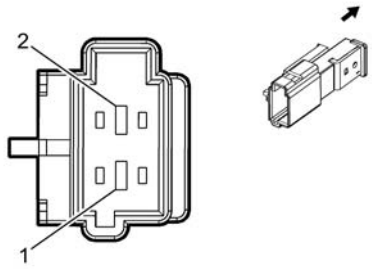
Service Manual: WIRING SYSTEMS AND POWER MANAGEMENT - COMPONENT CONNECTOR END VIEWS - A20 TO B107

COMPONENT CONNECTOR END VIEWS > A3L SUNSHADE - LEFT



Connector Part Information

- Harness Type: Headliner
- OEM Connector: 19179872
- Service Connector: 13574780
- Description: 2-Way M 1.6 Timer Series (BK)

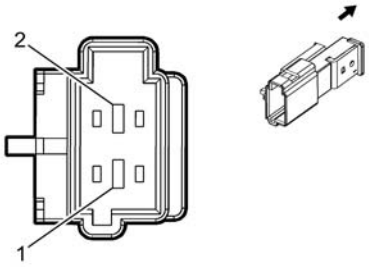
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-34 (YE)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH/BN	6815	Inadvertent Power Control	I	A1BC-1LT
2	0.5	BK	1350	Ground	I	A1BC-1LT

COMPONENT CONNECTOR END VIEWS > A3R SUNSHADE - RIGHT

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Connector Part Information

- Harness Type: Headliner
- OEM Connector: 19179872
- Service Connector: 13574780
- Description: 2-Way M 1.6 Timer Series (BK)

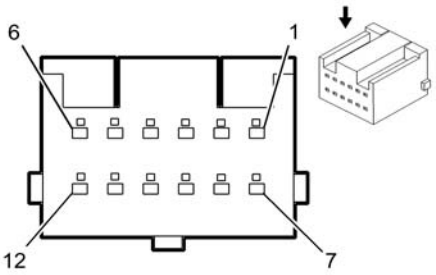
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-34 (YE)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH/BN	6815	Inadvertent Power Control	I	A1BC-1LT
2	0.5	BK	1350	Ground	I	A1BC-1LT

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COMPONENT CONNECTOR END VIEWS > A10 INSIDE REARVIEW MIRROR



Connector Part Information

- Harness Type: Headliner
- OEM Connector: 13504884
- Service Connector: 15211684
- Description: 12-Way F 0.64 Series (BK)

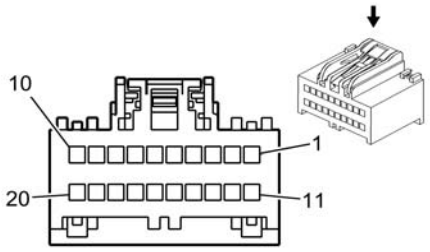
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13575867	J-35616-64B (LT BU)	J-38125-215A	Not available	Not available	Not available	Not available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GN/WH	24	Backup Lamp Control	I	DD8-UE1
2	0.35	VT/GY	539	Run/Crank Ignition 1 Voltage	I	(D31+UE1/UI3)/(DD8-UE1-UI3)
3	0.35	GN/WH	2514	Keypad Signal	I	D31/DD8+UE1/UI3
4	0.35	GN/BK	2515	Keypad Control	I	D31/DD8+UE1/UI3
5	0.35	BK	1350	Ground	I	D31/DD8
6	0.35	GN	5060	Low Speed GMLAN Serial Data	I	DD8+UE1
7	-	-	-	Not Occupied	-	-
8	0.35	RD/WH	5440	Battery Positive Voltage	I	DD8+UE1
9	0.35	BK/YE	1691	Automatic Day/Night Mirror Low Reference	I	DD8
10	0.35	YE/WH	1690	Automatic Day/Night Mirror Signal	I	DD8
11	0.35	YE/VT	2516	Keypad Green LED Control	I	D31+UE1/UI3
12	0.35	BN/WH	2517	Keypad Red LED Control	I	D31+UE1/UI3

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COMPONENT CONNECTOR END VIEWS > A11 RADIO X1 (IO5/IO6)



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

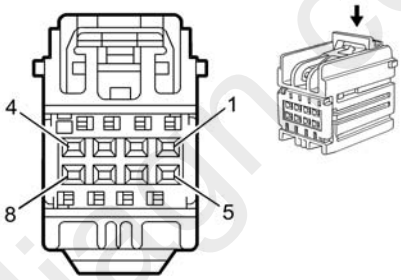
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13575845	J-35616-64B (LT BU)	J-38125-215A	SAIT-A03T-M064	23	P	P

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	-	-	-	Not Occupied	-	-
2	0.35	GN/YE	7066	Entertainment Remote Enable Signal	I	-
3 - 7	-	-	-	Not Occupied	-	-
8	0.35	VT	5843	Auxiliary Audio Common Signal	I	IO6+MAW
9	0.35	GY	5839	Left Auxiliary Audio Signal (2)	I	IO6+MAW
10	0.35	GN	5841	Right Auxiliary Audio Signal (2)	I	IO6+MAW
11 - 12	-	-	-	Not Occupied	-	-
13	0.35	GN/BU	7532	Local Interconnect Network Serial Data Bus 10	I	-
14	0.35	GY/GN	1102	Low Speed GMLAN Serial Data #2	I	IO5/IO6

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15	-	-	-	Not Occupied	-	-
16	0.35	BN/GN	4502	Video Display Request Signal	I	IO6+MAW
17	0.35	BU/VT	4609	Audio Request Signal	I	IO6+MAW
18	-	-	-	Not Occupied	-	-
19	0.35 0.35	BK/YE VT/BU	659 2061	Cellular Telephone Voice Low Reference Navigation Audio Low Mono Signal	I	IO5/IO6+UE1/UI3 IO6+MAW
20	0.35 0.35	YE BU/WH	658 2062	Cellular Telephone Voice Signal Navigation Audio High Mono Signal	I	IO5/IO6+UE1/UI3 IO6+MAW

COMPONENT CONNECTOR END VIEWS > A11 RADIO X2 (IO5/IO6)



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 89047354
- Service Connector: 19115653
- Description: 8-Way F YESC Kaizen Series (L-GY)

Terminal Part Information

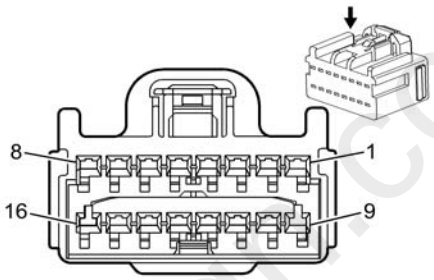
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal	Option

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					Type ID	
1	0.35	WH/GN	3997	MOST Serial Data (-)	I	-
2	0.35	GY/VT	3998	MOST Serial Data (+)	I	-
3	0.35	WH/GN	3997	MOST Serial Data (-)	I	IO5/IO6
4	0.35	GY/VT	3998	MOST Serial Data (+)	I	IO5/IO6
5	-	-	-	Not Occupied	-	-
6	0.35	WH/VT	3999	MOST Control	I	IO5/IO6
7 - 8	-	-	-	Not Occupied	-	-

COMPONENT CONNECTOR END VIEWS > A11 RADIO X3



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 89047090
- Service Connector: 89047090
- Description: 16-Way F 1.5 Kaizen Series (GN)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13575850	J-35616-2A (GY)	J-38125-11A	Not available	Not available	Not available	Not available

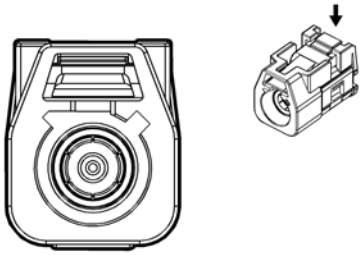
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75 0.75	BU BU	511 201	Left Front Low Level Audio Signal Left Front Speaker Control	I	NKC+UQ3+IO5/IO6 UQ3+IO5/IO6-NKC

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				(+) (1)		
2	0.75 0.75	YE YE	512 200	Right Front Low Level Audio Signal Right Front Speaker Control (+) (1)	I	NKC+UQ3+IO5/IO6 UQ3+IO5/IO6-NKC
3	0.75 0.75	GN/BK GN	599 199	Left Rear Low Level Audio Signal Left Rear Speaker Control (+)	I	NKC+UQ3+IO5/IO6 UQ3+IO5/IO6-NKC
4	0.75 0.75	BN/WH WH	546 46	Right Rear Low Level Audio Signal Right Rear Speaker Control (+)	I	NKC+UQ3+IO5/IO6 UQ3+IO5/IO6-NKC
5 - 7	-	-	-	Not Occupied	-	-
8	1	RD/VT	340	Battery Positive Voltage	I	IO5/IO6
9	0.75 0.75	BN/BU BN/BU	1947 118	Left Front Low Level Audio (-) Low Reference Left Front Speaker Signal (-) (1)	I	NKC+UQ3+IO5/IO6 UQ3+IO5/IO6-NKC
10	0.75 0.75	BU/BN YE/BK	1546 117	Front Low Level Audio (-) Low Reference Right Front Speaker Signal (-) (1)	I	NKC+UQ3+IO5/IO6 UQ3+IO5/IO6-NKC
11	0.75 0.75	BN/VT GN/BK	1999 116	Left Rear Low Level Audio (-) Low Reference Left Rear Speaker Signal (-)	I	NKC+UQ3+IO5/IO6 UQ3+IO5/IO6-NKC
12	0.75 0.75	BU/BK BU/BK	1946 115	Right Rear Low Level Audio (-) Low Reference Right Rear Speaker Signal (-)	I	NKC+UQ3+IO5/IO6 UQ3+IO5/IO6-NKC
13 - 15	-	-	-	Not Occupied	-	-
16	0.5	BK/WH	1551	Signal Ground	I	IO5/IO6

COMPONENT CONNECTOR END VIEWS > A11 RADIO X4 (IO5/IO6)

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Connector Part Information

- Harness Type: Instrument Panel COAX
- OEM Connector: 13583834
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: 1-Way F Coax Type (BK)

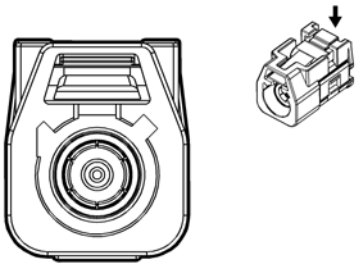
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
-	-	COAX	-	(AM/FM) Antenna RF Signal	I	-

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COMPONENT CONNECTOR END VIEWS > A11 RADIO X5 (IO5/IO6)



Connector Part Information

- Harness Type: Instrument Panel COAX

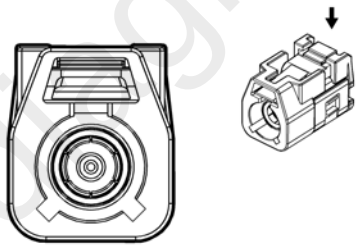
- OEM Connector: 13583835
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: 1-Way F Coax Type (WH)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
-	-	COAX	-	(FM2) Antenna RF Signal (2)	I	-

COMPONENT CONNECTOR END VIEWS > A11 RADIO X6 (IO5/IO6)



Connector Part Information

- Harness Type: Instrument Panel COAX
- OEM Connector: 13586878
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: 1-Way F Coax Type (CU)

Terminal Part Information

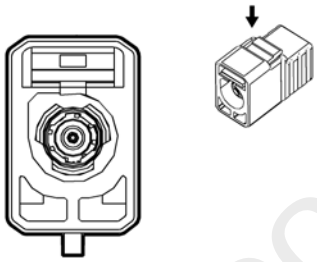
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp

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I	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
-	-	COAX	-	(XM +/-HD) Coaxial Antenna XM Signal	I	-

COMPONENT CONNECTOR END VIEWS > A11 RADIO X9 (IO5/IO6)



Connector Part Information

- Harness Type: Instrument Panel COAX
- OEM Connector: 13583838
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: 1-Way F Coax Type (GN)

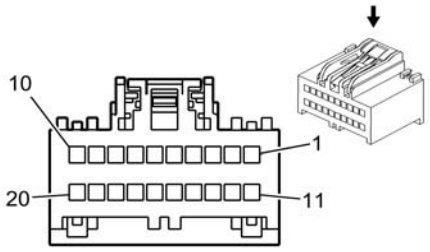
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
-	-	COAX	-	(DAB/DMB) Coaxial Antenna DAB Signal	I	-

COMPONENT CONNECTOR END VIEWS > A11 RADIO X1 (IOB)

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Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 13593932
- Service Connector: 13593932
- Description: 20-Way F USCAR 64 Series (GY)

Terminal Part Information

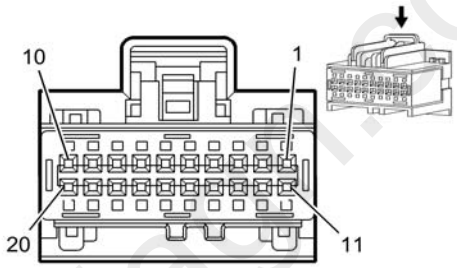
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13575845	J-35616-64B (LT BU)	J-38125-215A	SAIT-A03T-M064	23	P	P

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK/WH	1551	Signal Ground	I	IOB
2	0.35	GY/BN	3761	Infotainment Regulated Control	I	IOB
3	0.35	GY/BN	3761	Infotainment Regulated Control	I	IOB
4	0.35	GY/GN	1102	Low Speed GMLAN Serial Data #2	I	IOB
5	-	-	-	Not Occupied	-	-
6	0.35	BK/GY	5152	Voice Recognition Audio Low Reference	I	IOB+UE1
7	0.35	GY/YE	5149	Voice Recognition Audio Signal	I	IOB+UE1
8	0.35	BN/GN	3983	Display Radio Bank Switch Signal 2	I	IOB

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9	0.35	BK/YE	659	Cellular Telephone Voice Low Reference	I	IOB+UE1
10	0.35	YE	658	Cellular Telephone Voice Signal	I	IOB+UE1
11	0.75	RD/VT	340	Battery Positive Voltage	I	IOB
12	0.35	GN/YE	7066	Entertainment Remote Enable Signal	I	IOB+NKC+UQ3
13	0.5	BARE	6974	Camera Low Reference	I	IOB+UVC
14	0.35	WH/BU	6973	Camera Signal 2	I	IOB+UVC
15	0.35	GY/YE	6972	Camera Signal 2 +	I	IOB+UVC
16 - 20	-	-	-	Not Occupied	-	-

COMPONENT CONNECTOR END VIEWS > A11 RADIO X2 (IOB)



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 13593933
- Service Connector: 13593933
- Description: 20-Way F USCAR 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	13575845	J-35616-64B (LT BU)	J-38125-215A	SAIT-A03T-M064	23	P	P

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option

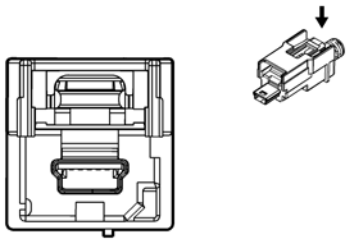
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1 - 2	-	-	-	Not Occupied	-	-
3	0.35	GY	314	Radio On Signal	I	IOB
4	0.35	VT/GY	1381	LCD Dimming Signal	I	IOB
5	0.35	GY/BU	3989	Display Radio Bank Switch Dim Signal	I	IOB
6	0.35	BN/GN	4502	Video Display Request Signal	I	IOB
7	0.35	BN/GN	3364	Navigation Display Reset Signal	I	IOB
8	0.35	BU	4315	Radio Volume Up Signal	I	IOB
9	0.35	GY/BN	4314	Radio Volume Down Signal	I	IOB
10	0.75	BK/WH	1551	Signal Ground	I	IOB
11	0.75 0.75	BN/WH WH	546 46	Right Rear Low Level Audio Signal Right Rear Speaker Control (+)	I	IOB+NKC+UQ3 IOB+UQ3-NKC
12	0.75 0.75	BU/BK BU/BK	1946 115	Right Rear Low Level Audio (-) Low Reference Right Rear Speaker Signal (-)	I	IOB+NKC+UQ3 IOB+UQ3-NKC
13	0.75 0.75	GN/BK GN	599 199	Left Rear Low Level Audio Signal Left Rear Speaker Control (+)	I	IOB+NKC+UQ3 IOB+UQ3-NKC
14	0.75 0.75	BN/VT GN/BK	1999 116	Left Rear Low Level Audio (-) Low Reference Left Rear Speaker Signal (-)	I	IOB+NKC+UQ3 IOB+UQ3-NKC
15	0.75 0.75	BU/BN YE/BK	1546 117	Front Low Level Audio (-) Low Reference Right Front Speaker Signal (-) (1)	I	IOB+NKC+UQ3 IOB+UQ3-NKC
16	0.75 0.75	YE YE	512 200	Right Front Low Level Audio Signal Right Front Speaker Control (+) (1)	I	IOB+NKC+UQ3 IOB+UQ3-NKC
17	0.75 0.75	BN/BU BN/BU	1947 118	Left Front Low Level Audio (-) Low Reference Left Front Speaker Signal (-) (1)	I	IOB+NKC+UQ3 IOB+UQ3-NKC
18	0.75 0.75	BU BU	511 201	Left Front Low Level Audio Signal Left Front Speaker Control	I	IOB+NKC+UQ3 IOB+UQ3-NKC

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				(+) (1)		
19	-	-	-	Not Occupied	-	-
20	0.75	RD/VT	340	Battery Positive Voltage	I	IOB

COMPONENT CONNECTOR END VIEWS > A11 RADIO X3 (IOB)



Connector Part Information

- Harness Type: Instrument Panel USB
- OEM Connector: 13578154
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: 5-Way M 2.0 Mini-B USB Type (BU)

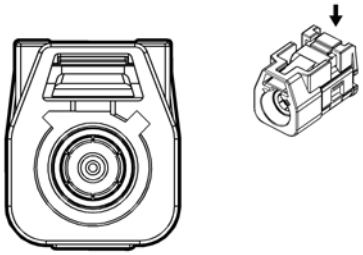
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
-	-	USB	-	USB Serial Data	I	-

COMPONENT CONNECTOR END VIEWS > A11 RADIO X4 (IOB)

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Connector Part Information

- Harness Type: Instrument Panel COAX
- OEM Connector: 13583834
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: 1-Way F Coax Type (BK)

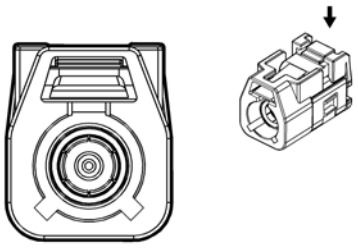
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
-	-	COAX	-	(AM/FM) Antenna RF Signal	I	-

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COMPONENT CONNECTOR END VIEWS > A11 RADIO X5 (IOB)



Connector Part Information

- Harness Type: Instrument Panel COAX

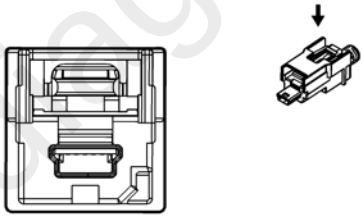
- OEM Connector: 13586878
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: 1-Way F Coax Type (CU)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
-	-	COAX	-	(XM +/-HD) Coaxial Antenna XM Signal	I	-

COMPONENT CONNECTOR END VIEWS > A11 RADIO X7 (IOB)



Connector Part Information

- Harness Type: Instrument Panel LVDS
- OEM Connector: 13576672
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: 5-Way M 2.0 Mini-B USB Type (GY)

Terminal Part Information

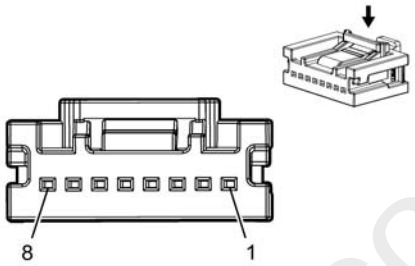
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp

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I	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
-	-	LVDS	-	(Infotainment) Infotainment Display Signal	I	-

COMPONENT CONNECTOR END VIEWS > A26 HVAC CONTROLS (IOB)



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 13593913
- Service Connector: 19333226
- Description: 8-Way F 0.64 Series (BK)

Terminal Part Information

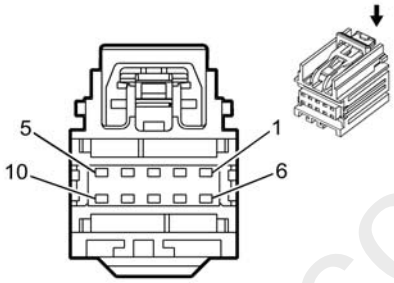
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GY/BN	3761	Infotainment Regulated Control	I	IOB
2	0.35	GN/BK	2515	Keypad Control	I	IOB
3	0.35	BN/GN	3983	Display Radio Bank Switch Signal 2	I	IOB

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4	0.35	GY	314	Radio On Signal	I	IOB
5	0.35	GY/BU	3989	Display Radio Bank Switch Dim Signal	I	IOB
6	0.35	BU	4315	Radio Volume Up Signal	I	IOB
7	0.35	GY/BN	4314	Radio Volume Down Signal	I	IOB
8	0.35	BK/BN	2518	Keypad Low Reference	I	IOB

COMPONENT CONNECTOR END VIEWS > A23D DOOR LATCH ASSEMBLY - DRIVER



Connector Part Information

- Harness Type: Driver Door
- OEM Connector: 15127041
- Service Connector: Service by Harness - See Part Catalog
- Description: 10-Way F 0.64 YESC Kaizen Series (GN)

Terminal Part Information

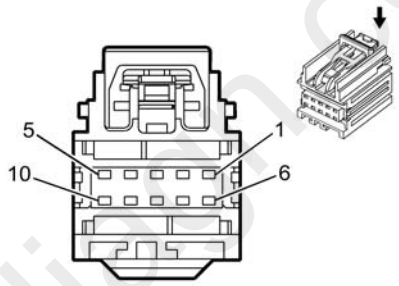
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GY	745	Left Front Door Ajar Switch Signal	I	-
2	0.35	WH/YE	3574	Driver Door Open Switch Signal	I	-

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3	0.35	BK	2150	Ground	I	-
4	0.35	WH/VT	3270	Driver Door Lock Motor Status Signal	I	-
5	0.35	BU/VT	1124	Door Lock Key Switch Unlock Signal	I	-
6	-	-	-	Not Occupied	-	-
7	0.75	GY	5911	Door Lock Actuator Lock Control 2	I	-
8	0.75	BN/YE	294	Door Lock Actuator Unlock Control	I	-
9 - 10	-	-	-	Not Occupied	-	-

COMPONENT CONNECTOR END VIEWS > A23P DOOR LATCH ASSEMBLY - PASSENGER



Connector Part Information

- Harness Type: Passenger Door
- OEM Connector: 15127041
- Service Connector: Service by Harness - See Part Catalog
- Description: 10-Way F 0.64 YESC Kaizen Series (GN)

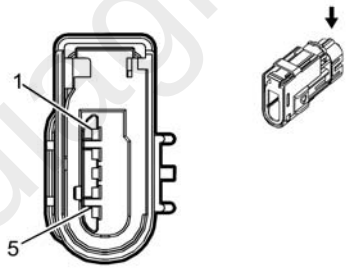
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal	Option

					Type ID	
1	-	-	-	Not Occupied	-	-
2	0.35	VT	4009	Passenger Door Lock Status	I	-
3	0.35	BK	2250	Ground	I	-
4	-	-	-	Not Occupied	-	-
5	0.35	GY	746	Right Front Door Ajar Switch Signal	I	-
6 - 7	-	-	-	Not Occupied	-	-
8	0.75	BN/YE	294	Door Lock Actuator Unlock Control	I	-
9	0.75	GY	295	Door Lock Actuator Lock Control	I	-
10	-	-	-	Not Occupied	-	-

COMPONENT CONNECTOR END VIEWS > A24D DOOR HANDLE ASSEMBLY - DRIVER EXTERIOR



Connector Part Information

- Harness Type: Driver Door
- OEM Connector: 13582039
- Service Connector: Service by Harness - See Part Catalog
- Description: 5-Way M 1.2 Series, Sealed (NA)

Terminal Part Information

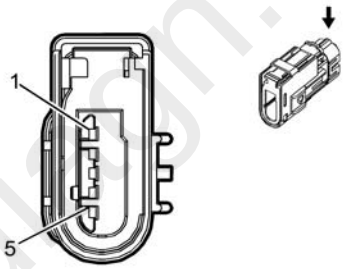
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp

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I	Not Required	J-35616-13 (BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN/WH	3570	Driver Door Handle Switch Signal	I	-
2	0.5	VT	3560	Passive Entry Driver Door Antenna Signal Hi	I	-
3	-	-	-	Not Occupied	-	-
4	0.5	VT/GY	3561	Passive Entry Driver Door Antenna Signal Lo	I	-
5	0.5	BK	2150	Ground	I	-

COMPONENT CONNECTOR END VIEWS > A24P DOOR HANDLE ASSEMBLY - PASSENGER EXTERIOR



Connector Part Information

- Harness Type: Passenger Door
- OEM Connector: 13582039
- Service Connector: Service by Harness - See Part Catalog
- Description: 5-Way M 1.2 Series, Sealed (NA)

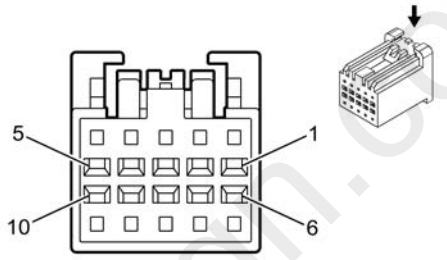
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-13 (BU)	Not Required	Not Required	Not Required	Not Required	Not Required

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT/WH	3571	Passenger Door Handle Switch Signal	I	-
2	0.5	GN/YE	3562	Passive Entry Passenger Door Antenna Signal Hi	I	-
3	-	-	-	Not Occupied	-	-
4	0.5	GN/BK	3563	Passive Entry Passenger Door Antenna Signal Lo	I	-
5	0.5	BK	2250	Ground	I	-

COMPONENT CONNECTOR END VIEWS > A26 HVAC CONTROLS (IO5/IO6)



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 13581139
- Service Connector: 13581139
- Description: 10-Way F 0.64 Kaizen Series (GY)

Terminal Part Information

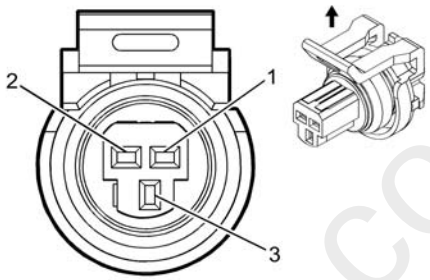
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13575845	J-35616-64B (LT BU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	RD/BU	3240	Battery Positive Voltage	I	-

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2	-	-	-	Not Occupied	-	-
3	0.35	GN	5060	Low Speed GMLAN Serial Data	I	-
4 - 8	-	-	-	Not Occupied	-	-
9	0.35	GN/YE	7531	Local Interconnect Network Serial Data Bus 9	I	-
10	0.5	BK/WH	1551	Signal Ground	I	-

COMPONENT CONNECTOR END VIEWS > B1 A/C REFRIGERANT PRESSURE SENSOR



Connector Part Information

- Harness Type: Engine
- OEM Connector: 19210607
- Service Connector: 88988301
- Description: 3-Way F 150 GT Series, Sealed (BK)

Terminal Part Information

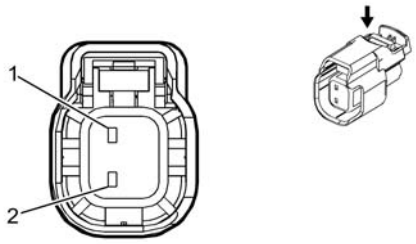
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK/WH	2151	Signal Ground	I	-
2	0.5	BN/RD	2700	A/C Pressure Sensor 5 Volt Reference	I	-

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3	0.5	GN	380	A/C Refrigerant Pressure Sensor Signal	I	-

COMPONENT CONNECTOR END VIEWS > B5LF WHEEL SPEED SENSOR - LEFT FRONT



Connector Part Information

- Harness Type: Forward Lamp
- OEM Connector: 13503508
- Service Connector: 13580230
- Description: 2-Way F 1.5 Series, Sealed (BK)

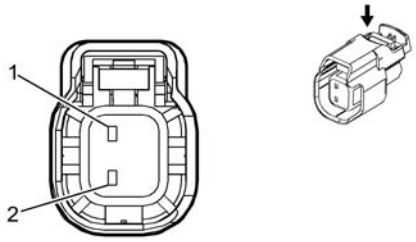
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY/WH	7064	Wheel Speed Sensor Control Left Front	I	-
2	0.5	GY	830	Wheel Speed Sensor Signal Left Front	I	-

COMPONENT CONNECTOR END VIEWS > B5LR WHEEL SPEED SENSOR - LEFT REAR

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Connector Part Information

- Harness Type: Rear Chassis
- OEM Connector: 13503508
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 1.5 Series, Sealed (BK)

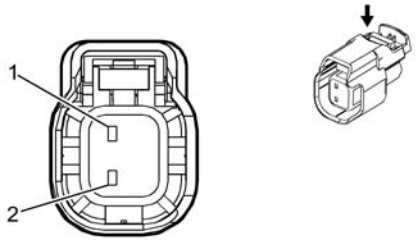
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

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

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COMPONENT CONNECTOR END VIEWS > B5RF WHEEL SPEED SENSOR - RIGHT FRONT



Connector Part Information

- Harness Type: Body
- OEM Connector: 13503508
- Service Connector: 13580230
- Description: 2-Way F 1.5 Series, Sealed (BK)

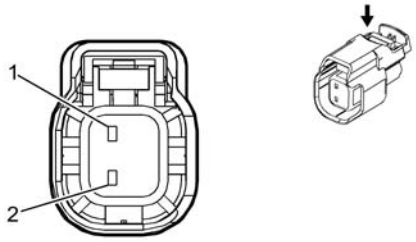
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY/BN	7065	Wheel Speed Sensor Control Right Front	I	-
2	0.5	YE	872	Wheel Speed Sensor Signal Right Front	I	-

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COMPONENT CONNECTOR END VIEWS > B5RR WHEEL SPEED SENSOR - RIGHT REAR



Connector Part Information

- Harness Type: Rear Chassis
- OEM Connector: 13503508
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 1.5 Series, Sealed (BK)

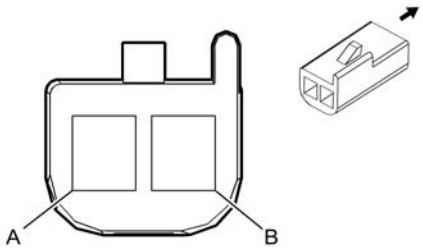
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

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

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COMPONENT CONNECTOR END VIEWS > B7D AIR TEMPERATURE SENSOR - DUCT LEFT LOWER



Connector Part Information

- Harness Type: HVAC
- OEM Connector: 12059249
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 150 Metri-Pack Series (NA)

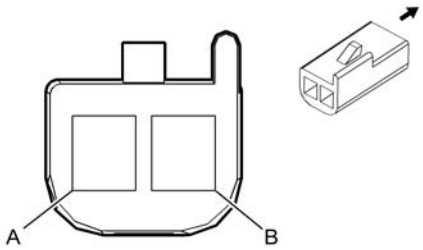
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

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

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COMPONENT CONNECTOR END VIEWS > B7E AIR TEMPERATURE SENSOR - DUCT RIGHT LOWER



Connector Part Information

- Harness Type: HVAC
- OEM Connector: 12059249
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 150 Metri-Pack Series (NA)

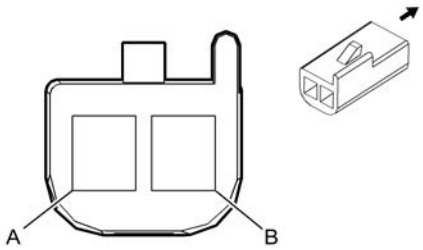
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

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

COMPONENT CONNECTOR END VIEWS > B7H AIR TEMPERATURE SENSOR - DUCT LEFT UPPER

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Connector Part Information

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

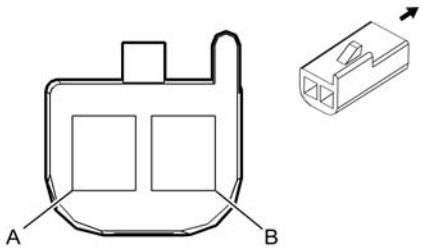
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

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

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COMPONENT CONNECTOR END VIEWS > 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 150 Metri-Pack Series (BK)

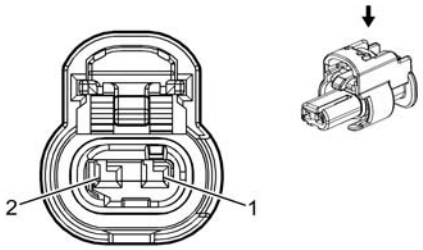
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

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

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COMPONENT CONNECTOR END VIEWS > B9 AMBIENT AIR TEMPERATURE SENSOR



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13591334
- Service Connector: 19330898
- Description: 2-Way F 1.2 MCON Series, Sealed (BK)

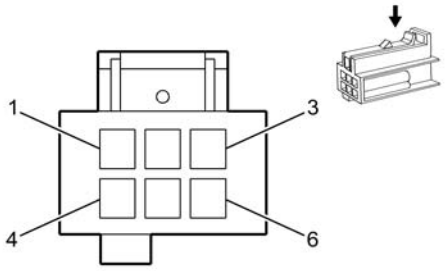
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU/GY	636	Outside Ambient Air Temperature Sensor Signal	I	-
2	0.5 0.5	BK/WH BK/BU	2151 61	Signal Ground Outside Ambient Temperature Sensor Low Reference	I	- LT1/LT4

COMPONENT CONNECTOR END VIEWS > B10B AMBIENT LIGHT/SUNLOAD SENSOR

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Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 965413-1
- Service Connector: 19333315
- Description: 6-Way F 0.64 Micro-Quadlock 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 Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE/VT	1783	Twilight Sentinel Delay Signal	I	-
2	-	-	-	Not Occupied	-	-
3	0.35	WH/BU	278	Ambient Light Sensor Signal	I	-
4	0.5	BU/WH	734	Inside Air Temperature Sensor Signal	I	-
5	0.35	GY	728	Security Indicator Control	I	-
6	0.35	BK/BN	6102	Inside Air Temperature Sensor Low Reference	I	-

COMPONENT CONNECTOR END VIEWS > B13 TRANSMISSION FLUID TEMPERATURE SENSOR

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Connector Part Information

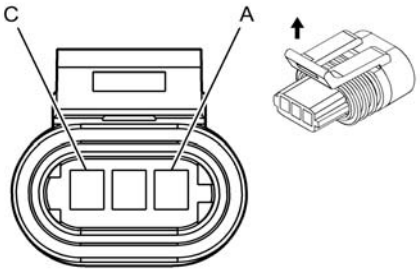
- Harness Type: Transmission Jumper
- OEM Connector: 311366
- Service Connector: Service by Harness - See Part Catalog
- Description: -

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK/BN	586	Transmission Oil Temperature Sensor Low Reference	I	-
2	0.5	BK/BN	585	Transmission Oil Temperature Sensor Signal	I	-

COMPONENT CONNECTOR END VIEWS > B14A TRANSMISSION OUTPUT SHAFT SPEED SENSOR



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13585443
- Service Connector: 12085538
- Description: 3-Way F 150.2 Metri-Pack Pull To Seat Series, Sealed (GY)

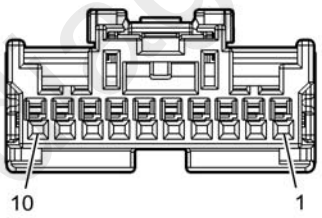
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Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.75	GY/BK	3096	Output Speed (Digital) Sensor 5 Volt Reference	I	-
B	0.75	GN	3098	Output Speed (Digital) Signal	I	-
C	0.75	WH/BK	3097	Output Speed (Digital) Sensor Low Reference	I	-

COMPONENT CONNECTOR END VIEWS > B15 TRANSMISSION INTERNAL MODE SWITCH



Connector Part Information

- Harness Type: Transmission Jumper
- OEM Connector: 2138504-1
- Service Connector: Service by Harness - See Part Catalog
- Description: 10-Way F 0.64 Generation Y Series (BN)

Terminal Part Information

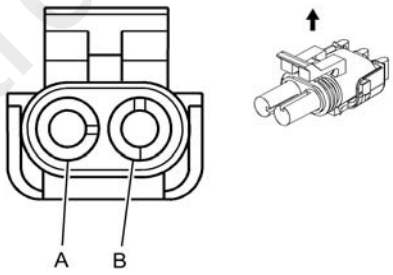
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp

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I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH/GY	1786	Transmission Park/Neutral Signal (1)	I	-
2	0.5	BK/GY	3927	IMS Mode Switch Low Reference	I	-
3	-	-	-	Not Occupied	-	-
4	0.5	YE/BU	4171	Transmission Position Sensor A 9 Volt Reference	I	-
5	0.5	VT/WH	5981	PRNDL A Signal	I	-
6	0.5	WH/BK	5983	PRNDL C Signal	I	-
7	0.5	GY/YE	4169	PRNDL S Signal	I	-
8	0.5	GY/BN	5982	PRNDL B Signal	I	-
9	0.5	GY/WH	4168	PRNDL P Signal	I	-
10	0.5	YE/GN	4170	Transmission Position Sensor B 9 Volt Reference	I	-

COMPONENT CONNECTOR END VIEWS > B16 BACKUP LAMP SWITCH



Connector Part Information

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

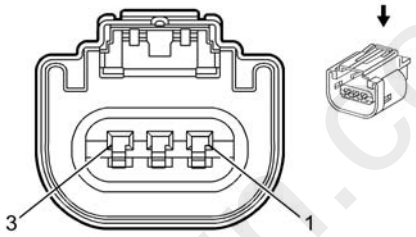
Terminal Part Information

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Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-9 (OG)	Not Required	Not Required	Not Required	Not Required	Not Required

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

COMPONENT CONNECTOR END VIEWS > B18 BATTERY CURRENT SENSOR



Connector Part Information

- Harness Type: Body
- OEM Connector: 13503514
- Service Connector: 19179750
- Description: 3-Way F 1.5 Series, Sealed (BK)

Terminal Part Information

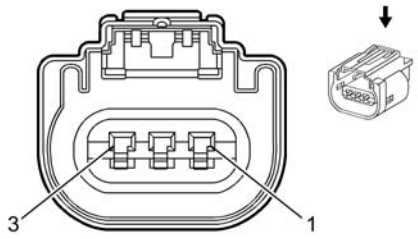
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BU/VT	5076	Current Sensor Control	I	-

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2	0.35	BK/VT	5077	Current Sensor Low Reference	I	-
3	0.35	WH/YE	5075	Current Sensor Signal	I	-

COMPONENT CONNECTOR END VIEWS > B19B BRAKE BOOSTER VACUUM SENSOR



Connector Part Information

- Harness Type: Body
- OEM Connector: 13503515
- Service Connector: 13584784
- Description: 3-Way F 1.5 Series, Sealed (BK)

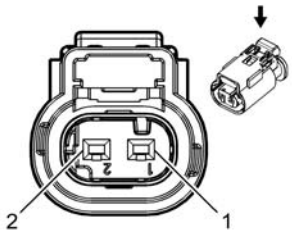
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

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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COMPONENT CONNECTOR END VIEWS > B20 BRAKE FLUID LEVEL SWITCH



Connector Part Information

- Harness Type: Body
- OEM Connector: 13503566
- Service Connector: 13587326
- Description: 2-Way F 1.2 MLK Series, Sealed (BK)

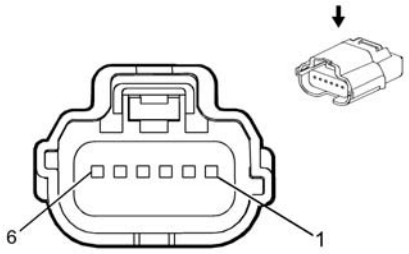
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN/GY	333	Brake Fluid Level Sensor Signal	I	-
2	0.5	BK	2150	Ground	I	-

COMPONENT CONNECTOR END VIEWS > B22 BRAKE PEDAL POSITION SENSOR

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Connector Part Information

- Harness Type: Body
- OEM Connector: 13584064
- Service Connector: 13577043
- Description: 6-Way F 64 Series, Sealed (NA)

Terminal Part Information

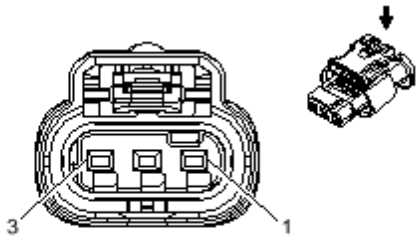
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	WH	5359	Brake Apply Sensor Control	I	-
2	0.35	BK/BN	5360	Brake Apply Sensor Low Reference	I	-
3	0.35	BU/YE	5361	Brake Apply Sensor Signal	I	-
4	0.35 0.35 0.35	WH/GN WH/GN BU/YE	5380 5380 -	Brake Position Sensor Signal Brake Position Sensor Signal -	I	M5T/M5U M5T/M5U/MGL MM6/M13/MH3
5	0.35 0.35 0.35	WH/RD WH/RD BU/YE	5381 5381 -	Brake Position Sensor 5 Volt Reference Brake Position Sensor 5 Volt Reference -	I	M5T/M5U M5T/M5U/MGL MM6/M13/MH3
6	0.35 0.35	BK/YE BK/YE	5382 5382	Brake Position Sensor Low Reference	I	M5T/M5U M5T/M5U/MGL

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	0.35	BU/YE	-	Brake Position Sensor Low Reference -		MM6/M13/MH3

COMPONENT CONNECTOR END VIEWS > B23A CAMSHAFT POSITION SENSOR - BANK 1 EXHAUST



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13582399
- Service Connector: 19329387
- Description: 3-Way F 1.2 Multiple Contact Point Series, Sealed (BN)

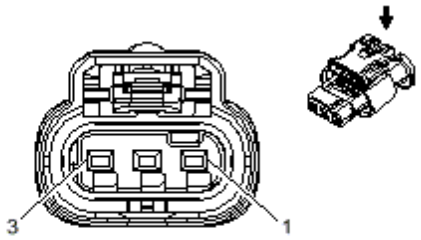
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

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

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COMPONENT CONNECTOR END VIEWS > B23B CAMSHAFT POSITION SENSOR - BANK 1 INTAKE



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13582399
- Service Connector: 19329387
- Description: 3-Way F 1.2 Multiple Contact Point Series, Sealed (BN)

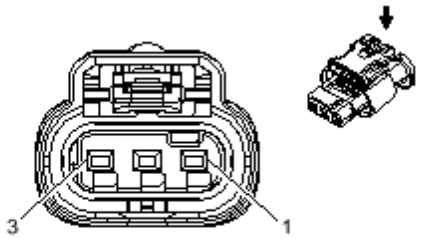
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

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

COMPONENT CONNECTOR END VIEWS > B23C CAMSHAFT POSITION SENSOR - BANK 2 EXHAUST

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Connector Part Information

- Harness Type: Engine
- OEM Connector: 13582399
- Service Connector: 19329387
- Description: 3-Way F 1.2 Multiple Contact Point Series, Sealed (BN)

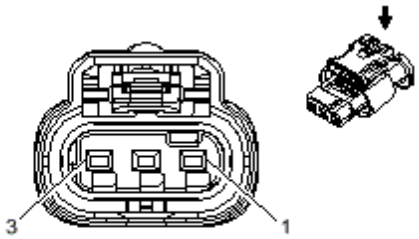
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

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

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COMPONENT CONNECTOR END VIEWS > B23D CAMSHAFT POSITION SENSOR - BANK 2 INTAKE



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13582399
- Service Connector: 19329387
- Description: 3-Way F 1.2 Multiple Contact Point Series, Sealed (BN)

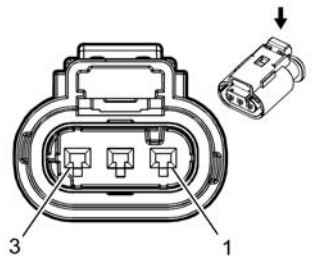
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

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

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COMPONENT CONNECTOR END VIEWS > B23E CAMSHAFT POSITION SENSOR - EXHAUST



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13503570
- Service Connector: 19299690
- Description: 3-Way F 1.2 MLK Series, Sealed (BK)

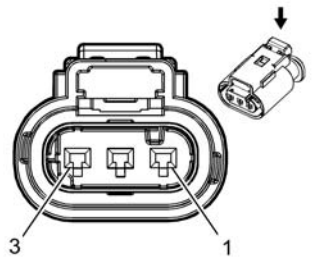
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

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

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COMPONENT CONNECTOR END VIEWS > B23F CAMSHAFT POSITION SENSOR - INTAKE



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13503570
- Service Connector: 19299690
- Description: 3-Way F 1.2 MLK Series, Sealed (BK)

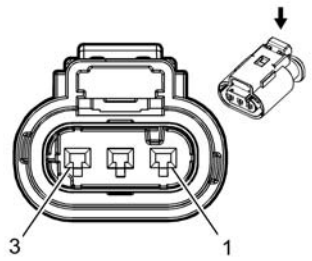
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

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

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COMPONENT CONNECTOR END VIEWS > B23 CAMSHAFT POSITION SENSOR



Connector Part Information

- Harness Type: Camshaft Position Sensor Jumper
- OEM Connector: 13763990
- Service Connector: Service by Harness - See Part Catalog
- Description: 3-Way F 1.2 MLK Series, Sealed (BK)

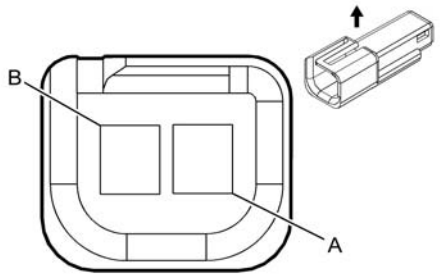
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

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

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COMPONENT CONNECTOR END VIEWS > B24 CELLULAR PHONE MICROPHONE



Connector Part Information

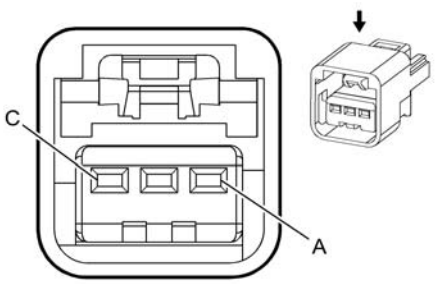
- Harness Type: Body
- OEM Connector: 12047663
- Service Connector: 13584278
- Description: 2-Way M 150 Metri-Pack Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-3 (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	BK/BN	654	Cellular Telephone Microphone Low Reference	I	-
B	0.35	BU	655	Cellular Telephone Microphone Signal	I	-

COMPONENT CONNECTOR END VIEWS > B25B CLUTCH PEDAL POSITION SENSOR



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Connector Part Information

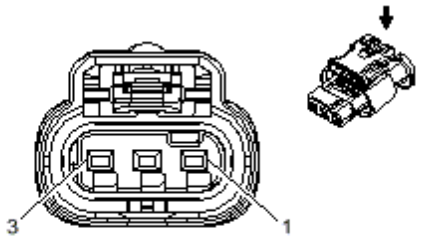
- Harness Type: Body
- OEM Connector: 15332132
- Service Connector: 88953364
- Description: 3-Way F 150 GT Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	GY/RD	6109	Clutch Apply Sensor 5 Volt Reference	I	MM6/M13/MH3
B	0.35	YE	6111	Clutch Apply Sensor Signal	I	MM6/M13/MH3
C	0.35	BK/GY	6110	Clutch Apply Sensor Low Reference	I	MM6/M13/MH3

COMPONENT CONNECTOR END VIEWS > B26 CRANKSHAFT POSITION SENSOR (LGX)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13582399
- Service Connector: 19329387

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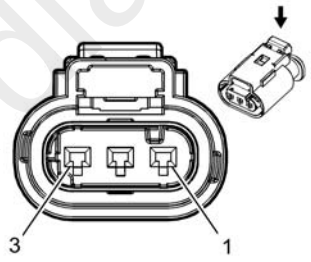
- Description: 3-Way F 1.2 Multiple Contact Point Series, Sealed (BN)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT/BU	6270	Crankshaft 60X Sensor 5 Volt Reference	I	LGX
2	0.5	BK/VT	6272	Crankshaft 60X Sensor Low Reference	I	LGX
3	0.5	GN	6271	Crankshaft 60X Sensor Signal	I	LGX

COMPONENT CONNECTOR END VIEWS > B26 CRANKSHAFT POSITION SENSOR (LT1/LTG)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13503570
- Service Connector: 19299690
- Description: 3-Way F 1.2 MLK Series, Sealed (BK)

Terminal Part Information

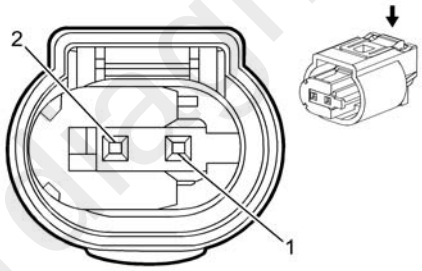
Terminal	Terminated	Diagnostic	Terminal	Service	Tray	Core	Insulation

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Type ID	Lead	Test Probe	Removal Tool	Terminal		Crimp	Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5 0.5	GN VT/BU	6271 6270	Crankshaft 60X Sensor Signal Crankshaft 60X Sensor 5 Volt Reference	I	LT1 LTG
2	0.5	BK/VT	6272	Crankshaft 60X Sensor Low Reference	I	-
3	0.5 0.5	VT/BU GN	6270 6271	Crankshaft 60X Sensor 5 Volt Reference Crankshaft 60X Sensor Signal	I	LT1 LTG

COMPONENT CONNECTOR END VIEWS > B34 ENGINE COOLANT TEMPERATURE SENSOR



Connector Part Information

- Harness Type: Engine
- OEM Connector: 24461693
- Service Connector: 13576533
- Description: 2-Way F 0.64 Micro-Quadlock Series, Sealed (BK)

Terminal Part Information

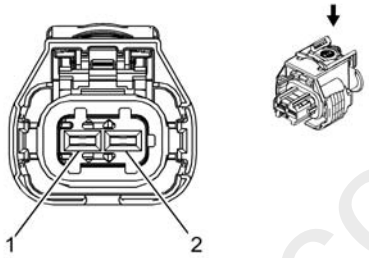
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B	Not	Not	Not	Not	Not

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		(LT BU)	Required	Required	Required	Required	Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU	410	Engine Coolant Temperature Sensor Signal	I	LTG
2	0.5	BK/WH	2051	Signal Ground	I	LTG

COMPONENT CONNECTOR END VIEWS > B35 ENGINE OIL LEVEL SWITCH



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13343443
- Service Connector: 13384371
- Description: 2-Way F 2.8 Series, Sealed (BK)

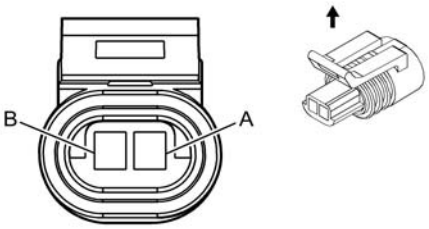
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-35 (VT)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK/WH	451	Signal Ground	I	-
2	0.5	BN/GN	1174	Oil Level Switch Signal	I	-

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COMPONENT CONNECTOR END VIEWS > B36 ENGINE OIL TEMPERATURE SENSOR



Connector Part Information

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

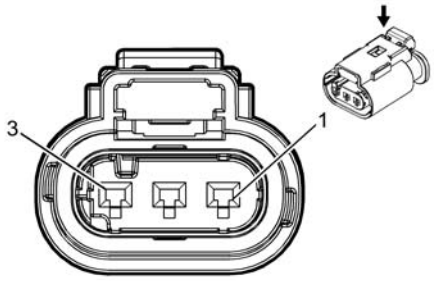
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	BK/BN	6273	Oil Temperature Sensor Low Reference	I	LT1
B	0.5	BN/BU	357	Oil Temperature Sensor Signal	I	LT1

COMPONENT CONNECTOR END VIEWS > B37B ENGINE OIL PRESSURE SENSOR (LGX)

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Connector Part Information

- Harness Type: Engine
- OEM Connector: 13503573
- Service Connector: 25957379
- Description: 3-Way F 1.2 MLK Series, Sealed (BK)

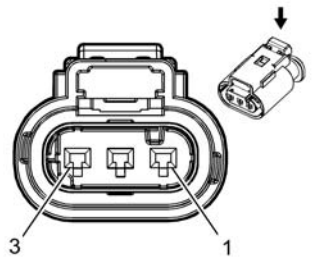
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH	311	Right Headlamp High Beam Control	I	LGX
2	0.5	BK/WH	2251	Signal Ground	I	LGX
3	0.5	WH/RD	2705	Oil Pressure Sensor 5 Volt Reference	I	LGX

COMPONENT CONNECTOR END VIEWS > B37B ENGINE OIL PRESSURE SENSOR (LTG)

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Connector Part Information

- Harness Type: Engine
- OEM Connector: 13503570
- Service Connector: 19299690
- Description: 3-Way F 1.2 MLK Series, Sealed (BK)

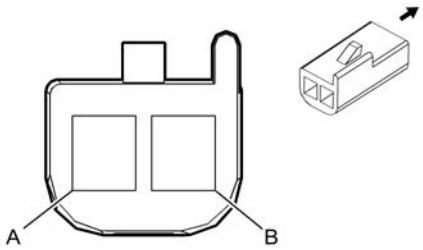
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

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

COMPONENT CONNECTOR END VIEWS > B39 A/C EVAPORATOR TEMPERATURE SENSOR

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Connector Part Information

- Harness Type: HVAC
- OEM Connector: 12059249
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 150 Metri-Pack Series (NA)

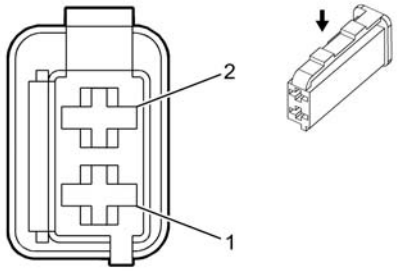
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	GN/RD	6137	EVAP Core Temperature Sensor Signal	I	-
B	0.35	GY/BK	1791	Air Temperature Door Control Low Reference	I	-

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COMPONENT CONNECTOR END VIEWS > B43 FOLDING TOP LUGGAGE BARRIER SENSOR



Connector Part Information

- Harness Type: Body
- OEM Connector: 19179871
- Service Connector: 13580951
- Description: 2-Way F 1.6 Timer Series (BK)

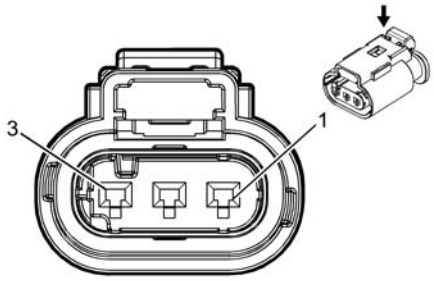
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GN/YE	5744	Left Side Luggage Barrier Limit Switch Signal	I	A1AC
2	0.35	YE/BN	7603	Retractable Roof Sensor Control	I	A1AC

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COMPONENT CONNECTOR END VIEWS > B47B FUEL RAIL PRESSURE SENSOR (LGX)



Connector Part Information

- Harness Type: Fuel Injector
- OEM Connector: 10010344
- Service Connector: Service by Harness - See Part Catalog
- Description: 3-Way F 1.2 Multilock Series, Sealed (BK)

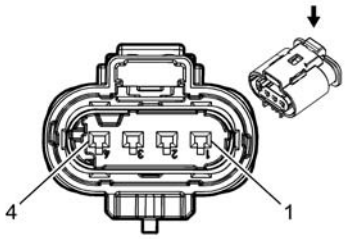
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN/RD	2917	Fuel Rail Pressure Sensor 5 Volt Reference	I	-
2	0.5	BU/WH	2918	Fuel Rail Pressure Sensor Signal	I	-
3	0.5	BK/GN	2919	Fuel Rail Pressure Sensor Low Reference	I	-

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COMPONENT CONNECTOR END VIEWS > B47B FUEL RAIL PRESSURE SENSOR (LT1)



Connector Part Information

- Harness Type: Fuel Injector Jumper
- OEM Connector: 13503575
- Service Connector: Service by Harness - See Part Catalog
- Description: 4-Way F 1.2 Multilock Series, Sealed (BK)

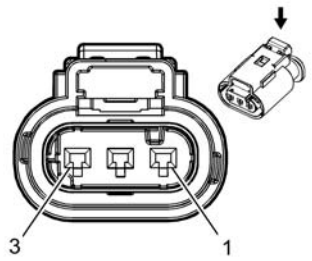
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN/RD	2917	Fuel Rail Pressure Sensor 5 Volt Reference	I	-
2	0.5	BN/YE	2161	Fuel Rail Pressure Sensor 2 Signal	I	-
3	0.5	BK/GN	2919	Fuel Rail Pressure Sensor Low Reference	I	-
4	0.5	BU/WH	2918	Fuel Rail Pressure Sensor Signal	I	-

COMPONENT CONNECTOR END VIEWS > B47B FUEL RAIL PRESSURE SENSOR (LTG)

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Connector Part Information

- Harness Type: Fuel Injector
- OEM Connector: 10010341
- Service Connector: Service by Harness - See Part Catalog
- Description: 3-Way F 1.2 Multilock Series, Sealed (BK)

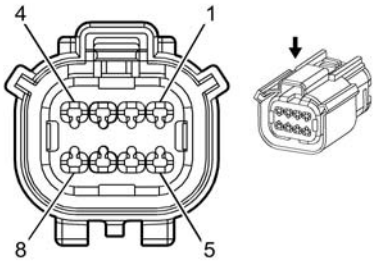
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK/GN	2919	Fuel Rail Pressure Sensor Low Reference	I	-
2	0.5	BU/WH	2918	Fuel Rail Pressure Sensor Signal	I	-
3	0.5	BN/RD	2917	Fuel Rail Pressure Sensor 5 Volt Reference	I	-

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COMPONENT CONNECTOR END VIEWS > B52A HEATED OXYGEN SENSOR 1



Connector Part Information

- Harness Type: Engine
- OEM Connector: 33472-0927
- Service Connector: 19330671
- Description: 8-Way F 150 MX Series, Sealed (BK)

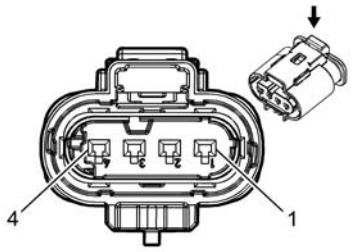
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN	6934	Heated Oxygen Sensor Ground	I	LTG
2	0.5	YE/GY	6936	Heated Oxygen Sensor Collector Signal	I	LTG
3	0.5	BN/WH	6933	Heated Oxygen Sensor Current Pump Signal	I	LTG
4	-	-	-	Not Occupied	-	-
5	0.5	VT/BU	5293	Powertrain Main Relay Fused Supply (4)	I	LTG
6	0.5	GY/WH	3113	Heated Oxygen Sensor Heater Low Control Bank 1 Sensor (1)	I	LTG
7	0.5	GN	6935	Heated Oxygen Sensor Current Adjust Signal	I	LTG
8	-	-	-	Not Occupied	-	-

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COMPONENT CONNECTOR END VIEWS > B52B HEATED OXYGEN SENSOR 2



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13503576
- Service Connector: 13587298
- Description: 4-Way F 1.2 MLK Series, Sealed (L-GY)

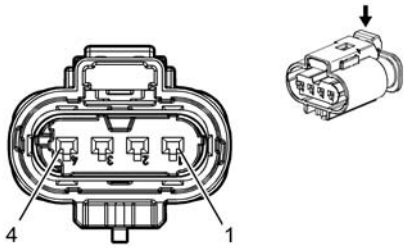
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY/WH	3122	Heated Oxygen Sensor Heater Low Control Bank 1 Sensor (2)	I	-
2	0.5	VT/BU	5294	Powertrain Main Relay Fused Supply (5)	I	-
3	0.5	WH/YE	3121	Heated Oxygen Sensor Low Signal Bank 1 Sensor (2)	I	-
4	0.5	VT/BU	3120	Heated Oxygen Sensor High Signal Bank 1 Sensor (2)	I	-

COMPONENT CONNECTOR END VIEWS > B52C HEATED OXYGEN SENSOR - BANK 1 SENSOR 1 (LGX)

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Connector Part Information

- Harness Type: Engine
- OEM Connector: 13576824
- Service Connector: 19330920
- Description: 4-Way F 1.2 MLK Series, Sealed (GY)

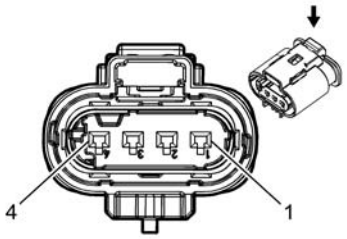
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY/WH	3113	Heated Oxygen Sensor Heater Low Control Bank 1 Sensor (1)	I	LGX
2	0.5	VT/BU	5293	Powertrain Main Relay Fused Supply (4)	I	LGX
3	0.5	WH/BK	3111	Heated Oxygen Sensor Low Signal Bank 1 Sensor (1)	I	LGX
4	0.5	VT/GY	3110	Heated Oxygen Sensor High Signal Bank 1 Sensor (1)	I	LGX

COMPONENT CONNECTOR END VIEWS > B52C HEATED OXYGEN SENSOR - BANK 1 SENSOR 1 (LT1)

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Connector Part Information

- Harness Type: Engine
- OEM Connector: 13503575
- Service Connector: 13587299
- Description: 4-Way F 1.2 MLK Series, Sealed (BK)

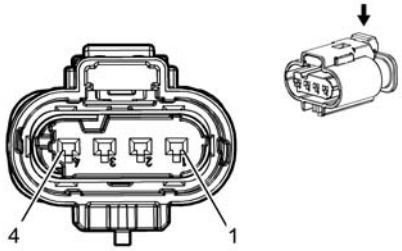
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY/WH	3113	Heated Oxygen Sensor Heater Low Control Bank 1 Sensor (1)	I	-
2	0.5	VT/BU	5293	Powertrain Main Relay Fused Supply (4)	I	-
3	0.5	WH/BK	3111	Heated Oxygen Sensor Low Signal Bank 1 Sensor (1)	I	-
4	0.5	VT/GY	3110	Heated Oxygen Sensor High Signal Bank 1 Sensor (1)	I	-

COMPONENT CONNECTOR END VIEWS > B52D HEATED OXYGEN SENSOR - BANK 1 SENSOR 2 (LGX)

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Connector Part Information

- Harness Type: Engine
- OEM Connector: 13576823
- Service Connector: 19330904
- Description: 4-Way F 1.2 MLK Series, Sealed (BK)

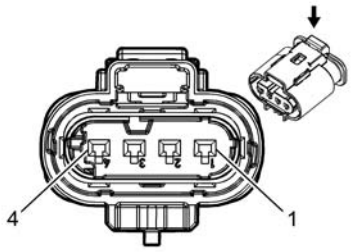
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY/WH	3122	Heated Oxygen Sensor Heater Low Control Bank 1 Sensor (2)	I	LGX
2	0.5	VT/BU	5294	Powertrain Main Relay Fused Supply (5)	I	LGX
3	0.5	WH/YE	3121	Heated Oxygen Sensor Low Signal Bank 1 Sensor (2)	I	LGX
4	0.5	VT/BU	3120	Heated Oxygen Sensor High Signal Bank 1 Sensor (2)	I	LGX

COMPONENT CONNECTOR END VIEWS > B52D HEATED OXYGEN SENSOR - BANK 1 SENSOR 2 (LT1)

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Connector Part Information

- Harness Type: Engine
- OEM Connector: 13503576
- Service Connector: 13587298
- Description: 4-Way F 1.2 MLK Series, Sealed (L-GY)

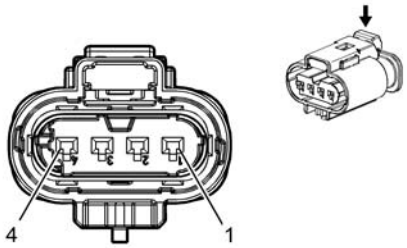
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY/WH	3122	Heated Oxygen Sensor Heater Low Control Bank 1 Sensor (2)	I	-
2	0.5	VT/BU	5294	Powertrain Main Relay Fused Supply (5)	I	-
3	0.5	WH/YE	3121	Heated Oxygen Sensor Low Signal Bank 1 Sensor (2)	I	-
4	0.5	VT/BU	3120	Heated Oxygen Sensor High Signal Bank 1 Sensor (2)	I	-

COMPONENT CONNECTOR END VIEWS > B52E HEATED OXYGEN SENSOR - BANK 2 SENSOR 1 (LGX)

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Connector Part Information

- Harness Type: Engine
- OEM Connector: 13576824
- Service Connector: 19330920
- Description: 4-Way F 1.2 MLK Series, Sealed (GY)

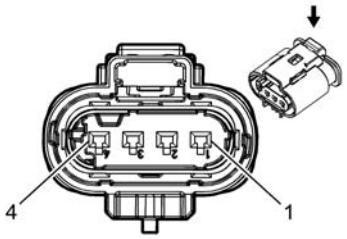
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN/YE	3212	Heated Oxygen Sensor Heater Low Control Bank 2 Sensor (1)	I	LGX
2	0.5	VT/BU	5293	Powertrain Main Relay Fused Supply (4)	I	LGX
3	0.5	YE/WH	3211	Heated Oxygen Sensor Low Signal Bank 2 Sensor (1)	I	LGX
4	0.5	VT/WH	3210	Heated Oxygen Sensor High Signal Bank 2 Sensor (1)	I	LGX

COMPONENT CONNECTOR END VIEWS > B52E HEATED OXYGEN SENSOR - BANK 2 SENSOR 1 (LT1)

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Connector Part Information

- Harness Type: Engine
- OEM Connector: 13503575
- Service Connector: 13587299
- Description: 4-Way F 1.2 MLK Series, Sealed (BK)

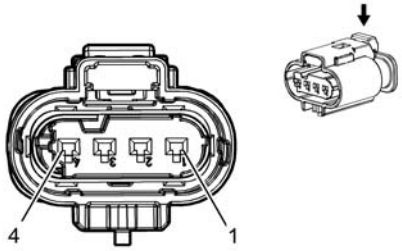
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN/YE	3212	Heated Oxygen Sensor Heater Low Control Bank 2 Sensor (1)	I	-
2	0.5	VT/BU	5293	Powertrain Main Relay Fused Supply (4)	I	-
3	0.5	YE/WH	3211	Heated Oxygen Sensor Low Signal Bank 2 Sensor (1)	I	-
4	0.5	VT/WH	3210	Heated Oxygen Sensor High Signal Bank 2 Sensor (1)	I	-

COMPONENT CONNECTOR END VIEWS > B52F HEATED OXYGEN SENSOR - BANK 2 SENSOR 2 (LGX)

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Connector Part Information

- Harness Type: Engine
- OEM Connector: 13576823
- Service Connector: 19330904
- Description: 4-Way F 1.2 MLK Series, Sealed (BK)

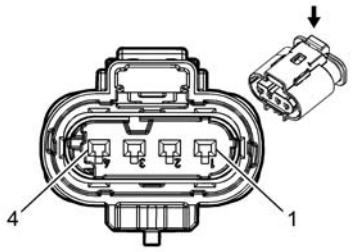
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH/BN	3223	Heated Oxygen Sensor Heater Low Control Bank 2 Sensor (2)	I	LGX
2	0.5	VT/BU	5294	Powertrain Main Relay Fused Supply (5)	I	LGX
3	0.5	YE/BU	3221	Heated Oxygen Sensor Low Signal Bank 2 Sensor (2)	I	LGX
4	0.5	VT/GN	3220	Heated Oxygen Sensor High Signal Bank 2 Sensor (2)	I	LGX

COMPONENT CONNECTOR END VIEWS > B52F HEATED OXYGEN SENSOR - BANK 2 SENSOR 2 (LT1)

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Connector Part Information

- Harness Type: Engine
- OEM Connector: 13503576
- Service Connector: 13587298
- Description: 4-Way F 1.2 MLK Series, Sealed (L-GY)

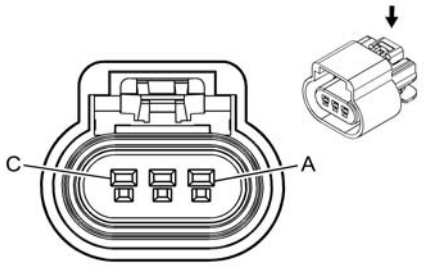
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH/BN	3223	Heated Oxygen Sensor Heater Low Control Bank 2 Sensor (2)	I	-
2	0.5	VT/BU	5294	Powertrain Main Relay Fused Supply (5)	I	-
3	0.5	YE/BU	3221	Heated Oxygen Sensor Low Signal Bank 2 Sensor (2)	I	-
4	0.5	VT/GN	3220	Heated Oxygen Sensor High Signal Bank 2 Sensor (2)	I	-

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COMPONENT CONNECTOR END VIEWS > B55 HOOD AJAR SWITCH



Connector Part Information

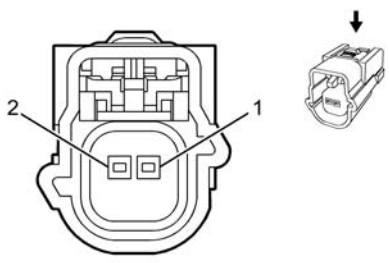
- Harness Type: Forward Lamp
- OEM Connector: 19153104
- Service Connector: 13580871
- Description: 3-Way F 150 GT Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	-	-	-	Not Occupied	-	-
B	0.35	BN/GN	4064	Hood Status B Signal	I	-
C	0.35	BK	550	Ground	I	-

COMPONENT CONNECTOR END VIEWS > B59L FRONT IMPACT SENSOR - LEFT



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Connector Part Information

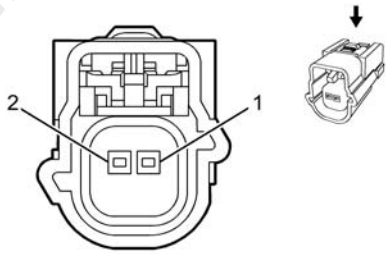
- Harness Type: Forward Lamp
- OEM Connector: 19151432
- Service Connector: 13585852
- Description: 2-Way F 0.64 Series, Sealed (D-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	OG/YE	354	Left Front Discriminating Sensor Signal	I	-
2	0.35	BK/OG	5045	Left Front Discriminating Sensor Low Reference	I	-

COMPONENT CONNECTOR END VIEWS > 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)

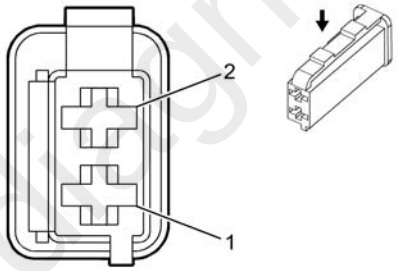
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Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	OG/GN	1409	Right Front Discriminating Sensor Signal	I	-
2	0.35	BK/OG	5600	Right Front Discriminating Sensor Low Reference	I	-

COMPONENT CONNECTOR END VIEWS > B61P SEAT BELT TENSION SENSOR - PASSENGER



Connector Part Information

- Harness Type: Body
- OEM Connector: 19179871
- Service Connector: 13580951
- Description: 2-Way F 1.6 Timer Series (BK)

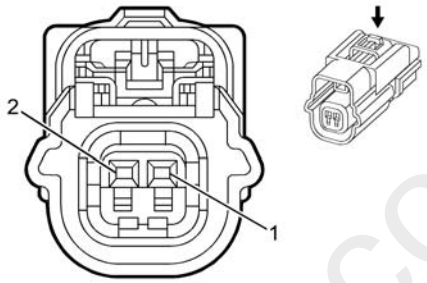
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	Not Required	Not Required	Not Required	Not Required	Not Required

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY/OG	3946	Automatic Locking Retractor Switch Low Reference	I	-
2	0.5	OG/BN	3947	Automatic Locking Retractor Switch Signal	I	-

COMPONENT CONNECTOR END VIEWS > B62P SEAT POSITION SENSOR - PASSENGER



Connector Part Information

- Harness Type: Passenger Seat
- OEM Connector: 54390239
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 0.64 Kaizen Series, Sealed (BK)

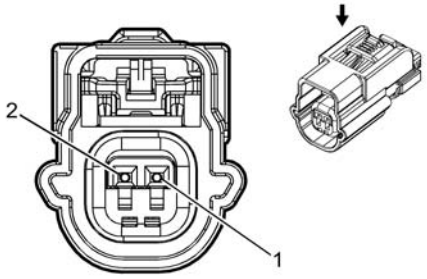
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BK/OG	1361	Passenger Seat Belt Switch Low Reference	I	-
2	0.35	OG/BU	5056	Passenger Seat Position Switch Signal	I	-

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COMPONENT CONNECTOR END VIEWS > B63LF SIDE IMPACT SENSOR - LEFT FRONT



Connector Part Information

- Harness Type: Driver Door
- OEM Connector: 89047492
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 0.64 Series, Sealed (L-GY)

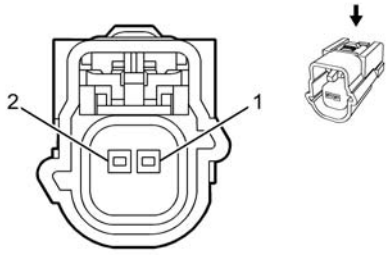
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

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	-

COMPONENT CONNECTOR END VIEWS > B63LR SIDE IMPACT SENSOR - LEFT REAR

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Connector Part Information

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

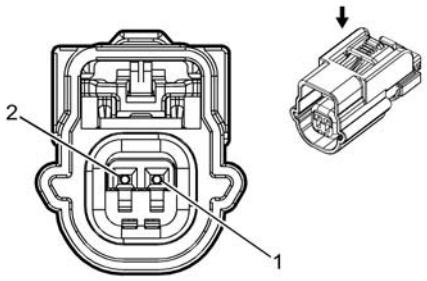
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	OG/BU	6620	Left Middle Side Impact Sensing Module Signal	I	-
2	0.35	BK/OG	6621	Left Middle Side Impact Sensing Module Low Reference	I	-

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COMPONENT CONNECTOR END VIEWS > B63RF SIDE IMPACT SENSOR - RIGHT FRONT



Connector Part Information

- Harness Type: Passenger Door
- OEM Connector: 89047492
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 0.64 Series, Sealed (L-GY)

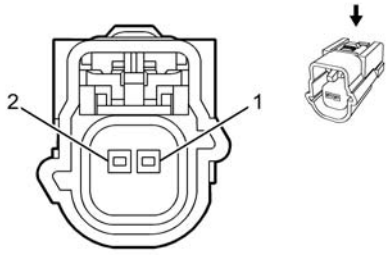
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

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	-

COMPONENT CONNECTOR END VIEWS > B63RR SIDE IMPACT SENSOR - RIGHT REAR

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Connector Part Information

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

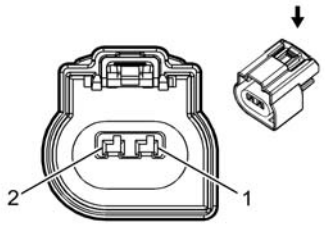
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	OG/VT	6624	Right Middle Side Impact Sensing Module Signal	I	-
2	0.35	BK/OG	6625	Right Middle Side Impact Sensing Module Low Reference	I	-

COMPONENT CONNECTOR END VIEWS > B68A KNOCK SENSOR 1

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Connector Part Information

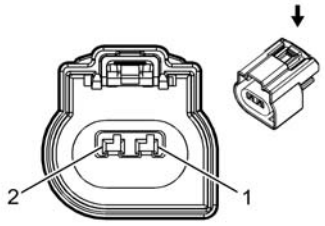
- Harness Type: Engine
- OEM Connector: 13583154
- Service Connector: 19301207
- Description: 2-Way F 150 MX Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5 0.75	VT/GY VT/GY	496 496	Knock Sensor Signal (1)	I	- LT1
2	0.5 0.75	BK/YE BK/YE	1716 1716	Knock Sensor Low Reference (1)	I	- LT1

COMPONENT CONNECTOR END VIEWS > B68B KNOCK SENSOR 2



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Connector Part Information

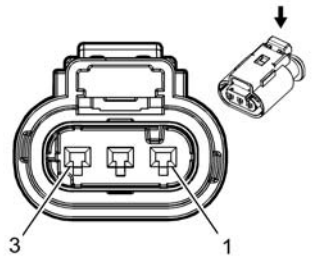
- Harness Type: Engine
- OEM Connector: 13583154
- Service Connector: 19301207
- Description: 2-Way F 150 MX Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5 0.75	WH/GY WH/GY	1876 1876	Knock Sensor Signal (2)	I	- LT1
2	0.5 0.75	BK/GY BK/GY	2303 2303	Knock Sensor Low Reference (2)	I	- LT1

COMPONENT CONNECTOR END VIEWS > B74 MANIFOLD ABSOLUTE PRESSURE SENSOR (LGX)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13503570
- Service Connector: 19299690
- Description: 3-Way F 1.2 MLK Series, Sealed (BK)

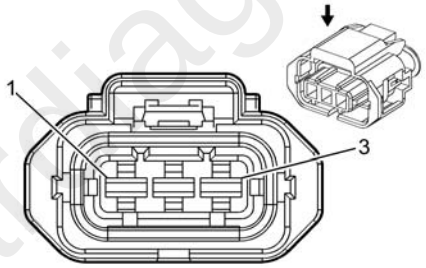
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Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

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

COMPONENT CONNECTOR END VIEWS > B74 MANIFOLD ABSOLUTE PRESSURE SENSOR (LT1)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13639747
- Service Connector: 19181248
- Description: 3-Way F 2.8 Junior Power Timer Series, Sealed (BK)

Terminal Part Information

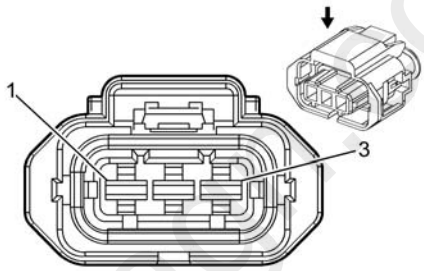
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp

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I	Not Required	J-35616-4A (PU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY/RD	2704	Manifold Absolute Pressure Sensor 5 Volt Reference	I	LT1
2	0.5	BK/GN	469	Manifold Absolute Pressure Sensor Low Reference	I	LT1
3	0.5	GN/WH	432	Manifold Absolute Pressure Sensor Signal	I	LT1

COMPONENT CONNECTOR END VIEWS > B74 MANIFOLD ABSOLUTE PRESSURE SENSOR (LTG)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 55567199
- Service Connector: 13580231
- Description: 3-Way F 2.8 Junior Power Timer Series, Sealed (GY)

Terminal Part Information

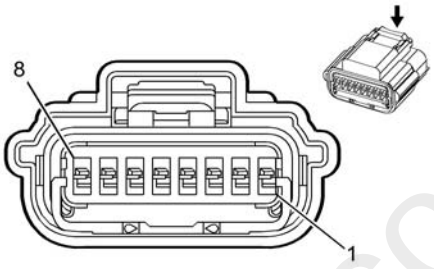
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-4A (PU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option

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1	0.5	GY/RD	2704	Manifold Absolute Pressure Sensor 5 Volt Reference	I	LTG
2	0.5	BK/GN	469	Manifold Absolute Pressure Sensor Low Reference	I	LTG
3	0.5	GN/WH	432	Manifold Absolute Pressure Sensor Signal	I	LTG

COMPONENT CONNECTOR END VIEWS > B75C MULTIFUNCTION INTAKE AIR SENSOR



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13504800
- Service Connector: 13583440
- Description: 8-Way F 0.64 Series, Sealed (BK)

Terminal Part Information

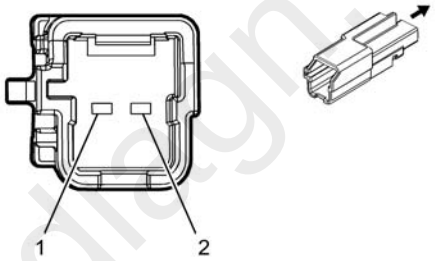
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH/BU	6289	Induction Air Temperature Sensor Signal	I	-
2	0.5 0.5	WH/RD GY/RD	3201 3053	Throttle Inlet Absolute Pressure Sensor 5 Volt Reference Turbo Intake Pressure Sensor	I	LGX/LT1 LTG

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				High Reference Bank (1)		
3	0.5 0.5	BK/VT BK/WH	2760 2151	Intake Air Temperature Sensor Low Reference Signal Ground	I	LGX/LT1 LTG
4	0.5 0.5	YE/WH YE	3200 3054	Throttle Inlet Absolute Pressure Sensor Signal Turbo Intake Pressure Sensor Signal Bank (1)	I	LGX/LT1 LTG
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	BN/GY	4008	Humidity Sensor Signal	I	-

COMPONENT CONNECTOR END VIEWS > B77LF RADIO VOLUME COMPENSATOR INTERIOR NOISE MICROPHONE - LEFT FRONT



Connector Part Information

- Harness Type: Driver Door Trim
- OEM Connector: 13588641
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way M 1.2 Series (BK)

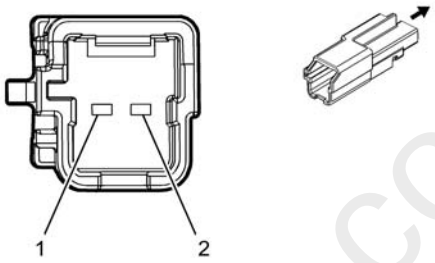
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-13 (BU)	Not Required	Not Required	Not Required	Not Required	Not Required

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN/BK	3008	Noise Reduction Microphone 1 Low Reference	I	A1BC+UQA+NKC/NKE
2	0.5	GN/BN	3005	Noise Reduction Microphone 1 Signal	I	A1BC+UQA+NKC/NKE

COMPONENT CONNECTOR END VIEWS > B77RF RADIO VOLUME COMPENSATOR INTERIOR NOISE MICROPHONE - RIGHT FRONT



Connector Part Information

- Harness Type: Passenger Door Trim
- OEM Connector: 13588641
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way M 1.2 Series (BK)

Terminal Part Information

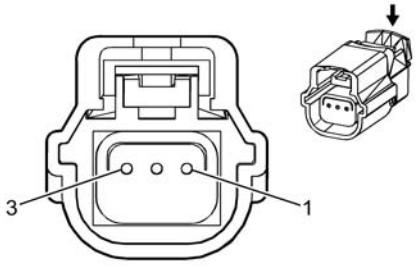
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-13 (BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU/BK	3009	Noise Reduction Microphone 2 Low Reference	I	A1BC+UQA+NKC/NKE

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2	0.5	BU/YE	3006	Noise Reduction Microphone 2 Signal	I	A1BC+UQA+NKC/NKE

COMPONENT CONNECTOR END VIEWS > B78E REAR OBJECT SENSOR - LEFT MIDDLE



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)

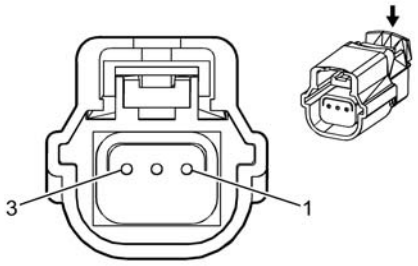
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BN/WH	2374	Object Sensor Control	I	UD7
2	0.35	YE/BU	2376	Left Rear Middle Object Sensor Signal	I	UD7
3	0.35	BK/GY	2379	Object Sensor Low Reference	I	UD7

COMPONENT CONNECTOR END VIEWS > B78F REAR OBJECT SENSOR - RIGHT MIDDLE

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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)

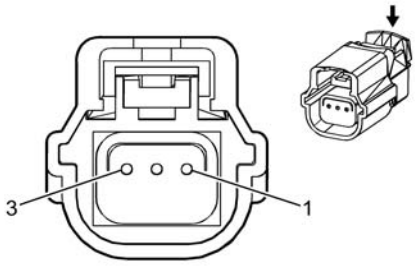
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BN/WH	2374	Object Sensor Control	I	UD7
2	0.35	YE/VT	2378	Right Rear Corner Object Sensor Signal	I	UD7
3	0.35	BK/GY	2379	Object Sensor Low Reference	I	UD7

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COMPONENT CONNECTOR END VIEWS > B78G REAR OBJECT SENSOR - LEFT OUTER



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)

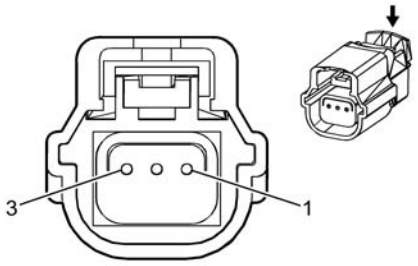
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BN/WH	2374	Object Sensor Control	I	UD7
2	0.35	YE	2375	Left Rear Corner Object Sensor Signal	I	UD7
3	0.35	BK/GY	2379	Object Sensor Low Reference	I	UD7

COMPONENT CONNECTOR END VIEWS > B78H REAR OBJECT SENSOR - RIGHT OUTER

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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)

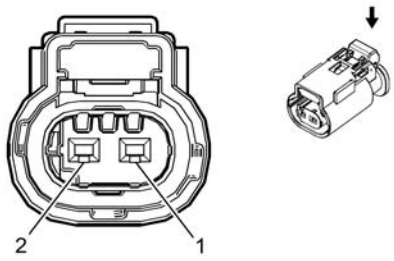
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BN/WH	2374	Object Sensor Control	I	UD7
2	0.35	YE/WH	2377	Right Rear Middle Object Sensor Signal	I	UD7
3	0.35	BK/GY	2379	Object Sensor Low Reference	I	UD7

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COMPONENT CONNECTOR END VIEWS > B82F PEDESTRIAN IMPACT DETECTION SENSOR-UPPER BEAM FRONT X1



Connector Part Information

- Harness Type: Front Fascia
- OEM Connector: 9405623
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 1.2 MLK Series, Sealed (BK)

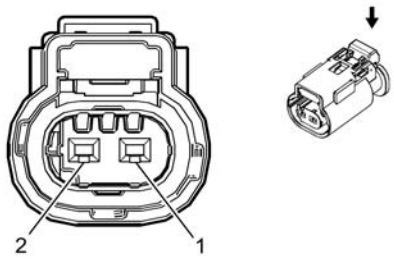
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BN/YE	4038	Pedestrian Protection Safing Sensor Module Signal	I	B3T
2	0.35	BK/VT	4045	Pedestrian Protection Safing Sensor Module Low Reference	I	B3T

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COMPONENT CONNECTOR END VIEWS > B82F PEDESTRIAN IMPACT DETECTION SENSOR-UPPER BEAM FRONT X2



Connector Part Information

- Harness Type: Front Fascia
- OEM Connector: 9405623
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 1.2 MLK Series, Sealed (BK)

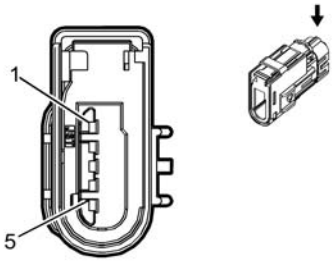
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	OG/VT	4034	Pedestrian Protection Impact Sensing Module Signal	I	B3T
2	0.35	BN/WH	4035	Pedestrian Protection Impact Sensing Module Low Reference	I	B3T

COMPONENT CONNECTOR END VIEWS > B87 REARVIEW CAMERA

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Connector Part Information

- Harness Type: Rear Fascia
- OEM Connector: 13582038
- Service Connector: Service by Harness - See Part Catalog
- Description: 5-Way M 1.2 Series, Sealed (L-GY)

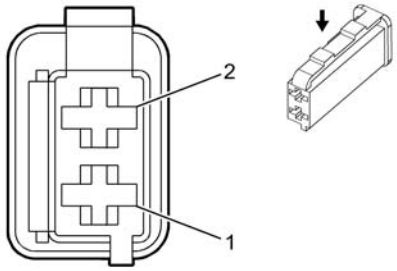
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-13 (BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GY/YE	6972	Camera Signal 2 +	I	UVC
2	0.35	WH/BU	6973	Camera Signal 2	I	UVC
3	0.35	WH	6974	Camera Low Reference	I	UVC
4	0.35	BK/WH	1551	Signal Ground	I	UVC
5	0.35	VT/GN	1339	Run/Crank Ignition 1 Voltage	I	UVC

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COMPONENT CONNECTOR END VIEWS > B88D SEAT BELT SWITCH - DRIVER



Connector Part Information

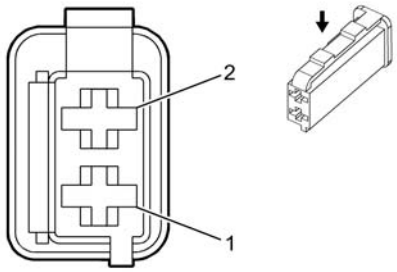
- Harness Type: Driver Seat
- OEM Connector: 1563189-1
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 1.6 Timer Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BK/OG	1363	Driver Seat Belt Switch Low Reference	I	-
2	0.35	OG/BN	238	Driver Seat Belt Switch Signal	I	-

COMPONENT CONNECTOR END VIEWS > B153P SEAT BELT BUCKLE - PASSENGER



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Connector Part Information

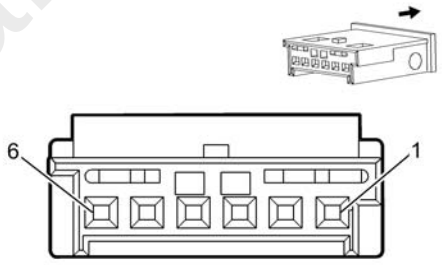
- Harness Type: Passenger Seat
- OEM Connector: 1563189-1
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 1.6 Timer Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BK/OG	1361	Passenger Seat Belt Switch Low Reference	I	-
2	0.35	OG/VT	1362	Passenger Seat Belt Switch Signal	I	-

COMPONENT CONNECTOR END VIEWS > B99 STEERING WHEEL ANGLE SENSOR



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 19151551
- Service Connector: 13505903
- Description: 6-Way F 0.64 Micro-Quadlock Series (BK)

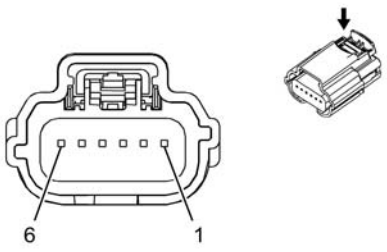
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Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

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	High Speed GMLAN Serial Data (+) (2)	I	-
4	0.35	BU/YE	6105	High Speed GMLAN Serial Data (+) (2)	I	-
5	0.35	BK/BN	6045	Steering Angle Sensor Low Reference	I	-
6	0.35	BK	1350	Ground	I	-

COMPONENT CONNECTOR END VIEWS > B107 ACCELERATOR PEDAL POSITION SENSOR (MN6)



Connector Part Information

- Harness Type: Body
- OEM Connector: 13580566
- Service Connector: 19300556
- Description: 6-Way F 64 Series, Sealed (GY)

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Terminal Part Information

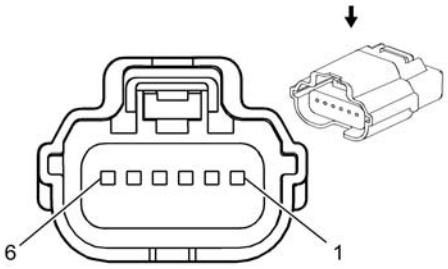
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BK/RD	1274	Accelerator Pedal Position 5 Volt Reference (2)	I	M13/MH3/MM6
2	0.35	BK/GN	1162	Accelerator Pedal Position Signal (2)	I	M13/MH3/MM6
3	0.35	BK/VT	1272	Accelerator Pedal Position Low Reference (2)	I	M13/MH3/MM6
4	0.35	BK/BU	1271	Accelerator Pedal Position Low Reference (1)	I	M13/MH3/MM6
5	0.35	BK/YE	1161	Accelerator Pedal Position Signal (1)	I	M13/MH3/MM6
6	0.35	BK/WH	1164	Accelerator Pedal Position 5 Volt Reference (1)	I	M13/MH3/MM6

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Service Manual: WIRING SYSTEMS AND POWER MANAGEMENT - COMPONENT CONNECTOR END VIEWS - B107 TO K19

COMPONENT CONNECTOR END VIEWS > B107 ACCELERATOR PEDAL POSITION SENSOR (MX0)



Connector Part Information

- Harness Type: Body
- OEM Connector: 88988771
- Service Connector: 13577043
- Description: 6-Way F 0.64 Series, Sealed (BK)

Terminal Part Information

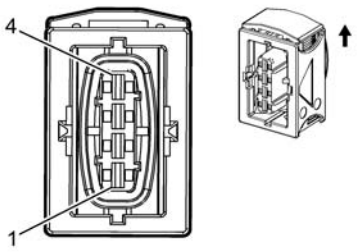
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BK/RD	1274	Accelerator Pedal Position 5 Volt Reference (2)	I	-
2	0.35	BK/GN	1162	Accelerator Pedal Position Signal (2)	I	-
3	0.35	BK/VT	1272	Accelerator Pedal Position Low Reference (2)	I	-
4	0.35	BK/BU	1271	Accelerator Pedal Position Low Reference (1)	I	-

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5	0.35	BK/YE	1161	Accelerator Pedal Position Signal (1)	I	-
6	0.35	BK/WH	1164	Accelerator Pedal Position 5 Volt Reference (1)	I	-

COMPONENT CONNECTOR END VIEWS > B111B TURBOCHARGER BOOST/INTAKE AIR TEMPERATURE SENSOR



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13140565
- Service Connector: 13384331
- Description: 4-Way F Junior Power Timer 2.8 Series, Sealed (BK)

Terminal Part Information

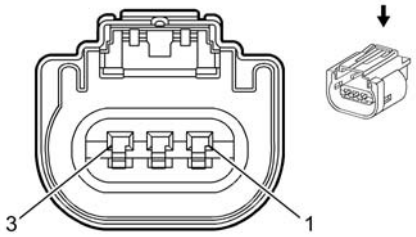
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-4A (PU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK/VT	7332	Pre Throttle Air Temp and Press (TMAP) Low Reference	I	LTG
2	0.5	WH/BU	7329	Pre-Throttle Air Temp and Press (TMAP) Temperature Signal	I	LTG
3	0.5	GY/RD	7331	Pre Throttle Air Temp and Press (TMAP) 5 Volt Reference	I	LTG

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4	0.5	VT/BU	7330	Pre Throttle Air Temp and Press (TMAP) Air Pressure Signal	I	LTG

COMPONENT CONNECTOR END VIEWS > B150 FUEL TANK PRESSURE SENSOR



Connector Part Information

- Harness Type: Body
- OEM Connector: 13503515
- Service Connector: 13584784
- Description: 3-Way F 1.5 Series, Sealed (BK)

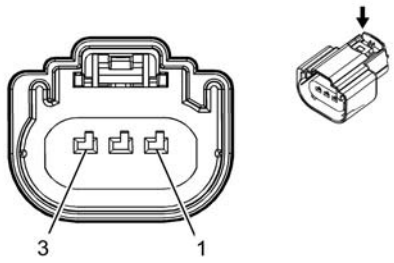
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BU/WH	890	Fuel Tank Pressure Sensor Signal	I	-
2	0.35	BK/WH	2151	Signal Ground	I	-
3	0.35	YE/RD	2709	Fuel Tank Pressure Sensor 5 Volt Reference	I	-

COMPONENT CONNECTOR END VIEWS > B152LF SUSPENSION POSITION SENSOR - LEFT FRONT

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Connector Part Information

- Harness Type: Engine
- OEM Connector: 13503516
- Service Connector: 19300594
- Description: 3-Way F 1.5 Series, Sealed (GY)

