Electronic Park Lock Description and Operation

Without BTM

If the vehicle is equipped with automatic transmission and a floor mounted console gear shift, it has an electronic park lock system. The electronic park lock system purpose is to prevent the ignition key from being turned to the OFF position when the transmission is in any position other than PARK and the vehicle may still be moving. The electronic park lock system consists of an ignition lock cylinder solenoid, and a park position switch that is located in the A/T shift lock control switch. The ignition lock cylinder solenoid contains a pin that mechanically prevents the ignition key cylinder from being turned to the lock position when the vehicle is not in park. The park position switch receives voltage from the body control module (BCM) when the ignition is turned ON. When the transmission shift selector is in PARK, the park position switch closes and the BCM then de-energizes the key capture solenoid actuator retracting the pin, allowing the ignition switch to be turned OFF..

With BTM

If the vehicle is equipped with automatic transmission and a floor mounted console gear shift, it has an electronic park lock system. The electronic park lock system purpose is to prevent the ignition from being switched to the OFF position when the transmission is in any position other than Park and the vehicle may still be moving. The electronic park lock system incorporates the park position switch that located in the A/T shift lock control switch. When the transmission shift selector is in Park, the park position switch closes and the BCM allows the ignition to be turned OFF.

If the vehicle is not in PARK, the ignition will return to ACC/ACCESSORY and display the message SHIFT TO PARK in the Driver Information Center. When the vehicle is shifted into PARK, the ignition system will switch to OFF.

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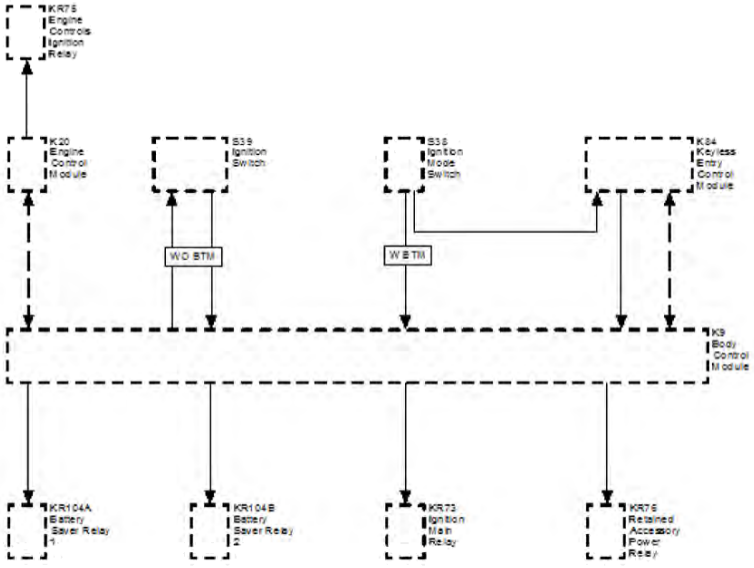
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Power Mode Description and Operation

Table 1: Power Mode Parameters (Without BTM)
Table 2: Power Mode Parameters (With BTM)

Serial Data Power Mode Master

Power Moding Description and Operation Block Diagram



[redacted]

Power to many of this vehicles circuits is controlled by the module that is designated the power mode master. This vehicles power mode master is the body control module (BCM). The BCM has multiple B+ circuits that feed into it. Each of those circuits are partitioned within the controller to drive certain outputs of the vehicle's body functions. An open or short in any one of the B+ circuits may induce multiple codes/or a section of non-functionality within the BCM with the rest of the BCM functioning normally. In this case it is useful to refer to the power distribution schematics to determine if the non-functional partition of the controller shares a common B+ circuit. The ignition switch is a low current switch with multiple discrete ignition switch signals to the power mode master for determination of the power mode that will be sent over the serial data circuits to the other modules that need this information. The power mode master will also activate relays and other direct outputs of the power mode master as

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needed. The power mode master determines which power mode (Off, Accessory, Run, Crank Request) is required, and reports this information to other modules via serial data. Modules which have switched voltage inputs may operate in a default mode if the power mode serial data message does not match what the individual module can see from its own connections.

The power mode master receives ignition switch or ignition mode switch signals to identify the operators desired power mode. The Power Mode Parameter tables below illustrate the correct state of these input parameters (circuits) in correspondence to the ignition switch position or ignition mode switch with the transmitter to vehicle range:

Power Mode Parameters (Without BTM)

Ignition Switch Position	Power Mode Transmitted	Ign. Off/Run/Crank (Off/Run Crank Voltage Circuit)	Ignition Accessory/Run (Accessory Voltage Circuit)	Ignition Run/Crank (Ignition 1 Voltage Circuit)
Off Key Out	Off	Key Out / ACC	Inactive	Inactive
Off Key IN	Off	Key In / Off	Inactive	Inactive
Accessory	Accessory	Key Out / ACC	Active	Inactive
Run	Run	Run	Active	Active
Start	Crank Request	Crank	Inactive	Active

Power Mode Parameters (With BTM)

Power Mode	Power Mode Transmitted	Push Button Ignition Switch (Power Button Switch Circuit Input to the BCM)	Push Button Ignition Switch Voltage Push Button Ignition Switch Voltage Input to the BCM	Key in Cylinder Switch/Key Fob in Vehicle (Transmitter in Range to the BCM Signal)
Transmitter in Range	Off	Inactive	9 V	Yes
Transmitter out of Range	Off	Inactive	9 V	No
Vehicle On Power Mode, then Press the Power Button Switch (Foot on or off the Brake Pedal) Transmitter in Vehicle	Off	Active (pushed) / Inactive (not pushed)	5-6 V (pressed)	Yes
Vehicle Off Power Mode, then Press the	Accessory Mode	Active (pushed) /	5-6 V (pressed)	Yes

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Power Mode	Power Mode Transmitted	Push Button Ignition Switch (Power Button Switch Circuit Input to the BCM)	Push Button Ignition Switch Voltage Push Button Ignition Switch Voltage Input to the BCM	Key in Cylinder Switch/Key Fob in Vehicle (Transmitter in Range to the BCM Signal)
Power Button Switch with foot off the Brake Pedal; Transmitter in Vehicle		Inactive (not pushed)		
Vehicle Off Power Mode, then Press the Power Button Switch with foot on the Brake Pedal; Transmitter in Vehicle	Vehicle in Run/Start Mode	Active (pushed) / Inactive (not pushed)	5-6 V (pressed)	Yes
Vehicle Off Power Mode, then Press and Hold the Power Button Switch up to 10 s with foot off the Brake Pedal; Transmitter in Vehicle	Vehicle in Run/Start Mode	Active (pushed) / Inactive (not pushed)	5-6 V (pressed)	Yes

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Relay Controlled Power Mode (Without BTM)

The BCM uses the discrete ignition switch inputs Off/Run/Crank Voltage, Accessory Voltage, and Ignition 1 Voltage, to distinguish the correct power mode. The BCM, after determining the desired power mode, will activate the appropriate relays for that power mode.

The retained accessory power relay remains on for a timed period after the Ignition key is removed. Refer to Retained Accessory Power Description and Operation for more information on the retained accessory power function.

Relay Controlled Power Mode (With BTM)

The BCM uses discrete push button switch inputs, transmitter in range status, current power mode state, and brake pedal position state to distinguish the correct power mode (Off, Accessory Mode, Vehicle in Run/Start Mode). The BCM, after determining the desired power mode, will activate the appropriate relays for that power mode.

The retained accessory power relay remains on for a timed period after the Ignition key is removed. Refer to Retained Accessory Power Description and Operation for more information on the retained accessory power function.

Push Button Start (If Equipped)

The ignition mode switch has 2 LEDs that indicate the vehicle power mode. When the vehicle is in the off mode, both LED's will be off. Pressing the ignition mode switch button once (without

the brake pedal applied), the vehicle enters the accessory mode and the amber LED (ACC) will illuminate. The accessory mode has a 5 min time out to reduce battery drain. With the ignition off (without the brake pedal applied) and pressing and holding the push button start switch for up to 10 seconds will place the vehicle in run/start mode (without the vehicle running) and the green LED (Run/Start) will illuminate. With the ignition off (with the brake pedal applied), pressing the ignition mode switch button once, the vehicle will enter run/start mode and the green LED (run/start) will illuminate. This will start the engine. Both LED's have the voltage supplied from the body control module (BCM). The ignition mode switch sends the ignition mode switch status to the passive entry passive start module (PEPS) and to the BCM. The PEPS module sends a redundant signal to the BCM with the ignition mode switch status.

Battery Saver Mode (Transport Mode) (If Equipped)

Battery saver mode (transport mode) reduces the parasitic load of some modules during overseas shipment or during vehicle storage conditions. This improves the drain time on the battery (up to 70 days without the battery going dead). When a vehicle is in transport/storage, some features may have reduced functionality while in the battery saver mode, such as disabling the Remote Function Actuator or content theft features. Battery saver mode is initiated by turning on the hazard flashers, applying the brake pedal, and then turning the ignition key to the start position or pushing the ignition mode switch with the foot on the brake for greater than 15 seconds. The mode is disengaged by repeating the previous process. The driver information center (if equipped) will display Transport Mode is On when battery saver mode is enabled and Transport Mode is Off when battery saver mode is disabled. For vehicles not equipped with a driver information center, the battery indicator light will constantly flash on the Instrument Cluster when battery saver mode is enabled. This feature can be used as many times as necessary if the vehicle is to be stored for an extended period of time.

Battery saver mode incorporates a latching relay that when enabled disconnects some modules from their ignition power or memory power sources. When battery saver mode is enabled and the vehicle is switched OFF, the BCM sends a momentary command to unlatch the relay disconnecting power up to 1 min after RAP is inactive. Every time the vehicle is switched ON the BCM will send a momentary command to latch the battery saver relay. This allows the use of all features when the ignition is ON. The BCM will send another command to unlatch the relay once the vehicle is switched OFF and RAP is inactive.

BCM Awake/Sleep States

The BCM is able to control or perform all of the BCM functions in the awake state. The BCM enters the sleep state when active control or normal monitoring of system functions has stopped and a time limit has passed. The BCM must detect certain wake-up inputs before entering the awake state. The BCM monitors for these inputs during the sleep state.

The BCM will enter the awake state if any of the following wake-up inputs are detected:

- Activity on the serial data line
- Detection of a battery reconnect
- Any door open signal
- Headlamps ON
- Key-in-ignition
- Ignition ON
- Park lamps ON
- Keyless entry or remote start message

The BCM will enter a sleep state when all of the following conditions exist:

- The ignition switch is OFF, key out.
- Ignition OFF, transmitter is out of range
- No activity exists on the serial data line.
- No outputs are commanded.

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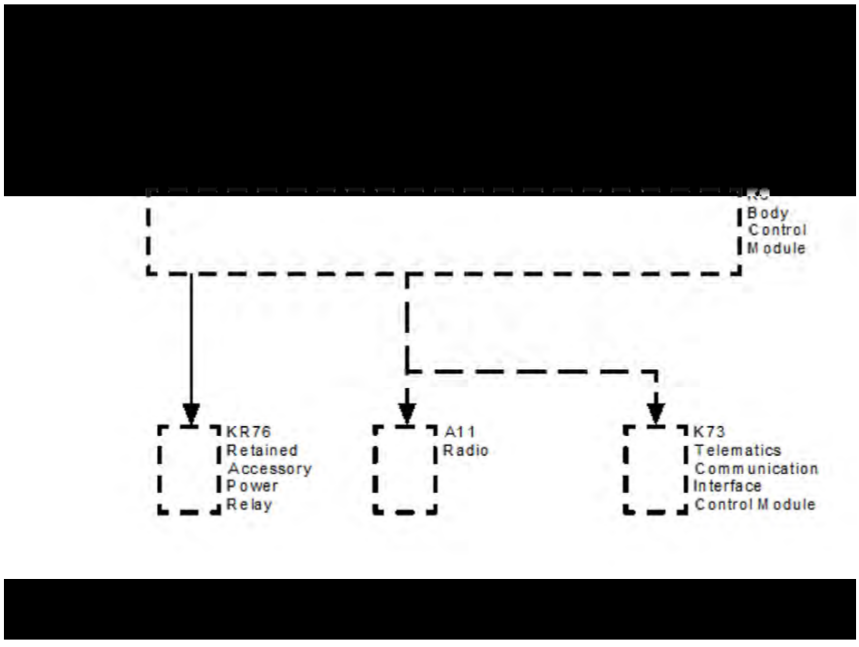
- No delay timers are actively counting.
- No wake-up inputs are present.

If all these conditions are met, the BCM will enter a low power or sleep condition.

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Retained Accessory Power Description and Operation

RAP Description and Operation Block Diagram



Retained Accessory Power

The body control module (BCM) monitors the ignition switch position, battery condition, and each door ajar/open switch status to determine whether the retained accessory power should be initiated or terminated. Retained accessory power is controlled by two different methods; relay control and serial data. Some modules receive a retained accessory power message from the BCM over the serial data circuits. Serial data controlled retained accessory power is deactivated as required by their modules retained accessory power mode operation. Other subsystems are activated directly by the BCM through a relay. Components and systems that are active in retained accessory power are also activated anytime the ignition is any position other than OFF regardless of the door switch signals.

Relay Controlled Retained Accessory Power

The BCM keeps the relay energized during all power modes, except Off-Awake and Crank. The relay is also energized for approximately 10 minutes after shutting the ignition OFF and removing the key, providing no door is opened.

Relay controlled retained accessory power will end when one of the following conditions is met:

- The BCM receives an input from any door ajar or open switch indicating the opening of any door after the ignition key is out of the ignition.

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Note: If the BCM is receiving any door ajar or open signal from those switches when the ignition key is turned OFF, retained accessory power will not initiate.

- The BCM internal timer for the retained accessory power expires after approximately 10 minutes.
- The BCM detects a decrease in battery capacity below a prescribed limit.

Systems powered by the retained accessory power relay during the retained accessory power mode are as follows:

Note: The vehicle may not be equipped with all components as listed below.

- Accessory Power Receptacle
- Cigarette Lighter Receptacle
- Window Switches
- Sunroof Control Module
- Sunroof Switch
- Mobile Device Wireless Charger Module
- Mobile Telephone Control Module
- Traffic Data Receiver
- Transmission Shift Lever Position Indicator (w/floor mounted console gear shift)
- Seat Heating Control Module

Serial Data Controlled Retained Accessory Power

Retained accessory power systems controlled by serial data are as follows:

Radio

Radio retained accessory power activation / termination is the same as relay operation with one exception; the only door switch that will turn off the radio during retained accessory power is the driver door open switch.

Vehicle Communication Interface Module (VCIM) (Onstar®) (If Equipped)

VCIM RAP activation/termination is the same as radio operation with 1 exception; if there is an active call when the ignition key is turned off the VCIM will remain in RAP mode, and keep the radio in RAP mode until the call is terminated.

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Master Electrical Component List

Master Electrical Component List

Code	Name	Option	Location	Locator View	Connector End View
A3L	Sunshade – Left	DHD	In the passenger compartment, left front, mounted to the headliner at left front	—	A3L Sunshade – Left (DHD)
A3R	Sunshade – Right	DHD	In the passenger compartment, right front, mounted to the headliner at right front	—	A3R Sunshade – Right (DHD)
A5	Driver Information Center	ERG	In the passenger compartment, center of the instrument panel	—	A5 Driver Information Center (ERG)
A7	Fuel Pump and Level Sensor Assembly	—	Under the rear of the vehicle, at the top right side of the fuel tank	—	A7 Fuel Pump and Level Sensor Assembly (LFW/LFX/L77/LS3/LSA)
A9A	Outside Rearview Mirror – Driver	—	Upper front of the driver door panel	Driver Door Components (RHD)	A9A Outside Rearview Mirror – Driver
A9B	Outside Rearview Mirror – Passenger	—	Upper front of the passenger door panel	Passenger Door Components (RHD)	A9B Outside Rearview Mirror – Passenger
A10	Inside Rearview Mirror	—	In the passenger compartment, upper center of the front windshield	—	A10 Inside Rearview Mirror (DD8)
A11	Radio	—	In the passenger compartment, center of the instrument panel	Rear of Instrument Panel Components (1 of 2)	• A11 Radio X1 • A11 Radio X3 • A11 Radio X4 • A11 Radio X5 • A11 Radio X7 • A11 Radio X8 • A11 Radio X10
A23D	Door Latch Assembly – Driver	—	Rear of the driver door	Driver Door Components (RHD)	A23D Door Latch Assembly – Driver
A23F	Tonneau Latch Assembly	F80 with E95	Rear of the utility tray	—	A23F Tonneau Latch Assembly (F80 with E95)
A23LR	Door Latch Assembly – Left Rear	—	Rear of the left rear door	Left Rear Door Components (1 of 2)	A23LR Door Latch Assembly – Left Rear

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Code	Name	Option	Location	Locator View	Connector End View
A23P	Door Latch Assembly – Passenger	—	Rear of the passenger door	Passenger Door Components (RHD)	A23P Door Latch Assembly – Passenger
A23RR	Door Latch Assembly – Right Rear	—	Rear of the right rear door	Right Rear Door Components (1 of 2)	A23RR Door Latch Assembly – Right Rear
A26	HVAC Controls	—	In the passenger compartment, center of the instrument panel	Front of Instrument Panel Components (2 of 3)	A26 HVAC Controls
B1	A/C Refrigerant Pressure Sensor	—	In the engine compartment, part of the A/C compressor, on the right of the engine	• Rear of Engine Components (L77 or LS3) • Left Rear of Engine Components (LFW or LFX) • Right Side of Engine Components (LWR) • Right Rear of Engine Components (LSA)	B1 A/C Refrigerant Pressure Sensor
B5LF	Wheel Speed Sensor – Left Front	—	Left front of vehicle inside the left front wheel hub	Left Side of Engine Compartment Components	B5LF Wheel Speed Sensor – Left Front
B5LR	Wheel Speed Sensor – Left Rear	—	Left rear of vehicle inside the left rear wheel hub	Rear Axle Components	B5LR Wheel Speed Sensor – Left Rear
B5RF	Wheel Speed Sensor – Right Front	—	Right front of vehicle inside the right front wheel hub	Right Side of Engine Compartment Components (L77 or LS3)	B5RF Wheel Speed Sensor – Right Front
B5RR	Wheel Speed Sensor – Right Rear	—	Right rear of vehicle inside the right rear wheel hub	Rear Axle Components	B5RR Wheel Speed Sensor – Right Rear
B7D	Air Temperature Sensor – Duct Left Lower	—	Behind the instrument panel attached to the left lower air duct	—	B7D Air Temperature Sensor – Duct Left Lower
B7E	Air Temperature Sensor – Duct Right Lower	—	Behind the instrument panel attached to the right lower air duct	—	B7E Air Temperature Sensor – Duct Right Lower
B7H	Air Temperature Sensor – Duct Left Upper	—	Behind the instrument panel attached to	—	B7H Air Temperature Sensor – Duct Left Upper

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Code	Name	Option	Location	Locator View	Connector End View
			the left upper air duct		
B7J	Air Temperature Sensor – Duct Right Upper	—	Behind the instrument panel attached to the right upper air duct	—	B7J Air Temperature Sensor – Duct Right Upper
B9	Ambient Air Temperature Sensor	C63 or CJ2	In front of the engine compartment, bottom right front of the radiator	Front Fascia Components (Long Wheelbase Sedan)	B9 Ambient Air Temperature Sensor
B10B	Ambient Light/Sunload Sensor	—	In the passenger compartment, on top of the instrument panel in the center near the windshield	Front of Instrument Panel Components (1 of 3)	B10B Ambient Light/Sunload Sensor
B12A	Transmission Fluid Pressure Switch	MYA/MYC/MYD	Part of Q8 Control Solenoid Valve Assembly	—	—
B13	Transmission Fluid Temperature Sensor	MYA/MYC/MYD	Part of Q8 Control Solenoid Valve Assembly	—	—
B14A	Transmission Output Shaft Speed Sensor	MYA/MYC/MYD	Part of Q8 Control Solenoid Valve Assembly	—	—
B14C	Transmission Input Shaft Speed Sensor	MYA/MYC/MYD	Part of Q8 Control Solenoid Valve Assembly	—	—
B15	Transmission Internal Mode switch	MYA/MYC/MYD	In the engine compartment, part of the control solenoid valve assembly, mounted to the valve body inside the transmission	—	—
B16	Backup Lamp Switch	MER/MG9	Right side of the manual transmission case	Manual Transmission Components (MER or MG9)	B16 Backup Lamp Switch (MER/MG9)
		MV5		Manual Transmission Components (MV5)	B16 Backup Lamp Switch (MV5)
B17	Barometric Pressure Sensor	LSA/LWR	In the engine compartment,	• Left Side of Engine	B17 Barometric Pressure Sensor (LSA/LWR)

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Code	Name	Option	Location	Locator View	Connector End View
			left front side, attached to the air cleaner assembly	Components (LSA) • Rear of Engine Components (LWR)	
B18	Battery Current Sensor	—	Inside the rear compartment on the left side	• Left Side of the Luggage Compartment Components (Short Wheelbase Sedan) • Left Side of the Luggage Compartment Components (Sportwagon) • Left Rear of the Passenger Compartment Components (Ute)	B18 Battery Current Sensor
B19B	Brake Booster Vacuum Sensor	—	In the engine compartment, on the right front side of the brake booster	Right Side of Engine Compartment Components (LFW, LFX or LWR)	B19B Brake Booster Vacuum Sensor
B20	Brake Fluid Level Switch	—	In the engine compartment, mounted to the bottom left of the master cylinder reservoir	Right Side of Engine Compartment Components (LFW, LFX or LWR)	B20 Brake Fluid Level Switch
B22	Brake Pedal Position Sensor	—	In the passenger compartment, attached to the top of the brake pedal assembly	Front of Instrument Panel Components (1 of 3)	B22 Brake Pedal Position Sensor
B23	Camshaft Position Sensor	L77/LS3/LSA	In the engine compartment, on the left front of the engine	Left Side of Engine Components (LSA)	B23 Camshaft Position Sensor (L77/LS3/LSA)
B23A	Camshaft Position Sensor — Bank 1 Exhaust	LFW/LFX/LWR	In the engine compartment, on the right front of the right cylinder head	• Front of Engine Components (LFW or LFX) • Front of Engine Components (LWR)	B23A Camshaft Position Sensor – Bank 1 Exhaust (LFW/LFX/LWR)
B23B	Camshaft Position Sensor — Bank 1 Intake	LFW/LFX/LWR	In the engine compartment, on the left front of the	• Front of Engine Components (LFW or LFX)	B23B Camshaft Position Sensor – Bank 1 Intake (LFW/LFX/LWR)

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Code	Name	Option	Location	Locator View	Connector End View
			right cylinder head	• Front of Engine Components (LWR)	
B23C	Camshaft Position Sensor — Bank 2 Exhaust	LFW/LFX/LWR	In the engine compartment, on the left front of the Left cylinder head	• Front of Engine Components (LFW or LFX) • Front of Engine Components (LWR)	B23C Camshaft Position Sensor – Bank 2 Exhaust (LFW/LFX/LWR)
B23D	Camshaft Position Sensor — Bank 2 Intake	LFW/LFX/LWR	In the engine compartment, on the right front of the Left cylinder head	• Front of Engine Components (LFW or LFX) • Front of Engine Components (LWR)	B23D Camshaft Position Sensor – Bank 2 Intake (LFW/LFX/LWR)
B25B	Clutch Pedal Position Sensor	MER/MG9/MV5	In the passenger compartment, attached to the top of the clutch pedal assembly	Front of Instrument Panel Components (2 of 3)	B25B Clutch Pedal Position Sensor (MER/MG9/MV5)
B26	Crankshaft Position Sensor	L77/LS3/LSA	Right front side of the engine, next to the knock sensor	Rear of Engine Components (L77 or LS3)	B26 Crankshaft Position Sensor (L77/LS3/LSA)
		LFW/LFX/LWR	Right Rear side of the engine, next to the knock sensor	• Front of Engine Components (LFW or LFX) • Rear of Engine Components (LWR)	B26 Crankshaft Position Sensor (LFW/LFX/LWR)
B27LR	Door Handle Switch - Left Rear Exterior	ATH	On the vehicle exterior, inside the left rear door handle	Left Rear Door Components (1 of 2)	B27LR Door Handle Switch - Left Rear Exterior
B27RR	Door Handle Switch - Right Rear Exterior	ATH	On the vehicle exterior, inside the right rear door handle	Right Rear Door Components (1 of 2)	B27RR Door Handle Switch - Right Rear Exterior
B34	Engine Coolant Temperature Sensor	L77/LS3/LSA	In the engine compartment, on the left front of the engine above spark plug 1	Left Side of Engine Components (LSA)	B34 Engine Coolant Temperature Sensor (L77/LS3/LSA)
		LFW/LFX/LWR	In the engine compartment, on the left	• Left Rear of Engine	B34 Engine Coolant Temperature Sensor (LFW/LFX/LWR)

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Code	Name	Option	Location	Locator View	Connector End View
			front of the engine above spark plug 1	Components (LFW or LFX) • Right Side of Engine Components (LWR)	
B35	Engine Oil Level Switch	LFW/LFX/LWR	In the engine compartment, below the engine, in the bottom right of the engine oil pan	• Left Rear of Engine Components (LFW or LFX) • Right Side of Engine Components (LWR)	B35 Engine Oil Level Switch (LFW/LFX/LWR)
B35C	Engine Oil Level and Temperature Sensor	L77/LS3/LSA	In the engine compartment, below the engine, in the bottom right of the engine oil pan	• Rear of Engine Components (L77 or LS3) • Right Front of Engine Components (LSA)	B35C Engine Oil Level and Temperature Sensor (L77/LS3/LSA)
B37	Engine Oil Pressure Switch	LFW/LFX/LWR	In the engine compartment, on the left side of the engine, in the oil filter housing	• Left Rear of Engine Components (LFW or LFX) • Right Side of Engine Components (LWR)	B37 Engine Oil Pressure Switch (LFW/LFX/LWR)
B37B	Engine Oil Pressure Sensor	L77/LS3	In the engine compartment, on the left side of the engine, in the oil filter housing	Rear of Engine Components (L77 or LS3)	B37B Engine Oil Pressure Sensor (L77/LS3)
		LSA	In the engine compartment, on the left side of the engine, in the oil filter housing	Right Rear of Engine Components (LSA)	B37B Engine Oil Pressure Sensor (LSA)
B39	A/C Evaporator Temperature Sensor	—	Behind the instrument panel on the right side of the HVAC assembly	—	B39 A/C Evaporator Temperature Sensor
B46B	Fuel Level Sensor – Secondary	—	Under the rear of the vehicle, at the top left side of the fuel tank	—	B46B Fuel Level Sensor - Secondary (LFW/LFX/L77/LS3/LSA)
B47	Fuel Pressure Sensor	L77/LFW/LFX/LS3/LSA	Under the vehicle, at the right side of the fuel tank,	—	B47 Fuel Pressure Sensor (L77/LFW/LFX/LS3/LSA)

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Code	Name	Option	Location	Locator View	Connector End View
			connected to the fuel line		
B47B	Fuel Rail Pressure Sensor	LFW/LFX	In the engine compartment, on top of the engine, mounted to the fuel injector rail, between injectors 1 and 2	—	B47B Fuel Rail Pressure Sensor (LFW/LFX)
		LWR	In the engine compartment, on top of the engine, mounted to the fuel injector rail	Rear of Engine Components (LWR)	B47B Fuel Rail Pressure Sensor (LWR)
B51F	Headlamp Leveling Sensor – Front	T3T	Under the vehicle attached to the front suspension arm	—	B51F Headlamp Leveling Sensor – Front (T3T)
B51R	Headlamp Leveling Sensor – Rear	T3T	Under the vehicle attached to the rear suspension arm	Rear Axle Components	B51R Headlamp Leveling Sensor – Rear (T3T)
B52C	Heated Oxygen Sensor – Bank 1 Sensor 1	L77/LS3/LSA	In the exhaust system, in front of the catalytic converter	• Rear of Engine Components (L77 or LS3) • Right Rear of Engine Components (LSA)	• B52C Heated Oxygen Sensor – Bank 1 Sensor 1 (L77/LS3) • B52C Heated Oxygen Sensor – Bank 1 Sensor 1 (LSA)
		LFW/LFX/LWR	In the exhaust system, in front of the catalytic converter	• Right Rear of Engine Components (LFW or LFX) • Rear of Engine Components (LWR)	B52C Heated Oxygen Sensor – Bank 1 Sensor 1 (LFW/LFX/LWR)
B52D	Heated Oxygen Sensor – Bank 1 Sensor 2	L77/LS3/LSA	In the exhaust system, behind the catalytic converter	• Rear of Engine Components (L77 or LS3) • Right Rear of Engine Components (LSA)	• B52D Heated Oxygen Sensor – Bank 1 Sensor 2 (L77/LS3) • B52D Heated Oxygen Sensor – Bank 1 Sensor 2 (LSA)
		LFW/LFX/LWR	In the exhaust system, behind the catalytic converter	• Right Rear of Engine Components (LFW or LFX)	B52D Heated Oxygen Sensor – Bank 1 Sensor 2 (LFW/LFX/LWR)

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Code	Name	Option	Location	Locator View	Connector End View
				• Rear of Engine Components (LWR)	
B52E	Heated Oxygen Sensor – Bank 2 Sensor 1	L77/LS3/LSA	In the exhaust system, in front of the catalytic converter	• Rear of Engine Components (L77 or LS3) • Right Rear of Engine Components (LSA)	• B52E Heated Oxygen Sensor – Bank 2 Sensor 1 (L77/LS3) • B52E Heated Oxygen Sensor – Bank 2 Sensor 1 (LSA)
		LFW/LFX/LWR	In the exhaust system, in front of the catalytic converter	• Left Rear of Engine Components (LFW or LFX) • Right Side of Engine Components (LWR)	B52E Heated Oxygen Sensor – Bank 2 Sensor 1 (LFW/LFX/LWR)
B52F	Heated Oxygen Sensor – Bank 2 Sensor 2	L77/LS3/LSA	In the exhaust system, behind the catalytic converter	• Rear of Engine Components (L77 or LS3) • Right Rear of Engine Components (LSA)	• B52F Heated Oxygen Sensor – Bank 2 Sensor 2 (L77/LS3) • B52F Heated Oxygen Sensor – Bank 2 Sensor 2 (LSA)
		LFW/LFX/LWR	In the exhaust system, in front of the catalytic converter	• Right Rear of Engine Components (LFW or LFX) • Rear of Engine Components (LWR)	B52F Heated Oxygen Sensor – Bank 2 Sensor 2 (LFW/LFX/LWR)
B55	Hood Ajar Switch	—	Part of the hood latch located on the underside of the front center of the hood	Front Fascia Components (Long Wheelbase Sedan)	B55 Hood Ajar Switch
B59L	Front Impact Sensor – Left	—	Left front of the engine compartment, mounted to the radiator core support near the upper left corner of the radiator	Front Fascia Components (Long Wheelbase Sedan)	B59L Front Impact Sensor – Left
B59R	Front Impact Sensor – Right	—	Right front of the engine compartment, mounted to the radiator core support near the upper right	Front Fascia Components (Long Wheelbase Sedan)	B59R Front Impact Sensor – Right

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Code	Name	Option	Location	Locator View	Connector End View
			corner of the radiator		
B60	Passenger Presence Sensor	—	In the passenger compartment, part of the passenger presence detection module, in the passenger seat cushion	—	—
B62D	Seat Position Sensor – Driver	—	In the passenger compartment, under the driver seat	—	B62D Seat Position Sensor – Driver
B62P	Seat Position Sensor – Passenger	—	In the passenger compartment, under the passenger seat	—	B62P Seat Position Sensor – Passenger
B63L	Side Impact Sensor – Left	—	In the passenger compartment, in front of the left B-pillar base	Left Front of the Passenger Compartment Components	B63L Side Impact Sensor – Left
B63R	Side Impact Sensor – Right	—	In the passenger compartment, in front of the right B-pillar base	Right Front of the Passenger Compartment Components	B63R Side Impact Sensor – Right
B66	Intake Air Temperature Sensor	LSA	In the engine compartment, left front side, attached to the air cleaner assembly	Left Side of Engine Components (LSA)	B66 Intake Air Temperature Sensor (LSA)
B68A	Knock Sensor 1	L77/LS3/LSA	In the engine compartment, on the left side of the engine block	• Front of Engine Components (L77 or LS3) • Right Front of Engine Components (LSA)	B68A Knock Sensor 1 (L77/LS3/LSA)
		LFW/LFX/LWR	In the engine compartment, on the left side of the engine block	• Front of Engine Components (LFW or LFX) • Rear of Engine Components (LWR)	B68A Knock Sensor 1 (LFW/LFX/LWR)
B68B	Knock Sensor 2	L77/LS3/LSA	In the engine compartment, on the right side of the engine block	• Rear of Engine Components (L77 or LS3)	B68B Knock Sensor 2 (L77/LS3/LSA)

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Code	Name	Option	Location	Locator View	Connector End View
				• Left Side of Engine Components (LSA)	
		LFW/LFX/LWR	In the engine compartment, on the right side of the engine block	• Left Rear of Engine Components (LFW or LFX) • Right Side of Engine Components (LWR)	B68B Knock Sensor 2 (LFW/LFX/LWR)
B74	Manifold Absolute Pressure Sensor	L77/LFW/LFX/LS3/LWR	In the engine compartment, top front of the engine, to the rear of the throttle body	• Front of Engine Components (L77 or LS3) • Right Rear of Engine Components (LFW or LFX) • Left Side of Engine Components (LSA) • Rear of Engine Components (LWR)	B74 Manifold Absolute Pressure Sensor
B75B	Mass Air Flow/Intake Air Temperature Sensor	L77/LS3/LSA/LWR	In the engine compartment, left front side, attached to the air cleaner assembly	• Rear of Engine Components (L77 or LS3) • Right Front of Engine Components (LSA) • Rear of Engine Components (LWR)	• B75B Mass Air Flow/Intake Air Temperature Sensor (L77/LS3) • B75B Mass Air Flow/Intake Air Temperature Sensor (LSA) • B75B Mass Air Flow/Intake Air Temperature Sensor (LWR)
B75C	Multifunction Intake Air Sensor	LFW/LFX	In the Engine Compartment, attached to the Air Cleaner assembly	Right Rear of Engine Components (LFW or LFX)	B75C Multifunction Intake Air Sensor (LFW/LFX)
B78A	Front Object Sensor – Left Outer	UFQ	In the left corner of the front fascia	Front of Vehicle Components (Short Wheelbase Sedan, Sportwagon or Ute)	B78A Front Object Sensor – Left Outer (UFQ)
B78B	Front Object Sensor – Right Outer	UFQ	In the right corner of the front fascia	Front of Vehicle Components (Long Wheelbase Sedan)	B78B Front Object Sensor – Right Outer (UFQ)
B78C	Front Object Sensor – Left Middle	UFQ	In the left middle of the front fascia	Front of Vehicle Components (Short Wheelbase Sedan, Sportwagon or Ute)	B78C Front Object Sensor – Left Middle (UFQ)

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Code	Name	Option	Location	Locator View	Connector End View
B78D	Front Object Sensor – Right Middle	UFQ	In the right middle of the front fascia	Front of Vehicle Components (Short Wheelbase Sedan, Sportwagon or Ute)	B78D Front Object Sensor – Right Middle (UFQ)
B78E	Rear Object Sensor – Left Middle	UD7/UFQ	In the left middle of the rear fascia	Rear of Vehicle Components (Long Wheelbase Sedan)	B78E Rear Object Sensor – Left Middle (UD7/UFQ)
B78F	Rear Object Sensor – Right Middle	UD7/UFQ	In the right middle of the rear fascia	Front of Vehicle Components (Long Wheelbase Sedan)	B78F Rear Object Sensor – Right Middle (UD7/UFQ)
B78G	Rear Object Sensor – Left Outer	UD7/UFQ	In the left corner of the rear fascia	Rear of Vehicle Components (Ute)	B78G Rear Object Sensor – Left Outer (UD7/UFQ)
B78H	Rear Object Sensor – Right Outer	UD7/UFQ	In the right corner of the rear fascia	Rear of Vehicle Components (Ute)	B78H Rear Object Sensor – Right Outer (UD7/UFQ)
B87	Rearview Camera	UVC	In the rear fascia	Rear of Vehicle Components (Long Wheelbase Sedan)	• B87 Rearview Camera (F19 with UVC) • B87 Rearview Camera (F35 with UVC) • B87 Rearview Camera (F69/F80 with UVC)
B88D	Seat Belt Switch – Driver	—	In the passenger compartment, in the driver seat belt buckle	—	B88D Seat Belt Switch – Driver
B88LR	Seat Belt Switch – Left Rear	UH5	In the passenger compartment, under the rear seat	Right Side of the Luggage Compartment Components (Sportwagon)	B88LR Seat Belt Switch – Left Rear (UH5)
B88P	Seat Belt Switch – Passenger	—	In the passenger compartment, in the passenger seat belt buckle	—	B88P Seat Belt Switch – Passenger
B88RR	Seat Belt Switch – Right Rear	UH5	In the passenger compartment, under the rear seat	Right Rear of the Passenger Compartment Components (Short Wheelbase Sedan)	B88RR Seat Belt Switch - Right Rear (UH5)
B99	Steering Wheel Angle Sensor	—	In the passenger compartment, behind the steering wheel	Steering Wheel/Column Components (2 of 2)	B99 Steering Wheel Angle Sensor
B105	Supercharger Inlet Pressure Sensor	LSA	In the engine compartment at the	—	B105 Supercharger Inlet Pressure Sensor (LSA)

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Code	Name	Option	Location	Locator View	Connector End View
			supercharger air inlet		
B107	Accelerator Pedal Position Sensor	—	In the passenger compartment, under instrument panel on top of the accelerator pedal assembly	Front of Instrument Panel Components (1 of 3)	B107 Accelerator Pedal Position Sensor
B115	Vehicle Speed Sensor	MER/MG9	Under the vehicle, left rear side of the manual transmission assembly	—	B115 Vehicle Speed Sensor (MER/MG9)
		MV5	Under the vehicle, left rear side of the manual transmission assembly	Manual Transmission Components (MV5)	B115 Vehicle Speed Sensor (MV5)
B117	Rain Sensor	CE1	In the passenger compartment at the top of the windscreen	—	B117 Rain Sensor (CE1)
B118B	Windshield Washer Fluid Switch	T3T	—	—	B118B Windshield Washer Fluid Level Switch (T3T)
B137	Power Steering Shaft Torque Sensor	—	Under the vehicle, on the steering shaft	—	B137 Power Steering Shaft Torque Sensor
B152LF	Suspension Position Sensor - Left Front	F55	—	—	B152LF Suspension Position Sensor - Left Front (F55)
B152LR	Suspension Position Sensor - Left Rear	F55	—	—	B152LR Suspension Position Sensor – Left Rear (F55)
B152RF	Suspension Position Sensor - Right Front	F55	—	—	B152RF Suspension Position Sensor - Right Front (F55)
B152RR	Suspension Position Sensor - Right Rear	F55	—	—	B152RR Suspension Position Sensor – Right Rear (F55)
B166LF	Advance Parking Assist Side Object Sensor Left Front	—	—	—	B166LF Advance Parking Assist Side Object Sensor Left Front
B166RF	Advance Parking Assist Side Object Sensor Right Front	—	—	—	B166RF Advance Parking Assist Side Object Sensor Right Front
B174	Frontview Camera	UFL/UEU	In the passenger compartment at the top of	—	B174 Frontview Camera (UFL/UEU)

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Code	Name	Option	Location	Locator View	Connector End View
			the windscreen		
B189	B189 LPG Level Sensor	LWR	Under the vehicle at the front of the LPG fuel tank	—	B189 LPG Level Sensor (LWR)
B198	Fuel Composition Sensor	LFW/LFX/L77	Under the rear of the vehicle, at the top right side of the fuel tank	—	B198 Fuel Composition Sensor (LFW/LFX/L77)
B218L	Side Object Sensor Module - Left	UFT	At the rear of the vehicle in the rear fascia	Rear of Vehicle Components (Sportwagon)	B218L Side Object Sensor Module - Left (UFT)
B218R	Side Object Sensor Module - Right	UFT	At the rear of the vehicle in the rear fascia	Rear of Vehicle Components (Ute)	B218R Side Object Sensor Module - Right (UFT)
C1	Battery	—	Inside the rear compartment on the left side	Left Side of the Luggage Compartment Components (Short Wheelbase Sedan)	C1 Battery
C1B	Battery — Auxiliary	—	Inside the rear compartment on the right side	—	—
E1C	Accent Lamp - Driver Door Handle	C9B	Inside the passenger compartment at the driver interior door handle	—	E1C Accent Lamp - Driver Door Handle
E1E	Accent Lamp - Left Rear Door Handle	F19	Inside the passenger compartment at the left rear interior door handle	—	E1E Accent Lamp - Left Rear Door Handle
E1F	Accent Lamp - Right Rear Door Handle	F19	Inside the passenger compartment at the right rear interior door handle	—	E1F Accent Lamp - Right Rear Door Handle
E1M	Accent Lamp - Passenger Door Handle	C9B	Inside the passenger compartment at the passenger interior door handle	—	E1M Accent Lamp - Passenger Door Handle
E4AC	Park/Daytime Running Lamp - Left	V5B	Part of the E13L Headlamp Assembly – Left	—	E4AC Park/Daytime Running Lamp - Left (V5B)
E4AD		V5B	Part of the E13R	—	

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Code	Name	Option	Location	Locator View	Connector End View
	Park/Daytime Running Lamp - Right		Headlamp Assembly – Right		E4AD Park/Daytime Running Lamp - Right (V5B)
E4C	Daytime Running Lamp - Left	T3N/V5B	Lower left front of the vehicle, below the left headlamp	• Front of Vehicle Components (Short Wheelbase Sedan, Sportwagon or Ute) • Front of Vehicle Components (Long Wheelbase Sedan)	• E4C Daytime Running Lamp - Left (T3N) • E4C Daytime Running Lamp - Left (V5B)
E4D	Daytime Running Lamp - Right	T3N/V5B	Lower left front of the vehicle, below the right headlamp	• Front of Vehicle Components (Short Wheelbase Sedan, Sportwagon or Ute) • Front of Vehicle Components (Long Wheelbase Sedan)	• E4D Daytime Running Lamp - Right (T3N) • E4D Daytime Running Lamp - Right (V5B)
E4E	Left High Beam Lamp	—	Part of the E13L Headlamp Assembly – Left	• Front of Vehicle Components (Short Wheelbase Sedan, Sportwagon or Ute) • Front of Vehicle Components (Long Wheelbase Sedan)	E13L Headlamp - Left
E4F	Right High Beam Lamp	—	Part of the E13R Headlamp Assembly – Right	• Front of Vehicle Components (Short Wheelbase Sedan, Sportwagon or Ute) • Front of Vehicle Components (Long Wheelbase Sedan)	E13R Headlamp - Right
E4G	Left Low Beam Lamp	—	Part of the E13L Headlamp Assembly – Left	• Front of Vehicle Components (Short	E13L Headlamp - Left

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Code	Name	Option	Location	Locator View	Connector End View
				Wheelbase Sedan, Sportwagon or Ute) • Front of Vehicle Components (Long Wheelbase Sedan)	
E4H	Right Low Beam Lamp	—	Part of the E13R Headlamp Assembly – Right	• Front of Vehicle Components (Short Wheelbase Sedan, Sportwagon or Ute) • Front of Vehicle Components (Long Wheelbase Sedan)	E13R Headlamp - Right
E4J	Park Lamp Left Front	—	Part of the E13L Headlamp Assembly – Left	• Front of Vehicle Components (Short Wheelbase Sedan, Sportwagon or Ute) • Front of Vehicle Components (Long Wheelbase Sedan)	E13L Headlamp - Left
E4K	Park Lamp Right Front	—	Part of the E13R Headlamp Assembly – Right	• Front of Vehicle Components (Short Wheelbase Sedan, Sportwagon or Ute) • Front of Vehicle Components (Long Wheelbase Sedan)	E13R Headlamp - Right
E4LF	Turn Signal Lamp – Left front	—	Part of the E13L Headlamp Assembly – Left	• Front of Vehicle Components (Short Wheelbase Sedan, Sportwagon or Ute) • Front of Vehicle Components (Long	E13L Headlamp - Left

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Code	Name	Option	Location	Locator View	Connector End View
				Wheelbase Sedan)	
E4LR	Turn Signal Lamp – Left Rear	—	Part of E42L Tail Lamp Assembly – Left	• Rear of Vehicle Components (Long Wheelbase Sedan) • Rear of Vehicle Components (Sportwagon) • Rear of Vehicle Components (Ute)	• E42L Tail Lamp Assembly - Left (F19) • E42L Tail Lamp Assembly - Left (F35) • E42L Tail Lamp Assembly - Left (F69) • E42L Tail Lamp Assembly - Left (F80)
E4RF	Turn Signal Lamp – Right Front	—	Part of the E13R Headlamp Assembly – Right	• Front of Vehicle Components (Short Wheelbase Sedan, Sportwagon or Ute) • Front of Vehicle Components (Long Wheelbase Sedan)	E13R Headlamp - Right
E4RR	Turn Signal Lamp – Right Rear	—	Rear of vehicle in E42R Tail Lamp Assembly – Right	• Rear of Vehicle Components (Long Wheelbase Sedan) • Rear of Vehicle Components (Sportwagon) • Rear of Vehicle Components (Ute)	• E42R Tail Lamp Assembly - Right (F19) • E42R Tail Lamp Assembly - Right (F35) • E42R Tail Lamp Assembly - Right (F69) • E42R Tail Lamp Assembly - Right (F80)
E4Y	Turn Signal Repeater Lamp – Left	—	On the left front guard	• Front of Vehicle Components (Short Wheelbase Sedan, Sportwagon or Ute) • Front of Vehicle Components (Long Wheelbase Sedan)	E4Y Turn Signal Repeater Lamp – Left
E4Z	Turn Signal Repeater Lamp – Right	—	On the left front guard	• Front of Vehicle Components (Short	E4Z Turn Signal Repeater Lamp – Right

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Code	Name	Option	Location	Locator View	Connector End View
				Wheelbase Sedan, Sportwagon or Ute) • Front of Vehicle Components (Long Wheelbase Sedan)	
E5A	Back Up Lamp – Left	—	Rear of vehicle in E42L Tail Lamp Assembly – Left	• Rear of Vehicle Components (Long Wheelbase Sedan) • Rear of Vehicle Components (Sportwagon) • Rear of Vehicle Components (Ute)	• E42L Tail Lamp Assembly - Left (F19) • E42L Tail Lamp Assembly - Left (F35) • E42L Tail Lamp Assembly - Left (F69) • E42L Tail Lamp Assembly - Left (F80)
E5AM	Stop/Turn Signal Lamp – Left	—	Rear of vehicle in E42L Tail Lamp Assembly – Left	• Rear of Vehicle Components (Long Wheelbase Sedan) • Rear of Vehicle Components (Sportwagon) • Rear of Vehicle Components (Ute)	• E42L Tail Lamp Assembly - Left (F19) • E42L Tail Lamp Assembly - Left (F35) • E42L Tail Lamp Assembly - Left (F69) • E42L Tail Lamp Assembly - Left (F80)
E5AN	Stop/Turn Signal Lamp – Right	—	Rear of vehicle in E42R Tail Lamp Assembly – Right	• Rear of Vehicle Components (Long Wheelbase Sedan) • Rear of Vehicle Components (Sportwagon) • Rear of Vehicle Components (Ute)	• E42R Tail Lamp Assembly - Right (F19) • E42R Tail Lamp Assembly - Right (F35) • E42R Tail Lamp Assembly - Right (F69) • E42R Tail Lamp Assembly - Right (F80)
E5B	Back Up Lamp – Right	—	Rear of vehicle in E42R Tail Lamp Assembly – Right	• Rear of Vehicle Components (Long Wheelbase Sedan) • Rear of Vehicle Components (Sportwagon)	• E42R Tail Lamp Assembly - Right (F19) • E42R Tail Lamp Assembly - Right (F35) • E42R Tail Lamp Assembly - Right (F69)

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Code	Name	Option	Location	Locator View	Connector End View
				• Rear of Vehicle Components (Ute)	• E42R Tail Lamp Assembly - Right (F80)
E5E	Tail Lamp – Left	—	Rear of vehicle in E42L Tail Lamp Assembly – Left	• Rear of Vehicle Components (Long Wheelbase Sedan) • Rear of Vehicle Components (Sportwagon) • Rear of Vehicle Components (Ute)	• E42L Tail Lamp Assembly - Left (F19) • E42L Tail Lamp Assembly - Left (F35) • E42L Tail Lamp Assembly - Left (F69) • E42L Tail Lamp Assembly - Left (F80)
E5F	Tail Lamp – Right	—	Rear of vehicle in E42R Tail Lamp Assembly – Right	• Rear of Vehicle Components (Long Wheelbase Sedan) • Rear of Vehicle Components (Sportwagon) • Rear of Vehicle Components (Ute)	• E42R Tail Lamp Assembly - Right (F19) • E42R Tail Lamp Assembly - Right (F35) • E42R Tail Lamp Assembly - Right (F69) • E42R Tail Lamp Assembly - Right (F80)
E5L	Stop Lamp – Left	—	Rear of vehicle in E42L Tail Lamp Assembly – Left	• Rear of Vehicle Components (Long Wheelbase Sedan) • Rear of Vehicle Components (Sportwagon) • Rear of Vehicle Components (Ute)	• E42L Tail Lamp Assembly - Left (F19) • E42L Tail Lamp Assembly - Left (F35) • E42L Tail Lamp Assembly - Left (F69) • E42L Tail Lamp Assembly - Left (F80)
E5R	Stop Lamp – Right	—	Rear of vehicle in E42R Tail Lamp Assembly – Right	• Rear of Vehicle Components (Long Wheelbase Sedan) • Rear of Vehicle Components (Sportwagon) • Rear of Vehicle Components (Ute)	• E42R Tail Lamp Assembly - Right (F19) • E42R Tail Lamp Assembly - Right (F35) • E42R Tail Lamp Assembly - Right (F69) • E42R Tail Lamp Assembly - Right (F80)
E6		—	Rear of the passenger		E6 Center High Mounted Stop Lamp

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Code	Name	Option	Location	Locator View	Connector End View
	Center High Mounted Stop Lamp		compartment, above the rear window at the rear of the headliner	• Rear of Vehicle Components (Long Wheelbase Sedan) • Rear of Vehicle Components (Sportwagon) • Rear of Vehicle Components (Ute)	
E7L	License Plate Lamp – Left	—	Rear of the vehicle above the left side of the license plate	• Rear of Vehicle Components (Long Wheelbase Sedan) • Rear of Vehicle Components (Sportwagon) • Rear of Vehicle Components (Ute)	E7L License Plate Lamp – Left
E7R	License Plate Lamp – Right	—	Rear of the vehicle above the right side of the license plate	• Rear of Vehicle Components (Long Wheelbase Sedan) • Rear of Vehicle Components (Sportwagon) • Rear of Vehicle Components (Ute)	E7R License Plate Lamp – Right
E8D	Door Courtesy Lamp - Driver	C90	At the bottom of the driver door	—	E8D Door Courtesy Lamp – Driver (C90)
E8J	Instrument Panel Courtesy Lamp – Left	U29	In the passenger compartment, below the passenger knee bolster next to the kick panel	Rear of Instrument Panel Components (2 of 2)	E8J Instrument Panel Courtesy Lamp – Left (U29)
E8K	Instrument Panel Courtesy Lamp – Right	U29	In the passenger compartment, below the driver knee bolster next to the kick panel	Rear of Instrument Panel Components (2 of 2)	E8K Instrument Panel Courtesy Lamp – Right (U29)
E8LR	Door Courtesy Lamp – Left Rear	C90	At the bottom of the left rear door	—	E8LR Door Courtesy Lamp – Left Rear (C90)

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Code	Name	Option	Location	Locator View	Connector End View
E8P	Door Courtesy Lamp – Passenger	C90	At the bottom of the passenger door	—	E8P Door Courtesy Lamp – Passenger (C90)
E8RR	Door Courtesy Lamp – Right Rear	C90	At the bottom of the right rear door	Right Rear Door Components (2 of 2)	E8RR Door Courtesy Lamp – Right Rear (C90)
E8S	Rear Compartment Courtesy Lamp	—	At the rear of the vehicle, inside the rear compartment, forward of opening	Left Rear of the Passenger Compartment Components (Long Wheelbase Sedan)	• E8S Rear Compartment Courtesy Lamp X1 (F19/F35/F69) • E8S Rear Compartment Courtesy Lamp X2 (F19/F35/F69) • E8S Rear Compartment Courtesy Lamp (F80 with E95)
E13L	Headlamp – Left	—	Front left side of the vehicle, left headlamp assembly	• Front of Vehicle Components (Short Wheelbase Sedan, Sportwagon or Ute) • Front of Vehicle Components (Long Wheelbase Sedan)	E13L Headlamp - Left
E13R	Headlamp – Right	—	Front right side of the vehicle, right headlamp assembly	• Front of Vehicle Components (Short Wheelbase Sedan, Sportwagon or Ute) • Front of Vehicle Components (Long Wheelbase Sedan)	E13R Headlamp - Right
E18	Rear Defogger Grid	—	On the rear window, inside on the glass	• Rear of Vehicle Components (Long Wheelbase Sedan) • Rear of Vehicle Components (Sportwagon) • Rear of Vehicle Components (Ute)	• E18 Rear Defogger Grid X1 (F19/F69) • E18 Rear Defogger Grid X1 (F35/F80) • E18 Rear Defogger Grid X2 (F19/F69) • E18 Rear Defogger Grid X2 (F35/F80)

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Code	Name	Option	Location	Locator View	Connector End View
E27	Instrument Panel Compartment Lamp	U27	In the passenger compartment, inside the instrument panel compartment	—	E27 Instrument Panel Compartment Lamp (U27)
E29LF	Fog Lamp – Left Front	—	Lower left front of the vehicle, below the left headlamp	Front of Vehicle Components (Short Wheelbase Sedan, Sportwagon or Ute)	• E29LF Fog Lamp – Left Front (F19/VB5 with T3U) • E29LF Fog Lamp – Left Front (F69 with T3U)
E29R	Fog Lamp – Rear	—	Lower rear of the vehicle in the rear fascia	—	E29R Fog Lamp – Rear (T79)
E29RF	Fog Lamp – Right Front	—	Lower right front of the vehicle below the right headlamp	Front of Vehicle Components (Short Wheelbase Sedan, Sportwagon or Ute)	• E29RF Fog Lamp – Right Front (F19/VB5 with T3U) • E29RF Fog Lamp – Right Front (F69 with T3U)
E33L	Cargo Lamp – Left	U25	In the passenger compartment rear of the left B Pillar	Left Rear of the Passenger Compartment Components (Ute)	E33L Cargo Lamp – Left (U25)
E33R	Cargo Lamp – Right	U25	In the passenger compartment rear of the right B Pillar	Right Rear of the Passenger Compartment Components (Ute)	E33R Cargo Lamp – Right (U25)
E37F	Dome/Reading Lamps – Front	– C74	In the passenger compartment, center front of the headliner	—	E37F Dome/Reading Lamps - Front (-C74)
		C74	In the passenger compartment, center front of the headliner	—	E37F Dome/Reading Lamps – Front (C74-TVR)
E37R	Dome/Reading Lamps – Rear	—	In the passenger compartment, center rear of the headliner	—	E37R Dome/Reading Lamps - Rear
E42L	Tail Lamp Left	—	Left Rear of Vehicle	• Rear of Vehicle Components (Long Wheelbase Sedan) • Rear of Vehicle Components (Sportwagon) • Rear of Vehicle	• E42L Tail Lamp Assembly - Left (F19) • E42L Tail Lamp Assembly - Left (F35) • E42L Tail Lamp Assembly - Left (F69) • E42L Tail Lamp Assembly - Left (F80)

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Code	Name	Option	Location	Locator View	Connector End View
				Components (Ute)	
E42R	Tail Lamp Right	—	Right Rear of Vehicle	• Rear of Vehicle Components (Long Wheelbase Sedan) • Rear of Vehicle Components (Sportwagon) • Rear of Vehicle Components (Ute)	• E42R Tail Lamp Assembly - Right (F19) • E42R Tail Lamp Assembly - Right (F35) • E42R Tail Lamp Assembly - Right (F69) • E42R Tail Lamp Assembly - Right (F80)
E57L	Driving Lamp – Left	—	Lower left front of the vehicle, below the left headlamp	—	E57L Driving Lamp – Left (V5B)
E57R	Driving Lamp – Right	—	Lower right front of the vehicle below the right headlamp	—	E57R Driving Lamp – Right (V5B)
F101	Passenger Instrument Panel Air Bag	—	In the passenger compartment, right side of the instrument panel above the instrument panel compartment	Front of Instrument Panel Components (1 of 3)	F101 Passenger Instrument Panel Air Bag
F105L	Roof Rail Air Bag – Left	—	In the passenger compartment, on the left side roof rail, above the B-pillar	Left Rear of the Passenger Compartment Components (Ute)	F105L Roof Rail Air Bag - Left
F105R	Roof Rail Air Bag – Right	—	In the passenger compartment, on the right side roof rail, above the B-pillar	Right Rear of the Passenger Compartment Components (Short Wheelbase Sedan)	F105R Roof Rail Air Bag - Right
F106LF	Seat Air Bag – Left Front	—	In the passenger compartment, on the left side of the driver seat back	—	F106LF Seat Air Bag - Left Front
F106RF	Seat Air Bag – Right Front	—	In the passenger compartment, on the right side of the	—	F106RF Seat Air Bag - Right Front

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Code	Name	Option	Location	Locator View	Connector End View
			passenger seat back		
F107	Steering Wheel Air Bag	—	In the passenger compartment, in the center of the steering wheel	—	• F107 Steering Wheel Air Bag X1 • F107 Steering Wheel Air Bag X2
F109D	Seat Belt Buckle Pretensioner – Driver	—	In the passenger compartment at the base of the driver seat belt	—	• F109D Seat Belt Buckle Pretensioner – Driver X1 • F109D Seat Belt Buckle Pretensioner – Driver X2
F109P	Seat Belt Buckle Pretensioner – Passenger	—	In the passenger compartment at the base of the passenger seat belt	—	• F109P Seat Belt Buckle Pretensioner – Passenger X1 (UEN) • F109P Seat Belt Buckle Pretensioner – Passenger X2
G1	A/C Compressor	—	Right side of the engine compartment mounted on the A/C line near the accumulator	• Rear of Engine Components (L77 or LS3) • Right Rear of Engine Components (LSA)	G1 A/C Compressor
G10L	Cooling Fan Motor – Left	—	In the engine compartment, behind the left side of the radiator	—	G10L Cooling Fan Motor – Left
G10R	Cooling Fan Motor – Right	—	In the engine compartment, behind the right side of the radiator	—	G10R Cooling Fan Motor – Right
G13	Generator	L77/LS3/LSA	In the engine compartment, lower front left side of the engine	• Front of Engine Components (L77 or LS3) • Left Side of Engine Components (LSA)	G13 Generator
G13	Generator	LFX	In the engine compartment, lower front right side of the engine	Front of Engine Components (L77 or LS3)	G13 Generator
G16	Headlamp Washer Pump	—	In the engine compartment, at the right end of the	Front Fascia Components (Long Wheelbase Sedan)	G16 Headlamp Washer Pump (T3T)

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Code	Name	Option	Location	Locator View	Connector End View
			washer fluid reservoir		
G18	High Pressure Fuel Pump	LFW/LFX	In the engine compartment, attached to the fuel rail, at the top left rear of the left cylinder head	—	G18 High Pressure Fuel Pump (LFW/LFX)
G19	Rear Window Washer Pump	F35	In the engine compartment, at the right end of the washer fluid reservoir	Front Fascia Components (Sportwagon)	G19 Rear Window Washer Pump (F35)
G24	Windshield Washer Pump	—	In the engine compartment, at the right end of the washer fluid reservoir	Front Fascia Components (Long Wheelbase Sedan)	G24 Windshield Washer Pump
G40	LPG Pump	—	Under the vehicle at the LPG Tank	—	G40 LPG Pump (LWR)
K8	Blower Motor Control Module	—	In the passenger compartment, on the center front of the HVAC unit, left of the blower motor	Front of HVAC Module Components	• K8 Blower Motor Control Module X1 • K8 Blower Motor Control Module X2
K9	Body Control Module	—	In the passenger compartment, lower left side of instrument panel above the accelerator pedal	Right Front of the Passenger Compartment Components	• K9 Body Control Module X1 • K9 Body Control Module X2 • K9 Body Control Module X3 • K9 Body Control Module X4 • K9 Body Control Module X5 • K9 Body Control Module X6 • K9 Body Control Module X7
K17	Electronic Brake Control Module	—	In the engine compartment, right of the engine, mounted to the right strut tower	Right Side of Engine Compartment Components (LFW, LFX or LWR)	K17 Electronic Brake Control Module
K19	Suspension Control Module	—	—	—	K19 Suspension Control Module (F55)
K20	Engine Control Module	LFW/LFX/LWR	In the engine compartment, right of the engine, beneath the	Right Side of Engine Compartment Components (LFW, LFX or LWR)	• K20 Engine Control Module X1 (LFW/LFX/LWR)

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Code	Name	Option	Location	Locator View	Connector End View
			underhood fuse block		• K20 Engine Control Module X2 (LFW/LFX/LWR) • K20 Engine Control Module X3 (LFW/LFX/LWR)
		L77/LS3		Right Side of Engine Compartment Components (L77 or LS3)	• K20 Engine Control Module X1 (L77/LS3) • K20 Engine Control Module X2 (L77/LS3)
		LSA		Right Side of Engine Compartment Components (LSA)	• K20 Engine Control Module X1 (LSA) • K20 Engine Control Module X2 (LSA) • K20 Engine Control Module X3 (LSA)
K22	Cooling Fan Control Module	—	In the engine compartment attached to the cooling fan shroud	—	• K22 Cooling Fan Control Module X1 • K22 Cooling Fan Control Module X2 • K22 Cooling Fan Control Module X3
K28	Headlamp Leveling Control Module	T3T	—	Right Rear of the Passenger Compartment Components (Long Wheelbase Sedan)	K28 Headlamp Leveling Control Module (T3T)
K29	Seat Heating Control Module	KA1	In the passenger compartment under the driver seat	—	• K29 Seat Heating Control Module X1 (KA1) • K29 Seat Heating Control Module X2 (KA1)
K33	HVAC Control Module	—	In the passenger compartment, on the right side of the HVAC unit	Front of HVAC Module Components	• K33 HVAC Control Module X1 • K33 HVAC Control Module X2 • K33 HVAC Control Module X3 • K33 HVAC Control Module X4
K36	Inflatable Restraint Sensing and Diagnostic Module	—	In the passenger compartment, under the center console	• Right Rear of the Passenger Compartment Components (Short Wheelbase Sedan) • Right Side of the Luggage Compartment Components (Sportwagon)	• K36 Inflatable Restraint Sensing and Diagnostic Module X1 • K36 Inflatable Restraint Sensing and Diagnostic Module X2

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Code	Name	Option	Location	Locator View	Connector End View
				• Right Rear of the Passenger Compartment Components (Ute)	
K38	Chassis Control Module	—	In the left rear of the luggage compartment	• Left Side of the Luggage Compartment Components (Short Wheelbase Sedan) • Left Side of the Luggage Compartment Components (Sportwagon) • Right Rear of the Passenger Compartment Components (Ute)	K38 Chassis Control Module (L77/LS3/LSA/LWR)
K39	Liftgate Control Module	—	At the rear of the vehicle in the liftgate	Liftgate Components (Sportwagon)	• K39 Liftgate Control Module X1 • K39 Liftgate Control Module X2
K40	Seat Memory Control Module	A45	In the passenger compartment under the driver seat	—	• K40 Seat Memory Control Module X1 (A45) • K40 Seat Memory Control Module X2 (A45) • K40 Seat Memory Control Module X3 (A45) • K40 Seat Memory Control Module X5 (A45) • K40 Seat Memory Control Module X6 (A45)
K41	Parking Assist Control Module	—	In the passenger compartment on the rear parcel shelf (Sedan)/cab back panel (Ute),	Right Rear of the Passenger Compartment Components (Ute)	• K41 Parking Assist Control Module X1 (UD7/UFQ) • K41 Parking Assist Control Module X2 (UD7/UFQ) • K41 Parking Assist Control Module X3 (UD7/UFQ)
K43	Power Steering Control Module	—	Under the vehicle, on the steering shaft	—	• K43 Power Steering Control Module X1 • K43 Power Steering Control Module X2 • K43 Power Steering Control Module X3

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Code	Name	Option	Location	Locator View	Connector End View
K46	Radio Antenna Module	F19	In the passenger compartment, on the right side in the C-pillar	Right Rear of the Passenger Compartment Components (Long Wheelbase Sedan)	K46 Radio Antenna Module X4
		F35	In the rear of the vehicle, at the top of the liftgate	Liftgate Components (Sportwagon)	
		F69	In the passenger compartment, on the right side in the C-pillar	Right Rear of the Passenger Compartment Components (Short Wheelbase Sedan)	
		F80	In the passenger compartment, on the left side in the B-pillar	Left Rear of the Passenger Compartment Components (Ute)	
K60	Steering Column Lock Module	ULS	In the passenger compartment, mounted to bottom of the steering column, near ignition lock cylinder	Steering Wheel/Column Components (2 of 2)	K60 Steering Column Lock Module (ULS)
K71	Transmission Control Module	—	In the engine compartment, part of the control solenoid valve assembly, mounted to the valve body inside the transmission	Automatic Transmission Components (MYA, MYC or MYD)	K71 Transmission Control Module (MYA/MYC/MYD)
K77	Remote Control Door Lock Receiver	F19	In the passenger compartment on the rear parcel shelf	Right Rear of the Passenger Compartment Components (Long Wheelbase Sedan)	• K77 Remote Control Door Lock Receiver X1 • K77 Remote Control Door Lock Receiver X2
		F35	In the rear of the vehicle, at the top of the liftgate	Liftgate Components (Sportwagon)	
		F69	In the passenger compartment on the rear parcel shelf	Right Rear of the Passenger Compartment Components (Short Wheelbase Sedan)	
		F80	In the passenger compartment, on the left side in the B-pillar	Left Rear of the Passenger Compartment Components (Ute)	
K83		J77	—		

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Code	Name	Option	Location	Locator View	Connector End View
	Parking Brake Control Module			Rear Axle Components	K83 Parking Brake Control Module (J77)
K84	Keyless Entry Control Module	—	In the passenger compartment on the rear parcel shelf	Left Rear of the Passenger Compartment Components (Long Wheelbase Sedan)	• K84 Keyless Entry Control Module X1 (ULS/BTM) • K84 Keyless Entry Control Module X2 (BTM) • K84 Keyless Entry Control Module X4 (ATH)
K89	Immobilizer Control Module	– BTM	In the passenger compartment, mounted to bottom of the steering column, near ignition lock cylinder	Steering Wheel/Column Components (1 of 2)	K89 Immobilizer Control Module
		BTM	In the passenger compartment, mounted at the rear of the center console	Center Console Components	
K96	Mirror Control Module	—	In the passenger compartment under the driver seat	—	K96 Mirror Control Module (DM7/DR3)
K101	Trailer Interface Control Module	—	In the luggage compartment beside the battery	Left Rear of the Passenger Compartment Components (Ute)	• K101 Trailer Interface Control Module X1 • K101 Trailer Interface Control Module X2
K103	Fuel Injector Control Module	—	—	Front of Instrument Panel Components (1 of 3)	• K103 Fuel Injector Control Module X1 (LWR) • K103 Fuel Injector Control Module X2 (LWR)
K111	Fuel Pump Driver Control Module	—	In the rear compartment, on the left side under the battery	Left Side of the Luggage Compartment Components (Sedan with LFW or LFX)	K111 Fuel Pump Driver Control Module (LFW/LFX)
K116	Auxiliary Display Control Module	—	—	—	• K116 Auxiliary Display Control Module X1 (BUJ) • K116 Auxiliary Display Control Module X2 (BUJ)
M6B		C63	In the passenger	—	

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Code	Name	Option	Location	Locator View	Connector End View
	Air Temperature Door Actuator – Auxiliary		compartment, part of the HVAC unit under the instrument panel		M6B Air Temperature Door Actuator – Auxiliary (C63)
M6L	Air Temperature Door Actuator – Left	—	In the passenger compartment, on the left side of the HVAC unit under the instrument panel	—	—
M6R	Air Temperature Door Actuator – Right	—	In the passenger compartment, on the right side of the HVAC unit under the instrument panel	—	—
M8	Blower Motor	—	In the passenger compartment, under the instrument panel on the right side	Front of HVAC Module Components	M8 Blower Motor
M9	Brake Booster Pump Motor	LFW/LFX/LWR	In the engine compartment, on the front of the left cylinder head	—	M9 Brake Booster Pump Motor (LFW/LFX/LWR)
M10	Charge Air Cooler Coolant Pump	—	In the engine compartment, on the front of the left cylinder head	—	M10 Charge Air Cooler Coolant Pump (LSA)
M14B	Door Lock Actuator - Liftgate	—	At the rear of the vehicle in the liftgate	Liftgate Components (Sportwagon)	M14B Door Lock Actuator - Liftgate
M29L	Headlamp Leveling Actuator – Left	—	In E13L Headlamp Left	—	—
M29R	Headlamp Leveling Actuator – Right	—	In E13R Headlamp Right	—	—
M37B	Mode Door Actuator – Auxiliary	—	In the passenger compartment, part of the HVAC unit under the I/P	—	M37B Mode Door Actuator – Auxiliary (C63)
M37L	Mode Door Actuator – Left	—	In the passenger compartment, part of the HVAC unit under the I/P	—	—

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Code	Name	Option	Location	Locator View	Connector End View
M37R	Mode Door Actuator – Right	—	In the passenger compartment, part of the HVAC unit under the I/P	—	—
M40	Rear Compartment Lid Latch	—	At the rear of vehicle, mounted to backside of rear compartment aperture	Right Side of the Luggage Compartment Components (Short Wheelbase Sedan with UQG)	M40 Rear Compartment Lid Latch
M45	Rear Wiper Motor	—	In the rear of the vehicle, in the center of the liftgate	Liftgate Components (Sportwagon)	M45 Rear Wiper Motor
M46	Air Recirculation Door Actuator	—	In the passenger compartment, part of the HVAC unit under the instrument panel	—	M46 Air Recirculation Door Actuator
M47	Reverse Inhibit Solenoid Actuator	MER/MG9	Under the vehicle, left rear side of the manual transmission assembly	Manual Transmission Components (MER or MG9)	M47 Reverse Inhibit Solenoid Actuator (MER/MG9)
M50D	Seat Front Vertical Motor – Driver	AH5/A45	In the passenger compartment, under the driver seat	—	M50D Seat Front Vertical Motor – Driver (AH5/A45)
M50P	Seat Front Vertical Motor – Passenger	A6F or AH7	In the passenger compartment, under the passenger seat	—	M50P Seat Front Vertical Motor – Passenger
M51D	Seat Horizontal Motor – Driver	AH5/A45	In the passenger compartment, under the driver seat	—	M51D Seat Horizontal Motor – Driver (AH5/A45)
M51P	Seat Horizontal Motor – Passenger	—	In the passenger compartment, under the passenger seat	—	M51P Seat Horizontal Motor – Passenger
M53D	Seat Lumbar Support Motor – Driver	A45 or AL9	In the driver compartment, inside the driver seat	—	• M53D Seat Lumbar Support Motor – Driver X1 (A45) • M53D Seat Lumbar Support Motor – Driver X2 (A45) • M53D Seat Lumbar Support Motor – Driver (AL9)

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Code	Name	Option	Location	Locator View	Connector End View
M53P	Seat Lumbar Support Motor – Passenger	AT9	In the passenger compartment, inside the passenger seat	—	M53P Seat Lumbar Support Motor – Passenger (AT9)
M55D	Seat Rear Vertical Motor – Driver	AG6	In the passenger compartment, under the driver seat	—	• M55D Seat Rear Vertical Motor – Driver (F19/F35/F69 with AH5/AH6/A45) • M55D Seat Rear Vertical Motor – Driver (F80 with AH6)
M55P	Seat Rear Vertical Motor – Passenger	—	In the passenger compartment, under the passenger seat	—	M55P Seat Rear Vertical Motor – Passenger
M56D	Seat Recline Motor – Driver	AH5/A45	In the passenger compartment, under the driver seat	—	M56D Seat Recline Motor – Driver (AH5/A45)
M56P	Seat Recline Motor – Passenger	AH8	In the passenger compartment, under the passenger seat	—	M56P Seat Recline Motor – Passenger (AH8)
M64	Starter Motor	—	In the engine compartment, lower right rear of the engine	• Right Front of Engine Components (LSA) • Right Side of Engine Components (LWR)	M64 Starter Motor X1
M69	Sunroof Motor	—	In the passenger compartment, above the headliner in front of the sunroof glass	—	M69 Sunroof Motor (CF5)
M74D	Window Motor – Driver	—	Center of the driver door	Driver Door Components (RHD)	• M74D Window Motor - Driver (Express Down) • M74D Window Motor - Driver (Express Up/Down)
M74LR	Window Motor – Left Rear	F19/F35/F69	Center of the left rear door	—	M74LR Window Motor – Left Rear (F19/F35/F69)
M74P	Window Motor – Passenger	—	Center of the passenger door	Left Rear Door Components (1 of 2)	• M74P Window Motor – Passenger (Express Down)

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Code	Name	Option	Location	Locator View	Connector End View
					• M74P Window Motor - Passenger (Express Up/Down)
M74RR	Window Motor – Right Rear	F19/F35/F69	Center of the right rear door	Right Rear Door Components (1 of 2)	M74RR Window Motor – Right Rear (F19/F35/F69)
M75	Windshield Wiper Motor	—	Left front of the windshield in the plenum chamber	Right Side of Engine Compartment Components (LFW, LFX or LWR)	M75 Windshield Wiper Motor
M97	Fuel Door Lock Actuator	—	In the luggage compartment, on the right rear quarter panel	Right Side of the Luggage Compartment Components (Short Wheelbase Sedan with UQA)	M97 Fuel Door Lock Actuator
P12L	Horn – Left	—	Behind the bumper on the front left of the vehicle	Front Fascia Components (Short Wheelbase Sedan or Ute)	P12L Horn – Left
P12R	Horn – Right	—	Behind the bumper on the front right of the vehicle	Front Fascia Components (Long Wheelbase Sedan)	P12R Horn – Right
P16	Instrument Cluster	—	In the passenger compartment, left side of the instrument panel	Front of Instrument Panel Components (1 of 3)	P16 Instrument Cluster
P17	Info Display Module	—	In the passenger compartment, center of the instrument panel	Front of Instrument Panel Components (2 of 3)	• P17 Info Display Module X1 • P17 Info Display Module X2 • P17 Info Display Module X3
P19AA	Speaker – Right Subwoofer	UQA	In the passenger compartment, right side of the rear shelf	Right Rear of the Passenger Compartment Components (Long Wheelbase Sedan)	P19AA Speaker – Right Subwoofer (UQA)
		UQG	In the passenger compartment, right side of the rear shelf	Right Rear of the Passenger Compartment Components (Long Wheelbase Sedan)	P19AA Speaker – Right Subwoofer (UQG)
P19AG	Speaker – Left Front Door	UQA	At the front of the left front door	Left Rear Door Components (1 of 2)	P19AG Speaker – Left Front Door (UQA)
		UQF/UQG	At the front of the left front door	Left Rear Door Components (1 of 2)	P19AG Speaker – Left Front Door (UQF/UQG)
P19AH	Speaker – Right Front Door	UQA	At the front of the right front door	Driver Door Components (RHD)	P19AH Speaker – Right Front Door (UQA)
		UQF/UQG			

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Code	Name	Option	Location	Locator View	Connector End View
			At the front of the right front door	Driver Door Components (RHD)	P19AH Speaker – Right Front Door (UQF/UQG)
P19AL	Speaker – Left Rear Door	UQA	At the front of the left rear door	—	P19AL Speaker – Left Rear Door (UQA)
		UQF/UQG	At the front of the left rear door	—	P19AL Speaker – Left Rear Door (UQF/UQG)
P19AM	Speaker – Right Rear Door	UQA	At the front of the right rear door	Right Rear Door Components (1 of 2)	P19AM Speaker – Right Rear Door (UQA)
		UQF/UQG	At the front of the right rear door	Right Rear Door Components (1 of 2)	P19AM Speaker – Right Rear Door (UQF/UQG)
P19B	Speaker – Center Instrument Panel	UQA	In the passenger compartment in the center of the instrument panel	—	P19B Speaker – Center Instrument Panel (UQA)
P19H	Speaker – Left Front Tweeter	UQA/UQF/UQG	In the passenger compartment, left side of the instrument panel	—	P19H Speaker – Left Front Tweeter (UQA/UQF/UQG)
P19N	Speaker – Left Subwoofer	UQA	In the passenger compartment, left side of the rear shelf	Left Rear of the Passenger Compartment Components (Ute)	P19N Speaker – Left Subwoofer (UQA)
P19N	Speaker – Left Subwoofer	UQG	In the passenger compartment, left side of the rear shelf	Left Rear of the Passenger Compartment Components (Ute)	P19N Speaker – Left Subwoofer (UQG)
P19V	Speaker – Right Front Tweeter	UQA/UQF/UQG	In the passenger compartment, right side of the instrument panel	—	P19V Speaker – Right Front Tweeter (UQA/UQF/UQG)
P22D	Video Display - Driver Seat Headrest	—	In the passenger compartment on the rear of the driver seat headrest	—	• P22D Video Display - Driver Seat Headrest (LHD with UWG) • P22D Video Display - Driver Seat Headrest (RHD with UWG)
P22P	Video Display - Passenger Seat Headrest	—	In the passenger compartment on the rear of the passenger seat headrest	—	• P22P Video Display - Passenger Seat Headrest (LHD with UWG) • P22P Video Display - Passenger Seat

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Code	Name	Option	Location	Locator View	Connector End View
					Headrest (RHD with UWG)
P29	Head-Up Display	UV6	In the passenger compartment, projected onto the windshield	Front of Instrument Panel Components (1 of 3)	P29 Head-Up Display (UV6)
Q2	AC Compressor Clutch	—	In the engine compartment on lower left front of engine	• Right Rear of Engine Components (LSA) • Right Side of Engine Components (LWR)	Q2 A/C Compressor Clutch
Q5	Brake Pressure Modulator	JL9	Part of Brake Pressure Modulator Valve Assembly	—	—
Q6A	Camshaft Position Actuator Solenoid Valve – Bank 1 Exhaust	LFW/LFX/LWR	In the engine compartment, on the right front of the right cylinder head	Front of Engine Components (LFW or LFX)	Q6A Camshaft Position Actuator Solenoid Valve – Bank 1 Exhaust (LFW/LFX/LWR)
Q6B	Camshaft Position Actuator Solenoid Valve – Bank 1 Intake	LFW/LFX/LWR	In the engine compartment, on the left front of the right cylinder head	Front of Engine Components (LWR)	Q6B Camshaft Position Actuator Solenoid Valve – Bank 1 Intake (LFW/LFX/LWR)
Q6C	Camshaft Position Actuator Solenoid Valve – Bank 2 Exhaust	LFW/LFX/LWR	In the engine compartment, on the left front of the left cylinder head	Front of Engine Components (LFW or LFX)	Q6C Camshaft Position Actuator Solenoid Valve – Bank 2 Exhaust (LFW/LFX/LWR)
Q6D	Camshaft Position Actuator Solenoid Valve – Bank 2 Intake	LFW/LFX/LWR	In the engine compartment, on the right front of the left cylinder head	Front of Engine Components (LWR)	Q6D Camshaft Position Actuator Solenoid Valve – Bank 2 Intake (LFW/LFX/LWR)
Q8	Control Solenoid Valve Assembly	—	Part of Transmission valve body and K71 transmission Control Module	—	—
Q12	Evaporative Emission Purge Solenoid Valve	L77/LS3/LSA	In the engine compartment, front right side of the engine, near the throttle body	• Front of Engine Components (L77 or LS3) • Right Front of Engine Components (LSA)	Q12 Evaporative Emission Purge Solenoid Valve (L77/LS3/LSA)

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Code	Name	Option	Location	Locator View	Connector End View
		LFW/LFX	In the engine compartment, front right side of the engine, near the throttle body	Right Rear of Engine Components (LFW or LFX)	Q12 Evaporative Emission Purge Solenoid Valve (LFW/LFX)
Q15	Exhaust Flow Control Valve	—	—	—	M4 Air Inlet Door Actuator (LSA)
Q15L	Exhaust Tail Pipe Flow Control Valve Solenoid – Left	—	—	—	Q15L Exhaust Tail Pipe Flow Control Valve Solenoid – Left (NPP)
Q15R	Exhaust Tail Pipe Flow Control Valve Solenoid – Right	—	—	—	Q15R Exhaust Tail Pipe Flow Control Valve Solenoid – Right (NPP)
Q17A	Fuel Injector 1	—	In the engine compartment, top of the engine, part of the fuel rail above cylinder 1	Top of Engine Components (L77 or LS3)	• Q17A Fuel Injector 1 (L77/LS3) • Q17A Fuel Injector 1 (LFW/LFX) • Q17A Fuel Injector 1 (LSA/LWR)
Q17B	Fuel Injector 2	—	In the engine compartment, top of the engine, part of the fuel rail above cylinder 2	Top of Engine Components (L77 or LS3)	• Q17B Fuel Injector 2 (L77/LS3) • Q17B Fuel Injector 2 (LFW/LFX) • Q17B Fuel Injector 2 (LSA/LWR)
Q17C	Fuel Injector 3	—	In the engine compartment, top of the engine, part of the fuel rail above cylinder 3	Top of Engine Components (L77 or LS3)	• Q17C Fuel Injector 3 (L77/LS3) • Q17C Fuel Injector 3 (LFW/LFX) • Q17C Fuel Injector 3 (LSA/LWR)
Q17D	Fuel Injector 4	—	In the engine compartment, top of the engine, part of the fuel rail above cylinder 4	Top of Engine Components (L77 or LS3)	• Q17D Fuel Injector 4 (L77/LS3) • Q17D Fuel Injector 4 (LFW/LFX) • Q17D Fuel Injector 4 (LSA/LWR)
Q17E	Fuel Injector 5	—	In the engine compartment, top of the engine, part of the fuel rail above cylinder 5	Top of Engine Components (L77 or LS3)	• Q17E Fuel Injector 5 (L77/LS3) • Q17E Fuel Injector 5 (LFW/LFX) • Q17E Fuel Injector 5 (LSA/LWR)
Q17F	Fuel Injector 6	—	In the engine compartment, top of the engine, part of the fuel rail above cylinder 6	Top of Engine Components (L77 or LS3)	• Q17F Fuel Injector 6 (L77/LS3) • Q17F Fuel Injector 6 (LFW/LFX) • Q17F Fuel Injector 6 (LSA/LWR)

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Code	Name	Option	Location	Locator View	Connector End View
Q17G	Fuel Injector 7	—	In the engine compartment, top of the engine, part of the fuel rail above cylinder 7	Top of Engine Components (L77 or LS3)	• Q17G Fuel Injector 7 (L77/LS3) • Q17G Fuel Injector 7 (LSA)
Q17H	Fuel Injector 8	—	In the engine compartment, top of the engine, part of the fuel rail above cylinder 8	Top of Engine Components (L77 or LS3)	• Q17H Fuel Injector 8 (L77/LS3) • Q17H Fuel Injector 8 (LSA)
Q27A	Pressure Control Solenoid Valve — 1	—	Part of Q8 Control Solenoid Valve Assembly	—	—
Q27B	Pressure Control Solenoid Valve — 2	—	Part of Q8 Control Solenoid Valve Assembly	—	—
Q27C	Pressure Control Solenoid Valve — 3	—	Part of Q8 Control Solenoid Valve Assembly	—	—
Q27D	Pressure Control Solenoid Valve — 4	—	Part of Q8 Control Solenoid Valve Assembly	—	—
Q27E	Pressure Control Solenoid Valve — 5	—	Part of Q8 Control Solenoid Valve Assembly	—	—
Q32A	Shift Solenoid Valve — 1	—	Part of Q8 Control Solenoid Valve Assembly	—	—
Q32B	Shift Solenoid Valve — 2	—	Part of Q8 Control Solenoid Valve Assembly	—	—
Q34	Skip Shift Solenoid Actuator	MER/MG9	—	Right Front of Engine Components (LSA)	Q34 Skip Shift Solenoid Actuator (MER/MG9)
Q36	Supercharger Bypass Solenoid Valve	LSA	—	Right Front of Engine Components (LSA)	Q36 Supercharger Bypass Solenoid Valve (LSA)
Q37LF	Shock Absorber Actuator - Left Front	—	Located on the left front shock absorber	—	Q37LF Shock Absorber Actuator - Left Front (F55)
Q37LR	Shock Absorber Actuator - Left Rear	—	Located on the left rear	—	

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Code	Name	Option	Location	Locator View	Connector End View
			shock absorber		Q37LR Shock Absorber Actuator - Left Rear (F55)
Q37RF	Shock Absorber Actuator - Right Front	—	Located on the right front shock absorber	—	Q37RF Shock Absorber Actuator - Right Front (F55)
Q37RR	Shock Absorber Actuator - Right Rear	—	Located on the right rear shock absorber	—	Q37RR Shock Absorber Actuator - Right Rear (F55)
Q38	Throttle Body	L77/LS3/LSA	In the engine compartment, on the front center of the intake manifold	Front of Engine Components (L77 or LS3)	Q38 Throttle Body (L77/LS3/LSA)
		LFW/LFX/LWR	In the engine compartment, on the front center of the intake manifold	Front of Engine Components (LFW or LFX)	Q38 Throttle Body (LFW/LFX/LWR)
Q39	Torque Converter Clutch Pressure Control Solenoid Valve	—	Part of Q8 Control Solenoid Valve Assembly	—	—
Q43	Valve Lifter Oil Manifold Assembly	—	In the engine compartment, top rear of the engine near the intake manifold	Rear of Engine Components (L77 or LS3)	Q43 Valve Lifter Oil Manifold Assembly (L77 with MYC)
Q58F	LPG Cut-Off Solenoid Valve - Front	—	In the rear of the right front wheel arch	Front Right Wheel Arch Components (LWR)	Q58F LPG Cut-Off Solenoid Valve - Front (LWR)
Q58R	LPG Cut-Off Solenoid Valve - Rear	—	Under the rear of the vehicle, at the top of the fuel tank	—	Q58R LPG Cut-Off Solenoid Valve - Rear (LWR)
R6	Data Link Resistor	—	In the luggage compartment, at the upper left side	—	R6 Data Link Resistor
S3	Transmission Shift Lever	—	In the passenger compartment in front of the center console	—	S3 Transmission Shift Lever (MYA/MYC/MYD)
S13D	Door Lock Switch - Driver	—	—	—	S13D Door Lock Switch - Driver
S27	Head-Up Display Switch	—	—	Front of Instrument Panel Components (1 of 3)	S27 Head-Up Display Switch (UV6)
S30	Headlamp Switch	—			S30 Headlamp Switch

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Code	Name	Option	Location	Locator View	Connector End View
			In the passenger compartment, on the instrument panel to the left of the steering wheel	Front of Instrument Panel Components (1 of 3)	
S33	Horn Switch	—	In Passengers compartment, part of drivers SIR Module	—	—
S38	Ignition Mode Switch	—	—	Front of Instrument Panel Components (2 of 3)	S38 Ignition Mode Switch (BTM)
S39	Ignition Switch	—	In the passenger compartment, on the upper steering column at the key cylinder	Steering Wheel/Column Components (1 of 2)	S39 Ignition Switch
S46B	Liftgate Unlatch Switch	F35	—	—	S46B Liftgate Unlatch Switch
S47D	Seat Memory Switch - Driver	—	—	—	S47D Seat Memory Switch - Driver (A45)
S48E	Multifunction Switch – Center Console	UD7/UFQ	In the passenger compartment, next to the hand brake in front of the Shifter Handle (Sport/Off)	Center Console Components	S48E Multi-Function Switch Module - Center Console (UD7/UFQ)
S52	Outside Rearview Mirror Switch	—	—	—	S52 Outside Rearview Mirror Switch
S58B	Rear Compartment Lid Unlatch Switch – Interior	—	In the passenger compartment, left side of the instrument panel compartment	—	S58B Rear Compartment Lid Unlatch Switch – Interior (F19/F69 and F80 with E95)
S64D	Seat Adjuster Switch – Driver	—	In the passenger compartment, on the outboard side of the driver seat	—	• S64D Seat Adjuster Switch – Driver (AH6) • S64D Seat Adjuster Switch – Driver X1 (A45 and RHD) • S64D Seat Adjuster Switch – Driver X1 (A45 and LHD) • S64D Seat Adjuster Switch – Driver X1 (AH5 and LHD) • S64D Seat Adjuster Switch – Driver X1 (AH5 and RHD)

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Code	Name	Option	Location	Locator View	Connector End View
					• S64D Seat Adjuster Switch – Driver X2 (A45/AL9) • S64D Seat Adjuster Switch – Driver X2 (A45/AL9) • S64D Seat Adjuster Switch – Driver X2 (AH5/AL9 and RHD) • S64D Seat Adjuster Switch – Driver X2 (AH5/AL9 and LHD)
S64P	Seat Adjuster Switch – Passenger	—	In the passenger compartment, on the outboard side of the passenger seat	—	• S64P Seat Adjuster Switch – Passenger X1 (AH8 and LHD) • S64P Seat Adjuster Switch – Passenger X1 (AH8 and RHD) • S64P Seat Adjuster Switch – Passenger X2 (AH8/AT9 and LHD) • S64P Seat Adjuster Switch – Passenger X2 (AH8/AT9 and RHD)
S65D	Seat Lumbar Support Switch – Driver	—	In the passenger compartment, on the outboard side of the driver seat	—	S65D Seat Lumbar Support Switch – Driver (AH6 with AL9)
S70L	Steering Wheel Controls Switch – Left	—	In the passenger compartment, in the steering column behind the steering wheel	—	S70L Steering Wheel Controls Switch – Left
S70R	Steering Wheel Controls Switch – Right	—	In the passenger compartment, in the steering column behind the steering wheel	—	S70R Steering Wheel Controls Switch – Right
S72	Sunroof Switch	—	In the passenger compartment, on the overhead console	—	S72 Sunroof Switch (CF5)
S73	Suspension Mode Switch	—	In the center of the instrument panel	—	S73 Suspension Mode Switch (V5B)
S78		—	In the passenger	Steering Wheel/Column	S78 Turn Signal Multifunction Switch

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Code	Name	Option	Location	Locator View	Connector End View
	Turn Signal/Multifunction Switch		compartment, on the left side of the steering column	Components (1 of 2)	
S79D	Window Switch – Driver	—	In the passenger compartment, in drivers Door Trim Panel behind Pull Handle	—	• S79D Window Switch - Driver (Express Down) • S79D Window Switch - Driver (Express Up/Down)
S79LR	Window Switch – Left Rear	—	In front of the door handle on the left rear door	—	S79LR Window Switch – Left Rear
S79P	Window Switch – Passenger	—	On the interior side of the passenger door, mounted to trim panel, near center.	—	• S79P Window Switch - Passenger (Express Down) • S79P Window Switch - Passenger (Express Up/Down without A45) • S79P Window Switch - Passenger X1 (Express Up/Down with A45) • S79P Window Switch - Passenger X2 (Express Up/Down with A45)
S79RR	Window Switch – Right Rear	—	Center of the right rear door	Right Rear Door Components (2 of 2)	S79RR Window Switch – Right Rear
S82	Windshield Wiper/Washer Switch	—	In the passenger compartment, right side of the steering column	Steering Wheel/Column Components (2 of 2)	S82 Windshield Wiper/Washer Switch
S91	Park Brake Control Switch	—	In the center of the instrument panel	Center Console Components	S91 Park Brake Control Switch (J77)
T3	Audio Amplifier	—	In the luggage compartment, on the left side, in front of the battery	Right Side of the Luggage Compartment Components (Short Wheelbase Sedan with UQG)	• T3 Audio Amplifier X1 (UQA) • T3 Audio Amplifier X1 (UQG) • T3 Audio Amplifier X2 (UQA) • T3 Audio Amplifier X1 (UQG) • T3 Audio Amplifier X3 (UQA)
T4M	Antenna — Radio	—	Center rear of Roof Panel.	Front of Vehicle Components (Long Wheelbase Sedan)	T4M Radio Antenna
T4P	Navigation Antenna	—	In the passenger		T4P Navigation Antenna

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Code	Name	Option	Location	Locator View	Connector End View
			compartment on the upper c pillar	Rear of Vehicle Components (Sportwagon)	
T8A	Ignition Coil 1	L77/LS3	In the engine compartment, left side of the engine, mounted to the rocker cover above the cylinder 1	Top of Engine Components (L77 or LS3)	• T8A Ignition Coil 1 (L77/LS3) • T8A Ignition Coil 1 (LSA)
		LFW/LFX/LWR		• Right Rear of Engine Components (LFW or LFX) • Rear of Engine Components (LWR)	T8A Ignition Coil 1 (LFW/LFX/LWR)
T8B	Ignition Coil 2	L77/LS3/LSA	In the engine compartment, right side of the engine, mounted to the rocker cover above cylinder 2	Top of Engine Components (L77 or LS3)	• T8B Ignition Coil 2 (L77/LS3) • T8B Ignition Coil 2 (LSA)
		LFW/LFX/LWR		• Left Rear of Engine Components (LFW or LFX) • Right Side of Engine Components (LWR)	T8B Ignition Coil 2 (LFW/LFX/LWR)
T8C	Ignition Coil 3	L77/LS3/LSA	In the engine compartment, left side of the engine, mounted to the rocker cover above cylinder 3	Top of Engine Components (L77 or LS3)	• T8C Ignition Coil 3 (L77/LS3) • T8C Ignition Coil 3 (LSA)
		LFW/LFX/LWR		• Right Rear of Engine Components (LFW or LFX) • Rear of Engine Components (LWR)	T8C Ignition Coil 3 (LFW/LFX/LWR)
T8D	Ignition Coil 4	L77/LS3/LSA	In the engine compartment, right side of the engine, mounted to the rocker cover above cylinder 4	Top of Engine Components (L77 or LS3)	• T8D Ignition Coil 4 (L77/LS3) • T8D Ignition Coil 4 (LSA)
		LFW/LFX/LWR		• Left Rear of Engine Components (LFW or LFX) • Right Side of Engine Components (LWR)	T8D Ignition Coil 4 (LFW/LFX/LWR)
T8E	Ignition Coil 5	L77/LS3			

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Code	Name	Option	Location	Locator View	Connector End View
			In the engine compartment, left side of the engine, mounted to the rocker cover above cylinder 5	Top of Engine Components (L77 or LS3)	• T8E Ignition Coil 5 (L77/LS3) • T8E Ignition Coil 5 (LSA)
		LFW/LFX/LWR		• Right Rear of Engine Components (LFW or LFX) • Rear of Engine Components (LWR)	T8E Ignition Coil 5 (LFW/LFX/LWR)
T8F	Ignition Coil 6	L77/LS3/LSA	In the engine compartment, right side of the engine, mounted to the rocker cover above cylinder 6	Top of Engine Components (L77 or LS3)	• T8F Ignition Coil 6 (L77/LS3) • T8F Ignition Coil 6 (LSA)
		LFW/LFX/LWR		• Left Rear of Engine Components (LFW or LFX) • Right Side of Engine Components (LWR)	T8F Ignition Coil 6 (LFW/LFX/LWR)
T8G	Ignition Coil 7	L77/LS3/LSA	In the engine compartment, left side of the engine, mounted to the rocker cover above cylinder 7	Top of Engine Components (L77 or LS3)	• T8G Ignition Coil 7 (L77/LS3) • T8G Ignition Coil 7 (LSA)
T8H	Ignition Coil 8	L77/LS3/LSA	In the engine compartment, right side of the engine, mounted to the rocker cover above cylinder 8	Top of Engine Components (L77 or LS3)	• T8H Ignition Coil 8 (L77/LS3) • T8H Ignition Coil 8 (LSA)
T10E	Keyless Entry Antenna - Rear Compartment	—	In the rear compartment, in the center of the metal floor pan near the seatback	Right Side of the Luggage Compartment Components (Short Wheelbase Sedan with UQA)	T10E Keyless Entry Antenna - Rear Compartment (BTM)
T10J	Keyless Entry Antenna - Center Console Front	—	In the passenger compartment, in the lower instrument panel near the front of the console	Front of Instrument Panel Components (1 of 3)	T10J Keyless Entry Antenna - Center Console Front (BTM)
T10K	Keyless Entry Antenna - Center Console Rear	—	In the passenger compartment, behind the front seats	Center Console Components	T10K Keyless Entry Antenna - Center Console Rear (BTM)

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Code	Name	Option	Location	Locator View	Connector End View
			near the rear of the console		
T10M	Keyless Entry Antenna - Driver Door Handle	—	On the vehicle exterior, inside the driver door handle	Driver Door Components (RHD)	T10M Keyless Entry Antenna - Driver Door Handle (ATH)
T10N	Keyless Entry Antenna - Passenger Door Handle	—	On the vehicle exterior, inside the passenger door handle	Left Rear Door Components (1 of 2)	T10N Keyless Entry Antenna - Passenger Door Handle (ATH)
T10P	Keyless Entry Antenna - Rear Cargo Door Handle	F35	On the vehicle exterior, inside the liftgate handle	—	T10P Keyless Entry Antenna - Rear Cargo Door Handle (ATH)
T12	Automatic Transmission Assembly	—	In the engine compartment, at the rear of the transmission assembly, under the vehicle	—	—
T17	LPG Vaporizer	—	In the rear of the right front wheel arch	Front Right Wheel Arch Components (LWR)	T17 LPG Vaporizer (LWR)
U1	Battery Isolator	—	In the Luggage Compartment on right side between Auxiliary Battery and Fuse Block	—	U1 Battery Isolator (9C1)
X50A	Fuse Block - Underhood	—	In the engine compartment, at the right front side	• Right Side of Engine Compartment Components (L77 or LS3) • Right Side of Engine Compartment Components (LFW, LFX or LWR) • Engine Harness Routing - Front of Engine (RHD with LWR)	• X50A Fuse Block - Underhood X1 • X50A Fuse Block - Underhood X2 • X50A Fuse Block - Underhood X3 • X50A Fuse Block - Underhood X4 • X50A Fuse Block - Underhood X5
X50D	Fuse Block— Battery	—	In the left rear of the luggage compartment, above the battery	—	X50D Fuse Block - Battery X6
X50E	Fuse Block – Battery Auxiliary	—	In the right rear of the luggage compartment, above the	—	—

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Code	Name	Option	Location	Locator View	Connector End View
			auxiliary battery		
X51A	Fuse Block – Instrument Panel	—	In the passenger compartment, behind the left kick panel	Rear of Instrument Panel Components (1 of 2)	X51A Fuse Block - Instrument Panel X1
X53A	Fuse Block – Rear Body	—	In the luggage compartment, at the left side above the battery	• Left Side of the Luggage Compartment Components (Short Wheelbase Sedan) • Left Side of the Luggage Compartment Components (Long Wheelbase Sedan) • Left Side of the Luggage Compartment Components (Sedan with LFW or LFX) • Left Side of the Luggage Compartment Components (Sportwagon)	• X53A Fuse Block - Rear Body X1 • X53A Fuse Block - Rear Body X2 • X53A Fuse Block - Rear Body X3 • X53A Fuse Block - Rear Body X4
X55J	Fuse Holder — Generator	—	In the Engine Compartment between the Generator and X60B Juction Block — Battery	—	—
X60B	Junction Block – Battery Cable	—	—	—	—
X63A	Junction Block — Rear Body	—	In Luggage Compartment at right rear, above X53A Fuse Block	—	—
X80C	Accessory Power Receptacle – Cargo	—	In the passenger compartment, at the right of the cargo area	—	X80C Accessory Power Receptacle – Cargo (F35)
X80F	Accessory Power Receptacle – Front	—	In the passenger compartment, at the front of the center console	Center Console Components	X80F Accessory Power Receptacle – Front
X80H	Accessory Power Receptacle – Center Console	—	In the passenger compartment, inside the center console	Center Console Components	X80H Accessory Power Receptacle – Center Console

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Code	Name	Option	Location	Locator View	Connector End View
X80R	Accessory Power Receptacle – Rear Compartment	—	In the passenger compartment, at the right of the luggage compartment	Right Side of the Luggage Compartment Components (Long Wheelbase Sedan)	X80R Accessory Power Receptacle – Rear Compartment (F19)
X82	Audio/Video Input Adapter	—	In the passenger compartment, inside the center console	Center Console Components	X82 Audio/Video Input Adapter (UWG)
X83	Auxiliary Audio Input	—	In the passenger compartment, inside the center console	Center Console Components	X83 Auxiliary Audio Input (USR) X1
X84	Data Link Connector	—	In the passenger compartment, on the bottom of the instrument panel, under the steering column	Rear of Instrument Panel Components (1 of 2)	X84 Data Link Connector
X85	Steering Wheel Air Bag Coil	—	In the passenger compartment, in the steering column behind the steering wheel	Steering Wheel/Column Components (1 of 2)	• X85 Steering Wheel Air Bag Coil X1 • X85 Steering Wheel Air Bag Coil X2 • X85 Steering Wheel Air Bag Coil X3
X88	Trailer Connector	—	On the vehicle exterior, at the rear of the vehicle, below the fascia	—	X88 Trailer Connector (RZW)
X92	USB Receptacle	—	In the passenger compartment, under the center of instrument panel, in front of the shifter	—	—
X100	Front Fascia Harness to Body/Body Front Harness	V5B	—	Front Fascia Harness Routing (except Long Wheelbase Sedan)	X100 Front Fascia Harness to Body Harness
X110	Engine Harness to Body Harness	LFW/LFX/L77	—	Right Side of Engine Compartment Harness Routing (LWR) - (1 of 2)	X110 Engine Harness to Body Harness
X111	Body Harness to Engine Harness	—	—	Engine Harness Routing - Front of Engine (LSA with MYD)	X111 Body Harness to Engine Harness
X117	Body Front Harness to Body Harness	without F55	—	Right Side of Engine Compartment	X117 Body Front Harness to Body Harness

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Code	Name	Option	Location	Locator View	Connector End View
				Harness Routing (Long Wheelbase Sedan)	
X121	Body Harness to Body Harness	LWR	—	Right Side of Engine Compartment Harness Routing (LWR) - (1 of 2)	X121 Body Harness to Body Harness
X122	Left Front Suspension Jumper Harness to Body Front Harness	F55	—	Front of Engine Compartment Harness Routing (HSV)	X122 Left Front Suspension Jumper Harness to Body Front Harness
X123	Right Front Suspension Jumper Harness to Body Harness	F55	—	Right Side of Engine Compartment Harness Routing (Short Wheelbase Sedan)	X123 Right Front Suspension Jumper Harness to Body Harness
X126	Forward Lamp Harness to Body Harness	—	—	Right Side of Engine Compartment Harness Routing (Short Wheelbase Sedan)	X126 Forward Lamp Harness to Body Harness
X127	Body Front Harness to Body Harness	F55	—	Right Side of Engine Compartment Harness Routing (Short Wheelbase Sedan)	X127 Body Front Harness to Body Harness
X135	Right Roo Bar Harness to Roo Bar Turn Signal Harness	RWN	—	—	—
X136	Left Roo Bar Harness to Roo Bar Turn Signal Harness	RWN	—	—	—
X140	LPG Fuel Harness to Body Harness	LWR	—	Right Side of Engine Compartment Harness Routing (LWR) - (2 of 2)	X140 LPG Fuel Harness to Body Harness
X160	Engine Harness to Ignition Coil Harness	L77/LS3	—	Engine Harness Routing - Front of Engine (RHD with L77)	X160 Engine Harness to Ignition Coil Harness (L77/LS3)
	Engine Harness to Fuel Injector Harness	LFW/LFX	—	Engine Harness Routing - Rear of Engine (RHD with LFX and MV5)	X160 Engine Harness to Fuel Injector Harness (LFW/LFX)
	Engine Harness to Fuel Injector Harness	LSA	—	Engine Harness Routing - Rear of Engine (LSA with MYD)	X160 Engine Harness to Fuel Injector Harness (LSA)
	Engine Harness to Fuel Injector Harness	LWR	—	Engine Harness Routing - Rear of Engine (RHD with LWR)	X160 Engine Harness to Fuel Injector Harness (LWR)
X161		L77/LS3	—		

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Code	Name	Option	Location	Locator View	Connector End View
	Engine Harness to Ignition Coil Harness			Engine Harness Routing - Front of Engine (RHD with L77)	X161 Engine Harness to Ignition Coil Harness (L77/LS3)
	Engine Harness to Fuel Injector Harness	LFW/LFX	—	Engine Harness Routing - Rear of Engine (RHD with LFX and MV5)	X161 Engine Harness to Fuel Injector Harness (LFW/LFX)
	Engine Harness to Fuel Injector Harness	LSA	—	Engine Harness Routing - Rear of Engine (LSA with MYD)	X161 Engine Harness to Fuel Injector Harness (LSA)
X170	Left Front Outer Object Sensor Harness to Front Fascia Harness	UFQ	—	Front Fascia Harness Routing (except Long Wheelbase Sedan)	X170 Left Front Outer Object Sensor Harness to Front Fascia Harness (UFQ)
X171	Right Front Outer Object Sensor Harness to Front Fascia Harness	UFQ	—	Front Fascia Harness Routing (except Long Wheelbase Sedan)	X171 Right Front Outer Object Sensor Harness to Front Fascia Harness
X205	USB Center Console Harness to Instrument Panel Harness	—	—	Instrument Panel Harness Routing (RHD) (L3-L5)	X205 Instrument Panel Harness to Body Harness
X206	USB Center Console Harness to Instrument Panel Harness	J77	—	Instrument Panel Harness Routing (RHD) (L3-L5)	X206 USB Center Console Harness to Instrument Panel Harness
X207	Instrument Panel Harness to Body Harness	—	—	Instrument Panel Harness Routing (RHD) (L3-L5)	X207 Instrument Panel Harness to Body Harness
X209	Instrument Panel Harness to Body Harness	Left Hand Drive with UQA	—	Right Side of Passenger Compartment Harness Routing (Short Wheelbase Sedan)	X209 Instrument Panel Harness to Body Harness
X213	Instrument Panel Harness to USB Center Console Harness	USR	—	Instrument Panel Harness Routing (RHD) (L3-L5)	—
X215	Instrument Panel Harness to Headliner Harness	UQG	—	Instrument Panel Harness Routing (RHD) (L3-L5)	X215 Instrument Panel Harness to Headliner Harness
X223	Instrument Panel Harness to Instrument Panel Compartment Harness	U23	—	Instrument Panel Harness Routing (RHD) (L1)	X223 Instrument Panel Harness to Instrument Panel Compartment Harness
X234	Instrument Panel Harness to Flashing Back Up Lamp Harness	9C1/9C3	—	Instrument Panel Harness Routing (RHD) (L1)	X234 Police Option Harness to Instrument Panel Harness
X245	Instrument Panel to HSV Switch Harness	V5B	—	Instrument Panel Harness Routing (RHD) (L3-L5)	X245 Instrument Panel Harness to HSV Switch Harness (V5B)
X252	Dealer Option Harness to	—	—		

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Code	Name	Option	Location	Locator View	Connector End View
	Instrument Panel Harness			Instrument Panel Harness Routing (RHD) (L3-L5)	X252 Dealer Option Harness to Instrument Panel Harness
X270	Headlining Harness to Instrument Panel Harness	—	—	Instrument Panel Harness Routing (RHD) (L1)	X270 Headlining Harness to Instrument Panel Harness
X315	Body Harness to Fuel Tank Harness	—	—	Fuel Tank Harness Routing (Short Wheelbase or Sportwagon without LWR)	• X315 Body Harness to Fuel Tank Harness (F19/F35/F69) • X315 Fuel Extension Harness to Fuel Tank Harness (F80)
X319	Fuel Harness to Fuel Pump Assembly Harness	LWR	—	—	X319 Body Harness to Fuel Pump Assembly Harness
X320	Body Harness to Fuel Harness	LWR	—	Fuel Tank Harness Routing (LWR)	X320 Body Harness to Fuel Harness (F19/F35/F69)
X322	Body Harness to Fuel Extension Harness	F80	—	Right Side of Luggage Compartment Harness Routing (Ute) - (1 of 2)	X322 Body Harness to Fuel Harness
X323	Body Harness to Driver Seat Harness	—	—	Lower Right Side of Passenger Compartment Harness Routing	X323 Body Harness to Driver Seat Harness
X324	Body Harness to Passenger Seat Harness	—	—	Left Side of Passenger Compartment Harness Routing (RHD)	X324 Body Harness to Passenger Seat Harness
X330	Rear Axle Harness to Body Harness	T3T	—	Fuel Tank Harness Routing (Long Wheelbase Sedan)	X330 Rear Axle Harness to Body Harness
X341	Police Option Harness to Body Harness	9C1/9C3	—	—	X341 Police Option Harness to Body Harness
X343	Rear Axle Harness to Left Rear Suspension Jumper Harness	F55	—	Rear Axle Harness Routing (HSV)	X343 Rear Axle Harness to Left Rear Suspension Jumper Harness
X344	Rear Axle Harness to Right Rear Suspension Jumper Harness	F55	—	Rear Axle Harness Routing (HSV)	X344 Rear Axle Harness to Right Rear Suspension Jumper Harness
X345	Rear Axle Harness to Body/Fuel Extension Harness	J77	—	Fuel Tank Harness Routing (Short Wheelbase or Sportwagon without LWR)	• X345 Rear Axle Harness to Body Harness (F19/F35/F69) • X345 Rear Axle Harness to Fuel Extension Harness (F80)
X346		F55	—		

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Code	Name	Option	Location	Locator View	Connector End View
	Rear Axle Harness to Body/Fuel Extension Harness			Fuel Tank Harness Routing (Short Wheelbase or Sportwagon without LWR)	• X346 Rear Axle Harness to Body Harness (F19/F35/F69 with F55) • X346 Rear Axle Harness to Fuel Extension Harness (F80 with F55)
X350	Body Front Harness to Body Harness	Left Hand Drive	—	Right Front of Passenger Compartment Harness Routing (LHD)	X350 Body Front Harness to Body Harness (LHD)
X351	Body Front Harness to Body Harness	Left Hand Drive	—	Right Front of Passenger Compartment Harness Routing (LHD)	X351 Body Front Harness to Body Harness (LHD)
X352	Body Front Harness to Body Harness	Left Hand Drive	—	Right Front of Passenger Compartment Harness Routing (LHD)	X352 Body Front Harness to Body Harness (LHD)
X353	Body Front Harness to Body Harness	Left Hand Drive	—	Right Front of Passenger Compartment Harness Routing (LHD)	X353 Body Front Harness to Body Harness (LHD)
X354	Body Front Harness to Body Harness	Left Hand Drive	—	Right Front of Passenger Compartment Harness Routing (LHD)	X354 Body Front Harness to Body Harness (LHD)
X356	Body Front Harness to Body Harness	Left Hand Drive	—	Right Front of Passenger Compartment Harness Routing (LHD)	X356 Body Front Harness to Body Harness (LHD)
X357	Body Front Harness to Body Harness	Left Hand Drive	—	Right Front of Passenger Compartment Harness Routing (LHD)	X357 Body Front Harness to Body Harness (LHD)
X358	Body Front Harness to Body Harness	Left Hand Drive	—	Right Front of Passenger Compartment Harness Routing (LHD)	X358 Body Front Harness to Body Harness (LHD)
X359	Body Front Harness to Body Harness	Left Hand Drive	—	Right Front of Passenger Compartment Harness Routing (LHD)	X359 Body Front Harness to Body Harness (LHD)
X360	Body Harness to Fuel Extension Harness	F80	—	Right Side of Luggage Compartment Harness Routing (Ute) - (1 of 2)	X360 Body Harness to Fuel Extension Harness (F80)
X372		F35	—	Right Side of Luggage	

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Code	Name	Option	Location	Locator View	Connector End View
	Body Harness to Liftgate Extension Harness			Compartment Harness Routing (Sportwagon)	X372 Body Harness to Liftgate Extension Harness (F35)
X377	Body Harness to Fuel Extension Harness	F80	—	Right Side of Luggage Compartment Harness Routing (Ute) - (1 of 2)	X377 Body Harness to Fuel Extension Harness (F80)
X378	Headlining Harness to Antenna Extension Harness	F69	—	—	X378 Headlining Harness to Antenna Extension Harness (F69)
X380	Antenna Extension Harness to Headlining Harness	F19	—	—	X380 Antenna Extension Harness to Headlining Harness (F19)
X381	Body Harness to Headlining Harness	F35	—	Right Side of Luggage Compartment Harness Routing (Sportwagon)	X381 Body Harness to Headlining Harness (F35)
X382	Body Harness to Headlining Harness	F35	—	—	X382 Body Harness to Headlining Harness (F35)
X392	Rain Sensor Harness to Headliner Harness	CE1	—	—	—
X400	Rear Compartment Lid Extension Harness to Body Harness	F69	—	Right Side of Luggage Compartment Harness Routing (Short Wheelbase Sedan)	X400 Rear Compartment Lid Extension Harness to Body Harness
X401	Rear Compartment Lid Harness to Body Harness	F19 with UVC	—	Rear Compartment Lid Harness Routing (Long Wheelbase Sedan)	X401 Rear Compartment Lid Harness to Body Harness (F19)
X402	Rear Prefuse Harness to Body Harness	—	—	Left Side of Luggage Compartment Harness Routing (Short Wheelbase Sedan with L77, LS3, LSA or LWR)	X402 Rear Fuse Block Harness to Body Harness
X406	Body Harness to Suspension Control Module Harness	F55	—	Left Side of Luggage Compartment Harness Routing (Short Wheelbase Sedan with L77, LS3, LSA or LWR)	X406 Body Harness to Suspension Control Module Harness (F55)
X410	Body Harness to Rear Fascia Harness	—	—	• Rear of Vehicle Harness Routing (Short Wheelbase Sedan) • Left Side of Luggage Compartment Harness Routing (Long	X410 Rear Fascia Harness to Body Harness

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Code	Name	Option	Location	Locator View	Connector End View
				Wheelbase Sedan) • Left Side of Luggage Compartment Harness Routing (L3 Sportwagon) • Left Side of Luggage Compartment Harness Routing (Ute)	
X418	Battery Isolator Harness to Battery Isolator Auxiliary Harness	9C1/9C3	—	—	X418 Battery Switch Harness to the Battery Switch Jumper Harness (9C1)
X420	Battery Isolator Harness to Body Harness	9C1/9C3	—	—	—
X421	Tonneau Release Jumper Harness to Body Harness	F80 with E95	—	Right Side of Luggage Compartment Harness Routing (Ute) - (1 of 2)	X421 Tonneau Release Jumper Harness to Body Harness
X425	License Lamp Harness to Rear End Harness	F80	—	Rear of Vehicle Harness Routing (Ute) - (2 of 2)	X425 License Lamp Harness to Rear End Harness
X426	Rearview Camera Extension Harness to Rear End Harness	F80 with UVC	—	Rear of Vehicle Harness Routing (Ute) - (2 of 2)	X426 Rearview Camera Extension Harness to Body Rear End Harness
X430	Left Liftgate Extension Harness to Body Harness	F35	—	Liftgate Harness Routing (Sportwagon)	X430 Left Liftgate Extension Harness to Body Harness
X431	Left Liftgate Extension Harness to Body Harness	F35	—	Liftgate Harness Routing (Sportwagon)	X431 Left Liftgate Extension Harness to Body Harness
X440	Body Harness to Accessory Power Harness	F35	—	Right Side of Luggage Compartment Harness Routing (Sportwagon)	X440 Body Harness to Accessory Power Harness
X451	Body Harness to Body Harness	F80	—	Right Side of Luggage Compartment Harness Routing (Ute) - (1 of 2)	X451 Body Harness to Body Harness (F80)
X456	Body Harness to Battery Isolator Harness	9C1/9C3	—	Left Side of Luggage Compartment (Short Wheelbase Sedan with LFW or LFX)	X456 Body Harness to Battery Isolator Harness
X461	Body Harness to Rear End Harness	F80	—	Rear of Vehicle Harness Routing (Ute) - (2 of 2)	X461 Body Harness to Body Rear End Harness
X462	Body Harness to Trailer Harness	F80 with RZW	—	Left Side of Luggage Compartment	X462 Body Harness to Accessory Trailer Harness (F80+RZW)

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Code	Name	Option	Location	Locator View	Connector End View
				Harness Routing (Ute)	
X463	Body Harness to Trailer Harness	F19/F35/F69 with RZW	—	• Left Side of Luggage Compartment (Short Wheelbase Sedan with LFW or LFX) • Left Side of Luggage Compartment Harness Routing (Long Wheelbase Sedan) • Left Side of Luggage Compartment Harness Routing (L3 Sportwagon)	X463 Body Harness to Accessory Trailer Harness (F19/F35/F69+RZW)
X464	Body Harness to Trailer Harness	F80 without E95	—	—	X464 Body Harness to Accessory Trailer Harness
X488	Rear Fascia Harness to License Lamp Harness	F19	—	Rear of Vehicle Harness Routing (Long Wheelbase Sedan)	X488 Rear Fascia Harness to License Lamp Harness
X498	Trailer Harness to Trailer Brake Harness	F80 with RZW	—	—	X498 Accessory Trailer Harness to Accessory Trailer Brake Harness
X499	Trailer Harness to Trailer Brake Harness	F19/F35/F69 with RZW	—	—	X499 Accessory Trailer Harness to Accessory Trailer Brake Harness (F19/F35/F69)
X500	Driver Door Harness to Body Harness	—	—	Driver Door Harness Routing (RHD)	X500 Driver Door Harness to Body Harness
X505	Driver Door Harness to Driver Door Trim Harness	—	—	Driver Door Harness Routing (RHD)	X505 Driver Door Harness to Driver Door Trim Harness
X600	Front Passenger Door Harness to Body Harness	—	—	Left Side of Passenger Compartment Harness Routing (RHD)	X600 Passenger Door Harness to Body Harness
X605	Passenger Door Harness to Passenger Door Trim Harness	—	—	Passenger Door Harness Routing (RHD)	X605 Passenger Door Harness to Passenger Door Trim Harness
X700	Body Harness to Left Rear Door Harness	except F80	—	Left Rear Door Harness Routing (Short Wheelbase)	X700 Body Harness to Left Rear Door Harness
X800	Body Harness to Right Rear Door Harness	except F80	—	Right Rear Door Harness Routing (Short Wheelbase)	X800 Body Harness to Right Rear Door Harness
X900		F69	—		

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Code	Name	Option	Location	Locator View	Connector End View
	Rear Compartment Lid Extension Harness to Rear Compartment Lid Harness			Rear Compartment Lid Harness Routing (Short Wheelbase Sedan)	X900 Rear Compartment Lid Extension Harness to Rear Compartment Lid Harness (F69)
X925	License Lamp Harness to Left Liftgate Harness	F35	—	Liftgate Harness Routing (Sportwagon)	X925 License Lamp Harness to Left Liftgate Harness
X926	License Lamp Jumper Harness to License Lamp Harness	F80	—	—	X926 License Lamp Jumper Harness to License Lamp Harness
X930	Left Liftgate Extension Harness to Left Liftgate Harness	F35	—	Liftgate Harness Routing (Sportwagon)	X930 Left Liftgate Extension Harness to Left Liftgate Harness (F35)
X932	Left Liftgate Extension Harness to Right Liftgate Harness	F35	—	Liftgate Harness Routing (Sportwagon)	X932 Left Liftgate Extension Harness to Right Liftgate Harness (F35)
X935	Liftgate Control Switch Harness to License Lamp Harness	F35	—	—	—
G100	Engine Ground Harness	—	(CKT 150) In the engine compartment, at the front right edge of the front cylinder head	G100, G107, and G110 (LFW or LFX)	—
G101	Forward Lamp Harness	—	(CKT 550) In the engine compartment behind the left headlamp assembly	G101	—
G102	Forward Lamp Harness	—	(CKT 650) In the engine compartment behind the right headlamp assembly	G102 and G103	—
G103	Engine Ground Harness	—	(CKT 150) In the engine compartment on the ABS bracket	G102 and G103	—
G106	Body Harness	—	(CKT 850) In the engine compartment, right rear, rear of the strut tower	G106 (RHD)	—
G107	Engine Harness	—	(CKT 451) In the engine compartment, at the front right edge of the front cylinder head	G100, G107, and G110 (LFW or LFX)	—

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Code	Name	Option	Location	Locator View	Connector End View
G109	Engine Harness	—	(CKT 250) On the left side of the engine block near the rear face	G109 (LFW or LFX)	—
G110	Engine Harness	—	(CKT 350) On the right side of the engine block near the rear face	G100, G107, and G110 (LFW or LFX)	—
G201	Instrument Panel Harness	—	(CKT 1350) At the end of the instrument panel on the left A-pillar	G201 and G301	—
G202	Instrument Panel Harness	—	(CKT 1450) At the end of the instrument panel on the right A-pillar	G202 and G302	—
G300	Instrument Panel Harness	—	(CKT 1551) In the passenger compartment, on the sensing and diagnostic module bracket	—	—
G301	Body Harness	—	(CKT 2150) At the end of the instrument panel on the left A-pillar	G201 and G301	—
G302	Body Harness	—	(CKT 2250) At the end of the instrument panel on the right A-pillar	G202 and G302	—
G303	Body Harness	F69	(CKT 2350) In the passenger compartment on the rear parcel shelf	G303 (Short Wheelbase Sedan)	—
		F19		G303 (Long Wheelbase Sedan)	—
		F35	(CKT 2350) In the passenger compartment at the base of the left C pillar	G303, G401, G403 (Sportwagon)	—
		F80	(CKT 2350) In the passenger compartment at the middle of the left B pillar	G303 (Ute)	—
G304	Body Harness	F69	CKT 2450) In the passenger compartment on the right rear seat back panel	G304 (Short Wheelbase Sedan)	—
		F19		G304 (Long Wheelbase Sedan)	—
		F35			—

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Code	Name	Option	Location	Locator View	Connector End View
			(CKT 2450) In the passenger compartment at the base of the right C pillar	G304, G402, G406 (Sportwagon)	
		F80	(CKT 2450) In the passenger compartment at the middle of the right B pillar	G304 (Ute)	—
G305	Battery Ground Harness	F80	(CKT 2750) In the passenger compartment on battery positive terminal	G305 (Ute)	—
G401	Battery Ground Harness	F19/F69	(CKT 2550) In the rear compartment on the left of the rear panel	G401 (Sedan)	—
		F35		G303, G401, G403 (Sportwagon)	—
G402	Body Harness	F19/F69	(CKT 2650) In the luggage compartment on the right of the rear panel	G402 (Sedan)	—
		F35		G304, G402, G406 (Sportwagon)	—
G403	Battery Ground Harness	F19/F69	(CKT 2750) In the rear compartment on battery positive terminal	G403 (Sedan)	—
		F35		G303, G401, G403 (Sportwagon)	—
	Rear End Harness	F80	(CKT 1850) In the rear compartment on the right of the rear panel	G403 (Ute)	—
G404	Rear End Harness	F80	(CKT 1950) In the rear compartment on the left of the rear panel	G404 (Ute)	—
G406	Body Harness	F35	(CKT 2850) In the rear compartment at the top of the right D pillar	G304, G402, G406 (Sportwagon)	—
G407	Body Harness	—	(CKT 3250) Underneath the vehicle in front of the right rear axle	G407	—
G901	Liftgate Harness	F35	(CKT 2850) On the left side of the lifgate panel	—	—
J100	Front Accessory Bar Harness	RWN	In the front accessory bar harness	—	—

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Code	Name	Option	Location	Locator View	Connector End View
J101	Front Accessory Bar Harness	RWN	In the front accessory bar harness	—	—
J102	Front Fascia Harness	F35/F69/F80	(CKT 6581) In the front fascia harness approximately 48.6 cm (19.4 in) left of the X100 breakout	**Front Fascia Harness Routing (except Long Wheelbase Sedan)**	—
		F19	(CKT 6581) In the front fascia harness approximately 6.7 cm (2.7 in) left of the B78D Front Object Sensor – Right Middle	**Front Fascia Harness Routing (Long Wheelbase Sedan)**	—
J103	Front Fascia Harness	—	(CKT 650) In the front fascia harness approximately 42.1 cm (16.8 in) left of the X100 breakout	**Front Fascia Harness Routing (except Long Wheelbase Sedan)**	—
J104	Front Fascia Harness	—	(CKT 550) In the front fascia harness approximately 31.5 cm (12.6 in) left of the X100 breakout	**Front Fascia Harness Routing (Long Wheelbase Sedan)**	—
J105	Front Fascia Harness	F35/F69/F80	(CKT 5214) In the front fascia harness approximately 26.6 cm (10.6 in) left of the X100 breakout	**Front Fascia Harness Routing (except Long Wheelbase Sedan)**	—
		F19	(CKT 6581) In the front fascia harness approximately 34.5 cm (13.8 in) left of the B78D Front Object Sensor – Right Middle	**Front Fascia Harness Routing (Long Wheelbase Sedan)**	—
J106	Front Fascia Harness	—	(CKT 359) In the front fascia harness approximately 16 cm (6.4 in) left of the X100 breakout	**Front Fascia Harness Routing (Long Wheelbase Sedan)**	—
J107	Front Fascia Harness	F35/F69/F80	(CKT 2234) In the front fascia harness	**Front Fascia Harness Routing**	—

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Code	Name	Option	Location	Locator View	Connector End View
			approximately 5.6 cm (2.2 in) right of the X171 breakout	(Long Wheelbase Sedan)	
		F19	(CKT 2234) In the front fascia harness approximately 9.8 cm (3.9 in) right of the B78B Front Object Sensor – Right Outer breakout	Front Fascia Harness Routing (Long Wheelbase Sedan)	—
J108	Front Fascia Harness	—	In the front fascia harness	—	—
J109	Forward Lamp Harness	—	(CKT 839) In the forward lamp harness approximately 31.9 cm (12.8 in) right of the B59L Front Impact Sensor - Left breakout	—	—
J110	Forward Lamp Harness	—	(CKT 29) In the forward lamp harness approximately 27.9 cm (11.2 in) left of the B59R Front Impact Sensor - Right breakout	—	—
J111	Forward Lamp Harness	—	In the forward lamp harness	—	—
J114	LPG Harness	LWR	(CKT 339) In the forward lamp harness approximately 15.8 cm (6.3 in) right of the X140 breakout	Right Side of Engine Compartment Harness Routing (LWR) - (2 of 2)	—
J115	Engine Harness	L77/LS3	(CKT 6311) In the engine harness approximately 10.2 cm (4.1 in) before the Q12 Evaporative Emission Purge Solenoid Valve breakout	• Engine Harness Routing - Rear of Engine (RHD with L77) • Engine Harness Routing - Rear of Engine (RHD with LS3)	—
		LFW/LFX	(CKT 6311) In the engine harness approximately	Engine Harness Routing - Front of Engine (RHD with LFW or LFX)	—

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Code	Name	Option	Location	Locator View	Connector End View
			9.9 cm (3.9 in) along the X110 breakout		
		LSA	(CKT 6311) In the engine harness approximately 4 cm (1.6 in) before the Q12 Evaporative Emission Purge Solenoid Valve breakout	Engine Harness Routing - Rear of Engine (LSA with MYD)	—
		LWR	(CKT 6311) In the engine harness approximately 10.8 cm (4.3 in) after the T8C Ignition Coil 3 breakout	Engine Harness Routing - Rear of Engine (RHD with LWR)	—
J116	Engine Harness	L77/LS3	(CKT 439) In the engine harness approximately 3.6 cm (1.4 in) before the Q38 Throttle Body breakout	• Engine Harness Routing - Rear of Engine (RHD with L77) • Engine Harness Routing - Rear of Engine (RHD with LS3)	—
		LSA	(CKT 439) In the engine harness approximately 10.6 cm (4.2 in) after the Q12 Evaporative Emission Purge Solenoid Valve breakout (LSA)	Engine Harness Routing - Rear of Engine (LSA with MYD)	—
J117	Engine Harness	L77/LS3	(CKT 5985) In the engine harness approximately 4.8 cm (1.9 in) before the Q12 Evaporative Emission Purge Solenoid Valve breakout	• Engine Harness Routing - Rear of Engine (RHD with L77) • Engine Harness Routing - Rear of Engine (RHD with LS3)	—
		LFW/LFX	(CKT 5985) In the engine		—

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Code	Name	Option	Location	Locator View	Connector End View
			harness approximately 8 cm (3.2 in) before the B52C Heated Oxygen Sensor - Bank 1 Sensor 1 breakout	• Engine Harness Routing - Rear of Engine (RHD with LFX and MV5) • Engine Harness Routing - Rear of Engine (RHD with LFW or LFX and MYA)	
		LSA	(CKT 5985) In the engine harness approximately 16.1 cm (6.4 in) after the Q12 Evaporative Emission Purge Solenoid Valve breakout	Engine Harness Routing - Rear of Engine (LSA with MYD)	—
		LWR	(CKT 5985) In the engine harness approximately 3.3 cm (1.3 in) after the T8A Ignition Coil 1 breakout	Engine Harness Routing - Rear of Engine (RHD with LWR)	—
		L77/LS3	(CKT 5293) In the engine harness approximately 16.4 cm (6.6 in) before the G110 breakout	• Engine Harness Routing - Front of Engine (RHD with L77) • Engine Harness Routing - Front of Engine (RHD with LS3)	—
J118	Engine Harness	LSA	(CKT 5293) In the engine harness approximately 20.9 cm (8.4 in) after the Q12 Evaporative Emission Purge Solenoid Valve breakout	Engine Harness Routing - Rear of Engine (LSA with MYD)	—
J119	Engine Harness	L77/LS3/LSA	(CKT 5294) In the engine harness approximately 5.1 cm (2 in) before the	• Engine Harness Routing - Rear of Engine (RHD with L77)	—

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Code	Name	Option	Location	Locator View	Connector End View
			G110 breakout	• Engine Harness Routing - Rear of Engine (RHD with LS3) • Engine Harness Routing - Rear of Engine (LSA with MYD)	
J120	Engine Harness	LSA	(CKT 2022) In the engine harness approximately 5.2 cm (2.1 in) along the M10 Charge Air Cooler Coolant Pump breakout	Engine Harness Routing - Front of Engine (LSA with MYD)	—
J121	Engine Harness	LSA	(CKT 451) In the engine harness approximately 10.3 cm (4.1 in) along the M10 Charge Air Cooler Coolant Pump breakout	Engine Harness Routing - Front of Engine (LSA with MYD)	—
		L77/LS3/LSA	(CKT 1840) In the engine harness approximately 18.5 cm (7.4 in) after the B52D Heated Oxygen Sensor - Bank 1 Sensor 2 breakout	• Engine Harness Routing - Rear of Engine (RHD with L77) • Engine Harness Routing - Rear of Engine (LSA with MYD)	—
J122	Engine Harness	LFW/LFX	(CKT 1840) In the engine harness approximately 18.5 cm (7.4 in) before the X111 breakout	Engine Harness Routing - Front of Engine (RHD with LFW or LFX)	—
		LWR	(CKT 1840) In the engine harness approximately 21.1 cm (8.4 in) along the X50A Fuse Block - Underhood X4 breakout	Engine Harness Routing - Front of Engine (RHD with LWR)	—
J123	Engine Harness	L77/LS3	(CKT 5292) In the engine	• Engine Harness	—

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Code	Name	Option	Location	Locator View	Connector End View
			harness approximately 5.5 cm (2.2 in) after the Q17D Fuel Injector 4 breakout	Routing - Front of Engine (RHD with L77) • Engine Harness Routing - Front of Engine (RHD with LS3)	
J124	Engine Harness	L77/LS3	(CKT 5291) In the engine harness approximately 5.7 cm (2.3 in) after the Q17C Fuel Injector 3 breakout	• Engine Harness Routing - Front of Engine (RHD with L77) • Engine Harness Routing - Front of Engine (RHD with LS3)	—
J125	Engine Harness	L77/LS3/LSA	(CKT 451) In the engine harness approximately 10.7 cm (4.3 in) before the K71 Transmission Control Module connector	Engine Harness Routing - Rear of Engine (RHD with L77)	—
		LFW/LFX	(CKT 451) In the engine harness approximately 23.4 cm (9.4 in) before the K71 Transmission Control Module connector	Engine Harness Routing - Rear of Engine (RHD with LFW or LFX and MYA)	—
		LWR	(CKT 451) In the engine harness approximately 25.9 cm (10.7 in) before the K71 Transmission Control Module connector	Engine Harness Routing - Rear of Engine (RHD with LWR)	—
J126	Engine Harness	LFW/LFX	(CKT 2129) In the engine harness approximately 13.4 cm (5.4 in) before the K20 Engine Control Module X2 breakout	Engine Harness Routing - Front of Engine (RHD with LFW or LFX)	—

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Code	Name	Option	Location	Locator View	Connector End View
		LWR	(CKT 2129) In the engine harness approximately 2.5 cm (1 in) after the T8C Ignition Coil 3 breakout (LWR)	Engine Harness Routing - Rear of Engine (RHD with LWR)	—
J127	Engine Harness	LFW/LFX	(CKT 5291) In the engine harness approximately 4 cm (1.6 in) before the Bank 1 breakout reaches the engine	Engine Harness Routing - Rear of Engine (RHD with LFX and MV5)	—
		LWR	(CKT 5291) In the engine harness approximately 6.6 cm (2.6 in) after the T8C Ignition Coil 3 breakout	Engine Harness Routing - Rear of Engine (RHD with LWR)	—
J128	Engine Harness	LFW/LFX	(CKT 6273) In the engine harness approximately 10.8 cm (4.2 in) behind the T8B Ignition Coil 2 breakout (LFW/LFX)	Engine Harness Routing - Front of Engine (RHD with LFW or LFX)	—
		LWR	(CKT 6273) In the engine harness approximately 4.9 cm (2 in) before the B37 Engine Oil Pressure Switch breakout	Engine Harness Routing - Front of Engine (RHD with LWR)	—
J129	Engine Harness	LFW/LFX/LWR	(CKT 5294) In the engine harness approximately 5 cm (2 in) after the T8E Ignition Coil 5 breakout	• Engine Harness Routing - Rear of Engine (RHD with LFX and MV5) • Engine Harness Routing - Rear of Engine (RHD with LWR)	—
J130	Engine Harness	LFW/LFX	(CKT 5293) In the engine harness approximately 7.4 cm (3	Engine Harness Routing - Rear of Engine (RHD with LFX and MV5)	—

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Code	Name	Option	Location	Locator View	Connector End View
			in) before the G18 High Pressure Fuel Pump breakout		
		LWR	(CKT 5293) In the engine harness approximately 5.9 cm (2.4 in) after the G13 Generator breakout	Engine Harness Routing - Rear of Engine (RHD with LWR)	—
J131	Engine Harness	LFW/LFX	(CKT 5292) In the engine harness approximately 14.3 cm (5.7 in) after the G18 High Pressure Fuel Pump breakout	Engine Harness Routing - Rear of Engine (RHD with LFX and MV5)	—
		LWR	(CKT 5292) In the engine harness approximately 3.2 cm (1.3 in) before the Bank 2 Ignition Coil breakout	Engine Harness Routing - Front of Engine (RHD with LWR)	—
J132	Engine Harness	LFW/LFX	(CKT 2130) In the engine harness approximately 19.3 cm (7.7 in) after the G18 High Pressure Fuel Pump breakout	Engine Harness Routing - Rear of Engine (RHD with LFX and MV5)	—
		LWR	(CKT 2130) In the engine harness approximately 8.1 cm (3.2 in) before the G109 breakout	Engine Harness Routing - Front of Engine (RHD with LWR)	—
J134	Body Harness	LWR	(CKT 339) In the body harness approximately 2.7 cm (1 in) before the X50A Fuse Block - Underhood X3	Right Side of Engine Compartment Harness Routing (LWR) - (1 of 2)	—
J135	Body Harness	F19	(CKT 309) In the body harness approximately 13.7 cm (5.5 in) forward of the right	Right Side of Engine Compartment Harness Routing (Long Wheelbase Sedan)	—

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Code	Name	Option	Location	Locator View	Connector End View
			strut tower rear conduit		
		F35/F69	(CKT 309) In the body harness approximately 5.5 cm (2.2 in) forward of the right strut tower rear conduit	Right Side of Engine Compartment Harness Routing (Short Wheelbase Sedan)	—
		F80	(CKT 309) In the body harness approximately 10.1 cm (4 in) after the X126 breakout	—	—
J136	Body Harness	F19/F80	(CKT 850) In the body harness approximately 7.3 cm (2.9 in) along the M75 Windshield Wiper Motor breakout	Right Side of Engine Compartment Harness Routing (Long Wheelbase Sedan)	—
		F35/F69	(CKT 850) In the body harness approximately 6.2 cm (2.5 in) rear of the right strut tower rear conduit	Right Side of Engine Compartment Harness Routing (Short Wheelbase Sedan)	—
J138	Body Front Harness	LHD	(CKT 750) In the body front harness approximately 23.2 cm (9.3 in) forward of the M75 Windshield Wiper Motor breakout	—	—
J139	Body Front Harness	LHD	(CKT 5986) In the body front harness approximately 4.8 cm (2 in) forward of the right strut tower rear conduit	—	—
J140	Fuel Injector Odd Harness	L77/LS3/LSA	On the left side of the engine	—	—
J141	Fuel Injector Even Harness	L77/LS3/LSA	On the right side of the engine	—	—
J142	Fuel Injector Odd Harness	L77/LS3/LSA		—	—

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Code	Name	Option	Location	Locator View	Connector End View
			On the left side of the engine		
J143	Fuel Injector Even Harness	L77/LS3/LSA	On the right side of the engine	—	—
J144	Fuel Injector Odd Harness	L77/LS3/LSA	On the left side of the engine	—	—
J145	Fuel Injector Even Harness	L77/LS3/LSA	On the right side of the engine	—	—
J200	Instrument Panel Harness	—	(CKT 801) In the instrument panel harness approximately 5 cm (2 in) from the bottom of the left A pillar conduit	**Instrument Panel Harness Routing (RHD) (L3-L5)**	—
J201	Instrument Panel Harness	—	(CKT 157) In the instrument panel harness approximately 10.3 cm (4.1 in) from the top of the left A pillar conduit	**Instrument Panel Harness Routing (RHD) (L3-L5)**	—
J202	Instrument Panel Harness	—	(CKT 201) In the instrument panel harness approximately 4.1 cm (1.6 in) right of the left A pillar conduit	**Instrument Panel Harness Routing (RHD) (L3-L5)**	—
J203	Instrument Panel Harness	—	(CKT 118) In the instrument panel harness approximately 9.5 cm (3.8 in) right of the left A pillar conduit	**Instrument Panel Harness Routing (RHD) (L3-L5)**	—
J204	Instrument Panel Harness	—	(CKT 3340) In the instrument panel harness approximately 15.6 cm (6.2 in) left of the F101 Passenger Instrument Panel Air Bag breakout	**Instrument Panel Harness Routing (RHD) (L3-L5)**	—
J205	Instrument Panel Harness	—	(CKT 6815) In the instrument	**Instrument Panel Harness Routing (RHD) (L3-L5)**	—

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Code	Name	Option	Location	Locator View	Connector End View
			panel harness approximately 10.6 cm (4.2 in) left of the F101 Passenger Instrument Panel Air Bag breakout		
J206	Instrument Panel Harness	—	(CKT 6815) In the instrument panel harness approximately 3 cm (1.2 in) right of the F101 Passenger Instrument Panel Air Bag breakout	**Instrument Panel Harness Routing (RHD) (L3-L5)**	—
J207	Instrument Panel Harness	—	(CKT 6105) In the instrument panel harness approximately 2.3 cm (0.9 in) left of the left edge of the left center instrument panel conduit	**Instrument Panel Harness Routing (RHD) (L1)**	—
J208	Instrument Panel Harness	—	(CKT 200) In the instrument panel harness approximately 7.9 cm (3.2 in) left of the right edge of the left center instrument panel conduit	**Instrument Panel Harness Routing (RHD) (L3-L5)**	—
J209	Instrument Panel Harness	—	(CKT 117) In the instrument panel harness approximately 3 cm (1.2 in) left of the right edge of the left center instrument panel conduit	**Instrument Panel Harness Routing (RHD) (L3-L5)**	—
J210	Instrument Panel Harness	—	(CKT 6980) In the instrument panel harness approximately 2.7 cm (1.1 in) left of the X80F Accessory Power Receptacle - Front breakout	**Instrument Panel Harness Routing (RHD) (L3-L5)**	—

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Code	Name	Option	Location	Locator View	Connector End View
J211	Instrument Panel Harness	—	(CKT 1450) In the instrument panel harness approximately 3.4 cm (1.4 in) right of the X80F Accessory Power Receptacle - Front breakout	Instrument Panel Harness Routing (RHD) (L3-L5)	—
J212	Instrument Panel Harness	—	(CKT 1788) In the instrument panel harness approximately 24.1 cm (9.6 in) right of the left edge of the right center instrument panel conduit	Instrument Panel Harness Routing (RHD) (L3-L5)	—
J213	Instrument Panel Harness	—	(CKT 2501) In the instrument panel harness approximately 29.1 cm (11.6 in) right of the left edge of the right center instrument panel conduit	Instrument Panel Harness Routing (RHD) (L3-L5)	—
J214	Instrument Panel Harness	—	(CKT 2500) In the instrument panel harness approximately 18.7 cm (7.5 in) left of the right edge of the right center instrument panel conduit	Instrument Panel Harness Routing (RHD) (L3-L5)	—
J215	Instrument Panel Harness	—	(CKT 5986) In the instrument panel harness approximately 13.7 cm (5.5 in) left of the right edge of the right center instrument panel conduit	Instrument Panel Harness Routing (RHD) (L3-L5)	—
J216	Instrument Panel Harness	—	(CKT 6817) In the instrument panel harness approximately 8.5 cm (3.4 in) left of the right edge	Instrument Panel Harness Routing (RHD) (L3-L5)	—

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Code	Name	Option	Location	Locator View	Connector End View
			of the right center instrument panel conduit		
J217	Instrument Panel Harness	—	(CKT 6816) In the instrument panel harness approximately 4.9 cm (2 in) along the X51A Fuse Block - Instrument Panel breakout	Instrument Panel Harness Routing (RHD) (L3-L5)	—
J218	Instrument Panel Harness	—	(CKT 3240) In the instrument panel harness approximately 13.1 cm (5.2 in) along the X51A Fuse Block - Instrument Panel breakout	Instrument Panel Harness Routing (RHD) (L3-L5)	—
J219	Instrument Panel Harness	—	(CKT 7556) In the instrument panel harness approximately 8.3 cm (3.3 in) right of the K9 Body Control Module X3 breakout	Instrument Panel Harness Routing (RHD) (L3-L5)	—
J220	Body Harness	—	(CKT 6189) In the instrument panel harness approximately 8.3 cm (3.3 in) rear of the Front Compartment breakout	Right Side of Passenger Compartment Harness Routing (Short Wheelbase Sedan)	—
J221	Body Harness	F19	(CKT 1334) In the body harness approximately 10 cm (4 in) forward of the X209 breakout	Right Side of Passenger Compartment Harness Routing (Long Wheelbase Sedan)	—
		F35	(CKT 1334) In the body harness approximately 5.2 cm (2 in) rear of the X209 breakout	Right Side of Passenger Compartment Harness Routing (Sportwagon)	—
		F69	(CKT 1334) In the body harness	Right Side of Passenger Compartment	—

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Code	Name	Option	Location	Locator View	Connector End View
			approximately 13.3 cm (5.3 in) rear of the Front Compartment breakout	Harness Routing (Short Wheelbase Sedan)	
		F80	(CKT 1334) In the instrument panel harness approximately 5.1 cm (2 in) rear of the X209 breakout	Right Side of Passenger Compartment Harness Routing (Ute)	—
J222	Body Harness	F19	(CKT 1315) In the body harness approximately 22.1 cm (8.8 in) rear of the X209 breakout	Right Side of Passenger Compartment Harness Routing (Long Wheelbase Sedan)	—
		F35/F80	(CKT 1315) In the body harness approximately 7.8 cm (3.1 in) rear from the front of the right strut tower rear conduit	Right Side of Engine Compartment Harness Routing (Ute)	—
		F69	(CKT 1315) In the body harness approximately 8 cm (3.2 in) along the E4Z Turn Signal Repeater Lamp - Right breakout	Right Side of Passenger Compartment Harness Routing (Short Wheelbase Sedan)	—
J223	Body Harness	F19/F35/F69	(CKT 1335) In the body harness approximately 9.2 cm (3.7 in) rear of the X209 breakout	Right Side of Passenger Compartment Harness Routing (Short Wheelbase Sedan)	—
		F80	(CKT 1335) In the body harness approximately 7.1 cm (2.8 in) rear of the X209 breakout	Right Side of Passenger Compartment Harness Routing (Ute)	—
J224	Body Harness	F19	(CKT 6817) In the body harness approximately 6.6 cm (2.6 in) rear of the B63R Side Impact	Right Rear of Passenger Compartment Harness Routing (Long Wheelbase Sedan)	—

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Code	Name	Option	Location	Locator View	Connector End View
			Sensor - Right breakout		
		F35/F80	(CKT 6817) In the body harness approximately 28.1 cm (11.2 in) from the front of the front right sill conduit	• Right Side of Passenger Compartment Harness Routing (Sportwagon) • Right Side of Passenger Compartment Harness Routing (Ute)	–
		F69	(CKT 6817) In the body harness approximately 19.2 cm (7.7 in) rear of the X209 breakout	Right Side of Passenger Compartment Harness Routing (Short Wheelbase Sedan)	–
J225	Body Harness	F19/F69	(CKT 5911) In the body harness approximately 13.9 cm (5.6 in) forward of the G302 breakout	• Right Side of Passenger Compartment Harness Routing (Long Wheelbase Sedan) • Right Side of Passenger Compartment Harness Routing (Short Wheelbase Sedan)	–
		F35/F80	(CKT 5911) In the body harness approximately 33.1 cm (13.2 in) from the front of the front right sill conduit	• Right Side of Passenger Compartment Harness Routing (Sportwagon) • Right Side of Passenger Compartment Harness Routing (Ute)	–
J226	Body Harness	F19	(CKT 5996) In the body harness approximately 19.5 cm (7.8 in) before the end of the front right sill conduit	Right Side of Passenger Compartment Harness Routing (Long Wheelbase Sedan)	–
		F35	(CKT 5996) In the body harness approximately 7.1 cm (2.8 in) from the front of the	Right Side of Passenger Compartment Harness Routing (Sportwagon)	–

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Code	Name	Option	Location	Locator View	Connector End View
			front right sill conduit		
		F69	(CKT 5996) In the body harness approximately 8.6 cm (3.4 in) forward of the G302 breakout	Lower Right Side of Passenger Compartment Harness Routing	—
J227	Instrument Panel Harness	LWR	(CKT 1540) In the instrument panel harness approximately 9 cm (3.6 in) along the X51A Fuse Block - Instrument Panel breakout	Instrument Panel Harness Routing (RHD) (L1)	—
J230	HVAC Harness	—	In the HVAC harness	—	—
J231	HVAC Harness	—	In the HVAC harness	—	—
J300	Body Harness	F19	(CKT 201) In the body harness approximately 12.6 cm (5 in) rear of the G301 breakout	Left Side of Passenger Compartment Harness Routing (Long Wheelbase Sedan)	—
		F69	(CKT 201) In the body harness approximately 10.6 cm (4.2 in) rear of the G301 breakout	Left Side of Passenger Compartment Harness Routing (RHD)	—
		F80	(CKT 201) In the body harness approximately 21.6 cm (8.6 in) rear of the G301 breakout	Left Side of Passenger Compartment Harness Routing (Ute)	—
J301	Body Harness	F19	(CKT 118) In the body harness approximately 17.6 cm (7 in) rear of the G301 breakout	Left Side of Passenger Compartment Harness Routing (Long Wheelbase Sedan)	—
		F69	(CKT 118) In the body harness approximately 15.6 cm (6.1 in) rear of	Left Side of Passenger Compartment Harness Routing (RHD)	—

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Code	Name	Option	Location	Locator View	Connector End View
			the G301 breakout		
		F80	(CKT 118) In the body harness approximately 10.5 cm (4.2 in) rear of the G301 breakout	Left Side of Passenger Compartment Harness Routing (Ute)	—
J302	Body Harness	F19/F35/F80	(CKT 6134) In the body harness approximately 23.1 cm (9.2 in) from the front of the front right sill conduit	• Right Side of Passenger Compartment Harness Routing (Long Wheelbase Sedan) • Right Side of Passenger Compartment Harness Routing (Sportwagon) • Right Side of Passenger Compartment Harness Routing (Ute)	—
		F69	(CKT 6134) In the body harness approximately 5.4 cm (2.1 in) rear of the G302 breakout	Right Side of Passenger Compartment Harness Routing (Short Wheelbase Sedan)	—
J303	Body Harness	F19	(CKT 7557) In the body harness approximately 19.1 cm (7.6 in) from the front of the front right sill conduit	Right Side of Passenger Compartment Harness Routing (Long Wheelbase Sedan)	—
		F35/F80	(CKT 7557) In the body harness approximately 8.9 cm (3.6 in) forward of the X209 breakout	• Right Side of Passenger Compartment Harness Routing (Sportwagon) • Right Side of Passenger Compartment Harness Routing (Ute)	—
		F69	(CKT 7557) In the body harness approximately 8.7 cm (3.5 in) from the front of the	Right Side of Passenger Compartment Harness Routing (Short Wheelbase Sedan)	—

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Code	Name	Option	Location	Locator View	Connector End View
			front right sill conduit		
J304	Body Harness	F19	(CKT 200) In the body harness approximately 7.5 cm (3 in) from the front of the front right sill conduit	Right Side of Passenger Compartment Harness Routing (Long Wheelbase Sedan)	—
		F69	(CKT 200) In the body harness approximately 13.7 cm (5.5 in) from the front of the front right sill conduit	Right Side of Passenger Compartment Harness Routing (Short Wheelbase Sedan)	—
		F80	(CKT 200) In the body harness approximately 3 cm (1.2 in) from the front of the front right sill conduit	Right Side of Passenger Compartment Harness Routing (Ute)	—
J305	Body Harness	F19	(CKT 117) In the body harness approximately 2.4 cm (1 in) before the front of the front right sill conduit	Right Side of Passenger Compartment Harness Routing (Long Wheelbase Sedan)	—
		F69	(CKT 117) In the body harness approximately 18.8 cm (7.5 in) from the front of the front right sill conduit	Right Side of Passenger Compartment Harness Routing (Short Wheelbase Sedan)	—
		F80	(CKT 117) In the body harness approximately 8.1 cm (3.2 in) from the front of the front right sill conduit	Right Side of Passenger Compartment Harness Routing (Ute)	—
J306	Body Harness	F35	(CKT 465) In the body harness approximately 17.1 cm (6.8 in) from the front of the front right sill conduit	Right Side of Passenger Compartment Harness Routing (Sportwagon)	—
		F69			—

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Code	Name	Option	Location	Locator View	Connector End View
			(CKT 465) In the body harness approximately 23.9 cm (9.6 in) from the front of the front right sill conduit	Lower Right Side of Passenger Compartment Harness Routing	
		F80	(CKT 465) In the body harness approximately 18.1 cm (7.2 in) from the front of the front right sill conduit	Right Side of Passenger Compartment Harness Routing (Ute)	—
J307	Body Harness	F19	(CKT 3264) In the body harness approximately 38.7 cm (15.5 in) from the front of the front right sill conduit	Right Side of Passenger Compartment Harness Routing (Long Wheelbase Sedan)	—
		F35	(CKT 3264) In the body harness approximately 11.1 cm (4.4 in) from the front of the front right sill conduit	Right Side of Passenger Compartment Harness Routing (Sportwagon)	—
		F69	(CKT 3264) In the body harness approximately 28.9 cm (11.6 in) from the front of the front right sill conduit	Right Side of Passenger Compartment Harness Routing (Short Wheelbase Sedan)	—
		F80	(CKT 3264) In the body harness approximately 13.1 cm (5.2 in) from the front of the front right sill conduit	Right Side of Passenger Compartment Harness Routing (Ute)	—
J308	Body Harness	F19	(CKT 157) In the body harness approximately 9.3 cm (3.7 in) from the front of the front right sill conduit	Right Side of Passenger Compartment Harness Routing (Long Wheelbase Sedan)	—
		F35	(CKT 157) In the body harness	Right Side of Passenger Compartment	—

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Code	Name	Option	Location	Locator View	Connector End View
			approximately 8.6 cm (3.4 in) forward of the G302 breakout	Harness Routing (Sportwagon)	
		F69	(CKT 157) In the body harness approximately 33.9 cm (13.6 in) from the front of the front right sill conduit	Right Side of Passenger Compartment Harness Routing (Short Wheelbase Sedan)	—
		F80	(CKT 157) In the body harness approximately 29.2 cm (11.7 in) rear of the X209 breakout	Right Side of Passenger Compartment Harness Routing (Ute)	—
J309	Body Harness	F19	(CKT 2267) In the body harness approximately 28.9 cm (11.6 in) from the front of the front right sill conduit	Right Side of Passenger Compartment Harness Routing (Long Wheelbase Sedan)	—
		F35	(CKT 2267) In the body harness approximately 5.3 cm (2.1 in) rear of the G302 breakout	Right Side of Passenger Compartment Harness Routing (Sportwagon)	—
		F69	(CKT 2267) In the body harness approximately 38.9 cm (15.6 in) from the front of the front right sill conduit	Right Side of Passenger Compartment Harness Routing (Short Wheelbase Sedan)	—
J310	Body Harness	F19	(CKT 3264) In the body harness approximately 33.8 cm (13.5 in) from the front of the front right sill conduit	Right Side of Passenger Compartment Harness Routing (Long Wheelbase Sedan)	—
		F35	(CKT 3263) In the body harness approximately 1.4 cm (0.6 in) from the	Right Side of Passenger Compartment Harness Routing (Sportwagon)	—

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Code	Name	Option	Location	Locator View	Connector End View
			front of the front right sill conduit		
		F69	(CKT 3263) In the body harness approximately 43.9 cm (17.6 in) from the front of the front right sill conduit	Right Side of Passenger Compartment Harness Routing (Short Wheelbase Sedan)	—
		F80	(CKT 3263) In the body harness approximately 5.3 cm (2.1 in) rear of the G302 breakout	Right Side of Passenger Compartment Harness Routing (Ute)	—
J311	Body Harness	F19	(CKT 5986) In the body harness approximately 43.6 cm (17.4 in) from the front of the front right sill conduit	Right Side of Passenger Compartment Harness Routing (Long Wheelbase Sedan)	—
		F35	(CKT 5986) In the body harness approximately 40.6 cm (16.3 in) from the front of the front right sill conduit	Right Side of Passenger Compartment Harness Routing (Sportwagon)	—
		F69	(CKT 5986) In the body harness approximately 48.8 cm (19.5 in) from the front of the front right sill conduit	Right Side of Passenger Compartment Harness Routing (Short Wheelbase Sedan)	—
		F80	(CKT 5986) In the body harness approximately 30 cm (12 in) from the front of the front right sill conduit	Right Side of Passenger Compartment Harness Routing (Ute)	—
J312	Body Harness	F19	(CKT 1314) In the body harness approximately 8.9 cm (3.6 in) forward of the G302 breakout	Right Side of Passenger Compartment Harness Routing (Long Wheelbase Sedan)	—

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Code	Name	Option	Location	Locator View	Connector End View
		F35	(CKT 1314) In the body harness approximately 13.6 cm (5.4 in) forward of the G302 breakout	Right Side of Passenger Compartment Harness Routing (Sportwagon)	—
		F69	(CKT 1314) In the body harness approximately 48.8 cm (19.5 in) from the front of the front right sill conduit	Right Side of Passenger Compartment Harness Routing (Short Wheelbase Sedan)	—
		F80	(CKT 1314) In the body harness approximately 24.2 cm (9.7 in) rear of the X209 breakout	Right Side of Passenger Compartment Harness Routing (Ute)	—
J313	Body Harness	F19	(CKT 1551) In the body harness approximately 48.7 cm (19.5 in) from the front of the front left sill conduit	Left Side of Passenger Compartment Harness Routing (Long Wheelbase Sedan)	—
J314	Body Harness	—	(CKT 46) In the body harness approximately 4.7 cm (1.9 in) rear of the B63R Side Impact Sensor - Right breakout	Right Side of Passenger Compartment Harness Routing (Short Wheelbase Sedan without UQA)	—
J315	Body Harness	F19	(CKT 7530) In the body harness approximately 27.1 cm (10.8 in) from the front of the rear right sill conduit	Right Rear of Passenger Compartment Harness Routing (Long Wheelbase Sedan)	—
		F69	(CKT 7530) In the body harness approximately 9.7 cm (3.9 in) rear of the B63R Side Impact Sensor - Right breakout	Right Side of Passenger Compartment Harness Routing (Short Wheelbase Sedan without UQA)	—
J316	Body Harness	F69			—

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Code	Name	Option	Location	Locator View	Connector End View
			(CKT 115) In the body harness approximately 14.7 cm (5.9 in) rear of the B63R Side Impact Sensor - Right breakout	Right Side of Passenger Compartment Harness Routing (Short Wheelbase Sedan without UQA)	
J317	Body Harness	LWR	(CKT 3507) In the body harness approximately 5.4 cm (2.2 in) rear of the X800 breakout	Right Side of Passenger Compartment Harness Routing (Sportwagon)	—
J318	Body Harness	F19	(CKT 294) In the body harness approximately 13.2 cm (5.3 in) rear of the B63R Side Impact Sensor - Right breakout	Right Rear of Passenger Compartment Harness Routing (Long Wheelbase Sedan)	—
		F35	(CKT 294) In the body harness approximately 10.1 cm (4 in) from the rear of the front right sill conduit	Right Side of Passenger Compartment Harness Routing (Sportwagon)	—
		F69	(CKT 294) In the body harness approximately 7.1 cm (2.8 in) from the front of the rear right sill conduit	Right Side of Passenger Compartment Harness Routing (Short Wheelbase Sedan without UQA)	—
		F80	(CKT 294) In the body harness approximately 10.4 cm (4.2 in) before the end of the right sill conduit	Right Side of Passenger Compartment Harness Routing (Ute)	
J319	Body Harness	F19	(CKT 709) In the body harness approximately 8.2 cm (3.2 in) forward of the right strut tower rear conduit	Right Side of Engine Compartment Harness Routing (Long Wheelbase Sedan)	—
		F35/F80	(CKT 709) In the body harness approximately	Right Side of Engine Compartment	—

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Code	Name	Option	Location	Locator View	Connector End View
			10.2 cm (4 in) rear of the X110 breakout	Harness Routing (Ute)	
		F69	(CKT 709) In the body harness approximately 12.1 cm (4.8 in) from the front of the rear right sill conduit	Right Side of Passenger Compartment Harness Routing (Short Wheelbase Sedan without UQA)	—
J320	Body Harness	F19	(CKT 6135) In the body harness approximately 32.1 cm (12.8 in) from the front of the rear right sill conduit	Right Rear of Passenger Compartment Harness Routing (Long Wheelbase Sedan)	—
		F35	(CKT 6135) In the body harness approximately 3.1 cm (1.2 in) forward of the X800 connector breakout	Right Side of Passenger Compartment Harness Routing (Sportwagon)	—
		F69	(CKT 6135) In the body harness approximately 17.1 cm (6.8 in) from the front of the rear right sill conduit	Right Side of Passenger Compartment Harness Routing (Short Wheelbase Sedan without UQA)	—
J321	Body Harness	F19	(CKT 5985) In the body harness approximately 7.5 cm (3 in) from the front of the rear right sill conduit	Right Rear of Passenger Compartment Harness Routing (Long Wheelbase Sedan)	—
		F35	(CKT 5985) In the body harness approximately 19.1 cm (7.6 in) forward of the rear of the front right sill conduit	Right Side of Passenger Compartment Harness Routing (Sportwagon)	—
		F69	(CKT 5985) In the body harness approximately 12.2 cm (4.9 in) from the front of the rear right sill conduit	Right Side of Passenger Compartment Harness Routing (Short Wheelbase Sedan without UQA)	—

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Code	Name	Option	Location	Locator View	Connector End View
		F80	(CKT 5985) In the body harness approximately 24.5 cm (9.8 in) before the end of the right sill conduit	Right Side of Passenger Compartment Harness Routing (Ute)	—
J322	Body Harness	F19/F69	(CKT 6133) In the body harness approximately 1 cm (0.4 in) rear of the rear right sill conduit	• Right Side of Passenger Compartment Harness Routing (Short Wheelbase Sedan without UQA) • Right Rear of Passenger Compartment Harness Routing (Long Wheelbase Sedan)	—
J323	Body Harness	F19	(CKT 755) In the body harness approximately 22.2 cm (8.9 in) from the front of the rear right sill conduit	Right Rear of Passenger Compartment Harness Routing (Long Wheelbase Sedan)	—
		F35	(CKT 755) In the body harness approximately 1 cm (0.3 in) before the end of the right sill conduit	Right Side of Passenger Compartment Harness Routing (Sportwagon)	—
		F69	(CKT 755) In the body harness approximately 5.8 cm (2.3 in) rear of the rear right sill conduit	Right Side of Passenger Compartment Harness Routing (Short Wheelbase Sedan without UQA)	—
		F80	(CKT 755) In the body harness approximately 1 cm (0.3 in) before the end of the right sill conduit	Right Side of Passenger Compartment Harness Routing (Ute)	—
J324	Body Harness	F19	(CKT 7066) In the body harness crossover section approximately	Right Rear of Passenger Compartment Harness Routing (Long Wheelbase Sedan)	—

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Code	Name	Option	Location	Locator View	Connector End View
			14.4 cm (5.8 in) from the right side crossover breakout (F19)		
J325	Body Harness	F19	(CKT 24) In the body harness crossover section approximately 11.3 cm (4.5 in) left of the B88RR Seat Belt Switch - Right Rear breakout	Left Rear of Passenger Compartment Harness Routing (Long Wheelbase Sedan)	—
		F35	(CKT 24) In the body harness crossover section approximately 17.3 cm (6.9 in) right of the B88RR Seat Belt Switch - Right Rear breakout	Right Center of Passenger Compartment Harness Routing (Sportwagon)	—
		F69	(CKT 24) In the body harness crossover section approximately 14.4 cm (5.8 in) from the right side crossover breakout	Right Side of Passenger Compartment Harness Routing (Short Wheelbase Sedan without UQA)	—
J326	Body Harness	F69 with V5B	(CKT 9542) In the body harness crossover section approximately 20.8 cm (8.3 in) from the right side crossover breakout	Right Side of Passenger Compartment Harness Routing (Short Wheelbase Sedan without UQA)	—
J327	Body Harness	F19	(CKT 539) In the body harness crossover section approximately 26 cm (10.4 in) left of the underbody breakout	Right Rear of Passenger Compartment Harness Routing (Long Wheelbase Sedan)	—
		F69	(CKT 539) In the body harness crossover section approximately	Right Side of Passenger Compartment Harness Routing (Short Wheelbase	—

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Code	Name	Option	Location	Locator View	Connector End View
			10.8 cm (4.3 in) left of the underbody breakout	Sedan without UQA)	
J328	Body Harness	F19	(CKT 295) In the body harness crossover section approximately 5.6 cm (2.2 in) left of the B88RR Seat Belt Switch - Right Rear breakout	Left Rear of Passenger Compartment Harness Routing (Long Wheelbase Sedan)	—
		F35	(CKT 295) In the body harness crossover section approximately 6.7 cm (2.7 in) left of the B88RR Seat Belt Switch - Right Rear breakout	Right Center of Passenger Compartment Harness Routing (Sportwagon)	—
		F69	(CKT 295) In the body harness crossover section approximately 8.2 cm (3.3 in) left of the B88RR Seat Belt Switch - Right Rear breakout	Right Side of Passenger Compartment Harness Routing (Short Wheelbase Sedan without UQA)	—
J329	Body Harness	UWG	(CKT 4240) In the body harness crossover section approximately 15.3 cm (6.1 in) right of the B88LR Seat Belt Switch - Left Rear breakout (UWG)	Left Rear of Passenger Compartment Harness Routing (Long Wheelbase Sedan)	—
J330	Body Harness	F19	(CKT 1361) In the body harness crossover section approximately 19.9 cm (8 in) left of the B88LR Seat Belt Switch - Left Rear breakout	Left Rear of Passenger Compartment Harness Routing (Long Wheelbase Sedan)	—
		F35	(CKT 1361) In the body harness	Right Center of Passenger Compartment	—

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Code	Name	Option	Location	Locator View	Connector End View
			crossover section approximately 15 cm (6 in) left of the B88LR Seat Belt Switch - Left Rear breakout	Harness Routing (Sportwagon)	
		F69	(CKT 1361) In the body harness crossover section approximately 16.2 cm (6.5 in) left of the B88LR Seat Belt Switch - Left Rear breakout	Right Side of Passenger Compartment Harness Routing (Short Wheelbase Sedan without UQA)	—
J331	Body Harness	—	(CKT 199) In the body harness crossover section approximately 19.5 cm (7.8 in) from the left side crossover breakout	Left Side of Passenger Compartment Harness Routing (RHD without UQA)	—
J332	Body Harness	—	(CKT 116) In the body harness crossover section approximately 14.4 cm (5.8 in) from the left side crossover breakout	Left Side of Passenger Compartment Harness Routing (RHD without UQA)	—
J333	Body Harness	—	(CKT 3760) In the body harness approximately 27 cm (10.8 in) from the front of the left rear seat base conduit	Left Rear of Passenger Compartment Harness Routing (LFX or LWR)	—
J334	Body Harness	F69 with V5B	(CKT 9541) In the body harness approximately 19.3 cm (7.7 in) from the rear of the right rear seat base conduit	Right Side of Passenger Compartment Harness Routing (Short Wheelbase Sedan without UQA)	—
J335	Body Harness	F19/F35	(CKT 1640) In the body harness approximately 4.9 cm (2 in) after the X315 breakout	Fuel Tank Harness Routing (Long Wheelbase Sedan)	—

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Code	Name	Option	Location	Locator View	Connector End View
		F69	(CKT 1640) In the body harness approximately 2 cm (0.8 in) from the X315 breakout	Fuel Tank Harness Routing (Short Wheelbase or Sportwagon without LWR)	—
		F80	(CKT 1640) In the body harness approximately 17.9 cm (7.2 in) after the X422 breakout	Right Side of Luggage Compartment Harness Routing (Ute) - (1 of 2)	—
		F19	(CKT 5065) In the body harness approximately 13.3 cm (5.3 in) rear of the G402 breakout	Right Rear of Passenger Compartment Harness Routing (Long Wheelbase Sedan)	—
		F35	(CKT 5065) In the body harness approximately 30.7 cm (12.3 in) rear of the G304 breakout	Right Center of Passenger Compartment Harness Routing (Sportwagon)	—
J336	Body Harness	F69	(CKT 5065) In the body harness approximately 14.3 cm (5.7 in) rear of the G304 breakout	Right Side of Luggage Compartment Harness Routing (Short Wheelbase Sedan)	—
		F80	(CKT 5065) In the body harness approximately 50 cm (20 in) before the K38 Chassis Control Module breakout	Right Rear of Passenger Compartment Harness Routing (Ute)	—
J338	Center Console Harness	—	In the center console harness approximately 9.9 cm (4 in) away from the X206 connector	Center Console Harness Routing	—
J340	Rear Axle Harness	—	(CKT 2450) In the rear axle harness approximately 15 cm (6 in) rear of the B5LR Wheel Speed Sensor	• Rear Axle Harness Routing (HSV) • Rear Axle Harness	—

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Code	Name	Option	Location	Locator View	Connector End View
			- Left Rear breakout	Routing (LSA)	
J341	Rear Axle Harness	—	(CKT 2450) In the rear axle harness approximately 32 cm (12.8 in) rear of the B5LR Wheel Speed Sensor - Left Rear breakout	• Rear Axle Harness Routing (HSV) • Rear Axle Harness Routing (LSA)	—
J350	Body Harness	F80	(CKT 5185) In the body harness crossover section approximately 26.6 cm (10.6 in) left of the G305 breakout	Left Rear of Passenger Compartment Harness Routing (Ute)	—
J351	Body Harness	F80	(CKT 5188) In the body harness crossover section approximately 21.5 cm (8.6 in) left of the G305 breakout	Left Rear of Passenger Compartment Harness Routing (Ute)	—
J354	Transmission Shifter Harness	—	In the transmission shifter harness	—	—
J355	Transmission Shifter Harness	—	In the transmission shifter harness	—	—
J356	Transmission Shifter Harness	—	In the transmission shifter harness	—	—
J357	Headlining Harness	—	In the headlining harness	—	—
J358	Headlining Harness	—	In the headlining harness	—	—
J359	Headlining Harness	—	In the headlining harness	—	—
J360	Fuel Tank Harness	—	In the fuel tank harness	—	—
J361	Passenger Seat Harness	—	In the passenger seat harness	—	—
J364	Passenger Seat Harness	—		—	—

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Code	Name	Option	Location	Locator View	Connector End View
			In the passenger seat harness		
J366	Driver Seat Harness	—	In the driver seat harness	—	—
J367	Driver Seat Harness	—	In the driver seat harness	—	—
J368	Driver Seat Harness	—	In the driver seat harness	—	—
J369	Driver Seat Harness	—	In the driver seat harness	—	—
J370	Driver Seat Harness	—	In the driver seat harness	—	—
J400	Body Harness	F19	(CKT 5060) In the body harness approximately 23.2 cm (9.3 in) from the front of the left rear seat base conduit	**Left Rear of Passenger Compartment Harness Routing (Long Wheelbase Sedan)**	—
		F35	(CKT 5060) In the body harness crossover section approximately 11 cm (4.4 in) right of the B88RR Seat Belt Switch - Right Rear breakout	**Right Center of Passenger Compartment Harness Routing (Sportwagon)**	—
		F69	(CKT 5060) In the body harness approximately 10 cm (4 in) from the front of the left luggage compartment upper conduit	**Left Side of Luggage Compartment (Short Wheelbase Sedan without UQA)**	—
		F80	(CKT 5060) In the body harness crossover section approximately 30.9 cm (12.4 in) right of the G305 breakout	**Right Rear of Passenger Compartment Harness Routing (Ute)**	—
J401	Body Harness	F19	(CKT 3840) In the body harness approximately 13.9 cm (5.6 in) from the front of the left luggage	**Left Side of Luggage Compartment Harness Routing (Long Wheelbase Sedan)**	—

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Code	Name	Option	Location	Locator View	Connector End View
			compartment upper conduit		
		F35	(CKT 3840) In the body harness crossover section approximately 17.7 cm (7 in) left of the B88RR Seat Belt Switch - Right Rear breakout	Right Center of Passenger Compartment Harness Routing (Sportwagon)	—
		F69	(CKT 3840) In the body harness approximately 16.7 cm (6.7 in) from the front of the left luggage compartment upper conduit	Left Side of Luggage Compartment (Short Wheelbase Sedan without UQA)	—
		F80	(CKT 3840) In the body harness crossover section approximately 21.8 cm (8.7 in) right of the G305 breakout	Right Rear of Passenger Compartment Harness Routing (Ute)	—
J410	Rear Fascia Harness	F19	(CKT 2374) In the rear fascia harness approximately 5.6 cm (2.2 in) right of the B78E Rear Object Sensor - Left Middle breakout	Rear of Vehicle Harness Routing (Long Wheelbase Sedan)	—
		F35	(CKT 2374) In the rear fascia harness approximately 36.4 cm (14.5 in) left of the B78F Rear Object Sensor - Right Middle breakout	Rear of Vehicle Harness Routing (Sportwagon)	—
		F69	(CKT 2374) In the rear fascia harness approximately 13.6 cm (5.4 in) before the license plate lamp breakout	Rear of Vehicle Harness Routing (Short Wheelbase Sedan)	—
		F80	(CKT 2374) In the rear fascia harness approximately	Rear of Vehicle Harness Routing (Ute) - (1 of 2)	—

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Code	Name	Option	Location	Locator View	Connector End View
			10.8 cm (4.3 in) right of the B78E Rear Object Sensor - Left Middle breakout		
J411	Rear Fascia Harness	F19	(CKT 2379) In the rear fascia harness approximately 26.6 cm (10.6 in) right of the B78E Rear Object Sensor - Left Middle breakout	Rear of Vehicle Harness Routing (Long Wheelbase Sedan)	—
		F35	(CKT 2379) In the rear fascia harness approximately 13.7 cm (5.5 in) right of the B78G Rear Object Sensor - Left Outer breakout	Rear of Vehicle Harness Routing (Sportwagon)	—
		F69	(CKT 2379) In the rear fascia harness approximately 19.7 cm (7.9 in) after the license plate lamp breakout	Rear of Vehicle Harness Routing (Short Wheelbase Sedan)	—
		F80	(CKT 2379) In the rear fascia harness approximately 16.1 cm (6.4 in) right of the B78E Rear Object Sensor - Left Middle breakout	Rear of Vehicle Harness Routing (Ute) - (1 of 2)	—
J412	Rear Fascia Harness	—	(CKT 6846) In the rear fascia harness approximately 5.5 cm (2.2 in) along the license plate lamp breakout	Rear of Vehicle Harness Routing (Short Wheelbase Sedan)	—
J413	Rear Fascia Harness	F19	(CKT 2550) In the rear fascia harness approximately 5.4 cm (2.2 in) right of the B78G Rear Object Sensor - Left Outer breakout	Rear of Vehicle Harness Routing (Long Wheelbase Sedan)	—
		F35			—

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Code	Name	Option	Location	Locator View	Connector End View
			(CKT 2550) In the rear fascia harness approximately 12.9 cm (5.2 in) left of the B78E Rear Object Sensor - Left Middle breakout	Rear of Vehicle Harness Routing (Sportwagon)	
		F69	(CKT 2550) In the rear fascia harness approximately 17.8 cm (7.1 in) along the license plate lamp breakout	Rear of Vehicle Harness Routing (Short Wheelbase Sedan)	—
		F80	(CKT 2550) In the rear fascia harness approximately 20.3 cm (8.1 in) from the X410 Connector	Rear of Vehicle Harness Routing (Ute) - (1 of 2)	—
J415	Rear Fascia Harness	F19	(CKT 3840) In the rear fascia harness approximately 11.6 cm (4.6 in) right of the B78E Rear Object Sensor - Left Middle breakout	Rear of Vehicle Harness Routing (Long Wheelbase Sedan)	—
		F35	(CKT 3840) In the rear fascia harness approximately 28.3 cm (11.3 in) right of the B78E Rear Object Sensor - Left Middle breakout	Rear of Vehicle Harness Routing (Sportwagon)	—
		F69	(CKT 3840) In the rear fascia harness approximately 27.2 cm (10.9 in) before the B78F Rear Object Sensor - Right Middle breakout	Rear of Vehicle Harness Routing (Short Wheelbase Sedan)	—
		F80	(CKT 3840) In the rear fascia harness approximately 25.3 cm (10.1 in) from the X410 Connector	Rear of Vehicle Harness Routing (Ute) - (1 of 2)	—
J420	Rear End Harness	F80			—

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Code	Name	Option	Location	Locator View	Connector End View
			(CKT 24) In the rear end harness approximately 19.5 cm (7.8 in) before the X473 breakout	Rear of Vehicle Harness Routing (Ute) - (2 of 2)	
J422	License Plate Lamp Harness	F19	In the license plate lamp harness	—	—
J423	License Plate Lamp Harness	F35/F80	In the license plate lamp harness	—	—
J424	License Plate Lamp Harness	F19	In the license plate lamp harness	—	—
J425	License Plate Lamp Harness	F35/F80	In the license plate lamp harness	—	—
J426	Trailer Harness	RZW	In the trailer harness	—	—
J427	Electronic Suspension Control Harness	F55	In the electronic suspension control harness	—	—
J500	Driver Door Harness	—	(CKT 6134) In the driver door harness approximately 1.2 cm (0.5 in) from the X500 harness grommet	Driver Door Harness Routing (RHD)	—
J501	Driver Door Harness	—	(CKT 2150) In the driver door harness approximately 21 cm (8.4 in) after the M74D Window Motor - Driver breakout	Driver Door Harness Routing (RHD)	—
J600	Passenger Door Harness	—	(CKT 2250) In the passenger door harness approximately 1.2 cm (0.5 in) from the X600 harness grommet	Passenger Door Harness Routing (RHD)	—
J700	Left Rear Door Harness	—	(CKT 2150) In the left rear door harness approximately 11.7 cm (4.7 in) after the P19AL Speaker - Left Rear Door breakout	Left Rear Door Harness Routing (Short Wheelbase)	—

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Code	Name	Option	Location	Locator View	Connector End View
J701	Left Rear Door Harness	—	(CKT 294) In the left rear door harness approximately 3.8 cm (1.5 in) after the S79LR Window Switch – Left Rear breakout	Left Rear Door Harness Routing (Long Wheelbase Sedan)	—
J800	Right Rear Door Harness	—	(CKT 2250) In the right rear door harness approximately 11.7 cm (4.7 in) after the P19AM Speaker - Right Rear Door breakout	Right Rear Door Harness Routing (Short Wheelbase)	—
J801	Right Rear Door Harness	—	(CKT 294) In the left rear door harness approximately 3.8 cm (1.5 in) after the S79RR Window Switch – Right Rear breakout	Right Rear Door Harness Routing (Long Wheelbase Sedan)	—
J900	Rear Compartment Lid Harness	—	(CKT 24) In the rear compartment lid harness approximately 4.6 cm (1.8 in) after the X900 breakout	Rear Compartment Lid Harness Routing (Short Wheelbase Sedan)	—
J901	Liftgate Extension Harness	F35	(CKT 2850) In the liftgate harness approximately 6.6 cm (2.6 in) after the X930 breakout	Liftgate Harness Routing (Sportwagon)	—
JX200	Instrument Panel Harness	—	In the passenger compartment, behind the instrument panel, taped back to the harness below instrument panel compartment	Instrument Panel Harness Routing (RHD) (L1)	JX200
JX300	Body Harness	F19	In the passenger compartment on the right rear seat back panel	Right Rear of Passenger Compartment Harness Routing (Long Wheelbase Sedan)	JX300
		F35	In the passenger compartment,	Right Side of Luggage Compartment	

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Code	Name	Option	Location	Locator View	Connector End View
			taped back to the harness at the base of the right C pillar	Harness Routing (Sportwagon)	
		F80	In the passenger compartment, taped back to the harness at the rear of the transmission tunnel	Right Rear of Passenger Compartment Harness Routing (Ute)	
JX400	Body Harness	F19/F69	In the right side of luggage compartment, taped back to the harness beneath the parcel shelf	Right Side of Luggage Compartment Harness Routing (Short Wheelbase Sedan)	JX400

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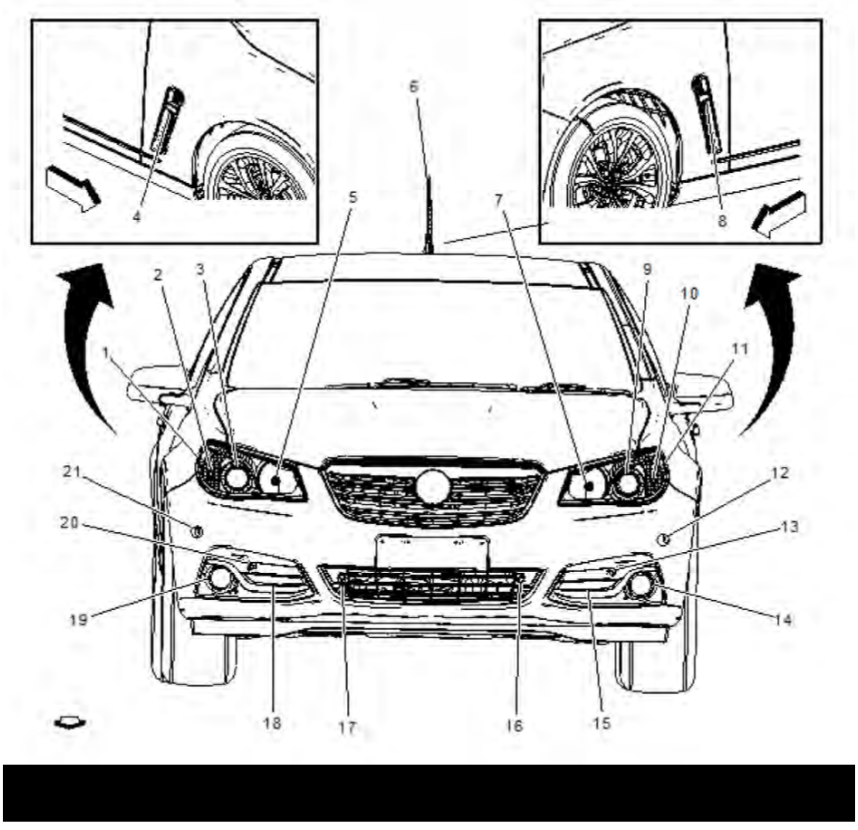
Front of Vehicle/Engine Compartment Component Views

Figure 1: Front of Vehicle Components (Short Wheelbase Sedan, Sportwagon or Ute)
Figure 2: Front of Vehicle Components (Long Wheelbase Sedan)
Figure 3: Front Fascia Components (Short Wheelbase Sedan or Ute)
Figure 4: Front Fascia Components (Long Wheelbase Sedan)
Figure 5: Front Fascia Components (Sportwagon)
Figure 6: Left Side of Engine Compartment Components
Figure 7: Right Side of Engine Compartment Components (L77 or LS3)
Figure 8: Right Side of Engine Compartment Components (LFW, LFX or LWR)
Figure 9: Right Side of Engine Compartment Components (LSA)

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Front of Vehicle Components (Short Wheelbase Sedan, Sportwagon or Ute)



(1) E4K Park Lamp - Right Front
(2) E4RF Turn Signal Lamp - Right Front
(3) E13R Headlamp - Right
(4) E4Z Turn Signal Repeater Lamp - Right
(5) E2RF Side Marker Lamp - Right Front
(6) T4M Radio Antenna
(7) E2LF Side Marker Lamp - Left Front
(8) E4Y Turn Signal Repeater Lamp - Left
(9) E13L Headlamp - Left
(10) E4LF Turn Signal Lamp - Left Front
(11) E4J Park Lamp - Left Front
(12) B166LF Advanced Parking Assist Side Object Sensor - Left Front
(13) B78A Front Object Sensor - Left Outer (UFQ)

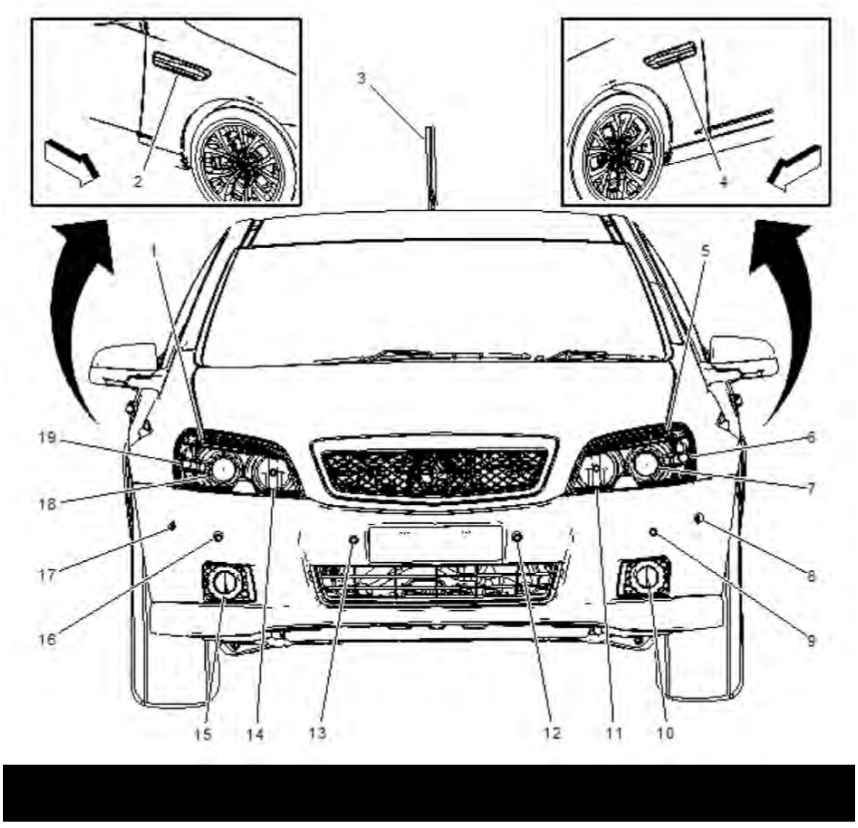
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(14) E29LF Fog Lamp - Left Front
(15) E4C Daytime Running Lamp - Left (T3N/V5B)
(16) B78C Front Object Sensor - Left Middle (UFQ)
(17) B78D Front Object Sensor - Right Middle (UFQ)
(18) E4D Daytime Running Lamp - Right (T3N/V5B)
(19) E29RF Fog Lamp - Right Front
(20) B78B Front Object Sensor - Right Outer (UFQ)
(21) B166RF Advance Parking Assist Side Object Sensor - Right Front

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Front of Vehicle Components (Long Wheelbase Sedan)



(1) E4RF Turn Signal Lamp - Right Front
(2) E4Z Turn Signal Repeater Lamp - Right
(3) T4M Radio Antenna
(4) E4Y Turn Signal Repeater Lamp - Left
(5) E4LF Turn Signal Lamp - Left Front
(6) E2LF Side Marker Lamp - Left Front
(7) E13L Headlamp - Left
(8) B166LF Advanced Parking Assist Side Object Sensor - Left Front
(9) B78A Front Object Sensor - Left Outer (UFQ)
(10) E29LF Fog Lamp - Left Front
(11) E2LF Side Marker Lamp - Left Front
(12) B78E Rear Object Sensor - Left Middle (UD7/UFQ)
(13) B78F Rear Object Sensor - Right Middle (UD7/UFQ)

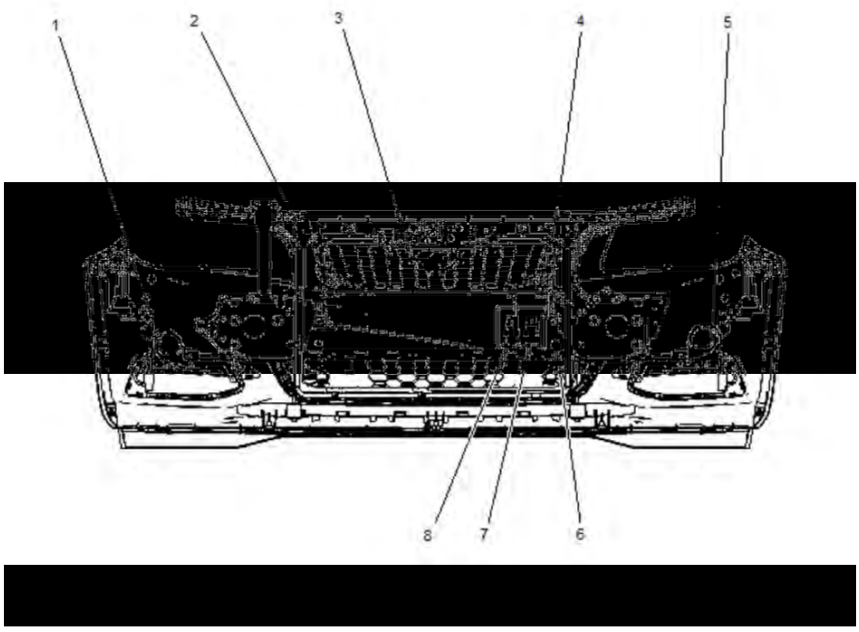
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(14) E2RF Side Marker Lamp - Right Front
(15) E29RF Fog Lamp - Right Front
(16) B78B Front Object Sensor - Right Outer (UFQ)
(17) B166RF Advance Parking Assist Side Object Sensor - Right Front
(18) E13R Headlamp - Right
(19) E2RF Side Marker Lamp - Right Front

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Front Fascia Components (Short Wheelbase Sedan or Ute)

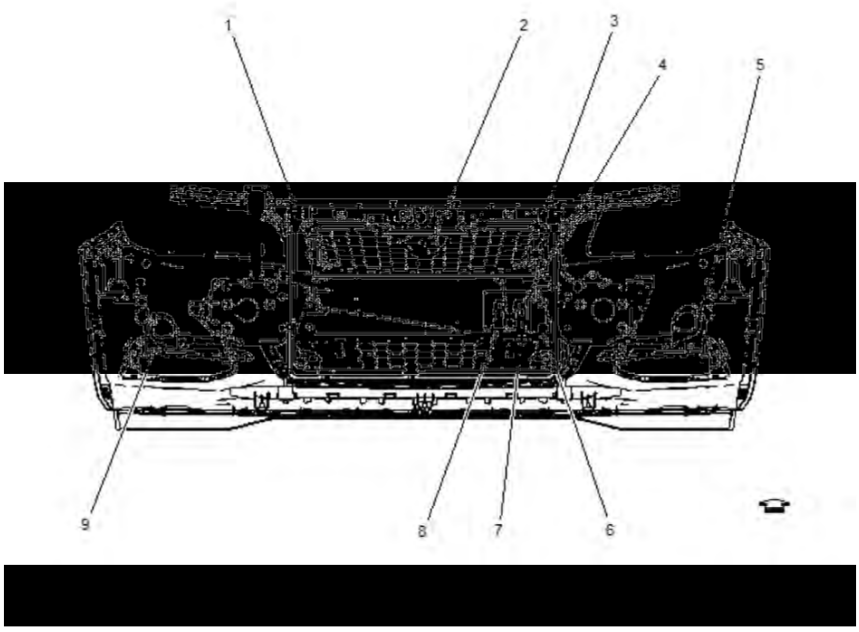


(1) P12L Horn - Left
(2) B59L Front Impact Sensor - Left
(3) B55 Hood Ajar Switch
(4) B59R Front Impact Sensor - Right
(5) P12R Horn - Right
(6) B9 Ambient Air Temperature Sensor (C63 or CJ2)
(7) G24 Windshield Washer Pump
(8) G16 Headlamp Washer Pump

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Front Fascia Components (Long Wheelbase Sedan)

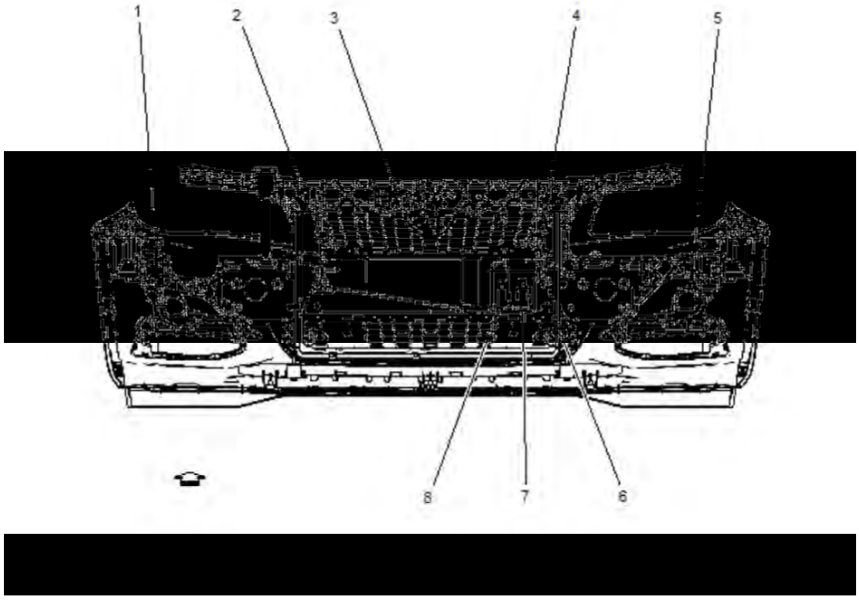


(1) B59L Front Impact Sensor - Left
(2) B55 Hood Ajar Switch
(3) B59R Front Impact Sensor - Right
(4) G24 Windshield Washer Pump
(5) P12R Horn - Right
(6) B9 Ambient Air Temperature Sensor (C63 or CJ2)
(7) B118B Windshield Washer Fluid Level Switch (T3T)
(8) G16 Headlamp Washer Pump
(9) P12L Horn - Left

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Front Fascia Components (Sportwagon)

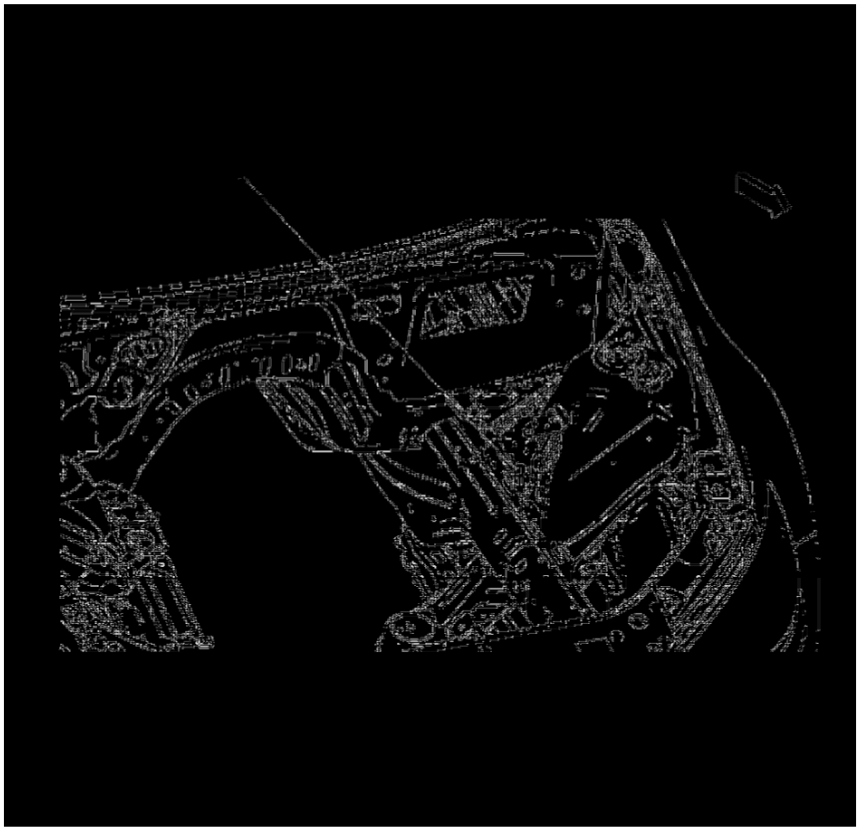


(1) P12L Horn - Left
(2) B59L Front Impact Sensor - Left
(3) B55 Hood Ajar Switch
(4) B59R Front Impact Sensor - Right
(5) P12R Horn - Right
(6) B9 Ambient Air Temperature Sensor (C63 or CJ2)
(7) G24 Windshield Washer Pump
(8) G19 Rear Window Washer Pump (F35)

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Left Side of Engine Compartment Components

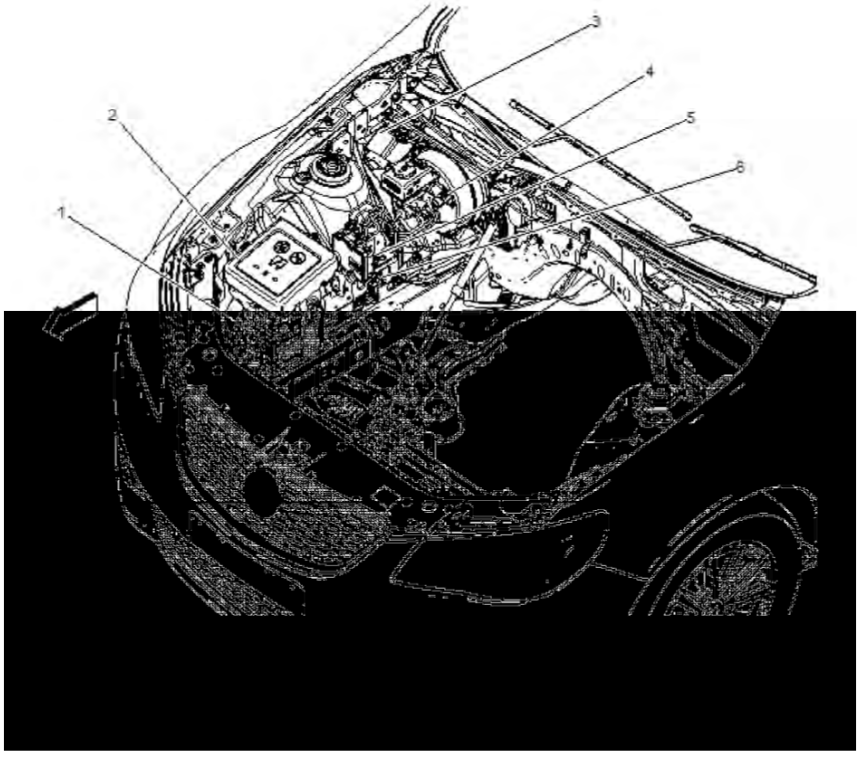


(1) B5LF Wheel Speed Sensor - Left Front

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Right Side of Engine Compartment Components (L77 or LS3)

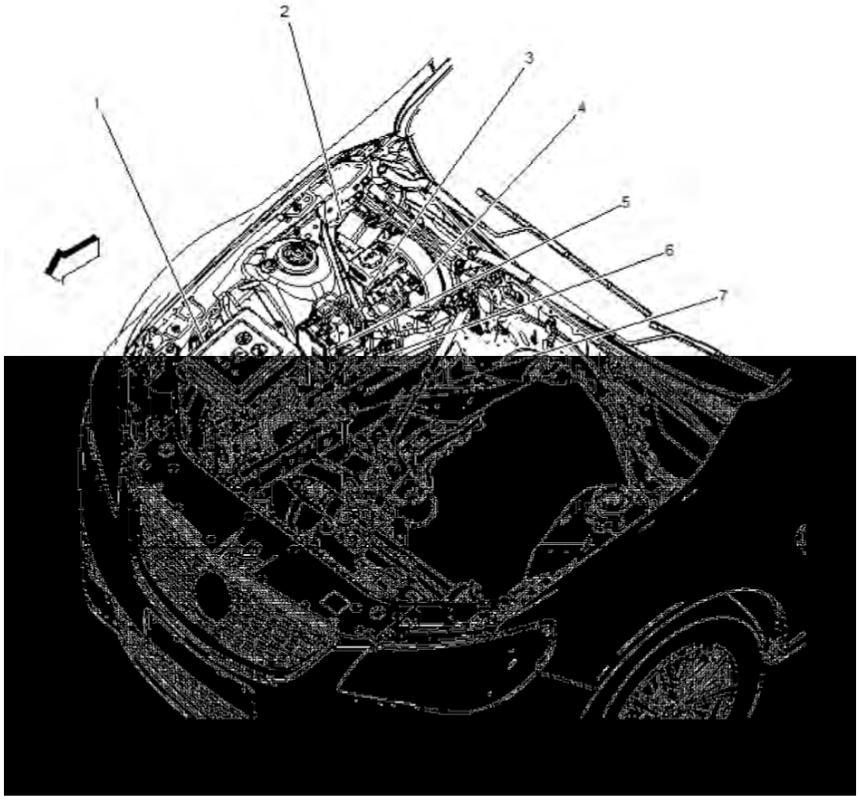


(1) K20 Engine Control Module
(3) M75 Windshield Wiper Motor
(4) B19B Brake Booster Vacuum Sensor
(5) K17 Electronic Brake Control Module
(6) B5RF Wheel Speed Sensor - Right Front

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Right Side of Engine Compartment Components (LFW, LFX or LWR)

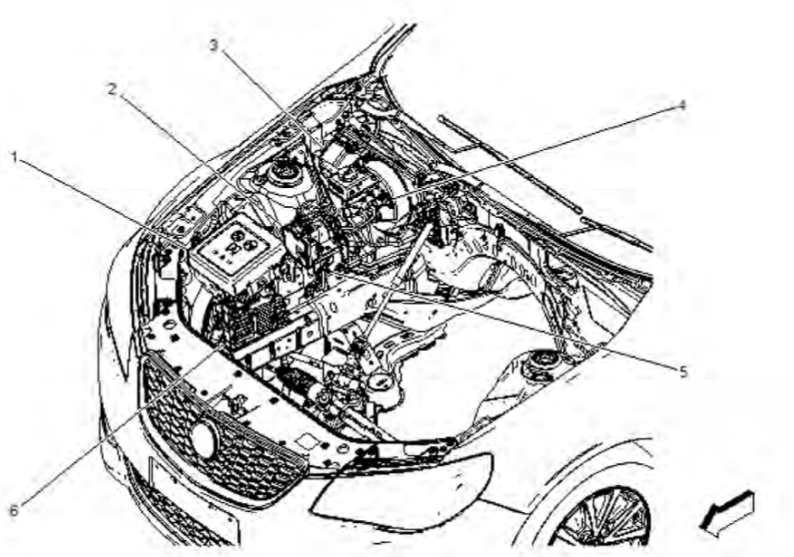


(2) M75 Windshield Wiper Motor
(3) B20 Brake Fluid Level Switch
(4) B19B Brake Booster Vacuum Sensor
(5) K17 Electronic Brake Control Module
(6) B5RF Wheel Speed Sensor - Right Front
(7) K20 Engine Control Module

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Right Side of Engine Compartment Components (LSA)



(2) K17 Electronic Brake Control Module
(3) M75 Windshield Wiper Motor
(4) B19B Brake Booster Vacuum Sensor
(5) B5RF Wheel Speed Sensor - Right Front
(6) K20 Engine Control Module

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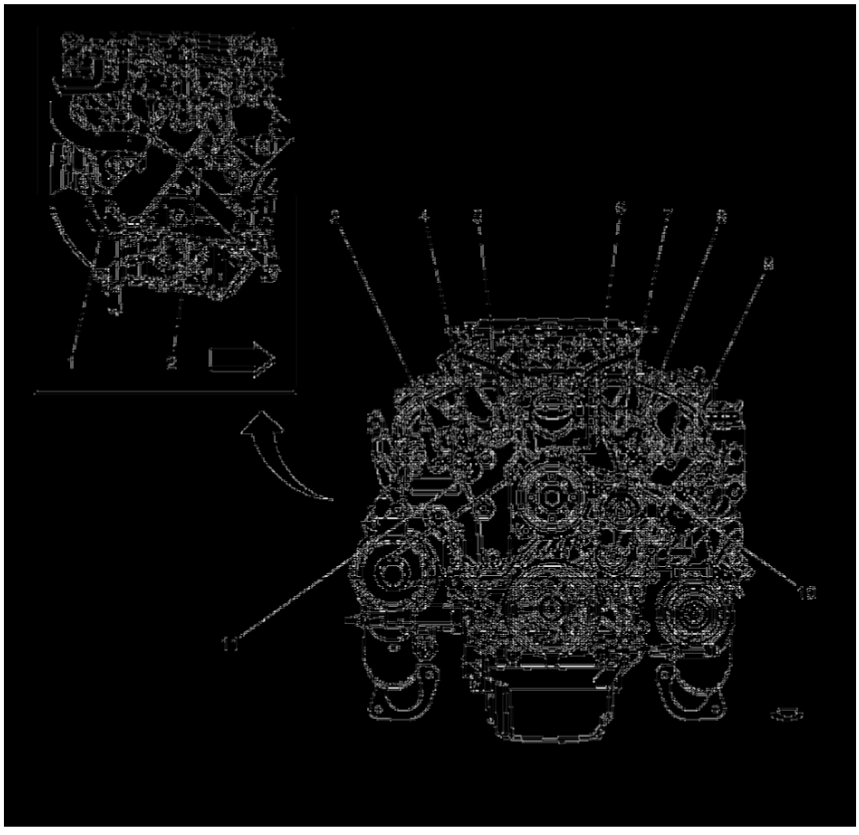
Powertrain Component Views

Figure 1: Front of Engine Components (LFW or LFX)
Figure 2: Left Rear of Engine Components (LFW or LFX)
Figure 3: Right Rear of Engine Components (LFW or LFX)
Figure 4: Front of Engine Components (LWR)
Figure 5: Right Side of Engine Components (LWR)
Figure 6: Rear of Engine Components (LWR)
Figure 7: Front of Engine Components (L77 or LS3)
Figure 8: Rear of Engine Components (L77 or LS3)
Figure 9: Top of Engine Components (L77 or LS3)
Figure 10: Left Side of Engine Components (LSA)
Figure 11: Right Front of Engine Components (LSA)
Figure 12: Right Rear of Engine Components (LSA)
Figure 13: Manual Transmission Components (MV5)
Figure 14: Manual Transmission Components (MER or MG9)
Figure 15: Automatic Transmission Components (MYA, MYC or MYD)

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Front of Engine Components (LFW or LFX)

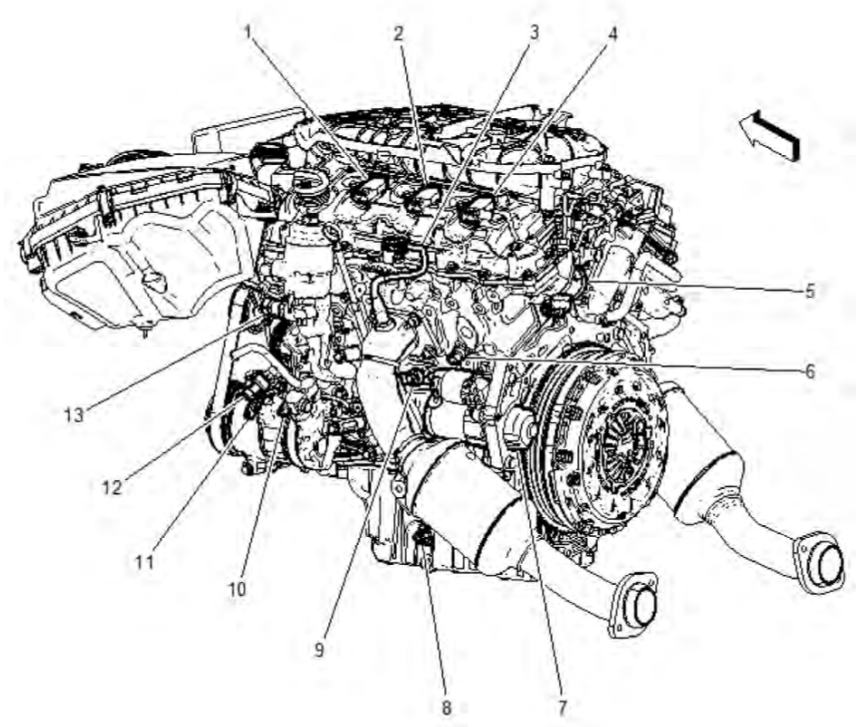


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(1) B26 Crankshaft Position Sensor
(2) B68A Knock Sensor 1
(3) B23A Camshaft Position Sensor - Bank 1 Exhaust (LFW/LFX/LWR)
(4) Q6B Camshaft Position Actuator Solenoid Valve - Bank 1 Intake (LFW/LFX/LWR)
(5) B23B Camshaft Position Sensor - Bank 1 Intake (LFW/LFX/LWR)
(6) Q38 Throttle Body
(7) B23D Camshaft Position Sensor - Bank 2 Intake (LFW/LFX/LWR)
(8) Q6D Camshaft Position Actuator Solenoid Valve - Bank 2 Intake (LFW/LFX/LWR)
(9) B23C Camshaft Position Sensor - Bank 2 Exhaust (LFW/LFX/LWR)
(10) Q6C Camshaft Position Actuator Solenoid Valve - Bank 2 Exhaust (LFW/LFX/LWR)
(11) Q6A Camshaft Position Actuator Solenoid Valve - Bank 1 Exhaust (LFW/LFX/LWR)

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Left Rear of Engine Components (LFW or LFX)

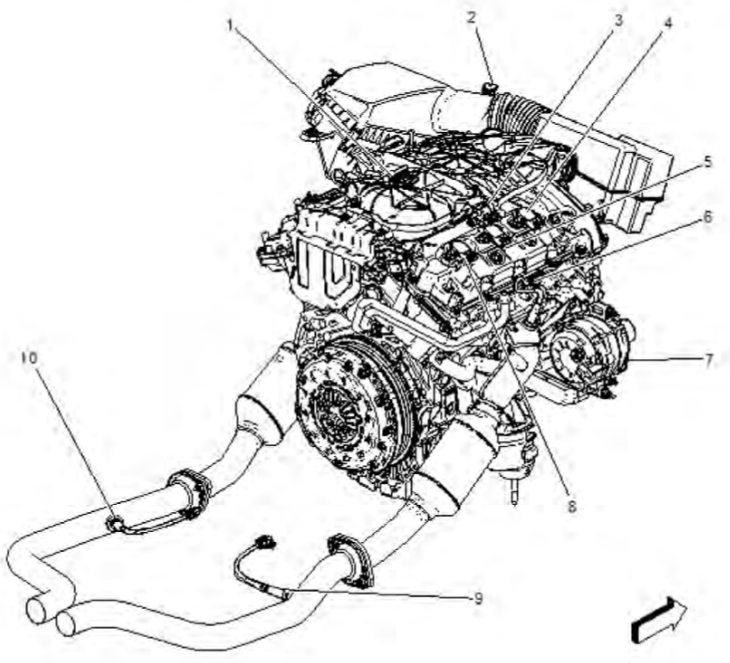


(1) T8F Ignition Coil 6
(2) T8D Ignition Coil 4
(3) B52E Heated Oxygen Sensor - Bank 2 Sensor 1
(4) T8B Ignition Coil 2
(5) G18 High Pressure Fuel Pump (LFW/LFX)
(6) B34 Engine Coolant Temperature Sensor
(7) M64 Starter Motor
(8) B35 Engine Oil Level Switch (LFW/LFX/LWR)
(9) B68B Knock Sensor 2
(10) G1 A/C Compressor
(11) Q2 A/C Compressor Clutch
(12) B1 A/C Refrigerant Pressure Sensor
(13) B37 Engine Oil Pressure Switch (LFW/LFX/LWR)

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Right Rear of Engine Components (LFW or LFX)

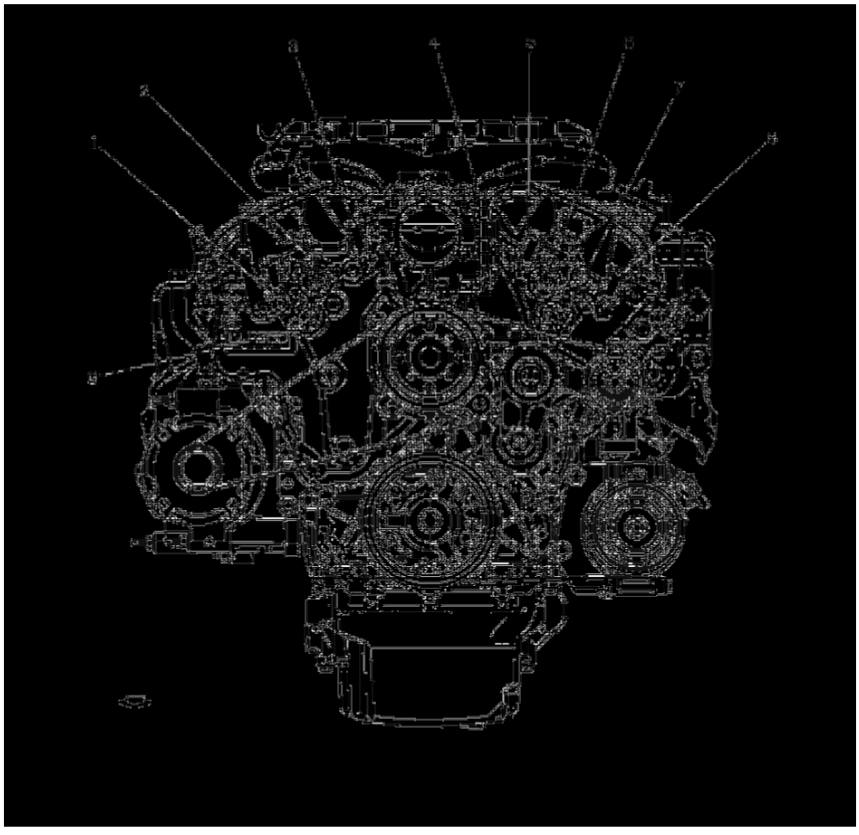


(1) B74 Manifold Absolute Pressure Sensor (L77/LFW/LFX/LS3/LWR)
(2) B75C Multifunction Intake Air Sensor (LFW/LFX)
(3) Q12 Evaporative Emission Purge Solenoid Valve
(4) T8A Ignition Coil 1
(5) T8C Ignition Coil 3
(6) B52C Heated Oxygen Sensor - Bank 1 Sensor 1
(7) G13 Generator
(8) T8E Ignition Coil 5
(9) B52D Heated Oxygen Sensor - Bank 1 Sensor 2
(10) B52F Heated Oxygen Sensor - Bank 2 Sensor 2

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Front of Engine Components (LWR)

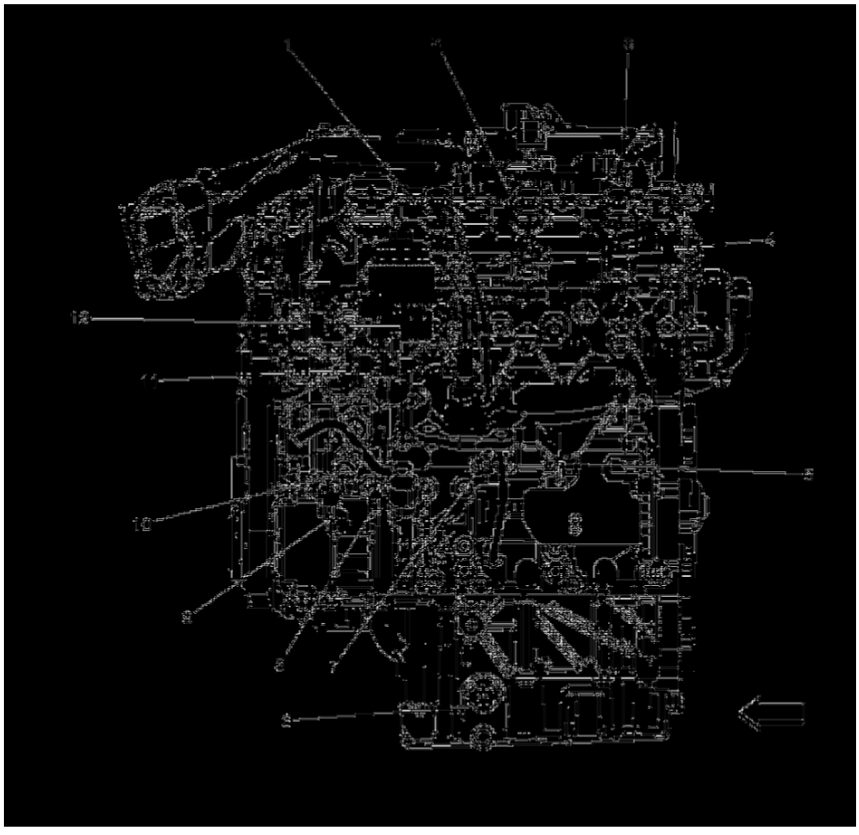


(1) B23A Camshaft Position Sensor - Bank 1 Exhaust (LFW/LFX/LWR)
(2) Q6B Camshaft Position Actuator Solenoid Valve - Bank 1 Intake (LFW/LFX/LWR)
(3) Q38 Throttle Body
(4) B23B Camshaft Position Sensor - Bank 1 Intake (LFW/LFX/LWR)
(5) B23D Camshaft Position Sensor - Bank 2 Intake (LFW/LFX/LWR)
(6) Q6D Camshaft Position Actuator Solenoid Valve - Bank 2 Intake (LFW/LFX/LWR)
(7) Q6C Camshaft Position Actuator Solenoid Valve - Bank 2 Exhaust (LFW/LFX/LWR)
(8) B23C Camshaft Position Sensor - Bank 2 Exhaust (LFW/LFX/LWR)
(9) Q6A Camshaft Position Actuator Solenoid Valve - Bank 1 Exhaust (LFW/LFX/LWR)

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Right Side of Engine Components (LWR)

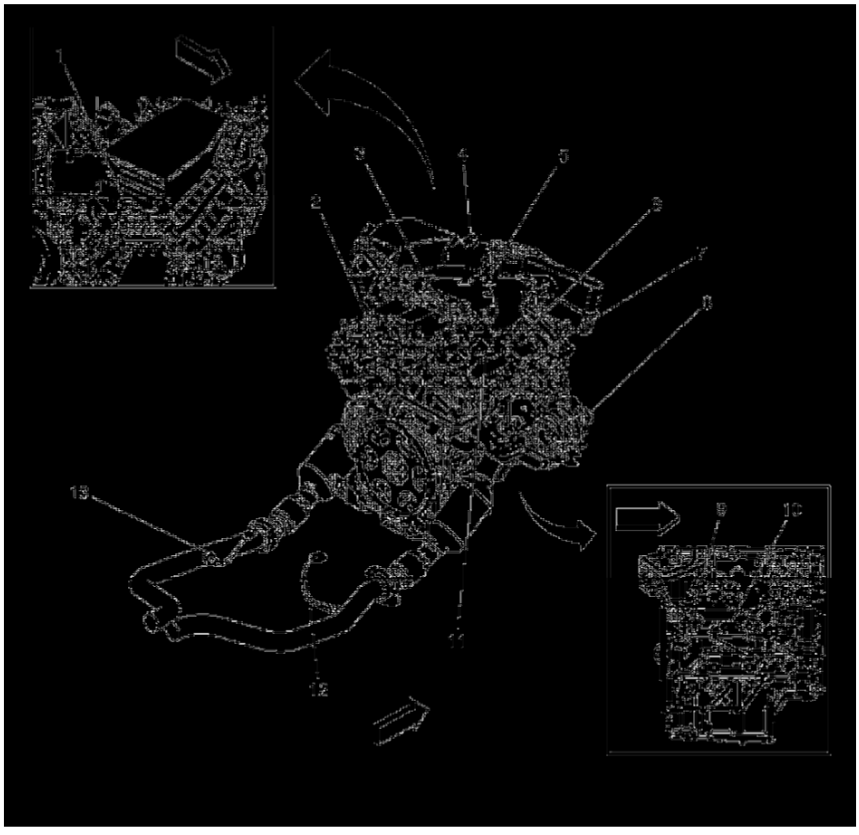


(1) T8B Ignition Coil 2
(2) T8D Ignition Coil 4
(3) T8F Ignition Coil 6
(4) B52E Heated Oxygen Sensor - Bank 2 Sensor 1
(5) M64 Starter Motor
(6) B35 Engine Oil Level Switch (LFW/LFX/LWR)
(7) B68B Knock Sensor 2
(8) G1 A/C Compressor
(9) B1 A/C Refrigerant Pressure Sensor
(10) Q2 A/C Compressor Clutch
(11) B37 Engine Oil Pressure Switch (LFW/LFX/LWR)
(12) B34 Engine Coolant Temperature Sensor

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Rear of Engine Components (LWR)

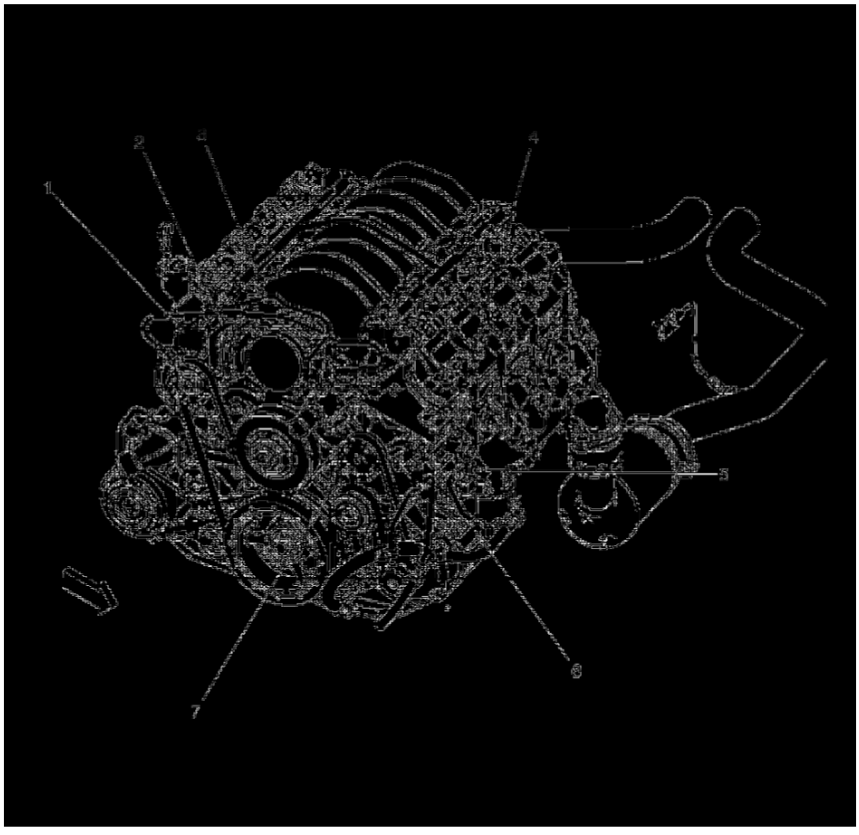


(1) B17 Barometric Pressure Sensor (LSA/LWR)
(2) B47B Fuel Rail Pressure Sensor
(3) T8E Ignition Coil 5
(4) B75B Mass Air Flow/Intake Air Temperature Sensor (L77/LS3/LSA/LWR)
(5) B74 Manifold Absolute Pressure Sensor (L77/LFW/LFX/LS3/LWR)
(6) T8A Ignition Coil 1
(7) B52C Heated Oxygen Sensor - Bank 1 Sensor 1
(8) G13 Generator
(9) B26 Crankshaft Position Sensor
(10) B68A Knock Sensor 1
(11) T8C Ignition Coil 3
(12) B52D Heated Oxygen Sensor - Bank 1 Sensor 2
(13) B52F Heated Oxygen Sensor - Bank 2 Sensor 2

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Front of Engine Components (L77 or LS3)

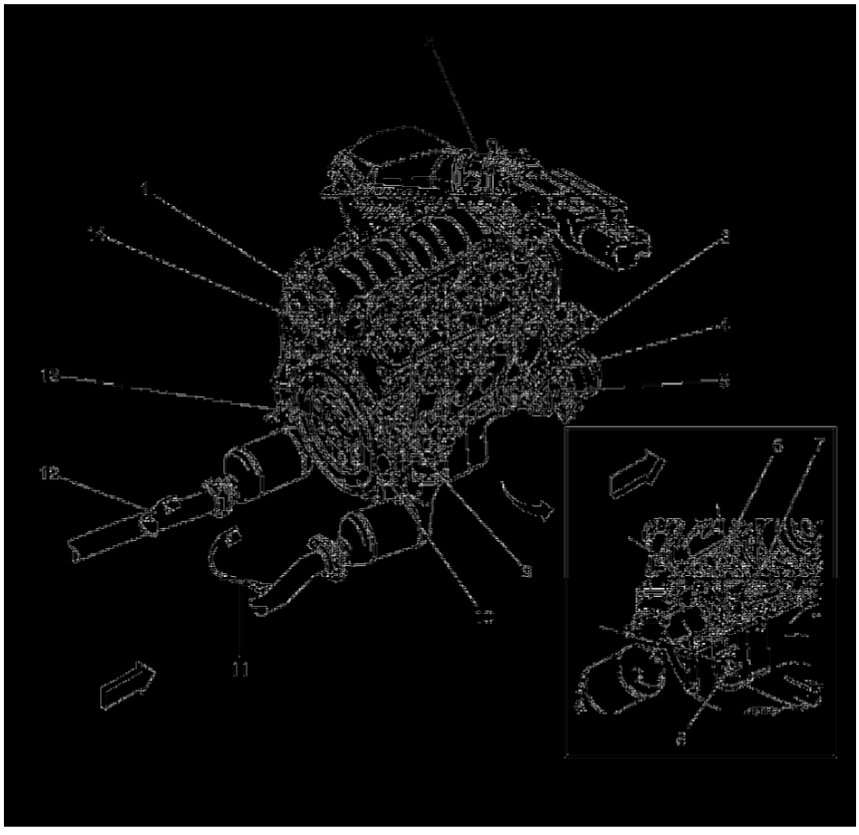


(1) Q12 Evaporative Emission Purge Solenoid Valve
(2) Q38 Throttle Body
(3) B74 Manifold Absolute Pressure Sensor (L77/LFW/LFX/LS3/LWR)
(4) B34 Engine Coolant Temperature Sensor
(5) B68A Knock Sensor 1
(6) G13 Generator
(7) B23 Camshaft Position Sensor (L77/LS3/LSA)

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Rear of Engine Components (L77 or LS3)



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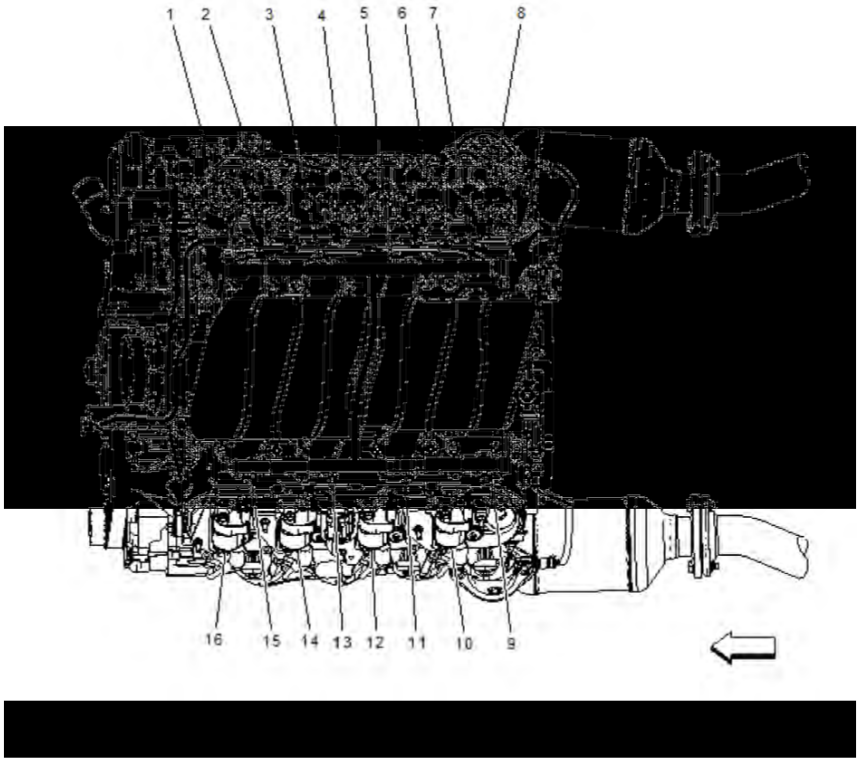
(1) B37B Engine Oil Pressure Sensor
(2) B75B Mass Air Flow/Intake Air Temperature Sensor (L77/LS3/LSA/LWR)
(3) Q2 A/C Compressor Clutch
(4) G1 A/C Compressor
(5) B1 A/C Refrigerant Pressure Sensor
(6) M64 Starter Motor
(7) B68B Knock Sensor 2
(8) B35C Engine Oil Level and Temperature Sensor (L77/LS3/LSA)
(9) B26 Crankshaft Position Sensor
(10) B52E Heated Oxygen Sensor - Bank 2 Sensor 1
(11) B52F Heated Oxygen Sensor - Bank 2 Sensor 2
(12) B52D Heated Oxygen Sensor - Bank 1 Sensor 2
(13) B52C Heated Oxygen Sensor - Bank 1 Sensor 1

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(14) Q43 Valve Lifter Oil Manifold Assembly

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Top of Engine Components (L77 or LS3)



(1) Q17B Fuel Injector 2
(2) T8B Ignition Coil 2
(3) Q17D Fuel Injector 4
(4) T8D Ignition Coil 4
(5) Q17F Fuel Injector 6
(6) T8F Ignition Coil 6
(7) Q17H Fuel Injector 8
(8) T8H Ignition Coil 8 (L77/LS3/LSA)
(9) Q17F Fuel Injector 6
(10) T8G Ignition Coil 7 (L77/LS3/LSA)
(11) Q17E Fuel Injector 5
(12) T8E Ignition Coil 5
(13) Q17C Fuel Injector 3

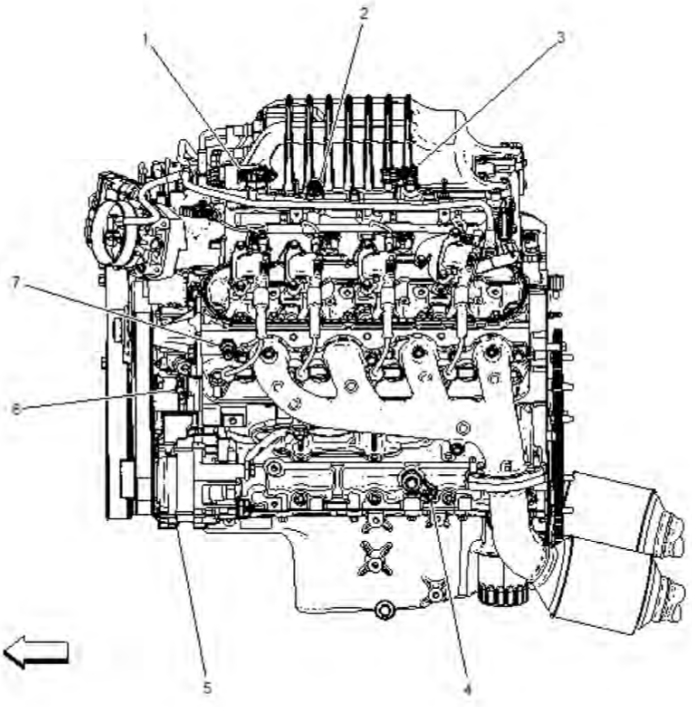
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(14) T8C Ignition Coil 3
(15) Q17A Fuel Injector 1
(16) T8A Ignition Coil 1

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Left Side of Engine Components (LSA)

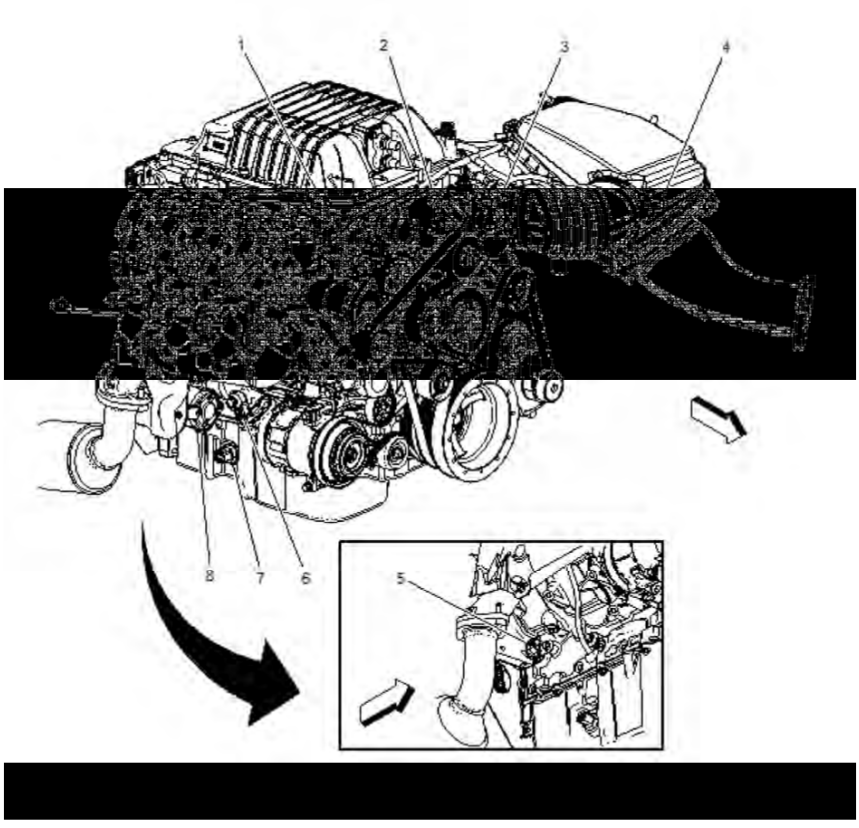


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(1) B17 Barometric Pressure Sensor (LSA/LWR)
(2) B66 Intake Air Temperature Sensor (LSA)
(3) B74 Manifold Absolute Pressure Sensor (L77/LFW/LFX/LS3/LWR)
(4) B68A Knock Sensor 1
(5) G13 Generator
(6) B23 Camshaft Position Sensor (L77/LS3/LSA)
(7) B34 Engine Coolant Temperature Sensor

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Right Front of Engine Components (LSA)

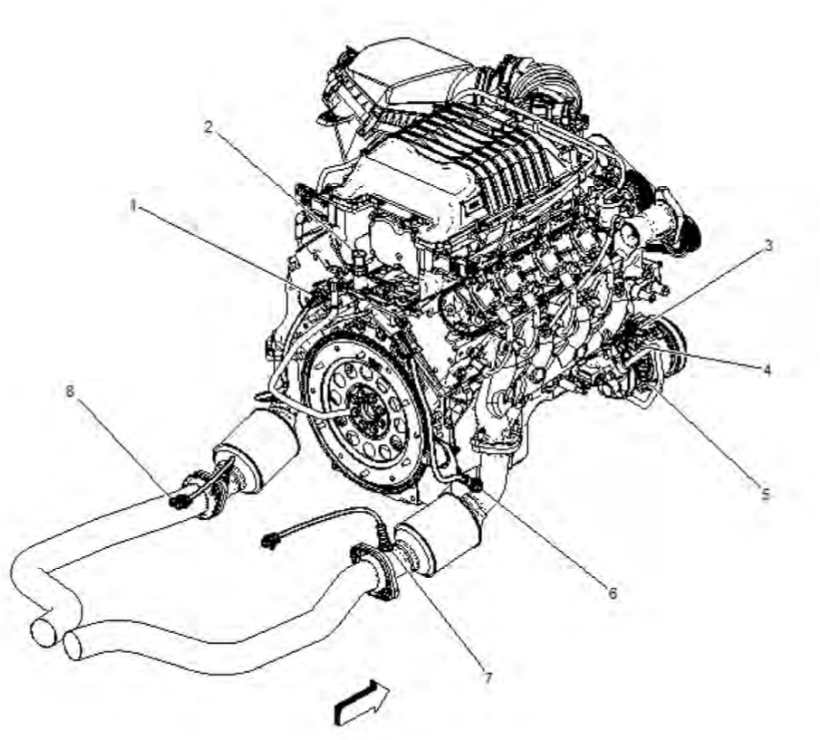


(1) Q36 Supercharger Bypass Solenoid Valve (LSA)
(2) Q12 Evaporative Emission Purge Solenoid Valve
(3) Q38 Throttle Body
(4) B75B Mass Air Flow/Intake Air Temperature Sensor (L77/LS3/LSA/LWR)
(5) B26 Crankshaft Position Sensor
(6) B68A Knock Sensor 1
(7) B35C Engine Oil Level and Temperature Sensor (L77/LS3/LSA)
(8) M64 Starter Motor

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Right Rear of Engine Components (LSA)

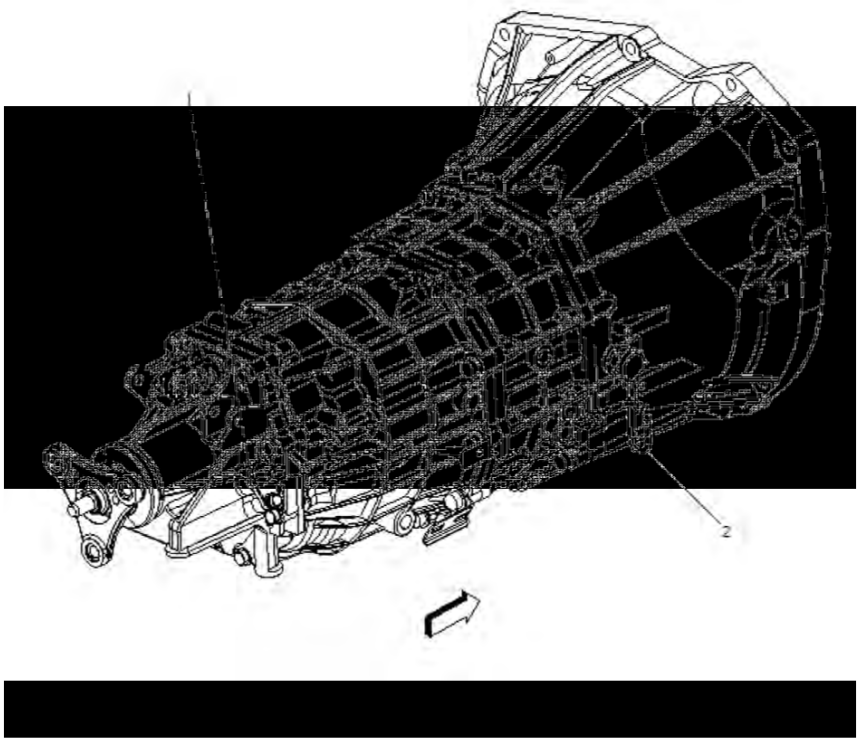


(1) B52C Heated Oxygen Sensor - Bank 1 Sensor 1
(2) B37B Engine Oil Pressure Sensor
(4) G1 A/C Compressor
(5) B1 A/C Refrigerant Pressure Sensor
(6) B52E Heated Oxygen Sensor - Bank 2 Sensor 1
(7) B52F Heated Oxygen Sensor - Bank 2 Sensor 2
(8) B52D Heated Oxygen Sensor - Bank 1 Sensor 2

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Manual Transmission Components (MV5)

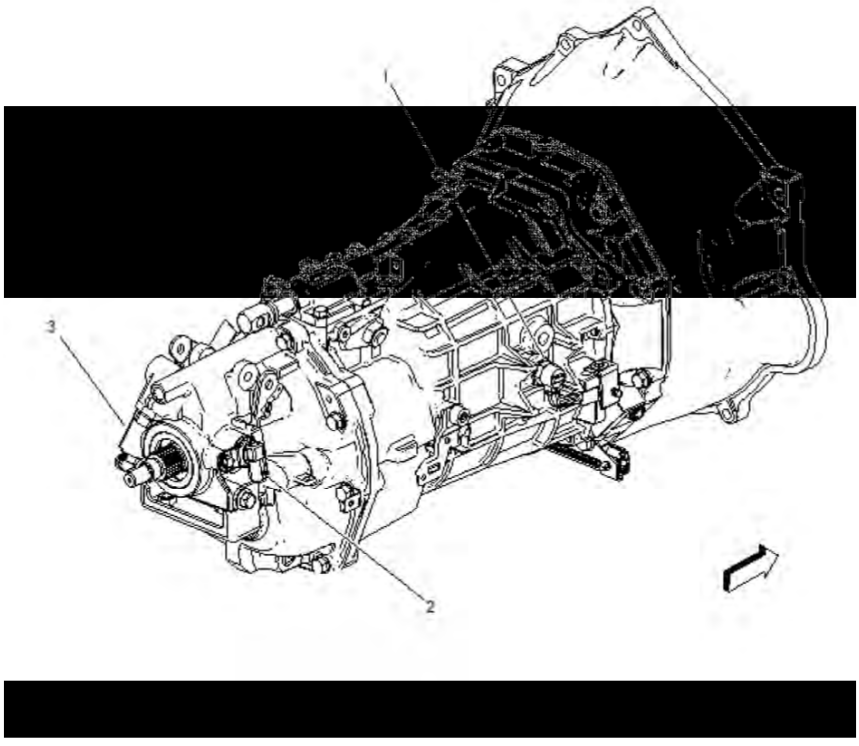


(1) B115 Vehicle Speed Sensor
(2) B16 Backup Lamp Switch

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Manual Transmission Components (MER or MG9)

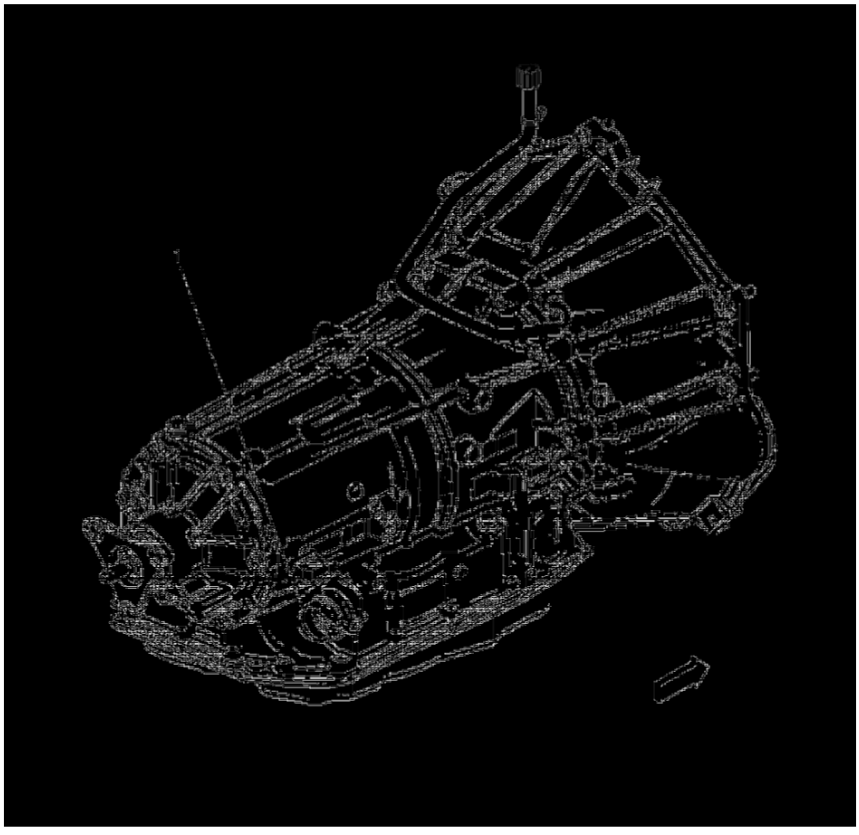


(1) B16 Backup Lamp Switch
(2) B115 Vehicle Speed Sensor
(3) M47 Reverse Inhibit Solenoid Actuator (MER/MG9)

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Automatic Transmission Components (MYA, MYC or MYD)



(1) K71 Transmission Control Module

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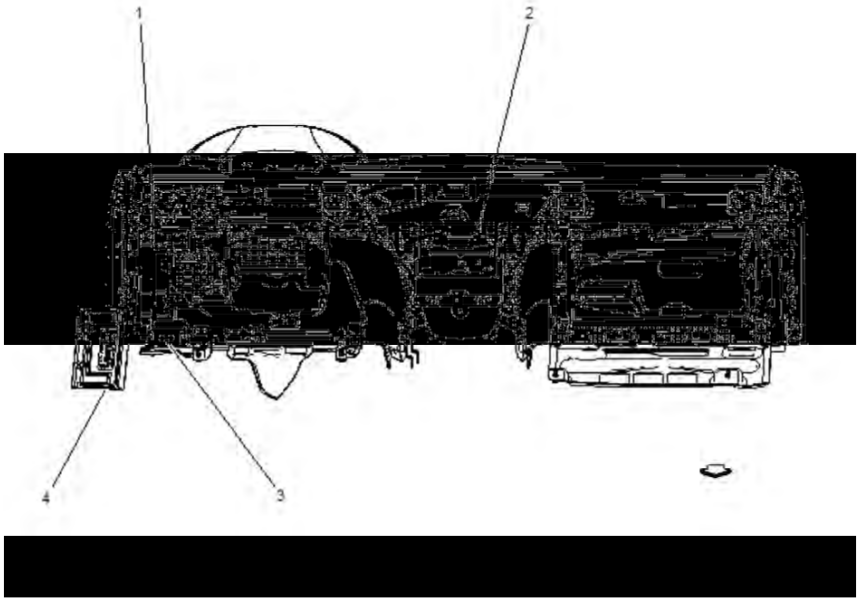
Instrument Panel/Center Console Component Views

Figure 1: Rear of Instrument Panel Components (1 of 2)
Figure 2: Rear of Instrument Panel Components (2 of 2)
Figure 3: Front of Instrument Panel Components (1 of 3)
Figure 4: Front of Instrument Panel Components (2 of 3)
Figure 5: Front of Instrument Panel Components (3 of 3)
Figure 6: Steering Wheel/Column Components (1 of 2)
Figure 7: Steering Wheel/Column Components (2 of 2)
Figure 8: Front of HVAC Module Components
Figure 9: Center Console Components

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Rear of Instrument Panel Components (1 of 2)

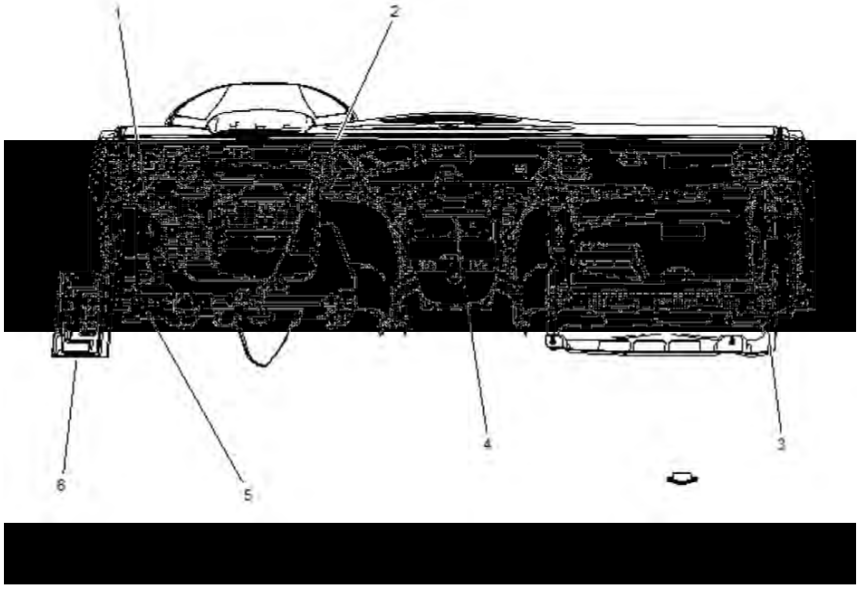


(1) X51A Fuse Block - Instrument Panel
(2) A11 Radio
(3) X84 Data Link Connector
(4) K9 Body Control Module

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Rear of Instrument Panel Components (2 of 2)

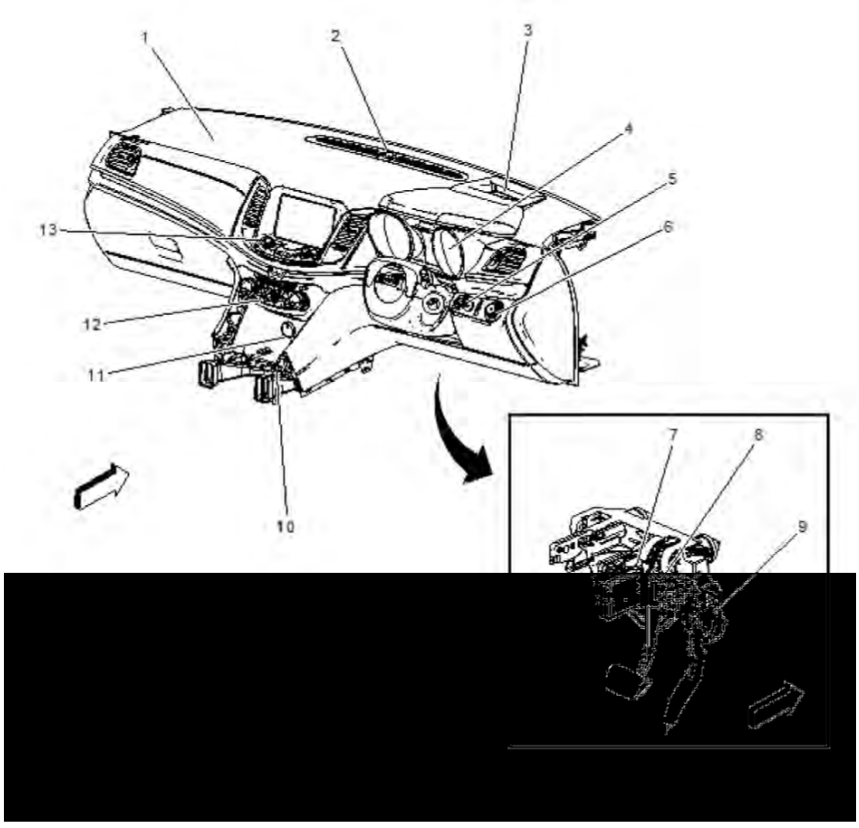


(1) X51A Fuse Block - Instrument Panel
(2) E8K Instrument Panel Courtesy Lamp - Right (U29)
(3) E8J Instrument Panel Courtesy Lamp - Left (U29)
(4) A11 Radio
(5) X84 Data Link Connector
(6) K9 Body Control Module

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Front of Instrument Panel Components (1 of 3)

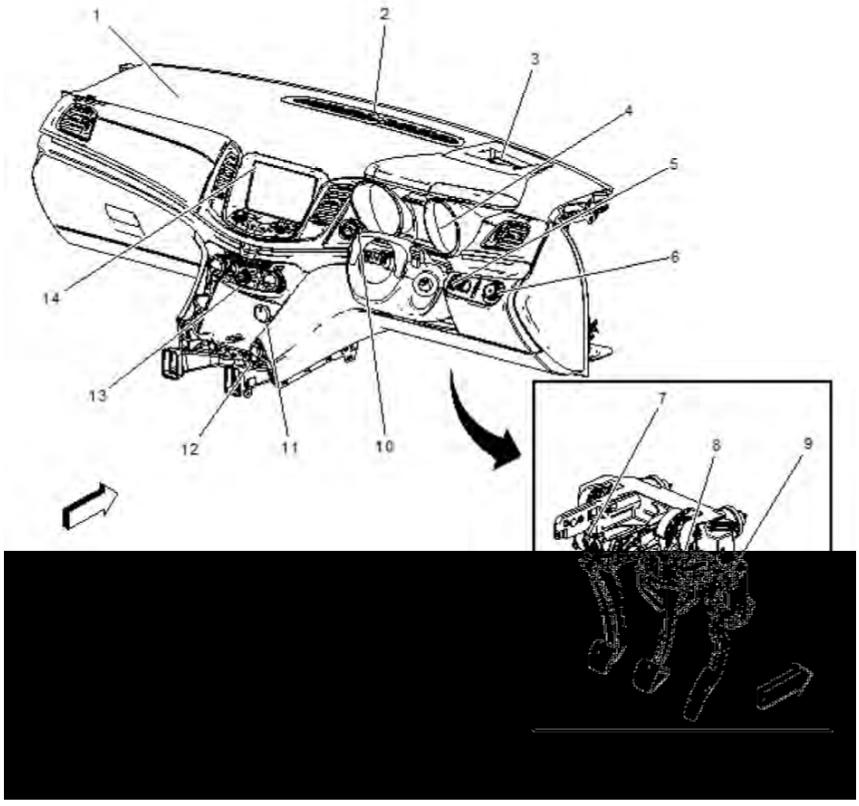


(1) F101 Passenger Instrument Panel Air Bag
(2) B10B Ambient Light/Sunload Sensor
(3) P29 Head-Up Display (UV6)
(4) P16 Instrument Cluster
(5) S27 Head-Up Display Switch
(6) S30 Headlamp Switch
(7) K103 Fuel Injector Control Module
(8) B22 Brake Pedal Position Sensor
(9) B107 Accelerator Pedal Position Sensor
(10) T10J Keyless Entry Antenna - Center Console Front
(11) X80F Accessory Power Receptacle - Front
(13) A11 Radio

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Front of Instrument Panel Components (2 of 3)

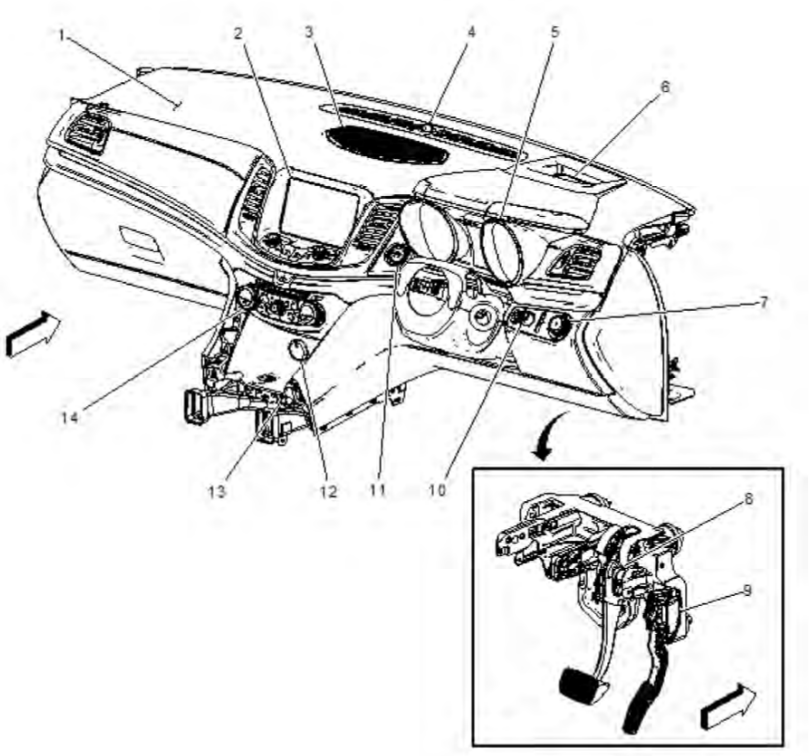


(1) F101 Passenger Instrument Panel Air Bag
(2) B10B Ambient Light/Sunload Sensor
(3) P29 Head-Up Display (UV6)
(4) P16 Instrument Cluster
(5) S27 Head-Up Display Switch
(6) S30 Headlamp Switch
(7) B25B Clutch Pedal Position Sensor (MER/MG9/MV5)
(8) B22 Brake Pedal Position Sensor
(9) B107 Accelerator Pedal Position Sensor
(10) S38 Ignition Mode Switch
(11) X80F Accessory Power Receptacle - Front
(12) T10J Keyless Entry Antenna - Center Console Front
(14) A11 Radio

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Front of Instrument Panel Components (3 of 3)



(1) F101 Passenger Instrument Panel Air Bag
(2) A11 Radio
(3) P19B Speaker - Center Instrument Panel (UQA)
(4) B10B Ambient Light/Sunload Sensor
(5) P16 Instrument Cluster
(6) P29 Head-Up Display (UV6)
(7) S30 Headlamp Switch
(8) B22 Brake Pedal Position Sensor
(9) B107 Accelerator Pedal Position Sensor
(10) S27 Head-Up Display Switch
(11) S38 Ignition Mode Switch
(12) X80F Accessory Power Receptacle - Front
(13) T10J Keyless Entry Antenna - Center Console Front

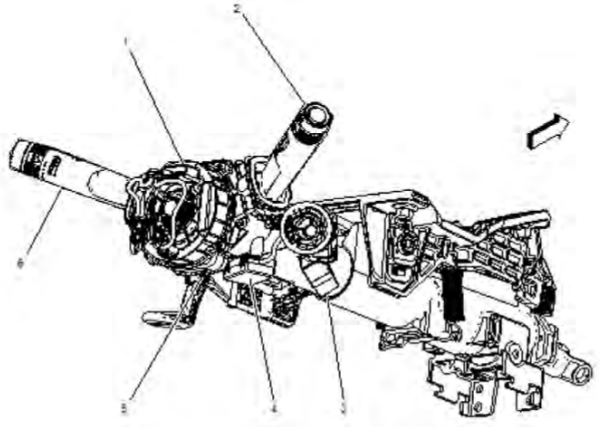
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(14) A20 Radio/HVAC Controls

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Steering Wheel/Column Components (1 of 2)



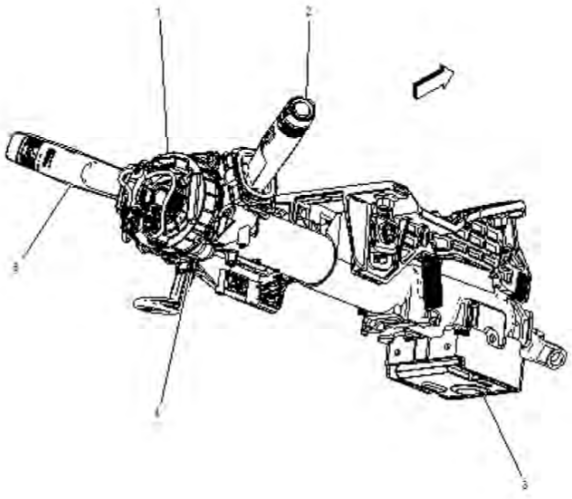
[redacted]

(1) X85 Steering Wheel Air Bag Coil
(2) S78 Turn Signal/Multifunction Switch
(3) S39 Ignition Switch
(4) K89 Immobilizer Control Module
(5) B99 Steering Wheel Angle Sensor
(6) S82 Windshield Wiper/Washer Switch

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Steering Wheel/Column Components (2 of 2)

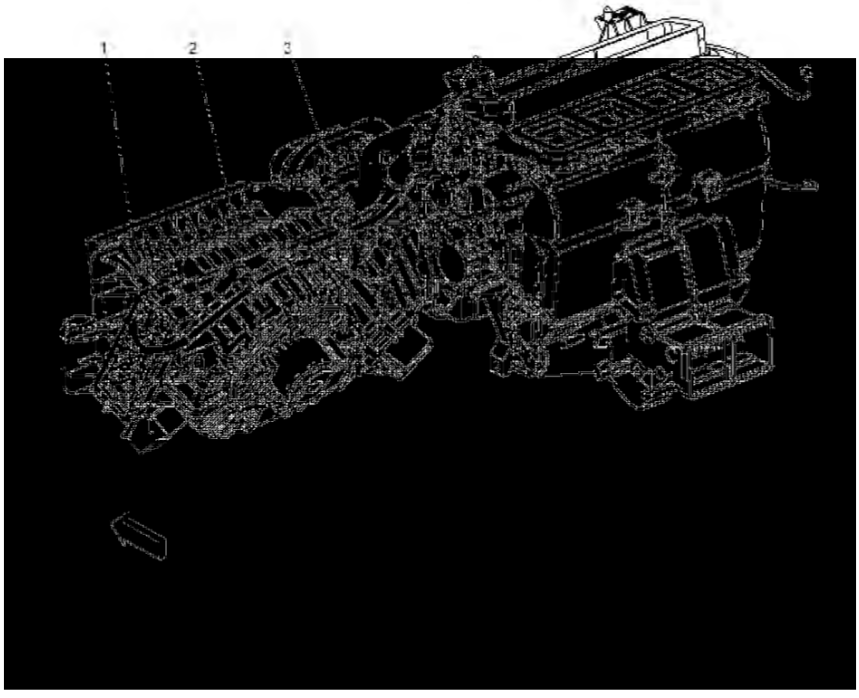


(1) X85 Steering Wheel Air Bag Coil
(2) S78 Turn Signal/Multifunction Switch
(3) K60 Steering Column Lock Module (ULS)
(4) B99 Steering Wheel Angle Sensor
(5) S82 Windshield Wiper/Washer Switch

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Front of HVAC Module Components

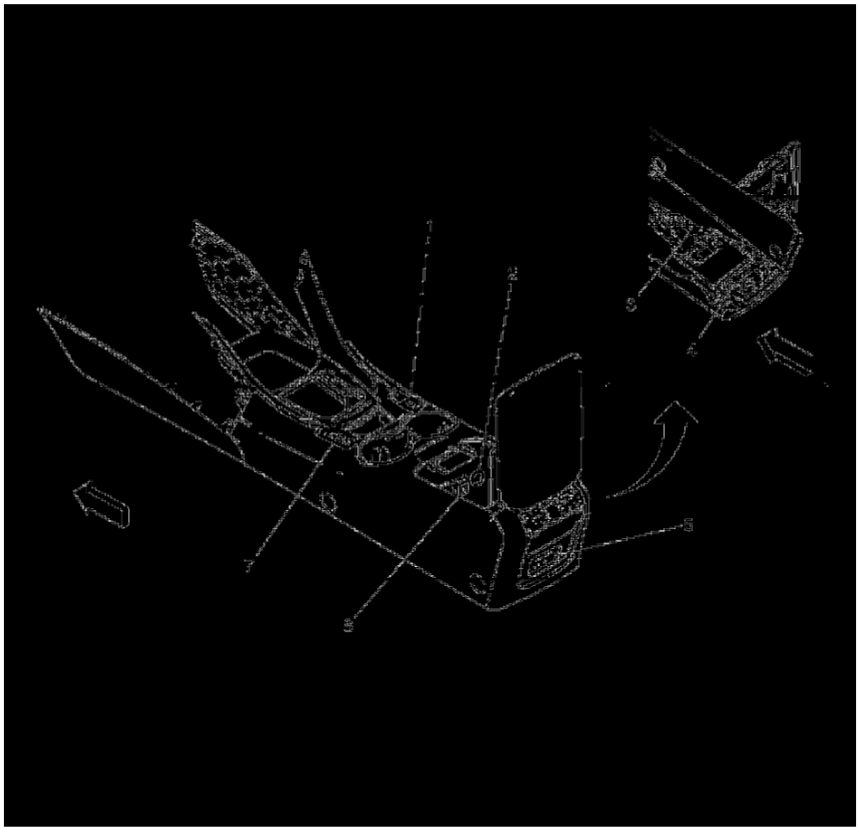


(1) K33 HVAC Control Module
(2) M8 Blower Motor
(3) K8 Blower Motor Control Module

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Center Console Components



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(1) S91 Park Brake Control Switch
(2) X80H Accessory Power Receptacle - Center Console
(3) K89 Immobilizer Control Module
(4) T10K Keyless Entry Antenna - Center Console Rear
(5) X82 Audio/Video Input Adapter
(6) X83 Auxiliary Audio Input
(7) S48E Multifunction Switch - Center Console (UD7/UFQ)

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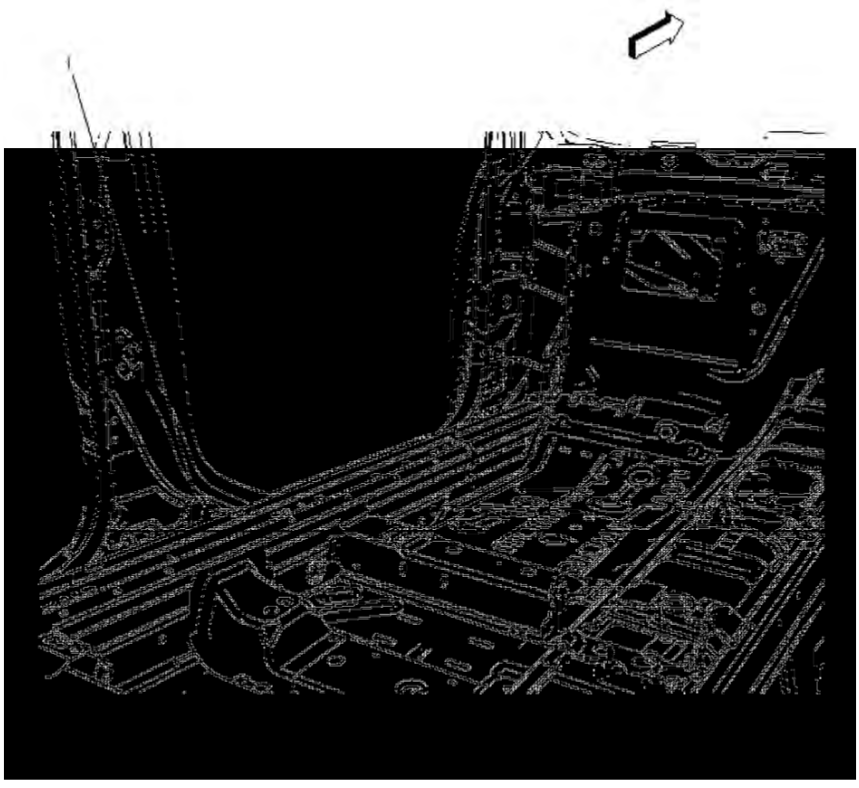
Passenger Compartment/Roof Component Views

Figure 1: Left Front of the Passenger Compartment Components
Figure 2: Right Front of the Passenger Compartment Components
Figure 3: Left Rear of the Passenger Compartment Components (Short Wheelbase Sedan)
Figure 4: Left Rear of the Passenger Compartment Components (Long Wheelbase Sedan)
Figure 5: Left Rear of the Passenger Compartment Components (Ute)
Figure 6: Right Rear of the Passenger Compartment Components (Short Wheelbase Sedan)
Figure 7: Right Rear of the Passenger Compartment Components (Long Wheelbase Sedan)
Figure 8: Right Rear of the Passenger Compartment Components (Ute)

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Left Front of the Passenger Compartment Components



(1) B63L Side Impact Sensor - Left

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Right Front of the Passenger Compartment Components



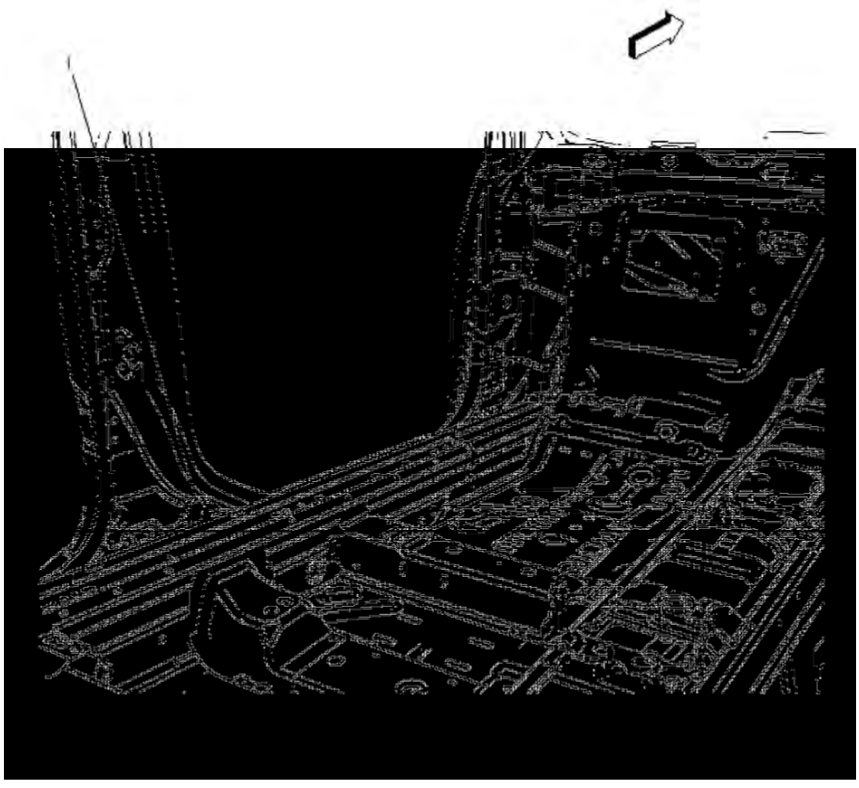
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Left Rear of the Passenger Compartment Components (Short Wheelbase Sedan)

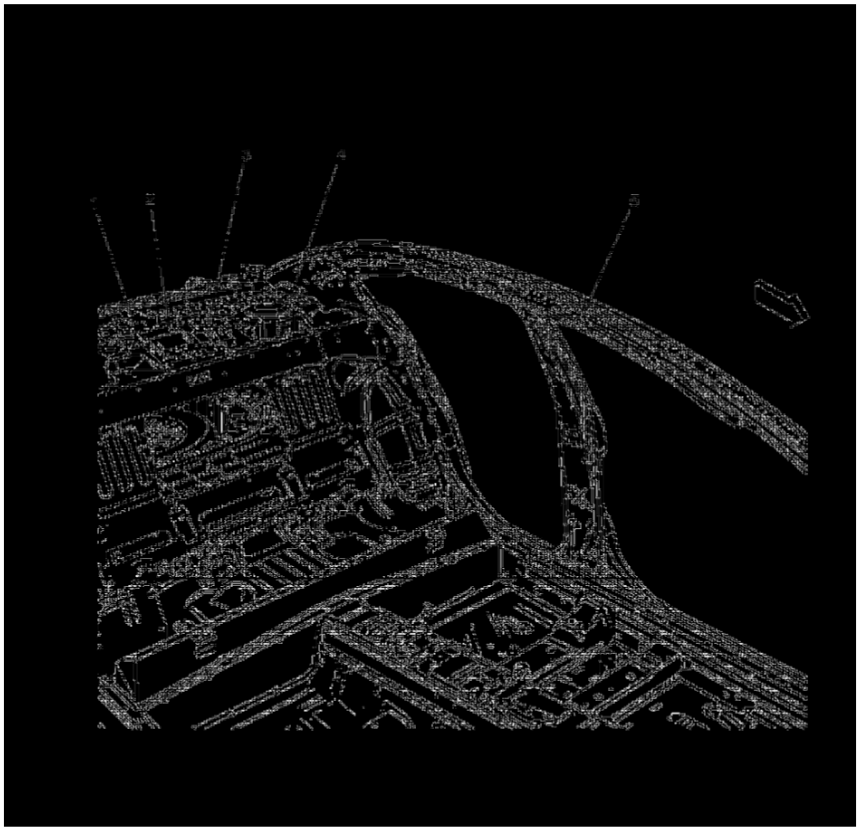


(1) B63L Side Impact Sensor – Left

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Left Rear of the Passenger Compartment Components (Long Wheelbase Sedan)

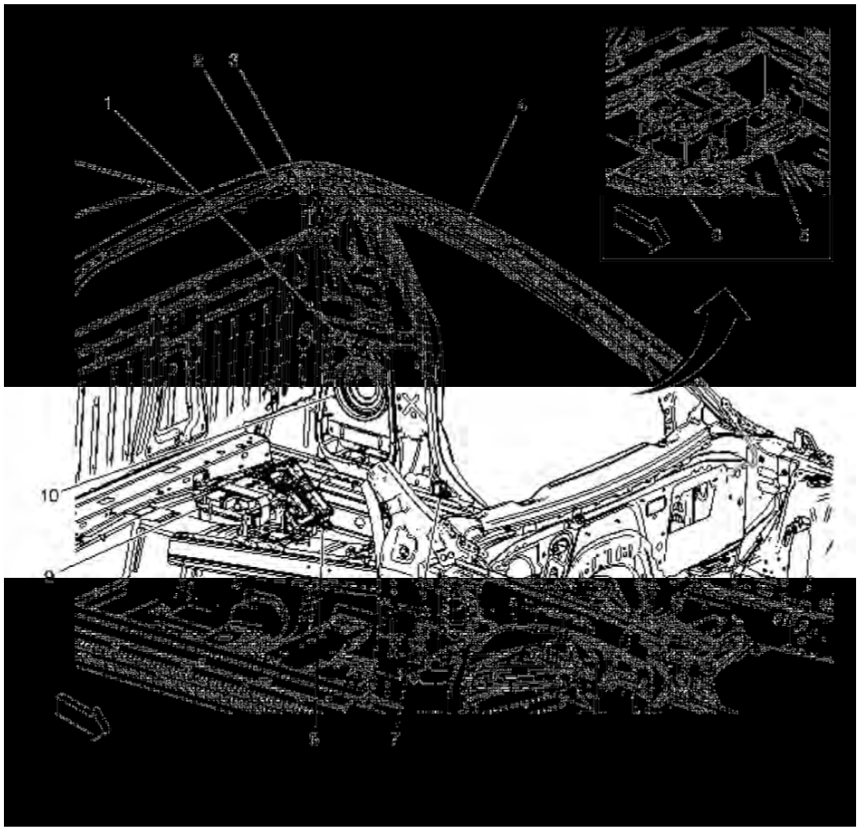


(1) E8S Rear Compartment Courtesy Lamp
(2) K84 Keyless Entry Control Module
(3) K41 Front and Rear Parking Assist Control Module
(4) P19N Speaker - Left Subwoofer
(5) F105L Roof Rail Air Bag - Left

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Left Rear of the Passenger Compartment Components (Ute)

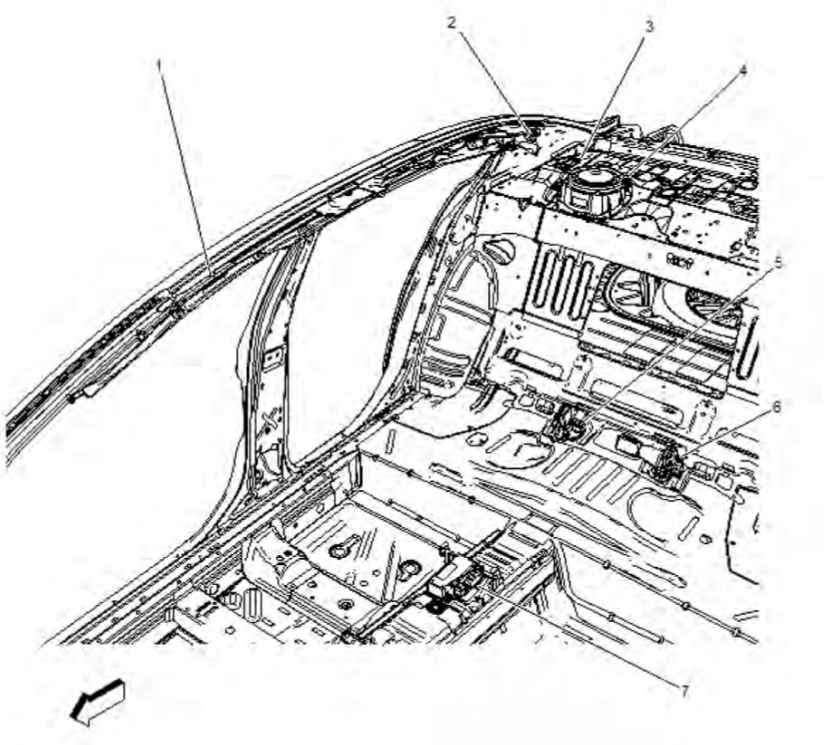


(1) E33 Cargo Lamp
(2) K77 Remote Control Door Lock Receiver
(3) K46 Radio Antenna Module
(4) F105L Roof Rail Air Bag - Left
(5) K101 Trailer Interface Control Module
(6) B18 Battery Current Sensor
(7) B63L Side Impact Sensor - Left
(8) X53A Fuse Block - Rear Body
(10) P19N Speaker - Left Subwoofer

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Right Rear of the Passenger Compartment Components (Short Wheelbase Sedan)

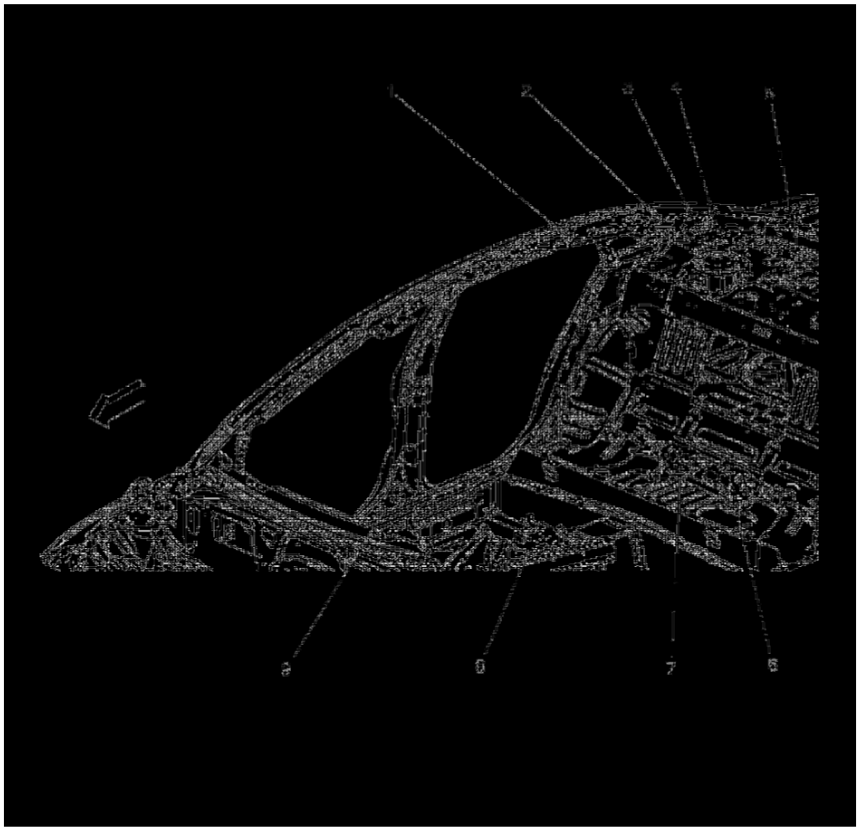


(1) F105R Roof Rail Air Bag - Right
(2) K46 Radio Antenna Module
(3) K77 Remote Control Door Lock Receiver
(4) P19AA Speaker - Right Subwoofer
(5) B88RR Seat Belt Switch - Right Rear (UH5)
(6) B88LR Seat Belt Switch - Left Rear (UH5)
(7) K36 Inflatable Restraint Sensing and Diagnostic Module

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Right Rear of the Passenger Compartment Components (Long Wheelbase Sedan)

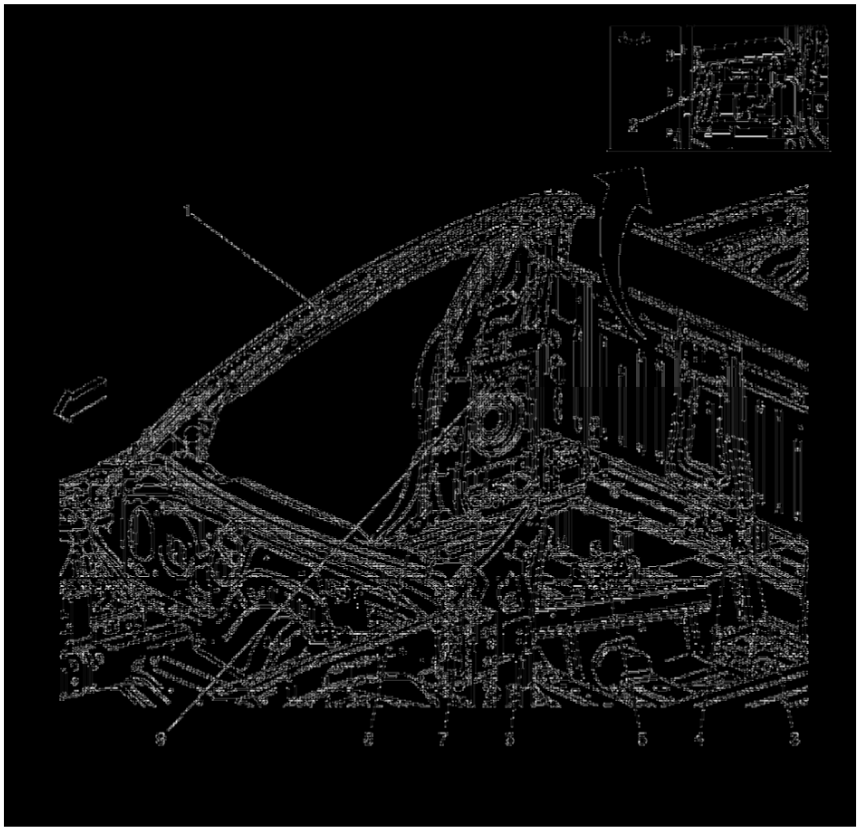


(1) F105R Roof Rail Air Bag - Right
(2) K46 Radio Antenna Module
(3) P19AA Speaker - Right Subwoofer
(4) K77 Remote Control Door Lock Receiver
(5) K28 Headlamp Leveling Control Module (T3T)
(6) B88LR Seat Belt Switch - Left Rear (UH5)
(7) B88RR Seat Belt Switch - Right Rear (UH5)
(8) K36 Inflatable Restraint Sensing and Diagnostic Module
(9) B63R Side Impact Sensor - Right

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Right Rear of the Passenger Compartment Components (Ute)



(1) F105R Roof Rail Air Bag - Right
(2) K41 Front and Rear Parking Assist Control Module
(3) K84 Keyless Entry Control Module
(4) T3 Audio Amplifier
(5) K36 Inflatable Restraint Sensing and Diagnostic Module
(6) K38 Chassis Control Module
(7) P19AA Speaker - Right Subwoofer
(8) B63R Side Impact Sensor - Right
(9) E33 Cargo Lamp

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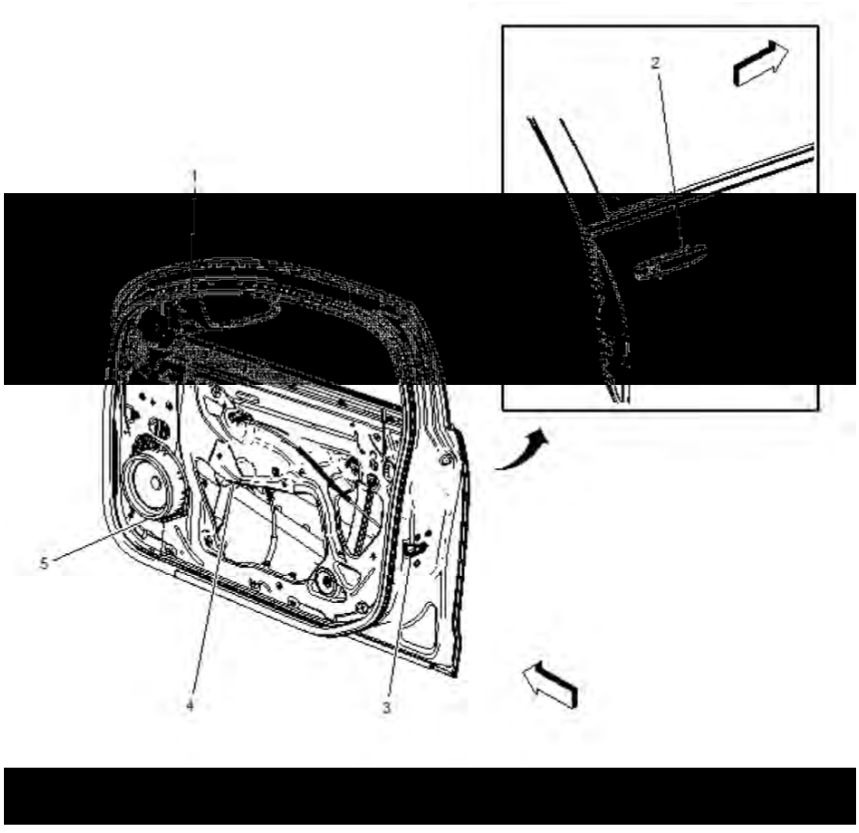
Door Component Views

Figure 1: Driver Door Components (RHD)
Figure 2: Passenger Door Components (RHD)
Figure 3: Left Rear Door Components (1 of 2)
Figure 4: Right Rear Door Components (1 of 2)
Figure 5: Right Rear Door Components (2 of 2)

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Driver Door Components (RHD)

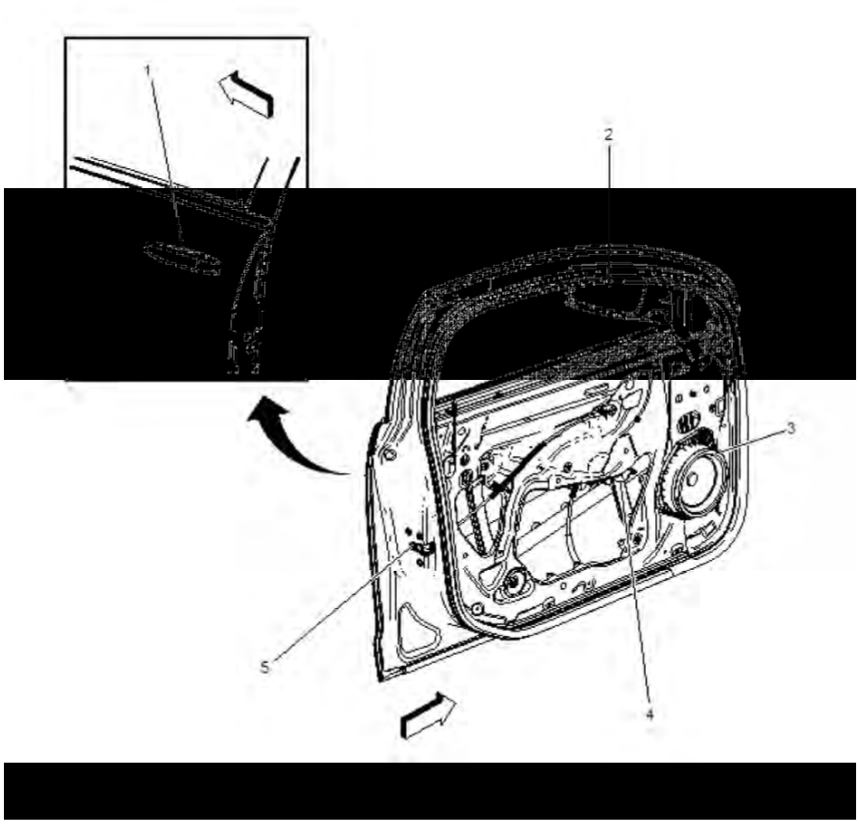


(1) A9A Outside Rearview Mirror - Driver
(2) T10M Keyless Entry Antenna - Driver Door Handle
(3) A23D Door Latch Assembly - Driver
(4) M74D Window Motor - Driver
(5) P19AH Speaker - Right Front Door

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Passenger Door Components (RHD)

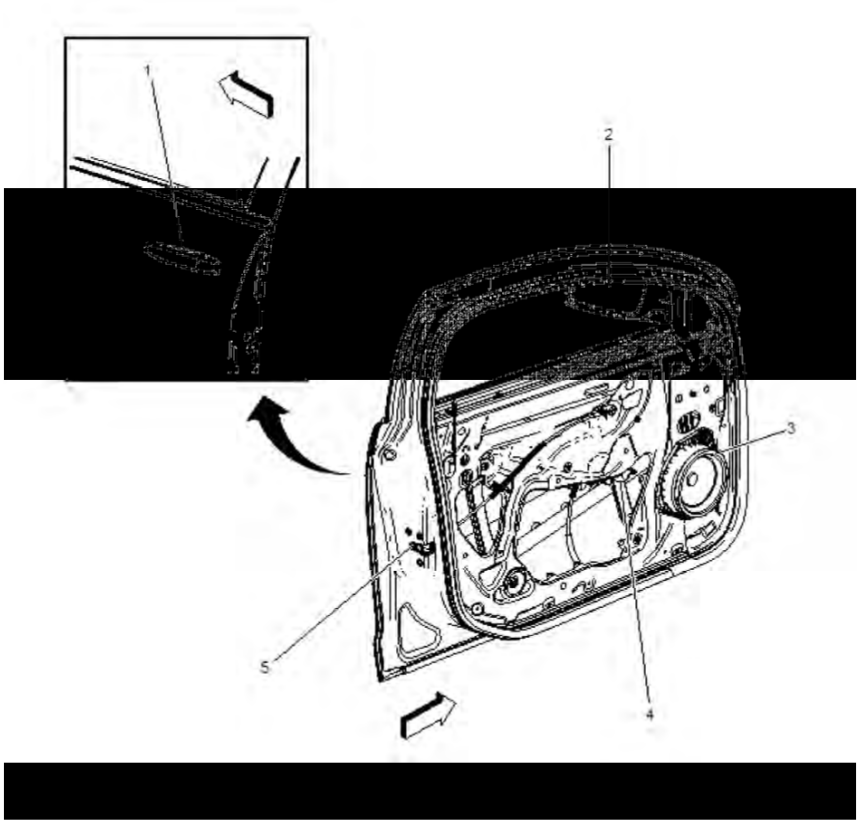


(1) T10N Keyless Entry Antenna - Passenger Door Handle
(2) A9B Outside Rearview Mirror - Passenger
(3) P19AG Speaker - Left Front Door
(4) M74P Window Motor - Passenger
(5) A23P Door Latch Assembly - Passenger

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Left Rear Door Components (1 of 2)

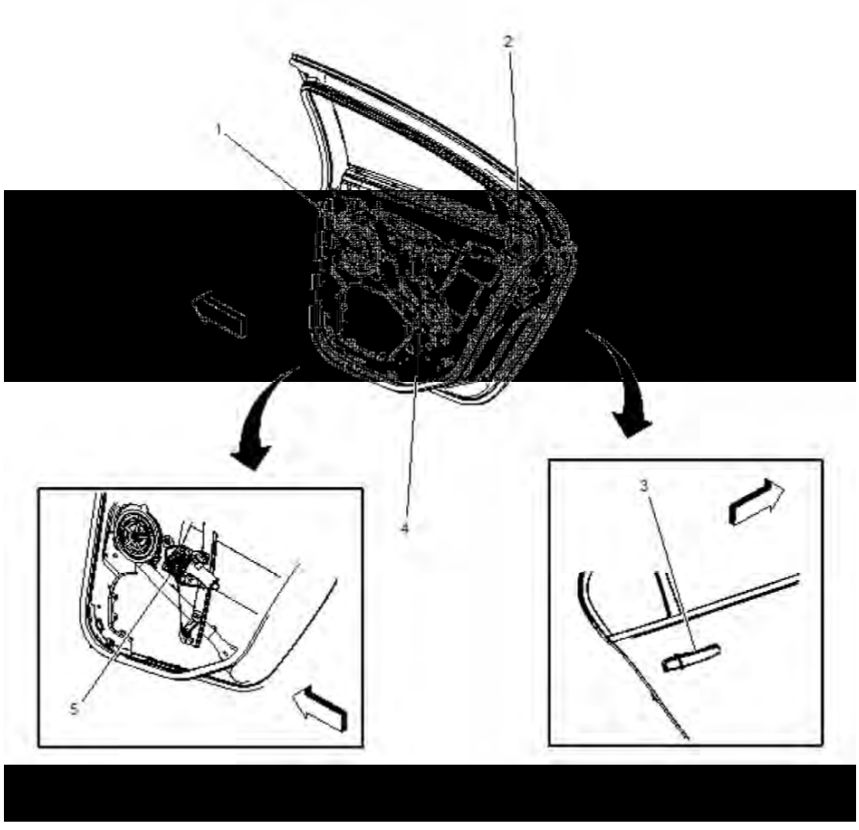


(1) T10N Keyless Entry Antenna – Passenger Door Handle
(2) A9B Outside Rearview Mirror – Passenger
(3) P19AG Speaker – Left Front Door (UQA or UQF/UQG)
(4) M74P Window Motor – Passenger
(5) A23P Door Latch Assembly – Passenger

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Right Rear Door Components (1 of 2)

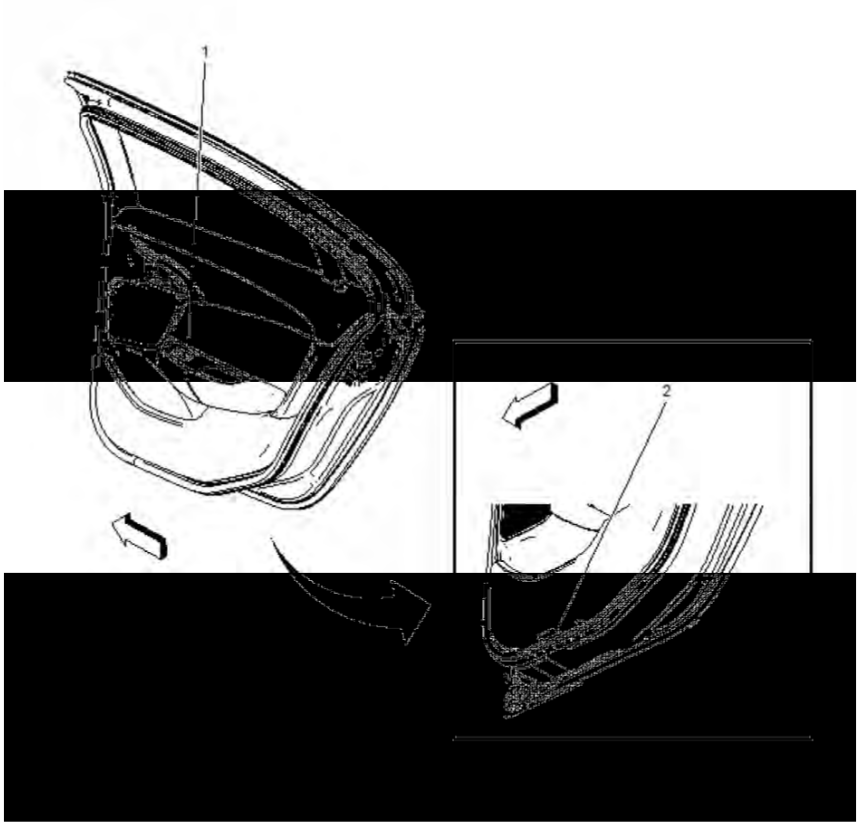


(1) P19AM Speaker - Right Rear Door
(2) A23RR Door Latch Assembly - Right Rear
(3) B27RR Door Handle Switch - Right Rear Exterior
(4) M74RR Window Motor - Right Rear (F19/F35/F69)
(5) M74RR Window Motor - Right Rear (F19/F35/F69)

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Right Rear Door Components (2 of 2)



(1) S79RR Window Switch - Right Rear
(2) E8RR Door Courtesy Lamp - Right Rear (C90)

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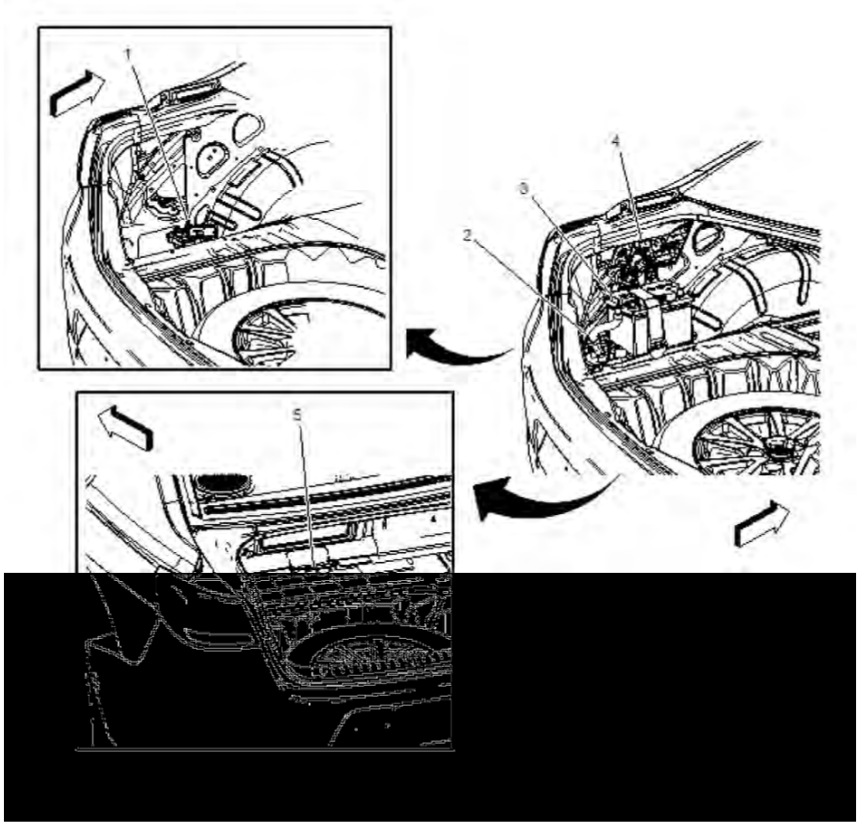
Luggage Compartment/Rear of Vehicle Component Views

Figure 1: Left Side of the Luggage Compartment Components (Short Wheelbase Sedan)
Figure 2: Left Side of the Luggage Compartment Components (Long Wheelbase Sedan)
Figure 3: Left Side of the Luggage Compartment Components (Sedan with LFW or LFX)
Figure 4: Left Side of the Luggage Compartment Components (Sportwagon)
Figure 5: Right Side of the Luggage Compartment Components (Short Wheelbase Sedan with UQA)
Figure 6: Right Side of the Luggage Compartment Components (Short Wheelbase Sedan with UQG)
Figure 7: Right Side of the Luggage Compartment Components (Long Wheelbase Sedan)
Figure 8: Right Side of the Luggage Compartment Components (Sportwagon)
Figure 9: Right Rear of the Luggage Compartment Components (Ute)
Figure 10: Rear of Vehicle Components (Long Wheelbase Sedan)
Figure 11: Rear of Vehicle Components (Sportwagon)
Figure 12: Rear of Vehicle Components (Ute)
Figure 13: Liftgate Components (Sportwagon)

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Left Side of the Luggage Compartment Components (Short Wheelbase Sedan)

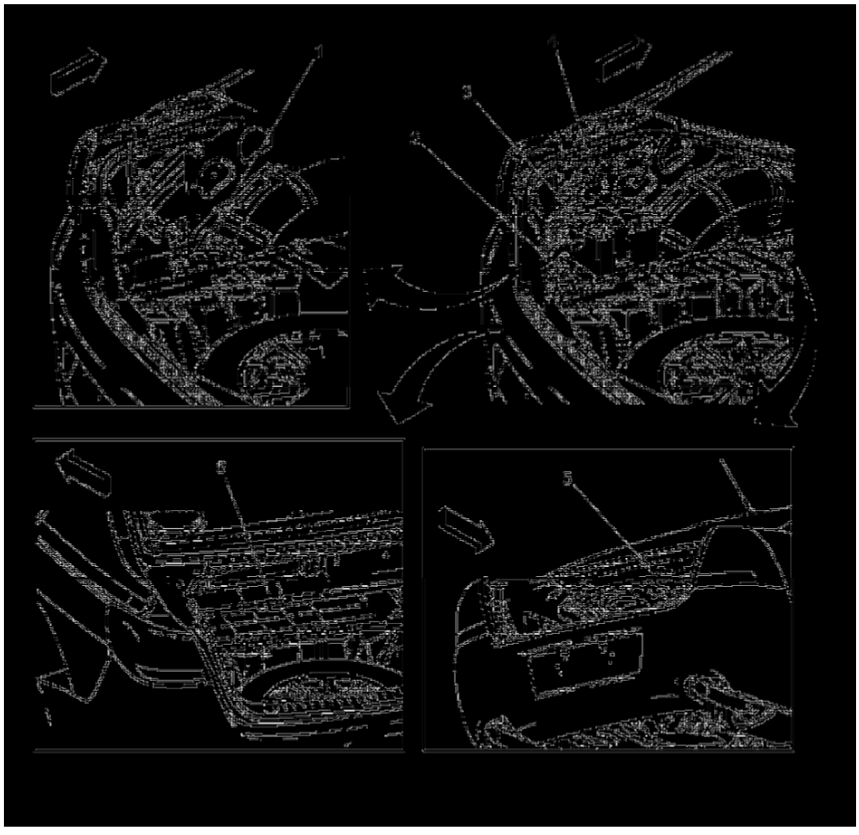


(1) K38 Chassis Control Module
(2) B18 Battery Current Sensor
(3) C1 Battery
(4) X53A Fuse Block - Rear Body
(5) T10E Keyless Entry Antenna - Rear Compartment

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Left Side of the Luggage Compartment Components (Long Wheelbase Sedan)

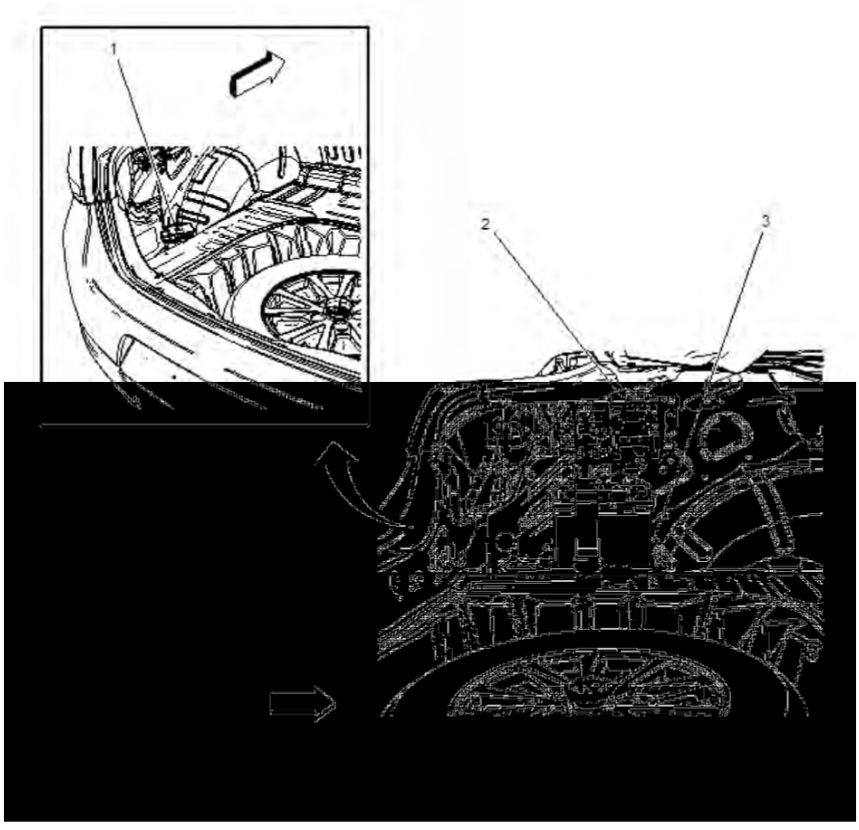


(1) K38 Chassis Control Module
(2) B18 Battery Current Sensor
(3) C1 Battery
(5) E8S Rear Compartment Courtesy Lamp
(6) T10E Keyless Entry Antenna - Rear Compartment