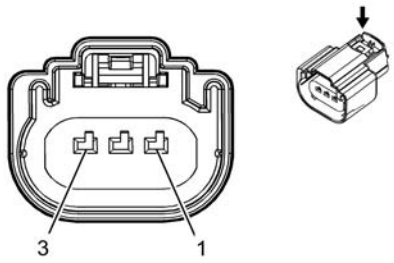
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU/RD	1205	Left Front Strut Position Sensor 5 Volt Reference	I	F55
2	0.5	BK/BU	1206	Left Front Strut Position Sensor Low Reference	I	F55
3	0.5	BN/WH	1207	Left Front Strut Position Sensor Signal	I	F55

COMPONENT CONNECTOR END VIEWS > B152LR SUSPENSION POSITION SENSOR - LEFT REAR

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Connector Part Information

- Harness Type: Rear Chassis
- OEM Connector: 13503516
- Service Connector: Service by Harness - See Part Catalog
- Description: 3-Way F 1.5 Series, Sealed (GY)

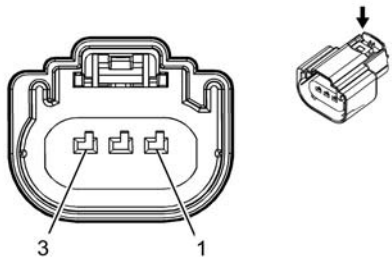
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE/RD	1208	Left Rear Strut Position Sensor 5 Volt Reference	I	F55
2	0.5	BK/GN	1209	Left Rear Strut Position Sensor Low Reference	I	F55
3	0.5	GN/WH	1210	Left Rear Strut Position Sensor Signal	I	F55

COMPONENT CONNECTOR END VIEWS > B152RF SUSPENSION POSITION SENSOR - RIGHT FRONT

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Connector Part Information

- Harness Type: Engine
- OEM Connector: 13503516
- Service Connector: 19300594
- Description: 3-Way F 1.5 Series, Sealed (GY)

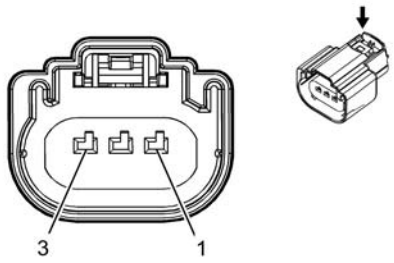
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN/RD	1211	Right Front Strut Position Sensor 5 Volt Reference	I	F55
2	0.5	BK/GY	1212	Right Front Strut Position Sensor Low Reference	I	F55
3	0.5	YE/WH	1213	Right Front Strut Position Sensor Signal	I	F55

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COMPONENT CONNECTOR END VIEWS > B152RR SUSPENSION POSITION SENSOR - RIGHT REAR



Connector Part Information

- Harness Type: Rear Chassis
- OEM Connector: 13503516
- Service Connector: Service by Harness - See Part Catalog
- Description: 3-Way F 1.5 Series, Sealed (GY)

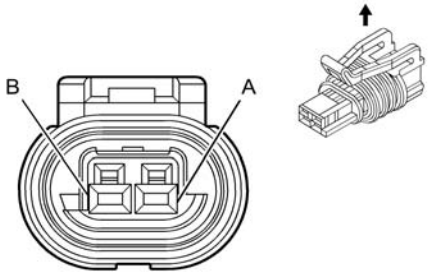
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN/RD	1214	Right Rear Strut Position Sensor 5 Volt Reference	I	F55
2	0.5	BK/YE	1215	Right Rear Strut Position Sensor Low Reference	I	F55
3	0.5	GN/GY	1216	Right Rear Strut Position Sensor Signal	I	F55

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COMPONENT CONNECTOR END VIEWS > B173 MANUAL TRANSMISSION FLUID TEMPERATURE SENSOR



Connector Part Information

- Harness Type: Engine
- OEM Connector: 89046954
- Service Connector: 88987993
- Description: 2-Way F 150 GT Series, Sealed (BK)

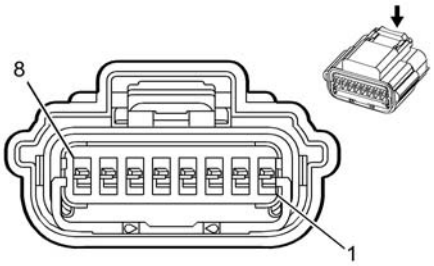
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5 0.5 0.5	BK/WH BK/BN BK/WH	2151 586 2051	Signal Ground Transmission Oil Temperature Sensor Low Reference Signal Ground	I	LGX+M13 LT1+MM6 LTG+M13
B	0.5	BN/WH	585	Transmission Oil Temperature Sensor Signal	I	-

COMPONENT CONNECTOR END VIEWS > B218L SIDE OBJECT SENSOR MODULE - LEFT

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Connector Part Information

- Harness Type: Rear Fascia
- OEM Connector: 13591325
- Service Connector: Service by Harness - See Part Catalog
- Description: 8-Way F 0.64 Series, Sealed (BK)

Terminal Part Information

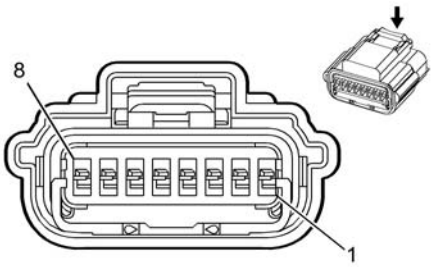
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	-	-	-	Not Occupied	-	-
2	0.35	GN	5060	Low Speed GMLAN Serial Data	I	UKC
3	-	-	-	Not Occupied	-	-
4	0.35	GY/YE	5853	Driver Side Object Detection LED Signal (1)	I	UKC
5	0.35	RD/GN	3840	Battery Positive Voltage	I	UKC
6	-	-	-	Not Occupied	-	-
7	0.35	GN	5060	Low Speed GMLAN Serial Data	I	UKC
8	0.35	BK	2550	Ground	I	UKC

COMPONENT CONNECTOR END VIEWS > B218R SIDE OBJECT SENSOR MODULE -

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RIGHT



Connector Part Information

- Harness Type: Rear Fascia
- OEM Connector: 13591324
- Service Connector: Service by Harness - See Part Catalog
- Description: 8-Way F 0.64 Series, Sealed (BK)

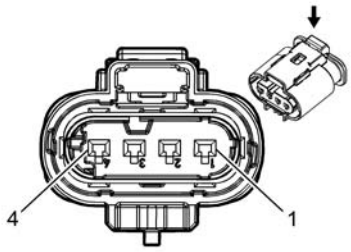
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	-	-	-	Not Occupied	-	-
3	0.35	BK	2550	Ground	I	UKC
4	0.35	GY	5861	Passenger Side Object Detection LED Signal (1)	I	UKC
5	0.35	RD/GN	3840	Battery Positive Voltage	I	UKC
6	-	-	-	Not Occupied	-	-
7	0.35	GN	5060	Low Speed GMLAN Serial Data	I	UKC
8	0.35	BK	2550	Ground	I	UKC

COMPONENT CONNECTOR END VIEWS > B227 GEAR POSITION SENSOR

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Connector Part Information

- Harness Type: Engine
- OEM Connector: 13503576
- Service Connector: 13587298
- Description: 4-Way F 1.2 MLK Series, Sealed (L-GY)

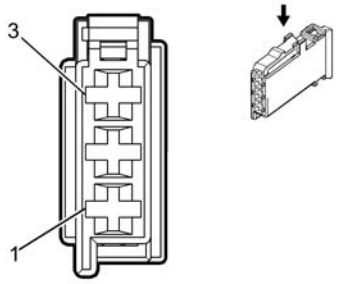
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE/RD	7344	Clutch Position Sensor Voltage Reference	I	LT1+MM6
2	0.5	WH	232	Gear Sensor Signal (2)	I	LT1+MM6
3	0.5	YE	1457	Gear Sensor Signal (1)	I	LT1+MM6
4	0.5	BK/YE	1704	Sensor Low Reference	I	LT1+MM6

COMPONENT CONNECTOR END VIEWS > B240L FOLDING TOP HEADER LATCHED POSITION SENSOR - LEFT (CM8)

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Connector Part Information

- Harness Type: Headliner
- OEM Connector: 24427883
- Service Connector: 93186706
- Description: 3-Way F 1.6 Micro-Timer Series (BK)

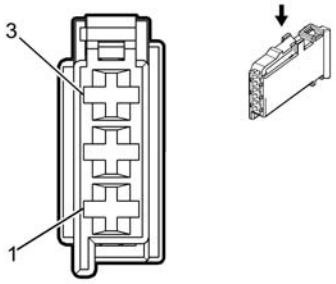
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	-	-	-	Not Occupied	-	-
2	0.35	YE/BN	7603	Retractable Roof Sensor Control	I	CM8
3	0.35	BN	5935	Folding Top Unlatch Switch Signal	I	CM8

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COMPONENT CONNECTOR END VIEWS > B240R FOLDING TOP HEADER LATCHED POSITION SENSOR - RIGHT (CM8)



Connector Part Information

- Harness Type: Headliner
- OEM Connector: 24427883
- Service Connector: 93186706
- Description: 3-Way F 1.6 Micro-Timer Series (BK)

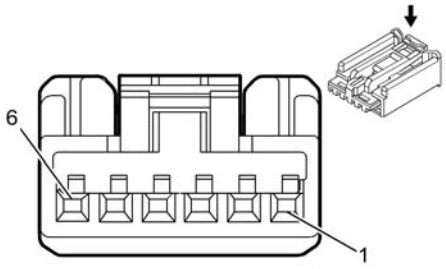
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	-	-	-	Not Occupied	-	-
2	0.35	YE/BN	7603	Retractable Roof Sensor Control	I	CM8
3	0.35	VT/WH	5933	Folding Top Position Sensor Signal	I	CM8

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COMPONENT CONNECTOR END VIEWS > B244L FOLDING TOP STOWAGE COMPARTMENT LID CLOSED POSITION SENSOR - LEFT



Connector Part Information

- Harness Type: Body
- OEM Connector: 15269798
- Service Connector: 19167753
- Description: 6-Way F 0.64 Kaizen 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 Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	YE/BN	7603	Retractable Roof Sensor Control	I	A1AC
2	0.35	WH	5937	Folding Top Header Latch Switch Signal	I	A1AC
3	0.35	VT	5936	Folding Top Open Switch Signal	I	A1AC
4 - 6	-	-	-	Not Occupied	-	-

COMPONENT CONNECTOR END VIEWS > B244R FOLDING TOP STOWAGE COMPARTMENT LID CLOSED POSITION SENSOR - RIGHT (CM8)

-

Connector Part Information

- Harness Type: Folding Top

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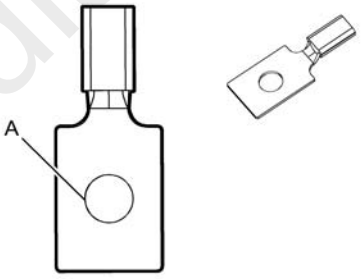
- OEM Connector: 191179871
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE	3249	Folding Top Position Sensor Control	I	-
2	0.5	BN	5934	Front Tonneau Position Sensor Signal	I	-

COMPONENT CONNECTOR END VIEWS > C1 BATTERY



Connector Part Information

- Harness Type: Body
- OEM Connector: 7009-5454-02
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: 1-Way Ring Terminal

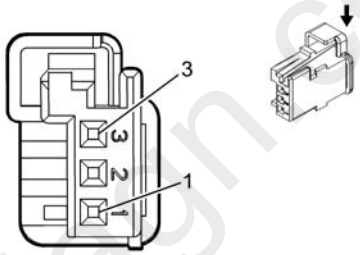
Terminal Part Information

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Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5 0.75	BK BK	150 150	Ground	I	- -
B	0.5	BK	150	Ground	I	-

COMPONENT CONNECTOR END VIEWS > E1AA FLOOR ACCENT LAMP - LEFT FRONT



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 953697-2
- Service Connector: 19333316
- Description: 3-Way F 0.64 MQS Series (WH)

Terminal Part Information

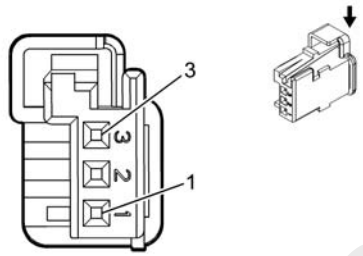
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal	Option

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					Type ID	
1	0.35	WH/YE	7557	LED Ambient Lighting Control 1	I	-
3	0.35	BK	1450	Ground	I	IO5/IO6

COMPONENT CONNECTOR END VIEWS > E1AB FLOOR ACCENT LAMP - RIGHT FRONT



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 953697-2
- Service Connector: 19333316
- Description: 3-Way F 0.64 MQS Series (WH)

Terminal Part Information

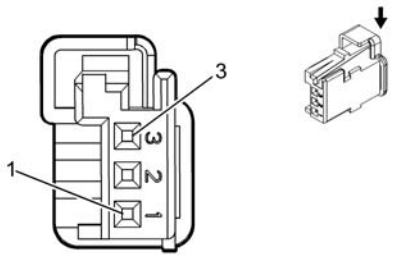
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	WH/YE	7557	LED Ambient Lighting Control 1	I	-
3	0.35	BK	1450	Ground	I	IO5/IO6

COMPONENT CONNECTOR END VIEWS > E1AC ACCENT LAMP - CENTER

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CONSOLE CUPHOLDER



Connector Part Information

- Harness Type: Floor Console
- OEM Connector: 953697-1
- Service Connector: Service by Harness - See Part Catalog
- Description: 3-Way F 0.64 MQS Series (BK)

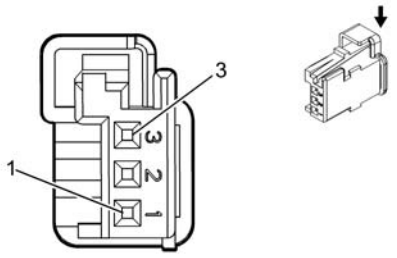
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	VT/GN	900	-	I	C70
2	0.35	BK	2250	Ground	I	C70
3	0.35	RD/BN	910	-	I	C70

COMPONENT CONNECTOR END VIEWS > E1D ACCENT LAMP - DRIVER DOOR X1

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Connector Part Information

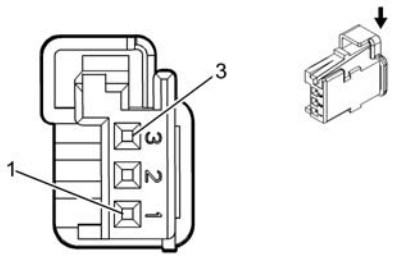
- Harness Type: Driver Door Trim
- OEM Connector: 953697-1
- Service Connector: Service by Harness - See Part Catalog
- Description: 3-Way F 0.64 MQS Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	WH/YE	900	-	I	C70
2	0.35	BK	2150	Ground	I	C70
3	0.35	RD/BN	910	-	I	C70

COMPONENT CONNECTOR END VIEWS > E1D ACCENT LAMP - DRIVER DOOR X2



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Connector Part Information

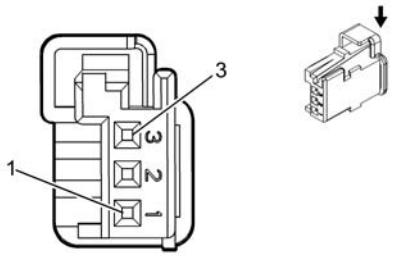
- Harness Type: Driver Door Trim
- OEM Connector: 953697-1
- Service Connector: Service by Harness - See Part Catalog
- Description: 3-Way F 0.64 MQS Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	WH/YE	900	-	I	C70
2	0.35	BK	2150	Ground	I	C70
3	0.35	RD/BN	910	-	I	C70

COMPONENT CONNECTOR END VIEWS > E1P ACCENT LAMP - PASSENGER DOOR X1



Connector Part Information

- Harness Type: Passenger Door Trim
- OEM Connector: 953697-1
- Service Connector: Service by Harness - See Part Catalog
- Description: 3-Way F 0.64 MQS Series (BK)

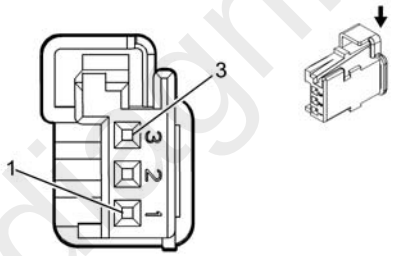
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Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	WH/YE	900	-	I	C70
2	0.35	BK	2250	Ground	I	C70
3	0.35	RD/BN	910	-	I	C70

COMPONENT CONNECTOR END VIEWS > E1P ACCENT LAMP - PASSENGER DOOR X2



Connector Part Information

- Harness Type: Passenger Door Trim
- OEM Connector: 953697-1
- Service Connector: Service by Harness - See Part Catalog
- Description: 3-Way F 0.64 MQS Series (BK)

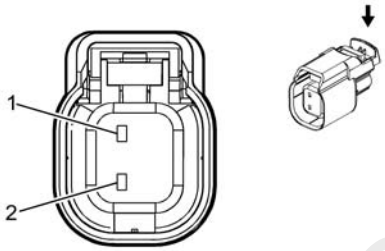
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	WH/YE	900	-	I	C70
2	0.35	BK	2250	Ground	I	C70
3	0.35	RD/BN	910	-	I	C70

COMPONENT CONNECTOR END VIEWS > E2LF SIDE MARKER LAMP - LEFT FRONT



Connector Part Information

- Harness Type: Front Fascia
- OEM Connector: 34062-0023
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 1.5 Series, Sealed (BK)

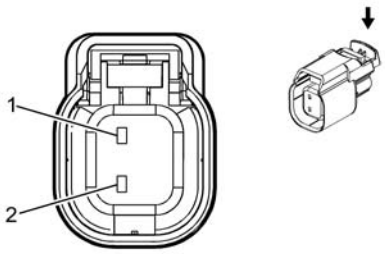
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35 0.35	BK BK	550 550	Ground	I	(-V8+T4F-T90)/(-V8-T4F) (V8+T4F-T90)/(V8-T4F)
2	0.35	BK	709	Left Park Lamp Control	I	(T4F-T90)/(-T4F)

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COMPONENT CONNECTOR END VIEWS > E2LR SIDE MARKER LAMP - LEFT REAR



Connector Part Information

- Harness Type: Rear Fascia
- OEM Connector: 13505923
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 1.5 Series, Sealed (BK)

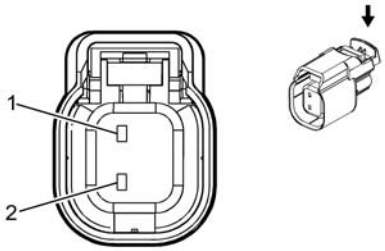
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	2550	Ground	I	(T4F-T90)/(-T4F)
2	0.5	VT/GY	709	Left Park Lamp Control	I	(T4F-T90)/(-T4F)

COMPONENT CONNECTOR END VIEWS > E2RF SIDE MARKER LAMP - RIGHT FRONT

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Connector Part Information

- Harness Type: Front Fascia
- OEM Connector: 34062-0023
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 1.5 Series, Sealed (BK)

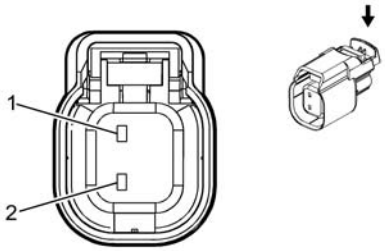
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35 0.35	BK BK	550 550	Ground	I	(-V8+T4F-T90)/(-V8-T4F) (V8+T4F-T90)/(V8-T4F)
2	0.35	GY/BN	309	Right Park Lamp Control	I	(T4F-T90)/(-T4F)

COMPONENT CONNECTOR END VIEWS > E2RR SIDE MARKER LAMP - RIGHT REAR

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Connector Part Information

- Harness Type: Rear Fascia
- OEM Connector: 13505923
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 1.5 Series, Sealed (BK)

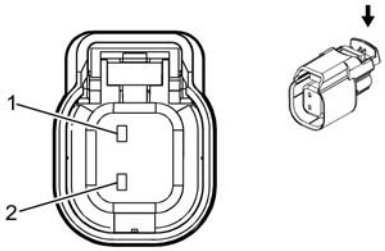
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	2550	Ground	I	(T4F-T90)/(-T4F)
2	0.5	GY/BN	309	Right Park Lamp Control	I	(T4F-T90)/(-T4F)

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COMPONENT CONNECTOR END VIEWS > E4AL PARK/DAYTIME RUNNING LAMP-LEFT LOWER



Connector Part Information

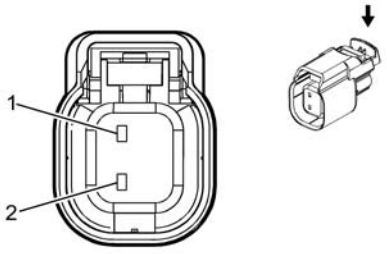
- Harness Type: Front Fascia
- OEM Connector: 34062-0027
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 1.5 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN	4357	Left Auxiliary DRL Control	I	(T4F-T90)/(-T4F-LS7)
2	0.35 0.35	BK BK	550 550	Ground	I	(-V8+T4F-T90)/(-V8-T4F-LS7) (V8+T4F-T90)/(V8-T4F-LS7)

COMPONENT CONNECTOR END VIEWS > E4AM PARK/DAYTIME RUNNING LAMP-RIGHT LOWER



Connector Part Information

- Harness Type: Front Fascia
- OEM Connector: 34062-0027
- Service Connector: Service by Harness - See Part Catalog

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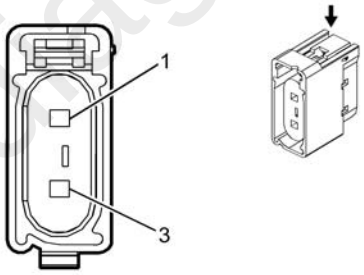
- Description: 2-Way F 1.5 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	GY	4356	Right Auxiliary DRL Control	I	(T4F-T90)/(-T4F-LS7)
2	0.35 0.35	BK BK	550 550	Ground	I	(-V8+T4F-T90)/(-V8-T4F-LS7) (V8+T4F-T90)/(V8-T4F-LS7)

COMPONENT CONNECTOR END VIEWS > E2LF SIDE MARKER LAMP - LEFT FRONT



Connector Part Information

- Harness Type: Forward Lamp
- OEM Connector: 13628679
- Service Connector: 19257923
- Description: 3-Way F 1.5 Series, Sealed (GY)

Terminal Part Information

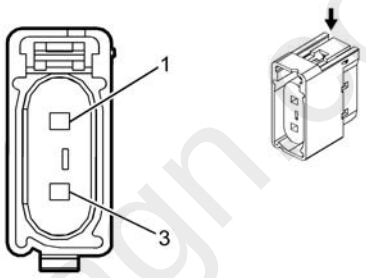
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal	Service Terminal	Tray	Core Crimp	Insulation Crimp

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			Tool				
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	550	Ground	I	-
2	-	-	-	Not Occupied	-	-
3	0.5	BU/WH	1314	Left Front Turn Signal Lamp Control	I	-

COMPONENT CONNECTOR END VIEWS > E2RF SIDE MARKER LAMP - RIGHT FRONT



Connector Part Information

- Harness Type: Forward Lamp
- OEM Connector: 13628679
- Service Connector: 19257923
- Description: 3-Way F 1.5 Series, Sealed (GY)

Terminal Part Information

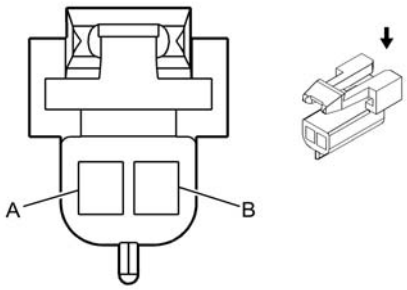
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option

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1	0.5	BK	650	Ground	I	-
2	-	-	-	Not Occupied	-	-
3	0.5	GN/VT	1315	Right Front Turn Signal Lamp Control	I	-

COMPONENT CONNECTOR END VIEWS > E6 CENTER HIGH MOUNTED STOP LAMP



Connector Part Information

- Harness Type: Body
- OEM Connector: 12052832
- Service Connector: 13583033
- Description: 2-Way F 150 Metri-Pack Series (BK)

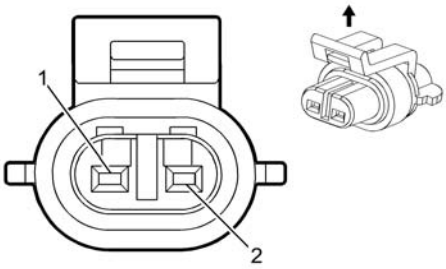
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	BK	2450	Ground	I	-
B	0.5	VT/WH	5065	Stop Lamp Relay Coil Control	I	-

COMPONENT CONNECTOR END VIEWS > E7L LICENSE PLATE LAMP - LEFT

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Connector Part Information

- Harness Type: Rear Fascia
- OEM Connector: 15336195
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 150 GT Series, Sealed (BK)

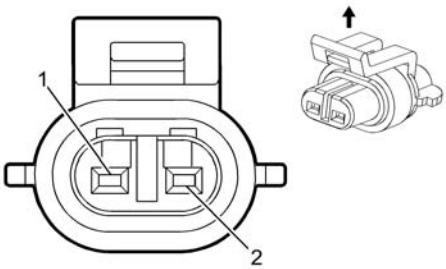
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN/YE	6846	Rear License Lamp Control	I	-
2	0.5	BK	2350	Ground	I	-

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COMPONENT CONNECTOR END VIEWS > E7R LICENSE PLATE LAMP - RIGHT



Connector Part Information

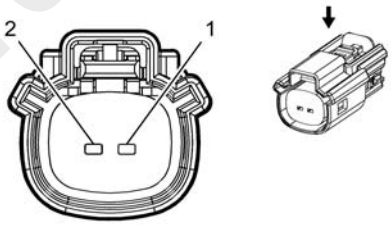
- Harness Type: Rear Fascia
- OEM Connector: 15336195
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 150 GT Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN/YE	6846	Rear License Lamp Control	I	-
2	0.5	BK	2350	Ground	I	-

COMPONENT CONNECTOR END VIEWS > E8A DOOR SILL PLATE LAMP - DRIVER



Connector Part Information

- Harness Type: Body
- OEM Connector: 33471-0206
- Service Connector: 13577534
- Description: 2-Way F 1.5 Series, Sealed (BK)

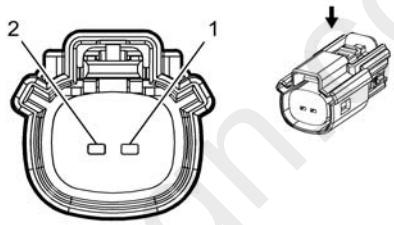
Terminal Part Information

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Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GY	157	Interior Lamp Control	I	B7G
2	0.35	BK	2150	Ground	I	B7G

COMPONENT CONNECTOR END VIEWS > E8B DOOR SILL PLATE LAMP - PASSENGER



Connector Part Information

- Harness Type: Body
- OEM Connector: 33471-0206
- Service Connector: 13577534
- Description: 2-Way F 1.5 Series, Sealed (BK)

Terminal Part Information

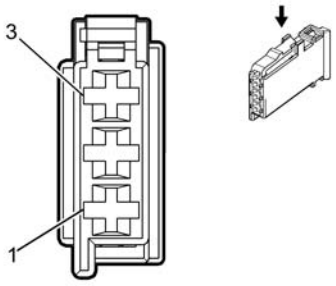
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option

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1	0.35	GY	157	Interior Lamp Control	I	B7G
2	0.35	BK	2250	Ground	I	B7G

COMPONENT CONNECTOR END VIEWS > E8J INSTRUMENT PANEL COURTESY LAMP - LEFT



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 24427883
- Service Connector: 93186706
- Description: 3-Way F 1.6 Micro-Timer Series (BK)

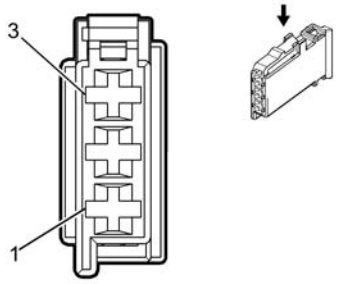
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY	157	Interior Lamp Control	I	C70
2	0.5	BK	1350	Ground	I	C70
3	-	-	-	Not Occupied	-	-

COMPONENT CONNECTOR END VIEWS > E8K INSTRUMENT PANEL COURTESY LAMP - RIGHT

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Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 24427883
- Service Connector: 93186706
- Description: 3-Way F 1.6 Micro-Timer Series (BK)

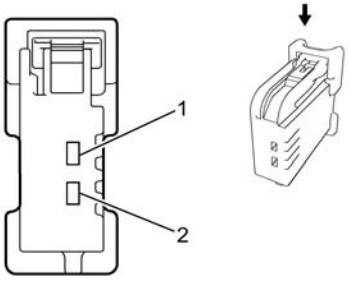
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY	157	Interior Lamp Control	I	C70
2	0.5	BK	1450	Ground	I	C70
3	-	-	-	Not Occupied	-	-

COMPONENT CONNECTOR END VIEWS > E8S REAR COMPARTMENT COURTESY LAMP

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Connector Part Information

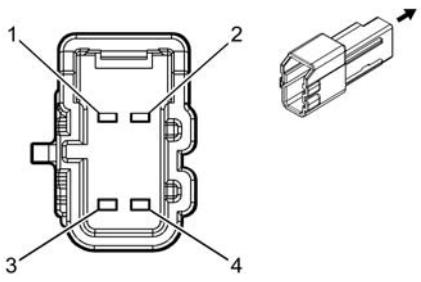
- Harness Type: Body
- OEM Connector: 19115613
- Service Connector: 13584097
- Description: 2-Way F 1.5 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN/GY	737	Rear Compartment Lid Lamp Control	I	-
2	0.5	BK	2450	Ground	I	-

COMPONENT CONNECTOR END VIEWS > E14A SEAT HEATING ELEMENT - DRIVER BACK



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Connector Part Information

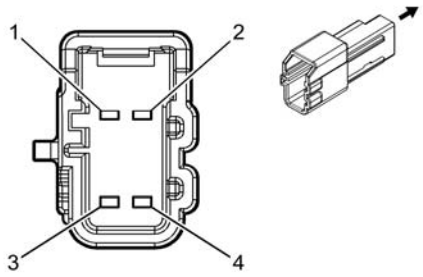
- Harness Type: Driver Seat
- OEM Connector: 6098-7781
- Service Connector: Service by Harness - See Part Catalog
- Description: 4-Way M 1.2 Series (GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-13 (BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN/VT	2077	Driver Heated Seat Element Control	I	-
2	0.35	BU	2425	Driver Heated Back NTC Signal	I	-
3	0.35	BK/YE	2080	Driver Heated Seat NTC Low Reference	I	-
4	0.5	BN/BK	2078	Driver Heated Seat Element Low Reference	I	-

COMPONENT CONNECTOR END VIEWS > E14B SEAT HEATING ELEMENT - DRIVER CUSHION



Connector Part Information

- Harness Type: Driver Seat

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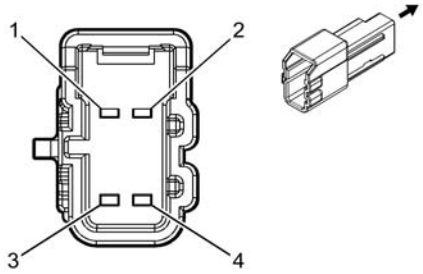
- OEM Connector: 6098-7779
- Service Connector: Service by Harness - See Part Catalog
- Description: 4-Way M 1.2 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-13 (BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN/VT	2077	Driver Heated Seat Element Control	I	-
2	0.35	YE/GY	2079	Driver Heated Seat NTC Signal	I	-
3	0.35	BK/YE	2080	Driver Heated Seat NTC Low Reference	I	-
4	0.5	BN/BK	2078	Driver Heated Seat Element Low Reference	I	-

COMPONENT CONNECTOR END VIEWS > E14C SEAT HEATING ELEMENT - PASSENGER BACK



Connector Part Information

- Harness Type: Passenger Seat
- OEM Connector: 6098-7781
- Service Connector: Service by Harness - See Part Catalog

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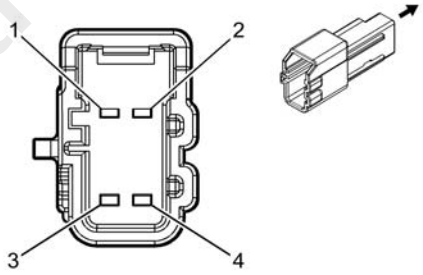
- Description: 4-Way M 1.2 Series (GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-13 (BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN/BU	2479	Passenger Heated Seat Element Control	I	-
2	0.35	WH/BU	2436	Passenger Heated Back NTC Signal	I	-
3	0.35	BK/GN	2482	Passenger Heated Back NTC Low Reference	I	-
4	0.5	GY/BK	2480	Passenger Heated Seat Element Low Reference	I	-

COMPONENT CONNECTOR END VIEWS > E14D SEAT HEATING ELEMENT - PASSENGER CUSHION



Connector Part Information

- Harness Type: Passenger Seat
- OEM Connector: 6098-7779
- Service Connector: Service by Harness - See Part Catalog
- Description: 4-Way M 1.2 Series (BK)

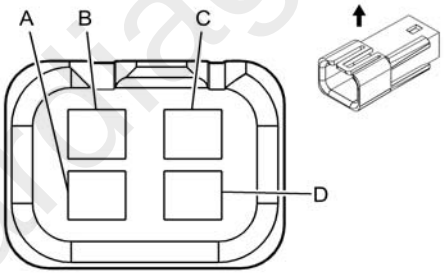
Terminal Part Information

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Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-13 (BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN/BU	2479	Passenger Heated Seat Element Control	I	-
2	0.35	WH/GY	2434	Passenger Heated Seat NTC Signal	I	-
3	0.35	BK/GY	2435	Passenger Heated Seat NTC Low Reference	I	-
4	0.5	GY/BK	2480	Passenger Heated Seat Element Low Reference	I	-

COMPONENT CONNECTOR END VIEWS > E15 STEERING WHEEL HEATER



Connector Part Information

- Harness Type: Steering Wheel
- OEM Connector: 12047786
- Service Connector: Service by Harness - See Part Catalog
- Description: 4-Way M 150 Metri-Pack Series (BK)

Terminal Part Information

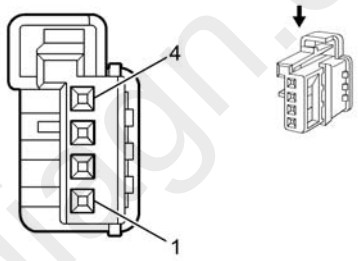
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal	Service Terminal	Tray Name	Core Crimp	Insulation Crimp

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			Tool				
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	BK	1350	Ground	I	-
B	0.5	WH	5888	Heated Steering Wheel High Control	I	-
C	0.5	L-BU	5885	Heated Steering Wheel Voltage Reference	I	-
D	0.5	BN	1350	Ground	I	-

COMPONENT CONNECTOR END VIEWS > E37LF DOME/READING LAMPS - LEFT FRONT



Connector Part Information

- Harness Type: Headliner
- OEM Connector: 13580945
- Service Connector: 19119349
- Description: 4-Way F 0.64 Micro Quadlock Series (GY)

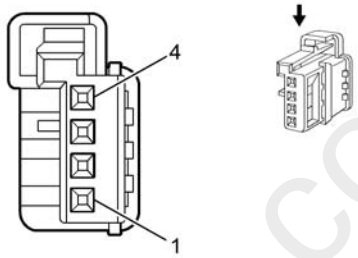
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	YE	6817	LED Backlight Dimming Control	I	-
2	0.5	WH/BN	6815	Inadvertent Power Control	I	-
3	0.5	GY	157	Interior Lamp Control	I	-
4	0.5	BK	1350	Ground	I	-

COMPONENT CONNECTOR END VIEWS > E37RF DOME/READING LAMPS - RIGHT FRONT



Connector Part Information

- Harness Type: Headliner
- OEM Connector: 13580945
- Service Connector: 19119349
- Description: 4-Way F 0.64 Micro Quadlock Series (GY)

Terminal Part Information

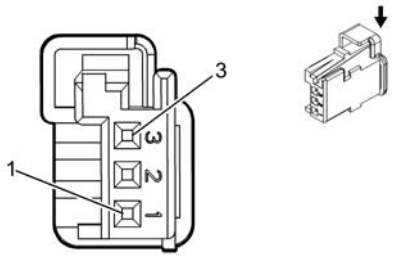
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	YE	6817	LED Backlight Dimming Control	I	-
2	0.5	WH/BN	6815	Inadvertent Power Control	I	-
3	0.5	GY	157	Interior Lamp Control	I	-

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4	0.5	BK	1350	Ground	I	-

COMPONENT CONNECTOR END VIEWS > E38 FLOOD LAMP - CENTER CONSOLE



Connector Part Information

- Harness Type: Headliner
- OEM Connector: 953697-1
- Service Connector: 19333317
- Description: 3-Way F 0.64 MQS Series (BK)

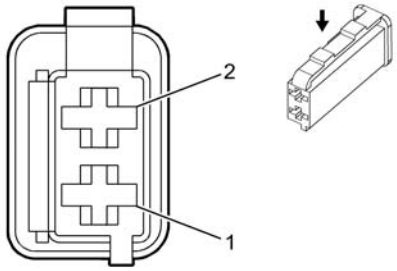
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT/GN	7558	LED Ambient Lighting Control 2	I	-
2	0.5	BK	1350	Ground	I	-

COMPONENT CONNECTOR END VIEWS > E63D FLOOD LAMP - DRIVER DOOR HANDLE

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Connector Part Information

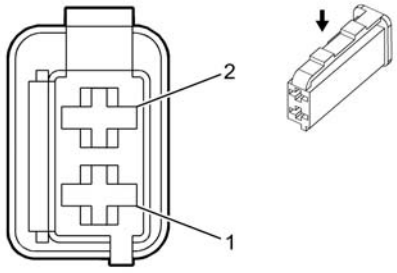
- Harness Type: Driver Door Trim
- OEM Connector: 19179871
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 1.6 Timer Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	Not Required	Not Required	Not Required	Not Required	Not Required

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	-

COMPONENT CONNECTOR END VIEWS > E63P FLOOD LAMP - PASSENGER DOOR HANDLE



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Connector Part Information

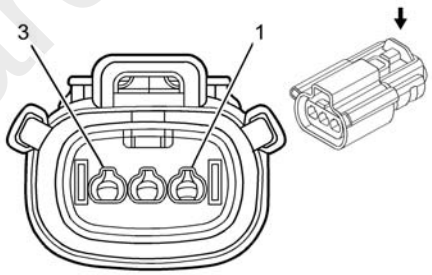
- Harness Type: Passenger Door Trim
- OEM Connector: 19179871
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 1.6 Timer Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	Not Required	Not Required	Not Required	Not Required	Not Required

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	-

COMPONENT CONNECTOR END VIEWS > E5 BACKUP LAMP



Connector Part Information

- Harness Type: Rear Fascia
- OEM Connector: 13503225
- Service Connector: Service by Harness - See Part Catalog
- Description: 3-Way F 150 MX Series, Sealed (BK)

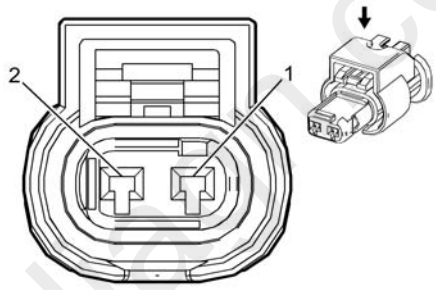
Terminal Part Information

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Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	2550	Ground	I	-
2	0.75	GN/WH	24	Backup Lamp Control	I	T79
3	0.5	YE/GY	122	Rear Fog Lamp Control	I	T79

COMPONENT CONNECTOR END VIEWS > F100L HOOD HINGE ACTUATOR - LEFT



Connector Part Information

- Harness Type: Body
- OEM Connector: 13580144
- Service Connector: 13587886
- Description: 2-Way F 1.2 Multiple Contact Point Series, Sealed (YE with BK Inner Connector)

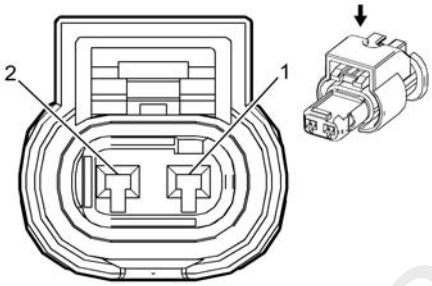
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal	Option

					Type ID	
1	0.35	WH/RD	7492	Left Hood Actuator High Control	I	B3T
2	0.35	BK/OG	7491	Left Hood Actuator Low Control	I	B3T

COMPONENT CONNECTOR END VIEWS > F100R HOOD HINGE ACTUATOR - RIGHT



Connector Part Information

- Harness Type: Body
- OEM Connector: 13580144
- Service Connector: 13587886
- Description: 2-Way F 1.2 Multiple Contact Point Series, Sealed (YE with BK Inner Connector)

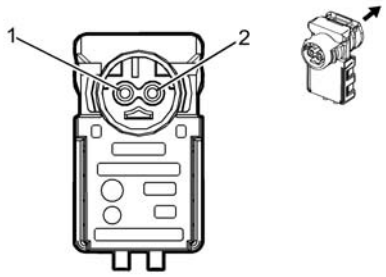
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	VT/RD	7490	Right Hood Actuator High Control	I	B3T
2	0.35	BK/OG	7489	Right Hood Actuator Low Control	I	B3T

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COMPONENT CONNECTOR END VIEWS > F101 PASSENGER INSTRUMENT PANEL AIR BAG X1



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 13580454
- Service Connector: 19330326
- Description: 2-Way F AK-2 Series (L-GN with YE cover)

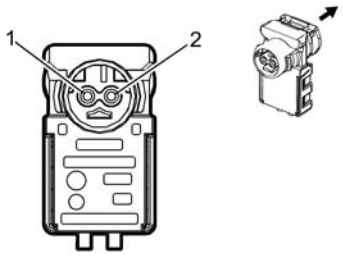
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	YE/OG	3025	Passenger IP Module Stage 1 High Control	I	-
2	0.35	OG/WH	3024	Passenger IP Module Stage 1 Low Control	I	-

COMPONENT CONNECTOR END VIEWS > F101 PASSENGER INSTRUMENT PANEL AIR BAG X2

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Connector Part Information

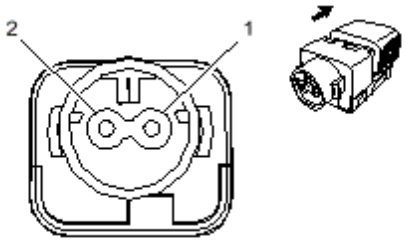
- Harness Type: Instrument Panel
- OEM Connector: 98853-0031
- Service Connector: 19119345
- Description: 2-Way F AK-2 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GY/OG	3027	Passenger IP Module Stage 2 High Control	I	-
2	0.35	OG/VT	3026	Passenger IP Module Stage 2 Low Control	I	-

COMPONENT CONNECTOR END VIEWS > F105L ROOF RAIL AIR BAG - LEFT



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Connector Part Information

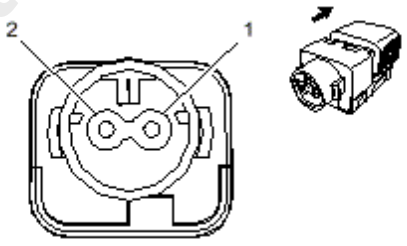
- Harness Type: Body
- OEM Connector: 19153419
- Service Connector: 19300405
- Description: 2-Way F FPB 180-1 Series (BK with YE Cover)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	OG/GN	5019	Left Front Head Curtain Module High Control	I	-
2	0.35	VT/OG	5020	Left Front Head Curtain Module Low Control	I	-

COMPONENT CONNECTOR END VIEWS > F105R ROOF RAIL AIR BAG - RIGHT



Connector Part Information

- Harness Type: Body
- OEM Connector: 19153419
- Service Connector: 19300405
- Description: 2-Way F FPB 180-1 Series (BK with YE Cover)

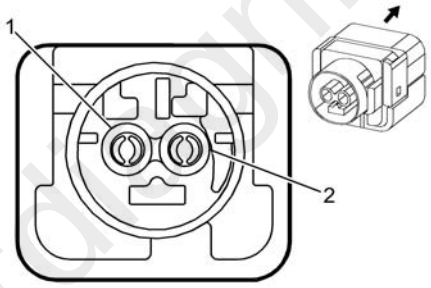
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Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	OG/GY	5021	Right Front Head Curtain Module High Control	I	-
2	0.35	WH/OG	5022	Right Front Head Curtain Module Low Control	I	-

COMPONENT CONNECTOR END VIEWS > F106LF SEAT SIDE AIR BAG - LEFT FRONT



Connector Part Information

- Harness Type: Driver Seat
- OEM Connector: PPI0001142
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F FPB 180-1 Series (BK with YE Cover)

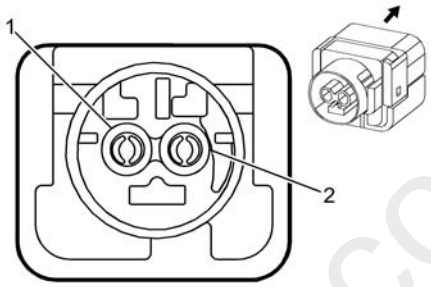
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG/BU	3068	Driver Side Impact Module High Control	I	-
2	0.5	GN/OG	3069	Driver Side Impact Module Low Control	I	-

COMPONENT CONNECTOR END VIEWS > F106RF SEAT SIDE AIR BAG - RIGHT FRONT



Connector Part Information

- Harness Type: Passenger Seat
- OEM Connector: PPI0001142
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F FPB 180-1 Series (BK with YE Cover)

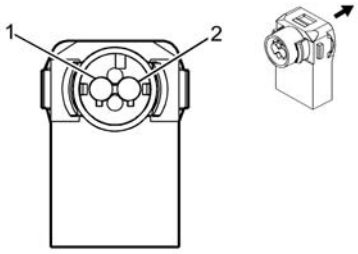
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG/GY	3066	Passenger Side Impact Module High Control	I	-
2	0.5	BN/OG	3067	Passenger Side Impact Module Low Control	I	-

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COMPONENT CONNECTOR END VIEWS > F112D SEAT BELT RETRACTOR PRETENSIONER-DRIVER



Connector Part Information

- Harness Type: Body
- OEM Connector: 13596555
- Service Connector: Pending
- Description: 2-Way F 1.0 MAC Series (PU)

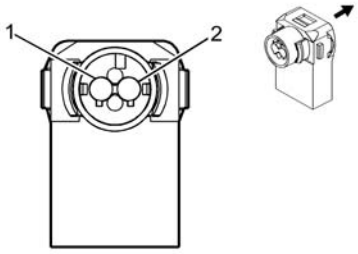
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	OG/WH	3477	Driver Seat Belt Retractor Pretensioner High Control	I	-
2	0.35	GY/OG	3478	Driver Seat Belt Retractor Pretensioner Low Control	I	-

COMPONENT CONNECTOR END VIEWS > F112P SEAT BELT RETRACTOR PRETENSIONER-PASSENGER

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Connector Part Information

- Harness Type: Body
- OEM Connector: 13596555
- Service Connector: Pending
- Description: 2-Way F 1.0 MAC Series (PU)

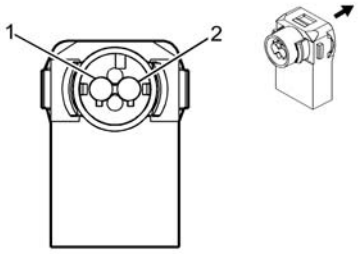
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	OG/GN	3475	Passenger Seat Belt Retractor Pretensioner High Control	I	-
2	0.35	WH/OG	3476	Passenger Seat Belt Retractor Pretensioner Low Control	I	-

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COMPONENT CONNECTOR END VIEWS > F113D SEAT BELT ANCHOR PRETENSIONER - DRIVER



Connector Part Information

- Harness Type: Driver Seat
- OEM Connector: 33154433
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 1.0 MAC Series (PU)

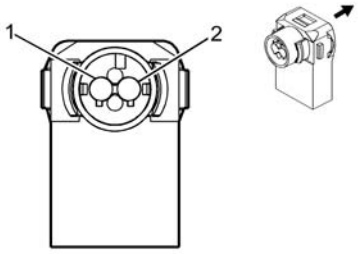
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG/YE	3481	Driver Seat Belt Anchor Pretensioner High Control	I	-
2	0.5	VT/OG	3482	Driver Seat Belt Anchor Pretensioner Low Control	I	-

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COMPONENT CONNECTOR END VIEWS > F113P SEAT BELT ANCHOR PRETENSIONER - PASSENGER



Connector Part Information

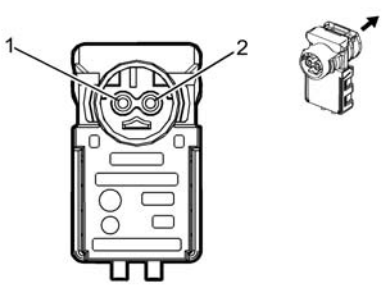
- Harness Type: Passenger Seat
- OEM Connector: 33154433
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 1.0 MAC Series (PU)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	OG/BN	3479	Passenger Seat Belt Anchor Pretensioner High Control	I	-
2	0.5	GY/OG	3480	Passenger Seat Belt Anchor Pretensioner Low Control	I	-

COMPONENT CONNECTOR END VIEWS > F114D KNEE AIR BAG - DRIVER



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Connector Part Information

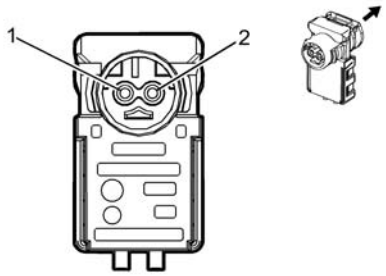
- Harness Type: Instrument Panel
- OEM Connector: 13580454
- Service Connector: 19330326
- Description: 2-Way F AK-2 Series (L-GN with YE cover)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	OG/BU	3078	Driver Knee Module High Control	I	-
2	0.35	GY/OG	3079	Driver Knee Module Low Control	I	-

COMPONENT CONNECTOR END VIEWS > F114P KNEE AIR BAG - PASSENGER



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 13580454
- Service Connector: 19330326
- Description: 2-Way F AK-2 Series (L-GN with YE cover)

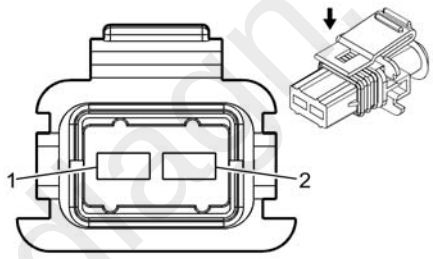
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Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	OG/BU	3076	Passenger Knee Module High Control	I	-
2	0.35	WH/OG	3077	Passenger Knee Module Low Control	I	-

COMPONENT CONNECTOR END VIEWS > G13 GENERATOR X1



Connector Part Information

- Harness Type: Engine
- OEM Connector: 12186308
- Service Connector: 13585849
- Description: 2-Way F Junior Power Timer Series, Sealed (BK)

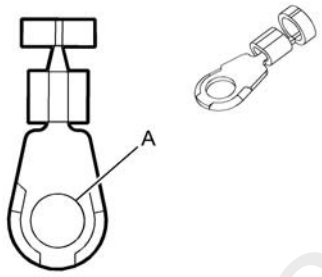
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-35 (VT)	Not Required	Not Required	Not Required	Not Required	Not Required

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN	25	Charge Indicator Control	I	-
2	0.5	GY	23	Generator Field Duty Cycle Signal	I	-

COMPONENT CONNECTOR END VIEWS > G13 GENERATOR X2



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13584015
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: 1-Way Ring Terminal

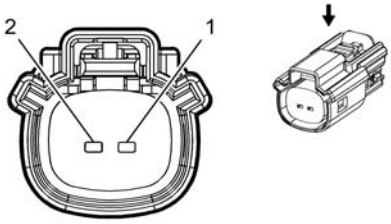
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	16	RD/YE	2	Battery Positive Voltage	I	-

COMPONENT CONNECTOR END VIEWS > G18 HIGH PRESSURE FUEL PUMP

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Connector Part Information

- Harness Type: Engine
- OEM Connector: 33471-0206
- Service Connector: 13577534
- Description: 2-Way F 1.5 Series, Sealed (BK)

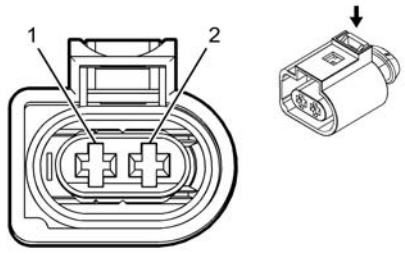
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75 0.5	VT/BK YE	7300 7301	High Pressure Fuel Pump Actuator Low - Control High Pressure Fuel Pump Actuator High - Control	I	LGX LTG
2	0.75 0.5	YE VT/BK	7301 7300	High Pressure Fuel Pump Actuator High - Control High Pressure Fuel Pump Actuator Low - Control	I	LGX LTG

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COMPONENT CONNECTOR END VIEWS > G24 WINDSHIELD WASHER PUMP



Connector Part Information

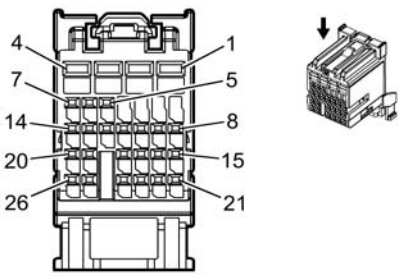
- Harness Type: Body
- OEM Connector: 13269697
- Service Connector: 13576532
- Description: 2-Way F 2.8 MDK5 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-35 (VT)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	GY/VT	228	Windshield Washer Pump Control	I	-
2	0.75	BK	850	Ground	I	-

COMPONENT CONNECTOR END VIEWS > K9 BODY CONTROL MODULE X1



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Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 13581573
- Service Connector: 13581573
- Description: 26-Way F 0.64, 2.8 Series (NA)

Terminal Part Information

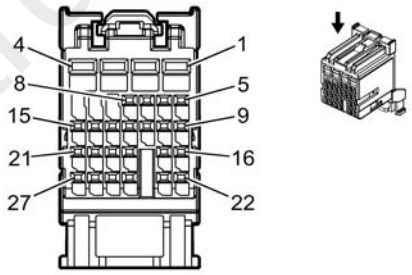
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13575578	J-35616-35 (VT)	J-38125-553	Not available	Not available	Not available	Not available
II	13582297	J-35616-64B (LT BU)	J-38125-22	Not available	Not available	Not available	Not available
III	13582326	J-35616-35 (VT)	J-38125-553	8100-4444	11	2	A

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	1350	Ground	III	-
2	1.5	RD/BU	2540	Battery Positive Voltage	I	-
3	1.5	RD/GY	2140	Battery Positive Voltage	I	-
4	0.75	RD/BN	2240	Battery Positive Voltage	III	-
5	0.5	WH	6816	Indicator Dimming Control	II	-
6	-	-	-	Not Occupied	-	-
7	0.35	BK/YE	5005	Instrument Panel Lamp Dimmer Switch Low Reference	II	-
8	0.35	BN/BK	5720	Ignition Mode Switch Accessory LED Signal	II	-
9 - 10	-	-	-	Not Occupied	-	-
11	0.35	GN/BN	306	Headlamp Switch Headlamps Off Signal Control	II	-
12	-	-	-	Not Occupied	-	-
13	0.35	BU/RD	1688	5 Volt Reference	II	-
14	0.35	BU/GY	187	Rear Fog Lamp Switch Signal	II	T79

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15	-	-	-	Not Occupied	-	-
16	0.35	WH/VT	103	Headlamp Switch On Signal	II	-
17	0.35	WH/YE	915	-	II	C70
18	0.35	BU/VT	5904	Steering Column Lock Status Signal	II	N06
19	0.35	BK/BN	5360	Brake Apply Sensor Low Reference	II	-
20	0.35	BU/BK	5719	Ignition Mode Switch Start LED Signal	II	-
21	0.35	GY	728	Security Indicator Control	II	-
22	0.35	GN/GY	13	Headlamp Switch Park Lamp Signal	II	-
23	0.5	VT/GN	7558	LED Ambient Lighting Control 2	II	-
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	BU	3275	Remote Function Actuator Receive Signal	II	-

COMPONENT CONNECTOR END VIEWS > K9 BODY CONTROL MODULE X2



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 13581574
- Service Connector: 13581574
- Description: 27-Way F 0.64, 2.8 Series (BU)

Terminal Part Information

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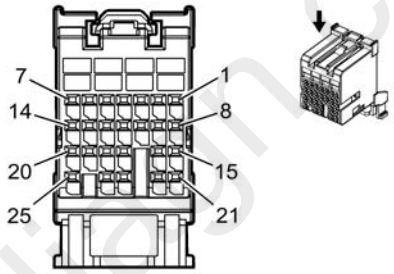
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13575578	J-35616-35 (VT)	J-38125-553	8100-4445	12	F	D
II	13582297	J-35616-64B (LT BU)	J-38125-22	Not available	Not available	Not available	Not available
III	13582298	J-35616-64B (LT BU)	J-38125-22	Not available	Not available	Not available	Not available
IV	13582326	J-35616-35 (VT)	J-38125-553	8100-4444	11	2	A

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	RD/VT	4040	Battery Positive Voltage	IV	-
2	0.75	BK	1350	Ground	IV	-
3	-	-	-	Not Occupied	-	-
4	2.5	RD/GY	642	Battery Positive Voltage	I	-
5	0.75	GY	157	Interior Lamp Control	III	C70
6	-	-	-	Not Occupied	-	-
7	0.35	BU/YE	5361	Brake Apply Sensor Signal	II	-
8	0.5	YE	6817	LED Backlight Dimming Control	II	-
9	0.35	YE/GY	44	Instrument Panel Lamp Dimmer Switch Signal	II	-
10	0.35	WH/BU	278	Ambient Light Sensor Signal	II	-
11	0.35	YE/BU	6855	Transmission Tap Down Switch Signal	II	M5T/M5U/MGL
12	-	-	-	Not Occupied	-	-
13	0.35	WH	5359	Brake Apply Sensor Control	II	-
14	0.35	BU/VT	1788	Traction Control Switch Signal (1)	II	-
15	0.35	BN/WH	781	Driver Door Lock Switch Unlock Signal	II	-
16	0.35	GY	3273	Remote Function Actuator Low Reference	II	-
17	0.35	BU/GN	5723	Ignition Mode Switch Mode Voltage	II	-

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18	0.35	GY	156	Courtesy Lamp Switch Signal	II	-
19	0.35	BN/YE	780	Driver Door Lock Switch Lock Signal	II	-
20	-	-	-	Not Occupied	-	-
21	0.35	GN/GY	6135	Local Interconnect Network Serial Data Bus 4	II	A1AC
22 - 24	-	-	-	Not Occupied	-	-
25	0.35	GY/WH	3272	Remote Function Actuator Control	II	-
26	0.35	GN/WH	111	Hazard Switch Signal	II	-
27	0.35	YE/GN	3274	Remote Function Actuator Transmit Signal	II	-

COMPONENT CONNECTOR END VIEWS > K9 BODY CONTROL MODULE X3



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 13581579
- Service Connector: 13581579
- Description: 25-Way F 0.64, 2.8 Series (GN)

Terminal Part Information

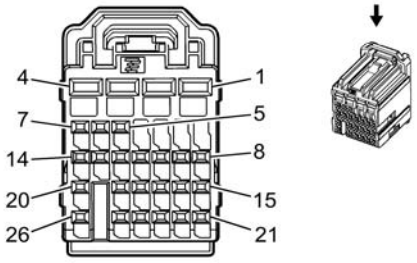
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13582297	J-35616-64B (LT BU)	J-38125-22	Not available	Not available	Not available	Not available

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GN/GY	3277	Vehicle Anti-Theft System Immobilizer Low Reference	I	-
2	0.35	GN/VT	7533	Local Interconnect Network Serial Data Bus 11	I	-
3	0.35	GY/BK	3276	Vehicle Anti-Theft System Immobilizer Control	I	-
4	0.35	WH/RD	1444	12 Volt Reference	I	-
5	0.35	VT/YE	4	Accessory Ignition Voltage	I	-
6	0.35	VT/BK	3	Run/Crank Ignition 1 Voltage	I	-
7	0.5	YE/GY	122	Rear Fog Lamp Control	I	T79
8	-	-	-	Not Occupied	-	-
9	0.35	BN/GN	1884	Cruise Control Set/Coast /Resume/Accelerate Switch Signal	I	-
10	0.35	BK/GY	6009	Windshield Wiper Switch Low Reference	I	-
11	0.35	WH	524	Headlamp Dimmer Switch High Beam Signal	I	-
12	0.35	WH/GN	663	Hazard Switch Left Turn Signal	I	-
13	0.35	YE/BU	1714	Windshield Wiper Switch Low Signal	I	-
14 - 16	-	-	-	Not Occupied	-	-
17	0.35	YE/BN	307	Headlamp Switch Flash To Pass Signal	I	-
18	0.35	GN/WH	3287	Horn Switch Signal	I	-
19	-	-	-	Not Occupied	-	-
20	0.35	GY	1715	Windshield Wiper Switch High Signal	I	-
21	0.35	VT/YE	5526	Tap Up/Tap Down Switch Signal	I	-
22 - 23	-	-	-	Not Occupied	-	-
24	0.35	VT/BU	664	Hazard Switch Right Turn Signal	I	-
25	0.35	WH/BK	94	Windshield Washer Switch Signal	I	-

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COMPONENT CONNECTOR END VIEWS > K9 BODY CONTROL MODULE X4



Connector Part Information

- Harness Type: Body
- OEM Connector: 13576033
- Service Connector: 13576033
- Description: 26-Way F 0.64, 2.8 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13575577	J-35616-35 (VT)	J-38125-553	8100-4443	10	E	A
II	13582297	J-35616-64B (LT BU)	J-38125-22	Not available	Not available	Not available	Not available
III	13582326	J-35616-35 (VT)	J-38125-553	8100-4444	11	2	A
IV	13582326	J-35616-35 (VT)	J-38125-553	8100-4444	11	E	A

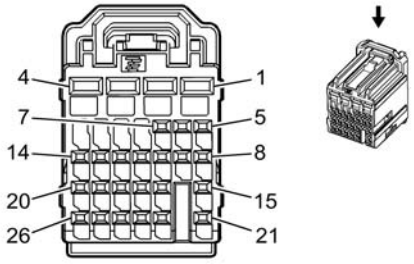
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	YE	312	Right Headlamp Low Beam Control	III	-
2	0.75	YE	712	Left Headlamp Low Beam Control	III	-
3	0.5 0.5	GN/VT GN/VT	1315 1315	Right Front Turn Signal Lamp Control	I IV	- -
4	0.75	BU/VT	1335	Right Rear Turn Signal Lamp Control	III	-

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5	0.5 0.5	GY/BN GY	309 4356	Right Park Lamp Control Right Auxiliary DRL Control	II	- -
6	0.5 0.5	BN VT/GY	4357 709	Left Auxiliary DRL Control Left Park Lamp Control	II	- -
7	0.5 0.5	BN VT/GY	4357 709	Left Auxiliary DRL Control Left Park Lamp Control	II	- -
8	0.35	BN/YE	186	Fuel Door Lock Relay Control	II	N08
9	0.35	GY/VT	3264	Logistic Mode Relay Close Control	II	LOG
10	-	-	-	Not Occupied	-	-
11	0.5	VT/WH	5065	Stop Lamp Relay Coil Control	II	-
12	0.35	GY/VT	755	RAP Relay Coil Control	II	-
13	0.5	GN/YE	6846	Rear License Lamp Control	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 Control	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	Current Sensor Control	II	-
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	4064	Hood Status B Signal	II	-
25	-	-	-	Not Occupied	-	-
26	0.5	BK	150	Ground	II	-

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COMPONENT CONNECTOR END VIEWS > K9 BODY CONTROL MODULE X5



Connector Part Information

- Harness Type: Body
- OEM Connector: 13576034
- Service Connector: 13576034
- Description: 26-Way F 0.64, 2.8 Series (BN)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13575577	J-35616-35 (VT)	J-38125-553	8100-4443	10	E	A
II	13582297	J-35616-64B (LT BU)	J-38125-22	Not available	Not available	Not available	Not available
III	13582326	J-35616-35 (VT)	J-38125-553	8100-4444	11	2	A
IV	13582326	J-35616-35 (VT)	J-38125-553	8100-4444	11	E	A

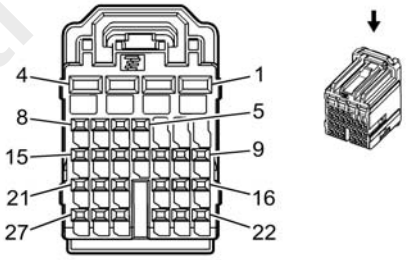
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BU/WH	1334	Left Rear Turn Signal Lamp Control	III	-
2	0.5 0.5	BU/WH BU/WH	1314 1314	Left Front Turn Signal Lamp Control	I IV	- -
3	0.75	RD/GN	5140	Battery Positive Voltage	III	-
4	0.75	RD/WH	3440	Battery Positive Voltage	III	-
5	0.5	VT/WH	5065	Stop Lamp Relay Coil Control	II	TW7

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6	0.35 0.35	BK/VT BK/VT	5077 5077	Current Sensor Low Reference	I II	- -
7	0.5 0.5	GY/BN GY	309 4356	Right Park Lamp Control Right Auxiliary DRL Control	II	- -
8 - 10	-	-	-	Not Occupied	-	-
11	0.35	GY/YE	6188	Lift Glass/Rear Compartment Lid Motor Release Control	II	-
12	0.35	WH/BU	6311	Cruise/ETC/TCC Brake Signal	II	-
13	0.35	BN/YE	1970	Headlamp Low Beam Relay Control	II	T4F
14 - 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	0.5	BU/BN	38	Backup Lamp Relay Control	II	T79
21 - 23	-	-	-	Not Occupied	-	-
24	0.35	WH/VT	860	Front Windshield Wiper Switch High Signal	II	-
25 - 26	-	-	-	Not Occupied	-	-

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COMPONENT CONNECTOR END VIEWS > K9 BODY CONTROL MODULE X6



Connector Part Information

- Harness Type: Body
- OEM Connector: 13576035
- Service Connector: 13576035
- Description: 27-Way F 0.64, 2.8 Series (PK)

Terminal Part Information

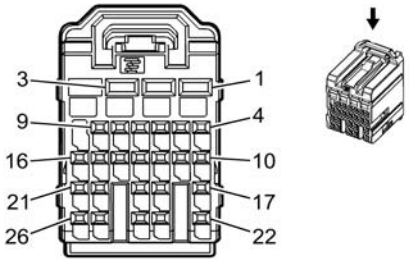
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13575578	J-35616-35 (VT)	J-38125-553	8100-4445	12	F	D
II	13575578	J-35616-35 (VT)	J-38125-553	Not available	Not available	Not available	Not available
III	13582297	J-35616-64B (LT BU)	J-38125-22	Not available	Not available	Not available	Not available
IV	13582326	J-35616-35 (VT)	J-38125-553	8100-4444	11	2	A

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5 1	BU/WH GY	195 5911	Door Lock Control Door Lock Actuator Lock Control 2	II IV	- A1BC-N08
2	0.75	GY	295	Door Lock Actuator Lock Control	IV	-
3	1.5 2.5	BK BK	2150 2150	Ground	II I	- -
4	1.5	BN/YE	294	Door Lock Actuator Unlock Control	II	-
5	0.35	VT/GY	1303	Lift Gate Ajar Switch Signal (1)	III	-
6 - 8	-	-	-	Not Occupied	-	-
9	0.35	GN/BU	6133	Local Interconnect Network Serial Data Bus 2	III	-
10	0.35	GN/YE	6134	Local Interconnect Network Serial Data Bus 3	III	-
11 - 12	-	-	-	Not Occupied	-	-
13	0.35	YE/BU	4086	Pushbutton Start Challenge Active Signal	III	-
14	0.35	VT	6189	Lift Glass/Rear Compartment Lid Interior Release Signal	III	-
15	0.35	YE/BU	5797	Rear Closure Handle Switch Open Signal	III	-
16	0.35	GN/BN	6132	Local Interconnect Network Serial Data Bus 1	III	CF5
17 - 25	-	-	-	Not Occupied	-	-

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26	0.5	VT/GN	916	-	III	-
27	0.5	WH/VT	6567	Rear Turn Lamp Feedback Signal	III	WRS-TW7

COMPONENT CONNECTOR END VIEWS > K9 BODY CONTROL MODULE X7



Connector Part Information

- Harness Type: Body
- OEM Connector: 13576036
- Service Connector: 13576036
- Description: 26-Way F 0.64, 2.8 Series (GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13575577	J-35616-35 (VT)	J-38125-553	8100-4443	10	E	A
II	13582297	J-35616-64B (LT BU)	J-38125-22	Not available	Not available	Not available	Not available
III	13582326	J-35616-35 (VT)	J-38125-553	8100-4444	11	2	A

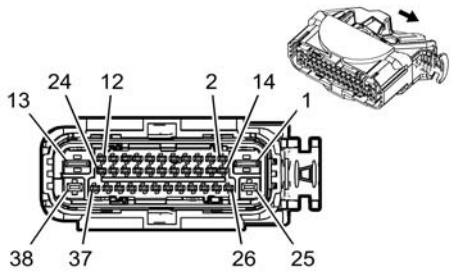
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY	157	Interior Lamp Control	I	-
2	0.75 0.5	GN/WH GN/WH	24 24	Backup Lamp Control	III I	- DD8+TW7-UE1
3	0.75	WH/BN	6815	Inadvertent Power Control	III	-

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4 - 5	-	-	-	Not Occupied	-	-
6	0.35	VT/BK	7553	Park Lock Solenoid Control	II	-
7	0.5	GN/GY	737	Rear Compartment Lid Lamp Control	II	-
8	0.5	VT/WH	5065	Stop Lamp Relay Coil Control	II	TW7
9	0.5	YE	6817	LED Backlight Dimming Control	II	-
10	-	-	-	Not Occupied	-	-
11	0.5	WH/BK	7544	Right Rear Turn Lamp Feedback Signal	II	WRS-TW7
12	-	-	-	Not Occupied	-	-
13	0.35	WH/VT	5905	Key Capture/Column Lock Shift Position Signal	II	-
14	0.35	YE/VT	244	Passenger Door Lock Switch Lock Control	II	-
15	-	-	-	Not Occupied	-	-
16	0.35	VT/BU	3263	Logistic Mode Relay Open Control	II	LOG
17 - 21	-	-	-	Not Occupied	-	-
22	0.5	WH/YE	7557	LED Ambient Lighting Control 1	II	-
23	0.35	GN	5060	Low Speed GMLAN Serial Data	II	-
24	0.35	GN	4512	Wireless Charging System Charge Indicator Control	II	K4C
25	0.35	BN/VT	245	Passenger Door Lock Switch Unlock Control	II	-
26	-	-	-	Not Occupied	-	-

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COMPONENT CONNECTOR END VIEWS > K17 ELECTRONIC BRAKE CONTROL MODULE (LT1)



Connector Part Information

- Harness Type: Body
- OEM Connector: 13302206
- Service Connector: 13422486
- Description: 38-Way F 1.5, 2.8, 4.8 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	13578852	J-35616-40 (BU)	J-38125-561	Not available	Not available	Not available	Not available
II	13578853	J-35616-35 (VT)	J-38125-561	Not available	Not available	Not available	Not available
III	13584537	J-35616-14 (GN)	J-38125-560	Not available	Not available	Not available	Not available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	4	RD/YE	442	Battery Positive Voltage	I	-
2	-	-	-	Not Occupied	-	-
3	0.35	BN	6305	Brake Vacuum Switch Signal	III	LT1/LT4
4	0.5	YE	872	Wheel Speed Sensor Signal Right Front	III	LT1/LT4
5	0.35	YE/RD	6031	Brake Vacuum Sensor 5 Volt Reference	III	LT1/LT4
6	-	-	-	Not Occupied	-	-
7	0.5	GN/GY	333	Brake Fluid Level Sensor Signal	III	LT1/LT4
8	0.5	GY	830	Wheel Speed Sensor Signal Left Front	III	LT1/LT4

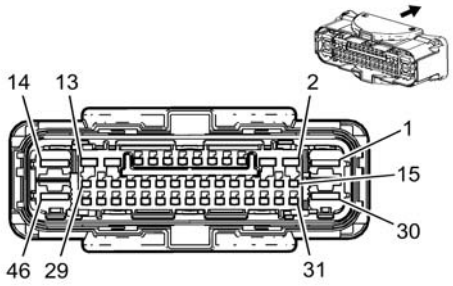
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9 - 12	-	-	-	Not Occupied	-	-
13	4	BK	850	Ground	I	LT1/LT4
14	0.5	WH	2501	High Speed GMLAN Serial Data (-) (1)	III	LT1/LT4
15	0.35	WH	2501	High Speed GMLAN Serial Data (-) (1)	III	LT1/LT4
16	0.5	GY/BN	7065	Wheel Speed Sensor Control Right Front	III	LT1/LT4
17	0.5	GY/YE	7128	Wheel Speed Sensor Control Right Rear	III	LT1/LT4
18	0.5	BU	884	Wheel Speed Sensor Signal Left Rear	III	LT1/LT4
19	0.5	GY/WH	7064	Wheel Speed Sensor Control Left Front	III	LT1/LT4
20	0.5	WH	6106	High Speed GMLAN Serial Data (-) (2)	III	LT1/LT4
21 - 24	-	-	-	Not Occupied	-	-
25	2.5	RD/YE	3740	Battery Positive Voltage	II	LT1/LT4
26	0.5	BU	2500	High Speed GMLAN Serial Data (+) (1)	III	LT1/LT4
27	0.35	BU	2500	High Speed GMLAN Serial Data (+) (1)	III	LT1/LT4
28	0.5	WH/BU	5986	Serial Data Communication Enable	III	LT1/LT4
29	0.5	VT	882	Wheel Speed Sensor Signal Right Rear	III	LT1/LT4
30	-	-	-	Not Occupied	-	-
31	0.5	GY/BK	7127	Wheel Speed Sensor Control Left Rear	III	LT1/LT4
32	0.35	BK/YE	6032	Brake Vacuum Sensor Low Reference	III	LT1/LT4
33	0.5	BU/YE	6105	High Speed GMLAN Serial Data (+) (2)	III	LT1/LT4
34	-	-	-	Not Occupied	-	-
35	0.5	BK/BN	6045	Steering Angle Sensor Low Reference	III	LT1/LT4
36	-	-	-	Not Occupied	-	-
37	0.35	YE/VT	6030	Brake Vacuum Sensor Signal	III	LT1/LT4

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38	2.5	BK	850	Ground	II	LT1/LT4

COMPONENT CONNECTOR END VIEWS > K17 ELECTRONIC BRAKE CONTROL MODULE (LTG/LGX)



Connector Part Information

- Harness Type: Body
- OEM Connector: 13582922
- Service Connector: 13582922
- Description: 46-Way F 1.5, 2.8, 5.8 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	13578852	J-35616-40 (BU)	J-38125-561	Not available	Not available	Not available	Not available
II	19300444	J-35616-16 (LT GN)	J-38125-12A	Not available	Not available	Not available	Not available
III	19300445	J-35616-16 (LT GN)	J-38125-12A	Not available	Not available	Not available	Not available
IV	19330700	J-35616-14 (GN)	J-38125-12A	Not available	Not available	Not available	Not available
V	19333321	J-35616-31 (OG)	J-38125-11A	Not available	Not available	Not available	Not available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	4	RD/YE	442	Battery Positive Voltage	I	-

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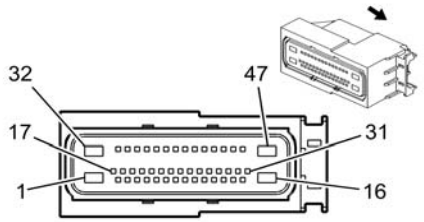
2	2.5	GN/VT	1988	Park Brake Motor Apply Right Rear Control	IV	J71
3	2.5	GY	4368	Park Brake Motor Low Reference Right Rear	IV	J71
4	0.35	BU	2500	High Speed GMLAN Serial Data (+) (1)	II	LGX/LTG
5	0.5	BU	2500	High Speed GMLAN Serial Data (+) (1)	III	LGX/LTG
6	-	-	-	Not Occupied	-	-
7	0.5	GY	830	Wheel Speed Sensor Signal Left Front	III	LGX/LTG
8	0.35	YE/RD	7683	Park Brake Release Switch Voltage Reference	V	J71
9	0.35	BU/VT	1134	Park Brake Switch Signal	V	J71
10	-	-	-	Not Occupied	-	-
11	0.5	BU/YE	6105	High Speed GMLAN Serial Data (+) (2)	III	LGX/LTG
12	2.5	GY/BK	4369	Park Brake Motor Low Reference Left Rear	IV	J71
13	2.5	WH	2001	Park Brake Motor Apply Left Rear Control	IV	J71
14	4	BK	850	Ground	I	LGX/LTG
15	0.35	BU/BK	6108	Park Brake Release Switch Signal	V	J71
16	0.35	YE	1492	Park Brake Switch Supply Voltage	V	J71
17	-	-	-	Not Occupied	-	-
18	0.35	WH	2501	High Speed GMLAN Serial Data (-) (1)	II	LGX/LTG
19	0.5	WH	2501	High Speed GMLAN Serial Data (-) (1)	III	LGX/LTG
20	-	-	-	Not Occupied	-	-
21	0.5	GY/BN	7065	Wheel Speed Sensor Control Right Front	III	LGX/LTG
22	0.5	GY/YE	7128	Wheel Speed Sensor Control Right Rear	III	LGX/LTG
23	0.5	BU	884	Wheel Speed Sensor Signal Left Rear	III	LGX/LTG

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24	0.5	GY/WH	7064	Wheel Speed Sensor Control Left Front	III	LGX/LTG
25	0.5	WH	6106	High Speed GMLAN Serial Data (-) (2)	III	LGX/LTG
26	0.5	YE	872	Wheel Speed Sensor Signal Right Front	III	LGX/LTG
27	0.35	YE/RD	6031	Brake Vacuum Sensor 5 Volt Reference	II	LGX/LTG
28	-	-	-	Not Occupied	-	-
29	0.35	BK/YE	6032	Brake Vacuum Sensor Low Reference	II	LGX/LTG
30	2.5	RD/YE	3740	Battery Positive Voltage	I	LGX/LTG
31	0.35	BN	6107	Park Brake Apply Switch Signal	V	J71
32	0.35	GY/RD	7684	Park Brake Apply Switch Voltage Reference	II	J71
33 - 35	-	-	-	Not Occupied	-	-
36	0.5	WH/BU	5986	Serial Data Communication Enable	III	LGX/LTG
37	0.5	VT	882	Wheel Speed Sensor Signal Right Rear	III	LGX/LTG
38	-	-	-	Not Occupied	-	-
39	0.5	GY/BK	7127	Wheel Speed Sensor Control Left Rear	III	LGX/LTG
40	0.5	BK/BN	6045	Steering Angle Sensor Low Reference	III	LGX/LTG
41	-	-	-	Not Occupied	-	-
42	0.5	GN/GY	333	Brake Fluid Level Sensor Signal	III	LGX/LTG
43 - 44	-	-	-	Not Occupied	-	-
45	0.35	YE/VT	6030	Brake Vacuum Sensor Signal	II	LGX/LTG
46	2.5	BK	850	Ground	I	LGX/LTG

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COMPONENT CONNECTOR END VIEWS > K19 SUSPENSION CONTROL MODULE



Connector Part Information

- Harness Type: Body
- OEM Connector: 89047377
- Service Connector: 89047377
- Description: 47-Way F 0.64, 6.3 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	13578917	J-35616-64B (LT BU)	J-38125-215A	SAITS-A03T-M064	24	9	9
II	13582251	J-35616-42 (RD)	J-38125-553	15476168	13	F	3
III	13582321	J-35616-64B (LT BU)	J-38125-215A	SAITS-A03T-M064	24	9	9

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	F55
3	0.35	YE/WH	1213	Right Front Strut Position Sensor Signal	I	F55
4	-	-	-	Not Occupied	-	-
5	0.35	BK/YE	1215	Right Rear Strut Position Sensor Low Reference	I	F55
6	0.35	BN/WH	1207	Left Front Strut Position Sensor Signal	I	F55
7 - 11	-	-	-	Not Occupied	-	-

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12	0.35	BU/YE	6105	High Speed GMLAN Serial Data (+) (2)	I	-
13	0.35	BU/YE	6105	High Speed GMLAN Serial Data (+) (2)	I	F55
14	0.35	WH	6106	High Speed GMLAN Serial Data (-) (2)	I	-
15	0.35	WH	6106	High Speed GMLAN Serial Data (-) (2)	I	F55
16	2	WH/BU	5986	Serial Data Communication Enable	II	F55
17	0.35	GN/WH	1210	Left Rear Strut Position Sensor Signal	I	F55
18	0.35	BK/GY	1212	Right Front Strut Position Sensor Low Reference	I	F55
19	-	-	-	Not Occupied	-	-
20	0.35	GN/GY	1216	Right Rear Strut Position Sensor Signal	I	F55
21	0.35	BK/BU	1206	Left Front Strut Position Sensor Low Reference	I	F55
22 - 23	-	-	-	Not Occupied	-	-
24	0.35	WH	2501	High Speed GMLAN Serial Data (-) (1)	I	-
25	0.5	WH	2501	High Speed GMLAN Serial Data (-) (1)	I	F55
26	-	-	-	Not Occupied	-	-
27	0.75	BN	1009	Right Front Strut Motor Decrease Damping Control	III	F55
28	0.75	WH/BK	1006	Right Front Strut Motor Increase Damping Control	III	F55
29	-	-	-	Not Occupied	-	-
30	0.75	WH/GN	1005	Left Front Strut Motor Decrease Damping Control	III	F55
31	0.75	WH/GY	1448	Left Front Strut Motor Increase Damping Control	III	F55
32	2	RD/BU	540	Battery Positive Voltage	II	F55
33	0.35	YE/RD	1208	Left Rear Strut Position Sensor 5 Volt Reference	I	F55
34	0.35	BN/RD	1211	Right Front Strut Position Sensor 5 Volt Reference	I	F55

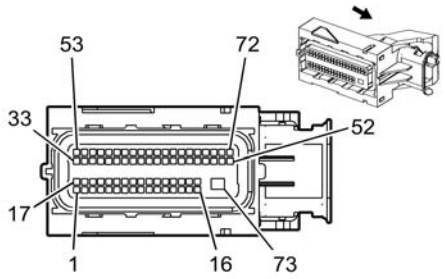
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35	0.35	GN/RD	1214	Right Rear Strut Position Sensor 5 Volt Reference	I	F55
36	0.35	BU/RD	1205	Left Front Strut Position Sensor 5 Volt Reference	I	F55
37 - 38	-	-	-	Not Occupied	-	-
39	0.35	BU	2500	High Speed GMLAN Serial Data (+) (1)	I	-
40	0.5	BU	2500	High Speed GMLAN Serial Data (+) (1)	I	F55
41	-	-	-	Not Occupied	-	-
42	0.75	WH/BK	1013	Left Rear Strut Motor Decrease Damping Control	III	F55
43	0.75	BN/VT	1010	Left Rear Strut Motor Increase Damping Control	III	F55
44	-	-	-	Not Occupied	-	-
45	0.75	VT	1017	Right Rear Strut Motor Decrease Damping Control	III	F55
46	0.75	YE	1014	Right Rear Strut Motor Increase Damping Control	III	F55
47	2	BK	2350	Ground	II	F55

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Service Manual: WIRING SYSTEMS AND POWER MANAGEMENT - COMPONENT CONNECTOR END VIEWS - K20 X1 (LGX) TO K23 X3

COMPONENT CONNECTOR END VIEWS > K20 ENGINE CONTROL MODULE X1 (LGX)



Connector Part Information

- Harness Type: Engine
- 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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575797	J-35616-35 (VT)	J-38125-11A	7116-4152-02	Yazaki 9	A	5
II	19330179	J-35616-64A (LT BU)	J-38125-12A	Not available	Not available	Not available	Not available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 4	-	-	-	Not Occupied	-	-
5	0.5	BK/VT	1272	Accelerator Pedal Position Low Reference (2)	II	LGX
6	0.5	YE/WH	1161	Accelerator Pedal Position Signal (1)	II	LGX
7	0.5	BK/BU	1271	Accelerator Pedal Position Low Reference (1)	II	LGX

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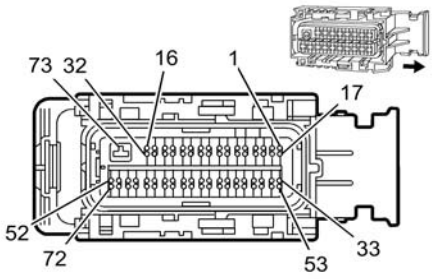
8	0.5	WH	7494	High Speed GMLAN Serial Data (-) (3)	II	LGX
9	0.5	BK/YE	5382	Brake Position Sensor Low Reference	II	LGX+M5T
10	0.5	YE	6111	Clutch Apply Sensor Signal	II	LGX+M13
11	0.5	BK/GY	6110	Clutch Apply Sensor Low Reference	II	LGX+M13
12	0.5	WH	2501	High Speed GMLAN Serial Data (-) (1)	II	-
13	0.5	WH/BU	6311	Cruise/ETC/TCC Brake Signal	II	LGX
14	0.5	WH/GY	459	A/C Compressor Clutch Relay Control	II	LGX
15	0.5	YE	5991	Powertrain Relay Coil Control	II	LGX-ESTOP
16	0.5	BN/WH	419	Check Engine Indicator Control	II	LGX
17	0.5	WH/BK	2366	Cooling Fan Control Relay Speed Signal	II	LGX
18 - 20	-	-	-	Not Occupied	-	-
21	0.5	BN/RD	1274	Accelerator Pedal Position 5 Volt Reference (2)	II	LGX
22	0.5	GN/WH	1162	Accelerator Pedal Position Signal (2)	II	LGX
23	0.5	WH/RD	1164	Accelerator Pedal Position 5 Volt Reference (1)	II	LGX
24	0.5	BU/BK	7493	High Speed GMLAN Serial Data (+) (3)	II	LGX
25	0.5	WH/RD	5381	Brake Position Sensor 5 Volt Reference	II	LGX+M5T
26	0.5	WH/GN	5380	Brake Position Sensor Signal	II	LGX+M5T
27	0.5	GY/RD	6109	Clutch Apply Sensor 5 Volt Reference	II	LGX+M13
28	0.5	BU	2500	High Speed GMLAN Serial Data (+) (1)	II	-
29	0.5	WH/GY	1786	Transmission Park/Neutral Signal (1)	II	LGX+M5T
30	0.5	GN/WH	492	Mass Air Flow Sensor Signal	II	LGX
31 - 37	-	-	-	Not Occupied	-	-
38	0.5	BU/WH	890	Fuel Tank Pressure Sensor Signal	II	LGX

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39	0.5	BN/GY	4008	Humidity Sensor Signal	II	LGX
40 - 43	-	-	-	Not Occupied	-	-
44	0.5	BK/WH	2151	Signal Ground	II	LGX
45	-	-	-	Not Occupied	-	-
46	0.5	GY	4109	Driver Mode Switch 5 Volt Reference	II	LGX
47	0.5	BN/RD	2700	A/C Pressure Sensor 5 Volt Reference	II	LGX
48	-	-	-	Not Occupied	-	-
49	0.5	VT/BU	5292	Powertrain Main Relay Fused Supply (3)	II	LGX
50	0.5	VT/BU	5291	Powertrain Main Relay Fused Supply (2)	II	LGX
51	0.5	VT/YE	5985	Accessory Wakeup Serial Data	II	-
52	0.5	RD/BN	440	Battery Positive Voltage	II	-
53	-	-	-	Not Occupied	-	-
54	0.5	WH	1310	EVAP Canister Vent Solenoid Control	II	LGX
55 - 63	-	-	-	Not Occupied	-	-
64	0.5	BU/GY	636	Outside Ambient Air Temperature Sensor Signal	II	LGX
65	-	-	-	Not Occupied	-	-
66	0.5	WH/VT	4108	Driver Mode Switch Signal	II	LGX
67	0.5	GN	380	A/C Refrigerant Pressure Sensor Signal	II	LGX
68	-	-	-	Not Occupied	-	-
69	0.5	GN/GY	465	Fuel Pump Primary Relay Control	II	LGX+NPP
70	0.5	VT/GY	6386	Starter Enable Relay (PPEI 3) Control	II	LGX
71	0.5	VT/GN	439	Run/Crank Ignition 1 Voltage	II	LGX-ESTOP
72	0.5	VT/BU	5290	Powertrain Main Relay Fused Supply (1)	II	LGX
73	2.5	VT/BU	5290	Powertrain Main Relay Fused Supply (1)	I	LGX

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COMPONENT CONNECTOR END VIEWS > K20 ENGINE CONTROL MODULE X2 (LGX)



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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575797	J-35616-35 (VT)	J-38125-11A	7116-4152-02	Yazaki 9	A	5
II	19330179	J-35616-64A (LT BU)	J-38125-12A	Not available	Not available	Not available	Not available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY/WH	3122	Heated Oxygen Sensor Heater Low Control Bank 1 Sensor (2)	II	LGX
2	0.5	WH/BN	3223	Heated Oxygen Sensor Heater Low Control Bank 2 Sensor (2)	II	LGX
3 - 8	-	-	-	Not Occupied	-	-
9	0.5	BN/GN	1174	Oil Level Switch Signal	II	LGX
10	-	-	-	Not Occupied	-	-
11	0.5	WH	311	Right Headlamp High Beam Control	II	LGX
12	0.5	BK/WH	2051	Signal Ground	II	LGX

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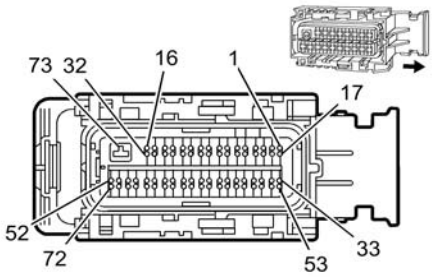
13 - 16	-	-	-	Not Occupied	-	-
17	0.5	GY/WH	3113	Heated Oxygen Sensor Heater Low Control Bank 1 Sensor (1)	II	LGX
18	0.5	GN/YE	3212	Heated Oxygen Sensor Heater Low Control Bank 2 Sensor (1)	II	LGX
19 - 20	-	-	-	Not Occupied	-	-
21	0.5	BU/WH	1937	Secondary Fuel Level Sensor Signal	II	LGX
22	0.5	BU/VT	1589	Primary Fuel Level Sensor Signal	II	LGX
23	0.5	GN/WH	5007	Reverse Switch Signal	II	LGX+M13
24 - 26	-	-	-	Not Occupied	-	-
27	0.5	WH/RD	2705	Oil Pressure Sensor 5 Volt Reference	II	LGX
28	0.5	VT/BU	5293	Powertrain Main Relay Fused Supply (4)	II	LGX
29 - 34	-	-	-	Not Occupied	-	-
35	0.5	WH/BK	3111	Heated Oxygen Sensor Low Signal Bank 1 Sensor (1)	II	LGX
36	0.5	YE/WH	3211	Heated Oxygen Sensor Low Signal Bank 2 Sensor (1)	II	LGX
37	0.5	WH/YE	3121	Heated Oxygen Sensor Low Signal Bank 1 Sensor (2)	II	LGX
38	0.5	YE/BU	3221	Heated Oxygen Sensor Low Signal Bank 2 Sensor (2)	II	LGX
39	0.5	BK/YE	1716	Knock Sensor Low Reference (1)	II	LGX
40	0.5	BK/GY	2303	Knock Sensor Low Reference (2)	II	LGX
41	-	-	-	Not Occupied	-	-
42	0.5	YE/WH	3200	Throttle Inlet Absolute Pressure Sensor Signal	II	LGX
43	0.5	WH/RD	3201	Throttle Inlet Absolute Pressure Sensor 5 Volt Reference	II	LGX
44	-	-	-	Not Occupied	-	-
45	0.75	GY/BK	3096	Output Speed (Digital) Sensor 5 Volt Reference	II	LGX+M13

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46	0.5	YE/RD	2709	Fuel Tank Pressure Sensor 5 Volt Reference	II	LGX
47	0.5	GY/RD	2704	Manifold Absolute Pressure Sensor 5 Volt Reference	II	LGX
48	0.5	BK/GN	469	Manifold Absolute Pressure Sensor Low Reference	II	LGX
49	0.5	BN/WH	585	Transmission Oil Temperature Sensor Signal	II	LGX+M13
50	-	-	-	Not Occupied	-	-
51	0.5	BK/WH	2251	Signal Ground	II	LGX
52	0.5	BN/WH	582	Throttle Actuator Control Close	II	LGX
53 - 54	-	-	-	Not Occupied	-	-
55	0.5	VT/GY	3110	Heated Oxygen Sensor High Signal Bank 1 Sensor (1)	II	LGX
56	0.5	VT/WH	3210	Heated Oxygen Sensor High Signal Bank 2 Sensor (1)	II	LGX
57	0.5	VT/BU	3120	Heated Oxygen Sensor High Signal Bank 1 Sensor (2)	II	LGX
58	0.5	VT/GN	3220	Heated Oxygen Sensor High Signal Bank 2 Sensor (2)	II	LGX
59	0.5	VT/GY	496	Knock Sensor Signal (1)	II	LGX
60	0.5	WH/GY	1876	Knock Sensor Signal (2)	II	LGX
61 - 62	-	-	-	Not Occupied	-	-
63	0.5	BK/VT	2760	Intake Air Temperature Sensor Low Reference	II	LGX
64	-	-	-	Not Occupied	-	-
65	0.75	GN	3098	Output Speed (Digital) Signal	II	LGX+M13
66	0.75	WH/BK	3097	Output Speed (Digital) Sensor Low Reference	II	LGX+M13
67	0.5	GN/WH	432	Manifold Absolute Pressure Sensor Signal	II	LGX
68 - 69	-	-	-	Not Occupied	-	-
70	0.5	WH/BU	6289	Induction Air Temperature Sensor Signal	II	LGX
71	-	-	-	Not Occupied	-	-
72	0.5	YE	581	Throttle Actuator Control Open	II	LGX
73	2.5	BK/WH	451	Signal Ground	I	LGX

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COMPONENT CONNECTOR END VIEWS > K20 ENGINE CONTROL MODULE X3 (LGX)



Connector Part Information

- Harness Type: Engine
- 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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575797	J-35616-35 (VT)	J-38125-11A	7116-4152-02	Yazaki 9	A	5
II	19330179	J-35616-64A (LT BU)	J-38125-12A	Not available	Not available	Not available	Not available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN	5492	Cylinder Shutoff Solenoid Control (2)	II	LGX
2	0.5	BU	5491	Cylinder Shutoff Solenoid Control (1)	II	LGX
3	0.5	GN/BN	5298	Camshaft Position Exhaust Sensor Control (2)	II	LGX
4	0.5	YE	5276	Camshaft Position Intake Sensor (2)	II	LGX
5	0.5	WH/BU	5302	Camshaft Position Intake Sensor Control (2)	II	LGX

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6	0.5	VT/BU	6270	Crankshaft 60X Sensor 5 Volt Reference	II	LGX
7	0.5	GN	6271	Crankshaft 60X Sensor Signal	II	LGX
8	0.5	BN/RD	2701	Throttle Position Sensor 5 Volt Reference	II	LGX
9 - 11	-	-	-	Not Occupied	-	-
12	0.5	BN/BU	2126	Ignition Control (6)	II	LGX
13	0.5	BU/GY	2125	Ignition Control (5)	II	-
14	0.5	YE/BU	2124	Ignition Control (4)	II	LGX
15	0.5	BK/GY	2130	Ignition Control Low Reference Bank 2	II	-
16	0.75	YE	7301	High Pressure Fuel Pump Actuator High - Control	II	-
17	0.5	YE/GN	4321	Park Phaser Lock Control	II	LGX
18	0.5	GY/GN	587	Skip/Shift Solenoid Control	II	LGX
19	0.5	BK/BN	5299	Camshaft Position Exhaust Sensor Low Reference (2)	II	LGX
20	0.5	VT/BU	5274	Camshaft Position Exhaust Sensor (2)	II	LGX
21	0.5	BK/VT	5303	Camshaft Position Intake Sensor Low Reference (2)	II	LGX
22	0.5	BK/VT	6272	Crankshaft 60X Sensor Low Reference	II	LGX
23	0.5	BU/WH	3630	Throttle Position Sensor (SENT1) Signal	II	LGX
24	0.5	BK/BN	2752	Throttle Position Sensor Low Reference	II	LGX
25	0.5	WH	121	Engine Speed Signal	II	LGX
26	0.5	BN	25	Charge Indicator Control	II	LGX
27	-	-	-	Not Occupied	-	-
28	0.5	GN/BU	2123	Ignition Control (3)	II	LGX
29	0.5	BU/WH	2122	Ignition Control (2)	II	LGX
30	0.5	BU/VT	2121	Ignition Control (1)	II	-
31	0.5	BK/BU	2129	Ignition Control Low Reference Bank 1	II	-
32	0.75	VT/BK	7300	High Pressure Fuel Pump Actuator Low - Control	II	-

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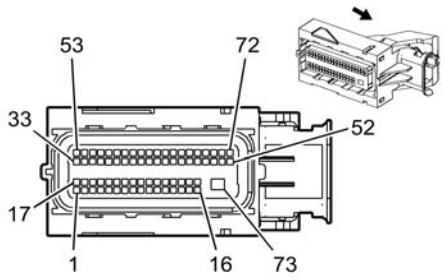
33	0.5	GN/BU	428	EVAP Canister Purge Solenoid Control	II	LGX
34	0.5	BU	179	Oil Pump Command Signal	II	LGX
35	0.5	GY/YE	5297	Camshaft Position Exhaust Sensor Control (1)	II	LGX
36	0.5	VT/BK	5273	Camshaft Position Exhaust Sensor (1)	II	LGX
37	0.5	BK/GY	5296	Camshaft Position Exhaust Sensor Low Reference (1)	II	LGX
38	0.5	BU	410	Engine Coolant Temperature Sensor Signal	II	LGX
39	0.5	BN/RD	7445	Fuel Line Pressure Sensor 5 Volt Reference	II	LGX
40	0.5	BN/RD	2917	Fuel Rail Pressure Sensor 5 Volt Reference	II	LGX
41	0.5	BK/GN	2919	Fuel Rail Pressure Sensor Low Reference	II	LGX
42	-	-	-	Not Occupied	-	-
43	0.5	BK/BU	6755	Cam Phaser Y Low Reference	II	LGX
44	0.5	GN	5272	Camshaft Phaser Intake Solenoid (2)	II	LGX
45	0.5	VT/BN	5284	Camshaft Phaser Intake Solenoid (1)	II	LGX
46	0.5	BK/BN	6753	Cam Phaser W Low Reference	II	LGX
47	0.75	WH/GN	4805	Direct Fuel Injector (DFI) High Voltage Control Cylinder 5	II	LGX
48	0.75	BU	4802	Direct Fuel Injector (DFI) High Voltage Control Cylinder 2	II	LGX
49	0.75	BN	4801	Direct Fuel Injector (DFI) High Voltage Control Cylinder 1	II	LGX
50	0.75	GY/BU	4804	Direct Fuel Injector (DFI) High Voltage Control Cylinder 4	II	LGX
51	0.75	VT/GN	4806	Direct Fuel Injector (DFI) High Voltage Control Cylinder 6	II	LGX
52	0.75	GN	4803	Direct Fuel Injector (DFI) High Voltage Control Cylinder 3	II	LGX
53 - 54	-	-	-	Not Occupied	-	-
55	0.5	GY/BU	5300	Camshaft Position Intake Sensor Control (1)	II	LGX

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56	0.5	YE/VT	5275	Camshaft Position Intake Sensor (1)	II	LGX
57	0.5	BK/GN	5301	Camshaft Position Intake Sensor Low Reference (1)	II	LGX
58	-	-	-	Not Occupied	-	-
59	0.5	BU/WH	7446	Fuel Line Pressure Sensor Signal	II	LGX
60	0.5	BU/WH	2918	Fuel Rail Pressure Sensor Signal	II	LGX
61	0.5	GY	23	Generator Field Duty Cycle Signal	II	LGX
62	-	-	-	Not Occupied	-	-
63	0.5	BK/GY	6756	Cam Phaser Z Low Reference	II	LGX
64	0.5	GN/BN	5283	Camshaft Phaser Exhaust Solenoid (2)	II	LGX
65	0.5	GY/BU	5282	Camshaft Phaser Exhaust Solenoid (1)	II	LGX
66	0.5	BK/VT	6754	Cam Phaser X Low Reference	II	LGX
67	0.75	GN/WH	4905	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 5	II	LGX
68	0.75	BU/GY	4902	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 2	II	LGX
69	0.75	BN/WH	4901	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 1	II	LGX
70	0.75	BU/WH	4904	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 4	II	LGX
71	0.75	VT/GY	4906	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 6	II	LGX
72	0.75	GN/GY	4903	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 3	II	LGX
73	2.5	BK/WH	451	Signal Ground	I	LGX

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COMPONENT CONNECTOR END VIEWS > K20 ENGINE CONTROL MODULE X1 (LT1)



Connector Part Information

- Harness Type: Engine
- 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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575797	J-35616-35 (VT)	J-38125-11A	7116-4152-02	Yazaki 9	A	5
II	19330179	J-35616-64A (LT BU)	J-38125-12A	Not available	Not available	Not available	Not available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 3	-	-	-	Not Occupied	-	-
4	0.5	YE/WH	3200	Throttle Inlet Absolute Pressure Sensor Signal	II	LT1
5	0.5	WH/RD	3201	Throttle Inlet Absolute Pressure Sensor 5 Volt Reference	II	LT1
6	0.5	GN	380	A/C Refrigerant Pressure Sensor Signal	II	LT1
7 - 8	-	-	-	Not Occupied	-	-
9	0.5	BU/WH	890	Fuel Tank Pressure Sensor Signal	II	LT1
10	0.5	YE/RD	2709	Fuel Tank Pressure Sensor 5 Volt Reference	II	LT1

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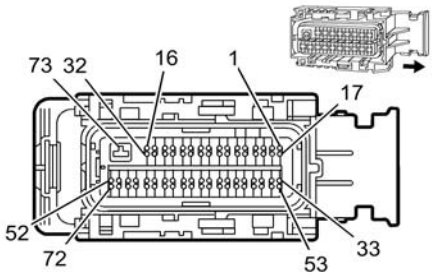
11 - 13	-	-	-	Not Occupied	-	-
14	0.5	WH/RD	1164	Accelerator Pedal Position 5 Volt Reference (1)	II	LT1
15	0.5	YE/WH	1161	Accelerator Pedal Position Signal (1)	II	LT1
16 - 20	-	-	-	Not Occupied	-	-
21	0.5	BN/RD	2700	A/C Pressure Sensor 5 Volt Reference	II	LT1
22	0.5	BK/WH	2151	Signal Ground	II	LT1
23 - 24	-	-	-	Not Occupied	-	-
25	0.5	BU/VT	1589	Primary Fuel Level Sensor Signal	II	LT1
26	0.5	BK/WH	2151	Signal Ground	II	LT1
27	0.5	BU/WH	1937	Secondary Fuel Level Sensor Signal	II	LT1
28 - 29	-	-	-	Not Occupied	-	-
30	0.5	BK/BU	1271	Accelerator Pedal Position Low Reference (1)	II	LT1
31	-	-	-	Not Occupied	-	-
32	0.5	WH/GY	459	A/C Compressor Clutch Relay Control	II	LT1
33	0.5	BN/RD	1274	Accelerator Pedal Position 5 Volt Reference (2)	II	LT1
34	0.5	GN/WH	1162	Accelerator Pedal Position Signal (2)	II	LT1
35	0.5	VT/WH	6384	Reverse Lockout Signal	II	LT1+MM6
36 - 38	-	-	-	Not Occupied	-	-
39	0.5	BU	2500	High Speed GMLAN Serial Data (+) (1)	II	-
40	0.5	WH	2501	High Speed GMLAN Serial Data (-) (1)	II	-
41 - 43	-	-	-	Not Occupied	-	-
44	0.5	GN/GY	465	Fuel Pump Primary Relay Control	II	LT1-G96
45	-	-	-	Not Occupied	-	-
46	0.5	BN/WH	419	Check Engine Indicator Control	II	LT1

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47	0.5 0.5	WH/RD GY/RD	5381 6109	Brake Position Sensor 5 Volt Reference Clutch Apply Sensor 5 Volt Reference	II	LT1+M5U LT1+MM6
48	0.5 0.5	WH/GN YE	5380 6111	Brake Position Sensor Signal Clutch Apply Sensor Signal	II	LT1+M5U LT1+MM6
49 - 50	-	-	-	Not Occupied	-	-
51	0.5	VT/GN	439	Run/Crank Ignition 1 Voltage	II	LT1-ESTOP
52	0.5	RD/BN	440	Battery Positive Voltage	II	-
53	0.5	BK/VT	1272	Accelerator Pedal Position Low Reference (2)	II	LT1
54 - 56	-	-	-	Not Occupied	-	-
57	0.5	WH/BU	6311	Cruise/ETC/TCC Brake Signal	II	LT1
58	-	-	-	Not Occupied	-	-
59	0.5	WH/BK	2366	Cooling Fan Control Relay Speed Signal	II	LT1
60 - 61	-	-	-	Not Occupied	-	-
62	0.5	VT/BU	5291	Powertrain Main Relay Fused Supply (2)	II	LT1
63	0.5	VT/GY	6386	Starter Enable Relay (PPEI 3) Control	II	LT1
64 - 65	-	-	-	Not Occupied	-	-
66	0.5	WH	1310	EVAP Canister Vent Solenoid Control	II	LT1
67	0.5	VT/BU	5292	Powertrain Main Relay Fused Supply (3)	II	LT1
68	0.5 0.5	BK/YE BK/GY	5382 6110	Brake Position Sensor Low Reference Clutch Apply Sensor Low Reference	II	LT1+M5U LT1+MM6
69	-	-	-	Not Occupied	-	-
70	0.5	VT/YE	5985	Accessory Wakeup Serial Data	II	-
71	-	-	-	Not Occupied	-	-
72	0.5	YE	5991	Powertrain Relay Coil Control	II	LT1-ESTOP
73	3	VT/BU	5290	Powertrain Main Relay Fused Supply (1)	I	LT1

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COMPONENT CONNECTOR END VIEWS > K20 ENGINE CONTROL MODULE X2 (LT1)



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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575797	J-35616-35 (VT)	J-38125-11A	7116-4152-02	Yazaki 9	A	5
II	19330179	J-35616-64A (LT BU)	J-38125-12A	Not available	Not available	Not available	Not available

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	II	LT1
4	-	-	-	Not Occupied	-	-
5	0.75	GY/BK	3096	Output Speed (Digital) Sensor 5 Volt Reference	II	LT1+MM6
6 - 7	-	-	-	Not Occupied	-	-
8	0.75	GN	3098	Output Speed (Digital) Signal	II	LT1+MM6
9	0.5	BN/WH	585	Transmission Oil Temperature Sensor Signal	II	LT1+MM6
10	0.5	VT/GY	3110	Heated Oxygen Sensor High Signal Bank 1 Sensor (1)	II	-

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11	0.5	VT/WH	3210	Heated Oxygen Sensor High Signal Bank 2 Sensor (1)	II	-
12	0.5	VT/BU	3120	Heated Oxygen Sensor High Signal Bank 1 Sensor (2)	II	-
13	0.5	VT/GN	3220	Heated Oxygen Sensor High Signal Bank 2 Sensor (2)	II	-
14	0.5	GY	4109	Driver Mode Switch 5 Volt Reference	II	LT1
15	0.5	BN/GY	4008	Humidity Sensor Signal	II	LT1
16	0.5	BN/WH	582	Throttle Actuator Control Close	II	LT1
17	-	-	-	Not Occupied	-	-
18	0.5	BN/RD	2917	Fuel Rail Pressure Sensor 5 Volt Reference	II	LT1
19	0.5	BU/WH	2918	Fuel Rail Pressure Sensor Signal	II	LT1
20	-	-	-	Not Occupied	-	-
21	0.75	WH/BK	3097	Output Speed (Digital) Sensor Low Reference	II	LT1+MM6
22 - 24	-	-	-	Not Occupied	-	-
25	0.5	BK/BN	586	Transmission Oil Temperature Sensor Low Reference	II	LT1+MM6
26	0.5	WH/BK	3111	Heated Oxygen Sensor Low Signal Bank 1 Sensor (1)	II	-
27	0.5	YE/WH	3211	Heated Oxygen Sensor Low Signal Bank 2 Sensor (1)	II	-
28	0.5	WH/YE	3121	Heated Oxygen Sensor Low Signal Bank 1 Sensor (2)	II	-
29	0.5	YE/BU	3221	Heated Oxygen Sensor Low Signal Bank 2 Sensor (2)	II	-
30 - 31	-	-	-	Not Occupied	-	-
32	0.5	YE	581	Throttle Actuator Control Open	II	LT1
33	-	-	-	Not Occupied	-	-
34	0.5	BN/RD	2701	Throttle Position Sensor 5 Volt Reference	II	LT1
35	-	-	-	Not Occupied	-	-
36	0.75	VT/GY	496	Knock Sensor Signal (1)	II	LT1
37	0.75	WH/GY	1876	Knock Sensor Signal (2)	II	LT1
38	0.5	GY/GN	587	Skip/Shift Solenoid Control	II	LT1+MM6

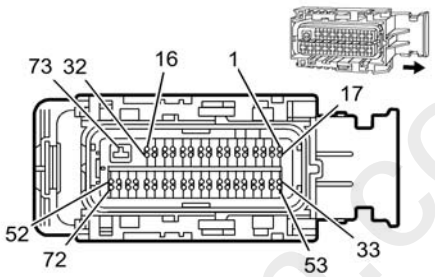
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39	0.5	WH	121	Engine Speed Signal	II	LT1
40	0.5	VT/BU	6091	Crankshaft Position Sensor Replicated Signal	II	LT1+NKC
41	0.5	GY/WH	3113	Heated Oxygen Sensor Heater Low Control Bank 1 Sensor (1)	II	-
42	0.5	GY/WH	3122	Heated Oxygen Sensor Heater Low Control Bank 1 Sensor (2)	II	-
43	0.5	GN/WH	432	Manifold Absolute Pressure Sensor Signal	II	LT1
44	0.5	GY/RD	2704	Manifold Absolute Pressure Sensor 5 Volt Reference	II	LT1
45 - 48	-	-	-	Not Occupied	-	-
49	0.5	WH/BU	6289	Induction Air Temperature Sensor Signal	II	LT1
50	0.5	WH/VT	4108	Driver Mode Switch Signal	II	LT1
51	0.5	GN/BU	428	EVAP Canister Purge Solenoid Control	II	LT1
52	0.5	GN/WH	492	Mass Air Flow Sensor Signal	II	LT1
53	0.5	BN	25	Charge Indicator Control	II	LT1
54	0.5	BK/BN	2752	Throttle Position Sensor Low Reference	II	LT1
55	0.5	GY	23	Generator Field Duty Cycle Signal	II	LT1
56	0.75	BK/YE	1716	Knock Sensor Low Reference (1)	II	LT1
57	0.75	BK/GY	2303	Knock Sensor Low Reference (2)	II	LT1
58	0.5	WH/GY	1786	Transmission Park/Neutral Signal (1)	II	LT1+M5U
59	0.5	BU	179	Oil Pump Command Signal	II	LT1
60	0.5	BN/GN	1174	Oil Level Switch Signal	II	LT1
61	0.5	GN/YE	3212	Heated Oxygen Sensor Heater Low Control Bank 2 Sensor (1)	II	-
62	0.5	WH/BN	3223	Heated Oxygen Sensor Heater Low Control Bank 2 Sensor (2)	II	-
63	0.5	BK/GN	469	Manifold Absolute Pressure Sensor Low Reference	II	LT1
64 - 66	-	-	-	Not Occupied	-	-

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67	0.5	YE	1457	Gear Sensor Signal (1)	II	LT1+MM6
68	0.5	WH	232	Gear Sensor Signal (2)	II	LT1+MM6
69	0.5	BK/VT	2760	Intake Air Temperature Sensor Low Reference	II	LT1
70	0.5	BU/WH	3630	Throttle Position Sensor (SENT1) Signal	II	LT1
71 - 72	-	-	-	Not Occupied	-	-
73	3	BK/WH	451	Signal Ground	I	LT1

COMPONENT CONNECTOR END VIEWS > K20 ENGINE CONTROL MODULE X3 (LT1)



Connector Part Information

- Harness Type: Engine
- 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	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575797	J-35616-35 (VT)	J-38125-11A	7116-4152-02	Yazaki 9	A	5
II	19330179	J-35616-64A (LT BU)	J-38125-12A	Not available	Not available	Not available	Not available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option

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1	0.5	YE/BN	331	Oil Pressure Sensor Signal	II	LT1
2	0.5	WH/RD	2705	Oil Pressure Sensor 5 Volt Reference	II	LT1
3	0.5	BN/YE	2161	Fuel Rail Pressure Sensor 2 Signal	II	LT1
4 - 6	-	-	-	Not Occupied	-	-
7	0.5	BN/BU	357	Oil Temperature Sensor Signal	II	LT1
8	0.5	GN/VT	2032	Coolant Temperature Sensor Signal	II	LT1
9	-	-	-	Not Occupied	-	-
10	0.5	VT/BU	6270	Crankshaft 60X Sensor 5 Volt Reference	II	LT1
11	0.5	GN/BU	2123	Ignition Control (3)	II	LT1
12	0.5	YE/BU	2124	Ignition Control (4)	II	LT1
13	0.5	BU/GY	2125	Ignition Control (5)	II	-
14	0.5	BN/BU	2126	Ignition Control (6)	II	LT1
15	0.5	BK/GY	2130	Ignition Control Low Reference Bank 2	II	-
16	0.75	YE	7301	High Pressure Fuel Pump Actuator High - Control	II	-
17	0.5	BK/VT	2755	Oil Pressure Sensor Low Reference	II	LT1
18	0.5	YE/RD	7344	Clutch Position Sensor Voltage Reference	II	LT1+MM6
19	0.5	BK/YE	1704	Sensor Low Reference	II	LT1+MM6
20 - 22	-	-	-	Not Occupied	-	-
23	0.5	BK/BN	6273	Oil Temperature Sensor Low Reference	II	LT1
24	0.5	BK/BN	2761	Coolant Temperature Sensor Low Reference	II	LT1
25	0.5	BK/VT	6272	Crankshaft 60X Sensor Low Reference	II	LT1
26	0.5	GN	6271	Crankshaft 60X Sensor Signal	II	LT1
27	0.5	BU/WH	2122	Ignition Control (2)	II	LT1
28	0.5	GN/GY	2127	Ignition Control (7)	II	LT1
29	0.5	VT/WH	2128	Ignition Control (8)	II	LT1
30	0.5	BU/VT	2121	Ignition Control (1)	II	-

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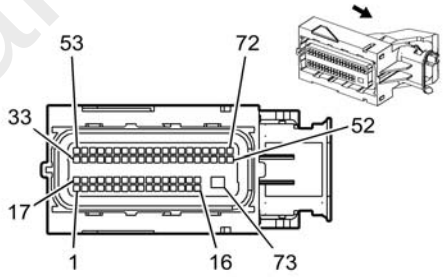
31	0.5	BK/BU	2129	Ignition Control Low Reference Bank 1	II	-
32	0.75	VT/BK	7300	High Pressure Fuel Pump Actuator Low - Control	II	-
33	0.5	YE/VT	5275	Camshaft Position Intake Sensor (1)	II	LT1
34	0.5	GY/BU	5300	Camshaft Position Intake Sensor Control (1)	II	LT1
35 - 38	-	-	-	Not Occupied	-	-
39	0.5	VT/BN	5284	Camshaft Phaser Intake Solenoid (1)	II	LT1
40 - 42	-	-	-	Not Occupied	-	-
43	0.5	GY	5493	Cylinder Shutoff Solenoid Control (3)	II	LT1
44	0.5	YE/BU	5494	Cylinder Shutoff Solenoid Control (4)	II	LT1
45	0.5	GY/BU	4804	Direct Fuel Injector (DFI) High Voltage Control Cylinder 4	II	LT1
46	0.5	BU	4802	Direct Fuel Injector (DFI) High Voltage Control Cylinder 2	II	LT1
47	0.5	VT/GN	4806	Direct Fuel Injector (DFI) High Voltage Control Cylinder 6	II	LT1
48	0.5	GY	4808	Direct Fuel Injector (DFI) High Voltage Control Cylinder 8	II	LT1
49	0.5	GN	4803	Direct Fuel Injector (DFI) High Voltage Control Cylinder 3	II	LT1
50	0.5	YE/GY	4807	Direct Fuel Injector (DFI) High Voltage Control Cylinder 7	II	LT1
51	0.5	WH/GN	4805	Direct Fuel Injector (DFI) High Voltage Control Cylinder 5	II	LT1
52	0.5	BN	4801	Direct Fuel Injector (DFI) High Voltage Control Cylinder 1	II	LT1
53	0.5	BK/GN	5301	Camshaft Position Intake Sensor Low Reference (1)	II	LT1
54 - 58	-	-	-	Not Occupied	-	-
59	0.5	BK/BN	6753	Cam Phaser W Low Reference	II	LT1
60 - 62	-	-	-	Not Occupied	-	-

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63	0.5	BU	5491	Cylinder Shutoff Solenoid Control (1)	II	LT1
64	0.5	GN	5492	Cylinder Shutoff Solenoid Control (2)	II	LT1
65	0.5	BU/WH	4904	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 4	II	LT1
66	0.5	BU/GY	4902	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 2	II	LT1
67	0.5	VT/GY	4906	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 6	II	LT1
68	0.5	GY/WH	4908	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 8	II	LT1
69	0.5	GN/GY	4903	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 3	II	LT1
70	0.5	WH/YE	4907	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 7	II	LT1
71	0.5	GN/WH	4905	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 5	II	LT1
72	0.5	BN/WH	4901	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 1	II	LT1
73	3	BK/WH	451	Signal Ground	I	LT1

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COMPONENT CONNECTOR END VIEWS > K20 ENGINE CONTROL MODULE X1



Connector Part Information

- Harness Type: Engine
- 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	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13575797	J-35616-35 (VT)	J-38125-11A	7116-4152-02	20	2	5
II	13575797	J-35616-35 (VT)	J-38125-11A	7116-4152-02	20	A	5
III	19330179	J-35616-64A (LT BU)	J-38125-12A	Not available	Not available	Not available	Not available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 3	-	-	-	Not Occupied	-	-
4	0.5	YE/WH	3200	Throttle Inlet Absolute Pressure Sensor Signal	III	LT1
5	0.5 0.5	BK/VT WH/RD	1272 3201	Accelerator Pedal Position Low Reference (2) Throttle Inlet Absolute Pressure Sensor 5 Volt Reference	III	LGX LT1
6	0.5 0.5	YE/WH GN	1161 380	Accelerator Pedal Position Signal (1) A/C Refrigerant Pressure Sensor Signal	III	LGX LT1
7	0.5	BK/BU	1271	Accelerator Pedal Position Low Reference (1)	III	LGX
8	0.5	WH	7494	High Speed GMLAN Serial Data (-) (3)	III	LGX
9	0.5 0.5 0.5	BU BK/YE BU/WH	2500 5382 890	High Speed GMLAN Serial Data (+) (1) Brake Position Sensor Low Reference Fuel Tank Pressure Sensor Signal	III	- LGX+M5T LT1
10	0.5 0.5 0.5	WH YE YE/RD	2501 6111 2709	High Speed GMLAN Serial Data (-) (1) Clutch Apply Sensor Signal Fuel Tank Pressure Sensor 5 Volt Reference	III	- LGX+M13 LT1
11	0.5 0.5	BK/GY BN/RD	6110 1274	Clutch Apply Sensor Low Reference Accelerator Pedal Position 5	III	LGX+M13 LTG

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				Volt Reference (2)		
12	0.5 0.5	WH WH/RD	2501 1164	High Speed GMLAN Serial Data (-) (1) Accelerator Pedal Position 5 Volt Reference (1)	III	- LTG
13	0.5 0.5	VT/YE WH/BU	5985 6311	Accessory Wakeup Serial Data Cruise/ETC/TCC Brake Signal	III	- LGX
14	0.5 0.5 0.5	WH/GY WH/RD VT/GN	459 1164 439	A/C Compressor Clutch Relay Control Accelerator Pedal Position 5 Volt Reference (1) Run/Crank Ignition 1 Voltage	III	LGX LT1 LTG-ESTOP
15	0.5 0.5 0.5	YE YE/WH RD/BN	5991 1161 440	Powertrain Relay Coil Control Accelerator Pedal Position Signal (1) Battery Positive Voltage	III	LGX-ESTOP LT1 LTG
16	0.5 0.5	BN/WH VT/BU	419 5292	Check Engine Indicator Control Powertrain Main Relay Fused Supply (3)	III	LGX LTG
17	0.5	WH/BK	2366	Cooling Fan Control Relay Speed Signal	III	LGX
18	0.5	GY/RD	3053	Turbo Intake Pressure Sensor High Reference Bank (1)	III	LTG
19 - 20	-	-	-	Not Occupied	-	-
21	0.5 0.5	BN/RD BN/RD	1274 2700	Accelerator Pedal Position 5 Volt Reference (2) A/C Pressure Sensor 5 Volt Reference	III	LGX LT1
22	0.5 0.5	GN/WH BK/WH	1162 2151	Accelerator Pedal Position Signal (2) Signal Ground	III	LGX LT1
23	0.5	WH/RD	1164	Accelerator Pedal Position 5 Volt Reference (1)	III	LGX
24	0.5	BU/BK	7493	High Speed GMLAN Serial Data (+) (3)	III	LGX
25	0.5 0.5 0.5	WH/RD BU/VT BK/YE	5381 1589 5382	Brake Position Sensor 5 Volt Reference Primary Fuel Level Sensor Signal Brake Position Sensor Low Reference	III	LGX+M5T LT1 LTG+M5T
26	0.5 0.5 0.5	WH/GN BK/WH BK/GY	5380 2151 6110	Brake Position Sensor Signal Signal Ground Clutch Apply Sensor Low	III	LGX+M5T LT1 LTG+M13

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				Reference		
27	0.5 0.5 0.5	GY/RD BU/WH BK/VT	6109 1937 1272	Clutch Apply Sensor 5 Volt Reference Secondary Fuel Level Sensor Signal Accelerator Pedal Position Low Reference (2)	III	LGX+M13 LT1 LTG
28	0.5 0.5	BU BK/BU	2500 1271	High Speed GMLAN Serial Data (+) (1) Accelerator Pedal Position Low Reference (1)	III	- LTG
29	0.5	WH/GY	1786	Transmission Park/Neutral Signal (1)	III	LGX+M5T
30	0.5 0.5	GN/WH BK/BU	492 1271	Mass Air Flow Sensor Signal Accelerator Pedal Position Low Reference (1)	III	LGX LT1
31	-	-	-	Not Occupied	-	-
32	0.5	WH/GY	459	A/C Compressor Clutch Relay Control	III	LT1
33	0.5 0.5	BN/RD GN/WH	1274 1162	Accelerator Pedal Position 5 Volt Reference (2) Accelerator Pedal Position Signal (2)	III	LT1 LTG
34	0.5 0.5	GN/WH GN/WH	1162 492	Accelerator Pedal Position Signal (2) Mass Air Flow Sensor Signal	III	LT1 LTG
35	0.5	VT/WH	6384	Reverse Lockout Signal	III	LT1+MM6
36	-	-	-	Not Occupied	-	-
37	0.5	BN/RD	2700	A/C Pressure Sensor 5 Volt Reference	III	LTG
38	0.5 0.5	BU/WH GY	890 4109	Fuel Tank Pressure Sensor Signal Driver Mode Switch 5 Volt Reference	III	LGX LTG
39	0.5 0.5	BU BN/GY	2500 4008	High Speed GMLAN Serial Data (+) (1) Humidity Sensor Signal	III	- LGX
40	0.5	WH	2501	High Speed GMLAN Serial Data (-) (1)	III	-
41	0.5	WH/RD	5381	Brake Position Sensor 5 Volt Reference	III	LTG+M5T

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42	0.5	GY/RD	6109	Clutch Apply Sensor 5 Volt Reference	III	LTG+M13
43	-	-	-	Not Occupied	-	-
44	0.5 0.5 0.5	BK/WH GN/GY VT/GY	2151 465 6386	Signal Ground Fuel Pump Primary Relay Control Starter Enable Relay (PPEI 3) Control	III	LGX LT1-G96 LTG
45	0.5	YE/WH	1161	Accelerator Pedal Position Signal (1)	III	LTG
46	0.5 0.5	GY BN/WH	4109 419	Driver Mode Switch 5 Volt Reference Check Engine Indicator Control	III	LGX LT1
47	0.5 0.5 0.5 0.5	BN/RD WH/RD GY/RD BU/GY	2700 5381 6109 636	A/C Pressure Sensor 5 Volt Reference Brake Position Sensor 5 Volt Reference Clutch Apply Sensor 5 Volt Reference Outside Ambient Air Temperature Sensor Signal	III	LGX LT1+M5U LT1+MM6 LTG
48	0.5 0.5 0.5	WH/GN YE WH/BU	5380 6111 6289	Brake Position Sensor Signal Clutch Apply Sensor Signal Induction Air Temperature Sensor Signal	III	LT1+M5U LT1+MM6 LTG
49	0.5 0.5	VT/BU WH/GY	5292 1786	Powertrain Main Relay Fused Supply (3) Transmission Park/Neutral Signal (1)	III	LGX LTG+M5T
50	0.5 0.5	VT/BU WH/BU	5291 6311	Powertrain Main Relay Fused Supply (2) Cruise/ETC/TCC Brake Signal	III	LGX LTG
51	0.5 0.5 0.5	VT/YE VT/GN VT/BU	5985 439 5291	Accessory Wakeup Serial Data Run/Crank Ignition 1 Voltage Powertrain Main Relay Fused Supply (2)	III	- LT1-ESTOP LTG
52	0.5 0.5	RD/BN WH/BK	440 2366	Battery Positive Voltage Cooling Fan Control Relay Speed Signal	III	- LTG
53	0.5	BK/VT	1272	Accelerator Pedal Position Low Reference (2)	III	LT1
54	0.5 0.5	WH WH/GY	1310 459	EVAP Canister Vent Solenoid Control A/C Compressor Clutch Relay Control	III	LGX LTG

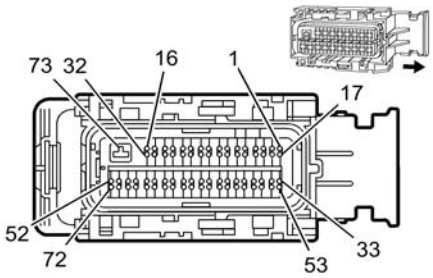
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55 - 56	-	-	-	Not Occupied	-	-
57	0.5 0.5	WH/BU GN	6311 380	Cruise/ETC/TCC Brake Signal A/C Refrigerant Pressure Sensor Signal	III	LT1 LTG
58	0.5	WH/VT	4108	Driver Mode Switch Signal	III	LTG
59	0.5	WH/BK	2366	Cooling Fan Control Relay Speed Signal	III	LT1
60	0.5	BN/GY	4008	Humidity Sensor Signal	III	LTG
61	0.5	WH/GN	5380	Brake Position Sensor Signal	III	LTG+M5T
62	0.5 0.5	VT/BU YE	5291 6111	Powertrain Main Relay Fused Supply (2) Clutch Apply Sensor Signal	III	LT1 LTG+M13
63	0.5	VT/GY	6386	Starter Enable Relay (PPEI 3) Control	III	LT1
64	0.5 0.5	BU/GY GN/GY	636 465	Outside Ambient Air Temperature Sensor Signal Fuel Pump Primary Relay Control	III	LGX LTG
65	0.5	WH	1310	EVAP Canister Vent Solenoid Control	III	LTG
66	0.5 0.5	WH/VT WH	4108 1310	Driver Mode Switch Signal EVAP Canister Vent Solenoid Control	III	LGX LT1
67	0.5 0.5 0.5	GN VT/BU YE	380 5292 5991	A/C Refrigerant Pressure Sensor Signal Powertrain Main Relay Fused Supply (3) Powertrain Relay Coil Control	III	LGX LT1 LTG-ESTOP
68	0.5 0.5	BK/YE BK/GY	5382 6110	Brake Position Sensor Low Reference Clutch Apply Sensor Low Reference	III	LT1+M5U LT1+MM6
69	0.5	GN/GY	465	Fuel Pump Primary Relay Control	III	LGX+NPP
70	0.5 0.5	VT/YE VT/GY	5985 6386	Accessory Wakeup Serial Data Starter Enable Relay (PPEI 3) Control	III	- LGX
71	0.5 0.5	VT/GN BN/WH	439 419	Run/Crank Ignition 1 Voltage Check Engine Indicator Control	III	LGX-ESTOP LTG
72	0.5 0.5	VT/BU YE	5290 5991	Powertrain Main Relay Fused Supply (1) Powertrain Relay Coil Control	III	LGX LT1-ESTOP

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73	2.5 3 2	VT/BU VT/BU VT/BU	5290 5290 5290	Powertrain Main Relay Fused Supply (1)	II II I	LGX LT1 LTG

COMPONENT CONNECTOR END VIEWS > K20 ENGINE CONTROL MODULE X2



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	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13575797	J-35616-35 (VT)	J-38125-11A	7116-4152-02	20	2	5
II	13575797	J-35616-35 (VT)	J-38125-11A	7116-4152-02	20	A	5
III	19330179	J-35616-64A (LT BU)	J-38125-12A	Not available	Not available	Not available	Not available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5 0.5	GY/WH BN/WH	3122 585	Heated Oxygen Sensor Heater Low Control Bank 1 Sensor (2) Transmission Oil Temperature Sensor Signal	III	LGX LTG+M13

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2	0.5 0.5	WH/BN BU	3223 410	Heated Oxygen Sensor Heater Low Control Bank 2 Sensor (2) Engine Coolant Temperature Sensor Signal	III	LGX LTG
3	0.5	BK/GN	2919	Fuel Rail Pressure Sensor Low Reference	III	LT1
4	-	-	-	Not Occupied	-	-
5	0.75 0.5	GY/BK GY/RD	3096 2704	Output Speed (Digital) Sensor 5 Volt Reference Manifold Absolute Pressure Sensor 5 Volt Reference	III	LT1+MM6 LTG
6	0.5	GY/YE	5297	Camshaft Position Exhaust Sensor Control (1)	III	LTG
7	0.5	GY/BU	5300	Camshaft Position Intake Sensor Control (1)	III	LTG
8	0.75	GN	3098	Output Speed (Digital) Signal	III	LT1+MM6
9	0.5 0.5 0.5	BN/GN BN/WH BN/RD	1174 585 2917	Oil Level Switch Signal Transmission Oil Temperature Sensor Signal Fuel Rail Pressure Sensor 5 Volt Reference	III	LGX LT1+MM6 LTG
10	0.5	VT/GY	3110	Heated Oxygen Sensor High Signal Bank 1 Sensor (1)	III	-
11	0.5 0.5	VT/WH WH	3210 311	Heated Oxygen Sensor High Signal Bank 2 Sensor (1) Right Headlamp High Beam Control	III	- LGX
12	0.5 0.5 0.5	VT/BU BK/WH BN/RD	3120 2051 2701	Heated Oxygen Sensor High Signal Bank 1 Sensor (2) Signal Ground Throttle Position Sensor 5 Volt Reference	III	- LGX LTG
13	0.5 0.5	VT/GN BU/WH	3220 3630	Heated Oxygen Sensor High Signal Bank 2 Sensor (2) Throttle Position Sensor (SENT1) Signal	III	- LTG
14	0.5 0.5	GY WH/RD	4109 2705	Driver Mode Switch 5 Volt Reference Oil Pressure Sensor 5 Volt Reference	III	LT1 LTG
15	0.5 0.5	BN/GY VT/BU	4008 6270	Humidity Sensor Signal Crankshaft 60X Sensor 5 Volt Reference	III	LT1 LTG
16	0.5	BN/WH	582	Throttle Actuator Control Close	III	LT1

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17	0.5	GY/WH	3113	Heated Oxygen Sensor Heater Low Control Bank 1 Sensor (1)	III	LGX
18	0.5 0.5	GN/YE BN/RD	3212 2917	Heated Oxygen Sensor Heater Low Control Bank 2 Sensor (1) Fuel Rail Pressure Sensor 5 Volt Reference	III	LGX LT1
19	0.5	BU/WH	2918	Fuel Rail Pressure Sensor Signal	III	LT1
20	-	-	-	Not Occupied	-	-
21	0.5 0.75 0.5	BU/WH WH/BK BK/GN	1937 3097 469	Secondary Fuel Level Sensor Signal Output Speed (Digital) Sensor Low Reference Manifold Absolute Pressure Sensor Low Reference	III	LGX LT1+MM6 LTG
22	0.5 0.5	BU/VT BK/GY	1589 5296	Primary Fuel Level Sensor Signal Camshaft Position Exhaust Sensor Low Reference (1)	III	LGX LTG
23	0.5 0.5	GN/WH BK/GN	5007 5301	Reverse Switch Signal Camshaft Position Intake Sensor Low Reference (1)	III	LGX+M13 LTG
24	-	-	-	Not Occupied	-	-
25	0.5 0.5	BK/BN BK/GN	586 2919	Transmission Oil Temperature Sensor Low Reference Fuel Rail Pressure Sensor Low Reference	III	LT1+MM6 LTG
26	0.5 0.5	WH/BK BU/WH	3111 2918	Heated Oxygen Sensor Low Signal Bank 1 Sensor (1) Fuel Rail Pressure Sensor Signal	III	- LTG
27	0.5 0.5	YE/WH WH/RD	3211 2705	Heated Oxygen Sensor Low Signal Bank 2 Sensor (1) Oil Pressure Sensor 5 Volt Reference	III	- LGX
28	0.5 0.5 0.5	WH/YE VT/BU BK/BN	3121 5293 2752	Heated Oxygen Sensor Low Signal Bank 1 Sensor (2) Powertrain Main Relay Fused Supply (4) Throttle Position Sensor Low Reference	III	- LGX LTG
29	0.5 0.5	YE/BU YE/BN	3221 331	Heated Oxygen Sensor Low Signal Bank 2 Sensor (2) Oil Pressure Sensor Signal	III	- LTG

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30	0.5	BK/VT	2755	Oil Pressure Sensor Low Reference	III	LTG
31	0.5	BK/VT	6272	Crankshaft 60X Sensor Low Reference	III	LTG
32	0.5 0.5	YE GN	581 3060	Throttle Actuator Control Open Turbo Bypass Solenoid Control Bank (1)	III	LT1 LTG
33	-	-	-	Not Occupied	-	-
34	0.5 0.5	WH/YE BN/RD	3121 2701	Heated Oxygen Sensor Low Signal Bank 1 Sensor (2) Throttle Position Sensor 5 Volt Reference	III	- LT1
35	0.5	WH/BK	3111	Heated Oxygen Sensor Low Signal Bank 1 Sensor (1)	III	LGX
36	0.5 0.75 0.5	YE/WH VT/GY BK/VT	3211 496 6754	Heated Oxygen Sensor Low Signal Bank 2 Sensor (1) Knock Sensor Signal (1) Cam Phaser X Low Reference	III	LGX LT1 LTG
37	0.5 0.75 0.5	WH/YE WH/GY BK/BN	3121 1876 6753	Heated Oxygen Sensor Low Signal Bank 1 Sensor (2) Knock Sensor Signal (2) Cam Phaser W Low Reference	III	LGX LT1 LTG
38	0.5 0.5 0.5	YE/BU GY/GN VT/BK	3221 587 5273	Heated Oxygen Sensor Low Signal Bank 2 Sensor (2) Skip/Shift Solenoid Control Camshaft Position Exhaust Sensor (1)	III	LGX LT1+MM6 LTG
39	0.5 0.5 0.5	BK/YE WH YE/VT	1716 121 5275	Knock Sensor Low Reference (1) Engine Speed Signal Camshaft Position Intake Sensor (1)	III	LGX LT1 LTG
40	0.5 0.5 0.5	BK/GY VT/BU GN	2303 6091 6271	Knock Sensor Low Reference (2) Crankshaft Position Sensor Replicated Signal Crankshaft 60X Sensor Signal	III	LGX LT1+NKC LTG
41	0.5 0.5	GY/WH WH	3113 121	Heated Oxygen Sensor Heater Low Control Bank 1 Sensor (1) Engine Speed Signal	III	- LTG
42	0.5 0.5 0.5	GY/WH YE/WH VT/BU	3122 3200 6091	Heated Oxygen Sensor Heater Low Control Bank 1 Sensor (2) Throttle Inlet Absolute Pressure Sensor Signal	III	- LGX LTG+NKC

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				Crankshaft Position Sensor Replicated Signal		
43	0.5 0.5 0.5	WH/RD GN/WH BK/WH	3201 432 2051	Throttle Inlet Absolute Pressure Sensor 5 Volt Reference Manifold Absolute Pressure Sensor Signal Signal Ground	III	LGX LT1 LTG
44	0.5 0.5	GY/RD BK/BU	2704 2129	Manifold Absolute Pressure Sensor 5 Volt Reference Ignition Control Low Reference Bank 1	III	LT1 LTG
45	0.75 0.5	GY/BK GN/BU	3096 2123	Output Speed (Digital) Sensor 5 Volt Reference Ignition Control (3)	III	LGX+M13 LTG
46	0.5 0.5	YE/RD BU/VT	2709 2121	Fuel Tank Pressure Sensor 5 Volt Reference Ignition Control (1)	III	LGX LTG
47	0.5	GY/RD	2704	Manifold Absolute Pressure Sensor 5 Volt Reference	III	LGX
48	0.5 0.75	BK/GN BU	469 4802	Manifold Absolute Pressure Sensor Low Reference Direct Fuel Injector (DFI) High Voltage Control Cylinder 2	III	LGX LTG
49	0.5 0.5 0.75	BN/WH WH/BU GY/BU	585 6289 4804	Transmission Oil Temperature Sensor Signal Induction Air Temperature Sensor Signal Direct Fuel Injector (DFI) High Voltage Control Cylinder 4	III	LGX+M13 LT1 LTG
50	0.5 0.75	WH/VT GN	4108 4803	Driver Mode Switch Signal Direct Fuel Injector (DFI) High Voltage Control Cylinder 3	III	LT1 LTG
51	0.5 0.5 0.75	BK/WH GN/BU BN	2251 428 4801	Signal Ground EVAP Canister Purge Solenoid Control Direct Fuel Injector (DFI) High Voltage Control Cylinder 1	III	LGX LT1 LTG
52	0.5 0.5 0.5	BN/WH GN/WH YE	582 492 581	Throttle Actuator Control Close Mass Air Flow Sensor Signal Throttle Actuator Control Open	III	LGX LT1 LTG
53	0.5	BN	25	Charge Indicator Control	III	LT1
54	0.5 0.5	VT/BU BK/BN	3120 2752	Heated Oxygen Sensor High Signal Bank 1 Sensor (2) Throttle Position Sensor Low	III	- LT1

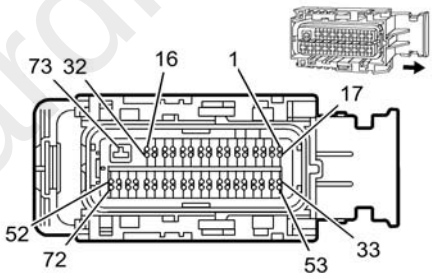
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				Reference		
55	0.5 0.5	VT/GY GY	3110 23	Heated Oxygen Sensor High Signal Bank 1 Sensor (1) Generator Field Duty Cycle Signal	III	LGX LT1
56	0.5 0.75 0.5	VT/WH BK/YE GY/BU	3210 1716 5282	Heated Oxygen Sensor High Signal Bank 2 Sensor (1) Knock Sensor Low Reference (1) Camshaft Phaser Exhaust Solenoid (1)	III	LGX LT1 LTG
57	0.5 0.75 0.5	VT/BU BK/GY VT/BN	3120 2303 5284	Heated Oxygen Sensor High Signal Bank 1 Sensor (2) Knock Sensor Low Reference (2) Camshaft Phaser Intake Solenoid (1)	III	LGX LT1 LTG
58	0.5 0.5	VT/GN WH/GY	3220 1786	Heated Oxygen Sensor High Signal Bank 2 Sensor (2) Transmission Park/Neutral Signal (1)	III	LGX LT1+M5U
59	0.5 0.5	VT/GY BU	496 179	Knock Sensor Signal (1) Oil Pump Command Signal	III	LGX LT1
60	0.5 0.5 0.5	GY/WH WH/GY BN/GN	3122 1876 1174	Heated Oxygen Sensor Heater Low Control Bank 1 Sensor (2) Knock Sensor Signal (2) Oil Level Switch Signal	III	- LGX LT1
61	0.5	GN/YE	3212	Heated Oxygen Sensor Heater Low Control Bank 2 Sensor (1)	III	-
62	0.5	WH/BN	3223	Heated Oxygen Sensor Heater Low Control Bank 2 Sensor (2)	III	-
63	0.5 0.5 0.5	BK/VT BK/GN BN/YE	2760 469 258	Intake Air Temperature Sensor Low Reference Manifold Absolute Pressure Sensor Low Reference Waste Gate Solenoid Control	III	LGX LT1 LTG
64	0.5	BU	179	Oil Pump Command Signal	III	LTG
65	0.75 0.5	GN BU/WH	3098 2122	Output Speed (Digital) Signal Ignition Control (2)	III	LGX+M13 LTG
66	0.75 0.5	WH/BK YE/BU	3097 2124	Output Speed (Digital) Sensor Low Reference Ignition Control (4)	III	LGX+M13 LTG
67	0.5 0.5	GN/WH YE	432 1457	Manifold Absolute Pressure Sensor Signal	III	LGX LT1+MM6

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				Gear Sensor Signal (1)		
68	0.5 0.75	WH BU/GY	232 4902	Gear Sensor Signal (2) Direct Fuel Injector (DFI) High Voltage Supply Cylinder 2	III	LT1+MM6 LTG
69	0.5 0.75	BK/VT BU/WH	2760 4904	Intake Air Temperature Sensor Low Reference Direct Fuel Injector (DFI) High Voltage Supply Cylinder 4	III	LT1 LTG
70	0.5 0.5 0.75	WH/BU BU/WH GN/GY	6289 3630 4903	Induction Air Temperature Sensor Signal Throttle Position Sensor (SENT1) Signal Direct Fuel Injector (DFI) High Voltage Supply Cylinder 3	III	LGX LT1 LTG
71	0.75	BN/WH	4901	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 1	III	LTG
72	0.5 0.5	YE BN/WH	581 582	Throttle Actuator Control Open Throttle Actuator Control Close	III	LGX LTG
73	2.5 3 2	BK/WH BK/WH BK/WH	451 451 451	Signal Ground	II II I	LGX LT1 LTG

COMPONENT CONNECTOR END VIEWS > K20 ENGINE CONTROL MODULE X3



Connector Part Information

- Harness Type: Engine
- 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

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Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13575797	J-35616-35 (VT)	J-38125-11A	7116-4152-02	20	2	5
II	13575797	J-35616-35 (VT)	J-38125-11A	7116-4152-02	20	A	5
III	19330179	J-35616-64A (LT BU)	J-38125-12A	Not available	Not available	Not available	Not available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5 0.5 0.5	GN YE/BN GY/WH	5492 331 3113	Cylinder Shutoff Solenoid Control (2) Oil Pressure Sensor Signal Heated Oxygen Sensor Heater Low Control Bank 1 Sensor (1)	III	LGX LT1 LTG
2	0.5 0.5	BU WH/RD	5491 2705	Cylinder Shutoff Solenoid Control (1) Oil Pressure Sensor 5 Volt Reference	III	LGX LT1
3	0.5 0.5	GN/BN BN/YE	5298 2161	Camshaft Position Exhaust Sensor Control (2) Fuel Rail Pressure Sensor 2 Signal	III	LGX LT1
4	0.5 0.5	YE GN/BU	5276 428	Camshaft Position Intake Sensor (2) EVAP Canister Purge Solenoid Control	III	LGX LTG
5	0.5	WH/BU	5302	Camshaft Position Intake Sensor Control (2)	III	LGX
6	0.5	VT/BU	6270	Crankshaft 60X Sensor 5 Volt Reference	III	LGX
7	0.5 0.5	GN BN/BU	6271 357	Crankshaft 60X Sensor Signal Oil Temperature Sensor Signal	III	LGX LT1
8	0.5 0.5 0.5	BN/RD GN/VT YE/RD	2701 2032 2709	Throttle Position Sensor 5 Volt Reference Coolant Temperature Sensor Signal Fuel Tank Pressure Sensor 5 Volt Reference	III	LGX LT1 LTG
9	-	-	-	Not Occupied	-	-

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10	0.5	VT/BU	6270	Crankshaft 60X Sensor 5 Volt Reference	III	LT1
11	0.5 0.75	GN/BU GY/BK	2123 3096	Ignition Control (3) Output Speed (Digital) Sensor 5 Volt Reference	III	LT1 LTG+M13
12	0.5 0.5	BN/BU YE/BU	2126 2124	Ignition Control (6) Ignition Control (4)	III	LGX LT1
13	0.5	BU/GY	2125	Ignition Control (5)	III	-
14	0.5 0.5 0.5	YE/BU BN/BU GY/RD	2124 2126 7331	Ignition Control (4) Ignition Control (6) Pre Throttle Air Temp and Press (TMAP) 5 Volt Reference	III	LGX LT1 LTG
15	0.5	BK/GY	2130	Ignition Control Low Reference Bank 2	III	-
16	0.75 0.5	YE VT/BU	7301 5293	High Pressure Fuel Pump Actuator High - Control Powertrain Main Relay Fused Supply (4)	III	- LTG
17	0.5 0.5	YE/GN BK/VT	4321 2755	Park Phaser Lock Control Oil Pressure Sensor Low Reference	III	LGX LT1
18	0.5 0.5 0.5	GY/GN YE/RD BN	587 7344 25	Skip/Shift Solenoid Control Clutch Position Sensor Voltage Reference Charge Indicator Control	III	LGX LT1+MM6 LTG
19	0.5 0.5 0.5	BK/BN BK/YE GY	5299 1704 23	Camshaft Position Exhaust Sensor Low Reference (2) Sensor Low Reference Generator Field Duty Cycle Signal	III	LGX LT1+MM6 LTG
20	0.5 0.5	VT/BU BK/WH	5274 2151	Camshaft Position Exhaust Sensor (2) Signal Ground	III	LGX LTG
21	0.5	BK/VT	5303	Camshaft Position Intake Sensor Low Reference (2)	III	LGX
22	0.5	BK/VT	6272	Crankshaft 60X Sensor Low Reference	III	LGX
23	0.5 0.5	BU/WH BK/BN	3630 6273	Throttle Position Sensor (SENT1) Signal Oil Temperature Sensor Low Reference	III	LGX LT1

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24	0.5 0.5	BK/BN BK/BN	2752 2761	Throttle Position Sensor Low Reference Coolant Temperature Sensor Low Reference	III	LGX LT1
25	0.5 0.5	WH BK/VT	121 6272	Engine Speed Signal Crankshaft 60X Sensor Low Reference	III	LGX LT1
26	0.5 0.5	BN GN	25 6271	Charge Indicator Control Crankshaft 60X Sensor Signal	III	LGX LT1
27	0.5 0.75	BU/WH WH/BK	2122 3097	Ignition Control (2) Output Speed (Digital) Sensor Low Reference	III	LT1 LTG+M13
28	0.5 0.5	GN/BU GN/GY	2123 2127	Ignition Control (3) Ignition Control (7)	III	LGX LT1
29	0.5 0.5	BU/WH VT/WH	2122 2128	Ignition Control (2) Ignition Control (8)	III	LGX LT1
30	0.5 0.5	BU/VT BK/VT	2121 7332	Ignition Control (1) Pre Throttle Air Temp and Press (TMAP) Low Reference	III	- LTG
31	0.5	BK/BU	2129	Ignition Control Low Reference Bank 1	III	-
32	0.75	VT/BK	7300	High Pressure Fuel Pump Actuator Low - Control	III	-
33	0.5 0.5	GN/BU YE/VT	428 5275	EVAP Canister Purge Solenoid Control Camshaft Position Intake Sensor (1)	III	LGX LT1
34	0.5 0.5	BU GY/BU	179 5300	Oil Pump Command Signal Camshaft Position Intake Sensor Control (1)	III	LGX LT1
35	0.5 0.5	GY/YE GN	5297 6935	Camshaft Position Exhaust Sensor Control (1) Heated Oxygen Sensor Current Adjust Signal	III	LGX LTG
36	0.5 0.5	VT/BK YE/GY	5273 6936	Camshaft Position Exhaust Sensor (1) Heated Oxygen Sensor Collector Signal	III	LGX LTG
37	0.5 0.5	BK/GY BN/WH	5296 6933	Camshaft Position Exhaust Sensor Low Reference (1) Heated Oxygen Sensor Current Pump Signal	III	LGX LTG

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38	0.5 0.5	BU BN	410 6934	Engine Coolant Temperature Sensor Signal Heated Oxygen Sensor Ground	III	LGX LTG
39	0.5 0.5	BN/RD VT/BN	7445 5284	Fuel Line Pressure Sensor 5 Volt Reference Camshaft Phaser Intake Solenoid (1)	III	LGX LT1
40	0.5 0.5	BN/RD GN/WH	2917 432	Fuel Rail Pressure Sensor 5 Volt Reference Manifold Absolute Pressure Sensor Signal	III	LGX LTG
41	0.5 0.5	BK/GN BN/GN	2919 1174	Fuel Rail Pressure Sensor Low Reference Oil Level Switch Signal	III	LGX LTG
42	-	-	-	Not Occupied	-	-
43	0.5 0.5 0.5	BK/BU GY BU/VT	6755 5493 1589	Cam Phaser Y Low Reference Cylinder Shutoff Solenoid Control (3) Primary Fuel Level Sensor Signal	III	LGX LT1 LTG
44	0.5 0.5 0.5	GN YE/BU BU/WH	5272 5494 1937	Camshaft Phaser Intake Solenoid (2) Cylinder Shutoff Solenoid Control (4) Secondary Fuel Level Sensor Signal	III	LGX LT1 LTG
45	0.5 0.5	VT/BN GY/BU	5284 4804	Camshaft Phaser Intake Solenoid (1) Direct Fuel Injector (DFI) High Voltage Control Cylinder 4	III	LGX LT1
46	0.5 0.5 0.5	BK/BN BU VT/BU	6753 4802 7330	Cam Phaser W Low Reference Direct Fuel Injector (DFI) High Voltage Control Cylinder 2 Pre Throttle Air Temp and Press (TMAP) Air Pressure Signal	III	LGX LT1 LTG
47	0.75 0.5 0.5	WH/GN VT/GN WH/BU	4805 4806 7329	Direct Fuel Injector (DFI) High Voltage Control Cylinder 5 Direct Fuel Injector (DFI) High Voltage Control Cylinder 6 Pre-Throttle Air Temp and Press (TMAP) Temperature Signal	III	LGX LT1 LTG

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48	0.75 0.5 0.5	BU GY YE	4802 4808 3054	Direct Fuel Injector (DFI) High Voltage Control Cylinder 2 Direct Fuel Injector (DFI) High Voltage Control Cylinder 8 Turbo Intake Pressure Sensor Signal Bank (1)	III	LGX LT1 LTG
49	0.75 0.5	BN GN	4801 4803	Direct Fuel Injector (DFI) High Voltage Control Cylinder 1 Direct Fuel Injector (DFI) High Voltage Control Cylinder 3	III	LGX LT1
50	0.75 0.5	GY/BU YE/GY	4804 4807	Direct Fuel Injector (DFI) High Voltage Control Cylinder 4 Direct Fuel Injector (DFI) High Voltage Control Cylinder 7	III	LGX LT1
51	0.75 0.5	VT/GN WH/GN	4806 4805	Direct Fuel Injector (DFI) High Voltage Control Cylinder 6 Direct Fuel Injector (DFI) High Voltage Control Cylinder 5	III	LGX LT1
52	0.75 0.5 0.5	GN BN VT/BK	4803 4801 7300	Direct Fuel Injector (DFI) High Voltage Control Cylinder 3 Direct Fuel Injector (DFI) High Voltage Control Cylinder 1 High Pressure Fuel Pump Actuator Low - Control	III	LGX LT1 LTG
53	0.5	BK/GN	5301	Camshaft Position Intake Sensor Low Reference (1)	III	LT1
54	-	-	-	Not Occupied	-	-
55	0.5	GY/BU	5300	Camshaft Position Intake Sensor Control (1)	III	LGX
56	0.5	YE/VT	5275	Camshaft Position Intake Sensor (1)	III	LGX
57	0.5	BK/GN	5301	Camshaft Position Intake Sensor Low Reference (1)	III	LGX
58	-	-	-	Not Occupied	-	-
59	0.5 0.5 0.5	BU/WH BK/BN BK/GY	7446 6753 2303	Fuel Line Pressure Sensor Signal Cam Phaser W Low Reference Knock Sensor Low Reference (2)	III	LGX LT1 LTG
60	0.5 0.5	BU/WH WH/GY	2918 1876	Fuel Rail Pressure Sensor Signal Knock Sensor Signal (2)	III	LGX LTG

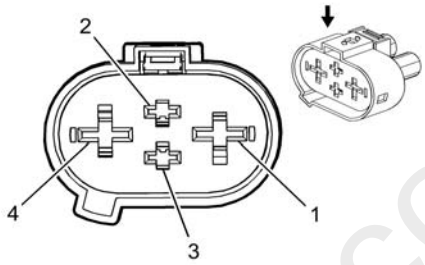
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61	0.5 0.5	GY BK/YE	23 1716	Generator Field Duty Cycle Signal Knock Sensor Low Reference (1)	III	LGX LTG
62	0.5	VT/GY	496	Knock Sensor Signal (1)	III	LTG
63	0.5 0.5 0.75	BK/GY BU GN	6756 5491 3098	Cam Phaser Z Low Reference Cylinder Shutoff Solenoid Control (1) Output Speed (Digital) Signal	III	LGX LT1 LTG+M13
64	0.5 0.5	GN/BN GN	5283 5492	Camshaft Phaser Exhaust Solenoid (2) Cylinder Shutoff Solenoid Control (2)	III	LGX LT1
65	0.5 0.5	GY/BU BU/WH	5282 4904	Camshaft Phaser Exhaust Solenoid (1) Direct Fuel Injector (DFI) High Voltage Supply Cylinder 4	III	LGX LT1
66	0.5 0.5	BK/VT BU/GY	6754 4902	Cam Phaser X Low Reference Direct Fuel Injector (DFI) High Voltage Supply Cylinder 2	III	LGX LT1
67	0.75 0.5 0.5	GN/WH VT/GY GN/WH	4905 4906 5007	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 5 Direct Fuel Injector (DFI) High Voltage Supply Cylinder 6 Reverse Switch Signal	III	LGX LT1 LTG+M13
68	0.75 0.5 0.5	BU/GY GY/WH BU/WH	4902 4908 890	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 2 Direct Fuel Injector (DFI) High Voltage Supply Cylinder 8 Fuel Tank Pressure Sensor Signal	III	LGX LT1 LTG
69	0.75 0.5	BN/WH GN/GY	4901 4903	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 1 Direct Fuel Injector (DFI) High Voltage Supply Cylinder 3	III	LGX LT1
70	0.75 0.5	BU/WH WH/YE	4904 4907	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 4 Direct Fuel Injector (DFI) High Voltage Supply Cylinder 7	III	LGX LT1
71	0.75 0.5	VT/GY GN/WH	4906 4905	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 6 Direct Fuel Injector (DFI) High Voltage Supply Cylinder 5	III	LGX LT1
72	0.75 0.5	GN/GY BN/WH	4903 4901	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 3	III	LGX LT1

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	0.5	YE	7301	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 1 High Pressure Fuel Pump Actuator High - Control		LTG
73	2.5 3 2	BK/WH BK/WH BK/WH	451 451 451	Signal Ground	II II I	LGX LT1 LTG

COMPONENT CONNECTOR END VIEWS > K22 COOLING FAN CONTROL MODULE (Y4Q)



Connector Part Information

- Harness Type: Forward Lamp
- OEM Connector: 13161013
- Service Connector: 19300216
- Description: 4-Way F 4.8, 9.5 Series, Sealed (BK)

Terminal Part Information

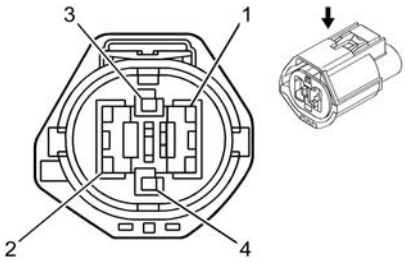
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-22 (RD)	Not Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-40 (BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	10	RD/GN	242	Battery Positive Voltage	I	(LTG)/(LGX+Y4Q)
2	-	-	-	Not Occupied	-	-

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3	0.5	WH/BK	2366	Cooling Fan Control Relay Speed Signal	II	(LTG)/(LGX+Y4Q)
4	10	BK	550	Ground	I	(LTG)/(LGX+Y4Q)

COMPONENT CONNECTOR END VIEWS > K22 COOLING FAN CONTROL MODULE (-Y4Q)



Connector Part Information

- Harness Type: Forward Lamp
- OEM Connector: 7283-8496-30
- Service Connector: 19115593
- Description: 4-Way F Mixed Series, Sealed (BK)

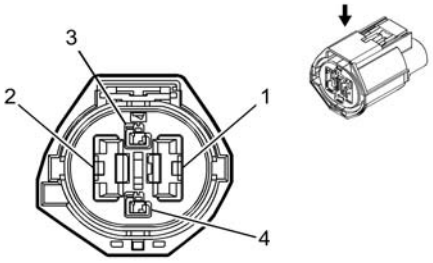
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-22 (RD)	Not Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	10	BK	550	Ground	I	LGX-Y4Q
2	5	RD/YE	1142	Battery Positive Voltage	I	LGX-Y4Q
3	-	-	-	Not Occupied	-	-
4	0.5	WH/BK	2366	Cooling Fan Control Relay Speed Signal	II	LGX-Y4Q

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COMPONENT CONNECTOR END VIEWS > K22 COOLING FAN CONTROL MODULE (LT1)



Connector Part Information

- Harness Type: Forward Lamp
- OEM Connector: 19181810
- Service Connector: 19332593
- Description: 4-Way F 1.5, 9.5 Series, Sealed (D-GY)

Terminal Part Information

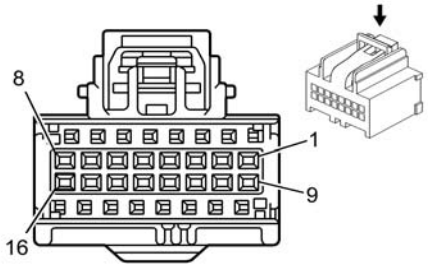
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-42 (RD)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	10	RD/GN	242	Battery Positive Voltage	II	LT1/LT4
2	10	BK	650	Ground	II	LT1/LT4
3	-	-	-	Not Occupied	-	-
4	0.5	BK	2366	Cooling Fan Control Relay Speed Signal	I	LT1/LT4

COMPONENT CONNECTOR END VIEWS > K23 FOLDING TOP CONTROL MODULE X1

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(CM8)



Connector Part Information

- Harness Type: Folding Top
- OEM Connector: 15136073
- Service Connector: Service by Harness - See Part Catalog
- Description: 16-Way F 0.64 Kaizen Series (BK)

Terminal Part Information

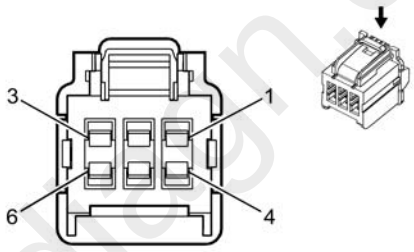
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575230	J-35616-64B (L-BU)	J-38125-215A	Not Stocked in Kit	Not Available	P	P

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN	162	Folding Top Motor Up Control	I	-
2	0.5	GY	163	Folding Top Motor Down Control	I	-
3 - 4	-	-	-	Not Occupied	-	-
5	0.5	GN	7092	Roof Door Module Roof Door Module Pump Manifold Valve 3	I	-
6	0.5	WH	7091	Power Roof Module Roof Door Module Pump Valve 2	I	-
7	0.5	BU	7087	Roof Door Module Pump Valve Manifold Roof Door Module Valve 1	I	-
8	0.5	YE	3249	Folding Top Position Sensor Control	I	-

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9	0.5	BN	5030	Sunroof Switch Data 4 Signal	I	-
10	0.5	BU/WH	5029	Sunroof Switch Data 3 Signal	I	-
11	0.5	GN/WH	7095	Roof Door Module Tonneau Cylinder Extended Hall Sensor	I	-
12	0.5	YE/GN	5934	Front Tonneau Position Sensor Signal	I	-
13	0.5	BN/YE	7163	Right Latch Sensor Retractable Roof Open Signal	I	-
14	0.5	GY/BN	7162	Left Latch Sensor Retractable Roof Open Signal	I	-
15	0.5	RD/WH	5027	Sunroof Switch Data 1 Signal	I	-
16	0.5	GN/BK	5028	Sunroof Switch Data 2 Signal	I	-

COMPONENT CONNECTOR END VIEWS > K23 FOLDING TOP CONTROL MODULE X2 (CM8)



Connector Part Information

- Harness Type: Folding Top
- OEM Connector: 13583929
- Service Connector: Service by Harness - See Part Catalog
- Description: 6-Way F 280 GT Series (BK)

Terminal Part Information

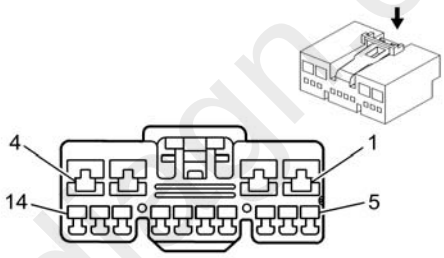
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575289	J-35616-42 (RD)	J-38125-11A	7116-4122-02	10	D	G

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II	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	-	-	-	Not Occupied	-	-
2	2.5	BK	930	-	II	-
3	-	-	-	Not Occupied	-	-
4	0.5	BK/YE	7088	Roof Door Module Pass Door Window Regulator Signal	I	-
5	0.5	RD/BN	7086	Roof Door Module Driver Door Window Regulator Signal	I	-
6	2.5	RD	931	-	II	-

COMPONENT CONNECTOR END VIEWS > K23 FOLDING TOP CONTROL MODULE X3



Connector Part Information

- Harness Type: Body
- OEM Connector: 19179972
- Service Connector: 19179972
- Description: 14-Way F 0.64, 2.8 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	13575838	J-35616-35 (VT)	J-38125-11A	7116-4110-02	12	E	C

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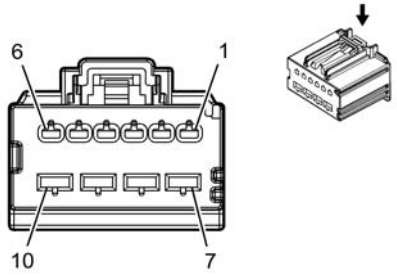
II	13575838	J-35616-35 (VT)	J-38125-11A	7116-4111-02	13	C	A
III	13575839	J-35616-35 (VT)	J-38125-11A	Not available	Not available	Not available	Not available
IV	13575847	J-35616-64B (LT BU)	J-38125-553	7116-4720-02	16	H	H

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	RD/WH	5740	Battery Positive Voltage	III	A1AC
2	0.5	RD/WH	1040	Battery Positive Voltage	I	A1AC
3	0.35	YE/BN	7603	Retractable Roof Sensor Control	I	A1AC
4	1	BK	1150	Ground	II	A1AC
5	0.35	VT	5936	Folding Top Open Switch Signal	IV	A1AC
6	0.35	GN	5060	Low Speed GMLAN Serial Data	IV	A1AC
7	0.35	WH	5937	Folding Top Header Latch Switch Signal	IV	A1AC
8	0.35	GN/YE	5744	Left Side Luggage Barrier Limit Switch Signal	IV	A1AC
9	-	-	-	Not Occupied	-	-
10	0.35	VT	4608	Sunroof Switch Signal	IV	A1AC
11	0.35	VT/WH	5933	Folding Top Position Sensor Signal	IV	A1AC
12	0.35	BN	5935	Folding Top Unlatch Switch Signal	IV	A1AC
13 - 14	-	-	-	Not Occupied	-	-

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Service Manual: WIRING SYSTEMS AND POWER MANAGEMENT - COMPONENT CONNECTOR END VIEWS - K29F X1 TO M55D

COMPONENT CONNECTOR END VIEWS > K29F SEAT HEATING CONTROL MODULE - FRONT X1



Connector Part Information

- Harness Type: Passenger Seat
- OEM Connector: 31372-1000
- Service Connector: Service by Harness - See Part Catalog
- Description: 10-Way F 1.5, 2.8 Series (BK)

Terminal Part Information

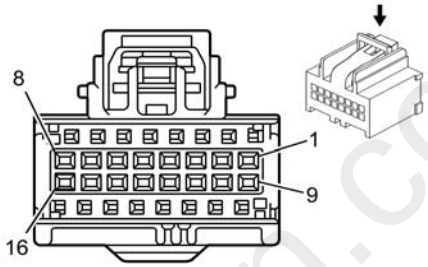
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-35 (VT)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	-	-	-	Not Occupied	-	-
2	0.75	BN/BU	2479	Passenger Heated Seat Element Control	I	-
3	0.75	GY/BK	2480	Passenger Heated Seat Element Low Reference	I	-
4	0.5	BN/BK	2078	Driver Heated Seat Element Low Reference	I	-

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5	-	-	-	Not Occupied	-	-
6	0.5	BN/VT	2077	Driver Heated Seat Element Control	I	-
7	0.75	RD/BU	5240	Battery Positive Voltage	II	-
8	1.5	BK	2250	Ground	II	-
9	-	-	-	Not Occupied	-	-
10	0.75	VT/WH	639	Run/Crank Ignition 1 Voltage	II	-

COMPONENT CONNECTOR END VIEWS > K29F SEAT HEATING CONTROL MODULE - FRONT X2



Connector Part Information

- Harness Type: Passenger Seat
- OEM Connector: 7283-9076-30
- Service Connector: Service by Harness - See Part Catalog
- Description: 16-Way F 0.64 Kaizen Series (BK)

Terminal Part Information

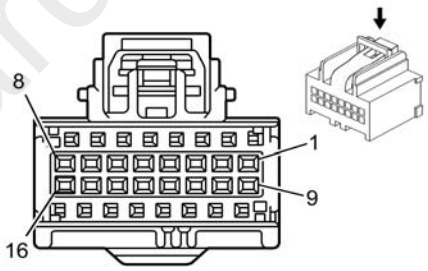
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BK/YE	2080	Driver Heated Seat NTC Low Reference	I	-

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2	0.35	BK/GY	2435	Passenger Heated Seat NTC Low Reference	I	-
3	0.35	BU	2425	Driver Heated Back NTC Signal	I	-
4	0.35	WH/BU	2436	Passenger Heated Back NTC Signal	I	-
5	0.35	WH/GY	2434	Passenger Heated Seat NTC Signal	I	-
6	0.35	YE/GY	2079	Driver Heated Seat NTC Signal	I	-
7	-	-	-	Not Occupied	-	-
8	0.35	GN/BU	6133	Local Interconnect Network Serial Data Bus 2	I	-
9	0.35	GN/VT	5906	Driver Seat Vent Motor Control 1	I	-
10	0.35	VT/WH	5908	Passenger Seat Vent Motor Control 1	I	-
11	-	-	-	Not Occupied	-	-
12	0.35	BK/GN	2482	Passenger Heated Back NTC Low Reference	I	-
13 - 16	-	-	-	Not Occupied	-	-

COMPONENT CONNECTOR END VIEWS > K31 NAVIGATION CONTROL MODULE X1



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 15136073
- Service Connector: 15136073
- Description: 16-Way F 0.64 Kaizen Series (BK)

Terminal Part Information

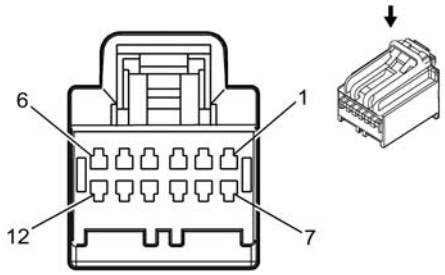
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Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13575845	J-35616-64B (LT BU)	J-38125-215A	Not available	Not available	Not available	Not available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	RD/BU	3940	Battery Positive Voltage	I	IO6+MAW
2	0.35	GN/YE	7066	Entertainment Remote Enable Signal	I	IO6+MAW
3	0.5	GY/GN	1102	Low Speed GMLAN Serial Data #2	I	IO6+MAW
4	-	-	-	Not Occupied	-	-
5	0.35	GN/BU	7532	Local Interconnect Network Serial Data Bus 10	I	IO6+MAW
6	0.35	BN/GN	4502	Video Display Request Signal	I	IO6+MAW
7	0.35	GN/WH	7527	Local Interconnect Network Serial Data Bus 5	I	IO6+MAW
8	0.5	BK/WH	1551	Signal Ground	I	IO6+MAW
9	0.35	BK/GY	5152	Voice Recognition Audio Low Reference	I	IO6+MAW
10	0.35	GY/YE	5149	Voice Recognition Audio Signal	I	IO6+MAW
11	0.5	BARE	1792	Low Reference	I	IO6+MAW
12 - 14	-	-	-	Not Occupied	-	-
15	0.35	BU	655	Cellular Telephone Microphone Signal	I	IO6+MAW
16	0.35	BK/BN	654	Cellular Telephone Microphone Low Reference	I	IO6+MAW

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COMPONENT CONNECTOR END VIEWS > K31 NAVIGATION CONTROL MODULE X2



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 19151154
- Service Connector: 19151154
- Description: 12-Way F 64 Series, Sealed (GY)

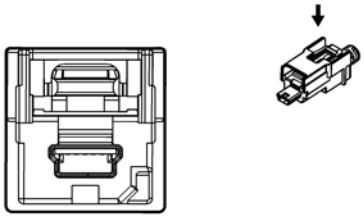
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13575845	J-35616-64B (LT BU)	J-38125-215A	Not available	Not available	Not available	Not available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	-	-	-	Not Occupied	-	-
3	0.35	BU/WH	2062	Navigation Audio High Mono Signal	I	IO6+MAW
4	0.35	BU/VT	4609	Audio Request Signal	I	IO6+MAW
5	0.35	GY	5839	Left Auxiliary Audio Signal (2)	I	IO6+MAW
6	0.5	BARE	5842	Auxiliary Audio Screen (2)	I	IO6+MAW
7 - 8	-	-	-	Not Occupied	-	-
9	0.35	VT/BU	2061	Navigation Audio Low Mono Signal	I	IO6+MAW
10	0.5	BARE	5345	Auxiliary Audio Low Reference (1)	I	IO6+MAW
11	0.35	GN	5841	Right Auxiliary Audio Signal (2)	I	IO6+MAW
12	0.35	VT	5843	Auxiliary Audio Common Signal	I	IO6+MAW

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COMPONENT CONNECTOR END VIEWS > K31 NAVIGATION CONTROL MODULE X3



Connector Part Information

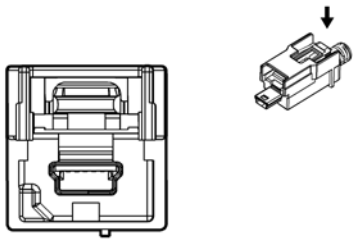
- Harness Type: Instrument Panel USB
- OEM Connector: 13576672
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: 5-Way M 2.0 Mini-B USB Type (GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
-	-	USB	-	USB Serial Data	I	-

COMPONENT CONNECTOR END VIEWS > K31 NAVIGATION CONTROL MODULE X5



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Connector Part Information

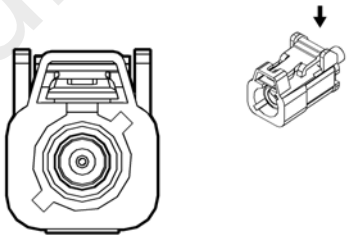
- Harness Type: Instrument Panel LVDS
- OEM Connector: 13578153
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: 5-Way M 2.0 Mini-B USB Type (GN)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
-	-	LVDS	-	(Infotainment) Infotainment Display Signal	I	-

COMPONENT CONNECTOR END VIEWS > K31 NAVIGATION CONTROL MODULE X6



Connector Part Information

- Harness Type: Instrument Panel COAX
- OEM Connector: 13586874
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: 1-Way F Coax Type (BU)

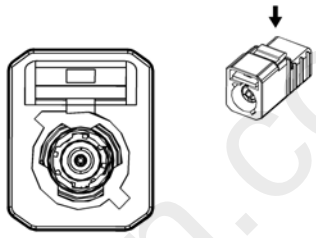
Terminal Part Information

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Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
-	-	COAX	-	(GPS only) Coaxial Antenna GPS Signal	I	-

COMPONENT CONNECTOR END VIEWS > K31 NAVIGATION CONTROL MODULE X7



Connector Part Information

- Harness Type: Instrument Panel COAX
- OEM Connector: 13585423
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: 1-Way F Coax Type (GY)

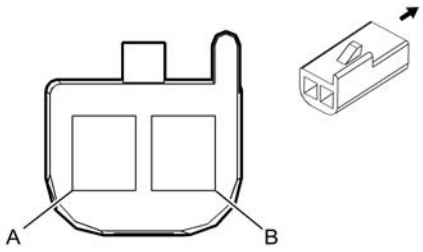
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
-	-	COAX	-	(DAB/DMB) Coaxial Antenna DAB Signal	I	-

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COMPONENT CONNECTOR END VIEWS > K32 STEERING WHEEL HEATING CONTROL MODULE (UVD)



Connector Part Information

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

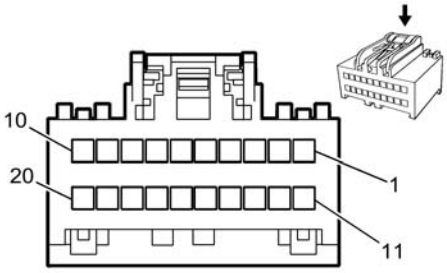
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	VT	5883	Heated Steering Wheel Switch Signal	I	-
B	0.35	PK	5884	Heated Steering Wheel Switch LED Control	I	-

COMPONENT CONNECTOR END VIEWS > K33 HVAC CONTROL MODULE X1

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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)

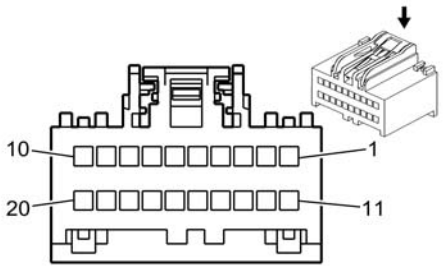
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13575845	J-35616-64B (LT BU)	J-38125-215A	Not available	Not available	Not available	Not available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 3	-	-	-	Not Occupied	-	-
4	0.5	BU/WH	734	Inside Air Temperature Sensor Signal	I	-
5 - 13	-	-	-	Not Occupied	-	-
14	0.5	YE/VT	1783	Twilight Sentinel Delay Signal	I	-
15 - 17	-	-	-	Not Occupied	-	-
18	0.35	BN	518	Lower Left Air Temperature Sensor Signal	I	C68
19 - 20	-	-	-	Not Occupied	-	-

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COMPONENT CONNECTOR END VIEWS > 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 with WH Terminal Position Assurance)

Terminal Part Information

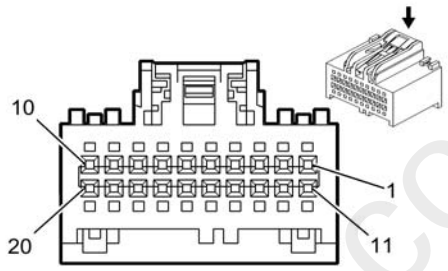
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13575845	J-35616-64B (LT BU)	J-38125-215A	SAIT-A03T-M064	23	P	P

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	Local Interconnect Network Serial Data Bus 9	I	-
5 - 7	-	-	-	Not Occupied	-	-
8	0.5	BK	1450	Ground	I	-
9	0.35	VT/GY	539	Run/Crank Ignition 1 Voltage	I	(D31+UE1/UI3) /(DD8)/(TR6)
10	0.5	BU/YE	7574	Electric Variable Displacement Control	I	-
11	0.5	BU/BN	7573	Electric Variable Displacement Supply	I	-
12 - 14	-	-	-	Not Occupied	-	-

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15	0.35	BU/GY	754	Blower Motor Speed Control	I	-
16	-	-	-	Not Occupied	-	-
17	0.75	GY/RD	598	5 Volt Reference	I	-
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	-	-

COMPONENT CONNECTOR END VIEWS > K33 HVAC CONTROL MODULE X3



Connector Part Information

- Harness Type: HVAC
- OEM Connector: 31410-1200
- Service Connector: Service by Harness - See Part Catalog
- Description: 20-Way F 64 Series, Sealed (BK)

Terminal Part Information

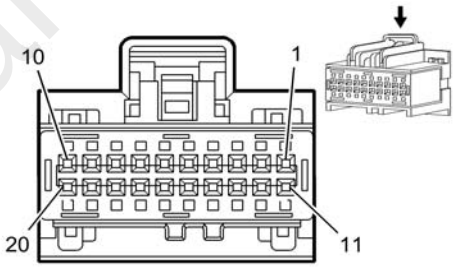
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GN	516	Upper Left Air Temperature Sensor Signal	I	-
2	0.35	PK	119	Mode Door Control	I	-

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3	0.35	GY/RD	2273	Mode Door Control	I	-
4	0.35	WH	2275	Mode 1 Valve Position Sensor Signal	I	-
5 - 8	-	-	-	Not Occupied	-	-
9	0.35	GY/BK	1791	Air Temperature Door Control Low Reference	I	-
10	-	-	-	Not Occupied	-	-
11	0.35	YE/WH	1199	Air Temperature Door Control	I	-
12	0.35	BN/BK	2210	Air Temperature Door Control	I	-
13	0.35	GY/YE	733	Air Temperature Door Position Signal	I	-
14 - 15	-	-	-	Not Occupied	-	-
16	0.35	YE	1614	Recirculation Door Control	I	-
17	0.35	L-BU	2274	Recirculation Door Control	I	-
18	0.35	BU	1838	Recirculation Door Position Signal	I	-
19	-	-	-	Not Occupied	-	-
20	0.35	GN/RD	6137	EVAP Core Temperature Sensor Signal	I	-

COMPONENT CONNECTOR END VIEWS > K33 HVAC CONTROL MODULE X4



Connector Part Information

- Harness Type: HVAC
- OEM Connector: 31410-1201
- Service Connector: Service by Harness - See Part Catalog
- Description: 20-Way F 64 Series, Sealed (GY with WH Terminal Position Assurance)

Terminal Part Information

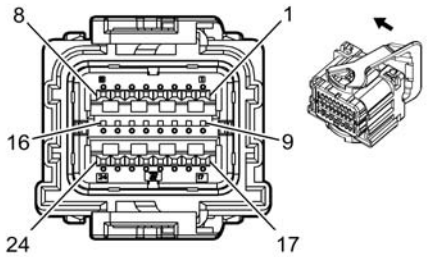
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Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 4	-	-	-	Not Occupied	-	-
5	0.35	YE/RD	3181	Temp Door Stepper Motor Passenger Control (1)	I	-
6	0.35	OG	3182	Temp Door Stepper Motor Passenger Control (2)	I	-
7	0.35	BK/RD	3183	Temp Door Stepper Motor Passenger Control (3)	I	-
8	-	-	-	Not Occupied	-	-
9	0.35	L-GN/BK	517	Upper Right Air Temperature Sensor Signal	I	-
10	-	-	-	Not Occupied	-	-
11	0.35	GY/GN	518	Lower Left Air Temperature Sensor Signal	I	-
12	0.35	L-GN/WH	520	Lower Right Air Temperature Sensor Signal	I	-
13 - 20	-	-	-	Not Occupied	-	-

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COMPONENT CONNECTOR END VIEWS > 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

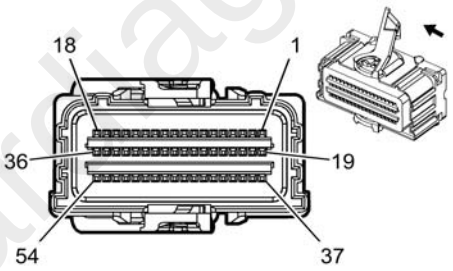
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	19328872	J-35616-64B (LT BU)	J-38125-11A	Not available	Not available	Not available	Not available
II	19331015	J-35616-64B (LT BU)	J-38125-12A	Not available	Not available	Not available	Not available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	OG/GN	3023	Steering Wheel Module Stage 2 High Control	II	-
2	0.35	WH/OG	3022	Steering Wheel Module Stage 2 Low Control	II	-
3	0.35	BN/OG	3020	Steering Wheel Module Stage 1 Low Control	II	-
4	0.35	OG/VT	3021	Steering Wheel Module Stage 1 High Control	II	-
5	0.35	YE/OG	3025	Passenger IP Module Stage 1 High Control	II	-
6	0.35	OG/WH	3024	Passenger IP Module Stage 1 Low Control	II	-
7	0.35	OG/VT	3026	Passenger IP Module Stage 2 Low Control	II	-
8	0.35	GY/OG	3027	Passenger IP Module Stage 2 High Control	II	-
9	0.5	RD/GN	4440	Battery Positive Voltage	I	-
10	0.35	VT	5234	Passenger Seat Belt Indicator Control	II	-
11	0.35	BU	2307	Passenger Air Bag On Indicator Control	II	-
12	0.35	GN	2308	Passenger Air Bag Off Indicator Control	II	-
13 - 14	-	-	-	Not Occupied	-	-

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15	0.35	GN	5060	Low Speed GMLAN Serial Data	II	-
16	-	-	-	Not Occupied	-	-
17	0.35	WH/BU	5986	Serial Data Communication Enable	II	-
18	0.35	BU/YE	6105	High Speed GMLAN Serial Data (+) (2)	II	-
19	0.5	BK/WH	1751	Signal Ground	I	-
20	0.35	WH	6106	High Speed GMLAN Serial Data (-) (2)	II	-
21	0.35	OG/BU	3078	Driver Knee Module High Control	II	-
22	0.35	GY/OG	3079	Driver Knee Module Low Control	II	-
23	0.35	WH/OG	3077	Passenger Knee Module Low Control	II	-
24	0.35	OG/BU	3076	Passenger Knee Module High Control	II	-

COMPONENT CONNECTOR END VIEWS > K36 INFLATABLE RESTRAINT SENSING AND DIAGNOSTIC MODULE X2



Connector Part Information

- Harness Type: Body
- OEM Connector: 2203515-4
- Service Connector: 13589171
- Description: 54-Way F 0.64 Series, Sealed (YE)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp

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I	19328872	J-35616-64B (LT BU)	J-38125-11A	Not available	Not available	Not available	Not available
II	19331015	J-35616-64B (LT BU)	J-38125-12A	Not available	Not available	Not available	Not available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35 0.35	WH/RD WH/RD	7492 7492	Left Hood Actuator High Control	I II	B3T B3T
2	0.35 0.35	BK/OG BK/OG	7491 7491	Left Hood Actuator Low Control	II I	B3T B3T
3 - 8	-	-	-	Not Occupied	-	-
9	0.35 0.35	OG/YE OG/YE	3481 3481	Driver Seat Belt Anchor Pretensioner High Control	II I	- -
10	0.35 0.35	YE/OG VT/OG	3482 3482	Driver Seat Belt Anchor Pretensioner Low Control	I II	- -
11	0.35 0.35	GY/OG GY/OG	3480 3480	Passenger Seat Belt Anchor Pretensioner Low Control	II I	- -
12	0.35 0.35	OG/BN OG/BN	3479 3479	Passenger Seat Belt Anchor Pretensioner High Control	II I	- -
13	0.35 0.35	OG/BU OG/BU	3068 3068	Driver Side Impact Module High Control	I II	- -
14	0.35 0.35	GN/OG GN/OG	3069 3069	Driver Side Impact Module Low Control	II I	- -
15	0.35 0.35	BN/OG BN/OG	3067 3067	Passenger Side Impact Module Low Control	I II	- -
16	0.35 0.35	OG/GY OG/GY	3066 3066	Passenger Side Impact Module High Control	II I	- -
17	0.35	OG/GN	5019	Left Front Head Curtain Module High Control	II	-
18	0.35	VT/OG	5020	Left Front Head Curtain Module Low Control	II	-
19	0.35 0.35	OG/GN OG/GN	2132 2132	Left Front Side Impact Sensing Module Signal	I II	- A1BC
20	0.35 0.35	BK/OG BK/OG	6628 6628	Left Front Side Impact Sensing Module Low Reference	I II	- A1BC
21	0.35 0.35	BK/OG BK/OG	6629 6629	Right Front Side Impact Sensing Module Low Reference	I II	- A1BC
22	0.35 0.35	BN/OG BN/OG	2134 2134	Right Front Side Impact Sensing Module Signal	I II	- A1BC

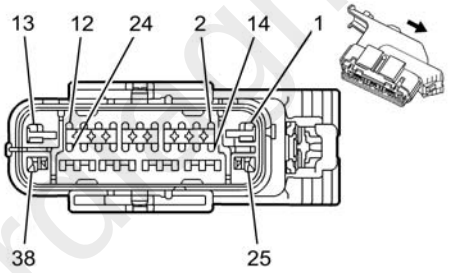
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23	0.35 0.35	OG/YE OG/YE	354 354	Left Front Discriminating Sensor Signal	I II	- -
24	0.35 0.35	BK/OG BK/OG	5045 5045	Left Front Discriminating Sensor Low Reference	II I	- -
25	0.35 0.35	BK/OG BK/OG	5600 5600	Right Front Discriminating Sensor Low Reference	II I	- -
26	0.35 0.35	OG/GN OG/GN	1409 1409	Right Front Discriminating Sensor Signal	II I	- -
27	0.35 0.35	OG/BU OG/BU	6620 6620	Left Middle Side Impact Sensing Module Signal	II I	- -
28	0.35 0.35	BK/OG BK/OG	6621 6621	Left Middle Side Impact Sensing Module Low Reference	I II	- -
29	0.35 0.35	BK/OG BK/OG	6625 6625	Right Middle Side Impact Sensing Module Low Reference	I II	- -
30	0.35 0.35	OG/VT OG/VT	6624 6624	Right Middle Side Impact Sensing Module Signal	II I	- -
31	0.35 0.35	BN/YE BN/YE	4038 4038	Pedestrian Protection Safing Sensor Module Signal	II I	B3T B3T
32	0.35 0.35	BK/VT BK/VT	4045 4045	Pedestrian Protection Safing Sensor Module Low Reference	II I	B3T B3T
33 - 34	-	-	-	Not Occupied	-	-
35	0.35 0.35	VT/RD VT/RD	7490 7490	Right Hood Actuator High Control	I II	B3T B3T
36	0.35 0.35	BK/OG BK/OG	7489 7489	Right Hood Actuator Low Control	II I	B3T B3T
37	0.35 0.35	OG/WH OG/WH	3477 3477	Driver Seat Belt Retractor Pretensioner High Control	II I	- -
38	0.35 0.35	GY/OG GY/OG	3478 3478	Driver Seat Belt Retractor Pretensioner Low Control	II I	- -
39	0.35 0.35	WH/OG WH/OG	3476 3476	Passenger Seat Belt Retractor Pretensioner Low Control	II I	- -
40	0.35 0.35	OG/GN OG/GN	3475 3475	Passenger Seat Belt Retractor Pretensioner High Control	II I	- -
41	0.35 0.35	OG/BN OG/BN	238 238	Driver Seat Belt Switch Signal	I II	- -
42	0.35 0.35	OG/GN OG/GN	5055 5055	Driver Seat Position Switch Signal	II I	- -
43	0.35 0.35	BK/OG BK/OG	1363 1363	Driver Seat Belt Switch Low Reference	II I	- -

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44	0.35 0.35	BK/OG BK/OG	1361 1361	Passenger Seat Belt Switch Low Reference	II I	- -
45	0.35 0.35	OG/VT OG/VT	1362 1362	Passenger Seat Belt Switch Signal	II I	- -
46	0.35 0.35	OG/BU OG/BU	5056 5056	Passenger Seat Position Switch Signal	I II	- -
47 - 50	-	-	-	Not Occupied	-	-
51	0.35 0.35	BN/WH BN/WH	4035 4035	Pedestrian Protection Impact Sensing Module Low Reference	II I	B3T B3T
52	0.35 0.35	OG/VT OG/VT	4034 4034	Pedestrian Protection Impact Sensing Module Signal	II I	B3T B3T
53	0.35	OG/GY	5021	Right Front Head Curtain Module High Control	II	-
54	0.35	WH/OG	5022	Right Front Head Curtain Module Low Control	II	-

COMPONENT CONNECTOR END VIEWS > K38 CHASSIS CONTROL MODULE



Connector Part Information

- Harness Type: Body
- OEM Connector: 89047375
- Service Connector: 19178089
- Description: 38-Way F 0.64, 280 GT 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	13575392	J-35616-4A (PU)	J-38125-553	15304720	15	4	5

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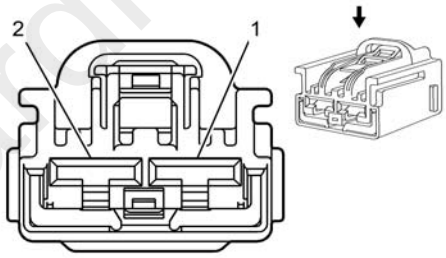
II	13578917	J-35616-64B (LT BU)	J-38125-215A	SAITS-A03T-M064	24	9	9
III	13579782	J-35616-4A (PU)	J-38125-553	Not available	Not available	Not available	Not available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2	RD/VT	2640	Battery Positive Voltage	I	-
2	-	-	-	Not Occupied	-	-
3	0.5	BN/GN	4305	Exhaust Flapper Valve Control 1	II	-
4	0.5	GN/VT	4316	Exhaust Flapper Valve Control 2	II	-
5	0.35	BU	2500	High Speed GMLAN Serial Data (+) (1)	II	-
6	0.35 0.5	BU BU	2500 2500	High Speed GMLAN Serial Data (+) (1)	II	- -
7	-	-	-	Not Occupied	-	-
8	0.35	VT/YE	5985	Accessory Wakeup Serial Data	II	-
9	-	-	-	Not Occupied	-	-
10	0.35	BU/WH	7446	Fuel Line Pressure Sensor Signal	II	-
11	0.5	VT/YE	4317	Exhaust Flapper Valve 2 Feedback Signal	II	-
12	0.5	BU/WH	4306	Exhaust Flapper Valve 1 Feedback Signal	II	-
13	2.5 2	GY GY	120 120	Fuel Pump Control	III I	(LTG)/(LGX+NPP) /(LT1-G96) (LTG)/(LT1) /(LGX+NPP)
14	-	-	-	Not Occupied	-	-
15	0.5	BN/BU	4065	Powertrain Mount Solenoid Control 1	II	LTG
16	0.5	BN/YE	4066	Powertrain Mount Solenoid Control 2	II	LTG
17	0.35	WH	2501	High Speed GMLAN Serial Data (-) (1)	II	-
18	0.35 0.5	WH WH	2501 2501	High Speed GMLAN Serial Data (-) (1)	II	- -