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Left Side of the Luggage Compartment Components (Sedan with LFW or LFX)

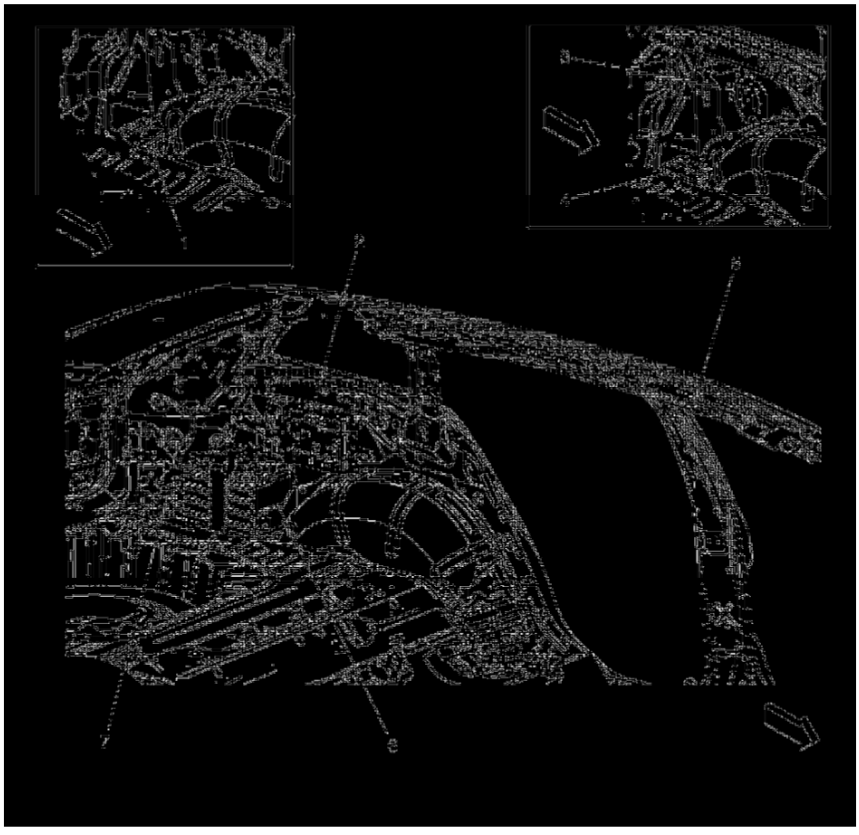


(1) K27 Fuel Pump Control Module
(3) C1 Battery

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Left Side of the Luggage Compartment Components (Sportwagon)

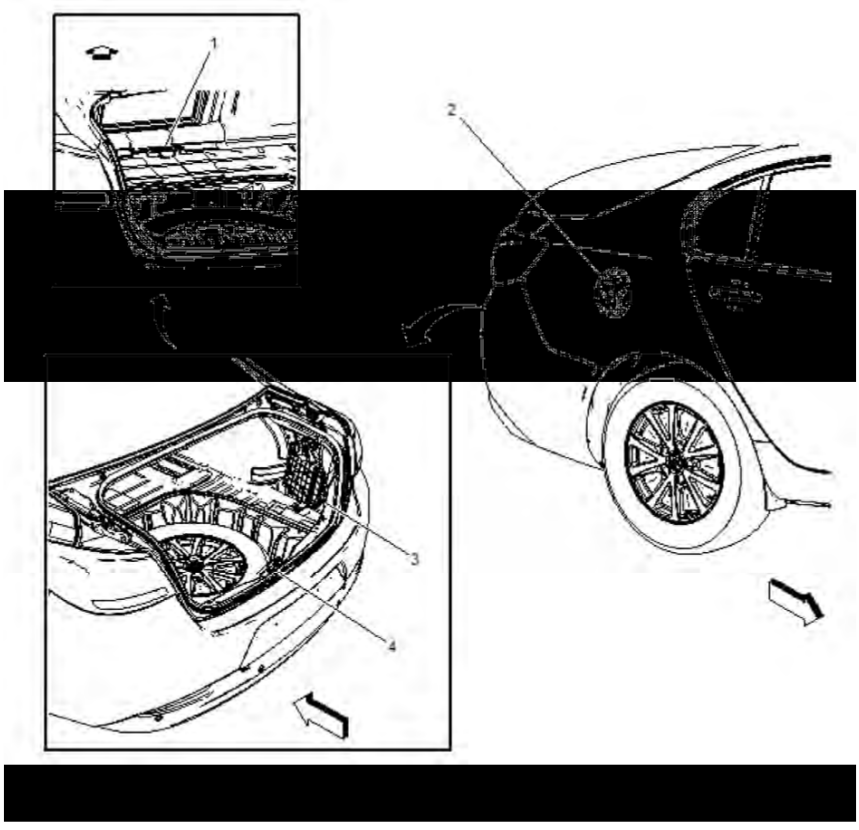


(1) K27 Fuel Pump Control Module
(2) X53A Fuse Block - Rear Body
(3) K41 Front and Rear Parking Assist Control Module
(4) K38 Chassis Control Module
(5) F105L Roof Rail Air Bag - Left
(6) C1 Battery
(7) B18 Battery Current Sensor

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Right Side of the Luggage Compartment Components (Short Wheelbase Sedan with UQA)

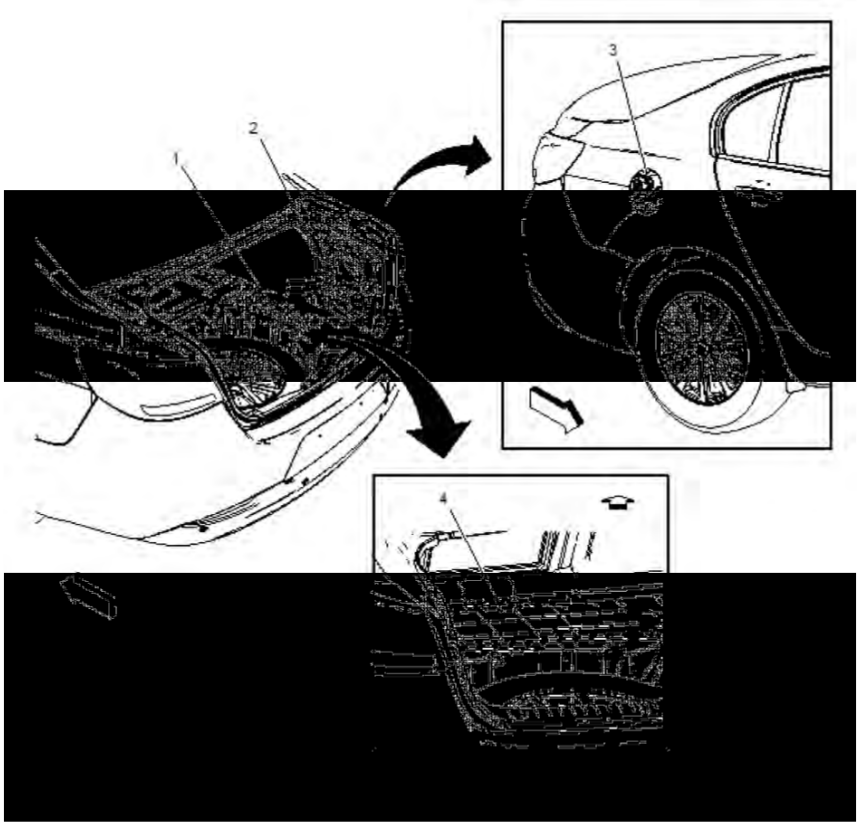


(1) T10E Keyless Entry Antenna - Rear Compartment
(2) M97 Fuel Fill Door Lock Actuator
(3) T3 Audio Amplifier
(4) M40 Rear Compartment Lid Latch

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Right Side of the Luggage Compartment Components (Short Wheelbase Sedan with UQG)

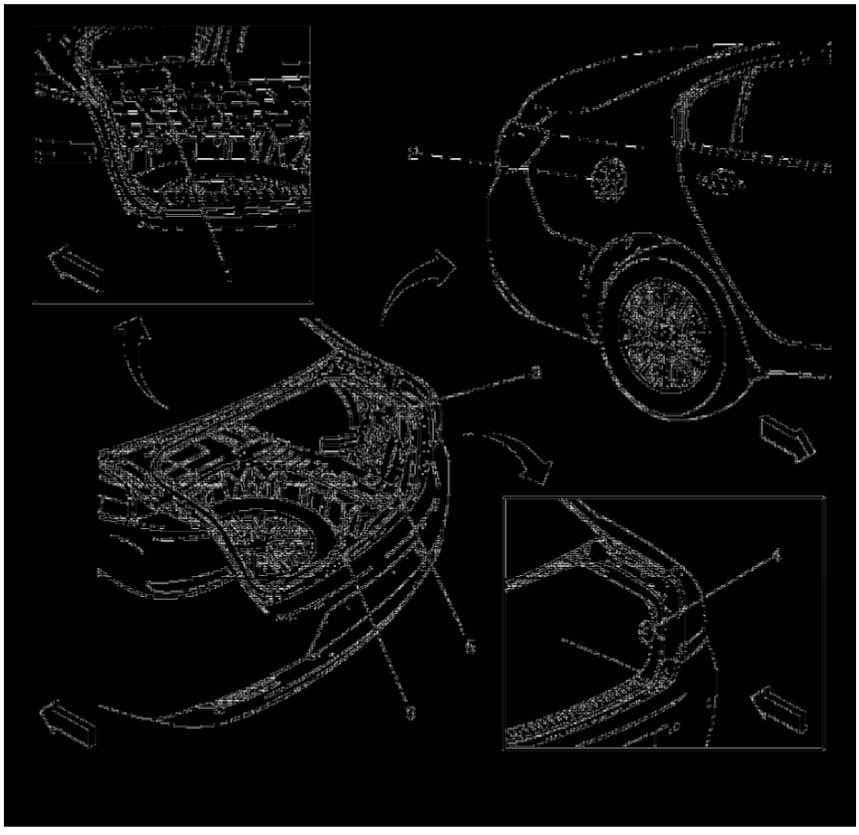


(1) M40 Rear Compartment Lid Latch
(2) T3 Audio Amplifier
(3) M97 Fuel Fill Door Lock Actuator
(4) T10E Keyless Entry Antenna - Rear Compartment

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Right Side of the Luggage Compartment Components (Long Wheelbase Sedan)

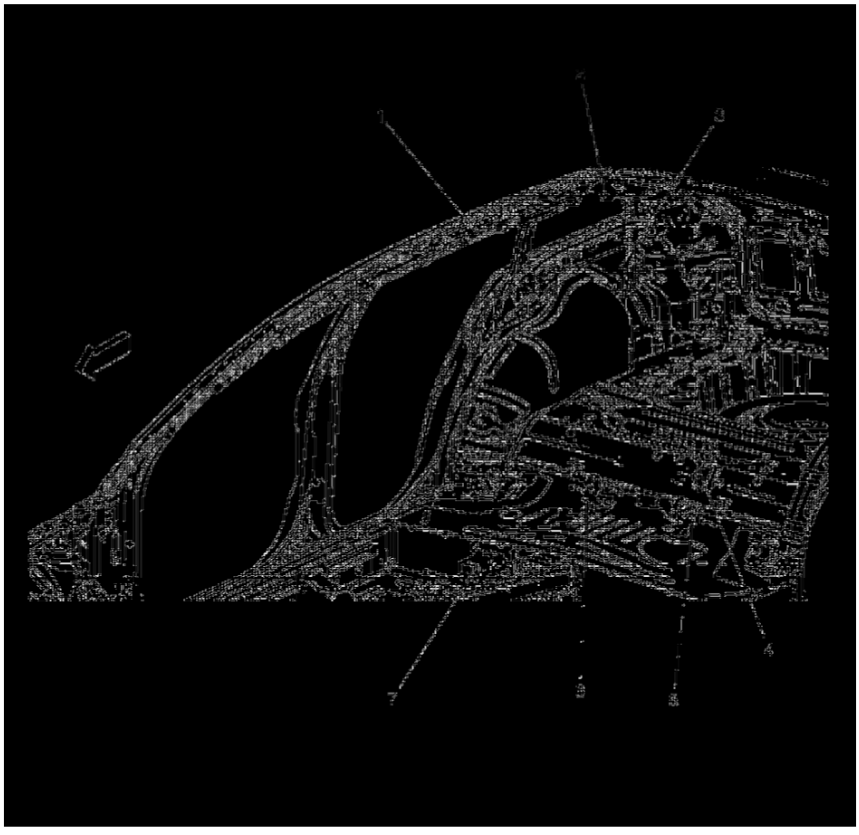


(1) T10E Keyless Entry Antenna - Rear Compartment
(2) M97 Fuel Fill Door Lock Actuator
(3) M97 Fuel Fill Door Lock Actuator
(4) X80R Accessory Power Receptacle - Rear Compartment
(5) T3 Audio Amplifier
(6) M40 Rear Compartment Lid Latch

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Right Side of the Luggage Compartment Components (Sportwagon)

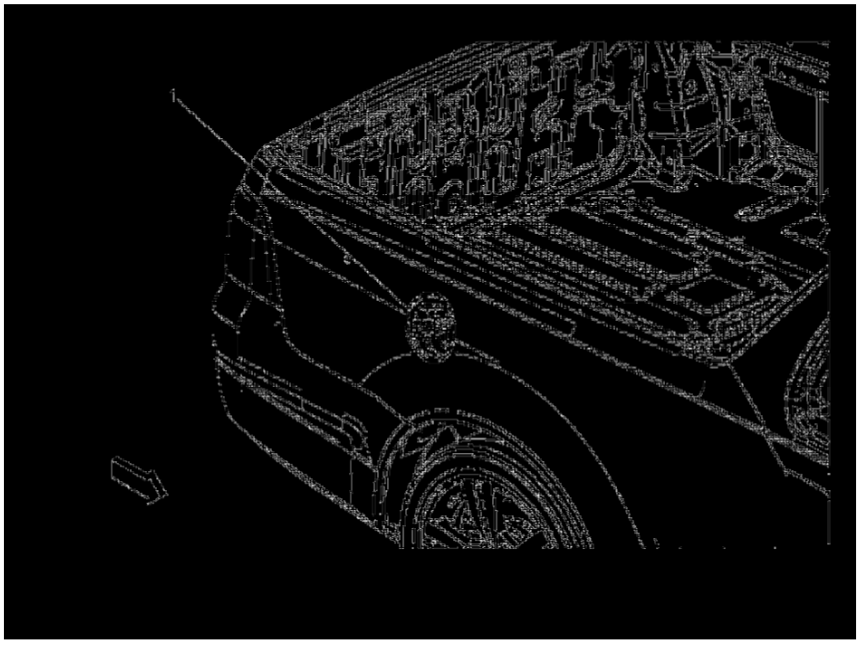


(1) F105R Roof Rail Air Bag - Right
(2) T4P Navigation Antenna
(3) K84 Keyless Entry Control Module
(4) T10E Keyless Entry Antenna - Rear Compartment
(5) B88LR Seat Belt Switch - Left Rear (UH5)
(6) B88RR Seat Belt Switch - Right Rear (UH5)
(7) K36 Inflatable Restraint Sensing and Diagnostic Module

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Right Rear of the Luggage Compartment Components (Ute)

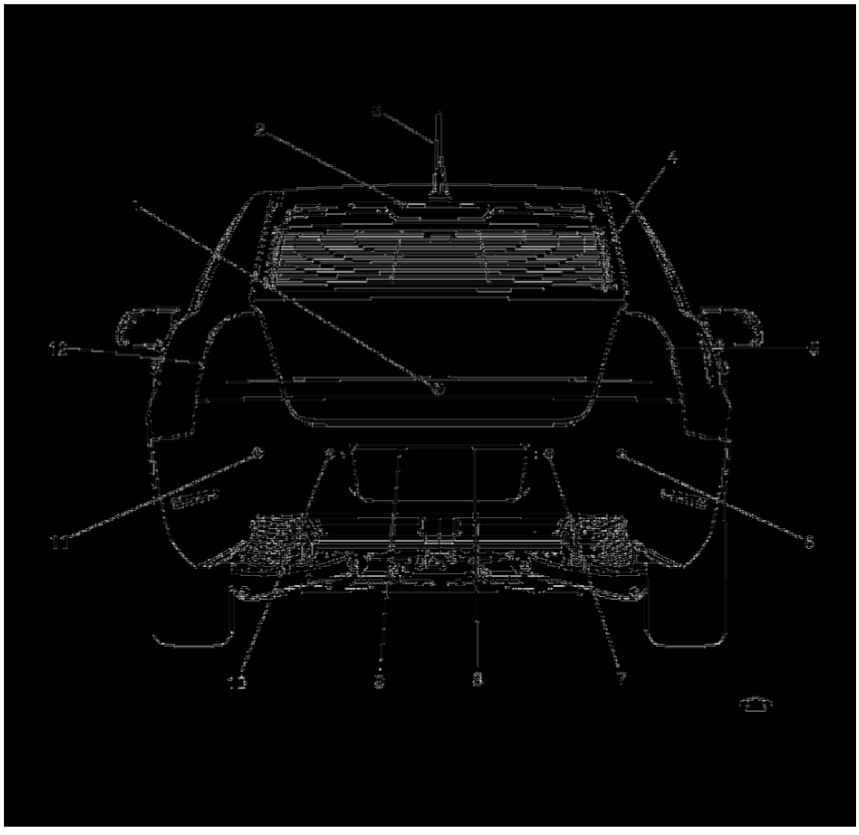


(1) M97 Fuel Fill Door Lock Actuator

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Rear of Vehicle Components (Long Wheelbase Sedan)

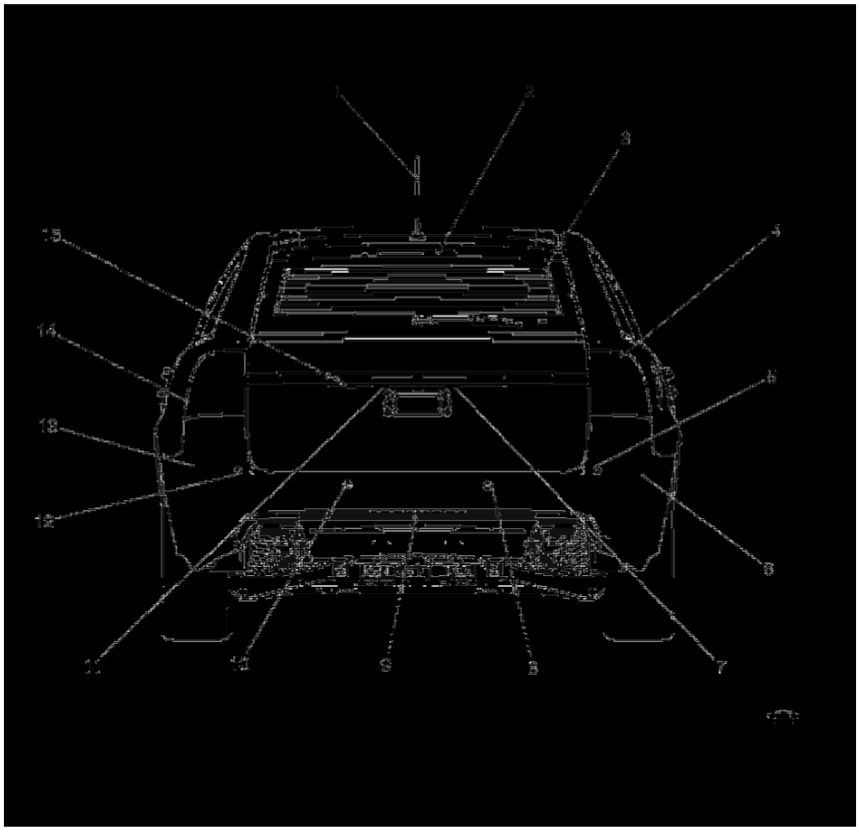


(1) B87 Rearview Camera (UVC)
(2) E6 Center High Mounted Stop Lamp
(3) T4P Navigation Antenna
(4) E18 Rear Defogger Grid
(5) E42R Tail Lamp Assembly - Right
(6) B78H Rear Object Sensor - Right Outer (UD7/UFQ)
(7) B78F Rear Object Sensor - Right Middle (UD7/UFQ)
(8) E7R License Plate Lamp - Right
(9) E7L License Plate Lamp - Left
(10) B78E Rear Object Sensor - Left Middle (UD7/UFQ)
(11) B78G Rear Object Sensor - Left Outer (UD7/UFQ)
(12) E42L Tail Lamp Assembly - Left

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Rear of Vehicle Components (Sportwagon)



(1) T4P Navigation Antenna
(2) E6 Center High Mounted Stop Lamp
(3) E18 Rear Defogger Grid
(4) E42R Tail Lamp Assembly - Right
(5) B78H Rear Object Sensor - Right Outer (UD7/UFQ)
(6) B218R Side Object Sensor Module - Right (UFT)
(7) E7R License Plate Lamp - Right
(8) B78F Rear Object Sensor - Right Middle (UD7/UFQ)
(9) T10G Keyless Entry Antenna - Rear Fascia
(10) B78E Rear Object Sensor - Left Middle (UD7/UFQ)
(11) E7L License Plate Lamp - Left
(12) B78G Rear Object Sensor - Left Outer (UD7/UFQ)
(13) B218L Side Object Sensor Module - Left (UFT)

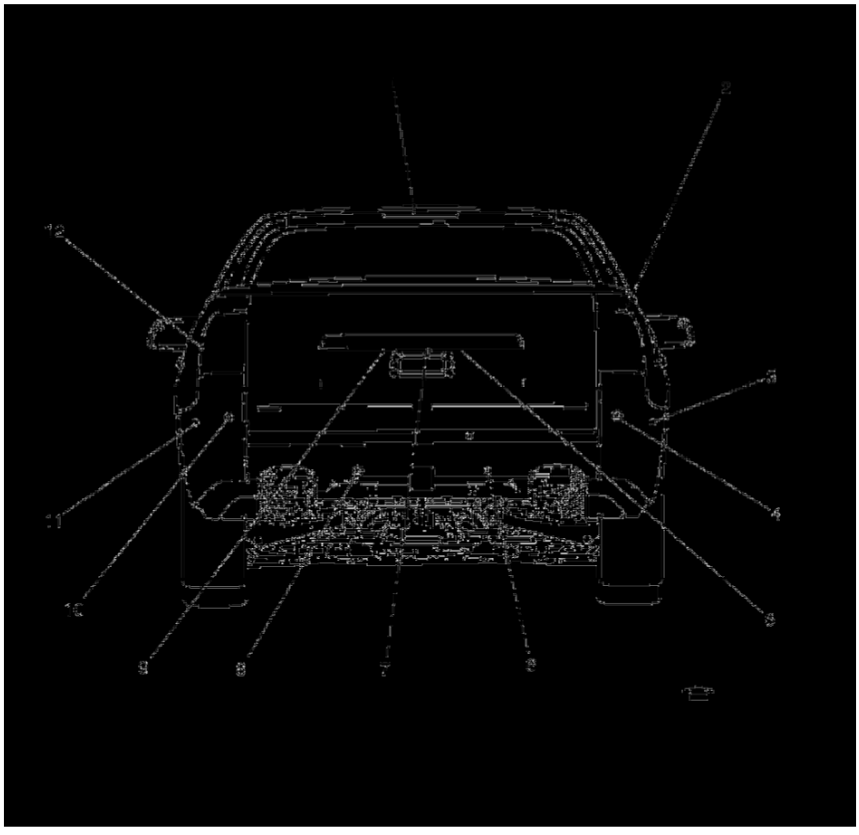
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(14) E42L Tail Lamp Assembly - Left
(15) B87 Rearview Camera (UVC)

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Rear of Vehicle Components (Ute)

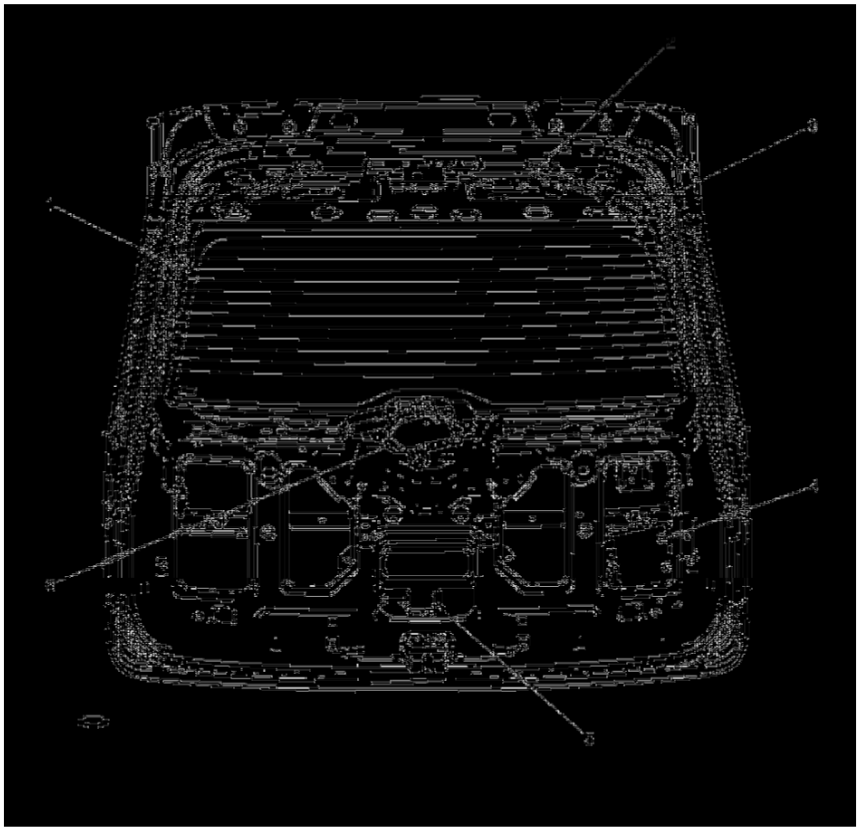


(1) E6 Center High Mounted Stop Lamp
(2) E42R Tail Lamp Assembly - Right
(3) B218R Side Object Sensor Module - Right (UFT)
(4) B78H Rear Object Sensor - Right Outer (UD7/UFQ)
(5) E7R License Plate Lamp - Right
(6) B78F Rear Object Sensor - Right Middle (UD7/UFQ)
(7) B87 Rearview Camera (UVC)
(8) B78E Rear Object Sensor - Left Middle (UD7/UFQ)
(9) E7L License Plate Lamp - Left
(10) B78G Rear Object Sensor - Left Outer (UD7/UFQ)
(11) B218R Side Object Sensor Module - Right (UFT)
(12) E42L Tail Lamp Assembly - Left

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Liftgate Components (Sportwagon)



(1) E18 Rear Defogger Grid
(2) K77 Remote Control Door Lock Receiver
(3) K46 Radio Antenna Module
(4) K39 Liftgate Control Module
(5) M14B Door Lock Actuator - Liftgate
(6) M45 Rear Wiper Motor

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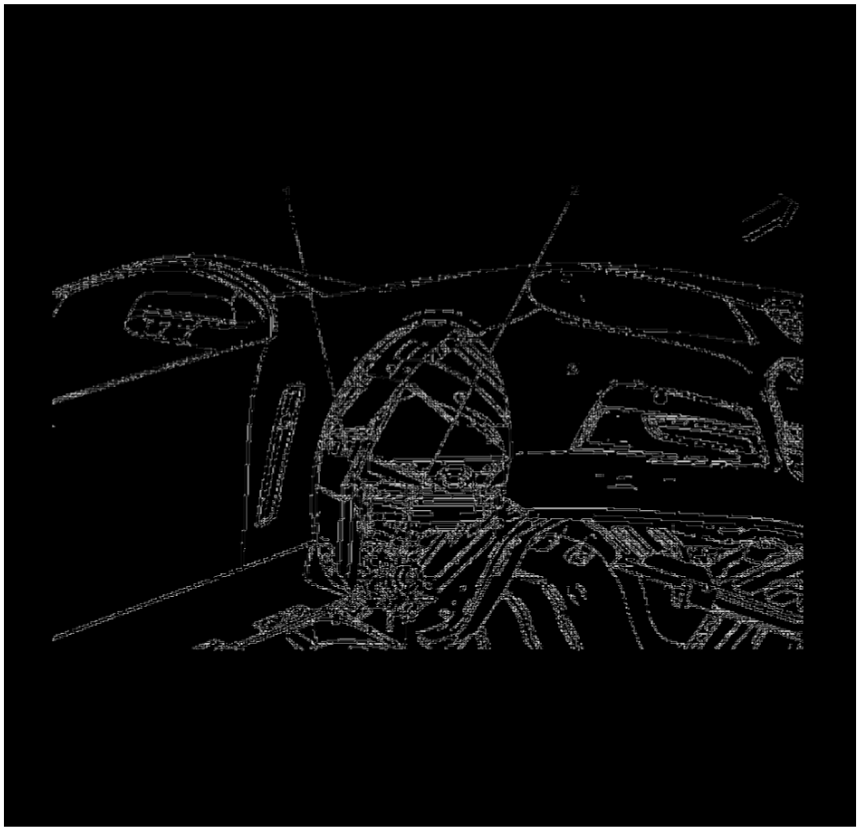
Wheels/Vehicle Underbody Component Views

Figure 1: Front Right Wheel Arch Components
Figure 2: Rear Axle Components

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Front Right Wheel Arch Components (LWR)

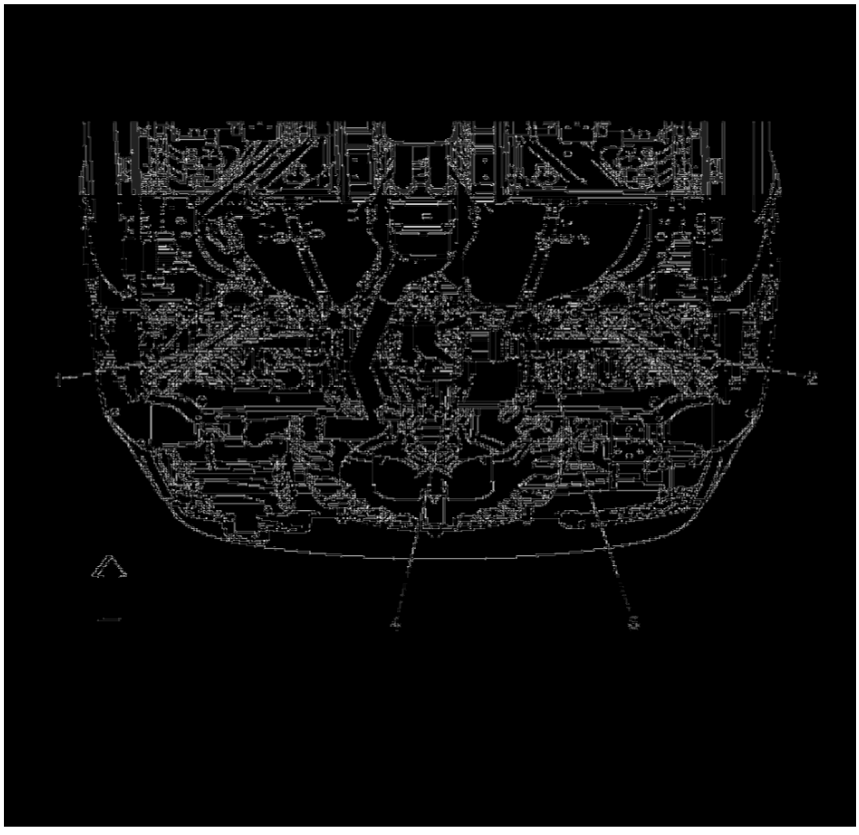


(1) T17 LPG Vaporizer
(2) Q58F LPG Cut-Off Solenoid Valve - Front

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Rear Axle Components



(1) B5RR Wheel Speed Sensor - Right Rear
(2) B5LR Wheel Speed Sensor - Left Rear
(3) B51R Suspension Height Sensor - Rear (T3T)
(4) K83 Park Brake Control Module (J77)

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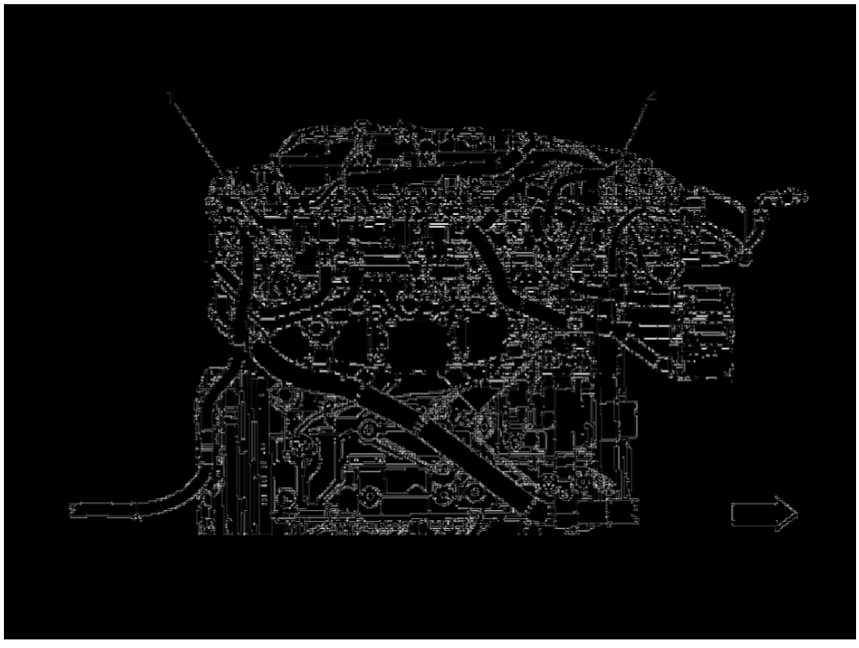
Ground Views

Figure 1: G100, G107, and G110 (LFW or LFX)
Figure 2: G100, G107, and G110 (LWR)
Figure 3: G101
Figure 4: G102 and G103
Figure 5: G106 (RHD)
Figure 6: G109 (LFW or LFX)
Figure 7: G109 (LWR)
Figure 8: G301
Figure 9: G302
Figure 10: G303 (Long Wheelbase Sedan)
Figure 11: G303 (Short Wheelbase Sedan)
Figure 12: G303 (Ute)
Figure 13: G303, G401, G403 (Sportwagon)
Figure 14: G304 (Long Wheelbase Sedan)
Figure 15: G304 (Short Wheelbase Sedan)
Figure 16: G304 (Ute)
Figure 17: G304, G402, G406 (Sportwagon)
Figure 18: G305 (Ute)
Figure 19: G401 (Sedan)
Figure 20: G402 (Sedan)
Figure 21: G403 (Sedan)
Figure 22: G403 (Ute)
Figure 23: G404 (Ute)
Figure 24: G407

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G100, G107, and G110 (LFW or LFX)

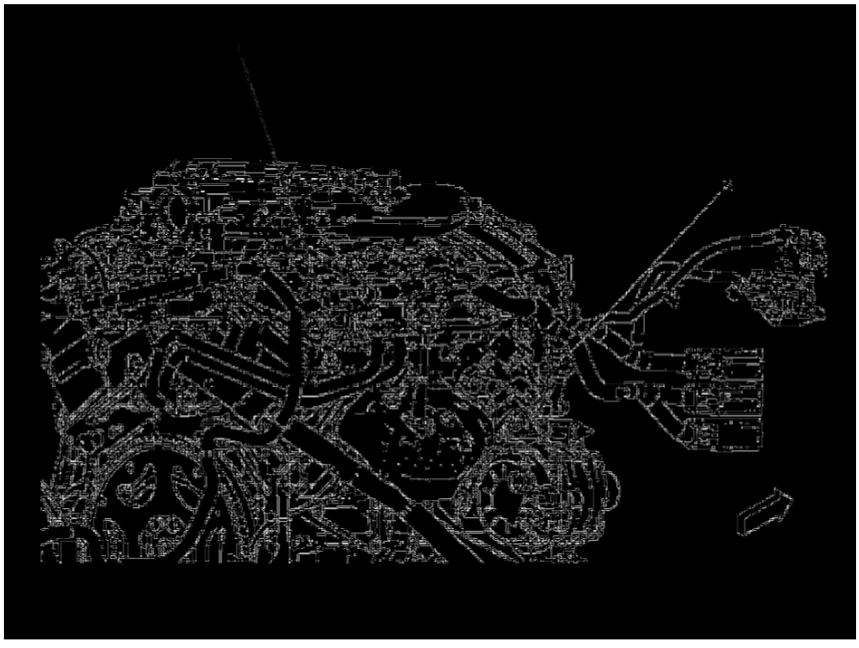


(1) G110
(2) G107

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G100, G107, and G110 (LWR)

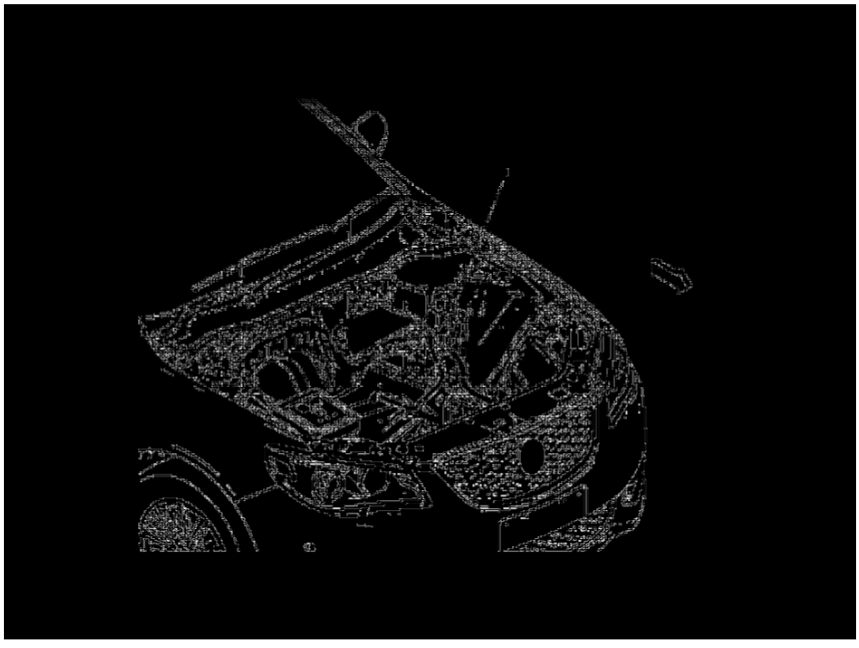


(1) G109
(2) G107

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G101

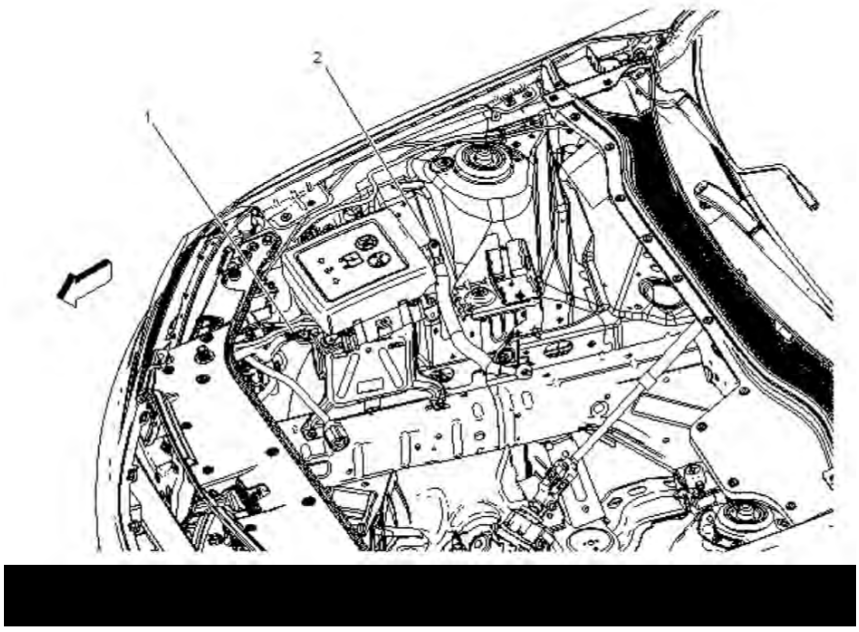


(1) G101

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G102 and G103

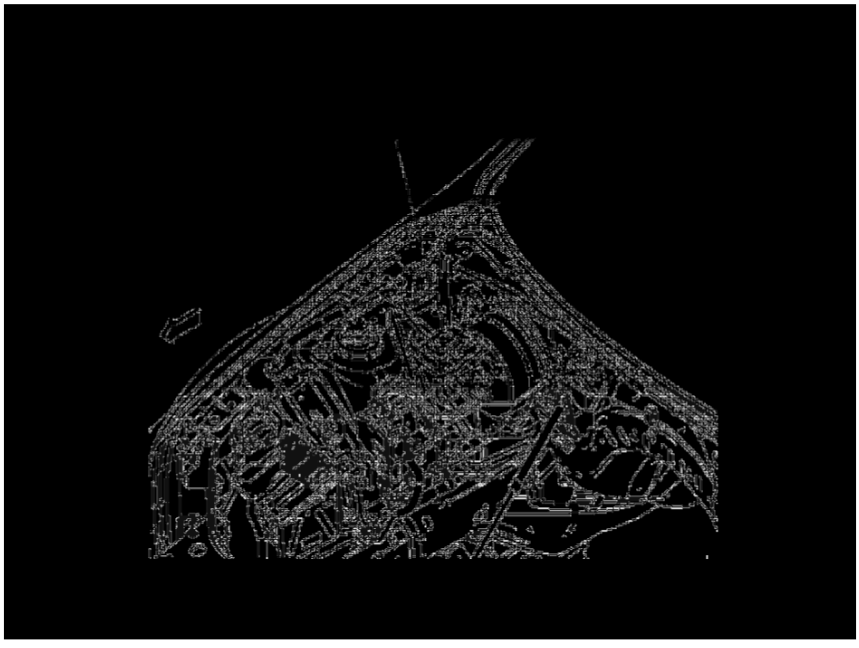


(1) G102
(2) G103

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G106 (RHD)

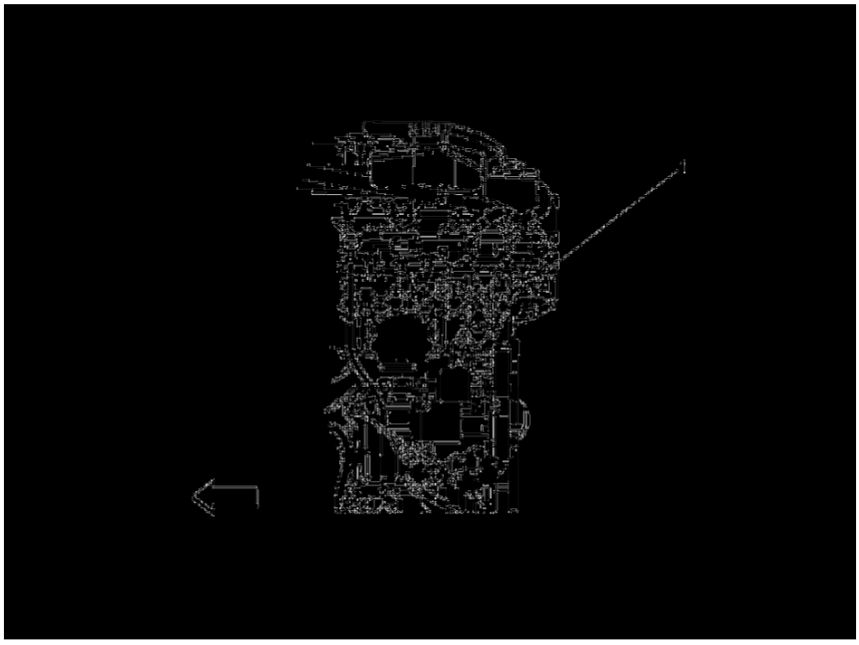


(1) G106

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G109 (LFW or LFX)

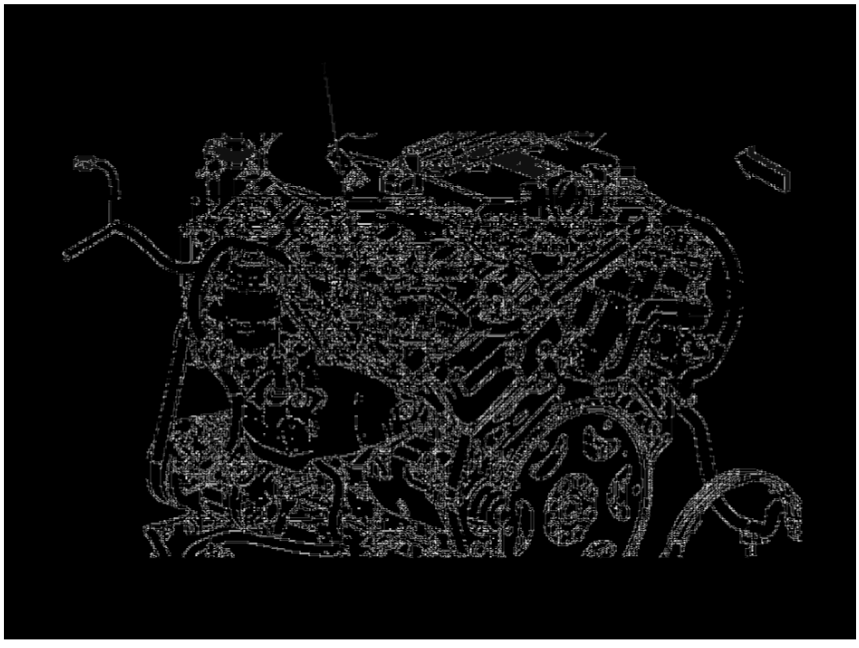


(1) G109

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G109 (LWR)

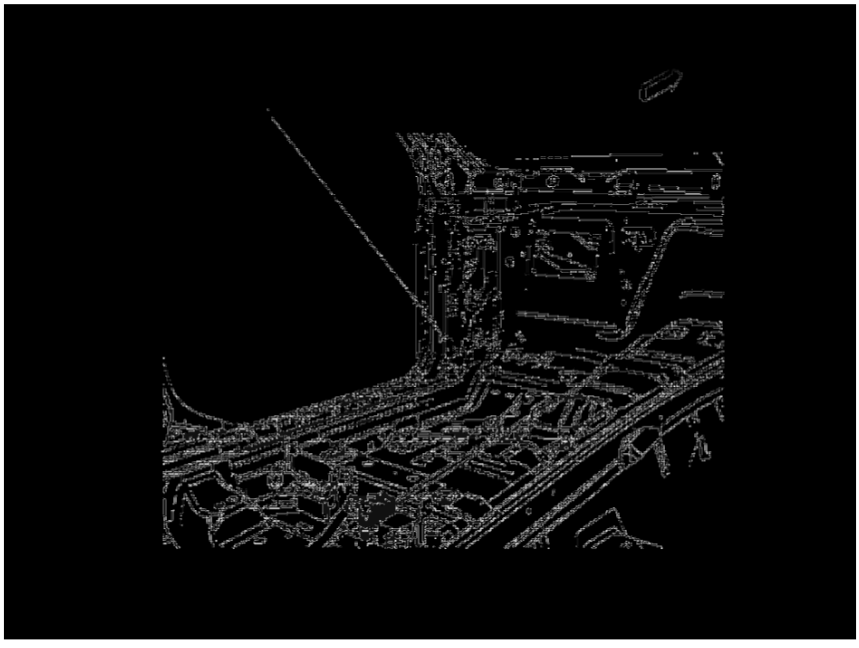


(1) G109

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G201 and G301

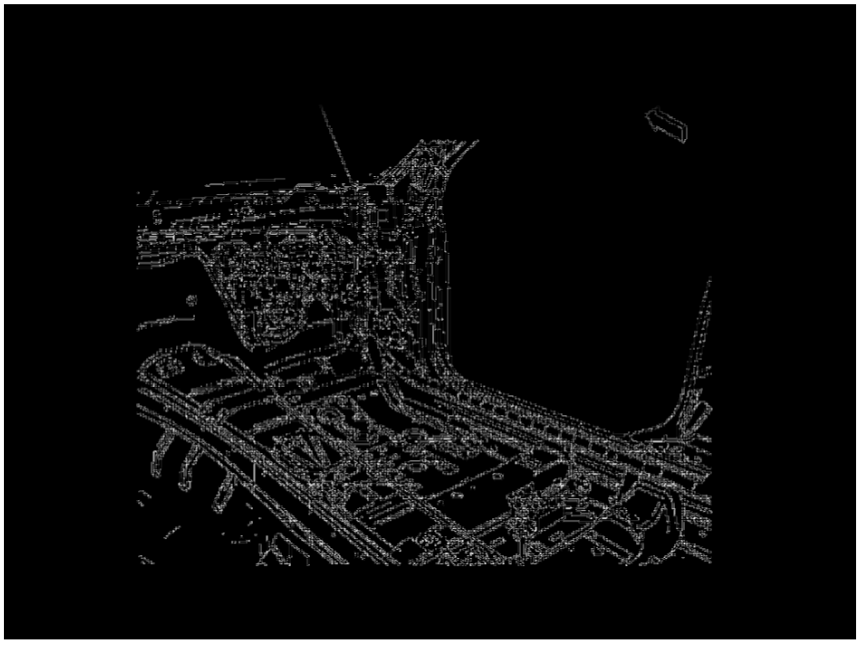


(1) G301

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G202 and G302

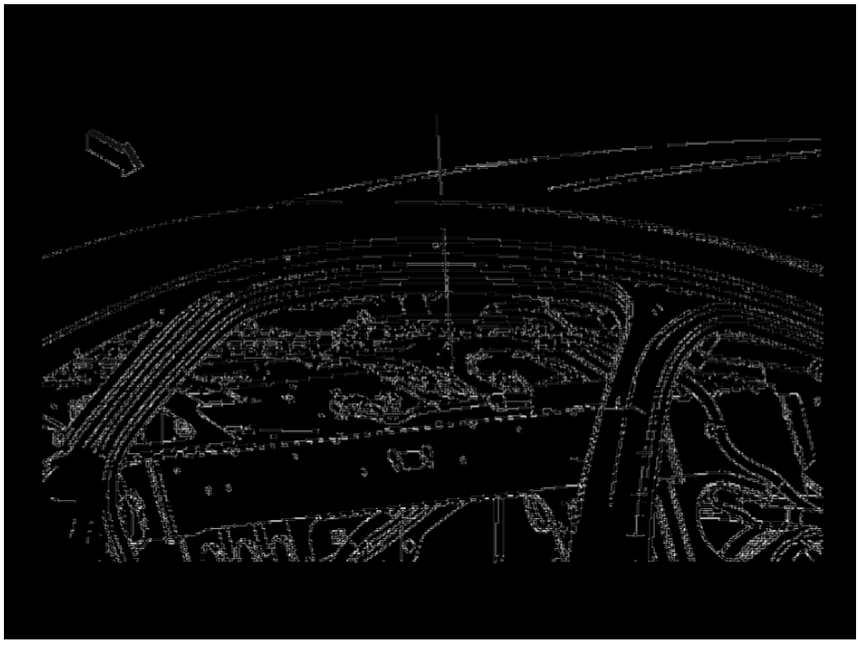


(1) G302

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G303 (Long Wheelbase Sedan)

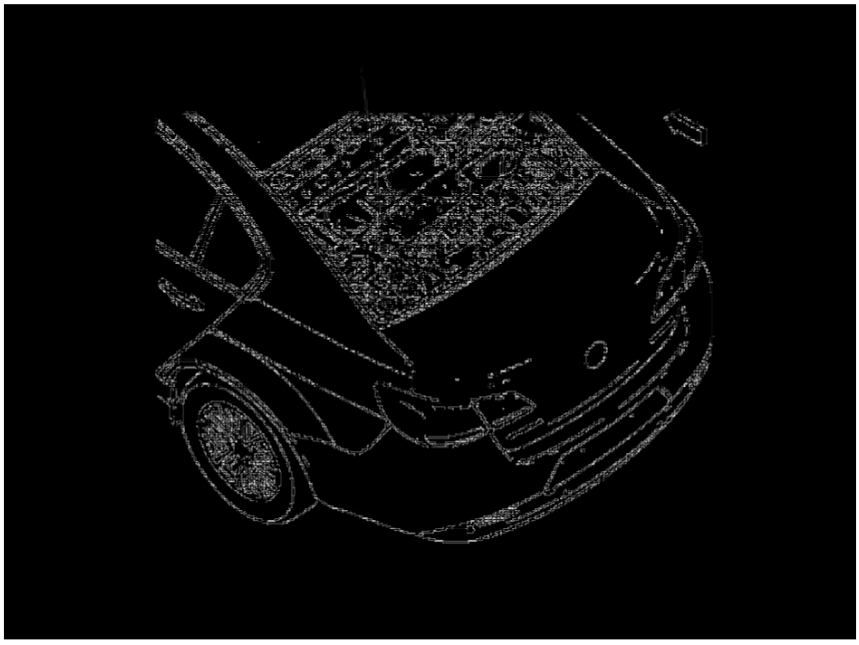


(1) G303

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G303 (Short Wheelbase Sedan)

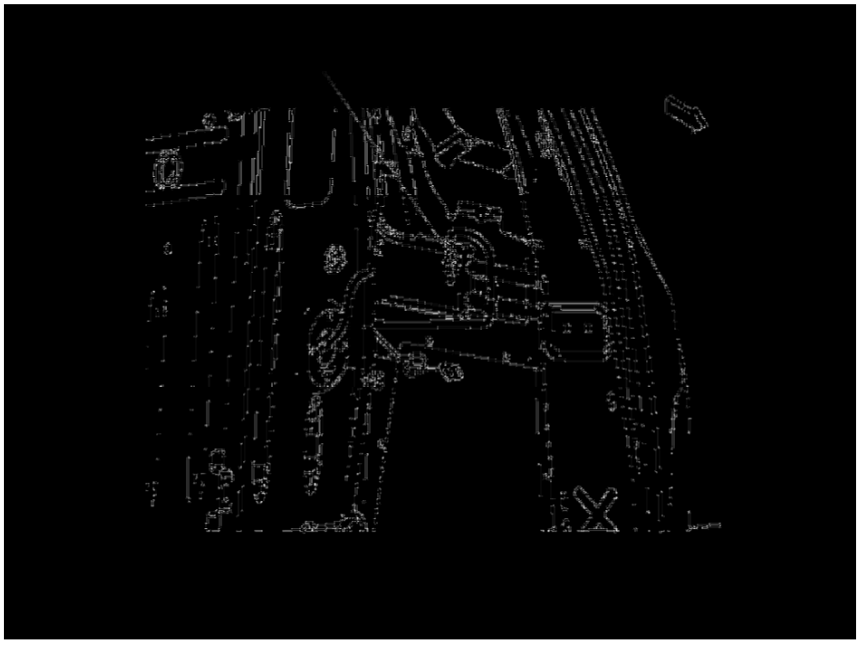


(1) G303

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G303 (Ute)

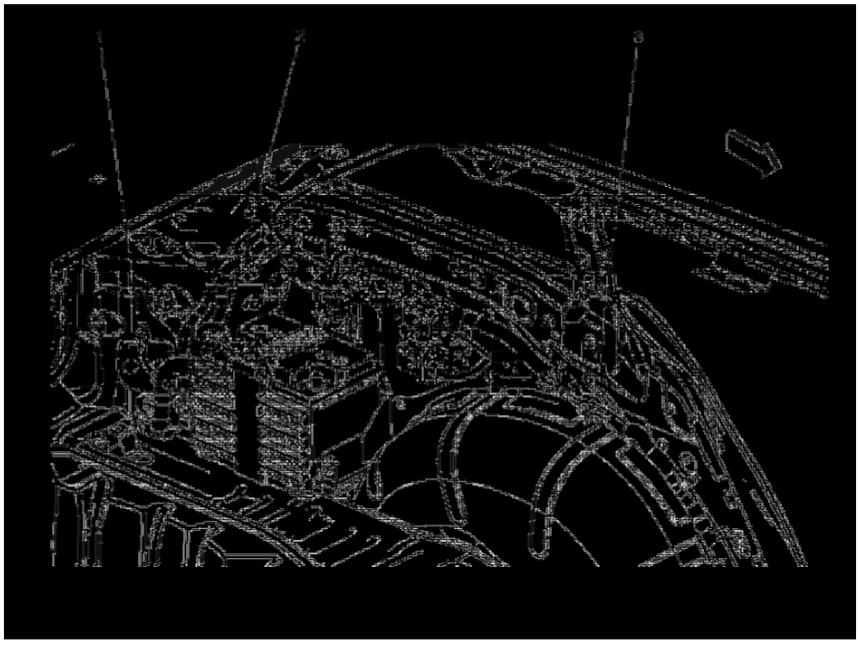


(1) G303

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G303, G401, G403 (Sportwagon)



(1) G401
(2) G403
(3) G303

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G304 (Long Wheelbase Sedan)



(1) G304

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G304 (Short Wheelbase Sedan)

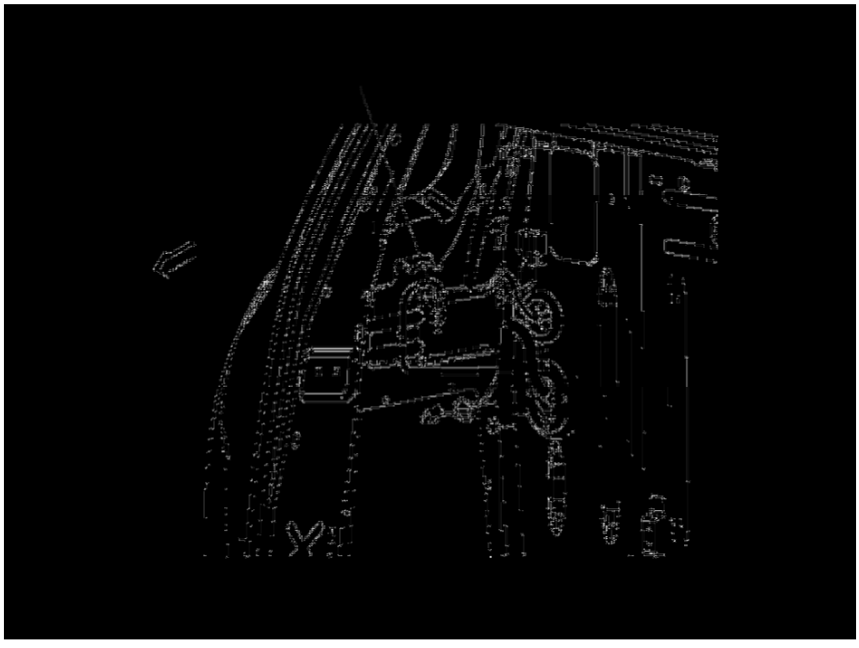


(1) G304

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G304 (Ute)



(1) G304

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G304, G402, G406 (Sportwagon)

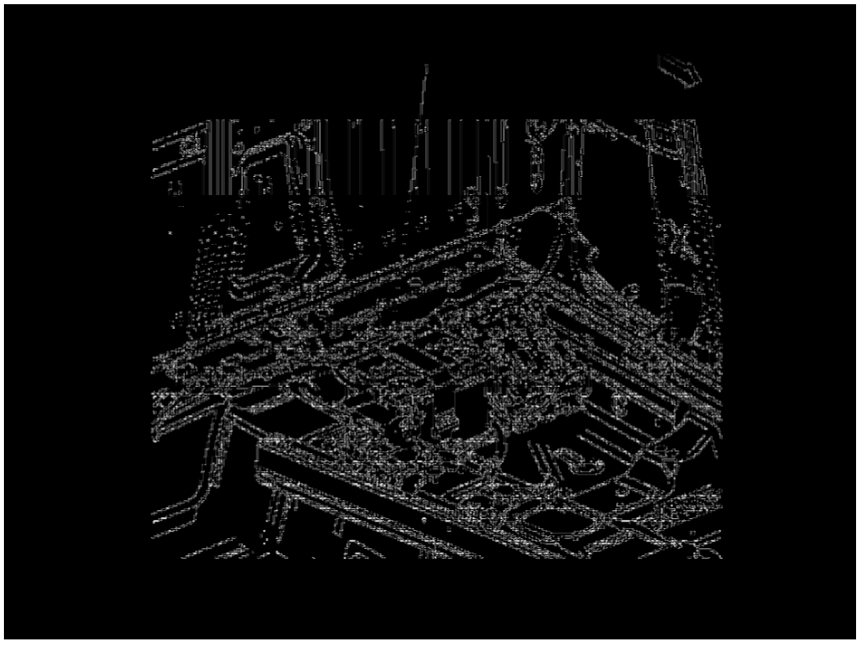


(1) G406 (F35)
(2) G402
(3) G304

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G305 (Ute)

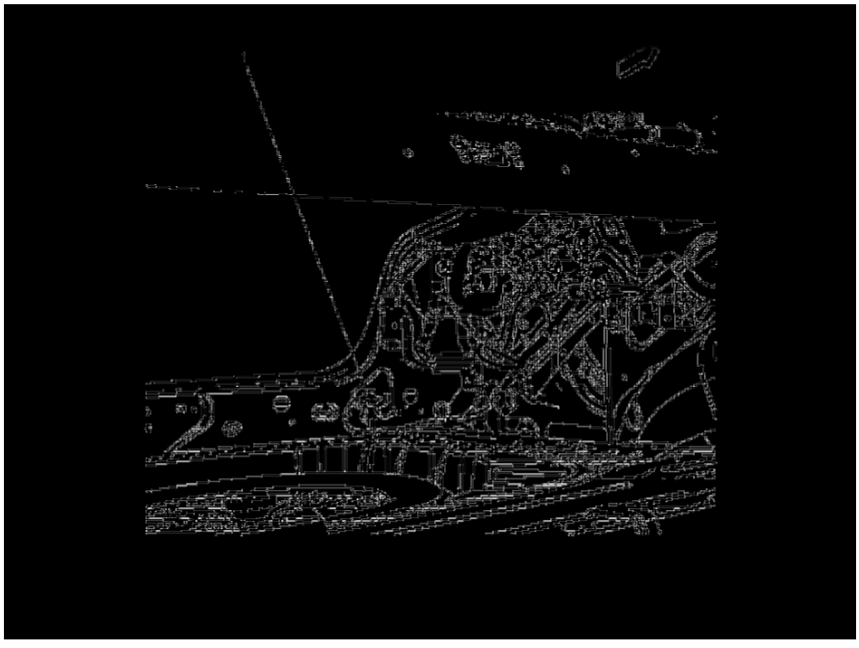


(1) G305 (F80)

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G401 (Sedan)

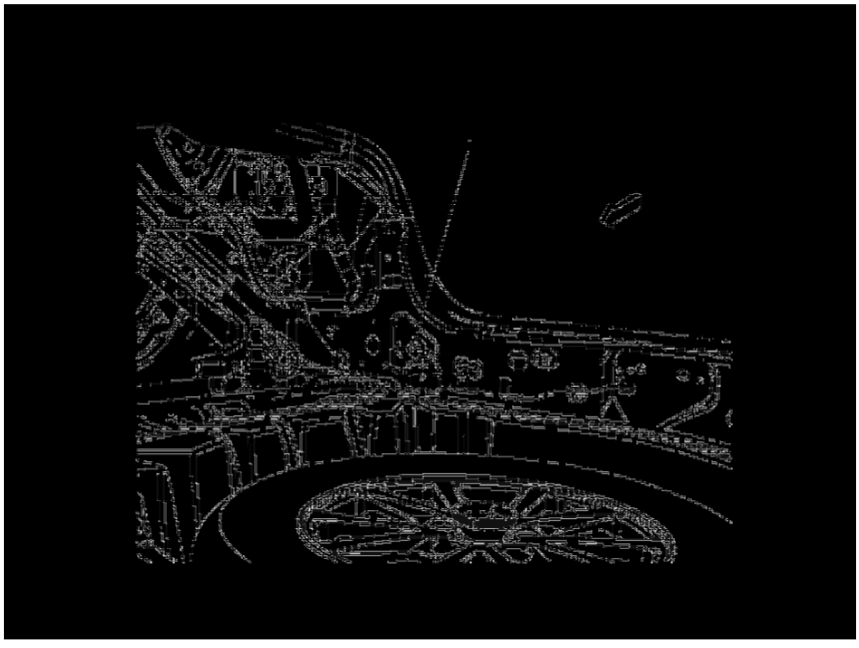


(1) G401

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G402 (Sedan)

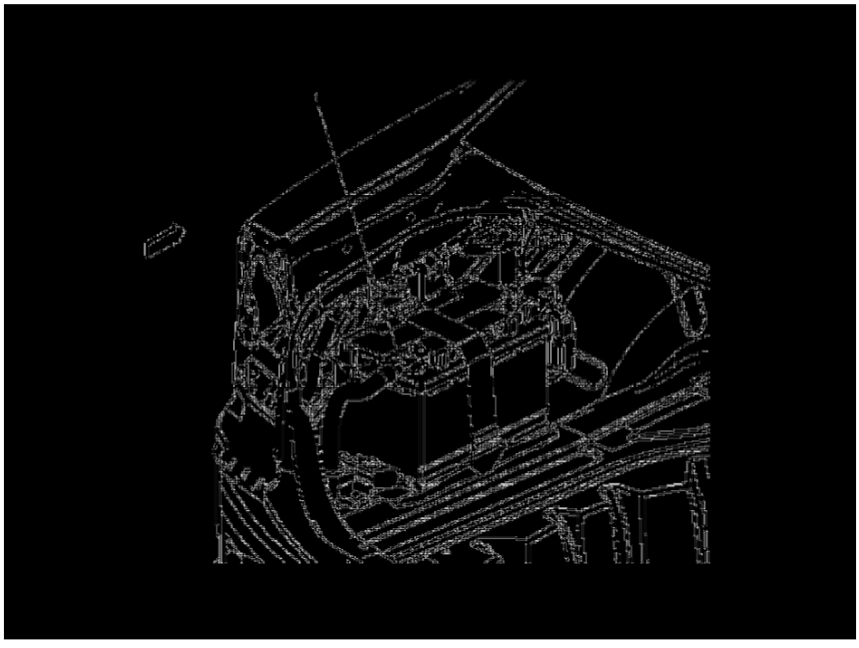


(1) G402

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G403 (Sedan)

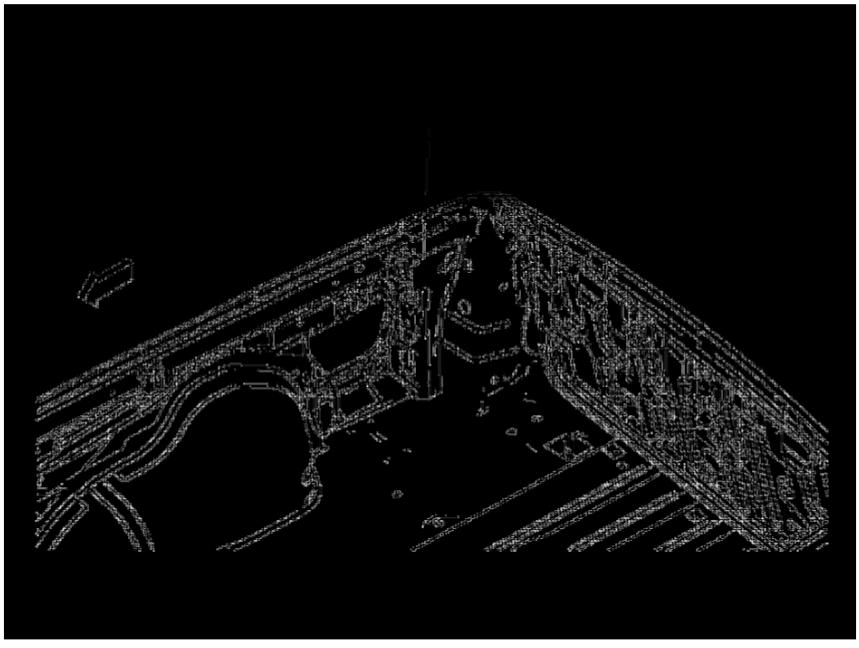


(1) G403

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G403 (Ute)

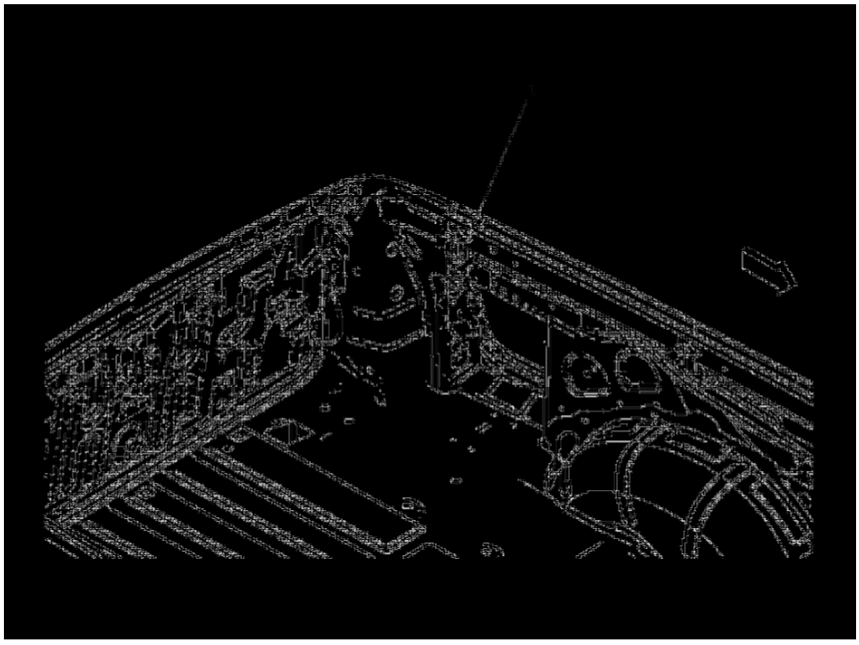


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G404 (Ute)

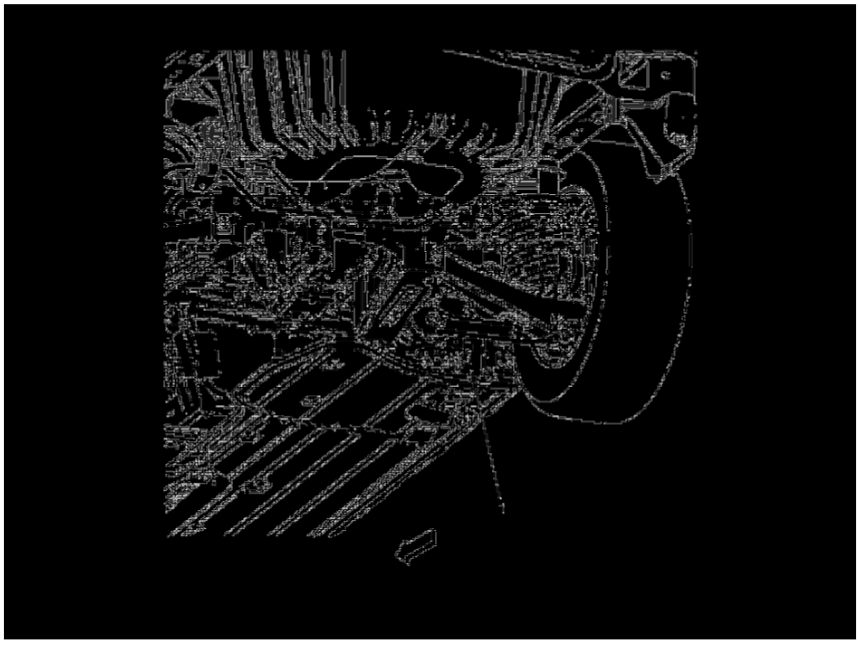


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G407



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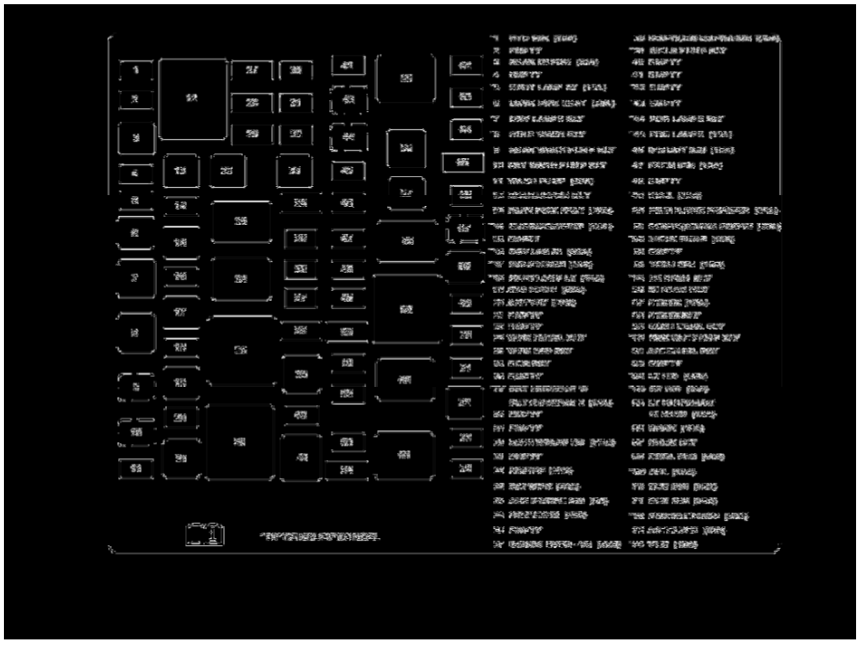
Electrical Center Identification Views

Figure 1: X50A Fuse Block - Underhood Label
Figure 2: X50A Fuse Block - Underhood X1
Figure 3: X50A Fuse Block - Underhood X2
Figure 4: X50A Fuse Block - Underhood X3
Figure 5: X50A Fuse Block - Underhood X4
Figure 6: X50A Fuse Block - Underhood X5
Figure 7: X51A Fuse Block - Instrument Panel Label
Figure 8: X51A Fuse Block - Instrument Panel X1
Figure 9: X53A Fuse Block - Rear Body Label
Figure 10: X53A Fuse Block - Rear Body X1
Figure 11: X53A Fuse Block - Rear Body X2
Figure 12: X53A Fuse Block - Rear Body X3
Figure 13: X53A Fuse Block - Rear Body X4

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X50A Fuse Block – Underhood Label



X50A Fuse Block – Underhood Label Usage

No.	Device Label Name	Device Assigned Name	Rating	Description
Fuses				
1	HTD MIR (10A)	F1UA Fuse	10 A	A9A Outside Rearview Mirror - Driver, A9B Outside Rearview Mirror - Passenger
2	EMPTY	F2UA Fuse	—	Not Used
3	REAR DEFOG (30A)	F3UA Fuse	30 A	E18 Rear Defogger Grid
4	EMPTY	F4UA Fuse	—	Not Used
5	SPOT LAMP RT (15A)	F5UA Fuse	15 A	E35R Exterior Spot Lamp - Right
6	DRVR PWR SEAT (30A)	F6UA Fuse	30 A	S64D Seat Adjuster Switch - Driver

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No.	Device Label Name	Device Assigned Name	Rating	Description
11	WASH PUMP (20A)	F11UA Fuse	20 A	G24 Windshield Washer Pump
13	PASS PWR SEAT (30A)	F13UA Fuse	30 A	S64P Seat Adjuster Switch - Passenger
14	EMER/VEH/FT/LP (15A)	F14UA Fuse	15 A	P10 Emergency Vehicle Headlamp Flasher
15	EMPTY	F15UA Fuse	—	Not Used
16	DRV LAMPS (20A)	F16UA Fuse	20 A	E57L Driving Lamp – Left (V5B), E57R Driving Lamp – Right (V5B)
17	HDLP WASH (25A)	F17UA Fuse	25 A	G16 Headlamp Washer Pump (T3T)
18	SPOT LAMP LT (15A)	F18UA Fuse	15 A	E35L Exterior Spot Lamp - Left
19	ABS PUMP (60A)	F19UA Fuse	60 A	K17 Electronic Brake Control Module
20	ABS VLV (30A)	F20UA Fuse	30 A	K17 Electronic Brake Control Module
21	EMPTY	F21UA Fuse	15 A	Not Used
22	EMPTY	F22UA Fuse	10 A	Not Used
26	EMPTY	F26UA Fuse	—	Not Used
27	FRT HTD/SEAT 1/FRT HTD/SEAT 2 (15A)	F27UA Fuse	15 A	K29 Seat Heating Control Module
28	EMPTY	F28UA Fuse	—	Not Used
29	EMPTY	F29UA Fuse	—	Not Used
30	PASS WNDW SW (7.5A)	F30UA Fuse	7.5 A	S79P Window Switch - Passenger
31	EMPTY	F31UA Fuse	—	Not Used
32	S/ROOF (20A)	F32UA Fuse	20 A	M69 Sunroof Motor (CF5)
33	FRT WPR (30A)	F33UA Fuse	30 A	KR12C Windshield Wiper Speed Control Relay
34	AOS IGN/IPC IGN (5A)	F34UA Fuse	5 A	PXX Passenger Presence Display (AL5), P16 Instrument Cluster

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No.	Device Label Name	Device Assigned Name	Rating	Description
35	LRBEC IGN (20A)	F35UA Fuse	20 A	X53A Fuse Block - Rear Body
36	EMPTY	F36UA Fuse	—	Not Used
37	IGN/INJ EVEN - V8 (20A)	F37UA Fuse	20 A	V8 (L77/LS3/LSA) - Q17B Fuel Injector 2, Q17D Fuel Injector 4, Q17F Fuel Injector 6, Q17H Fuel Injector 8 V8 (L77/LS3) - T8B Ignition Coil 2, T8D Ignition Coil 4, T8F Ignition Coil 6, T8H Ignition Coil 8
38	ECM - V8, IGN ODD - V6/EMIS 1 (15A)	F38UA Fuse	15 A	V8 (L77/LS3/LSA) - K20 Engine Control Module V6 (LFW/LFX/LWR) - K20 Engine Control Module, T8A Ignition Coil 1, T8C Ignition Coil 3, T8E Ignition Coil 5,
40	EMPTY	F40UA Fuse	—	Not Used
41	EMPTY	F41UA Fuse	—	Not Used
42	REAR/WPR (20A)	F42UA Fuse	20A	KR7 Rear Wiper Relay, M45 Rear Wiper Motor
43	EMPTY	F43UA Fuse	—	Not Used
45	FOG LAMPS (15A)	F45UA Fuse	15 A	E29LF Fog Lamp – Left Front (T3U), E29RF Fog Lamp – Right Front (T3U)
46	IP/BODY IGN (10A)	F46UA Fuse	10 A	A10 Inside Rearview Mirror, K33 HVAC Control Module
47	FSCM IGN (10A)	F47UA Fuse	10 A	K38 Chassis Control Module, X54A Fuse Block - LPG
48	EMPTY	F48UA Fuse	—	Not Used
49	ESCL (15A)	F49UA Fuse	15 A	K60 Steering Column Lock Module (ULS)
50	EMIS 2/ IGN EVEN-V6 (15A)	F50UA Fuse	15 A	B52D Heated Oxygen Sensor - Bank 1 Sensor 2, B52F Heated Oxygen Sensor - Bank 2 Sensor 2, B75B Mass Air Flow/Intake Air Temperature Sensor (LWR), B75C Multifunction Intake Air Sensor (LFW/LFX), B198 Fuel Composition Sensor V6 (LFW/LFX/LWR) - K20 Engine Control Module, T8B Ignition Coil 2, T8D Ignition Coil 4, T8F Ignition Coil 6
51		F51UA Fuse	20 A	

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No.	Device Label Name	Device Assigned Name	Rating	Description
	ECM-V6, IGN/INJ ODD-V8 (20A)			V6 (LFW/LFX/LWR) - K20 Engine Control Module V8 (L77/LS3/LSA) - Q17A Fuel Injector 1, Q17C Fuel Injector 3, Q17E Fuel Injector 5, Q17G Fuel Injector 7 V8 (L77/LS3) - T8A Ignition Coil 1, T8C Ignition Coil 3, T8E Ignition Coil 5, T8G Ignition Coil 7
52	INCLR PUMP (10A)	F52UA Fuse	10 A	M10 Charge Air Cooler Coolant Pump (LSA)
53	EMPTY	F53UA Fuse	—	Not Used
54	TCM / EPS (15A)	F54UA Fuse	15 A	K71 Transmission Control Module K43 Power Steering Control Module
57	STRTR (30A)	F57UA Fuse	30 A	KR27 Starter Relay
62	EMPTY	F62UA Fuse	—	Not Used
63	LT HID (15A)	F63UA Fuse	15 A	E4G Left Low Beam Lamp (T4F)
64	RT HID (15A)	F64UA Fuse	15 A	E4H Right Low Beam Lamp (T4F)
65	LT HI BEAM/RT HI BEAM (10A)	F65UA Fuse	10 A	E4E Left High Beam Lamp E4F Right High Beam Lamp
66	HORN (15A)	F66UA Fuse	15 A	P12L Horn - Left, P12R Horn - Right
68	COOL FAN (60A)	F68UA Fuse	60 A	K22 Cooling Fan Control Module
69	AHL (10A)	F69UA Fuse	10 A	M29L Headlamp Leveling Actuator - Left, M29R Headlamp Leveling Actuator - Right
70	TCM IGN (15A)	F70UA Fuse	15 A	K71 Transmission Control Module
71	ECM IGN (15A)	F71UA Fuse	15 A	B75B Mass Air Flow/Intake Air Temperature Sensor (L77/LS3/LSA), K20 Engine Control Module, Q34 Skip Shift Solenoid Actuator (MER)
72	BRK VAC PUMP (30A)	F72UA Fuse	30 A	M9 Brake Booster Pump Motor (LFW/LFX/LWR)
73	A/C CLTCH (10A)	F73UA Fuse	10 A	G1 A/C Compressor
74	VCM (10A)	F74UA Fuse	10 A	K103 Fuel Injector Control Module
Relays				

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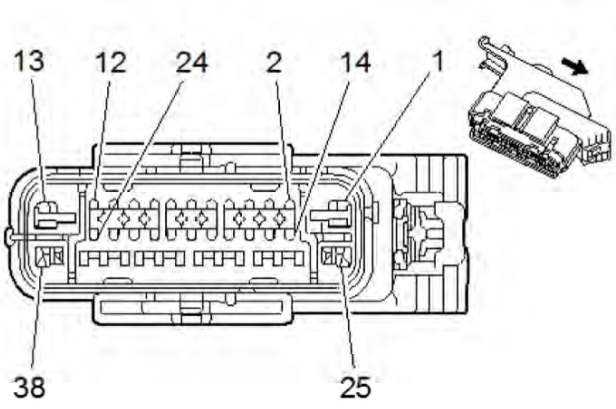
No.	Device Label Name	Device Assigned Name	Rating	Description
7	DRV LAMPS RLY	KR122 Driving Lamp Relay	—	F16UA Fuse
8	HDLP WASH RLY	KR2 Headlamp Washer Pump Relay	—	F17UA Fuse
9	REAR WASH PUMP RLY	KR6 Rear Window Washer Pump Relay	—	G19 Rear Window Washer Pump (F35)
10	FRT WASH PUMP RLY	KR11 Windshield Washer Pump Relay	—	G24 Windshield Washer Pump
12	REAR DEFOG RLY	KR5 Rear Defogger Relay	—	F1UA Fuse, F3UA Fuse
23	WPR CNTRL RLY	KR12B Windshield Wiper Relay	—	KR12C Windshield Wiper Speed Control Relay
24	WPR SPD RLY	KR12C Windshield Wiper Speed Control Relay	—	M75 Windshield Wiper Motor
25	ECM RLY	KR75 Engine Controls Ignition Relay	—	F37UA Fuse, F38UAB Fuse, F50UA Fuse, F51UA Fuse,
39	INCLR PUMP RLY	KR31 Coolant Pump Relay - Auxiliary	—	F52UA Fuse
43	REAR WPR CNTRL RLY	KR7 Rear Wiper Relay	—	M45 Rear Wiper Motor
44	FOG LAMPS RLY	KR46 Front Fog Lamp Relay	—	F45UA Fuse
55	LO BEAM RLY	KR49 Headlamp	—	F63UA Fuse, F64UA Fuse

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No.	Device Label Name	Device Assigned Name	Rating	Description
		Low Beam Relay		
56	HI BEAM RLY	KR48 Headlamp High Beam Relay	—	F65UA Fuse
58	STRTR RLY	KR27 Starter Relay	—	M64 Starter Motor
59	RUN / CRNK RLY	KR73 Ignition Main Relay	—	F34UA Fuse, F35UA Fuse, F46UA Fuse, F47UA Fuse, F49UA Fuse, F69UA Fuse, F70UA Fuse, F71UA Fuse
60	BRK VAC PUMP RLY	KR14 Brake Booster Pump Motor Relay	—	F72UA Fuse
61	A/C CNTRL RLY	KR29 A/C Compressor Clutch Relay	—	G1 A/C Compressor
67	HORN RLY	KR3 Horn Relay	—	F66UA Fuse

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X50A Fuse Block - Underhood X1



Connector Part Information

- Harness Type: Forward Lamp
- OEM Connector: 13585273
- Service Connector: TBD
- Description: 38-Way F

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	TBD	—	—

X50A Fuse Block - Underhood X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1-3	—	—	—	Not Occupied	—	—
4	0.35	WH	311	Right Headlamp High Beam Supply Voltage	I	—
5-9	—	—	—	Not Occupied	—	—

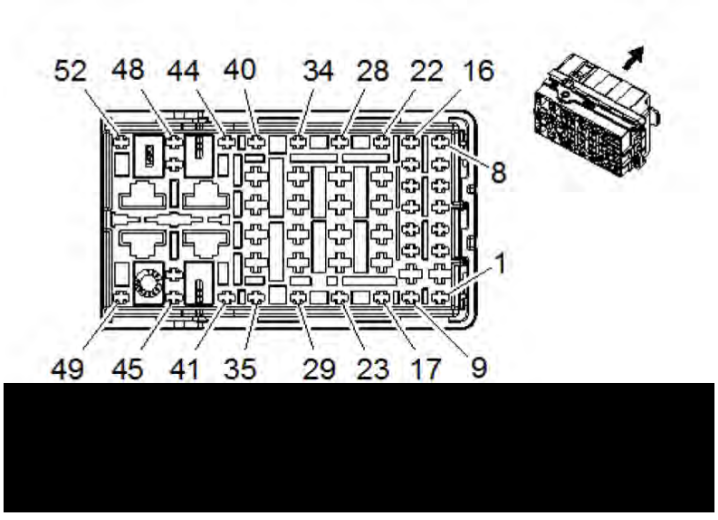
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
10	0.75	YE	712	Left Headlamp Low Beam Supply Voltage	I	T4F
11-15	—	—	—	Not Occupied	—	—
16	0.75	YE	312	Right Headlamp Low Beam Supply Voltage	I	T4F
17-21	—	—	—	Not Occupied	—	—
22	0.35	WH	711	Left Headlamp High Beam Supply Voltage	I	—
23	1	VT/BU	5292	Powertrain Main Relay Fused Supply (3)	I	LFW/LFX/LWR
23-26	—	—	—	Not Occupied	—	—
27	1.5	BN/GY	29	Horn Control	I	—
28	—	—	—	Not Occupied	—	—
29	0.35	VT/GN	839	Run/Crank Ignition 1 Voltage	I	T3T
30	0.5	BN/VT	2234	Front Fog Lamp Supply Voltage	I	T3U/V5B
31-35	—	—	—	Not Occupied	—	—
36	6	RD/YE	1142	Battery Positive Voltage	I	—
37-38	—	—	—	Not Occupied	—	—

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X50A Fuse Block - Underhood X2



Connector Part Information

- Harness Type: Body (RHD), Body Front (LHD)
- OEM Connector: 13585274
- Service Connector: TBD
- Description: 52-Way F

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	TBD	—	—

X50A Fuse Block - Underhood X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE	5991	Powertrain Relay Coil Control	I	—
2	1	VT/BU	5292	Powertrain Main Relay Fused Supply (3)	I	L77/LS3/LSA
3-8	—	—	—	Not Occupied	—	—

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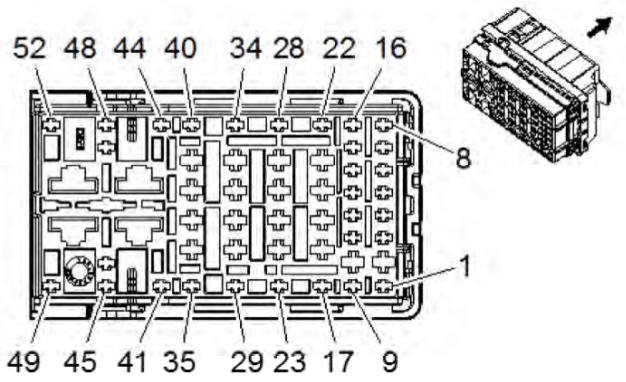
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
9	0.75 1	VT/BU VT/BU	5290 5291	Powertrain Main Relay Fused Supply (1) Powertrain Main Relay Fused Supply (1)	I I	L77/LS3/LSA LFW/LFX/LWR
10	0.5	GY/YE	2014	Coolant Pump Relay Coil Control	I	LSA
11	0.75	VT/BU	5293	Powertrain Main Relay Fused Supply (4)	I	—
12-16	—	—	—	Not Occupied	—	—
17	0.75	VT/BU	5294	Powertrain Main Relay Fused Supply (5)	I	—
18	1.5 1 0.75	VT/BU VT/BU VT/BU	5290 5291 5291	Powertrain Main Relay Fused Supply (1) Powertrain Main Relay Fused Supply (1) Powertrain Main Relay Fused Supply (1)	I I I	LFW/LFX/LWR L77/LS3 LSA
19-22	—	—	—	Not Occupied	—	—
23	1	VT/BU	5292	Powertrain Main Relay Fused Supply (3)	I	LFW/LFX/LWR
24-27	—	—	—	Not Occupied	—	—
28	0.75	RD/GN	1840	Battery Positive Voltage	I	MYA/MYC/MYD
29-34	—	—	—	Not Occupied	—	—
35	0.5	VT/GN	439	Run/Crank Ignition 1 Voltage	I	—
36	0.5	VT/WH	2022	Coolant Pump Control	I	LSA
37-39	—	—	—	Not Occupied	—	—
40	0.5	RD/BN	5940	Battery Positive Voltage	I	—
41	—	—	—	Not Occupied	—	—
42	2.5	YE	6	Starter Solenoid Crank Voltage	I	—
	—	—	—	Not Occupied	—	—

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
43-44						
45	0.5	VT/GY	6386	Starter Enable Relay Control	I	—
46	0.5	BK/WH	451	Signal Ground	I	—
47	0.5	BN/GN	59	A/C Compressor Clutch Supply Voltage	I	—
48	0.5	WH/GY	459	A/C Compressor Clutch Relay Control	I	—
49	0.5	VT/BK	2139	Run/Crank Ignition 1 Voltage	I	MYA/MYC/MYD
50	1.5	BN/VT	1470	Brake Booster Pump Motor Supply Voltage	I	LFW/LFX/LWR
51-52	—	—	—	Not Occupied	—	—

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X50A Fuse Block - Underhood X3



Connector Part Information

- Harness Type: Body (RHD), Body Front (LHD)
- OEM Connector: 13585275
- Service Connector: TBD
- Description: 52-Way F

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	TBD	—	—

X50A Fuse Block - Underhood X3

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BN/WH	28	Horn Relay Control	I	—
2	—	—	—	Not Occupied	—	—
3	0.35	BN/VT	1969	Headlamp High Beam Relay Control	I	—

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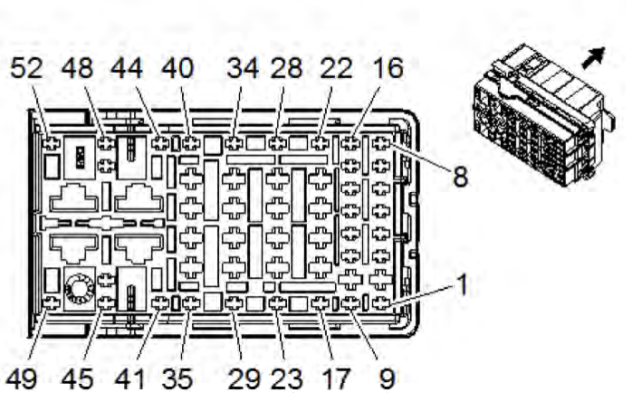
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4-6	—	—	—	Not Occupied	—	—
7	0.35	GY	7599	Siren Control	I	UTP
8	0.5	YE/BU	1149	Content Theft Horn Control	8	UTP
9	0.35	VT/GY	139	Run/Crank Ignition 1 Voltage	I	—
10-12	—	—	—	Not Occupied	—	—
13	0.35	BN/WH	1317	Fog Lamp Relay Control	I	T3U
14	—	—	—	Not Occupied	—	—
15	0.35	BN/YE	1970	Headlamp Low Beam Relay Control	I	T4F
16-19	—	—	—	Not Occupied	—	—
20	1.5	RD/GY	3540	Battery Positive Voltage	I	CF5
21	—	—	—	Not Occupied	—	—
22	0.35	RD/BU	840	Battery Positive Voltage	I	—
23-27	—	—	—	Not Occupied	—	—
28	0.75	RD/GY	6240	Battery Positive Voltage	I	KA1
29-39	—	—	—	Not Occupied	—	—
40	0.75	RD/GN	6140	Battery Positive Voltage	I	KA1
41-42	—	—	—	Not Occupied	—	—
43	1	BN/YE	2267	Mirror Heating Element Supply Voltage	I	DR9/DR3/DM7
44	—	—	—	Not Occupied	—	—
45	0.5	RD/GY	5540	Battery Positive Voltage	I	7X7
46	0.35	BN/VT	193	Rear Defog Relay Control	I	—
47-49	—	—	—	Not Occupied	—	—

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
50	1.5	RD/GY	1042	Battery Positive Voltage	I	—
51	2.5	BN/VT	293	Rear Defog Element Supply Voltage	I	—
52	—	—	—	Not Occupied	—	—

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X50A Fuse Block - Underhood X4



Connector Part Information

- Harness Type: Body (RHD), Body Front (LHD)
- OEM Connector: 13585276
- Service Connector: TBD
- Description: 52-Way F

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	TBD	—	—

X50A Fuse Block - Underhood X4

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1-2	—	—	—	Not Occupied	—	—
3	0.35	BU/VT	807	OFF /Accessory Voltage	I	ULS
4	0.35	GN/VT	5199	Run/Crank Relay Coil Control	I	—
5	—	—	—	Not Occupied	—	—

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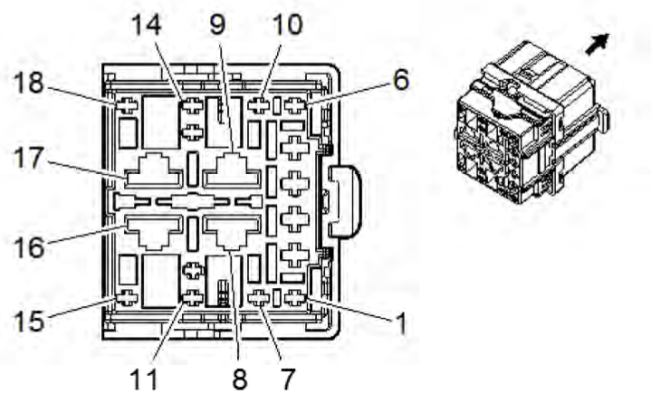
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
6	0.35	VT/BK	339	Run/Crank Ignition 1 Voltage	I	—
7	0.5	VT/GY	539	Run/Crank Ignition 1 Voltage	I	—
8	0.35	VT/WH	1139	Run/Crank Ignition 1 Voltage	I	AL5
9-13	—	—	—	Not Occupied	—	—
14	0.75	VT/WH	639	Run/Crank Ignition 1 Voltage	I	RZW/UVC
15-24	—	—	—	Not Occupied	—	—
25	0.35	WH/VT	860	Front Windshield Wiper Switch High Signal	I	—
26	2.5	YE/BN	95	Windshield Wiper Motor Low Speed Control	I	—
27	2.5	BK	750	Ground	I	—
28	0.35	GY	91	Windshield Wiper Motor Relay Coil Supply Voltage	I	—
29	—	—	—	Not Occupied	—	—
30	2.5	WH	92	Windshield Wiper Motor High Speed Control	I	—
31-34	—	—	—	Not Occupied	—	—
35	0.5	BK	850	Ground	I	V5B
36	0.75	BK	850	Ground	I	—
37	0.5	RD/BN	702	Battery Positive Voltage	I	V5B
38-40	—	—	—	Not Occupied	—	—
41	0.5	RD/WH	5440	Battery Positive Voltage	I	7X6/7X7
42	1.5	VT	1197	Headlamp Washer Pump Control	I	T3T
43	2.5	RD/WH	4042	Battery Positive Voltage	I	—
44-47	—	—	—	Not Occupied	—	—

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
48	0.5	RD/VT	5340	Battery Positive Voltage	I	6J7
49-50	—	—	—	Not Occupied	—	—
51	1.5	RD/GY	1342	Battery Positive Voltage	I	—
52	0.35	WH	311	Right Headlamp High Beam Supply Voltage	I	V5B

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X50A Fuse Block - Underhood X5



Connector Part Information

- Harness Type: Body (RHD), Body Front (LHD)
- OEM Connector: 13585277
- Service Connector: TBD
- Description: 18-Way F

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	TBD	—	—

X50A Fuse Block - Underhood X5

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	RD/VT	4640	Battery Positive Voltage	I	LWR
2-5	—	—	—	Not Occupied	—	—
6	0.35	BN	6305	Brake Vacuum Switch Signal	I	LFW/LFX/LWR
7	—	—	—	Not Occupied	—	—

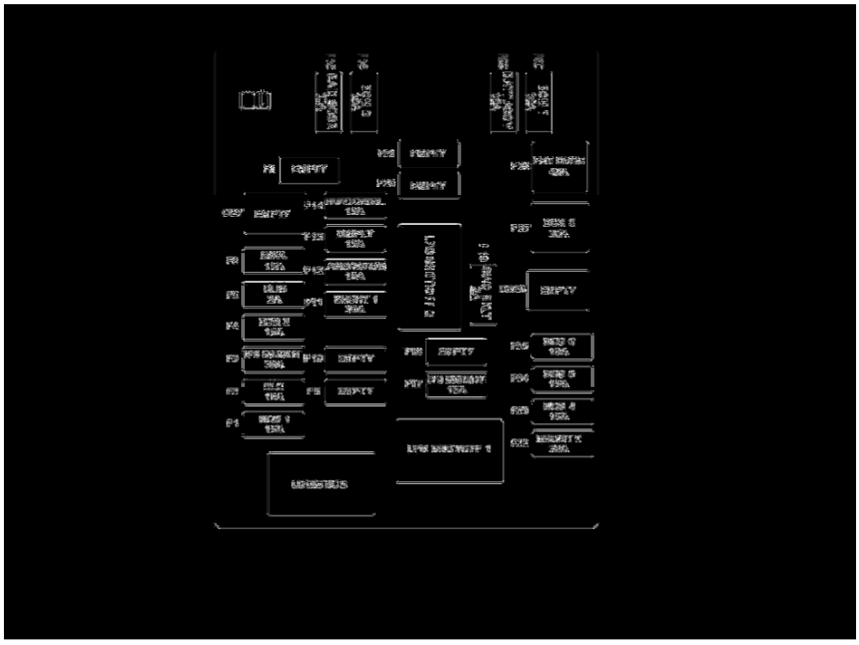
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
8	2.5	RD/YE	3740	Battery Positive Voltage	I	—
9	4	RD/YE	442	Battery Positive Voltage	I	—
10	—	—	—	Not Occupied	—	—
11	— 0.75	GY/VT	228	Windshield Washer Pump Control	I	—
12	—	—	—	Not Occupied	—	—
13	0.35	YE/BU	2282	Headlamp Washer Relay Control	I	T3T
14	0.75	BU/VT	392	Rear Window Washer Pump Control	I	F35
15	0.35	BN/GY	2268	Windshield Washer Relay Control	I	—
16-17	—	—	—	Not Occupied	—	—
18	0.355	GN/WH	2270	Rear Window Washer Relay Control	I	F35

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X51A Fuse Block – Instrument Panel Label



X51A Fuse Block – Instrument Panel Label Usage

No.	Device Label Name	Device Assigned Name	Rating	Description
Fuses				
F1	BCM 1 15A	F1DA Fuse	15A	E6 Center High Mounted Stop Lamp, E7L License Plate Lamp - Left, E7R License Plate Lamp - Right, K9 Body Control Module, K20 Engine Control Module, K71 Transmission Control Module, KR6 Rear Window Washer Pump Relay, KR11 Windshield Washer Pump Relay, KR74 Ignition Run Relay, KR104A Battery Saver Relay 1, S38 Ignition Mode Switch (BTM)
F2	DLC 10A	F2DA Fuse	10A	X84 Data Link Connector
F3	LPG SHUT/OFF 30A	F3DA Fuse	30A	KR118A LPG Relay 1, KR118B LPG Relay 2

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No.	Device Label Name	Device Assigned Name	Rating	Description
F4	BCM 2 15A	F4DA Fuse	15A	B10B Ambient Light/Sunload Sensor, K9 Body Control Module, KR77 Ignition Power Provision Relay, KR95B Rear Compartment Lid Unlatch Relay, KR104A Battery Saver Relay 1, KR104B Battery Saver Relay 2, M69 Sunroof Motor (CF5), M93 Key Capture Solenoid Actuator (M97-BTM)
F5	DLIS 2A	F5DA Fuse	2A	S39 Ignition Switch
F6	ESCL 15A	F6DA Fuse	15A	K60 Steering Column Lock Module (ULS)
CB7	EMPTY	F7DA Fuse	—	Not Used
F8	BATTERY	F8DA Fuse	30A	F12DA Fuse, F13DA Fuse, F14DA Fuse
F9	EMPTY	F9DA Fuse	—	Not Used
F10	EMPTY	F10DA Fuse	—	Not Used
F11	SHUNT 1 30A	F11DA Fuse	30A	F12DA Fuse, F13DA Fuse, F14DA Fuse
F12	AIRBAG/AOS 10A	F12DA Fuse	10A	K36 Inflatable Restraint Sensing and Diagnostic Module, K85 Passenger Presence Module (AL5)
F13	DISPLY 15A	F13DA Fuse	15A	P16 Instrument Cluster, P29 Head-Up Display (UV6), PXX Infotainment Display
F14	HVAC CNTRL 15A	F14DA Fuse	15A	K33 HVAC Control Module, PXX HVAC Display,
F15	RAIN SNSR 10A	F15DA Fuse	10A	B117 Rain Sensor (CE1)
F16	BCM 3 15A	F16DA Fuse	15A	E2LF Side Marker Lamp - Left Front, E2LR Side Marker Lamp - Left Rear, E4C Daytime Running Lamp - Left, E4D Daytime Running Lamp - Right, E4G Left Low Beam Lamp, E4J Park Lamp Left Front, E4LF Turn Signal Lamp - Left Front, E4Y Turn Signal Repeater Lamp - Left, E5AA Tail/Stop Lamp - Left, E5AB Tail/Stop Lamp - Right, E5AN Stop/Turn Signal Lamp - Right, K9 Body Control Module, M29L Headlamp Leveling Actuator - Left
F17	LPG SHUT/OFF 15A	F17DA Fuse	15A	KR109B Fuel Cut-Off Solenoid Valve Relay 2, Q58F LPG Cut-Off Solenoid

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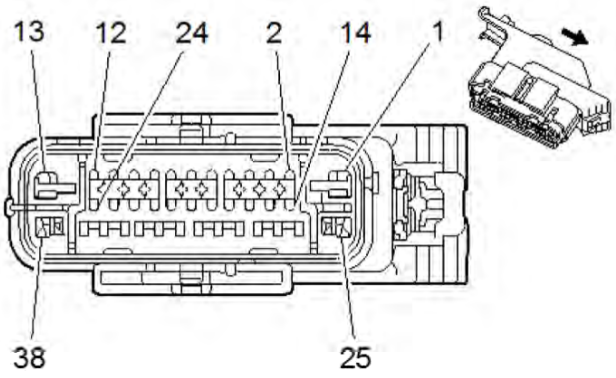
No.	Device Label Name	Device Assigned Name	Rating	Description
				Valve - Front (LWR), Q58R LPG Cut-Off Solenoid Valve - Rear (LWR)
F18	EMPTY	F18DA Fuse	—	Not Used
F19	SWC BKLT 2A	F19DA Fuse	2A	S70 Steering Wheel Controls Assembly
F20	EMPTY	F20DA Fuse	—	Not Used
F21	EMPTY	F21DA Fuse	—	Not Used
F22	SHUNT 2 30A	F22DA Fuse	30A	KR104A Battery Saver Relay 1
F23	BCM 4 15A	F23DA Fuse	15A	E2RF Side Marker Lamp - Right Front, E2RR Side Marker Lamp - Right Rear, E4D Daytime Running Lamp - Right, E4H Right Low Beam Lamp, E4K Park Lamp Right Front, E4RF Turn Signal Lamp - Right Front, E4Z Turn Signal Repeater Lamp - Right, E5AA Tail/Stop Lamp - Left, E5AB Tail/Stop Lamp - Right, E5AM Stop/Turn Signal Lamp - Left, E8S Rear Compartment Courtesy Lamp, E33 Cargo Lamp, K9 Body Control Module, M29R Headlamp Leveling Actuator - Right
F24	BCM 5 15A	F24DA Fuse	15A	KR2 Headlamp Washer Pump Relay, KR7 Rear Wiper Relay, KR46 Front Fog Lamp Relay, KR74 Ignition Run Relay, KR114 Door Dead Lock Relay, S10 Cruise Control Switch, S48E Multi-Function Switch Module - Center Console (UD7/UFQ)
F25	BCM 6 15A	F25DA Fuse	15A	E4RR Turn Signal Lamp - Right Rear, E5A Back Up Lamp - Left, E5B Back Up Lamp - Right, PXX HVAC Display, X271 Upfitter Provision, X341 Upfitter Provision
CB26	EMPTY	F26DA Fuse	—	Not Used
F27	BCM 8 30A	F27DA Fuse	30A	A23D Door Latch Assembly - Driver, A23P Door Latch Assembly - Passenger, M97 Fuel Door Lock Actuator
F28	FRT HVAC 40A	F28DA Fuse	40A	K8 Blower Motor Control Module
F29	BATT ACCY 15A	F29DA Fuse	15A	X252 Upfitter Provision, X435 Upfitter Provision

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No.	Device Label Name	Device Assigned Name	Rating	Description
F30	BCM 7 15A	F30DA Fuse	15A	A9A Outside Rearview Mirror - Driver, A9B Outside Rearview Mirror - Passenger, E4LR Turn Signal Lamp - Left Rear, E8D Door Courtesy Lamp - Driver (C90), E8LR Door Courtesy Lamp - Left Rear (C90), E8P Door Courtesy Lamp - Passenger (C90), E8RR Door Courtesy Lamp - Right Rear (C90), E27 Instrument Panel Compartment Lamp (U27), E37F Dome/Reading Lamps - Front, M7 Transmission Shift Lock Control Solenoid Actuator, S3 Transmission Shift Lever,
Relays				
R1	LOGISTICS	KR104A Battery Saver Relay 1	—	F11DA Fuse
R2	LPG SHUT/OFF 1	KR109A Fuel Cut-Off Solenoid Valve Relay 1	—	F17DA Fuse
R3	LPG SHUT/OFF 2	KR109B Fuel Cut-Off Solenoid Valve Relay 2	—	Q58F LPG Cut-Off Solenoid Valve - Front (LWR), Q58R LPG Cut-Off Solenoid Valve - Rear (LWR)
Note:: Items listed below are diagnostic testing points .				
TP18	—	—	—	Not Used
TP19	—	—	—	Not Used
TP24	—	—	—	Not Used
TP26	—	—	—	Not Used

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X51A Fuse Block - Instrument Panel X1



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 13585275
- Service Connector: TBD
- Description: 52-Way F

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	TBD	—	—

X51A Fuse Block - Instrument Panel X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	0.75	RD/GY	4140	Battery Positive Voltage	I	—
3	0.35	RD/WH	140	Battery Positive Voltage	I	—
4	0.75	RD/BN	2240	Battery Positive Voltage	I	—

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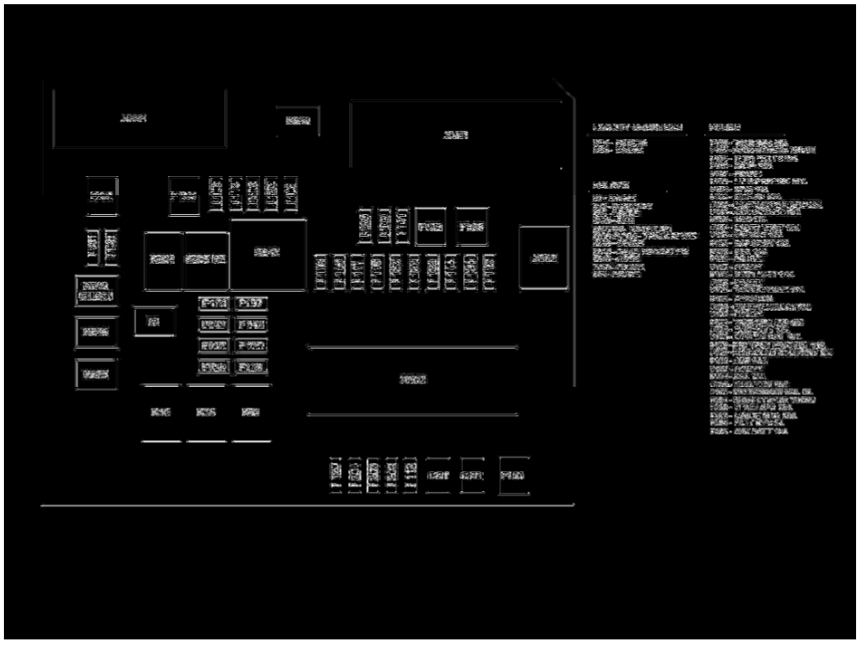
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
5	1.5	RD/GN	1540	Battery Positive Voltage	I	LWR
6	0.35	RD/GN	40	Battery Positive Voltage	I	—
7	0.75	RD/WH	2740	Battery Positive Voltage	I	—
8	0.35	GY/VT	3264	Logistic Mode Relay Close Control	I	—
9	0.35	BK	1450 1350	Ground Ground	I I	Right Hand Drive Left Hand Drive
10	0.35	VT/BU	3263	Logistic Mode Relay Open Control	I	—
11	0.35	RD/VT	1440	Battery Positive Voltage	I	CE1
12-13	—	—	—	Not Occupied	—	—
14	1.5	RD/GY	1740	Battery Positive Voltage	I	—
15	0.75	RD/GY	2140	Battery Positive Voltage	I	—
16	0.5	RD/VT	3340	Battery Positive Voltage	I	—
17	0.5	RD/BU	3240	Battery Positive Voltage	I	—
18	0.35	RD/WH	4440	Battery Positive Voltage	I	—
19	1.5	RD/BU	1240	Battery Positive Voltage	I	—
20-21	—	—	—	Not Occupied	—	—
22	1.5	RD/BU	1240	Battery Positive Voltage	I	—
23-24	—	—	—	Not Occupied	—	—
25	0.75	BU/YE	3506	Liquid Petroleum Gas Fuel Shutoff Solenoid Control (1)	I	LWR
26	1.5	RD/GN	1540	Battery Positive Voltage	I	LWR
27	0.35	GN/GY	465	Fuel Pump Primary Relay Control	I	LWR
28	1.5	RD/GN	1540	Battery Positive Voltage	I	LWR
	—	—	—	Not Occupied	—	—

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
29-30						
31	0.35	BU/GN	5665	Liquid Petroleum Gas Valve Solenoid Control	I	LWR
32	0.75	BN/BK	3507	Liquid Petroleum Gas Fuel Shutoff Solenoid Control (2)	I	LWR
33-34	—	—	—	Not Occupied	—	—
35	0.75	BU/YE	3506	Liquid Petroleum Gas Fuel Shutoff Solenoid Control (1)	I	LWR
36	—	—	—	Not Occupied	—	—
37	0.35	YE	6817	LED Backlight Dimming Control	I	—
38	0.35	BN	6136	Supply Voltage	I	—
39	0.35	BK	1450	Ground	I	LWR
40	0.5	RD/WH	1340	Battery Positive Voltage	I	—
41	0.5	RD/GN	5140	Battery Positive Voltage	I	—
42	4	RD/GN	242	Battery Positive Voltage	I	—
43-44	—	—	—	Not Occupied	—	—
45	0.35	RD/WH	3440	Battery Positive Voltage	I	—
46	0.75	RD/BN	2940	Battery Positive Voltage	I	—
47	0.75	RD/BU	2540	Battery Positive Voltage	I	—
48	1.5	RD/GY	1740	Battery Positive Voltage	I	—

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X53A Fuse Block – Rear Body Label



X53A Fuse Block – Rear Body Label Usage

No.	Device Label Name	Device Assigned Name	Rating	Description
Fuses				
F100	TRLR MDL	F1RA Fuse	40A	K101 Trailer Interface Control Module, X464 Upfitter Provision
F103	PASS/RT REAR WNDW	F2RA Fuse	30A	S79P Window Switch - Passenger, S79RR Window Switch – Right Rear
F105	PEPS BATT 2	F3RA Fuse	30A	K84 Keyless Entry Control Module
F106	MRTD	F4RA Fuse	30A	K19 Suspension Control Module
F107	SPARE	F5RA Fuse	—	Not Used
F108	ELEC PRK/BRK	F6RA Fuse	30A	K83 Parking Brake Control Module (J77)
F109	MSM	F7RA Fuse	10A	K40 Seat Memory Control Module

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No.	Device Label Name	Device Assigned Name	Rating	Description
F112	INT/APO	F8RA Fuse	20A	X80F Accessory Power Receptacle - Front, X80H Accessory Power Receptacle - Center Console
F113	EVDF LAMPS/EDIM	F9RA Fuse	20A	KR43 Emergency Vehicle Rear Compartment Lid Lamp Relay, K116 Auxiliary Display Control Module
F115	AUX GAUGES	F10DA Fuse	10A	P9 Driver Information Center
F116	LGM	F11RA Fuse	10A	K39 Liftgate Control Module
F117	CNSTR VENT	F12RA Fuse	10A	Q13 Evaporative Emissions Vent Solenoid Valve
F118	ONSTAR	F13RA Fuse	10A	K73 Telematics Communication Interface Control Module
F120	RAP ACCY	F14RA Fuse	10A	X252 Upfitter Provision
F121	RDO	F15RA Fuse	15A	A11 Radio
F122	SPARE	F16RA Fuse	—	Not Used
F123	SPARE	F17RA Fuse	—	Not Used
F125	PEPS BATT 1	F18RA Fuse	5A	K84 Keyless Entry Control Module
F126	SPARE	F19RA Fuse	—	Not Used
F128	TRUNK RELSE	F20RA Fuse	15A	KR95C Rear Compartment Lid Unlatch Relay 1
F129	FSCM	F21RA Fuse	20A	KR23A Fuel Pump Relay
F131	EMER/VEH/ACCY	F22RA Fuse	10A	U1 Battery Isolator, X278 Upfitter Provision
F132	SPARE	F23RA Fuse	—	Not Used
F133	TRLR MDL IGN	F24RA Fuse	10A	K101 Trailer Interface Control Module
F134	ECM BATT	F25RA Fuse	10A	K20 Engine Control Module
F135	CAMERA IGN	F26RA Fuse	10A	B87 Rearview Camera
F136	FRT VENT SEAT IGN	F27RA Fuse	15A	M73C Seat Blower Motor - Driver Cushion, M73D Seat Blower Motor - Passenger Cushion
F137		F28RA Fuse	10A	

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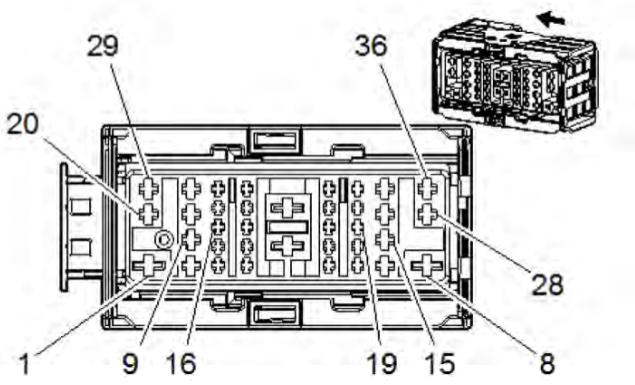
No.	Device Label Name	Device Assigned Name	Rating	Description
	REAR SEAT INFOTMNT			P22D Video Display - Driver Seat Headrest, P22P Video Display - Passenger Seat Headrest
F141	AMP	F29RA Fuse	30A	T3 Audio Amplifier
F142	SPARE	F30RA Fuse	—	Not Used
F143	AHL	F31RA Fuse	15A	K28 Headlamp Leveling Control Module
F144	APA/SBZA	F32RA Fuse	15A	B174 Frontview Camera, B218L Side Object Sensor Module - Left, B218R Side Object Sensor Module - Right, K41 Parking Assist Control Module
F145	MIR WNDW MDL	F33RA Fuse	5A	K96 Mirror Control Module, S52 Outside Rearview Mirror Switch, S101 Door Lock/Window Switch
F201	DRVR/LT REAR WNDW	F34RA Fuse	30A	M74D Window Motor – Driver, S101 Door Lock/Window Switch
F202	REAR/APO	F35RA Fuse	20A	X80C Accessory Power Receptacle – Cargo, X80R Accessory Power Receptacle – Rear Compartment
F203	L/GATE MTR	F36RA Fuse	30A	K39 Liftgate Control Module
F204	BATT RVC	F37RA Fuse	5A	K9 Body Control Module
F205	AUX BATT	F38RA Fuse	10A	E29R Fog Lamp – Rear
Relays				
K1	SPARE	—	—	Not Used
K10	RAP/ACCY	KR76 Retained Accessory Power Relay	—	F14RA Fuse, F15RA Fuse
K35	SPARE	—	—	Not Used
K604	RUN	KR74 Ignition Run Relay	—	F38RA Fuse
K605	R2 - LOGISTICS	KR104B Battery Saver Relay 2	—	F22DA Fuse

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No.	Device Label Name	Device Assigned Name	Rating	Description
K609	CLSR1 - TRUNK RELSE	KR95C Rear Compartment Lid Unlatch Relay 1	—	, M40 Rear Compartment Lid Latch
K609	SPARE	—	—	Not Used
K630	CHILD DR/LCK SEC	KR113 Child Security Lock Disable Relay	—	A23LR Door Latch Assembly – Left Rear, A23P Door Latch Assembly – Passenger, A23RR Door Latch Assembly – Right Rear
K645	ACCY	KR80 Accessory Relay	—	F22RA Fuse
K649	SPARE	—	—	Not Used
K69	SPARE	—	—	Not Used

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X53A Fuse Block - Rear Body X1



Connector Part Information

- Harness Type: Body
- OEM Connector: 13709529
- Service Connector: 13576555
- Description: 36-Way F DSQ 1.5/2.8/Ducon 6.3 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	TBD	—	—

X53A Fuse Block - Rear Body X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	RD/GN	742	Battery Positive Voltage	I	RZW
2	1	VT	1001	Retained Accessory Power Fuse Supply Voltage	I	—
3-4	—	—	—	Not Occupied	—	—

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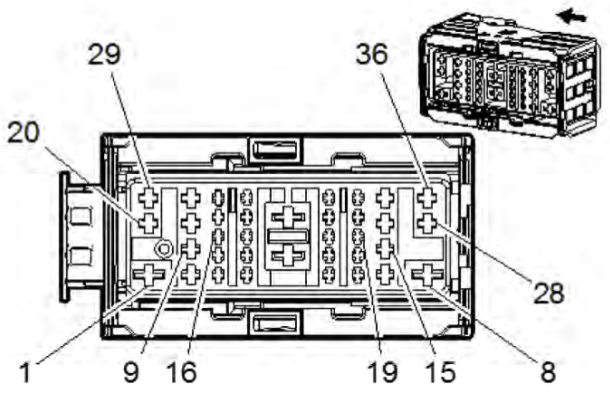
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
5	0.35	RD/YE	2340	Battery Positive Voltage	I	—
6	0.5	VT	1701	Retained Accessory Power Fuse Supply Voltage	I	—
7-8	—	—	—	Not Occupied	—	—
9	1	VT	801	Retained Accessory Power Fuse Supply Voltage	I	—
10-11	—	—	—	Not Occupied	—	—
12	2.5	RD/YE	5840	Battery Positive Voltage	I	F35
13	0.35	GY/VT	755	RAP Relay Coil Control	I	—
14-16	—	—	—	Not Occupied	—	—
17	0.35	VT/GN	1339	Run/Crank Ignition 1 Voltage	I	UVC
18	0.5	RD/YE	740	Battery Positive Voltage	I	T3T
19	—	—	—	Not Occupied	—	—
20	0.5	RD/WH	6440	Battery Positive Voltage	I	ERG
21	—	—	—	Not Occupied	—	—
22	0.5	VT/BK	739	Run/Crank Ignition 1 Voltage	I	KA1/KU3
23	0.5	RD/VT	340	Battery Positive Voltage	I	—
24	1	RD/BN	4940	Retained Accessory Power Fuse Supply Voltage	I	—
25	0.35	RD/BN	4240	Battery Positive Voltage	I	UWG
26-27	—	—	—	Not Occupied	—	—
28	3	RD/VT	2640	Battery Positive Voltage	I	—
29	0.5	RD/BN	440	Battery Positive Voltage	I	—
30	0.75	VT/WH	639	Run/Crank Ignition 1 Voltage	I	RZW/UVC
31	0.5	PU	739	Run/Crank Ignition 1 Voltage	I	KA1/KU1
32	0.5	RD/VT	1940	Battery Positive Voltage	I	—

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
33-36	—	—	—	Not Occupied	—	—

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X53A Fuse Block - Rear Body X2



Connector Part Information

- Harness Type: Body
- OEM Connector: 13709530
- Service Connector: 13576556
- Description: 36-Way F DSQ 1.5/2.8/Ducon 6.3 Series (GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	TBD	—	—

X53A Fuse Block - Rear Body X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	4	RD/VT	1640	Battery Positive Voltage	I	J77
2	—	—	—	Not Occupied	—	—
3	0.5	RD/GN	3840	Battery Positive Voltage	I	UD7/UFQ
4	0.35	VT/BK	1239	Run/Crank Ignition 1 Voltage	I	RZW

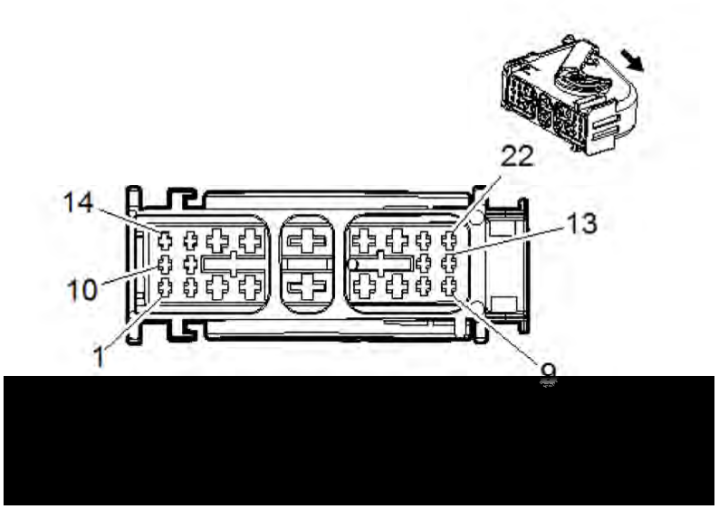
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
5	0.5	RD/GN	2440	Battery Positive Voltage	I	—
6	0.5	RD/YE	4340	Battery Positive Voltage	I	BTM
7-9	—	—	—	Not Occupied	—	—
10	0.35	RD/BU	3940	Battery Positive Voltage	I	UE1
11	1	RD/WH	5740	Battery Positive Voltage	I	F35
12	2.5	RD/WH	1642	Battery Positive Voltage	I	—
13	0.5	RD/WH	2040	Battery Positive Voltage	I	A45
14	—	—	—	Not Occupied	—	—
15	2.5	RD/VT	4040	Battery Positive Voltage	I	UQA/UQG
16-23	—	—	—	Not Occupied	—	—
24	2.5	RD/WH	1642	Battery Positive Voltage	I	—
25	—	—	—	Not Occupied	—	—
26	0.35	VT/YE	3267	Child Security Lock Relay Control	I	NCG
27	1.5	BK	2350 2550	Ground Ground	I I	F80 F19/F35/F69
28	1	WH/BU	3266	Child Security Lock Motor Lock Control	I	NCG
29-30	—	—	—	Not Occupied	—	—
31	0.35	GY/VT	3264	Logistic Mode Relay Close Control	I	—
32-34	—	—	—	Not Occupied	—	—
35	1.5	GY/GN	3271	Door Lock Control (2)	I	NCG
36	1.5	GY	295	Door Lock Actuator Lock Control	I	NCG

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X53A Fuse Block - Rear Body X3



Connector Part Information

- Harness Type: Body
- OEM Connector: 13709539
- Service Connector: 19300574
- Description: 22-Way F 1.5/2.8/Ducon 6.3 Series (NA)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	TBD	—	—

X53A Fuse Block - Rear Body X3

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1-2	—	—	—	Not Occupied	—	—
3	2	RD/BN	3640	Battery Positive Voltage	I	F55
4	2	RD/BU	540	Battery Positive Voltage	I	ATH
5	2.5	RD/BU	1842	Battery Positive Voltage	I	—

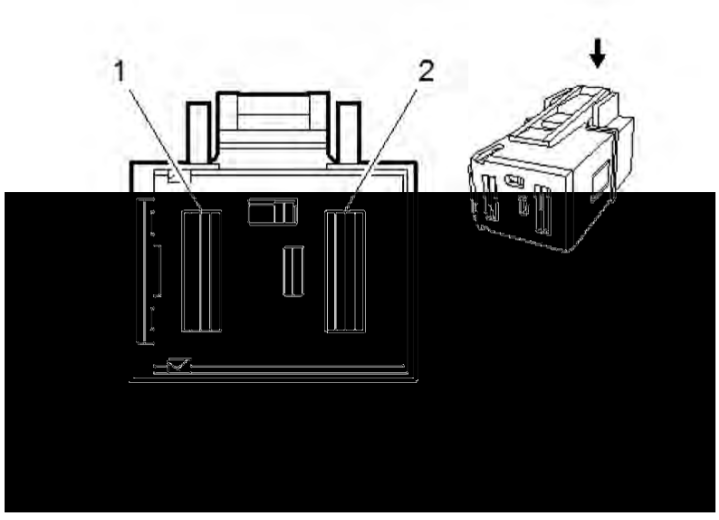
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
6-7	—	—	—	Not Occupied	—	—
8	0.35	BU	3760	Switched Auxiliary Accessory Voltage Control	I	9C1/9C3
9	0.35	BN/BU YE/GN	1977 9000	Rear Fog Lamp Relay Control Accessory Voltage	I I	T79 K5S
10	—	—	—	Not Occupied	—	—
11	0.35	VT/BU	3263	Logistic Mode Relay Open Control	I	—
12	0.35	BK	2550	Ground	I	F19/F69
13	0.35	VT/YE	343	Accessory Voltage	I	9C1/9C3
14-15	—	—	—	Not Occupied	—	—
16	1	RD/VT	5640	Battery Positive Voltage	I	BUJ/T53
17	0.35	YE/GN	122	Rear Fog Lamp Supply Voltage	I	T79
18	2.5	RD/BU	1842	Battery Positive Voltage	I	F19/F35/F69
19-20	—	—	—	Not Occupied	—	—
21	0.35	GY/YE	6188	Lift Glass/Trunk Motor Release Control	I	F19/F69
22	0.5	BU/WH	6128	Rear Closure Unlatch Motor Unlatch Control	I	F19/F69/F80 with E95

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X53A Fuse Block - Rear Body X4



Connector Part Information

- Harness Type: Body
- OEM Connector: 15344936
- Service Connector: 13285252
- Description: 2-Way F 9.5 Ducon Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	TBD	—	—

X53A Fuse Block - Rear Body X4

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	6	RD/GY	142	Battery Positive Voltage	I	—
2	6	RD/BU	42	Battery Positive Voltage	I	—

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Component Connector End Views

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Figure 336: Q17C Fuel Injector 3 (LSA/LWR)
Figure 337: Q17C Fuel Injector 3 (LFW/LFX)
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Figure 339: Q17D Fuel Injector 4 (LSA/LWR)
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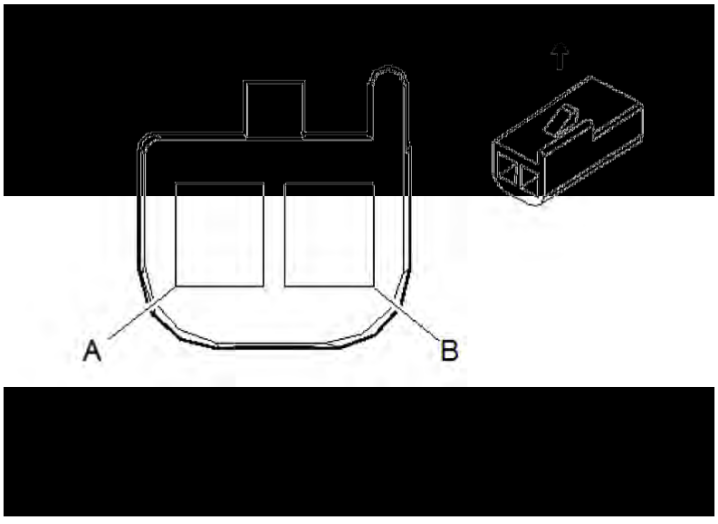
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A3L Sunshade – Left (DHD)



Connector Part Information

- Harness Type: Headliner
- OEM Connector: 12047662
- Service Connector: 12085535
- Description: 2-Way F Metri-Pack 150 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-14 (GN)	J-38125-12A

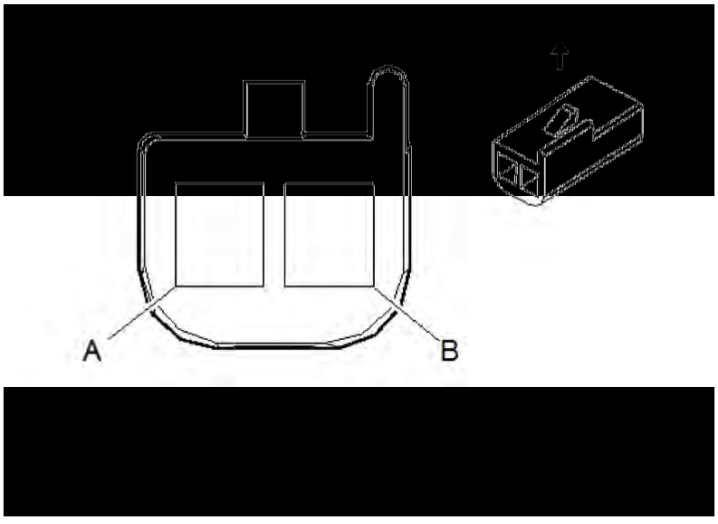
A3L Sunshade – Left (DHD)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	WH/BN	6815	Inadvertent Power Control	I	—
B	0.35	BK	2250	Ground	I	—

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A3R Sunshade – Right (DHD)



Connector Part Information

- Harness Type: Headliner
- OEM Connector: 12047662
- Service Connector: 12085535
- Description: 2-Way F Metri-Pack 150 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-14 (GN)	J-38125-12A

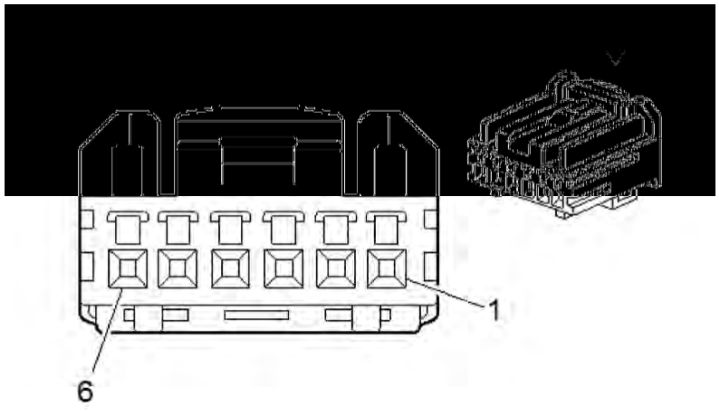
A3R Sunshade – Right (DHD)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	WH/BN	6815	Inadvertent Power Control	I	—
B	0.35	BK	2250	Ground	I	—

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A5 Driver Information Center (ERG)



Connector Part Information

- Harness Type: HSV Patch
- OEM Connector: HCMPB-06-K
- Service Connector: Service by Harness – See Part Catalog
- Description: 6-Way F HCM Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-38125-12A	J-35616-64B (L-BU)

A5 Driver Information Center (ERG)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	RD/WH	6440	Battery Positive Voltage	I	—
2-3	—	—	—	Not Occupied	—	—
4	0.5	BK	1450	Ground	I	—
5	0.35	GN	5060	Low Speed GMLAN Serial Data	I	—

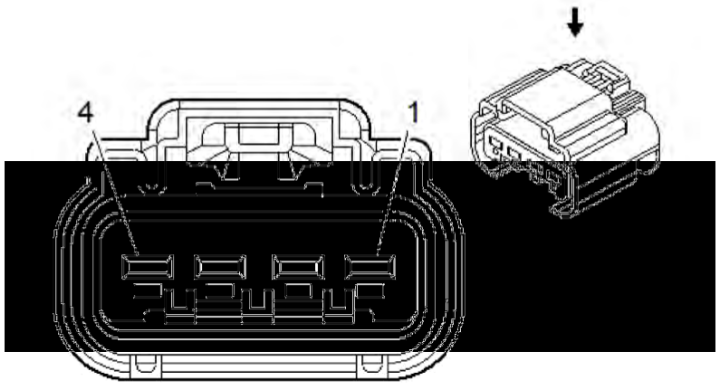
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
6	—	—	—	Not Occupied	—	—

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A7 Fuel Pump and Level Sensor Assembly (LFW/LFX/L77/LS3/LSA)



Connector Part Information

- Harness Type: Fuel Tank
- OEM Connector: 13527865
- Service Connector: Service by Harness - See part Catalog
- Description: 4-Way F GT 280 Series, Sealed (NA)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-4A (PU)	J-38125-553

A7 Fuel Pump and Level Sensor Assembly (LFW/LFX/L77/LS3/LSA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	3	GY	120	Fuel Pump Supply Voltage	I	—
2	3	BK/GN	1580	Fuel Pump Low Reference	I	—
3	0.35	BK/GN	6281	Fuel Level Sensor Low Reference	I	—
4	0.5	BU/VT	1589	Primary Fuel Level Sensor Signal	I	—

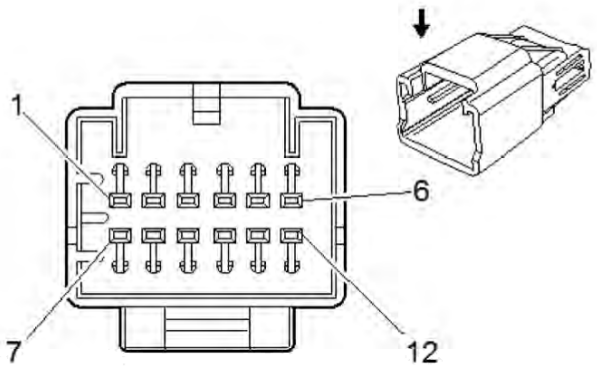
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option

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A9A Outside Rearview Mirror – Driver



Connector Part Information

- Harness Type: Driver Door
- OEM Connector: 7282-7696-40
- Service Connector: 19115699
- Description: 12-Way M (L-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575828	J-35616-65B (L-BU)	J-38125-553

A9A Outside Rearview Mirror – Driver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	VT/BU	3390	Driver Mirror Motor Up (+) Down (-) Control	I	—
2	0.35	YE/BN	3391	Driver Mirror Motor Common Control	I	—
3	0.35	BN/BK	3389		I	—

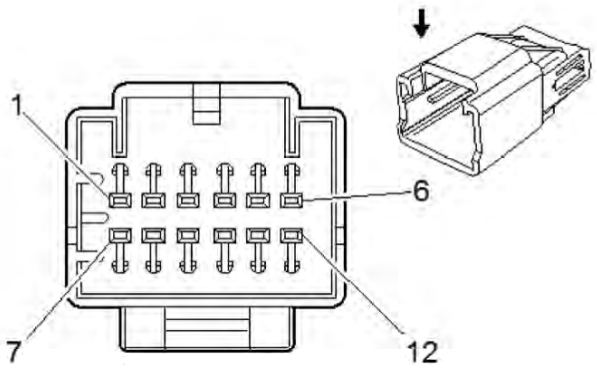
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Driver Mirror Motor Right (+) Left (-) Control		
4	0.35	VT/RD	3392	Driver Mirror Position Sensor High Reference	I	DM7/DR3
5	0.35	BN/YE	2267	Mirror Heating Element Supply Voltage	I	DM7/DR3
6	0.35	GY/YE	5853	Driver Side Object Detection LED Signal (1)	I	UFT
7	0.35	GY/BN	3394	Driver Mirror Position Sensor Up (+) Down (-) Signal	I	DM7/DR3
8	0.35	BK/BN	3393	Driver Mirror Position Sensor Low Reference	I	DM7/DR3
9	0.35	WH/YE	3395	Driver Mirror Position Sensor Left (-) Right (+) Signal	I	DM7/DR3
10	0.35	GY/GN	5996	Driver Outside Rear View Mirror Puddle Lamp Supply Voltage	I	DM7
		YE/WH	1690	Automatic Day/Night Mirror Signal	I	DR3
11	0.35	BK	2150	Ground	I	—
12	0.35	BK/YE	1691	Automatic Day/Night Mirror Low Reference	I	DR3

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A9B Outside Rearview Mirror – Passenger



Connector Part Information

- Harness Type: Passenger Door
- OEM Connector: 7282-7696-40
- Service Connector: 19115699
- Description: 12-Way M (L-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575828	J-35616-65B (L-BU)	J-38125-553

A9B Outside Rearview Mirror – Passenger

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	YE/VT	3397	Co-Driver Mirror Motor Up (+) Down (-) Control	I	—
2	0.35	WH	3398	Co-Driver Mirror Motor Common Control	I	—
3	0.35	GN/BK	3396		I	—

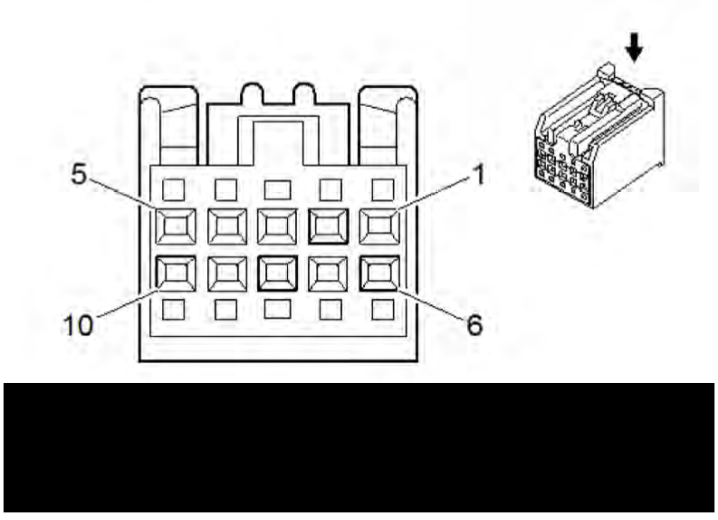
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Co-Driver Mirror Motor Right (+) Left (-) Control		
4	0.35	YE/RD	3399	Co-Driver Mirror Position Sensor High Reference	I	DM7/DR3
5	0.35	BN/YE	2267	Mirror Heating Element Supply Voltage	I	DM7/DR3
6	0.35	GY	5861	Passenger Side Object Detection LED Signal (1)	I	UFT
7	0.35	BU/YE	3401	Co-Driver Mirror Position Sensor Up (+) Down (-) Signal	I	DM7/DR3
8	0.35	BK/BN	3400	Co-Driver Mirror Position Sensor Low Reference	I	DM7/DR3
9	0.35	VT/WH	3403	Co-Driver Mirror Position Sensor Left (-) Right (+) Signal	I	DM7/DR3
10	0.35	GY/GN	5996	Driver Outside Rear View Mirror Puddle Lamp Supply Voltage	I	DM7
11	0.35	BK	2250	Ground	I	—
12	—	—	—	Not Occupied	—	—

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A10 Inside Rearview Mirror (DD8)



[redacted]

Connector Part Information

- Harness Type: Headliner
- OEM Connector: 19177676
- Service Connector: 13577390
- Description: 10-Way F Kaizen 0.64 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575867	J-35616-64B (L-BU)	J-38125-215A

A10 Inside Rearview Mirror (DD8)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GN/WH	24	Backup Lamp Supply Voltage	I	—
2	0.35	VT/GY	539	Run/Crank Ignition 1 Voltage	I	—
3-4	—	—	—	Not Occupied	—	—
5	0.35	BK	2250	Ground	I	—

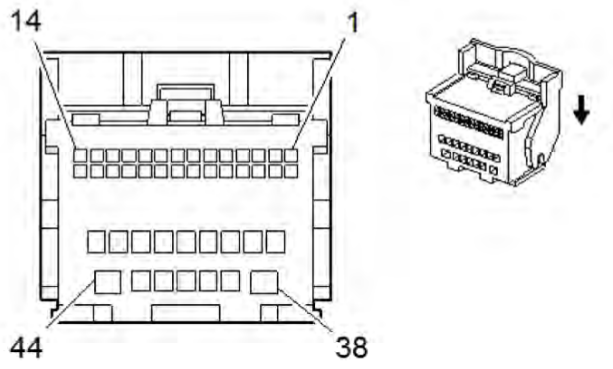
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
6-10	—	—	—	Not Occupied	—	—

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A11 Radio X1



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 88988902
- Service Connector: 88988902
- Description: 44-Way F 0.64 GT 150, 280 Series (BK with WH Terminal Position Assurance)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13587474	J-35616-64B (L-BU)	J-38125-215A
II	13575479	J-35616-2A (GY)	J-38125-553
III	13327111	J-35616-2A (GY)	J-38125-553
IV	13575579	J-35616-2A (GY)	J-38125-553
V	13575756	J-35616-4A (PU)	J-38125-553
VI	13327130	J-35616-4A (PU)	J-38125-553

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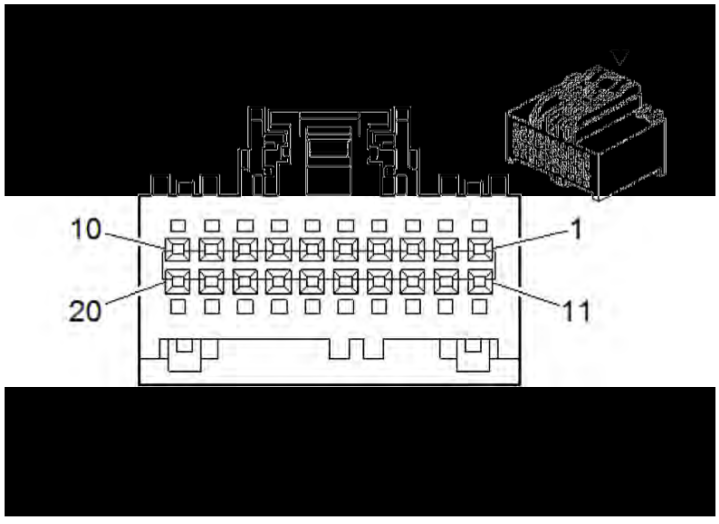
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BARE	1574	Rear Audio Drain Wire	I	UWG
2	0.35	YE	7459	Integrated Center Stack Serial Data Low	I	-
3	0.35	BARE	7460	Integrated Center Stack Serial Data Shield	I	-
4-8	-	-	-	Not Occupied	-	-
9	0.35	BARE	5842	Auxiliary Audio Screen (2)	I	USR
10	0.35	GN	5841	Right Auxiliary Audio Signal (2)	I	USR
11	0.35	BU	2060	Auxiliary Detection Signal	I	USR
12	0.35	YE/VT	3352	Rear Seat Audio Common Signal	I	RHD with UWG
13	0.35	GY/GN	3291	Integrated Center Stack Wake Up Signal	I	-
14	-	-	-	Not Occupied	-	-
15	0.35	VT	693	Cellular Telephone Mute Signal	I	9C1 or 9C3
16	0.35	VT	7458	Center Integrated Center Stack Serial Data High	I	-
17-22	-	-	-	Not Occupied	-	-
23	0.35	VT	5843	Auxiliary Audio Common Signal	I	USR
24	0.35	GY	5839	Left Auxiliary Audio Signal (2)	I	USR
25	0.35	WH/GY	5312	Left Rear Seat Audio Signal	I	UWG
26	0.35	WH/GN	5313	Right Rear Seat Audio Signal	I	UWG
27	0.35	VT	3290	Integrated Center Stack Reset Signal	I	-
28	0.35	GN	5060	Low Speed GMLAN Serial Data	I	-
29	0.35	BARE	2011	Left Front Audio Drain Wire	II	UQA

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
30	0.35	BARE	2099	Left Rear Audio Drain Wire	II	UQA
31	0.75 0.35	YE/BK BU/BN	117 1546	Right Front Speaker Signal (-) (1) Front Low Level Audio (-)	III	UQF or UQG UQA
32	0.35 0.75	BN/BU BN/BU	1947 118	Left Front Low Level Audio (-) Left Front Speaker Signal (-) (1)	IV	UQA UQF or UQG
33	0.75 0.35	BU/BK BU/BK	115 1946	Right Rear Speaker Signal (-) Right Rear Low Level Audio (-)	III	UQF or UQG UQA
34	0.75 0.35	GN/BK BN/VT	116 1999	Left Rear Speaker Signal (-) Left Rear Low Level Audio (-)	III	UQF or UQG UQA
35-36	-	-	-	Not Occupied	-	-
37	0.35	VT/BU	6978	Amplifier Control	IV	UQA
38	2	BK/WH	1551	Signal Ground	V	-
39	0.35 0.75	YE YE	512 200	Right Front Low Level Audio Signal Right Front Speaker (+) (1)	IV	UQA UQF or UQG
40	0.35 0.75	BU BU	511 201	Left Front Low Level Audio Signal Left Front Speaker (+) (1)	IV	UQA UQF or UQG
41	0.75 0.35	WH BN/WH	46 546	Right Rear Speaker (+) Right Rear Low Level Audio Signal	III	UQF or UQG UQA
42	0.35 0.75	GN/BK GN	599 199	Left Rear Low Level Audio Signal Left Rear Speaker (+)	IV	UQA UQF or UQG
43	0.35	GN/YE	7066	Entertainment Remote Enable Signal	IV	UQG or UQA or UWG
44	0.75	RD/VT	340	Battery Positive Voltage	VI	-

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A11 Radio X3



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 15126711
- Service Connector: 15126711
- Description: 20-Way F 0.64 Series BK with WH Terminal Position Assurance

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575299	J-35616-35 (VT)	Not Available

A11 Radio X3

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BU/YE	5826	Left DVD Audio Signal (+)	I	-
2	0.35	VT	6979	DVD Audio Common	I	-
3	0.35	YE	2059	Left Auxiliary Audio Signal (1)	I	-

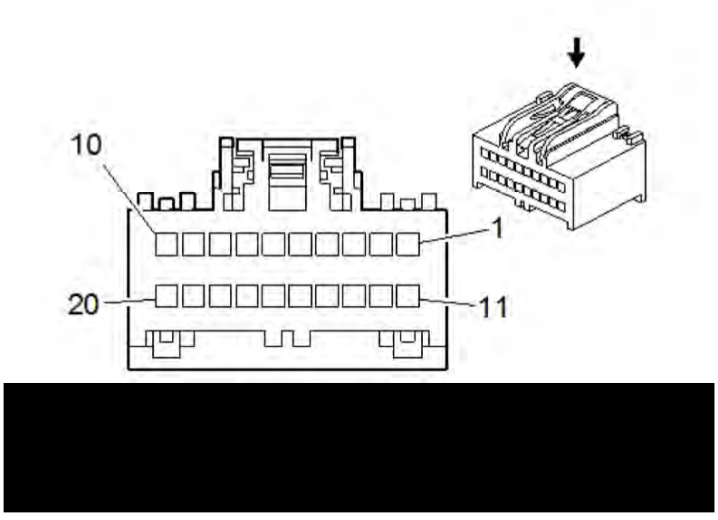
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4	0.35	GY/BN	5844	Video Bright Control	I	-
5	0.35	VT/BK	5845	Video Module Signal	I	-
6	0.35	GN/BU	5831	Remote Infra Red Signal (+)	I	-
7	0.35	YE	2056	Auxiliary Video High Signal	I	-
8	0.35	BU	7396	DVD Video Signal 2 (+)	I	-
9	0.35	BARE	6976	DVD Video Drain Wire	I	-
10	0.35	GN	6975	DVD Video Signal (+)	I	-
11	0.35	WH/BU	5828	Right DVD Audio Signal (+)	I	-
12	0.35	BK	6980	DVD Audio Shield	I	-
13	0.35	WH	2058	Right Auxiliary Audio Signal (1)	I	-
14	0.35	VT	5843	Auxiliary Audio Common Signal	I	-
15	0.35	WH/GN	7395	Video Mode 2 Signal	I	-
16	0.35	WH/YE	5830	Remote Infra Red Signal (-)	I	-
17	0.35	BARE	2057	Auxiliary Video Low Signal	I	-
18	0.35	WH	7394	DVD Video Signal 2 (-)	I	-
19	0.35	BARE	5818	Video Drain Wire	I	-
20	0.35	BN	5335	DVD Video Signal (-)	I	-

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A11 Radio X4



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 15126710
- Service Connector: 15126710
- Description: 20-Way F USCAR 64 Series (GY with WH Terminal Position Assurance)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575299	J-35616-35 (VT)	Not Available

A11 Radio X4

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1-2	-	-	-	Not Occupied	-	-
3	0.35	VT/WH	3361	Pop Up Display Control	I	-
4	-	-	-	Not Occupied	-	-
5	0.35	GY/YE	6972	Camera Signal #2 +	I	UVC

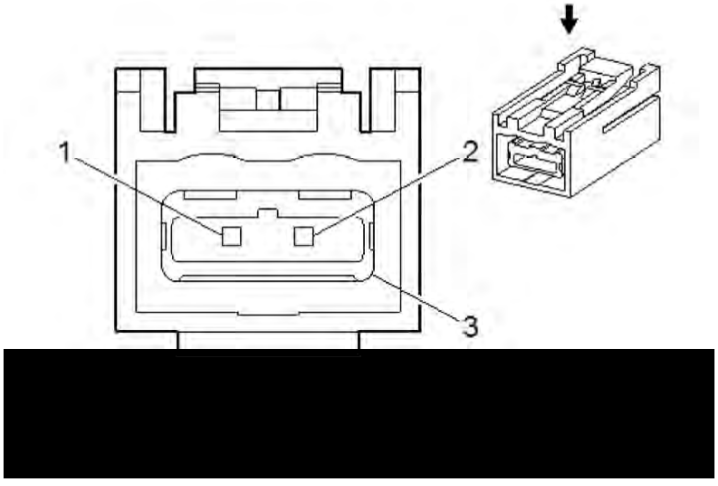
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
6	0.35	BU	655	Cellular Telephone Microphone Signal	I	-
7	-	-	-	Not Occupied	-	-
8	0.35	BARE	3368	Touch Screen Display Drain Wire	I	-
9	0.35	GY	3369	Touch Screen Display Signal (+)	I	-
10-12	-	-	-	Not Occupied	-	-
13	0.35	WH/GN	3362	Pop Up Display Position Signal	I	-
14	-	-	-	Not Occupied	-	-
15	0.35	WH/BU	6973	Camera Signal #2	I	UVC
16	0.35	BK/BN	654	Cellular Telephone Microphone Low Reference	I	-
17-18	-	-	-	Not Occupied	-	-
19	0.35	VT	3370	Touch Screen Display Signal (-)	I	-
20	-	-	-	Not Occupied	-	-

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A11 Radio X5



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 13649293
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: 3-Way F Sealed (L-BU)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

A11 Radio X5

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.08	BN	3367	Navigation Display Signal (-)	I	-
2	0.08	BU	3366	Navigation Display Signal (+)	I	-
S	0.08	BARE	3365	Navigation Display Drain Wire	I	-

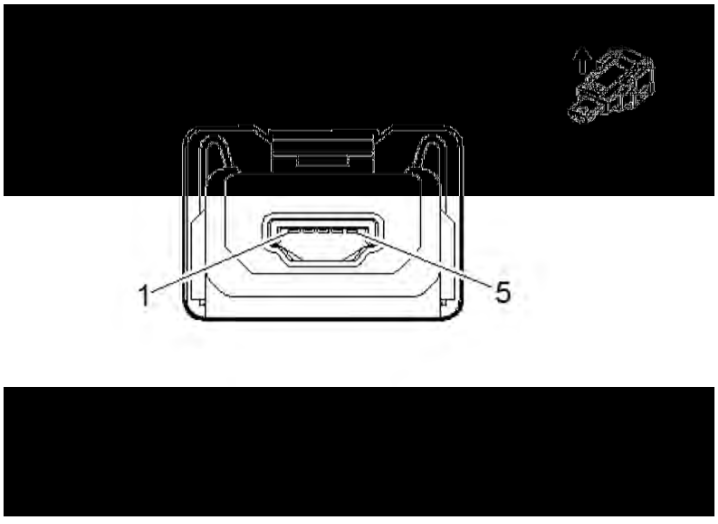
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option

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A11 Radio X7



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 13668054
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: 5-Way M 2.0 Mini B USB Type (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

A11 Radio X7

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.08	GN	3146	USB D (+) Serial Data	I	USR
2	0.08	BK	3148	USB Serial Data Low Reference	I	USR
3	0.08	WH	3147	USB D (-) Serial Data	I	USR

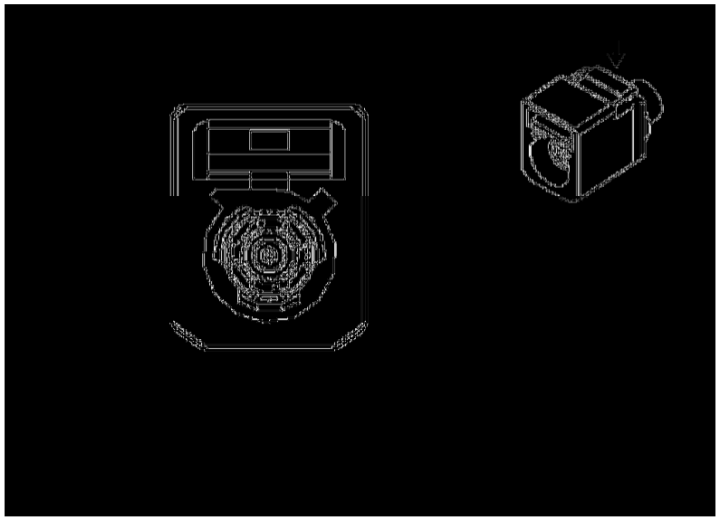
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4	-	-	-	Not Occupied	-	-
5	0.08	RD	3149	USB Serial Data Supply Voltage	I	USR
S	0.08	BARE	3145	USB Serial Data Drain Wire	I	USR

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A11 Radio X8



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Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 3FA1-NARJ-C04-3
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: 1-Way F Coax Type (BK)

Terminal Part Information

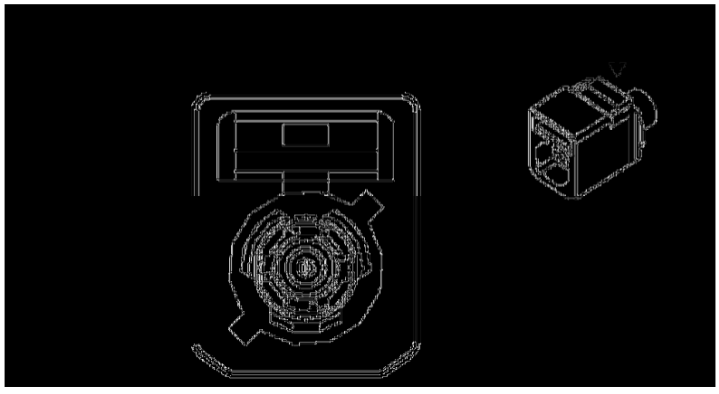
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

A11 Radio X8

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
C	0.5	WH	6001	Antenna RF Signal	I	-
S	0.2	BARE	6015	Antenna RF Drain Wire	I	-

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A11 Radio X10



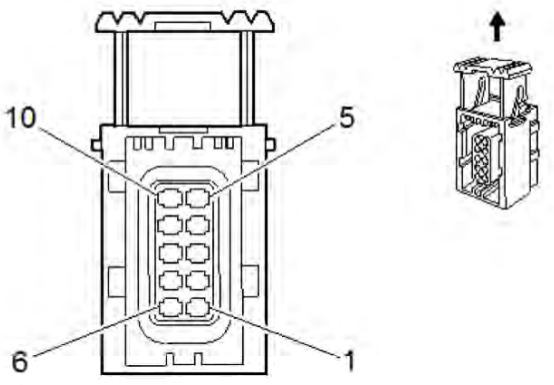
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ERROR: stackunderflow
OFFENDING COMMAND: ~

STACK:

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A23D Door Latch Assembly – Driver



Connector Part Information

- Harness Type: Driver Door
- OEM Connector: 10768367
- Service Connector: Service by Harness - See Part Catalog
- Description: 10-Way F 1.2 Micro Timer Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-14 (GN)	Not Available

A23D Door Latch Assembly – Driver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GY	746	Right Front Door Ajar Switch Signal	I	RHD
2	0.75 0.35	BN/YE WH/YE	294 3574	Door Lock Actuator Unlock Control Driver Door Open Switch Signal	I	LHD RHD with ULS

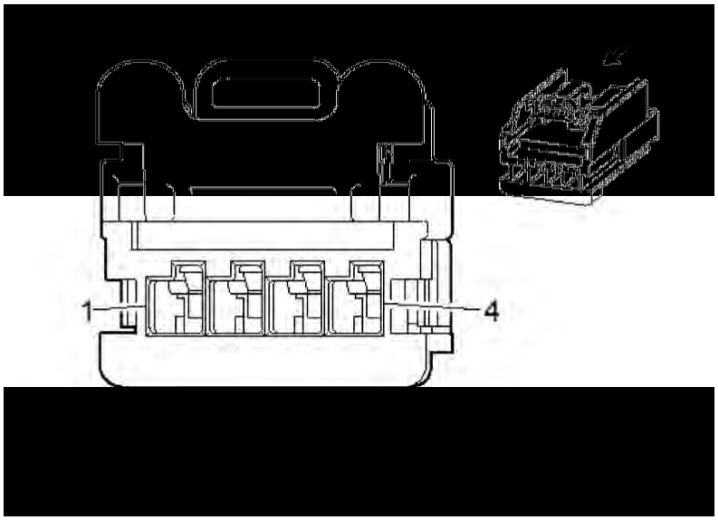
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
3	0.75 0.35	GY BK	5911 2150	Door Lock Actuator Lock Control 2 Ground	I	LHD RHD
4	0.35 0.35	WH/VT BU/VT	3270 1124	Driver Door Lock Motor Status Door Lock Key Switch Unlock Signal	I	LHD RHD with BTM
5	-	-	-	Not Occupied	-	-
6	0.35	GY	745	Left Front Door Ajar Switch Signal	I	LHD
7	0.35 0.75	WH/YE BN/YE	3574 294	Driver Door Open Switch Signal Door Lock Actuator Unlock Control	I	LHD with ULS RHD
8	0.35 0.75	BK GY	2150 5911	Ground Door Lock Actuator Lock Control 2	I	LHD RHD
9	0.35 0.35	BU/VT WH/VT	1124 3270	Door Lock Key Switch Unlock Signal Driver Door Lock Motor Status	I	LHD with BTM RHD
10	-	-	-	Not Occupied	-	-

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A23F Tonneau Latch Assembly (F80 with E95)



Connector Part Information

- Harness Type: Tonneau Release
- OEM Connector: 4-1419169-6
- Service Connector: Service by Harness – See Part Catalog
- Description: 4-Way F GET 0.64 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

A23F Tonneau Latch Assembly (F80 with E95)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	0.35	VT/GY	1303	Lift Gate Ajar Switch Signal (1)	I	—
3	0.75	BU/WH	6128	Rear Closure Unlatch Motor Unlatch Control	I	—

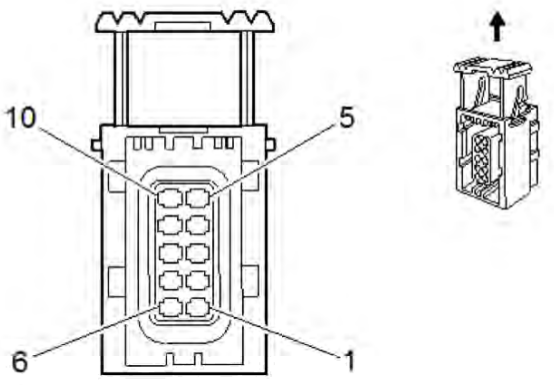
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4	0.75	BK	2450	Ground	I	—

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A23LR Door Latch Assembly – Left Rear



Connector Part Information

- Harness Type: Left Rear Door
- OEM Connector: 10768367
- Service Connector: Service by Harness - See Part Catalog
- Description: 10-Way F 1.2 Micro Timer Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-14 (GN)	Not Available

A23LR Door Latch Assembly – Left Rear

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	-	-	-	Not Occupied	-	-
2	0.75	BN/YE	294	Door Lock Actuator Unlock Control	I	-
3	0.75	GY	295	Door Lock Actuator Lock Control	I	-

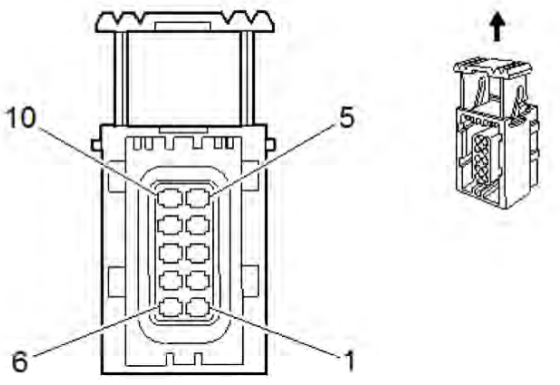
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4-5	-	-	-	Not Occupied	-	-
6	0.35	GY	747	Left Rear Door Ajar Switch Signal	I	-
7	-	-	-	Not Occupied	-	-
8	0.35	BK	2150	Ground	I	-
9-10	-	-	-	Not Occupied	-	-

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A23P Door Latch Assembly – Passenger



Connector Part Information

- Harness Type: Passenger Door
- OEM Connector: 10768367
- Service Connector: Service by Harness - See Part Catalog
- Description: 10-Way F 1.2 Micro Timer Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-14 (GN)	Not Available

A23P Door Latch Assembly – Passenger

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GY	746	Right Front Door Ajar Switch Signal	I	LHD
2	0.35 0.75	WH/YE BN/YE	3575 294	Passenger Door Open Switch Signal Door Lock Actuator Unlock Control	I	LHD with ULS RHD

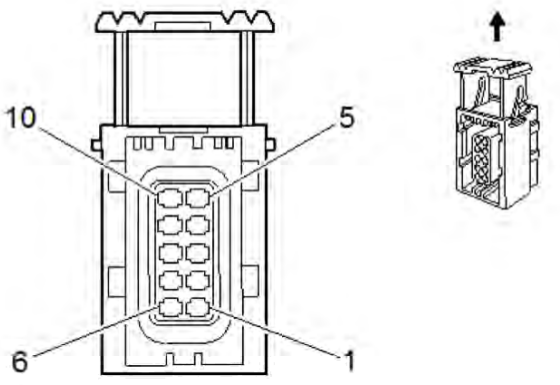
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
3	0.35 0.75	BK GY	2250 295	Ground Door Lock Actuator Lock Control	I	LHD RHD
4-5	-	-	-	Not Occupied	-	-
6	0.35	GY	745	Left Front Door Ajar Switch Signal	I	RHD
7	0.75 0.35	BN/YE GY/GN	294 3575	Door Lock Actuator Unlock Control Passenger Door Open Switch Signal	I	LHD RHD with ULS
8	0.75 0.35	GY BK	295 2250	Door Lock Actuator Lock Control Ground	I	LHD RHD
9-10	-	-	-	Not Occupied	-	-

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A23RR Door Latch Assembly – Right Rear



Connector Part Information

- Harness Type: Right Rear Door
- OEM Connector: 10768367
- Service Connector: Service by Harness - See Part Catalog
- Description: 10-Way F 1.2 Micro Timer Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-14 (GN)	Not Available

A23RR Door Latch Assembly – Right Rear

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GY	748	Right Rear Door Ajar Switch Signal	I	-
2	-	-	-	Not Occupied	-	-
3	0.35	BK	2250	Ground	I	-

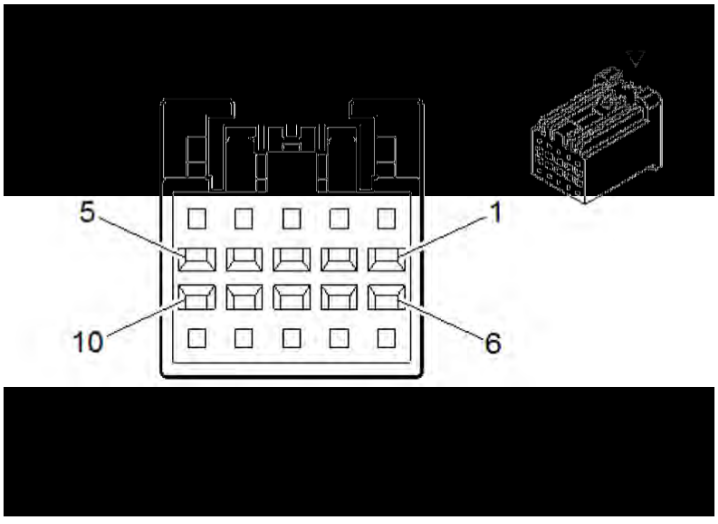
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4-6	-	-	-	Not Occupied	-	-
7	0.75	BN/YE	294	Door Lock Actuator Unlock Control	I	-
8	0.75	GY	295	Door Lock Actuator Lock Control	I	-
9-10	-	-	-	Not Occupied	-	-

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A26 HVAC Controls



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: AIT2PB-10P-2BH
- Service Connector: 19299775
- Description: 10-Way F 0.64 Kaizen Series (GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13327119	J-35616-64B (L-BU)	J-38125-215A

A26 HVAC Controls

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GN	5060	Low Speed GMLAN Serial Data	I	-
2	-	-	-	Not Occupied	-	-
3	0.35	GN/YE	7531	Linear Interconnect Network Bus 9	I	-

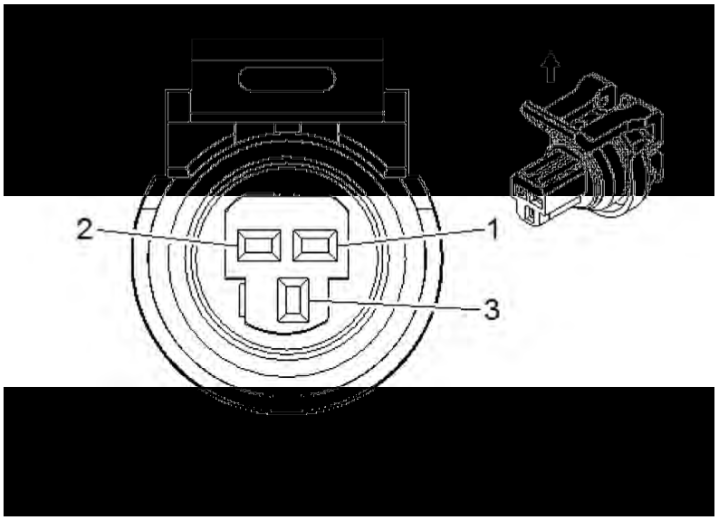
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4	0.35	GY	4016	Remote Media Eject Signal	I	-
5	0.35	GN/WH	111	Hazard Switch Signal	I	-
6	0.5	BK	1350	Ground	I	-
7	0.5	RD/VT	3340	Battery Positive Voltage	I	-
8	-	-	-	Not Occupied	-	-
9	0.35	WH/YE	7557	LED Ambient Lighting Control 1	I	-
10	0.35	BK	1450	Ground	I	-

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B1 A/C Refrigerant Pressure Sensor



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13602480
- Service Connector: 88988301
- Description: 3-Way F 150 GT Series, Sealed BK

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

B1 A/C Refrigerant Pressure Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK/BN	5514	A/C Refrigerant Pressure Sensor Low Reference	I	-
2	0.5	BN/RD	2700	A/C Pressure Sensor 5 Volt Reference	I	-
3	0.5	GN	380		I	-

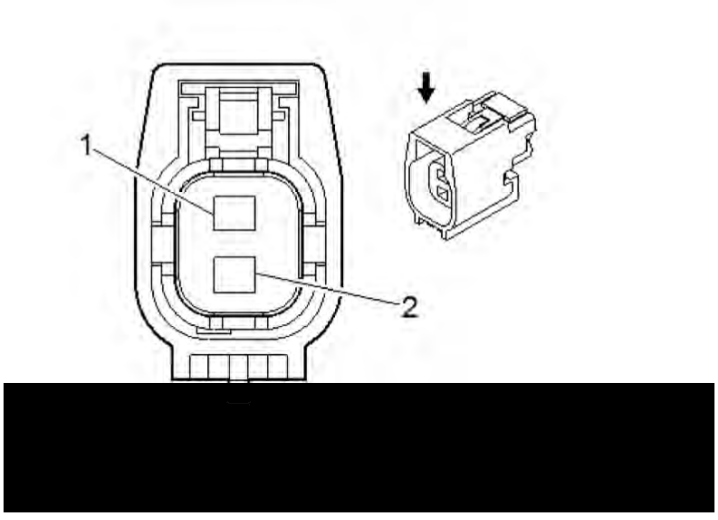
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				A/C Refrigerant Pressure Sensor Signal		

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B5LF Wheel Speed Sensor – Left Front



Connector Part Information

- Harness Type: Body Front
- OEM Connector: 19153615
- Service Connector: 13586115
- Description: 2-Way F 1.5 GT Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

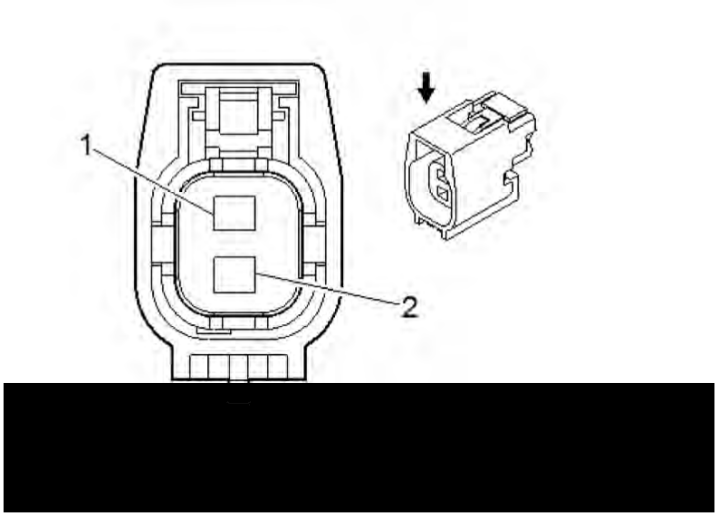
B5LF Wheel Speed Sensor – Left Front

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GY/WH	7064	Wheel Speed Sensor Supply Voltage Left Front	I	-
2	0.35	GY	830	Wheel Speed Sensor Signal Left Front	I	-

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B5LR Wheel Speed Sensor – Left Rear



Connector Part Information

- Harness Type: Rear Axle
- OEM Connector: 19153615
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 1.5 GT Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	Not Available

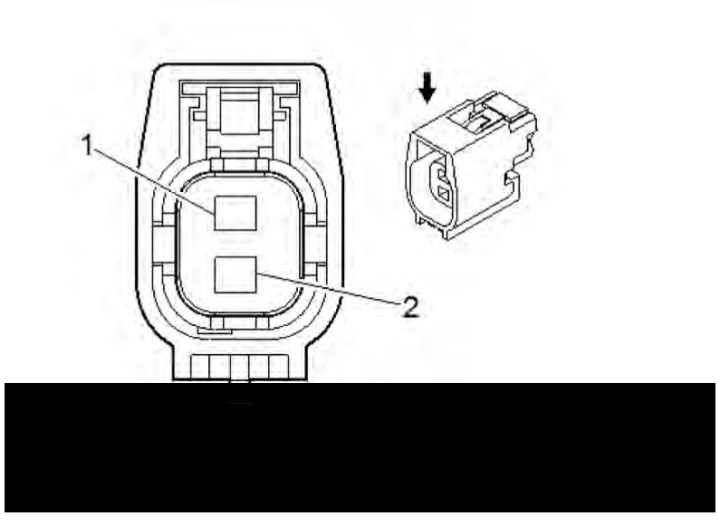
B5LR Wheel Speed Sensor – Left Rear

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY/BK	7127	Wheel Speed Sensor Supply Voltage Left Rear	I	-
2	0.5	BU	884	Wheel Speed Sensor Signal Left Rear	I	-

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B5RF Wheel Speed Sensor – Right Front



Connector Part Information

- Harness Type: Body
- OEM Connector: 19153615
- Service Connector: 13586115
- Description: 2-Way F 1.5 GT Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	J-38125-553

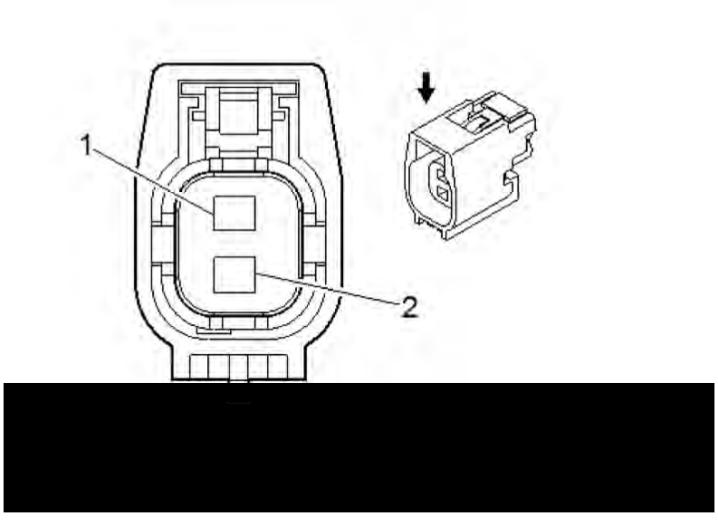
B5RF Wheel Speed Sensor – Right Front

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GY/BN	7065	Wheel Speed Sensor Supply Voltage Right Front	I	-
2	0.35	YE	872	Wheel Speed Sensor Signal Right Front	I	-

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B5RR Wheel Speed Sensor – Right Rear



Connector Part Information

- Harness Type: Rear Axle
- OEM Connector: 19153615
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 1.5 GT Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	Not Available

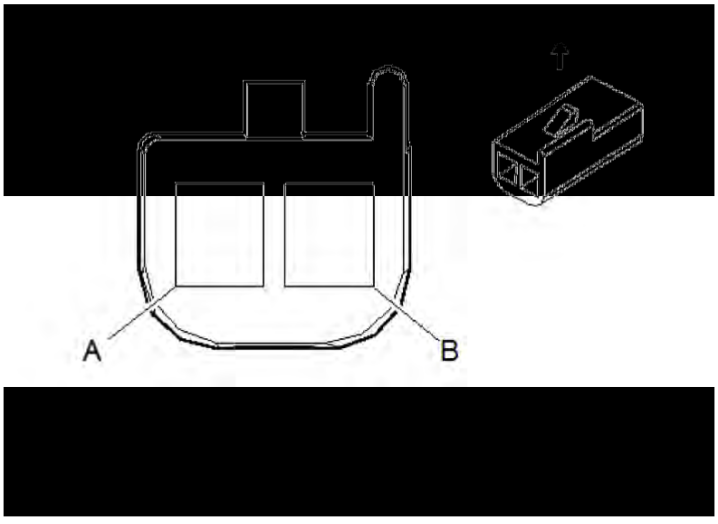
B5RR Wheel Speed Sensor – Right Rear

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY/YE	7128	Wheel Speed Sensor Supply Voltage Right Rear	I	-
2	0.5	VT	882	Wheel Speed Sensor Signal Right Rear	I	-

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B7D Air Temperature Sensor – Duct Left Lower



Connector Part Information

- Harness Type: HVAC
- OEM Connector: 12047662
- Service Connector: Service by Harness – See Part Catalog
- Description: 2-Way F Metri-Pack 150 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-14 (GN)	J-38125-12A

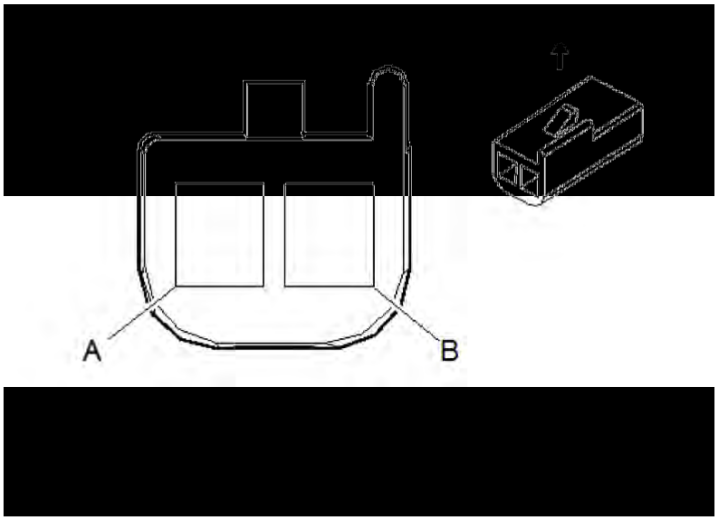
B7D Air Temperature Sensor – Duct Left Lower

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	BU/YE	518	Lower Left Air Temperature Sensor Signal	I	—
B	0.35	GY	1791	Air Temperature Door Control Low Reference	I	—

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B7E Air Temperature Sensor – Duct Right Lower



Connector Part Information

- Harness Type: HVAC
- OEM Connector: 12047662
- Service Connector: Service by Harness – See Part Catalog
- Description: 2-Way F Metri-Pack 150 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-14 (GN)	J-38125-12A

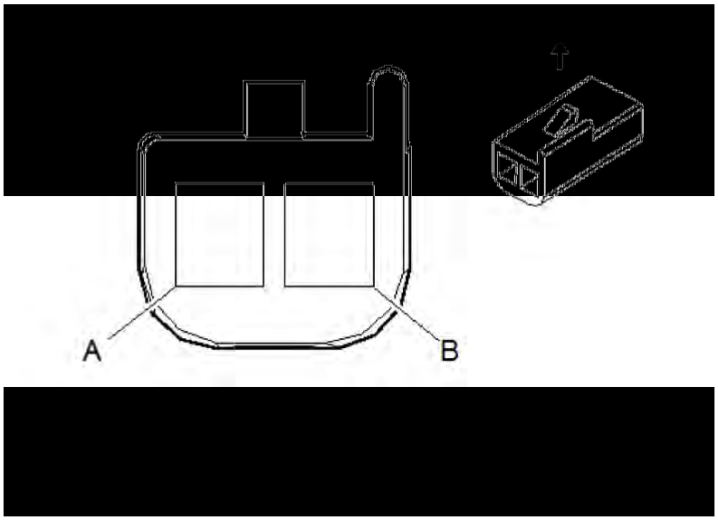
B7E Air Temperature Sensor – Duct Right Lower

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	WH/GN	520	Lower Right Air Temperature Sensor Signal	I	—
B	0.35	GY	1791	Air Temperature Door Control Low Reference	I	—

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B7H Air Temperature Sensor – Duct Left Upper



Connector Part Information

- Harness Type: HVAC
- OEM Connector: 12047662
- Service Connector: Service by Harness – See Part Catalog
- Description: 2-Way F Metri-Pack 150 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-14 (GN)	J-38125-12A

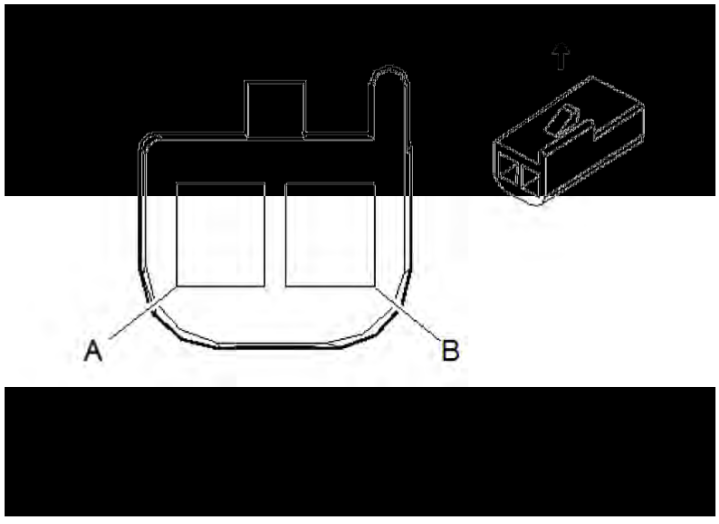
B7H Air Temperature Sensor – Duct Left Upper

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	BU/YE	516	Upper Left Air Temperature Sensor Signal	I	—
B	0.35	GY	1791	Air Temperature Door Control Low Reference	I	—

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B7J Air Temperature Sensor – Duct Right Upper



Connector Part Information

- Harness Type: HVAC
- OEM Connector: 12047662
- Service Connector: Service by Harness – See Part Catalog
- Description: 2-Way F Metri-Pack 150 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-14 (GN)	J-38125-12A

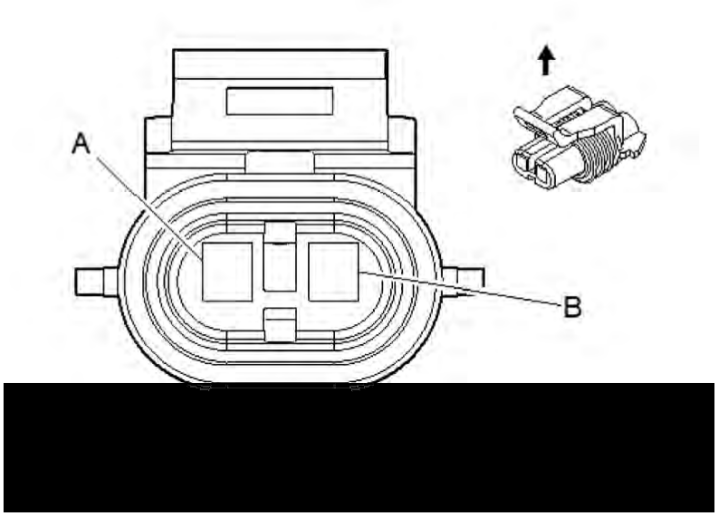
B7J Air Temperature Sensor – Duct Right Upper

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	GN	517	Upper Right Air Temperature Sensor Signal	I	—
B	0.35	GY	1791	Air Temperature Door Control Low Reference	I	—

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B9 Ambient Air Temperature Sensor



Connector Part Information

- Harness Type: Forward Lamp
- OEM Connector: 13543521
- Service Connector: 12101856
- Description: 2-Way F 150 Metri Pack Series, Sealed BK

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

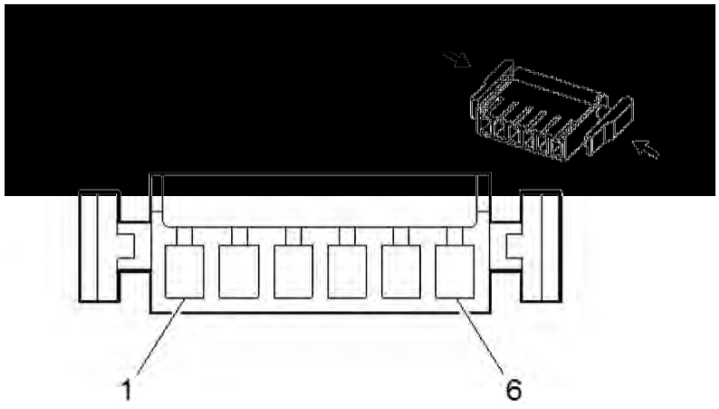
B9 Ambient Air Temperature Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	BU/GY	636	Outside Ambient Air Temperature Sensor Signal	I	-
B	0.35	BK/BU	61	Outside Ambient Temperature Sensor Low Reference	I	-

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B10B Ambient Light/Sunload Sensor



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Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 13726957
- Service Connector: 13576539
- Description: 6-Way F 0.64 Micro Quadlok Series BK

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

B10B Ambient Light/Sunload Sensor

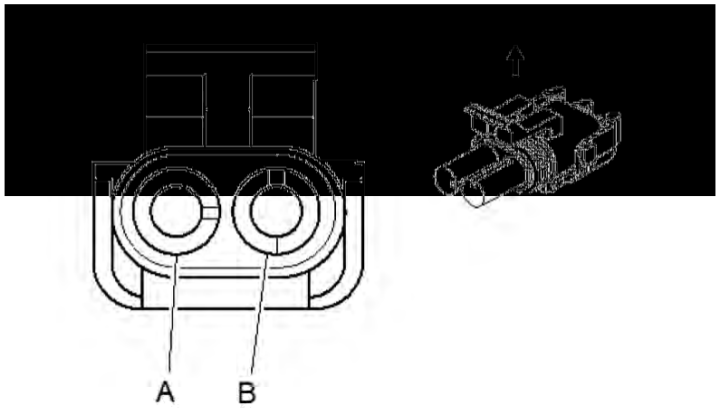
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.13	GY	728	Security Indicator Control	I	-
2	0.35	GY	590	Solar Sensor Driver Signal	I	-
3	0.35	BU/WH	734	Inside Air Temperature Sensor Signal	I	-

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4	0.35	YE/VT	1783	Twilight Sentinel Delay Signal	I	-
5	0.13	WH	278	Ambient Light Sensor Signal	I	-
6	0.35	BK/BN	6102	Inside Air Temperature Sensor Low Reference	I	-

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B16 Backup Lamp Switch (MER/MG9)



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Connector Part Information

- Harness Type: Engine Harness
- OEM Connector: 12015792
- Service Connector: 12126452
- Description: 2-Way F Weather Pack Series (BK)

Terminal Part Information

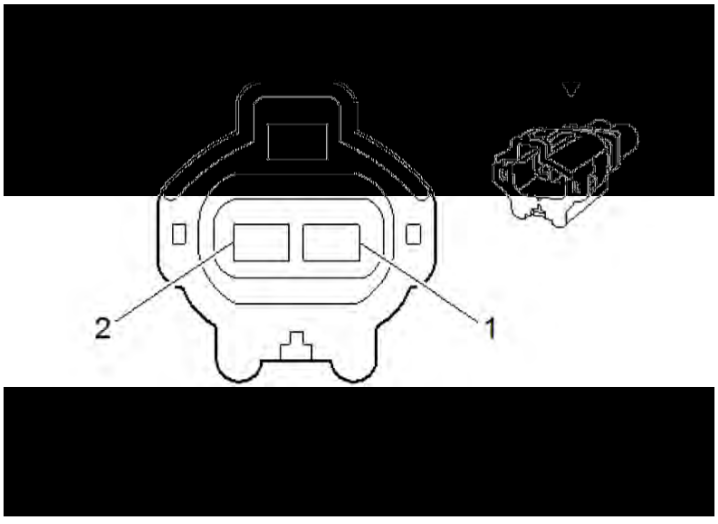
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-8 (OG)	J-38125-10A

B16 Backup Lamp Switch (MER/MG9)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	GN/WH	5007	Reverse Switch Signal	I	MER/MG9
B	0.5	BK/WH	451	Signal Ground	I	MER/MG9

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B16 Backup Lamp Switch (MV5)



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Connector Part Information

- Harness Type: Engine
- OEM Connector: 7282-7420-40
- Service Connector: 13505906
- Description: 2-Way M 090 II Series, Sealed (L-GY)

Terminal Part Information

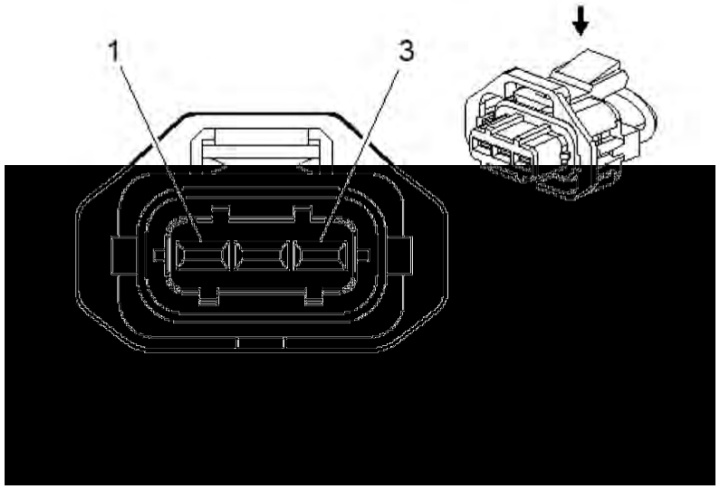
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

B16 Backup Lamp Switch (MV5)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN/WH	5007	Reverse Switch Signal	I	-
2	0.5	BK/WH	451	Signal Ground	I	-

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B17 Barometric Pressure Sensor (LSA/LWR)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 89047242
- Service Connector: 13585850
- Description: 3-Way F Kompakt 2.8 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

B17 Barometric Pressure Sensor (LSA/LWR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75 0.5	WH/RD WH/RD	2932 3201	Barometric Pressure Sensor (5) Volt Reference Throttle Inlet Absolute Pressure Sensor 5V Reference	I	LSA LWR
2	0.75 0.5	BK/YE WH/YE	6014 3202	Barometric Pressure Sensor Low Reference	I	LSA LWR

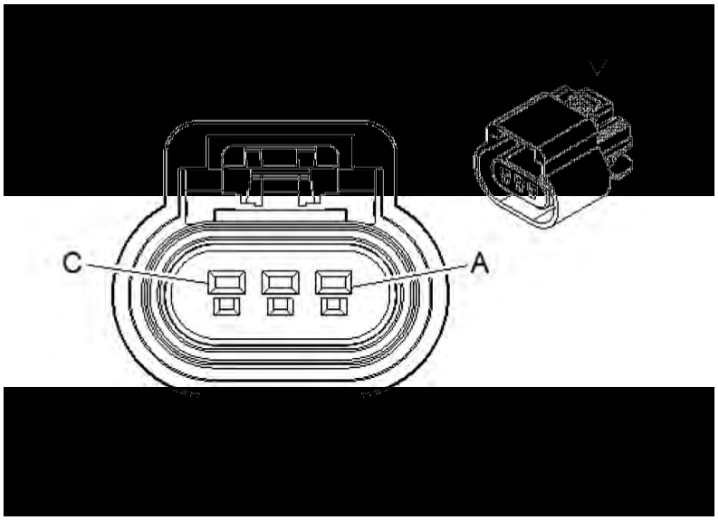
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Throttle Inlet Absolute Pressure Sensor 5V Return		
3	0.75 0.5	BU/GY YE/WH	433 3200	Barometric Pressure Sensor Signal Throttle Inlet Absolute Pressure Sensor Signal	I	LSA LWR

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B18 Battery Current Sensor



Connector Part Information

- Harness Type: Body
- OEM Connector: 13519047
- Service Connector: 13580871
- Description: 3-Way F 150 GT Series, Sealed BK

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

B18 Battery Current Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	BU/VT	5076	Current Sensor Supply Voltage	I	-
B	0.35	BK/VT	5077	Current Sensor Low Reference	I	-
C	0.35	WH/YE	5075	Current Sensor Signal	I	-

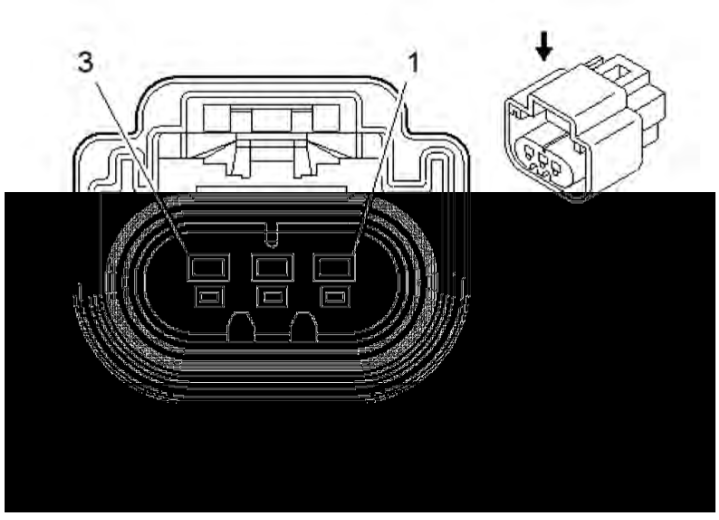
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option

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B19B Brake Booster Vacuum Sensor



Connector Part Information

- Harness Type: Body (RHD), Body Front (LHD)
- OEM Connector: 88988720
- Service Connector: 13580873
- Description: 3-Way F GT 150 Series, Sealed (GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13578895	J-35616-2A (GY)	J-38125-553

B19B Brake Booster Vacuum Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	YE/VT	6030	Brake Vacuum Sensor Signal	I	—
2	0.35	BK/YE	6032	Brake Vacuum Sensor Low Reference	I	—
3	0.35	YE/RD	6031	Brake Vacuum Sensor 5 Volt Reference	I	—

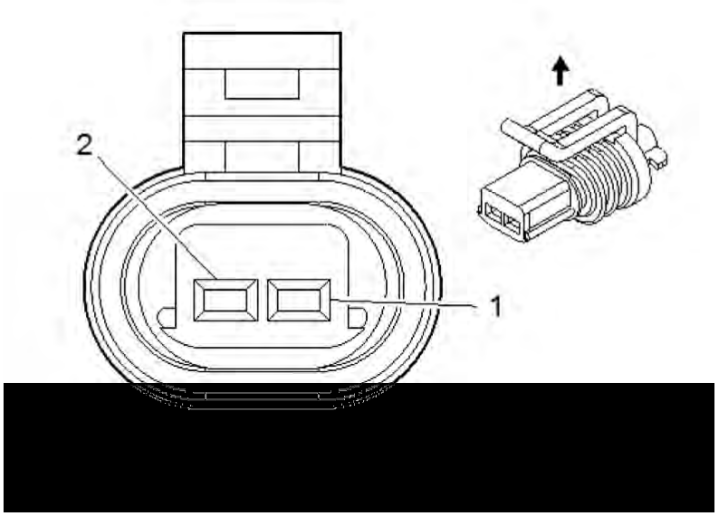
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option

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B20 Brake Fluid Level Switch



Connector Part Information

- Harness Type: Body
- OEM Connector: 19177506
- Service Connector: 88987993
- Description: 2-Way F 150 GT Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13584457	J-35616-2A (GY)	J-38125-553

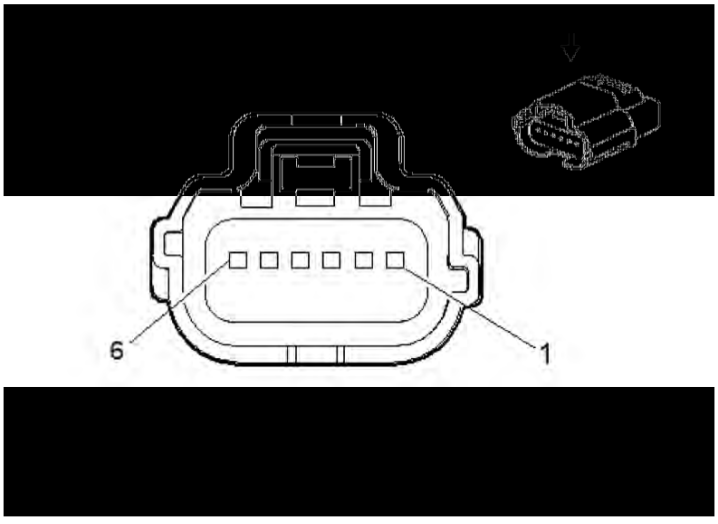
B20 Brake Fluid Level Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GN/GY	333	Brake Fluid Level Sensor Signal	I	-
2	0.35	BK	850	Ground	I	-

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B22 Brake Pedal Position Sensor



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 13584064
- Service Connector: 19119371
- Description: 6-Way F 64 Series, Sealed (NA)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

B22 Brake Pedal Position Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5 0.5	BK/BN WH	5360 5359	Brake Apply Sensor Low Reference Brake Apply Sensor Supply Voltage	I	LHD RHD
2	0.5 0.5	WH BK/BN	5359 5360	Brake Apply Sensor Supply Voltage	I	LHD RHD

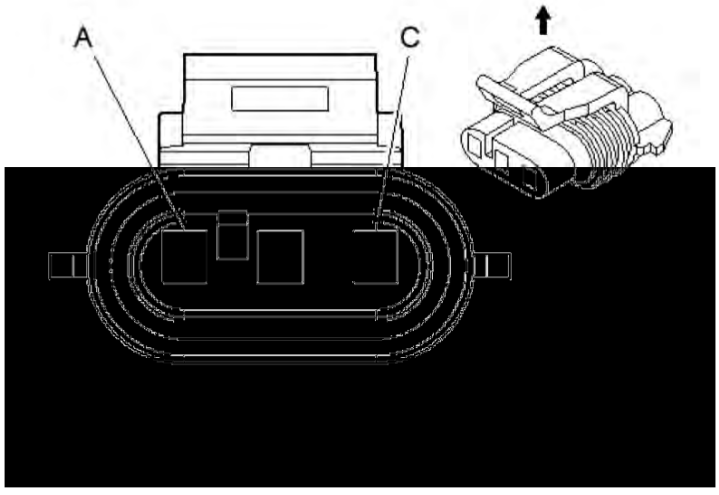
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Brake Apply Sensor Low Reference		
3	0.5	BU/YE	5361	Brake Apply Sensor Signal	I	-
4	0.5	WH/GN	5380	Brake Position Sensor Signal	I	-
5	0.5 0.5	BK/YE WH/RD	5382 5381	Brake Position Sensor Low Reference Brake Position Sensor 5 Volt Reference	I	LHD RHD
6	0.5 0.5	WH/RD BK/YE	5381 5382	Brake Position Sensor 5 Volt Reference Brake Position Sensor Low Reference	I	LHD RHD

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B23 Camshaft Position Sensor (L77/LS3/LSA)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 12059595
- Service Connector: 13585316
- Description: 3-Way F Metri Pack 150 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

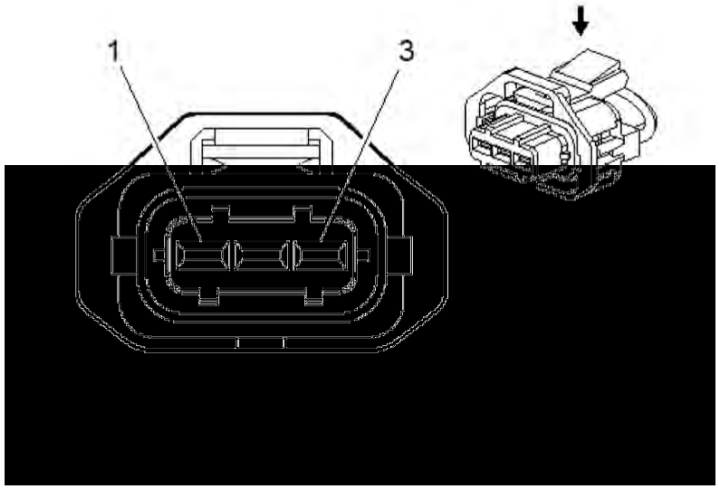
B23 Camshaft Position Sensor (L77/LS3/LSA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	GY/BU	6259	Camshaft CAM W Supply Voltage	I	-
B	0.5	GN/BK	6266	Camshaft CAM W Ground	I	-
C	0.5	YE/VT	6265	Camshaft CAM W Signal	I	-

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B23A Camshaft Position Sensor – Bank 1 Exhaust (LFW/LFX/LWR)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 88988158
- Service Connector: 13584311
- Description: 3-Way F 2.8 Series, Sealed BK

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	J-38125-561

B23A Camshaft Position Sensor – Bank 1 Exhaust (LFW/LFX/LWR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK/GY	5296	Camshaft Position Exhaust Sensor Low Reference (1)	I	-
2	0.5	VT/BK	5273	Camshaft Position Exhaust Sensor (1)	I	-
3	0.5	GY/YE	5297		I	-

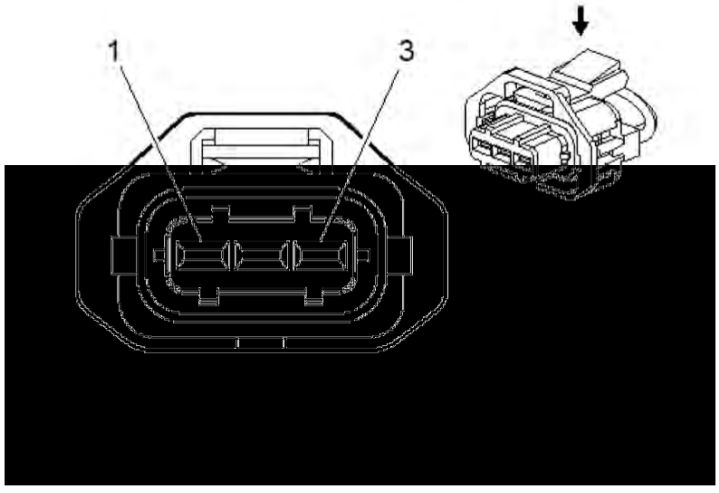
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Camshaft Position Exhaust Sensor Supply Voltage (1)		

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B23B Camshaft Position Sensor – Bank 1 Intake (LFW/LFX/LWR)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 88988158
- Service Connector: 13584311
- Description: 3-Way F 2.8 Series, Sealed BK

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	J-38125-561

B23B Camshaft Position Sensor – Bank 1 Intake (LFW/LFX/LWR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK/GN	5301	Camshaft Position Intake Sensor Low Reference (1)	I	-
2	0.5	YE/VT	5275	Camshaft Position Intake Sensor (1)	I	-
3	0.5	GY/BU	5300		I	-

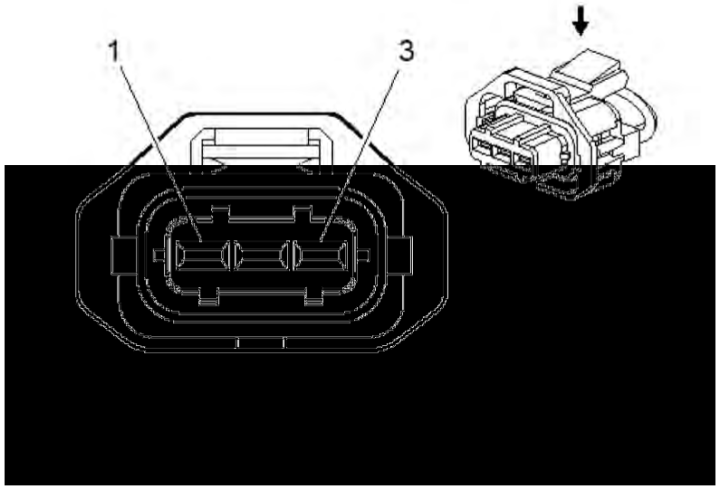
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Camshaft Position Intake Sensor Supply Voltage (1)		

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B23C Camshaft Position Sensor – Bank 2 Exhaust (LFW/LFX/LWR)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 88988158
- Service Connector: 13584311
- Description: 3-Way F 2.8 Series, Sealed BK

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	J-38125-561

B23C Camshaft Position Sensor – Bank 2 Exhaust (LFW/LFX/LWR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK/BN	5299	Camshaft Position Exhaust Sensor Low Reference (2)	I	-
2	0.5	VT/BU	5274	Camshaft Position Exhaust Sensor (2)	I	-
3	0.5	GN/BN	5298		I	-

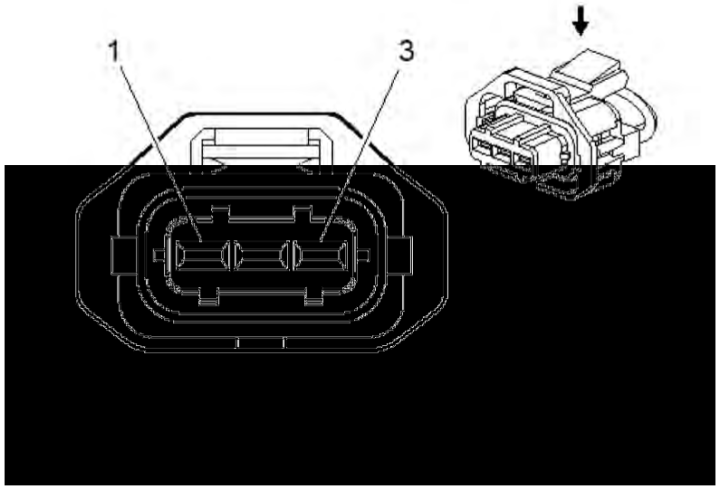
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Camshaft Position Exhaust Sensor Supply Voltage (2)		

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B23D Camshaft Position Sensor – Bank 2 Intake (LFW/LFX/LWR)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 88988158
- Service Connector: 13584311
- Description: 3-Way F 2.8 Series, Sealed BK

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	J-38125-561

B23D Camshaft Position Sensor – Bank 2 Intake (LFW/LFX/LWR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK/VT	5303	Camshaft Position Intake Sensor Low Reference (2)	I	-
2	0.5	YE	5276	Camshaft Position Intake Sensor (2)	I	-
3	0.5	WH/BU	5302		I	-

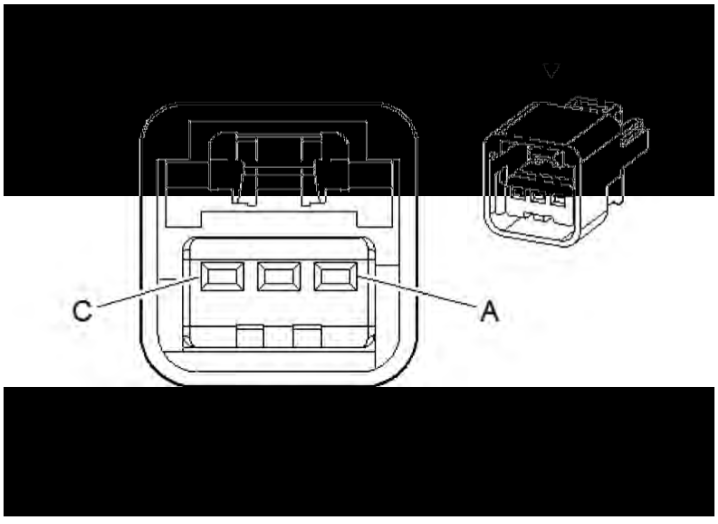
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Camshaft Position Intake Sensor Supply Voltage (2)		

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B25B Clutch Pedal Position Sensor (MER/MG9/MV5)



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 15332132
- Service Connector: 88953364
- Description: 3-Way F 150 GT Series BK

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

B25B Clutch Pedal Position Sensor (MER/MG9/MV5)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	GY/RD	6109	Clutch Apply Sensor Voltage Reference	I	-
B	0.35	YE	6111	Clutch Apply Sensor Signal	I	-
C	0.35	BK/GY	6110	Clutch Apply Sensor Low Reference	I	-

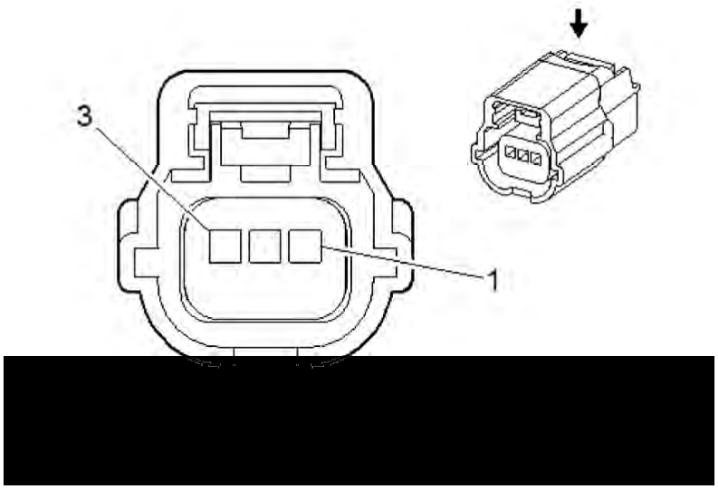
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option

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B26 Crankshaft Position Sensor (LFW/LFX/LWR)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 89047365
- Service Connector: 88988337
- Description: 3-Way F USCAR 064 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

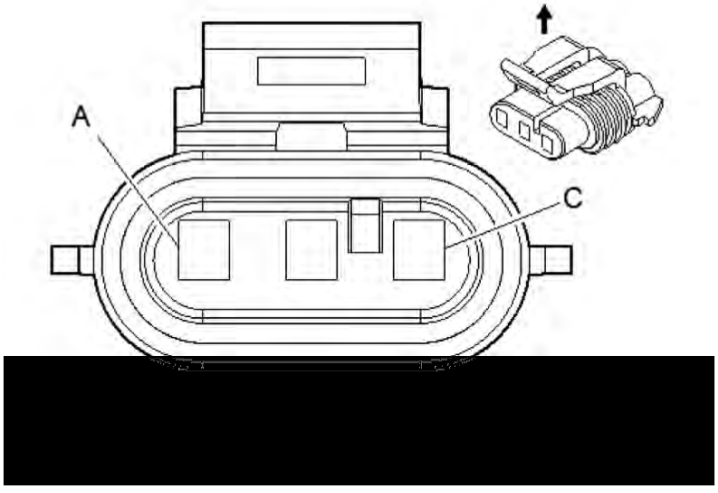
B26 Crankshaft Position Sensor (LFW/LFX/LWR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK/VT	6272	Crankshaft 60X Sensor Low Reference	I	-
2	0.5	GN	6271	Crankshaft 60X Sensor Signal	I	-
3	0.5	VT/BU	6270	Crankshaft 60X Sensor Voltage	I	-

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B26 Crankshaft Position Sensor (L77/LS3/LSA)



Connector Part Information

- Harness Type: Engine Harness
- OEM Connector: 12129946
- Service Connector: 88987997
- Description: 3-Way F 150 Metri Pack Series, Sealed (GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	J-38125-12A

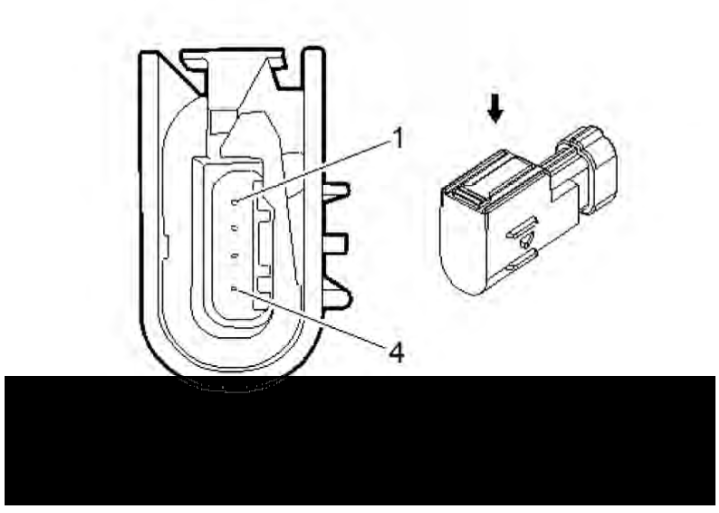
B26 Crankshaft Position Sensor (L77/LS3/LSA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	GN	6271	Crankshaft 60X Sensor Signal	I	—
B	0.5	BK/VT	6272	Crankshaft 60X Sensor Low Reference	I	—
C	0.5	VT/BU	6270	Crankshaft 60X Sensor Voltage	I	—

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B27LR Door Handle Switch - Left Rear Exterior



Connector Part Information

- Harness Type: Left Rear Door
- OEM Connector: 19153433
- Service Connector: Service by Harness - See Part Catalog
- Description: 4-Way M 0.64 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

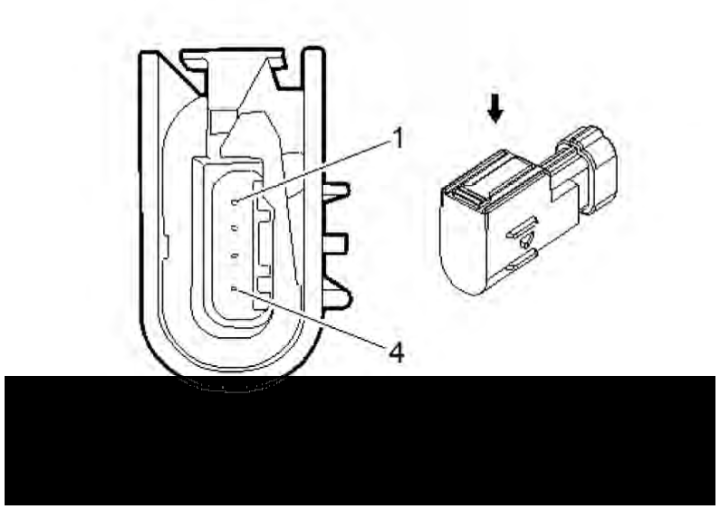
B27LR Door Handle Switch - Left Rear Exterior

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BN/YE	6157	Left Rear Door Handle Switch Signal	I	-
2	0.35	BK	2150	Ground	I	-
3-4	-	-	-	Not Occupied	-	-

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B27RR Door Handle Switch - Right Rear Exterior



Connector Part Information

- Harness Type: Right Rear Door
- OEM Connector: 19153433
- Service Connector: Service by Harness - See Part Catalog
- Description: 4-Way M 0.64 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

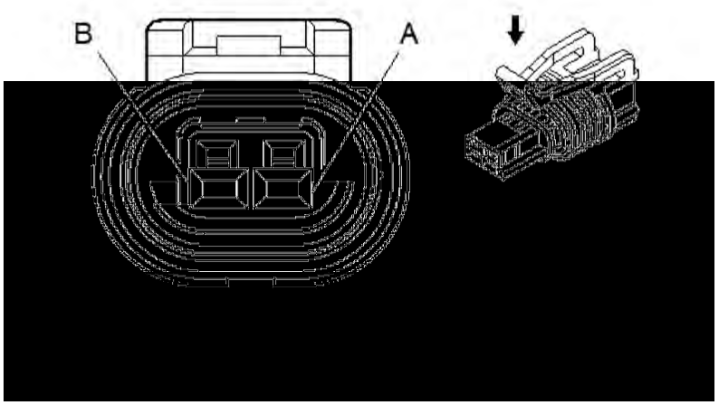
B27RR Door Handle Switch - Right Rear Exterior

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	YE/GY	6158	Right Rear Door Handle Switch Signal	I	-
2	0.35	BK	2250	Ground	I	-
3-4	-	-	-	Not Occupied	-	-

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B34 Engine Coolant Temperature Sensor (L77/LS3/LSA)



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Connector Part Information

- Harness Type: Engine
- OEM Connector: 15449028
- Service Connector: 88987993
- Description: 2-Way F 150 GT Series, Sealed (BK)

Terminal Part Information

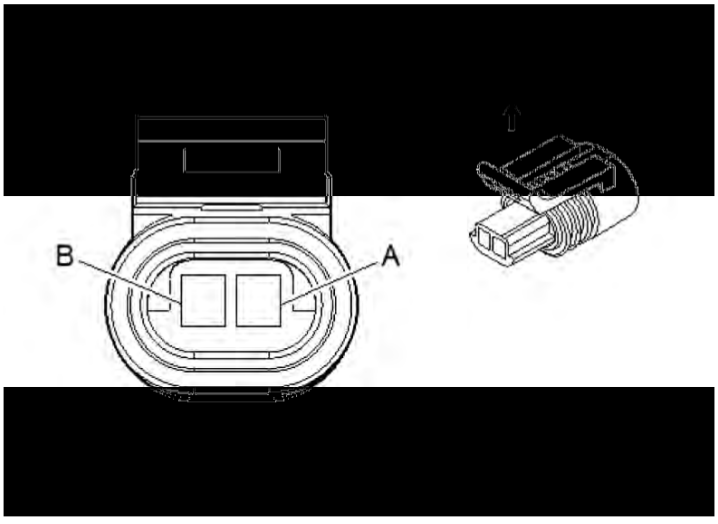
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

B34 Engine Coolant Temperature Sensor (L77/LS3/LSA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	BK/BN	2761	Coolant Temperature Sensor Low Reference	I	-
B	0.5	BU	410	Engine Coolant Temperature Sensor Signal	I	-

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B34 Engine Coolant Temperature Sensor (LFW/LFX/LWR)



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Connector Part Information

- Harness Type: Engine
- OEM Connector: 19152934
- Service Connector: 13585857
- Description: 2-Way F Metri-Pack 150.2 Series, Sealed (GY)

Terminal Part Information

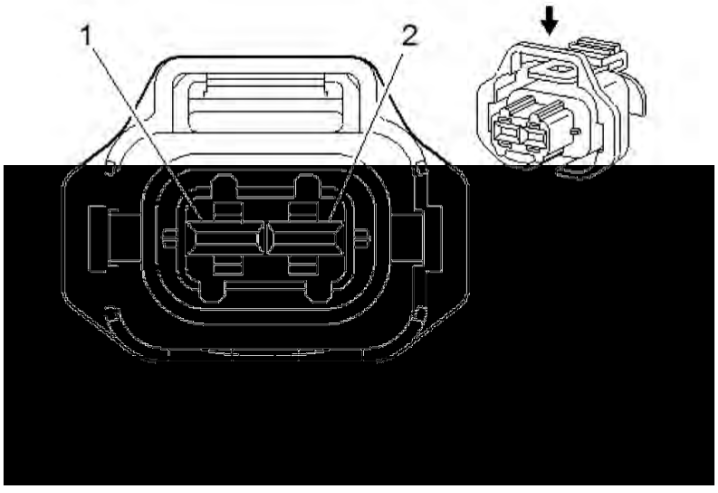
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-14 (GN)	J-38125-559

B34 Engine Coolant Temperature Sensor (LFW/LFX/LWR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	BK/BN	2761	Coolant Temperature Sensor Low Reference	I	—
B	0.5	BU	410	Engine Coolant Temperature Sensor Signal	I	—

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B35 Engine Oil Level Switch (LFW/LFX/LWR)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 1928403874
- Service Connector: 88988963
- Description: 2-Way F Kompakt 280 Series, Sealed BK

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

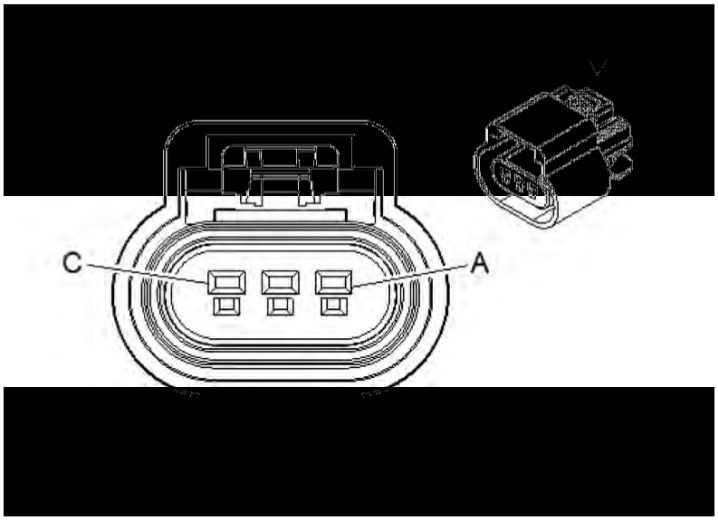
B35 Engine Oil Level Switch (LFW/LFX/LWR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK/BN	6273	Oil Temperature Sensor Low Reference	I	-
2	0.5	BN/GN	1174	Oil Level Switch Signal	I	-

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B35C Engine Oil Level and Temperature Sensor (L77/LS3/LSA)



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Connector Part Information

- Harness Type: Engine
- OEM Connector: 15326808
- Service Connector: 13580871
- Description: 3-Way F 150 GT Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

B35C Engine Oil Level and Temperature Sensor (L77/LS3/LSA)

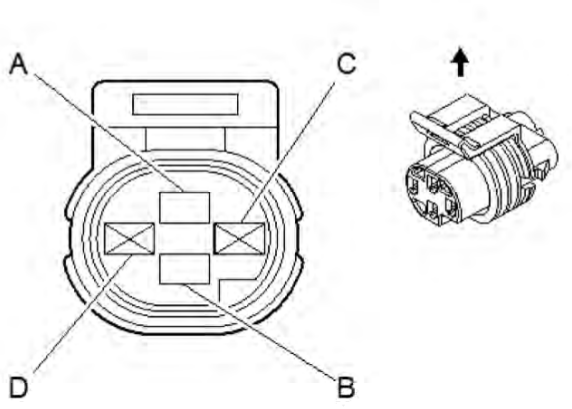
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5 0.75	BN/GN BN/GN	1174 1174	Oil Level Switch Signal Oil Level Switch Signal	I	L77 or LS3 LSA
B	0.75 0.5	BN/BU BN/BU	357 357	Oil Temperature Sensor Signal	I	LSA L77 or LS3

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Oil Temperature Sensor Signal		
C	0.75 0.5	BK/VT BK/BN	470 6273	Sensor Low Reference Oil Temperature Sensor Low Reference	I	LSA L77 or LS3

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B37 Engine Oil Pressure Switch (LFW/LFX/LWR)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 12065400
- Service Connector: 13585859
- Description: 4-Way F Metri Pack 150 Series (L-GN)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

B37 Engine Oil Pressure Switch (LFW/LFX/LWR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	VT	114	Low Oil Pressure Switch Signal	I	-
B	0.5	BK/BN	6273	Oil Temperature Sensor Low Reference	I	-
C-D	-	-	-	Not Occupied	-	-

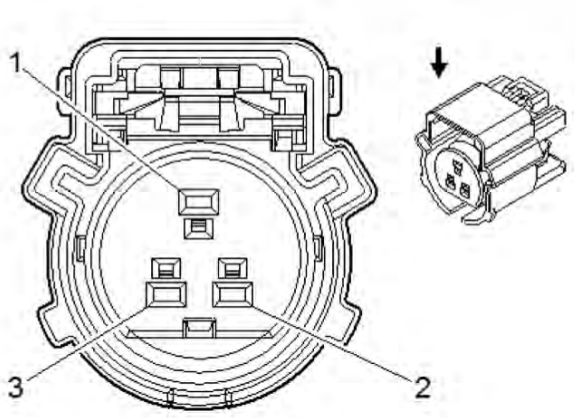
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option

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B37B Engine Oil Pressure Sensor (LSA)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13589761
- Service Connector: 13501882
- Description: 3-Way F 150 GT Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	J-38125-553

B37B Engine Oil Pressure Sensor (LSA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE/BN	331	Oil Pressure Sensor Signal	I	-
2	0.5	WH/RD	2705	Oil Pressure Sensor 5 Volt Reference	I	-
3	0.5	BK/VT	2755	Oil Pressure Sensor Low Reference	I	-

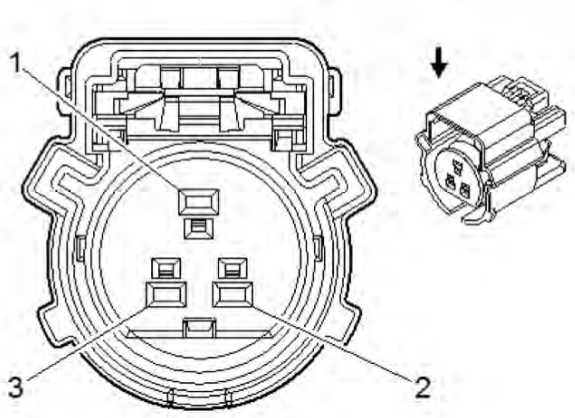
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option

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B37B Engine Oil Pressure Sensor (L77/LS3)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 88988886
- Service Connector: 13501882
- Description: 3-Way F (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	J-38125-553

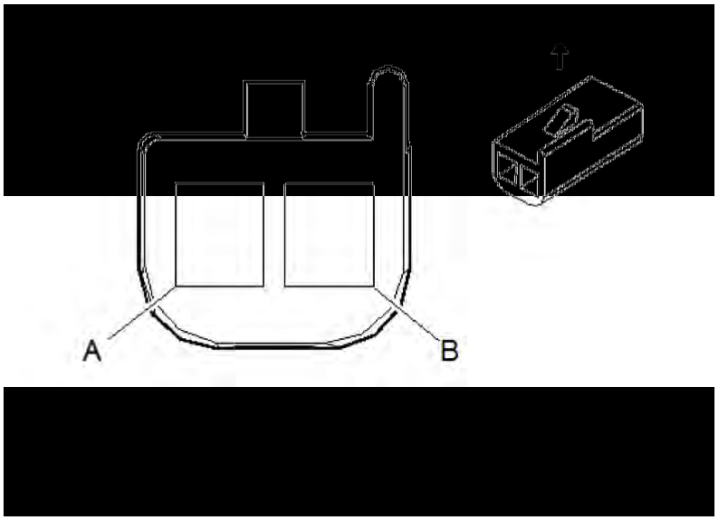
B37B Engine Oil Pressure Sensor (L77/LS3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE/BN	331	Oil Pressure Sensor Signal	I	—
2	0.5	WH/RD	2705	Oil Pressure Sensor 5 Volt Reference	I	—
3	0.5	BK/VT	2755	Oil Pressure Sensor Low Reference	I	—

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B39 A/C Evaporator Temperature Sensor



Connector Part Information

- Harness Type: HVAC
- OEM Connector: 12047662
- Service Connector: Service by Harness – See Part Catalog
- Description: 2-Way F Metri-Pack 150 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-14 (GN)	J-38125-12A

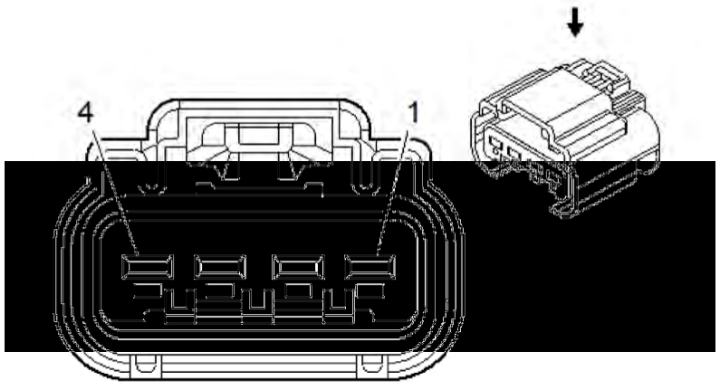
B39 A/C Evaporator Temperature Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	GY	6137	EVAP Core Temperature Sensor Signal	I	—
B	0.35	BK/YE	1791	Low Reference	I	—

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B46B Fuel Level Sensor - Secondary (LFW/LFX/L77/LS3/LSA)



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Connector Part Information

- Harness Type: Fuel Tank
- OEM Connector: 13527865
- Service Connector: Service by Harness - See part Catalog
- Description: 4-Way F GT 280 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-4A (PU)	J-38125-553

B46B Fuel Level Sensor - Secondary (LFW/LFX/L77/LS3/LSA)

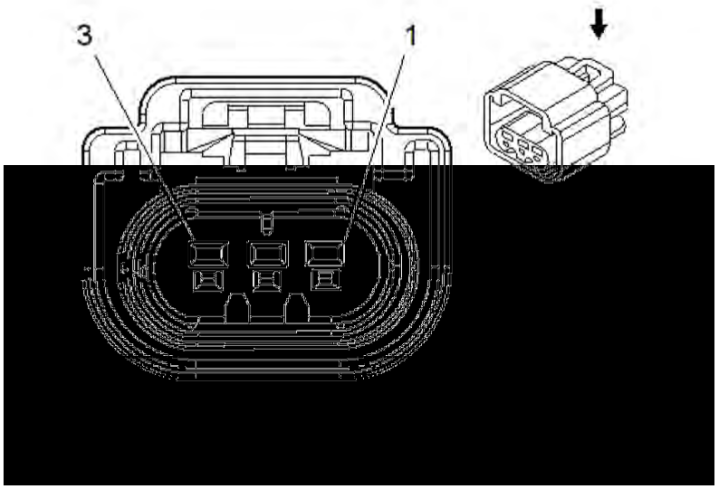
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1-2	—	—	—	Not Occupied	—	—
3	0.35	BK/GN	6281	Fuel Level Sensor Low Reference	I	L77/LFW/LFX/LS3/LSA
4	0.5	BU/WH	1937	Secondary Fuel Level Sensor Signal	I	L77/LFW/LFX/LS3/LSA

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option

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B47 Fuel Pressure Sensor (L77/LFW/LFX/LS3/LSA)



Connector Part Information

- Harness Type: Fuel Tank
- OEM Connector: 19115173
- Service Connector: Service by Harness – See Part Catalog
- Description: 3-Way F GT 150 Series Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

B47 Fuel Pressure Sensor (L77/LFW/LFX/LS3/LSA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU/WH	7446	Fuel Line Pressure Sensor Signal	I	—
2	0.5	BK/YE	7447	Fuel Line Pressure Sensor Low Reference	I	—
3	0.5	BN/RD	7445	Fuel Line Pressure Sensor 5V Reference	I	—

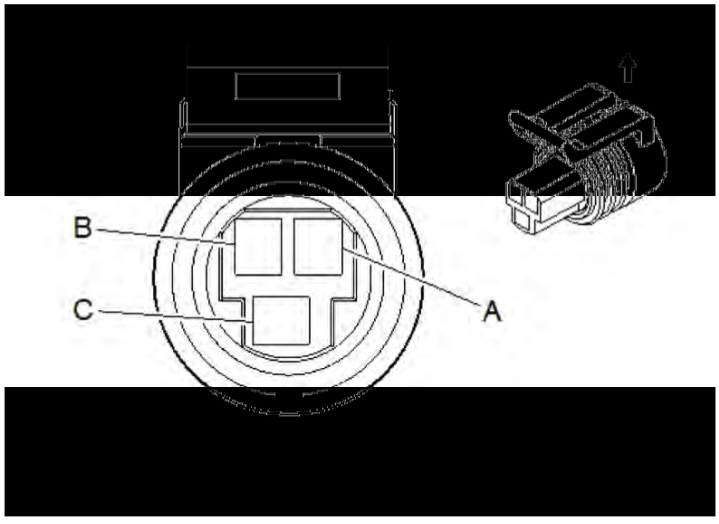
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option

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B47B Fuel Rail Pressure Sensor (LWR)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 12065287
- Service Connector: 88988301
- Description: 3-Way F Metri Pack 150 Series BK

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

B47B Fuel Rail Pressure Sensor (LWR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	BK/GN	2919	Fuel Rail Pressure Sensor Low Reference	I	-
B	0.5	BN/RD	2917	Fuel Rail Pressure Sensor (5) Volt Reference	I	-
C	0.5	BU/WH	2918		I	-

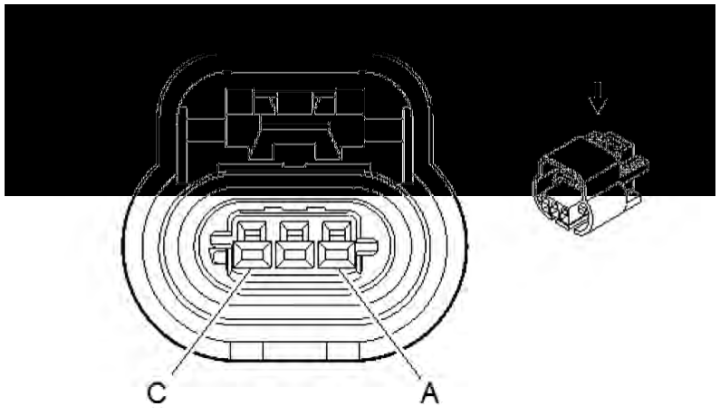
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Fuel Rail Pressure Sensor Signal		

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B47B Fuel Rail Pressure Sensor (LFW/LFX)



Connector Part Information

- Harness Type: Fuel Injector Even
- OEM Connector: 15336000
- Service Connector: Service by Harness - See Part Catalog
- Description: 3-Way F GT 150 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	15315247

B47B Fuel Rail Pressure Sensor (LFW/LFX)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	GY	2917	Fuel Rail Pressure Sensor (5) Volt Reference	I	—
B	0.5	YE	2918	Fuel Rail Pressure Sensor Signal	I	—
B	0.5	TN	2919	Fuel Rail Pressure Sensor Low Reference	I	—

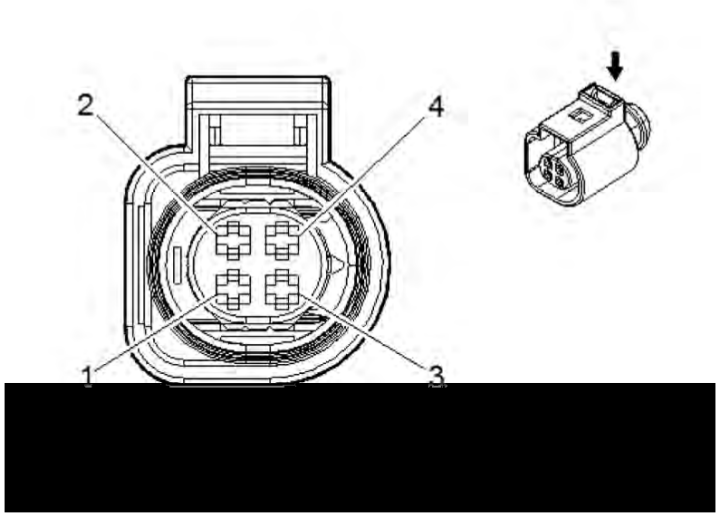
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option

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B51F Headlamp Leveling Sensor – Front (T3T)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 42122000
- Service Connector: 19119429
- Description: 4-Way F 1.2 Micro Timer Series, Sealed BK

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

B51F Headlamp Leveling Sensor – Front (T3T)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN/WH	7525	Front Axle Level Sensor Signal	I	-
2	0.5	WH/RD	7524	Front Axle Level Sensor 5 Volt Reference	I	-
3	-	-	-	Not Occupied	-	-

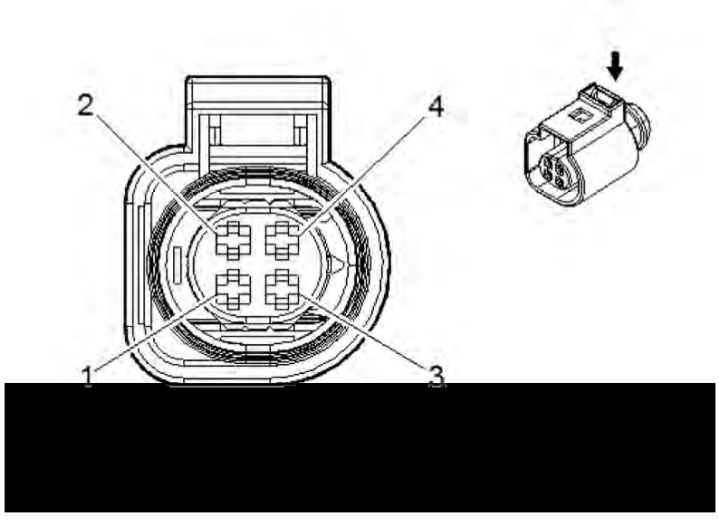
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4	0.5	BK/GY	7526	Front Axle Level Sensor Low Reference	I	-

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B51R Headlamp Leveling Sensor – Rear (T3T)



Connector Part Information

- Harness Type: Rear Axle
- OEM Connector: 42122000
- Service Connector: Service by Harness - See part Catalog
- Description: 4-Way F 1.2 Micro Timer Series, Sealed BK

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

B51R Headlamp Leveling Sensor – Rear (T3T)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK/BN	2185	Automatic Level Control Position Sensor Low Reference	I	-
2	0.5	WH/RD	2165	Automatic Level Control Position Sensor 5 Volt Reference	I	-
3	-	-	-	Not Occupied	-	-

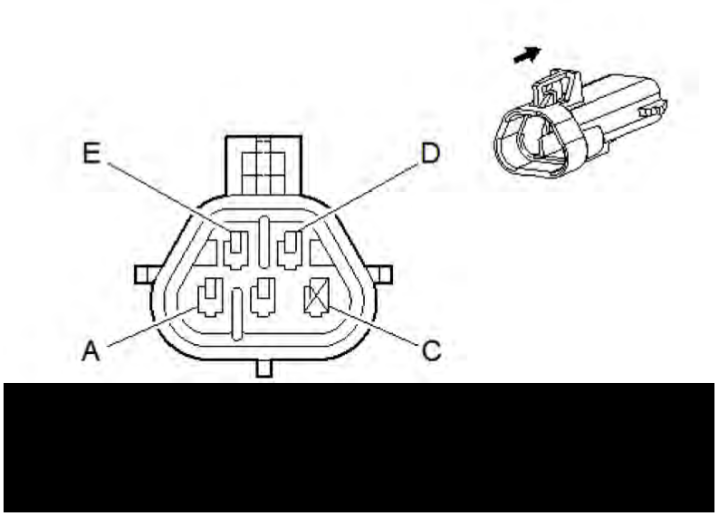
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4	0.5	BN	2184	Automatic Level Control Position Sensor Signal	I	-

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B52C Heated Oxygen Sensor – Bank 1 Sensor 1 (LSA)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 12092839
- Service Connector: 13585848
- Description: 5-Way M Metri-Pack 150 Series, (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575419	J-35616-3 (GY)	J-38125-12A

B52C Heated Oxygen Sensor – Bank 1 Sensor 1 (LSA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	YE/BN	1664	Heated Oxygen Sensor Low Signal Bank 1 Sensor (1)	I	—
B	0.5	GN	1665	Heated Oxygen Sensor High Signal Bank 1 Sensor (1)	I	—
C	—	—	—	Not Occupied	—	—

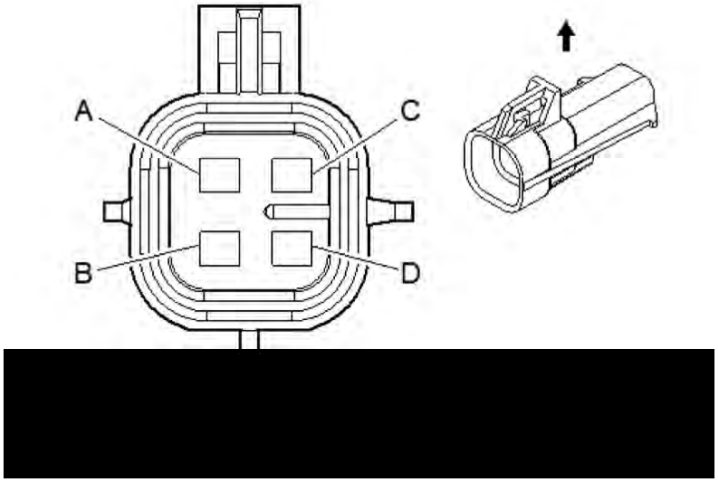
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
D	0.5	VT/BU	5293	Powertrain Main Relay Fused Supply (4)	I	—
E	0.5	GY/WH	3113	Heated Oxygen Sensor Heater Low Control Bank 1 Sensor (1)	I	—

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B52C Heated Oxygen Sensor – Bank 1 Sensor 1 (LFW/LFX/LWR)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 12160825
- Service Connector: 15305801
- Description: 4-Way M 150 Metri Pack Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-3 (GY)	J-38125-12A

B52C Heated Oxygen Sensor – Bank 1 Sensor 1 (LFW/LFX/LWR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	WH/BK	3111	Heated Oxygen Sensor Low Signal Bank 1 Sensor (1)	I	-
B	0.5	VT/GY	3110	Heated Oxygen Sensor High Signal Bank 1 Sensor (1)	I	-
C	0.5	VT/BU	5293		I	-

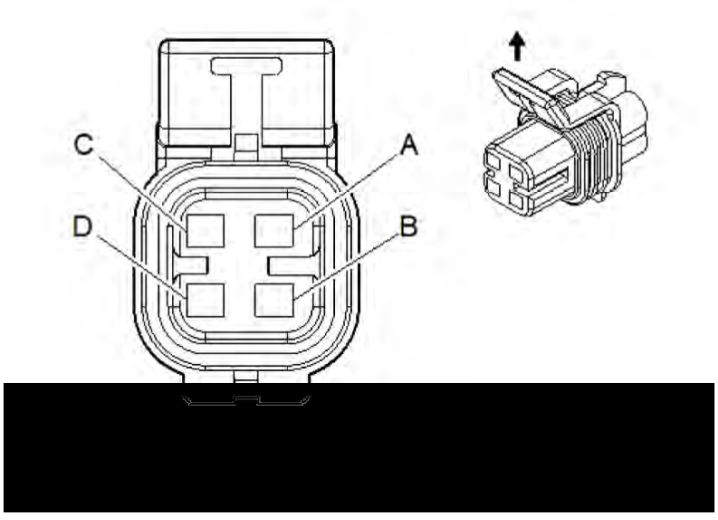
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Powertrain Main Relay Fused Supply (4)		
D	0.5	GY/WH	3113	Heated Oxygen Sensor Heater Low Control Bank 1 Sensor (1)	I	-

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B52C Heated Oxygen Sensor – Bank 1 Sensor 1 (L77/LS3)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 12176897
- Service Connector: 15305960
- Description: 4-Way F Metri-Pack 150 Sealed (L-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575427	J-35616-14 (GN)	J-38125-12A

B52C Heated Oxygen Sensor – Bank 1 Sensor 1 (L77/LS3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	WH/BK	3111	Heated Oxygen Sensor Low Signal Bank 1 Sensor (1)	I	—
B	0.5	VT/GY	3110	Heated Oxygen Sensor High Signal Bank 1 Sensor (1)	I	—
C	0.5	GY/WH	3113		I	—

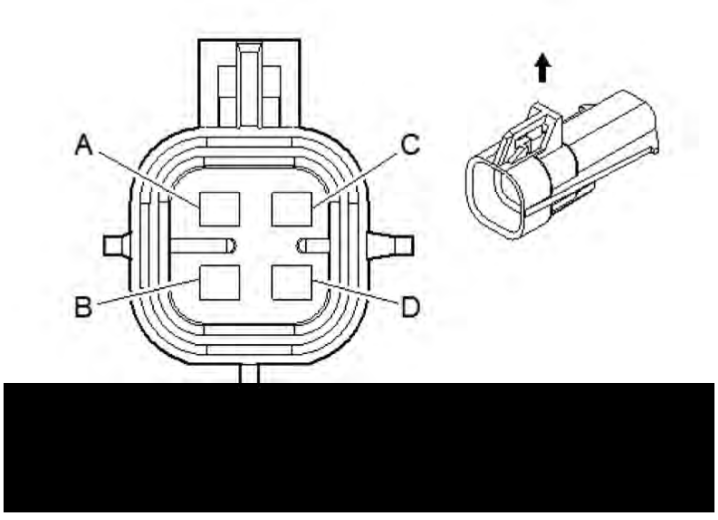
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Heated Oxygen Sensor Heater Low Control Bank 1 Sensor (1)		
D	0.5	VT/BU	5293	Powertrain Main Relay Fused Supply (4)	I	—

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B52D Heated Oxygen Sensor – Bank 1 Sensor 2 (LSA)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 15326423
- Service Connector: 15306319
- Description: 4-Way M Metri-Pack 150 Series, Sealed (GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Pending	J-35616-3 (GY)	J-38125-12A

B52D Heated Oxygen Sensor – Bank 1 Sensor 2 (LSA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	YE/WH	1669	Heated Oxygen Sensor Low Signal Bank 1 Sensor (2)	I	—
B	0.5	GN	1668	Heated Oxygen Sensor High Signal Bank 1 Sensor (2)	I	—
C	0.5	GY/WH	3122		I	—

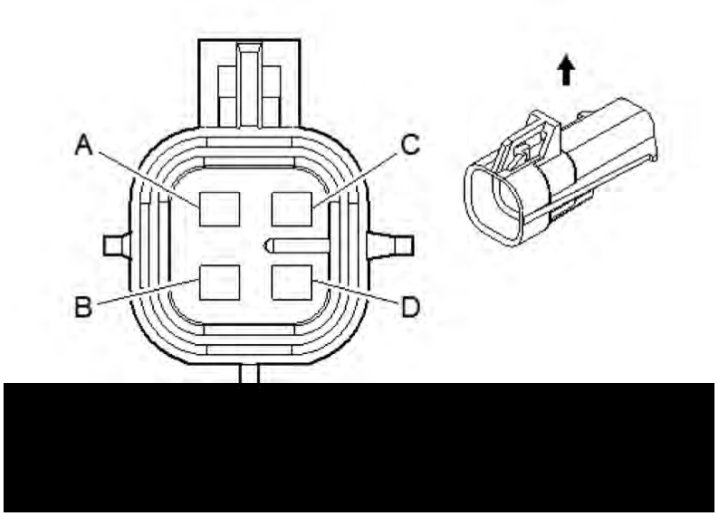
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Heated Oxygen Sensor Heater Low Control Bank 1 Sensor (2)		
D	0.5	VT/BU	5294	Powertrain Main Relay Fused Supply (5)	I	—

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B52D Heated Oxygen Sensor – Bank 1 Sensor 2 (LFW/LFX/LWR)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 12160825
- Service Connector: 15305801
- Description: 4-Way M 150 Metri Pack Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-3 (GY)	J-38125-12A

B52D Heated Oxygen Sensor – Bank 1 Sensor 2 (LFW/LFX/LWR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	WH/YE	3121	Heated Oxygen Sensor Low Signal Bank 1 Sensor (2)	I	-
B	0.5	VT/BU	3120	Heated Oxygen Sensor High Signal Bank 1 Sensor (2)	I	-
C	0.5	VT/BU	5294		I	-

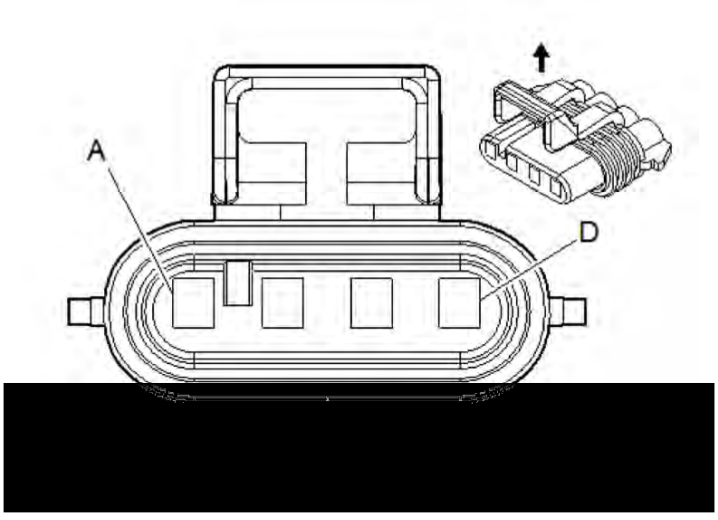
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Powertrain Main Relay Fused Supply (5)		
D	0.5	GY/WH	3122	Heated Oxygen Sensor Heater Low Control Bank 1 Sensor (2)	I	-

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B52D Heated Oxygen Sensor – Bank 1 Sensor 2 (L77/LS3)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 12162144
- Service Connector: TBD
- Description: 4-Way F Metri-Pack 150 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	TBD	—	—

B52D Heated Oxygen Sensor – Bank 1 Sensor 2 (L77/LS3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	WH/YE	3121	Heated Oxygen Sensor Low Signal Bank 1 Sensor (2)	I	—
B	0.5	VT/BU	3120	Heated Oxygen Sensor High Signal Bank 1 Sensor (2)	I	—
C	0.5	GY/WH	3122		I	—

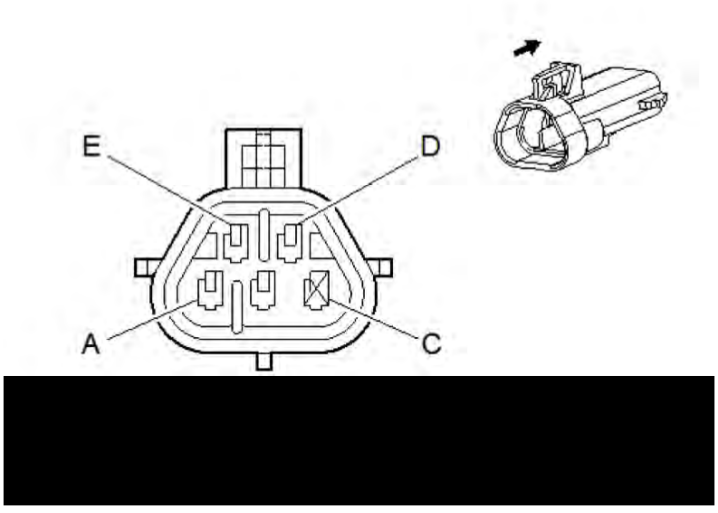
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Heated Oxygen Sensor Heater Low Control Bank 1 Sensor (2)		
D	0.5	VT/BU	5294	Powertrain Main Relay Fused Supply (5)	I	—

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B52E Heated Oxygen Sensor – Bank 2 Sensor 1 (LSA)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 12092839
- Service Connector: 13585848
- Description: 5-Way M Metri-Pack 150 Series, (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575419	J-35616-3 (GY)	J-38125-12A

B52E Heated Oxygen Sensor – Bank 2 Sensor 1 (LSA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	WH	1667	Heated Oxygen Sensor Low Signal Bank 2 Sensor (1)	I	—
B	0.5	BN/VT	1666	Heated Oxygen Sensor High Signal Bank 2 Sensor (1)	I	—
C	—	—	—	Not Occupied	—	—

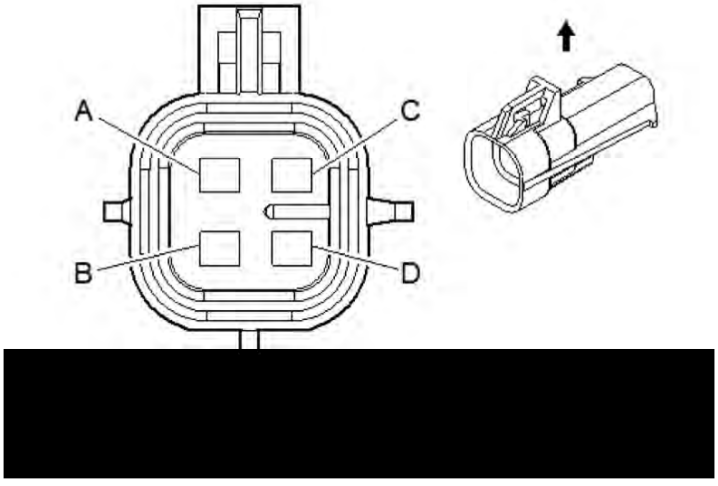
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
D	0.5	VT/BU	5293	Powertrain Main Relay Fused Supply (4)	I	—
E	0.5	GY/YE	3212	Heated Oxygen Sensor Heater Low Control Bank 2 Sensor (1)	I	—

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B52E Heated Oxygen Sensor – Bank 2 Sensor 1 (LFW/LFX/LWR)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 12160825
- Service Connector: 15305801
- Description: 4-Way M 150 Metri Pack Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-3 (GY)	J-38125-12A

B52E Heated Oxygen Sensor – Bank 2 Sensor 1 (LFW/LFX/LWR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	YE/WH	3211	Heated Oxygen Sensor Low Signal Bank 2 Sensor (1)	I	-
B	0.5	VT/WH	3210	Heated Oxygen Sensor High Signal Bank 2 Sensor (1)	I	-
C	0.5	VT/BU	5293		I	-

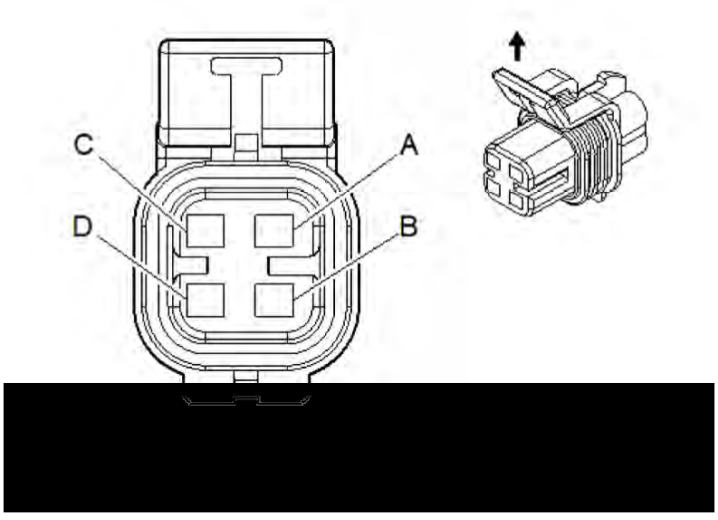
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Powertrain Main Relay Fused Supply (4)		
D	0.5	GN/YE	3212	Heated Oxygen Sensor Heater Low Control Bank 2 Sensor (1)	I	-

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B52E Heated Oxygen Sensor – Bank 2 Sensor 1 (L77/LS3)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 12176897
- Service Connector: 15305960
- Description: 4-Way F Metri-Pack 150 Sealed (L-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575427	J-35616-14 (GN)	J-38125-12A

B52E Heated Oxygen Sensor – Bank 2 Sensor 1 (L77/LS3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	YE/WH	3211	Heated Oxygen Sensor Low Signal Bank 2 Sensor (1)	I	—
B	0.5	VT/WH	3210	Heated Oxygen Sensor High Signal Bank 2 Sensor (1)	I	—
C	0.5	GN/YE	3212		I	—

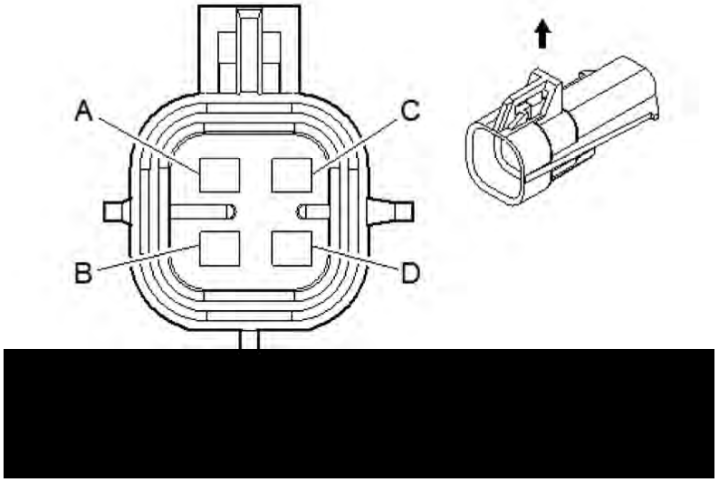
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Heated Oxygen Sensor Heater Low Control Bank 2 Sensor (1)		
D	0.5	VT/BU	5293	Powertrain Main Relay Fused Supply (4)	I	—

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B52F Heated Oxygen Sensor – Bank 2 Sensor 2 (LSA)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 15326423
- Service Connector: 15306319
- Description: 4-Way M Metri-Pack 150 Series, Sealed (GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Pending	J-35616-3 (GY)	J-38125-12A

B52F Heated Oxygen Sensor – Bank 2 Sensor 2 (LSA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	BN/GY	1671	Heated Oxygen Sensor Low Signal Bank 2 Sensor (2)	I	—
B	0.5	BU	1670	Heated Oxygen Sensor High Signal Bank 2 Sensor (2)	I	—
C	0.5	WH/BN	3223		I	—

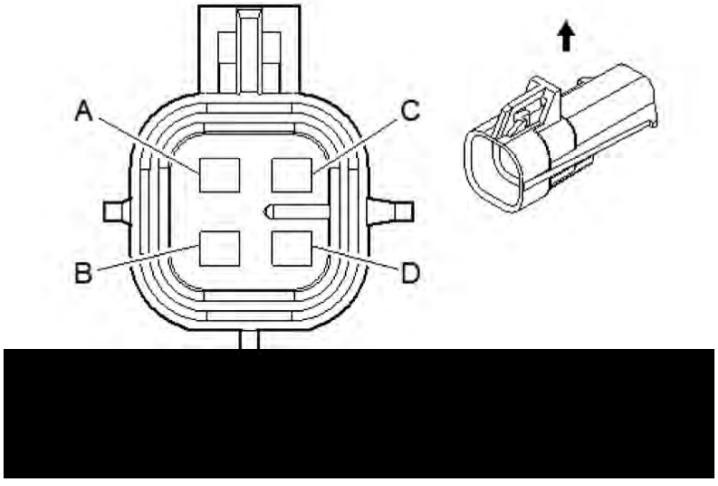
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Heated Oxygen Sensor Heater Low Control Bank 2 Sensor (2)		
D	0.5	VT/BU	5294	Powertrain Main Relay Fused Supply (5)	I	—

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B52F Heated Oxygen Sensor – Bank 2 Sensor 2 (LFW/LFX/LWR)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 12160825
- Service Connector: 15305801
- Description: 4-Way M 150 Metri Pack Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-3 (GY)	J-38125-12A

B52F Heated Oxygen Sensor – Bank 2 Sensor 2 (LFW/LFX/LWR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	YE/BU	3221	Heated Oxygen Sensor Low Signal Bank 2 Sensor (2)	I	-
B	0.5	VT/GN	3220	Heated Oxygen Sensor High Signal Bank 2 Sensor (2)	I	-
C	0.5	VT/BU	5294		I	-

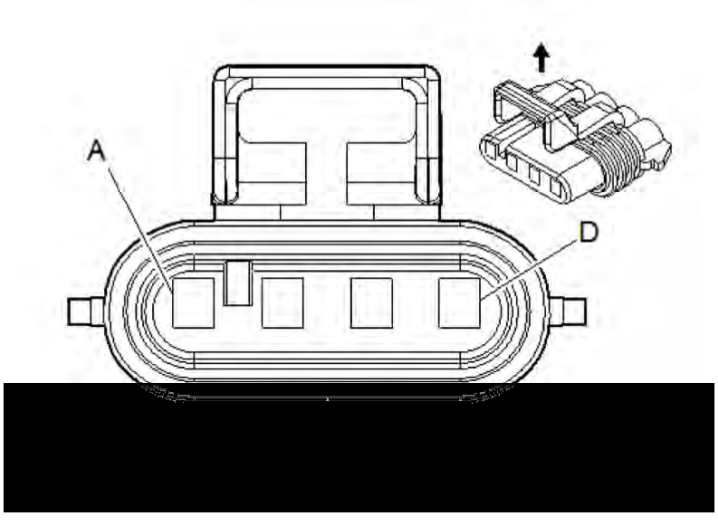
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Powertrain Main Relay Fused Supply (5)		
D	0.5	WH/BN	3223	Heated Oxygen Sensor Heater Low Control Bank 2 Sensor (2)	I	-

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B52F Heated Oxygen Sensor – Bank 2 Sensor 2 (L77/LS3)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 12162144
- Service Connector: TBD
- Description: 4-Way F Metri-Pack 150 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	TBD	—	—

B52F Heated Oxygen Sensor – Bank 2 Sensor 2 (L77/LS3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	YE/BU	3221	Heated Oxygen Sensor Low Signal Bank 2 Sensor (2)	I	—
B	0.5	VT/GN	3220	Heated Oxygen Sensor High Signal Bank 2 Sensor 2(2)	I	—
C	0.5	WH/BN	3223		I	—

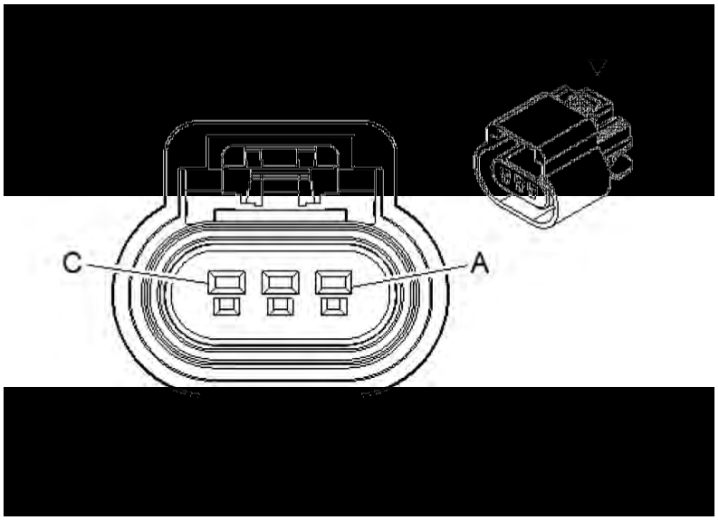
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Heated Oxygen Sensor Heater Low Control Bank 2 Sensor (2)		
D	0.5	VT/BU	5294	Powertrain Main Relay Fused Supply (5)	I	—

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B55 Hood Ajar Switch



Connector Part Information

- Harness Type: Forward Lamp
- OEM Connector: 19153104
- Service Connector: 13580871
- Description: 3-Way F 150 GT Series, Sealed BK

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

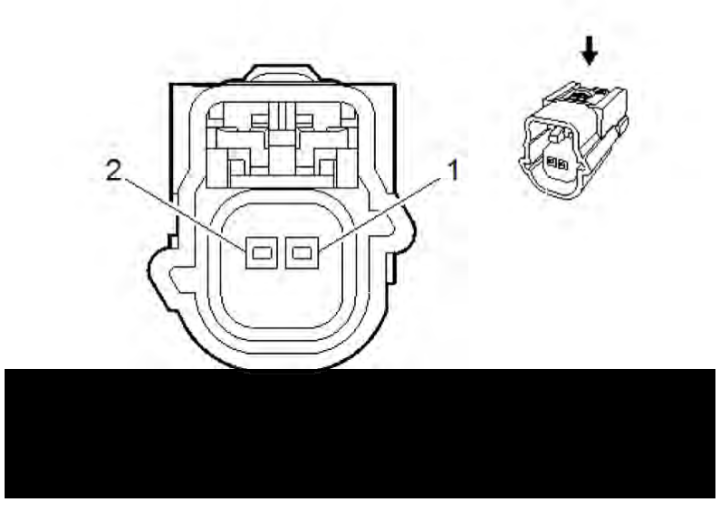
B55 Hood Ajar Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	-	-	-	Not Occupied	-	-
B	0.35	BN/GN	109	Hood Ajar Switch Signal	I	-
C	0.5	BK	550	Ground	I	-

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B59L Front Impact Sensor – Left



Connector Part Information

- Harness Type: Forward Lamp
- OEM Connector: 19151432
- Service Connector: 13585852
- Description: 2-Way F 0.64 Series, Sealed (D-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-64B (L-BU)	Not Available

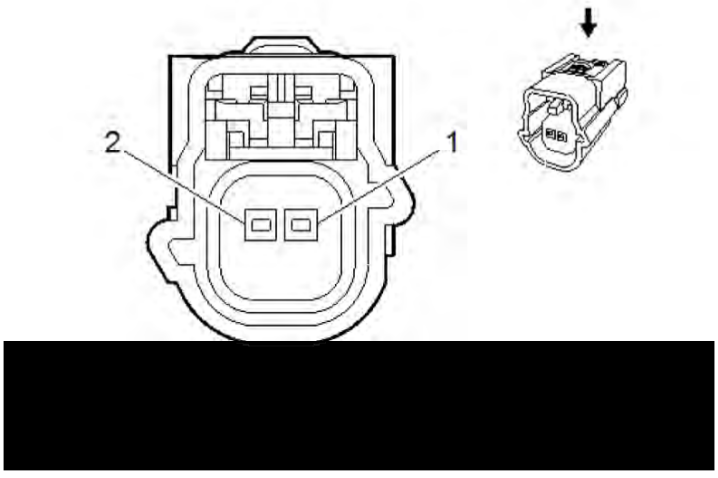
B59L Front Impact Sensor – Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG/YE	354	Left Front Discriminating Sensor Signal	I	-
2	0.5	BK/OG	5045	Left Front Discriminating Sensor Low Reference	I	-

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B59R Front Impact Sensor – Right



Connector Part Information

- Harness Type: Forward Lamp
- OEM Connector: 19151432
- Service Connector: 13585852
- Description: 2-Way F 0.64 Series, Sealed (D-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-64B (L-BU)	J-38125-215A

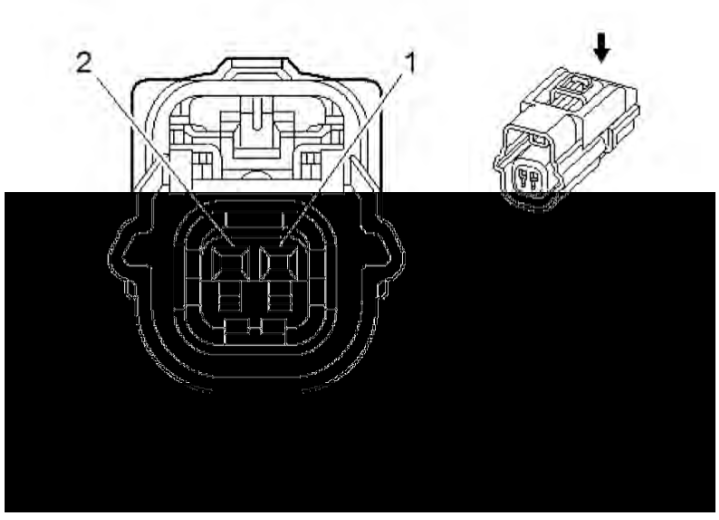
B59R Front Impact Sensor – Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG/GN	1409	Right Front Discriminating Sensor Signal	I	-
2	0.5	BK/OG	5600	Right Front Discriminating Sensor Low Reference	I	-

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B62D Seat Position Sensor – Driver



Connector Part Information

- Harness Type: Driver Seat
- OEM Connector: 89047381
- Service Connector: Service by Harness – See Part Catalog
- Description: 2-Way F GT 1.5 Series Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	J-38125-553

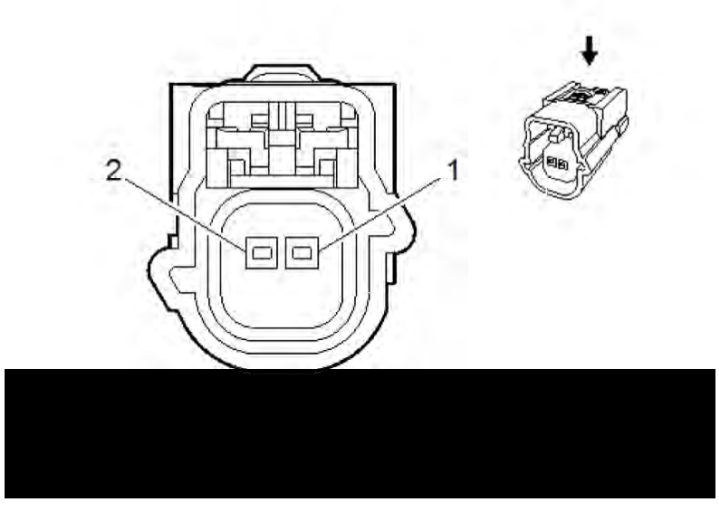
B62D Seat Position Sensor – Driver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK/OG	1363	Driver Seat Belt Switch Low Reference	I	—
2	0.5	OG/GN	5055	Driver Seat Position Switch Signal	I	—

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B63L Side Impact Sensor – Left



Connector Part Information

- Harness Type: Body
- OEM Connector: 19151432
- Service Connector: 13585852
- Description: 2-Way F 0.64 Series, Sealed (D-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-64B (L-BU)	J-38125-215A

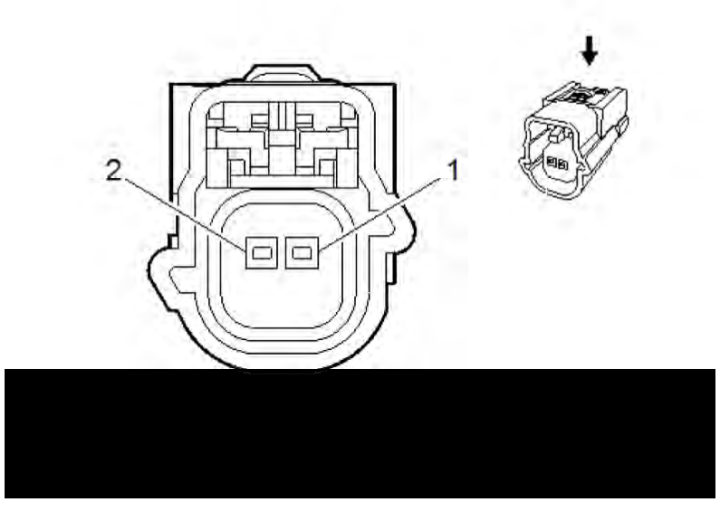
B63L Side Impact Sensor – Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG/GN	2132	Left Front Side Impact Sensing Module Signal	I	-
2	0.5	BK/OG	6628	Left Front Side Impact Sensing Module Low Reference	I	-

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B63R Side Impact Sensor – Right



Connector Part Information

- Harness Type: Body
- OEM Connector: 19151432
- Service Connector: 13585852
- Description: 2-Way F 0.64 Series, Sealed (D-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-64B (L-BU)	J-38125-215A

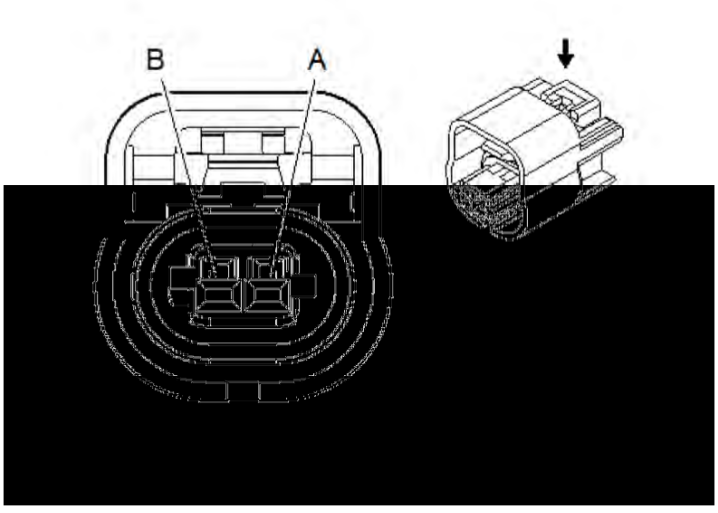
B63R Side Impact Sensor – Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN/OG	2134	Right Front Side Impact Sensing Module Signal	I	-
2	0.5	BK/OG	6629	Right Front Side Impact Sensing Module Low Reference	I	-

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B66 Intake Air Temperature Sensor (LSA)



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Connector Part Information

- Harness Type: Engine
- OEM Connector: 15335987
- Service Connector: 13587320
- Description: 2-Way F 150 GT Series, Sealed BK

Terminal Part Information

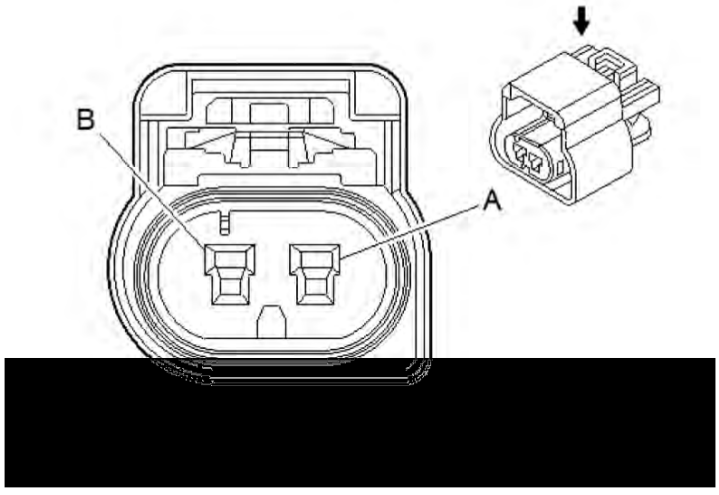
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

B66 Intake Air Temperature Sensor (LSA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.75	GY/BU	6118	Manifold Air Temperature Sensor Signal	I	-
B	0.75	BK/YE	6120	Manifold Air Temperature Sensor Low Reference	I	-

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B68A Knock Sensor 1 (LFW/LFX/LWR)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 88986864
- Service Connector: 13580877
- Description: 2-Way F 150 GT Series, Sealed (NA)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575396	J-35616-2A (GY)	15315247

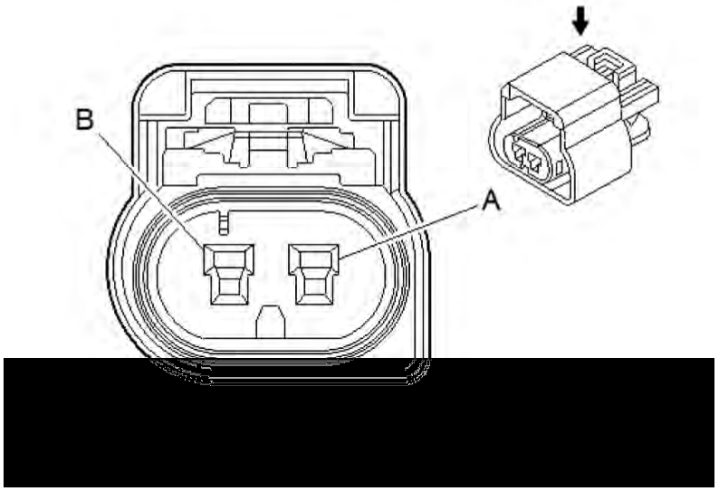
B68A Knock Sensor 1 (LFW/LFX/LWR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	VT/GY	496	Knock Sensor Signal (1)	I	-
B	0.5	BK/YE	1716	Knock Sensor Low Reference (1)	I	-

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B68A Knock Sensor 1 (L77/LS3/LSA)



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Connector Part Information

- Harness Type: Engine
- OEM Connector: 15374222
- Service Connector: 13580877
- Description: 2-Way F 150 GT Series, Sealed (NA)

Terminal Part Information

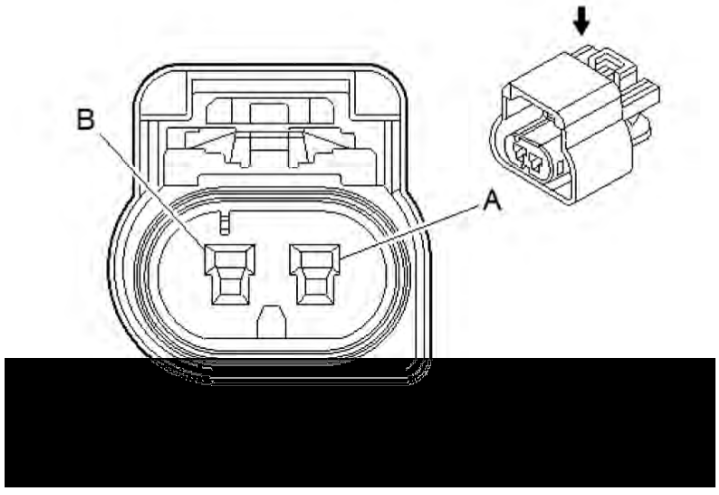
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575396	J-35616-2A (GY)	J-38125-553

B68A Knock Sensor 1 (L77/LS3/LSA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	VT/GY	496	Knock Sensor Signal (1)	I	-
B	0.5	BK/YE	1716	Knock Sensor Low Reference (1)	I	-

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B68B Knock Sensor 2 (LFW/LFX/LWR)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 88986864
- Service Connector: 13580877
- Description: 2-Way F 150 GT Series, Sealed (NA)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575396	J-35616-2A (GY)	J-38125-553

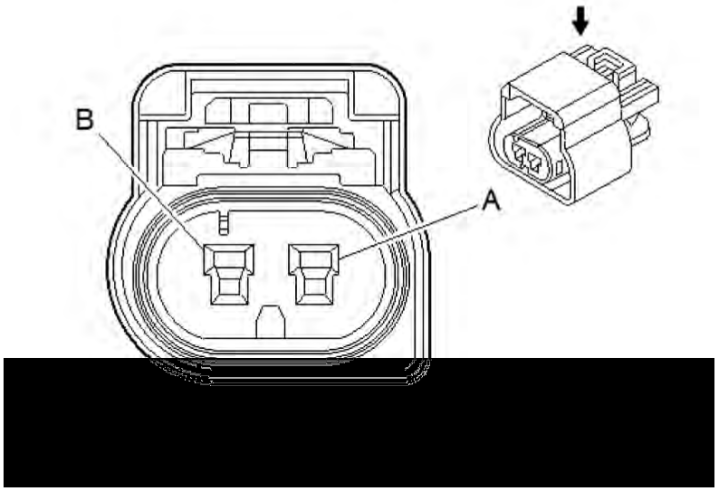
B68B Knock Sensor 2 (LFW/LFX/LWR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	WH/GY	1876	Knock Sensor Signal (2)	I	-
B	0.5	BK/GY	2303	Knock Sensor Low Reference (2)	I	-

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B68B Knock Sensor 2 (L77/LS3/LSA)



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Connector Part Information

- Harness Type: Engine
- OEM Connector: 15374222
- Service Connector: 13580877
- Description: 2-Way F 150 GT Series, Sealed (NA)

Terminal Part Information

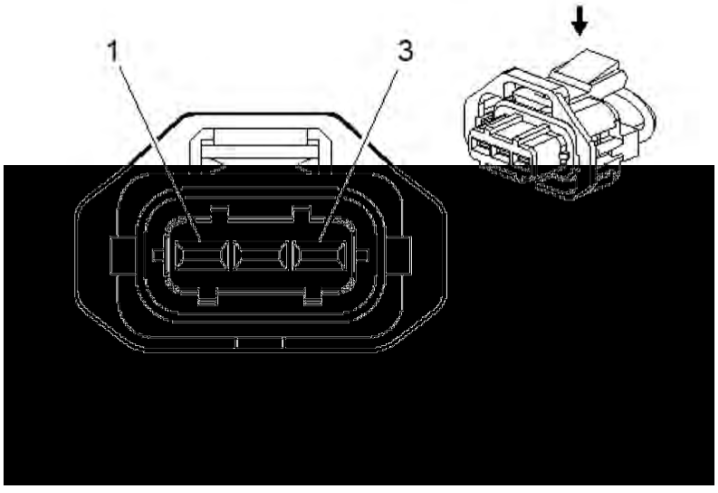
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575396	J-35616-2A (GY)	J-38125-553

B68B Knock Sensor 2 (L77/LS3/LSA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	WH/GY	1876	Knock Sensor Signal (2)	I	-
B	0.5	BK/GY	2303	Knock Sensor Low Reference (2)	I	-

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B74 Manifold Absolute Pressure Sensor



Connector Part Information

- Harness Type: Engine
- OEM Connector: 89047242
- Service Connector: 13585850
- Description: 3-Way F Kompakt 2.8 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

B74 Manifold Absolute Pressure Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY/RD	2704	Manifold Absolute Pressure Sensor 5 Volt Reference	I	-
2	0.5	BK/GN	469	Manifold Absolute Pressure Sensor Low Reference	I	-
3	0.5	GN/WH	432		I	-

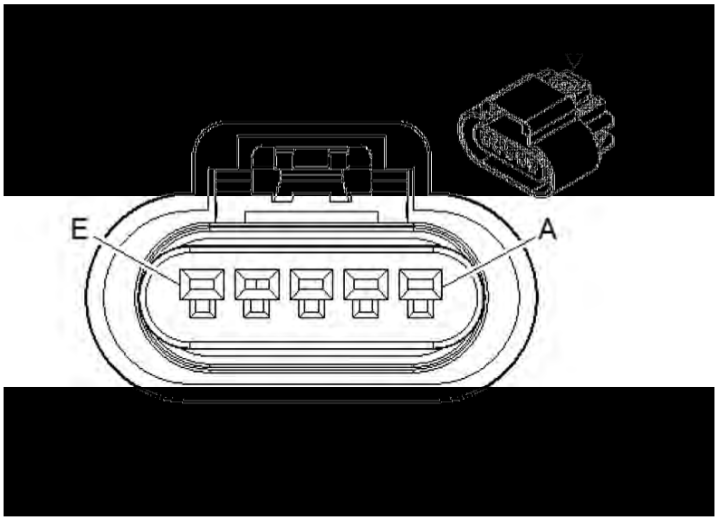
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Manifold Absolute Pressure Sensor Signal		

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B75B Mass Air Flow/Intake Air Temperature Sensor (L77/LS3)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 15326822
- Service Connector: 13585858
- Description: 5-Way F 150 GT Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	Not Available

B75B Mass Air Flow/Intake Air Temperature Sensor (L77/LS3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	GN/WH	492	Mass Air Flow Sensor Signal	I	-
B	0.5	VT/GN	439	Run/Crank Ignition 1 Voltage	I	-
C	0.5	BK/WH	451	Signal Ground	I	-
D	0.5	BN/VT	472		I	-

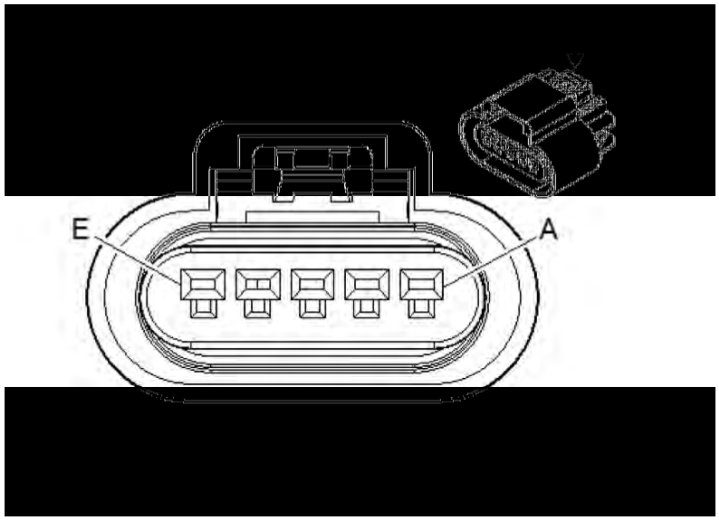
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Intake Air Temperature Sensor Signal		
E	0.5	BK/VT	2760	Intake Air Temperature Sensor Low Reference	I	-

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B75B Mass Air Flow/Intake Air Temperature Sensor (LSA)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13519051
- Service Connector: 13585858
- Description: 5-Way F 150 GT Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	Not Available

B75B Mass Air Flow/Intake Air Temperature Sensor (LSA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	GN/WH	492	Mass Air Flow Sensor Signal	I	-
B	0.5	BK/WH	451	Signal Ground	I	-
C	0.5	VT/GN	439	Run/Crank Ignition 1 Voltage	I	-
D	0.5	BK/VT	2760		I	-

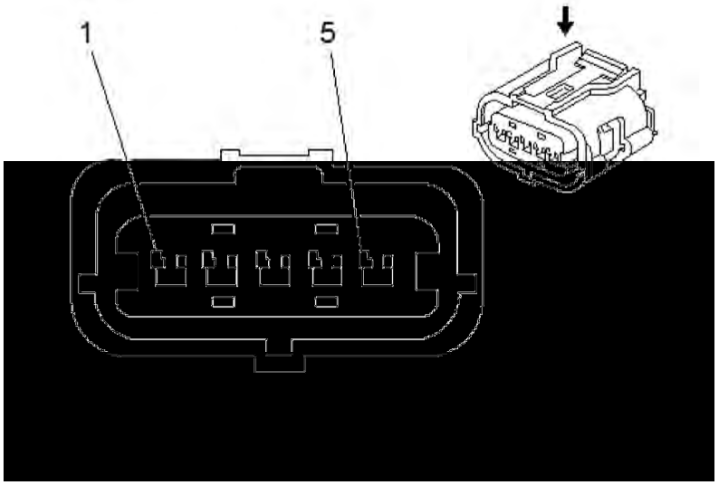
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Intake Air Temperature Sensor Low Reference		
E	0.5	WH/BU	6289	Induction Air Temperature Sensor Signal	I	-

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B75B Mass Air Flow/Intake Air Temperature Sensor (LWR)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 61891046
- Service Connector: 19300577
- Description: 5-Way F TS Series, Sealed

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

B75B Mass Air Flow/Intake Air Temperature Sensor (LWR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH/BU	6289	Induction Air Temperature Sensor Signal	I	-
2	0.5	BK/VT	2760	Intake Air Temperature Sensor Low Reference	I	-
3	0.5	VT/BU	5294		I	-

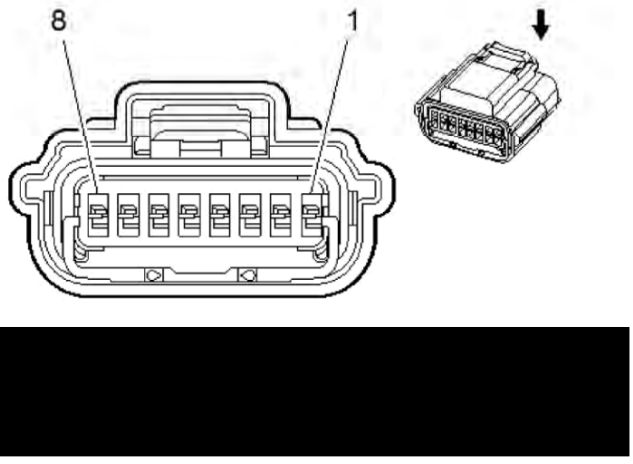
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Powertrain Main Relay Fused Supply (5)		
4	0.5	BK/WH	451	Signal Ground	I	-
5	0.5	GN/WH	492	Mass Air Flow Sensor Signal	I	-

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B75C Multifunction Intake Air Sensor (LFW/LFX)



[redacted]

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Connector Part Information

- Harness Type: Engine
- OEM Connector: 13504800
- Service Connector: 13583440
- Description: 8-Way F 064 Series, Sealed BK

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

B75C Multifunction Intake Air Sensor (LFW/LFX)

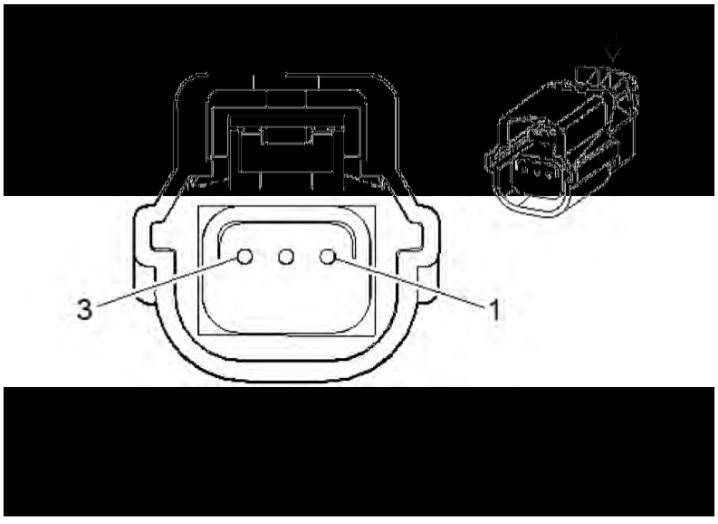
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH/BU	6289	Induction Air Temperature Sensor Signal	I	-
2	0.5	WH/RD	3201	Throttle Inlet Absolute Pressure Sensor 5V Reference	I	-
3	0.5	WH/YE	3202		I	-

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Throttle Inlet Absolute Pressure Sensor 5V Return		
4	0.5	YE/WH	3200	Throttle Inlet Absolute Pressure Sensor Signal	I	-
5	0.5	VT/BU	5294	Powertrain Main Relay Fused Supply (5)	I	-
6	0.5	GN/WH	492	Mass Air Flow Sensor Signal	I	-
7	0.5	BK/WH	451	Signal Ground	I	-
8	0.5	GY/BU	7564	Humidity Sensor Signal	I	-

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B78A Front Object Sensor – Left Outer (UFQ)



Connector Part Information

- Harness Type: Front Fascia
- OEM Connector: 19115171
- Service Connector: Service by Harness - See Part Catalog
- Description: 3-Way F 0.64 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-64B (L-BU)	Not Available

B78A Front Object Sensor – Left Outer (UFQ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BN	6581	Front Parking Aid Display Supply Voltage	I	-
2	0.35	VT/WH	5215	Front Parking Left Corner Sensor	I	-
3	0.35	BK/BU	5214		I	-

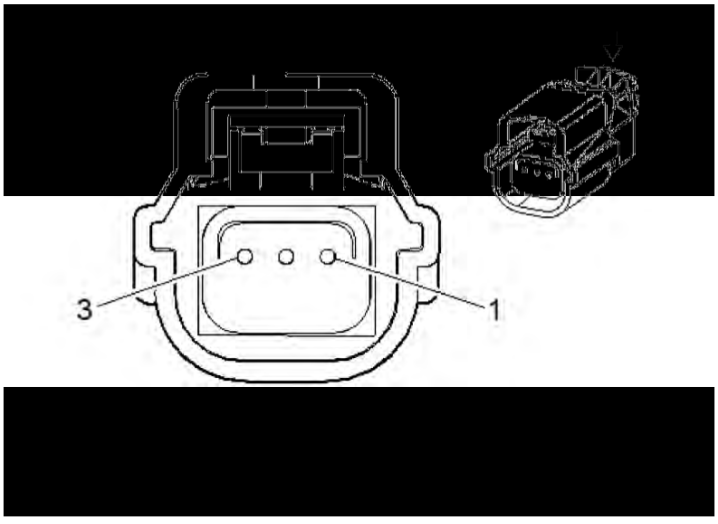
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Front Parking Sensor Low Reference		

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B78B Front Object Sensor – Right Outer (UFQ)



Connector Part Information

- Harness Type: Front Fascia
- OEM Connector: 19115171
- Service Connector: Service by Harness - See Part Catalog
- Description: 3-Way F 0.64 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-64B (L-BU)	Not Available

B78B Front Object Sensor – Right Outer (UFQ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BN	6581	Front Parking Aid Display Supply Voltage	I	-
2	0.35	WH/GY	5217	Front Parking Right Corner Sensor	I	-
3	0.35	BK/BU	5214		I	-

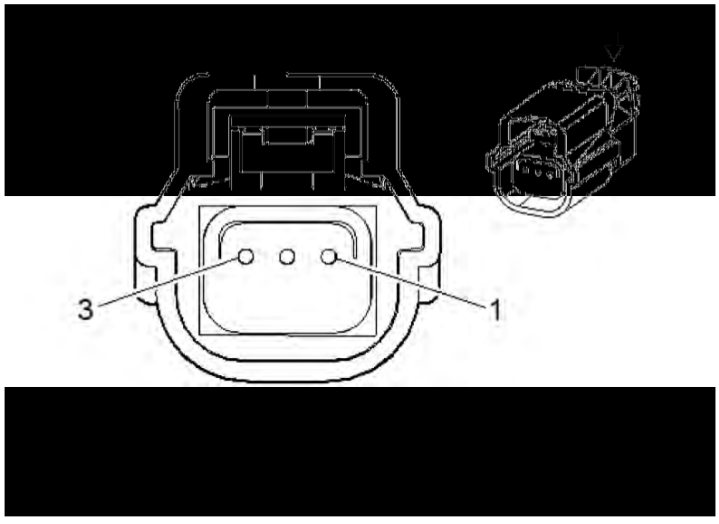
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Front Parking Sensor Low Reference		

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B78C Front Object Sensor – Left Middle (UFQ)



Connector Part Information

- Harness Type: Front Fascia
- OEM Connector: 19115171
- Service Connector: Service by Harness - See Part Catalog
- Description: 3-Way F 0.64 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-64B (L-BU)	Not Available

B78C Front Object Sensor – Left Middle (UFQ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BN	6581	Front Parking Aid Display Supply Voltage	I	-
2	0.35	YE/GY	5216	Front Parking Left Mid Sensor	I	-
3	0.35	BK/BU	5214	Front Parking Sensor Low Reference	I	-

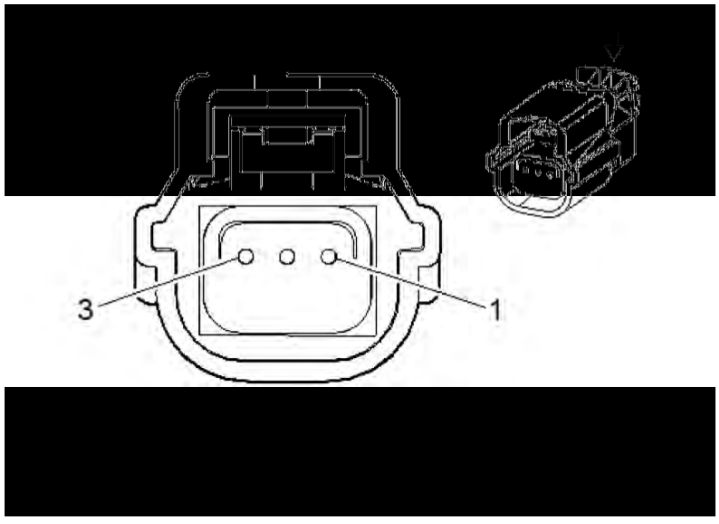
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option

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B78D Front Object Sensor – Right Middle (UFQ)



Connector Part Information

- Harness Type: Front Fascia
- OEM Connector: 19115171
- Service Connector: Service by Harness - See Part Catalog
- Description: 3-Way F 0.64 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-64B (L-BU)	Not Available

B78D Front Object Sensor – Right Middle (UFQ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BN	6581	Front Parking Aid Display Supply Voltage	I	-
2	0.35	VT/GY	5218	Front Parking Right Mid Sensor	I	-
3	0.35	BK/BU	5214	Front Parking Sensor Low Reference	I	-

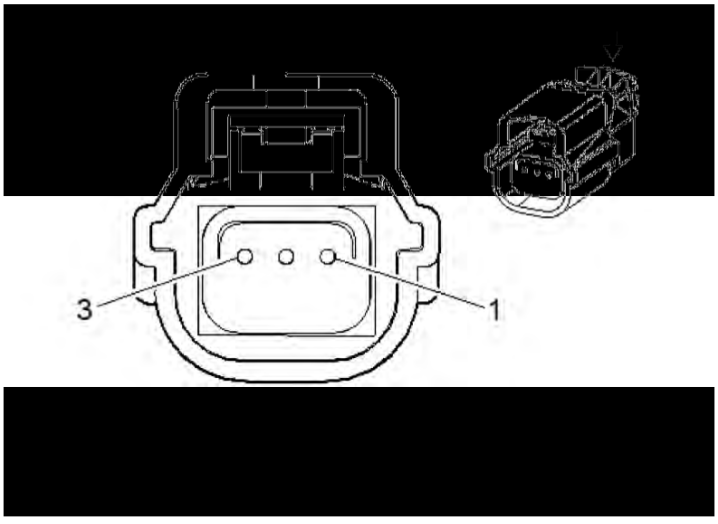
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option

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B78E Rear Object Sensor – Left Middle (UD7/UFQ)



Connector Part Information

- Harness Type: Rear Fascia
- OEM Connector: 19115171
- Service Connector: Service by Harness - See Part Catalog
- Description: 3-Way F 0.64 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-64B (L-BU)	Not Available

B78E Rear Object Sensor – Left Middle (UD7/UFQ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BN/WH	2374	Object Sensor Supply Voltage	I	-
2	0.35 0.35 0.35	YE/BU YE/BU BK/GY	2376 2376 2379	Left Rear Middle Object Sensor Signal Left Rear Middle Object Sensor Signal	I	UD7 or UFQ 69 or 19 or 35 with UD7 or UFQ UD7 or UFQ

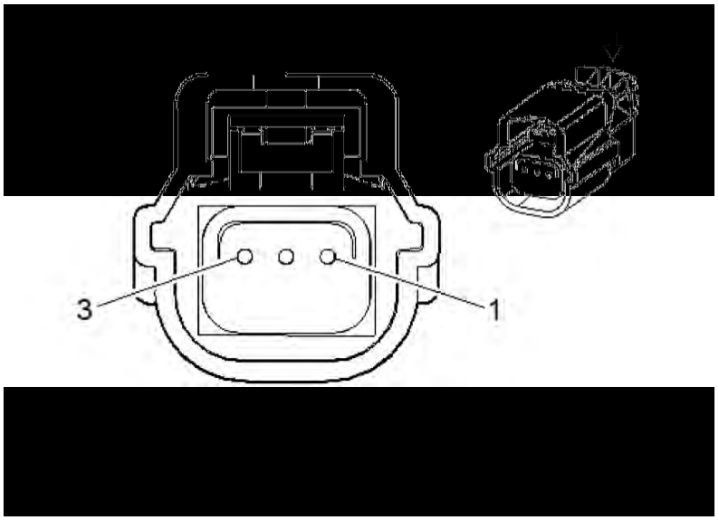
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Object Sensor Low Reference		
3	0.35 0.35	BK/GY YE/BU	2379 2376	Object Sensor Low Reference Left Rear Middle Object Sensor Signal	I	UD7 or UFQ 69 or 19 or 35 with UD7 or UFQ

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B78F Rear Object Sensor – Right Middle (UD7/UFQ)



Connector Part Information

- Harness Type: Rear Fascia
- OEM Connector: 19115171
- Service Connector: Service by Harness - See Part Catalog
- Description: 3-Way F 0.64 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-64B (L-BU)	Not Available

B78F Rear Object Sensor – Right Middle (UD7/UFQ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BN/WH	2374	Object Sensor Supply Voltage	I	UD7 or UFQ
2	0.35 0.35 0.35	BK/GY YE/WH YE/WH	2379 2377 2377	Object Sensor Low Reference Right Rear Middle Object Sensor Signal	I	UD7 or UFQ 69 or 19 or 35 with UD7 or UFQ UD7 or UFQ

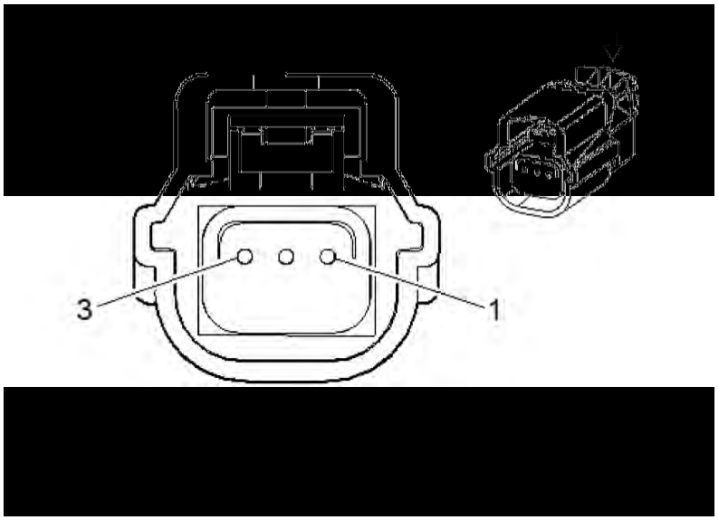
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Right Rear Middle Object Sensor Signal		
3	0.35 0.35	YE/WH BK/GY	2377 2379	Right Rear Middle Object Sensor Signal Object Sensor Low Reference	I	69 or 19 or 35 with UD7 or UFQ UD7 or UFQ

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B78G Rear Object Sensor – Left Outer (UD7/UFQ)



Connector Part Information

- Harness Type: Rear Fascia
- OEM Connector: 19115171
- Service Connector: Service by Harness - See Part Catalog
- Description: 3-Way F 0.64 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-64B (L-BU)	Not Available

B78G Rear Object Sensor – Left Outer (UD7/UFQ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BN/WH	2374	Object Sensor Supply Voltage	I	UD7 or UFQ
2	0.35 0.35 0.35	YE YE BK/GY	2375 2375 2379	Left Rear Corner Object Sensor Signal Left Rear Corner Object Sensor Signal	I	UD7 or UFQ 69 or 19 or 35 with UD7 or UFQ UD7 or UFQ

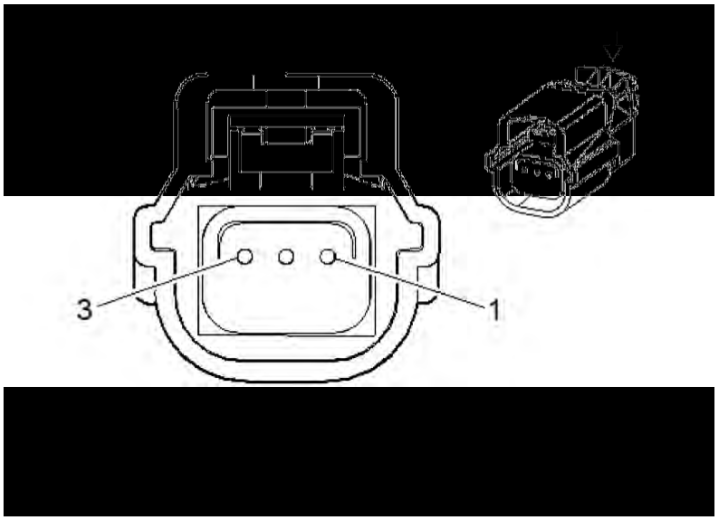
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Object Sensor Low Reference		
3	0.35 0.35	BK/GY YE	2379 2375	Object Sensor Low Reference Left Rear Corner Object Sensor Signal	I	UD7 or UFQ 69 or 19 or 35 with UD7 or UFQ

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B78H Rear Object Sensor – Right Outer (UD7/UFQ)



Connector Part Information

- Harness Type: Rear Fascia
- OEM Connector: 19115171
- Service Connector: Service by Harness - See Part Catalog
- Description: 3-Way F 0.64 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-64B (L-BU)	Not Available

B78H Rear Object Sensor – Right Outer (UD7/UFQ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BN/WH	2374	Object Sensor Supply Voltage	I	UD7 or UFQ
2	0.35 0.35 0.35	BK/GY YE/VT YE/VT	2379 2378 2378	Object Sensor Low Reference Right Rear Corner Object Sensor Signal	I	UD7 or UFQ UD7 or UFQ 69 or 19 or 35 with UD7 or UFQ

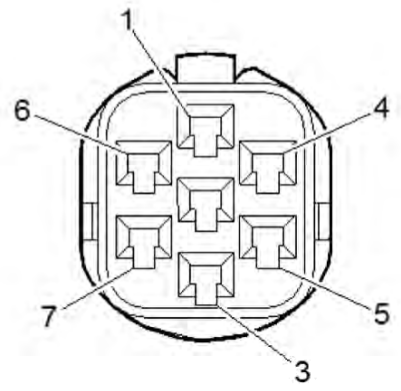
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Right Rear Corner Object Sensor Signal		
3	0.35 0.35	YE/VT BK/GY	2378 2379	Right Rear Corner Object Sensor Signal Object Sensor Low Reference	I	69 or 19 or 35 with UD7 or UFQ UD7 or UFQ

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B87 Rearview Camera (F19 with UVC)





Connector Part Information

- Harness Type: Rear Compartment Lid
- OEM Connector: 13576423
- Service Connector: Service by Harness - See part Catalog
- Description: 7-Way F Multi Lock Series GN

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

B87 Rearview Camera (F19 with UVC)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GY/YE	6972	Camera Signal #2 +	I	-
2	0.35	BARE	6974	Camera Drain Wire	I	-
3	0.35	GN/WH	24	Backup Lamp Supply Voltage	I	-

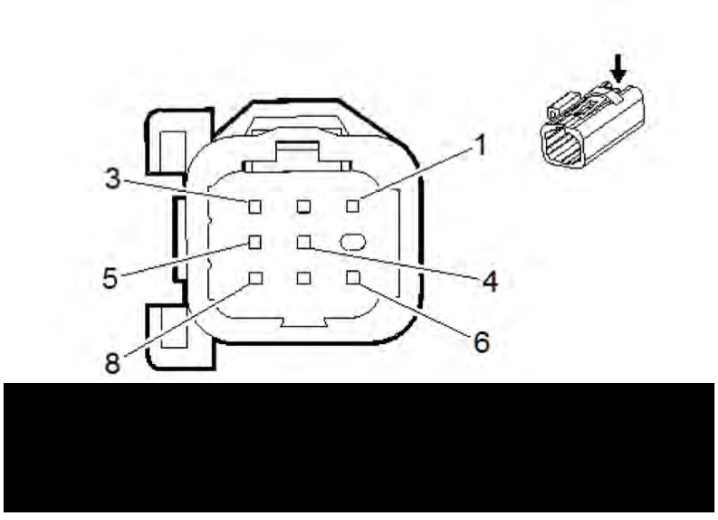
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4	0.35	WH/BU	6973	Camera Signal #2	I	-
5	0.5	BK	2550	Ground	I	-
6	0.35	VT/GN	1339	Run/Crank Ignition 1 Voltage	I	-
7	-	-	-	Not Occupied	-	-

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B87 Rearview Camera (F35 with UVC)



Connector Part Information

- Harness Type: Right Liftgate
- OEM Connector: 7282-2405
- Service Connector: Service by Harness - See part Catalog
- Description: 8-Way M 025 Series

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

B87 Rearview Camera (F35 with UVC)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GY/YE	6972	Camera Signal #2 +	I	-
2	0.35	BARE	6974	Camera Drain Wire	I	-
3	0.35	GN/WH	24	Backup Lamp Supply Voltage	I	-

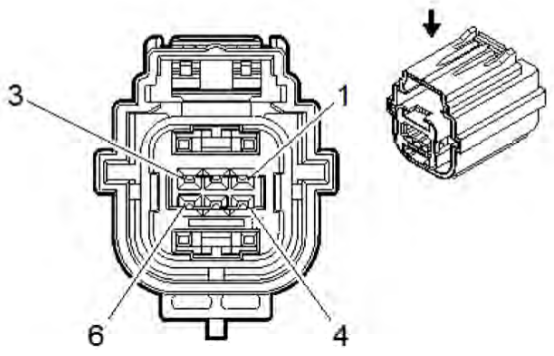
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4	0.35	WH/BU	6973	Camera Signal #2	I	-
5	0.35	BK	2550	Ground	I	-
6	0.35	VT/GN	1339	Run/Crank Ignition 1 Voltage	I	-
7-8	-	-	-	Not Occupied	-	-

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B87 Rearview Camera (F69/F80 with UVC)



Connector Part Information

- Harness Type: Rear End
- OEM Connector: 19169088
- Service Connector: Service by Harness - See Part Catalog
- Description: 6-Way F 0.64 Series, Sealed (GY)
- Harness Type: Rear Fascia
- OEM Connector: 19169088
- Service Connector: Service by Harness - See Part Catalog
- Description: 6-Way F 0.64 Series, Sealed (GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-64B (L-BU)	J-38125-215A

B87 Rearview Camera (F69/F80 with UVC)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GY/YE	6972	Camera Signal #2 +	I	-
2	0.35	BARE	6974	Camera Drain Wire	I	-

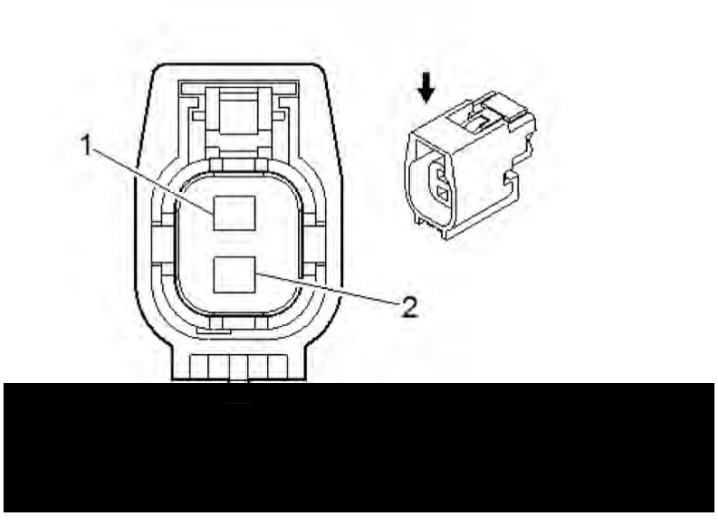
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
3	0.5 0.35	GN/WH GN/WH	24 24	Backup Lamp Supply Voltage Backup Lamp Supply Voltage	I	F80 F69
4	0.35	WH/BU	6973	Camera Signal #2	I	-
5	0.35 0.35	BK BK	1950 2550	Ground Ground	I	F80 F69
6	0.35	VT/GN	1339	Run/Crank Ignition 1 Voltage	I	-

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B88D Seat Belt Switch – Driver



Connector Part Information

- Harness Type: Driver Seat
- OEM Connector: 7182-4020
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 1.5 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-34 (YE)	J-38125-553

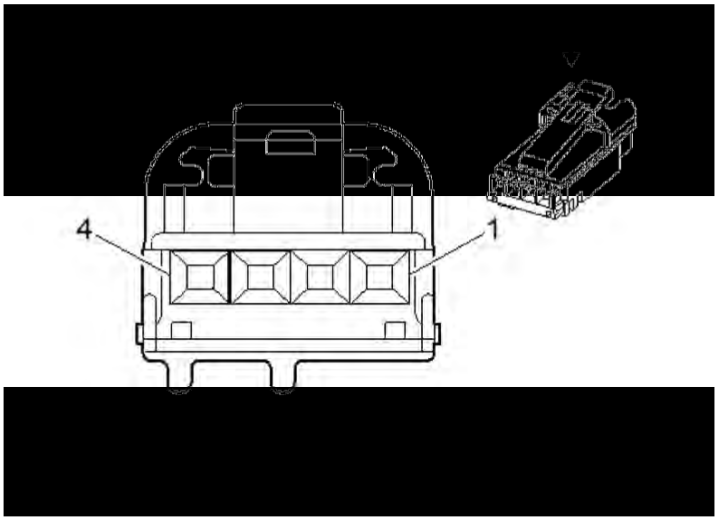
B88D Seat Belt Switch – Driver

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG/BN	238	Driver Seat Belt Switch Signal	I	—
2	0.5	BK/OG	1363	Driver Seat Belt Switch Low Reference	I	—

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B88LR Seat Belt Switch – Left Rear (UH5)



Connector Part Information

- Harness Type: Body
- OEM Connector: 310681010
- Service Connector: 19153195
- Description: 4-Way F 0.64 H DAC Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

B88LR Seat Belt Switch – Left Rear (UH5)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE/OG	5161	Left Rear Seat Belt Switch Signal	I	-
2	0.5	BK/OG	1361	Passenger Seat Belt Switch Low Reference	I	-
3	0.5	BU/OG	5163		I	-

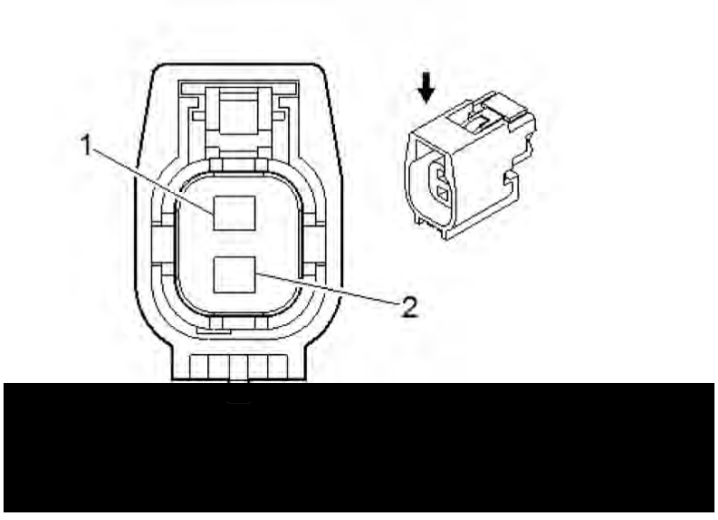
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Center Rear Seat Belt Switch Signal		
4	0.5	BK/OG	1361	Passenger Seat Belt Switch Low Reference	I	-

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B88P Seat Belt Switch – Passenger



Connector Part Information

- Harness Type: Passenger Seat
- OEM Connector: 7182-4020
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 1.5 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-34 (YE)	J-38125-553

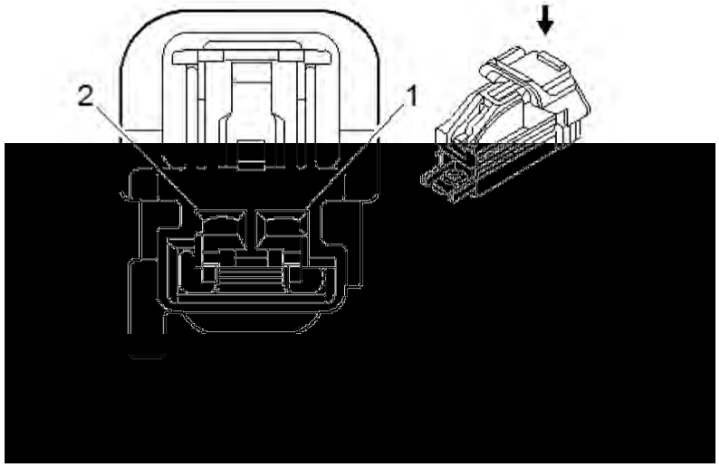
B88P Seat Belt Switch – Passenger

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG/VT	1362	Passenger Seat Belt Switch Signal	I	—
2	0.5	BK/OG	1361	Passenger Seat Belt Switch Low Reference	I	—

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B88RR Seat Belt Switch - Right Rear (UH5)



Connector Part Information

- Harness Type: Body
- OEM Connector: 7283-6443-40
- Service Connector: 88988504
- Description: 2-Way F 1.5 YESC Series (L-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

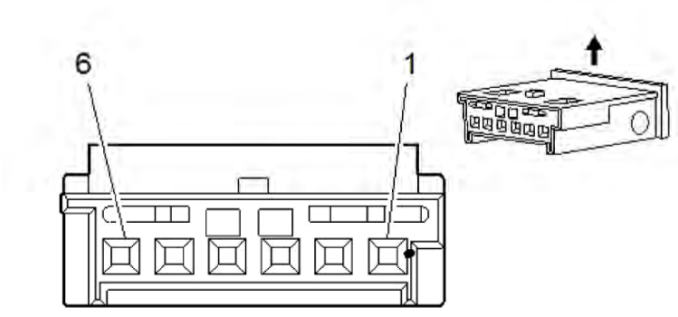
B88RR Seat Belt Switch - Right Rear (UH5)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN/OG	5162	Right Rear Seat Belt Switch Signal	I	-
2	0.5	BK/OG	1361	Passenger Seat Belt Switch Low Reference	I	-

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B99 Steering Wheel Angle Sensor





Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 19151551
- Service Connector: 13505903
- Description: 6-Way F Micro Quadlok Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

B99 Steering Wheel Angle Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	WH	6106	High Speed GMLAN Serial Data (-) (2)	I	-
2	0.35	WH	6106	High Speed GMLAN Serial Data (-) (2)	I	-
3	0.35	BU/YE	6105		I	-

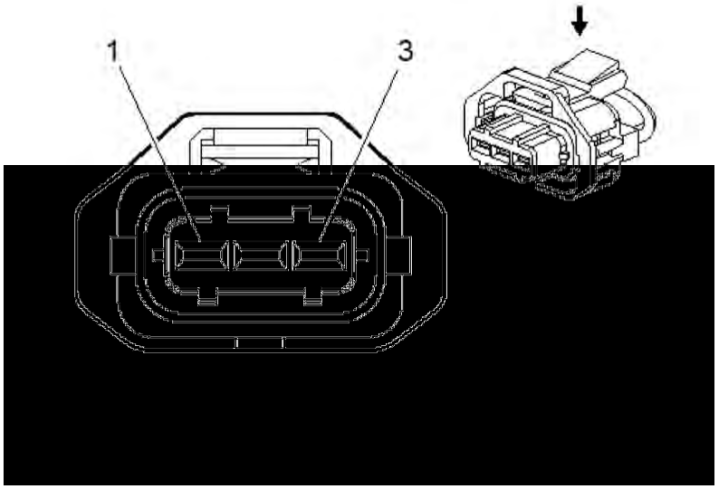
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				High Speed GMLAN Serial Data (+) (2)		
4	0.35	BU/YE	6105	High Speed GMLAN Serial Data (+) (2)	I	-
5	0.5	GN/BN	2087	Combined Vehicle Inertial Sensor Supply Voltage	I	-
6	0.35 0.35	BK BK	1350 1450	Ground Ground	I	LHD RHD

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B105 Supercharger Inlet Pressure Sensor (LSA)



Connector Part Information

- Harness Type: Fuel Injector Odd
- OEM Connector: 89047242
- Service Connector: Service by Harness – See Part Catalog
- Description: 3-Way F Kompakt 2.8 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	J-38125-561

B105 Supercharger Inlet Pressure Sensor (LSA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	YE/BK	7124	Super Charger Inlet Air Pressure Sensor Supply Voltage 5V	I	—
2	0.75	BN/GN	7125	Super Charger Inlet Air Pressure Sensor Return	I	—
2	0.75	BN	7123		I	—

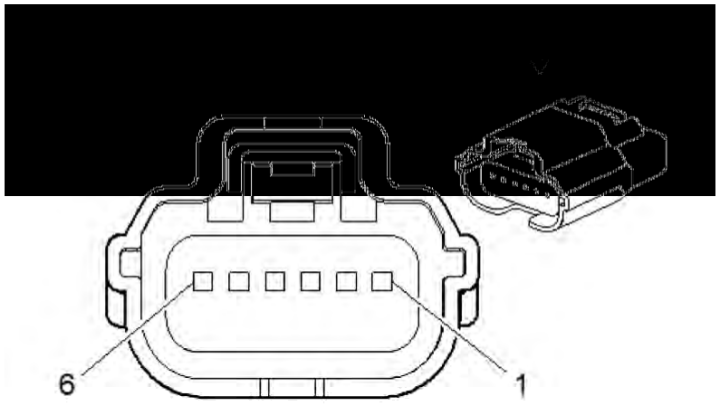
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Super Charger Inlet Air Pressure Sensor Signal		

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B107 Accelerator Pedal Position Sensor



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Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 88988771
- Service Connector: 13577043
- Description: 6-Way F 64 Series, Sealed BK

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

B107 Accelerator Pedal Position Sensor

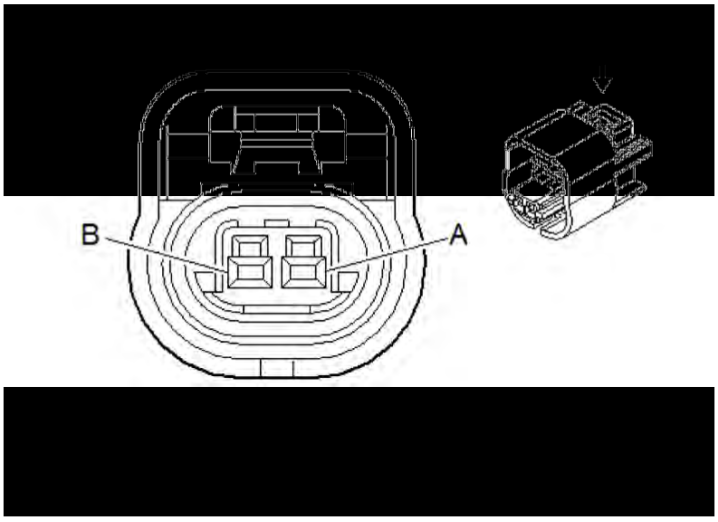
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BN/RD	1274	Accelerator Pedal Position 5 Volt Reference (2)	I	-
2	0.35	GN/WH	1162	Accelerator Pedal Position Signal (2)	I	-
3	0.35	BK/VT	1272		I	-

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Accelerator Pedal Position Low Reference (2)		
4	0.35	BK/BU	1271	Accelerator Pedal Position Low Reference (1)	I	-
5	0.35	YE/WH	1161	Accelerator Pedal Position Signal (1)	I	-
6	0.35	WH/RD	1164	Accelerator Pedal Position 5 Volt Reference (1)	I	-

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B115 Vehicle Speed Sensor (MER/MG9)



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Connector Part Information

- Harness Type: Engine
- OEM Connector: 15336004
- Service Connector: 19178093
- Description: 2-Way F GT 150 Series, Sealed (BK)

Terminal Part Information

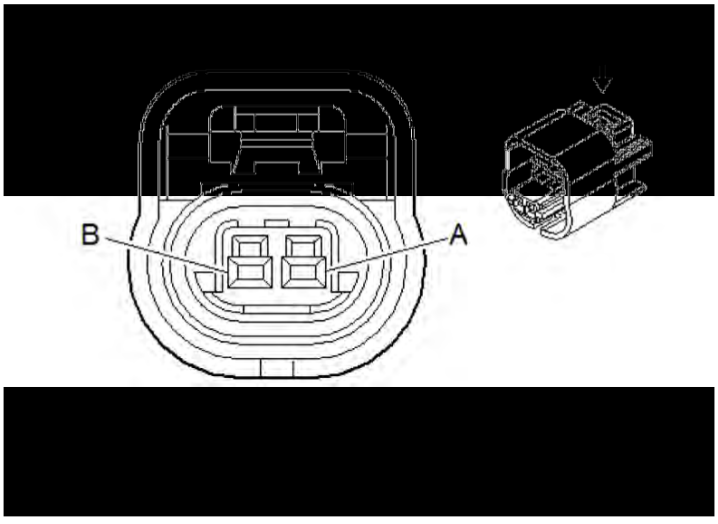
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Pending	J-35616-2A (GY)	J-38125-553

B115 Vehicle Speed Sensor (MER/MG9)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	WH/PU	6356	Output Speed Low Signal	I	—
B	0.5	GY/BK	6355	Output Speed High Signal Output	I	—

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B115 Vehicle Speed Sensor (MV5)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 15336004
- Service Connector: 19178093
- Description: 2-Way F 150 GT Series, Sealed BK

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

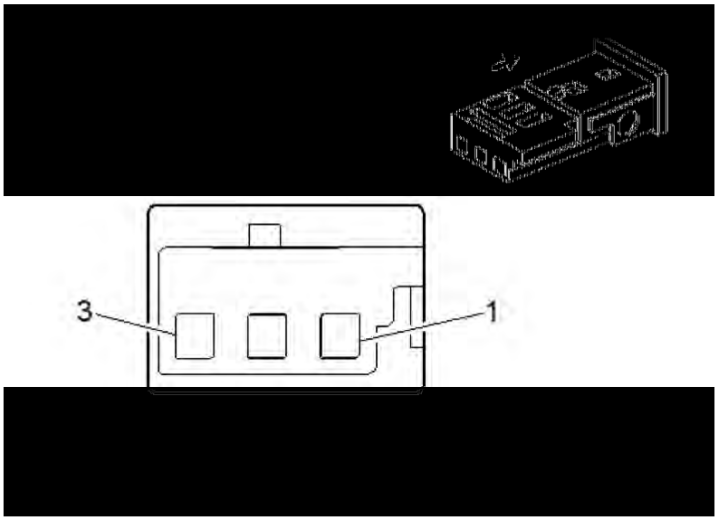
B115 Vehicle Speed Sensor (MV5)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	WH/VT	6356	Output Speed Low Signal	I	-
B	0.5	GY/BK	6355	Output Speed High Signal Output	I	-

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B117 Rain Sensor (CE1)



Connector Part Information

- Harness Type: Rain Sensor
- OEM Connector: 13153088
- Service Connector: Service by Harness - See Part Catalog
- Description: 3-Way F 0.64 Micro-Quadlock Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

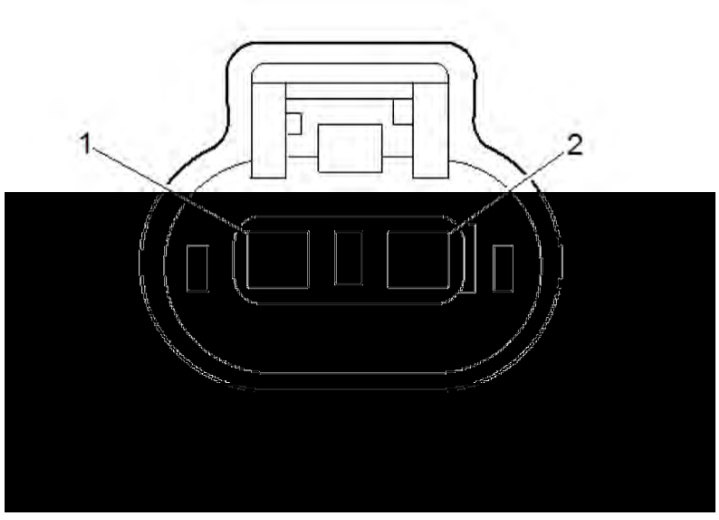
B117 Rain Sensor (CE1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	RD/VT	1440	Battery Positive Voltage	I	—
2	0.35	GN/BN	6132	Local Interconnect Network Bus 1	I	—
3	0.35	BK	2250	Ground	I	—

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B118B Windshield Washer Fluid Level Switch (T3T)



Connector Part Information

- Harness Type: Forward Lamp
- OEM Connector: PB625-02027
- Service Connector: 13576998
- Description: 2-Way F 1.8 Series, Sealed BK

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

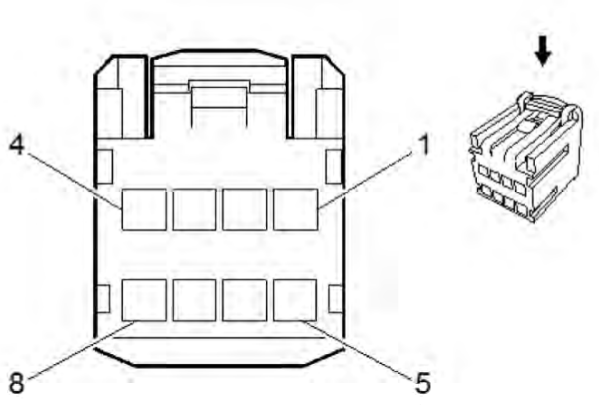
B118B Windshield Washer Fluid Level Switch (T3T)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	BK	650	Ground	I	-
B	0.35	VT	185	Low Washer Fluid Indicator Control	I	-

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B137 Power Steering Shaft Torque Sensor



Connector Part Information

- Harness Type: Power Steering Shaft Torque Sensor
- OEM Connector: 965382-2
- Service Connector: Service by Harness - See Part Catalog
- Description: 8-Way F (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-16 (L-GN)	J-38125-553

B137 Power Steering Shaft Torque Sensor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN/RD	6631	Torque Input Sensor High Reference	I	—
2-3	—	—	—	Not Occupied	—	—
4	0.5	BK/BU	6632	Torque Input Sensor Low Reference	I	—

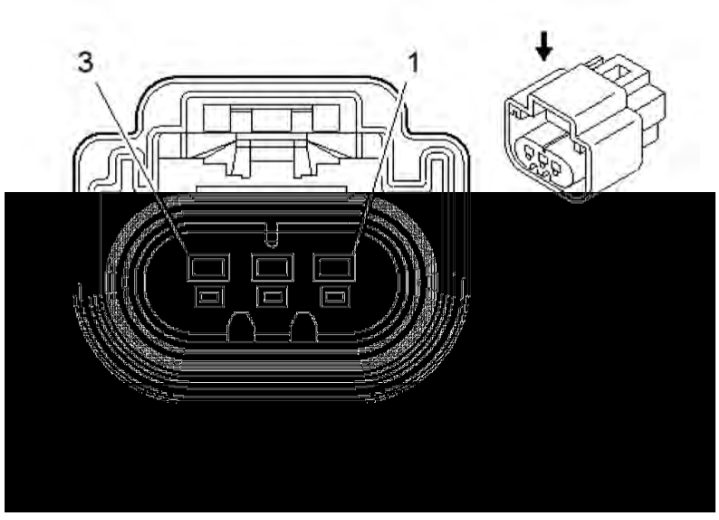
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
5	0.5	BN/RD	6631	Torque Input Sensor High Reference	I	—
6	0.5	BU/GY	6633	Torque Input Sensor Signal	I	—
7	0.5	BU/GY	6633	Torque Input Sensor Signal	I	—
8	0.5	BK/GY	6632	Torque Input Sensor Low Reference	I	—

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B152LF Suspension Position Sensor - Left Front (F55)



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Connector Part Information

- Harness Type: Front Suspension
- OEM Connector: 88988720
- Service Connector: Service by Harness – See Part Catalog
- Description: 3-Way F GT 150 Series, Sealed (GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	J-38125-553

B152LF Suspension Position Sensor - Left Front (F55)

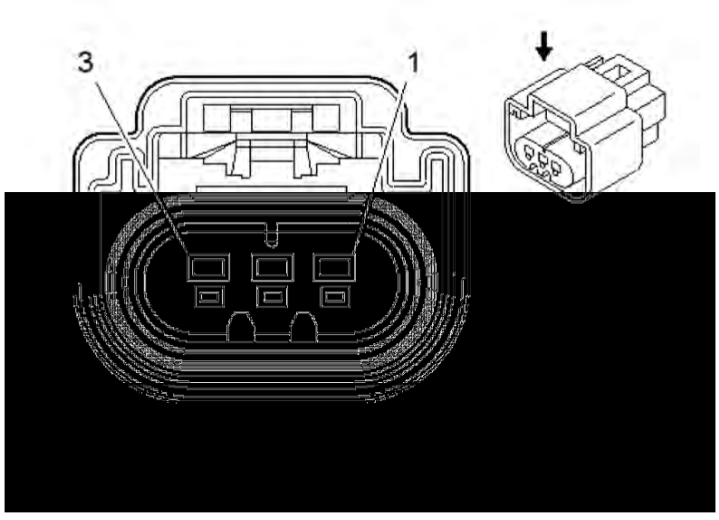
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BU/RD	1205	Left Front Strut Position Sensor Voltage Reference	I	—
2	0.35	BN/WH	1207	Left Front Strut Position Sensor Signal	I	—
3	0.35	BK/BU	1206		I	—

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Left Front Strut Position Sensor Low Reference		

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B152LR Suspension Position Sensor – Left Rear (F55)



Connector Part Information

- Harness Type: Rear Suspension
- OEM Connector: 88988720
- Service Connector: Service by Harness – See Part Catalog
- Description: 3-Way F GT 150 Series, Sealed (GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	J-38125-553

B152LR Suspension Position Sensor – Left Rear (F55)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	YE/RD	1208	Left Rear Strut Position Sensor Voltage Reference	I	—
2	0.35	GN/WH	1210	Left Rear Strut Position Sensor Signal	I	—
3	0.35	BK/GN	1209		I	—

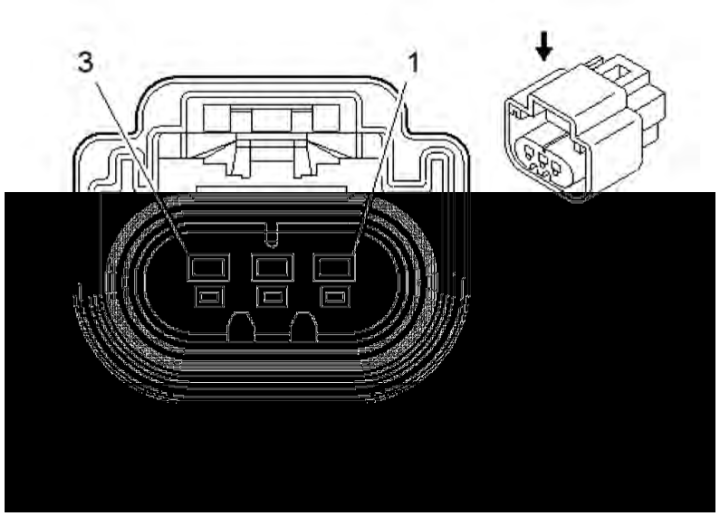
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Left Rear Strut Position Sensor Low Reference		

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B152RF Suspension Position Sensor - Right Front (F55)



Connector Part Information

- Harness Type: Front Suspension
- OEM Connector: 88988720
- Service Connector: Service by Harness – See Part Catalog
- Description: 3-Way F GT 150 Series, Sealed (GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	J-38125-553

B152RF Suspension Position Sensor - Right Front (F55)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1		BN/RD	1211	Right Front Strut Position Sensor Voltage Reference	I	—
2	0.35	YE/WH	1213	Right Front Strut Position Sensor Signal	I	—
3	0.35	BK/GY	1212		I	—

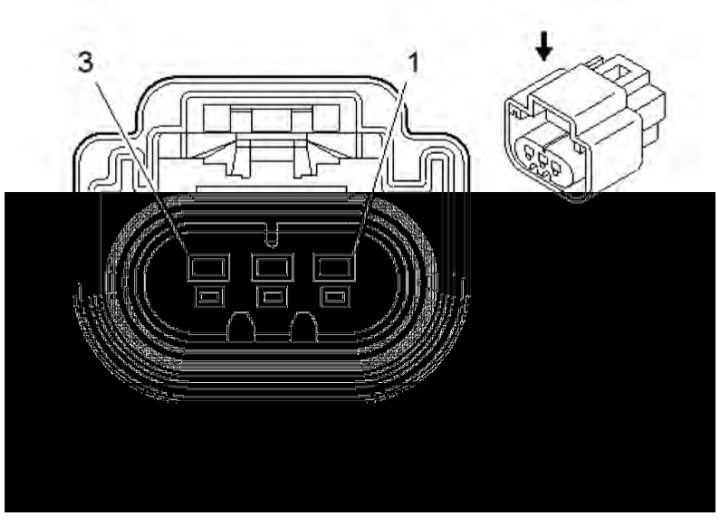
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Right Front Strut Position Sensor Low Reference		

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B152RR Suspension Position Sensor – Right Rear (F55)



Connector Part Information

- Harness Type: Rear Suspension
- OEM Connector: 88988720
- Service Connector: Service by Harness – See Part Catalog
- Description: 3-Way F GT 150 Series, Sealed (GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	J-38125-553

B152RR Suspension Position Sensor – Right Rear (F55)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GN/RD	1214	Right Rear Strut Position Sensor Voltage Reference	I	—
2	0.35	GN/GY	1216	Right Rear Strut Position Sensor Signal	I	—
3	0.35	BK/YE	1215		I	—

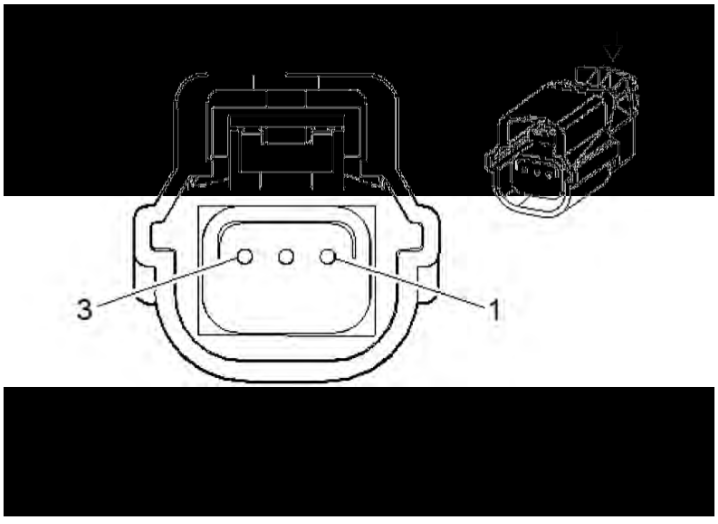
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Right Rear Strut Position Sensor Low Reference		

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B166LF Advance Parking Assist Side Object Sensor Left Front



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Connector Part Information

- Harness Type: Front Fascia
- OEM Connector: 19115171
- Service Connector: Service by Harness - See Part Catalog
- Description: 3-Way F 0.64 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

B166LF Advance Parking Assist Side Object Sensor Left Front

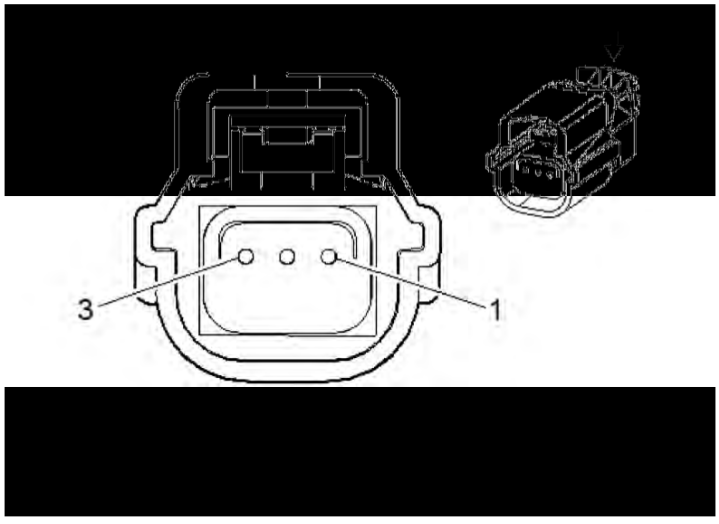
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BN	6581	Front Parking Aid Display Supply Voltage	I	-
2	0.35	GY	3154	Left Front Supplemental Object Sensor Signal	I	-
3	0.35	BK/BU	5214		I	-

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Front Parking Sensor Low Reference		

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B166RF Advance Parking Assist Side Object Sensor Right Front



Connector Part Information

- Harness Type: Front Fascia
- OEM Connector: 19115171
- Service Connector: Service by Harness - See Part Catalog
- Description: 3-Way F 0.64 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

B166RF Advance Parking Assist Side Object Sensor Right Front

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BN	6581	Front Parking Aid Display Supply Voltage	I	-
2	0.35	GN	3155	Right Front Supplemental Object Sensor Signal	I	-
3	0.35	BK/BU	5214		I	-

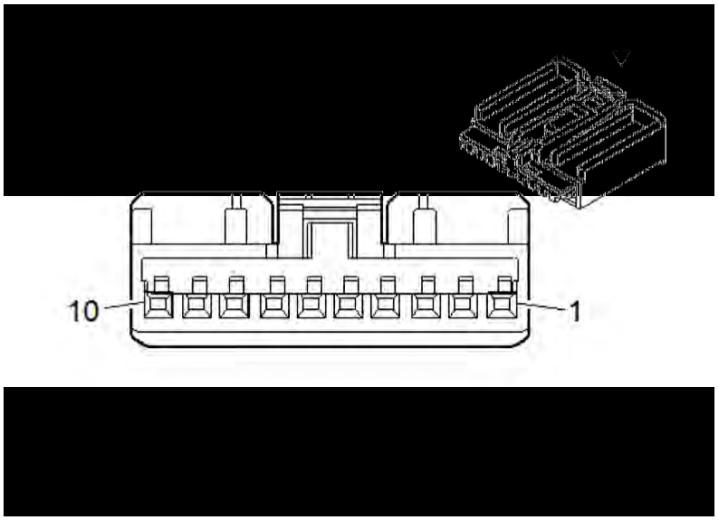
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Front Parking Sensor Low Reference		

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B174 Frontview Camera (UFL/UEU)



Connector Part Information

- Harness Type: Headliner
- OEM Connector: 15269795
- Service Connector: 13576634
- Description: 10-Way F AIT II Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19303550	J-35616-35 (VT)	J-38125-36

B174 Frontview Camera (UFL/UEU)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	2250	Ground	I	—
2	—	—	—	Not Occupied	—	—
3	0.35	RD/GN	3840	Battery Positive Voltage	I	—
4	0.35	WH	3152		I	—

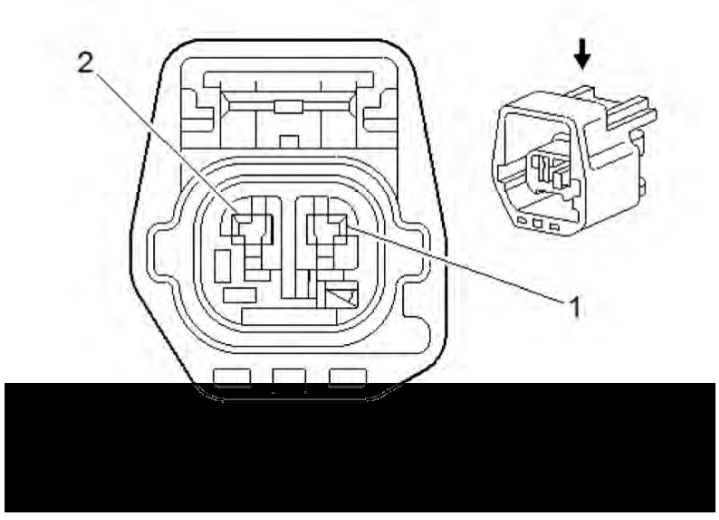
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Lane Departure Warning Indicator Control		
5-6	—	—	—	Not Occupied	—	—
7	0.35	GN	5060	Low Speed GMLAN Serial Data	I	—
8-10	—	—	—	Not Occupied	—	—

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B189 LPG Level Sensor (LWR)



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Connector Part Information

- Harness Type: Fuel Tank
- OEM Connector: 7283-5548-30
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F YESC Weather Pack (BK)

Terminal Part Information

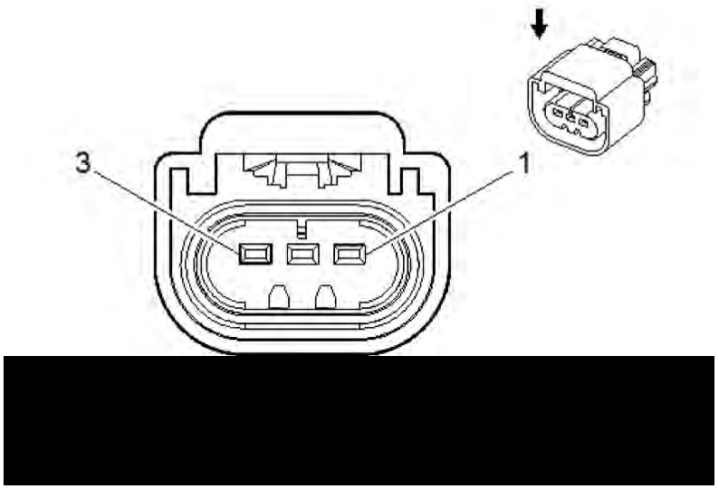
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

B189 LPG Level Sensor (LWR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK/GN	6281	Fuel Level Sensor Low Reference	I	—
2	0.5	BU/VT	1589	Primary Fuel Level Sensor Signal	I	—

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B198 Fuel Composition Sensor (LFW/LFX/L77)



Connector Part Information

- Harness Type: Fuel Tank
- OEM Connector: 19168017
- Service Connector: Service by Harness – See Part Catalog
- Description: 3-Way F GT150 Series, Sealed

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

B198 Fuel Composition Sensor (LFW/LFX/L77)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT/BU	5294	Powertrain Main Relay Fused Supply (5)	I	—
2	0.5	BK/WH	451	Signal Ground	I	—
2	0.5	WH	1579	Fuel Temperature/Composition Signal	I	—

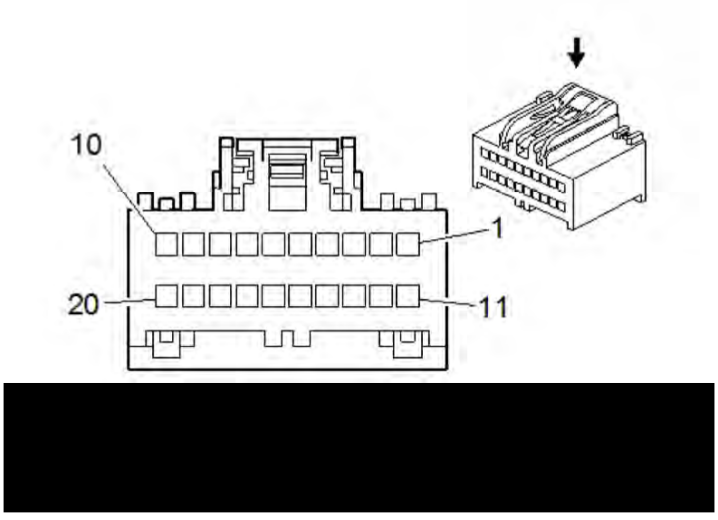
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option

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B218L Side Object Sensor Module - Left (UFT)



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Connector Part Information

- Harness Type: Rear Fascia
- OEM Connector: 13579653
- Service Connector: Service by Harness - See Part Catalog
- Description: 8-Way F 0.64 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-64B (L-BU)	Not Available

B218L Side Object Sensor Module - Left (UFT)

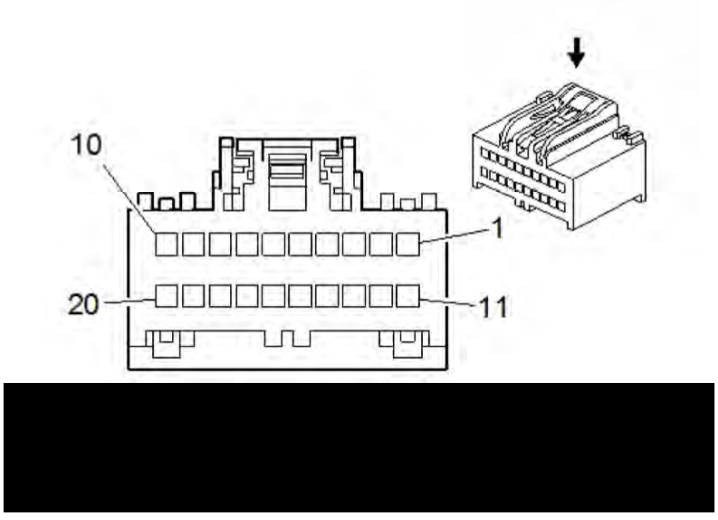
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	-	-	-	Not Occupied	-	-
2	0.35	GN	5060	Low Speed GMLAN Serial Data	I	-
3	-	-	-	Not Occupied	-	-
4	0.35	GY	5861		I	-

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Passenger Side Object Detection LED Signal (1)		
5	0.5	RD/GN	3840	Battery Positive Voltage	I	-
6	-	-	-	Not Occupied	-	-
7	0.35	GN	5060	Low Speed GMLAN Serial Data	I	-
8	0.5	BK	2550	Ground	I	-

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B218R Side Object Sensor Module - Right (UFT)



Connector Part Information

- Harness Type: Rear Fascia
- OEM Connector: 13579654
- Service Connector: Service by Harness - See Part Catalog
- Description: 8-Way F 0.64 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-64B (L-BU)	Not Available

B218R Side Object Sensor Module - Right (UFT)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1-2	-	-	-	Not Occupied	-	-
3	0.5	BK	2550	Ground	I	-
4	0.35	GY/YE	5853	Driver Side Object Detection LED Signal (1)	I	-

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
5	0.5	RD/GN	3840	Battery Positive Voltage	I	-
6	-	-	-	Not Occupied	-	-
7	0.35	GN	5060	Low Speed GMLAN Serial Data	I	-
8	0.5	BK	2550	Ground	I	-

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C1 Battery

Connector Part Information

- Harness Type: Battery Positive
- OEM Connector: 13297452
- Service Connector: Service by Harness – See Part Catalog
- Description: Battery Positive

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	No Tool Required – Ring Terminal	No Tool Required – Ring Terminal

C1 Battery

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5 0.50	BK BK	350 350	Ground Ground	I	LWD/L2Z/LDD -KL9 LWD/L2Z/LDD -KL9

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C1 Battery (-)

Connector Part Information

- Harness Type: Negative Battery
- OEM Connector: 09130524
- Service Connector: Service by Harness - See Part Catalog
- Description:

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	No Tool Required – Ring Terminal	No Tool Required – Ring Terminal

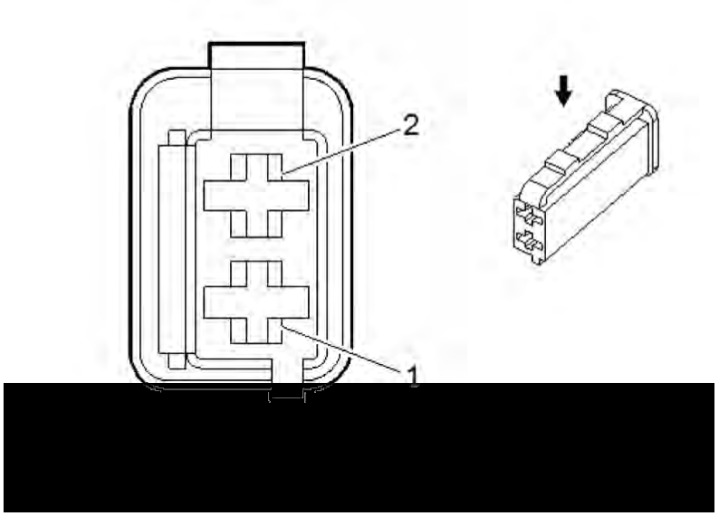
C1 Battery (-)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A-W	-	-	-	Not Occupied	-	-
X	25	BK	150	Ground	I	-

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E1E Accent Lamp - Left Rear Door Handle



Connector Part Information

- Harness Type: Left Rear Door
- OEM Connector: 19179871
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 1.6 Timer Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

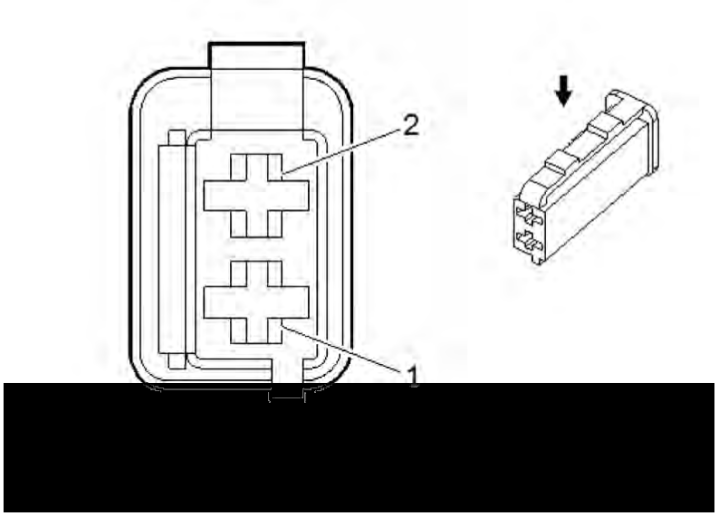
E1E Accent Lamp - Left Rear Door Handle

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	WH/YE	7557	LED Ambient Lighting Control 1	I	-
2	0.35	BK	2150	Ground	I	-

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E1F Accent Lamp - Right Rear Door Handle



Connector Part Information

- Harness Type: Right Rear Door
- OEM Connector: 19179871
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 1.6 Timer Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

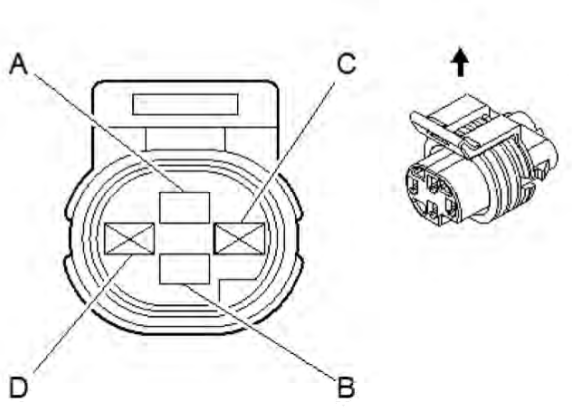
E1F Accent Lamp - Right Rear Door Handle

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	WH/YE	7557	LED Ambient Lighting Control 1	I	-
2	0.35	BK	2250	Ground	I	-

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E4AC Park/Daytime Running Lamp - Left (V5B)



Connector Part Information

- Harness Type: Front Fascia
- OEM Connector: 13577106
- Service Connector: Service by Harness - See Part Catalog
- Description: 3-Way F

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

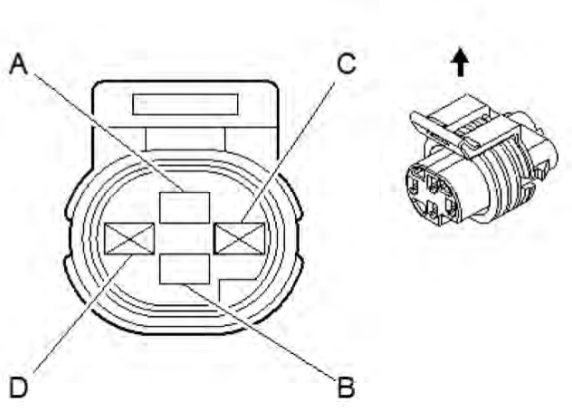
E4AC Park/Daytime Running Lamp - Left (V5B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT/GN	359	DRL Supply Voltage	I	—
2	0.5	BK	550	Ground	I	—
3	0.5	VT/GY	709	Left Park Lamp Supply Voltage	I	—

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E4AD Park/Daytime Running Lamp - Right (V5B)



Connector Part Information

- Harness Type: Front Fascia
- OEM Connector: 13577106
- Service Connector: Service by Harness - See Part Catalog
- Description: 3-Way F

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

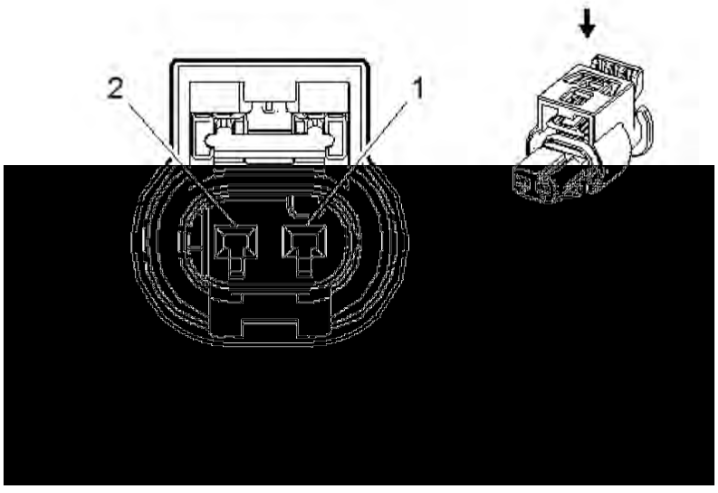
E4AD Park/Daytime Running Lamp - Right (V5B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT/GN	359	DRL Supply Voltage	I	—
2	0.5	BK	650	Ground	I	—
3	0.5	GY/BN	309	Right Park Lamp Supply Voltage	I	—

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E4C Daytime Running Lamp - Left (T3N)



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Connector Part Information

- Harness Type: Front Fascia
- OEM Connector: 55564248
- Service Connector: Service by Harness - See part Catalog
- Description: 2-Way F 1.2 MLK Series, Sealed BK

Terminal Part Information

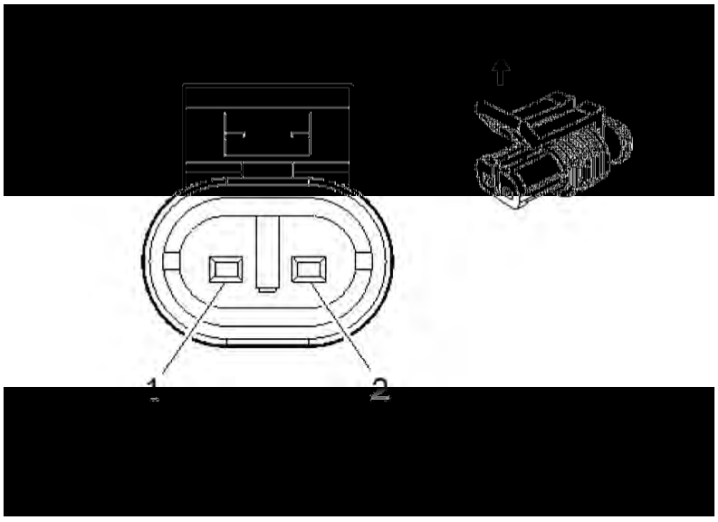
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

E4C Daytime Running Lamp - Left (T3N)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT/GN	359	DRL Supply Voltage	I	-
2	0.5	BK	550	Ground	I	-

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E4C Daytime Running Lamp - Left (V5B)



Connector Part Information

- Harness Type: Front Fascia
- OEM Connector: 282080-1
- Service Connector: Service by Harness – See Part Catalog
- Description: 2-Way F 1.5 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

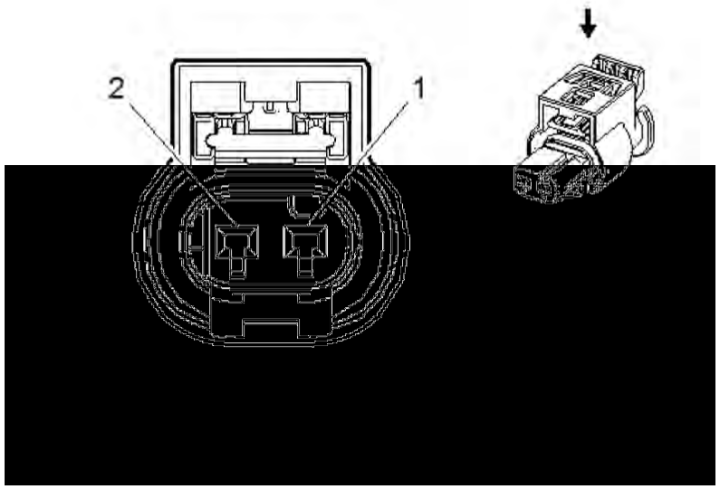
E4C Daytime Running Lamp - Left (V5B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	550	Ground	I	—
2	0.5	VT/GN	359	DRL Supply Voltage	I	—

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E4D Daytime Running Lamp - Right (T3N)



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Connector Part Information

- Harness Type: Front Fascia
- OEM Connector: 55564248
- Service Connector: Service by Harness - See part Catalog
- Description: 2-Way F 1.2 MLK Series, Sealed BK

Terminal Part Information

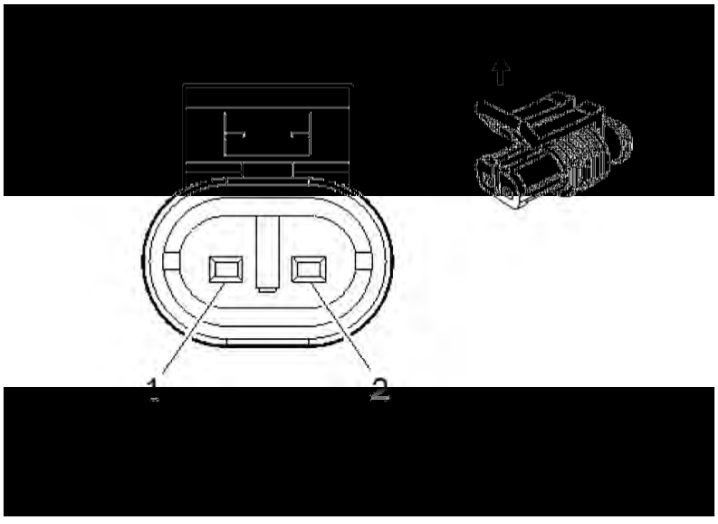
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

E4D Daytime Running Lamp - Right (T3N)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT/GN	359	DRL Supply Voltage	I	-
2	0.5	BK	650	Ground	I	-

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E4D Daytime Running Lamp - Right (V5B)



Connector Part Information

- Harness Type: Front Fascia
- OEM Connector: 282080-1
- Service Connector: Service by Harness – See Part Catalog
- Description: 2-Way F 1.5 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

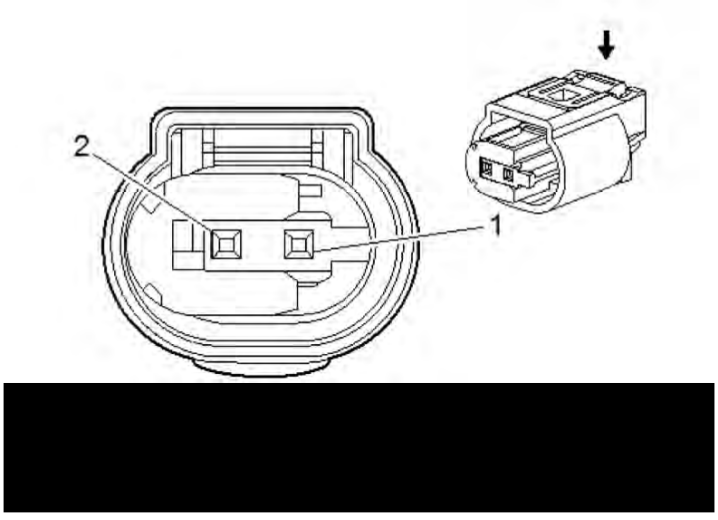
E4D Daytime Running Lamp - Right (V5B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	650	Ground	I	—
2	0.5	VT/GN	359	DRL Supply Voltage	I	—

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E4Y Turn Signal Repeater Lamp – Left



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Connector Part Information

- Harness Type: Body
- OEM Connector: 1-967644-1
- Service Connector: 13576533
- Description: 2-Way F 0.64 Micro Quadlock Series, Sealed BK with GN Terminal Position Assurance

Terminal Part Information

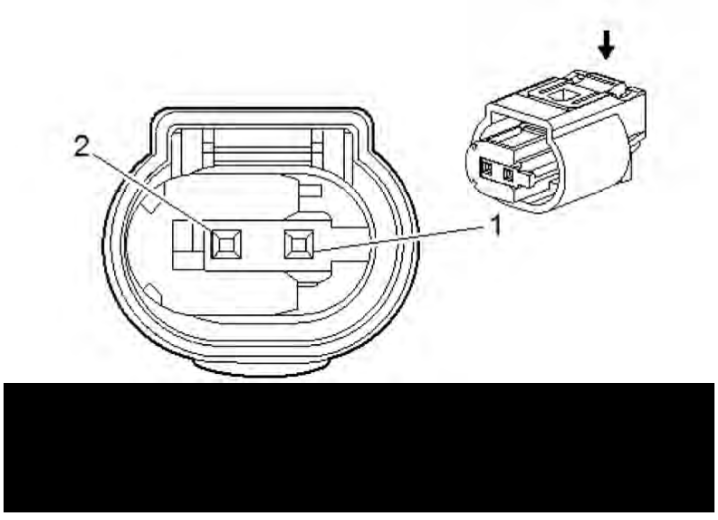
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-64B (L-BU)	J-38125-12A

E4Y Turn Signal Repeater Lamp – Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	2150	Ground	I	-
2	0.5	BU/WH	1314	Left Front Turn Signal Lamp Supply Voltage	I	-

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E4Z Turn Signal Repeater Lamp – Right



Connector Part Information

- Harness Type: Body
- OEM Connector: 1-967644-1
- Service Connector: 13576533
- Description: 2-Way F 0.64 Micro Quadlock Series, Sealed BK with GN Terminal Position Assurance

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-64B (L-BU)	J-38125-12A

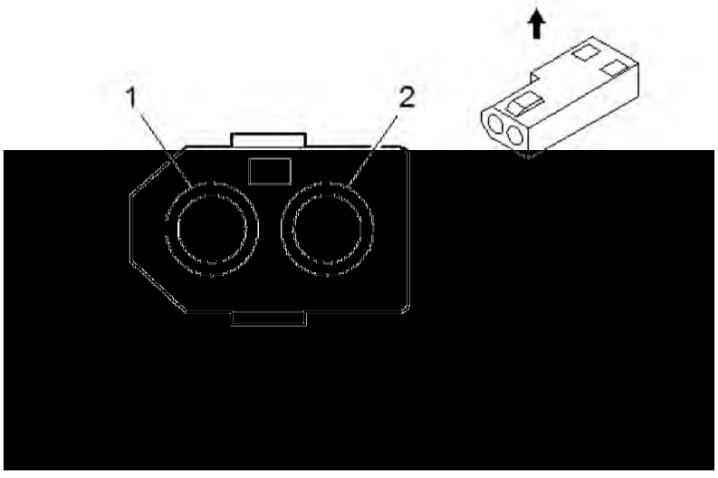
E4Z Turn Signal Repeater Lamp – Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	2250	Ground	I	-
2	0.5	GN/VT	1315	Right Front Turn Signal Lamp Supply Voltage	I	-

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E6 Center High Mounted Stop Lamp



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Connector Part Information

- Harness Type: Body
- OEM Connector: 03-06-1023
- Service Connector: 12102670
- Description: 2-Way F (NA)
- Harness Type: Right Liftgate
- OEM Connector: 03-06-1023
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F (NA)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

E6 Center High Mounted Stop Lamp

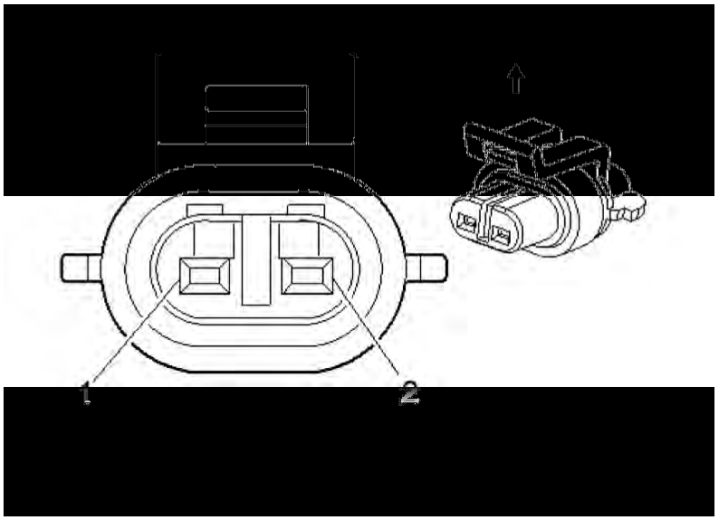
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT/WH	5065	Stop Lamp Relay Coil Supply Voltage	I	-
2	0.5	BK	2350	Ground	I	-

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
	0.5	BK	2850	Ground		

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E7L License Plate Lamp – Left



Connector Part Information

- Harness Type: Rear Fascia
- OEM Connector: 90565978
- Service Connector: Service by Harness - See part Catalog
- Description: 2-Way F 150 GT Series, Sealed BK

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	Not Available

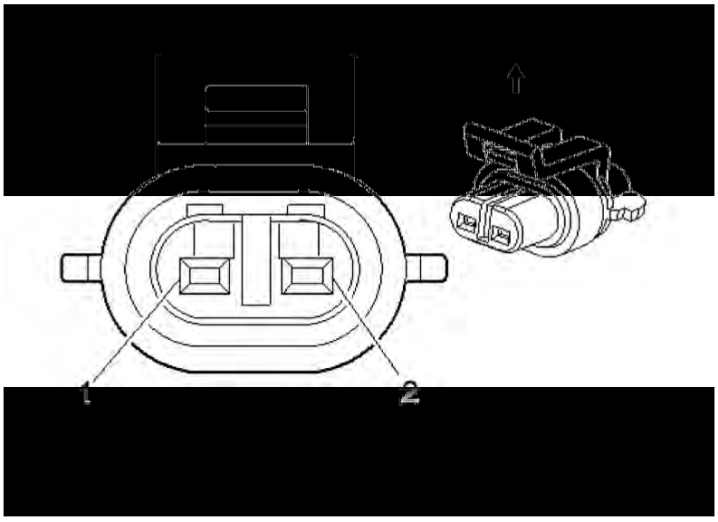
E7L License Plate Lamp – Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GN/YE	6846	Rear License Lamp Supply Voltage	I	-
2	0.35	BK	2550	Ground	I	-

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E7R License Plate Lamp – Right



Connector Part Information

- Harness Type: Rear Fascia
- OEM Connector: 90565978
- Service Connector: Service by Harness - See part Catalog
- Description: 2-Way F 150 GT Series, Sealed BK

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	Not Available

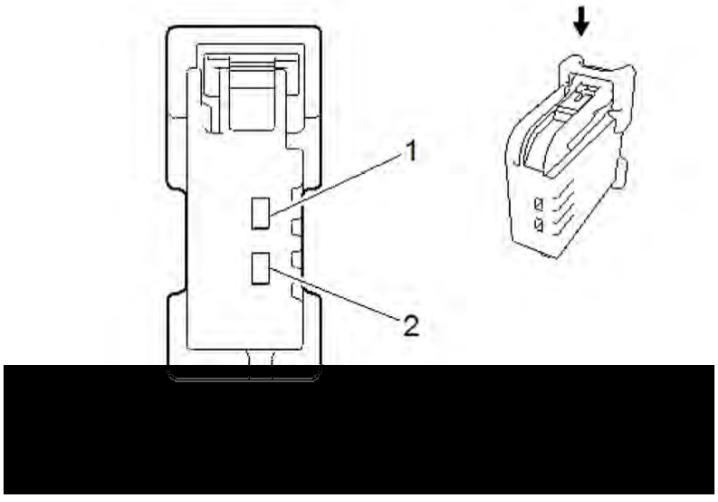
E7R License Plate Lamp – Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GN/YE	6846	Rear License Lamp Supply Voltage	I	-
2	0.35	BK	2550	Ground	I	-

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E8D Door Courtesy Lamp – Driver (C90)



Connector Part Information

- Harness Type: Driver Door Trim
- OEM Connector: 19115613
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 0.64, 1.5 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	Not Available

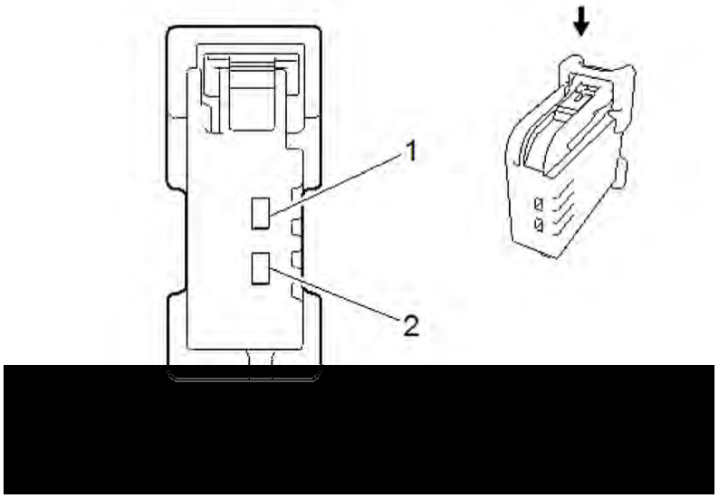
E8D Door Courtesy Lamp – Driver (C90)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY	157	Interior Lamp Control	I	-
2	0.5 0.5	BK BK	2250 2150	Ground Ground	I	RHD LHD

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E8J Instrument Panel Courtesy Lamp – Left (U29)



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 19115613
- Service Connector: 13584097
- Description: 2-Way F 0.64, 1.5 Series BK

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	J-38125-553

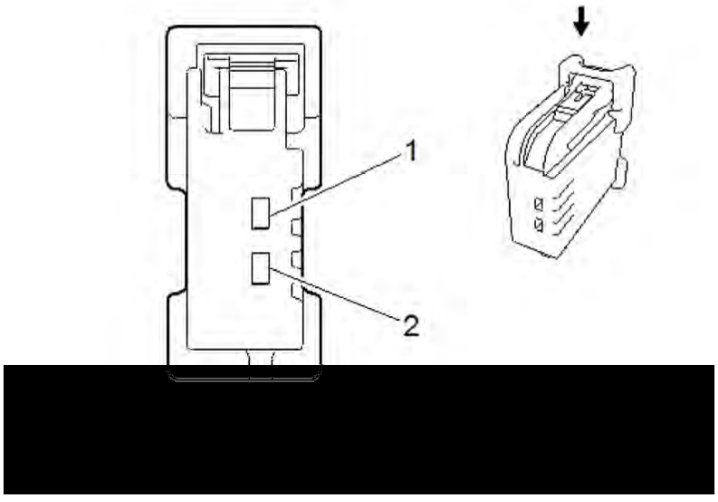
E8J Instrument Panel Courtesy Lamp – Left (U29)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY	157	Interior Lamp Control	I	-
2	0.5	BK	1350	Ground	I	-

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E8K Instrument Panel Courtesy Lamp – Right (U29)



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 19115613
- Service Connector: 13584097
- Description: 2-Way F 0.64, 1.5 Series BK

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	J-38125-553

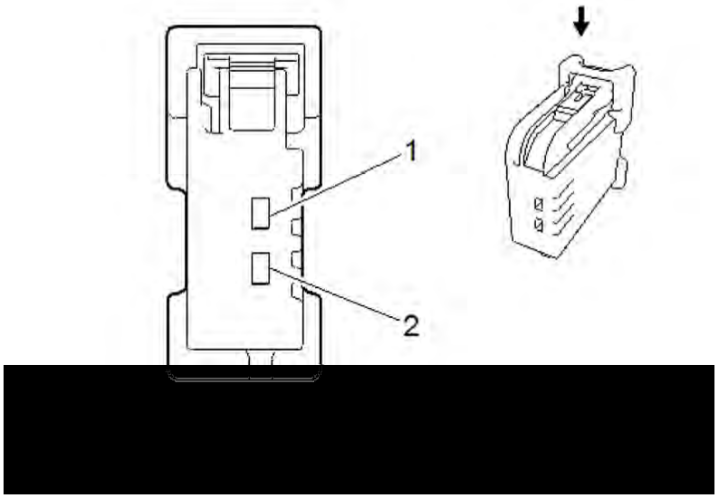
E8K Instrument Panel Courtesy Lamp – Right (U29)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY	157	Interior Lamp Control	I	-
2	0.5	BK	1450	Ground	I	-

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E8LR Door Courtesy Lamp – Left Rear (C90)



Connector Part Information

- Harness Type: Left Rear Door
- OEM Connector: 19115613
- Service Connector: Service by Harness - See part Catalog
- Description: 2-Way F 1.5/0.64 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	Not Available

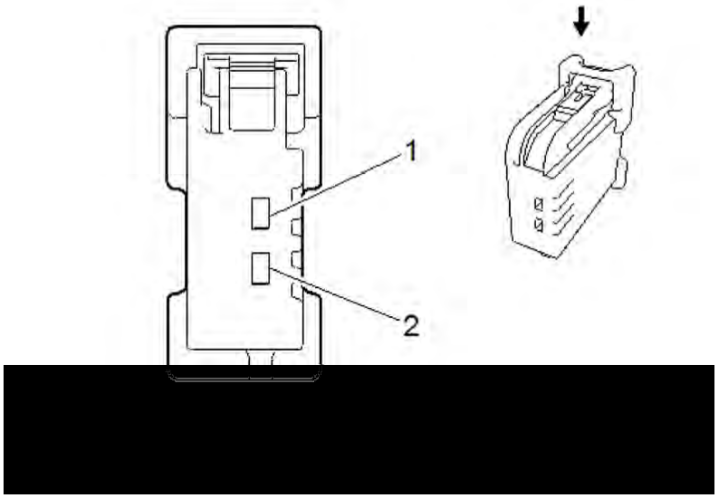
E8LR Door Courtesy Lamp – Left Rear (C90)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY	157	Interior Lamp Control	I	—
2	0.5	BK	2150	Ground	I	—

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E8P Door Courtesy Lamp – Passenger (C90)



Connector Part Information

- Harness Type: Passenger Door Trim
- OEM Connector: 19115613
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 0.64, 1.5 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	Not Available

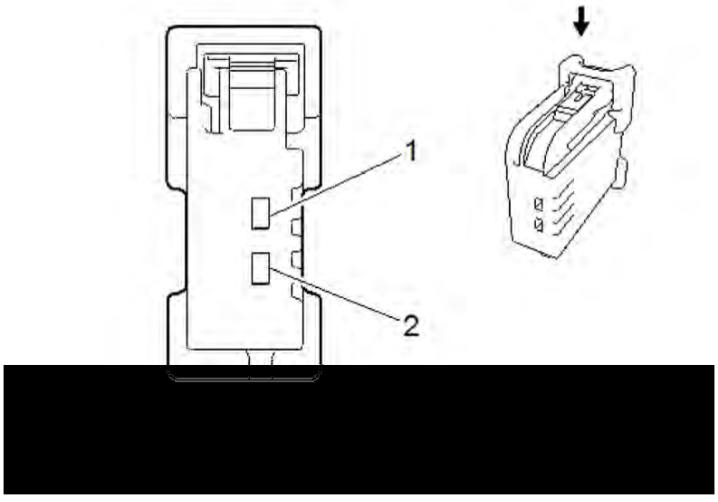
E8P Door Courtesy Lamp – Passenger (C90)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY	157	Interior Lamp Control	I	-
2	0.5	BK	2250	Ground	I	-

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E8RR Door Courtesy Lamp – Right Rear (C90)



Connector Part Information

- Harness Type: Right Rear Door
- OEM Connector: 19115613
- Service Connector: Service by Harness - See part Catalog
- Description: 2-Way F 0.64, 1.5 Series BK

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	Not Available

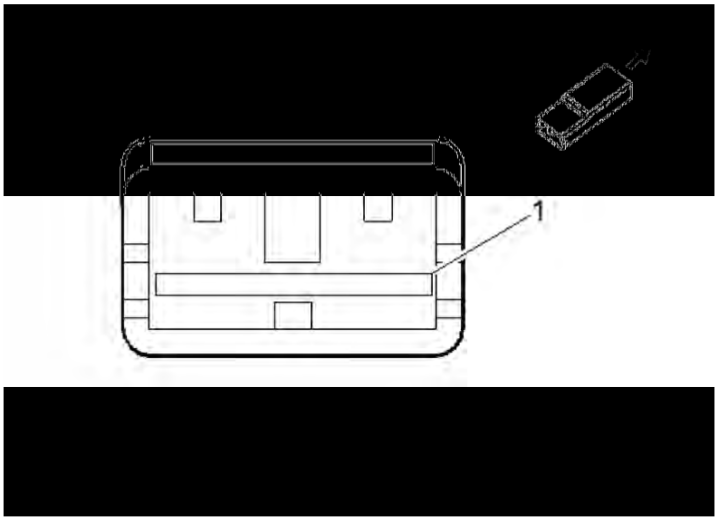
E8RR Door Courtesy Lamp – Right Rear (C90)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY	157	Interior Lamp Control	I	-
2	0.5	BK	2250	Ground	I	-

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E8S Rear Compartment Courtesy Lamp X1 (F19/F35/F69)



Connector Part Information

- Harness Type: Body
- OEM Connector: 1-1661612-0
- Service Connector: 19119430
- Description: 1-Way F 6.3 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

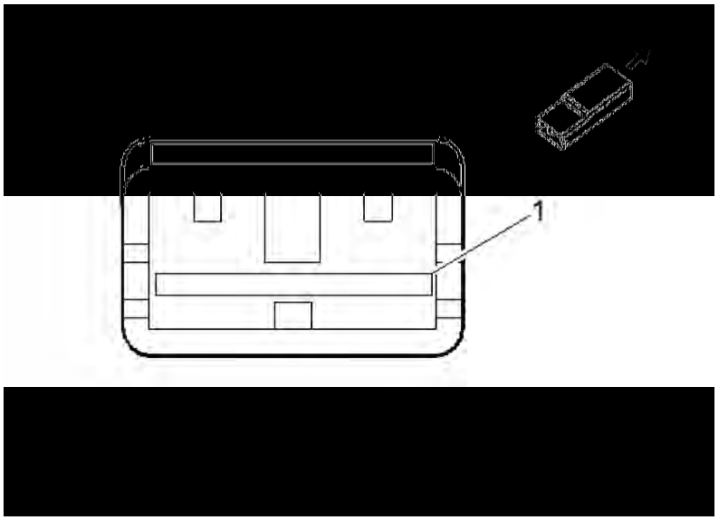
E8S Rear Compartment Courtesy Lamp X1 (F19/F35/F69)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	GN/GY	737	Trunk Lamp Control	I	—

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E8S Rear Compartment Courtesy Lamp X2 (F19/F35/F69)



Connector Part Information

- Harness Type: Body
- OEM Connector: 1-1661612-0
- Service Connector: 19119430
- Description: 1-Way F 6.3 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

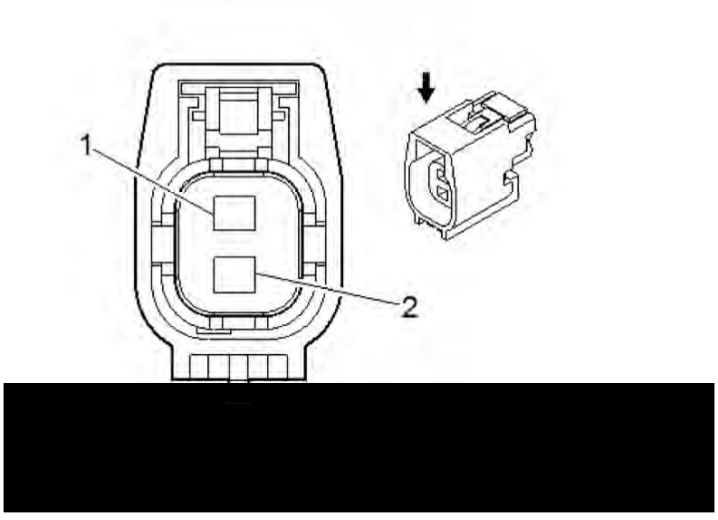
E8S Rear Compartment Courtesy Lamp X2 (F19/F35/F69)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5 0.5	BK BK	2350 2650	Ground Ground	I	F19 or F69 F35

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E8S Rear Compartment Courtesy Lamp (F80 with E95)



Connector Part Information

- Harness Type: Tonneau Release
- OEM Connector: 6180-2321
- Service Connector: TBD
- Description: 2-Way F (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	TBD	—	—

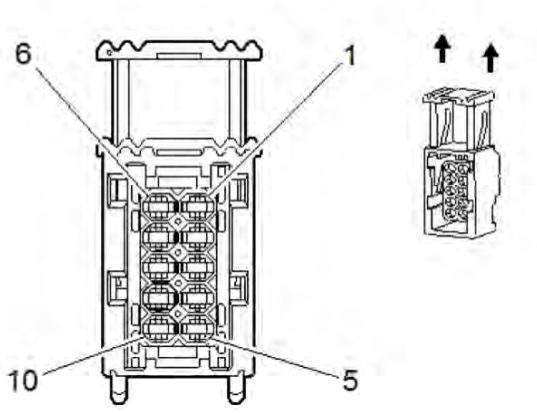
E8S Rear Compartment Courtesy Lamp (F80 with E95)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN/GY	737	Rear Compartment Lamp Control	I	—
2	0.5	BK	2450	Ground	I	—

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E13L Headlamp - Left



Connector Part Information

- Harness Type: Forward Lamp
- OEM Connector: 1-1967189-1
- Service Connector: 88988927
- Description: 10-Way F 2.8 Junior Power Timer Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575415	J-35616-35 (VT)	J-38125-36

E13L Headlamp - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	550	Ground	I	-
2	1	BK	550	Ground	I	-
3	0.35	BK	550	Ground	I	Without T3T

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4-5	-	-	-	Not Occupied	-	-
6	0.35	VT/GY	709	Left Park Lamp Supply Voltage	I	-
7	0.75	YE	712	Left Headlamp Low Beam Supply Voltage	I	-
8	0.35	WH	711	Left Headlamp High Beam Supply Voltage	I	-
9	0.5	BU/WH	1314	Left Front Turn Signal Lamp Supply Voltage	I	-
10	-	-	-	Not Occupied	-	-

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E13R Headlamp - Right

Connector Part Information

- Harness Type: Forward Lamp
- OEM Connector: 1-1967189-1
- Service Connector: 88988927
- Description: 10-Way F 2.8 Junior Power Timer Series, Sealed

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575415	J-35616-35 (VT)	J-38125-36

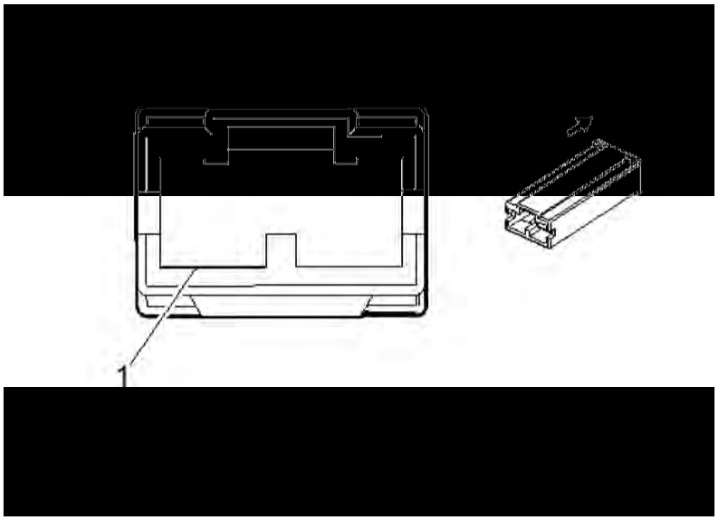
E13R Headlamp - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	650	Ground	I	-
2	0.75 1	BK BK	650 650	Ground Ground	I	Without T3T T3T
3	0.35 0.5	BK BK	650 650	Ground Ground	I	Without T3T T3T
4	0.5	GN/VT	7528	Linear Interconnect Network Bus 6	I	T3T
5	0.35	VT/GN	839	Run/Crank Ignition 1 Voltage	I	T3T
6	0.35	GY/BN	309	Right Park Lamp Supply Voltage	I	-
7	0.75	YE	312	Right Headlamp Low Beam Supply Voltage	I	-
8	0.35	WH	311	Right Headlamp High Beam Supply Voltage	I	-
9	0.5	GN/VT	1315	Right Front Turn Signal Lamp Supply Voltage	I	-
10	-	-	-	Not Occupied	-	-

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E18 Rear Defogger Grid X1 (F19/F69)



Connector Part Information

- Harness Type: Body
- OEM Connector: 13129191
- Service Connector: 88988738
- Description: 1-Way F 6.3 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

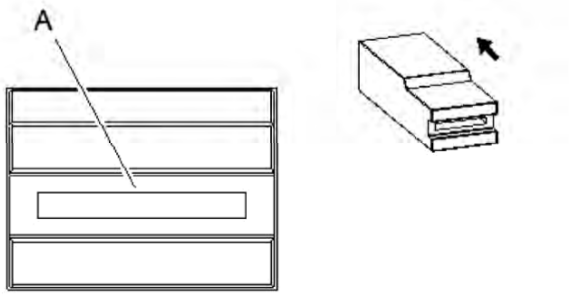
E18 Rear Defogger Grid X1 (F19/F69)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	BN/VT	293	Rear Defog Element Supply Voltage	I	-

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E18 Rear Defogger Grid X1 (F35/F80)





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Connector Part Information

- Harness Type: Body
- OEM Connector: 1-1661612-0
- Service Connector: 19119430
- Description: 1-Way F 6.3 Series (BK)
- Harness Type: Right Liftgate
- OEM Connector: 1-1661612-0
- Service Connector: Service by Harness - See Part Catalog
- Description: 1-Way F 6.3 Series (BK)

Terminal Part Information

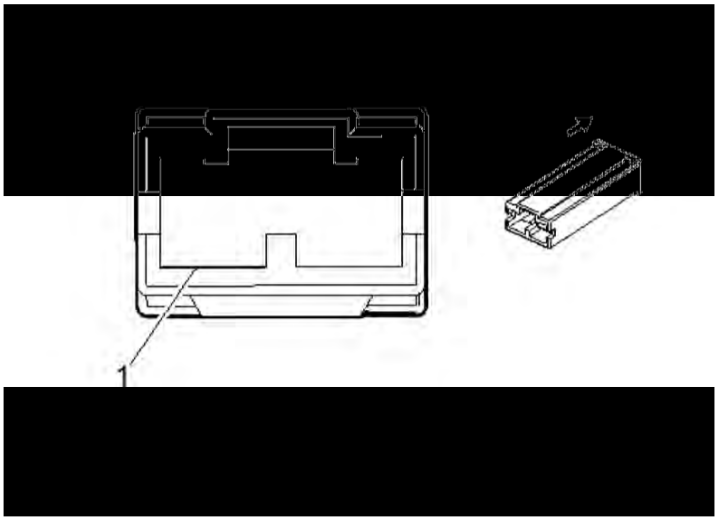
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

E18 Rear Defogger Grid X1 (F35/F80)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	2.5	BN/VT	293	Rear Defog Element Supply Voltage	I	-

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E18 Rear Defogger Grid X2 (F19/F69)



Connector Part Information

- Harness Type: Body
- OEM Connector: 13129191
- Service Connector: 88988738
- Description: 1-Way F 6.3 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

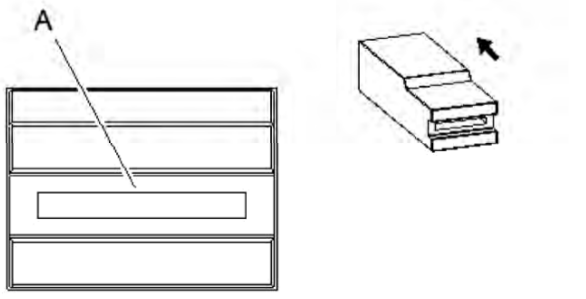
E18 Rear Defogger Grid X2 (F19/F69)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	BK	2350	Ground	I	-

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E18 Rear Defogger Grid X2 (F35/F80)



[redacted]

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Connector Part Information

- Harness Type: Body
- OEM Connector: 1-1661612-0
- Service Connector: 19119430
- Description: 1-Way F 6.3 Series (BK)
- Harness Type: Left Liftgate
- OEM Connector: 1-1661612-0
- Service Connector: Service by Harness - See Part Catalog
- Description: 1-Way F 6.3 Series (BK)

Terminal Part Information

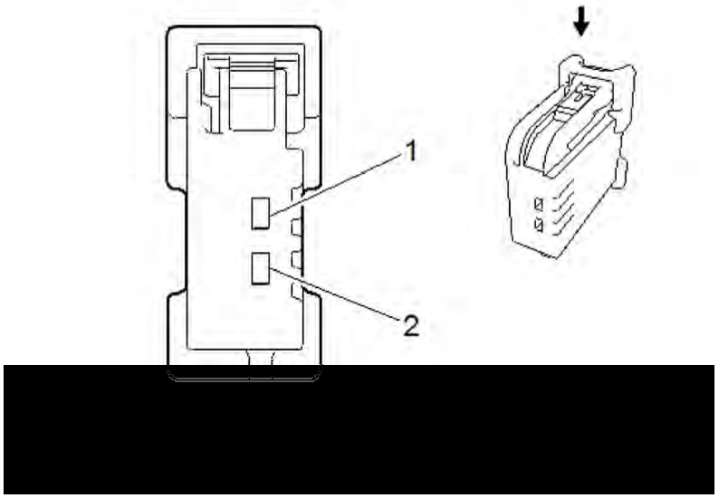
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

E18 Rear Defogger Grid X2 (F35/F80)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	2.5 2.5	BK BK	2350 2850	Ground Ground	I	F80 F35

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E27 Instrument Panel Compartment Lamp (U27)



Connector Part Information

- Harness Type: Instrument Panel Compartment
- OEM Connector: 19115613
- Service Connector: Service by Harness - See part Catalog
- Description: 2-Way F 1.5/0.64 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	Not Available

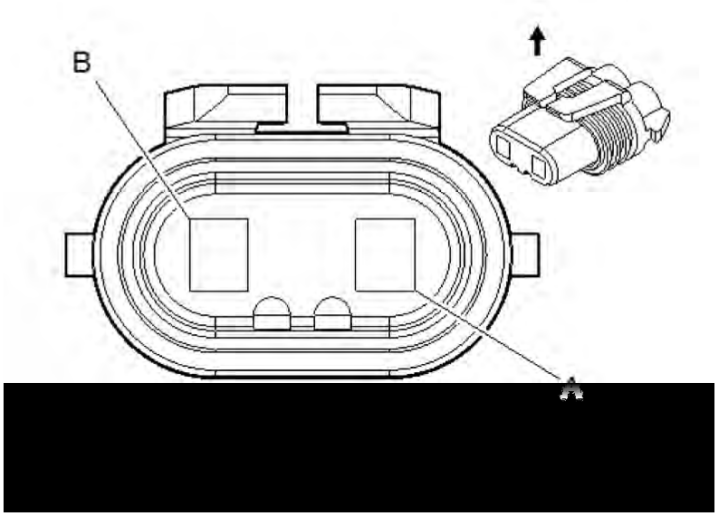
E27 Instrument Panel Compartment Lamp (U27)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH/BN	6815	Inadvertent Power Control	I	—
2	0.5	BK	1350	Ground	I	—

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E29LF Fog Lamp – Left Front (F19/VB5 with T3U)



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Connector Part Information

- Harness Type: Front Fascia
- OEM Connector: 12059183
- Service Connector: Service by Harness - See part Catalog
- Description: 2-Way F 280 Metri Pack Series, Sealed BK

Terminal Part Information

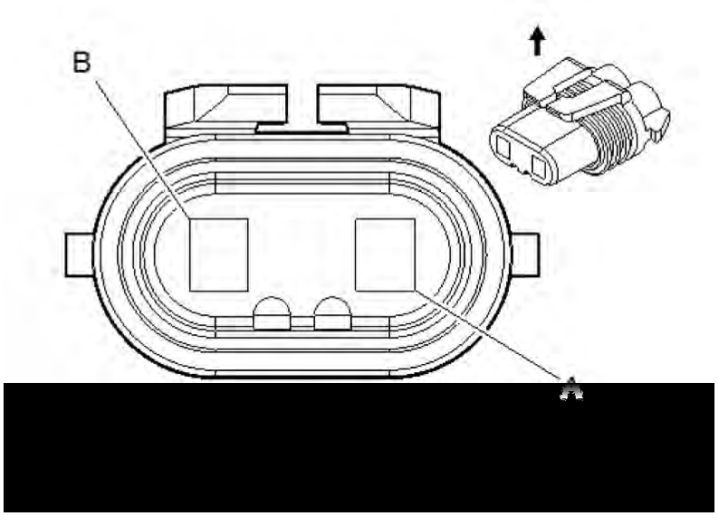
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-4A (PU)	Not Available

E29LF Fog Lamp – Left Front (F19/VB5 with T3U)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	BK	550	Ground	I	-
B	0.5	BN/VT	2234	Front Fog Lamp Supply Voltage	I	-

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E29LF Fog Lamp – Left Front (F69 with T3U)



Connector Part Information

- Harness Type: Front Fascia
- OEM Connector: 12059183
- Service Connector: Service by Harness - See part Catalog
- Description: 2-Way F Metri-Pack 280 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-4A (PU)	J-38125-11A

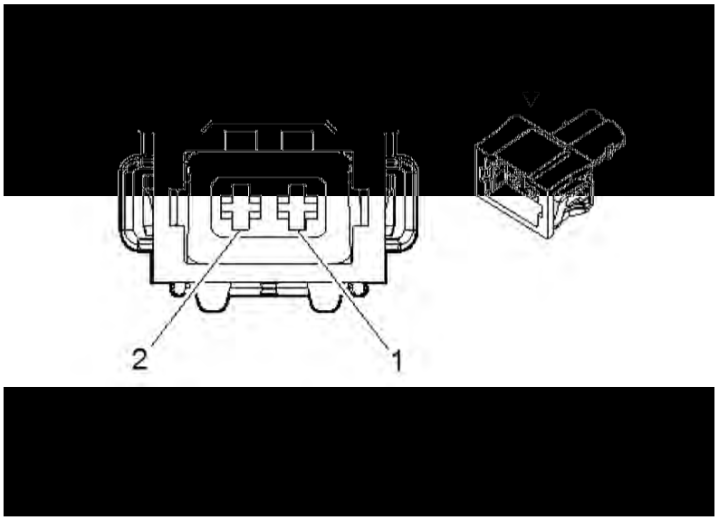
E29LF Fog Lamp – Left Front (F69 with T3U)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	BK	550	Ground	I	—
B	0.5	BN/VT	2234	Front Fog Lamp Supply Voltage	I	—

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E29R Fog Lamp – Rear (T79)



Connector Part Information

- Harness Type: Rear Fascia
- OEM Connector: 0-1418893-1
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 2.8 Junior Power Timer Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

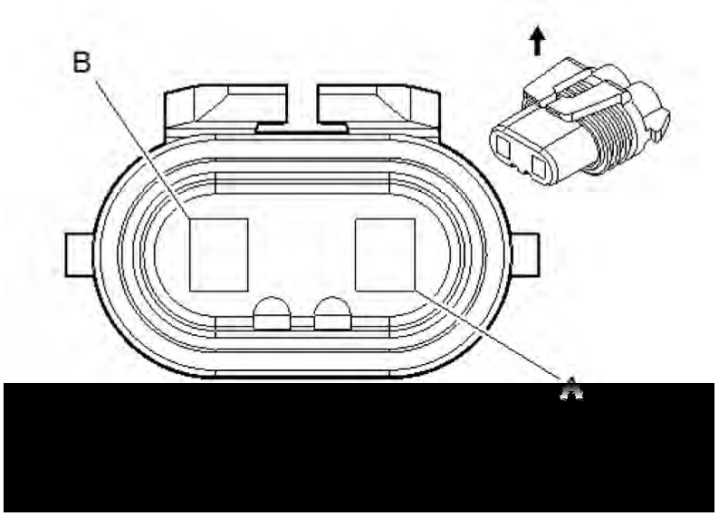
E29R Fog Lamp – Rear (T79)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	YE/GY	122	Rear Fog Lamp Supply Voltage	I	—
2	0.35	BK	2550	Ground	I	—

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E29RF Fog Lamp – Right Front (F19/VB5 with T3U)



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Connector Part Information

- Harness Type: Front Fascia
- OEM Connector: 12059183
- Service Connector: Service by Harness - See part Catalog
- Description: 2-Way F 280 Metri Pack Series, Sealed BK

Terminal Part Information

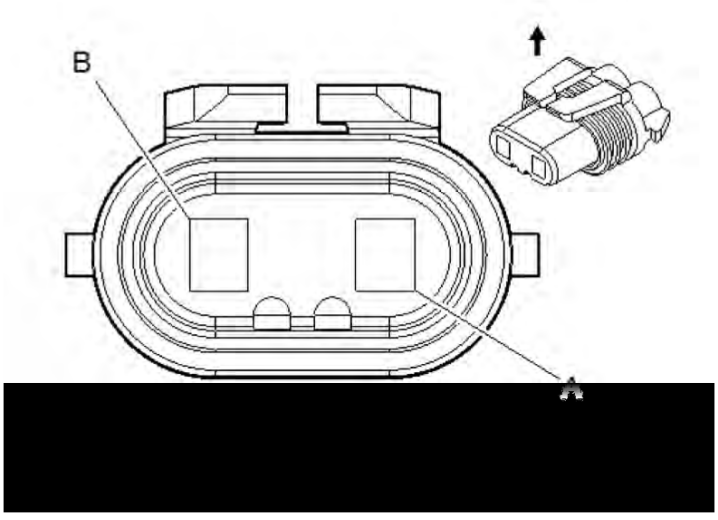
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-4A (PU)	Not Available

E29RF Fog Lamp – Right Front (F19/VB5 with T3U)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	BK	650	Ground	I	-
B	0.5	BN/VT	2234	Front Fog Lamp Supply Voltage	I	-

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E29RF Fog Lamp – Right Front (F69 with T3U)



Connector Part Information

- Harness Type: Front Fascia
- OEM Connector: 12059183
- Service Connector: Service by Harness - See part Catalog
- Description: 2-Way F Metri-Pack 280 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-4A (PU)	J-38125-11A

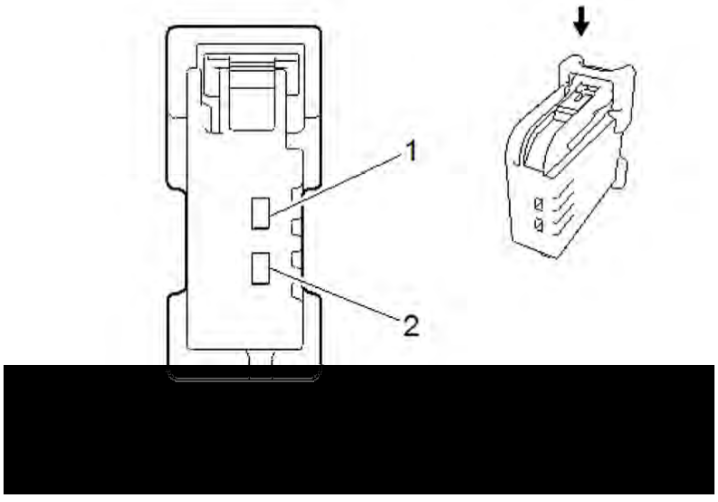
E29RF Fog Lamp – Right Front (F69 with T3U)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	BK	650	Ground	I	—
B	0.5	BN/VT	2234	Front Fog Lamp Supply Voltage	I	—

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E33L Cargo Lamp – Left (U25)



Connector Part Information

- Harness Type: Body
- OEM Connector: 19115613
- Service Connector: 13584097
- Description: 2-Way F 0.64, 1.5 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	J-38125-553

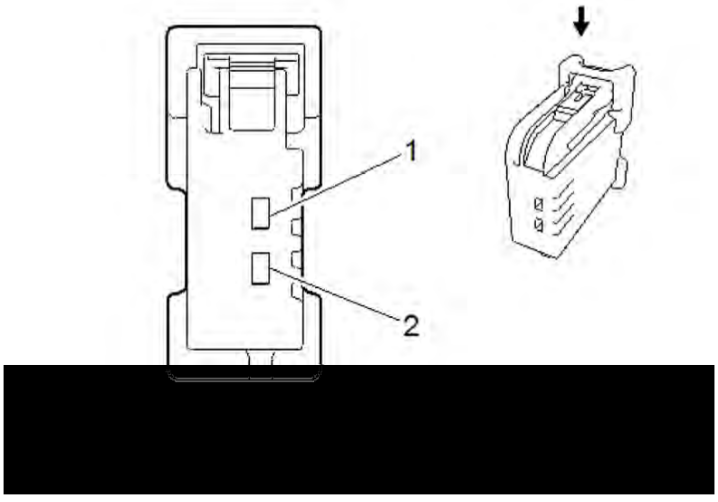
E33L Cargo Lamp – Left (U25)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY	157	Interior Lamp Control	I	-
2	0.5	BK	2350	Ground	I	-

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E33R Cargo Lamp – Right (U25)



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Connector Part Information

- Harness Type: Body
- OEM Connector: 19115613
- Service Connector: 13584097
- Description: 2-Way F 0.64, 1.5 Series (BK)

Terminal Part Information

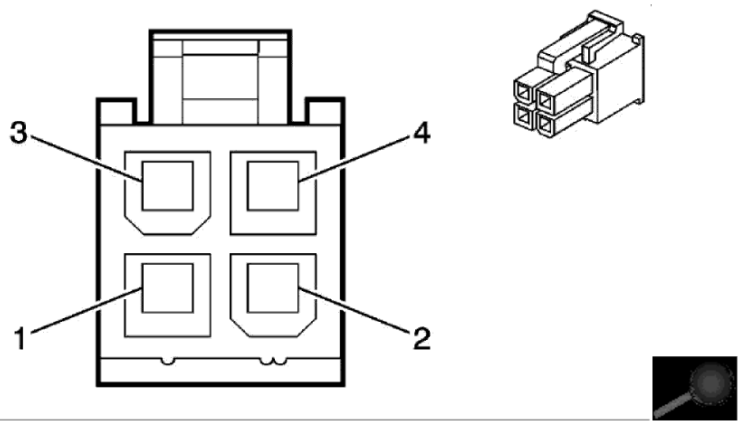
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	J-38125-553

E33R Cargo Lamp – Right (U25)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY	157	Interior Lamp Control	I	-
2	0.5	BK	2450	Ground	I	-

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E37F Dome/Reading Lamps - Front (-C74)



Connector Part Information

- Harness Type: Headliner
- OEM Connector: 0039-01-2045
- Service Connector: 13579580
- Description: 4-Way F Mini-Fit Series (NA)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-12 (BU)	J-38125-560

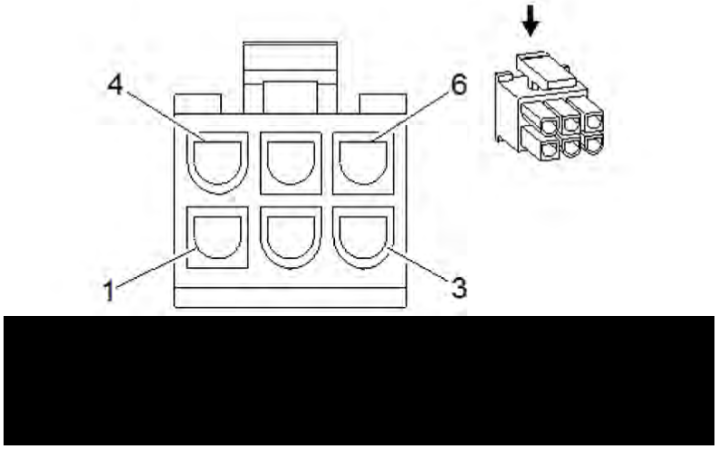
E37F Dome/Reading Lamps - Front (-C74)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	2250	Ground	I	—
2	0.5	GY	156	Courtesy Lamp Switch Signal	I	—
3	0.35	GY/GN	328	Interior Lamp Defeat Switch Signal	I	—
4	0.5	GY	157	Interior Lamp Control	I	—

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E37F Dome/Reading Lamps – Front (C74-TVR)



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Connector Part Information

- Harness Type: Headliner
- OEM Connector: 0039-01-2065
- Service Connector: 13579581
- Description: 6-Way F (WH)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-12 (BU)	J-38125-560

E37F Dome/Reading Lamps – Front (C74-TVR)

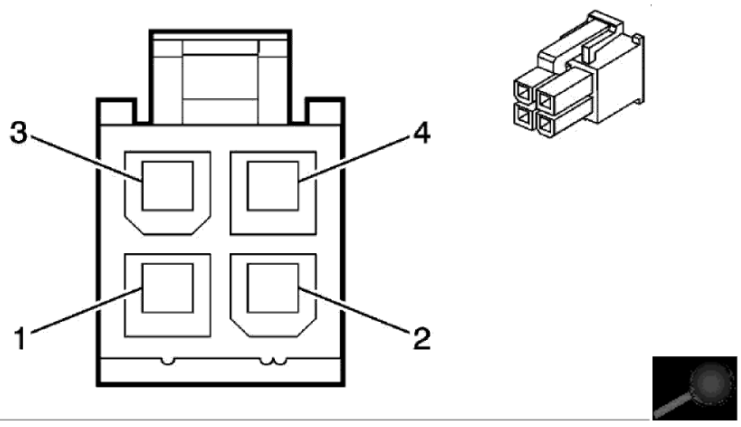
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	2250	Ground	I	—
2	0.5	GY	156	Courtesy Lamp Switch Signal	I	—
3	0.35	GY/GN	328	Interior Lamp Defeat Switch Signal	I	—

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4	0.5	GY	157	Interior Lamp Control	I	—
5	0.5	WH/BN	6815	Inadvertent Power Control	I	—
6	0.35	YE	6817	LED Backlight Dimming Control	I	—

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E37R Dome/Reading Lamps - Rear



Connector Part Information

- Harness Type: Headliner
- OEM Connector: 0039-01-2045
- Service Connector: 13579580
- Description: 4-Way F Mini-Fit Series (NA)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-12 (BU)	J-38125-560

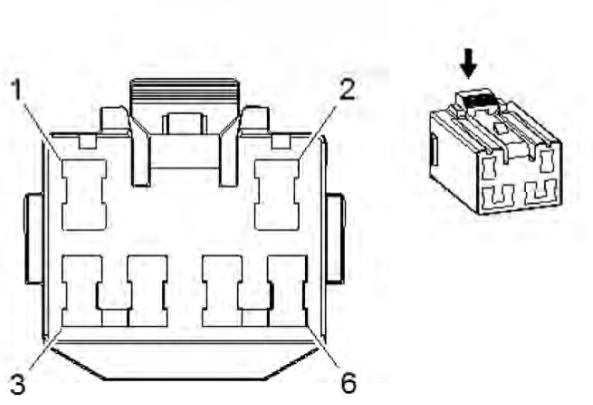
E37R Dome/Reading Lamps - Rear

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	2250	Ground	I	—
2	0.5	GY	157	Interior Lamp Control	I	—
3	0.5	WH/BN	6815	Inadvertent Power Control	I	TVR
4	0.5	YE	6817	LED Backlight Dimming Control	I	TVR

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E42L Tail Lamp Assembly - Left (F19)



Connector Part Information

- Harness Type: Body
- OEM Connector: 7283-7166
- Service Connector: 13580982
- Description: 6-Way F GT 150 Series (NAT)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-18 (BK)	J-38125-553
II	Not Available	J-35616-18 (BK)	J-38125-553
III	Not Available	J-35616-18 (BK)	J-38125-553

E42L Tail Lamp Assembly - Left (F19)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.25	BK	2550	Ground	I	—
2	1.25	BK	2550	Ground	I	—

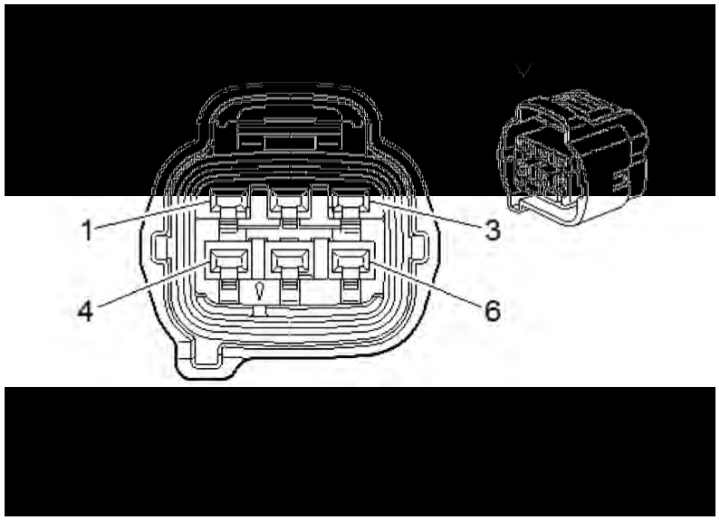
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
3	0.35	BN VT/GY	709 709	Left Park Lamp Supply Voltage Left Park Lamp Supply Voltage	II II	- T81 + T81
4	0.5	GY/YE	7452	Left Rear Stop Lamp Supply Voltage	III	—
5	0.35	GN/WH	24	Backup Lamp Supply Voltage	II	—
6	0.5	BU/WH	1334	Left Rear Turn Signal Lamp Supply Voltage	III	—

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E42L Tail Lamp Assembly - Left (F35)



Connector Part Information

- Harness Type: Body
- OEM Connector: 7283-7062-40
- Service Connector: 13585861
- Description: 6-Way F 090 Class III Series, Sealed (L-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-18 (BK)	J-38125-552
II	Not Available	J-35616-18 (BK)	J-38125-552

E42L Tail Lamp Assembly - Left (F35)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.25	BK	2650	Ground	I	—
2	1.25	BK	2650	Ground	II	—
3	0.35	VT/GY	709	Left Park Lamp Supply Voltage	II	—

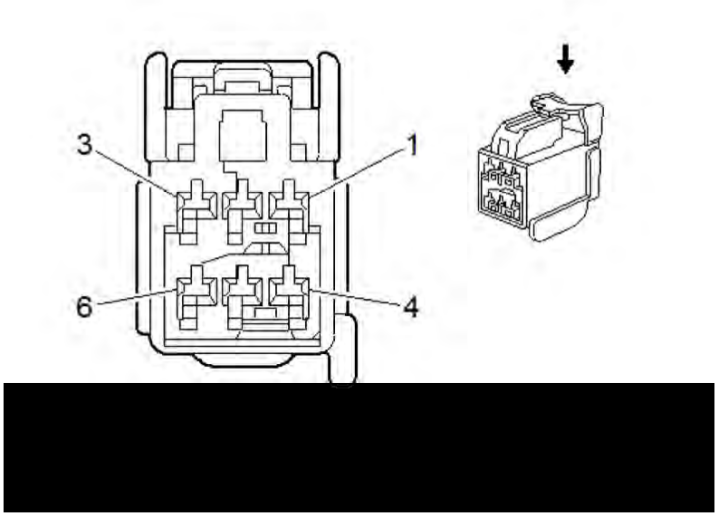
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4	0.5	GY/YE	7452	Left Rear Stop Lamp Supply Voltage	II	—
5	0.35	GN/WH	24	Backup Lamp Supply Voltage	II	—
6	0.5	BU/WH	1334	Left Rear Turn Signal Lamp Supply Voltage	III	—

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E42L Tail Lamp Assembly - Left (F69)



Connector Part Information

- Harness Type: Body
- OEM Connector: 19152836
- Service Connector: 89046849
- Description: 6-Way F (GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	J-38125-11A

E42L Tail Lamp Assembly - Left (F69)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	2550	Ground	I	—
2	0.5	RD	9542	Left Rear Stop Lamp Supply Voltage	I	—
3	—	—	—	Not Occupied	—	—

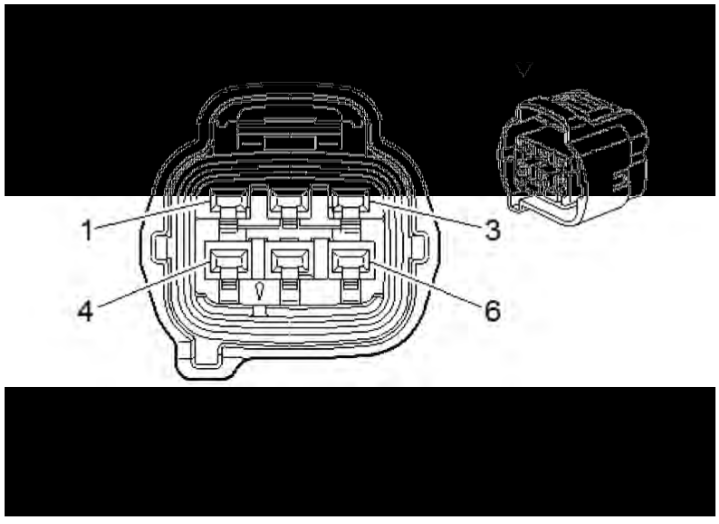
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4	0.5	BU/WH	1334	Left Rear Turn Signal Lamp Supply Voltage	I	—
5-6	—	—	—	Not Occupied	—	—

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E42L Tail Lamp Assembly - Left (F80)



Connector Part Information

- Harness Type: Rear End
- OEM Connector: 7283-7062-30
- Service Connector: Service by Harness - See Part Catalog
- Description: 6-Way F 090 Class III Series, Sealed (L-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-18 (BK)	J-38125-552

E42L Tail Lamp Assembly - Left (F80)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.25	BK	1850	Ground	I	—
2	1.25	BK	1850	Ground	I	—
3	0.35	VT/GY	709	Left Park Lamp Supply Voltage	I	—
4	0.5	GY/YE	7452		I	—

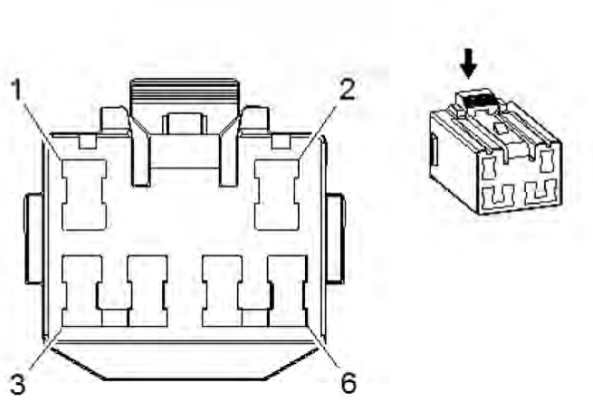
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Left Rear Stop Lamp Supply Voltage		
5	0.35	GN/WH	24	Backup Lamp Supply Voltage	I	—
6	0.5	BU/WH	1334	Left Rear Turn Signal Lamp Supply Voltage	I	—

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E42R Tail Lamp Assembly - Right (F19)



Connector Part Information

- Harness Type: Body
- OEM Connector: 7283-7166
- Service Connector: 13580982
- Description: 6-Way F GT 150 Series (NAT)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-18 (BK)	J-38125-553
II	Not Available	J-35616-18 (BK)	J-38125-553
III	Not Available	J-35616-18 (BK)	J-38125-553

E42R Tail Lamp Assembly - Right (F19)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.25	BK	2650	Ground	I	—
2	1.25	BK	2650	Ground	I	—

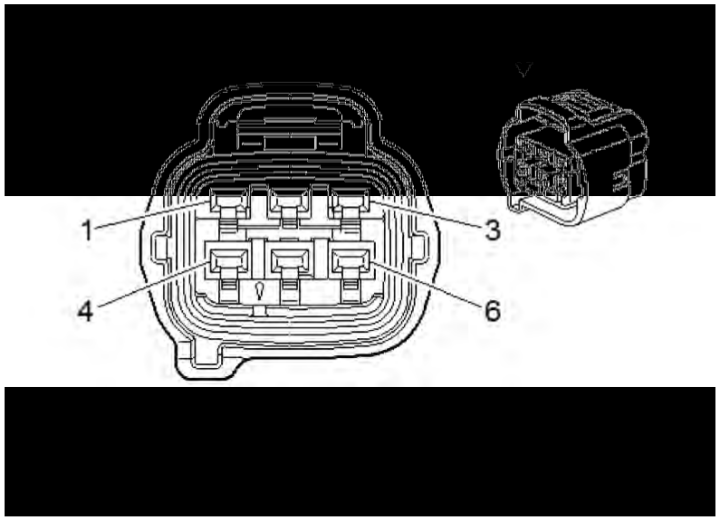
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
3	0.35	GY/BN	309 709	Right Park Lamp Supply Voltage	II	—
4	0.5	WH/YE	7451	Right Rear Stop Lamp Supply Voltage	III	—
5	0.35	GN/WH	24	Backup Lamp Supply Voltage	II	—
6	0.5	BU/WH	1335	Right Rear Turn Signal Lamp Supply Voltage	III	—

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E42R Tail Lamp Assembly - Right (F35)



Connector Part Information

- Harness Type: Body
- OEM Connector: 7283-7062-40
- Service Connector: 13585861
- Description: 6-Way F 090 Class III Series, Sealed (L-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-18 (BK)	J-38125-552
II	Not Available	J-35616-18 (BK)	J-38125-552

E42R Tail Lamp Assembly - Right (F35)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.25	BK	2650	Ground	I	—
2	1.25	BK	2650	Ground	II	—
3	0.35	GY/BN	309	Right Park Lamp Supply Voltage	II	—

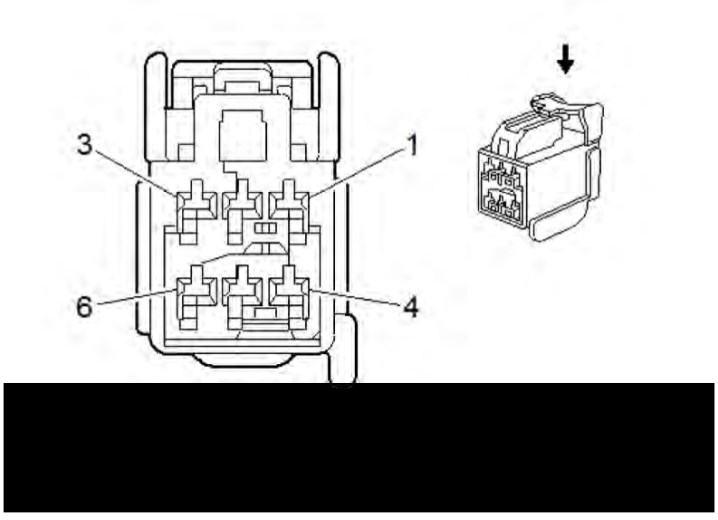
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4	0.5	WH/YE	7451	Right Rear Stop Lamp Supply Voltage	II	—
5	0.35	GN/WH	24	Backup Lamp Supply Voltage	II	—
6	0.5	BU/VT	1335	Right Rear Turn Signal Lamp Supply Voltage	III	—

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E42R Tail Lamp Assembly - Right (F69)



Connector Part Information

- Harness Type: Body
- OEM Connector: 19152836
- Service Connector: 89046849
- Description: 6-Way F (GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	J-38125-11A

E42R Tail Lamp Assembly - Right (F69)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	2650	Ground	I	—
2	0.5	WH/YE	9541	Right Rear Stop Lamp Supply Voltage	I	—
3	—	—	—	Not Occupied	—	—

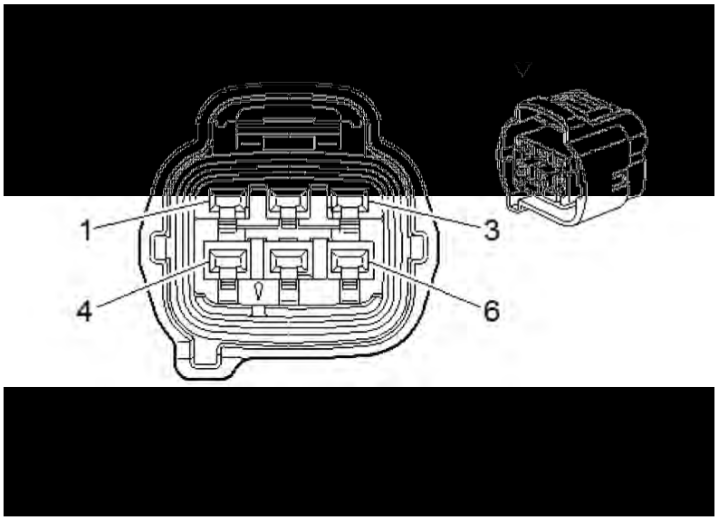
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4	0.5	BU/VT	1335	Right Rear Turn Signal Lamp Supply Voltage	I	—
5-6	—	—	—	Not Occupied	—	—

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E42R Tail Lamp Assembly - Right (F80)



Connector Part Information

- Harness Type: Rear End
- OEM Connector: 7283-7062-30
- Service Connector: Service by Harness - See Part Catalog
- Description: 6-Way F 090 Class III Series, Sealed (L-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-18 (BK)	J-38125-552

E42R Tail Lamp Assembly - Right (F80)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.25	BK	1950	Ground	I	—
2	1.25	BK	1950	Ground	I	—
3	0.35	GY/BN	309	Right Park Lamp Supply Voltage	I	—
4	0.5	WH/YE	7451		I	—

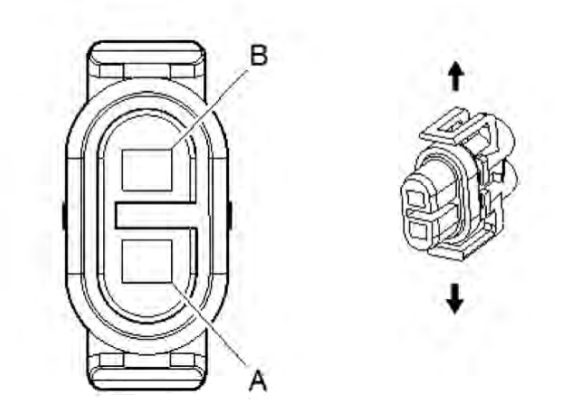
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Right Rear Stop Lamp Supply Voltage		
5	0.35	GN/WH	24	Backup Lamp Supply Voltage	I	—
6	0.5	BU/VT	1335	Right Rear Turn Signal Lamp Supply Voltage	I	—

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E57L Driving Lamp – Left (V5B)



Connector Part Information

- Harness Type: Front Fascia
- OEM Connector: 12124819
- Service Connector: Service by Harness - See part Catalog
- Description: 2-Way F Metri-Pack 280 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-4A (PU)	J-38125-11A

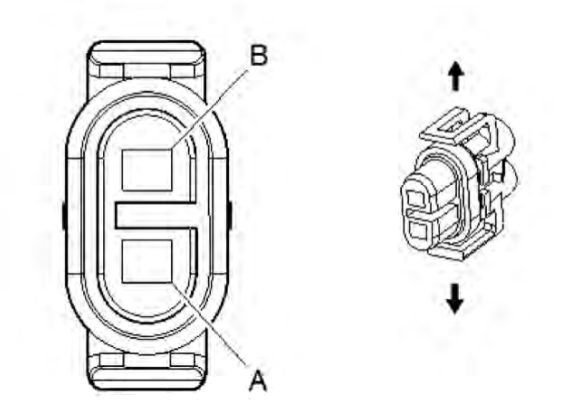
E57L Driving Lamp – Left (V5B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	RD/BN	702	Battery Positive Voltage	I	—
B	0.5	BK	650	Ground	I	—

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E57R Driving Lamp – Right (V5B)



Connector Part Information

- Harness Type: Front Fascia
- OEM Connector: 12124819
- Service Connector: Service by Harness - See part Catalog
- Description: 2-Way F Metri-Pack 280 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-4A (PU)	J-38125-11A

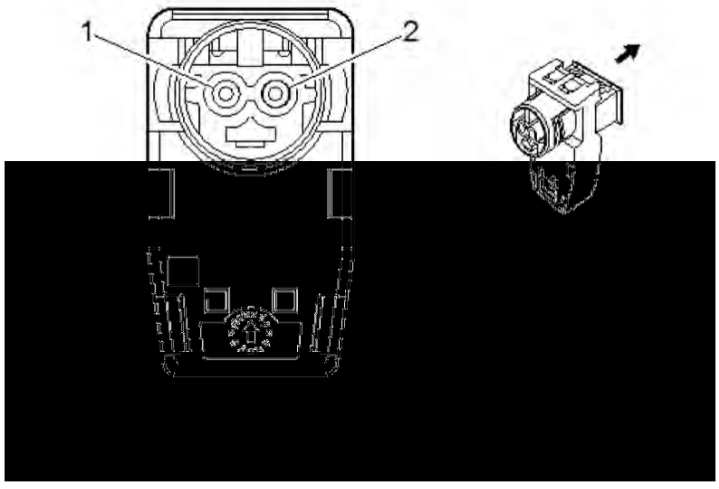
E57R Driving Lamp – Right (V5B)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	RD/BN	702	Battery Positive Voltage	I	—
B	0.5	BK	650	Ground	I	—

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F101 Passenger Instrument Panel Air Bag



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 19178105
- Service Connector: 13355778
- Description: 2-Way F FPB90-1 Series (BK with YE Cover)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	TBD	—	—

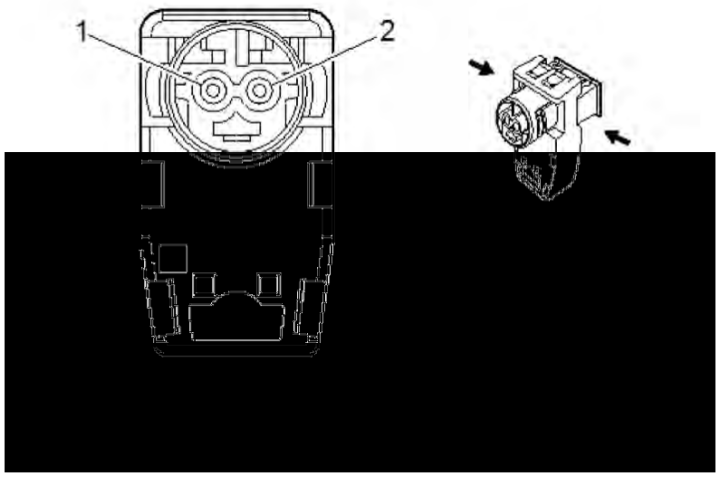
F101 Passenger Instrument Panel Air Bag

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN/BK	3025	Passenger IP Module Stage 1 High Control	I	—
2	0.5	PK	3024	Passenger IP Module Stage 1 Low Control	I	—

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F105L Roof Rail Air Bag - Left



Connector Part Information

- Harness Type: Body
- OEM Connector: 19178105
- Service Connector: 13355778
- Description: 2-Way F 0.64 Series, Sealed (BK with YE cover)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

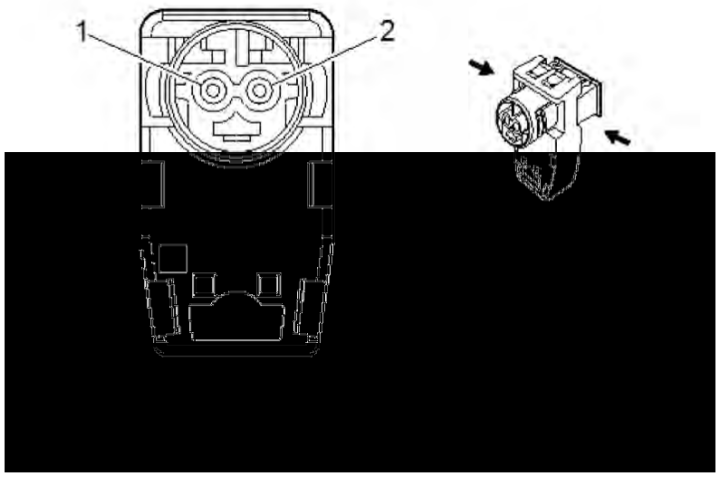
F105L Roof Rail Air Bag - Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT/OG	5020	Left Front Head Curtain Module Low Control	I	-
2	0.5	OG/GN	5019	Left Front Head Curtain Module High Control	I	-

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F105R Roof Rail Air Bag - Right



Connector Part Information

- Harness Type: Body
- OEM Connector: 19178105
- Service Connector: 13355778
- Description: 2-Way F 0.64 Series, Sealed (BK with YE cover)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

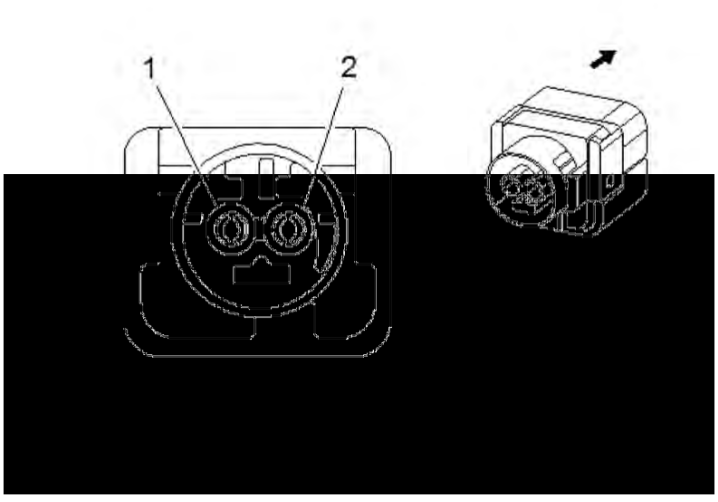
F105R Roof Rail Air Bag - Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG/GY	5021	Right Front Head Curtain Module High Control	I	-
2	0.5	WH/OG	5022	Right Front Head Curtain Module Low Control	I	-

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F106LF Seat Air Bag - Left Front



Connector Part Information

- Harness Type: Passenger Seat (RHD), Driver Seat (LHD)
- OEM Connector: 19178108
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F (BK with YE cover)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

F106LF Seat Air Bag - Left Front

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG/GY OG/BU	3066 3068	Passenger Side Impact Module High Control Driver Side Impact Module High Control	I I	Right Hand Drive Left Hand Drive
2	0.5	BN/OG	3067		I	

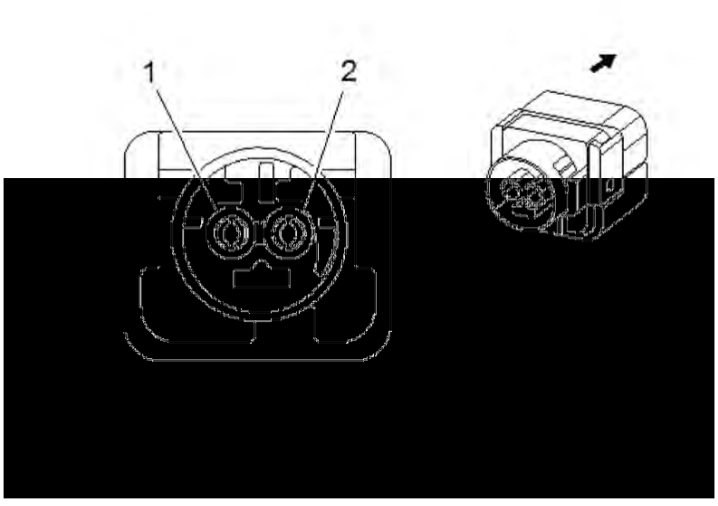
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
		GN/OG	3069	Passenger Side Impact Module Low Control Driver Side Impact Module Low Control	I	Right Hand Drive Left Hand Drive

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F106RF Seat Air Bag - Right Front



Connector Part Information

- Harness Type: Driver Seat (RHD), Passenger Seat (LHD)
- OEM Connector: 19178108
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F (BK with YE cover)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

F106RF Seat Air Bag - Right Front

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG/BU OG/GY	3068 3066	Driver Side Impact Module High Control Passenger Side Impact Module High Control	I I	Right Hand Drive Left Hand Drive
2	0.5	GN/OG	3069		I	

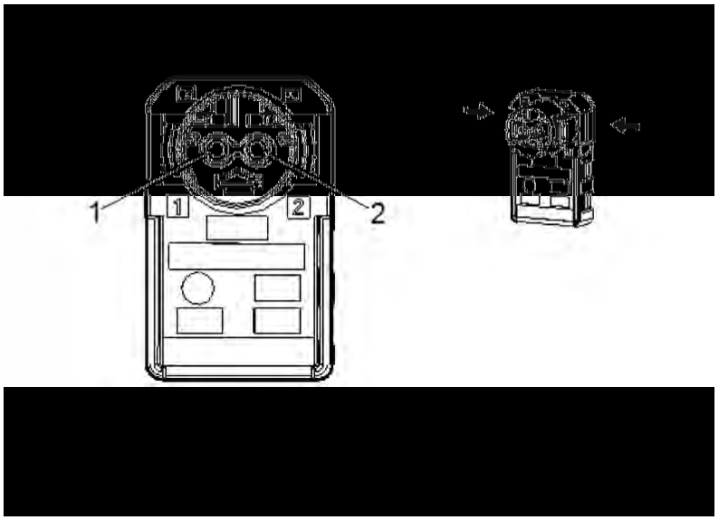
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
		BN/OG	3067	Driver Side Impact Module Low Control Passenger Side Impact Module Low Control	I	Right Hand Drive Left Hand Drive

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F107 Steering Wheel Air Bag X1



Connector Part Information

- Harness Type: SIR Coil
- OEM Connector: 13262035
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F (L-GN with YE cover)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

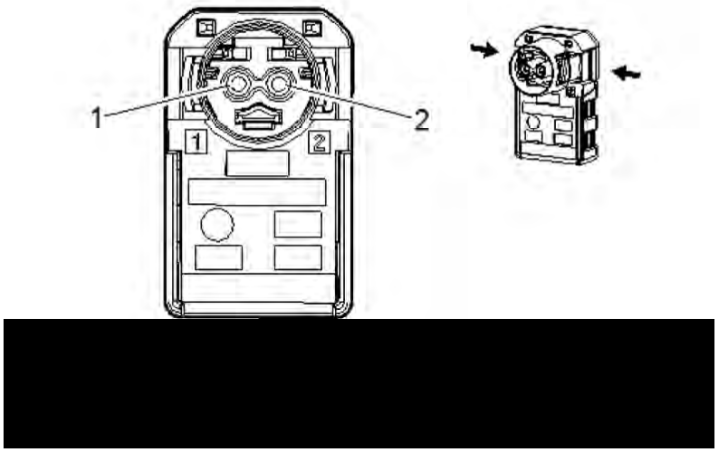
F107 Steering Wheel Air Bag X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	TN	3021	Steering Wheel Module Stage 1 High Control	I	—
2	0.5	BN	3020	Steering Wheel Module Stage 1 Low Control	I	—

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F107 Steering Wheel Air Bag X2



Connector Part Information

- Harness Type: SIR Coil
- OEM Connector: 13262036
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F (YE)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

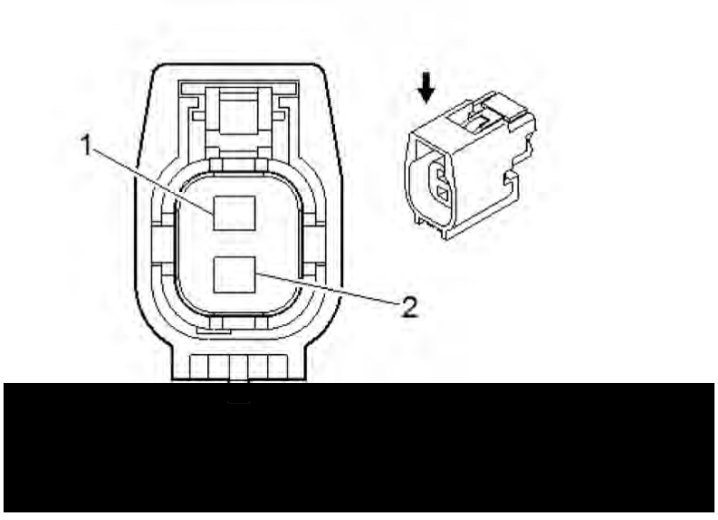
F107 Steering Wheel Air Bag X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH	3023	Steering Wheel Module Stage 2 High Control	I	—
2	0.5	PK	3022	Steering Wheel Module Stage 2 Low Control	I	—

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F109D Seat Belt Buckle Pretensioner – Driver X1



Connector Part Information

- Harness Type: Driver Seat
- OEM Connector: 7182-4020
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

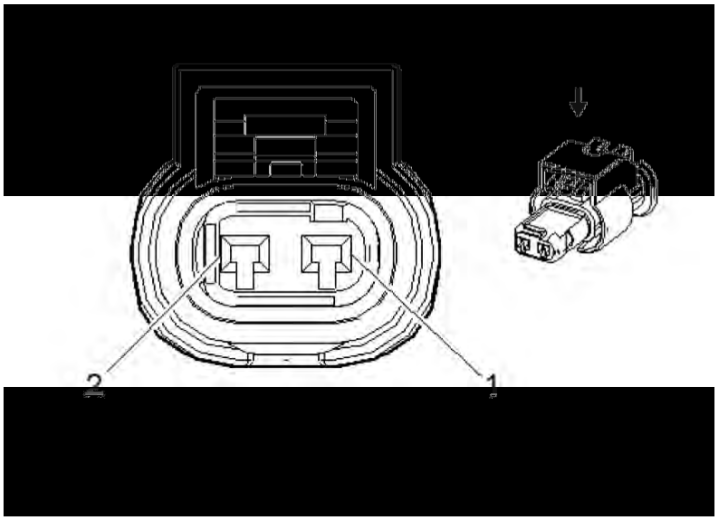
F109D Seat Belt Buckle Pretensioner – Driver X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG/BN	238	Driver Seat Belt Switch Signal	I	—
2	0.5	BK/OG	1361	Driver Seat Belt Switch Low Reference	I	—

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F109D Seat Belt Buckle Pretensioner – Driver X2



Connector Part Information

- Harness Type: Driver Seat
- OEM Connector: 13580144
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 1.2 MCP Series, Sealed (YE with BK Inner Connector)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

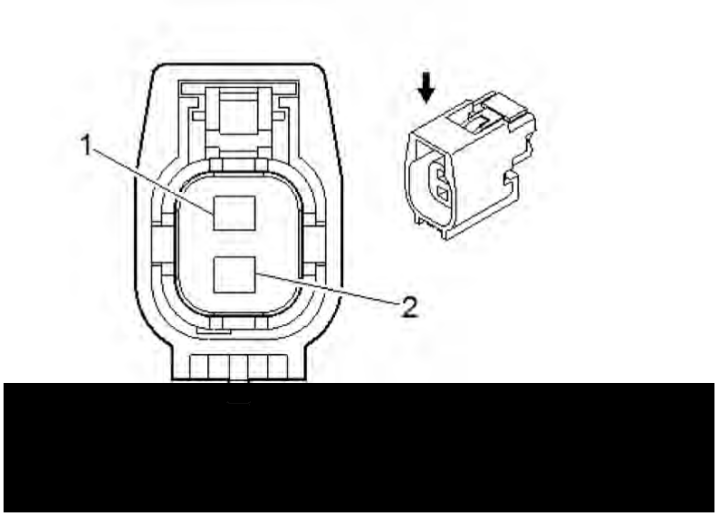
F109D Seat Belt Buckle Pretensioner – Driver X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG/WH	3064	Driver Seat Belt Buckle Pretensioner High Control	I	—
2	0.5	YE/OG	3065	Driver Seat Belt Buckle Pretensioner Low Control	I	—

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F109P Seat Belt Buckle Pretensioner – Passenger X1 (UEN)



Connector Part Information

- Harness Type: Passenger Seat
- OEM Connector: 7182-4020
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

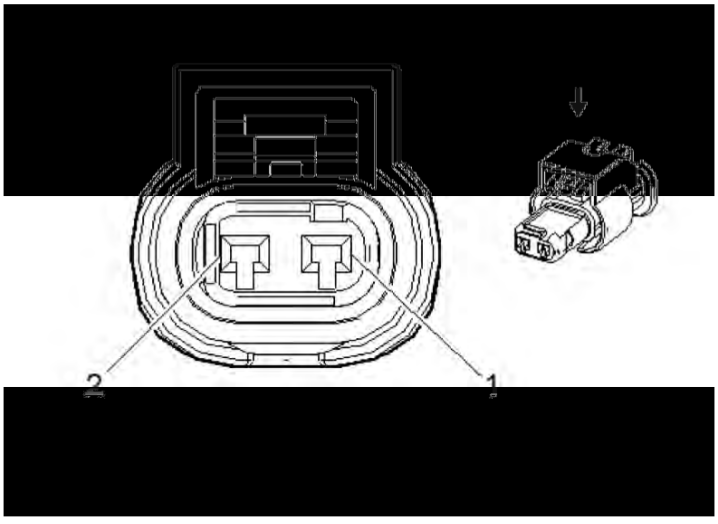
F109P Seat Belt Buckle Pretensioner – Passenger X1 (UEN)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG/VT	1362	Passenger Seat Belt Switch Signal	I	—
2	0.5	BK/OG	1361	Passenger Seat Belt Switch Low Reference	I	—

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F109P Seat Belt Buckle Pretensioner – Passenger X2



- Harness Type: Passenger Seat
- OEM Connector: 13580144
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 1.2 MCP Series, Sealed (YE with BK Inner Connector)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

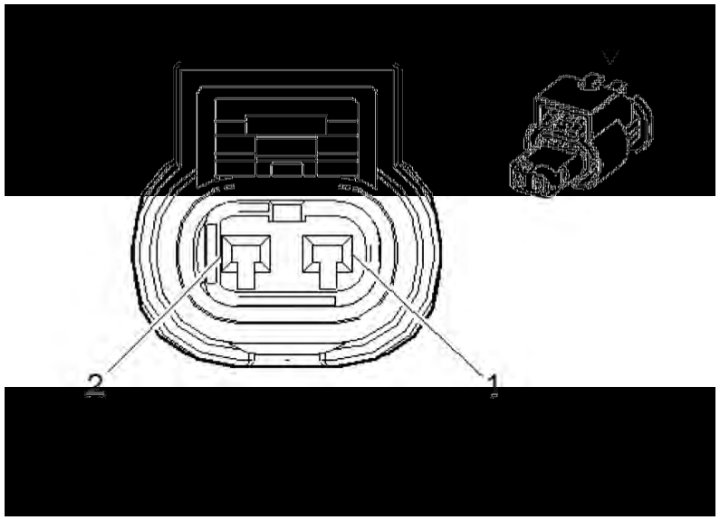
F109P Seat Belt Buckle Pretensioner – Passenger X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG/BN	3062	Passenger Seat Belt Buckle Pretensioner High Control	I	—
2	0.5	BU/OG	3063	Passenger Seat Belt Buckle Pretensioner Low Control	I	—

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G1 A/C Compressor



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13505429
- Service Connector: 13585623
- Description: 2-Way F 1.2 MCP Series, Sealed (BK with NA Inner Connector)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

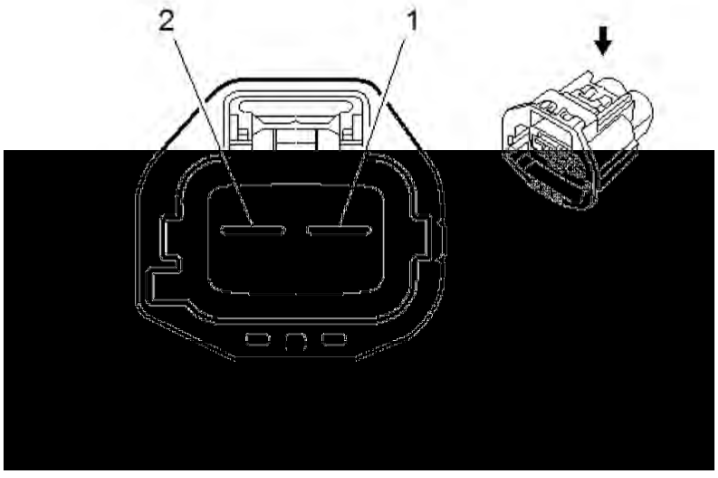
G1 A/C Compressor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU/YE	7574	Electric Variable Displacement Control	I	-
2	0.5	BU/BN	7573	Electric Variable Displacement Supply	I	-

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G10L Cooling Fan Motor – Left



Connector Part Information

- Harness Type: Cooling Fan
- OEM Connector: 7283-5596-10
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F YESC/USCAR Class III (D-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-43 (RD)	J-38125-11A

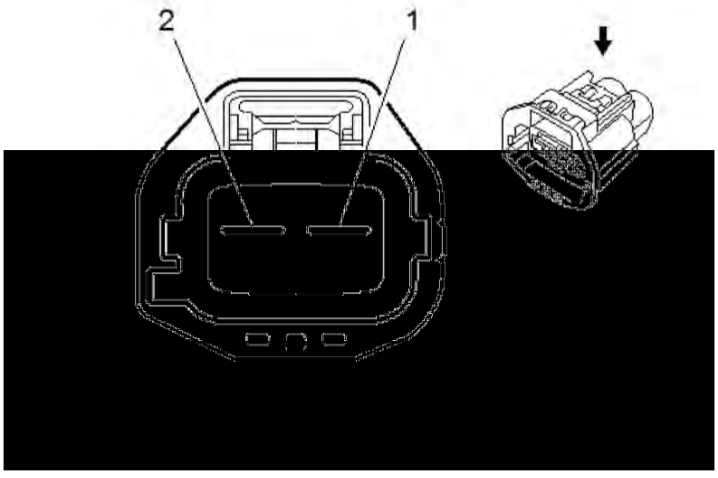
G10L Cooling Fan Motor – Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	4	GY	532	Cooling Fan Motor Supply Voltage	I	—
2	4	GN/BK	504	Cooling Fan Motor Return	I	—

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G10R Cooling Fan Motor – Right



Connector Part Information

- Harness Type: Cooling Fan
- OEM Connector: 7283-5596-10
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F YESC/USCAR Class III (D-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-43 (RD)	J-38125-11A

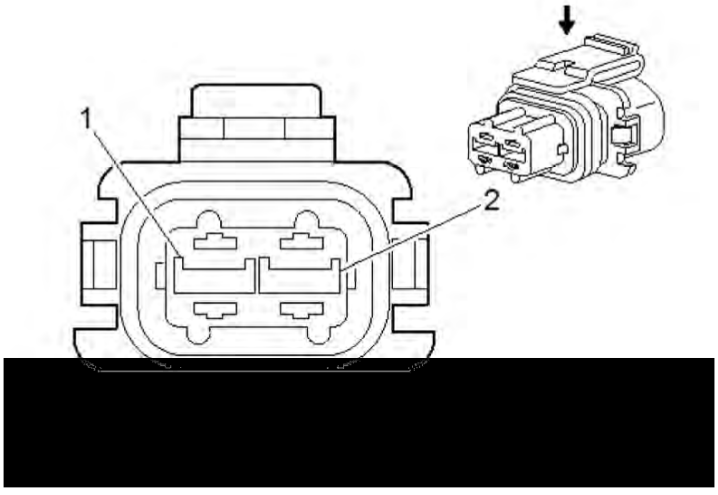
G10R Cooling Fan Motor – Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	4	GY	409	Cooling Fan Motor Supply Voltage	I	—
2	4	GN/BK	504	Cooling Fan Motor Return	I	—

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G13 Generator X1



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Connector Part Information

- Harness Type: Engine
- OEM Connector: 1928404072
- Service Connector: 88988586
- Description: 2-Way F 2.8 Junior Power Timer Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	1928498056	J-35616-35 (VT)	J-38125-561

G13 Generator X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY/WH	25	Charge Indicator Control	I	—
2	0.5	GY	23	Generator Field Duty Cycle Signal	I	—

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G13 Generator

Connector Part Information

- Harness Type: Generator Starter
- OEM Connector: 90565968
- Service Connector: Service by Harness - See Part Catalog
- Description: 1 Ring Terminal

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Pending	Pending	Pending

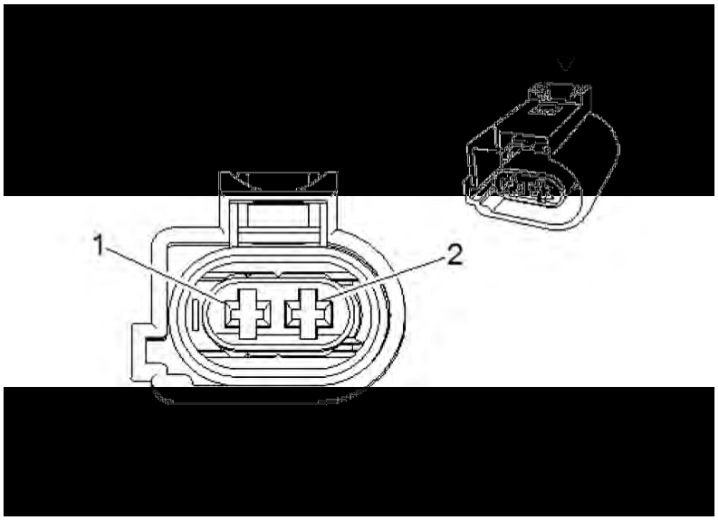
G13 Generator

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	25.0 25.0	RD RD	1 1	Unfused Battery Positive Voltage Unfused Battery Positive Voltage	I	LDC LDD

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G16 Headlamp Washer Pump (T3T)



Connector Part Information

- Harness Type: Forward Lamp
- OEM Connector: 2-1355200-2
- Service Connector: 13506003
- Description: 2-Way F 2.8 MCP Series, Sealed BK

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

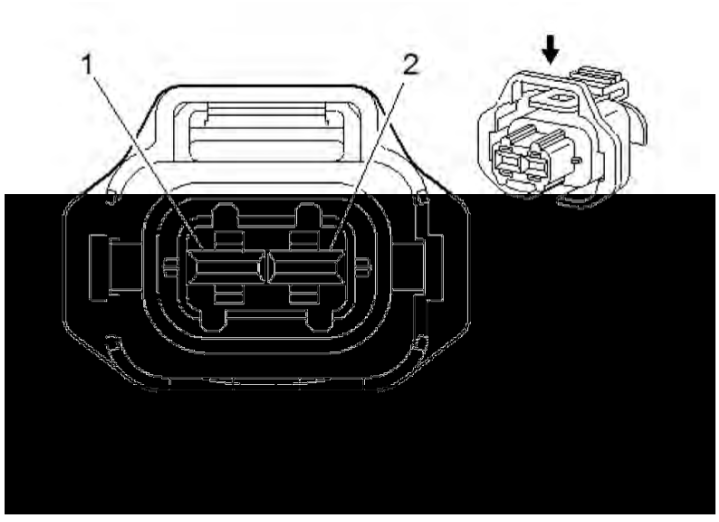
G16 Headlamp Washer Pump (T3T)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	VT	1197	Headlamp Washer Pump Control	I	-
2	1.5	BK	650	Ground	I	-

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G18 High Pressure Fuel Pump (LFW/LFX)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 1928403874
- Service Connector: 88988963
- Description: 2-Way F Kompakt 280 Series, Sealed BK

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

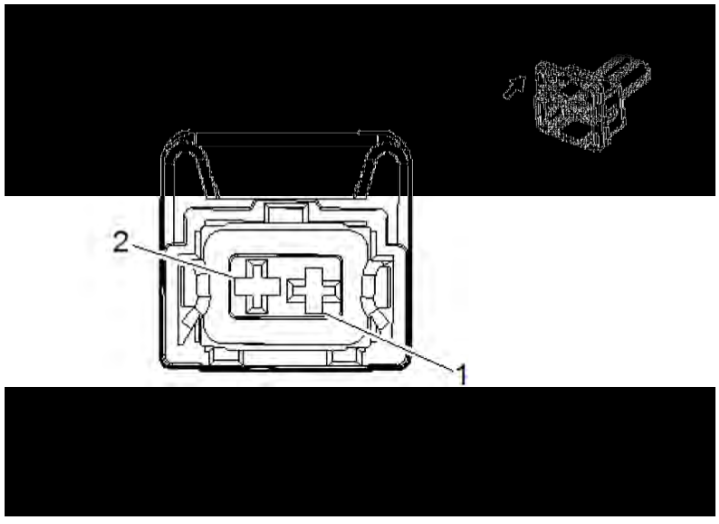
G18 High Pressure Fuel Pump (LFW/LFX)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT/BK	7300	High Pressure Fuel Pump Actuator Low - Control	I	-
2	0.5	YE	7301	High Pressure Fuel Pump Actuator High - Control	I	-

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G19 Rear Window Washer Pump (F35)



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Connector Part Information

- Harness Type: Forward Lamp
- OEM Connector: 60400611
- Service Connector: 19119431
- Description: 2-Way F Sealed BK

Terminal Part Information

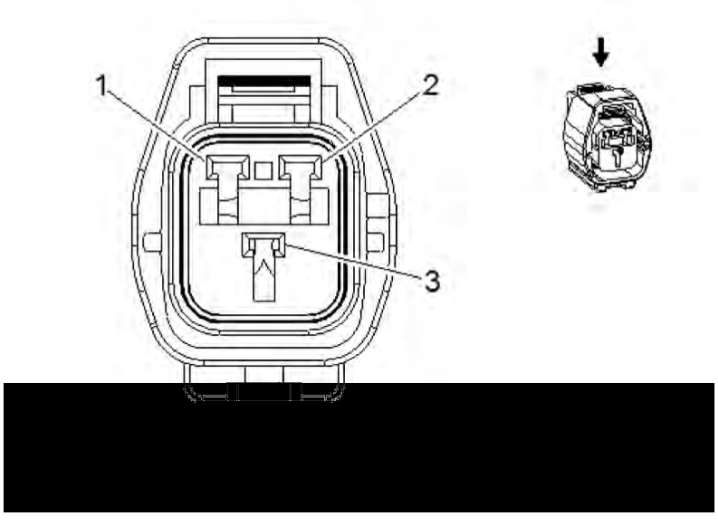
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

G19 Rear Window Washer Pump (F35)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BU/VT	392	Rear Window Washer Pump Control	I	-
2	0.75	BK	650	Ground	I	-

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G24 Windshield Washer Pump



Connector Part Information

- Harness Type: Forward Lamp
- OEM Connector: 7283-7031-10
- Service Connector: 13578536
- Description: 3-Way F 090 Series, Sealed BK

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

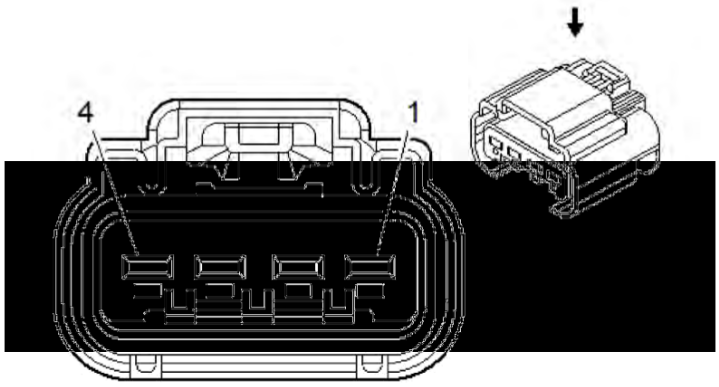
G24 Windshield Washer Pump

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	GY/VT	228	Windshield Washer Pump Control	I	-
2	0.75	BK	650	Ground	I	-
3	-	-	-	Not Occupied	-	-

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G40 LPG Pump (LWR)



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Connector Part Information

- Harness Type: Fuel Pump
- OEM Connector: 13527865
- Service Connector: Service by Harness – See Part Catalog
- Description: 4-Way F GT 280 Series, Sealed (NA)

Terminal Part Information

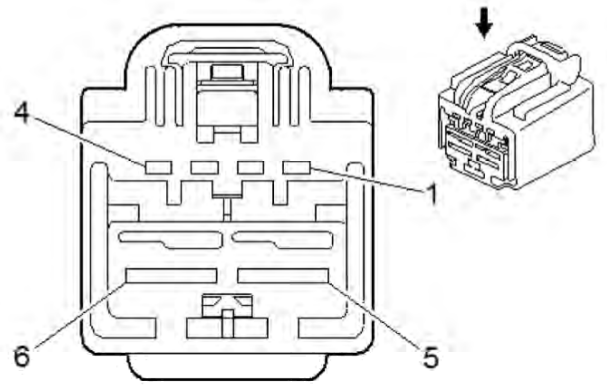
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-4A (PU)	J-38125-553

G40 LPG Pump (LWR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2	WH	120	Fuel Pump Supply Voltage	I	—
2	2	BK	1580	Fuel Pump Low Reference	I	—
3–4	—	—	—	Not Occupied	—	—

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K8 Blower Motor Control Module X1



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Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 15226104
- Service Connector: 88988512
- Description: 6-Way F YESC Kaizen Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575735	J-35616-2A (GY)	J-38125-553
II	13575835	J-35616-42 (RD)	J-38125-11A

K8 Blower Motor Control Module X1

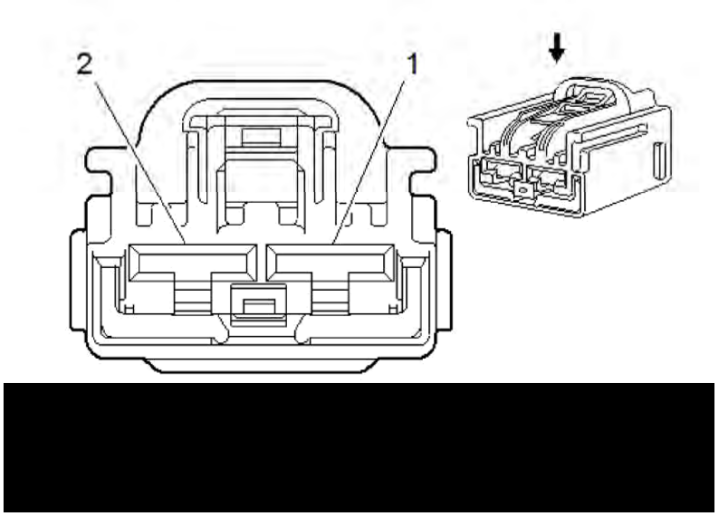
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1-2	-	-	-	Not Occupied	-	-
3	0.35	BU/GY	754	Blower Motor Speed Control	I	-
4	-	-	-	Not Occupied	-	-

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
5	4 4	BK BK	1450 1350	Ground Ground	II	LHD RHD
6	4	RD/GN	242	Battery Positive Voltage	II	-

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K8 Blower Motor Control Module X2



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 15226103
- Service Connector: 88988507
- Description: 2-Way F 6.3 Series (L-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575289	J-35616-42 (RD)	12094430

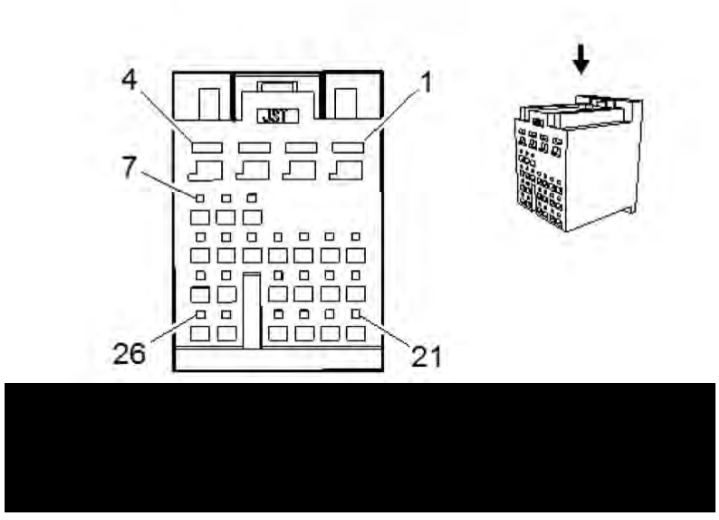
K8 Blower Motor Control Module X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	4	VT	65	Blower Motor Supply Voltage	I	-
2	4	VT/BK	5987	Front Blower Motor Return	I	-

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K9 Body Control Module X1



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 19151262
- Service Connector: 19151262
- Description: 26-Way F 0.64 2.8 Series (WH)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575871	J-35616-35 (VT)	J-38125-215A
II	13575259	J-35616-35 (VT)	Not Available
III	13579954	J-35616-35 (VT)	J-38125-215A

K9 Body Control Module X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	1450	Ground	I	-
2	0.75	RD/BU	2540	Battery Positive Voltage	I	-

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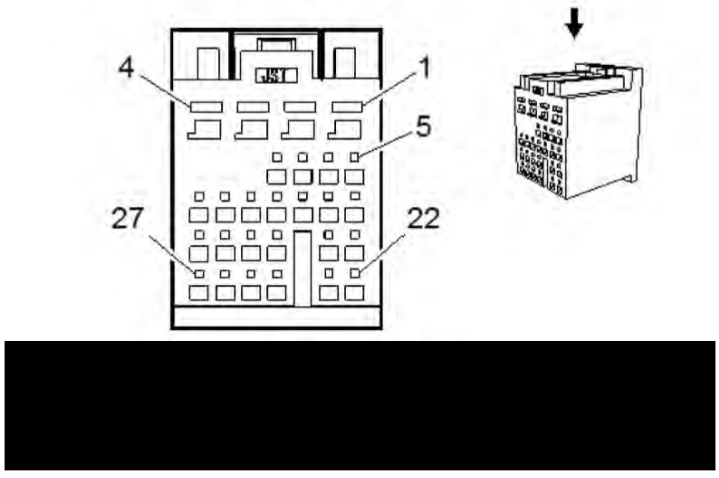
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
3	0.75	RD/GY	2140	Battery Positive Voltage	I	-
4	0.75	RD/BN	2240	Battery Positive Voltage	I	-
5	0.35 0.35	WH WH	6816 6816	Indicator Dimming Control Indicator Dimming Control	II	- UD7 or UFQ with UFL or UEU
6-7	-	-	-	Not Occupied	-	-
8	0.35	BN/BK	5720	Ignition Mode Switch Accessory LED Signal	II	BTM
9	0.35	WH/BN	7555	Lighting Control Switch Signal	II	-
10	-	-	-	Not Occupied	-	-
11	0.35	GN/BN	306	Headlamp Switch Headlamps Off Signal Control	II	-
12	0.35	WH/VT	6821	Surveillance Switch Signal	II	9C1 or 9C3
13	-	-	-	Not Occupied	-	-
14	0.35	GY/GN	328	Interior Lamp Defeat Switch Signal	II	-
15	0.35	BU/GN	6841	Rear Lamp Flasher Signal	II	9C1 or 9C3
16	0.35	WH/VT	103	Headlamp Switch On Signal	II	-
17	-	-	-	Not Occupied	-	-
18	0.35	BU/VT	5904	Steering Column Lock Status Signal	II	ULS
19	0.5	BK/BN	5360	Brake Apply Sensor Low Reference	II	-
20	0.35	BU/BK	5719	Ignition Mode Switch Start LED Signal	II	BTM
21	0.13	GY	728	Security Indicator Control	III	-
22	0.35	GN/GY	13	Headlamp Switch Park Lamp Signal	II	-

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
23	-	-	-	Not Occupied	-	-
24	0.35	WH	2501	High Speed GMLAN Serial Data (-) (1)	II	-
25	0.35	BU	2500	High Speed GMLAN Serial Data (+) (1)	II	-
26	0.35	YE/GN	3274	Remote Function Actuator Transmit Signal	II	-

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K9 Body Control Module X2



[redacted]

Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 19151266
- Service Connector: 19151266
- Description: 27-Way F 0.64 2.8 Series (L-BU)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575871	J-35616-35 (VT)	J-38125-215A
II	13579954	J-35616-35 (VT)	J-38125-215A
III	13575259	J-35616-35 (VT)	Not Available
IV	13327200	J-35616-35 (VT)	J-38125-215A

K9 Body Control Module X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	RD/WH	2740	Battery Positive Voltage	I	-

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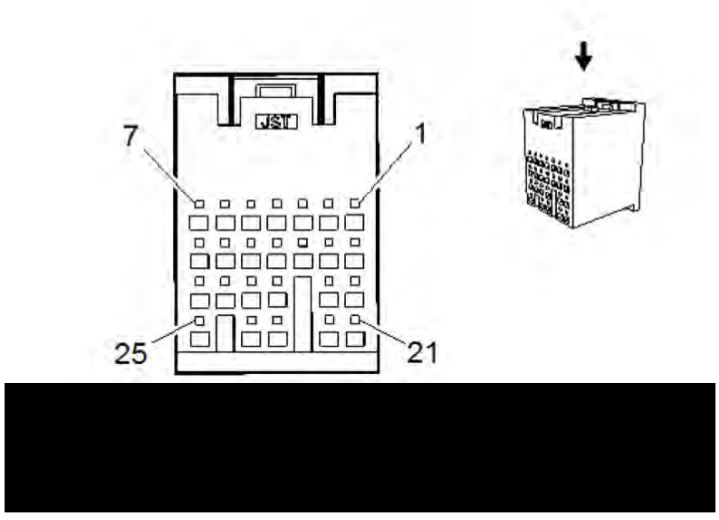
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
2	1.5	BK	1450	Ground	I	RHD
3	0.75	RD/BN	2940	Battery Positive Voltage	I	-
4	2.5	RD/WH	4042	Battery Positive Voltage	IV	-
5-6	-	-	-	Not Occupied	-	-
7	0.5	BU/YE	5361	Brake Apply Sensor Signal	III	RHD
8	0.35	YE	6817	LED Backlight Dimming Control	III	-
9	-	-	-	Not Occupied	-	-
10	0.13	WH	278	Ambient Light Sensor Signal	II	-
11	0.35	VT/YE	5526	Tap Up/Tap Down Switch Signal	III	MYA or MYC or MYD
12	0.35	BN/BU	391	Rear Window Wiper Switch Signal	III	F35
13	0.5	WH	5359	Brake Apply Sensor Supply Voltage	III	RHD
14	0.35 0.13	BU/VT BU	1788 1788	Traction Control Switch Signal (1) Traction Control Switch Signal (1)	III	V5B Without V5B
15	0.35	BN/WH	781	Driver Door Lock Switch Unlock Signal	III	-
16	0.35	GY	3273	Remote Function Actuator Return	III	-
17	0.35	BU/GN	5723	Ignition Mode Switch Mode Voltage	III	BTM
18	0.35	WH/BU	9007		III	9C1 or 9C3
19	0.35	BN/YE	780	Driver Door Lock Switch Lock Signal	III	-
20	-	-	-	Not Occupied	-	-
21	0.35	GN/GY	6135	Linear Interconnect Network Bus 4	III	F19 or F35 or F69

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
22-24	-	-	-	Not Occupied	-	-
25	0.35	GY/WH	3272	Remote Function Actuator Supply Voltage	III	-
26	0.35	GN/WH	111	Hazard Switch Signal	III	-
27	0.35	BU/WH	3275	Remote Function Actuator Receive Signal	III	-

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K9 Body Control Module X3



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 19151261
- Service Connector: 19151261
- Description: 25-Way F 0.64 Series (L-GN)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13579954	J-35616-35 (VT)	J-38125-215A
II	13575259	J-35616-35 (VT)	Not Available

K9 Body Control Module X3

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.13	GN	3277	Vehicle Anti-Theft System Immobilizer Return	I	-
2	0.35	GN/VT	7533	Linear Interconnect Network Bus 11	II	-

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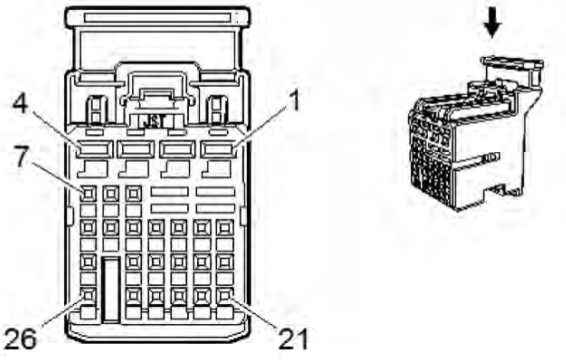
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
3	0.13	GY	3276	Vehicle Anti-Theft System Immobilizer Supply Voltage	I	-
4	0.35	YE	7556	Lighting Control Switch Reference	II	-
5	0.13 0.35	VT VT/YE	4 4	Accessory Voltage Accessory Voltage	I	Without BTM BTM
6	0.13 0.35	VT VT/BK	3 3	Run/Crank Ignition 1 Voltage Run/Crank Ignition 1 Voltage	I	BTM Without BTM
7	-	-	-	Not Occupied	-	-
8	0.35	GN	6818	Steering Wheel Resistor Ladder Signal #1	II	-
9	0.35	BN/GN	1884	Cruise Control Set/Coast/Resume/Accelerate Switch Signal	II	-
10	0.13	BK	6009	Windshield Wiper Switch Low Reference	I	-
11	0.13	WH	524	Headlamp Dimmer Switch High Beam Signal	I	-
12	0.13	WH	663	Hazard Switch Left Turn Signal	I	-
13	0.13	YE	1714	Windshield Wiper Switch Low Signal	I	-
14	-	-	-	Not Occupied	-	-
15	0.13	WH	1020	Off/Run/Crank Voltage	I	-
16	-	-	-	Not Occupied	-	-
17	0.13	YE	307	Headlamp Switch Flash To Pass Signal	I	-
18	0.35	GN/WH	3287	Horn Switch Signal	II	-
19	-	-	-	Not Occupied	-	-
20	0.13	GY	1715	Windshield Wiper Switch High Signal	I	-
21	-	-	-	Not Occupied	-	-
22	0.13	WH	1073	Ignition Key Resistor Signal	I	-

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
23	-	-	-	Not Occupied	-	-
24	0.13	VT	664	Hazard Switch Right Turn Signal	I	-
25	0.13	WH	94	Windshield Washer Switch Signal	I	-

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K9 Body Control Module X4



Connector Part Information

- Harness Type: Body
- OEM Connector: 19151263
- Service Connector: 19151263
- Description: 26-Way F 0.64 2.8 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575871	J-35616-35 (VT)	J-38125-215A
II	13575259	J-35616-35 (VT)	Not Available

K9 Body Control Module X4

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	YE	312	Right Headlamp Low Beam Supply Voltage	I	T4A
2	0.75	YE	712	Left Headlamp Low Beam Supply Voltage	I	T4A

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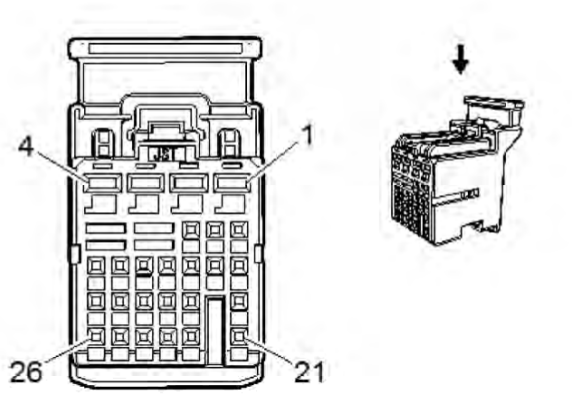
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
3	0.75	GN/VT	1315	Right Front Turn Signal Lamp Supply Voltage	I	-
4	0.75	BU/VT	1335	Right Rear Turn Signal Lamp Supply Voltage	I	-
5	0.35	VT/GY	709	Left Park Lamp Supply Voltage	II	-
6	0.35	GY/BN	309	Right Park Lamp Supply Voltage	II	-
7	0.5 0.5	WH/YE WH/YE	7541 9541	Right Rear Stop Lamp Supply Voltage Right Rear Stop/Turn Lamp Supply Voltage	II	F35 or F80 or F19 with T81 F69
8	0.35	GY/YE	6188	Lift Glass/Trunk Motor Release Control	II	F19 or F69 of F80 with E95
9	0.35	GY/VT	3264	Logistic Mode Relay Close Control	II	-
10	0.35	YE	5420	Rear Wiper Motor Relay Coil Control	II	F35
11	0.5	VT/WH	5065	Stop Lamp Relay Coil Supply Voltage	II	-
12	0.35	GY	755	RAP Relay Coil Control	II	-
13	0.35	GN/YE	6846	Rear License Lamp Supply Voltage	II	-
14	0.35	BN/GY	2268	Windshield Washer Relay Control	II	-
15	0.35	GN/VT	5199	Run/Crank Relay Coil Control	II	-
16	0.35	GY	91	Windshield Wiper Motor Relay Coil Supply Voltage	II	-
17	0.35	BN/GN	196	Windshield Wiper Motor Park Switch Signal	II	-
18	0.35	WH/YE	5075	Current Sensor Signal	II	-
19	-	-	-	Not Occupied	-	-
20	0.35	RD/YE	2340	Battery Positive Voltage	II	-
21	0.35	BU/VT	5076		II	-

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Current Sensor Supply Voltage		
22	0.35	VT/YE	5985	Accessory Wakeup Serial Data	II	-
23	0.35	WH/BU	5986	Serial Data Communication Enable	II	-
24	0.35	BN/GN	109	Hood Ajar Switch Signal	II	-
25	-	-	-	Not Occupied	-	-
26	0.5	BK	2750	Ground	II	-

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K9 Body Control Module X5



Connector Part Information

- Harness Type: Body
- OEM Connector: 19151264
- Service Connector: 19151264
- Description: 26-Way F 0.64 2.8 Series (BN)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575871	J-35616-35 (VT)	J-38125-215A
II	13575259	J-35616-35 (VT)	Not Available
III	13575259	J-35616-64B (L-BU)	J-38125-12A

K9 Body Control Module X5

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BU/WH	1334	Left Rear Turn Signal Lamp Supply Voltage	I	-

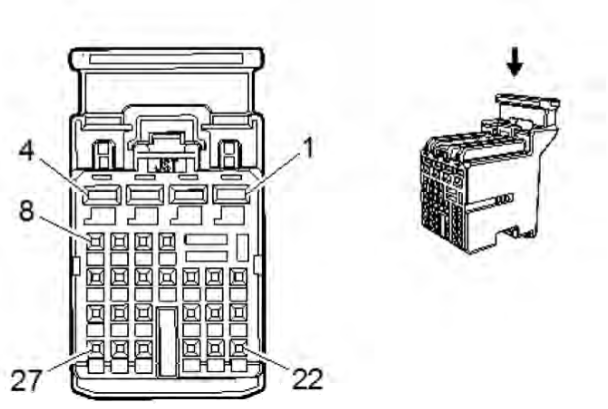
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
2	0.75	BU/WH	1314	Left Front Turn Signal Lamp Supply Voltage	I	-
3	0.75	RD/GN	5140	Battery Positive Voltage	I	-
4	0.75	RD/WH	3440	Battery Positive Voltage	I	-
5	0.5	VT/GN	359	DRL Supply Voltage	II	T3N or V5B
6	0.35	BK/VT	5077	Current Sensor Low Reference	III	-
7	0.5 0.5	GY/YE GY/YE	7542 9542	Left Rear Stop Lamp Supply Voltage Left Rear Stop/Turn Lamp Supply Voltage	II	F35 or F80 or F19 with T81 F69
8-9	-	-	-	Not Occupied	-	-
10	0.35	BN/WH	1317	Fog Lamp Relay Control	II	T3U or V5B
11	0.35	GN/WH	2270	Rear Window Washer Relay Control	II	-
12	0.35	WH/BU	6311	Cruise/ETC/TCC Brake Signal	III	-
13	0.35	BN/YE	1970	Headlamp Low Beam Relay Control	II	T4F
14	0.35	BU	3760	Switched Auxiliary Accessory Voltage Control	II	9C1 or 9C3
15-17	-	-	-	Not Occupied	-	-
18	0.35	BN/VT	1969	Headlamp High Beam Relay Control	II	-
19	0.35	BN/WH	28	Horn Relay Control	II	-
20-23	-	-	-	Not Occupied	-	-
24	0.35	WH/VT	860	Front Windshield Wiper Switch High Signal	II	-
25	-	-	-	Not Occupied	-	-
26	0.35	YE/BU	2282	Headlamp Washer Relay Control	II	T3T

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K9 Body Control Module X6



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 19151267
- Service Connector: 19151267
- Description: 27-Way F 0.64 2.8 Series (PK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13327199	J-35616-35 (VT)	J-38125-12A
II	13575870	J-35616-64B (L-BU)	J-38125-12A

K9 Body Control Module X6

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1	GY	5911	Door Lock Actuator Lock Control 2	I	—
2	0.75 1.5	GY GY	295 295	Door Lock Actuator Lock Control Door Lock Actuator Lock Control	I I	F80

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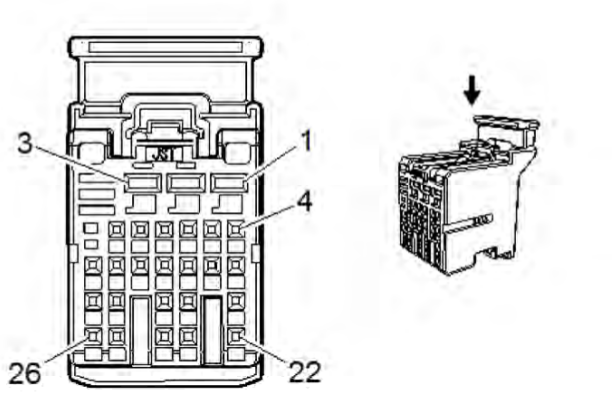
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
	1.5	GY/GN	3271	Door Lock Control (2)	I	F19/F35/F69 without NCG F19/F35/F69 with NCG
3	1.5	BK	2250	Ground	I	—
4	1.5	BN/YE	294	Door Lock Actuator Unlock Control	I	—
5	0.35	VT/GY	1303	Lift Gate Ajar Switch Signal (1)	II	—
6	—	—	—	Not Occupied	I	—
7	0.35	WH/YE	7557	LED Ambient Lighting Control 1	I	—
8	—	—	—	Not Occupied	—	—
9	0.35	GN/BU	6133	Local Interconnect Network Bus 2	II	—
10	0.35	GN/YE	6134	Local Interconnect Network Bus 3	I	—
11	—	—	—	Not Occupied	—	—
12	0.5	BU/VT	1134	Park Brake Switch Signal	II	JFA
13	—	—	—	Not Occupied	—	—
14	0.13	VT	6189	Lift Glass/Trunk Interior Release Signal	II	—
15	—	—	—	Not Occupied	—	—
16	0.35	GN/BN	6132	Local Interconnect Network Bus 1	II	CE1
17 – 21	—	—	—	Not Occupied	—	—
22	0.35	GY	5054	Sport Mode Switch Signal	II	—
23	—	—	—	Not Occupied	—	—
24	0.5	BU	2500	High Speed GMLAN Serial Data (+) (1)	II	—
25	0.5	WH	2501	High Speed GMLAN Serial Data (-) (1)	II	—

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
26 – 27	—	—	—	Not Occupied	—	—

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K9 Body Control Module X7



Connector Part Information

- Harness Type: Body
- OEM Connector: 19151265
- Service Connector: 19151265
- Description: 26-Way F 0.64 2.8 Series (GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575871	J-35616-35 (VT)	J-38125-215A
II	13575259	J-35616-64B (L-BU)	J-38125-12A
III	13579954	J-35616-35 (VT)	J-38125-215A

K9 Body Control Module X7

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	GY	157	Interior Lamp Control	I	-
2	0.75	WH/BN	6815	Inadvertent Power Control	I	-

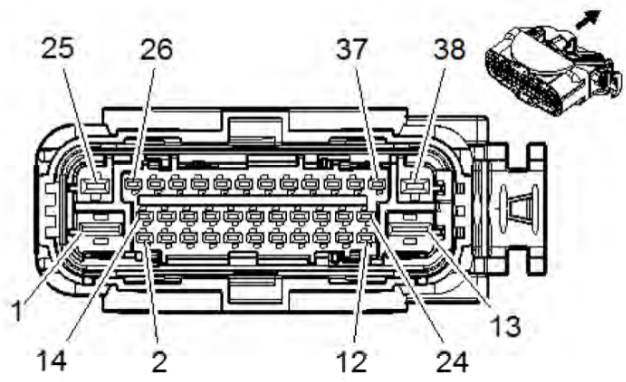
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
3	0.75	GN/WH	24	Backup Lamp Supply Voltage	I	-
4	-	-	-	Not Occupied	-	-
5	0.35	YE	5810	Park Enable Signal	II	9C1 or 9C3
6	-	-	-	Not Occupied	-	-
7	0.5	GN/GY	737	Trunk Lamp Control	II	-
8	0.35	GY/GN	5996	Driver Outside Rear View Mirror Puddle Lamp Supply Voltage	II	DM7
9	0.35	YE	6817	LED Backlight Dimming Control	II	-
10-12	-	-	-	Not Occupied	-	-
13	0.35	WH/VT	5905	Key Capture/Column Lock Shift Position Signal	II	BTM or M97
14	0.13	YE	244	Passenger Door Lock Switch Lock Control	III	-
15	-	-	-	Not Occupied	-	-
16	0.35	VT/BU	3263	Logistic Mode Relay Open Control	II	-
17-18	-	-	-	Not Occupied	-	-
19	0.35	GY	156	Courtesy Lamp Switch Signal	II	-
20-22	-	-	-	Not Occupied	-	-
23	0.35	GN	5060	Low Speed GMLAN Serial Data	II	-
24	-	-	-	Not Occupied	-	-
25	0.13	BN	245	Passenger Door Lock Switch Unlock Control	III	-
26	-	-	-	Not Occupied	-	-

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K17 Electronic Brake Control Module



Connector Part Information

- Harness Type: Body
- OEM Connector: 13359630
- Service Connector: 19299780
- Description: 38-Way F 1.5, 2.8, 4.8 Series, Sealed

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13578852	J-35616-35 (VT)	J-38125-215A
II	13584537	J-35616-35 (VT)	J-38125-215A
III	13578853	J-35616-35 (VT)	J-38125-215A

K17 Electronic Brake Control Module

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	4	RD/YE	442	Battery Positive Voltage	I	-
2	0.35	WH/BK	381	Vehicle Speed Signal	II	-

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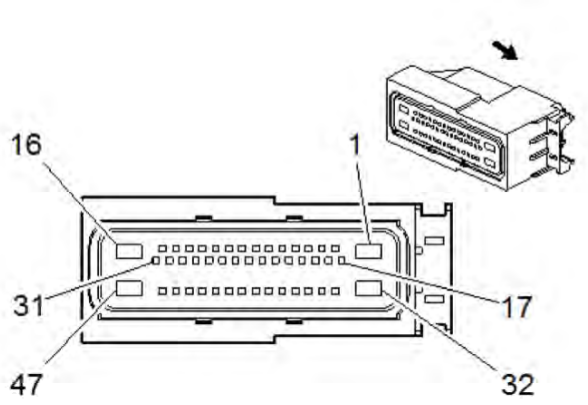
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
3	-	-	-	Not Occupied	-	-
4	0.35	YE	872	Wheel Speed Sensor Signal Right Front	II	-
5	0.35	YE/RD	6031	Brake Vacuum Sensor 5 Volt Reference	II	LFW or LFX or LWR or LSA
6-7	-	-	-	Not Occupied	-	-
8	0.35	GY	830	Wheel Speed Sensor Signal Left Front	II	-
9-11	-	-	-	Not Occupied	-	-
12	0.35	GN/GY	333	Brake Fluid Level Sensor Signal	II	-
13	4	BK	850	Ground	I	-
14	0.5	WH	2501	High Speed GMLAN Serial Data (-) (1)	II	-
15	0.5	WH	2501	High Speed GMLAN Serial Data (-) (1)	II	-
16	0.35	GY/BN	7065	Wheel Speed Sensor Supply Voltage Right Front	II	-
17	0.5	GY/YE	7128	Wheel Speed Sensor Supply Voltage Right Rear	II	-
18	0.5	BU	884	Wheel Speed Sensor Signal Left Rear	II	-
19	0.35	GY/WH	7064	Wheel Speed Sensor Supply Voltage Left Front	II	-
20	0.5	WH	6106	High Speed GMLAN Serial Data (-) (2)	II	-
21	-	-	-	Not Occupied	-	-
22	0.35	BN	6305	Brake Vacuum Switch Signal	II	LFW or LFX or LWR
23	0.35	BU/GY	9362	Suspension Control Switch Return	II	V5B
24	-	-	-	Not Occupied	-	-

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
25	2.5	RD/YE	3740	Battery Positive Voltage	III	-
26	0.5	BU	2500	High Speed GMLAN Serial Data (+) (1)	II	-
27	0.5	BU	2500	High Speed GMLAN Serial Data (+) (1)	II	-
28	0.5	WH/BU	5986	Serial Data Communication Enable	II	-
29	0.5	VT	882	Wheel Speed Sensor Signal Right Rear	II	-
30	-	-	-	Not Occupied	-	-
31	0.5	GY/BK	7127	Wheel Speed Sensor Supply Voltage Left Rear	II	-
32	0.35	BK/YE	6032	Brake Vacuum Sensor Low Reference	II	LFW or LFX or LWR or LSA
33	0.5	BU/YE	6105	High Speed GMLAN Serial Data (+) (2)	II	-
34	0.35	BU/GY	9361	Suspension Control Switch Signal	II	V5B
35	0.5	GN/BN	2087	Combined Vehicle Inertial Sensor Supply Voltage	II	-
36	-	-	-	Not Occupied	-	-
37	0.35	YE/VT	6030	Brake Vacuum Sensor Signal	II	LFW or LFX or LWR or LSA
38	2.5	BK	850	Ground	III	-

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K19 Suspension Control Module (F55)



Connector Part Information

- Harness Type: Electronic Suspension Control
- OEM Connector: 89047358
- Service Connector: Service by Harness - See Part Catalog
- Description: 26-Way F 0.64 2.8 Series (BN)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	J-38125-12A
II	Not Available	J-35616-64B (L-BU)	J-38125-12A

K19 Suspension Control Module (F55)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	0.35	BK/GN	1209	Left Rear Strut Position Sensor Low Reference	I	—
3	0.35	YE/WH	1213		I	—

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Right Front Strut Position Sensor Signal		
4	—	—	—	Not Occupied	—	—
5	0.35	BK/YE	1215	Right Rear Strut Position Sensor Low Reference	I	—
7	0.35	BN/WH	1207	Left Front Strut Position Sensor Signal	I	—
7–11	—	—	—	Not Occupied	—	—
12	0.35	BU/YE	6105	High Speed GMLAN Serial Data (+) (2)	I	—
13	0.5	BU/YE	6105	High Speed GMLAN Serial Data (+) (2)	I	—
14	0.35	WH	6106	High Speed GMLAN Serial Data (-) (2)	I	—
15	0.5	WH	6106	High Speed GMLAN Serial Data (-) (2)	I	—
16	2	WH/BU	5986	Serial Data Communication Enable	I	—
17	0.35	GN/WH	1210	Left Rear Strut Position Sensor Signal	I	—
18	0.355	BK/GY	1212	Right Front Strut Position Sensor Low Reference	I	—
19	—	—	—	Not Occupied	I	—
20	0.35	GN/GY	1216	Right Rear Strut Position Sensor Signal	I	—
21	0.35	BK/BU	1206	Left Front Strut Position Sensor Low Reference	I	—
22-23	—	—	—	Not Occupied	—	—
20	0.35	WH	2501	High Speed GMLAN Serial Data (-) (1)	I	—
25	0.35	WH	2501	High Speed GMLAN Serial Data (-) (1)	I	—
26	0.35	WH/BU	3214	Computer Command Ride Tour LED Control	I	—

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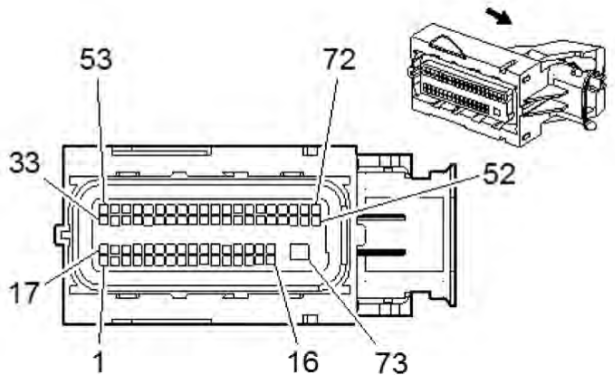
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
27	0.75	GY/WH	1117	Right Front Damping Servo Control	I	—
28	27	BN/BU	1116	Right Front Damping Servo Supply Voltage	I	—
29	—	—	—	Not Occupied	—	—
30	0.75	GY/BU	1113	Left Front Damping Servo Control	I	—
31	0.75	BN/WH	1107	Left Front Damping Servo Supply Voltage	I	—
32	2	RD/BN	3640	Battery Positive Voltage	I	—
32	0.35	YE/RD	1208	Left Rear Strut Position Sensor Voltage Reference	I	—
34	0.35	BN/RD	1211	Right Front Strut Position Sensor Voltage Referenc	I	—
35	0.35	GN/RD	1214	Right Rear Strut Position Sensor Voltage Reference	I	—
36	0.35	BU/RD	1205	Left Front Strut Position Sensor Voltage Reference	I	—
37-38	—	—	—	Not Occupied	—	—
39	0.35	BU	2500	High Speed GMLAN Serial Data (+) (1)	I	—
40	0.35	BU	2500	High Speed GMLAN Serial Data (+) (1)	I	—
41	0.35	GN/GY	3215	Computer Command Ride Sport LED Control	I	—
42	0.75	GN/VT	1115	Left Rear Damping Servo Control	I	—
43	0.75	BU/GY	1114	Left Rear Damping Servo Supply Voltage	I	—
44	—	—	—	Not Occupied	—	—
45	0.75	GN/GY	1119	Right Rear Damping Servo Control	I	—
46	0.75	BN/GN	1118	Right Rear Damping Servo Supply Voltage	I	—
47	2	BK	2550	Ground	I	—

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option

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K20 Engine Control Module X1 (L77/LS3)



Connector Part Information

- Harness Type: Engine Harness
- OEM Connector: 12603596
- Service Connector: 13574947
- Description: 73-Way F 0.64, 2.8 Series, Sealed (BK with BK Terminal Position Assurance)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19119437	J-35616-35 (VT)	J-38125-561
II	13575291	J-35616-35 (VT)	J-38125-11A

K20 Engine Control Module X1 (L77/LS3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH/GY	1786	Transmission Park/Neutral Signal (1)	I	MYC
2-7	-	-	-	Not Occupied	-	-

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
8	0.5	GN/WH	5007	Reverse Switch Signal	I	MER
9	0.5	WH/BU	6311	Cruise/ETC/TCC Brake Signal	I	-
10	0.5	VT/BU	3120	Heated Oxygen Sensor High Signal Bank 1 Sensor (2)	I	-
11	0.5	WH/YE	3121	Heated Oxygen Sensor Low Signal Bank 1 Sensor (2)	I	-
12	0.5	GN	380	A/C Refrigerant Pressure Sensor Signal	I	-
13	0.5	BK/BN	5514	A/C Refrigerant Pressure Sensor Low Reference	I	-
14-15	-	-	-	Not Occupied	-	-
16	0.5	BU/VT	1589	Primary Fuel Level Sensor Signal	I	-
17	-	-	-	Not Occupied	-	-
18	0.5	VT/YE	5985	Accessory Wakeup Serial Data	I	MER
19	0.5	VT/GN	439	Run/Crank Ignition 1 Voltage	I	-
20	0.5	RD/BN	440	Battery Positive Voltage	I	-
21	0.5	YE/VT	6030	Brake Vacuum Sensor Signal	I	-
22	0.5	BK/YE	6032	Brake Vacuum Sensor Low Reference	I	-
23	0.5	BK/VT	1272	Accelerator Pedal Position Low Reference (2)	I	-
24-25	-	-	-	Not Occupied	-	-
26	0.5	YE	6111	Clutch Apply Sensor Signal	I	MER
		WH/GN	5380	Brake Position Sensor Signal	I	MYC
27	0.5	WH	2501	High Speed GMLAN Serial Data (-) (1)	I	-
28	0.5	BU	2500	High Speed GMLAN Serial Data (+) (1)	I	-
29	0.5	YE/WH	1161	Accelerator Pedal Position Signal (1)	I	-

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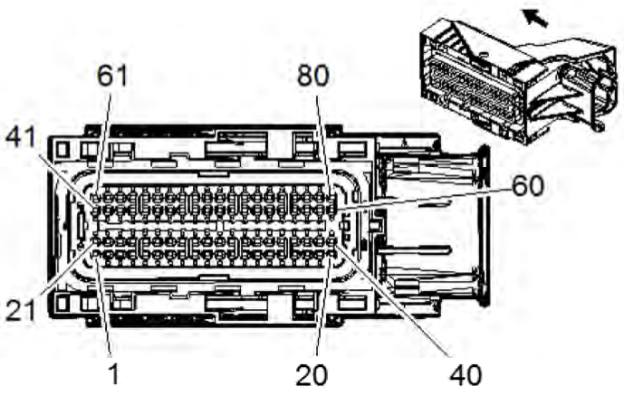
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
30	0.5	BK/BU	1271	Accelerator Pedal Position Low Reference (1)	I	-
31	0.5	BK/GN	6281	Fuel Level Sensor Low Reference	I	-
32	0.5	GN/WH	1162	Accelerator Pedal Position Signal (2)	I	-
33	-	-	-	Not Occupied	-	-
34	0.5	BN/RD	2700	A/C Pressure Sensor 5 Volt Reference	I	-
35	-	-	-	Not Occupied	-	-
36	0.5	BN/RD	1274	Accelerator Pedal Position 5 Volt Reference (2)	I	-
37	0.5	BN/VT	472	Intake Air Temperature Sensor Signal	I	-
38	0.5	BK/VT	2760	Intake Air Temperature Sensor Low Reference	I	-
39	-	-	-	Not Occupied	-	-
40	0.5	WH	1579	Fuel Temperature/Composition Signal	I	L77
41	0.5	GN/WH	492	Mass Air Flow Sensor Signal	I	-
42	0.5	BK/GY	6110	Clutch Apply Sensor Low Reference	I	MER
		BK/YE	5382	Low Reference	I	MYC
43-46	-	-	-	Not Occupied	-	-
47	0.75	VT/BU	5290	Powertrain Main Relay Fused Supply (1)	I	-
48	-	-	-	Not Occupied	-	-
49	0.5	YE/BU	3221	Heated Oxygen Sensor Low Signal Bank 2 Sensor (2)	I	-
50	0.5	GN/GY	465	Fuel Pump Primary Relay Control	I	-
51	-	-	-	Not Occupied	-	-
52	0.5	VT/GY	6386		I	-

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Starter Enable Relay (PPEI 3) Control		
53	0.5	YE/RD	6031	Brake Vacuum Sensor 5 Volt Reference	I	-
54	0.5	GY/RD	6109	Clutch Apply Sensor Voltage Reference	I	MER
		WH/RD	5381	5 Volt Reference	I	MYC
55	-	-	-	Not Occupied	-	-
56	0.5	WH/RD	1164	Accelerator Pedal Position 5 Volt Reference (1)	I	-
57	-	-	-	Not Occupied	-	-
58	0.5	WH/BK	2366	Cooling Fan Control Relay Speed Signal	I	-
59	0.5	YE	5991	Powertrain Relay Coil Control	I	-
60-62	-	-	-	Not Occupied	-	-
63	0.5	WH/GY	459	A/C Compressor Clutch Relay Control	I	-
64	0.5	WH/BN	3223	Heated Oxygen Sensor Heater Low Control Bank 2 Sensor (2)	I	-
65	0.5	GY/WH	3122	Heated Oxygen Sensor Heater Low Control Bank 1 Sensor (2)	I	-
66-67	-	-	-	Not Occupied	-	-
68	0.5	BN/WH	419	Check Engine Indicator Control	I	-
69	0.5	VT/GN	3220	Heated Oxygen Sensor High Signal Bank 2 Sensor (2)	I	-
70	0.5	BU/WH	1937	Secondary Fuel Level Sensor Signal	I	-
71	0.5	GY/BK	6355	Output Speed High Signal Output	I	-
72	0.5	WH/VT	6356	Output Speed Low Signal	I	MER
73	2.5	BK/WH	451	Signal Ground	II	-

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K20 Engine Control Module X2 (L77/LS3)



Connector Part Information

- Harness Type: Engine Harness
- OEM Connector: 12603599
- Service Connector: 13579724
- Description: 73-Way F 0.64.2.8 Series, Sealed (BK with GY Terminal Position Assurance)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Pending	Pending	Pending

K20 Engine Control Module X2 (L77/LS3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	-	-	-	Not Occupied	-	-
2	0.5	VT/BU	6270	Crankshaft 60X Sensor Voltage	I	-
3	0.5	BN/RD	2701	Throttle Position Sensor 5 Volt Reference	I	-

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4	-	-	-	Not Occupied	-	-
5	0.75	BN/WH	582	Throttle Actuator Control Close	I	-
6	0.75	YE	581	Throttle Actuator Control Open	I	-
7	-	-	-	Not Occupied	-	-
8	0.5	GN/BU	428	EVAP Canister Purge Solenoid Control	I	-
9	0.5	GY	5493	Cylinder Shutoff Solenoid Control (3)	I	L77+MYC
10	0.5	BU	5491	Cylinder Shutoff Solenoid Control (1)	I	L77+MYC
11	0.5	GN/BN	1652	Reverse Lockout Solenoid Control	I	MER
		YE/BU	5494	Cylinder Shutoff Solenoid Control (4)	I	L77+MYC
12	0.5	GY/WH	3113	Heated Oxygen Sensor Heater Low Control Bank 1 Sensor (1)	I	-
13	0.5	GN/YE	3212	Heated Oxygen Sensor Heater Low Control Bank 2 Sensor (1)	I	-
14	0.5	GN	5492	Cylinder Shutoff Solenoid Control (2)	I	L77+MYC
15-16	-	-	-	Not Occupied	-	-
17	0.75	BN/GY	878	Fuel Injector Control (8)	I	-
18	0.75	BN/GN	845	Fuel Injector Control (5)	I	-
19	0.75	BN/BU	846	Fuel Injector Control (6)	I	-
20	0.75	GN/YE	1744	Fuel Injector Control (1)	I	-
21	0.5	BU	410	Engine Coolant Temperature Sensor Signal	I	-
22	0.5	BK/BN	2761	Coolant Temperature Sensor Low Reference	I	-
23	0.5	BN/BU	357	Oil Temperature Sensor Signal	I	-
24	0.5	BK/BN	6273	Oil Temperature Sensor Low Reference	I	-

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
25	-	-	-	Not Occupied	-	-
26	0.5	VT/GY	496	Knock Sensor Signal (1)	I	-
27	0.5	BK/YE	1716	Knock Sensor Low Reference (1)	I	-
28	-	-	-	Not Occupied	-	-
29	0.5	WH/GY	1876	Knock Sensor Signal (2)	I	-
30	0.5	BK/GY	2303	Knock Sensor Low Reference (2)	I	-
31	-	-	-	Not Occupied	-	-
32	0.5	GY	23	Generator Field Duty Cycle Signal	I	-
33	0.5	BN/GN	1174	Oil Level Switch Signal	I	-
34	0.5	BK/VT	2755	Oil Pressure Sensor Low Reference	I	-
35	0.5	BK/BN	2752	Throttle Position Sensor Low Reference	I	-
36	-	-	-	Not Occupied	-	-
37	0.75	YE/WH	1745	Fuel Injector Control (2)	I	-
38	0.75	BN/VT	1746	Fuel Injector Control (3)	I	-
39	0.75	BN/YE	844	Fuel Injector Control (4)	I	-
40	0.75	BN/VT	877	Fuel Injector Control (7)	I	-
41	0.5	WH/RD	2705	Oil Pressure Sensor 5 Volt Reference	I	-
42	-	-	-	Not Occupied	-	-
43	0.5	GY/RD	2704	Manifold Absolute Pressure Sensor 5 Volt Reference	I	-
44	0.5	GY/BU	6259	Camshaft CAM W Supply Voltage	I	-
45-49	-	-	-	Not Occupied	-	-
50	0.5	YE/BN	331	Oil Pressure Sensor Signal	I	-
51-52	-	-	-	Not Occupied	-	-

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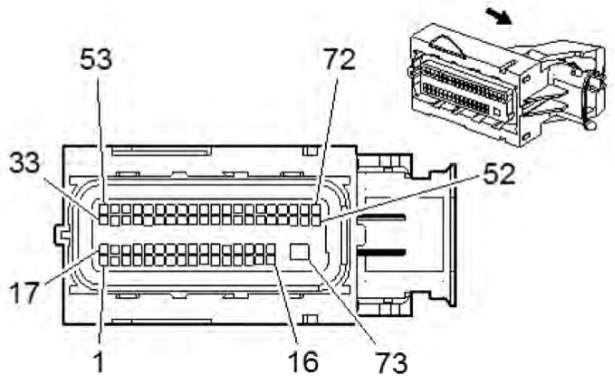
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
53	0.5	BK/GN	469	Manifold Absolute Pressure Sensor Low Reference	I	-
54-55	-	-	-	Not Occupied	-	-
56	0.5	WH/BK	3111	Heated Oxygen Sensor Low Signal Bank 1 Sensor (1)	I	-
57	0.5	WH/GY	3110	Heated Oxygen Sensor High Signal Bank 1 Sensor (1)	I	-
58	0.5	GN/WH	432	Manifold Absolute Pressure Sensor Signal	I	-
59	0.5	VT/WH	3210	Heated Oxygen Sensor High Signal Bank 2 Sensor (1)	I	-
60	0.5	YE/WH	3211	Heated Oxygen Sensor Low Signal Bank 2 Sensor (1)	I	-
61	0.5	BN	25	Charge Indicator Control	I	-
62	-	-	-	Not Occupied	-	-
63	0.5	BN/BU	486	Throttle Position Sensor Signal (2)	I	-
64	0.5	YE/VT	6265	Camshaft CAM W Signal	I	-
65	0.5	BN/GN	485	Throttle Position Sensor Signal (1)	I	-
66	0.5	GN/BK	6266	Camshaft CAM W Ground	I	-
67	-	-	-	Not Occupied	-	-
68	0.5	GN	6271	Crankshaft 60X Sensor Signal	I	-
69	0.5	BK/VT	6272	Crankshaft 60X Sensor Low Reference	I	-
70	0.5	BU/WH	2121	Ignition Control (1)	I	-
71	0.5	VT/WH	2128	Ignition Control (8)	I	-
72	0.5	GN/GY	2127	Ignition Control (7)	I	-
73	0.5	BU/WH	2122	Ignition Control (2)	I	-
74	0.5	BN/BU	2126	Ignition Control (6)	I	-

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
75	0.5	BU/GY	2125	Ignition Control (5)	I	-
76	0.5	YE/BU	2124	Ignition Control (4)	I	-
77	0.5	GN/BU	2123	Ignition Control (3)	I	-
78	0.5	BK/BU	2129	Ignition Control Low Reference Bank 1	I	-
79	0.5	BK/GY	2130	Ignition Control Low Reference Bank 2	I	-

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K20 Engine Control Module X1 (LFW/LFX/LWR)



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Connector Part Information

- Harness Type: Engine Harness
- OEM Connector: 12615655
- Service Connector: 13574946
- Description: 73-Way F 0.64, 2.8 Series, Sealed (BK with BU Terminal Position Assurance)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Pending	Pending	Pending

K20 Engine Control Module X1 (LFW/LFX/LWR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	-	-	-	Not Occupied	-	-
2	0.5	BU/WH	7446	Fuel Line Pressure Sensor Signal	I	LFW/LFX
3	-	-	-	Not Occupied	-	-

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4	0.5	YE/WH	3200	Throttle Inlet Absolute Pressure Sensor Signal	I	-
5	0.5	WH/RD	3201	Throttle Inlet Absolute Pressure Sensor 5V Reference	I	-
6	0.5	GN	380	A/C Refrigerant Pressure Sensor Signal	I	-
7	-	-	-	Not Occupied	-	-
8	0.5		7447	Fuel Line Pressure Sensor Low Reference	I	LFW/LFX
9-13	-	-	-	Not Occupied	-	-
14	0.5	WH/RD	1164	Accelerator Pedal Position 5 Volt Reference (1)	I	-
15	0.5	YE/WH	1161	Accelerator Pedal Position Signal (1)	I	-
16-19	-	-	-	Not Occupied	-	-
20	0.5	WH/YE	3202	5 Volt Reference	I	LWR
21	0.5	BN/RD	2700	A/C Pressure Sensor 5 Volt Reference	I	-
22	0.5	BK/BN	5514	A/C Refrigerant Pressure Sensor Low Reference	I	-
23	-	-	-	Not Occupied	-	-
24	0.5	BN/RD	7445	Fuel Line Pressure Sensor 5V Reference	I	LFW/LFX
25	0.5	BU/VT	1589	Primary Fuel Level Sensor Signal	I	-
26	0.5	BK/GN	6281	Fuel Level Sensor Low Reference	I	-
27	0.5	BU/WH	1937	Secondary Fuel Level Sensor Signal	I	LFW/LFX
28-29	-	-	-	Not Occupied	-	-
30	0.5	BK/BU	1271	Accelerator Pedal Position Low Reference (1)	I	-
31	-	-	-	Not Occupied	-	-

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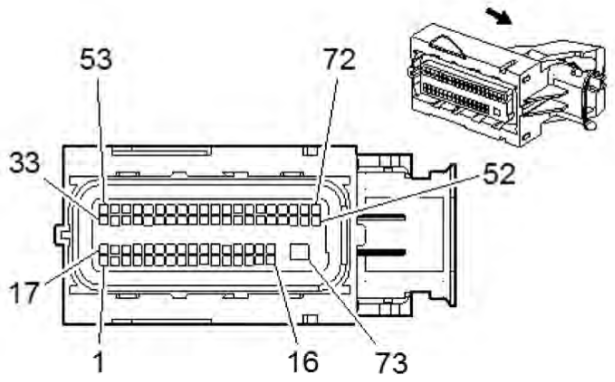
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
32	0.5	WH/GY	459	A/C Compressor Clutch Relay Control	I	-
33	0.5	BN/RD	1274	Accelerator Pedal Position 5 Volt Reference (2)	I	-
34	0.5	GN/WH	1162	Accelerator Pedal Position Signal (2)	I	-
35	-	-	-	Not Occupied	-	-
36	0.5	BU/BK	7493	High Speed GMLAN Serial Data (+)(3)	I	LFW/LFX
37	0.5	WH	7494	High Speed GMLAN Serial Data (-)(3)	I	LFW/LFX
38	0.5	WH	1579	Fuel Temperature/Composition Signal	I	LFW/LFX
		WH/BK	5666	Liquid Petroleum Gas Module Control	I	LWR
39	0.5	BU	2500	High Speed GMLAN Serial Data (+) (1)	I	-
40	0.5	WH	2501	High Speed GMLAN Serial Data (-) (1)	I	-
41-43	-	-	-	Not Occupied	-	-
44	0.5	GY	5660	Fuel Pump Controller Data Out Signal	I	LFW/LFX
		GN/GY	465	Fuel Pump Primary Relay Control	I	LWR
45	-	-	-	Not Occupied	-	-
46	0.5	BN/WH	419	Check Engine Indicator Control	I	-
47	0.5	GY/RD	6109	Clutch Apply Sensor Voltage Reference	I	MV5
		WH/RD	5381	5 Volt Reference	I	MYA
48	0.5	YE	6111	Clutch Apply Sensor Signal	I	MV5
		WH/GN	5380	Brake Position Sensor Signal	I	MYA
49-50	-	-	-	Not Occupied	-	-

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
51	0.5	VT/GN	439	Run/Crank Ignition 1 Voltage	I	-
52	0.5	RD/BN	440	Battery Positive Voltage	I	-
53	0.5	BK/VT	1272	Accelerator Pedal Position Low Reference (2)	I	-
54-56	-	-	-	Not Occupied	-	-
57	0.5	WH/BU	6311	Cruise/ETC/TCC Brake Signal	I	MV5/MYA
58	-	-	-	Not Occupied	-	-
59	0.5	WH/BK	2366	Cooling Fan Control Relay Speed Signal	I	-
60-61	-	-	-	Not Occupied	-	-
62	0.5	VT/BU	5291	Powertrain Main Relay Fused Supply (2)	I	-
63	0.5	VT/GY	6386	Starter Enable Relay (PPEI 3) Control	I	-
64-66	-	-	-	Not Occupied	-	-
67	0.5	VT/BU	5292	Powertrain Main Relay Fused Supply (3)	I	-
68	0.5	BK/GY	6110	Clutch Apply Sensor Low Reference	I	MV5
		BK/YE	5382	Low Reference	I	MYA
69	-	-	-	Not Occupied	-	-
70	0.5	VT/YE	5985	Accessory Wakeup Serial Data	I	-
71	-	-	-	Not Occupied	-	-
72	0.5	YE	5991	Powertrain Relay Coil Control	I	-
73	1.5	VT/BU	5290	Powertrain Main Relay Fused Supply (1)	I	-

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K20 Engine Control Module X2 (LFW/LFX/LWR)



Connector Part Information

- Harness Type: Engine Harness
- OEM Connector: 12603596
- Service Connector: 13574947
- Description: 73-Way F 0.64, 2.8 Series, Sealed (BK with BK Terminal Position Assurance)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Pending	Pending	Pending

K20 Engine Control Module X2 (LFW/LFX/LWR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1-2	-	-	-	Not Occupied	-	-
3	0.5	BK/GN	2919	Fuel Rail Pressure Sensor Low Reference	I	-
4-7	-	-	-	Not Occupied	-	-

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
8	0.5	GY/BK	6355	Output Speed High Signal Output	I	-
9	-	-	-	Not Occupied	-	-
10	0.5	VT/GY	3110	Heated Oxygen Sensor High Signal Bank 1 Sensor (1)	I	-
11	0.5	VT/WH	3210	Heated Oxygen Sensor High Signal Bank 2 Sensor (1)	I	-
12	0.5	VT/BU	3120	Heated Oxygen Sensor High Signal Bank 1 Sensor (2)	I	-
13	0.5	VT/GN	3220	Heated Oxygen Sensor High Signal Bank 2 Sensor (2)	I	-
14	-	-	-	Not Occupied	-	-
15	0.5	GY/BU	7564	Humidity Sensor Signal	I	LFW/LFX
16	0.5	BN/WH	582	Throttle Actuator Control Close	I	-
17	-	-	-	Not Occupied	-	-
18	0.5	BN/RD	2917	Fuel Rail Pressure Sensor (5) Volt Reference	I	-
19	0.5	BU/WH	2918	Fuel Rail Pressure Sensor Signal	I	-
20-22	-	-	-	Not Occupied	-	-
23	0.5	GN/WH	5007	Reverse Switch Signal	I	MV5
24-25	-	-	-	Not Occupied	-	-
26	0.5	WH/BK	3111	Heated Oxygen Sensor Low Signal Bank 1 Sensor (1)	I	-
27	0.5	YE/WH	3211	Heated Oxygen Sensor Low Signal Bank 2 Sensor (1)	I	-
28	0.5	WH/YE	3121	Heated Oxygen Sensor Low Signal Bank 1 Sensor (2)	I	-
29	0.5	YE/BU	3221	Heated Oxygen Sensor Low Signal Bank 2 Sensor (2)	I	-
30-31	-	-	-	Not Occupied	-	-

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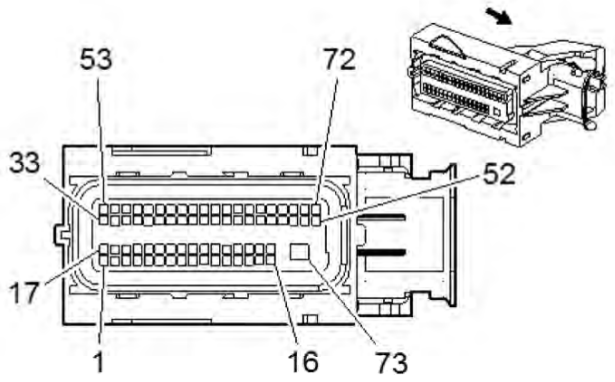
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
32	0.5	YE	581	Throttle Actuator Control Open	I	-
33	-	-	-	Not Occupied	-	-
34	0.5	BN/RD	2701	Throttle Position Sensor 5 Volt Reference	I	-
35	-	-	-	Not Occupied	-	-
36	0.5	VT/GY	496	Knock Sensor Signal (1)	I	-
37	0.5	WH/GY	1876	Knock Sensor Signal (2)	I	-
38-40	-	-	-	Not Occupied	-	-
41	0.5	GY/WH	3113	Heated Oxygen Sensor Heater Low Control Bank 1 Sensor (1)	I	-
42	0.5	GY/WH	3122	Heated Oxygen Sensor Heater Low Control Bank 1 Sensor (2)	I	-
43	0.5	GN/WH	432	Manifold Absolute Pressure Sensor Signal	I	-
44	0.5	GY/RD	2704	Manifold Absolute Pressure Sensor 5 Volt Reference	I	-
45-48	-	-	-	Not Occupied	-	-
49	0.5	WH/BU	6289	Induction Air Temperature Sensor Signal	I	-
50	-	-	-	Not Occupied	-	-
51	0.5	GN/BU	428	EVAP Canister Purge Solenoid Control	I	LFW/LFX
52	0.5	GN/WH	492	Mass Air Flow Sensor Signal	I	-
53	0.5	BN	25	Charge Indicator Control	I	-
54	0.5	BK/BN	2752	Throttle Position Sensor Low Reference	I	-
55	0.5	GY	23	Generator Field Duty Cycle Signal	I	-
56	0.5	BK/YE	1716	Knock Sensor Low Reference (1)	I	-
57	0.5	BK/GY	2303	Knock Sensor Low Reference (2)	I	-

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
58	0.5	WH/GY	1786	Transmission Park/Neutral Signal (1)	I	MYA
59	-	-	-	Not Occupied	-	-
60	0.5	BN/GN	1174	Oil Level Switch Signal	I	-
61	0.5	GN/YE	3212	Heated Oxygen Sensor Heater Low Control Bank 2 Sensor (1)	I	-
62	0.5	WH/BN	3223	Heated Oxygen Sensor Heater Low Control Bank 2 Sensor (2)	I	-
63	0.5	BK/GN	469	Manifold Absolute Pressure Sensor Low Reference	I	-
64-68	-	-	-	Not Occupied	-	-
69	0.5	WH/YE	3202	Throttle Inlet Absolute Pressure Sensor 5V Return	I	LFW/LFX
		BK/VT	2760	Low Reference	I	LWR
70	0.5	BU/WH	3630	Throttle Position Sensor (SENT1) Signal	I	-
71-72	-	-	-	Not Occupied	-	-
73	1.5	BK/WH	451	Signal Ground	I	-

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K20 Engine Control Module X3 (LFW/LFX/LWR)



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Connector Part Information

- Harness Type: Engine Harness
- OEM Connector: 12603597
- Service Connector: 13574948
- Description: 73-Way F 0.64, 2.8 Series, Sealed (BK with GY Terminal Position Assurance)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Pending	Pending	Pending

K20 Engine Control Module X3 (LFW/LFX/LWR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1-7	-	-	-	Not Occupied	-	-
8	0.5	BU	410	Engine Coolant Temperature Sensor Signal	I	-
9	0.5	VT	114	Low Oil Pressure Switch Signal	I	-

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
10	0.5	VT/BK	6270	Crankshaft 60X Sensor Voltage	I	-
11-12	-	-	-	Not Occupied	-	-
13	0.5	BN/BU	2126	Ignition Control (6)	I	-
14	0.5	BU/GY	2125	Ignition Control (5)	I	-
15	0.5	BK/GY	2130	Ignition Control Low Reference Bank 2	I	-
16	0.5	YE	7301	High Pressure Fuel Pump Actuator High - Control	I	LFW/LFX
17-22	-	-	-	Not Occupied	-	-
23	0.5	BK/BN	6273	Oil Temperature Sensor Low Reference	I	-
24	0.5	BK/BN	2761	Coolant Temperature Sensor Low Reference	I	-
25	0.5	BK/VT	6272	Crankshaft 60X Sensor Low Reference	I	-
26	0.5	GN	6271	Crankshaft 60X Sensor Signal	I	-
27	0.5	YE/BU	2124	Ignition Control (4)	I	-
28	0.5	GN/BU	2123	Ignition Control (3)	I	-
29	0.5	BU/WH	2122	Ignition Control (2)	I	-
30	0.5	BU/VT	2121	Ignition Control (1)	I	-
31	0.5	BK/BU	2129	Ignition Control Low Reference Bank 1	I	-
32	0.5	VT/BK	7300	High Pressure Fuel Pump Actuator Low - Control	I	LFW/LFX
33	0.5	YE/VT	5275	Camshaft Position Intake Sensor (1)	I	-
34	0.5	GY/BU	5300	Camshaft Position Intake Sensor Supply Voltage (1)	I	-
35	0.5	VT/BK	5273	Camshaft Position Exhaust Sensor (1)	I	-

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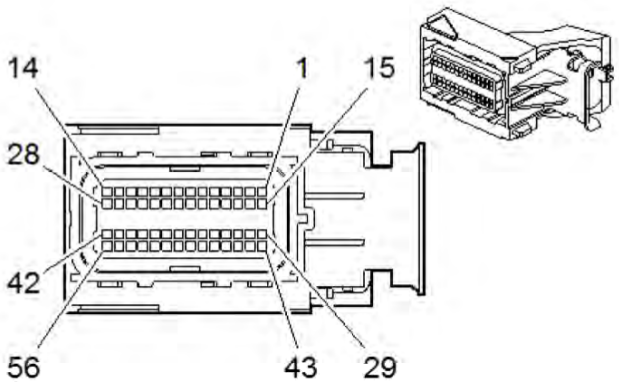
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
36	0.5	YE	5276	Camshaft Position Intake Sensor (2)	I	-
37	0.5	WH/BU	5302	Camshaft Position Intake Sensor Supply Voltage (2)	I	-
38	0.5	VT/BU	5274	Camshaft Position Exhaust Sensor (2)	I	-
39	0.5	VT/BN	5284	Camshaft Phaser Intake Solenoid (1)	I	-
40	0.5	GY/BU	5282	Camshaft Phaser Exhaust Solenoid (1)	I	-
41	0.5	GN	5272	Camshaft Phaser Intake Solenoid (2)	I	-
42	0.5	GN/BN	5283	Camshaft Phaser Exhaust Solenoid (2)	I	-
43-45	-	-	-	Not Occupied	-	-
46	0.75	GY/BU	4804	Direct Fuel Injector (DFI) High Voltage Control Cylinder 4	I	-
47	0.75	WH/GN	4805	Direct Fuel Injector (DFI) High Voltage Control Cylinder 5	I	-
48	0.75	BU	4802	Direct Fuel Injector (DFI) High Voltage Control Cylinder 2	I	-
49	-	-	-	Not Occupied	-	-
50	0.75	GN	4803	Direct Fuel Injector (DFI) High Voltage Control Cylinder 3	I	-
51	0.75	VT/GN	4806	Direct Fuel Injector (DFI) High Voltage Control Cylinder 6	I	-
52	0.75	BN	4801	Direct Fuel Injector (DFI) High Voltage Control Cylinder 1	I	-
53	0.5	BK/GN	5301	Camshaft Position Intake Sensor Low Reference (1)	I	-
54	0.5	GY/YE	5297	Camshaft Position Exhaust Sensor Supply Voltage (1)	I	-
55	0.5	BK/GY	5296	Camshaft Position Exhaust Sensor Low Reference (1)	I	-

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
56	0.5	BK/VT	5303	Camshaft Position Intake Sensor Low Reference (2)	I	-
57	0.5	GN/BN	5298	Camshaft Position Exhaust Sensor Supply Voltage (2)	I	-
58	0.5	BK/BN	5299	Camshaft Position Exhaust Sensor Low Reference (2)	I	-
59	0.5	BK/BN	6753	Cam Phaser W Return Low Reference	I	-
60	0.5	BK/VT	6754	Cam Phaser X Return Low Reference	I	-
61	0.5	BK/BU	6755	Cam Phaser Y Return Low Reference	I	-
62	0.5	BK/GY	6756	Cam Phaser Z Return Low Reference	I	-
63-65	-	-	-	Not Occupied	-	-
66	0.75	BU/WH	4904	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 4	I	-
67	0.75	GN/WH	4905	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 5	I	-
68	0.75	BU/GY	4902	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 2	I	-
69	-	-	-	Not Occupied	-	-
70	0.75	GN/GY	4903	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 3	I	-
71	0.75	VT/GY	4906	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 6	I	-
72	0.75	BN/WH	4901	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 1	I	-
73	1.5	BK/WH	451	Signal Ground	I	-

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K20 Engine Control Module X1 (LSA)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 12582680
- Service Connector: 88988373
- Description: 56-Way F MX123 34576 Series (BU)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19119437	J-35616-35 (VT)	J-38125-215A

K20 Engine Control Module X1 (LSA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1-6	-	-	-	Not Occupied	-	-
7	0.5	WH/BU	6311	Cruise/ETC/TCC Brake Signal	I	-
8	-	-	-	Not Occupied	-	-
9	0.5	BK/GN	6281		I	-

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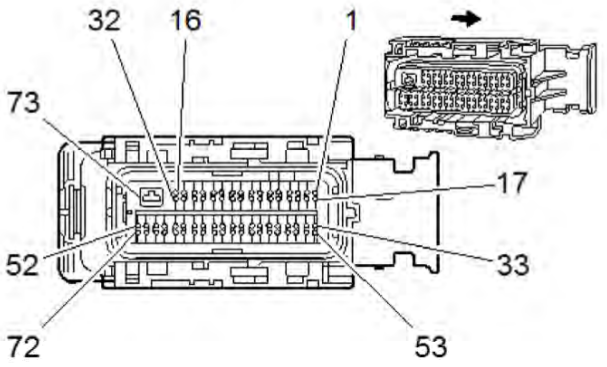
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Fuel Level Sensor Low Reference		
10-11	-	-	-	Not Occupied	-	-
12	0.5	BN/WH	419	Check Engine Indicator Control	I	-
13	0.5	GN/GY	465	Fuel Pump Primary Relay Control	I	-
14-17	-	-	-	Not Occupied	-	-
18	0.5	VT/YE	5985	Accessory Wakeup Serial Data	I	-
19	0.5	VT/GN	439	Run/Crank Ignition 1 Voltage	I	-
20	0.75	RD/BN	440	Battery Positive Voltage	I	-
21-25	-	-	-	Not Occupied	-	-
26	0.5	VT/GY	6386	Starter Enable Relay (PPEI 3) Control	I	-
27-32	-	-	-	Not Occupied	-	-
33	0.5	WH/RD	1164	Accelerator Pedal Position 5 Volt Reference (1)	I	-
34	-	-	-	Not Occupied	-	-
35	0.5	BN/RD	1274	Accelerator Pedal Position 5 Volt Reference (2)	I	-
36	0.5	BK/BU	1271	Accelerator Pedal Position Low Reference (1)	I	-
37	0.5	BK/VT	1272	Accelerator Pedal Position Low Reference (2)	I	-
38-39	-	-	-	Not Occupied	-	-
40	0.5	YE	5991	Powertrain Relay Coil Control	I	-
41-43	-	-	-	Not Occupied	-	-
44	0.5	BU/VT	1589	Primary Fuel Level Sensor Signal	I	-

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
45	0.5	BU/WH	1937	Secondary Fuel Level Sensor Signal	I	-
46	0.75	BN	7123	Super Charger Inlet Air Pressure Sensor Signal	I	-
47	0.5	YE/WH	1161	Accelerator Pedal Position Signal (1)	I	-
48	-	-	-	Not Occupied	-	-
49	0.5	GN/WH	1162	Accelerator Pedal Position Signal (2)	I	-
50-52	-	-	-	Not Occupied	-	-
53	0.5	WH/GY	459	A/C Compressor Clutch Relay Control	I	-
54-56	-	-	-	Not Occupied	-	-

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K20 Engine Control Module X2 (LSA)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 12582677
- Service Connector: 88988931
- Description: 73-Way F 0.64 2.8 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19119437	J-35616-35 (VT)	J-38125-215A
II	13579770	J-35616-35 (VT)	Not Available

K20 Engine Control Module X2 (LSA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU/VT	2121	Ignition Control (1)	I	-
2	0.5	YE/BN	1664	Heated Oxygen Sensor Low Signal Bank 1 Sensor (1)	I	-

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
3	0.5	GN	1665	Heated Oxygen Sensor High Signal Bank 1 Sensor (1)	I	-
4	0.5	GN	1668	Heated Oxygen Sensor High Signal Bank 1 Sensor (2)	I	-
5	0.5	YE/WH	1669	Heated Oxygen Sensor Low Signal Bank 1 Sensor (2)	I	-
6	0.5	WH/GY	1876	Knock Sensor Signal (2)	I	-
7	0.5	BK/GY	2303	Knock Sensor Low Reference (2)	I	-
8	0.5	VT/GY	496	Knock Sensor Signal (1)	I	-
9	0.5	BK/YE	1716	Knock Sensor Low Reference (1)	I	-
10	-	-	-	Not Occupied	-	-
11	0.75	YE	581	Throttle Actuator Control Open	I	-
12	0.75	BN/WH	582	Throttle Actuator Control Close	I	-
13	0.75	VT/BU	5290	Powertrain Main Relay Fused Supply (1)	I	-
14-15	-	-	-	Not Occupied	-	-
16	0.5	BN/VT	1746	Fuel Injector Control (3)	I	-
17	0.5	VT/WH	2128	Ignition Control (8)	I	-
18	0.5	YE/BU	2124	Ignition Control (4)	I	-
19	0.5	BK/GY	2130	Ignition Control Low Reference Bank 2	I	-
20-22	-	-	-	Not Occupied	-	-
23	0.5	GN/BK	6266	Camshaft CAM W Ground	I	-
24	0.5	BK/VT	2755	Oil Pressure Sensor Low Reference	I	-
25	0.75	BN/GN	7125	Super Charger Inlet Air Pressure Sensor Return	I	-
26	-	-	-	Not Occupied	-	-

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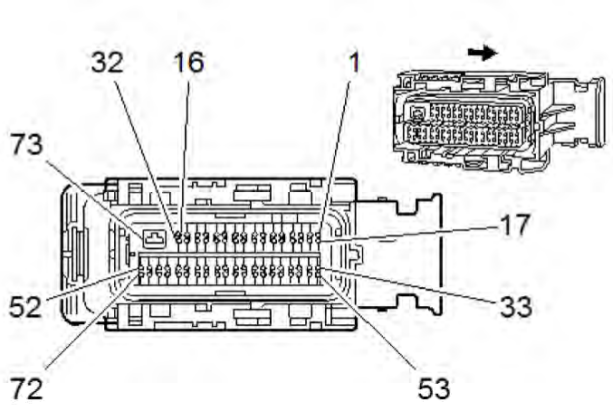
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
27	0.5	BK/VT	6272	Crankshaft 60X Sensor Low Reference	I	-
28	-	-	-	Not Occupied	-	-
29	0.5	BK/BN	2752	Throttle Position Sensor Low Reference	I	-
30-31	-	-	-	Not Occupied	-	-
32	0.5	YE/WH	1745	Fuel Injector Control (2)	I	-
33	0.5	GN/GY	2127	Ignition Control (7)	I	-
34	0.5	BU/GY	2125	Ignition Control (5)	I	-
35	0.5	BK/BU	2129	Ignition Control Low Reference Bank 1	I	-
36-38	-	-	-	Not Occupied	-	-
39	0.5	GY/BU	6259	Camshaft CAM W Supply Voltage	I	-
40	0.5	WH/RD	2705	Oil Pressure Sensor 5 Volt Reference	I	-
41	0.75	YE/BK	7124	Super Charger Inlet Air Pressure Sensor Supply Voltage 5V	I	-
42	0.5	BK/VT	2760	Intake Air Temperature Sensor Low Reference	I	-
43	0.5	VT/BU	6270	Crankshaft 60X Sensor Voltage	I	-
44	0.5	BN/RD	2701	Throttle Position Sensor 5 Volt Reference	I	-
45-47	-	-	-	Not Occupied	-	-
48	0.5	BN/GY	878	Fuel Injector Control (8)	I	-
49	0.5	BN/GN	845	Fuel Injector Control (5)	I	-
50-51	-	-	-	Not Occupied	-	-
52	0.5	BN/BU	846	Fuel Injector Control (6)	I	-

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
53	0.5	BU/WH	2122	Ignition Control (2)	I	-
54	0.5	BN/BU	2126	Ignition Control (6)	I	-
55	0.5	GN/BU	2123	Ignition Control (3)	I	-
56-58	-	-	-	Not Occupied	-	-
59	0.5	YE/VT	6265	Camshaft CAM W Signal	I	-
60	0.5	YE/BN	331	Oil Pressure Sensor Signal	I	-
61	-	-	-	Not Occupied	-	-
62	0.5	WH/BU	6289	Induction Air Temperature Sensor Signal	I	-
63	0.5	GN	6271	Crankshaft 60X Sensor Signal	I	-
64	0.5	BN/GN	485	Throttle Position Sensor Signal (1)	I	-
65	0.75	BN/BU	357	Oil Temperature Sensor Signal	I	-
66	0.5	BN/BU	486	Throttle Position Sensor Signal (2)	I	-
67	0.5	GN/WH	492	Mass Air Flow Sensor Signal	I	-
68	0.5	GY/WH	3113	Heated Oxygen Sensor Heater Low Control Bank 1 Sensor (1)	I	-
69	0.5	GY/WH	3122	Heated Oxygen Sensor Heater Low Control Bank 1 Sensor (2)	I	-
70	0.5	BN/YE	844	Fuel Injector Control (4)	I	-
71	0.5	BN/VT	877	Fuel Injector Control (7)	I	-
72	0.5	GN/YE	1744	Fuel Injector Control (1)	I	-
73	2.5	BK/WH	451	Signal Ground	II	-

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K20 Engine Control Module X3 (LSA)



Connector Part Information

- Harness Type: Engine Harness
- OEM Connector: 12582678
- Service Connector: 88988372
- Description: 73-Way F 0.64, 2.8 Series, Sealed (BK with GY Terminal Position Assurance)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Pending	Pending	Pending

K20 Engine Control Module X3 (LSA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1-2	-	-	-	Not Occupied	-	-
3	0.5	WH	1667	Heated Oxygen Sensor Low Signal Bank 2 Sensor (1)	I	-
4	0.5	BN/VT	1666		I	-

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Heated Oxygen Sensor High Signal Bank 2 Sensor (1)		
5	0.5	BU	1670	Heated Oxygen Sensor High Signal Bank 2 Sensor (2)	I	-
6	0.5	BN/GY	1671	Heated Oxygen Sensor Low Signal Bank 2 Sensor (2)	I	-
7	0.5	BN	25	Charge Indicator Control	I	-
8	0,5	YE/BU	1652	Reverse Lockout Solenoid Control	I	MG9
9-13	-	-	-	Not Occupied	-	-
14	0.5	BN/YE	258	Waste Gate Solenoid Control	I	-
15	0.5	GN/YE	3212	Heated Oxygen Sensor Heater Low Control Bank 2 Sensor (1)	I	-
16	0.5	GY/YE	2014	Coolant Pump Relay Coil Control	I	-
17	-	-	-	Not Occupied	-	-
18	0.75	BN/GN	1174	Oil Level Switch Signal	I	-
19-20	-	-	-	Not Occupied	-	-
21	0.5	BK/BN	5514	A/C Refrigerant Pressure Sensor Low Reference	I	-
22	0.75	BK/YE	6014	Barometric Pressure Sensor Low Reference	I	-
23	0.5	BK/GN	469	Manifold Absolute Pressure Sensor Low Reference	I	-
24-26	-	-	-	Not Occupied	-	-
		BK/GY	6110	Low Reference	I	MG9
27	0.5	BK/YE	5382	Brake Position Sensor Low Reference	I	MYD
28	-	-	-	Not Occupied	-	-
29	0.5	GY	23	Generator Field Duty Cycle Signal	I	-
	-	-	-	Not Occupied	-	-

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
30-32						
33	0.5	WH	2501	High Speed GMLAN Serial Data (-) (1)	I	-
34	0.75	BK/VT	470	Sensor Low Reference	I	-
35	0.5	BK/BN	2761	Coolant Temperature Sensor Low Reference	I	-
36	0.75	BK/YE	6120	Manifold Air Temperature Sensor Low Reference	I	-
37	0.5	BN/RD	2700	A/C Pressure Sensor 5 Volt Reference	I	-
38	0.75	WH/RD	2932	Barometric Pressure Sensor (5) Volt Reference	I	-
39	0.5	GY/RD	2704	Manifold Absolute Pressure Sensor 5 Volt Reference	I	-
40-42	-	-	-	Not Occupied	-	-
43	0.5	GY/RD	6109	Clutch Apply Sensor Voltage Reference	I	MG9
		WH/RD	5381	Brake Position Sensor 5 Volt Reference	I	MYD
44	-	-	-	Not Occupied	-	-
45	0.5	GN/WH	5007	Reverse Switch Signal	I	MG9
46	0.5	WH/GY	1786	Transmission Park/Neutral Signal (1)	I	MYD
47	-	-	-	Not Occupied	-	-
48	0.5	GN/BU	428	EVAP Canister Purge Solenoid Control	I	-
49	0.5	WH/BK	2366	Cooling Fan Control Relay Speed Signal	I	-
50	0.5	WH/BN	3223	Heated Oxygen Sensor Heater Low Control Bank 2 Sensor (2)	I	-
51-52	-	-	-	Not Occupied	-	-

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
53	0.5	BU	2500	High Speed GMLAN Serial Data (+) (1)	I	-
54	-	-	-	Not Occupied	-	-
55	0.5	BU	410	Engine Coolant Temperature Sensor Signal	I	-
56	0.75	GY/BU	6118	Manifold Air Temperature Sensor Signal	I	-
57	0.5	GN	380	A/C Refrigerant Pressure Sensor Signal	I	-
58	0.75	BU/GY	433	Barometric Pressure Sensor Signal	I	-
59	0.5	GN/WH	432	Manifold Absolute Pressure Sensor Signal	I	-
60-62	-	-	-	Not Occupied	-	-
63	0.5	YE	6111	Clutch Apply Sensor Signal	I	MG9
		WH/GN	5380	Brake Position Sensor Signal	I	MYD
64-65	-	-	-	Not Occupied	-	-
66	0.5	GY/BK	6355	Output Speed High Signal Output	I	MG9
67	0.5	WH/VT	6356	Output Speed Low Signal	I	MG9
68-73	-	-	-	Not Occupied	-	-

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K22 Cooling Fan Control Module X1

Connector Part Information

- Harness Type: Forward Lamp
- OEM Connector: 7283-8496-30
- Service Connector: 19115593
- Description: 4-Way F Mixed Series, Sealed BK

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

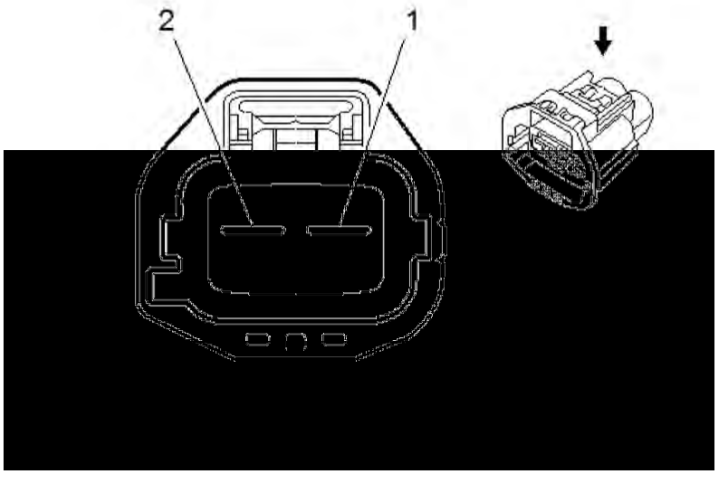
K22 Cooling Fan Control Module X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	6	RD/YE	1142	Battery Positive Voltage	I	-
2	6	BK	650	Ground	I	-
3	-	-	-	Not Occupied	-	-
4	0.35	WH/BK	2366	Cooling Fan Control Relay Speed Signal	I	-

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K22 Cooling Fan Control Module X2



Connector Part Information

- Harness Type: Cooling Fan Left
- OEM Connector: 7283-5596-10
- Service Connector: Service by Harness – See Part Catalog
- Description: 2-Way F YESC/USCAR Class III (D-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-43 (RD)	J-38125-11A

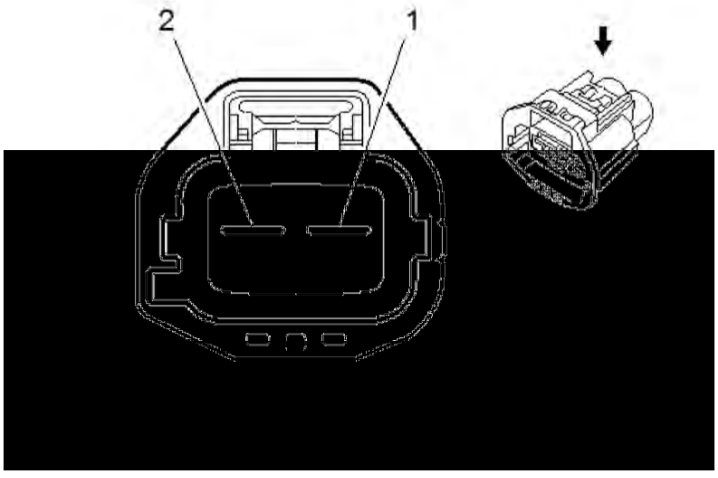
K22 Cooling Fan Control Module X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	3	GY	532	Cooling Fan Motor Supply Voltage (2)	I	—
2	3	GN/BK	504	Cooling Fan Motor Return	I	—

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K22 Cooling Fan Control Module X3



Deleted CPL/TPL

Connector Part Information

- Harness Type: Cooling Fan Right
- OEM Connector: 7283-5596-10
- Service Connector: Service by Harness – See Part Catalog
- Description: 2-Way F YESC/USCAR Class III (D-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-43 (RD)	J-38125-11A

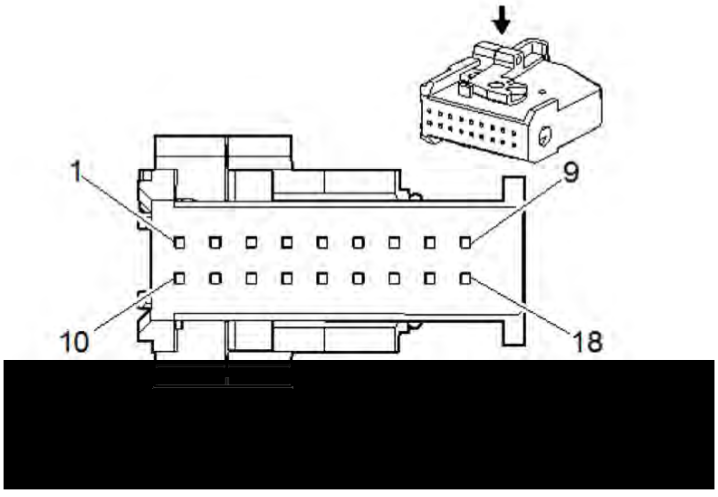
K22 Cooling Fan Control Module X3

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	3	GY	409	Cooling Fan Motor Supply Voltage (1)	I	—
2	3	GN/BK	504	Cooling Fan Motor Return	I	—

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K28 Headlamp Leveling Control Module (T3T)



Connector Part Information

- Harness Type: Body
- OEM Connector: 90506317
- Service Connector: 13576561
- Description: 18-Way F 0.64 Micro Quadlok Series BK

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575197	J-35616-35 (VT)	J-38125-12A

K28 Headlamp Leveling Control Module (T3T)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	2250	Ground	I	-
2	0.35	WH/RD	2165	Automatic Level Control Position Sensor 5 Volt Reference	I	-
3	0.35	BK/BN	2185	Automatic Level Control Position Sensor Low Reference	I	-

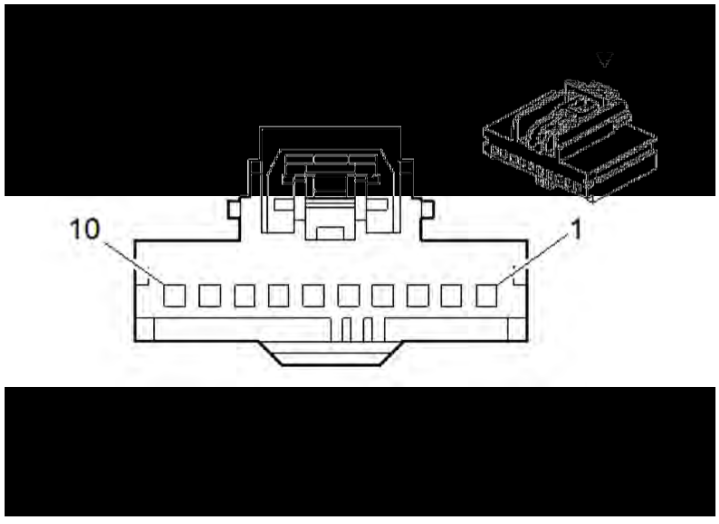
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4	0.35	WH	2501	High Speed GMLAN Serial Data (-) (1)	I	-
5	0.35	BU	2500	High Speed GMLAN Serial Data (+) (1)	I	-
6	0.35	BN	2184	Automatic Level Control Position Sensor Signal	I	-
7	0.35	WH/BU	5986	Serial Data Communication Enable	I	-
8-9	-	-	-	Not Occupied	-	-
10	0.5	RD/YE	740	Battery Positive Voltage	I	-
11	0.5	WH/RD	7524	Front Axle Level Sensor 5 Volt Reference	I	-
12	0.5	BN/WH	7525	Front Axle Level Sensor Signal	I	-
13	0.5	WH	2501	High Speed GMLAN Serial Data (-) (1)	I	-
14	0.5	BU	2500	High Speed GMLAN Serial Data (+) (1)	I	-
15	0.5	BK/GY	7526	Front Axle Level Sensor Low Reference	I	-
16	-	-	-	Not Occupied	-	-
17	0.35	GN/VT	7528	Linear Interconnect Network Bus 6	I	-
18	0.35	GN/BN	7529	Linear Interconnect Network Bus 7	I	-

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K29 Seat Heating Control Module X1 (KA1)



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Connector Part Information

- Harness Type: Passenger Seat
- OEM Connector: 7283-9088-30
- Service Connector: Service by Harness – See Part Catalog
- Description: 10-Way F Kaizen 64 Series (BK)

Terminal Part Information

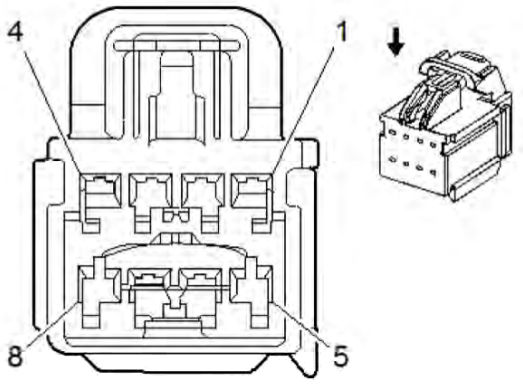
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-64B (L-BU)	J-38125-215A

K29 Seat Heating Control Module X1 (KA1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	0.35	GN/BU	6133	Local Interconnect Network Bus 2	I	—
3-10	—	—	—	Not Occupied	—	—

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K29 Seat Heating Control Module X2 (KA1)



Connector Part Information

- Harness Type: Passenger Seat
- OEM Connector: 7283-3441-40
- Service Connector: Service by Harness - See Part Catalog
- Description: 8-Way F Kaizen YESC Series (L-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	J-38125-11A
II	Not Available	J-35616-2A (GY)	J-38125-11A
III	Not Available	J-35616-2A (GY)	J-38125-11A

K29 Seat Heating Control Module X2 (KA1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	0.5	RD/GY	6240	Battery Positive Voltage	I	—

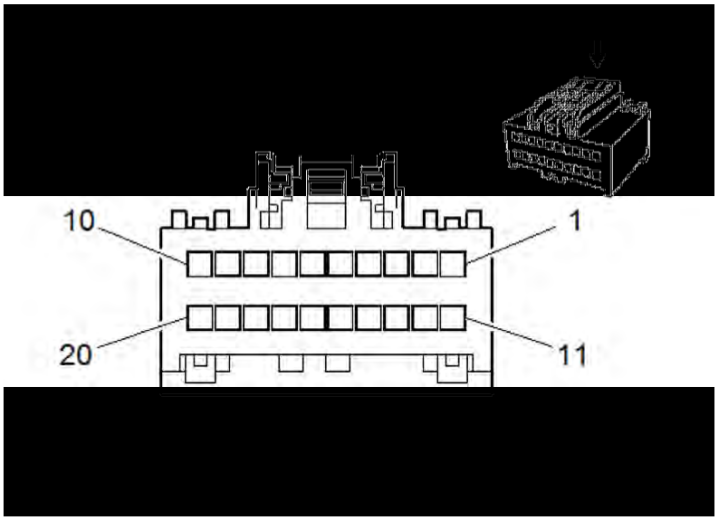
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
3	0.5	RD/GN	6140	Battery Positive Voltage	I	—
4	0.75	BN/VT	2077	Driver Heated Seat Element Supply Voltage	II	—
5	0.75	BN/BU	2479	Passenger Heated Seat Element Supply Voltage	II	—
6	0.75	GY	2045	Passenger Heated Back Element Supply Voltage	II	—
7	1.5	BK	2250	Ground	III	—
8	0.75	BN	2432	Driver Heated Back Element Supply Voltage	II	—

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K33 HVAC Control Module X1



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 19153728
- Service Connector: 13576644
- Description: 20-Way F 0.64 Series (GN with WH Terminal Position Assurance)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	TBD	J-35616-64B (L-BU)	J-38125-215A

K33 HVAC Control Module X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1–3	—	—	—	Not Occupied	—	—
4	0.35	BU/WH	734	Inside Air Temperature Sensor Signal	I	—
	—	—	—	Not Occupied	—	—

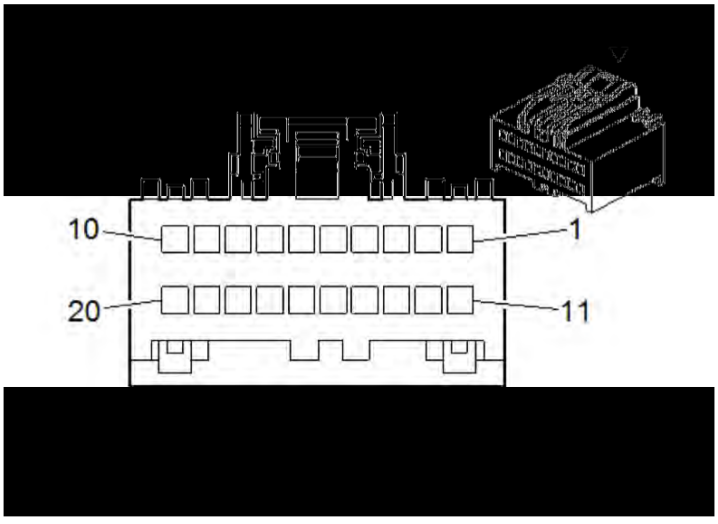
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
5-12						
13	0.35	YE/VT	1783	Twilight Sentinel Delay Signal	I	—
14-19	—	—	—	Not Occupied	—	—
20	0.35	GY	590	Solar Sensor Driver Signal	I	—

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K33 HVAC Control Module X2



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 15126709
- Service Connector: 15126709
- Description: 20-Way F USCAR 64 Series BN

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575299	J-35616-35 (VT)	Not Available

K33 HVAC Control Module X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	RD/VT	3340	Battery Positive Voltage	I	-
2	0.35	GN	5060	Low Speed GMLAN Serial Data	I	-
3	-	-	-	Not Occupied	-	-
4	0.35	GN/YE	7531		I	-

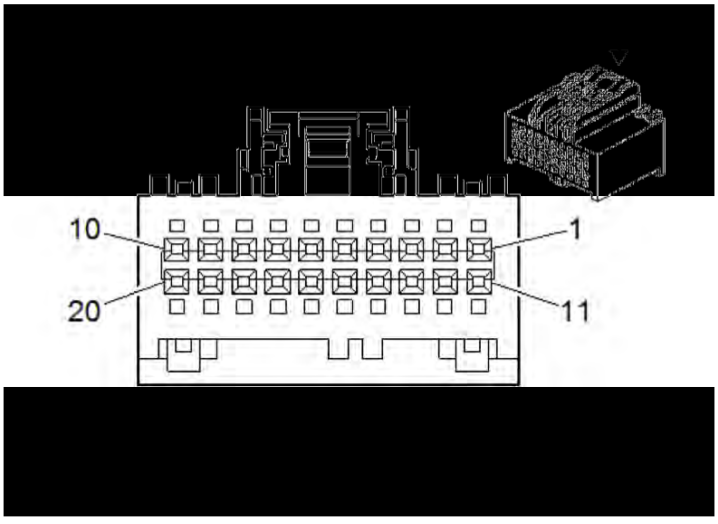
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Linear Interconnect Network Bus 9		
5-7	-	-	-	Not Occupied	-	-
8	0.5	BK	1350	Ground	I	-
9	0.35	VT/GY	539	Run/Crank Ignition 1 Voltage	I	-
10	0.35	BU/YE	7574	Electric Variable Displacement Control	I	-
11	0.35	BU/BN	7573	Electric Variable Displacement Supply	I	-
12-14	-	-	-	Not Occupied	-	-
15	0.35	BU/GY	754	Blower Motor Speed Control	I	-
16-17	-	-	-	Not Occupied	-	-
18	0.35	BK/BN	6102	Inside Air Temperature Sensor Low Reference	I	-
19	0.35	BN/VT	193	Rear Defog Relay Control	I	-
20	-	-	-	Not Occupied	-	-

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K33 HVAC Control Module X3



Connector Part Information

- Harness Type: HVAC
- OEM Connector: 15126711
- Service Connector: Service by Harness - See Part Catalog
- Description: 26-Way F 0.64 Series (BK with WH Terminal Position Assurance)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

K33 HVAC Control Module X3

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BN	516	Upper Left Air Temperature Sensor Signal	I	—
2	0.75	YE/BN	2273	Mode Door Control	I	—
3	0.75	WH	119	Mode Door Control	I	—

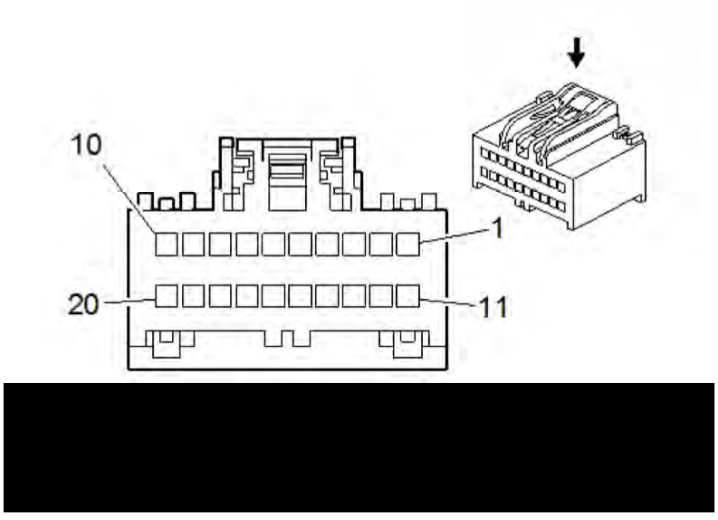
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4	0.75	WH/GN	2275	Mode 1 Valve Position Sensor Signal	I	—
5	—	—	—	Not Occupied	I	—
6	0.75	YE/BK	2274	Recirculation Door Control	I	—
7	0.75	GN	1614	Recirculation Door Control	I	—
8	0.75	VT/GN	1838	Recirculation Door Position Signal	I	—
9	0.75	BK/YE	1791	Air Temperature Door Control Low Reference	I	—
10	0.75	GY/RD	598	5 Volt Reference	I	—
11	0.75	GY/GN	2210	Air Temperature Door Control	I	—
12	0.75	BU/BN	1199	Air Temperature Door Control	I	—
13	0.75	BU/YE	733	Air Temperature Door Position Signal	I	—
14-19	—	—	—	Not Occupied	—	—
20	0.35	GY	6137	EVAP Core Temperature Sensor Signal	I	—

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K33 HVAC Control Module X4



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Connector Part Information

- Harness Type: HVAC
- OEM Connector: 15126710
- Service Connector: Service by Harness – See Part Catalog
- Description: 20-Way F USCAR 64 Series (GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-64B (L-BU)	J-38125-215A

K33 HVAC Control Module X4

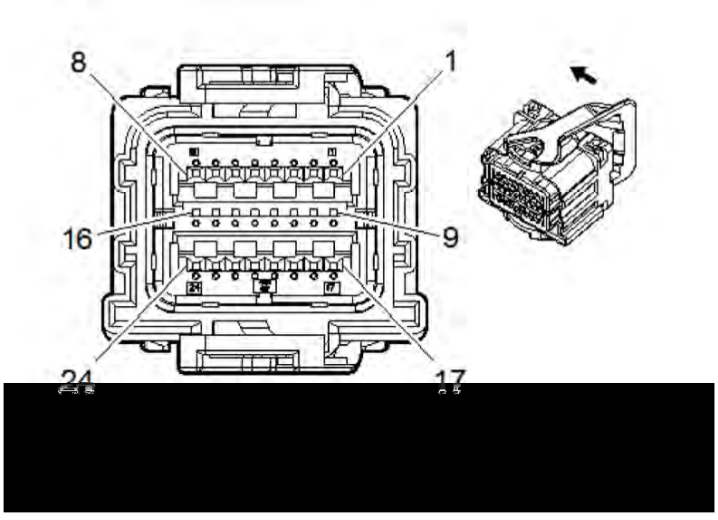
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	WH/GY	2615	Auxiliary Mode Door Control	I	CJ2
2	0.75	WH	454	Auxiliary Mode Door Control	I	CJ2
3	0.75	GN/BK	2276	Mode 2 Valve Position Sensor Signal	I	CJ2

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4	—	—	—	Not Occupied	—	—
5	0.75	GY/BK	2778	Passenger Air Temperature Motor Control	I	CJ2
6	0.75	WH/BK	1236	Passenger Air Temperature Door Control	I	CJ2
7	0.75	BN/BU	1646	Passenger Air Temperature Door Position Signal	I	CJ2
8	—	—	—	Not Occupied	—	—
9	0.35	BN/YE	517	Upper Right Air Temperature Sensor Signal	I	—
10	—	—	—	Not Occupied	—	—
11	0.35	BN	518	Lower Left Air Temperature Sensor Signal	I	—
12	0.35	BN/YE	520	Lower Right Air Temperature Sensor Signal	I	—
13	0.75	GY	2599	Rear Mode Motor Signal	I	C63
14	0.75	WH/BK	2215	Rear Mode Door Control	I	C63
15	0.75	GN	3193	Rear Mode Door Position Signal	I	C63
16	—	—	—	Not Occupied	—	—
17	0.75	WH/BN	2775	Rear Air Temperature Motor Control	I	C63
18	0.75	GY	2614	Rear Air Temperature Door Control	I	C63
19	0.75	GY/GN	7523	Rear Air Temperature Door Position Signal	I	C63
20	—	—	—	Not Occupied	—	—

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K36 Inflatable Restraint Sensing and Diagnostic Module X1



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 13580322
- Service Connector: 19299778
- Description: 24-Way F 0.64 Series, Sealed (YE)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13587521	J-35616-35 (VT)	Not Available

K36 Inflatable Restraint Sensing and Diagnostic Module X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	OG/GN	3023	Steering Wheel Module Stage 2 High Control	I	-
2	0.35	WH/OG	3022	Steering Wheel Module Stage 2 Low Control	I	-
3	0.35	BN/OG	3020		I	-

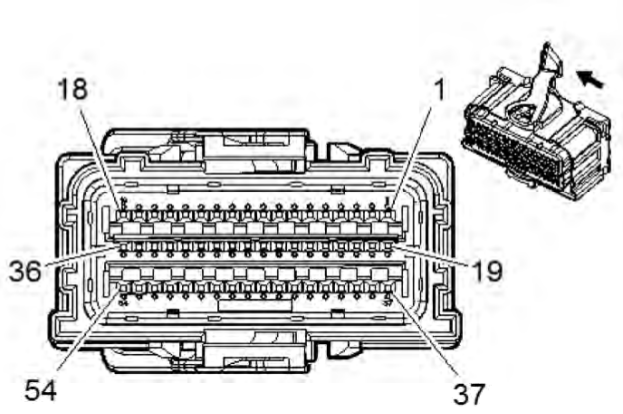
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Steering Wheel Module Stage 1 Low Control		
4	0.35	OG/VT	3021	Steering Wheel Module Stage 1 High Control	I	-
5	0.5	YE/OG	3025	Passenger IP Module Stage 1 High Control	I	-
6	0.5	OG/WH	3024	Passenger IP Module Stage 1 Low Control	I	-
7-8	-	-	-	Not Occupied	-	-
9	0.35	RD/WH	4440	Battery Positive Voltage	I	-
10-14	-	-	-	Not Occupied	-	-
15	0.35	GN	5060	Low Speed GMLAN Serial Data	I	-
16	-	-	-	Not Occupied	-	-
17	0.35	WH/BU	5986	Serial Data Communication Enable	I	-
18	0.35	BU/YE	6105	High Speed GMLAN Serial Data (+) (2)	I	-
19	-	-	-	Not Occupied	-	-
20	0.35	WH	6106	High Speed GMLAN Serial Data (-) (2)	I	-
21-24	-	-	-	Not Occupied	-	-

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K36 Inflatable Restraint Sensing and Diagnostic Module X2



Connector Part Information

- Harness Type: Body
- OEM Connector: 13579259
- Service Connector: 19119424
- Description: 54-Way F 0.64 Series, Sealed (YE)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13587521	J-35616-35 (VT)	Not Available

K36 Inflatable Restraint Sensing and Diagnostic Module X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1-12	-	-	-	Not Occupied	-	-
13	0.35	OG/BU	3068	Driver Side Impact Module High Control	I	-
14	0.35	GN/OG	3069		I	-

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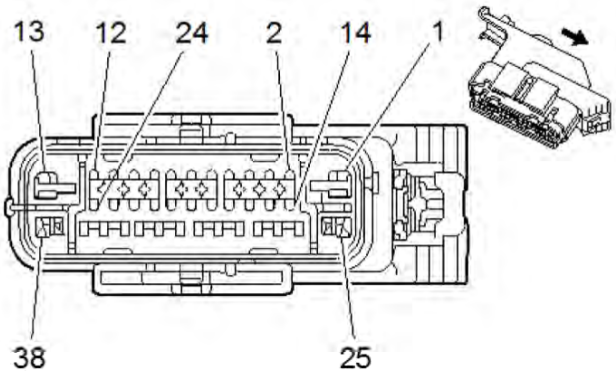
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Driver Side Impact Module Low Control		
15	0.35	BN/OG	3067	Passenger Side Impact Module Low Control	I	-
16	0.35	OG/GY	3066	Passenger Side Impact Module High Control	I	-
17	0.5	OG/GN	5019	Left Front Head Curtain Module High Control	I	-
18	0.5	VT/OG	5020	Left Front Head Curtain Module Low Control	I	-
19	0.5	OG/GN	2132	Left Front Side Impact Sensing Module Signal	I	-
20	0.5	BK/OG	6628	Left Front Side Impact Sensing Module Low Reference	I	-
21	0.5	BK/OG	6629	Right Front Side Impact Sensing Module Low Reference	I	-
22	0.5	BN/OG	2134	Right Front Side Impact Sensing Module Signal	I	-
23	0.35	OG/YE	354	Left Front Discriminating Sensor Signal	I	-
24	0.35	BK/OG	5045	Left Front Discriminating Sensor Low Reference	I	-
25	0.35	BK/OG	5600	Right Front Discriminating Sensor Low Reference	I	-
26	0.35	OG/GN	1409	Right Front Discriminating Sensor Signal	I	-
27-36	-	-	-	Not Occupied	-	-
37	0.35	OG/WH	3064	Driver Seat Belt Buckle Pretensioner High Control	I	-
38	0.35	YE/OG	3065	Driver Seat Belt Buckle Pretensioner Low Control	I	-
39	0.35	BU/OG	3063	Passenger Seat Belt Buckle Pretensioner Low Control	I	-
40	0.35	OG/BN	3062	Passenger Seat Belt Buckle Pretensioner High Control	I	-

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
41	0.35	OG/BN	238	Driver Seat Belt Switch Signal	I	-
42	0.35	OG/GN	5055	Driver Seat Position Switch Signal	I	-
43	0.35	BK/OG	1363	Driver Seat Belt Switch Low Reference	I	-
44	0.35	BK/OG	1361	Passenger Seat Belt Switch Low Reference	I	-
45	0.35	OG/VT	1362	Passenger Seat Belt Switch Signal	I	-
46	-	-	-	Not Occupied	-	-
47	0.35	OG/BN	7571	Passenger Seat Belt Reminder Signal	I	-
48	0.5	BU/OG	5163	Center Rear Seat Belt Switch Signal	I	-
49	0.5	YE/OG	5161	Left Rear Seat Belt Switch Signal	I	-
50	0.5	BN/OG	5162	Right Rear Seat Belt Switch Signal	I	-
51-52	-	-	-	Not Occupied	-	-
53	0.5	OG/GY	5021	Right Front Head Curtain Module High Control	I	-
54	0.5	WH/OG	5022	Right Front Head Curtain Module Low Control	I	-

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K38 Chassis Control Module (L77/LS3/LSA/LWR)



Connector Part Information

- Harness Type: Body
- OEM Connector: 89047375
- Service Connector: 19178089
- Description: 38-Way F 2.8 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13576407	J-35616-35 (VT)	Not Available
II	13576407	J-35616-35 (VT)	Not Available
III	13575264	J-35616-35 (VT)	J-38125-215A
IV	13575264	J-35616-35 (VT)	J-38125-215A

K38 Chassis Control Module (L77/LS3/LSA/LWR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	3	RD/VT	2640	Battery Positive Voltage	I	-

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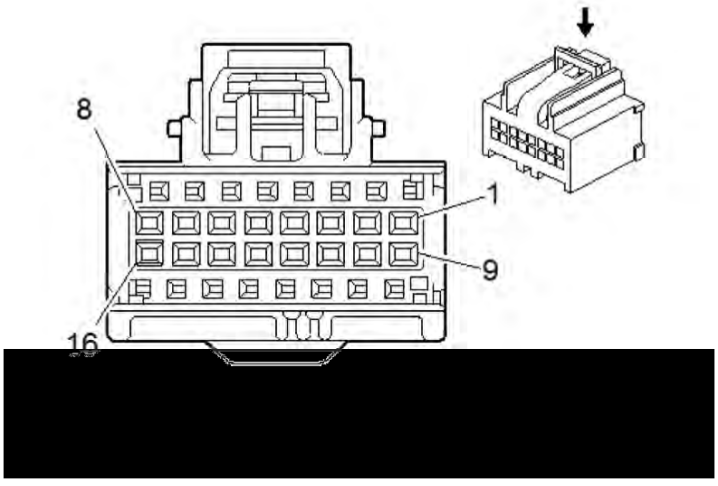
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
2-4	-	-	-	Not Occupied	-	-
5	0.5 0.35	BU BU	2500 2500	High Speed GMLAN Serial Data (+) (1) High Speed GMLAN Serial Data (+) (1)	IV	Without T3T or F80 T3T or F80
6	0.35	BU	2500	High Speed GMLAN Serial Data (+) (1)	IV	-
7	-	-	-	Not Occupied	-	-
8	0.35	VT/YE	5985	Accessory Wakeup Serial Data	III	-
9	-	-	-	Not Occupied	-	-
10	0.35	BU/WH	7446	Fuel Line Pressure Sensor Signal	III	-
11-12	-	-	-	Not Occupied	-	-
13	3	GY	120	Fuel Pump Supply Voltage	II	-
14-16	-	-	-	Not Occupied	-	-
17	0.5 0.35	WH WH	2501 2501	High Speed GMLAN Serial Data (-) (1) High Speed GMLAN Serial Data (-) (1)	III	Without T3T or F80 T3T or F80
18	0.35	WH	2501	High Speed GMLAN Serial Data (-) (1)	IV	-
19	-	-	-	Not Occupied	-	-
20	0.35 0.5 0.35	GN/GY GN/GY GN/GY	465 465 465	Fuel Pump Primary Relay Control Fuel Pump Primary Relay Control Fuel Pump Primary Relay Control	IV	L77 or LS3 or LSA LWR
21	0.35	VT/BK	339	Run/Crank Ignition 1 Voltage	III	-
22	0.35	BN/RD	7445	Fuel Line Pressure Sensor 5V Reference	III	-
23	0.35	BK/YE	7447		III	-

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Fuel Line Pressure Sensor Low Reference		
24	0.5	BU	7443	Fuel System Control Module Shield Extension	III	-
25	3 3	BK BK	2450 2550	Ground Ground	I	F80 F19 or F35 or F69
26-37	-	-	-	Not Occupied	-	-
38	3	BK/GN	1580	Fuel Pump Low Reference	II	-

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K39 Liftgate Control Module X1



Connector Part Information

- Harness Type: Left Liftgate
- OEM Connector: 15136073
- Service Connector: Service by Harness - See Part Catalog
- Description: 16-Way F Kaizen 64 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-64B (L-BU)	Not Available

K39 Liftgate Control Module X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1-2	-	-	-	Not Occupied	-	-
3	0.35	WH/GN	9006		I	-
4	0.35	VT/GN	3987	Cinch Latch Lift Gate Signal	I	-
5	0.35	VT/GY	1303		I	-

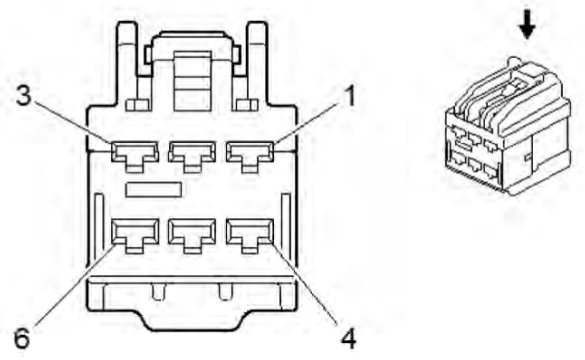
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Lift Gate Ajar Switch Signal (1)		
6	0.35	YE	3988	Detent Lift Gate Signal	I	-
7	0.35	GN	5060	Low Speed GMLAN Serial Data	I	-
8	-	-	-	Not Occupied	-	-
9	0.5	GY	3986	Cinch Latch Lift Gate Stall Motor Release Signal	I	-
10-13	-	-	-	Not Occupied	-	-
14	0.35	YE/BU	5797	Rear Closure Handle Switch Open Signal	I	-
15	-	-	-	Not Occupied	-	-
16	0.35	BK/VT	5801	Lift Gate Object Sensor Low Reference	I	-

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K39 Liftgate Control Module X2



Connector Part Information

- Harness Type: Left Liftgate
- OEM Connector: 15134094
- Service Connector: Service by Harness - See part Catalog
- Description: 6-Way F 2.8 Series BK

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

K39 Liftgate Control Module X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	BU/GY	5791	Lift Gate Cinch Latch Motor Close Control	I	-
2	1.5	BN	5790	Lift Gate Cinch Latch Motor Open Control	I	-
3	2.5	RD/YE	5840	Battery Positive Voltage	I	-

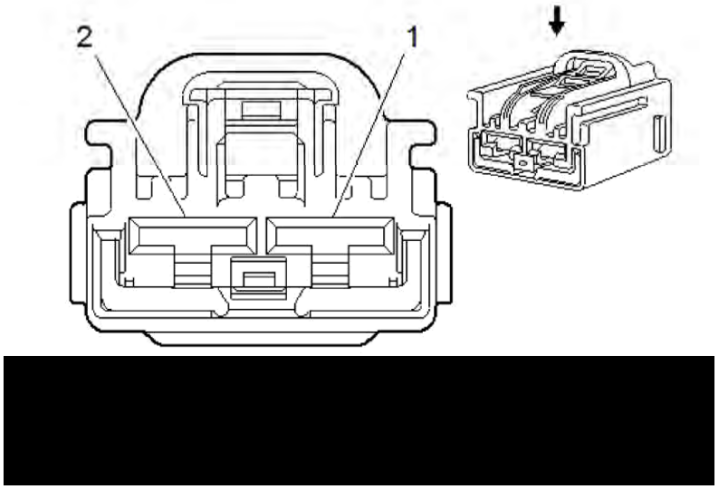
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4	1	RD/WH	5740	Battery Positive Voltage	I	-
5	-	-	-	Not Occupied	-	-
6	2.5	BK	2850	Ground	I	-

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K40 Seat Memory Control Module X1 (A45)



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Connector Part Information

- Harness Type: Driver Seat
- OEM Connector: 15226103
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 6.3 Series (L-GY)

Terminal Part Information

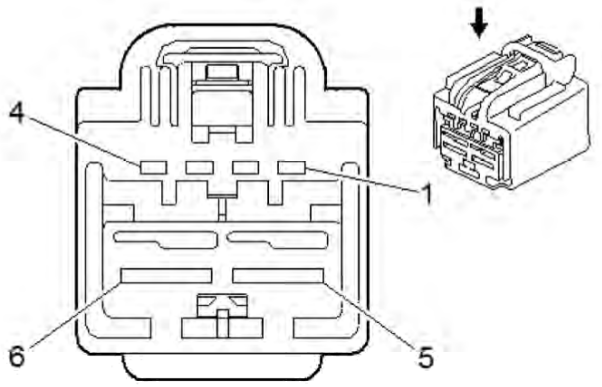
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-42 (RD)	J-38125-11A

K40 Seat Memory Control Module X1 (A45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	RD/WH	2040	Battery Positive Voltage	I	—
2	1.5	RD/GY	1342	Battery Positive Voltage	I	—

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K40 Seat Memory Control Module X2 (A45)



Connector Part Information

- Harness Type: Driver Seat
- OEM Connector: 15226104
- Service Connector: Service by Harness - See Part Catalog
- Description: 6-Way F YESC Kaizen Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	J-38125-553
II	Not Available	J-35616-42 (RD)	J-38125-11A

K40 Seat Memory Control Module X2 (A45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GN	5060	Low Speed GMLAN Serial Data	I	—
2	—	—	—	Not Occupied	—	—
3	0.35	GN/WH	7530	Local Interconnect Network Bus 8	I	—

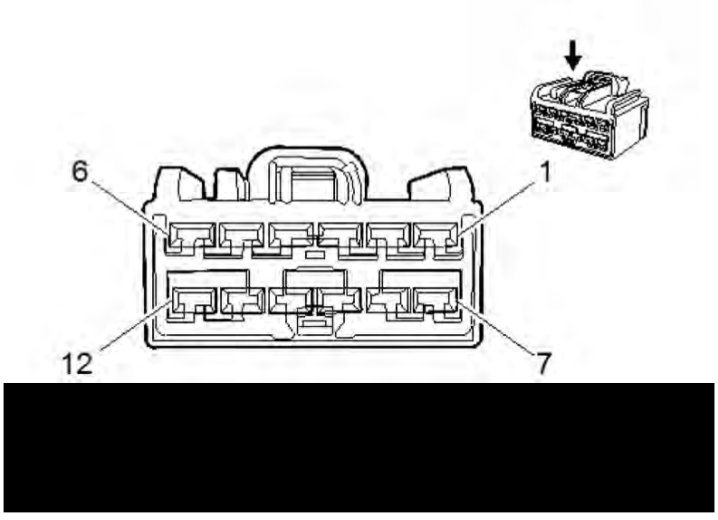
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4	—	—	—	Not Occupied	—	—
5	1.5	BK	2150	Ground	I	—
6	—	—	—	Not Occupied	—	—

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K40 Seat Memory Control Module X3 (A45)



Connector Part Information

- Harness Type: Driver Seat
- OEM Connector: 19178907
- Service Connector: Service by Harness - See Part Catalog
- Description: 12-Way F 2.8 Kaizen Series (L-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

K40 Seat Memory Control Module X3 (A45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2	GN/YE	276	Driver Power Seat Recline Motor Forward Control	I	—
2	2	BU/YE	277	Driver Power Seat Recline Motor Rearward Control	I	—
3	2	GN/BN	286		I	—

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Driver Power Seat Front Vertical Motor Up Control		
4	2	BU/VT	287	Driver Power Seat Front Vertical Motor Down Control	I	—
5	2	YE	282	Driver Power Seat Rear Vertical Motor Up Control	I	—
6	2	GY/BU	283	Driver Power Seat Rear Vertical Motor Down Control	I	—
7-8	—	—	—	Not Occupied	—	—
9	1	BU	611	Driver Power Seat Lumbar Motor Forward Control	I	AL9
10	1	VT	610	Driver Power Seat Lumbar Motor Rearward Control	I	AL9
11	2	YE/BU	285	Driver Power Seat Horizontal Motor Forward Control	I	—
12	2	GY/GN	284	Driver Power Seat Horizontal Motor Rearward Control	I	—

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K40 Seat Memory Control Module X5 (A45)

Connector Part Information

- Harness Type: Driver Seat
- OEM Connector: 13581049
- Service Connector: Service by Harness - See Part Catalog
- Description: 26-Way F 0.64 2.8 Series (BN)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

K40 Seat Memory Control Module X5 (A45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	WH/RD	3298	Memory Sensor High Reference (2)	I	—
2-5	—	—	—	Not Occupied	—	—
6	0.35	BK/GY	6206	Memory Sensor Low Reference	I	AL9
7	0.35	YE/BN	1522	Power Seat Horizontal Forward Switch Signal	I	—
8	0.35	GY/GN	1523	Power Seat Horizontal Rearward Switch Signal	I	—
9	0.35	GN/BN	1518	Power Seat Front Vertical Up Switch Signal	I	—
10	0.35	BU/VT	1520	Power Seat Front Vertical Down Switch Signal	I	—
11	0.35	GN	569	Memory Seat Horizontal Motor Position Sensor Signal	I	—
12	0.35	BN/WH	557	Memory Seat Front Vertical Motor Position Sensor Signal	I	—
13	0.35	WH/RD	6207	Memory Sensor High Reference	I	—
14	0.35	YE	1065	Driver Seat Lumbar Forward Switch Signal	I	AL9

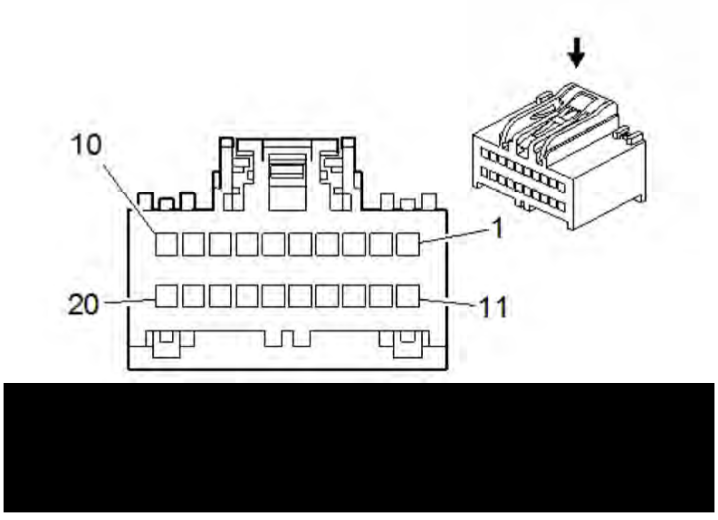
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
15	0.35	BU/VT	1064	Driver Seat Lumbar Rearward Switch Signal	I	AL9
16-18	—	—	—	Not Occupied	—	—
19	0.35	YE	1519	Power Seat Rear Vertical Up Switch Signal	I	—
20	0.35	YE/BU	1521	Power Seat Rear Vertical Down Switch Signal	I	—
21	0.35	GY/BK	1269	Power Seat Recline Forward Switch Signal	I	—
22	0.35	GN/GY	1270	Power Seat Recline Rearward Switch Signal	I	—
23	—	—	—	Not Occupiedl	—	—
24	0.35	YE	1063	Driver Memory Seat Lumbar Horizontal Position Sensor Signal	I	AL9
25	0.35	YE/BU	568	Memory Seat Rear Vertical Motor Position Sensor Signal	I	—
26	0.35	WH/BK	570	Driver Memory Seat Recline Motor Position Sensor Signal	I	—

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K40 Seat Memory Control Module X6 (A45)



Connector Part Information

- Harness Type: Driver Seat
- OEM Connector: 15126710
- Service Connector: 15126710
- Description: 20-Way F USCAR 64 Series (GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	TBD	—	—

K40 Seat Memory Control Module X6 (A45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1-10	—	—	—	Not Occupied	—	—
11	0.35	BK/BU	5978	Memory Switch Low Reference	I	—
12	0.35	WH	615	Memory Seat Switch Signal (1)	I	—

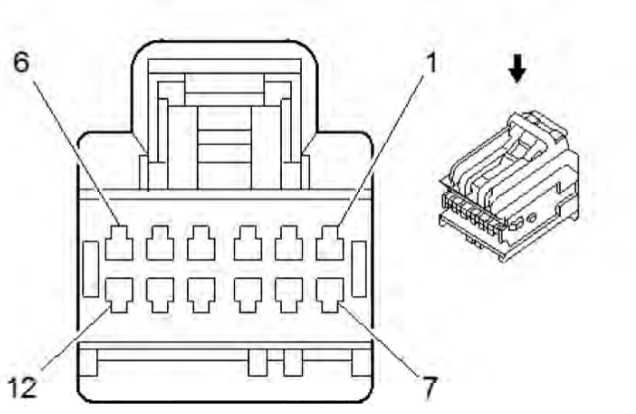
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
13-14	—	—	—	Not Occupied	—	—
15	0.35	BU/GN	614	Memory Seat Switch Set Signal	I	—
16-20	—	—	—	Not Occupied	—	—

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K41 Parking Assist Control Module X1 (UD7/UFQ)



Connector Part Information

- Harness Type: Body
- OEM Connector: 89047364
- Service Connector: 89047364
- Description: 12-Way F 64 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575299	J-35616-35 (VT)	Not Available
II	13575299	J-35616-35 (VT)	Not Available

K41 Parking Assist Control Module X1 (UD7/UFQ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	RD/GN	3840	Battery Positive Voltage	I	-
2	-	-	-	Not Occupied	-	-
3	0.35	GN/BN	5852		II	-

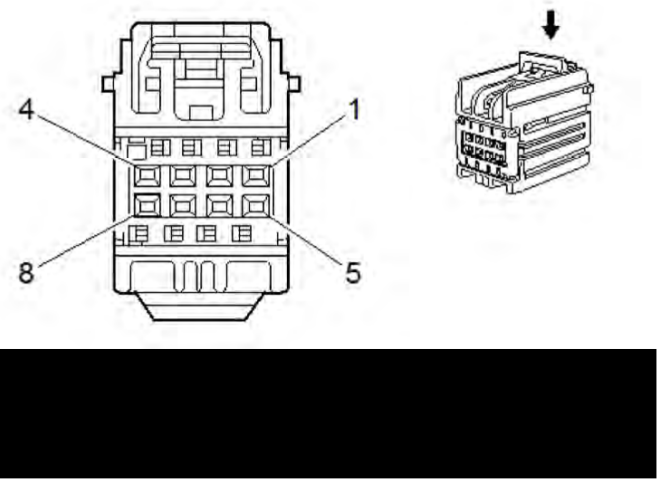
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Rear Park Assist LED Disable Signal		
4	-	-	-	Not Occupied	-	-
5	0.35	BU/YE	6105	High Speed GMLAN Serial Data (+) (2)	II	UFQ
6	0.35 0.5	BU/YE BU/YE	6105 6105	High Speed GMLAN Serial Data (+) (2) High Speed GMLAN Serial Data (+) (2)	II	LHD RHD
7	0.5	BK	2350	Ground	I	-
8	0.35	GY/GN	2555	Rear Park Assist Disable Signal	I	-
9	0.35	GN	5060	Low Speed GMLAN Serial Data	I	-
10	0.35	BU/BN	3161	Parallel Park Assist Disable Switch Signal	II	UFQ
11	0.5 0.35	WH WH	6106 6106	High Speed GMLAN Serial Data (-) (2) High Speed GMLAN Serial Data (-) (2)	I	RHD LHD
12	0.35	WH	6106	High Speed GMLAN Serial Data (-) (2)	II	UFQ

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K41 Parking Assist Control Module X2 (UD7/UFQ)



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Connector Part Information

- Harness Type: Body
- OEM Connector: 89047354
- Service Connector: 19115653
- Description: 8-Way F YESC Kaizen Series (L-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575299	J-35616-64B (L-BU)	J-38125-215A

K41 Parking Assist Control Module X2 (UD7/UFQ)

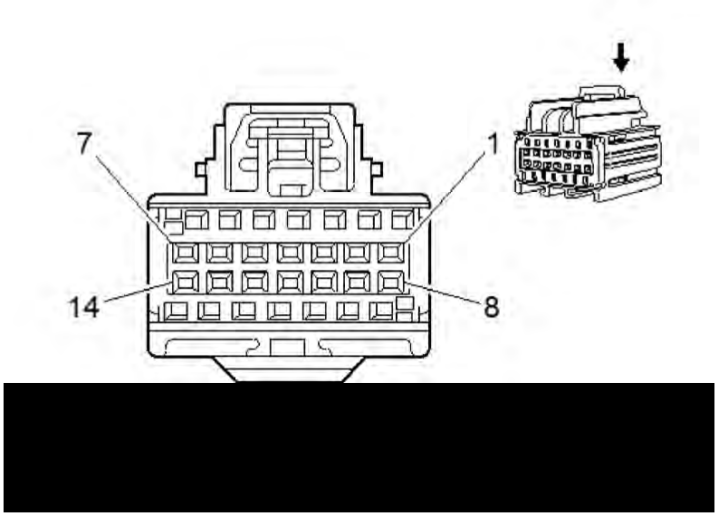
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	YE	2375	Left Rear Corner Object Sensor Signal	I	-
2	-	-	-	Not Occupied	-	-
3	0.35	YE/BU	2376	Left Rear Middle Object Sensor Signal	I	-

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4	0.35	BN/WH	2374	Object Sensor Supply Voltage	I	-
5	0.35	YE/VT	2378	Right Rear Corner Object Sensor Signal	I	-
6	-	-	-	Not Occupied	-	-
7	0.35	YE/WH	2377	Right Rear Middle Object Sensor Signal	I	-
8	0.35	BK/GY	2379	Object Sensor Low Reference	I	-

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K41 Parking Assist Control Module X3 (UD7/UFQ)



Connector Part Information

- Harness Type: Body
- OEM Connector: 15127038
- Service Connector: 15127038
- Description: 14-Way F Kaizen 64 Series (BU)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575299	J-35616-64B (L-BU)	J-38125-215A

K41 Parking Assist Control Module X3 (UD7/UFQ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BN	6581	Front Parking Aid Display Supply Voltage	I	-
2	0.35	BK	2350	Ground	I	-
3	0.35	GY	3154	Left Front Supplemental Object Sensor Signal	I	-

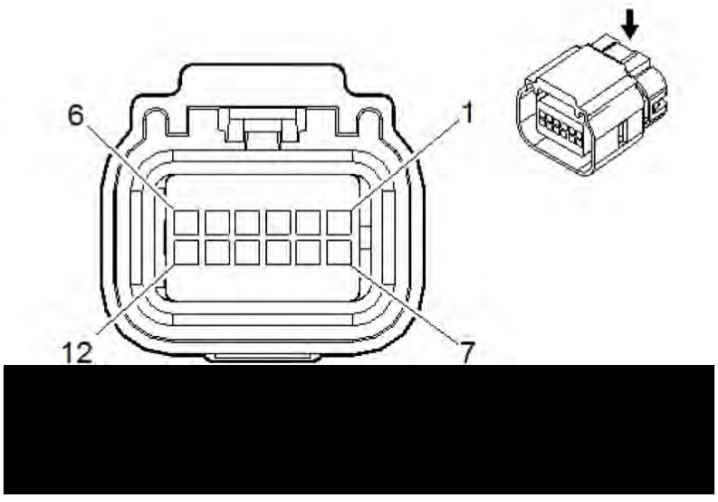
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4	0.35	VT/WH	5215	Front Parking Left Corner Sensor	I	-
5	0.35	YE/GY	5216	Front Parking Left Mid Sensor	I	-
6-7	-	-	-	Not Occupied	-	-
8	0.35	BK/BU	5214	Front Parking Sensor Low Reference	I	-
9	0.35	BK	2350	Ground	I	-
10	0.35	GN	3155	Right Front Supplemental Object Sensor Signal	I	-
11	0.35	WH/GY	5217	Front Parking Right Corner Sensor	I	-
12	0.35	VT/GY	5218	Front Parking Right Mid Sensor	I	-
13	0.35	BK	2350	Ground	I	-
14	-	-	-	Not Occupied	-	-

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K43 Power Steering Control Module X1



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13678638
- Service Connector: 19300889
- Description: 12-Way F 1.2 OCS Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19119438	J-35616-35 (VT)	J-38125-11A

K43 Power Steering Control Module X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	RD/BN	5940	Battery Positive Voltage	I	-
2	-	-	-	Not Occupied	-	-
3	0.5	BU/YE	6105	High Speed GMLAN Serial Data (+) (2)	I	-

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4	0.5	WH	6106	High Speed GMLAN Serial Data (-) (2)	I	-
5	0.5	BU/YE	6105	High Speed GMLAN Serial Data (+) (2)	I	-
6	0.5	WH	6106	High Speed GMLAN Serial Data (-) (2)	I	-
7	0.5	WH/BU	5986	Serial Data Communication Enable	I	-
8	0.5	BU	2500	High Speed GMLAN Serial Data (+) (1)	I	-
9	0.5	WH	2501	High Speed GMLAN Serial Data (-) (1)	I	-
10	0.5	BU	2500	High Speed GMLAN Serial Data (+) (1)	I	-
11	0.5	WH	2501	High Speed GMLAN Serial Data (-) (1)	I	-
12	-	-	-	Not Occupied	-	-

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K43 Power Steering Control Module X2

Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 13231519
- Service Connector: Pending
- Description:

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Pending	Pending	Pending

K43 Power Steering Control Module X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	WH/BU	5986	Serial Data Communication Enable	I	LT
2	0.35	BU/YE	6105	High Speed GMLAN Serial Data (+) (2)	I	LT
3	0.35	WH	6106	High Speed GMLAN Serial Data (-) (2)	I	LT
4-6	-	-	-	Not Occupied	-	-
7	0.35 0.35 0.35	BU BU/YE BU/YE	6105 6105 6105	High Speed GMLAN Serial Data (+) (2) High Speed GMLAN Serial Data (+) (2) High Speed GMLAN Serial Data (+) (2)	I	LHD -UFQ UFQ
8	0.35 0.35 0.35	WH WH WH	6106 6106 6106	High Speed GMLAN Serial Data (-) (2) High Speed GMLAN Serial Data (-) (2) High Speed GMLAN Serial Data (-) (2)	I	LHD -UFQ UFQ

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K43 Power Steering Control Module X3

Connector Part Information

- Harness Type: Power Steering
- OEM Connector: 13572498
- Service Connector: Service by Harness - See Part Catalog
- Description: 8-Way F 0.64 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

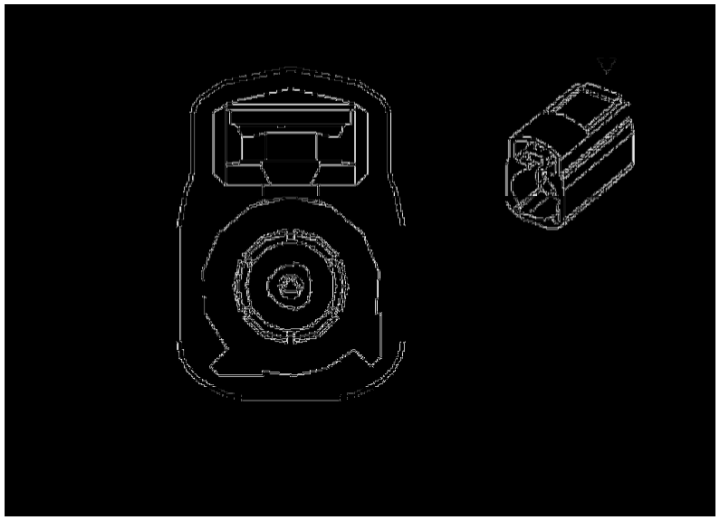
K43 Power Steering Control Module X3

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	0.5	BN/RD	6631	Torque Input Sensor High Reference	I	—
3	0.5	BU/GY	6633	Torque Input Sensor Signal	I	—
4	0.5	BK/BU	6632	Torque Input Sensor Low Reference	I	—
5	—	—	—	Not Used	—	—
6	0.5	BN/RD	6631	Torque Input Sensor High Reference	I	—
7	0.5	BU/GY	6633	Torque Input Sensor Signal	I	—
6	0.5	BK/BU	6632	Torque Input Sensor Low Reference	I	—

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K46 Radio Antenna Module X4



Connector Part Information

- Harness Type: Body (F19/F69/F80)
- Harness Type: Left Liftgate (F80)
- OEM Connector: 59Z073-001M
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: 1-Way F Coax Type (OG)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

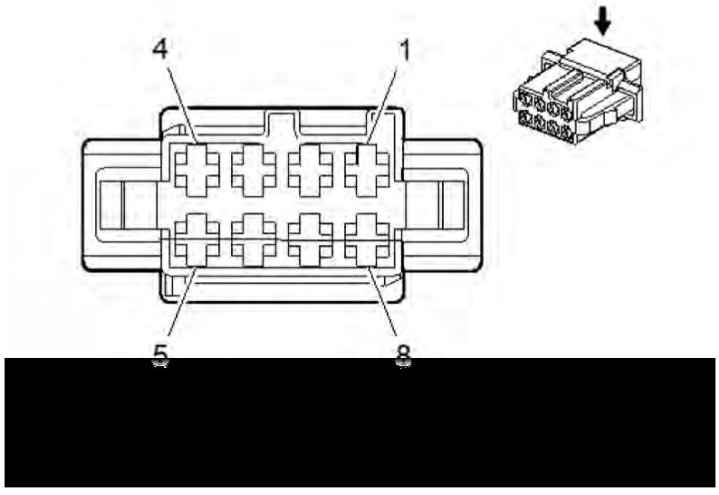
K46 Radio Antenna Module X4

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
C	0.2	GY	6203	Coaxial Antenna RFA Signal	I	—
S	0.2	BARE	6204	Coaxial Antenna RFA Drain Wire	I	—

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K60 Steering Column Lock Module (ULS)



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 24466119
- Service Connector: 13576545
- Description: 8-Way F 1.6 Micro Timer Series BK

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

K60 Steering Column Lock Module (ULS)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	-	-	-	Not Occupied	-	-
2	0.35	BU/VT	5904	Steering Column Lock Status Signal	I	-
3	0.35	BU/VT	807	OFF /Accessory Voltage	I	-

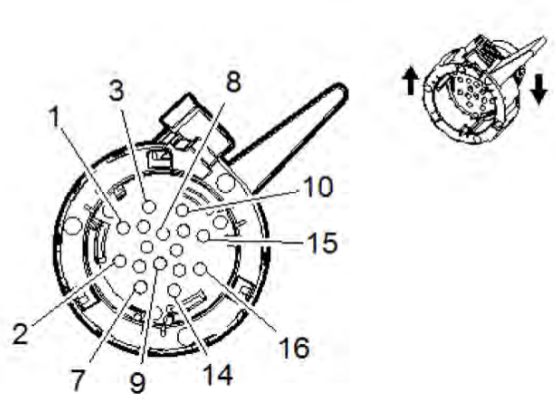
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4	0.35	GN/VT	1601	Steering Column Lock Signal	I	-
5	0.75	RD/GY	4140	Battery Positive Voltage	I	-
6	0.75	BK	1450	Ground	I	-
7	0.75	BK	1450	Ground	I	-
8	0.35	GN	5060	Low Speed GMLAN Serial Data	I	-

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K71 Transmission Control Module (MYA/MYC/MYD)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13582817
- Service Connector: 13582817
- Description: 16-Way F 1.5 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19119439	J-35616-35 (VT)	J-38125-215A

K71 Transmission Control Module (MYA/MYC/MYD)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	RD/GN	1840	Battery Positive Voltage	I	-
2	0.75	BK/WH	451	Signal Ground	I	-
3	0.5	WH/GY	1786	Transmission Park/Neutral Signal (1)	I	-

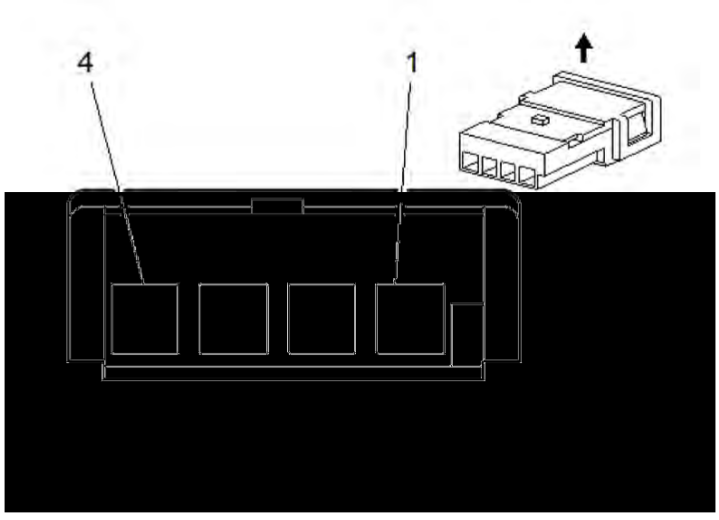
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4	0.75	RD/GN	1840	Battery Positive Voltage	I	-
5	0.75	BK/WH	451	Signal Ground	I	-
6	0.5	WH/BU	6311	Cruise/ETC/TCC Brake Signal	I	-
7-8	-	-	-	Not Occupied	-	-
9	0.5	VT/YE	5985	Accessory Wakeup Serial Data	I	-
10	0.5	BU	2500	High Speed GMLAN Serial Data (+) (1)	I	-
11	0.5	WH	2501	High Speed GMLAN Serial Data (-) (1)	I	-
12	0.5	VT/BK	2139	Run/Crank Ignition 1 Voltage	I	-
13	0.5	WH	2501	High Speed GMLAN Serial Data (-) (1)	I	-
14	0.5	BU	2500	High Speed GMLAN Serial Data (+) (1)	I	-
15	-	-	-	Not Occupied	-	-
16	0.5	GY/BK	6355	Output Speed High Signal Output	I	-

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K77 Remote Control Door Lock Receiver X1



Connector Part Information

- Harness Type: Body (F19/F69/F80), Left Liftgate (F35)
- OEM Connector: 9130527
- Service Connector: Service by Harness - See Part Catalog
- Description: 4-Way F 0.64 Micro Quadlock Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

K77 Remote Control Door Lock Receiver X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GY	3273	Remote Function Actuator Return	I	—
2	0.35	BU/WH	3275	Remote Function Actuator Receive Signal	I	—
3	0.35	YE/GN	3274		I	—

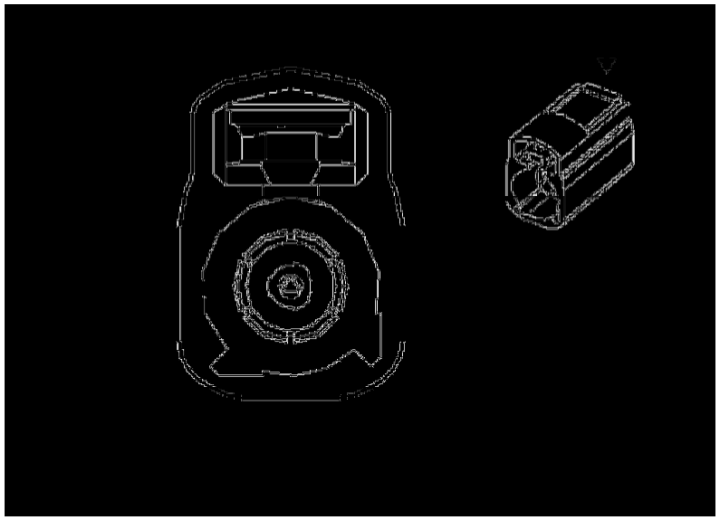
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Remote Function Actuator Transmit Signal		
4	0.35	GY/WH	3272	Remote Function Actuator Supply Voltage	I	—

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K77 Remote Control Door Lock Receiver X2



Connector Part Information

- Harness Type: Body (F19/F69/F80)
- Harness Type: Left Liftgate (F80)
- OEM Connector: 59Z073-001M
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: 1-Way F Coax Type (OG)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

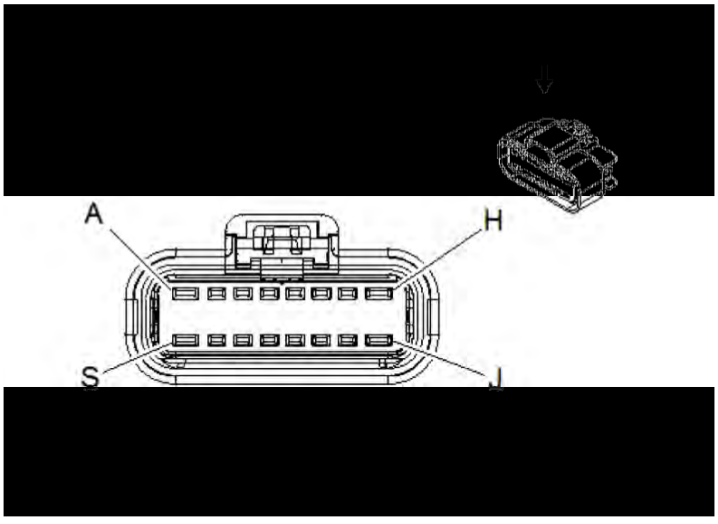
K77 Remote Control Door Lock Receiver X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
C	0.2	GY	6203	Coaxial Antenna RFA Signal	I	—
S	0.2	BARE	6204	Coaxial Antenna RFA Drain Wire	I	—

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K83 Parking Brake Control Module (J77)



Connector Part Information

- Harness Type: Rear Axle
- OEM Connector: 88988439
- Service Connector: Service by Harness - See Part Catalog
- Description: 16-Way F GT 150 280 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available
II	Not Available	J-35616-35 (VT)	Not Available
III	Not Available	J-35616-35 (VT)	Not Available

K83 Parking Brake Control Module (J77)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	4	RD/VT	1640	Battery Positive Voltage	I	-
B	0.5	YE/RD	7683		II	-

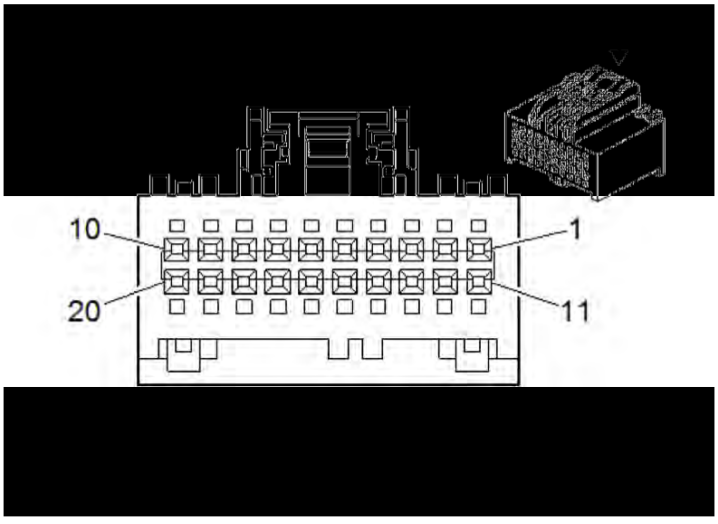
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Park Brake Release Switch Voltage Reference		
C	0.5	BU/VT	1134	Park Brake Switch Signal	II	-
D	0.5	GY/RD	7684	Park Brake Apply Switch Voltage Reference	II	-
E	0.5	WH	2501	High Speed GMLAN Serial Data (-) (1)	II	-
F	0.5	BU	2500	High Speed GMLAN Serial Data (+) (1)	II	-
G	0.5	BU	2500	High Speed GMLAN Serial Data (+) (1)	II	-
H	4	BK	3250	Ground	II	-
K	0.5	WH	2501	High Speed GMLAN Serial Data (-) (1)	II	-
L	0.5	WH	2501	High Speed GMLAN Serial Data (-) (1)	II	-
M	0.5	BU	2500	High Speed GMLAN Serial Data (+) (1)	II	-
N	0.5	YE	1492	Park Brake Switch Supply Voltage	II	-
P	0.5	WH/BU	5986	Serial Data Communication Enable	II	-
R	0.5	BN	6107	Park Brake Apply Switch Signal	II	-
S	0.5	BU/BK	6108	Park Brake Release Switch Signal	II	-

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K84 Keyless Entry Control Module X1 (ULS/BTM)



Connector Part Information

- Harness Type: Body
- OEM Connector: 15126711
- Service Connector: 15126711
- Description: 20-Way F 0.64 Series (BK with WH Terminal Position Assurance)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575299	J-35616-64B (L-BU)	J-38125-215A

K84 Keyless Entry Control Module X1 (ULS/BTM)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GN/VT	1601	Steering Column Lock Signal	I	-
2	-	-	-	Not Occupied	-	-
3	0.35	GN	5060	Low Speed GMLAN Serial Data	I	-