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19	-	-	-	Not Occupied	-	-
20	0.35	GN/GY	465	Fuel Pump Primary Relay Control	II	-
21	0.5	VT/BK	339	Run/Crank Ignition 1 Voltage	II	-
22	0.35	BN/RD	7445	Fuel Line Pressure Sensor 5 Volt Reference	II	-
23	0.35	BK/YE	7447	Fuel Line Pressure Sensor Low Reference	II	-
24	0.5	BU	7443	Fuel System Control Module Shield Ground Extension	II	-
25	2	BK	2350	Ground	I	-
26 - 37	-	-	-	Not Occupied	-	-
38	2.5 2	BK/GN BK/GN	1580 1580	Fuel Pump Low Reference	III I	(LTG)/(LGX+NPP) /(LT1-G96) (LTG)/(LT1) /(LGX+NPP)

COMPONENT CONNECTOR END VIEWS > K40D SEAT MEMORY CONTROL MODULE - DRIVER X1



Connector Part Information

- Harness Type: Driver Seat
- OEM Connector: 7283-6458-40
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 6.3 Series (L-GY)

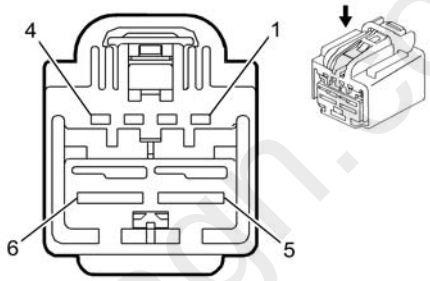
Terminal Part Information

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Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-42 (RD)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	RD/WH	2040	Battery Positive Voltage	I	-
2	2.5	RD/YE	5040	Battery Positive Voltage	I	-

COMPONENT CONNECTOR END VIEWS > K40D SEAT MEMORY CONTROL MODULE - DRIVER X2



Connector Part Information

- Harness Type: Driver Seat
- OEM Connector: 7283-9749-30
- Service Connector: Service by Harness - See Part Catalog
- Description: 6-Way F YESC Kaizen Series (BK)

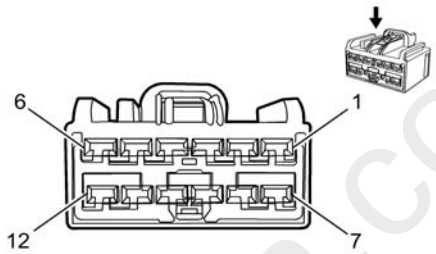
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-42 (RD)	No Tool Required	Not Required	Not Required	Not Required	Not Required

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GN	5060	Low Speed GMLAN Serial Data	I	-
2	0.35	GN/WH	7530	Local Interconnect Network Serial Data Bus 8	I	-
3	2.5	BK	2150	Ground	II	-
4 - 6	-	-	-	Not Occupied	-	-

COMPONENT CONNECTOR END VIEWS > K40D SEAT MEMORY CONTROL MODULE - DRIVER X3



Connector Part Information

- Harness Type: Driver Seat
- OEM Connector: 7283-6467-40
- Service Connector: Service by Harness - See Part Catalog
- Description: 12-Way F 2.8 Kaizen Series (L-GY)

Terminal Part Information

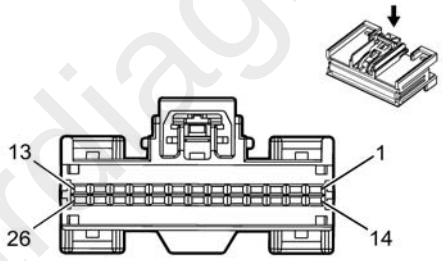
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-35 (VT)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	GN/YE	276	Driver Power Seat Recline Motor Forward Control	I	-

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2	1.5	BU/YE	277	Driver Power Seat Recline Motor Rearward Control	I	-
3	1.5	GN/BN	286	Driver Power Seat Front Vertical Motor Up Control	I	-
4	1.5	BU/VT	287	Driver Power Seat Front Vertical Motor Down Control	I	-
5	1.5	YE	282	Driver Power Seat Rear Vertical Motor Up Control	I	-
6	1.5	GY/BU	283	Driver Power Seat Rear Vertical Motor Down Control	I	-
7 - 10	-	-	-	Not Occupied	-	-
11	1.5	YE/BU	285	Driver Power Seat Horizontal Motor Forward Control	I	-
12	1.5	GY/GN	284	Driver Power Seat Horizontal Motor Rearward Control	I	-

COMPONENT CONNECTOR END VIEWS > K40D SEAT MEMORY CONTROL MODULE - DRIVER X5



Connector Part Information

- Harness Type: Driver Seat
- OEM Connector: 7287-2043-30
- Service Connector: Service by Harness - See Part Catalog
- Description: 26-Way F 0.64 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp

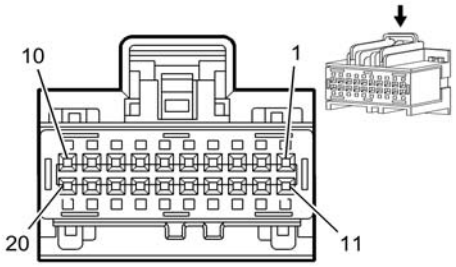
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I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	WH/RD	3298	Memory Sensor High Reference 2	I	-
2 - 6	-	-	-	Not Occupied	-	-
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 - 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 - 24	-	-	-	Not Occupied	-	-
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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COMPONENT CONNECTOR END VIEWS > K40D SEAT MEMORY CONTROL MODULE - DRIVER X6



Connector Part Information

- Harness Type: Driver Seat
- OEM Connector: 31410-1201
- Service Connector: Service by Harness - See Part Catalog
- Description: 20-Way F 64 Series, Sealed (GY)

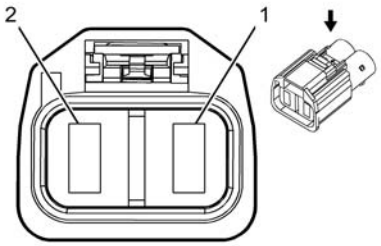
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BK/BU	5978	Memory Switch Low Reference	I	-
2	0.35	WH	615	Memory Seat Switch Signal 1	I	-
3	0.35	BU/GN	614	Memory Seat Switch Set Signal	I	-
4 - 20	-	-	-	Not Occupied	-	-

COMPONENT CONNECTOR END VIEWS > K43 POWER STEERING CONTROL MODULE X1

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Connector Part Information

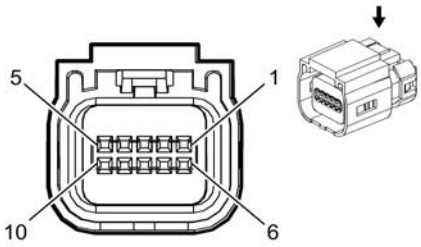
- Harness Type: Engine
- OEM Connector: 13581053
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 9.5 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-42 (RD)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	8	RD/GN	742	Battery Positive Voltage	I	-
2	8	BK	1050	Ground	I	-

COMPONENT CONNECTOR END VIEWS > K43 POWER STEERING CONTROL MODULE X2



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Connector Part Information

- Harness Type: Engine
- OEM Connector: 19178082
- Service Connector: 19178082
- Description: 10-Way F 0.64 Series, Sealed (BK)

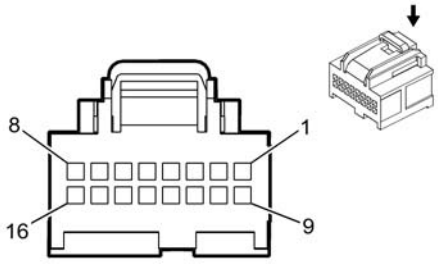
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13575845	J-35616-64B (LT BU)	J-38125-215A	SAIT-A03T-M064	23	P	P

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	-	-	-	Not Occupied	-	-
2	0.5	BU	2500	High Speed GMLAN Serial Data (+) (1)	I	-
3	0.5	WH	2501	High Speed GMLAN Serial Data (-) (1)	I	-
4	0.5	BU/YE	6105	High Speed GMLAN Serial Data (+) (2)	I	-
5	0.5	WH	6106	High Speed GMLAN Serial Data (-) (2)	I	-
6	0.5	WH/BU	5986	Serial Data Communication Enable	I	-
7	0.5	BU	2500	High Speed GMLAN Serial Data (+) (1)	I	-
8	0.5	WH	2501	High Speed GMLAN Serial Data (-) (1)	I	-
9	0.5	BU/YE	6105	High Speed GMLAN Serial Data (+) (2)	I	-
10	0.5	WH	6106	High Speed GMLAN Serial Data (-) (2)	I	-

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COMPONENT CONNECTOR END VIEWS > K56 SERIAL DATA GATEWAY MODULE X1



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 13582576
- Service Connector: 13582576
- Description: 16-Way F 0.64 OCS Series (BK)

Terminal Part Information

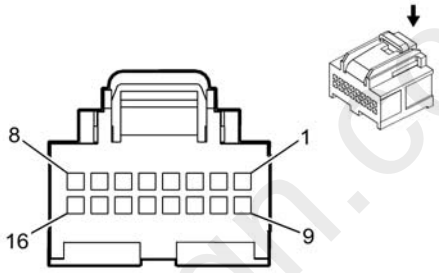
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13587581	J-35616-64B (LT BU)	J-38125-12A	Not available	Not available	Not available	Not available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	RD/WH	6440	Battery Positive Voltage	I	-
2	-	-	-	Not Occupied	-	-
3	0.35	BU/GN	1304	High Speed GMLAN Serial Data (+) (9)	I	-
4	0.35	WH/GN	1305	High Speed GMLAN Serial Data (-) (9)	I	-
5	-	-	-	Not Occupied	-	-
6	0.35	BK	1350	Ground	I	-
7	0.35	BU	2500	High Speed GMLAN Serial Data (+) (1)	I	-
8	0.35	WH	2501	High Speed GMLAN Serial Data (-) (1)	I	-
9	-	-	-	Not Occupied	-	-
10	0.35	WH/BU	5986	Serial Data Communication Enable	I	-

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11	0.35	BU/GN	1304	High Speed GMLAN Serial Data (+) (9)	I	-
12	0.35	WH/GN	1305	High Speed GMLAN Serial Data (-) (9)	I	-
13	0.35	BU/GN	1304	High Speed GMLAN Serial Data (+) (9)	I	-
14	0.35	WH/GN	1305	High Speed GMLAN Serial Data (-) (9)	I	-
15	0.35	GN	5060	Low Speed GMLAN Serial Data	I	-
16	-	-	-	Not Occupied	-	-

COMPONENT CONNECTOR END VIEWS > K56 SERIAL DATA GATEWAY MODULE X2



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 13781484
- Service Connector: 13594066
- Description: 16-Way F 0.64 OCS Series (GY)

Terminal Part Information

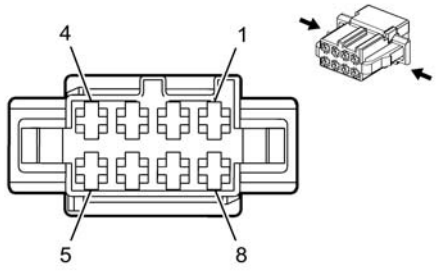
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13587581	J-35616-64B (LT BU)	J-38125-12A	Not available	Not available	Not available	Not available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BU	2500	High Speed GMLAN Serial Data (+) (1)	I	-

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2	0.35	WH	2501	High Speed GMLAN Serial Data (-) (1)	I	-
10	0.35	GY/GN	1102	Low Speed GMLAN Serial Data #2	I	-

COMPONENT CONNECTOR END VIEWS > K60 STEERING COLUMN LOCK MODULE



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

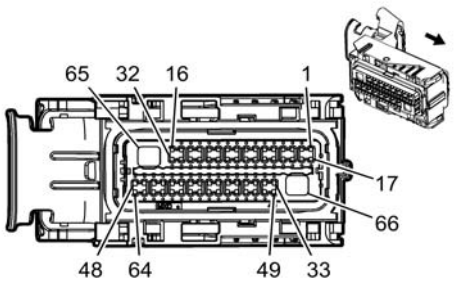
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	-	-	-	Not Occupied	-	-
2	0.35	BU/VT	5904	Steering Column Lock Status Signal	I	N06
3	0.75	BU/VT	807	OFF /Accessory Ignition Voltage	I	N06
4	0.35	GN/VT	1601	Steering Column Lock Signal	I	N06
5	0.75	RD/GY	4140	Battery Positive Voltage	I	N06

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6	0.75	BK	1350	Ground	I	N06
7	0.35	BK	1350	Ground	I	N06
8	0.35	GN	5060	Low Speed GMLAN Serial Data	I	N06

COMPONENT CONNECTOR END VIEWS > K71 TRANSMISSION CONTROL MODULE



Connector Part Information

- Harness Type: Engine
- OEM Connector: 34822-0023
- Service Connector: 19330900
- Description: 66-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	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13575797	J-35616-35 (VT)	J-38125-11A	Not available	Not available	Not available	Not available
II	19330179	J-35616-64A (LT BU)	J-38125-12A	Not available	Not available	Not available	Not available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH/BU	4507	Transmission Clutch H Control	II	M5T/M5U
2	0.5	BU	6401	Clutch B Control	II	M5T/M5U
3	0.5	GY/GN	6403	Clutch D Control	II	M5T/M5U
4 - 6	-	-	-	Not Occupied	-	-

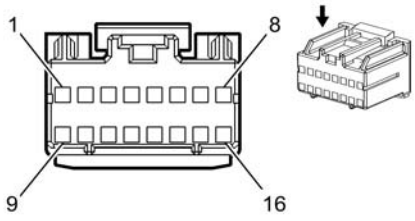
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7	0.5	YE/GN	4170	Transmission Position Sensor B 9 Volt Reference	II	M5T/M5U
8	0.5	YE/BU	4171	Transmission Position Sensor A 9 Volt Reference	II	M5T/M5U
9 - 12	-	-	-	Not Occupied	-	-
13	0.5	GN/VT	4510	Transmission Intermediate Speed Signal	II	M5T/M5U
14	0.5	GY/BU	6358	Output Speed Signal	II	M5T/M5U
15	0.5	GN/YE	6353	Input Speed Signal	II	M5T/M5U
16	-	-	-	Not Occupied	-	-
17	0.5	WH	4508	Transmission Clutch G Control	II	M5T/M5U
18	0.5	BN	6400	Clutch A Control	II	M5T/M5U
19	0.5	GY	6402	Clutch C Control	II	M5T/M5U
20	0.5	YE/BN	6404	Clutch E Control	II	M5T/M5U
21	0.5	GN/WH	6380	TCC On/Off Solenoid A Control	II	M5T/M5U
22	0.5	YE/BN	6210	TCC On/Off Solenoid B Control	II	M5T/M5U
23 - 24	-	-	-	Not Occupied	-	-
25	0.5	BK/GY	3927	IMS Mode Switch Low Reference	II	M5T/M5U
26 - 27	-	-	-	Not Occupied	-	-
28	0.5	BK/BN	586	Transmission Oil Temperature Sensor Low Reference	II	M5T/M5U
29 - 32	-	-	-	Not Occupied	-	-
33	0.75	GN/GY	6387	Transmission High Side Driver 1 Signal Driver	II	M5T/M5U
34	-	-	-	Not Occupied	-	-
35	0.5	VT/BK	2139	Run/Crank Ignition 1 Voltage	II	M5T/M5U
36	-	-	-	Not Occupied	-	-
37	0.5	BU	2500	High Speed GMLAN Serial Data (+) (1)	II	M5T/M5U
38	0.5	WH	2501	High Speed GMLAN Serial Data (-) (1)	II	M5T/M5U
39 - 46	-	-	-	Not Occupied	-	-
47	0.5	GY/YE	4169	PRNDL S Signal	II	M5T/M5U
48	-	-	-	Not Occupied	-	-

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49	0.75	GY/BN	6388	Transmission High Side Driver 2 Signal	II	M5T/M5U
50	-	-	-	Not Occupied	-	-
51	0.5	VT/YE	5985	Accessory Wakeup Serial Data	II	M5T/M5U
52	-	-	-	Not Occupied	-	-
53	0.5	BU	2500	High Speed GMLAN Serial Data (+) (1)	II	-
54	0.5	WH	2501	High Speed GMLAN Serial Data (-) (1)	II	-
55 - 58	-	-	-	Not Occupied	-	-
59	0.5	GY/WH	4168	PRNDL P Signal	II	M5T/M5U
60	0.5	WH/BK	5983	PRNDL C Signal	II	M5T/M5U
61	0.5	GY/BN	5982	PRNDL B Signal	II	M5T/M5U
62	0.5	VT/WH	5981	PRNDL A Signal	II	M5T/M5U
63	0.5	BN/WH	585	Transmission Oil Temperature Sensor Signal	II	M5T/M5U
64	-	-	-	Not Occupied	-	-
65	1.5	BK/WH	451	Signal Ground	I	-
66	1.5	RD/GN	1840	Battery Positive Voltage	I	M5T/M5U

COMPONENT CONNECTOR END VIEWS > K73 TELEMATICS COMMUNICATION INTERFACE CONTROL MODULE X1



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 19153138
- Service Connector: 19153138
- Description: 16-Way F Multilock 040 II Series (WH)

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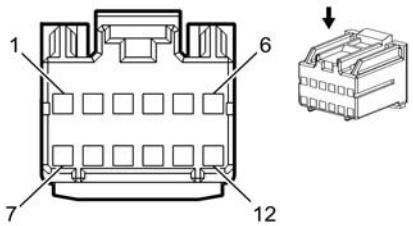
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13575803	J-35616-16 (LT GN)	J-38125-559	15445905	8	J	J

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GY/GN	1102	Low Speed GMLAN Serial Data #2	I	UE1/UI3
2	0.35	BN/WH	2517	Keypad Red LED Control	I	D31+UE1/UI3
3	0.35	YE/VT	2516	Keypad Green LED Control	I	D31+UE1/UI3
4 - 5	-	-	-	Not Occupied	-	-
6	0.35	GN/BK	2515	Keypad Control	I	D31/DD8+UE1/UI3
7	0.5	BK/WH	1551	Signal Ground	I	UE1/UI3
8 - 9	-	-	-	Not Occupied	-	-
10	0.35	BU/GN	1304	High Speed GMLAN Serial Data (+) (9)	I	UE1
11	0.35	GN/WH	2514	Keypad Signal	I	D31/DD8+UE1/UI3
12	0.35	WH/GN	1305	High Speed GMLAN Serial Data (-) (9)	I	UE1
13 - 14	-	-	-	Not Occupied	-	-
15	0.5	RD/BU	3940	Battery Positive Voltage	I	UE1/UI3
16	-	-	-	Not Occupied	-	-

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COMPONENT CONNECTOR END VIEWS > K73 TELEMATICS COMMUNICATION INTERFACE CONTROL MODULE X2



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 19153139
- Service Connector: 88952886
- Description: 12-Way F Multilock 040 II Series (WH)

Terminal Part Information

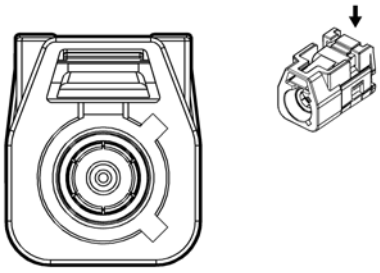
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13575803	J-35616-16 (LT GN)	J-38125-559	15445905	8	J	J

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	YE	658	Cellular Telephone Voice Signal	I	-
2	0.35	BK/YE	659	Cellular Telephone Voice Low Reference	I	-
3	0.35	BU/GN	1304	High Speed GMLAN Serial Data (+) (9)	I	-
4	0.35	WH/GN	1305	High Speed GMLAN Serial Data (-) (9)	I	-
5	0.5	BARE	1792	Low Reference	I	-
6	0.35	GY/YE	5149	Voice Recognition Audio Signal	I	-
7	0.35	WH/BU	5986	Serial Data Communication Enable	I	UE1
8	0.5	BARE	1782	Low Reference	I	-
9	0.35	BU	655	Cellular Telephone Microphone Signal	I	-
10	0.35	BK/BN	654	Cellular Telephone Microphone Low Reference	I	-
11	-	-	-	Not Occupied	-	-
12	0.35	BK/GY	5152	Voice Recognition Audio Low Reference	I	-

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COMPONENT CONNECTOR END VIEWS > K73 TELEMATICS COMMUNICATION

INTERFACE CONTROL MODULE X5



Connector Part Information

- Harness Type: Instrument Panel COAX
- OEM Connector: 13583836
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: 1-Way F Coax Type (VT)

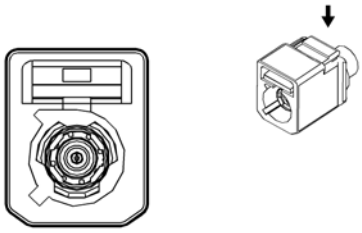
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
-	-	COAX	-	(Cell only) Coaxial Antenna Cell Phone Signal	I	-

COMPONENT CONNECTOR END VIEWS > K73 TELEMATICS COMMUNICATION INTERFACE CONTROL MODULE X7 (CZ2)

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Connector Part Information

- Harness Type: Instrument Panel COAX
- OEM Connector: 13581969
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: 1-Way M Coax Type (BN)

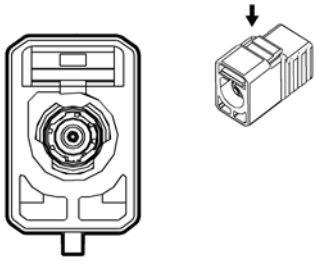
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
-	-	COAX	-	(GPS/Cell) Coaxial Antenna Cell/GPS combined Signal	I	-

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COMPONENT CONNECTOR END VIEWS > K73 TELEMATICS COMMUNICATION INTERFACE CONTROL MODULE X7 (U2K)



Connector Part Information

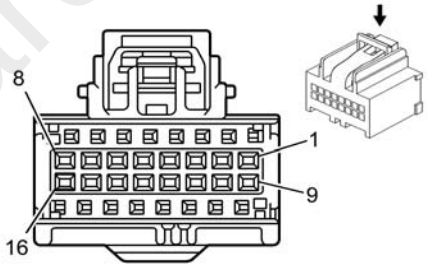
- Harness Type: Instrument Panel COAX
- OEM Connector: 3FA1-NESJ-C04W0
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: 1-Way F Coax Type (GN)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
-	-	COAX	-	(GPS/Cell) Coaxial Antenna Cell/GPS combined Signal	I	-

COMPONENT CONNECTOR END VIEWS > K74 HUMAN MACHINE INTERFACE CONTROL MODULE X1



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 15136073
- Service Connector: 15136073
- Description: 16-Way F 0.64 Kaizen Series (BK)

Terminal Part Information

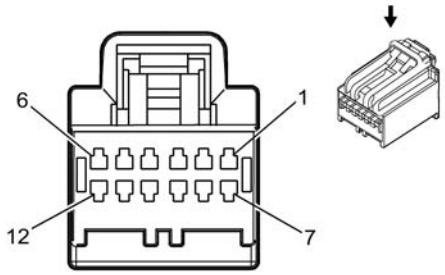
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Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13575845	J-35616-64B (LT BU)	J-38125-215A	Not available	Not available	Not available	Not available
II	19119865	J-35616-64B (LT BU)	J-38125-12A	Not available	Not available	Not available	Not available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35 0.35	GY/YE BU	5149 655	Voice Recognition Audio Signal Cellular Telephone Microphone Signal	I	- IO5/IO6-MAW-UE1-UI3
2	0.35 0.35	BK/GY BK/BN	5152 654	Voice Recognition Audio Low Reference Cellular Telephone Microphone Low Reference	I	- IO5/IO6-MAW-UE1-UI3
3 - 4	-	-	-	Not Occupied	-	-
5	0.35	WH/BU	5986	Serial Data Communication Enable	I	IO5/IO6
6	-	-	-	Not Occupied	-	-
7	0.75	RD/VT	340	Battery Positive Voltage	II	IO5/IO6
8	0.75	BK/WH	1551	Signal Ground	II	IO5/IO6
9	0.35	GN/WH	7527	Local Interconnect Network Serial Data Bus 5	I	-
10	-	-	-	Not Occupied	-	-
11	0.35	BU/GN	1304	High Speed GMLAN Serial Data (+) (9)	I	-
12	0.35	WH/GN	1305	High Speed GMLAN Serial Data (-) (9)	I	-
13	0.35	BU/GN	1304	High Speed GMLAN Serial Data (+) (9)	I	IO5/IO6-UQT
14	0.35	WH/GN	1305	High Speed GMLAN Serial Data (-) (9)	I	IO5/IO6-UQT
15 - 16	-	-	-	Not Occupied	-	-

COMPONENT CONNECTOR END VIEWS > K74 HUMAN MACHINE INTERFACE CONTROL MODULE X2

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Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 19151154
- Service Connector: 19151154
- Description: 12-Way F 64 Series, Sealed (GY)

Terminal Part Information

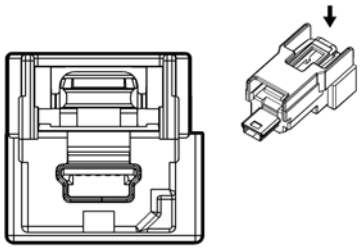
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13575845	J-35616-64B (LT BU)	J-38125-215A	Not available	Not available	Not available	Not available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	WH/VT	3999	MOST Control	I	IO5/IO6
2	0.35	WH/GN	3997	MOST Serial Data (-)	I	-
3	0.35	GY/VT	3998	MOST Serial Data (+)	I	-
4	-	-	-	Not Occupied	-	-
5	0.35	GY/YE	6972	Camera Signal 2 +	I	UVC+IO5/IO6
6	0.35	WH/BU	6973	Camera Signal 2	I	UVC+IO5/IO6
7	-	-	-	Not Occupied	-	-
8	0.35	GY/VT	3998	MOST Serial Data (+)	I	IO5/IO6
9	0.35	WH/GN	3997	MOST Serial Data (-)	I	IO5/IO6
10 - 12	-	-	-	Not Occupied	-	-

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COMPONENT CONNECTOR END VIEWS > K74 HUMAN MACHINE INTERFACE

CONTROL MODULE X3



Connector Part Information

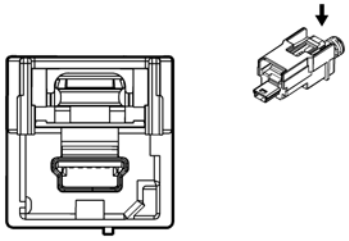
- Harness Type: Instrument Panel USB
- OEM Connector: 13576682
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: 5-Way M 2.0 Mini-B USB Type (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
-	-	USB	-	USB Serial Data	I	-

COMPONENT CONNECTOR END VIEWS > K74 HUMAN MACHINE INTERFACE CONTROL MODULE X5



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Connector Part Information

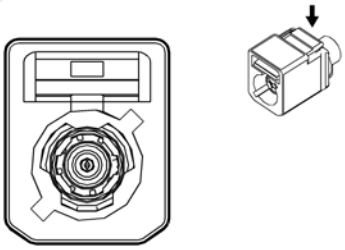
- Harness Type: Instrument Panel LVDS
- OEM Connector: 13578158
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: 5-Way M 2.0 Mini-B USB Type (BU)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
-	-	LVDS	-	(Infotainment) Infotainment Display Signal	I	-

COMPONENT CONNECTOR END VIEWS > K74 HUMAN MACHINE INTERFACE CONTROL MODULE X7



Connector Part Information

- Harness Type: Instrument Panel COAX
- OEM Connector: 13591270
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: 1-Way F Coax Type (BU)

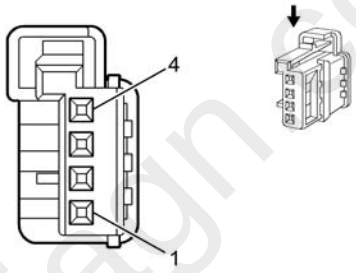
Terminal Part Information

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Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
-	-	COAX	-	(GPS only) Coaxial Antenna GPS Signal	I	-

COMPONENT CONNECTOR END VIEWS > K77 REMOTE CONTROL DOOR LOCK RECEIVER



Connector Part Information

- Harness Type: Body
- OEM Connector: 13271140
- Service Connector: 13316147
- Description: 4-Way F 0.64 Micro-Quadlock Series (BU)

Terminal Part Information

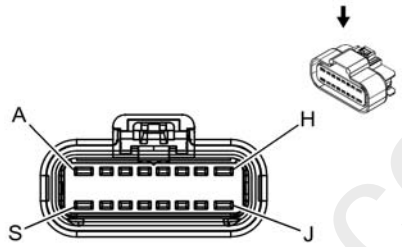
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option

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1	0.35	GY	3273	Remote Function Actuator Low Reference	I	-
2	0.35	YE/GN	3274	Remote Function Actuator Transmit Signal	I	-
3	0.35	BU	3275	Remote Function Actuator Receive Signal	I	-
4	0.35	GY/WH	3272	Remote Function Actuator Control	I	-

COMPONENT CONNECTOR END VIEWS > K83 PARK BRAKE CONTROL MODULE



Connector Part Information

- Harness Type: Rear Chassis
- OEM Connector: 88988439
- Service Connector: Service by Harness - See Part Catalog
- Description: 16-Way F 150, 280 GT 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 Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-4A (PU)	Not Required	Not Required	Not Required	Not Required	Not Required

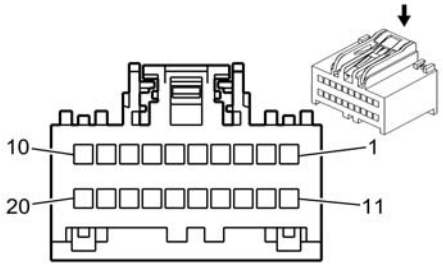
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	2.5	RD/VT	1640	Battery Positive Voltage	II	J77

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B	0.5	YE/RD	7683	Park Brake Release Switch Voltage Reference	I	J77
C	0.5	BU/VT	1134	Park Brake Switch Signal	I	J77
D	0.5	GY/RD	7684	Park Brake Apply Switch Voltage Reference	I	J77
E	0.5	GN/WH	2500	High Speed GMLAN Serial Data (+) (1)	I	J77
F	0.5	GN/WH	2500	High Speed GMLAN Serial Data (+) (1)	I	J77
G	0.5	BU	2500	High Speed GMLAN Serial Data (+) (1)	I	J77
H	2.5	BK	2550	Ground	II	J77
J	-	-	-	Not Occupied	-	-
K	0.5	WH	2501	High Speed GMLAN Serial Data (-) (1)	I	J77
L	0.5	BK/GN	2501	High Speed GMLAN Serial Data (-) (1)	I	J77
M	0.5	BK/GN	2501	High Speed GMLAN Serial Data (-) (1)	I	J77
N	0.5	YE	1492	Park Brake Switch Supply Voltage	I	J77
P	0.5	WH/BU	5986	Serial Data Communication Enable	I	J77
R	0.5	BN	6107	Park Brake Apply Switch Signal	I	J77
S	0.5	BU/BK	6108	Park Brake Release Switch Signal	II	J77

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COMPONENT CONNECTOR END VIEWS > K84 KEYLESS ENTRY CONTROL MODULE X1



Connector Part Information

- Harness Type: Body
- OEM Connector: 15126709
- Service Connector: 15126709
- Description: 20-Way F USCAR 64 Series (BN with WH Terminal Position Assurance)

Terminal Part Information

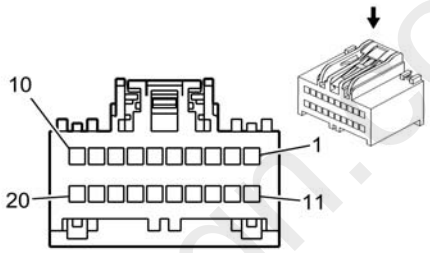
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13575845	J-35616-64B (LT BU)	J-38125-215A	SAIT-A03T-M064	23	P	P

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GN/VT	1601	Steering Column Lock Signal	I	N06
2	0.35	RD/YE	4340	Battery Positive Voltage	I	-
3	0.35	GN	5060	Low Speed GMLAN Serial Data	I	-
4	-	-	-	Not Occupied	-	-
5	0.35	VT/YE	4	Accessory Ignition Voltage	I	-
6	-	-	-	Not Occupied	-	-
7	0.35	GY/GN	4083	RAP Relay 2 Coil Control	I	-
8	-	-	-	Not Occupied	-	-
9	0.35	WH/YE	3574	Driver Door Open Switch Signal	I	-
10	0.35	YE/BU	4086	Pushbutton Start Challenge Active 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	0.35	VT/BK	3	Run/Crank Ignition 1 Voltage	I	-
14	0.35	BK/WH	1551	Signal Ground	I	-
15	0.35	GY/BK	3555	Passive Start Interior Antenna 2 Signal Lo	I	-

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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	-

COMPONENT CONNECTOR END VIEWS > K84 KEYLESS ENTRY CONTROL MODULE X2



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

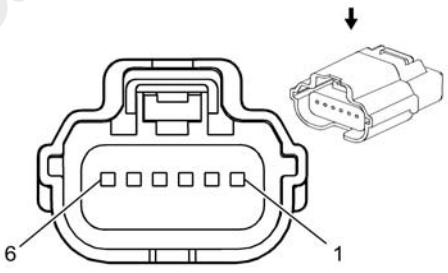
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13575845	J-35616-64B (LT BU)	J-38125-215A	SAIT-A03T-M064	23	P	P

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 5	-	-	-	Not Occupied	-	-

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6	0.35	VT	3560	Passive Entry Driver Door Antenna Signal Hi	I	-
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 Passenger Door Antenna Signal Lo	I	-
10	-	-	-	Not Occupied	-	-
11	0.35	VT	3571	Passenger Door Handle Switch Signal	I	-
12	0.35	GN/WH	3570	Driver Door Handle Switch Signal	I	-
13 - 15	-	-	-	Not Occupied	-	-
16	0.35	BN/GN	3568	Passive Entry Rear Closure Antenna Signal Hi	I	-
17	-	-	-	Not Occupied	-	-
18	0.35	GN/GY	3569	Passive Entry Rear Closure Antenna Signal Lo	I	-
19	-	-	-	Not Occupied	-	-
20	0.35	GN/YE	3562	Passive Entry Passenger Door Antenna Signal Hi	I	-

COMPONENT CONNECTOR END VIEWS > K85 PASSENGER PRESENCE MODULE



Connector Part Information

- Harness Type: Passenger Seat
- OEM Connector: 31404-6132
- Service Connector: Service by Harness - See Part Catalog
- Description: 6-Way F 0.64 Series, Sealed (BK)

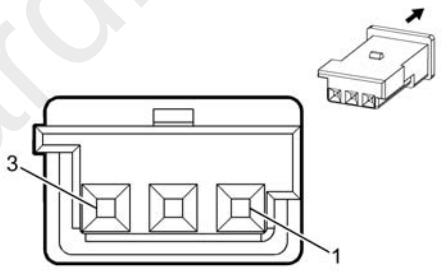
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Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	RD/GN	4440	Battery Positive Voltage	I	-
2	0.35	GN	5060	Low Speed GMLAN Serial Data	I	-
3	-	-	-	Not Occupied	-	-
4	0.35	BK/WH	1751	Signal Ground	I	-
5	0.35	GY/OG	3946	Automatic Locking Retractor Switch Low Reference	I	-
6	0.35	OG/BN	3947	Automatic Locking Retractor Switch Signal	I	-

COMPONENT CONNECTOR END VIEWS > K89 IMMOBILIZER CONTROL MODULE



Connector Part Information

- Harness Type: Floor Console
- OEM Connector: 19153569
- Service Connector: Service by Harness - See Part Catalog
- Description: 3-Way F Micro-Quadlock Series (PU)

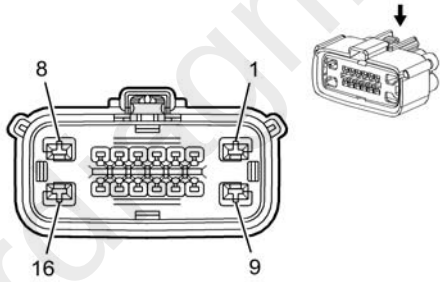
Terminal Part Information

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Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GN/GY	3277	Vehicle Anti-Theft System Immobilizer Low Reference	I	-
2	0.35	GN/VT	7533	Local Interconnect Network Serial Data Bus 11	I	-
3	0.35	GY/BK	3276	Vehicle Anti-Theft System Immobilizer Control	I	-

COMPONENT CONNECTOR END VIEWS > K111 FUEL PUMP DRIVER CONTROL MODULE



Connector Part Information

- Harness Type: Body
- OEM Connector: 13593402
- Service Connector: 13587961
- Description: 16-Way F 1.5, 2.8 Series, Sealed (BK)

Terminal Part Information

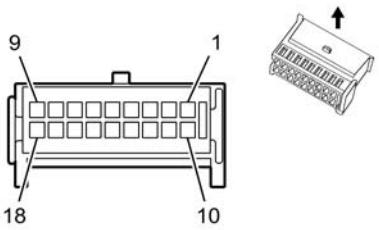
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13505803	J-35616-35 (VT)	J-38125-12A	1326030-8	13	4	D

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II	13505803	J-35616-35 (VT)	J-38125-12A	1326030-8	13	A	4
III	19300635	J-35616-2A (GY)	J-38125-217	Not available	Not available	Not available	Not available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2	RD/VT	2640	Battery Positive Voltage	II	-
2	0.35	GN/GY	465	Fuel Pump Primary Relay Control	III	-
3	-	-	-	Not Occupied	-	-
4	0.5	BU/BK	7493	High Speed GMLAN Serial Data (+) (3)	III	-
5	0.5	WH	7494	High Speed GMLAN Serial Data (-) (3)	III	-
6	0.5	VT/BK	339	Run/Crank Ignition 1 Voltage	III	LGX-NPP
7	0.35	VT/YE	5985	Accessory Wakeup Serial Data	III	-
8	2 2.5	GY GY	120 120	Fuel Pump Control	II I	(LGX-NPP)/(LT4) LGX-NPP
9	2	BK	2350	Ground	II	-
10 - 14	-	-	-	Not Occupied	-	-
15	0.5	BU	7443	Fuel System Control Module Shield Ground Extension	III	-
16	2 2.5	BK/GN BK/GN	1580 1580	Fuel Pump Low Reference	II I	(LGX-NPP)/(LT4) LGX-NPP

COMPONENT CONNECTOR END VIEWS > K126 ACCENT LAMP CONTROL MODULE



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Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 24444119
- Service Connector: 13578579
- Description: 18-Way F 0.64 Micro Quadlok Series (BK)

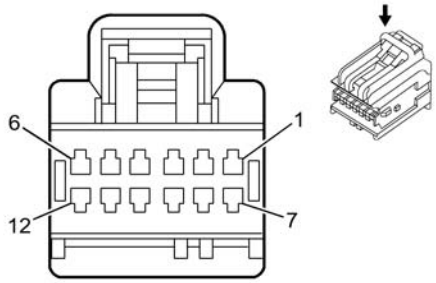
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13575521	J-35616-64B (LT BU)	J-38125-12A	Not available	Not available	Not available	Not available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	RD/BN	4940	Battery Positive Voltage	I	C70
2	0.35	RD/BN	910	-	I	C70
3	0.35	VT/GN	916	-	I	C70
4	0.35	WH/YE	915	-	I	C70
5	0.5	VT/GN	7558	LED Ambient Lighting Control 2	I	C70
6	0.35	VT/GN	900	-	I	C70
7	0.35	VT/GN	900	-	I	C70
8	0.35	VT/GN	900	-	I	C70
9	0.35	VT/GN	900	-	I	C70
10 - 17	-	-	-	Not Occupied	-	-
18	0.35	BK	1450	Ground	I	C70

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COMPONENT CONNECTOR END VIEWS > K182 PARKING ASSIST CONTROL MODULE X1



Connector Part Information

- Harness Type: Body
- OEM Connector: 89047364
- Service Connector: 89047364
- Description: 12-Way F 0.64 Series (BK)

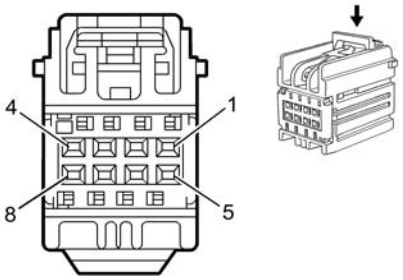
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13575845	J-35616-64B (LT BU)	J-38125-215A	Not available	Not available	Not available	Not available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	RD/GN	3140	Battery Positive Voltage	I	-
2 - 3	-	-	-	Not Occupied	-	-
4	0.35	GN	5060	Low Speed GMLAN Serial Data	I	UD7
5 - 6	-	-	-	Not Occupied	-	-
7	0.35	BK	2350	Ground	I	UD7
8 - 12	-	-	-	Not Occupied	-	-

COMPONENT CONNECTOR END VIEWS > K182 PARKING ASSIST CONTROL MODULE X2

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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)

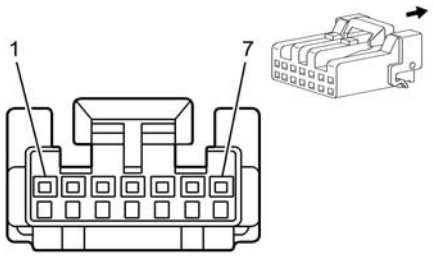
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	YE	2375	Left Rear Corner Object Sensor Signal	I	UD7
2	-	-	-	Not Occupied	-	-
3	0.35	YE/BU	2376	Left Rear Middle Object Sensor Signal	I	UD7
4	0.35	BN/WH	2374	Object Sensor Control	I	UD7
5	0.35	YE/VT	2378	Right Rear Corner Object Sensor Signal	I	UD7
6	-	-	-	Not Occupied	-	-
7	0.35	YE/WH	2377	Right Rear Middle Object Sensor Signal	I	UD7
8	0.35	BK/GY	2379	Object Sensor Low Reference	I	UD7

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COMPONENT CONNECTOR END VIEWS > M6L AIR TEMPERATURE DOOR ACTUATOR - LEFT



Connector Part Information

- Harness Type: HVAC
- OEM Connector: IL-AG5-7S-S3C1
- Service Connector: Service by Harness - See Part Catalog
- Description: 7-Way F IL-AG5 Series (GN)

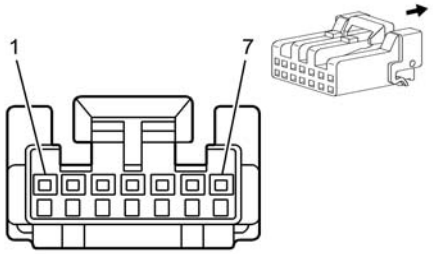
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GY	598	5 Volt Reference	I	-
2	-	-	-	Not Occupied	-	-
3	0.35	GY/BK	1791	Air Temperature Door Control Low Reference	I	-
4	-	-	-	Not Occupied	-	-
5	0.35	GY/YE	733	Air Temperature Door Position Signal	I	-
6	0.35	YE/WH	1199	Air Temperature Door Control	I	-
7	0.35	BN/BK	2210	Air Temperature Door Control	I	-

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COMPONENT CONNECTOR END VIEWS > M6R AIR TEMPERATURE DOOR ACTUATOR - RIGHT



Connector Part Information

- Harness Type: HVAC
- OEM Connector: IL-AG5-7S-S3C1
- Service Connector: Service by Harness - See Part Catalog
- Description: 7-Way F IL-AG5 Series (GN)

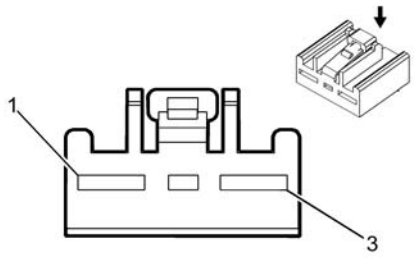
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GY	598	5 Volt Reference	I	-
2	-	-	-	Not Occupied	-	-
3	0.35	GY/BK	1791	Air Temperature Door Control Low Reference	I	-
4	-	-	-	Not Occupied	-	-
5	0.35	BK/RD	3183	Temp Door Stepper Motor Passenger Control (3)	I	-
6	0.35	OG	3182	Temp Door Stepper Motor Passenger Control (2)	I	-
7	0.35	YE/RD	3181	Temp Door Stepper Motor Passenger Control (1)	I	-

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COMPONENT CONNECTOR END VIEWS > M8 BLOWER MOTOR



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 7283-3032
- Service Connector: 19333319
- Description: 3-Way F 187, 312 Series (NA)

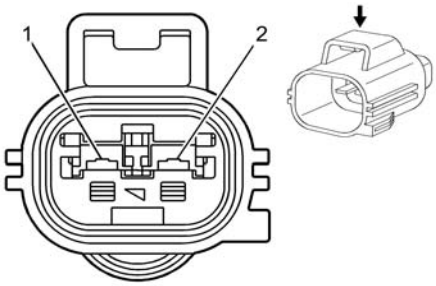
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-40 (BU)	Not Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-44 (YE)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	4	BK	1450	Ground	II	-
2	0.35	BU/GY	754	Blower Motor Speed Control	I	-
3	2.5	RD/VT	542	Battery Positive Voltage	II	-

COMPONENT CONNECTOR END VIEWS > M9 BRAKE BOOSTER PUMP MOTOR

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Connector Part Information

- Harness Type: Forward Lamp
- OEM Connector: 19150022
- 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	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-5 (PU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	BN/VT	1470	Brake Booster Pump Motor Control	I	LT1/LT4
2	2.5	BK	550	Ground	I	LT1/LT4

COMPONENT CONNECTOR END VIEWS > M23 FOLDING TOP PUMP MOTOR X1 (CM8)

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Connector Part Information

- Harness Type: Folding Top Pump Motor
- OEM Connector: N/A
- Service Connector: Service by Harness - See Part Catalog

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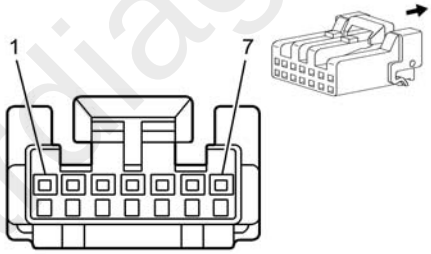
- Description: 4-Way F

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	4.0	RD	7088	Roof Door Module Pass Door Window Regulator Signal	I	-
2	4.0	RD	7086	Roof Door Module Driver Door Window Regulator Status	I	-
3 - 4	-	-	-	Not Occupied	-	-

COMPONENT CONNECTOR END VIEWS > M37 MODE DOOR ACTUATOR



Connector Part Information

- Harness Type: HVAC
- OEM Connector: IL-AG5-7S-S3C1
- Service Connector: Service by Harness - See Part Catalog
- Description: 7-Way F IL-AG5 Series (GN)

Terminal Part Information

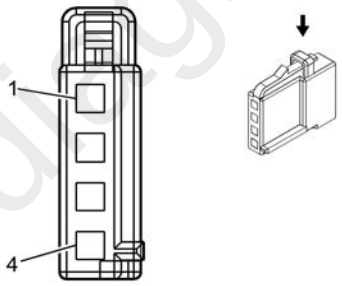
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal	Service Terminal	Tray Name	Core Crimp	Insulation Crimp

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			Tool				
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GY	598	5 Volt Reference	I	-
2	-	-	-	Not Occupied	-	-
3	0.35	GY/BK	1791	Air Temperature Door Control Low Reference	I	-
4	-	-	-	Not Occupied	-	-
5	0.35	WH	2275	Mode 1 Valve Position Sensor Signal	I	-
6	0.35	PK	119	Mode Door Control	I	-
7	0.35	GY/RD	2273	Mode Door Control	I	-

COMPONENT CONNECTOR END VIEWS > M40 REAR COMPARTMENT LID LATCH



Connector Part Information

- Harness Type: Body
- OEM Connector: 24466147
- Service Connector: 15306167
- Description: 4-Way F 1.2 Timer Series (BK)

Terminal Part Information

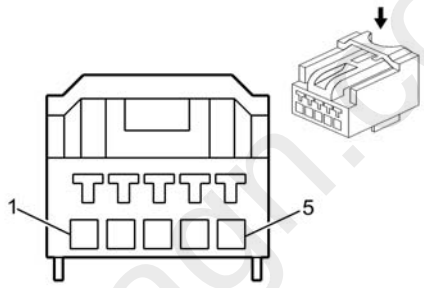
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp

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I	Not Required	J-35616-14 (GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU/WH	6128	Rear Closure Unlatch Motor Unlatch Control	I	-
2	0.5	BK	2450	Ground	I	-
3	-	-	-	Not Occupied	-	-
4	0.35	VT/GY	1303	Lift Gate Ajar Switch Signal (1)	I	-

COMPONENT CONNECTOR END VIEWS > M46 AIR RECIRCULATION DOOR ACTUATOR



Connector Part Information

- Harness Type: HVAC
- OEM Connector: 7283-5830-30
- Service Connector: Service by Harness - See Part Catalog
- Description: 5-Way F (BK)

Terminal Part Information

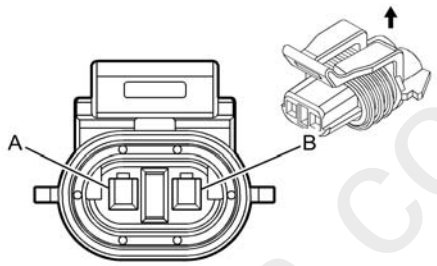
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option

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1	0.35	GY/BK	1791	Air Temperature Door Control Low Reference	I	-
2	0.35	GY	598	5 Volt Reference	I	-
3	0.35	BU	1838	Recirculation Door Position Signal	I	-
4	0.35	YE	1614	Recirculation Door Control	I	-
5	0.35	L-BU	2274	Recirculation Door Control	I	-

COMPONENT CONNECTOR END VIEWS > M47 REVERSE INHIBIT SOLENOID ACTUATOR



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13585444
- Service Connector: 13585444
- Description: 2-Way F 150 Metri-Pack Series, Sealed (WH)

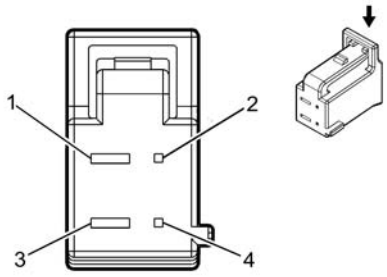
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	VT/WH	6384	Reverse Lockout Signal	I	LT1+MM6
B	0.5	RD/GN	1840	Battery Positive Voltage	I	MM6/MH3

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COMPONENT CONNECTOR END VIEWS > M50D SEAT FRONT VERTICAL MOTOR - DRIVER



Connector Part Information

- Harness Type: Driver Seat
- OEM Connector: 6098-2830
- Service Connector: Service by Harness - See Part Catalog
- Description: 4-Way F 0.64, 2.8 Series (BN)

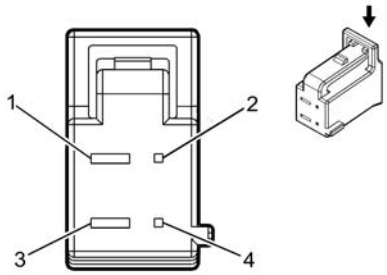
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

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	0.35	WH/RD	3298	Memory Sensor High Reference 2	II	-
3	1.5	BU/VT	287	Driver Power Seat Front Vertical Motor Down Control	I	-
4	0.35	BN/WH	557	Memory Seat Front Vertical Motor Position Sensor Signal	II	-

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COMPONENT CONNECTOR END VIEWS > M51D SEAT HORIZONTAL MOTOR - DRIVER



Connector Part Information

- Harness Type: Driver Seat
- OEM Connector: 6098-2830
- Service Connector: Service by Harness - See Part Catalog
- Description: 4-Way F 0.64, 2.8 Series (BN)

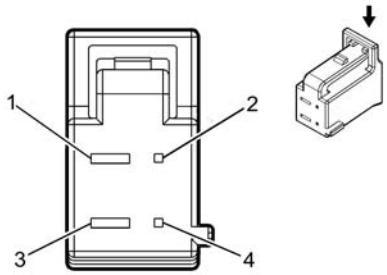
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	YE/BU	285	Driver Power Seat Horizontal Motor Forward Control	I	-
2	0.35	WH/RD	3298	Memory Sensor High Reference 2	II	-
3	1.5	GY/GN	284	Driver Power Seat Horizontal Motor Rearward Control	I	-
4	0.35	GN	569	Memory Seat Horizontal Motor Position Sensor Signal	II	-

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COMPONENT CONNECTOR END VIEWS > 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: 4-Way F 0.64, 2.8 Series (BN)

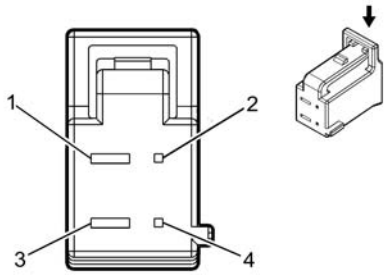
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	YE/BU	290	Passenger Power Seat Horizontal Motor Rearward Control	I	-
2	1.5	YE/WH	296	Passenger Power Seat Horizontal Motor Forward Control	I	-
3 - 4	-	-	-	Not Occupied	-	-

COMPONENT CONNECTOR END VIEWS > M55D SEAT REAR VERTICAL MOTOR - DRIVER

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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 0.64, 2.8 Series (BN)

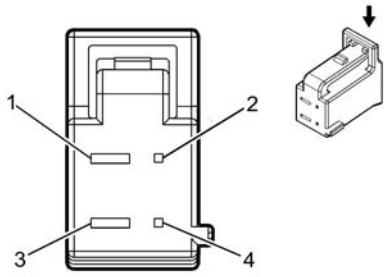
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

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	0.35	WH/RD	3298	Memory Sensor High Reference 2	II	-
3	1.5	YE	282	Driver Power Seat Rear Vertical Motor Up Control	I	-
4	0.5	YE/BU	568	Memory Seat Rear Vertical Motor Position Sensor Signal	II	-

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COMPONENT CONNECTOR END VIEWS > M56D SEAT RECLINE MOTOR - DRIVER



Connector Part Information

- Harness Type: Driver Seat
- OEM Connector: 6098-2830
- Service Connector: Service by Harness - See Part Catalog
- Description: 4-Way F 0.64, 2.8 Series (BN)

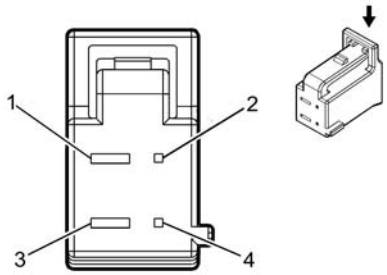
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	GN/YE	276	Driver Power Seat Recline Motor Forward Control	I	-
2	0.35	WH/RD	3298	Memory Sensor High Reference 2	II	-
3	1.5	BU/YE	277	Driver Power Seat Recline Motor Rearward Control	I	-
4	0.35	WH/BK	570	Driver Memory Seat Recline Motor Position Sensor Signal	II	-

COMPONENT CONNECTOR END VIEWS > M56P SEAT RECLINE MOTOR - PASSENGER

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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 0.64, 2.8 Series (BN)

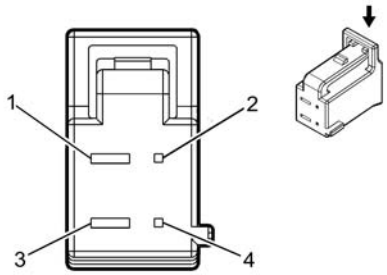
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	BU/BN	77	Passenger Power Seat Recline Motor Rearward Control	I	-
2	-	-	-	Not Occupied	-	-
3	1.5	GN	76	Passenger Power Seat Recline Motor Forward Control	I	-
4	-	-	-	Not Occupied	-	-

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COMPONENT CONNECTOR END VIEWS > M57P SEAT 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 0.64, 2.8 Series (BN)

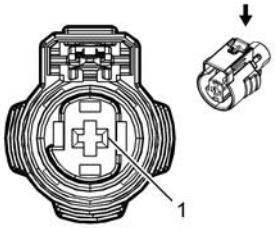
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	GN/WH	288	Passenger Power Seat Rear Vertical Motor Up Control	I	-
2	-	-	-	Not Occupied	-	-
3	1.5	BU/WH	289	Passenger Power Seat Rear Vertical Motor Down Control	I	-
4	-	-	-	Not Occupied	-	-

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COMPONENT CONNECTOR END VIEWS > M64 STARTER MOTOR



Connector Part Information

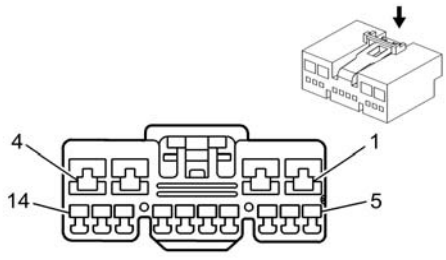
- Harness Type: Engine
- OEM Connector: 13589322
- Service Connector: 19300471
- Description: 1-Way F 2.8 MCP Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-35 (VT)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	4	YE	6	Starter Solenoid Crank Ignition Voltage	I	-

COMPONENT CONNECTOR END VIEWS > M69 SUNROOF MOTOR



Connector Part Information

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- Harness Type: Body
- OEM Connector: 19179972
- Service Connector: 19179972
- Description: 14-Way F 0.64, 2.8 YESC Series (L-GY)

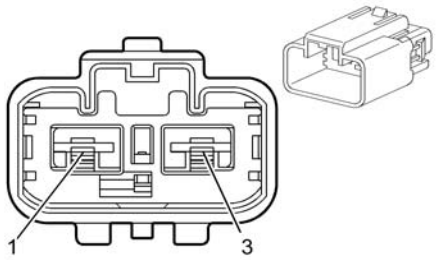
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13575839	J-35616-35 (VT)	J-38125-11A	7116-4112-02	14	C	D
II	13575839	J-35616-35 (VT)	J-38125-11A	Not available	Not available	Not available	Not available
III	13575847	J-35616-64B (LT BU)	J-38125-553	7116-4720-02	16	H	H

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	RD/GY	3540	Battery Positive Voltage	II	CF5
2 - 3	-	-	-	Not Occupied	-	-
4	2.5	BK	2350	Ground	I	CF5
5 - 6	-	-	-	Not Occupied	-	-
7	0.35	BU/VT	5027	Sunroof Switch Data (1) Signal	III	CF5
8	0.35	BK/GY	128	Sunroof Switch Low Reference	III	CF5
9 - 10	-	-	-	Not Occupied	-	-
11	0.35	GN/BN	6132	Local Interconnect Network Serial Data Bus 1	III	CF5
12 - 14	-	-	-	Not Occupied	-	-

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COMPONENT CONNECTOR END VIEWS > M73A SEAT BLOWER MOTOR - DRIVER BACK



Connector Part Information

- Harness Type: Driver Seat
- OEM Connector: 7282-5563-40
- Service Connector: Service by Harness - See Part Catalog
- Description: 3-Way M YESC USCAR Class III Series, Sealed (L-GY)

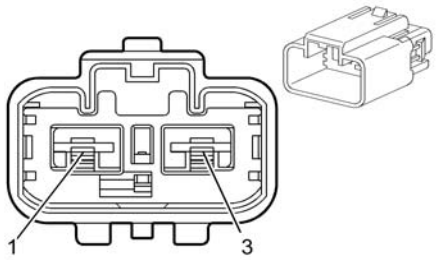
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-5 (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	VT/BK	739	Run/Crank Ignition 1 Voltage	I	-
2	0.35	GN/VT	5906	Driver Seat Vent Motor Control 1	I	-
3	0.5	BK	2150	Ground	I	-

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COMPONENT CONNECTOR END VIEWS > M73B SEAT BLOWER MOTOR - PASSENGER BACK



Connector Part Information

- Harness Type: Passenger Seat
- OEM Connector: 7282-5563-40
- Service Connector: Service by Harness - See Part Catalog
- Description: 3-Way M YESC USCAR Class III Series, Sealed ()

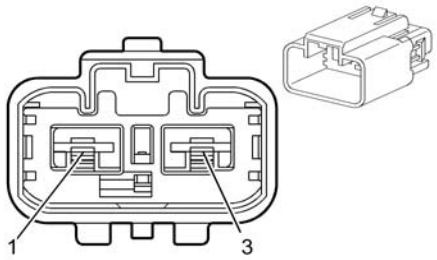
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-5 (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	VT/BK	739	Run/Crank Ignition 1 Voltage	I	-
2	0.35	VT/WH	5908	Passenger Seat Vent Motor Control 1	I	-
3	0.5	BK	2250	Ground	I	-

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COMPONENT CONNECTOR END VIEWS > M73C SEAT BLOWER MOTOR - DRIVER CUSHION



Connector Part Information

- Harness Type: Driver Seat
- OEM Connector: 7282-5563-40
- Service Connector: Service by Harness - See Part Catalog
- Description: 3-Way M YESC USCAR Class III Series, Sealed (L-GY)

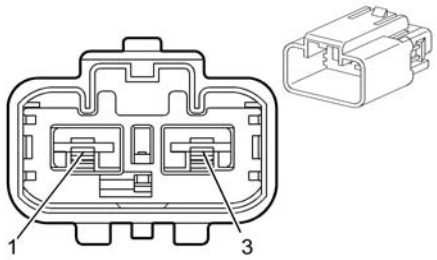
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-5 (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	VT/BK	739	Run/Crank Ignition 1 Voltage	I	-
2	0.35	GN/VT	5906	Driver Seat Vent Motor Control 1	I	-
3	0.5	BK	2150	Ground	I	-

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COMPONENT CONNECTOR END VIEWS > M73D SEAT BLOWER MOTOR - PASSENGER CUSHION



Connector Part Information

- Harness Type: Passenger Seat
- OEM Connector: 7282-5563-40
- Service Connector: Service by Harness - See Part Catalog
- Description: 3-Way M YESC USCAR Class III Series, Sealed ()

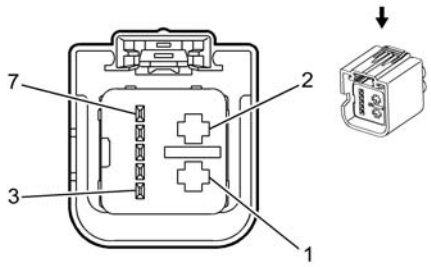
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-5 (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	VT/BK	739	Run/Crank Ignition 1 Voltage	I	-
2	0.35	VT/WH	5908	Passenger Seat Vent Motor Control 1	I	-
3	0.5	BK	2250	Ground	I	-

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COMPONENT CONNECTOR END VIEWS > M74D WINDOW MOTOR - DRIVER



Connector Part Information

- Harness Type: Driver Door
- OEM Connector: 13590001
- Service Connector: Service by Harness - See Part Catalog
- Description: 7-Way F 0.64, 2.8 Kaizen Timer Series, Sealed (BK)

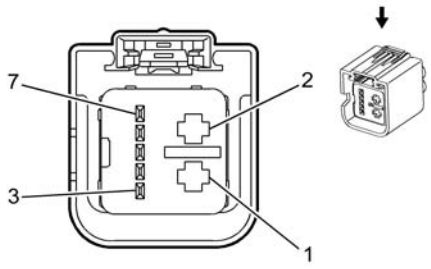
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-4A (PU)	Not Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	BK	2150	Ground	I	-
2	2.5	RD/BU	1842	Battery Positive Voltage	I	-
3	0.35	GN/WH	3379	Power Window Switch Driver Up Signal	II	-
4	0.35	GN/YE	6134	Local Interconnect Network Serial Data Bus 3	II	-
5	0.35	GN	3381	Power Window Switch Driver Express Signal	II	-
6	0.35	GY	745	Left Front Door Ajar Switch Signal	II	-
7	0.35	GY	3380	Power Window Switch Driver Down Signal	II	-

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COMPONENT CONNECTOR END VIEWS > M74LR WINDOW MOTOR - LEFT REAR



Connector Part Information

- Harness Type: Body
- OEM Connector: 13590001
- Service Connector: 19333318
- Description: 7-Way F 0.64, 2.8 Kaizen Timer Series, Sealed (BK)

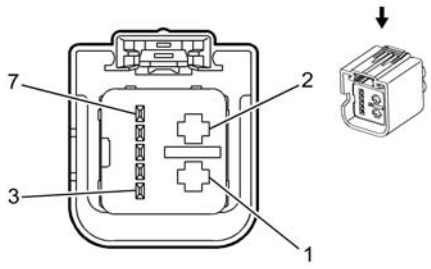
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-4A (PU)	Not Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	BK	2350	Ground	I	A1AC
2	2.5	RD/BU	1842	Battery Positive Voltage	I	A1AC
3	0.35	GN/GY	-	-	II	A1AC
4	0.35	GN/GY	6135	Local Interconnect Network Serial Data Bus 4	II	A1AC
5	0.35	GN/GY	-	-	II	A1AC
6	0.35	GN/GY	-	-	II	A1AC
7	0.35	GN/GY	-	-	II	A1AC

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COMPONENT CONNECTOR END VIEWS > M74P WINDOW MOTOR - PASSENGER



Connector Part Information

- Harness Type: Passenger Door
- OEM Connector: 13590001
- Service Connector: Service by Harness - See Part Catalog
- Description: 7-Way F 0.64, 2.8 Kaizen Timer Series, Sealed (BK)

Terminal Part Information

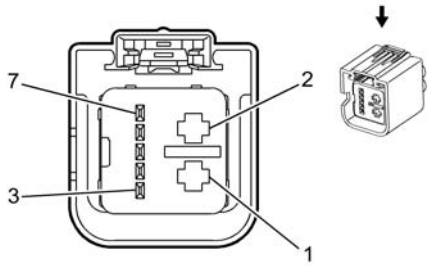
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-4A (PU)	Not Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	BK	2250	Ground	I	-
2	2.5	RD/WH	4042	Battery Positive Voltage	I	-
3	0.35	YE/BK	3384	Power Window Switch Passenger Up Signal	II	-
4	0.35	GN/YE	6134	Local Interconnect Network Serial Data Bus 3	II	-
5	0.35	VT/GY	3386	Power Window Switch Passenger Express Signal	II	-
6	0.35	GY	746	Right Front Door Ajar Switch Signal	II	-

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7	0.35	BN/YE	3385	Power Window Switch Passenger Down Signal	II	-

COMPONENT CONNECTOR END VIEWS > M74RR WINDOW MOTOR - RIGHT REAR



Connector Part Information

- Harness Type: Body
- OEM Connector: 13590001
- Service Connector: 19333318
- Description: 7-Way F 0.64, 2.8 Kaizen Timer Series, Sealed (BK)

Terminal Part Information

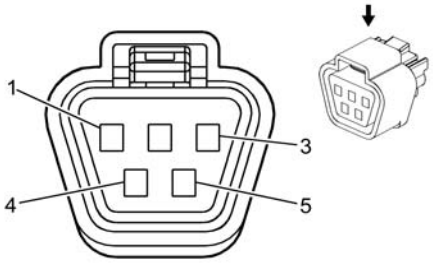
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-4A (PU)	Not Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	BK	2450	Ground	I	A1AC
2	2.5	RD/WH	4042	Battery Positive Voltage	I	A1AC
3	0.35	GN/GY	-	-	II	A1AC
4	0.35	GN/GY	6135	Local Interconnect Network Serial Data Bus 4	II	A1AC
5	0.35	GN/GY	-	-	II	A1AC

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6	0.35	GN/GY	-	-	II	A1AC
7	0.35	GN/GY	-	-	II	A1AC

COMPONENT CONNECTOR END VIEWS > M79 WINDSHIELD WIPER MOTOR MODULE



Connector Part Information

- Harness Type: Body
- OEM Connector: 15316488
- Service Connector: 13587179
- Description: 5-Way F 090 Series, Sealed (GY)

Terminal Part Information

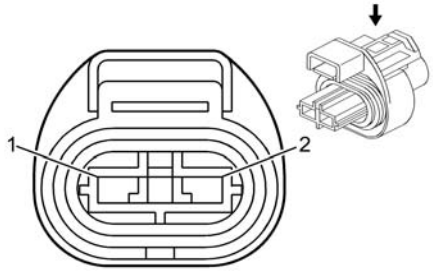
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	Not Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-18 (BK)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2	YE/BN	95	Windshield Wiper Motor Low Speed Control	II	-
2	-	-	-	Not Occupied	-	-
3	0.35	BN/GN	196	Windshield Wiper Motor Park Switch Signal	II	-

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4	2	WH	92	Windshield Wiper Motor High Speed Control	II	-
5	1.5	BK	750	Ground	I	-

COMPONENT CONNECTOR END VIEWS > M97 FUEL FILL DOOR LOCK ACTUATOR



Connector Part Information

- Harness Type: Body
- OEM Connector: 13156102
- Service Connector: 13314083
- Description: 2-Way F 1.2 Timer Series, Sealed (BK)

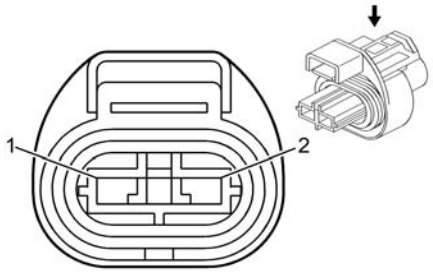
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN/YE	294	Door Lock Actuator Unlock Control	I	-
2	0.75	BU	6800	Fuel Door Lock/Unlock (1) Signal	I	-

COMPONENT CONNECTOR END VIEWS > M97 FUEL FILL DOOR LOCK ACTUATOR (CM8)

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Connector Part Information

- Harness Type: Body
- OEM Connector: 13156102
- Service Connector: 13314083
- Description: 2-Way F 1.2 Timer Series, Sealed (BK)

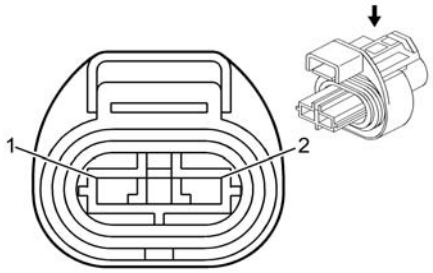
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN/YE	294	Door Lock Actuator Unlock Control	I	N08
2	0.75	BU	6800	Fuel Door Lock/Unlock (1) Signal	I	N08

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COMPONENT CONNECTOR END VIEWS > M97 FUEL FILL DOOR LOCK ACTUATOR (-CM8)



Connector Part Information

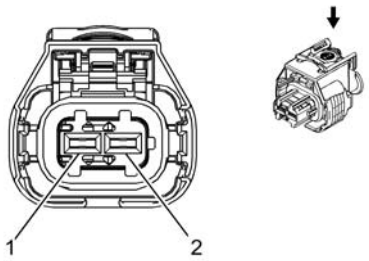
- Harness Type: Fuel Door Jumper
- OEM Connector: 13156102
- Service Connector: 13314083
- Description: 2-Way F 1.2 Timer Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN/YE	294	Door Lock Actuator Unlock Control	I	N08-CM8
2	0.75	BU	6800	Fuel Door Lock/Unlock (1) Signal	I	N08-CM8

COMPONENT CONNECTOR END VIEWS > M104L PARK BRAKE ACTUATOR - LEFT



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Connector Part Information

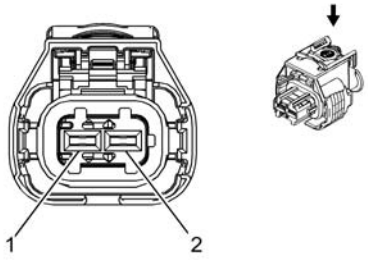
- Harness Type: Rear Chassis
- OEM Connector: 13343443
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 2.8 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-35 (VT)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	WH	2001	Park Brake Motor Apply Left Rear Control	I	J71
2	2.5	GY/BK	4369	Park Brake Motor Low Reference Left Rear	I	J71

COMPONENT CONNECTOR END VIEWS > M104R PARK BRAKE ACTUATOR - RIGHT



Connector Part Information

- Harness Type: Rear Chassis
- OEM Connector: 13343443
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 2.8 Series, Sealed (BK)

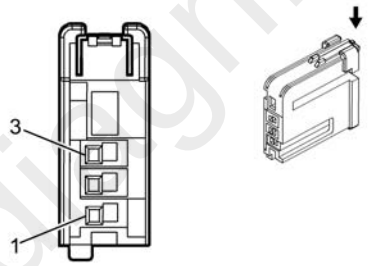
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Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-35 (VT)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	GN/VT	1988	Park Brake Motor Apply Right Rear Control	I	J71
2	2.5	GY	4368	Park Brake Motor Low Reference Right Rear	I	J71

COMPONENT CONNECTOR END VIEWS > P2 TRANSMISSION SHIFT LEVER POSITION INDICATOR



Connector Part Information

- Harness Type: Floor Console
- OEM Connector: 19153430
- Service Connector: Service by Harness - See Part Catalog
- Description: 3-Way F 0.64 Series (BK)

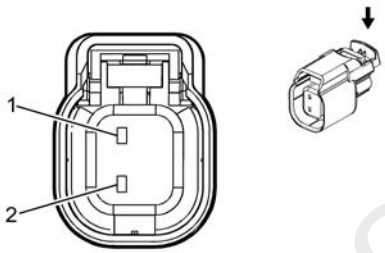
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GY/VT	755	RAP Relay Coil Control	I	M5T/M5U/MGL
2	0.35	GN/BU	6133	Local Interconnect Network Serial Data Bus 2	I	M5U/M5T/MGL
3	0.35	BK	2250	Ground	I	M5U/M5T/MGL

COMPONENT CONNECTOR END VIEWS > P12 HORN



Connector Part Information

- Harness Type: Forward Lamp
- OEM Connector: 13503510
- Service Connector: 19300543
- Description: 2-Way F 1.5 Series, Sealed (BK)

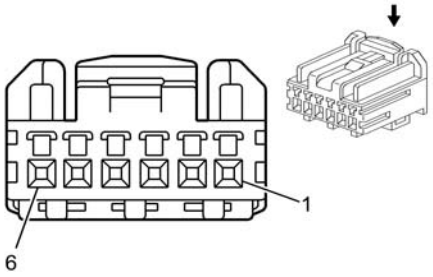
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	550	Ground	I	LTG/LGX/LT1
2	0.75	BN/GY	29	Horn Control	I	LTG/LGX/LT1

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COMPONENT CONNECTOR END VIEWS > P14 PASSENGER AIR BAG DISABLED INDICATOR



Connector Part Information

- Harness Type: Headliner
- OEM Connector: 19151550
- Service Connector: 19153174
- Description: 6-Way F 0.64 HCM Series (NA)

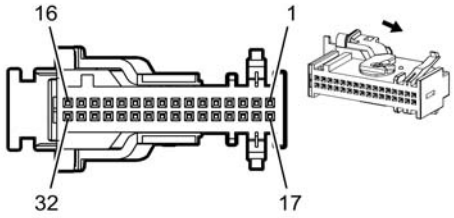
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BU	2307	Passenger Air Bag On Indicator Control	I	-
2	0.35	BK	1350	Ground	I	-
3	0.35	GN	2308	Passenger Air Bag Off Indicator Control	I	-
4	0.35	VT/WH	1139	Run/Crank Ignition 1 Voltage	I	-
5	0.35	VT	5234	Passenger Seat Belt Indicator Control	I	-
6	-	-	-	Not Occupied	-	-

COMPONENT CONNECTOR END VIEWS > P16 INSTRUMENT CLUSTER

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Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 90587345
- Service Connector: 88988405
- Description: 32-Way F 0.64 Micro Quadlok Series (BK)

Terminal Part Information

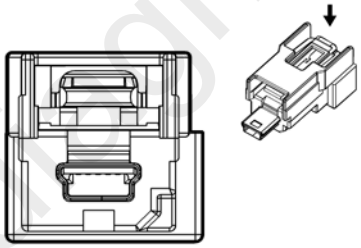
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13575584	J-35616-64B (LT BU)	J-38125-12A	Not available	Not available	Not available	Not available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	WH/GN	3997	MOST Serial Data (-)	I	-
2	0.35	GY/VT	3998	MOST Serial Data (+)	I	-
3	0.35	GY/GN	1102	Low Speed GMLAN Serial Data #2	I	-
4	-	-	-	Not Occupied	-	-
5	0.35	WH/VT	3999	MOST Control	I	IO5/IO6
6	-	-	-	Not Occupied	-	-
7	0.5	RD/BU	3240	Battery Positive Voltage	I	-
8	0.35	VT/GY	139	Run/Crank Ignition 1 Voltage	I	-
9 - 15	-	-	-	Not Occupied	-	-
16	0.35	BN/WH	419	Check Engine Indicator Control	I	-
17	0.35	GY/VT	3998	MOST Serial Data (+)	I	UHS+IO5/IO6

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18	0.35	WH/GN	3997	MOST Serial Data (-)	I	UHS+IO5/IO6
19	0.5	BK	1350	Ground	I	-
20	0.35	GN/BK	3894	Local Interconnect Network Serial data Bus 12	I	-
21	0.35	GN/BK	3894	Local Interconnect Network Serial data Bus 12	I	UV6
22	0.35	WH	121	Engine Speed Signal	I	-
23 - 24	-	-	-	Not Occupied	-	-
25	0.35	BK/BU	61	Outside Ambient Temperature Sensor Low Reference	I	LT1/LT4
26	-	-	-	Not Occupied	-	-
27	0.35	BU/GY	636	Outside Ambient Air Temperature Sensor Signal	I	LT1/LT4
28 - 32	-	-	-	Not Occupied	-	-

COMPONENT CONNECTOR END VIEWS > P16 INSTRUMENT CLUSTER X3



Connector Part Information

- Harness Type: Instrument Panel USB
- OEM Connector: 111014-0003
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: 5-Way M 2.0 Mini-B USB Type (BK)

Terminal Part Information

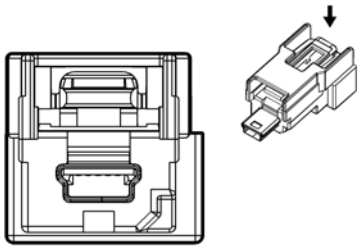
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Available	Not Available	Not	Not	Not	Not	Not

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			Available	Available	Available	Available	Available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
-	-	USB	-	USB Serial Data	I	-

COMPONENT CONNECTOR END VIEWS > P16 INSTRUMENT CLUSTER X2



Connector Part Information

- Harness Type: Instrument Panel LVDS
- OEM Connector: 13579208
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: 5-Way M 2.0 Mini-B USB Type (BK)

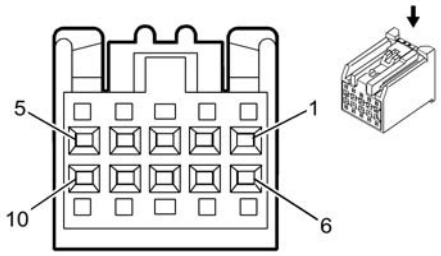
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
-	-	LVDS	-	(Head Up Display) Head Up Display Signal	I	-

COMPONENT CONNECTOR END VIEWS > P17 INFO DISPLAY MODULE (IO5/IO6)

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Connector Part Information

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

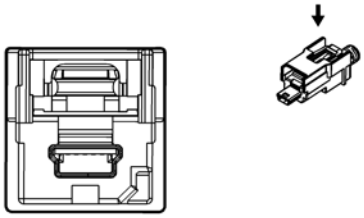
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13575845	J-35616-64B (LT BU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	RD/BU	3240	Battery Positive Voltage	I	IO5/IO6
2	-	-	-	Not Occupied	-	-
3	0.35	GY/GN	1102	Low Speed GMLAN Serial Data #2	I	IO5/IO6
4	-	-	-	Not Occupied	-	-
5	0.35	GN/BU	7532	Local Interconnect Network Serial Data Bus 10	I	-
6 - 7	-	-	-	Not Occupied	-	-
8	0.35	GN/WH	7527	Local Interconnect Network Serial Data Bus 5	I	-
9	-	-	-	Not Occupied	-	-
10	0.5	BK/WH	1551	Signal Ground	I	IO5/IO6

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COMPONENT CONNECTOR END VIEWS > P17 INFO DISPLAY MODULE X2 (IO5/IO6)



Connector Part Information

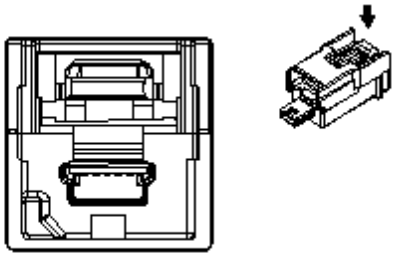
- Harness Type: Instrument Panel LVDS
- OEM Connector: 13576672
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: 5-Way M 2.0 Mini-B USB Type (GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
-	-	LVDS	-	(Infotainment) Infotainment Display Signal	I	-

COMPONENT CONNECTOR END VIEWS > P17 INFO DISPLAY MODULE X3 (IO5/IO6)



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Connector Part Information

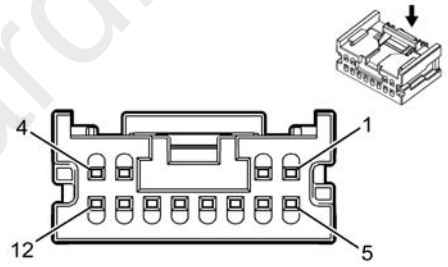
- Harness Type: Instrument Panel LVDS
- OEM Connector: 13576673
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: 5-Way M 2.0 Mini-B USB Type (GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
-	-	LVDS	-	(Infotainment) Infotainment Display Signal	I	-

COMPONENT CONNECTOR END VIEWS > P17 INFO DISPLAY MODULE (IOB)



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 13593916
- Service Connector: 19330348
- Description: 12-Way F Mini 50 Series (BK)

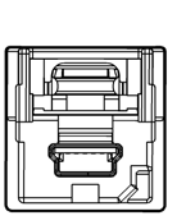
Terminal Part Information

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Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	19330186	J-35616-64B (LT BU)	J-38125-11A N/A	Not available	Not available	Not available	Not available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GY/BN	3761	Infotainment Regulated Control	I	IOB
2	0.35	BN/GN	3364	Navigation Display Reset Signal	I	IOB
3	0.35	GY/BN	3761	Infotainment Regulated Control	I	IOB
4	0.35	GN/BK	2515	Keypad Control	I	IOB
5	0.35	VT/GY	1381	LCD Dimming Signal	I	IOB
6	0.35	GY/BU	3989	Display Radio Bank Switch Dim Signal	I	IOB
7	0.35	BN/GN	4502	Video Display Request Signal	I	IOB
8	0.35	GY/BN	3761	Infotainment Regulated Control	I	IOB
9	0.35	BK/WH	1551	Signal Ground	I	IOB
10	0.35	BK/WH	1551	Signal Ground	I	IOB
11	0.35	BK/BN	2518	Keypad Low Reference	I	IOB
12	0.35	GY/BU	3989	Display Radio Bank Switch Dim Signal	I	IOB

COMPONENT CONNECTOR END VIEWS > P17 INFO DISPLAY MODULE X2 (IOB)



Connector Part Information

- Harness Type: Instrument Panel LVDS
- OEM Connector: 13576672
- Service Connector: Service by Cable Assembly - See Part Catalog

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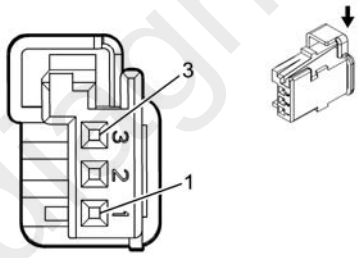
- Description: 5-Way M 2.0 Mini-B USB Type (GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
-	-	LVDS	-	(Infotainment) Infotainment Display Signal	I	-

COMPONENT CONNECTOR END VIEWS > E1G ACCENT LAMP - LEFT INSTRUMENT PANEL (-C70)



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 953697-2
- Service Connector: 19333316
- Description: 3-Way F 0.64 MQS Series (WH)

Terminal Part Information

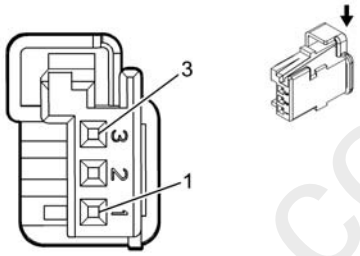
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B	Not	Not	Not	Not	Not

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		(LT BU)	Required	Required	Required	Required	Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	WH/YE	7557	LED Ambient Lighting Control 1	I	IO5/IO6-C70
3	0.35	BK	1450	Ground	I	IO5/IO6-C70

COMPONENT CONNECTOR END VIEWS > E1H ACCENT LAMP - RIGHT INSTRUMENT PANEL (-C70)



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 953697-2
- Service Connector: 19333316
- Description: 3-Way F 0.64 MQS Series (WH)

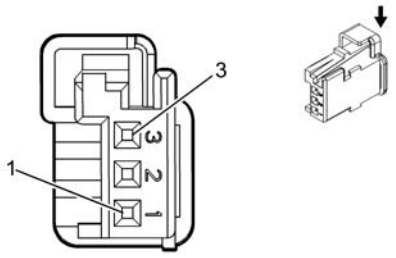
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	WH/YE	7557	LED Ambient Lighting Control 1	I	IO5/IO6-C70
3	0.35	BK	1450	Ground	I	IO5/IO6-C70

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COMPONENT CONNECTOR END VIEWS > E1G ACCENT LAMP - LEFT INSTRUMENT PANEL (C70)



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 953697-1
- Service Connector: 19333317
- Description: 3-Way F 0.64 MQS Series (BK)

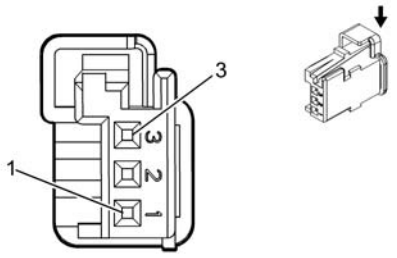
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	VT/GN	900	-	I	C70
2	0.35	BK	1450	Ground	I	C70
3	0.35	RD/BN	910	-	I	C70

COMPONENT CONNECTOR END VIEWS > E1H ACCENT LAMP - RIGHT INSTRUMENT PANEL (C70)

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Connector Part Information

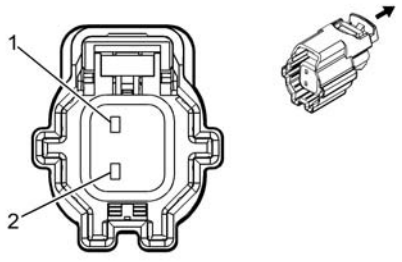
- Harness Type: Instrument Panel
- OEM Connector: 953697-1
- Service Connector: 19333317
- Description: 3-Way F 0.64 MQS Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	VT/GN	900	-	I	C70
2	0.35	BK	1450	Ground	I	C70
3	0.35	RD/BN	910	-	I	C70

COMPONENT CONNECTOR END VIEWS > P19AG SPEAKER - LEFT FRONT DOOR



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Connector Part Information

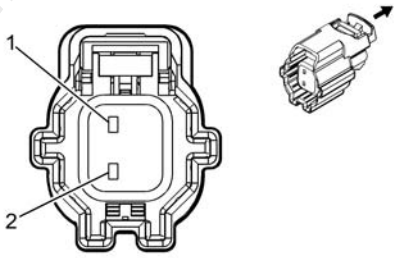
- Harness Type: Driver Door
- OEM Connector: 34062-0044
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 150 MX Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	BN/BU	118	Left Front Speaker Signal (-) (1)	I	-
2	1.5	BU	201	Left Front Speaker Control (+) (1)	I	-

COMPONENT CONNECTOR END VIEWS > P19AH SPEAKER - RIGHT FRONT DOOR



Connector Part Information

- Harness Type: Passenger Door
- OEM Connector: 34062-0044
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 150 MX Series (BK)

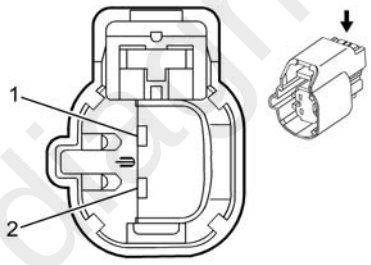
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Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75 1.5	YE/BK YE/BK	117 117	Right Front Speaker Signal (-) (1)	I	- -
2	0.75 1.5	YE YE	200 200	Right Front Speaker Control (+) (1)	I	- -

COMPONENT CONNECTOR END VIEWS > P19AJ SPEAKER - LEFT REAR WINDOW SHELF (UQ3-CM8)



Connector Part Information

- Harness Type: Body
- OEM Connector: 19179953
- Service Connector: 19179953
- Description: 2-Way F 150 GT Series (BK)

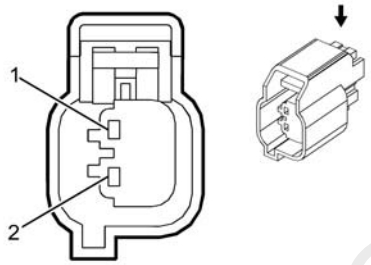
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	No Tool Required	Not Required	Not Required	Not Required	Not Required

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	GN/BK	116	Left Rear Speaker Signal (-)	I	-
2	0.75	GN	199	Left Rear Speaker Control (+)	I	-

COMPONENT CONNECTOR END VIEWS > P19AJ SPEAKER - LEFT REAR WINDOW SHELF



Connector Part Information

- Harness Type: Body
- OEM Connector: 19168541
- Service Connector: 19119898
- Description: 2-Way F 150 GT Series (NA)

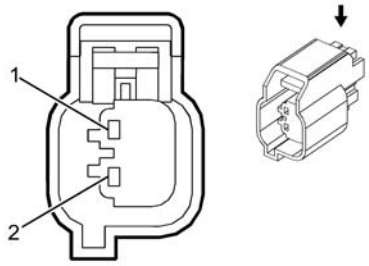
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1	GN/BK	1794	Left/Rear Subwoofer Speaker (-) Low Reference	I	UQA+A1BC
2	1	BU/GY	346	Left/Rear Subwoofer Speaker Control (+)	I	UQA+A1BC

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COMPONENT CONNECTOR END VIEWS > P19AK SPEAKER - RIGHT REAR WINDOW SHELF



Connector Part Information

- Harness Type: Body
- OEM Connector: 19168541
- Service Connector: 19119898
- Description: 2-Way F 150 GT Series (NA)

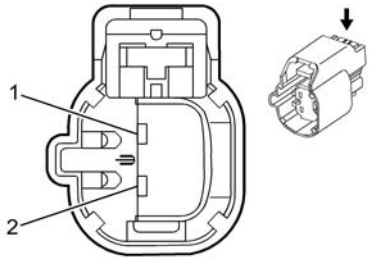
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1	GN/VT	1795	Right Subwoofer Speaker Control (+)	I	UQA+A1BC
2	1	GY/BK	315	Right Subwoofer Speaker (-) Low Reference	I	UQA+A1BC

COMPONENT CONNECTOR END VIEWS > P19AN SPEAKER - LEFT REAR TRIM PANEL (UQ3)

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Connector Part Information

- Harness Type: Body
- OEM Connector: 19179953
- Service Connector: 19179953
- Description: 2-Way F 150 GT Series (BK)

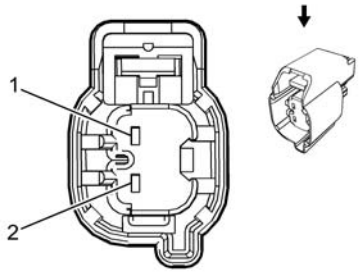
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	GN/BK	116	Left Rear Speaker Signal (-)	I	-
2	0.75	GN	199	Left Rear Speaker Control (+)	I	-

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COMPONENT CONNECTOR END VIEWS > P19AN SPEAKER - LEFT REAR TRIM PANEL (UQA)



Connector Part Information

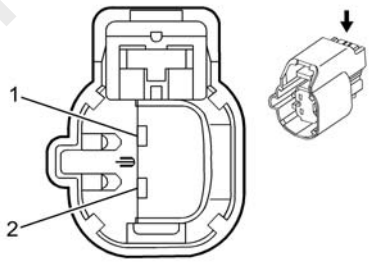
- Harness Type: Body
- OEM Connector: 19168540
- Service Connector: 13504282
- Description: 2-Way F 150 GT Series (L-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1	GN/BK	116	Left Rear Speaker Signal (-)	I	-
2	1	GN	199	Left Rear Speaker Control (+)	I	-

COMPONENT CONNECTOR END VIEWS > P19AP SPEAKER - RIGHT REAR TRIM PANEL (UQ3)



Connector Part Information

- Harness Type: Body
- OEM Connector: 19179953
- Service Connector: 19179953
- Description: 2-Way F 150 GT Series (BK)

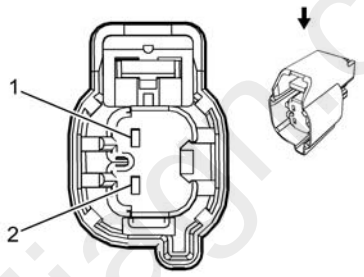
Terminal Part Information

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Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BU/BK	115	Right Rear Speaker Signal (-)	I	-
2	0.75	WH	46	Right Rear Speaker Control (+)	I	-

COMPONENT CONNECTOR END VIEWS > P19AP SPEAKER - RIGHT REAR TRIM PANEL (UQA)



Connector Part Information

- Harness Type: Body
- OEM Connector: 19168540
- Service Connector: 13504282
- Description: 2-Way F 150 GT Series (L-GY)

Terminal Part Information

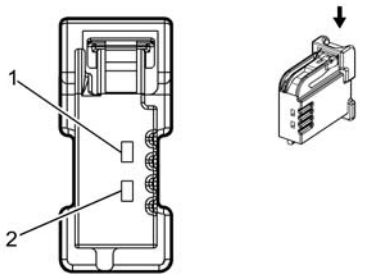
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal	Option

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					Type ID	
1	1	BU/BK	115	Right Rear Speaker Signal (-)	I	-
2	1	WH	46	Right Rear Speaker Control (+)	I	-

COMPONENT CONNECTOR END VIEWS > P19B SPEAKER - CENTER INSTRUMENT PANEL



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 19150056
- Service Connector: 13314097
- Description: 2-Way F 1.5 Series (GY)

Terminal Part Information

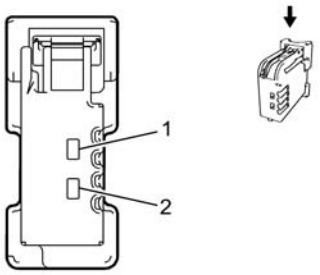
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1	BU/YE	1960	Front Center Speaker (-) Low Reference	I	UQA+A1BC
2	1	YE/WH	1860	Front Center Speaker Control (+)	I	UQA+A1BC

COMPONENT CONNECTOR END VIEWS > P19H SPEAKER - LEFT FRONT TWEETER

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(UQ3)



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 19168545
- Service Connector: 13505908
- Description: 2-Way F 1.5 Series (GN)

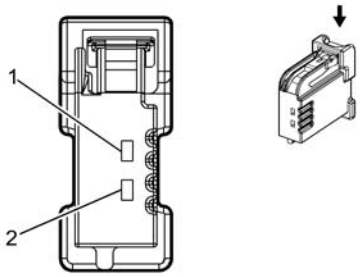
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

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 Control (+) (1)	I	-

COMPONENT CONNECTOR END VIEWS > P19H SPEAKER - LEFT FRONT TWEETER (UQA)

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Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 19150056
- Service Connector: 13314097
- Description: 2-Way F 1.5 Series (GY)

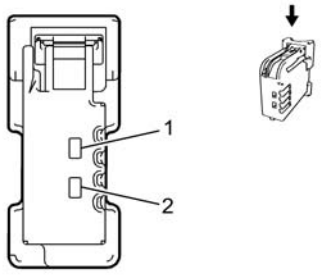
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1	YE/GY	1956	Left Front Tweeter Speaker (-) Low Reference	I	UQA+A1BC
2	1	YE/BU	1856	Left Front Tweeter Speaker Control (+)	I	UQA+A1BC

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COMPONENT CONNECTOR END VIEWS > P19V SPEAKER - RIGHT FRONT TWEETER (UQ3)



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 19168545
- Service Connector: 13505908
- Description: 2-Way F 1.5 Series (GN)

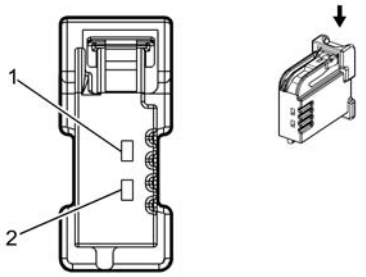
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