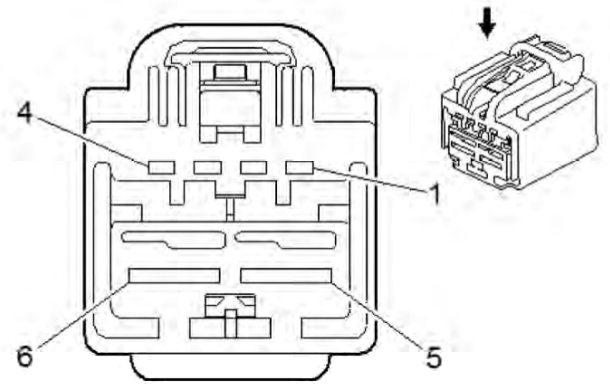
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4-8	-	-	-	Not Occupied	-	-
9	0.35	WH/YE	3574	Driver Door Open Switch Signal	I	-
10	0.35	GY/GN	3575	Co_Driver Door Open Switch Signal	I	-
11	0.35	GN/BK	3558	Passive Start Switch Signal 2	I	-
12	0.35	BK/GY	3559	Passive Start Switch 2 Low Reference	I	-
13-14	-	-	-	Not Occupied	-	-
15	0.35	GY/BK	3555	Passive Start Interior Antenna 2 Signal Lo	I	-
16	0.35	BN/BK	3552	Passive Start Interior Antenna 1 Signal Hi	I	-
17	0.35	WH	3553	Passive Start Interior Antenna 1 Signal Lo	I	-
18	0.35	WH/GN	3556	Passive Start Interior Antenna 3 Signal Hi	I	-
19	0.35	GN	3557	Passive Start Interior Antenna 3 Signal Lo	I	-
20	0.35	BU	3554	Passive Start Interior Antenna 2 Signal Hi	I	-

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K84 Keyless Entry Control Module X2 (BTM)



Connector Part Information

- Harness Type: Body
- OEM Connector: 15226104
- Service Connector: 88988512
- Description: 6-Way F YESC Kaizen Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available
II	Not Available	J-35616-35 (VT)	Not Available
III	Not Available	J-35616-35 (VT)	Not Available

K84 Keyless Entry Control Module X2 (BTM)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	RD/YE	4340	Battery Positive Voltage	III	-
2	1.5	BK	2450	Ground	III	-

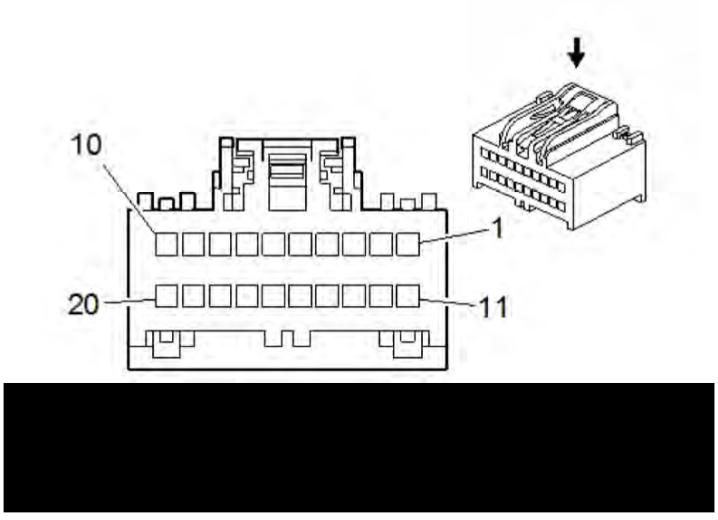
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
	1.5	BK	2350	Ground		
3	0.35	VT/YE	4	Accessory Voltage	III	-
4	0.35	VT/BK	3	Run/Crank Ignition 1 Voltage	III	-
5	2	RD/BU	540	Battery Positive Voltage	III	-
6	2 2	BK BK	2350 2450	Ground Ground	III	-

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K84 Keyless Entry Control Module X4 (ATH)



Connector Part Information

- Harness Type: Body
- OEM Connector: 15126710
- Service Connector: 15126710
- Description: 20-Way F USCAR 64 Series (GY with WH Terminal Position Assurance)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575299	J-35616-16 (L-GN) J-35616-16 (L-GN) J-35616-16 (L-GN)	Not Available
II	13575299	J-35616-35 (VT)	Not Available
III	13575299	J-35616-16 (L-GN) J-35616-16 (L-GN) J-35616-16 (L-GN)	Not Available

K84 Keyless Entry Control Module X4 (ATH)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	YE/GY	6158		I	-

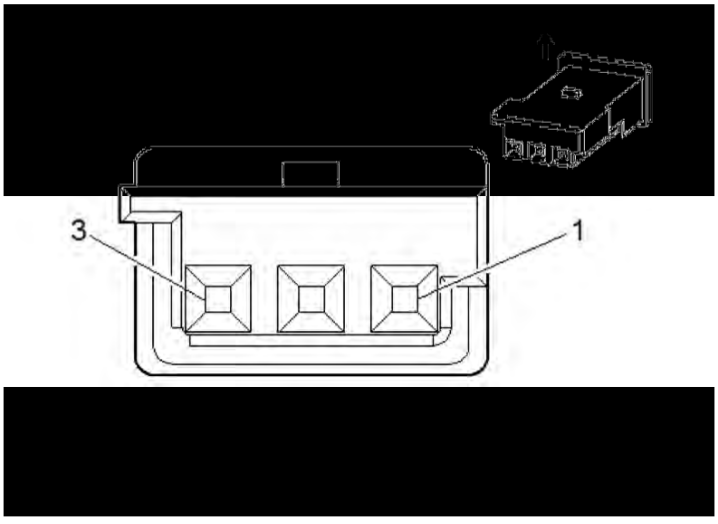
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Right Rear Door Handle Switch Signal		
2	0.35	BN/YE	6157	Left Rear Door Handle Switch Signal	II	-
3-5	-	-	-	Not Occupied	-	-
6	0.35	VT	3560	Passive Entry Driver Door Antenna Signal Hi	II	-
7	0.35	VT/GY	3561	Passive Entry Driver Door Antenna Signal Lo	I	-
8	-	-	-	Not Occupied	-	-
9	0.35	GN/BK	3563	Passive Entry Co_Driver Door Antenna Signal Lo	III	-
10	-	-	-	Not Occupied	-	-
11	0.35	VT/WH	3571	Co_Driver Door Handle Switch Signal	II	-
12	0.35	GN/WH	3570	Driver Door Handle Switch Signal	I	-
13-15	-	-	-	Not Occupied	-	-
16	0.5	BN/GN	3568	Passive Entry Rear Closure Antenna Signal Hi	I	F35
17	-	-	-	Not Occupied	-	-
18	0.5	GN/GY	3569	Passive Entry Rear Closure Antenna Signal Lo	I	F35
19	-	-	-	Not Occupied	-	-
20	0.35	GN/YE	3562	Passive Entry Co_Driver Door Antenna Signal Hi	III	-

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K89 Immobilizer Control Module



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Connector Part Information

- Harness Type: Center Console
- OEM Connector: 19153569
- Service Connector: 13576530
- Description: 3-Way F Micro Quadlok Series (PU)
- Harness Type: Instrument Panel
- OEM Connector: 19153569
- Service Connector: 13576530
- Description: 3-Way F Micro Quadlok Series (PU)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

K89 Immobilizer Control Module

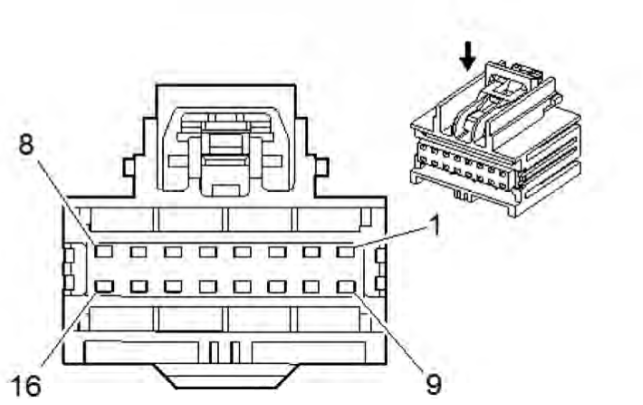
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.13	GN	3277	Vehicle Anti-Theft System Immobilizer Return	I	-
2	0.35	GN/VT	7533		I	-

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Linear Interconnect Network Bus 11		
3	0.13	GY	3276	Vehicle Anti-Theft System Immobilizer Supply Voltage	I	-

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K96 Mirror Control Module (DM7/DR3)



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Connector Part Information

- Harness Type: Driver Door
- OEM Connector: 89047357
- Service Connector: Service by Harness - See Part Catalog
- Description: 16-Way F Kaizen 64 Series (L-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

K96 Mirror Control Module (DM7/DR3)

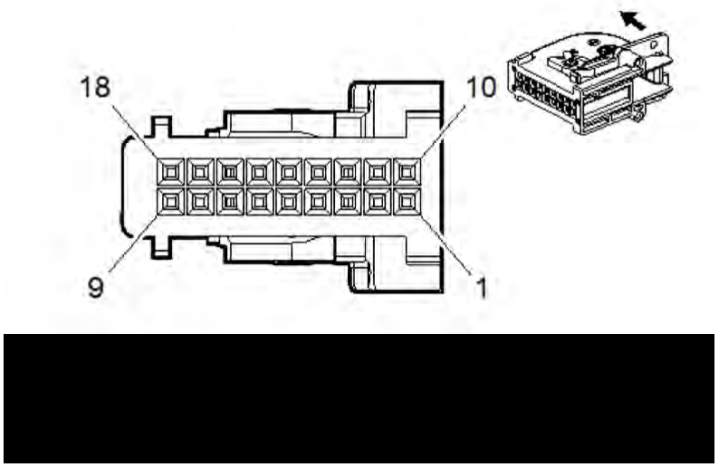
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	RD/VT	1940	Battery Positive Voltage	I	—
2-3	—	—	—	Not Occupied	—	—
4	0.35	WH/RD	3395	Driver Mirror Position Sensor Left (-) Right (+) Signal	I	—

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
5	0.35	VT/RD	3392	Driver Mirror Position Sensor High Reference	I	—
6	0.35	BK/BN	3393	Driver Mirror Position Sensor Low Reference	I	—
7	7	VT/BK	3404	Driver Mirror Switch Right (+) Left (-) Signal	I	—
8	0.35	YE/GY	1382	LED Dimming Signal	I	—
9	0.35	VT/BU	3390	Driver Mirror Motor Up (+) Down (-) Control	I	—
10	0.35	BN/BK	3389	Driver Mirror Motor Right (+) Left (-) Control	I	—
11	0.35	YE/BN	3391	Driver Mirror Motor Common Control	I	—
12	0.35	GN/WH	7530	Local Interconnect Network Bus 8	I	—
13	0.35	GY/BN	3394	Driver Mirror Position Sensor Up (+) Down (-) Signal	I	—
14	0.5	BK	2150	Ground	I	—
15	0.35	BK/VT	5478	Mirror Switch Low Reference	I	—
16	0.35	WH/VT	3405	Driver Mirror Switch Up (-) Down (+) Signal	I	—

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K101 Trailer Interface Control Module X1



[redacted]

Connector Part Information

- Harness Type: Trailer Harness (F19/F35/F69), Body Harness (F80)
- OEM Connector: 13292663
- Service Connector: 19119427
- Description: 18-Way F 0.64 Series (WH)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13587506	J-35616-35 (VT)	Not Available
II	13579917	J-35616-35 (VT)	J-38125-215A

K101 Trailer Interface Control Module X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GN	5060	Low Speed GMLAN Serial Data	I	—
2	0.75	GN	5187	Right Trailer Turn Signal Lamp	II	—

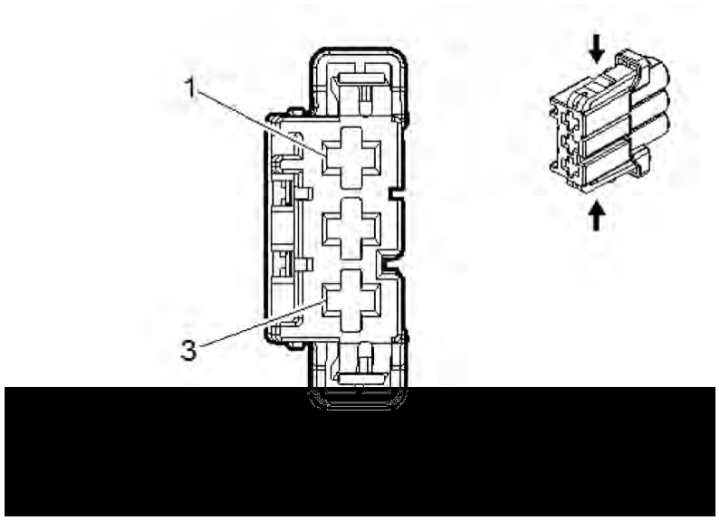
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
3	-	-	-	Not Occupied	-	-
4	0.75	BN	5185	Right Trailer Park Lamp	II	—
5	0.75	RD	5188	Trailer Brake Lamp	II	—
6	-	-	-	Not Occupied	-	-
7	0.75	BK	5189	Trailer Backup Lamp	II	—
8-9	-	-	-	Not Occupied	-	-
10	0.75	RD	5188	Trailer Brake Lamp	II	—
11	-	-	-	Not Occupied	-	-
12	0.75	GY	5992	Trailer Connected Signal	II	—
13	0.35	VT/BK	1239	Run/Crank Ignition 1 Voltage	I	—
14	0.5	VT/WH	5065	Stop Lamp Relay Coil Supply Voltage	I	—
15	-	-	-	Not Occupied	-	-
16	0.75	BN	5185	Right Trailer Park Lamp	II	—
17	0.75	YE	5186	Left Trailer Turn Signal Lamp	II	—
18	-	-	-	Not Occupied	-	-

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K101 Trailer Interface Control Module X2



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Connector Part Information

- Harness Type: Body
- OEM Connector: 13227253
- Service Connector: 13314094
- Description: 3-Way F 2.8 MCP Series, Sealed (BK)

Terminal Part Information

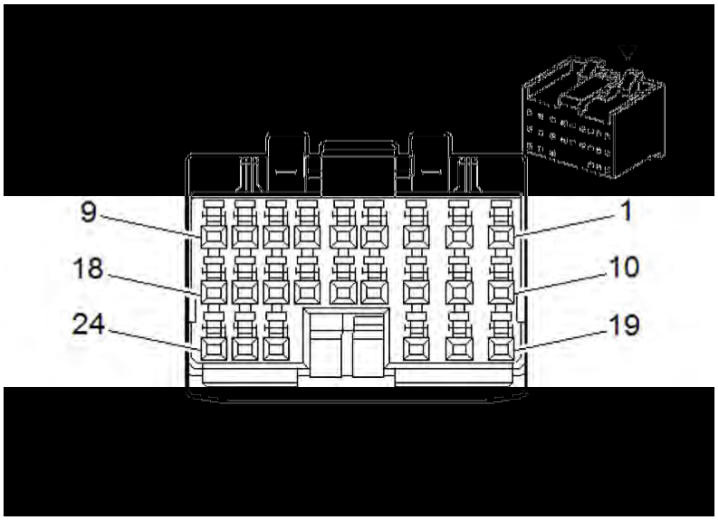
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

K101 Trailer Interface Control Module X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	3	BK	2450	Ground	I	-
2	-	-	-	Not Occupied	-	-
3	3	RD/GN	742	Battery Positive Voltage	I	-

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K103 Fuel Injector Control Module X1 (LWR)



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 316371-1
- Service Connector: 13584366
- Description: 24-Way F 040 Multi Lock Series (WH)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	19119436	J-35616-35 (VT)	J-38125-553

K103 Fuel Injector Control Module X1 (LWR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH	2501	High Speed GMLAN Serial Data (-) (1)	I	-
2	0.5	WH	2501	High Speed GMLAN Serial Data (-) (1)	I	-
3	0.5	BU	2500		I	-

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				High Speed GMLAN Serial Data (+) (1)		
4	0.5	BU	2500	High Speed GMLAN Serial Data (+) (1)	I	-
5-14	-	-	-	Not Occupied	-	-
15	0.35	BU/GN	5665	Liquid Petroleum Gas Valve Solenoid Control	I	-
16-20	-	-	-	Not Occupied	-	-
21	0.5	BK	2250	Ground	I	-
22	0.35	RD/VT	4640	Battery Positive Voltage	I	-
23	0.35	WH/BU	5986	Serial Data Communication Enable	I	-
24	-	-	-	Not Occupied	-	-

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K103 Fuel Injector Control Module X2 (LWR)

Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 175964-2
- Service Connector: TBD
- Description: 8-Way F

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	TBD	—	—

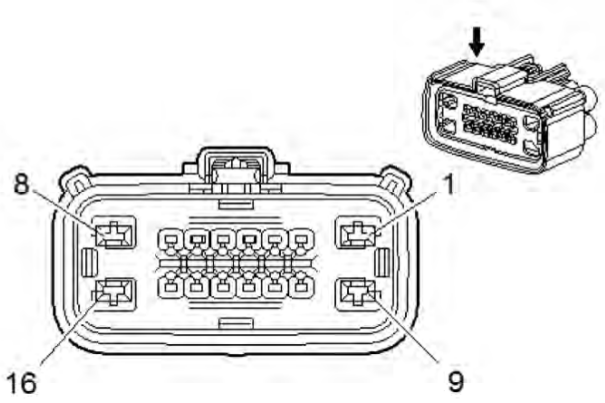
K103 Fuel Injector Control Module X2 (LWR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1-3	—	—	—	Not Occupied	—	—
4	0.35	VT/WH	3361	Pop Up Display Control	I	—
5-6	5-6	—	—	Not Occupied	—	—
7	0.35	BARE	3371	Video Drain Wire (2)	I	—
8	0.35	WH/GN	3362	Pop Up Display Position Signal	I	—

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K111 Fuel Pump Driver Control Module (LFW/LFX)



Connector Part Information

- Harness Type: Body
- OEM Connector: 13576334
- Service Connector: 19119426
- Description: 16-Way F 1.5, 2.8 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13587384	J-35616-35 (VT)	J-38125-215A
II	13575805	J-35616-35 (VT)	J-38125-215A
III	13575805	J-35616-35 (VT)	J-38125-215A

K111 Fuel Pump Driver Control Module (LFW/LFX)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	3	RD/VT	2640	Battery Positive Voltage	I	-
2	0.35	GY	5660		III	-

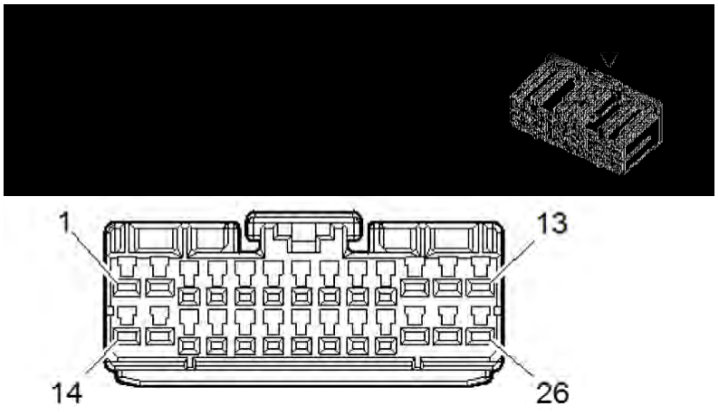
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Fuel Pump Controller Data Out Signal		
3	-	-	-	Not Occupied	-	-
4	0.5	BU/BK	7493	High Speed GMLAN Serial Data (+)(3)	II	-
5	0.5	WH	7494	High Speed GMLAN Serial Data (-)(3)	II	-
6	0.35	VT/BK	339	Run/Crank Ignition 1 Voltage	III	-
7	0.35	VT/YE	5985	Accessory Wakeup Serial Data	III	-
8	3	GY	120	Fuel Pump Supply Voltage	I	-
9	3 3	BK BK	2550 2450	Ground Ground	I	-
10	-	-	-	Not Occupied	-	-
11	0.35	BU/BK	7493	High Speed GMLAN Serial Data (+)(3)	II	-
12	0.35	BU/BK	7493	High Speed GMLAN Serial Data (+)(3)	III	-
13	0.35	WH	7494	High Speed GMLAN Serial Data (-)(3)	II	-
14	0.35	WH	7494	High Speed GMLAN Serial Data (-)(3)	II	-
15	0.5	BU	7443	Fuel System Control Module Shield Extension	II	-
16	3	BK/GN	1580	Fuel Pump Low Reference	I	-

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K116 Auxiliary Display Control Module X1 (BUJ)



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 917992-6
- Service Connector: 19119428
- Description: 26-Way F 040, 070 Series D-GY

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575245	J-35616-35 (VT)	J-38125-553
II	13575244	J-35616-35 (VT)	J-38125-553
III	13575247	J-35616-35 (VT)	Not Available

K116 Auxiliary Display Control Module X1 (BUJ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1	RD/VT	5640	Battery Positive Voltage	I	-
2-11	-	-	-	Not Occupied	-	-

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
12	0.5	GY	1724	Supercharger Boost Solenoid Control	II	-
13	0.5	BU/WH	7455	FSCM Exhaust Flapper Valve Feedback Control	II	-
14	1	BK/WH	1551	Signal Ground	I	-
15	-	-	-	Not Occupied	-	-
16	0.35	WH/BU	5986	Serial Data Communication Enable	III	-
17	-	-	-	Not Occupied	-	-
18	0.35	GN	5060	Low Speed GMLAN Serial Data	III	-
19	0.35	GN	9060		III	-
20	0.35	BU	2500	High Speed GMLAN Serial Data (+) (1)	III	-
21	0.35	WH	2501	High Speed GMLAN Serial Data (-) (1)	III	-
22-23	-	-	-	Not Occupied	-	-
24	1	BK/WH	1551	Signal Ground	I	-
25-26	-	-	-	Not Occupied	-	-

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K116 Auxiliary Display Control Module X2 (BUJ)



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 175964-2
- Service Connector: 15306185
- Description: 8-Way F 090 Series BK

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

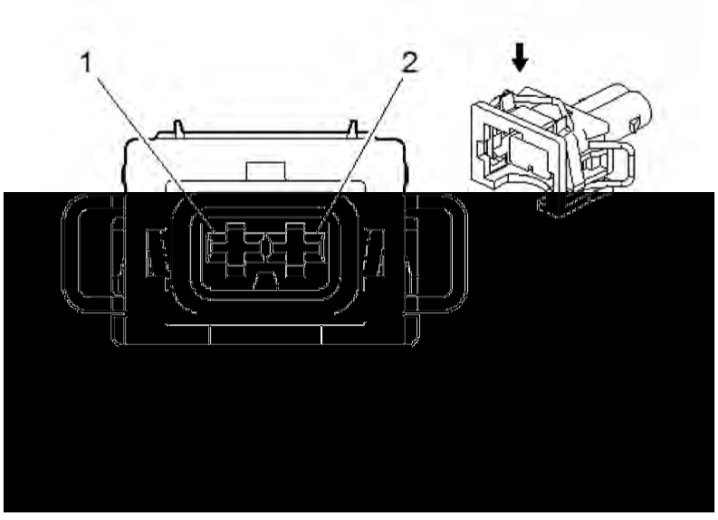
K116 Auxiliary Display Control Module X2 (BUJ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1-5	-	-	-	Not Occupied	-	-
6	0.35	VT/WH	3361	Pop Up Display Control	I	-
7	0.35	BARE	3371	Video Drain Wire (2)	I	-
8	0.35	WH/GN	3362	Pop Up Display Position Signal	I	-

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M4 Air Inlet Door Actuator (LSA)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 12131678
- Service Connector: 89046833
- Description: 2-Way F Mini Timer Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13505668	J-35616-3 (GY)	J-38125-12A

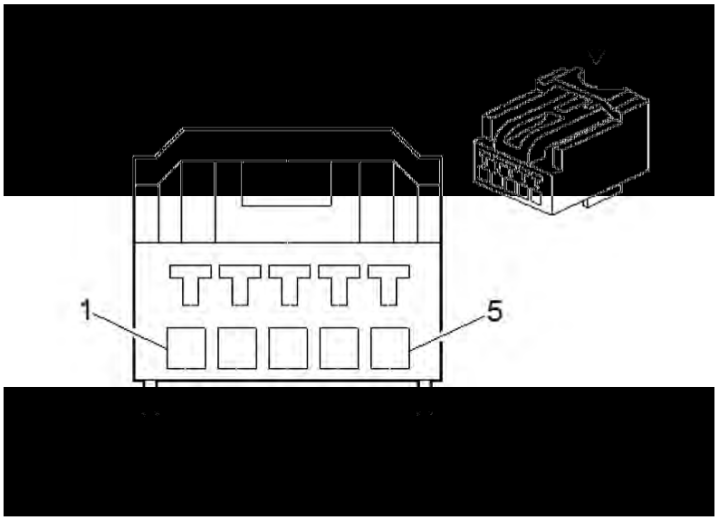
M4 Air Inlet Door Actuator (LSA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK/WH	451	Signal Ground	I	—
2	0.5	GY	1724	Supercharger Boost Solenoid Control	I	—

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M6B Air Temperature Door Actuator – Auxiliary (C63)



Connector Part Information

- Harness Type: HVAC
- OEM Connector: 7283-5830
- Service Connector: Service by Harness - See Part Catalog
- Description: 5-Way F (NA)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-16 (L-GN)	J-38125-553

M6B Air Temperature Door Actuator – Auxiliary (C63)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	WH/BN	2775	Rear Air Temperature Motor Control	I	—
2	0.75	GY	2614	Rear Air Temperature Door Control	I	—
3	0.75	GY/GN	7523	Rear Air Temperature Door Position Signal	I	—

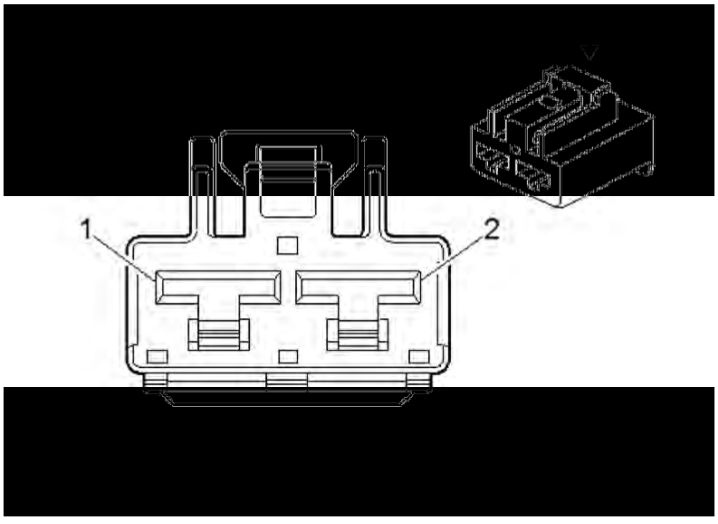
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4	0.75	BK/YE	1791	Air Temperature Door Control Low Reference	I	—
5	0.75	GY/RD	598	5 Volt Reference	I	—

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M8 Blower Motor



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 6098-1104
- Service Connector: 88988637
- Description: 2-Way F 312 TS Series (NA)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-44 (YE)	Not Available

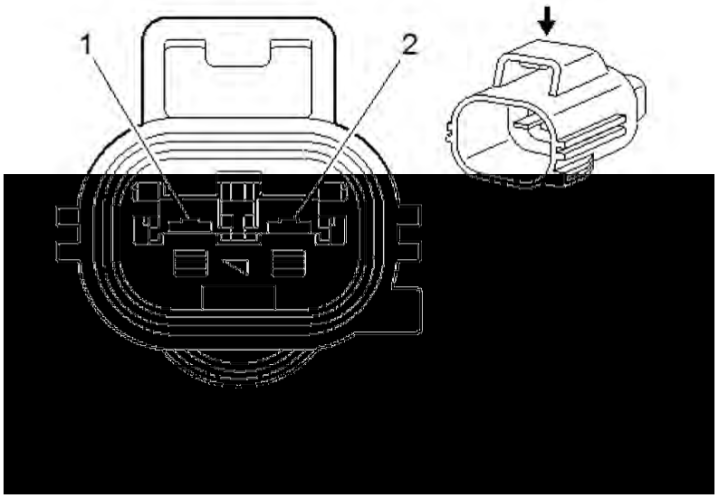
M8 Blower Motor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	4	VT/BK	5987	Front Blower Motor Return	I	-
2	4	VT	65	Blower Motor Supply Voltage	I	-

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M9 Brake Booster Pump Motor (LFW/LFX/LWR)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 7282-5575-10
- Service Connector: 19115602
- Description: 2-Way M 2.8 Series, Sealed (D-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-5 (PU)	J-38125-11A

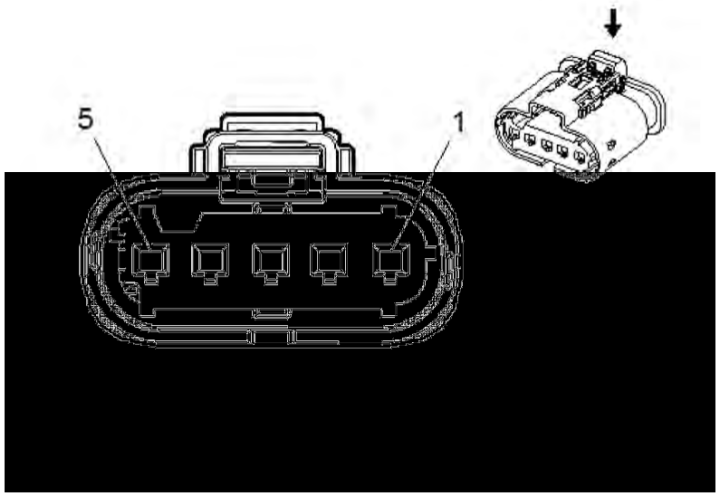
M9 Brake Booster Pump Motor (LFW/LFX/LWR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	BN/VT	1470	Brake Booster Pump Motor Supply Voltage	I	-
2	1.5	BK/WH	451	Signal Ground	I	-

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M10 Charge Air Cooler Coolant Pump (LSA)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 9408621
- Service Connector: 19300589
- Description: 5-Way F 1.2 MLK Series, Sealed BK

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

M10 Charge Air Cooler Coolant Pump (LSA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT/WH	2022	Coolant Pump Control	I	-
2-3	-	-	-	Not Occupied	-	-
4	0.5	BK/WH	451	Signal Ground	I	-
5	0.5	VT/WH	2022	Coolant Pump Control	I	-

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M14B Door Lock Actuator - Liftgate

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Connector Part Information

- Harness Type: Left Liftgate
- OEM Connector: 19115648
- Service Connector: Service by Harness - See part Catalog
- Description: 8-Way F 1.5 Series BK

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

M14B Door Lock Actuator - Liftgate

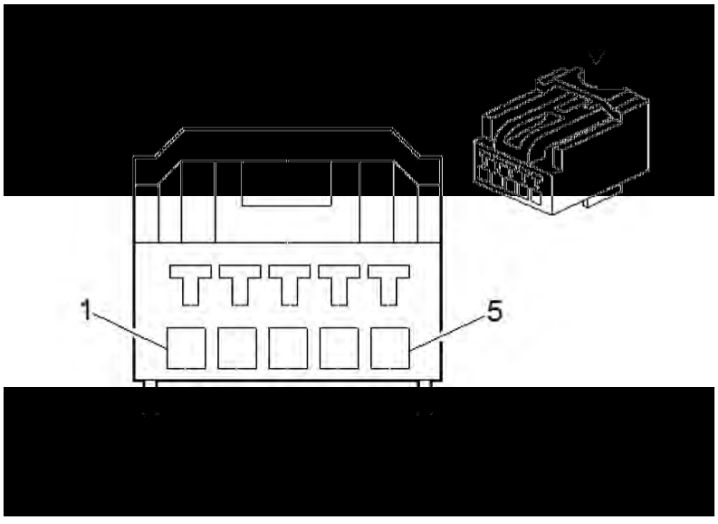
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	YE	3988	Detent Lift Gate Signal	I	-
2	0.35	VT/GN	3987	Cinch Latch Lift Gate Signal	I	-
3	0.35	WH/GN	9006		I	-
4	0.5	GY	3986	Cinch Latch Lift Gate Stall Motor Release Signal	I	-
5	0.35	VT/GY	1303	Lift Gate Ajar Switch Signal (1)	I	-
6	0.5	BK	2850	Ground	I	-

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
7	1.5	BN	5790	Lift Gate Cinch Latch Motor Open Control	I	-
8	1.5	BU/GY	5791	Lift Gate Cinch Latch Motor Close Control	I	-

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M37B Mode Door Actuator – Auxiliary (C63)



Connector Part Information

- Harness Type: HVAC
- OEM Connector: 7283-5830
- Service Connector: Service by Harness - See Part Catalog
- Description: 5-Way F (NA)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-16 (L-GN)	J-38125-553

M37B Mode Door Actuator – Auxiliary (C63)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	GY	2599	Rear Mode Motor Signal	I	—
2	0.75	WH/BK	2215	Rear Mode Door Control	I	—
3	0.75	GN	3193	Rear Mode Door Position Signal	I	—
4	0.75	BK/YE	1791		I	—

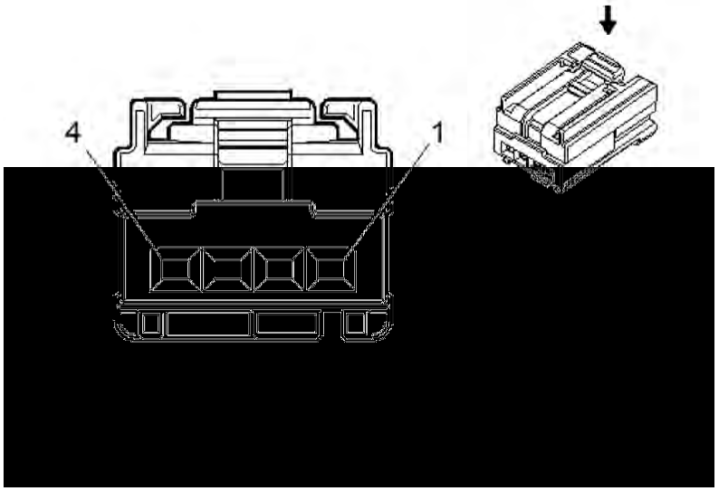
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Air Temperature Door Control Low Reference		
5	0.75	GY/RD	598	5 Volt Reference	I	—

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M40 Rear Compartment Lid Latch



Connector Part Information

- Harness Type: Body
- OEM Connector: 1456983-5
- Service Connector: 19119433
- Description: 4-Way F 0.64 GET Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available
II	Not Available	J-35616-35 (VT)	Not Available

M40 Rear Compartment Lid Latch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	-	-	-	Not Occupied	-	-
2	0.35	VT/GY	1303	Lift Gate Ajar Switch Signal (1)	I	-
3	0.5	BU/WH	6128		II	-

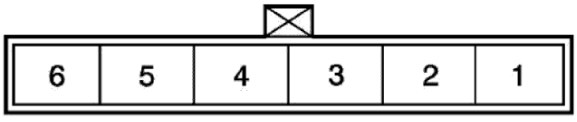
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Rear Closure Unlatch Motor Unlatch Control		
4	0.5	BK	2650	Ground	II	-

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M45 Rear Wiper Motor





Connector Part Information

- Harness Type: Left Liftgate
- OEM Connector: 9362301
- Service Connector: Service by Harness - See part Catalog
- Description: 6-Way M

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-18 (BK)	Not Available

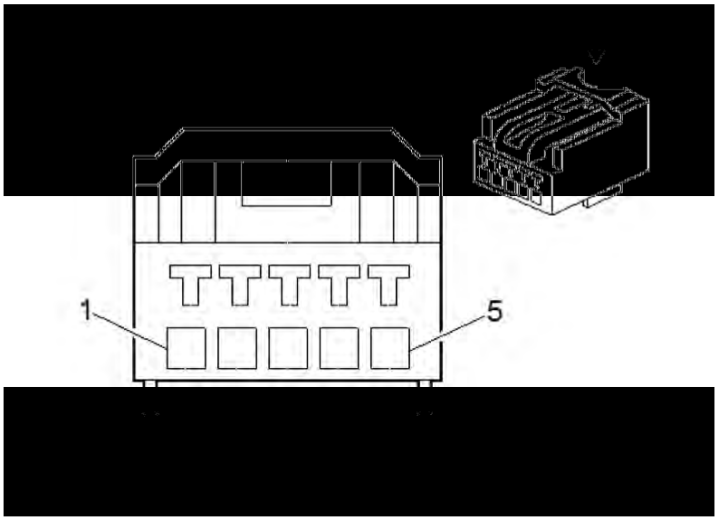
M45 Rear Wiper Motor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BU	393	Rear Window Wiper Motor Control	I	-
2	0.75	RD/YE	3040	Battery Positive Voltage	I	-
3	0.75	BK	2850	Ground	I	-
4-6	-	-	-	Not Occupied	-	-

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M46 Air Recirculation Door Actuator



Connector Part Information

- Harness Type: HVAC
- OEM Connector: 7283-5830
- Service Connector: Service by Harness - See Part Catalog
- Description: 5-Way F (NA)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-16 (L-GN)	J-38125-553

M46 Air Recirculation Door Actuator

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	YE/BK	2274	Recirculation Door Control	I	—
2	0.75	GN	1614	Recirculation Door Control	I	—
3	0.75	VT/GN	1838	Recirculation Door Position Signal	I	—
4	0.75	BK/YE	1791		I	—

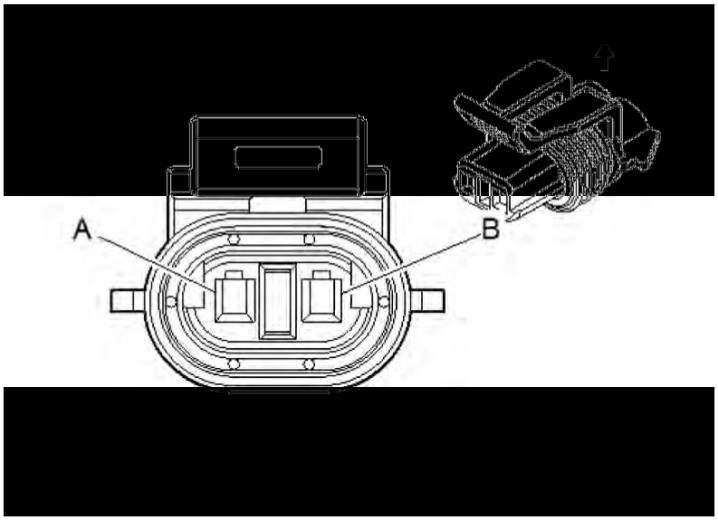
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Air Temperature Door Control Low Reference		
5	0.75	GY/RD	598	5 Volt Reference	I	—

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M47 Reverse Inhibit Solenoid Actuator (MER/MG9)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 12052646
- Service Connector: 12101857
- Description: 2-Way F 150 Metri Pack Series, Sealed (WH)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-14 (GN)	Not Available

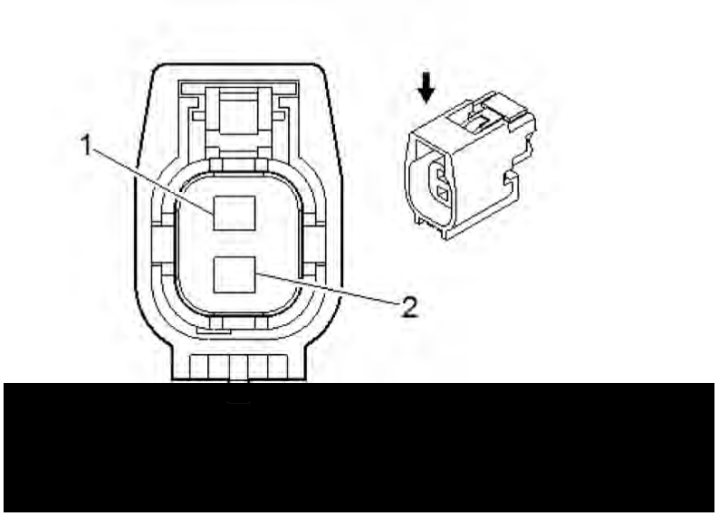
M47 Reverse Inhibit Solenoid Actuator (MER/MG9)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5 0.5	YE/BU GN/BU	5494 1652	Cylinder Shutoff Solenoid Control (4) Reverse Lockout Solenoid Control	I	MG9 MER
B	0.5	VT/BU	5294	Powertrain Main Relay Fused Supply (5)	I	-

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M50D Seat Front Vertical Motor – Driver (AH5/A45)



Connector Part Information

- Harness Type: Driver Seat
- OEM Connector: 6098-2830
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 1.5 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

M50D Seat Front Vertical Motor – Driver (AH5/A45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	BU/VT	287	Driver Power Seat Front Vertical Motor Down Control	I	Right Hand Drive with AH5
	2	BU/VT	287		I	
	1.5	GN/BN	286	Driver Power Seat Front Vertical Motor Down Control	I	Right Hand Drive with A45
	2	GN/BN	286		I	
				Driver Power Seat Front Vertical Motor Up Control		

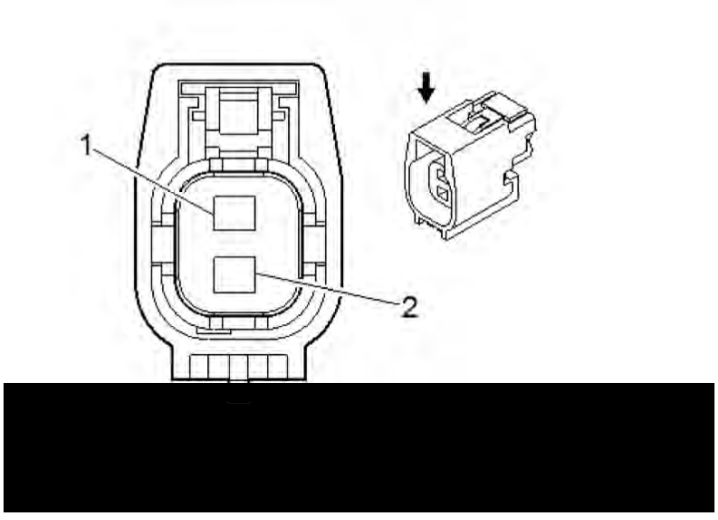
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Driver Power Seat Front Vertical Motor Up Control		Left Hand Drive with AH5 Left Hand Drive with A45
2	0.35	WH/RD	3298	Memory Sensor High Reference (2)	I	A45
—	1.5 2 1.5 2	GN/BN GN/BN BU/VT BU/VT	286 286 287 287	Driver Power Seat Front Vertical Motor Up Control Driver Power Seat Front Vertical Motor Up Control Driver Power Seat Front Vertical Motor Down Control Driver Power Seat Front Vertical Motor Down Control	I I I I	Right Hand Drive with AH5 Right Hand Drive with A45 Left Hand Drive with AH5 Left Hand Drive with A45
—	0.35	BN/WH	557	Memory Seat Front Vertical Motor Position Sensor Signal	I	—

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M50P Seat Front Vertical Motor – Passenger



Connector Part Information

- Harness Type: Passenger Seat
- OEM Connector: 6098-2830
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 1.5 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

M50P Seat Front Vertical Motor – Passenger

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	GN/VT GN/BU	297 298	Passenger Power Seat Front Vertical Motor Up Control Passenger Power Seat Front Vertical Motor Down Control	I I	Right Hand Drive Left Hand Drive
2	—	—	—	Not Occupied	—	—

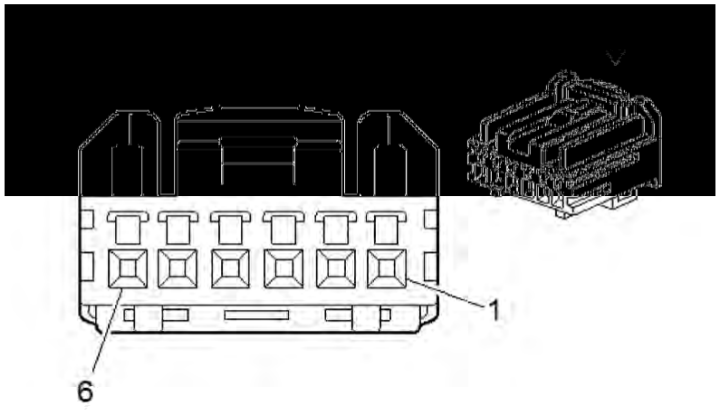
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	2	GN/BU GN/VT	298 297	Passenger Power Seat Front Vertical Motor Down Control Passenger Power Seat Front Vertical Motor Up Control	I I	Right Hand Drive Left Hand Drive
—	—	—	—	Not Occupied	—	—

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M51D Seat Horizontal Motor – Driver (AH5/A45)



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Connector Part Information

- Harness Type: Driver Seat
- OEM Connector: 6098-2830
- Service Connector: Service by Harness - See Part Catalog
- Description: 4-Way F

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

M51D Seat Horizontal Motor – Driver (AH5/A45)

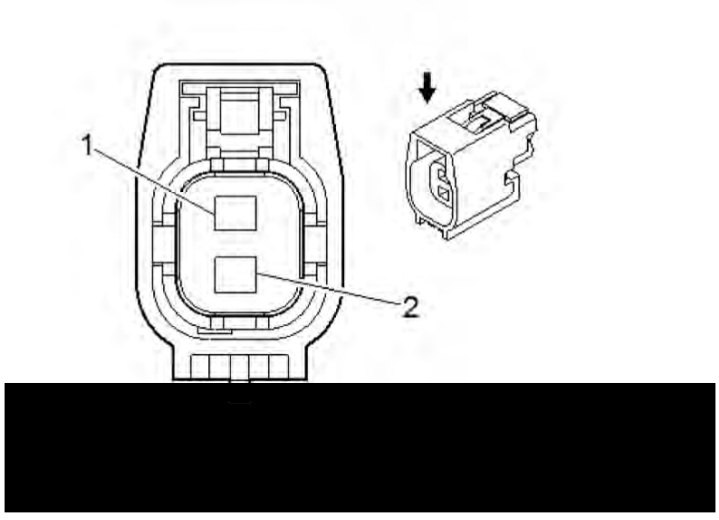
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	GY/GN YE/BU	284 285	Driver Power Seat Horizontal Motor Rearward Control Driver Power Seat Horizontal Motor Forward Control	I I	Right Hand Drive Left Hand Drive
2	0.35	WH/RD	3298	Memory Sensor High Reference	I	—

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
3	1.5	YE/BU GY/GN	285 284	Driver Power Seat Horizontal Motor Forward Control Driver Power Seat Horizontal Motor Rearward Control	— —	Right Hand Drive Left Hand Drive
4	0.35	GN	569	Memory Seat Horizontal Motor Position Sensor Signal	I	—

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M51P Seat Horizontal Motor – Passenger



Connector Part Information

- Harness Type: Passenger Seat
- OEM Connector: 6098-2830
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 1.5 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

M51P Seat Horizontal Motor – Passenger

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	YE/WH YE/BU	296 290	Passenger Power Seat Horizontal Motor Forward Control Passenger Power Seat Horizontal Motor Rearward Control	I I	Right Hand Drive Left Hand Drive
2	—	—	—	Not Occupied	—	—

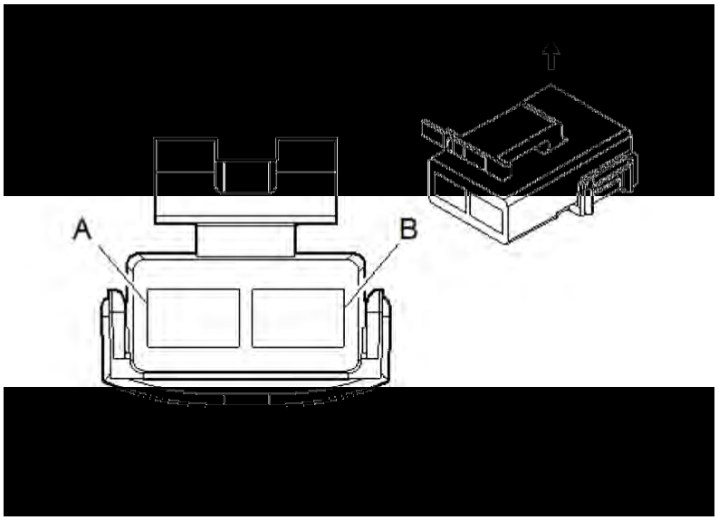
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
—	2	YE/BU YE/WH	290 296	Passenger Power Seat Horizontal Motor Rearward Control Passenger Power Seat Horizontal Motor Forward Control	I I	Right Hand Drive Left Hand Drive
—	—	—	—	Not Occupied	—	—

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M53D Seat Lumbar Support Motor – Driver X1 (A45)



Connector Part Information

- Harness Type: Driver Seat
- OEM Connector: 12020556
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F Metri-Pack 480 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-40 (BU)	J-38125-11A

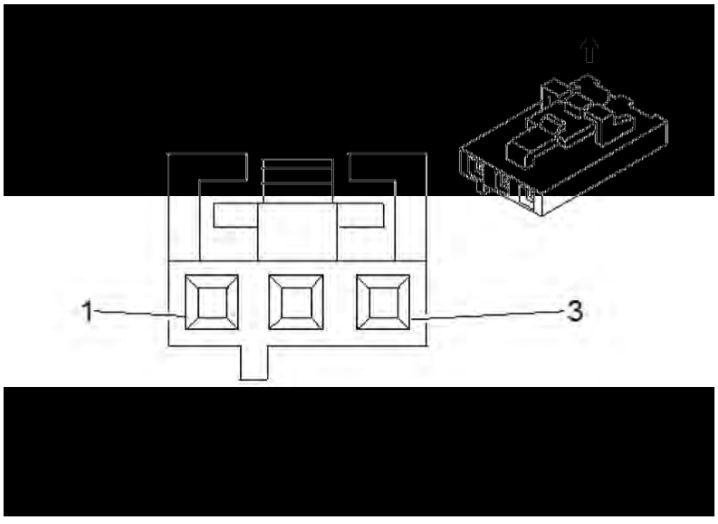
M53D Seat Lumbar Support Motor – Driver X1 (A45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1.5	BU	611	Driver Power Seat Lumbar Motor Rearward Control	I	—
B	1.5	VT	610	Driver Power Seat Lumbar Motor Forward Control	I	—

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M53D Seat Lumbar Support Motor – Driver X2 (A45)



Connector Part Information

- Harness Type: Driver Seat
- OEM Connector: 50-57-9403
- Service Connector: Service by Harness - See Part Catalog
- Description: 3-Way F SL Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

M53D Seat Lumbar Support Motor – Driver X2 (A45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	WH/RD	6207	Driver Memory Seat Lumbar Horizontal Position Sensor High Reference	I	—
2	0.35	YE	1063	Driver Memory Seat Lumbar Horizontal Position Sensor Signal	I	—

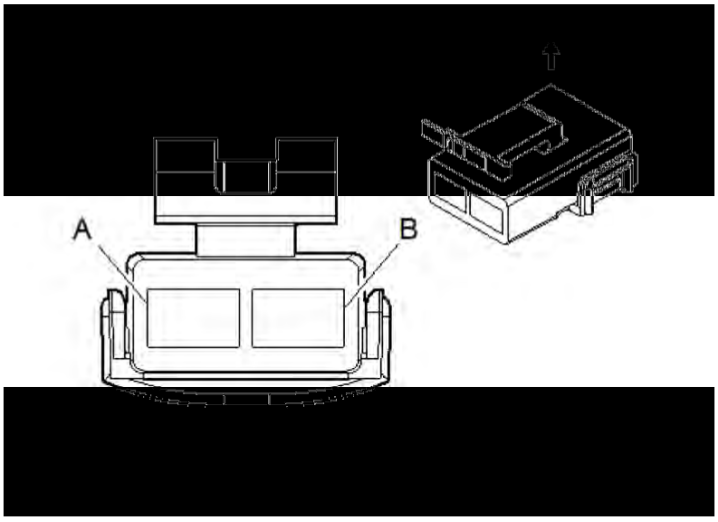
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
3	0.35	BK/GY	6206	Driver Memory Seat Lumbar Horizontal Position Sensor Low Reference	I	—

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M53D Seat Lumbar Support Motor – Driver (AL9)



Connector Part Information

- Harness Type: Driver Seat
- OEM Connector: 12020556
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F Metri-Pack 480 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-40 (BU)	12094430

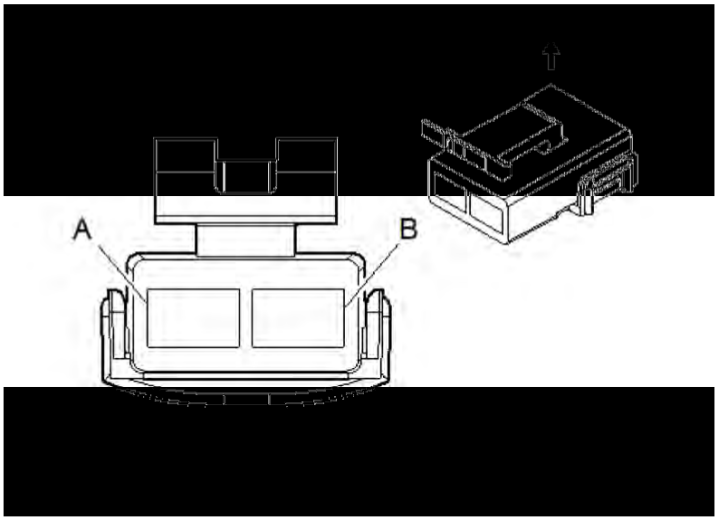
M53D Seat Lumbar Support Motor – Driver (AL9)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1.5	BU	611	Driver Power Seat Lumbar Motor Forward Control	I	—
B	1.5	VT	610	Driver Power Seat Lumbar Motor Rearward Control	I	—

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M53P Seat Lumbar Support Motor – Passenger (AT9)



Connector Part Information

- Harness Type: Passenger Seat
- OEM Connector: 12020556
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F Metri-Pack 480 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-40 (BU)	12094430

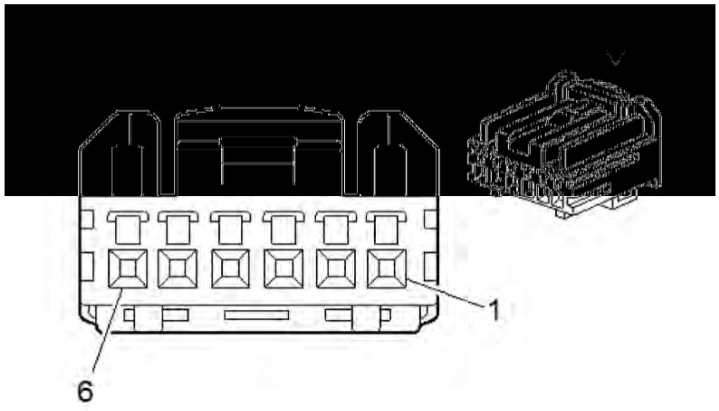
M53P Seat Lumbar Support Motor – Passenger (AT9)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1.5	BU	211	Passenger Power Seat Lumbar Motor Forward Control	I	—
B	1.5	VT	210	Passenger Power Seat Lumbar Motor Rearward Control	I	—

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M55D Seat Rear Vertical Motor – Driver (F19/F35/F69 with AH5/AH6/A45)



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Connector Part Information

- Harness Type: Driver Seat
- OEM Connector: 6098-2830
- Service Connector: Service by Harness - See Part Catalog
- Description: 4-Way F

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

M55D Seat Rear Vertical Motor – Driver (F19/F35/F69 with AH5/AH6/A45)

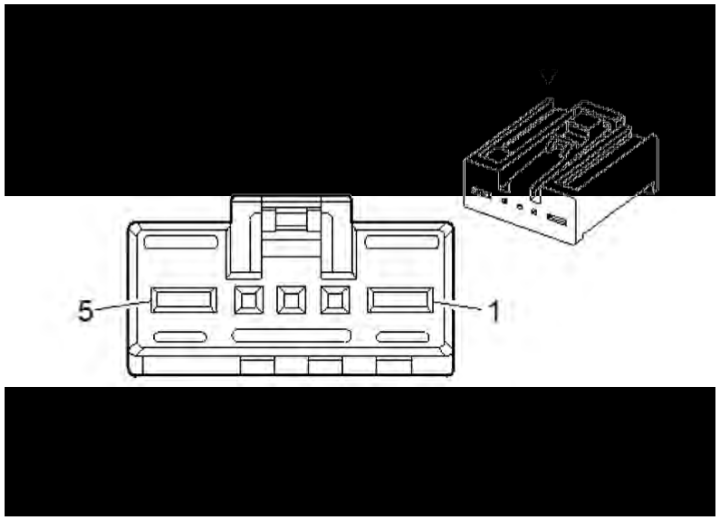
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	YE GY/BU	282 283	Driver Power Seat Rear Vertical Motor Up Control Driver Power Seat Rear Vertical Motor Down Control	I I	Right Hand Drive Left Hand Drive
2	0.35	WH/RD	3298	Memory Sensor High Reference	I	—

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
3	1.5	GY/BU YE	283 282	Driver Power Seat Rear Vertical Motor Down Control Driver Power Seat Rear Vertical Motor Up Control	I I	Right Hand Drive Left Hand Drive
4	0.35	YE/BU	568	Memory Seat Rear Vertical Motor Position Sensor Signal	I	—

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M55D Seat Rear Vertical Motor – Driver (F80 with AH6)



Connector Part Information

- Harness Type: Driver Seat
- OEM Connector: 24466137
- Service Connector: Service by Harness - See Part Catalog
- Description: 5–Way F MQS/MCP Mixed Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

M55D Seat Rear Vertical Motor – Driver (F80 with AH6)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	GY/BU	283	Driver Power Seat Rear Vertical Motor Down Control	I	—
2-4	—	—	—	Not Occupied	—	—
5	1.5	YE	282	Driver Power Seat Rear Vertical Motor Up Control	I	—

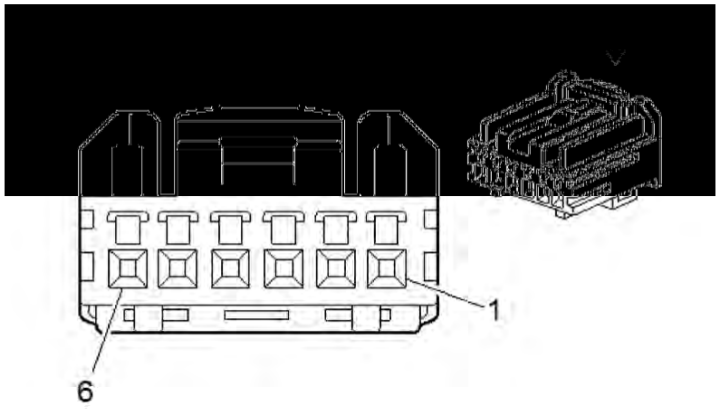
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option

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M55P Seat Rear Vertical Motor – Passenger



Connector Part Information

- Harness Type: Passenger Seat
- OEM Connector: 6098-2830
- Service Connector: Service by Harness - See Part Catalog
- Description: 4-Way F

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

M55P Seat Rear Vertical Motor – Passenger

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	BU/WH GN/WH	289 288	Passenger Power Seat Rear Vertical Motor Down Control Passenger Power Seat Rear Vertical Motor Up Control	I I	Right Hand Drive Left Hand Drive
2	—	—	—	Not Occupied	—	—

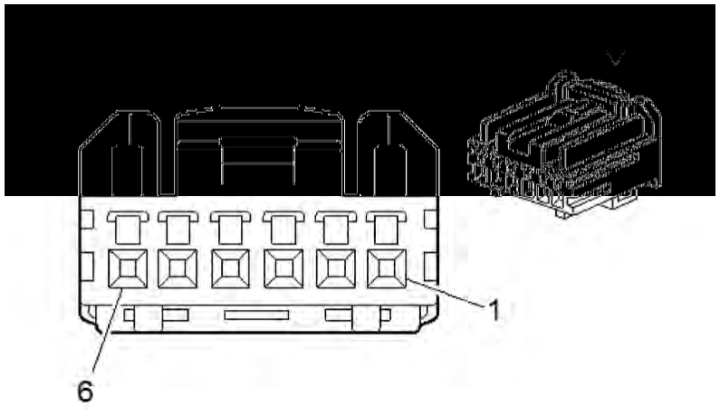
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
3	1.5	GN/WH BU/WH	288 289	Passenger Power Seat Rear Vertical Motor Up Control Passenger Power Seat Rear Vertical Motor Down Control	I I	Right Hand Drive Left Hand Drive
4	—	—	—	Not Occupied	—	—

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M56D Seat Recline Motor – Driver (AH5/A45)



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Connector Part Information

- Harness Type: Driver Seat
- OEM Connector: 6098-2830
- Service Connector: Service by Harness - See Part Catalog
- Description: 4-Way F

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

M56D Seat Recline Motor – Driver (AH5/A45)

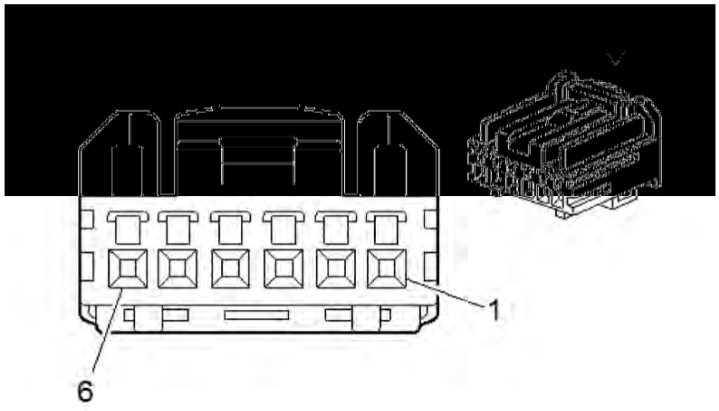
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	BU/YE GN/YE	277 276	Driver Power Seat Recline Motor Rearward Control Driver Power Seat Recline Motor Forward Control	I I	Right Hand Drive Left Hand Drive
2	0.35	WH/RD	3298	Memory Sensor High Reference	I	—

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
3	1.5	GN/YE BU/YE	276 277	Driver Power Seat Recline Motor Forward Control Driver Power Seat Recline Motor Rearward Control	I I	Right Hand Drive Left Hand Drive
4	0.35	WH/BK	570	Driver Memory Seat Recline Motor Position Sensor Signal	I	—

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M56P Seat Recline Motor – Passenger (AH8)



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Connector Part Information

- Harness Type: Passenger Seat
- OEM Connector: 6098-2830
- Service Connector: Service by Harness - See Part Catalog
- Description: 4-Way F

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

M56P Seat Recline Motor – Passenger (AH8)

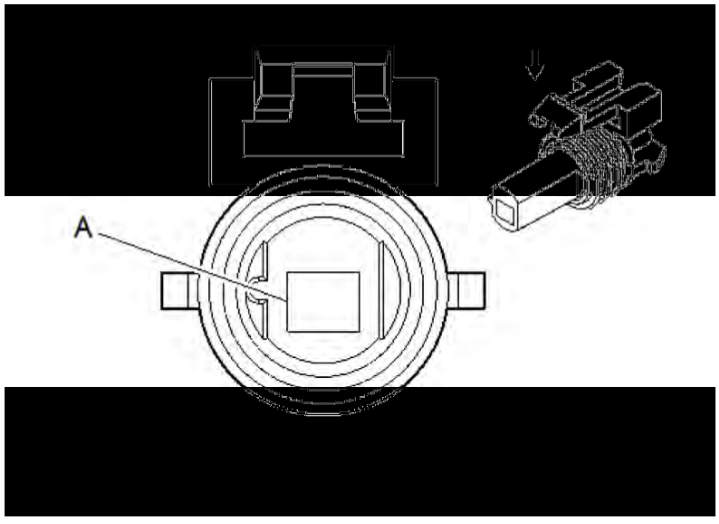
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	GN BU/BN	76 77	Passenger Power Seat Recline Motor Forward Passenger Power Seat Recline Motor Rearward	I I	Right Hand Drive Left Hand Drive
2	—	—	—	Not Occupied	—	—

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
3	1.5	BU/BN GN	77 76	Passenger Power Seat Recline Motor Rearward Passenger Power Seat Recline Motor Forward	I I	Right Hand Drive Left Hand Drive
4	—	—	—	Not Occupied	—	—

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M64 Starter Motor X1



Connector Part Information

- Harness Type: Engine
- OEM Connector: 12089916
- Service Connector: 12101763
- Description: 1-Way F Metri Pack 280 Series, Sealed (GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

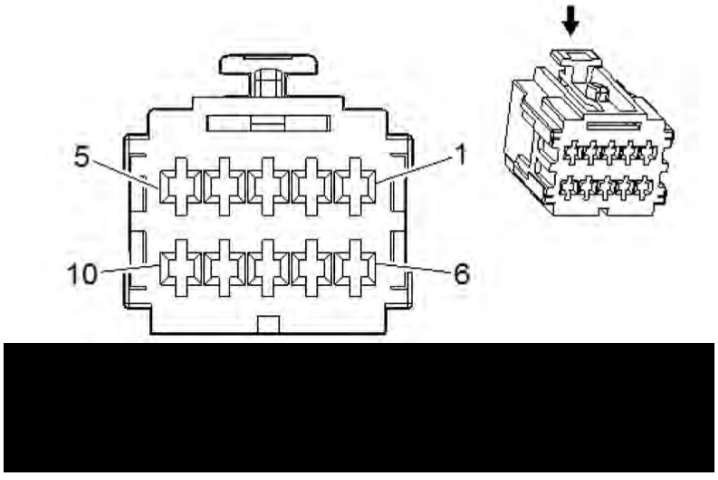
M64 Starter Motor X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	2.5	YE	6	Starter Solenoid Crank Voltage	I	-

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M69 Sunroof Motor (CF5)



Connector Part Information

- Harness Type: Headliner
- OEM Connector: 18101EV10M1
- Service Connector: 13579583
- Description: 10-Way F

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-14 (GN)	J-38125-12A

M69 Sunroof Motor (CF5)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	BK	2250	Ground	I	—
2	0.35	BU/WH	110	Sunroof Switch Close Signal	I	—
3	0.35	BN/BU	2074	Sunroof Switch Express Signal	I	—
4	0.35	GN/WH	100	Sunroof Switch Open Signal	I	—

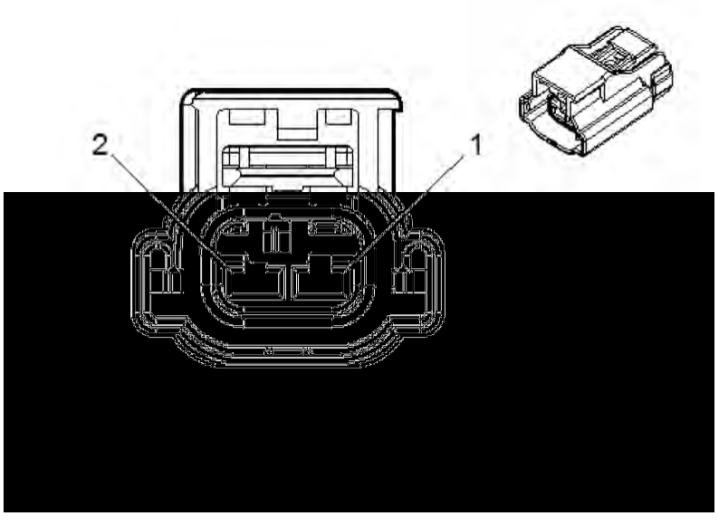
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
5	0.35	YE/VT	144	Sunroof Switch Open Vent Signal	I	—
6	1.5	RD/GY	3540	Battery Positive Voltage	I	6
7-8	—	—	—	Not Occupied	—	—
9	0.35	BU	3760	Switched Auxiliary Accessory Voltage Control	I	—

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M74D Window Motor - Driver (Express Down)



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Connector Part Information

- Harness Type: Driver Door
- OEM Connector: 13579062
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 2.8 Series, Sealed (BK)

Terminal Part Information

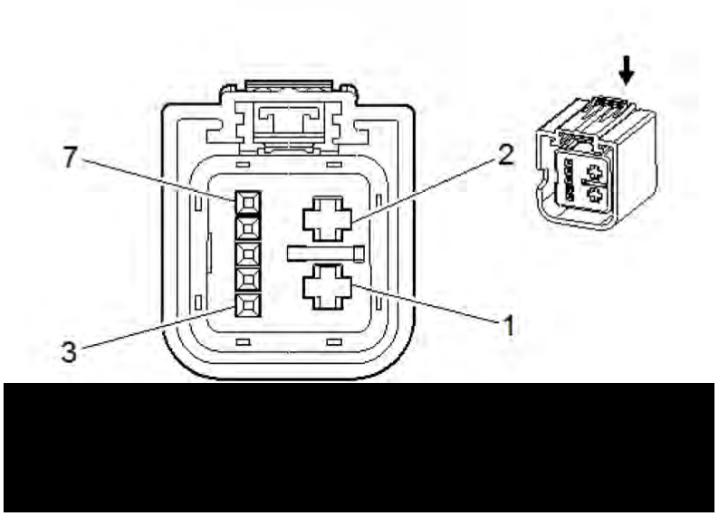
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

M74D Window Motor - Driver (Express Down)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	GN/GY	3382	Power Window Motor Driver Up Control	I	-
2	1.5	YE/VT	3383	Power Window Motor Driver Down Control	I	-

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M74D Window Motor - Driver (Express Up/Down)



Connector Part Information

- Harness Type: Driver Door
- OEM Connector: 19152718
- Service Connector: Service by Harness - See Part Catalog
- Description: 7-Way F 0.64 Kaizen 2.8 Timer Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available
II	Not Available	J-35616-35 (VT)	Not Available

M74D Window Motor - Driver (Express Up/Down)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	BK	2150	Ground	I	-
2	1.5	RD/BU	1842	Battery Positive Voltage	I	-
3	0.35	GN/WH	3379		II	-

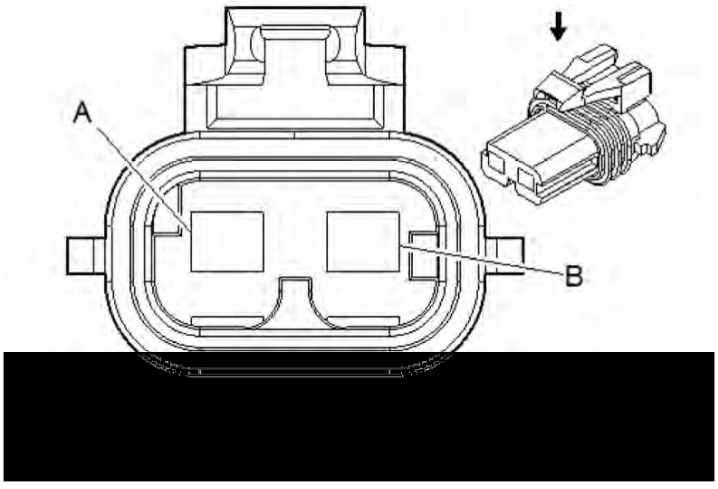
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Power Window Switch Driver Up Signal		
4	0.35	GN/YE	6134	Linear Interconnect Network Bus 3	II	-
5	0.35	GN	3381	Power Window Switch Driver Express Signal	II	-
6	0.35 0.35	GY GY	745 746	Right Front Door Ajar Switch Signal Right Front Door Ajar Switch Signal	II	LHD RHD
7	0.35	GY	3380	Power Window Switch Driver Down Signal	II	-

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M74LR Window Motor – Left Rear (F19/F35/F69)



Connector Part Information

- Harness Type: Left Rear Door
- OEM Connector: 12129487
- Service Connector: Service by Harness - See part Catalog
- Description: 2-Way F 280 Metri Pack Series, Flexlock, Sealed GY

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-4A (PU)	Not Available

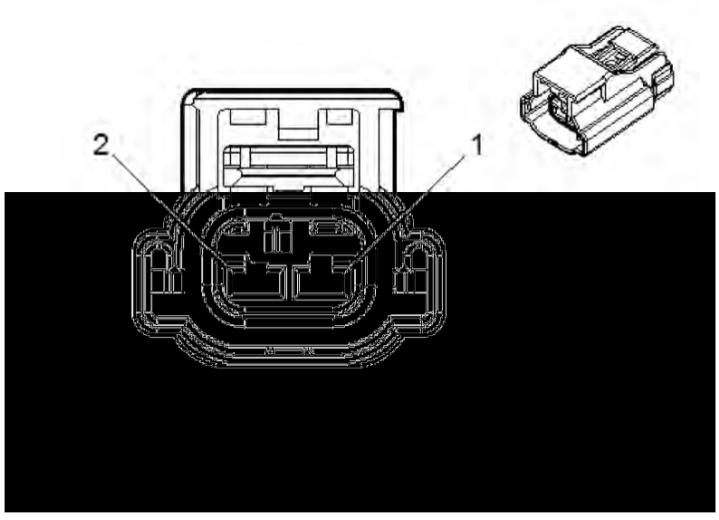
M74LR Window Motor – Left Rear (F19/F35/F69)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1.5	YE/BU	669	Power Window Motor Left Rear Down Control	I	-
B	1.5	BU/VT	668	Power Window Motor Left Rear Up Control	I	-

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M74P Window Motor – Passenger (Express Down)



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Connector Part Information

- Harness Type: Passenger Door
- OEM Connector: 13579062
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 1.5 Series, Sealed (BK)

Terminal Part Information

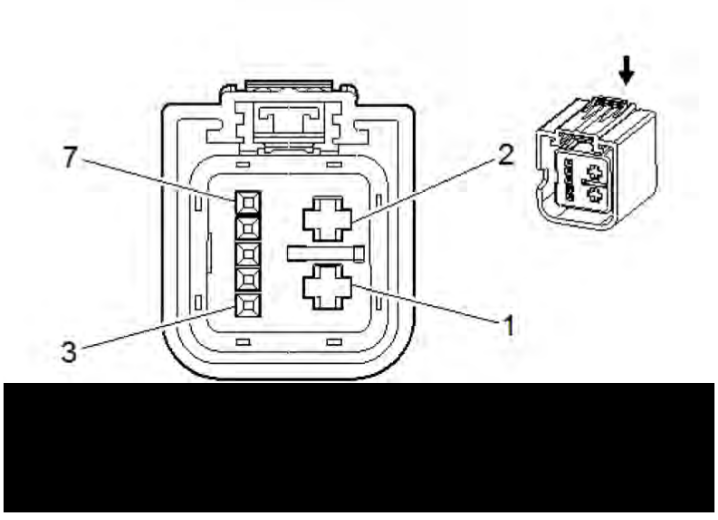
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Service by Harness - See Part Catalog	—	—

M74P Window Motor – Passenger (Express Down)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	GN/GY	3387	Power Window Motor Passenger Up Control	I	—
2	1.5	YE/BU	3388	Power Window Motor Passenger Down Control	I	—

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M74P Window Motor - Passenger (Express Up/Down)



Connector Part Information

- Harness Type: Passenger Door
- OEM Connector: 19152718
- Service Connector: Service by Harness - See Part Catalog
- Description: 7-Way F 0.64 Kaizen 2.8 Timer Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Service by Harness - See Part Catalog	J-35616-35 (VT)	Not Available

M74P Window Motor - Passenger (Express Up/Down)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	BK	2250	Ground	I	-
2	1.5	RD/WH	1642	Battery Positive Voltage	I	-
3	0.35	YE/BK	166	Power Window Master Switch Right Front Up Signal	I	-

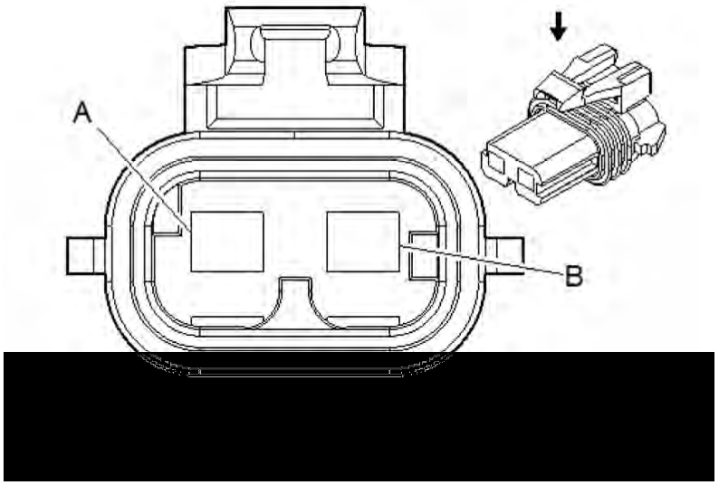
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4	0.35	GN/YE	6134	Linear Interconnect Network Bus 3	I	-
5	0.35	VT/GY	2765	Power Window Switch Right Front Express Signal	I	-
6	0.35	GY	746 746	Left Front Door Ajar Switch Signal Right Front Door Ajar Switch Signal	I I	Right Hand Drive Left Hand Drive
7	0.35	BN/YE	167	Power Window Master Switch Right Front Down Signal	I	-

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M74RR Window Motor – Right Rear (F19/F35/F69)



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Connector Part Information

- Harness Type: Right Rear Door
- OEM Connector: 12129487
- Service Connector: Service by Harness - See part Catalog
- Description: 2-Way F 280 Metri Pack Series, Flexlock, Sealed GY

Terminal Part Information

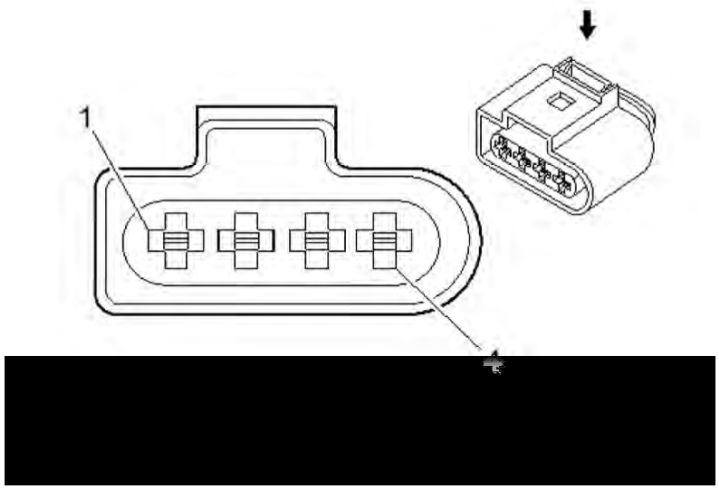
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-4A (PU)	Not Available

M74RR Window Motor – Right Rear (F19/F35/F69)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1.5	GN/BK	671	Power Window Motor Right Rear Down Control	I	-
B	1.5	BU/GY	670	Power Window Motor Right Rear Up Control	I	-

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M75 Windshield Wiper Motor



Connector Part Information

- Harness Type: Body
- OEM Connector: 13147125
- Service Connector: 13578531
- Description: 4-Way F 2. 8 Junior Power Timer Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

M75 Windshield Wiper Motor

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5 0.35	YE/BN BN/GN	95 196	Windshield Wiper Motor Low Speed Control Windshield Wiper Motor Park Switch Signal	I	LHD RHD
2	2.5 2.5	WH BK	92 850	Windshield Wiper Motor High Speed Control	I	LHD RHD

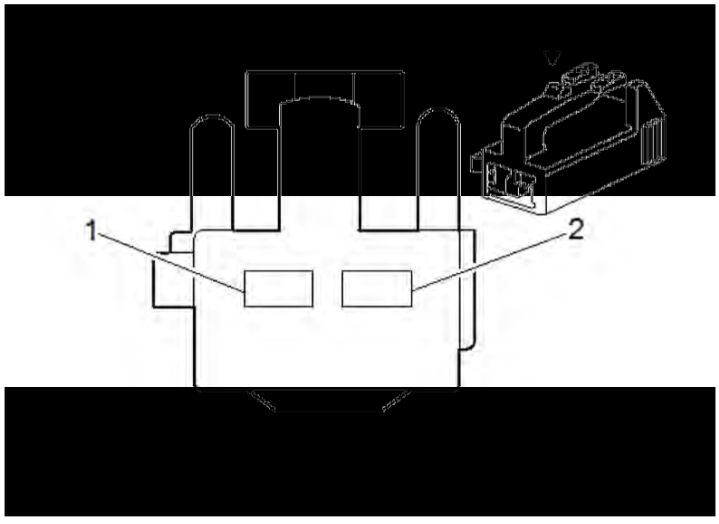
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Ground		
3	2.5 2.5	BK WH	750 92	Ground Windshield Wiper Motor High Speed Control	I	LHD RHD
4	0.35 2.5	BN/GN YE/BN	196 95	Windshield Wiper Motor Park Switch Signal Windshield Wiper Motor Low Speed Control	I	LHD RHD

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M97 Fuel Door Lock Actuator



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Connector Part Information

- Harness Type: Body
- OEM Connector: 7283-1020
- Service Connector: 88953305
- Description: 2-Way F 2.3 Series (NA)

Terminal Part Information

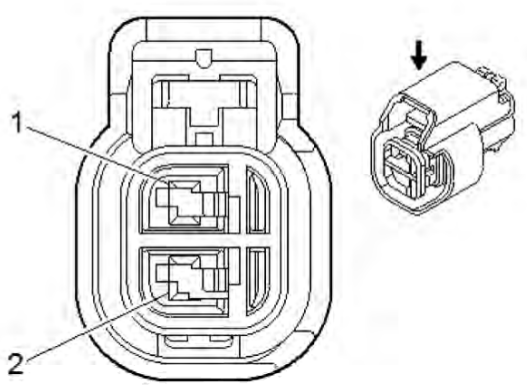
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-18 (BK)	J-38125-553

M97 Fuel Door Lock Actuator

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	GY	5911	Door Lock Actuator Lock Control 2	I	-
2	0.75	BN/YE	294	Door Lock Actuator Unlock Control	I	-

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P12L Horn – Left



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Connector Part Information

- Harness Type: Forward Lamp
- OEM Connector: E-2157-000
- Service Connector: 88988054
- Description: 2-Way F 1.5 Series, Sealed (BK)

Terminal Part Information

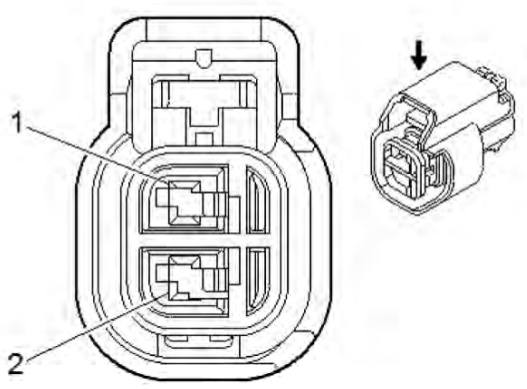
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

P12L Horn – Left

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2	BN/GY	29	Horn Control	I	-
2	2	BK	550	Ground	I	-

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P12R Horn – Right



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Connector Part Information

- Harness Type: Forward Lamp
- OEM Connector: E-2157-000
- Service Connector: 88988054
- Description: 2-Way F 1.5 Series, Sealed (BK)

Terminal Part Information

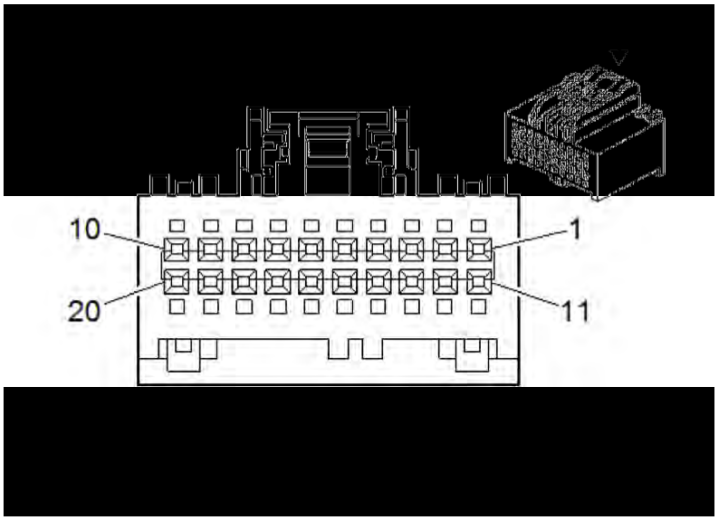
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

P12R Horn – Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2	BN/GY	29	Horn Control	I	-
2	2	BK	650	Ground	I	-

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P16 Instrument Cluster



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 15126711
- Service Connector: 15126711
- Description: 20-Way F 0.64 Series (BK with WH Terminal Position Assurance)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575299	J-35616-35 (VT)	Not Available

P16 Instrument Cluster

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GN	5060	Low Speed GMLAN Serial Data	I	-
2-3	-	-	-	Not Occupied	-	-
4	0.35	GN/WH	1358	Driver Information Center Switch Signal	I	-

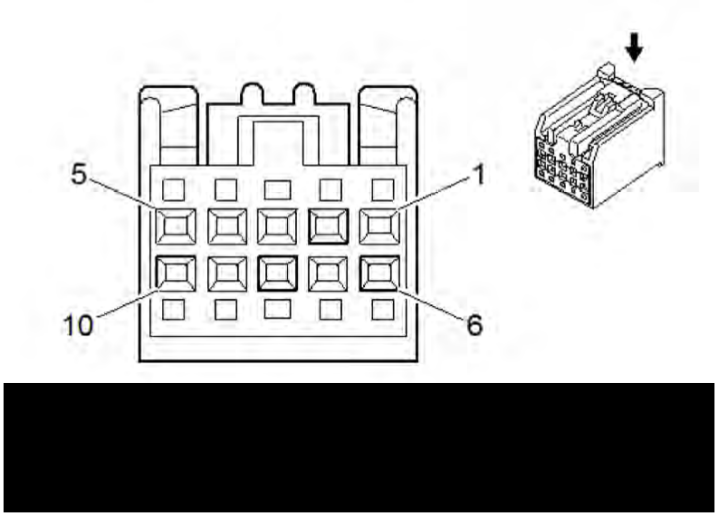
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
5	0.35	BK/BN	897	Driver Information Center Switch Low Reference	I	-
6	0.35	BK/BU	61	Outside Ambient Temperature Sensor Low Reference	I	-
7	0.35	BU/GY	636	Outside Ambient Air Temperature Sensor Signal	I	-
8-9	-	-	-	Not Occupied	-	-
10	0.5 0.5	BK BK	1450 1350	Ground Ground	I	LHD RHD
11-14	-	-	-	Not Occupied	-	-
15	0.35	VT	185	Low Washer Fluid Indicator Control	I	T3T
16	0.35	GY/BU	893	Driver Information Center Select Menu Switch Signal	I	-
17	0.35	BN/WH	419	Check Engine Indicator Control	I	-
18	-	-	-	Not Occupied	-	-
19	0.35	VT/GY	139	Run/Crank Ignition 1 Voltage	I	-
20	0.5	RD/BU	3240	Battery Positive Voltage	I	-

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P17 Info Display Module X1



[redacted]

Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: AIT2PB-10A-2AK
- Service Connector: 13577390
- Description: 10-Way F Kaizen 0.64 Series BK

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13327119	J-35616-35 (VT)	J-38125-215A

P17 Info Display Module X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	-	-	-	Not Occupied	-	-
2	0.5	BK/WH	1551	Signal Ground	I	-
3	0.35	GY/GN	3291	Integrated Center Stack Wake Up Signal	I	-

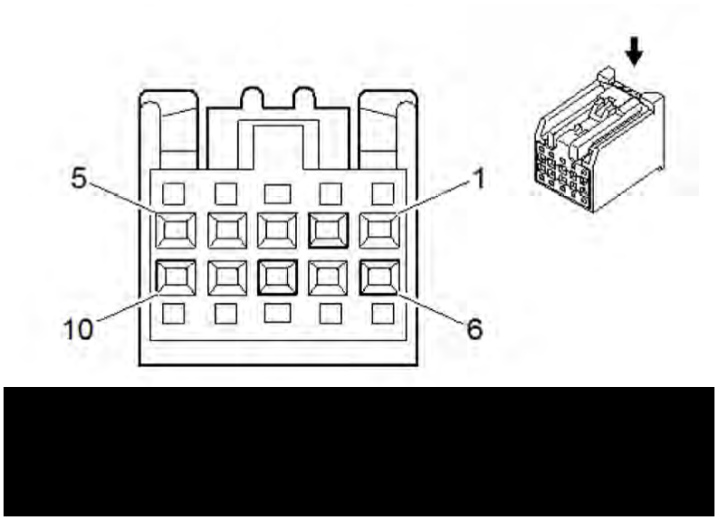
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4	-	-	-	Not Occupied	-	-
5	0.35	GN	5060	Low Speed GMLAN Serial Data	I	-
6	0.5	RD/BU	3240	Battery Positive Voltage	I	-
7	-	-	-	Not Occupied	-	-
8	0.35	GY	4016	Remote Media Eject Signal	I	-
9	0.35	VT	3290	Integrated Center Stack Reset Signal	I	-
10	-	-	-	Not Occupied	-	-

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P17 Info Display Module X2



[redacted]

Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: AIT2PB-10A-2AK
- Service Connector: 13577390
- Description: 10-Way F Kaizen 0.64 Series BK

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13327119	J-35616-35 (VT)	J-38125-215A

P17 Info Display Module X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	YE	7459	Integrated Center Stack Serial Data Low	I	-
2	0.35	VT	7458	Center Integrated Center Stack Serial Data High	I	-
3-4	-	-	-	Not Occupied	-	-

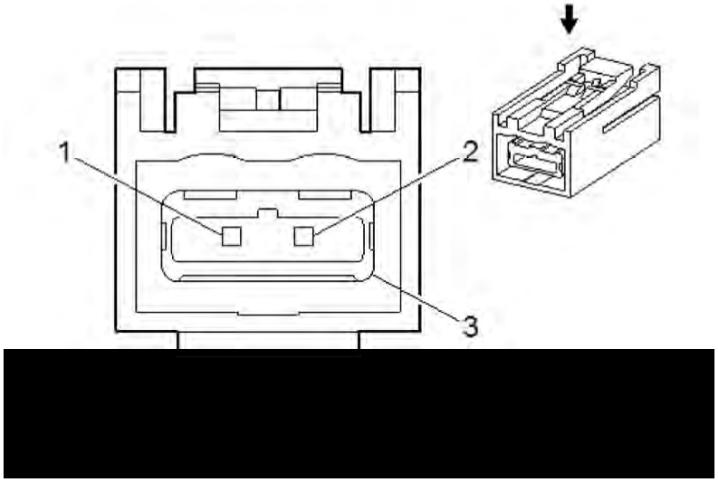
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
5	0.35	VT	3370	Touch Screen Display Signal (-)	I	-
6	0.35	BARE	7460	Integrated Center Stack Serial Data Shield	I	-
7-8	-	-	-	Not Occupied	-	-
9	0.35	BARE	3368	Touch Screen Display Drain Wire	I	-
10	0.35	GY	3369	Touch Screen Display Signal (+)	I	-

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P17 Info Display Module X3



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 13649293
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: 3-Way F MX38 Series Twinax, Sealed L-BU

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

P17 Info Display Module X3

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A-K	-	-	-	Not Occupied	-	-
L	0.08 0.08 0.08	BARE BU BN	3365 3366 3367	Navigation Display Drain Wire Navigation Display Signal (+)	I	-

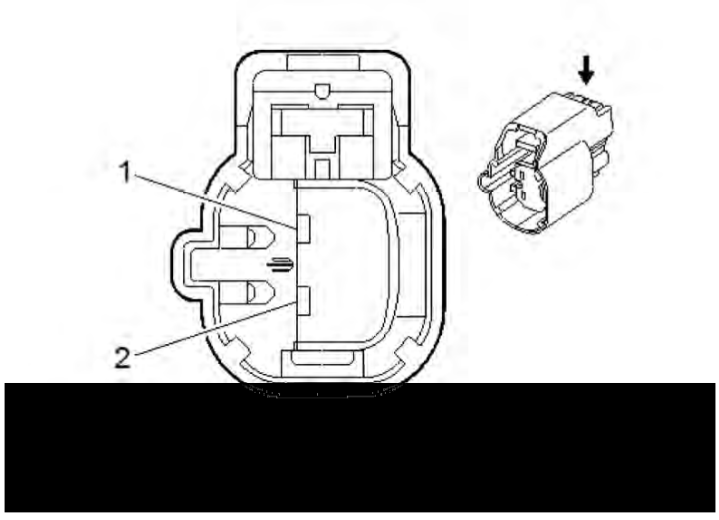
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Navigation Display Signal (-)		

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P19AA Speaker – Right Subwoofer (UQA)



Connector Part Information

- Harness Type: Body
- OEM Connector: 19179953
- Service Connector: 19179953
- Description: 2-Way F 150 GT Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	J-38125-553

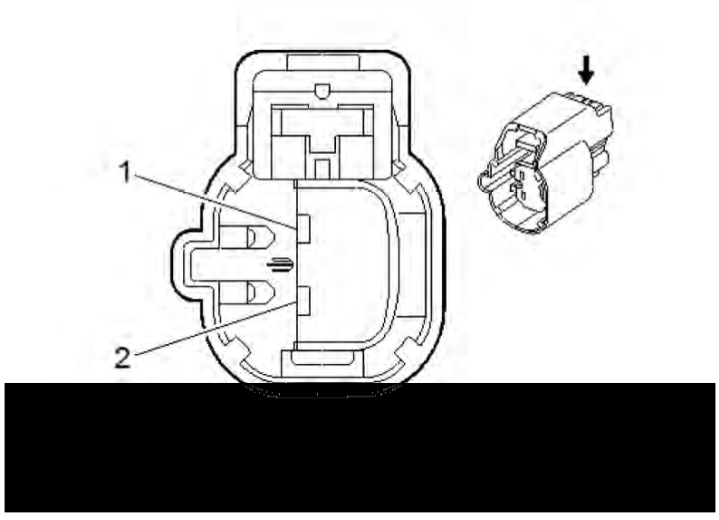
P19AA Speaker – Right Subwoofer (UQA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1	GY/BK	315	Right Subwoofer Speaker (-)	I	-
2	1	GN/VT	1795	Right Subwoofer Speaker (+)	I	-

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P19AA Speaker – Right Subwoofer (UQG)



Connector Part Information

- Harness Type: Body
- OEM Connector: 19179953
- Service Connector: 19179953
- Description: 2-Way F GT 150 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575735	J-35616-2A (GY)	J-38125-553

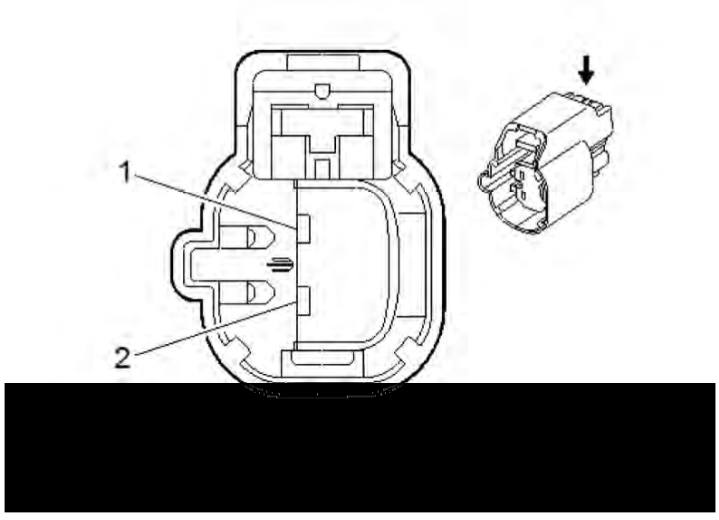
P19AA Speaker – Right Subwoofer (UQG)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1	GY/BK	315	Right Subwoofer Speaker (-)	I	—
2	1	GN/VT	1795	Right Subwoofer Speaker (+)	I	—

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P19AG Speaker – Left Front Door (UQA)



Connector Part Information

- Harness Type: Passenger Door
- OEM Connector: 19179953
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 150 GT Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	Not Available

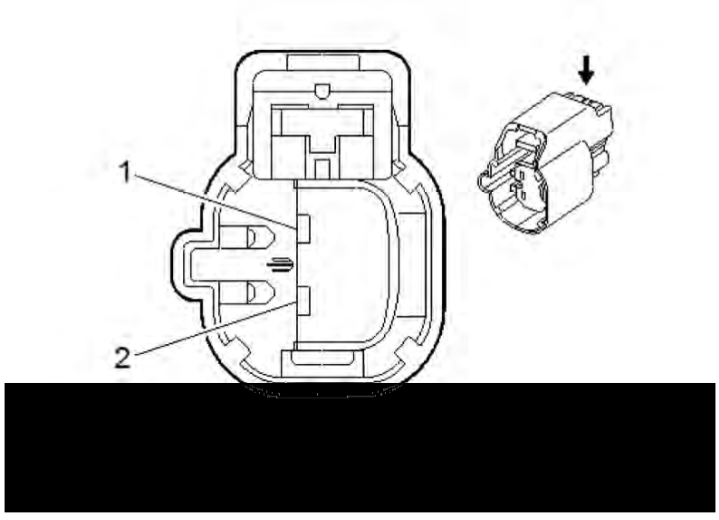
P19AG Speaker – Left Front Door (UQA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN/BU	118	Left Front Speaker Signal (-) (1)	I	-
2	0.75	BU	201	Left Front Speaker (+) (1)	I	-

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P19AG Speaker – Left Front Door (UQF/UQG)



Connector Part Information

- Harness Type: Left Front Door
- OEM Connector: 19179953
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F GT 150 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I		J-35616-2A (GY)	J-38125-553

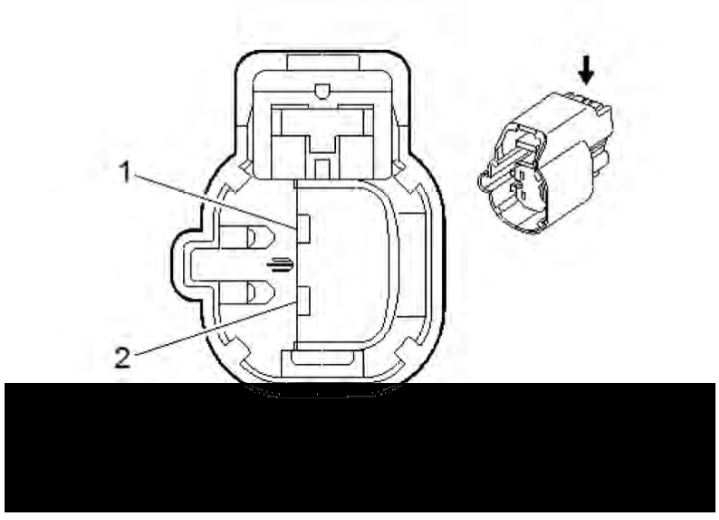
P19AG Speaker – Left Front Door (UQF/UQG)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN/BU	118	Left Front Speaker Signal (-) (1)	I	—
2	0.75	BU	201	Left Front Speaker (+) (1)	I	—

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P19AH Speaker – Right Front Door (UQA)



Connector Part Information

- Harness Type: Driver Door
- OEM Connector: 19179953
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 150 GT Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	Not Available

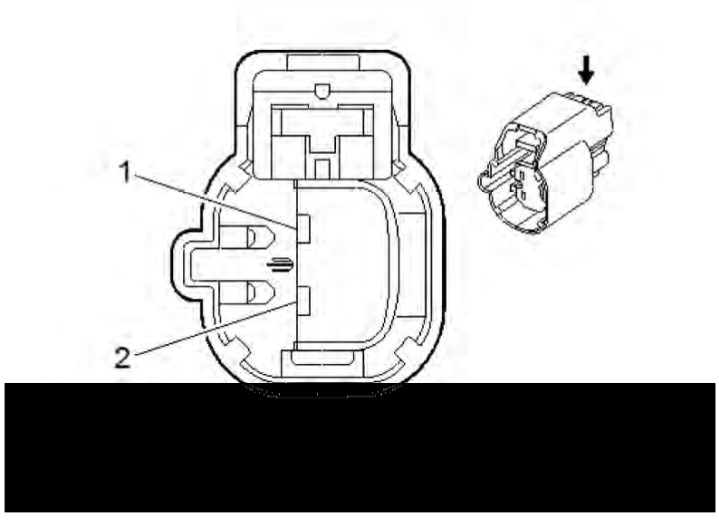
P19AH Speaker – Right Front Door (UQA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	YE/BK	117	Right Front Speaker Signal (-) (1)	I	-
2	0.75	YE	200	Right Front Speaker (+) (1)	I	-

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P19AH Speaker – Right Front Door (UQF/UQG)



Connector Part Information

- Harness Type: Right Front Door
- OEM Connector: 19179953
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F GT 150 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I		J-35616-2A (GY)	J-38125-553

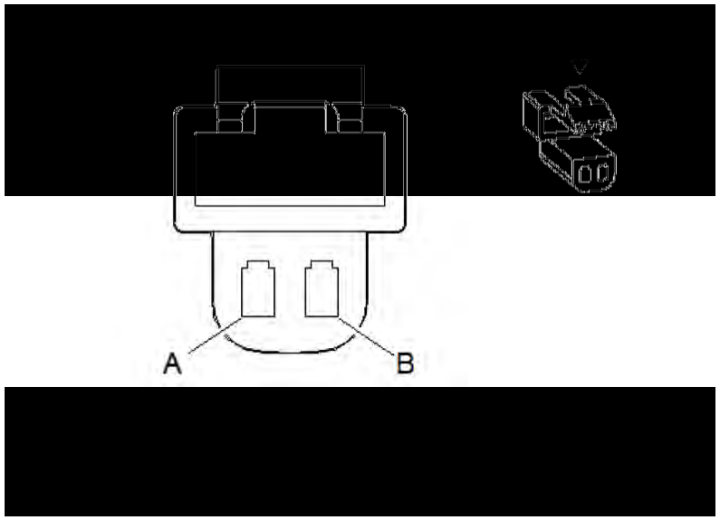
P19AH Speaker – Right Front Door (UQF/UQG)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	YE/BK	117	Right Front Speaker Signal (-) (1)	I	—
2	0.75	YE	200	Right Front Speaker (+) (1)	I	—

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P19AL Speaker – Left Rear Door (UQA)



Connector Part Information

- Harness Type: Left Rear Door
- OEM Connector: 15434358
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F Metri-Pack 150 Series (BU)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-14 (GN)	J-38125-12A

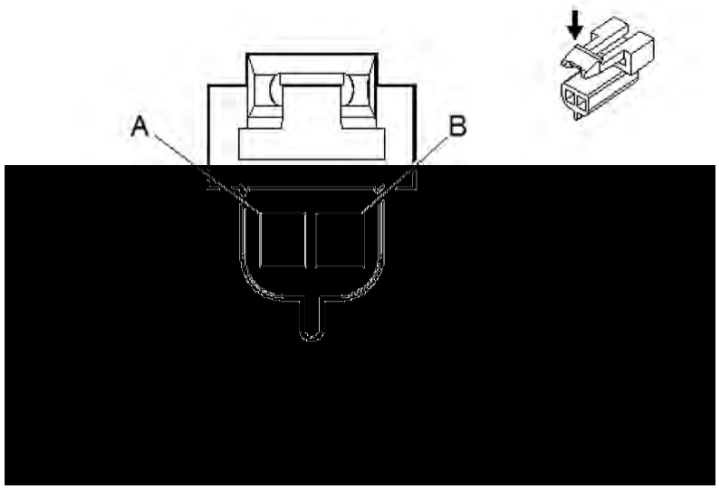
P19AL Speaker – Left Rear Door (UQA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.75	GN/BK	116	Left Rear Speaker Signal (-)	I	—
B	0.75	GN	199	Left Rear Speaker (+)	I	—

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P19AL Speaker – Left Rear Door (UQF/UQG)



Connector Part Information

- Harness Type: Left Rear Door
- OEM Connector: 15434358
- Service Connector: Service by Harness - See part Catalog
- Description: 2-Way F 150 Metri Pack Series BU

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-14 (GN)	Not Available

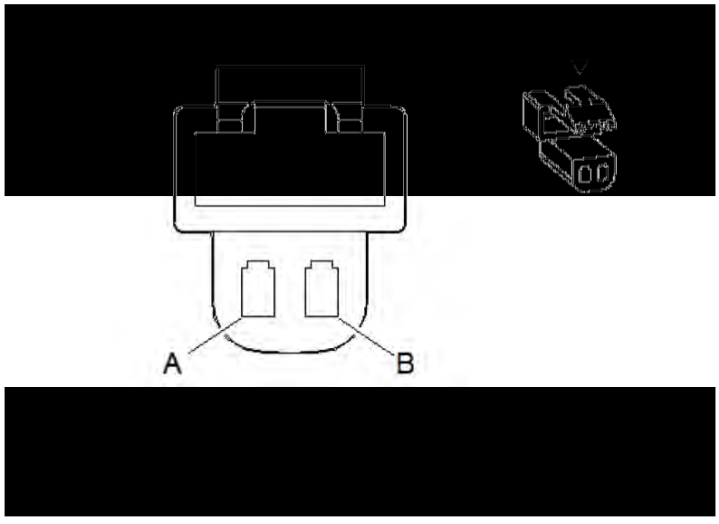
P19AL Speaker – Left Rear Door (UQF/UQG)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.75	GN/BK	116	Left Rear Speaker Signal (-)	I	-
B	0.75	GN	199	Left Rear Speaker (+)	I	-

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P19AM Speaker – Right Rear Door (UQA)



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Connector Part Information

- Harness Type: Right Rear Door
- OEM Connector: 15434358
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F Metri-Pack 150 Series (BU)

Terminal Part Information

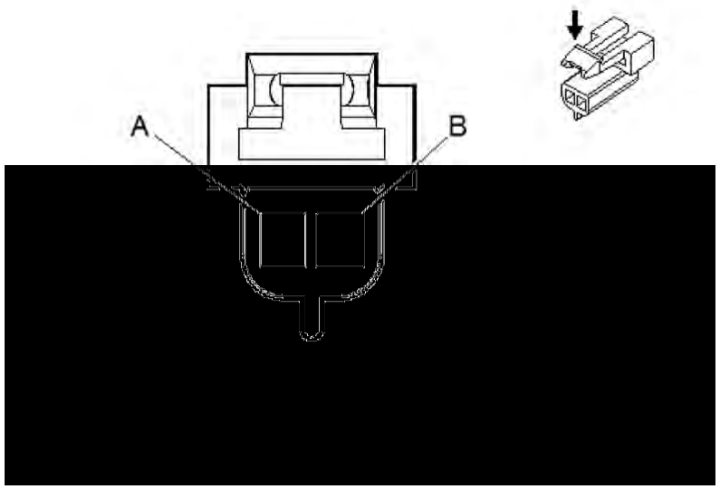
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-14 (GN)	J-38125-12A

P19AM Speaker – Right Rear Door (UQA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.75	BU/BK	115	Right Rear Speaker Signal (-)	I	—
B	0.75	WH	46	Right Rear Speaker (+)	I	—

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P19AM Speaker – Right Rear Door (UQF/UQG)



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Connector Part Information

- Harness Type: Right Rear Door
- OEM Connector: 15434358
- Service Connector: Service by Harness - See part Catalog
- Description: 2-Way F 150 Metri Pack Series BU

Terminal Part Information

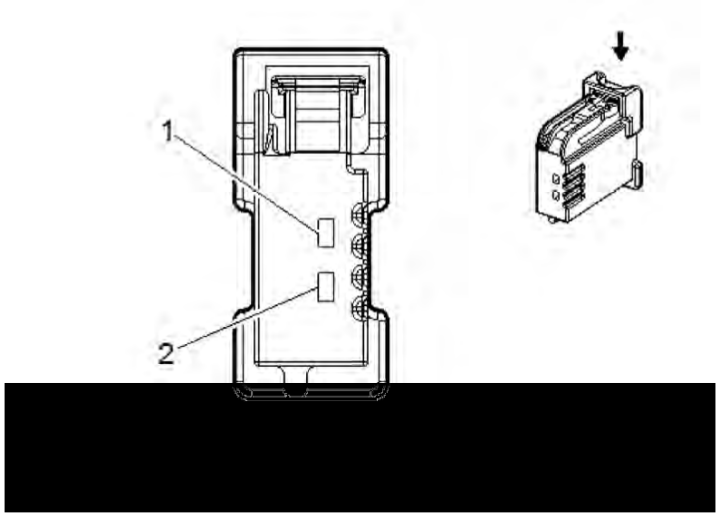
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-14 (GN)	Not Available

P19AM Speaker – Right Rear Door (UQF/UQG)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.75	BU/BK	115	Right Rear Speaker Signal (-)	I	-
B	0.75	WH	46	Right Rear Speaker (+)	I	-

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P19B Speaker – Center Instrument Panel (UQA)



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 19150056
- Service Connector: 13314097
- Description: 2-Way F 1.5 Series GY

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	J-38125-553

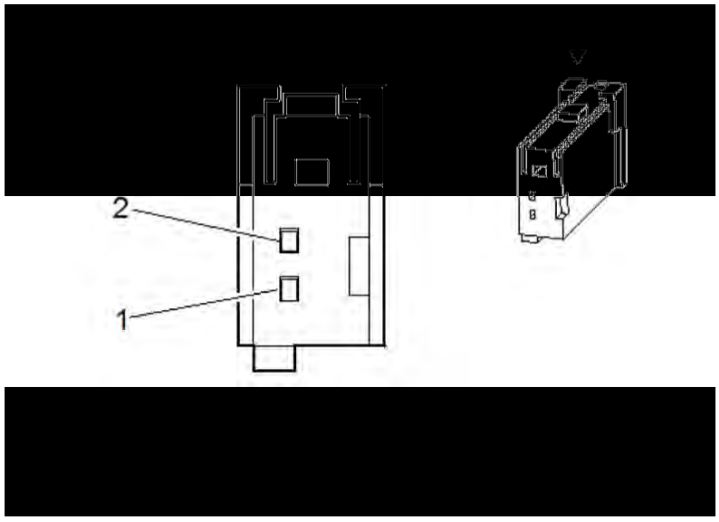
P19B Speaker – Center Instrument Panel (UQA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BU/YE	1960	Front Center Speaker (-)	I	-
2	0.75	YE/WH	1860	Front Center Speaker (+)	I	-

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P19H Speaker – Left Front Tweeter (UQA/UQF/UQG)



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Connector Part Information

- Harness Type: Headliner
- OEM Connector: 19115645
- Service Connector: 13314093
- Description: 2-Way F 0.64 Series (BK)

Terminal Part Information

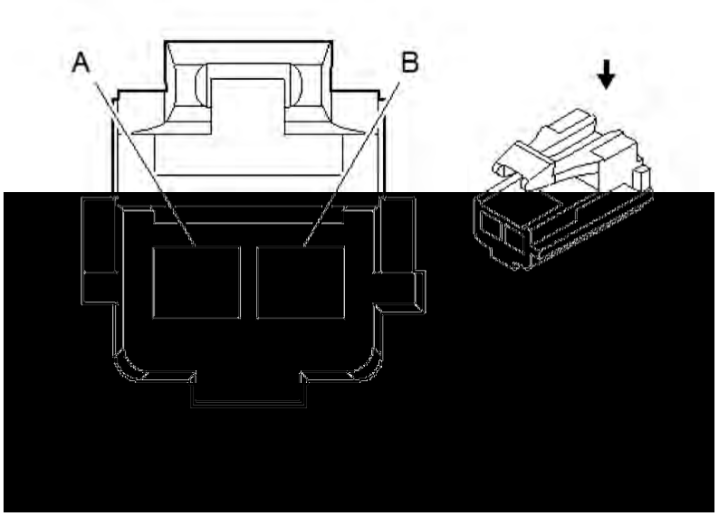
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-64B (L-BU)	J-38125-215A

P19H Speaker – Left Front Tweeter (UQA/UQF/UQG)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN/BU	118	Left Front Speaker Signal (-) (1)	I	—
2	0.5	BU	201	Left Front Speaker (+) (1)	I	—

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P19N Speaker – Left Subwoofer (UQA)



Connector Part Information

- Harness Type: Body
- OEM Connector: 12129081
- Service Connector: 12129081
- Description: 2-Way F Metri-Pack 280 Series, Flexlock (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Pending	J-35616-4A (PU)	J-38125-553

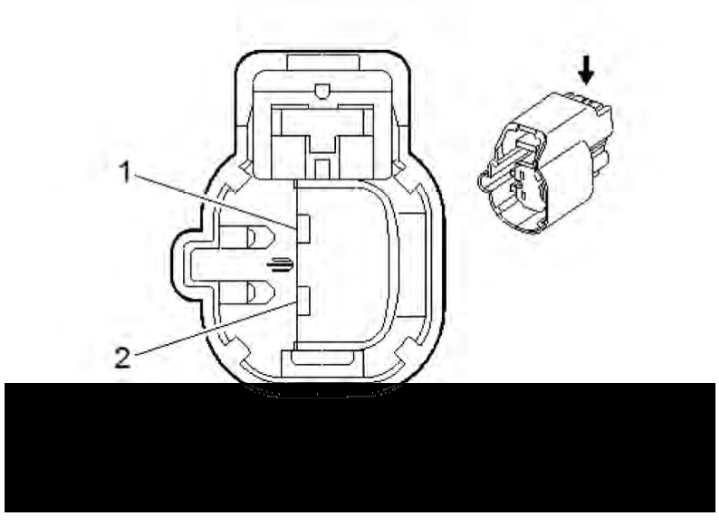
P19N Speaker – Left Subwoofer (UQA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1	GN/BK	1794	Left Subwoofer Speaker (-)	I	—
B	1	BU/GY	346	Left Subwoofer Speaker (+)	I	—

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P19N Speaker – Left Subwoofer (UQG)



Connector Part Information

- Harness Type: Body
- OEM Connector: 19179953
- Service Connector: 19179953
- Description: 2-Way F 150 GT Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	J-38125-553

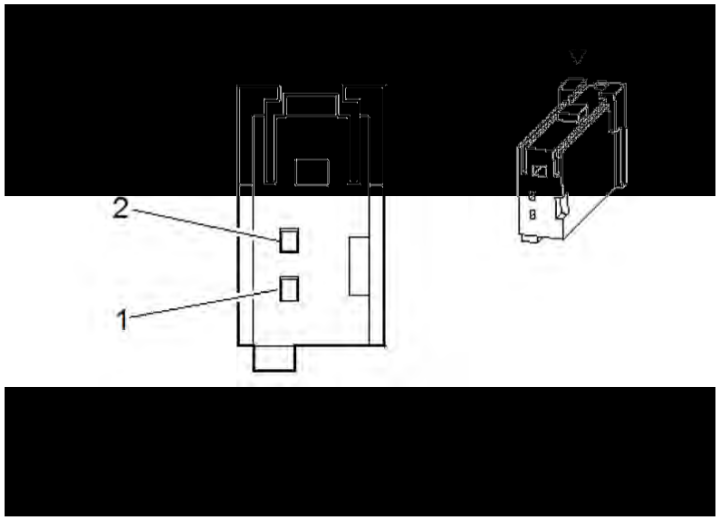
P19N Speaker – Left Subwoofer (UQG)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1	GN/BK	1794	Left/Rear Subwoofer Speaker (-)	I	-
2	1	BU/GY	346	Left/Rear Subwoofer Speaker (+)	I	-

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P19V Speaker – Right Front Tweeter (UQA/UQF/UQG)



Connector Part Information

- Harness Type: Headliner
- OEM Connector: 19115645
- Service Connector: 13314093
- Description: 2-Way F 0.64 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-64B (L-BU)	J-38125-215A

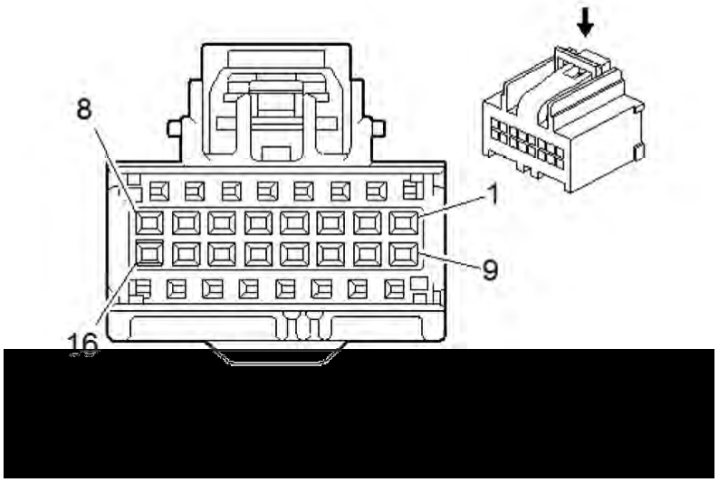
P19V Speaker – Right Front Tweeter (UQA/UQF/UQG)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE/BK	117	Right Front Speaker Signal (-) (1)	I	—
2	0.5	YE	200	Right Front Speaker (+) (1)	I	—

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P22D Video Display - Driver Seat Headrest (LHD with UWG)



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Connector Part Information

- Harness Type: Driver Seat
- OEM Connector: 15136073
- Service Connector: Service by Harness - See Part Catalog
- Description: 16-Way F Kaizen 64 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-64B (L-BU)	J-38125-215A

P22D Video Display - Driver Seat Headrest (LHD with UWG)

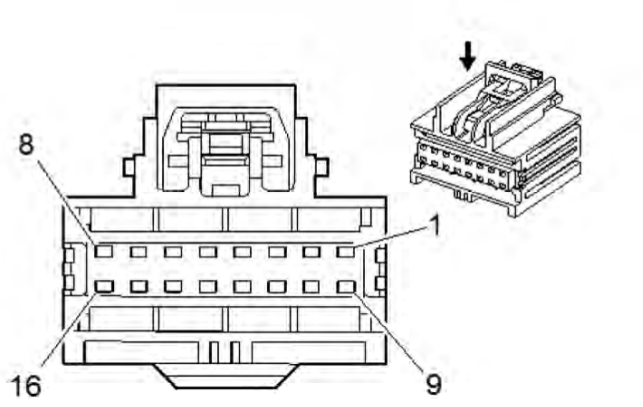
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	RD/BN	4240	Battery Positive Voltage	I	—
2	0.35	GN/YE	7066	Entertainment Remote Enable Signal	I	—
3	0.35	WH/GY	5312	Left Rear Seat Audio Signal	I	—

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4	0.35	WH/GN	5313	Right Rear Seat Audio Signal	I	—
5	0.35	VT	6979	DVD Audio Common	I	—
7	0.35	BU/YE	5826	Left DVD Audio Signal (+)	I	—
7	0.35	WH/BU	5828	Right DVD Audio Signal (+)	I	—
8	0.5	BK/WH	1551	Signal Ground	I	—
9	0.35	GN	6975	DVD Video Signal (+)	I	—
10	0.35	BN	5335	DVD Video Signal (-)	I	—
11	0.35	YE/VT	3352	Rear Seat Audio Common Signal	I	—
12	0.35	GN/BU	5831	Remote Infra Red Signal (+)	I	—
13	0.35	WH/YE	5830	Remote Infra Red Signal (-)	I	—
14	0.5	BK/WH	1551	Signal Ground	I	—
15	0.35	VT/BK	5845	Video Module Signal	I	—
16	0.35	GY/BN	5844	Video Bright Control	I	—

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P22D Video Display - Driver Seat Headrest (RHD with UWG)



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Connector Part Information

- Harness Type: Passenger Door
- OEM Connector: 89047357
- Service Connector: Service by Harness - See Part Catalog
- Description: 16-Way F Kaizen 64 Series (L-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

P22D Video Display - Driver Seat Headrest (RHD with UWG)

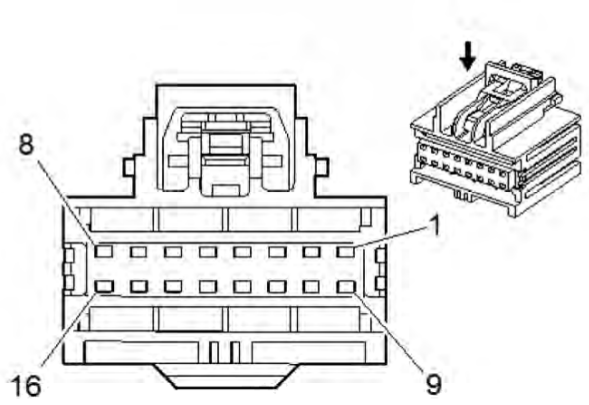
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	RD/VT	1940	Battery Positive Voltage	I	—
2-3	—	—	—	Not Occupied	—	—
4	0.35	WH/RD	3395	Driver Mirror Position Sensor Left (-) Right (+) Signal	I	—

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
5	0.35	VT/RD	3392	Driver Mirror Position Sensor High Reference	I	—
6	0.35	BK/BN	3393	Driver Mirror Position Sensor Low Reference	I	—
7	7	VT/BK	3404	Driver Mirror Switch Right (+) Left (-) Signal	I	—
8	0.35	YE/GY	1382	LED Dimming Signal	I	—
9	0.35	VT/BU	3390	Driver Mirror Motor Up (+) Down (-) Control	I	—
10	0.35	BN/BK	3389	Driver Mirror Motor Right (+) Left (-) Control	I	—
11	0.35	YE/BN	3391	Driver Mirror Motor Common Control	I	—
12	0.35	GN/WH	7530	Local Interconnect Network Bus 8	I	—
13	0.35	GY/BN	3394	Driver Mirror Position Sensor Up (+) Down (-) Signal	I	—
14	0.5	BK	2150	Ground	I	—
15	0.35	BK/VT	5478	Mirror Switch Low Reference	I	—
16	0.35	WH/VT	3405	Driver Mirror Switch Up (-) Down (+) Signal	I	—

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P22P Video Display - Passenger Seat Headrest (LHD with UWG)



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Connector Part Information

- Harness Type: Driver Door
- OEM Connector: 89047357
- Service Connector: Service by Harness - See Part Catalog
- Description: 16-Way F Kaizen 64 Series (L-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

P22P Video Display - Passenger Seat Headrest (LHD with UWG)

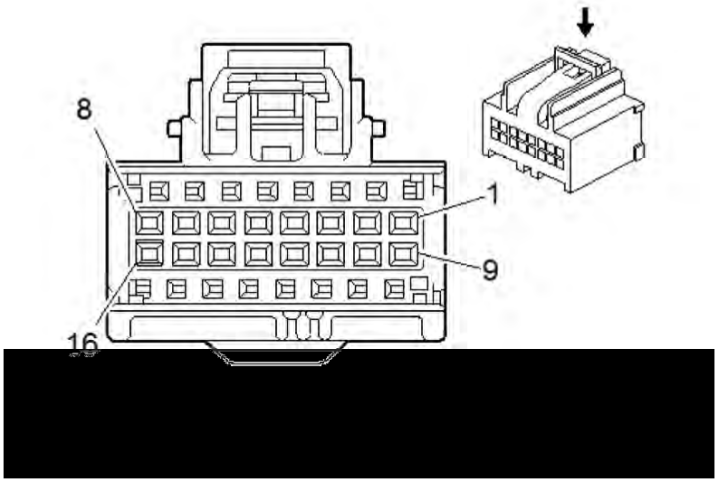
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	RD/VT	1940	Battery Positive Voltage	I	—
2-3	—	—	—	Not Occupied	—	—
4	0.35	WH/RD	3395	Driver Mirror Position Sensor Left (-) Right (+) Signal	I	—

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
5	0.35	VT/RD	3392	Driver Mirror Position Sensor High Reference	I	—
6	0.35	BK/BN	3393	Driver Mirror Position Sensor Low Reference	I	—
7	7	VT/BK	3404	Driver Mirror Switch Right (+) Left (-) Signal	I	—
8	0.35	YE/GY	1382	LED Dimming Signal	I	—
9	0.35	VT/BU	3390	Driver Mirror Motor Up (+) Down (-) Control	I	—
10	0.35	BN/BK	3389	Driver Mirror Motor Right (+) Left (-) Control	I	—
11	0.35	YE/BN	3391	Driver Mirror Motor Common Control	I	—
12	0.35	GN/WH	7530	Local Interconnect Network Bus 8	I	—
13	0.35	GY/BN	3394	Driver Mirror Position Sensor Up (+) Down (-) Signal	I	—
14	0.5	BK	2150	Ground	I	—
15	0.35	BK/VT	5478	Mirror Switch Low Reference	I	—
16	0.35	WH/VT	3405	Driver Mirror Switch Up (-) Down (+) Signal	I	—

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P22P Video Display - Passenger Seat Headrest (RHD with UWG)



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Connector Part Information

- Harness Type: Passenger Seat
- OEM Connector: 15136073
- Service Connector: Service by Harness - See Part Catalog
- Description: 16-Way F Kaizen 64 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-64B (L-BU)	J-38125-215A

P22P Video Display - Passenger Seat Headrest (RHD with UWG)

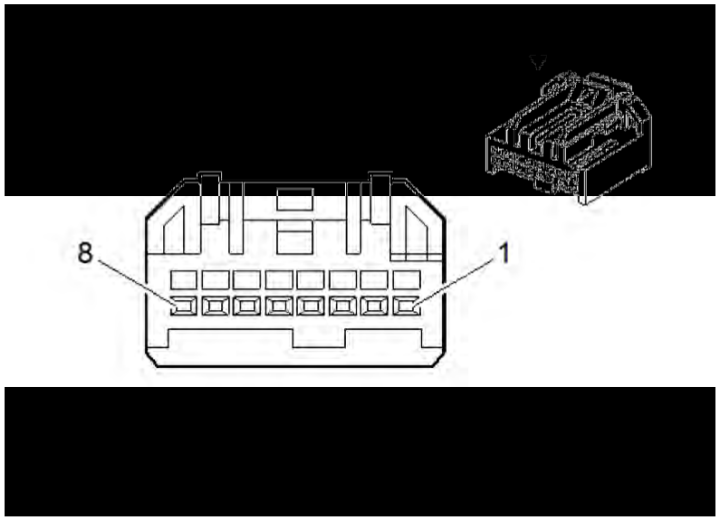
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	RD/BN	4240	Battery Positive Voltage	I	—
2	0.35	GN/YE	7066	Entertainment Remote Enable Signal	I	—
3	0.35	WH/GY	5312	Left Rear Seat Audio Signal	I	—

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4	0.35	WH/GN	5313	Right Rear Seat Audio Signal	I	—
5	0.35	VT	6979	DVD Audio Common	I	—
6	0.35	BU/YE	5826	Left DVD Audio Signal (+)	I	—
7	0.35	WH/BU	5828	Right DVD Audio Signal (+)	I	—
8	0.5	BK/WH	1551	Signal Ground	I	—
9	0.35	GN	6975	DVD Video Signal (+)	I	—
10	0.35	BN	5335	DVD Video Signal (-)	I	—
11	0.35	YE/VT	3352	Rear Seat Audio Common Signal	I	—
12	0.35	GN/BU	5831	Remote Infra Red Signal (+)	I	—
13	0.35	WH/YE	5830	Remote Infra Red Signal (-)	I	—
14	0.5	BK/WH	1551	Signal Ground	I	—
15	0.35	VT/BK	5845	Video Module Signal	I	—
16	0.35	GY/BN	5844	Video Bright Control	I	—

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P29 Head-Up Display (UV6)



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 19153438
- Service Connector: 13587955
- Description: 8-Way F 0.64 Series BK

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

P29 Head-Up Display (UV6)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GY/YE	5812	Head Up Display Dimming Signal	I	-
2	0.35	BK/GN	5699	Head Up Display Switch Low Reference	I	-
3	0.35	YE/WH	622	Head Up Display Switch Signal	I	-

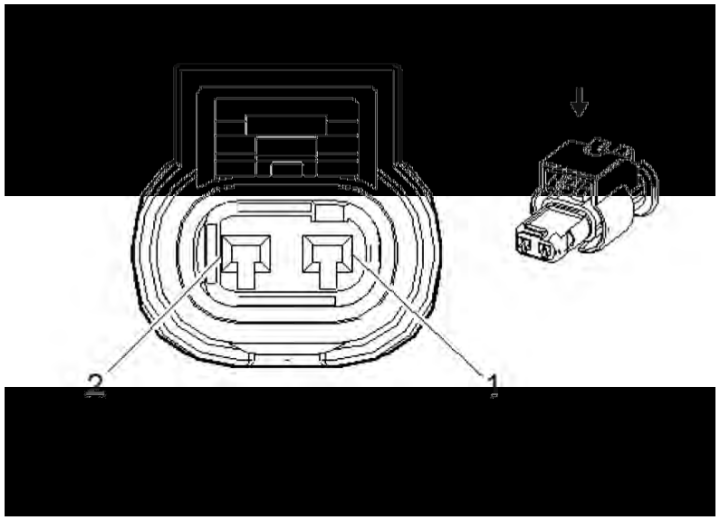
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4	0.5	RD/BU	3240	Battery Positive Voltage	I	-
5	-	-	-	Not Occupied	-	-
6	0.5	BK	1450	Ground	I	-
7	0.35	GN	5060	Low Speed GMLAN Serial Data	I	-
8	-	-	-	Not Occupied	-	-

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Q2 A/C Compressor Clutch



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13505426
- Service Connector: 13384337
- Description: 2-Way F 1.2 MCP Series, Sealed (BK with BK Inner Connector)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

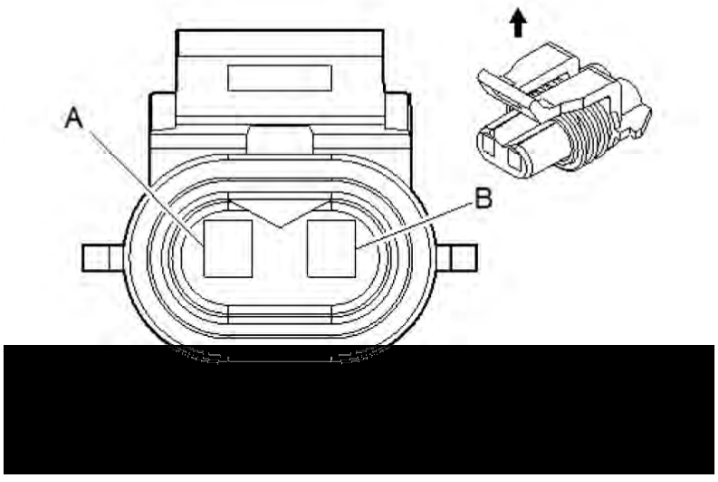
Q2 A/C Compressor Clutch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK/WH	451	Signal Ground	I	-
2	0.5	BN/GN	59	A/C Compressor Clutch Supply Voltage	I	-

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Q12 Evaporative Emission Purge Solenoid Valve (LFW/LFX)



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Connector Part Information

- Harness Type: Engine
- OEM Connector: 12052643
- Service Connector: 13585860
- Description: 2-Way F Metri Pack 150 Series, Sealed (RD)

Terminal Part Information

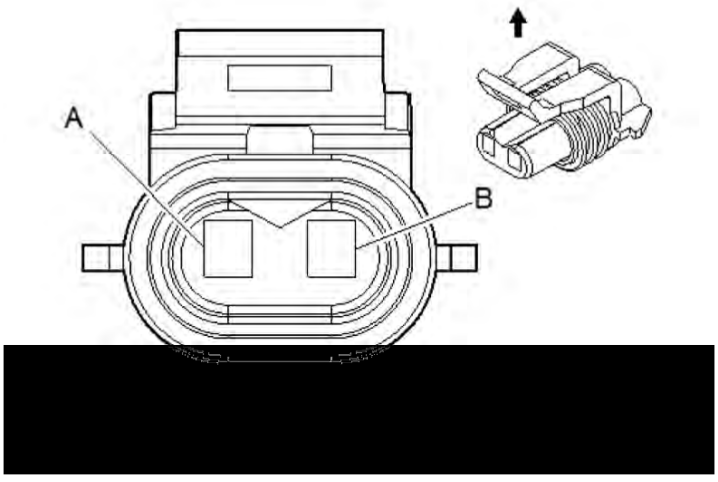
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-14 (GN)	Not Available

Q12 Evaporative Emission Purge Solenoid Valve (LFW/LFX)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5 0.75	VT/BU VT/BU	5293 5293	Powertrain Main Relay Fused Supply (4) Powertrain Main Relay Fused Supply (4)	I	LSA L77 or LS3
B	0.5	GN/BU	428	EVAP Canister Purge Solenoid Control	I	-

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Q12 Evaporative Emission Purge Solenoid Valve (L77/LS3/LSA)



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Connector Part Information

- Harness Type: Engine
- OEM Connector: 12052643
- Service Connector: 12101858
- Description: 2-Way F Metri-Pack 150 Series, Sealed (RD)

Terminal Part Information

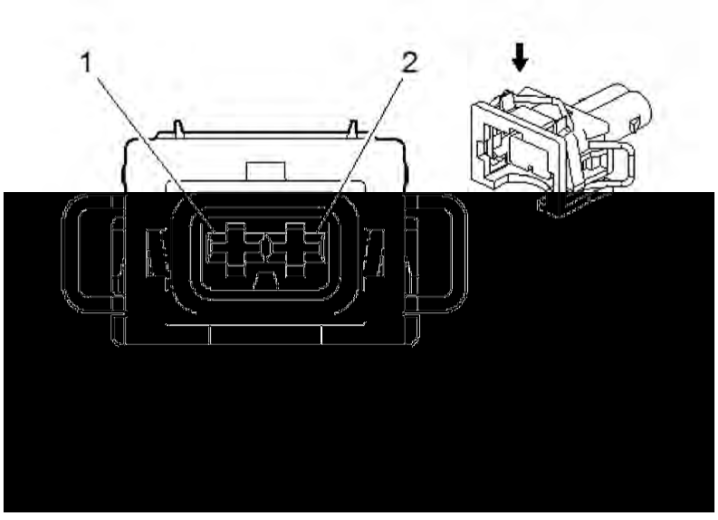
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575427	J-35616-14 (GN)	J-38125-12A

Q12 Evaporative Emission Purge Solenoid Valve (L77/LS3/LSA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	VT/BU	5293	Powertrain Main Relay Fused Supply (4)	I	—
B	0.5	GN/BU	428	EVAP Canister Purge Solenoid Control	I	—

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Q15L Exhaust Tail Pipe Flow Control Valve Solenoid – Left (NPP)



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Connector Part Information

- Harness Type: Exhaust
- OEM Connector: 12131678
- Service Connector: Service by Harness – See Part Catalog
- Description: 2-Way F Mini Timer Series, Sealed (BK)

Terminal Part Information

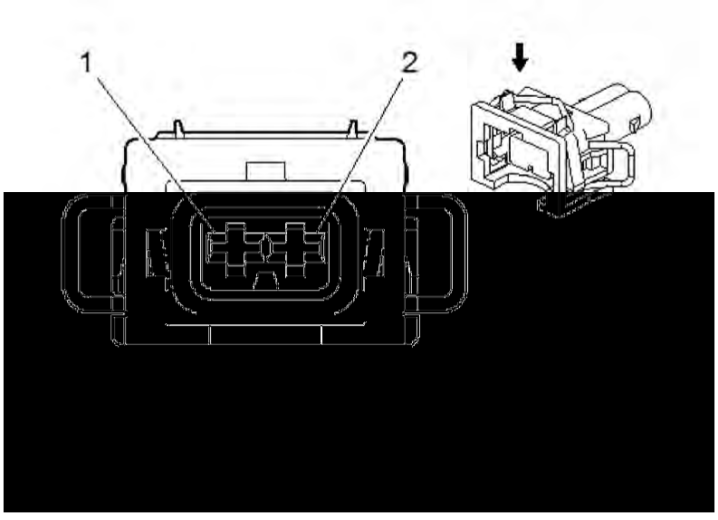
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-3 (GY)	J-38125-12A

Q15L Exhaust Tail Pipe Flow Control Valve Solenoid – Left (NPP)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	2450	Ground	I	—
2	0.5	BU/WH	7455	FSCM Exhaust Flapper Valve Feedback Control	I	—

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Q15R Exhaust Tail Pipe Flow Control Valve Solenoid – Right (NPP)



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Connector Part Information

- Harness Type: Exhaust
- OEM Connector: 12131678
- Service Connector: Service by Harness – See Part Catalog
- Description: 2-Way F Mini Timer Series, Sealed (BK)

Terminal Part Information

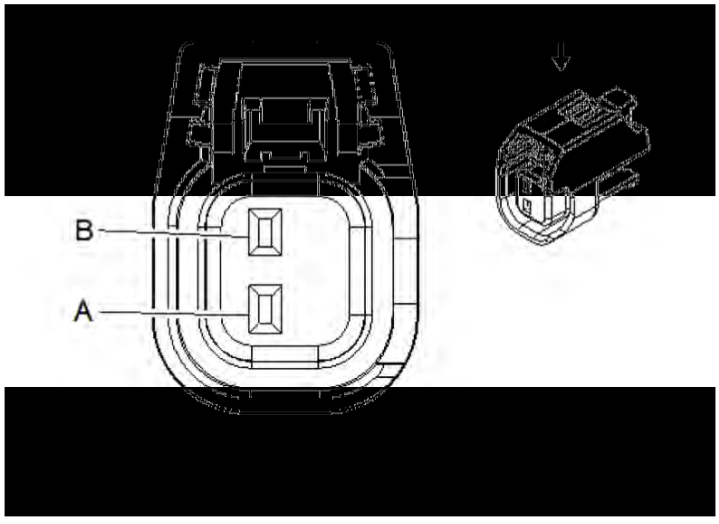
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-3 (GY)	J-38125-12A

Q15R Exhaust Tail Pipe Flow Control Valve Solenoid – Right (NPP)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	2450	Ground	I	—
2	0.5	BU/WH	7455	FSCM Exhaust Flapper Valve Feedback Control	I	—

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Q17A Fuel Injector 1 (L77/LS3)



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Connector Part Information

- Harness Type: Engine
- OEM Connector: 15305086
- Service Connector: 13580876
- Description: 2-Way F 150 GT Series, Sealed (BK)

Terminal Part Information

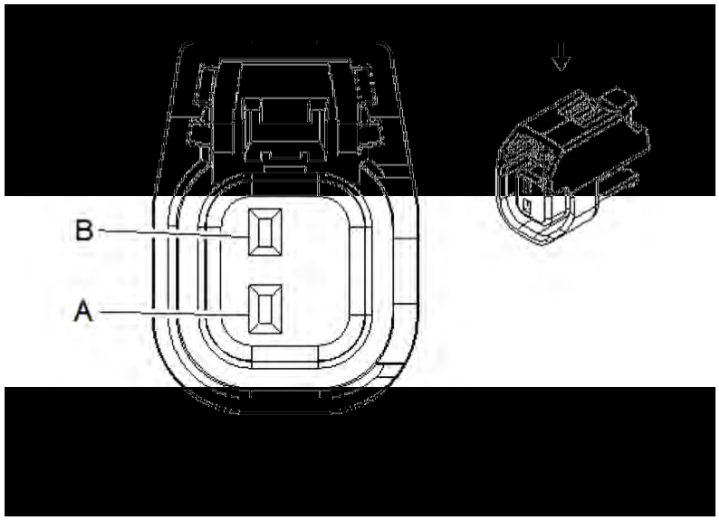
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	Not Available

Q17A Fuel Injector 1 (L77/LS3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.75	VT/BU	5291	Powertrain Main Relay Fused Supply (2)	I	-
B	0.75	GN/YE	1744	Fuel Injector Control (1)	I	-

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Q17A Fuel Injector 1 (LSA/LWR)



Connector Part Information

- Harness Type: Fuel Injector Odd
- OEM Connector: 15419715
- Service Connector: Service by Harness – See Part Catalog
- Description: 2-Way F GT 150 Series, Sealed (GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	J-38125-553

Q17A Fuel Injector 1 (LSA/LWR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8 0.8	PK/BK BN/WH	5291 4901	Powertrain Main Relay Fused Supply (2) Direct Fuel Injector (DFI) High Voltage Supply Cylinder 1	I I	LSA LWR
B	0.5 0.8	TN BN	1744 4801	Fuel Injector Control (1)	I I	LSA LWR

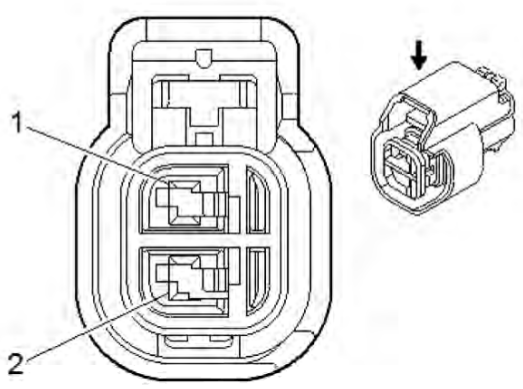
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Direct Fuel Injector (DFI) High Voltage Control Cylinder 1		

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Q17A Fuel Injector 1 (LFW/LFX)



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Connector Part Information

- Harness Type: Fuel Injector Odd
- OEM Connector: E-2157
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F GT 150 Series, Sealed (BK)

Terminal Part Information

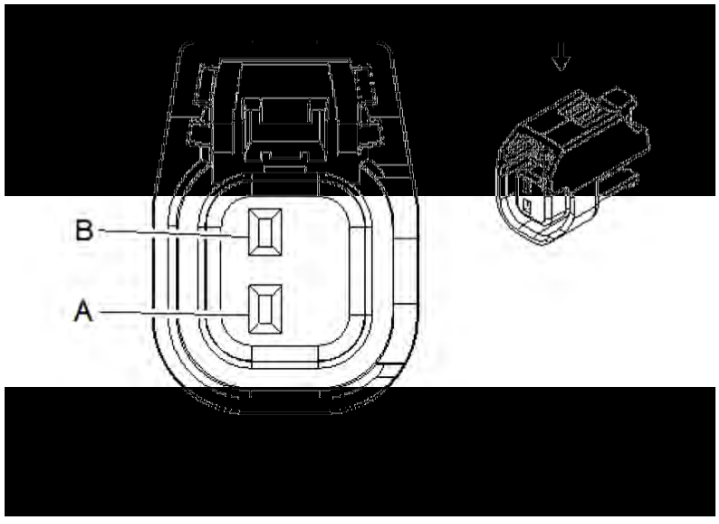
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

Q17A Fuel Injector 1 (LFW/LFX)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN	4801	Direct Fuel Injector (DFI) High Voltage Control Cylinder 1	I	—
2	0.5	BN/WH	4901	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 1	I	—

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Q17B Fuel Injector 2 (L77/LS3)



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Connector Part Information

- Harness Type: Engine
- OEM Connector: 15305086
- Service Connector: 13580876
- Description: 2-Way F 150 GT Series, Sealed (BK)

Terminal Part Information

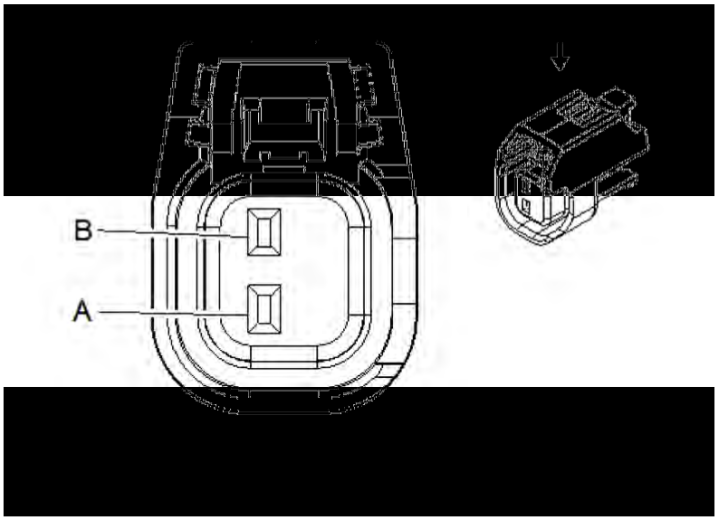
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	Not Available

Q17B Fuel Injector 2 (L77/LS3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.75	VT/BU	5292	Powertrain Main Relay Fused Supply (3)	I	-
B	0.75	YE/WH	1745	Fuel Injector Control (2)	I	-

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Q17B Fuel Injector 2 (LSA/LWR)



Connector Part Information

- Harness Type: Fuel Injector Even
- OEM Connector: 15419715
- Service Connector: Service by Harness – See Part Catalog
- Description: 2-Way F GT 150 Series, Sealed (GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	J-38125-553

Q17B Fuel Injector 2 (LSA/LWR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8 0.8	VT/BU BU/GY	5292 4902	Powertrain Main Relay Fused Supply (3) Direct Fuel Injector (DFI) High Voltage Supply Cylinder 2	I I	LSA LWR
B	0.5 0.8	L-GN/BK	1745 4802	Fuel Injector Control (2)	I I	LSA LWR

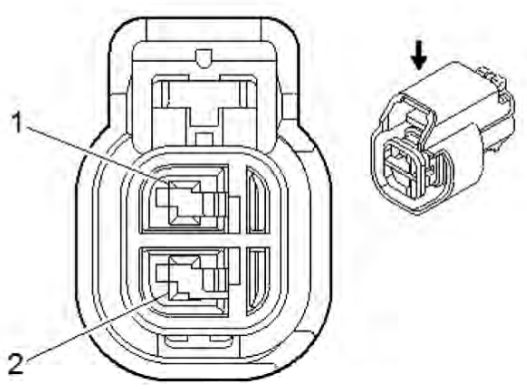
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
		BU		Direct Fuel Injector (DFI) High Voltage Control Cylinder 2		

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Q17B Fuel Injector 2 (LFW/LFX)



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Connector Part Information

- Harness Type: Fuel Injector Even
- OEM Connector: E-2157
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F GT 150 Series, Sealed (BK)

Terminal Part Information

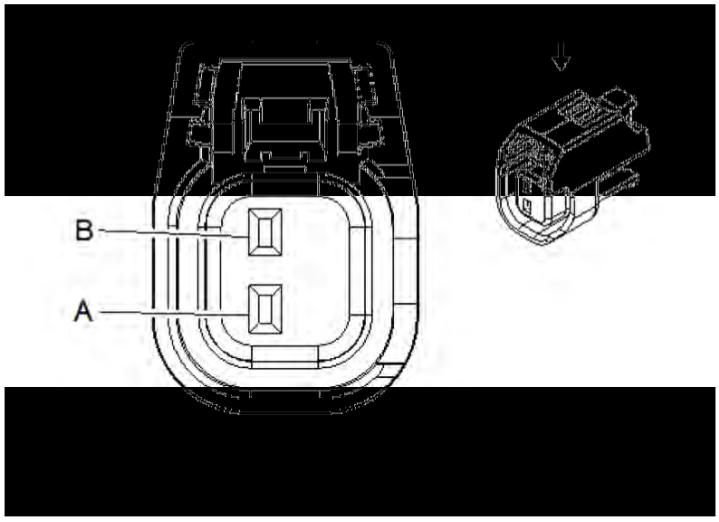
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

Q17B Fuel Injector 2 (LFW/LFX)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	D-BU	4802	Direct Fuel Injector (DFI) High Voltage Control Cylinder 2	I	—
2	0.5	D-BU/WH	4902	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 2	I	—

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Q17C Fuel Injector 3 (L77/LS3)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 15305086
- Service Connector: 13580876
- Description: 2-Way F 150 GT Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	Not Available

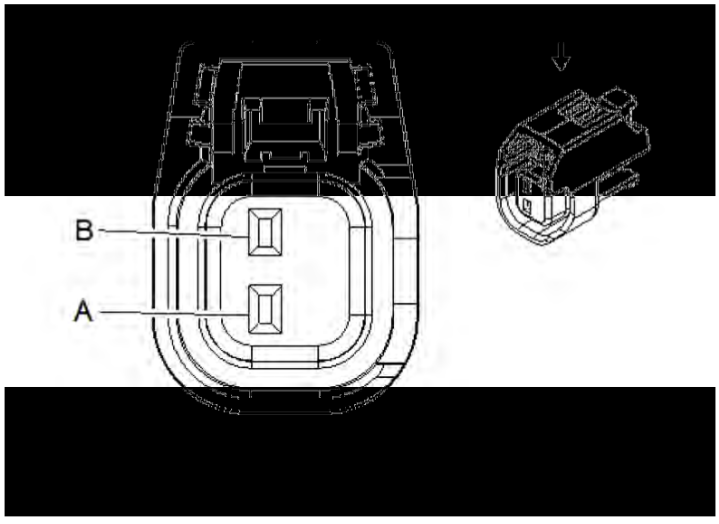
Q17C Fuel Injector 3 (L77/LS3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.75	VT/BU	5291	Powertrain Main Relay Fused Supply (2)	I	-
B	0.75	BN/VT	1746	Fuel Injector Control (3)	I	-

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Q17C Fuel Injector 3 (LSA/LWR)



Connector Part Information

- Harness Type: Fuel Injector Odd
- OEM Connector: 15419715
- Service Connector: Service by Harness – See Part Catalog
- Description: 2-Way F GT 150 Series, Sealed (GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	J-38125-553

Q17C Fuel Injector 3 (LSA/LWR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8 0.8	PK/BK GN/GY	5291 4903	Powertrain Main Relay Fused Supply (2) Direct Fuel Injector (DFI) High Voltage Supply Cylinder 3	I I	LSA LWR
B	0.5 0.8	PK/BK GN	1746 4803	Fuel Injector Control (3)	I I	LSA LWR

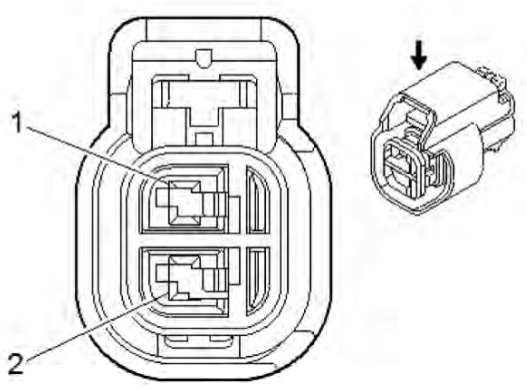
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Direct Fuel Injector (DFI) High Voltage Control Cylinder 3		

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Q17C Fuel Injector 3 (LFW/LFX)



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Connector Part Information

- Harness Type: Fuel Injector Odd
- OEM Connector: E-2157
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F GT 150 Series, Sealed (BK)

Terminal Part Information

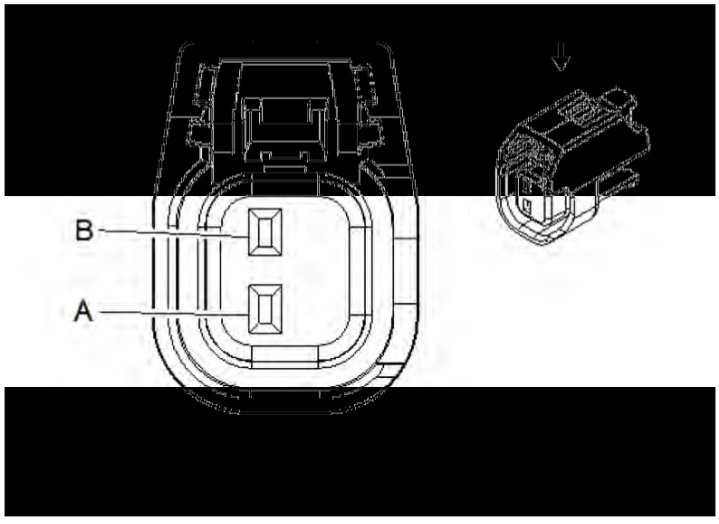
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

Q17C Fuel Injector 3 (LFW/LFX)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	D-GN	4803	Direct Fuel Injector (DFI) High Voltage Control Cylinder 3	I	—
2	0.5	D-GN/WH	4903	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 3	I	—

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Q17D Fuel Injector 4 (L77/LS3)



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Connector Part Information

- Harness Type: Engine
- OEM Connector: 15305086
- Service Connector: 13580876
- Description: 2-Way F 150 GT Series, Sealed (BK)

Terminal Part Information

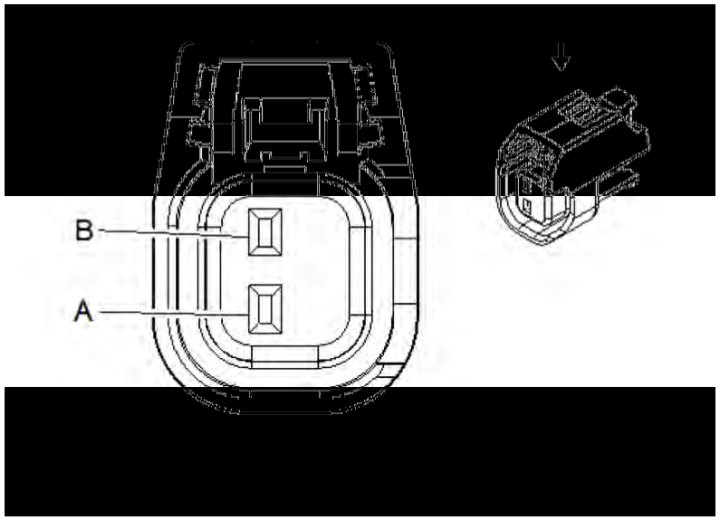
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	Not Available

Q17D Fuel Injector 4 (L77/LS3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.75	VT/BU	5292	Powertrain Main Relay Fused Supply (3)	I	-
B	0.75	BN/YE	844	Fuel Injector Control (4)	I	-

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Q17D Fuel Injector 4 (LSA/LWR)



Connector Part Information

- Harness Type: Fuel Injector Even
- OEM Connector: 15419715
- Service Connector: Service by Harness – See Part Catalog
- Description: 2-Way F GT 150 Series, Sealed (GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	J-38125-553

Q17D Fuel Injector 4 (LSA/LWR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8 0.8	PK/BK BU/WH	5292 4904	Powertrain Main Relay Fused Supply (3) Direct Fuel Injector (DFI) High Voltage Supply Cylinder 4	I I	LSA LWR
B	0.5 0.8	L-BU/BK	844 4804	Fuel Injector Control (4)	I I	LSA LWR

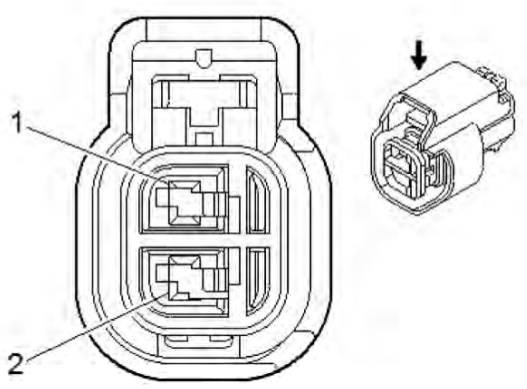
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
		GY/BU		Direct Fuel Injector (DFI) High Voltage Control Cylinder 4		

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Q17D Fuel Injector 4 (LFW/LFX)



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Connector Part Information

- Harness Type: Fuel Injector Even
- OEM Connector: E-2157
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F GT 150 Series, Sealed (BK)

Terminal Part Information

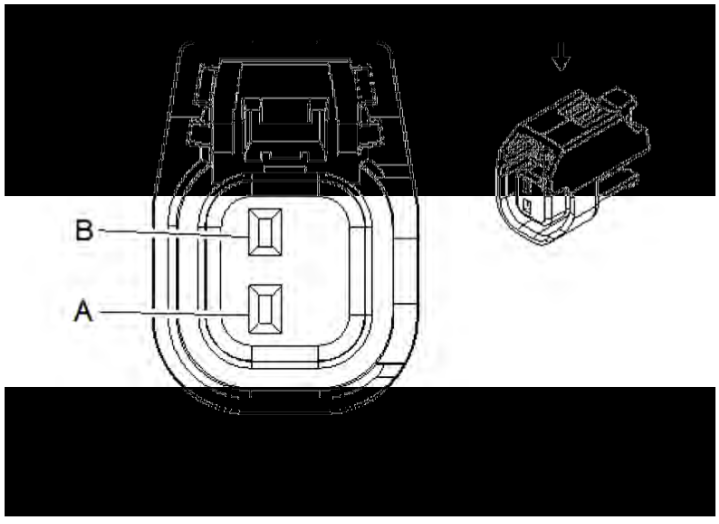
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

Q17D Fuel Injector 4 (LFW/LFX)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	L-BU	4804	Direct Fuel Injector (DFI) High Voltage Control Cylinder 4	I	—
2	0.5	L-BU/WH	4904	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 4	I	—

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Q17E Fuel Injector 5 (L77/LS3)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 15305086
- Service Connector: 13580876
- Description: 2-Way F 150 GT Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	Not Available

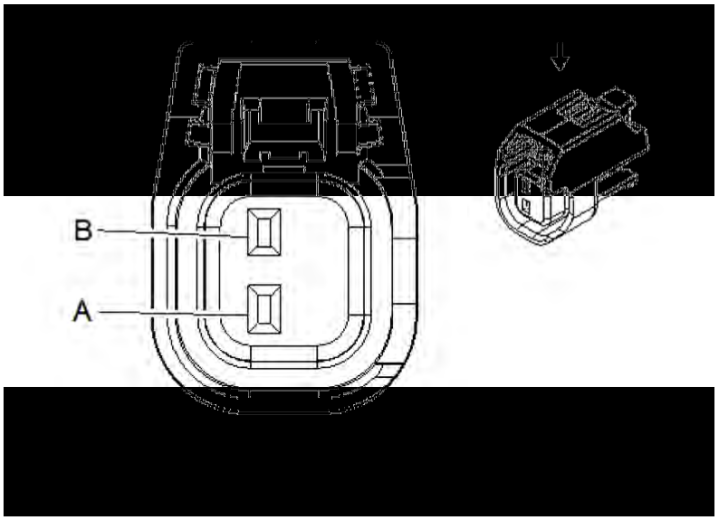
Q17E Fuel Injector 5 (L77/LS3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.75	VT/BU	5291	Powertrain Main Relay Fused Supply (2)	I	-
B	0.75	BN/GN	845	Fuel Injector Control (5)	I	-

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Q17E Fuel Injector 5 (LSA/LWR)



Connector Part Information

- Harness Type: Fuel Injector Odd
- OEM Connector: 15419715
- Service Connector: Service by Harness – See Part Catalog
- Description: 2-Way F GT 150 Series, Sealed (GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	J-38125-553

Q17E Fuel Injector 5 (LSA/LWR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8 0.8	PK/BK GN/WH	5291 4905	Powertrain Main Relay Fused Supply (2) Direct Fuel Injector (DFI) High Voltage Supply Cylinder 5	I I	LSA LWR
B	0.5 0.8	TN/WH WH/GN	845 4805	Fuel Injector Control (5)	I I	LSA LWR

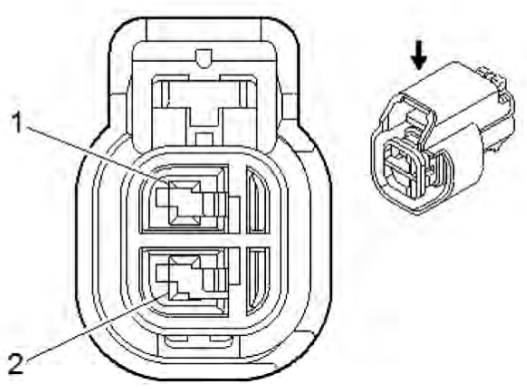
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Direct Fuel Injector (DFI) High Voltage Control Cylinder 5		

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Q17E Fuel Injector 5 (LFW/LFX)



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Connector Part Information

- Harness Type: Fuel Injector Odd
- OEM Connector: E-2157
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F GT 150 Series, Sealed (BK)

Terminal Part Information

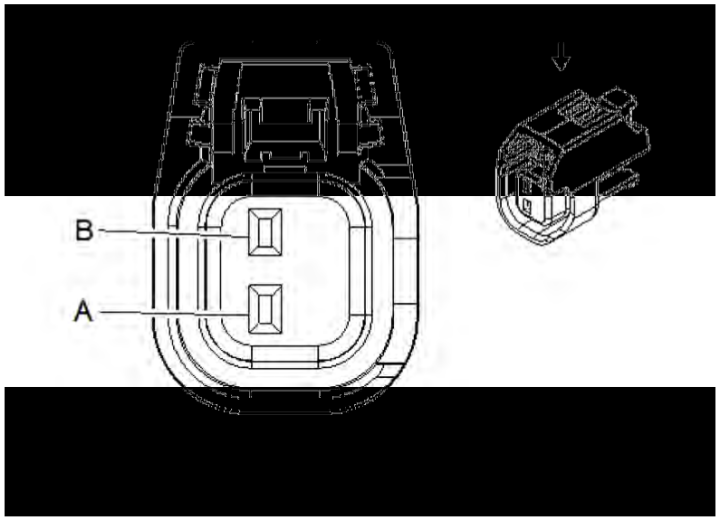
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

Q17E Fuel Injector 5 (LFW/LFX)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	L-GN	4805	Direct Fuel Injector (DFI) High Voltage Control Cylinder 5	I	—
2	0.5	L-GN/WH	4905	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 5	I	—

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Q17F Fuel Injector 6 (L77/LS3)



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Connector Part Information

- Harness Type: Engine
- OEM Connector: 15305086
- Service Connector: 13580876
- Description: 2-Way F 150 GT Series, Sealed (BK)

Terminal Part Information

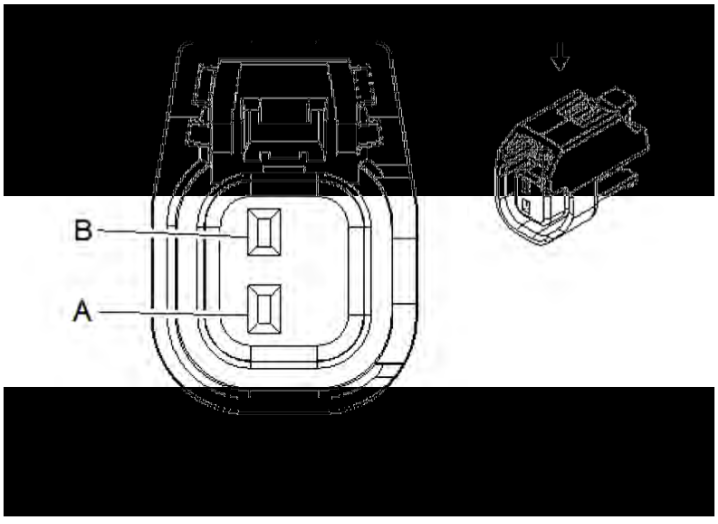
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	Not Available

Q17F Fuel Injector 6 (L77/LS3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.75	VT/BU	5292	Powertrain Main Relay Fused Supply (3)	I	-
B	0.75	BN/BU	846	Fuel Injector Control (6)	I	-

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Q17F Fuel Injector 6 (LSA/LWR)



Connector Part Information

- Harness Type: Fuel Injector Even
- OEM Connector: 15419715
- Service Connector: Service by Harness – See Part Catalog
- Description: 2-Way F GT 150 Series, Sealed (GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	J-38125-553

Q17F Fuel Injector 6 (LSA/LWR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8 0.8	PK/BK VT/GY	5292 4906	Powertrain Main Relay Fused Supply (3) Direct Fuel Injector (DFI) High Voltage Supply Cylinder 6	I I	LSA LWR
B	0.5 0.8	YE/BK VT/GN	846 4806	Fuel Injector Control (6)	I I	LSA LWR

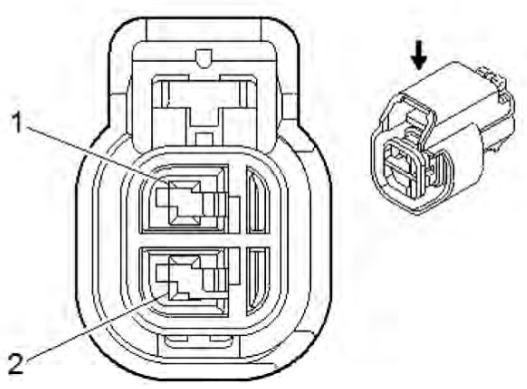
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Direct Fuel Injector (DFI) High Voltage Control Cylinder 6		

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Q17F Fuel Injector 6 (LFW/LFX)



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Connector Part Information

- Harness Type: Fuel Injector Even
- OEM Connector: E-2157
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F GT 150 Series, Sealed (BK)

Terminal Part Information

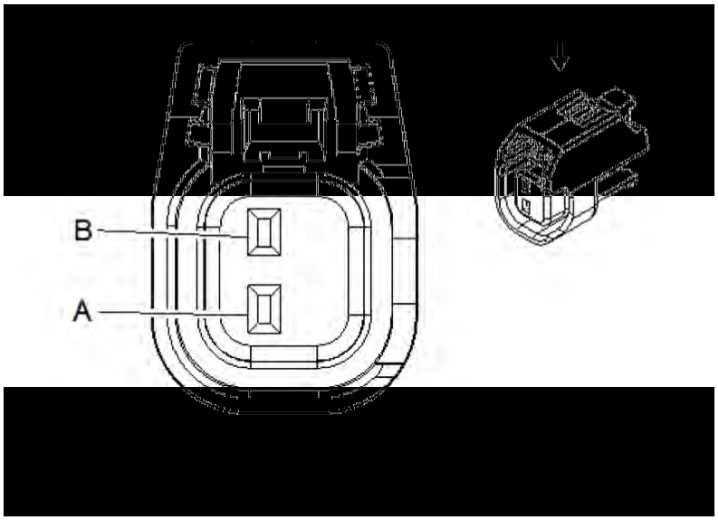
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

Q17F Fuel Injector 6 (LFW/LFX)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	PU	4806	Direct Fuel Injector (DFI) High Voltage Control Cylinder 6	I	—
2	0.5	PU/WH	4906	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 6	I	—

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Q17G Fuel Injector 7 (L77/LS3)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 15305086
- Service Connector: 13580876
- Description: 2-Way F GT 150 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575413	J-35616-2A (GY)	J-38125-553

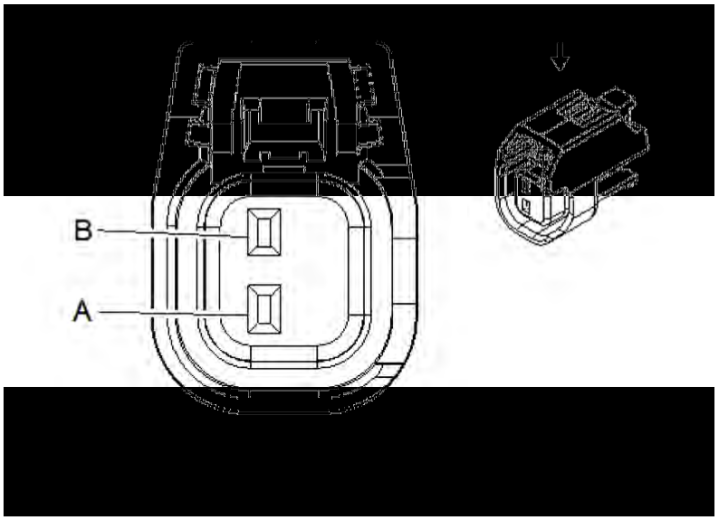
Q17G Fuel Injector 7 (L77/LS3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	VT/BU	5291	Powertrain Main Relay Fused Supply (2)	I	—
B	0.5	BN/VT	877	Fuel Injector Control (7)	I	—

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Q17G Fuel Injector 7 (LSA)



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Connector Part Information

- Harness Type: Fuel Injector Odd
- OEM Connector: 15419715
- Service Connector: Service by Harness – See Part Catalog
- Description: 2-Way F GT 150 Series, Sealed (GY)

Terminal Part Information

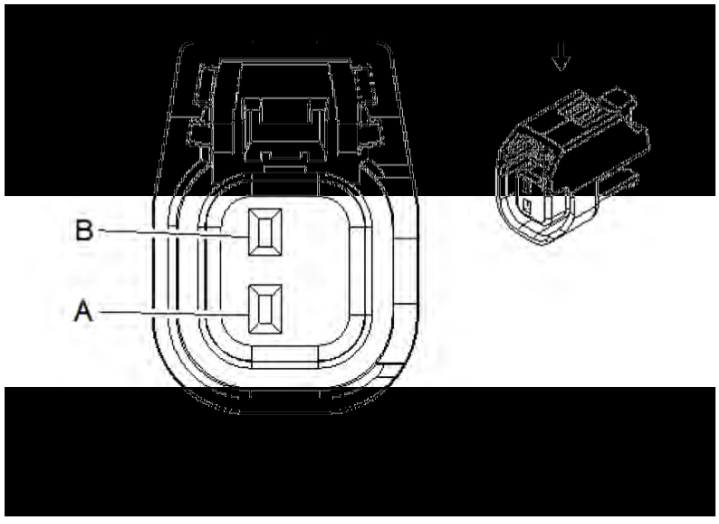
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	J-38125-553

Q17G Fuel Injector 7 (LSA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	PK/BK	5291	Powertrain Main Relay Fused Supply (2)	I	—
B	0.5	OG/BK	877	Fuel Injector Control (7)	I	—

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Q17H Fuel Injector 8 (L77/LS3)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 15305086
- Service Connector: 13580876
- Description: 2-Way F 150 GT Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	Not Available

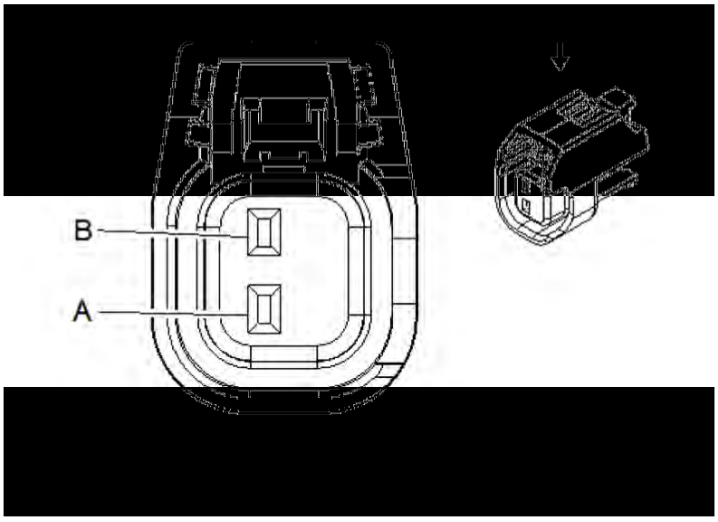
Q17H Fuel Injector 8 (L77/LS3)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.75	VT/BU	5292	Powertrain Main Relay Fused Supply (3)	I	-
B	0.75	BN/GY	878	Fuel Injector Control (8)	I	-

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Q17H Fuel Injector 8 (LSA)



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Connector Part Information

- Harness Type: Fuel Injector Even
- OEM Connector: 15419715
- Service Connector: Service by Harness – See Part Catalog
- Description: 2-Way F GT 150 Series, Sealed (GY)

Terminal Part Information

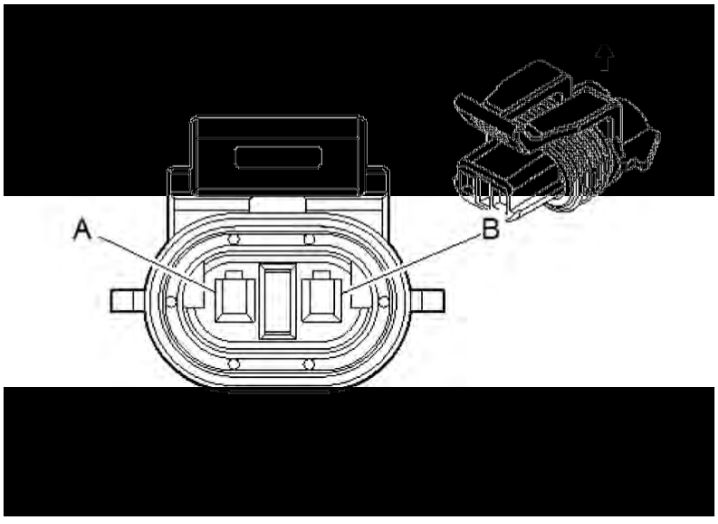
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	J-38125-553

Q17H Fuel Injector 8 (LSA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	PK/BK	5292	Powertrain Main Relay Fused Supply (3)	I	—
B	0.5	D-BU/WH	878	Fuel Injector Control (8)	I	—

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Q34 Skip Shift Solenoid Actuator (MER/MG9)



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Connector Part Information

- Harness Type: Engine
- OEM Connector: 12052646
- Service Connector: 12101857
- Description: 2-Way F Metri-Pack 150 Sealed (WH)

Terminal Part Information

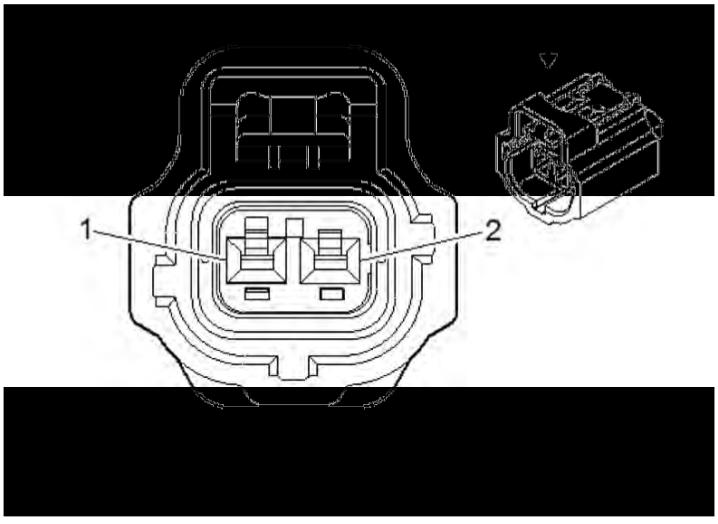
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575419	J-35616-14 (GN)	J-38125-12A

Q34 Skip Shift Solenoid Actuator (MER/MG9)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	VT/GN	439	Run/Crank Ignition 1 Voltage	II	MERMG9
B	0.5	GY/GN	587	Skip/Shift Solenoid Control	I	—

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Q36 Supercharger Bypass Solenoid Valve (LSA)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 184006-2
- Service Connector: 88988501
- Description: 2-Way F Sealed GY

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

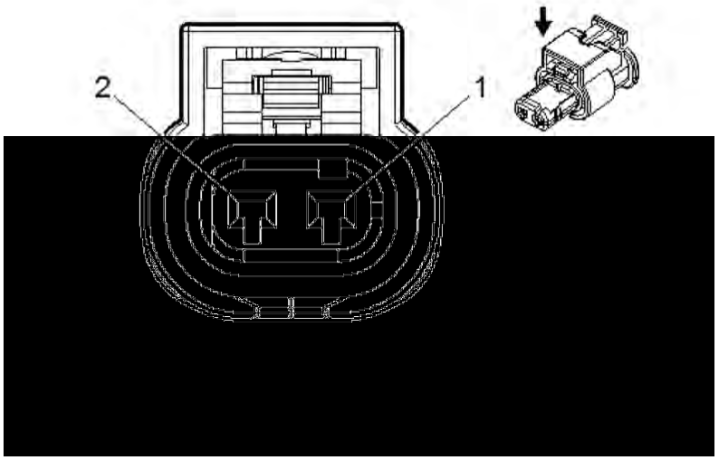
Q36 Supercharger Bypass Solenoid Valve (LSA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT/BU	5293	Powertrain Main Relay Fused Supply (4)	I	-
2	0.5	BN/YE	258	Waste Gate Solenoid Control	I	-

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Q37LF Shock Absorber Actuator - Left Front (F55)



Connector Part Information

- Harness Type: Front Suspension
- OEM Connector: 13580179
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 1.2 MCP Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

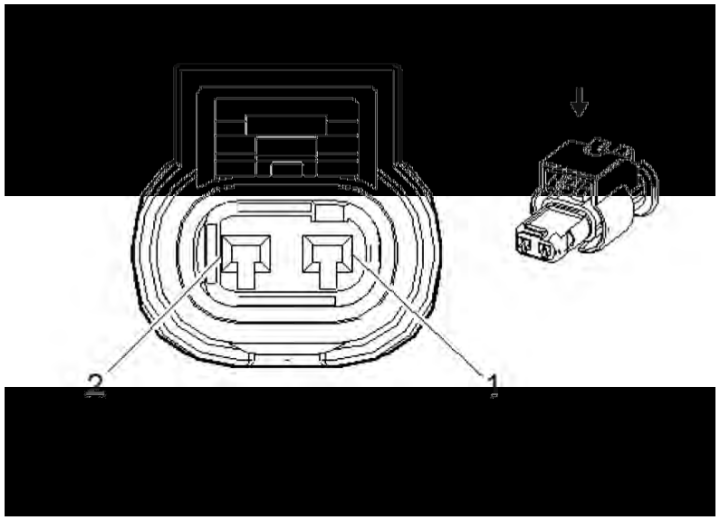
Q37LF Shock Absorber Actuator - Left Front (F55)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN/WH	1107	Left Front Damping Servo Supply Voltage	I	—
2	0.75	GY/BU	1113	Left Front Damping Servo Control	I	—

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Q37LR Shock Absorber Actuator - Left Rear (F55)



Connector Part Information

- Harness Type: Rear Suspension
- OEM Connector: 13505426
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 1.2 MCP Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

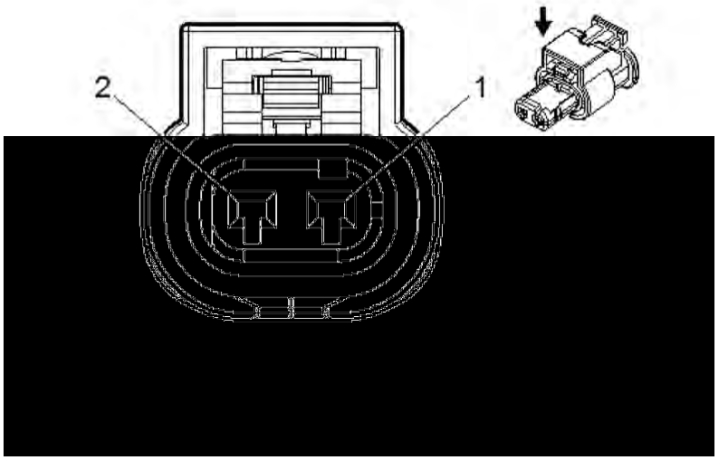
Q37LR Shock Absorber Actuator - Left Rear (F55)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BU/GY	1114	Left Rear Damping Servo Supply Voltage	I	—
2	0.75	GN/VT	1115	Left Rear Damping Servo Control	I	—

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Q37RF Shock Absorber Actuator - Right Front (F55)



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Connector Part Information

- Harness Type: Front Suspension
- OEM Connector: 13580179
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 1.2 MCP Series, Sealed (BK)

Terminal Part Information

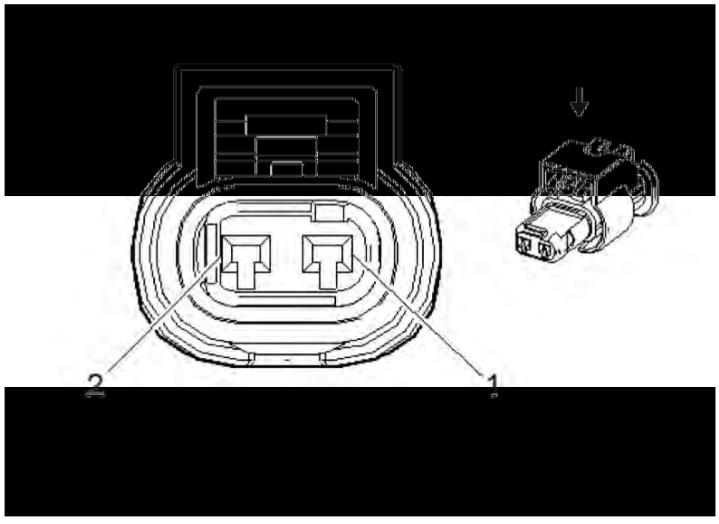
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

Q37RF Shock Absorber Actuator - Right Front (F55)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN/BU	1116	Right Front Damping Servo Supply Voltage	I	—
2	0.75	GY/WH	1117	Right Front Damping Servo Control	I	—

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Q37RR Shock Absorber Actuator - Right Rear (F55)



Connector Part Information

- Harness Type: Rear Suspension
- OEM Connector: 13505426
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 1.2 MCP Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

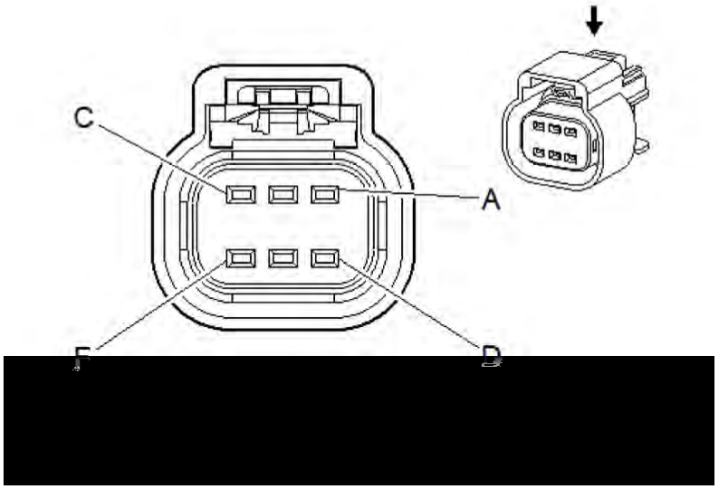
Q37RR Shock Absorber Actuator - Right Rear (F55)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN/GN	1118	Right Rear Damping Servo Supply Voltage	I	—
2	0.75	GN/GY	1119	Right Rear Damping Servo Control	I	—

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Q38 Throttle Body (L77/LS3/LSA)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 15355297
- Service Connector: 13584095
- Description: 6-Way F GT 150 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	J-38125-553

Q38 Throttle Body (L77/LS3/LSA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.75	BN/WH	582	Throttle Actuator Control Close	I	—
B	0.75	YE	581	Throttle Actuator Control Open	I	—
C	0.5	BK/BN	2752	Throttle Position Sensor Low Reference	I	—

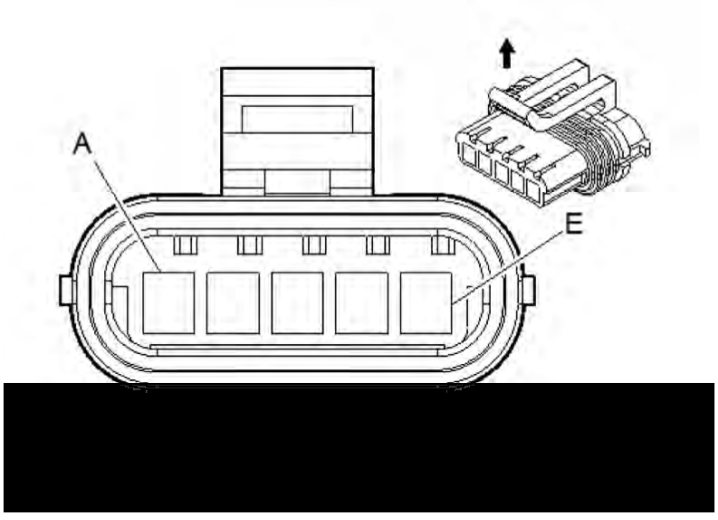
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
D	0.5	BN/GN	485	Throttle Position Sensor Signal (1))	I	—
E	0.5	BN/RD	2701	Throttle Position Sensor 5 Volt Reference	I	—
F	0.5	BN/BU	486	Throttle Position Sensor Signal (2)	I	—

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Q43 Valve Lifter Oil Manifold Assembly (L77 with MYC)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 12186057
- Service Connector: 15306027
- Description: 5-Way F Metri Pack 150.2 , Pull To Seat Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-14 (GN)	Not Available

Q43 Valve Lifter Oil Manifold Assembly (L77 with MYC)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	YE/BU	5494	Cylinder Shutoff Solenoid Control (4)	I	-
B	0.5	GY	5493	Cylinder Shutoff Solenoid Control (3)	I	-
C	0.5	BU	5491		I	-

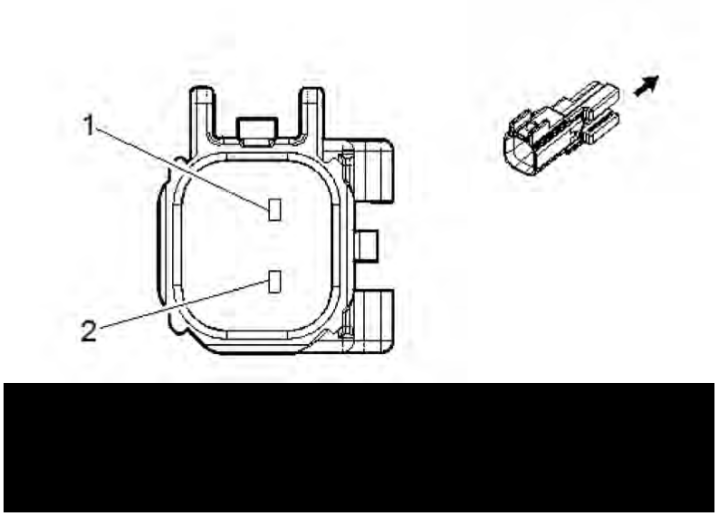
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Cylinder Shutoff Solenoid Control (1)		
D	0.5	GN	5492	Cylinder Shutoff Solenoid Control (2)	I	-
E	0.75	VT/BU	5293	Powertrain Main Relay Fused Supply (4)	I	-

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Q58F LPG Cut-Off Solenoid Valve - Front (LWR)



Connector Part Information

- Harness Type: Body
- OEM Connector: 13503928
- Service Connector: 19301583
- Description: 2-Way M 1.5 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

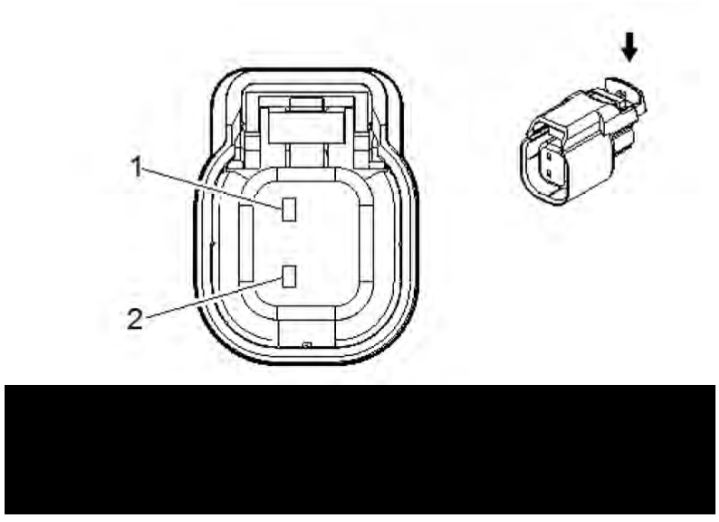
Q58F LPG Cut-Off Solenoid Valve - Front (LWR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN/BK	3507	Liquid Petroleum Gas Fuel Shutoff Solenoid Control (2)	I	-
2	-	-	-	Not Occupied	-	-

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Q58R LPG Cut-Off Solenoid Valve - Rear (LWR)



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Connector Part Information

- Harness Type: LPG Pump Harness
- OEM Connector: 13503510
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 1.5 Series, Sealed (BK)

Terminal Part Information

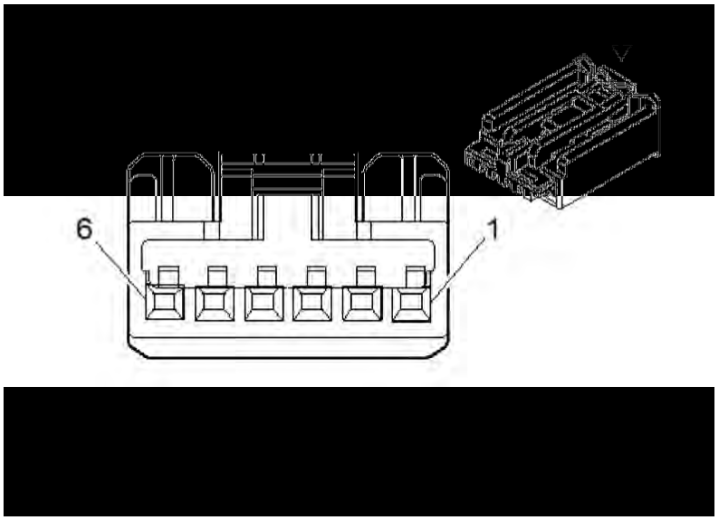
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

Q58R LPG Cut-Off Solenoid Valve - Rear (LWR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.85	YE	3507	Liquid Petroleum Gas Fuel Shutoff Solenoid Control (2)	I	—
2	0.85	BU	2450	Ground	I	—

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S3 Transmission Shift Lever (MYA/MYC/MYD)



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 15269798
- Service Connector: 19167753
- Description: 6-Way F AIT II Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575867	J-35616-64B (L-BU)	J-38125-215A

S3 Transmission Shift Lever (MYA/MYC/MYD)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GY/VT	755	RAP Relay Coil Control	I	—
2	0.35	BK	1450	Ground	I	—
3	0.35	VT/YE	5526	Tap Up/Tap Down Switch Signal	I	—
4	0.5	VT/BK	7553	Park Lock Solenoid Control	I	M97

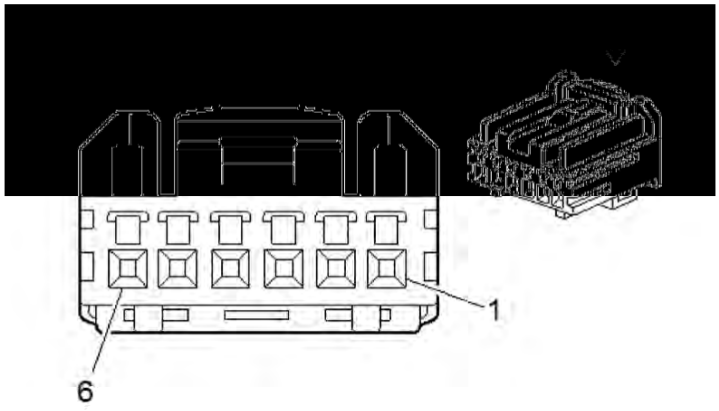
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
5	0.35	GN/BU	6133	Local Interconnect Network Bus 2	—	—
6	0.5	WH/VT	5905	Key Capture/Column Lock Shift Position Signal	I	M97

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S13D Door Lock Switch - Driver



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Connector Part Information

- Harness Type: Driver Door Trim
- OEM Connector: HCMPB-C06-K
- Service Connector: Service by Harness - See Part Catalog
- Description: 6-Way F 0.64 HCM Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

S13D Door Lock Switch - Driver

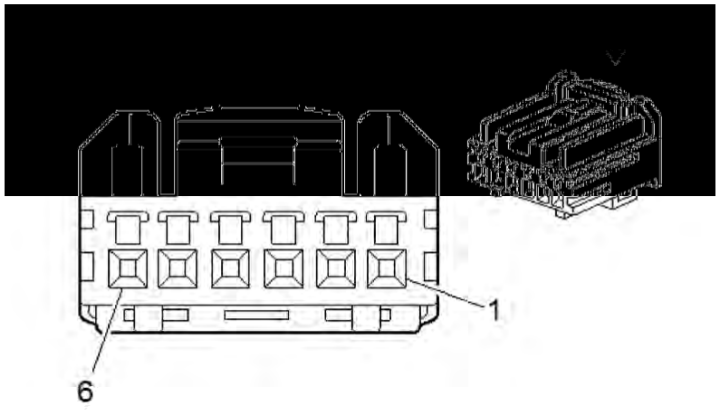
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	YE	6817	LED Backlight Dimming Control	I	-
2	0.35	BN/YE	780	Driver Door Lock Switch Lock Signal	I	-
3	0.35	BN/WH	781		I	-

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Driver Door Lock Switch Unlock Signal		
4	0.35	BK	2150	Ground	I	-
5-6	-	-	-	Not Occupied	-	-

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S27 Head-Up Display Switch (UV6)



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Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 19115685
- Service Connector: 19115655
- Description: 6-Way F HCM Series BK

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

S27 Head-Up Display Switch (UV6)

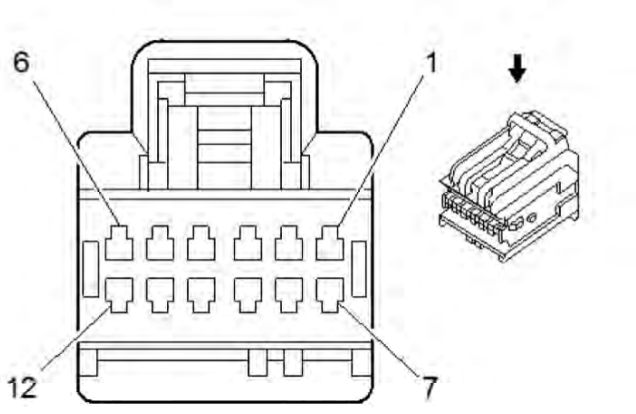
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BK/GN	5699	Head Up Display Switch Low Reference	I	-
2	0.35	BK	1450	Ground	I	-
3	0.35	GY/YE	5812	Head Up Display Dimming Signal	I	-

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4	-	-	-	Not Occupied	-	-
5	0.35	YE	6817	LED Backlight Dimming Control	I	-
6	0.35	YE/WH	622	Head Up Display Switch Signal	I	-

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S30 Headlamp Switch



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 89047364
- Service Connector: 89047364
- Description: 12-Way F 64 Series BK

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575299	J-35616-35 (VT)	Not Available

S30 Headlamp Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	YE	7556	Lighting Control Switch Reference	I	-
2	-	-	-	Not Occupied	-	-
3	0.35	GN/GY	13	Headlamp Switch Park Lamp Signal	I	-

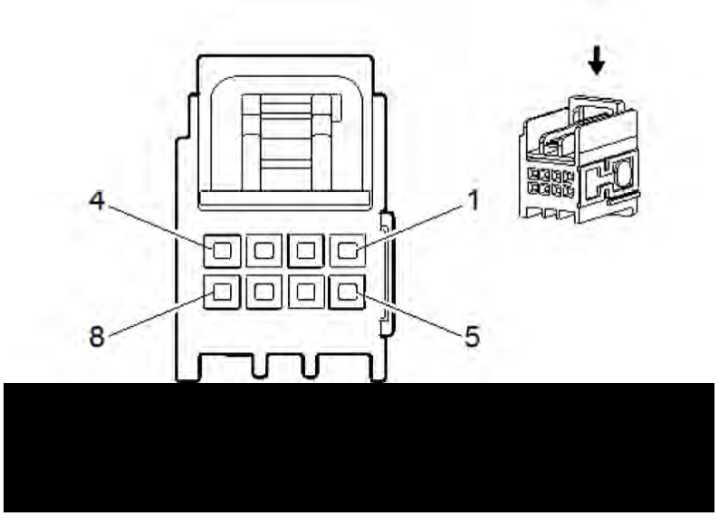
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4	0.35	WH/VT	103	Headlamp Switch On Signal	I	-
5	0.35	GN/BN	306	Headlamp Switch Headlamps Off Signal Control	I	-
6	0.35	BK	1450	Ground	I	-
7	0.35	YE	6817	LED Backlight Dimming Control	I	-
8-11	-	-	-	Not Occupied	-	-
12	0.35	WH/BN	7555	Lighting Control Switch Signal	I	-

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S38 Ignition Mode Switch (BTM)



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 13235933
- Service Connector: 13576543
- Description: 8-Way F 0.64 Series (BK with BK cover)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

S38 Ignition Mode Switch (BTM)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	-	-	-	Not Occupied	-	-
2	0.35	BN/BK	5720	Ignition Mode Switch Accessory LED Signal	I	-
3	0.35	GN/BK	3558	Passive Start Switch Signal 2	I	-

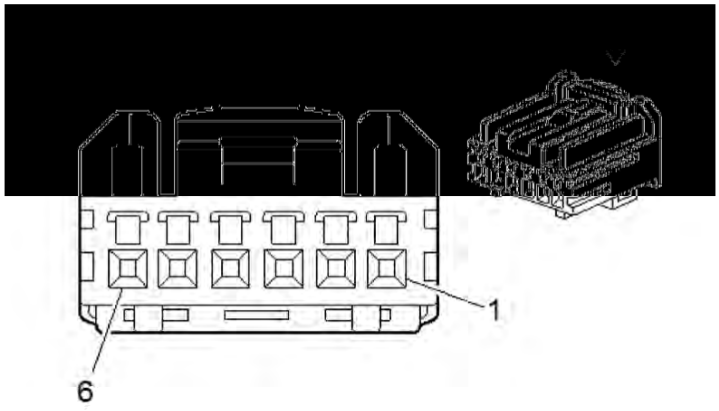
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4	0.35 0.35	BK BK	1350 1450	Ground Ground	I	LHD RHD
5	0.35	BU/BK	5719	Ignition Mode Switch Start LED Signal	I	-
6	0.35	BU/GN	5723	Ignition Mode Switch Mode Voltage	I	-
7	0.35	BK/GY	3559	Passive Start Switch 2 Low Reference	I	-
8	0.35	YE	6817	LED Backlight Dimming Control	I	-

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S39 Ignition Switch



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 19151550
- Service Connector: 19153174
- Description: 6-Way F 1.2 HCM Series NA

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

S39 Ignition Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.13	VT	3	Run/Crank Ignition 1 Voltage	I	-
2	0.35	RD/WH	140	Battery Positive Voltage	I	-
3	0.13	VT	4	Accessory Voltage	I	-

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4	0.13	WH	1020	Off/Run/Crank Voltage	I	-
5	-	-	-	Not Occupied	-	-
6	0.13	WH	1073	Ignition Key Resistor Signal	I	-

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S46B Liftgate Unlatch Switch

Connector Part Information

- Harness Type: Liftgate Unlatch Switch
- OEM Connector: Not Available
- Service Connector: Service by Harness – See Part Catalog
- Description: 2-Way F 1.2 MCP Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

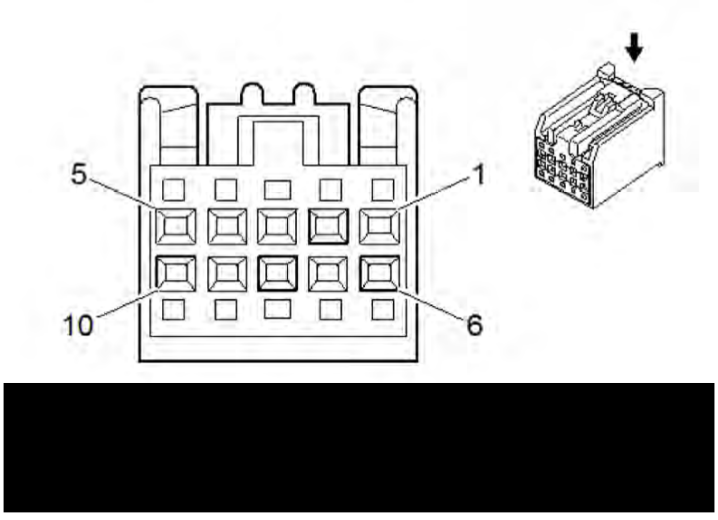
S46B Liftgate Unlatch Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BU	5801	Lift Gate Object Sensor Low Reference	I	—
2	0.35	BU	5797	Rear Closure Handle Switch Open Signal	I	—

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S47D Seat Memory Switch - Driver (A45)



[redacted]

Connector Part Information

- Harness Type: Driver Door
- OEM Connector: 13577390
- Service Connector: Service by Harness - See Part Catalog
- Description: 10-Way F Kaizen 0.64 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-64B (L-BU)	J-38125-215A

S47D Seat Memory Switch - Driver (A45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BK/BU	5978	Memory Switch Low Reference	I	—
2	0.35	YE	6817	LED Backlight Dimming Control	I	—
3-4	—	—	—	Not Occupied	—	—
5	0.35	BU/GN	614	Memory Seat Switch Set Signal	I	—

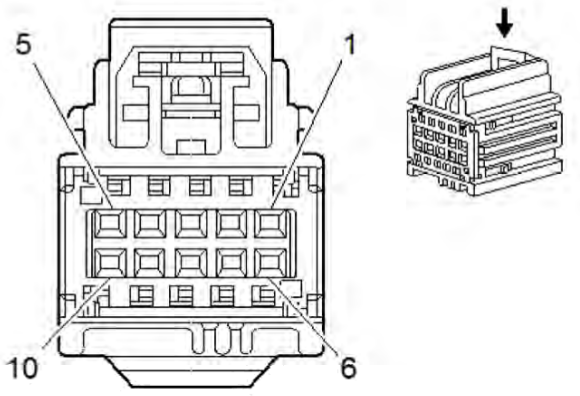
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
7	0.35	WH	615	Memory Seat Switch Signal (1)	I	—
7-10	—	—	—	Not Occupied	—	—

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S48E Multi-Function Switch Module - Center Console (UD7/UFQ)



Connector Part Information

- Harness Type: Center Console
- OEM Connector: 15127042
- Service Connector: Service by Harness - See Part Catalog
- Description: 10-Way F 0.64 YESC Kaizen Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-64B (L-BU)	Not Available

S48E Multi-Function Switch Module - Center Console (UD7/UFQ)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GY/GN	2555	Rear Park Assist Disable Signal	I	-
2	0.35	GN/BN	5852	Rear Park Assist LED Disable Signal	I	-
3-4	-	-	-	Not Occupied	-	-

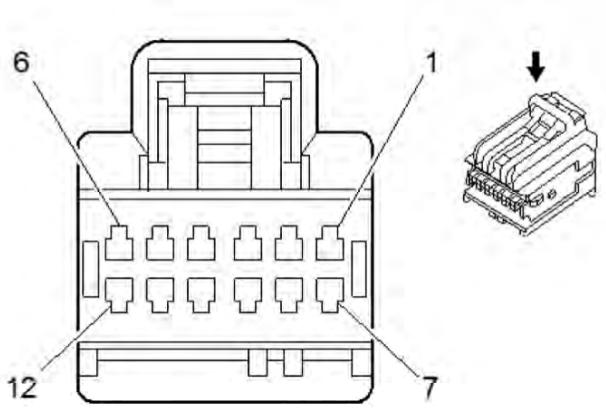
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
5	0.35	BU/VT	1788	Traction Control Switch Signal (1)	I	-
6	-	-	-	Not Occupied	-	-
7	0.35	BU/BN	3161	Parallel Park Assist Disable Switch Signal	I	-
8	0.35	WH	6816	Indicator Dimming Control	I	-
9	0.35	BK	1450	Ground	I	-
10	0.35	YE	6817	LED Backlight Dimming Control	I	-

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S52 Outside Rearview Mirror Switch



Connector Part Information

- Harness Type: Driver Door Trim
- OEM Connector: 19151154
- Service Connector: Service by Harness - See Part Catalog
- Description: 12-Way F 64 Series, Sealed (GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

S52 Outside Rearview Mirror Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	WH/GY	2615	LED Backlight Dimming Control	I	DL6/DP2/DR9
2-4	—	—	—	Not Occupied	—	—
5	0.35	VT/BK WH	3404 3398	Driver Mirror Switch Right (+) Left (-) Signal	I I	DM7/DR3

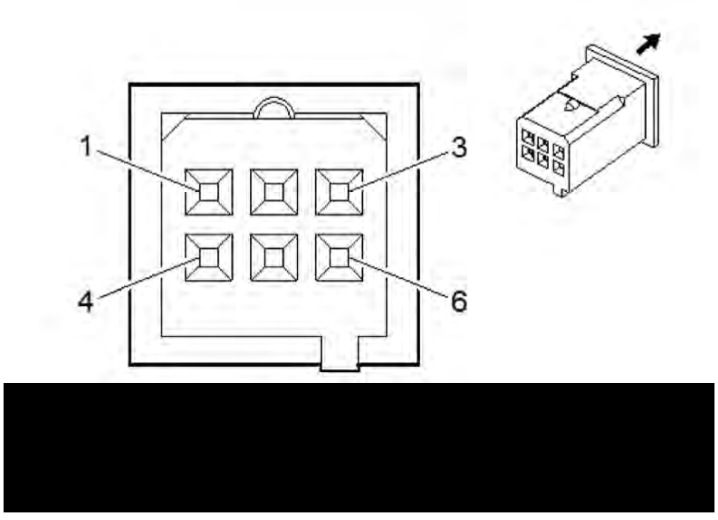
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
		YE/BN	3391	Co-Driver Mirror Motor Common Control Driver Mirror Motor Common Control	I	Left Hand Drive with DL6/DP2/DR9 Right Hand Drive with DL6/DP2/DR9
6	0.35	YE/GY YE/BN WH	1382 3391 3398	LED Dimming Signal Driver Mirror Motor Common Control Co-Driver Mirror Motor Common Control	I I I	DM7/DR3 Left Hand Drive with DL6/DP2/DR9 Right Hand Drive with DL6/DP2/DR9
7	0.35	YE/VT VT/BU	3397 3390	Co-Driver Mirror Motor Up (+) Down (-) Control Driver Mirror Motor Up (+) Down (-) Control	I I	Left Hand Drive with DL6/DP2/DR9 Right Hand Drive with DL6/DP2/DR9
8	0.35	VT/BU YE/VT	3390 3397	Driver Mirror Motor Up (+) Down (-) Control Co-Driver Mirror Motor Up (+) Down (-) Control	I I	Left Hand Drive with DL6/DP2/DR9 Right Hand Drive with DL6/DP2/DR9
9	0.35	GN/BK BN/BK	3396 3389	Co-Driver Mirror Motor Right (+) Left (-) Control Driver Mirror Motor Right (+) Left (-) Control	I I	Left Hand Drive with DL6/DP2/DR9 Right Hand Drive with DL6/DP2/DR9
10	0.35	BN/BK GN/BK	3389 3396	Driver Mirror Motor Right (+) Left (-) Control Co-Driver Mirror Motor Right (+) Left (-) Control	I I	Left Hand Drive with DL6/DP2/DR9 Right Hand Drive with DL6/DP2/DR9
11	0.35 0.5	BK/VT BK	5478 2150	Mirror Switch Low Reference Ground	I I	DM7/DR3 DL6/DP2/DR9
12	0.35 0.5	WH/VT RD/VT	3405 1940	Driver Mirror Switch Up (-) Down (+) Signal Battery Positive Voltage	I I	DM7/DR3 DL6/DP2/DR9

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S58B Rear Compartment Lid Unlatch Switch – Interior (F19/F69 and F80 with E95)



Connector Part Information

- Harness Type: Driver Door Trim
- OEM Connector: 13225892
- Service Connector: Service by Harness - See Part Catalog
- Description: 6-Way F 0.64 Micro-Quadlock Series (NA)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

S58B Rear Compartment Lid Unlatch Switch – Interior (F19/F69 and F80 with E95)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	VT/BU	6189	Lift Glass/Trunk Interior Release Signal	I	—
2	0.35	BK	2150	Ground	I	—
3-5	—	—	—	Not Occupied	—	—

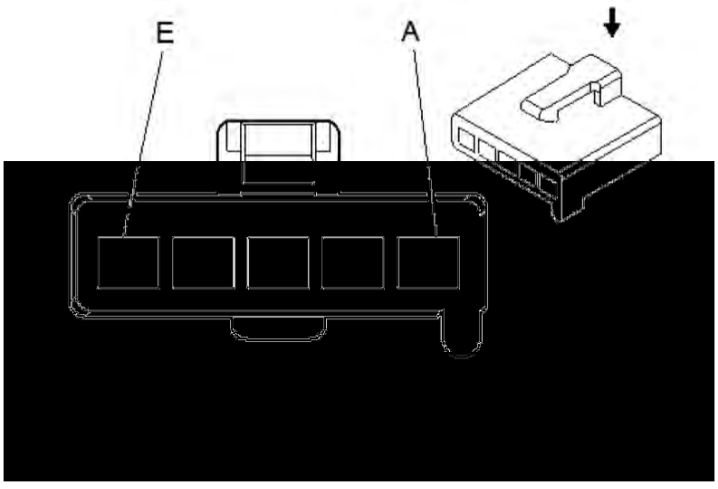
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
6	0.35	YE	6817	LED Backlight Dimming Control	I	—

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S64D Seat Adjuster Switch – Driver (AH6)



Connector Part Information

- Harness Type: Driver Seat
- OEM Connector: 12041429
- Service Connector: Service by Harness - See Part Catalog
- Description: 5-Way F Metri-Pack 280 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-4A (PU)	12094430

S64D Seat Adjuster Switch – Driver (AH6)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1.5	BK	2250 2150	Ground Ground	I I	RHD LHD
B	1.5	GY/BU	283	Driver Power Seat Rear Vertical Motor Down Control	I	—
C	1.5	BK	2250	Ground	I	RHD

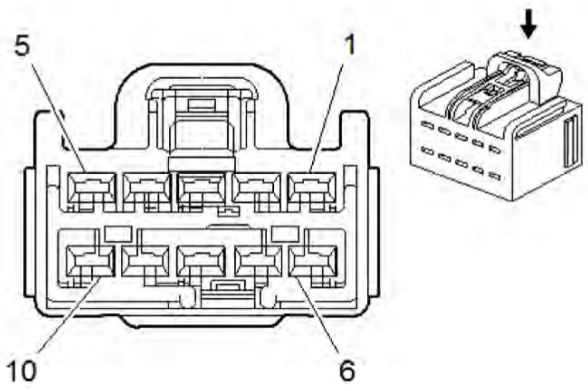
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
			2150	Ground	I	LHD
D	1.5	RD/GY	1342	Battery Positive Voltage	I	—
E	1.5	YE	282	Driver Power Seat Rear Vertical Motor Up Control	I	—

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S64D Seat Adjuster Switch – Driver X1 (A45 and LHD)



Connector Part Information

- Harness Type: Driver Seat
- OEM Connector: 7283-6457-40
- Service Connector: Service by Harness - See Part Catalog
- Description: 10-Way F Kaizen YESC Series (L-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

S64D Seat Adjuster Switch – Driver X1 (A45 and LHD)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	L-GN/BN	1518	Power Seat Front Vertical Up Switch Signal	I	—
2	—	—	—	Not Occupied	—	—
3	0.35	YE/BN	1522	Power Seat Horizontal Forward Switch Signal	I	—

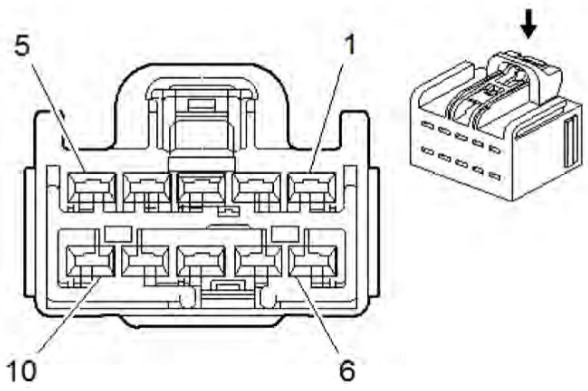
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4	0.35	GY/BK	1269	Power Seat Recline Forward Switch Signal	I	—
5	0.35	L-BU/VT	1520	Power Seat Front Vertical Down Switch Signal	I	—
6	0.35	BK	2150	Ground	I	—
7	0.35	GY/L-GN	1523	Power Seat Horizontal Rearward Switch Signal	I	—
8	0.35	YE	1519	Power Seat Rear Vertical Up Switch Signal	I	—
9	0.35	L-GN/GY	1270	Power Seat Recline Rearward Switch Signal	I	—
10	0.35	YE/L-BU	1521	Power Seat Rear Vertical Down Switch Signal	I	—

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S64D Seat Adjuster Switch – Driver X1 (A45 and RHD)



Connector Part Information

- Harness Type: Driver Seat
- OEM Connector: 7283-6457-40
- Service Connector: Service by Harness - See Part Catalog
- Description: 10-Way F Kaizen YESC Series (L-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

S64D Seat Adjuster Switch – Driver X1 (A45 and RHD)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	L-BU/VT	1520	Power Seat Front Vertical Down Switch Signal	I	—
2	0.35	GY/BK	1269	Power Seat Recline Forward Switch Signal	I	—
3	0.35	YE/BN	1522		I	—

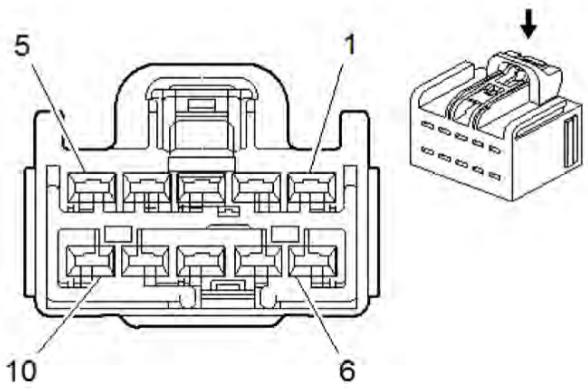
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Power Seat Horizontal Forward Switch Signal		
4	0.35	L-GN/BN	1518	Power Seat Front Vertical Up Switch Signal	I	—
5	—	—	—	Not Occupied	—	—
6	0.35	YE/L-BU	1521	Power Seat Rear Vertical Down Switch Signal	I	—
7	0.35	L-GN/GY	1270	Power Seat Recline Rearward Switch Signal	I	—
8	0.35	YE	1519	Power Seat Rear Vertical Up Switch Signal	I	—
9	0.35	GY/L-GN	1523	Power Seat Horizontal Rearward Switch Signal	I	—
10	0.35	BK	2250	Ground	I	—

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S64D Seat Adjuster Switch – Driver X1 (AH5 and LHD)



Connector Part Information

- Harness Type: Driver Seat
- OEM Connector: 7283-6457-40
- Service Connector: Service by Harness - See Part Catalog
- Description: 10-Way F Kaizen YESC Series (L-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

S64D Seat Adjuster Switch – Driver X1 (AH5 and LHD)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	GN/BN	286	Driver Power Seat Front Vertical Motor Up Control	I	—
2	1.5	BK	2150	Ground	I	—
3	1.5	YE/BU	285	Driver Power Seat Horizontal Motor Forward Control	I	—

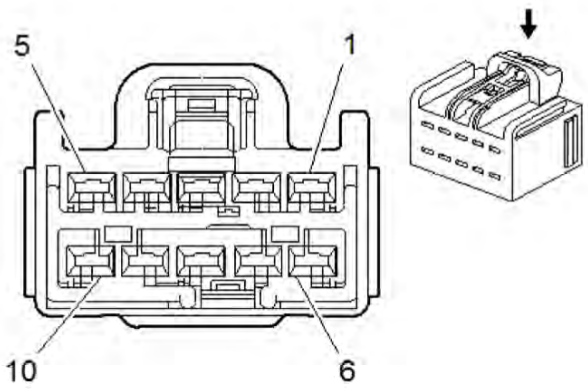
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4	1.5	GN/YE	276	Driver Power Seat Recline Motor Forward Control	I	—
5	1.5	BU/VT	287	Driver Power Seat Front Vertical Motor Down Control	I	—
6	1.5	RD/GY	1342	Battery Positive Voltage	I	—
7	1.5	GN/GY	284	Driver Power Seat Horizontal Motor Rearward Control	I	—
8	1.5	YE	282	Driver Power Seat Rear Vertical Motor Up Control	I	—
9	1.5	BU/YE	277	Driver Power Seat Recline Motor Rearward Control	I	—
10	1.5	GY/BU	283	Driver Power Seat Rear Vertical Motor Down Control	I	—

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S64D Seat Adjuster Switch – Driver X1 (AH5 and RHD)



Connector Part Information

- Harness Type: Driver Seat
- OEM Connector: 7283-6457-40
- Service Connector: Service by Harness - See Part Catalog
- Description: 10-Way F Kaizen YESC Series (L-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

S64D Seat Adjuster Switch – Driver X1 (AH5 and RHD)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	BU/VT	287	Driver Power Seat Front Vertical Motor Down Control	I	—
2	1.5	GN/YE	276	Driver Power Seat Recline Motor Forward Control	I	—
3	1.5	YE/BU	285		I	—

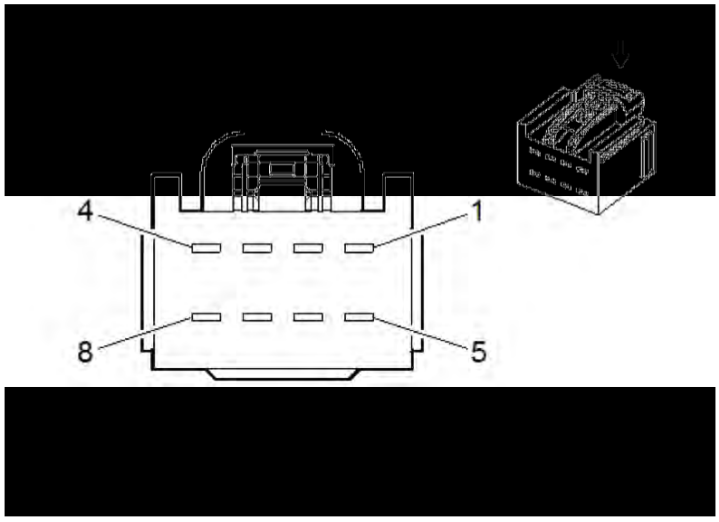
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Driver Power Seat Horizontal Motor Forward Control		
4	1.5	GN/BN	286	Driver Power Seat Front Vertical Motor Up Control	I	—
5	1.5	BK	2150	Ground	I	—
6	1.5	GY/BU	283	Driver Power Seat Rear Vertical Motor Down Control	I	—
7	1.5	BU/YE	277	Driver Power Seat Recline Motor Rearward Control	I	—
8	1.5	YE	282	Driver Power Seat Rear Vertical Motor Up Control	I	—
9	1.5	GY/GN	284	Driver Power Seat Horizontal Motor Rearward Control	I	—
10	1.5	RD/GY	1342	Battery Positive Voltage	I	—

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S64D Seat Adjuster Switch – Driver X2 (A45/AL9)



Connector Part Information

- Harness Type: Driver Seat
- OEM Connector: 7283-3243-40
- Service Connector: Service by Harness - See Part Catalog
- Description: 8-Way F (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

S64D Seat Adjuster Switch – Driver X2 (A45/AL9)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	0.35	YE	1065	Driver Seat Lumbar Forward Switch Signal	I	LHD
3	0.35	BU/VT	1064	Driver Seat Lumbar Rearward Switch Signal	I	RHD

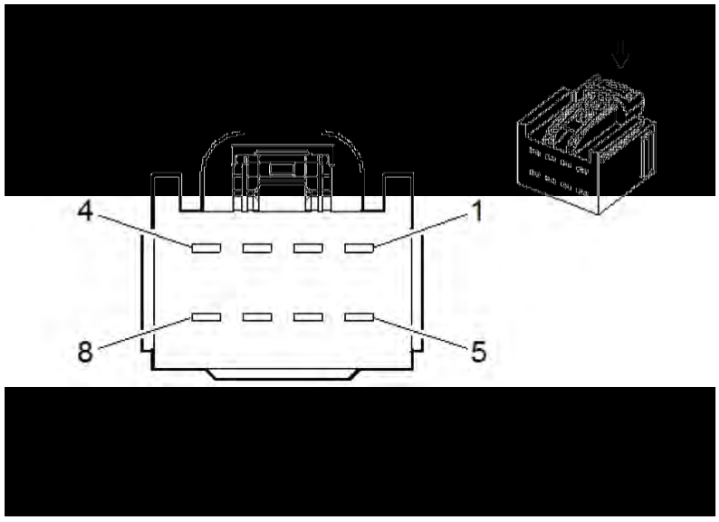
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4–5	—	—	—	Not Occupied	—	—
6	0.35	YE BU/VT	1065 1064	Driver Seat Lumbar Forward Switch Signal Driver Seat Lumbar Rearward Switch Signal	I I	RHD LHD
7–8	—	—	—	Not Occupied	—	—

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S64D Seat Adjuster Switch – Driver X2 (AH5/AL9 and LHD)



Connector Part Information

- Harness Type: Driver Seat
- OEM Connector: 7283-3243-40
- Service Connector: Service by Harness - See Part Catalog
- Description: 8-Way F (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

S64D Seat Adjuster Switch – Driver X2 (AH5/AL9 and LHD)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	1.5	BU	611	Driver Power Seat Lumbar Motor Forward Control	I	—
3–5	—	—	—	Not Occupied	—	—

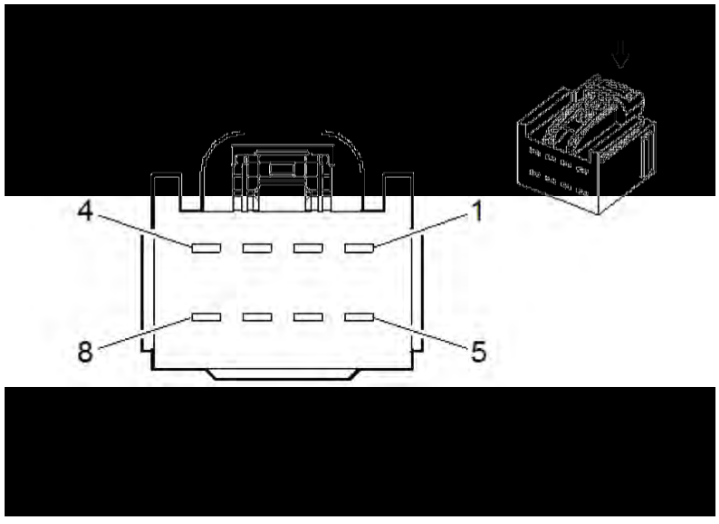
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
6	1.5	VT	610	Driver Power Seat Lumbar Motor Rearward Control	I	—
7–8	—	—	—	Not Occupied	—	—

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S64D Seat Adjuster Switch – Driver X2 (AH5/AL9 and RHD)



Connector Part Information

- Harness Type: Driver Seat
- OEM Connector: 7283-3243-40
- Service Connector: Service by Harness - See Part Catalog
- Description: 8-Way F (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

S64D Seat Adjuster Switch – Driver X2 (AH5/AL9 and RHD)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1–2	—	—	—	Not Occupied	—	—
3	1.5	VT	610	Driver Power Seat Lumbar Motor Rearward Control	I	—
	—	—	—	Not Occupied	—	—

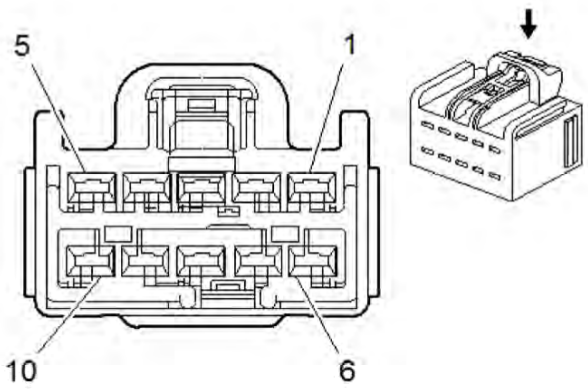
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4–5						
6	1.5	BU	611	Driver Power Seat Lumbar Motor Forward Control	I	—
7–8	—	—	—	Not Occupied	—	—

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S64P Seat Adjuster Switch – Passenger X1 (AH8 and LHD)



Connector Part Information

- Harness Type: Passenger Seat
- OEM Connector: 7283-6457-40
- Service Connector: Service by Harness - See Part Catalog
- Description: 5-Way F Metri Pack 280 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

S64P Seat Adjuster Switch – Passenger X1 (AH8 and LHD)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	GN/BU	298	Passenger Power Seat Front Vertical Motor Down Control	I	—
2	1.5	GN	76	Passenger Power Seat Recline Motor Forward	I	—
3	1.5	YE/WH	296		I	—

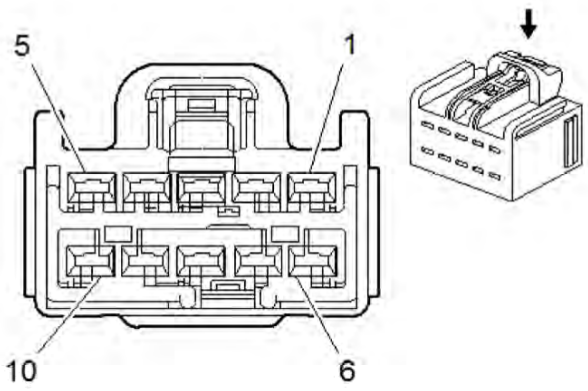
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Passenger Power Seat Horizontal Motor Forward Control		
4	1.5	GN/VT	297	Passenger Power Seat Front Vertical Motor Up Control	I	—
5	1.5	BK	2250	Ground	I	—
6	1.5	BU/WH	289	Passenger Power Seat Rear Vertical Motor Down Control	I	—
7	1.5	BU/BN	77	Passenger Power Seat Recline Motor Rearward	I	—
8	1.5	GN/WH	288	Passenger Power Seat Rear Vertical Motor Up Control	I	—
9	1.5	YE/BU	290	Passenger Power Seat Horizontal Motor Rearward Control	I	—
10	1.5	RD/GY	1042	Battery Positive Voltage	I	—

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S64P Seat Adjuster Switch – Passenger X1 (AH8 and RHD)



Connector Part Information

- Harness Type: Passenger Seat
- OEM Connector: 7283-6457-40
- Service Connector: Service by Harness - See Part Catalog
- Description: 10-Way F Kaizen YESC Series (L-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

S64P Seat Adjuster Switch – Passenger X1 (AH8 and RHD)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	GN/VT	297	Passenger Power Seat Front Vertical Motor Up Control	I	—
2	1.5	BK	2250	Ground	I	—
3	1.5	YE/WH	296		I	—

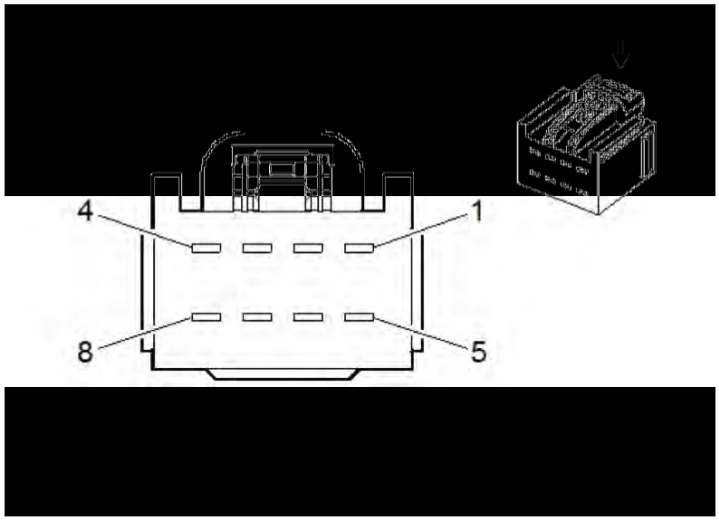
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Passenger Power Seat Horizontal Motor Forward Control		
4	1.5	GN	76	Passenger Power Seat Recline Motor Forward	I	—
5	1.5	GN/BU	298	Passenger Power Seat Front Vertical Motor Down Control	I	—
6	1.5	RD/GY	1042	Battery Positive Voltage	I	—
7	1.5	YE/BU	290	Passenger Power Seat Horizontal Motor Rearward Control	I	—
8	1.5	GN/WH	288	Passenger Power Seat Rear Vertical Motor Up Control	I	—
9	1.5	BU/BN	77	Passenger Power Seat Recline Motor Rearward	I	—
10	1.5	BU/WH	289	Passenger Power Seat Rear Vertical Motor Down Control	I	—

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S64P Seat Adjuster Switch – Passenger X2 (AH8/AT9 and LHD)



Connector Part Information

- Harness Type: Passenger Seat
- OEM Connector: 7283-3243-40
- Service Connector: Service by Harness - See Part Catalog
- Description: 8-Way F (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

S64P Seat Adjuster Switch – Passenger X2 (AH8/AT9 and LHD)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1–2	—	—	—	Not Occupied	—	—
3	1.5	VT	210	Passenger Power Seat Lumbar Motor Rearward Control	I	—
	—	—	—	Not Occupied	—	—

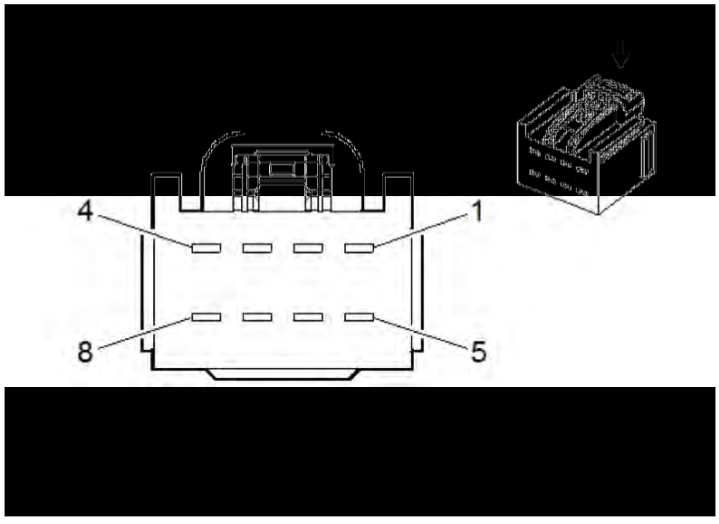
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4–5						
6	1.5	BU	211	Passenger Power Seat Lumbar Motor Forward Control	I	—
7–8	—	—	—	Not Occupied	—	—

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S64P Seat Adjuster Switch – Passenger X2 (AH8/AT9 and RHD)



Connector Part Information

- Harness Type: Passenger Seat
- OEM Connector: 7283-3243-40
- Service Connector: Service by Harness - See Part Catalog
- Description: 8-Way F (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

S64P Seat Adjuster Switch – Passenger X2 (AH8/AT9 and RHD)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	—	Not Occupied	—	—
2	1.5	BU	211	Passenger Power Seat Lumbar Motor Forward Control	I	—
3–5	—	—	—	Not Occupied	—	—

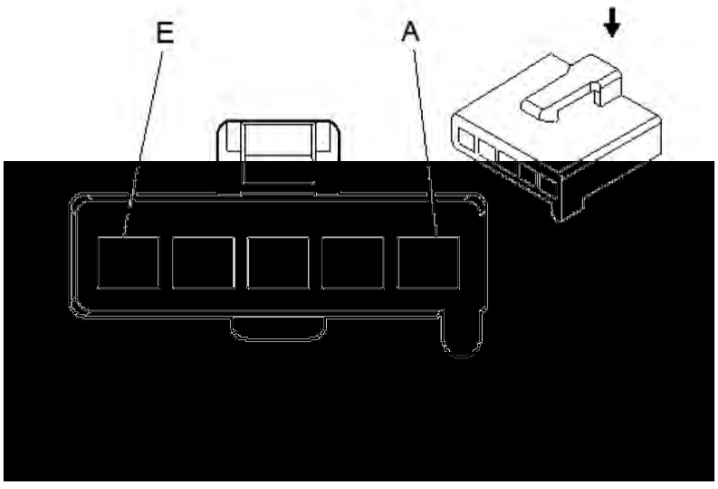
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
6	1.5	VT	210	Passenger Power Seat Lumbar Motor Rearward Control	I	—
7–8	—	—	—	Not Occupied	—	—

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S65D Seat Lumbar Support Switch – Driver (AH6 with AL9)



Connector Part Information

- Harness Type: Driver Seat
- OEM Connector: 12041429
- Service Connector: Service by Harness - See Part Catalog
- Description: 5-Way F Metri-Pack 280 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-4A (PU)	12094430

S65D Seat Lumbar Support Switch – Driver (AH6 with AL9)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1.5	BK	2250 2150	GroundGround	II	RHD LHD
B	1.5	VT BU	610 611	Driver Power Seat Lumbar Motor Rearward Control Driver Power Seat Lumbar Motor Forward Control	I I	Right Hand Drive

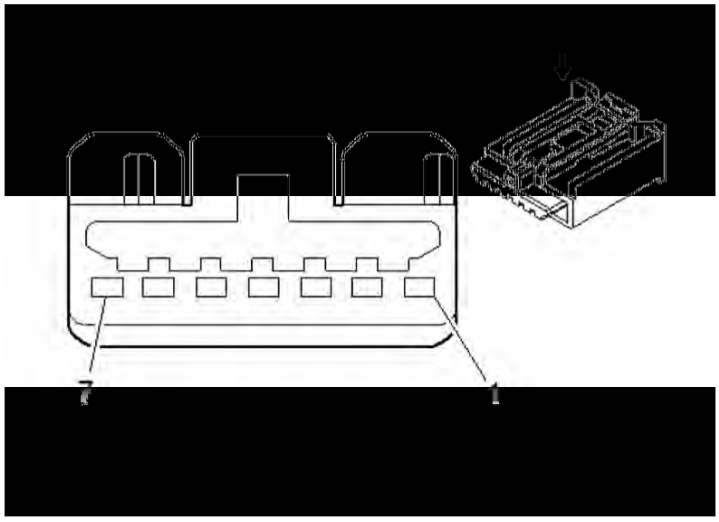
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
						Left Hand Drive
C	1.5	BK	2250 2150	GroundGround	I I	RHD LHD
D	1.5	RD/GY	1342	Battery Positive Voltage	I	—
E	1.5	BU VT	611 610	Driver Power Seat Lumbar Motor Forward Control Driver Power Seat Lumbar Motor Rearward Control	I I	Right Hand Drive Left Hand Drive

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S70L Steering Wheel Controls Switch – Left



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Connector Part Information

- Harness Type: Steering Wheel
- OEM Connector: 88988919
- Service Connector: Service by Harness - See Part Catalog
- Description: 7-Way F 0.64 Series (NA)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

S70L Steering Wheel Controls Switch – Left

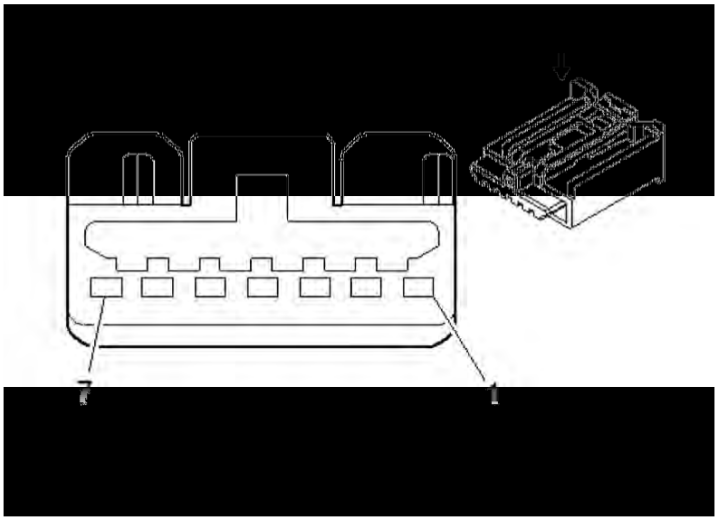
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	WH/RD	1444	12 Volt Reference	I	-
2	0.35	GN	3153	Lane Departure Warning Disable Switch Signal	I	-
3	0.35	BN/GN	1884		I	-

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Cruise Control Set/Coast/Resume/Accelerate Switch Signal		
4	0.35	WH	6816	Steering Wheel Resistor Ladder Signal #1	I	-
5	0.35	WH	3152	Lane Departure Warning Indicator Control	I	-
6	0.35	YE	6136	Supply Voltage	I	-
7	0.35	BK	1350	Ground	I	-

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S70R Steering Wheel Controls Switch – Right



Connector Part Information

- Harness Type: Steering Wheel
- OEM Connector: 15269798
- Service Connector: Service by Harness - See Part Catalog
- Description: 6-Way F AIT II Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

S70R Steering Wheel Controls Switch – Right

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	WH/RD	1444	12 Volt Reference	I	-
2	0.35	GN	6818	Steering Wheel Resistor Ladder Signal #1	I	-
3	—	—	—	Not Occupied	—	—

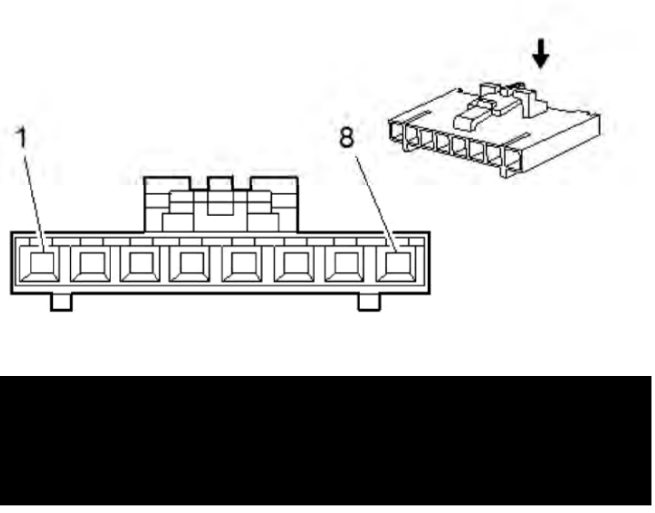
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4	0.35	YE	6136	Supply Voltage	I	-
5	0.35	BK	1350	Ground	I	-
6	—	—	—	Not Occupied	—	—

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S72 Sunroof Switch (CF5)



[redacted]

Connector Part Information

- Harness Type: Headliner
- OEM Connector: 50-57-9408
- Service Connector: 89046705
- Description: 8-Way F SL Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-64B (L-BU)	J-38125-213

S72 Sunroof Switch (CF5)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BN/BU	2074	Sunroof Switch Express Signal	I	—
2	0.35	YE/VT	144	Sunroof Switch Open Vent Signale	I	—
3	0.35	YE	6817	LED Backlight Dimming Control	I	—
4	0.35	BU/WH	110	Sunroof Switch Close Signal	I	—

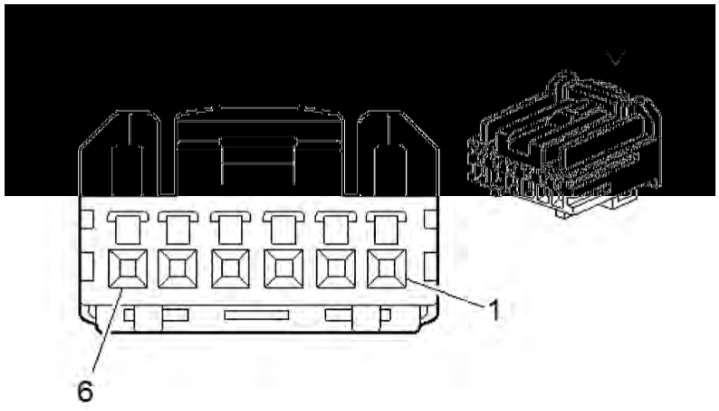
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
5	0.5	BK	2250	Ground	I	—
6	0.35	GN/WH	100	Sunroof Switch Open Signal	I	—
7	—	—	—	Not Occupied	—	—
8	0.35	BU/WH	110	Sunroof Switch Close Signal	—	—

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S73 Suspension Mode Switch (V5B)



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Connector Part Information

- Harness Type: Center Console
- OEM Connector: 19115685
- Service Connector: Service by Harness - See Part Catalog
- Description: 6-Way F 1.2 HCM Series (NA)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

S73 Suspension Mode Switch (V5B)

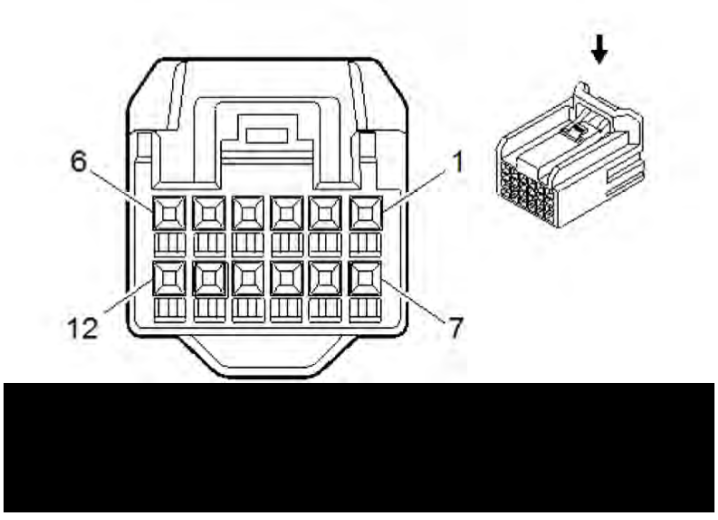
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	—	—	2555	Not Occupied	—	—
2	0.35	YE	6817	LED Backlight Dimming Control	I	—
3	0.35	BU/GY	9361	Shift Select Switch Performance Signal	I	—

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4	0.13	BU	1788	Traction Control Switch Signal	I	—
5	0.35	BU/GY	9362	Shift Select Switch Performance Signal	I	—
6	0.35	BK	1450	Ground	I	—

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S78 Turn Signal Multifunction Switch



[redacted]

Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 19167197
- Service Connector: 13576635
- Description: 12-Way F 0.64 Series BK

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13579954	J-35616-35 (VT)	J-38125-215A
II	13575259	J-35616-35 (VT)	Not Available

S78 Turn Signal Multifunction Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.13	WH	663	Hazard Switch Left Turn Signal	I	-
2	0.13	WH	524	Headlamp Dimmer Switch High Beam Signal	I	-

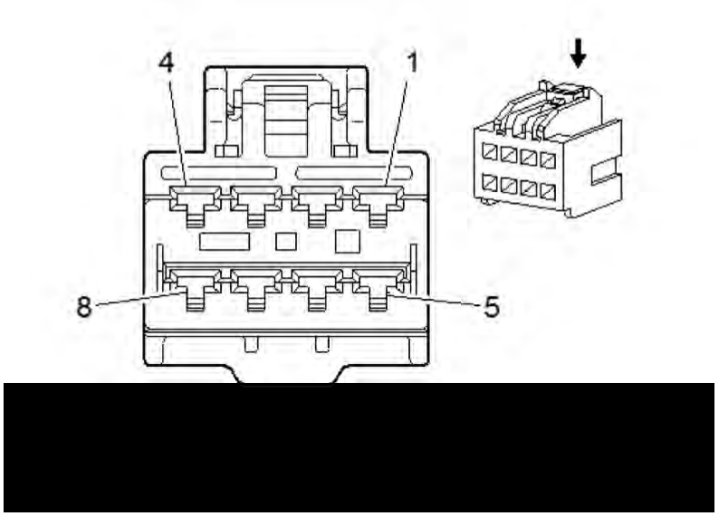
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
3	0.35	BK	1450	Ground	II	-
4	0.13	YE	307	Headlamp Switch Flash To Pass Signal	I	-
5	0.35	GY/BU	893	Driver Information Center Select Menu Switch Signal	II	-
6	0.35	BK/BN	897	Driver Information Center Switch Low Reference	II	-
7	0.13	VT	664	Hazard Switch Right Turn Signal	I	-
8-11	-	-	-	Not Occupied	-	-
12	0.35	GN/WH	1358	Driver Information Center Switch Signal	II	-

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S79D Window Switch - Driver (Express Down)



Connector Part Information

- Harness Type: Driver Door
- OEM Connector: 15134093
- Service Connector: Service by Harness – See Part Catalog
- Description: 8-Way F 2.8 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	J-38125-553

S79D Window Switch - Driver (Express Down)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	BK	2150	Ground	I	—
2	1.5	GN/GY	3382	Power Window Motor Driver Up Control	I	—
3	1.5	YE/VT	3383	Power Window Motor Driver Down Control	I	—

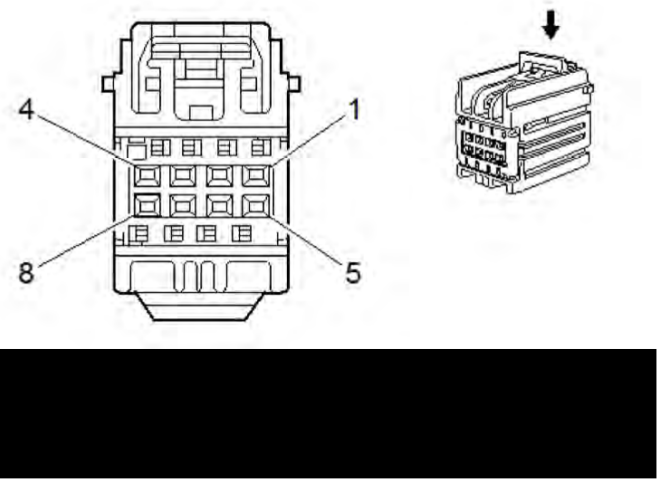
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4	1.5	RD/BU	1842	Battery Positive Voltage	I	—
5	0.35	GN/YE	6134	Local Interconnect Network Bus 3	I	—
6	0.35	GY	746 745	Right Front Door Ajar Switch Signal Left Front Door Ajar Switch Signal	I I	Right Hand Drive Left Hand Drive
7	0.35	WH/VT	3270	Driver Door Lock Motor Status	I	—
8	0.35	BU/VT	1124	Door Lock Key Switch Unlock Signal	I	—

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S79D Window Switch - Driver (Express Up/Down)



Connector Part Information

- Harness Type: Driver Door Trim
- OEM Connector: 89047354
- Service Connector: Service by Harness - See Part Catalog
- Description: 8-Way F YESC Kaizen Series (L-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

S79D Window Switch - Driver (Express Up/Down)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	2150	Ground	I	—
2	0.35	GN	3381	Power Window Switch Driver Express Signal	I	—
3	0.35	GY	3380	Power Window Switch Driver Down Signal	I	—

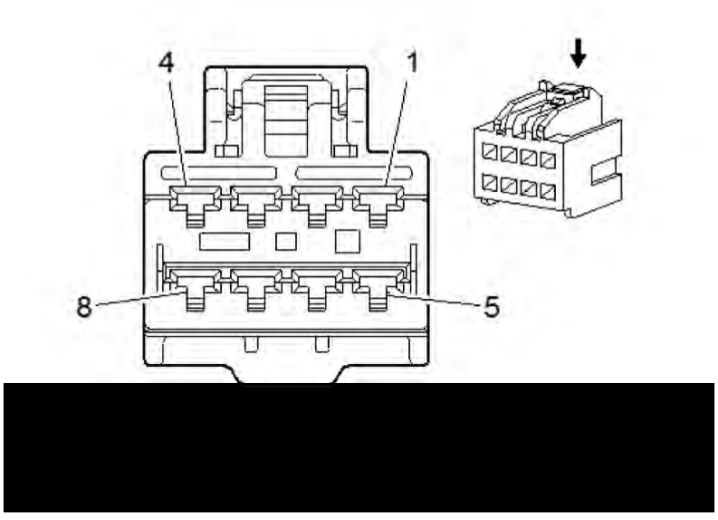
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4	0.5	RD/VT	1940	Battery Positive Voltage	I	—
5	0.35	GN/YE	6134	Local Interconnect Network Bus 3	I	—
6	0.35	GN/WH	3379	Power Window Switch Driver Up Signal	I	—
7	0.35	WH/VT	3270	Driver Door Lock Motor Status	I	—
8	0.35	BU/VT	1124	Door Lock Key Switch Unlock Signal	I	—

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S79LR Window Switch – Left Rear



Connector Part Information

- Harness Type: Left Rear Door
- OEM Connector: 15134093
- Service Connector: Service by Harness - See part Catalog
- Description: 8-Way F 2.8 Series BK

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available
II	Not Available	J-35616-35 (VT)	Not Available

S79LR Window Switch – Left Rear

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN/GY	6135	Linear Interconnect Network Bus 4	I	-
2	0.35	GY	747	Left Rear Door Ajar Switch Signal	I	-

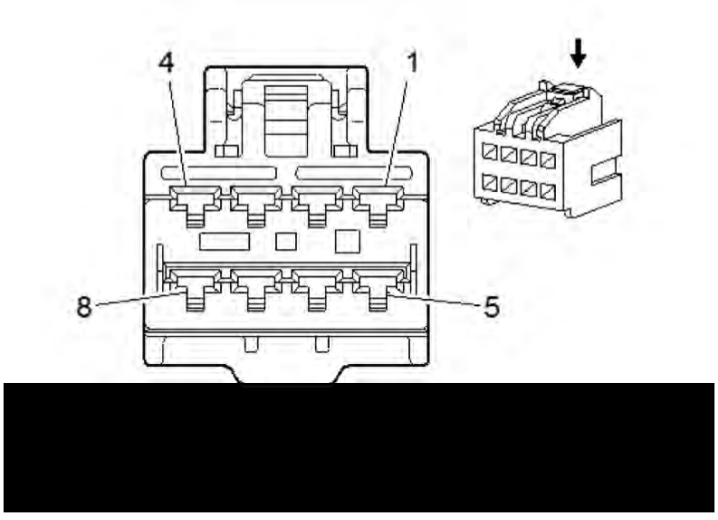
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
3	0.35	BK	2150	Ground	I	-
4	-	-	-	Not Occupied	-	-
5	1.5	BK	2150	Ground	II	-
6	1.5	BU/VT	668	Power Window Motor Left Rear Up Control	II	-
7	1.5	YE/BU	669	Power Window Motor Left Rear Down Control	II	-
8	1.5	RD/BU	1842	Battery Positive Voltage	II	-

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S79P Window Switch - Passenger (Express Down)



Connector Part Information

- Harness Type: Passenger Door Trim
- OEM Connector: 15134093
- Service Connector: Service by Harness - See Part Catalog
- Description: 8-Way F 2.8 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

S79P Window Switch - Passenger (Express Down)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	BK	2150 2250	Ground Ground	I I	Right Hand Drive Left Hand Drive
2	1.5	GN/GY	3387		I	—

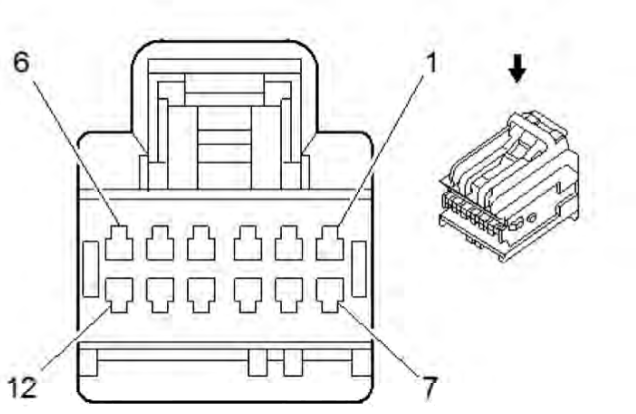
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Power Window Motor Passenger Up Control		
3	1.5	YE/BU	3388	Power Window Motor Passenger Down Control	I	—
4	1.5	RD/WH	1642	Battery Positive Voltage	I	—
5	0.35	GN/YE	6134	Local Interconnect Network Bus 3	I	—
6	1	GY	745 746	Left Front Door Ajar Switch Signal Right Front Door Ajar Switch Signal	II	Right Hand Drive Left Hand Drive
7–8	—	—	—	Not Occupied	—	—

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S79P Window Switch - Passenger (Express Up/Down without A45)



Connector Part Information

- Harness Type: Passenger Door Trim
- OEM Connector: 89047364
- Service Connector: Service by Harness - See Part Catalog
- Description: 12-Way F 0.64 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

S79P Window Switch - Passenger (Express Up/Down without A45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BK	2150 2250	Ground Ground	I I	Right Hand Drive Left Hand Drive
2	0.35	YE	6817	LED Backlight Dimming Control	I	—

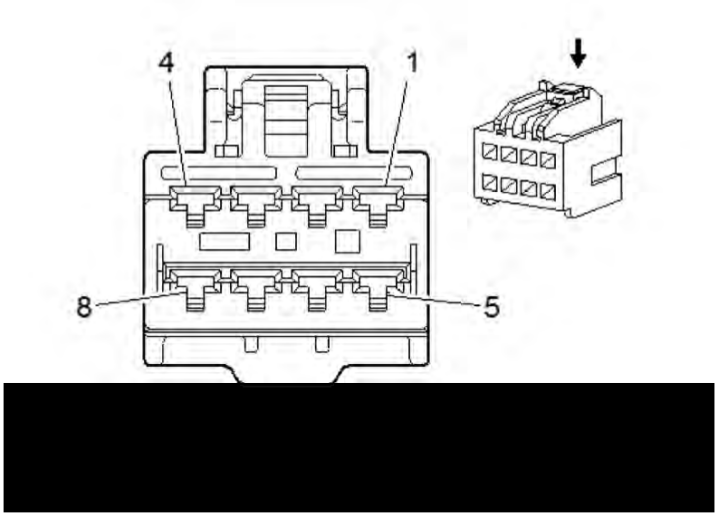
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
3-5	—	—	—	Not Occupied	—	—
6	0.35	VT/GY	2765	Power Window Switch Right Front Express Signal	I	—
7	0.35	BN/YE	167	Power Window Master Switch Right Front Down Signal	I	—
8	0.35	YE/BK	166	Power Window Master Switch Right Front Up Signal	I	—
9-12	—	—	—	Not Occupied	—	—

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S79P Window Switch - Passenger X1 (Express Up/Down with A45)



Connector Part Information

- Harness Type: Passenger Door Trim
- OEM Connector: 15134093
- Service Connector: Service by Harness - See Part Catalog
- Description: 8-Way F 2.8 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

S79P Window Switch - Passenger X1 (Express Up/Down with A45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BK	2150 2250	Ground Ground	I I	Right Hand Drive Left Hand Drive
2	0.35	YE	6817	LED Backlight Dimming Control	I	—

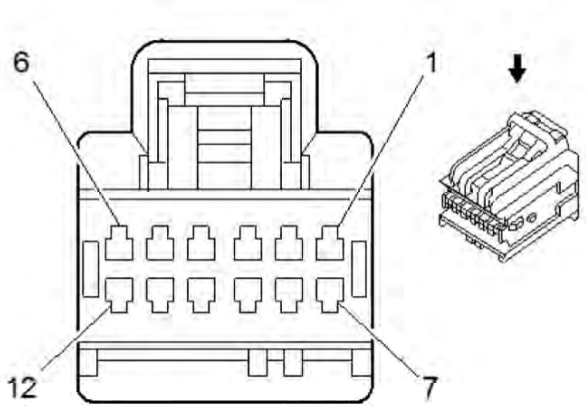
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
3	—	—	—	Not Occupied	—	—
4	0.35	RD/BU	840	Battery Positive Voltage	I	—
5	—	—	—	Not Occupied	—	—
6	0.35	VT/GY	2765	Power Window Switch Right Front Express Signal	I	—
7	0.35	BN/YE	167	Power Window Master Switch Right Front Down Signal	I	—
8	0.35	YE/BK	166	Power Window Master Switch Right Front Up Signal	I	—

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S79P Window Switch - Passenger X2 (Express Up/Down with A45)



Connector Part Information

- Harness Type: Passenger Door Trim
- OEM Connector: 89047364
- Service Connector: Service by Harness - See Part Catalog
- Description: 12-Way F 0.64 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

S79P Window Switch - Passenger X2 (Express Up/Down with A45)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	-	-	-	Not Occupied	-	-
2	0.35	YE/VT	3397	Co-Driver Mirror Motor Up (+) Down (-) Control	I	-
3	0.35	WH	3398	Co-Driver Mirror Motor Common Control	I	-

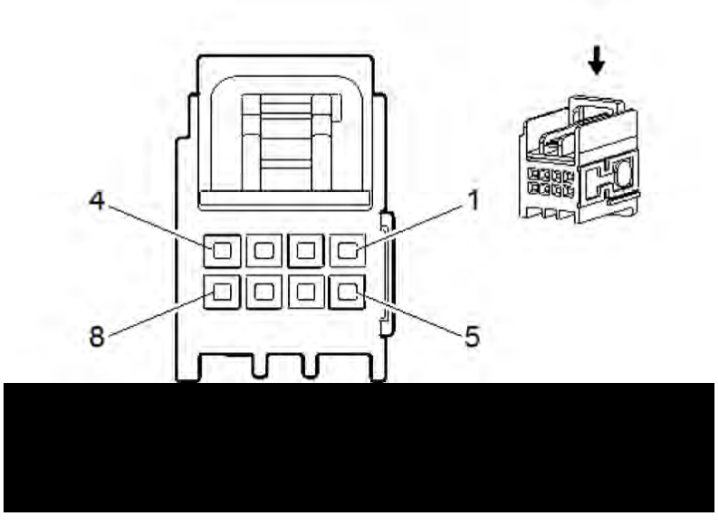
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4	0.35	YE/RD	3399	Co-Driver Mirror Position Sensor High Reference	I	-
5	0.35	BU/YE	3401	Co-Driver Mirror Position Sensor Up (+) Down (-) Signal	I	-
6	0.35	BK/GN	3400	Co-Driver Mirror Position Sensor Low Reference	I	-
7	-	-	-	Not Occupied	-	-
8	0.35	GN/BK	3396	Co-Driver Mirror Motor Right (+) Left (-) Control	I	-
9	0.35	GN/WH	7530	Linear Interconnect Network Bus 8	I	-
10	-	-	-	Not Occupied	-	-
11	0.35	VT/WH	3403	Co-Driver Mirror Position Sensor Left (-) Right (+) Signal	I	-
12	-	-	-	Not Occupied	-	-

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S79P Window Switch - Passenger (LHD)



Connector Part Information

- Harness Type: Passenger Door
- OEM Connector: 13235933
- Service Connector: 13576543
- Description: 8 F 0.64 Series BK with BK cover

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	service by connector assembly -13576543	J-35616-64B (L-BU)	J-38125-215A

S79P Window Switch - Passenger (LHD)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BK	650	Ground	I	LHD
2	0.35	YE	6817	LED Backlight Dimming Control	I	LHD
3-5	-	-	-	Not Occupied	-	-

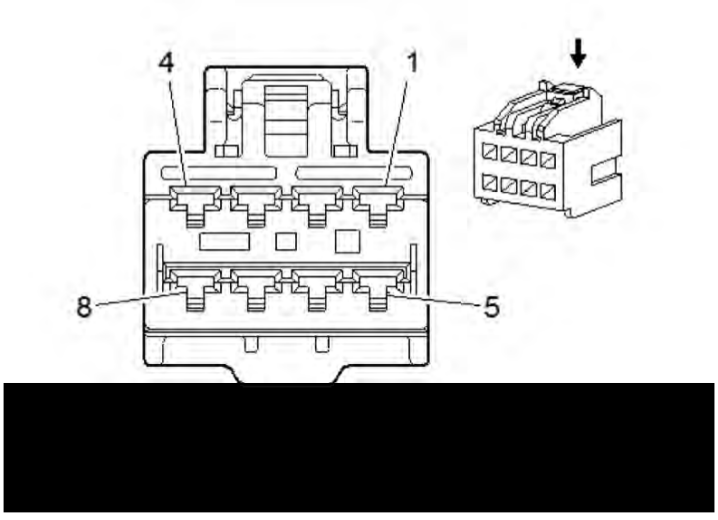
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
6	0.5	VT/GY	3386	Power Window Switch Co-Driver Express Signal	I	LHD
7	0.5	BN/YE	3385	Power Window Switch Co-Driver Down Signal	I	LHD
8	0.5	YE/BK	3384	Power Window Switch Co-Driver Up Signal	I	LHD

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S79RR Window Switch – Right Rear



Connector Part Information

- Harness Type: Left Rear Door
- OEM Connector: 15134093
- Service Connector: Service by Harness - See Part Catalog
- Description: 8-Way F 2.8 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

S79RR Window Switch – Right Rear

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN/GY	6135	Local Interconnect Network Bus 4	I	—
2	0.35	GY	748	Right Rear Door Ajar Switch Signal	I	—
3-4	—	—	—	Not Occupied	—	—
5	1.5	BK	2250	Ground	I	—

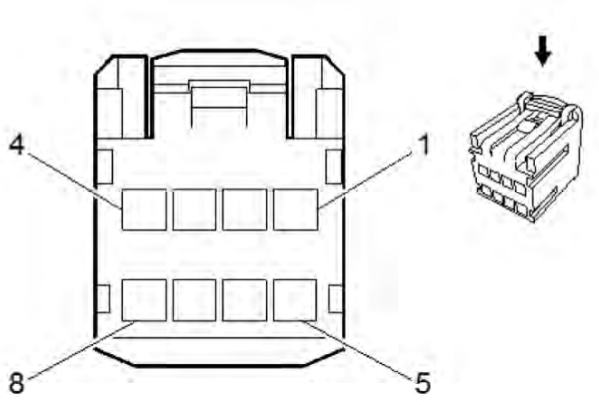
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
6	1.5	BU/GY	670	Power Window Motor Right Rear Up Control	I	—
7	1.5	GN/BK	671	Power Window Motor Right Rear Down Control	I	—
8	1.5	RD/WH	1642	Battery Positive Voltage	I	—

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S82 Windshield Wiper/Washer Switch



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 19153437
- Service Connector: 13576541
- Description: 8-Way F 1.2 HCM Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-16 (L-GN)	Not Available

S82 Windshield Wiper/Washer Switch

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.13	GY	1715	Windshield Wiper Switch High Signal	I	-
2	0.13	BK	6009	Windshield Wiper Switch Low Reference	I	-
3	0.13	YE	1714		I	-

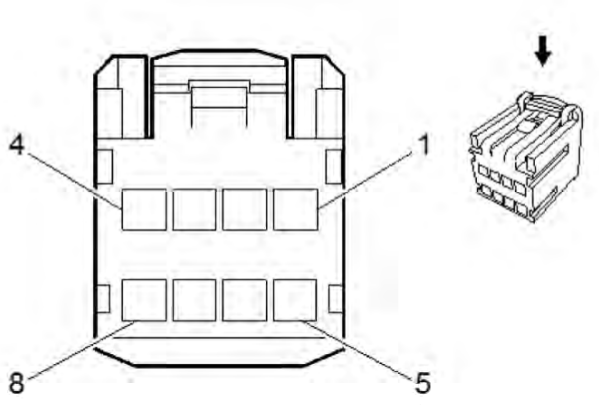
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Windshield Wiper Switch Low Signal		
4	0.35	BN/BU	391	Rear Window Wiper Switch Signal	I	-
5	0.13	WH	94	Windshield Washer Switch Signal	I	-
6-8	-	-	-	Not Occupied	-	-

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S91 Park Brake Control Switch (J77)



Connector Part Information

- Harness Type: Center Console
- OEM Connector: 19153437
- Service Connector: Service by Harness - See Part Catalog
- Description: 8-Way F 1.2 HCM Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-16 (L-GN)	Not Available

S91 Park Brake Control Switch (J77)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.13	YE	1492	Park Brake Switch Supply Voltage	I	-
2	0.13	BU	1134	Park Brake Switch Signal	I	-
3	0.13	YE	7683	Park Brake Release Switch Voltage Reference	I	-

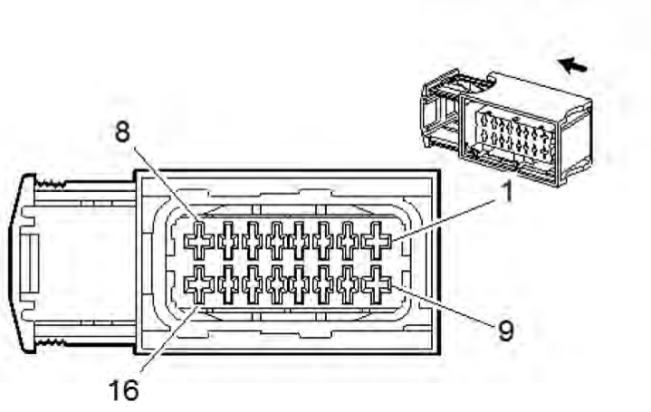
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4	0.13	BN	6107	Park Brake Apply Switch Signal	I	-
5	0.13	BU	6108	Park Brake Release Switch Signal	I	-
6	0.35	YE	6817	LED Backlight Dimming Control	I	-
7	0.13	GY	7684	Park Brake Apply Switch Voltage Reference	I	-
8	0.35	BK	1450	Ground	I	-

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T3 Audio Amplifier X1 (UQA)



Connector Part Information

- Harness Type: Body
- OEM Connector: 185760-4
- Service Connector: 13584254
- Description: 16-Way F 1.5/2.8 SICMA 2 Series (WH)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13584442	J-35616-35 (VT)	J-38125-215A
II	Not Available	Not Available	Not Available

T3 Audio Amplifier X1 (UQA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75 0.75	BU/BK YE/BK	115 117	Right Rear Speaker Signal (-) Right Front Speaker Signal (-) (1)	I	-
2	0.75	WH	46	Right Rear Speaker (+)	I	-

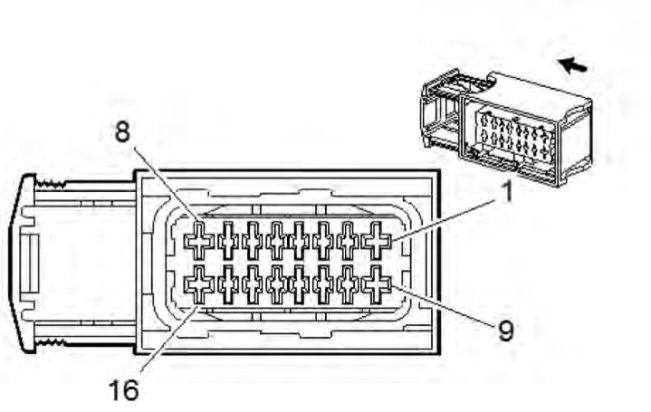
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
	0.75	YE	200	Right Front Speaker (+) (1)		
3-6	-	-	-	Not Occupied	-	-
7	0.35	GN/YE	7066	Entertainment Remote Enable Signal	II	-
8	2.5	BK	2450	Ground	I	-
9	0.75 0.75	GN/BK BN/BU	116 118	Left Rear Speaker Signal (-) Left Front Speaker Signal (-) (1)	I	-
10	0.75 0.75	BU GN	201 199	Left Front Speaker (+) (1) Left Rear Speaker (+)	I	-
11-15	-	-	-	Not Occupied	-	-
16	2.5	RD/VT	4040	Battery Positive Voltage	I	-

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T3 Audio Amplifier X1 (UQG)



Connector Part Information

- Harness Type: Body
- OEM Connector: 185760-4
- Service Connector: 13584254
- Description: 16-Way F 1.5/2.8 SICMA-2 Series (WH)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	TBD	—	—

T3 Audio Amplifier X1 (UQG)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BU/BK YE/BK	115 117	Right Rear Speaker Signal (-) Right Front Speaker Signal (-)	I I	F19/F35/F69 F80
2	0.75	WH YE	46 200	Right Rear Speaker (+) Right Front Speaker (+)	I I	F19/F35/F69 F80
3-6	—	—	—	Not Occupied	—	—

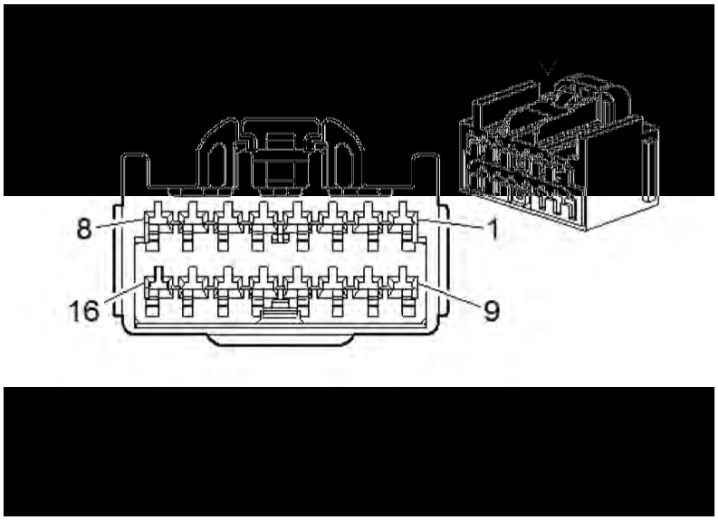
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
7	0.35	GN/YE	7066	Entertainment Remote Enable Signal	I	—
8	2.5	BK	2450	Ground	I	—
9	0.75	GN/BK BN/BU	116 118	Left Rear Speaker Signal (-) Left Front Speaker Signal (-)	I I	F19/F35/F69 F80
10	0.75	GN BU	199 201	Left Rear Speaker (+) Left Front Speaker (+)	I I	F19/F35/F69 F80
11-15	—	—	—	Not Occupied	—	—
16	2.5	RD/VT	4040	Battery Positive Voltage	I	—

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T3 Audio Amplifier X2 (UQA)



Connector Part Information

- Harness Type: Body
- OEM Connector: 15134091
- Service Connector: 15134091
- Description: 16-Way F 1.5 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Pending	Pending	Pending

T3 Audio Amplifier X2 (UQA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	-	-	-	Not Occupied	-	-
2	1 1.00	BN/BU BN	118 118	Left Front Speaker Signal (-) (1) Left Front Speaker Signal (-) (1)	I	UQA UQA
3	1 1.00	YE/BK YE	117 117	Right Front Speaker Signal (-) (1) Right Front Speaker Signal (-) (1)	I	UQA UQA

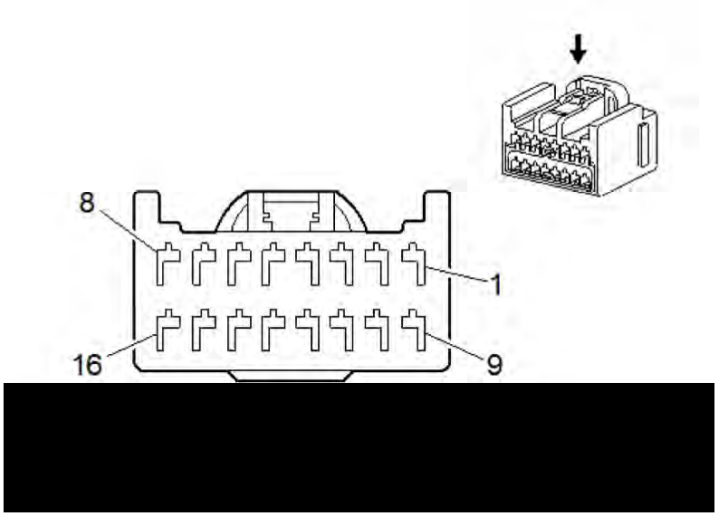
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4	1 1.00	GN/BK GN	116 116	Left Rear Speaker Signal (-) Left Rear Speaker Signal (-)	I	UQA UQA
5	1 1.00	BU/BK BU	115 115	Right Rear Speaker Signal (-) Right Rear Speaker Signal (-)	I	UQA UQA
6	0.75 0.75	BU/YE BU	1960 1960	Front Center Speaker (-) Front Center Speaker (-)	I	UQA UQA
7-9	-	-	-	Not Occupied	-	-
10	1.00 1	BU BU	201 201	Left Front Speaker (+) (1) Left Front Speaker (+) (1)	I	UQA UQA
11	1.00 1	YE YE	200 200	Right Front Speaker (+) (1) Right Front Speaker (+) (1)	I	UQA UQA
12	1 1.00	GN GN	199 199	Left Rear Speaker (+) Left Rear Speaker (+)	I	UQA UQA
13	1 1.00	WH WH	46 46	Right Rear Speaker (+) Right Rear Speaker (+)	I	UQA UQA
14	0.75 0.75	YE YE/WH	1860 1860	Front Center Speaker (+) Front Center Speaker (+)	I	UQA UQA
15-16	-	-	-	Not Occupied	-	-

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T3 Audio Amplifier X2 (UQG)



Connector Part Information

- Harness Type: Body
- OEM Connector: 7283-5534-60
- Service Connector: 89047090
- Description: 16-Way F YESC USCAR Class II Series, Sealed (GN)
- Harness Type: Body
- OEM Connector: 7283-5534-60
- Service Connector: 89047090
- Description: 16-Way F YESC/USCAR Class II Series, Sealed (GN)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575283	J-35616-2A (GY)	J-38125-11A
II	13578892	J-35616-35 (VT)	Not Available

T3 Audio Amplifier X2 (UQG)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BU/BK	115	Right Rear Speaker Signal (-	I	-

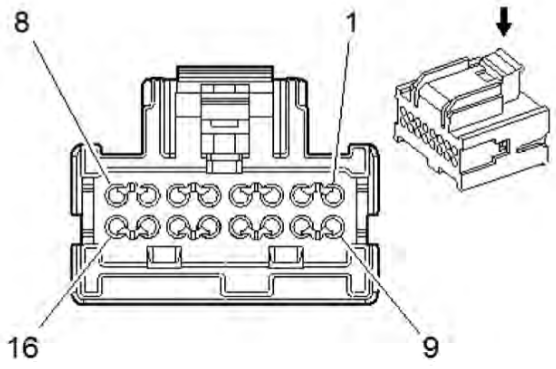
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
2	0.75	WH	46	Right Rear Speaker (+)	I	-
3	0.75	BU/YE	1960	Front Center Speaker (-)	II	-
4	0.75	YE/WH	1860	Front Center Speaker (+)	I	-
5-6	-	-	-	Not Occupied	-	-
7	0.75	YE/BK	117	Right Front Speaker Signal (-) (1)	II	-
8	0.75	YE	200	Right Front Speaker (+) (1)	I	-
9-14	-	-	-	Not Occupied	-	-
15	0.75	GN	199	Left Rear Speaker (+)	II	-
16	0.75	GN/BK	116	Left Rear Speaker Signal (-)	II	-

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T3 Audio Amplifier X3 (UQA)



Connector Part Information

- Harness Type: Body
- OEM Connector: 15394150
- Service Connector: 13504130
- Description: 16-Way F 0.64 Micro Pack Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575238	J-35616-64B (L-BU)	J-38125-21

T3 Audio Amplifier X3 (UQA)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1-3	-	-	-	Not Occupied	-	-
4	0.35	BU/BK	1946	Right Rear Low Level Audio (-)	I	-
5	0.35	BN/VT	1999	Left Rear Low Level Audio (-)	I	-

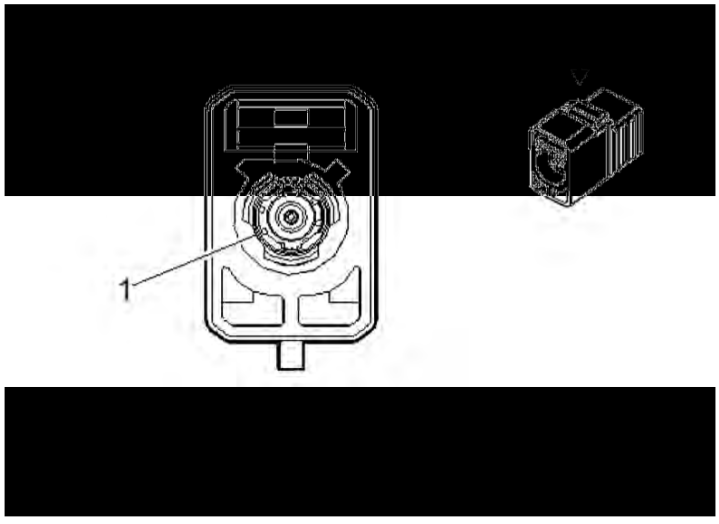
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
6	0.35	BU/BN	1546	Front Low Level Audio (-)	I	-
7	0.35	BN/BU	1947	Left Front Low Level Audio (-)	I	-
8	0.35	GN/YE	7066	Entertainment Remote Enable Signal	I	-
9-10	-	-	-	Not Occupied	-	-
11	0.35	VT/BU	6978	Amplifier Control	I	-
12	0.35	BN/WH	546	Right Rear Low Level Audio Signal	I	-
13	0.35	GN/BK	599	Left Rear Low Level Audio Signal	I	-
14	0.35	YE	512	Right Front Low Level Audio Signal	I	-
15	0.35	BU	511	Left Front Low Level Audio Signal	I	-
16	-	-	-	Not Occupied	-	-

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T4M Radio Antenna



Connector Part Information

- Harness Type: Antenna Extension Harness (F19/F69/F80), Left Liftgate Extension Harness (F35)
- OEM Connector: 13581685
- Service Connector: Service by Harness - See Part Catalog
- Description: 1-Way F Coax Type (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

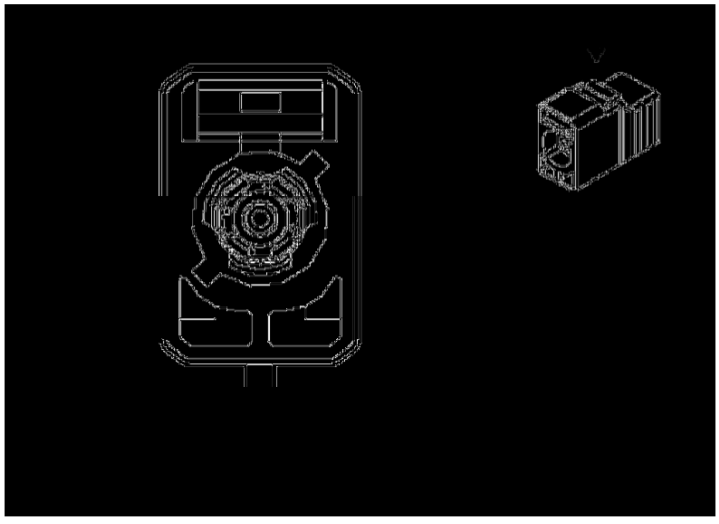
T4M Radio Antenna

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
C	0.5	WH	6001	Antenna RF Signal	I	—
S	0.2	BARE	6015	Antenna RF Drain Wire	I	—

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T4P Navigation Antenna



Connector Part Information

- Harness Type: Body
- OEM Connector: 13581690
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: 1-Way F Coax Type (BU)
- Harness Type: Left Liftgate Extension
- OEM Connector: 13581690
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: 1-Way F Coax Type (BU)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

T4P Navigation Antenna

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
L	0.2	BARE	6757	Coaxial Antenna	I	F35 with UHK or UHM or UHQ without UE1
	0.2	WH	6758	GPS 2 Drain Wire		
	0.2	WH	6758	Coaxial Antenna GPS 2 Signal		F35 with UHK or UHM or UHQ without UE1

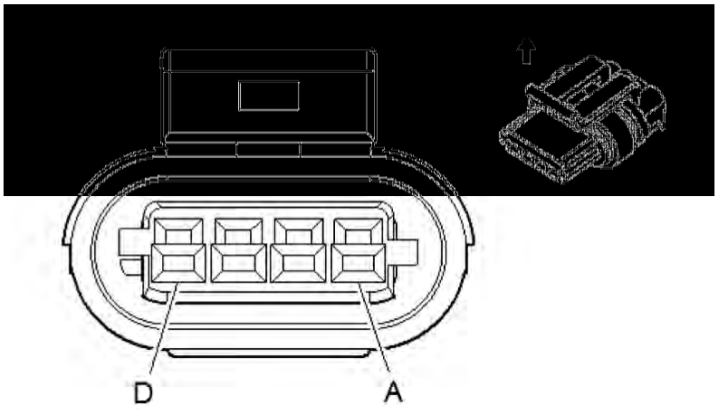
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
	0.2	BARE	6757	Coaxial Antenna GPS 2 Signal Coaxial Antenna GPS 2 Drain Wire		F35 with UHK or UHM or UHQ F35 with UHK or UHM or UHQ

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T8A Ignition Coil 1 (L77/LS3)



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Connector Part Information

- Harness Type: Ignition Coil Odd
- OEM Connector: 15439568
- Service Connector: Service by Harness – See Part Catalog
- Description: 4-Way F GT 150 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	J-38125-553

T8A Ignition Coil 1 (L77/LS3)

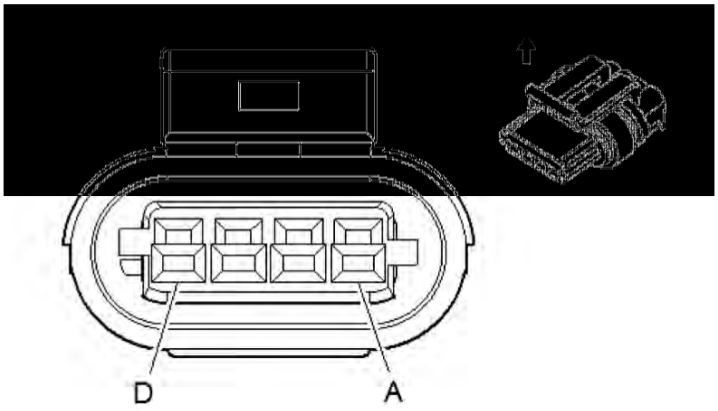
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	BK	250	Ground	I	—
B	0.5	BN	2129	Ignition Control Low Reference Bank 1	I	—
C	0.5	PU	2121	Ignition Control (1)	I	—

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
D	0.8	PK	5291	Powertrain Main Relay Fused Supply (2)	I	—

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T8A Ignition Coil 1 (LSA)



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Connector Part Information

- Harness Type: Ignition Coil Odd
- OEM Connector: 12558693
- Service Connector: Service by Harness - See Part Catalog
- Description: 4-Way F GT 150 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	J-38125-553

T8A Ignition Coil 1 (LSA)

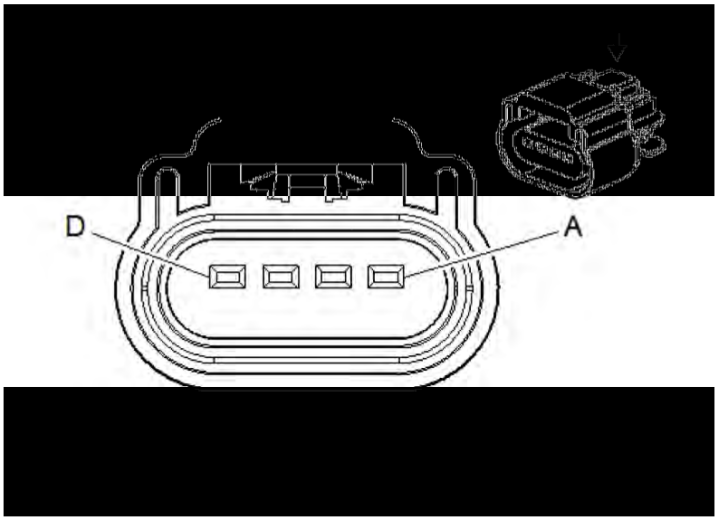
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.8	BK	250	Ground	I	—
2	0.5	BK/BU	2129	Ignition Control Low Reference Bank 1	I	—
3	0.5	BU/VT	2121	Ignition Control (1)	I	—

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4	0.8	VT/BU	5291	Powertrain Main Relay Fused Supply (2)	I	—

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T8A Ignition Coil 1 (LFW/LFX/LWR)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 15466325
- Service Connector: 13585847
- Description: 4-Way F 150 GT Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	Not Available

T8A Ignition Coil 1 (LFW/LFX/LWR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1	BK	350	Ground	I	-
B	0.5	BK/BU	2129	Ignition Control Low Reference Bank 1	I	-
C	0.5	BU/VT	2121	Ignition Control (1)	I	-

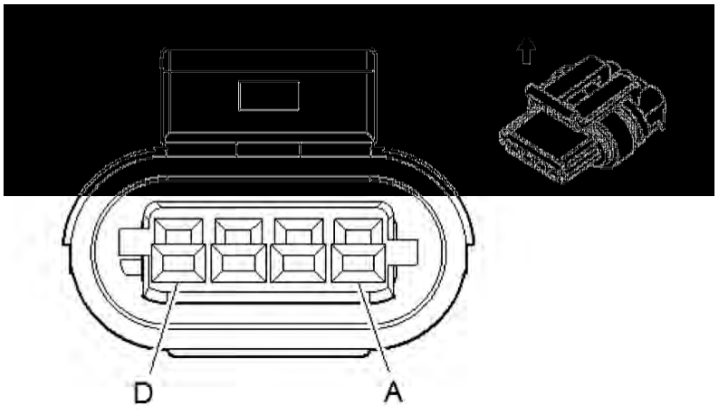
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
D	1	VT/BU	5291	Powertrain Main Relay Fused Supply (2)	I	-

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T8B Ignition Coil 2 (L77/LS3)



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Connector Part Information

- Harness Type: Ignition Coil Odd
- OEM Connector: 15439568
- Service Connector: Service by Harness – See Part Catalog
- Description: 4-Way F GT 150 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	J-38125-553

T8B Ignition Coil 2 (L77/LS3)

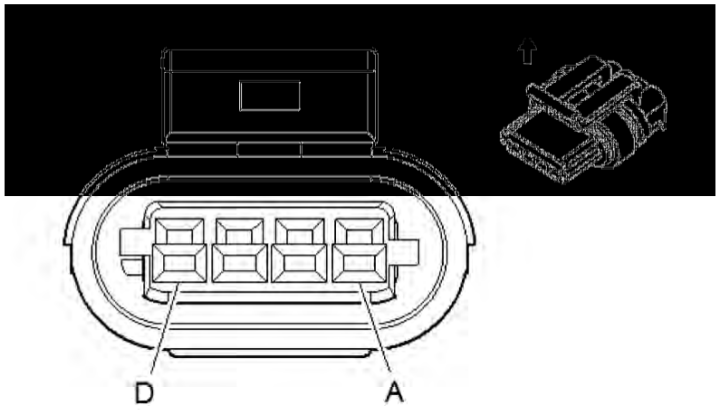
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	BK	350	Ground	I	—
B	0.5	BN	2130	Ignition Control Low Reference Bank 2	I	—
C	0.5	RD	2122	Ignition Control (2)	I	—

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
D	0.8	PK	5292	Powertrain Main Relay Fused Supply (3)	I	—

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T8B Ignition Coil 2 (LSA)



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Connector Part Information

- Harness Type: Ignition Coil Even
- OEM Connector: 12558693
- Service Connector: Service by Harness - See Part Catalog
- Description: 4-Way F GT 150 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	J-38125-553

T8B Ignition Coil 2 (LSA)

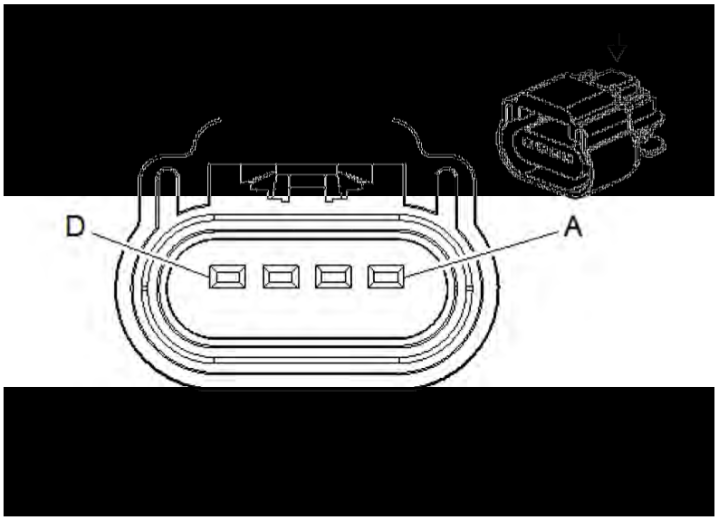
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.8	BK	350	Ground	I	—
2	0.5	BK/GY	2130	Ignition Control Low Reference Bank 2	I	—
3	0.5	BU/WH	2122	Ignition Control (2)	I	—

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4	0.8	VT/BU	5292	Powertrain Main Relay Fused Supply (3)	I	—

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T8B Ignition Coil 2 (LFW/LFX/LWR)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 15466325
- Service Connector: 13585847
- Description: 4-Way F 150 GT Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	Not Available

T8B Ignition Coil 2 (LFW/LFX/LWR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1	BK	250	Ground	I	-
B	0.5	BK/GY	2130	Ignition Control Low Reference Bank 2	I	-
C	0.5	BU/WH	2122	Ignition Control (2)	I	-

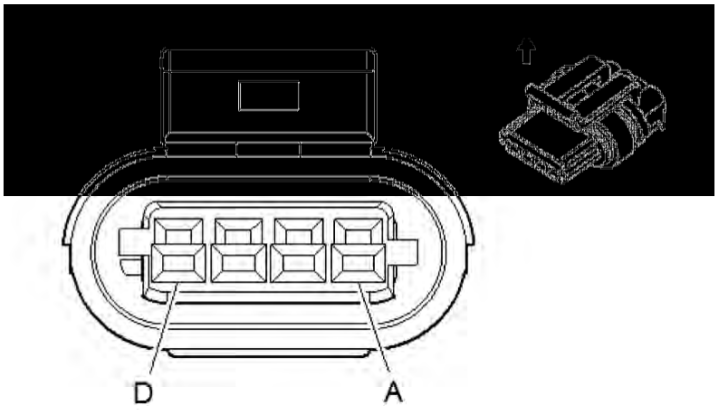
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
D	1	VT/BU	5292	Powertrain Main Relay Fused Supply (3)	I	-

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T8C Ignition Coil 3 (L77/LS3)



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Connector Part Information

- Harness Type: Ignition Coil Odd
- OEM Connector: 15439568
- Service Connector: Service by Harness – See Part Catalog
- Description: 4-Way F GT 150 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	J-38125-553

T8C Ignition Coil 3 (L77/LS3)

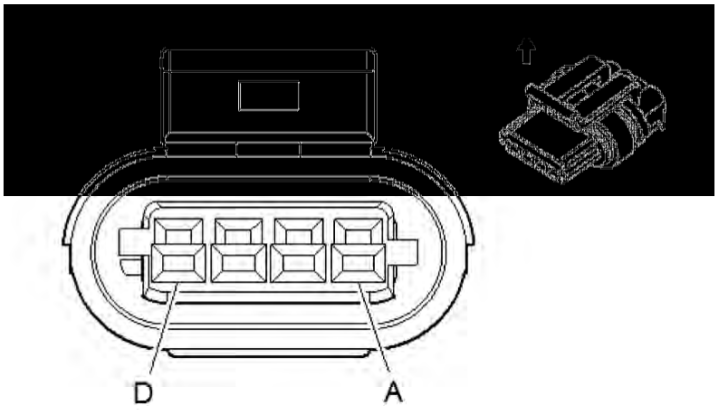
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	BK	250	Ground	I	—
B	0.5	BN	2129	Ignition Control Low Reference Bank 1	I	—
C	0.5	L-BU	2123	Ignition Control (3)	I	—

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
D	0.8	PK	5291	Powertrain Main Relay Fused Supply (2)	I	—

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T8C Ignition Coil 3 (LSA)



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Connector Part Information

- Harness Type: Ignition Coil Odd
- OEM Connector: 12558693
- Service Connector: Service by Harness - See Part Catalog
- Description: 4-Way F GT 150 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	J-38125-553

T8C Ignition Coil 3 (LSA)

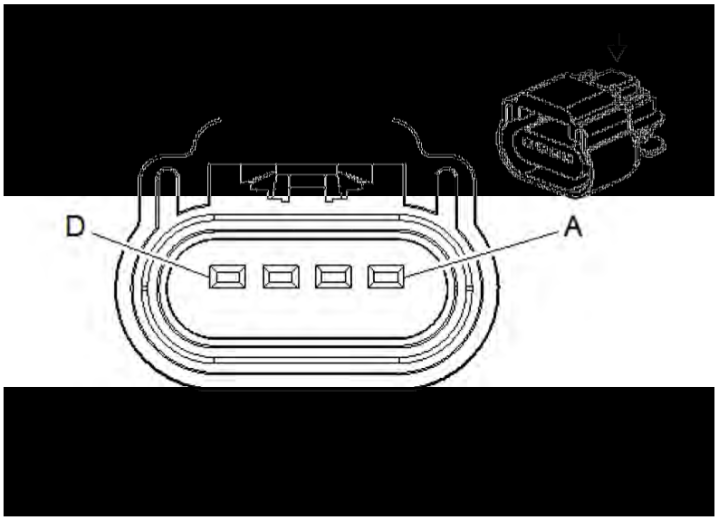
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.8	BK	250	Ground	I	—
2	0.5	BK/BU	2129	Ignition Control Low Reference Bank 1	I	—
3	0.5	GN/BU	2123	Ignition Control (3)	I	—

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4	0.8	VT/BU	5291	Powertrain Main Relay Fused Supply (2)	I	—

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T8C Ignition Coil 3 (LFW/LFX/LWR)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 15466325
- Service Connector: 13585847
- Description: 4-Way F 150 GT Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	Not Available

T8C Ignition Coil 3 (LFW/LFX/LWR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1	BK	350	Ground	I	-
B	0.5	BK/BU	2129	Ignition Control Low Reference Bank 1	I	-
C	0.5	GN/BU	2123	Ignition Control (3)	I	-

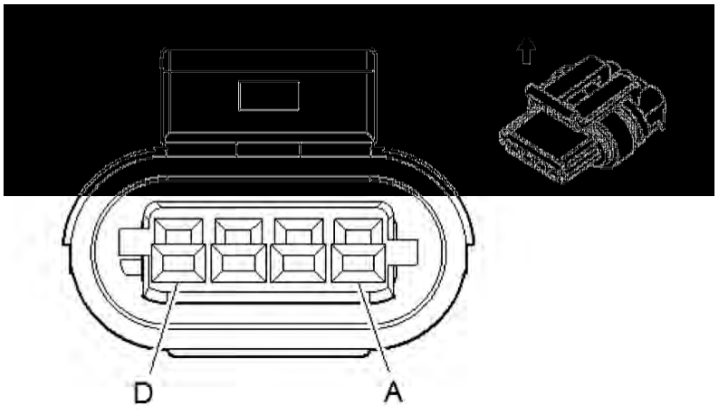
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
D	1	VT/BU	5291	Powertrain Main Relay Fused Supply (2)	I	-

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T8D Ignition Coil 4 (L77/LS3)



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Connector Part Information

- Harness Type: Ignition Coil Odd
- OEM Connector: 15439568
- Service Connector: Service by Harness – See Part Catalog
- Description: 4-Way F GT 150 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	J-38125-553

T8D Ignition Coil 4 (L77/LS3)

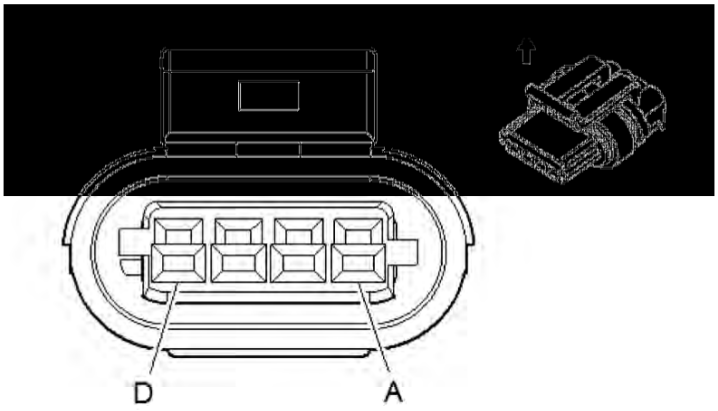
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	BK	350	Ground	I	—
B	0.5	BN	2130	Ignition Control Low Reference Bank 2	I	—
C	0.5	D-GN	2124	Ignition Control (4)	I	—

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
D	0.8	PK	5292	Powertrain Main Relay Fused Supply (3)	I	—

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T8D Ignition Coil 4 (LSA)



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Connector Part Information

- Harness Type: Ignition Coil Even
- OEM Connector: 12558693
- Service Connector: Service by Harness - See Part Catalog
- Description: 4-Way F GT 150 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	J-38125-553

T8D Ignition Coil 4 (LSA)

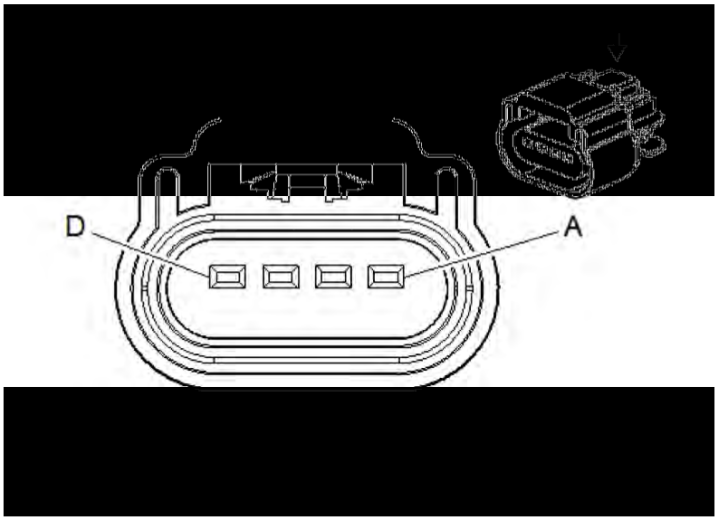
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.8	BK	350	Ground	I	—
2	0.5	BK/GY	2130	Ignition Control Low Reference Bank 2	I	—
3	0.5	YE/BU	2124	Ignition Control (4)	I	—

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4	0.8	VT/BU	5292	Powertrain Main Relay Fused Supply (3)	I	—

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T8D Ignition Coil 4 (LFW/LFX/LWR)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 15466325
- Service Connector: 13585847
- Description: 4-Way F 150 GT Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	Not Available

T8D Ignition Coil 4 (LFW/LFX/LWR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1	BK	250	Ground	I	-
B	0.5	BK/GY	2130	Ignition Control Low Reference Bank 2	I	-
C	0.5	YE/BU	2124	Ignition Control (4)	I	-

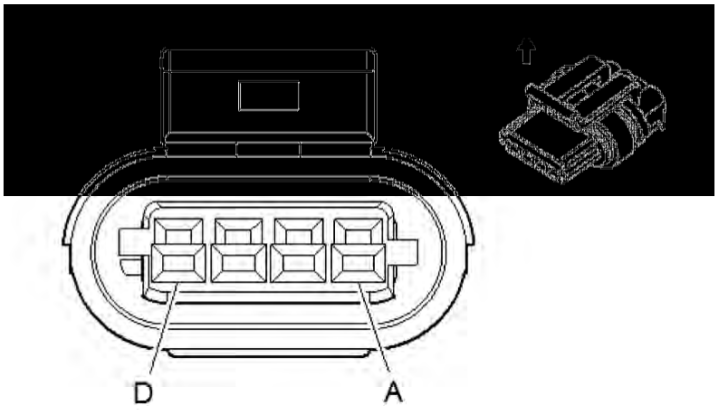
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
D	1	VT/BU	5292	Powertrain Main Relay Fused Supply (3)	I	-

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T8E Ignition Coil 5 (L77/LS3)



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Connector Part Information

- Harness Type: Ignition Coil Odd
- OEM Connector: 15439568
- Service Connector: Service by Harness – See Part Catalog
- Description: 4-Way F GT 150 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	J-38125-553

T8E Ignition Coil 5 (L77/LS3)

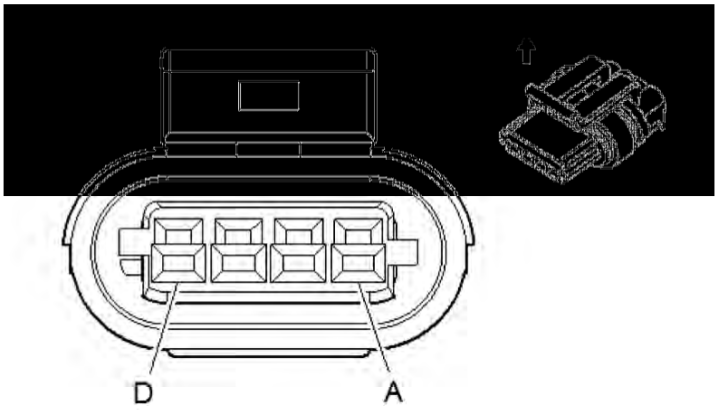
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	BK	250	Ground	I	—
B	0.5	BN	2129	Ignition Control Low Reference Bank 1	I	—
C	0.5	D-GN	2125	Ignition Control (5)	I	—

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
D	0.8	PK	5291	Powertrain Main Relay Fused Supply (2)	I	—

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T8E Ignition Coil 5 (LSA)



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Connector Part Information

- Harness Type: Ignition Coil Odd
- OEM Connector: 12558693
- Service Connector: Service by Harness - See Part Catalog
- Description: 4-Way F GT 150 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	J-38125-553

T8E Ignition Coil 5 (LSA)

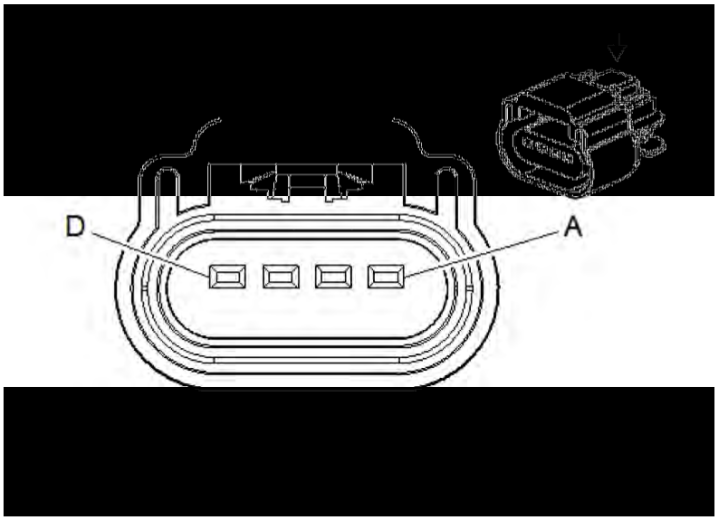
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.8	BK	250	Ground	I	—
2	0.5	BK/BU	2129	Ignition Control Low Reference Bank 1	I	—
3	0.5	BU/GY	2125	Ignition Control (5)	I	—

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4	0.8	VT/BU	5291	Powertrain Main Relay Fused Supply (2)	I	—

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T8E Ignition Coil 5 (LFW/LFX/LWR)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 15466325
- Service Connector: 13585847
- Description: 4-Way F 150 GT Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	Not Available

T8E Ignition Coil 5 (LFW/LFX/LWR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1	BK	350	Ground	I	-
B	0.5	BK/BU	2129	Ignition Control Low Reference Bank 1	I	-
C	0.5	BU/GY	2125	Ignition Control (5)	I	-

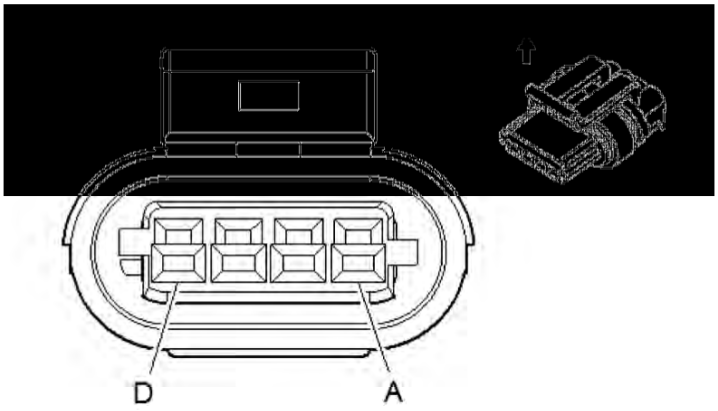
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
D	1	VT/BU	5291	Powertrain Main Relay Fused Supply (2)	I	-

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T8F Ignition Coil 6 (L77/LS3)



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Connector Part Information

- Harness Type: Ignition Coil Odd
- OEM Connector: 15439568
- Service Connector: Service by Harness – See Part Catalog
- Description: 4-Way F GT 150 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	J-38125-553

T8F Ignition Coil 6 (L77/LS3)

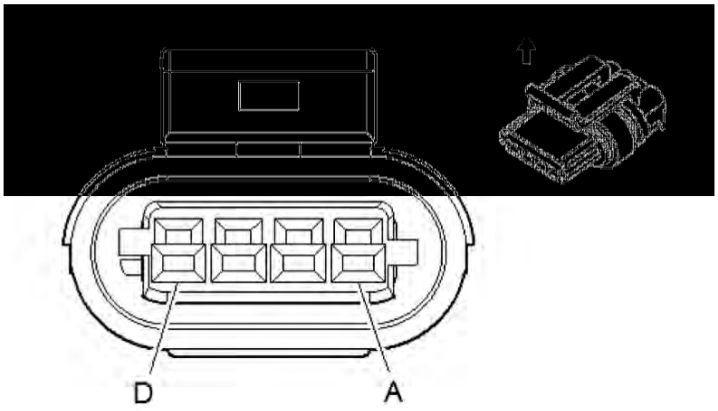
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	BK	350	Ground	I	—
B	0.5	BN	2130	Ignition Control Low Reference Bank 2	I	—
C	0.5	L-BU	2126	Ignition Control (6)	I	—

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
D	0.8	PK	5292	Powertrain Main Relay Fused Supply (3)	I	—

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T8F Ignition Coil 6 (LSA)



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Connector Part Information

- Harness Type: Ignition Coil Even
- OEM Connector: 12558693
- Service Connector: Service by Harness - See Part Catalog
- Description: 4-Way F GT 150 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	J-38125-553

T8F Ignition Coil 6 (LSA)

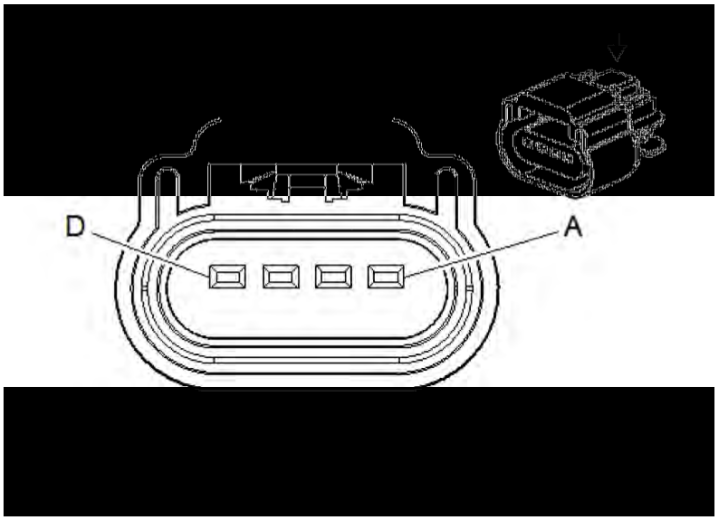
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.8	BK	350	Ground	I	—
2	0.5	BK/GY	2130	Ignition Control Low Reference Bank 2	I	—
3	0.5	BN/BU	2126	Ignition Control (6)	I	—

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4	0.8	VT/BU	5292	Powertrain Main Relay Fused Supply (3)	I	—

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T8F Ignition Coil 6 (LFW/LFX/LWR)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 15466325
- Service Connector: 13585847
- Description: 4-Way F 150 GT Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	Not Available

T8F Ignition Coil 6 (LFW/LFX/LWR)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1	BK	250	Ground	I	-
B	0.5	BK/GY	2130	Ignition Control Low Reference Bank 2	I	-
C	0.5	BN/BU	2126	Ignition Control (6)	I	-

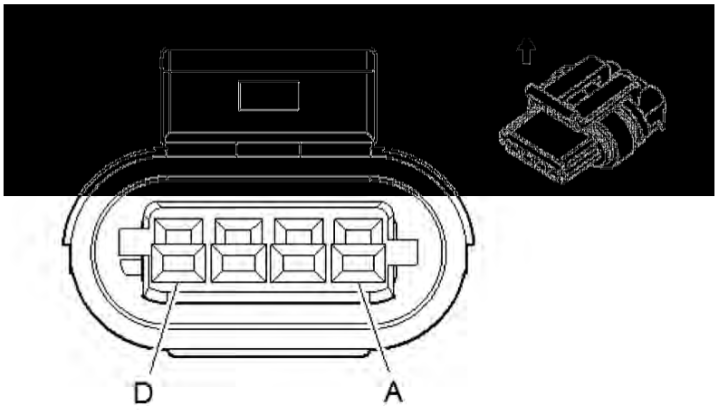
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
D	1	VT/BU	5292	Powertrain Main Relay Fused Supply (3)	I	-

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T8G Ignition Coil 7 (L77/LS3)



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Connector Part Information

- Harness Type: Ignition Coil Odd
- OEM Connector: 15439568
- Service Connector: Service by Harness – See Part Catalog
- Description: 4-Way F GT 150 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	J-38125-553

T8G Ignition Coil 7 (L77/LS3)

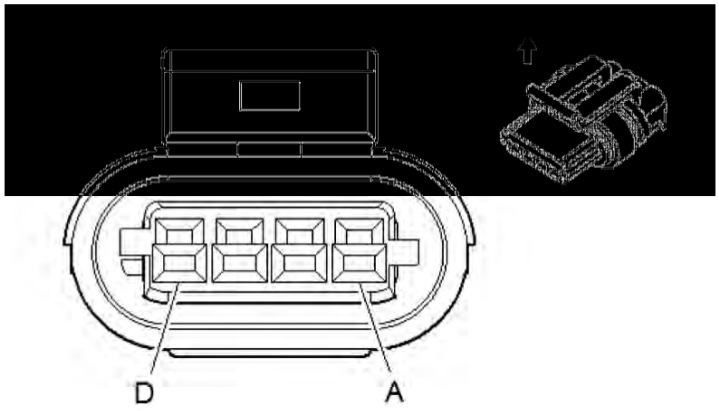
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	BK	250	Ground	I	—
B	0.5	BN	2129	Ignition Control Low Reference Bank 1	I	—
C	0.5	RD	2127	Ignition Control (7)	I	—

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
D	0.8	PK	5291	Powertrain Main Relay Fused Supply (2)	I	—

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T8G Ignition Coil 7 (LSA)



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Connector Part Information

- Harness Type: Ignition Coil Odd
- OEM Connector: 12558693
- Service Connector: Service by Harness - See Part Catalog
- Description: 4-Way F GT 150 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	J-38125-553

T8G Ignition Coil 7 (LSA)

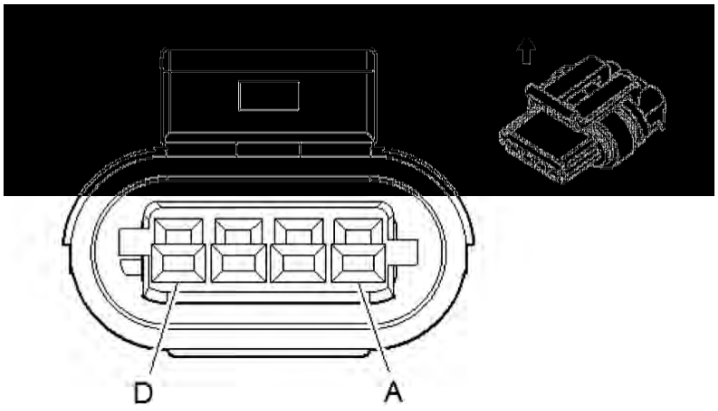
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.8	BK	250	Ground	I	—
2	0.5	BK/BU	2129	Ignition Control Low Reference Bank 1	I	—
3	0.5	GN/GY	2127	Ignition Control (7)	I	—

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4	0.8	VT/BU	5291	Powertrain Main Relay Fused Supply (2)	I	—

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T8H Ignition Coil 8 (L77/LS3)



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Connector Part Information

- Harness Type: Ignition Coil Odd
- OEM Connector: 15439568
- Service Connector: Service by Harness – See Part Catalog
- Description: 4-Way F GT 150 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	J-38125-553

T8H Ignition Coil 8 (L77/LS3)

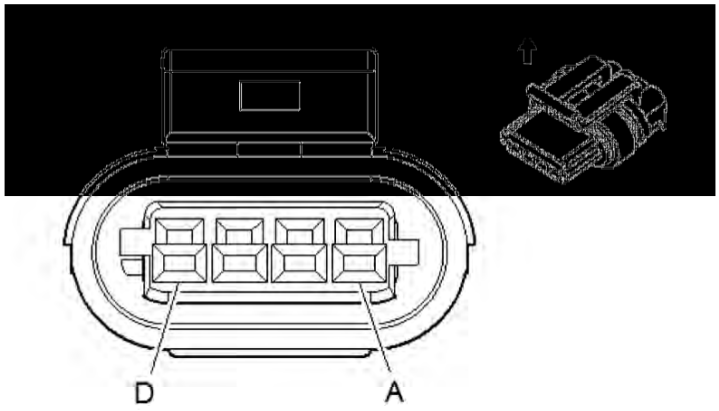
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.8	BK	350	Ground	I	—
B	0.5	BN	2130	Ignition Control Low Reference Bank 2	I	—
C	0.5	PU	2128	Ignition Control (8)	I	—

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
D	0.8	PK	5292	Powertrain Main Relay Fused Supply (3)	I	—

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T8H Ignition Coil 8 (LSA)



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Connector Part Information

- Harness Type: Ignition Coil Even
- OEM Connector: 12558693
- Service Connector: Service by Harness - See Part Catalog
- Description: 4-Way F GT 150 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	J-38125-553

T8H Ignition Coil 8 (LSA)

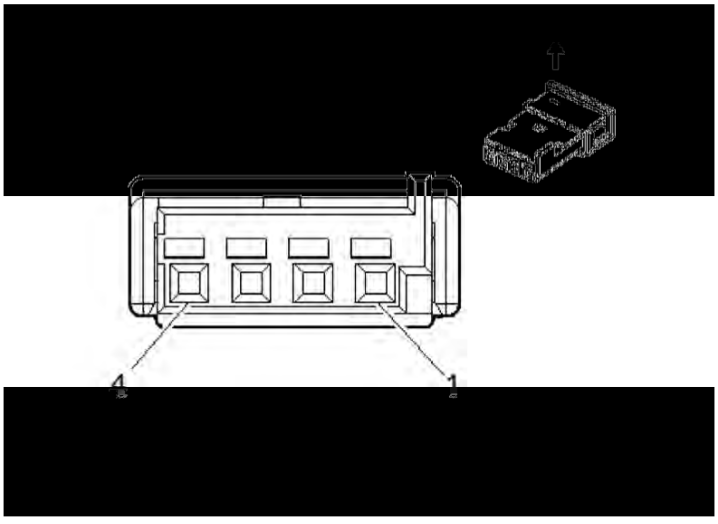
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.8	BK	350	Ground	I	—
2	0.5	BK/GY	2130	Ignition Control Low Reference Bank 2	I	—
3	0.5	VT/WH	2128	Ignition Control (8)	I	—

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4	0.8	VT/BU	5292	Powertrain Main Relay Fused Supply (3)	I	—

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T10E Keyless Entry Antenna - Rear Compartment (BTM)



Connector Part Information

- Harness Type: Body
- OEM Connector: 24414929
- Service Connector: 13576534
- Description: 4-Way F 0.64 Micro Quadlock Series (GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-64B (L-BU)	J-38125-12A

T10E Keyless Entry Antenna - Rear Compartment (BTM)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	WH/GN	3556	Passive Start Interior Antenna 3 Signal Hi	I	-
2	0.35	GN	3557	Passive Start Interior Antenna 3 Signal Lo	I	-
3-4	-	-	-	Not Occupied	-	-

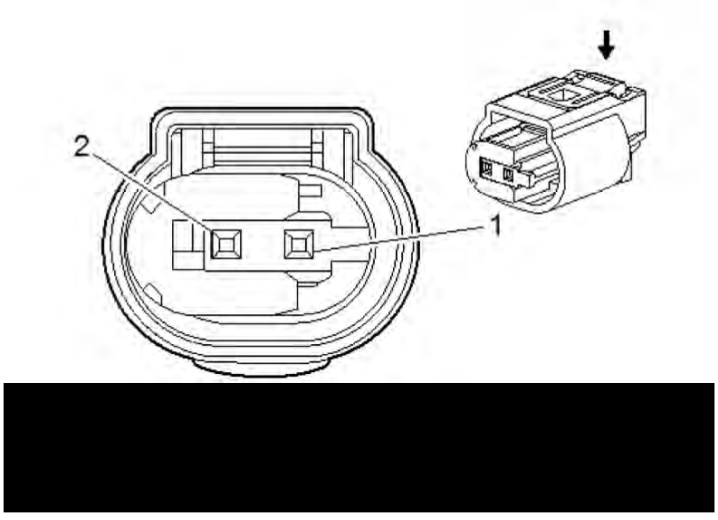
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option

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T10J Keyless Entry Antenna - Center Console Front (BTM)



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Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 24461693
- Service Connector: 13576533
- Description: 2-Way F 0.64 Micro Quadlock Series, Sealed (BK)

Terminal Part Information

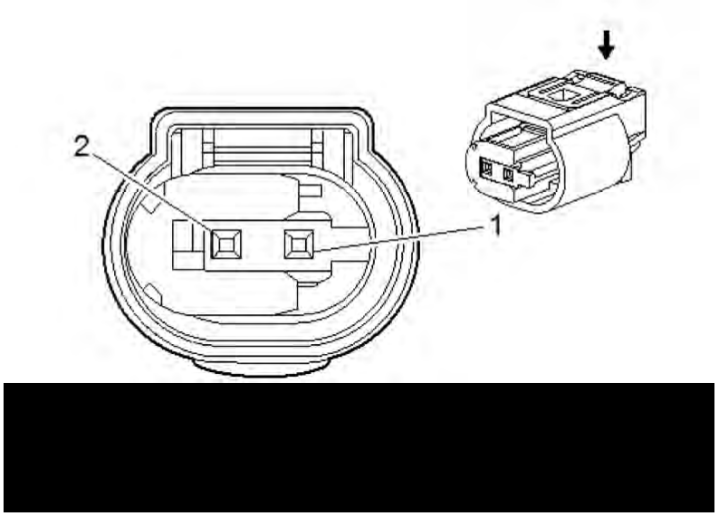
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-64B (L-BU)	Not Available

T10J Keyless Entry Antenna - Center Console Front (BTM)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BN/BK	3552	Passive Start Interior Antenna 1 Signal Hi	I	-
2	0.35	WH	3553	Passive Start Interior Antenna 1 Signal Lo	I	-

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T10K Keyless Entry Antenna - Center Console Rear (BTM)



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Connector Part Information

- Harness Type: Center Console
- OEM Connector: 24461693
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 0.64 Micro Quadlock Series, Sealed (BK)

Terminal Part Information

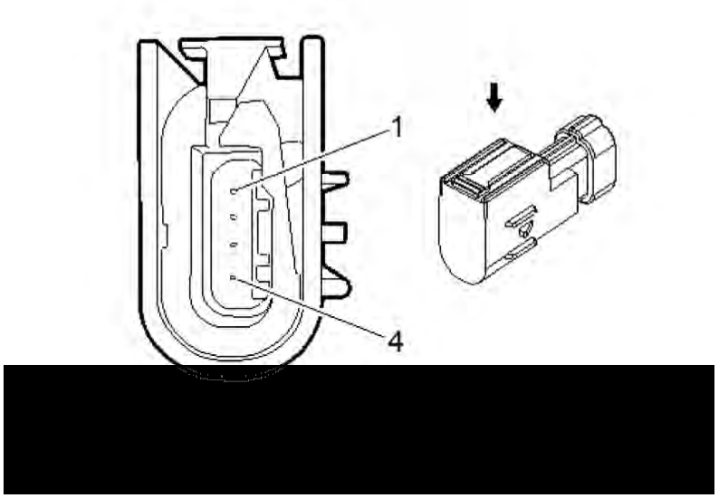
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-64B (L-BU)	Not Available

T10K Keyless Entry Antenna - Center Console Rear (BTM)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BU	3554	Passive Start Interior Antenna 2 Signal Hi	I	-
2	0.35	GY/BK	3555	Passive Start Interior Antenna 2 Signal Lo	I	-

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T10M Keyless Entry Antenna - Driver Door Handle (ATH)



Connector Part Information

- Harness Type: Driver Door
- OEM Connector: 19153433
- Service Connector: Service by Harness - See Part Catalog
- Description: 4-Way M 0.64 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-14 (GN)	Not Available

T10M Keyless Entry Antenna - Driver Door Handle (ATH)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	VT	3560	Passive Entry Driver Door Antenna Signal Hi	I	-
2	0.35	VT/GY	3561	Passive Entry Driver Door Antenna Signal Lo	I	-
3	0.35	GN/WH	3570		I	-

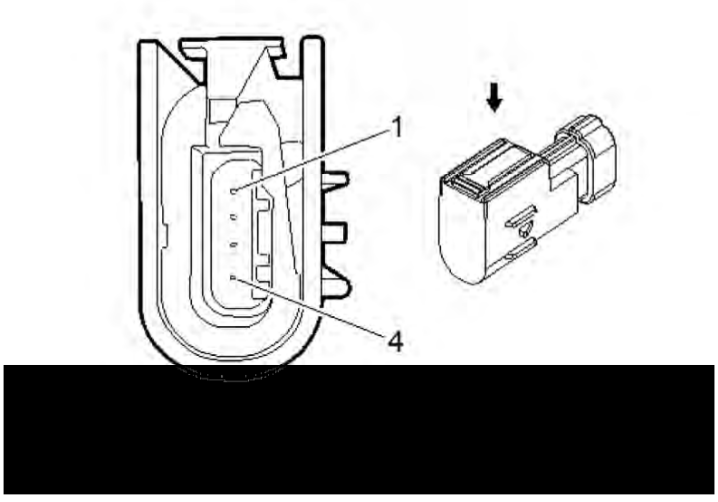
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Driver Door Handle Switch Signal		
4	0.35	BK	2150	Ground	I	-

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T10N Keyless Entry Antenna - Passenger Door Handle (ATH)



Connector Part Information

- Harness Type: Passenger Door
- OEM Connector: 19153433
- Service Connector: Service by Harness - See Part Catalog
- Description: 4-Way M 0.64 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-14 (GN)	Not Available

T10N Keyless Entry Antenna - Passenger Door Handle (ATH)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GN/YE	3562	Passive Entry Co_Driver Door Antenna Signal Hi	I	-
2	0.35	GN/BK	3563	Passive Entry Co_Driver Door Antenna Signal Lo	I	-
3	0.35	VT/WH	3571		I	-

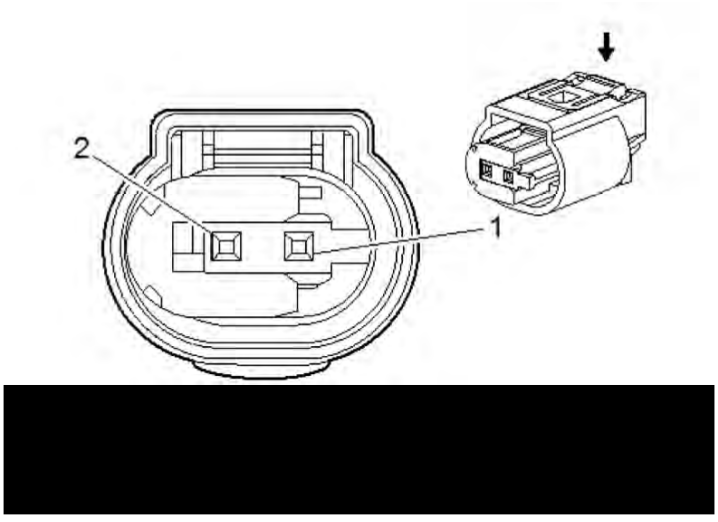
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Co_Driver Door Handle Switch Signal		
4	0.35	BK	2250	Ground	I	-

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T10P Keyless Entry Antenna - Rear Cargo Door Handle (ATH)



Connector Part Information

- Harness Type: Rear Fascia
- OEM Connector: 24461693
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 0.64 Micro Quadlock Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-64B (L-BU)	Not Available

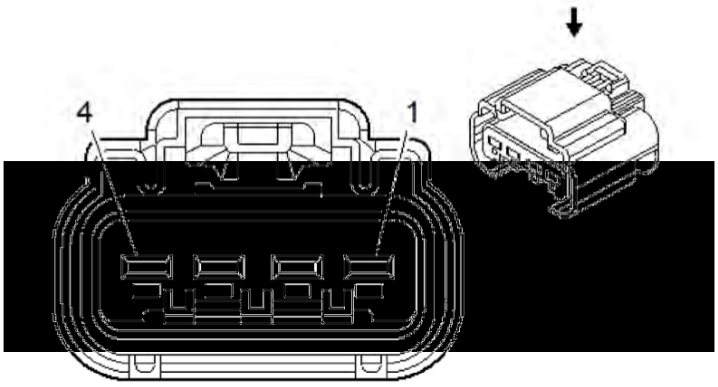
T10P Keyless Entry Antenna - Rear Cargo Door Handle (ATH)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN/GN	3568	Passive Entry Rear Closure Antenna Signal Hi	I	-
2	0.5	GN/GY	3569	Passive Entry Rear Closure Antenna Signal Lo	I	-

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T17 LPG Vaporizer (LWR)



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Connector Part Information

- Harness Type: LPG Fuel
- OEM Connector: 54200421
- Service Connector: Service by Harness - See Part Catalog
- Description: 4-Way F 2.8 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

T17 LPG Vaporizer (LWR)

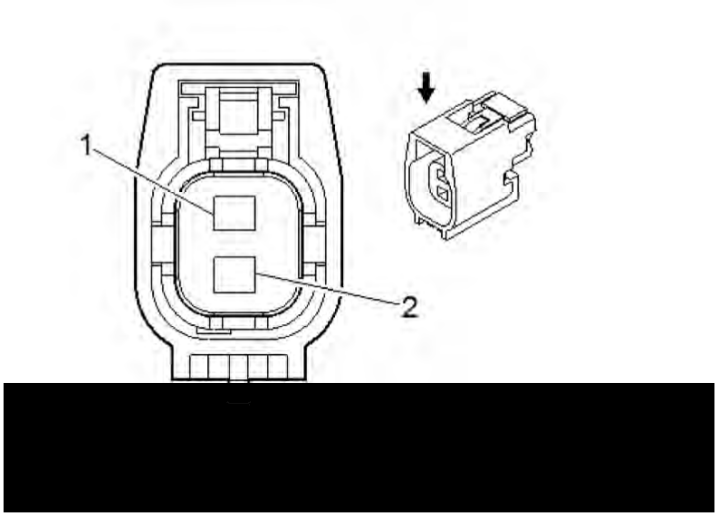
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	3	VT/BN	3498	Liquid Petroleum Gas PTC Heater Supply Voltage (1)	I	-
2	-	-	-	Not Occupied	-	-
3	3	GY/GN	3499	Liquid Petroleum Gas PTC Heater Supply Voltage (2)	I	-

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4	3	GY/WH	3500	Liquid Petroleum Gas PTC Heater Supply Voltage (3)	I	-

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U1 Battery Isolator (9C1)



Connector Part Information

- Harness Type: Battery
- OEM Connector: 805402-BS2
- Service Connector: Service by Harness - See Part Catalog
- Description: 1-Way F

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

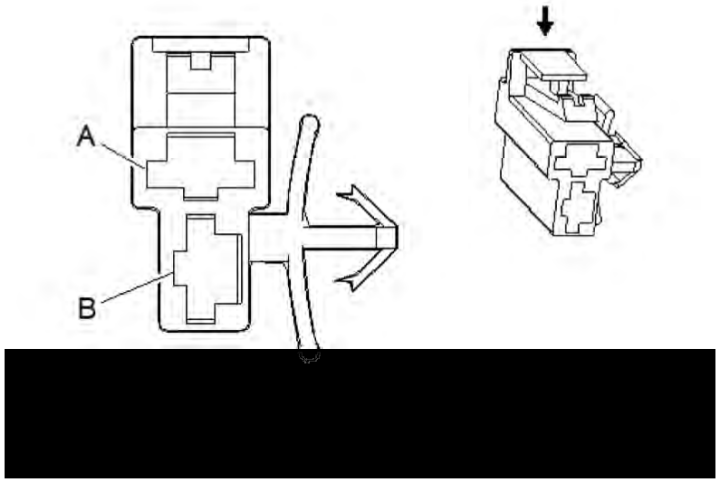
U1 Battery Isolator (9C1)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT/YE	343	Accessory Voltage	I	—

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X80C Accessory Power Receptacle – Cargo (F35)



Connector Part Information

- Harness Type: Accessory Power
- OEM Connector: 7123-5125
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

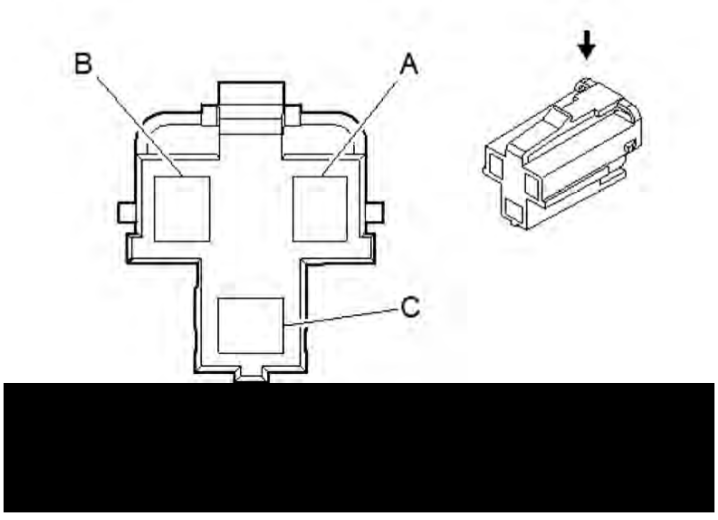
X80C Accessory Power Receptacle – Cargo (F35)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.25	OG	4940	Battery Positive Voltage	I	—
2	1.25	BK	2650	Ground	I	—

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X80F Accessory Power Receptacle – Front



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 12176836
- Service Connector: 19257374
- Description: 3-Way F Metri Pack 280 Series (GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

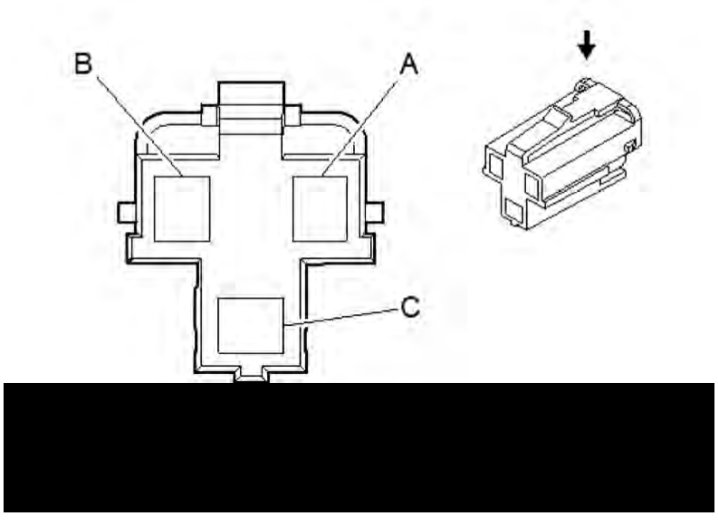
X80F Accessory Power Receptacle – Front

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1	VT	801	Retained Accessory Power Fuse Supply Voltage	I	-
B	-	-	-	Not Occupied	-	-
C	1	BK	1450	Ground	I	-

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X80H Accessory Power Receptacle – Center Console



Connector Part Information

- Harness Type: Center Console
- OEM Connector: 12176836
- Service Connector: Service by Harness - See Part Catalog
- Description: 3-Way F Metri Pack 280 Series (GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

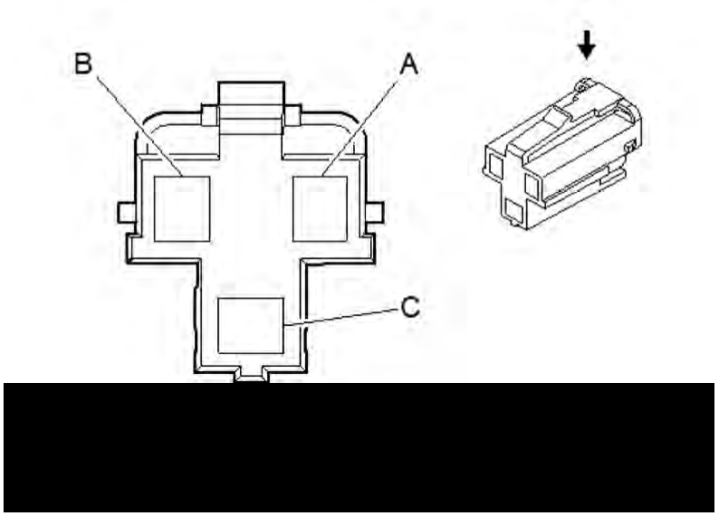
X80H Accessory Power Receptacle – Center Console

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1	VT	801	Retained Accessory Power Fuse Supply Voltage	I	-
B	-	-	-	Not Occupied	-	-
C	1	BK	1450	Ground	I	-

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X80R Accessory Power Receptacle – Rear Compartment (F19)



Connector Part Information

- Harness Type: Body
- OEM Connector: 12176836
- Service Connector: 19257374
- Description: 3-Way F 280 Metri Pack Series (GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-4A (PU)	J-38125-553

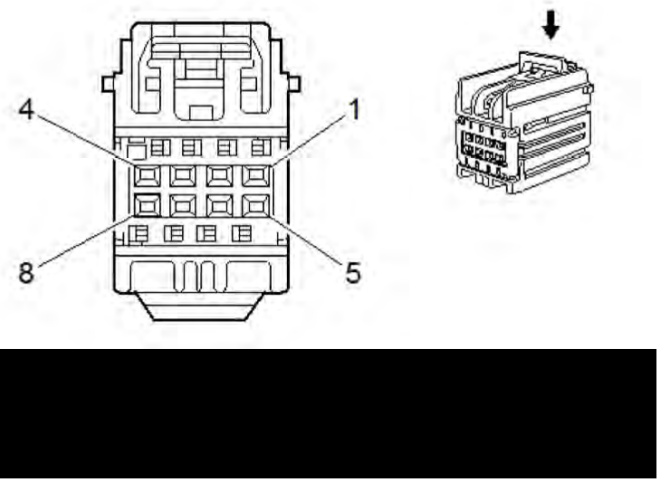
X80R Accessory Power Receptacle – Rear Compartment (F19)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	1	RD/BN	4940	Battery Positive Voltage	I	-
B	-	-	-	Not Occupied	-	-
C	1	BK	2650	Ground	I	-

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X82 Audio/Video Input Adapter (UWG)



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Connector Part Information

- Harness Type: Center Console
- OEM Connector: 89047354
- Service Connector: Service by Harness - See Part Catalog
- Description: 8-Way F YESC Kaizen Series (L-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-64B (L-BU)	Not Available

X82 Audio/Video Input Adapter (UWG)

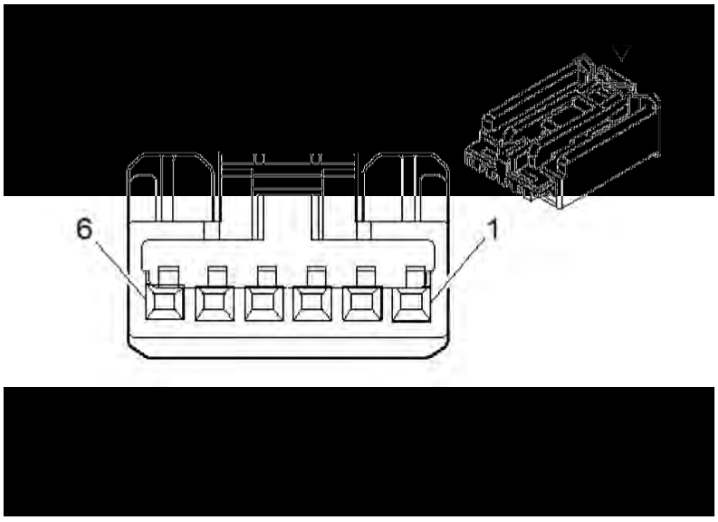
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BARE	2057	Auxiliary Video Low Signal	I	-
2	-	-	-	Not Occupied	-	-
3	0.35	YE	2056	Auxiliary Video High Signal	I	-
4	-	-	-	Not Occupied	-	-

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
5	0.35	WH	2058	Right Auxiliary Audio Signal (1)	I	-
6	0.35	YE	2059	Left Auxiliary Audio Signal (1)	I	-
7	0.35	VT	5843	Auxiliary Audio Common Signal	I	-
8	-	-	-	Not Occupied	-	-

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X83 Auxiliary Audio Input (USR) X1



Connector Part Information

- Harness Type: Center Console
- OEM Connector: 15269798
- Service Connector: 19167753
- Description: 6-Way F AIT II Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575867	J-35616-64B (L-BU)	J-38125-215A

X83 Auxiliary Audio Input (USR) X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GY	5839	Left Auxiliary Audio Signal	I	—
2	0.35	GN	5841	Right Auxiliary Audio Signal	I	—
3	0.35	VT	5843	Auxiliary Audio Common Signal	I	—
4	—	—	—	Not Occupied	—	—

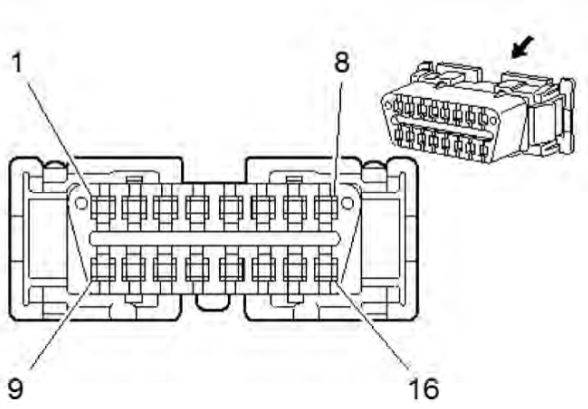
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
5	0.35	BU	2060	Auxiliary Detection Signal	I	—
6	—	—	—	Not Occupied	I	—

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X84 Data Link Connector



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Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 13580435
- Service Connector: 19178163
- Description: 16-Way F (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

X84 Data Link Connector

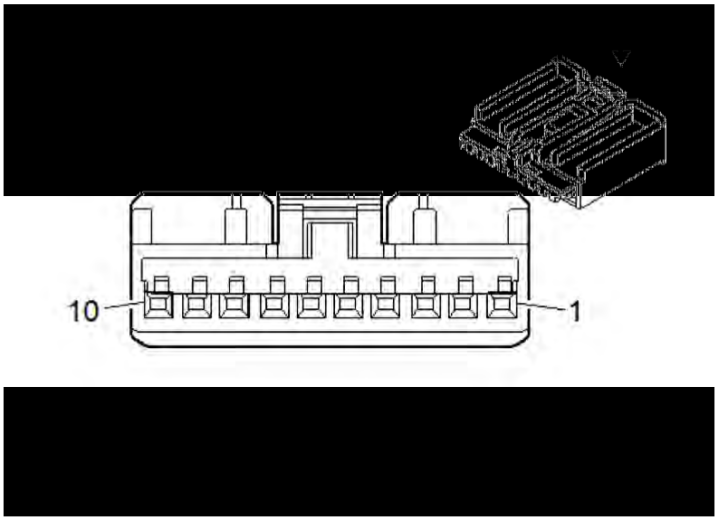
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GN	5060	Low Speed GMLAN Serial Data	I	—
2	—	—	—	Not Occupied	—	—
3	0.35	YE	5169	Mid Speed GMLAN Serial Data (+)	I	UBT
4	0.35	BK	1450	Ground	I	

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
			1350	Ground	I	Right Hand Drive Left Hand Drive
5	0.35	BK	1450 1350	Ground Ground	I I	Right Hand Drive Left Hand Drive
6	0.35	BU	2500	High Speed GMLAN Serial Data (+) (1)	I	—
7-10	—	—	—	Not Occupied	—	—
11	0.35	WH	5170	Mid Speed GMLAN Serial Data (-)	I	UBT
12	0.35	BU/YE	6105	High Speed GMLAN Serial Data (+) (2)	I	—
13	0.35	WH	6106	High Speed GMLAN Serial Data (-) (2)	I	—
14	0.35	WH	2501	High Speed GMLAN Serial Data (-) (1)	I	—
15	—	—	—	Not Occupied	—	—
16	0.35	RD/GN	40	Battery Positive Voltage	I	—

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X85 Steering Wheel Air Bag Coil X1



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 15269795
- Service Connector: 13576634
- Description: 10 F 0.64 Kaizen Series BK

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	TBD	—	—

X85 Steering Wheel Air Bag Coil X1

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GN/WH	3287	Horn Switch Signal	I	—
2	0.5	BK	1450 1350	Ground Ground	I I	Right Hand Drive Left Hand Drive

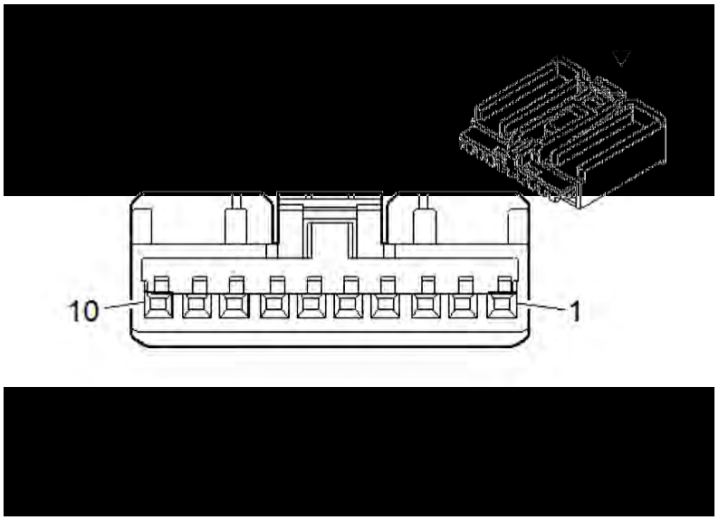
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
3	0.35	BN/GN	1884	Cruise Control Set/Coast/Resume/Accelerate Switch Signal	I	—
4	0.35	GN	6818	Steering Wheel Resistor Ladder Signal #1	I	—
5	0.35	YE	7556	Lighting Control Switch Reference	I	—
6	0.35	BN	6136	Supply Voltage	I	—
7	0.35	WH	6816	Indicator Dimming Control	I	—
8	—	—	—	Not Occupied	—	—
9	0.35	WH	3152	Lane Departure Warning Indicator Control	I	UFL/UEU
10	0.35	GY/WH	3153	Lane Departure Warning Disable Switch Signal	I	UFL/UEU

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X85 Steering Wheel Air Bag Coil X2



Connector Part Information

- Harness Type: Steering Wheel
- OEM Connector: 15269795
- Service Connector: Service by Harness - See Part Catalog
- Description: 10-Way F AIT II Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

X85 Steering Wheel Air Bag Coil X2

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GN	3153	Lane Departure Warning Disable Switch Signal	I	UFL/UEU
2	0.35	WH	3152	Lane Departure Warning Indicator Control	—	UFL/UEU
3	0.35	VT	5526	Tap Up/Tap Down Switch Signal	I	WZI

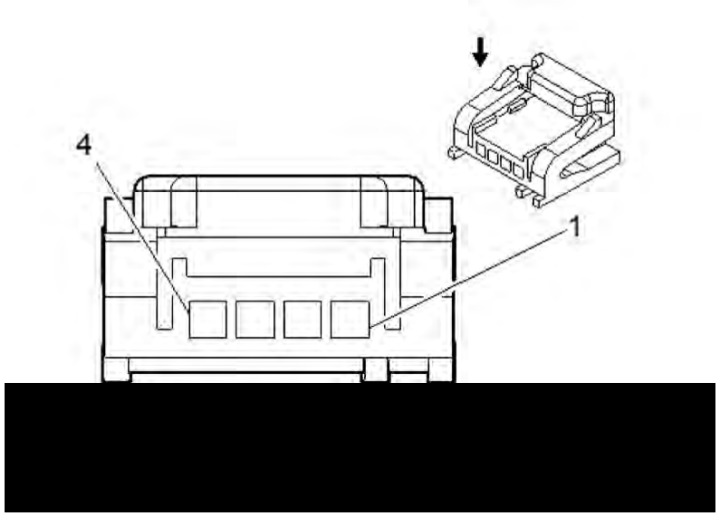
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
4	0.35	WH	6816	Indicator Dimming Control	I	UFL/UEU
5	0.35	YE	6136	Supply Voltage	I	—
6	0.35	WH/RD	1444	12 Volt Reference	I	—
7	0.35	GN	6818	Steering Wheel Resistor Ladder Signal #1	I	—
8	0.35	BN/GN	1884	Cruise Control Set/Coast/Resume/Accelerate Switch Signal	I	—
9	0.35	BK	1350	Ground	I	—
10	0.35	BN/WH	3287	Horn Switch Signal	I	—

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X85 Steering Wheel Air Bag Coil X3



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 15393421
- Service Connector: 13580115
- Description: 4-Way F Micro Pack 064 Series (YE)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-64B (L-BU)	Not Available

X85 Steering Wheel Air Bag Coil X3

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	OG/VT	3021	Steering Wheel Module Stage 1 High Control	I	-
2	0.35	BN/OG	3020	Steering Wheel Module Stage 1 Low Control	I	-
3	0.35	OG/GN	3023		I	-

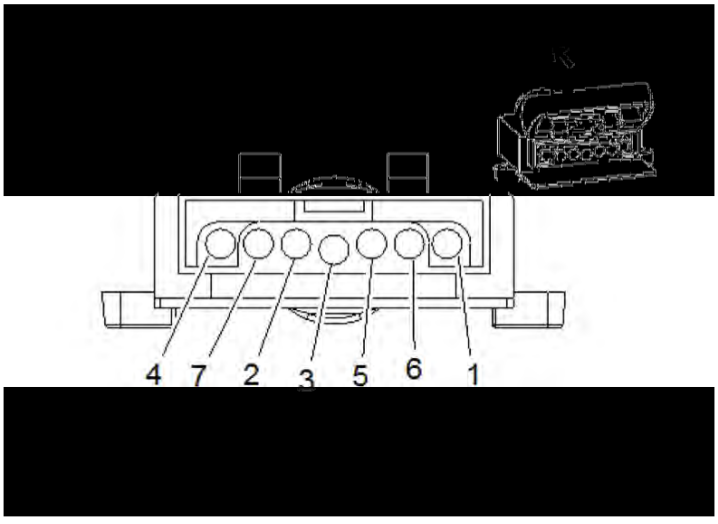
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
				Steering Wheel Module Stage 2 High Control		
4	0.35	WH/OG	3022	Steering Wheel Module Stage 2 Low Control	I	-

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X88 Trailer Connector (RZW)



Connector Part Information

- Harness Type: Trailer
- OEM Connector: 92218771
- Service Connector: Service by Harness - See Part Catalog
- Description: 9-Way F

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

X88 Trailer Connector (RZW)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	YE	5186	Left Trailer Turn Signal Lamp	I	—
2	0.75	BK	5189	Trailer Backup Lamp	I	—
3	2.5	WH	2650	Ground	I	—
4	0.75	GN	5187	Right Trailer Turn Signal Lamp	I	—

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
5	2.5	BU	47	Trailer Auxiliary Supply Voltage	I	—
6	0.75	RD	5188	Trailer Brake Lamp	I	—
7	0.75	BN	5185	Right Trailer Park Lamp	I	—
8	0.75	GY	5992	Trailer Connected Signal	I	—
9	2.5	WH	2650	Ground	I	—

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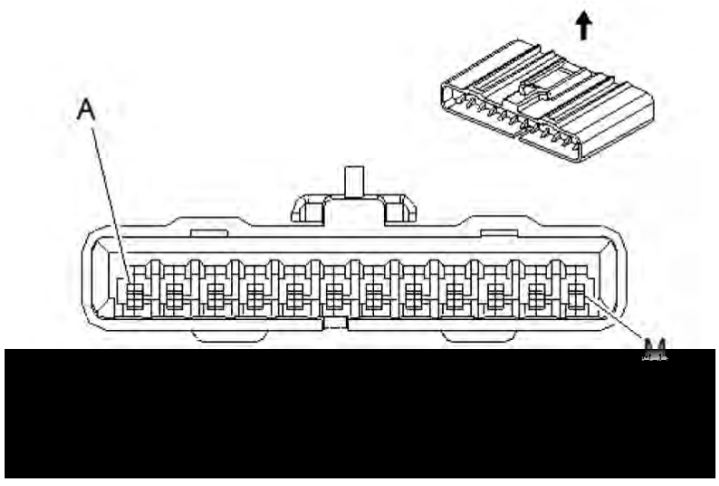
Splice Pack Connector End Views

Figure 1: JX200
Figure 2: JX300
Figure 3: JX400

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JX200



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 12176461
- Service Connector: 15305914
- Description: 12-Way F GT 150 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Pending	Pending	Pending

JX200

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	GN	5060	Low Speed GMLAN Serial Data	I	-
B	0.35	GN	5060	Low Speed GMLAN Serial Data	I	ULS
C	0.35	GN	5060	Low Speed GMLAN Serial Data	I	-
D	0.35	GN	5060	Low Speed GMLAN Serial Data	I	BUJ/ERG

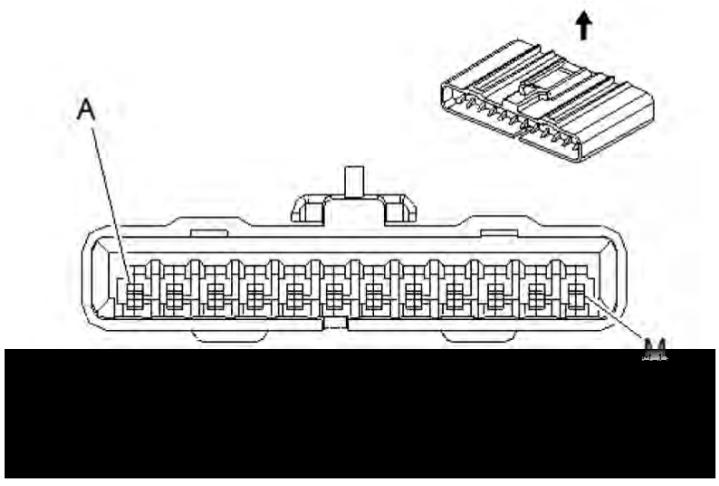
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
E	0.35	GN	5060	Low Speed GMLAN Serial Data	I	-
F	0.35	GN	5060	Low Speed GMLAN Serial Data	I	-
G	0.35	GN	5060	Low Speed GMLAN Serial Data	I	-
H	0.35	GN	5060	Low Speed GMLAN Serial Data	I	UFL/UEU
J	0.35	GN	5060	Low Speed GMLAN Serial Data	I	-
K	0.35	GN	5060	Low Speed GMLAN Serial Data	I	-
L	0.35	GN	5060	Low Speed GMLAN Serial Data	I	UV6
M	0.35	GN	5060	Low Speed GMLAN Serial Data	I	

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JX300



Connector Part Information

- Harness Type: Body
- OEM Connector: 12176461
- Service Connector: 15305914
- Description: 12-Way F GT 150 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Pending	Pending	Pending

JX300

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	GN	5060	Low Speed GMLAN Serial Data	I	-
B	-	-	-	Not Occupied	-	-
C	-	-	-	Not Occupied	-	-
D	0.35	GN	5060	Low Speed GMLAN Serial Data	I	UD7/UFQ/UFT

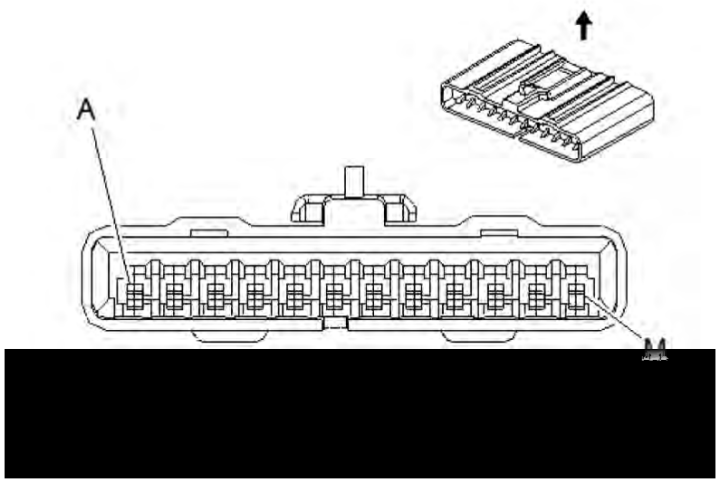
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
E	0.35	GN	5060	Low Speed GMLAN Serial Data	I	BTM
F	-	-	-	Not Occupied	-	-
G	-	-	-	Not Occupied	-	-
H	0.35	GN	5060	Low Speed GMLAN Serial Data	I	RZW
J	0.35	GN	5060	Low Speed GMLAN Serial Data	I	F35
K	-	-	-	Not Occupied	-	-
L	0.35	GN	5060	Low Speed GMLAN Serial Data	I	A45
M	0.35	GN	5060	Low Speed GMLAN Serial Data	I	-

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JX400



Connector Part Information

- Harness Type: Body
- OEM Connector: 12176461
- Service Connector: 15305914
- Description: 12-Way F GT 150 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Pending	Pending	Pending

JX400

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	GN	5060	Low Speed GMLAN Serial Data	I	-
B	-	-	-	Not Occupied	-	-
C	-	-	-	Not Occupied	-	-
D	0.35	GN	5060	Low Speed GMLAN Serial Data	I	UD7/UFQ/UFT

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
E	0.35	GN	5060	Low Speed GMLAN Serial Data	I	BTM
F	-	-	-	Not Occupied	-	-
G	-	-	-	Not Occupied	-	-
H	0.35	GN	5060	Low Speed GMLAN Serial Data	I	RZW
J	-	-	-	Not Occupied	-	-
K	-	-	-	Not Occupied	-	-
L	0.35	GN	5060	Low Speed GMLAN Serial Data	I	A45
M	0.35	GN	5060	Low Speed GMLAN Serial Data	I	-

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Inline Harness Connector End Views

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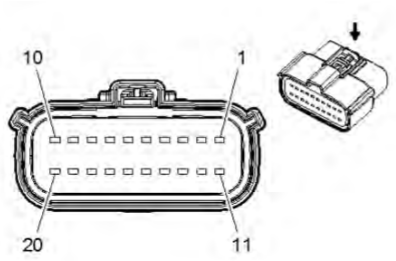
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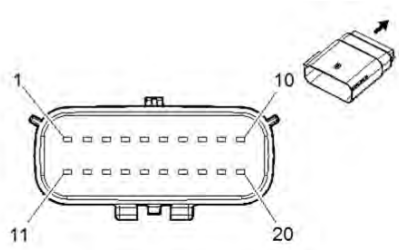
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X100 Front Fascia Harness to Body Harness





Connector Part Information

- Harness Type: Front Fascia
- OEM Connector: 13504367
- Service Connector: Service by Harness - See part Catalog
- Description: 20-Way F 1.5 Series, Sealed BK

Connector Part Information

- Harness Type: Body
- OEM Connector: 13504369
- Service Connector: 19300560
- Description: 20-Way M 1.5 Series, Sealed BK

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available
II	19119440	J-35616-35 (VT)	J-38125-215A
III	13587412	J-35616-35 (VT)	J-38125-215A
IV	Not Available	J-35616-3 (GY)	J-38125-217
V	Not Available	J-35616-3 (GY)	J-38125-217

X100 Front Fascia Harness to Body Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.75	RD/BN	702	I	-	Battery Positive Voltage	1	0.75	RD/BN	702	II	-
2	-	-	-	I	-	Supercharger Boost Solenoid Control	2	0.5	GY	1724	III	-
3	0.5	GY/BN	309	I	-	Right Park Lamp Supply Voltage	3	0.35	GY/BN	309	III	-
4	-	-	-	I	-	Ground	4	0.5	BK	850	III	-
5	0.5	BK	550	I	-	Ground	5	0.5	BK	550	III	-
6	0.5	VT/GN	359	I	-	DRL Supply Voltage	6	0.5	VT/GN	359	III	-
7	0.35	BN	6581	I	-	Front Parking Aid Display Supply Voltage	7	0.35	BN	6581	III	-
8	0.35	VT/WH	5215	I	-	Front Parking Left Corner Sensor	8	0.35	VT/WH	5215	III	-
9	0.35	YE/GY	5216	I	-	Front Parking Left Mid Sensor	9	0.35	YE/GY	5216	III	-
10	0.35	GY	3154	I	-	Left Front Supplemental Object Sensor Signal	10	0.35	GY	3154	III	-
11-12	-	-	-	I	-	Not Occupied	11-12					
13	0.5	VT/GY	709	I	-	Left Park Lamp Supply Voltage	13	0.35	VT/GY	709	III	-
14	-	-	-	I	-	Not Occupied	14					

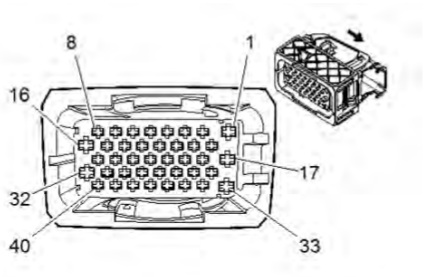
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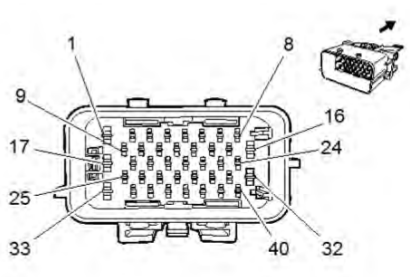
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Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
15	0.75	BK	650	I	-	Ground	15	0.5	BK	650	III	-
16	0.5	BN/VT	2234	I	-	Front Fog Lamp Supply Voltage	16	0.5	BN/VT	2234	III	-
17	0.35	WH/GY	5217	I	-	Front Parking Right Corner Sensor	17	0.35	WH/GY	5217	III	-
18	0.35	VT/GY	5218	I	-	Front Parking Right Mid Sensor	18	0.35	VT/GY	5218	III	-
19	0.35	BK/BU	5214	I	-	Front Parking Sensor Low Reference	19	0.35	BK/BU	5214	III	-
20	0.35	GN	3155	I	-	Right Front Supplemental Object Sensor Signal	20	0.35	GN	3155	III	-

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X110 Engine Harness to Body Harness





Connector Part Information

- Harness Type: Engine
- OEM Connector: 13257305
- Service Connector: 13576549
- Description: 40-Way F DSQ 1.5, ATS 2.8 Series, Sealed BK

Connector Part Information

- Harness Type: Body
- OEM Connector: 13262025
- Service Connector: 13576551
- Description: 40-Way M 2.8 ATS DSQ 1.5 Series, Sealed

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available
II	13582181	J-35616-35 (VT)	J-38125-215A
III	13575233	J-35616-35 (VT)	J-38125-215A
IV	13575380	J-35616-35 (VT)	J-38125-215A
V	19119443	J-35616-35 (VT)	J-38125-215A
VI	Not Available	Not Available	Not Available

X110 Engine Harness to Body Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	VT/BU	5294	I	-	Powertrain Main Relay Fused Supply (5)	1	0.5	VT/BU	5294	II	-
2	0.5	GY/RD	6109	I	-	Clutch Apply Sensor Voltage Reference	2	0.35	GY/RD	6109	III	-
3	0.5	YE	6111	I	-	Clutch Apply Sensor Signal	3	0.35	YE	6111	III	-
4	0.5	BU/WH	1937	I	-	Secondary Fuel Level Sensor Signal	4	0.35	BU/WH	1937	IV	-
5	0.5	BU/VT	1589	I	-	Primary Fuel Level Sensor Signal	5	0.35	BU/VT	1589	IV	-
6	0.5	BK/GN	6281	I	-	Fuel Level Sensor Low Reference	6	0.35	BK/GN	6281	IV	-
7	0.5	GY	5660	I	-	Fuel Pump Controller Data Out Signal	7	0.35	GY	5660	IV	-
8	0.5	WH	1579	I	-	Fuel Temperature/Composition Signal	8	0.5	WH	1579	IV	-
9	0.5	BU/BN	7573	I	-	Electric Variable Displacement Supply	9	0.35	BU/BN	7573	IV	-
10	0.5 0.5	BK/GY WH/BK	6110 5666	I	-	Clutch Apply Sensor Low Reference Liquid Petroleum Gas Module Control	10	0.35 0.5	BK/GY WH/BK	6110 5666	III	-
11	0.5	BK/BU	1271	I	-		11	0.35	BK/BU	1271	III	-

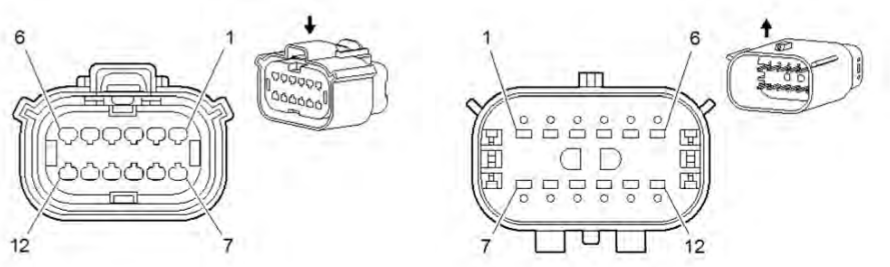
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Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
						Accelerator Pedal Position Low Reference (1)						
12	0.5	YE/WH	1161	I	-	Accelerator Pedal Position Signal (1)	12	0.35	YE/WH	1161	III	-
13	0.5	WH/RD	1164	I	-	Accelerator Pedal Position 5 Volt Reference (1)	13	0.35	WH/RD	1164	III	-
14	0.5	BK/WH	451	I	-	Signal Ground	14	0.5	BK/WH	451	IV	-
15	0.5	BU/WH	7446	I	-	Fuel Line Pressure Sensor Signal	15	0.35	BU/WH	7446	IV	-
16	0.5	GN/GY	465	I	-	Fuel Pump Primary Relay Control	16	0.35 0.5	GN/GY GN/GY	465 465	II	-
17	0.5	BN/WH	419	I	-	Check Engine Indicator Control	17	0.35	BN/WH	419	II	-
18	0.5	BU/YE	7574	I	-	Electric Variable Displacement Control	18	0.35	BU/YE	7574	IV	-
19	0.5	BK/VT	1272	I	-	Accelerator Pedal Position Low Reference (2)	19	0.35	BK/VT	1272	III	-
20	0.5	GN/WH	1162	I	-	Accelerator Pedal Position Signal (2)	20	0.35	GN/WH	1162	III	-
21	0.5	BN/RD	1274	I	-	Accelerator Pedal Position 5 Volt Reference (2)	21	0.35	BN/RD	1274	III	-
22	0.5	VT/YE	5985	I	-	Accessory Wakeup Serial Data	22	0.35	VT/YE	5985	IV	-
23	0.5	BK/YE	7447	I	-	Fuel Line Pressure Sensor Low Reference	23	0.35	BK/YE	7447	IV	-
24	0.5	BN/RD	7445	I	-	Fuel Line Pressure Sensor 5V Reference	24	0.35	BN/RD	7445	IV	-
25	0.5	WH/BU	5986	I	-	Serial Data Communication Enable	25	0.35	WH/BU	5986	IV	-
26	0.5	WH/BU	6311	I	-	Cruise/ETC/TCC Brake Signal	26	0.35	WH/BU	6311	IV	-
27	0.5	WH	7494	I	-	High Speed GMLAN Serial Data (-)(3)	27	0.5	WH	7494	IV	-
28	0.5	BU	2500	I	-	High Speed GMLAN Serial Data (+) (1)	28	0.5	BU	2500	IV	-
29	0.5	BU/YE	6105	I	-	High Speed GMLAN Serial Data (+) (2)	29	0.5	BU/YE	6105	IV	-
30	0.5	BU/YE	6105	I	-	High Speed GMLAN Serial Data (+) (2)	30	0.5	BU/YE	6105	IV	-
31	0.5	BK/YE	5382	I	-	Brake Position Sensor Low Reference	31	0.35	BK/YE	5382	III	-
32	0.5	WH/RD	5381	I	-	Brake Position Sensor 5 Volt Reference	32	0.35	WH/RD	5381	V	-
33	0.5 0.75	RD/BN RD/BN	440 440	I	-	Battery Positive Voltage Battery Positive Voltage	33	0.5	RD/BN	440	II	-
34	0.5	WH/BK	2366	I	-	Cooling Fan Control Relay Speed Signal	34	0.35	WH/BK	2366	IV	-
35	0.5	GY	1724	I	-	Supercharger Boost Solenoid Control	35					
36	0.5	BU/BK	7493	I	-	High Speed GMLAN Serial Data (+)(3)	36	0.5	BU/BK	7493	IV	-
37	0.5	WH	2501	I	-	High Speed GMLAN Serial Data (-) (1)	37	0.5	WH	2501	IV	-
38	0.5	WH	6106	I	-	High Speed GMLAN Serial Data (-) (2)	38	0.5	WH	6106	IV	-
39	0.5	WH	6106	I	-	High Speed GMLAN Serial Data (-) (2)	39	0.5	WH	6106	IV	-
40	0.5	WH/GN	5380	I	-	Brake Position Sensor Signal	40	0.35	WH/GN	5380	III	-

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X111 Body Harness to Engine Harness



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13503526
- Service Connector: 13503528
- Description: 12-Way F 1.5 Series, Sealed (BK)

Connector Part Information

- Harness Type: Body
- OEM Connector: 13503540
- Service Connector: 13503540
- Description: 12-Way M 150 MX Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13588067	J-35616-35 (VT)	J-38125-217
II	19119444	J-35616-35 (VT)	J-38125-215A
III	13588067	J-35616-35 (VT)	J-38125-215A
IV	19119441	J-35616-35 (VT)	J-38125-217

X111 Body Harness to Engine Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	YE/WH	6030	I	-	Brake Vacuum Sensor Signal	1	0.35	YE/WH	6030	III	-
2	0.5	BK/YE	6032	I	-	Brake Vacuum Sensor Low Reference	2	0.35	BK/YE	6032	III	-
3	0.5	YE/RD	6031	I	-	Brake Vacuum Sensor 5 Volt Reference	3	0.35	YE/RD	6031	III	-
4	0.5	WH/RD	5381	II	-	Brake Position Sensor 5 Volt Reference	4	0.35	WH/RD	5381	IV	-
5	0.5	BK/YE	5382	II	-	Brake Position Sensor Low Reference	5	0.35	BK/YE	5382	IV	-
6	0.5	WH/GN	5380	II	-	Brake Position Sensor Signal	6	0.35	WH/GN	5380	IV	-
7	0.5	WH/RD	7524	I	-	Front Axle Level Sensor 5 Volt Reference	7	0.5	WH/RD	7524	III	-
8	0.5	BK/GY	7526	I	-	Front Axle Level Sensor Low Reference	8	0.5	BK/GY	7526	III	-
9	0.5 0.5	GN BN/WH	9600 7525	I	MG9 or MV5 T3T	Anchor Wire Front Axle Level Sensor Signal	9	0.5 0.5	GN BN/WH	9600 7525	III	- RHD with T3T
10	0.5	GN	9600	I	MG9 or MV5	Anchor Wire	10	0.5	GN	9600	III	-
11	0.5	BU	9601	I	MG9 or MV5	Anchor Wire	11	0.5	BU	9601	III	-

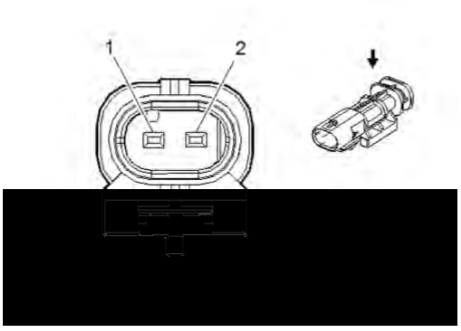
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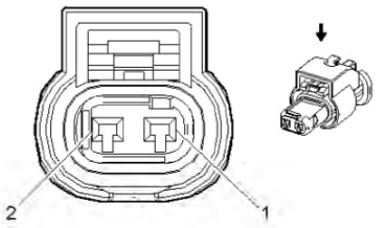
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Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
12	0.5	BU	9601	I	MG9 or MV5	Anchor Wire	12	0.5	BU	9601	III	-

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X117 Body Front Harness to Body Harness





Connector Part Information

- Harness Type: Body Front
- OEM Connector: 13505427
- Service Connector: 22836728
- Description: 2-Way F 1.2 MLK Series, Sealed BK
- Harness Type: Body
- OEM Connector: 13505427
- Service Connector: 22836728
- Description: 2-Way M 1.2 MLK Series, Sealed BK

Connector Part Information

- Harness Type: Body
- OEM Connector: 13505426
- Service Connector: 13384337
- Description: 2-Way M 1.2 MCP Series, Sealed BK with BK Inner Connector

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available
II	Not Available	J-35616-35 (VT)	Not Available

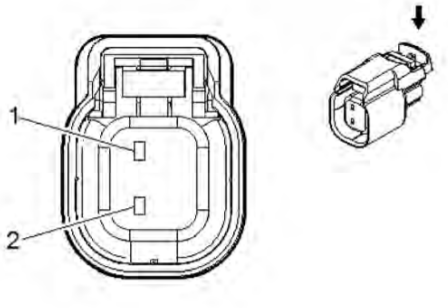
X117 Body Front Harness to Body Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	GY	830	I	-	Wheel Speed Sensor Signal Left Front	1	0.35	GY	830	I	-
2	0.35	GY/WH	7064	I	-	Wheel Speed Sensor Supply Voltage Left Front	2	0.35	GY/WH	7064	I	-

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X121 Body Harness to Body Harness



Connector Part Information

- Harness Type: Body
- OEM Connector: 13503510
- Service Connector: 19300543
- Description: 2-Way F 1.5 Series, Sealed BK

Connector Part Information

- Harness Type:
- OEM Connector:
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way M

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available
II	Not Available	J-35616-14 (GN)	J-38125-217
III	Not Available	Not Available	Not Available

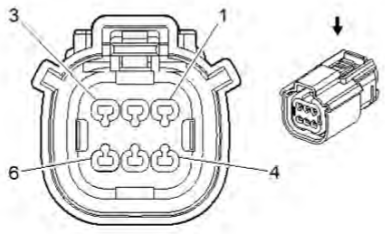
X121 Body Harness to Body Harness

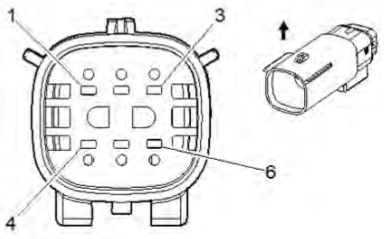
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.75	BN/BK	3507	I	-	Liquid Petroleum Gas Fuel Shutoff Solenoid Control (2)	1	0.75	BN/BK	3507	III	-
2	-	-	-	-	-	Not Occupied	2	-	-	-	-	-

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X122 Left Front Suspension Jumper Harness to Body Front Harness





Connector Part Information

- Harness Type: Left Front Suspension Jumper
- OEM Connector: 33472-0606
- Service Connector: Service by Harness - See Part Catalog
- Description: 6-Way F MX150 Series Sealed (BK)

Connector Part Information

- Harness Type: Body Front
- OEM Connector: 13503535
- Service Connector: 13576414
- Description: 6-Way M 150 MX Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available
II	Not Available	J-35616-35 (VT)	Not Available

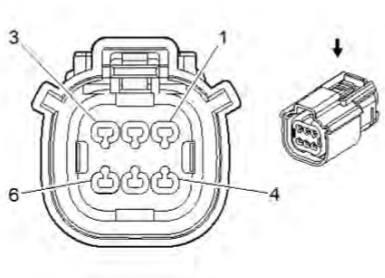
X122 Left Front Suspension Jumper Harness to Body Front Harness

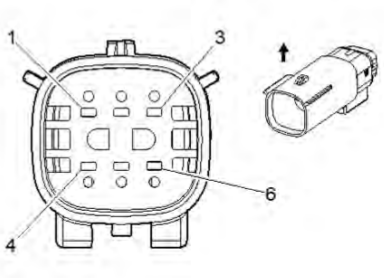
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	BK/BU	1206	I	F55	Left Front Strut Position Sensor Low Reference	1	0.35	BK/BU	1206	II	-
2	0.35	BN/WH	1207	I	F55	Left Front Strut Position Sensor Signal	2	0.35	BN/WH	1207	II	-
3	0.35	BU/RD	1205	I	F55	Left Front Strut Position Sensor Voltage Reference	3	0.35	BU/RD	1205	II	-
4	0.75	BN/WH	1107	I	F55	Left Front Damping Servo Supply Voltage	4	0.75	BN/WH	1107	II	-
5	0.75	GY/BU	1113	I	F55	Left Front Damping Servo Control	5	0.75	GY/BU	1113	II	-
6	-	-	-	-	-	Not Occupied	6	-	-	-	-	-

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X123 Right Front Suspension Jumper Harness to Body Harness





Connector Part Information

- Harness Type: Right Front Suspension Jumper
- OEM Connector: 19178149
- Service Connector: 13585853
- Description: 6-Way F MX150 Series Sealed (BK)

Connector Part Information

- Harness Type: Body
- OEM Connector: 13503535
- Service Connector: No SDC/FSU
- Description: 6-Way M MX150 Series Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575808	J-35616-14 (GN)	J-38125-217

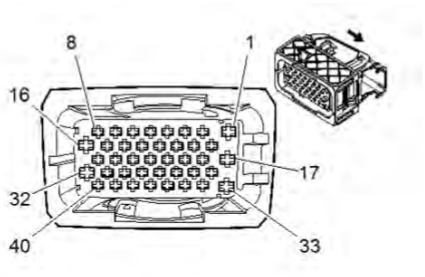
X123 Right Front Suspension Jumper Harness to Body Harness

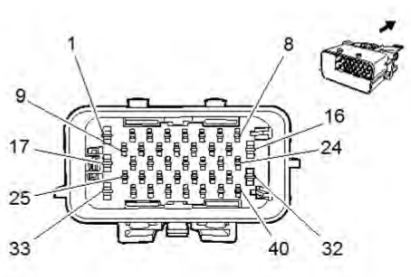
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	BK/GY	1212	I	-	Right Front Strut Position Sensor Low Reference	1	0.35	BK/GY	1212	I	F55
2	0.35	YE/WH	1213	I	-	Right Front Strut Position Sensor Signal	2	0.35	YE/WH	1213	I	F55
3	0.35	BN/RD	1211	I	-	Right Front Strut Position Sensor Voltage Reference	3	0.35	BN/RD	1211	I	F55
4	0.75	BN/BU	1116	I	-	Right Front Damping Servo Supply Voltage	4	0.75	BN/BU	1116	I	F55
5	0.75	GY/WH	1117	I	-	Right Front Damping Servo Control	5	0.75	GY/WH	1117	I	F55
6	-	-	-	-	-	Not Occupied	6	-	-	-	-	-

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X126 Forward Lamp Harness to Body Harness





Connector Part Information

- Harness Type: Forward Lamp
- OEM Connector: 13257305
- Service Connector: 13576549
- Description: 40-Way F DSQ 1.5, ATS 2.8 Series, Sealed (BK)

Connector Part Information

- Harness Type: Body
- OEM Connector: 13262025
- Service Connector: 13576551
- Description: 40-Way M 2.8 ATS DSQ 1.5 Series, Sealed

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available
II	Not Available	J-35616-14 (GN)	J-38125-560
III	Not Available	J-35616-35 (VT)	J-38125-36
IV	13581368	J-35616-35 (VT)	J-38125-215A
V	13575380	J-35616-35 (VT)	J-38125-215A
VI	13578881	J-35616-35 (VT)	J-38125-215A
VII	Not Available	J-35616-35 (VT)	J-38125-215A

X126 Forward Lamp Harness to Body Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.75	BU/VT	392	I	-	Rear Window Washer Pump Control	1	0.75	BU/VT	392	IV	-
2-7	-	-	-	-	-	Not Occupied	2-7	-	-	-	-	-
8	0.5	RD/VT	5340	IV	-	Battery Positive Voltage	8	0.5	RD/VT	5340	VII	-
9	-	-	-	-	-	Not Occupied	9	-	-	-	-	-
10	0.35	WH	311	II	V5B	Right Headlamp High Beam Supply Voltage	10	0.35	WH	311	V	V5B
11-13	-	-	-	-	-	Not Occupied	11-13	-	-	-	-	-
14	0.5	BU/WH	1314	II	-	Left Front Turn Signal Lamp Supply Voltage	14	0.5	BU/WH	1314	V	-
15	0.5	GN/VT	1315	II	-	Right Front Turn Signal Lamp Supply Voltage	15	0.5	GN/VT	1315	V	-
16	0.75	YE	712	I	-	Left Headlamp Low Beam Supply Voltage	16	0.75	YE	712	IV	-
17	0.75	GY/VT	228	I	-	Windshield Washer Pump Control	17	0.75	GY/VT	228	IV	-
	-	-	-	-	-	Not Occupied		-	-	-	-	-

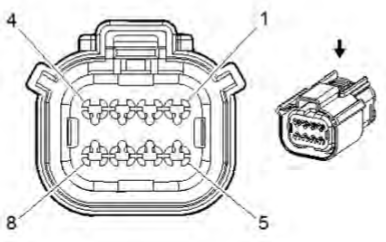
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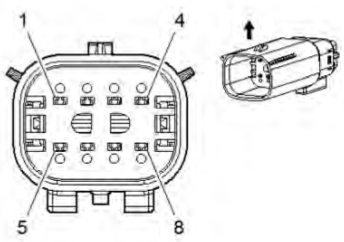
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Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
18-22							18-22					
23	0.35	VT/GY	709	II	-	Left Park Lamp Supply Voltage	23	0.35	VT/GY	709	V	-
24	0.35	GY/BN	309	II	-	Right Park Lamp Supply Voltage	24	0.35	GY/BN	309	V	-
25	0.35	BU/GY	636	II	-	Outside Ambient Air Temperature Sensor Signal	25	0.35	BU/GY	636	V	-
26	0.5	BK	550	II	-	Ground	26	0.5	BK	550	V	-
27	0.5	GN/VT	7528	II	-	Linear Interconnect Network Bus 6	27	0.35	GN/VT	7528	V	-
28	0.5	BK/OG	5045	II	-	Left Front Discriminating Sensor Low Reference	28	0.35	BK/OG	5045	V	-
29	0.5	BK/OG	5600	II	-	Right Front Discriminating Sensor Low Reference	29	0.35	BK/OG	5600	V	-
30	0.35	BN/GN	109	II	-	Hood Ajar Switch Signal	30	0.35	BN/GN	109	V	-
31	0.35	VT	185	II	-	Low Washer Fluid Indicator Control	31	0.35	VT	185	V	-
32	0.75	YE	312	I	-	Right Headlamp Low Beam Supply Voltage	32	0.75	YE	312	IV	-
33	1.5	VT	1197	III	-	Headlamp Washer Pump Control	33	1.5	VT	1197	VI	-
34	0.35	BK/BU	61	II	-	Outside Ambient Temperature Sensor Low Reference	34	0.35	BK/BU	61	V	-
35	0.5	BK	650	II	-	Ground	35	0.5	BK	650	V	-
36	0.5	GN/BN	7529	II	-	Linear Interconnect Network Bus 7	36	0.35	GN/BN	7529	V	-
37	0.5	OG/YE	354	II	-	Left Front Discriminating Sensor Signal	37	0.35	OG/YE	354	V	-
38	0.5	OG/GN	1409	II	-	Right Front Discriminating Sensor Signal	38	0.35	OG/GN	1409	V	-
39	0.35	WH/BK	2366	II	-	Cooling Fan Control Relay Speed Signal	39	0.35	WH/BK	2366	V	-
40	0.5	BN/VT	2234	II	-	Front Fog Lamp Supply Voltage	40	0.5	BN/VT	2234	V	-

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X127 Body Front Harness to Body Harness





Connector Part Information

- Harness Type: Body Front
- OEM Connector: 13503524
- Service Connector: 13577527
- Description: 8-Way F 1.5 Series, Sealed (BK)

Connector Part Information

- Harness Type: Body
- OEM Connector: 13503538
- Service Connector: 19300474
- Description: 8-Way M 150 MX Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

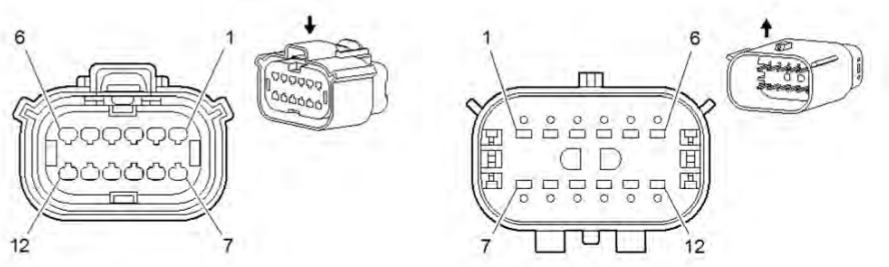
X127 Body Front Harness to Body Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	GY	830	I	-	Wheel Speed Sensor Signal Left Front	1	0.35	GY	830	I	-
2	0.35	GY/WH	7064	I	-	Wheel Speed Sensor Supply Voltage Left Front	2	0.35	GY/WH	7064	I	-
3	0.35	BU/RD	1205	I	-	Left Front Strut Position Sensor Voltage Reference	3	0.35	BU/RD	1205	I	-
4	0.35	BN/WH	1207	I	-	Left Front Strut Position Sensor Signal	4	0.35	BN/WH	1207	I	-
5	0.35	BK/BU	1206	I	-	Left Front Strut Position Sensor Low Reference	5	0.35	BK/BU	1206	I	-
6	0.75	GY/BU	1113	I	-	Left Front Damping Servo Control	6	0.75	GY/BU	1113	I	-
7	0.75	BN/WH	1107	I	-	Left Front Damping Servo Supply Voltage	7	0.75	BN/WH	1107	I	-
8	-	-	-	-	-	Not Occupied	8	-	-	-	-	-

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X140 LPG Fuel Harness to Body Harness



Connector Part Information

- Harness Type: LPG Fuel
- OEM Connector: 13503526
- Service Connector: Service by Harness - See Part Catalog
- Description: 12-Way F 1.5 Series, Sealed (BK)

Connector Part Information

- Harness Type: Body
- OEM Connector: 13503540
- Service Connector: 13503540
- Description: 12-Way M 150 MX Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available
II	19119440	J-35616-35 (VT)	J-38125-215A
III	Not Available	J-35616-3 (GY)	J-38125-217
IV	Not Available	Not Available	Not Available
V	13588067	J-35616-35 (VT)	J-38125-215A

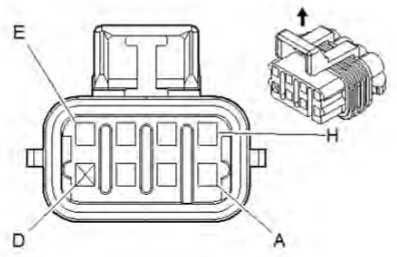
X140 LPG Fuel Harness to Body Harness

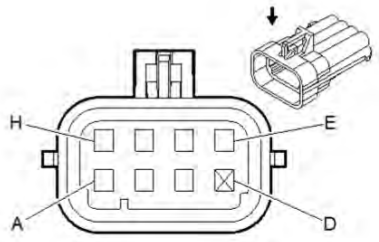
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.75	BN/BK	3507	I	-	Liquid Petroleum Gas Fuel Shutoff Solenoid Control (2)	1	0.75	BN/BK	3507	II	-
2	0.5	VT/GY	3502	I	-	Liquid Petroleum Gas PTC Heater Relay Control (1)	2	0.5	VT/GY	3502	IV	-
3	0.5	BU/WH	3503	I	-	Liquid Petroleum Gas PTC Heater Relay Control (2)	3	0.5	BU/WH	3503	IV	-
4	0.5	GY/BK	3504	I	-	Liquid Petroleum Gas PTC Heater Relay Control (3)	4	0.5	GY/BK	3504	V	-
5	0.5	VT/BK	339	I	-	Run/Crank Ignition 1 Voltage	5	0.35	VT/BK	339	V	-
6	0.75	BK	850	I	-	Ground	6	0.75	BK	850	III	-
7-12	-	-	-	-	-	Not Occupied	7-12	-	-	-	-	-

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X160 Engine Harness to Ignition Coil Harness (L77/LS3)





Connector Part Information

- Harness Type: Engine
- OEM Connector: 12047938
- Service Connector: 13580883
- Description: 8-Way F Metri Pack 150 Series, Sealed (L-GY)

Connector Part Information

- Harness Type: Ignition Coil
- OEM Connector: 15496016
- Service Connector: Service by Harness - See Part Catalog
- Description: 8-Way M Metri Pack 150 Series, Sealed (GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available
II	Not Available	Not Available	Not Available

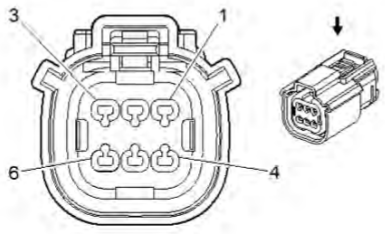
X160 Engine Harness to Ignition Coil Harness (L77/LS3)

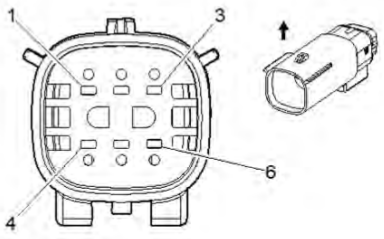
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	0.75	BK	250	I	-	Ground	A	0.8	BK	250	II	-
B	0.5	GN/GY	2127	I	-	Ignition Control (7)	B	0.5	RD	2127	II	-
C	0.5	BU/GY	2125	I	-	Ignition Control (5)	C	0.5	D-GN	2125	II	-
D	-	-	-	-	-	Not Occupied	D	-	-	-	-	-
E	0.5	BK/BU	2129	I	-	Ignition Control Low Reference Bank 1	E	0.5	BN	2129	II	-
F	0.5	GN/BU	2123	I	-	Ignition Control (3)	F	0.5	LT-BU	2123	II	-
G	0.5	BU/VT	2121	I	-	Ignition Control (1)	G	0.5	PU	2121	II	-
H	0.5	VT/BU	5291	I	-	Powertrain Main Relay Fused Supply (2)	H	0.5	PK	5291	II	-

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X160 Engine Harness to Fuel Injector Harness (LFW/LFX)





Connector Part Information

- Harness Type: Engine
- OEM Connector: 33472-0606
- Service Connector: 13585853
- Description: 6-Way F 150 MX Series, Sealed (BK)

Connector Part Information

- Harness Type: Fuel Injector
- OEM Connector: 33482-0601
- Service Connector: Service by Harness - See Part Catalog
- Description: 6-Way M MX150 Series Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-14 (GN)	J-38125-217
II	Not Available	Not Available	Not Available

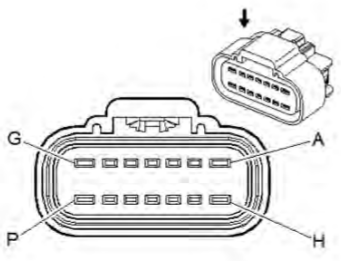
X160 Engine Harness to Fuel Injector Harness (LFW/LFX)

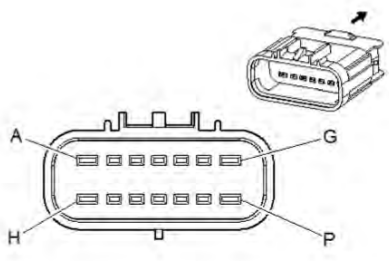
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.75	BN	4801	I	-	Direct Fuel Injector (DFI) High Voltage Control Cylinder 1	1	0.5	BN	4801	II	-
2	0.75	BN/WH	4901	I	-	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 1	2	0.5	BN/WH	4901	II	-
3	0.75	GN	4803	I	-	Direct Fuel Injector (DFI) High Voltage Control Cylinder 3	3	0.5	D-GN	4803	II	-
4	0.75	GN/GY	4903	I	-	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 3	4	0.5	D-GN/WH	4903	II	-
5	0.75	WH/GN	4805	I	-	Direct Fuel Injector (DFI) High Voltage Control Cylinder 5	5	0.5	L-GN	4805	II	-
6	0.75	GN/WH	4905	I	-	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 5	6	0.5	L-GN/WH	4905	II	-

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X160 Engine Harness to Fuel Injector Harness (LSA)





Connector Part Information

- Harness Type: Engine
- OEM Connector: 15336037
- Service Connector: 19179461
- Description: 14-Way F 150, 250 GT Series, Sealed (BK)

Connector Part Information

- Harness Type: Fuel Injector
- OEM Connector: 15422562
- Service Connector: Service by Harness - See Part Catalog
- Description: 14-Way M GT Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-4A (PU)	J-38125-553
II	13578912	J-35616-2A (GY)	J-38125-553
III	13578915	J-35616-4A (PU)	J-38125-553
IV	13584446	J-35616-2A (GY)	J-38125-553
V	Not Available	Not Available	Not Available

X160 Engine Harness to Fuel Injector Harness (LSA)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	0.75	PK/BK	5291	I	-	Powertrain Main Relay Fused Supply (2)	A	0.75	PK/BK	5291	V	-
B	0.5	GN/GY	2127	II	-	Ignition Control (7)	B	0.5	GN/GY	2127	V	-
C	0.5	BN/VT	877	II	-	Fuel Injector Control (7)	C	0.5	OG/BK	877	V	-
D	0.5	BU/GY	2125	II	-	Ignition Control (5)	D	0.5	BU/GY	2125	V	-
E	0.5	BN/GY	845	II	-	Fuel Injector Control (5)	E	0.5	TN/WH	845	V	-
F	0.5	GN/BU	2123	II	-	Ignition Control (3)	F	0.5	GN/BU	2123	V	-
G	0.75	BK	250	I	-	Ground	G	0.75	BK	250	V	-
H	0.5	BN/VT	1746	III	-	Fuel Injector Control (3)	H	0.5	PK/BK	1746	V	-
J	0.5	BU/VT	2121	II	-	Ignition Control (1)	J	0.5	BU/VT	2121	V	-
K	0.5	GN/YE	1744	II	-	Fuel Injector Control (1)	K	0.5	TN	1744	V	-
L	0.75	YE/BK	7124	IV	-	Super Charger Inlet Air Pressure Sensor Supply Voltage 5V	L	0.75	YE/BK	7124	V	-
M	0.75	BN/GN	7125	IV	-	Super Charger Inlet Air Pressure Sensor Return	M	0.75	BN/GN	7125	V	-
N	0.75	BN	7123	IV	-	Super Charger Inlet Air Pressure Sensor Signal	N	0.75	BN	7123	V	-
P	0.5	BK/BU	2129	III	-	Ignition Control Low Reference	P	0.5	BK/BU	2129	V	-

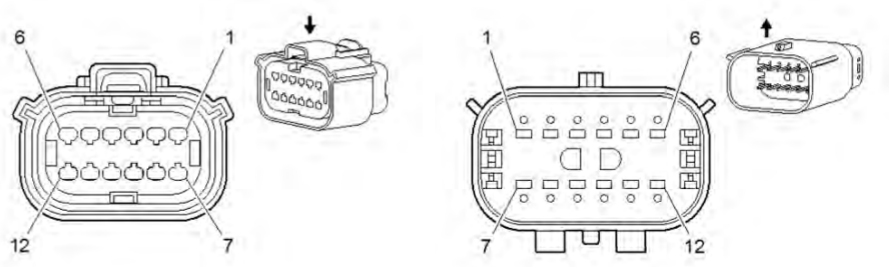
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Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option

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X160 Engine Harness to Fuel Injector Harness (LWR)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 33472-1206
- Service Connector: TBD
- Description: 12-Way F MX150 Series, Sealed (BK)

Connector Part Information

- Harness Type: Fuel Injector
- OEM Connector: 33482-1201
- Service Connector: Service by Harness – See Part Catalog
- Description: 12-Way M MX150 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Pending	Pending	Pending

X160 Engine Harness to Fuel Injector Harness (LWR)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.75	BN	4801	I	LWR	Direct Fuel Injector (DFI) High Voltage Control Cylinder 1	1				I	-
2	0.75		4802	I	LWR	Direct Fuel Injector (DFI) High Voltage Control Cylinder 2	2				I	-
3	0.75		4803	I	LWR	Direct Fuel Injector (DFI) High Voltage Control Cylinder 3	3				I	-
4	0.75	GY	4804	I	LWR	Direct Fuel Injector (DFI) High Voltage Control Cylinder 4	4				I	-
5	0.75		4805	I	LWR	Direct Fuel Injector (DFI) High Voltage Control Cylinder 5	5				I	-
6	0.75		4806	I	LWR	Direct Fuel Injector (DFI) High Voltage Control Cylinder 6	6				I	-
7	0.75	BN	4901	I	LWR	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 1	7				I	-
8	0.75	GY	4902	I	LWR	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 2	8				I	-
9	0.75	GY	4903	I	LWR	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 3	9				I	-
10	0.75		4904	I	LWR	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 4	10				I	-
11	0.75		4905	I	LWR		11				I	-

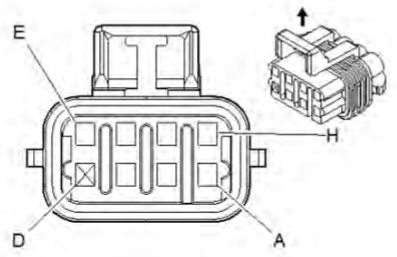
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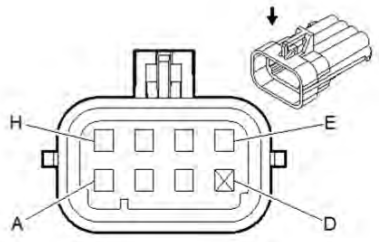
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Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
						Direct Fuel Injector (DFI) High Voltage Supply Cylinder 5						
12	0.75	GY	4906	I	LWR	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 6	12				I	-

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X161 Engine Harness to Ignition Coil Harness (L77/LS3)





Connector Part Information

- Harness Type: Engine
- OEM Connector: 12047938
- Service Connector: 13580883
- Description: 8-Way F Metri Pack 150 Series, Sealed (L-GY)

Connector Part Information

- Harness Type: Ignition Coil
- OEM Connector: 15496016
- Service Connector: Service by Harness - See Part Catalog
- Description: 8-Way M Metri Pack 150 Series, Sealed (GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available
II	Not Available	Not Available	Not Available

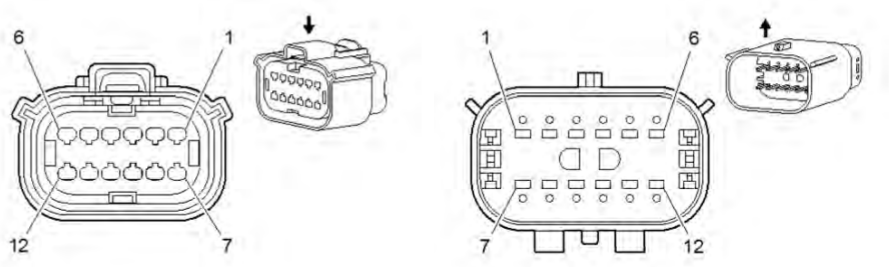
X161 Engine Harness to Ignition Coil Harness (L77/LS3)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	0.75	BK	350	I	-	Ground	A	0.8	BK	350	II	-
B	0.5	BU/WH	2122	I	-	Ignition Control (2)	B	0.5	RD	2122	II	-
C	0.5	YE/BU	2124	I	-	Ignition Control (4)	C	0.5	D-GN	2124	II	-
D	-	-	-	-	-	Not Occupied	D	-	-	-	-	-
E	0.5	BK/GY	2130	I	-	Ignition Control Low Reference Bank 2	E	0.5	BN	2130	II	-
F	0.5	BN/BU	2126	I	-	Ignition Control (6)	F	0.5	L-BU	2126	II	-
G	0.5	VT/WH	2128	I	-	Ignition Control (8)	G	0.5	PU	2128	II	-
H	0.75	VT/BU	5292	I	-	Powertrain Main Relay Fused Supply (3)	H	0.8	PK	5292	II	-

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X161 Engine Harness to Fuel Injector Harness (LFW/LFX)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 33472-1236
- Service Connector: 19178148
- Description: 12-Way F 150 MX Series, Sealed (BK)

Connector Part Information

- Harness Type: Fuel Injector
- OEM Connector: 33482-1216
- Service Connector: Service by Harness - See Part Catalog
- Description: 12-Way M MX150 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-14 (GN)	J-38125-217
II	13587508	J-35616-14 (GN)	J-38125-217
III	Not Available	Not Available	Not Available

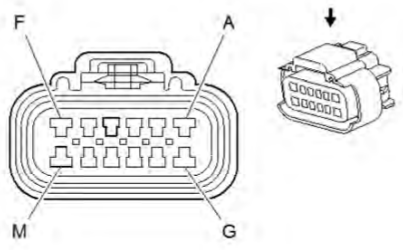
X161 Engine Harness to Fuel Injector Harness (LFW/LFX)

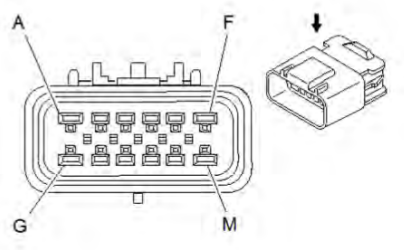
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	-	-	-	-	-	Not Occupied	1	-	-	-	-	-
2	0.75	BU	4802	I	-	Direct Fuel Injector (DFI) High Voltage Control Cylinder 2	2	0.5	D-BU	4802	III	-
3	0.75	GY/BU	4804	I	-	Direct Fuel Injector (DFI) High Voltage Control Cylinder 4	3	0.5	L-BU	4804	III	-
4	0.75	VT/GN	4806	I	-	Direct Fuel Injector (DFI) High Voltage Control Cylinder 6	4	0.5	PU	4806	III	-
5	0.5	BK/GN	2919	II	-	Fuel Rail Pressure Sensor Low Reference	5	0.5	TN	2919	III	-
6-7	-	-	-	-	-	Not Occupied	6-7	-	-	-	-	-
8	0.75	BU/GY	4902	I	-	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 2	8	0.5	D-BU/WH	4902	III	-
9	0.75	BU/WH	4904	I	-	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 4	9	0.5	L-BU/WH	4904	III	-
10	0.75	VT/GY	4906	I	-	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 6	10	0.5	PU/WH	4906	III	-
11	0.5	BN/RD	2917	II	-	Fuel Rail Pressure Sensor (5) Volt Reference	11	0.5	GY	2917	III	-
12	0.5	BU/WH	2918	II	-	Fuel Rail Pressure Sensor Signal	12	0.5	YE	2918	III	-

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X161 Engine Harness to Fuel Injector Harness (LSA)





Connector Part Information

- Harness Type: Engine
- OEM Connector: 15326939
- Service Connector: 88988440
- Description: 12-Way F 150, 280 GT Series, Sealed (BK)

Connector Part Information

- Harness Type: Fuel Injector
- OEM Connector: 15336034
- Service Connector: Service by Harness - See Part Catalog
- Description: 12-Way M GT 150/280 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-4A (PU)	J-38125-553
II	13578912	J-35616-2A (GY)	J-38125-553
III	13578915	J-35616-4A (PU)	J-38125-553
IV	Not Available	Not Available	Not Available

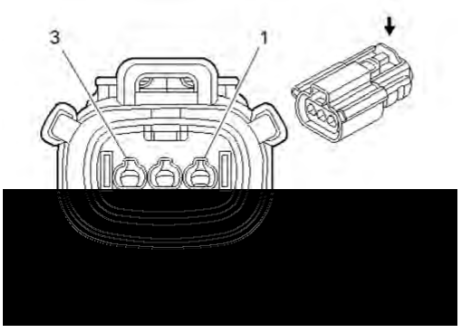
X161 Engine Harness to Fuel Injector Harness (LSA)

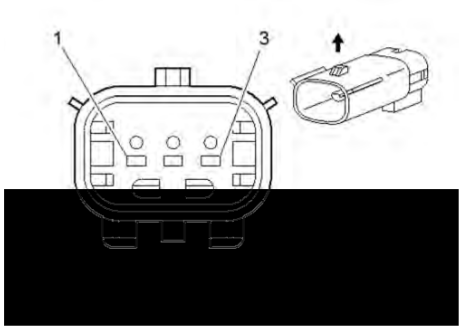
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	0.75	PK/BK	5292	I	-	Powertrain Main Relay Fused Supply (3)	A	0.75	PK/BK	5292	IV	-
B	0.5	VT/WH	2128	II	-	Ignition Control (8)	B	0.5	VT/WH	2128	IV	-
C	0.5	BN/GY	878	II	-	Fuel Injector Control (8)	C	0.5	D-BU/WH	878	IV	-
D	0.5	BN/BU	2126	II	-	Ignition Control (6)	D	0.5	BN/BU	2126	IV	-
E	0.5	BN/BU	846	II	-	Fuel Injector Control (6)	E	0.5	YE/BK	846	IV	-
F	0.75	BK	350	I	-	Ground	F	0.75	BK	350	IV	-
G	0.5	BK/GY	2130	III	-	Ignition Control Low Reference Bank 2	G	0.5	BK/GY	2130	IV	-
H	0.5	YE/BU	2124	II	-	Ignition Control (4)	H	0.5	YE/BU	2124	IV	-
J	0.5	BN/YE	844	II	-	Fuel Injector Control (4)	J	0.5	L-BU/BK	844	IV	-
K	0.5	BU/WH	2122	II	-	Ignition Control (2)	K	0.5	BU/WH	2122	IV	-
L	0.5	YE/WH	1745	II	-	Fuel Injector Control (2)	L	0.5	L-GN/BK	1745	IV	-
L	-	-	-	-	-	Not Occupied	L	-	-	-	-	-

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X170 Left Front Outer Object Sensor Harness to Front Fascia Harness (UFQ)





Connector Part Information

- Harness Type: Front Fascia
- OEM Connector: 13503225
- Service Connector: Service by Harness - See part Catalog
- Description: 3-Way F 150 MX Series BK

Connector Part Information

- Harness Type: Front Fascia
- OEM Connector: 13503931
- Service Connector: Service by Harness - See part Catalog
- Description: 3-Way M 150 MX Series BK

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available
II	Not Available	Not Available	Not Available

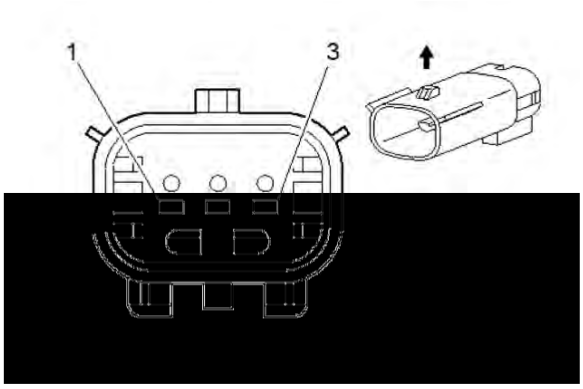
X170 Left Front Outer Object Sensor Harness to Front Fascia Harness (UFQ)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	BN	6581	I	-	Front Parking Aid Display Supply Voltage	1	0.35	BN	6581	II	-
2	0.35	VT/WH	5215	I	-	Front Parking Left Corner Sensor	2	0.35	VT/WH	5215	II	-
3	0.35	BK/BU	5214	I	-	Front Parking Sensor Low Reference	3	0.35	BK/BU	5214	II	-

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X171 Right Front Outer Object Sensor Harness to Front Fascia Harness (UFQ)



Connector Part Information

- Harness Type:
- OEM Connector:
- Service Connector: Service by Harness - See Part Catalog
- Description: 3-Way F

Connector Part Information

- Harness Type: Front Fascia
- OEM Connector: 13503931
- Service Connector: Service by Harness - See part Catalog
- Description: 3-Way M 150 MX Series BK

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available
II	Not Available	Not Available	Not Available
III	Not Available	J-35616-35 (VT)	Not Available

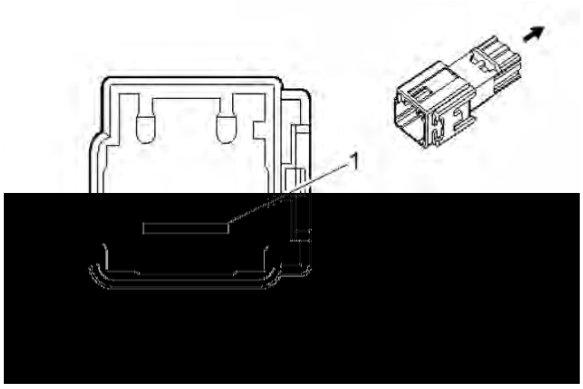
X171 Right Front Outer Object Sensor Harness to Front Fascia Harness (UFQ)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	BN	6581	I	-	Front Parking Aid Display Supply Voltage	1	0.35	BN	6581	II	-
2	0.35	WH/GY	5217	I	-	Front Parking Right Corner Sensor	2	0.35	WH/GY	5217	II	-
3	0.35	BK/BU	5214	I	-	Front Parking Sensor Low Reference	3	0.35	BK/BU	5214	II	-

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X205 Instrument Panel Harness to Body Harness



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 13581074
- Service Connector: 19119434
- Description: 1-Way F 9.5 Series NA

Connector Part Information

- Harness Type: Body
- OEM Connector: 13581075
- Service Connector: 19119435
- Description: 1-Way M 9.5 Series NA

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

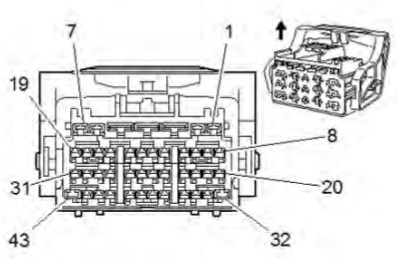
X205 Instrument Panel Harness to Body Harness

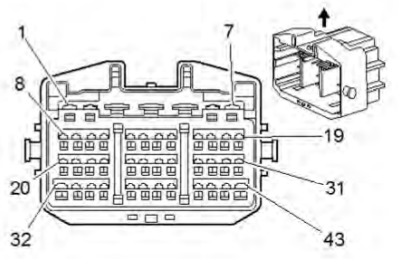
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	10	RD/WH	342	I	-	Battery Positive Voltage	1	10	RD/WH	342	I	-

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X206 Center Console Harness to Instrument Panel Harness





Connector Part Information

- Harness Type: Center Console
- OEM Connector: 13581055
- Service Connector: Service by Harness - See part Catalog
- Description: 43-Way F YESC Series BK

Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 13581056
- Service Connector: 19115704
- Description: 43-Way M YESC Series BK

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available
II	Not Available	Not Available	Not Available

X206 Center Console Harness to Instrument Panel Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	-	-	-	I	-	Not Occupied	1	-	-	-	II	-
2	1	BK	1450	I	-	Ground	2	1	BK	1450	II	-
3-5	-	-	-	I	-	Not Occupied	3-5	-	-	-	II	-
3-5	-	-	-	-	-	Not Occupied	3-5	-	-	-	-	-
6	1	VT	801	I	-	Retained Accessory Power Fuse Supply Voltage	6	1	VT	801	II	-
7	-	-	-	I	-	Not Occupied	7	-	-	-	II	-
8	0.13	YE	1492	I	-	Park Brake Switch Supply Voltage	8	0.35	YE	1492	II	-
9	0.13	YE	7683	I	-	Park Brake Release Switch Voltage Reference	9	0.35	YE/RD	7683	II	-
10	0.13	BU	6108	I	-	Park Brake Release Switch Signal	10	0.35	BU/BK	6108	II	-
11	0.35	BU	2060	I	-	Auxiliary Detection Signal	11	0.35	BU	2060	II	-
12	0.35	BARE	5842	I	-	Auxiliary Audio Screen (2)	12	0.35	BARE	5842	II	-
13	0.35	VT	5843	I	-	Auxiliary Audio Common Signal	13	0.35	VT	5843	II	-
14	0.35	GY	5839	I	-	Left Auxiliary Audio Signal (2)	14	0.35	GY	5839	II	-
15	0.35	GN	5841	I	-	Right Auxiliary Audio Signal (2)	15	0.35	GN	5841	II	-
16	0.35	WH	2058	I	-	Right Auxiliary Audio Signal (1)	16	0.35	WH	2058	II	-
17	0.35	YE	2059	I	-	Left Auxiliary Audio Signal (1)	17	0.35	YE	2059	II	-

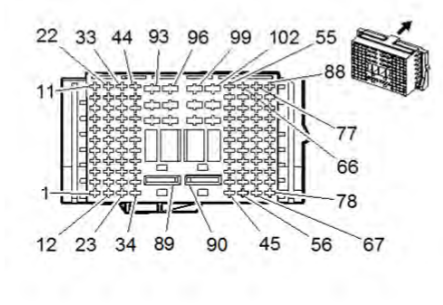
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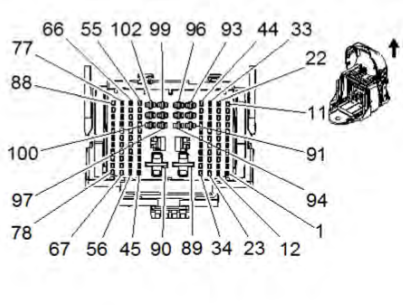
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Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
18	0.35	VT	5843	I	-	Auxiliary Audio Common Signal	18	0.35	VT	5843	II	-
19	0.35	BARE	5345	I	-	Auxiliary Audio Drain Wire (1)	19	0.35	BARE	5345	II	-
20	0.13	BU	1134	I	-	Park Brake Switch Signal	20	0.35	BU/VT	1134	II	-
21	0.13	GY	7684	I	-	Park Brake Apply Switch Voltage Reference	21	0.35	GY/RD	7684	II	-
22	0.13	BN	6107	I	-	Park Brake Apply Switch Signal	22	0.35	BN	6107	II	-
23-24	-	-	-	I	-	Not Occupied	23-24	-	-	-	II	-
25	0.35	GN/BN	5852	I	-	Rear Park Assist LED Disable Signal	25	0.35	GN/BN	5852	II	-
26	-	-	-	I	-	Not Occupied	26	-	-	-	II	-
27	0.35	GY/BK	3555	I	-	Passive Start Interior Antenna 2 Signal Lo	27	0.35	GY/BK	3555	II	-
28	0.35	WH	6816	I	-	Indicator Dimming Control	28	0.35	WH	6816	II	-
29	0.35	BU/VT	1788	I	-	Traction Control Switch Signal (1)	29	0.13 0.35	BU BU/VT	1788 1788	II	-
30	0.35	YE	2056	I	-	Auxiliary Video High Signal	30	0.35	YE	2056	II	-
31	0.35	BARE	2057	I	-	Auxiliary Video Low Signal	31	0.35	BARE	2057	II	-
32	0.35	BU/BN	3161	I	-	Parallel Park Assist Disable Switch Signal	32	0.35	BU/BN	3161	II	-
33	0.13	GY	3276	I	-	Vehicle Anti-Theft System Immobilizer Supply Voltage	33	0.13	GY	3276	II	-
34	0.35	GN/VT	7533	I	-	Linear Interconnect Network Bus 11	34	0.35	GN/VT	7533	II	-
35	0.13	GN	3277	I	-	Vehicle Anti-Theft System Immobilizer Return	35	0.13	GN	3277	II	-
36	0.35	YE	6817	I	-	LED Backlight Dimming Control	36	0.35	YE	6817	II	-
37	0.35	GY/GN	2555	I	-	Rear Park Assist Disable Signal	37	0.35	GY/GN	2555	II	-
38	-	-	-	I	-	Not Occupied	38	-	-	-	II	-
39	0.35	BU	3554	I	-	Passive Start Interior Antenna 2 Signal Hi	39	0.35	BU	3554	II	-
40-43	-	-	-	I	-	Not Occupied	40-43	-	-	-	II	-
40-43	-	-	-	-	-	Not Occupied	40-43	-	-	-	-	-

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X207 Instrument Panel Harness to Body Harness





Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 24414905
- Service Connector: 13574784
- Description: 102-Way F 1.5, 2.5, 9.5 Series BK

Connector Part Information

- Harness Type: Body
- OEM Connector: 13588077
- Service Connector: 13588077
- Description: 102-Way M 1.6, 2.8, 8.0 Timer Series BK

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available
II	13575593	J-35616-35 (VT)	J-38125-11A
III	13582269	J-35616-35 (VT)	J-38125-11A
IV	Not Available	Not Available	Not Available

X207 Instrument Panel Harness to Body Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	VT	1701	I	-	Retained Accessory Power Fuse Supply Voltage	1	0.5	VT	1701	II	-
2-9	-	-	-	I	-	Not Occupied	18-21					
2-9	-	-	-	-	-	Not Occupied	2-9	-	-	-	-	-
10	0.35	BU/BN	3161	I	-	Parallel Park Assist Disable Switch Signal	10	0.35	BU/BN	3161	III	-
11	0.35	WH	6106	I	-	High Speed GMLAN Serial Data (-) (2)	11	0.35	WH	6106	III	-
12	0.35	GY/WH	3272	I	-	Remote Function Actuator Supply Voltage	12	0.35	GY/WH	3272	III	-
13	0.35	YE/GN	3274	I	-	Remote Function Actuator Transmit Signal	13	0.35	YE/GN	3274	III	-
14	0.35	BU/WH	3275	I	-	Remote Function Actuator Receive Signal	14	0.35	BU/WH	3275	III	-
15	0.35	GY	3273	I	-	Remote Function Actuator Return	15	0.35	GY	3273	III	-
16	0.35	GN/VT	1601	I	-	Steering Column Lock Signal	16	0.35	GN/VT	1601	III	-
17	0.35	BU/VT	807	I	-	OFF /Accessory Voltage	17	0.35	BU/VT	807	III	-
18-21	-	-	-	I	-	Not Occupied	18-21					
22	0.35	BU/YE	6105	I	-		22	0.35	BU/YE	6105	III	-

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Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
						High Speed GMLAN Serial Data (+) (2)						
23	0.35	GY/GN	2555	I	-	Rear Park Assist Disable Signal	23	0.35	GY/GN	2555	III	-
24	0.35	GN/BN	5852	I	-	Rear Park Assist LED Disable Signal	24	0.35	GN/BN	5852	III	-
25	-	-	-	I	-	Not Occupied	25					
26	0.5	RD/WH	6440	I	-	Battery Positive Voltage	26	0.5	RD/WH	6440	II	-
27-28	-	-	-	I	-	Not Occupied	18-21					
27-28	-	-	-	-	-	Not Occupied	27-28	-	-	-	-	-
29	0.5	BU/WH	7455	I	-	FSCM Exhaust Flapper Valve Feedback Control	29	0.5	BU/WH	7455	II	-
30-33	-	-	-	I	-	Not Occupied	18-21					
30-33	-	-	-	-	-	Not Occupied	30-33	-	-	-	-	-
34	0.35	BU/VT	1134	I	-	Park Brake Switch Signal	34	0.5 0.35	BU/VT BU/VT	1134 1134	II	-
35	0.35	GY/RD	7684	I	-	Park Brake Apply Switch Voltage Reference	35	0.5 0.35	GY/RD GY/RD	7684 7684	II	-
36	0.35	BN	6107	I	-	Park Brake Apply Switch Signal	36	0.5 0.35	BN BN	6107 6107	II	-
37	0.35	BU/BK	6108	I	-	Park Brake Release Switch Signal	37	0.5 0.35	BU/BK BU/BK	6108 6108	II	-
38	0.35	YE/RD	7683	I	-	Park Brake Release Switch Voltage Reference	38	0.5 0.35	YE/RD YE/RD	7683 7683	II	-
39	0.35	YE	1492	I	-	Park Brake Switch Supply Voltage	39	0.5 0.35	YE YE	1492 1492	II	-
40-45	-	-	-	I	-	Not Occupied	18-21					
40-45	-	-	-	-	-	Not Occupied	40-45	-	-	-	-	-
46	0.35	BK/VT	1272	I	-	Accelerator Pedal Position Low Reference (2)	46					
47	0.35	GN/WH	1162	I	-	Accelerator Pedal Position Signal (2)	47					
48	0.35	BN/RD	1274	I	-	Accelerator Pedal Position 5 Volt Reference (2)	48					
49-50	-	-	-	I	-	Not Occupied	18-21					
49-50	-	-	-	-	-	Not Occupied	49-50	-	-	-	-	-
51	0.35	YE/VT	3352	I	-	Rear Seat Audio Common Signal	51	0.35	YE/VT	3352	III	-
52	0.35	WH/GN	5313	I	-	Right Rear Seat Audio Signal	52	0.35	WH/GN	5313	III	-
53-56	-	-	-	I	-	Not Occupied	18-21					
53-56	-	-	-	-	-	Not Occupied	53-56	-	-	-	-	-
57	0.35	BK/BU	1271	I	-	Accelerator Pedal Position Low Reference (1)	57					
58	0.35	YE/WH	1161	I	-	Accelerator Pedal Position Signal (1)	58					

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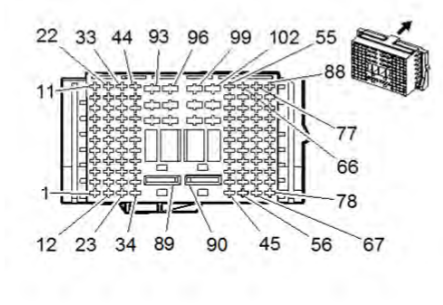
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
59	0.35	WH/RD	1164	I	-	Accelerator Pedal Position 5 Volt Reference (1)	59					
60-61	-	-	-	-	-	Not Occupied	60-61	-	-	-	-	-
62	0.35	WH/GY	5312	I	-	Left Rear Seat Audio Signal	62	0.35	WH/GY	5312	III	-
63	0.35	BARE	1574	I	-	Rear Audio Drain Wire	63	0.35	BARE	1574	III	-
64	0.35	BARE	6980	I	-	DVD Audio Shield	64	0.35	BARE	6980	III	-
65-66	-	-	-	I	-	Not Occupied	18-21					
65-66	-	-	-	-	-	Not Occupied	65-66	-	-	-	-	-
67	0.35	BU	2500	I	-	High Speed GMLAN Serial Data (+) (1)	67	0.35 0.5	BU BU	2500 2500	III	-
68	0.35	GN	5060	I	-	Low Speed GMLAN Serial Data	68	0.35	GN	5060	III	-
69-72	-	-	-	I	-	Not Occupied	18-21					
69-72	-	-	-	-	-	Not Occupied	69-72	-	-	-	-	-
73	0.35	GY/BN	5844	I	-	Video Bright Control	73	0.35	GY/BN	5844	III	-
74	0.35	GN/BU	5831	I	-	Remote Infra Red Signal (+)	74	0.35	GN/BU	5831	III	-
75	0.35	BU/YE	5826	I	-	Left DVD Audio Signal (+)	75	0.35	BU/YE	5826	III	-
76	0.35	VT	6979	I	-	DVD Audio Common	76	0.35	VT	6979	III	-
77	0.35	WH/BU	5828	I	-	Right DVD Audio Signal (+)	77	0.35	WH/BU	5828	III	-
78	0.35	WH	2501	I	-	High Speed GMLAN Serial Data (-) (1)	78	0.35 0.5	WH WH	2501 2501	III	-
79-83	-	-	-	I	-	Not Occupied	18-21					
79-83	-	-	-	-	-	Not Occupied	79-83	-	-	-	-	-
84	0.35	VT/BK	5845	I	-	Video Module Signal	84	0.35	VT/BK	5845	III	-
85	0.35	WH/YE	5830	I	-	Remote Infra Red Signal (-)	85	0.35	WH/YE	5830	III	-
86	0.35	BARE	6976	I	-	DVD Video Drain Wire	86	0.35	BARE	6976	III	-
87	0.35	GN	6975	I	-	DVD Video Signal (+)	87	0.35	GN	6975	III	-
88	0.35	BN	5335	I	-	DVD Video Signal (-)	88	0.35	BN	5335	III	-
89-91	-	-	-	I	-	Not Occupied	18-21					
89-91	-	-	-	-	-	Not Occupied	89-91	-	-	-	-	-
92	1	VT	801	I	-	Retained Accessory Power Fuse Supply Voltage	92	1	VT	801	II	-
93	1	RD/VT	5640	I	-	Battery Positive Voltage	93	1	RD/VT	5640	II	-
94	0.75	RD/VT	340	I	-	Battery Positive Voltage	94	0.5	RD/VT	340	II	-
95-96	-	-	-	I	-	Not Occupied	18-21					
95-96	-	-	-	-	-	Not Occupied	95-96	-	-	-	-	-
97	0.75 0.5	BU BU	201 201	I	-	Left Front Speaker (+) (1) Left Front Speaker (+) (1)	97	0.5 0.75	BU BU	201 201	II	-
98	0.75	GN	199	I	-	Left Rear Speaker (+)	98	0.75	GN	199	II	-

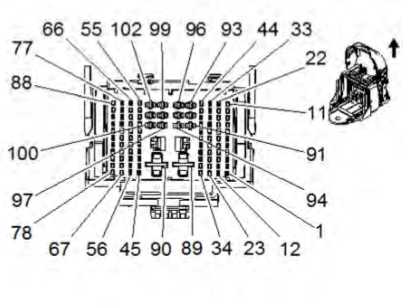
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Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
99	0.75	BK/WH	1551	I	-	Signal Ground	99	0.75	BK/WH	1551	II	-
100	0.75 0.5	BN/BU BN/BU	118 118	I	-	Left Front Speaker Signal (-) (1) Left Front Speaker Signal (-) (1)	100	0.5 0.75	BN/BU BN/BU	118 118	II	-
101	0.75	GN/BK	116	I	-	Left Rear Speaker Signal (-)	101	0.75	GN/BK	116	II	-
102	-	-	-	I	-	Not Occupied	102					

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X209 Instrument Panel Harness to Body Harness





Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 24414905
- Service Connector: 13574784
- Description: 102-Way F 1.5, 2.5, 9.5 Series BK

Connector Part Information

- Harness Type: Body
- OEM Connector: 13588077
- Service Connector: 13588077
- Description: 102-Way M 1.6, 2.8, 8.0 Timer Series BK

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available
II	13575593	J-35616-35 (VT)	J-38125-11A
III	Not Available	Not Available	Not Available

X209 Instrument Panel Harness to Body Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	YE	512	I	-	Right Front Low Level Audio Signal	1	0.35	YE	512	II	-
2	0.35	BU/BN	1546	I	-	Front Low Level Audio (-)	2	0.35	BU/BN	1546	II	-
3	0.35	BARE	2099	I	-	Left Rear Audio Drain Wire	3	0.35	BARE	2099	II	-
4	0.35	BN/WH	546	I	-	Right Rear Low Level Audio Signal	4	0.35	BN/WH	546	II	-
5	0.35	BU/BK	1946	I	-	Right Rear Low Level Audio (-)	5	0.35	BU/BK	1946	II	-
6	0.35	WH/BU	6973	I	-	Camera Signal #2	6	0.35	WH/BU	6973	II	-
7	-	-	-	I	-	Not Occupied	7					
8	0.5	WH/RD	5381	I	-	Brake Position Sensor 5 Volt Reference	8	0.35	WH/RD	5381	II	-
9	0.5	BK/YE	5382	I	-	Brake Position Sensor Low Reference	9	0.35	BK/YE	5382	II	-
10	0.5	WH/GN	5380	I	-	Brake Position Sensor Signal	10	0.35	WH/GN	5380	II	-
11	-	-	-	I	-	Not Occupied	11					
12	0.35	BU	511	I	-	Left Front Low Level Audio Signal	12	0.35	BU	511	II	-
13	0.35	BN/BU	1947	I	-	Left Front Low Level Audio (-)	13	0.35	BN/BU	1947	II	-
14	0.35	BARE	2011	I	-	Left Front Audio Drain Wire	14	0.35	BARE	2011	II	-
15	0.35	GN/BK	599	I	-	Left Rear Low Level Audio Signal	15	0.35	GN/BK	599	II	-

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Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
16	0.35	BN/VT	1999	I	-	Left Rear Low Level Audio (-)	16	0.35	BN/VT	1999	II	-
17	0.35	GY/YE	6972	I	-	Camera Signal #2 +	17	0.35	GY/YE	6972	II	-
18	0.35	BARE	6974	I	-	Camera Drain Wire	18	0.35	BARE	6974	II	-
19	0.35	GY/RD	6109	I	-	Clutch Apply Sensor Voltage Reference	19	0.35	GY/RD	6109	II	-
20	0.35	BK/GY	6110	I	-	Clutch Apply Sensor Low Reference	20	0.35	BK/GY	6110	II	-
21	0.35	YE	6111	I	-	Clutch Apply Sensor Signal	21	0.35	YE	6111	II	-
22	-	-	-	I	-	Not Occupied	22					
23	0.35	VT/BU	6978	I	-	Amplifier Control	23	0.35	VT/BU	6978	II	-
24	0.35	GN/YE	7066	I	-	Entertainment Remote Enable Signal	24	0.35	GN/YE	7066	II	-
25	0.35	WH/GN	7395	I	-	Video Mode 2 Signal	25	0.35	WH/GN	7395	II	-
26-28	-	-	-	I	-	Not Occupied	101-102					
26-28	-	-	-	-	-	Not Occupied	26-28	-	-	-	-	-
29	0.5	WH/BN	6815	I	-	Inadvertent Power Control	29	0.75	WH/BN	6815	II	-
30	0.35	BN/YE	780	I	-	Driver Door Lock Switch Lock Signal	30	0.35	BN/YE	780	II	-
31	0.35	BN/WH	781	I	-	Driver Door Lock Switch Unlock Signal	31	0.35	BN/WH	781	II	-
32	0.35	WH/VT	5905	I	-	Key Capture/Column Lock Shift Position Signal	32	0.35	WH/VT	5905	II	-
33	0.35	WH/BU	5986	I	-	Serial Data Communication Enable	33	0.35	WH/BU	5986	II	-
34	0.35	BU	7396	I	-	DVD Video Signal 2 (+)	34	0.35	BU	7396	II	-
35	0.35	WH	7394	I	-	DVD Video Signal 2 (-)	35	0.35	WH	7394	II	-
36	0.35	BARE	5818	I	-	Video Drain Wire	36	0.35	BARE	5818	II	-
37	0.35	RD/VT	1440	I	-	Battery Positive Voltage	37	0.35	RD/VT	1440	II	-
38	0.35	GY/GN	328	I	-	Interior Lamp Defeat Switch Signal	38	0.35	GY/GN	328	II	-
39	0.35	WH/YE	7557	I	-	LED Ambient Lighting Control 1	39	0.35	WH/YE	7557	II	-
40	0.5	GY	157	I	-	Interior Lamp Control	40	0.75 0.5	GY GY	157 157	II	-
41	0.35	GN/GY	6135	I	-	Linear Interconnect Network Bus 4	41	0.35	GN/GY	6135	II	-
42	0.35	VT	185	I	-	Low Washer Fluid Indicator Control	42	0.35	VT	185	II	-
43	0.5	WH/BK	5666	I	-	Liquid Petroleum Gas Module Control	43	0.5	WH/BK	5666	II	-
44	-	-	-	I	-	Not Occupied	44					
45	0.35	GN/GY	465	I	-	Fuel Pump Primary Relay Control	45	0.5	GN/GY	465	II	-
46	0.35	BK/VT	1272	I	-	Accelerator Pedal Position Low Reference (2)	46	0.35	BK/VT	1272	II	-
47	0.35	GN/WH	1162	I	-	Accelerator Pedal Position Signal (2)	47	0.35	GN/WH	1162	II	-
48	0.35	BN/RD	1274	I	-	Accelerator Pedal Position 5 Volt Reference (2)	48	0.35	BN/RD	1274	II	-

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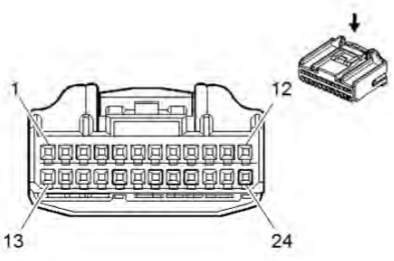
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
49	0.35	BU/BN	7573	I	-	Electric Variable Displacement Supply	49	0.35	BU/BN	7573	II	-
50	0.35	BU/YE	7574	I	-	Electric Variable Displacement Control	50	0.35	BU/YE	7574	II	-
51	0.35	BN/VT	193	I	-	Rear Defog Relay Control	51	0.35	BN/VT	193	II	-
52	0.5	GY/BK	3504	I	-	Liquid Petroleum Gas PTC Heater Relay Control (3)	52	0.5	GY/BK	3504	II	-
53	0.5	BU/WH	3503	I	-	Liquid Petroleum Gas PTC Heater Relay Control (2)	53	0.5	BU/WH	3503	II	-
54	0.5	VT/GY	3502	I	-	Liquid Petroleum Gas PTC Heater Relay Control (1)	54	0.5	VT/GY	3502	II	-
55	0.5	BK	2250	I	-	Ground	55	0.5	BK	2250	II	-
56	0.35	WH/BK	381	I	-	Vehicle Speed Signal	56	0.35	WH/BK	381	II	-
57	0.35	BK/BU	1271	I	-	Accelerator Pedal Position Low Reference (1)	57	0.35	BK/BU	1271	II	-
58	0.35	YE/WH	1161	I	-	Accelerator Pedal Position Signal (1)	58	0.35	YE/WH	1161	II	-
59	0.35	WH/RD	1164	I	-	Accelerator Pedal Position 5 Volt Reference (1)	59	0.35	WH/RD	1164	II	-
60	0.5	RD/GN	5140	I	-	Battery Positive Voltage	60	0.75	RD/GN	5140	II	-
61	0.35	RD/WH	3440	I	-	Battery Positive Voltage	61	0.75	RD/WH	3440	II	-
62	0.35	VT/BU	3263	I	-	Logistic Mode Relay Open Control	62	0.35	VT/BU	3263	II	-
63	0.35	GY/VT	3264	I	-	Logistic Mode Relay Close Control	63	0.35	GY/VT	3264	II	-
64	0.35	GN	5060	I	-	Low Speed GMLAN Serial Data	64					
65	0.35	VT/GY	139	I	-	Run/Crank Ignition 1 Voltage	65	0.35	VT/GY	139	II	-
66	0.35	VT/GY	539	I	-	Run/Crank Ignition 1 Voltage	66	0.5	VT/GY	539	II	-
67	0.5	GN/BN	2087	I	-	Combined Vehicle Inertial Sensor Supply Voltage	67	0.5	GN/BN	2087	II	-
68	0.35	BU/GY	636	I	-	Outside Ambient Air Temperature Sensor Signal	68	0.35	BU/GY	636	II	-
69	0.35	BK/GY	3559	I	-	Passive Start Switch 2 Low Reference	69	0.35	BK/GY	3559	II	-
70	0.35	GN/BK	3558	I	-	Passive Start Switch Signal 2	70	0.35	GN/BK	3558	II	-
71	0.35	VT/BK	3	I	-	Run/Crank Ignition 1 Voltage	71	0.35	VT/BK	3	II	-
72	0.35	VT/YE	4	I	-	Accessory Voltage	72	0.35	VT/YE	4	II	-
73	0.35	GY/VT	755	I	-	RAP Relay Coil Control	73	0.35	GY	755	II	-
74	0.35	BU/GY	9361	I	-	Suspension Control Switch Signal	74	0.35	BU/GY	9361	II	-
75	0.35	BU/GY	9362	I	-	Suspension Control Switch Return	75	0.35	BU/GY	9362	II	-
76	0.35	RD/VT	4640	I	-	Battery Positive Voltage	76	0.35	RD/VT	4640	II	-
77	-	-	-	I	-	Not Occupied	77					
78	0.35	BN/WH	419	I	-	Check Engine Indicator Control	78	0.35	BN/WH	419	II	-
79	0.35	BK/BU	61	I	-	Outside Ambient Temperature Sensor Low Reference	79	0.35	BK/BU	61	II	-
80	-	-	-	I	-	Not Occupied	80					
81	0.5	GY	1724	I	-		81	0.5	GY	1724	II	-

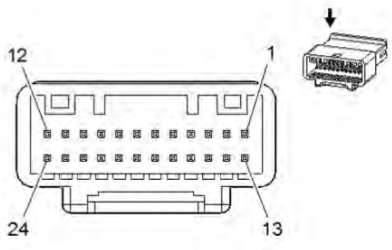
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Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
						Supercharger Boost Solenoid Control						
82	0.35	GN/BU	6133	I	-	Linear Interconnect Network Bus 2	82	0.35	GN/BU	6133	II	-
83-84	-	-	-	I	-	Not Occupied	101-102					
83-84	-	-	-	-	-	Not Occupied	83-84	-	-	-	-	-
85	0.35	BN/BK	3552	I	-	Passive Start Interior Antenna 1 Signal Hi	85	0.35	BN/BK	3552	II	-
86	0.35	WH	3553	I	-	Passive Start Interior Antenna 1 Signal Lo	86	0.35	WH	3553	II	-
87	0.35	BU	3554	I	-	Passive Start Interior Antenna 2 Signal Hi	87	0.35	BU	3554	II	-
88	0.35	GY/BK	3555	I	-	Passive Start Interior Antenna 2 Signal Lo	88	0.35	GY/BK	3555	II	-
89-90	-	-	-	I	-	Not Occupied	101-102					
89-90	-	-	-	-	-	Not Occupied	89-90	-	-	-	-	-
91	0.5 0.75	YE YE	200 200	I	-	Right Front Speaker (+) (1) Right Front Speaker (+) (1)	91	0.5 0.75	YE YE	200 200	III	-
92	0.75	WH	46	I	-	Right Rear Speaker (+)	92	0.75	WH	46	II	-
93	-	-	-	I	-	Not Occupied	93					
94	0.5 0.75	YE/BK YE/BK	117 117	I	-	Right Front Speaker Signal (-) (1) Right Front Speaker Signal (-) (1)	94	0.5 0.75	YE/BK YE/BK	117 117	III	-
95	0.75	BU/BK	115	I	-	Right Rear Speaker Signal (-)	95	0.75	BU/BK	115	II	-
96	-	-	-	I	-	Not Occupied	96					
97	0.75	BU/YE	1960	I	-	Front Center Speaker (-)	97	0.75	BU/YE	1960	II	-
98	0.75	YE/WH	1860	I	-	Front Center Speaker (+)	98	0.75	YE/WH	1860	II	-
99	-	-	-	I	-	Not Occupied	99					
100	0.75	BN/BK	3507	I	-	Liquid Petroleum Gas Fuel Shutoff Solenoid Control (2)	100	0.75	BN/BK	3507	II	-
101-102	-	-	-	I	-	Not Occupied	101-102					

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X215 Instrument Panel Harness to Headliner Harness





Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 1318917-1
- Service Connector: 88988436
- Description: 24-Way F 025 Series (NA)

Connector Part Information

- Harness Type: Headliner
- OEM Connector: 1376103-1
- Service Connector: 13577360
- Description: 24-Way M

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575198	J-35616-64B (L-BU)	J-38125-24

X215 Instrument Panel Harness to Headliner Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	BN/BU	118	I	—	Left Front Speaker Signal (-) (1)	1	0.5	BN/BU	118	I	—
2	0.5	YE/BK	117	I	—	Right Front Speaker Signal (-) (1)	2	0.5	YE/BK	117	I	—
3	0.35	BK/BN	654	I	—	Cellular Telephone Microphone Low Reference	3	0.35	BK/BN	654	I	—
4	-	-	-	-	-	Not Occupied	4	-	-	-	-	-
5	0.35	GY/WH	3153	I	UFL/UEU	Lane Departure Warning Disable Switch Signal	5	0.35	GY/WH	3153	I	UFL/UEU
6	0.35	WH	3152	I	UFL/UEU	Lane Departure Warning Indicator Control	6	0.35	WH	3152	I	UFL/UEU
7–9	-	-	-	-	-	Not Occupied	7–9	-	-	-	-	-
10	0.35	YE	6817	I	—	LED Backlight Dimming Control	10	0.35	YE	6817	I	—
11	-	-	-	-	-	Not Occupied	11	-	-	-	-	-
12	0.35	GN	5060	I	UFL/UEU	Low Speed GMLAN Serial Data	12	0.35	GN	5060	I	UFL/UEU
13	0.5	BU	201	I	—	Left Front Speaker (+) (1)	13	0.5	BU	201	I	—
14	0.5	YE	200	I	—	Right Front Speaker (+) (1)	14	0.5	YE	200	I	—
15	0.35	BU	655	I	—	Cellular Telephone Microphone Signal	15	0.35	BU	655	I	—
16	-	-	-	-	-	Not Occupied	16	-	-	-	-	-

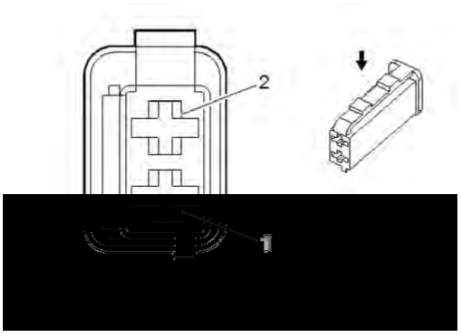
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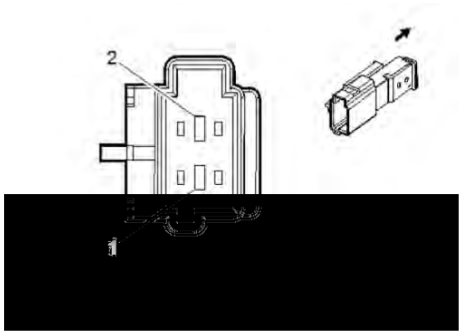
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Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
17	0.5	WH/BN	6815	I	—	Inadvertent Power Control	17	0.5	WH/BN	6815	I	—
18	0.5	GY	157	I	—	Interior Lamp Control	18	0.5	GY	157	I	—
19–24	-	-	-	-	-	Not Occupied	19–24	-	-	-	-	-

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X223 Instrument Panel Harness to Instrument Panel Compartment Harness





Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 19179871
- Service Connector: TBD
- Description: 2-Way F 1.6 Timer Series (BK)

Connector Part Information

- Harness Type: Instrument Panel Compartment
- OEM Connector: 19179872
- Service Connector: 13574780
- Description: 2-Way M 1.6 Timer Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	TBD	—	—

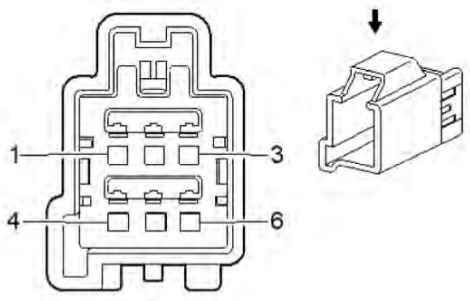
X223 Instrument Panel Harness to Instrument Panel Compartment Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	WH/BN	6815	I	—	Inadvertent Power Control	1	0.5	WH/BN	6815	I	—
2	0.5	BK	1350	I	—	Ground	2	0.5	BK	1350	I	—

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X234 Police Option Harness to Instrument Panel Harness



Connector Part Information

- Harness Type:
- OEM Connector:
- Service Connector: Service by Harness - See Part Catalog
- Description: 6 F

Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 13580898
- Service Connector: 89046743
- Description: 6-Way M 1.5 Series (L-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available
II	Not Available	J-35616-35 (VT)	Not Available

X234 Police Option Harness to Instrument Panel Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	BU/GN	6841	I	-	Rear Lamp Flasher Signal	1	0.35	BU/GN	6841	II	-
2	0.35	WH/BU	9007	I	-		2	0.35	WH/BU	9007	II	CX5 or CX6 with 9C1 or 9C3
3	-	-	-	-	-	Not Occupied	3	-	-	-	-	-
4	0.35	BARE	3371	I	-	Video Drain Wire (2)	4	0.35	BARE	3371	II	-
5	0.35	VT/WH	3361	I	-		5	0.35	VT/WH	3361	II	-

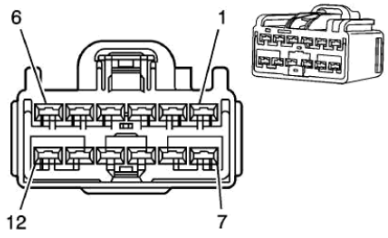
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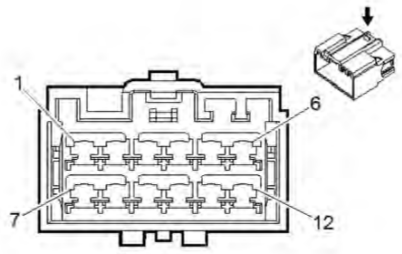
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Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
						Pop Up Display Control						
6	0.35	WH/GN	3362	I	-	Pop Up Display Position Signal	6	0.35	WH/GN	3362	II	-

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X245 Instrument Panel Harness to HSV Switch Harness (V5B)







Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 19178907
- Service Connector: 13580444
- Description: 12-Way F YESC Kaizen Series (GN)

Connector Part Information

- Harness Type: HSV Switch Harness
- OEM Connector: 19179143
- Service Connector: 19179143
- Description: 12-Way M

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	TBD	—	—

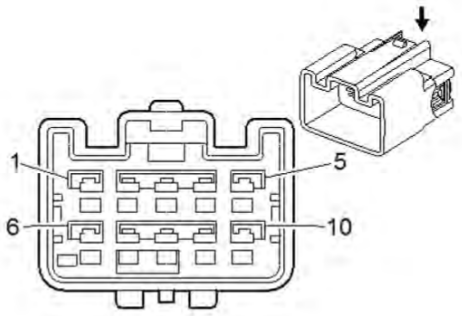
X245 Instrument Panel Harness to HSV Switch Harness (V5B)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	YE	6817	I	V5B	Inadvertent Power Control	1	0.35	YE	6817	I	V5B
2	0.35	BU/GY	9361	I	V5B	Electronic Suspension Control Switch Signal	2	0.35	BU/GY	9361	I	V5B
3	0.35	BU/VT	1788	I	V5B	Traction Control Switch Signal (1)	3	0.35	BU/VT	1788	I	V5B
4	0.35	BU/BK	9632	I	V5B	Electronic Suspension Control Switch Return	4	0.35	BU/BK	9632	I	V5B
5	0.5	BK	1450	I	V5B/ERG	Ground	5	0.5	BK	1450	I	V5B/ERG
6	0.5	RD/WH	6440	I	ERG	Battery Positive Voltage	6	0.5	RD/WH	6440	I	ERG
7	0.35	GN	9060	I	ERG	Low Speed GMLAN Serial Data	7	0.35	GN	9060	I	ERG

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X252 Dealer Option Harness to Instrument Panel Harness



Connector Part Information

- Harness Type:
- OEM Connector:
- Service Connector: Service by Harness - See Part Catalog
- Description: 10 F

Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 13581035
- Service Connector: 19167914
- Description: 10-Way M Kaizen YESC Series (L-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available
II	13575593	J-35616-35 (VT)	J-38125-11A

X252 Dealer Option Harness to Instrument Panel Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	WH/BK	381	I	-	Vehicle Speed Signal	1	0.35	WH/BK	381	II	-
2	-	-	-	-	-	Not Occupied	2	-	-	-	-	-
3	0.75	RD/WH	1340	I	-	Battery Positive Voltage	3	0.75	RD/WH	1340	II	-
4	-	-	-	-	-	Not Occupied	4	-	-	-	-	-
5	0.5	VT	1701	I	-	Retained Accessory Power Fuse Supply Voltage	5	0.5	VT	1701	II	-
6	0.75	BK	1350	I	-	Ground	6	0.75	BK	1350	II	-

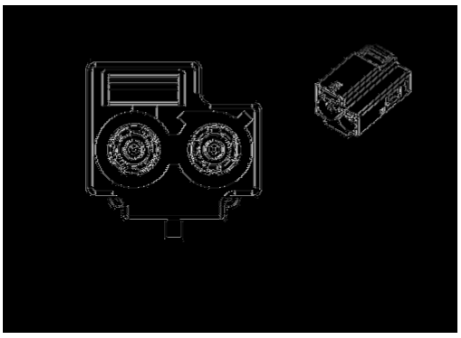
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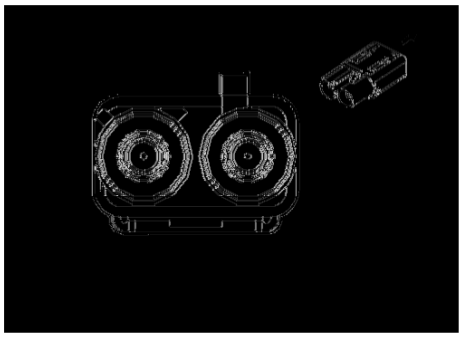
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Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
7	0.35	VT	693	I	-	Cellular Telephone Mute Signal	7	0.35	VT	693	II	-
8	0.35	WH/VT	6821	I	-	Surveillance Switch Signal	8	0.35	WH/VT	6821	II	-
9-10	-	-	-	-	-	Not Occupied	9-10	-	-	-	-	-

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X270 Headlining Harness to Instrument Panel Harness





Connector Part Information

- Harness Type: Headlining Harness (F19/F35/F69), Antenna Extension (F80)
- OEM Connector: 13581716
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F Coax Type (BK)

Connector Part Information

- Harness Type: Instrument Panel Harness
- OEM Connector: 2FAH-NASP-C00W9
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: 2-Way M Coax Type (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Pending	Pending	Pending

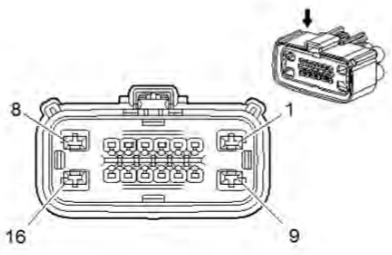
X270 Headlining Harness to Instrument Panel Harness

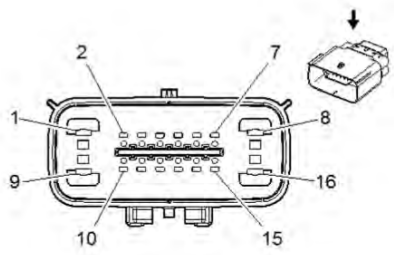
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
C1	0.5	WH	6001	I	-	Antenna RF Signal	C1	0.5	WH	6001	I	-
C2	0.2	WH	6758	I	-	Coaxial Antenna GPS 2 Signal	C2	0.2	WH	6758	I	-
S1	0.2	BARE	6015	I	-	Antenna RF Drain Wire	S1	0.2	BARE	6015	I	-
S2	0.2	BARE	6757	I	-	Coaxial Antenna GPS 2 Drain Wire	S2	0.2	BARE	6757	I	-

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X315 Body Harness to Fuel Tank Harness (F19/F35/F69)





Connector Part Information

- Harness Type: Body
- OEM Connector: 55572154
- Service Connector: 13587961
- Description: 16-Way F 1.5/2.8 Series, Sealed (BN)

Connector Part Information

- Harness Type: Fuel Tank
- OEM Connector: 55572155
- Service Connector: TBD
- Description: 16-Way M MX150 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	TBD	—	—

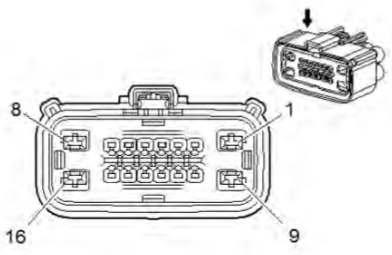
X315 Body Harness to Fuel Tank Harness (F19/F35/F69)

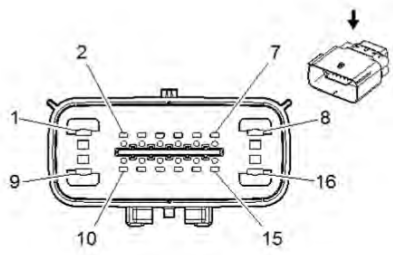
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	-	-	-	-	-	Not Occupied	1	-	-	-	-	-
2	0.5	WH	1579	I	—	Fuel Temperature/Composition Signal	2	0.5	WH	1579	I	—
3	0.5	BU/WH	1937	I	—	Secondary Fuel Level Sensor Signal	3	0.5	BU/WH	1937	I	—
4	0.5	BU/VT	1589	I	—	Primary Fuel Level Sensor Signal	4	0.5	BU/VT	1589	I	—
5	0.5	BN/RD	7445	I	—	Fuel Line Pressure Sensor 5 Volt Reference	5	0.5	BN/RD	7445	I	—
6-7	-	-	-	-	-	Not Occupied	6-7	-	-	-	-	-
8	3	GY	120	I	—	Fuel Pump Supply Voltage	8	3	GY	120	I	—
9	0.5	VT/BU	5294	I	—	Powertrain Main Relay Fused Supply (5)	9	0.5	VT/BU	5294	I	—
10	0.5	BU/WH	7446	I	—	Fuel Line Pressure Sensor Signal	10	0.5	BU/WH	7446	I	—
11	0.5	BK/YE	7447	I	—	Fuel Line Pressure Sensor Low Reference	11	0.5	BK/YE	7447	I	—
12	-	-	-	-	-	Not Occupied	12	-	-	-	-	-
13	0.5	BK/WH	451	I	—	Ground	13	0.5	BK/WH	451	I	—
14	0.5	BK/GN	6281	I	—	Fuel Level Sensor Low Reference	14	0.5	BK/GN	6281	I	—
15	0.5	BU	7443	I	—	Fuel System Control Module Shield Extension	15	0.5	BU	7443	I	—
16	3	BK/GN	1580	I	—	Fuel Pump Low Reference	16	3	BK/GN	1580	I	—

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X315 Fuel Extension Harness to Fuel Tank Harness (F80)





Connector Part Information

- Harness Type: Fuel Extension
- OEM Connector: 55572154
- Service Connector: 13587961
- Description: 16-Way F 1.5/2.8 Series, Sealed (BN)

Connector Part Information

- Harness Type: Fuel Tank
- OEM Connector: 55572155
- Service Connector: TBD
- Description: 16-Way M MX150 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	TBD	—	—

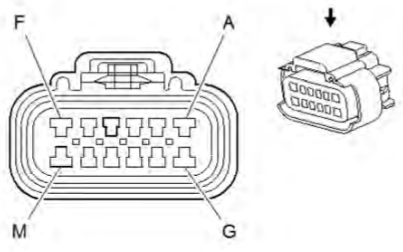
X315 Fuel Extension Harness to Fuel Tank Harness (F80)

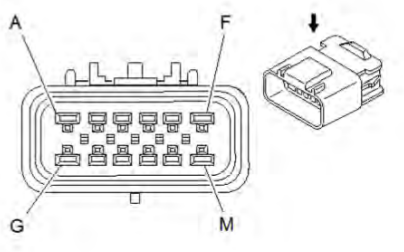
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	-	-	-	-	-	Not Occupied	1	-	-	-	-	-
2	0.5	WH	1579	I	—	Fuel Temperature/Composition Signal	2	0.5	WH	1579	I	—
3	0.5	BU/WH	1937	I	—	Secondary Fuel Level Sensor Signal	3	0.5	BU/WH	1937	I	—
4	0.5	BU/VT	1589	I	—	Primary Fuel Level Sensor Signal	4	0.5	BU/VT	1589	I	—
5	0.5	BN/RD	7445	I	—	Fuel Line Pressure Sensor 5 Volt Reference	5	0.5	BN/RD	7445	I	—
6-7	-	-	-	-	-	Not Occupied	6-7	-	-	-	-	-
8	3	GY	120	I	—	Fuel Pump Supply Voltage	8	3	GY	120	I	—
9	0.5	VT/BU	5294	I	—	Powertrain Main Relay Fused Supply (5)	9	0.5	VT/BU	5294	I	—
10	0.5	BU/WH	7446	I	—	Fuel Line Pressure Sensor Signal	10	0.5	BU/WH	7446	I	—
11	0.5	BK/YE	7447	I	—	Fuel Line Pressure Sensor Low Reference	11	0.5	BK/YE	7447	I	—
12	-	-	-	-	-	Not Occupied	12	-	-	-	-	-
13	0.5	BK/WH	451	I	—	Ground	13	0.5	BK/WH	451	I	—
14	0.5	BK/GN	6281	I	—	Fuel Level Sensor Low Reference	14	0.5	BK/GN	6281	I	—
15	0.5	BU	7443	I	—	Fuel System Control Module Shield Extension	15	0.5	BU	7443	I	—
16	3	BK/GN	1580	I	—	Fuel Pump Low Reference	16	3	BK/GN	1580	I	—

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X319 Body Harness to Fuel Pump Assembly Harness





Connector Part Information

- Harness Type: Fuel Tank
- OEM Connector: 15326939
- Service Connector: 88988440
- Description: 12-Way F GT 150/280 Series, Sealed (BK)

Connector Part Information

- Harness Type: Fuel Pump Assembly
- OEM Connector: 15336034
- Service Connector: 19168032
- Description: 12-Way M GT 150/280 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	TBD	—	—

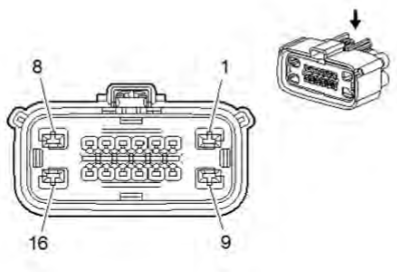
X319 Body Harness to Fuel Pump Assembly Harness

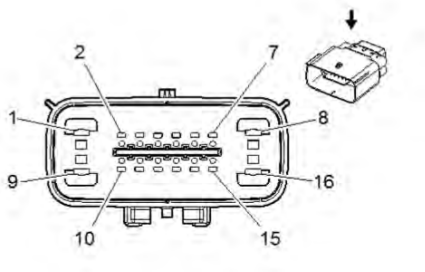
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	2	GY	120	I	—	Fuel Pump Supply Voltage	A	2	WH	120	I	—
B	-	-	-	-	-	Not Occupied	B	-	-	-	-	-
C	0.5	BN/RD	7445	I	—	Fuel Line Pressure Sensor 5 Volt Reference	C	0.5	GY	7445	I	—
D	0.5	BU/WH	7446	I	—	Fuel Line Pressure Sensor Signal	D	0.5	GN	7446	I	—
E	-	-	-	-	-	Not Occupied	E	-	-	-	-	-
F	0.75	BN/BK	3507	I	—	Liquid Petroleum Gas Fuel Shutoff Solenoid Control (2)	F	0.75	YE	3507	I	—
G	2	PK	1580	I	—	Fuel Pump Low Reference	G	2	BK	1580	I	—
H	-	-	-	-	-	Not Occupied	H	-	-	-	-	-
J	0.5	BK/YE	7447	I	—	Fuel Line Pressure Sensor Low Reference	J	0.5	BN	7447	I	—
K-L	-	-	-	-	-	Not Occupied	K-L	-	-	-	-	-
M	0.75	BK	2450	I	—	Ground	M	0.75	BU	2450	I	—

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X320 Body Harness to Fuel Harness (F19/F35/F69)





Connector Part Information

- Harness Type: Body
- OEM Connector: 55572154
- Service Connector: 13587961
- Description: 16-Way F 1.5, 2.8 Series, Sealed (BN)

Connector Part Information

- Harness Type: LPG Fuel
- OEM Connector: 55572155
- Service Connector: 13503540
- Description: 16-Way M 1.5, 2.8 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Pending	Pending	Pending

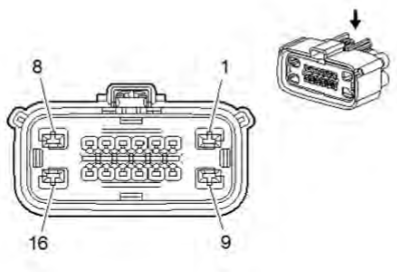
X320 Body Harness to Fuel Harness (F19/F35/F69)

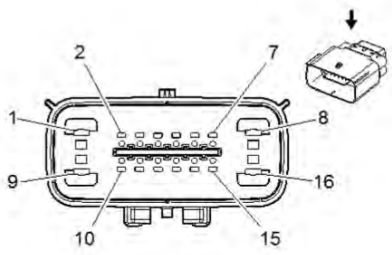
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.75	BN/BK	3507	I	—	Liquid Petroleum Gas Fuel Shutoff Solenoid Control (2)	1	0.75	BN/BK	3507	I	—
2	—	—	—	—	—	Not Occupied	2	—	—	—	—	—
3	0.35	BN/RD	7445	I	—	Fuel Line Pressure Sensor 5V Reference	3	0.5	BN/RD	7445	I	—
4-5	—	—	—	—	—	Not Occupied	4-5	—	—	—	—	—
6	0.35	BU/VT	1589	I	—	Primary Fuel Level Sensor Signal	6	0.5	BU/VT	1589	I	—
7	—	—	—	—	—	Not Occupied	7	—	—	—	—	—
8	3	GY	120	I	—	Fuel Pump Supply Voltage	8	2	GY	120	I	—
9	0.75	BK	2450	I	—	Ground	9	0.75	BK	2450	I	—
10	0.35	BU/WH	7446	I	—	Fuel Line Pressure Sensor Signal	10	0.5	BU/WH	7446	I	—
11	0.35	BK/YE	7447	I	—	Fuel Line Pressure Sensor Low Reference	11	0.5	BK/YE	7447	I	—
12-13	—	—	—	—	—	Not Occupied	12-13	—	—	—	—	—
14	0.35	BK/GN	6281	I	—	Fuel Level Sensor Low Reference	14	0.5	BK/GN	6281	I	—
15	0.5	BU	7443	I	—	Fuel System Control Module Shield Extension	15	0.5	BK	7443	I	—
16	3	BK/GN	1580	I	—	Fuel Pump Low Reference	16	2	PK	1580	I	—

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X320 Fuel Extension Harness to Fuel Harness (F80)





Connector Part Information

- Harness Type: Fuel Extension
- OEM Connector: 55572154
- Service Connector: 13587961
- Description: 16-Way F 1.5, 2.8 Series, Sealed (BN)

Connector Part Information

- Harness Type: Fuel
- OEM Connector: 55572155
- Service Connector: 13503540
- Description: 16-Way M 1.5, 2.8 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Pending	Pending	Pending

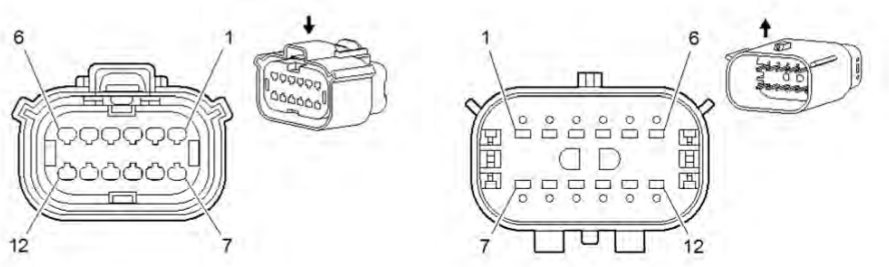
X320 Fuel Extension Harness to Fuel Harness (F80)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.75	BN/BK	3507	I	—	Liquid Petroleum Gas Fuel Shutoff Solenoid Control (2)	1	0.75	BN/BK	3507	I	—
2	—	—	—	—	—	Not Occupied	2	—	—	—	—	—
3	0.35	BN/RD	7445	I	—	Fuel Line Pressure Sensor 5V Reference	3	0.5	BN/RD	7445	I	—
4-5	—	—	—	—	—	Not Occupied	4-5	—	—	—	—	—
6	0.35	BU/VT	1589	I	—	Primary Fuel Level Sensor Signal	6	0.5	BU/VT	1589	I	—
7	—	—	—	—	—	Not Occupied	7	—	—	—	—	—
8	3	GY	120	I	—	Fuel Pump Supply Voltage	8	2	GY	120	I	—
9	0.75	BK	2450	I	—	Ground	9	0.75	BK	2450	I	—
10	0.35	BU/WH	7446	I	—	Fuel Line Pressure Sensor Signal	10	0.5	BU/WH	7446	I	—
11	0.35	BK/YE	7447	I	—	Fuel Line Pressure Sensor Low Reference	11	0.5	BK/YE	7447	I	—
12-13	—	—	—	—	—	Not Occupied	12-13	—	—	—	—	—
14	0.35	BK/GN	6281	I	—	Fuel Level Sensor Low Reference	14	0.5	BK/GN	6281	I	—
15	0.5	BU	7443	I	—	Fuel System Control Module Shield Extension	15	0.5	BK	7443	I	—
16	3	BK/GN	1580	I	—	Fuel Pump Low Reference	16	2	PK	1580	I	—

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X322 Body Harness to Fuel Harness



Connector Part Information

- Harness Type: Body
- OEM Connector: 13503526
- Service Connector: 19260070
- Description: 12-Way F MX150 Series, Sealed (BK)

Connector Part Information

- Harness Type: Fuel
- OEM Connector: 13503540
- Service Connector: 13503540
- Description: 12-Way M MX150 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13578889	J-35616-3 (GY)	J-38125-11A
II	13578890	J-35616-3 (GY)	J-38125-11A

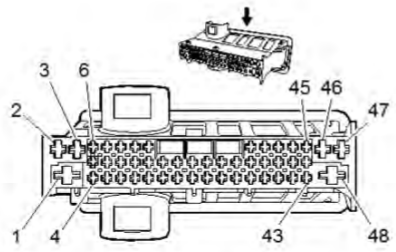
X322 Body Harness to Fuel Harness

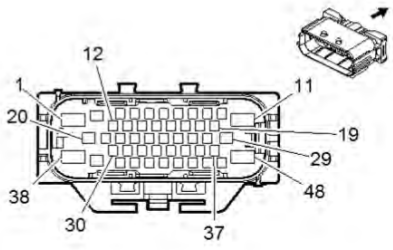
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	BU/WH	7455	I	NPP	FSCM Exhaust Flapper Valve Feedback Control	1	0.5	BU/WH	7455	I	NPP
2	0.75	GN/VT	1115	I	F55	Left Rear Damping Servo Control	2	0.75	GN/VT	1115	I	F55
3	0.75	BU/GY	1114	I	F55	Left Rear Damping Servo Supply Voltage	3	0.75	BU/GY	1114	I	F55
4	0.75	GN/GY	1119	I	F55	Right Rear Damping Servo Control	4	0.75	GN/GY	1119	I	F55
5	0.75	BN/GN	1118	I	F55	Right Rear Damping Servo Supply Voltage	5	0.75	BN/GN	1118	I	F55
6	0.5	BK	2450	I	NPP	Ground	6	0.5	BK	2450	I	NPP
7	0.35	YE/RD	1208	I	F55	Left Rear Strut Position Sensor Voltage Reference	7	0.35	YE/RD	1208	I	F55
8	0.35	GN/WH	1210	I	F55	Left Rear Strut Position Sensor Signal	8	0.35	GN/WH	1210	I	F55
9	0.35	BK/GN	1209	I	F55	Left Rear Strut Position Sensor Low Reference	9	0.35	BK/GN	1209	I	F55
10	0.35	GN/RD	1214	I	F55	Right Rear Strut Position Sensor Voltage Reference	10	0.35	GN/RD	1214	I	F55
11	0.35	GN/GY	1216	I	F55	Right Rear Strut Position Sensor Signal	11	0.35	GN/GY	1216	I	F55
12	0.35	BK/YE	1215	I	F55	Right Rear Strut Position Sensor Low Reference	12	0.35	BK/YE	1215	I	F55

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X323 Body Harness to Driver Seat Harness





Connector Part Information

- Harness Type: Driver Seat
- OEM Connector: 13586843
- Service Connector: Service by Harness - See part Catalog
- Description: 48-Way F 1.5/2.8/6.3 Timer Series BK

Connector Part Information

- Harness Type: Body
- OEM Connector: 13586849
- Service Connector: 19301796
- Description: 48-Way M 1.6, 2.8, 5.8 Series, Sealed YE
- Harness Type: Body
- OEM Connector: 13586849
- Service Connector: 19301796
- Description: 48-Way M 1.6, 2.8, 5.8 Series, Sealed YE

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available
II	Not Available	J-35616-35 (VT)	J-38125-11A
III	13575593	J-35616-35 (VT)	J-38125-11A
IV	Not Available	Not Available	Not Available

X323 Body Harness to Driver Seat Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	-	-	-	I	-	Not Occupied	1	-	-	-	II	-
2	0.75	BN	2077	I	-	Driver Heated Seat Element Supply Voltage	2	0.75 0.75	BN BN/VT	2077 2077	II	-
3	0.35	BARE	1574	I	-	Rear Audio Drain Wire	3	0.35	BARE	1574	II	-
4	0.35	GN/YE	7066	I	-	Entertainment Remote Enable Signal	4	0.35	GN/YE	7066	II	-
5	0.35	OG/GN	5055	I	-	Driver Seat Position Switch Signal	5	0.35 0.35	OG/GN OR/GN	5055 5055	II	-
6	0.35	BN	238	I	-	Driver Seat Belt Switch Signal	6	0.35 0.35	BN OR/BN	238 238	II	-
7	0.35	WH	615	I	-	Memory Seat Switch Signal (1)	7	0.35	WH	615	II	-
8	0.35	BU/GN	614	I	-	Memory Seat Switch Set Signal	8	0.35	BU/GN	614	II	-
9	-	-	-	I	-	Not Occupied	9	-	-	-	II	-
10	0.35	BN	4240	I	-	Battery Positive Voltage	10	0.35 0.35	BN RD/BN	4240 4240	II	-
11	1.5	RD/GY	1342	I	-	Battery Positive Voltage	11	1.5	RD/GY	1342	II	-
12	0.35	WH/GY	5312	I	-	Left Rear Seat Audio Signal	12	0.35	WH/GY	5312	II	-

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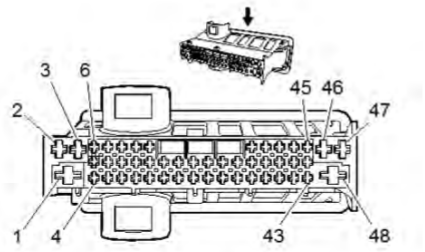
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
13	0.35	WH/GN	5313	I	-	Right Rear Seat Audio Signal	13	0.35	WH/GN	5313	II	-
14	0.35	YE/VT	3352	I	-	Rear Seat Audio Common Signal	14	0.35	YE/VT	3352	II	-
15	0.35	BK/OG	1363	I	-	Driver Seat Belt Switch Low Reference	15	0.35 0.35	BK/OG BK/OR	1363 1363	II	-
16	0.35	OG/WH	3064	I	-	Driver Seat Belt Buckle Pretensioner High Control	16	0.35 0.35	OG/WH OR/WH	3064 3064	II	-
17	-	-	-	I	-	Not Occupied	17	-	-	-	II	-
18	0.35	BK/BU	5978	I	-	Memory Switch Low Reference	18	0.35	BK/BU	5978	II	-
19	0.5	BK/WH	1551	I	-	Signal Ground	19	0.5	BK/WH	1551	II	-
20	0.75	BN	2432	I	-	Driver Heated Back Element Supply Voltage	20	0.75	BN	2432	II	-
21	0.35	GY/BN	5844	I	-	Video Bright Control	21	0.35	GY/BN	5844	II	-
22	0.35	VT/BK	5845	I	-	Video Module Signal	22	0.35	VT/BK	5845	II	-
23	0.35	WH	7394	I	-	DVD Video Signal 2 (-)	23	0.35	WH	7394	II	-
24	0.35	BU	7396	I	-	DVD Video Signal 2 (+)	24	0.35	BU	7396	II	-
25	0.35	GN/WH	7530	I	-	Local Interconnect Network Bus 8	25	0.35 0.35	GN/WH GN/WH	7530 7530	II	-
26	0.35	YE/OG	3065	I	-	Driver Seat Belt Buckle Pretensioner Low Control	26	0.35 0.35	YE/OG YE/OR	3065 3065	II	-
27-28	-	-	-	I	-	Not Occupied	27-28	-	-	-	II	-
29	0.5	RD/WH	2040	I	-	Battery Positive Voltage	29	0.5	RD/WH	2040	II	-
30	0.35	GN	6975	I	-	DVD Video Signal (+)	30	0.35	GN	6975	II	-
31	0.35	BN	5335	I	-	DVD Video Signal (-)	31	0.35	BN	5335	II	-
32	0.35	BARE	5818	I	-	Video Drain Wire	32	0.35	BARE	5818	II	-
33	0.35	GN	5060	I	-	Low Speed GMLAN Serial Data	33	0.35	GN	5060	II	-
34-35	-	-	-	I	-	Not Occupied	34-35	-	-	-	II	-
34-35	-	-	-	-	-	Not Occupied	34-35	-	-	-	-	-
36	0.35	WH/BU	5828	I	-	Right Rear Door Unlatch Switch Low Reference	36	0.35	WH/BU	5828	II	-
37	0.35	VT	6979	I	-	DVD Audio Common	37	0.35	VT	6979	II	-
38-39	-	-	-	I	-	Not Occupied	38-39	-	-	-	II	-
38-39	-	-	-	-	-	Not Occupied	38-39	-	-	-	-	-
40	0.35	BARE	6976	I	-	DVD Video Drain Wire	40	0.35	BARE	6976	II	-
41	0.35	GN/BU	5831	I	-	Remote Infra Red Signal (+)	41	0.35	GN/BU	5831	II	-
42	0.35	WH/BU	5830	I	-	Remote Infra Red Signal (-)	42	0.35 0.35	WH/BU WH/YE	5830 5830	II	-
43	0.35	OG/BU	3068	I	-	Driver Side Impact Module High Control	43	0.35 0.35	OG/BU OR/BU	3068 3068	II	-
44	0.35	GN/OG	3069	I	-	Driver Side Impact Module Low Control	44	0.35 0.35	GN/OG GN/OR	3069 3069	II	-
45	0.35	BARE	6980	I	-	DVD Audio Shield	45	0.35	BARE	6980	II	-

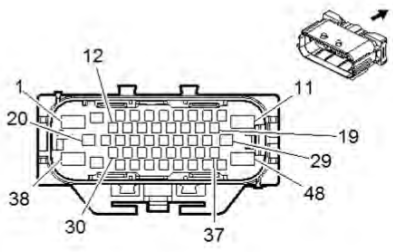
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Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
46	0.35	BU/YE	5826	I	-	Left DVD Audio Signal (+)	46	0.35	BU/YE	5826	II	-
47	0.35	WH/GN	7395	I	-	Video Mode 2 Signal	47	0.35	WH/GN	7395	II	-
48	1.5 1.5	BK BK	2150 2250	I	-	Ground Ground	48	1.5 1.5	BK BK	2150 2250	II	-

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X324 Body Harness to Passenger Seat Harness





Connector Part Information

- Harness Type: Passenger Seat
- OEM Connector: 13586843
- Service Connector: Service by Harness - See Part Catalog
- Description: 48-Way F 1.5/2.8/6.3 Timer Series (BK)

Connector Part Information

- Harness Type: Body
- OEM Connector: 13586849
- Service Connector: 19301796
- Description: 48-Way M 1.6, 2.8, 5.8 Series, Sealed (YE)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available
II	13575593	J-35616-35 (VT)	J-38125-11A
III	Not Available	J-35616-35 (VT)	J-38125-11A

X324 Body Harness to Passenger Seat Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	RD/GY	6240	I	KA1	Battery Positive Voltage	1	0.5 0.75	RD/GY RD/GY	6240 6240	I	KA1 with RHD
2	0.75	BN/VT	2077	I	KA1	Driver Heated Seat Element Supply Voltage	2	0.75	BN/VT	2077	I	-
3	0.35	BARE	1574	I	RHD and UWG	Rear Audio Drain Wire	3	-	-	1574	II	-
4	0.35	GN/YE	7066	I	UWG	Entertainment Remote Enable Signal	4	0.35	GN/YE	7066	II	-
5	0.35	OG/BU	5056	I	-	Passenger Seat Position Switch Signal	5	0.35	OG/BU	5056	III	-
6	0.35	BK/OG	1361	I	-	Passenger Seat Belt Switch Low Reference	6	0.35	BK/OG	1361	I	-
7-9	-	-	-	-	-	Not Occupied	7-9	-	-	-	-	-
10	0.35	RD/BN	4240	I	UWG	Battery Positive Voltage	10	0.35	RD/BN	4240	II	-
11	1.5	RD/GY	1342	I	-	Battery Positive Voltage	11	1.5 1.5	RD/GY RD/GY	1042 1342	I	- RHD
12	0.35	WH/GY	5312	I	RHD and UWG	Left Rear Seat Audio Signal	12	0.35	WH/GY	5312	II	-
13	0.35	WH/GN	5313	I	RHD and UWG	Right Rear Seat Audio Signal	13	0.35	WH/GN	5313	II	-
14	0.35	YE/VT	3352	I	-	Rear Seat Audio Common Signal	14	0.35	YE/VT	3352	II	-
15	0.35	OG/VT	1362	I	-	Passenger Seat Belt Switch Signal	15	0.35	OG/VT	1362	I	-

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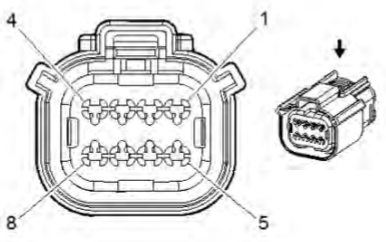
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
16	0.5	OG/BN	3062	I	-	Passenger Seat Belt Buckle Pretensioner High Control	16	0.5 0.35	OG/BN OG/BN	3062 3062	II	AY0
17-18	-	-	-	-	-	Not Occupied	17-18	-	-	-	-	-
19	0.5	BK/WH	1551	I	UWG	Signal Ground	19	0.5	BK/WH	1551	II	-
20	0.75	BN	2432	I	KA1	Driver Heated Back Element Supply Voltage	20	0.75	BN	2432	I	-
21	0.35	GY/BN	5844	I	UWG	Video Bright Control	21	0.35	GY/BN	5844	II	-
22	0.35	VT/BK	5845	I	RHD and UWG	Video Module Signal	22	0.35	VT/BK	5845	II	-
23	0.35	WH	7394	I	LHD and UWG	DVD Video Signal 2 (-)	23	0.35	WH	7394	III	LHD and UWG
24	0.35	BU	7396	I	LHD and UWG	DVD Video Signal 2 (+)	24	0.35	BU	7396	III	RHD and UWG
25	0.35	GN/BU	7530	I	A45	Local Interconnect Network Bus 8	25	0.35 0.35 0.35 0.35	GN/BU GN/BU GN/BU GN/BU	7530 6133 7530 6133	III	A45 KA1 with MYA or MYC or MYD
26	0.35	BU/OG	3063	I	-	Passenger Seat Belt Buckle Pretensioner Low Control	26	0.35	BU/OG	3063	I	-
27-28	-	-	-	-	-	Not Occupied	27-28	-	-	-	-	-
29	0.5	RD/GN	6140	I	KA1	Battery Positive Voltage	29	0.75 0.5	RD/GN RD/GN	6140 6140	I	- KA1 with RHD
30	0.35	GN	6975	I	RHD and UWG	DVD Video Signal (+)	30	0.35	GN	6975	II	-
31	0.35	BN	5335	I	RHD and UWG	DVD Video Signal (-)	31	0.35	BN	5335	II	-
32	0.35	BARE	5818	I	LHD and UWG	Video Drain Wire	32	0.35	BARE	5818	III	RHD and UWG
33	-	-	-	-	-	Not Occupied	33	-	-	-	-	-
34	0.5	OG/BN	7571	I	-	Passenger Seat Belt Reminder Signal	34	0.35 0.5	OG/BN OG/BN	7571 7571	I	- AY0 with UEN
35	-	-	-	-	-	Not Occupied	35	-	-	-	-	-
36	0.35	WH/BU	5828	I	RHD and UWG	Right DVD Audio Signal (+)	36	0.35	WH/BU	5828	II	-
37	0.35	VT	6979	I	RHD and UWG	DVD Audio Common	37	0.35	VT	6979	I	-
38-39	-	-	-	-	-	Not Occupied	38-39	-	-	-	-	-
40	0.35	BARE	6975	I	RHD and UWG	DVD Video Signal (+)	40	0.35	BARE	6975	II	-
41	0.35	GN/BU	5831	I	UWG	Remote Infra Red Signal (+)	41	0.35	GN/BU	5831	II	-
42	0.35	WH/YE	5830	I	UWG	Remote Infra Red Signal (-)	42	0.35	WH/YE	5830	II	-
43	0.35	OG/GY	3066	I	-	Passenger Side Impact Module High Control	43	0.35	OG/GY	3066	I	-
44	0.35	BN/OG	3067	I	-	Passenger Side Impact Module Low Control	44	0.35	BN/OG	3067	II	-
45	0.35	BARE	6980	I	RHD and UWG	DVD Audio Shield	45	0.35	BARE	6980	II	-
46	0.35	BU/YE	5826	I	RHD and UWG	Left DVD Audio Signal (+)	46	0.35	BU/YE	5826	II	-

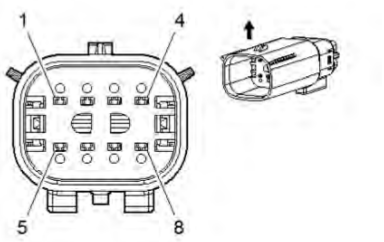
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Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
47	0.35	WH/GN	7395	I	LHD and UWG	Video Mode 2 Signal	47	0.35	WH/GN	7395	III	LHD and UWG
48	1.5	BK	2150	I	RHD	Ground	48	1.5	BK	2150	I	-

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X330 Rear Axle Harness to Body Harness





Connector Part Information

- Harness Type: Rear Axle
- OEM Connector: 13503524
- Service Connector: Service by Harness - See part Catalog
- Description: 8-Way F 1.5 Series, Sealed BK

Connector Part Information

- Harness Type: Body
- OEM Connector: 13503538
- Service Connector: 19300474
- Description: 8-Way M 150 MX Series, Sealed BK

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available
II	Not Available	J-35616-35 (VT)	Not Available

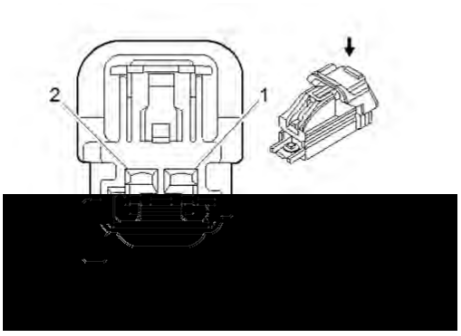
X330 Rear Axle Harness to Body Harness

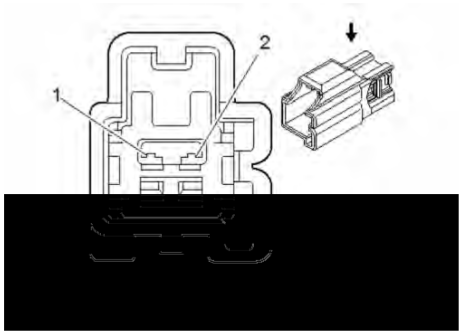
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1-4	-	-	-	-	-		1-4	-	-	-	-	-
5	0.5	WH/RD	2165	I	-	Automatic Level Control Position Sensor 5 Volt Reference	5	0.35	WH/RD	2165	II	-
6	0.5	BK/BN	2185	I	-	Automatic Level Control Position Sensor Low Reference	6	0.35	BK/BN	2185	II	-
7	0.5	BN	2184	I	-	Automatic Level Control Position Sensor Signal	7	0.35	BN	2184	II	-
8	-	-	-	-	-		8	-	-	-	-	-

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X341 Police Option Harness to Body Harness





Connector Part Information

- Harness Type: Police Option
- OEM Connector: 19167918
- Service Connector: 88988504
- Description: 2-Way F 1.5 YESC Series (L-GY)

Connector Part Information

- Harness Type: Body
- OEM Connector: 13580902
- Service Connector: 88988503
- Description: 2-Way M 1.5 Series (L-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Pending	Pending	Pending

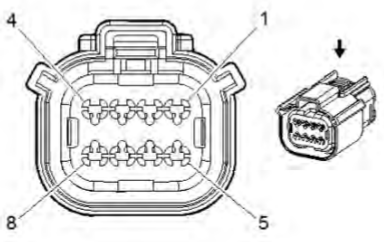
X341 Police Option Harness to Body Harness

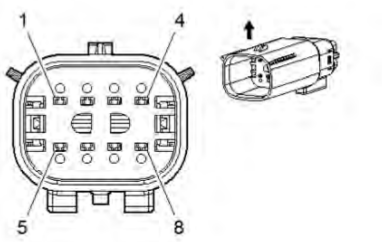
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	VT/BU	6189	I	-	Lift Glass/Trunk Interior Release Signal	1	0.35	VT/BU	6189	I	-
2	0.35	YE	5810	I	-	Park Enable Signal	2	0.35	YE	5810	I	-

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X343 Rear Axle Harness to Left Rear Suspension Jumper Harness





Connector Part Information

- Harness Type: Rear Axle Harness
- OEM Connector: 13503524
- Service Connector: Service by Harness – See Part Catalog
- Description: 8-Way F 1.5 Series, Sealed (BK)

Connector Part Information

- Harness Type: Left Rear Suspension Jumper
- OEM Connector: 13503538
- Service Connector: Service by Harness – See Part Catalog
- Description: 8-Way M 150 MX Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	TBD	—	—

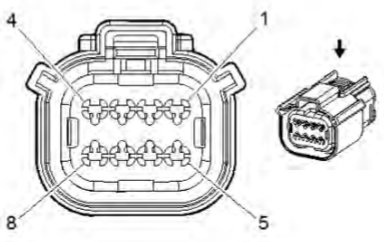
X343 Rear Axle Harness to Left Rear Suspension Jumper Harness

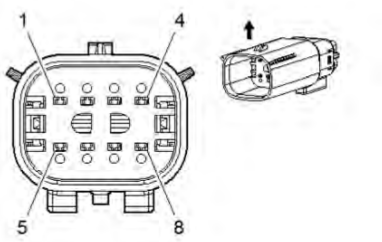
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	BK/GN	1209	I	F55	Left Rear Strut Position Sensor Low Reference	1	0.35	BK/GN	1209	I	F55
2	0.35	GN/WH	1210	I	F55	Left Rear Strut Position Sensor Signal	2	0.35	GN/WH	1210	I	F55
3	0.35	YE/RD	1208	I	F55	Left Rear Strut Position Sensor Voltage Reference	3	0.35	YE/RD	1208	I	F55
4	0.75	BU/GY	1114	I	F55	Left Rear Damping Servo Supply Voltage	4	0.75	BU/GY	1114	I	F55
5	0.75	GN/VT	1115	I	F55	Left Rear Damping Servo Control	5	0.75	GN/VT	1115	I	F55
6	0.5	BU/WH	7455	I	NPP	FSCM Exhaust Flapper Valve Feedback Control	6	0.5	BU/WH	7455	I	NPP

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X344 Rear Axle Harness to Right Rear Suspension Jumper Harness





Connector Part Information

- Harness Type: Rear Axle Harness
- OEM Connector: 13503524
- Service Connector: Service by Harness – See Part Catalog
- Description: 8-Way F 1.5 Series, Sealed (BK)

Connector Part Information

- Harness Type: Right Rear Suspension Jumper
- OEM Connector: 13503538
- Service Connector: Service by Harness – See Part Catalog
- Description: 8-Way M 150 MX Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	TBD	–	–

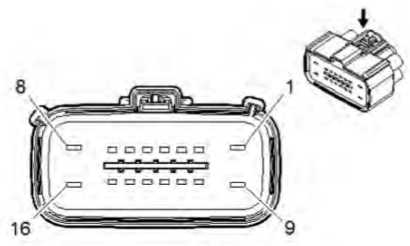
X344 Rear Axle Harness to Right Rear Suspension Jumper Harness

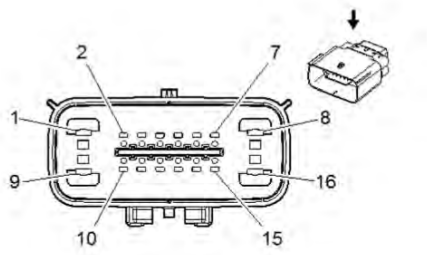
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	BK/YE	1215	I	F55	Right Rear Strut Position Sensor Low Reference	1	0.35	BK/YE	1215	I	F55
2	0.35	GN/GY	1216	I	F55	Right Rear Strut Position Sensor Signal	2	0.35	GN/GY	1216	I	F55
3	0.35	GN/RD	1214	I	F55	Right Rear Strut Position Sensor Voltage Reference	3	0.35	GN/RD	1214	I	F55
4	0.75	BN/GN	1118	I	F55	Right Rear Damping Servo Supply Voltage	4	0.75	BN/GN	1118	I	F55
5	0.75	GN/GY	1119	I	F55	Right Rear Damping Servo Control	5	0.75	GN/GY	1119	I	F55
6	0.5	BU/WH	7455	I	NPP	FSCM Exhaust Flapper Valve Feedback Control	6	0.5	BU/WH	7455	I	NPP

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X345 Rear Axle Harness to Body Harness (F19/F35/F69)





Connector Part Information

- Harness Type: Rear Axle
- OEM Connector: 13503532
- Service Connector: Service by Harness - See part Catalog
- Description: 16-Way F 150 MX Series, Sealed L-GY

Connector Part Information

- Harness Type: Body
- OEM Connector: 13504361
- Service Connector: 19119423
- Description: 16-Way M 150 MX Series, Sealed L-GY

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available
II	Not Available	Not Available	Not Available

X345 Rear Axle Harness to Body Harness (F19/F35/F69)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	3	RD/VT	1640	I	-	Battery Positive Voltage	1	3	RD/VT	1640	II	-
2	0.5	WH/BU	5986	I	-	Serial Data Communication Enable	2	0.5	WH/BU	5986	II	-
3	0.5	BU/VT	1134	I	-	Park Brake Switch Signal	3	0.5	BU/VT	1134	II	-
4	0.5	GY/RD	7684	I	-	Park Brake Apply Switch Voltage Reference	4	0.5	GY/RD	7684	II	-
5	0.5	BN	6107	I	-	Park Brake Apply Switch Signal	5	0.5	BN	6107	II	-
6	0.5	BU	2500	I	-	High Speed GMLAN Serial Data (+) (1)	6	0.5	BU	2500	II	-
7	0.5	GY/BK	7127	I	-	Wheel Speed Sensor Supply Voltage Left Rear	7	0.5	GY/BK	7127	II	-
8	0.5	BU	884	I	-	Wheel Speed Sensor Signal Left Rear	8	0.5	BU	884	II	-
9		-		I	-	Not Occupied	9		-		II	-
10	0.5	BU/BK	6108	I	-	Park Brake Release Switch Signal	10	0.5	BU/BK	6108	II	-
11	0.5	YE/RD	7683	I	-	Park Brake Release Switch Voltage Reference	11	0.5	YE/RD	7683	II	-
12	0.5	YE	1492	I	-	Park Brake Switch Supply Voltage	12	0.5	YE	1492	II	-
13		-		I	-	Not Occupied	13		-		II	-
14	0.5	WH	2501	I	-	High Speed GMLAN Serial Data (-) (1)	14	0.5	WH	2501	II	-
15	0.5	GY/YE	7128	I	-		15	0.5	GY/YE	7128	II	-

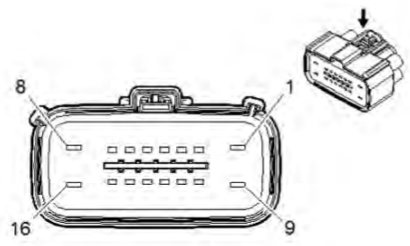
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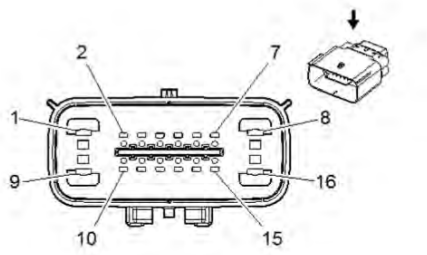
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Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
						Wheel Speed Sensor Supply Voltage Right Rear						
16	0.5	VT	882	I	-	Wheel Speed Sensor Signal Right Rear	16	0.5	VT	882	II	-

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X345 Rear Axle Harness to Fuel Extension Harness (F80)





Connector Part Information

- Harness Type: Rear Axle
- OEM Connector: 13503532
- Service Connector: Service by Harness - See Part Catalog
- Description: 16-Way F 150 MX Series, Sealed (L-GY)

Connector Part Information

- Harness Type: Fuel Extension
- OEM Connector: 13504361
- Service Connector: Service by Harness - See Part Catalog
- Description: 16-Way M 150 MX Series, Sealed (L-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

X345 Rear Axle Harness to Fuel Extension Harness (F80)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	3	RD/VT	1640	I	J77	Battery Positive Voltage	1	3	RD/VT	1640	I	J77
2	0.5	WH/BU	5986	I	J77	Serial Data Communication Enable	2	0.5	WH/BU	5986	I	J77
3	0.5	BU/VT	1134	I	J77	Park Brake Switch Signal	3	0.5	BU/VT	1134	I	J77
4	0.5	GY/RD	7684	I	J77	Park Brake Apply Switch Voltage Reference	4	0.5	GY/RD	7684	I	J77
5	0.5	BN	6107	I	J77	Park Brake Apply Switch Signal	5	0.5	BN	6107	I	J77
6	0.5	BU	2500	I	J77	High Speed GMLAN Serial Data (+) (1)	6	0.5	BU	2500	I	J77
7	0.5	GY/BK	7127	I	-	Wheel Speed Sensor Supply Voltage Left Rear	7	0.5	GY/BK	7127	I	-
8	0.5	BU	884	I	-	Wheel Speed Sensor Signal Left Rear	8	0.5	BU	884	I	-
9	-	-	-	-	-	Not Occupied	9	-	-	-	-	-
10	0.5	BU/BK	6108	I	J77	Park Brake Release Switch Signal	10	0.5	BU/BK	6108	I	J77
11	0.5	YE/RD	7683	I	J77	Park Brake Release Switch Voltage Reference	11	0.5	YE/RD	7683	I	J77
12	0.5	YE	1492	I	J77	Park Brake Switch Supply Voltage	12	0.5	YE	1492	I	J77
13	-	-	-	-	-	Not Occupied	13	-	-	-	-	-
14	0.5	WH	2501	I	J77	High Speed GMLAN Serial Data (-) (1)	14	0.5	WH	2501	I	J77
15	0.5	GY/YE	7128	I	-	Wheel Speed Sensor Supply Voltage Right Rear	15	0.5	GY/YE	7128	I	-

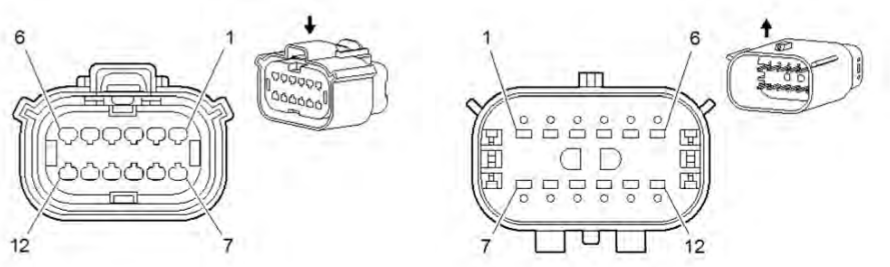
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Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
16	0.5	VT	882	I	-	Wheel Speed Sensor Signal Right Rear	16	0.5	VT	882	I	-

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X346 Rear Axle Harness to Body Harness (F19/F35/F69 with F55)



Connector Part Information

- Harness Type: Rear Axle
- OEM Connector: 13503526
- Service Connector: 13503528
- Description: 12-Way F 1.5 Series, Sealed (BK)

Connector Part Information

- Harness Type: Body
- OEM Connector: 13503540
- Service Connector: 13503540
- Description: 12-Way M 150 MX Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available

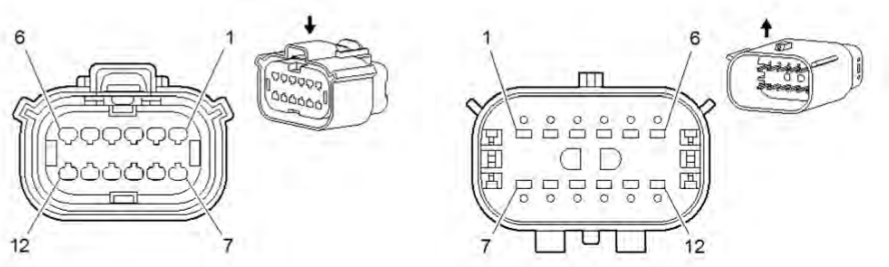
X346 Rear Axle Harness to Body Harness (F19/F35/F69 with F55)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	BU/WH	7455	I	NPP	FSCM Exhaust Flapper Valve Feedback Control	1	0.5	BU/WH	7455	I	NPP
2	0.75	GN/VT	1115	I	F55	Left Rear Damping Servo Control	2	0.75	GN/VT	1115	I	F55
3	0.75	BU/GY	1114	I	F55	Left Rear Damping Servo Supply Voltage	3	0.75	BU/GY	1114	I	F55
4	0.75	GN/GY	1119	I	F55	Right Rear Damping Servo Control	4	0.75	GN/GY	1119	I	F55
5	0.75	BN/GN	1118	I	F55	Right Rear Damping Servo Supply Voltage	5	0.75	BN/GN	1118	I	F55
6	0.5	BK	2450	I	NPP	Ground	6	0.5	BK	2450	I	NPP
7	0.35	YE/RD	1208	I	F55	Left Rear Strut Position Sensor Voltage Reference	7	0.35	YE/RD	1208	I	F55
8	0.35	GN/WH	1210	I	F55	Left Rear Strut Position Sensor Signal	8	0.35	GN/WH	1210	I	F55
9	0.35	BK/GN	1209	I	F55	Left Rear Strut Position Sensor Low Reference	9	0.35	BK/GN	1209	I	F55
10	0.35	GN/RD	1214	I	F55	Right Rear Strut Position Sensor Voltage Reference	10	0.35	GN/RD	1214	I	F55
11	0.35	GN/GY	1216	I	F55	Right Rear Strut Position Sensor Signal	11	0.35	GN/GY	1216	I	F55
12	0.35	BK/YE	1215	I	F55	Right Rear Strut Position Sensor Low Reference	12	0.35	BK/YE	1215	I	F55

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X346 Rear Axle Harness to Fuel Extension Harness (F80 with F55)



Connector Part Information

- Harness Type: Rear Axle
- OEM Connector: 13503526
- Service Connector: 13503528
- Description: 12-Way F 1.5 Series, Sealed (BK)

Connector Part Information

- Harness Type: Fuel Tank Extension
- OEM Connector: 13503540
- Service Connector: 13503540
- Description: 12-Way M 150 MX Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available

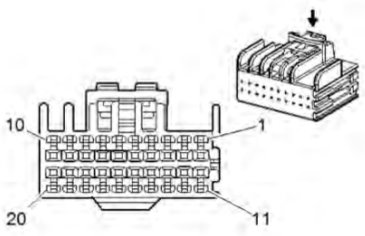
X346 Rear Axle Harness to Fuel Extension Harness (F80 with F55)

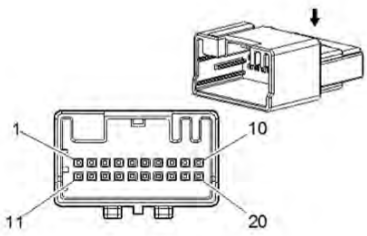
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	BU/WH	7455	I	-	FSCM Exhaust Flapper Valve Feedback Control	1	0.5	BU/WH	7455	I	-
2	0.75	GN/VT	1115	I	-	Left Rear Damping Servo Control	2	0.75	GN/VT	1115	I	-
3	0.75	BU/GY	1114	I	-	Left Rear Damping Servo Supply Voltage	3	0.75	BU/GY	1114	I	-
4	0.75	GN/GY	1119	I	-	Right Rear Damping Servo Control	4	0.75	GN/GY	1119	I	-
5	0.75	BN/GN	1118	I	-	Right Rear Damping Servo Supply Voltage	5	0.75	BN/GN	1118	I	-
6	0.5	BK	2450	I	-	Ground	6	0.5	BK	2450	I	-
7	0.35	YE/RD	1208	I	-	Left Rear Strut Position Sensor Voltage Reference	7	0.35	YE/RD	1208	I	-
8	0.35	GN/WH	1210	I	-	Left Rear Strut Position Sensor Signal	8	0.35	GN/WH	1210	I	-
9	0.35	BK/GN	1209	I	-	Left Rear Strut Position Sensor Low Reference	9	0.35	BK/GN	1209	I	-
10	0.35	GN/RD	1214	I	-	Right Rear Strut Position Sensor Voltage Reference	10	0.35	GN/RD	1214	I	-
11	0.35	GN/GY	1216	I	-	Right Rear Strut Position Sensor Signal	11	0.35	GN/GY	1216	I	-
12	0.35	BK/YE	1215	I	-	Right Rear Strut Position Sensor Low Reference	12	0.35	BK/YE	1215	I	-

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X350 Body Front Harness to Body Harness (LHD)





Connector Part Information

- Harness Type: Front Body
- OEM Connector: 7283-6388-40
- Service Connector: 88988264
- Description: 20-Way F 0.64 YESC Series (L-GY)

Connector Part Information

- Harness Type: Body
- OEM Connector: 13580904
- Service Connector: 88988270
- Description: 20-Way M 0.64 Series (GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Pending	J-35616-3 (GY)	J-38125-11A

X350 Body Front Harness to Body Harness (LHD)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	-	-	-	-	-	Not Occupied	1	-	-	-	-	-
2	0.35	GN/VT	5199	I	-	Run/Crank Relay Coil Control	2	0.35	GN/VT	5199	I	-
3	0.35	BN/WH	28	I	-	Horn Relay Control	3	0.35	BN/WH	28	I	-
4	0.35	BN/VT	193	I	-	Rear Defog Relay Control	4	0.35	BN/VT	193	I	-
5	0.35	BN/VT	1969	I	-	Headlamp High Beam Relay Control	5	0.35	BN/VT	1969	I	-
6	-	-	-	-	-	Not Occupied	6	-	-	-	-	-
7	0.35	WH/VT	860	I	-	Front Windshield Wiper Switch High Signal	7	0.35	WH/VT	860	I	-
8	0.35	BN/GY	2268	I	-	Windshield Washer Relay Control	8	0.35	BN/GY	2268	I	-
9	0.35	BN/WH	1317	I	T3U	Fog Lamp Relay Control	9	0.35	BN/WH	1317	I	LHD+T3U
10	0.35	BN/WH	419	I	-	Check Engine Indicator Control	10	0.35	BN/WH	419	I	-
11	0.35	BK/BU	61	I	-	Outside Ambient Temperature Sensor Low Reference	11	0.35	BK/BU	61	I	-
12	0.35	WH/BU	5986	I	-	Serial Data Communication Enable	12	0.35	WH/BU	5986	I	-
13-14	-	-	-	-	-	Not Occupied	13-14	-	-	-	-	-
15	0.35	BU/VT	1589	I	LFW/LFX/L77/LS3/LSA	Primary Fuel Level Sensor Signal	15	0.35	BU/VT	1589	I	LFW/LFX/L77/LS3/LSA
16	0.35	BK/GN	6281	I	LFW/LFX/L77/LS3/LSA	Fuel Level Sensor Low Reference	16	0.35	BK/GN	6281	I	LFW/LFX/L77/LS3/LSA
17	0.35	BU/WH	1937	I	LFW/LFX/L77/LS3/LSA	Secondary Fuel Level Sensor Signal	17	0.35	BU/WH	1937	I	LFW/LFX/L77/LS3/LSA
18	0.5	WH	1579	I	LFW/LFX/L77/LS3/LSA		18	0.5	WH	1579	I	LFW/LFX/L77/LS3/LSA

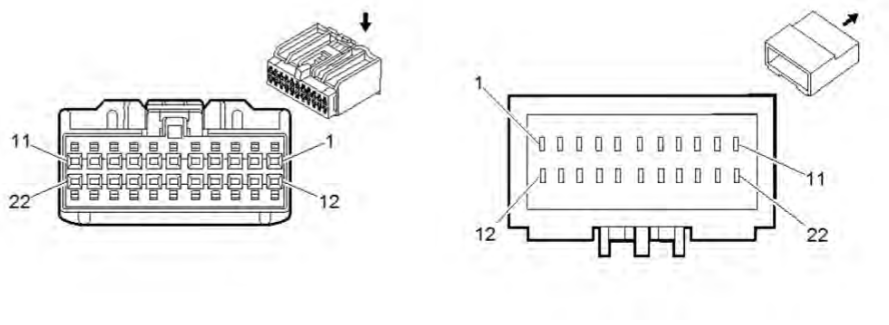
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Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
						Fuel Temperature/Composition Signal						
19	0.35	GY	5660	I	LFW/LFX	Fuel Pump Controller Data Out Signal	19	0.35	GY	5660	I	LFW/LFX
20	-	-	-	-	-	Not Occupied	20	-	-	-	-	-

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X351 Body Front Harness to Body Harness (LHD)



Connector Part Information

- Harness Type: Front Body
- OEM Connector: 13504097
- Service Connector: Pending
- Description: 22-Way F 0.64 Kaizen Series (BK)

Connector Part Information

- Harness Type: Body
- OEM Connector: 13505628
- Service Connector: Pending
- Description: 22-Way M 0.64 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Pending	Pending	Pending	Not Available	Not Available	Not Available	Not Available

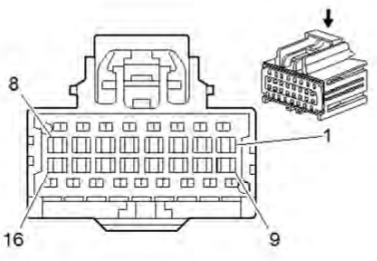
X351 Body Front Harness to Body Harness (LHD)

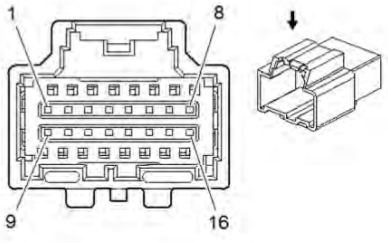
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	VT/YE	5985	I	LHD	Accessory Wakeup Serial Data	1	0.35	VT/YE	5985	I	LHD
2	0.5	BU/YE	6105	I	LHD	High Speed GMLAN Serial Data (+) (2)	2	0.35	BU/YE	6105	I	LHD+UFQ
3	0.5	WH	6106	I	LHD	High Speed GMLAN Serial Data (-) (2)	3	0.35	WH	6106	I	LHD+UFQ
4	0.35	WH/BU	6311	I	LHD	Cruise/ETC/TCC Brake Signal	4	0.35	WH/BU	6311	I	LHD
5	0.35	BN/GN	109	I	LHD	Hood Ajar Switch Signal	5	0.35	BN/GN	109	I	LHD
6-10	—	—	—	—	—	Not Occupied	6-10	—	—	—	—	—
11	0.35	BN/YE	1970	I	LHD+T4F	Headlamp Low Beam Relay Control	11	0.35	BN/YE	1970	I	LHD+T4F
12	0.35	BU/GY	636	I	LHD	Outside Ambient Air Temperature Sensor Signal	12	0.35	BU/GY	636	I	LHD
13-17	—	—	—	—	—	Not Occupied	13-17	—	—	—	—	—
18	0.35	WH/BK	381	I	LHD	Vehicle Speed Signal	18	0.35	WH/BK	381	I	LHD
19	0.5	GN/BN	2087	I	LHD	Combined Vehicle Inertial Sensor Supply Voltage	19	0.5	GN/BN	2087	I	LHD
20-22	—	—	—	—	—	Not Occupied	20-22	—	—	—	—	—

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X352 Body Front Harness to Body Harness (LHD)





Connector Part Information

- Harness Type: Front Body
- OEM Connector: 15136074
- Service Connector: 15136074
- Description: 16-Way F 0.64 Kaizen Series (BN)

Connector Part Information

- Harness Type: Body
- OEM Connector: 89047490
- Service Connector: 89047490
- Description: 16-Way M YESC Kaizen 64 Series (BN)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Pending	Pending	Pending	Not Available	Not Available	Not Available	Not Available

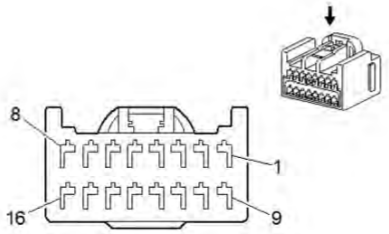
X352 Body Front Harness to Body Harness (LHD)

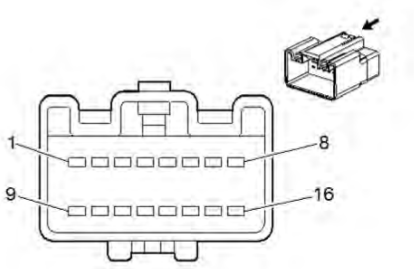
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	GY/YE	7128	I	LHD	Wheel Speed Sensor Supply Voltage Right Rear	1	0.5	GY/YE	7128	I	LHD
2	0.5	VT	882	I	LHD	Wheel Speed Sensor Signal Right Rear	2	0.5	VT	882	I	LHD
3	0.5	GY/BK	7127	I	LHD	Wheel Speed Sensor Supply Voltage Left Rear	3	0.5	GY/BK	7127	I	LHD
4	0.5	BU	884	I	LHD	Wheel Speed Sensor Signal Left Rear	4	0.5	BU	884	I	LHD
5	0.5	BU	2500	I	LHD	High Speed GMLAN Serial Data (+) (1)	5	0.5	BU	2500	I	LHD
6	0.5	WH	2501	I	LHD	High Speed GMLAN Serial Data (-) (1)	6	0.5	WH	2501	I	LHD
7-16	-	-	-	-	-	Not Occupied	7-16	-	-	-	-	-

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X353 Body Front Harness to Body Harness (LHD)





Connector Part Information

- Harness Type: Front Body
- OEM Connector: 7283-5534-60
- Service Connector: 89047090
- Description: 16-Way F YESC/USCAR Class II Series, Sealed (GN)

Connector Part Information

- Harness Type: Body
- OEM Connector: 7282-5534-60
- Service Connector: 88952799
- Description: 16-Way M 1.5 Series Weather Pack (GN)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Pending	Pending	Pending	Not Available	Not Available	Not Available	Not Available

X353 Body Front Harness to Body Harness (LHD)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	1	BN/YE	2267	I	LHD+DR9/DR3/DM7	Mirror Heating Element Supply Voltage	1	0.35	BN/YE	2267	I	LHD+DR9/DR3/DM7
2	0.5	RD/BN	440	I	LHD	Battery Positive Voltage	2	0.5	RD/BN	440	I	LHD
3	0.35	RD/BU	840	I	LHD	Battery Positive Voltage	3	0.35	RD/BU	840	I	LHD
4-5	-	-	-	-	-	Not Occupied	4-5	-	-	-	-	-
6	0.5	VT/GY	539	I	LHD	Run/Crank Ignition 1 Voltage	6	0.5	VT/GY	539	I	(LHD+DD8/UE1)/ (9C1/9C3+EF7/Z49)
7	0.35	VT/GY	139	I	LHD	Run/Crank Ignition 1 Voltage	7	0.35	VT/GY	139	I	LHD
8-9	-	-	-	-	-	Not Occupied	8-9	-	-	-	-	-
10	0.75	RD/GY	6240	I	KA1+LHD	Battery Positive Voltage	10	0.75	RD/GY	6240	I	KA1+LHD
11	0.35	VT/GY	709	I	(LHD+-EF7+-Z49)/ (69+EF7/Z49)	Left Park Lamp Supply Voltage	11	0.35	VT/GY	709	I	LHD
12	0.35	GY/BN	309	I	(LHD+-EF7+-Z49)/ (69+EF7/Z49)	Right Park Lamp	12	0.35	GY/BN	309	I	LHD

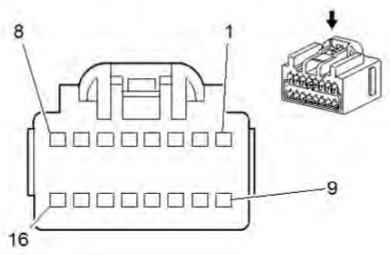
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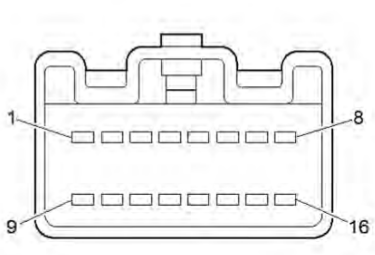
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Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
						Supply Voltage						
13	0.75	RD/GN	6140	I	KA1+LHD	Battery Positive Voltage	13	0.75	RD/GN	6140	I	KA1+LHD
14-16	-	-	-	-	-	Not Occupied	14-16	-	-	-	-	-

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X354 Body Front Harness to Body Harness (LHD)





Connector Part Information

- Harness Type: Front Body
- OEM Connector: 7283-5535-90
- Service Connector: 88952778
- Description: 16-Way F YESC 1.5 Series (BU)

Connector Part Information

- Harness Type: Body
- OEM Connector: 7282-5535-90
- Service Connector: 88956528
- Description: 12-Way M 1.5 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Pending	Pending	Pending	Not Available	Not Available	Not Available	Not Available

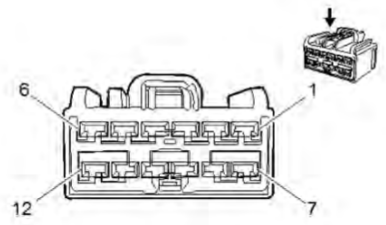
X354 Body Front Harness to Body Harness (LHD)

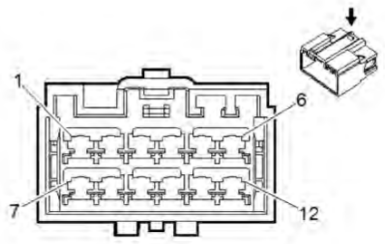
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	OG/YE	354	I	LHD+AYG/AKC	Left Front Discriminating Sensor Signal	1	0.35	OG/YE	354	I	LHD+AYG/AKC
2	0.35	BK/OG	5045	I	LHD+AYG/AKC	Left Front Discriminating Sensor Low Reference	2	0.35	BK/OG	5045	I	LHD+AYG/AKC
3	0.35	OG/GN	1409	I	LHD+AYG/AKC	Right Front Discriminating Sensor Signal	3	0.35	OG/GN	1409	I	LHD+AYG/AKC
4	0.35	BK/OG	5600	I	LHD+AYG/AKC	Right Front Discriminating Sensor Low Reference	4	0.35	BK/OG	5600	I	LHD+AYG/AKC
10	0.35	BN/GN	196	I	LHD	Windshield Wiper Motor Park Switch Signal	10	0.35	BN/GN	196	I	LHD
11	-	-	-	-	-		11	-	-	-	-	-
12	0.5	VT/GN	359	I	LHD+T3N	DRL Supply Voltage	12	0.5	VT/GN	359	I	LHD+T3N
15	0.5	BU/WH	1314	I	LHD	Left Front Turn Signal Lamp Supply Voltage	15	0.5	BU/WH	1314	I	(LHD+-EF7+-Z49)/(EF7/Z49+-9C1+-9C3)
16	0.5	GN/VT	1315	I	LHD	Right Front Turn Signal Lamp Supply Voltage	16	0.5	GN/VT	1315	I	(LHD+-EF7+-Z49)/(EF7/Z49+-9C1+-9C3)

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X356 Body Front Harness to Body Harness (LHD)





Connector Part Information

- Harness Type: Front Body
- OEM Connector: 19178907
- Service Connector: 13580444
- Description: 12-Way F 2.8 Kaizen Series (L-GY)

Connector Part Information

- Harness Type: Body
- OEM Connector: 19179143
- Service Connector: No SDC/FSU
- Description: 12-Way M (L-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Pending	Pending	Pending	Not Available	Not Available	Not Available	Not Available

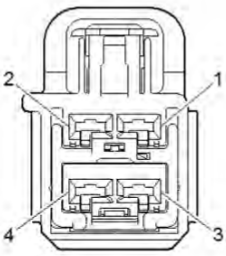
X356 Body Front Harness to Body Harness (LHD)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	1.5	RD/GY	3540	I	CF5+LHD	Battery Positive Voltage	1	1.5	RD/GY	3540	I	CF5+LHD
2	0.35	BU/BN	7573	I	LHD	Electric Variable Displacement Supply	2	0.35	BU/BN	7573	I	LHD
3	0.35	BU/YE	7574	I	LHD	Electric Variable Displacement Control	3	0.35	BU/YE	7574	I	LHD
4	-	-	-	-	-	Not Occupied	4	-	-	-	-	-
5	0.75	VT/WH	639	I	LHD+UVC/RZW/KU1/KU3	Run/Crank Ignition 1 Voltage	5	0.75	VT/WH	639	I	LHD+UVC/RZW/KU1/KU3
6-12	-	-	-	-	-	Not Occupied	6-12	-	-	-	-	-

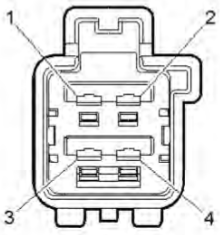
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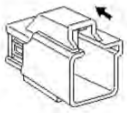
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X357 Body Front Harness to Body Harness (LHD)









Connector Part Information

- Harness Type: Front Body
- OEM Connector: 13581041
- Service Connector: 19119857
- Description: 4-Way F Kaizen YESC Series (L-GY)

Connector Part Information

- Harness Type: Body
- OEM Connector: 13581042
- Service Connector: 89046843
- Description: 4-Way M 2.8 Kaizen YESC Series (L-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Pending	Pending	Pending	Not Available	Not Available	Not Available	Not Available

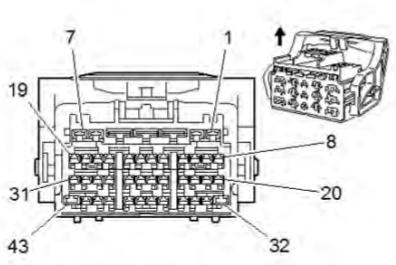
X357 Body Front Harness to Body Harness (LHD)

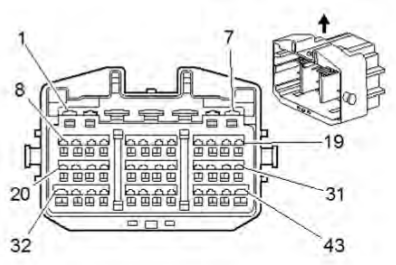
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	1.5	RD/GY	1042	I	LHD	Battery Positive Voltage	1	1.5	RD/GY	1042	I	LHD
2	-	-	-	-	-	Not Occupied	2	-	-	-	-	-
3	2.5	BN/VT	293	I	LHD	Rear Defog Element Supply Voltage	3	2.5	BN/VT	293	I	EF7/Z49+-9C1+-9C3
4	-	-	-	-	-	Not Occupied	4	-	-	-	-	-

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X359 Body Front Harness to Body Harness (LHD)





Connector Part Information

- Harness Type: Front Body
- OEM Connector: 13581055
- Service Connector: 19115705
- Description: 43-Way F YESC Series (BK)

Connector Part Information

- Harness Type: Body
- OEM Connector: 7282-4190-30
- Service Connector: 19115704
- Description: 43-Way M YESC Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available

X359 Body Front Harness to Body Harness (LHD)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1-2	-	-	-	-	-	Not Occupied	1-2	-	-	-	-	-
3	1.5	RD/GY	1342	I	—	Battery Positive Voltage	3	1.5	RD/GY	1342	I	—
4-9	-	-	-	-	-	Not Occupied	4-9	-	-	-	-	-
10	0.35	VT/BK	339	I	L77/LS3/LSA+LHD	Run/Crank Ignition 1 Voltage	10	0.35	VT/BK	339	I	L77/LS3/LSA+LHD
11	0.35	GN/GY	465	I	L77/LS3/LSA+LHD	Fuel Pump Primary Relay Control	11	0.35	GN/GY	465	I	L77/LS3/LSA+LHD
12-20	-	-	-	-	-	Not Occupied	12-20	-	-	-	-	-
21	0.35	GY/RD	6109	I	LHD+MV5/MER/MG9	Clutch Apply Sensor Voltage Reference	21	0.35	GY/RD	6109	I	LHD+MV5/MER/MG9
22	0.35	BK/GY	6110	I	LHD+MV5/MER/MG9	Clutch Apply Sensor Low Reference	22	0.35	BK/GY	6110	I	LHD+MV5/MER/MG9
23	0.35	YE	6111	I	LHD+MV5/MER/MG9	Clutch Apply Sensor Signal	23	0.35	YE	6111	I	LHD+MV5/MER/MG9
24	0.35	BK/BU	5214	I	UFQ+LHD	Front Parking Sensor Low Reference	24	0.35	BK/BU	5214	I	UFQ+LHD
25	0.35	VT/GY	5218	I	UFQ+LHD	Front Parking Right Mid Sensor	25	0.35	VT/GY	5218	I	UFQ+LHD
26	0.35	WH/GY	5217	I	UFQ+LHD	Front Parking Left Mid Sensor	26	0.35	WH/GY	5217	I	UFQ+LHD

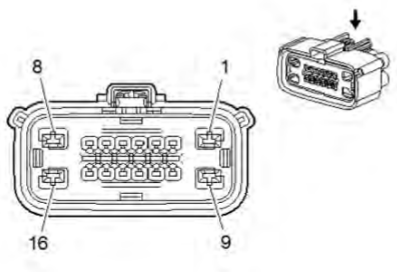
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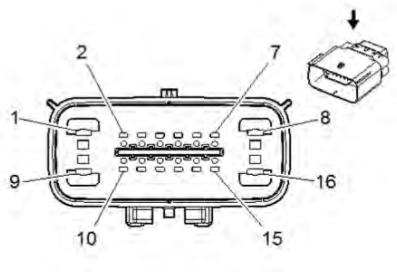
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Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
						Front Parking Right Corner Sensor						
27	0.35	GN	3155	I	UFQ+LHD	Right Front Supplemental Object Sensor Signal	27	0.35	GN	3155	I	UFQ+LHD
28	0.35	BK/VT	1272	I	LHD	Accelerator Pedal Position Low Reference (2)	28	0.35	BK/VT	1272	I	LHD
29	0.35	GN/WH	1162	I	LHD	Accelerator Pedal Position Signal (2)	29	0.35	GN/WH	1162	I	LHD
30	0.35	BN/RD	1274	I	LHD	Accelerator Pedal Position 5 Volt Reference (2)	30	0.35	BN/RD	1274	I	LHD
31-32	-	-	-	-	-	Not Occupied	31-32	-	-	-	-	-
33	0.35	WH/RD	5381	I	LHD+MYA/MYC/MYD	Brake Position Sensor 5 Volt Reference	33	0.35	WH/RD	5381	I	LHD+MYA/MYC/MYD
34	0.35	BK/YE	5382	I	LHD+MYA/MYC/MYD	Brake Position Sensor Low Reference	34	0.35	BK/YE	5382	I	LHD+MYA/MYC/MYD
35	0.35	WH/GN	5380	I	LHD+MYA/MYC/MYD	Brake Position Sensor Signal	35	0.35	WH/GN	5380	I	LHD+MYA/MYC/MYD
36	0.35	BN	6581	I	UFQ+LHD	Front Parking Aid Display Supply Voltage	36	0.35	BN	6581	I	UFQ+LHD
37	0.35	YE/GY	5216	I	UFQ+LHD	Front Parking Left Mid Sensor	37	0.35	YE/GY	5216	I	UFQ+LHD
38	0.35	VT/WH	5215	I	UFQ+LHD	Front Parking Left Corner Sensor	38	0.35	VT/WH	5215	I	UFQ+LHD
39	0.35	GY	3154	I	UFQ+LHD	Left Front Supplemental Object Sensor Signal	39	0.35	GY	3154	I	UFQ+LHD
40	0.35	BK/BU	1271	I	LHD	Accelerator Pedal Position Low Reference (1)	40	0.35	BK/BU	1271	I	LHD
41	0.35	YE/WH	1161	I	LHD	Accelerator Pedal Position Signal (1)	41	0.35	YE/WH	1161	I	LHD
42	0.35	WH/RD	1164	I	LHD	Accelerator Pedal Position 5 Volt Reference (1)	42	0.35	WH/RD	1164	I	LHD
43	-	-	-	-	-	Not Occupied	43	-	-	-	-	-

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X360 Body Harness to Fuel Extension Harness (F80)





Connector Part Information

- Harness Type: Body
- OEM Connector: 55572154
- Service Connector: 13587961
- Description: 16-Way F 1.5, 2.8 Series, Sealed (BN)

Connector Part Information

- Harness Type: Fuel Extension
- OEM Connector: 55572155
- Service Connector: Not Available
- Description: 16-Way M 1.5, 2.8 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Pending	Pending	Pending

X360 Body Harness to Fuel Extension Harness (F80)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	3	RD/VT	1640	I	—	Battery Positive Voltage	1	4	RD/VT	1640	I	—
2	0.35	WH/BU	5986	I	—	Serial Data Communication Enable	2	0.5	WH/BU	5986	I	—
3	0.5	BU	884	I	—	Wheel Speed Sensor Signal Left Rear	3	0.5	BU	884	I	—
4	0.5	GY/BK	7127	I	—	Wheel Speed Sensor Supply Voltage Left Rear	4	0.5	GY/BK	7127	I	—
5	0.5	VT	882	I	—	Wheel Speed Sensor Signal Right Rear	5	0.5	VT	882	I	—
6	0.5	GY/YE	7128	I	—	Wheel Speed Sensor Supply Voltage Right Rear	6	0.5	GY/YE	7128	I	—
7	0.5	BU	7443	I	—	Fuel System Control Module Shield Extension	7	0.5	BU	7443	I	—
8	3	GY	120	I	—	Fuel Pump Supply Voltage	8	3	GY	120	I	—
9	—	—	—	—	—	Not Occupied	9	—	—	—	—	—
10	0.35	BU/VT	1134	I	—	Park Brake Switch Signal	10	0.5	BU/VT	1134	I	—
11	0.35	GY/RD	7684	I	—	Park Brake Apply Switch Voltage Reference	11	0.5	GY/RD	7684	I	—
12	0.35	BN	6107	I	—	Park Brake Apply Switch Signal	12	0.5	BN	6107	I	—
13	0.35	BU/BK	6108	I	—	Park Brake Release Switch Signal	13	0.5	BU/BK	6108	I	—
14	0.35	YE/RD	7683	I	—		14	0.5	YE/RD	7683	I	—

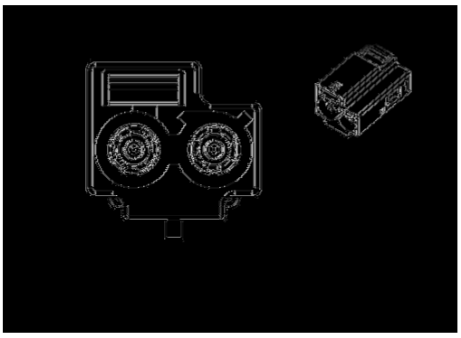
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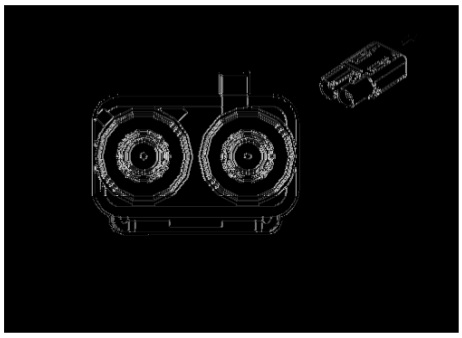
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Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
						Park Brake Release Switch Voltage Reference						
15	0.35	YE	1492	I	—	Park Brake Switch Supply Voltage	15	0.5	YE	1492	I	—
16	3	BK/GN	1580	I	—	Fuel Pump Low Reference	16	3	BK/GN	1580	I	—

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X372 Body Harness to Liftgate Extension Harness (F35)





Connector Part Information

- Harness Type: Body Harness
- OEM Connector: 13581716
- Service Connector: No SDC/FSU
- Description: 2 F 4.8 Series

Connector Part Information

- Harness Type: Left Liftgate Extension Harness
- OEM Connector: 13581708
- Service Connector: No SDC/FSU
- Description: 2 M Coax Type

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Pending	Pending	Pending

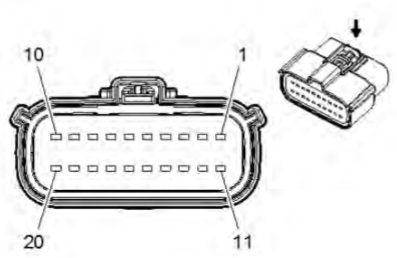
X372 Body Harness to Liftgate Extension Harness (F35)

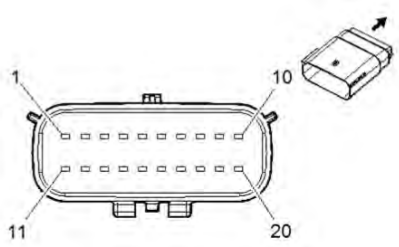
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
C1	0.5	WH	6001	I	-	Antenna RF Signal	C1	0.5	WH	6001	I	-
C2	0.2	WH	6758	I	-	Coaxial Antenna GPS 2 Signal	C2	0.2	WH	6758	I	-
S1	0.2	BARE	6015	I	-	Antenna RF Drain Wire	S1	0.2	BARE	6015	I	-
S2	0.2	BARE	6757	I	-	Coaxial Antenna GPS 2 Drain Wire	S2	0.2	BARE	6757	I	-

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X377 Body Harness to Fuel Extension Harness (F80)





Connector Part Information

- Harness Type: Body
- OEM Connector: 13504367
- Service Connector: 19300557
- Description: 20-Way F 1.5 Series, Sealed (BK)

Connector Part Information

- Harness Type: Fuel Extension
- OEM Connector: 13504369
- Service Connector: 19300560
- Description: 20-Way M 1.5 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Pending	Pending	Pending

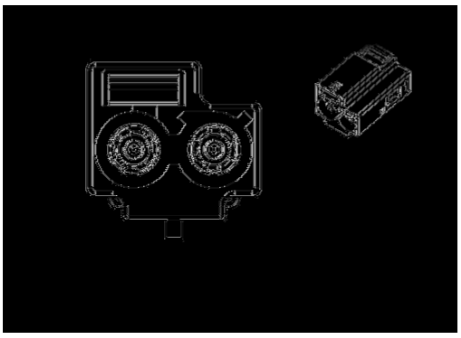
X377 Body Harness to Fuel Extension Harness (F80)

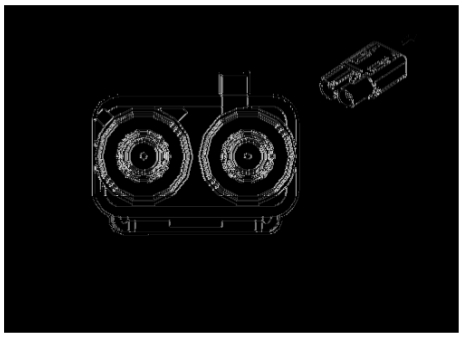
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.75	BK	2450	I	—	Ground	1	0.75	BK	2450	I	—
2	0.75	BN/BK	3507	I	—	Liquid Petroleum Gas Fuel Shutoff Solenoid Control (2)	2	0.75	BN/BK	3507	I	—
3	0.35	BK/YE	7447	I	—	Fuel Line Pressure Sensor Low Reference	3	0.35	BK/YE	7447	I	—
4	0.35	BU/WH	7446	I	—	Fuel Line Pressure Sensor Signal	10	0.35	BU/WH	7446	I	—
5	0.35	BN/RD	7445	I	—	Fuel Line Pressure Sensor 5V Reference	3	0.35	BN/RD	7445	I	—
6-8	—	—	—	—	—	Not Occupied	6-8	—	—	—	—	—
9	0.5	BU	2500	I	—	High Speed GMLAN Serial Data (+) (1)	9	0.5	BU	2500	I	—
10	0.5	WH	2501	I	—	High Speed GMLAN Serial Data (-) (1)	10	0.5	WH	2501	I	—
11	0.5	BK/WH	451	I	—	Signal Ground	11	0.5	BK/WH	451	I	—
12	0.5	VT/BU	5294	I	—	Powertrain Main Relay Fused Supply (5)	12	0.5	VT/BU	5294	I	—
13	0.5	WH	1579	I	—	Fuel Temperature/Composition Signal	13	0.5	WH	1579	I	—
14	0.35	BU/VT	1589	I	—	Primary Fuel Level Sensor Signal	14	0.35	BU/VT	1589	I	—
15	0.35	BK/GN	6281	I	—	Fuel Level Sensor Low Reference	15	0.35	BK/GN	6281	I	—
16	0.35	BU/WH	1937	I	—	Secondary Fuel Level Sensor Signal	16	0.35	BU/WH	1937	I	—

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X378 Headlining Harness to Antenna Extension Harness (F69)





Connector Part Information

- Harness Type: Headliner Harness
- OEM Connector: 13581716
- Service Connector: No SDC/FSU
- Description: 2 F 4.8 Series

Connector Part Information

- Harness Type: Antenna Extension Harness
- OEM Connector: 13581708
- Service Connector: No SDC/FSU
- Description: 2 M Coax Type

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Pending	Pending	Pending

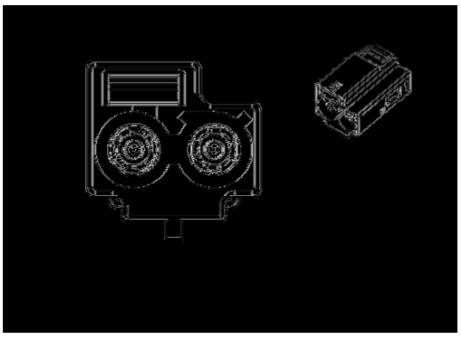
X378 Headlining Harness to Antenna Extension Harness (F69)

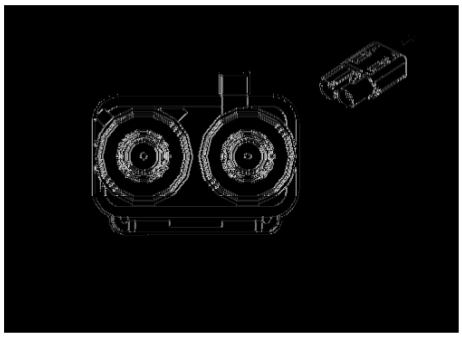
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
C1	0.5	WH	6001	I	-	Antenna RF Signal	C1	0.5	WH	6001	I	-
C2	0.2	WH	6758	I	-	Coaxial Antenna GPS 2 Signal	C2	0.2	WH	6758	I	-
S1	0.2	BARE	6015	I	-	Antenna RF Drain Wire	S1	0.2	BARE	6015	I	-
S2	0.2	BARE	6757	I	-	Coaxial Antenna GPS 2 Drain Wire	S2	0.2	BARE	6757	I	-

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X380 Antenna Extension Harness to Headlining Harness (F19)





Connector Part Information

- Harness Type: Antenna Extension Harness
- OEM Connector: 13581716
- Service Connector: No SDC/FSU
- Description: 2 F 4.8 Series

Connector Part Information

- Harness Type: Headlining Harness
- OEM Connector: 13581708
- Service Connector: No SDC/FSU
- Description: 2 M Coax Type

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Pending	Pending	Pending

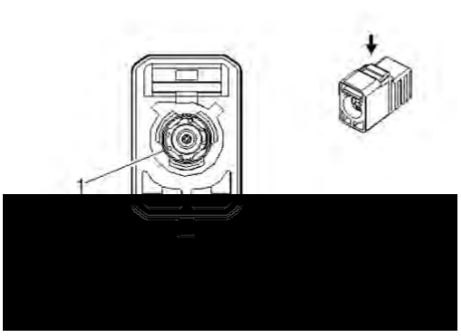
X380 Antenna Extension Harness to Headlining Harness (F19)

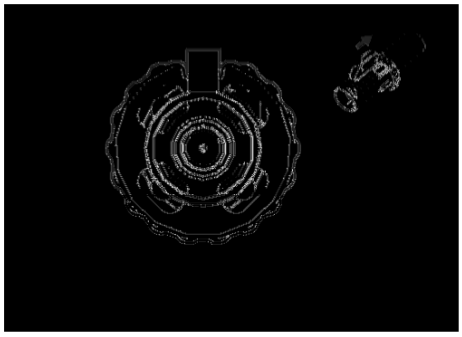
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
C1	0.5	WH	6001	I	-	Antenna RF Signal	C1	0.5	WH	6001	I	-
C2	0.2	WH	6758	I	-	Coaxial Antenna GPS 2 Signal	C2	0.2	WH	6758	I	-
S1	0.2	BARE	6015	I	-	Antenna RF Drain Wire	S1	0.2	BARE	6015	I	-
S2	0.2	BARE	6757	I	-	Coaxial Antenna GPS 2 Drain Wire	S2	0.2	BARE	6757	I	-

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X381 Body Harness to Headlining Harness (F35)





Connector Part Information

- Harness Type: Body Harness
- OEM Connector: 13581685
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: 1-Way F Coax Type (BK)

Connector Part Information

- Harness Type: Headlining Harness
- OEM Connector: 13581673
- Service Connector: Service by Harness - See Part Catalog
- Description: 1-Way M Coax Type (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Pending	Pending	Pending

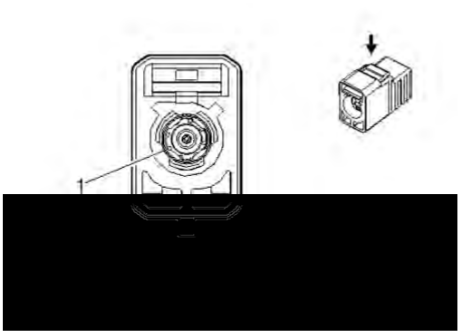
X381 Body Harness to Headlining Harness (F35)

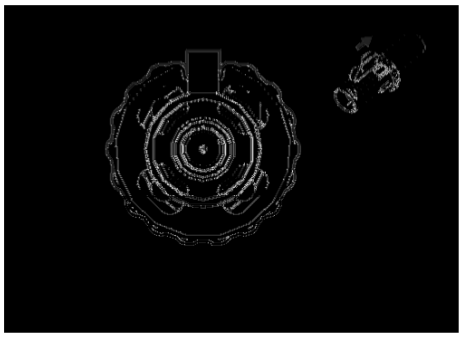
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
C	0.5	WH	6001	I	-	Antenna RF Signal	C	0.5	WH	6001	I	-
S	0.2	BARE	6015	I	-	Antenna RF Drain Wire	S	0.2	BARE	6015	I	-

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X382 Body Harness to Headlining Harness (F35)





Connector Part Information

- Harness Type: Body Harness
- OEM Connector: 13581685
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: 1-Way F Coax Type (BK)

Connector Part Information

- Harness Type: Headlining Harness
- OEM Connector: 13581673
- Service Connector: Service by Harness - See Part Catalog
- Description: 1-Way M Coax Type (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Pending	Pending	Pending

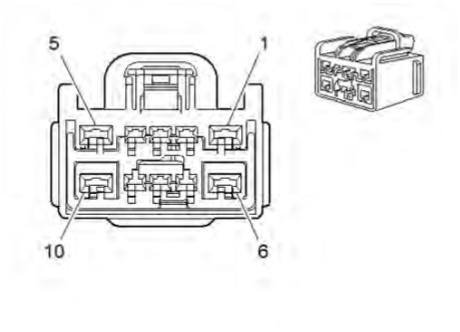
X382 Body Harness to Headlining Harness (F35)

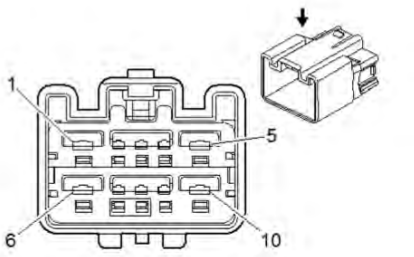
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
C	0.2	WH	6758	I	-	Coaxial Antenna GPS 2 Signal	C	0.2	WH	6758	I	-
S	0.2	BARE	6757	I	-	Coaxial Antenna GPS 2 Drain Wire	S	0.2	BARE	6757	I	-

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X390 Headlining Harness to Body Harness





Connector Part Information

- Harness Type: Headlining
- OEM Connector: 7283-6459-40
- Service Connector: Service by Harness - See Part Catalog
- Description: 10-Way F YESC Kaizen Series L-GY

Connector Part Information

- Harness Type: Body
- OEM Connector: 7282-6459-40
- Service Connector: 89047070
- Description: 10-Way M YESC Kaizen Series L-GY

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

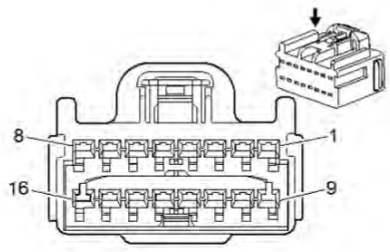
X390 Headlining Harness to Body Harness

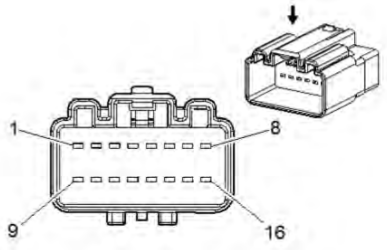
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	1.5	RD/GY	3540	I	-	Battery Positive Voltage	1	1.5	RD/GY	3540	I	-
2	0.35	GY/GN	328	I	-	Interior Lamp Defeat Switch Signal	2	0.35	GY/GN	328	I	-
3	0.35	GY	156	I	-	Courtesy Lamp Switch Signal	3	0.35	GY	156	I	-
4	0.5 0.5	RD/GN VT/WH	3840 5065	I	-	Battery Positive Voltage Stop Lamp Relay Coil Supply Voltage	4	0.5 0.5	VT/WH RD/GN	5065 3840	I	-
5	1 1	BK BK	2250 2350	I	-	Ground Ground	5	1 1	BK BK	2350 2250	I	-
6	1.5	BK	2250	I	-	Ground	6	1.5	BK	2250	I	-
7		-		I	-	Not Occupied	7		-		I	-
8	0.35	GN/BN	6132	I	-	Local Interconnect Network Bus 1	8	0.35	GN/BN	6132	I	-
9	0.35	RD/VT	1440	I	-	Battery Positive Voltage	9	0.35	RD/VT	1440	I	-
10		-		I	-	Not Occupied	10		-		I	-

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X391 Headlining Harness to Body Harness





Connector Part Information

- Harness Type: Headlining
- OEM Connector: 7283-6453-60
- Service Connector: 89047090
- Description: 16-Way F YESC Kaizen Series GN

Connector Part Information

- Harness Type: Body
- OEM Connector: 7282-6453-60
- Service Connector: 89047072
- Description: 16-Way M YESC Kaizen Series GN

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

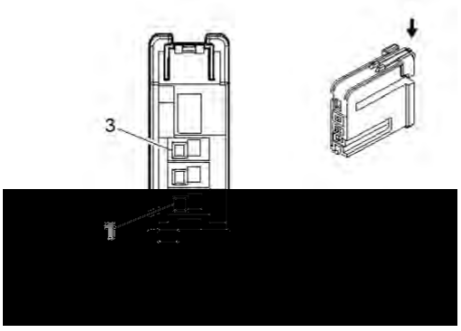
X391 Headlining Harness to Body Harness

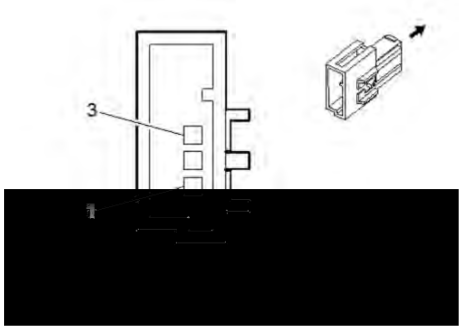
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1-2	-	-	-	I	-	Not Occupied	1-2	-	-	-	I	-
3	0.35	BU	3760	I	-	Switched Auxiliary Accessory Voltage Control	3	0.35	BU	3760	I	-
4	0.5	RD/GN	3840	I	-	Battery Positive Voltage	4	0.5	RD/GN	3840	I	-
5	0.35	GN/WH	24	I	-	Backup Lamp Supply Voltage	5	0.35	GN/WH	24	I	-
6	0.35	VT/GY	539	I	-	Run/Crank Ignition 1 Voltage	6	0.35	VT/GY	539	I	-
7-16	-	-	-	I	-	Not Occupied	7-16	-	-	-	I	-
A-B	-	-	-	-	-	Not Occupied	A-B	-	-	-	-	-
G-P	-	-	-	-	-	Not Occupied	G-P	-	-	-	-	-

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X392 Rain Sensor Harness to Headlining Harness (CE1)





Connector Part Information

- Harness Type: Rain Sensor
- OEM Connector: 19153430
- Service Connector: Service by Harness - See Part Catalog
- Description: 3-Way F 0.64 Series (BK)

Connector Part Information

- Harness Type: Headlining
- OEM Connector: 19153431
- Service Connector: 13579450
- Description: 3-Way M 0.64 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

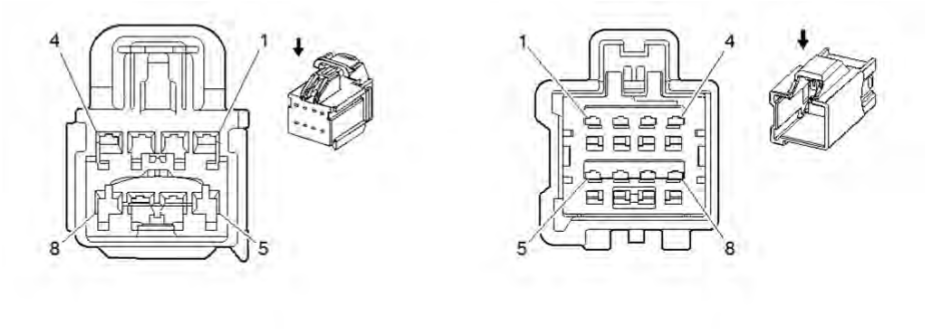
X392 Rain Sensor Harness to Headlining Harness (CE1)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	RD/VT	1440	I	-	Battery Positive Voltage	1	0.35	RD/VT	1440	I	-
2	0.35	GN/BN	6132	I	-	Local Interconnect Network Bus 1	2	0.35	GN/BN	6132	I	-
3	0.35	BK	2250	I	-	Ground	3	0.35	BK	2250	I	-

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X400 Rear Compartment Lid Extension Harness to Body Harness (F69)



Connector Part Information

- Harness Type: Rear Compartment Lid
- OEM Connector: 13580896
- Service Connector: Service by Harness - See Part Catalog
- Description: 8-Way F 1.5 Kaizen YESC Series (L-GY)

Connector Part Information

- Harness Type: Body
- OEM Connector: 13580897
- Service Connector: 19153162
- Description: 8-Way M 1.5 Kaizen YESC Series (L-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available
II	Not Available	J-35616-35 (VT)	Not Available

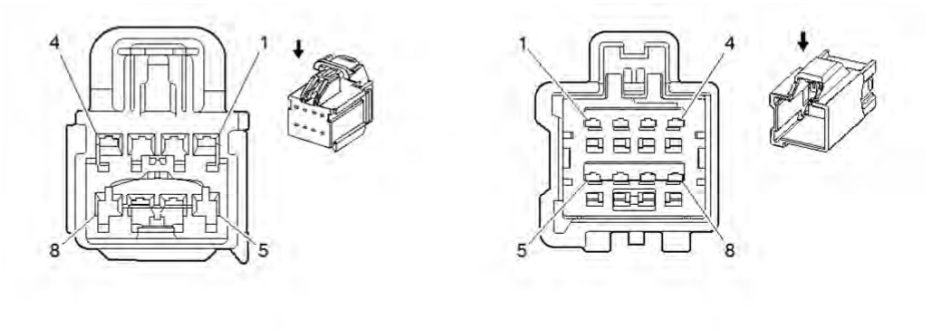
X400 Rear Compartment Lid Extension Harness to Body Harness (F69)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	GN/WH	24	I	-	Backup Lamp Supply Voltage	1	0.35	GN/WH	24	II	-
2	-	-	-	-	-	Not Occupied	2	-	-	-	-	-
3	0.35	VT/GY	709	I	-	Left Park Lamp Supply Voltage	3	0.35	VT/GY	709	II	-
4	0.75	BK	2450	I	-	Ground	4	0.75	BK	2450	II	-
5		-	9541	I	-	Right Rear Stop/Turn Lamp Supply Voltage	5	0.5	WH/YE	9541	II	69 with V5B
6		-	9542	I	-	Left Rear Stop/Turn Lamp Supply Voltage	6	0.5	GY/YE	9542	II	69 with V5B
7	0.75	BK	2650	I	-	Ground	7	0.75	BK	2650	II	-
8	0.35	GY/BN	309	I	-	Right Park Lamp Supply Voltage	8	0.35	GY/BN	309	II	-

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X401 Rear Compartment Lid Harness to Body Harness (F19)



Connector Part Information

- Harness Type: Rear Compartment Lid
- OEM Connector: 13580896
- Service Connector: Service by Harness - See Part Catalog
- Description: 8-Way F 1.5 Kaizen YESC Series (L-GY)

Connector Part Information

- Harness Type: Body
- OEM Connector: 13580897
- Service Connector: 19153162
- Description: 8-Way M 1.5 Kaizen YESC Series (L-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

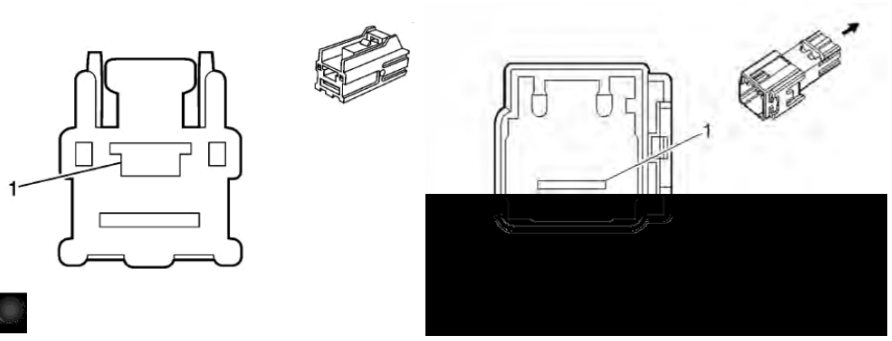
X401 Rear Compartment Lid Harness to Body Harness (F19)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	VT/GN	1339	I	-	Run/Crank Ignition 1 Voltage	1	0.35	VT/GN	1339	I	-
2	0.35	GN/WH	24	I	-	Backup Lamp Supply Voltage	2	0.35	GN/WH	24	I	-
3-4	-	-	-	-	-	Not Occupied	3-4	-	-	-	-	-
5	0.5	BK	2550	I	-	Ground	5	0.35	BK	2550	I	-
6	0.35	BARE	6974	I	-	Camera Drain Wire	6	0.35	BARE	6974	I	-
7	0.35	GY/YE	6972	I	-	Camera Signal #2 +	7	0.35	GY/YE	6972	I	-
8	0.35	WH/BU	6973	I	-	Camera Signal #2	8	0.35	WH/BU	6973	I	-

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X402 Rear Fuse Block Harness to Body Harness



Connector Part Information

- Harness Type: Rear Fuse Block
- OEM Connector: 13581074
- Service Connector: Service by Harness - See Part Catalog
- Description: 1-Way F 090 Series

Connector Part Information

- Harness Type: Body
- OEM Connector: 13581075
- Service Connector: 19119435
- Description: 1-Way M 9.5 Series (NA)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Pending	Pending	Pending

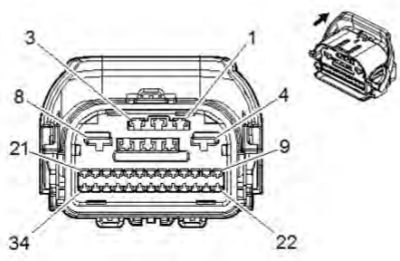
X402 Rear Fuse Block Harness to Body Harness

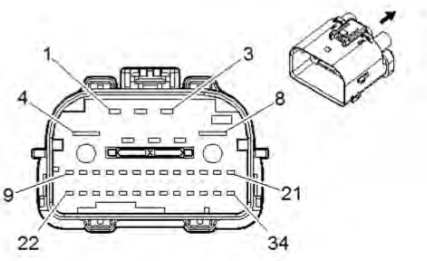
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	10	RD/WH	342	I	-	Battery Positive Voltage	1	10	RD/WH	342	I	-

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X406 Body Harness to Suspension Control Module Harness (F55)





Connector Part Information

- Harness Type: Body
- OEM Connector: 13580083
- Service Connector: 19119425
- Description: 34-Way F 1.5, 2.8 6.3 Series BK

Connector Part Information

- Harness Type: Suspension Control Module
- OEM Connector: 13580084
- Service Connector: Service by Harness - See part Catalog
- Description: 34-Way M 1.5, 2.8 6.3 Series BK

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available
II	Not Available	Not Available	Not Available

X406 Body Harness to Suspension Control Module Harness (F55)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	BN/WH	1207	I	-	Left Front Strut Position Sensor Signal	1	0.35	BN/WH	1207	II	-
2	0.35	BK/BU	1206	I	-	Left Front Strut Position Sensor Low Reference	2	0.35	BK/BU	1206	II	-
3	0.35	BU/RD	1205	I	-	Left Front Strut Position Sensor Voltage Reference	3	0.35	BU/RD	1205	II	-
4	2	BK	2550	I	-	Ground	4	2	BK	2550	II	-
5	0.35	WH	6106	I	-	High Speed GMLAN Serial Data (-) (2)	5	0.35	WH	6106	II	-
6	0.35	BU/YE	6105	I	-	High Speed GMLAN Serial Data (+) (2)	6	0.35	BU/YE	6105	II	-
7	0.5	WH	6106	I	-	High Speed GMLAN Serial Data (-) (2)	7	0.5	WH	6106	II	-
8	2	RD/BN	3640	I	-	Battery Positive Voltage	8	2	RD/BN	3640	II	-
9	0.35	BK/GN	1209	I	-	Left Rear Strut Position Sensor Low Reference	9	0.35	BK/GN	1209	II	-
10	0.35	GN/WH	1210	I	-	Left Rear Strut Position Sensor Signal	10	0.35	GN/WH	1210	II	-
11	0.35	BK/GY	1212	I	-	Right Front Strut Position Sensor Low Reference	11	0.35	BK/GY	1212	II	-
12	0.35	GN/GY	1216	I	-	Right Rear Strut Position Sensor Signal	12	0.35	GN/GY	1216	II	-
13	0.35	BK/YE	1215	I	-	Right Rear Strut Position Sensor Low Reference	13	0.35	BK/YE	1215	II	-
14	0.35	WH	2501	I	-	High Speed GMLAN Serial Data (-) (2)	14	0.35	WH	2501	II	-

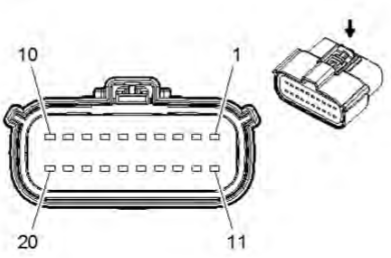
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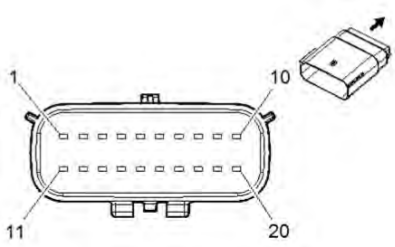
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Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
15	0.35	WH	2501	I	-	High Speed GMLAN Serial Data (-) (1)	15	0.35	WH	2501	II	-
16	0.5	BU/YE	6105	I	-	High Speed GMLAN Serial Data (+) (2)	16	0.5	BU/YE	6105	II	-
17	0.75	GY/WH	1117	I	-	Right Front Damping Servo Control	17	0.75	GY/WH	1117	II	-
18	0.75	BN/BU	1116	I	-	Right Front Damping Servo Supply Voltage	18	0.75	BN/BU	1116	II	-
19	0.75	GY/BU	1113	I	-	Left Front Damping Servo Control	19	0.75	GY/BU	1113	II	-
20	0.75	BN/WH	1107	I	-	Left Front Damping Servo Supply Voltage	20	0.75	BN/WH	1107	II	-
21		-		I	-	Not Occupied	21		-		II	-
22	0.35	YE/RD	1208	I	-	Left Rear Strut Position Sensor Voltage Reference	22	0.35	YE/RD	1208	II	-
23	0.35	BN/RD	1211	I	-	Right Front Strut Position Sensor Voltage Reference	23	0.35	BN/RD	1211	II	-
24	0.35	GN/RD	1214	I	-	Right Rear Strut Position Sensor Voltage Reference	24	0.35	GN/RD	1214	II	-
25	0.35	YE/WH	1213	I	-	Right Front Strut Position Sensor Signal	25	0.35	YE/WH	1213	II	-
26	0.35	BU	2500	I	-	High Speed GMLAN Serial Data (+) (1)	26	0.35	BU	2500	II	-
27	0.35	BU	2500	I	-	High Speed GMLAN Serial Data (+) (1)	27	0.35	BU	2500	II	-
28		-		I	-	Not Occupied	28		-		II	-
29	0.75	GN/VT	1115	I	-	Left Rear Damping Servo Control	29	0.75	GN/VT	1115	II	-
30	0.75	BU/GY	1114	I	-	Left Rear Damping Servo Supply Voltage	30	0.75	BU/GY	1114	II	-
31	0.75	GN/GY	1119	I	-	Right Rear Damping Servo Control	31	0.75	GN/GY	1119	II	-
32	0.75	BN/GN	1118	I	-	Right Rear Damping Servo Supply Voltage	32	0.75	BN/GN	1118	II	-
33		-		I	-	Not Occupied	33		-		II	-
34	0.35	WH/BU	5986	I	-	Serial Data Communication Enable	34	0.35	WH/BU	5986	II	-

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X410 Rear Fascia Harness to Body Harness





Connector Part Information

- Harness Type: Rear Fascia
- OEM Connector: 13504367
- Service Connector: Service by Harness - See part Catalog
- Description: 20-Way F 1.5 Series, Sealed BK

Connector Part Information

- Harness Type: Body
- OEM Connector: 13504369
- Service Connector: 19300560
- Description: 20-Way M 1.5 Series, Sealed BK

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available
II	Not Available	Not Available	Not Available

X410 Rear Fascia Harness to Body Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	RD/GN	3840	I	-	Battery Positive Voltage	1	0.5	RD/GN	3840	II	-
2	0.35	GY	5861	I	-	Passenger Side Object Detection LED Signal (1)	2	0.35	GY	5861	II	-
3	0.35	GY/YE	5853	I	-	Driver Side Object Detection LED Signal (1)	3	0.35	GY/YE	5853	II	-
4	0.35	GN	5060	I	-	Low Speed GMLAN Serial Data	4	0.35	GN	5060	II	-
5	0.35	BN/WH	2374	I	-	Object Sensor Supply Voltage	5	0.35	BN/WH	2374	II	-
6	0.35	YE	2375	I	-	Left Rear Corner Object Sensor Signal	6	0.35	YE	2375	II	-
7	0.35	YE/BU	2376	I	-	Left Rear Middle Object Sensor Signal	7	0.35	YE/BU	2376	II	-
8	0.35	YE/VT	2378	I	-	Right Rear Corner Object Sensor Signal	8	0.35	YE/VT	2378	II	-
9	0.35	YE/WH	2377	I	-	Right Rear Middle Object Sensor Signal	9	0.35	YE/WH	2377	II	-
10	0.35	BK/GY	2379	I	-	Object Sensor Low Reference	10	0.35	BK/GY	2379	II	-
11	0.5	BK	2550	I	-	Ground	11	0.75	BK	2550	II	-
12	0.35	BARE	6974	I	-	Rear Vision Camera Drain Wire	12	0.35	BARE	6974	II	-
13	0.35	GY/YE	6972	I	-	Rear Vision Camera Signal (+)	13	0.35	GY/YE	6972	II	-
14	0.35	WH/BU	6973	I	-	Rear Vision Camera Signal (-)	14	0.35	WH/BU	6973	II	-
15	0.35	GN/YE	6846	I	-	Rear License Lamp Supply Voltage	15	0.35	GN/YE	6846	II	-

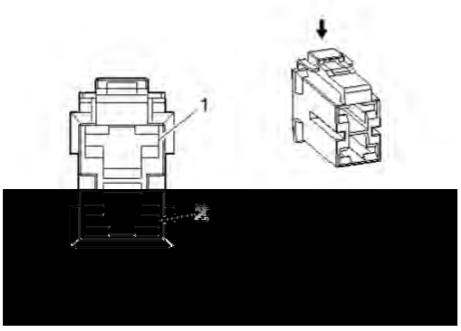
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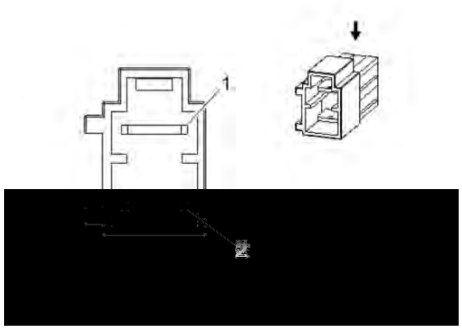
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Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
16	0.35	GN/WH	24	I	-	Backup Lamp Supply Voltage	16	0.35	GN/WH	24	II	-
17	0.35	YE/GY	122	I	-	Not Occupied	17	0.35	YE/GY	122	II	-
18	0.5	BN/GN	3568	I	-	Passive Entry Rear Closure Antenna Signal Hi	18	0.5	BN/GN	3568	II	-
19	0.5	GN/GY	3569	I	-	Passive Entry Rear Closure Antenna Signal Lo	19	0.5	GN/GY	3569	II	-
20	0.35	VT/GN	1339	I	-	Run/Crank Ignition 1 Voltage	20	0.35	VT/GN	1339	II	-

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X418 Battery Switch Harness to the Battery Switch Jumper Harness (9C1)





Connector Part Information

- Harness Type: Battery Switch
- OEM Connector: 13581073
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F F

Connector Part Information

- Harness Type: Battery Switch Jumper
- OEM Connector: 13581072
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way M M

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

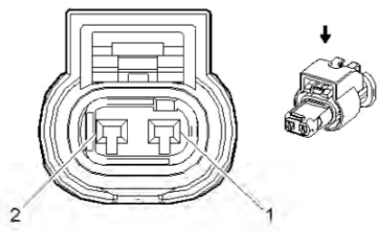
X418 Battery Switch Harness to the Battery Switch Jumper Harness (9C1)

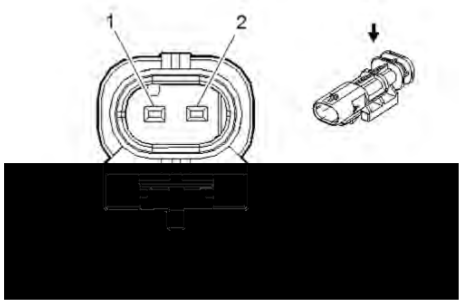
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	5	RD	302	I	-	Battery Positive Voltage	1	6	RD/BU	302	I	-
2	5	RD	302	I	-	Battery Positive Voltage	2	6	RD/BU	302	I	-

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X419 Battery Switch Harness to the Battery Switch Jumper Harness (9C1)





Connector Part Information

- Harness Type: Body
- OEM Connector: 13505426
- Service Connector: TBD
- Description: 2-Way M 1.2 MCP Series, Sealed (BK with BK Inner Connector)

Connector Part Information

- Harness Type: Body Front
- OEM Connector: 13505427
- Service Connector: TBD
- Description: 2-Way F 1.2 MLK Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Pending	Pending	Pending

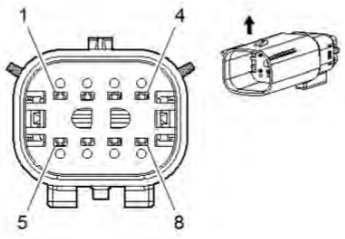
X419 Battery Switch Harness to the Battery Switch Jumper Harness (9C1)

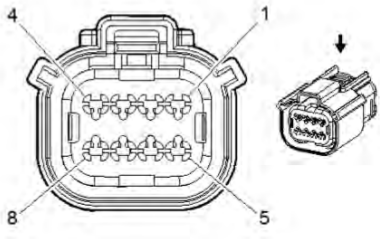
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1				I	-		1	0.35	GY	830	I	RHD+-F55
2				I	-		2	0.35	GY	7064	I	RHD+-F55

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X421 Tonneau Release Jumper Harness to Body Harness





Connector Part Information

- Harness Type: Tonneau Release Jumper
- OEM Connector: 13503538
- Service Connector: Service by Harness - See part Catalog
- Description: 8-Way F 150 MX Series, Sealed BK

Connector Part Information

- Harness Type: Body
- OEM Connector: 13503524
- Service Connector: 13577527
- Description: 8-Way M 1.5 Series, Sealed BK

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available
II	Not Available	J-35616-35 (VT)	Not Available

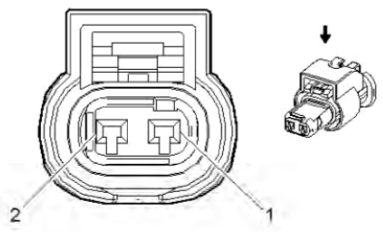
X421 Tonneau Release Jumper Harness to Body Harness

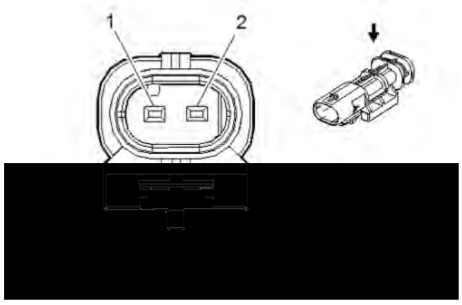
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	-	-	-	I	-	Not Occupied	1	-	-	-	II	-
2	0.35	VT/GY	1303	I	-	Lift Gate Ajar Switch Signal (1)	2	0.35	VT/GY	1303	II	-
3	0.75	BU/WH	6128	I	-	Rear Closure Unlatch Motor Unlatch Control	3	0.5	BU/WH	6128	II	-
4	0.75	BK	2450	I	-	Ground	4	0.75	BK	2450	II	-
5	0.5	GN/GY	737	I	-	Trunk Lamp Control	5	0.5	GN/GY	737	II	-
6-7	-	-	-	I	-	Not Occupied	6-7	-	-	-	II	-
8	0.5	BK	2450	I	-	Ground	8	0.5	BK	2450	II	-

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X425 License Lamp Harness to Rear End Harness





Connector Part Information

- Harness Type: License Lamp
- OEM Connector: 13586143
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 1.2 MCP Series, Sealed (BK with BK Inner Connector)

Connector Part Information

- Harness Type: Rear End
- OEM Connector: 13505427
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way M 1.2 MLK Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

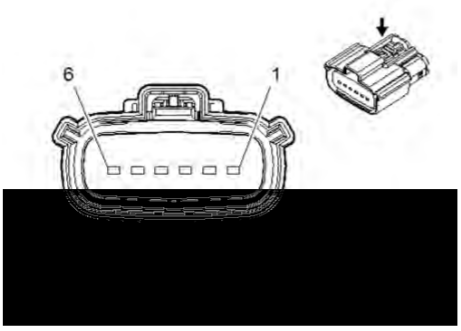
X425 License Lamp Harness to Rear End Harness

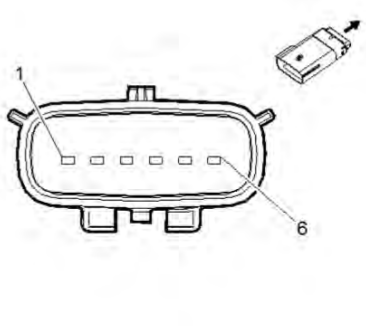
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	GN/YE	6846	I	-	Rear License Lamp Supply Voltage	1	0.35	GN/YE	6846	I	-
2	0.35	BK	1850	I	-	Ground	2	0.35	BK	1850	I	-

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X426 Rearview Camera Extension Harness to Body Rear End Harness





Connector Part Information

- Harness Type: Rear End
- OEM Connector: 13503506
- Service Connector: Service by Harness - See Part Catalog
- Description: 6-Way F 1.5 Series, Sealed (BK)

Connector Part Information

- Harness Type: Rear End
- OEM Connector: 13504374
- Service Connector: Service by Harness - See Part Catalog
- Description: 6-Way M 1.5 MX Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available

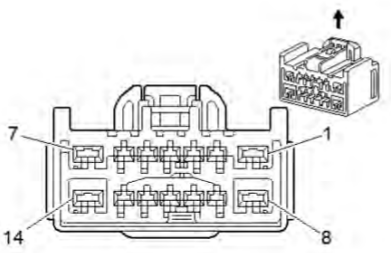
X426 Rearview Camera Extension Harness to Body Rear End Harness

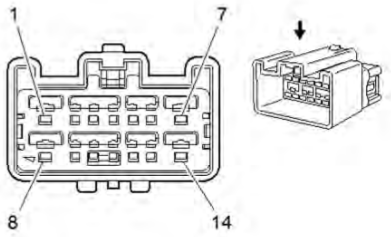
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	GY/YE	6972	I	-	Camera Signal #2 +	1	0.35	GY/YE	6972	I	-
2	0.35	BARE	6974	I	-	Camera Drain Wire	2	0.35	BARE	6974	I	-
3	0.5	GN/WH	24	I	-	Backup Lamp Supply Voltage	3	0.35	GN/WH	24	I	-
4	0.35	WH/BU	6973	I	-	Camera Signal #2	4	0.35	WH/BU	6973	I	-
5	0.35	BK	1950	I	-	Ground	5	0.35	BK	1950	I	-
6	0.35	VT/GN	1339	I	-	Run/Crank Ignition 1 Voltage	6	0.35	VT/GN	1339	I	-

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X430 Left Liftgate Extension Harness to Body Harness





Connector Part Information

- Harness Type: Left Liftgate Extension
- OEM Connector: 7283-5622-40
- Service Connector: Service by Harness - See part Catalog
- Description: 14-Way F Hybrid Series L-GY

Connector Part Information

- Harness Type: Body
- OEM Connector: 7282-5622-40
- Service Connector: 88956523
- Description: 14-Way M Hybrid Series L-GY

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available
II	Not Available	Not Available	Not Available

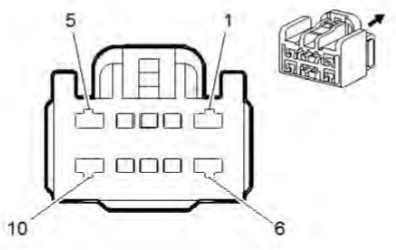
X430 Left Liftgate Extension Harness to Body Harness

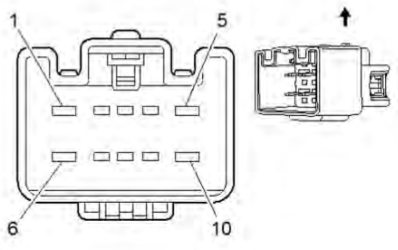
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
				I	-						II	-
1	2.5	RD/YE	5840	I	-	Battery Positive Voltage	1	2.5	RD/YE	5840	II	-
2	0.5	GN	5060	I	-	Low Speed GMLAN Serial Data	2	0.35	GN	5060	II	-
3-4	-	-	-	I	-	Not Occupied	3-4	-	-	-	II	-
5	1	RD/WH	5740	I	-	Battery Positive Voltage	5	1	RD/WH	5740	II	-
6-7	-	-	-	I	-	Not Occupied	6-7	-	-	-	II	-
8	0.75	RD/YE	3040	I	-	Battery Positive Voltage	8	0.75	RD/YE	3040	II	-
9	0.35	GY/WH	3272	I	-	Remote Function Actuator Supply Voltage	9	0.35	GY/WH	3272	II	-
10	0.35	YE/GN	3274	I	-	Remote Function Actuator Transmit Signal	10	0.35	YE/GN	3274	II	-
11	0.35	BU/WH	3275	I	-	Remote Function Actuator Receive Signal	11	0.35	BU/WH	3275	II	-
12	0.35	GY	3273	I	-	Remote Function Actuator Return	12	0.35	GY	3273	II	-
13	0.35	GN/YE	6846	I	-	Rear License Lamp Supply Voltage	13	0.35	GN/YE	6846	II	-
14	0.75	BU	393	I	-	Rear Window Wiper Motor Control	14	0.75	BU	393	II	-
C-D	-	-	-	-	-	Not Occupied	C-D	-	-	-	-	-
F-G	-	-	-	-	-	Not Occupied	F-G	-	-	-	-	-

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X431 Left Liftgate Extension Harness to Body Harness





Connector Part Information

- Harness Type: Left Liftgate Extension
- OEM Connector: 7283-5621-40
- Service Connector: Service by Harness - See Part Catalog
- Description: 10-Way F YESC Series (L-GY)

Connector Part Information

- Harness Type: Body
- OEM Connector: 7282-5621-40
- Service Connector: 88956521
- Description: 10-Way M 040 Series, Sealed (L-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575593	J-35616-35 (VT)	Not Available
II	13575593	J-35616-35 (VT)	J-38125-11A

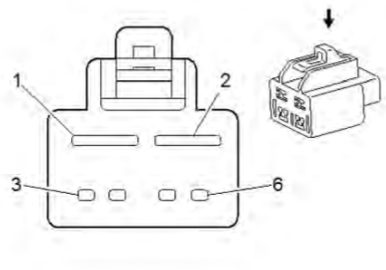
X431 Left Liftgate Extension Harness to Body Harness

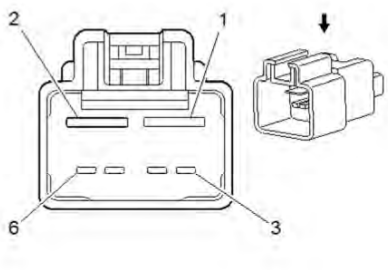
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	2.5	BN/VT	293	I	-	Rear Defog Element Supply Voltage	1	2.5	BN/VT	293	II	-
2	0.5	VT/WH	5065	I	-	Stop Lamp Relay Coil Supply Voltage	2	0.5	VT/WH	5065	II	-
3	0.35	GN/WH	24	I	-	Backup Lamp Supply Voltage	3	0.35	GN/WH	24	II	-
4	0.35	BK	2550	I	-	Ground	4	0.35	BK	2650	II	-
5	-	-	-	-	-	Not Occupied	5	-	-	-	-	-
6	0.35	BARE	1339	I	-	Run/Crank Ignition 1 Voltage	6	0.35	BARE	1339	II	-
7	0.35	GN/YE	6974	I	-	Camera Drain Wire	7	0.35	GN/YE	6974	II	-
8	0.35	GY	6972	I	-	Camera Signal #2 +	8	0.35	GY	6972	II	-
9	0.35	WH/BU	6973	I	-	Camera Signal #2	9	0.35	WH/BU	6973	II	-
10	4	BK	2850	I	-	Ground	10	4	BK	2850	II	-

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X440 Body Harness to Accessory Power Harness





Connector Part Information

- Harness Type: Body
- OEM Connector: 7283-1064
- Service Connector: 88953318
- Description: 6-Way F (WH)

Connector Part Information

- Harness Type: Accessory Power
- OEM Connector: 7282-1064
- Service Connector: 13585872
- Description: 6-Way M (WH)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	TBD	—	—

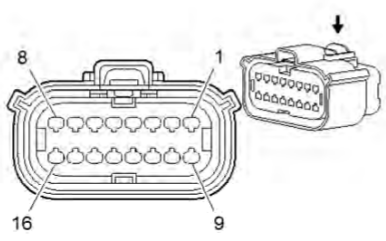
X440 Body Harness to Accessory Power Harness

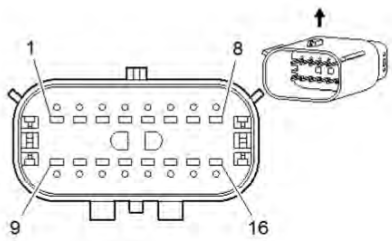
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	1	RD/BN	4940	I	—	Battery Positive Voltage	1	1.25	RD/BN	4940	I	—
2	1	BK	2650	I	—	Ground	2	1.25	BK	2650	I	—
3	0.5	GN/GY	737	I	—	Trunk Lamp Control	3	0.5	OG	737	I	—
4	0.5	BK	2650	I	—	Ground	4	0.5	BU	2650	I	—
5-6	—	—	—	—	—	Not Occupied	5-6	—	—	—	—	—

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X451 Body Harness to Body Harness (F80)





Connector Part Information

- Harness Type: Body
- OEM Connector: 13503529
- Service Connector: 13584788
- Description: 16-Way F 1.5 Series, Sealed BK

Connector Part Information

- Harness Type: Body
- OEM Connector: 13503544
- Service Connector: Not Available
- Description: 16-Way M 150 MX Series, Sealed BK

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

X451 Body Harness to Body Harness (F80)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	VT/GN	1339	I	-	Run/Crank Ignition 1 Voltage	1	0.35	VT/GN	1339	I	-
2	0.5	GY/YE	7542	I	-	Left Rear Stop Lamp Supply Voltage	2	0.5	GY/YE	7542	I	-
3	0.5	WH/YE	7541	I	-	Right Rear Stop Lamp Supply Voltage	3	0.5	WH/YE	7541	I	-
4	0.35	GN/YE	6846	I	-	Rear License Lamp Supply Voltage	4	0.35	GN/YE	6846	I	-
5	0.5	BU/WH	1334	I	-	Left Rear Turn Signal Lamp Supply Voltage	5	0.5	BU/WH	1334	I	-
6	0.5	BU/VT	1335	I	-	Right Rear Turn Signal Lamp Supply Voltage	6	0.5	BU/VT	1335	I	-
7	0.5	BU/WH	6128	I	-	Rear Closure Unlatch Motor Unlatch Control	7	0.5	BU/WH	6128	I	-
8	0.75	GN/WH	24	I	-	Backup Lamp Supply Voltage	8	0.35	GN/WH	24	I	-
9	0.35	VT/GY	709	I	-	Left Park Lamp Supply Voltage	9	0.35	VT/GY	709	I	-
10	0.35	GY/BN	309	I	-	Right Park Lamp Supply Voltage	10	0.35	GY/BN	309	I	-
11	0.75	BK	2450	I	-	Ground	11	0.75	BK	2450	I	-
12	0.35	BARE	6974	I	-	Camera Drain Wire	12	0.35	BARE	6974	I	-
13	0.35	GY/YE	6972	I	-	Camera Signal #2 +	13	0.35	GY/YE	6972	I	-
14	0.35	WH/BU	6973	I	-	Camera Signal #2	14	0.35	WH/BU	6973	I	-
15	0.75	BN/YE	294	I	-	Door Lock Actuator Unlock Control	15	0.75	BN/YE	294	I	-
16	0.75	GY	5911	I	-		16	0.75	GY	5911	I	-

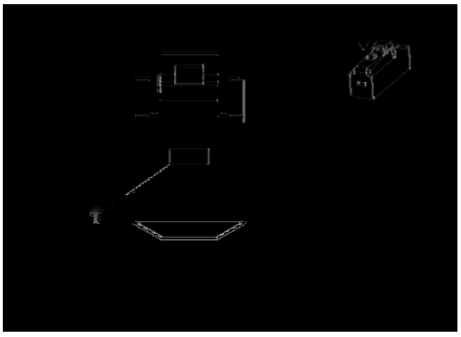
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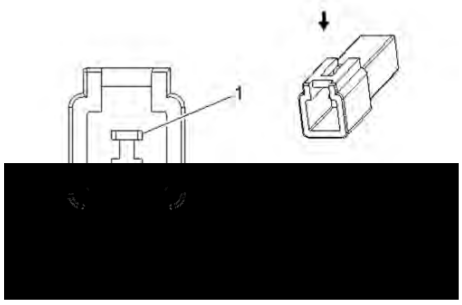
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Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
						Door Lock Actuator Lock Control 2						

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X456 Body Harness to Battery Isolator Harness





Connector Part Information

- Harness Type: Body
- OEM Connector: 7283-1010
- Service Connector: 13578524
- Description: 1-Way F 090 Series NA
- Harness Type: Body
- OEM Connector: 7283-1010
- Service Connector: 13578524
- Description: 1-Way F 090 Series NA

Connector Part Information

- Harness Type: Battery Isolator
- OEM Connector: 7282-7014
- Service Connector: Service by Harness - See part Catalog
- Description: 1-Way M WH

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available
II	Not Available	J-35616-35 (VT)	Not Available
III	13575272	J-35616-18 (BK)	J-38125-553

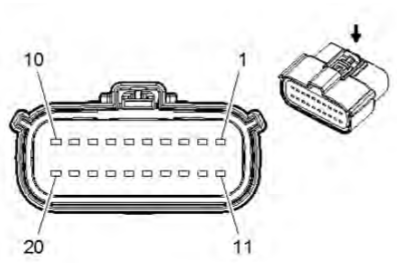
X456 Body Harness to Battery Isolator Harness

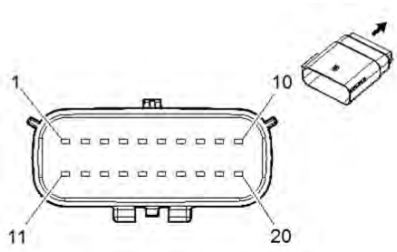
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	VT/YE	343	I	-	Accessory Voltage	1	0.5	VT/YE	343	I	-

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X461 Body Harness to Body Rear End Harness





Connector Part Information

- Harness Type: Body
- OEM Connector: 13504367
- Service Connector: 19300557
- Description: 20-Way F 1.5 Series, Sealed (BK)

Connector Part Information

- Harness Type: Rear End
- OEM Connector: 13504369
- Service Connector: Service by Harness - See Part Catalog
- Description: 20-Way M 1.5 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13575593	J-35616-35 (VT)	J-38125-11A
II	13575593	J-35616-35 (VT)	Not Available

X461 Body Harness to Body Rear End Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	VT/GN	1339	I	-	Run/Crank Ignition 1 Voltage	1	0.35	VT/GN	1339	II	-
2	0.5	GY/YE	7542	I	-	Left Rear Stop Lamp Supply Voltage	2	0.5	GY/YE	7542	II	-
3	0.5	WH/YE	7541	I	-	Right Rear Stop Lamp Supply Voltage	3	0.5	WH/YE	7541	II	-
4	0.35	GN/YE	6846	I	-	Rear License Lamp Supply Voltage	4	0.35	GN/YE	6846	II	-
5	0.5	BU/WH	1334	I	-	Left Rear Turn Signal Lamp Supply Voltage	5	0.5	BU/WH	1334	II	-
6	0.5	BU/VT	1335	I	-	Right Rear Turn Signal Lamp Supply Voltage	6	0.5	BU/VT	1335	II	-
7	-	-	-	-	-	Not Occupied	7	-	-	-	-	-
8	0.35	GN/WH	24	I	-	Backup Lamp Supply Voltage	8	0.35	GN/WH	24	II	-
9	0.35	VT/GY	709	I	-	Left Park Lamp Supply Voltage	9	0.35	VT/GY	709	II	-
10	0.35	GY/BN	309	I	-	Right Park Lamp Supply Voltage	10	0.35	GY/BN	309	II	-
11	-	-	-	-	-	Not Occupied	11	-	-	-	-	-
12	0.35	BARE	6974	I	-	Camera Drain Wire	12	0.35	BARE	6974	II	-
13	0.35	GY/YE	6972	I	-	Camera Signal #2 +	13	0.35	GY/YE	6972	II	-
14	0.35	WH/BU	6973	I	-	Camera Signal #2	14	0.35	WH/BU	6973	II	-
	-	-	-	-	-	Not Occupied		-	-	-	-	-

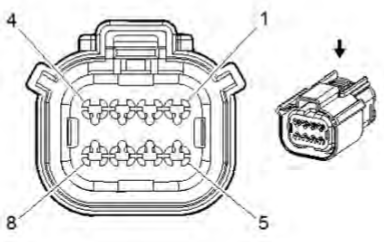
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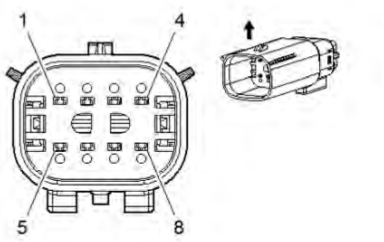
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Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
15-20							15-20					

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X462 Body Harness to Accessory Trailer Harness (F80+RZW)





Connector Part Information

- Harness Type: Body
- OEM Connector: 13503524
- Service Connector: Pending
- Description: 8-Way F 1.5 Series, Sealed (BK)

Connector Part Information

- Harness Type: Accessrory Trailer
- OEM Connector: 13503538
- Service Connector: Pending
- Description: 8-Way M 150 MX Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Pending	Pending	Pending

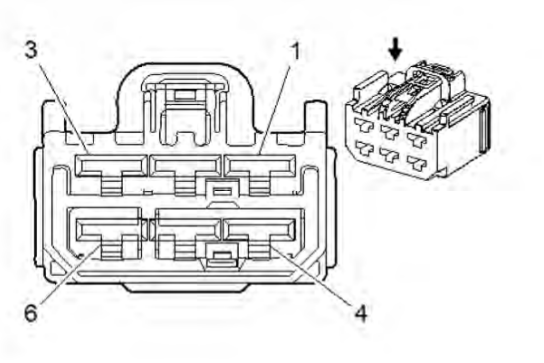
X462 Body Harness to Accessory Trailer Harness (F80+RZW)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.75	GY	5992	I	—	Trailer Connected Signal	1	0.75	GY	5992	I	—
2	0.75	BK	5189	I	—	Trailer Backup Lamp Control	2	0.75	BK	5189	I	—
3	0.75	RD	5188	I	—	Trailer Brake Lamp Control	3	0.75	RD	5188	I	—
4	0.75	BN	5185	I	—	Right Trailer Park Lamp Control	4	0.75	BN	5185	I	—
5	0.75	GN	5187	I	—	Right Trailer Turn Signal Lamp Control	5	0.75	GN	5187	I	—
6	0.75	YE	5186	I	—	Left Trailer Turn Signal Lamp Control	6	0.75	YE	5186	I	—
7	2	BK	2350	I	—	Ground	7	2	BK	2650	I	—
8	0.5	VT/WH	5065	I	—	Stop Lamp Relay Coil Control	8	0.5	VT/WH	5065	I	—

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X463 Body Harness to Accessory Trailer Harness (F19/F35/F69+RZW)



Connector Part Information

- Harness Type: Body
- OEM Connector: 13581028
- Service Connector: 19153168
- Description: 6-Way F Kaizen YESC Series L-GY

Connector Part Information

- Harness Type:
- OEM Connector:
- Service Connector: Service by Harness - See Part Catalog
- Description: 6-Way M

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available
II	13575289	J-35616-42 (RD)	J-38125-11A
III	Not Available	Not Available	Not Available

X463 Body Harness to Accessory Trailer Harness (F19/F35/F69+RZW)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	3	RD/GN	742	I	-	Battery Positive Voltage	1	3	RD/GN	742	III	-
2	0.5	VT/BK	1239	I	-	Run/Crank Ignition 1 Voltage	2	0.5	VT/BK	1239	III	-
3	0.5	GN	5060	I	-	Low Speed GMLAN Serial Data	3	0.5	GN	5060	III	-
4	0.5	VT/WH	5065	I	-	Stop Lamp Relay Coil	4	0.5	VT/WH	5065	III	-

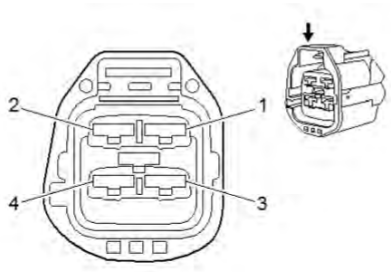
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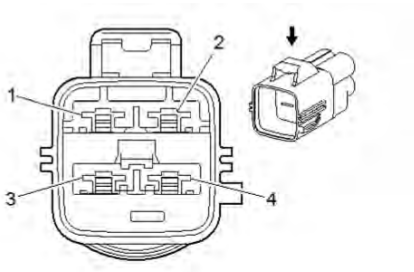
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Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
						Supply Voltage						
5	3	BK	2550	I	-	Ground	5	3	BK	2550	III	-
6	-	-	-	-	-	Not Occupied	6	-	-	-	-	-

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X464 Body Harness to Accessory Trailer Harness (F80)





Connector Part Information

- Harness Type: Body
- OEM Connector: 13581024
- Service Connector: 19153180
- Description: 4-Way F 250 Series, Sealed (D-GY)

Connector Part Information

- Harness Type: Accessory Trailer
- OEM Connector: Not Available
- Service Connector: Service by Harness - See Part Catalog
- Description: 4-Way M 6.3 Series, Sealed (D-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-35 (VT)	Not Available
II	Not Available	Not Available	Not Available

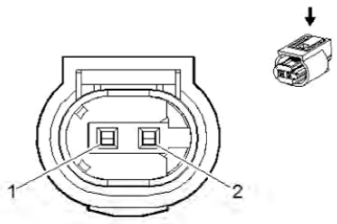
X464 Body Harness to Accessory Trailer Harness (F80)

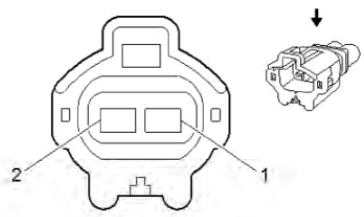
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	GN/GY	737	I	80 without E95	Trunk Lamp Control	1		-	737	II	-
2	3	RD/GN	742	I	80 with RZW without E95	Battery Positive Voltage	2		-	5640	II	-
3	0.5	VT/WH	5065	I	80 without E95	Stop Lamp Relay Coil Supply Voltage	3		-	5065	II	-
4	0.5	VT/GY	1303	I	80 without E95	Lift Gate Ajar Switch Signal (1)	4		-	1303	II	-

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X488 Rear Fascia Harness to License Lamp Harness (F19)





Connector Part Information

- Harness Type: Rear Fascia
- OEM Connector: 7283-7029-40
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 090 Series, Sealed (L-GY)

Connector Part Information

- Harness Type: License Lamp Harness
- OEM Connector: 7282-7420-40
- Service Connector: 13505906
- Description: 2-Way M 090 II Series, Sealed (L-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Pending	Pending	Pending

X488 Rear Fascia Harness to License Lamp Harness (F19)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	BK	2550	I	-	Ground	1	0.35	BK	2550	I	-
2	0.35	GN/YE	6846	I	-	Rear License Lamp Control	2	0.35	GN/YE	6846	I	-

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X498 Accessory Trailer Harness to Accessory Trailer Brake Harness

Connector Part Information

- Harness Type: Accessory Trailer
- OEM Connector: 13580776
- Service Connector: No SDC/FSU
- Description: 2-Way F

Connector Part Information

- Harness Type: Accessory Trailer Brake
- OEM Connector: Not Available
- Service Connector: Not Available
- Description: 2-Way M

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Pending	Pending	Pending

X498 Accessory Trailer Harness to Accessory Trailer Brake Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	2.5	BU	47	I	RZW	Trailer Auxiliary Supply Voltage	1	-	-	-	-	-
2	0.5	VT/WH	5065	I	RZW	Stop Lamp Relay Coil Control	2	-	-	-	-	-

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X499 Accessory Trailer Harness to Accessory Trailer Brake Harness (F19/F35/F69)

Connector Part Information

- Harness Type: Accessory Trailer
- OEM Connector: 13580776
- Service Connector: No SDC/FSU
- Description: 2-Way F

Connector Part Information

- Harness Type: Accessory Trailer Brake
- OEM Connector: Not Available
- Service Connector: Not Available
- Description: 2-Way M

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Pending	Pending	Pending

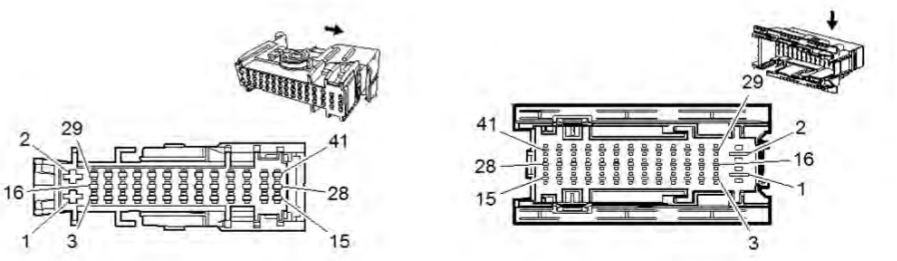
X499 Accessory Trailer Harness to Accessory Trailer Brake Harness (F19/F35/F69)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	2.5	BU	47	I	RZW	Trailer Auxiliary Supply Voltage	1				I	-
2	0.5	VT/WH	5065	I	RZW	Stop Lamp Relay Coil Control	2	0.5	VT/WH	5065	I	RZW

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X500 Driver Door Harness to Body Harness



Connector Part Information

- Harness Type: Driver Door
- OEM Connector: 13254913
- Service Connector: Service by Harness - See part Catalog
- Description: 41-Way F 4.8 Timer Series GY

Connector Part Information

- Harness Type: Body
- OEM Connector: 13254914
- Service Connector: 13576548
- Description: 41-Way M DSQ 1.5 2.8 Series GY

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available
II	13575593	J-35616-35 (VT)	J-38125-11A
III	Not Available	Not Available	Not Available

X500 Driver Door Harness to Body Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	1.5	RD/BU	1842	I	-	Battery Positive Voltage	1	2.5	RD/BU	1842	II	-
2	2.5 2.5	BK BK	2150 2250	I	-	Ground Ground	2	2.5	BK	2250	II	-
3	0.35	BN/YE	2267	I	-	Mirror Heating Element Supply Voltage	3	0.35	BN/YE	2267	II	-
4	0.35	YE/VT	3397	I	-	Co-Driver Mirror Motor Up (+) Down (-) Control	4	0.5	YE/VT	3397	II	-
5	0.35	WH	3398	I	-	Co-Driver Mirror Motor Common Control	5	0.5	WH	3398	II	-
6	0.35	GN/BK	3396	I	-	Co-Driver Mirror Motor Right (+) Left (-) Control	6	0.5	GN/BK	3396	II	-
7	0.35	GY/YE	5853	I	-	Driver Side Object Detection LED Signal (1)	7	0.35	GY/YE	5853	II	-
8	0.75	BN/YE	294	I	-	Door Lock Actuator Unlock Control	8	0.75	BN/YE	294	II	-
9	0.35	WH/YE	3574	I	-	Driver Door Open Switch Signal	9	0.35	WH/YE	3574	II	-
10	0.35	VT	3560	I	-	Passive Entry Driver Door Antenna Signal Hi	10	0.35	VT	3560	II	-
11	0.35	VT/GY	3561	I	-	Passive Entry Driver Door Antenna Signal Lo	11	0.35	VT/GY	3561	II	-
12		-		I	-	Not Occupied	12					
13	0.5	GN/WH	7530	I	-	Linear Interconnect Network Bus 8	13	0.35	GN/WH	7530	II	-

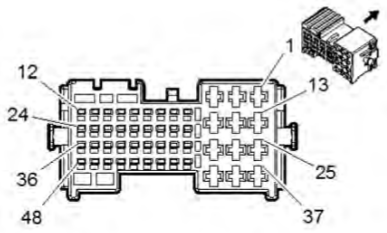
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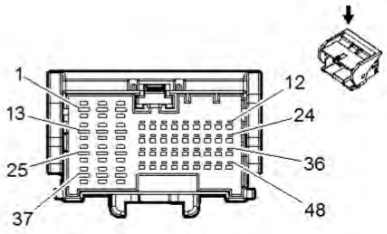
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Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
14	0.35	BN/YE	780	I	-	Driver Door Lock Switch Lock Signal	14	0.35	BN/YE	780	II	-
15	0.5	GN/YE	6134	I	-	Linear Interconnect Network Bus 3	15	0.35	GN/YE	6134	II	-
16		-		I	-	Not Occupied	16					
17	0.35	GY/GN	5996	I	-	Driver Outside Rear View Mirror Puddle Lamp Supply Voltage	17	0.35	GY/GN	5996	II	-
18-20		-		I	-	Not Occupied	18-20					
21	0.75	GY	5911	I	-	Door Lock Actuator Lock Control 2	21	1	GY	5911	II	-
22	0.35	GN/WH	3570	I	-	Driver Door Handle Switch Signal	22	0.35	GN/WH	3570	II	-
23		-		I	-	Not Occupied	23					
24	0.35	BU/GN	614	I	-	Memory Seat Switch Set Signal	24	0.35	BU/GN	614	II	-
25	0.35	BK/BU	5978	I	-	Memory Switch Low Reference	25	0.35	BK/BU	5978	II	-
26	0.35	WH	615	I	-	Memory Seat Switch Signal (1)	26	0.35	WH	615	II	-
27	0.35	BN/WH	781	I	-	Driver Door Lock Switch Unlock Signal	27	0.35	BN/WH	781	II	-
28	0.35	YE	6817	I	-	LED Backlight Dimming Control	28	0.35	YE	6817	II	-
29		-		I	-	Not Occupied	29					
30	0.5	GY	157	I	-	Interior Lamp Control	30	0.5	GY	157	II	-
31	0.35	WH/YE	7557	I	-	LED Ambient Lighting Control 1	31	0.35	WH/YE	7557	II	-
32-33		-		I	-	Not Occupied	18-20					
32-33	-	-	-	-	-	Not Occupied	32-33	-	-	-	-	-
34	0.5	RD/VT	1940	I	-	Battery Positive Voltage	34	0.5	RD/VT	1940	II	-
35	0.35	VT/BU	6189	I	-	Lift Glass/Trunk Interior Release Signal	35	0.35 0.13	VT/BU VT	6189 6189	II	-
36-37		-		I	-	Not Occupied	18-20					
36-37	-	-	-	-	-	Not Occupied	36-37	-	-	-	-	-
38	0.75	BU	201	I	-	Left Front Speaker (+) (1)	38					
39	0.75	BN/BU	118	I	-	Left Front Speaker Signal (-) (1)	39					
40	0.75	YE/BK	117	I	-	Right Front Speaker Signal (-) (1)	40	0.75	YE/BK	117	II	-
41	0.75	YE	200	I	-	Right Front Speaker (+) (1)	41	0.75	YE	200	II	-

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X505 Driver Door Harness to Driver Door Trim Harness





Connector Part Information

- Harness Type: Driver Door
- OEM Connector: 13582058
- Service Connector: Service by Harness - See part Catalog
- Description: 48-Way F 1.2 MCON, 2.8 MCP Series BK
- Harness Type: Front Passenger Door
- OEM Connector: 13582058
- Service Connector: Service by Harness - See part Catalog
- Description: 48-Way F 1.2 MCON, 2.8 MCP Series
- Harness Type: Driver Door
- OEM Connector: 13582058
- Service Connector: Service by Harness - See part Catalog
- Description: 48-Way F 1.2 MCON, 2.8 MCP Series

Connector Part Information

- Harness Type: Driver Door Trim
- OEM Connector: 13582054
- Service Connector: Service by Harness - See part Catalog
- Description: 48-Way M 1.2 MCON, 2.8 MCP Series BK

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available
II	13575593	J-35616-35 (VT)	Not Available

X505 Driver Door Harness to Driver Door Trim Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1-3	-	-	-	I	-	Not Occupied	1-3	-	-	-	I	-
4	0.35 0.35 0.35 0.35	WH VT/RD YE/RD WH	3398 3392 3399 3398	I	-	Passenger Mirror Motor Common Control Driver Mirror Position Sensor High Reference Co-Driver Mirror Position Sensor High Reference Co-Driver Mirror Motor Common Control	4	0.35 0.35	WH VT/RD	3398 3392	I	-
5	0.35 0.35 0.35 0.35	WH/YE YE/VT VT/WH YE/VT	3395 3397 3403 3397	I	-	Driver Mirror Position Sensor Left (-) Right (+) Signal Passenger Mirror Motor Up (+) Down (-) Control Co-Driver Mirror Position Sensor Left (-) Right (+) Signal Co-Driver Mirror Motor Up (+) Down (-) Control	5	0.35 0.35	YE/VT WH/YE	3397 3395	I	-
6	0.35 0.35 0.35 0.35	BK/BN GN/BK BK/GN GN/BK	3393 3396 3400 3396	I	-	Driver Mirror Position Sensor Low Reference Passenger Mirror Motor Right (+) Left (-) Control Co-Driver Mirror Position Sensor Low Reference Co-Driver Mirror Motor Right (+) Left (-) Control	6	0.35 0.35	BK/BN GN/BK	3393 3396	I	-
7	0.5 0.5	BK BK	2150 2250	I	-	Ground Ground	7	0.5 0.5	BK BK	2250 2150	I	-

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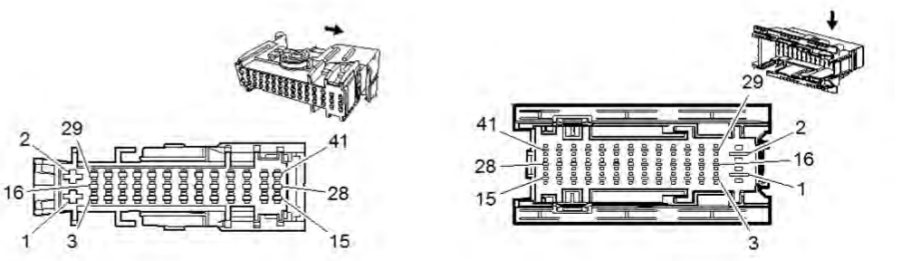
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
8	0.5	GY	157	I	-	Interior Lamp Control	8	0.5	GY	157	I	-
9	0.35 0.35 0.35	VT/BU YE/BN YE/VT	3390 3391 3397	I	-	Driver Mirror Motor Up (+) Down (-) Control Driver Mirror Motor Common Control Co-Driver Mirror Motor Up (+) Down (-) Control	9	0.35 0.35	YE/BN VT/BU	3391 3390	I	-
10	0.35 0.35 0.35	VT/BU YE/BN WH	3390 3391 3398	I	-	Driver Mirror Motor Up (+) Down (-) Control Driver Mirror Motor Common Control Co-Driver Mirror Motor Common Control	10	0.35 0.35	VT/BU YE/BN	3390 3391	I	-
11	0.35 0.35	BN/BK GN/BK	3389 3396	I	-	Driver Mirror Motor Right (+) Left (-) Control Co-Driver Mirror Motor Right (+) Left (-) Control	11	0.35	BN/BK	3389	I	-
12	0.5	GN/WH	7530	I	-	Linear Interconnect Network Bus 8	12	0.5	GN/WH	7530	I	-
13-17	-	-	-	I	-	Not Occupied	13-17	-	-	-	I	-
13-17	-	-	-	-	-	Not Occupied	13-17	-	-	-	-	-
18	0.35 0.35 0.35	BN/YE YE/VT BN/YE	780 244 780	I	-	Driver Door Lock Switch Lock Control Passenger Door Lock Switch Lock Control Driver Door Lock Switch Lock Signal	18				I	-
19	0.35 0.35	BN/WH BN/VT	781 245	I	-	Driver Door Lock Switch Unlock Signal Passenger Door Lock Switch Unlock Control	19				I	-
20	0.35 0.35	GY/BN BU/YE	3394 3401	I	-	Driver Mirror Position Sensor Up (+) Down (-) Signal Co-Driver Mirror Position Sensor Up (+) Down (-) Signal	20	0.35	GY/BN	3394	I	-
21	-	-	-	I	-	Not Occupied	21	-	-	-	I	-
22	0.35 0.35	GY GY	745 746	I	-	Left Front Door Ajar Switch Signal Right Front Door Ajar Switch Signal	22	0.35 0.35	GY GY	746 745	I	-
23	0.35	VT/BU	6189	I	-	Lift Glass/Trunk Interior Release Signal	23	0.35	VT/BU	6189	I	-
24	0.5 0.35	RD/VT RD/BU	1940 840	I	-	Battery Positive Voltage Battery Positive Voltage	24	0.5	RD/VT	1940	I	-
25	-	-	-	I	-	Not Occupied	25	-	-	-	I	-
26	1.5	GN/GY	3382	I	-	Power Window Motor Driver Up Control	26	1.5	GN/GY	3382	I	-
27	1.5	YE/VT	3383	I	-	Power Window Motor Driver Down Control	27	1.5	YE/VT	3383	I	-
28-29	-	-	-	I	-	Not Occupied	28-29	-	-	-	I	-
28-29	-	-	-	-	-	Not Occupied	28-29	-	-	-	-	-
30	0.35	WH/VT	3270	I	-	Driver Door Lock Motor Status	30	0.35	WH/VT	3270	I	-
31	0.35	BU/VT	1124	I	-	Door Lock Key Switch Unlock Signal	31	0.35	BU/VT	1124	I	-
32	0.35	YE	6817	I	-	LED Backlight Dimming Control	32	0.35	YE	6817	I	-
33	0.35	WH/YE	7557	I	-		33	0.35	WH/YE	7557	I	-

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Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
						LED Ambient Lighting Control 1						
34	0.35	BU/GN	614	I	-	Memory Seat Switch Set Signal	34	0.35	BU/GN	614	I	-
35	0.35	BK/BU	5978	I	-	Memory Switch Low Reference	35	0.35	BK/BU	5978	I	-
36	0.35	WH	615	I	-	Memory Seat Switch Signal (1)	36	0.35	WH	615	I	-
37	-	-	-	I	-	Not Occupied	37	-	-	-	I	-
38	2.5	RD/BU	1842	I	-	Battery Positive Voltage	38	1.5	RD/BU	1842	I	-
39	0.75 2.5	BK BK	2150 2150	I	-	Ground Ground	39	15 0.75	BK BK	2150 2150	I	-
40	0.5 0.35	GN/YE GN/YE	6134 6134	I	-	Linear Interconnect Network Bus 3 Linear Interconnect Network Bus 3	40	0.5	GN/YE	6134	I	-
41-43	-	-	-	I	-	Not Occupied	41-43	-	-	-	I	-
41-43	-	-	-	-	-	Not Occupied	41-43	-	-	-	-	-
44	0.35 0.35	GN VT/GY	3381 2765	I	-	Power Window Switch Driver Express Signal Power Window Switch Right Front Express Signal	44	0.35	GN	3381	I	-
45	0.35 0.35	GY BN/YE	3380 167	I	-	Power Window Switch Driver Down Signal Power Window Master Switch Right Front Down Signal	45	0.35	GY	3380	I	-
46	0.35 0.35	GN/WH YE/BK	3379 166	I	-	Power Window Switch Driver Up Signal Power Window Master Switch Right Front Up Signal	46	0.35	GN/WH	3379	I	-
47-48	-	-	-	I	-	Not Occupied	47-48	-	-	-	I	-
47-48	-	-	-	-	-	Not Occupied	47-48	-	-	-	-	-

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X600 Passenger Door Harness to Body Harness



Connector Part Information

- Harness Type: Front Passenger Door
- OEM Connector: 13254913
- Service Connector: Service by Harness - See part Catalog
- Description: 41-Way F 4.8 Timer Series GY

Connector Part Information

- Harness Type: Body
- OEM Connector: 13254914
- Service Connector: 13576548
- Description: 41-Way M DSQ 1.5 2.8 Series GY

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available
II	Not Available	Not Available	Not Available

X600 Passenger Door Harness to Body Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	1.5	RD/WH	1642	I	-	Battery Positive Voltage	1	2.5	RD/WH	1642	II	-
2	1.5 2.5	BK BK	2150 2250	I	-	Ground Ground	2	2.5 2.5	BK BK	2250 2150	II	-
3	0.35	BN/YE	2267	I	-	Mirror Heating Element Contro	3	0.35	BN/YE	2267	II	-
4	0.35	YE/VT	3397	I	-	Co-Driver Mirror Motor Up (+) Down (-) Control	4	0.5	YE/VT	3397	II	-
5	0.35	WH	3398	I	-	Co-Driver Mirror Motor Common Control	5	0.5	WH	3398	II	-
6	0.35	GN/BK	3396	I	-	Co-Driver Mirror Motor Right (+) Left (-) Control	6	0.5	GN/BK	3396	II	-
7	0.35	GY	5861	I	-	Passenger Side Object Detection LED Signal (1)	7	0.35	GY	5861	II	-
8	0.75	BN/YE	294	I	-	Door Lock Actuator Unlock Control	8	0.75	BN/YE	294	II	-
9	0.35	GY/GN	3575	I	-	Co_Driver Door Open Switch Signal	9	0.35	GY/GN	3575	II	-
10	0.35	GN/YE	3562	I	-	Passive Entry Co_Driver Door Antenna Signal Hi	10	0.35	GN/YE	3562	II	-
11	0.35	GN/BK	3563	I	-	Passive Entry Co_Driver Door Antenna Signal Lo	11	0.35	GN/BK	3563	II	-
12		-		I	-	Not Occupied	12		-		II	-
13	0.35	GN/WH	7530	I	-	Local Interconnect Network Serial Data Bus 8	13	0.35	GN/WH	7530	II	-
14	0.35	YE/VT	244	I	-		14	0.13	YE	244	II	-

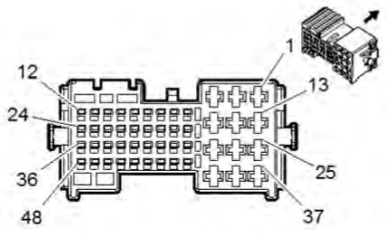
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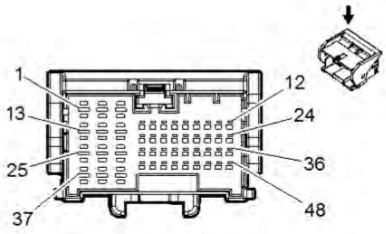
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Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
						Passenger Door Lock Switch Lock Control						
15	0.5	GN/YE	6134	I	-	Linear Interconnect Network Bus 3	15	0.35	GN/YE	6134	II	-
16		-		I	-	Not Occupied	16		-		II	-
17	0.35	GY/GN	5996	I	-	Driver Outside Rear View Mirror Puddle Lamp Control	17	0.35	GY/GN	5996	II	-
18-20		-		I	-	Not Occupied	18-20		-		II	-
21	0.75	GY	295	I	-	Door Lock Actuator Lock Control	21	0.75	GY	295	II	-
22	0.35	VT/WH	3571	I	-	Co_Driver Door Handle Switch Signal	22	0.35	VT/WH	3571	II	-
23-26		-		I	-	Not Occupied	23-26		-		II	-
23-26	-	-	-	-	-	Not Occupied	23-26	-	-	-	-	-
27	0.35	BN/VT	245	I	-	Passenger Door Lock Switch Unlock Control	27	0.13	BN	245	II	-
28	0.35	YE	6817	I	-	LED Backlight Dimming Control	28	0.35	YE	6817	II	-
29		-		I	-	Not Occupied	29		-		II	-
30	0.5	GY	157	I	-	Interior Lamp Control	30	0.5	GY	157	II	-
31	0.35	WH/YE	7557	I	-	LED Ambient Lighting Control 1	31	0.35	WH/YE	7557	II	-
32-33		-		I	-	Not Occupied	32-33		-		II	-
32-33	-	-	-	-	-	Not Occupied	32-33	-	-	-	-	-
34	0.35	RD/BU	840	I	-	Battery Positive Voltage	34	0.35	RD/BU	840	II	-
35-37		-		I	-	Not Occupied	35-37		-		II	-
35-37	-	-	-	-	-	Not Occupied	35-37	-	-	-	-	-
38	0.75	BN/BU	118	I	-	Left Front Speaker Signal (-) (1)	38	0.75	BN/BU	118	II	-
39	0.75	BU	201	I	-	Left Front Speaker (+) (1)	39	0.75	BU	201	II	-
40	0.75	YE/BK	117	I	-	Right Front Speaker Signal (-) (1)	40	0.75	YE/BK	117	II	-
41	0.75	YE	200	I	-	Right Front Speaker Control (+) (1)	41	0.75	YE	200	II	-

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X605 Passenger Door Harness to Passenger Door Trim Harness





Connector Part Information

- Harness Type: Passenger Door
- OEM Connector: 13582058
- Service Connector: Service by Harness - See part Catalog
- Description: 48-Way F 1.2 MCON, 2.8 MCP Series BK

Connector Part Information

- Harness Type: Passenger Door Trim
- OEM Connector: 13582054
- Service Connector: Service by Harness - See part Catalog
- Description: 48-Way M 1.2 MCON, 2.8 MCP Series BK

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available

X605 Passenger Door Harness to Passenger Door Trim Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1-3	-	-	-	I	-	Not Occupied	1-3	-	-	-	I	-
4	0.35	YE/RD	3399	I	-	Passenger Mirror Position Sensor 5 Volt Reference	4	0.35	YE/RD	3399	I	-
5	0.35	VT/WH	3403	I	-	Passenger Mirror Position Sensor Left (-) Right (+) Signal	5	0.35	VT/WH	3403	I	-
6	0.35	BK/GN	3400	I	-	Passenger Mirror Position Sensor Low Reference	6	0.35	BK/GN	3400	I	-
7	0.5 0.5	BK BK	2150 2250	I	-	Ground Ground	7	0.5 0.5	BK BK	2250 2150	I	-
8	0.5	GY	157	I	-	Interior Lamp Control	8	0.5	GY	157	I	-
9	0.35	YE/VT	3397	I	-	Passenger Mirror Motor Up (+) Down (-) Control	9	0.35	VT/BU	3390	I	-
10	0.35	WH	3398	I	-	Passenger Mirror Motor Common Control	10	0.35	WH	3398	I	-
11	0.35	GN/BK	3396	I	-	Passenger Mirror Motor Right (+) Left (-) Control	11	0.35	GN/BK	3396	I	-
12	0.5	GN/WH	7530	I	-	Linear Interconnect Network Bus 8	12	0.5	GN/WH	7530	I	-
13-17	-	-	-	I	-	Not Occupied	13-17	-	-	-	I	-
13-17	-	-	-	-	-	Not Occupied	13-17	-	-	-	-	-
18	0.35	YE/VT	244	I	-	Driver Door Lock Switch Lock Control	18	0.35	YE/VT	244	I	-
19	0.35	BN/VT	245	I	-	Driver Door Lock Switch Unlock Signal	19	0.35	BN/VT	245	I	-

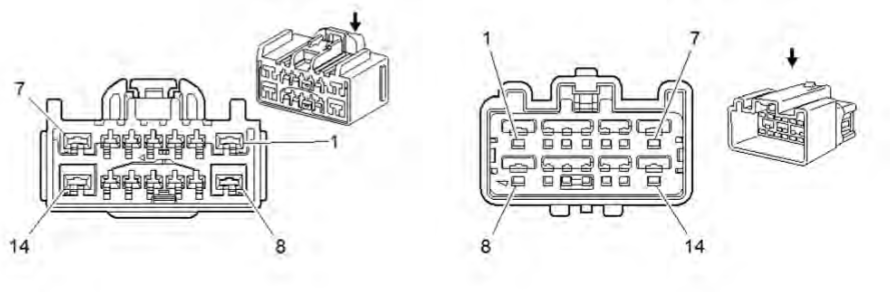
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Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
20	0.35	BU/YE	3401	I	-	Passenger Mirror Position Sensor Up (+) Down (-) Signal	20	0.35	BU/YE	3401	I	-
21	-	-	-	I	-	Not Occupied	21	-	-	-	I	-
22	0.35 0.35	GY GY	746 745	I	-	Right Front Door Ajar Switch Signal Left Front Door Ajar Switch Signal	22	0.35 0.35	GY GY	746 745	I	-
23	-	-	-	I	-	Not Occupied	23	-	-	-	I	-
24	0.5	RD/BU	840	I	-	Battery Positive Voltage	24	0.5	RD/BU	840	I	-
25	-	-	-	I	-	Not Occupied	25	-	-	-	I	-
26	1.5	GN/GY	3387	I	-	Power Window Motor Passenger Up Control	26	1.5	GN/GY	3387	I	-
27	1.5	YE/BU	3388	I	-	Power Window Motor Passenger Down Control	27	1.5	YE/BU	3388	I	-
28-31	-	-	-	I	-	Not Occupied	28-31	-	-	-	I	-
28-31	-	-	-	-	-	Not Occupied	28-31	-	-	-	-	-
32	0.35	YE	6817	I	-	LED Backlight Dimming Control	32	0.35	YE	6817	I	-
33	0.35	WH/YE	7557	I	-	LED Ambient Lighting Control 1	33	0.35	WH/YE	7557	I	-
34-37	-	-	-	I	-	Not Occupied	34-37	-	-	-	I	-
34-37	-	-	-	-	-	Not Occupied	34-37	-	-	-	-	-
38	2.5	RD/WH	1642	I	-	Battery Positive Voltage	38	1.5	RD/WH	1642	I	-
39	2.5	BK	2250	I	-	Ground	39	15	BK	2250	I	-
40	0.5	GN/YE	6134	I	-	Linear Interconnect Network Bus 3	40	0.5	GN/YE	6134	I	-
41-43	-	-	-	I	-	Not Occupied	41-43	-	-	-	I	-
41-43	-	-	-	-	-	Not Occupied	41-43	-	-	-	-	-
44	0.35	VT/GY	2765	I	-	Power Window Switch Right Front Express Signal	44	0.35	VT/GY	2765	I	-
45	0.35	BN/YE	167	I	-	Power Window Master Switch Right Front Down Signal	45	0.35	BN/YE	167	I	-
46	0.35	YE/BK	166	I	-	Power Window Master Switch Right Front Up Signal	46	0.35	YE/BK	166	I	-
47-48	-	-	-	I	-	Not Occupied	47-48	-	-	-	I	-
47-48	-	-	-	-	-	Not Occupied	47-48	-	-	-	-	-

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X700 Body Harness to Left Rear Door Harness



Connector Part Information

- Harness Type: Body
- OEM Connector: 13581064
- Service Connector: 19167675
- Description: 14-Way F 1.5, 2.8 Series BK

Connector Part Information

- Harness Type: Left Rear Door
- OEM Connector: 13581065
- Service Connector: Service by Harness - See part Catalog
- Description: 14-Way M 1.5, 2.8 Series BK

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13580025	J-35616-35 (VT)	J-38125-215A
II	13578892	J-35616-35 (VT)	Not Available
III	13578891	J-35616-2A (GY)	J-38125-11A
IV	13575286	J-35616-35 (VT)	J-38125-215A
V	13578891	J-35616-35 (VT)	Not Available
VI	13580025	J-35616-35 (VT)	J-38125-11A
VII	13575283	J-35616-2A (GY)	J-38125-11A
VIII	13580025	J-35616-35 (VT)	J-38125-11A
IX	13580025	J-35616-35 (VT)	J-38125-11A
X	Not Available	Not Available	Not Available

X700 Body Harness to Left Rear Door Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	1.5	BK	2150	I	-	Ground	1	1.5	BK	2150	X	-
2	0.35	GN/GY	6135	V	-	Linear Interconnect Network Bus 4	2	0.5	GN/GY	6135	X	-
3	0.75	BN/YE	294	II	-	Door Lock Actuator Unlock Control	3	0.75	BN/YE	294	X	-
4-5	-	-	-	-	-	Not Occupied	4-5	-	-	-	-	-
6	0.35	BN/YE	6157	V	-	Left Rear Door Handle Switch Signal	6	0.35	BN/YE	6157	X	-
7	0.75	GN	199	IV	-	Left Rear Speaker (+)	7	0.75	GN	199	X	-
8	2.5	RD/BU	1842	I	-	Battery Positive Voltage	8	1.5	RD/BU	1842	X	-
9							9	-	-	-	X	-
10	0.75	GY	295	II	-	Door Lock Actuator Lock Control	10	0.75	GY	295	X	-

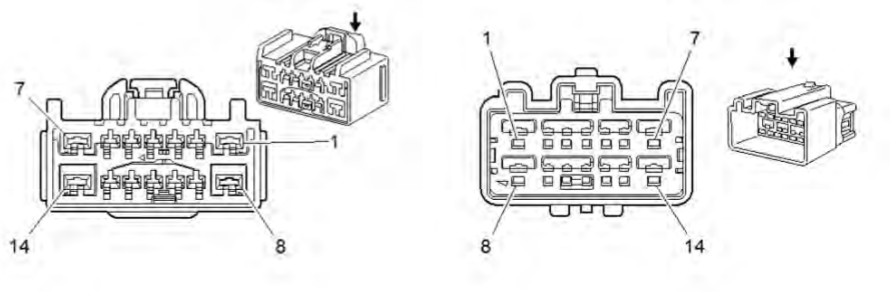
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Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
11	0.35	WH/YE	7557	V	-	LED Ambient Lighting Control 1	11	0.35	WH/YE	7557	X	-
12	0.5	GY	157	III	-	Interior Lamp Control	12	0.5	GY	157	X	-
13							13	-	-	-	X	-
14	0.75	GN/BK	116	IV	-	Left Rear Speaker Signal (-)	14	0.75	GN/BK	116	X	-

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X800 Body Harness to Right Rear Door Harness



Connector Part Information

- Harness Type: Body
- OEM Connector: 13581064
- Service Connector: 19167675
- Description: 14-Way F 1.5, 2.8 Series (BK)

Connector Part Information

- Harness Type: Right Rear Door
- OEM Connector: 13581065
- Service Connector: Service by Harness - See Part Catalog
- Description: 14-Way M 1.5, 2.8 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	13580025	J-35616-35 (VT)	J-38125-215A
II	13580025	J-35616-35 (VT)	J-38125-11A
III	13575283	J-35616-2A (GY)	J-38125-11A
IV	13578892	J-35616-35 (VT)	Not Available
V	13578891	J-35616-35 (VT)	Not Available
VI	13578891	J-35616-2A (GY)	J-38125-11A
VII	13575286	J-35616-35 (VT)	J-38125-215A
VIII	13580025	J-35616-35 (VT)	J-38125-11A
IX	13580025	J-35616-35 (VT)	J-38125-11A
X	Not Available	J-35616-35 (VT)	Not Available
XI	13575824	J-35616-5 (PU)	Not Available
XII	13575818	J-35616-3 (GY)	Not Available
XIII	13575816	J-35616-3 (GY)	Not Available
XIV	13575823	J-35616-5 (PU)	Not Available

X800 Body Harness to Right Rear Door Harness

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	1.5	BK	2250	I	-	Ground	1	1.5	BK	2250	X	-
2	0.35	GN/GY	6135	VI	-	Linear Interconnect Network Bus 4	2	0.5	GN/GY	6135	XIII	-
3	0.75	BN/YE	294	III	-	Door Lock Actuator Unlock Control	3	0.75	BN/YE	294	XII	-
4-5	-	-	-	-	-	Not Occupied	4-5	-	-	-	-	-
6	0.35	YE/GY	6158	VI	ATH with 19 or 35 or 69 without EF7	Right Rear Door Handle Switch Signal	6			6158	X	ATH without EF7

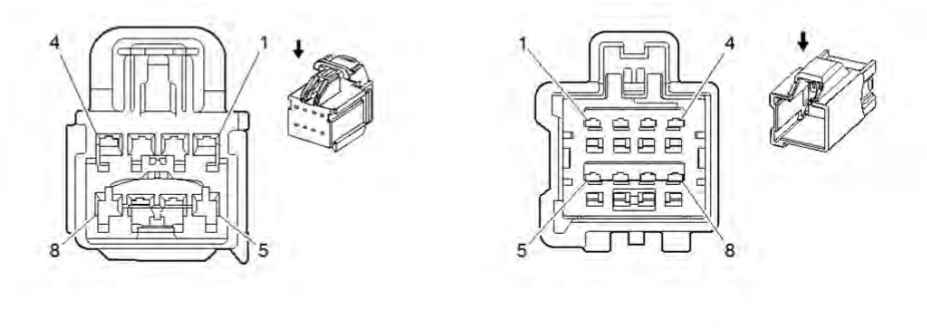
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Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
7	0.75	WH	46	VII	-	Right Rear Speaker (+)	7	0.75	WH	46	XIV	-
8	2.5	RD/WH	1642	IX	-	Battery Positive Voltage	8	1.5	RD/WH	1642	XI	-
9	-	-	-	-	-	Not Occupied	9	-	-	-	-	-
10	0.75	GY	295	III	-	Door Lock Actuator Lock Control	10	0.75	GY	295	X	-
11	0.35	WH/YE	7557	V	-	LED Ambient Lighting Control 1	11	0.35	WH/YE	7557	X	-
12	0.5	GY	157	VI	-	Interior Lamp Control	12	0.5	GY	157	XIII	-
13	-	-	-	-	-	Not Occupied	13	-	-	-	-	-
14	0.75	BU/BK	115	VII	-	Right Rear Speaker Signal (-)	14	0.75	BU/BK	115	XIV	-

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X900 Rear Compartment Lid Extension Harness to Rear Compartment Lid Harness (F69)



Connector Part Information

- Harness Type: Rear Compartment Lid Extension
- OEM Connector: 13580896
- Service Connector: Service by Harness - See Part Catalog
- Description: 8-Way F 1.5 Kaizen YESC Series (L-GY)

Connector Part Information

- Harness Type: Rear Compartment Lid
- OEM Connector: 13580897
- Service Connector: Service by Harness - See Part Catalog
- Description: 8-Way M 1.5 Kaizen YESC Series (L-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-2A (GY)	Not Available
II	Not Available	J-35616-3 (GY)	Not Available

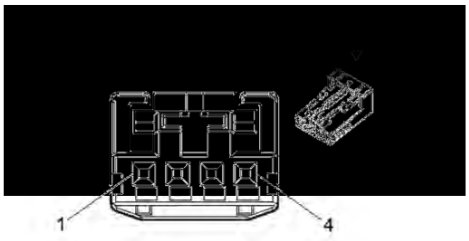
X900 Rear Compartment Lid Extension Harness to Rear Compartment Lid Harness (F69)

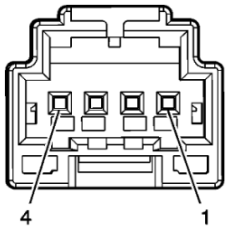
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	GN/WH	24	I	-	Backup Lamp Supply Voltage	1	0.35	GN/WH	24	II	-
2	-	-	-	-	-	Not Occupied	2	-	-	-	-	-
3	0.35	VT/GY	709	I	-	Left Park Lamp Supply Voltage	3	0.35	VT/GY	709	II	-
4	0.75	BK	2450	I	-	Ground	4	0.75	BK	2450	II	-
5-6	-	-	-	-	-	Not Occupied	5-6	-	-	-	-	-
7	0.75	BK	2650	I	-	Ground	7	0.75	BK	2650	II	-
8	0.35	GY/BN	309	I	-	Right Park Lamp Supply Voltage	8	0.35	GY/BN	309	II	-

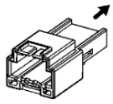
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X925 License Lamp Harness to Left Liftgate Harness (F35)









Connector Part Information

- Harness Type: License Lamp
- OEM Connector: 0-936119-1
- Service Connector: Service by Harness - See Part Catalog
- Description: 4-Way F 0.64 Micro Quadlock Series (BK)

Connector Part Information

- Harness Type: Left Liftgate
- OEM Connector: 13585683
- Service Connector: Service by Harness - See Part Catalog
- Description: 4-Way M

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available
II	Not Available	J-35616-64B (L-BU)	Not Available

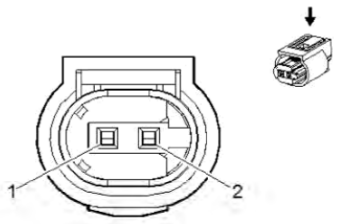
X925 License Lamp Harness to Left Liftgate Harness (F35)

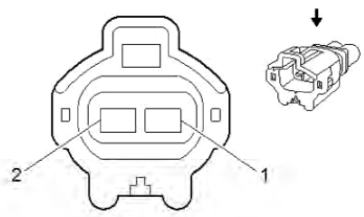
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	BU	5797	I	-	Rear Closure Handle Switch Open Signal	1	0.35	YE/BU	5797	II	-
2	0.35	BU	5801	I	-	Lift Gate Object Sensor Low Reference	2	0.35	BK/VT	5801	II	-
3	0.35	GY/BK	6846	I	-	Rear License Lamp Control	3	0.35	GY/BK	6846	II	-
4	0.35	BK	2850	I	-	Ground	4	0.35	BK	2850	II	-

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X926 License Lamp Jumper Harness to License Lamp Harness (F80)





Connector Part Information

- Harness Type: License Lamp Jumper
- OEM Connector: 7283-7029-40
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 090 Series, Sealed (L-GY)

Connector Part Information

- Harness Type: License Lamp
- OEM Connector: 7282-7420-40
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way M 090 II Series, Sealed (L-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	Not Available	Not Available
II	Not Available	J-35616-19 (BK)	Not Available

X926 License Lamp Jumper Harness to License Lamp Harness (F80)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	BK	1850	I	-	Ground	1	0.35	BK	1850	II	-
2	0.35	GN/YE	6846	I	-	Rear License Lamp Control	2	0.35	GN/YE	6846	II	-

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X930 Left Liftgate Extension Harness to Left Liftgate Harness (F35)





Connector Part Information

- Harness Type: Left Liftgate Extension
- OEM Connector: 7283-1118
- Service Connector: Service by Harness - See Part Catalog
- Description: 11-Way F

Connector Part Information

- Harness Type: Left Liftgate
- OEM Connector: 7282-1118
- Service Connector: Service by Harness - See Part Catalog
- Description: 11-Way M 090,197 Series

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-40 (BU)	Not Available
II	Not Available	J-35616-18 (BK)	Not Available
III	Not Available	J-35616-41 (BU)	Not Available
IV	Not Available	J-35616-19 (BK)	Not Available

X930 Left Liftgate Extension Harness to Left Liftgate Harness (F35)

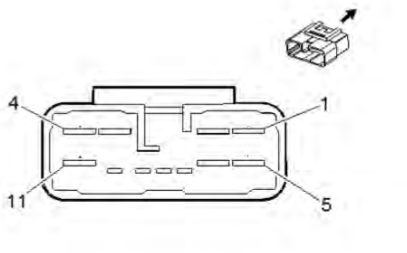
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	2.5	RD/YE	5840	I	-	Battery Positive Voltage	1	2.5	RD/YE	5840	III	-
2	4	BK	2850	I	-	Ground	2	4	BK	2850	III	-
3	1	RD/WH	5740	I	-	Battery Positive Voltage	3	1	RD/WH	5740	III	-
4	0.35	GY/WH	3272	I	-	Remote Function Actuator Supply Voltage	4	0.35	GY/WH	3272	III	-
5	0.75	RD/YE	3040	I	-	Battery Positive Voltage	5	0.75	RD/YE	3040	III	-
6	0.75	BU	393	I	-	Rear Window Wiper Motor Control	6	0.75	BU	393	III	-
7	0.5	GN	5060	II	-	Low Speed GMLAN Serial Data	7	0.35	GN	5060	IV	-
8	0.35	GN/YE	6846	II	-	Rear License Lamp Supply Voltage	8	0.35	GN/YE	6846	IV	-
9	0.35	YE/GN	3274	II	-	Remote Function Actuator Transmit Signal	9	0.35	YE/GN	3274	IV	-
10	0.35	BU/WH	3275	II	-	Remote Function Actuator Receive Signal	10	0.35	BU/WH	3275	IV	-
11	0.35	GY	3273	I	-	Remote Function Actuator Return	11	0.35	GY	3273	III	-

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X932 Left Liftgate Extension Harness to Right Liftgate Harness (F35)





Connector Part Information

- Harness Type: Left Liftgate Extension
- OEM Connector: 7283-1118-30
- Service Connector: Service by Harness - See Part Catalog
- Description: 11-Way F (BK)

Connector Part Information

- Harness Type: Right Liftgate
- OEM Connector: 7282-1118-30
- Service Connector: Service by Harness - See Part Catalog
- Description: 11-Way M 090,197 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool
I	Not Available	J-35616-40 (BU)	Not Available
II	Not Available	J-35616-18 (BK)	Not Available
III	Not Available	J-35616-41 (BU)	Not Available
IV	Not Available	J-35616-19 (BK)	Not Available

X932 Left Liftgate Extension Harness to Right Liftgate Harness (F35)

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	2.5	BN/VT	293	I	-	Rear Defog Element Supply Voltage	1	2.5	BN/VT	293	III	-
2	0.35	GN/WH	24	I	-	Backup Lamp Supply Voltage	2	0.35	GN/WH	24	III	-
3	0.35	VT/GN	1339	I	-	Run/Crank Ignition 1 Voltage	3	0.35	VT/GN	1339	III	-
4	-	-	-	-	-	Not Occupied	4	-	-	-	-	-
5	0.5	BK	2850	I	-	Ground	5	0.5	BK	2850	III	-
6	0.5	VT/WH	5065	I	-	Stop Lamp Relay Coil Supply Voltage	6	0.5	VT/WH	5065	III	-
7	0.35	BK	2550	II	-	Ground	7	0.35	BK	2550	IV	-
8	0.35	GY/YE	6972	II	-	Camera Signal #2 +	8	0.35	GY/YE	6972	IV	-
9	0.35	WH/BU	6973	II	-	Camera Signal #2	9	0.35	WH/BU	6973	IV	-
10	0.35	BARE	6974	II	-	Camera Drain Wire	10	0.35	BARE	6974	IV	-
11	-	-	-	-	-	Not Occupied	11	-	-	-	-	-

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DTC B097B

Diagnostic Instructions

- Perform the Diagnostic System Check - Vehicle prior to using this diagnostic procedure.
- Review Strategy Based Diagnosis for an overview of the diagnostic approach.
- Diagnostic Procedure Instructions provides an overview of each diagnostic category.