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 Control (+) (1)	I	-

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COMPONENT CONNECTOR END VIEWS > P19V SPEAKER - RIGHT FRONT TWEETER (UQA)



Connector Part Information

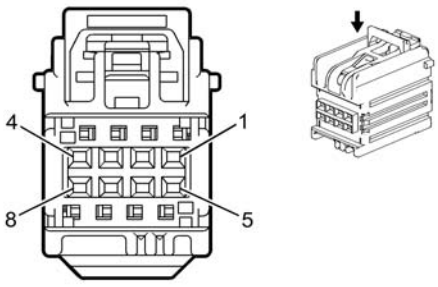
- Harness Type: Instrument Panel
- OEM Connector: 19150056
- Service Connector: 13314097
- Description: 2-Way F 1.5 Series (GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1	VT/BN	1952	Right Front Tweeter Speaker (-) Low Reference	I	UQA+A1BC
2	1	BN/GN	1852	Right Front Tweeter Speaker Control (+)	I	UQA+A1BC

COMPONENT CONNECTOR END VIEWS > P29 HEAD-UP DISPLAY



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Connector Part Information

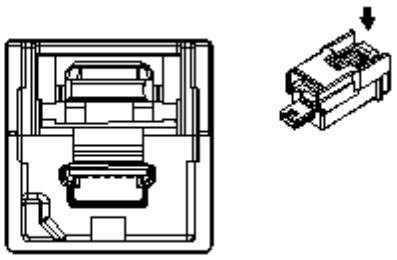
- Harness Type: Instrument Panel
- OEM Connector: 89047352
- Service Connector: 13576542
- Description: 8-Way F YESC Kaizen Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GN/BK	3894	Local Interconnect Network Serial data Bus 12	I	UV6
2	-	-	-	Not Occupied	-	-
3	0.35	YE/WH	622	Head Up Display Switch Signal	I	UV6
4	0.5	BK	1350	Ground	I	UV6
5	-	-	-	Not Occupied	-	-
6	0.5	RD/BU	3240	Battery Positive Voltage	I	UV6
7	-	-	-	Not Occupied	-	-
8	0.35	BK/GN	5699	Head Up Display Switch Low Reference	I	UV6

COMPONENT CONNECTOR END VIEWS > P29 HEAD-UP DISPLAY X2



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Connector Part Information

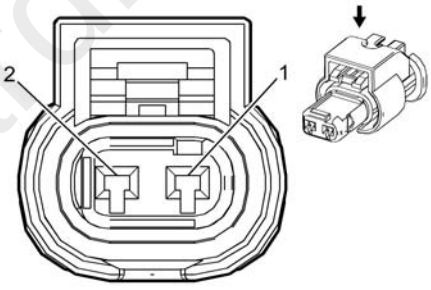
- Harness Type: Instrument Panel LVDS
- OEM Connector: 13576673
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: 5-Way M 2.0 Mini-B USB Type (GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
-	-	LVDS	-	(Head Up Display) Head Up Display Signal	I	-

COMPONENT CONNECTOR END VIEWS > Q2 A/C COMPRESSOR CLUTCH



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13586143
- Service Connector: 19300402
- Description: 2-Way F 1.2 MCP Series, Sealed (BK)

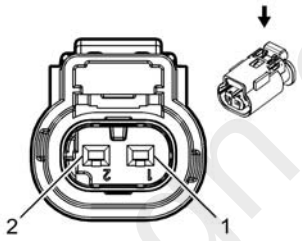
Terminal Part Information

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Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	250	Ground	I	-
2	0.5	BN/GN	59	A/C Compressor Clutch Control	I	-

COMPONENT CONNECTOR END VIEWS > Q6A CAMSHAFT POSITION ACTUATOR SOLENOID VALVE - BANK 1 EXHAUST



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13503567
- Service Connector: 13587325
- Description: 2-Way F 1.2 MLK Series, Sealed (L-GY)

Terminal Part Information

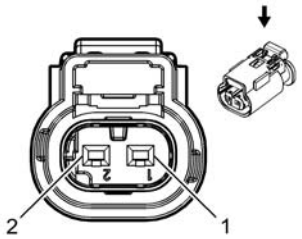
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option

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1	0.5	GN/BN	5283	Camshaft Phaser Exhaust Solenoid (2)	I	LGX
2	0.5	BK/GY	6756	Cam Phaser Z Low Reference	I	LGX

COMPONENT CONNECTOR END VIEWS > Q6B CAMSHAFT POSITION ACTUATOR SOLENOID VALVE - BANK 1 INTAKE



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13503567
- Service Connector: 13587325
- Description: 2-Way F 1.2 MLK Series, Sealed (L-GY)

Terminal Part Information

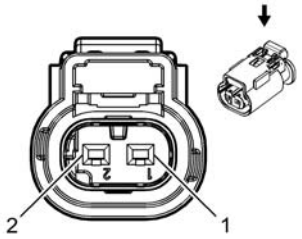
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT/BN	5284	Camshaft Phaser Intake Solenoid (1)	I	LGX
2	0.5	BK/BN	6753	Cam Phaser W Low Reference	I	LGX

COMPONENT CONNECTOR END VIEWS > Q6C CAMSHAFT POSITION ACTUATOR

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SOLENOID VALVE - BANK 2 EXHAUST



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13503567
- Service Connector: 13587325
- Description: 2-Way F 1.2 MLK Series, Sealed (L-GY)

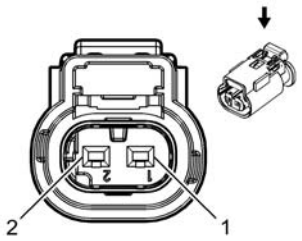
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN	5272	Camshaft Phaser Intake Solenoid (2)	I	LGX
2	0.5	BK/BU	6755	Cam Phaser Y Low Reference	I	LGX

COMPONENT CONNECTOR END VIEWS > Q6D CAMSHAFT POSITION ACTUATOR SOLENOID VALVE - BANK 2 INTAKE

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Connector Part Information

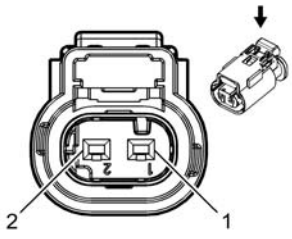
- Harness Type: Engine
- OEM Connector: 13503567
- Service Connector: 13587325
- Description: 2-Way F 1.2 MLK Series, Sealed (L-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY/BU	5282	Camshaft Phaser Exhaust Solenoid (1)	I	LGX
2	0.5	BK/VT	6754	Cam Phaser X Low Reference	I	LGX

COMPONENT CONNECTOR END VIEWS > Q6E CAMSHAFT POSITION ACTUATOR SOLENOID VALVE - EXHAUST



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Connector Part Information

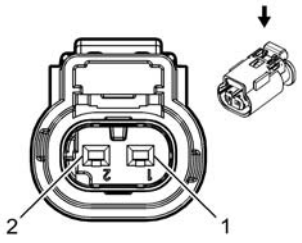
- Harness Type: Engine
- OEM Connector: 13503566
- Service Connector: 13587326
- Description: 2-Way F 1.2 MLK Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY/BU	5282	Camshaft Phaser Exhaust Solenoid (1)	I	LTG
2	0.5	BK/VT	6754	Cam Phaser X Low Reference	I	LTG

COMPONENT CONNECTOR END VIEWS > Q6F CAMSHAFT POSITION ACTUATOR SOLENOID VALVE - INTAKE



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13503567
- Service Connector: 13587325
- Description: 2-Way F 1.2 MLK Series, Sealed (L-GY)

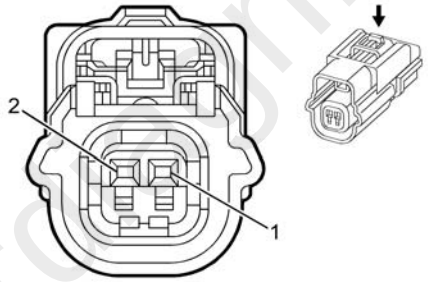
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Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT/BN	5284	Camshaft Phaser Intake Solenoid (1)	I	LTG
2	0.5	BK/BN	6753	Cam Phaser W Low Reference	I	LTG

COMPONENT CONNECTOR END VIEWS > Q6 CAMSHAFT POSITION ACTUATOR SOLENOID VALVE



Connector Part Information

- Harness Type: Camshaft Position Sensor Jumper
- OEM Connector: 13528494
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F Kaizen 64 Series, Sealed (BK)

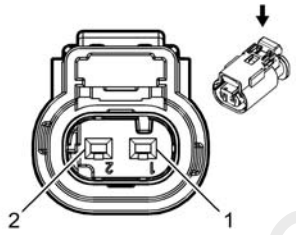
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK/BN	6753	Cam Phaser W Low Reference	I	-
2	0.5	VT/BN	5284	Camshaft Phaser Intake Solenoid (1)	I	-

COMPONENT CONNECTOR END VIEWS > Q12 EVAPORATIVE EMISSION PURGE SOLENOID VALVE



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13503566
- Service Connector: 13587326
- Description: 2-Way F 1.2 MLK Series, Sealed (BK)

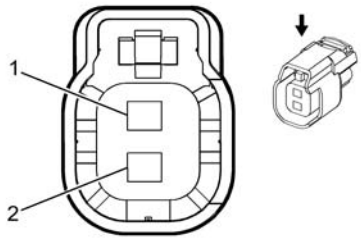
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

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	GN/BU	428	EVAP Canister Purge Solenoid Control	I	-

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COMPONENT CONNECTOR END VIEWS > Q13 EVAPORATIVE EMISSION VENT SOLENOID VALVE



Connector Part Information

- Harness Type: Body
- OEM Connector: 13503511
- Service Connector: 13579002
- Description: 2-Way F 1.5 Series, Sealed (BK)

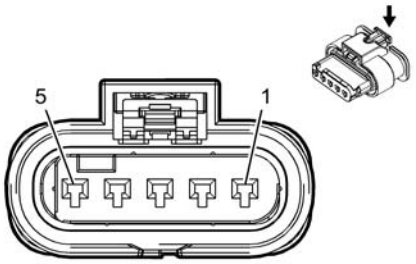
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH	1310	EVAP Canister Vent Solenoid Control	I	-
2	0.5	RD/GN	2440	Battery Positive Voltage	I	-

COMPONENT CONNECTOR END VIEWS > Q15A EXHAUST FLOW CONTROL VALVE - CYLINDER DEACTIVATION LEFT

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Connector Part Information

- Harness Type: Rear Chassis
- OEM Connector: 13582075
- Service Connector: Service by Harness - See Part Catalog
- Description: 5-Way F 1.2 MLK Series, Sealed (BK)

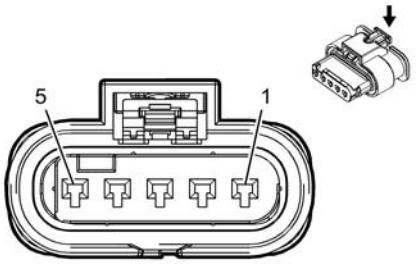
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	2550	Ground	I	(LGX+M5T+NPP)/(LT1-G96)
2	0.5	BN/GN	4305	Exhaust Flapper Valve Control 1	I	(LGX+M5T+NPP)/(LT1-G96)
3	0.5	BU/WH	4306	Exhaust Flapper Valve 1 Feedback Signal	I	(LGX+M5T+NPP)/(LT1-G96)
4	0.75	VT/GN	2239	Run/Crank Ignition 1 Voltage	I	(LGX+M5T+NPP)/(LT1-G96)
5	0.5	WH	9020	-	I	(LGX+M5T+NPP)/(LT1-G96)

COMPONENT CONNECTOR END VIEWS > Q15B EXHAUST FLOW CONTROL VALVE - CYLINDER DEACTIVATION RIGHT

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Connector Part Information

- Harness Type: Rear Chassis
- OEM Connector: 13582075
- Service Connector: Service by Harness - See Part Catalog
- Description: 5-Way F 1.2 MLK Series, Sealed (BK)

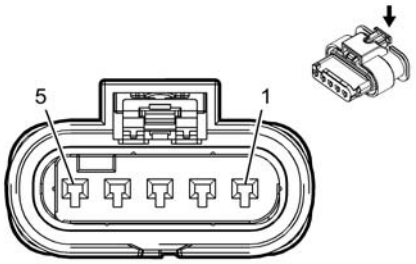
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	2550	Ground	I	(LGX+M5T+NPP)/(LT1-G96)
2	0.5	BN/GN	4305	Exhaust Flapper Valve Control 1	I	(LGX+M5T+NPP)/(LT1-G96)
3	0.5	VT/YE	4317	Exhaust Flapper Valve 2 Feedback Signal	I	(LGX+M5T+NPP)/(LT1-G96)
4	0.75	VT/GN	2239	Run/Crank Ignition 1 Voltage	I	(LGX+M5T+NPP)/(LT1-G96)
5	0.5	WH	9021	-	I	(LGX+M5T+NPP)/(LT1-G96)

COMPONENT CONNECTOR END VIEWS > Q15L EXHAUST FLOW CONTROL VALVE - LEFT

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Connector Part Information

- Harness Type: Body
- OEM Connector: 13582075
- Service Connector: 19119351
- Description: 5-Way F 1.2 MLK Series, Sealed (BK)

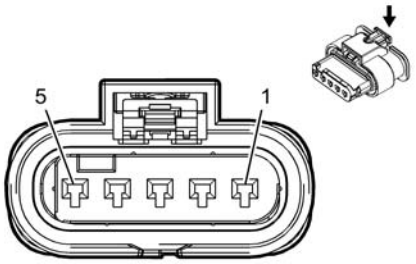
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	2550	Ground	I	-
2	0.5	GN/VT	4316	Exhaust Flapper Valve Control 2	I	-
3	0.5	WH	9023	-	I	-
4	1	VT/GY	1039	Run/Crank Ignition 1 Voltage	I	-
5	0.5	WH	9023	-	I	-

COMPONENT CONNECTOR END VIEWS > Q15R EXHAUST FLOW CONTROL VALVE - RIGHT

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Connector Part Information

- Harness Type: Body
- OEM Connector: 13582075
- Service Connector: 19119351
- Description: 5-Way F 1.2 MLK Series, Sealed (BK)

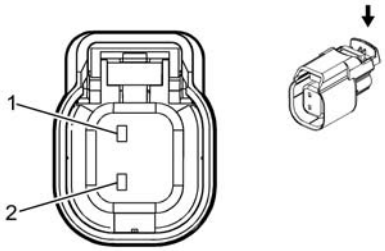
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	2450	Ground	I	-
2	0.5	GN/VT	4316	Exhaust Flapper Valve Control 2	I	-
3	0.5	WH	9022	-	I	-
4	1	VT/GY	1039	Run/Crank Ignition 1 Voltage	I	-
5	0.5	WH	9022	-	I	-

COMPONENT CONNECTOR END VIEWS > Q17A FUEL INJECTOR 1 (LGX)

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Connector Part Information

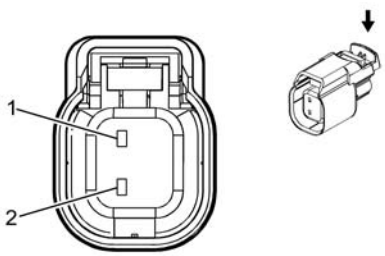
- Harness Type: Fuel Injector
- OEM Connector: 34062-4008
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 1.5 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

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	-

COMPONENT CONNECTOR END VIEWS > Q17A FUEL INJECTOR 1 (LT1)



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Connector Part Information

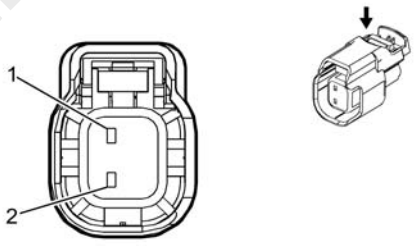
- Harness Type: Fuel Injector Jumper
- OEM Connector: 13581410
- Service Connector: -
- Description: 2-Way F 1.5 Series, Sealed

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN/WH	4901	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 1	I	-
2	0.5	BN	4801	Direct Fuel Injector (DFI) High Voltage Control Cylinder 1	I	-

COMPONENT CONNECTOR END VIEWS > Q17A FUEL INJECTOR 1 (LTG)



Connector Part Information

- Harness Type: Fuel Injector
- OEM Connector: 34062-4009
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 1.5 Series, Sealed (BK)

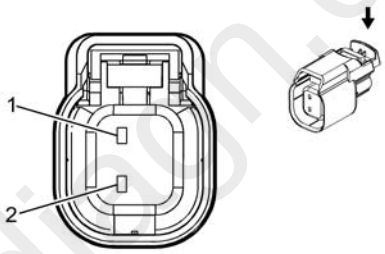
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Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

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	-

COMPONENT CONNECTOR END VIEWS > Q17B FUEL INJECTOR 2 (LGX)



Connector Part Information

- Harness Type: Fuel Injector
- OEM Connector: 34062-4008
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 1.5 Series, Sealed (BK)

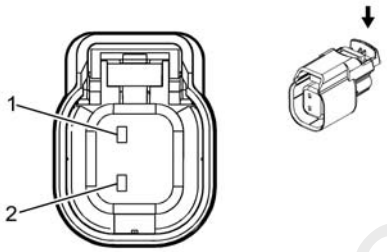
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU	4802	Direct Fuel Injector (DFI) High Voltage Control Cylinder 2	I	-
2	0.5	BU/GY	4902	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 2	I	-

COMPONENT CONNECTOR END VIEWS > Q17B FUEL INJECTOR 2 (LT1)



Connector Part Information

- Harness Type: Fuel Injector Jumper
- OEM Connector: 13581410
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 1.5 Series, Sealed

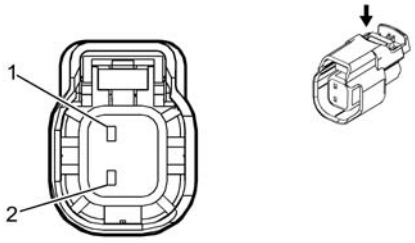
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU/GY	4902	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 2	I	-
2	0.5	BU	4802	Direct Fuel Injector (DFI) High Voltage Control Cylinder 2	I	-

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COMPONENT CONNECTOR END VIEWS > Q17B FUEL INJECTOR 2 (LTG)



Connector Part Information

- Harness Type: Fuel Injector
- OEM Connector: 34062-4009
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 1.5 Series, Sealed (BK)

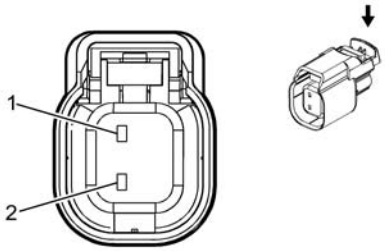
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU	4802	Direct Fuel Injector (DFI) High Voltage Control Cylinder 2	I	-
2	0.5	BU/GY	4902	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 2	I	-

COMPONENT CONNECTOR END VIEWS > Q17C FUEL INJECTOR 3 (LGX)

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Connector Part Information

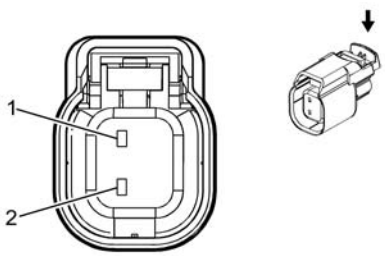
- Harness Type: Fuel Injector
- OEM Connector: 34062-4008
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 1.5 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN	4803	Direct Fuel Injector (DFI) High Voltage Control Cylinder 3	I	-
2	0.5	GN/GY	4903	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 3	I	-

COMPONENT CONNECTOR END VIEWS > Q17C FUEL INJECTOR 3 (LT1)



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Connector Part Information

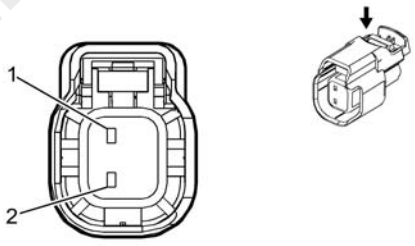
- Harness Type: Fuel Injector Jumper
- OEM Connector: 13581410
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 1.5 Series, Sealed

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN/GY	4903	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 3	I	-
2	0.5	GN	4803	Direct Fuel Injector (DFI) High Voltage Control Cylinder 3	I	-

COMPONENT CONNECTOR END VIEWS > Q17C FUEL INJECTOR 3 (LTG)



Connector Part Information

- Harness Type: Fuel Injector
- OEM Connector: 34062-4009
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 1.5 Series, Sealed (BK)

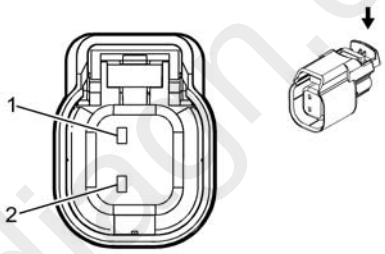
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Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN	4803	Direct Fuel Injector (DFI) High Voltage Control Cylinder 3	I	-
2	0.5	GN/GY	4903	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 3	I	-

COMPONENT CONNECTOR END VIEWS > Q17D FUEL INJECTOR 4 (LGX)



Connector Part Information

- Harness Type: Fuel Injector
- OEM Connector: 34062-4008
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 1.5 Series, Sealed (BK)

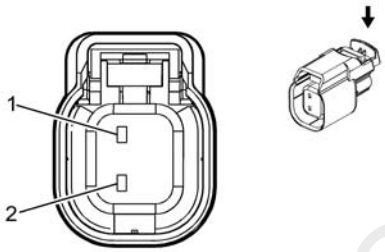
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY/BU	4804	Direct Fuel Injector (DFI) High Voltage Control Cylinder 4	I	-
2	0.5	BU/WH	4904	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 4	I	-

COMPONENT CONNECTOR END VIEWS > Q17D FUEL INJECTOR 4 (LT1)



Connector Part Information

- Harness Type: Fuel Injector Jumper
- OEM Connector: 13581410
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 1.5 Series, Sealed

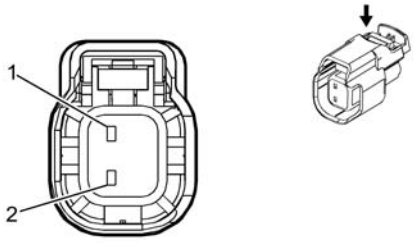
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU/WH	4904	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 4	I	-
2	0.5	GY/BU	4804	Direct Fuel Injector (DFI) High Voltage Control Cylinder 4	I	-

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COMPONENT CONNECTOR END VIEWS > Q17D FUEL INJECTOR 4 (LTG)



Connector Part Information

- Harness Type: Fuel Injector
- OEM Connector: 34062-4009
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 1.5 Series, Sealed (BK)

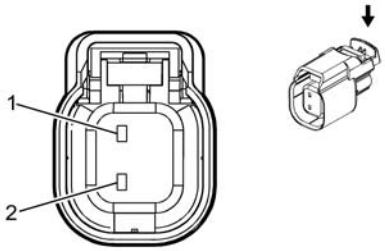
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY/BU	4804	Direct Fuel Injector (DFI) High Voltage Control Cylinder 4	I	-
2	0.5	BU/WH	4904	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 4	I	-

COMPONENT CONNECTOR END VIEWS > Q17E FUEL INJECTOR 5 (LGX)

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Connector Part Information

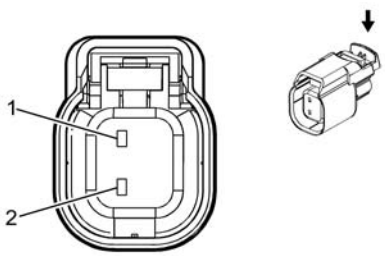
- Harness Type: Fuel Injector
- OEM Connector: 34062-4008
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 1.5 Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH/GN	4805	Direct Fuel Injector (DFI) High Voltage Control Cylinder 5	I	-
2	0.5	GN/WH	4905	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 5	I	-

COMPONENT CONNECTOR END VIEWS > Q17E FUEL INJECTOR 5 (LT1)



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Connector Part Information

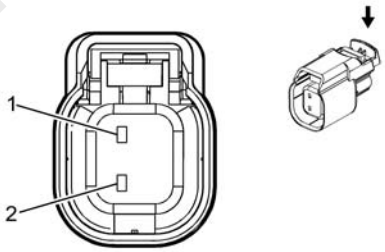
- Harness Type: Fuel Injector Jumper
- OEM Connector: 13581410
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 1.5 Series, Sealed

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN/WH	4905	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 5	I	-
2	0.5	WH/GN	4805	Direct Fuel Injector (DFI) High Voltage Control Cylinder 5	I	-

COMPONENT CONNECTOR END VIEWS > Q17F FUEL INJECTOR 6 (LGX)



Connector Part Information

- Harness Type: Fuel Injector
- OEM Connector: 34062-4008
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 1.5 Series, Sealed (BK)

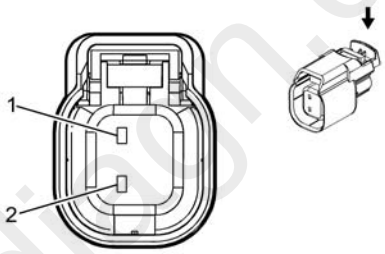
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Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT/GN	4806	Direct Fuel Injector (DFI) High Voltage Control Cylinder 6	I	-
2	0.5	VT/GY	4906	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 6	I	-

COMPONENT CONNECTOR END VIEWS > Q17F FUEL INJECTOR 6 (LT1)



Connector Part Information

- Harness Type: Fuel Injector Jumper
- OEM Connector: 13581410
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 1.5 Series, Sealed

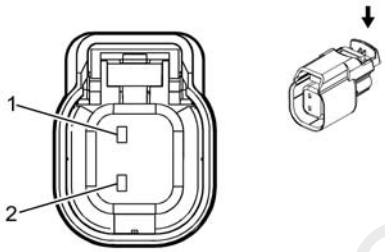
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT/GY	4906	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 6	I	-
2	0.5	VT/GN	4806	Direct Fuel Injector (DFI) High Voltage Control Cylinder 6	I	-

COMPONENT CONNECTOR END VIEWS > Q17G FUEL INJECTOR 7 (LT1)



Connector Part Information

- Harness Type: Fuel Injector Jumper
- OEM Connector: 13581410
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 1.5 Series, Sealed

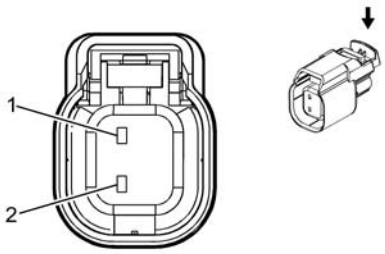
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH/YE	4907	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 7	I	-
2	0.5	YE/GY	4807	Direct Fuel Injector (DFI) High Voltage Control Cylinder 7	I	-

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COMPONENT CONNECTOR END VIEWS > Q17H FUEL INJECTOR 8 (LT1)



Connector Part Information

- Harness Type: Fuel Injector Jumper
- OEM Connector: 13581410
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 1.5 Series, Sealed

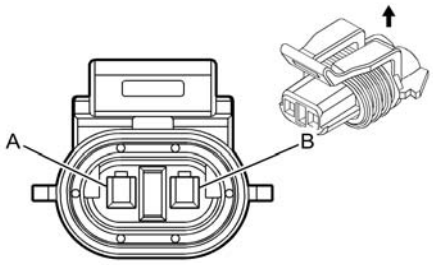
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY/WH	4908	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 8	I	-
2	0.5	GY	4808	Direct Fuel Injector (DFI) High Voltage Control Cylinder 8	I	-

COMPONENT CONNECTOR END VIEWS > Q34 SKIP SHIFT SOLENOID ACTUATOR

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Connector Part Information

- Harness Type: Engine
- OEM Connector: 13585444
- Service Connector: 13585444
- Description: 2-Way F 150 Metri-Pack Series, Sealed (WH)

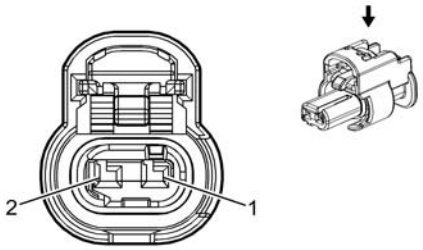
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-14 (GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	VT/GY	1439	Run/Crank Ignition 1 Voltage	I	(LT1+MM6)/(LT4+MH3)
B	0.5	GY/GN	587	Skip/Shift Solenoid Control	I	LT1+MM6

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COMPONENT CONNECTOR END VIEWS > Q37LF SHOCK ABSORBER ACTUATOR - LEFT FRONT



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13591334
- Service Connector: 19330898
- Description: 2-Way F 1.2 MCON Series, Sealed (BK)

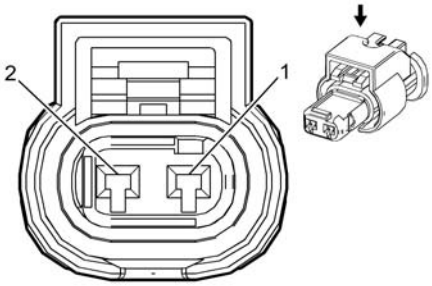
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	WH/GY	1448	Left Front Strut Motor Increase Damping Control	I	F55
2	0.75	WH/GN	1005	Left Front Strut Motor Decrease Damping Control	I	F55

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COMPONENT CONNECTOR END VIEWS > Q37LR SHOCK ABSORBER ACTUATOR - LEFT REAR



Connector Part Information

- Harness Type: Body
- OEM Connector: 13586143
- Service Connector: 15949005
- Description: 2-Way F 1.2 Multiple Contact Point Series, Sealed (BK with BK Inner Connector)

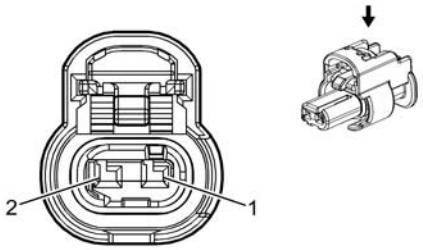
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BN/VT	1010	Left Rear Strut Motor Increase Damping Control	I	F55
2	0.75	WH/BK	1013	Left Rear Strut Motor Decrease Damping Control	I	F55

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COMPONENT CONNECTOR END VIEWS > Q37RF SHOCK ABSORBER ACTUATOR - RIGHT FRONT



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13591334
- Service Connector: 19330898
- Description: 2-Way F 1.2 MCON Series, Sealed (BK)

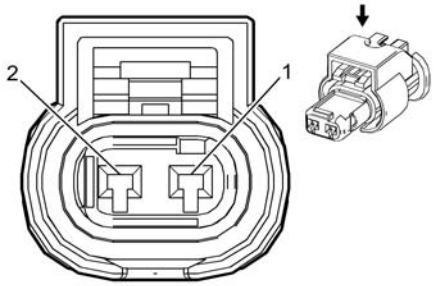
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	WH/BK	1006	Right Front Strut Motor Increase Damping Control	I	F55
2	0.75	BN	1009	Right Front Strut Motor Decrease Damping Control	I	F55

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COMPONENT CONNECTOR END VIEWS > Q37RR SHOCK ABSORBER ACTUATOR - RIGHT REAR



Connector Part Information

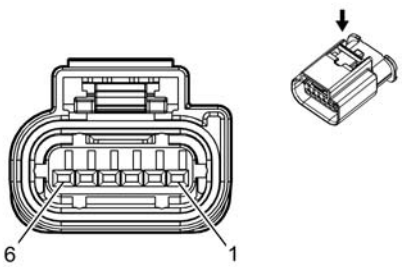
- Harness Type: Body
- OEM Connector: 13586143
- Service Connector: 15949005
- Description: 2-Way F 1.2 Multiple Contact Point Series, Sealed (BK with BK Inner Connector)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	YE	1014	Right Rear Strut Motor Increase Damping Control	I	F55
2	0.75	VT	1017	Right Rear Strut Motor Decrease Damping Control	I	F55

COMPONENT CONNECTOR END VIEWS > Q38 THROTTLE BODY



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Connector Part Information

- Harness Type: Engine
- OEM Connector: 13583851
- Service Connector: 19329736
- Description: 6-Way F 1.2 Series, Sealed (BK)

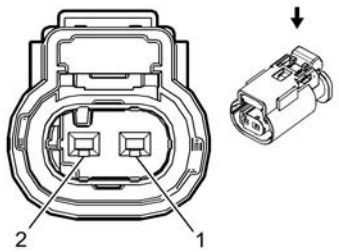
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE	581	Throttle Actuator Control Open	I	-
2	0.5	BN/WH	582	Throttle Actuator Control Close	I	-
3	0.5	BU/WH	3630	Throttle Position Sensor (SENT1) Signal	I	-
4	0.5	BK/BN	2752	Throttle Position Sensor Low Reference	I	-
5	0.5	BN/RD	2701	Throttle Position Sensor 5 Volt Reference	I	-
6	-	-	-	Not Occupied	-	-

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COMPONENT CONNECTOR END VIEWS > Q40 TURBOCHARGER BYPASS SOLENOID VALVE



Connector Part Information

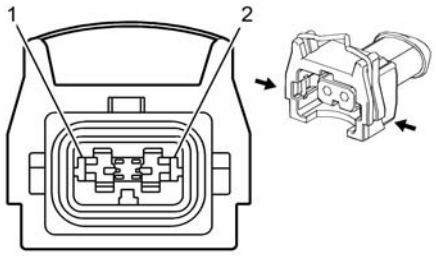
- Harness Type: Engine
- OEM Connector: 13503568
- Service Connector: 13587321
- Description: 2-Way F 1.2 MLK Series, Sealed (D-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT/BU	5293	Powertrain Main Relay Fused Supply (4)	I	LTG
2	0.5	GN	3060	Turbo Bypass Solenoid Control Bank (1)	I	LTG

COMPONENT CONNECTOR END VIEWS > Q42 TURBOCHARGER WASTEGATE SOLENOID VALVE



Connector Part Information

- Harness Type: Engine
- OEM Connector: 10756754
- Service Connector: 19115592
- Description: 2-Way F Sealed (BK)

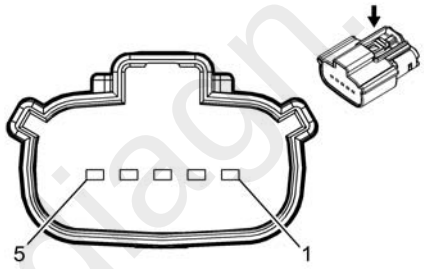
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Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-35 (VT)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT/BU	5293	Powertrain Main Relay Fused Supply (4)	I	LTG
2	0.5	BN/YE	258	Waste Gate Solenoid Control	I	LTG

COMPONENT CONNECTOR END VIEWS > Q43 VALVE LIFTER OIL MANIFOLD ASSEMBLY



Connector Part Information

- Harness Type: Valve Lifter Oil Manifold Jumper
- OEM Connector: 13503504
- Service Connector: Pending
- Description: 5-Way F 150 MX Series, Sealed (BK)

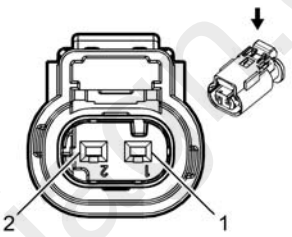
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	-	Pending	No Tool Required	-	-	-	-

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE/BU	5494	Cylinder Shutoff Solenoid Control 4	I	-
2	0.5	GY	5493	Cylinder Shutoff Solenoid Control 3	I	-
3	0.5	BU	5491	Cylinder Shutoff Solenoid Control 1	I	-
4	0.5	VT/BU	5293	Powertrain Main Relay Fused Supply 4	I	-
5	0.5	GN	5492	Cylinder Shutoff Solenoid Control 2	I	-

COMPONENT CONNECTOR END VIEWS > Q44 ENGINE OIL PRESSURE CONTROL SOLENOID VALVE



Connector Part Information

- Harness Type: Camshaft Position Sensor Jumper
- OEM Connector: 13735326
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 1.2 MLK Series, Sealed (BK)

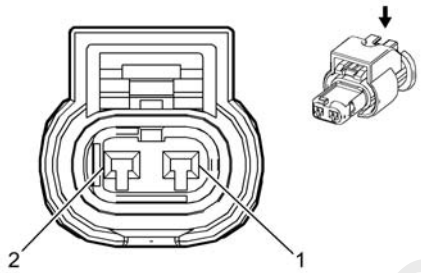
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT/D-BU	5293	Powertrain Main Relay Fused Supply (4)	I	-
2	0.5	D-BU	179	Oil Pump Command Signal	I	-

COMPONENT CONNECTOR END VIEWS > Q46 A/C COMPRESSOR SOLENOID VALVE



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13586144
- Service Connector: 15949006
- Description: 2-Way F 1.2 Multiple Contact Point Series, Sealed (BK with NA Inner Connector)

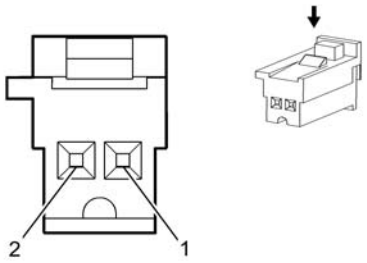
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

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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COMPONENT CONNECTOR END VIEWS > Q77A TRANSMISSION CONTROL SOLENOID VALVE 1



Connector Part Information

- Harness Type: Transmission Jumper
- OEM Connector: 13956948
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 0.64 MTS Series (VT)

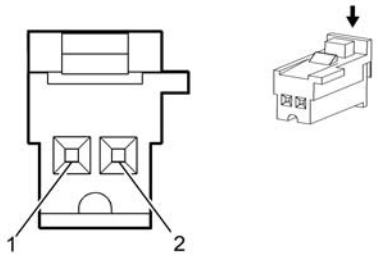
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN	6400	Clutch A Control	I	-
2	0.5	GY/BN	6388	Transmission High Side Driver 2 Signal	I	-

COMPONENT CONNECTOR END VIEWS > Q77B TRANSMISSION CONTROL SOLENOID VALVE 2

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Connector Part Information

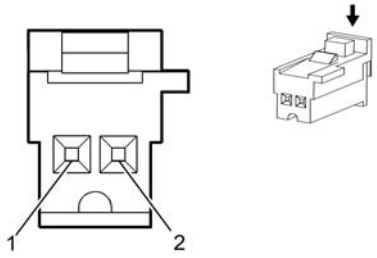
- Harness Type: Transmission Jumper
- OEM Connector: 13941672
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 0.64 MTS Series (GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BU	6401	Clutch B Control	I	-
2	0.5	GY/BN	6388	Transmission High Side Driver 2 Signal	I	-

COMPONENT CONNECTOR END VIEWS > Q77C TRANSMISSION CONTROL SOLENOID VALVE 3



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Connector Part Information

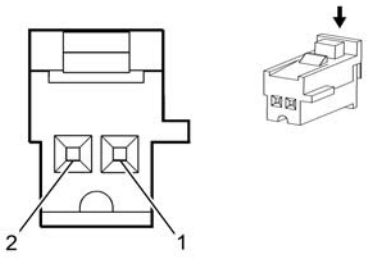
- Harness Type: Transmission Jumper
- OEM Connector: 13941672
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 0.64 MTS Series (GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY	6402	Clutch C Control	I	-
2	0.5	GY/BN	6388	Transmission High Side Driver 2 Signal	I	-

COMPONENT CONNECTOR END VIEWS > Q77D TRANSMISSION CONTROL SOLENOID VALVE 4



Connector Part Information

- Harness Type: Transmission Jumper
- OEM Connector: 13947283
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 0.64 MTS Series (NA)

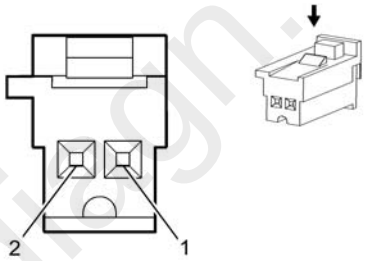
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Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH	4508	Transmission Clutch G Control	I	-
2	0.5	GN/GY	6387	Transmission High Side Driver 1 Signal Driver	I	-

COMPONENT CONNECTOR END VIEWS > Q77E TRANSMISSION CONTROL SOLENOID VALVE 5



Connector Part Information

- Harness Type: Transmission Jumper
- OEM Connector: 13956948
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 0.64 MTS Series (VT)

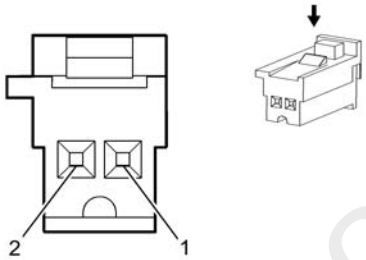
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	WH/BU	4507	Transmission Clutch H Control	I	-
2	0.5	GN/GY	6387	Transmission High Side Driver 1 Signal Driver	I	-

COMPONENT CONNECTOR END VIEWS > Q77F TRANSMISSION CONTROL SOLENOID VALVE 6



Connector Part Information

- Harness Type: Transmission Jumper
- OEM Connector: 13956948
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 0.64 MTS Series (VT)

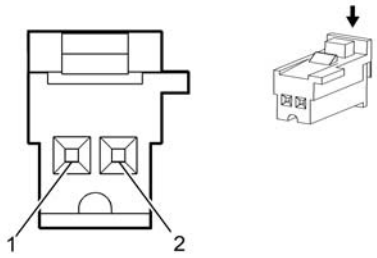
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY/GN	6403	Clutch D Control	I	-
2	0.5	GY/BN	6388	Transmission High Side Driver 2 Signal	I	-

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COMPONENT CONNECTOR END VIEWS > Q77G TRANSMISSION CONTROL SOLENOID VALVE 7



Connector Part Information

- Harness Type: Transmission Jumper
- OEM Connector: 13941672
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 0.64 MTS Series (GY)

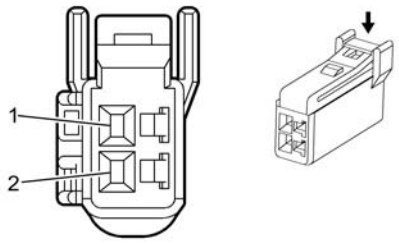
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE/BN	6404	Clutch E Control	I	-
2	0.5	GY/BN	6388	Transmission High Side Driver 2 Signal	I	-

COMPONENT CONNECTOR END VIEWS > Q77H TRANSMISSION CONTROL SOLENOID VALVE 8

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Connector Part Information

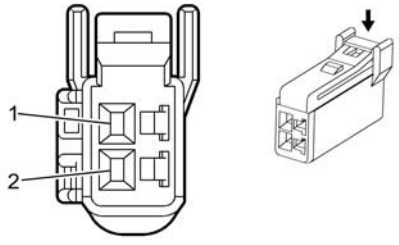
- Harness Type: Transmission Jumper
- OEM Connector: 7287-0122
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 040 III Series (NA)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GN/GY	6387	Transmission High Side Driver 1 Signal Driver	I	-
2	0.5	GN/WH	6380	TCC On/Off Solenoid A Control	I	-

COMPONENT CONNECTOR END VIEWS > Q77J TRANSMISSION CONTROL SOLENOID VALVE 9



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Connector Part Information

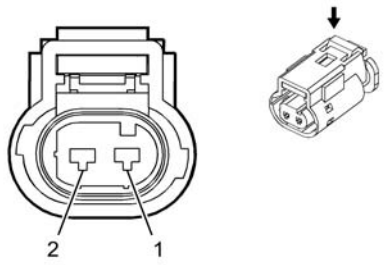
- Harness Type: Transmission Jumper
- OEM Connector: 7287-0122
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 040 III Series (NA)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	GY/BN	6388	Transmission High Side Driver 2 Signal	I	-
2	0.5	YE/BN	6210	TCC On/Off Solenoid B Control	I	-

COMPONENT CONNECTOR END VIEWS > Q80L ENGINE MOUNT SOLENOID VALVE - LEFT



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13576809
- Service Connector: 19301825
- Description: 2-Way F 1.2 Series, Sealed (BK)

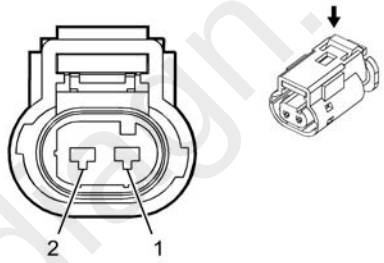
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Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN/BU	4065	Powertrain Mount Solenoid Control 1	I	LTG
2	0.5	VT/GY	1439	Run/Crank Ignition 1 Voltage	I	LTG

COMPONENT CONNECTOR END VIEWS > Q80R ENGINE MOUNT SOLENOID VALVE - RIGHT



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13576809
- Service Connector: 19301825
- Description: 2-Way F 1.2 Series, Sealed (BK)

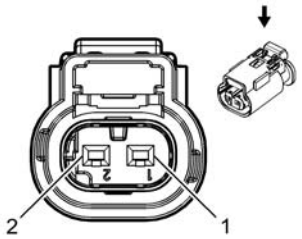
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BN/YE	4066	Powertrain Mount Solenoid Control 2	I	LTG
2	0.5	VT/GY	1439	Run/Crank Ignition 1 Voltage	I	LTG

COMPONENT CONNECTOR END VIEWS > Q83A VALVE LIFTER OIL SOLENOID VALVE - BANK 1



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13503567
- Service Connector: 13587325
- Description: 2-Way F 1.2 MLK Series, Sealed (L-GY)

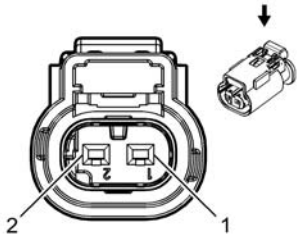
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT/BU	5293	Powertrain Main Relay Fused Supply (4)	I	LGX
2	0.5	BU	5491	Cylinder Shutoff Solenoid Control (1)	I	LGX

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COMPONENT CONNECTOR END VIEWS > Q83B VALVE LIFTER OIL SOLENOID VALVE - BANK 2



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13503567
- Service Connector: 13587325
- Description: 2-Way F 1.2 MLK Series, Sealed (L-GY)

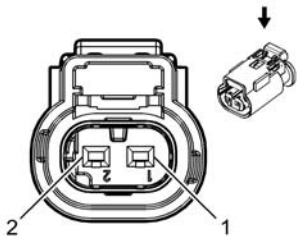
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT/BU	5293	Powertrain Main Relay Fused Supply (4)	I	LGX
2	0.5	GN	5492	Cylinder Shutoff Solenoid Control (2)	I	LGX

COMPONENT CONNECTOR END VIEWS > Q84A CAMSHAFT POSITION ACTUATOR PARK LOCK SOLENOID VALVE - BANK 1 INTAKE

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Connector Part Information

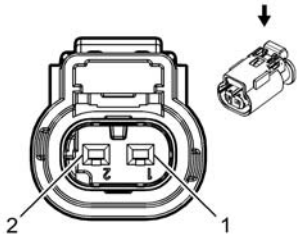
- Harness Type: Engine
- OEM Connector: 13503567
- Service Connector: 13587325
- Description: 2-Way F 1.2 MLK Series, Sealed (L-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT/BU	5293	Powertrain Main Relay Fused Supply (4)	I	LGX
2	0.5	YE/GN	4321	Park Phaser Lock Control	I	LGX

COMPONENT CONNECTOR END VIEWS > Q84B CAMSHAFT POSITION ACTUATOR PARK LOCK SOLENOID VALVE - BANK 2 INTAKE



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Connector Part Information

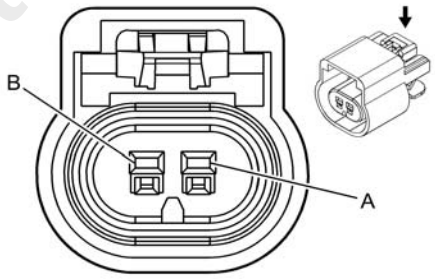
- Harness Type: Engine
- OEM Connector: 13503567
- Service Connector: 13587325
- Description: 2-Way F 1.2 MLK Series, Sealed (L-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT/BU	5293	Powertrain Main Relay Fused Supply (4)	I	LGX
2	0.5	GY/GN	587	Skip/Shift Solenoid Control	I	LGX

COMPONENT CONNECTOR END VIEWS > R6C TERMINATING RESISTOR 1 - HIGH SPEED BUS



Connector Part Information

- Harness Type: Body
- OEM Connector: 19153731
- Service Connector: 13580114
- Description: 2-Way F 150 GT Series, Sealed (BK)

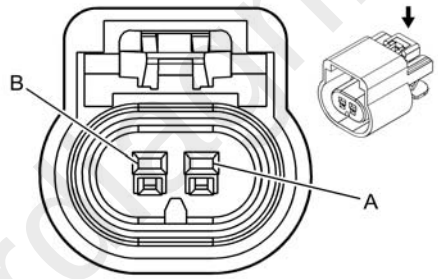
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Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-4A (PU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	BU	2500	High Speed GMLAN Serial Data (+) (1)	I	-
B	0.35	WH	2501	High Speed GMLAN Serial Data (-) (1)	I	-

COMPONENT CONNECTOR END VIEWS > R6D TERMINATING RESISTOR 2 - HIGH SPEED BUS



Connector Part Information

- Harness Type: Body
- OEM Connector: 19153731
- Service Connector: 13580114
- Description: 2-Way F 150 GT Series, Sealed (BK)

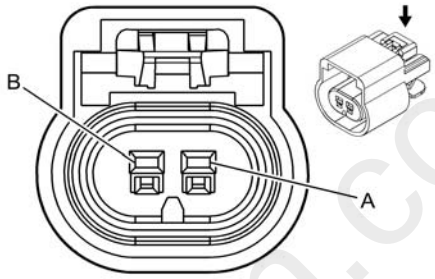
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-4A (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35 0.35 0.35	BU/GN BU/GN BU/GN	1304 1304 1304	High Speed GMLAN Serial Data (+) (9)	I	(LGX/LT1)/(LTG+UQ3) CM8+LTG+NKE+UQA LTG+NKC+UQA-CM8
B	0.35 0.35 0.35	WH/GN WH/GN WH/GN	1305 1305 1305	High Speed GMLAN Serial Data (-) (9)	I	(LGX/LT1)/(LTG+UQ3) CM8+LTG+NKE+UQA LTG+NKC+UQA-CM8

COMPONENT CONNECTOR END VIEWS > R6D TERMINATING RESISTOR 2- HIGH SPEED BUS



Connector Part Information

- Harness Type: Body
- OEM Connector: 19153731
- Service Connector: 13580114
- Description: 2-Way F 150 GT Series, Sealed (BK)

Terminal Part Information

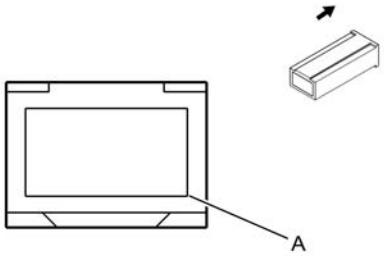
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-4A (PU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	BU/GN	1304	High Speed GMLAN Serial Data (+) (9)	I	-

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B	0.35	WH/GN	1305	High Speed GMLAN Serial Data (-) (9)	I	-

COMPONENT CONNECTOR END VIEWS > R14L REAR WINDOW DEFOGGER NOISE FILTER - LEFT



Connector Part Information

- Harness Type: Body
- OEM Connector: 13129191
- Service Connector: 13580102
- Description: 1-Way F 6.3 Series (BK)

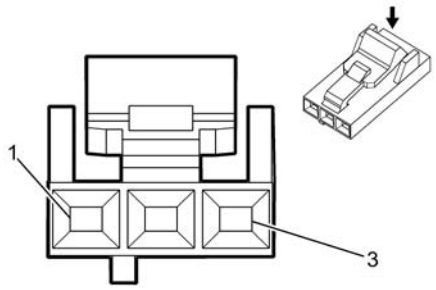
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-42 (RD)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	BN/VT	293	Rear Defog Element Control	I	A1BC
A	-	-	-	Not Occupied	-	-

COMPONENT CONNECTOR END VIEWS > S2L TRANSMISSION MANUAL SHIFT SWITCH - LEFT (MX0)

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Connector Part Information

- Harness Type: Steering Wheel
- OEM Connector: 104257-2
- Service Connector: Service by Harness - See Part Catalog
- Description: 3-Way F 0.64 Series (BK)

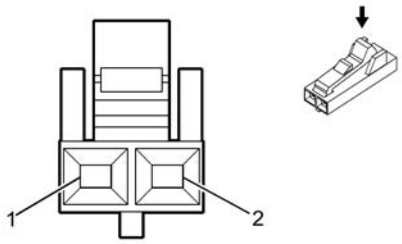
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	VT/YE	5526	Tap Up/Tap Down Switch Signal	I	-
2	0.35	BK	1350	Ground	I	-
3	0.35	GN	5525	Tap Up/Tap Down Enable Signal	I	-

COMPONENT CONNECTOR END VIEWS > S2R TRANSMISSION MANUAL SHIFT SWITCH - RIGHT (MX0)

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Connector Part Information

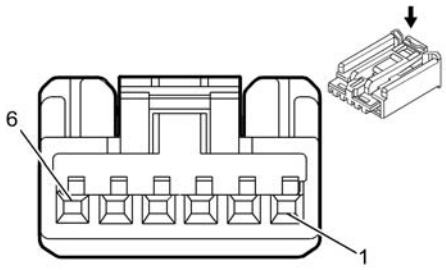
- Harness Type: Steering Wheel
- OEM Connector: 104257-1
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way M 0.64 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BK	1350	Ground	I	-
2	0.35	GN	5525	Tap Up/Tap Down Enable Signal	I	-

COMPONENT CONNECTOR END VIEWS > S3 TRANSMISSION SHIFT LEVER



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Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 15269798
- Service Connector: 19167753
- Description: 6-Way F 0.64 Kaizen Series (BK)

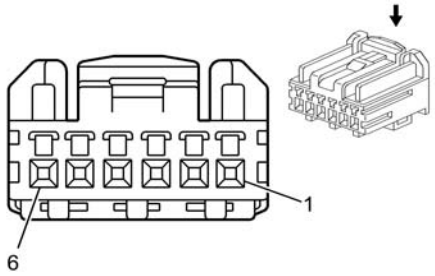
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	VT/YE	5985	Accessory Wakeup Serial Data	I	M5T/M5U/MGL
2	0.35	BK	1450	Ground	I	M5T/M5U/MGL
3	0.35	YE/BU	6855	Transmission Tap Down Switch Signal	I	M5T/M5U/MGL
4	0.35	VT/BK	7553	Park Lock Solenoid Control	I	M5T/M5U/MGL
5	-	-	-	Not Occupied	-	-
6	0.35	WH/VT	5905	Key Capture/Column Lock Shift Position Signal	I	M5T/M5U/MGL

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COMPONENT CONNECTOR END VIEWS > S13D DOOR LOCK SWITCH - DRIVER



Connector Part Information

- Harness Type: Driver Door Trim
- OEM Connector: 19153361
- Service Connector: Service by Harness - See Part Catalog
- Description: 6-Way F 0.64 HCM Series (BK)

Terminal Part Information

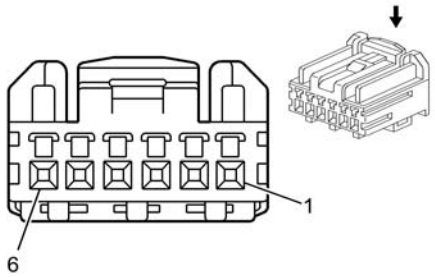
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

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	Driver Door Lock Switch Unlock Signal	I	-
4	0.35	BK	2150	Ground	I	-
5	0.35	WH	6816	Indicator Dimming Control	I	-
6	0.35	WH/VT	3270	Driver Door Lock Motor Status Signal	I	-

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Service Manual: WIRING SYSTEMS AND POWER MANAGEMENT - COMPONENT CONNECTOR END VIEWS - S13P TO X92

COMPONENT CONNECTOR END VIEWS > S13P DOOR LOCK SWITCH - PASSENGER



Connector Part Information

- Harness Type: Passenger Door Trim
- OEM Connector: 19153361
- Service Connector: Service by Harness - See Part Catalog
- Description: 6-Way F 0.64 HCM Series (BK)

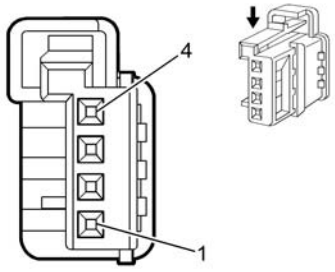
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE	6817	LED Backlight Dimming Control	I	-
2	0.35	YE/VT	244	Passenger Door Lock Switch Lock Control	I	-
3	0.35	BN/VT	245	Passenger Door Lock Switch Unlock Control	I	-
4	0.35	BK	2250	Ground	I	-
5	0.35	WH	6816	Indicator Dimming Control	I	-
6	0.35	VT	4009	Passenger Door Lock Status	I	-

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COMPONENT CONNECTOR END VIEWS > S22B FOLDING TOP CONTROL SWITCH



Connector Part Information

- Harness Type: Headliner
- OEM Connector: 13271139
- Service Connector: 13576536
- Description: 4-Way F 0.64 Micro-Quadlock Series (WH)

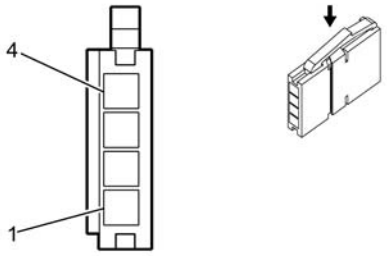
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	YE	6817	LED Backlight Dimming Control	I	A1AC
2	-	-	-	Not Occupied	-	-
3	0.35	VT	4608	Sunroof Switch Signal	I	A1AC
4	0.35	BK	2150	Ground	I	A1AC

COMPONENT CONNECTOR END VIEWS > S25 GARAGE DOOR OPENER

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Connector Part Information

- Harness Type: Headliner
- OEM Connector: 13583930
- Service Connector: 19300600
- Description: 4-Way F 0.50 OCS Series (BK)

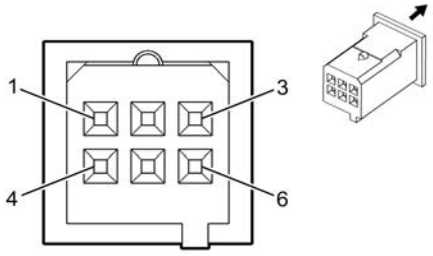
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	RD/BU	4540	Battery Positive Voltage	I	UG1
2	0.35	YE	6817	LED Backlight Dimming Control	I	UG1
3	-	-	-	Not Occupied	-	-
4	0.35	BK	1350	Ground	I	UG1

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COMPONENT CONNECTOR END VIEWS > S26 HAZARD WARNING SWITCH



Connector Part Information

- Harness Type: Floor Console
- OEM Connector: 13225892
- Service Connector: Service by Harness - See Part Catalog
- Description: 6-Way F 0.64 Micro-Quadlock Series (NA)

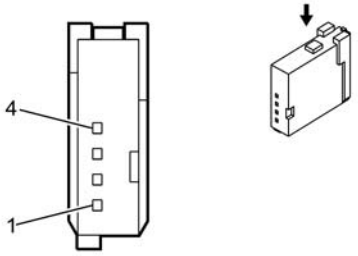
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GN/WH	111	Hazard Switch Signal	I	-
2	0.35	BK	2250	Ground	I	-
3 - 5	-	-	-	Not Occupied	-	-
6	0.35	YE	6817	LED Backlight Dimming Control	I	-

COMPONENT CONNECTOR END VIEWS > S27 HEAD-UP DISPLAY SWITCH

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Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 13577683
- Service Connector: 19300398
- Description: 4-Way F 0.64 Series (BK)

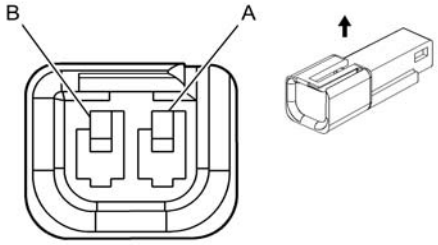
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE	6817	LED Backlight Dimming Control	I	UV6
2	0.5	BK	1350	Ground	I	UV6
3	0.35	BK/GN	5699	Head Up Display Switch Low Reference	I	UV6
4	0.35	YE/WH	622	Head Up Display Switch Signal	I	UV6

COMPONENT CONNECTOR END VIEWS > S33 HORN SWITCH

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Connector Part Information

- Harness Type: Steering Wheel
- OEM Connector: 12059252
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way M 150 Metri-Pack Series (RD)

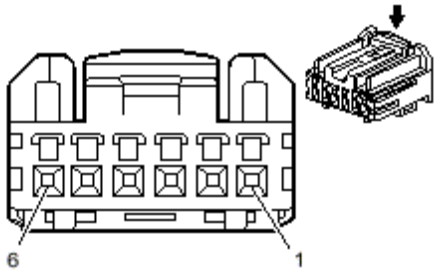
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	BK	1350	Ground	I	-
B	0.35	GN/WH	3287	Horn Switch Signal	I	-

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COMPONENT CONNECTOR END VIEWS > S36 INSTRUMENT PANEL DIMMER SWITCH



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 19115685
- Service Connector: 19115655
- Description: 6-Way F 0.64 HCM Series (BK)

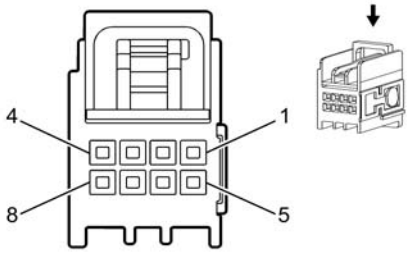
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BK/YE	5005	Instrument Panel Lamp Dimmer Switch Low Reference	I	-
2	0.35	YE/GY	44	Instrument Panel Lamp Dimmer Switch Signal	I	-
3	0.35	GY	156	Courtesy Lamp Switch Signal	I	-
4	0.5	BK	1350	Ground	I	-
5	0.5	YE	6817	LED Backlight Dimming Control	I	-
6	0.35	BU/RD	1688	5 Volt Reference	I	-

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COMPONENT CONNECTOR END VIEWS > S38 IGNITION MODE SWITCH



Connector Part Information

- Harness Type: Instrument Panel

- OEM Connector: 13235933
- Service Connector: 13576543
- Description: 8-Way F 0.64 Series (BK with BK cover)

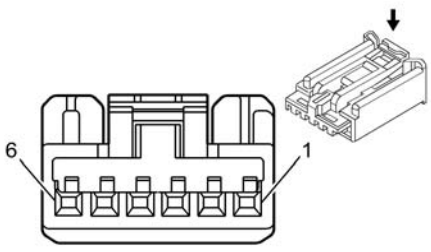
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

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	-
4	0.5	BK	1350	Ground	I	-
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	0.5	YE	6817	LED Backlight Dimming Control	I	-

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COMPONENT CONNECTOR END VIEWS > S42 HEADLAMP LEVELING SWITCH



Connector Part Information

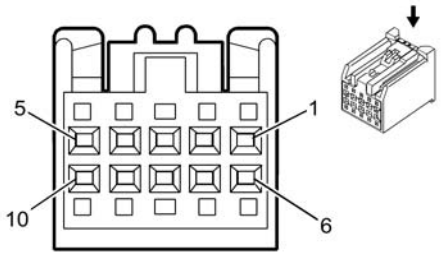
- Harness Type: Instrument Panel
- OEM Connector: 19115612
- Service Connector: 19178090
- Description: 6-Way F 0.64 Series (NA)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	BK	1350	Ground	I	TR6
2	0.35	BN/YE	189	Headlamp Leveling Motor Control	I	TR6
3 - 4	-	-	-	Not Occupied	-	-
5	0.5	YE	6817	LED Backlight Dimming Control	I	TR6
6	0.35	VT/GY	539	Run/Crank Ignition 1 Voltage	I	TR6

COMPONENT CONNECTOR END VIEWS > S47D SEAT MEMORY SWITCH - DRIVER



Connector Part Information

- Harness Type: Driver Door Trim
- OEM Connector: 13577390

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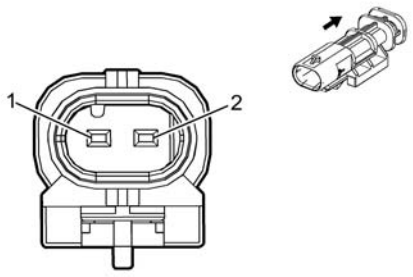
- Service Connector: Service by Harness - See Part Catalog
- Description: 10-Way F 0.64 Kaizen Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BK/BU	5978	Memory Switch Low Reference	I	A45
2	0.35	YE	6817	LED Backlight Dimming Control	I	A45
3 - 4	-	-	-	Not Occupied	-	-
5	0.35	BU/GN	614	Memory Seat Switch Set Signal	I	A45
6	0.35	WH	615	Memory Seat Switch Signal (1)	I	A45
7 - 10	-	-	-	Not Occupied	-	-

COMPONENT CONNECTOR END VIEWS > S58A REAR COMPARTMENT LID UNLATCH SWITCH - EXTERIOR



Connector Part Information

- Harness Type: Rear Fascia
- OEM Connector: 13505427
- Service Connector: Service by Harness - See Part Catalog

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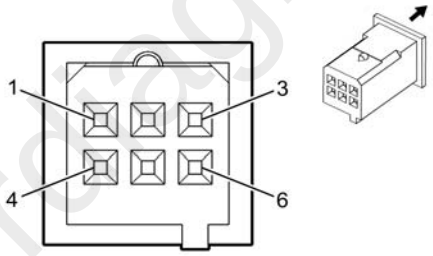
- Description: 2-Way M 1.2 MLK Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-13 (BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	YE/BU	5797	Rear Closure Handle Switch Open Signal	I	-
2	0.5	BK	2350	Ground	I	-

COMPONENT CONNECTOR END VIEWS > S58B REAR COMPARTMENT LID UNLATCH SWITCH - INTERIOR



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

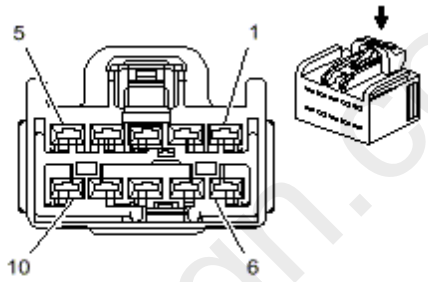
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp

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I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	VT/BU	6189	Lift Glass/Rear Compartment Lid Interior Release Signal	I	-
2	0.35	BK	2150	Ground	I	-
3 - 5	-	-	-	Not Occupied	-	-
6	0.35	YE	6817	LED Backlight Dimming Control	I	-

COMPONENT CONNECTOR END VIEWS > S64D SEAT ADJUSTER SWITCH - DRIVER



Connector Part Information

- Harness Type: Driver Seat
- OEM Connector: Not Available
- Service Connector: Service by Harness - See Part Catalog
- Description: 10-Way F YESC Kaizen Series (L-GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-35 (VT)	No Tool Required	Not Required	Not Required	Not Required	Not Required

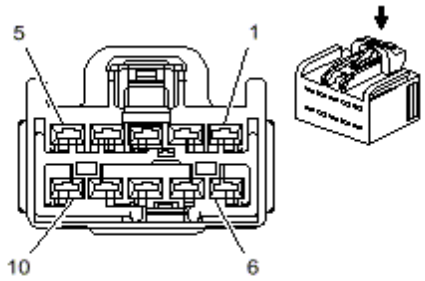
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GN/BN	151	Signal Ground	I	A45

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	1.5	GN/BN	286	Driver Power Seat Front Vertical Motor Up Control		-A45
1	0.35 1.5	GN/BN GN/BN	151 286	Signal Ground Driver Power Seat Front Vertical Motor Up Control	I	A45 -A45
2	2.5	BK/BK	2150	Ground	I	-A45
3	0.35 1.5	YE/BN YE/BU	1522 285	Power Seat Horizontal Forward Switch Signal Driver Power Seat Horizontal Motor Forward Control	I	A45 -A45
4	0.35 1.5	GY/BK GN/YE	1269 276	Power Seat Recline Forward Switch Signal Driver Power Seat Recline Motor Forward Control	I	A45 -A45
5	0.35 1.5	BU/VT BU/VT	1520 287	Power Seat Front Vertical Down Switch Signal Driver Power Seat Front Vertical Motor Down Control	I	A45 -A45
6	0.35 2.5	BK RD/YE	2150 5040	Ground Battery Positive Voltage	I	A45 -A45
7	0.35 1.5	GY/GN GY/GN	1523 284	Power Seat Horizontal Rearward Switch Signal Driver Power Seat Horizontal Motor Rearward Control	I	A45 -A45
8	0.35 1.5	YE YE	1519 282	Power Seat Rear Vertical Up Switch Signal Driver Power Seat Rear Vertical Motor Up Control	I	A45 -A45
9	0.35 1.5	GN/GY BU/YE	1270 277	Power Seat Recline Rearward Switch Signal Driver Power Seat Recline Motor Rearward Control	I	A45 -A45
10	0.35 1.5	YE/BU GY/BU	1521 283	Power Seat Rear Vertical Down Switch Signal Driver Power Seat Rear Vertical Motor Down Control	I	A45 -A45

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COMPONENT CONNECTOR END VIEWS > S64P SEAT ADJUSTER SWITCH - PASSENGER



Connector Part Information

- Harness Type: Passenger Seat
- OEM Connector: 7283-6457-40
- Service Connector: Service by Harness - See Part Catalog
- Description: 10-Way F YESC Kaizen Series (L-GY)

Terminal Part Information

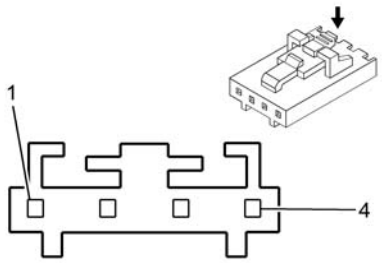
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-35 (VT)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	BU/WH	289	Passenger Power Seat Rear Vertical Motor Down Control	I	-
2	1.5	GN	76	Passenger Power Seat Recline Motor Forward Control	I	-
3	1.5	YE/WH	296	Passenger Power Seat Horizontal Motor Forward Control	I	-
4	1.5	GN/WH	288	Passenger Power Seat Rear Vertical Motor Up Control	I	-
5	2.5	BK	2250	Ground	I	-
6	-	-	-	Not Occupied	-	-
7	1.5	BU/BN	77	Passenger Power Seat Recline Motor Rearward Control	I	-
8	-	-	-	Not Occupied	-	-

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9	1.5	YE/BU	290	Passenger Power Seat Horizontal Motor Rearward Control	I	-
10	2.5	RD/GY	1042	Battery Positive Voltage	I	-

COMPONENT CONNECTOR END VIEWS > S70E STEERING WHEEL CONTROLS SWITCH - RADIO PRESETS



Connector Part Information

- Harness Type: Steering Wheel
- OEM Connector: 50-57-9404
- Service Connector: Service by Harness - See Part Catalog
- Description: 4-Way F 0.64 SL Series (BK)

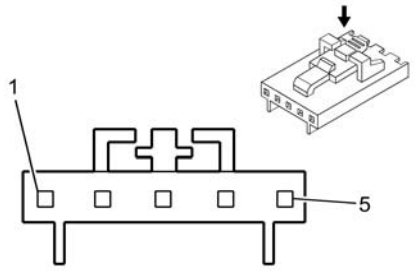
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BK	1350	Ground	I	-
2	0.35	YE/BU	4312	Radio Favorite Back Signal	I	-
3	0.35	WH/YE	4313	Radio Favorite Forward Signal	I	-
4	0.35	YE	6817	LED Backlight Dimming Control	I	-

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COMPONENT CONNECTOR END VIEWS > S70F STEERING WHEEL CONTROLS SWITCH - RADIO VOLUME



Connector Part Information

- Harness Type: Steering Wheel
- OEM Connector: 50-57-9405
- Service Connector: Service by Harness - See Part Catalog
- Description: 5-Way F 0.64 SL Series (BK)

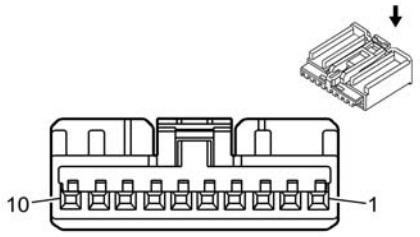
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	-	-	-	Not Occupied	-	-
2	0.35	BK	1350	Ground	I	-
3	0.35	GY/BN	4314	Radio Volume Down Signal	I	-
4	0.35	BU	4315	Radio Volume Up Signal	I	-
5	0.35	YE	6817	LED Backlight Dimming Control	I	-

COMPONENT CONNECTOR END VIEWS > S70L STEERING WHEEL CONTROLS SWITCH - LEFT

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Connector Part Information

- Harness Type: Steering Wheel
- OEM Connector: 15269796
- Service Connector: Service by Harness - See Part Catalog
- Description: 10-Way F 0.64 Kaizen Series (GY)

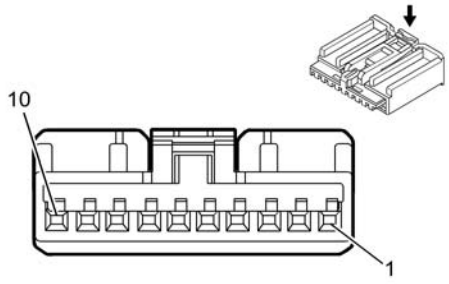
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BK	1350	Ground	I	-
2	0.35	VT	5883	Heated Steering Wheel Switch Signal	I	-
3	0.35	YE	6817	LED Backlight Dimming Control	I	-
4	0.35	WH/RD	1444	12 Volt Reference	I	-
5	0.35	BN/GN	1884	Cruise Control Set/Coast /Resume/Accelerate Switch Signal	I	-
6	0.35	PK	5884	Heated Steering Wheel Switch LED Control	I	-
7	0.35	WH	6816	Indicator Dimming Control	I	-
8 - 10	-	-	-	Not Occupied	-	-

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COMPONENT CONNECTOR END VIEWS > S70R STEERING WHEEL CONTROLS SWITCH - RIGHT



Connector Part Information

- Harness Type: Steering Wheel
- OEM Connector: 15269795
- Service Connector: Service by Harness - See Part Catalog
- Description: 10-Way F 0.64 Kaizen Series (BK)

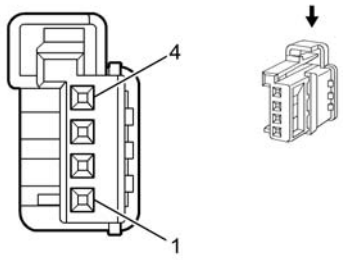
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	RD/BN	3040	Battery Positive Voltage	I	-
2	0.35	GN/BK	3894	Local Interconnect Network Serial data Bus 12	I	-
3	0.35	WH/YE	4313	Radio Favorite Forward Signal	I	-
4	0.35	YE/BU	4312	Radio Favorite Back Signal	I	-
5	0.35	BU	4315	Radio Volume Up Signal	I	-
6	0.35	GY/BN	4314	Radio Volume Down Signal	I	-
7	0.35	YE	6817	LED Backlight Dimming Control	I	-
8 - 9	-	-	-	Not Occupied	-	-
10	0.35	BK	1350	Ground	I	-

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COMPONENT CONNECTOR END VIEWS > S72 SUNROOF SWITCH



Connector Part Information

- Harness Type: Headliner
- OEM Connector: 13216377
- Service Connector: 13584096
- Description: 4-Way F 0.64 Micro Quadlok Series (BK)

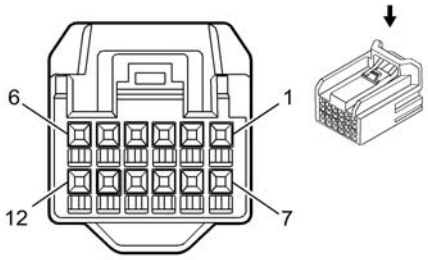
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BK/GY	128	Sunroof Switch Low Reference	I	CF5
2	0.35	YE	6817	LED Backlight Dimming Control	I	CF5
3	0.35	BK	1350	Ground	I	CF5
4	0.35	BU/VT	5027	Sunroof Switch Data (1) Signal	I	CF5

COMPONENT CONNECTOR END VIEWS > S78 TURN SIGNAL/MULTIFUNCTION SWITCH

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Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 19167197
- Service Connector: 13576635
- Description: 12-Way F 0.64 Series (BK)

Terminal Part Information

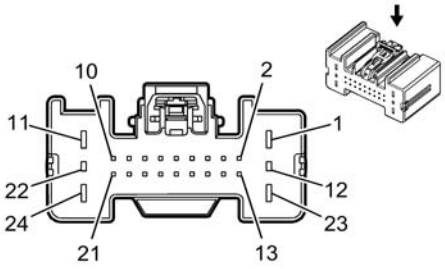
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13575870	J-35616-64B (LT BU)	J-38125-12A	SNAC3-A021T-M0.64	12	J	J

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BU/GY	187	Rear Fog Lamp Switch Signal	I	T79
2	0.35	WH/VT	103	Headlamp Switch On Signal	I	-
3	-	-	-	Not Occupied	-	-
4	0.35	VT/BU	664	Hazard Switch Right Turn Signal	I	-
5	0.35	WH/GN	663	Hazard Switch Left Turn Signal	I	-
6	0.35	BK	1350	Ground	I	-
7	0.35	GN/GY	13	Headlamp Switch Park Lamp Signal	I	-
8	-	-	-	Not Occupied	-	-
9	0.35	GN/BN	306	Headlamp Switch Headlamps Off Signal Control	I	-
10	-	-	-	Not Occupied	-	-

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11	0.35	WH	524	Headlamp Dimmer Switch High Beam Signal	I	-
12	0.35	YE/BN	307	Headlamp Switch Flash To Pass Signal	I	-

COMPONENT CONNECTOR END VIEWS > S79D WINDOW SWITCH - DRIVER



Connector Part Information

- Harness Type: Driver Door Trim
- OEM Connector: 13581061
- Service Connector: Service by Harness - See Part Catalog
- Description: 24-Way F 0.64, 1.5, 2.8 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 Required	J-35616-35 (VT)	Not Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

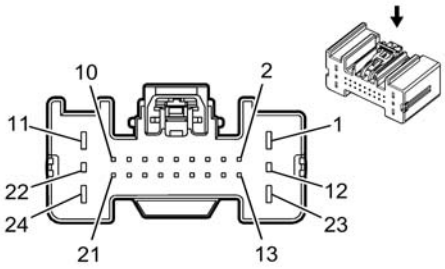
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GY	3380	Power Window Switch Driver Down Signal	I	-
2	0.35	YE/VT	3397	Passenger Mirror Motor Up (+) Down (-) Control	II	-B45
3	0.35	WH	3398	Passenger Mirror Motor Common Control	II	-B45

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4	0.35	GN/BK	3396	Passenger Mirror Motor Right (+) Left (-) Control	II	-B45
5	0.35	GN	3381	Power Window Switch Driver Express Signal	II	-
6	0.35	BN/BK	3389	Driver Mirror Motor Right (+) Left (-) Control	II	-
7	0.35	VT/BU	3390	Driver Mirror Motor Up (+) Down (-) Control	II	-
8	0.35	YE/BN	3391	Driver Mirror Motor Common Control	II	-
9	0.35	GN/YE	6134	Local Interconnect Network Serial Data Bus 3	II	-
10	-	-	-	Not Occupied	-	-
11	0.35	GN/WH	3379	Power Window Switch Driver Up Signal	I	-
12 - 13	-	-	-	Not Occupied	-	-
14	0.35	WH/VT	3270	Driver Door Lock Motor Status Signal	II	-
15	0.35	BU/VT	1124	Door Lock Key Switch Unlock Signal	II	-
16	0.35	WH/YE	3395	Driver Mirror Position Sensor Left (-) Right (+) Signal	II	A45+DD1/DAZ
17	0.35	VT/RD	3392	Driver Mirror Position Sensor 5 Volt Reference	II	A45+DD1/DAZ
18	0.35	GY/BN	3394	Driver Mirror Position Sensor Up (+) Down (-) Signal	II	A45+DD1/DAZ
19	0.35	BK/BN	3393	Driver Mirror Position Sensor Low Reference	II	A45+DD1/DAZ
20	-	-	-	Not Occupied	-	-
21	0.35	GN/WH	7530	Local Interconnect Network Serial Data Bus 8	II	A45+DD1/DAZ
22	-	-	-	Not Occupied	-	-
23	0.5	RD/VT	1940	Battery Positive Voltage	I	-
24	0.75	BK	2150	Ground	I	-

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COMPONENT CONNECTOR END VIEWS > S79P WINDOW SWITCH - PASSENGER



Connector Part Information

- Harness Type: Passenger Door Trim
- OEM Connector: 13581061
- Service Connector: Service by Harness - See Part Catalog
- Description: 24-Way F 0.64, 1.5, 2.8 Series (BK)

Terminal Part Information

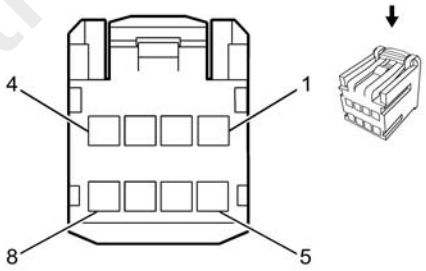
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-35 (VT)	Not Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BN/YE	3385	Power Window Switch Passenger Down Signal	I	-
2	-	-	-	Not Occupied	-	-
3	0.35	GN/BK	3396	Passenger Mirror Motor Right (+) Left (-) Control	II	A45+DD1/DAZ
4	0.35	YE/VT	3397	Passenger Mirror Motor Up (+) Down (-) Control	II	A45+DD1/DAZ
5	0.35	WH	3398	Passenger Mirror Motor Common Control	II	A45+DD1/DAZ
6	0.35	YE/RD	3399	Passenger Mirror Position Sensor 5 Volt Reference	II	A45+DD1/DAZ
7	0.35	BU/YE	3401	Passenger Mirror Position Sensor Up (+) Down (-)	II	A45+DD1/DAZ

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				Signal		
8	0.35	BK/GN	3400	Passenger Mirror Position Sensor Low Reference	II	A45+DD1/DAZ
9	0.35	VT/WH	3403	Passenger Mirror Position Sensor Left (-) Right (+) Signal	II	A45+DD1/DAZ
10	0.5	YE	6817	LED Backlight Dimming Control	II	-
11	0.35	YE/BK	3384	Power Window Switch Passenger Up Signal	I	-
12	-	-	-	Not Occupied	-	-
13	0.35	VT/GY	3386	Power Window Switch Passenger Express Signal	II	-
14 - 20	-	-	-	Not Occupied	-	-
21	0.35	GN/WH	7530	Local Interconnect Network Serial Data Bus 8	II	A45+DD1/DAZ
22	-	-	-	Not Occupied	-	-
23	0.35	RD/BU	840	Battery Positive Voltage	I	A45+DD1/DAZ
24	0.5	BK	2250	Ground	I	-

COMPONENT CONNECTOR END VIEWS > 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)

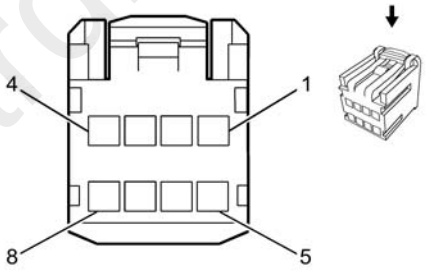
Terminal Part Information

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Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GY	1715	Windshield Wiper Switch High Signal	I	-
2	0.35	BK/GY	6009	Windshield Wiper Switch Low Reference	I	-
3	0.35	YE/BU	1714	Windshield Wiper Switch Low Signal	I	-
4	-	-	-	Not Occupied	-	-
5	0.35	WH/BK	94	Windshield Washer Switch Signal	I	-
6 - 8	-	-	-	Not Occupied	-	-

COMPONENT CONNECTOR END VIEWS > S91 PARK BRAKE CONTROL SWITCH



Connector Part Information

- Harness Type: Floor Console
- OEM Connector: 19153437
- Service Connector: Service by Harness - See Part Catalog
- Description: 8-Way F 1.2 HCM Series (BK)

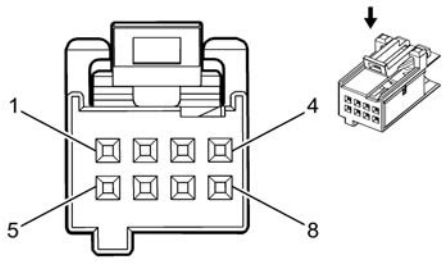
Terminal Part Information

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Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	YE	1492	Park Brake Switch Supply Voltage	I	J77
2	0.35	BU/VT	1134	Park Brake Switch Signal	I	J77
3	0.35	YE/RD	7683	Park Brake Release Switch Voltage Reference	I	J77
4	0.35	BN	6107	Park Brake Apply Switch Signal	I	J77
5	0.35	BU/BK	6108	Park Brake Release Switch Signal	I	J77
6	0.35	YE	6817	LED Backlight Dimming Control	I	J77
7	0.35	GY/RD	7684	Park Brake Apply Switch Voltage Reference	I	J77
8	0.35	BK	2250	Ground	I	-

COMPONENT CONNECTOR END VIEWS > S86 VEHICLE STABILITY CONTROL SWITCH



Connector Part Information

- Harness Type: Floor Console
- OEM Connector: 12782871
- Service Connector: Service by Harness - See Part Catalog
- Description: 8-Way F 0.64 Micro-Quadlock Series (BK with GY cover)

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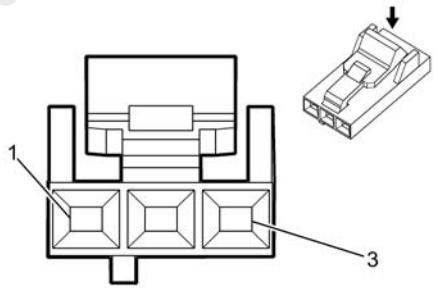
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	-	-	-	Not Occupied	-	-
2	0.35	BU/VT	1788	Traction Control Switch Signal (1)	I	-
3	0.35	GY	4109	Driver Mode Switch 5 Volt Reference	I	-
4	0.5	BK	2250	Ground	I	-
5	-	-	-	Not Occupied	-	-
6	0.35	WH/VT	4108	Driver Mode Switch Signal	I	-
7	-	-	-	Not Occupied	-	-
8	0.35	YE	6817	LED Backlight Dimming Control	I	-

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COMPONENT CONNECTOR END VIEWS > S147L MANUAL TRANSMISSION SHIFT ANTICIPATE SWITCH - LEFT (MN6)



Connector Part Information

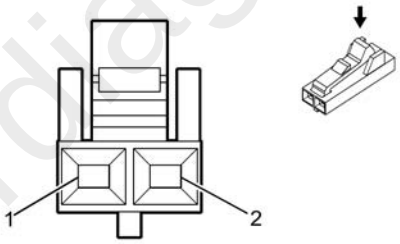
- Harness Type: Steering Wheel
- OEM Connector: 104257-2
- Service Connector: Service by Harness - See Part Catalog
- Description: 3-Way F 0.64 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 3	-	-	-	Not Occupied	-	-
A	0.35	VT/YE	5526	Tap Up/Tap Down Switch Signal	I	-
B	0.35	BK	1350	Ground	I	-
C	0.35	GN	5525	Tap Up/Tap Down Enable Signal	I	-

COMPONENT CONNECTOR END VIEWS > S147R MANUAL TRANSMISSION SHIFT ANTICIPATE SWITCH - RIGHT (MN6)



Connector Part Information

- Harness Type: Steering Wheel
- OEM Connector: 104257-1
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way M 0.64 Series (BK)

Terminal Part Information

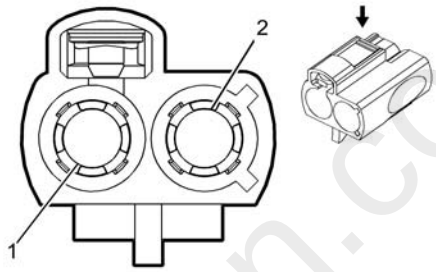
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal	Service Terminal	Tray Name	Core Crimp	Insulation Crimp

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			Tool				
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BK	1350	Ground	I	-
2	0.35	GN	5525	Tap Up/Tap Down Enable Signal	I	-

COMPONENT CONNECTOR END VIEWS > T2RR ANTENNA - ROOF REAR X1 (U2K)



Connector Part Information

- Harness Type: Body COAX
- OEM Connector: 13581719
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: 2-Way F Coax Type (PU)

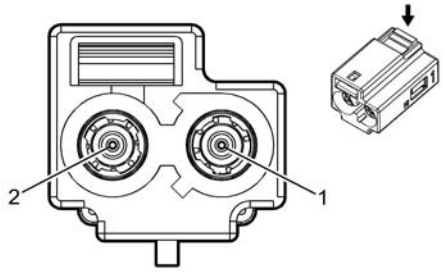
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
-	-	COAX	-	(GPS/Cell) Coaxial Antenna Cell/GPS combined Signal	I	-

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COMPONENT CONNECTOR END VIEWS > T2EL ANTENNA - REAR END SPOILER LEFT (-U2K)



Connector Part Information

- Harness Type: Body COAX
- OEM Connector: 13590279
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: 2-Way F Coax Type (BN)

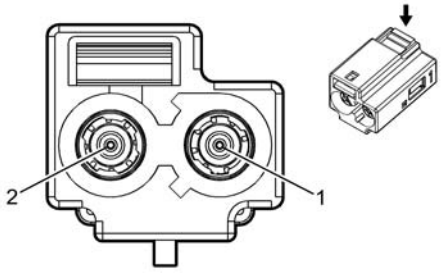
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
-	-	COAX	-	(GPS/Cell) Coaxial Antenna Cell/GPS combined Signal	I	-

COMPONENT CONNECTOR END VIEWS > T2RR ANTENNA - ROOF REAR X1 (-U2K)

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Connector Part Information

- Harness Type: Body COAX
- OEM Connector: 13590279
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: 2-Way F Coax Type (BN)

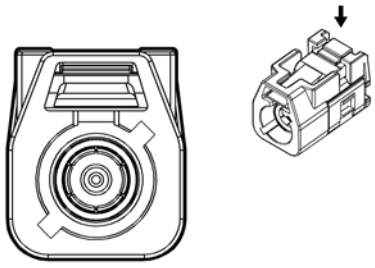
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
-	-	COAX	-	(GPS/Cell) Coaxial Antenna Cell/GPS combined Signal	I	-

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COMPONENT CONNECTOR END VIEWS > T2RR ANTENNA - ROOF REAR X3



Connector Part Information

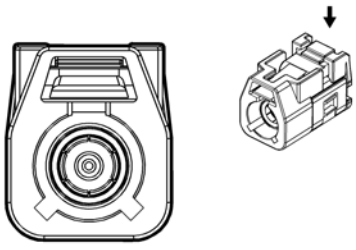
- Harness Type: Body
- OEM Connector: 13586875
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: 1-Way F Coax Type (BU)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
C	-	WH	6242	Coaxial Antenna GPS Signal	I	-
COAX	-	-	-	Not Occupied	-	-
S	- 0.35	BARE BARE	6243 6243	Coaxial Antenna GPS Low Reference	I	- IO6-UE1-UI3-MAW

COMPONENT CONNECTOR END VIEWS > T2RR ANTENNA - ROOF REAR X4



Connector Part Information

- Harness Type: Body COAX
- OEM Connector: 13586879
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: 1-Way F Coax Type (CU)

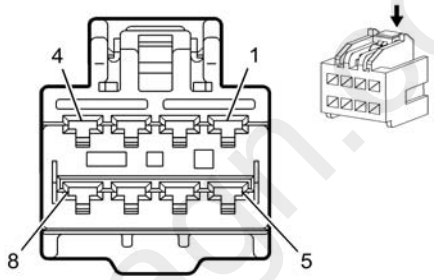
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Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
-	-	COAX	-	(XM +/-HD) Coaxial Antenna XM Signal	I	-

COMPONENT CONNECTOR END VIEWS > T3 AUDIO AMPLIFIER X1 (UQ3)



Connector Part Information

- Harness Type: Body
- OEM Connector: 15134093
- Service Connector: 13580111
- Description: 8-Way F 2.8 Series (BK)

Terminal Part Information

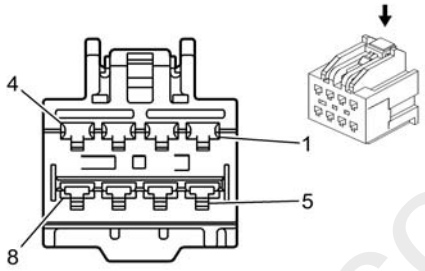
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-35 (VT)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option

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1 - 2	-	-	-	Not Occupied	-	-
3	0.35	GN/YE	7066	Entertainment Remote Enable Signal	I	UQ3+NKC
4	3	RD/YE	240	Battery Positive Voltage	I	UQ3+NKC
5 - 7	-	-	-	Not Occupied	-	-
8	3	BK/WH	1551	Signal Ground	I	UQ3+NKC

COMPONENT CONNECTOR END VIEWS > T3 AUDIO AMPLIFIER X1 (CM8 + UQA)



Connector Part Information

- Harness Type: Body
- OEM Connector: 89047379
- Service Connector: 19115652
- Description: 8-Way F 2.8 Series (L-GY)

Terminal Part Information

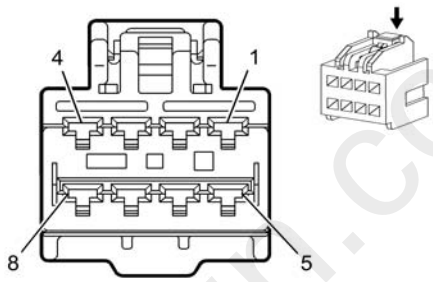
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-35 (VT)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	3	YE	200	Right Front Speaker Control (+) (1)	I	UQA+A1AC
2	-	-	-	Not Occupied	-	-

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3	3	BU	201	Left Front Speaker Control (+) (1)	I	UQA+A1AC
4	3	RD/YE	240	Battery Positive Voltage	I	A1AC+UQA
5	3	YE/BK	117	Right Front Speaker Signal (-) (1)	I	UQA+A1AC
6	-	-	-	Not Occupied	-	-
7	3	BN/BU	118	Left Front Speaker Signal (-) (1)	I	UQA+A1AC
8	3	BK/WH	1551	Signal Ground	I	A1AC+UQA

COMPONENT CONNECTOR END VIEWS > T3 AUDIO AMPLIFIER X1 (UQA -CM8)



Connector Part Information

- Harness Type: Body
- OEM Connector: 15134093
- Service Connector: 13580111
- Description: 8-Way F 2.8 Series (BK)

Terminal Part Information

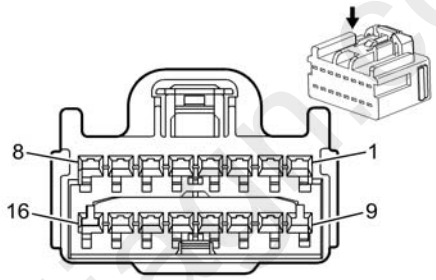
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-35 (VT)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1	BU/GY	346	Left/Rear Subwoofer Speaker Control (+)	I	UQA+A1BC

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2	2	YE	200	Right Front Speaker Control (+) (1)	I	UQA+A1BC
3	2	BU	201	Left Front Speaker Control (+) (1)	I	UQA+A1BC
4	3	RD/YE	240	Battery Positive Voltage	I	A1BC+UQA
5	1	GN/BK	1794	Left/Rear Subwoofer Speaker (-) Low Reference	I	UQA+A1BC
6	2	YE/BK	117	Right Front Speaker Signal (-) (1)	I	UQA+A1BC
7	2	BN/BU	118	Left Front Speaker Signal (-) (1)	I	UQA+A1BC
8	3	BK/WH	1551	Signal Ground	I	A1BC+UQA

COMPONENT CONNECTOR END VIEWS > T3 AUDIO AMPLIFIER X2 (UQ3)



Connector Part Information

- Harness Type: Body
- OEM Connector: 89047090
- Service Connector: 89047090
- Description: 16-Way F 1.5 Kaizen Series (GN)