DTC Descriptors

DTC B097B

Power Mode Start Switch Circuit

For symptom byte information refer to Symptom Byte List

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Signal – Terminal 3	B097B 02*	B097B 05*	B097B 05*	—
Signal – Terminal 6	B097B 02	B097B 04	B097B 04	—
Low Reference	—	B097B 05*	—	—
Ground	—	B097B 04	—	—
* DTC set in keyless entry control module				

Circuit/System Description

The ignition mode switch has two LED's that indicate the vehicle power mode. When the vehicle is in the off mode, both LED's will be off. Pressing the ignition mode switch button once (without the brake pedal applied), the vehicle enters the accessory mode and the amber LED Accessory will illuminate. The accessory mode has a 5 min timeout to reduce battery drain. Pressing and holding the push button start switch for up to 10 s will place the vehicle in run/start mode (without the vehicle running) and the green LED (Run/Start) will illuminate. With the ignition off (with the brake pedal applied), pressing the ignition mode switch button once, the vehicle will enter run/start mode and the green LED (run/start) will illuminate. This will start the engine. Both LED's have the voltage supplied from the body control module (BCM). The ignition mode switch sends the ignition mode switch status to the keyless entry control module and to the BCM. The keyless entry control module sends a redundant signal to the BCM with the ignition mode switch status.

The ignition mode switch contains two individual switches that provides redundant switch inputs to both the BCM and the keyless entry control module. The BCM supplies the ignition mode switch a constant B+ signal. The BCM monitors this signal to determine if the switch is released or pressed. When the ignition mode switch is not pressed, voltage on the signal circuit is pulled down through two resistors in the switch. When the ignition mode switch is pressed, voltage on the signal circuit is pulled down through only one resistor, changing the voltage seen at the BCM and indicating that the ignition mode switch is pressed.

The keyless entry control module monitors voltage on the switch in the same manner as the BCM, but monitors the second switch located in the ignition mode switch. The keyless entry

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control module also controls the backup power for the ignition main relay through the control circuit by applying voltage to the ignition voltage circuit. This circuit is a pass-thru in the BCM and will energize the ignition circuit when the vehicle is in Service Mode, the vehicle is ON, or when a remote start is requested.

Conditions for Running the DTC

Control module voltage is 9–16 V.

Conditions for Setting the DTC

B097B 02

- The control module detects a short to ground in the vehicle ignition mode switch signal circuit
- The above condition exists for more than 1 s

B097B 04

- The control module detects an open in the vehicle ignition mode switch signal circuit
- The above condition exists for more than 1 s

B097B 05

- The control module detects an open in the vehicle ignition mode switch circuit
- The above condition exists for more than 1 s

B097B 08

- The control module detects a change in the ignition mode without observing a switch press
- The above condition occurs 4 consecutive times

B097B 61

- The control module detects a continuously closed ignition mode switch
- The above condition exists for more than 1 min

Action Taken When the DTC Sets

No action is taken.

Conditions for Clearing the DTC

- A current DTC clears when the malfunction is no longer present.
- A history DTC clears after 40 consecutive module ignition cycles without a repeat of the malfunction.

Reference Information

Schematic Reference

Power Distribution Schematics

Power Moding Schematics

Connector End View Reference

Component Connector End Views

Description and Operation

- Power Mode Description and Operation
- Keyless Entry System Description and Operation

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Electrical Information Reference

- Circuit Testing
- Connector Repairs
- Testing for Intermittent Conditions and Poor Connections
- Wiring Repairs

Scan Tool Reference

Control Module References for scan tool information

Circuit/System Verification

1. Verify DTC B097B 08 or B097B 61 is not set.

⇒ **If either DTC is set**

Test or replace the S38 Ignition Mode Switch.

⇓ **If the DTCs are not set**

2. Refer to Circuit/System Testing.

Circuit/System Testing

1. Vehicle OFF and all vehicle systems OFF, disconnect the harness connector at the S38 Ignition Mode Switch. It may take up to 2 mins for all vehicle systems to power down.
2. Test for less than 10 Ω between the ground circuit terminal 4 and ground.

⇒ **If 10 Ω or greater**

2.1. Ignition OFF.

2.2. Test for less than 2 Ω in the ground circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, repair the open/high resistance in the ground connection.

⇓ **If less than 10 Ω**

3. Test for less than 10 Ω between the low reference circuit terminal 7 and ground.

⇒ **If 10 Ω or greater**

3.1. Vehicle OFF.

3.2. Test for less than 2 Ω in the ground circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, repair the open/high resistance in the ground connection.

⇓ **If less than 10 Ω**

4. Connect the S38 Ignition Mode Switch, ignition ON.
5. Disconnect the S38 Ignition Mode Switch.
6. Verify the scan tool K9 Body Control Module Push Button Ignition Switch Voltage parameter is greater than 11 V.

⇒ **If 11 V or less**

6.1. Ignition OFF, disconnect the X2 harness connector at the K9 Body Control Module.

6.2. Test for infinite resistance between the signal circuit terminal 6 and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇒ If infinite resistance, replace the K9 Body Control Module.

⇓ **If greater than 11 V**

7. Install a 3 A fused jumper wire between the signal circuit terminal 6 and ground.
8. Verify the scan tool K9 Body Control Module Push Button Ignition Switch Voltage parameter is less than 1 V.

⇒ **If 1 V or greater**

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8.1. Ignition OFF, disconnect the harness connector at the K9 Body Control Module, ignition ON.

8.2. Test for less than 1 V between the signal circuit and ground.

⇒ If 1 V or greater, repair the short to voltage on the circuit.

⇓ If less than 1 V

8.3. Test for less than 2 Ω in signal circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the K9 Body Control Module.

⇓ **If less than 1 V**

9. Connect the harness connector at the S38 Ignition Mode Switch.
10. Verify the scan tool K9 Body Control Module Push Button Ignition Switch Voltage parameter is 8–10 V, with the S38 Ignition Mode Switch released.

⇒ **If not between 8–10 V**

Test or replace the S38 Ignition Mode Switch.

⇓ **If between 8–10 V**

11. Verify the scan tool K9 Body Control Module Push Button Ignition Switch Voltage parameter is 4–7 V, with the S38 Ignition Mode Switch pressed.

⇒ **If not between 4–7 V**

Test or replace the S38 Ignition Mode Switch.

⇓ **If between 4–7 V**

12. Disconnect the X1 harness connector at the K84 Keyless Entry Control Module.
13. Test for infinite resistance between the signal circuit terminal 11 and ground.

⇒ **If less than infinite resistance**

Repair the short to ground on the circuit.

⇓ **If infinite resistance**

14. Ignition ON.
15. Test for less than 1 V between the signal circuit terminal 11 and ground.

⇒ **If 1 V or greater**

Repair the short to voltage on the circuit.

⇓ **If less than 1 V**

16. Test for 4.5–5.5 k Ω between the signal circuit terminal 11 and the low reference circuit terminal 12, with the S38 Ignition Mode Switch released.

⇒ **If not between 4.5–5.5 k Ω**

16.1. Vehicle OFF, disconnect the harness connector at the S38 Ignition Mode Switch.

16.2. Test for less than 2 Ω in the signal circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, test or replace the S38 Ignition Mode Switch.

⇓ **If between 4.5–5.5 k Ω**

17. Test for 1–1.5k Ω between the signal circuit terminal 11 and the low reference circuit terminal 12, with the S38 Ignition Mode Switch pressed.

⇒ **If not between 1–1.5 k Ω**

Test or replace the S38 Ignition Mode Switch.

⇓ **If between 1–1.5 k Ω**

18. Replace the K84 Keyless Entry Control Module.

Component Testing

Ignition Mode Switch Test

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1. Ignition OFF, disconnect the harness connector at the S38 Ignition Mode Switch.
2. Test for 4.5–5.5 k Ω between the terminals listed below with the S38 Ignition Mode Switch released:
    - Signal terminal 6 and ground terminal 4
    - Signal terminal 3 and low reference terminal 7

⇒ **If not between 4.5–5.5 k Ω**

Replace the S38 Ignition Mode Switch.

⇓ **If between 4.5–5.5 k Ω**

3. Test for 1–1.5 k Ω between the terminals listed below with the S38 Ignition Mode Switch pressed :
    - Signal terminal 6 and ground terminal 4
    - Signal terminal 3 and low reference terminal 7

⇒ **If not between 1–1.5 k Ω**

Replace the S38 Ignition Mode Switch.

⇓ **If between 1–1.5 k Ω**

4. All OK.

Repair Instructions

Perform the Diagnostic Repair Verification after completing the repair.

- Ignition and Start Switch Replacement
- Control Module References for body control module or keyless entry control module replacement, programming and setup.

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DTC B097C

Diagnostic Instructions

- Perform the Diagnostic System Check - Vehicle prior to using this diagnostic procedure.
- Review Strategy Based Diagnosis for an overview of the diagnostic approach.
- Diagnostic Procedure Instructions provides an overview of each diagnostic category.

DTC Descriptors

DTC B097C

Power Mode Run/Start Indicator Circuit

For symptom byte information refer to Symptom Byte List

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Control	B097C 02	B097C 04	B097C 01	—
Ground	—	B097C 04	—	—

Circuit/System Description

The ignition mode switch has two LED's that indicate the vehicle power mode. When the vehicle is in the off mode, both LED's will be off. Pressing the ignition mode switch button once (without the brake pedal applied), the vehicle enters the accessory mode and the amber LED (ACC) will illuminate. The accessory mode has a 5 min timeout to reduce battery drain. Pressing and holding the push button start switch for at least 5 s will place the vehicle in run/start mode (without the vehicle running) and the green LED (Run/Start) will illuminate. With the ignition off (with the brake pedal applied), pressing the ignition mode switch button once, the vehicle will enter run/start mode and the green LED (run/start) will illuminate. This will start the engine. Both LED's have the voltage supplied from the body control module (BCM). The ignition mode switch sends the ignition mode switch status to the keyless entry control module and to the BCM. The keyless entry control module sends a redundant signal to the BCM with the ignition mode switch status.

The ignition mode switch contains two individual switches that provides redundant switch inputs to both the BCM and the keyless entry control module. The BCM supplies the ignition mode switch a constant B+ signal. The BCM monitors this signal to determine if the switch is released or pressed. When the ignition mode switch is not pressed, voltage on the signal circuit is pulled down through two resistors in the switch. When the ignition mode switch is pressed, voltage on the signal circuit is pulled down through only one resistor, changing the voltage seen at the BCM and indicating that the ignition mode switch is pressed.

The keyless entry control module monitors voltage on the switch is the same manner as the BCM, but monitors the second switch located in the ignition mode switch.

Conditions for Running the DTC

Control module voltage is 9–16 V

Conditions for Setting the DTC

B097C 01

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- The BCM detects a short to voltage in the control circuit.
- The above condition exists for more than 1 min.

B097C 02

- The BCM detects a short to ground in the control circuit.
- The above condition exists for more than 1 min.

B097C 04

- The BCM detects an open in the respective circuit, when the output is inactive.
- The above condition exists for more than 1 min.

Action Taken When the DTC Sets

The BCM disables the control output.

Conditions for Clearing the DTC

- A current DTC clears when the malfunction is no longer present.
- A history DTC clears when the module power mode cycle counter reaches 40, without a repeat of the malfunction.

Reference Information

Schematic Reference

Power Moding Schematics

Connector End View Reference

Component Connector End Views

Description and Operation

Power Mode Description and Operation

Electrical Information Reference

- Circuit Testing
- Connector Repairs
- Testing for Intermittent Conditions and Poor Connections
- Wiring Repairs

Scan Tool Reference

Control Module References for scan tool information

Circuit/System Verification

1. Ignition ON.
2. Verify the green LED turns ON and OFF when commanding the Run/Start Power Mode Indicator On and Off with the scan tool.

⇒ **If the green LED does not turn ON and OFF**

Refer to Circuit/System Testing.

⇓ **If the green LED turns ON and OFF**

3. All OK.

Circuit/System Testing

1. Ignition OFF and all vehicle systems OFF, disconnect the harness connector at the S38 Ignition Mode Switch. It may take up to 2 min for all vehicle systems to power down.

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2. Test for less than 10 Ω between the ground circuit terminal 4 and ground.

⇒ **If 10 Ω or greater**

2.1. Ignition OFF.

2.2. Test for less than 2 Ω in the ground circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, repair the open/high resistance in the ground connections.

⇓ **If less than 10 Ω**

3. Connect the harness connector at the S38 Ignition Mode Switch.
4. Ignition ON, disconnect the harness connector at the S38 Ignition Mode Switch.
5. Connect a test lamp between the control circuit terminal 5 and ground.
6. Verify the test lamp stays OFF when commanding Run/Start Power Mode Indicator Off with the scan tool.

⇒ **If the test lamp is always ON**

6.1. Connect the harness connector at the S38 Ignition Mode Switch.

6.2. Ignition OFF, remove the test lamp, disconnect the harness connector at the K9 Body Control Module.

6.3. Ignition ON, disconnect the harness connector at the S38 Ignition Mode Switch.

6.4. Test for less than 1 V between the control circuit and ground.

⇒ If 1 V or greater, repair the short to voltage on the circuit.

⇒ If less than 1 V, replace the K9 Body Control Module.

⇓ **If the test lamp is always OFF**

7. Test for greater than 3 V between the control circuit terminal 5 and ground while commanding Run/Start Power Mode Indicator On with the scan tool.

⇒ **If 3 V or less**

7.1. Ignition OFF, disconnect the harness connector at the K9 Body Control Module.

7.2. Test for infinite resistance between the control circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇓ If infinite resistance

7.3. Test for less than 2 Ω in the control circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the K9 Body Control Module.

⇓ **If 3 V or greater**

8. Test or replace the S38 Ignition Mode Switch.

Component Testing

1. Ignition OFF, disconnect the harness at the S38 Ignition Mode Switch.
2. Connect a jumper wire between the S38 Ignition Mode Switch terminal 4 and ground.
3. Connect a 3 A fused jumper wire between the S38 Ignition Mode Switch terminal 5 and B+.
4. Verify the green LED illuminates.

⇒ **If the LED does not illuminate**

Replace the S38 Ignition Mode Switch.

⇓ **If the LED illuminates**

5. Connect a 3 A fused jumper wire between the S38 Ignition Mode Switch terminal 2 and B+.
6. Verify the amber LED illuminates.

⇒ **If the LED does not illuminate**

Replace the S38 Ignition Mode Switch.

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⇓ **If the LED illuminates**

7. All OK.

Repair Instructions

Perform the Diagnostic Repair Verification after completing the repair.

- Ignition and Start Switch Replacement
- Control Module References for body control module replacement, programming and setup.

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DTC B1370 (Instrument Cluster)

Diagnostic Instructions

- Perform the Diagnostic System Check - Vehicle prior to using this diagnostic procedure.
- Review Strategy Based Diagnosis for an overview of the diagnostic approach.
- Diagnostic Procedure Instructions provides an overview of each diagnostic category.

DTC Descriptors

DTC B1370

Control Module Ignition On and Start Circuit

For symptom byte information refer to Symptom Byte List

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Instrument Cluster Ignition (Instrument Panel terminal 19)	B1370 06	B1370 06	B1370 01	—

Circuit/System Description

The vehicle power mode master is the body control module (BCM). The ignition switch is a low current switch with multiple discrete circuits to the BCM.

The power mode master will activate relays and other direct outputs of the power mode master as needed according to the calculated power mode. Some relays controlled by the BCM are switched ignition voltage outputs that are pass through circuits within the BCM directly from the ignition switch. If these circuits short to ground, the B+ circuit fuse to the ignition switch will open.

Conditions for Running the DTC

B1370 01

Ignition switch is in the Accessory position.

B1370 06

Ignition switch is in the Accessory, Run, or Crank positions.

Conditions for Setting the DTC

B1370 01

Ignition circuit is shorted to voltage.

B1370 06

- Ignition circuit is open.
- Ignition or run/crank relay coil control circuit is shorted to ground.
- Ignition run/crank relay coil control circuit open, including relay coil and ground.

Action Taken When the DTC Sets

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The instrument cluster still functions except check engine light is always off.

Conditions for Clearing the DTC

- The condition responsible for setting the DTC no longer exists.
- A history DTC will clear once 50 consecutive malfunction-free ignition cycles have occurred.

Reference Information

Schematic Reference

Instrument Cluster Schematics

Connector End View Reference

Component Connector End Views

Description and Operation

- Instrument Cluster Description and Operation
- Power Mode Description and Operation

Electrical Information Reference

- Circuit Testing
- Connector Repairs
- Testing for Intermittent Conditions and Poor Connections
- Wiring Repairs

Scan Tool Reference

Control Module References for scan tool information

Circuit/System Verification

1. Verify that DTC B144B or B1380 is not set.

⇒ **If DTC B144B or B1380 is set**

Refer to Diagnostic Trouble Code (DTC) List - Vehicle.

⇓ **If DTC B144B or B1380 is not set**

Refer to Circuit/System Testing.

Circuit/System Testing

1. Ignition OFF, disconnect the harness connector at the P16 Instrument Cluster.
2. Verify that a test lamp does not illuminate between the ignition circuit terminal 19 and ground.

⇒ **If the test lamp illuminates**

Repair the short to voltage on the ignition circuit.

⇓ **If the test lamp does not illuminate**

3. Ignition ON, verify that a test lamp illuminates between the ignition terminal 19 and ground.

⇒ **If the test lamp does not illuminate and the Ignition fuse is good**

3.1. Ignition OFF, remove the test lamp.

3.2. Test for less than 2 Ω in the ignition circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, refer to Power Mode Mismatch.

⇒ **If the test lamp does not illuminate and the Ignition fuse is open**

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3.1. Ignition OFF, remove the test lamp.
3.2. Test for infinite resistance between the ignition circuit and ground.
⇒ If less than infinite resistance, repair the short to ground on the circuit.
⇒ If infinite resistance, replace the P16 Instrument Cluster.

⇓ **If the test lamp illuminates**

4. Replace the P16 Instrument Cluster.

Repair Instructions

Perform the Diagnostic Repair Verification after completing the repair.

- Relay Replacement
- Control Module References for instrument cluster replacement, programming and setup.

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DTC B1370-B1379, B1380-B1389, or B1440-B1443

Diagnostic Instructions

- Perform the Diagnostic System Check - Vehicle prior to using this diagnostic procedure.
- Review Strategy Based Diagnosis for an overview of the diagnostic approach.
- Diagnostic Procedure Instructions provides an overview of each diagnostic category.

DTC Descriptors

DTC B1370

Control Module Ignition ON and Start Circuit

DTC B1380

Control Module Ignition Accessory Circuit

DTC B1441

Control Module Ignition OFF, Run, and Start Circuit

For symptom byte information refer to Symptom Byte List

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
B+ terminal 2	B1370 04, B1380 04	B1370 04, B1380 04	—	—
Ignition Terminal 1	B1370 04, B1380 04	B1370 04, B1380 04	B1370 01	—
Ignition Terminal 3	B1370 04, B1380 04	B1380 04	B1380 01	—
Ignition Terminal 4	B1370 04, B1380 04, B1441 04	B1441 04	B1441 01	—
5 V Reference	—	1	—	—
1. Power mode mismatch				

Circuit/System Description

The vehicle power mode master is the body control module (BCM). The ignition switch is a low current switch with multiple discrete circuits to the BCM. The BCM logic uses the ignition switch positions to identify the operator's desired power mode and activate specific discrete signals, and serial data messages for the operation of different subsystems as necessary. Other modules which have switched voltage inputs may operate in a default mode if the power mode master serial data message does not match what the individual module can detect from its own connections.

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The power mode master will activate relays and other direct outputs of the power mode master as needed according to the calculated power mode. Some relays controlled by the BCM are switched ignition voltage outputs that are pass through circuits within the BCM directly from the ignition switch. If these circuits short to ground, the B+ circuit fuse to the ignition switch will open.

Conditions for Running the DTC

B1370 01, B1370 04

Ignition switch is in the RUN or CRANK positions.

B1380 01, B1380 04

Ignition switch is in the RUN or ACCESSORY positions.

B1441 01, B1441 04

Ignition switch is in the CRANK position.

Conditions for Setting the DTC

B1370 01

Ignition circuit is shorted to voltage.

B1370 04

- Ignition circuit is open.
- Ignition, accessory, or off/run/crank circuit shorted to ground.
- B+ circuit of the ignition switch is open or shorted to ground.
- Ignition relay control circuit open, including relay coil and ground.

B1380 01

Ignition, accessory circuit is shorted to voltage.

B1380 04

- Ignition, accessory circuit is open.
- Ignition, accessory, or off/run/crank circuit shorted to ground.
- B+ circuit of the ignition switch is open or shorted to ground.

B1441 01

Ignition, off/run/crank signal circuit is shorted to voltage.

B1441 04

Ignition, off/run/crank signal circuit is open.

Actions Taken When the DTC Sets

- The BCM operates in a fail-safe power mode dependent on the last valid power mode detected and the state of the engine run flag data on the serial data communications circuits.
- The other modules on the vehicle operate in a fail-safe power mode dependent on the last valid power mode transmitted by the BCM and the state of the engine run flag on the serial data communications circuits.

Conditions for Clearing the DTC

- The condition responsible for setting the DTC no longer exists.

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- A history DTC will clear once 50 consecutive malfunction-free ignition cycles have occurred.

Diagnostic Aids

An open in the ignition switch B+ circuit or circuit fuse will cause the key in ignition warning chime to be inoperative.

Reference Information

Schematic Reference

Power Distribution Schematics

Connector End View Reference

Component Connector End Views

Description and Operation

Power Mode Description and Operation

Electrical Information Reference

- Circuit Testing
- Connector Repairs
- Testing for Intermittent Conditions and Poor Connections
- Wiring Repairs

Scan Tool Reference

Control Module References for scan tool information

Circuit/System Verification

1. Verify DTC U1814 is not set.

⇒ **If DTC is set**

Refer to Diagnostic Trouble Code (DTC) List - Vehicle.

⇓ **If DTC is not set**

2. Ignition ON.
3. Verify the scan tool power mode parameters change when cycling the S39 Ignition Switch between OFF, ACCESSORY, ON, and CRANK.

⇒ **If the power mode parameters do not change**

Refer to Circuit/System Testing.

⇓ **If the power mode parameters change**

4. All OK.

Circuit/System Testing

1. Ignition ON, disconnect the harness connector at the S39 Ignition Switch while the ignition is ON.
2. Verify a test lamp illuminates between the B+ circuit terminal 2 and ground.

⇒ **If the test lamp does not illuminate and the circuit fuse is good**

2.1. Ignition OFF, remove the test lamp.

2.2. Test for less than 2 Ω in the B+ circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, verify the fuse is not open and there is voltage at the fuse.

⇒ **If the test lamp does not illuminate and the circuit fuse is open**

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2.1. Ignition OFF, remove the test lamp.

2.2. Test for infinite resistance between the B+ circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on one of the following circuits listed below:

Note: To help isolate a short to ground, it may be necessary to disconnect modules that are connected to the following circuits:

- B+ circuit terminal 2
- Ignition circuit terminal 1
- Ignition circuit terminal 3
- Ignition circuit terminal 4

⇓ **If the test lamp illuminates**

3. Ignition ON.

4. Test for 4.8–5.2 V between the 5 V reference circuit terminal 6 and ground.

⇒ **If less than 4.8 V**

4.1. Ignition OFF, disconnect the X3 harness connector at the K9 Body Control Module.

4.2. Test for infinite resistance between the 5 V reference circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇓ If infinite resistance

4.3. Test for less than 2 Ω in the 5 V reference circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the K9 Body Control Module.

⇒ **If greater than 5.2 V**

4.1. Ignition OFF, disconnect the X3 harness connector at the K9 Body Control Module.

4.2. Test for less than 1 V between the 5 V reference circuit and ground.

⇒ If 1 V or greater, repair the short to voltage on the circuit.

⇒ If less than 1 V, replace the K9 Body Control Module.

⇓ **If between 4.8–5.2 V**

5. Connect the harness connector at the S39 Ignition Switch.

6. Ignition OFF.

7. Disconnect the X3 harness connector at the K9 Body Control Module, ignition ON.

8. Verify a test lamp illuminates between each of the ignition circuits listed below and ground:

- Ignition circuit terminal 5
- Ignition circuit terminal 6

⇒ **If the test lamp does not illuminate and the circuit fuse is good**

8.1. Ignition OFF, remove the test lamp.

8.2. Test for less than 2 Ω in the ignition circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, verify the fuse is not open and there is voltage at the fuse.

⇒ **If the test lamp does not illuminate and the circuit fuse is open**

8.1. Ignition OFF, remove the test lamp.

8.2. Test for infinite resistance between the ignition circuits listed below and ground.

- Ignition circuit terminal 5
- Ignition circuit terminal 6
- Ignition circuit terminal 15

⇒ If less than infinite resistance, repair the short to ground on the circuit.

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⇓ If infinite resistance, replace the K9 Body Control Module.

⇓ **If the test lamp illuminates**

9. Ignition OFF with the key in.
10. Verify a test lamp illuminates between ignition circuit terminal 15 and ground.

⇒ **If the test lamp does not illuminate and the circuit fuse is good**

10.1. Ignition OFF with the key out, remove the test lamp.
10.2. Test for less than 2 Ω in the ignition circuit end to end.
⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.
⇒ If less than 2 Ω, verify the fuse is not open and there is voltage at the fuse.

⇒ **If the test lamp does not illuminate and the circuit fuse is open**

10.1. Ignition OFF with the key out remove the test lamp.
10.2. Test for infinite resistance between the ignition circuit terminal 15 and ground.
⇒ If less than infinite resistance, repair the short to ground on the circuit.
⇓ If infinite resistance, replace the K9 Body Control Module.

⇓ **If the test lamp illuminates**

11. Connect the X3 harness connector at the K9 Body Control Module, ignition ON.
12. Disconnect the harness connector at the S39 Ignition Switch.
13. Test for less than 1 V between each of the ignition circuits listed below and ground.
    - Ignition circuit terminal 1
    - Ignition circuit terminal 3
    - Ignition circuit terminal 4

⇒ **If 1 V or greater**

Repair the short to voltage on the circuit.

⇓ **If less than 1 V**

14. Test or replace the S39 Ignition Switch.

Component Testing

1. Ignition OFF, disconnect the harness connector at the S39 Ignition Switch.
2. Using the Resistance Test below, verify the resistance between the terminals listed below match for each S39 Ignition Switch position.

⇒ **If any reading is other than specified**

Replace the S39 Ignition Switch.

⇓ **If the readings match**

3. All OK.

Resistance Test

Ignition Switch Position	Terminals 1 and 2	Terminals 2 and 3	Terminals 2 and 4	Terminals 2 and 6	Terminals 4 and 6
OFF Key Out	Infinite	Infinite	Infinite	Infinite	Infinite
OFF Key In	Infinite	Infinite	<5.0 Ω	Infinite	Infinite
ACCESSORY	Infinite	<5.0 Ω	Infinite	Infinite	Infinite
ON/RUN	<5.0 Ω	<5.0 Ω	Infinite	Infinite	<5.0 Ω

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Ignition Switch Position	Terminals 1 and 2	Terminals 2 and 3	Terminals 2 and 4	Terminals 2 and 6	Terminals 4 and 6
CRANK	<5.0 Ω	Infinite	Infinite	Infinite	1275–1325 Ω

Repair Instructions

Perform the Diagnostic Repair Verification after completing the repair.

- Ignition and Start Switch Replacement
- Control Module References for body control module replacement, programming and setup.

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DTC B1445

Diagnostic Instructions

- Perform the Diagnostic System Check - Vehicle prior to using this diagnostic procedure.
- Review Strategy Based Diagnosis for an overview of the diagnostic approach.
- Diagnostic Procedure Instructions provides an overview of each diagnostic category.

DTC Descriptor

DTC B1445

Control Module Voltage Output Circuit Short

For symptom byte information refer to Symptom Byte List

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Relay Coil Control	B1445 02	B1445 04	B1445 01	—
Ground	—	B1445 04	—	—

Circuit/System Description

The body control module (BCM) controls the retained accessory power relay through the control circuit by applying voltage to the retained accessory power relay coil control circuit. The retained accessory power relay is energized when the ignition switch is in the ACCESSORY or the ON position.

Conditions for Running the DTC

The system voltage is between 9–16 V.

Conditions for Setting the DTC

The DTC will set only when the module requests the output and there is a short to ground in the ignition voltage circuit.

B1445 01

The ignition output is not active and a short to battery is detected 3 consecutive times on the ignition voltage circuit.

B1445 02

A short to ground is detected on the retained accessory power relay coil control circuit.

B1445 04

The ignition output is not active and an open is detected 20 consecutive times on the ignition voltage circuit.

Action Taken When the DTC Sets

B1445 01, B1445 04

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No action is taken.

B1445 02

The module output driver will be shut down and not supply voltage to the circuit.

Conditions for Clearing the DTC

- The current DTC will clear when the malfunction is no longer present.
- A history DTC clears when the module ignition cycle counter reaches the reset threshold of 50, without a repeat of the malfunction.

Reference Information

Schematic Reference

Power Moding Schematics

Connector End View Reference

Component Connector End Views

Description and Operation

Retained Accessory Power Description and Operation

Electrical Information Reference

- Circuit Testing
- Connector Repairs
- Testing for Intermittent Conditions and Poor Connections
- Wiring Repairs

Scan Tool Reference

Control Module References for scan tool information

Circuit/System Verification

1. Ignition ON.
2. Verify the KR76 Retained Accessory Power Relay clicks ON and OFF when commanding the Accessory/Retained Accessory Power Relay On and Off with a scan tool.

⇒ **If the KR76 Retained Accessory Power Relay does not click ON and OFF**

Refer to Circuit/System Testing.

⇓ **If the KR76 Retained Accessory Power Relay clicks ON and OFF**

3. All OK.

Circuit/System Testing

1. Ignition OFF and all vehicle systems OFF, disconnect the KR76 Retained Accessory Power Relay. It may take up to 2 min for all vehicle systems to power down.
2. Test for less than 10 Ω between the ground circuit terminal 86 and ground.

⇒ **If 10 Ω or greater**

2.1. Ignition OFF.

2.2. Test for less than 2 Ω in the ground circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, repair the open/high resistance in the ground connection.

⇓ **If less than 10 Ω**

3. Ignition ON, connect a test lamp between the control circuit terminal 85 and ground circuit terminal 86.

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4. Verify the test lamp turns ON and OFF when commanding the Accessory/Retained Accessory Power Relay On and Off with a scan tool.

⇒ **If the test lamp is always OFF**

4.1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K9 Body Control Module.

4.2. Test for infinite resistance between the control circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇓ If infinite resistance

4.3. Test for less than 2 Ω in the control circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the K9 Body Control Module.

⇒ **If the test lamp is always ON**

4.1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K9 Body Control Module, ignition ON.

4.2. Test for less than 1 V between the control circuit and ground.

⇒ If 1 V or greater, repair the short to voltage on the circuit.

⇒ If less than 1 V, replace the K9 Body Control Module.

⇓ **If the test lamp turns ON and OFF**

5. Test or replace the KR76 Retained Accessory Power Relay.

Repair Instructions

Perform the Diagnostic Repair Verification after completing the repair.

- Relay Replacement
- Control Module References for body control module replacement, programming and setup.

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DTC B144B

Diagnostic Instructions

- Perform the Diagnostic System Check - Vehicle prior to using this diagnostic procedure.
- Review Strategy Based Diagnosis for an overview of the diagnostic approach.
- Diagnostic Procedure Instructions provides an overview of each diagnostic category.

DTC Descriptors

DTC B144B

Run/Start Power Relay Circuit

For symptom byte information refer to Symptom Byte List

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Ignition	B144B 02*	B144B 04*	B144B 01*	—
Control	B144B 02**	1	2	—
Ground	—	B144B 04*	—	—

1. No Start
2. Engine will continue to run after the ignition is turned OFF
* DTC set in keyless entry control module
** DTC Set in BCM

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Circuit/System Description

The body control module (BCM) controls the ignition main relay through the control circuit by applying voltage to the ignition run/crank relay coil control circuit. The ignition main relay is energized when the ignition is in the ON, CRANK positions, or when a remote start is requested.

The keyless entry control module controls the backup power for the ignition main relay through the control circuit by applying voltage to the ignition circuit. This circuit is a pass-thru in the BCM and will energize the ignition circuit when the vehicle is in the ON, CRANK positions or when a remote start is requested.

Conditions for Running the DTC

System voltage greater than 9 V.

Conditions for Setting the DTC

B144B 01

The ignition output is not active and a short to battery is detected 3 consecutive times on the ignition voltage circuit.

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B144B 02

A short to ground is detected on the ignition run/crank relay coil control circuit.

B144B 04

The ignition output is not active and an open is detected 20 consecutive times on the ignition voltage circuit.

Action Taken When the DTC Sets

B144B 01, B144B 04

No action is taken.

B144B 02

The ignition main relay is deactivated when the fault is set. After 100 ms, the ignition main relay will be activated. If the fault is still set, the relay will be deactivated. The ignition main relay will again be activated after 100 ms. If this also results in a fault, the ignition main relay will be deactivated until a new ignition request is received.

Conditions for Clearing the DTC

- The current DTC will clear when the malfunction is no longer present and an ignition request is received.
- A history DTC will clear after 40 malfunction-free ignition cycles.

Diagnostic Aids

A short to ground on the ignition run/crank relay coil control circuit will cause the engine to remain running after the mode is changed to OFF.

An open on the ignition run/crank relay coil control circuit will cause a no CRANK condition.

Reference Information

Schematic Reference

Power Moding Schematics

Connector End View Reference

Component Connector End Views

Description and Operation

Power Mode Description and Operation

Electrical Information Reference

- Circuit Testing
- Connector Repairs
- Testing for Intermittent Conditions and Poor Connections
- Wiring Repairs

Scan Tool Reference

Control Module References for scan tool information

Circuit/System Verification

1. Ignition ON.
2. Verify the KR73 Ignition Main Relay clicks ON and OFF when commanding the Run/Crank Relay On and Off with a scan tool.

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⇒ **If the KR73 Ignition Main Relay does not click ON and OFF**

Refer to Circuit/System Testing.

⇓ **If the KR73 Ignition Main Relay clicks ON and OFF**

3. All OK.

Circuit/System Testing

Without ATH/BTM

1. Ignition OFF and all vehicle systems OFF, disconnect the KR73 Ignition Main Relay. It may take up to 2 min for all vehicle systems to power down.
2. Test for less than 10 Ω between the ground circuit terminal 86 and ground.

⇒ **If 10 Ω or greater**

2.1. Ignition OFF.

2.2. Test for less than 2 Ω in the ground circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, repair the open/high resistance in the ground connection.

⇓ **If less than 10 Ω**

3. Ignition ON, connect a test lamp between the control circuit terminal 85 and ground circuit terminal 86.
4. Verify the test lamp turns ON and OFF when commanding the Run/Crank Relay On and Off with a scan tool.

⇒ **If the test lamp is always OFF**

4.1. Ignition OFF, remove the test lamp. disconnect the harness connector at the K9 Body Control Module.

4.2. Test for infinite resistance between the control circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇓ If infinite resistance

4.3. Test for less than 2 Ω in the control circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the K9 Body Control Module.

⇒ **If the test lamp is always ON**

4.1. Ignition OFF, disconnect the harness connector at the K9 Body Control Module, ignition ON.

4.2. Test for less than 1 V between the control circuit and ground.

⇒ If 1 V or greater, repair the short to voltage on the circuit.

⇒ If less than 1 V, replace the K9 Body Control Module.

⇓ **If the test lamp turns ON and OFF**

5. Test or replace the KR73 Ignition Main Relay.

With ATH/BTM

1. Ignition ON, disconnect the X2 harness connector at the K84 Keyless Entry Control Module.
2. Verify a test lamp illuminates between the B+ circuit terminal 5 and ground.

⇒ **If the test lamp does not illuminate and the circuit fuse is good**

2.1. Ignition OFF, remove the test lamp.

2.2. Test for less than 2 Ω in the B+ circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, verify the fuse is not open and there is voltage at the fuse.

⇒ **If the test lamp does not illuminate and the circuit fuse is open**

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2.1. Ignition OFF, remove the test lamp.

2.2. Test for infinite resistance between the ignition circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇒ If infinite resistance, replace the K84 Keyless Entry Control Module.

⇓ **If the test lamp illuminates**

3. Ignition OFF, connect the X2 harness connector at the K84 Keyless Entry Control Module and disconnect the X2 harness connector at the K9 Body Control Module.
4. Test for less than 1 V between the ignition circuit terminal 6 and ground.

⇒ **If 1 V or greater**

Repair the short to voltage on the circuit.

⇓ **If less than 1 V**

5. Ignition ON.
6. Verify a test lamp illuminates between the ignition circuit terminal 6 and ground.

⇒ **If the test lamp does not illuminate**

6.1. Ignition OFF, remove the test lamp.

6.2. Test for infinite resistance between the ignition circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇓ If infinite resistance.

6.3. Test for less than 2 Ω in the ignition circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the K84 Keyless Entry Control Module.

⇓ **If the test lamp illuminates**

7. Ignition OFF, remove the test lamp, connect the X3 harness connector at the K9 Body Control Module.
8. Ignition OFF and all vehicle systems OFF, disconnect the KR73 Ignition Main Relay. It may take up to 2 min for all vehicle systems to power down.
9. Test for less than 10 Ω between the ground circuit terminal 86 and ground.

⇒ **If 10 Ω or greater**

9.1. Ignition OFF.

9.2. Test for less than 2 Ω in the ground circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, repair the open/high resistance in the ground connection.

⇓ **If less than 10 Ω**

10. Connect a test lamp between the control circuit terminal 85 and the ground circuit terminal 86.
11. Verify the test lamp turns ON and OFF when commanding the Run/Crank Relay On and Off with a scan tool.

⇒ **If the test lamp is always OFF**

11.1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K9 Body Control Module.

11.2. Test for infinite resistance between the control circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇓ If infinite resistance.

11.3. Test for less than 2 Ω in the control circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the K9 Body Control Module.

⇒ **If the test lamp is always ON**

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11.1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K9 Body Control Module, ignition ON.

11.2. Test for less than 1 V between the control circuit and ground.

⇒ If 1 V or greater, repair the short to voltage on the circuit.

⇒ If less than 1 V, replace the K9 Body Control Module.

⇓ **If the test lamp turns ON and OFF**

12. Test or replace the KR73 Ignition Main Relay.

Repair Instructions

Perform the Diagnostic Repair Verification after completing the repair.

- Relay Replacement
- Control Module References for body control module or keyless entry control module replacement, programming and setup.

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DTC B1451

Diagnostic Instructions

- Perform the Diagnostic System Check - Vehicle prior to using this diagnostic procedure.
- Review Strategy Based Diagnosis for an overview of the diagnostic approach.
- Diagnostic Procedure Instructions provides an overview of each diagnostic category.

DTC Descriptors

DTC B1451

Accessory Power Circuit

For symptom byte information refer to Symptom Byte List

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Ignition	B1451 02	B1451 04	B1451 01	—

Circuit/System Description

The keyless entry control module provides as a backup control for the ignition power circuit, by applying voltage to the ignition power circuit. The ignition power circuit is energized when the vehicle power mode is in ACCESSORY mode or Ignition ON mode.

Conditions for Running the DTC

B1451 01, B1451 04

- Vehicle power mode is Ignition OFF
- Module is awake
- DTC B1451 not already set
- System voltage between 6 and 16 V

B1451 02

- Vehicle power mode is ACCESSORY or Ignition ON mode
- Module is awake
- The DTC is only run when the output is active
- DTC B1451 is not already set
- System voltage between 6 and 16 V

Conditions for Setting the DTC

B1451 01

Ignition output is not active and a short to battery is detected 3 consecutive times.

B1451 02

Ignition output is active and a short to ground is detected 3 consecutive times.

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B1451 04

Ignition output is not active and an open circuit is detected 20 consecutive times.

Action Taken When the DTC Sets

B1451 02

The ignition output is deactivated when a short to ground is detected. After 100 ms the output is activated again. This happens 3 times and then the output is deactivated until a new ACCESSORY or Ignition ON mode request is received.

B1451 01, B1451 04

No action is taken.

Conditions for Clearing the DTC

- The current DTC will clear when the malfunction is no longer present during a DTC check.
- A history DTC clears when the module power mode cycle counter reaches the reset threshold of 40, without a repeat of the malfunction.

Diagnostic Aids

- A short to voltage in the ignition control circuit will keep the vehicle modules awake, which can drain the vehicle's battery.
- A short to ground in the extension of this circuit through the body control module can back feed to the keyless entry control module. Check for a short to ground on the ignition circuit on the other side of the ignition pass thru, in the body control module, before replacing the body control module.

Reference Information

Schematic Reference

- Power Distribution Schematics
- Remote Function Schematics
- Body Control System Schematics

Connector End View Reference

Component Connector End Views

Description and Operation

Power Mode Description and Operation

Electrical Information Reference

- Circuit Testing
- Connector Repairs
- Testing for Intermittent Conditions and Poor Connections
- Wiring Repairs

Scan Tool Reference

Control Module References for scan tool information

Circuit/System Verification

1. Verify DTC U1814 or B1380 is not set.

⇒ **If any of the DTCs are set**
Refer to Diagnostic Trouble Code (DTC) List - Vehicle.

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⇓ **If none of the DTCs are set**

2. Refer to Circuit/System Testing.

Circuit/System Testing

1. Ignition ON, disconnect the X2 harness connector at the K84 Keyless Entry Control Module.
2. Verify a test lamp illuminates between the B+ circuit terminal 5 and ground.

⇒ **If the test lamp does not illuminate and the circuit fuse is good**

2.1. Ignition OFF, remove the test lamp.

2.2. Test for less than 2 Ω in the B+ circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, verify the fuse is good and there is voltage at the fuse.

⇒ **If the test lamp does not illuminate and the circuit fuse is open**

2.1. Ignition OFF, remove the test lamp.

2.2. Test for infinite resistance between the B+ circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇒ If infinite resistance, replace the K84 Keyless Entry Control Module.

⇓ **If the test lamp illuminates**

3. Ignition OFF, connect the X2 harness connector at the K84 Keyless Entry Control Module and disconnect the X3 harness connector at the K9 Body Control Module.
4. Test for less than 1 V between the ignition circuit terminal 5 and ground.

⇒ **If 1 V or greater**

Repair the short to voltage on the circuit.

⇓ **If less than 1 V**

5. Ignition ON.
6. Verify a test lamp illuminates between the ignition circuit terminal 5 and ground.

⇒ **If the test lamp does not illuminate**

6.1. Ignition OFF, remove the test lamp.

6.2. Test for infinite resistance between the ignition circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇓ If infinite resistance.

6.3. Test for less than 2 Ω in the ignition circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the K84 Keyless Entry Control Module.

⇓ **If the test lamp illuminates**

7. Replace the K9 Body Control Module.

Repair Instructions

Perform the Diagnostic Repair Verification after completing the repair.

Control Module References for keyless entry control module or body control module replacement, programming and setup.

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DTC B147E or B147F

Diagnostic Instructions

- Perform the Diagnostic System Check - Vehicle prior to using this diagnostic procedure.
- Review Strategy Based Diagnosis for an overview of the diagnostic approach.
- Diagnostic Procedure Instructions provides an overview of each diagnostic category.

DTC Descriptors

DTC B147E

Battery Saver Relay Set Secondary Circuit

DTC B147F

Battery Saver Relay Reset Secondary Circuit

For symptom byte information refer to Symptom Byte List

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
F4DA (BCM 2) Fuse B+	B147F 01, B147F 04	B147F 01, B147F 04	—	—
Set Relay Coil Control	B147E 02	B147E 04	B147E 01	—
Reset Relay Coil Control	B147F 02	B147F 04	B147F 01	—

Circuit/System Description

The battery saver mode (transport mode) reduces the parasitic load of some modules during overseas shipment or during vehicle storage conditions. This improves the drain time on the battery (up to 70 days without the battery going dead). When the vehicle is in transport/storage, some features may have reduced functionality while in the battery saver mode (transport mode), such as disabling the keyless entry or content theft features.

The battery saver mode (transport mode) incorporates a latching relay that when enabled disconnects some modules from their ignition power or memory power sources. Battery saver mode (transport mode) is initiated by turning on the hazard flashers and then turning the ignition key into the crank position or pushing the push button start switch (if equipped) for greater than 15 s. The mode is disengaged by repeating the previous process. After battery saver mode (transport mode) has been enabled, the body control module (BCM) may not send the command to unlatch the relay until after the ignition has been switched to the off position for up to 1 min. In battery saver mode (transport mode) the BCM will send a command to latch the relay for operation of those modules while the ignition is in the RUN position and then again unlatching the relay after the ignition is turned off. The driver information center (if equipped) will display Transport Mode is On when the transport mode is enabled and Transport Mode is Off when the transport mode is disabled. For vehicles not equipped with a driver information center, the battery indicator light will constantly flash on the instrument cluster when transport mode is enabled. This feature can be used as many times as necessary if the vehicle is to be stored for an extended period of time.

Conditions for Running the DTC

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- The system voltage is between 9–16 V.
- The DTC can only run when the output is activated.

Conditions for Setting the DTC

B147E 01 or B147F 01

The BCM detects short to battery in the battery saver relay set/reset circuits.

B147E 02 or B147F 02

The BCM detects a short to ground in the battery saver relay set/reset circuits.

B147E 04 or B147F 04

The BCM detects an open/high resistance in the battery saver relay set/reset circuits.

Action Taken When the DTC Sets

B147E 01, B147E 04, B147F 01, and B147F 04

No action is taken.

B147E 02 and B147F 02

The module output driver will be shut down and not supply voltage to the battery saver relay set/reset circuits.

Conditions for Clearing the DTC

- The current DTC will clear when the module request for the output is removed or the malfunction is no longer present.
- A history DTC clears when the module ignition cycle counter reaches the reset threshold of 50, without a repeat of the malfunction.

Reference Information

Schematic Reference

- Power Moding Schematics
- Power Distribution Schematics

Connector End View Reference

Component Connector End Views

Description and Operation

Power Mode Description and Operation

Electrical Information Reference

- Circuit Testing
- Connector Repairs
- Testing for Intermittent Conditions and Poor Connections
- Wiring Repairs

Scan Tool Reference

Control Module References for scan tool information

Circuit/System Verification

1. Ignition ON.

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2. Verify the KR104A Battery Saver Relay 1 clicks ON and OFF when enabling and disabling the battery saver mode.

⇒ **If the KR104A Battery Saver Relay 1 does not click ON and OFF**

Refer to Circuit/System Testing. – Diagnostic A.

⇓ **If the KR104A Battery Saver Relay 1 clicks ON and OFF**

3. Verify the KR104B Battery Saver Relay 2 clicks ON and OFF when enabling and disabling the battery saver mode.

⇒ **If the KR104B Battery Saver Relay 2 does not click ON and OFF**

Refer to Circuit/System Testing. – Diagnostic B.

⇓ **If the KR104B Battery Saver Relay 2 clicks ON and OFF**

4. All OK.

Circuit/System Testing

Diagnostic A

1. Ignition OFF, disconnect the X1 harness connector at the K9 Body Control Module, Ignition ON.
2. Verify a test lamp illuminates between the B+ circuit terminal 4 and ground.

⇒ **If the test lamp does not illuminate and the circuit fuse is good**

2.1. Ignition OFF, remove the test lamp.

2.2. Test for less than 2 Ω in the B+ circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, verify the fuse is not open and there is voltage at the fuse.

⇒ **If the test lamp does not illuminate and the circuit fuse is open**

2.1. Ignition OFF, remove the test lamp.

2.2. Test for infinite resistance between the B+ circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇓ If infinite resistance, replace the K9 Body Control Module

⇓ **If the test lamp illuminates**

3. Ignition OFF, Connect the X1 harness connector at the K9 Body Control Module.
4. Ignition OFF and all vehicle systems OFF, disconnect the KR104A Battery Saver Relay 1. It may take up to 2 min for all vehicle systems to power down.
5. Test for less than 10 Ω between the ground circuit terminal 6 and ground.

⇒ **If 10 Ω or greater**

5.1. Ignition OFF.

5.2. Test for less than 2 Ω in the ground circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, repair the open/high resistance in the ground connection.

⇓ **If less than 10 Ω**

6. Ignition ON.
7. Verify a test lamp illuminates between the B+ circuit terminal 5 and ground.

⇒ **If the test lamp does not illuminate and the circuit fuse is good**

7.1. Ignition OFF, remove the test lamp.

7.2. Test for less than 2 Ω in the B+ circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, verify the fuse is not open and there is voltage at the fuse.

⇒ **If the test lamp does not illuminate and the circuit fuse is open**

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7.1. Ignition OFF, remove the test lamp.

7.2. Test for infinite resistance between the B+ circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇓ If infinite resistance, replace the KR104B Battery Saver Relay 1.

⇓ **If the test lamp illuminates**

8. Connect a test lamp between the control circuit terminal 1 and ground.
9. Verify the test lamp turns ON and OFF when enabling and disabling the battery saver mode.

⇒ **If the test lamp is always OFF**

9.1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K9 Body Control Module.

9.2. Test for infinite resistance between the control circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇓ If infinite resistance

9.3. Test for less than 2 Ω in the control circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the K9 Body Control Module.

⇒ **If the test lamp is always ON**

9.1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K9 Body Control Module, ignition ON.

9.2. Test for less than 1 V between the control circuit and ground.

⇒ If 1 V or greater, repair the short to voltage on the circuit.

⇒ If less than 1 V, replace the K9 Body Control Module.

⇓ **If the test lamp turns ON and OFF**

10. Connect a test lamp between the control circuit terminal 2 and ground.
11. Verify the test lamp turns ON and OFF when enabling and disabling the battery saver mode.

⇒ **If the test lamp is always OFF**

11.1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K9 Body Control Module.

11.2. Test for infinite resistance between the control circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇓ If infinite resistance

11.3. Test for less than 2 Ω in the control circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the K9 Body Control Module.

⇒ **If the test lamp is always ON**

11.1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K9 Body Control Module, ignition ON.

11.2. Test for less than 1 V between the control circuit and ground.

⇒ If 1 V or greater, repair the short to voltage on the circuit.

⇒ If less than 1 V, replace the K9 Body Control Module.

⇓ **If the test lamp turns ON and OFF**

12. Verify that a test lamp does not illuminate between the ignition circuit terminal 3 and ground.

⇒ **If the test lamp illuminates**

Repair the short to voltage on the ignition circuit

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⇓ **If the test lamp does not illuminate**

13. Ignition ON, connect a 40 A fused jumper wire between the B+ circuit terminal 5 and the ignition circuit terminal 3.
14. Verify device is activated.

⇒ **If the device does not activate**

14.1. Ignition OFF, disconnect the harness connector at the device.

14.2. Test for infinite resistance between the ignition circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇓ If infinite resistance

14.3. Test for less than 2 Ω in the ignition circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the device.

⇓ **If the device activates**

15. Test or replace the KR104A Battery Saver Relay 1.

Diagnostic B

1. Ignition OFF, disconnect the X1 harness connector at the K9 Body Control Module, ignition ON.
2. Verify a test lamp illuminates between the B+ circuit terminal 4 and ground.

⇒ **If the test lamp does not illuminate and the circuit fuse is good**

2.1. Ignition OFF, remove the test lamp.

2.2. Test for less than 2 Ω in the B+ circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, verify the fuse is not open and there is voltage at the fuse.

⇒ **If the test lamp does not illuminate and the circuit fuse is open**

2.1. Ignition OFF, remove the test lamp.

2.2. Test for infinite resistance between the B+ circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇓ If infinite resistance, replace the K9 Body Control Module

⇓ **If the test lamp illuminates**

3. Ignition OFF, Connect the X1 harness connector at the K9 Body Control Module.
4. Ignition OFF and all vehicle systems OFF, disconnect the KR104B Battery Saver Relay 2. It may take up to 2 min for all vehicle systems to power down.
5. Test for less than 10 Ω between the ground circuit terminal 6 and ground.

⇒ **If 10 Ω or greater**

5.1. Ignition OFF.

5.2. Test for less than 2 Ω in the ground circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, repair the open/high resistance in the ground connection.

⇓ **If less than 10 Ω**

6. Ignition ON.
7. Verify a test lamp illuminates between the B+ circuit terminal 3 and ground.

⇒ **If the test lamp does not illuminate**

Replace the X53A Fuse Block - Rear Body.

⇓ **If the test lamp illuminates**

8. Connect a test lamp between the control circuit terminal 1 and ground.

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9. Verify the test lamp turns ON and OFF when enabling and disabling the battery saver mode.

⇒ **If the test lamp is always OFF**

9.1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K9 Body Control Module.

9.2. Test for infinite resistance between the control circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇓ If infinite resistance

9.3. Test for less than 2 Ω in the control circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the K9 Body Control Module.

⇒ **If the test lamp is always ON**

9.1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K9 Body Control Module, ignition ON.

9.2. Test for less than 1 V between the control circuit and ground.

⇒ If 1 V or greater, repair the short to voltage on the circuit.

⇒ If less than 1 V, replace the K9 Body Control Module.

⇓ **If the test lamp turns ON and OFF**

10. Connect a test lamp between the control circuit terminal 2 and ground.

11. Verify the test lamp turns ON and OFF when enabling and disabling the battery saver mode.

⇒ **If the test lamp is always OFF**

11.1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K9 Body Control Module.

11.2. Test for infinite resistance between the control circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇓ If infinite resistance

11.3. Test for less than 2 Ω in the control circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the K9 Body Control Module.

⇒ **If the test lamp is always ON**

11.1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K9 Body Control Module, ignition ON.

11.2. Test for less than 1 V between the control circuit and ground.

⇒ If 1 V or greater, repair the short to voltage on the circuit.

⇒ If less than 1 V, replace the K9 Body Control Module.

⇓ **If the test lamp turns ON and OFF**

12. Verify that a test lamp does not illuminate between the ignition circuit terminal 5 and ground.

⇒ **If the test lamp illuminates**

Repair the short to voltage on the ignition circuit

⇓ **If the test lamp does not illuminate**

13. Ignition ON, connect a 40 A fused jumper wire between the B+ circuit terminal 3 and the ignition circuit terminal 5.

14. Verify device is activated.

⇒ **If the device does not activate**

14.1. Ignition OFF, disconnect the harness connector at the device.

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14.2. Test for infinite resistance between the ignition circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇓ If infinite resistance

14.3. Test for less than 2 Ω in the ignition circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the device.

⇓ **If the device activates**

15. Test or replace the KR104B Battery Saver Relay 2.

Component Testing

Relay Test

1. Ignition OFF, disconnect the appropriate KR104A Battery Saver Relay 1 or KR104B Battery Saver Relay 2.
2. Test for 70–150 Ω between the following terminals.
    - 1 and 6
    - 2 and 6

⇒ **If less than 70 or greater than 150 Ω**

Replace the relay.

⇓ **If between 70–150 Ω**

3. Install a 3 A fused jumper wire between relay terminal 2 and 12 V. Install a jumper wire between relay terminal 6 and ground.
4. Test for infinite resistance between the following terminals:
    - 3 and 6
    - 3 and 5
    - 3 and 1
    - 3 and 2
    - 1 and 5
    - 2 and 5

⇒ **If less than infinite resistance**

Replace the relay.

⇓ **If infinite resistance**

5. Install a 3 A fused jumper wire between relay terminal 1 and 12 V. Install a jumper wire between relay terminal 6 and ground.
6. Test for less than 5.0 Ω between terminals 3 and 5.

⇒ **If 5.0 Ω or greater**

Replace the relay.

⇓ **If less than 5.0 Ω**

7. All OK

Repair Instructions

Perform the Diagnostic Repair Verification after completing the repair.

- Relay Replacement
- Control Module References for body control module replacement, programming and setup.

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DTC P2534 or P2535

Diagnostic Instructions

- Perform the Diagnostic System Check - Vehicle prior to using this diagnostic procedure.
- Review Strategy Based Diagnosis for an overview of the diagnostic approach.
- Diagnostic Procedure Instructions provides an overview of each diagnostic category.

DTC Descriptors

DTC P2534

Ignition On/Start Switch Circuit Low Voltage

DTC P2535

Ignition On/Start Switch Circuit High Voltage

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Ignition	P2534	P2534	P2535	—
Ground	—	P2534	—	—

Circuit/System Description

The body control module (BCM) controls the ignition main relay through the control circuit by applying voltage to the circuit. The control module samples the system voltage on the Ignition 1 voltage circuit from the ignition main relay every 0.1 s.

Conditions for Running the DTC

P2534

The control module ignition voltage signal is valid, with the ignition ON.

P2535

The control module ignition voltage signal is valid, with the ignition OFF.

Conditions for Setting the DTC

P2534

The control module detects 6 V or less on the ignition voltage circuit, with the ignition turned ON.

P2535

The control module detects greater than 6 V or greater on the ignition voltage circuit, with the ignition turned OFF.

Action Taken When the DTC Sets

DTCs P2534 and P2535 are Type A DTCs.

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Conditions for Clearing the DTC

DTCs P2534 and P2535 are Type A DTCs.

Diagnostic Aids

A short to voltage in the ignition circuit will keep the vehicle modules awake, which can drain the vehicle's battery.

Reference Information

Schematic Reference

Power Distribution Schematics

Connector End View Reference

Component Connector End Views

Electrical Information Reference

- Circuit Testing
- Connector Repairs
- Testing for Intermittent Conditions and Poor Connections
- Wiring Repairs

Description and Operation

Power Mode Description and Operation

DTC Type Reference

Powertrain Diagnostic Trouble Code (DTC) Type Definitions

Scan Tool Reference

Control Module References for scan tool information

Circuit/System Verification

1. Engine running.
2. Verify DTC B144B is not set.

⇒ **If the DTC is set**

Refer to DTC B144B.

⇓ **If the DTC is not set**

3. Verify the scan tool control module Ignition 1 Signal parameter is between 12.6–15 V.

⇒ **If not between 12.6–15 V**

Refer to Circuit/System Testing.

⇓ **If between 12.6–15 V**

4. Verify that the DTC does not reset by operating the vehicle within the Conditions for Running the DTC. You may also operate the vehicle within the conditions you observe from the Freeze Frame/Failure Records data. If the vehicle passes the Circuit/System Verification procedure, then STOP. Do not perform the Circuit/System Testing or Component Testing as this may result in an unnecessary part replacement. Refer to Testing for Intermittent Conditions and Poor Connections.

Circuit/System Testing

1. Ignition OFF, and all vehicle systems OFF, disconnect the appropriate harness connector at the control module setting the DTC.
2. Test for less than 1 V between the ignition circuit terminal and ground.

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⇒ **If 1 V or greater**

Repair the short to voltage on the circuit.

⇓ **If less than 1 V**

3. Ignition ON.
4. Verify a test lamp illuminates between the ignition circuit terminal and ground.

⇒ **If the test lamp does not illuminate and the circuit fuse is good**

4.1. Ignition OFF remove the test lamp.

4.2. Test for less than 2 Ω in the ignition circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, refer to Power Mode Mismatch.

⇒ **If the test lamp does not illuminate and the circuit fuse is open**

4.1. Ignition OFF remove the test lamp

4.2. Test for infinite resistance between the ignition circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇓ **If the test lamp illuminates**

5. Replace the control module setting the DTC.

Repair Instructions

Perform the Diagnostic Repair Verification after completing the repair.

Refer to Control Module References for control module replacement, programming, and setup.

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DTC P2537

Diagnostic Instructions

- Perform the Diagnostic System Check - Vehicle prior to using this diagnostic procedure.
- Review Strategy Based Diagnosis for an overview of the diagnostic approach.
- Diagnostic Procedure Instructions provides an overview of each diagnostic category.

DTC Descriptor

DTC P2537

Ignition Accessory Switch Circuit Low Voltage

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Ignition	P2537	P2537	—	—
Ground	—	P2537	—	—

Circuit/System Description

The transmission control module (TCM) continuously monitors the voltage on the Ignition Accessory/Run circuit from the body control module (BCM). When the ignition switch is in the ACCESSORY or RUN position, the BCM sends a 12 V wake up signal to the TCM. This wake up signal allows the TCM to power up and start functioning before the engine is started.

Conditions for Running the DTC

The ignition switch is in the Accessory or Run position.

Conditions for Setting the DTC

The TCM detects the Ignition Accessory/Run circuit is less than 6 V for 1 minute.

Action Taken When the DTC Sets

DTC P2537 is a Type C DTC.

Conditions for Clearing the DTC

DTC P2537 is a Type C DTC.

Reference Information

Schematic Reference

Automatic Transmission Controls Schematics

Connector End View Reference

- Component Connector End Views
- Inline Harness Connector End Views

Description and Operation

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- Transmission General Description
- Transmission Component and System Description
- Electronic Component Description

Electrical Information Reference

- Circuit Testing
- Connector Repairs
- Testing for Intermittent Conditions and Poor Connections
- Wiring Repairs

DTC Type Reference

Powertrain Diagnostic Trouble Code (DTC) Type Definitions

Scan Tool Reference

Control Module References for scan tool information

Special Tools

DT-47825-10 Jumper Harness

For equivalent regional tools, refer to Special Tools.

Circuit/System Verification

1. Ignition in the ACCESSORY position.
2. Verify the scan tool BCM Accessory Relay Command parameter is Active.

⇒ **If the parameter is not Active**
Refer to Power Mode Mismatch.

⇓ **If the parameter is Active**

3. Ignition ON.
4. Verify the scan tool BCM Accessory Relay Command parameter is Active.

⇒ **If the parameter is not Active**
Refer to Power Mode Mismatch.

⇓ **If the parameter is Active**

5. Ignition ON, clear all DTCs in the K9 Body Control Module and the K71 Transmission Control Module, ignition OFF for 2 min.
6. Engine Running for 1 min with the transmission in Park.
7. Verify DTC P2537 is not set in the K71 Transmission Control Module.

⇒ **If DTC P2537 is set**
Refer to Circuit/System Testing.

⇓ **If DTC P2537 is not set**

8. After performing the above steps, verify that the DTC does not set by operating the vehicle within the Conditions for Running the DTC. You may also operate the vehicle within the conditions you observe from the Freeze Frame/Failure Records data. If the vehicle passes the Circuit/System Verification procedure, then STOP. Do not perform the Circuit/System Testing or Component Testing as this may result in an unnecessary part replacement. Refer to Testing for Intermittent Conditions and Poor Connections.

Circuit/System Testing

1. Ignition OFF, disconnect the harness connector at the T12 Automatic Transmission Assembly. Install the *DT-47825-10* Jumper harness to the X1 vehicle wire harness connector.
2. Ignition ON.

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3. Verify a test lamp illuminates between the ignition circuit terminal 9 and ground.

⇒ **If the test lamp does not illuminate.**

3.1. Ignition OFF remove the test lamp.

3.2. Test for infinite resistance between the ignition circuit and ground.

⇒ If less than infinite resistance, repair the short to ground in the circuit.

⇓ If infinite resistance

3.3. Test for less than 2 Ω on the ignition circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the K9 Body Control Module.

⇓ **If the test lamp illuminates**

4. Replace the K71 Transmission Control Module.

Repair Instructions

Perform the Diagnostic Repair Verification after completing the repair.

Refer to Control Module References for body control module or transmission control module replacement, programming, and setup.

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Symptoms - Wiring Systems

Note: The following steps must be completed before using the symptom tables.

1. Perform the Diagnostic System Check - Vehicle before using the symptom tables in order to verify that all of the following are true:
   - There are no DTCs set.
   - The control modules can communicate via the serial data links.
2. Review the system operation in order to familiarize yourself with the system functions. Refer to the following:
   - Electronic Park Lock Description and Operation
   - Power Mode Description and Operation
   - Retained Accessory Power Description and Operation

Visual/Physical Inspection

- Inspect for aftermarket devices which could affect the operation of the systems. Refer to Checking Aftermarket Accessories.
- Inspect the easily accessible or visible system components for obvious damage or conditions which could cause the symptom.

Intermittent

Faulty electrical connections or wiring may be the cause of intermittent conditions. Refer to Testing for Intermittent Conditions and Poor Connections.

Symptom List

Refer to a symptom diagnostic procedure from the following list in order to diagnose the symptom:

- Ignition Can/Cannot Be Turned Off with Transmission in Any Gear
- Ignition Mode Switch Indicator Malfunction
- Power Mode Mismatch
- Retained Accessory Power Malfunction
- Vehicle Will Not Change Power Mode

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Ignition Can/Cannot Be Turned Off with Transmission in Any Gear (With BTM)

Diagnostic Instructions

- Perform the Diagnostic System Check - Vehicle prior to using this diagnostic procedure.
- Review Strategy Based Diagnosis for an overview of the diagnostic approach.
- Diagnostic Procedure Instructions provides an overview of each diagnostic category

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Signal	2	1	—	—
Ground	—	1	—	—
1. Ignition will not turn to OFF with vehicle in park 2. Ignition will turn to OFF with vehicle out of park				

Circuit/System Description

If the vehicle is equipped with automatic transmission and a floor mounted console gear shift, it has an electronic park lock system. The electronic park lock system purpose is to prevent the ignition from being switched to the OFF position when the transmission is in any position other than Park and the vehicle may still be moving. The electronic park lock system incorporates the park position switch that located in the A/T shift lock control switch. When the transmission shift selector is in Park, the park position switch closes and the BCM allows the ignition to be turned OFF.

If the vehicle is not in Park, the ignition will return to ACC/ACCESSORY and display the message SHIFT TO PARK in the Driver Information Center. When the vehicle is shifted into Park, the ignition system will switch to OFF.

Diagnostic Aids

- Verify that the transmission shift selector indicator matches the position of the gear shift lever while selecting between the Park, Reverse, Drive and Low positions.

Reference Information

Schematic Reference

Ignition Lock Schematics

Connector End View Reference

Component Connector End Views

Description and Operation

Electronic Park Lock Description and Operation

Electrical Information Reference

- Circuit Testing

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- Connector Repairs
- Testing for Intermittent Conditions and Poor Connections
- Wiring Repairs

Circuit/System Verification

1. Ignition ON.
2. Verify the scan tool Body Control Module In Park Switch Status parameter changes between On and Off when shifting the S3 Transmission Shift Lever in and out of Park.

⇒ **If the parameter does not change**

Refer to Circuit/System Testing.

⇓ **If the parameter changes**

3. All OK.

Circuit/System Testing

1. Ignition OFF and all vehicle systems OFF, disconnect the harness connector at the S3 Transmission Shift Lever. It may take up to 2 min for all vehicle systems to power down.
2. Test for less than 10 Ω between the ground circuit terminal 2 and ground.

⇒ **If 10 Ω or greater**

2.1. Ignition OFF.

2.2. Test for less than 2 Ω in the ground circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, repair the open/high resistance in the ground connection.

⇓ **If less than 10 Ω**

3. Ignition ON.
4. Verify the scan tool Body Control Module In Park Switch Status parameter is Off.

⇒ **If not Off**

4.1. Ignition OFF, disconnect the harness connector at the K9 Body Control Module.

4.2. Test for infinite resistance between the signal circuit terminal 6 and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇒ If infinite resistance, replace the K9 Body Control Module.

⇓ **If Off**

5. Install a 3 A fused jumper wire between the signal circuit terminal 6 and the ground circuit terminal 2.
6. Verify the scan tool Body Control Module In Park Switch Status parameter is On.

⇒ **If not On**

6.1. Ignition OFF, remove the jumper wire, disconnect the harness connector at the K9 Body Control Module, ignition ON.

6.2. Test for less than 1 V between the signal circuit and ground.

⇒ If 1 V or greater, repair the short to voltage on the circuit.

⇓ If less than 1 V

6.3. Test for less than 2 Ω in the signal circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the K9 Body Control Module.

⇓ **If On**

7. Test or replace the S3 Transmission Shift Lever.

Repair Instructions

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Perform the Diagnostic Repair Verification after completing the repair.

- Transmission Control Replacement
- Control Module References for body control module replacement, programming, and setup.

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Ignition Can/Cannot Be Turned Off with Transmission in Any Gear (Without BTM)

Diagnostic Instructions

- Perform the Diagnostic System Check - Vehicle prior to using this diagnostic procedure.
- Review Strategy Based Diagnosis for an overview of the diagnostic approach.
- Diagnostic Procedure Instructions provides an overview of each diagnostic category

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Signal	2	1	—	—
Control	2	2	1	—
Ground	—	2	—	—

1. Ignition key will not turn to OFF with vehicle in park.
2. Ignition key will turn to OFF with vehicle out of park.

Circuit/System Description

If the vehicle is equipped with automatic transmission and a floor mounted console gear shift, it has an electronic park lock system. The electronic park lock system purpose is to prevent the ignition key from being turned to the OFF position when the transmission is in any position other than PARK and the vehicle may still be moving. The electronic park lock system consists of an ignition lock cylinder solenoid, and a park position switch that is located in the A/T shift lock control switch. The ignition lock cylinder solenoid contains a pin that mechanically prevents the ignition key cylinder from being turned to the lock position when the vehicle is not in park. The park position switch receives voltage from the body control module (BCM) when the ignition is turned ON. When the transmission shift selector is in PARK, the park position switch closes and the BCM then de-energizes the key capture solenoid actuator retracting the pin, allowing the ignition switch to be turned OFF.

Diagnostic Aids

- Verify that the transmission shift selector indicator matches the position of the gear shift lever while selecting between the Park, Reverse, Drive and Low positions.
- A faulty ignition switch can prevent the ignition key from turning to the lock position and prevent ignition key removal from the column.

Reference Information

Schematic Reference

Ignition Lock Schematics

Connector End View Reference

Component Connector End Views

Description and Operation

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Electronic Park Lock Description and Operation

Electrical Information Reference

- Circuit Testing
- Connector Repairs
- Testing for Intermittent Conditions and Poor Connections
- Wiring Repairs

Circuit/System Verification

1. Ignition OFF, gear shift selector in PARK, ignition ON.
2. Verify that S39 Ignition Switch can be rotated to the ON position.

⇒ **If the ignition switch cannot be rotated to the ON position.**

Refer to Ignition Key Cannot Be Inserted, Rotated, or Removed from the Ignition Lock Cylinder.

⇓ **If the ignition switch can be rotated to the ON position**

3. Verify the scan tool body control module In Park Switch Status parameter changes between On and Off when shifting the S3 Transmission Shift Lever in and out of Park.

⇒ **If the parameter does not change**

Refer to Circuit/System Testing – Park Position Switch Malfunction.

⇓ **If the parameter changes**

4. Ignition ON, gear shift selector in NEUTRAL, ignition OFF.
5. Verify that the S39 Ignition Switch cannot be rotated to the LOCK position.

⇒ **If the ignition switch can be rotated to the LOCK position and Ignition Key Cannot Be Inserted, Rotated, or Removed from the Ignition Lock Cylinder has NOT been performed**

Refer to Ignition Key Cannot Be Inserted, Rotated, or Removed from the Ignition Lock Cylinder.

⇒ **If the ignition switch can be rotated to the LOCK position and Ignition Key Cannot Be Inserted, Rotated, or Removed from the Ignition Lock Cylinder has been performed**

Refer to Circuit/System Testing – Key Capture Solenoid Malfunction.

⇓ **If the ignition switch cannot be rotated to the LOCK position**

6. All OK.

Circuit/System Testing

Park Position Switch Malfunction

1. Ignition OFF and all vehicle systems OFF, disconnect the harness connector at the S3 Transmission Shift Lever. It may take up to 2 min for all vehicle systems to power down.
2. Test for less than 10 Ω between the ground circuit terminal 2 and ground.

⇒ **If 10 Ω or greater**

2.1. Ignition OFF.

2.2. Test for less than 2 Ω in the ground circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, repair the open/high resistance in the ground connection.

⇓ **If less than 10 Ω**

3. Ignition ON.
4. Verify the scan tool In Park Switch Status parameter is Off.

⇒ **If not Off**

4.1. Ignition OFF, disconnect the harness connector at the K9 Body Control Module.

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4.2. Test for infinite resistance between the signal circuit terminal 6 and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇒ If infinite resistance, replace the K9 Body Control Module.

⇓ **If Off**

5. Install a 3 A fused jumper wire between the signal circuit terminal 6 and the ground circuit terminal 2.
6. Verify the scan tool In Park Switch Status parameter is On.

⇒ **If not On**

6.1. Ignition OFF, remove the jumper wire, disconnect the harness connector at the K9 Body Control Module, ignition ON.

6.2. Test for less than 1 V between the signal circuit and ground.

⇒ If 1 V or greater, repair the short to voltage on the circuit.

⇓ If less than 1 V

6.3. Test for less than 2 Ω in the signal circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the K9 Body Control Module.

⇓ **If On**

7. Test or replace the S3 Transmission Shift Lever.

Key Capture Solenoid Malfunction

1. Ignition OFF and all vehicle systems OFF, disconnect the harness connector at the M93 Key Capture Solenoid Actuator. It may take up to 2 min for all vehicle systems to power down.
2. Test for less than 10 Ω between the ground circuit terminal 2 and ground.

⇒ **If 10 Ω or greater**

2.1. Ignition OFF.

2.2. Test for less than 2 Ω in the ground circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, repair the open/high resistance in the ground connection.

⇓ **If less than 10 Ω**

3. Ignition ON, gear shift selector in NEUTRAL.
4. Verify a test lamp illuminates between the control circuit terminal 1 and ground.

⇒ **If the test lamp does not illuminate**

4.1. Ignition OFF, remove the test lamp.

4.2. Test for infinite resistance between the ignition circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇓ If infinite resistance

4.3. Test for less than 2 Ω in the ignition circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the K9 Body Control Module.

⇓ **If the test lamp illuminates**

5. Verify that a test lamp does not illuminate between the ignition circuit terminal 1 ground with the gear shift selector in PARK .

⇒ **If the test lamp illuminates**

5.1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K9 Body Control Module.

5.2. Test for less than 1 V between the ignition circuit and ground.

⇒ If 1 V or greater, repair the short to voltage on the circuit.

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⇒ If less than 1 V, replace the K9 Body Control Module.

⇓ **If the test lamp does not illuminate**

6. Test or replace the M93 Key Capture Solenoid Actuator.

Repair Instructions

Perform the Diagnostic Repair Verification after completing the repair.

- Transmission Control Replacement
- Control Module References for body control module replacement, programming, and setup.

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Ignition Mode Switch Indicator Malfunction

Diagnostic Instructions

- Perform the Diagnostic System Check - Vehicle prior to using this diagnostic procedure.
- Review Strategy Based Diagnosis for an overview of the diagnostic approach.
- Diagnostic Procedure Instructions provides an overview of each diagnostic category.

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Control	2	2	1	—
Ground	—	2	—	—

1. Ignition mode switch indicator always On
2. Ignition mode switch indicator inoperative

Circuit/System Description

The ignition mode switch has two LED's that indicate the vehicle power mode. When the vehicle is in the off mode, both LED's will be off. Pressing the ignition mode switch button once (without the brake pedal applied), the vehicle enters the accessory mode and the amber LED (ACCESSORY) will illuminate. The accessory mode has a 5 min timeout to reduce battery drain. With the ignition OFF, pressing and holding the push button start switch for at least 10 s will place the vehicle in run/start mode (without the vehicle running) and the green LED (RUN/START) will illuminate. With the ignition OFF (with the brake pedal applied), pressing the ignition mode switch button once, the vehicle will enter run/start mode and the green LED (RUN/START) will illuminate. This will start the engine. With the engine running and while the vehicle is in P (Park), pressing the ignition mode switch once will turn the ignition OFF. If the vehicle is not in Park, the ignition will return to ACCESSORY and display the message SHIFT TO PARK in the Driver Information Center. When the vehicle is shifted into Park, the ignition system will then switch to OFF. Both LED's have the voltage supplied from the body control module (BCM). The ignition mode switch sends the ignition mode switch status to the keyless entry control module and to the BCM. The keyless entry control module sends a redundant signal to the BCM with the ignition mode switch status.

Reference Information

Schematic Reference

- Power Distribution Schematics
- Power Moding Schematics

Connector End View Reference

Component Connector End Views

Description and Operation

Power Mode Description and Operation

Electrical Information Reference

- Circuit Testing

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- Connector Repairs
- Testing for Intermittent Conditions and Poor Connections
- Wiring Repairs

Scan Tool Reference

Control Module References for scan tool information

Circuit/System Verification

1. Ignition ON.
2. Verify the green LED turns ON and OFF when commanding the Run/Start Power Mode Indicator On and Off with the scan tool.

⇒ **If the green LED does not turn ON and OFF**

Refer to Circuit/System Testing – Green LED Test.

⇓ **If the green LED turns ON and OFF**

3. Verify the amber LED turns ON and OFF when commanding the Accessory Power Mode Indicator On and Off with the scan tool.

⇒ **If the amber LED does not turn ON and OFF**

Refer to Circuit/System Testing – Amber LED Test.

⇓ **If the amber LED turns ON and OFF**

4. All OK.

Circuit/System Testing

Green LED Test

1. Ignition OFF and all vehicle systems OFF, disconnect the harness connector at the S38 Ignition Mode Switch. It may take up to 2 min for all vehicle systems to power down.
2. Test for less than 10 Ω between the ground circuit terminal 4 and ground.

⇒ **If 10 Ω or greater**

2.1. Ignition OFF.

2.2. Test for less than 2 Ω in the ground circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, repair the open/high resistance in the ground connections.

⇓ **If less than 10 Ω**

3. Connect the harness connector at the S38 Ignition Mode Switch.
4. Ignition ON, disconnect the harness connector at the S38 Ignition Mode Switch.
5. Connect a test lamp between the control circuit terminal 5 and ground.
6. Verify the test lamp stays OFF when commanding Run/Start Power Mode Indicator Off with the scan tool.

⇒ **If the test lamp is always ON**

6.1. Connect the harness connector at the S38 Ignition Mode Switch.

6.2. Ignition OFF, remove the test lamp, disconnect the harness connector at the K9 Body Control Module.

6.3. Ignition ON, disconnect the harness connector at the S38 Ignition Mode Switch.

6.4. Test for less than 1 V between the control circuit and ground.

⇒ If 1 V or greater, repair the short to voltage on the circuit.

⇒ If less than 1 V, replace the K9 Body Control Module.

⇓ **If the test lamp is always OFF**

7. Test for greater than 3 V between the control circuit terminal 5 and ground while commanding Run/Start Power Mode Indicator On with the scan tool.

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⇒ **If 3 V or less**

7.1. Ignition OFF, disconnect the harness connector at the K9 Body Control Module.

7.2. Test for infinite resistance between the control circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇓ If infinite resistance

7.3. Test for less than 2 Ω in the control circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the K9 Body Control Module.

⇓ **If 3 V or greater**

8. Test or replace the S38 Ignition Mode Switch.

Amber LED Test

1. Ignition OFF and all vehicle systems OFF, disconnect the harness connector at the S38 Ignition Mode Switch. It may take up to 2 min for all vehicle systems to power down.
2. Test for less than 10 Ω between the ground circuit terminal 4 and ground.

⇒ **If 10 Ω or greater**

2.1. Ignition OFF.

2.2. Test for less than 2 Ω in the ground circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, repair the open/high resistance in the ground connections.

⇓ **If less than 10 Ω**

3. Connect the harness connector at the S38 Ignition Mode Switch.
4. Ignition ON, disconnect the harness connector at the S38 Ignition Mode Switch.
5. Connect a test lamp between the control circuit terminal 2 and ground.
6. Verify the test lamp stays OFF when commanding Accessory Power Mode Indicator Off with the scan tool.

⇒ **If the test lamp is always ON**

6.1. Connect the harness connector at the S38 Ignition Mode Switch.

6.2. Ignition OFF, remove the test lamp, disconnect the harness connector at the K9 Body Control Module.

6.3. Ignition ON, disconnect the harness connector at the S38 Ignition Mode Switch.

6.4. Test for less than 1 V between the control circuit and ground.

⇒ If 1 V or greater, repair the short to voltage on the circuit.

⇒ If less than 1 V, replace the K9 Body Control Module.

⇓ **If the test lamp is always OFF**

7. Test for greater than 3 V between the control circuit terminal 2 and ground while commanding Accessory Power Mode Indicator On with the scan tool.

⇒ **If 3 V or less**

7.1. Ignition OFF, disconnect the harness connector at the K9 Body Control Module.

7.2. Test for infinite resistance between the control circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇓ If infinite resistance

7.3. Test for less than 2 Ω in the control circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the K9 Body Control Module.

⇓ **If 3 V or greater**

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8. Test or replace the S38 Ignition Mode Switch.

Component Testing

1. Ignition OFF, disconnect the harness at the S38 Ignition Mode Switch.
2. Connect a jumper wire between the S38 Ignition Mode Switch terminal 4 and ground.
3. Connect a 3 A fused jumper wire between the S38 Ignition Mode Switch terminal 5 and B+.
4. Verify the green LED illuminates.

⇒ **If the LED does not illuminate**
Replace the S38 Ignition Mode Switch.

⇓ **If the LED illuminates**

5. Connect a 3 A fused jumper wire between the S38 Ignition Mode Switch terminal 2 and B+.
6. Verify the amber LED illuminates.

⇒ **If the LED does not illuminate**
Replace the S38 Ignition Mode Switch.

⇓ **If the LED illuminates**

7. All OK.

Repair Instructions

Perform the Diagnostic Repair Verification after completing the repair.

- Ignition and Start Switch Replacement
- Control Module References for body control module replacement, programming and setup.

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Power Mode Mismatch

Diagnostic Instructions

- Perform the Diagnostic System Check - Vehicle prior to using this diagnostic procedure.
- Review Strategy Based Diagnosis for an overview of the diagnostic approach.
- Diagnostic Procedure Instructions provides an overview of each diagnostic category.

Circuit/System Description

Note: The vehicle may not be equipped with all components as listed below.

The body control module (BCM) controls the ignition main and retained accessory power relays by applying voltage to their individual relay control circuits. The ignition main relay is energized when the ignition is in the ON or the CRANK position. The retained accessory power relay is energized during all power modes, except OFF-awake and CRANK. The relay is also energized for approximately 10 min after shutting the ignition OFF, providing no door is opened.

The BCM also controls the battery saver relays through individual circuits by applying voltage to the battery saver set and reset circuits. The battery saver relays are a latching relays that when enabled disconnect some modules from their ignition power or memory power sources.

The engine control module (ECM) controls the engine controls the ignition relay by applying voltage to the engine controls relay control circuit.

Diagnostic Aids

A short to voltage on the ignition run/crank relay coil control will cause the engine to remain running after the mode is changed to OFF.

Reference Information

Schematic Reference

- Power Distribution Schematics
- Power Moding Schematics

Connector End View Reference

Component Connector End Views

Electrical Center Identification View Reference

Electrical Center Identification Views

Description and Operation

Power Mode Description and Operation

Electrical Information Reference

- Circuit Testing
- Connector Repairs
- Testing for Intermittent Conditions and Poor Connections
- Wiring Repairs

Scan Tool Reference

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Control Module References for scan tool information

Circuit/System Verification

Note: The vehicle may not be equipped with all components as listed below. Use schematics to determine which ignition relay supplies the ignition feed for the appropriate devices. Use the connector end view to identify the ignition circuit terminal for each of those devices.

1. Ignition ON.
2. Verify that the appropriate devices controlled by the KR76 Retained Accessory Power Relay turn ON and OFF when commanding the Accessory/Retained Accessory Power Relay On and Off with a scan tool.

⇒ **If the devices do not turn ON and OFF**

Refer to Circuit/System Testing – Diagnostic A.

⇓ **If the devices turn ON and OFF**

3. Verify that the appropriate devices controlled by the KR73 Ignition Main Relay turn ON and OFF when commanding the Run/Crank Relay On and Off with a scan tool.

⇒ **If the devices do not turn ON and OFF**

Refer to Circuit/System Testing – Diagnostic B.

⇓ **If the devices turn ON and OFF**

4. Verify that the appropriate devices controlled by the KR75 Engine Controls Ignition Relay turn ON and OFF when switching the ignition between ON and OFF.

⇒ **If the devices do not turn ON and OFF**

Refer to Circuit/System Testing – Diagnostic C.

⇓ **If the devices turn ON and OFF**

5. Verify that the appropriate devices controlled by the KR104A Battery Saver Relay 1 turn ON and OFF when enabling and disabling the battery saver mode .

⇒ **If the devices do not turn ON and OFF**

Refer to Circuit/System Testing – Diagnostic D.

⇓ **If the devices turn ON and OFF**

6. Verify that the appropriate devices controlled by the KR104B Battery Saver Relay 2 turn ON and OFF when enabling and disabling the battery saver mode .

⇒ **If the devices do not turn ON and OFF**

Refer to Circuit/System Testing – Diagnostic E.

⇓ **If the devices turn ON and OFF**

7. All OK.

Circuit/System Testing

Diagnostic A

1. Ignition OFF and all vehicle systems OFF, disconnect the KR76 Retained Accessory Power Relay. It may take up to 2 min for all vehicle systems to power down.
2. Test for less than 10 Ω between the ground circuit terminal 86 and ground.

⇒ **If 10 Ω or greater**

2.1. Ignition OFF.

2.2. Test for less than 2 Ω in the ground circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, repair the open/high resistance in the ground connection.

⇓ **If less than 10 Ω**

3. Ignition ON.
4. Verify a test lamp illuminates between the B+ circuit terminal 87 and ground.

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⇒ **If the test lamp does not illuminate**

Replace the X53A Fuse Block - Rear Body

⇓ **If the test lamp illuminates**

5. Connect a test lamp between the control circuit terminal 85 and the ground circuit terminal 86.
6. Verify the test lamp turns ON and OFF when commanding the Accessory/Retained Accessory Power Relay On and Off with a scan tool.

⇒ **If the test lamp is always OFF**

6.1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K9 Body Control Module.

6.2. Test for infinite resistance between the control circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇓ If infinite resistance

6.3. Test for less than 2 Ω in the control circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the K9 Body Control Module.

⇒ **If the test lamp is always ON**

6.1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K9 Body Control Module, ignition ON.

6.2. Test for less than 1 V between the control circuit and ground.

⇒ If 1 V or greater, repair the short to voltage on the circuit.

⇒ If less than 1 V, replace the K9 Body Control Module.

⇓ **If the test lamp turns ON and OFF**

7. Verify that a test lamp does not illuminate between the ignition circuit terminal 30 and ground.

⇒ **If the test lamp illuminates**

Repair the short to voltage on the ignition circuit

⇓ **If the test lamp does not illuminate**

8. Ignition ON, connect a 40 A fused jumper wire between the B+ circuit terminal 87 and the ignition circuit terminal 30.
9. Verify device is activated.

⇒ **If the device does not activate**

9.1. Ignition OFF, disconnect the harness connector at the device.

9.2. Test for infinite resistance between the ignition circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇓ If infinite resistance

9.3. Test for less than 2 Ω in the ignition circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the device.

⇓ **If the device activates**

10. Test or replace the KR76 Retained Accessory Power Relay.

Diagnostic B

1. Ignition OFF and all vehicle systems OFF, disconnect the KR73 Ignition Main Relay. It may take up to 2 min for all vehicle systems to power down.
2. Test for less than 10 Ω between the ground circuit terminal 85 and ground.

⇒ **If 10 Ω or greater**

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2.1. Ignition OFF.

2.2. Test for less than 2 Ω in the ground circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, repair the open/high resistance in the ground connection.

⇓ **If less than 10 Ω**

3. Ignition ON.

4. Verify a test lamp illuminates between the B+ circuit terminal 30 and ground.

⇒ **If the test lamp does not illuminate**

Replace the X50A Fuse Block - Underhood

⇓ **If the test lamp illuminates**

5. Connect a test lamp between the control circuit terminal 86 and the ground circuit terminal 85.

6. Verify the test lamp turns ON and OFF when commanding the Run/Crank Relay On and Off with a scan tool.

⇒ **If the test lamp is always OFF**

6.1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K9 Body Control Module.

6.2. Test for infinite resistance between the control circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇓ If infinite resistance

6.3. Test for less than 2 Ω in the control circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the K9 Body Control Module.

⇒ **If the test lamp is always ON**

6.1. Ignition OFF and all vehicle systems OFF, remove the test lamp, disconnect the K9 Body Control Module, ignition ON.

6.2. Test for less than 1 V between the control circuit and ground.

⇒ If 1 V or greater, repair the short to voltage on the circuit.

⇒ If less than 1 V, replace the K9 Body Control Module.

⇓ **If the test lamp turns ON and OFF**

7. Verify that a test lamp does not illuminate between the ignition circuits listed below and ground.

- Ignition circuit terminal 87
- Ignition circuit terminal 87A

⇒ **If the test lamp illuminates**

Repair the short to voltage on the ignition circuit.

⇓ **If the test lamp does not illuminate**

8. Ignition ON, connect a 40 A fused jumper wire between the B+ circuit terminal 30 and the ignition circuits listed below.

- Ignition circuit terminal 87
- Ignition circuit terminal 87A

9. Verify the device is activated.

⇒ **If the device is not activated**

9.1. Ignition OFF, disconnect the harness connector at the device.

9.2. Test for infinite resistance between the ignition circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇓ If infinite resistance

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9.3. Test for less than 2 Ω in the ignition circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the device.

⇓ **If the device activates**

10. Test or replace the KR73 Ignition Main Relay.

Diagnostic C

1. Ignition OFF and all vehicle systems OFF, disconnect the KR75 Engine Controls Ignition Relay, ignition ON.
2. Verify a test lamp illuminates between the B+ circuit terminal 30 and ground.

⇒ **If the test lamp does not illuminate**

Replace the X50A Fuse Block - Underhood

⇓ **If the test lamp illuminates**

3. Verify a test lamp illuminates between the B+ circuit terminal 85 and ground.

⇒ **If the test lamp does not illuminate**

Replace the X50A Fuse Block - Underhood

⇓ **If the test lamp illuminates**

4. Connect a test lamp between the B+ circuit terminal 85 and the control circuit terminal 86.
5. Verify the test lamp turns ON and OFF when switching the ignition ON and OFF.

⇒ **If the test lamp is always OFF**

5.1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K20 Engine Control Module, ignition ON.

5.2. Test for less than 1 V between the control circuit and ground.

⇒ If 1 V or greater, repair the short to voltage on the circuit.

⇓ If less than 1 V

5.3. Ignition OFF.

5.4. Test for less than 2 Ω in the control circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the K20 Engine Control Module.

⇒ **If the test lamp is always ON**

5.1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K20 Engine Control Module.

5.2. Test for infinite resistance between the control circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇒ If infinite resistance, replace the K20 Engine Control Module.

⇓ **If the test lamp turns ON and OFF**

6. Verify a test lamp does not illuminate between the ignition circuit terminal 87 and ground.

⇒ **If the test lamp illuminates**

Repair the short to voltage on the circuit.

⇓ **If the test lamp does not illuminate**

7. Ignition ON, connect a 40 A fused jumper wire between the B+ circuit terminal 30 and the ignition circuit terminal 87.
8. Verify device is activated.

⇒ **If the device is not activated**

8.1. Ignition OFF, disconnect the harness connector at the device.

8.2. Test for infinite resistance between the ignition circuit terminal 87 and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

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⇓ If infinite resistance

8.3. Test for less than 2 Ω in the ignition circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the device.

⇓ **If the device activates**

9. Test or replace the KR75 Engine Controls Ignition Relay.

Diagnostic D

1. Ignition OFF and all vehicle systems OFF, disconnect the KR104A Battery Saver Relay 1. It may take up to 2 min for all vehicle systems to power down.
2. Test for less than 10 Ω between the ground circuit terminal 6 and ground.

⇒ **If 10 Ω or greater**

2.1. Ignition OFF.

2.2. Test for less than 2 Ω in the ground circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, repair the open/high resistance in the ground connection.

⇓ **If less than 10 Ω**

3. Ignition ON.
4. Verify a test lamp illuminates between the B+ circuit terminal 5 and ground.

⇒ **If the test lamp does not illuminate and the circuit fuse is good**

4.1. Ignition OFF, remove the test lamp.

4.2. Test for less than 2 Ω in the B+ circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, verify the fuse is not open and there is voltage at the fuse.

⇒ **If the test lamp does not illuminate and the circuit fuse is open**

4.1. Ignition OFF, remove the test lamp.

4.2. Test for infinite resistance between the B+ circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇓ If infinite resistance, replace the KR104B Battery Saver Relay 1.

⇓ **If the test lamp illuminates**

5. Connect a test lamp between the control circuit terminal 1 and ground.
6. Verify the test lamp turns ON and OFF when enabling and disabling the battery saver mode.

⇒ **If the test lamp is always OFF**

6.1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K9 Body Control Module.

6.2. Test for infinite resistance between the control circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇓ If infinite resistance

6.3. Test for less than 2 Ω in the control circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the K9 Body Control Module.

⇒ **If the test lamp is always ON**

6.1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K9 Body Control Module, ignition ON.

6.2. Test for less than 1 V between the control circuit and ground.

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⇒ If 1 V or greater, repair the short to voltage on the circuit.

⇒ If less than 1 V, replace the K9 Body Control Module.

⇓ **If the test lamp turns ON and OFF**

7. Connect a test lamp between the control circuit terminal 2 and ground.
8. Verify the test lamp turns ON and OFF when enabling and disabling the battery saver mode.

⇒ **If the test lamp is always OFF**

8.1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K9 Body Control Module.

8.2. Test for infinite resistance between the control circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇓ If infinite resistance

8.3. Test for less than 2 Ω in the control circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the K9 Body Control Module.

⇒ **If the test lamp is always ON**

8.1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K9 Body Control Module, ignition ON.

8.2. Test for less than 1 V between the control circuit and ground.

⇒ If 1 V or greater, repair the short to voltage on the circuit.

⇒ If less than 1 V, replace the K9 Body Control Module.

⇓ **If the test lamp turns ON and OFF**

9. Verify that a test lamp does not illuminate between the ignition circuit terminal 3 and ground.

⇒ **If the test lamp illuminates**

Repair the short to voltage on the ignition circuit

⇓ **If the test lamp does not illuminate**

10. Ignition ON, connect a 40 A fused jumper wire between the B+ circuit terminal 5 and the ignition circuit terminal 3.
11. Verify device is activated.

⇒ **If the device does not activate**

11.1. Ignition OFF, disconnect the harness connector at the device.

11.2. Test for infinite resistance between the ignition circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇓ If infinite resistance

11.3. Test for less than 2 Ω in the ignition circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the device.

⇓ **If the device activates**

12. Test or replace the KR104A Battery Saver Relay 1.

Diagnostic E

1. Ignition OFF and all vehicle systems OFF, disconnect the KR104B Battery Saver Relay 2. It may take up to 2 min for all vehicle systems to power down.
2. Test for less than 10 Ω between the ground circuit terminal 6 and ground.

⇒ **If 10 Ω or greater**

2.1. Ignition OFF.

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2.2. Test for less than 2 Ω in the ground circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, repair the open/high resistance in the ground connection.

⇓ **If less than 10 Ω**

3. Ignition ON.

4. Verify a test lamp illuminates between the B+ circuit terminal 3 and ground.

⇒ **If the test lamp does not illuminate**

Replace the X53A Fuse Block - Rear Body.

⇓ **If the test lamp illuminates**

5. Connect a test lamp between the control circuit terminal 1 and ground.

6. Verify the test lamp turns ON and OFF when enabling and disabling the battery saver mode.

⇒ **If the test lamp is always OFF**

6.1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K9 Body Control Module.

6.2. Test for infinite resistance between the control circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇓ If infinite resistance

6.3. Test for less than 2 Ω in the control circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the K9 Body Control Module.

⇒ **If the test lamp is always ON**

6.1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K9 Body Control Module, ignition ON.

6.2. Test for less than 1 V between the control circuit and ground.

⇒ If 1 V or greater, repair the short to voltage on the circuit.

⇒ If less than 1 V, replace the K9 Body Control Module.

⇓ **If the test lamp turns ON and OFF**

7. Connect a test lamp between the control circuit terminal 2 and ground.

8. Verify the test lamp turns ON and OFF when enabling and disabling the battery saver mode.

⇒ **If the test lamp is always OFF**

8.1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K9 Body Control Module.

8.2. Test for infinite resistance between the control circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇓ If infinite resistance

8.3. Test for less than 2 Ω in the control circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the K9 Body Control Module.

⇒ **If the test lamp is always ON**

8.1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K9 Body Control Module, ignition ON.

8.2. Test for less than 1 V between the control circuit and ground.

⇒ If 1 V or greater, repair the short to voltage on the circuit.

⇒ If less than 1 V, replace the K9 Body Control Module.

⇓ **If the test lamp turns ON and OFF**

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9. Verify that a test lamp does not illuminate between the ignition circuit terminal 5 and ground.

⇒ **If the test lamp illuminates**

Repair the short to voltage on the ignition circuit

⇓ **If the test lamp does not illuminate**

10. Ignition ON, connect a 40 A fused jumper wire between the B+ circuit terminal 3 and the ignition circuit terminal 5.
11. Verify device is activated.

⇒ **If the device does not activate**

11.1. Ignition OFF, disconnect the harness connector at the device.

11.2. Test for infinite resistance between the ignition circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇓ If infinite resistance

11.3. Test for less than 2 Ω in the ignition circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the device.

⇓ **If the device activates**

12. Test or replace the KR104B Battery Saver Relay 2.

Component Testing

Relay Test

1. Ignition OFF, disconnect the appropriate relay.
2. Test for 70–150 Ω between terminals (85 or 1) and (86 or 2).

⇒ **If less than 70 or greater than 150 Ω**

Replace the relay.

⇓ **If between 70–150 Ω**

3. Test for infinite resistance between the terminals listed below:
   - (30 or 3) and (86 or 2)
   - (30 or 3) and (87 or 5)
   - (30 or 3) and (85 or 1)
   - (85 or 1) and (87 or 5)
   - (86 or 2) and (87 or 5)

⇒ **If less than infinite resistance**

Replace the relay.

⇓ **If infinite resistance**

4. Install a 3 A fused jumper wire between relay terminal (85 or 1) and 12 V. Install a jumper wire between relay terminal (86 or 2) and ground.
5. Test for less than 5.0 Ω between terminals (30 or 3) and (87 or 5).

⇒ **If 5.0 Ω or greater**

Replace the relay.

⇓ **If less than 5.0 Ω**

6. All OK

Repair Instructions

Perform the Diagnostic Repair Verification after completing the repair.

- Relay Replacement

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- Control Module References for the appropriate control module replacement, programming and setup.

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Retained Accessory Power Malfunction

Diagnostic Instructions

- Perform the Diagnostic System Check - Vehicle prior to using this diagnostic procedure.
- Review Strategy Based Diagnosis for an overview of the diagnostic approach.
- Diagnostic Procedure Instructions provides an overview of each diagnostic category.

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Relay Switch B+	1	1	1	—
Relay Switch Ignition	1	1	1, 2	—
Relay Coil Control	B1445 02	1	1	—
Relay Coil Ground	—	1	—	—
1. Retained accessory power malfunction 2. Retained accessory power relay always ON				

Circuit/System Description

The body control module (BCM) controls the retained accessory power relay through the control circuit by applying voltage to the retained accessory power relay coil control circuit. The retained accessory power relay is energized when the ignition switch is in the ACCESSORY or the ON position.

Reference Information

Schematic Reference

Power Distribution Schematics

Power Moding Schematics

Sunroof Schematics

Connector End View Reference

Component Connector End Views

Description and Operation

Retained Accessory Power Description and Operation

Electrical Information Reference

- Circuit Testing
- Connector Repairs
- Testing for Intermittent Conditions and Poor Connections
- Wiring Repairs

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Scan Tool Reference

Control Module References for scan tool information

Circuit/System Verification

Note: Use schematics to determine which devices are on the K9 Body Control Module's ignition circuit terminal 14 X5 or controlled by the KR76 Retained Accessory Power Relay. Use the connector end view to identify the ignition circuit terminal for each of those devices.

1. Ignition ON.
2. Verify the appropriate devices controlled by the KR76 Retained Accessory Power Relay turn ON and OFF when commanding the Accessory/Retained Accessory Power Relay On and Off with a scan tool.

⇒ **If the devices do not turn ON and OFF**

Refer to Circuit/System Testing – Diagnostic A.

⇓ **If the devices turn ON and OFF**

3. Verify that the appropriate devices controlled by the K9 Body Control Module's circuit terminal 14 X5 turn ON and OFF when commanding the Accessory Power Relay On and Off with a scan tool.

⇒ **If the devices do not turn ON and OFF**

Refer to Circuit/System Testing – Diagnostic B.

⇓ **If the devices turn ON and OFF**

4. All OK.

Circuit/System Testing

Diagnostic A

1. Ignition OFF and all vehicle systems OFF, disconnect the KR76 Retained Accessory Power Relay. It may take up to 2 min for all vehicle systems to power down.
2. Test for less than 10 Ω between the ground circuit terminal 86 and ground.

⇒ **If 10 Ω or greater**

2.1. Ignition OFF.

2.2. Test for less than 2 Ω in the ground circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, repair the open/high resistance in the ground connection.

⇓ **If less than 10 Ω**

3. Ignition ON.
4. Verify a test lamp illuminates between the B+ circuit terminal 87 and ground.

⇒ **If the test lamp does not illuminate**

Replace the X53A Fuse Block - Rear Body

⇓ **If the test lamp illuminates**

5. Connect a test lamp between the control circuit terminal 85 and the ground circuit terminal 86.
6. Verify the test lamp turns ON and OFF when commanding the Accessory/Retained Accessory Power Relay On and Off with a scan tool.

⇒ **If the test lamp is always OFF**

6.1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K9 Body Control Module.

6.2. Test for infinite resistance between the control circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

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⇓ If infinite resistance

6.3. Test for less than 2 Ω in the control circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the K9 Body Control Module.

⇒ **If the test lamp is always ON**

6.1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K9 Body Control Module, ignition ON.

6.2. Test for less than 1 V between the control circuit and ground.

⇒ If 1 V or greater, repair the short to voltage on the circuit.

⇒ If less than 1 V, replace the K9 Body Control Module.

⇓ **If the test lamp turns ON and OFF**

7. Connect the KR76 Retained Accessory Power Relay.
8. Disconnect the appropriate X80 Accessory Power Receptacle.
9. Ignition OFF.
10. Verify that a test lamp does not illuminate between each of the ignition circuits listed below and ground.
    - X80F Accessory Power Receptacle – Front – Ignition circuit terminal A
    - X80H Accessory Power Receptacle – Center Console– Ignition circuit terminal A

⇒ **If the test lamp illuminates**

Repair the short to voltage on the ignition circuit.

⇓ **If the test lamp does not illuminate**

11. Ignition ON.
12. Verify that a test lamp illuminates between each of the ignition circuits listed below and ground.
    - X80F Accessory Power Receptacle – Front – Ignition circuit terminal A
    - X80H Accessory Power Receptacle – Center Console– Ignition circuit terminal A

⇒ **If the test lamp does not illuminate and the circuit fuse is good**

12.1. Ignition OFF, remove the test lamp.

12.2. Test for less than 2 Ω in the ignition circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, test or replace the KR76 Retained Accessory Power Relay.

⇒ **If the test lamp does not illuminate and the circuit fuse is open**

12.1. Ignition OFF.

12.2. Test for infinite resistance between the ignition circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇒ If infinite resistance, test or replace the appropriate X80 Accessory Power Receptacle.

⇓ **If the test lamp illuminates**

13. Test or replace the appropriate X80 Accessory Power Receptacle.

Diagnostic B

1. Ignition OFF and all vehicle systems OFF, disconnect the M69 Sunroof Motor.
2. Connect a test lamp between the ignition circuit terminal 9 and ground, Ignition ON.
3. Verify the test lamp turns ON and OFF when commanding the Accessory Power Relay On and Off with a scan tool.

⇒ **If the test lamp is always OFF**

3.1. Ignition OFF, remove test lamp, disconnect the harness connector at the K9 Body Control Module.

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3.2. Test for infinite resistance between the ignition circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇓ If infinite resistance.

3.3. Test for less than 2 Ω in the control circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the K9 Body Control Module.

⇒ **If the test lamp is always ON**

3.1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K9 Body Control Module, ignition ON.

3.2. Test for less than 1 V between the control circuit and ground.

⇒ If 1 V or greater, repair the short to voltage on the circuit.

⇒ If less than 1 V, replace the K9 Body Control Module.

⇓ **If the test lamp turns ON and OFF**

4. Test or replace the M69 Sunroof Motor.

Component Testing

Relay Test

1. Ignition OFF, disconnect the appropriate relay.
2. Test for 70–150 Ω between terminals (85 or 1) and (86 or 2).

⇒ **If less than 70 or greater than 150 Ω**

Replace the relay.

⇓ **If between 70–150 Ω**

3. Test for infinite resistance between the terminals listed below:
   - (30 or 3) and (86 or 2)
   - (30 or 3) and (87 or 5)
   - (30 or 3) and (85 or 1)
   - (85 or 1) and (87 or 5)
   - (86 or 2) and (87 or 5)

⇒ **If less than infinite resistance**

Replace the relay.

⇓ **If infinite resistance**

4. Install a 3 A fused jumper wire between relay terminal (85 or 1) and 12 V. Install a jumper wire between relay terminal (86 or 2) and ground.
5. Test for less than 5.0 Ω between terminals (30 or 3) and (87 or 5).

⇒ **If 5.0 Ω or greater**

Replace the relay.

⇓ **If less than 5.0 Ω**

6. All OK

Repair Instructions

Perform the Diagnostic Repair Verification after completing the repair.

- Relay Replacement
- Accessory Power Receptacle Replacement
- Sunroof Actuator Motor Replacement
- Control Module References for body control module replacement, programming and setup.

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Vehicle Will Not Change Power Mode

Diagnostic Instructions

- Perform the Diagnostic System Check - Vehicle prior to using this diagnostic procedure.
- Review Strategy Based Diagnosis for an overview of the diagnostic approach.
- Diagnostic Procedure Instructions provides an overview of each diagnostic category.

Diagnostic Fault Information

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
B+ terminal 2	B1370 04, B1380 04	B1370 04, B1380 04	—	—
Ignition Terminal 1	B1370 04, B1380 04	B1370 04, B1380 04	B1370 01	—
Ignition Terminal 3	B1370 04, B1380 04	B1380 04	B1380 01	—
Ignition Terminal 4	B1370 04, B1380 04, B1441 04	B1441 04	B1441 04	—
Signal – Terminal 3	B097B 02*	B097B 05*	B097B 05*	—
Signal – Terminal 6	2	B097B 05*	2	—
5 V Reference	—	2	—	—
Low Reference	—	B097B 05*	—	—
Ground	—	1	—	—

* DTC set in keyless entry control module
1. Ignition mode switch indicator always Off
2. Power mode mismatch

Circuit/System Description

Without ATH/BTM

The vehicle power mode master is the body control module (BCM). The ignition switch is a low current switch with multiple discrete circuits to the BCM. The BCM logic uses the ignition switch positions to identify the operator's desired power mode and activate specific discrete signals, and serial data messages for the operation of different subsystems as necessary. Other modules which have switched voltage inputs may operate in a default mode if the power mode master serial data message does not match what the individual module can detect from its own connections.

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The power mode master will activate relays and other direct outputs of the power mode master as needed according to the calculated power mode. Some relays controlled by the BCM are switched ignition voltage outputs that are pass through circuits within the BCM directly from the ignition switch. If these circuits short to ground, the B+ circuit fuse to the ignition switch will open.

With ATH/BTM

The ignition mode switch has 2 LED's that indicate the vehicle power mode. When the vehicle is in the off mode, both LED's will be off. Pressing the ignition mode switch button once (without the brake pedal applied), the vehicle enters the accessory mode and the amber LED (ACC) will illuminate. The accessory mode has a 5 min timeout to reduce battery drain. Pressing the ignition mode switch button a second time (without the brake pedal applied), the vehicle enters the run/start mode (without the engine running) and the green LED (Run/Start) will illuminate. Pressing and holding the push button start switch for up to 10 s, will place the vehicle in run/start mode (without the vehicle running) and the green LED (Run/Start) will illuminate. With the ignition off (with the brake pedal applied), pressing the ignition mode switch button once, the vehicle will enter run/start mode and the green LED (run/start) will illuminate. This will start the engine. Both LED's have the voltage supplied from the BCM. The ignition mode switch sends the ignition mode switch status to the keyless entry control module and to the BCM. The keyless entry control module sends a redundant signal to the BCM with the ignition mode switch status.

The ignition mode switch contains two individual switches that provides redundant switch inputs to both the BCM and the keyless entry control module. The BCM supplies the ignition mode switch a constant B+ signal. The BCM monitors this signal to determine if the switch is released or pressed. When the ignition mode switch is not pressed, voltage on the signal circuit is pulled down through two resistors in the switch. When the ignition mode switch is pressed, voltage on the signal circuit is pulled down through only one resistor, changing the voltage seen at the BCM and indicating that the ignition mode switch is pressed.

The keyless entry control module monitors voltage on the switch is the same manner as the BCM, but monitors the second switch located in the ignition mode switch. The keyless entry control module also controls the backup power for the ignition main relay through the control circuit by applying voltage to the ignition voltage circuit. This circuit is a pass-thru in the BCM and will energize the ignition circuit when the vehicle is in Service Mode, the vehicle is ON, or when a remote start is requested.

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Reference Information

Schematic Reference

- Power Distribution Schematics
- Power Moding Schematics

Connector End View Reference

Component Connector End Views

Description and Operation

Power Mode Description and Operation

Electrical Information Reference

- Circuit Testing
- Connector Repairs
- Testing for Intermittent Conditions and Poor Connections
- Wiring Repairs

Scan Tool Reference

Control Module References for scan tool information

Circuit/System Verification

Without ATH/BTM

1. Ignition ON.
2. Verify the scan tool power mode parameters change when cycling the S39 Ignition Switch between OFF, ACCESSORY, ON, and CRANK.

⇒ **If the parameters do not change**

Refer to Circuit/System Testing – Without ATH/BTM.

⇓ **If the parameters change**

3. All OK.

With ATH/BTM

1. Verify DTC B097B 08 or B097B 61 are not set.

⇒ **If either DTC is set**

Test or replace the S38 Ignition Mode Switch.

⇓ **If the DTCs are not set**

2. Verify the green LED illuminates when the S38 Ignition Mode Switch is pressed and held for up to 10 s, with the brake pedal released.

⇒ **If the green LED does not illuminate**

Refer to Circuit/System Testing – With ATH/BTM.

⇓ **If the green LED illuminates**

3. All OK.

Circuit/System Testing

Without ATH/BTM

1. Ignition ON, disconnect the harness connector at the S39 Ignition Switch while the ignition is ON.
2. Verify a test lamp illuminates between the B+ circuit terminal 2 and ground.

⇒ **If the test lamp does not illuminate and the circuit fuse is good**

2.1. Ignition OFF, remove the test lamp.

2.2. Test for less than 2 Ω in the B+ circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, verify the fuse is not open and there is voltage at the fuse.

⇒ **If the test lamp does not illuminate and the circuit fuse is open**

2.1. Ignition OFF, remove the test lamp.

2.2. Test for infinite resistance between the B+ circuit and ground.

⇒ If less than infinite resistance, repair the short to ground on one of the following circuits listed below:

Note: To help isolate a short to ground, it may be necessary to disconnect modules that are connected to the following circuits:

- B+ circuit terminal 2
- Ignition circuit terminal 1
- Ignition circuit terminal 3
- Ignition circuit terminal 4

⇓ **If the test lamp illuminates**

3. Ignition ON.
4. Test for 4.8–5.2 V between the 5 V reference circuit terminal 6 and ground.

⇒ **If less than 4.8 V**

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4.1. Ignition OFF, disconnect the X3 harness connector at the K9 Body Control Module.
4.2. Test for infinite resistance between the 5 V reference circuit and ground.
⇒ If less than infinite resistance, repair the short to ground on the circuit.
⇓ If infinite resistance
4.3. Test for less than 2 Ω in the 5 V reference circuit end to end.
⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.
⇒ If less than 2 Ω, replace the K9 Body Control Module.

⇒ **If greater than 5.2 V**

4.1. Ignition OFF, disconnect the X3 harness connector at the K9 Body Control Module.
4.2. Test for less than 1 V between the 5 V reference circuit and ground.
⇒ If 1 V or greater, repair the short to voltage on the circuit.
⇒ If less than 1 V, replace the K9 Body Control Module.

⇓ **If between 4.8–5.2 V**

5. Connect the harness connector at the S39 Ignition Switch.
6. Ignition OFF.
7. Disconnect the X3 harness connector at the K9 Body Control Module, ignition ON.
8. Verify a test lamp illuminates between each of the ignition circuits listed below and ground:
   - Ignition circuit terminal 5
   - Ignition circuit terminal 6

⇒ **If the test lamp does not illuminate and the circuit fuse is good**

8.1. Ignition OFF remove the test lamp.
8.2. Test for less than 2 Ω in the ignition circuit end to end.
⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.
⇒ If less than 2 Ω, verify the fuse is not open and there is voltage at the fuse.

⇒ **If the test lamp does not illuminate and the circuit fuse is open**

8.1. Ignition OFF remove the test lamp.
8.2. Test for infinite resistance between the ignition circuit and ground.
⇒ If less than infinite resistance, repair the short to ground on the circuit.
⇓ If infinite resistance, replace the K9 Body Control Module.

⇓ **If the test lamp illuminates**

9. Ignition OFF with the key in.
10. Verify a test lamp illuminates between ignition circuit terminal 15 and ground.

⇒ **If the test lamp does not illuminate and the circuit fuse is good**

10.1. Ignition OFF with the key out, remove the test lamp.
10.2. Test for less than 2 Ω in the ignition circuit end to end.
⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.
⇒ If less than 2 Ω, verify the fuse is not open and there is voltage at the fuse.

⇒ **If the test lamp does not illuminate and the circuit fuse is open**

10.1. Ignition OFF with the key out remove the test lamp.
10.2. Test for infinite resistance between the ignition circuit terminal 15 and ground.
⇒ If less than infinite resistance, repair the short to ground on the circuit.
⇓ If infinite resistance, replace the K9 Body Control Module.

⇓ **If the test lamp illuminates**

11. Connect the X3 harness connector at the K9 Body Control Module, ignition ON.
12. Disconnect the harness connector at the S39 Ignition Switch.

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13. Test for less than 1 V between each of the ignition circuits listed below and ground:
    - Ignition circuit terminal 1
    - Ignition circuit terminal 3
    - Ignition circuit terminal 4

⇒ **If 1 V or greater**

Repair the short to voltage on the circuit.

⇓ **If less than 1 V**

14. Test or replace the S39 Ignition Switch.

With ATH/BTM

1. Vehicle OFF and all vehicle systems OFF, disconnect the harness connector at the S38 Ignition Mode Switch. It may take up to 2 min for all vehicle systems to power down.
2. Test for less than 10 Ω between the ground circuit terminal 4 and ground.

⇒ **If 10 Ω or greater**

2.1. Ignition OFF.

2.2. Test for less than 2 Ω in the ground circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, repair the open/high resistance in the ground connection.

⇓ **If less than 10 Ω**

3. Test for less than 10 Ω between the low reference circuit terminal 7 and ground.

⇒ **If 10 Ω or greater**

3.1. Vehicle OFF.

3.2. Test for less than 2 Ω in the ground circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the K84 Keyless Entry Control Module.

⇓ **If less than 10 Ω**

4. Connect the S38 Ignition Mode Switch, ignition ON.
5. Disconnect the S38 Ignition Mode Switch.
6. Verify the scan tool K9 Body Control Module Push Button Ignition Switch Voltage parameter is greater than 11 V.

⇒ **If 11 V or less**

6.1. Ignition OFF, disconnect the X2 harness connector at the K9 Body Control Module.

6.2. Test for infinite resistance between the signal circuit terminal 6 and ground.

⇒ If less than infinite resistance, repair the short to ground on the circuit.

⇒ If infinite resistance, replace the K9 Body Control Module.

⇓ **If greater than 11 V**

7. Install a 3 A fused jumper wire between the signal circuit terminal 6 and ground.
8. Verify the scan tool K9 Body Control Module Push Button Ignition Switch Voltage parameter is less than 1 V.

⇒ **If 1 V or greater**

8.1. Ignition OFF, disconnect the harness connector at the K9 Body Control Module, ignition ON.

8.2. Test for less than 1 V between the signal circuit and ground.

⇒ If 1 V or greater, repair the short to voltage on the circuit.

⇓ If less than 1 V

8.3. Test for less than 2 Ω in signal circuit end to end.

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⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, replace the K9 Body Control Module.

⇓ **If less than 1 V**

9. Connect the harness connector at the S38 Ignition Mode Switch.
10. Verify the scan tool K9 Body Control Module Push Button Ignition Switch Voltage parameter is 8–10 V, with the S38 Ignition Mode Switch released.

⇒ **If not between 8–10 V**

Test or replace the S38 Ignition Mode Switch.

⇓ **If between 8–10 V**

11. Verify the scan tool K9 Body Control Module Push Button Ignition Switch Voltage parameter is 4–7 V, with the S38 Ignition Mode Switch pressed.

⇒ **If not between 4–7 V**

Test or replace the S38 Ignition Mode Switch.

⇓ **If between 4–7 V**

12. Disconnect the X1 harness connector at the K84 Keyless Entry Control Module.
13. Test for infinite resistance between the signal circuit terminal 11 and ground.

⇒ **If less than infinite resistance**

Repair the short to ground on the circuit.

⇓ **If infinite resistance**

14. Ignition ON.
15. Test for less than 1 V between the signal circuit terminal 11 and ground.

⇒ **If 1 V or greater**

Repair the short to voltage on the circuit.

⇓ **If less than 1 V**

16. Test for 4.5–5.5 kΩ between the signal circuit terminal 11 and the low reference circuit terminal 12, with the S38 Ignition Mode Switch released.

⇒ **If not between 4.5–5.5 kΩ**

16.1. Vehicle OFF, disconnect the harness connector at the S38 Ignition Mode Switch.

16.2. Test for less than 2 Ω in the signal circuit end to end.

⇒ If 2 Ω or greater, repair the open/high resistance in the circuit.

⇒ If less than 2 Ω, test or replace the S38 Ignition Mode Switch.

⇓ **If between 4.5–5.5 kΩ**

17. Test for 1–1.5 kΩ between the signal circuit terminal 11 and the low reference circuit terminal 12, with the S38 Ignition Mode Switch pressed.

⇒ **If not between 1–1.5 kΩ**

Test or replace the S38 Ignition Mode Switch.

⇓ **If between 1–1.5 kΩ**

18. Replace the K84 Keyless Entry Control Module.

Component Testing

S39 Ignition Switch

1. Ignition OFF, disconnect the X1 harness connector at the S39 Ignition Switch.
2. Using the Resistance Test below, verify the resistance between the terminals listed below match for each S39 Ignition Switch Position.

⇒ **If any reading is other than specified**

Replace the S39 Ignition Switch.

⇓ **If the readings match**

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3. All OK.

Resistance Test

Ignition Switch Position	Terminals 1 and 2	Terminals 2 and 3	Terminals 2 and 4	Terminals 2 and 6	Terminals 4 and 6
OFF Key Out	Infinite	Infinite	Infinite	Infinite	Infinite
OFF Key In	Infinite	Infinite	<5.0 Ω	Infinite	Infinite
Accessory	Infinite	<5.0 Ω	Infinite	Infinite	Infinite
Run	<5.0 Ω	<5.0 Ω	Infinite	Infinite	<5.0 Ω
Start	<5.0 Ω	Infinite	Infinite	Infinite	1275–1325 Ω

S38 Ignition Mode Switch

1. Ignition OFF, disconnect the harness connector at the S38 Ignition Mode Switch.
2. With the S38 Ignition Mode Switch released, test for 4.5–5.5 kΩ between the terminals listed below:
   - Signal terminal 6 and ground terminal 4
   - Signal terminal 3 and low reference terminal 7

⇒ **If not between 4.5–5.5 kΩ**

Replace the S38 Ignition Mode Switch

⇓ **If between 4.5–5.5 kΩ**

3. With the S38 Ignition Mode Switch pressed, test for 1–1.5 kΩ between the terminals listed below:
   - Signal terminal 6 and ground terminal 4
   - Signal terminal 3 and low reference terminal 7

⇒ **If not between 1–1.5 kΩ**

Replace the S38 Ignition Mode Switch.

⇓ **If between 1–1.5 kΩ**

4. All OK.

Repair Instructions

Perform the Diagnostic Repair Verification after completing the repair.

- Ignition and Start Switch Replacement
- Control Module References for body control module or keyless entry control module replacement, programming and setup.

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General Electrical Diagnosis

Basic Knowledge Required

Without a basic knowledge of electricity, it will be difficult to use the diagnostic procedures contained in the service manual. You should understand the basic theory of electricity, and know the meaning of voltage (V), current (A), and resistance (Ω). You should also be able to read and understand a wiring diagram, as well as understand what happens in a circuit with an open or a shorted wire.

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Checking Aftermarket Accessories

Warning: Refer to SIR Warning.

Caution: The OBD II symbol is used on the circuit diagrams in order to alert the technician that the circuit is essential for proper OBD II emission control circuit operation. Any circuit which fails and causes the malfunction indicator lamp (MIL) to turn ON, or causes emissions-related component damage, is identified as an OBD II circuit.

Do not connect aftermarket accessories into the following circuits:

- SIR circuits, all such circuits are indicated on circuit diagrams with the SIR symbol.
- OBD II circuits, all such circuits are indicated on circuit diagrams with the OBD II symbol.

Always check for aftermarket accessories (non-OEM) as the first step in diagnosing electrical problems. If the vehicle is so equipped, disconnect the system to verify that these add-on accessories are not the cause of the problems.

Possible causes of vehicle problems related to aftermarket accessories include:

- Power feeds connected to points other than the battery
- Antenna location
- Transceiver wiring located too close to vehicle electronic modules or wiring
- Poor shielding or poor connectors on antenna feed line
- Check for recent service bulletins detailing installation guidelines for aftermarket accessories.

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Circuit Testing

The Circuit Testing section contains the following diagnostic testing information. Using this information along with the diagnostic procedures will identify the cause of the electrical malfunction.

- Using Connector Test Adapters
- Probing Electrical Connectors
- Troubleshooting with a Digital Multimeter
- Troubleshooting with a Test Lamp
- Using Fused Jumper Wires
- Measuring Voltage
- Measuring Voltage Drop
- Measuring Frequency
- Testing Ground and Low Reference Circuits
- Testing for Continuity
- Testing for Short to Ground
- Testing for a Short to Voltage
- Testing for Intermittent Conditions and Poor Connections
- Inducing Intermittent Fault Conditions
- Testing for Electrical Intermittents
- Scan Tool Snapshot Procedure
- Circuit Protection - Fuses
- Circuit Protection - Circuit Breakers
- Circuit Protection - Fusible Links

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Using Connector Test Adapters

Special Tools

- *EL-35616* Terminal Test Probe Kit
- *EL-38125-550* Terminal Release Tool Kit

For equivalent regional tools, refer to Special Tools.

Caution: Do not insert test equipment probes (DMM etc.) into any connector or fuse block terminal. The diameter of the test probes will deform most terminals. A deformed terminal will cause a poor connection, which will result in a system failure. Always use the EL-35616 GM Approved Terminal Test Probe Kit in order to front probe terminals. Do not use paper clips or other substitutes to probe terminals.

When using the EL-35616 GM Approved Terminal Test Probe Kit, ensure the terminal test adapter choice is the correct size for the connector terminal. Do not visually choose the terminal test adapter because some connector terminal cavities may appear larger than the actual terminal in the cavity. Using a larger terminal test adapter will damage the terminal. Refer to the EL-35616 GM Approved Terminal Test Probe Kit label on the inside of the EL-35616 GM Approved Terminal Test Probe Kit for the correct adapter along with the connector end view.

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Probing Electrical Connectors

Special Tools

EL-35616 Terminal Test Probe Kit

For equivalent regional tools, refer to Special Tools.

Note: Always be sure to reinstall the connector position assurance (CPA) and terminal position assurance (TPA) when reconnecting connectors or replacing terminals.

Front probe

Disconnect the connector and probe the terminals from the mating side (front) of the connector.

Caution: Refer to Test Probe Caution.

Note: When probing female 0.64 terminals, it is important to use the correct adapter. There have been some revisions to the test adapter for 0.64 terminals. The proper adapter for 0.64 terminals is the J-35616-64B which has a gold terminal and a black wire between the base and tip. Failure to use the proper test adapter may result in damage to the terminal being tested and improper diagnosis.

Note: The proper adapter for probing the terminals for fuses, relays, or diodes in an electrical center is J-35616-35. Using any other tool or adapter may damage the terminal being tested.

Refer to the following table as a guide in selecting the correct test adapter for front probing connectors:

Test Adapter	Description
J-35616-2A	150 Male Probe Adapter (gray)
J-35616-3	150 Female Probe Adapter (gray)
J-35616-4A	280 Male Probe Adapter (purple)
J-35616-5	280 Female Probe Adapter (purple)
J-35616-6	100W Male (round) Probe Adapter (brown)
J-35616-7	100W Female (round) Probe Adapter (brown)
J-35616-8	Weather Pack Male Probe Adapter (orange)
J-35616-9	Weather Pack Female Probe Adapter (orange)
J-35616-10	100W Male (round) Probe Adapter (green)
J-35616-11	100W Female (round) Probe Adapter (green)
J-35616-12	130 Male Probe Adapter (blue)

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Test Adapter	Description
J-35616-13	130 Female Probe Adapter (blue)
J-35616-14	150 Male Probe Adapter (green)
J-35616-16	100 Male Probe Adapter (lt green)
J-35616-17	100 Female Probe Adapter (lt green)
J-35616-18	220 Male Probe Adapter (black)
J-35616-19	220 Female Probe Adapter (black)
J-35616-21	950 Female Probe Adapter (red)
J-35616-22	950 Male Probe Adapter (red)
J-35616-31	500 Male Probe Adapter (orange)
J-35616-32	500 Female Probe Adapter (orange)
J-35616-33	160/180 Male Probe Adapter (yellow)
J-35616-34	160/180 Female Probe Adapter (yellow)
J-35616-35	280 Male Probe Adapter (violet)
J-35616-40	480 Male Probe Adapter (dk blue)
J-35616-41	480 Female Probe Adapter (dk blue)
J-35616-42	630 Male Probe Adapter (red)
J-35616-43	630 Female Probe Adapter (red)
J-35616-44	800 Male Probe Adapter (yellow)
J-35616-45	800 Female Probe Adapter (yellow)
J-35616-54	280 Male (round) Probe Adapter (tan)
J-35616-55	280 Female (round) Probe Adapter (tan)
J-35616-64B	0.64 Male Probe Adapter (lt blue)
J-35616-65B	0.64 Female Probe Adapter (lt blue)
J-35616-66	150 Male (round) Probe Adapter (yellow)
J-35616-67	150 Female (round) Probe Adapter (yellow)

Backprobe

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Note:

- Backprobe connector terminals only when specifically required in diagnostic procedures.
- Do not backprobe a sealed (Weather Pack®) connector, less than a 280 series Metri-Pack connector, a Micro-Pack connector, or a flat wire connector.
- Backprobing can be a source of damage to connector terminals. Use care in order to avoid deforming the terminal, either by forcing the test probe too far into the cavity or by using too large of a test probe.
- After backprobing any connector, inspect for terminal damage. If terminal damage is suspected, test for proper terminal contact.

Do not disconnect the connector and probe the terminals from the harness side (back) of the connector.

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Troubleshooting with a Digital Multimeter

Special Tools

EL–39200 Digital Multimeter (DMM)

For equivalent regional tools, refer to Special Tools.

Caution: Refer to Test Probe Caution.

Digital Multimeter (DMM) Basic Requirements

Service information is validated using digital multimeters that meet or exceed the following requirements. Using a multimeter that does not meet these basic requirements may give inaccurate readings which could lead to an incorrect diagnosis.

Display and Settings

1. Four digits displayed
2. Voltage, current, resistance, frequency, diode test settings, and min-max function
3. Display positive and negative values

Voltage

1. Have at least 10 MΩ input impedance
2. Test a DC voltage range of 0.1–1000 V.
3. Test an AC voltage range of 0.1–1000 V.

Current

1. Test a DC current range of 0.1 µA–10 A.
2. Test an AC current range of 0.1 µA–10 A.

Resistance

Test a resistance range of 0.1 Ω–40 MΩ and displays infinite for a value greater than 40 MΩ (O.L. (Over-load))

Frequency

Test for a frequency range of 0.5 Hz–199 k Hz

Diode Test

1. Apply at least 1 mA when performing the diode bias test
2. Display the break over voltage drop (0–3 V) of a forward biased diode
3. Display infinite (O.L. (Over-load)) when a diode is reverse biased

Min-Max Readings

1. Can update at a 25 ms sample rate
2. Saves and displays minimum and maximum values

Note: Circuits which include any solid state control modules, such as the engine control module (ECM), should only be tested with a 10 MΩ or higher impedance digital multimeter such as the EL-39200.

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The DMM instruction manual is a good source of information and should be read thoroughly upon receipt of the DMM as well as kept on hand for future reference.

A DMM should be used instead of a test lamp in order to test for voltage in high impedance circuits. While a test lamp shows whether voltage is present if the impedance is low enough, a DMM indicates how much voltage is present. In other words, if there is not enough current, the test lamp will not illuminate even though voltage is present.

The ohmmeter function on a DMM shows how much resistance exists between 2 points along a circuit. Low resistance in a circuit means good continuity.

Note: Disconnect the power feed from the suspect circuit when measuring resistance with a DMM. This prevents incorrect readings. DMMs apply such a small voltage to measure resistance that the presence of voltages can upset a resistance reading.

Diodes and solid state components in a circuit can cause a DMM to display a false reading. To find out if a component is affecting a measurement take a reading once, then reverse the leads and take a second reading. If the readings differ the solid state component is affecting the measurement.

Following are examples of the various methods of connecting the DMM to the circuit to be tested:

- Probe both ends of the connector and either hold the leads in place while manipulating the connector or tape the leads to the harness for continuous monitoring while you perform other operations or test driving. Refer to Probing Electrical Connectors.
- Disconnect the harness at both ends of the suspected circuit where it connects either to a component or to other harnesses.
- If the system that is being diagnosed has a specified pinout or breakout box, it may be used in order to simplify connecting the DMM to the circuit or for testing multiple circuits quickly.

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Troubleshooting with a Test Lamp

Special Tools

EL-35616-200 Test Light – Probe Kit

For equivalent regional tools, refer to Special Tools.

Caution: Refer to Test Probe Caution.

A test lamp can simply and quickly test a low impedance circuit for voltage. A Digital Multimeter (DMM) should be used instead of a test lamp in order to test for voltage in high impedance circuits. While a test lamp shows whether voltage is present if the impedance is low enough, a DMM indicates how much voltage is present. In other words, if there is not enough current, the test lamp will not illuminate even though voltage is present.

The *EL-35616-200* kitis Micro-Pack compatible and comprised of a 12 V light bulb with an attached pair of leads.

To properly operate this tool use the following procedures.

When testing for voltage:

1. Attach one lead to ground.
2. Touch the other lead to various points along the circuit where voltage should be present.
3. When the bulb illuminates, there is voltage at the point being tested.

When testing for ground:

1. Attach one lead to battery positive voltage.
2. Touch the other lead to various points along the circuit where ground should be present.
3. When the bulb illuminates, there is ground at the point being tested.

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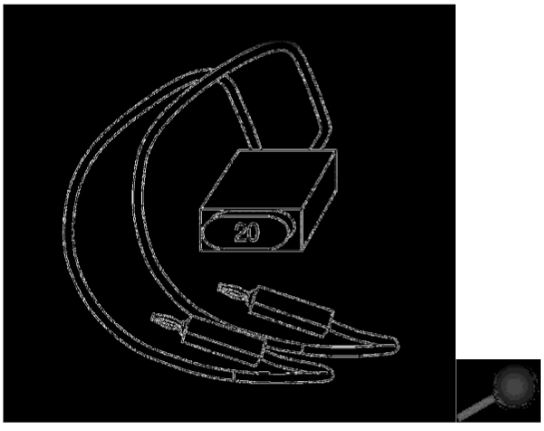
Using Fused Jumper Wires

Special Tools

EL 35616-20F Fused Jumper Wire

For equivalent regional tools, refer to Special Tools.

Note: A fused jumper may not protect solid state components from being damaged.



The *EL 35616-20F* Fused Jumper Wireincludes banana jack connectors that provide adaptation to most connectors without damage. This fused jumper wire is supplied with a 20 A fuse which may not be suitable for some circuits. Do not use a fuse with a higher rating than the fuse that protects the circuit being tested.

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Measuring Voltage

Special Tools

EL-39200 Digital Multimeter (DMM)

For equivalent regional tools, refer to Special Tools.

Caution: Refer to Test Probe Caution.

The following procedure measures the voltage at a selected point in a circuit.

1. Disconnect the electrical harness connector for the circuit being tested, if necessary.
2. Enable the circuit and/or system being tested. Use the following methods:
    - Turn ON the ignition, with the engine OFF.
    - Turn ON the engine.
    - Turn ON the circuit and/or system with a scan tool in Output Controls.
    - Turn ON the switch for the circuit and/or system being tested.
3. Select the V (AC) or V (DC) position on the Digital Multimeter (DMM).
4. Connect the positive lead of the DMM to the point of the circuit to be tested.
5. Connect the negative lead of the DMM to a good ground.
6. The DMM displays the voltage measured at that point.

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Measuring Voltage Drop

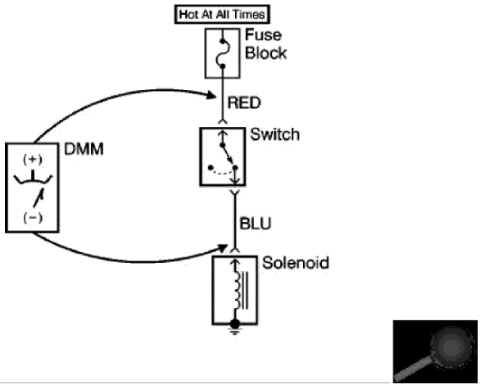
Special Tools

EL–39200 Digital Multimeter (DMM)

For equivalent regional tools, refer to Special Tools.

Caution: Refer to Test Probe Caution.

The following procedure determines the difference in voltage potential between 2 points.



1. Set the Digital Multimeter (DMM) to the V (DC) position.
2. Connect the positive lead of the DMM to one point of the circuit to be tested.
3. Connect the negative lead of the DMM to the other point of the circuit.
4. Operate the circuit.
5. The DMM displays the difference in voltage between the 2 points.

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Measuring Frequency

Special Tools

EL-39200 Digital Multimeter (DMM)

For equivalent regional tools, refer to Special Tools.

Caution: Refer to Test Probe Caution.

The following procedure determines the frequency of a signal.

Note: Connecting the Digital Multimeter (DMM) to the circuit before pressing the Hz button will allow the DMM to autorange to an appropriate range.

1. Apply power to the circuit.
2. Set the DMM to the V (AC) position.
3. Connect the positive lead of the DMM to the circuit to be tested.
4. Connect the negative lead of the DMM to a good ground.
5. Set to Hz on the DMM.
6. The DMM will display the frequency measured.

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Testing Ground and Low Reference Circuits

Because a test lamp can light with up to 200 Ω in a ground or low reference circuit they are not recommended to be used for this type of test. A low impedance test lamp can light and indicate the circuit is good when there is as much as 20–30 Ω present, while a high impedance test lamp can light with up to 200 Ω present in the circuit. This is why the Digital Multi-Meter (DMM) is used when validating a ground or low reference circuit continuity.

When using the DMM there are many vehicle conditions that can affect the ground and low reference continuity testing. If these conditions are not met, a ground or low reference circuit test can fail on a good circuit. This may cause longer diagnosis time and incorrect component replacement.

Any current flow through a ground or low reference circuit, while being tested, will skew the DMM continuity reading, or display a reading higher than when there is no current flowing. Performing a ground or low reference circuit continuity test, in reference to the vehicles battery negative terminal, will have the highest risk of failing a good ground or low reference circuit test than any other ground reference point. The best ground test points would be a control module housing (if the control modules housing is metal and grounded), under dash metal frame work, engine block, or body ground studs (other than where the negative battery cable is attached).

A typical DMM ground or low reference circuit continuity reading can be as high as 100 Ω with the ignition ON, and drop to 15–25 Ω after the ignition is turned OFF. The reading will drop below 10 Ω after 30–40 seconds, then below 5 Ω after 60 seconds. Once the vehicle completely goes to sleep (generally 3-10 minutes) the reading will drop below 0.3 Ω.

The following list of conditions may need to be met to ensure a valid continuity reading on a ground or low reference circuit:

- Ignition OFF
- Key out of the ignition switch (when not equipped with keyless entry and remote start)
- Retained Accessory Power (RAP) OFF (open and close the driver door after ignition OFF)
- Battery charger set at a 2 A or less charge rate
- Scan tool not communicating with any vehicle control module (in some cases it may need to be disconnected from the DLC)
- All entry doors closed
- Headlamps OFF (auto headlamps disabled)
- Any delay lighting OFF
- HVAC after blow OFF
- Any accessory that can work when the ignition is OFF
- Wait up to 60 seconds (after all other listed conditions are met)

Activating the DOOR LOCK function with a key fob can greatly reduce the time to achieve a valid ground or low reference continuity test result.

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Testing for Continuity

Special Tools

EL-39200 Digital Multimeter (DMM)

For equivalent regional tools, refer to Special Tools.

Caution: Refer to Test Probe Caution.

The following procedures verify good continuity in a circuit.

With a Digital Multimeter (DMM)

1. Set the DMM to the Ω position.
2. Disconnect the power feed (i.e. fuse, control module) from the suspect circuit.
3. Disconnect the load.
4. Select the MIN MAX function on the DMM.
5. Connect one lead of the DMM to one end of the circuit to be tested.
6. Connect the other lead of the DMM to the other end of the circuit.
7. If the DMM displays low or no resistance, the circuit has good continuity.

With a Test Lamp

Note: Only use the test lamp procedure on low impedance power and ground circuits.

1. Remove the power feed (i.e. fuse, control module) from the suspect circuit.
2. Disconnect the load.
3. Connect one lead of the test lamp to one end of the circuit to be tested.
4. Connect the other lead of the test lamp to battery positive voltage.
5. Connect the other end of the circuit to ground.
6. If the test lamp illuminates (full intensity), then the circuit has good continuity.

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Testing for Short to Ground

Caution: Refer to Test Probe Caution.

The following procedures test for a short to ground in a circuit.

With a Digital Multimeter (DMM)

1. Remove the power feed (i.e. fuse, control module) from the suspect circuit.
2. Disconnect the load.
3. Set the rotary dial of the DMM to the Ω position.
4. Connect one lead of the DMM to one end of the circuit to be tested.
5. Connect the other lead of the DMM to a good ground.
6. If the DMM does NOT display infinite resistance (OL), there is a short to ground in the circuit.

With a Test Lamp

1. Remove the power feed (i.e. fuse, control module) from the suspect circuit.
2. Disconnect the load.
3. Connect one lead of the test lamp to battery positive voltage.
4. Connect the other lead of the test lamp to one end of the circuit to be tested.
5. If the test lamp illuminates, there is a short to ground in the circuit.

Fuse Powering Several Loads

1. Review the system schematic and locate the fuse that is open.
2. Open the first connector or switch leading from the fuse to each load.
3. Connect a DMM across the fuse terminals (be sure that the fuse is powered).
    - When the DMM displays voltage the short is in the wiring leading to the first connector or switch.
    - If the DMM does not display voltage refer to the next step.
4. Close each connector or switch until the DMM displays voltage in order to find which circuit is shorted.

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Testing for a Short to Voltage

Special Tools

EL-39200 Digital Multimeter (DMM)

For equivalent regional tools, refer to Special Tools.

Caution: Refer to Test Probe Caution.

The following procedure tests for a short to voltage in a circuit.

1. Remove the power feed (i.e. fuse, control module) from the suspect circuit.
2. Disconnect the load.
3. Set the Digital Multimeter (DMM) to the V (DC) position.
4. Connect the positive lead of the DMM to one end of the circuit to be tested.
5. Connect the negative lead of the DMM to a good ground.
6. Turn ON the ignition and operate all accessories.
7. If the voltage measured is greater than 1 V, there is a short to voltage in the circuit.

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Testing for Intermittent Conditions and Poor Connections

Special Tools

EL-35616 Terminal Test Probe Kit

For equivalent regional tools, refer to Special Tools.

When the condition is not currently present, but is indicated in DTC history, the cause may be intermittent. An intermittent may also be the cause when there is a customer complaint, but the symptom cannot be duplicated. Refer to the Symptom Table of the system that is suspect of causing the condition before trying to locate an intermittent condition.

Most intermittent conditions are caused by faulty electrical connections or wiring. Inspect for the following items:

- Wiring broken inside the insulation
- Poor connection between the male and female terminal at a connector
- Poor terminal to wire connection - Some conditions which fall under this description are poor crimps, poor solder joints, crimping over the wire insulation rather than the wire itself, and corrosion in the wire to terminal contact area, etc.
- Pierced or damaged insulation can allow moisture to enter the wiring causing corrosion. The conductor can corrode inside the insulation, with little visible evidence. Look for swollen and stiff sections of wire in the suspect circuits.
- Wiring which has been pinched, cut, or its insulation rubbed through may cause an intermittent open or short as the bare area touches other wiring or parts of the vehicle.
- Wiring that comes in contact with hot or exhaust components
- Refer to Inducing Intermittent Fault Conditions in order to duplicate the conditions required, in order to verify the customer concern.
- Refer to Testing for Electrical Intermittents for test procedures to detect intermittent open, high resistance, short to ground, and short to voltage conditions.
- Refer to Scan Tool Snapshot Procedure for advanced intermittent diagnosis and Vehicle Data Recorder operation.

Testing for Terminal Fretting

Some intermittent conditions can be caused by wire terminal fretting corrosion. Fretting corrosion is a build-up of insulating, oxidized wear debris that can form when there is a small motion between electrical contacts. The oxidized wear debris can pile up enough at the electrical contact spots that the electrical resistance across the connection increases. Movement between the contacting surfaces as small as 10 to 100 microns can cause fretting. To put this in perspective, a sheet of paper is about 100 microns thick, so fretting motion is small and hard to see. Vibration and thermal expansion/contraction are the main sources that create fretting motion. Since vehicles vibrate and can experience large temperature swings, they are a good source for fretting motion. Tin, copper, nickel, and iron surfaces are all susceptible to fretting corrosion. Fretting corrosion can be difficult to see but it looks like small, dark smudges on the terminals contact surface.

To correct a fretting condition disconnect the suspect connector and add dielectric grease / lubricant (Nyogel 760G or equivalent, meeting GM specification 9986087) to both sides of the connector terminals. Then reconnect the connector and wipe away any excess lubricant. This will correct the additional terminal contact resistance due to the terminal fretting corrosion.

Testing for Proper Terminal Contact

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It is important to test terminal contact at the component and any inline connectors before replacing a suspect component. Mating terminals must be inspected to ensure good terminal contact. A poor connection between the male and female terminal at a connector may be the result of contamination or deformation.

Contamination may be caused by the connector halves being improperly connected. A missing or damaged connector seal, damage to the connector itself, or exposing the terminals to moisture and dirt can also cause contamination. Contamination, usually in the underhood or underbody connectors, leads to terminal corrosion, causing an open circuit or intermittently open circuit.

Deformation is caused by probing the mating side of a connector terminal without the proper adapter. Always use the *EL-35616* kitwhen probing connectors. Other causes of terminal deformation are improperly joining the connector halves, or repeatedly separating and joining the connector halves. Deformation, usually to the female terminal contact tang, can result in poor terminal contact causing an open or intermittently open circuit.

Testing for Proper Terminal Contact in Bussed Electrical Centers

It is very important to use the correct test adapter when testing for proper terminal contact of fuses and relays in a bussed electrical center. Use the *EL-35616* kit to test for proper terminal contact. Failure to use the *EL-35616* kitcan result in improper diagnosis of the bussed electrical center.

Follow the procedure below in order to test terminal contact:

1. Separate the connector halves.
2. Visually inspect the connector halves for contamination. Contamination may result in a white or green build-up within the connector body or between terminals. This causes high terminal resistance, intermittent contact, or an open circuit. An underhood or underbody connector that shows signs of contamination should be replaced in its entirety: terminals, seals, and connector body.
3. Using an equivalent male terminal/terminated lead, verify that the retention force is significantly different between a known good terminal and the suspect terminal. Replace the female terminal in question.

Flat Wire Connectors

There are no serviceable parts for flat wire connectors on the harness side or the component side.

Follow the procedure below in order to test terminal contact:

1. Remove the component in question.
2. Visually inspect each side of the connector for signs of contamination. Avoid touching either side of the connector as oil from your skin may be a source of contamination as well.
3. Visually inspect the terminal bearing surfaces of the flat wire circuits for splits, cracks, or other imperfections that could cause poor terminal contact. Visually inspect the component side connector to ensure that all of the terminals are uniform and free of damage or deformation.
4. Insert the appropriate adapter into the flat wire harness connector in order to test the circuit in question.

Control Module/Component Voltage and Grounds

Poor voltage or ground connections can cause widely varying symptoms.

- Test all control module voltage supply circuits. Many vehicles have multiple circuits supplying voltage to a control module. Other components in the system may have separate voltage supply circuits that may also need to be tested. Inspect connections at the module/component connectors, fuses, and any intermediate connections between the voltage source and the module/component. A test lamp or a DMM may indicate that

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voltage is present, but neither tests the ability of the circuit to carry sufficient current. Operate the component to test the ability of the circuit to carry sufficient current. Refer to Circuit Testing and Power Distribution Schematics.

- Test all control module ground and system ground circuits. The control module may have multiple ground circuits. Other components in the system may have separate grounds that may also need to be tested. Inspect grounds for clean and tight connections at the grounding point. Inspect the connections at the component and in splice packs, where applicable. Operate the component to test the ability of the circuit to carry sufficient current. Refer to Circuit Testing and Ground Distribution Schematics.

Temperature Sensitivity

- An intermittent condition may occur when a component/connection reaches normal operating temperature. The condition may occur only when the component/connection is cold, or only when the component/connection is hot.
- Freeze Frame, Failure Records, Snapshot, or Vehicle Data Recorder data may help with this type of intermittent condition, where applicable.
- If the intermittent is related to heat, review the data for a relationship with the following:
  - High ambient temperatures
  - Underhood/engine generated heat
  - Circuit generated heat due to a poor connection, or high electrical load
  - Higher than normal load conditions, towing, etc.
- If the intermittent is related to cold, review the data for the following:
  - Low ambient temperatures - In extremely low temperatures, ice may form in a connection or component. Inspect for water intrusion.
  - The condition only occurs on a cold start.
  - The condition goes away when the vehicle warms up.
- Information from the customer may help to determine if the trouble follows a pattern that is temperature related.
- If temperature is suspected of causing an intermittent fault condition, attempt to duplicate the condition. Refer to Inducing Intermittent Fault Conditions in order to duplicate the conditions required.

Electromagnetic Interference and Electrical Noise

Some electrical components/circuits are sensitive to electromagnetic interference or other types of electrical noise. Inspect for the following conditions:

- A mis-routed harness that is too close to high voltage/high current devices such as secondary ignition components, motors, generator etc. — These components may induce electrical noise on a circuit that could interfere with normal circuit operation.
- Electrical system interference caused by a malfunctioning relay, or a control module driven solenoid or switch — These conditions can cause a sharp electrical surge. Normally, the condition will occur when the malfunctioning component is operating.
- Installation of non-factory or aftermarket add on accessories such as lights, 2-way radios, amplifiers, electric motors, remote starters, alarm systems, cell phones, etc. — These accessories may create interference in other circuits while operating and the interference would disappear when the accessory is not operating. Refer to Checking Aftermarket Accessories.
- Test for an open diode across the A/C compressor clutch and for other open diodes. Some relays may contain a clamping diode.
- The generator may be allowing AC noise into the electrical system.

Incorrect Control Module

- There are only a few situations where reprogramming a control module is appropriate:

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- A new service control module is installed.
- A control module from another vehicle is installed.
- Revised software/calibration files have been released for this vehicle.

Note: DO NOT re-program the control module with the SAME software/calibration files that are already present in the control module. This is not an effective repair for any type of concern.

- Verify that the control module contains the correct software/calibration. If incorrect programming is found, reprogram the control module with the most current software/calibration. Refer to Control Module References for replacement, setup, and programming.

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Inducing Intermittent Fault Conditions

Special Tools

J-25070 Heat Gun

For equivalent regional tools, refer to Special Tools.

Many intermittent open or shorted circuits are affected by harness/connector movement that is caused by vibration, engine torque, bumps/rough pavement, etc. In order to duplicate the customer's concern, it may be necessary to manipulate the wiring harness if the malfunction appears to be vibration related. Manipulation of a circuit can consist of a wide variety of actions, including:

- Wiggling the harness
- Disconnecting a connector and reconnecting
- Stressing the mechanical connection of a connector
- Pulling on the harness or wire in order to identify a separation/break inside the insulation
- Relocating a harness or wires

All these actions should be performed with some goal in mind. For instance, with a scan tool connected, wiggling the wires may uncover a faulty input to the control module. The snapshot option would be appropriate here. Refer to Scan Tool Snapshot Procedure. Another option is, with the component commanded ON and OFF by the scan tool, to move related connectors and wiring and observe the component operation. With the engine running, move related connectors and wiring while monitoring engine operation. If harness or connector movement affects the data displayed, component/system operation, or engine operation, inspect and repair the harness/connections as necessary.

You may need to load the vehicle in order to duplicate the concern. This may require the use of weights, floor jacks, jackstands, frame machines, etc. In these cases you are attempting to duplicate the concern by manipulating the suspension or frame. This method is useful in finding harnesses that are too short and their connectors pull apart enough to cause a poor connection. A DMM set to the Min/Max mode and connected to the suspect circuit while testing can yield desirable results. Refer to Testing for Electrical Intermittents.

Certainly, using the senses of sight, smell, and hearing while manipulating the circuit can provide good results as well.

There may be instances where circuit manipulation alone will not meet the required criteria for the fault condition to appear. In such cases it may be necessary to expose the suspect circuit to other conditions while manipulating the harness. Such conditions would include high moisture conditions, along with exceptionally high or low temperatures. The following discusses how to expose the circuit to these kinds of conditions.

High Temperature Conditions

If the complaint tends to be heat related, you can simulate the condition using the *J-25070* heat gun.

Using the heat gun, you can heat up the suspected area or component. Manipulate the harnesses under high temperature conditions while monitoring the scan tool or DMM to locate the fault condition.

The high temperature condition may be achieved simply by test driving the vehicle at normal operating temperature. If a heat gun is unavailable, consider this option to enhance your diagnosis. This option does not allow for the same control, however.

Low Temperature Conditions

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Depending on the nature of the fault condition, placing a fan in front of the vehicle while the vehicle is in the shade can have the desired effect.

If this is unsuccessful, use local cooling treatments such as ice or a venturi type nozzle (one that provides hot or cold air). This type of tool is capable of producing air stream temperatures down to −18°C (0°F) from one end and +71°C (160°F) from the other. This is ideally suited for localized cooling needs. In addition, circuit cooling spray can be used to cool down a component or circuit.

Once the vehicle, component, or harness has been sufficiently cooled, manipulate the harness or components in an effort to duplicate the concern.

Duplicating Failure Conditions

- If none of the previous tests are successful, attempt to duplicate and/or capture the failure conditions.
- Freeze Frame/Failure Records data, where applicable, contains the conditions that were present when the DTC set.
  1. Review and record Freeze Frame/Failure Records data.
  2. Clear the DTCs using the scan tool.
  3. Turn the key to OFF and wait 15 seconds.
  4. Operate the vehicle under the same conditions that were noted in Freeze Frame/Failure Records data, as closely as possible. The vehicle must also be operating within the Conditions for Running the DTC. Refer to Conditions for Running the DTC in the supporting text if a DTC is being diagnosed.
  5. Monitor DTC Status for the DTC being tested. The scan tool will indicate Ran, when the enabling conditions have been satisfied long enough for the DTC to run. The scan tool will also indicate whether the DTC passed or failed.
- An alternate method is to drive the vehicle with the DMM connected to a suspected circuit. An abnormal reading on the DMM when the concern occurs, may help you locate the concern.

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Testing for Electrical Intermittents

Special Tools

EL-39200 Digital Multimeter

For equivalent regional tools, refer to Special Tools.

Perform the following procedures while wiggling the harness from side to side. Continue this at convenient points (about 6 inches apart) while watching the test equipment.

- Testing for Short to Ground
- Testing for Continuity
- Testing for a Short to Voltage

If the fault is not identified, perform the procedure below using the MIN MAX feature on the *EL-39200* digital multimeter(DMM). This feature allows you to manipulate the circuit without having to watch the DMM. The DMM will generate an audible tone when a change is detected.

Note: The DMM must be used in order to perform the following procedure since the DMM can monitor current, resistance or voltage while recording the minimum (MIN), and maximum (MAX) values measured.

1. Connect the DMM to both sides of a suspected connector (still connected), or from one end of a suspected circuit to the other. Refer to Troubleshooting with a Digital Multimeter for information on connecting the DMM to the circuit.
2. Set the DMM to the V (AC) or V (DC) position.
3. Select the voltage range feature of the DMM in order to select the desired voltage range.
   Note: The 100 ms RECORD mode is the length of time an input must stay at a new value in order to record the full change.
4. Select the MIN MAX function of the DMM. The DMM displays the 100 ms RECORD and emits an audible tone (beep).
5. Simulate the condition that is potentially causing the intermittent connection, either by wiggling the connections or the wiring, test driving, or performing other operations. Refer to Inducing Intermittent Fault Conditions.
6. Listen for the audible Min Max Alert which indicates that a new minimum or maximum value has been recorded.
7. Press the MIN MAX button until the MAX value is displayed and note the value.
8. Press the MIN MAX button until the MIN value is displayed and note the value.
9. Determine the difference between the MIN and MAX values.
   - If the variation between the recorded MIN and MAX voltage values is 1 V or greater an intermittent open or high resistance condition exists. Repair the condition as necessary.
   - If the variation between the recorded MIN and MAX voltage values is less than 1 V, an intermittent open or high resistance condition does not exist.

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Scan Tool Snapshot Procedure

Using Snapshots in Global Diagnostic System (GDS)

Overview

A snapshot is a recording of what a control module on the vehicle was receiving for information while the snapshot is being made. A snapshot may be used to analyze the data during the time a vehicle condition is current. This allows you to concentrate on making the condition occur, rather than trying to view all the data in anticipation of the fault. In GDS 2, snapshots are automatically recorded whenever the user views Module Diagnostics, Vehicle Diagnostics and/or Systems Diagnostics. Module Diagnostics includes DTC Data, Identification Information, Data Display, Control Functions and Configuration/Reset Functions. Vehicle Diagnostics includes Vehicle Wide DTCs. Systems Diagnostics includes Inspection/Maintenance Status and Inspection/Maintenance Information.

Snapshot Replay

The Snapshot Replay function allows reviews of previously recorded vehicle snapshot data. This information can be used in analysis of vehicle problems and detection of trigger error conditions. The graph function can be used to compare parameters to see if a component is functioning properly. Recorded snapshots can be selected for viewing by the following two methods:

- From the Home Page, click on Review Stored Data. In the Snapshot Select Page, highlight the vehicle in the upper pane and highlight the desired snapshot in the lower pane, then click the Select Snapshot button.
- The user can view a snapshot without ending a current on-vehicle diagnostic session by clicking the Module button (when active) or Back button until the Session Manager is displayed in the menu. This is used when a user is viewing live data and wants the quickest way to review the data. Click on the Session Manager button. Highlight the desired snapshot in the lower pane and click Select Snapshot

View Selections

The following information can be selected in the tabs at the top of the screen:

- Line Graph – Displays information from the snapshot file in graph view. The current value of the parameters is displayed on the screen. Use the buttons on the right side to modify the graph data.
- Diagnostic Data Display – Displays incoming information from the snapshot file. The current value of the parameters is displayed on the screen. Use the buttons on the right side to modify the data.
- DTC Display – This tab will be displayed when a DTC is current or the status has changed. The tab will not be displayed when there are no DTCs.
- Bookmarks – If bookmarks are present, this displays the Type, Description and Time of automatic and manually generated bookmarks.
- System Information – Displays the GDS 2 Software Version and MDI Serial Number used when the snapshot was recorded.
- Selected Vehicle Configuration – Displays vehicle options information.

Snapshot Replay Functions

To review the snapshot there are buttons at the bottom of the window to control the cursor. From left to right the buttons are:

- Return to Frame 0 – This button returns the cursor to frame 0.

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- Stop – This button pauses or stops the cursor. Click the Play button to resume.
- Play – This button starts the replay of the data.
- Play Speed – This button changes the speed between 1x, 2x, 4x and 8x.
- Back 1 Frame – This button moves the cursor back 1 frame.
- Forward 1 Frame – This button moves the cursor forward 1 frame.
- Previous Bookmark – This button moves the cursor to the previous bookmark.
- Next Bookmark – This button moves the cursor forward 1 bookmark.

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Circuit Protection - Fuses

Special Tools

EL–39200 Digital Multimeter (DMM)

For equivalent regional tools, refer to Special Tools.



The fuse is the most common method of an automotive wiring circuit protection. Whenever there is an excessive amount of current flowing through a circuit the fusible element will melt and create an open or incomplete circuit. Fuses are a one time protection device and must be replaced each time the circuit is overloaded. To determine if a fuse is open, remove the suspected fuse and examine if the element in the fuse is broken (2). If not broken (1), also check for continuity using a Digital Multimeter (DMM) or a continuity tester. If the element is broken or continuity is suspect, replace the fuse with one of equal current rating.

Fuse Types

Current Rating Amperes	Color
Auto Fuses, Mini Fuses	
2	Gray
3	Violet
5	Tan
7.5	Brown
10	Red
15	Blue
20	Yellow

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Current Rating Amperes	Color
25	White or Natural
30	Green
Maxi Fuses	
20	Yellow
30	Light Green
40	Orange or Amber
60	Blue
50	Red
J-Case Fuses	
20	Blue
30	Pink
40	Green
50	Red
60	Yellow
Midi Fuses	
80	Black
Mega Fuses	
100	Black
150	Black
200	Black

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Circuit Protection - Circuit Breakers

A circuit breaker is a protective device that is designed to open the circuit when a current load is in excess of the rated breaker capacity. If there is a short or other type of overload condition in the circuit, the excessive current will open the circuit between the circuit breaker terminals. Two types of circuit breakers are used.

Circuit Breaker

This type opens when excessive current passes through it for a period of time. It closes again after a few seconds, and if the cause of the high current is still present, it will open again. The circuit breaker will continue to cycle open and closed until the condition causing the high current is removed.

Positive Temperature Coefficient (PTC) Circuit Breaker

This type greatly increases its resistance when excessive current passes through it. The excessive current heats the PTC device, as the device heats its resistance increases. Eventually the resistance gets so high that the circuit is effectively open. Unlike the ordinary circuit breaker the PTC unit will not reset until the circuit is opened, by removing the voltage from its terminals. Once the voltage is removed the circuit breaker will re-close within a second or 2.

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Circuit Protection - Fusible Links

Special Tools

EL–39200 Digital Multimeter (DMM)

For equivalent regional tools, refer to Special Tools.

Note: When repairing a fusible link, fusible links cut longer than 225 mm (approximately 9 in) will not provide sufficient overload protection.

Fusible link is wire designed to melt and break continuity when excessive current is applied. It is often located between or near the battery and starter or electrical center. Use a continuity tester or a Digital Multimeter (DMM) at each end of the wire containing the fusible link in order to determine if it is broken. If broken, it must be replaced with fusible link of the same gauge size.

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Wiring Repairs

The Wiring Repairs section contains the following types of wiring repair information. Using these elements together will make wiring repair faster and easier:

- Testing for Intermittent Conditions and Poor Connections
- Flat Wire Repairs
- GMLAN and Media Oriented Systems Transport (MOST) Wiring Repairs
- High Temperature Wiring Repairs
- Heated Oxygen Sensor Wiring Repairs
- Splicing Copper Wire Using Splice Sleeves
- Splicing Twisted or Shielded Cable
- Splicing Inline Harness Diodes
- SIR/SRS Wiring Repairs

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Repairing Damaged Wire Insulation

If the wire insulation has been chafed, or broken, enough to show the conductive portion of the wire, and the wire is not damaged, determine the length of insulation that needs to be repaired. If the repair is less than 280 mm (11 in), cut the wire within the damaged area. Then slide the appropriate heat shrink tubing (listed below) over the wire, and repair the wire by splicing the wires together. Refer to Splicing Copper Wire Using Splice Sleeves. Once the wire is spliced together slide heat shrink tubing over the damaged area and apply heat to seal the repaired wire.

If the wire is damaged, or the damaged area is larger than 280 mm (11 in), then replace the damaged wire by splicing in a new section of wire. Refer to Splicing Copper Wire Using Splice Sleeves.

Heat Shrink Tubing Selection

GM Part Number	Diameter		Description	Color	Length	
	Metric	English			Metric	English
12355003	9.5 mm	0.375 in	Tubing, Shrink 3/8	Black	305 mm	12 in
12355005	12.7 mm	0.5 in	Tubing, Shrink 1/2	Black	305 mm	12 in
12355011	19.1 mm	0.75 in	Tubing, Shrink 3/4	Black	305 mm	12 in
12355008	25.4 mm	1.0 in	Tubing, Shrink 1.00	Black	305 mm	12 in

Wire Size Conversion

Metric Wire Sizes (mm 2)	AWG Sizes
0.13	26
0.21	24
0.32	22
0.52	20
0.83	18
1.31	16
2.09	14
3.31	12
5.27	10

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Metric Wire Sizes (mm 2)	AWG Sizes
8.37	8
13.3	6
21.2	4
33.6	2
53.5	1/0

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Coaxial Cable Repairs

The GM global coaxial cable repair strategy uses coaxial cables, connectors and jumpers to repair coaxial cables. The intent is to install the new service cable in vehicle, but removal of the old cable is not necessary. There are several repair scenarios:

- New cables, jumpers, and connector housing are required.
- Only new cables are required while it is possible to reuse the existing connector housing in vehicle. A jumper may or may not be needed.
- Only new connector housing are required, while it is possible to reuse the existing cable in the vehicle.
- A new cable would need to be installed from source to destination and by-pass the inline connector in some cases when an inline connector is unrepairable (Example: a cracked male end of a 1-way connector).

Coaxial Cable Kits

Four different kits will be available to repair coaxial cables. Components of each kit cannot be ordered separately from the kit.

- **Communication Interface Module Antenna Cable Kit** (Kit # 13581174) is used to repair Cellular coaxial cables. This kit uses RG58 low loss coaxial cables that are available in four lengths. The coaxial cables can be attached together in various lengths to closely match the length of the faulty/damaged coaxial cable.
- **Digital Radio and Vehicle Locator Antenna Coaxial Cable Kit** (Kit # 13581173) is used to repair XM and GPS coaxial cables. For vehicles that have a combined GPS and Cellular/OnStar signal on one cable, use Kit # 13581174. This kit uses RG316 low loss coaxial cables that are available in three lengths. The coaxial cables can be attached together in various lengths to closely match the length of the faulty/damaged coaxial cable.
- **Digital Radio, Mobile Telephone and Vehicle Locator Antenna Coaxial Cable Kit** (Kit # 19119056) is used with OnStar, XM, and GPS cables. This kit consists of jumpers and connectors. The jumpers are used to adapt different types of connectors together (to attach 2-way and 3-way connector onto the long 7, 5, and 3 foot cables). The connectors are used to replace existing connectors. The 1-way and 2-way connectors in the kit are in water-blue color (different than what the vehicle is built with) and are non-keyed (universal fit). The 3-way connectors in the kit are in the same color as in the vehicle.
- **Communication Interface Module Antenna Cable Kit** (Kit # 22803854) is used for the OnStar module on some vehicles built before the 2011 model year.

Coaxial Cable Repair Kits

Repair Kit Name	Description
Communication Interface Module Antenna Cable Kit (Kit # 13581174)	RG58 coaxial cable with female/female connectors – 7ft/2.1m
	RG58 coaxial cable with female/male connectors – 5ft/1.5m

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Repair Kit Name		Description
		RG58 coaxial cable with female/male connectors – 3.5ft/1.1m
		RG58 coaxial cable with female/male connectors – 3.5ft/1.1m
Digital Radio and Vehicle Locator Antenna Coaxial Cable Kit (Kit # 13581173)		RG316 coaxial cable with female/female connectors – 7ft/2.1m
		RG316 coaxial cable with female/male connectors – 5ft/1.5m
		RG316 coaxial cable with female/male connectors – 3.5ft/1.1m
Digital Radio, Mobile Telephone and Vehicle Locator Antenna Coaxial Cable Kit (Kit # 19119056)	3-way Gen 1 sub-kit	1-way to 3-way Gen 1 jumper for female connector – Part # 13581154 – 4in/10cm 1-way to 3-way Gen 1 jumper for male connector – Part # 19119052 – 4in/10cm
		White female connector
		White male connector
		Blue female connector
		Blue male connector
	3-way Gen 2 sub-kit	1-way to 3-way Gen 2 jumper for female connector – Part # 13581155 – 4in/10cm 1-way to 3-way Gen 2 jumper for male connector – Part # 19119058 – 4in/10cm
		Tan female connector
		Tan male connector
		Gray female connector
		Gray male connector
	2-way Gen 1 sub-kit	

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Repair Kit Name		Description
		1-way to 2-way Gen 1 jumper for female connector – Part # 13581156 – 4in/10cm
		Water-blue female connector
	2-way Gen 2 sub-kit (wide)	1-way to 2-way Gen 2 jumper for female connector – Part # 13581157 – 4in/10cm
		1-way to 2-way Gen 2 jumper for male connector – Part # 13581158 – 4in/10cm
		Water-blue female connector
		Water-blue male connector
	2-way Gen 2 and 3 sub-kit (narrow)	1-way to 2-way Gen 2 and 3 jumper for female connector – Part # 13582468 – 4in/10cm
		Use the 1-way to 2-way Gen 2 jumper for female connector 19119058 – 4in/10cm from the 2-way Gen 2 sub-kit.
		Water-blue female connector
		Water-blue male connector
	Right-angle jumper with water-blue universal 1-way connector – 4in/10cm	
Communication Interface Module Antenna Cable Kit (Kit # 22803854)		1-way to mini UHF jumper – 4in/10cm

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Connector Housing Repair Procedure

The connector housings (available in Digital Radio, Mobile Telephone and Vehicle Locator Antenna Coaxial Cable Kit) are available for 1-way housings, 2-way housings and 3-way housings. Determine the connector housing required:

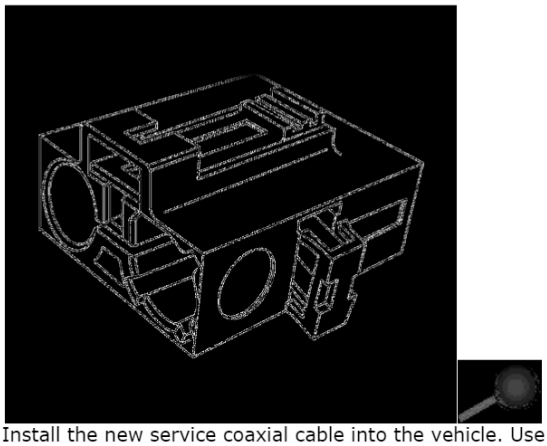
1-way housing

No change to the service coaxial cable is necessary in order to install the new coaxial cable into the vehicle.

2-way housing

A 4-inch jumper is required.

1. Determine the appropriate generation (1, 2, or 3) and/or size (12.7mm or 8mm) of the 2-way housing that is in the vehicle.
2. Remove the faulty/damaged coaxial cable from the 2-way connector housing by removing the terminal position assurance (TPA) from the connector housing and then slide the cable out of the connector.

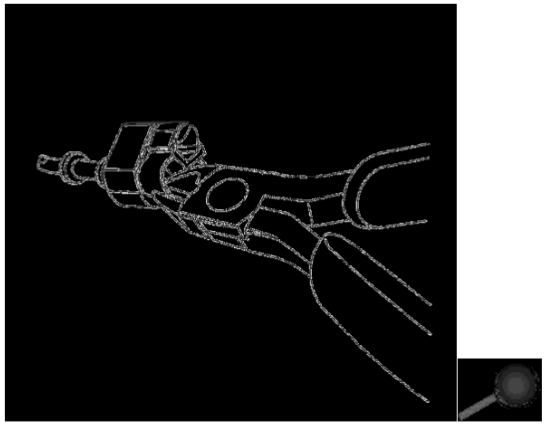


3. Install the new service coaxial cable into the vehicle. Use the 4-inch jumper for the appropriate 2-way connector housing to connect the new service coaxial cable to the connector housing.
4. If the issue is found to be the connector housing and not cable, a new connector housing may be installed while reusing all other components.

3-way housing

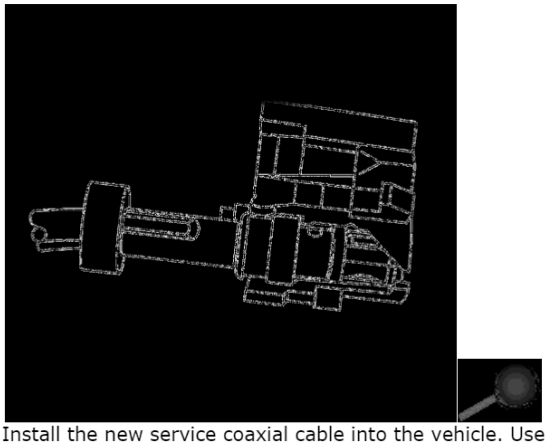
A 4-inch jumper is required.

1. Determine the appropriate generation (1 or 2) and keyed 3-way connector housing based on the connector housing color.
2. Note the locations of each of the cables in 3-way housing, as it is important for new cables be placed in the appropriate terminal location in the new connector. The connector housing colors are not interchangeable.
3. Remove the faulty/damaged coaxial cable from the 3-way connector housing by using a pair of side/diagonal cutters to nip and break away the housing.



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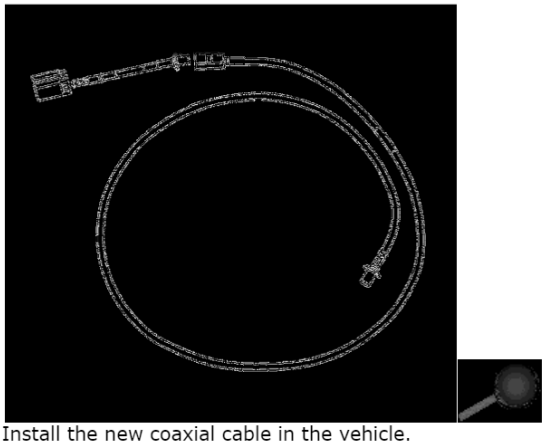
4. Use caution not to damage the conductive ends of the coaxial cables inside the connector housing. Do not bend or force the terminal out or it could be damaged.



5. Install the new service coaxial cable into the vehicle. Use the 4-inch jumper for the appropriate color 3-way connector housing to connect the new service coaxial cable to the new 3-way connector housing.
6. If the issue is found to be the connector housing and not cable, a new connector housing may be installed while reusing all other components.

Coaxial Cable Repair Procedure

1. Identify the faulty/damaged coaxial cable.
2. Disconnect the faulty/damaged coaxial cable and leave it in the vehicle.
3. Identify the type of coaxial cable to be replaced and match up with the appropriate pieces to repair the damaged coaxial cable. Match up the type of coaxial cable, cable length and connector types. In some cases there may be extra length of cable left over.



4. Install the new coaxial cable in the vehicle.

   Note: Avoid routing the new coaxial cable near sharp edges that can damage the new coaxial cable.

   Use tie-straps to attach the new service coaxial cable to existing harnesses or brackets. Use felt tape/foam to reduce rattles, as necessary.

   Note: To avoid permanent damage, do not pinch the cable or bend it tighter than a 2 inch (5 centimeter) radius.
5. Remove the faulty/damaged connectors, if applicable.

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6. Install new connectors or jumpers, as needed. Refer to Connector Housing Repair Procedure.
7. Verify the repair by operating the system with the engine running.

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Flat Wire Repairs

The flat wire within the flex wiring harness is not serviceable. If an open or short exists within the flex wiring harness the complete harness must be replaced.

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Folded-Over Wire Repair

Special Tools

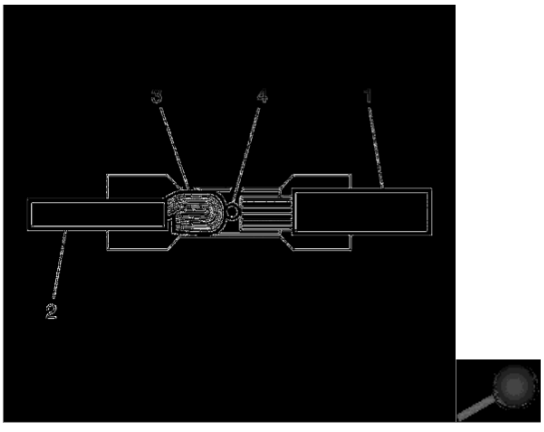
EL-38125-10 Splice Sleeve Crimping Tool

For equivalent regional tools, refer to Special Tools.

The GM global wire repair strategy uses connector assemblies (pigtails) and terminated leads to repair wiring harnesses.

To reduce and manage GM Service Parts proliferation, the service pigtails and terminated leads are designed with the largest wire gauge size that can be held by either the terminal or the connector housing.

The folded over wire repair technique, in which the copper wire strands are folded over before being installed into a splice sleeve, allows the service part to be used when repairing a smaller gauge size wire in a vehicle. This technique has passed all GM testing standards.



The larger harness size wires (1) will be placed in one side of the splice sleeve and match the splice sleeve closely in size. The wires are moved into the splice sleeve until they hit the stop (4) in the splice sleeve. The smaller harness size wires (2) will be placed in the other side of the splice sleeve. The smaller harness size wires will be folded over (3) to match up with the splice sleeve size.

Use the folded over wire repair for:

Note: Increasing the amount of copper strands in the smaller gauge size will allow for a better crimp

- Splicing wires of 0.35 mm or less (22, 24, 26 gauge sizes)

Note: Vehicle side needs to be of same or less gauge size (not greater than the service part's gauge size)

- Splicing wires of different gauges

Use the Service Information (SI) connector end-views to determine:

- Gauge size of wiring harness
- Recommended Repair: Terminated Lead or Pigtail

The following table lists the acceptable variance within the gauge size

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Folded-Over Wire Selection Table

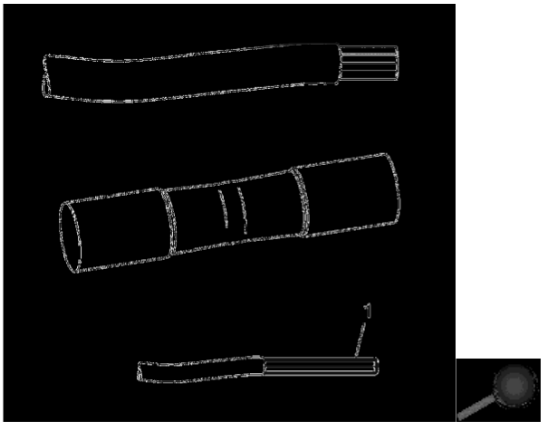
Harness Wire Gauge		Connector Assembly (Pigtail) or Terminated Lead Wire Gauge Size			
—		Salmon Color Splice Sleeve		Blue Color Splice Sleeve	Yellow Color Splice Sleeve
Metric	—	0.35 mm	0.5–0.8 mm	1.0–2.0 mm	3.0–5.0 mm
—	Wire Gauge (AWG)	22	20–18	16–14	12–10
0.13 mm	26	Fold Over Wire	Fold Over Wire	Fold Over Wire	Not Acceptable
0.22 mm	24	Fold Over Wire	Fold Over Wire	Fold Over Wire	Not Acceptable
0.35 mm	22	Fold Over Wire	Fold Over Wire	Fold Over Wire	Not Acceptable
0.5 mm	20	Not Acceptable	Wire to Wire	Fold Over Wire	Not Acceptable
0.75 mm	—	Not Acceptable	Wire to Wire	Fold Over Wire	Not Acceptable
0.8 mm	18	Not Acceptable	Wire to Wire	Fold Over Wire	Not Acceptable
1.0 mm	16	Not Acceptable	Wire to Wire	Fold Over Wire	Not Acceptable
1.5 mm	—	Not Acceptable	Not Acceptable	Wire to Wire	Fold Over Wire
2.0 mm	14	Not Acceptable	Not Acceptable	Wire to Wire	Fold Over Wire
2.5 mm	—	Not Acceptable	Not Acceptable	Wire to Wire	Fold Over Wire
3.0-5.0 mm	12–10	Not Acceptable	Not Acceptable	Not Acceptable	Wire to Wire

Example

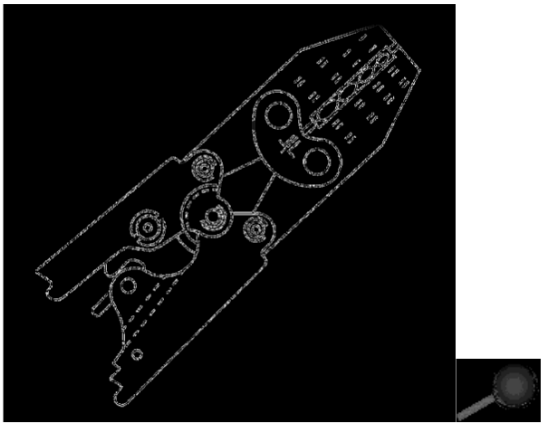
For an IP Harness of 0.22 mm (24 gauge on left side of table) wire size, the SI connector end-view recommends a pigtail with leads of 0.8 mm (18 gauge on the top of the table) with a salmon colored DuraSeal splice sleeve of 0.5–1.0 mm (20–16 gauge).

Follow these steps to use the folded over wire (1) technique on an IP Harness.

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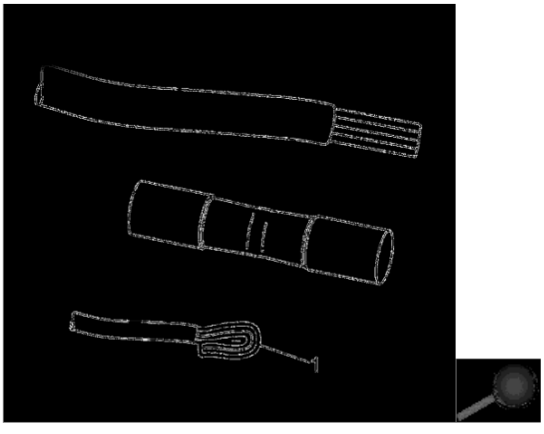
Strip twice the amount of insulation on the smaller (1) wire (IP Harness is the lower wire) than normally required. Normally, the terminated leads have 5 mm of insulation stripped off the wire.



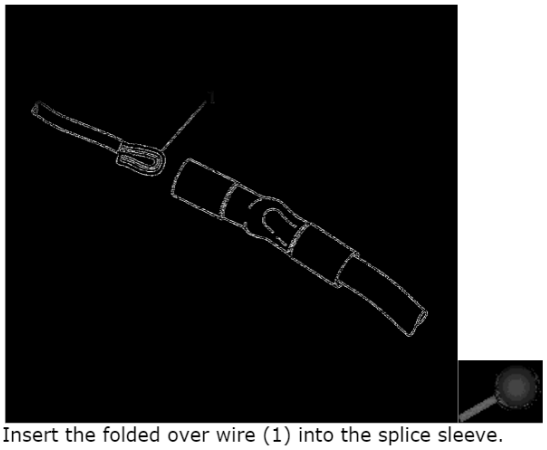
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Note: Use *EL-38125-10* splice sleeve crimping tool.

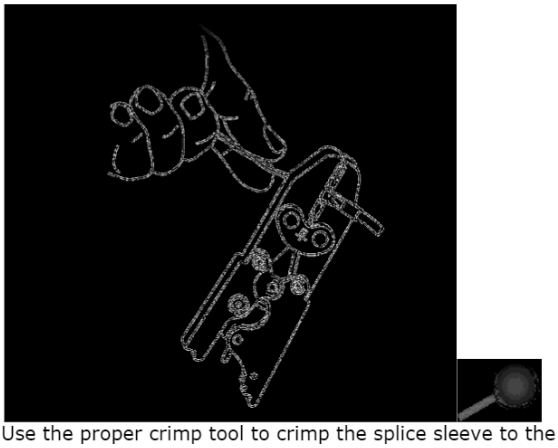
1. For wiring repair, refer to Splicing Copper Wire Using Splice Sleeves.



2. Twist the wires before you fold them over to prevent the wire strands from opening up. Fold over the copper wire strands of the smaller (1) gauge wire so that it is the same length as the non-folded wire.



3. Insert the folded over wire (1) into the splice sleeve.



4. Use the proper crimp tool to crimp the splice sleeve to the smaller wire (harness side of repair). Complete the crimp as usual (using the heat tool to shrink the tube).

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High Temperature Wiring Repairs

Note: All wiring repairs need to be 200 mm from the heat zone. Areas of consideration would be any area located near the exhaust manifolds, catalytic converter, exhaust pipes, and turbocharged engines.

Items Required

- DuraSeal splice sleeves to crimp and seal connections
- High temperature SCT1 shrink tubing to protect the splice sleeves
- Terminated leads or pigtails
- The correct tools to remove the terminals from the connectors

Use high temperature bulk wire rated at 150°C (302°F) continuous temperature of the same or larger gauge size as the original wire when repair damage wire. Also replace any reflective tape that you remove during the repair.

High Temperature Wiring

Wiring that is exposed to high temperatures, 135°C (275°F) or higher, for prolonged periods of time may use materials i.e. wires, connectors, and shielding that has a higher heat rating than typical wiring. When making a repair in a high temperature area observe the following:

- Use high temperature bulk wire rated at 150°C (302°F) continuous temperature to replace any damaged wire.
- Replace any heat shielding that is removed.
- Cover any DuraSeal splice sleeves with SCT1 shrink tubing.
- After making a wiring repair, ensure that the location of the wiring is not moved closer to the heat source.

Identifying High Temperature Wiring

Note: High temperature areas would be areas located near exhaust manifolds, catalytic converters, exhaust pipes, and turbocharged engines.

Wiring that is exposed to high temperature, 135°C (275°F) or higher, for prolonged periods of time need special considerations when making wiring repairs. Areas that may be exposed to higher temperatures can be identified by heat resistant materials that are being used in those areas. These materials may include heat reflective tape, moon tape, and high temperature shrink tubing. Also conduit and other protective coverings may be used. Because conduit or similar coverings are used throughout the vehicle regardless of the temperature, it may be necessary for the technician to determine if an area is exposed to excessive heat before making a wiring repair.

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Heated Oxygen Sensor Wiring Repairs

Caution: Do not solder repairs under any circumstances as this could result in the air reference being obstructed.

If the heated oxygen sensor pigtail wiring, connector, or terminal is damaged the entire oxygen sensor assembly must be replaced. Do not attempt to repair the wiring, connector, or terminals. In order for the sensor to function properly it must have a clean air reference. This clean air reference is obtained by way of the oxygen sensor signal and heater wires. Any attempt to repair the wires, connectors or terminals could result in the obstruction of the air reference and degrade oxygen sensor performance.

The following guidelines should be used when servicing the heated oxygen sensor:

- Do not apply contact cleaner or other materials to the sensor or vehicle harness connectors. These materials may get into the sensor, causing poor performance. Also, the sensor pigtail and harness wires must not be damaged in such a way that the wires inside are exposed. This could provide a path for foreign materials to enter the sensor and cause performance problems.
- Neither the sensor nor vehicle lead wires should be bent sharply or kinked. Sharp bends, kinks, etc., could block the reference air path through the lead wire.
- Do not remove or defeat the oxygen sensor ground wire (where applicable). Vehicles that utilize the ground wire sensor may rely on this ground as the only ground contact to the sensor. Removal of the ground wire will also cause poor engine performance.
- To prevent damage due to water intrusion, be sure that the peripheral seal remains intact on the vehicle harness connector.

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Splicing Copper Wire Using Splice Sleeves

Special Tools

- *EL-38125-10* Splice Sleeve Crimping Tool
- *J-38125-5A* Ultra Torch Special Tool
- *J-38125-8* Splice Sleeve Crimping Tool

For equivalent regional tools, refer to Special Tools.

Note: The DuraSeal splice sleeves have the following 2 critical features:

- A special heat shrink sleeve environmentally seals the splice. The heat shrink sleeve contains a sealing adhesive inside.
- A cross hatched (knurled) core crimp provides the necessary low resistance contact integrity for these sensitive, low energy circuits.

Use only DuraSeal splice sleeves to form a one-to-one splice on all types of insulation except Tefzel and coaxial. Use DuraSeal splice sleeves where there are special requirements such as moisture sealing. Follow the instructions below in order to splice copper wire using DuraSeal splice sleeves.

Splice Sleeve Selection

Splice Sleeve Color	Crimp Tool Nest Color		Wire Gauge mm² / (AWG)
	3 Crimp Nests	4 Crimp Nests	
Salmon (Yellow-Pink) 19168446	Red (1) or Red/Green (1)	Red (2)	0.5–0.8/(18–20)
Blue 19168447	Blue (2)	Blue (3)	1.0–2.0/(14–16)
Yellow 19168448	Yellow (3)	Yellow (4)	3.0–5.0/(10–12)

Note: You must perform the following procedures in the listed order. Repeat the procedure if any wire strands are damaged. You must obtain a clean strip with all of the wire strands intact.

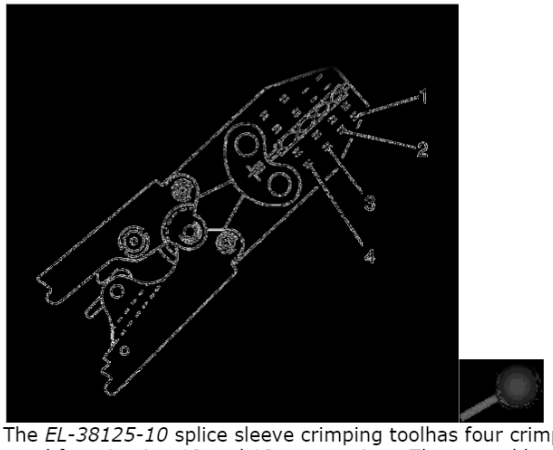
1. Open the harness by removing any tape:
   - Use a sewing seam ripper, available from sewing supply stores, in order to cut open the harness in order to avoid wire insulation damage.
   - Use the DuraSeal splice sleeves on all types of insulation except Tefzel and coaxial.
   - Do not use the crimp and DuraSeal splice sleeve to form a splice with more than 2 wires coming together.
2. Cut as little wire off the harness as possible. You may need the extra length of wire in order to change the location of a splice.
   Adjust splice locations so that each splice is at least 40 mm (1.5 in) away from the other splices, harness branches, or connectors.
3. Strip the insulation:
   - When adding a length of wire to the existing harness, use the same size wire as the original wire.

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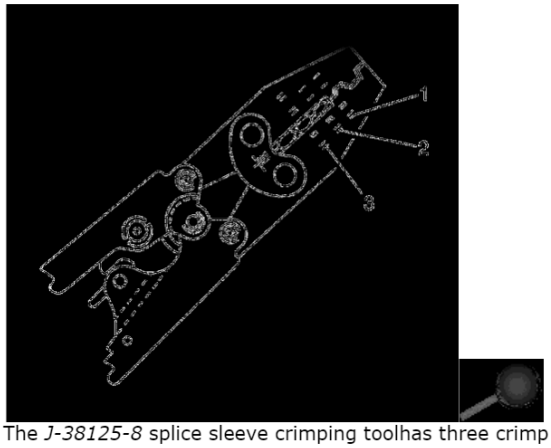
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- Perform one of the following items in order to find the correct wire size:
  - Find the wire on the schematic and convert to regional wiring gauge size.
  - If you are unsure of the wire size, begin with the largest opening in the wire stripper and work down until achieving a clean strip of the insulation.
- Strip approximately 5.0 mm (0.20 in) of insulation from each wire to be spliced.
- Do not nick or cut any of the strands. Inspect the stripped wire for nicks or cut strands.
- If the wire is damaged, repeat this procedure after removing the damaged section.

4. For high temperature wiring, slide a section of high temperature SCT1 shrink tubing down the length of wire to be spliced. Ensure that the shrink tubing will not interfere with the splice procedure.
5. Select the proper DuraSeal splice sleeve according to the wire size. Refer to the above table at the beginning of the repair procedure for the color coding of the DuraSeal splice sleeves and the crimp tool nests.



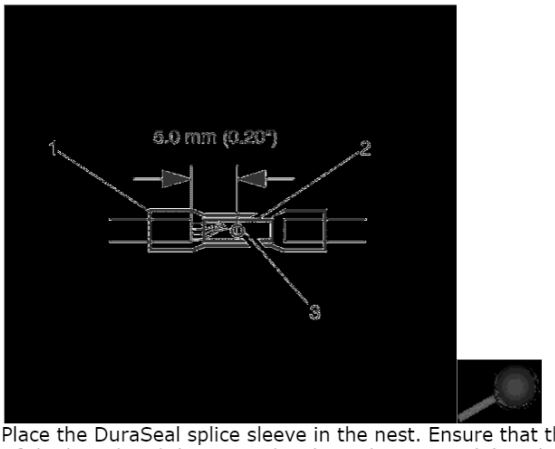
6. The *EL-38125-10* splice sleeve crimping toolhas four crimp nests. The largest crimp nest (4) is used for crimping 10 and 12 gauge wires. The second largest crimp nest (3) is used for crimping 14 and 16 gauge wires. The third largest crimp nest (2) is used for crimping 18 and 20 gauge wires. The smallest crimp nest (1) is used for crimping 22 to 26 gauge wires. The crimp nests are referenced in the table (farther above) under the crimp tool nest color.



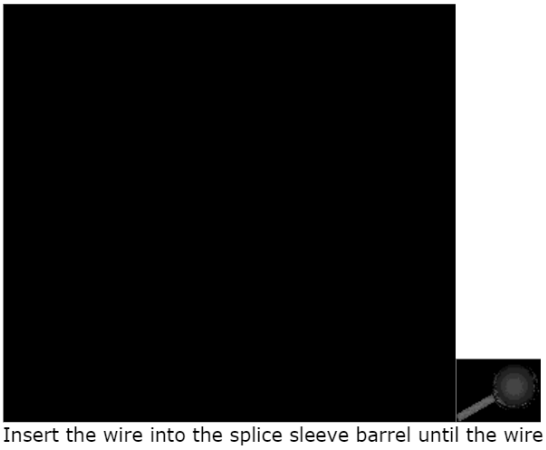
7. The *J-38125-8* splice sleeve crimping toolhas three crimp nests. The largest crimp nest (3) is used for crimping 10 and 12 gauge wires. The second largest crimp nest (2) is used for crimping 14 and 16 gauge wires. The smallest crimp nest (1) is used for crimping 18 to 20 gauge wires. The crimp nests are referenced in the table (farther above) under the crimp tool nest color.

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8. Use the splice sleeve crimp tool in order to position the DuraSeal splice sleeve in the proper color nest of the splice sleeve crimp tool. For the four crimp nest tool, use the three largest crimp nests to crimp the splice sleeves. For the three crimp nest tool, use all three crimp nests to crimp the splice sleeves. Use the four and three crimp tool diagrams (above) and the table (farther above) to match the splice sleeve with the correct crimp nest. The crimp tool diagram callout numbers match the numbers in the table (under crimp tool nest color).



9. Place the DuraSeal splice sleeve in the nest. Ensure that the crimp falls midway between the end of the barrel and the stop. The sleeve has a stop (3) in the middle of the barrel (2) in order to prevent the wire (1) from going further. Close the hand crimper handles slightly in order to firmly hold the DuraSeal splice sleeve in the proper nest.



10. Insert the wire into the splice sleeve barrel until the wire hits the barrel stop.
11. Tightly close the handles of the crimp tool until the crimper handles open when released.

    The crimper handles will not open until you apply the proper amount of pressure to the DuraSeal splice sleeve. Repeat steps 4 and 6 for the opposite end of the splice.

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12. Using the heat torch, apply heat to the crimped area of the barrel.
13. Start in the middle and gradually move the heat barrel to the open ends of the tubing:
    - The tubing will shrink completely as the heat is moved along the insulation.
    - A small amount of sealant will come out of the end of the tubing when sufficient shrinkage is achieved.

High Temperature Wiring Repairs

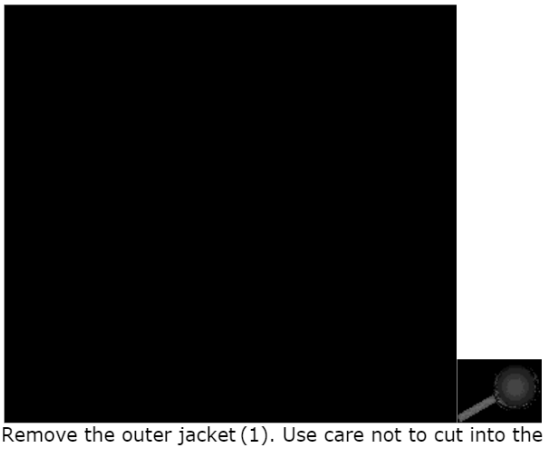
Use the following procedures to perform high temperature wiring repairs:

1. Center the high temperature SCT1 shrink tube over the DuraSeal splice sleeve.
2. Using the heat torch, apply heat to the high temperature heat shrink tubing.
3. Gradually move the heat from the center to the open end of the tubing:
    - The tubing will shrink completely as the heat is moved along the insulation.
    - A small amount of sealant will come out of the end of the tubing when sufficient shrinkage is achieved.
4. Replace any reflective tape and clips that may have been removed during the repair.

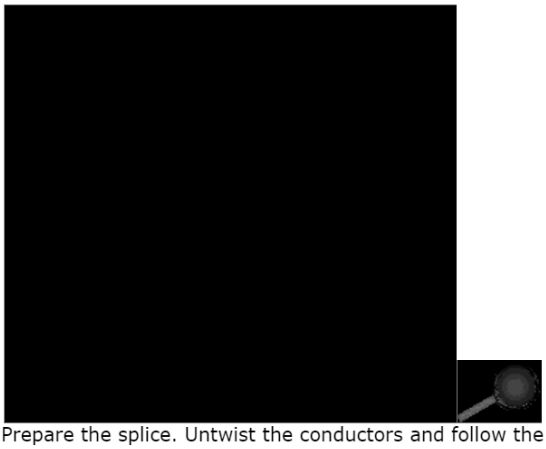
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Splicing Twisted or Shielded Cable

Twisted/shielded cable is used in order to protect wiring from electrical noise. Two-conductor cable of this construction is used between the radio and the Delco-Bose® speaker/amplifier units and other applications where low level, sensitive signals must be carried. Follow the instructions below in order to repair the twisted/shielded cable.



1. Remove the outer jacket (1). Use care not to cut into the drain wire of the mylar tape.
2. Unwrap the tape. Do not remove the tape. Use the tape in order to rewrap the twisted conductors after the splice is made.



3. Prepare the splice. Untwist the conductors and follow the instructions for Splicing Copper Wire Using Splice Sleeves. Staggering the splices by 65 mm (2.5 in) is recommended.

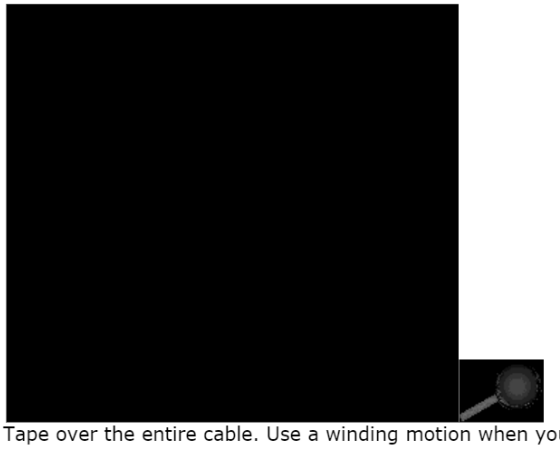
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Note: Apply the mylar tape with the aluminum side inward. This ensures good electrical contact with the drain wire.

4. Re-assemble the cable.
   - Rewrap the conductors with the mylar tape. If the mylar tape is damaged, use 3M product AL-36FR to replace the damaged mylar tape.
   - Use caution not to wrap the drain wire in the tape (1).
   - Follow the splicing instructions for copper wire and splice the drain wire.
   - Wrap the drain wire around the conductors and tape with electrical tape to replace the outer insulation.



5. Tape over the entire cable. Use a winding motion when you apply the tape.

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Splicing Inline Harness Diodes

Many vehicle electrical systems use a diode to isolate circuits and protect the components from voltage spikes. When installing a new diode use the following procedure.

1. Open the harness.
    - If the harness is taped, remove the tape.
    - To avoid wiring insulation damage, use a sewing seam ripper (available from sewing supply stores) in order to cut open the harness.
    - If the harness has a black plastic conduit, pull out the diode.
2. If the diode is taped to the harness, remove all of the tape.
3. Check and record the current flow direction and orientation of diode.
4. Remove the inoperative diode from the harness with a suitable soldering tool.

    Note: If the diode is located next to a connector terminal remove the terminal(s) from the connector to prevent damage from the soldering tool.
5. Carefully strip away a section of insulation next to the old soldered portion of the wire(s). Do not remove any more than is needed to attach the new diode.
6. Check current flow direction of the new diode, being sure to install the diode with correct bias. Reference the appropriate service manual wiring schematic to obtain the correct diode installation position.
7. Attach the new diode to the wire(s) using 60/40 rosin core solder. Before soldering attach some heat sinks (aluminum alligator clips) across the diode wire ends to protect the diode from excessive heat. Follow the manufacturer's instruction for the soldering equipment.
8. Reinstall terminal(s) into the connector body if previously removed.

    Note: To prevent shorts to ground and water intrusion, completely cover all exposed wire and diode attachment points with tape.
9. Tape the diode to the harness or connector using electrical tape.

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SIR/SRS Wiring Repairs

Note: Refer to SIR Service Precautions.

For **European** regions – If the SIR/SRS wiring, connector, or terminal is damaged, the affected wiring harness must be replaced. Do not attempt to repair the wiring, connector, or terminals. Any attempt to repair the wires, connectors, or terminals could result in performance problems of the SIR/SRS System. Operations on restraint systems must only be performed by trained and qualified personnel.

Special Tools

EL-38125-10 Splice Sleeve Crimping Tool

For equivalent regional tools, refer to Special Tools.

The Supplemental Inflatable Restraint (SIR) System/Supplemental Restraint System (SRS) requires special wiring repair procedures due to the sensitive nature of the circuitry. Follow the specific procedures and instructions when working with the SIR/SRS, and the wiring components, such as connectors and terminals.

SIR/SRS Connector Repair (Plastic Body and Terminal Metal Pin)

Note: Do not use the terminals in the kit in order to replace damaged SIR/SRS system terminals. Use either an SIR/SRS pigtail or a terminated lead from the SIR Repair Kit Tray.

The terminals in the SIR/SRS system are made with a special plating. This plating provides the necessary contact integrity for the sensitive, low energy circuits.

Pigtail repair packs are available for SIR/SRS connectors with eight or less terminals. Only the connector body is available for connectors with more than eight terminals. Terminated leads can be used to replace damaged terminals when replacing the connector body.

SIR/SRS Component Wire Pigtail Repair

Note: Do not make wire, connector, or terminal repairs on components with wire pigtails.

A wire pigtail is a wire or wires attached directly to the device, not by a connector. If a wiring pigtail is damaged, you must replace the entire component, with pigtail. The inflatable restraint steering wheel module coil is an example of a pigtail component.

SIR/SRS Wire Repair

Caution: Do not install more than 2 DuraSeal splice sleeves per SIR deployment loop. A deployment loop consists of both wires from the K36 Inflatable Restraint Sensing and Diagnostic Module to the deployable component. If more than 2 DuraSeal splice sleeves are required for any SIR deployment loop, the complete circuit of the loop must be replaced. More than 2 DuraSeal splice sleeves per deployment loop may increase the resistance in the circuit causing a DTC to be set.

Note: Refer to Wiring Repairs in the service information connector end views or the vehicle schematics in order to determine the correct wire size for the circuit you are repairing. You must obtain this information in order to ensure circuit integrity.

If any wire except the pigtail is damaged, repair the wire by splicing in a new section of wire of the same gauge size (0.5 mm, 0.8 mm, 1.0 mm etc.). Use the DuraSeal splice sleeves and *EL-38125-10* splice sleeve crimping tool. For wiring repair, refer to Splicing Copper Wire Using Splice Sleeves.

For connector position assurance (CPA), refer to Connector Position Assurance Locks.

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For terminal position assurance (TPA), refer to Terminal Position Assurance Locks.

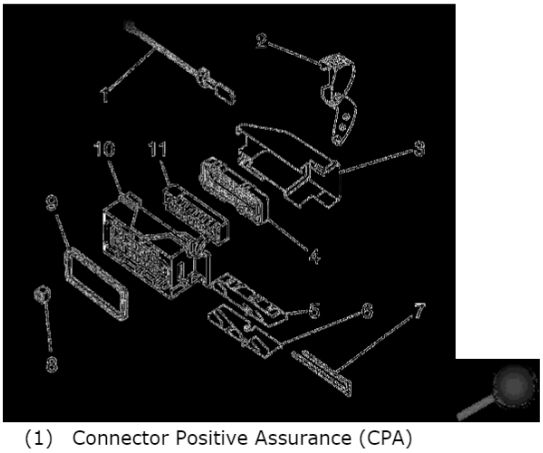
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Connector Repairs

Connector Repairs contains a list of all connector repairs. The connector repairs are listed by the connector manufacturer and then by connector type. If the technician cannot identify the manufacturer of the connector, refer to Identifying Connectors below. Knowing the connector manufacturer will assist in finding the correct connector repair from the following list:

- Connector Position Assurance Locks
- Terminal Position Assurance Locks
- AFL/EPC Connectors
- Bosch Connectors
- Delphi Connectors
- FCI Connectors
- FEP Connectors
- JST Connectors
- Kostal Connectors
- Molex Connectors
- Sumitomo Connectors
- Tyco/AMP Connectors
- Yazaki Connectors
- Repairing Connector Terminals

Connector Anatomy



(1) Connector Positive Assurance (CPA)
(2) Assist Lever
(3) Wiredress Cover
(4) Seal Strain/Relief
(5) Slide Left Hand
(6) Slide Right Hand
(7) Terminal Positive Assurance (TPA)

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(8) Terminal Positive Assurance (TPA)
(9) Connector Seal
(10) Connector Housing
(11) Inner Connector

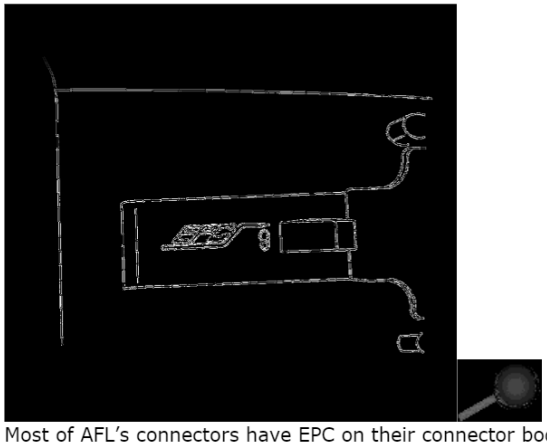
Identifying Connectors

Knowing the connector manufacturer is helpful when trying to locating the correct connector repair procedure. There are many different connector designs used on GM vehicles and it is sometimes difficult to identify the connector manufacturer. The information in this document should help with the identification of connector manufactures.

The following connector manufacturers make most of the connectors found in GM vehicles:

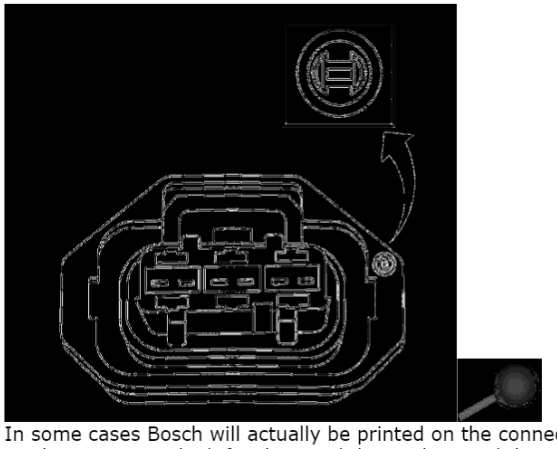
- AFL/EPC (Alcoa Fujikura Ltd./Engineered Plastics Components)
- Bosch
- Delphi
- FCI (Framatome Connectors International)
- JAE (Japan Aviation Electronics)
- JST (Japan Solderless Terminals)
- Kostal
- Molex
- Sumitomo
- Tyco/AMP
- Yazaki

Identifying the manufacturer of a connector is often difficult. When trying to determine the manufacturer of a connector, look for specific identifying marks that are unique to that connector supplier. Most of these identify marks are hard to find or see. Check the connector carefully and refer to the information below for pictures and descriptions of connector identification markings.

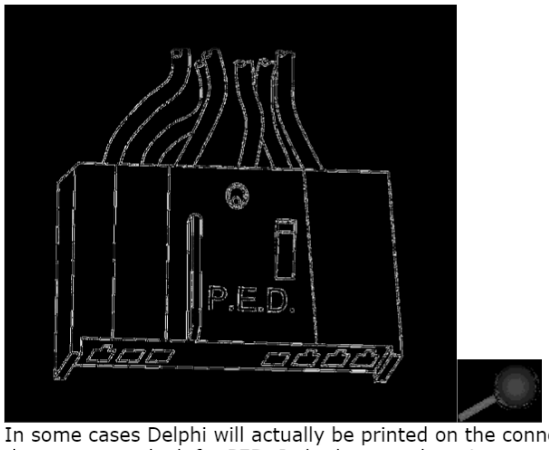


- Most of AFL's connectors have EPC on their connector body. Some of the smaller connectors will not have any markings on them.

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- In some cases Bosch will actually be printed on the connector. If Bosch does not appear on the connector, look for the Bosch logo. The Bosch logo is a circle with a blunted arrow inside. This logo can appear anywhere on the connector and is often very small.

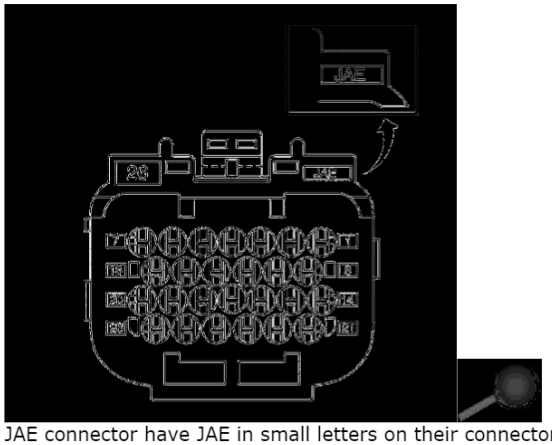


- In some cases Delphi will actually be printed on the connector. If Delphi is not printed on the connector, look for PED. In both cases there is no specific orientation for Delphi or PED and they can appear anywhere on the connector.

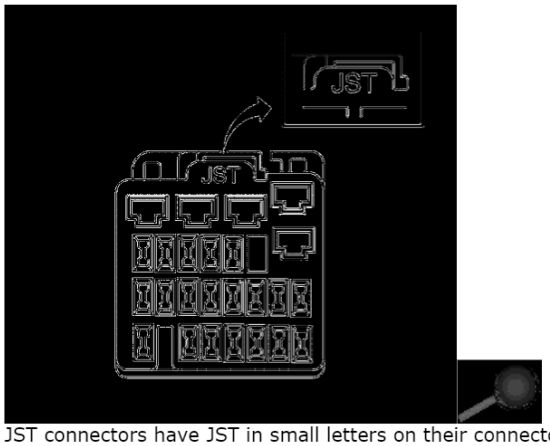


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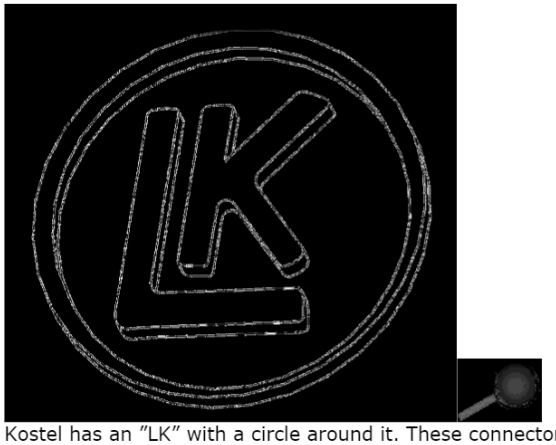
- FCI connectors may have the FCI logo on their connectors. The logo is the letters FCI with an "A" above it.



- JAE connector have JAE in small letters on their connectors.

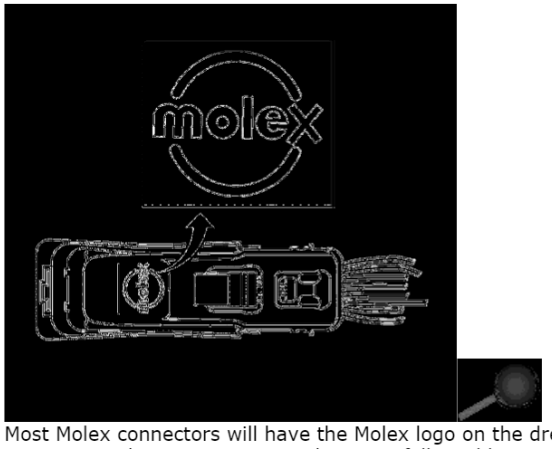


- JST connectors have JST in small letters on their connectors, similar to that above. The location of the logo will vary with the connector size and style.

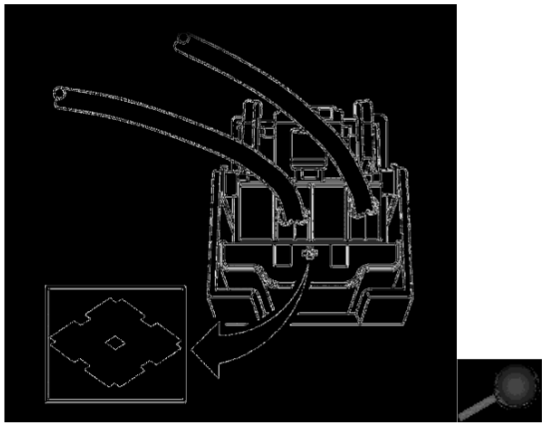


- Kostel has an "LK" with a circle around it. These connector are usually used as a transmissions connection.

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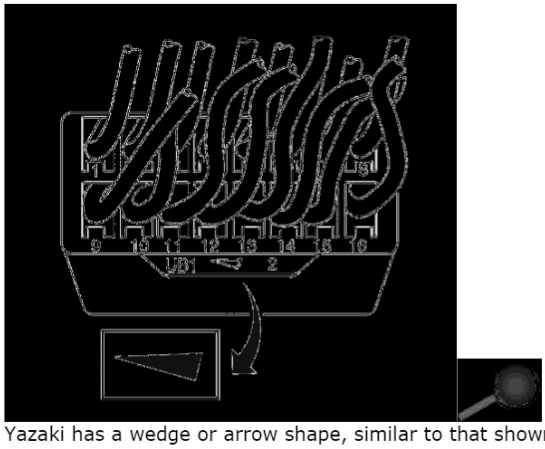
- Most Molex connectors will have the Molex logo on the dresscover of the connector. In some cases the connectors may have MX followed by another letter. The third letter indicates where the connector was made. A connector with MXD is a Molex connector made in Detroit.



Sumitomo has a unique symbol on their connector and possibly a part number. The symbol is similar to that of a diamond lying on its side, similar to that shown. The logo could appear anywhere but the most common place is at the wire side of the housing.

- Tyco/AMP has many different and unique connector designs. Some may or may not have identifiable marks on them.

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- Yazaki has a wedge or arrow shape, similar to that shown.

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Connector Position Assurance Locks

The connector position assurance (CPA) is a small plastic insert that fits through the locking tabs of the connector. CPAs are used in various connectors throughout the vehicle. CPAs are also used in all SIR system electrical connectors. The CPA ensures that the connector halves cannot vibrate apart. You must have the CPA in place in order to ensure good contact between the mating terminals of the connector.

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Terminal Position Assurance Locks

The terminal position assurance (TPA) insert resembles the plastic combs used in the control module connectors. The TPA keeps the terminal securely seated in the connector body. Do not remove the TPA from the connector body unless you remove a terminal for replacement. If the TPA is removed, be sure to reinstall it before reconnecting the connector.

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AFL/EPC Connectors

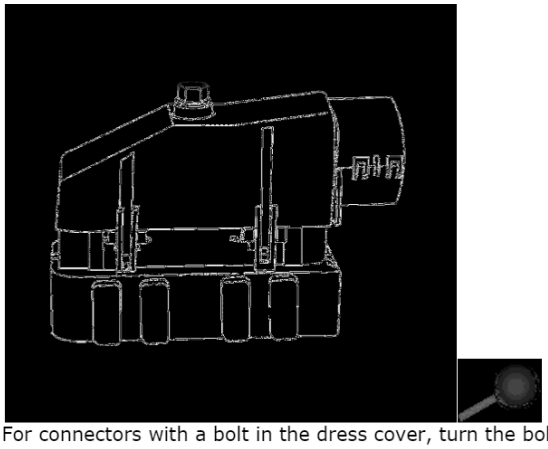
Special Tools

- *EL-38125-550* Terminal Release Tool Kit
- *EL-38125-580* Terminal Release Tool Kit
- *J-38125-12A* Terminal Release Tool
- *J-38125-216* Terminal Release Tool

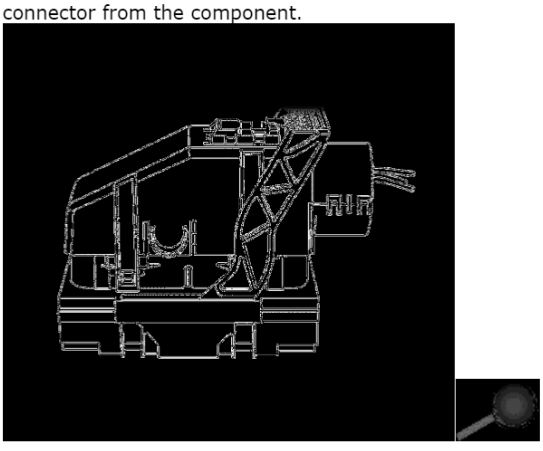
For equivalent regional tools, refer to Special Tools.

Terminal Removal Procedure

Follow the steps below in order to remove terminals from the connector.



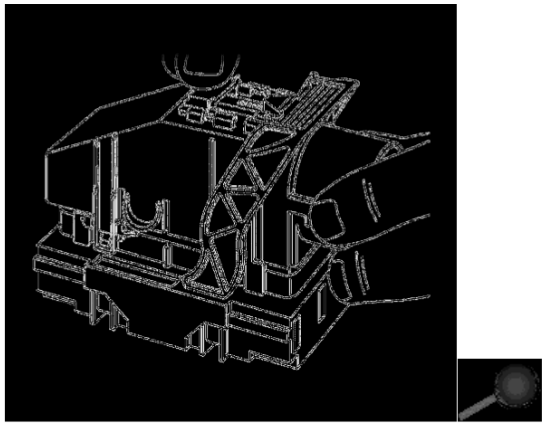
1. For connectors with a bolt in the dress cover, turn the bolt counterclockwise to remove the connector from the component.



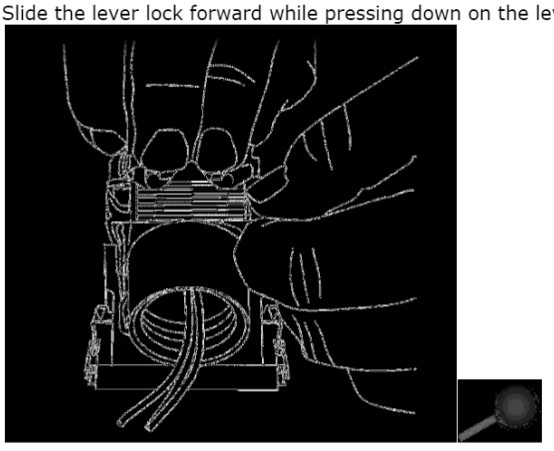
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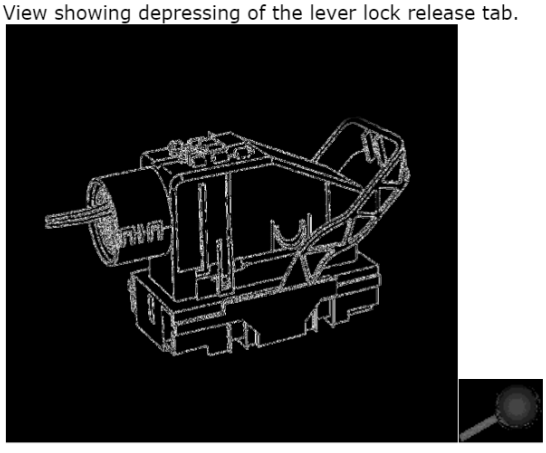
2. Locate the connector position assurance (CPA) on the top of the wire dress cover. Slide the CPA forward.



3. Slide the lever lock forward while pressing down on the lever lock release tab.



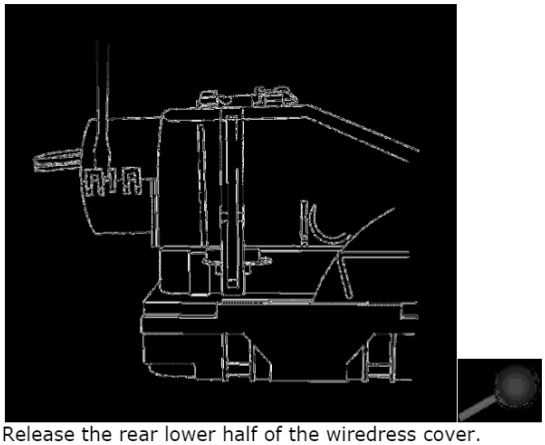
4. View showing depressing of the lever lock release tab.



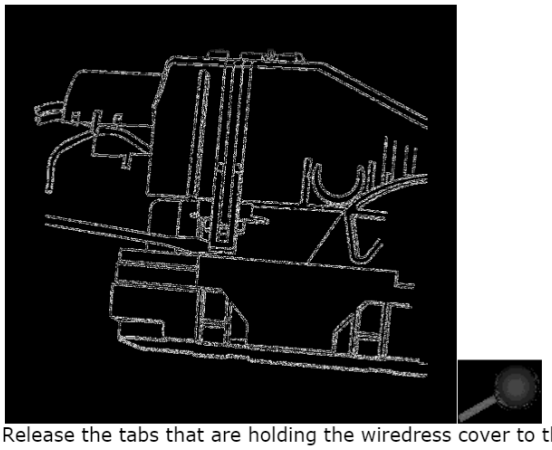
5. View of connector in released position.
6. Disconnect the connector from the component.

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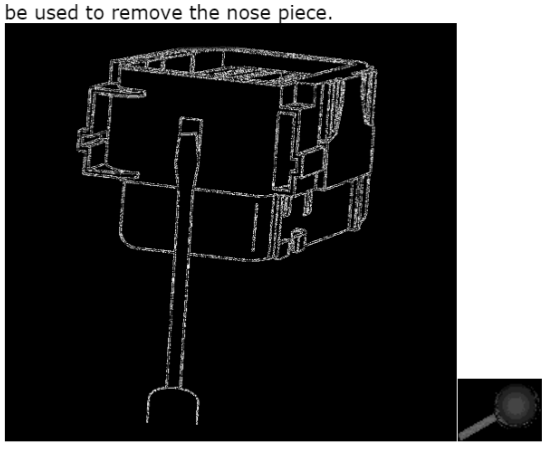
7. Locate the dress cover locking tabs at the corners of the dress cover. Use a small flat-blade tool to release the locking tabs and remove the dress cover.



8. Release the rear lower half of the wiredress cover.

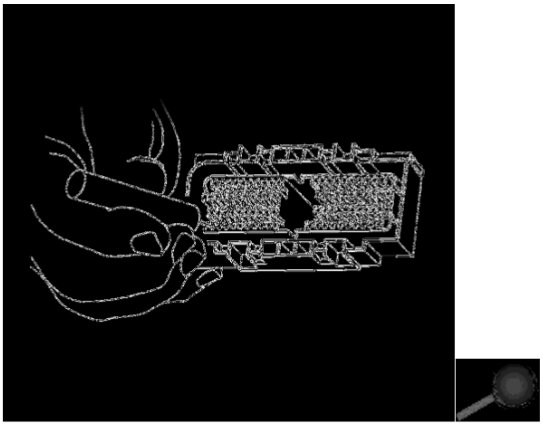


9. Release the tabs that are holding the wiredress cover to the connector body.
10. Remove the nose piece by inserting a small flat-blade tool into the slots on both ends of the connector body. Gently pry the nose piece out of the connector. J-38125-216 can also be used to remove the nose piece.



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11. Use the J-38125-12A tool to release the terminals by lifting the terminal retaining tabs on the inside of the connector.



12. While holding the removal tool in place, gently pull the wire out of the back of the connector. Always remember never use force when pulling a terminal out of a connector.
13. Repair the terminal by following the Repairing Connector Terminals procedure.
14. Insert the repaired terminal back into the cavity. Repeat the diagnostic procedure to verify the repair and reconnect the connector bodies.

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Bosch Connectors (BSK)

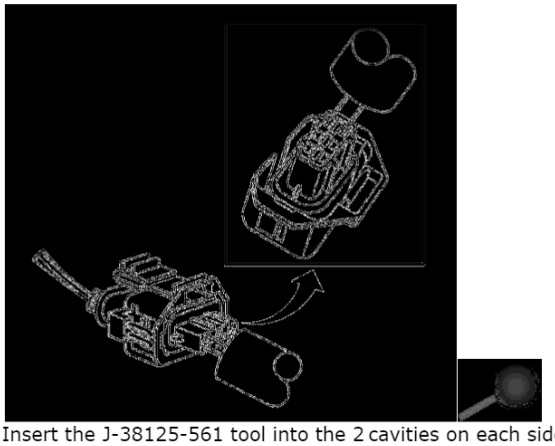
Special Tools

- *EL-38125-550* Terminal Release Tool Kit
- *EL-38125-580* Terminal Release Tool Kit
- *J-38125-561* Terminal Release Tool

For equivalent regional tools, refer to Special Tools.

Terminal Removal Procedure

1. Disconnect the connector from the component.
2. Remove the wire dress cover, if necessary.
3. Push the wire side of the terminal that is being removed toward the connector and hold it in position.



4. Insert the J-38125-561 tool into the 2 cavities on each side of the terminal at the front of the connector and push until you feel the tool disengage the terminal retainers.
5. Carefully pull the terminal out of the connector. Always remember never use force when pulling a terminal out of a connector. If the terminal is difficult to remove, repeat the entire procedure.
6. Repair the terminal by following the Repairing Connector Terminals procedure.
7. Insert the repaired terminal back into the cavity. Repeat the diagnostic procedure to verify the repair and reconnect the connector bodies.

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Bosch Connectors (0.64)

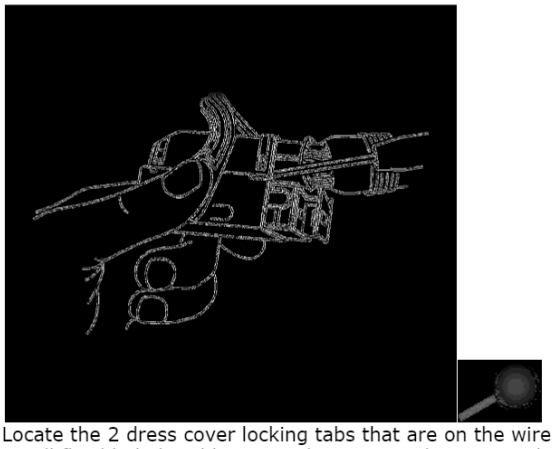
Special Tools

- *EL-38125-550* Terminal Release Tool Kit
- *EL-38125-580* Terminal Release Tool Kit
- *J-38125-560* Terminal Release Tool

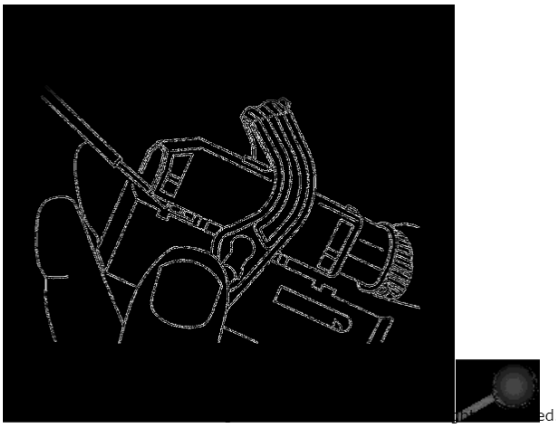
For equivalent regional tools, refer to Special Tools.

Terminal Removal Procedure

1. Locate the lever lock on the wire dress cover. While pressing the lock, pull the lever over and past the lock until the lever is at the end of its travel.
2. Disconnect the connector from the component.
3. Pull the rubber boot that covers the wires back to expose the end of the connector dress cover.
4. Place the connector locking lever in the center of the connector.

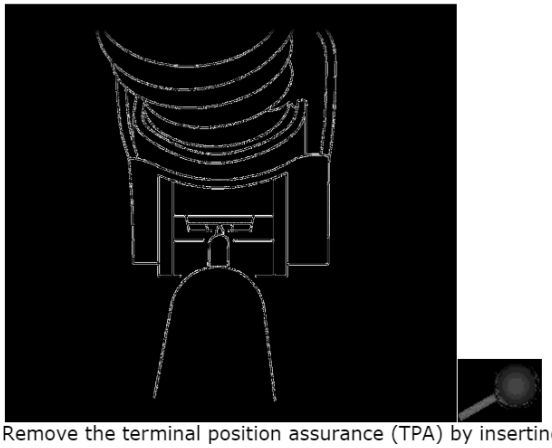


5. Locate the 2 dress cover locking tabs that are on the wire end of the connector. Insert a small flat-bladed tool between the cover and connector body and pry up.

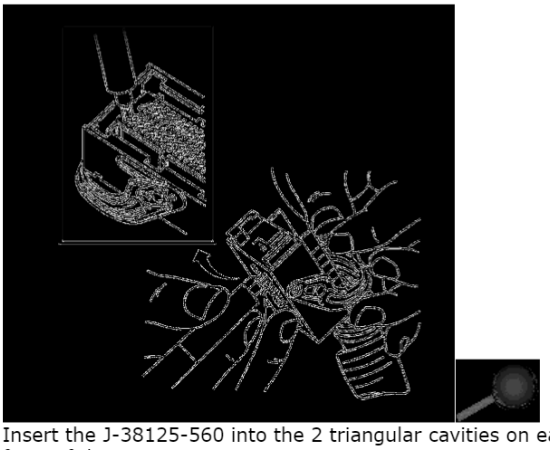


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6. Locate the 2 dress cover locking tabs located on the opposite side of the connector. Insert a small flat-bladed tool between the cover at the connector end and pry up.
7. Remove the dress cover.
8. Cut the tie wrap on the wire bundle.



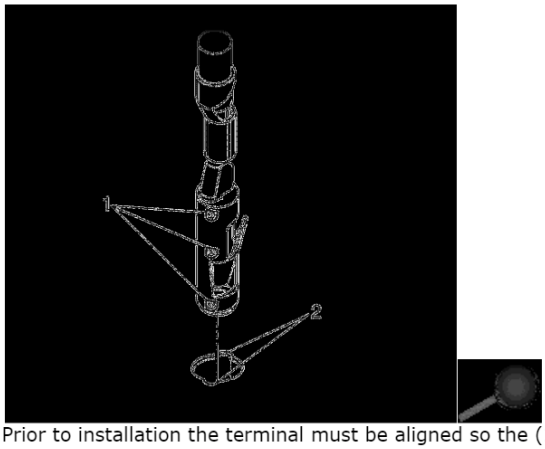
9. Remove the terminal position assurance (TPA) by inserting a small flat-bladed tool into the small slot in the end of the slider and pushing on the TPA until it comes out of the connector. When the TPA exits the opposite side of the connector, gasp the TPA and pull it completely out of the connector.
10. Push the wire side of the terminal that is being removed toward the connector and hold it in position.



11. Insert the J-38125-560 into the 2 triangular cavities on each side of the terminal at the front of the connector.
12. Carefully pull the terminal out of the connector. Always remember never use force when pulling a terminal out of a connector. If the terminal is difficult to remove, repeat the entire procedure.
13. Repair the terminal by following the Repairing Connector Terminals procedure.
14. Insert the repaired terminal back into the cavity. Repeat the diagnostic procedure to verify the repair and reconnect the connector bodies.

Terminal Insertion Procedure

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1. Prior to installation the terminal must be aligned so the (1) coding lugs align with the (2) coding grooves on the connector.
2. Once the terminal is aligned, slide the terminal into the cavity until the retainer has engaged in the cavity of the connector.
3. Slide the TPA in the connector body and seat it using a small flat bladed tool. The TPA is seated when it is flush with the contact housing.
4. Secure the wires to the connector body using a tie wrap and replace the dress cover and grommet.

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Bosch Connectors (2.8 JPT)

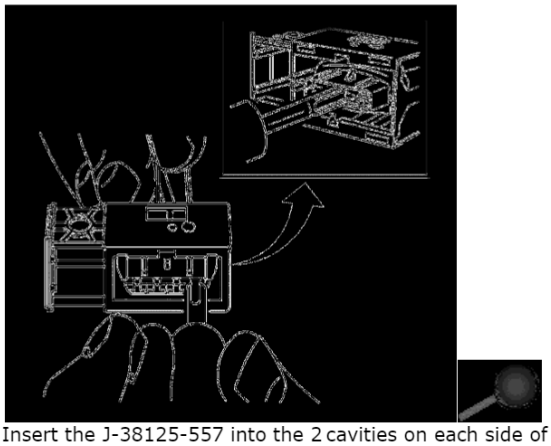
Special Tools

- *EL-38125-550* Terminal Release Tool Kit
- *EL-38125-580* Terminal Release Tool Kit
- *J-38125-557* Terminal Release Tool

For equivalent regional tools, refer to Special Tools.

Terminal Removal Procedure

1. Pull out the slider on the connector position assurance (CPA) until it is at the end of its travel.
2. Disconnect the connector from the component.
3. Remove the wire dress cover, if necessary.
4. Push the wire side of the terminal that is being removed toward the connector and hold it in position.



5. Insert the J-38125-557 into the 2 cavities on each side of the terminal at the front of the connector and push until you feel the tool disengage the terminal retainers.
6. Carefully pull the terminal out of the connector. Always remember never use force when pulling a terminal out of a connector. If the terminal is difficult to remove, repeat the entire procedure.
7. Repair the terminal by following the Repairing Connector Terminals procedure.
8. Insert the repaired terminal back into the cavity. Repeat the diagnostic procedure to verify the repair and reconnect the connector bodies.

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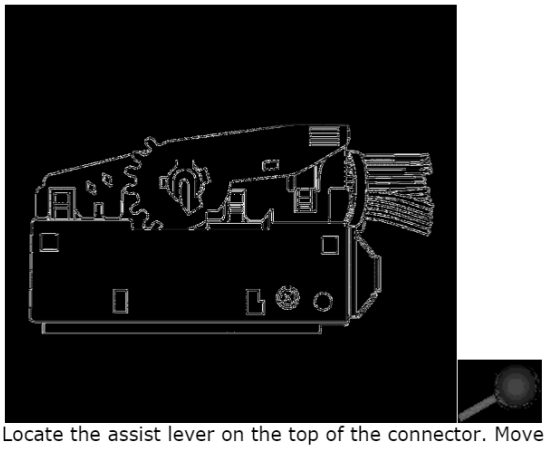
Bosch Connectors (ECM)

Special Tools

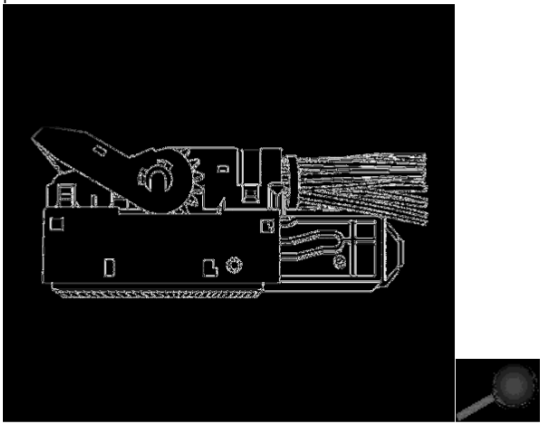
- *EL-38125-550* Terminal Release Tool Kit
- *EL-38125-580* Terminal Release Tool Kit
- *J-38125-213* Terminal Release Tool
- *J-38125-556* Terminal Release Tool

For equivalent regional tools, refer to Special Tools.

Terminal Removal Procedure



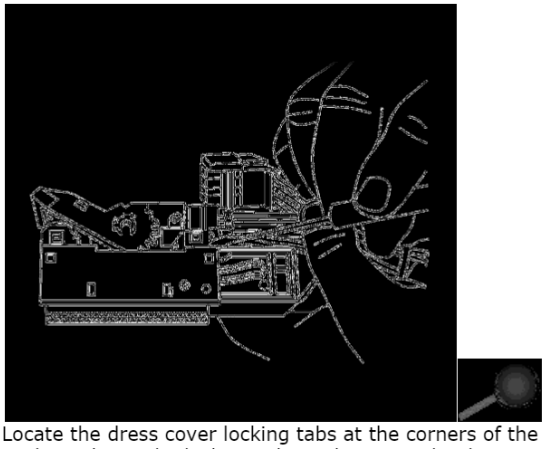
1. Locate the assist lever on the top of the connector. Move the assist lever to the forward position.



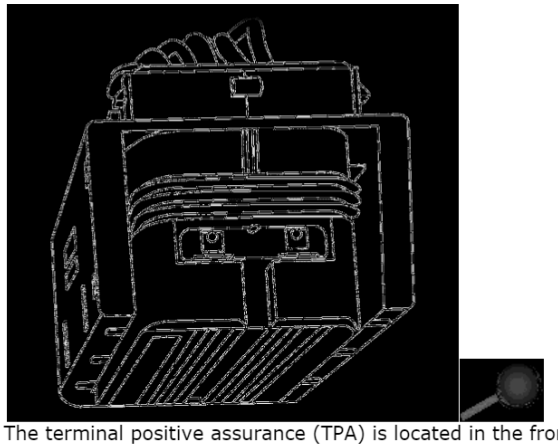
2. Disconnect the connector from the component.

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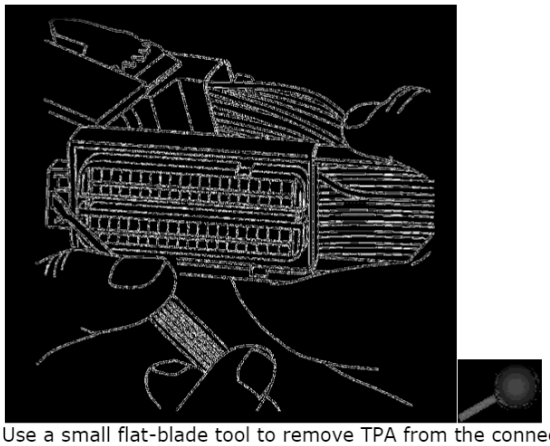
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3. Locate the dress cover locking tabs at the corners of the connector. Use a small flat-blade tool to release the locking tabs and remove the dress cover.

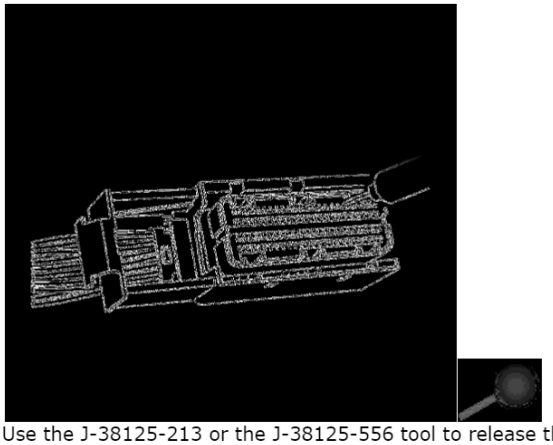


4. The terminal positive assurance (TPA) is located in the front of the connector.



5. Use a small flat-blade tool to remove TPA from the connector.

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6. Use the J-38125-213 or the J-38125-556 tool to release the terminals by inserting the tool into the terminal release cavity.
7. While holding the removal tool in place, gently pull the wire out of the back of the connector. Always remember never use force when pulling a terminal out of a connector.
8. Repair the terminal by following the Repairing Connector Terminals procedure.
9. Insert the repaired terminal back into the cavity. Repeat the diagnostic procedure to verify the repair and reconnect the connector bodies.

   Note: Ensure that the dress cover and connector body are both in the released position before reassembling. Failure to do so may cause damage to the connector and component.
10. Reconnect the connector bodies.

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Delphi Connectors (Weather Pack)

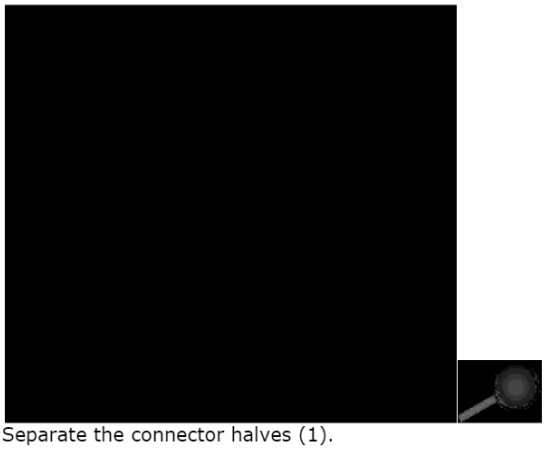
Special Tools

- *EL-38125-550* Terminal Release Tool Kit
- *EL-38125-580* Terminal Release Tool Kit
- *J-38125-10A* Terminal Release Tool

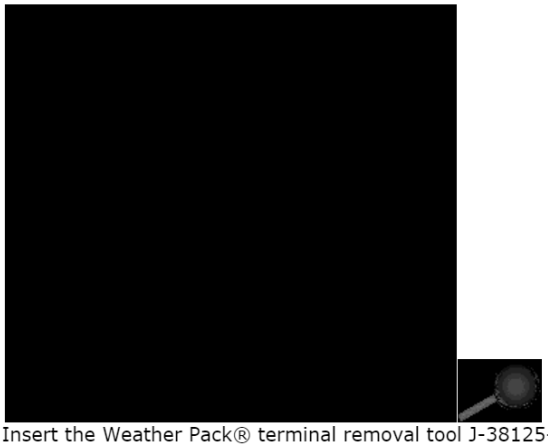
For equivalent regional tools, refer to Special Tools.

Terminal Removal Procedure

The following is the proper procedure for the repair of Weather Pack® Connectors.



1. Separate the connector halves (1).
2. Open the secondary lock. A secondary lock aids in terminal retention and is usually molded to the connector (1).
3. Grasp the wire and push the terminal to the forward most position. Hold the wire in this position.



4. Insert the Weather Pack® terminal removal tool J-38125-10A into the front (mating end) of the connector cavity until it rests on the cavity shoulder (1).

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5. Gently pull on the wire to remove the terminal through the back of the connector (2).

   Note: Never use force to remove a terminal from a connector.

6. Inspect the terminal and connector for damage. Repair as necessary. Refer to Repairing Connector Terminals.
7. Reform the lock tang (2) and reset terminal in connector body.
8. Close secondary locks and join connector halves.
9. Verify that circuit is complete and working satisfactorily.
10. Perform system check.
11. Repair the terminal by following the Repairing Connector Terminals procedure.
12. Insert the repaired terminal back into the cavity. Repeat the diagnostic procedure to verify the repair and reconnect the connector bodies.

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Delphi Connectors (Push To Seat)

Special Tools

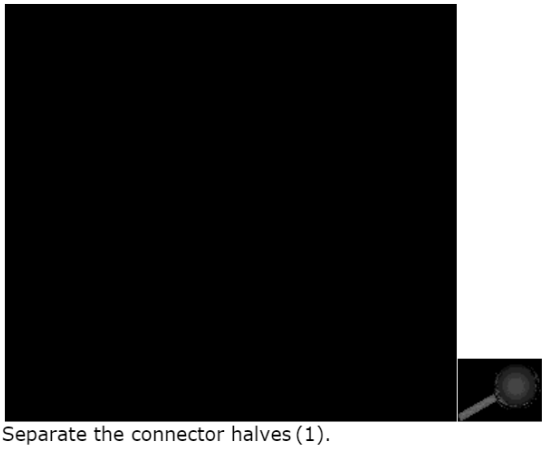
- *EL-38125-550* Terminal Release Tool Kit
- *EL-38125-580* Terminal Release Tool Kit

For equivalent regional tools, refer to Special Tools.

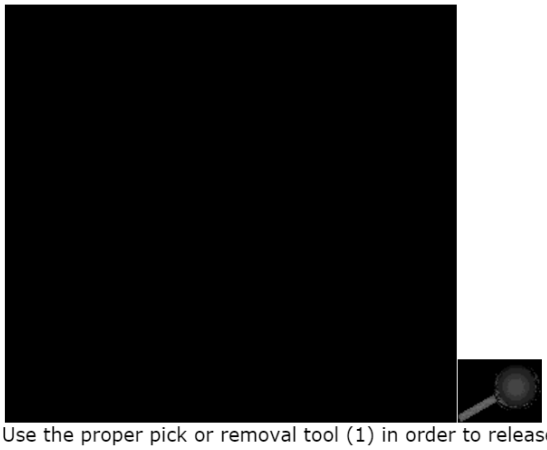
Terminal Removal Procedure

Follow the steps below in order to repair push to seat connectors.

1. Remove the terminal position assurance (TPA) device, the connector position assurance (CPA) device, and/or the secondary lock.



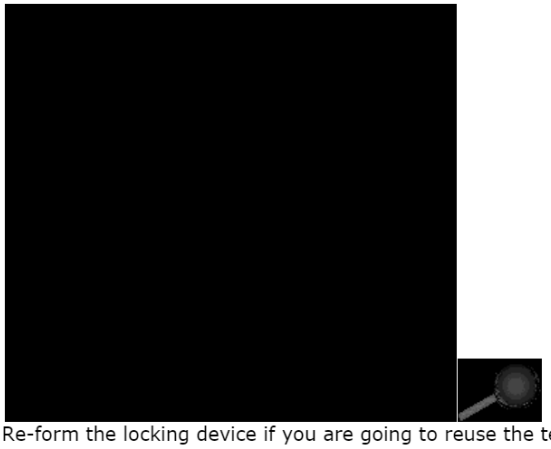
2. Separate the connector halves (1).



3. Use the proper pick or removal tool (1) in order to release the terminal.
4. Gently pull the cable and the terminal (2) out of the back of the connector.

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5. Re-form the locking device if you are going to reuse the terminal (1).
6. Repair the terminal by following the Repairing Connector Terminals procedure.
7. Insert the repaired terminal back into the cavity. Repeat the diagnostic procedure to verify the repair and reconnect the connector bodies.

Terminal Insertion Procedure

1. In order to reuse a terminal or lead assembly, refer to Wiring Repairs.
2. Ensure that the cable seal is kept on the terminal side of the splice.
3. Insert the lead from the back until it catches.
4. Install the TPA, CPA, and/or the secondary locks.

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Delphi Connectors (Pull To Seat)

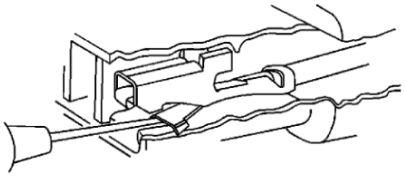
Special Tools

- *EL-38125-550* Terminal Release Tool Kit
- *EL-38125-580* Terminal Release Tool Kit

For equivalent regional tools, refer to Special Tools.

Terminal Removal Procedure

If the terminal is visibly damaged or is suspected of having a faulty connection, the terminal should be replaced.





Follow the steps below in order to repair pull-to-seat connectors:

1. Remove the connector position assurance (CPA) device and/or the secondary lock.
2. Disconnect the connector from the component or separate the connectors for in-line connectors.
3. Remove the terminal position assurance (TPA) device.
4. Review the connector end view to determine the proper test probe and release tool.
5. Insert the release tool into the front of the connector body.
6. Grasp the wire at the back of the connector body and gently push the terminal out the front of the connector body.
7. Repair the terminal by following the Repairing Connector Terminals procedure.
8. Insert the repaired terminal back into the cavity. Repeat the diagnostic procedure to verify the repair and reconnect the connector bodies.

Terminal Insertion Procedure

1. Align the terminal and pull the wire from the back of the connector in order to seat the terminal.
2. If the connector is outside of the passenger compartment, apply dielectric grease to the connector.
3. Install the TPA, CPA, and/or the secondary locks.

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Delphi Connectors (Micro-Pack 100W)

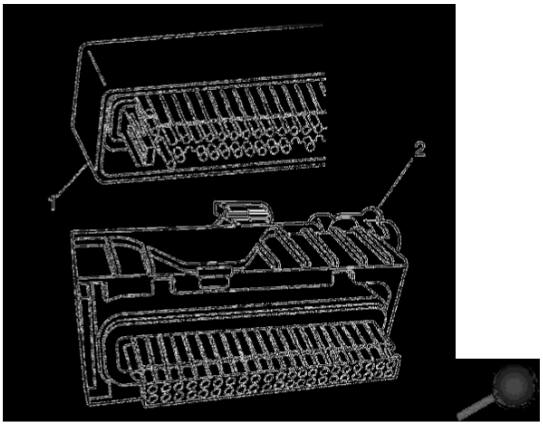
Special Tools

- *EL-38125-550* Terminal Release Tool Kit
- *EL-38125-580* Terminal Release Tool Kit
- *J-38125-12A* Terminal Release Tool

For equivalent regional tools, refer to Special Tools.

Terminal Removal Procedure

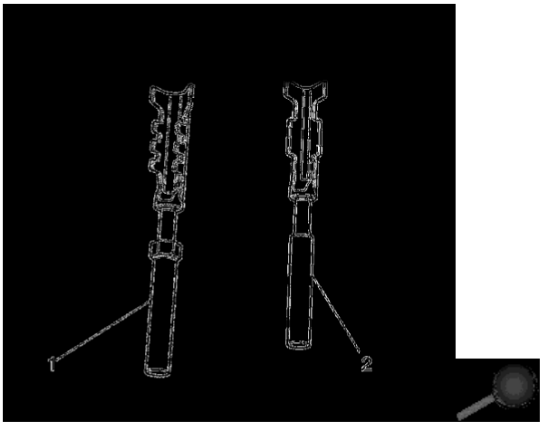
There are 2 styles of Micro-Pack 100W connectors. These connectors are very similar but use different terminals and have some minor physical differences also.



The first connector design of the Micro-Pack 100W (1) has a white connector interface that holds the terminals. The second design of the Micro-Pack 100W (2) has a gray interface to hold the terminals. Also, the first design has terminal cavities that are further apart (3 mm centerline) and offset from the other row of terminal cavities in the connector. The second design has terminals cavities that are closer together (2.54 mm centerline) and aligned vertically. One other way to identify the second design is the thin strip of material that runs along the outside of the cavities.

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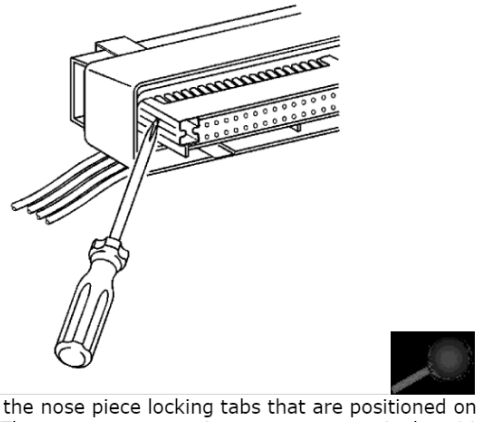
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Note: There are 2 styles of Micro-Pack 100W terminals which are very similar. Ensure that you have the correct terminal before crimping the new terminal to the wire. The first design connector uses the longer terminal (1) that has a raised area in front of the recess in the terminal. The second design connector uses the shorter terminal without the raised area.

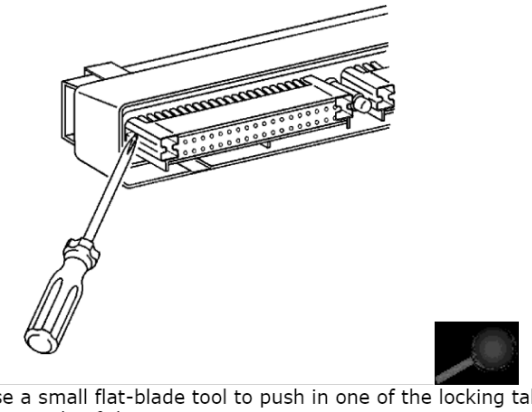
Follow the steps below in order to remove terminals from Micro-Pack 100W connectors. Some Micro-Pack 100W connector disassembly procedures will vary. Use this procedure as a guide.

1. Disconnect the connector from the component.

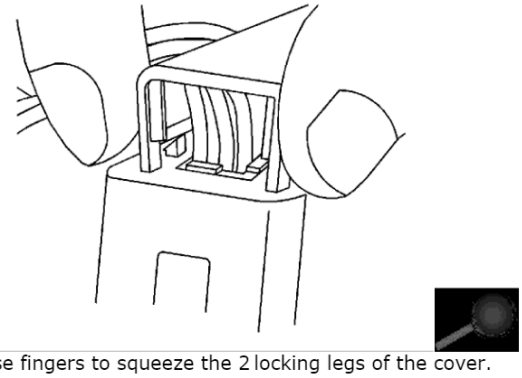


2. Locate the nose piece locking tabs that are positioned on the side of the connector nose piece. The connector nose piece acts as a terminal positive assurance (TPA) and may be referred to as such.

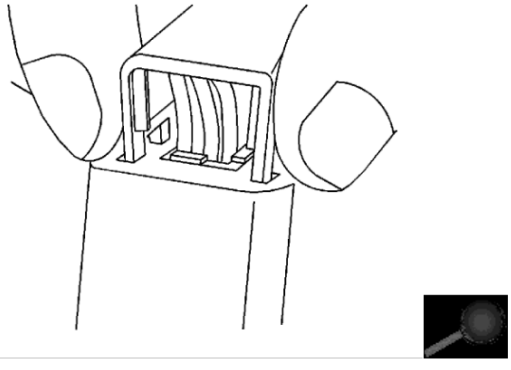
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3. Use a small flat-blade tool to push in one of the locking tabs while gently pulling on the same side of the nose piece.
4. Repeat the procedure for the other locking tab and remove the nose piece.
5. Remove the wire dress cover. The following is a general procedure for wire dress cover removal. Use this procedure as a guide, some dress cover removal procedures may vary.

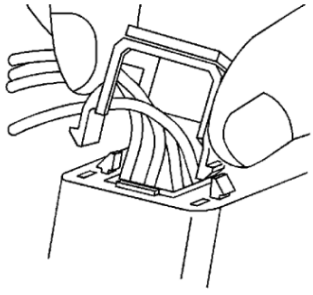


6. Use fingers to squeeze the 2 locking legs of the cover.

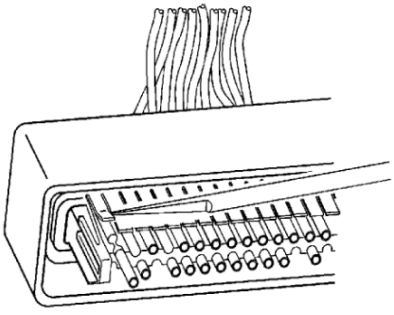


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7. Apply pressure and gently rock the cover until one locking leg is unseated.



8. Continue to apply pressure and rock the cover until the second locking leg is unseated. Repeat procedure for the other side of the dress cover and remove the cover.



9. Use J-38125-12A to gently lift the terminal retaining tab while gently pulling the wire out of the back of the connector. Always remember never use force when pulling a terminal out of a connector.
10. If the terminal is severely bent or damaged, it may be possible on some connectors to push the wire out of the front of the connector instead of pulling it through. This will prevent damage to the internal seals of the connector. Once the terminal is pushed out of the connector, cut the wire as close to the terminal as possible and pull the wire through the connector.
11. Repair the terminal by following the Repairing Connector Terminals procedure.
12. Insert the repaired terminal back into the cavity. Repeat the diagnostic procedure to verify the repair and reconnect the connector bodies.

Terminal Insertion Procedure

After the terminal is crimped to the wire perform the following procedure in order to replace Micro-Pack 100 terminals.

1. Slide the new terminal into the correct cavity at the back of the connector.
2. Push the terminal into the connector until it locks into place. The new terminal should be even with the other terminals. Ensure that the terminal is locked in place by gently pulling on the wire.

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3. To assemble the connector, reverse the Terminal Removal Procedure.

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Delphi Connectors (Micro .64)

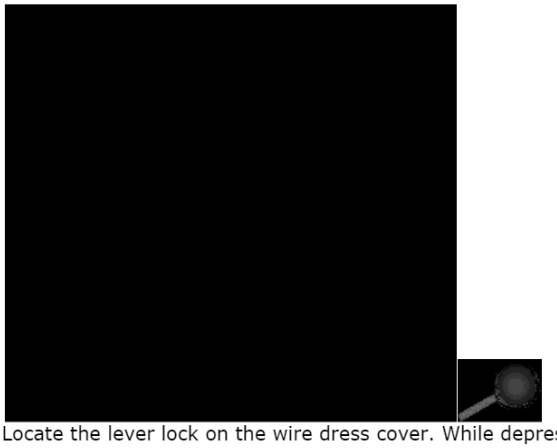
Special Tools

- *EL-38125-550* Terminal Release Tool Kit
- *EL-38125-580* Terminal Release Tool Kit
- *J-38125-21* Terminal Release Tool

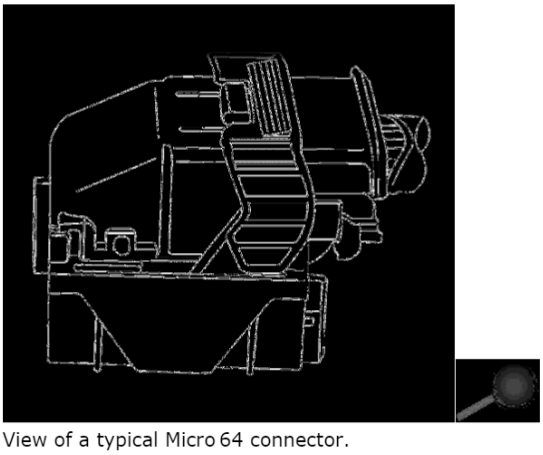
For equivalent regional tools, refer to Special Tools.

Terminal Removal Procedure

Follow the steps below in order to remove terminals from Micro .64 connectors.



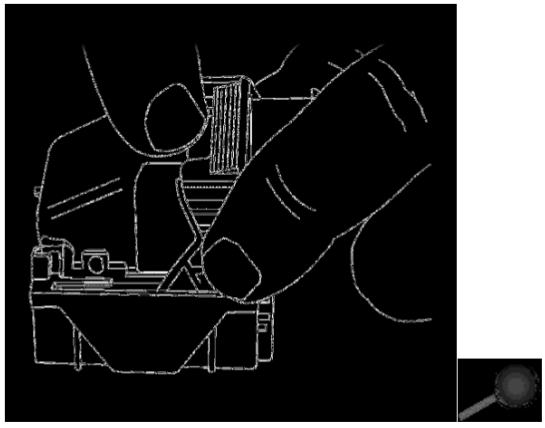
1. Locate the lever lock on the wire dress cover. While depressing the lock, pull the lever over and past the lock. The lever lock may be located on the top or sides of the wire dress cover.



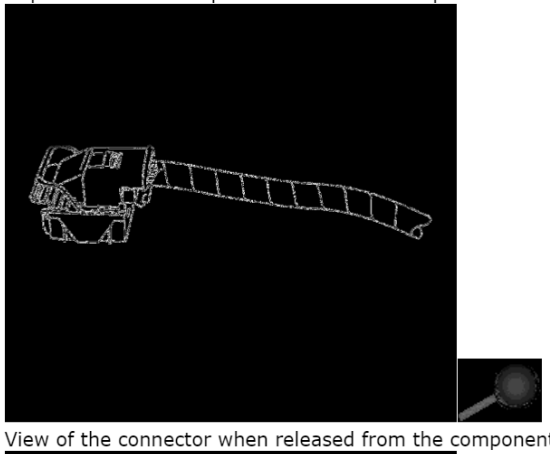
View of a typical Micro 64 connector.

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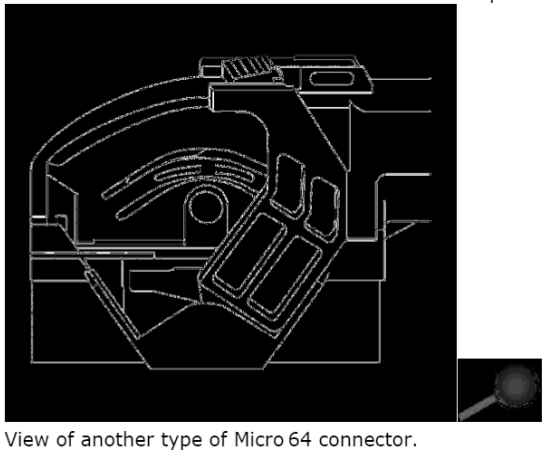
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Depress the lock and pull the lever over and past the lock.

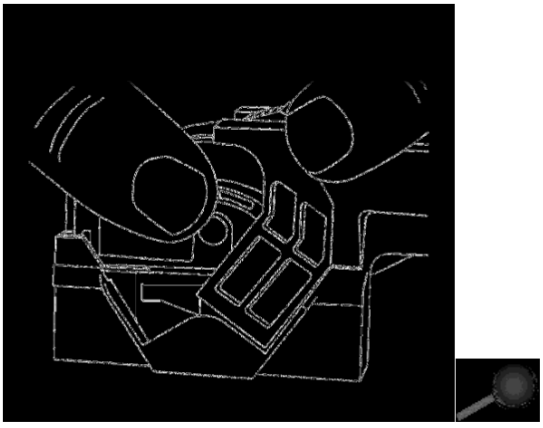


View of the connector when released from the component.

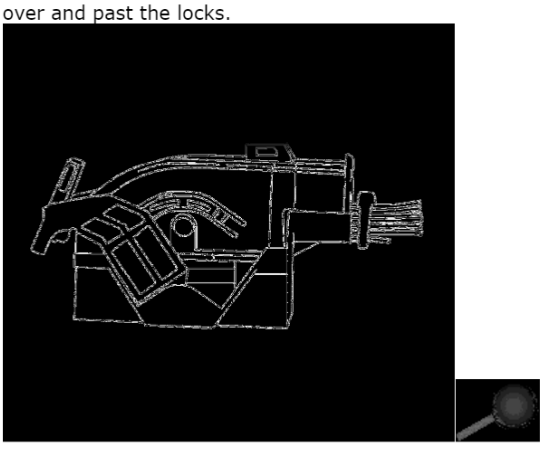


View of another type of Micro 64 connector.

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Depress the locks that are located on both sides of the wire dress cover and pull the lever over and past the locks.



View of the connector when released from the component.

2. Disconnect the connector from the component.



3. Locate the dress cover locking tabs at the front of the connector. Using a small flat-blade tool push down on one of the locking tabs and pull the cover up until the dress cover releases. Repeat this procedure for the other locking tab.

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4. Once the front 2 locks are unlocked, lift the front of the dress cover and pull it forward.



Note: Always use care when removing a terminal position assurance (TPA) in order to avoid damaging it.

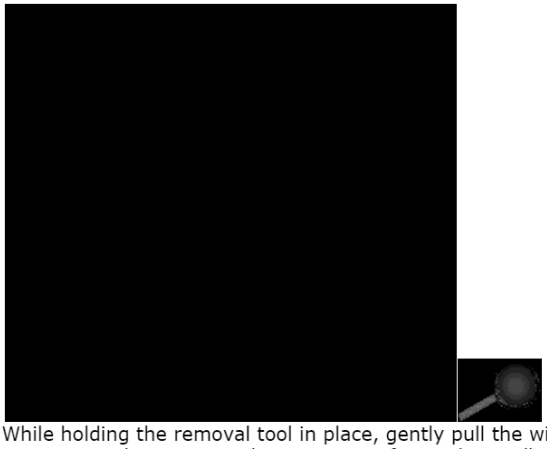
5. Remove the TPA by inserting a small flat-blade tool into the small slot on the TPA and pushing down until the TPA releases. Gently pry the TPA out of the connector.



Note: Be careful not to angle or rock the J-38125-21 tool when inserting it into the connector or the tool may break.

6. Insert the J-38125-21 tool into the round canal between the terminals cavities at the front of the connector.

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7. While holding the removal tool in place, gently pull the wire out of the back of the connector. Always remember never use force when pulling a terminal out of a connector.
8. Repair the terminal by following the Repairing Connector Terminals procedure.
9. Insert the repaired terminal back into the cavity. Repeat the diagnostic procedure to verify the repair and reconnect the connector bodies.

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Delphi Connectors (12-Way)

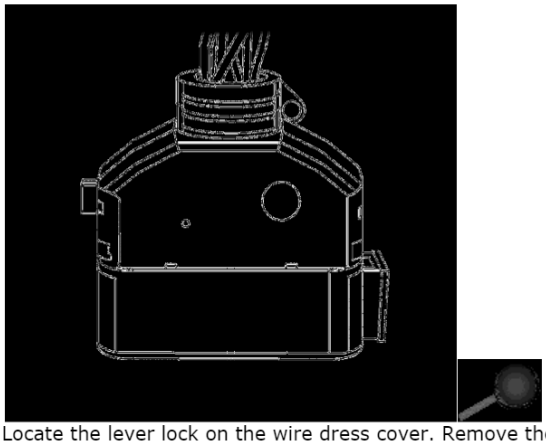
Special Tools

- *EL-38125-550* Terminal Release Tool Kit
- *EL-38125-580* Terminal Release Tool Kit
- *J-38125-12A* Terminal Release Tool

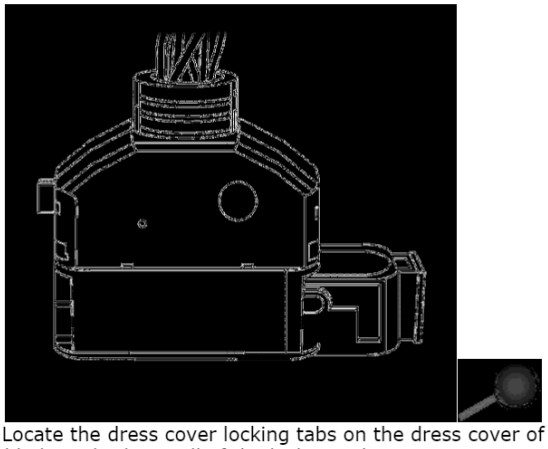
For equivalent regional tools, refer to Special Tools.

Terminal Removal Procedure

Follow the steps below in order to remove terminals from the connector.



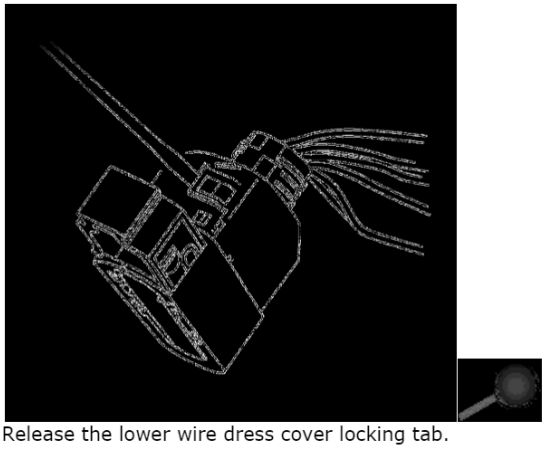
1. Locate the lever lock on the wire dress cover. Remove the connector position assurance (CPA) and slide the lever lock away from the connector body.
2. Disconnect the connector from the component.



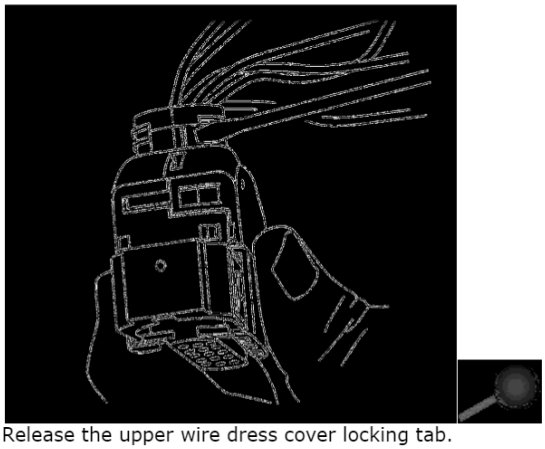
3. Locate the dress cover locking tabs on the dress cover of the connector. Using a small flat-blade tool release all of the locking tabs.

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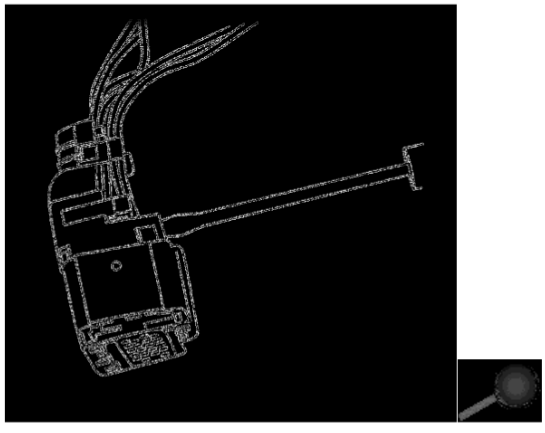
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4. Release the lower wire dress cover locking tab.



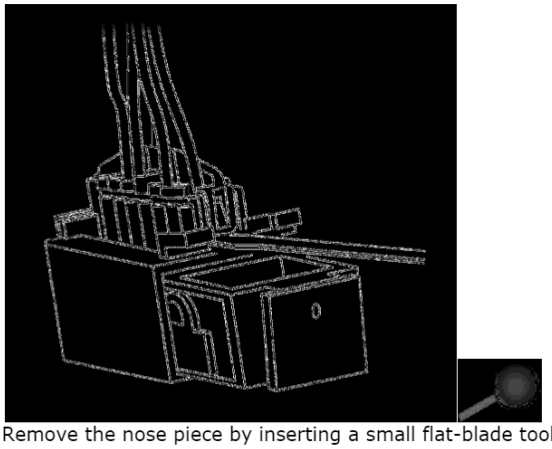
5. Release the upper wire dress cover locking tab.
6. Once the locks are unlocked, lift the dress cover off.



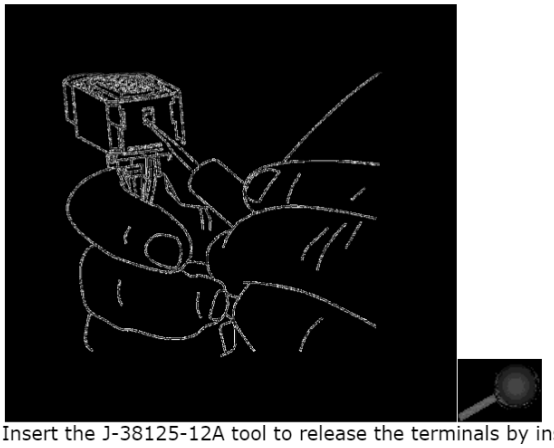
Note: Always use care when removing a terminal position assurance (TPA) in order to avoid damaging it.

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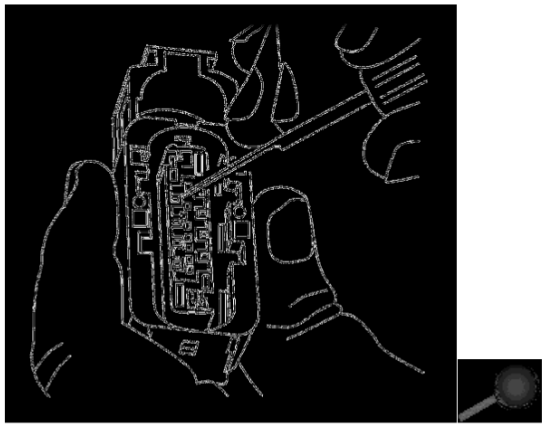
7. Remove the TPA by inserting a small flat-blade tool into the locking tabs on both sides of the TPA . Gently pry the TPA out of the connector.



8. Remove the nose piece by inserting a small flat-blade tool into the locking tabs on both sides of the nose piece. Gently pry the nose piece out of the connector.



9. Insert the J-38125-12A tool to release the terminals by inserting the tool into the terminal release cavity.



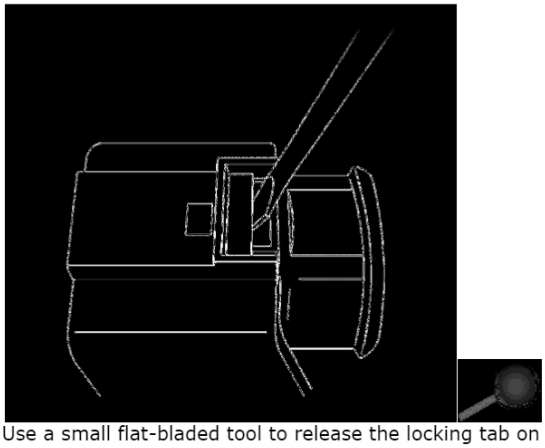
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10. While holding the removal tool in place, gently pull the wire out of the back of the connector. Always remember never use force when pulling a terminal out of a connector.
11. Repair the terminal by following the Repairing Connector Terminals procedure.
12. Insert the repaired terminal back into the cavity. Repeat the diagnostic procedure to verify the repair and reconnect the connector bodies.

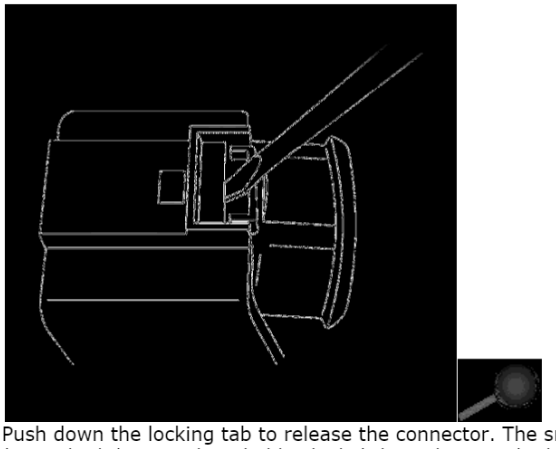
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Delphi Connectors (Steering Gear)

Removal Procedure



1. Use a small flat-bladed tool to release the locking tab on the connector.



2. Push down the locking tab to release the connector. The small flat-bladed tool may need to be pushed down and angled back slightly to depress the locking tab. Pull on the connector body while releasing the locking tab to disconnect the connector.

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FCI Connectors (Lever Lock)

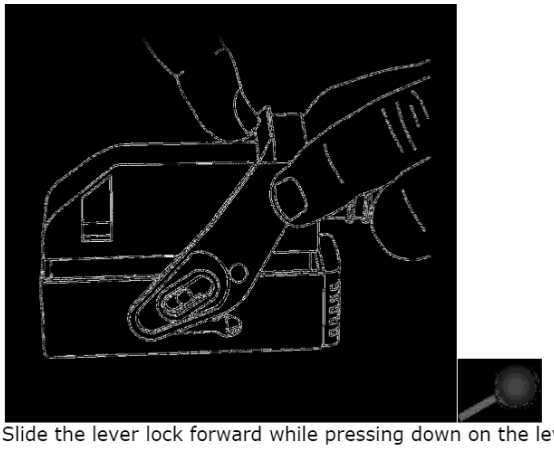
Special Tools

- *EL-38125-550* Terminal Release Tool Kit
- *EL-38125-580* Terminal Release Tool Kit
- *J-38125-556* Terminal Release Tool
- *J-38125-560* Terminal Release Tool

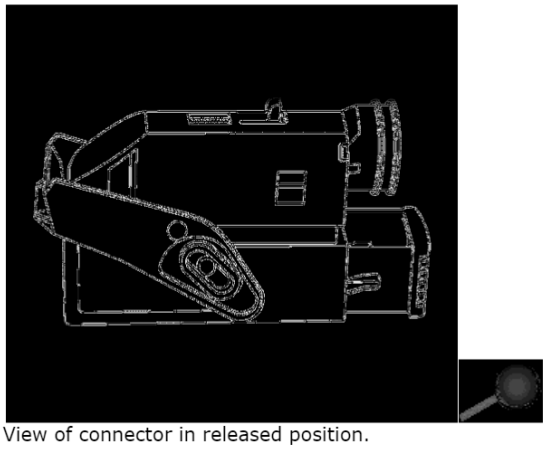
For equivalent regional tools, refer to Special Tools.

Terminal Removal Procedure

Follow the steps below in order to remove terminals from the connector.



1. Slide the lever lock forward while pressing down on the lever lock release tab.
2. The release tab is located on the top of the wiredress cover.

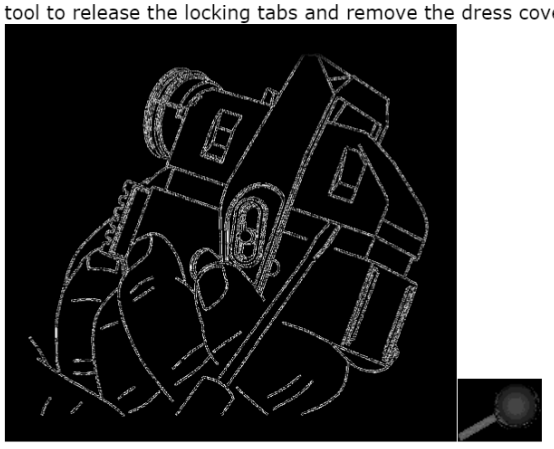


3. View of connector in released position.
4. Disconnect the connector from the component.

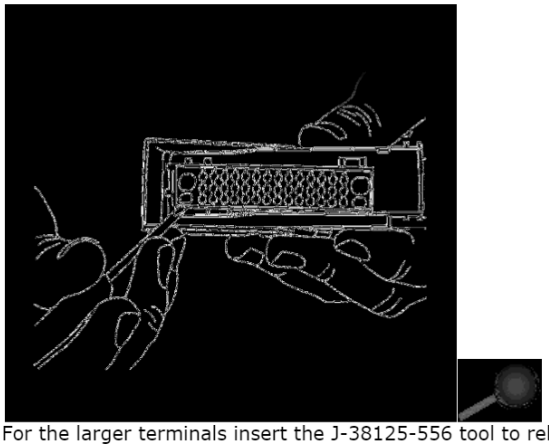
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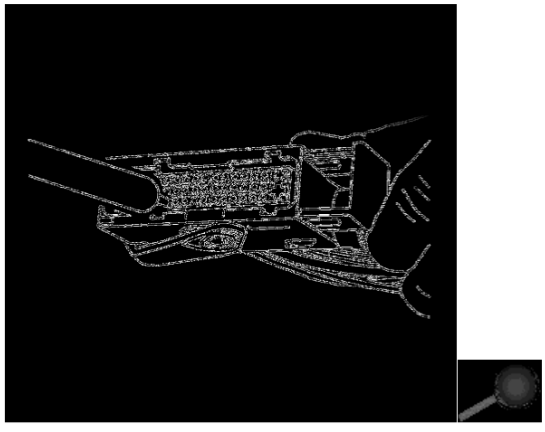
5. Locate the dress cover locking tabs at the corners of the dress cover. Use a small flat-blade tool to release the locking tabs and remove the dress cover.



6. Use a small flat-blade tool to slide the terminal position assurance (TPA) up one notch on both ends of the connector. The TPA is located underneath the wire dress cover.



7. For the larger terminals insert the J-38125-556 tool to release the terminals by inserting the tool into the terminal release cavity. For the smaller terminals insert the J-38125-560 tool to release the terminals by inserting the tool into the terminal release cavity.



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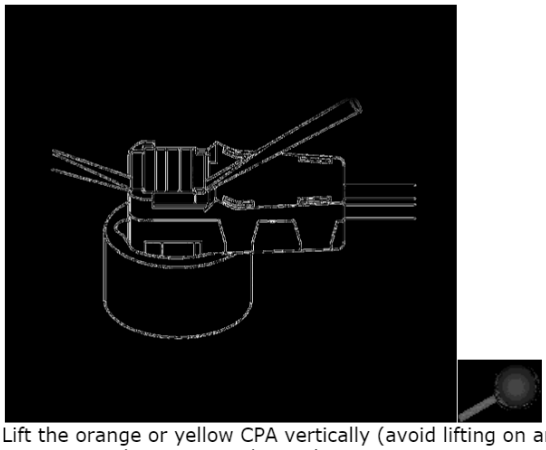
8. While holding the removal tool in place, gently pull the wire out of the back of the connector. Always remember never use force when pulling a terminal out of a connector.
9. Repair the terminal by following the Repairing Connector Terminals procedure.
10. Insert the repaired terminal back into the cavity. Repeat the diagnostic procedure to verify the repair and reconnect the connector bodies.

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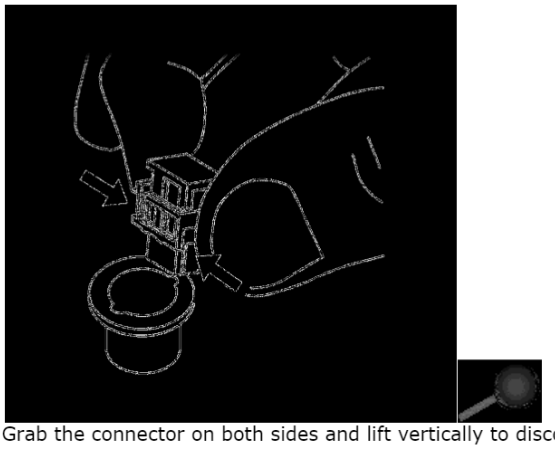
FCI Connectors (SIR)

Removal Procedure

Note: The orange or yellow connector position assurance (CPA) must be released first to disconnect or to connect the connector.



1. Lift the orange or yellow CPA vertically (avoid lifting on an angle to the connector) approximately 4 mm to release the connector. Use a small flat-bladed tool to help release the CPA. The CPA may also be released manually without any tools.

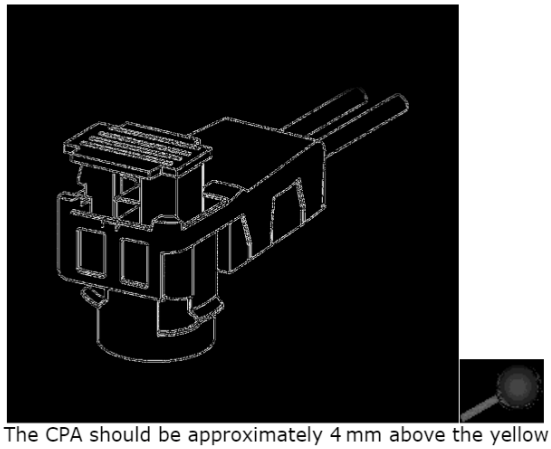


2. Grab the connector on both sides and lift vertically to disconnect the connector.

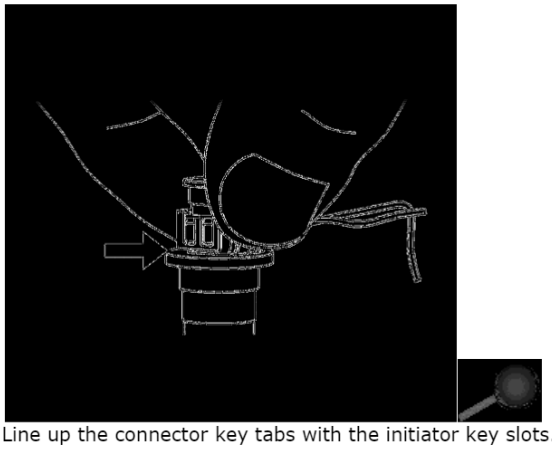
Installation Procedure

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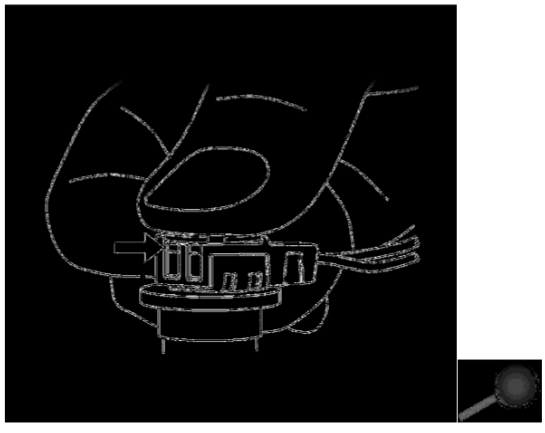
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1. The CPA should be approximately 4 mm above the yellow cover before installing the connector. If not, use a small flat-bladed tool to help release the CPA. The CPA may also be released manually without any tools.



2. Line up the connector key tabs with the initiator key slots. Grab the connector on both sides and push down into the initiator connector sub assembly until fully seated.



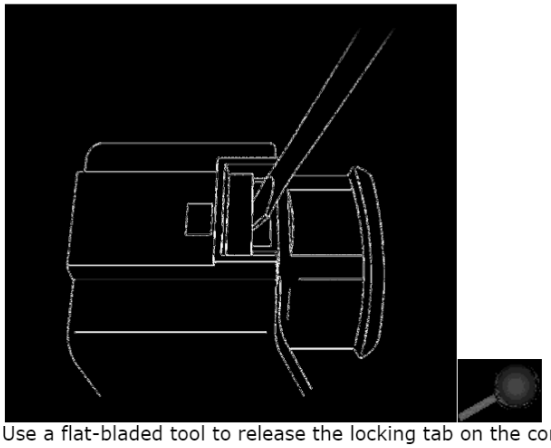
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3. After the connector is fully seated, push the CPA down with your thumb until the CPA is touching the yellow cover on the connector.

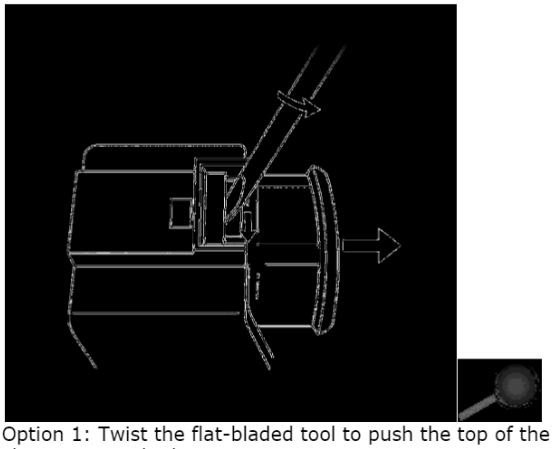
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FEP Connectors (Steering Gear)

Removal Procedure



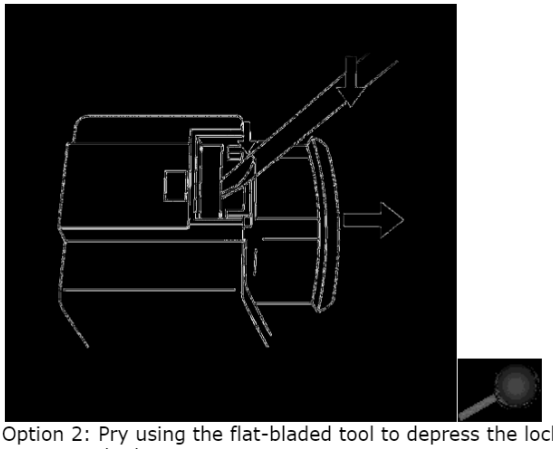
1. Use a flat-bladed tool to release the locking tab on the connector.



2. Option 1: Twist the flat-bladed tool to push the top of the locking tab inward while pulling the connector body out.

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3. Option 2: Pry using the flat-bladed tool to depress the locking tab while pulling the connector body out.

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JST Connectors

Special Tools

- *EL-38125-550* Terminal Release Tool Kit
- *EL-38125-580* Terminal Release Tool Kit
- *J-38125-553* Terminal Release Tool

For equivalent regional tools, refer to Special Tools.

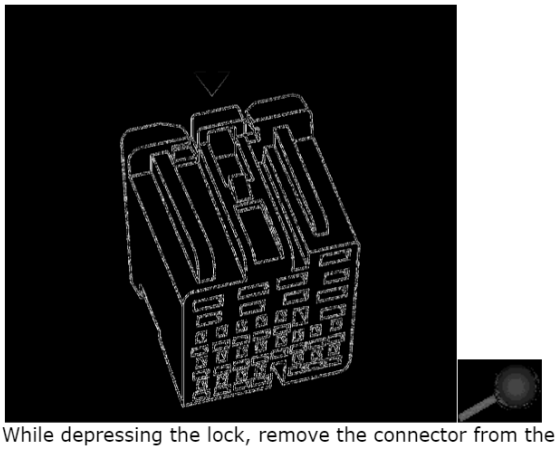
Terminal Removal Procedure

The JST connector family consists of seven unique connector housings differentiated by color and keying. This connector family is designed to use both 0.64 and 2.8 sized terminals.

JST BCM Connector

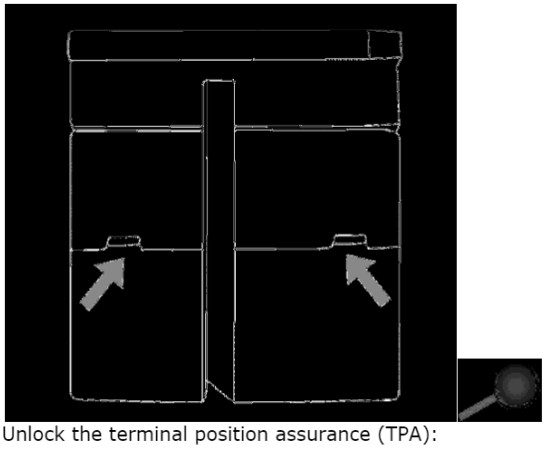
GM Service Part #	Color
88988806	Gray
88988837	Brown
88988838	Lt Green
88988839	Natural
88988840	Lt Blue
88988841	Black
88988842	Pink

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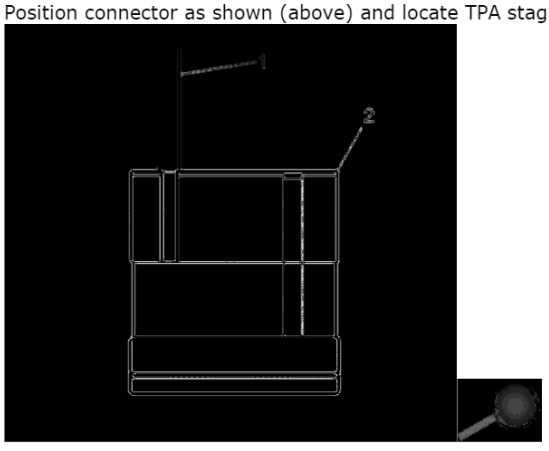


1. While depressing the lock, remove the connector from the component.

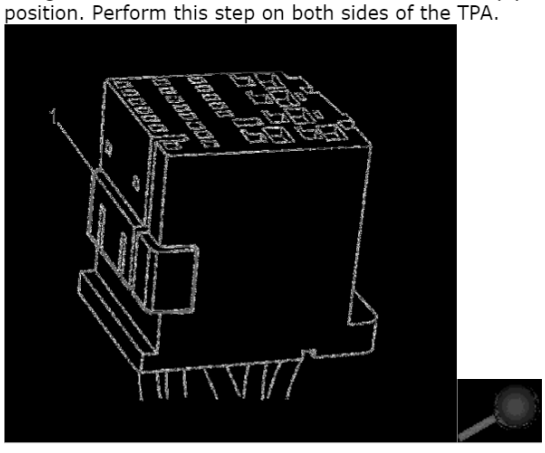
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2. Unlock the terminal position assurance (TPA):
   - Position connector as shown (above) and locate TPA staging cavities.

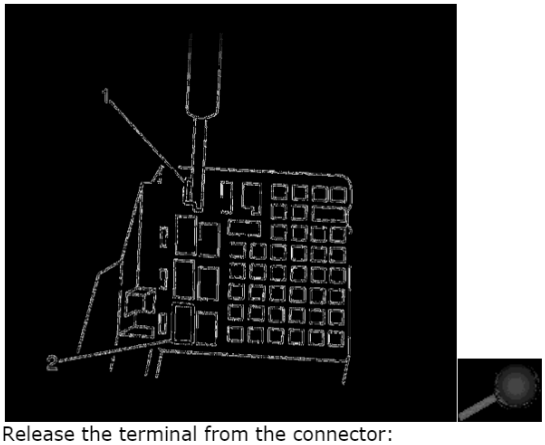


   - Using connector terminal release tool J-38125-553 (1) lift the TPA into the staged position. Perform this step on both sides of the TPA.

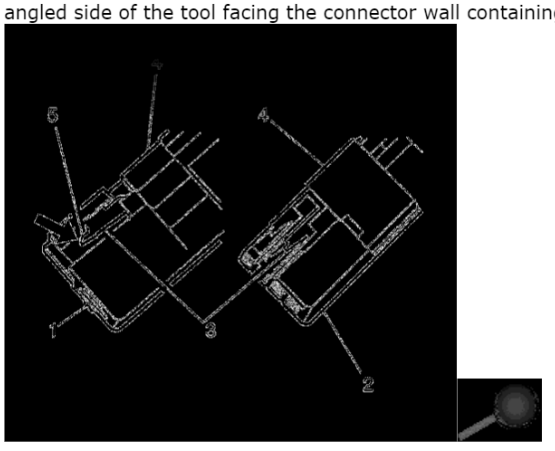


   - You will feel the TPA click into place when fully extended into the staged position. The figure above shows the TPA (1) in the staged position.

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3. Release the terminal from the connector:
   - Position the connector as shown (above) and locate the terminal release entry canal (1) of the suspect terminal.
   - Insert the connector terminal release tool J-38125-553 into the entry canal with the angled side of the tool facing the connector wall containing cavity 4 (2).



   - The cavity on the left (1) is a 2.8 mm² cavity and the cavity on the right (2) is a 0.64 mm² cavity.
   - Place the tip of the connector terminal release tool onto the connector lance (3) and deflect the lance to the right (5) to release the lock. Hold this released position.
   - Holding the lance in the released position, slightly pull on the suspect terminal to remove it from the connector housing. The side TPA (4) is a secondary lock.
4. Repair the terminal by following the Repairing Connector Terminals procedure.
5. Insert the repaired terminal back into the cavity. Repeat the diagnostic procedure to verify the repair and reconnect the connector bodies.

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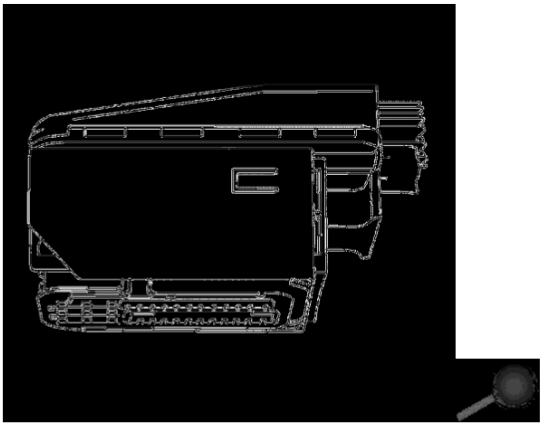
Kostal Connectors (Glow Plug Control Module)

Special Tools

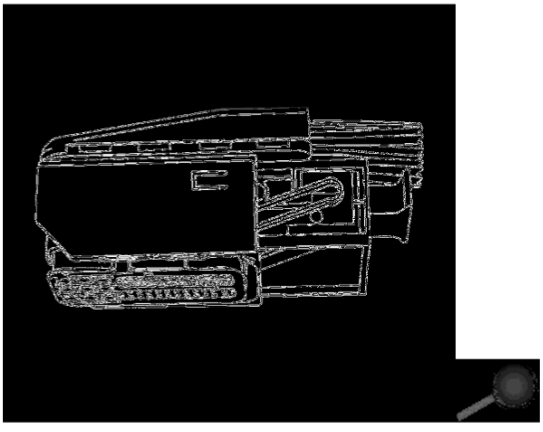
- *EL-38125-550* Terminal Release Tool Kit
- *EL-38125-580* Terminal Release Tool Kit
- *J-38125-24* Terminal Release Tool
- *J-38125-560* Terminal Release Tool

For equivalent regional tools, refer to Special Tools.

Terminal Removal Procedure



View of typical connector.



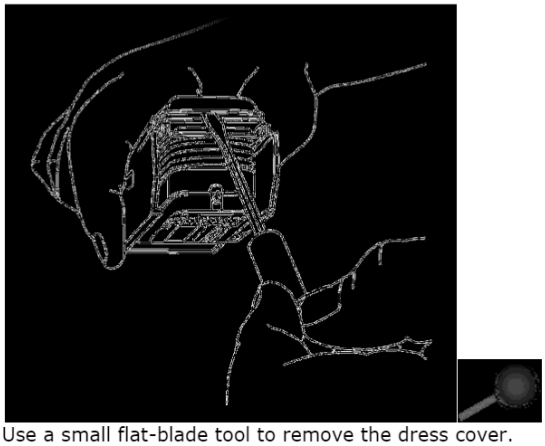
View of connector in released position.

1. Locate the assist lever at the back of the connector. Move the assist lever to the rear position.

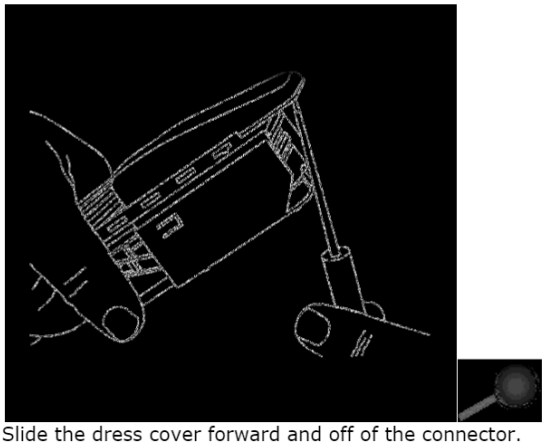
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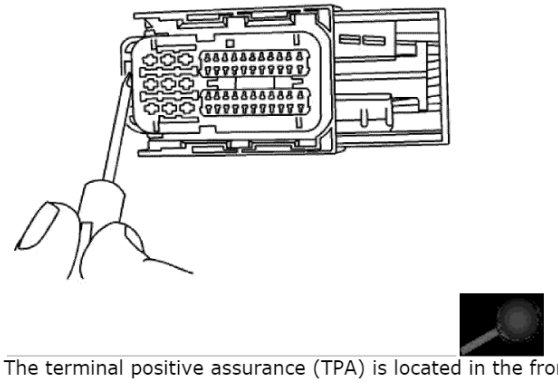
2. Disconnect the connector from the component.



3. Use a small flat-blade tool to remove the dress cover.



4. Slide the dress cover forward and off of the connector.

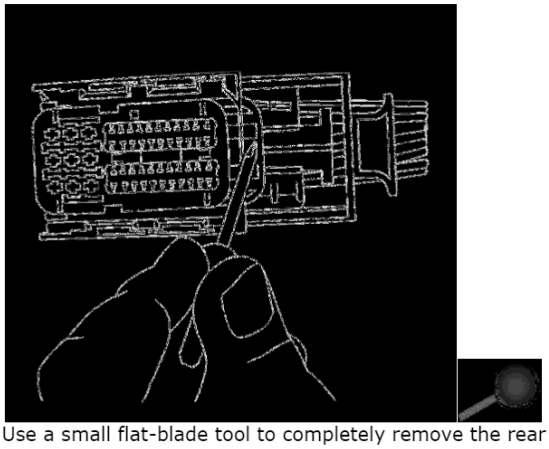


5. The terminal positive assurance (TPA) is located in the front and rear of the connector.

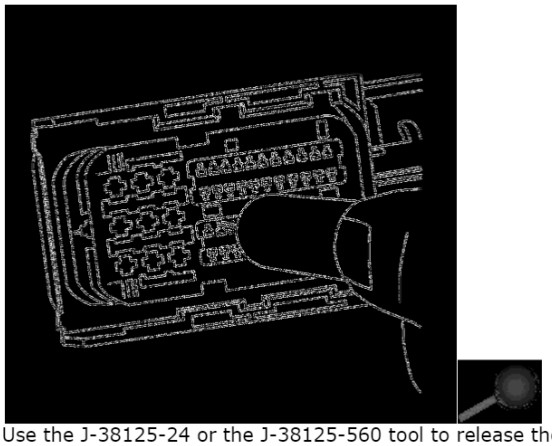
Note: The front TPA cannot be removed from the connector. Only move it to the preset position.

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6. Use a small flat-blade tool to move the front TPA to the preset position, outboard approximately 0.125 in. (3 mm).



7. Use a small flat-blade tool to completely remove the rear TPA from the connector.



8. Use the J-38125-24 or the J-38125-560 tool to release the terminals by inserting the tool into the terminal release cavity.
9. While holding the removal tool in place, gently pull the wire out of the back of the connector. Always remember never use force when pulling a terminal out of a connector.
10. Repair the terminal by following the Repairing Connector Terminals procedure.

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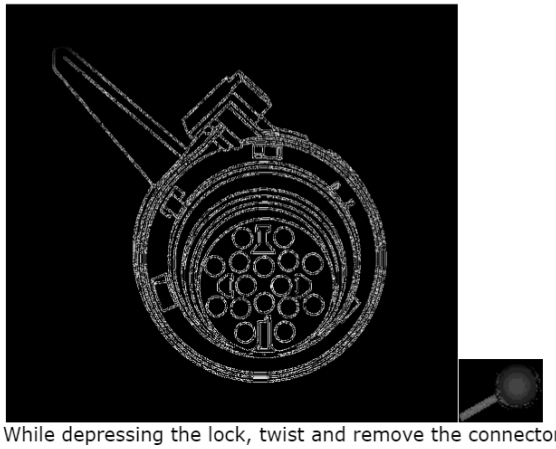
Kostal Connectors (Transmission)

Special Tools

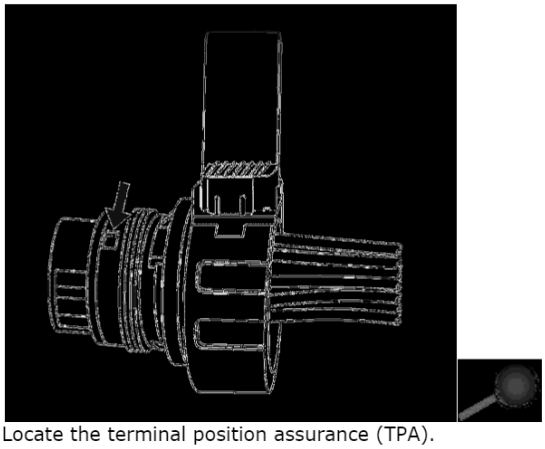
- *EL-38125-550* Terminal Release Tool Kit
- *EL-38125-580* Terminal Release Tool Kit
- *J-38125-28* Terminal Release Tool

For equivalent regional tools, refer to Special Tools.

Terminal Removal Procedure



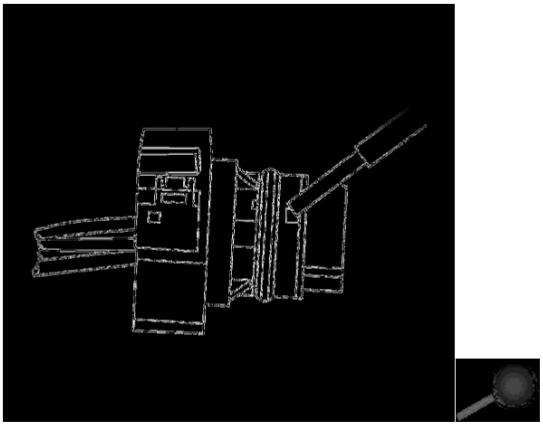
1. While depressing the lock, twist and remove the connector from the component.



2. Locate the terminal position assurance (TPA).

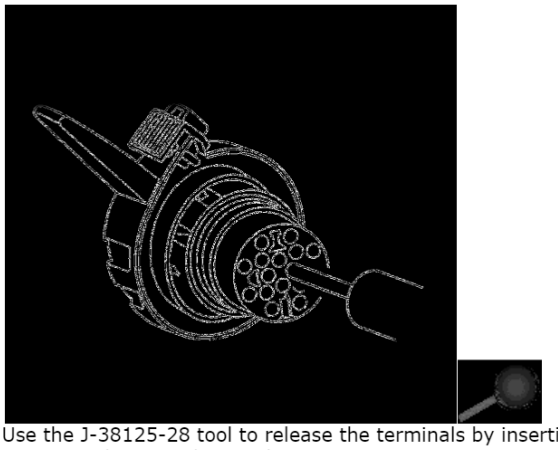
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Note: The TPA cannot be removed from the connector while there are terminals present in the connector body.

3. Use a small flat-blade tool to push the TPA until it bottoms out.



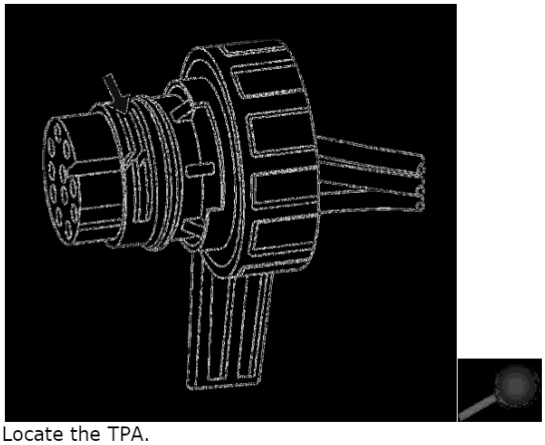
4. Use the J-38125-28 tool to release the terminals by inserting the tool into the terminal cavity as shown in the graphic.
5. While holding the removal tool in place, gently pull the wire out of the back of the connector. Always remember never use force when pulling a terminal out of a connector.
6. Repair the terminal by following the Repairing Connector Terminals procedure.

Terminal Insertion Procedure

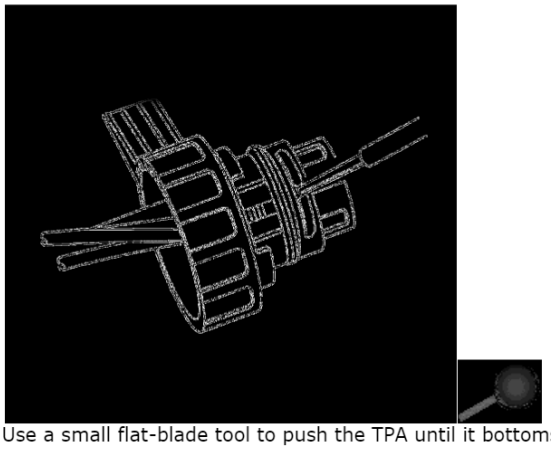
After the terminal is replaced, perform the following procedure in order to insert the terminal.

1. Slide the new terminal into the correct cavity at the back of the connector.
2. Push the terminal into the connector until it locks into place. The new terminal should be even with the other terminals. Ensure that the terminal is locked in place by gently pulling on the wire.

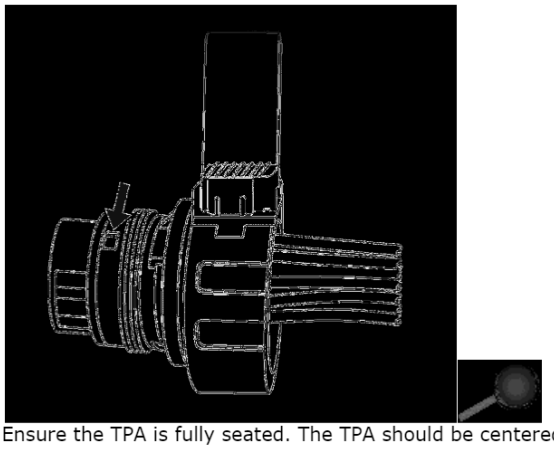
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3. Locate the TPA.



4. Use a small flat-blade tool to push the TPA until it bottoms out.



5. Ensure the TPA is fully seated. The TPA should be centered and flush with the connector body when viewed.

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Molex Connectors

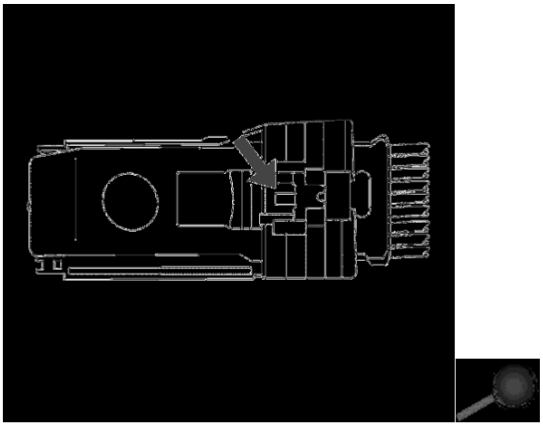
Special Tools

- *EL-38125-550* Terminal Release Tool Kit
- *EL-38125-580* Terminal Release Tool Kit
- *J-38125-213* Terminal Release Tool

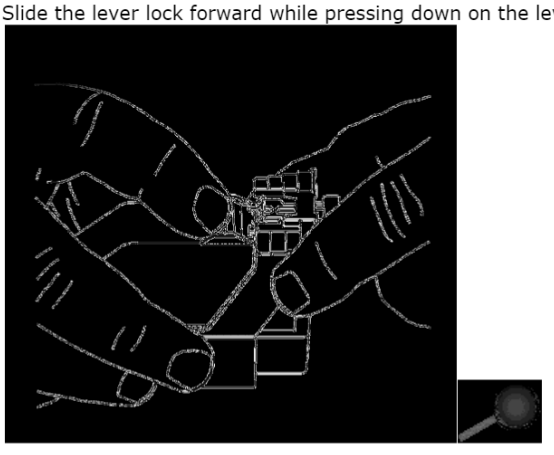
For equivalent regional tools, refer to Special Tools.

Terminal Removal Procedure

1. Locate the connector position assurance (CPA) on the top of the wire dress cover. Slide the CPA forward.



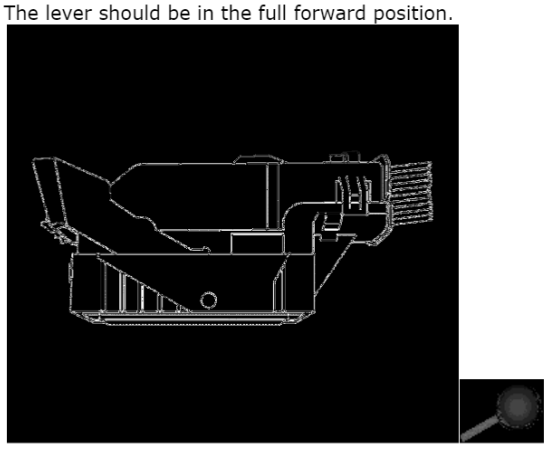
2. Slide the lever lock forward while pressing down on the lever lock release tab.



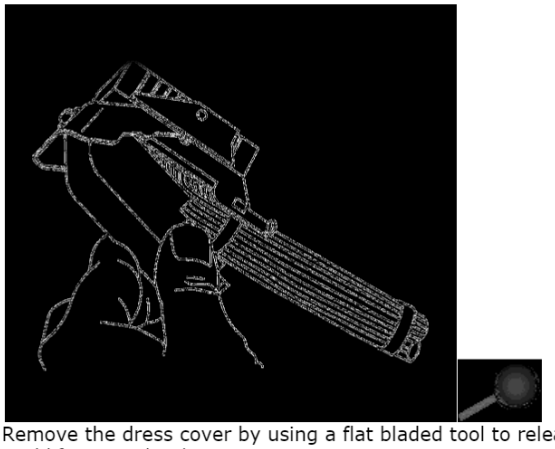
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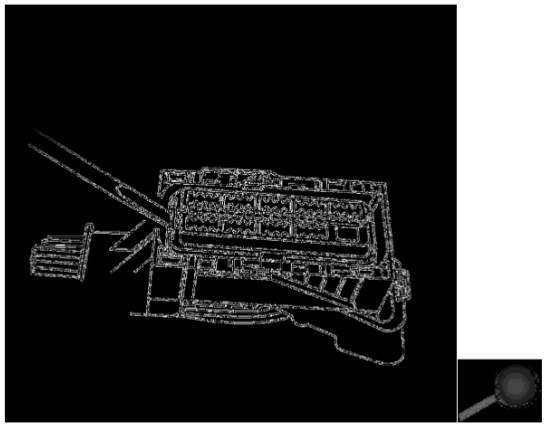
3. The lever should be in the full forward position.



4. Disconnect the connector from the component.

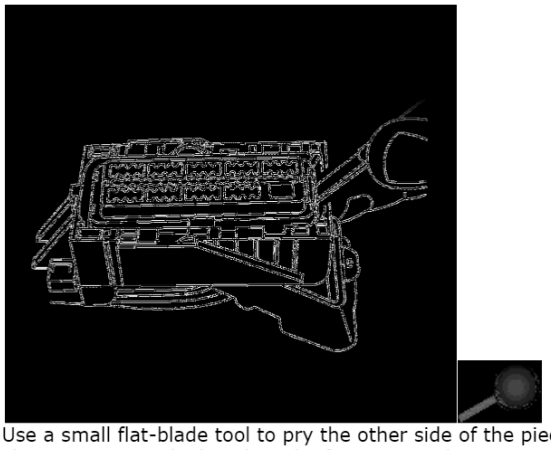


5. Remove the dress cover by using a flat bladed tool to release the dress cover locking tabs and lift up on the dress cover.
6. Cut the tie wrap that holds the wires to the connector body.

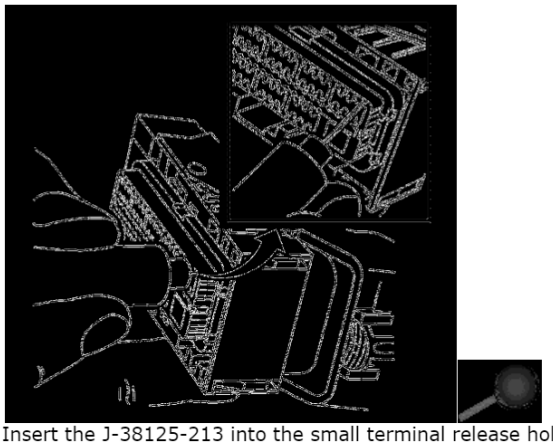


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7. Use a small flat-blade tool to pry one side of the nose piece up to the pre-stage position. When the nose piece is in the pre-staged position, the nose piece will be raised above the connector body the length of the step in the nose piece.



8. Use a small flat-blade tool to pry the other side of the piece to the pre-stage position. If the nose piece is higher than the first step in the nose piece, gently push down on the nose piece until it meets with resistance from the connector body, you should feel the nose piece click into position.



9. Insert the J-38125-213 into the small terminal release hole on the nose piece and gently pull on the back of the wire.
10. Repair the terminal by following the Repairing Connector Terminals procedure.
11. Insert the repaired terminal back into the cavity. Repeat the diagnostic procedure to verify the repair and reconnect the connector bodies.

Terminated Lead Repair

1. Remove the terminal.
2. Find the appropriate terminated lead.
3. Use the appropriate splice sleeves depending on the gauge size.
4. Refer to Splicing Copper Wire Using Splice Sleeves.

Terminal Insertion Procedure

After the terminal is replaced, perform the following procedure in order to insert the terminal.

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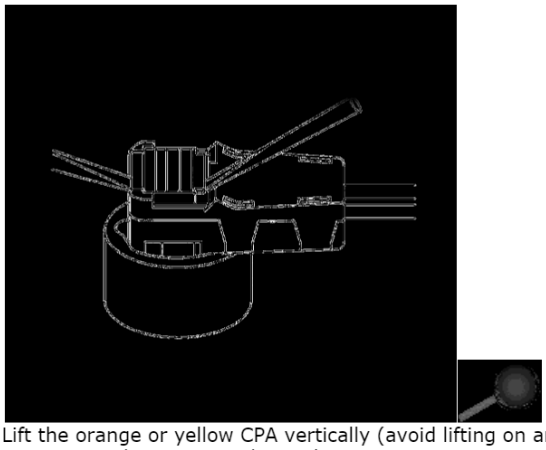
1. Slide the new terminal into the correct cavity at the back of the connector.
2. Push the terminal into the connector until it locks into place. The new terminal should be even with the other terminals. Insure that the terminal is locked in place by gently pulling on the wire.
3. To assemble the connector, reverse the connector disassembly procedure.

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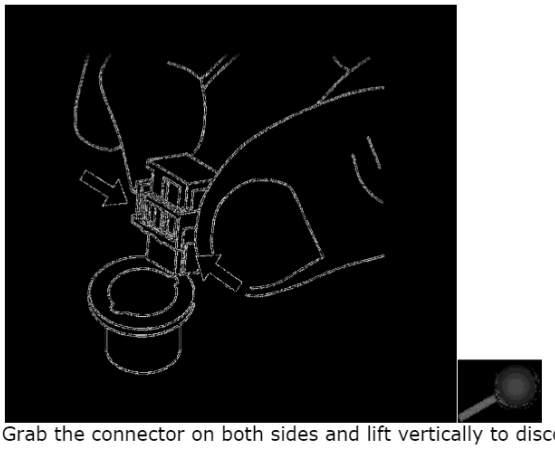
Molex Connectors (SIR)

Removal Procedure

Note: The orange or yellow connector position assurance (CPA) must be released first to disconnect or to connect the connector.



1. Lift the orange or yellow CPA vertically (avoid lifting on an angle to the connector) approximately 4 mm to release the connector. Use a small flat-bladed tool to help release the CPA. The CPA may also be released manually without any tools.

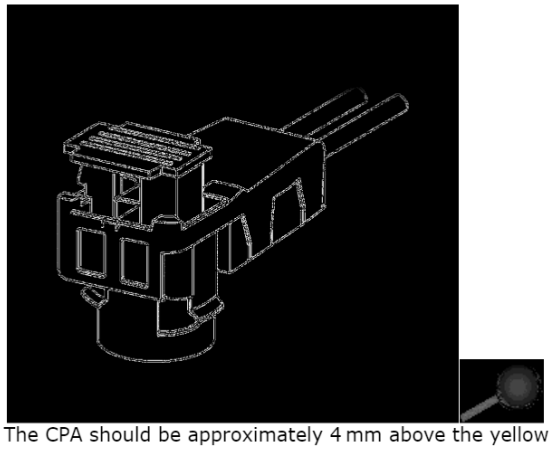


2. Grab the connector on both sides and lift vertically to disconnect the connector.

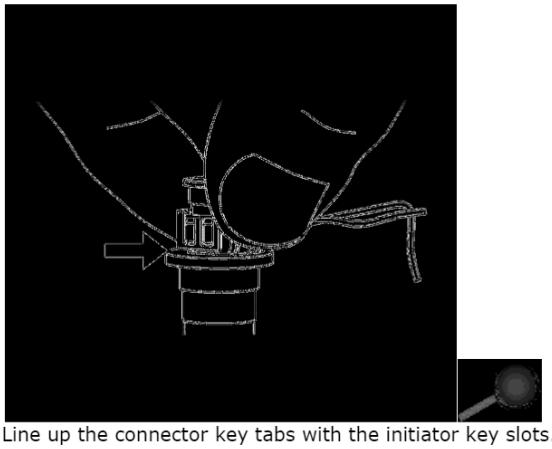
Installation Procedure

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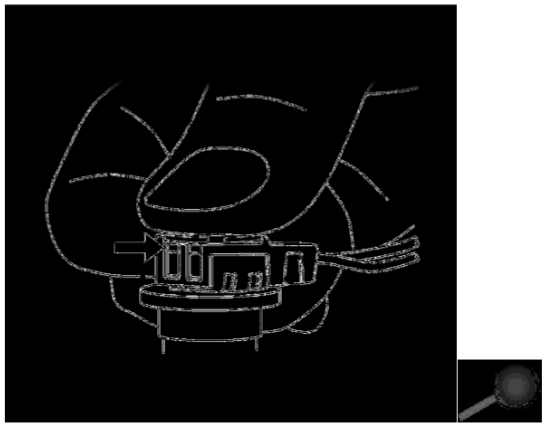
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1. The CPA should be approximately 4 mm above the yellow cover before installing the connector. If not, use a small flat-bladed tool to help release the CPA. The CPA may also be released manually without any tools.



2. Line up the connector key tabs with the initiator key slots. Grab the connector on both sides and push down into the initiator connector sub assembly until fully seated.



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3. After the connector is fully seated, push the CPA down with your thumb until the CPA is touching the yellow cover on the connector.

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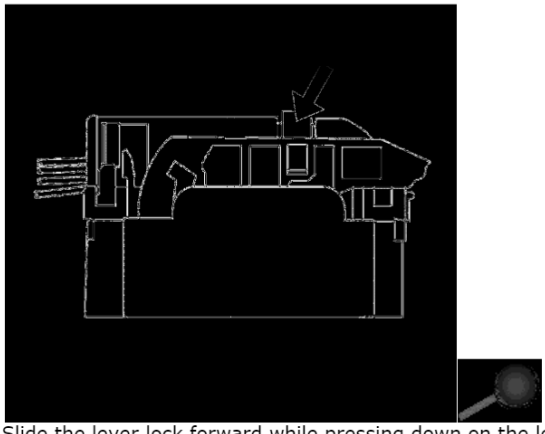
Sumitomo Connectors

Special Tools

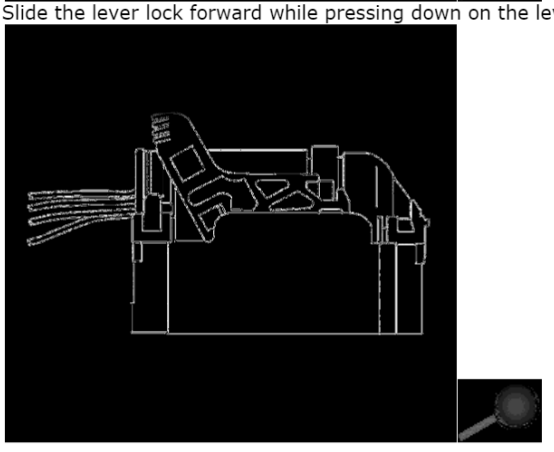
- *EL-38125-550* Terminal Release Tool Kit
- *EL-38125-580* Terminal Release Tool Kit
- *J-38125-12A* Terminal Release Tool
- *J-38125-552* Terminal Release Tool
- *J-38125-553* Terminal Release Tool

For equivalent regional tools, refer to Special Tools.

Terminal Removal Procedure



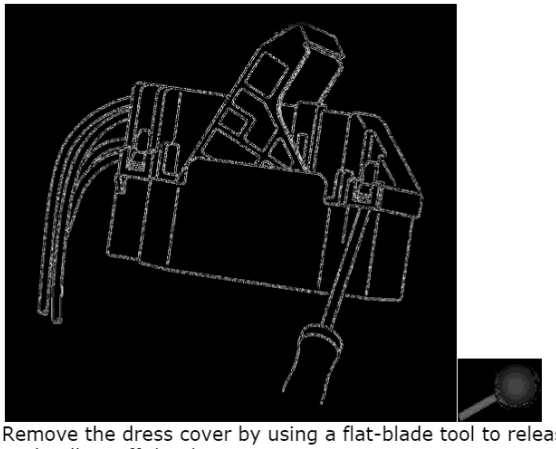
1. Slide the lever lock forward while pressing down on the lever lock release tab.



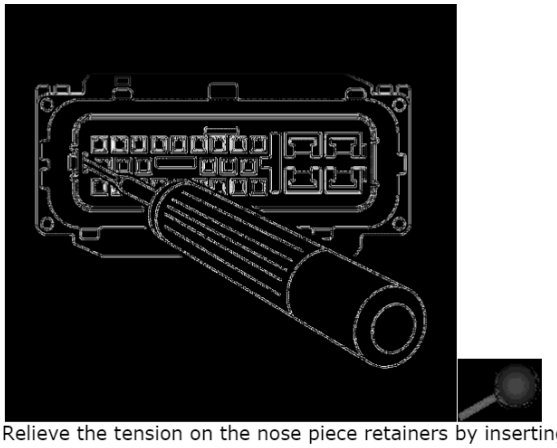
2. Disconnect the connector from the component.

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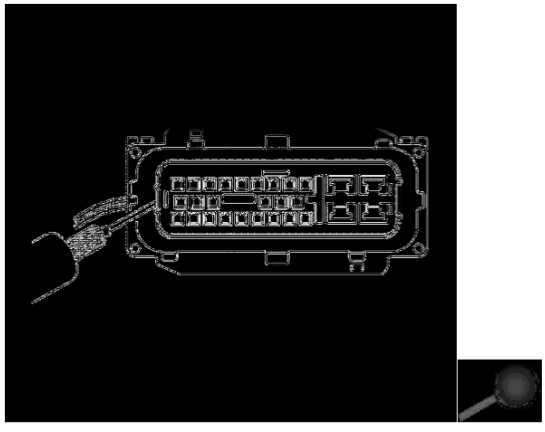
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3. Remove the dress cover by using a flat-blade tool to release the connector locking tabs and pulling off the dress cover.

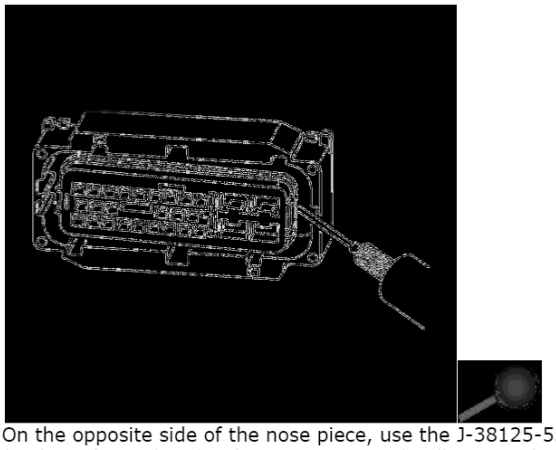


4. Relieve the tension on the nose piece retainers by inserting J-38125-12A into the single retainer slot on the end of the nose piece and gently prying out the locking tab. Repeat the process for both of the nose piece locking tabs on the opposite side of the nose piece.

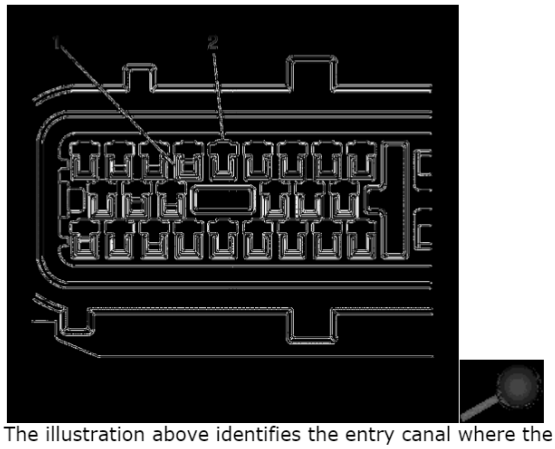


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5. Once the nose piece retainers are relaxed, use the J-38125-552 to pull up the nose piece by hooking the tool under the nose piece and pulling up. The nose piece should raise slightly.

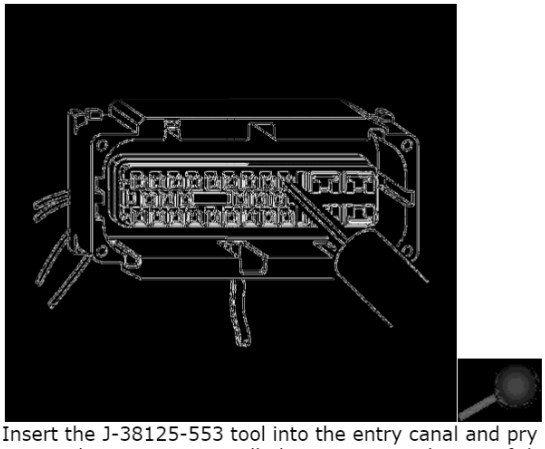


6. On the opposite side of the nose piece, use the J-38125-552 pull up the nose piece by hooking the tool under the nose piece and pulling up. The nose piece should release completely. If the nose piece does not come off, repeat the procedure on the opposite side.

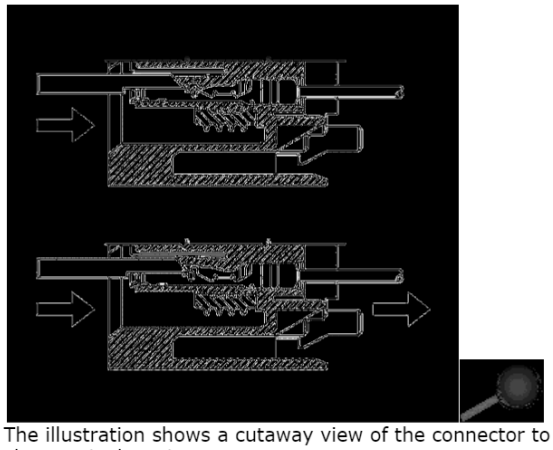


7. The illustration above identifies the entry canal where the terminal release tool will be inserted, and the terminal cavity.
    - Terminal (1)
    - Entry Canal (2)

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8. Insert the J-38125-553 tool into the entry canal and pry up on the terminal retainer. The terminal retainer is a small plastic piece on the top of the terminal. The terminal retainer must be held up while the terminal is pulled out of the connector.



9. The illustration shows a cutaway view of the connector to aid the technician in releasing the terminal retainer.
10. Repair the terminal by following the Repairing Connector Terminals procedure.
11. Insert the repaired terminal back into the cavity. Repeat the diagnostic procedure to verify the repair and reconnect the connector bodies.

Terminal Insertion Procedure

After the terminal is replaced, perform the following procedure in order to insert the terminal.

1. Slide the new terminal into the correct cavity at the back of the connector.
2. Push the terminal into the connector until it locks into place. The new terminal should be even with the other terminals. Ensure that the terminal is locked in place by gently pulling on the wire.
3. To assemble the connector, reverse the connector disassembly procedure.

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Tyco/AMP Connectors (CM 42-Way)

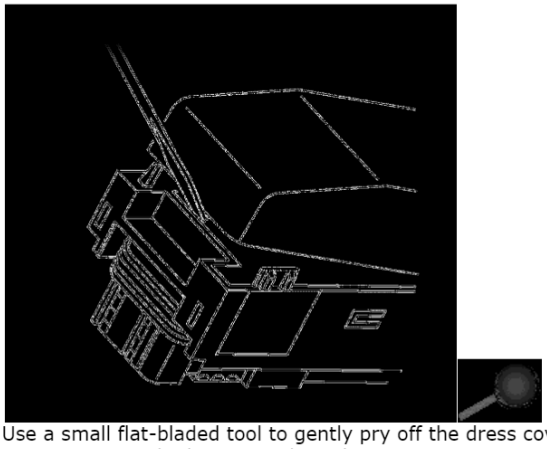
Special Tools

- *EL-38125-550* Terminal Release Tool Kit
- *EL-38125-580* Terminal Release Tool Kit
- *J-38125-12A* Terminal Release Tool

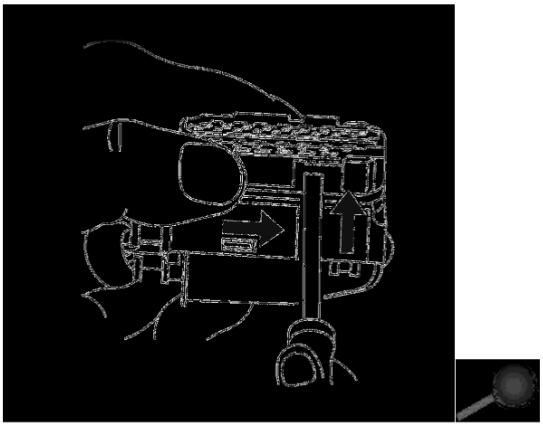
For equivalent regional tools, refer to Special Tools.

Terminal Removal Procedure

1. Locate the connector position assurance (CPA) on the connector body and pull the CPA out. The CPA is on the wire harness side of connector.
2. Disconnect the connector from the component.



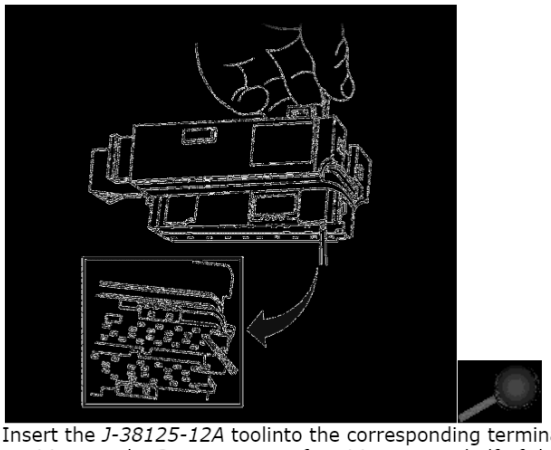
3. Use a small flat-bladed tool to gently pry off the dress cover by inserting the tool under the cover opposite the harness side and prying up.
4. Remove the cover.



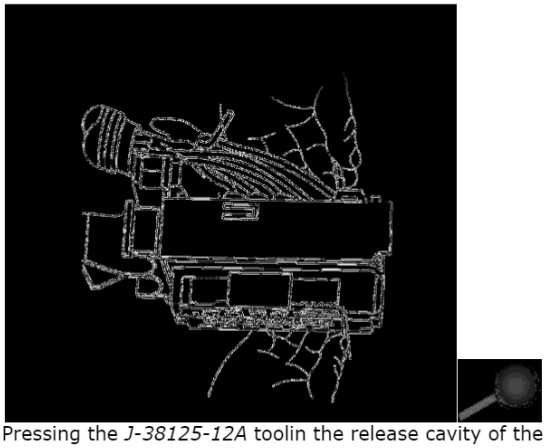
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5. Using a small flat-bladed tool, push on the side of the nose piece retainer while pushing the nose piece forward with your thumb. This will release the terminal position assurance (TPA).



6. Insert the *J-38125-12A* toolinto the corresponding terminal release cavity. The release cavities are the 2 center rows of cavities on one half of the connector.



7. Pressing the *J-38125-12A* toolin the release cavity of the terminal you are removing, gently pull the wire out of the back of the connector. Always remember never use force when pulling a terminal out of a connector.
8. Repair the terminal by following the Repairing Connector Terminals procedure.
9. Insert the repaired terminal back into the cavity. Repeat the diagnostic procedure to verify the repair and reconnect the connector bodies.

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Tyco/AMP Connectors (Sensor)

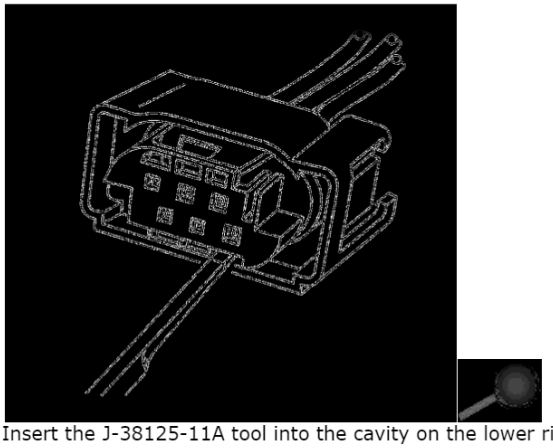
Special Tools

- *EL-38125-550* Terminal Release Tool Kit
- *EL-38125-580* Terminal Release Tool Kit
- *J-38125-11A* Terminal Release Tool

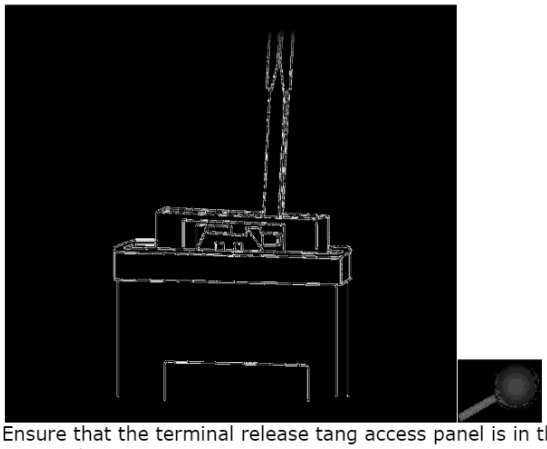
For equivalent regional tools, refer to Special Tools.

Terminal Removal Procedure

1. Disconnect the connector from the component.



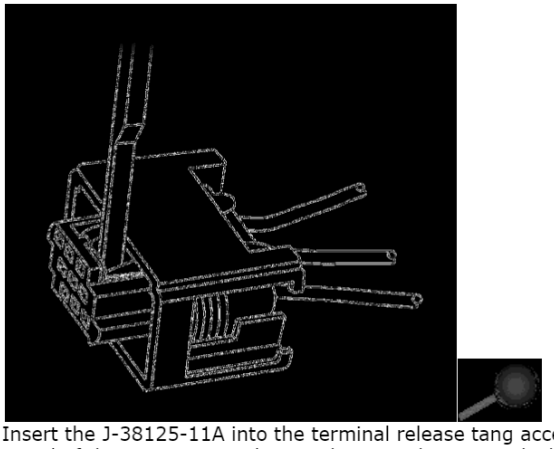
2. Insert the J-38125-11A tool into the cavity on the lower right hand face of the connector until the terminal release tang access panel slides over.



3. Ensure that the terminal release tang access panel is in the correct location to access the terminals.
4. Push the wire side of the terminal that is being removed toward the connector and hold it in position.

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5. Insert the J-38125-11A into the terminal release tang access slot located behind the access panel of the connector and press down on the terminal while carefully pulling the terminal out of the connector. Always remember never use force when pulling a terminal out of a connector. If the terminal is difficult to remove, repeat the entire procedure.
6. Repair the terminal by following the Repairing Connector Terminals procedure.
7. Insert the repaired terminal back into the cavity. Repeat the diagnostic procedure to verify the repair and reconnect the connector bodies.

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Tyco/AMP Connectors (0.25 Cap)

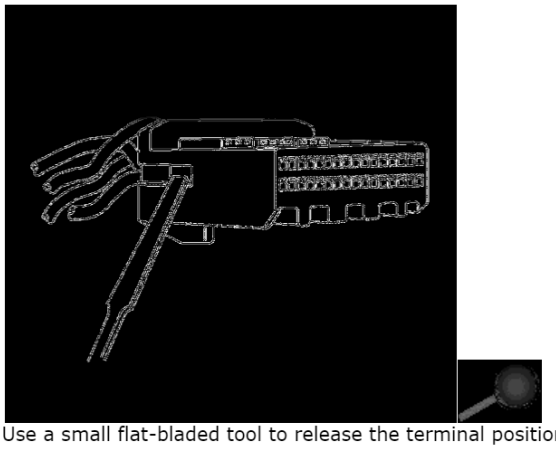
Special Tools

- *EL-38125-550* Terminal Release Tool Kit
- *EL-38125-580* Terminal Release Tool Kit
- *J-38125-24* Terminal Release Tool

For equivalent regional tools, refer to Special Tools.

Terminal Removal Procedure

1. Disconnect the connector from the component by pressing down on the connector position assurance (CPA).



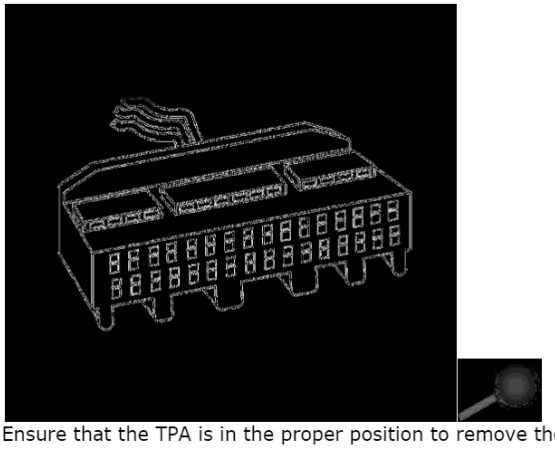
2. Use a small flat-bladed tool to release the terminal position assurance (TPA) by inserting the tool in the small recess on the side of the connector and pushing up until the TPA releases from the connector body. The TPA should raise just slightly. Do not try to remove the TPA.

   Note: The TPA on this connector cannot be removed unless the terminals are removed first. The TPA will come out of the connector body, but only slightly. When the TPA is slightly raised the terminals can be removed. Using excessive force to remove the TPA with the terminals still in the connector will damage the connector.

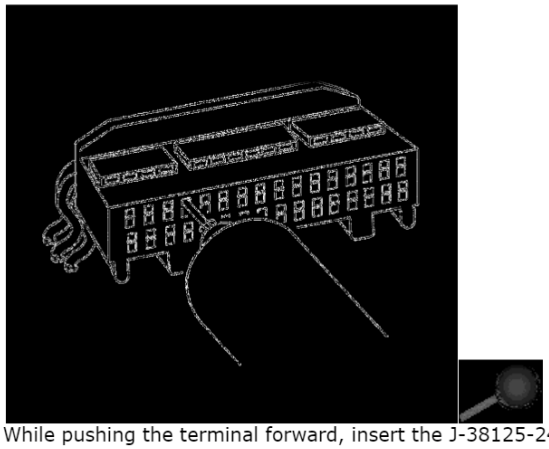
3. Repeat the process for the other side of the connector.

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4. Ensure that the TPA is in the proper position to remove the terminals.



5. While pushing the terminal forward, insert the J-38125-24 in the release cavity above the terminal you are removing, gently pull the wire out of the back of the connector. Always remember never use force when pulling a terminal out of a connector.
6. Repair the terminal by following the Repairing Connector Terminals procedure.
7. Insert the repaired terminal back into the cavity. Repeat the diagnostic procedure to verify the repair and reconnect the connector bodies.

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Tyco/AMP Connectors (43-Way)

Special Tools

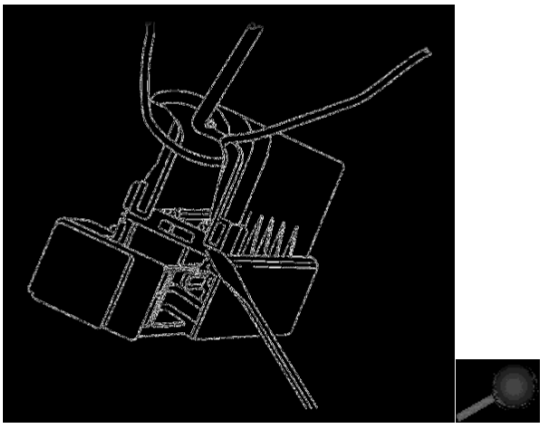
- *EL-38125-550* Terminal Release Tool Kit
- *EL-38125-580* Terminal Release Tool Kit
- *J-38125-12A* Terminal Release Tool
- *J-38125-13A* Terminal Release Tool

For equivalent regional tools, refer to Special Tools.

Terminal Removal Procedure

Follow the steps below in order to remove terminals from the connector.

1. Locate the lever lock on the wire dress cover. Slide the lever lock away from the connector body.
2. Disconnect the connector from the component.
3. Locate the dress cover locking tabs on the dress cover of the connector. Using a small flat-bladed tool release all of the locking tabs.
4. Once the locks are unlocked, lift the dress cover off.

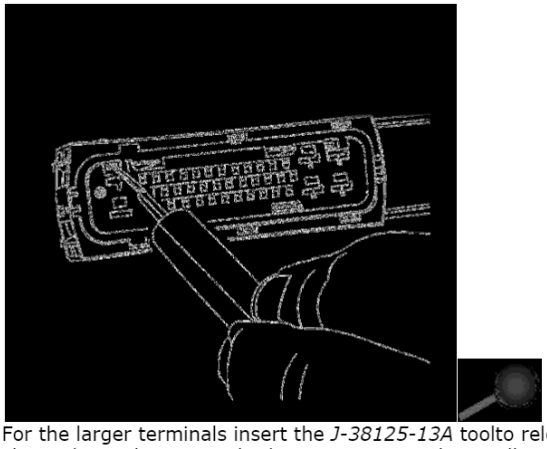


Note: Always use care when removing a terminal position assurance (TPA) in order to avoid damaging it.

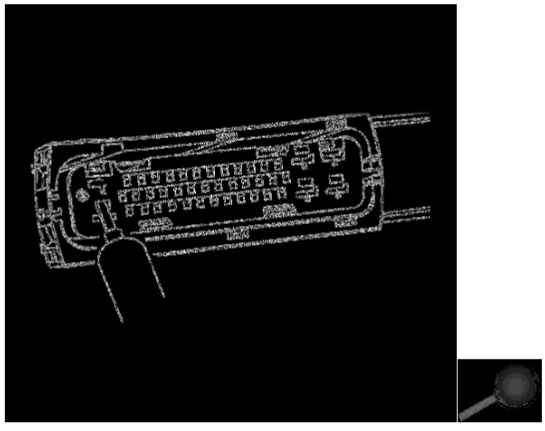
5. Release the TPA by inserting a small flat-bladed tool into the blue locking tabs on both ends of the connector. Gently slide the TPA up to the released position on both ends.

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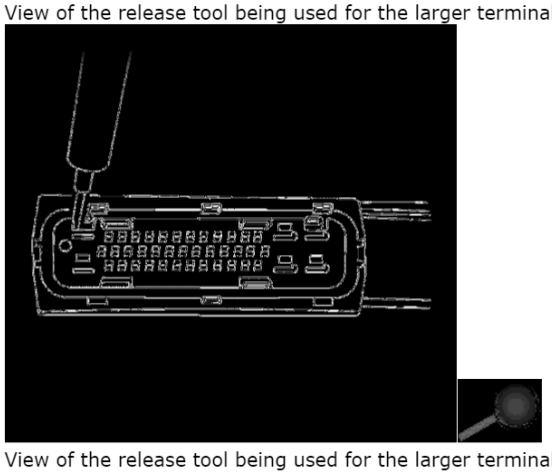
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6. For the larger terminals insert the *J-38125-13A* toolto release the terminals by inserting the tool into the terminal release cavity. For the smaller terminals insert the *J-38125-12A* toolto release the terminals by inserting the tool into the terminal release cavity.

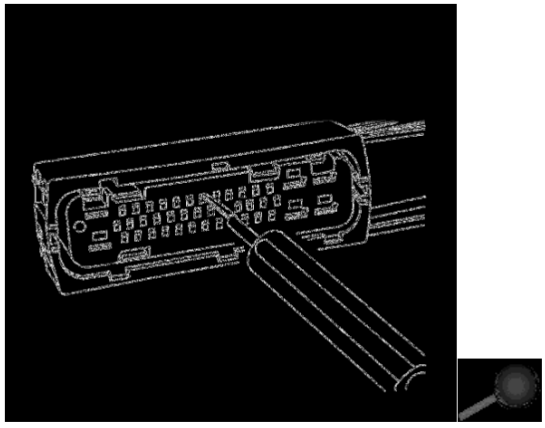


View of the release tool being used for the larger terminals.



View of the release tool being used for the larger terminals.

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View of the release tool being used for the smaller terminals.

7. While holding the removal tool in place, gently pull the wire out of the back of the connector. Always remember never use force when pulling a terminal out of a connector.
8. Repair the terminal by following the Repairing Connector Terminals procedure.
9. Insert the repaired terminal back into the cavity. Repeat the diagnostic procedure to verify the repair and reconnect the connector bodies.

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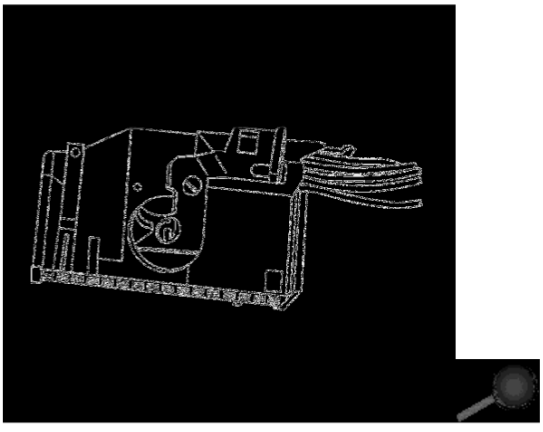
Tyco/AMP Connectors (Door Module)

Special Tools

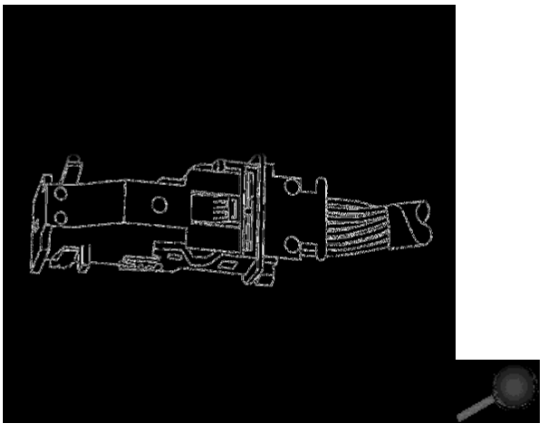
- *EL-38125-550* Terminal Release Tool Kit
- *EL-38125-580* Terminal Release Tool Kit
- *J-38125-12A* Terminal Release Tool

For equivalent regional tools, refer to Special Tools.

Terminal Removal Procedure



Side view of connector.

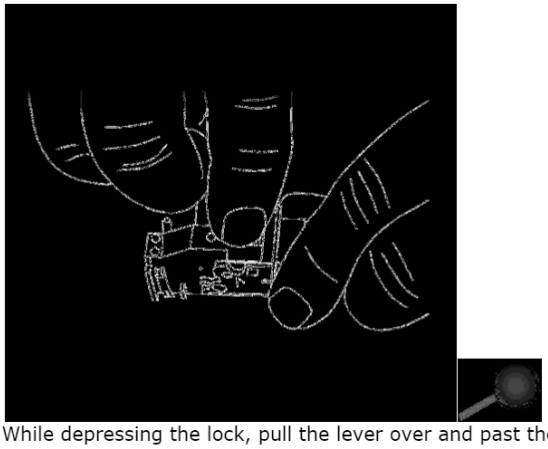


View of top of connector.

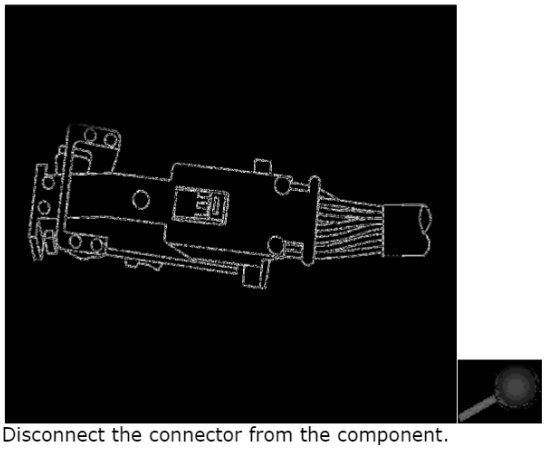
1. Locate the assist lever and lock on the top of the connector.

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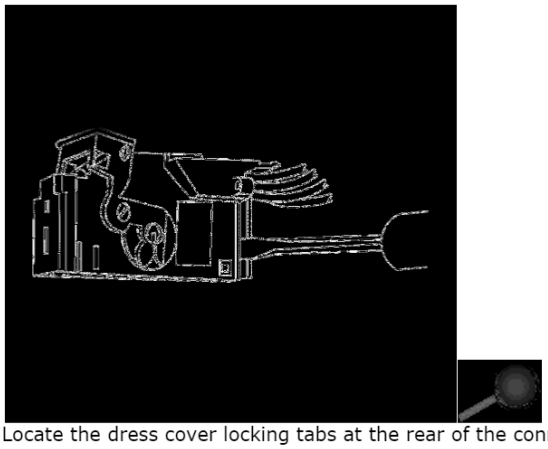
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2. While depressing the lock, pull the lever over and past the lock.

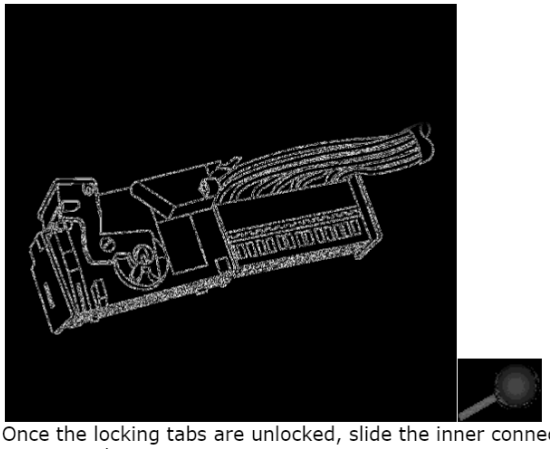


3. Disconnect the connector from the component.

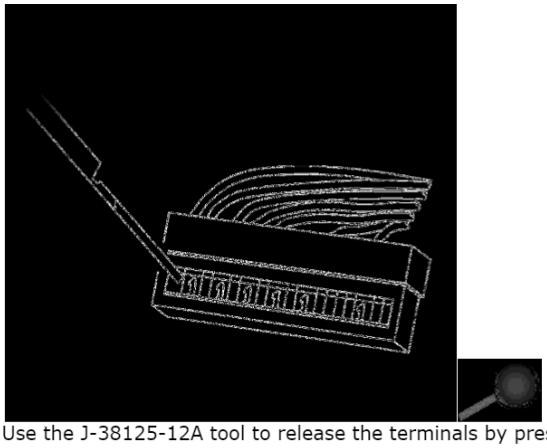


4. Locate the dress cover locking tabs at the rear of the connector. Use a small flat-blade tool to release the locking tabs. Repeat this procedure for the other locking tab.

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5. Once the locking tabs are unlocked, slide the inner connector out of the rear of the connector housing.



6. Use the J-38125-12A tool to release the terminals by pressing on the tang.
7. While holding the removal tool in place, gently pull the wire out of the back of the connector. Always remember never use force when pulling a terminal out of a connector.
8. Repair the terminal by following the Repairing Connector Terminals procedure.
9. Insert the repaired terminal back into the cavity. Repeat the diagnostic procedure to verify the repair and reconnect the connector bodies.

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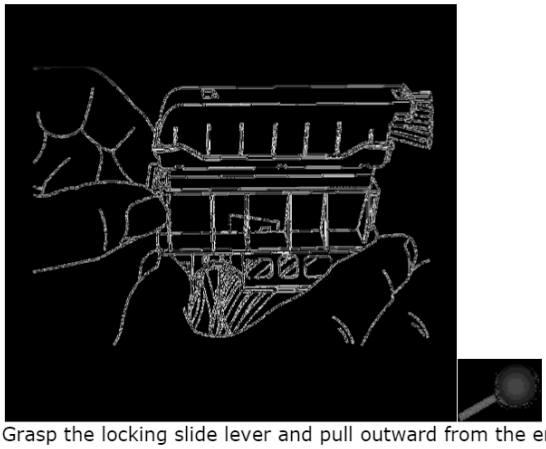
Tyco/AMP Connectors (Seat)

Special Tools

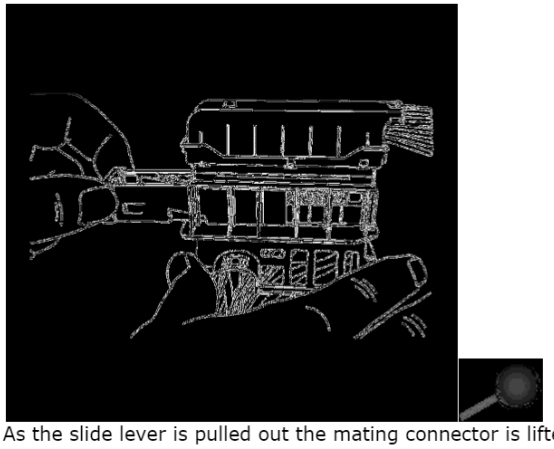
- *EL-38125-550* Terminal Release Tool Kit
- *EL-38125-580* Terminal Release Tool Kit
- *J-38125-11A* Terminal Release Tool
- *J-38125-212* Terminal Release Tool
- *J-38125-556* Terminal Release Tool
- *J-38125-560* Terminal Release Tool

For equivalent regional tools, refer to Special Tools.

Terminal Removal Procedure



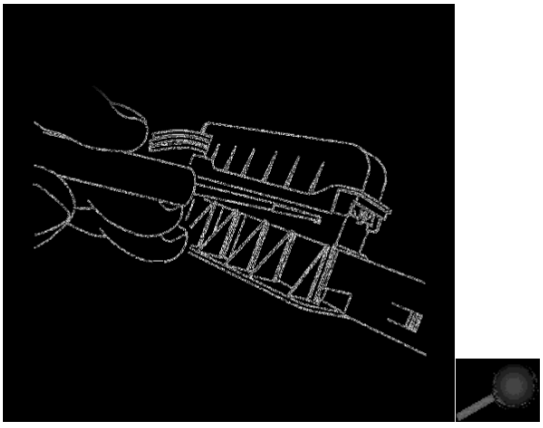
1. Grasp the locking slide lever and pull outward from the end of the connector.



2. As the slide lever is pulled out the mating connector is lifted from the seated position.

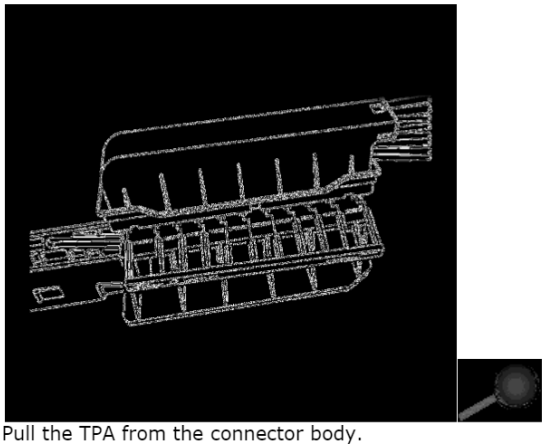
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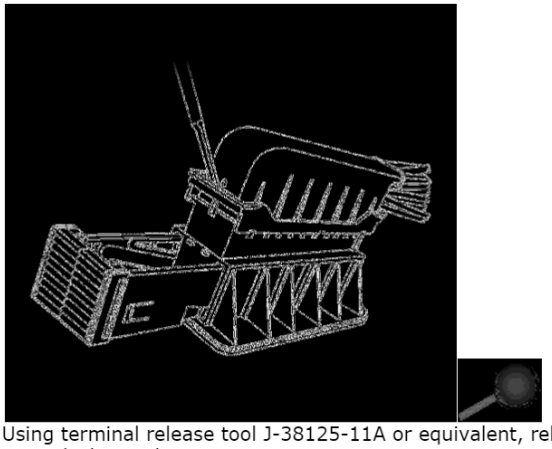


Note: Terminal position assurance (TPA) is keyed and can only be inserted in one direction.

3. Using terminal release tool J-38125-11A or equivalent, push the TPA tabs into the connector body.

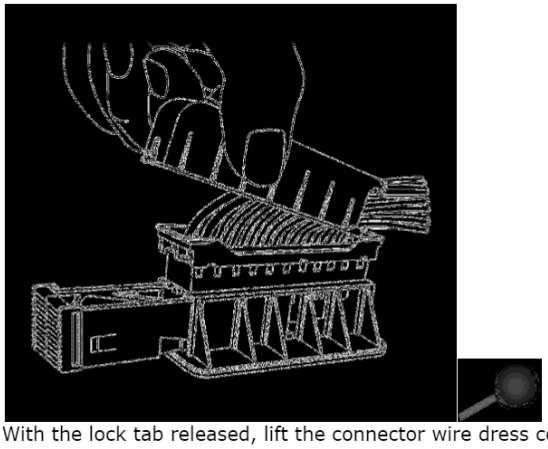


4. Pull the TPA from the connector body.

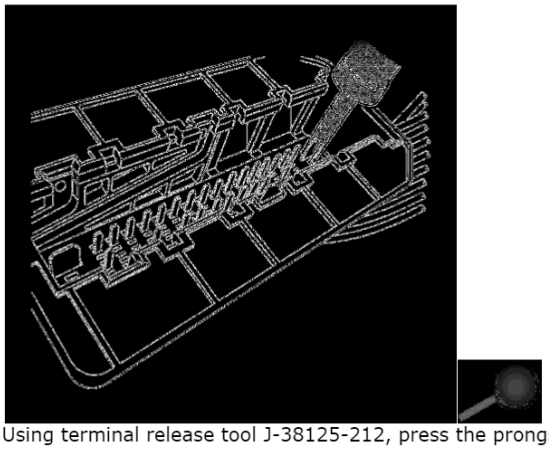


5. Using terminal release tool J-38125-11A or equivalent, release the connector wire dress cover locking tab.

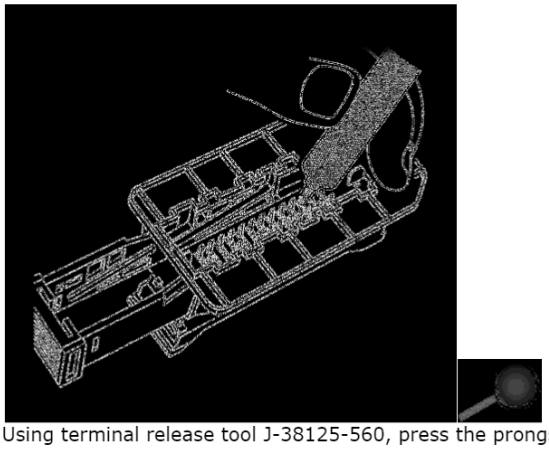
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6. With the lock tab released, lift the connector wire dress cover from the connector body.

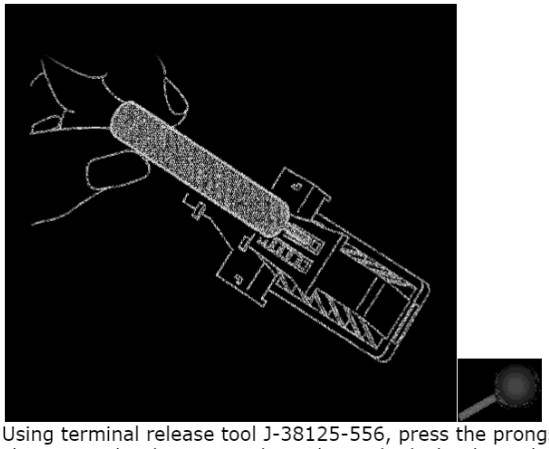


7. Using terminal release tool J-38125-212, press the prongs into the holes each side of the terminal to be removed to release the lock tabs and pull the terminal out of the connector body.



8. Using terminal release tool J-38125-560, press the prongs into the holes on each side of the terminal to be removed to release the lock tabs and pull the terminal out of the connector body.

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9. Using terminal release tool J-38125-556, press the prongs into the holes on each side of the terminal to be removed to release the lock tabs and pull the terminal out of the connector body.
10. Repair the terminal by following the Repairing Connector Terminals procedure.
11. Insert the repaired terminal back into the cavity. Repeat the diagnostic procedure to verify the repair and reconnect the connector bodies.

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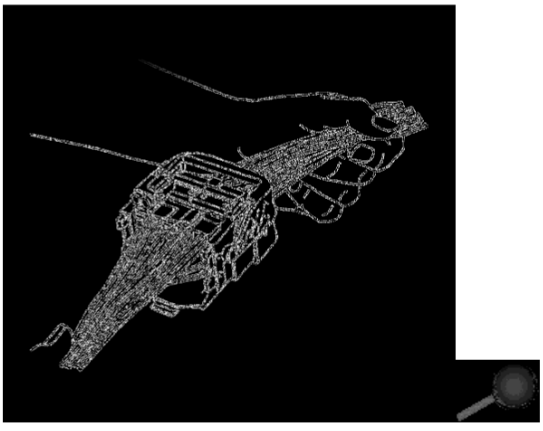
Tyco/AMP Connectors (102-Way Inline)

Special Tools

- *EL-38125-550* Terminal Release Tool Kit
- *EL-38125-580* Terminal Release Tool Kit
- *J-38125-11A* Terminal Release Tool
- *J-38125-212* Terminal Release Tool
- *J-38125-216* Terminal Release Tool
- *J-38125-221* Terminal Release Tool
- *J-38125-560* Terminal Release Tool
- *J-38125-566* Terminal Release Tool

For equivalent regional tools, refer to Special Tools.

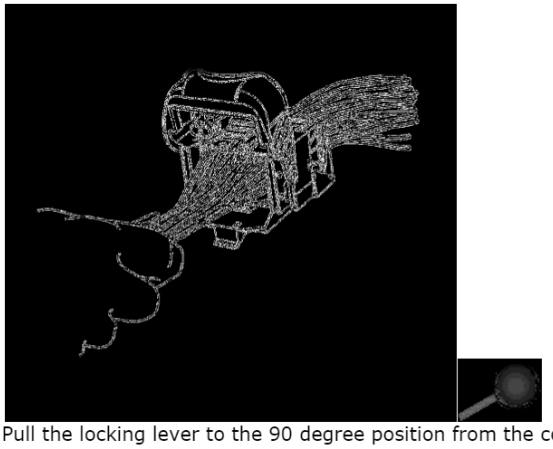
Terminal Removal Procedure



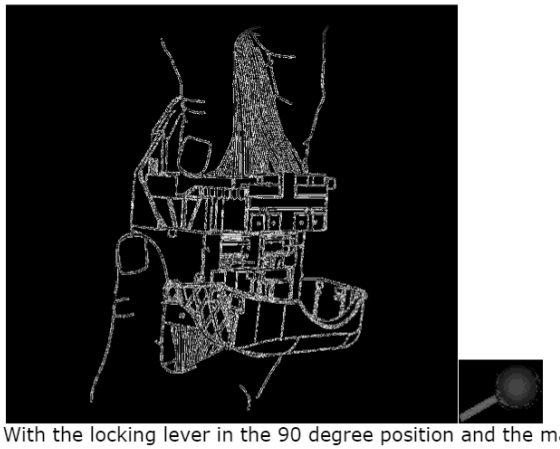
View of a typical connector in the assembled position.

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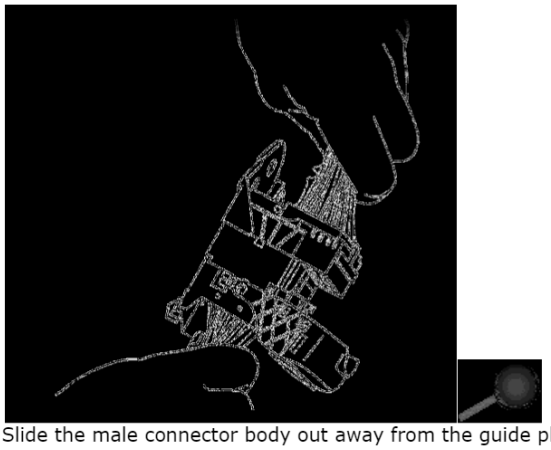
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1. Pull the locking lever to the 90 degree position from the connector body.

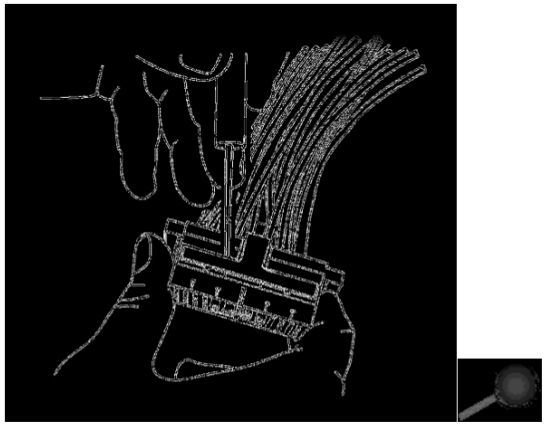


2. With the locking lever in the 90 degree position and the male connector body separated, it can be slid outward for removal.



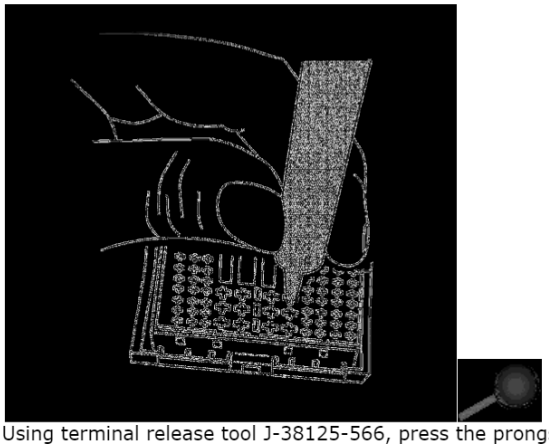
3. Slide the male connector body out away from the guide plates.

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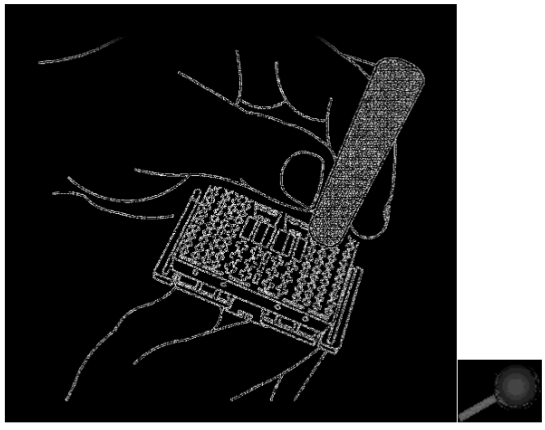


Note: During assembly the terminal position assurance (TPA) will not fully seat if any terminal is not fully seated.

4. Using terminal release tool J-38125-11A or equivalent, remove the TPA from the connector body.

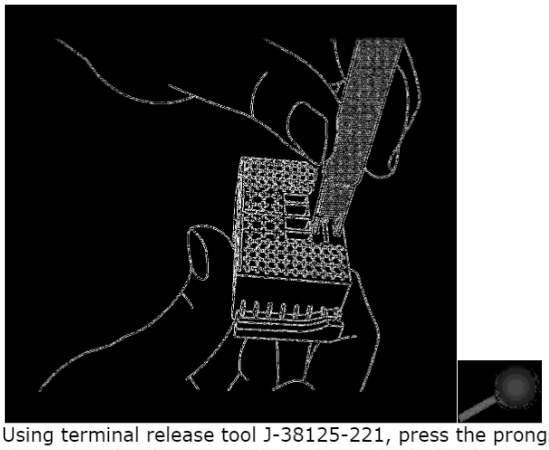


5. Using terminal release tool J-38125-566, press the prongs into the holes on each side of the terminal to be removed to release the lock tabs and pull the terminal out of the connector body.

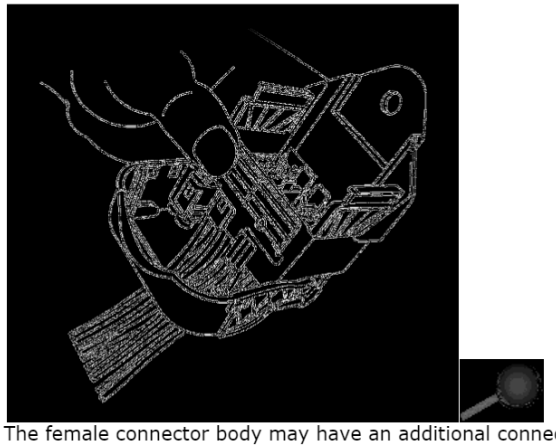


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6. Using terminal release tool J-38125-560, press the prongs into the holes on each side of the terminal to be removed to release the lock tabs and pull the terminal out of the connector body.

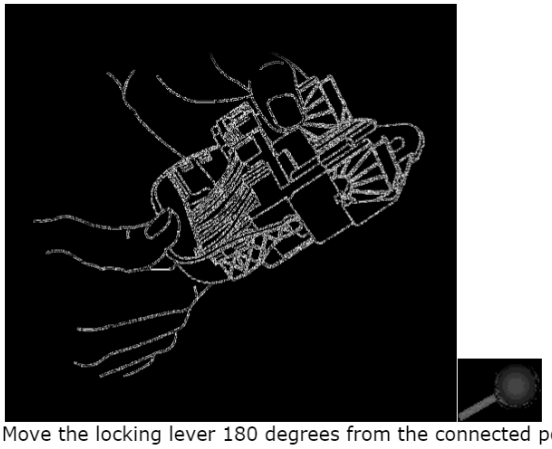


7. Using terminal release tool J-38125-221, press the prongs into the holes on each side of the terminal to be removed to release the lock tabs and pull the terminal out of the connector body.

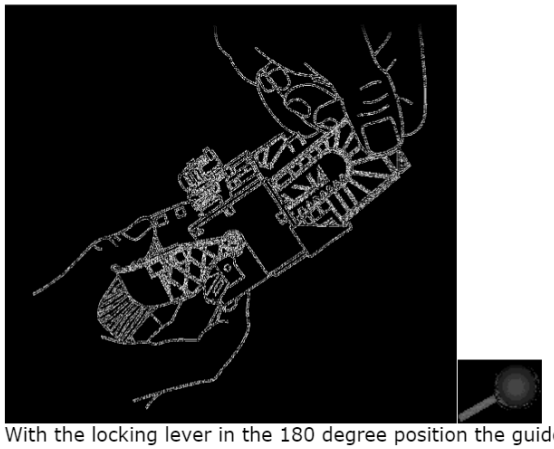


8. The female connector body may have an additional connector hooked to the edge of the body. Use terminal release tool J-38125-11A or equivalent to release the locking tab and slide the connector off the female body.

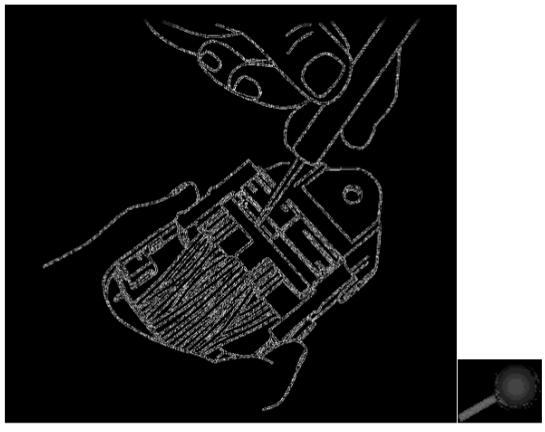
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9. Move the locking lever 180 degrees from the connected position.



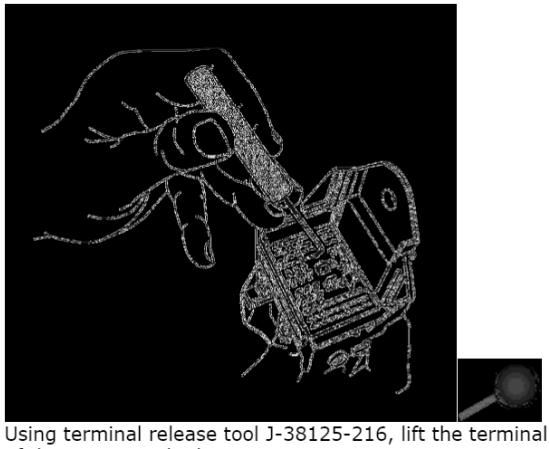
10. With the locking lever in the 180 degree position the guide plates can be removed from the connector body.



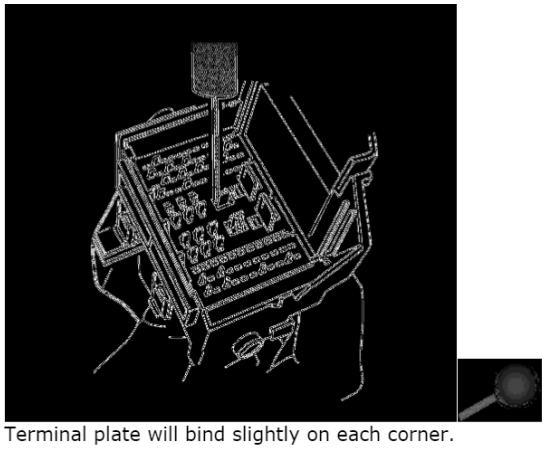
Note: During assembly the TPA will not fully seat if any terminal is not fully seated.

11. Using terminal release tool J-38125-11A or equivalent, remove the TPA from the connector body.

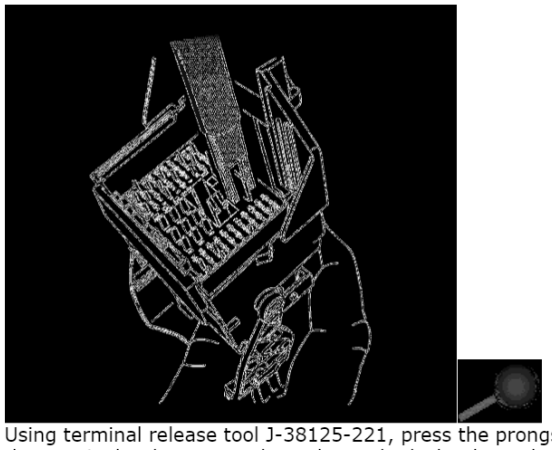
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12. Using terminal release tool J-38125-216, lift the terminal plate past the terminals and out of the connector body cavity.

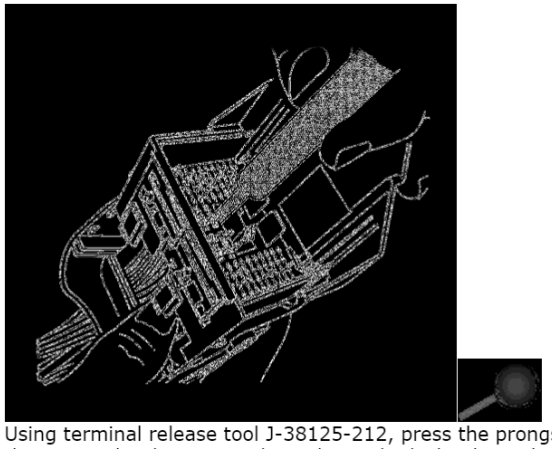


13. Terminal plate will bind slightly on each corner.

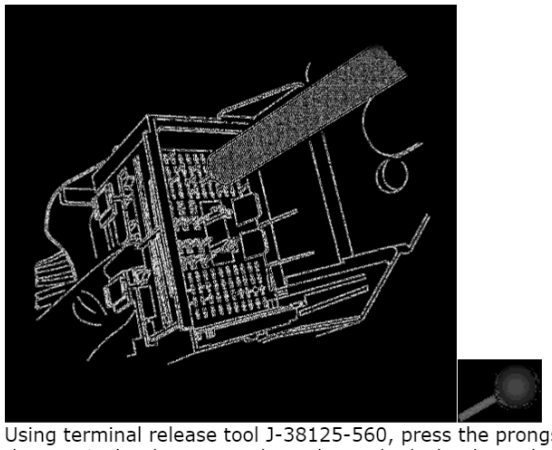


14. Using terminal release tool J-38125-221, press the prongs into the holes on each side of the terminal to be removed to release the lock tabs and pull the terminal out of the connector body.

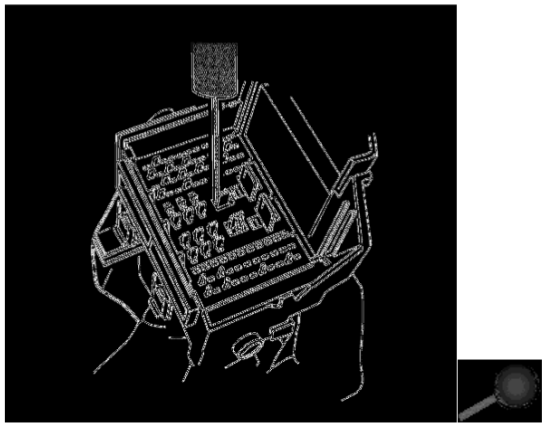
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15. Using terminal release tool J-38125-212, press the prongs into the holes on each side of the terminal to be removed to release the lock tabs and pull the terminal out of the connector body.

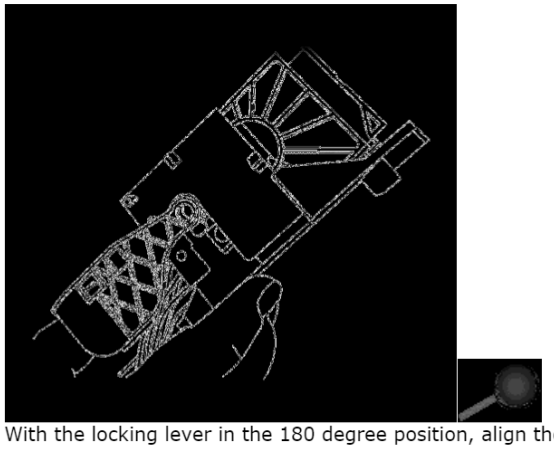


16. Using terminal release tool J-38125-560, press the prongs into the holes on each side of the terminal to be removed to release the lock tabs and pull the terminal out of the connector body.

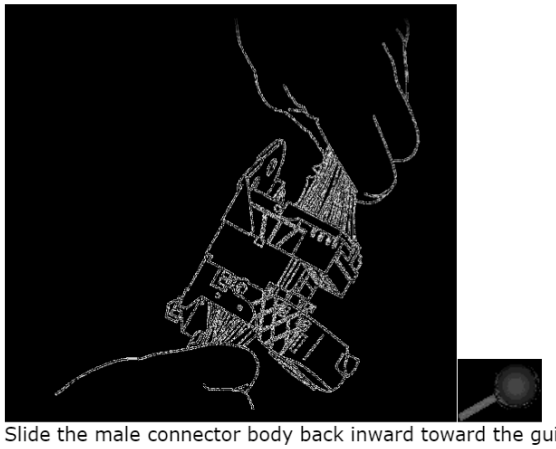


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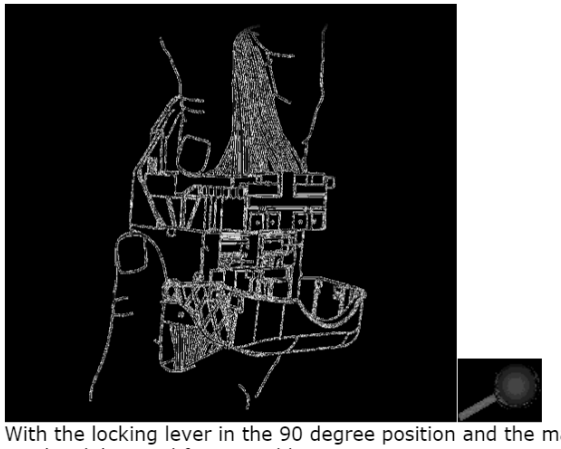
17. Press the terminal plate back into the female connector to the preset position. The plate will bind slightly on each corner.



18. With the locking lever in the 180 degree position, align the guide plates to mesh with the gears on the locking lever.

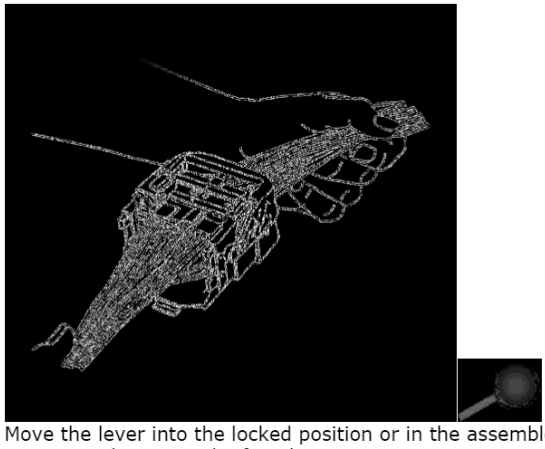


19. Slide the male connector body back inward toward the guide plates.



20. With the locking lever in the 90 degree position and the male connector body connected, it can be slid inward for assembly.

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21. Move the lever into the locked position or in the assembled position. This will pull the male connector down into the female connector.
22. Repair the terminal by following the Repairing Connector Terminals procedure.
23. Insert the repaired terminal back into the cavity. Repeat the diagnostic procedure to verify the repair and reconnect the connector bodies.

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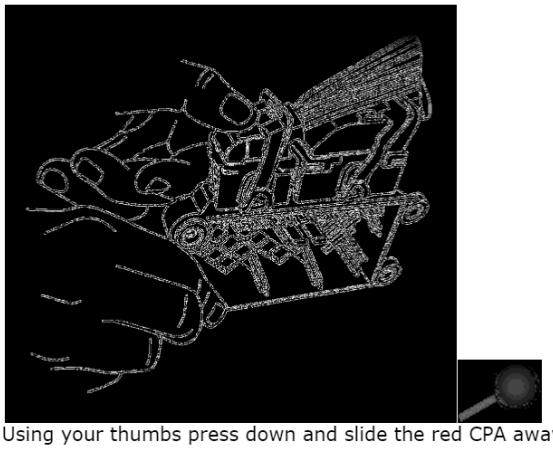
Tyco/AMP Connectors (SIR)

Special Tools

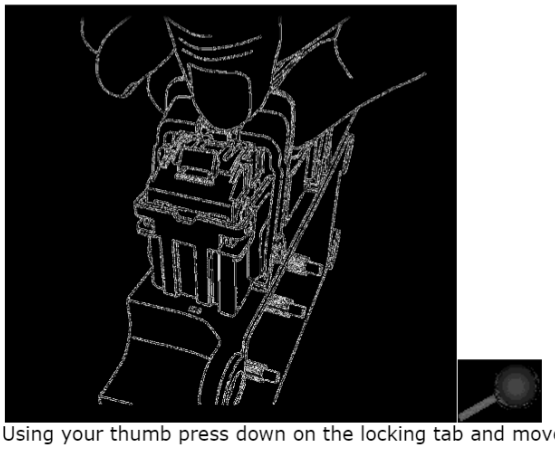
- *EL-38125–550* Terminal Release Tool Kit
- *EL-38125–580* Terminal Release Tool Kit
- *J-38125–11A* Terminal Release Tool
- *J-38125-215A* Terminal Release Tool

For equivalent regional tools, refer to Special Tools.

Removal Procedure



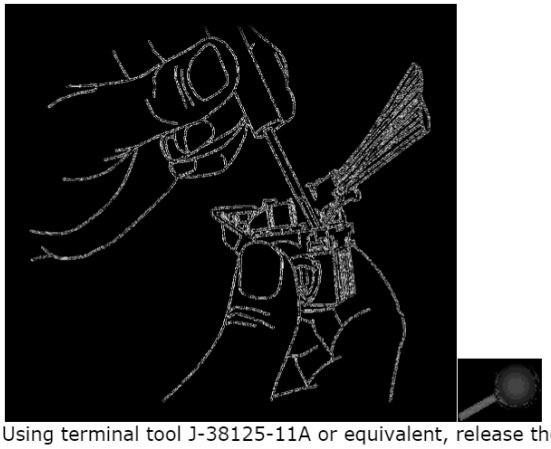
1. Using your thumbs press down and slide the red CPA away from the connector lever.



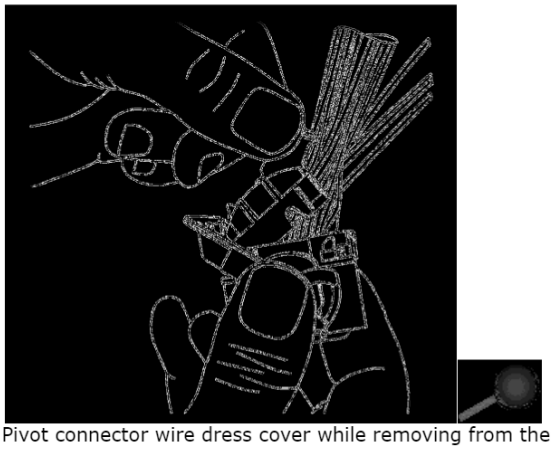
2. Using your thumb press down on the locking tab and move the lever to the released position.

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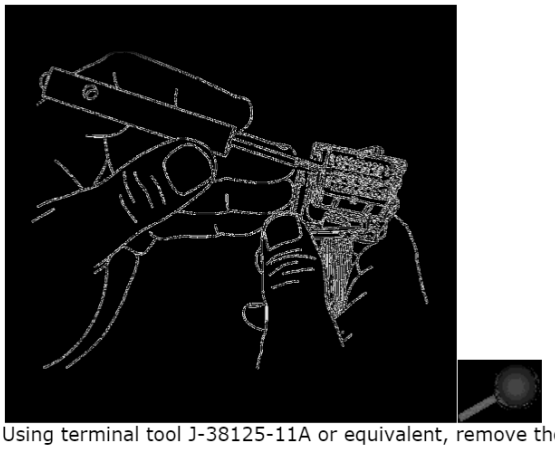
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3. Using terminal tool J-38125-11A or equivalent, release the wire dress cover locking tabs.



4. Pivot connector wire dress cover while removing from the connector body.



5. Using terminal tool J-38125-11A or equivalent, remove the TPA by lifting straight off the connector body.

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6. Using terminal release tool J-38125-215A, place the tip of the tool on the outside edge next to the terminal and depress the lock tab and remove the rear of the connector body.

Terminal Repair Procedure

Use the appropriate terminal and crimper in order to replace the terminal.

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Yazaki Connectors (2-Way)

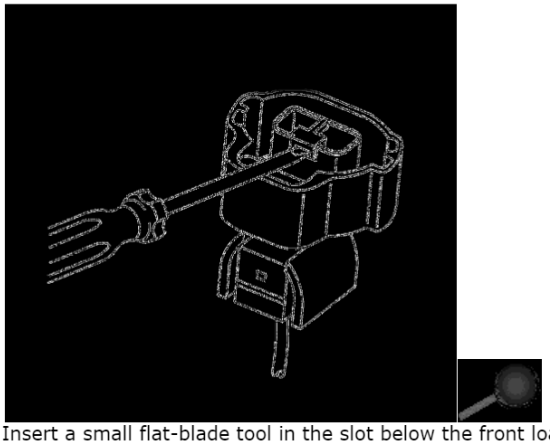
Special Tools

- *EL-38125-550* Terminal Release Tool Kit
- *EL-38125-580* Terminal Release Tool Kit
- *J-38125-553* Terminal Release Tool

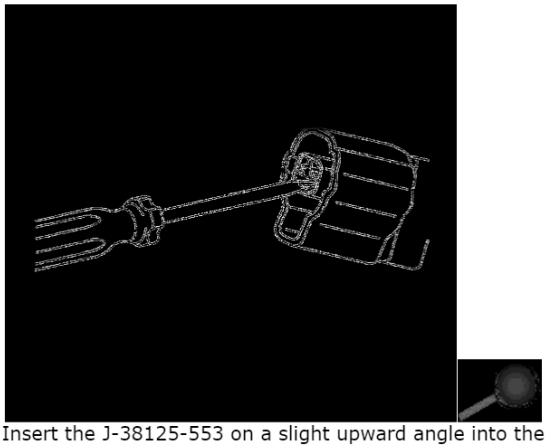
For equivalent regional tools, refer to Special Tools.

Terminal Removal Procedure

1. Disconnect the connector from the component.



2. Insert a small flat-blade tool in the slot below the front loaded terminal position assurance (TPA) and pry up.
3. Remove the TPA by pulling it out of the connector.
4. Push the wire side of the terminal that is being removed toward the connector and hold it in position.

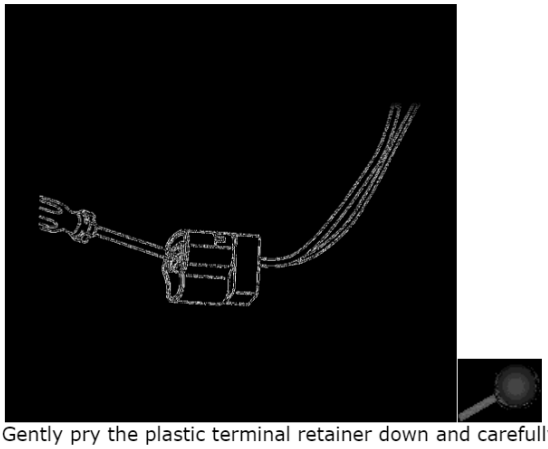


5. Insert the J-38125-553 on a slight upward angle into the cavity below the terminal to be removed. Ensure that the pointed on the end of the tool is facing the bottom of the

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terminal and it stays in contact with the terminal until it stops on the plastic terminal retainer.



6. Gently pry the plastic terminal retainer down and carefully pull the terminal out of the connector. Always remember never use force when pulling a terminal out of a connector. If the terminal is difficult to remove, repeat the entire procedure.
7. Repair the terminal by following the Repairing Connector Terminals procedure.
8. Insert the repaired terminal back into the cavity. Repeat the diagnostic procedure to verify the repair and reconnect the connector bodies.

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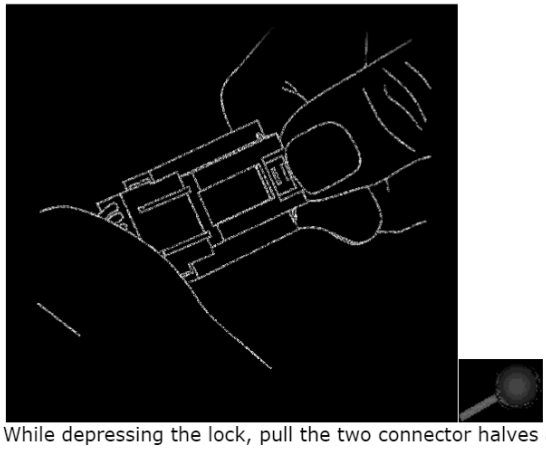
Yazaki Connectors (16-Way)

Special Tools

- *EL-38125-550* Terminal Release Tool Kit
- *EL-38125-580* Terminal Release Tool Kit
- *J-38125-215* Terminal Release Tool

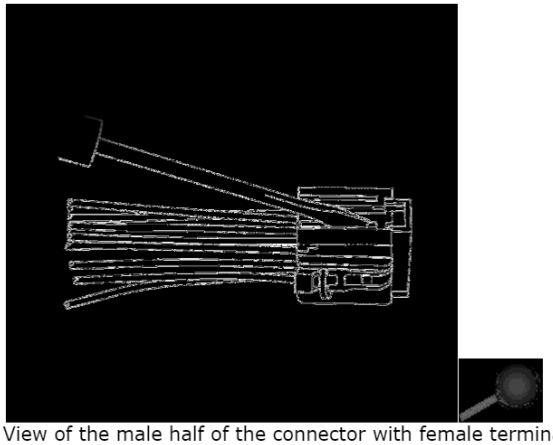
For equivalent regional tools, refer to Special Tools.

Terminal Removal Procedure



1. While depressing the lock, pull the two connector halves apart.

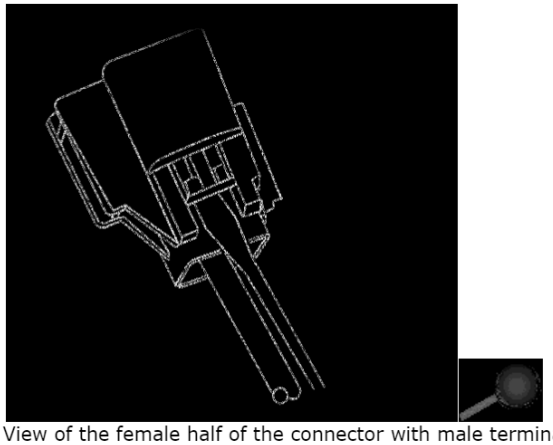
   Note: The terminal position assurance (TPA) is fragile and may break if not done carefully.
2. Use a small flat-blade tool to very carefully push the TPA towards the face of the connector on both sides of the connector.



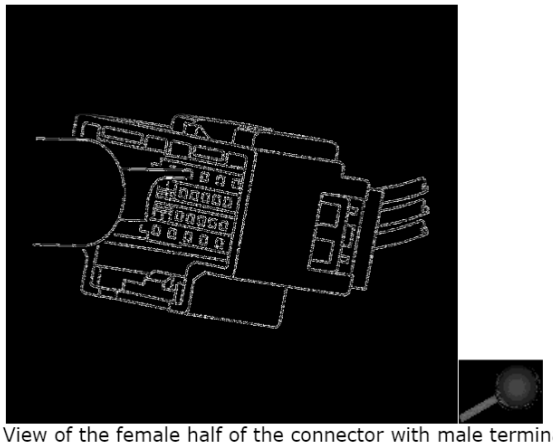
3. View of the male half of the connector with female terminals.

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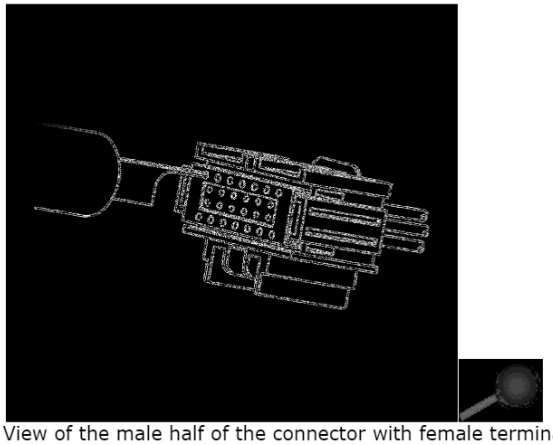
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4. View of the female half of the connector with male terminals.
5. Use the J-38125-215 tool to release the terminals by inserting the tool into the terminal release cavity.



6. View of the female half of the connector with male terminals.



7. View of the male half of the connector with female terminals.

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8. While holding the removal tool in place, gently pull the wire out of the back of the connector. Always remember never use force when pulling a terminal out of a connector.
9. Repair the terminal by following the Repairing Connector Terminals procedure.
10. Insert the repaired terminal back into the cavity. Repeat the diagnostic procedure to verify the repair and reconnect the connector bodies.

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Repairing Connector Terminals (Terminated Lead Repair)

Special Tools

EL-38125-10 Splice Sleeve Crimp Tool

For equivalent regional tools, refer to Special Tools.

Note: All repairs near the engine manifold, turbo engine and all exhaust pipes should follow the High Temperature Wiring Repairs procedures.

For high temperature wiring repairs, refer to High Temperature Wiring Repairs.

Terminated leads are terminals that are crimped onto wires. The terminated lead can be used throughout the vehicle since it is designed for temperatures up to 150°C. The length of the wire is 450 mm.

1. Use the connector end view to identify the correct terminated lead.
2. The terminated lead package should include a DuraSeal splice sleeve. If not, use the chart to in Splicing Copper Wire Using Splice Sleeves to identify the correct DuraSeal splice sleeve, refer to Splicing Copper Wire Using Splice Sleeves.

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Repairing Connector Terminals (Terminal Repair)

Special Tools

- *J-38125–580* Terminal Repair Kit
- *J-38125-6* Crimp Tool
- *J-38125-7* Crimp Tool
- *J-38125-8* Crimp Tool
- *J-38125-64* Crimp Tool
- *J-38125-101* Crimp Tool
- *J-38125-641* Crimp Tool
- *J-38125-642* Crimp Tool
- *J-38125-643* Crimp Tool

For equivalent regional tools, refer to Special Tools.

Use the following repair procedures to repair each type of terminal:

- For push to seat terminals, refer to Delphi Connectors.
- For pull to seat terminals, refer to Delphi Connectors.

Note: The first step for all terminal repairs is to find the connector end view in SI.

Cable Seal Terminals

1. Cut off the terminal between the core and the insulation crimp to minimize any wire loss.
2. Remove the old seal.
3. Apply the correct cable seal, per the wire gauge size, from the kit. Slide the seal back along the wire to enable removal of the insulation.
4. To minimize wire loss, remove only the insulation required.
5. Using the connector end view, determine the correct crimp tool and crimp jaw.
6. Align the seal with the end of the cable insulation.
7. Position the stripped wire and seal in the terminal.
8. Hand Crimp the core wings first.
9. Hand Crimp the insulation wings around the seal and the cable.
10. Solder all of the hand crimp terminals except the Micro-Pack 100 and 0.64 sizes.

Unsealed Terminals

1. Cut off the terminal between the core and the insulation crimp to minimize any wire loss.
2. To minimize wire loss, remove only the insulation required.
3. Position the stripped wire in the terminal.
4. Hand Crimp the core wings first.
5. Hand Crimp the insulation wings around the cable.
6. Solder all of the hand crimp terminals except the Micro-Pack 100 and 0.64 sizes.

Micro-Pack 100W Size Terminal

The Micro-Pack 100W connectors have small terminals that are difficult to handle and hold when crimping. In order to aid the technician when crimping these terminals, a new crimping tool was developed. The J 38125-101 (W jaw) crimping tool was developed to crimp Micro-

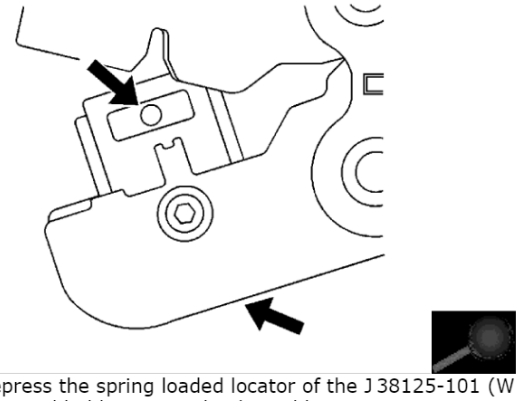
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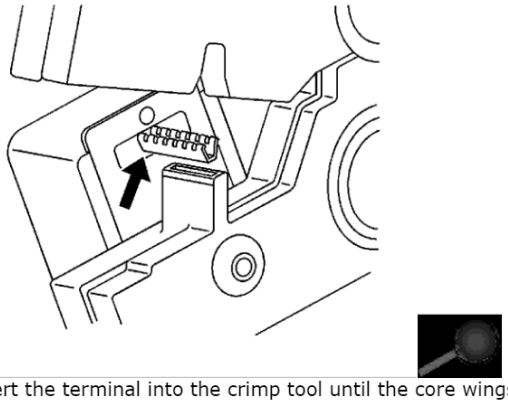
Pack 100W terminals. The J 38125-101 (W jaw) crimping tool has a terminal holding block that will hold the terminal in place while the terminal is being crimped. After the terminal is removed from the connector perform the following procedure in order to repair Micro-Pack 100 terminals.

1. Cut the wire as close to the terminal as possible.

   Note: After cutting the damaged terminal from the wire, determine if the remaining wire is long enough to reach the connector without putting a strain on the wire. If the wire is not long enough, splice a small length of the same gauge wire to the existing wire, then crimp the new terminal on the added wire.
2. Strip 5 mm (3/16 in) of insulation from the wire.



3. Depress the spring loaded locator of the J 38125-101 (W jaw) crimping tool until the terminal holder is completely visible.



4. Insert the terminal into the crimp tool until the core wings are flush with the anvil on the crimp tool. Be sure that the wings are pointed toward the crimp tool former and release the spring locator. The locator will hold the terminal in place. Inspect the alignment of the terminal wings with the crimp tool former. If the terminal wings are wider than the crimp tool former, remove the terminal and bend the terminal wings in slightly.
5. Place stripped wire into terminal.
6. Crimp the new terminal to the wire. If a jam occurs, press the emergency release to open applicator.

Micro 0.64 Size Terminal

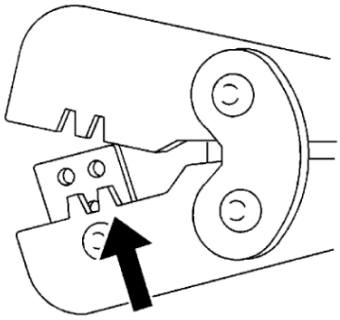
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The Micro 64 connectors have small terminals that are difficult to handle and hold when crimping. In order to aid the technician when crimping these terminals, a new crimping tool was developed. The J 38125-64 (M jaw) was developed to crimp Micro 64 terminals. The J-38125-64 crimping tool has a terminal holding block that will hold the terminal in place while the terminal is being crimped. The J-38125-64 crimping tool is also designed to crimp both the wire and the insulation at the same time.

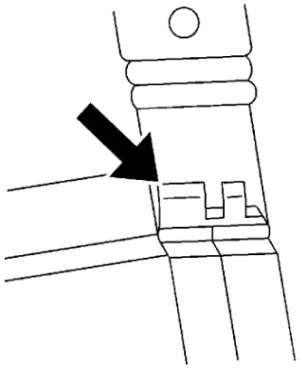
After the terminal is removed from the connector perform the following procedure in order to repair Micro 64 terminals.

Note: After cutting the damaged terminal from the wire, determine if the remaining wire is long enough to reach the connector without putting a strain on the wire. If the wire is not long enough, splice a small length of the same gauge wire to the existing wire, then crimp the new terminal on the added wire.

1. Cut the wire as close to the damaged terminal as possible.
2. Strip 5 mm (3/16 in) of insulation from the wire.



3. Depress the spring loaded locator of the crimping tool until the terminal holder is completely visible.



4. Insert terminal into the appropriate terminal holder until it hits bottom and stops. The correct terminal holder is determined by the wire size. Also ensure that the terminals wings are pointing towards the former on the tool and the release locator.
5. Insert the stripped cable into the terminal. Insulation should be visible on both sides of the terminal insulation wings.
6. Compress the handles until the ratchet automatically releases.

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7. Place the terminal into the appropriate cavity and assemble the connector.

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Terminal Removal

Special Tools

- *EL-38125-550* Terminal Release Tool Kit
- *EL-38125-580* Terminal Release Tool Kit
- *EL-35616* Terminal Test Probe Kit

For equivalent regional tools, refer to Special Tools.

Note: All repairs near the engine manifold, turbo engine and all exhaust pipes should follow the High Temperature Wiring Repair procedures.

1. Find the appropriate connector end view within the connector end view section. The connector end view has the following information:
   - Diagnostic probe tool
   - Terminal release tool
   - Terminal/terminated lead part numbers

   Note: Not using the proper test kit probe may cause damage to the terminal(s) that are probed.
2. Determine if a terminal is damaged.
   - Locate the diagnostic probe tool from the connector end view. The connector end view describes the color and part number to help the technician find and use the correct tool.
   - Connect the probe tool to the Digital Multimeter.
   - Insert the probe tool into the cavity and follow the procedures from the Troubleshooting with a Digital Multimeter.
3. Disconnect the connector body to perform the repair.
4. Use the following procedure to remove the terminal from the connector body.

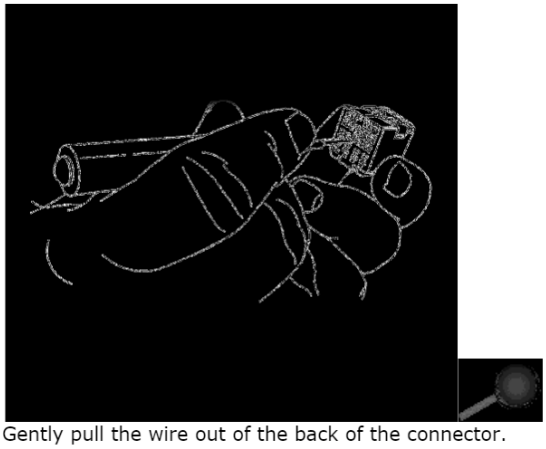
   Note: Several procedures for specific connector bodies are called out in the Wiring Repairs section.
   - The terminal position assurance (TPA) and connector position assurance (CPA) should be removed before releasing the terminal for the connector body.
   - Look at the connector end view to locate the cavity of the damaged terminal and find the proper terminal release tool from the terminal release tool kit.

     Note: Using the incorrect terminal release tool can damage the connector body.

     Note: Some terminals have a lever that must be disengaged before the terminal can be released.
   - Insert the terminal release tool into the cavity.

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5. Gently pull the wire out of the back of the connector.
6. Repair the terminal by following the Repairing Connector Terminals procedure.
7. Insert the repaired terminal back into the cavity. Repeat the diagnostic procedure to verify the repair and reconnect the connector bodies.

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Ignition Key Cannot Be Inserted, Rotated, or Removed from the Ignition Lock Cylinder

Ignition Key Cannot Be Inserted, Rotated, or Removed from the Ignition Lock Cylinder

Step	Action	Yes	No
1	Did you review the Steering Wheel and Column Description and Operation and perform the necessary inspections?	Go to Step 2	Go to Steering Wheel and Column Description and Operation
2	Verify that the key cannot be removed from the ignition lock cylinder. Can the key be removed from the ignition lock cylinder?	System OK	Go to Step 3
3	Is the vehicle equipped with a manual transmission?	Go to Step 6	Go to Step 4
4	Turn the ignition key to the OFF position. Can the key be turned to the OFF position and be removed?	Go to Step 6	Go to Step 5
5	Check the automatic transmission cable and adjust if required. Refer to Range Selector Lever Link Adjustment. Can the key be turned to the OFF position and be removed?	System OK	Go to Step 6
6	Inspect for a faulty ignition lock cylinder. Is the ignition lock cylinder damaged?	Go to Step 8	Go to Step 7
7	Inspect the ignition lock cylinder housing for wear, damage or looseness. Is the housing worn, damaged or loose?	Go to Step 9	Verify customer concern, go to Strategy Based Diagnosis
8	Replace the ignition lock cylinder. Refer to Ignition Lock Cylinder Replacement. Did you complete the repair?	Go to Step 10	—
9	Replace the ignition and start switch housing. Refer to Ignition and Start Switch Housing Replacement. Did you complete the repair?	Go to Step 10	—
10	Operate the system to verify the repair. Did you correct the condition?	System OK	Go to Step 2

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GMLAN and Media Oriented Systems Transport (MOST) Wiring Repairs

Special Tools

- *EL-38125-10* Splice Sleeve Crimping Tool
- DuraSeal splice sleeves
- A wire stripping tool

For equivalent regional tools, refer to Special Tools.

The DuraSeal splice sleeves have the following 2 critical features:

- A special heat shrink sleeve environmentally seals the splice. The heat shrink sleeve contains a sealing adhesive inside.
- A cross hatched (knurled) core crimp provides necessary contact integrity for the sensitive, low energy circuits.

The GM Local Area Network (GMLAN) System requires special wiring repair procedures due to the sensitive nature of the circuitry. Follow the specific procedures and instructions when working on GMLAN connectors and terminals.

GMLAN Repairs

Note: When making a repair to any GMLAN network, the original wire length after the repair must be the same length as before the repair. If the network is a twisted pair, the twist must be maintained after the repair is completed.

GMLAN has 2 types of networks, low speed and high speed. Low speed GMLAN has a single wire and works at slow speeds. High speed GMLAN has 2 wires in a twisted pair and works at higher speeds. For more information on GMLAN, refer to Data Link Communications Description and Operation.

GMLAN Connector Terminal Repair

Note: A terminated lead can be used to replace damaged connector terminals for both high speed and low speed GMLAN systems. When making a connector terminal repair on a GMLAN high speed system with twisted pair wires, do not untwist the wires more than necessary to make the repair.

If the individual terminals are damaged on any GMLAN connection, use the appropriate connector repair procedure in order to repair the terminal. Refer to Connector Repairs for the appropriate connector repair procedure.

GMLAN Wire Repair

Note: Refer to Wiring Repairs in the service information connector end views or the vehicle schematics in order to determine the correct wire size for the circuit you are repairing. You must obtain this information in order to ensure circuit integrity.

If any wire except the pigtail is damaged, repair the wire by splicing in a new section of wire of the same gauge size (0.5 mm^2, 0.8 mm^2, 1.0 mm^2 etc.). Use the DuraSeal splice sleeves and *EL-38125-10* tool. For wiring repair, refer to Splicing Copper Wire Using Splice Sleeves.

Media Oriented Systems Transport (MOST) Wiring Repair

Note: If harness repair/analysis is performed, MOST bus Twist Pair unshielded wire should be 0.22 mm gauge wire with at least one twist per each 1 45/64 inch (45 mm) and must not be untwisted for more than 3 15/16 of an inch (10 cm).

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The following conditions need to be met to ensure a valid continuity:

- Untwisted length for all MOST 50 circuits at each wire harness connector should be no longer 50 mm max (25 mm preferred).
- When wire repairs are made, a minimum 25 twists/meter for all MOST 50 circuits.
- MOST 50 has specific receive and transmit I/O.

The transmit of one module is connected to receive of the next module in ring topology.

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Body Front Wiring Harness Fuse Block Replacement



Body Front Wiring Harness Fuse Block Replacement

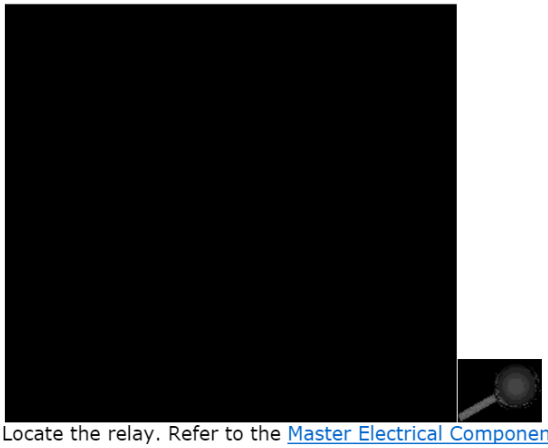
Callout	Component Name
Preliminary Procedures 1. Disconnect the battery negative cable. Refer to Battery Negative Cable Replacement.	
1	Body Front Wiring Harness Fuse Block Cover **Procedure** Carefully release the three retainer tabs.
2	Body Front Wiring Harness Fuse Block Junction Block Stud **Caution:** Refer to Fastener Caution. **Tighten** 15 N•m (11 lb ft)
3	Body Front Wiring Harness Fuse Block Positive Battery Cable Nut (Qty: 2) **Tighten** 9 N•m (80 lb in)
4	Body Front Wiring Harness Fuse Block

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Relay Replacement (Attached to Wire Harness)

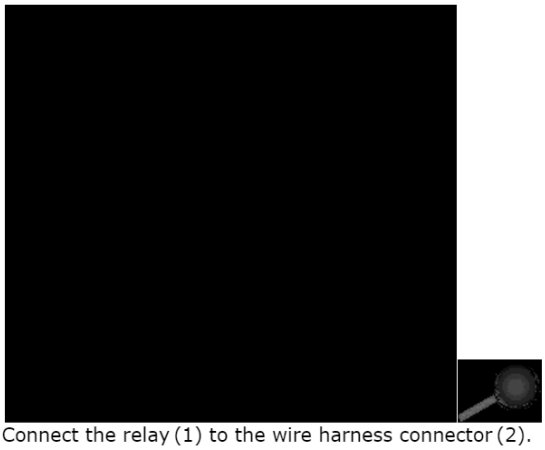
Removal Procedure



1. Locate the relay. Refer to the Master Electrical Component List to locate the relay in the vehicle.
2. Remove any fasteners which hold the relay in place.
3. Remove any connector position assurance (CPA) devices or secondary locks.

   Note: Use care when removing a relay in a wiring harness when the relay is secured by fasteners or tape.
4. Separate the relay (1) from the wire harness connector (2).

Installation Procedure



1. Connect the relay (1) to the wire harness connector (2).
2. Install any connector position assurance (CPA) devices or secondary locks.
3. Install the relay using any fasteners or tape that originally held the relay in place.

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Relay Replacement (Within an Electrical Center)

Special Tools

EL-43244 Relay Puller Pliers

Removal Procedure

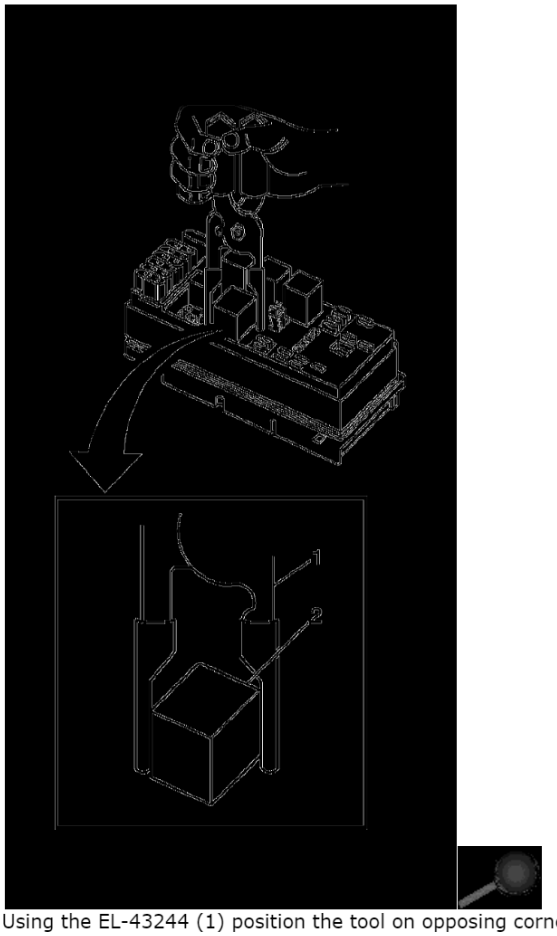
1. Remove the electrical center cover.

   Note:
   - Always note the orientation of the relay.
   - If equipped with a notch style relay; observe the location of the notch on the old relay to verify the new relay is installed with the notch in the same location.
   - Ensure that the electrical center is secure, as not to put added stress on the wires or terminals.

2. Locate the relay. Refer to Electrical Center Identification Views to locate the electrical center where the relay exists.

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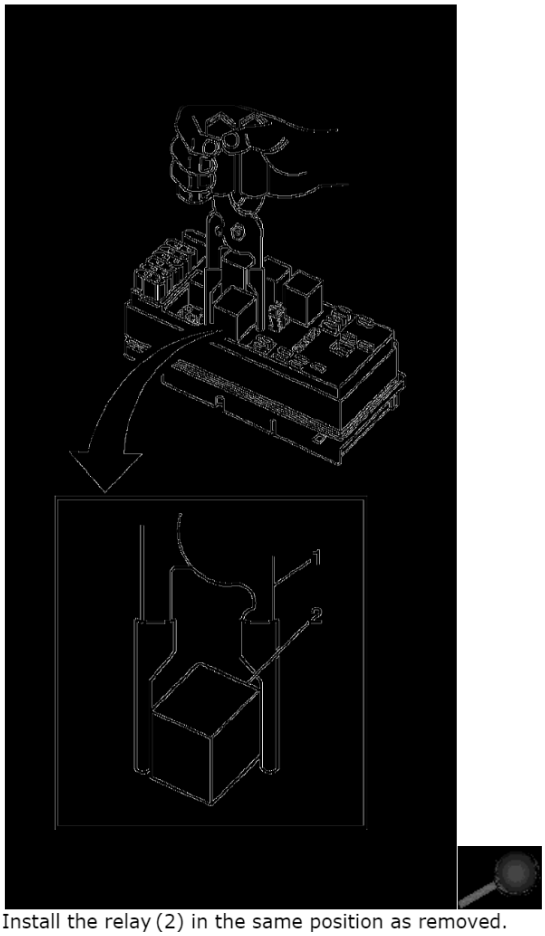
3. Using the EL-43244 (1) position the tool on opposing corners of the relay (2).

Caution: Use *EL-43244* to pull the relay straight out from the electrical center terminals. The use of pliers or a flat bladed tool could damage the electrical center.

4. Remove the relay (2) from the electrical center.

Installation Procedure

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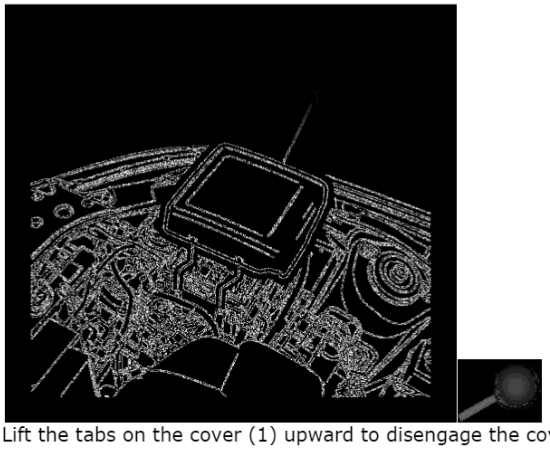
1. Install the relay (2) in the same position as removed.
2. Install the electrical center cover.

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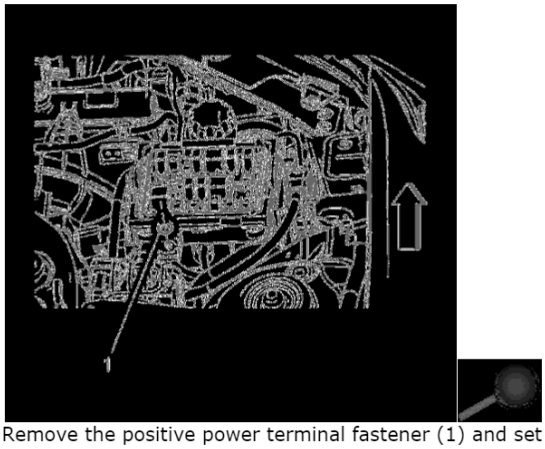
Accessory Wiring Junction Block Replacement

Removal Procedure

1. Disconnect the negative battery cable. Refer to Battery Negative Cable Disconnection and Connection.



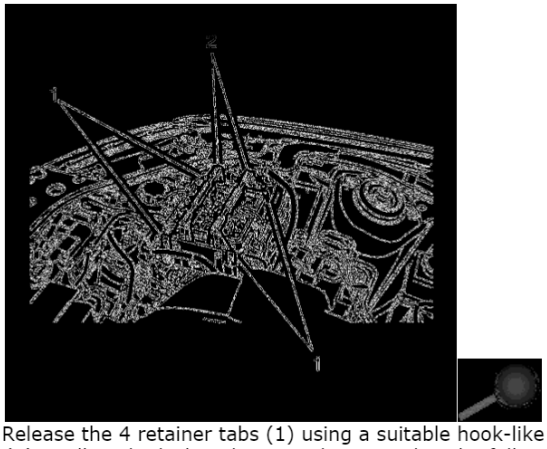
2. Lift the tabs on the cover (1) upward to disengage the cover from the fuse block.



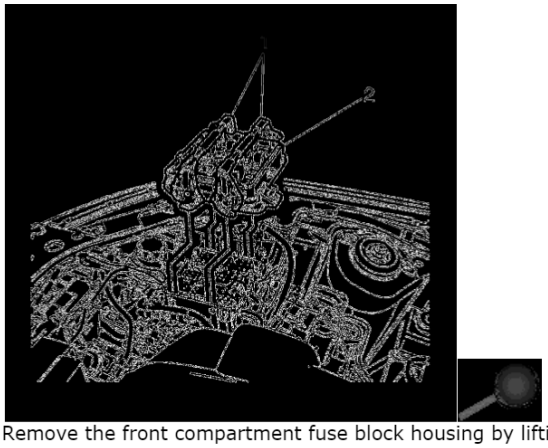
3. Remove the positive power terminal fastener (1) and set the positive power cable aside.

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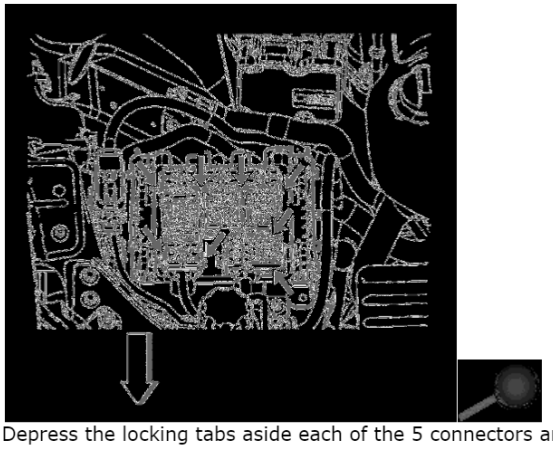
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4. Release the 4 retainer tabs (1) using a suitable hook-like tool to release the locking levers (2) to allow the locking levers to be rotated to the full up position.

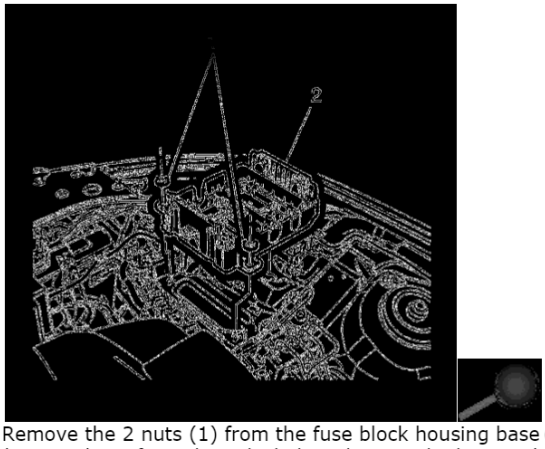


5. Remove the front compartment fuse block housing by lifting on the locking levers (1) then with a slight shacking motion on the locking levers remove the front compartment fuse block housing (2) from the fuse block housing base.



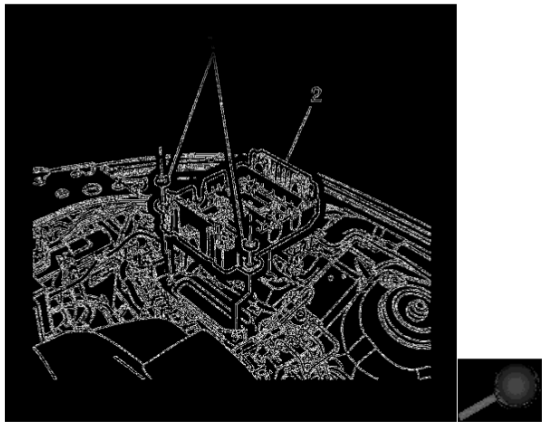
6. Depress the locking tabs aside each of the 5 connectors and remove them from the junction block base plate.

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7. Remove the 2 nuts (1) from the fuse block housing base (2) and remove the fuse block housing base from the vehicle by releasing the lower tab from the front wheelhouse panel.
.

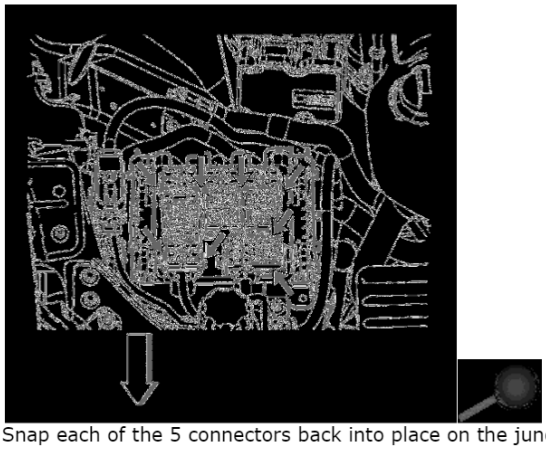
Installation Procedure



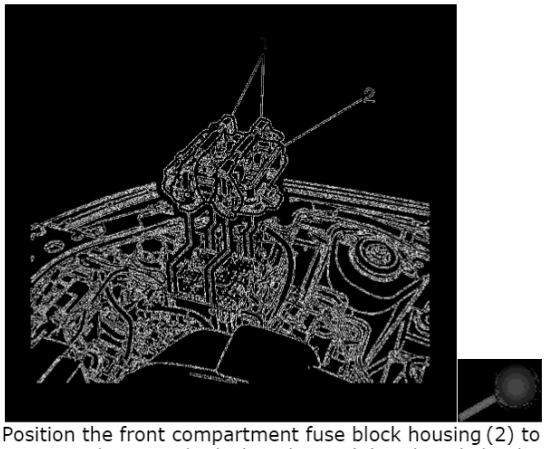
Caution: Refer to Fastener Caution.

1. Position the fuse block housing base (2) to the vehicle. Install the 2 nuts (1) to the fuse block housing base (2). Tighten the block base nuts to **5 N•m (44 lb in)**.

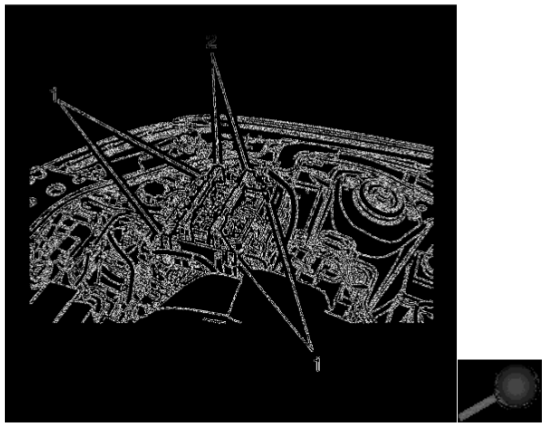
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2. Snap each of the 5 connectors back into place on the junction block base plate, ensuring the front locator tab is engaged and the two locking tabs snap into place for each connector.

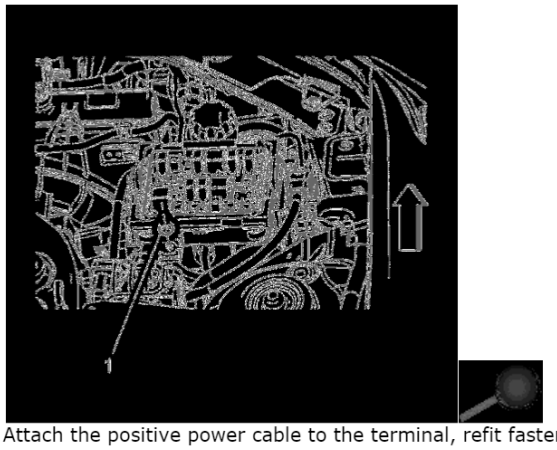


3. Position the front compartment fuse block housing (2) to the fuse block housing base by pressing down on the locking levers (1) with a slight shacking motion on the locking levers.

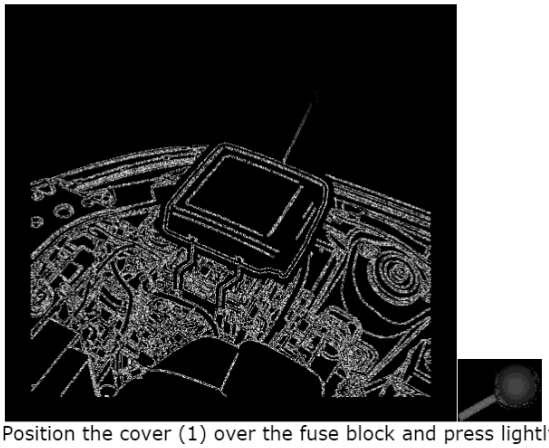


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4. Press the locking levers (2) in the full down position to the fuse block housing. To engage the 4 retainer tabs (1) using light pressure on the locking levers (2) to allow the locking levers to be rotated to the full down position.



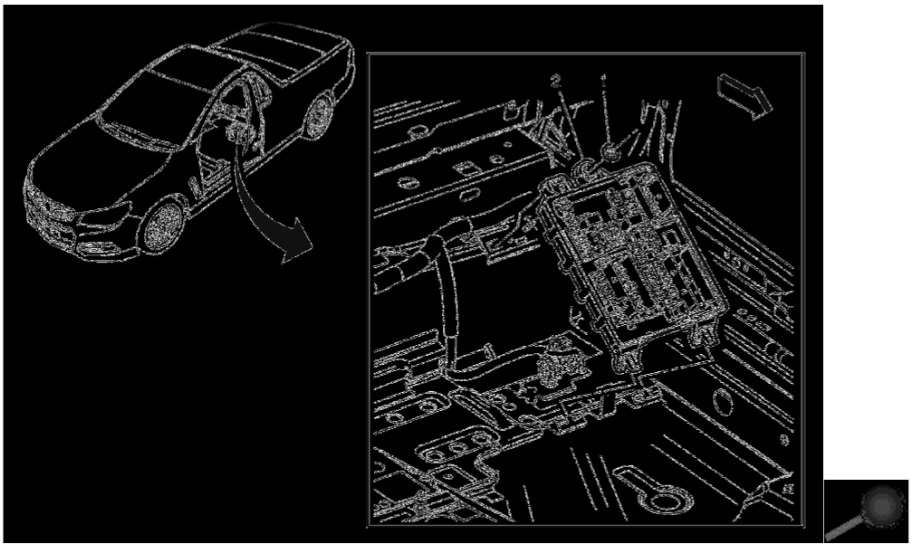
5. Attach the positive power cable to the terminal, refit fastener and tighten to **10 N•m (89 lb in)**



6. Position the cover (1) over the fuse block and press lightly until the cover is locked into position.
7. Connect the negative battery cable. Refer to Battery Negative Cable Disconnection and Connection.

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Body Wiring Harness Junction Block Replacement (Ute)



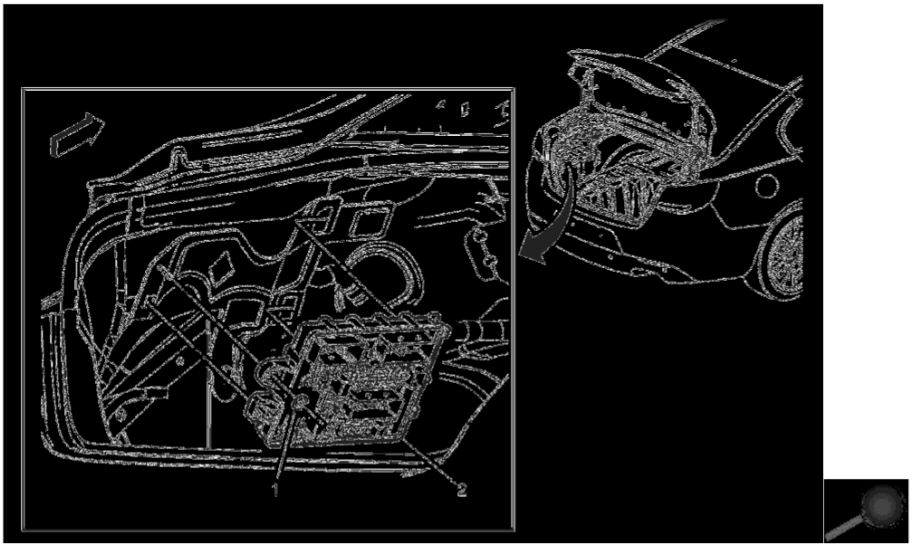
Body Wiring Harness Junction Block Replacement

Callout	Component Name
Preliminary Procedure 1. Slide the driver seat to the forward position. 2. Remove the rear seat back body cushion. Refer to Rear Seat Back Cushion Opening Panel Replacement. 3. Disconnect the negative battery cable. Refer to Battery Negative Cable Disconnection and Connection.	
1	Body Wiring Harness Junction Block Fastener **Caution:** Refer to Fastener Caution. **Tighten** 9 N•m (80 lb in)
2	Body Wiring Harness Junction Block **Procedure** Disconnect the electrical connectors.

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Body Wiring Harness Junction Block Replacement (Sedan)



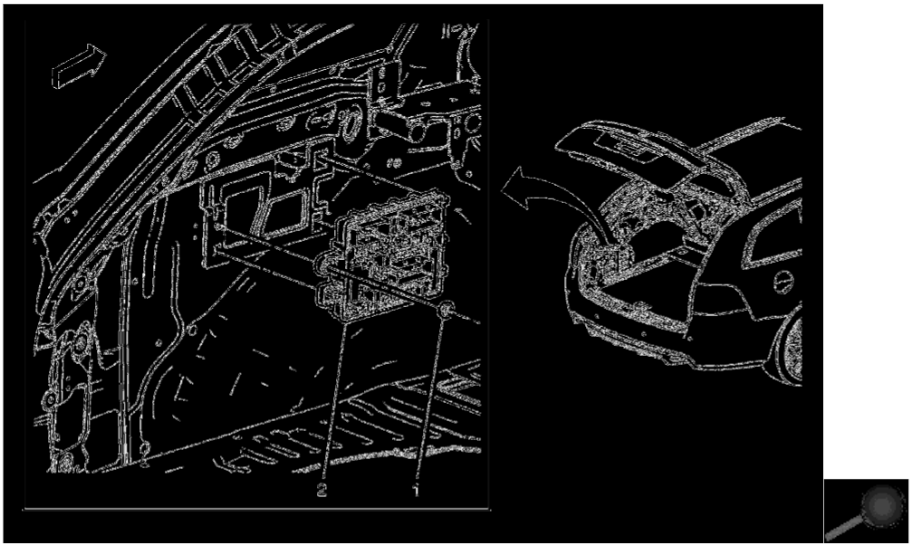
Body Wiring Harness Junction Block Replacement

Callout	Component Name
Preliminary Procedure 1. Remove the rear compartment side trim panel – left side. Refer to Rear Compartment Side Trim Panel Replacement. 2. Disconnect the negative battery cable. Refer to Battery Negative Cable Disconnection and Connection.	
1	Body Wiring Harness Junction Block Fastener **Caution:** Refer to Fastener Caution. **Tighten** 9 N•m (80 lb in)
2	Body Wiring Harness Junction Block **Procedure** Disconnect the electrical connectors.

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Body Wiring Harness Junction Block Replacement (Sportwagon)



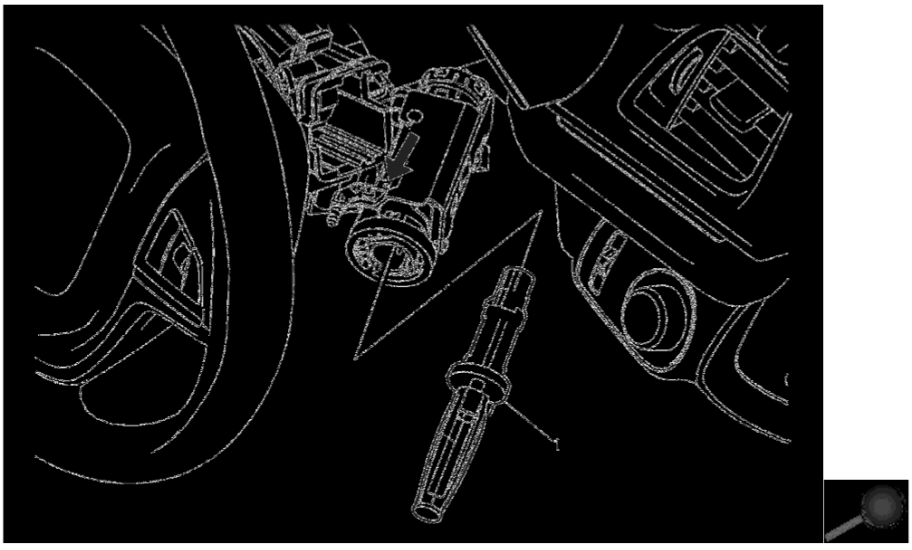
Body Wiring Harness Junction Block Replacement

Callout	Component Name
Preliminary Procedure 1. Remove the quarter inner trim finish panel– left side. Refer to Quarter Inner Trim Finish Panel Replacement - Left Side. 2. Disconnect the negative battery cable. Refer to Battery Negative Cable Disconnection and Connection.	
1	Body Wiring Harness Junction Block Fastener **Caution:** Refer to Fastener Caution. **Tighten** 9 N•m (80 lb in)
2	Body Wiring Harness Junction Block **Procedure** Disconnect the electrical connectors.

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Ignition Lock Cylinder Replacement



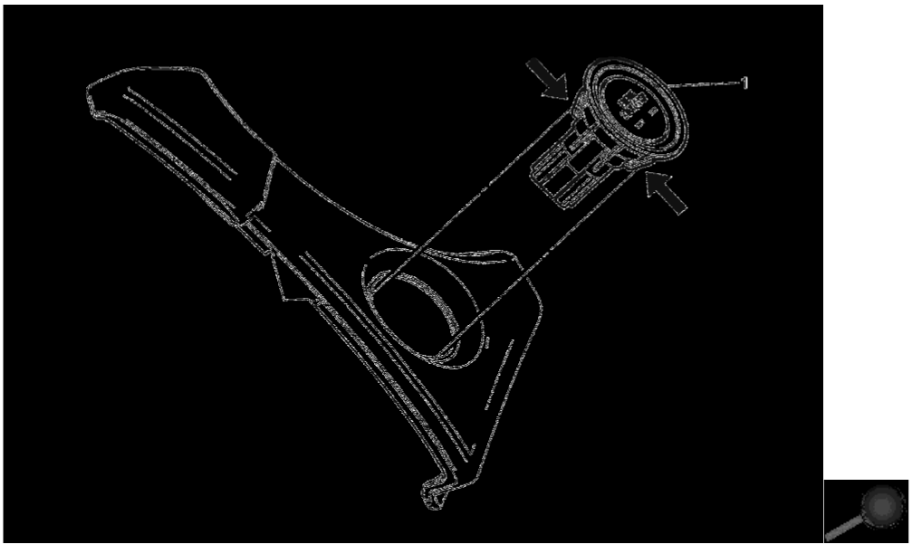
Ignition Lock Cylinder Replacement

Callout	Component Name
Preliminary Procedures 1. Disconnect the battery negative cable. Refer to Battery Negative Cable Disconnection and Connection. 2. Remove the steering column upper and lower trim covers. Refer to Steering Column Lower Trim Cover Replacement.	
1	Ignition Lock Cylinder **Procedure** 1. Turn the ignition lock cylinder to the RUN position. 2. Insert a pick-type tool into the proper hole on the ignition and start switch housing and press the lock tab on the ignition lock cylinder down. 3. Pull the ignition lock cylinder out of the ignition and start switch housing.

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Ignition and Start Switch Replacement (With BTM)



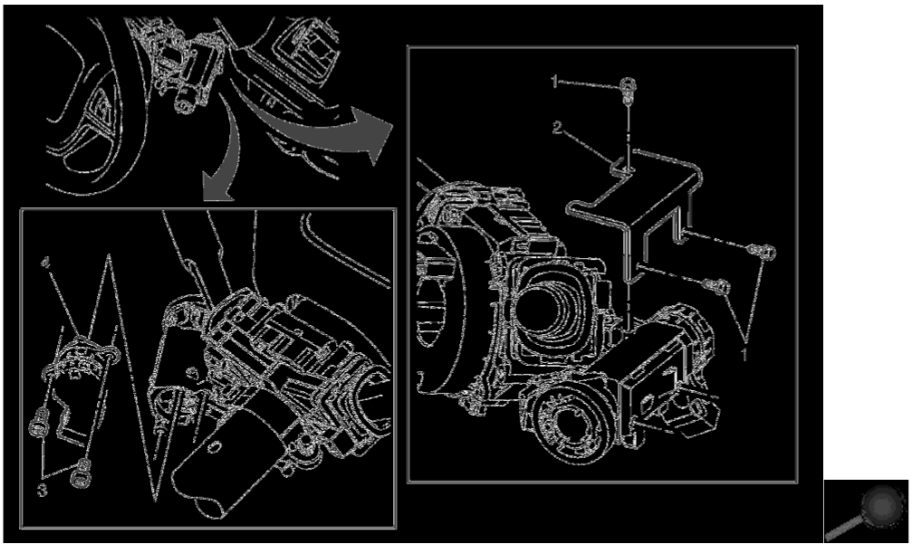
Ignition and Start Switch Replacement

Callout	Component Name
Preliminary Procedure Remove the instrument panel molding. Refer to Instrument Panel Molding Replacement.	
1	Ignition and Start Switch **Procedure** Depress tabs on switch and remove from the panel.

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Ignition and Start Switch Replacement (Without BTM)



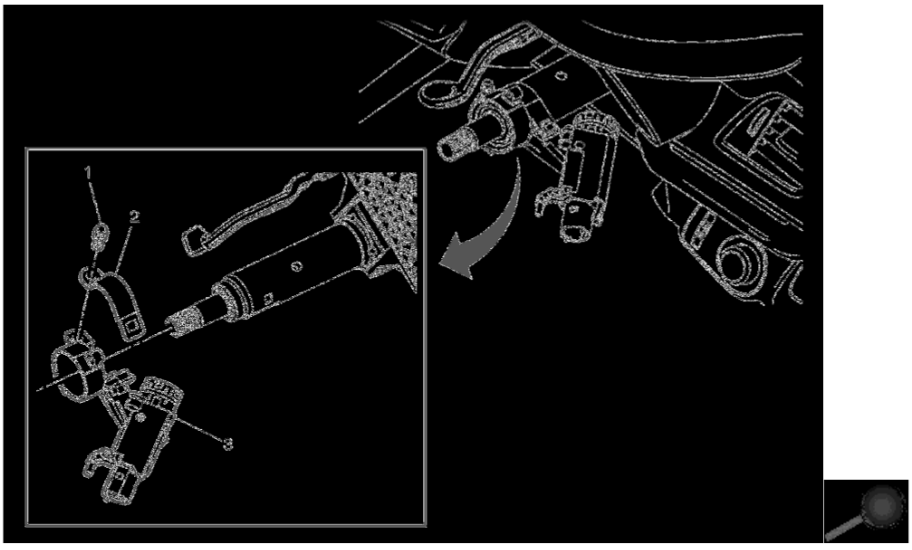
Ignition and Start Switch Replacement

Callout	Component Name
Preliminary Procedure 1. Disconnect the battery negative cable. Refer to Battery Negative Cable Disconnection and Connection. 2. Remove the steering column upper and lower trim covers. Refer to Steering Column Lower Trim Cover Replacement.	
1	Theft Deterrent Plate Fastener (Qty: 3) **Caution:** Refer to Fastener Caution.
2	Theft Deterrent Plate
3	Ignition and Start Switch Fastener (Qty: 2)
4	Ignition and Start Switch **Procedure** Disconnect the electrical connector.

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Ignition and Start Switch Housing Replacement



Ignition and Start Switch Housing Replacement

Callout	Component Name
Preliminary Procedure Remove the turn signal switch bracket. Refer to Turn Signal Switch Bracket Replacement.	
1	Ignition and Start Switch Housing Bolt **Caution:** Refer to Fastener Caution. **Procedure** 1. Discard the old ignition and start switch housing bolt. 2. Install the NEW ignition and start switch housing bolt and tighten until the bolt head breaks off.
2	Ignition and Start Switch Housing Strap
3	Ignition and Start Switch Housing **Procedure** 1. Disconnect any electrical connectors as necessary. 2. Transfer components as necessary.

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Fastener Tightening Specifications

Fastener Tightening Specifications

Application	Specification	
	Metric	English
Accessory Wiring Junction Block Junction Block Base Nut	9 N•m	80 lb in
Auxiliary Positive Battery Cable Nut	12 N•m	106.20 lb in
Ground Fastener M6 Nut	9 N•m	80 lb in
Ground Fastener M6 Nut – Repair	8 N•m	71 lb in
Ground Fastener M7 Bolt	9 N•m	80 lb in
Ground Fastener M8 Nut	22 N•m	16 lb ft
Ground Fastener M10 Nut	45 N•m	33 lb ft
Pre Fuse Base Nuts Junction Block Nut	7 N•m	61 lb in

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Harness Routing Views

Figure 1: Front Fascia Harness Routing (Long Wheelbase Sedan)
Figure 2: Front Fascia Harness Routing (except Long Wheelbase Sedan)
Figure 3: Front of Engine Compartment Harness Routing (HSV)
Figure 4: Right Side of Engine Compartment Harness Routing (Short Wheelbase Sedan)
Figure 5: Right Side of Engine Compartment Harness Routing (Long Wheelbase Sedan)
Figure 6: Right Side of Engine Compartment Harness Routing (Sportwagon)
Figure 7: Right Side of Engine Compartment Harness Routing (Ute)
Figure 8: Right Side of Engine Compartment Harness Routing (LWR) - (1 of 2)
Figure 9: Right Side of Engine Compartment Harness Routing (LWR) - (2 of 2)
Figure 10: Engine Harness Routing - Front of Engine (RHD with LFW or LFX)
Figure 11: Engine Harness Routing - Rear of Engine (RHD with LFX and MV5)
Figure 12: Engine Harness Routing - Rear of Engine (RHD with LFW or LFX and MYA)
Figure 13: Engine Harness Routing - Front of Engine (RHD with LWR)
Figure 14: Engine Harness Routing - Rear of Engine (RHD with LWR)
Figure 15: Engine Harness Routing - Front of Engine (RHD with L77)
Figure 16: Engine Harness Routing - Rear of Engine (RHD with L77)
Figure 17: Engine Harness Routing - Front of Engine (RHD with LS3)
Figure 18: Engine Harness Routing - Rear of Engine (RHD with LS3)
Figure 19: Engine Harness Routing - Front of Engine (LSA with MG9)
Figure 20: Engine Harness Routing - Front of Engine (LSA with MYD)
Figure 21: Engine Harness Routing - Rear of Engine (LSA with MG9)
Figure 22: Engine Harness Routing - Rear of Engine (LSA with MYD)
Figure 23: Instrument Panel Harness Routing (RHD) (L1)
Figure 24: Instrument Panel Harness Routing (RHD) (L3-L5)
Figure 25: Left Side of Passenger Compartment Harness Routing (RHD)
Figure 26: Left Side of Passenger Compartment Harness Routing (Long Wheelbase Sedan)
Figure 27: Left Side of Passenger Compartment Harness Routing (Sportwagon)
Figure 28: Left Side of Passenger Compartment Harness Routing (Ute)

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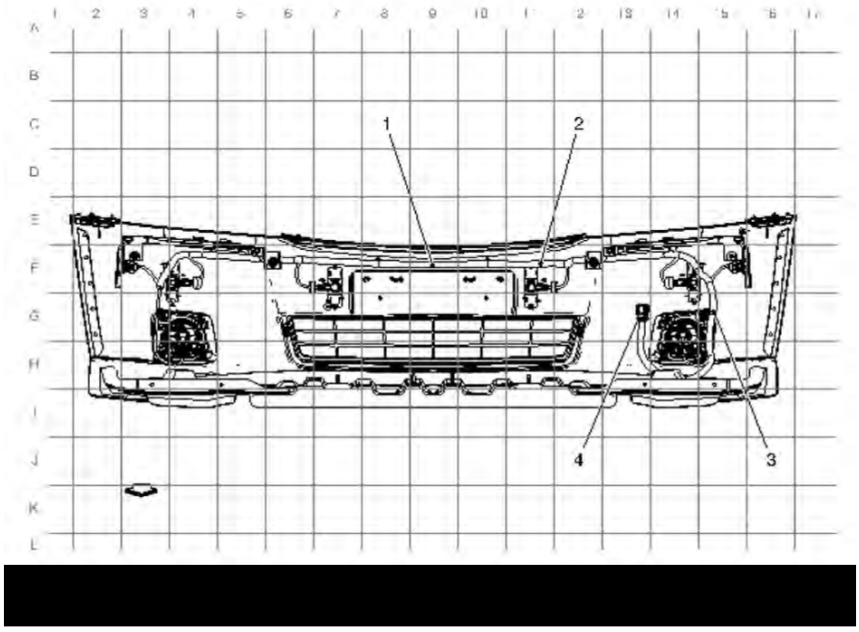
Figure 29: Lower Right Side of Passenger Compartment Harness Routing
Figure 30: Right Side of Passenger Compartment Harness Routing (Short Wheelbase Sedan)
Figure 31: Right Side of Passenger Compartment Harness Routing (Long Wheelbase Sedan)
Figure 32: Right Side of Passenger Compartment Harness Routing (Sportwagon)
Figure 33: Right Side of Passenger Compartment Harness Routing (Ute)
Figure 34: Right Side of Passenger Compartment Harness Routing (Ute with LWR)
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Figure 40: Left Rear of Passenger Compartment Harness Routing (Long Wheelbase Sedan)
Figure 41: Left Rear of Passenger Compartment Harness Routing (Ute)
Figure 42: Right Side of Passenger Compartment Harness Routing (Short Wheelbase Sedan without UQA)
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Figure 44: Right Rear of Passenger Compartment Harness Routing (Ute)
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Figure 49: Right Rear Door Harness Routing (Short Wheelbase)
Figure 50: Right Rear Door Harness Routing (Long Wheelbase Sedan)
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Figure 52: Left Side of Luggage Compartment (Short Wheelbase Sedan without UQA)
Figure 53: Left Side of Luggage Compartment Harness Routing (Short Wheelbase Sedan with L77, LS3, LSA or LWR)
Figure 54: Left Side of Luggage Compartment Harness Routing (Long Wheelbase Sedan)
Figure 55: Left Side of Luggage Compartment Harness Routing (L1-L2 Sportwagon)

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Figure 56: Left Side of Luggage Compartment Harness Routing (L3 Sportwagon)
Figure 57: Left Side of Luggage Compartment Harness Routing (Ute)
Figure 58: Right Side of Luggage Compartment Harness Routing (Short Wheelbase Sedan)
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Figure 60: Right Side of Luggage Compartment Harness Routing (Sportwagon)
Figure 61: Right Side of Luggage Compartment Harness Routing (Ute) - (1 of 2)
Figure 62: Right Side of Luggage Compartment Harness Routing (Ute) - (2 of 2)
Figure 63: Fuel Tank Harness Routing (LWR)
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Figure 65: Fuel Tank Harness Routing (Long Wheelbase Sedan)
Figure 66: Rear Axle Harness Routing (HSV)
Figure 67: Rear Axle Harness Routing (LSA)
Figure 68: Rear Compartment Lid Harness Routing (Short Wheelbase Sedan)
Figure 69: Rear Compartment Lid Harness Routing (Long Wheelbase Sedan)
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Figure 71: Rear of Vehicle Harness Routing (Short Wheelbase Sedan)
Figure 72: Rear of Vehicle Harness Routing (Long Wheelbase Sedan)
Figure 73: Rear of Vehicle Harness Routing (Sportwagon)
Figure 74: Rear of Vehicle Harness Routing (Ute) - (1 of 2)
Figure 75: Rear of Vehicle Harness Routing (Ute) - (2 of 2)

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Front Fascia Harness Routing (Long Wheelbase Sedan)

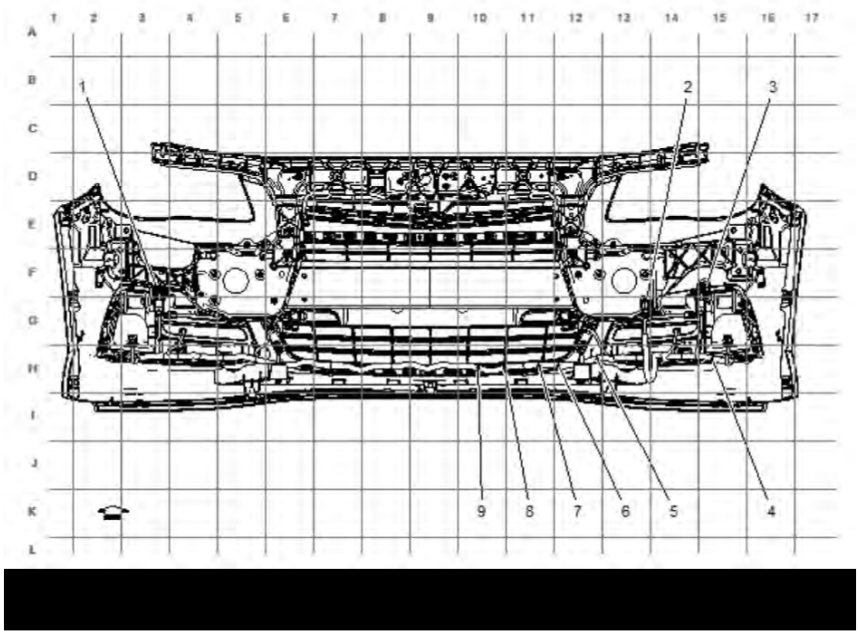


(1) J104
(2) J106
(3) J107
(4) X100 (V5B)

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Front Fascia Harness Routing (except Long Wheelbase Sedan)

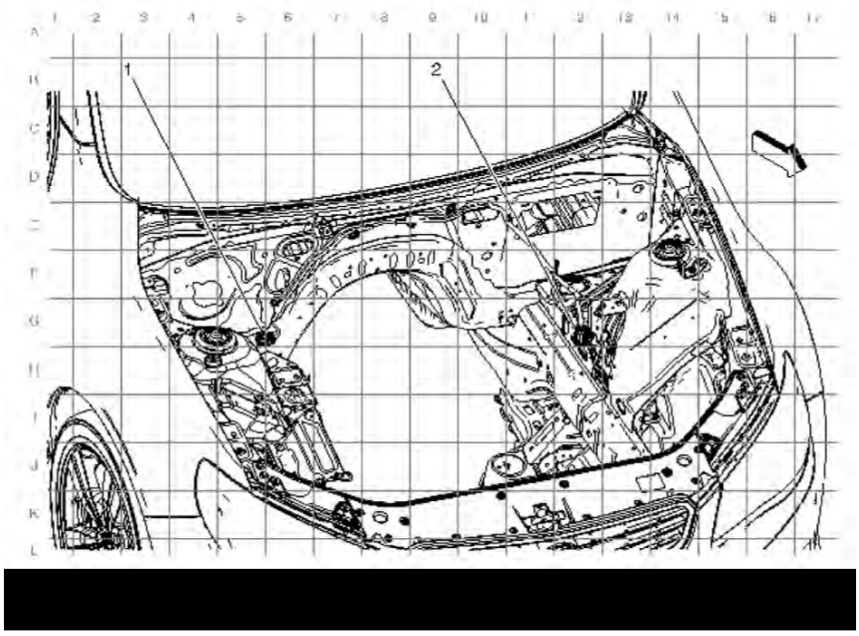


(1) X170 (UFQ)
(2) X100 (V5B)
(3) X171 (UFQ)
(4) J107
(5) J106
(6) J105
(7) J104
(8) J103
(9) J102

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Front of Engine Compartment Harness Routing (HSV)

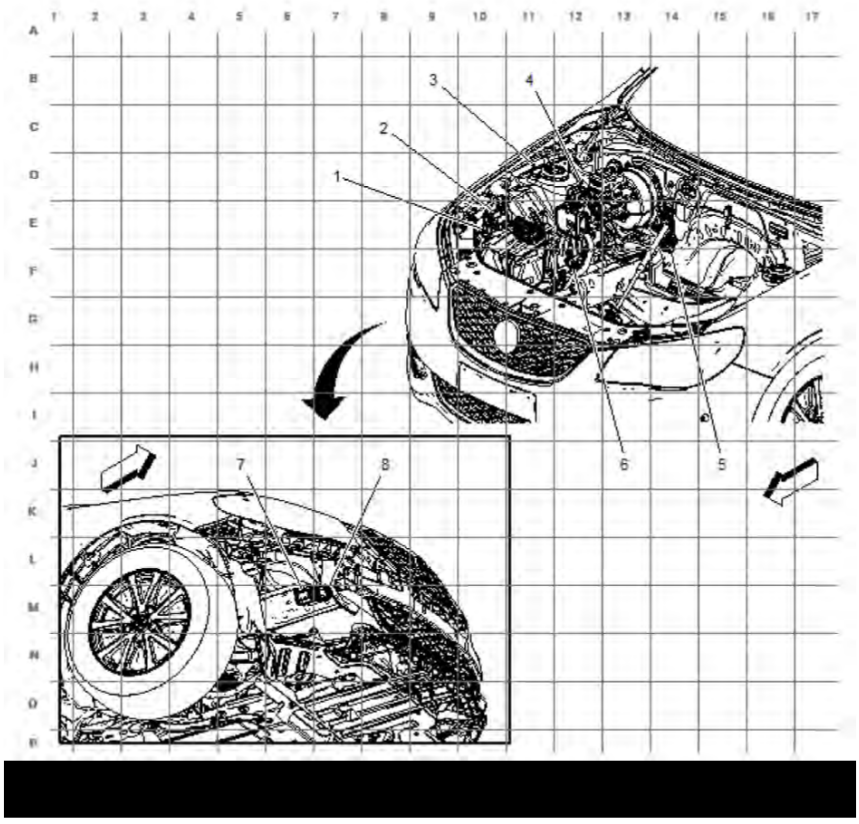


(1) X127 (F55)
(2) X122 (F55)

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Right Side of Engine Compartment Harness Routing (Short Wheelbase Sedan)

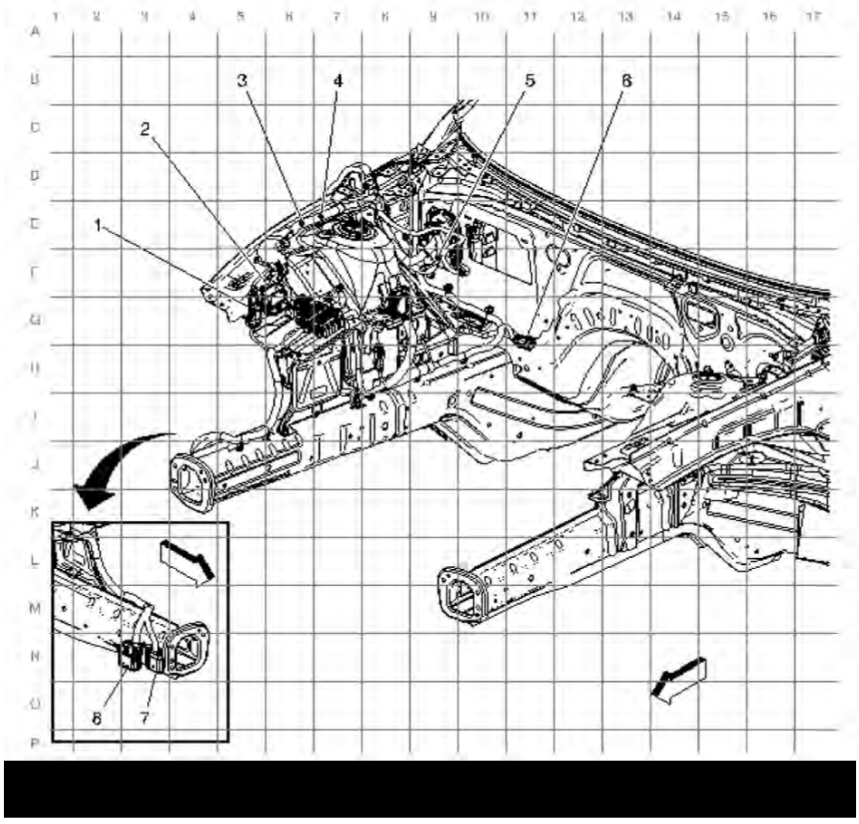


(1) X111
(2) X110 (LFW/LFX/L77)
(3) J135
(4) J136
(5) X127 (F55)
(6) X123 (F55)
(7) X126 (F35)
(8) X100 (V5B)

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Right Side of Engine Compartment Harness Routing (Long Wheelbase Sedan)

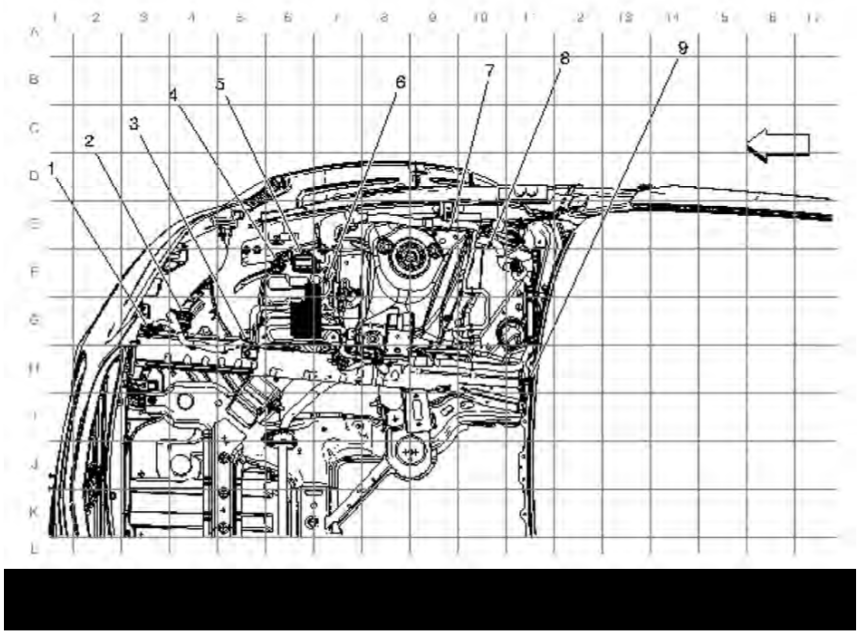


(1) X111
(2) X110 (LFW/LFX/L77)
(3) J135
(4) J319
(5) J138 (LHD)
(6) X117 (without F55)
(7) X100 (V5B)
(8) X126 (F35)

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Right Side of Engine Compartment Harness Routing (Sportwagon)

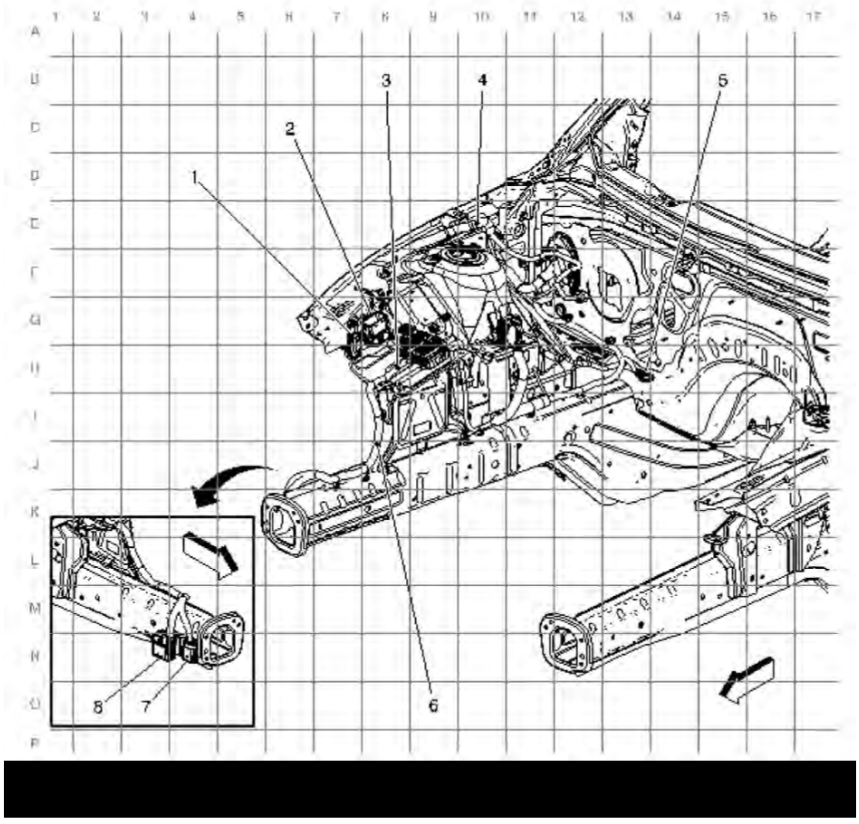


(1) X100 (V5B)
(2) X126 (F35)
(3) J135
(4) X111
(5) X110 (LFW/LFX/L77)
(6) J134 (LWR)
(7) J222
(8) J136
(9) X117 (without F55)

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Right Side of Engine Compartment Harness Routing (Ute)

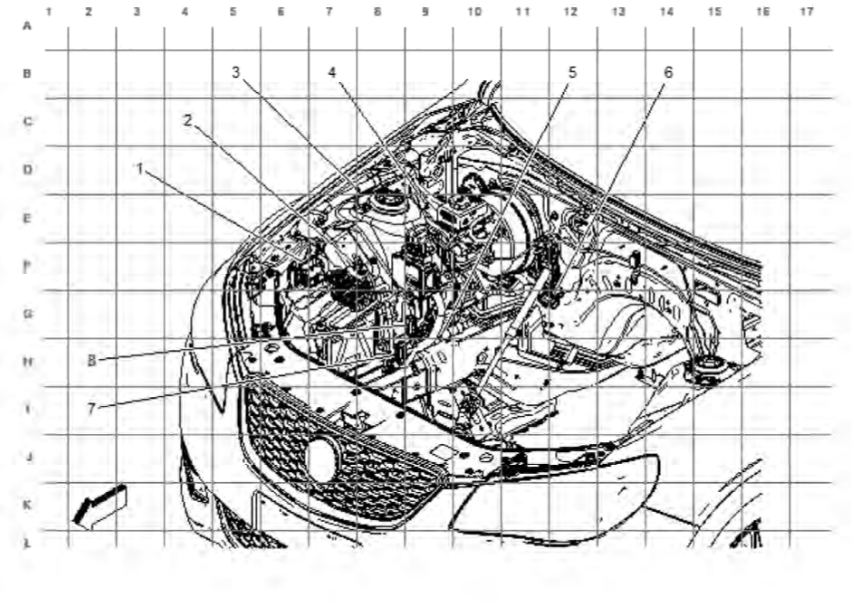


(1) X111
(2) X110 (LFW/LFX/L77)
(3) J305
(4) J222
(5) X117 (without F55)
(6) J319
(7) X100 (V5B)
(8) X126 (F35)

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Right Side of Engine Compartment Harness Routing (LWR) - (1 of 2)



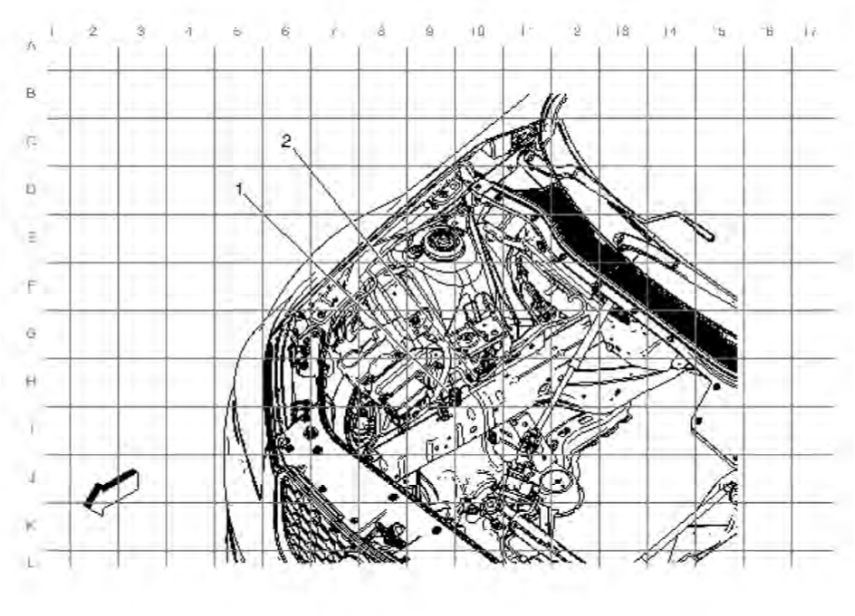
[redacted]

(1) X110 (LFW/LFX/L77)
(2) X121 (LWR)
(3) J135
(4) J136
(5) J134 (LWR)
(6) X127 (F55)
(7) X140 (LWR)
(8) X123 (F55)

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Right Side of Engine Compartment Harness Routing (LWR) - (2 of 2)

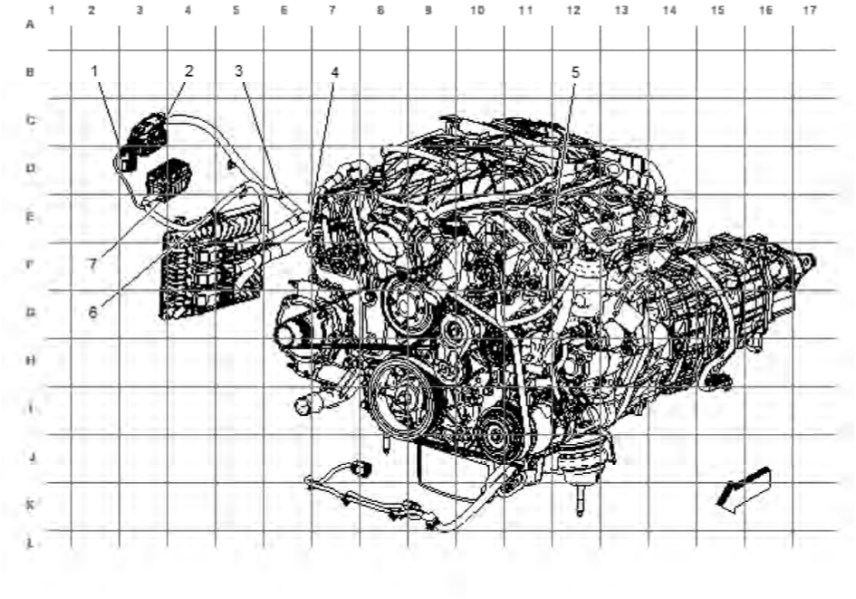


(1) X140 (LWR)
(2) J114 (LWR)

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Engine Harness Routing - Front of Engine (RHD with LFW or LFX)



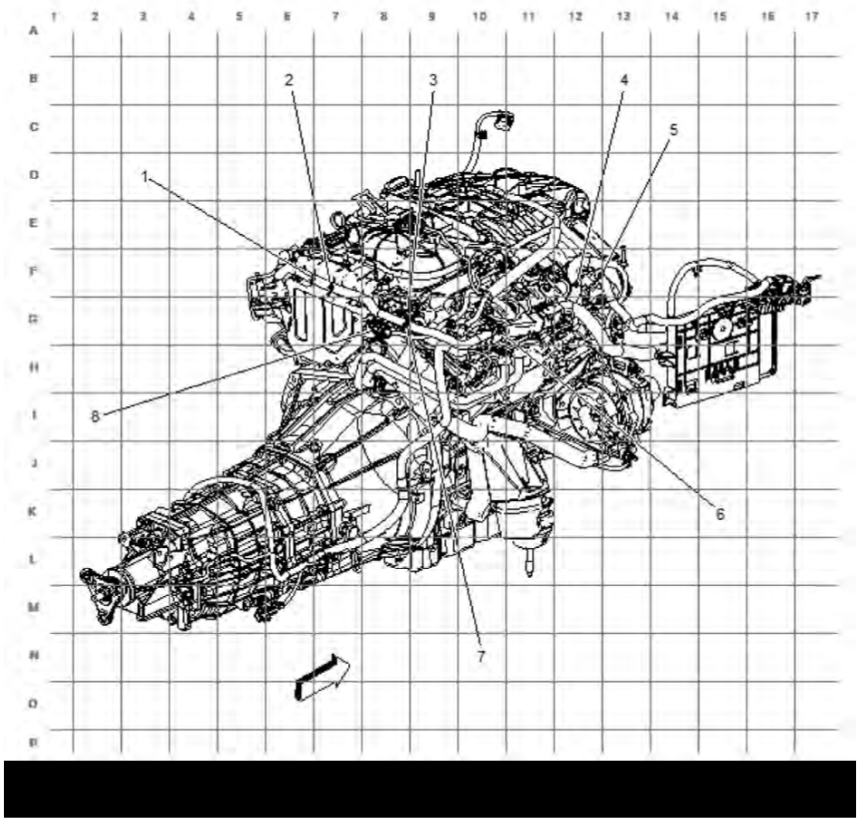
[redacted]

(1) X111
(2) X110 (LFW/LFX/L77)
(3) J115
(4) J126
(5) J128
(6) J122
(7) X50A Fuse Block - Underhood

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Engine Harness Routing - Rear of Engine (RHD with LFX and MV5)

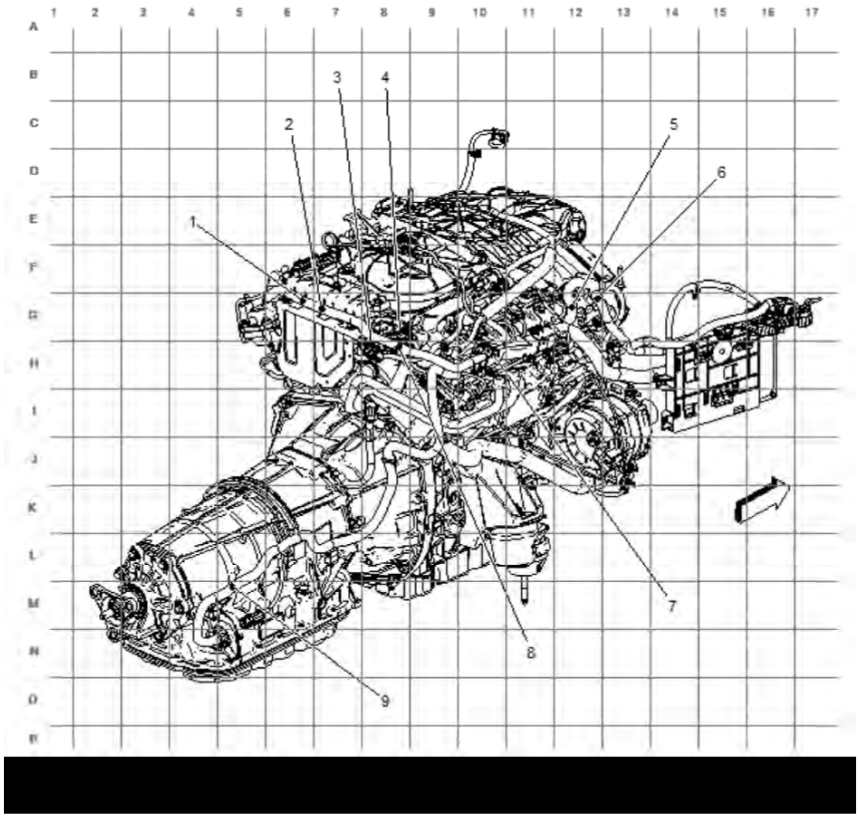


(1) J132
(2) J131
(3) X161
(4) J117
(5) J127
(6) J129
(7) J130
(8) X160

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Engine Harness Routing - Rear of Engine (RHD with LFW or LFX and MYA)

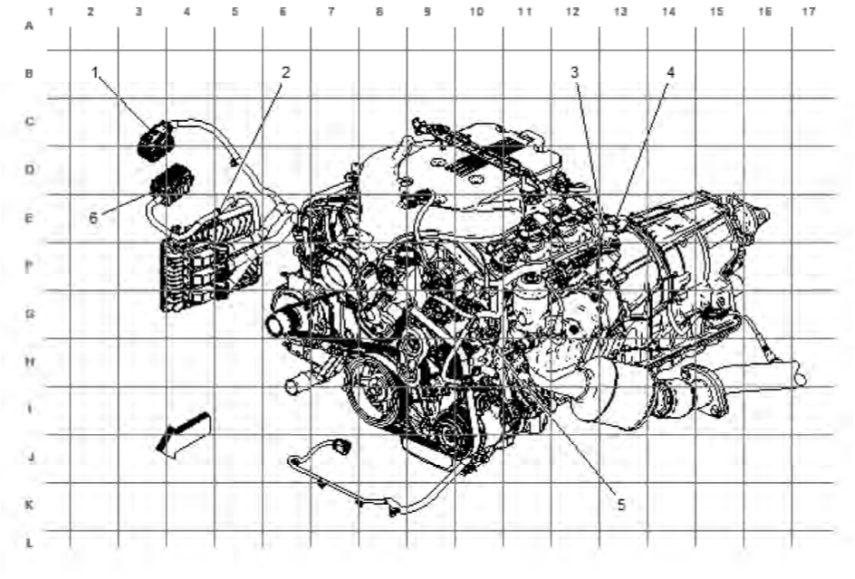


(1) J132
(2) J131
(3) X160
(4) X161
(5) J117
(6) J127
(7) J129
(8) J130
(9) J125

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Engine Harness Routing - Front of Engine (RHD with LWR)



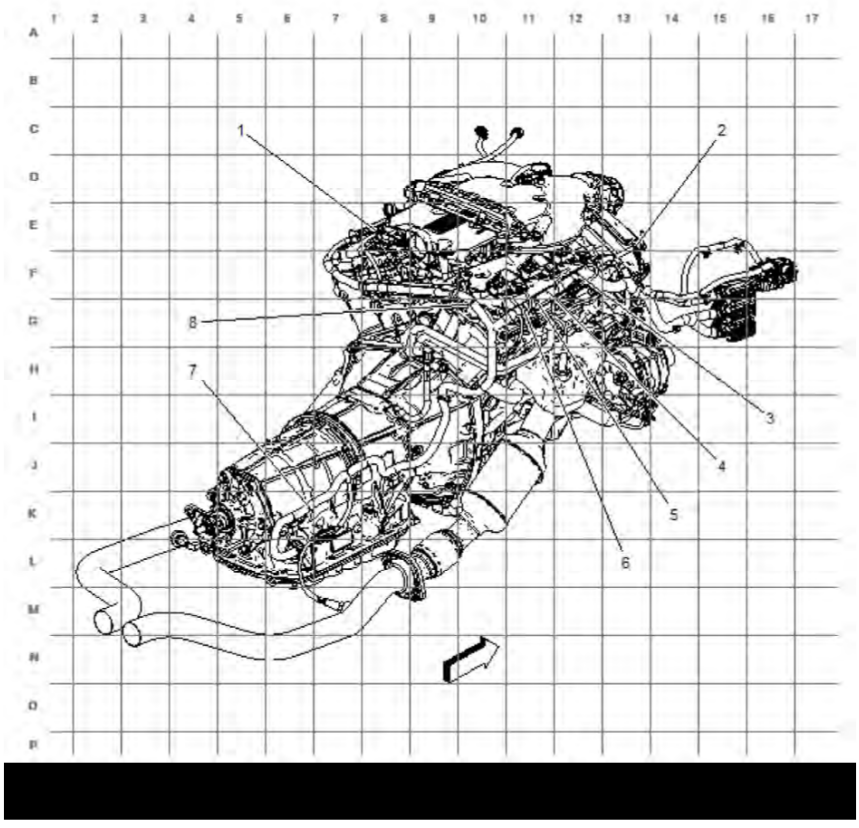
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[redacted]

(1) X110 (LFW/LFX/L77)
(2) J122
(3) J132
(4) J131
(5) J128
(6) X50A Fuse Block - Underhood

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Engine Harness Routing - Rear of Engine (RHD with LWR)

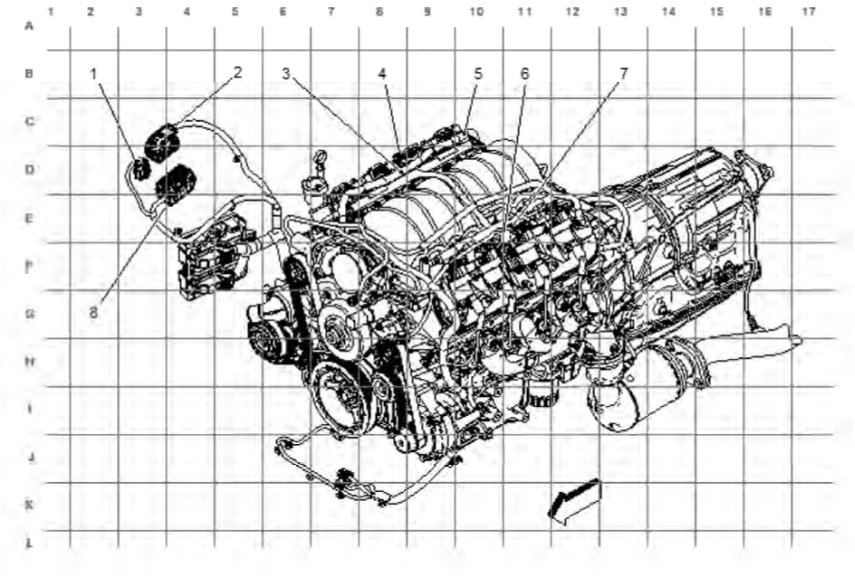


(1) X160
(2) J130
(3) J117
(4) J126
(5) J127
(6) J115
(7) J125
(8) J129

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Engine Harness Routing - Front of Engine (RHD with L77)



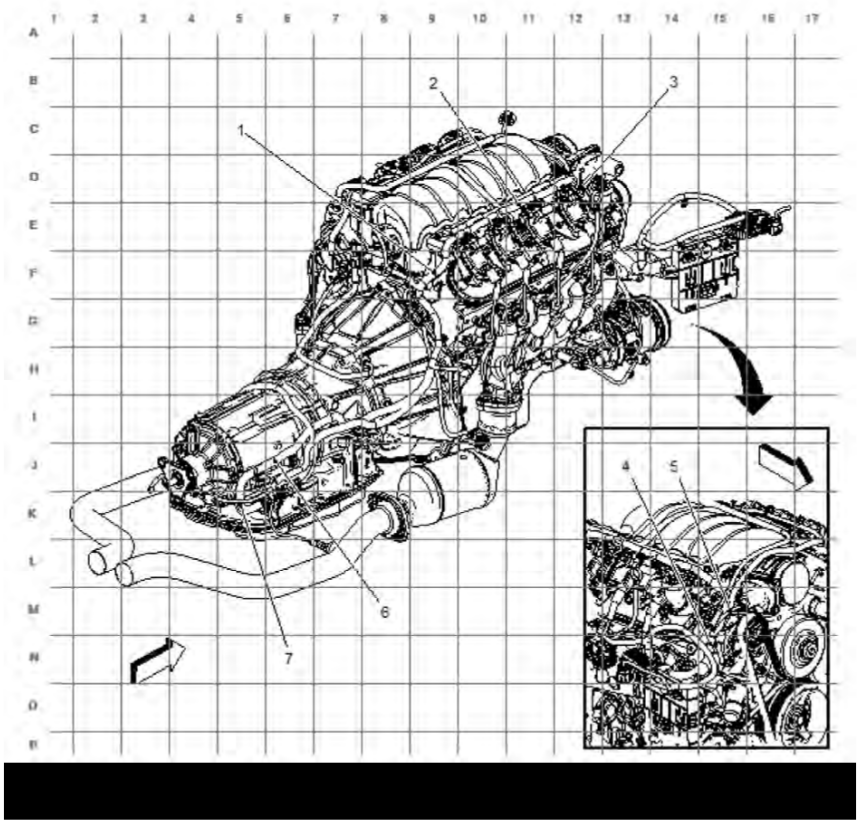
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[redacted]

(1) X111
(2) X110 (LFW/LFX/L77)
(3) J123 (L77/LS3)
(4) X161
(5) J118
(6) X600
(7) J124 (L77/LS3)
(8) X50A Fuse Block - Underhood

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Engine Harness Routing - Rear of Engine (RHD with L77)

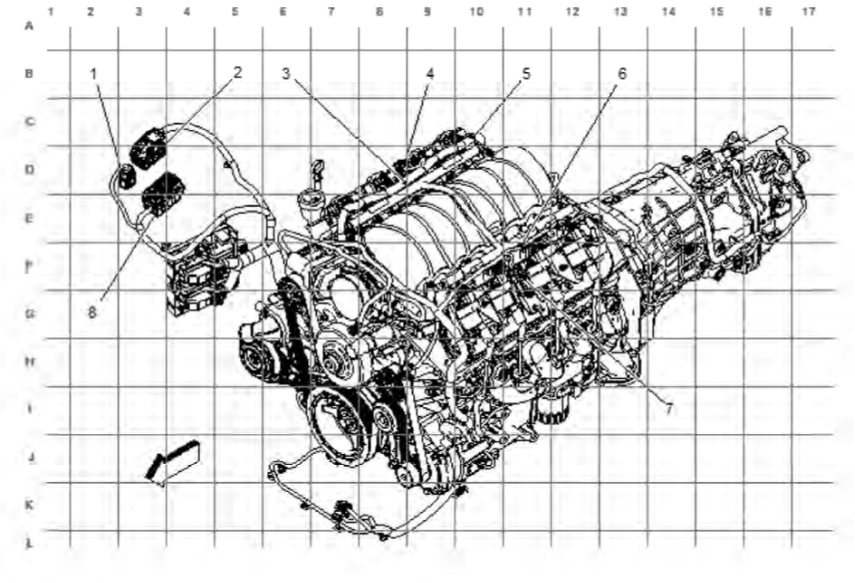


(1) J119
(2) J123 (L77/LS3)
(3) J117
(4) J116
(5) J115
(6) J122
(7) J125

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Engine Harness Routing - Front of Engine (RHD with LS3)



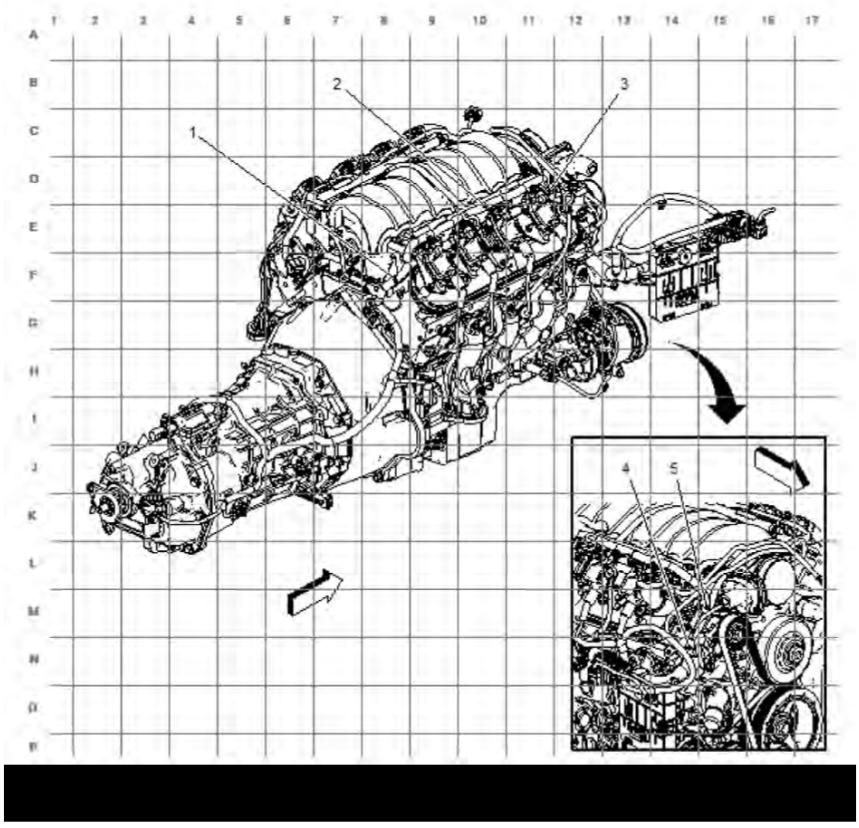
[redacted]

(1) X111
(2) X110 (LFW/LFX/L77)
(3) J123 (L77/LS3)
(4) X161
(5) J118
(7) X600
(8) X50A Fuse Block - Underhood

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Engine Harness Routing - Rear of Engine (RHD with LS3)

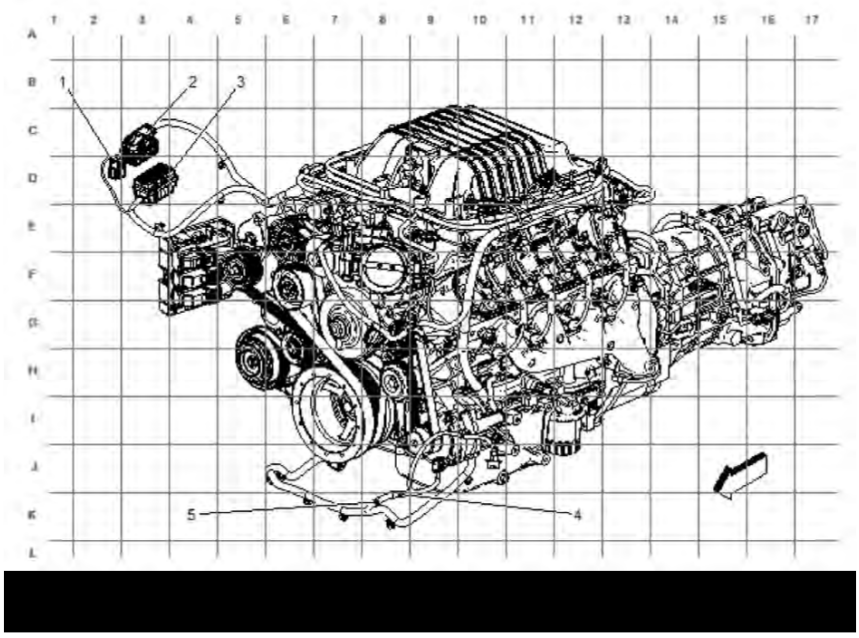


(1) J119
(2) J123 (L77/LS3)
(3) J117
(4) J116
(5) J115

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Engine Harness Routing - Front of Engine (LSA with MG9)

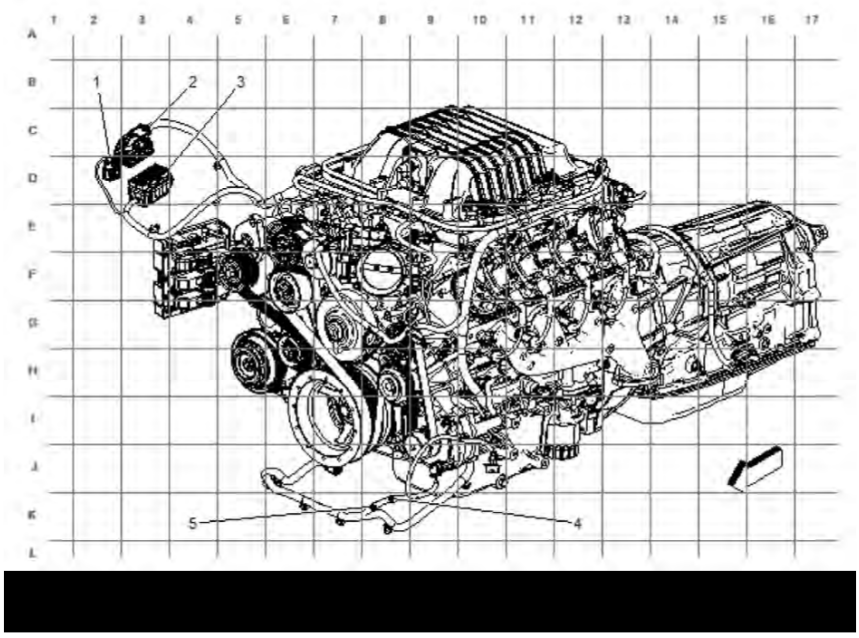


(1) X111
(2) X110 (LFW/LFX/L77)
(3) X50A Fuse Block - Underhood
(4) J121 (LSA)
(5) J120 (LSA)

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Engine Harness Routing - Front of Engine (LSA with MYD)

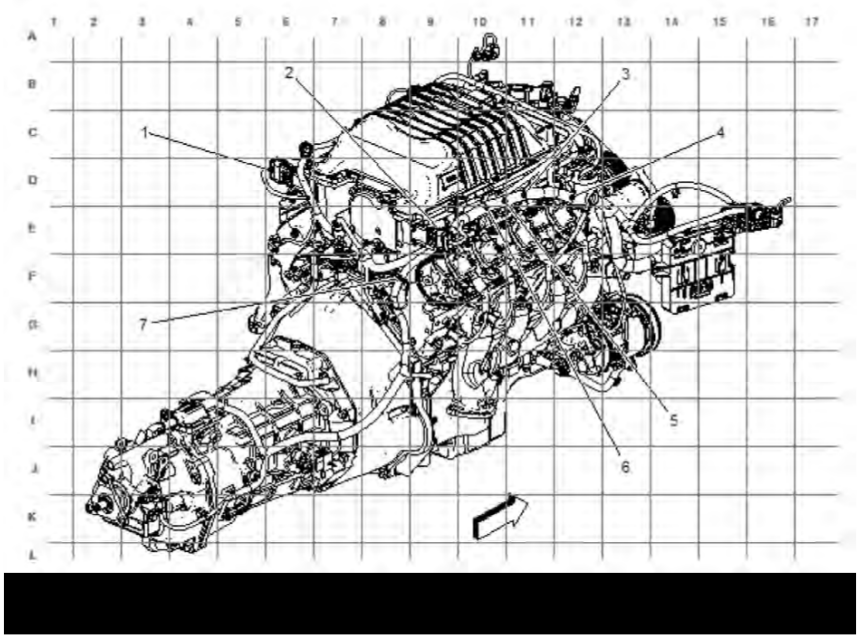


(1) X111
(2) X110 (LFW/LFX/L77)
(3) X50A Fuse Block - Underhood
(4) J121 (LSA)
(5) J120 (LSA)

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Engine Harness Routing - Rear of Engine (LSA with MG9)

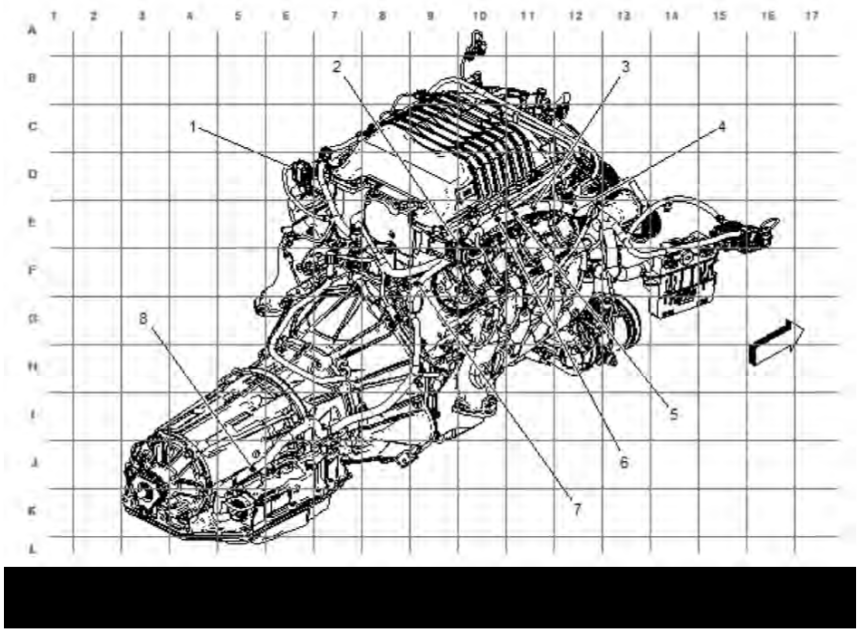


(1) X160
(2) X161
(3) J116
(4) J115
(5) J117
(6) J118
(7) J119

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Engine Harness Routing - Rear of Engine (LSA with MYD)

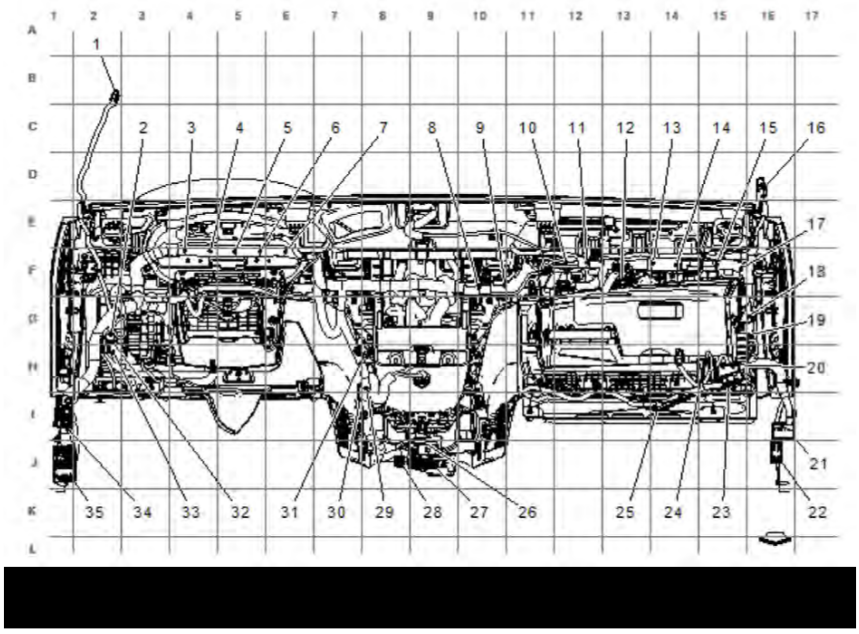


(1) X160
(2) X161
(3) J116
(4) J115
(5) J117
(6) J118
(7) J119
(8) J122

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Instrument Panel Harness Routing (RHD) (L1)



(1) X270
(2) J217
(3) J216
(4) J215
(5) J214
(6) J213
(7) J212
(8) J209
(9) J208
(10) J207
(11) J206
(12) X223 (U23)
(13) J205
(14) J204
(15) J203
(16) X215 (UQG)
(17) J202
(18) J201
(19) J200

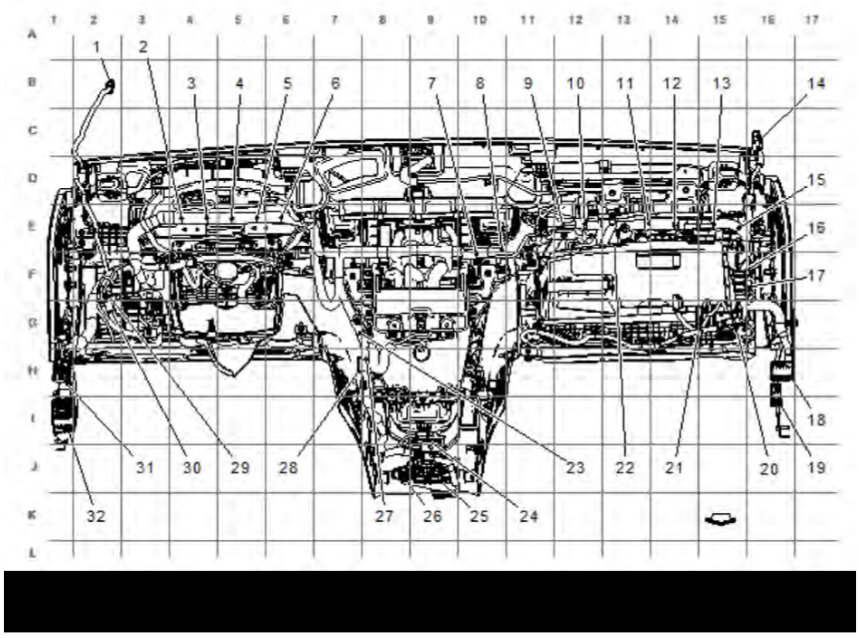
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(20) JX200
(21) X207
(22) X205
(23) X234 (9C1/9C3)
(24) X252 (without 9C1/9C3)
(26) X214 (MYA/MYC/MYD)
(27) X206 (J77)
(28) X213 (USR)
(29) J210
(30) X245 (V5B)
(31) J211
(32) J226
(33) J218
(34) J219
(35) X209 (Left Hand Drive with UQA)

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Instrument Panel Harness Routing (RHD) (L3-L5)



(1) X270
(2) J216
(3) J215
(4) J214
(5) J213
(6) J212
(7) J209
(8) J208
(9) J207
(10) J206
(11) J205
(12) J204
(13) J203
(14) X215 (UQG)
(15) J202
(16) J201
(17) J200
(18) X207
(19) X205

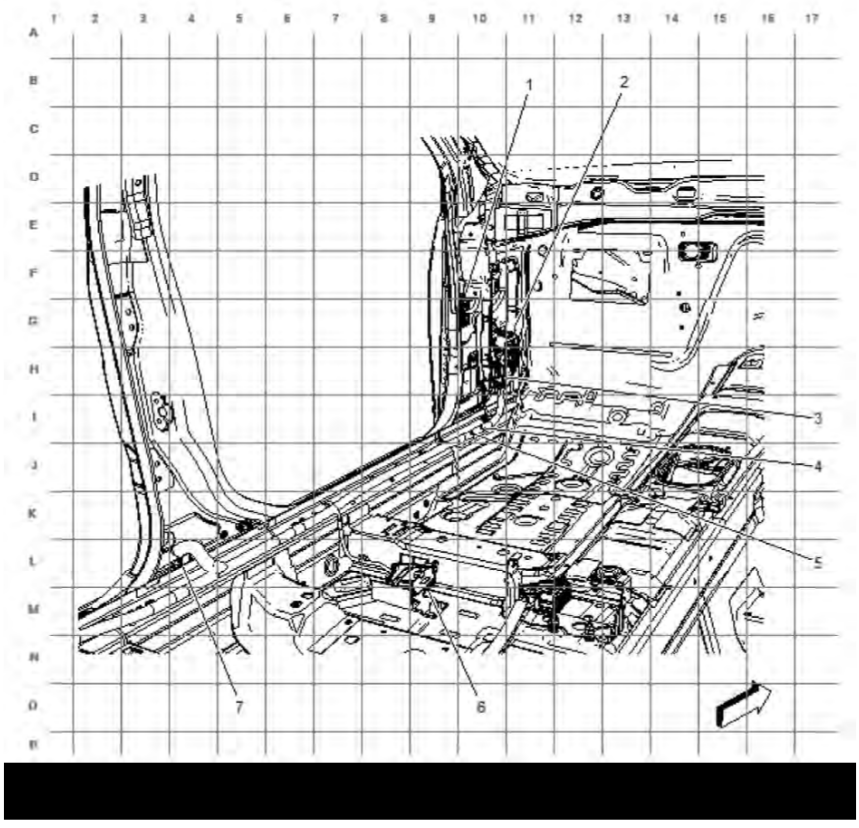
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(20) JX200
(21) X252 (without 9C1/9C3)
(22) X223 (U23)
(23) J211
(24) X214 (MYA/MYC/MYD)
(25) X206 (J77)
(26) X213 (USR)
(27) J210
(28) X245 (V5B)
(29) J217
(30) J218
(31) J219
(32) X209 (Left Hand Drive with UQA)

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Left Side of Passenger Compartment Harness Routing (RHD)

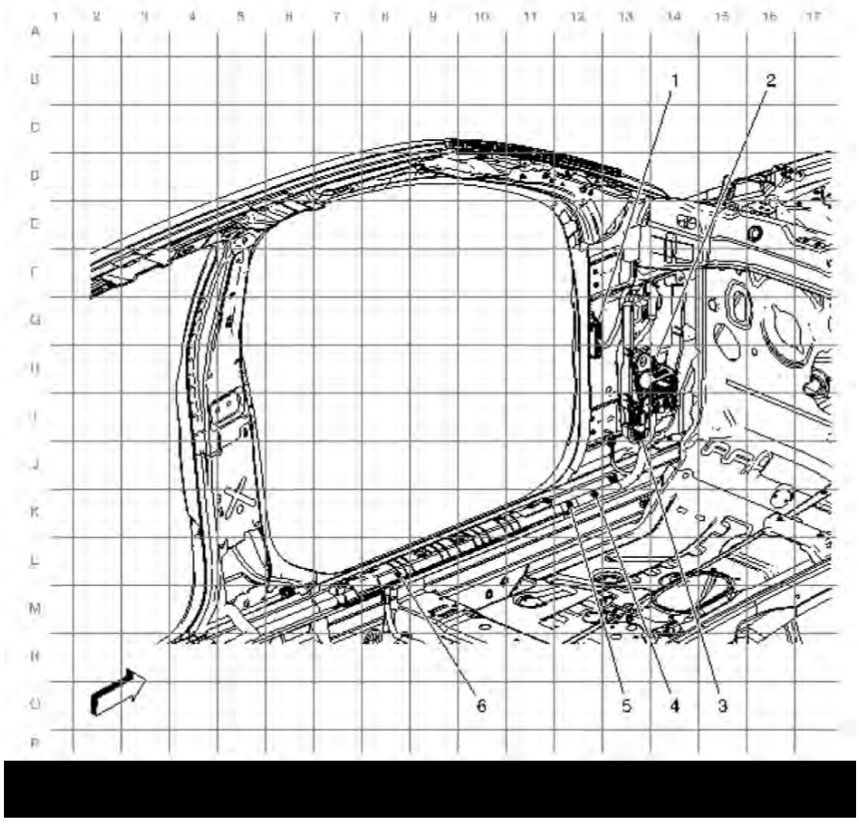


(1) X600
(2) X207
(3) X205
(4) J300 (F19 Or F69 Or F80)
(5) J301 (F19 Or F69 Or F80)
(6) X324 (AH7)
(7) X700 (except F80)

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Left Side of Passenger Compartment Harness Routing (Long Wheelbase Sedan)

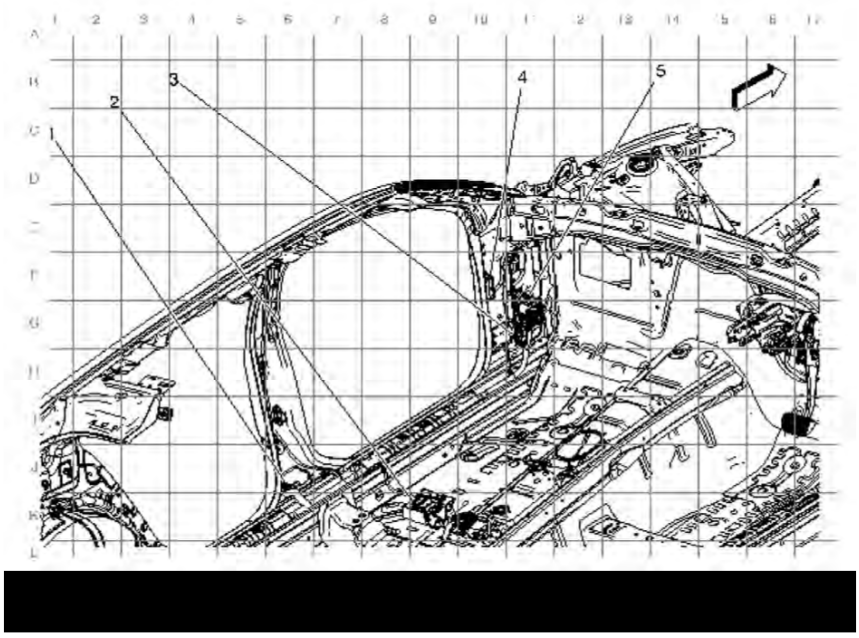


(1) X600
(2) X207
(3) X205
(4) J300
(5) J301
(6) J313 (F19)

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Left Side of Passenger Compartment Harness Routing (Sportwagon)

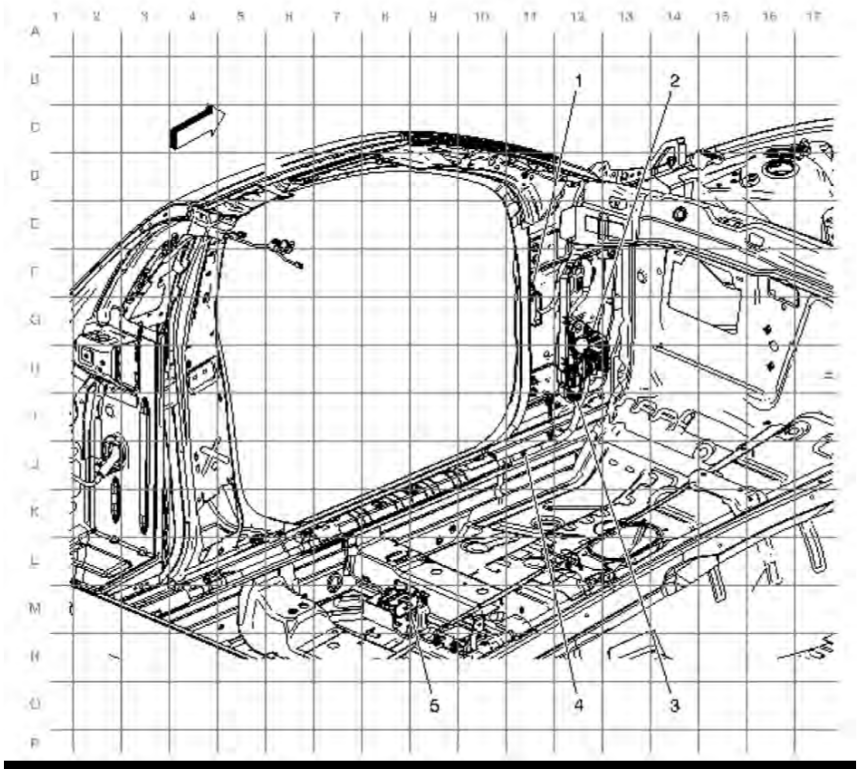


(1) X700 (except F80)
(2) X324 (AH7)
(3) X205
(4) X600
(5) X207

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Left Side of Passenger Compartment Harness Routing (Ute)

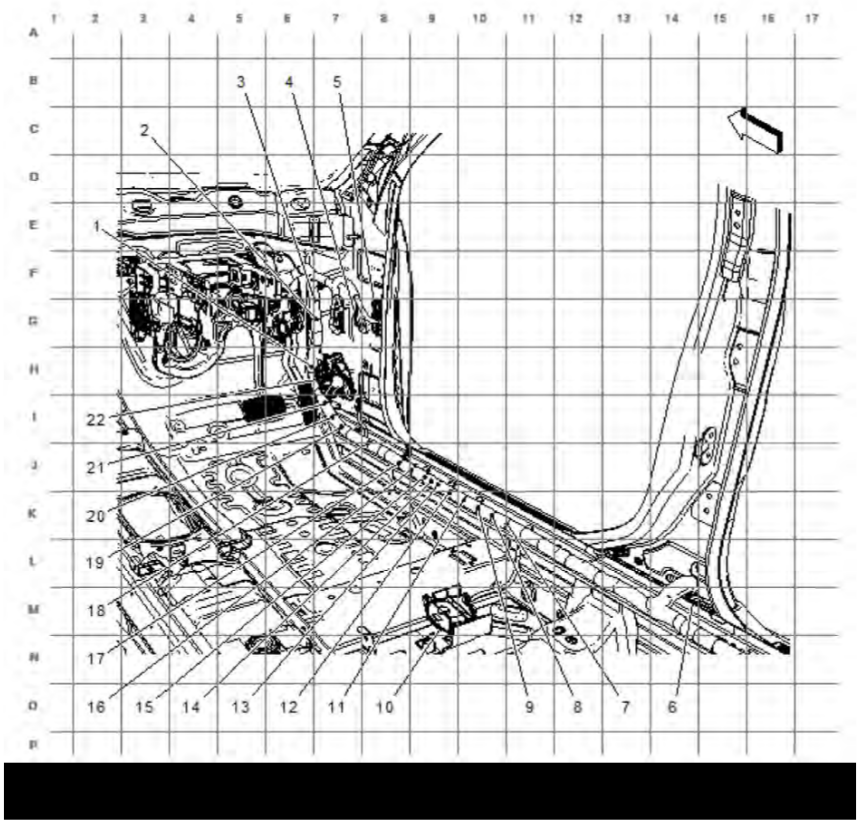


(1) X600
(2) X207
(3) X205
(4) J300
(5) X324 (AH7)

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Lower Right Side of Passenger Compartment Harness Routing



(1) J223
(2) J221
(3) J220
(4) J222
(5) X500
(6) X800 (except F80)
(7) J312
(8) J311
(9) J310
(10) X323 (A45)
(11) J309
(12) J308
(13) J307

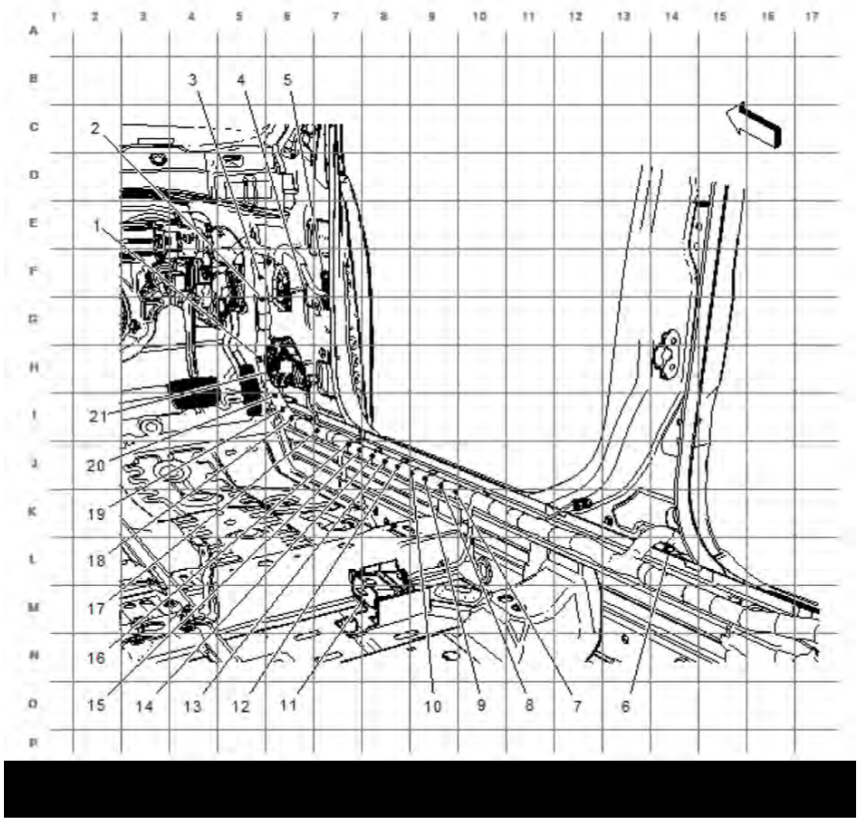
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(14) J306
(15) J305
(16) J304
(17) J303
(18) J302
(19) J226
(20) J225
(21) J224
(22) X209 (Left Hand Drive with UQA)

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Right Side of Passenger Compartment Harness Routing (Short Wheelbase Sedan)



(1) J223
(2) J221
(3) J220
(4) J222
(5) X500
(6) X800 (except F80)
(7) J312
(8) J311
(9) J310
(10) J309
(11) X323 (A45)
(12) J308
(13) J307

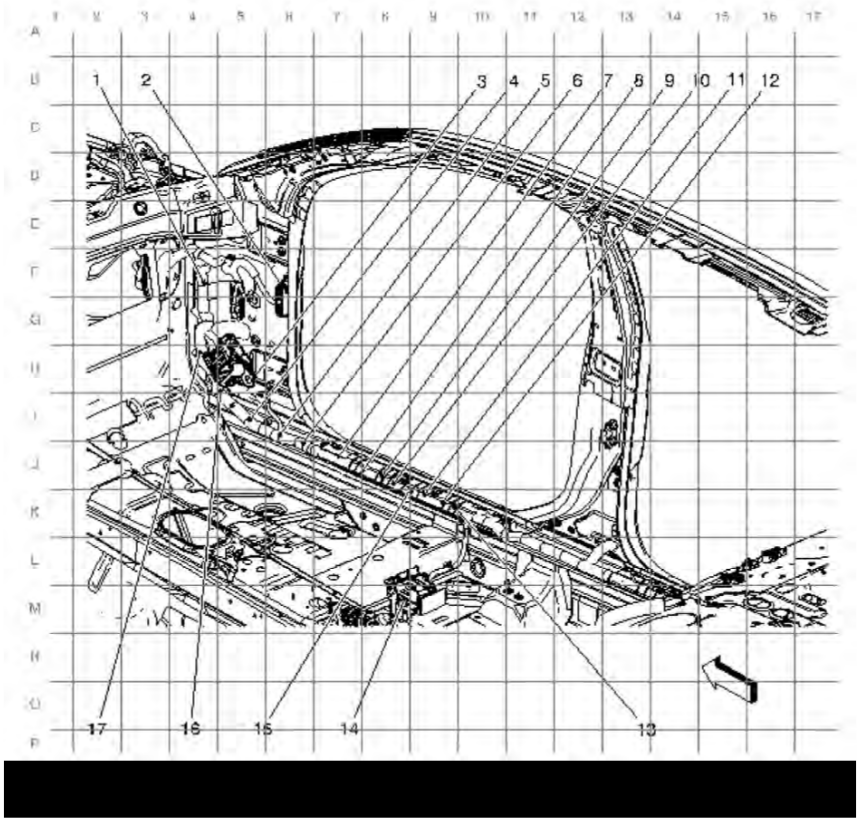
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(14) J305
(15) J304
(16) J303
(17) J302
(18) J226
(19) J225
(20) J224
(21) X209 (Left Hand Drive with UQA)

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Right Side of Passenger Compartment Harness Routing (Long Wheelbase Sedan)



(1) J221
(2) X500
(3) X209 (Left Hand Drive with UQA)
(4) J312
(5) J304
(6) J305
(7) J308
(8) J303
(9) J302
(10) J309
(11) J307
(12) J311
(13) J226

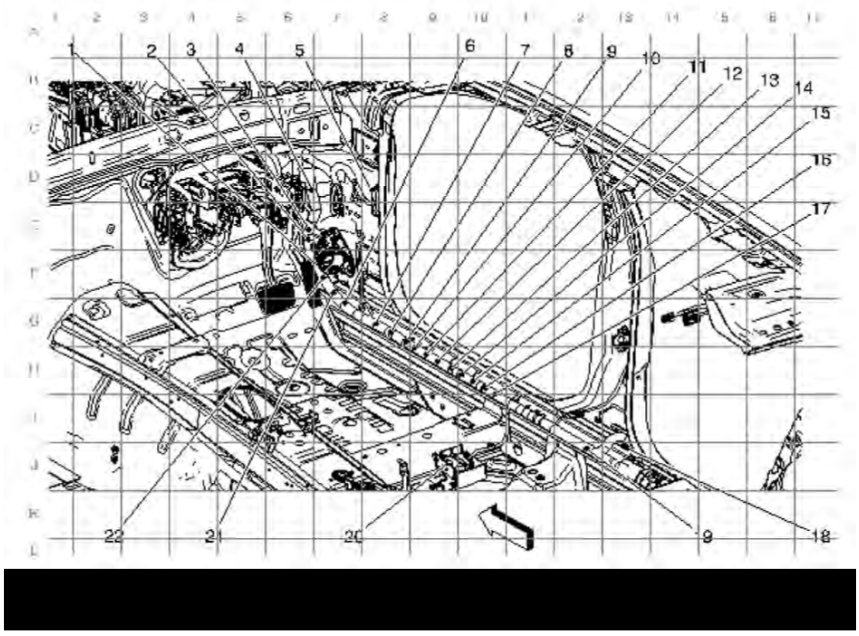
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(14) X324 (AH7)
(15) J310
(16) J222
(17) J223

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Right Side of Passenger Compartment Harness Routing (Sportwagon)



(1) X209 (Left Hand Drive with UQA)
(2) J223
(3) J221
(4) J303
(5) X500
(6) J308
(7) J309
(8) J310
(9) J310
(10) J226
(11) J302
(12) J224
(13) J318
(14) J311
(15) J322 (F19/F69)
(16) J315
(17) J323
(18) X800 (except F80)
(19) J320

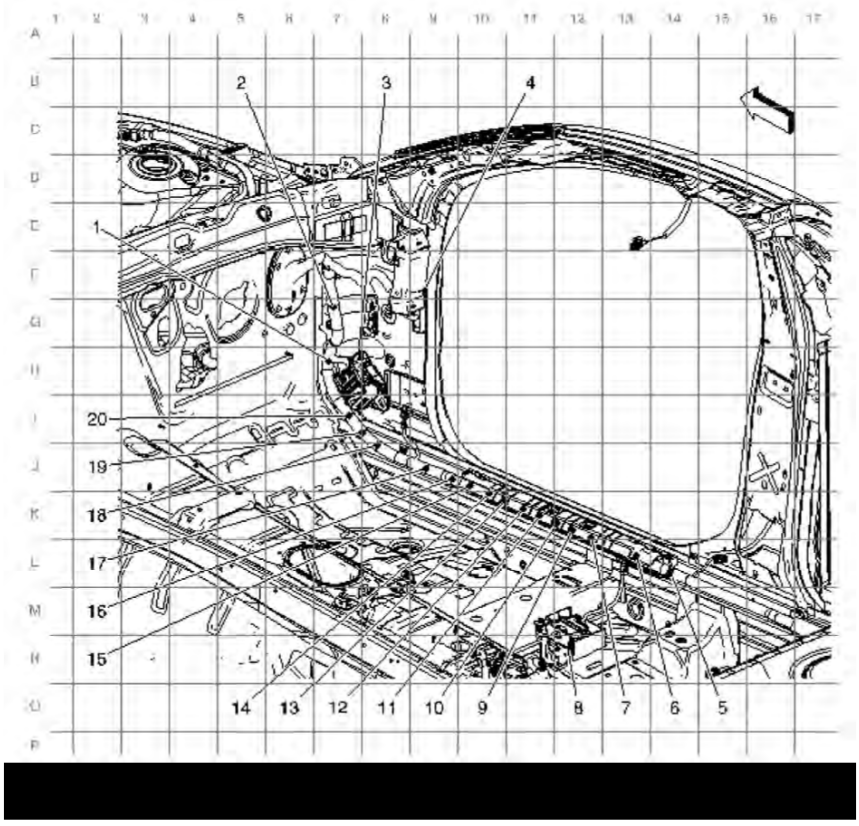
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(20) X324 (AH7)
(21) J312
(22) J317 (LWR)

cardiagn.com

Right Side of Passenger Compartment Harness Routing (Ute)



(1) J221
(2) J303
(3) X209 (Left Hand Drive with UQA)
(4) X500
(5) J323
(6) J318
(7) J321
(8) X323 (A45)
(9) J311
(10) J225
(11) J224
(12) J302
(13) J306

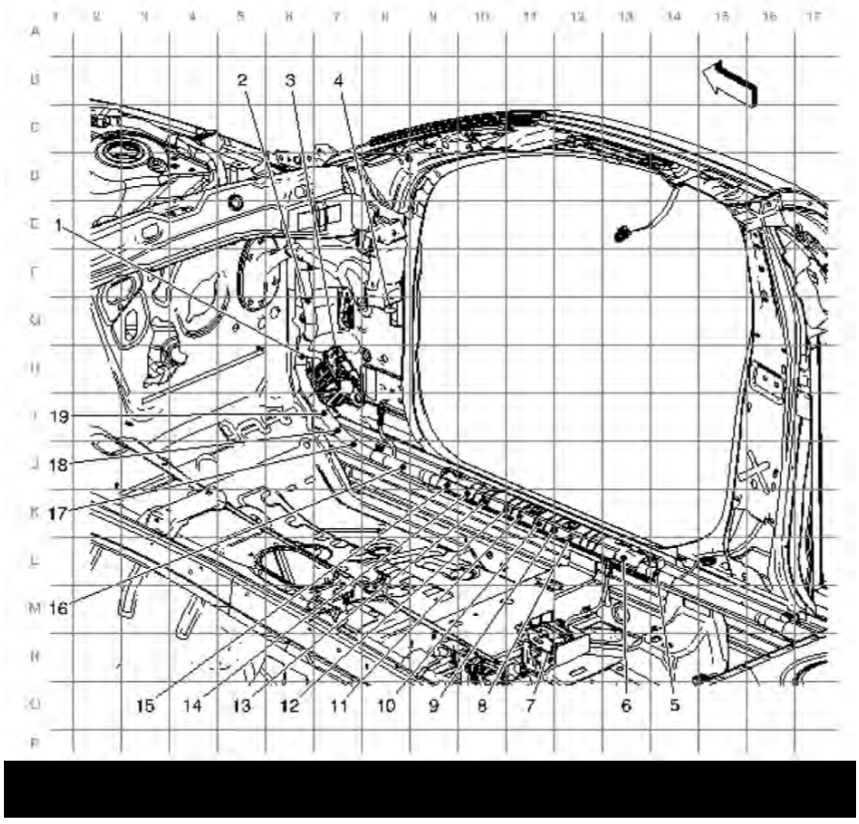
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(14) J307
(15) J305
(16) J304
(17) J310
(18) J308
(19) J312
(20) J223

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Right Side of Passenger Compartment Harness Routing (Ute with LWR)



(1) J221
(2) J303
(3) X209 (Left Hand Drive with UQA)
(4) X500
(5) J323
(6) J318
(7) X323 (A45)
(8) J321
(9) J311
(10) J225
(11) J224
(12) J302
(13) J306

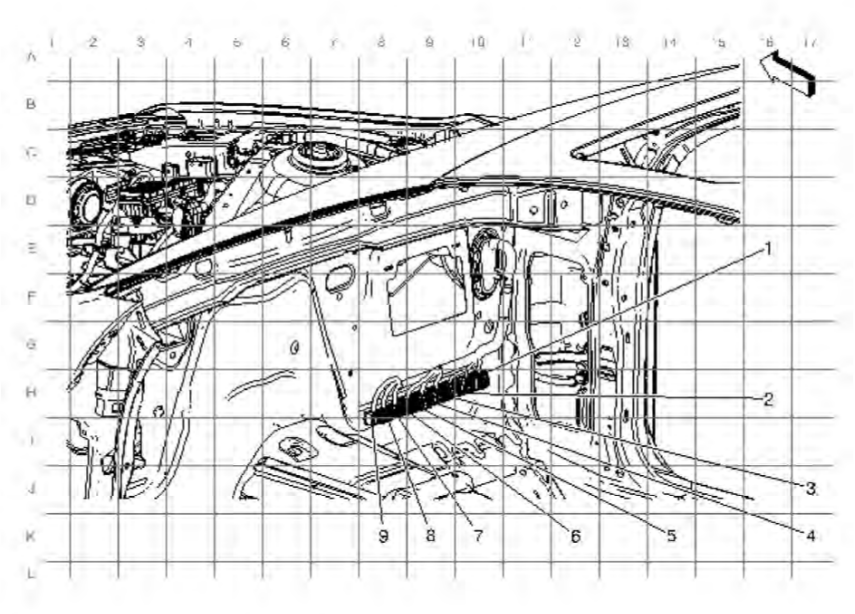
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(14) J307
(15) J305
(16) J310
(17) J308
(18) J312
(19) J223

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Right Front of Passenger Compartment Harness Routing (LHD)



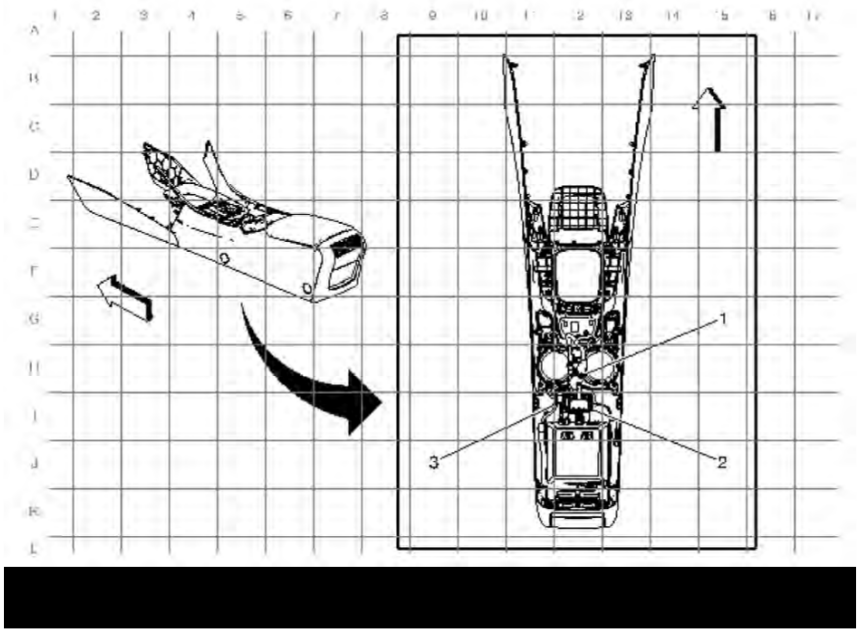
[redacted]

(1) X357
(2) X358
(3) X356
(4) X353
(5) X359
(6) X354
(7) X352
(8) X350
(9) X351

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Center Console Harness Routing

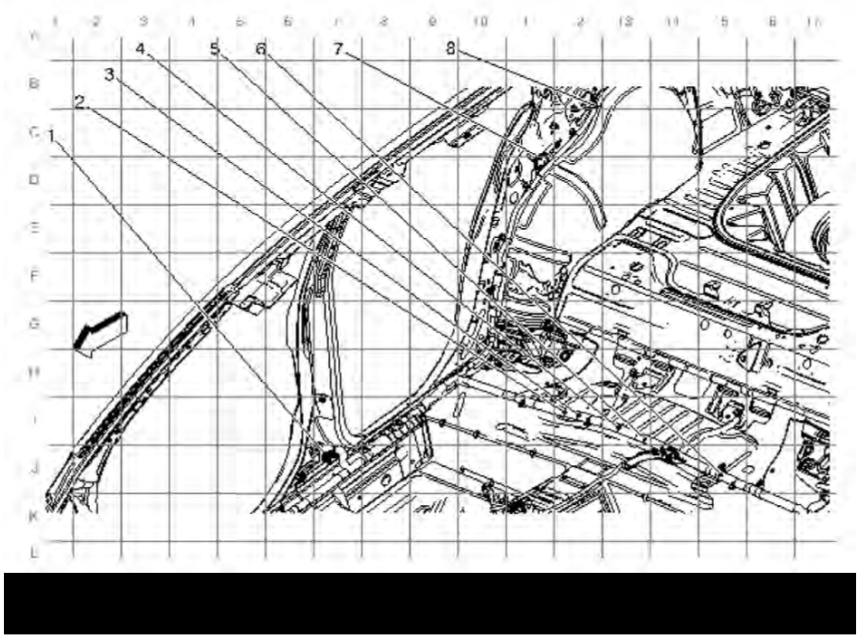


(1) J338
(2) X206 (J77)
(3) X213 (USR)

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Right Center of Passenger Compartment Harness Routing (Sportwagon)

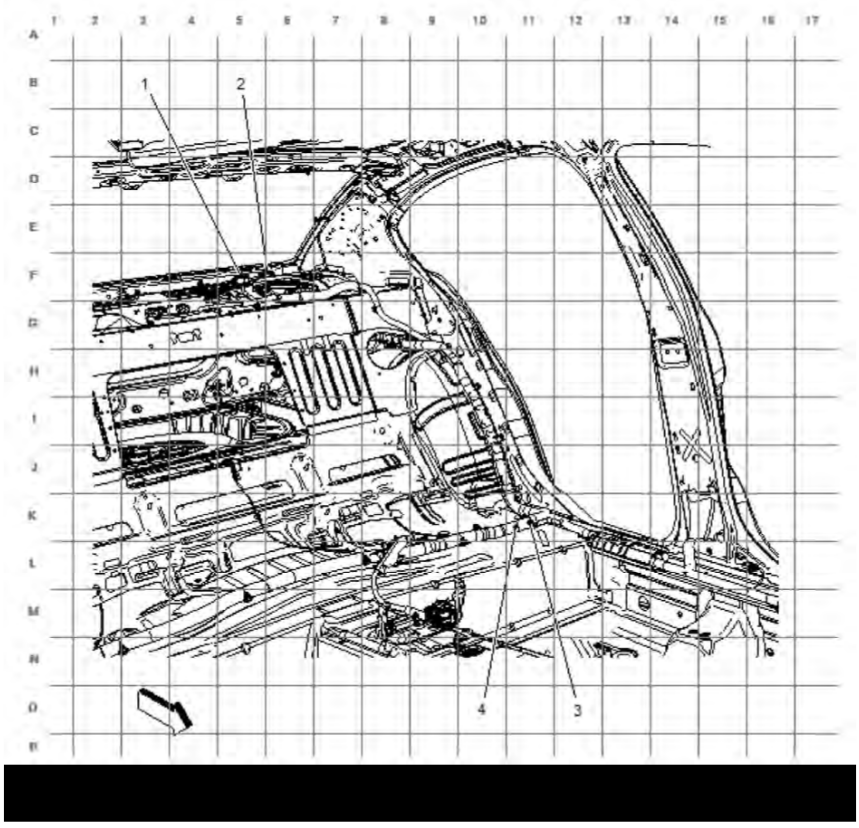


(1) X700 (except F80)
(2) J325
(3) J400
(4) J328
(5) J401
(6) J330
(7) JX300
(8) J336

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Left Side of Passenger Compartment Harness Routing (RHD without UQA)

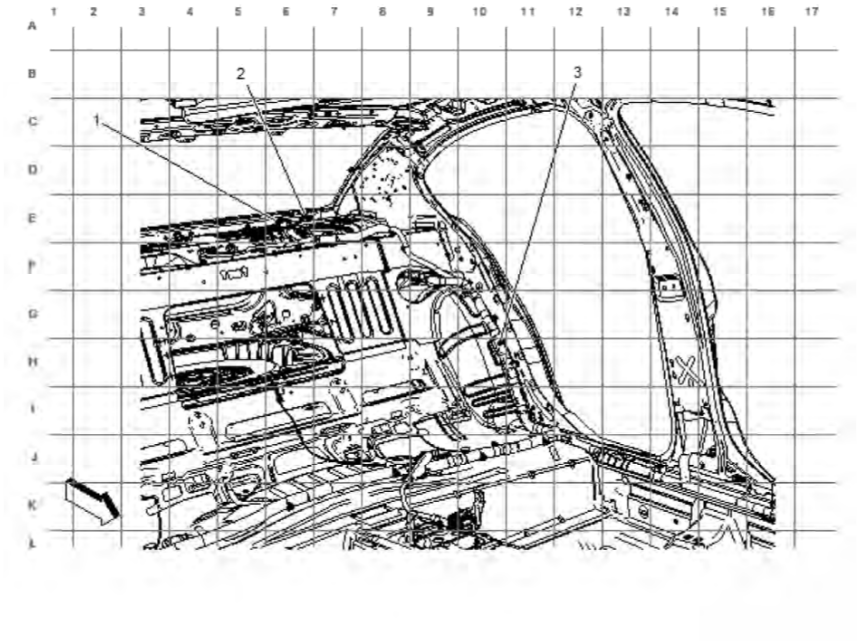


(1) X390
(2) X391
(3) J332
(4) J331

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Left Rear of Passenger Compartment Harness Routing (LFX or LWR)



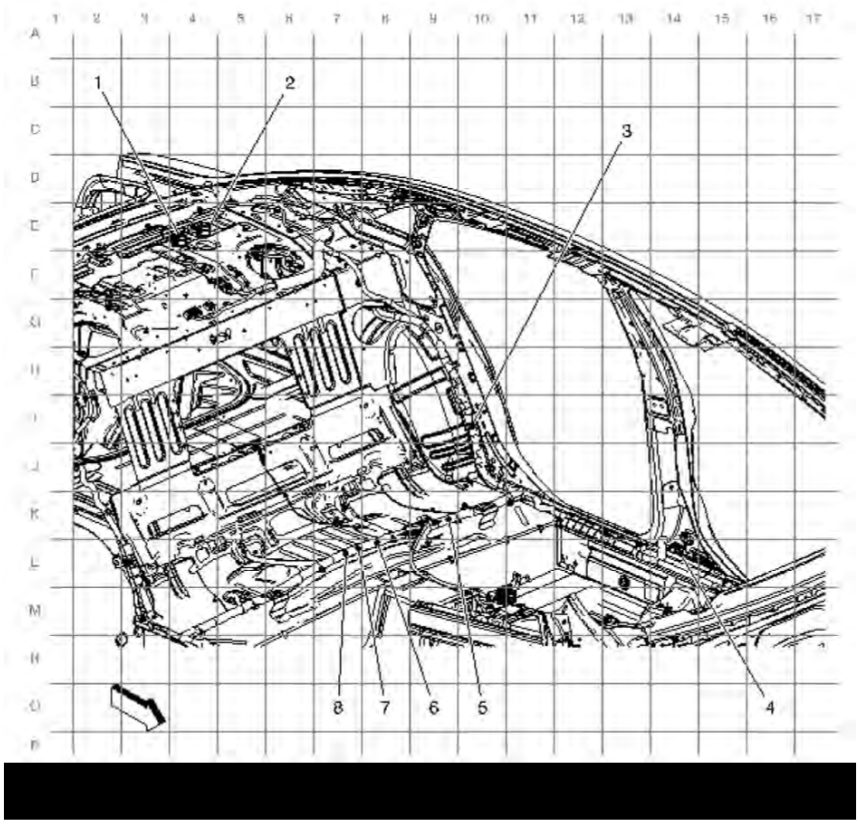
[redacted]

(1) X390
(2) X391
(3) J333

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Left Rear of Passenger Compartment Harness Routing (Long Wheelbase Sedan)

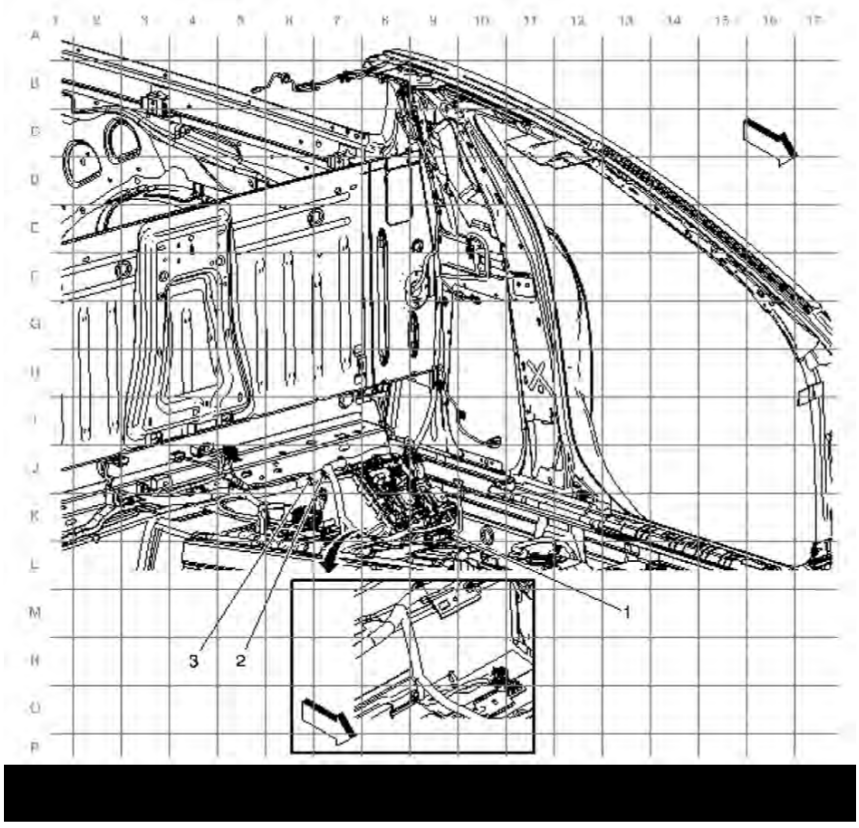


(1) X391
(2) X390
(3) J400
(4) X700 (except F80)
(5) J330
(6) J329 (UWG)
(7) J325
(8) J328

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Left Rear of Passenger Compartment Harness Routing (Ute)

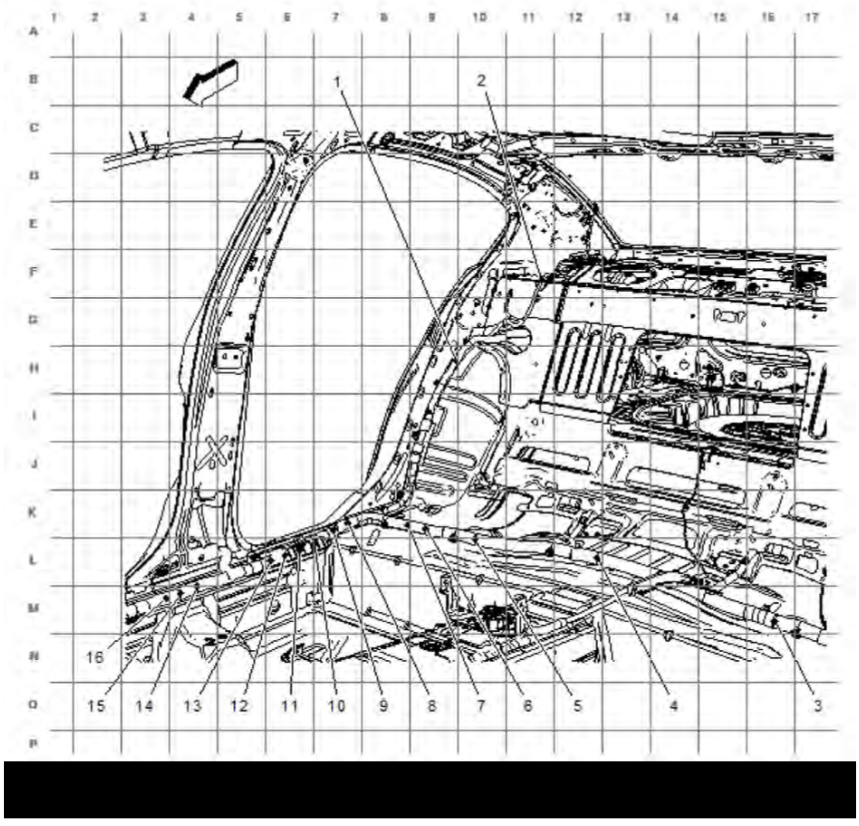


(1) X402
(2) J350 (F80)
(3) J351 (F80)

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Right Side of Passenger Compartment Harness Routing (Short Wheelbase Sedan without UQA)



(1) J334 (F69 with V5B)
(2) J336
(3) J330
(4) J328
(5) J327
(6) J326 (F69 with V5B)
(7) J325
(8) J323
(9) J322 (F19/F69)
(10) J321
(11) J320
(12) J319

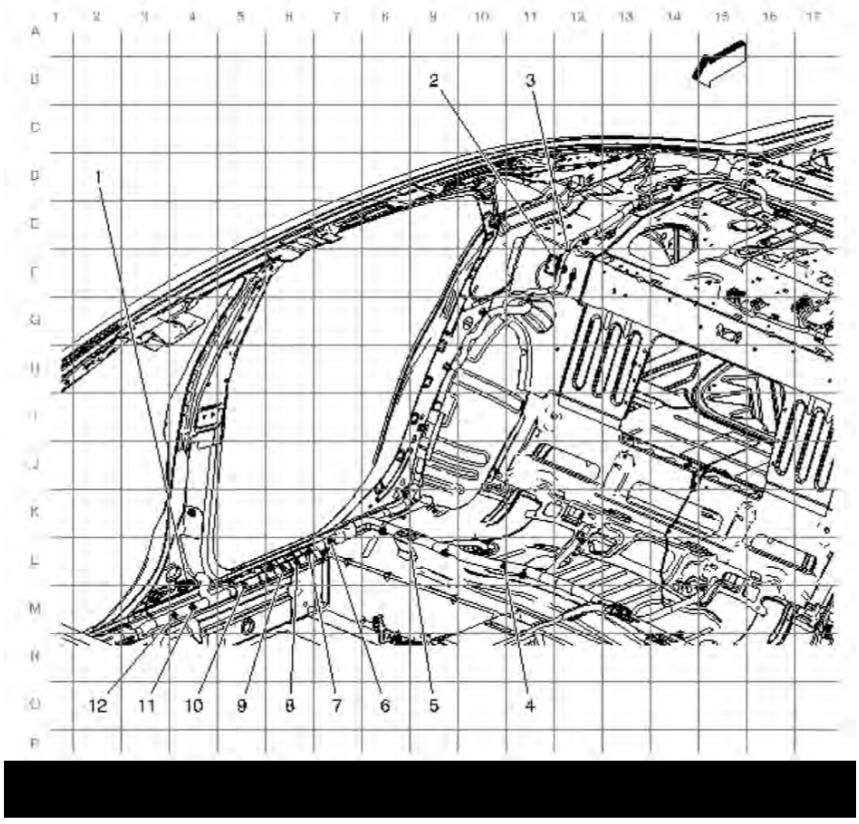
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(13) J318
(14) J316 (F69)
(15) J315
(16) J314

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Right Rear of Passenger Compartment Harness Routing (Long Wheelbase Sedan)

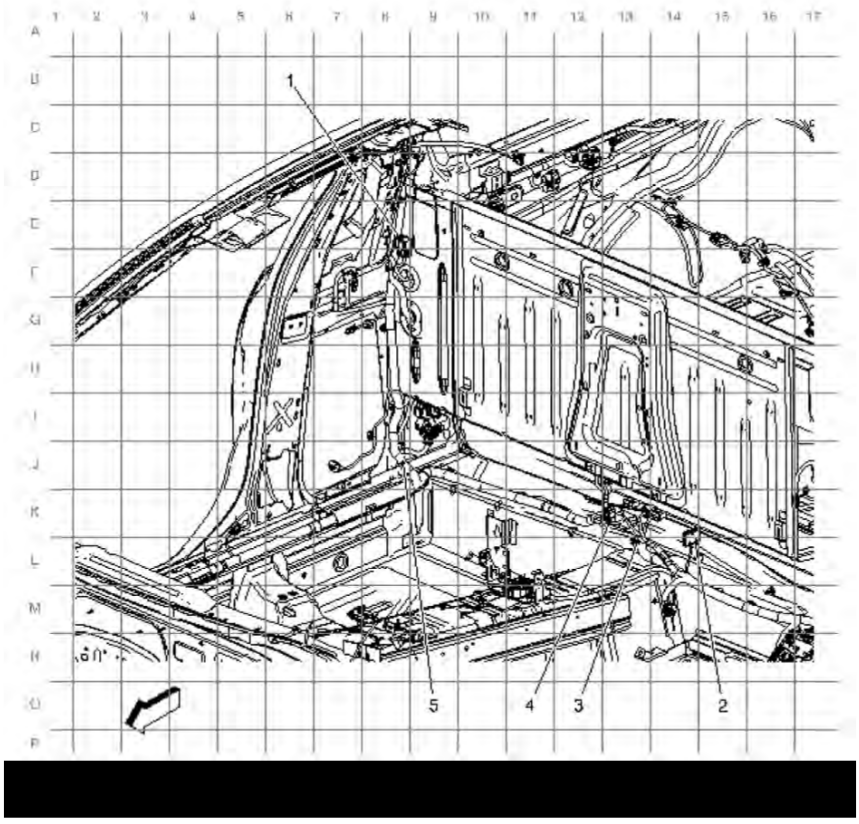


(1) X800 (except F80)
(2) JX400 (F19/F69)
(3) J336
(4) J327
(5) J324 (F19)
(6) J322 (F19/F69)
(7) J320
(8) J315
(9) J323
(10) J321
(11) J318
(12) J224

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Right Rear of Passenger Compartment Harness Routing (Ute)

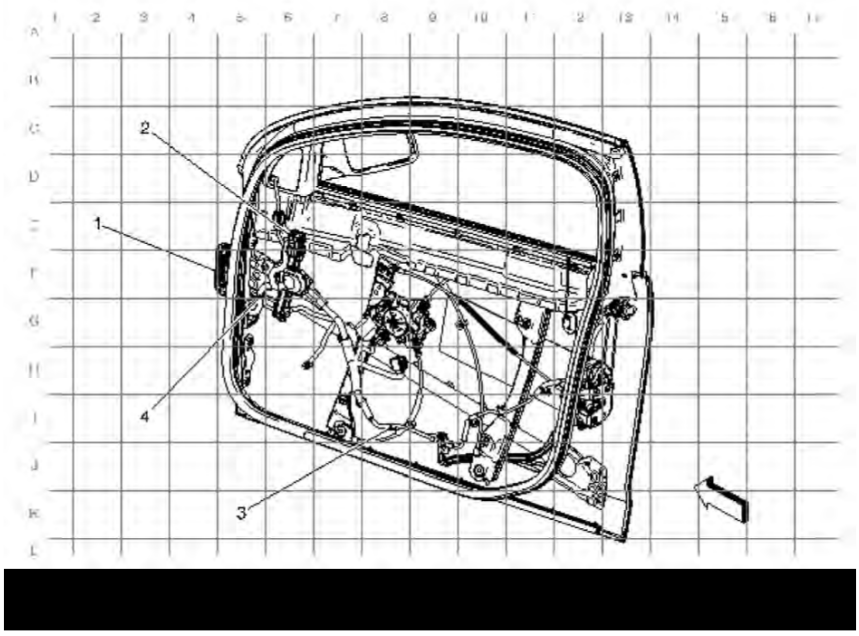


(1) X390
(2) JX300
(3) J401
(4) J400
(5) J336

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Driver Door Harness Routing (RHD)

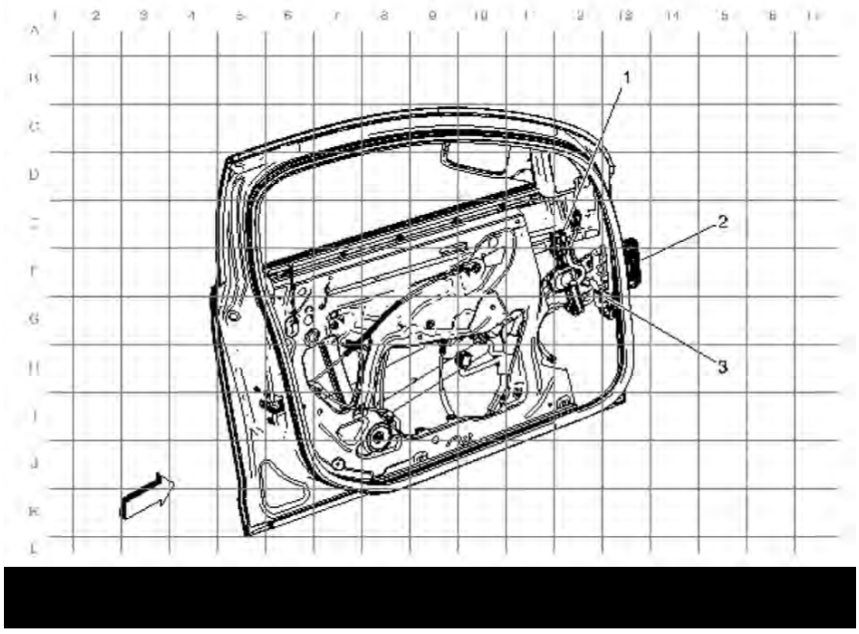


(1) X500
(2) X505 (Left Hand Drive with DP2/DR9/DL6)
(3) J501
(4) J500

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Passenger Door Harness Routing (RHD)

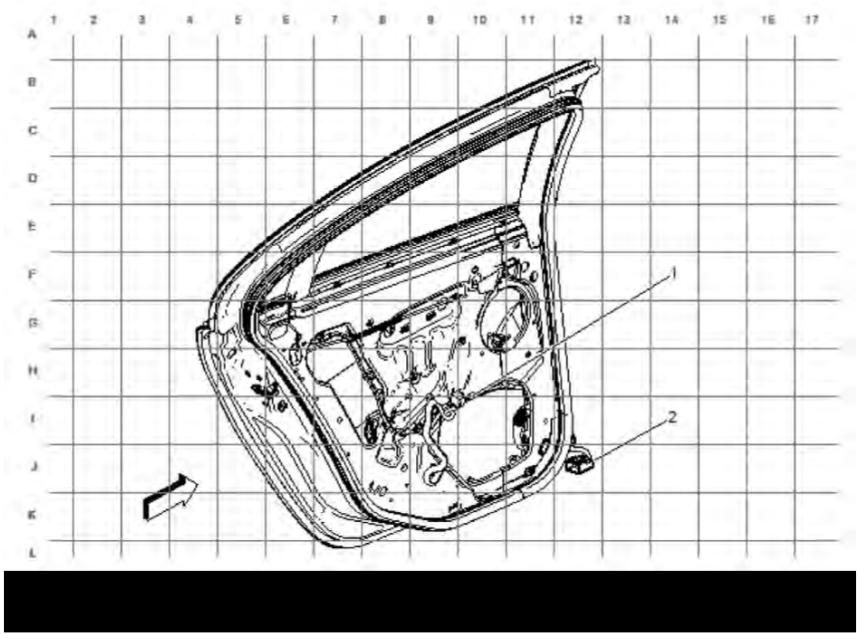


(1) X605 (DM7/DR3)
(2) X600
(3) J600

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Left Rear Door Harness Routing (Short Wheelbase)

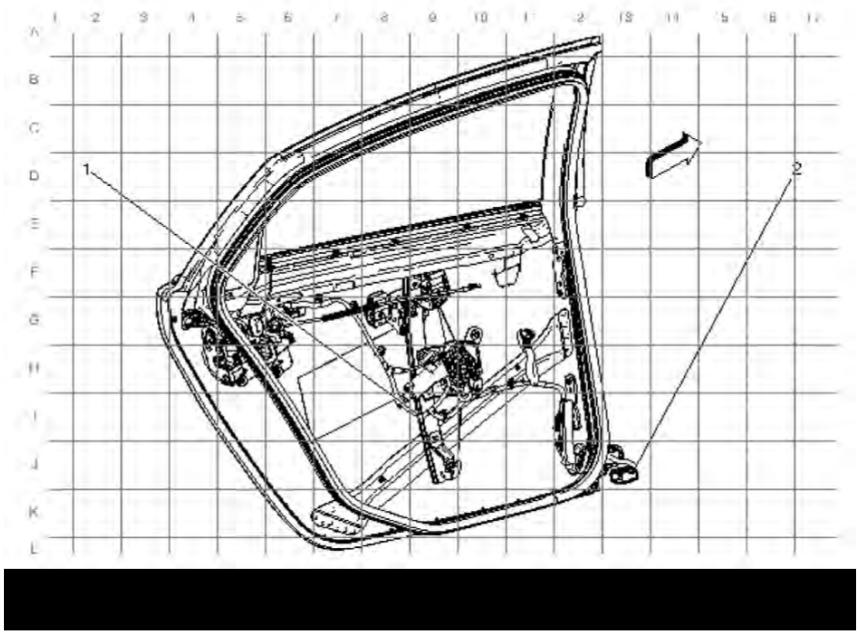


(1) J700
(2) X700 (except F80)

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Left Rear Door Harness Routing (Long Wheelbase Sedan)

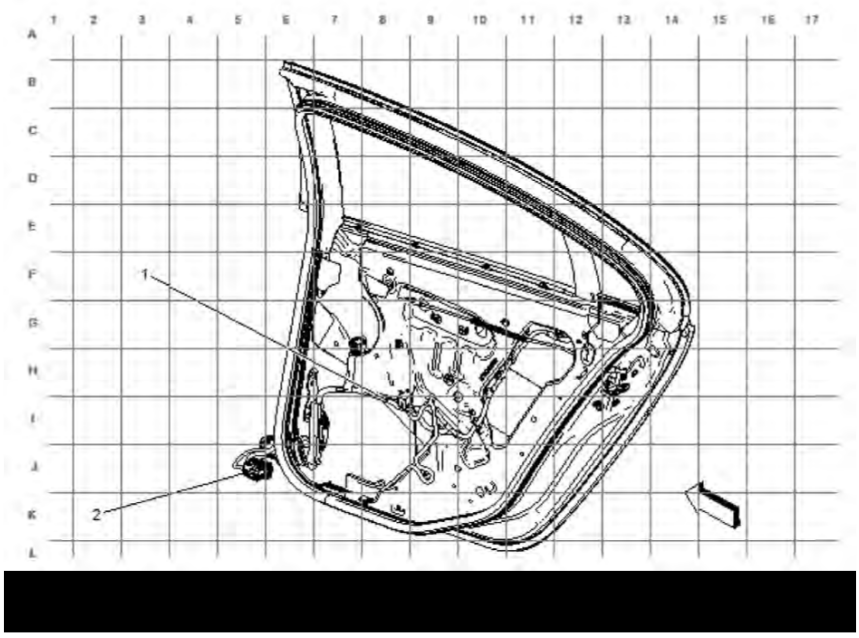


(1) J701
(2) X700 (except F80)

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Right Rear Door Harness Routing (Short Wheelbase)

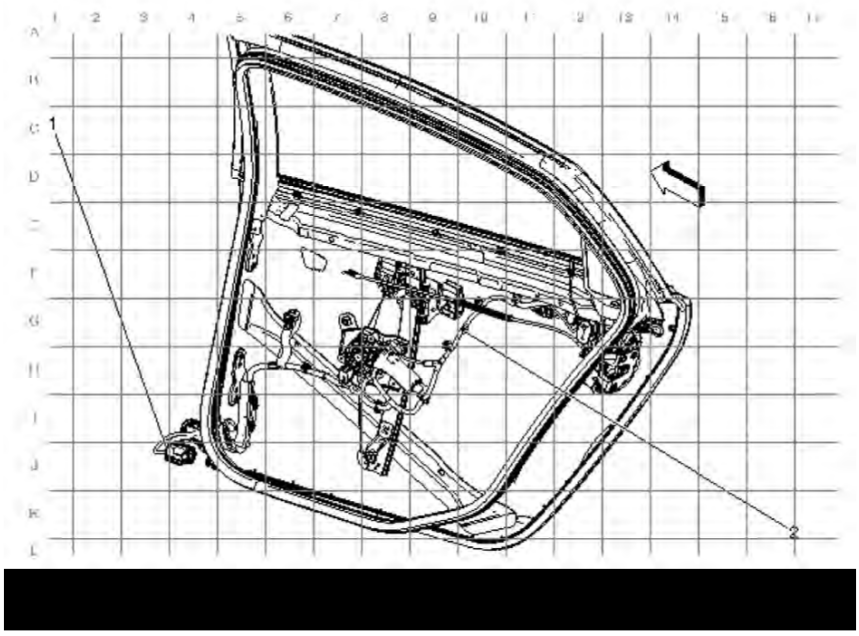


(1) J800
(2) X800 (except F80)

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Right Rear Door Harness Routing (Long Wheelbase Sedan)

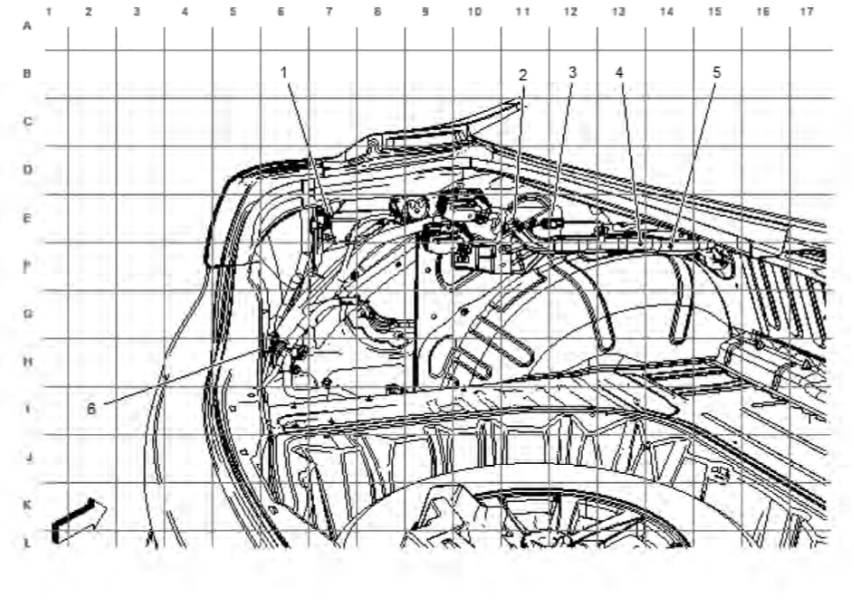


(1) X800 (except F80)
(2) J801

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Left Side of Luggage Compartment (Short Wheelbase Sedan with LFW or LFX)



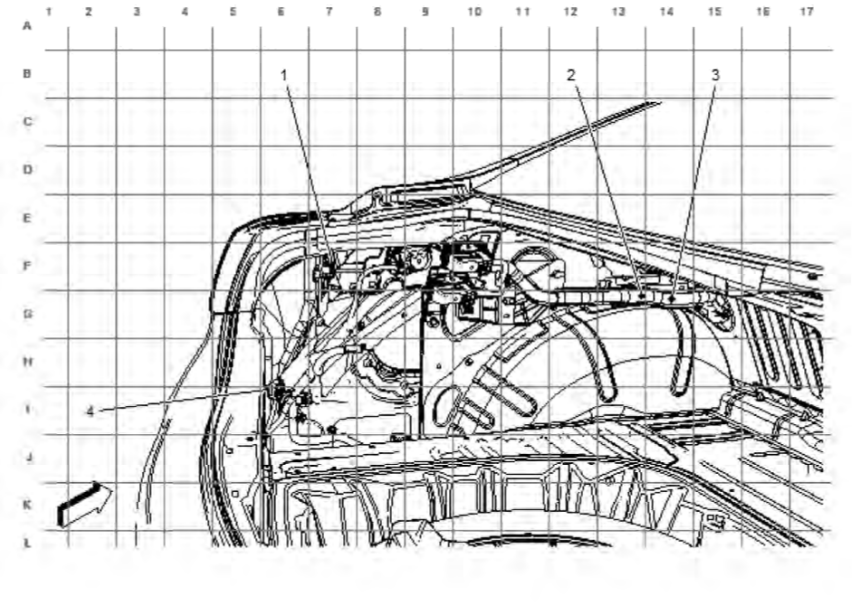
[redacted]

(2) X341 (9C1/9C3)
(3) X456 (9C1/9C3)
(4) J401
(5) J400
(6) X463 (F19/F35/F69 with RZW)

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Left Side of Luggage Compartment (Short Wheelbase Sedan without UQA)



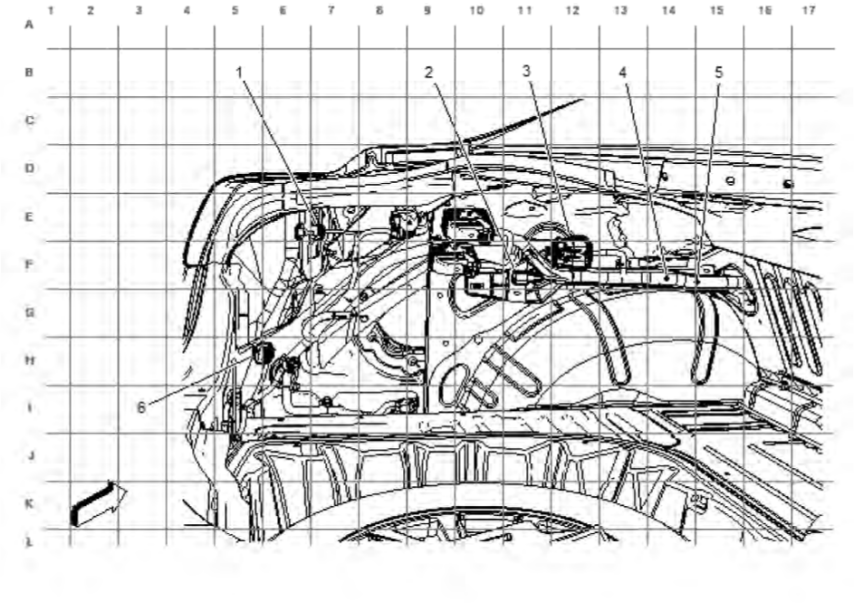
[redacted]

(2) J401
(3) J400
(4) X463 (F19/F35/F69 with RZW)

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Left Side of Luggage Compartment Harness Routing (Short Wheelbase Sedan with L77, LS3, LSA or LWR)



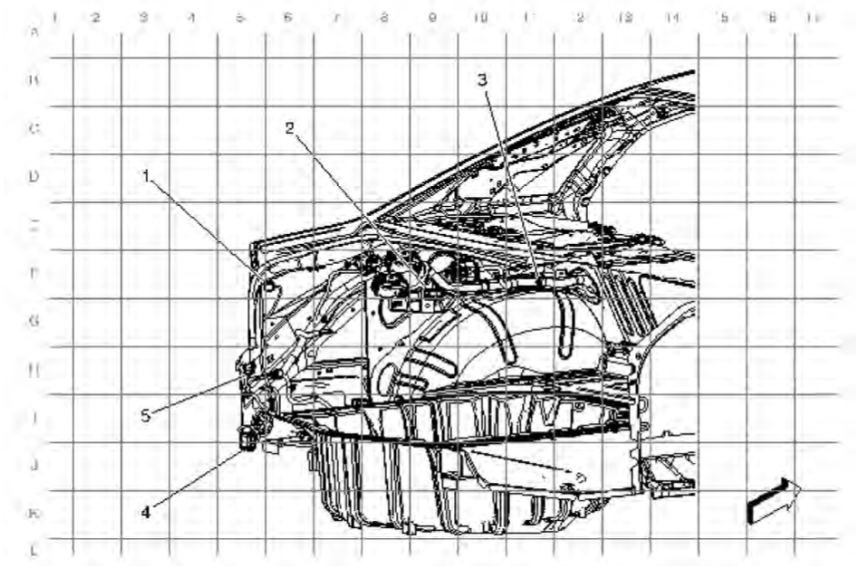
[redacted]

(2) X402
(3) X406 (F55)
(4) J401
(5) J400
(6) X463 (F19/F35/F69 with RZW)

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Left Side of Luggage Compartment Harness Routing (Long Wheelbase Sedan)

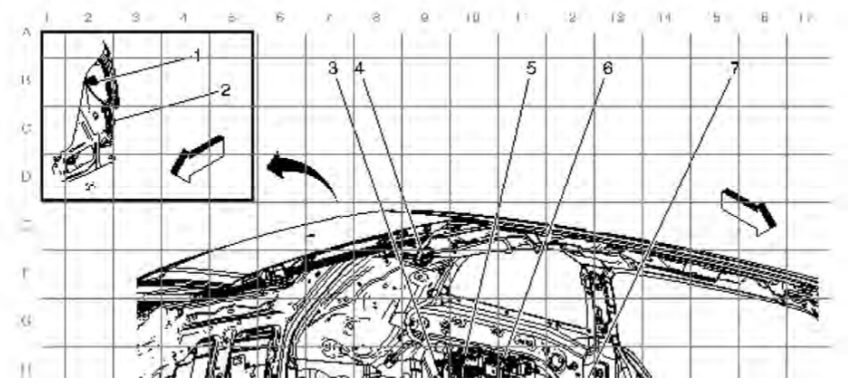


(2) X402
(3) J401
(4) X410 (F19/F69 with RZW)
(5) X463 (F19/F35/F69 with RZW)

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Left Side of Luggage Compartment Harness Routing (L1-L2 Sportwagon)



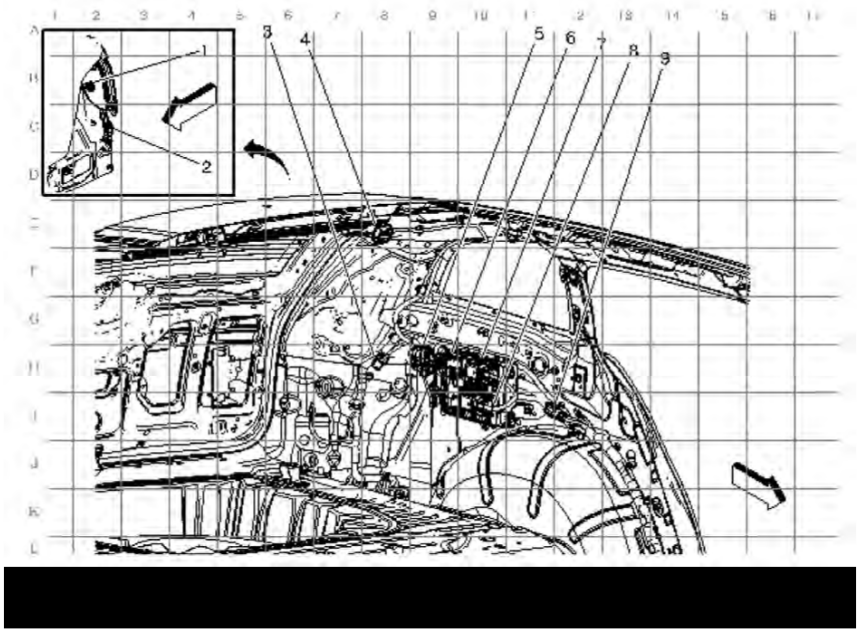
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ERROR: undefined
OFFENDING COMMAND: ‘~

STACK:

cardiagn.com

Left Side of Luggage Compartment Harness Routing (L3 Sportwagon)

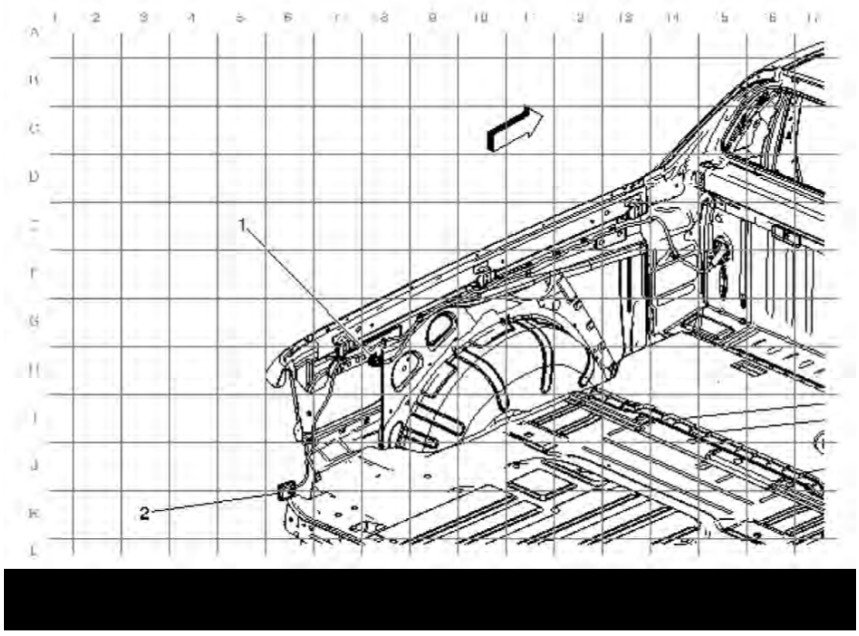


(2) X410 (F19/F69 with RZW)
(3) X463 (F19/F35/F69 with RZW)
(4) X430
(5) X406 (F55)
(6) X53A Fuse Block - Rear Body
(7) X53A Fuse Block - Rear Body
(8) X53A Fuse Block - Rear Body
(9) X402

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Left Side of Luggage Compartment Harness Routing (Ute)

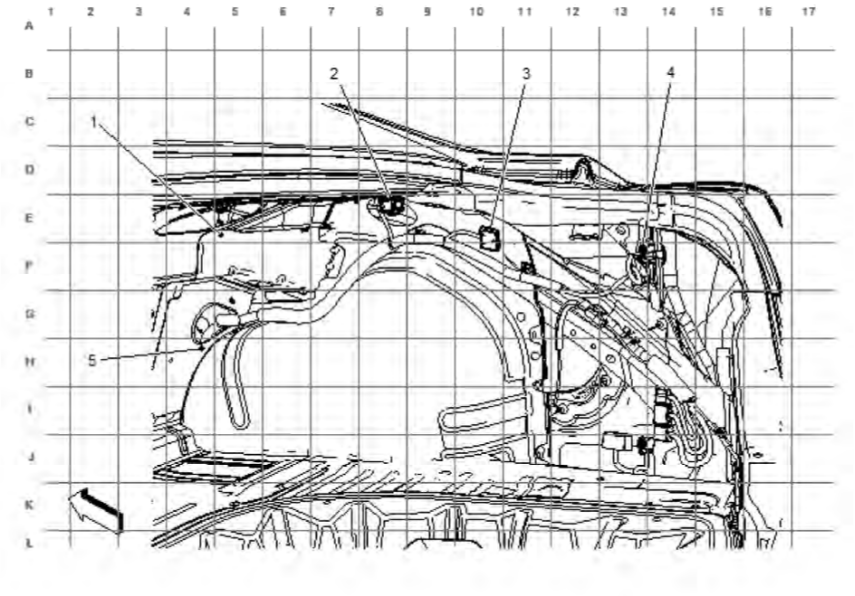


(1) X462 (F80 with RZW)
(2) X410 (F19/F69 with RZW)

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Right Side of Luggage Compartment Harness Routing (Short Wheelbase Sedan)



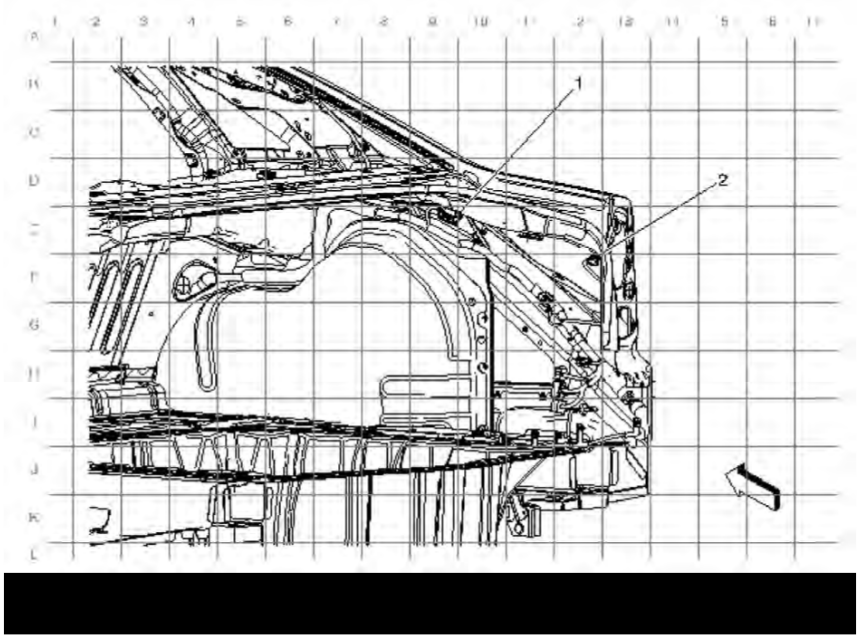
[redacted]

(1) J336
(2) X400 (F69)
(3) JX400 (F19/F69)
(5) J334 (F69 with V5B)

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Right Side of Luggage Compartment Harness Routing (Long Wheelbase Sedan)

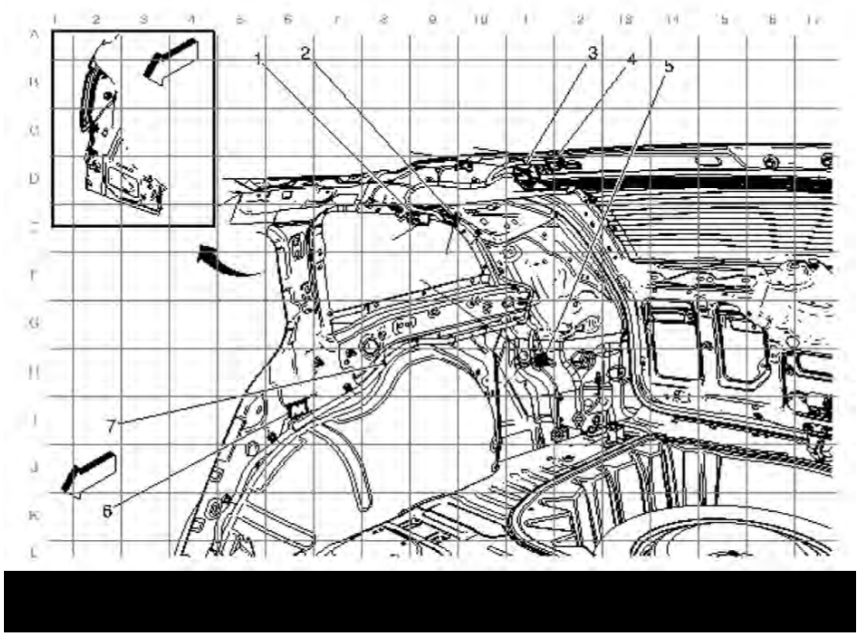


(1) X401 (F19 with UVC)

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Right Side of Luggage Compartment Harness Routing (Sportwagon)

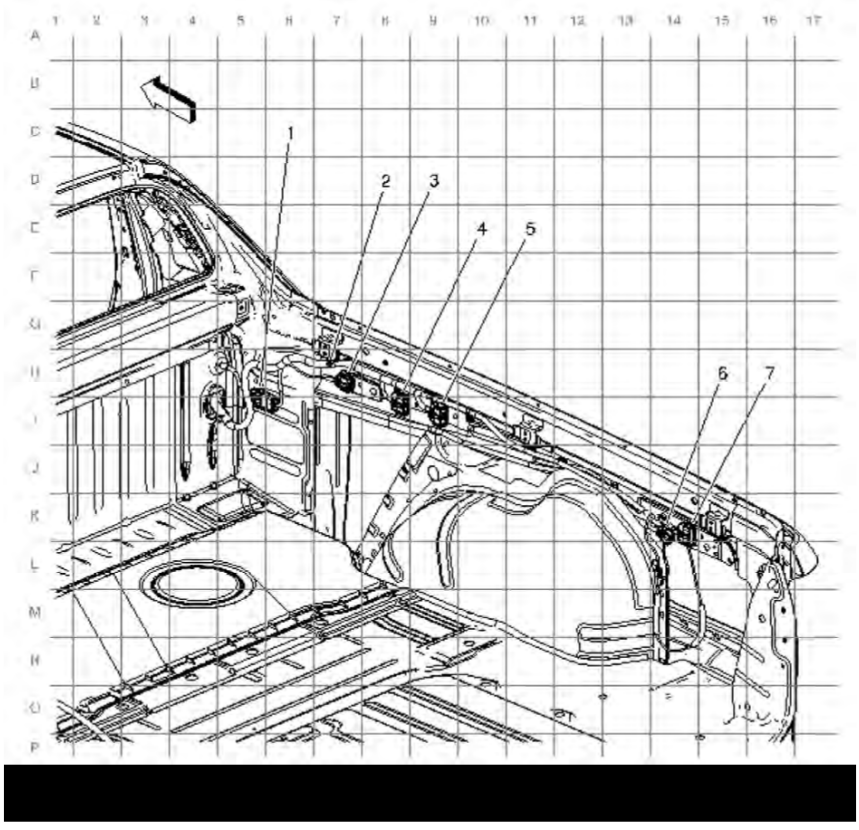


(1) X390
(2) X381 (F35)
(3) X431 (F35)
(4) X372 (F35)
(5) X440 (F35)
(6) JX300
(7) J336

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Right Side of Luggage Compartment Harness Routing (Ute) - (1 of 2)

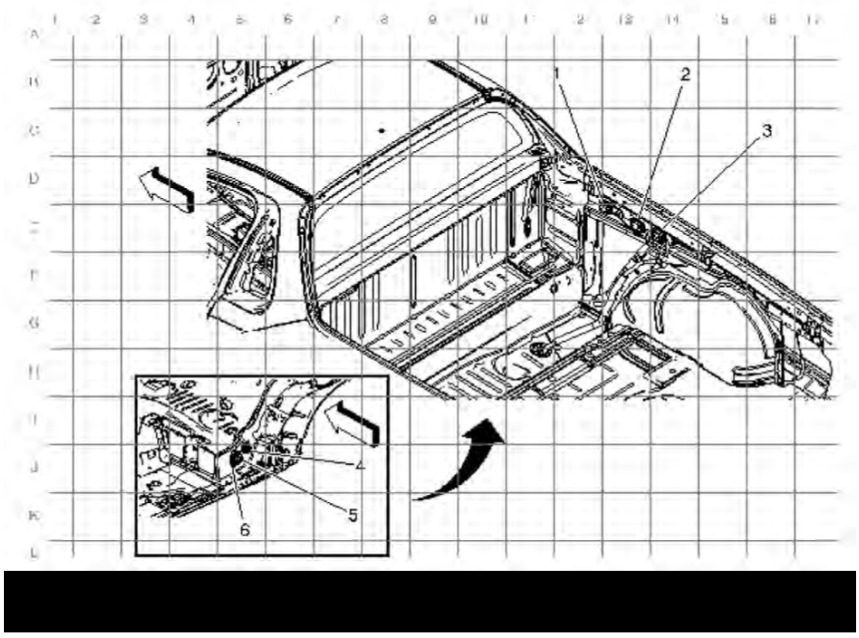


(1) X451 (F80 with UVC)
(2) J335
(6) X421 (F80 with E95)
(7) X461 (F80 with UVC)

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Right Side of Luggage Compartment Harness Routing (Ute) - (2 of 2)

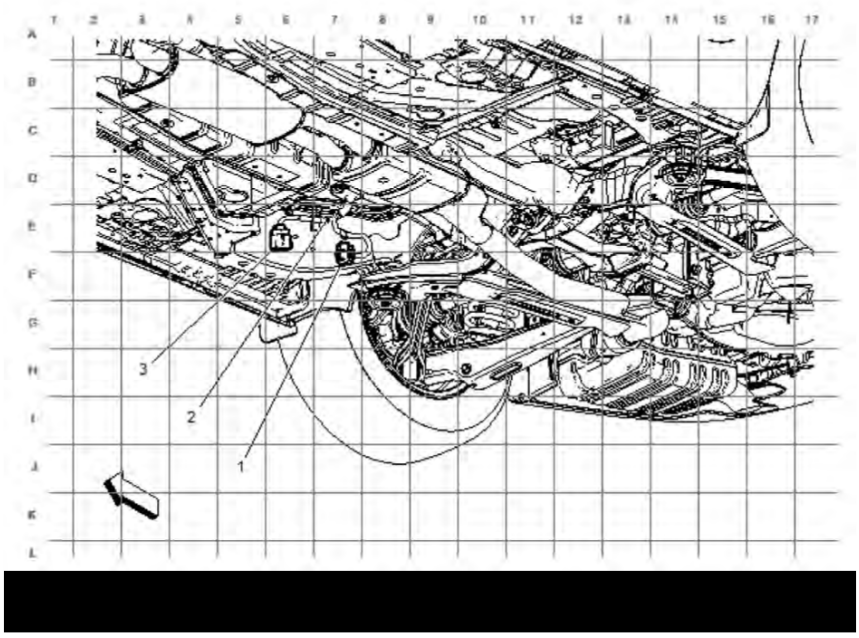


(4) X430
(5) X445 (F80)

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Fuel Tank Harness Routing (LWR)

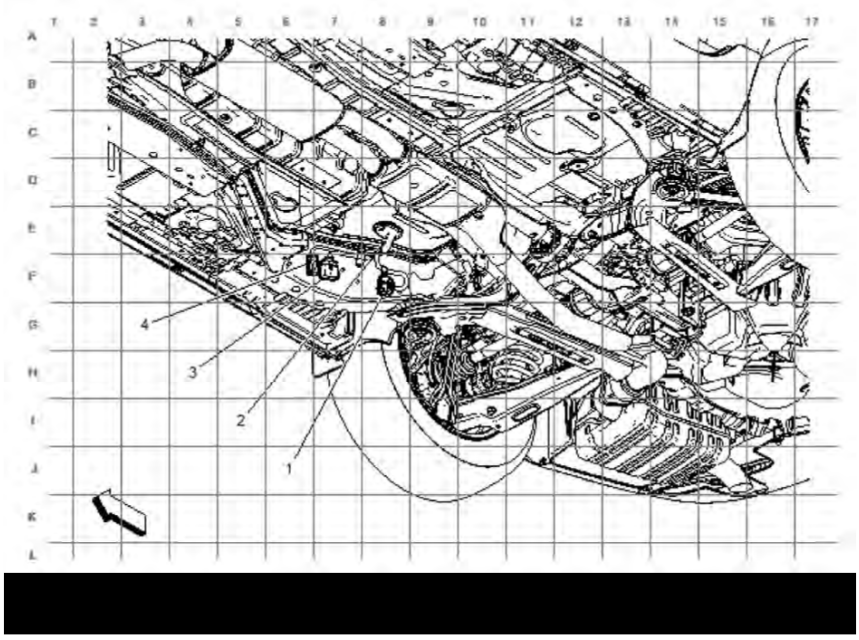


(2) J335
(3) X345 (J77)

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Fuel Tank Harness Routing (Short Wheelbase or Sportwagon without LWR)

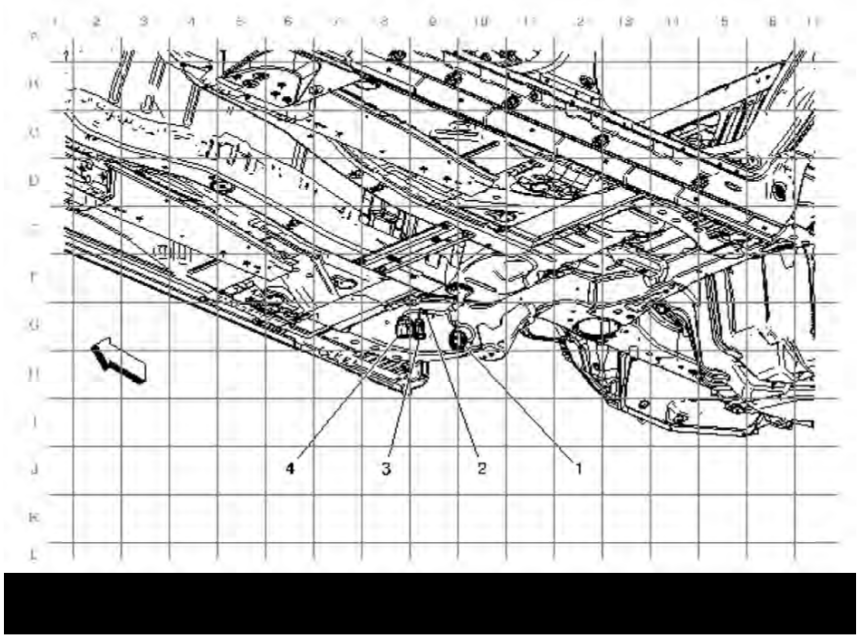


(1) X315
(2) J335
(3) X345 (J77)
(4) X346

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Fuel Tank Harness Routing (Long Wheelbase Sedan)

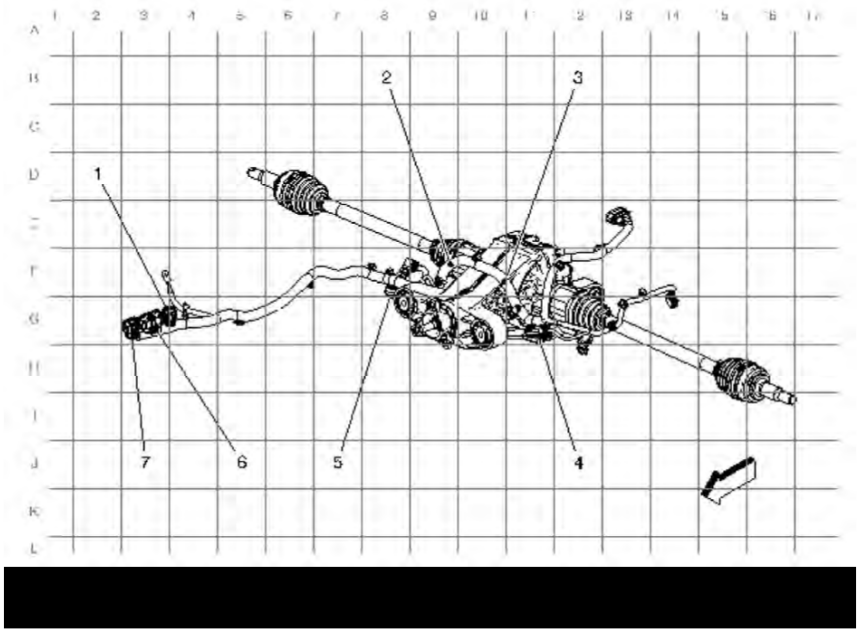


(1) X315
(2) J335
(3) X330
(4) X345 (J77)

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Rear Axle Harness Routing (HSV)

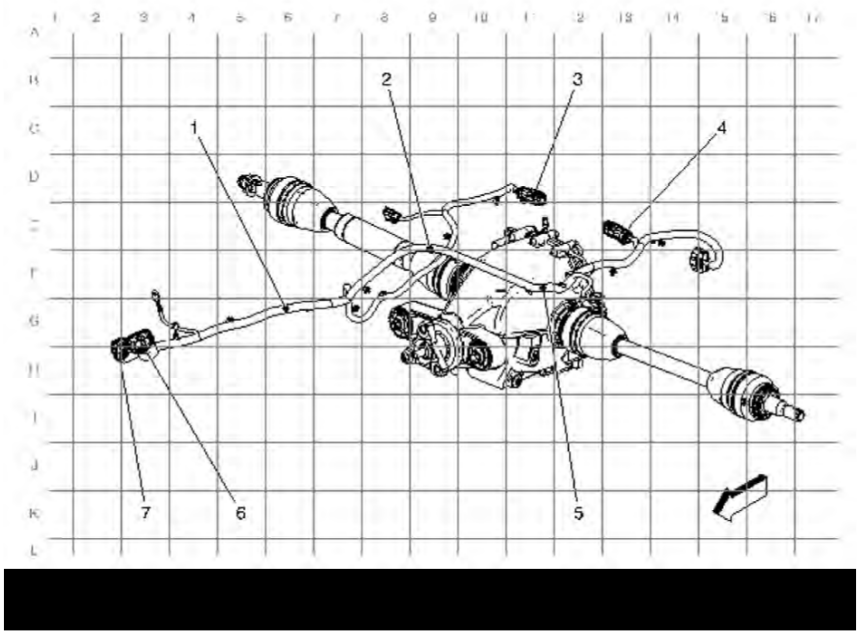


(1) X330
(2) J341
(3) J340
(4) X343 (F55)
(5) X344 (F55)
(6) X345 (J77)
(7) X346

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Rear Axle Harness Routing (LSA)

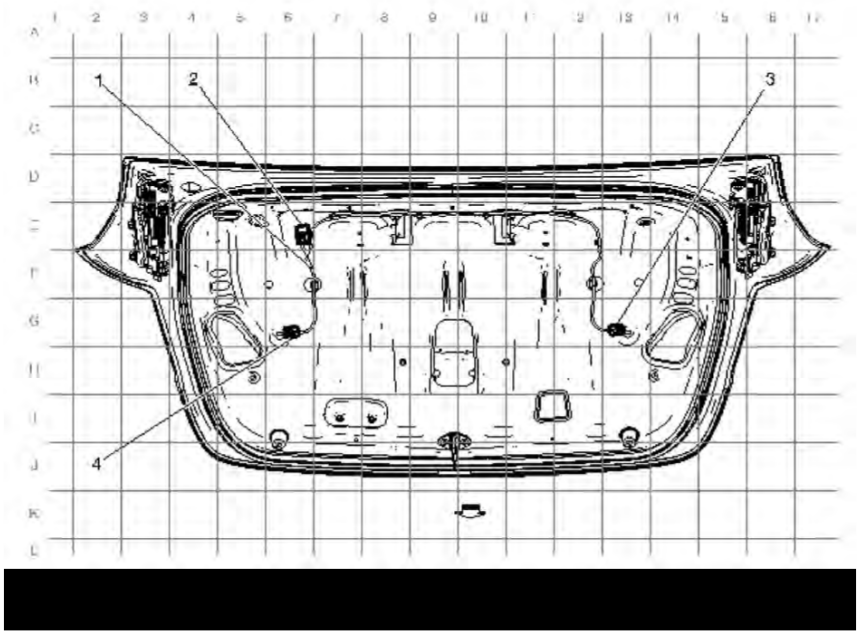


(1) J335
(2) J341
(3) X344 (F55)
(4) X343 (F55)
(5) J340
(6) X345 (J77)
(7) X346

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Rear Compartment Lid Harness Routing (Short Wheelbase Sedan)

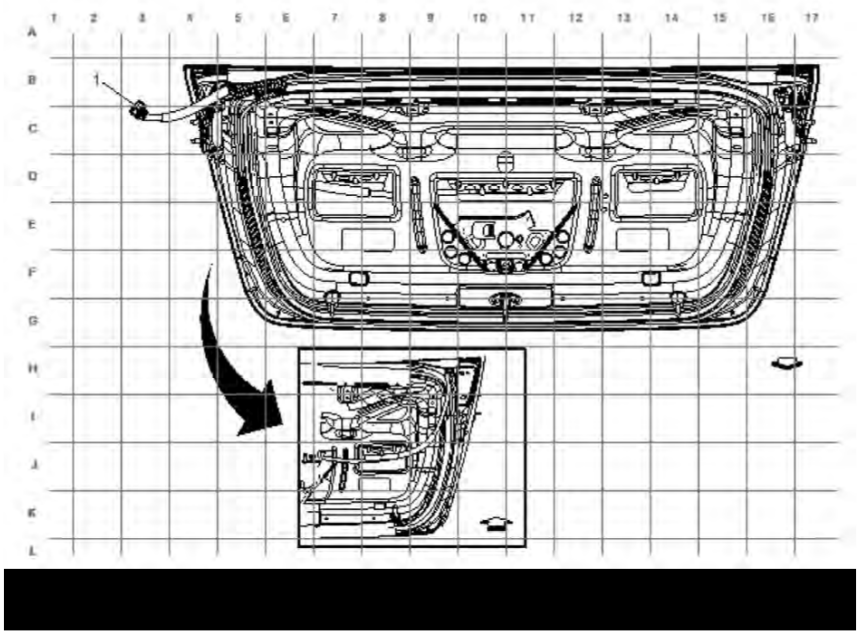


(1) J900
(2) X900 (F69)
(3) X970 (F69)
(4) X971 (F69)

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Rear Compartment Lid Harness Routing (Long Wheelbase Sedan)

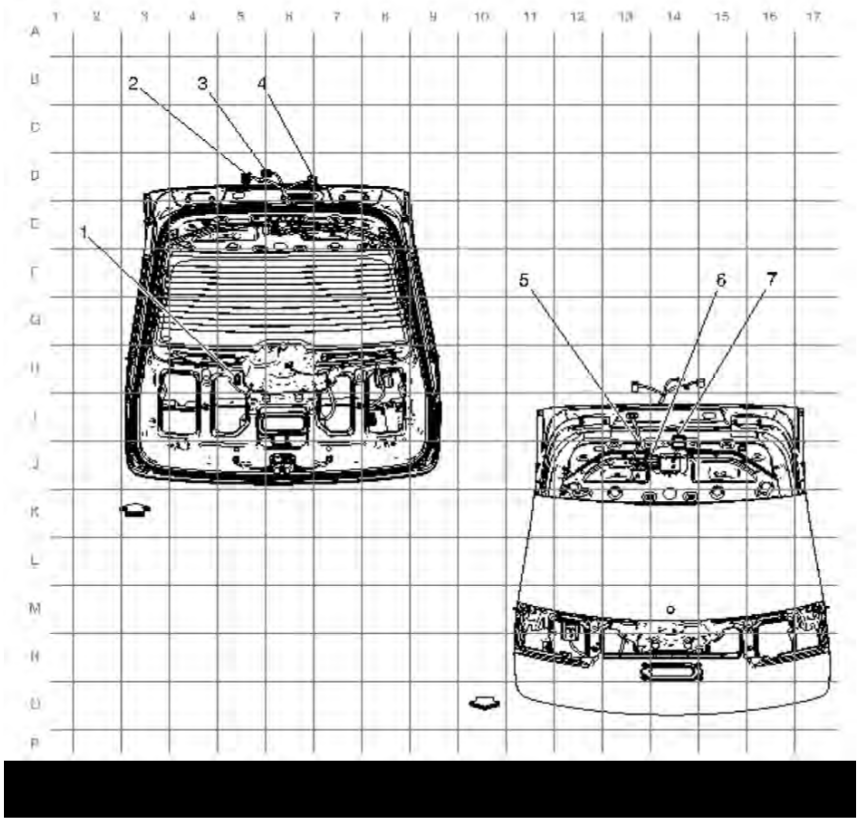


(1) X401 (F19 with UVC)

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Liftgate Harness Routing (Sportwagon)

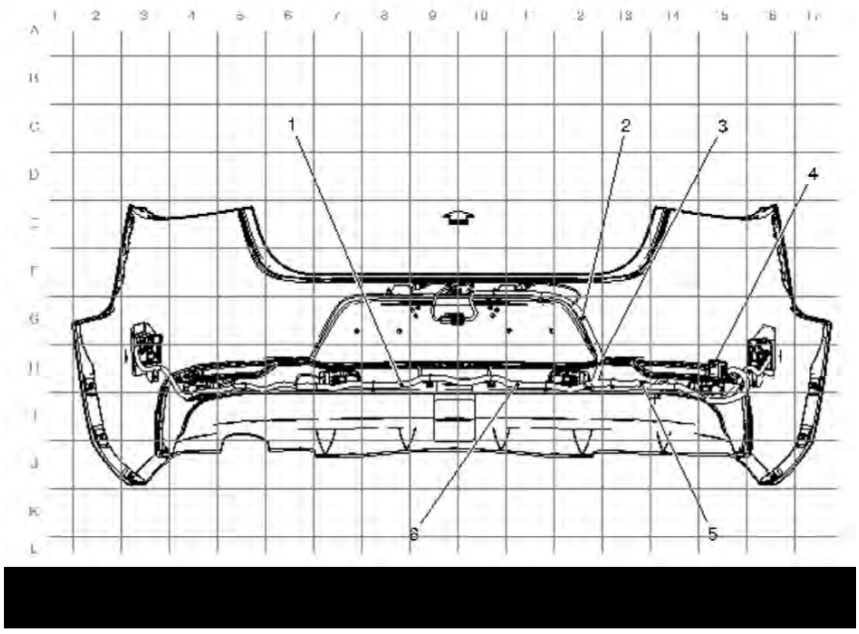


(1) X925 (F35)
(2) X431 (F35)
(3) X372 (F35)
(4) X430
(5) J901 (F35)
(6) X930 (F35)
(7) X932 (F35)

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Rear of Vehicle Harness Routing (Short Wheelbase Sedan)

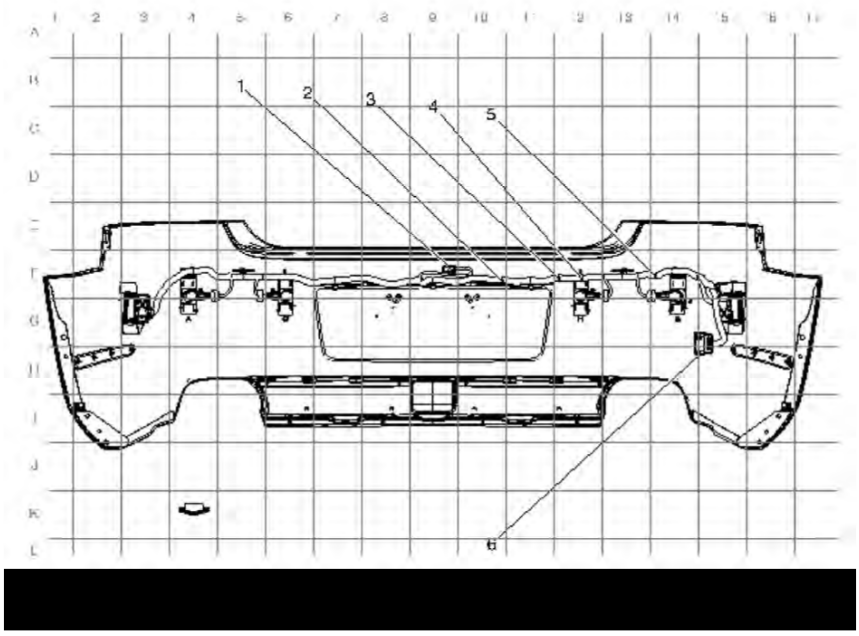


(1) J415
(2) J413
(3) J412
(4) X410 (F19/F69 with RZW)
(5) J410
(6) J411

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Rear of Vehicle Harness Routing (Long Wheelbase Sedan)

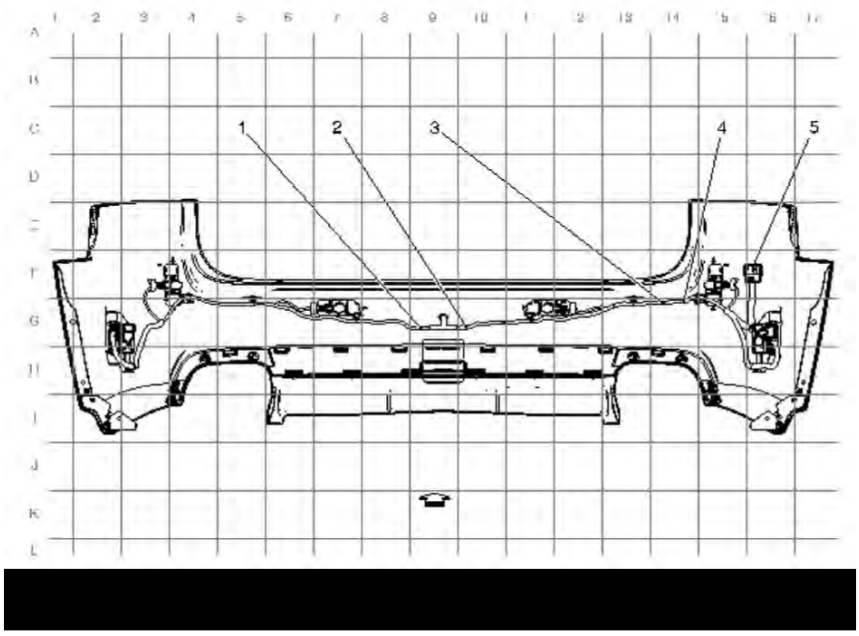


(1) X488 (F19)
(2) J411
(3) J415
(4) J410
(5) J143 (L77/LS3/LSA)
(6) X410 (F19/F69 with RZW)

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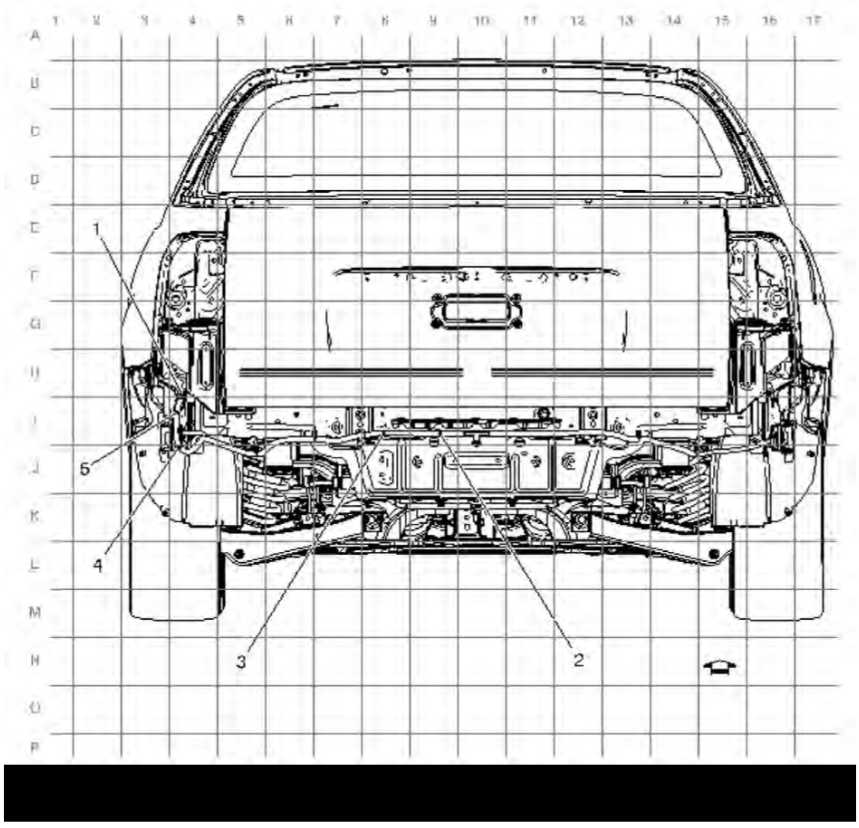
Rear of Vehicle Harness Routing (Sportwagon)



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Rear of Vehicle Harness Routing (Ute) - (1 of 2)

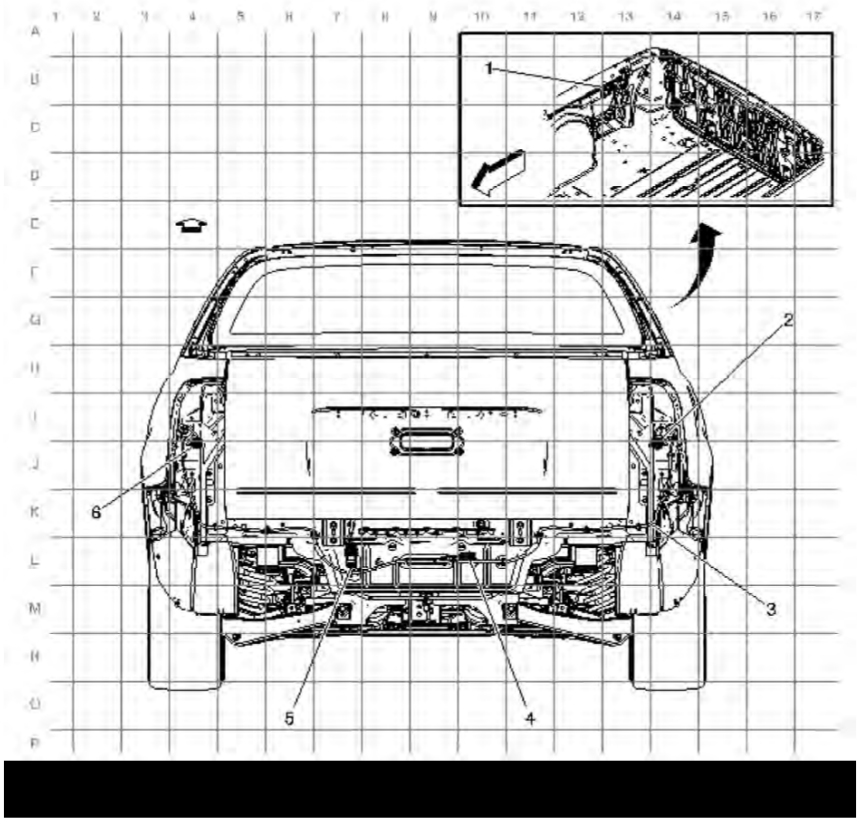


(1) J410
(2) J411
(3) J410
(4) J415
(5) J413

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Rear of Vehicle Harness Routing (Ute) - (2 of 2)



(1) X461
(3) J420
(4) X425
(5) X426 (UVC)

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How to Use Electrical Schematics

Information Overview

The following explains some of the key parts of the GM wiring diagrams. Included are:

- Color Abbreviations
- Electronic Delivery Navigation Features

Color Abbreviations

The following sequence is used when depicting wire colors:

1. Color modifier of the wire, such as light or dark (if applicable)
2. Primary color of the wire
3. Secondary color of the wire (tracer/stripe)

Wire insulation and connector body colors in schematic information are abbreviated with a two character code as listed below.