Terminal Part Information

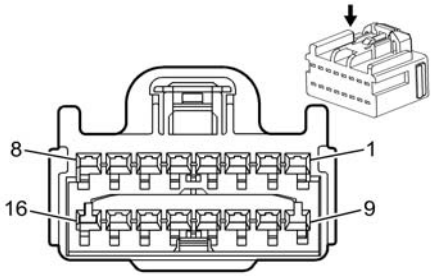
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13575850	J-35616-2A (GY)	J-38125-11A	Not available	Not available	Not available	Not available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option

1	0.75	BU	511	Left Front Low Level Audio Signal	I	UQ3+NKC
2	0.75	YE	512	Right Front Low Level Audio Signal	I	UQ3+NKC
3	0.75	GN/BK	599	Left Rear Low Level Audio Signal	I	UQ3+NKC
4	0.75	BN/WH	546	Right Rear Low Level Audio Signal	I	UQ3+NKC
5	0.75	BU	201	Left Front Speaker Control (+) (1)	I	UQ3+NKC
6	0.75	YE	200	Right Front Speaker Control (+) (1)	I	UQ3+NKC
7	0.75	GN	199	Left Rear Speaker Control (+)	I	UQ3+NKC
8	0.75	WH	46	Right Rear Speaker Control (+)	I	UQ3+NKC
9	0.75	BN/BU	1947	Left Front Low Level Audio (-) Low Reference	I	UQ3+NKC
10	0.75	BU/BN	1546	Front Low Level Audio (-) Low Reference	I	UQ3+NKC
11	0.75	BN/VT	1999	Left Rear Low Level Audio (-) Low Reference	I	UQ3+NKC
12	0.75	BU/BK	1946	Right Rear Low Level Audio (-) Low Reference	I	UQ3+NKC
13	0.75	BN/BU	118	Left Front Speaker Signal (-) (1)	I	UQ3+NKC
14	0.75	YE/BK	117	Right Front Speaker Signal (-) (1)	I	UQ3+NKC
15	0.75	GN/BK	116	Left Rear Speaker Signal (-)	I	UQ3+NKC
16	0.75	BU/BK	115	Right Rear Speaker Signal (-)	I	UQ3+NKC

COMPONENT CONNECTOR END VIEWS > T3 AUDIO AMPLIFIER X2 (UQA)

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Connector Part Information

- Harness Type: Body
- OEM Connector: 89047090
- Service Connector: 89047090
- Description: 16-Way F 1.5 Kaizen Series (GN)

Terminal Part Information

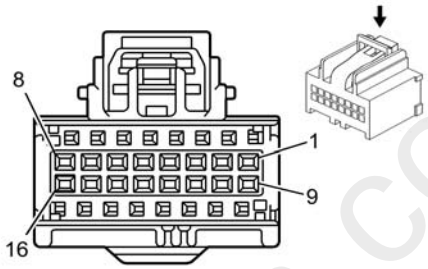
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13575850	J-35616-2A (GY)	J-38125-11A	Not available	Not available	Not available	Not available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	-	-	-	Not Occupied	-	-
3	1	YE/WH	1860	Front Center Speaker Control (+)	I	-
4	1	BN/GN	1852	Right Front Tweeter Speaker Control (+)	I	-
5	1	YE/BU	1856	Left Front Tweeter Speaker Control (+)	I	-
6	1	WH	46	Right Rear Speaker Control (+)	I	-
7	1	GN	199	Left Rear Speaker Control (+)	I	-
8	1	GY/BK	315	Right Subwoofer Speaker (-) Low Reference	I	UQA+A1BC
9 - 10	-	-	-	Not Occupied	-	-
11	1	BU/YE	1960	Front Center Speaker (-) Low Reference	I	-

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12	1	VT/BN	1952	Right Front Tweeter Speaker (-) Low Reference	I	-
13	1	YE/GY	1956	Left Front Tweeter Speaker (-) Low Reference	I	-
14	1	BU/BK	115	Right Rear Speaker Signal (-)	I	-
15	1	GN/BK	116	Left Rear Speaker Signal (-)	I	-
16	1	GN/VT	1795	Right Subwoofer Speaker Control (+)	I	UQA+A1BC

COMPONENT CONNECTOR END VIEWS > T3 AUDIO AMPLIFIER X3 (UQ3)



Connector Part Information

- Harness Type: Body
- OEM Connector: 15136073
- Service Connector: 15136073
- Description: 16-Way F 0.64 Kaizen Series (BK)

Terminal Part Information

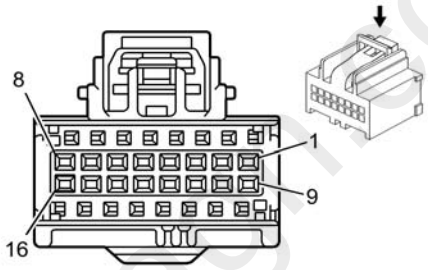
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13575845	J-35616-64B (LT BU)	J-38125-215A	Not available	Not available	Not available	Not available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	-	-	-	Not Occupied	-	-
2	0.5	VT/BU	6091	Crankshaft Position Sensor Replicated Signal	I	-

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3	-	-	-	Not Occupied	-	-
4	0.35	GN/BN	3005	Noise Reduction Microphone 1 Signal	I	-
5	0.35	BU/YE	3006	Noise Reduction Microphone 2 Signal	I	-
6 - 11	-	-	-	Not Occupied	-	-
12	0.35	GN/BK	3008	Noise Reduction Microphone 1 Low Reference	I	-
13	0.35	BU/BK	3009	Noise Reduction Microphone 2 Low Reference	I	-
14 - 16	-	-	-	Not Occupied	-	-

COMPONENT CONNECTOR END VIEWS > T3 AUDIO AMPLIFIER X3 (UQA)



Connector Part Information

- Harness Type: Body
- OEM Connector: 15136073
- Service Connector: 15136073
- Description: 16-Way F 0.64 Kaizen Series (BK)

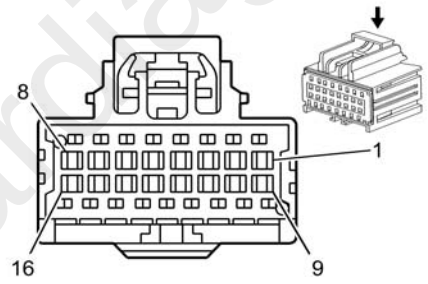
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13575845	J-35616-64B (LT BU)	J-38125-215A	Not available	Not available	Not available	Not available
II	19119865	J-35616-64B (LT BU)	J-38125-12A	Not available	Not available	Not available	Not available

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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	GY/GN	1102	Low Speed GMLAN Serial Data #2	II	-
2	0.35	VT/BU	6091	Crankshaft Position Sensor Replicated Signal	I	-
3	-	-	-	Not Occupied	-	-
4	0.35	GN/BN	3005	Noise Reduction Microphone 1 Signal	I	-
5	0.35	BU/YE	3006	Noise Reduction Microphone 2 Signal	I	-
6 - 11	-	-	-	Not Occupied	-	-
12	0.35	GN/BK	3008	Noise Reduction Microphone 1 Low Reference	I	-
13	0.35	BU/BK	3009	Noise Reduction Microphone 2 Low Reference	I	-
14 - 16	-	-	-	Not Occupied	-	-

COMPONENT CONNECTOR END VIEWS > T3 AUDIO AMPLIFIER X4



Connector Part Information

- Harness Type: Body
- OEM Connector: 15136074
- Service Connector: 15136074
- Description: 16-Way F 0.64 Kaizen Series (BN)

Terminal Part Information

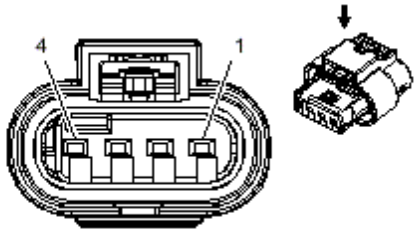
Terminal	Terminated	Diagnostic	Terminal	Service	Tray	Core	Insulation

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Type ID	Lead	Test Probe	Removal Tool	Terminal		Crimp	Crimp
I	13575845	J-35616-64B (LT BU)	J-38125-215A	Not available	Not available	Not available	Not available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 2	-	-	-	Not Occupied	-	-
3	0.35	WH/GN	3997	MOST Serial Data (-)	I	-
4	0.35	GY/VT	3998	MOST Serial Data (+)	I	-
5	0.5	WH/GN	3997	MOST Serial Data (-)	I	-
6	0.5	GY/VT	3998	MOST Serial Data (+)	I	-
7	0.35	WH/GN	1305	High Speed GMLAN Serial Data (-) (9)	I	-
8	0.35	WH/GN	1305	High Speed GMLAN Serial Data (-) (9)	I	-
9 - 13	-	-	-	Not Occupied	-	-
14	0.35	WH/VT	3999	MOST Control	I	-
15	0.35	BU/GN	1304	High Speed GMLAN Serial Data (+) (9)	I	-
16	0.35	BU/GN	1304	High Speed GMLAN Serial Data (+) (9)	I	-

COMPONENT CONNECTOR END VIEWS > T8A IGNITION COIL 1 (LGX)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13576418
- Service Connector: 19300397
- Description: 4-Way F 1.2 Multiple Contact Point Series, Sealed (BK)

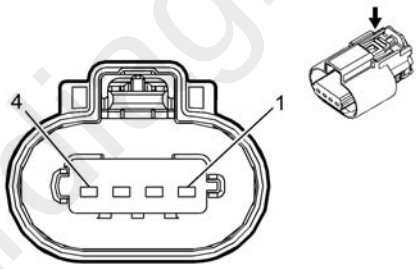
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Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1	BK	350	Ground	I	LGX
2	0.5	BK/BU	2129	Ignition Control Low Reference Bank 1	I	LGX
3	0.5	BU/VT	2121	Ignition Control (1)	I	LGX
4	1	VT/BU	5291	Powertrain Main Relay Fused Supply (2)	I	LGX

COMPONENT CONNECTOR END VIEWS > T8A IGNITION COIL 1 (LT1)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13503518
- Service Connector: 19301722
- Description: 4-Way F 150 MX Series, Sealed (BK)

Terminal Part Information

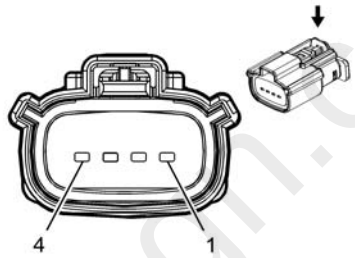
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp

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I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1	BK	350	Ground	I	LT1
2	0.5	BK/BU	2129	Ignition Control Low Reference Bank 1	I	LT1
3	0.5	BU/VT	2121	Ignition Control (1)	I	LT1
4	1	VT/BU	5291	Powertrain Main Relay Fused Supply (2)	I	LT1

COMPONENT CONNECTOR END VIEWS > T8A IGNITION COIL 1 (LTG)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13577579
- Service Connector: 19299695
- Description: 4-Way F 150 MX Series, Sealed (BK)

Terminal Part Information

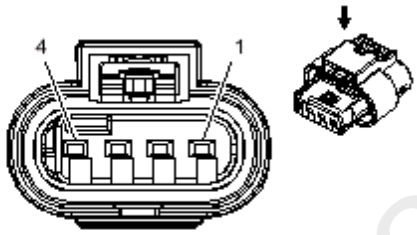
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option

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1	0.75	BK	250	Ground	I	LTG
2	0.5	BK/BU	2129	Ignition Control Low Reference Bank 1	I	LTG
3	0.5	BU/VT	2121	Ignition Control (1)	I	LTG
4	0.75	VT/BU	5291	Powertrain Main Relay Fused Supply (2)	I	LTG

COMPONENT CONNECTOR END VIEWS > T8B IGNITION COIL 2 (LGX)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13576418
- Service Connector: 19300397
- Description: 4-Way F 1.2 Multiple Contact Point Series, Sealed (BK)

Terminal Part Information

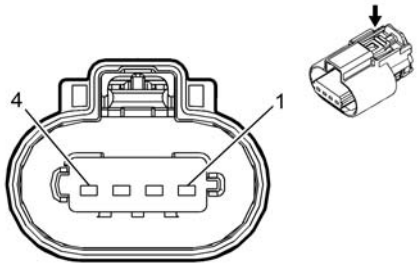
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1	BK	250	Ground	I	LGX
2	0.5	BK/GY	2130	Ignition Control Low Reference Bank 2	I	LGX
3	0.5	BU/WH	2122	Ignition Control (2)	I	LGX

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4	1	VT/BU	5292	Powertrain Main Relay Fused Supply (3)	I	LGX

COMPONENT CONNECTOR END VIEWS > T8B IGNITION COIL 2 (LT1)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13503518
- Service Connector: 19301722
- Description: 4-Way F 150 MX Series, Sealed (BK)

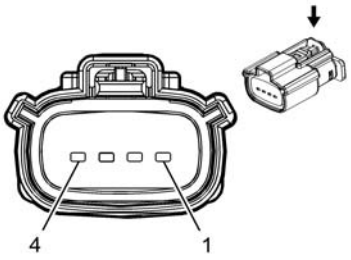
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1	BK	250	Ground	I	LT1
2	0.5	BK/GY	2130	Ignition Control Low Reference Bank 2	I	LT1
3	0.5	BU/WH	2122	Ignition Control (2)	I	LT1
4	1	VT/BU	5292	Powertrain Main Relay Fused Supply (3)	I	LT1

COMPONENT CONNECTOR END VIEWS > T8B IGNITION COIL 2 (LTG)

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Connector Part Information

- Harness Type: Engine
- OEM Connector: 13577579
- Service Connector: 19299695
- Description: 4-Way F 150 MX Series, Sealed (BK)

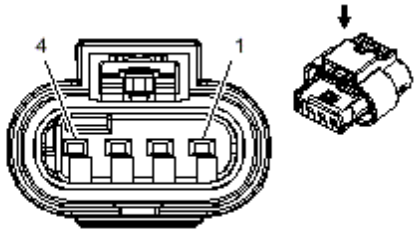
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	250	Ground	I	LTG
2	0.5	BK/BU	2129	Ignition Control Low Reference Bank 1	I	LTG
3	0.5	BU/WH	2122	Ignition Control (2)	I	LTG
4	0.75	VT/BU	5291	Powertrain Main Relay Fused Supply (2)	I	LTG

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COMPONENT CONNECTOR END VIEWS > T8C IGNITION COIL 3 (LGX)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13576418
- Service Connector: 19300397
- Description: 4-Way F 1.2 Multiple Contact Point Series, Sealed (BK)

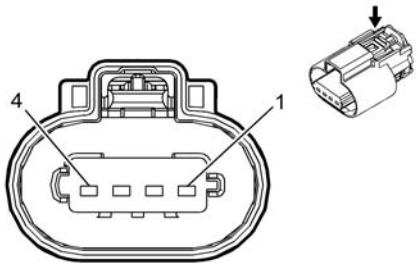
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1	BK	350	Ground	I	LGX
2	0.5	BK/BU	2129	Ignition Control Low Reference Bank 1	I	LGX
3	0.5	GN/BU	2123	Ignition Control (3)	I	LGX
4	1	VT/BU	5291	Powertrain Main Relay Fused Supply (2)	I	LGX

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COMPONENT CONNECTOR END VIEWS > T8C IGNITION COIL 3 (LT1)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13503518
- Service Connector: 19301722
- Description: 4-Way F 150 MX Series, Sealed (BK)

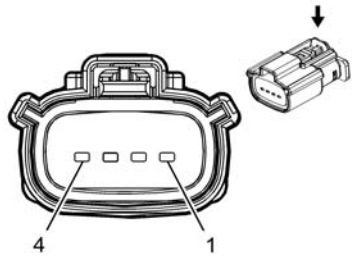
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1	BK	350	Ground	I	LT1
2	0.5	BK/BU	2129	Ignition Control Low Reference Bank 1	I	LT1
3	0.5	GN/BU	2123	Ignition Control (3)	I	LT1
4	1	VT/BU	5291	Powertrain Main Relay Fused Supply (2)	I	LT1

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COMPONENT CONNECTOR END VIEWS > T8C IGNITION COIL 3 (LTG)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13577579
- Service Connector: 19299695
- Description: 4-Way F 150 MX Series, Sealed (BK)

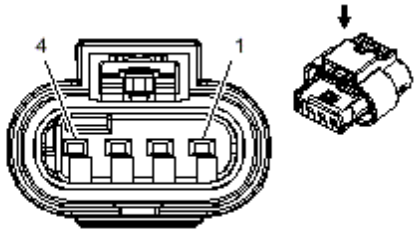
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	250	Ground	I	LTG
2	0.5	BK/BU	2129	Ignition Control Low Reference Bank 1	I	LTG
3	0.5	GN/BU	2123	Ignition Control (3)	I	LTG
4	0.75	VT/BU	5291	Powertrain Main Relay Fused Supply (2)	I	LTG

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COMPONENT CONNECTOR END VIEWS > T8D IGNITION COIL 4 (LGX)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13576418
- Service Connector: 19300397
- Description: 4-Way F 1.2 Multiple Contact Point Series, Sealed (BK)

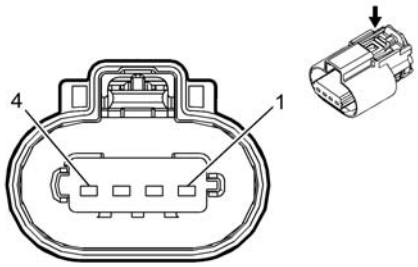
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1	BK	250	Ground	I	LGX
2	0.5	BK/GY	2130	Ignition Control Low Reference Bank 2	I	LGX
3	0.5	YE/BU	2124	Ignition Control (4)	I	LGX
4	1	VT/BU	5292	Powertrain Main Relay Fused Supply (3)	I	LGX

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COMPONENT CONNECTOR END VIEWS > T8D IGNITION COIL 4 (LT1)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13503518
- Service Connector: 19301722
- Description: 4-Way F 150 MX Series, Sealed (BK)

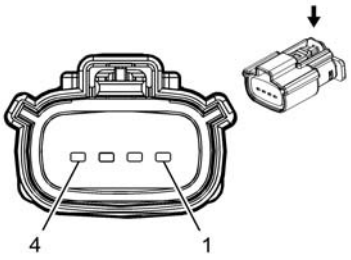
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1	BK	250	Ground	I	LT1
2	0.5	BK/GY	2130	Ignition Control Low Reference Bank 2	I	LT1
3	0.5	YE/BU	2124	Ignition Control (4)	I	LT1
4	1	VT/BU	5292	Powertrain Main Relay Fused Supply (3)	I	LT1

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COMPONENT CONNECTOR END VIEWS > T8D IGNITION COIL 4 (LTG)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13577579
- Service Connector: 19299695
- Description: 4-Way F 150 MX Series, Sealed (BK)

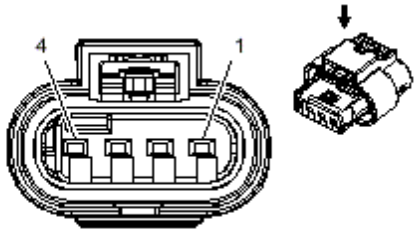
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75	BK	250	Ground	I	LTG
2	0.5	BK/BU	2129	Ignition Control Low Reference Bank 1	I	LTG
3	0.5	YE/BU	2124	Ignition Control (4)	I	LTG
4	0.75	VT/BU	5291	Powertrain Main Relay Fused Supply (2)	I	LTG

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COMPONENT CONNECTOR END VIEWS > T8E IGNITION COIL 5 (LGX)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13576418
- Service Connector: 19300397
- Description: 4-Way F 1.2 Multiple Contact Point Series, Sealed (BK)

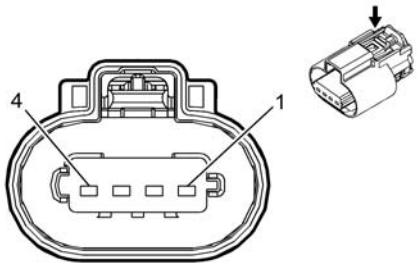
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1	BK	350	Ground	I	LGX
2	0.5	BK/BU	2129	Ignition Control Low Reference Bank 1	I	LGX
3	0.5	BU/GY	2125	Ignition Control (5)	I	LGX
4	1	VT/BU	5291	Powertrain Main Relay Fused Supply (2)	I	LGX

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COMPONENT CONNECTOR END VIEWS > T8E IGNITION COIL 5 (LT1)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13503518
- Service Connector: 19301722
- Description: 4-Way F 150 MX Series, Sealed (BK)

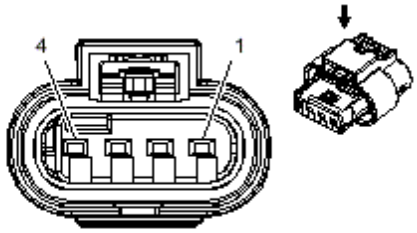
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1	BK	350	Ground	I	LT1
2	0.5	BK/BU	2129	Ignition Control Low Reference Bank 1	I	LT1
3	0.5	BU/GY	2125	Ignition Control (5)	I	LT1
4	1	VT/BU	5291	Powertrain Main Relay Fused Supply (2)	I	LT1

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COMPONENT CONNECTOR END VIEWS > T8F IGNITION COIL 6 (LGX)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13576418
- Service Connector: 19300397
- Description: 4-Way F 1.2 Multiple Contact Point Series, Sealed (BK)

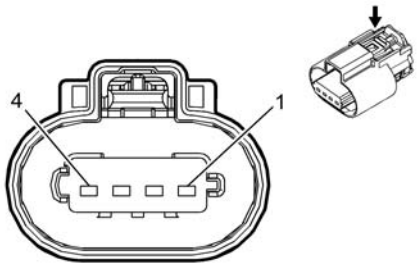
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1	BK	250	Ground	I	LGX
2	0.5	BK/GY	2130	Ignition Control Low Reference Bank 2	I	LGX
3	0.5	BN/BU	2126	Ignition Control (6)	I	LGX
4	1	VT/BU	5292	Powertrain Main Relay Fused Supply (3)	I	LGX

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COMPONENT CONNECTOR END VIEWS > T8F IGNITION COIL 6 (LT1)



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13503518
- Service Connector: 19301722
- Description: 4-Way F 150 MX Series, Sealed (BK)

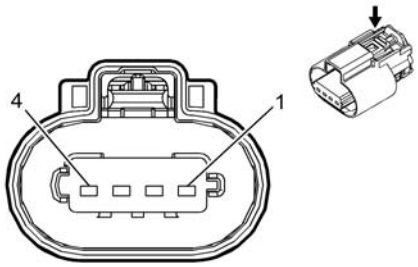
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1	BK	250	Ground	I	LT1
2	0.5	BK/GY	2130	Ignition Control Low Reference Bank 2	I	LT1
3	0.5	BN/BU	2126	Ignition Control (6)	I	LT1
4	1	VT/BU	5292	Powertrain Main Relay Fused Supply (3)	I	LT1

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COMPONENT CONNECTOR END VIEWS > T8G IGNITION COIL 7



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13503518
- Service Connector: 19301722
- Description: 4-Way F 150 MX Series, Sealed (BK)

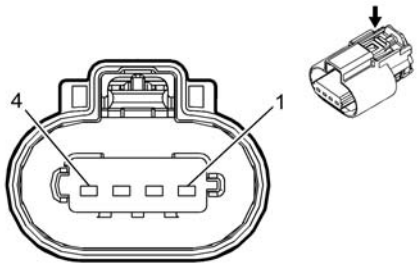
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1	BK	350	Ground	I	LT1
2	0.5	BK/BU	2129	Ignition Control Low Reference Bank 1	I	LT1
3	0.5	GN/GY	2127	Ignition Control (7)	I	LT1
4	1	VT/BU	5291	Powertrain Main Relay Fused Supply (2)	I	LT1

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COMPONENT CONNECTOR END VIEWS > T8H IGNITION COIL 8



Connector Part Information

- Harness Type: Engine
- OEM Connector: 13503518
- Service Connector: 19301722
- Description: 4-Way F 150 MX Series, Sealed (BK)

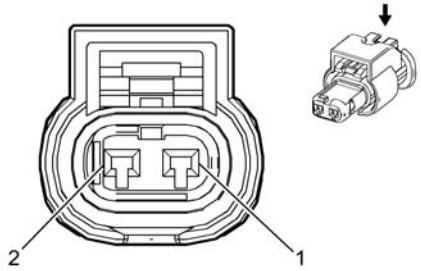
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1	BK	250	Ground	I	LT1
2	0.5	BK/GY	2130	Ignition Control Low Reference Bank 2	I	LT1
3	0.5	VT/WH	2128	Ignition Control (8)	I	LT1
4	1	VT/BU	5292	Powertrain Main Relay Fused Supply (3)	I	LT1

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COMPONENT CONNECTOR END VIEWS > T10E KEYLESS ENTRY ANTENNA - REAR COMPARTMENT



Connector Part Information

- Harness Type: Body
- OEM Connector: 13505429
- Service Connector: 15208801
- Description: 2-Way F 1.2 Multiple Contact Point Series, Sealed (BK with NA Inner Connector)

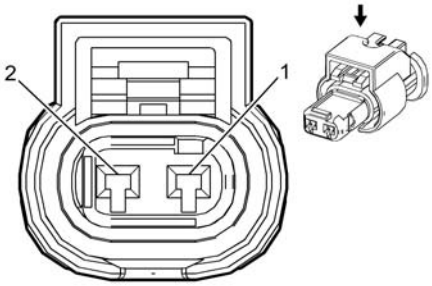
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

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	-

COMPONENT CONNECTOR END VIEWS > T10G KEYLESS ENTRY ANTENNA - REAR FASCIA

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Connector Part Information

- Harness Type: Rear Fascia
- OEM Connector: 13586143
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 1.2 Multiple Contact Point Series, Sealed (BK with BK Inner Connector)

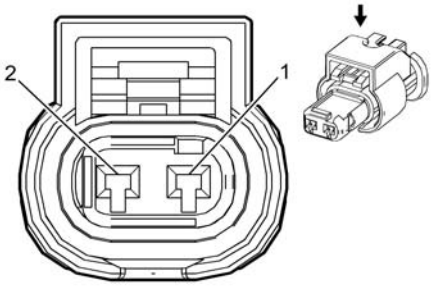
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	BN/GN	3568	Passive Entry Rear Closure Antenna Signal Hi	I	-
2	0.35	GN/GY	3569	Passive Entry Rear Closure Antenna Signal Lo	I	-

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COMPONENT CONNECTOR END VIEWS > T10J KEYLESS ENTRY ANTENNA - CENTER CONSOLE FRONT



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 13586143
- Service Connector: 15949005
- Description: 2-Way F 1.2 Multiple Contact Point Series, Sealed (BK with BK Inner Connector)

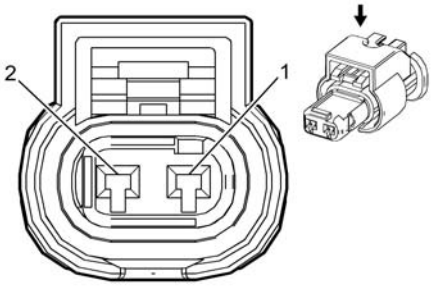
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

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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COMPONENT CONNECTOR END VIEWS > T10K KEYLESS ENTRY ANTENNA - CENTER CONSOLE REAR



Connector Part Information

- Harness Type: Floor Console
- OEM Connector: 13586143
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way F 1.2 Multiple Contact Point Series, Sealed (BK with BK Inner Connector)

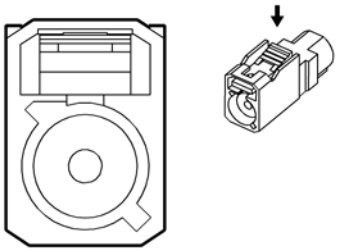
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

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	-

COMPONENT CONNECTOR END VIEWS > T15 NAVIGATION ANTENNA SIGNAL SPLITTER X1

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Connector Part Information

- Harness Type: Instrument Panel COAX
- OEM Connector: 13585502
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: 1-Way F Coax Type (GY)

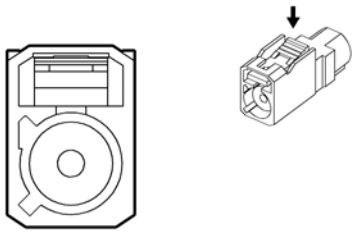
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
-	-	COAX	-	(GPS/Cell) Coaxial Antenna Cell/GPS combined Signal	I	-

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COMPONENT CONNECTOR END VIEWS > T15 NAVIGATION ANTENNA SIGNAL SPLITTER X2



Connector Part Information

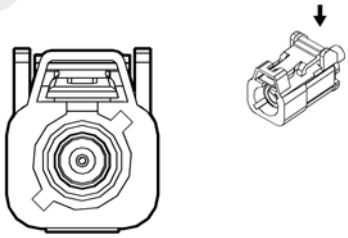
- Harness Type: Instrument Panel COAX
- OEM Connector: 13790718
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: 1-Way F Coax Type (PK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
-	-	COAX	-	(GPS/Cell) Coaxial Antenna Cell/GPS combined Signal	I	-

COMPONENT CONNECTOR END VIEWS > T15 NAVIGATION ANTENNA SIGNAL SPLITTER X3



Connector Part Information

- Harness Type: Instrument Panel COAX
- OEM Connector: 13586874
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: 1-Way F Coax Type (BU)

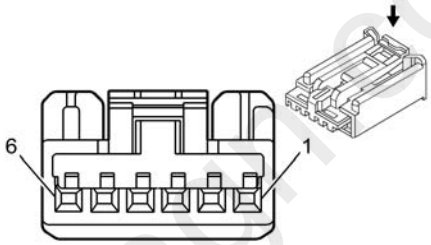
Terminal Part Information

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Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
-	-	COAX	-	(GPS only) Coaxial Antenna GPS Signal	I	-

COMPONENT CONNECTOR END VIEWS > T22 MOBILE DEVICE WIRELESS CHARGER MODULE



Connector Part Information

- Harness Type: Floor Console
- OEM Connector: 19115612
- Service Connector: Service by Harness - See Part Catalog
- Description: 6-Way F 0.64 Series (NA)

Terminal Part Information

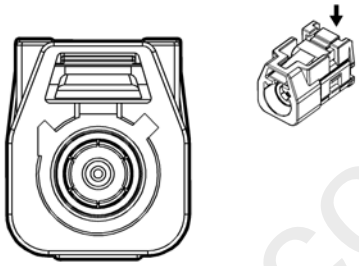
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option

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1	0.35	VT	4601	Retained Accessory Power Fused Control	I	K4C
2	0.35	BK	2250	Ground	I	K4C
3	0.35	GN	4512	Wireless Charging System Charge Indicator Control	I	K4C
4 - 6	-	-	-	Not Occupied	-	-

COMPONENT CONNECTOR END VIEWS > T23L RADIO ANTENNA AMPLIFIER - LEFT X1 (CM8)



Connector Part Information

- Harness Type: Body COAX
- OEM Connector: 13583835
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: 1-Way F Coax Type (WH)

Terminal Part Information

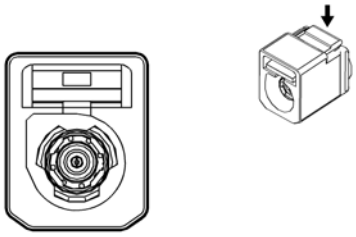
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
-	-	COAX	-	(FM2) Antenna RF Signal (2)	I	-

COMPONENT CONNECTOR END VIEWS > T23L RADIO ANTENNA AMPLIFIER - LEFT

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(-CM8)



Connector Part Information

- Harness Type: Body COAX
- OEM Connector: 13592029
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: 1-Way F Coax Type (GN)

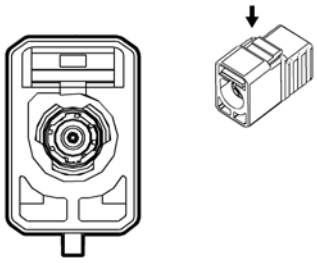
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
-	-	COAX	-	(DAB/DMB) Coaxial Antenna DAB Signal	I	-

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COMPONENT CONNECTOR END VIEWS > T23L RADIO ANTENNA AMPLIFIER - LEFT X2 (CM8)



Connector Part Information

- Harness Type: Body COAX
- OEM Connector: 13583838
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: 1-Way F Coax Type (GN)

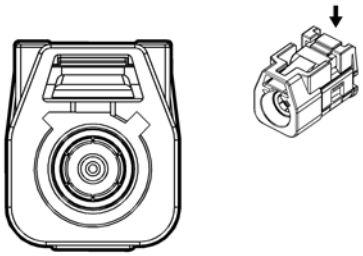
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
-	-	COAX	-	(DAB/DMB) Coaxial Antenna DAB Signal	I	-

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COMPONENT CONNECTOR END VIEWS > T23R RADIO ANTENNA AMPLIFIER - RIGHT (CM8)



Connector Part Information

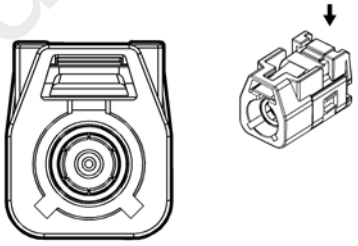
- Harness Type: Body COAX
- OEM Connector: 13583834
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: 1-Way F Coax Type (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
-	-	COAX	-	(AM/FM) Antenna RF Signal	I	-

COMPONENT CONNECTOR END VIEWS > T23R RADIO ANTENNA AMPLIFIER - RIGHT (-CM8)



Connector Part Information

- Harness Type: Body COAX
- OEM Connector: 13586873
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: 1-Way F Coax Type (CU)

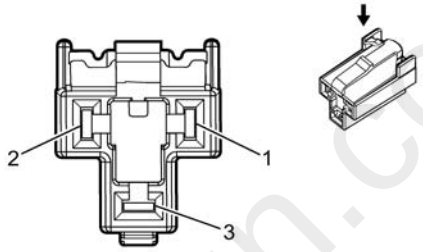
Terminal Part Information

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Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
-	-	COAX	-	(AM/FM) Antenna RF Signal	I	-

COMPONENT CONNECTOR END VIEWS > X80H ACCESSORY POWER RECEPTACLE - CENTER CONSOLE



Connector Part Information

- Harness Type: Floor Console
- OEM Connector: 13582371
- Service Connector: Service by Harness - See Part Catalog
- Description: 3-Way F 2.8 Series (L-GY)

Terminal Part Information

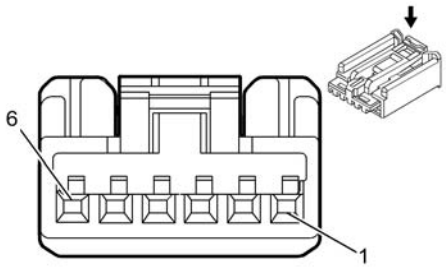
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-35 (VT)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1	VT	1001	Retained Accessory Power	I	-

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				Ignition		
2	-	-	-	Not Occupied	-	-
3	1	BK	2250	Ground	I	-

COMPONENT CONNECTOR END VIEWS > X83 AUXILIARY AUDIO INPUT



Connector Part Information

- Harness Type: Floor Console
- OEM Connector: 15269798
- Service Connector: Service by Harness - See Part Catalog
- Description: 6-Way F 0.64 Kaizen Series (BK)

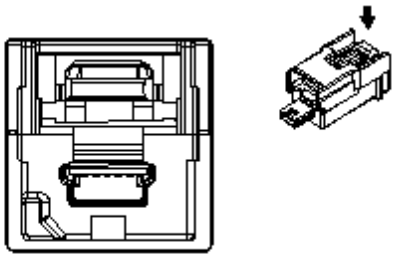
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1 - 3	-	-	-	Not Occupied	-	-
4	0.5	BK/WH	1551	Signal Ground	I	-
5	-	-	-	Not Occupied	-	-
6	0.5	RD/VT	340	Battery Positive Voltage	I	-

COMPONENT CONNECTOR END VIEWS > X83 AUXILIARY AUDIO INPUT X2

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Connector Part Information

- Harness Type: Floor Console USB
- OEM Connector: 13576673
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: 5-Way M 2.0 Mini-B USB Type (GY)

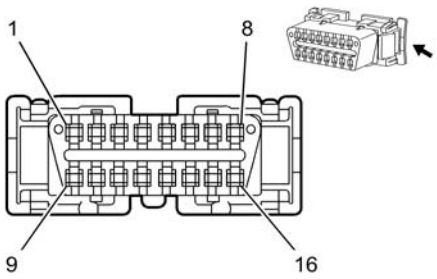
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
-	-	USB	-	USB Serial Data	I	-

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COMPONENT CONNECTOR END VIEWS > X84 DATA LINK CONNECTOR



Connector Part Information

- Harness Type: Instrument Panel

- OEM Connector: 51115-1611
- Service Connector: 19178163
- Description: 16-Way F 51115 Series (BK)

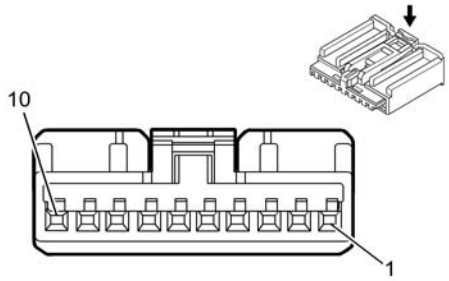
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13575533	J-35616-2A (GY)	J-38125-12A	50420-8000	24	H	H

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	BK	1350	Ground	I	-
5	0.35	BK	1350	Ground	I	-
6	0.35	BU	2500	High Speed GMLAN Serial Data (+) (1)	I	-
7 - 11	-	-	-	Not Occupied	-	-
12	0.35	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	40	Battery Positive Voltage	I	-

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COMPONENT CONNECTOR END VIEWS > X85 STEERING WHEEL AIR BAG COIL X1



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 15269795
- Service Connector: 13576634
- Description: 10-Way F 0.64 Kaizen Series (BK)

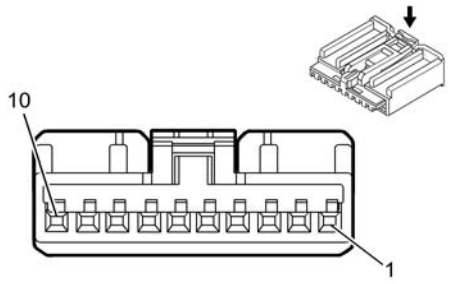
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13575845	J-35616-64B (LT BU)	J-38125-215A	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	GN/WH	3287	Horn Switch Signal	I	-
2	0.5	BK	1350	Ground	I	-
3	0.35	BN/GN	1884	Cruise Control Set/Coast /Resume/Accelerate Switch Signal	I	-
4	0.35	WH	6816	Indicator Dimming Control	I	UVD
5	0.35	WH/RD	1444	12 Volt Reference	I	-
6 - 7	-	-	-	Not Occupied	-	-
8	0.35	VT/YE	5526	Tap Up/Tap Down Switch Signal	I	-
9	0.35	GN/BK	3894	Local Interconnect Network Serial data Bus 12	I	-
10	0.35	RD/YE	3040	Battery Positive Voltage	I	-

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COMPONENT CONNECTOR END VIEWS > 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 0.64 Kaizen Series (BK)

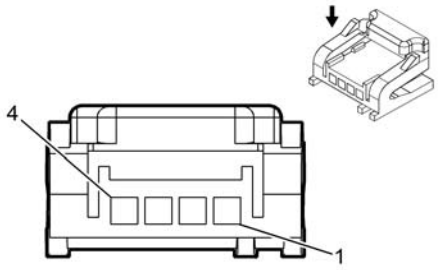
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.35	RD/BN	3040	Battery Positive Voltage	I	-
2	0.35	GN/BK	3894	Local Interconnect Network Serial data Bus 12	I	-
3	0.35	VT/YE	5526	Tap Up/Tap Down Switch Signal	I	-
4 - 5	-	-	-	Not Occupied	-	-
6	0.35	WH/RD	1444	12 Volt Reference	I	-
7	0.35	WH	6816	Indicator Dimming Control	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	GN/WH	3287	Horn Switch Signal	I	-

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COMPONENT CONNECTOR END VIEWS > X85 STEERING WHEEL AIR BAG COIL X3



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 15393421
- Service Connector: 13580115
- Description: 4-Way F 0.64 Micro-Pack Series (YE)

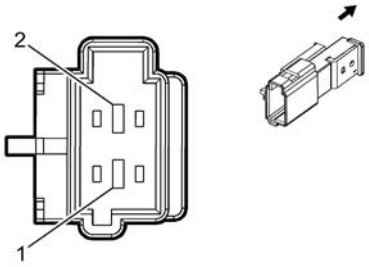
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

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	Steering Wheel Module Stage 2 High Control	I	-
4	0.35	WH/OG	3022	Steering Wheel Module Stage 2 Low Control	I	-

COMPONENT CONNECTOR END VIEWS > X85 STEERING WHEEL AIR BAG COIL X4

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Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 19179872
- Service Connector: 13574780
- Description: 2-Way M 1.6 Timer Series (BK)

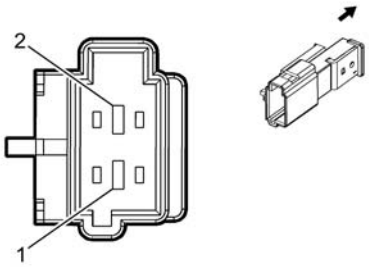
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-34 (YE)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	VT/WH	239	Run/Crank Ignition 1 Voltage	I	UVD
2	0.5	BK	1350	Ground	I	UVD

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COMPONENT CONNECTOR END VIEWS > X85 STEERING WHEEL AIR BAG COIL X5



Connector Part Information

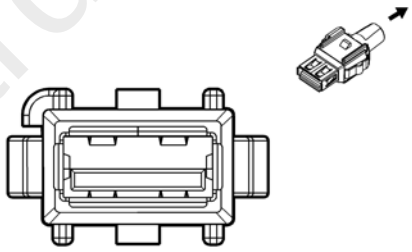
- Harness Type: Steering Wheel
- OEM Connector: 1563190-1
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way M 1.6 Timer Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.5	RD	239	Run/Crank Ignition 1 Voltage	I	-
2	0.5	BK	1350	Ground	I	-

COMPONENT CONNECTOR END VIEWS > X92 USB RECEPTACLE



Connector Part Information

- Harness Type: Instrument Panel USB
- OEM Connector: 111015-9200
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: USB Type (BK)

Terminal Part Information

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Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available

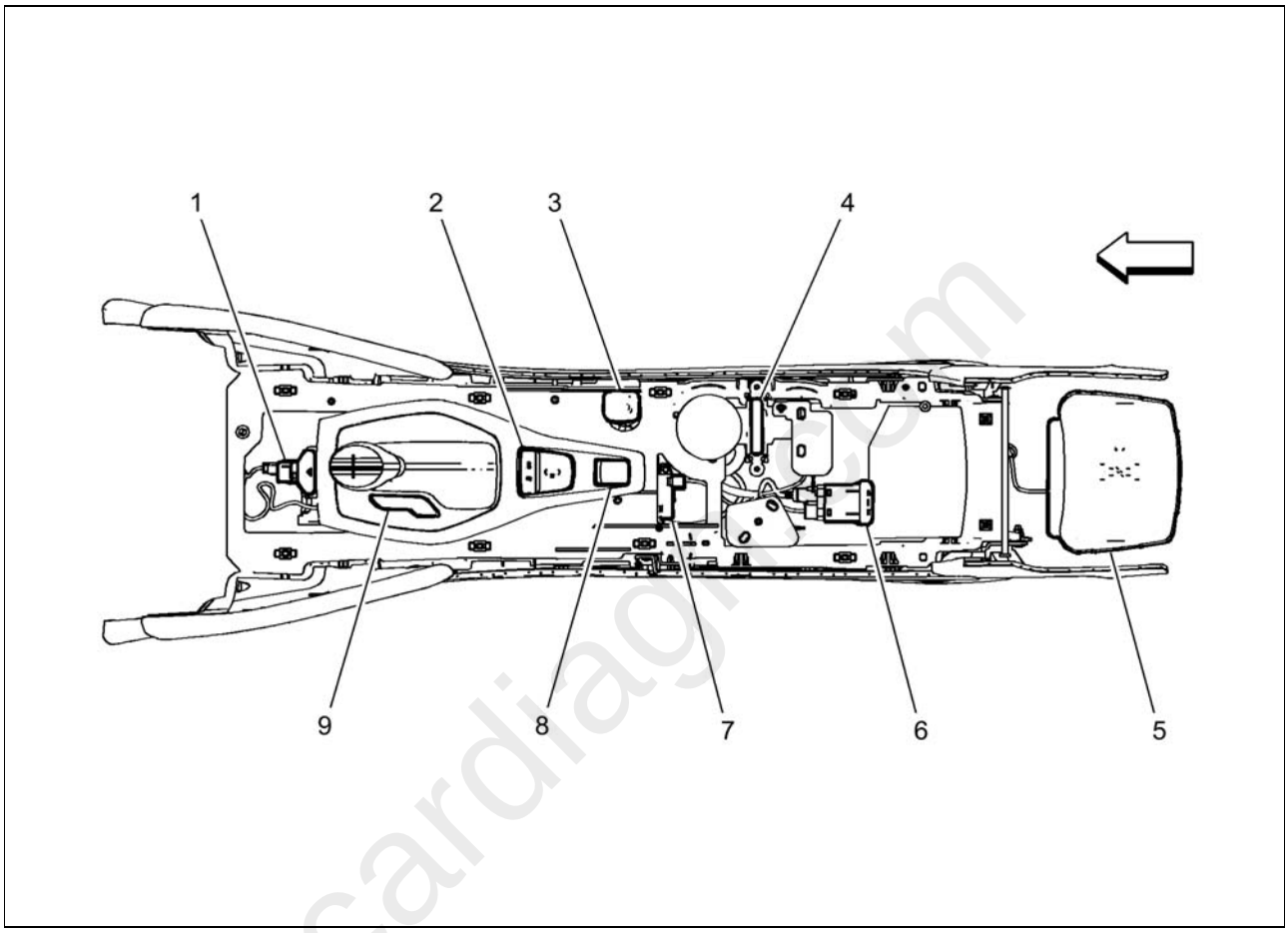
Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
-	-	USB	-	USB Serial Data	I	-

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Service Manual: WIRING SYSTEMS AND POWER MANAGEMENT - COMPONENT LOCATOR - CENTER CONSOLE AND CONVERTIBLE TOP

COMPONENT LOCATOR > CENTER CONSOLE AND CONVERTIBLE TOP > CENTER CONSOLE COMPONENTS

Fig 1: Center Console Components



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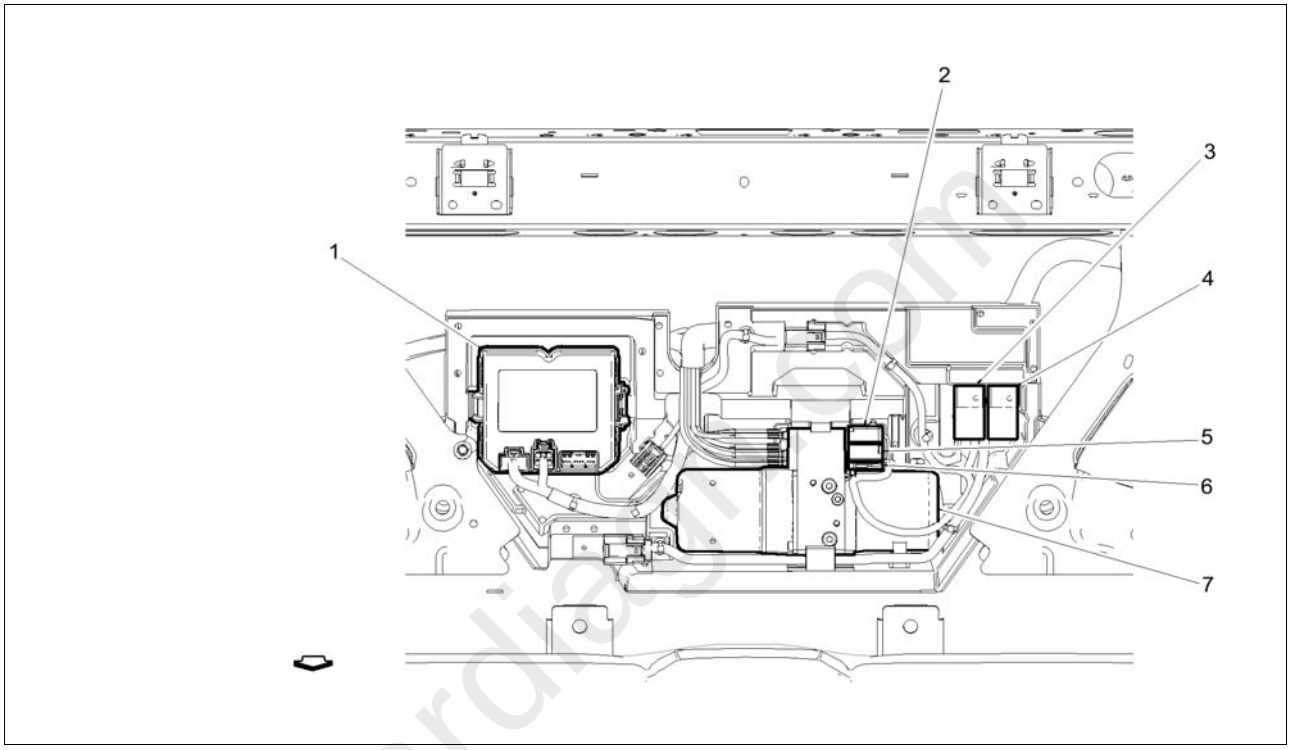
Courtesy of GENERAL MOTORS COMPANY

Items
1: S26 Hazard Warning Switch S26 Hazard Warning Switch
2: S126 Drive Mode Select Switch S86 Vehicle Stability Control Switch
3: X80H Accessory Power Receptacle - Center Console X80H Accessory Power Receptacle - Center Console
4: E1AC Accent Lamp - Center Console Cupholder (C70) E1AC Accent Lamp - Center Console Cupholder
5: T22 Mobile Device Wireless Charger Module (K4C) T22 Mobile Device Wireless Charger Module
6: X83 Auxiliary Audio Input X83 Auxiliary Audio InputX83 Auxiliary Audio Input X2

7: K89 Immobilizer Control Module K89 Immobilizer Control Module
8: S91 Park Brake Control Switch S91 Park Brake Control Switch
9: P2 Transmission Shift Lever Position Indicator P2 Transmission Shift Lever Position Indicator

COMPONENT LOCATOR > CENTER CONSOLE AND CONVERTIBLE TOP > FOLDING TOP COMPONENTS - CONTROLS

Fig 1: Folding Top Components - Controls



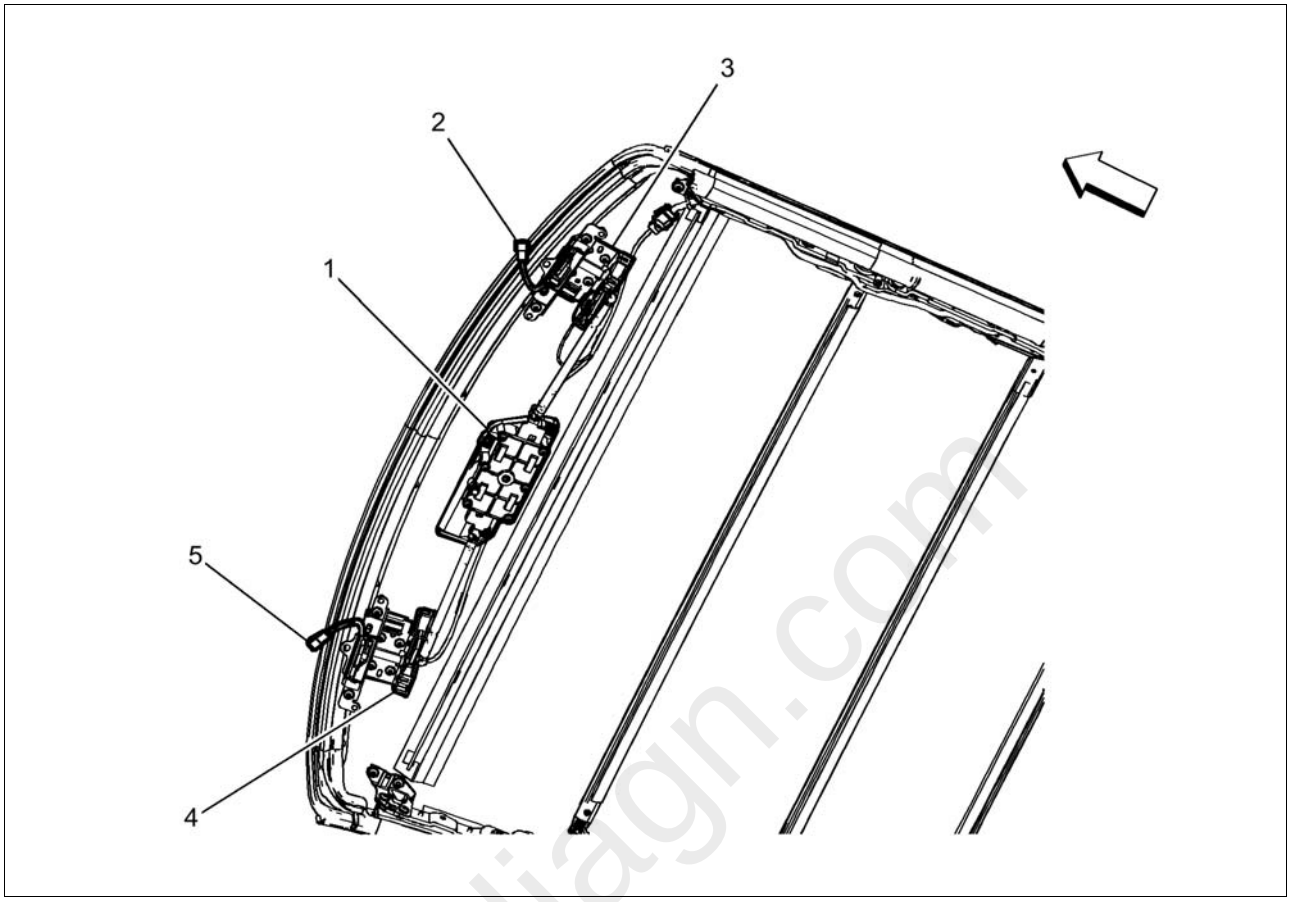
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Items
1: K23 Folding Top Control Module (CM8) K23 Folding Top Control Module X3
2: Q16A Folding Top Solenoid Valve 1 (CM8)
3: KR149A Folding Top Pump Motor Relay 1 (CM8)
4: KR149B Folding Top Pump Motor Relay 2 (CM8)
5: Q16B Folding Top Solenoid Valve 2 (CM8)
6: Q16C Folding Top Solenoid Valve 3 (CM8)
7: M23 Folding Top Pump Motor (CM8)

COMPONENT LOCATOR > CENTER CONSOLE AND CONVERTIBLE TOP > FOLDING TOP COMPONENTS - LATCHES

Fig 1: Folding Top Components - Latches



Courtesy of GENERAL MOTORS COMPANY

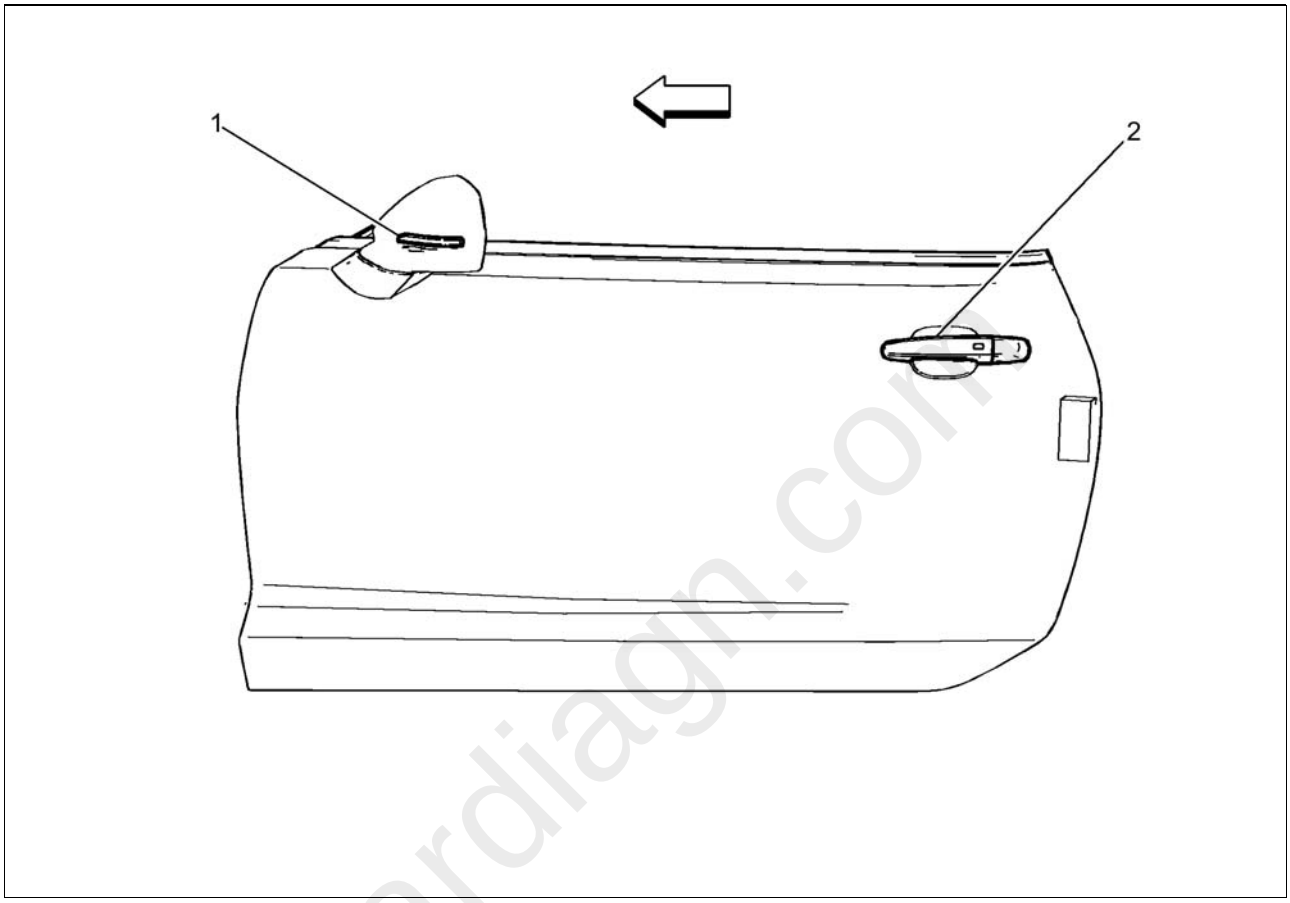
Items
1: M86 Folding Top Header Latch Motor (CM8)
2: B240L Folding Top Header Latched Position Sensor - Left (CM8) B240L Folding Top Header Latched Position Sensor - Left (CM8)
3: B239 Folding Top Header Latch Motor Unlatched Position Sensor (CM8)
4: B238 Folding Top Header Latch Motor Latched Position Sensor (CM8)
5: B240R Folding Top Header Latched Position Sensor - Right (CM8) B240R Folding Top Header Latched Position Sensor - Right (CM8)

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Service Manual: WIRING SYSTEMS AND POWER MANAGEMENT - COMPONENT LOCATOR - DOOR COMPONENT VIEWS

DOOR COMPONENT VIEWS > DRIVER DOOR COMPONENTS

Fig 1: Driver Door Components



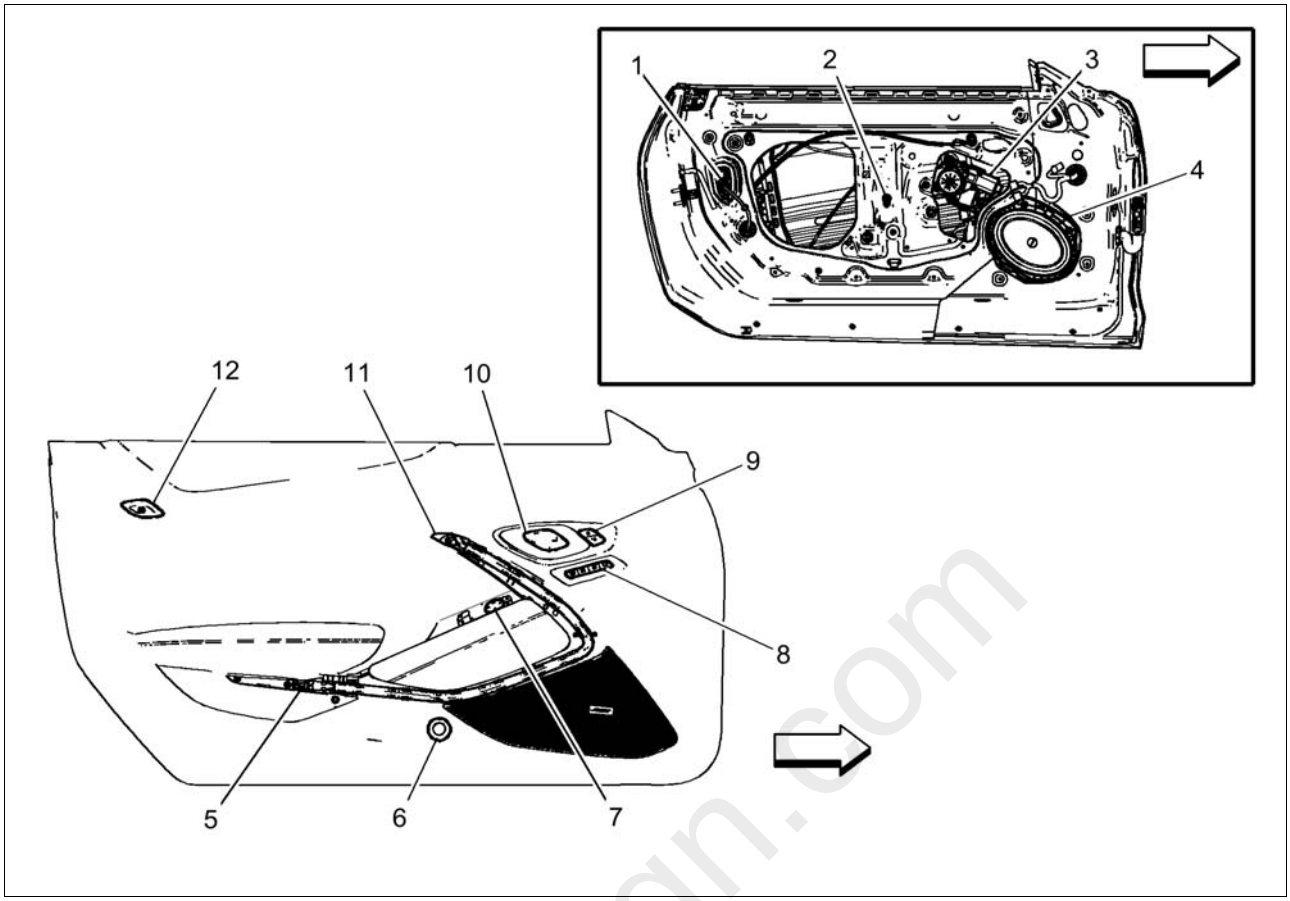
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Items
1: E4Y Turn Signal Repeater Lamp - Left (T90)
2: A24D Door Handle Assembly - Driver Exterior A24D Door Handle Assembly - Driver Exterior

DOOR COMPONENT VIEWS > DRIVER DOOR TRIM COMPONENTS

Fig 1: Driver Door Trim Components



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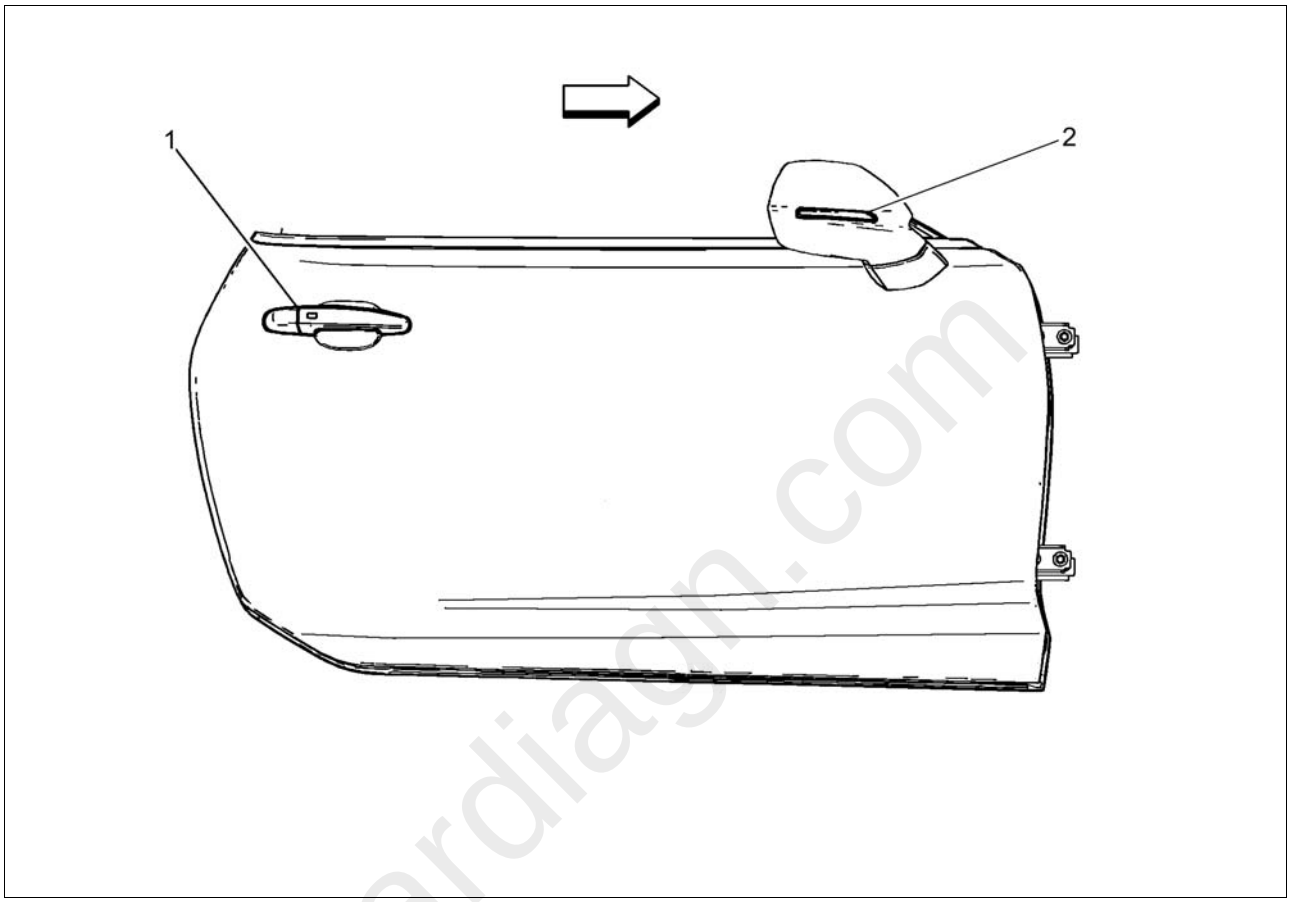
Items
1: A23D Door Latch Assembly - Driver A23D Door Latch Assembly - Driver
2: B63LF Side Impact Sensor - Left Front B63LF Side Impact Sensor - Left Front
3: M74D Window Motor - Driver M74D Window Motor - Driver
4: P19AG Speaker - Left Front Door P19AG Speaker - Left Front Door
5: E1D Accent Lamp - Driver Door (C70) E1D Accent Lamp - Driver Door X1E1D Accent Lamp - Driver Door X2
6: S58B Rear Compartment Lid Unlatch Switch - Interior S58B Rear Compartment Lid Unlatch Switch - Interior
7: S79D Window Switch - Driver S79D Window Switch - Driver
8: S47D Seat Memory Switch - Driver (A45) S47D Seat Memory Switch - Driver
9: S13D Door Lock Switch - Driver S13D Door Lock Switch - Driver
10: E63D Flood Lamp - Driver Door Handle E63D Flood Lamp - Driver Door Handle
11: E1D Accent Lamp - Driver Door (C70) E1D Accent Lamp - Driver Door X1E1D Accent Lamp - Driver Door X2

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12: B77LF Radio Volume Compensator Interior Noise Microphone - Left Front (NKC) B77LF Radio Volume Compensator Interior Noise Microphone - Left Front

DOOR COMPONENT VIEWS > PASSENGER DOOR COMPONENTS

Fig 1: Passenger Door Components



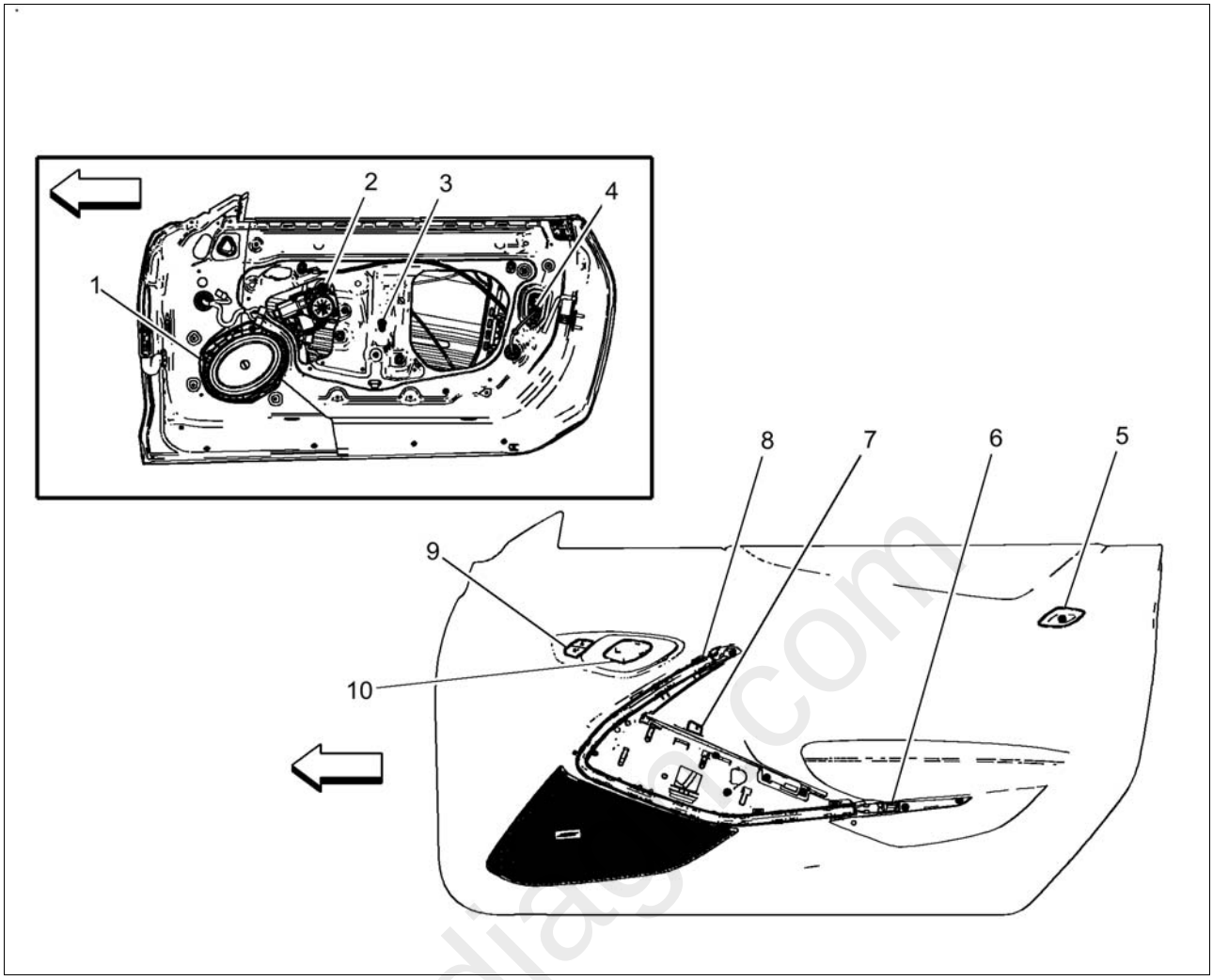
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Items
1: A24P Door Handle Assembly - Passenger Exterior A24P Door Handle Assembly - Passenger Exterior
2: E4Z Turn Signal Repeater Lamp - Right (T90)

DOOR COMPONENT VIEWS > PASSENGER DOOR TRIM COMPONENTS

Fig 1: Passenger Door Trim Components



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Items
1: P19AH Speaker - Right Front Door P19AH Speaker - Right Front Door
2: M74P Window Motor - Passenger M74P Window Motor - Passenger
3: B63RF Side Impact Sensor - Right Front B63RF Side Impact Sensor - Right Front
4: A23P Door Latch Assembly - Passenger A23P Door Latch Assembly - Passenger
5: B77RF Radio Volume Compensator Interior Noise Microphone - Right Front (NKC) B77RF Radio Volume Compensator Interior Noise Microphone - Right Front
6: E1P Accent Lamp - Passenger Door (C70) E1P Accent Lamp - Passenger Door X1E1P Accent Lamp - Passenger Door X2
7: S79P Window Switch - Passenger S79P Window Switch - Passenger
8: E1P Accent Lamp - Passenger Door (C70) E1P Accent Lamp - Passenger Door X1E1P Accent Lamp - Passenger Door X2
9: S13P Door Lock Switch - Passenger S13P Door Lock Switch - Passenger

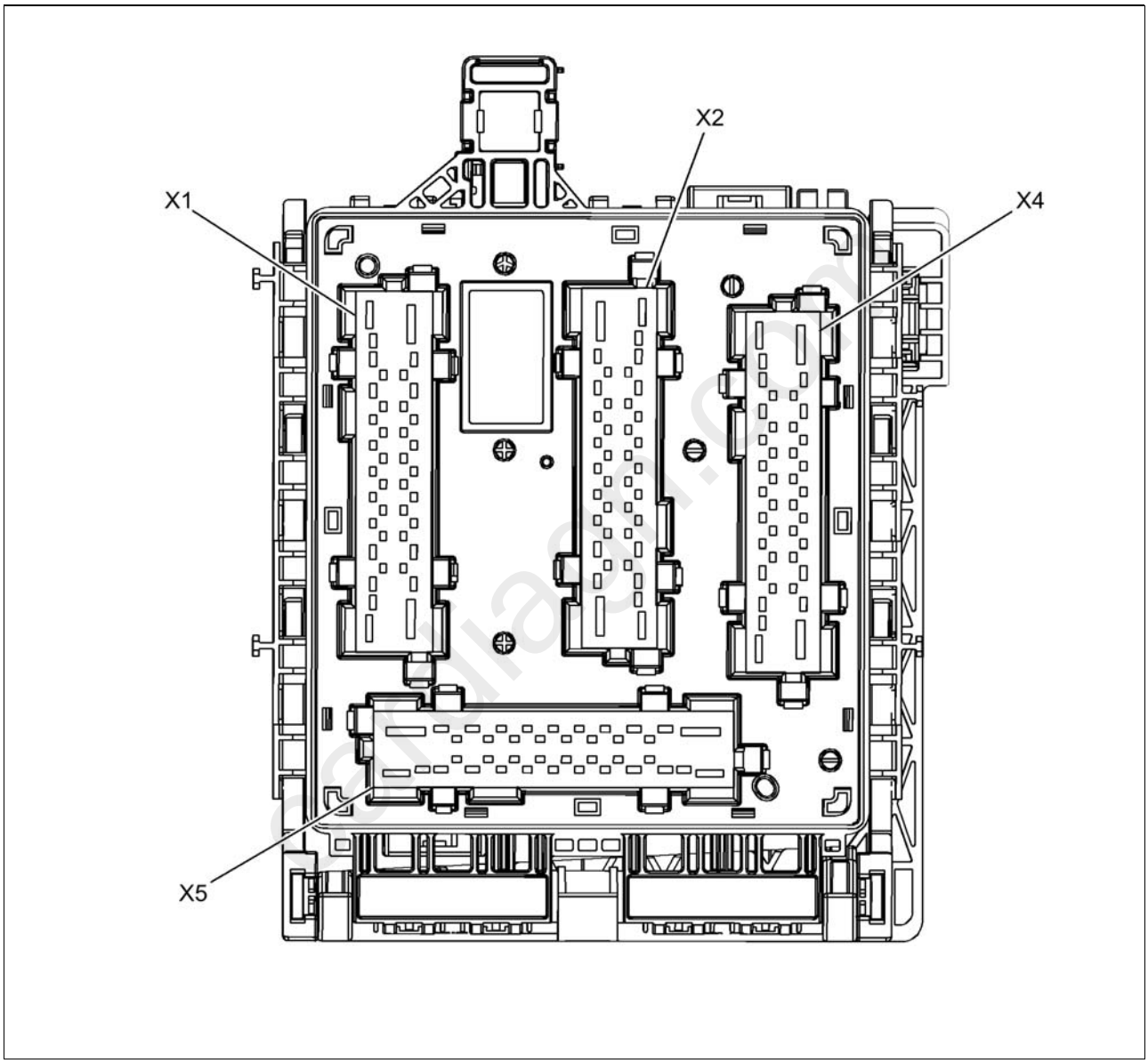
10: E63P Flood Lamp - Passenger Door Handle E63P Flood Lamp - Passenger Door Handle

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Service Manual: WIRING SYSTEMS AND POWER MANAGEMENT - COMPONENT LOCATOR - ELECTRICAL CENTER IDENTIFICATION VIEWS

ELECTRICAL CENTER IDENTIFICATION VIEWS > X50A FUSE BLOCK - UNDERHOOD BOTTOM VIEW

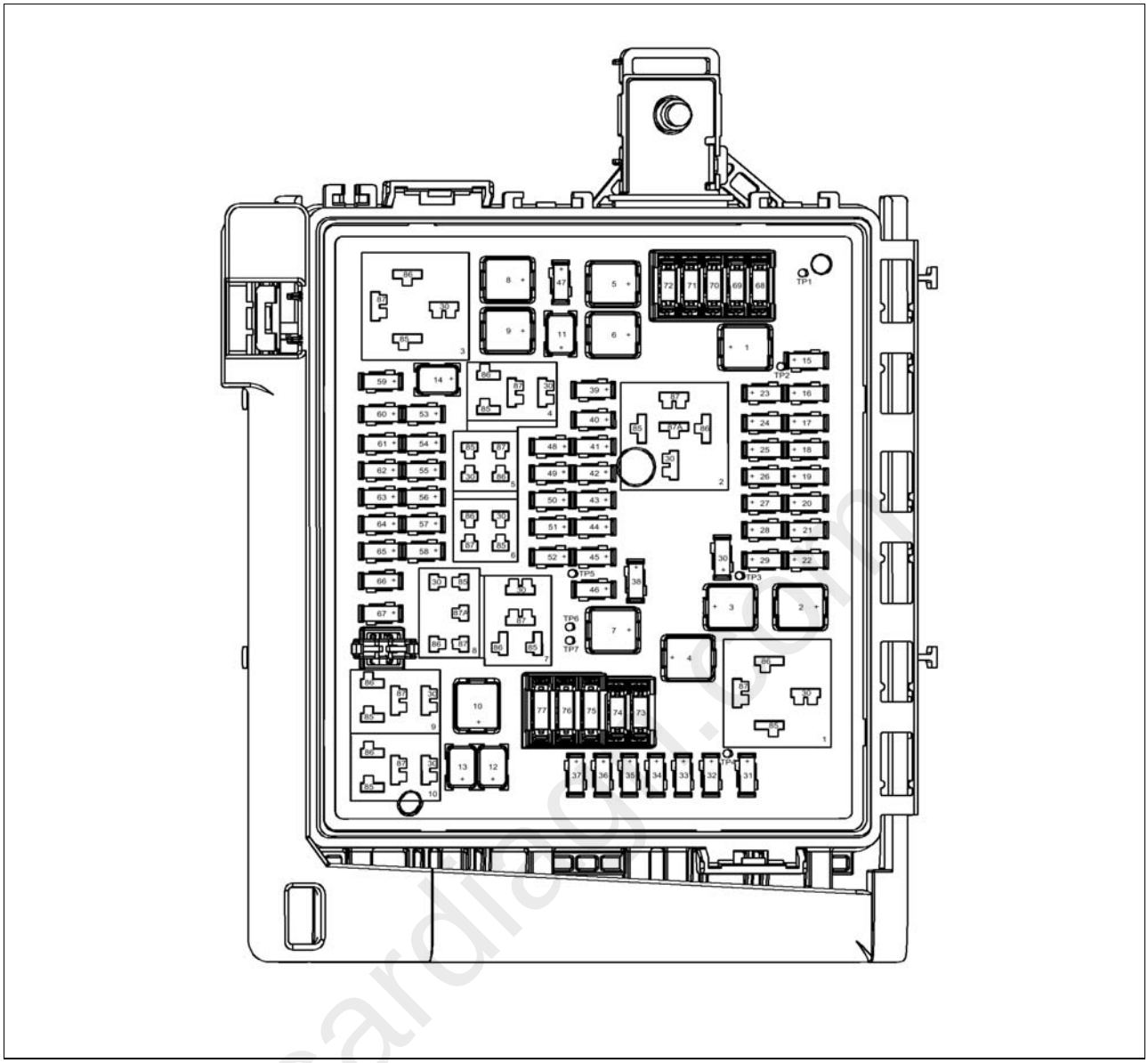
Fig 1: X50A Fuse Block - Underhood Bottom View



Courtesy of GENERAL MOTORS COMPANY

ELECTRICAL CENTER IDENTIFICATION VIEWS > X50A FUSE BLOCK - UNDERHOOD TOP VIEW (LATE PRODUCTION)

Fig 1: X50A Fuse Block - Underhood Top View (Late Production)



Courtesy of GENERAL MOTORS COMPANY

X50A Fuse Block - Underhood Bottom View (Late Production)

No.	Device Label Name	Device Assigned Name	Rating	Description
Fuses				
F1	ABS	F1UA	60A	K17 Electronic Brake Control Module
F2	EMPTY	F2UA	-	Not Used
F3	DRVR PWR SEAT	F3UA	30A	K40D Seat Memory Control Module - Driver S64D Seat Adjuster Switch - Driver

F4	COOLING FAN	F4UA	60A	K22 Cooling Fan Control Module (LTG or LGX-Y4Q)
F5	PASS PWR SEAT	F5UA	30A	S64P Seat Adjuster Switch - Passenger
F6	EMPTY	F6UA	-	Not Used
F7	EMPTY	F7UA	-	Not Used
F8	EMPTY	F8UA	-	Not Used
F9	EMPTY	F9UA	-	Not Used
F10	EMPTY	F10UA	-	Not Used
F11	EMPTY	F11UA	-	Not Used
F12	WPR FRT	F12UA	30A	KR12B Windshield Wiper Relay KR12C Windshield Wiper Speed Control Relay
F13	STRTR	F13UA	30A	KR27 Starter Relay
F14	BRK VAC PUMP	F14UA	30A	M9 Brake Booster Pump Motor
F15	EMPTY	F15UA	-	Not Used
F16	HTD SEAT	F16UA	15A	K29F Seat Heating Control Module - Front (KA1)
F17	PASS WDW	F17UA	10A	S79P Window Switch - Passenger
F18	EMPTY	F18UA	-	Not Used
F19	EMPTY	F19UA	-	Not Used
F20	EMPTY	F20UA	-	Not Used
F21	BCM 6	F21UA	10A	K9 Body Control Module
F22	ABS VLV	F22UA	30A	K17 Electronic Brake Control Module
F23	EMPTY	F23UA	-	Not Used
F24	EMPTY	F24UA	-	Not Used
F25	STR CLM LCK	F25UA	5A	K60 Steering Column Lock Module
F26	EMPTY	F26UA	-	Not Used
F27	EMPTY	F27UA	-	Not Used
F28	EMPTY	F28UA	-	Not Used
F29	EMPTY	F29UA	-	Not Used
F30	WSW	F30UA	20A	KR11 Windshield Washer Pump Relay
F31	RT HID	F31UA	20A	E4H Headlamp - Right Low Beam
F32	LT HID	F32UA	20A	E4G Headlamp - Left Low Beam
F33	EMPTY	F33UA	-	Not Used

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F34	HORN	F34UA	15A	P13 Horn Assembly
F35	EMPTY	F35UA	-	Not Used
F36	LT HI BEAM	F36UA	10A	E4E Headlamp - Left High Beam M28L High Beam Solenoid Actuator - Left
F37	RT HI BEAM	F37UA	10A	E4F Headlamp - Right High Beam M28R High Beam Solenoid Actuator - Right
F38	MANUAL HDLP LVL	F38UA	10A	M29L Headlamp Leveling Actuator - Left (TR6) M29R Headlamp Leveling Actuator - Right (TR6)
F39	EMPTY	F39UA	-	Not Used
F40	REC IGN	F40UA	20A	F17RA F18RA F19RA Fuses K29F Seat Heating Control Module - Front (KA1)
F41	MIL IGN	F41UA	5A	P16 Instrument Cluster
F42	I/P BODY IGN	F42UA	10A	A10 Inside Rearview Mirror K33 HVAC Control Module S42 Headlamp Leveling Switch (TR6)
F43	EXH VLV AFM	F43UA	15A	Q15A Exhaust Flow Control Valve - Cylinder Deactivation Left (NPP) Q15B Exhaust Flow Control Valve - Cylinder Deactivation Right (NPP)
F44	AOS DISPLAY IGN	F44UA	5A	P14 Passenger Air Bag Disabled Indicator
F45	S/ROOF	F45UA	30A	M69 Sunroof Motor (CF5)
F46	BCM 7	F46UA	10A	K9 Body Control Module
F47	EMPTY	F47UA	-	Not Used
F48	EMPTY	F48UA	-	Not Used
F49	HTD WHL	F49UA	15A	F12RA Fuse (UVD) Q34 Skip Shift Solenoid Actuator (MH3/MG9/MM6/M13) Q80L Engine Mount Solenoid Valve - Left (LTG) Q80R Engine Mount Solenoid Valve - Right (LTG)
F50	FSCM IGN	F50UA	10A	K38 Chassis Control Module K111 Fuel Pump Driver Control Module (LGX-NPP)
F51	EXH VLV PTSQ	F51UA	15A	Q15R Exhaust Flow Control Valve - Right (NPP) Q15L Exhaust Flow Control Valve - Left

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				(NPP)
F52	A/C CLTCH	F52UA	10A	KR29 A/C Compressor Clutch Relay
F53	EMPTY	F53UA	-	Not Used
F54	COOLANT PUMP	F54UA	15A	Not Used
F55	EMPTY	F55UA	-	Not Used
F56	EMPTY	F56UA	-	Not Used
F57	ECM IGN	F57UA	15A	Not Used
F58	TCM IGN	F58UA	15A	K71 Transmission Control Module (MGL/M5T/M5U)
F59	EMPTY	F59UA	-	Not Used
F60	TCM BATT	F60UA	15A	K71 Transmission Control Module (MGL/M5T/M5U) M47 Reverse Inhibit Solenoid Actuator (MN6)
F61	MAF / O2 SNSR	F61UA	10A	B52B Heated Oxygen Sensor 2 (LTG) B52D Heated Oxygen Sensor - Bank 1 Sensor 2 (-LTG) B52F Heated Oxygen Sensor - Bank 2 Sensor 2 (-LTG) B75C Multifunction Intake Air Sensor
F62	COIL ODD	F62UA	15A	K20 Engine Control Module T8A Ignition Coil 1 T8B Ignition Coil 2 (LTG) T8C Ignition Coil 3 T8D Ignition Coil 4 (LTG) T8E Ignition Coil 5 (-LTG) T8G Ignition Coil 7 (LT1)
F63	NON WALK O2	F63UA	15A	B52A Heated Oxygen Sensor 1 (LTG) B52C Heated Oxygen Sensor - Bank 1 Sensor 1 (-LTG) B52E Heated Oxygen Sensor - Bank 1 Sensor 2 (-LTG) K20 Engine Control Module (LGX/LTG) Q12 Evaporative Emission Purge Solenoid Valve Q40 Turbocharger Bypass Solenoid Valve (LTG) Q42 Turbocharger Wastegate Solenoid Valve (LTG) Q44 Engine Oil Pressure Control Solenoid Valve Q84A Camshaft Position Actuator Park Lock Solenoid Valve - Bank 1 Intake (LGX) Q84B Camshaft Position Actuator Park Lock Solenoid Valve - Bank 2 Intake (LGX)

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F64	COIL EVEN	F64UA	15A	K20 Engine Control Module T8B Ignition Coil 2 (-LTG) T8D Ignition Coil 4 (-LTG) T8F Ignition Coil 6 and T8H Ignition Coil 8 (LT1)
F65	EMPTY	F65UA	-	Not Used
F66	ECM 1	F66UA	25A	K20 Engine Control Module
F67	ECM 2	F67UA	10A	K20 Engine Control Module (LGX)
F68	SPARE	F68UA	5A	SPARE MICRO FUSE
F69	SPARE	F69UA	7.5A	SPARE MICRO FUSE
F70	SPARE	F70UA	10A	SPARE MICRO FUSE
F71	SPARE	F71UA	15A	SPARE MICRO FUSE
F72	SPARE	F72UB	20A	SPARE MICRO FUSE
F73	SPARE	F73UB	25A	SPARE MICRO FUSE
F74	SPARE	F74UB	30A	SPARE MICRO FUSE
F75	SPARE	F75UB	2A	SPARE MINI FUSE
F76	SPARE	F75UB	15A	SPARE MINI FUSE
F77	SPARE	F75UB	30A	SPARE MINI FUSE
Relays				
K1	EMPTY	-	-	Not Used
K2	RUN CRNK RLY	KR73 Ignition Main Relay	-	F25UA F38UA F40UA F41UA F42UA F43UA F44UA F49UA F50UA F51UA F55UA F56UA F57UA F58UA
K3	EMPTY	-	-	Not Used
K4	VAC PUMP RLY	KR14 Brake Booster Pump Motor Relay	-	F14UA
K5	EMPTY	-	-	Not Used

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K6	EMPTY	-	-	Not Used
K6	COOLANT PUMP RLY	KR18 Charge Air Cooler Coolant Pump Relay	-	Not Used
K7	ECM RLY	KR75 Engine Controls Ignition Relay	-	F61UA F62UA F63UA F64UA F65UA F66UA F67UA
K8	A/C CLTCH RLY	KR29 A/C Compressor Clutch Relay	-	Q2 A/C Compressor Clutch
K9	EMPTY	-	-	Not Used
K10	STRTR RLY	KR27 Starter Relay	-	M64 Starter Motor
Important: Relays listed below are non-serviceable Printed Circuit Board (PCB) relays and are internal to the block.				
K18	-	KR3 Horn Relay	-	F34UA
K16	-	Not Used	-	Not Used
K14	-	Not Used	-	Not Used
K15	-	KR11 Windshield Washer Pump Relay	-	G24 Windshield Washer Pump
K22	-	KR12B Windshield Wiper Relay	-	M79 Windshield Wiper Motor Module (M75 Windshield Wiper Motor)
K21	-	KR12C Windshield Wiper Speed Control Relay	-	M79 Windshield Wiper Motor Module (M75 Windshield Wiper Motor)
K19	-	Not Used	-	Not Used
K23	-	KR48 Headlamp High Beam Relay	-	F36UA F37UA
K20	-	KR49 Headlamp Low Beam	-	F31UA F32UA

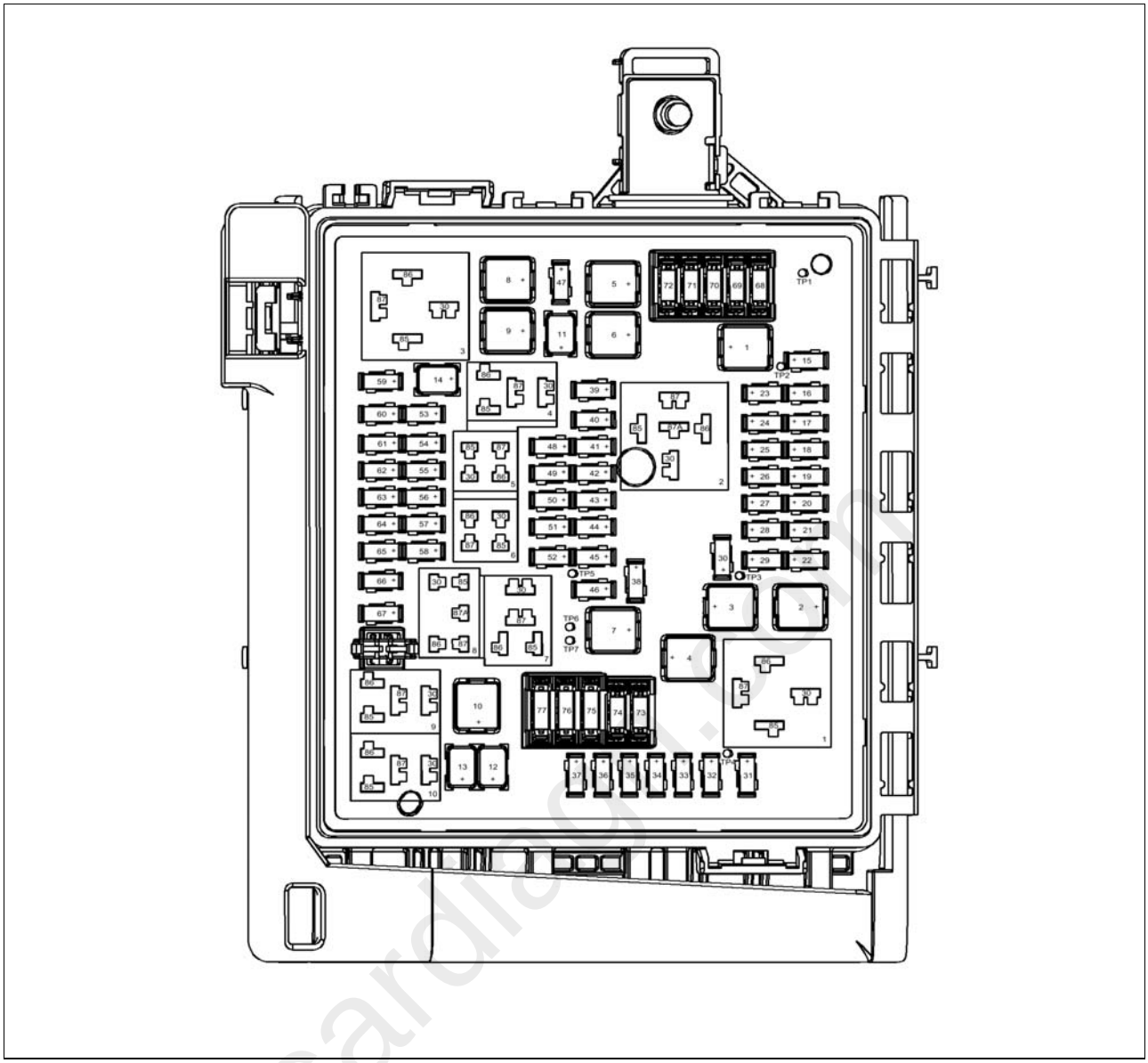
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		Relay		
K17	-	Not Used	-	Not Used
K13	-	Not Used	-	Not Used
K12	-	Not Used	-	Not Used
Important: Items listed below are diagnostic testing points.				
TP1	TEST POINT CKT 1350	TP1	-	KR7 Rear Wiper Relay
TP2	TEST POINT CKT 393	TP2	-	KR7 Rear Wiper Relay
TP3	TEST POINT CKT 228	TP3	-	KR11 Windshield Washer Pump Relay
TP4	TEST POINT CKT 392	TP4	-	KR6 Rear Window Washer Pump Relay
TP5	TEST POINT CKT 750	TP5	-	KR12B Windshield Wiper Relay
TP6	TEST POINT CKT 92	TP6	-	KR12C Windshield Wiper Speed Control Relay
TP7	TEST POINT CKT 95	TP7	-	KR12C Windshield Wiper Speed Control Relay

ELECTRICAL CENTER IDENTIFICATION VIEWS > X50A FUSE BLOCK - UNDERHOOD TOP VIEW (EARLY PRODUCTION)

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Fig 1: X50A Fuse Block - Underhood Top View (Early Production)



Courtesy of GENERAL MOTORS COMPANY

X50A Fuse Block - Underhood Bottom View (Early Production)

No.	Device Label Name	Device Assigned Name	Rating	Description
Fuses				
F1	ABS	F1UA	60A	K17 Electronic Brake Control Module
F2	EMPTY	F2UA	-	Not Used
F3	DRVR PWR SEAT	F3UA	30A	K40D Seat Memory Control Module - Driver S64D Seat Adjuster Switch - Driver

F4	COOLING FAN	F4UA	60A	K22 Cooling Fan Control Module (LTG or LGX-Y4Q)
F5	PASS PWR SEAT	F5UA	30A	S64P Seat Adjuster Switch - Passenger
F6	EMPTY	F6UA	-	Not Used
F7	EMPTY	F7UA	-	Not Used
F8	EMPTY	F8UA	-	Not Used
F9	EMPTY	F9UA	-	Not Used
F10	EMPTY	F10UA	-	Not Used
F11	EMPTY	F11UA	-	Not Used
F12	WPR FRT	F12UA	30A	KR12B Windshield Wiper Relay KR12C Windshield Wiper Speed Control Relay
F13	STRTR	F13UA	30A	KR27 Starter Relay
F14	BRK VAC PUMP	F14UA	30A	M9 Brake Booster Pump Motor
F15	EMPTY	F15UA	-	Not Used
F16	HTD SEAT	F16UA	15A	K29F Seat Heating Control Module - Front (KA1)
F17	PASS WDW	F17UA	10A	S79P Window Switch - Passenger
F18	EMPTY	F18UA	-	Not Used
F19	EMPTY	F19UA	-	Not Used
F20	EMPTY	F20UA	-	Not Used
F21	BCM 6	F21UA	10A	K9 Body Control Module
F22	ABS VLV	F22UA	30A	K17 Electronic Brake Control Module
F23	EMPTY	F23UA	-	Not Used
F24	EMPTY	F24UA	-	Not Used
F25	STR CLM LCK	F25UA	5A	K60 Steering Column Lock Module
F26	EMPTY	F26UA	-	Not Used
F27	EMPTY	F27UA	-	Not Used
F28	EMPTY	F28UA	-	Not Used
F29	EMPTY	F29UA	-	Not Used
F30	WSW	F30UA	20A	KR11 Windshield Washer Pump Relay
F31	RT HID	F31UA	20A	E4H Headlamp - Right Low Beam
F32	LT HID	F32UA	20A	E4G Headlamp - Left Low Beam
F33	EMPTY	F33UA	-	Not Used

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F34	HORN	F34UA	15A	P13 Horn Assembly
F35	EMPTY	F35UA	-	Not Used
F36	LT HI BEAM	F36UA	10A	E4E Headlamp - Left High Beam M28L High Beam Solenoid Actuator - Left
F37	RT HI BEAM	F37UA	10A	E4F Headlamp - Right High Beam M28R High Beam Solenoid Actuator - Right
F38	MANUAL HDLP LVL	F38UA	10A	M29L Headlamp Leveling Actuator - Left (TR6) M29R Headlamp Leveling Actuator - Right (TR6)
F39	EMPTY	F39UA	-	Not Used
F40	REC IGN	F40UA	20A	F17RA F18RA F19RA Fuses K29F Seat Heating Control Module - Front (KA1)
F41	MIL IGN	F41UA	5A	P16 Instrument Cluster
F42	I/P BODY IGN	F42UA	10A	A10 Inside Rearview Mirror K33 HVAC Control Module S42 Headlamp Leveling Switch (TR6)
F43	EXH VLV AFM	F43UA	15A	Q15A Exhaust Flow Control Valve - Cylinder Deactivation Left (NPP) Q15B Exhaust Flow Control Valve - Cylinder Deactivation Right (NPP)
F44	AOS DISPLAY IGN	F44UA	5A	P14 Passenger Air Bag Disabled Indicator
F45	S/ROOF	F45UA	30A	M69 Sunroof Motor (CF5)
F46	BCM 7	F46UA	10A	K9 Body Control Module
F47	EMPTY	F47UA	-	Not Used
F48	EMPTY	F48UA	-	Not Used
F49	HTD WHL	F49UA	15A	F12RA Fuse (UVD) Q34 Skip Shift Solenoid Actuator (MH3/MG9/MM6/M13) Q80L Engine Mount Solenoid Valve - Left (LTG) Q80R Engine Mount Solenoid Valve - Right (LTG)
F50	FSCM IGN	F50UA	10A	K38 Chassis Control Module K111 Fuel Pump Driver Control Module (LGX-NPP)
F51	EXH VLV PTSQ	F51UA	15A	Q15R Exhaust Flow Control Valve - Right (NPP) Q15L Exhaust Flow Control Valve - Left

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				(NPP)
F52	A/C CLTCH	F52UA	10A	KR29 A/C Compressor Clutch Relay
F53	EMPTY	F53UA	-	Not Used
F54	COOLANT PUMP	F54UA	15A	Not Used
F55	EMPTY	F55UA	-	Not Used
F56	EMPTY	F56UA	-	Not Used
F57	ECM IGN	F57UA	15A	Not Used
F58	TCM IGN	F58UA	15A	K71 Transmission Control Module (MGL/M5T/M5U)
F59	EMPTY	F59UA	-	Not Used
F60	TCM BATT	F60UA	15A	K71 Transmission Control Module (MGL/M5T/M5U) M47 Reverse Inhibit Solenoid Actuator (MN6)
F61	MAF / O2 SNSR	F61UA	10A	B52B Heated Oxygen Sensor 2 (LTG) B52D Heated Oxygen Sensor - Bank 1 Sensor 2 (-LTG) B52F Heated Oxygen Sensor - Bank 2 Sensor 2 (-LTG) B75C Multifunction Intake Air Sensor
F62	COIL ODD	F62UA	15A	K20 Engine Control Module T8A Ignition Coil 1 T8B Ignition Coil 2 (LTG) T8C Ignition Coil 3 T8D Ignition Coil 4 (LTG) T8E Ignition Coil 5 (-LTG) T8G Ignition Coil 7 (LT1)
F63	NON WALK O2	F63UA	15A	B52A Heated Oxygen Sensor 1 (LTG) B52C Heated Oxygen Sensor - Bank 1 Sensor 1 (-LTG) B52E Heated Oxygen Sensor - Bank 1 Sensor 2 (-LTG) K20 Engine Control Module (LGX/LTG) Q12 Evaporative Emission Purge Solenoid Valve Q40 Turbocharger Bypass Solenoid Valve (LTG) Q42 Turbocharger Wastegate Solenoid Valve (LTG) Q44 Engine Oil Pressure Control Solenoid Valve Q84A Camshaft Position Actuator Park Lock Solenoid Valve - Bank 1 Intake (LGX) Q84B Camshaft Position Actuator Park Lock Solenoid Valve - Bank 2 Intake (LGX)

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F64	COIL EVEN	F64UA	15A	K20 Engine Control Module T8B Ignition Coil 2 (-LTG) T8D Ignition Coil 4 (-LTG) T8F Ignition Coil 6 and T8H Ignition Coil 8 (LT1)
F65	EMPTY	F65UA	-	Not Used
F66	ECM 1	F66UA	25A	K20 Engine Control Module
F67	ECM 2	F67UA	10A	K20 Engine Control Module (LGX)
F68	SPARE	F68UA	5A	SPARE MICRO FUSE
F69	SPARE	F69UA	7.5A	SPARE MICRO FUSE
F70	SPARE	F70UA	10A	SPARE MICRO FUSE
F71	SPARE	F71UA	15A	SPARE MICRO FUSE
F72	SPARE	F72UB	20A	SPARE MICRO FUSE
F73	SPARE	F73UB	25A	SPARE MICRO FUSE
F74	SPARE	F74UB	30A	SPARE MICRO FUSE
F75	SPARE	F75UB	2A	SPARE MINI FUSE
F76	SPARE	F75UB	15A	SPARE MINI FUSE
F77	SPARE	F75UB	30A	SPARE MINI FUSE
Relays				
K1	EMPTY	-	-	Not Used
K2	RUN CRNK RLY	KR73 Ignition Main Relay	-	F25UA F38UA F40UA F41UA F42UA F43UA F44UA F49UA F50UA F51UA F55UA F56UA F57UA F58UA
K3	EMPTY	-	-	Not Used
K4	VAC PUMP RLY	KR14 Brake Booster Pump Motor Relay	-	F14UA
K5	EMPTY	-	-	Not Used

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K6	EMPTY	-	-	Not Used
K6	COOLANT PUMP RLY	KR18 Charge Air Cooler Coolant Pump Relay	-	Not Used
K7	ECM RLY	KR75 Engine Controls Ignition Relay	-	F61UA F62UA F63UA F64UA F65UA F66UA F67UA
K8	A/C CLTCH RLY	KR29 A/C Compressor Clutch Relay	-	Q2 A/C Compressor Clutch
K9	EMPTY	-	-	Not Used
K10	STRTR RLY	KR27 Starter Relay	-	M64 Starter Motor
Important: Relays listed below are non-serviceable Printed Circuit Board (PCB) relays and are internal to the block.				
K18	-	KR3 Horn Relay	-	F34UA
K16	-	Not Used	-	Not Used
K14	-	Not Used	-	Not Used
K15	-	KR11 Windshield Washer Pump Relay	-	G24 Windshield Washer Pump
K22	-	KR12B Windshield Wiper Relay	-	M79 Windshield Wiper Motor Module (M75 Windshield Wiper Motor)
K21	-	KR12C Windshield Wiper Speed Control Relay	-	M79 Windshield Wiper Motor Module (M75 Windshield Wiper Motor)
K19	-	Not Used	-	Not Used
K23	-	KR48 Headlamp High Beam Relay	-	F36UA F37UA
K20	-	KR49 Headlamp Low Beam	-	F31UA F32UA

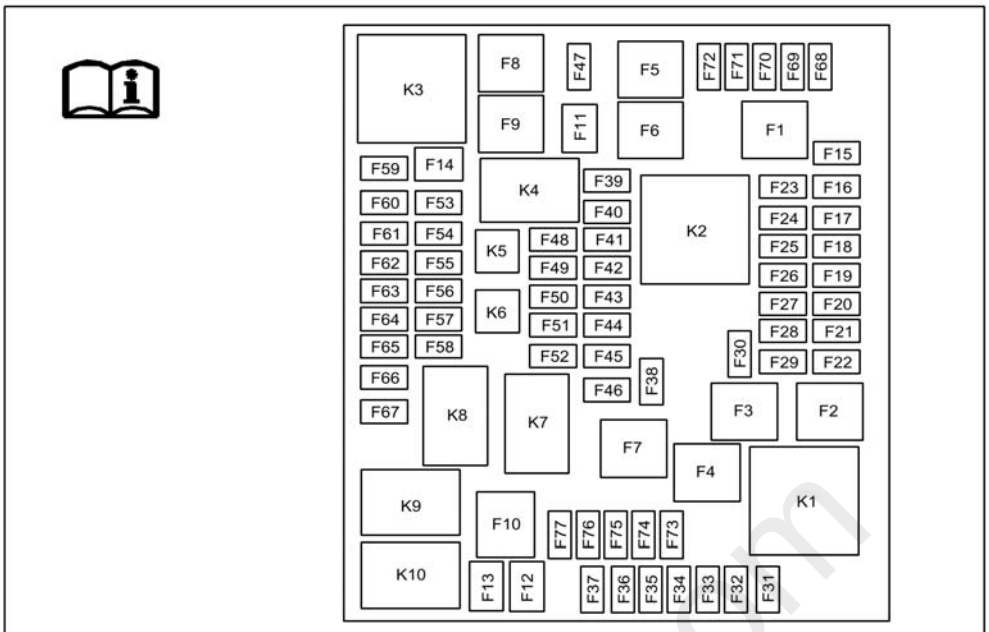
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		Relay		
K17	-	Not Used	-	Not Used
K13	-	Not Used	-	Not Used
K12	-	Not Used	-	Not Used
Important: Items listed below are diagnostic testing points.				
TP1	TEST POINT CKT 1350	TP1	-	KR7 Rear Wiper Relay
TP2	TEST POINT CKT 393	TP2	-	KR7 Rear Wiper Relay
TP3	TEST POINT CKT 228	TP3	-	KR11 Windshield Washer Pump Relay
TP4	TEST POINT CKT 392	TP4	-	KR6 Rear Window Washer Pump Relay
TP5	TEST POINT CKT 750	TP5	-	KR12B Windshield Wiper Relay
TP6	TEST POINT CKT 92	TP6	-	KR12C Windshield Wiper Speed Control Relay
TP7	TEST POINT CKT 95	TP7	-	KR12C Windshield Wiper Speed Control Relay

ELECTRICAL CENTER IDENTIFICATION VIEWS > X50A FUSE BLOCK - UNDERHOOD LABEL (EARLY PRODUCTION)

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Fig 1: X50A Fuse Block - Underhood Label (Early Production)



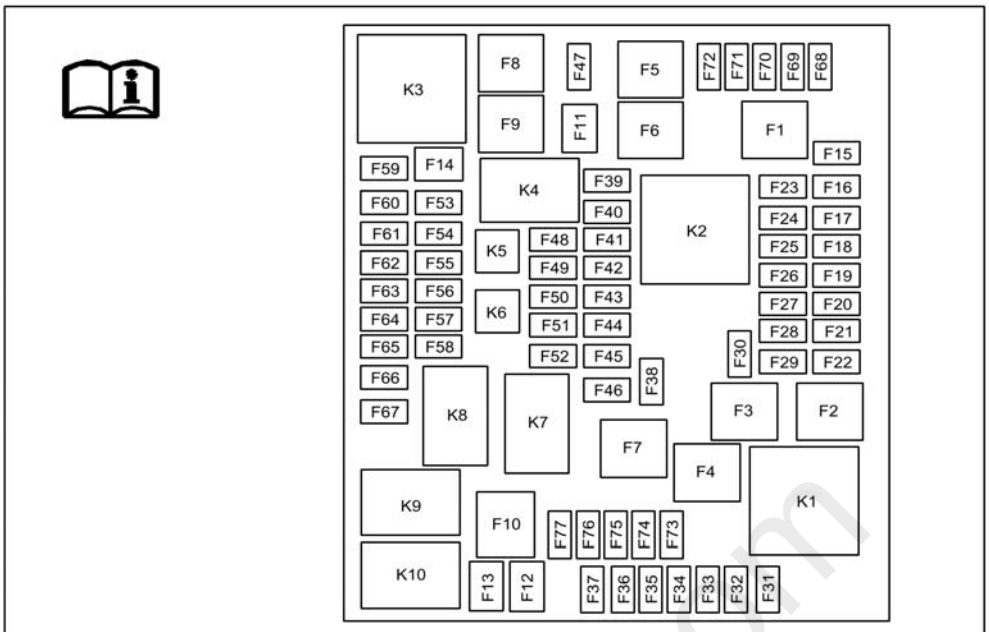
F1 - 60A ABS PUMP
F2 - EMPTY
F3 - 30A DRVR PWR SEAT
F4 - 60A COOLING FAN
F5 - 30A PASS PWR SEAT
F6 - EMPTY
F7 - EMPTY
F8 - EMPTY
F9 - EMPTY
F10 - EMPTY
F11 - EMPTY
F12 - 30A WPR FRT
F13 - 30A STRTR
F14 - 30A BRK VAC PUMP
F15 - EMPTY
F16 - 15A HTD SEAT
F17 - 10A PASS WDW
F18 - EMPTY
F19 - EMPTY
F20 - EMPTY
F21 - 10A BCM 6
F22 - 30A ABS VLV
F23 - EMPTY
F24 - EMPTY
F25 - 5A STR CLM LCK
F26 - EMPTY
F27 - EMPTY
F28 - EMPTY
F29 - EMPTY
F30 - 20A WSW
F31 - 20A RT HID
F32 - 20A LT HID
F33 - EMPTY
F34 - 15A HORN
F35 - EMPTY
F36 - 10A LT HI BEAM
F37 - 10A RT HI BEAM
F38 - 10A MANUAL HDLP LVL
F39 - EMPTY
F40 - 20A REC IGN
F41 - 5A MIL IGN
F42 - 10A I/P BODY IGN
F43 - 15A EXH VLV AFM
F44 - 5A AOS DISPLAY IGN
F45 - 30A S/ROOF
F46 - 10A BCM 7
F47 - EMPTY
F48 - EMPTY
F49 - 15A HTD WHL
F50 - 10A FSCM IGN
F51 - 15A EXH VLV PTSQ
F52 - 10A A/C CLTCH
F53 - EMPTY
F54 - 15A COOLANT PUMP
F55 - EMPTY
F56 - EMPTY
F57 - 15A ECM IGN
F58 - 15A TCM IGN
F59 - EMPTY
F60 - 15A TCM BATT
F61 - 10A MAF / O2 SNSR
F62 - 15A COIL ODD
F63 - 15A NON WALK O2
F64 - 15A COIL EVEN
F65 - EMPTY
F66 - 25A ECM 1
F67 - 10A ECM 2
F68 - F77 - SPARE
K1 - EMPTY
K2 - RUN CRNK RLY
K3 - EMPTY
K4 - VAC PUMP RLY
K5 - EMPTY
K6 - COOLANT PUMP RLY
K7 - ECM RLY
K8 - A/C CNTRL RLY
K9 - EMPTY
K10- STRTR RLY

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ELECTRICAL CENTER IDENTIFICATION VIEWS > X50A FUSE BLOCK - UNDERHOOD LABEL (LATE PRODUCTION)

Fig 1: X50A Fuse Block - Underhood Label (Late Production)

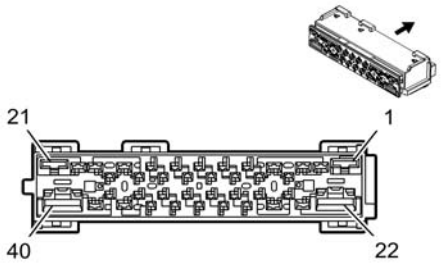


F1 - 60A ABS PUMP
F2 - EMPTY
F3 - 30A DRVR PWR SEAT
F4 - 60A COOLING FAN
F5 - 30A PASS PWR SEAT
F6 - EMPTY
F7 - EMPTY
F8 - EMPTY
F9 - EMPTY
F10 - EMPTY
F11 - EMPTY
F12 - 30A WPR FRT
F13 - 30A STRTR
F14 - 30A BRK VAC PUMP
F15 - EMPTY
F16 - 15A HTD SEAT
F17 - 10A PASS WDW
F18 - 15A BCM 4
F19 - 10A AIRBAG MDL / AOS
F20 - 10A ONSTAR / NAV (EXP)
F21 - 10A BCM 6
F22 - 30A ABS VLV
F23 - EMPTY
F24 - EMPTY
F25 - 5A STR CLM LCK
F26 - 10A BCM 2
F27 - EMPTY
F28 - 15A BCM 3
F29 - 30A BCM 8
F30 - 20A WSW
F31 - 20A RT HID
F32 - 20A LT HID
F33 - EMPTY
F34 - 15A HORN
F35 - EMPTY
F36 - 10A LT HI BEAM
F37 - 10A RT HI BEAM
F38 - 10A MANUAL HDLP LVL
F39 - EMPTY
F40 - 20A REC IGN
F41 - 5A MIL IGN
F42 - 10A I/P BODY IGN
F43 - 15A EXH VLV AFM
F44 - 5A AOS DISPLAY IGN
F45 - 30A S/ROOF
F46 - 10A BCM 7
F47 - 10A CGM
F48 - EMPTY
F49 - 15A HTD WHL
F50 - 10A FSCM IGN
F51 - 15A EXH VLV PTSQ
F52 - 10A A/C CLTCH
F53 - EMPTY
F54 - 15A COOLANT PUMP
F55 - EMPTY
F56 - EMPTY
F57 - 15A ECM IGN
F58 - 15A TCM IGN
F59 - EMPTY
F60 - 15A TCM BATT
F61 - 10A MAF / O2 SNSR
F62 - 15A COIL ODD
F63 - 15A NON WALK O2
F64 - 15A COIL EVEN
F65 - EMPTY
F66 - 25A ECM 1
F67 - 10A ECM 2
F68 - F77 - SPARE
K1 - EMPTY
K2 - RUN CRNK RLY
K3 - EMPTY
K4 - VAC PUMP RLY
K5 - EMPTY
K6 - COOLANT PUMP RLY
K7 - ECM RLY
K8 - A/C CNTRL RLY
K9 - EMPTY
K10- STRTR RLY

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ELECTRICAL CENTER IDENTIFICATION VIEWS > X50A FUSE BLOCK - UNDERHOOD X1



Connector Part Information

- Harness Type: Body
- OEM Connector: 23161961
- Service Connector: 19333352
- Description: 40-Way F 1.5, 2.8, 6.3, 9.5 Kaizen Series (BK)

Terminal Part Information

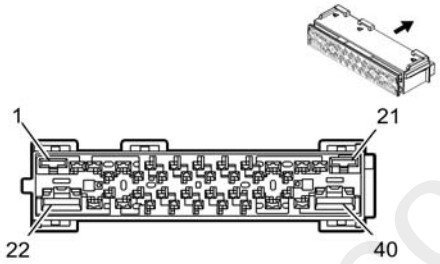
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13575838	J-35616-35 (VT)	J-38125-11A	Not available	Not available	Not available	Not available
II	13575839	J-35616-35 (VT)	J-38125-11A	Not available	Not available	Not available	Not available
III	13575850	J-35616-2A (GY)	J-38125-11A	Not available	Not available	Not available	Not available
IV	19333327	J-35616-22 (RD)	J-38125-11A	Not available	Not available	Not available	Not available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
5	2.5	RD/YE	3740	Battery Positive Voltage	II	-
7	0.75	RD/WH	3440	Battery Positive Voltage	III	-
15	0.35	RD/BU	840	Battery Positive Voltage	III	-
17	1	RD/BU	5240	Battery Positive Voltage	I	KA1
22	2.5	RD/YE	5040	Battery Positive Voltage	I	-
23	0.75	GY/VT	228	Windshield Washer Pump Control	I	-
24	0.35	BN/YE	1970	Headlamp Low Beam Relay Control	III	T4F

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26	0.35	BN/WH	28	Horn Relay Control	III	-
30	0.35	BN/GY	2268	Windshield Washer Relay Control	III	-
32	0.75	BK	850	Ground	III	-
33	0.35	BU/VT	807	OFF /Accessory Ignition Voltage	III	N06
40	4	RD/YE	442	Battery Positive Voltage	IV	-

ELECTRICAL CENTER IDENTIFICATION VIEWS > X50A FUSE BLOCK - UNDERHOOD X2



Connector Part Information

- Harness Type: Body
- OEM Connector: 7289-3992-40
- Service Connector: 19333353
- Description: 40-Way F 1.5, 2.8, 6.3, 9.5 Kaizen Series (GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13575838	J-35616-35 (VT)	J-38125-11A	7116-4111-02	13	C	A
II	13575839	J-35616-35 (VT)	J-38125-11A	7116-4111-02	13	E	A
III	13575839	J-35616-35 (VT)	J-38125-11A	7116-4112-02	14	C	D
IV	13575839	J-35616-35 (VT)	J-38125-11A	Not available	Not available	Not available	Not available

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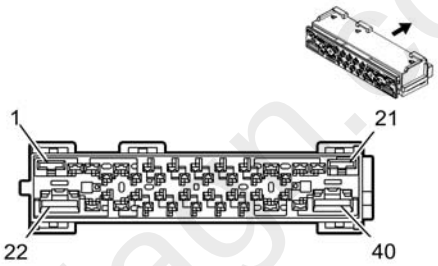
V	13575850	J-35616-2A (GY)	J-38125-11A	Not available	Not available	Not available	Not available
VI	13578892	J-35616-2A (GY)	J-38125-11A	Not available	Not available	Not available	Not available
VII	13578928	J-35616-42 (RD)	J-38125-11A	Not available	Not available	Not available	Not available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	RD/GY	1042	Battery Positive Voltage	VI	-
2-3	-	-	-	Not Occupied	-	-
4	0.35	RD/WH	6440	Battery Positive Voltage	IV	-
5-10	-	-	-	Not Occupied	-	-
11	0.75	VT/GY	1439	Run/Crank Ignition 1 Voltage	IV	UVD
12	-	-	-	Not Occupied	-	-
13	0.5	VT/BK	339	Run/Crank Ignition 1 Voltage	IV	-
14	0.35	WH/VT	860	Front Windshield Wiper Switch High Signal	IV	-
15	1	VT/GY	1039	Run/Crank Ignition 1 Voltage	IV	-
16	0.35	GY	91	Windshield Wiper Motor Relay Coil Control	IV	-
17	-	-	-	Not Occupied	-	-
18	0.35	BN/VT	1969	Headlamp High Beam Relay Control	IV	-
19	2	WH	92	Windshield Wiper Motor High Speed Control	II	-
20	2	YE/BN	95	Windshield Wiper Motor Low Speed Control	II	-
21 - 25	-	-	-	Not Occupied	-	-
26	0.35	BN	6305	Brake Vacuum Switch Signal	IV	-
27	1 0.75	VT/WH VT/WH	639 639	Run/Crank Ignition 1 Voltage Run/Crank Ignition 1 Voltage	IV IV	KA1+UVC+KQV UVC-KA1-KQV
28	0.35	GN/VT	5199	Run/Crank Relay Coil Control	IV	-
29	0.35	VT/GY	139	Run/Crank Ignition 1 Voltage	IV	-
30	-	-	-	Not Occupied	-	-
31	0.5	VT/GY	539	Run/Crank Ignition 1 Voltage	IV	-

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32	-	-	-	Not Occupied	-	-
33	0.75	VT/GN	2239	Run/Crank Ignition 1 Voltage	IV	-
34	-	-	-	Not Occupied	-	-
35	0.35	VT/WH	1139	Run/Crank Ignition 1 Voltage	IV	-
36	-	-	-	Not Occupied	-	-
37	1.5	RD/GY	3540	Battery Positive Voltage	III	CF5
38	1.5	BK	750	Ground	V	-
39	0.75	RD/GN	5140	Battery Positive Voltage	I	-
40	-	-	-	Not Occupied	-	-

ELECTRICAL CENTER IDENTIFICATION VIEWS > X50A FUSE BLOCK - UNDERHOOD X3



Connector Part Information

- Harness Type: Engine
- OEM Connector: 7289-3993-80
- Service Connector: 19333354
- Description: 40-Way F 1.5, 2.8, 6.3, 9.5 Kaizen Series (BN)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	13575832	J-35616-35 (VT)	J-38125-11A	Not Available	Not Available	Not Available	Not Available
II	13575838	J-35616-35 (VT)	J-38125-11A	7116-4110-02	Yazaki 9	E	C

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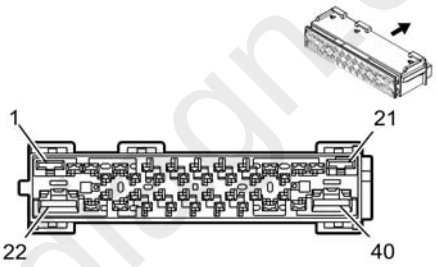
III	13575839	J-35616-35 (VT)	J-38125-11A	7116-4112-02	Yazaki 9	C	D
IV	13575839	J-35616-35 (VT)	J-38125-11A	Not Available	Not Available	Not Available	Not Available
V	13575850	J-35616-2A (GY)	J-38125-11A	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	-	-	-	Not Occupied	-	-
2	4	YE	6	Starter Solenoid Crank Ignition Voltage	I	-
3	-	-	-	Not Occupied	-	-
4	0.5	BN/GN	59	A/C Compressor Clutch Control	V	-
5 - 6	-	-	-	Not Occupied	-	-
7	0.5	VT/BK	2139	Run/Crank Ignition 1 Voltage	V	M5T/M5U
8 - 9	-	-	-	Not Occupied	-	-
10	0.5	YE	5991	Powertrain Relay Coil Control	V	-
11	-	-	-	Not Occupied	-	-
12	0.5	VT/GY	1439	Run/Crank Ignition 1 Voltage	V	-
13 - 17	-	-	-	Not Occupied	-	-
18	0.5	BK	250	Ground	V	-
19	1.5	BN/VT	1470	Brake Booster Pump Motor Control	IV	LT1
20 - 22	-	-	-	Not Occupied	-	-
23	0.5	VT/BU	5290	Powertrain Main Relay Fused Supply 1	II	LGX
24	0.5	VT/GY	6386	Starter Enable Relay (PPEI 3) Control	V	-
25	2.5 3 2	VT/BU VT/BU VT/BU	5290 5290 5290	Powertrain Main Relay Fused Supply 1	III V III	LGX LT1 LTG
26 - 27	-	-	-	Not Occupied	-	-
28	0.5	WH/GY	459	A/C Compressor Clutch Relay Control	V	-
29	1 0.5	VT/BU VT/BU	5292 5292	Powertrain Main Relay Fused Supply 3	V	LGX/LT1 LTG
30	-	-	-	Not Occupied	-	-

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31	0.75	VT/BU	5293	Powertrain Main Relay Fused Supply 4	V	-
32	-	-	-	Not Occupied	-	-
33	1	VT/BU	5291	Powertrain Main Relay Fused Supply 2	V	-
34	-	-	-	Not Occupied	-	-
35	0.75	VT/BU	5294	Powertrain Main Relay Fused Supply 5	V	-
36	-	-	-	Not Occupied	-	-
37	1.5 0.5	RD/GN RD/GN	1840 1840	Battery Positive Voltage	IV II	M5T/M5U MM6/MH3
38 - 40	-	-	-	Not Occupied	-	-

ELECTRICAL CENTER IDENTIFICATION VIEWS > X50A FUSE BLOCK - UNDERHOOD X4



Connector Part Information

- Harness Type: Forward Lamp
- OEM Connector: 7289-3994-60
- Service Connector: 19333355
- Description: 40-Way F 1.5, 2.8, 6.3, 9.5 Kaizen Series (GN)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13575838	J-35616-35 (VT)	J-38125-11A	7116-4111-02	13	E	A

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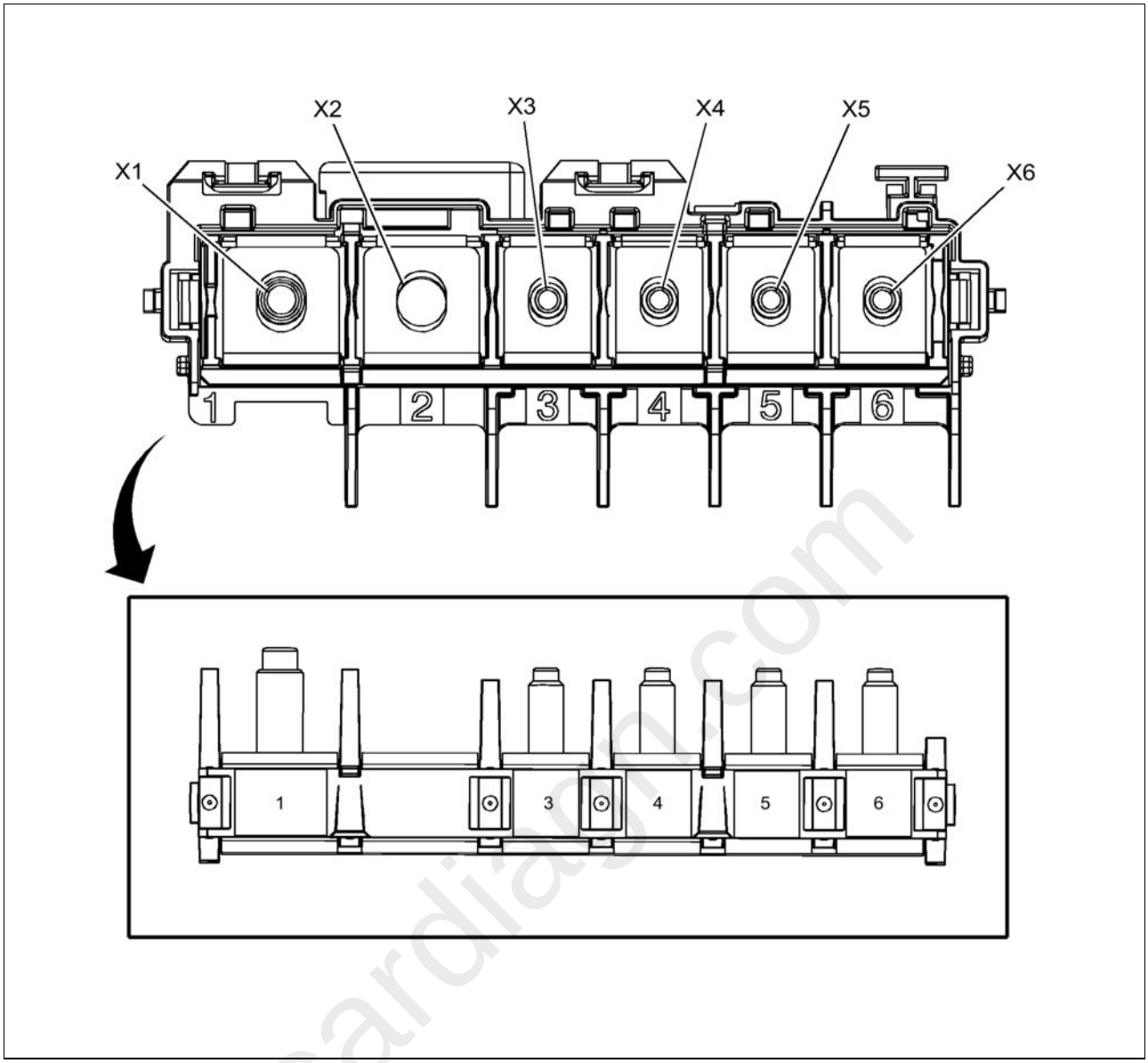
II	13575850	J-35616-2A (GY)	J-38125-11A	Not available	Not available	Not available	Not available
III	19333327	J-35616-22 (RD)	J-38125-11A	Not available	Not available	Not available	Not available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
7	0.75	WH	311	Right Headlamp High Beam Control	II	-
9	0.75	WH	711	Left Headlamp High Beam Control	II	-
13	0.75	BN/GY	29	Horn Control	II	LTG/LGX/LT1
17	0.75	YE	712	Left Headlamp Low Beam Control	I	-
19	0.75	YE	312	Right Headlamp Low Beam Control	I	-
32	0.35	VT/GN	839	Run/Crank Ignition 1 Voltage	II	TR6
40	5	RD/YE	1142	Battery Positive Voltage	III	LGX-Y4Q

ELECTRICAL CENTER IDENTIFICATION VIEWS > X50B FUSE BLOCK - UNDERHOOD AUXILIARY TOP VIEW

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Fig 1: X50B Fuse Block - Underhood Auxiliary Top View



Courtesy of GENERAL MOTORS COMPANY

X50B Fuse Block - Underhood Auxiliary Usage

No.	Device Label Name	Device Assigned Name	Rating	Description
1	-	F1UB	200A	G13 Generator
3	-	F3UB	80A	K43 Power Steering Control Module
4	-	F4UB	200A	Not Used
5	-	F5UB	100A	K22 Cooling Fan Control Module
6	-	F6UB	100A	Not Used

ELECTRICAL CENTER IDENTIFICATION VIEWS > X50B FUSE BLOCK - UNDERHOOD AUXILIARY X1

-
Connector Part Information • Harness Type: Engine • OEM Connector: 7209-5960-02 • Service Connector: Service by Cable Assembly - See Part Catalog • Description: Ring Terminal

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	16	RD/YE	2	Battery Positive Voltage	I	-

ELECTRICAL CENTER IDENTIFICATION VIEWS > X50B FUSE BLOCK - UNDERHOOD AUXILIARY X3

-
Connector Part Information • Harness Type: Engine • OEM Connector: 7209-5954-02 • Service Connector: Service by Cable Assembly - See Part Catalog • Description: Ring Terminal

Terminal Part Information

Terminal	Terminated	Diagnostic	Terminal	Service	Tray	Core	Insulation

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Type ID	Lead	Test Probe	Removal Tool	Terminal		Crimp	Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	8	RD/GN	742	Battery Positive Voltage	I	-

ELECTRICAL CENTER IDENTIFICATION VIEWS > X50B FUSE BLOCK - UNDERHOOD AUXILIARY X5

-
Connector Part Information • Harness Type: Forward Lamp • OEM Connector: 7209-5952-02 • Service Connector: Service by Cable Assembly - See Part Catalog • Description: Ring Terminal

Terminal Part Information

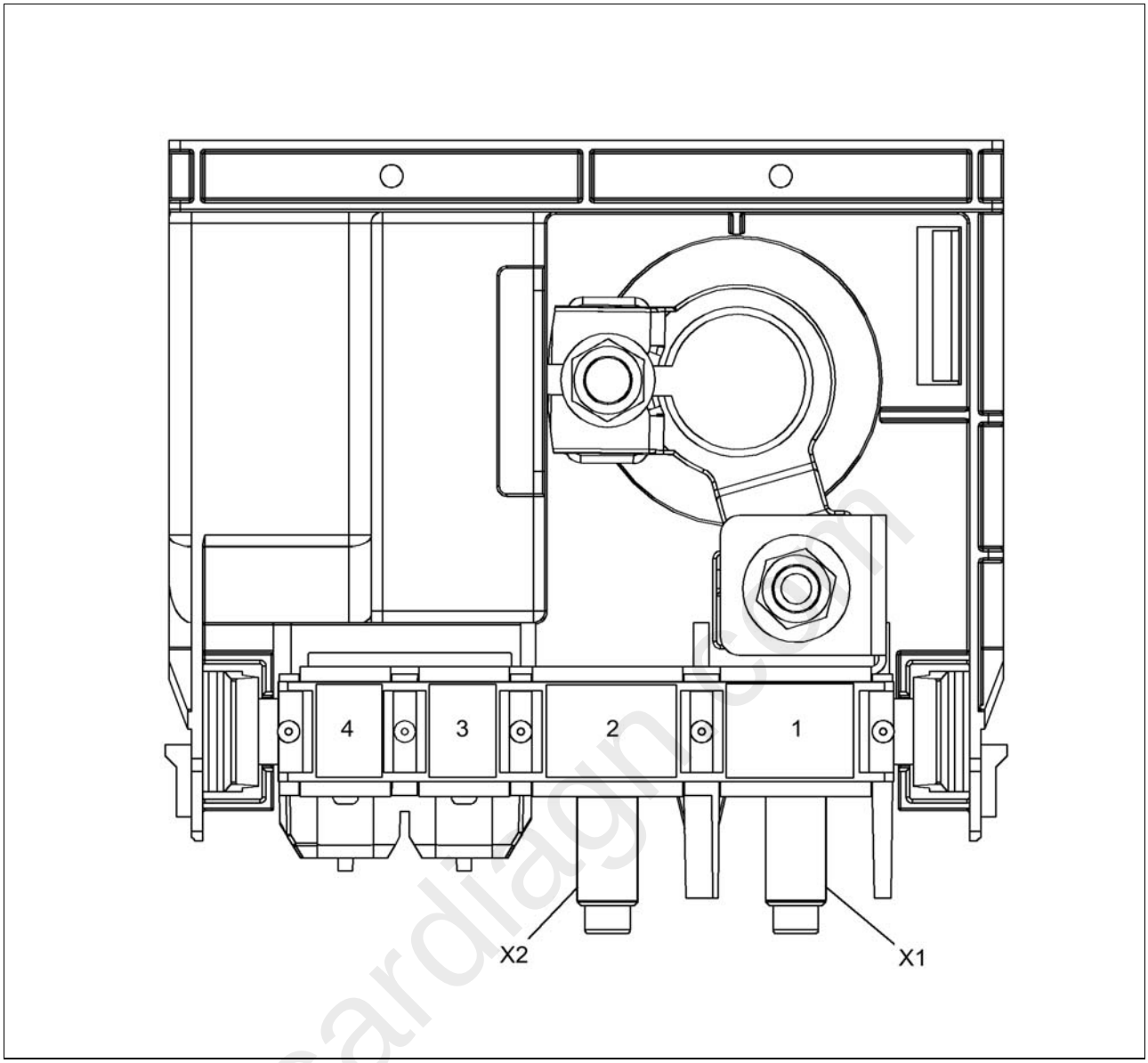
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	10	RD/GN	242	Battery Positive Voltage	I	-

ELECTRICAL CENTER IDENTIFICATION VIEWS > X50D FUSE BLOCK - BATTERY TOP VIEW

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Fig 1: X50D Fuse Block - Battery Top View



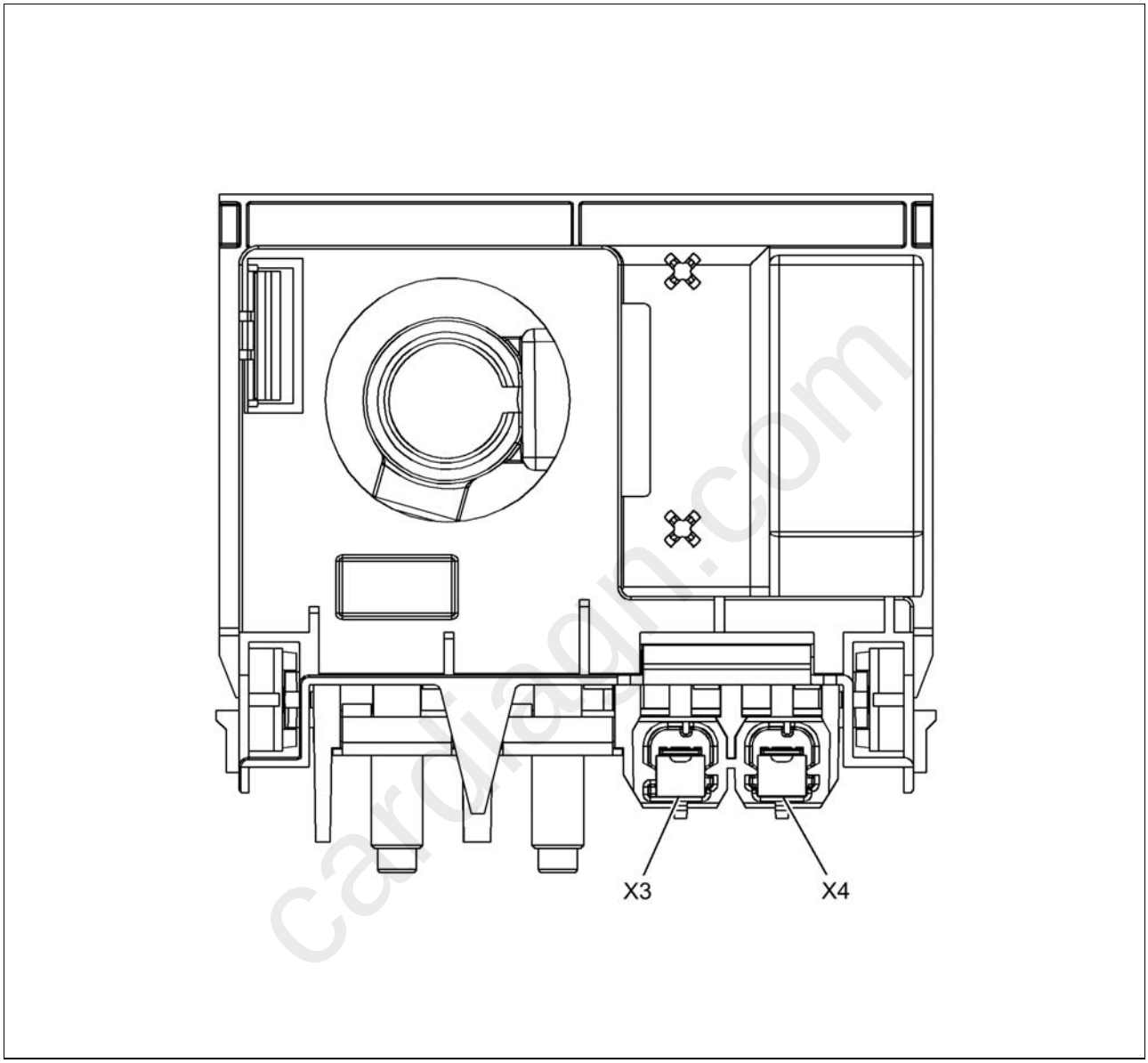
Courtesy of GENERAL MOTORS COMPANY

X50D Fuse Block - Battery Usage

No.	Device Label Name	Device Assigned Name	Rating	Description
1	-	F1RD	350A	M64 Starter Motor, X50A Fuse Block - Underhood, X50B Fuse Block - Underhood Auxiliary
2	-	F2RD	200A	X53A Fuse Block - Rear Body
3	-	FF3RD	100A	Not Used
4	-	F4RD	60A	KR149A Folding Top Pump Motor Relay 1, KR149B Folding Top Pump Motor Relay 2

ELECTRICAL CENTER IDENTIFICATION VIEWS > X50D FUSE BLOCK - BATTERY BOTTOM VIEW

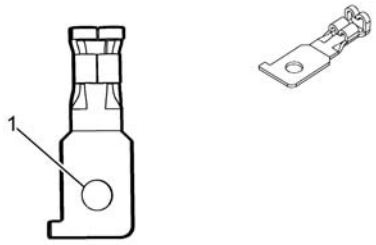
Fig 1: X50D Fuse Block - Battery Bottom View



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ELECTRICAL CENTER IDENTIFICATION VIEWS > X50D FUSE BLOCK - BATTERY X2 (CM8)



Connector Part Information

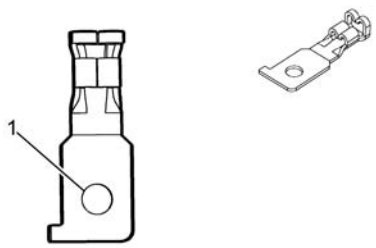
- Harness Type: Body
- OEM Connector: 13598209
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: 1-Way Ring Terminal

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	25	RD/WH	1642	Battery Positive Voltage	I	-

ELECTRICAL CENTER IDENTIFICATION VIEWS > X50D FUSE BLOCK - BATTERY X2 (EXCEPT CM8)



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Connector Part Information

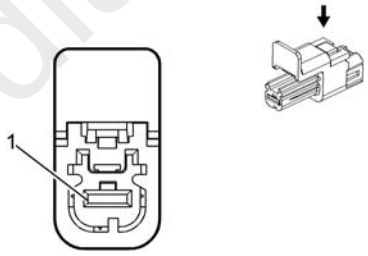
- Harness Type: Body
- OEM Connector: 7009-5961-02
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: 1-Way Ring Terminal

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	No Tool Required	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	25	RD/WH	1642	Battery Positive Voltage	I	-

ELECTRICAL CENTER IDENTIFICATION VIEWS > X50D FUSE BLOCK - BATTERY X4



Connector Part Information

- Harness Type: Body
- OEM Connector: 33121434
- Service Connector: 19333351
- Description: 1-Way F 6.3 Series (BU)

Terminal Part Information

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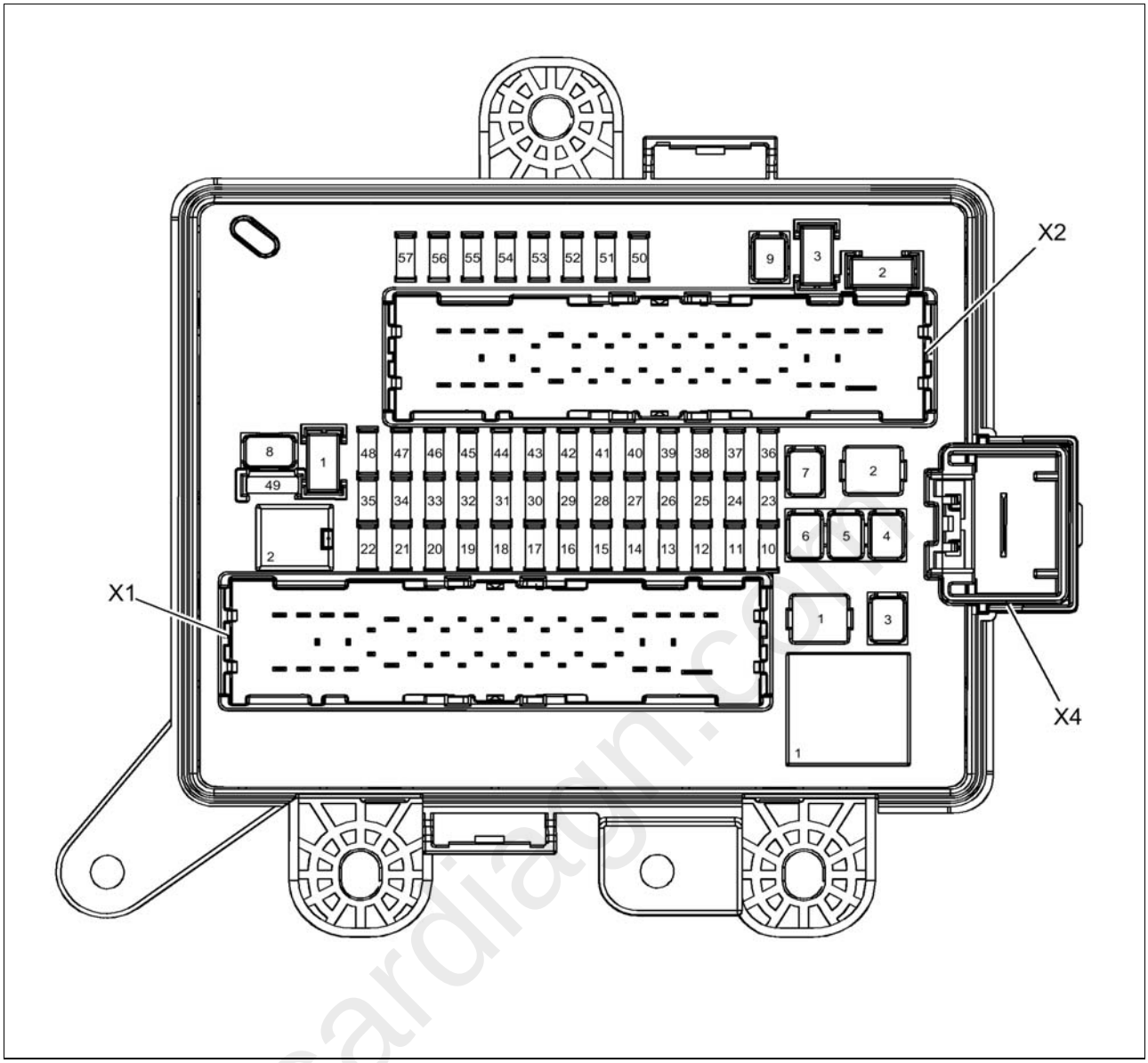
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-42 (RD)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	-	-	-	Not Occupied	-	-
A	4	RD/VT	842	Battery Positive Voltage	I	A1AC

ELECTRICAL CENTER IDENTIFICATION VIEWS > X53A FUSE BLOCK - REAR BODY TOP VIEW (EARLY PRODUCTION)

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Fig 1: X53A Fuse Block - Rear Body Top View (Early Production)



Courtesy of GENERAL MOTORS COMPANY

X53A Fuse Block - Rear Body Top View (Early Production)

No.	Device Label Name	Device Assigned Name	Rating	Description
Fuses				
1	REAR DEFOG	F1RA	40A	E18 Rear Defogger Grid (-CM8) R14L Rear Window Defogger Noise Filter - Left (CM8)
2	FT HVAC	F2RA	40A	M8 Blower Motor
3	EPB	F3RA	30A	K83 Park Brake Control Module

4	BCM 8	F4RA	30A	K9 Body Control Module
5	EMPTY	F5RA	-	Not Used
6	RR DRIVE CNTRL MDL	F6RA	30A	Not Used
7	RT WNDW 1	F7RA	30A	M74P Window Motor - Passenger M74RR Window Motor - Right Rear (CM8)
8	EMPTY	F8RA	-	Not Used
9	LT WNDW 1	F9RA	30A	M74D Window Motor - Driver M74LR Window Motor - Left Rear (CM8)
10	HTD MIR 1	F10RA	10A	E17D Outside Rearview Mirror Glass - Driver E17P Outside Rearview Mirror Glass - Passenger
11	EMPTY	F11RA	-	Not Used
12	HTD STR WHL	F12RA	7.5A	K32 Steering Wheel Heating Control Module
13	EMPTY	F13RA	-	Not Used
14	HVAC CNTRL	F14RA	15A	K33 HVAC Control Module
15	AIRBAG MDL / AOS	F15RA	10A	K36 Inflatable Restraint Sensing and Diagnostic Module K85 Passenger Presence Module
16	DISPLY	F16RA	15A	P16 Instrument Cluster P17 Info Display Module P29 Head-Up Display F49RA Fuse
17	CAMERA	F17RA	7.5A	B87 Rearview Camera (UVC)
18	EMPTY	F18RA	-	Not Used
19	FRT VENT SEAT 1	F19RA	10A	M73A Seat Blower Motor - Driver Back (KQV) M73B Seat Blower Motor - Passenger Back (KQV) M73C Seat Blower Motor - Driver Cushion (KQV) M73D Seat Blower Motor - Passenger Cushion (KQV)
20	REVERSE LPS (NO)	F20RA	10A	A10 Inside Rearview Mirror E83 Backup/ Rear Fog Lamp (T90)
21	EMPTY	F21RA	-	Not Used
22	EMPTY	F22RA	-	Not Used
23	BCM 1	F23RA	10A	K9 Body Control Module
24	BCM 2	F24RA	10A	K9 Body Control Module
25	EMPTY	F25RA	-	Not Used

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26	BCM 3	F26RA	15A	K9 Body Control Module
27	RGB LTS	F27RA	10A	K126 Accent Lamp Control Module
28	PEPS BATT 1	F28RA	5A	K84 Keyless Entry Control Module
29	DLC	F29RA	10A	X84 Data Link Connector
30	CNSTR VENT	F30RA	10A	Q13 Evaporative Emission Vent Solenoid Valve
31	MSM FOLD TOP	F31RA	10A	K23 Folding Top Control Module
32	MSM	F32RA	10A	K40D Seat Memory Control Module - Driver
33	WLESS CHRGR	F33RA	5A	T22 Mobile Device Wireless Charger Module (K4C)
34	ECM BATT	F34RA	10A	K20 Engine Control Module
35	FUEL PUMP FSCM	F35RA	20A	K38 Chassis Control Module (LTG/LGX+NPP/LT1) K111 Fuel Pump Driver Control Module (LGX-NPP)
36	CGM	F36RA	10A	K56 Serial Data Gateway Module
37	ESCL	F37RA	15A	K60 Steering Column Lock Module
38	MIR WNDW MDL	F38RA	5A	S79D Window Switch-Driver
39	REAR CLOSR	F39RA	10A	KR95B Rear Compartment Lid Unlatch Relay
40	BCM 4	F40RA	15A	K9 Body Control Module
41	BATT RVC	F41RA	5A	K9 Body Control Module
42	SADS	F42RA	25A	K19 Suspension Control Module
43	EMPTY	F43RA	-	Not Used
44	FOLD TOP SOL	F44RA	30A	K23 Folding Top Control Module
45	AMP	F45RA	30A	T3 Audio Amplifier
46	FPPM 22	F46RA	30A	Not Used
47	SHUNT	F47RA	30A	F14RA F15RA F16RA Fuses (-VPH) KR104B Battery Saver Relay 2 (VPH)
48	EMPTY	F48RA	-	Not Used
49	STRG WHL	F49RA	2A	S70R Steering Wheel Controls Switch - Right
50	ISRVM	F50RA	10A	A10 Inside Rearview Mirror
51	CAMERA MDL	F51RA	10A	Not Used
52	UPA	F52RA	10A	K182 Parking Assist Control Module (UD7)

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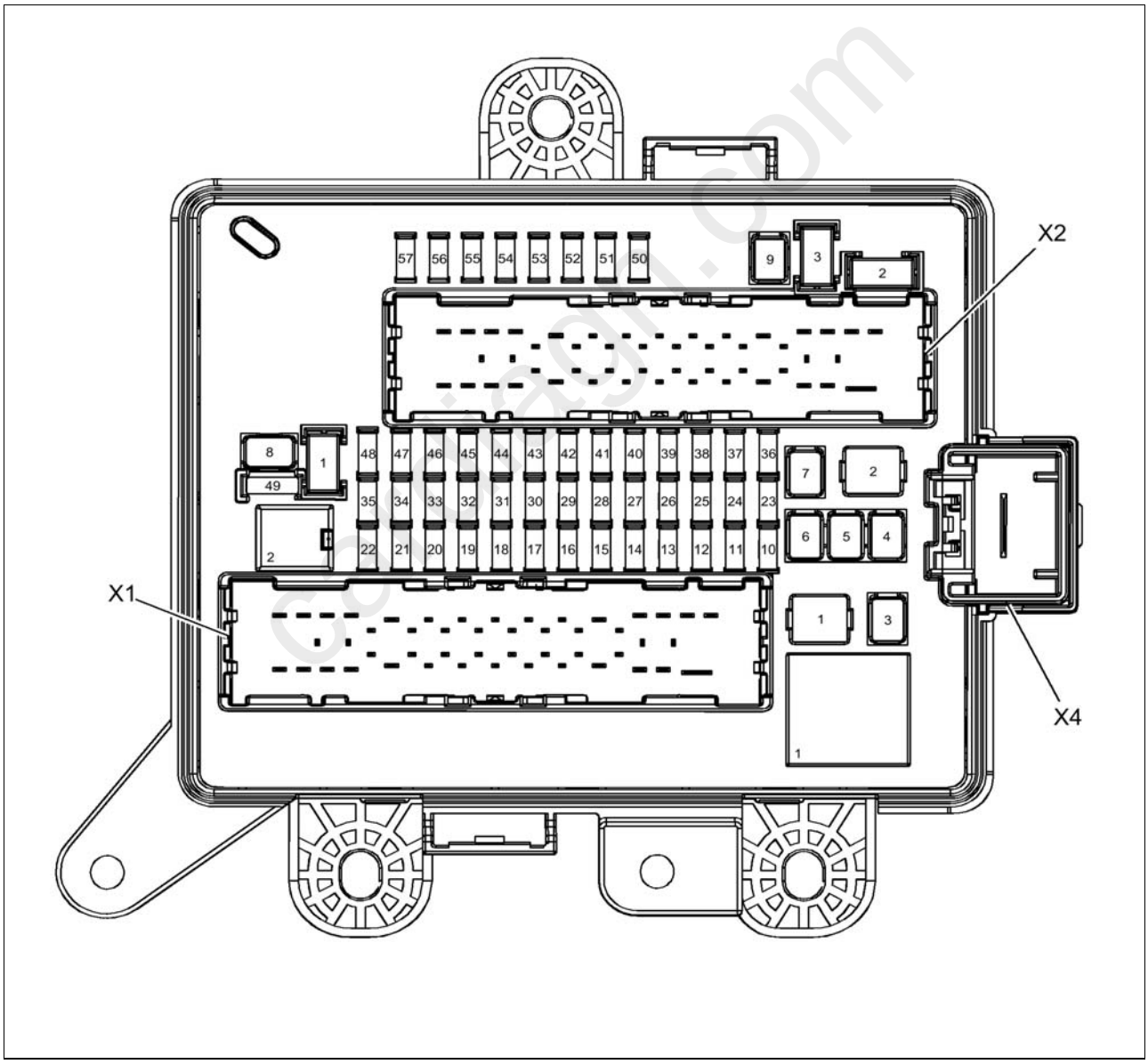
53	ELSD	F53RA	15A	K38 Chassis Control Module
54	SBZA	F54RA	10A	B218L Side Object Sensor Module - Left (UKC) B218R Side Object Sensor Module - Right (UKC)
55	RADIO CNTRL	F55RA	15A	A11 Radio K74 Human Machine Interface Control Module X83 Auxiliary Audio Input
56	THEFT UGDO	F56RA	5A	S25 Garage Door Opener (UG1)
57	ONSTAR / NAV (EXP)	F57RA	10A	K31 Navigation Control Module (LVM) K73 Telematics Communication Interface Control Module (UE1)
Circuit Breakers				
1	EMPTY	F1RB Circuit Breaker	-	Not Used
2	C1 RAP ACCY	F2RB Circuit Breaker	15A	KR76 Retained Accessory Power Relay
3	EMPTY	F3RB Circuit Breaker	-	Not Used
Relays				
K1	REAR DEFOG	KR5 Rear Defogger Relay	-	F1RA F10RA
K2	FUEL PUMP RELAY	KR23A Fuel Pump Relay	-	Not Used
Important: Relays listed below are non-serviceable Printed Circuit Board (PCB) relays and are internal to the block.				
-	-	KR40 Backup Lamp Relay	-	F20RA
-	-	KR76 Retained Accessory Power Relay	-	F33RA X80H Accessory Power Receptacle - Center Console
-	-	KR95B Rear Compartment Lid Unlatch Relay	-	M40 Rear Compartment Lid Latch
-	-	KR104A Battery Saver Relay 1	-	F50RA F51RA F52RA F53RA F54RA F55RA

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				F56RA F57RA
-	-	KR104B Battery Saver Relay 2	-	F14RA F15RA F16RA
-	-	KR132 Fuel Fill Door Lock Relay	-	M97 Fuel Fill Door Lock Actuator (N08)

ELECTRICAL CENTER IDENTIFICATION VIEWS > X53A FUSE BLOCK - REAR BODY TOP VIEW (LATE PRODUCTION)

Fig 1: X53A Fuse Block - Rear Body Top View (Late Production)



Courtesy of GENERAL MOTORS COMPANY

X53A Fuse Block - Rear Body Top View (Early Production)

No.	Device Label Name	Device Assigned Name	Rating	Description
Fuses				
1	REAR DEFOG	F1RA	40A	E18 Rear Defogger Grid (-CM8) R14L Rear Window Defogger Noise Filter - Left (CM8)
2	FT HVAC	F2RA	40A	M8 Blower Motor
3	EPB	F3RA	30A	K83 Park Brake Control Module
4	BCM 8	F4RA	30A	K9 Body Control Module
5	EMPTY	F5RA	-	Not Used
6	RR DRIVE CNTRL MDL	F6RA	30A	Not Used
7	RT WNDW 1	F7RA	30A	M74P Window Motor - Passenger M74RR Window Motor - Right Rear (CM8)
8	EMPTY	F8RA	-	Not Used
9	LT WNDW 1	F9RA	30A	M74D Window Motor - Driver M74LR Window Motor - Left Rear (CM8)
10	HTD MIR 1	F10RA	10A	E17D Outside Rearview Mirror Glass - Driver E17P Outside Rearview Mirror Glass - Passenger
11	EMPTY	F11RA	-	Not Used
12	HTD STR WHL	F12RA	7.5A	K32 Steering Wheel Heating Control Module
13	EMPTY	F13RA	-	Not Used
14	HVAC CNTRL	F14RA	15A	K33 HVAC Control Module
15	AIRBAG MDL / AOS	F15RA	10A	K36 Inflatable Restraint Sensing and Diagnostic Module K85 Passenger Presence Module
16	DISPLY	F16RA	15A	P16 Instrument Cluster P17 Info Display Module P29 Head-Up Display F49RA Fuse
17	CAMERA	F17RA	7.5A	B87 Rearview Camera (UVC)
18	EMPTY	F18RA	-	Not Used
19	FRT VENT SEAT 1	F19RA	10A	M73A Seat Blower Motor - Driver Back (KQV) M73B Seat Blower Motor - Passenger Back (KQV)

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				M73C Seat Blower Motor - Driver Cushion (KQV) M73D Seat Blower Motor - Passenger Cushion (KQV)
20	REVERSE LPS (NO)	F20RA	10A	A10 Inside Rearview Mirror E83 Backup/ Rear Fog Lamp (T90)
21	EMPTY	F21RA	-	Not Used
22	EMPTY	F22RA	-	Not Used
23	BCM 1	F23RA	10A	K9 Body Control Module
24	BCM 2	F24RA	10A	K9 Body Control Module
25	EMPTY	F25RA	-	Not Used
26	BCM 3	F26RA	15A	K9 Body Control Module
27	RGB LTS	F27RA	10A	K126 Accent Lamp Control Module
28	PEPS BATT 1	F28RA	5A	K84 Keyless Entry Control Module
29	DLC	F29RA	10A	X84 Data Link Connector
30	CNSTR VENT	F30RA	10A	Q13 Evaporative Emission Vent Solenoid Valve
31	MSM FOLD TOP	F31RA	10A	K23 Folding Top Control Module
32	MSM	F32RA	10A	K40D Seat Memory Control Module - Driver
33	WLESS CHRGR	F33RA	5A	T22 Mobile Device Wireless Charger Module (K4C)
34	ECM BATT	F34RA	10A	K20 Engine Control Module
35	FUEL PUMP FSCM	F35RA	20A	K38 Chassis Control Module (LTG/LGX+NPP/LT1) K111 Fuel Pump Driver Control Module (LGX-NPP)
36	CGM	F36RA	10A	K56 Serial Data Gateway Module
37	ESCL	F37RA	15A	K60 Steering Column Lock Module
38	MIR WNDW MDL	F38RA	5A	S79D Window Switch-Driver
39	REAR CLOSR	F39RA	10A	KR95B Rear Compartment Lid Unlatch Relay
40	BCM 4	F40RA	15A	K9 Body Control Module
41	BATT RVC	F41RA	5A	K9 Body Control Module
42	SADS	F42RA	25A	K19 Suspension Control Module
43	EMPTY	F43RA	-	Not Used
44	FOLD TOP SOL	F44RA	30A	K23 Folding Top Control Module

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45	AMP	F45RA	30A	T3 Audio Amplifier
46	FPPM 22	F46RA	30A	Not Used
47	SHUNT	F47RA	30A	F14RA F15RA F16RA Fuses (-VPH) KR104B Battery Saver Relay 2 (VPH)
48	EMPTY	F48RA	-	Not Used
49	STRG WHL	F49RA	2A	S70R Steering Wheel Controls Switch - Right
50	ISRVM	F50RA	10A	A10 Inside Rearview Mirror
51	CAMERA MDL	F51RA	10A	Not Used
52	UPA	F52RA	10A	K182 Parking Assist Control Module (UD7)
53	ELSD	F53RA	15A	K38 Chassis Control Module
54	SBZA	F54RA	10A	B218L Side Object Sensor Module - Left (UKC) B218R Side Object Sensor Module - Right (UKC)
55	RADIO CNTRL	F55RA	15A	A11 Radio K74 Human Machine Interface Control Module X83 Auxiliary Audio Input
56	THEFT UGDO	F56RA	5A	S25 Garage Door Opener (UG1)
57	ONSTAR / NAV (EXP)	F57RA	10A	K31 Navigation Control Module (LVM) K73 Telematics Communication Interface Control Module (UE1)
Circuit Breakers				
1	EMPTY	F1RB Circuit Breaker	-	Not Used
2	C1 RAP ACCY	F2RB Circuit Breaker	15A	KR76 Retained Accessory Power Relay
3	EMPTY	F3RB Circuit Breaker	-	Not Used
Relays				
K1	REAR DEFOG	KR5 Rear Defogger Relay	-	F1RA F10RA
K2	FUEL PUMP RELAY	KR23A Fuel Pump Relay	-	Not Used
Important: Relays listed below are non-serviceable Printed Circuit Board (PCB) relays and are internal to the block.				
-	-	KR40 Backup Lamp Relay	-	F20RA

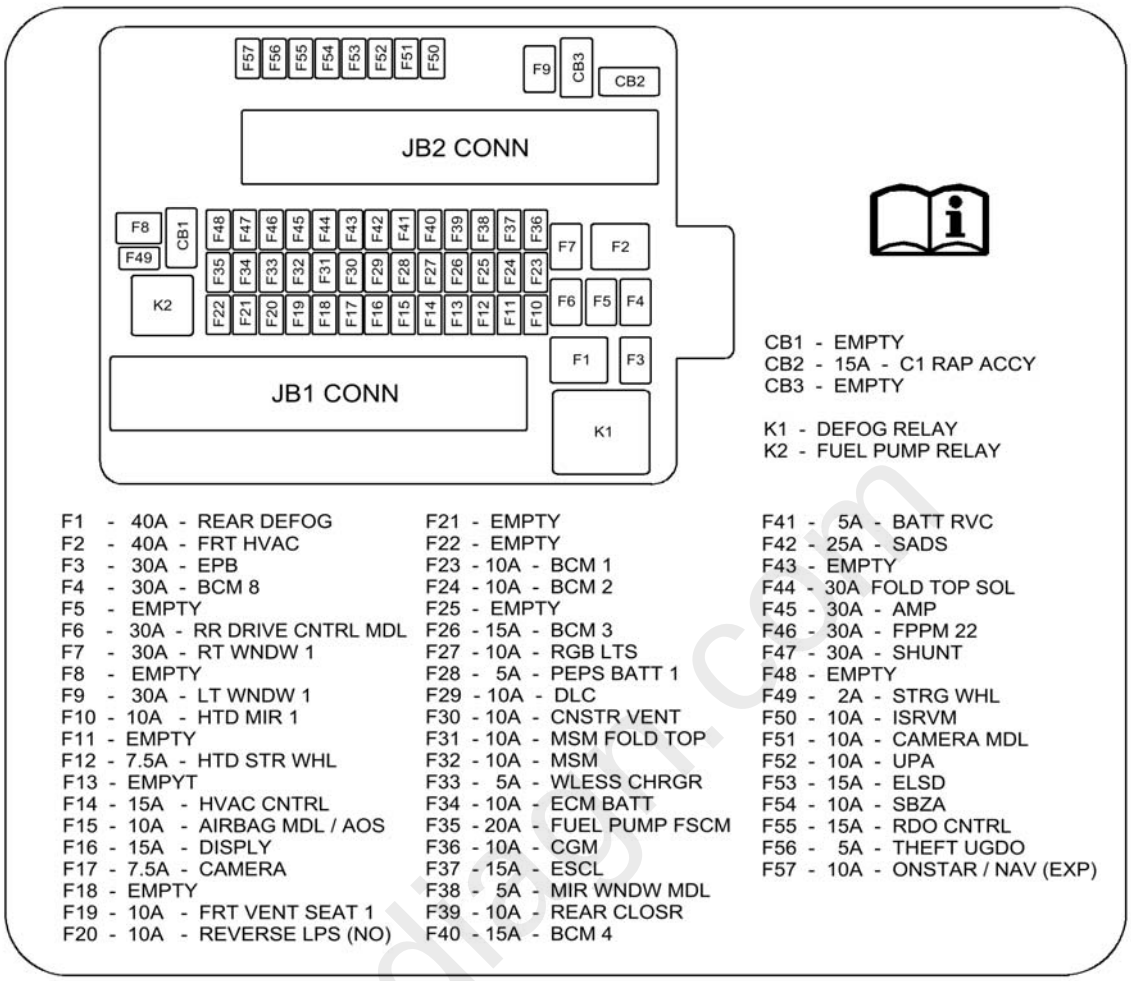
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-	-	KR76 Retained Accessory Power Relay	-	F33RA X80H Accessory Power Receptacle - Center Console
-	-	KR95B Rear Compartment Lid Unlatch Relay	-	M40 Rear Compartment Lid Latch
-	-	KR104A Battery Saver Relay 1	-	F50RA F51RA F52RA F53RA F54RA F55RA F56RA F57RA
-	-	KR104B Battery Saver Relay 2	-	F14RA F15RA F16RA
-	-	KR132 Fuel Fill Door Lock Relay	-	M97 Fuel Fill Door Lock Actuator (N08)

ELECTRICAL CENTER IDENTIFICATION VIEWS > X53A FUSE BLOCK - REAR BODY BOTTOM VIEW (EARLY PRODUCTION)

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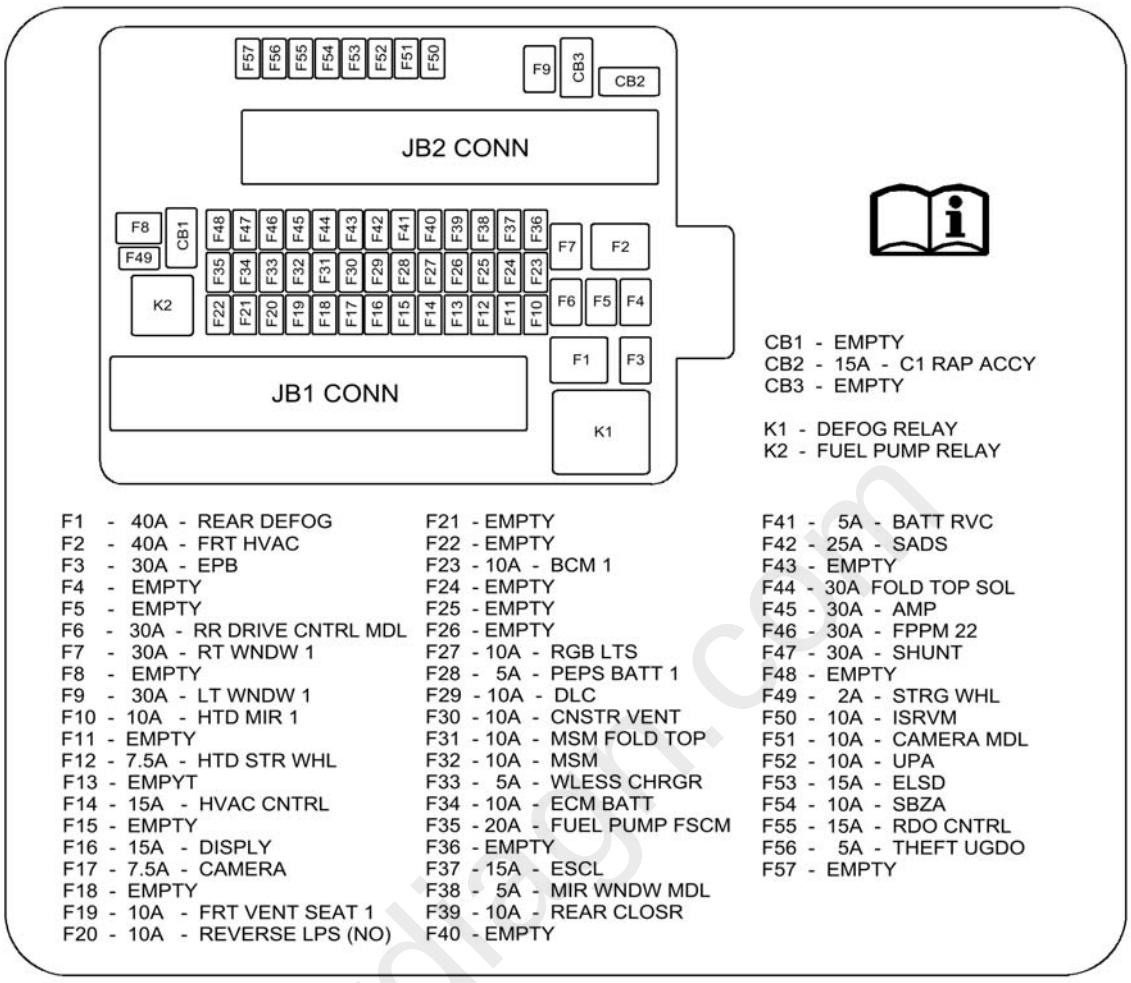
Fig 1: X53A Fuse Block - Rear Body Bottom View (Early Production)



Courtesy of GENERAL MOTORS COMPANY

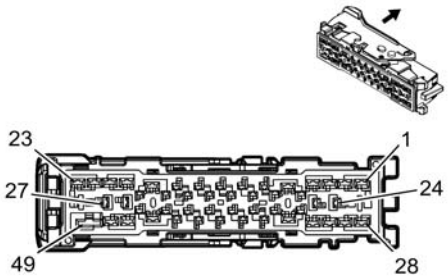
ELECTRICAL CENTER IDENTIFICATION VIEWS > X53A FUSE BLOCK - REAR BODY BOTTOM VIEW (LATE PRODUCTION)

Fig 1: X53A Fuse Block - Rear Body Bottom View (Late Production)



Courtesy of GENERAL MOTORS COMPANY

ELECTRICAL CENTER IDENTIFICATION VIEWS > X53A FUSE BLOCK - REAR BODY X1



Connector Part Information

- Harness Type: Body
- OEM Connector: 7289-3998-60
- Service Connector: 19333256
- Description: 49-Way F 1.5, 2.8, 6.3 Kaizen Series (GN)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13575832	J-35616-35 (VT)	J-38125-11A	7116-4112-02	14	C	D
II	13575832	J-35616-35 (VT)	J-38125-11A	Not available	Not available	Not available	Not available
III	13575835	J-35616-42 (RD)	J-38125-11A	7116-4122-02	2	A	B
IV	13575839	J-35616-35 (VT)	J-38125-11A	7116-4112-02	14	C	D
V	13575839	J-35616-35 (VT)	J-38125-11A	Not available	Not available	Not available	Not available
VI	13575850	J-35616-2A (GY)	J-38125-11A	Not available	Not available	Not available	Not available
VII	13578892	J-35616-2A (GY)	J-38125-11A	Not available	Not available	Not available	Not available
VIII	13578928	J-35616-42 (RD)	J-38125-11A	Not available	Not available	Not available	Not available
IX	13580025	J-35616-35 (VT)	J-38125-11A	7116-4112-02	14	C	D
X	13580025	J-35616-35 (VT)	J-38125-11A	Not available	Not available	Not available	Not available

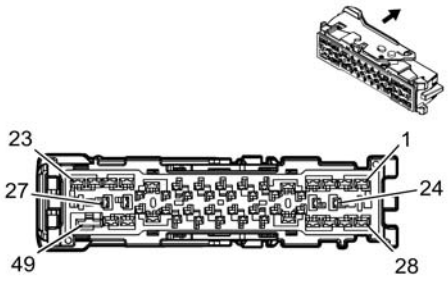
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Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	3	RD/BU	1240	Battery Positive Voltage	I	-
2-3	-	-	-	Not Occupied	-	-
4	1.5	RD/VT	340	Battery Positive Voltage	III	-
5	0.35	RD/GN	3840	Battery Positive Voltage	IV	UKC
6	-	-	-	Not Occupied	-	-
7	0.5	RD/GN	3140	Battery Positive Voltage	IV	UD7
8	0.5	RD/BU	3940	Battery Positive Voltage	IV	EARLY
9	-	-	-	Not Occupied	-	-
10	0.35	RD/BU	4540	Battery Positive Voltage	IV	UG1
11	0.35	RD/WH	5440	Battery Positive Voltage	IV	DD8+UE1
12	0.35	GY/VT	3264	Logistic Mode Relay Close Control	IV	-
13	0.35	VT/BU	3263	Logistic Mode Relay Open Control	IV	-
14	0.35	BK	2550	Ground	IV	-
15	0.35	GY/YE	6188	Lift Glass/Rear Compartment Lid Motor Release Control	IV	-
16	0.5	BU/WH	6128	Rear Closure Unlatch Motor Unlatch Control	IV	-
17	0.75	RD/BN	2240	Battery Positive Voltage	IV	-
18	2.5	RD/BU	1842	Battery Positive Voltage	VII	-
19	0.75	RD/VT	4040	Battery Positive Voltage	IV	-
20	-	-	-	Not Occupied	-	-
21	1.5	RD/BU	42	Battery Positive Voltage	III	-
22	-	-	-	Not Occupied	-	-
23	2.5	RD/GY	642	Battery Positive Voltage	II	-
24 - 26	-	-	-	Not Occupied	-	-
27	0.35	BN/VT	193	Rear Defog Relay Control	IV	-
28	1.5 3	RD/BU RD/BU	1240 1240	Battery Positive Voltage Battery Positive Voltage	VIII I	-VPH
29	-	-	-	Not Occupied	-	-
30	3	RD/YE	240	Battery Positive Voltage	I	-
31	2	RD/WH	5740	Battery Positive Voltage	II	-

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32	0.35	VT	4601	Retained Accessory Power Fused Control	IV	K4C
33	2	RD/BU	540	Battery Positive Voltage	II	-
34	1.5	BK	2450	Ground	V	-
35	0.35	RD/YE	2340	Battery Positive Voltage	IV	-
36	0.35	RD	40	Battery Positive Voltage	IV	-
37	1.5	RD/BU	2540	Battery Positive Voltage	V	-
38	0.35	RD/YE	4340	Battery Positive Voltage	IV	-
39	0.35	VT/BU	3263	Logistic Mode Relay Open Control	IV	-
40	0.35	GY/VT	3264	Logistic Mode Relay Close Control	IV	-
41	0.5	RD/VT	1940	Battery Positive Voltage	IV	-
42	-	-	-	Not Occupied	-	-
43	0.5	VT/WH	239	Run/Crank Ignition 1 Voltage	IV	UVD
44	0.75	RD/GY	4140	Battery Positive Voltage	IV	N06
45	2.5	RD/BU	1842	Battery Positive Voltage	II	-
46	0.35	RD/WH	6440	Battery Positive Voltage	IV	-
47	2.5	RD/WH	4042	Battery Positive Voltage	II	-
48	2.5	RD/WH	4042	Battery Positive Voltage	II	-
49	2.5	RD/VT	542	Battery Positive Voltage	VI	-

ELECTRICAL CENTER IDENTIFICATION VIEWS > X53A FUSE BLOCK - REAR BODY X2



Connector Part Information

- Harness Type: Body
- OEM Connector: 7289-3996-90

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- Service Connector: 19333257
- Description: 49-Way F 1.5, 2.8, 6.3 Kaizen Series (BU)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13575832	J-35616-35 (VT)	J-38125-11A	7116-4112-02	14	C	D
II	13575838	J-35616-35 (VT)	J-38125-11A	7116-4110-02	12	E	C
III	13575838	J-35616-35 (VT)	J-38125-11A	7116-4111-02	13	E	A
IV	13575839	J-35616-35 (VT)	J-38125-11A	7116-4112-02	14	C	D
V	13575839	J-35616-35 (VT)	J-38125-11A	Not available	Not available	Not available	Not available
VI	13575850	J-35616-2A (GY)	J-38125-11A	Not available	Not available	Not available	Not available
VII	13578892	J-35616-2A (GY)	J-38125-11A	Not available	Not available	Not available	Not available
VIII	13578928	J-35616-42 (RD)	J-38125-11A	Not available	Not available	Not available	Not available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	1.5	RD/BU	1240	Battery Positive Voltage	V	-
2	-	-	-	Not Occupied	-	-
3	2	RD/VT	2640	Battery Positive Voltage	IV	-
4-6	-	-	-	Not Occupied	-	-
7	1	RD/BN	440	Battery Positive Voltage	VI	-
8	0.75	GN/WH	24	Backup Lamp Control	VI	T79
9	0.75	VT	1001	Retained Accessory Power Ignition	VI	K4C
10	0.5	VT/BK	739	Run/Crank Ignition 1 Voltage	VI	KA1+KQV
11	0.5	VT/BK	739	Run/Crank Ignition 1 Voltage	VI	KA1+KQV
12	-	-	-	Not Occupied	-	-

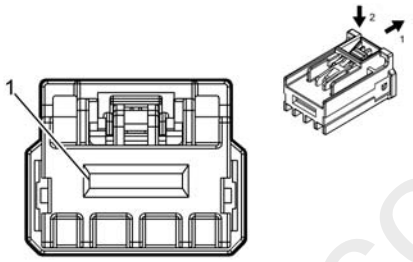
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13	0.5	RD/GN	2440	Battery Positive Voltage	VI	-
14	0.35	VT/GN	1339	Run/Crank Ignition 1 Voltage	VI	UVC
15	0.35 0.35	RD/GN RD/GN	4440 4440	Battery Positive Voltage Battery Positive Voltage	VI	- -
16	0.5	RD/BU	3240	Battery Positive Voltage	VI	-
17	0.5	RD/YE	3040	Battery Positive Voltage	VI	-
18	0.75	VT/WH	639	Run/Crank Ignition 1 Voltage	III	-
19	0.75	VT/GY	1439	Run/Crank Ignition 1 Voltage	VI	UVD
20	0.35	RD/BN	4940	Battery Positive Voltage	II	C70
21	1.5	RD/GY	2140	Battery Positive Voltage	V	-
22 - 23	-	-	-	Not Occupied	-	-
24	0.35	RD/YE	3040	Battery Positive Voltage	VI	-
25	0.5	RD/BU	3240	Battery Positive Voltage	VI	-
26	0.35	BN/YE	2267	Mirror Heating Element Control	VI	-
27 - 29	-	-	-	Not Occupied	-	-
30	1.5	BU/WH	195	Door Lock Control	V	N08
31 - 33	-	-	-	Not Occupied	-	-
34	0.5	BU/BN	38	Backup Lamp Relay Control	VI	T79
35	0.35	GY/GN	4083	RAP Relay 2 Coil Control	VI	-
36	0.35	BN/YE	186	Fuel Door Lock Relay Control	VI	N08
37	1.5	RD/BU	42	Battery Positive Voltage	VII	-
38	0.5	RD/WH	2040	Battery Positive Voltage	VI	A45
39	0.5	RD/WH	1040	Battery Positive Voltage	VI	-
40	1.5	VT	1001	Retained Accessory Power Ignition	VII	-
41	1	GY	5911	Door Lock Actuator Lock Control 2	VI	-
42	0.35	BN/YE	2267	Mirror Heating Element Control	VI	-
43	0.75	BU	6800	Fuel Door Lock/Unlock 1 Signal	VI	-
44	-	-	-	Not Occupied	-	-

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45	3	RD/BU	1240	Battery Positive Voltage	I	-
46	-	-	-	Not Occupied	-	-
47	3	RD/BU	1240	Battery Positive Voltage	I	-
48	2.5	RD/VT	1640	Battery Positive Voltage	IV	J77
49	2.5	BN/VT	293	Rear Defog Element Control	VIII	-

ELECTRICAL CENTER IDENTIFICATION VIEWS > X53A FUSE BLOCK - REAR BODY X3



Connector Part Information

- Harness Type: Body
- OEM Connector: 7289-3961-30
- Service Connector: Service by Component - See Part Catalog
- Description: 1-Way F 14.5 HC Series (BK)

Terminal Part Information

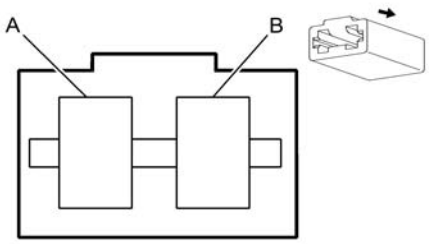
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	Not Available	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	25	RD/WH	1642	Battery Positive Voltage	I	-

ELECTRICAL CENTER IDENTIFICATION VIEWS > X55AE FUSE HOLDER - STEERING

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WHEEL HEATER (UVD)



Connector Part Information

- Harness Type: Steering Wheel Air Bag Coil
- OEM Connector: Not Available
- Service Connector: Service by Cable Assembly - See Part Catalog
- Description: 2-Way Fuse Holder (BK)

Terminal Part Information

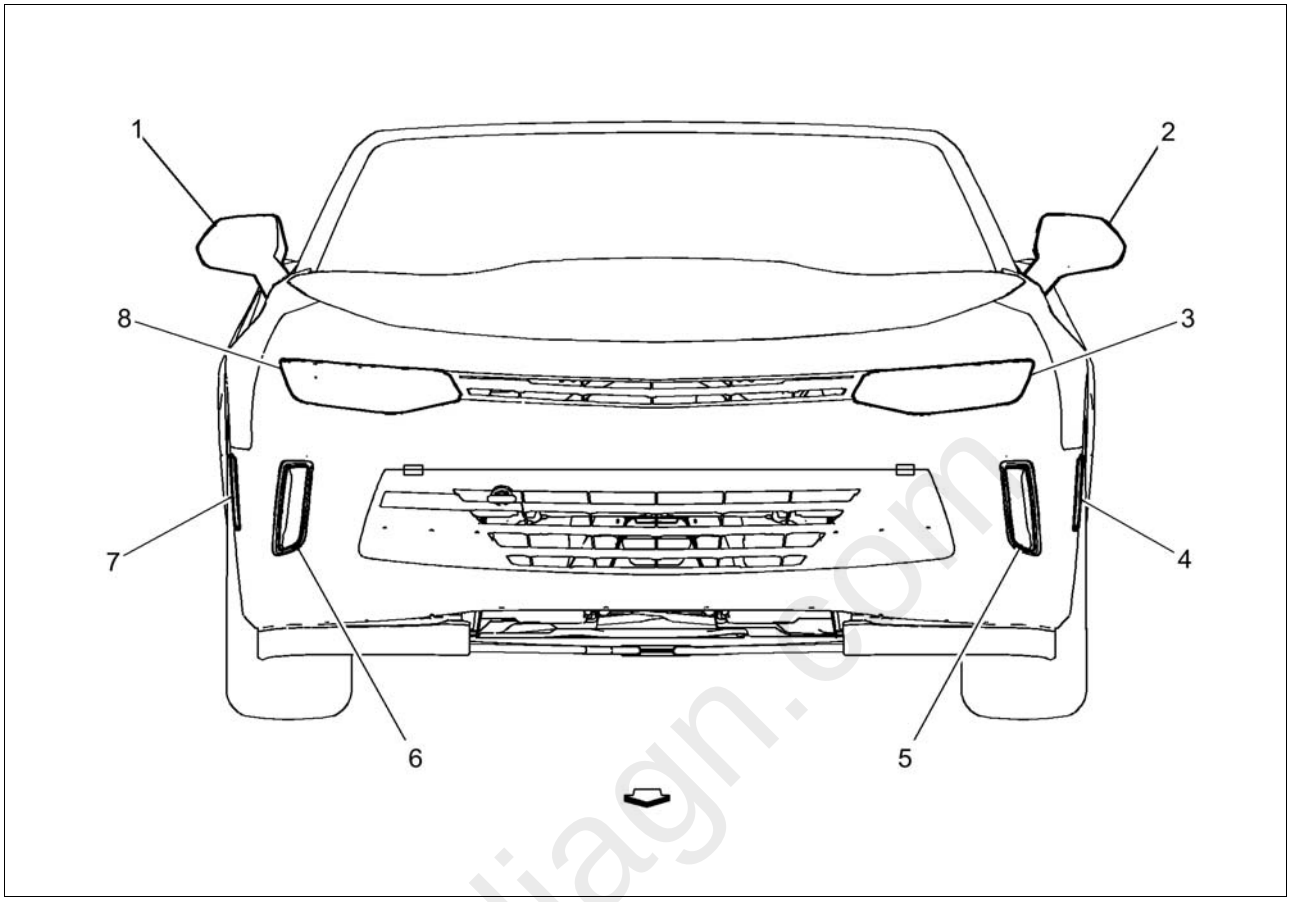
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Available	J-35616-64B (LT BU)	Not Available	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.5	BN/SR	239	Run/Crank Ignition 1 Voltage	I	-
B	0.5	BN	239	Run/Crank Ignition 1 Voltage	I	-

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FRONT OF VEHICLE/ENGINE COMPARTMENT COMPONENT VIEWS > FRONT OF VEHICLE COMPONENTS

Fig 1: Front of Vehicle Components



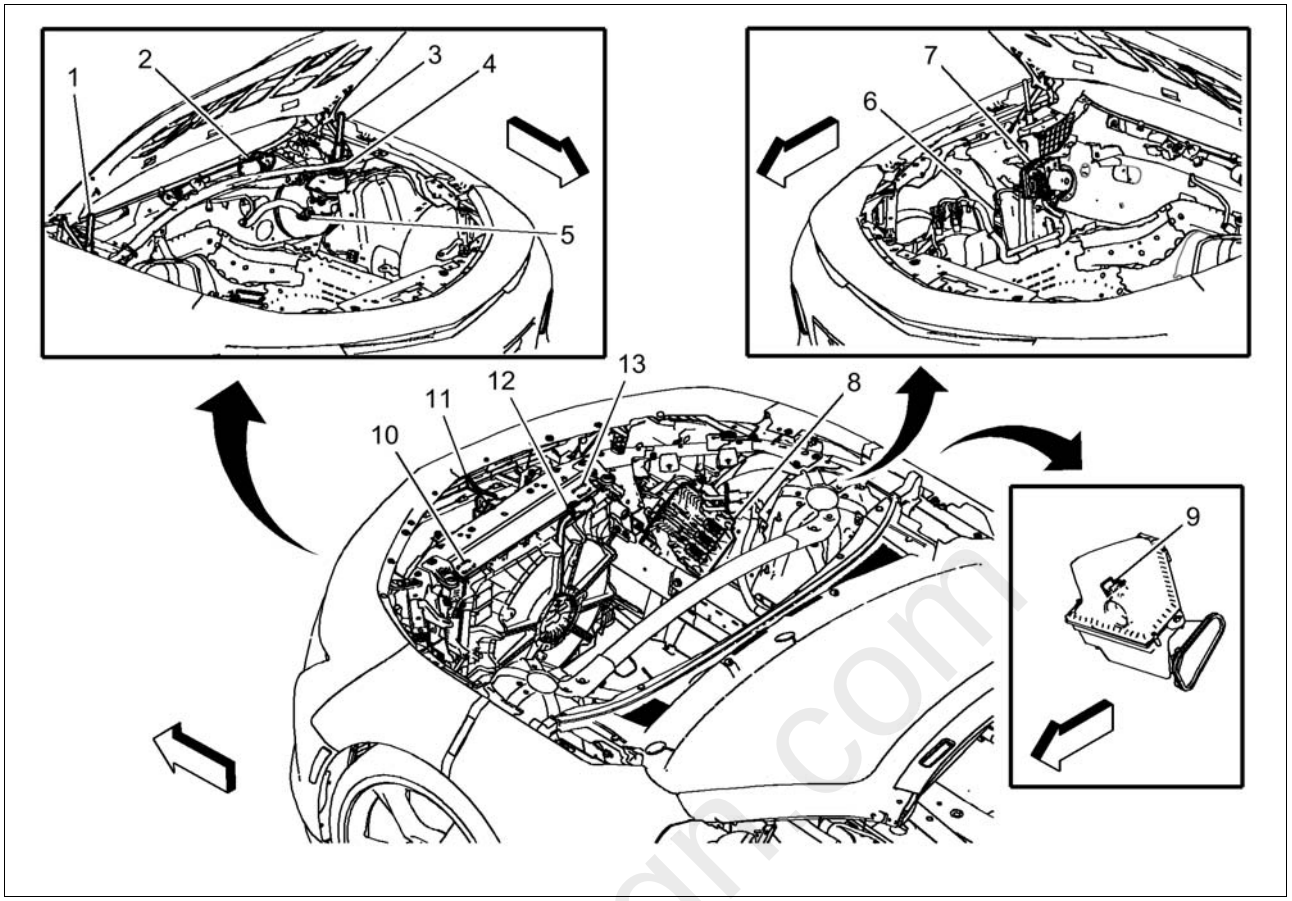
Courtesy of GENERAL MOTORS COMPANY

Items
1: A9B Outside Rearview Mirror - Passenger
2: A9A Outside Rearview Mirror - Driver
3: E13LA Headlamp Assembly - Left
4: E2LF Side Marker Lamp - Left Front (except T90) E2LF Side Marker Lamp - Left Front
5: E4AL Park/Daytime Running Lamp - Left Lower E4AL Park/Daytime Running Lamp-Left Lower
6: E4AM Park/Daytime Running Lamp - Right Lower E4AM Park/Daytime Running Lamp-Right Lower
7: E2RF Side Marker Lamp - Right Front (except T90) E2RF Side Marker Lamp - Right Front
8: E13RA Headlamp Assembly - Right

FRONT OF VEHICLE/ENGINE COMPARTMENT COMPONENT VIEWS > ENGINE COMPARTMENT COMPONENTS

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Fig 1: Engine Compartment Components