Abbreviation	Color	Abbreviation	Color
AM	Amber	OG	Orange
BARE	Bare	PK	Pink
BG	Beige	PU	Purple
BK	Black	RD	Red
BN	Brown	RU	Rust
BU	Blue	SR	Silver
CL	Clear	TL	Teal
CR	Cream	TN	Tan
CU	Curry	TQ	Turquoise
GD	Gold	VT	Violet
GN	Green	WH	White
GY	Gray	YE	Yellow
NA	Natural	—	—
Color Modifiers			
L	Light	D	Dark

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Additionally, industry standard cable types are not identified by color, but are listed by cable type as follows:

Abbreviation	Cable Type
COAX	Coax Cable
FW	Flat Wire
HDMI	High Definition Multimedia Interface
TWINAX	Twinax Cable
USB	Universal Serial Bus

Electronic Delivery Navigation Features

The schematics information has been enhanced for electronic delivery and the following explains the features that are now available.

The enhanced features are categorized into three types:

- Mouse-overs, which are active when the mouse pointer is placed over the activated area
- Hotspots (links to other information), which are active by placing the mouse pointer over the activated area and clicking the left mouse button
- Hotspot Target Highlighting, which is when linking from one graphic to another graphic, the point of interest will be highlighted in red. This feature is available only when linking from a schematic graphic to a component locator/harness routing view, or when linking from a schematic to an electrical center identification view

Depending on the amount of information that is linked to from a hotspot, the mouse pointer changes shape.



1. Basic mouse pointer – this means there are no hotspots available, but there may be a mouse-over available.
2. Single hand pointer – this means there is a mouse-over and hotspot link to a single document. Clicking on these areas will automatically take you to the target link.
3. Multiple hand pointer – this means there is a mouse-over and hotspot link to a multiple document. Clicking on these areas will bring up a pop-up menu that will display all

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available links. You may then select one of the available links clicking on one of the displayed links.

To see which areas of the schematic information have an available hotspot and/or a mouse-over, select and hold down the highlight hotspots button of the cgm viewer. This will highlight all areas of the graphic that have an available hotspot and/or a mouse-over in red. Once the button is released, the areas of the graphic will no longer be highlighted.





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Each type of schematic related information has some level of these features. The schematic related information consists of the following information types:

- Schematics
- Connector End Views
- Component Locator Views
- Harness Routing Views
- Electrical Center Identification Views
- Master Electrical Component List
- Master Electrical Schematic Icons
- Schematics RPO Code List
- Circuit Number/Wire Colors
- Wire Lines
- Connector Cavities

Schematics

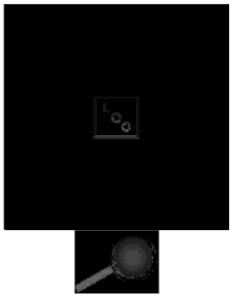
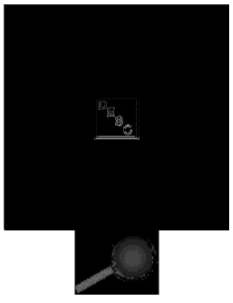
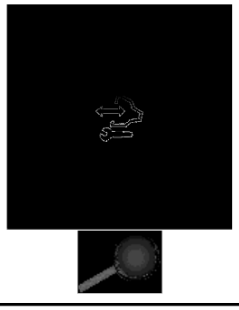
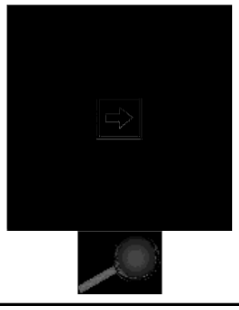
An electrical schematic hotspot is an activated icon or area in the schematic that can be cursor selected to link to additional information. Additionally, each of the hotspots in schematics has a mouse-over.

Hotspots in schematics are categorized into three types:

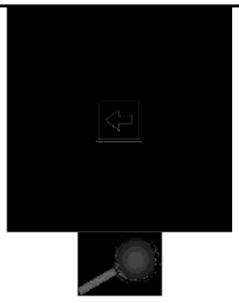
- Schematic Navigational Icon Hotspots
- Schematic Informational Icon Hotspots
- Schematic Navigational Hotspots

Schematic Navigational Icon Hotspots

The following lists icons that may appear on the upper right corner of a schematic that have an available mouse-over and hotspot.

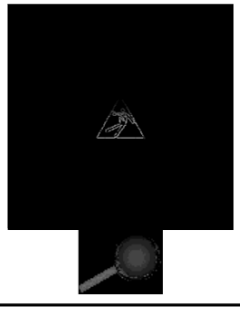
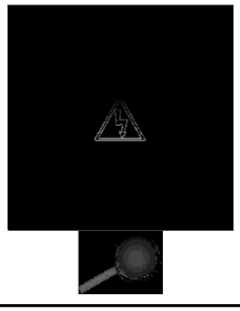
Icon	Mouse-Over	Hotspot Link to Information
	Master Electrical Component List	Links to the vehicle Master Electrical Component List that shows all electrical components and harness items on the vehicle and has links to any available views
	Title of the subsystem description and operation	Links to the System Description and Operation
	Control Module References	Links to the Control Module References table
	Title of the next schematic page	Links to the next schematic of the subsystem schematics
	Title of the previous schematic page	Links to the previous schematic of the subsystem schematics

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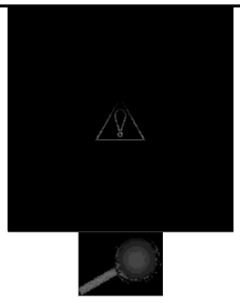
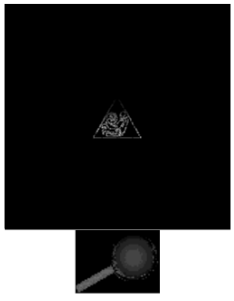
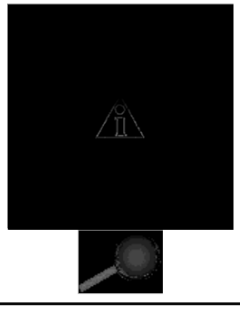
Icon	Mouse-Over	Hotspot Link to Information
		

Schematic Informational Icon Hotspots

The following lists the icons that may appear anywhere on a schematic that have an available mouse-over and hotspot.

Icon	Mouse-Over	Hotspot Link to Information
Danger 	Master Electrical Schematic Icons	Links to the vehicle Master Electrical Schematic Icons list that describes the message for the icon.
High Voltage 	Master Electrical Schematic Icons	Links to the vehicle Master Electrical Schematic Icons list that describes the message for the icon.
Caution	Master Electrical Schematic Icons	Links to the vehicle Master Electrical Schematic Icons list that describes the message for the icon.

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Icon	Mouse-Over	Hotspot Link to Information
		
Supplemental Restraint 	Master Electrical Schematic Icons	Links to the vehicle Master Electrical Schematic Icons list that describes the message for the icon.
Pedestrian Impact  	Master Electrical Schematic Icons	Links to the vehicle Master Electrical Schematic Icons list that describes the message for the icon.
Additional Information 	Master Electrical Schematic Icons	Links to the vehicle Master Electrical Schematic Icons list that describes the message for the icon.

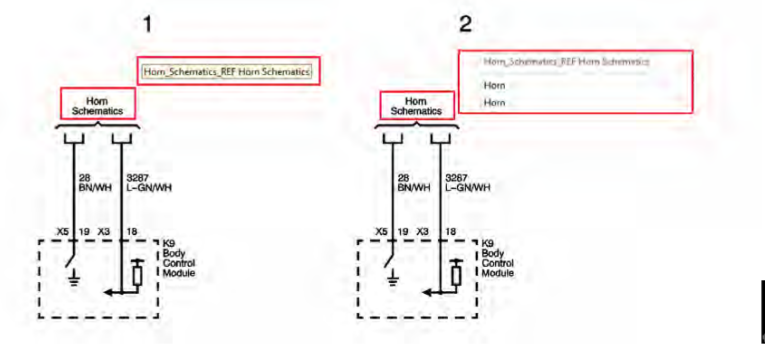
Schematic Navigational Hotspots

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In addition to the navigational icons, schematics have other active hotspots that link to supporting information such as related schematics, component locator views, harness routing views, and connector end views.

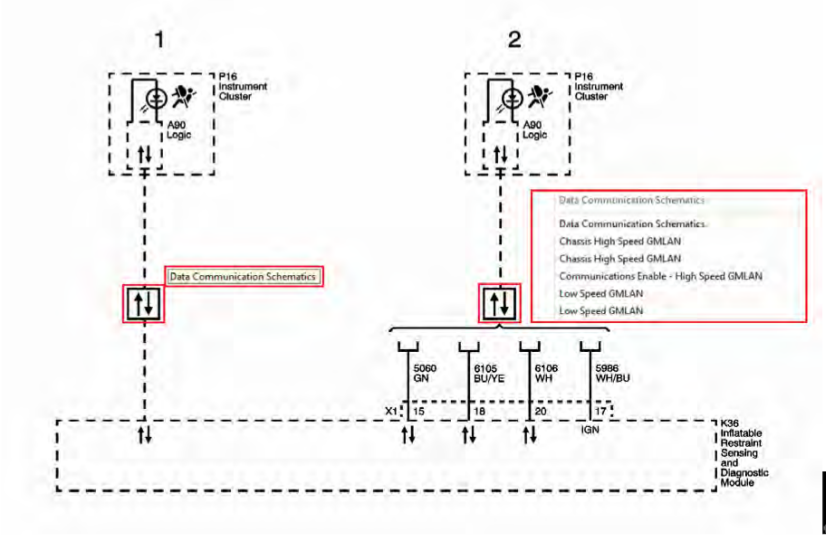
These hotspots can be either text based or symbol based. The following are the items that will have a mouse-over and hotspot.

Schematic Title Circuit References



1. **Mouse-over:** Displays the title of the schematic page linked to.
2. **Hotspot Link to Information:** Links to the individual subsystem schematic page(s) that shows the circuit in detail. If multiple circuits are included, or if the circuit is shown in multiple schematics, a menu will appear when the link is selected. This menu includes links to all schematics that contain the same circuit number as the circuit being referenced. Additionally, when the target schematic is opened, the referenced circuit will be highlighted to draw visual attention. Note that when there are multiple target links, the links may appear to be duplicate in the menu, however, they are not. The exact same title is repeated for each circuit number that is pointing to the same target schematic. A future update will include the circuit number before the link description to further assist in link selection.

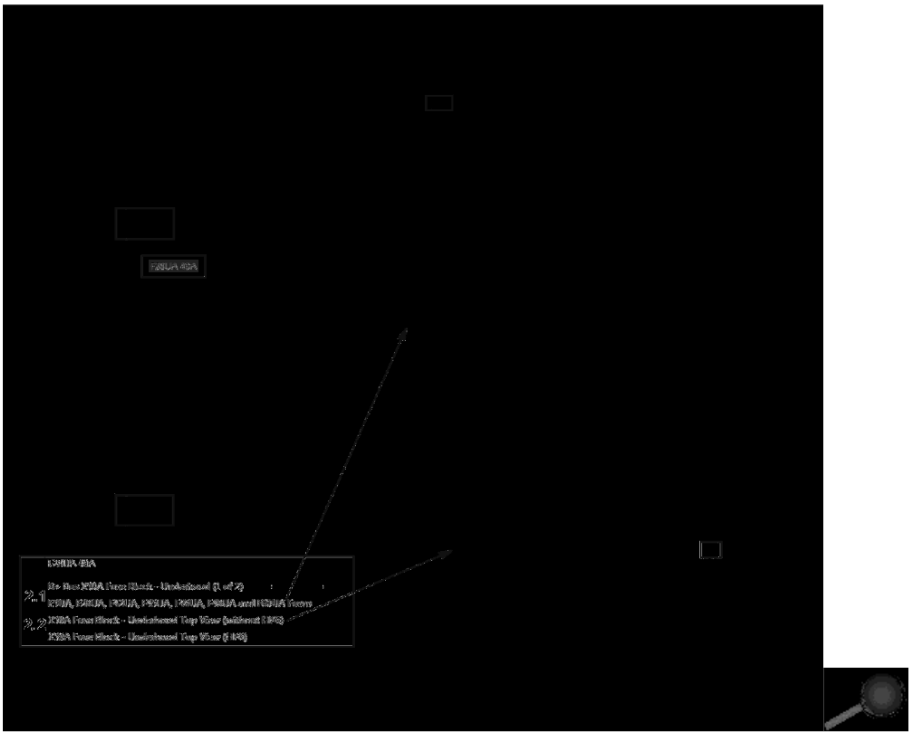
Serial Data Functional Circuit Icon



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1. **Mouse-over:** Displays the schematic title Data Communication Schematics.
2. **Hotspot Link to Information:**
   ⇒ When a dashed serial data wire and icon are shown without any circuit numbers, the serial data circuit icon will link to the complete list of Data Communication schematic pages, and not a specific schematic. This is due to no circuit numbers are shown.
   ⇒ When a circuit wire(s) are shown with circuit numbers, a menu will appear when the link is selected. This menu includes links to the list of Data Communication schematic pages as well as links to the individual schematics that contain the same circuit number as the circuit being referenced. Additionally, when the target schematic is opened, the referenced circuit will be highlighted to draw visual attention. Note that when there are multiple target links, the links may appear to be duplicate in the menu, however, they are not. The exact same title is repeated for each circuit number that is pointing to the same target schematic. A future update will include the circuit number before the link description to further assist in link selection.

Fuse/Circuit Breaker Symbol and Name within Subsystem Schematics

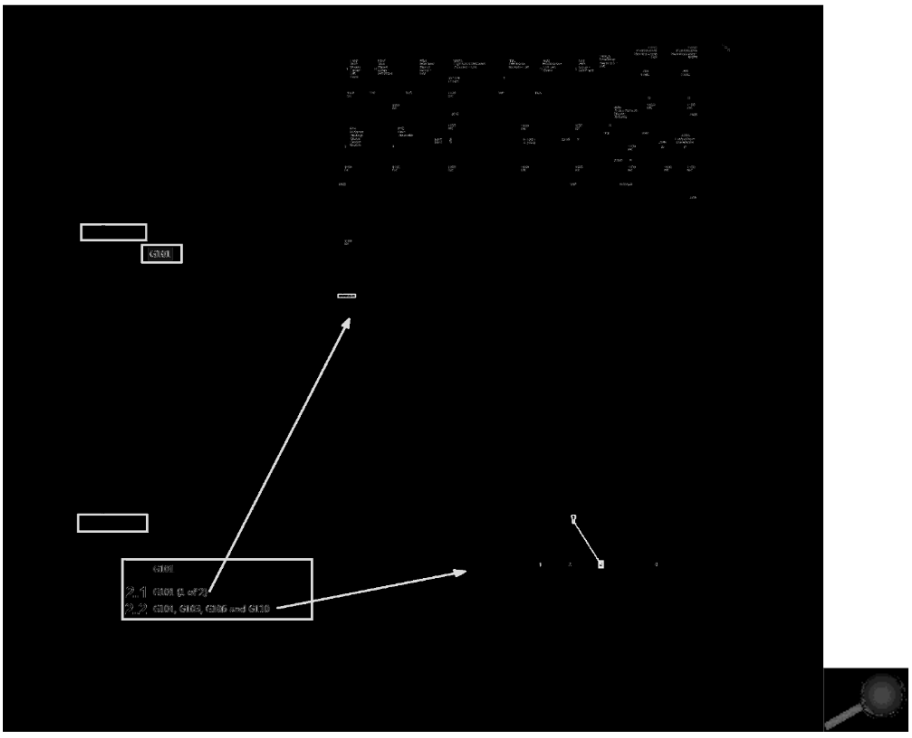


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1. **Mouse-over:** Displays the code and the amperage of the protection device.
2. **Hotspot Link to Information:**
   ⇒ When multiple links are available, a menu will appear when the link is selected. This menu includes all available links in a structured sequence.
   2.1. Links to the individual schematic page(s) within the Power Distribution Schematics where the circuits are shown in detail. Additionally, when the target schematic is opened, the circuit protection device will be highlighted to draw visual attention.
   2.2. Links to individual fuse block top or bottom view(s) within the Electrical Center Identification Views and will show where the device is located in the fuse block.

Additionally, when the target view is opened, the device outline will be highlighted for visual attention.

Ground Symbol/Name in Subsystem Schematics



1. **Mouse-over:** Displays the ground number.
2. **Hotspot Link to Information:**

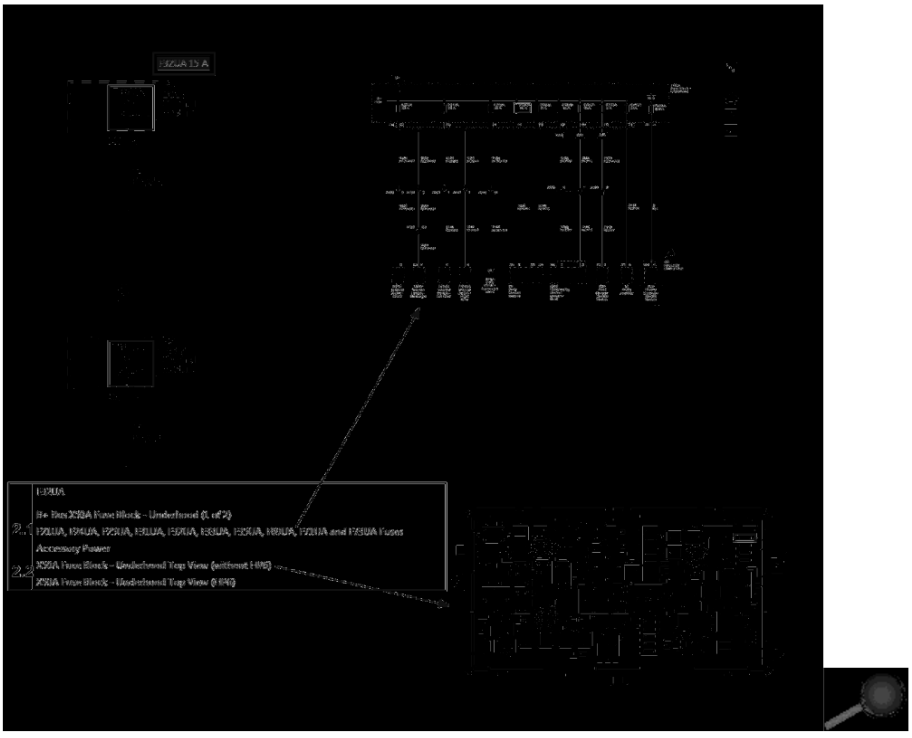
   ⇒ When multiple links are available, a menu will appear when the link is selected. This menu includes all available links in a structured sequence.

   2.1. Links to the individual schematic page(s) within the Ground Distribution Schematics where the circuits are shown in detail. Additionally, when the target schematic is opened, the ground will be highlighted to draw visual attention.

   2.2. Links to the individual locator view(s) within the Ground Views and will show where the ground is located on the vehicle. Additionally, when the target view is opened, the ground and callout leader line/number will be highlighted to draw visual attention.

Body Control Module High-Side Driver Output Symbol/Driver Source Fuse Name in Subsystem Schematics

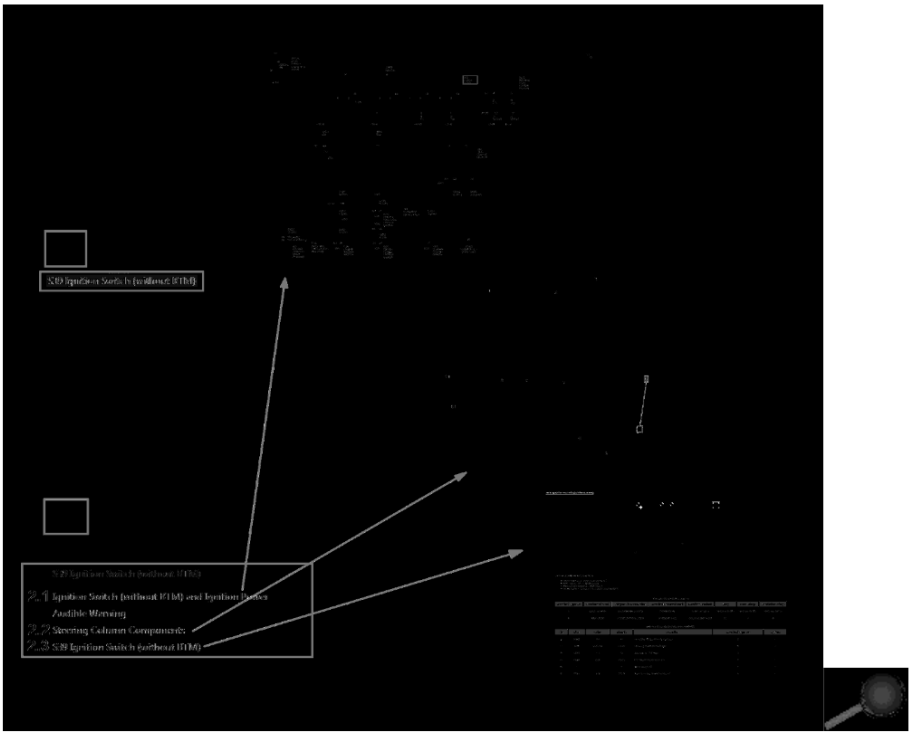
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1. **Mouse-over:** Displays the code of the protection device that supplies the high-side driver output circuit.
2. **Hotspot Link to Information:**
   ⇒ When multiple links are available, a menu will appear when the link is selected. This menu includes all available links in a structured sequence.
   2.1. Links to the individual schematic page(s) within the Power Distribution Schematics where the circuits are shown in detail. Additionally, when the target schematic is opened, the circuit protection device will be highlighted to draw visual attention.
   2.2. Links to individual fuse block top or bottom view(s) within the Electrical Center Identification Views and will show where the device is located in the fuse block. Additionally, when the target view is opened, the device outline will be highlighted for visual attention.

Component Name in Power and Ground Distribution Schematics

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1. **Mouse-over:** Displays the code and name of the component.
2. **Hotspot Link to Information:**

   ⇒ When multiple links are available, a menu will appear when the link is selected. This menu includes all available links in a structured sequence.

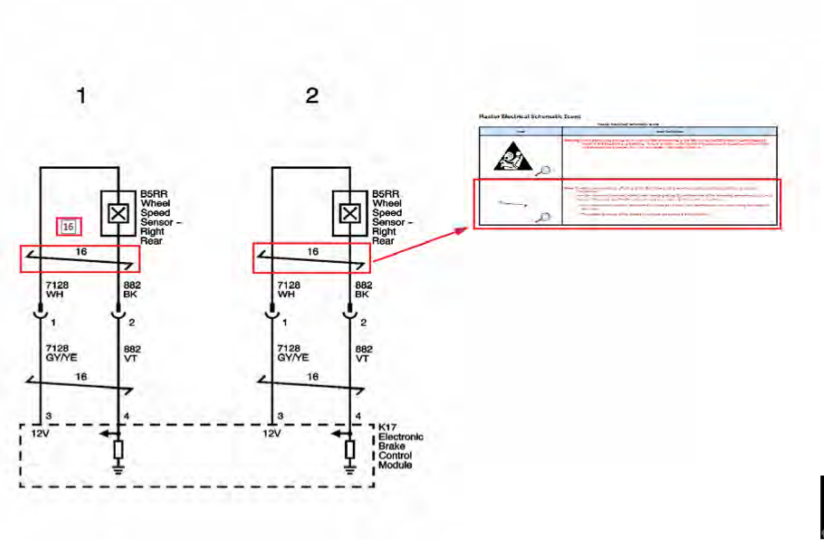
   2.1. Links to the individual schematic page(s) within the Subsystem Schematic(s) where the circuits are shown in detail. Additionally, when the target schematic is opened, the component code and name will be highlighted to draw visual attention.

   2.2. Links to the individual locator view(s) within the applicable component view category and will show where the component is located on the vehicle. Additionally, when the target view is opened, the component and callout leader line/number will be highlighted to draw visual attention.

   2.3. Links to individual connector end view(s) within the Component Connector End Views.

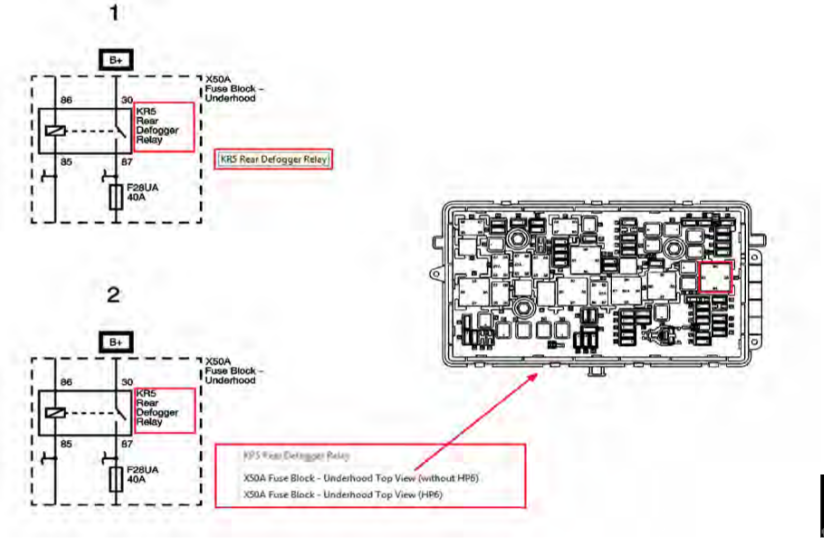
Twisted Pair Symbols

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1. **Mouse-over:** Displays the repair specification for the number of twists of the wire within the specified distance.
2. **Hotspot Link to Information:** Links to the Master Electrical Schematic Icons list that shows the icon along with the repair specification details for the wire.

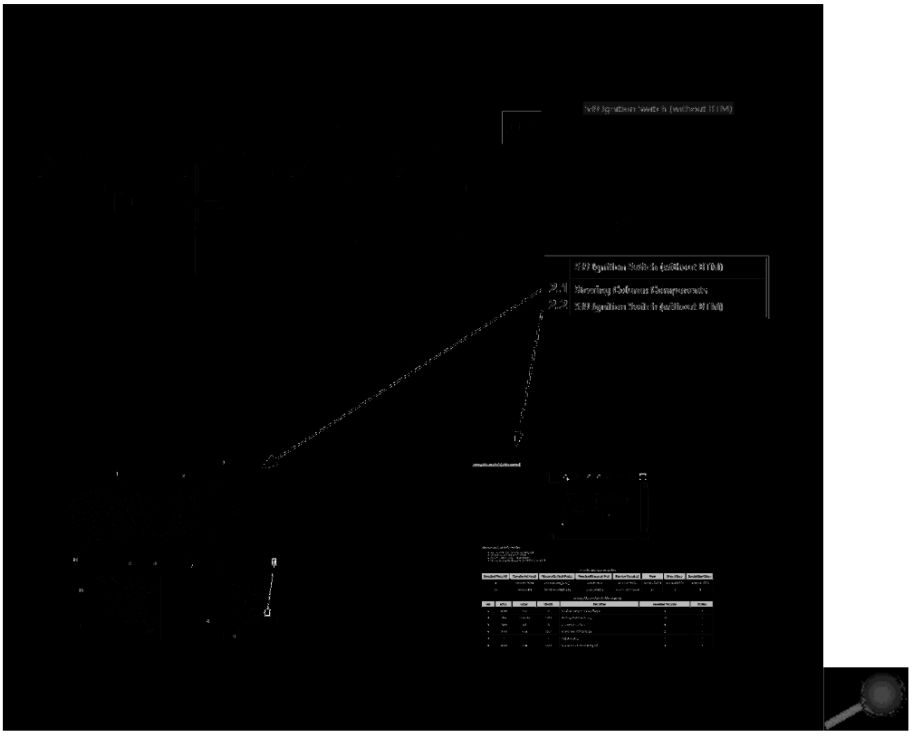
Relay Name (located within a block)



1. **Mouse-over:** Displays the relay code and name.
2. **Hotspot Link to Information:** Links to individual fuse block top or bottom view(s) within the Electrical Center Identification Views and will show where the device is located in the fuse block. Additionally, when the target view is opened, the device outline will be highlighted for visual attention.

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Component Name in Subsystem Schematics



1. **Mouse-over:** Displays the code and name of the component.
2. **Hotspot Link to Information:**

   ⇒ When multiple links are available, a menu will appear when the link is selected. This menu includes all available links in a structured sequence.

   2.1. Links to the individual locator view(s) within the applicable component view category and will show where the component is located on the vehicle. Additionally, when the target view is opened, the component and callout leader line/number will be highlighted to draw visual attention.

   2.2. Links to individual connector end view(s) within the Component Connector End Views.

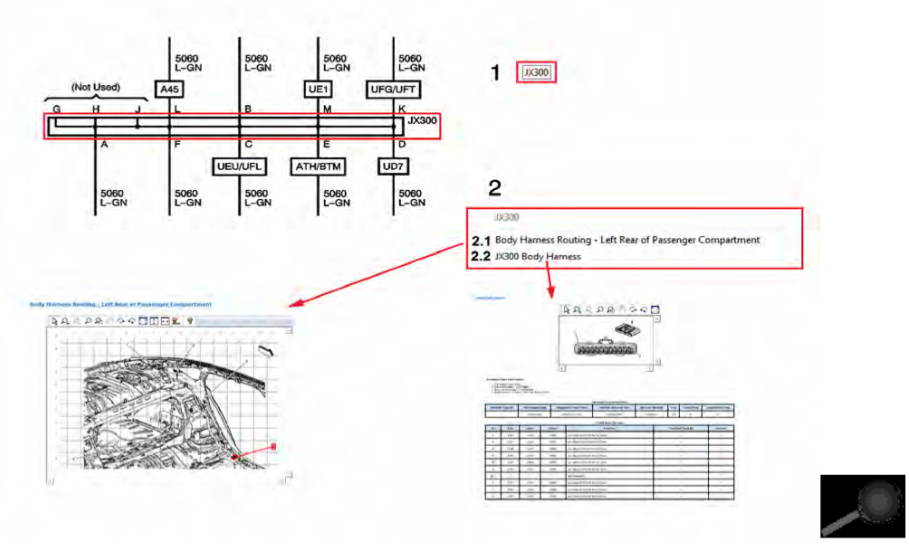
Splice Names

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1. **Mouse-over:** Displays the code of the harness splice.
2. **Hotspot Link to Information:** Links to the individual harness routing view(s) within the Harness Routing Views and will show where the harness item is located on the vehicle harness. Additionally, when the target view is opened, the harness item and callout leader line/number will be highlighted to draw visual attention.

Splice Pack Names



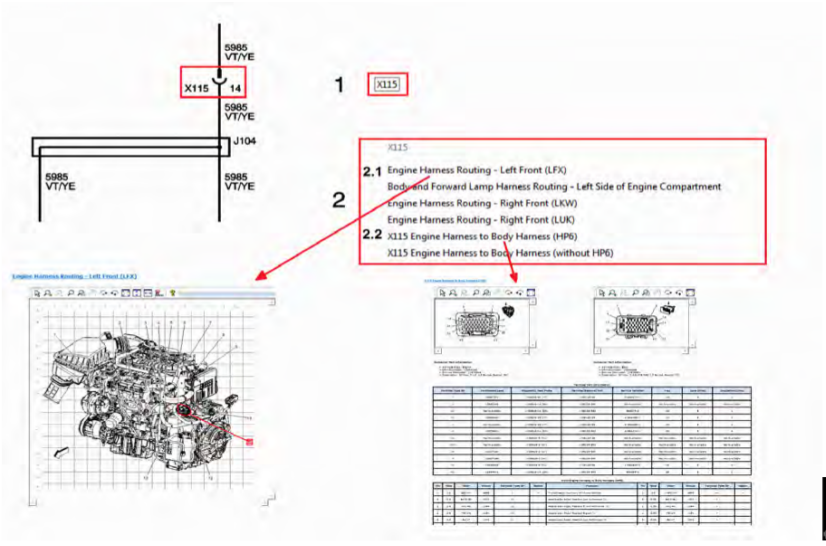
1. **Mouse-over:** Displays the code of the harness splice pack.
2. **Hotspot Link to Information:**
   ⇒ When multiple links are available, a menu will appear when the link is selected. This menu includes all available links in a structured sequence.

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2.1. Links to the individual harness routing view(s) within the Harness Routing Views and will show where the harness item is located on the vehicle harness. Additionally, when the target view is opened, the harness item and callout leader line/number will be highlighted to draw visual attention.

2.2. Links to individual connector end view(s) within the Splice Pack Connector End Views.

Inline Harness Connector Names



1. **Mouse-over:** Displays the code of the inline harness connector.
2. **Hotspot Link to Information:**

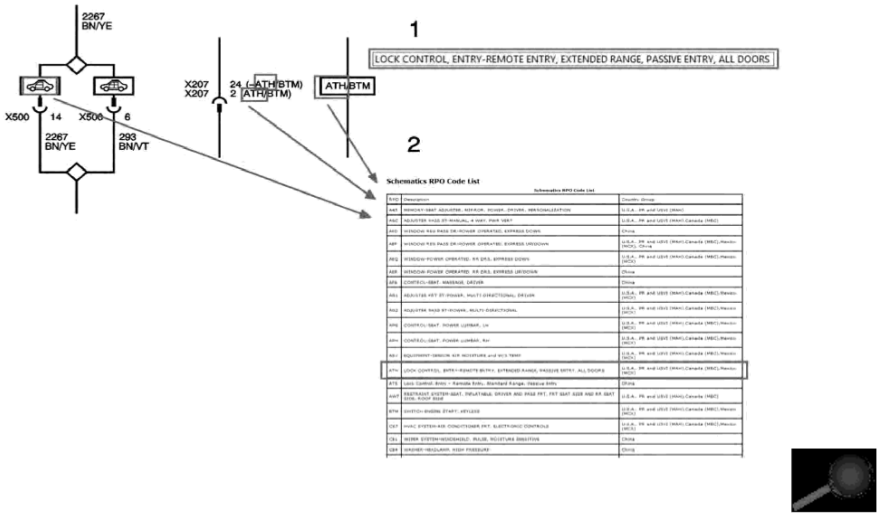
   ⇒ When multiple links are available, a menu will appear when the link is selected. This menu includes all available links in a structured sequence.

   2.1. Links to the individual harness routing view(s) within the Harness Routing Views and will show where the harness item is located on the vehicle harness. Additionally, when the target view is opened, the harness item and callout leader line/number will be highlighted to draw visual attention.

   2.2. Links to individual connector end view(s) within the Inline Harness Connector End Views.

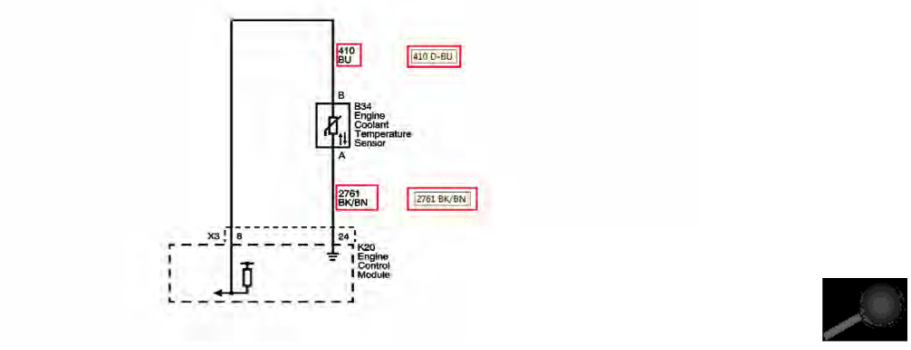
Regular Production Option (RPO) Codes/Icons

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1. **Mouse-over:** Displays the description of the RPO code as well as the country group names where the option is possible to order. Note that each RPO shown will have its own mouse-over and description. Also note that the mouse-over does not include any symbols indicating with (shown as a + sign if combined option) or without (shown as a – sign to mean without/except).
2. **Hotspot Link to Information:** Links to the Schematics RPO Code List that shows the RPO, the description of the option, and the country group names where the option is possible to order.

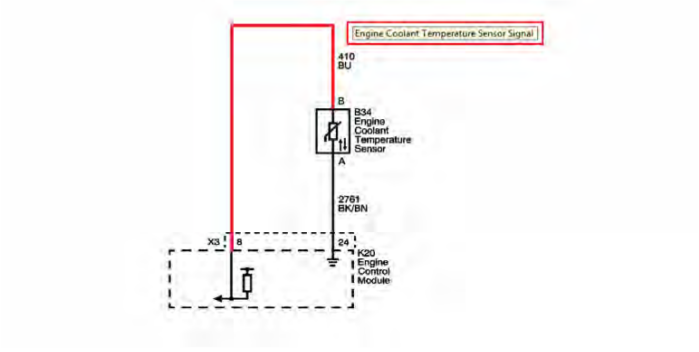
Circuit Number/Wire Colors



1. **Mouse-over:** Displays the circuit number (if shown) and the color abbreviation of the wire insulation. Refer to Color Abbreviations for an explanation of each wire color abbreviation. A future update may spell out the wire colors in all languages.
2. **Hotspot Link to Information:** None at this time.

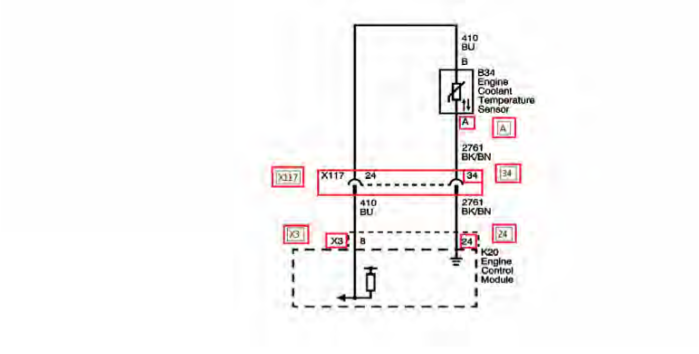
Wire Lines

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1. **Mouse-over:** Displays the circuit function of the wire as used on the vehicle. This same function is shown in the connector end view pinout table for the component the wire connects. Note if there is no circuit number shown, the circuit will not have an associated mouse-over.
2. **Hotspot Link to Information:** None at this time. A future update may include links to harness routing views to show the routing of the circuit within the vehicle harness.

Connector Identifiers and Cavities

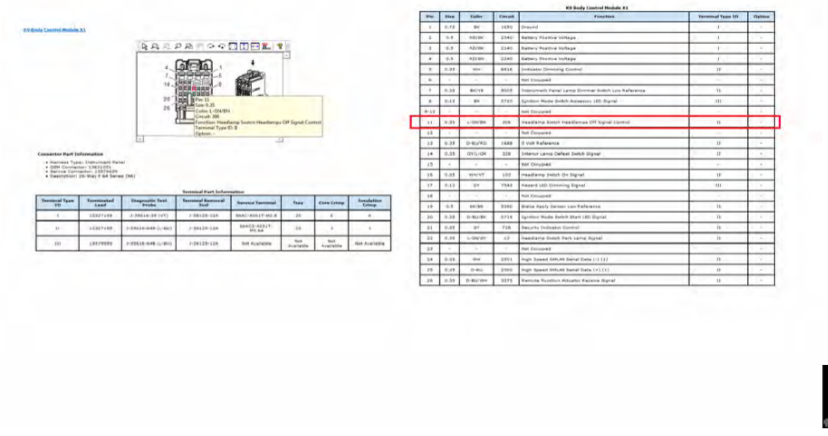


1. **Mouse-over:** Displays the cavity (pin) identifier (letter/number) for the connection at the component or inline harness connection.
2. **Hotspot Link to Information:** None at this time.

Connector End Views

Connector end view graphics now have mouse-overs to show the wire details of each of the populated cavities. Additionally, the terminal part information has been restructured into an easier to read table.

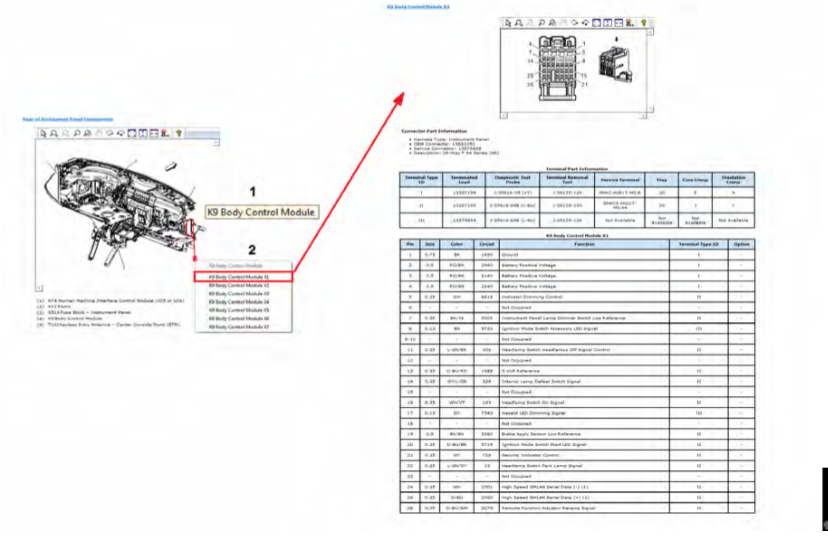
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1. **Mouse-over:** Displays all of the pinout table information for each column including Pin, Size, Color, Circuit, Function, Terminal Type ID, and Option. Note, that not used/not occupied cavities will not have a mouse-over at all. For not used/not occupied cavities, the connector graphic will appear to have a mouse-over, but no information will be displayed in a pop-up menu.
2. **Hotspot Link to Information:** None at this time. A future update may include links to individual subsystem schematic(s) for each circuit.

Component Locator Views

Component locator views now have links to component connector end views.



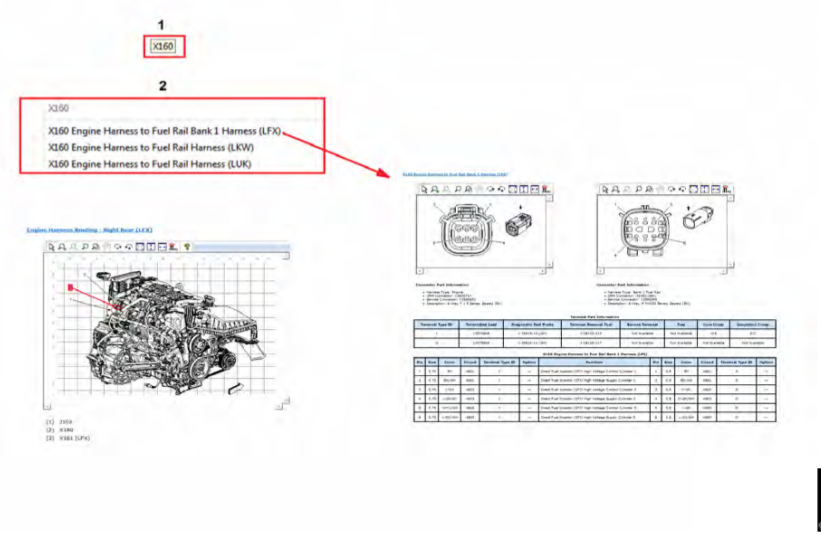
1. **Mouse-over:** Displays the code and name of the component.

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2. **Hotspot Link to Information:** Links to individual connector end view(s) within Component Connector End Views.

Harness Routing Views

Harness routing views now have links to splice pack and inline harness connector end views.



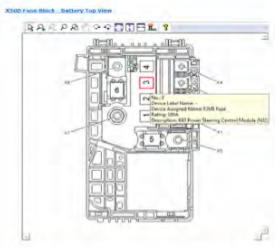


1. **Mouse-over:** Displays the code of the harness item.
2. **Hotspot Link to Information:** Links to individual splice pack connector end view(s) within Splice Pack Connector End Views for splice packs and to the individual inline harness connector end view(s) within Inline Harness Connector End Views for inline harness connectors.

Electrical Center Identification Views

Electrical center identification views (top and bottom/front and back) graphics now have mouse-overs to show the function details of each of utilized devices. Note that the label view will not have any mouse-overs or links at all.

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X500 Fuse Block - Battery Usage

No.	Device Label Name	Device Assigned Name	Rating	Description
1	-	F1UB Fuse	60A	X11A Fuse Block - Instrument Panel
2	-	F2UB Fuse	60A	X11A Fuse Block - Instrument Panel
3	-	F3UB Fuse	100A	K43 Power Steering Control Module (K31)
4	-	F4UB Fuse	80A	K43 Power Steering Control Module (K31)
5	-	F5UB Fuse	250A	X10A Fuse Block - Underhood
6	-	F6UB Fuse	300A	G13 Generator (without HPO), M64 Starter Motor



1. **Mouse-over:** Displays all of the usage table information for each column including No., Device Label Name, Device Assigned Name, Rating, and Description. Note, that not used/not occupied devices will not have a mouse-over at all. For not used/not occupied devices, the device graphic may appear to have a mouse-over, but no information will be displayed in a pop-up screen.
2. **Hotspot Link to Information:** None at this time.

Master Electrical Component List

While the master electrical component list format has not changed, it will continue to have links to component locator, harness routing, and connector end views for each of the available electrical devices within the vehicle.

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Master Electrical Component List

Master Electrical Component List

Code	Name	Option	Location	Location View	Connector End View
E4L	Soundhole – Left	--	In the passenger compartment, left front, mounted to the dashtop at left knee	--	--
E4R	Soundhole – Right	--	In the passenger compartment, right front, mounted to the headliner at right front	--	--
E4	Subwoofer, battery pack	AGE	In the luggage compartment, right behind rear of the seats	Radio Body of Equipment (Forward Controls) Components	--
E7	Fuel Pump and Level Sensor Assembly	--	In the vehicle underbody, below rear seats, mounted to fuel tank	Fuel Tank Components	E7 Fuel Pump and Level Sensor Assembly
E8R	Outside Pressure Wire – Driver	--	On outside of driver door, front middle, forward of window opening	Driver Door Components	--
E8E	Outside Pressure Wire – Passenger	--	On outside of passenger door, front middle, forward of window opening	Passenger Door Components	--
E17	Inside Rearview Mirror	DCB	In the passenger compartment, front center, mounted to top of windshield	Headliner Components	E17 Inside Rearview Mirror (DCB)
E18	Radio	--	In the passenger compartment, front right in instrument panel, rear instrument panel cavities: amp – type	Rear of Instrument Panel Components	• E18 Radio B1 • E18 Radio B2 • E18 Radio B3 • E18 Radio B4 (AUX or USB) • E18 Radio C1 (GCS) • E18 Radio B8 (GTR)
E19D	Seat Lumbar Support Pump – Driver	--	In the passenger compartment, left forward of center, in driver seat back outboard side	Driver Seat Components	E19D Seat Lumbar Support Pump – Driver
E19P	Seat Lumbar Support Pump – Passenger	APH	In the passenger compartment, right forward of center, in the passenger seat back outboard side	Passenger Seat Components	E19P Seat Lumbar Support Pump – Passenger (APH)
E1T	Starter/Generator	HHA	In the engine compartment, right front of engine	--	• E1T Starting Connector B1 (HHA) • E1T Starter/Generator B2 (HHA)
E2G	Radio Controls	--	In the passenger compartment, center front, part of the info display module in instrument panel, above HVAC controls	Panel of Instrument Panel Components	--
E32D	Door Latch Assembly – Driver	--	Inside the driver door, at rear below middle	Driver Door Components	E32D Door Latch Assembly – Driver
E32LD	Door Latch Assembly – Left Rear	--	Inside the left rear door, at rear below middle	Left Rear Door Components	E32LD Door Latch Assembly – Left Rear
E32P	Door Latch Assembly – Passenger	--	Inside the passenger door, at rear below middle	Passenger Door Components	E32P Door Latch Assembly – Passenger
E32RD	Door Latch Assembly – Right Rear	--	Inside the right rear door, at rear below middle	Right Rear Door Components	E32RD Door Latch Assembly – Right Rear
E34D	Door Handle Assembly – Driver Exterior	ATH	On the outside of driver door, rear middle	Driver Door Components	E34D Door Handle Assembly – Driver Exterior (ATH)
E34LD	Door Handle Assembly – Left Rear Exterior	ATH	On the outside of left rear door, rear middle	Left Rear Door Components	E34LD Door Handle Assembly – Left Rear Exterior (ATH)
E34P	Door Handle Assembly – Passenger Exterior	ATH	On the outside of passenger door, rear middle	Passenger Door Components	E34P Door Handle Assembly – Passenger Exterior (ATH)
E34RD	Door Handle Assembly – Right Rear Exterior	ATH	On the outside of right rear door, rear middle	Right Rear Door Components	E34RD Door Handle Assembly – Right Rear Exterior (ATH)
E3K	HVAC Controls	--	In the passenger compartment, front center, on instrument panel, below radio controls	Panel of Instrument Panel Components	E3K HVAC Controls
E3S	Media Jack Player	--	In the passenger compartment, front center, on instrument panel, below and forward of HVAC controls	--	E3S Media Jack Player
E5	A/C Refrigerant Pressure Sensor	--	In the front of vehicle, right of radiator, front of A/C condenser, mounted to right side rear bracket	Radiator Assembly Components	• E5 A/C Refrigerant Pressure Sensor (LC9 or LEA) • E5 A/C Refrigerant Pressure Sensor (LEA2)
E6LF	Wheel Speed Sensor – Left Front	--	At the left front suspension, mounted to knuckle, forward of axle	Front Corner/Drive Module, Wheel Speed Sensors and Factory Radar	E6LF Wheel Speed Sensor – Left Front
E6LR	Wheel Speed Sensor – Left Rear	--	At the left rear suspension, mounted to knuckle, forward axle	Rear Corner/Drive Module, Wheel Speed Sensors and Factory Radar	E6LR Wheel Speed Sensor – Left Rear
E6RF	Wheel Speed Sensor – Right Front	--	At the right front suspension, mounted to knuckle, rearward of axle	Front Corner/Drive Module, Wheel Speed Sensors and Factory Radar	E6RF Wheel Speed Sensor – Right Front
E6RR	Wheel Speed Sensor – Right Rear	--	At the right rear suspension, mounted to knuckle, forward axle	Rear Corner/Drive Module, Wheel Speed Sensors and Factory Radar	E6RR Wheel Speed Sensor – Right Rear
E7D	Air Temperature Sensor – Dual Left Lower	CJD	In the passenger compartment, within the instrument panel, center front, left side middle of HVAC assembly	HVAC Assembly Components (CJC)	E7D Air Temperature Sensor – Dual Left Lower (CJD)
E7DL	Air Temperature Sensor – Dual Right Lower	CJD	In the passenger compartment, within the instrument panel, center front, right side middle of HVAC assembly	HVAC Assembly Components (CJC)	E7DL Air Temperature Sensor – Dual Right Lower (CJD)
E7U	Air Temperature Sensor – Dual Left Upper	CJD	In the passenger compartment, within the instrument panel, center front, left side top of HVAC assembly	HVAC Assembly Components (CJC)	E7U Air Temperature Sensor – Dual Left Upper (CJD)
E7UL	Air Temperature Sensor – Dual Right Upper	CJD	In the passenger compartment, within the instrument panel, center front, right side top of HVAC assembly	HVAC Assembly Components (CJC)	E7UL Air Temperature Sensor – Dual Right Upper (CJD)
E8	Ambient Air Temperature Sensor	--	At the front of vehicle, left of grille, mounted to rear of lower grille	Front of Vehicle Components	E8 Ambient Air Temperature Sensor
E8CR	Ambient Light/Sunload Sensor	--	In the passenger compartment, center front, in instrument panel, rear of windshield defroster outlet	Front of Instrument Panel Components	E8CR Ambient Light/Sunload Sensor
E9CR	Transducer, Fluid Pressure Solid	--	In the engine compartment, part of the control valve body assembly, mounted to the valve body inside the transmission	--	--
E9D	Transducer, Fluid Temperature Sensor	--	In the engine compartment, part of the control valve body assembly, mounted to the valve body inside the transmission	--	--



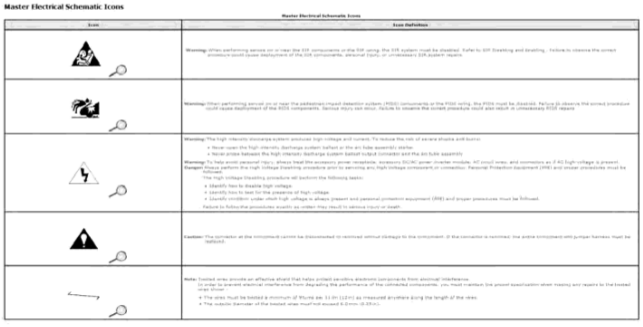
1. **Mouse-over:** None at this time.
2. **Hotspot Link to Information:**
   - ⇒ A future update may include links to individual subsystem schematic(s) for each component/harness item.
   - ⇒ **Components**
   - – Links to individual locator view within one of the eight component view categories and will show where the component is located in the vehicle.
   - – Links to individual connector end view(s) within Component Connector End Views.
   - ⇒ **Electrical Centers (Fuse Blocks)**
   - – Links to individual locator view within one of the eight component view categories and will show where the component is located in the vehicle.
   - – Links to individual connector end view(s) within Electrical Center Identification Views.
   - ⇒ **Inline Harness Connectors**
   - – Links to individual harness routing view(s) within Harness Routing Views and will show where the harness item is located on the vehicle harness.
   - – Links to individual connector end view(s) within Inline Harness Connector End Views.
   - ⇒ **Grounds**
   - – Links to individual locator view within Ground Views component view and will show where the ground is located in the vehicle.
   - ⇒ **Splices**
   - – Links to individual harness routing view(s) within Harness Routing Views and will show where the harness item is located on the vehicle harness.
   - ⇒ **Splice Packs**

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- Links to individual harness routing view(s) within Harness Routing Views and will show where the harness item is located on the vehicle harness.
- Links to individual connector end view(s) within Splice Pack Connector End Views.

Master Electrical Schematic Icons

While the master electrical schematic icons list format has not changed, it will continue to include icons used in the vehicle schematics along with the message for the icon.





1. **Mouse-over:** None at this time.
2. **Hotspot Link to Information:** None at this time.

Schematic RPO Code List

The schematic RPO code list only includes RPOs shown in schematics and also includes the country groupings for the options. This list is in addition to the vehicle RPO Code List that is included in General Information.

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Schematics RPO Code List

Schematics RPO Code List

RPO	Description	Country Group
A40	MEMORY SEAT ADJUSTER, DRIVER, POWER, DRIVER, PERSONALIZATION	U.S.A., PR and USVI (VIN:1)
A57	VOLUMETRIC OVER RT Interior, w/ Anti- Theft UBPT	U.S.A., PR and USVI (VIN:1),Canada (VIN:2)
A62	HORIZONTAL PASS SIDE POWER OPERATED, EXPOSED DOOR	China
A97	Antenna, Rear Glass and Roof Mounted, Antenna Mounted	U.S.A., PR and USVI (VIN:1),Canada (VIN:2),Mexico (VIN:3), China
A9Q	HORIZONTAL POWER OPERATED, PR SIDE, EXPOSED DOOR	U.S.A., PR and USVI (VIN:1),Canada (VIN:2),Mexico (VIN:3)
A9R	HORIZONTAL POWER OPERATED, PR SIDE, EXPOSED DOOR	China
A9W	Control, Seat, Passenger	China
A9X	SEAT, REAR, FRT FT SEATS, MULTI-DIRECTIONAL, DRIVER	U.S.A., PR and USVI (VIN:1),Canada (VIN:2),Mexico (VIN:3)
AB0	ADJUSTER, HEAD RT, POWER, MULTI-DIRECTIONAL	U.S.A., PR and USVI (VIN:1),Canada (VIN:2),Mexico (VIN:3)
AB9	CONTROL, SEAT, POWER, LUMBAR, LH	U.S.A., PR and USVI (VIN:1),Canada (VIN:2),Mexico (VIN:3)
AB9	CONTROL, SEAT, POWER, LUMBAR, RH	U.S.A., PR and USVI (VIN:1),Canada (VIN:2),Mexico (VIN:3)
AC1	SEQUENCE, DRIVER AIR MODE, LHD and w/o TEMP	U.S.A., PR and USVI (VIN:1),Canada (VIN:2),Mexico (VIN:3)
AT4	LOCK CONTROL, REMOTE KEYLESS ENTRY, EXTERIOR TRUNK, DRIVER REMOTE, ALL SYSTEMS	U.S.A., PR and USVI (VIN:1),Canada (VIN:2),Mexico (VIN:3)
AT5	Lock Control, Extra — Remote Only, Standard Range, Double Entry	China
AU7	RESTRAINT SYSTEM SEAT, DETACHABLE, DRIVER AND PASS FRT, FRT SEAT SIDE AND FR SEAT SIDE, ROOF SIDE	U.S.A., PR and USVI (VIN:1),Canada (VIN:2)
AY6	SWITCH-MASSAGE SEAT, VARIABLE	U.S.A., PR and USVI (VIN:1),Canada (VIN:2),Mexico (VIN:3)
C07	HVAC SYSTEM-AIR CONDITIONER FRT, ELECTRONIC CONTROLS	U.S.A., PR and USVI (VIN:1),Canada (VIN:2),Mexico (VIN:3)
C41	HVAC SYSTEM-WINDSHIELD, HEATING SHORTER	China
C60	Ashtray-Cigarette, Rear Instrument	China
C7Z	FLOOR CVR, CARGO, SLIDING, ELEC	U.S.A., PR and USVI (VIN:1),Canada (VIN:2),Mexico (VIN:3)
D55	HVAC SYSTEM-AIR CONDITIONER RMT, AUTO TEMP CONT, ALL TEMP CONT	U.S.A., PR and USVI (VIN:1),Canada (VIN:2),Mexico (VIN:3)
G80	Differential, Locking	China
GU6	REAR AXLE 3.73 LT SPEEDING	U.S.A., PR and USVI (VIN:1),Canada (VIN:2),Mexico (VIN:3)
IBT	COUNTRY, UNITED STATES OF AMERICA (USA)	U.S.A., PR and USVI (VIN:1)
IU2	HVAC SYSTEM-AIR CONDITIONER, MANUAL FULL TEMP, CENTRAL	U.S.A., PR and USVI (VIN:1),Canada (VIN:2)
K05	VEHICLE FUEL, GASOLINE USE	U.S.A., PR and USVI (VIN:1),Canada (VIN:2),Mexico (VIN:3)
K8G	HYBRID PROPULSION ELECTRIC, PARALLEL, 14KW CONTINUOUS POWER	U.S.A., PR and USVI (VIN:1),Canada (VIN:2)
KC1	ENTRY SYSTEM, KEYLESS, PASSIVE	U.S.A., PR and USVI (VIN:1),Canada (VIN:2),Mexico (VIN:3)
KG1	HEATER, SEAT FRT DRVR and PASS	U.S.A., PR and USVI (VIN:1),Canada (VIN:2),Mexico (VIN:3)
KO4	RECEPTACLE ELECTRICAL, FRT CONSOLE	U.S.A., PR and USVI (VIN:1),Canada (VIN:2),Mexico (VIN:3)
K16	RECEPTACLE-ELECTRICAL, PRT CONSOLE RR 115 VOLT	U.S.A., PR and USVI (VIN:1),Canada (VIN:2),Mexico (VIN:3)
KNJ	CONTROL, CONSOLE, INFOTAINMENT, HEADMENT CONTROLS, ADVANCE	U.S.A., PR and USVI (VIN:1),Canada (VIN:2),Mexico (VIN:3)
KT6	AUDIO INTERFACE	China
KU3	VENTILATED SEAT DRIVER HEATER	U.S.A., PR and USVI (VIN:1)
KU5	VENTILATED SEAT DRIVER FRONT	U.S.A., PR and USVI (VIN:1)
LA7	ENGINE GAS, 8 CYL, 5.4L, SIDI DOHC VVT, 4LZ6E GM - DO NOT USE AFTER 2013, USE L2A	China
L2A	ENGINE GAS, 8 CYL, 5.3L, SIDI, DOHC, VVT&CYCL, VAR VALVE LIFT&VVT, 355HP - DO NOT USE AFTER 2018, USE L8A	China
LM1	ENGINE GAS, 2.5L, RS4, L4, DOHC TURBO, VVT MLT, AUTO	U.S.A., PR and USVI (VIN:1),Canada (VIN:2),Mexico (VIN:3)
LSY	ENGINE GAS, 4 CYL, 1.5L, VVT, DOHC TURBO, FT-IV, 155HP	China
LY5	ENGINE GAS, 8 CYL, 5.3L, VVT, ALUM, DOHC, 355H	China
LV8	ENGINE GAS, 6 CYL, 3.6L, V6, GDI, DOHC, 24V, VVT	U.S.A., PR and USVI (VIN:1),Canada (VIN:2)
MQ6	TRANSMISSION AUTO 6 SPD, HD/DI-MAGNA, W/PRO ELECTRONIC SHIFT	U.S.A., PR and USVI (VIN:1),Canada (VIN:2)
MH8	TRANSMISSION AUTO 6 SPD, HMD, 4WD	U.S.A., PR and USVI (VIN:1),Canada (VIN:2)
MH9	TRANSMISSION AUTO 6 SPD, HMD, DSL, 4WD, MTAP, HARMO, PNC	U.S.A., PR and USVI (VIN:1),Canada (VIN:2)
MH0	TRANSMISSION AUTO 6 SPD, HTAP, 4WD	U.S.A., PR and USVI (VIN:1),Canada (VIN:2),Mexico (VIN:3)
MN6	TRANSMISSION MAN 6 SPD, GMS, 8SPD, 3.55 LPT, 3.42 PTV (TAX GAS), REDUCE WEIGH	U.S.A., PR and USVI (VIN:1),Canada (VIN:2)
N11	STEERING POWER, NON-VARIABLE RATIO, ELECTRIC	U.S.A., PR and USVI (VIN:1),Canada (VIN:2)
N3B	STEERING SYSTEM-CALIFORNIA, TOW	U.S.A., PR and USVI (VIN:1)
N4T	STEERING POWER, VAR VARIABLE EFFORT	U.S.A., PR and USVI (VIN:1),Canada (VIN:2),Mexico (VIN:3)
N4U	STEERING POWER, VAR VARIABLE EFFORT, REDUCED RACK TRAVEL	U.S.A., PR and USVI (VIN:1),Canada (VIN:2)
T4H	HEADLAMPS-HALOGEN	U.S.A., PR and USVI (VIN:1),Canada (VIN:2)



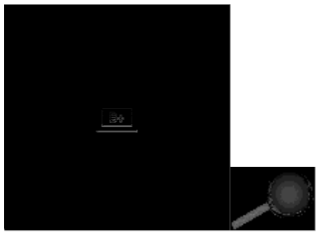
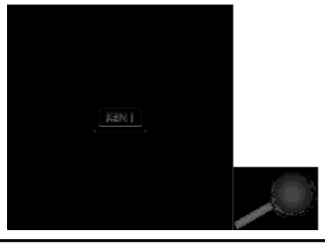
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2. **Hotspot Link to Information:** None at this time.

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Electrical Schematic Symbols

Table 1: Voltage Indicators
Table 2: General Icons
Table 3: Switch Position Icons
Table 4: Module Circuit Function Icons
Table 5: Harness Components
Table 6: Component Parts
Table 7: Switches and Relays
Table 8: Devices and Sensors

Voltage Indicators

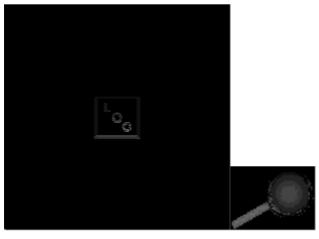
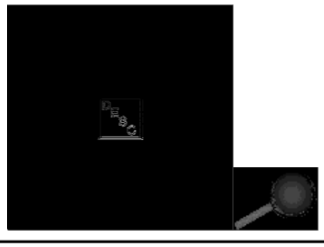
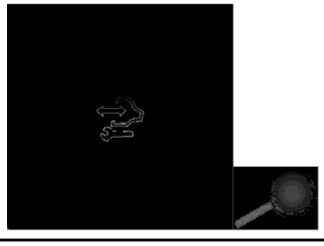
Symbol	Description
	Battery Voltage
	Ignition Switch– Off Position
	Ignition Switch– Accessory Position
	Ignition Switch– Run Position

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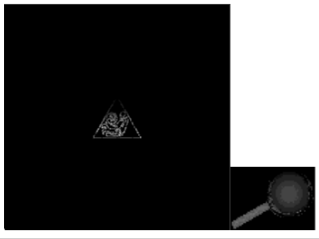
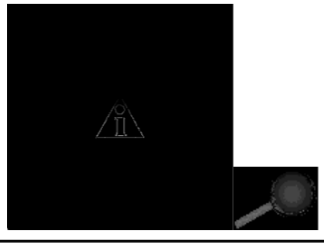
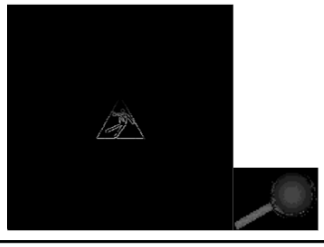
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Symbol	Description
	
	Ignition Switch– Start Position

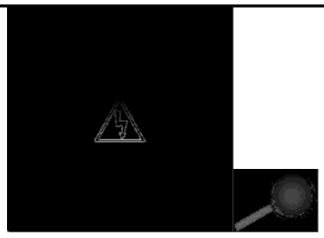
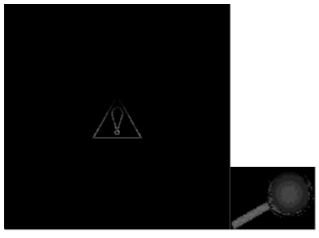
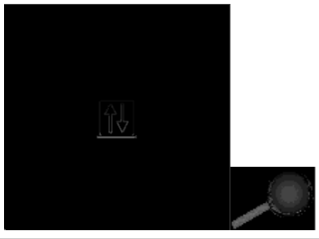
General Icons

Symbol	Description
	Master Component List Icon This icon is used on the schematic to link to the Master Electrical Component List.
	Description and Operation Icon This icon is used on the schematic to link to the Description and Operation of that particular system.
	Computer Programming Icon This icon is used on the schematic to link to Control Module References, which identifies which components need programming upon replacement.
	Next Schematic Page Icon

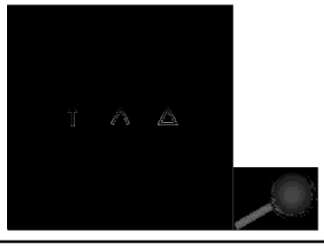
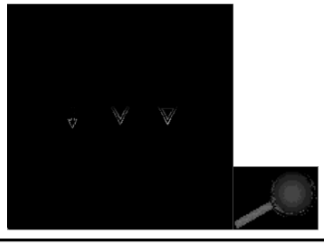
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Symbol	Description
	This icon is used on the schematic to navigate to the next schematic in the subsystem.
	Previous Schematic Page Icon This icon is used on the schematic to navigate to the previous schematic in the subsystem.
	Supplemental Inflatable Restraint (SIR) or Supplemental Restraint System (SRS) Icon This icon is used to alert the technician that the system contains SIR/SRS components that require certain precautions before servicing.
	Information Icon This icon is used to alert the technician that there is additional information that will aid in servicing a system.
	Danger Icon This icon is intended to alert the technician that a component within the system contains labeling with the same icon. This icon is used when a source component has potential for 60 volts DC or greater or has potential for 42 volts AC or greater.
	High Voltage Icon This icon is intended to alert the technician that a component within the system contains labeling with the same icon.

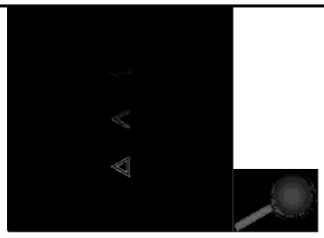
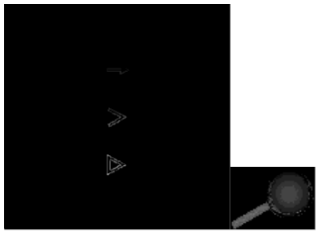
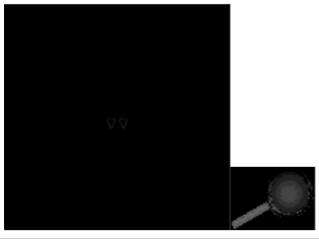
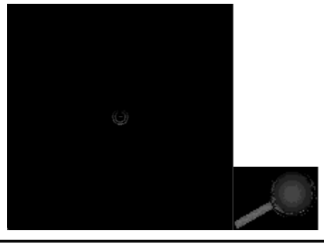
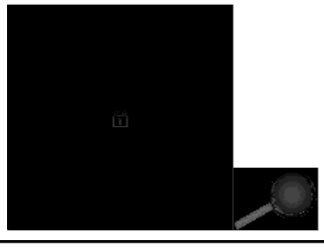
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Symbol	Description
	This icon is used when a component/circuit has potential for 60 volts DC or greater or has potential for 42 volts AC or greater.
	Caution Icon This icon is used to advise the technician to use caution when servicing this component. This icon may be used when a component/circuit has a voltage range potential between 30-60 volts DC or 15-42 volts AC.
	Functional Serial Data Communication This icon is used to show the technician that the serial data circuit detail is shown incomplete. It also provides an active link to the Data Communication Schematics were the circuit is shown complete.

Switch Position Icons

Symbol	Description
	Generic Up Arrows
	Generic Down Arrows
	Generic Left Arrows

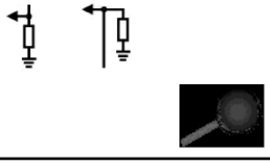
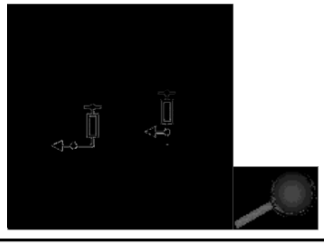
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Symbol	Description
	
	Generic Right Arrows
	Generic Express Down Arrows
	On/Off Icon
	Generic Lock Icon
	Generic Unlock Icon

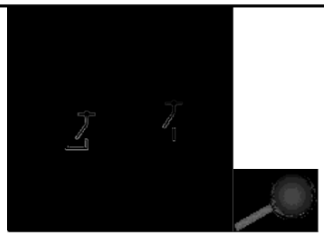
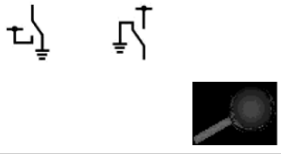
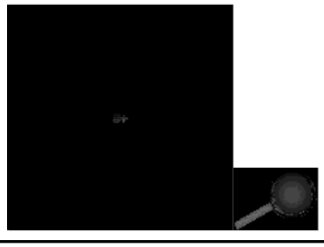
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Symbol	Description
	
	Generic Window Switch Positions– 4 Door
	Generic Window Switch Positions– 2 Door

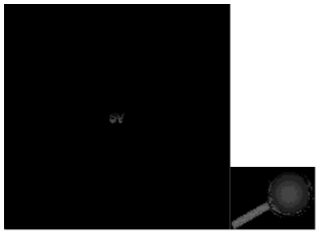
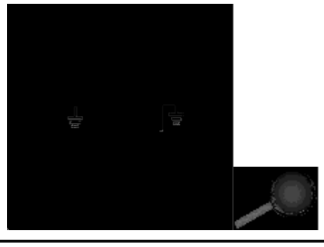
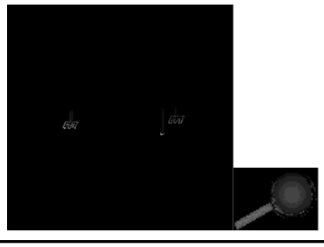
Module Circuit Function Icons

Symbol	Description
	I/O Pull-Down Resistors (–)
	I/O Pull-Up Resistors (+)
	I/O High-Side Drive Switch (+)

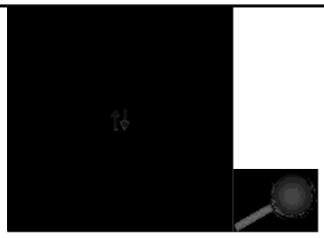
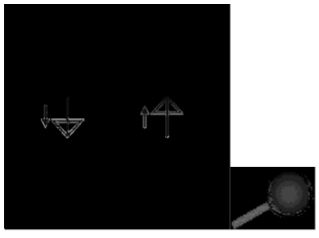
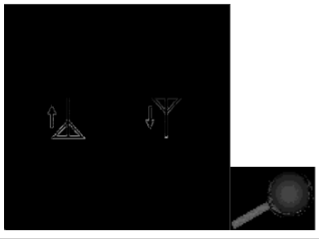
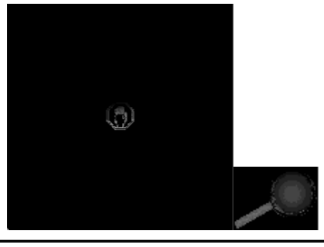
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Symbol	Description
	
	I/O Low-Side Drive Switch (+)
	I/O Bidirectional Switch (+/−)
	Pulse-Width Modulation Symbol
	Battery Voltage
	Ignition Voltage

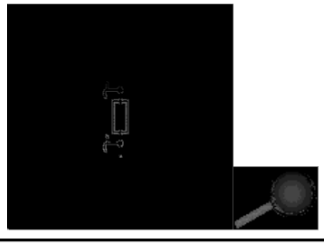
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Symbol	Description
	
	Voltage Reference
	A/C Voltage
	Low Reference
	Ground
	Serial Data

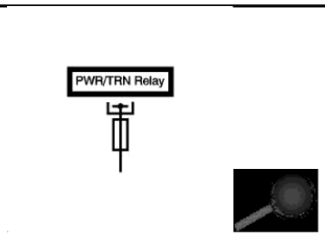
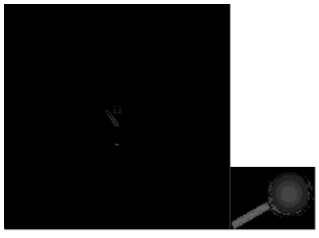
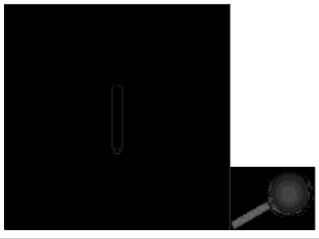
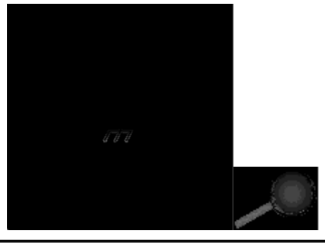
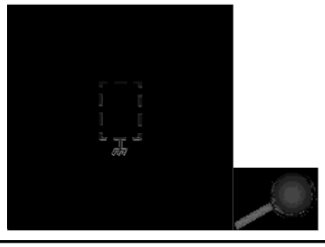
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Symbol	Description
	
	Antenna Signal– In
	Antenna Signal– Out
	Brake Apply

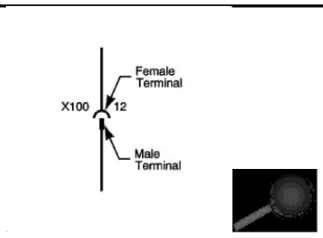
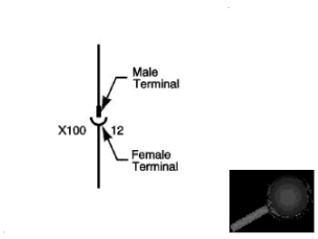
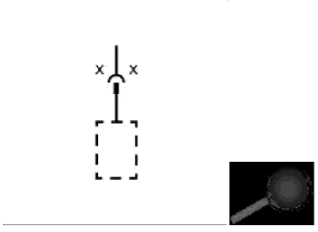
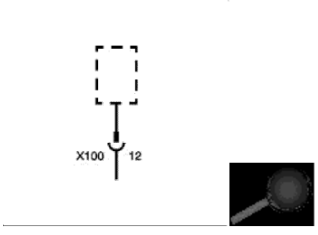
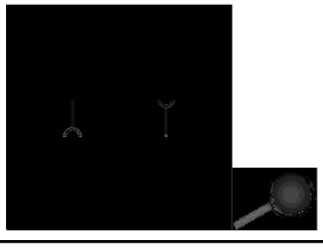
Harness Components

Symbol	Description
	Fuse
	Fuse Supplied by a Relay

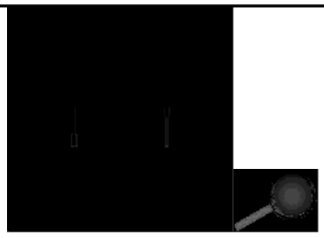
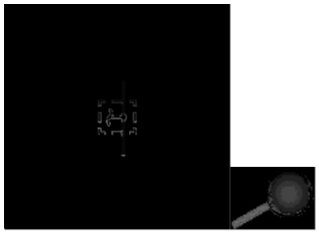
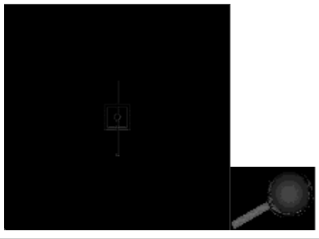
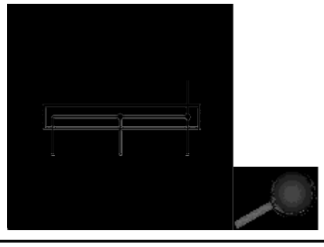
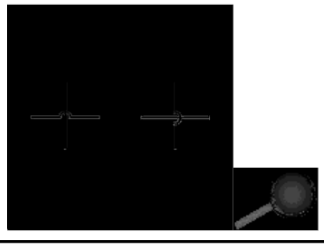
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Symbol	Description
	
	Circuit Breaker
	Fusible Link
	Ground
	Case Ground
	Inline Harness Connector

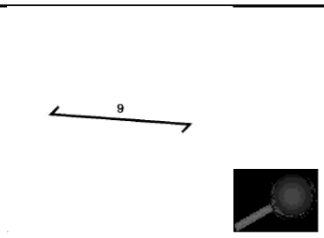
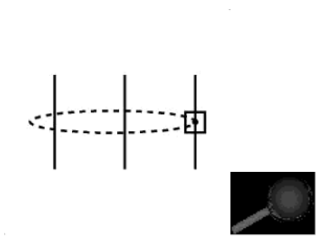
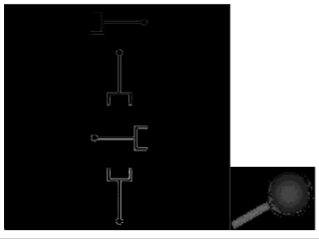
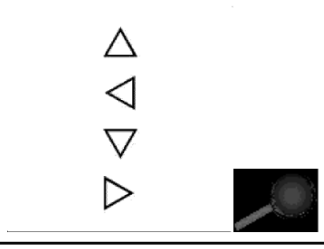
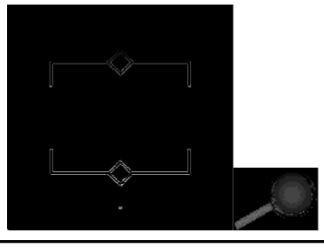
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Symbol	Description
	
	Inline Harness Connector
	Pigtail Connection
	Pigtail Connection
	Provisional or Diagnostic Connector
	Blunt Cut Wire

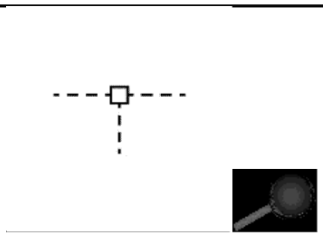
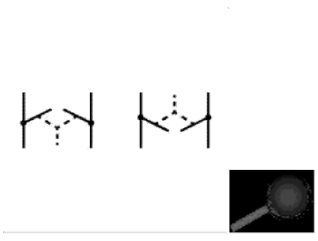
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Symbol	Description
	
	Incomplete Physical Splice
	Complete Physical Splice– 2 Wires
	Complete Physical Splice– 3 or more wires
	Wire Crosses
	Twisted Wires

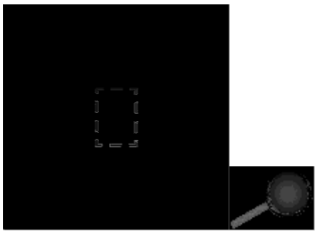
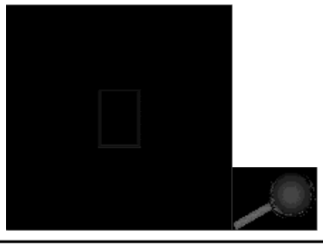
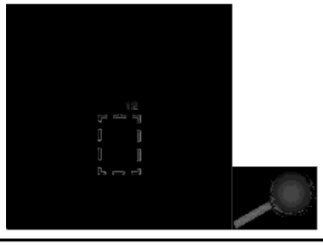
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Symbol	Description
	
	Shield
	Circuit References
	Circuit Continuation Arrowheads
	Option Breakpoint
	Ground Circuit Connection

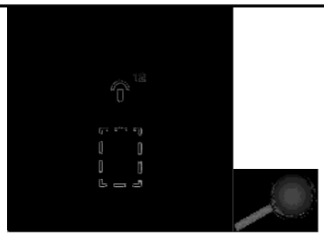
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Symbol	Description
	
	Connector Shorting Clip

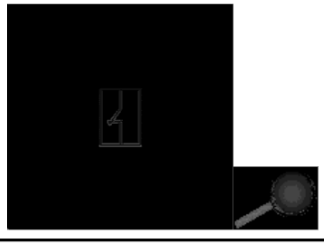
Component Parts

Symbol	Description
	Partial Component When a component is represented in a dashed box, the component or its wiring is not shown in its entirety.
	Entire Component When a component is represented in a solid box the component or its wiring is shown in its entirety.
	Connector Directly Attached to Component
	Pigtail Connector

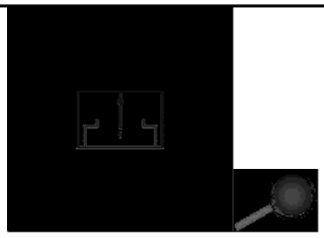
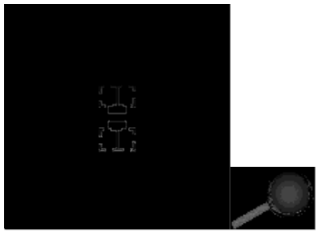
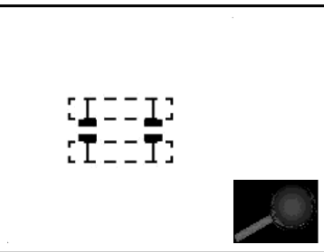
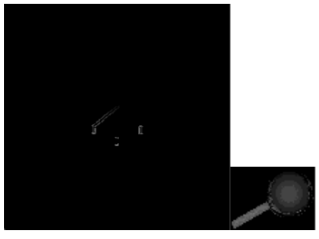
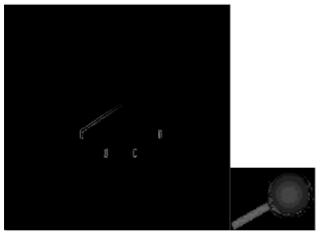
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Symbol	Description
	

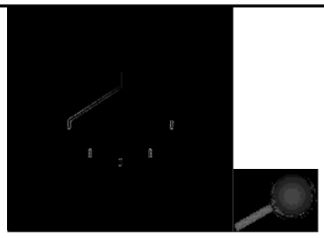
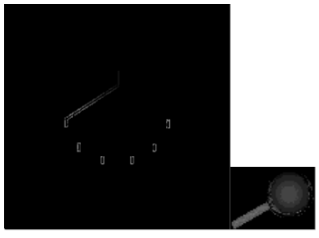
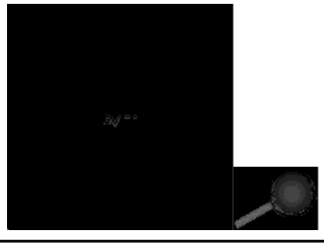
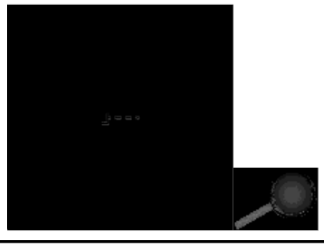
Switches and Relays

Symbol	Description
	Accessory Power Outlet
 	Cigar Lighter
	Switch– 2 Position Normally Open
	Switch– 2 Position Normally Closed
	Switch– Rocker

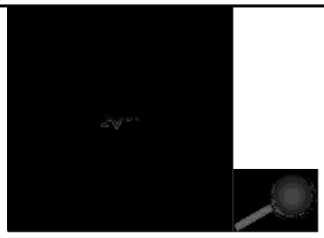
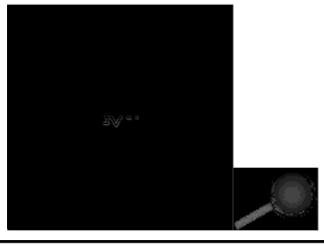
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Symbol	Description
	
	Switch– Contact Plate (1 Wire)
	Switch– Contact Plate (2 Wire)
	Switch– 3 Position
	Switch– 4 Position
	Switch– 5 Position

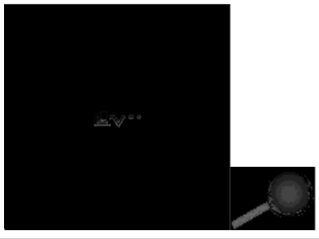
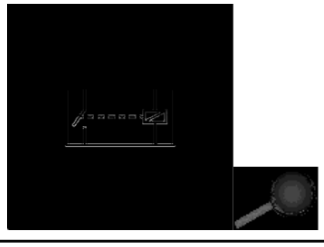
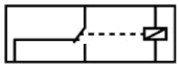
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Symbol	Description
	
	Switch– 6 Position
	Switch Actuator– Push (Momentary)
	Switch Actuator– Push (Latching)
	Switch Actuator– Pull (Momentary)
	Switch Actuator– Pull (Latching)

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Symbol	Description
	
	Switch Actuator– Rotate (Momentary)
	Switch Actuator– Rotate (Latching)
	Switch Actuator– Slide (Momentary)
	Switch Actuator– Slide (Latching)
	Switch Actuator– Pressure (Momentary)

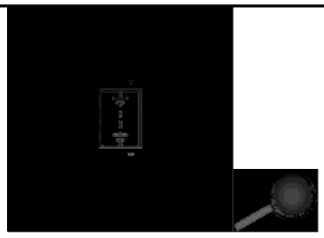
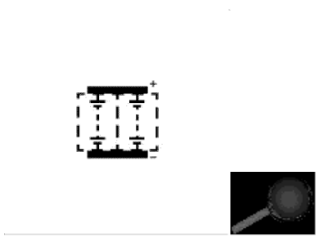
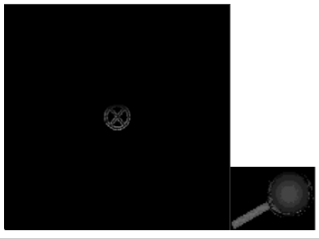
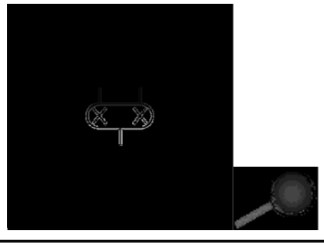
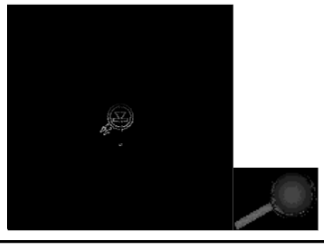
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Symbol	Description
	
	Switch Actuator– Temperature (Momentary)
	Switch Actuator– Volume (Latching)
	4-Pin Single Pole/Throw Relay– Normally Open
 	5-Pin Relay– Normally Closed

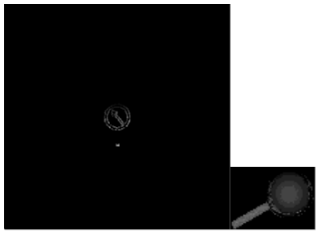
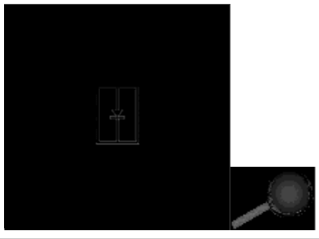
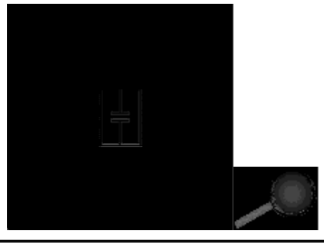
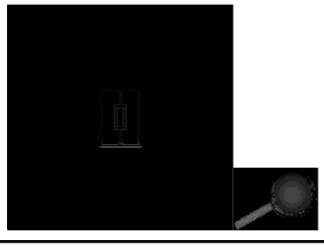
Devices and Sensors

Symbol	Description
	Battery

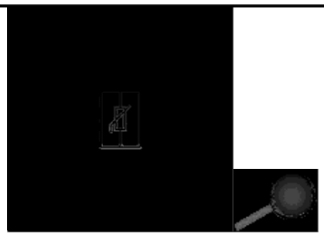
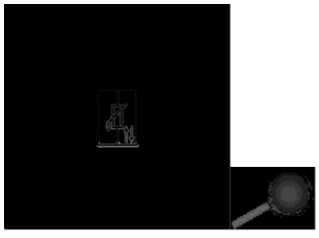
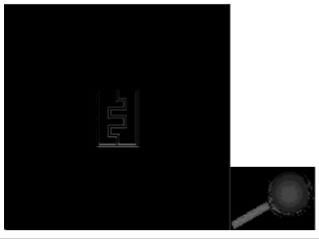
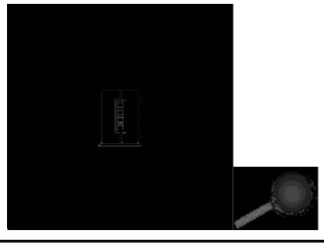
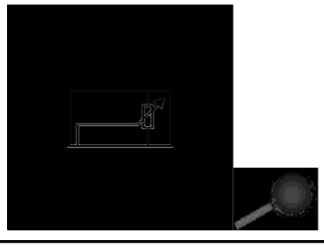
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Symbol	Description
	
	Battery Assembly– Hybrid
	Single Filament Light Bulb
	Double Filament Light Bulb
	Light Emitting Diode (LED)
	Photo Sensor

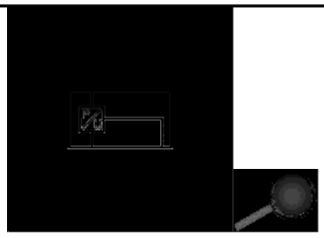
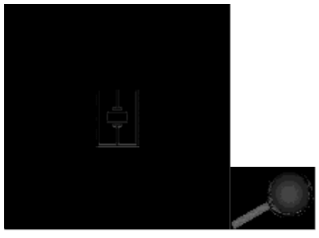
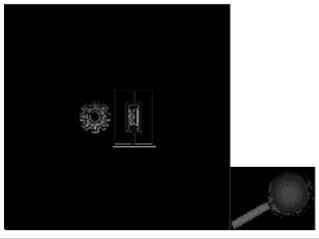
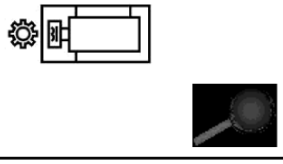
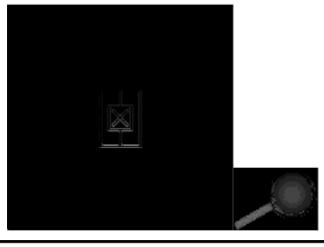
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Symbol	Description
	
	Gauge
	Diode
	Capacitor
	Resistor
	Variable Resistor

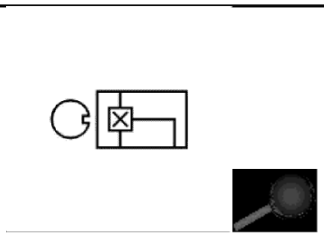
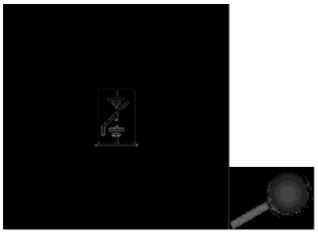
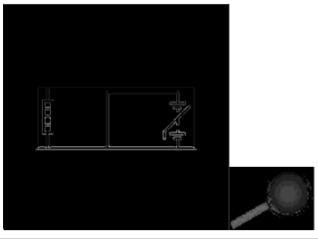
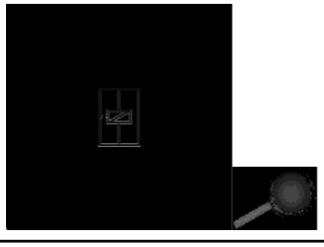
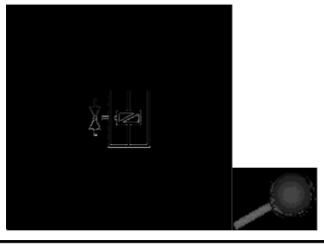
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Symbol	Description
	
	Variable Resistor– NTC
	Breakable Wire
	Heating Element
	Position Sensor
	Pressure Sensor

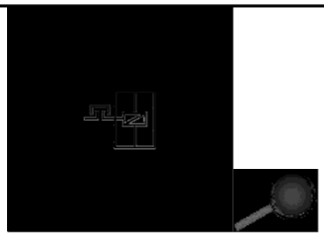
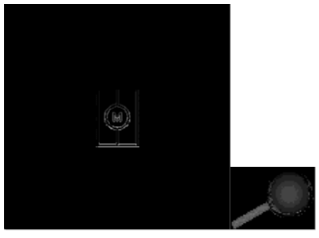
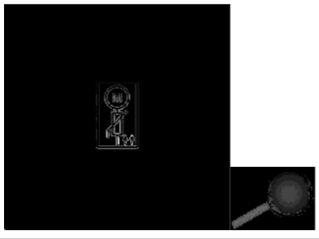
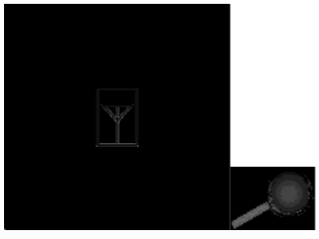
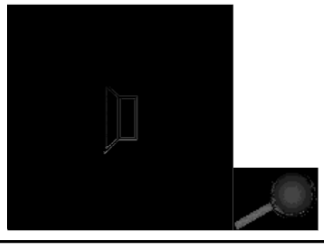
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Symbol	Description
	
	Knock Sensor
	Inductive Type Sensor– 2-Wire
	Inductive Type Sensor– 3-Wire
	Hall Effect Sensor– 2-Wire
	Hall Effect Sensor– 3-Wire

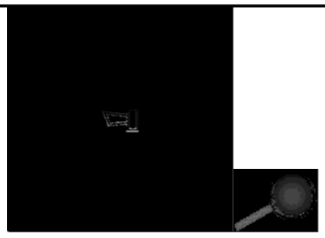
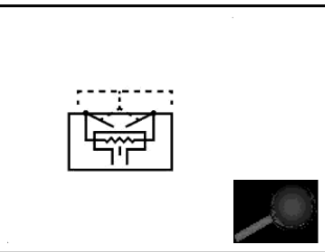
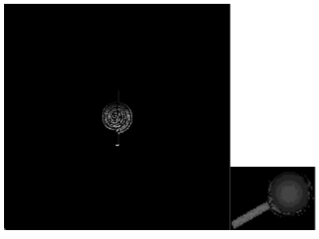
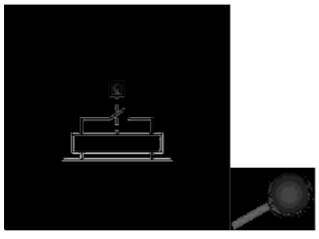
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Symbol	Description
	
	Oxygen Sensor– 2-Wire
	Heated Oxygen Sensor– 4-Wire
	Solenoid– Actuator
	Solenoid– Valve
	Clutch

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Symbol	Description
	
	Motor
	Motor with PTC
	Antenna
	Speaker
	Horn

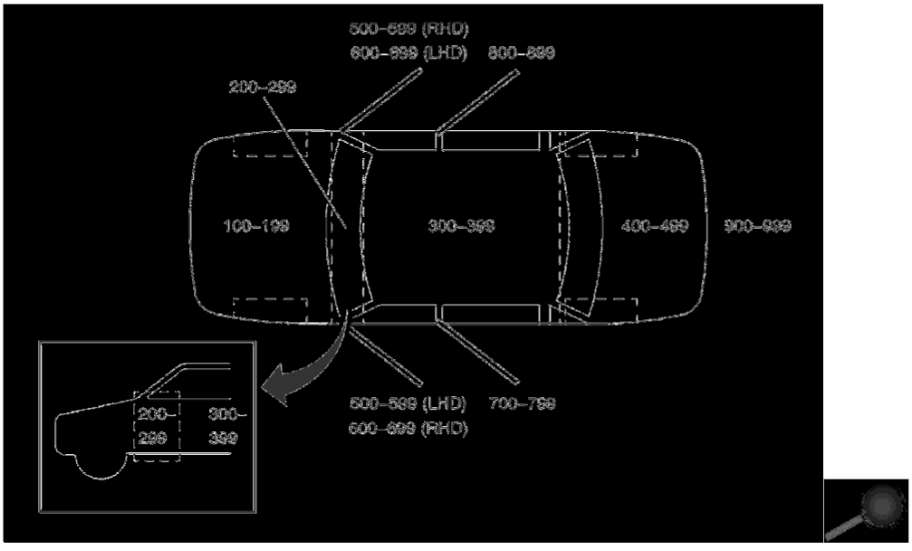
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Symbol	Description
	
	Microphone
	Airbag
	SIR Coil
	SIR Impact Sensor

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Vehicle Zoning Strategy

All grounds, in-line connectors, and splices have identifying numbers that correspond to where they are located in the vehicle. The following table explains the numbering system.



Vehicle Zoning Strategy

Callout Numbers	Zone Description
100-199	Engine compartment (all forward of the instrument panel)
200-299	Within the instrument panel area (between the bulkhead and the front plane of the instrument panel)
300-399	Passenger compartment (from instrument panel to the back of the rear seats)
400-499	Luggage compartment (from the back of the rear seats to the rear of the vehicle)
500-599	Inline harness connectors to or within the driver door
600-699	Inline harness connectors to or within the front passenger door
700-799	Inline harness connectors to or within the left rear door

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Callout Numbers	Zone Description
800-899	Inline harness connectors to or within the right rear door
900-999	Inline harness connectors to or within the luggage compartment lid or hatch

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Schematics RPO Code List

Schematics RPO Code List

RPO	Option Name	Country Group
A45	MEMORY-SEAT ADJUSTER, MIRROR, POWER, DRIVER, PERSONALIZATION	U.S.A., PR and USVI (MAH),Australia/NZ (MBB)
AH5	ADJUSTER FRT ST-POWER, 8 WAY, NO MEMORY, DRIVER	Australia/NZ (MBB),Africa (MAA),Mid-East (MAM)
AH6	ADJUSTER FRT ST-SEAT, POWER, 4 WAY, VERT, DRIVER	U.S.A., PR and USVI (MAH),Australia/NZ (MBB),Africa (MAA),Mid-East (MAM)
AH7	ADJUSTER PASS ST-POWER, 4 WAY, VERT	U.S.A., PR and USVI (MAH)
AH8	ADJUSTER PASS ST-POWER, 8 WAY	U.S.A., PR and USVI (MAH),Australia/NZ (MBB),Mid-East (MAM)
ATH	LOCK CONTROL, ENTRY-REMOTE ENTRY, EXTENDED RANGE, PASSIVE ENTRY, ALL DOORS	U.S.A., PR and USVI (MAH),Australia/NZ (MBB),Africa (MAA)
AY0	RESTRAINT SYSTEM-SEAT, INFLATABLE, DRIVER AND PASS FRT, SEAT SIDE, ROOF SIDE	Australia/NZ (MBB),Africa (MAA),Mid-East (MAM)
BTM	SWITCH-ENGINE START, KEYLESS	U.S.A., PR and USVI (MAH),Australia/NZ (MBB),Africa (MAA)
C90	LAMP INTR, FRT & RR DRS, COURTESY	TBD
CF5	ROOF-SUN, GLASS, SLIDING, ELEC	U.S.A., PR and USVI (MAH),Australia/NZ (MBB),Africa (MAA),Mid-East (MAM)
CZ1	COUNTRY CENTRAL AMERICA	TBD
E95	COVER TONNEAU, RR COMPT	TBD
ERG	EQUIPMENT AUX GAUGE	TBD
F19	RATIO TRANSAXLE FINAL DRIVE 3.82	TBD
F55	CHASSIS CONTINOUSLY VARIABLE REAL TIME DAMPING MAGNETO RHEOLOGICAL	TBD
J77	BRAKE PARKING ELECTRONICALLY OPERATED	TBD

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RPO	Option Name	Country Group
JFA	BRAKE PARKING-FOOT APPLY	U.S.A., PR and USVI (MAH)
L77	ENGINE-FLEXIBLE FUEL, (GAS/ETHANOL), 8 CYL, 6.0L, SFI, ALUM, AFM, GM	U.S.A., PR and USVI (MAH),Australia/NZ (MBB),Africa (MAA),Mid-East (MAM)
LFN	ENGINE GAS, 4 CYL, 1.2L, MFI, VVT, L4, DOHC, GEN 2, FAM A /B, 61 KW	TBD
LFW	ENGINE-GAS, 6 CYL, 3.0L, SIDI, DOHC, VVT, E85 MAX, ALUM, GM	Australia/NZ (MBB)
LFX	ENGINE-GAS, 6 CYL, 3.6L, SIDI, DOHC, VVT, E85 MAX, ALUM, GM	U.S.A., PR and USVI (MAH),Australia/NZ (MBB)
LHD	VEHICLE DRIVE-LEFTHAND DRIVE	U.S.A., PR and USVI (MAH),Mid-East (MAM)
LS3	ENGINE-GAS, 8 CYL, 6.2L, SFI, ALUM, HO, GM	U.S.A., PR and USVI (MAH),Australia/NZ (MBB)
LSA	ENGINE-GAS, 8 CYL, 6.2L, SFI, ER, ALUM, INTR CLR SC, GM	Australia/NZ (MBB)
LWR	ENGINE-LP GAS, 6 CYL, 3.6L, MFI, V6, VVT, ALUM, 196KW	Australia/NZ (MBB)
MER	TRANSMISSION-MAN 6 SPD, TREMEC (TR6060), 85MM, 3.01 1ST, 0.71 5TH, 0.57 6TH, O/D	Australia/NZ (MBB),Africa (MAA)
MG9	TRANSMISSION-MAN 6 SPD, TREMEC, 85MM, 2.66 1ST, 0.63 6TH.	Australia/NZ (MBB)
MV5	TRANSMISSION-MAN 6 SPD, AISIN, 85MM, 4.475 1ST, 0.752 6TH, O/D	Australia/NZ (MBB)
MYA	TRANSMISSION-AUTO 6 SPD, HMD, 6L45	U.S.A., PR and USVI (MAH),Australia/NZ (MBB)
MYC	TRANSMISSION-AUTO 6 SPD, HMD, 6L80	U.S.A., PR and USVI (MAH),Australia/NZ (MBB),Africa (MAA),Mid-East (MAM)
MYD	TRANSMISSION-AUTO 6 SPD, HMD, 6L90	Australia/NZ (MBB)
NPP	EXHAUST SYSTEM PERFORMANCE	TBD
RHD	VEHICLE DRIVE-RIGHTHAND DRIVE	Australia/NZ (MBB),Africa (MAA)
RZW	ACCESSORY-HARNESS - TRAILER HITCH	Australia/NZ (MBB)
T3N	LAMP SYSTEM-DAYTIME RUNNING, SEPARATE CAVITY	

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RPO	Option Name	Country Group
		U.S.A., PR and USVI (MAH),Australia/NZ (MBB),Africa (MAA)
T3T	HEADLAMPS CONTROL LEVELING SYSTEM, AUTOMATIC, DYNAMIC	TBD
T3U	LAMP FRT FOG-FRT FOG	U.S.A., PR and USVI (MAH),Australia/NZ (MBB),Africa (MAA),Mid-East (MAM)
T4A	HEADLAMPS-HALOGEN	U.S.A., PR and USVI (MAH),Australia/NZ (MBB),Africa (MAA),Mid-East (MAM)
T4F	HEADLAMPS-HIGH INTENSITY DISCHARGE	U.S.A., PR and USVI (MAH),Australia/NZ (MBB),Mid-East (MAM)
T83	HEADLAMPS CONTROL AUTOMATIC ON-OFF	TBD
U25	LAMP INTR, RR COMPT, COURTESY	TBD
U27	LAMP INTR, I/P COMPT, COURTESY	TBD
U29	LAMP INTR, I/P COURTESY	TBD
UD7	PARK ASSIST-REAR	Mid-East (MAM)
UE1	COMMUNICATION SYSTEM-VEHICLE, ONSTAR	U.S.A., PR and USVI (MAH)
UEN	SENSOR INDICATOR-SEAT BELT, FRT PASS PRESENCE DETECTOR	Australia/NZ (MBB),Africa (MAA),Mid-East (MAM)
UEU	SENSOR INDICATOR-FORWARD COLLISION ALERT	U.S.A., PR and USVI (MAH),Australia/NZ (MBB),Africa (MAA)
UFL	LANE ACTIVE SAFETY-DEPARTURE WARNING	U.S.A., PR and USVI (MAH),Australia/NZ (MBB),Africa (MAA)
UFQ	PARK ASSIST-FRONT, REAR, LATERAL-FRONT (SEMIAUTOMATIC STEERING ADVANCED PARKING AID)	U.S.A., PR and USVI (MAH),Australia/NZ (MBB),Africa (MAA),Mid-East (MAM)
UFT	SIDE ACTIVE SAFETY-OBSTACLE DETECTION	U.S.A., PR and USVI (MAH),Australia/NZ (MBB),Africa (MAA)
UH5	INDICATOR SEAT BELT WARNING, REAR SEAT	TBD
UL5	RADIO (- DELETE)	TBD

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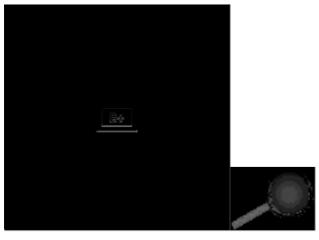
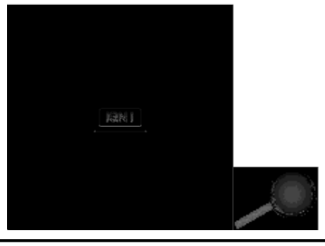
RPO	Option Name	Country Group
ULS	LOCK CONTROL STEERING COLUMN	TBD
UQA	SPEAKER SYSTEM-PREMIUM AUDIO BRANDED WITH AMPLIFIER	U.S.A., PR and USVI (MAH),Australia/NZ (MBB),Mid-East (MAM)
UQG	SPEAKER SYSTEM-ENHANCED AUDIO WITH AMPLIFIER	Australia/NZ (MBB),Africa (MAA)
UVC	VISION-REAR VIEW, MONO	U.S.A., PR and USVI (MAH),Australia/NZ (MBB),Africa (MAA),Mid-East (MAM)
UVL	CAMERA LANE DEPARTURE WARNING	TBD
UWG	ENTERTAINMENT PKG-RR SEAT, DUAL DISPLAY, REM CONTROL, AUX JACK, 2 WIRELESS DUAL CHANNEL HEADPHONES	Australia/NZ (MBB),Mid-East (MAM)
V25	GUARD RADIATOR, GRILLE, WRAP AROUND, BLACK	TBD
V58	CARRIER LUGGAGE, RR COMPARTMENT LID, CHROME	TBD
V5B	CONVERSION-H.S.V	Australia/NZ (MBB)
VFT	PROTECTOR VEHICLE, CORROSION PREVENTIVE	TBD
VQG	ACCESSORY WEATHER PROTECTION PACKAGE	TBD
Z95	CHASSIS PACKAGE MAGNERIDE	TBD

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Master Electrical Schematic Icons

Table 1: Voltage Indicators
Table 2: General Icons
Table 3: Switch Position Icons
Table 4: Module Circuit Function Icons
Table 5: Harness Components
Table 6: Component Parts
Table 7: Switches and Relays
Table 8: Devices and Sensors

Voltage Indicators

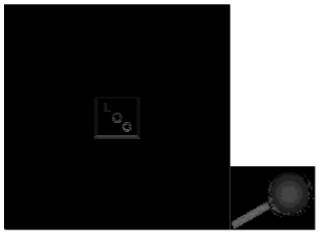
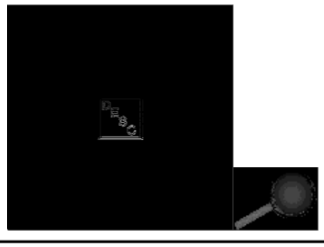
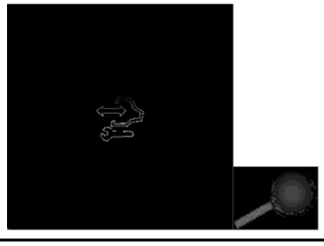
Symbol	Description
	Battery Voltage
	Ignition Switch– Off Position
	Ignition Switch– Accessory Position
	Ignition Switch– Run Position

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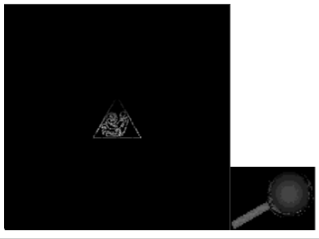
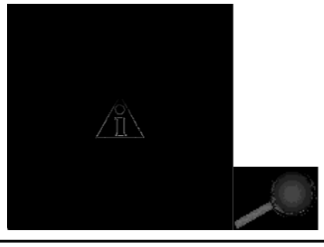
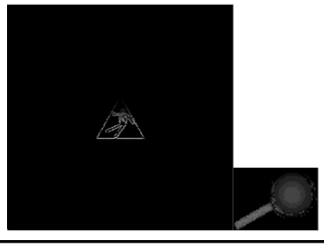
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Symbol	Description
	
	Ignition Switch– Start Position

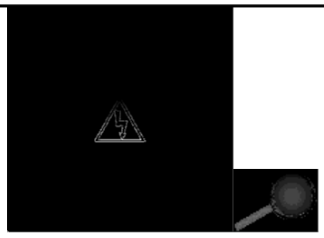
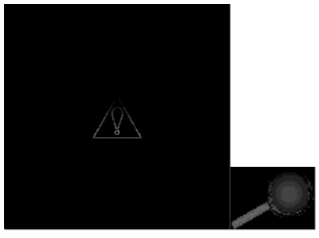
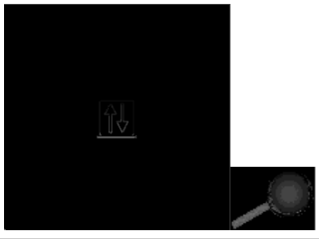
General Icons

Symbol	Description
	Master Component List Icon This icon is used on the schematic to link to the Master Electrical Component List.
	Description and Operation Icon This icon is used on the schematic to link to the Description and Operation of that particular system.
	Computer Programming Icon This icon is used on the schematic to link to Control Module References, which identifies which components need programming upon replacement.
	Next Schematic Page Icon

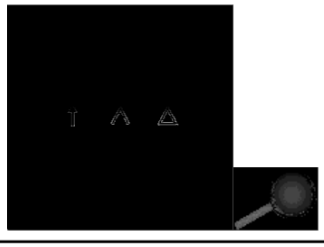
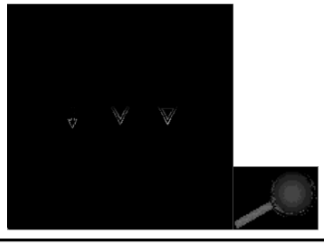
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Symbol	Description
	This icon is used on the schematic to navigate to the next schematic in the subsystem.
	Previous Schematic Page Icon This icon is used on the schematic to navigate to the previous schematic in the subsystem.
	Supplemental Inflatable Restraint (SIR) or Supplemental Restraint System (SRS) Icon This icon is used to alert the technician that the system contains SIR/SRS components that require certain precautions before servicing.
	Information Icon This icon is used to alert the technician that there is additional information that will aid in servicing a system.
	Danger Icon This icon is intended to alert the technician that a component within the system contains labeling with the same icon. This icon is used when a source component has potential for 60 volts DC or greater or has potential for 42 volts AC or greater.
	High Voltage Icon This icon is intended to alert the technician that a component within the system contains labeling with the same icon.

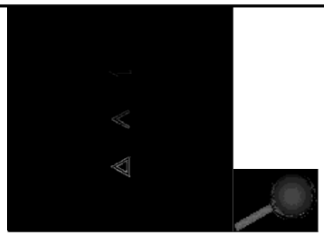
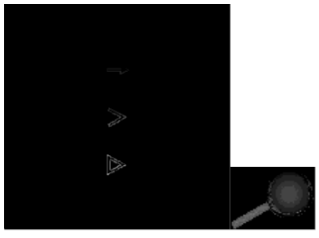
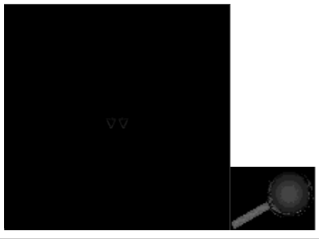
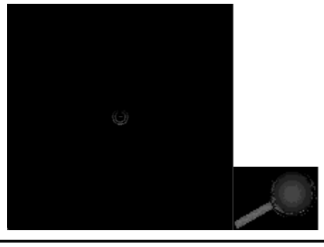
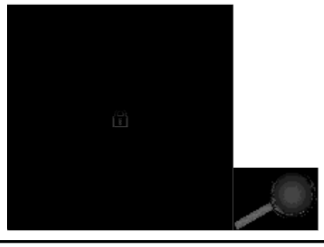
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Symbol	Description
	This icon is used when a component/circuit has potential for 60 volts DC or greater or has potential for 42 volts AC or greater.
	Caution Icon This icon is used to advise the technician to use caution when servicing this component. This icon may be used when a component/circuit has a voltage range potential between 30-60 volts DC or 15-42 volts AC.
	Functional Serial Data Communication This icon is used to show the technician that the serial data circuit detail is shown incomplete. It also provides an active link to the Data Communication Schematics were the circuit is shown complete.

Switch Position Icons

Symbol	Description
	Generic Up Arrows
	Generic Down Arrows
	Generic Left Arrows

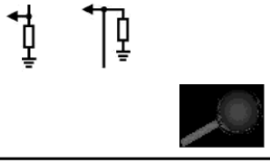
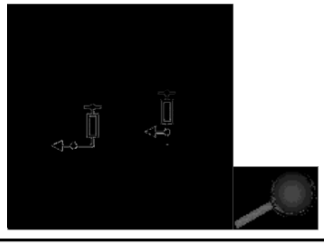
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Symbol	Description
	
	Generic Right Arrows
	Generic Express Down Arrows
	On/Off Icon
	Generic Lock Icon
	Generic Unlock Icon

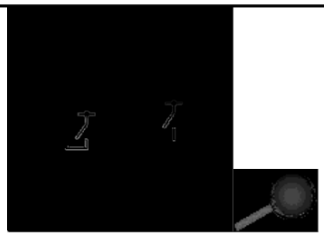
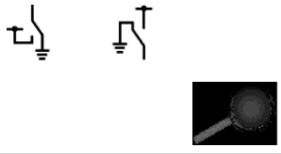
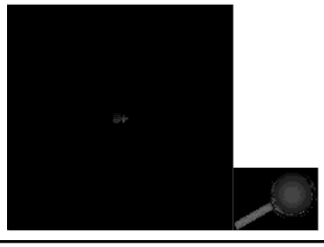
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Symbol	Description
	
	Generic Window Switch Positions– 4 Door
	Generic Window Switch Positions– 2 Door

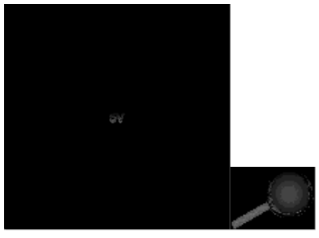
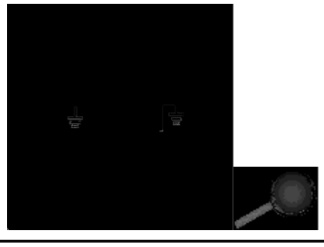
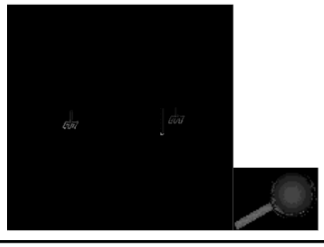
Module Circuit Function Icons

Symbol	Description
	I/O Pull-Down Resistors (–)
	I/O Pull-Up Resistors (+)
	I/O High-Side Drive Switch (+)

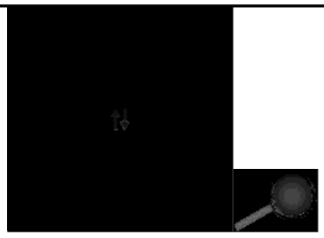
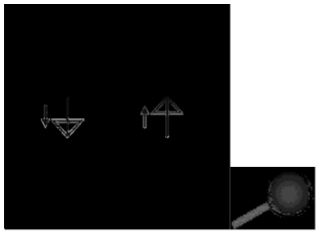
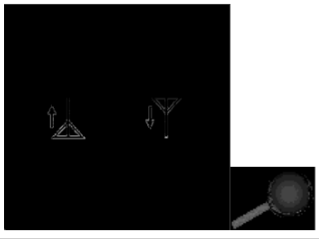
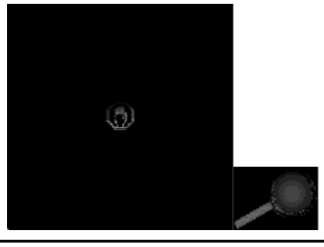
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Symbol	Description
	
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	I/O Bidirectional Switch (+/−)
	Pulse-Width Modulation Symbol
	Battery Voltage
	Ignition Voltage

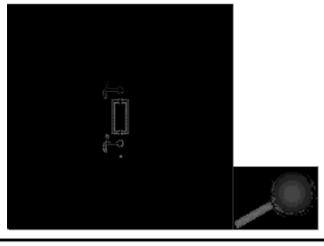
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Symbol	Description
	
	Voltage Reference
	A/C Voltage
	Low Reference
	Ground
	Serial Data

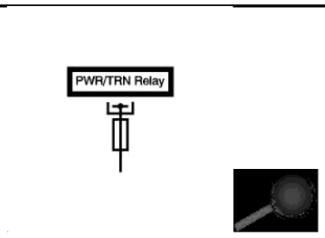
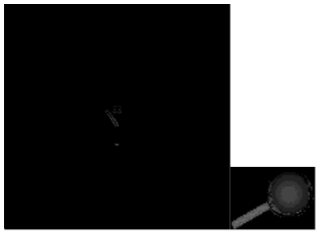
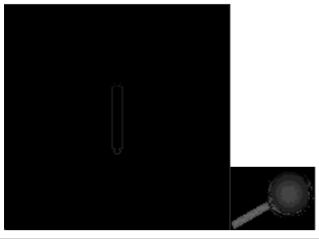
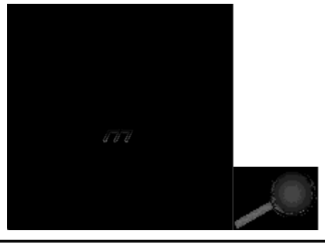
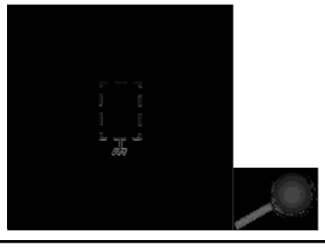
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Symbol	Description
	
	Antenna Signal– In
	Antenna Signal– Out
	Brake Apply

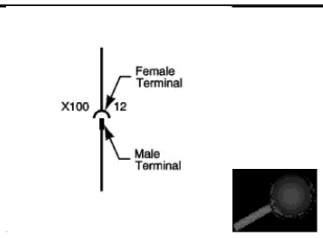
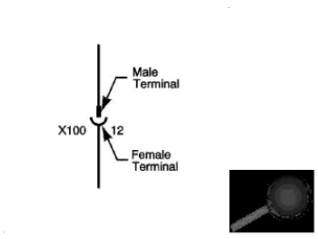
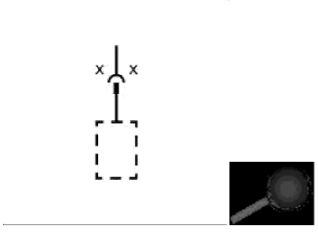
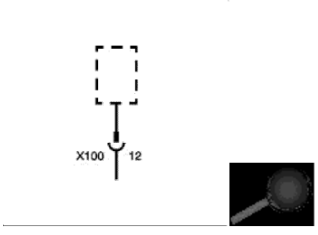
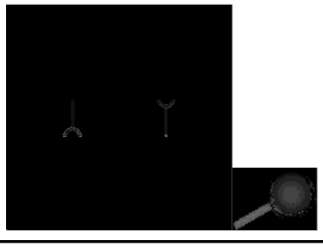
Harness Components

Symbol	Description
	Fuse
	Fuse Supplied by a Relay

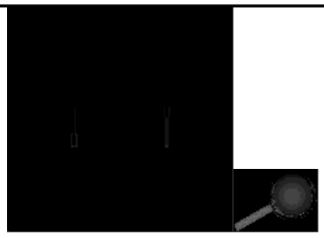
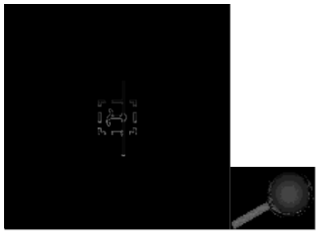
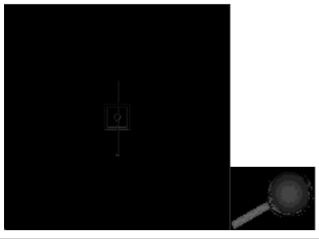
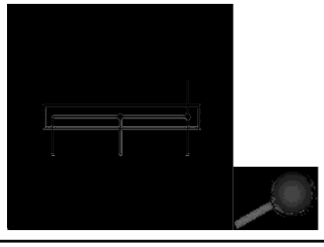
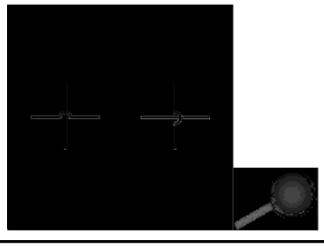
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Symbol	Description
	
	Circuit Breaker
	Fusible Link
	Ground
	Case Ground
	Inline Harness Connector

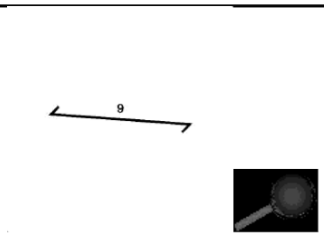
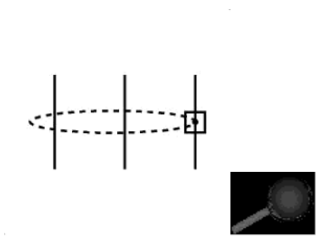
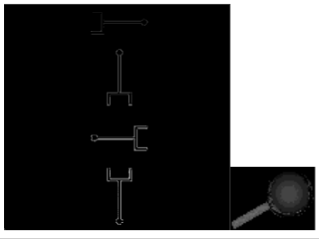
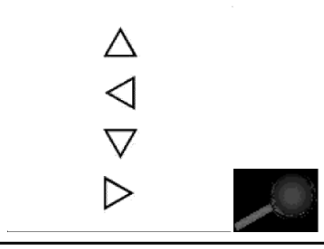
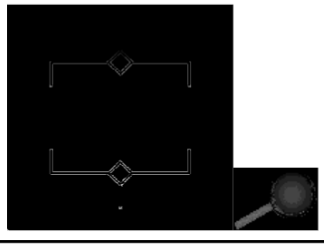
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Symbol	Description
	
	Inline Harness Connector
	Pigtail Connection
	Pigtail Connection
	Provisional or Diagnostic Connector
	Blunt Cut Wire

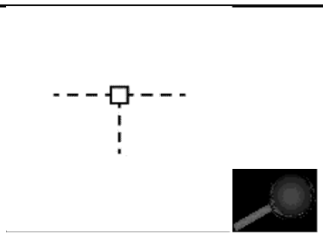
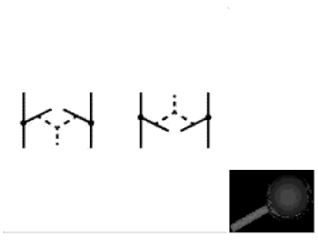
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Symbol	Description
	
	Incomplete Physical Splice
	Complete Physical Splice– 2 Wires
	Complete Physical Splice– 3 or more wires
	Wire Crosses
	Twisted Wires

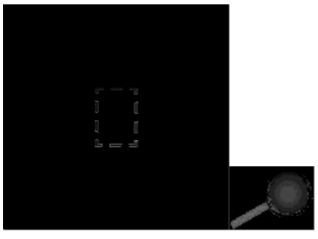
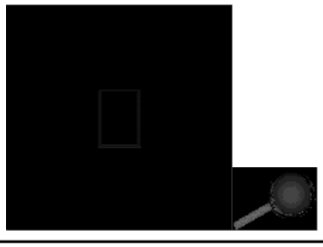
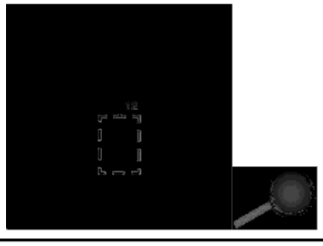
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Symbol	Description
	
	Shield
	Circuit References
	Circuit Continuation Arrowheads
	Option Breakpoint
	Ground Circuit Connection

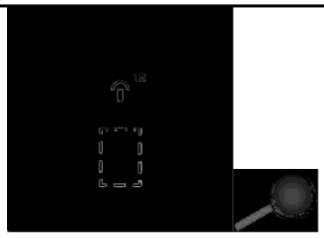
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Symbol	Description
	
	Connector Shorting Clip

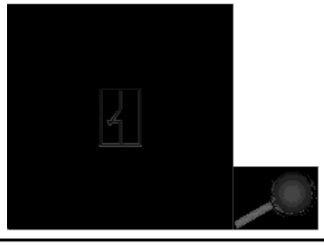
Component Parts

Symbol	Description
	Partial Component When a component is represented in a dashed box, the component or its wiring is not shown in its entirety.
	Entire Component When a component is represented in a solid box the component or its wiring is shown in its entirety.
	Connector Directly Attached to Component
	Pigtail Connector

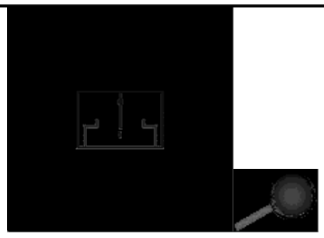
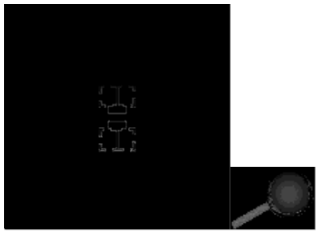
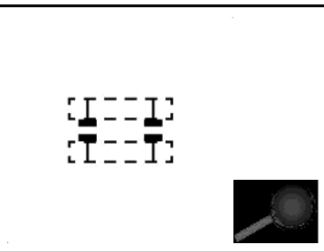
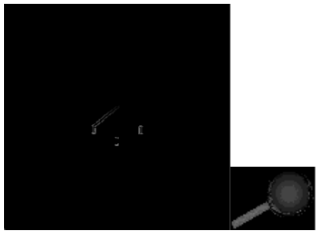
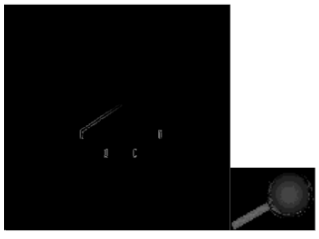
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Symbol	Description
	

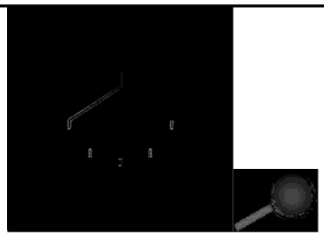
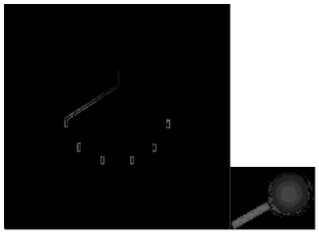
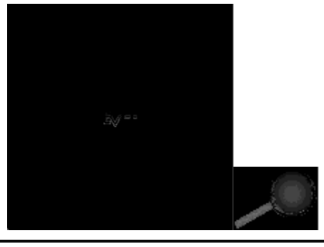
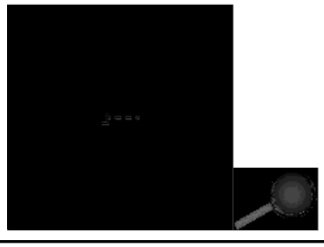
Switches and Relays

Symbol	Description
	Accessory Power Outlet
 	Cigar Lighter
	Switch– 2 Position Normally Open
	Switch– 2 Position Normally Closed
	Switch– Rocker

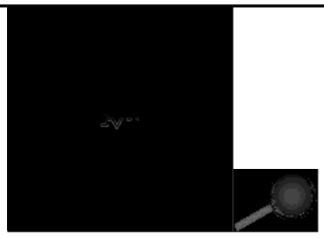
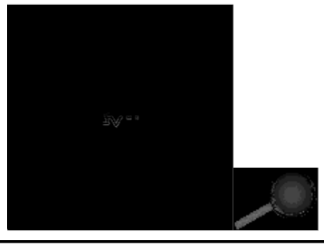
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Symbol	Description
	
	Switch– Contact Plate (1 Wire)
	Switch– Contact Plate (2 Wire)
	Switch– 3 Position
	Switch– 4 Position
	Switch– 5 Position

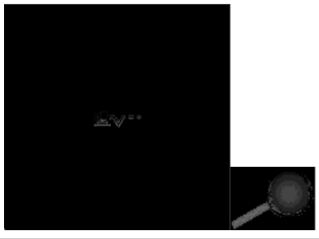
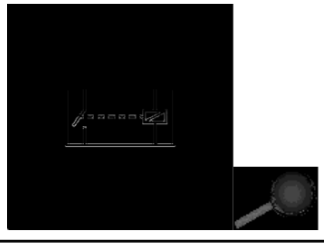
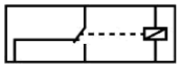
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Symbol	Description
	
	Switch– 6 Position
	Switch Actuator– Push (Momentary)
	Switch Actuator– Push (Latching)
	Switch Actuator– Pull (Momentary)
	Switch Actuator– Pull (Latching)

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Symbol	Description
	
	Switch Actuator– Rotate (Momentary)
	Switch Actuator– Rotate (Latching)
	Switch Actuator– Slide (Momentary)
	Switch Actuator– Slide (Latching)
	Switch Actuator– Pressure (Momentary)

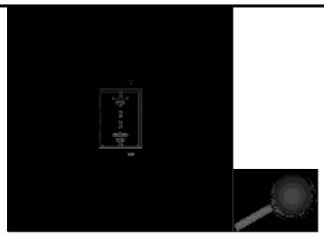
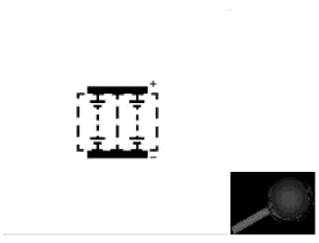
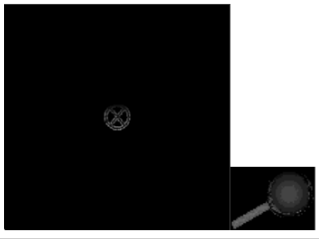
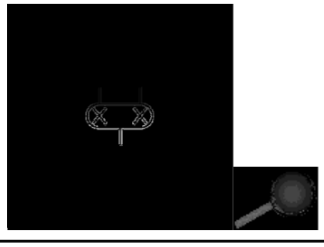
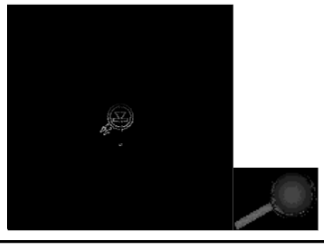
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Symbol	Description
	
	Switch Actuator– Temperature (Momentary)
	Switch Actuator– Volume (Latching)
	4-Pin Single Pole/Throw Relay– Normally Open
 	5-Pin Relay– Normally Closed

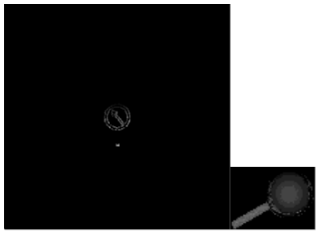
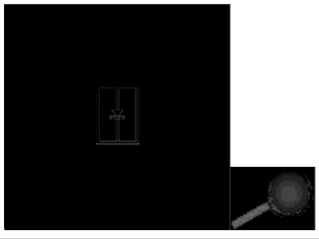
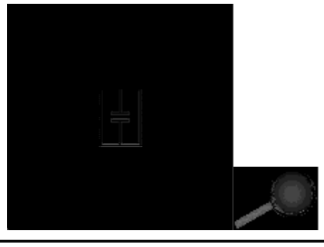
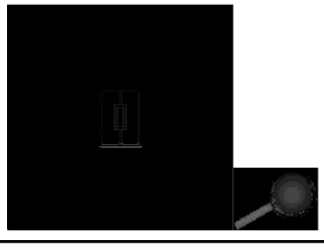
Devices and Sensors

Symbol	Description
	Battery

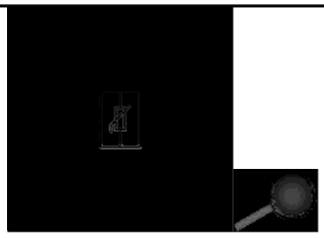
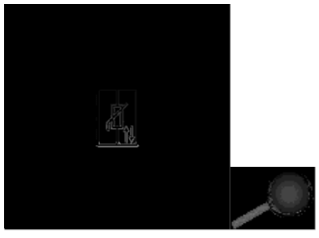
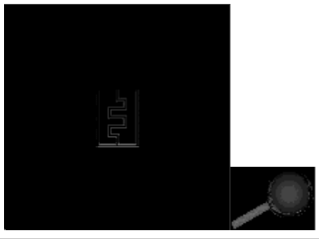
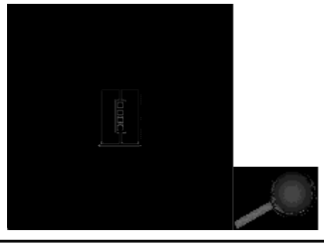
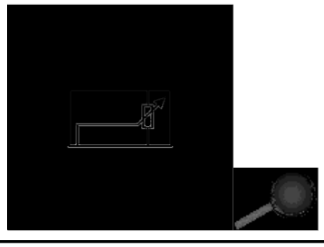
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Symbol	Description
	
	Battery Assembly– Hybrid
	Single Filament Light Bulb
	Double Filament Light Bulb
	Light Emitting Diode (LED)
	Photo Sensor

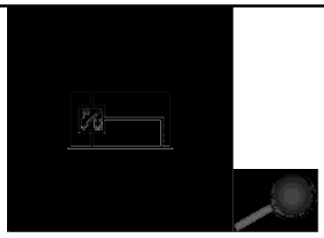
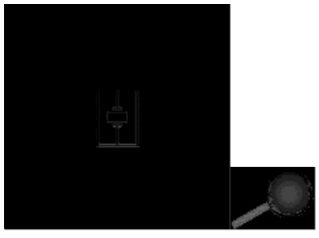
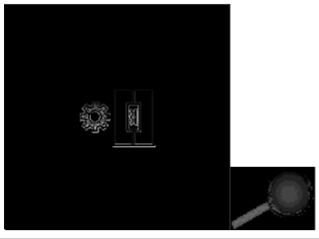
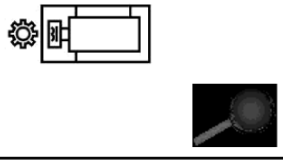
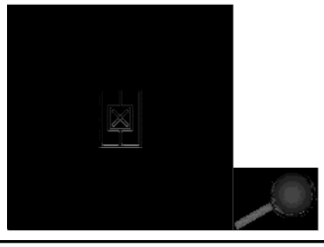
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Symbol	Description
	
	Gauge
	Diode
	Capacitor
	Resistor
	Variable Resistor

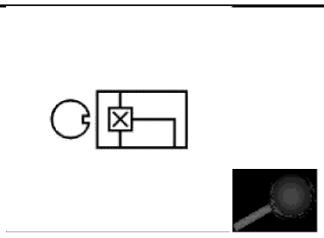
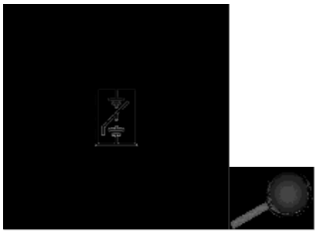
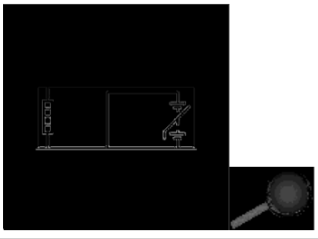
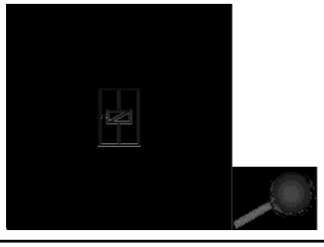
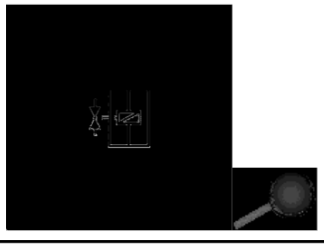
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Symbol	Description
	
	Variable Resistor– NTC
	Breakable Wire
	Heating Element
	Position Sensor
	Pressure Sensor

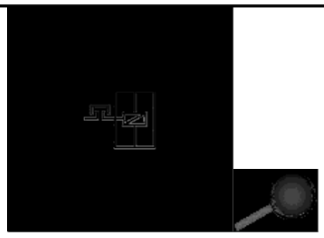
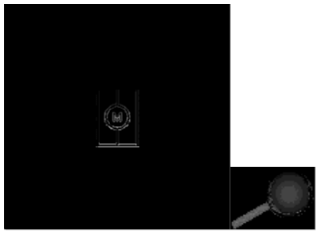
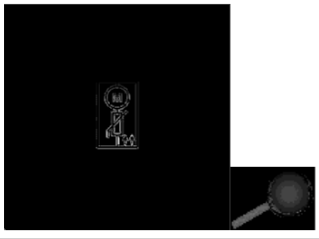
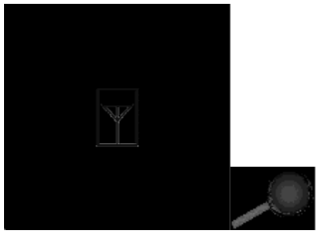
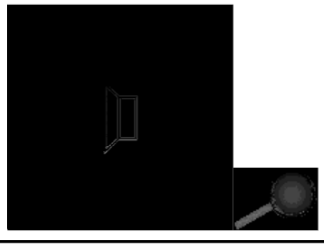
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Symbol	Description
	
	Knock Sensor
	Inductive Type Sensor– 2-Wire
	Inductive Type Sensor– 3-Wire
	Hall Effect Sensor– 2-Wire
	Hall Effect Sensor– 3-Wire

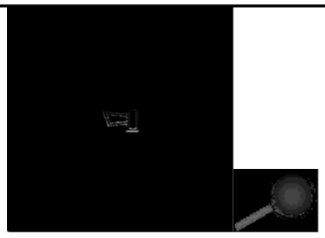
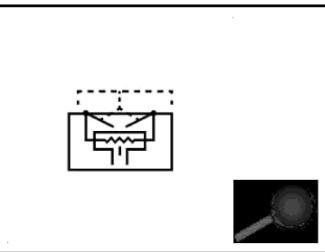
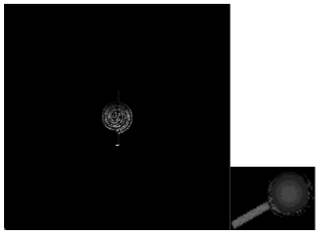
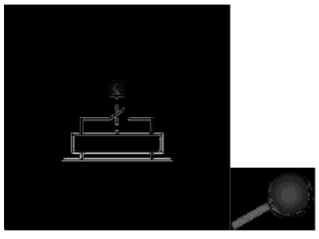
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Symbol	Description
	
	Oxygen Sensor– 2-Wire
	Heated Oxygen Sensor– 4-Wire
	Solenoid– Actuator
	Solenoid– Valve
	Clutch

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Symbol	Description
	
	Motor
	Motor with PTC
	Antenna
	Speaker
	Horn

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Symbol	Description
	
	Microphone
	Airbag
	SIR Coil
	SIR Impact Sensor

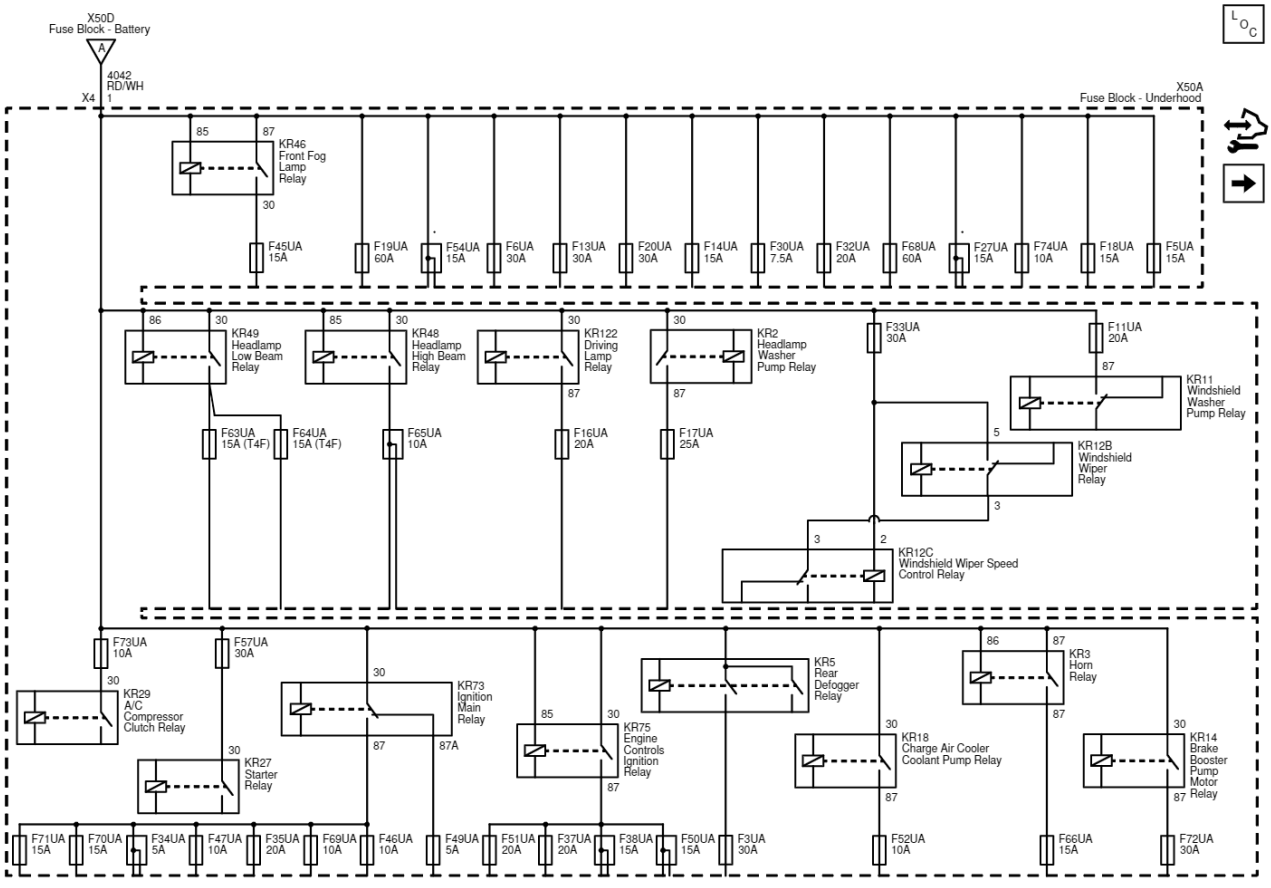
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Power Distribution Schematics

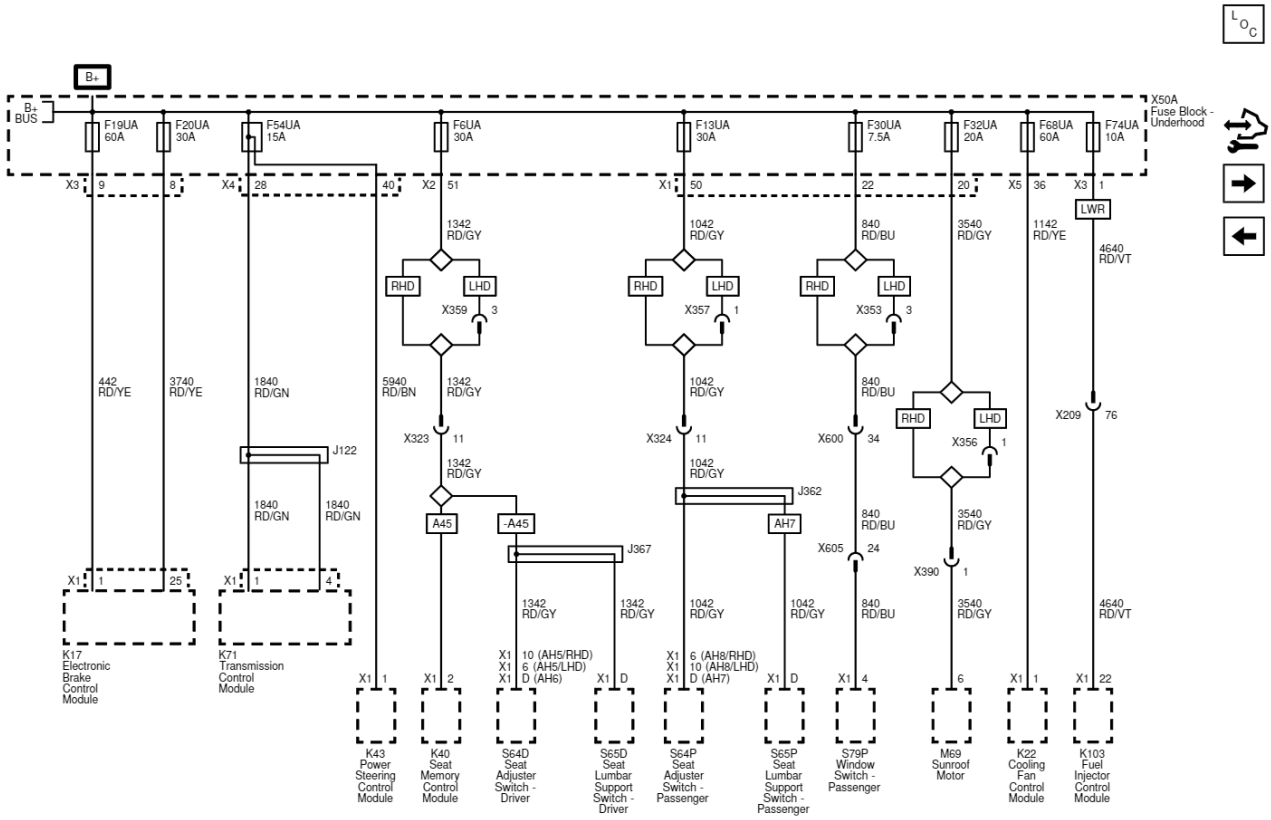
Figure 1: B+ Bus
Figure 2: F6UA, F13UA, F19UA, F20UA, F30UA, F32UA, F54UA, F68UA, and F74UA Fuses
Figure 3: F38UA Fuse
Figure 4: F51UA Fuse
Figure 5: F37UA and F50UA Fuses
Figure 6: F35UA, F46UA, F49UA, F69UA, F70UA Fuses and K73 Ignition Main Relay
Figure 7: F34UA, F47UA, and F71UA Fuses
Figure 8: F2DA, F4DA, F5DA, F6DA, F10DA, F15DA, F16DA, F23DA, F24DA, F25DA, F27DA, F28DA, F29DA, and F30DA Fuses
Figure 9: F3DA, F12DA, F13DA, F14DA, F22DA Fuses and KR104 Battery Saver Relay 1
Figure 10: F1RA, F3RA, F4RA, F7RA, F9RA, F11RA, F18RA, F33RA, F35RA, F36RA, and F37RA Fuses
Figure 11: F14RA, F15RA, F22RA, F24RA, F26RA, and F38RA Fuses
Figure 12: F2RA, F6RA, F10RA, F25RA, F29RA, and F34RA Fuses
Figure 13: F15RA, F28RA, F31RA, F32RA Fuses and KR104B Battery Saver Relay 2

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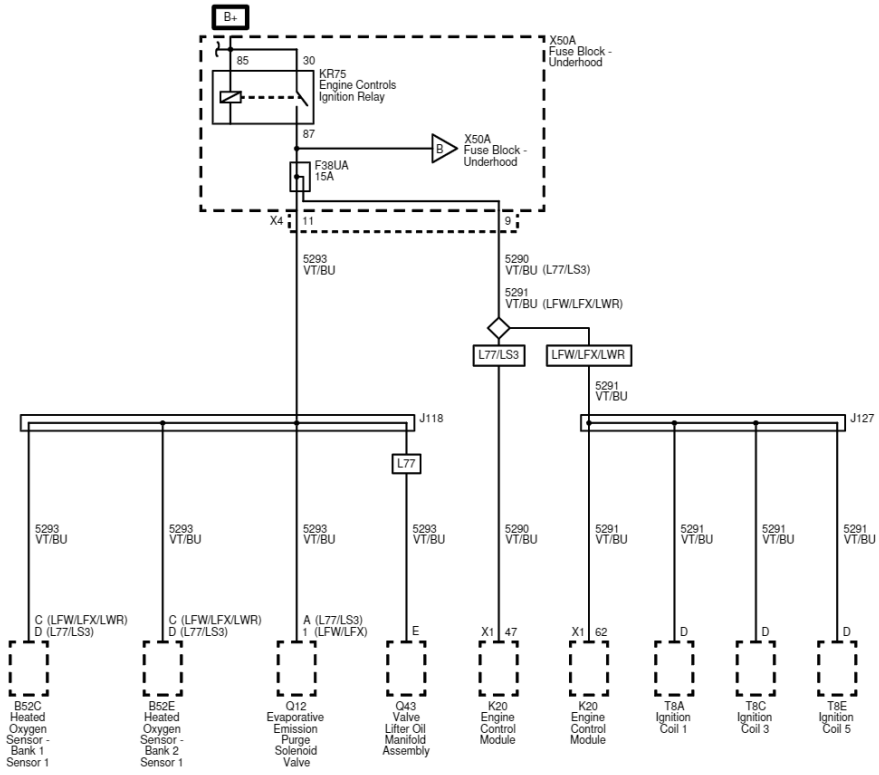
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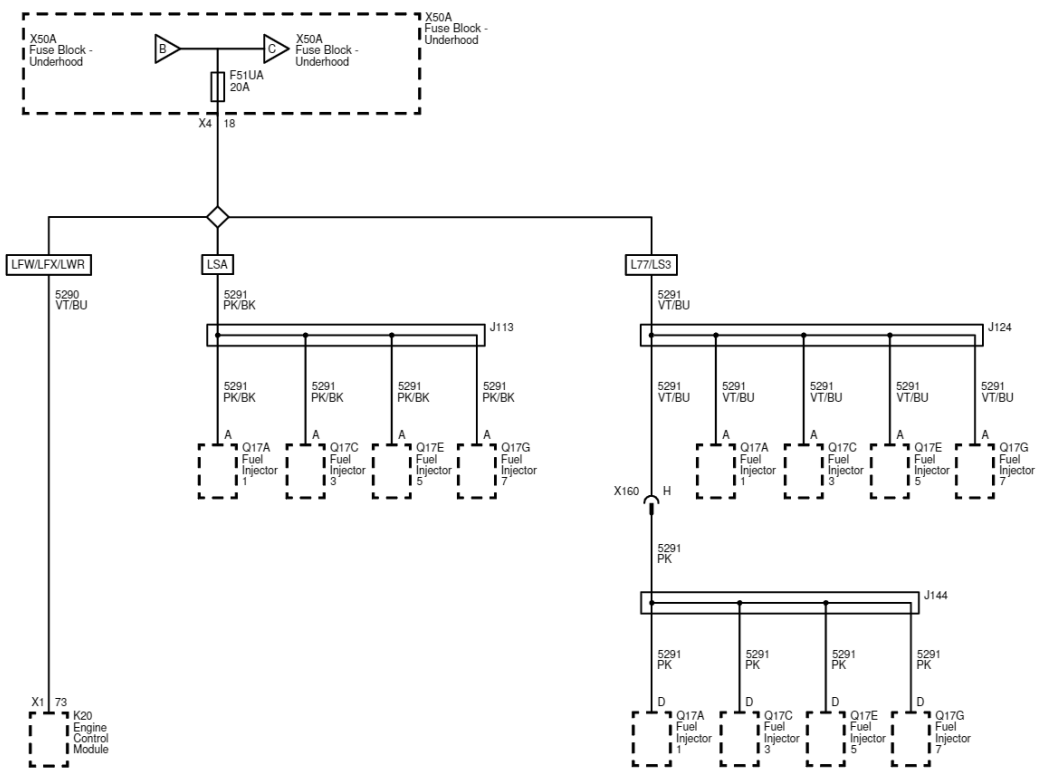
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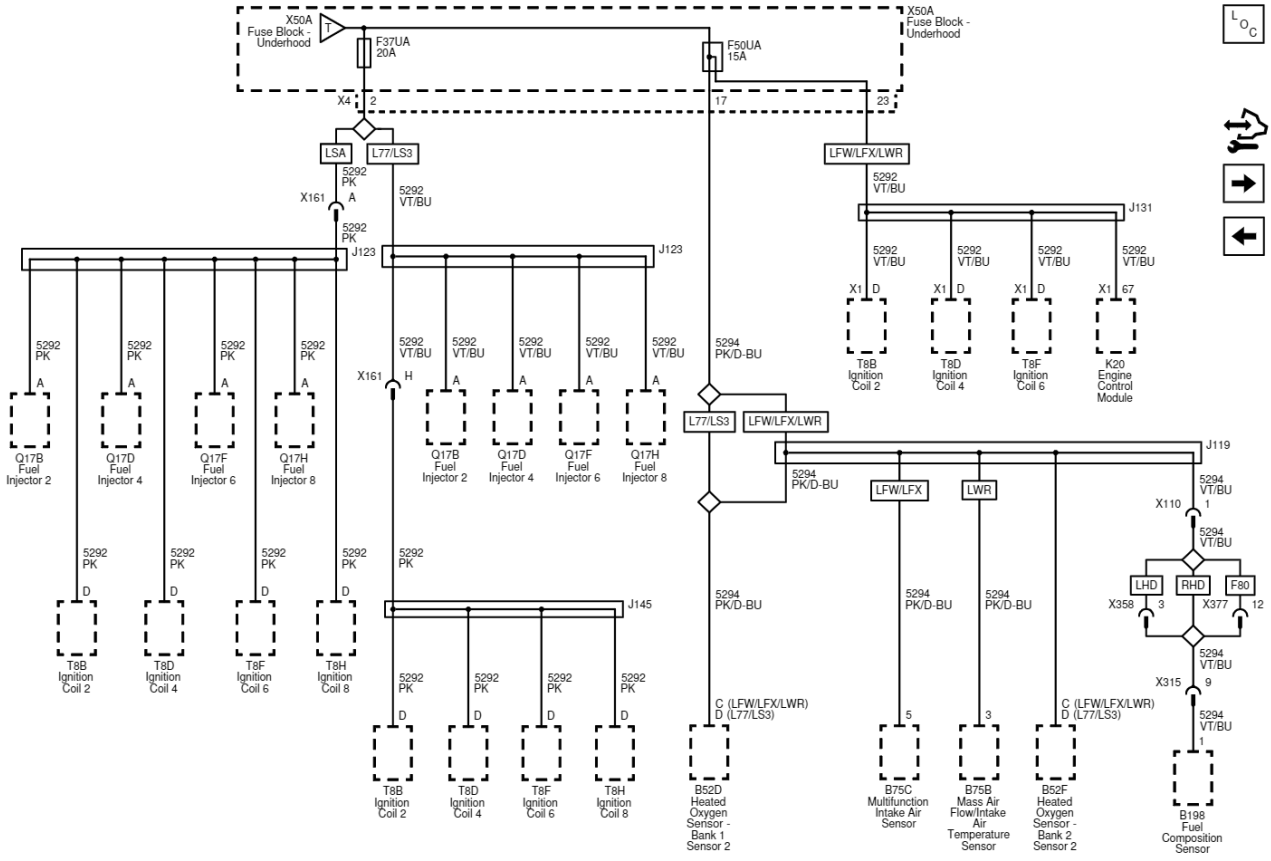
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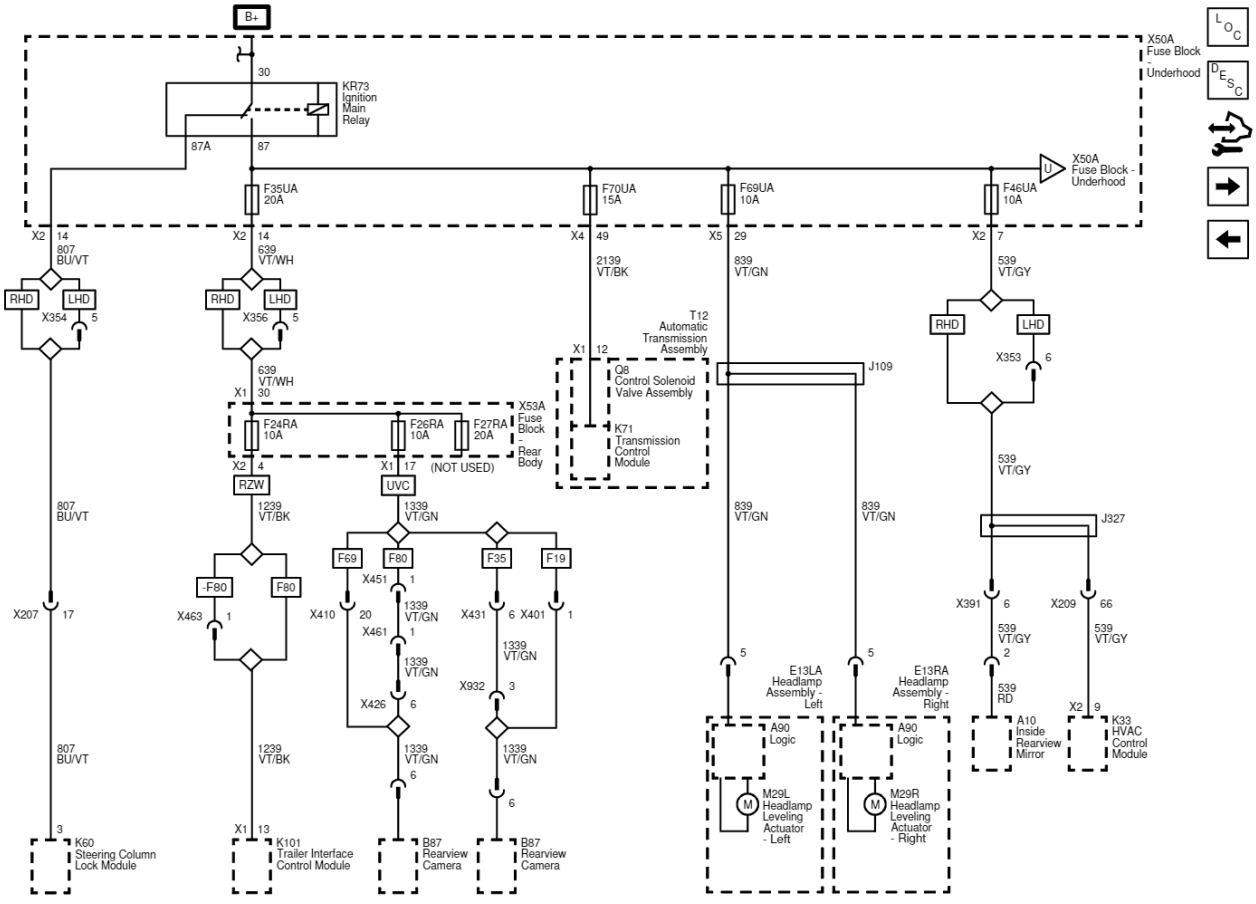
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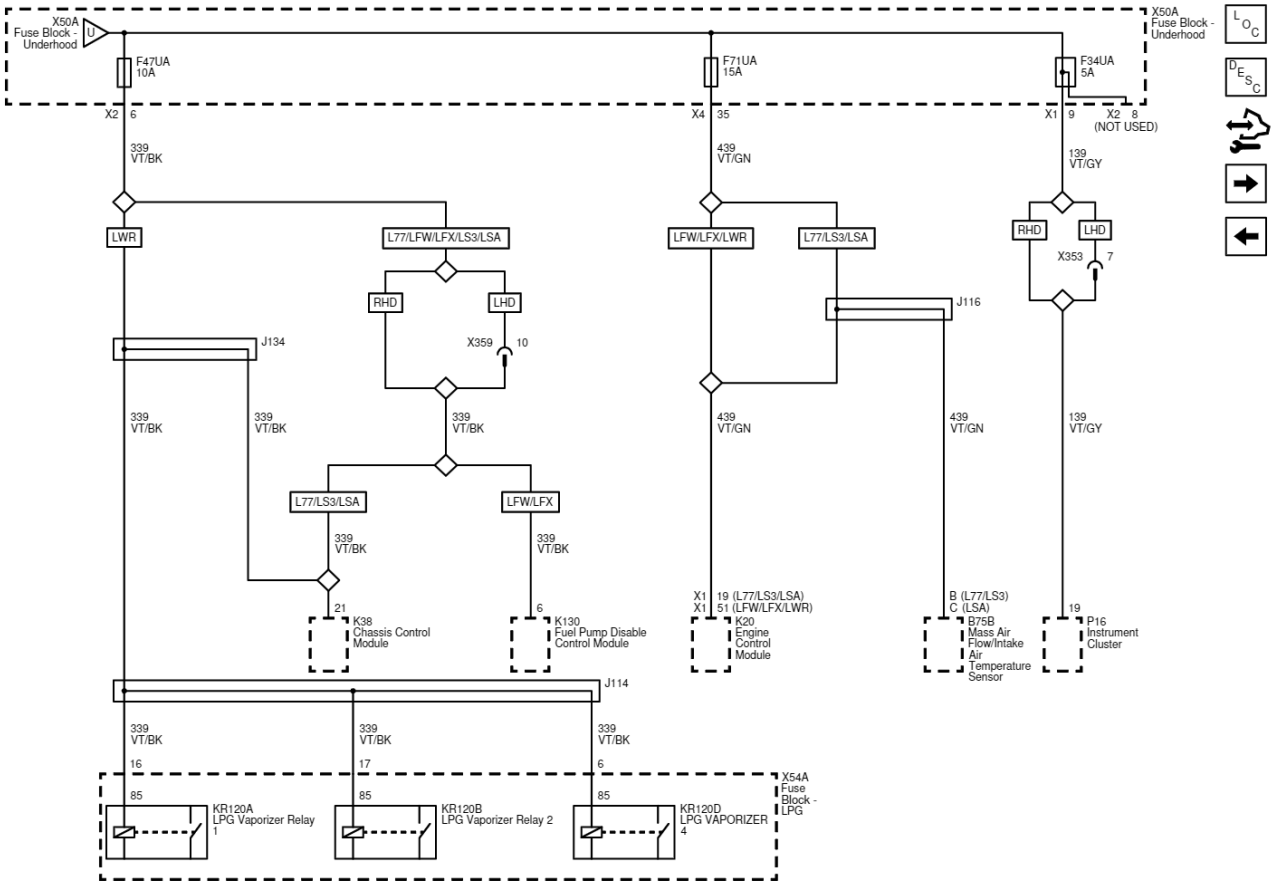
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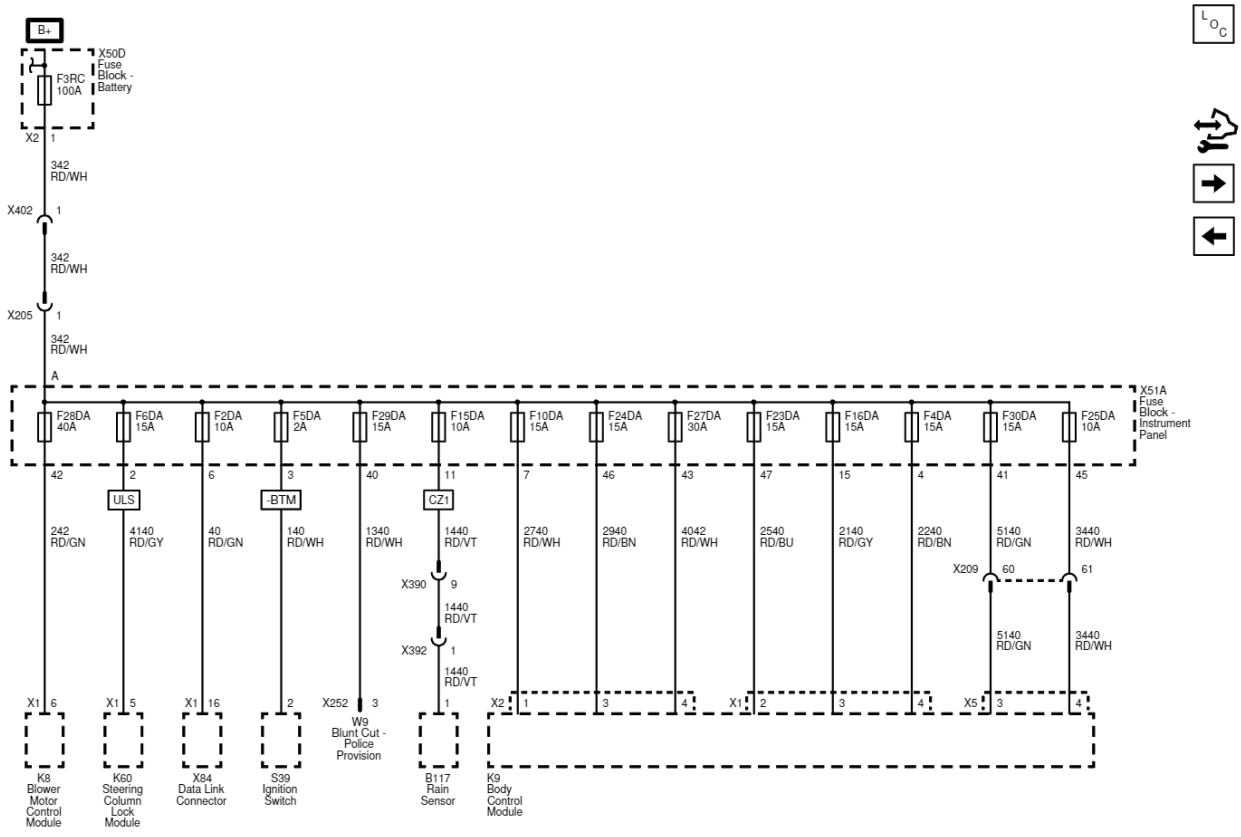
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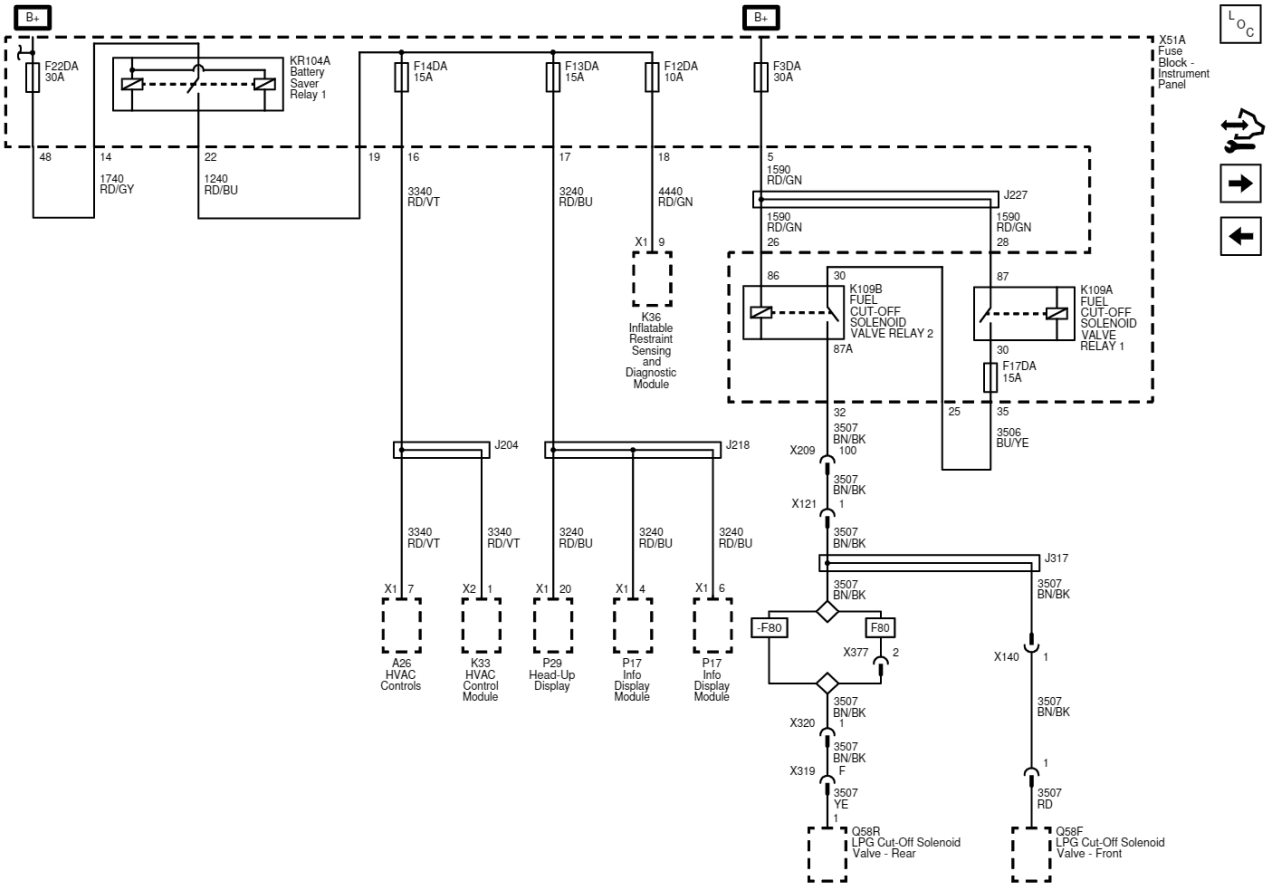
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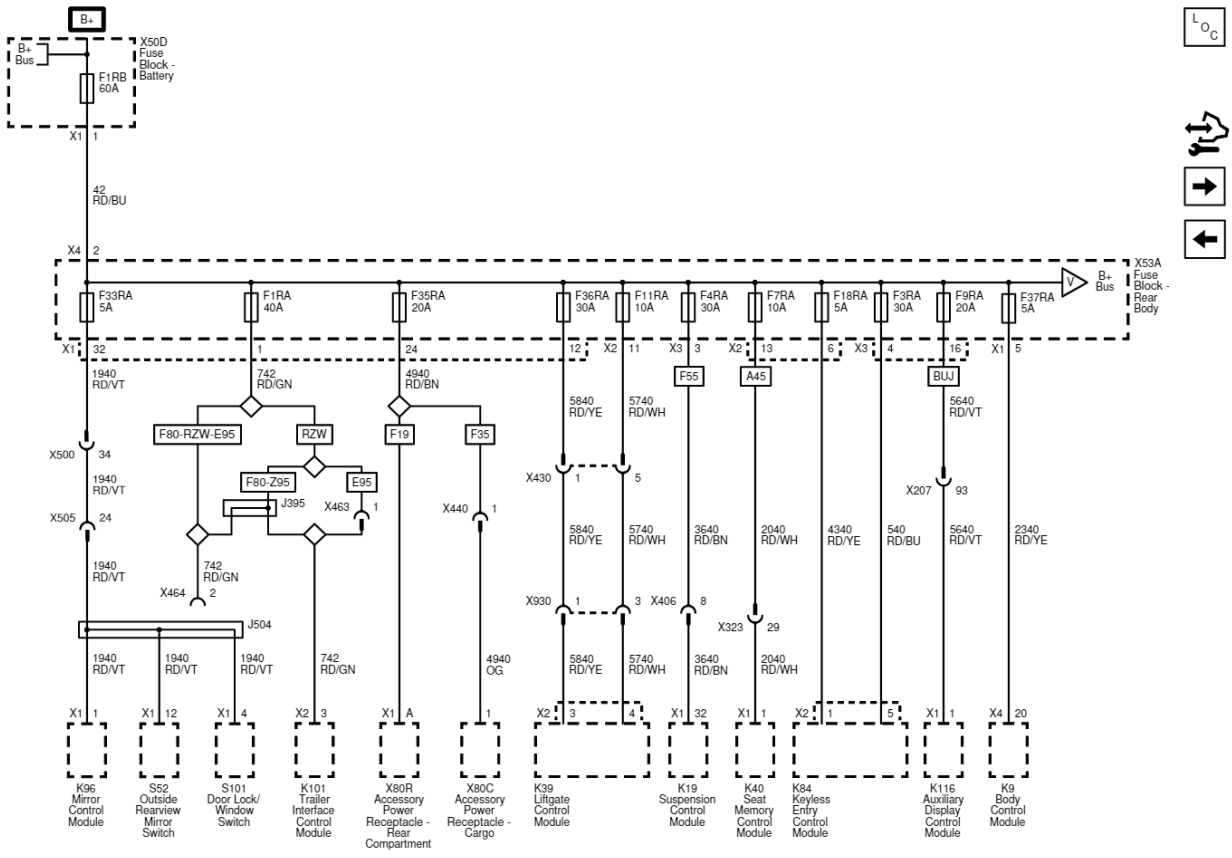
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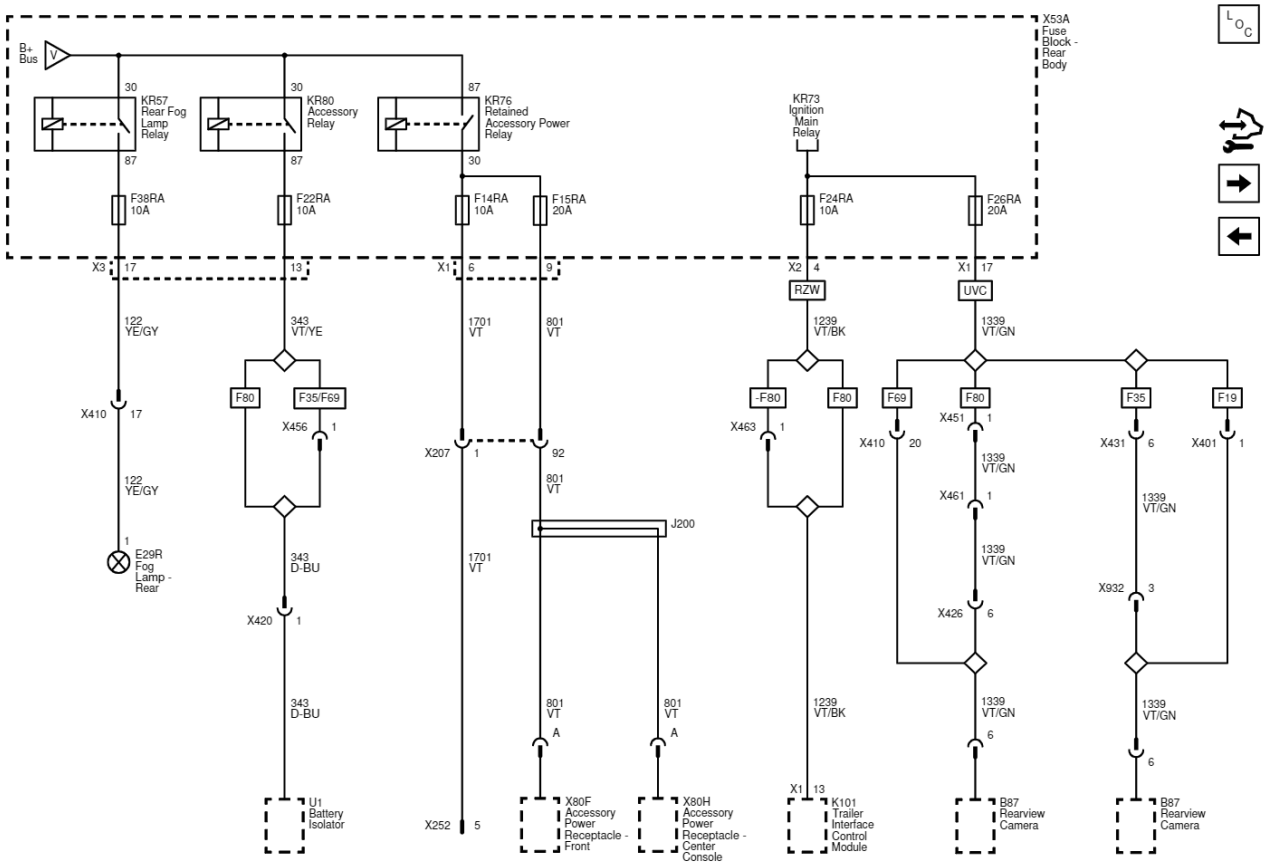
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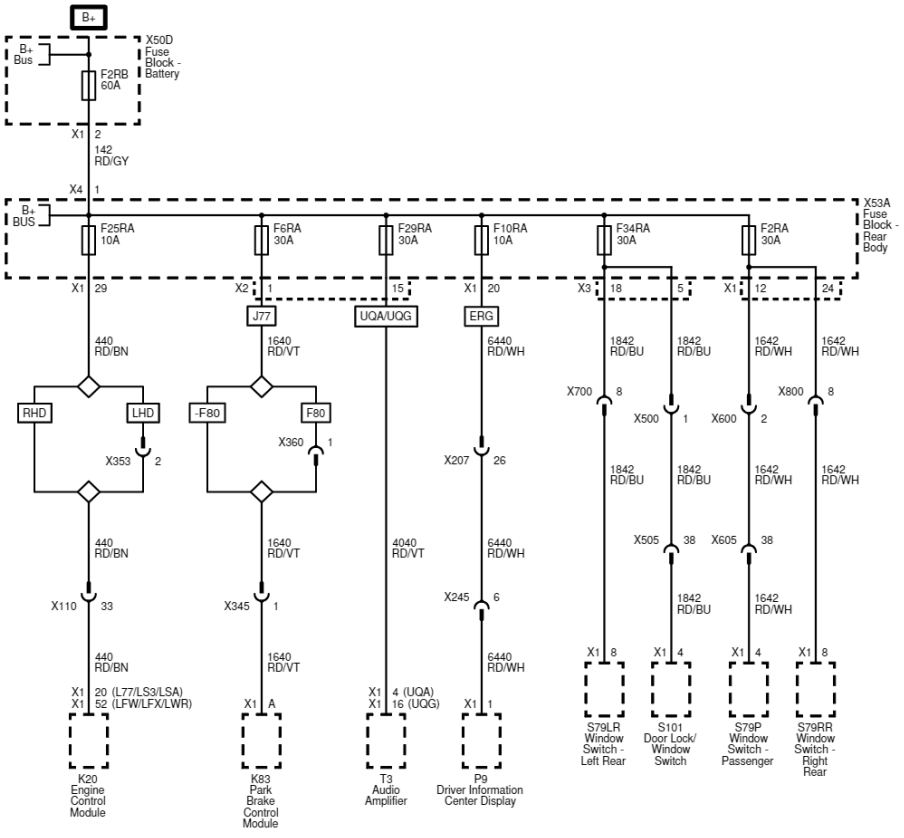
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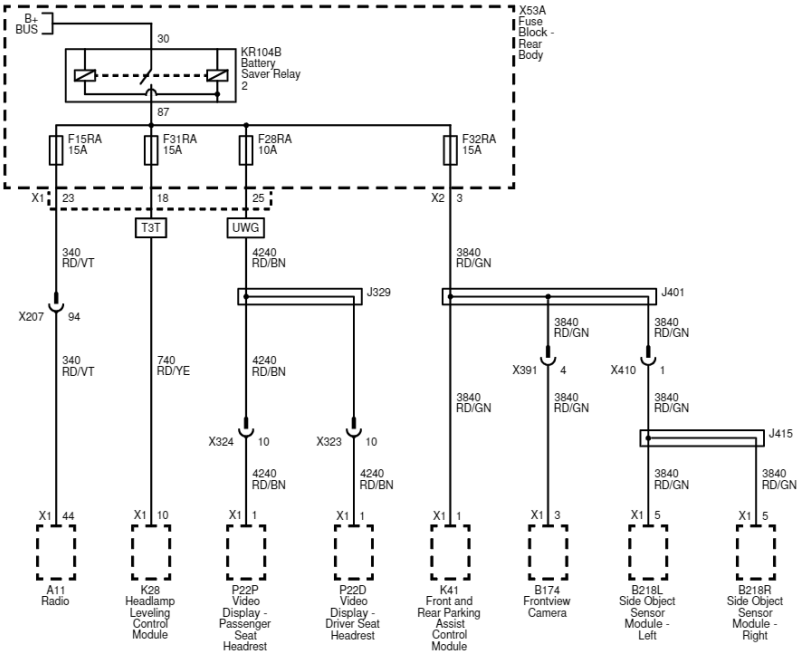
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Power Moding Schematics

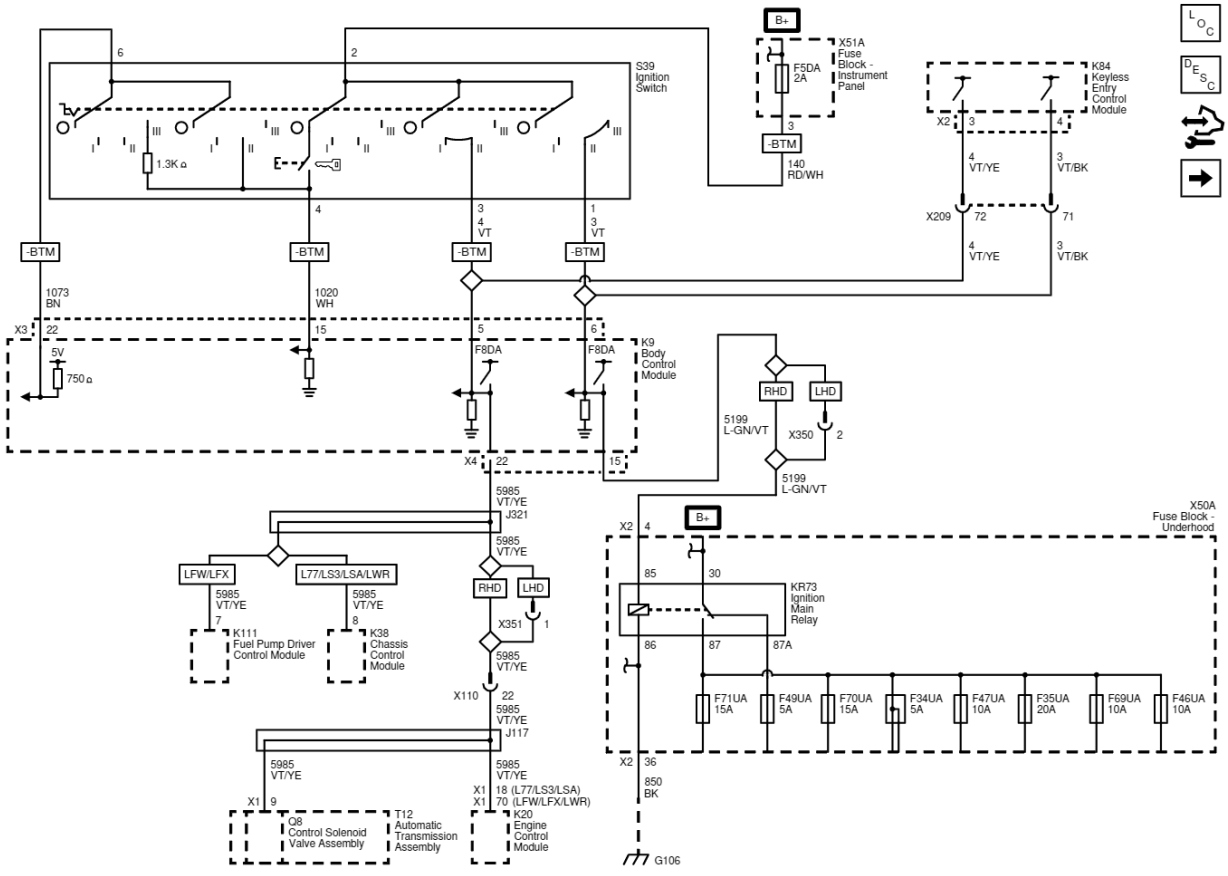
Figure 1: S39 Ignition Switch (-BTM), KR73 Ignition Main Relay and Ignition Power

Figure 2: S38 Ignition Mode Switch (BTM), KR76 Retained Accessory Power Relay and KR80 Accessory Relay

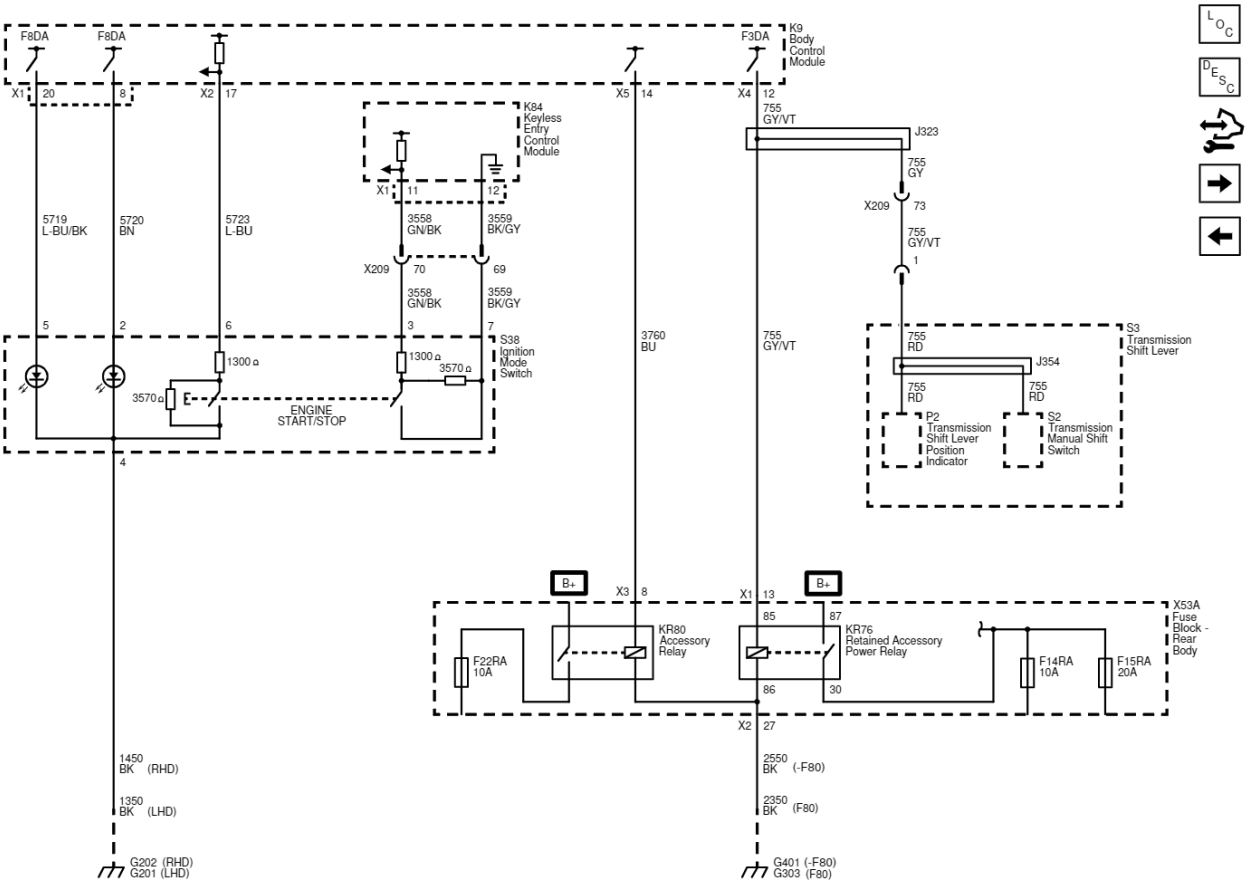
Figure 3: Battery Saver Relays

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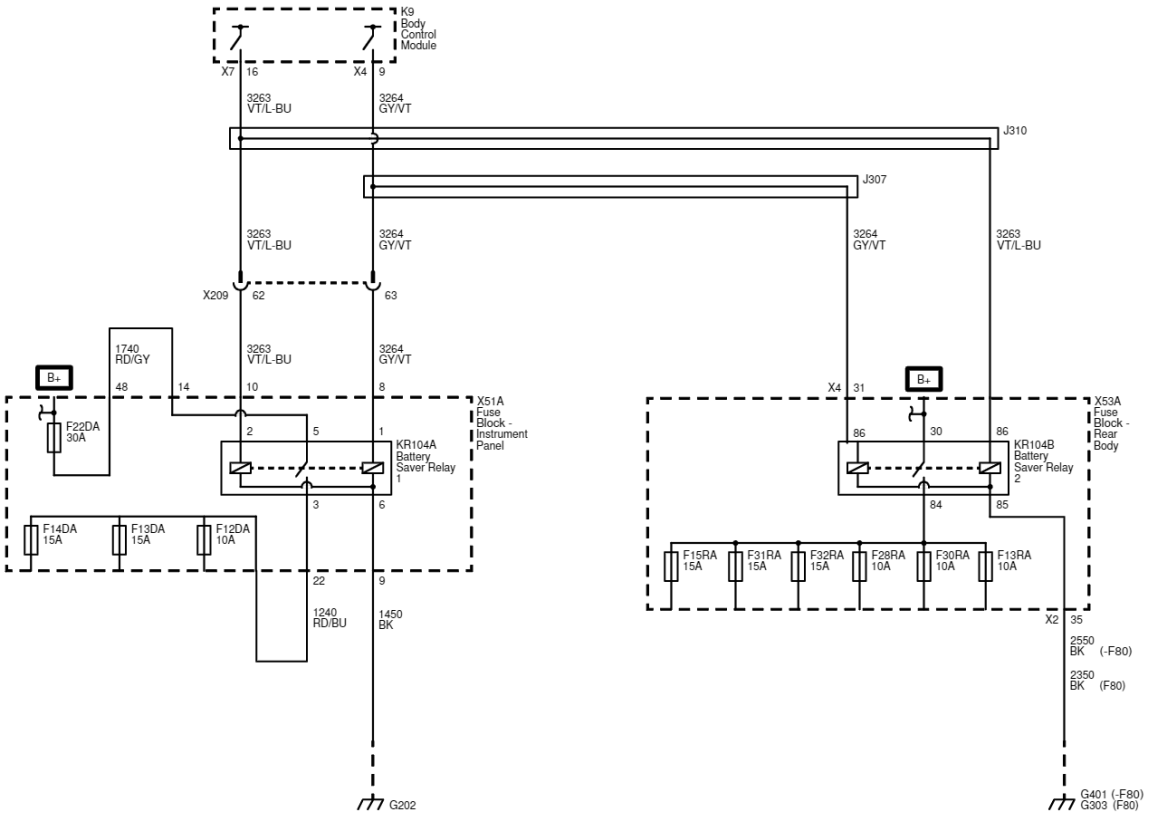
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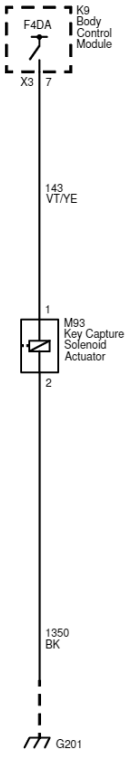
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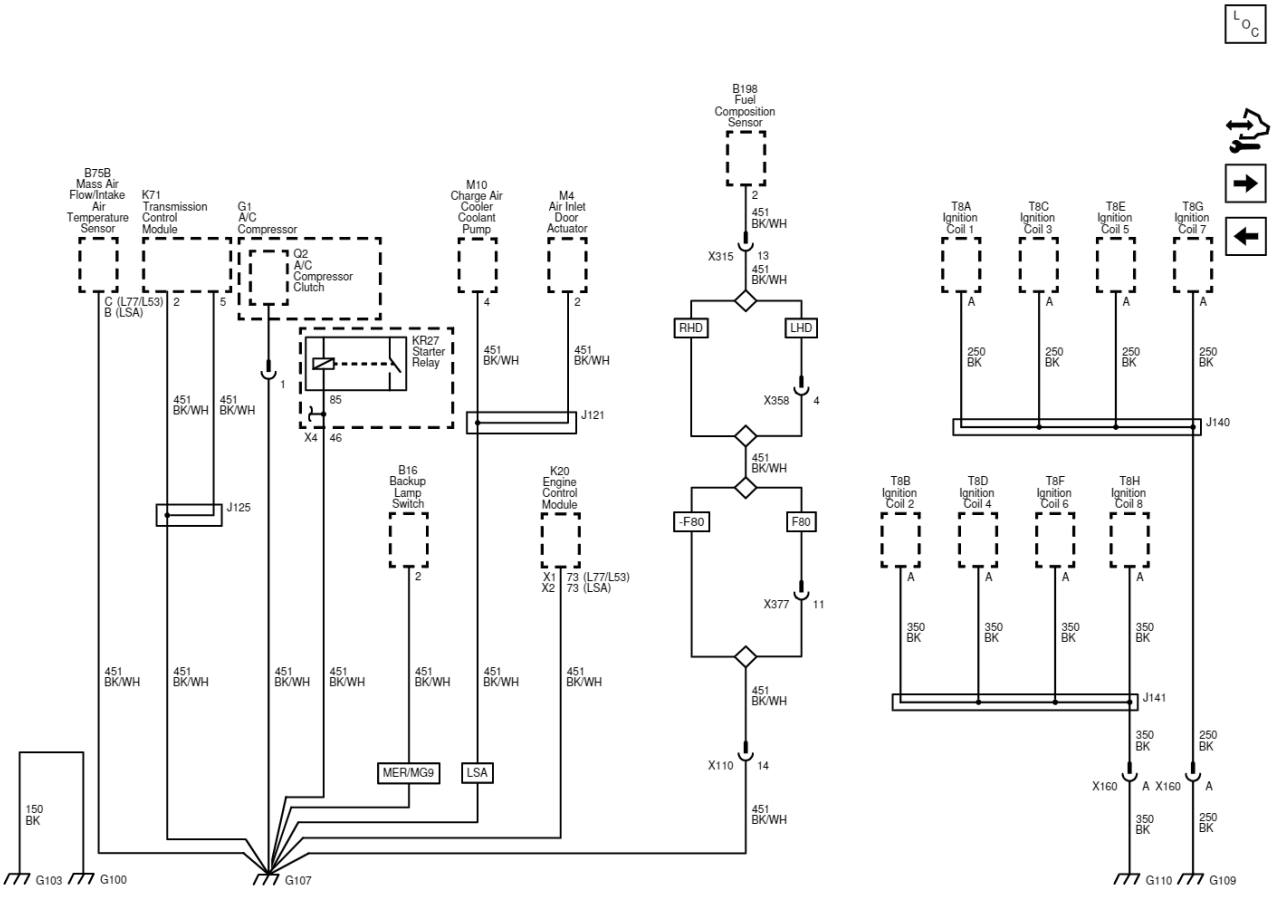
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Ground Distribution Schematics

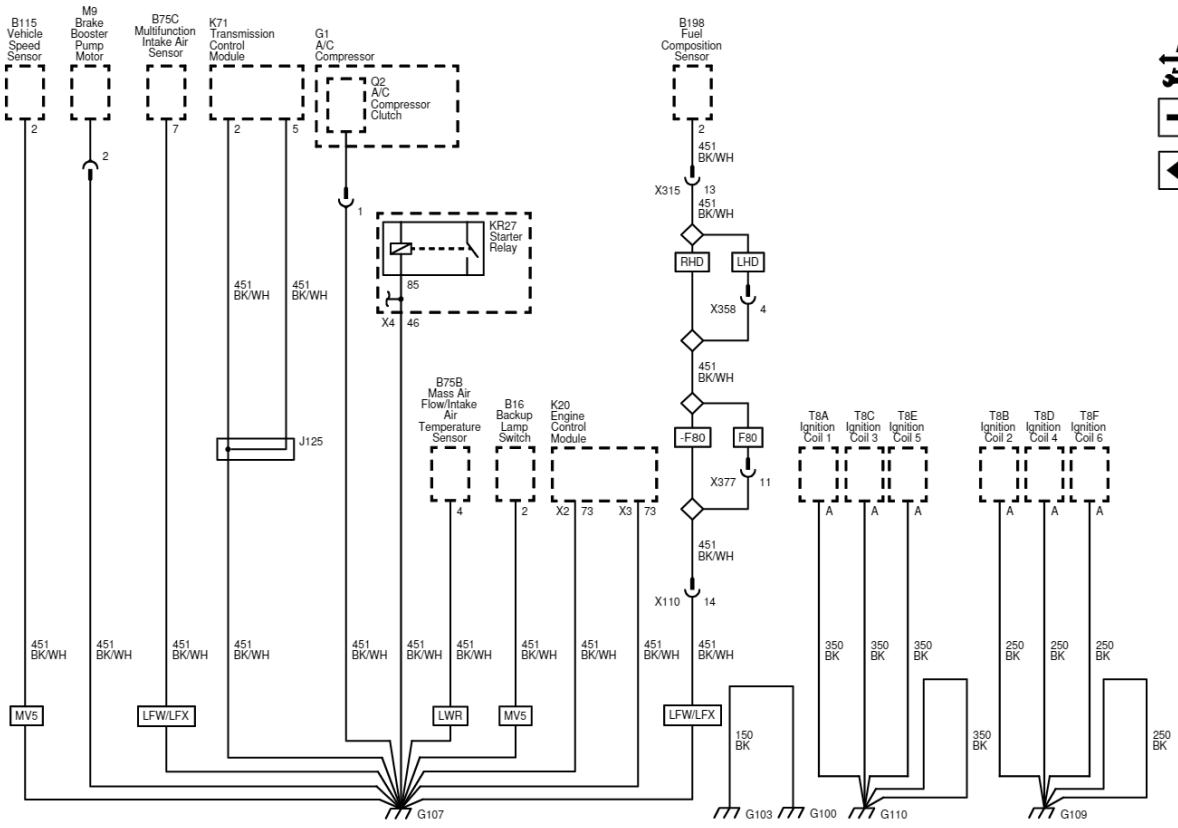
Figure 1: G100, G103, G107, G109 and G110 (L77/LS3/LSA)
Figure 2: G100, G103, G107, G109 and G110 (LFW/LFX/LWR)
Figure 3: G101
Figure 4: G102
Figure 5: G201 (RHD)
Figure 6: G201 (LHD)
Figure 7: G202 (RHD)
Figure 8: G202 (LHD)
Figure 9: G300
Figure 10: G301 (1 of 2)
Figure 11: G301 (2 0f 2)
Figure 12: G302 (1 of 2)
Figure 13: G302 (2 0f 2)
Figure 14: G303 (F19/F69)
Figure 15: G303 (F35/F80)
Figure 16: G304 (F19/F35/F69)
Figure 17: G304 (F80)
Figure 18: G401
Figure 19: G402
Figure 20: G403 and G404 (F80)
Figure 21: G406 and G901 (F35)

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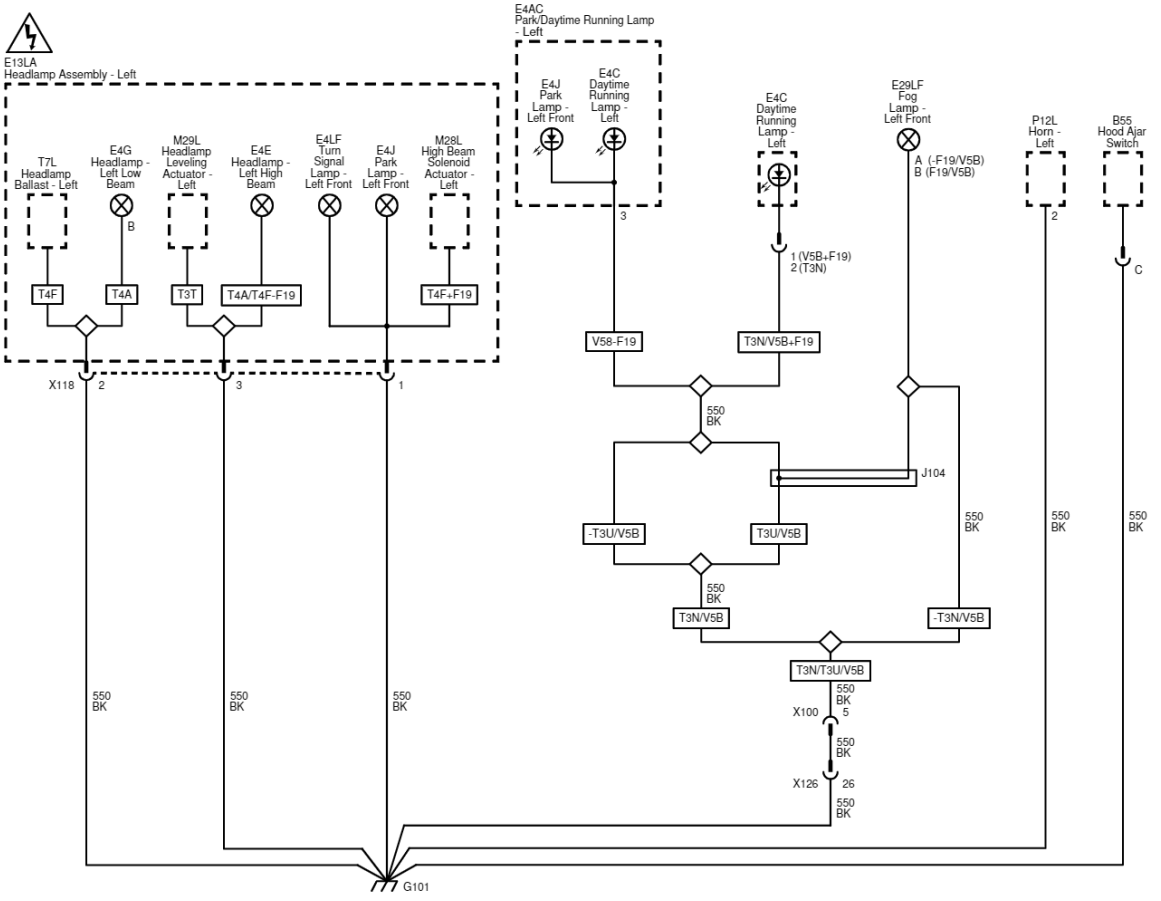
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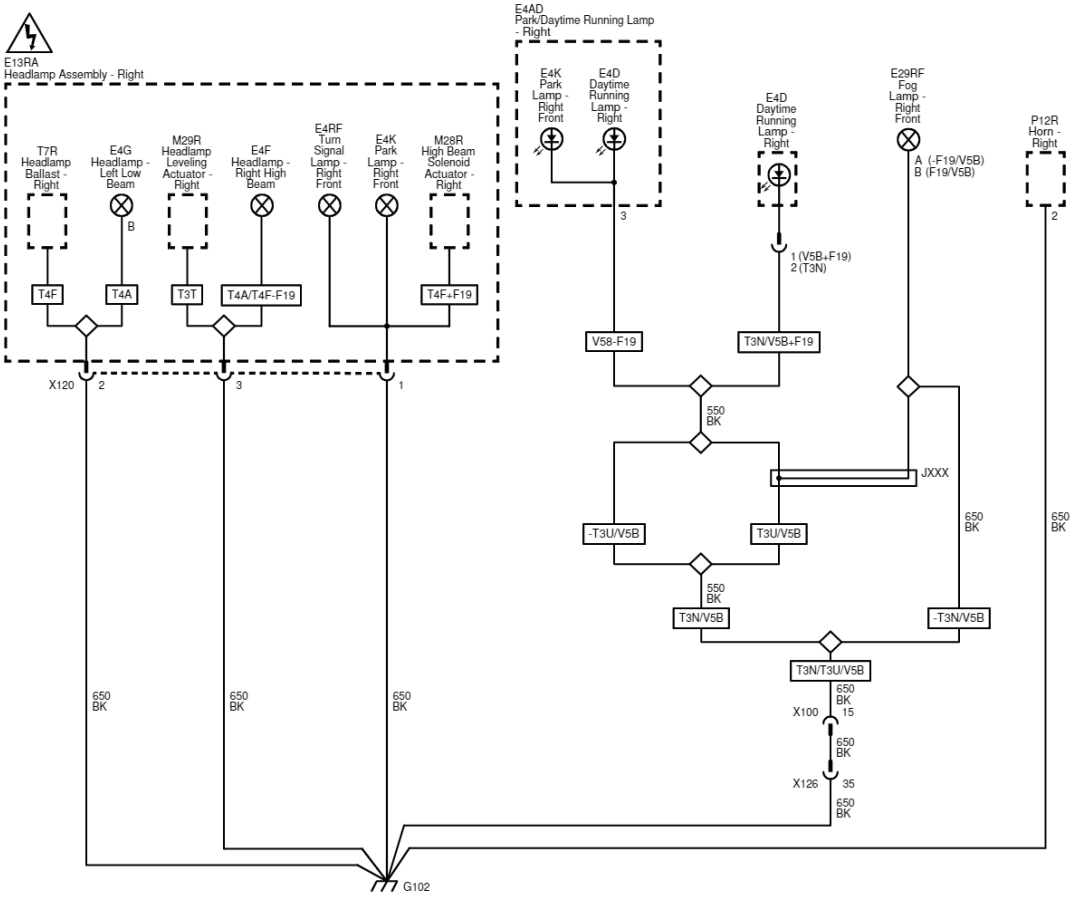
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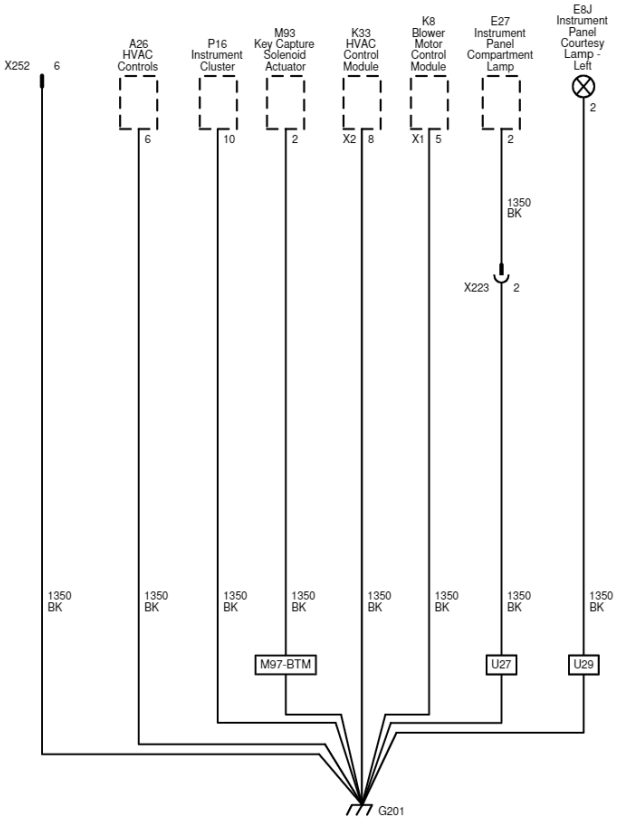
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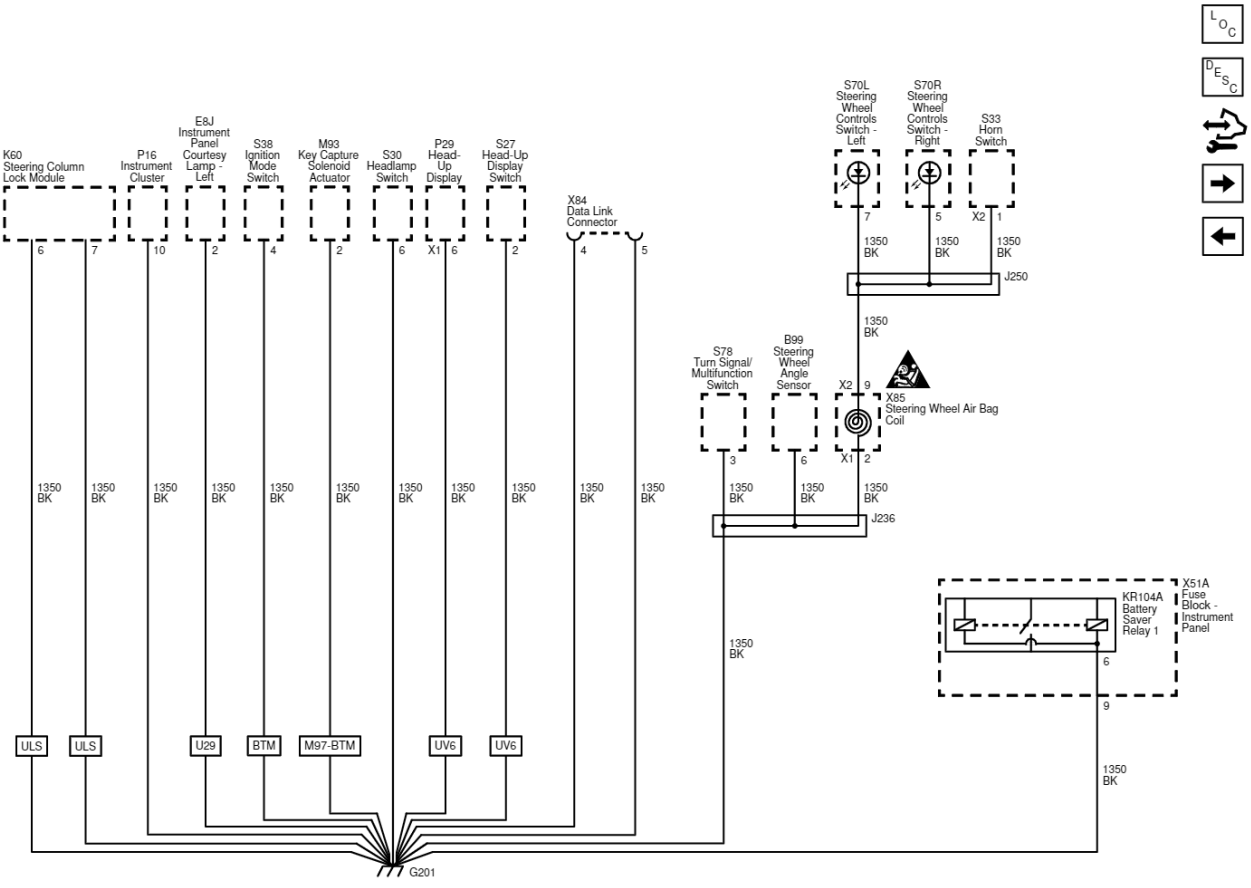
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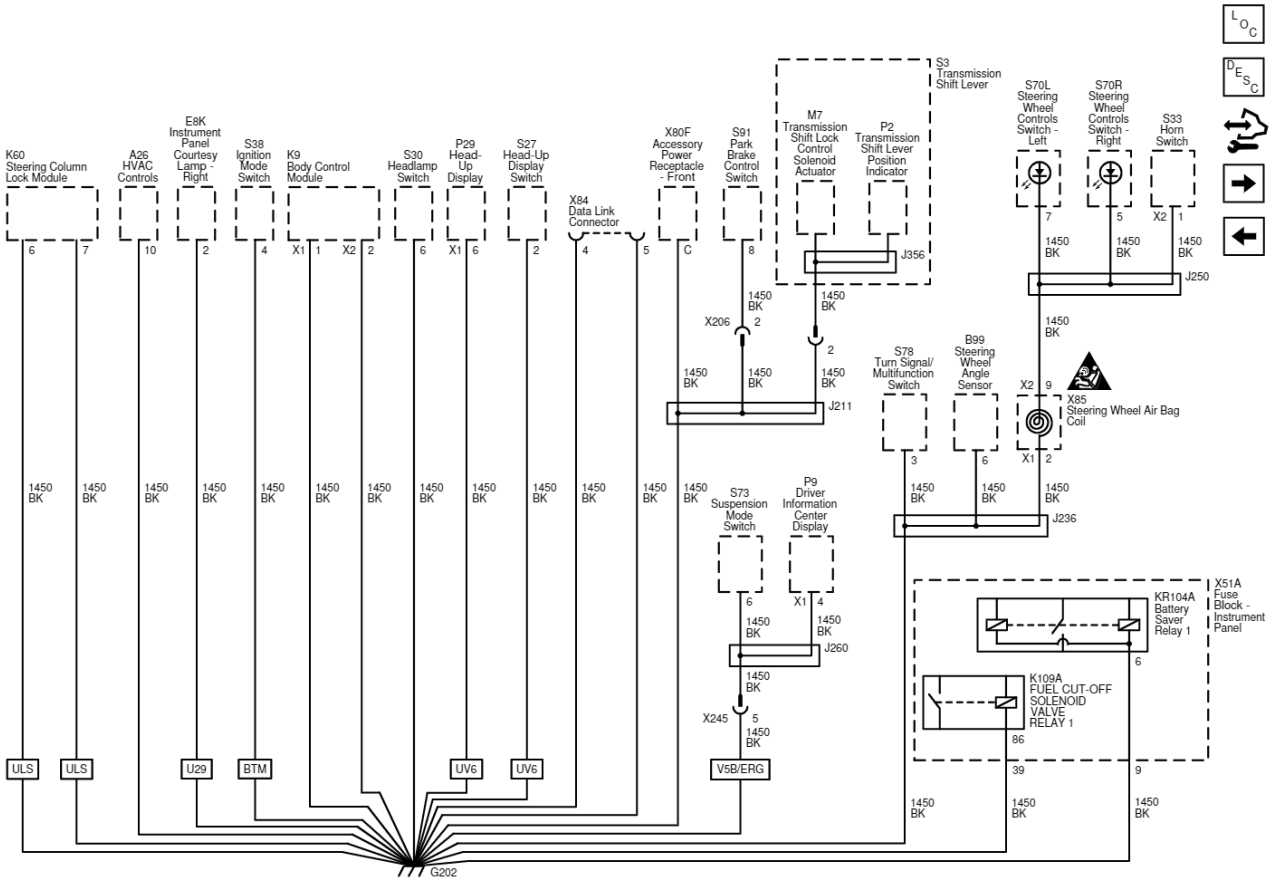
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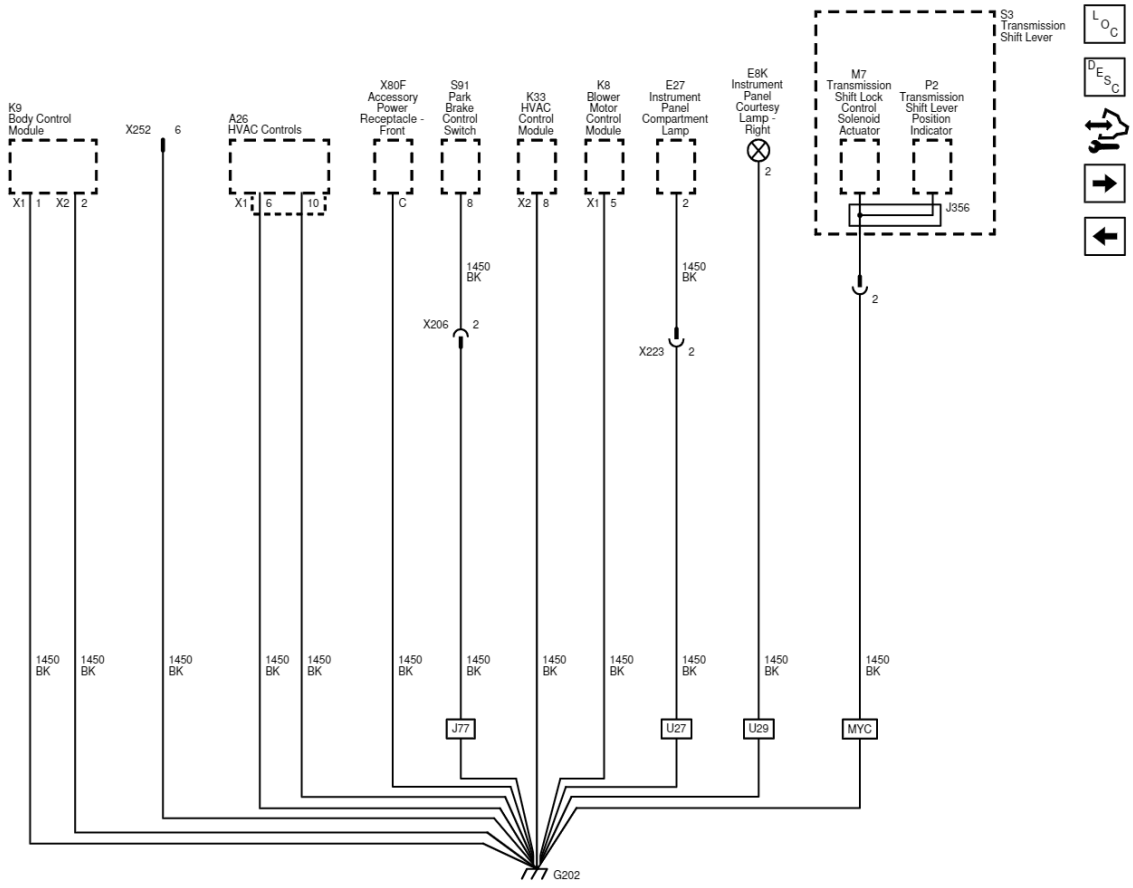
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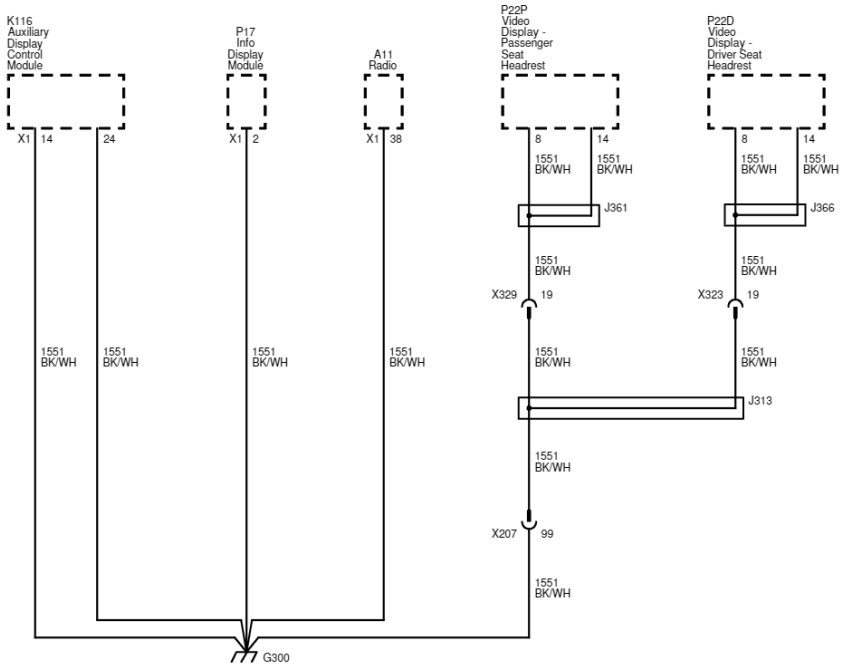
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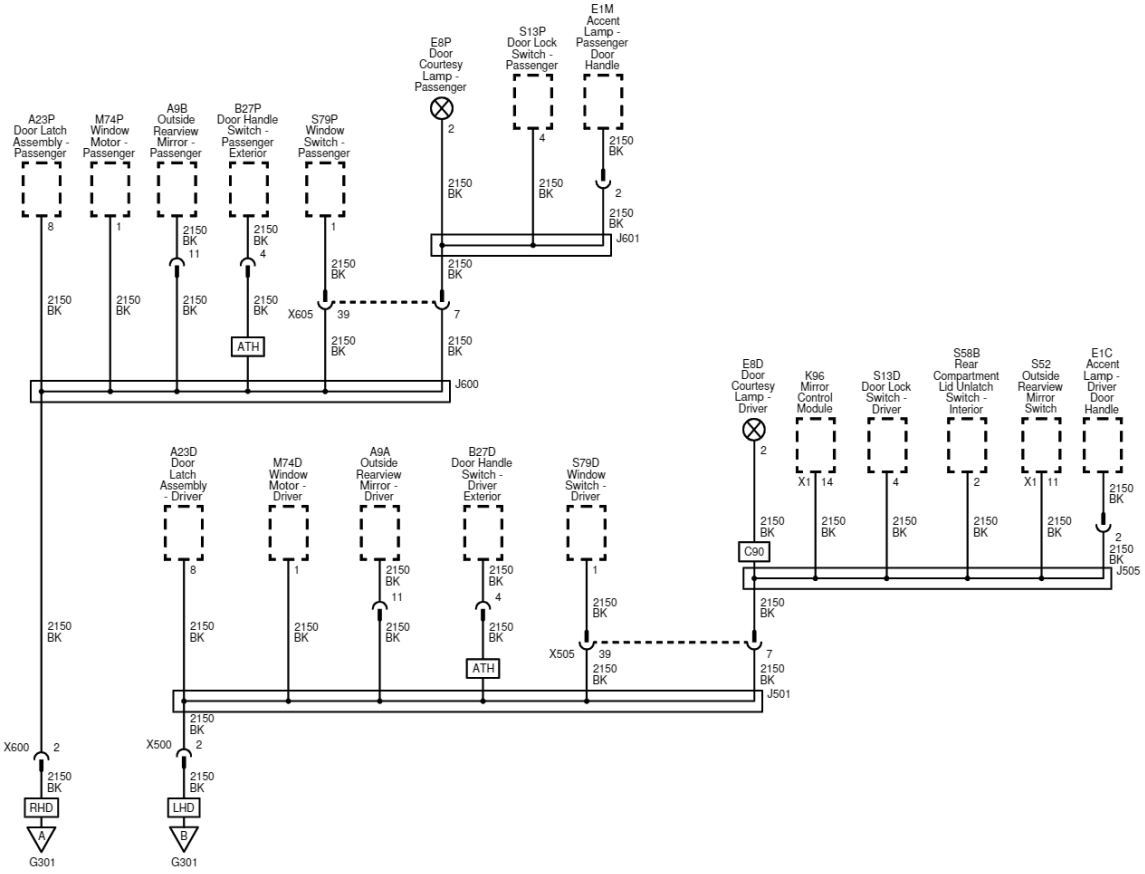
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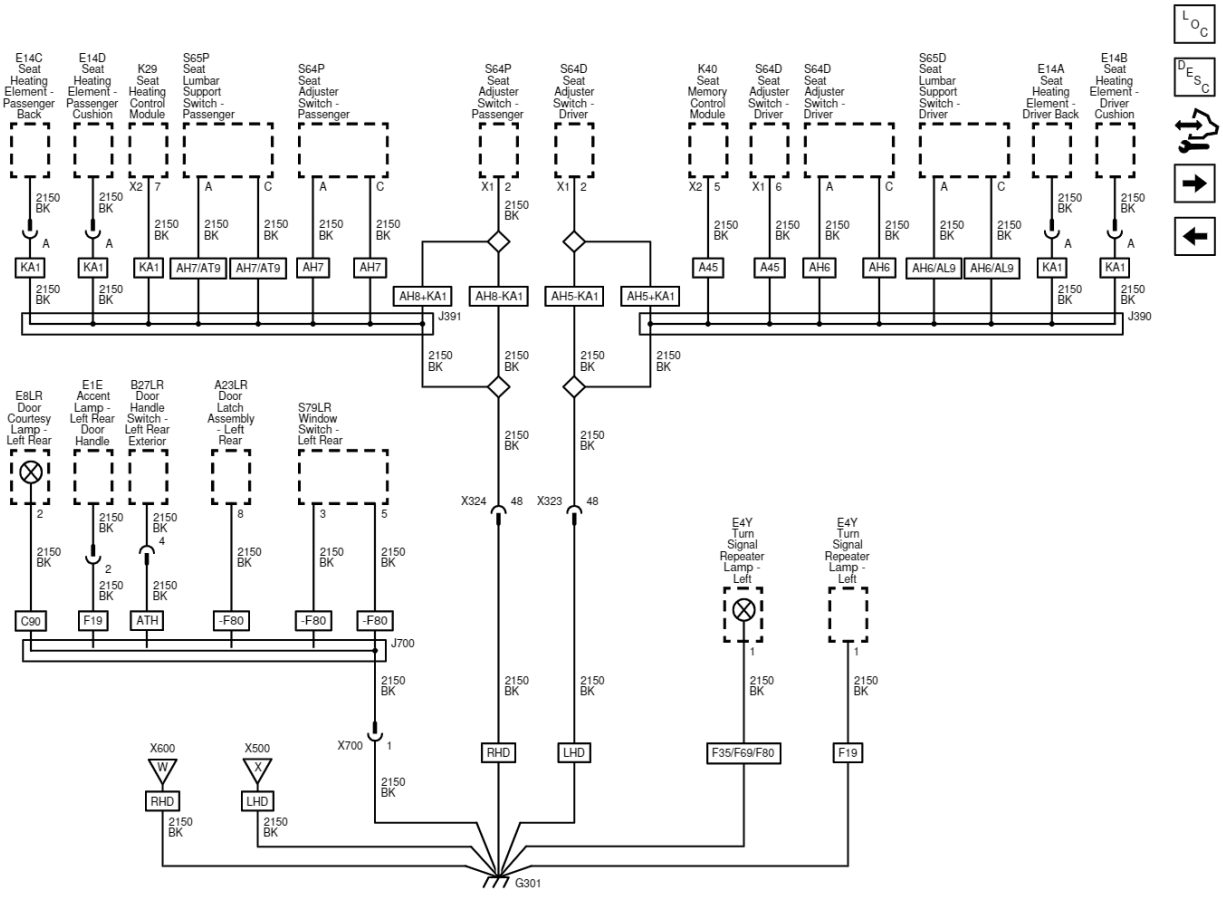
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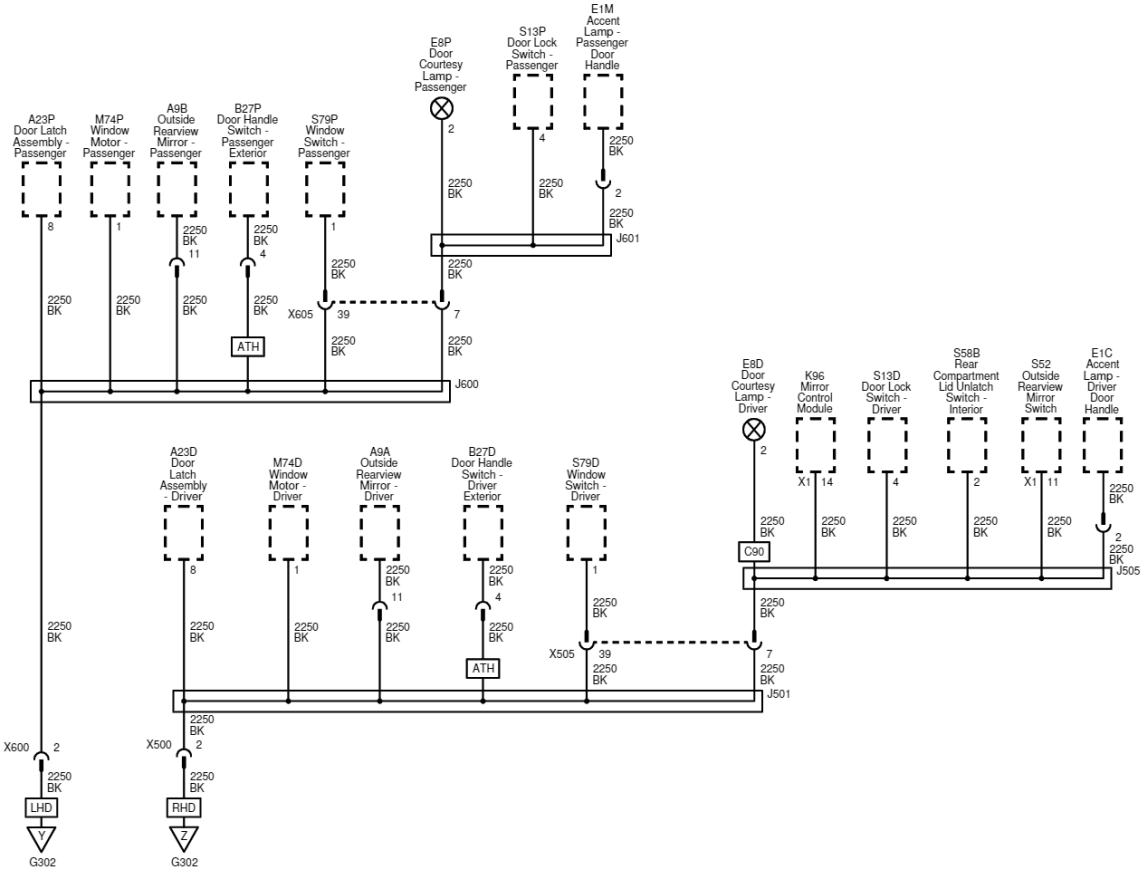
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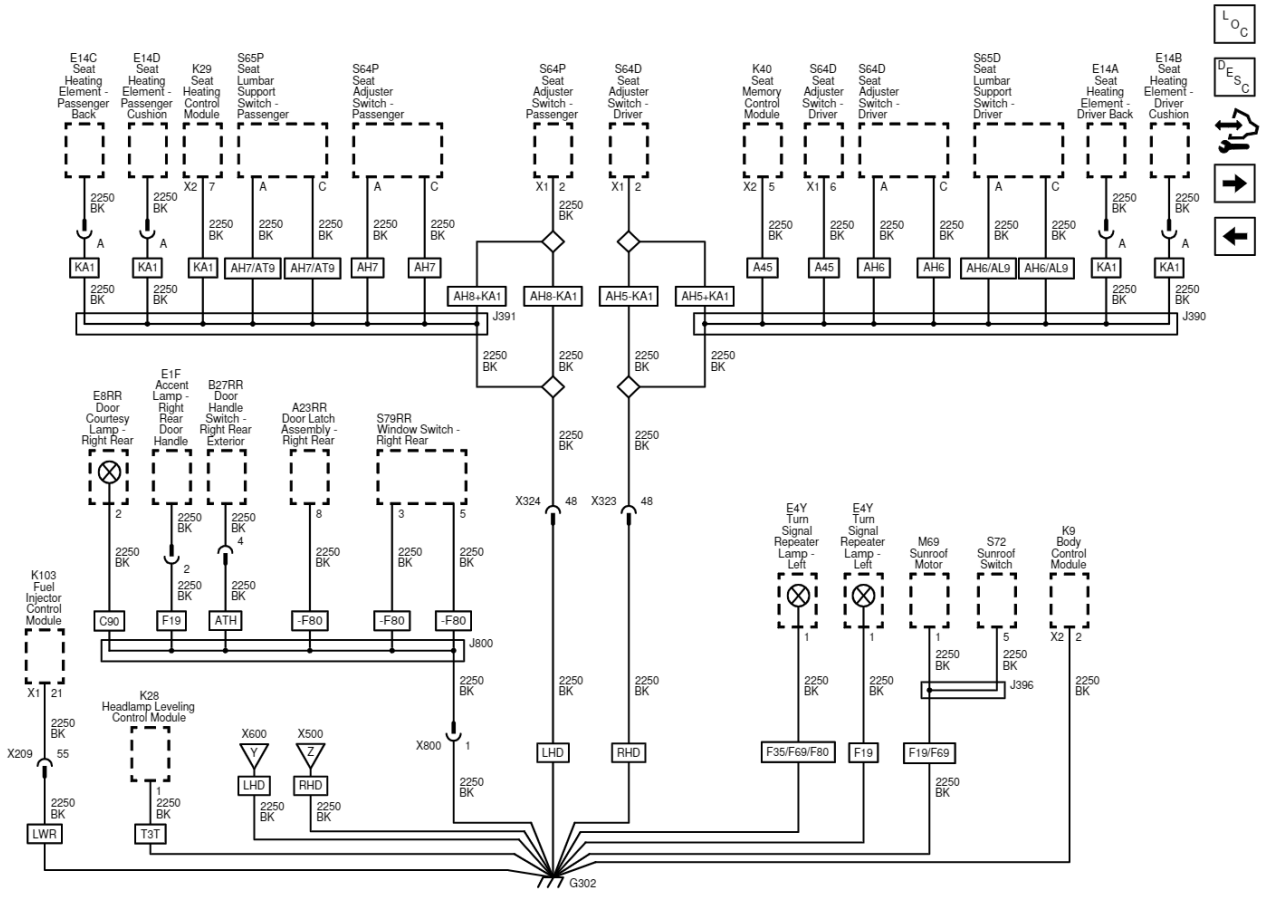
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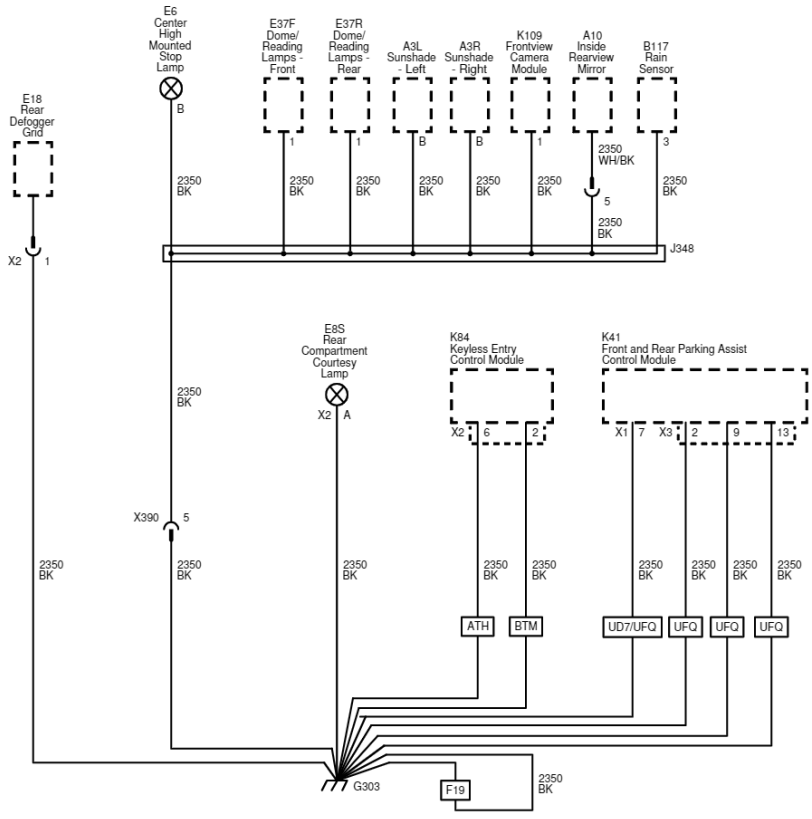
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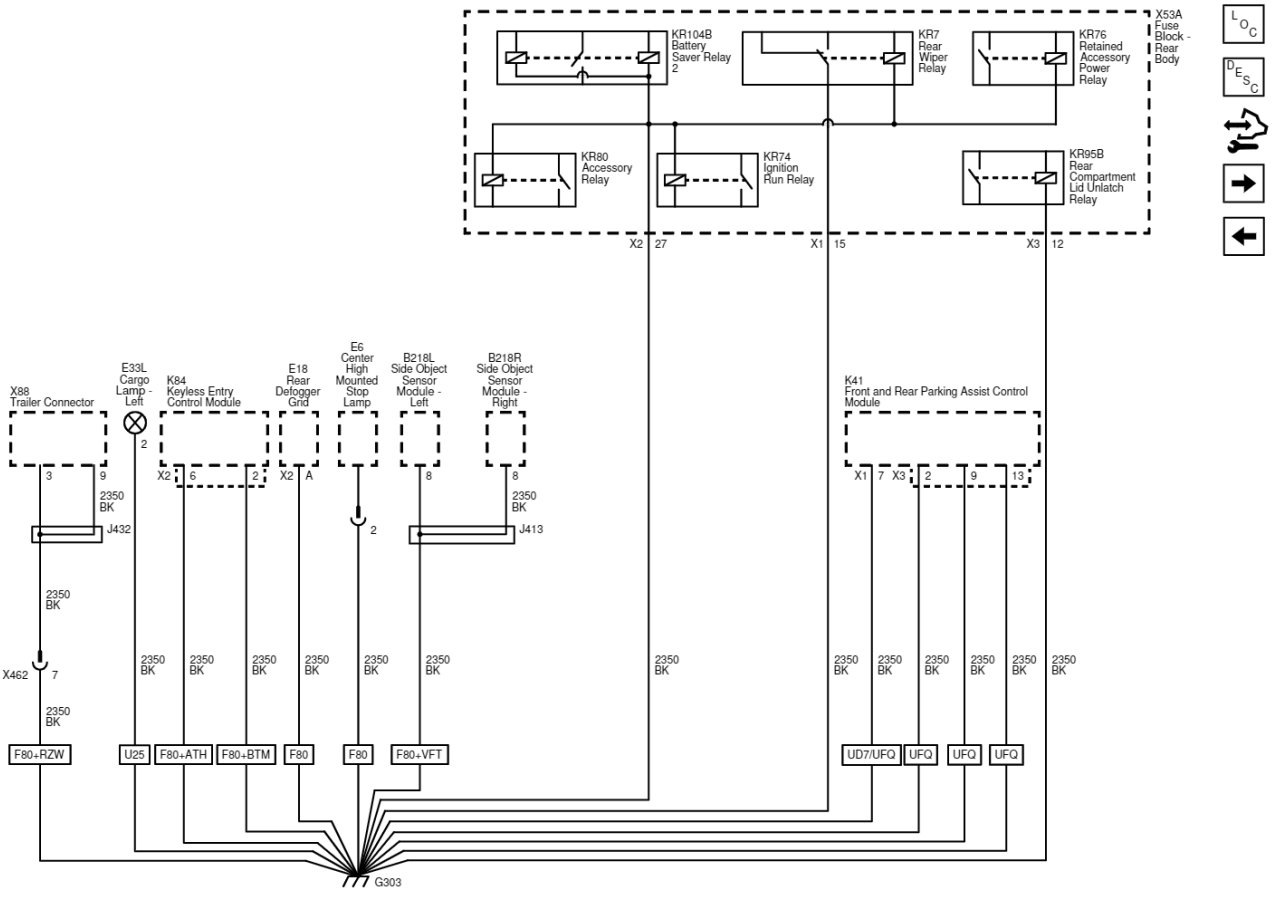
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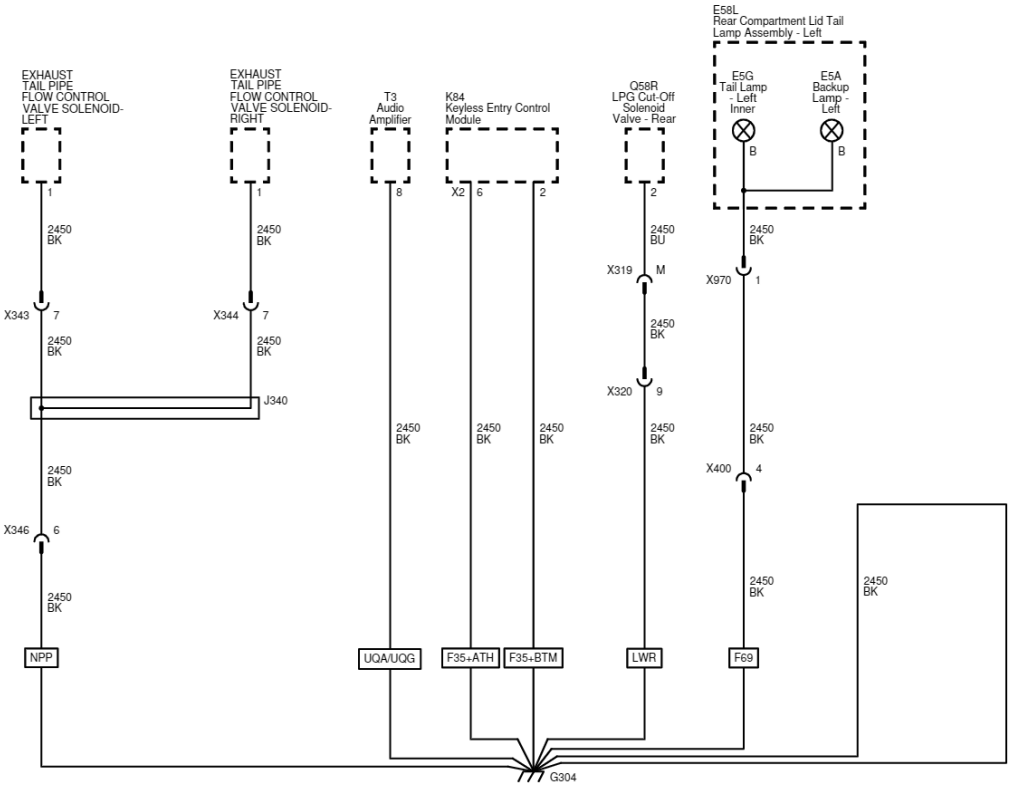
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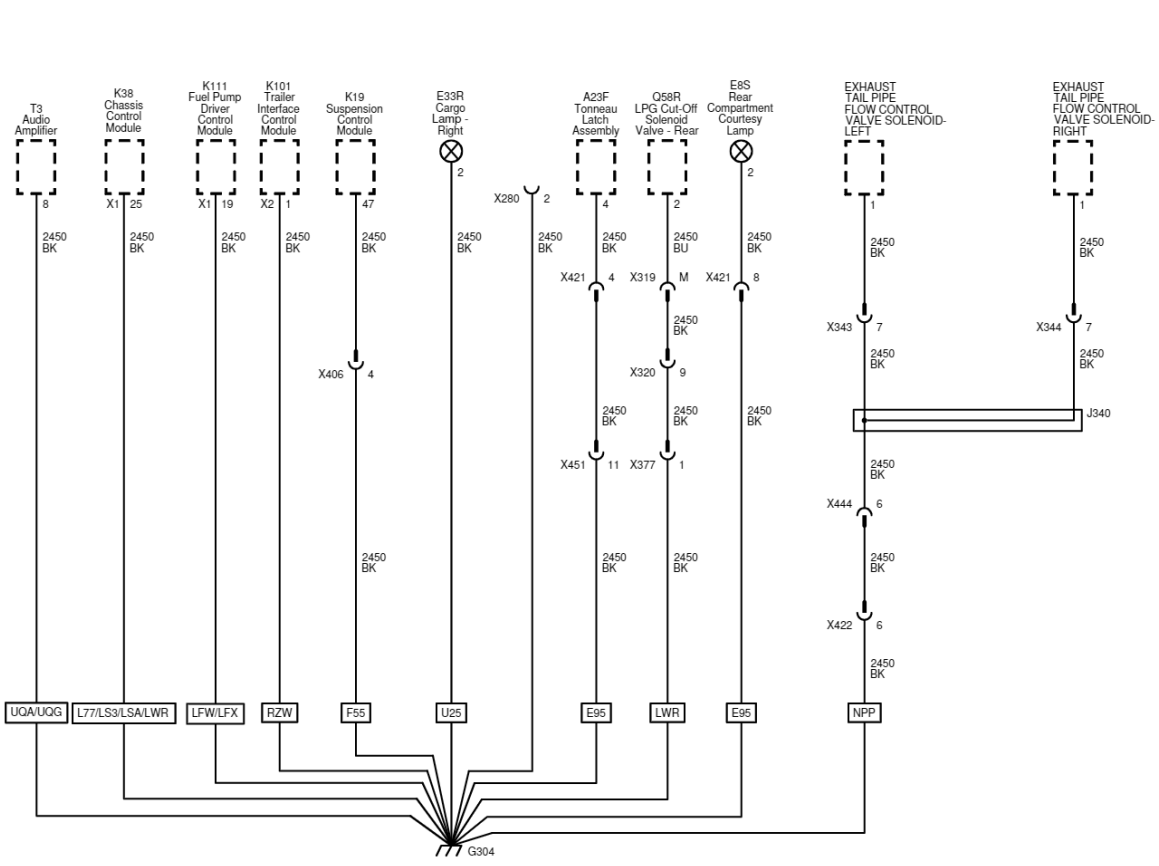
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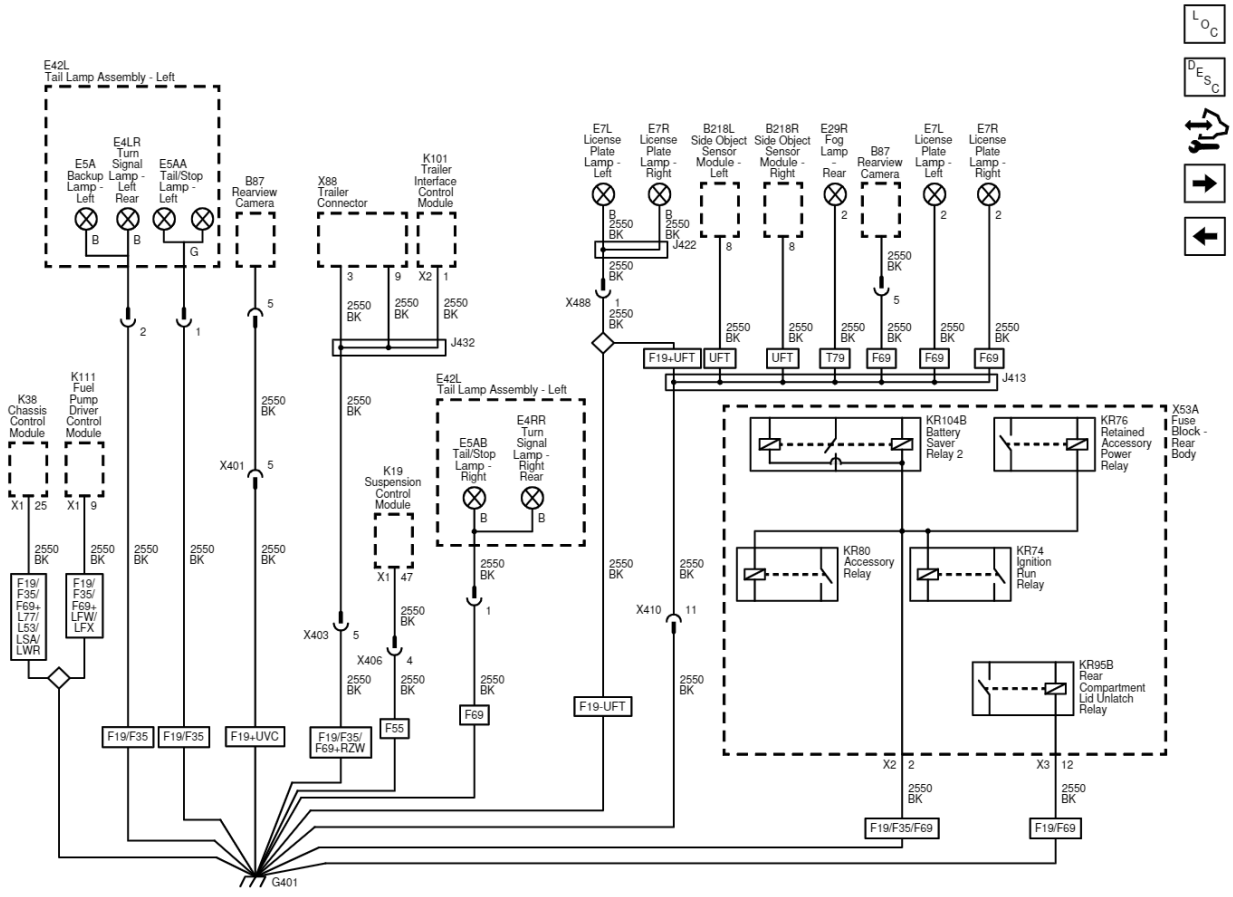
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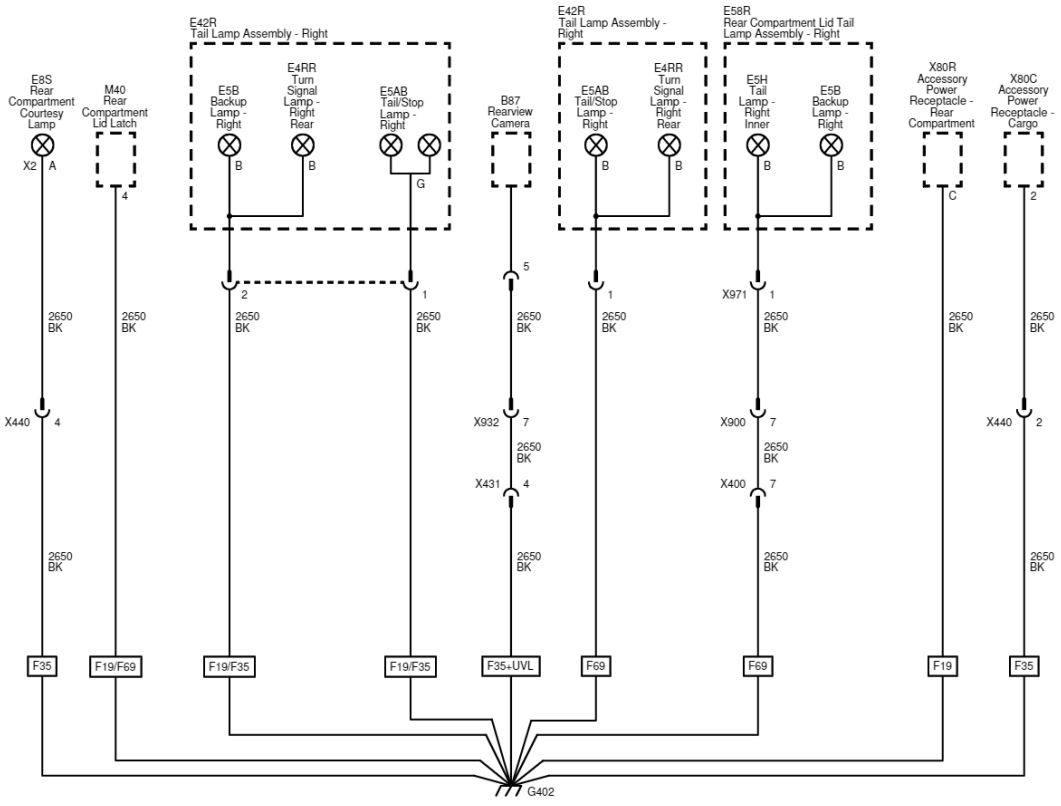
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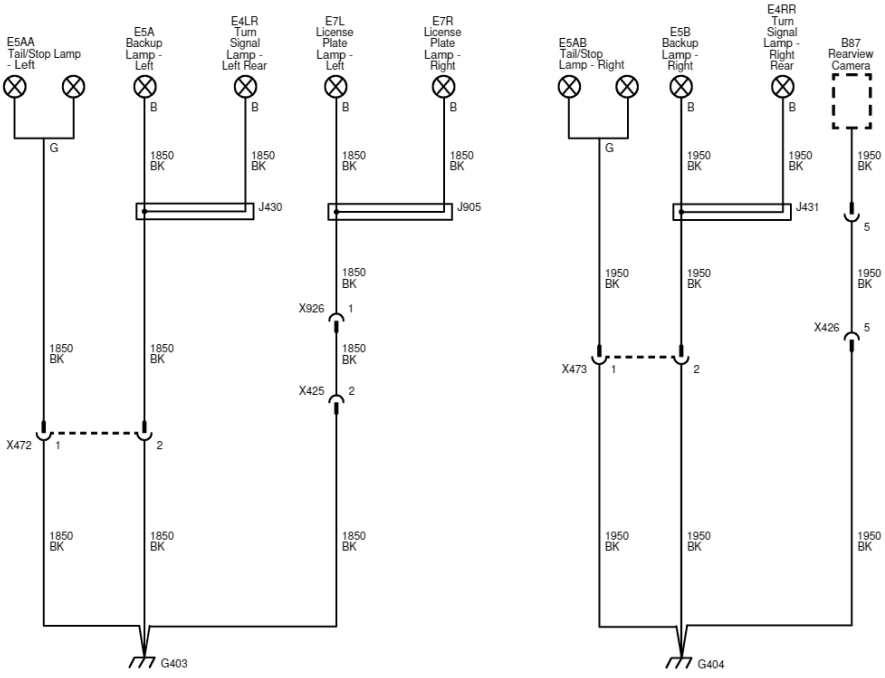
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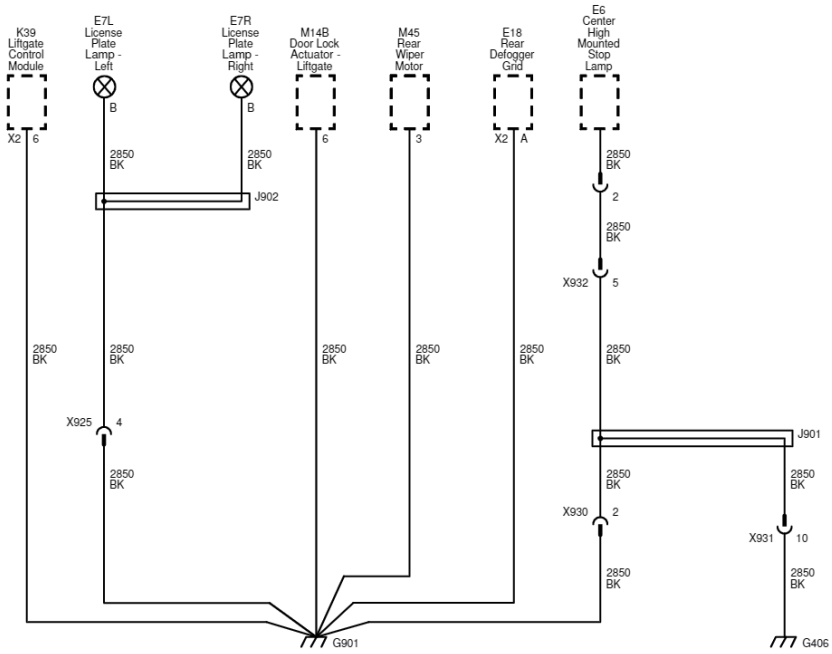
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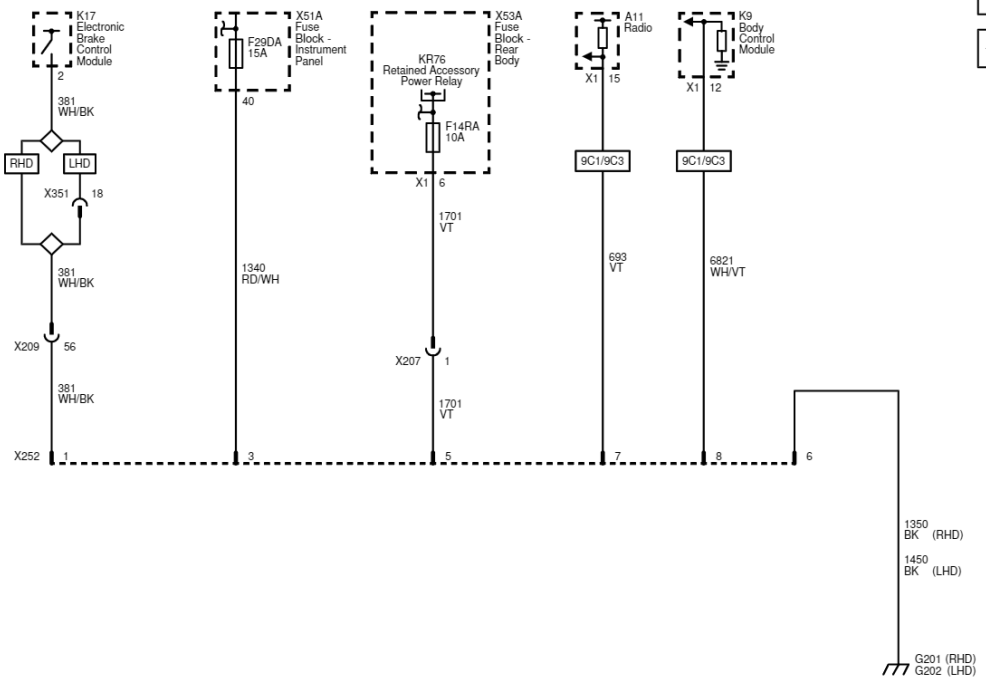
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Upfitter Provision Schematics

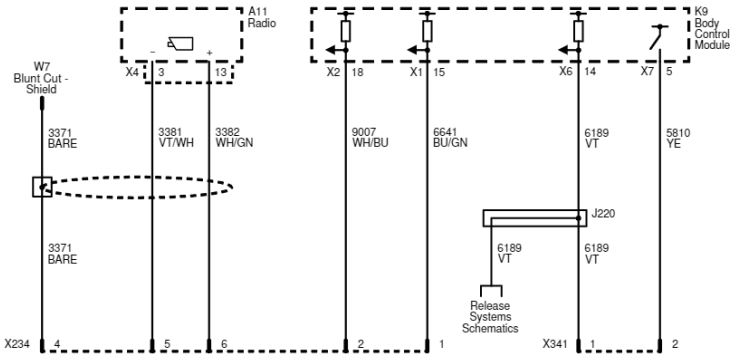
Figure 1: Dealer Options Connector (1 of 2)
Figure 2: Dealer Options Connector (2 of 2)
Figure 3: Fuse Block - Auxiliary Rear - Power Distribution (1 of 2) (9C1)
Figure 4: Fuse Block - Auxiliary Rear - Power Distribution (2 of 2) (9C1)
Figure 5: Fuse Block - Auxiliary Rear - Ground Distribution (9C1)

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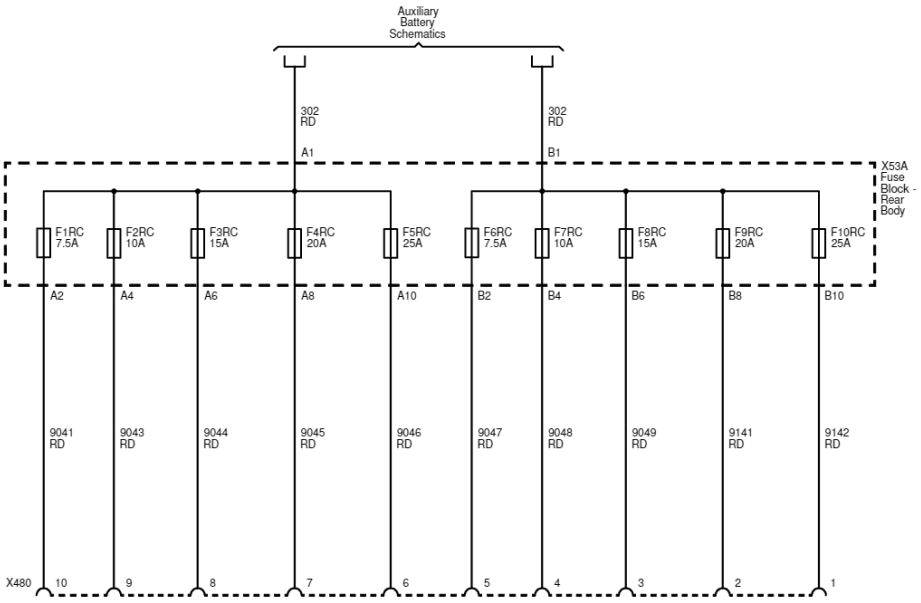
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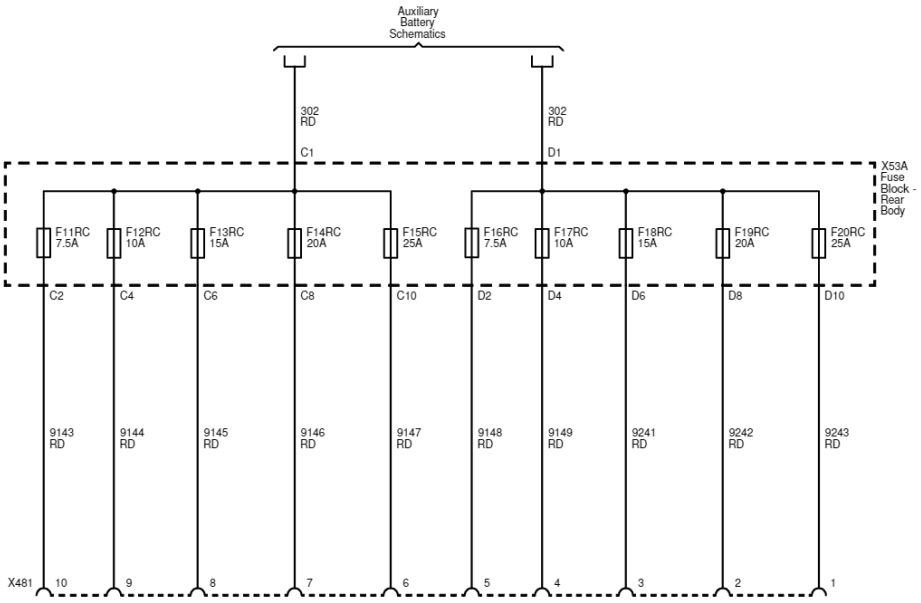
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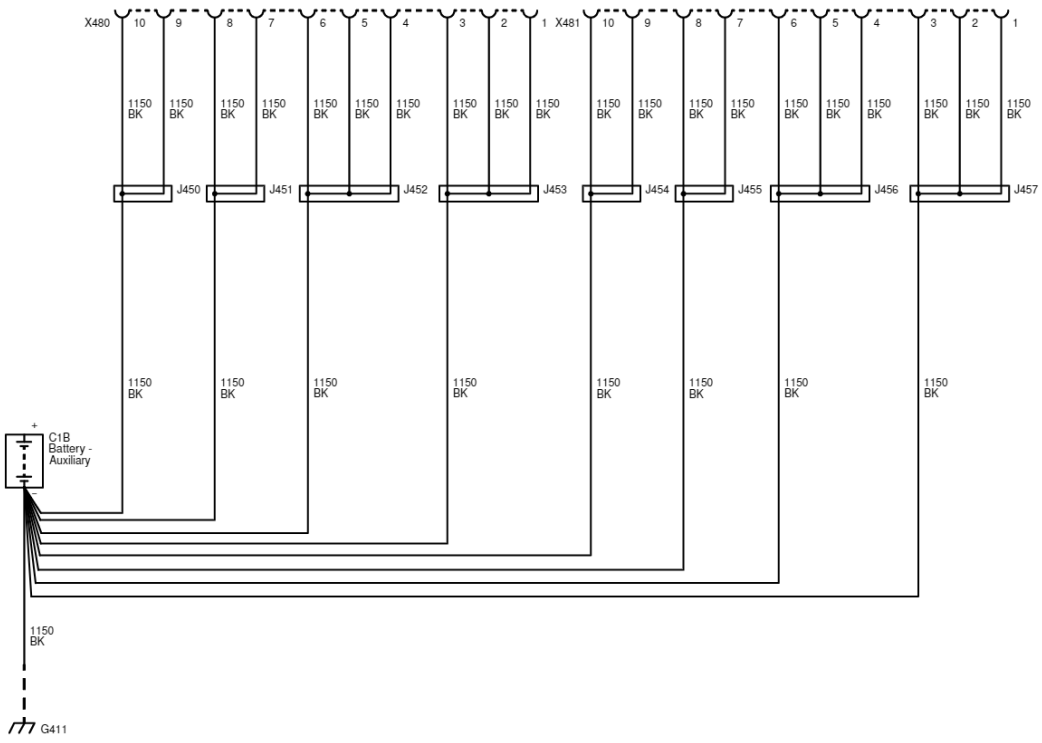
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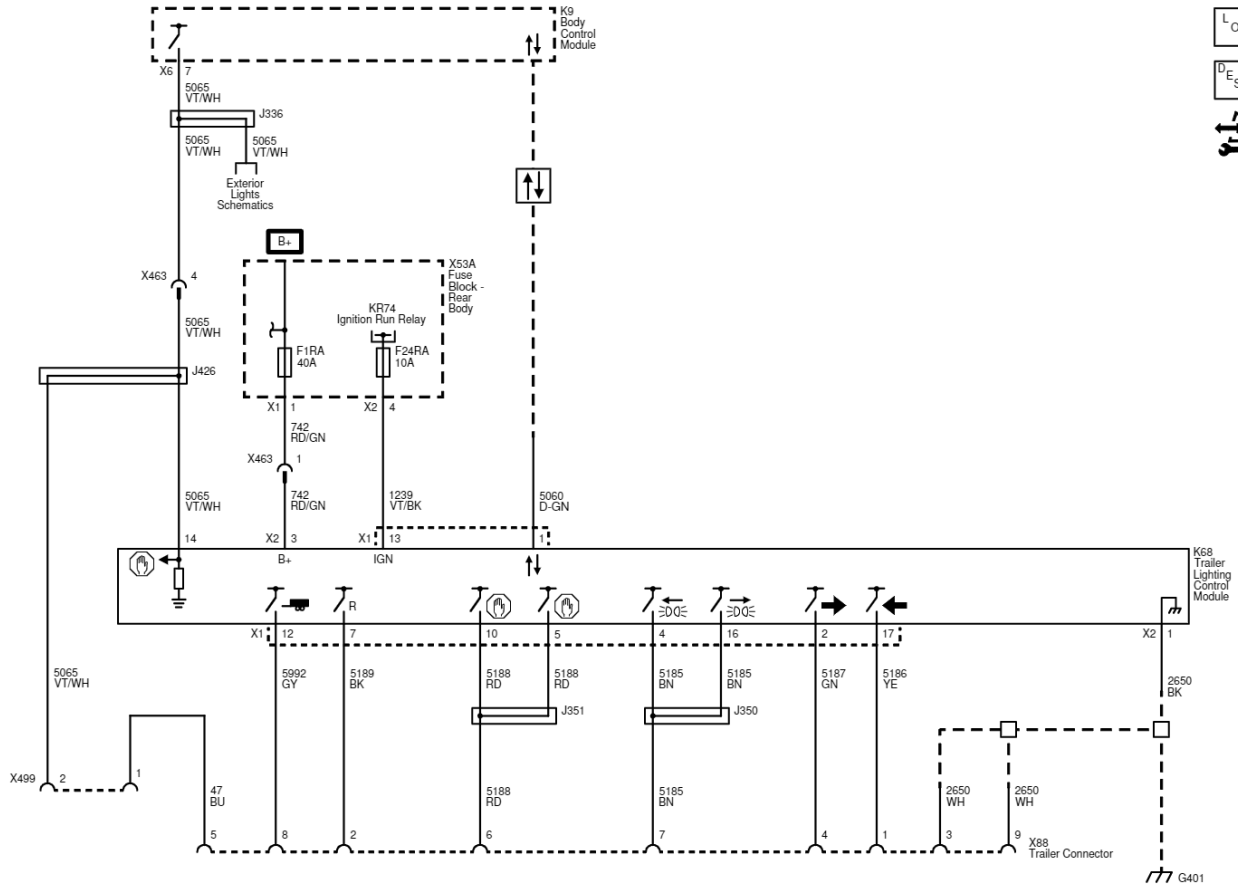
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Trailer Connector/Provision Schematics

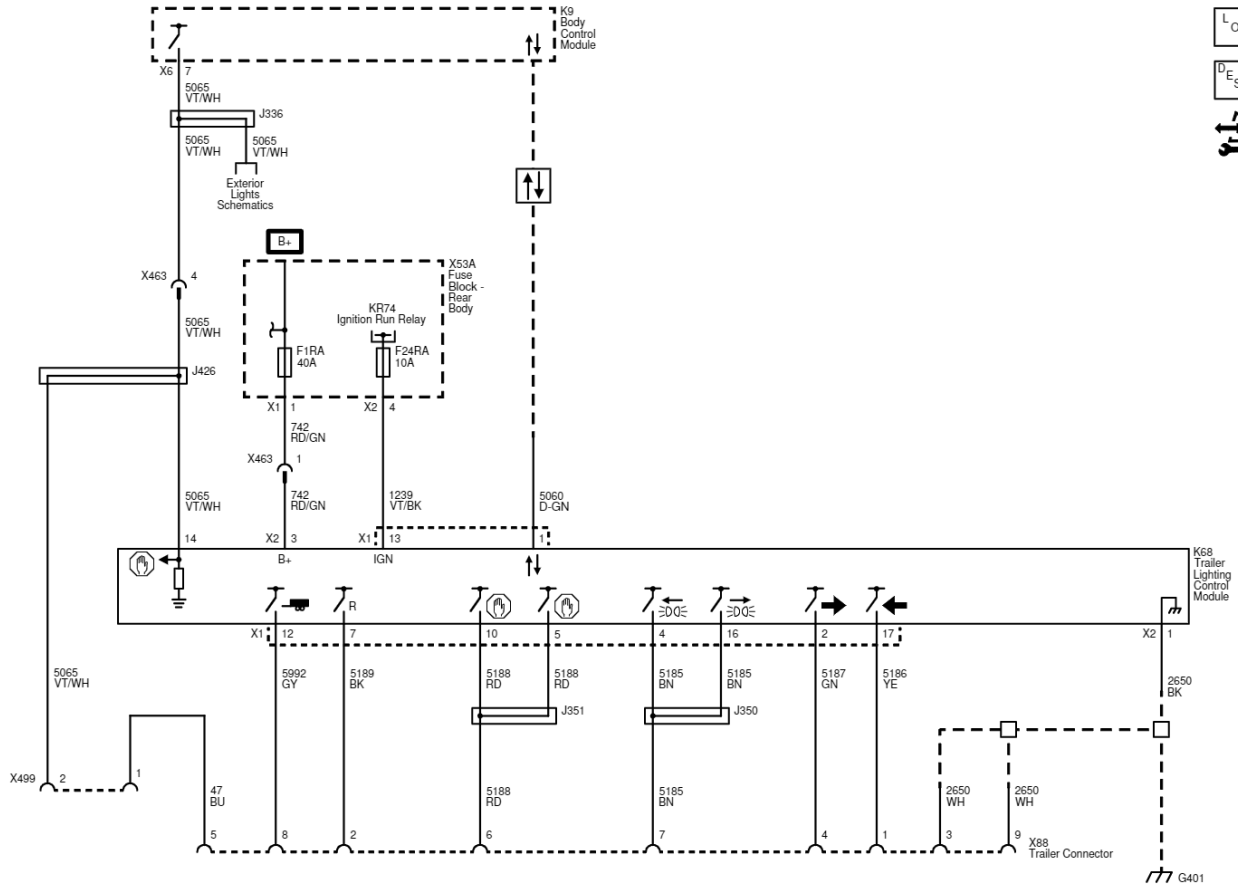
Figure 1: Trailer Connector/Provision (F19/F35/F69)
Figure 2: Trailer Connector/Provision (F80)

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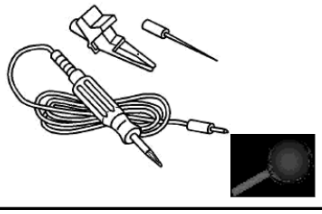
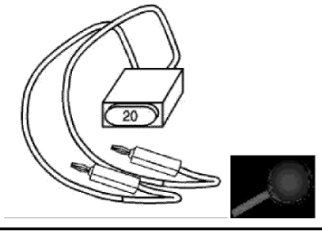
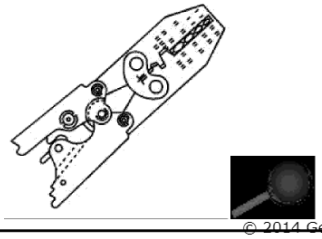


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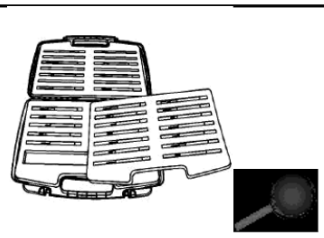
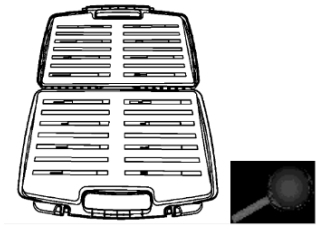
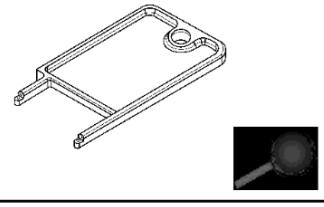
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Special Tools

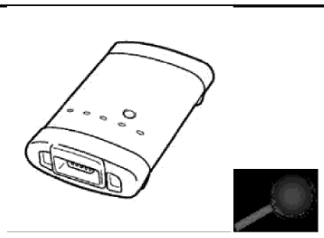
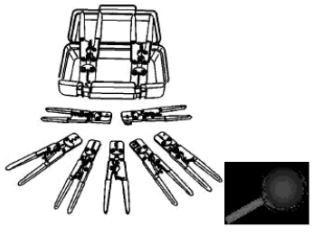
Illustration	Tool Number / Description
	EL-25070 EL-38125-5A EL-38125-5 J-38125-5A Heat Gun 500–700 F
	EL-35616 KM-609 Tyco Electronic Tool (5–1579007–3) Terminal Test Probe Kit
	EL-35616-200 KM-J-34142–B Test Light– Probe Kit
	EL-35616-20F KM-963 Fused Jumper Wire
	EL-38125–10 (Non-North America) EL-38125–EU (Europe) J-38125-8 (North America Only) Splice Sleeve Crimp Tool

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Illustration	Tool Number / Description
	EL-38125-550 (North America Only) Terminal Release Tool Kit
	EL-38125-580 (Non-North America) Terminal Release Tool Kit
	EL-39200 Digital Multimeter
	EL-42759 Ignition Switch Connector Release Tool
	EL-43244 Relay Puller Pliers
	EL-47955 J-2534 Multi Diagnostic Interface MDI

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Illustration	Tool Number / Description
	
	EL-50040 (Holden Only) Crimping Tool Kit

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