Courtesy of GENERAL MOTORS COMPANY

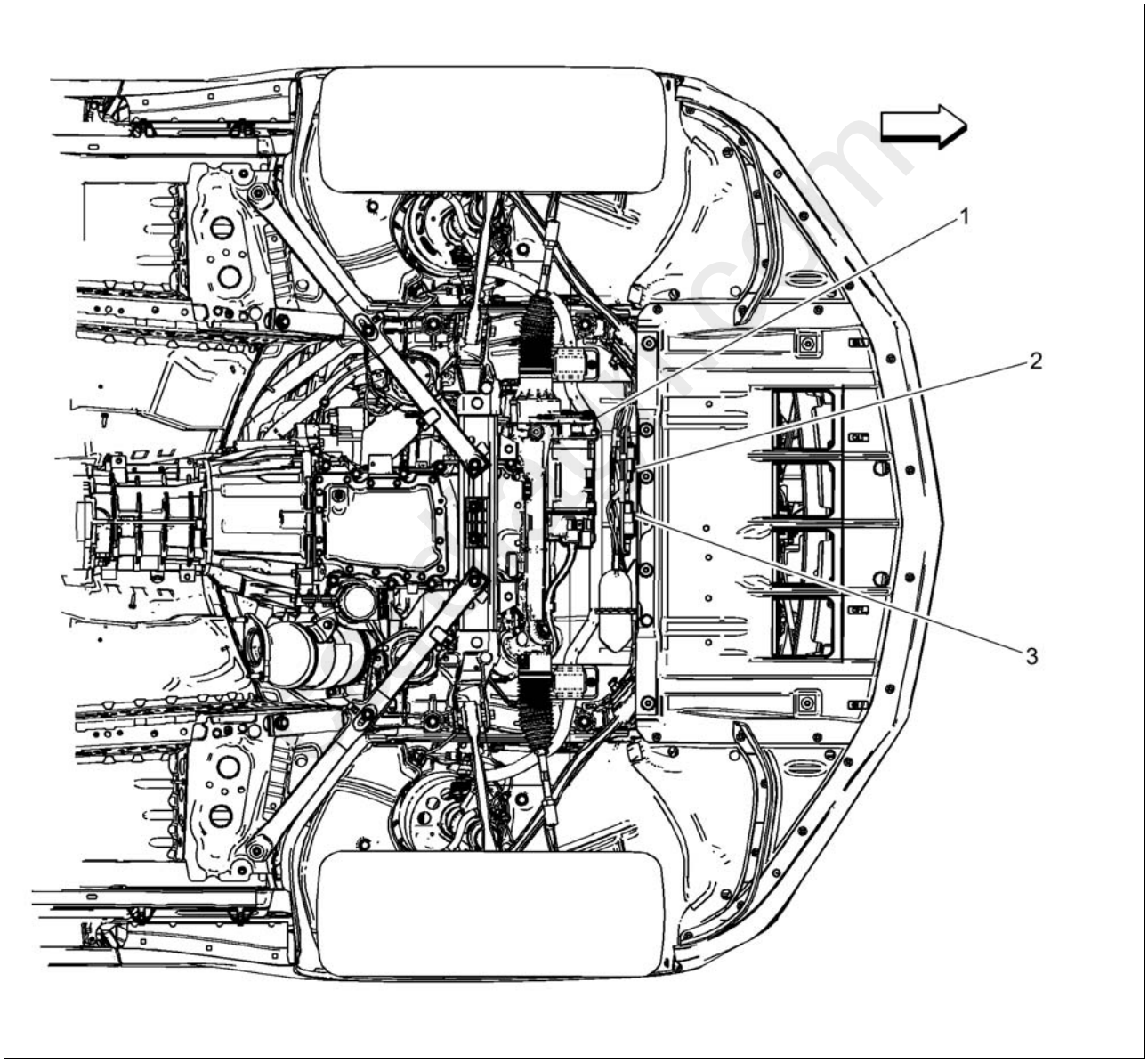
Items
1: F100R Hood Hinge Actuator - Right (B3T) F100R Hood Hinge Actuator - Right
2: M75 Windshield Wiper Motor M79 Windshield Wiper Motor Module
3: F100L Hood Hinge Actuator - Left (B3T) F100L Hood Hinge Actuator - Left
4: B20 Brake Fluid Level Switch B20 Brake Fluid Level Switch
5: B19B Brake Booster Vacuum Sensor B19B Brake Booster Vacuum Sensor
6: G24 Windshield Washer Pump G24 Windshield Washer Pump
7: K17 Electronic Brake Control Module K17 Electronic Brake Control Module (LT1)K17 Electronic Brake Control Module (LTG/LGX)
8: K20 Engine Control Module K20 Engine Control Module X1 (LGX)K20 Engine Control Module X1 (LT1)K20 Engine Control Module X1K20 Engine Control Module X2 (LGX)K20 Engine Control Module X2 (LT1)K20 Engine Control Module X2K20 Engine Control Module X3 (LGX)K20 Engine Control Module X3 (LT1)K20 Engine Control Module X3
9: B75C Multifunction Intake Air Sensor B75C Multifunction Intake Air Sensor
10: B59L Front Impact Sensor - Left B59L Front Impact Sensor - Left

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11: B55 Hood Ajar Switch B55 Hood Ajar Switch
12: K22 Cooling Fan Control Module K22 Cooling Fan Control Module (-Y4Q)K22 Cooling Fan Control Module (LT1)K22 Cooling Fan Control Module (Y4Q)
13: B59R Front Impact Sensor - Right B59R Front Impact Sensor - Right

FRONT OF VEHICLE/ENGINE COMPARTMENT COMPONENT VIEWS > BELOW ENGINE COMPARTMENT COMPONENTS

Fig 1: Below Engine Compartment Components



Courtesy of GENERAL MOTORS COMPANY

Items
1: K43 Power Steering Control Module K43 Power Steering Control Module X1K43 Power Steering

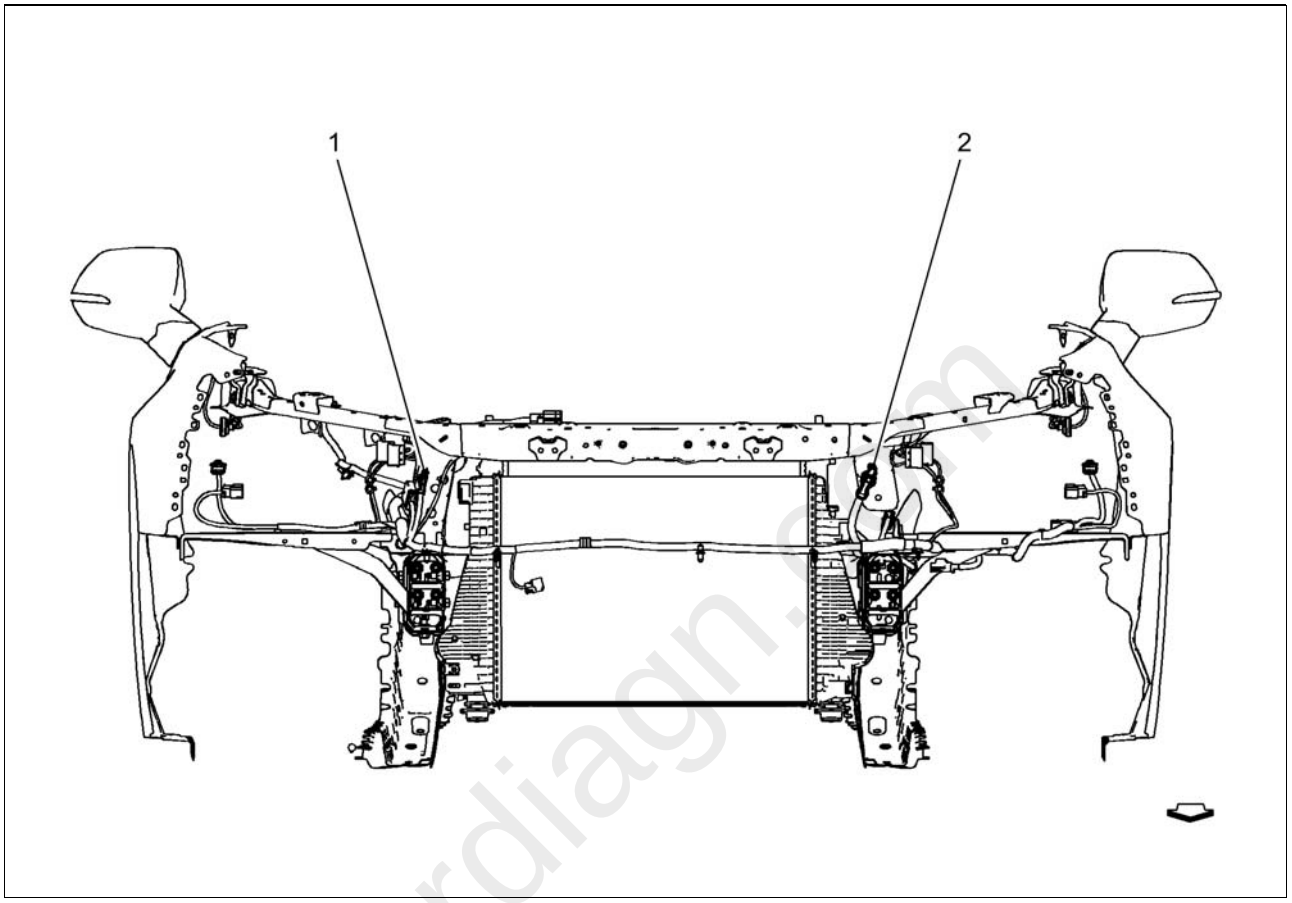
Control Module X2
2: Q80L Engine Mount Solenoid Valve - Left (LTG) Q80L Engine Mount Solenoid Valve - Left
3: Q80R Engine Mount Solenoid Valve - Right (LTG) Q80R Engine Mount Solenoid Valve - Right

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Service Manual: WIRING SYSTEMS AND POWER MANAGEMENT - COMPONENT LOCATOR - GROUND VIEWS

GROUND VIEWS > G101 AND G102

Fig 1: G101 and G102



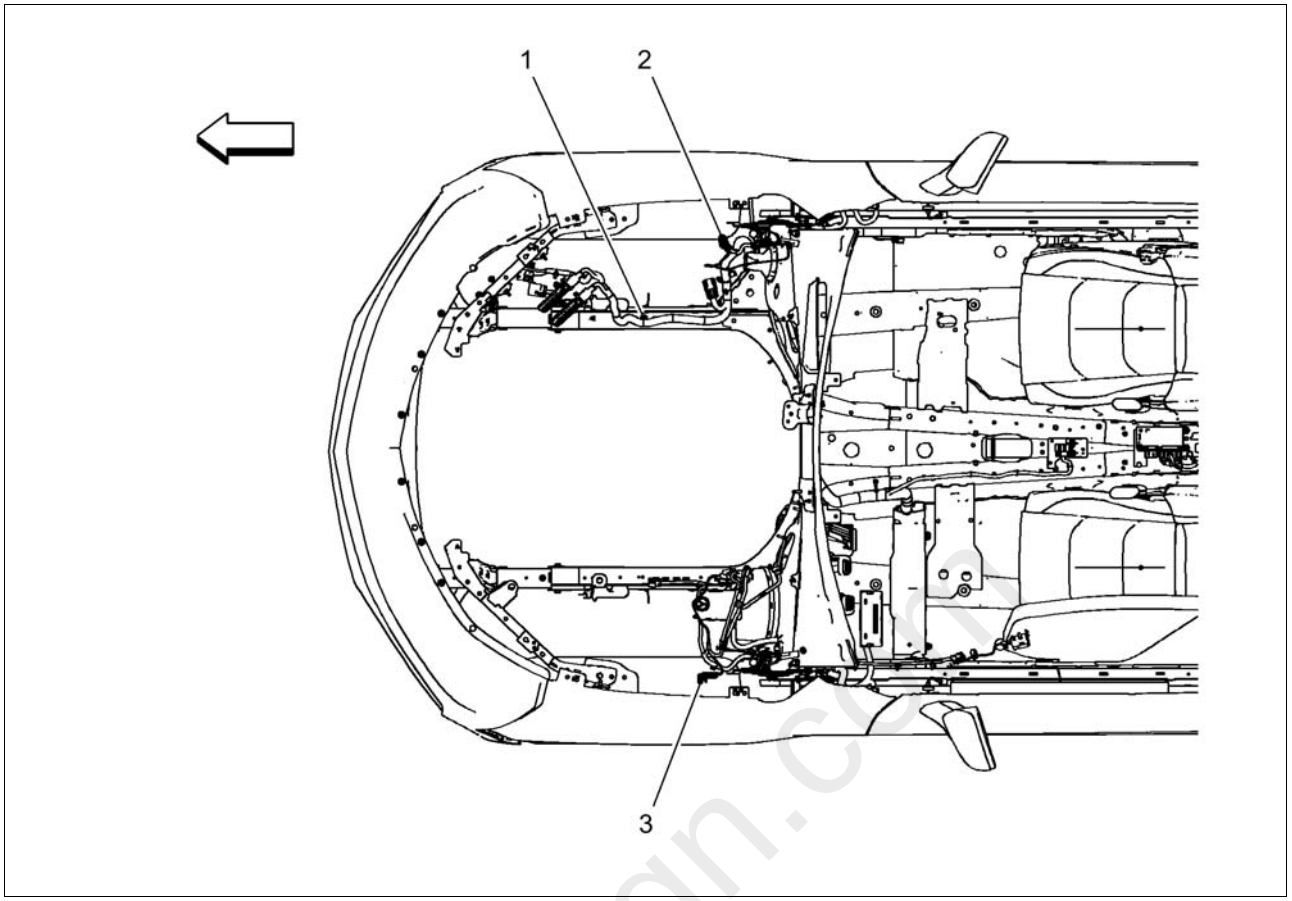
Courtesy of GENERAL MOTORS COMPANY

Items
1:G102
2:G101

GROUND VIEWS > G103, G105, AND G106

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Fig 1: G103, G105, and G106



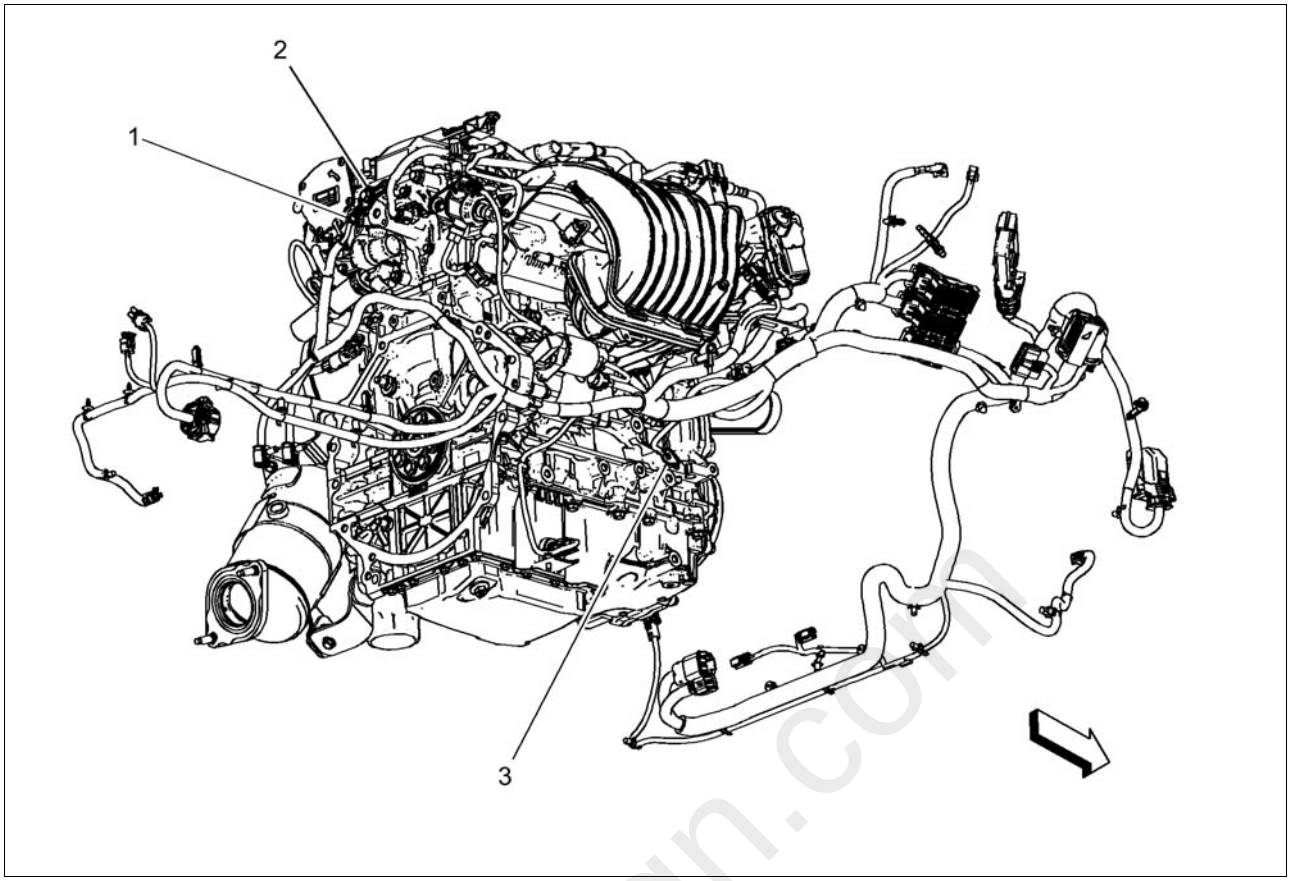
Courtesy of GENERAL MOTORS COMPANY

Items
1:G103
2:G106
3:G105

GROUND VIEWS > G120, G130, AND G140 (LTG)

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Fig 1: G120, G130, and G140 (LTG)



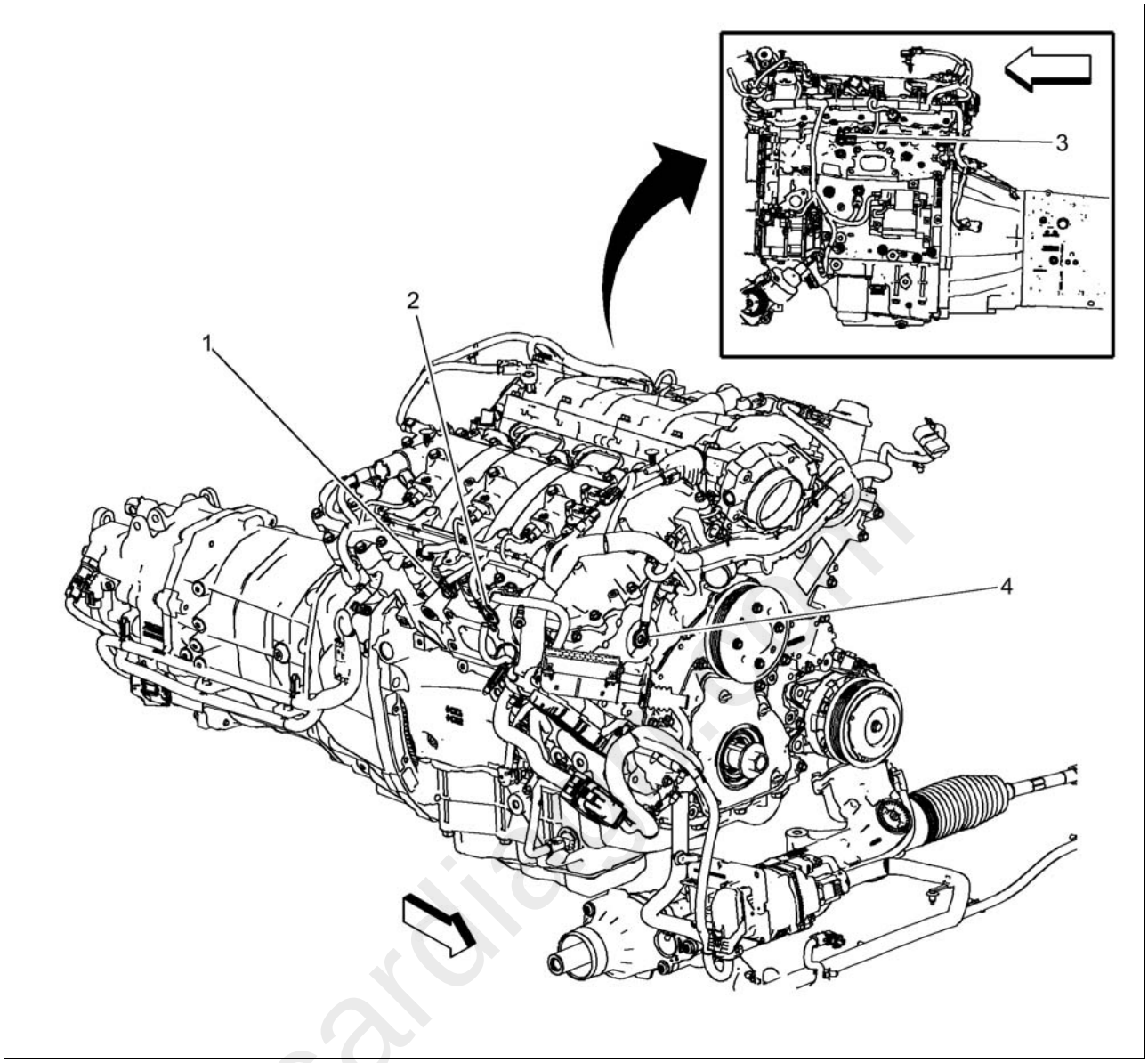
Courtesy of GENERAL MOTORS COMPANY

Items
1:G130
2:G120
3:G140

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GROUND VIEWS > G110, G120, G130 AND G140 (LGX)

Fig 1: G110, G120, G130 and G140 (LGX)

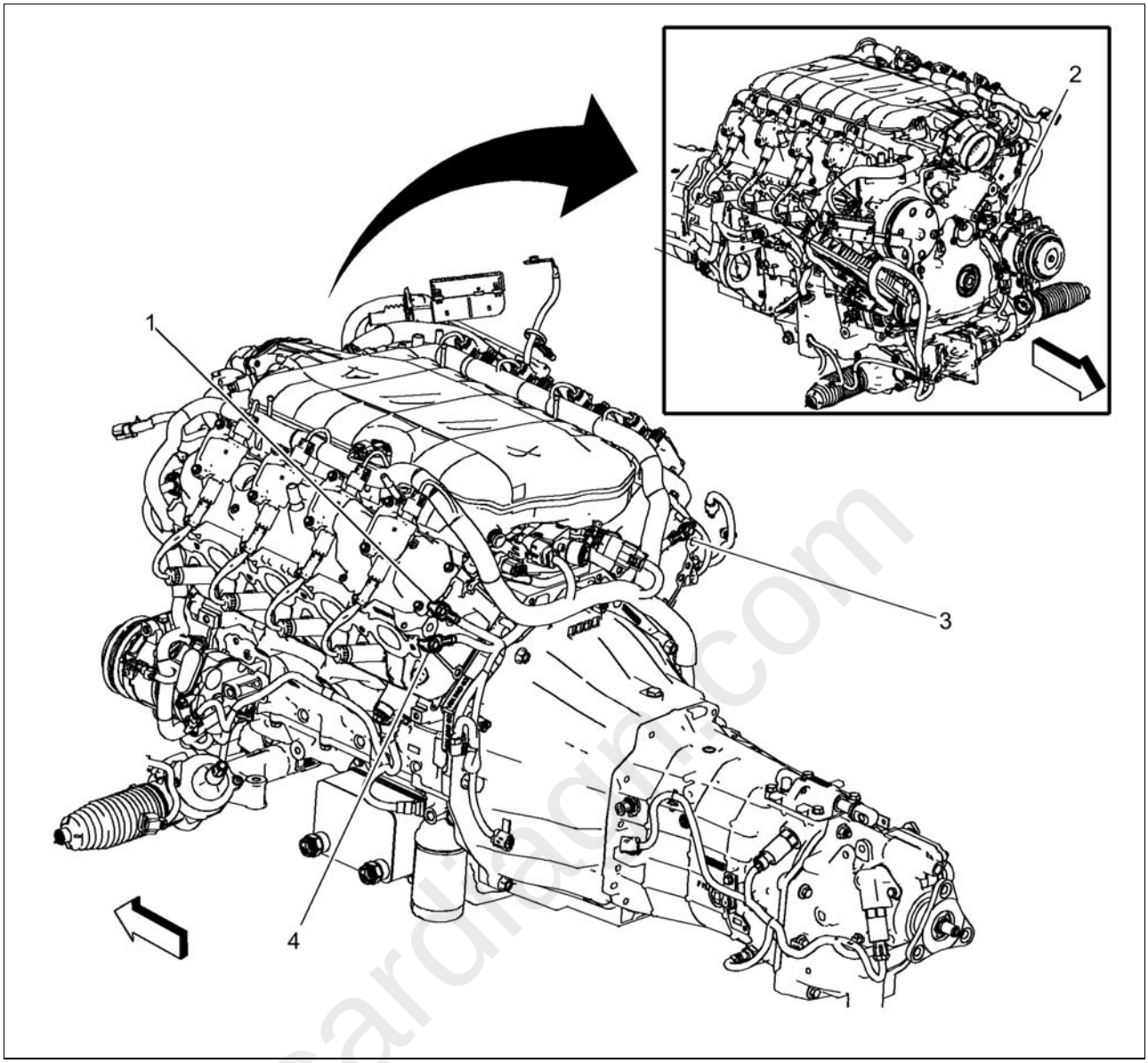


Courtesy of GENERAL MOTORS COMPANY

Items
1:G130
2:G110
3:G120
4:G140

GROUND VIEWS > G110, G120, G130 AND G140 (LT1)

Fig 1: G110, G120, G130 and G140 (LT1)

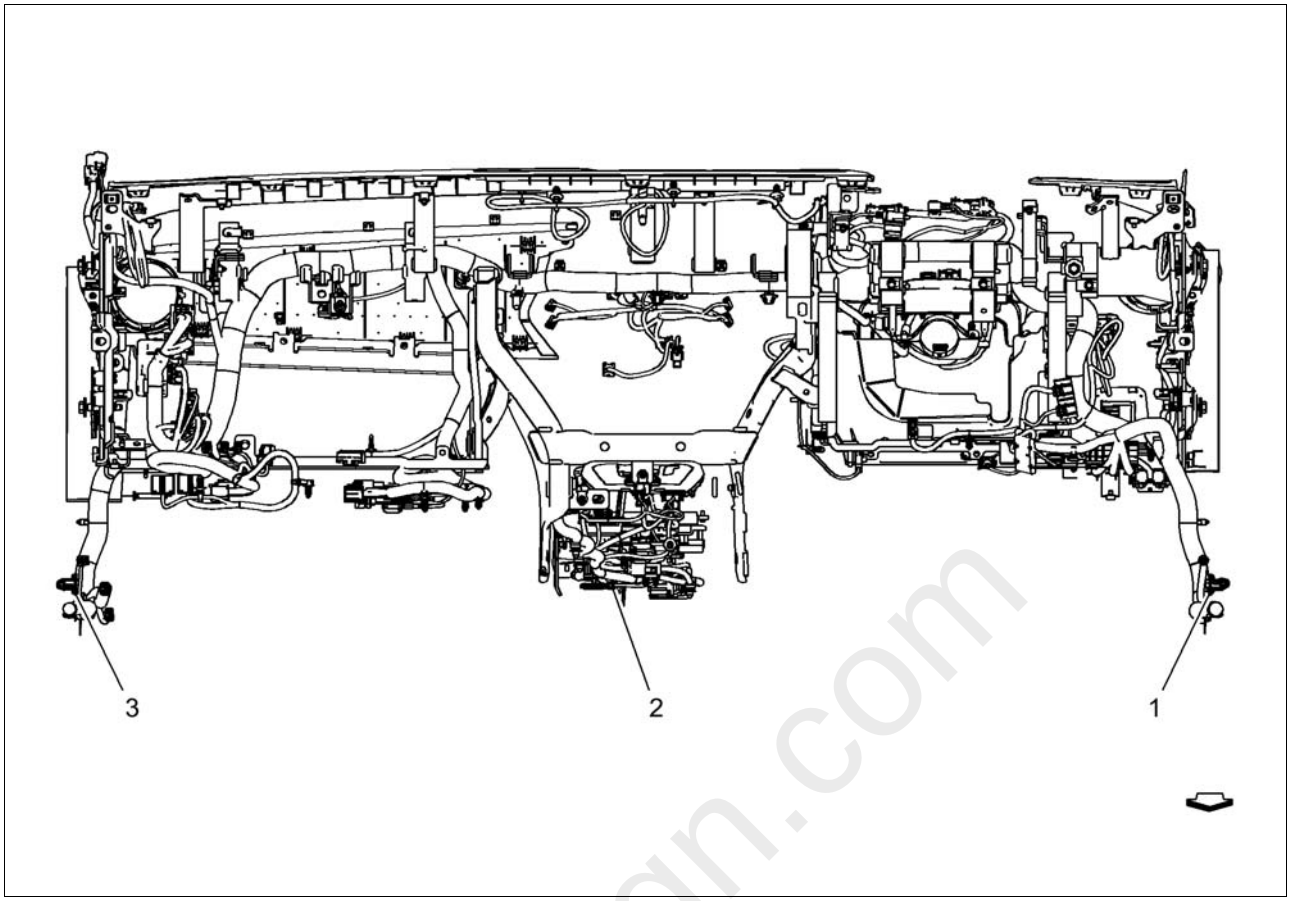


Courtesy of GENERAL MOTORS COMPANY

Items
1:G130
2:G140
3:G120
4:G110

GROUND VIEWS > G201, G202, AND G205

Fig 1: G201, G202, and G205



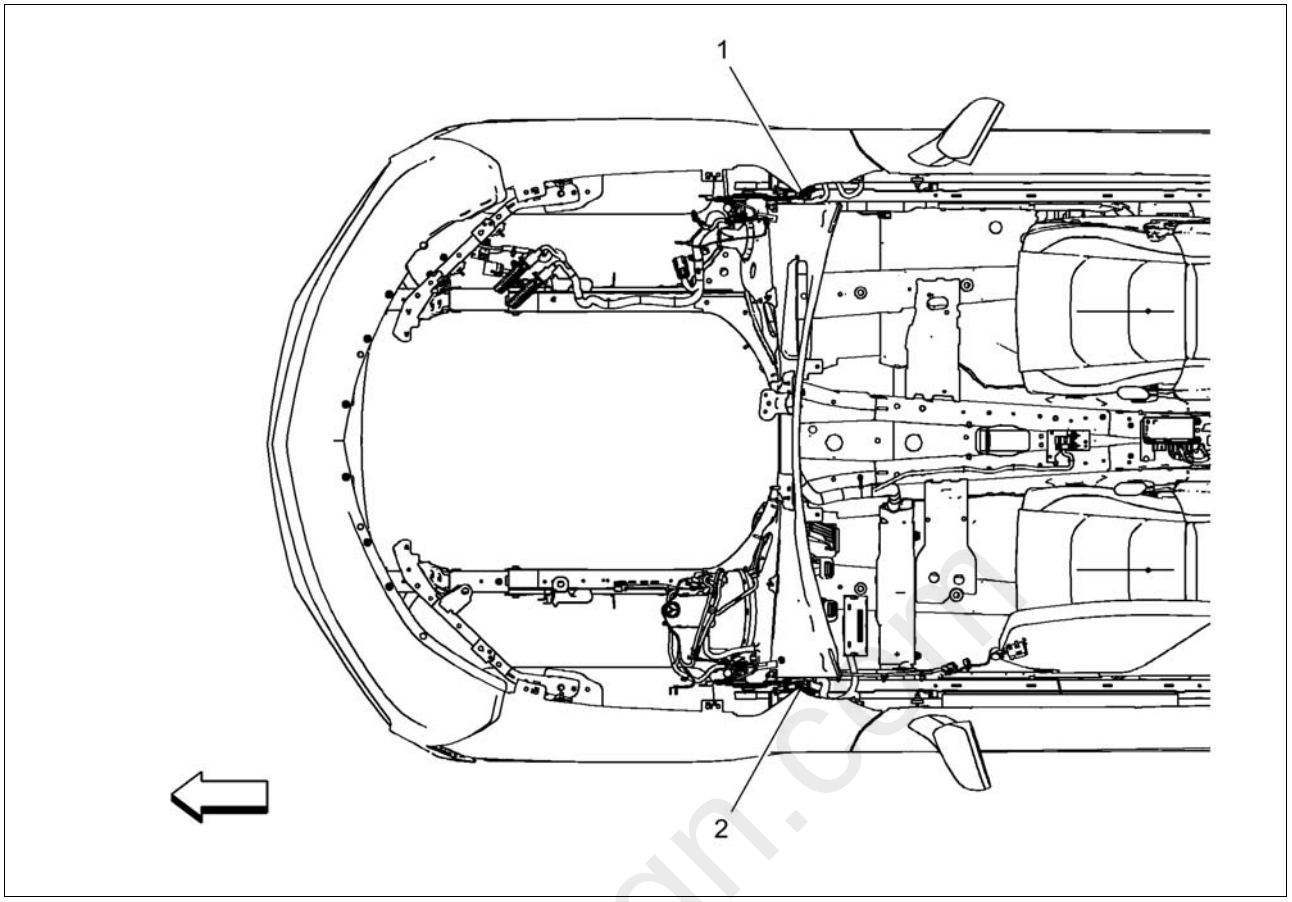
Courtesy of GENERAL MOTORS COMPANY

Items
1:G201
2:G205
3:G202

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GROUND VIEWS > G301 AND G302

Fig 1: G301 and G302



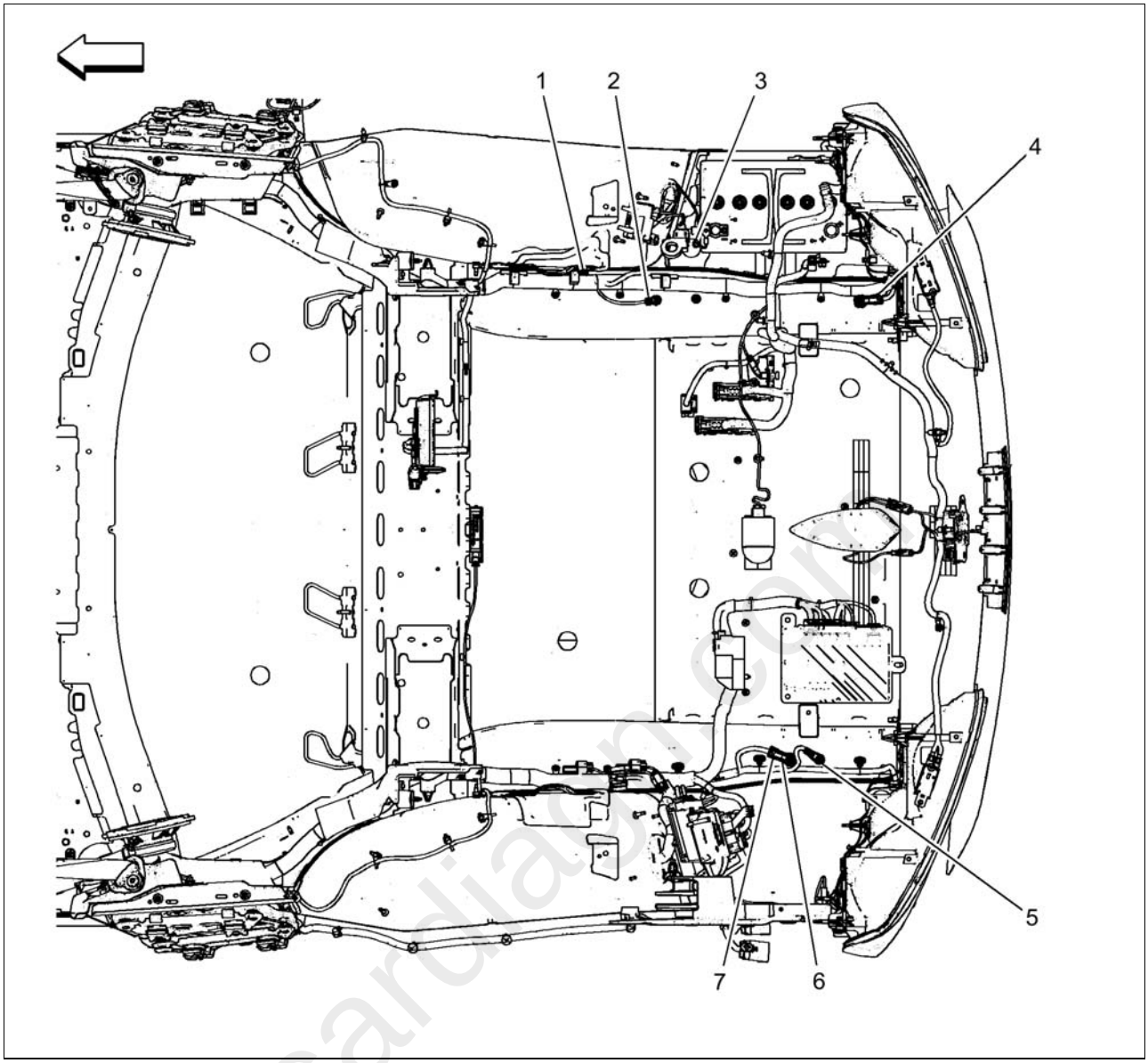
Courtesy of GENERAL MOTORS COMPANY

Items
1:G302
2:G301

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GROUND VIEWS > G303, G304, G305, G400, G401, G402, AND G404

Fig 1: G303, G304, G305, G400, G401, G402, and G404



Courtesy of GENERAL MOTORS COMPANY

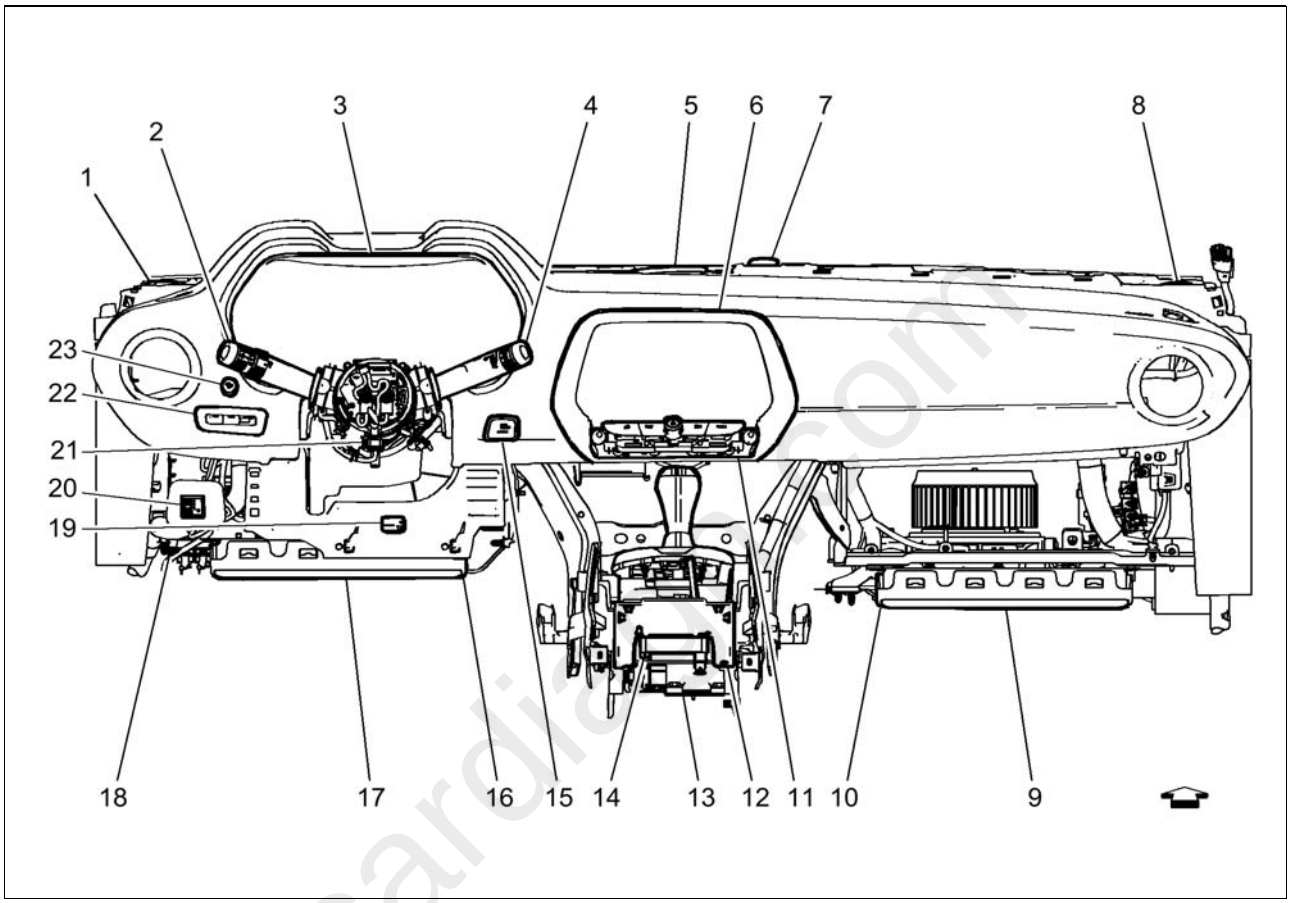
Items
1:G404
2:G402
3:G400
4:G304
5:G305
6:G303
7:G401

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Service Manual: WIRING SYSTEMS AND POWER MANAGEMENT - COMPONENT LOCATOR - INSTRUMENT PANEL/CENTER CONSOLE COMPONENT VIEWS

INSTRUMENT PANEL/CENTER CONSOLE COMPONENT VIEWS > INSTRUMENT PANEL COMPONENTS - FRONT

Fig 1: Instrument Panel Components - Front



Courtesy of GENERAL MOTORS COMPANY

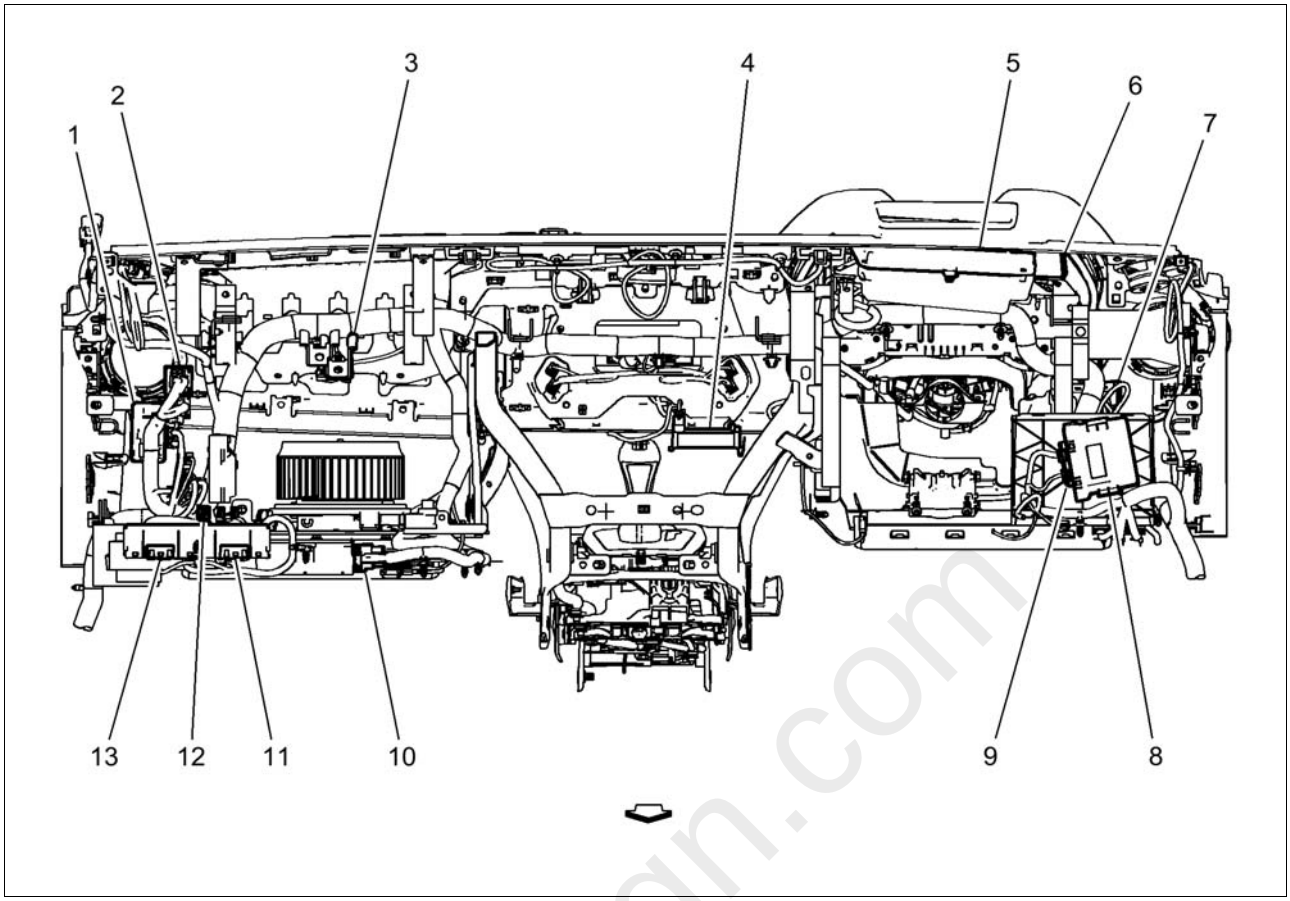
Items
1: P19H Speaker - Left Front Tweeter P19H Speaker - Left Front Tweeter (UQ3)P19H Speaker - Left Front Tweeter (UQA)
2: S78 Turn Signal/Multifunction Switch S78 Turn Signal/Multifunction Switch
3: P16 Instrument Cluster P16 Instrument ClusterP16 Instrument Cluster X3P16 Instrument Cluster X2
4: S82 Windshield Wiper/Washer Switch S82 Windshield Wiper/Washer Switch
5: P19B Speaker - Center Instrument Panel P19B Speaker - Center Instrument Panel
6: P17 Info Display Module P17 Info Display Module (IO5/IO6)P17 Info Display Module (IOB)
7: B10B Ambient Light/Sunload Sensor B10B Ambient Light/Sunload Sensor

8: P19V Speaker - Right Front Tweeter P19V Speaker - Right Front Tweeter (UQ3)P19V Speaker - Right Front Tweeter (UQA)
9: E8K Instrument Panel Courtesy Lamp - Right E8K Instrument Panel Courtesy Lamp - Right
10: F114P Knee Air Bag - Passenger F114P Knee Air Bag - Passenger
11: A22 Radio Controls A26 HVAC Controls (IOB)
12: S3 Transmission Shift Lever (MX0) S3 Transmission Shift Lever
13: K36 Inflatable Restraint Sensing and Diagnostic Module K36 Inflatable Restraint Sensing and Diagnostic Module X1K36 Inflatable Restraint Sensing and Diagnostic Module X2
14: T10K Keyless Entry Antenna - Center Console Rear T10K Keyless Entry Antenna - Center Console Rear
15: S38 Ignition Mode Switch S38 Ignition Mode Switch
16: F114D Knee Air Bag - Driver F114D Knee Air Bag - Driver
17: E8J Instrument Panel Courtesy Lamp - Left E8J Instrument Panel Courtesy Lamp - Left
18: K9 Body Control Module K9 Body Control Module X1K9 Body Control Module X2K9 Body Control Module X3K9 Body Control Module X4
19: K60 Steering Column Lock Module (N06) K60 Steering Column Lock Module
20: S42 Headlamp Leveling Switch (TR6) S42 Headlamp Leveling Switch
21: B99 Steering Wheel Angle Sensor B99 Steering Wheel Angle Sensor
22: S27 Head-Up Display Switch (UV6) S27 Head-Up Display Switch
23: S36 Instrument Panel Dimmer Switch S36 Instrument Panel Dimmer Switch

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INSTRUMENT PANEL/CENTER CONSOLE COMPONENT VIEWS > INSTRUMENT PANEL COMPONENTS - REAR

Fig 1: Instrument Panel Components - Rear



Courtesy of GENERAL MOTORS COMPANY

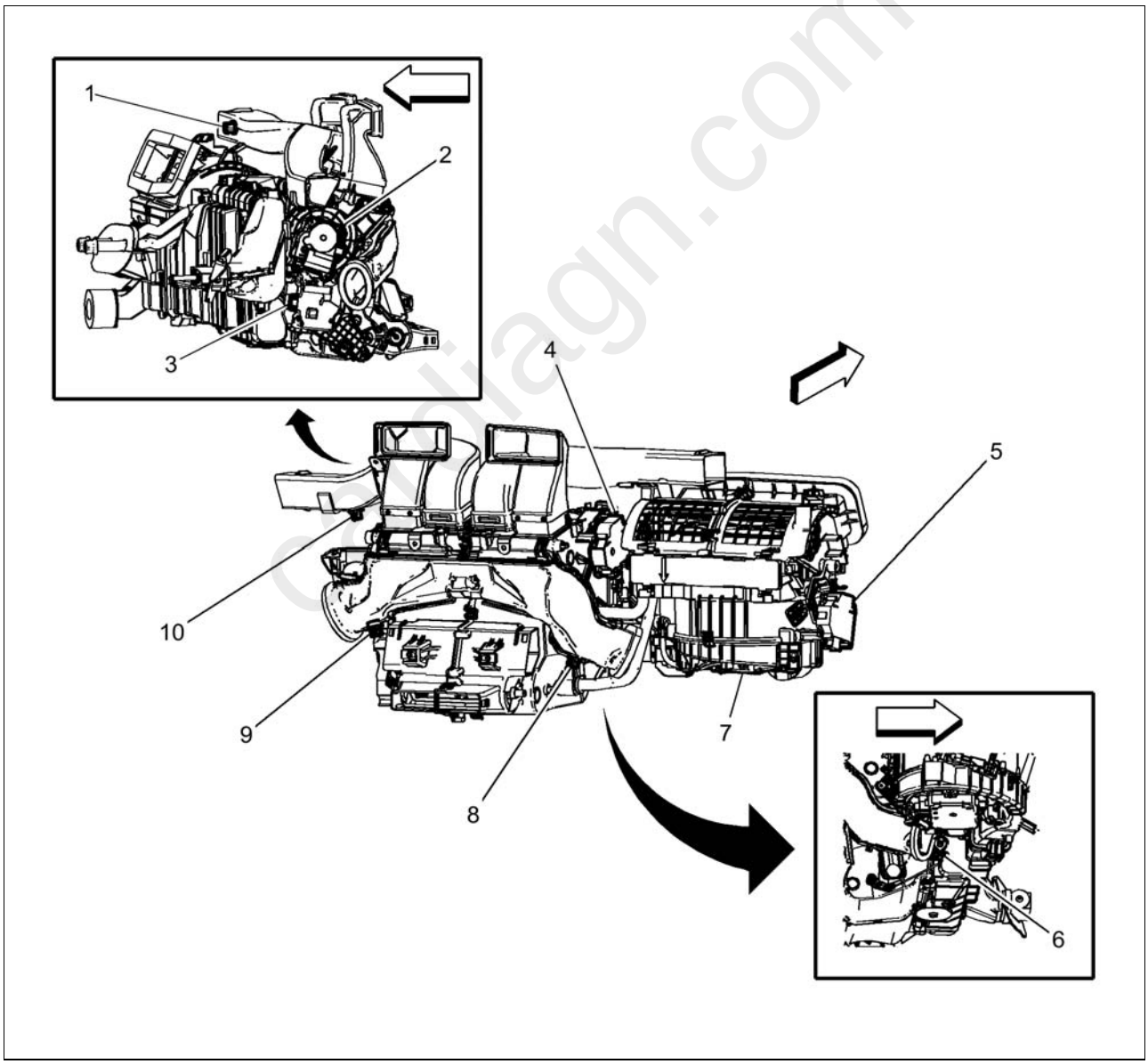
Items
1: K126 Accent Lamp Control Module (C70) K126 Accent Lamp Control Module
2: A11 Radio A11 Radio X1 (IO5/IO6)A11 Radio X1 (IOB)A11 Radio X2 (IO5/IO6)A11 Radio X2 (IOB)A11 Radio X3A11 Radio X3 (IOB)A11 Radio X4 (IO5/IO6)A11 Radio X4 (IOB)A11 Radio X5 (IO5/IO6)A11 Radio X5 (IOB)A11 Radio X6 (IO5/IO6)A11 Radio X7 (IOB)A11 Radio X9 (IO5/IO6)
3: F101 Passenger Instrument Panel Air Bag F101 Passenger Instrument Panel Air Bag X1F101 Passenger Instrument Panel Air Bag X2
4: T10J Keyless Entry Antenna - Center Console Front T10J Keyless Entry Antenna - Center Console Front
5: P29 Head-Up Display (UV6) P29 Head-Up Display
6: P17 Info Display Module P17 Info Display Module (IO5/IO6)P17 Info Display Module (IOB)
7: S27 Head-Up Display Switch (UV6) S27 Head-Up Display Switch
8: S42 Headlamp Leveling Switch (TR6) S42 Headlamp Leveling Switch
9: K56 Serial Data Gateway Module K56 Serial Data Gateway Module X1

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10: K31 Navigation Control Module (IO6 with MAW) K31 Navigation Control Module X1K31 Navigation Control Module X2K31 Navigation Control Module X3K31 Navigation Control Module X5K31 Navigation Control Module X6K31 Navigation Control Module X7
11: K74 Human Machine Interface Control Module (IO5 or IO6) K74 Human Machine Interface Control Module X1
12: T15 Navigation Antenna Signal Splitter T15 Navigation Antenna Signal Splitter X1
13: K33 HVAC Control Module K33 HVAC Control Module X1K33 HVAC Control Module X2K33 HVAC Control Module X3K33 HVAC Control Module X4

INSTRUMENT PANEL/CENTER CONSOLE COMPONENT VIEWS > HVAC MODULE COMPONENTS

Fig 1: HVAC Module Components



Courtesy of GENERAL MOTORS COMPANY

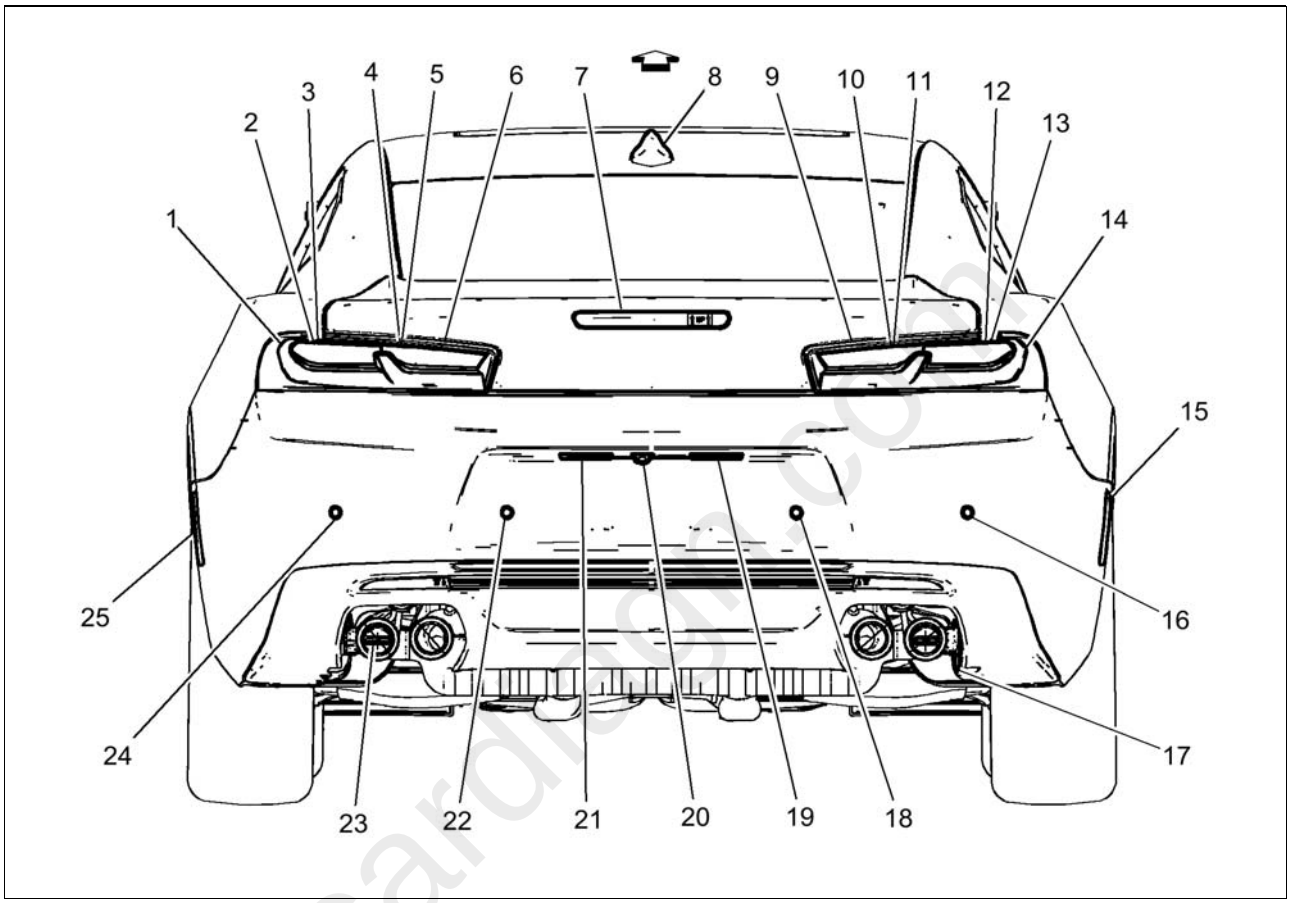
Items
1: B7J Air Temperature Sensor - Duct Right Upper B7J Air Temperature Sensor - Duct Right Upper
2: M37 Mode Door Actuator M37 Mode Door Actuator
3: M6L Air Temperature Door Actuator - Left M6L Air Temperature Door Actuator - Left
4: M6R Air Temperature Door Actuator - Right M6R Air Temperature Door Actuator - Right
5: M46 Air Recirculation Door Actuator M46 Air Recirculation Door Actuator
6: B39 A/C Evaporator Temperature Sensor B39 A/C Evaporator Temperature Sensor
7: M8 Blower Motor M8 Blower Motor
8: B7E Air Temperature Sensor - Duct Right Lower B7E Air Temperature Sensor - Duct Right Lower
9: B7D Air Temperature Sensor - Duct Left Lower B7D Air Temperature Sensor - Duct Left Lower
10: B7H Air Temperature Sensor - Duct Left Upper B7H Air Temperature Sensor - Duct Left Upper

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Service Manual: WIRING SYSTEMS AND POWER MANAGEMENT - COMPONENT LOCATOR - LUGGAGE COMPARTMENT/REAR OF VEHICLE COMPONENT VIEWS

LUGGAGE COMPARTMENT/REAR OF VEHICLE COMPONENT VIEWS > REAR OF VEHICLE COMPONENTS

Fig 1: Rear of Vehicle Components



Courtesy of GENERAL MOTORS COMPANY

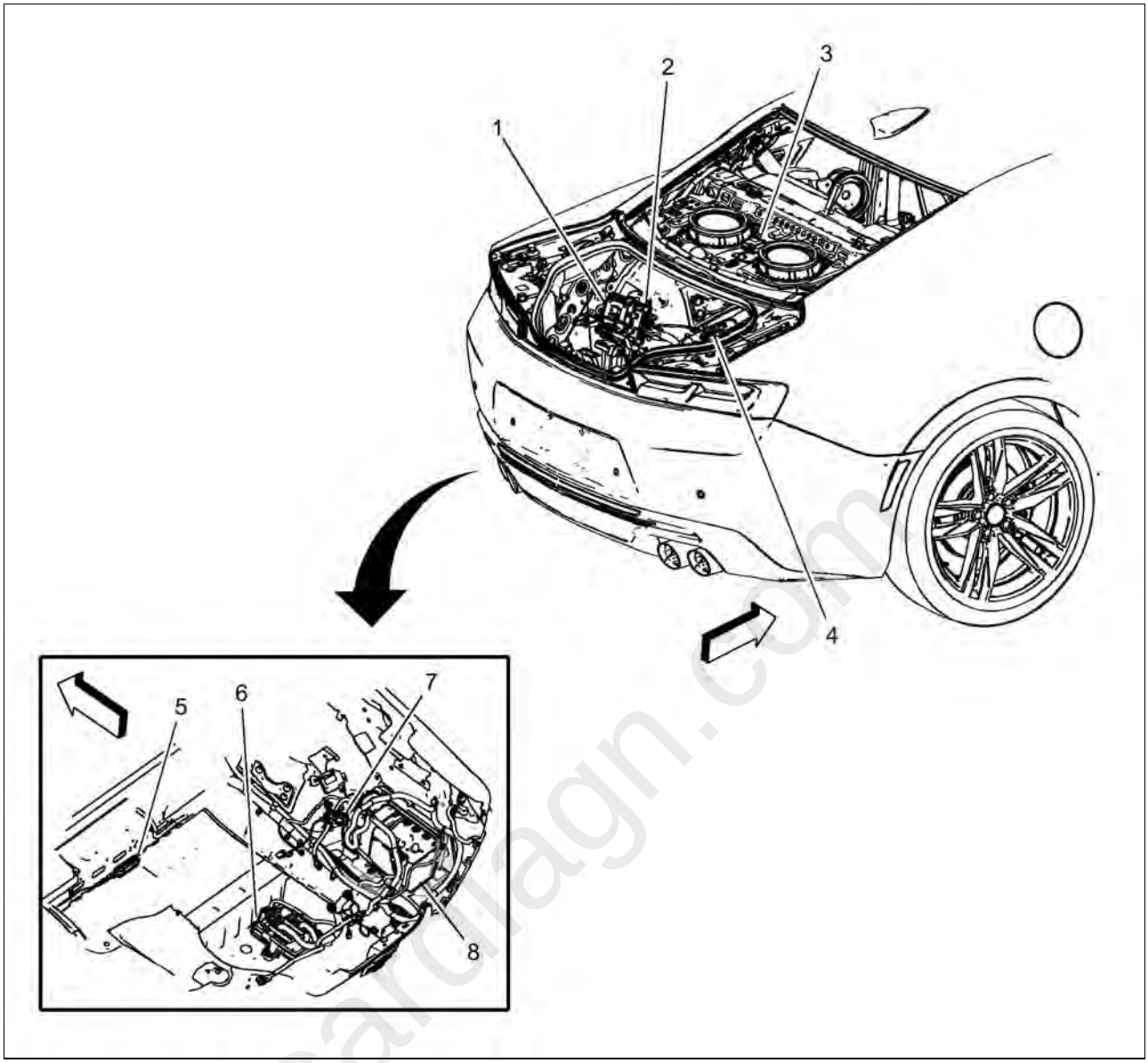
Items
1: E5E Tail Lamp - Left
2: E5L Stop Lamp - Left (T90)
3: E5AM Stop/Turn Signal Lamp - Left (except T90)
4: E4LR Turn Signal Lamp - Left Rear (T90)
5: E5A Backup Lamp - Left (except T90)
6: E42L Tail Lamp Assembly - Left
7: E6 Center High Mounted Stop Lamp E6 Center High Mounted Stop Lamp
8: T2RR Antenna - Roof Rear T2RR Antenna - Roof Rear X3T2RR Antenna - Roof Rear X4

9: E42R Tail Lamp Assembly - Right
10: E4RR Turn Signal Lamp - Right Rear (T90)
11: E5B Backup Lamp - Right (except T90)
12: E5R Stop Lamp - Right (T90)
13: E5AN Stop/Turn Signal Lamp - Right (except T90)
14: E5F Tail Lamp - Right
15: E2RR Side Marker Lamp - Right Rear (except T90) E2RR Side Marker Lamp - Right Rear
16: B78H Rear Object Sensor - Right Outer (UD7) B78H Rear Object Sensor - Right Outer
17: Q15R Exhaust Flow Control Valve - Right (NPP) Q15R Exhaust Flow Control Valve - Right
18: B78F Rear Object Sensor - Right Middle (UD7) B78F Rear Object Sensor - Right Middle
19: E7R License Plate Lamp - Right E7R License Plate Lamp - Right
20: B87 Rearview Camera B87 Rearview Camera
21: E7L License Plate Lamp - Left E7L License Plate Lamp - Left
22: B78E Rear Object Sensor - Left Middle (UD7) B78E Rear Object Sensor - Left Middle
23: Q15L Exhaust Flow Control Valve - Left (NPP) Q15L Exhaust Flow Control Valve - Left
24: B78E Rear Object Sensor - Left Middle (UD7) B78E Rear Object Sensor - Left Middle
25: E2LR Side Marker Lamp - Left Rear (except T90) E2LR Side Marker Lamp - Left Rear

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LUGGAGE COMPARTMENT/REAR OF VEHICLE COMPONENT VIEWS > LUGGAGE COMPARTMENT COMPONENTS

Fig 1: Luggage Compartment Components



Courtesy of GENERAL MOTORS COMPANY

Items
1:K182 (UD7) K182 Parking Assist Control Module X1
2: K84 Keyless Entry Control Module K84 Keyless Entry Control Module X1K84 Keyless Entry Control Module X2
R6D R6D Terminating Resistor 2 - High Speed BusR6D Terminating Resistor 2- High Speed Bus
4: C1 Battery C1 Battery
5: B18 Battery Current Sensor B18 Battery Current Sensor
6: K77 Remote Control Door Lock Receiver K77 Remote Control Door Lock Receiver
7: X53A Fuse Block - Rear Body X53A Fuse Block - Rear Body X1X53A Fuse Block - Rear Body X2X53A Fuse Block - Rear Body X3

8: T10E Keyless Entry Antenna - Rear Compartment T10E Keyless Entry Antenna - Rear Compartment

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Service Manual: WIRING SYSTEMS AND POWER MANAGEMENT - COMPONENT LOCATOR - MASTER ELECTRICAL COMPONENT LIST

MASTER ELECTRICAL COMPONENT LIST

Code	Name	Option	Location	Locator View	Connector End View
A3L	Sunshade - Left	-	In the passenger compartment, at left front attached to the headliner	• Headliner Components (Convertible) • Headliner Components (Coupe)	A3L Sunshade - Left
A3R	Sunshade - Right	-	In the passenger compartment, at right front attached to the headliner	• Headliner Components (Coupe) • Headliner Components (Convertible)	A3R Sunshade - Right
A7	Fuel Pump and Level Sensor Assembly	-	In the vehicle underbody, mounted to the top of the fuel tank, right of center	Fuel Tank Components	-
A9A	Outside Rearview Mirror - Driver	-	On outside of driver door, front middle, forward of window opening	Front of Vehicle Components	-
A9B	Outside Rearview Mirror - Passenger	-	On outside of passenger door, front middle, forward of window opening	Front of Vehicle Components	-
A10	Inside Rearview Mirror	-	In the passenger compartment, front center of the headliner	• Headliner Components (Convertible) • Headliner	A10 Inside Rearview Mirror

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				Components (Coupe)	
A11	Radio	-	In the passenger compartment, right front, within the instrument panel, between instrument panel compartment and A-pillar	Instrument Panel Components - Rear	• A11 Radio X1 (IO5/IO6) • A11 Radio X2 (IO5/IO6) • A11 Radio X3 • A11 Radio X4 (IO5/IO6) • A11 Radio X5 (IO5/IO6) • A11 Radio X6 (IO5/IO6) • A11 Radio X9 (IO5/IO6) • A11 Radio X1 (IOB) • A11 Radio X2 (IOB) • A11 Radio X3 (IOB) • A11 Radio X4 (IOB) • A11 Radio X5 (IOB) • A11 Radio X7 (IOB)
A22	Radio Controls	-	In the passenger compartment, at the center of the instrument panel, part of the info display module	Instrument Panel Components - Front	A26 HVAC Controls (IOB)
A23D	Door Latch Assembly - Driver	-	Inside driver door, at rear	Driver Door Trim Components	A23D Door Latch Assembly - Driver

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A23P	Door Latch Assembly - Passenger	-	Inside passenger door, at rear	Passenger Door Trim Components	A23P Door Latch Assembly - Passenger
A24D	Door Handle Assembly - Driver Exterior	-	On outside of driver door, at rear	Driver Door Components	A24D Door Handle Assembly - Driver Exterior
A24P	Door Handle Assembly - Passenger Exterior	-	On outside of passenger door, at rear	Passenger Door Components	A24P Door Handle Assembly - Passenger Exterior
A26	HVAC Controls	-	In the passenger compartment, at the front of the center console, above the center air vents	-	A26 HVAC Controls (IO5/IO6)
B1	A/C Refrigerant Pressure Sensor	-	In the vehicle underbody, front, left of center, rear of bumper, below left frame rail	-	B1 A/C Refrigerant Pressure Sensor
B5LF	Wheel Speed Sensor - Left Front	-	In the vehicle underbody, left front, mounted to knuckle at wheel bearing	Wheelwell Components	B5LF Wheel Speed Sensor - Left Front
B5LR	Wheel Speed Sensor - Left Rear	-	In the vehicle underbody, left rear, mounted to knuckle at wheel bearing	Wheelwell Components	B5LR Wheel Speed Sensor - Left Rear
B5RF	Wheel Speed Sensor - Right Front	-	In the vehicle underbody, right front, mounted to knuckle at wheel bearing	Wheelwell Components	B5RF Wheel Speed Sensor - Right Front
B5RR	Wheel Speed Sensor - Right Rear	-	In the vehicle underbody, right rear, mounted to knuckle at wheel bearing	Wheelwell Components	B5RR Wheel Speed Sensor - Right Rear

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B7D	Air Temperature Sensor - Duct Left Lower	-	In the passenger compartment, front, left of center within the instrument panel, on bottom of lower duct	HVAC Module Components	B7D Air Temperature Sensor - Duct Left Lower
B7E	Air Temperature Sensor - Duct Right Lower	-	In the passenger compartment, front, right of center within the instrument panel, on bottom of lower duct	HVAC Module Components	B7E Air Temperature Sensor - Duct Right Lower
B7H	Air Temperature Sensor - Duct Left Upper	-	In the passenger compartment, front, left of center within the instrument panel, on bottom of upper duct	HVAC Module Components	B7H Air Temperature Sensor - Duct Left Upper
B7J	Air Temperature Sensor - Duct Right Upper	-	In the passenger compartment, front, right of center within the instrument panel, on front of upper duct	HVAC Module Components	B7J Air Temperature Sensor - Duct Right Upper
B9	Ambient Air Temperature Sensor	-	At front of vehicle, right of center, behind fascia, mounted to bumper	-	B9 Ambient Air Temperature Sensor
B10B	Ambient Light/Sunload Sensor	-	In the passenger compartment, front center, in instrument panel, rear of windshield defroster outlet	Instrument Panel Components - Front	B10B Ambient Light/Sunload Sensor

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B13	Transmission Fluid Temperature Sensor	MX0	Under the vehicle, inside the transmission assembly	Automatic Transmission Valve Body Components (M5T or M5U)	B13 Transmission Fluid Temperature Sensor
B14A	Transmission Output Shaft Speed Sensor	-	In the vehicle underbody, near center, forward of middle, inside the automatic transmission assembly	• Manual Transmission Components (MM6) • Automatic Transmission Case Components (M5T or M5U) • Manual Transmission Components (M13)	B14A Transmission Output Shaft Speed Sensor
B14C	Transmission Input Shaft Speed Sensor	MX0	Under the vehicle, inside the transmission assembly	Automatic Transmission Case Components (M5T or M5U)	-
B14D	Transmission Intermediate Shaft Speed Sensor	MX0	Under the vehicle, inside the transmission assembly	Automatic Transmission Case Components (M5T or M5U)	-
B15	Transmission Internal Mode Switch	MX0	Under the vehicle, inside the transmission assembly	Automatic Transmission Case Components (M5T or M5U)	B15 Transmission Internal Mode Switch
B16	Backup Lamp Switch	MN6	Under the vehicle, mounted to the transmission assembly	Manual Transmission Components (M13)	B16 Backup Lamp Switch
B18	Battery Current Sensor	-	In the luggage compartment, near the Battery	Luggage Compartment Components	B18 Battery Current Sensor
B19B	Brake Booster Vacuum Sensor	-	In the engine compartment, at rear left,	Engine Compartment Components	B19B Brake Booster Vacuum Sensor

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			mounted to vacuum booster		
B20	Brake Fluid Level Switch	-	In the engine compartment, at rear left, mounted to master cylinder	Engine Compartment Components	B20 Brake Fluid Level Switch
B22	Brake Pedal Position Sensor	-	In the passenger compartment, left front, at near top of brake pedal	Passenger Compartment Components - Left Front	B22 Brake Pedal Position Sensor
B23A	Camshaft Position Sensor - Bank 1 Exhaust	LGX	In the engine compartment, at the rear of bank 1 cylinder head	Engine Components - Right Rear (LGX)	B23A Camshaft Position Sensor - Bank 1 Exhaust
B23B	Camshaft Position Sensor - Bank 1 Intake	LGX	In the engine compartment, at the rear of bank 1 cylinder head	Engine Components - Right Rear (LGX)	B23B Camshaft Position Sensor - Bank 1 Intake
B23C	Camshaft Position Sensor - Bank 2 Exhaust	LGX	In the engine compartment, at the rear of bank 2 cylinder head	Engine Components - Left Rear (LGX)	B23C Camshaft Position Sensor - Bank 2 Exhaust
B23D	Camshaft Position Sensor - Bank 2 Intake	LGX	In the engine compartment, at the rear of bank 2 cylinder head	Engine Components - Left Rear (LGX)	B23D Camshaft Position Sensor - Bank 2 Intake
B23E	Camshaft Position Sensor - Exhaust	LTG	In the engine compartment, rear left of center, mounted to cylinder head, on left side	Engine Components - Rear (LTG)	B23E Camshaft Position Sensor - Exhaust
B23F	Camshaft Position Sensor - Intake	LTG	In the engine compartment, rear right of center, mounted to cylinder head,	Engine Components - Rear (LTG)	B23F Camshaft Position Sensor - Intake

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			on right lower side		
B23	Camshaft Position Sensor	LT1	In the engine compartment, front middle of the engine	-	B23 Camshaft Position Sensor
B24	Cellular Phone Microphone	-	In the passenger compartment, in the left A-Pillar Trim	-	B24 Cellular Phone Microphone
B25B	Clutch Pedal Position Sensor	MN6	In the passenger compartment, above the driver footwell, mounted to the arm of the clutch pedal	Passenger Compartment Components - Left Front	B25B Clutch Pedal Position Sensor
B26	Crankshaft Position Sensor	-	In the engine compartment, right of center, near rear, mounted to right side of engine block	• Engine Components - Right Rear (LGX) • Engine Components - Right Side (LT1) • Engine Components - Right Side on Intake Manifold (LTG)	• B26 Crankshaft Position Sensor (LGX) • B26 Crankshaft Position Sensor (LT1/LTG)
B27D	Door Handle Switch - Driver Exterior	-	On outside of driver door, at rear, part of door handle assembly	-	-
B27P	Door Handle Switch - Passenger Exterior	-	On outside of passenger door, at rear, part of door handle assembly	-	-

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B34	Engine Coolant Temperature Sensor	-	In the engine compartment, right of center, rear, mounted to coolant outlet near rear of bank 1 cylinder head	• Top of Engine Components (LT1) • Engine Components - Front (LGX) • Engine Components - Rear (LTG)	B34 Engine Coolant Temperature Sensor
B35	Engine Oil Level Switch	-	In the engine compartment, center, near front, mounted to front of oil pan	• Engine Components - Engine Oil Level Sensor (LGX) • Engine Components - Right Side on Intake Manifold (LTG) • Engine Components - Right Side (LT1)	B35 Engine Oil Level Switch
B36	Engine Oil Temperature Sensor	-	In the engine compartment, at the left side of the engine, in the oil filter housing	Engine Components - Left Front (LT1)	B36 Engine Oil Temperature Sensor
B37B	Engine Oil Pressure Sensor	-	In the engine compartment, left of center, near front lower, mounted to oil cooler adapter	• Top of Engine Components (LT1) • Engine Components - Left Rear (LGX) • Engine Components - Right Side Behind Intake Manifold	• B37B Engine Oil Pressure Sensor (LGX) • B37B Engine Oil Pressure Sensor (LTG)

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				(LTG)	
B39	A/C Evaporator Temperature Sensor	-	In the passenger compartment, front, left of center, on right side of HVAC assembly	HVAC Module Components	B39 A/C Evaporator Temperature Sensor
B43	Folding Top Luggage Barrier Sensor	CM8	In the luggage compartment	-	B43 Folding Top Luggage Barrier Sensor
B46A	Fuel Level Sensor - Primary	-	In the vehicle underbody, on fuel tank	Fuel Tank Components	-
B46B	Fuel Level Sensor - Secondary	-	In the vehicle underbody, on fuel tank, part of the fuel level sensor assembly	Fuel Tank Components	-
B47B	Fuel Rail Pressure Sensor	-	In the engine compartment, near middle rear, mounted to bank 2 fuel rail on inboard side of bank 2 cylinder head	• Engine Components - Right Side Behind Intake Manifold (LTG) • Engine Components - Fuel Rail Components (LGX) • Top of Engine Components (LT1)	• B47B Fuel Rail Pressure Sensor (LGX) • B47B Fuel Rail Pressure Sensor (LT1) • B47B Fuel Rail Pressure Sensor (LTG)
B47	Fuel Pressure Sensor	-	Under the vehicle, near the fuel tank	Fuel Tank Components	-
B52A	Heated Oxygen Sensor 1	LTG	In the engine compartment, left of center near middle, mounted to catalytic converter, near	Engine Components - Rear (LTG)	B52A Heated Oxygen Sensor 1

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			turbocharger		
B52B	Heated Oxygen Sensor 2	LTG	In the engine compartment, rear, left of center, mounted to catalytic converter, near transmission	Engine Components - Rear (LTG)	B52B Heated Oxygen Sensor 2
B52C	Heated Oxygen Sensor - Bank 1 Sensor 1	LGX or LT1	In the engine compartment, on bank 1 exhaust pipe, before the catalytic converter	• Engine Components - Right Rear (LGX) • Oxygen Sensors (LGX) • Oxygen Sensors (LT1)	• B52C Heated Oxygen Sensor - Bank 1 Sensor 1 (LGX) • B52C Heated Oxygen Sensor - Bank 1 Sensor 1 (LT1)
B52D	Heated Oxygen Sensor - Bank 1 Sensor 2	LGX or LT1	In the engine compartment, on bank 1 exhaust pipe, after the catalytic converter	• Oxygen Sensors (LGX) • Oxygen Sensors (LT1) • Engine Components - Left Rear (LGX)	• B52D Heated Oxygen Sensor - Bank 1 Sensor 2 (LGX) • B52D Heated Oxygen Sensor - Bank 1 Sensor 2 (LT1)
B52E	Heated Oxygen Sensor - Bank 2 Sensor 1	LGX or LT1	In the engine compartment, on bank 2 exhaust pipe, before the catalytic converter	• Oxygen Sensors (LT1) • Engine Components - Left Rear (LGX) • Oxygen Sensors (LGX)	• B52E Heated Oxygen Sensor - Bank 2 Sensor 1 (LGX) • B52E Heated Oxygen Sensor - Bank 2 Sensor 1 (LT1)

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B52F	Heated Oxygen Sensor - Bank 2 Sensor 2	LGX or LT1	In the engine compartment, on bank 2 exhaust pipe, after the catalytic converter	• Oxygen Sensors (LGX) • Engine Components - Left Rear (LGX) • Oxygen Sensors (LT1)	• B52F Heated Oxygen Sensor - Bank 2 Sensor 2 (LGX) • B52F Heated Oxygen Sensor - Bank 2 Sensor 2 (LT1)
B55	Hood Ajar Switch	-	In the engine compartment, at front, center, mounted to the front of the radiator support	Engine Compartment Components	B55 Hood Ajar Switch
B59L	Front Impact Sensor - Left	-	At the front of the vehicle, behind the left side of the front fascia	Engine Compartment Components	B59L Front Impact Sensor - Left
B59R	Front Impact Sensor - Right	-	At the front of the vehicle, behind the right side of the front fascia	Engine Compartment Components	B59R Front Impact Sensor - Right
B60	Passenger Presence Sensor	-	In the passenger compartment, under the passenger seat cushion	-	-
B61P	Seat Belt Tension Sensor - Passenger	-	In the passenger compartment, at the base of the B-Pillar	-	B61P Seat Belt Tension Sensor - Passenger
B62P	Seat Position Sensor - Passenger	-	In the passenger compartment, mounted to the seat track	Passenger Seat Components	B62P Seat Position Sensor - Passenger

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B63LF	Side Impact Sensor - Left Front	-	In the left door, behind the trim panel	Driver Door Trim Components	B63LF Side Impact Sensor - Left Front
B63LR	Side Impact Sensor - Left Rear	-	In the passenger compartment, behind the left rear trim panel	-	B63LR Side Impact Sensor - Left Rear
B63RF	Side Impact Sensor - Right Front	-	In the right door, behind the trim panel	Passenger Door Trim Components	B63RF Side Impact Sensor - Right Front
B63RR	Side Impact Sensor - Right Rear	-	In the passenger compartment, behind the right rear trim panel	-	B63RR Side Impact Sensor - Right Rear
B68A	Knock Sensor 1	-	In the engine compartment, near middle front, between cylinder heads, mounted to top of engine block, below intake manifold	• Engine Components - Right Rear (LGX) • Engine Components - Right Side Behind Intake Manifold (LTG) • Engine Components - Left Front (LT1)	B68A Knock Sensor 1
B68B	Knock Sensor 2	-	In the engine compartment, near middle rear, between cylinder heads, mounted to top of engine block, below intake manifold	• Engine Components - Front (LGX) • Engine Components - Right Side (LT1) • Engine Components - Right Side Behind Intake Manifold (LTG)	B68B Knock Sensor 2

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B74	Manifold Absolute Pressure Sensor	-	In the engine compartment, center near rear, mounted to top of intake manifold, rear of turbocharger boost/intake air temperature sensor	• Engine Components - Right Rear (LGX) • Engine Components - Left Front (LT1) • Engine Components - Right Side on Intake Manifold (LTG)	• B74 Manifold Absolute Pressure Sensor (LGX) • B74 Manifold Absolute Pressure Sensor (LT1) • B74 Manifold Absolute Pressure Sensor (LTG)
B75C	Multifunction Intake Air Sensor	-	In the engine compartment, left front, mounted to air cleaner assembly, near duct feeding bank 2 turbocharger	• Engine Components - Rear (LTG) • Engine Compartment Components	B75C Multifunction Intake Air Sensor
B77LF	Radio Volume Compensator Interior Noise Microphone - Left Front	NKC	In the passenger compartment, at the top rear of the left door trim	Driver Door Trim Components	B77LF Radio Volume Compensator Interior Noise Microphone - Left Front
B77RF	Radio Volume Compensator Interior Noise Microphone - Right Front	NKC	In the passenger compartment, at the top rear of the right door trim	Passenger Door Trim Components	B77RF Radio Volume Compensator Interior Noise Microphone - Right Front
B78E	Rear Object Sensor - Left Middle	UD7	At the rear of the vehicle, mounted in the rear fascia	• Rear of Vehicle Components • Rear of Vehicle Components	B78E Rear Object Sensor - Left Middle
B78F	Rear Object Sensor - Right Middle	UD7	At the rear of the vehicle, mounted in the	Rear of Vehicle Components	B78F Rear Object Sensor - Right Middle

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			rear fascia		
B78G	Rear Object Sensor - Left Outer	UD7	At the rear of the vehicle, mounted in the rear fascia	-	B78G Rear Object Sensor - Left Outer
B78H	Rear Object Sensor - Right Outer	UD7	At the rear of the vehicle, mounted in the rear fascia	Rear of Vehicle Components	B78H Rear Object Sensor - Right Outer
B81B	Park Position Switch	-	In the passenger compartment, center near front, on top right side of shift lever within floor console, part of the shift lever	-	-
B82F	Pedestrian Impact Detection Sensor - Upper Beam Front	B3T	At the front of the vehicle, behind the middle of the front fascia	-	• B82F Pedestrian Impact Detection Sensor-Upper Beam Front X1 • B82F Pedestrian Impact Detection Sensor-Upper Beam Front X2
B87	Rearview Camera	-	At rear of vehicle, left of center, on bottom of trim at top license plate pocket	Rear of Vehicle Components	B87 Rearview Camera
B88D	Seat Belt Switch - Driver	-	In the passenger compartment, in the driver seat, on inboard side, at rear of cushion, part of	-	B88D Seat Belt Switch - Driver

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			seat belt buckle		
B88P	Seat Belt Switch - Passenger	-	In the passenger compartment, in the passenger seat, on inboard side, at rear of cushion, part of seat belt buckle	-	B153P Seat Belt Buckle - Passenger
B99	Steering Wheel Angle Sensor	-	In the passenger compartment, left front, attached to steering column, center, forward of air bag coil	Instrument Panel Components - Front	B99 Steering Wheel Angle Sensor
B107	Accelerator Pedal Position Sensor	-	In the passenger compartment, left front, at part of the accelerator pedal assembly	Passenger Compartment Components - Left Front	• B107 Accelerator Pedal Position Sensor (MN6) • B107 Accelerator Pedal Position Sensor (MX0)
B111B	Turbocharger Boost/Intake Air Temperature Sensor	LTG	In the engine compartment, center near rear, mounted to top of intake manifold, forward of manifold absolute pressure sensor	Engine Components - Left Front (LTG)	B111B Turbocharger Boost/Intake Air Temperature Sensor
B137	Power Steering Shaft Torque Sensor	-	In the vehicle underbody, near front, left of center, mounted to steering gear at input shaft	-	-

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B150	Fuel Tank Pressure Sensor	-	In right rear wheel well, rear of wheel, on evaporative emission pipe	-	B150 Fuel Tank Pressure Sensor
B152LF	Suspension Position Sensor - Left Front	F55	In the vehicle underbody, left front, at left front suspension	-	B152LF Suspension Position Sensor - Left Front
B152LR	Suspension Position Sensor - Left Rear	F55	In the vehicle underbody, left rear, mounted to front of rear frame, rear of axle shaft	-	B152LR Suspension Position Sensor - Left Rear
B152RF	Suspension Position Sensor - Right Front	F55	In the vehicle underbody, right front, at right front suspension	-	B152RF Suspension Position Sensor - Right Front
B152RR	Suspension Position Sensor - Right Rear	F55	In the vehicle underbody, right rear, mounted to front of rear frame, rear of axle shaft	-	B152RR Suspension Position Sensor - Right Rear
B153D	Seat Belt Buckle - Driver	-	In the passenger compartment, in the driver seat, on inboard side, at rear of cushion	Driver Seat Components	-
B153P	Seat Belt Buckle - Passenger	-	In the passenger compartment, in the passenger seat, on inboard side, at rear of cushion	Passenger Seat Components	-
B173	Manual Transmission Fluid Temperature Sensor	MN6	Under the vehicle, mounted to the transmission assembly	Manual Transmission Components (MM6)	B173 Manual Transmission Fluid Temperature Sensor

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B187	Fuel Level Sensor Assembly	-	In the vehicle underbody, on fuel tank	Fuel Tank Components	-
B218L	Side Object Sensor Module - Left	UKC	At left rear of vehicle, mounted to back side of rear fascia	-	B218L Side Object Sensor Module - Left
B218R	Side Object Sensor Module - Right	UKC	At right rear of vehicle, mounted to back side of rear fascia	-	B218R Side Object Sensor Module - Right
B219	Steering Wheel Angle Sensor Module	-	In the passenger compartment, left front, attached to steering column, center, forward of air bag coil	-	-
B227	Gear Position Sensor	MN6	Under the vehicle, at the rear of the transmission assembly	• Manual Transmission Components (M13) • Manual Transmission Components (MM6)	B227 Gear Position Sensor
B238	Folding Top Header Latch Motor Latched Position Sensor	CM8	In the passenger compartment, in the folding top	Folding Top Components - Latches	-
B239	Folding Top Header Latch Motor Unlatched Position Sensor	CM8	In the passenger compartment, in the folding top	Folding Top Components - Latches	-
B240L	Folding Top Header Latched Position Sensor - Left	CM8	In the passenger compartment, in the top of the windshield frame	Folding Top Components - Latches	B240L Folding Top Header Latched Position Sensor - Left (CM8)

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B240R	Folding Top Header Latched Position Sensor - Right	CM8	In the passenger compartment, in the top of the windshield frame	Folding Top Components - Latches	B240R Folding Top Header Latched Position Sensor - Right (CM8)
B244L	Folding Top Stowage Compartment Lid Closed Position Sensor - Left	CM8	In the passenger compartment, behind the rear seat	-	B244L Folding Top Stowage Compartment Lid Closed Position Sensor - Left
B244R	Folding Top Stowage Compartment Lid Closed Position Sensor - Right	CM8	In the passenger compartment, behind the rear seat	-	B244R Folding Top Stowage Compartment Lid Closed Position Sensor - Right (CM8)
B248	Folding Top Stowage Compartment Lid Open Position Sensor	CM8	In the passenger compartment, behind the rear seat	-	-
B249L	Folding Top Tension Bow Down Position Sensor - Left	CM8	In the passenger compartment, in the folding top	-	-
B249R	Folding Top Tension Bow Down Position Sensor - Right	CM8	In the passenger compartment, in the folding top	-	-
B250	Folding Top Tension Bow Up Position Sensor	CM8	In the passenger compartment, in the folding top	-	-
B251	Folding Top Down Position Sensor	CM8	In the passenger compartment, in the folding top	-	-
B252	Folding Top Up Position Sensor	CM8	In the passenger compartment, in the folding top	-	-

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C1	Battery	-	In the luggage compartment, behind the right trim panel	Luggage Compartment Components	C1 Battery
C3	Telematics Communication Interface Control Module Battery	Early Production	In the passenger compartment, above the right front footwell	-	-
E1AA	Floor Accent Lamp - Left Front	-	In the passenger compartment, above the left front footwell	-	E1AA Floor Accent Lamp - Left Front
E1AB	Floor Accent Lamp - Right Front	-	In the passenger compartment, above the right front footwell	-	E1AB Floor Accent Lamp - Right Front
E1AC	Accent Lamp - Center Console Cupholder	C70	In the passenger compartment, center, near middle, within the floor console, in the middle of the cupholder	Center Console Components	E1AC Accent Lamp - Center Console Cupholder
E1D	Accent Lamp - Driver Door	C70	On the driver door, near top, at trim near release handle	Driver Door Trim Components	• E1D Accent Lamp - Driver Door X1 • E1D Accent Lamp - Driver Door X2
E1G	Accent Lamp - Left Instrument Panel	-	In the passenger compartment, part of the Info Display Module housing	-	-
E1H	Accent Lamp - Right Instrument Panel	-	In the passenger compartment, part of the Info Display Module housing	-	-

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E1P	Accent Lamp - Passenger Door	C70	On the passenger door, near top, at trim near release handle	Passenger Door Trim Components	• E1P Accent Lamp - Passenger Door X1 • E1P Accent Lamp - Passenger Door X2
E1W	Accent Lamp - Instrument Panel	C70	In the passenger compartment, part of the Info Display Module housing	-	-
E2LF	Side Marker Lamp - Left Front	except T90	At left side, front of vehicle forward of left front wheel well	Front of Vehicle Components	E2LF Side Marker Lamp - Left Front
E2LR	Side Marker Lamp - Left Rear	except T90	At left rear corner of vehicle, aft of the rear wheel well	Rear of Vehicle Components	E2LR Side Marker Lamp - Left Rear
E2RF	Side Marker Lamp - Right Front	except T90	At right side, front of vehicle forward of right front wheel well	Front of Vehicle Components	E2RF Side Marker Lamp - Right Front
E2RR	Side Marker Lamp - Right Rear	except T90	At right rear corner of vehicle, aft of the rear wheel well	Rear of Vehicle Components	E2RR Side Marker Lamp - Right Rear
E4AC	Park/Daytime Running Lamp - Left	-	At the left front corner of the vehicle, part of the headlamp assembly	-	-
E4AD	Park/Daytime Running Lamp - Right	-	At the right front corner of the vehicle, part of the headlamp assembly	-	-
E4AL	Park/Daytime Running Lamp -	-	At the front of the vehicle, left	Front of Vehicle Components	E4AL Park/Daytime Running Lamp-Left

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	Left Lower		side of the fascia, below the headlamp assembly		Lower
E4AM	Park/Daytime Running Lamp - Right Lower	-	At the front of the vehicle, right side of the fascia, below the headlamp assembly	Front of Vehicle Components	E4AM Park/Daytime Running Lamp-Right Lower
E4E	Headlamp - Left High Beam	without T4F	At the left front corner of the vehicle, part of the headlamp assembly	-	-
E4F	Headlamp - Right High Beam	without T4F	At the right front corner of the vehicle, part of the headlamp assembly	-	-
E4G	Headlamp - Left Low Beam	-	At left front corner of vehicle, within the headlamp assembly, at rear of projector assembly	-	-
E4H	Headlamp - Right Low Beam	-	At right front corner of vehicle, within the headlamp assembly, at rear of projector assembly	-	-
E4LF	Turn Signal Lamp - Left Front	-	At the left front corner of the vehicle, part of the headlamp assembly	-	E2LF Side Marker Lamp - Left Front
E4LR	Turn Signal Lamp - Left Rear	T90	At left rear corner of vehicle, within the tail lamp assembly	Rear of Vehicle Components	-

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E4RF	Turn Signal Lamp - Right Front	-	At the right front corner of the vehicle, part of the headlamp assembly	-	E2RF Side Marker Lamp - Right Front
E4RR	Turn Signal Lamp - Right Rear	T90	At right rear corner of vehicle, within the tail lamp assembly	Rear of Vehicle Components	-
E4Y	Turn Signal Repeater Lamp - Left	T90	At left side of vehicle, forward of middle, within the outside rearview mirror assembly	Driver Door Components	-
E4Z	Turn Signal Repeater Lamp - Right	T90	At right side of vehicle, forward of middle, within the outside rearview mirror assembly	Passenger Door Components	-
E5A	Backup Lamp - Left	except T90	At rear of vehicle, lower center, left lamp in assembly	Rear of Vehicle Components	-
E5AM	Stop/Turn Signal Lamp - Left	except T90	At left rear corner of vehicle, within the tail lamp assembly, outer lamp	Rear of Vehicle Components	-
E5AN	Stop/Turn Signal Lamp - Right	except T90	At right rear corner of vehicle, within the tail lamp assembly, outer lamp	Rear of Vehicle Components	-
E5B	Backup Lamp - Right	except T90	At rear of vehicle, lower center, right lamp in assembly	Rear of Vehicle Components	-

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E5E	Tail Lamp - Left	-	At left rear corner of vehicle, within the tail lamp assembly	Rear of Vehicle Components	-
E5F	Tail Lamp - Right	-	At right rear corner of vehicle, within the tail lamp assembly	Rear of Vehicle Components	-
E5L	Stop Lamp - Left	T90	At left rear corner of vehicle, within the tail lamp assembly	Rear of Vehicle Components	-
E5R	Stop Lamp - Right	T90	At right rear corner of vehicle, within the tail lamp assembly	Rear of Vehicle Components	-
E6	Center High Mounted Stop Lamp	-	At rear of vehicle, upper center, on rear compartment lid	Rear of Vehicle Components	E6 Center High Mounted Stop Lamp
E7L	License Plate Lamp - Left	-	At rear of vehicle, left of center, on bottom of trim at top license plate pocket	Rear of Vehicle Components	E7L License Plate Lamp - Left
E7R	License Plate Lamp - Right	-	At rear of vehicle, right of center, on bottom of trim at top license plate pocket	Rear of Vehicle Components	E7R License Plate Lamp - Right
E8A	Door Sill Plate Lamp - Driver	-	In the driver door jamb, on the body, at bottom	Passenger Compartment Components - Right Rear	E8A Door Sill Plate Lamp - Driver
E8B	Door Sill Plate Lamp - Passenger	-	In the passenger door jamb, on the body, at bottom	Passenger Compartment Components - Left Rear	E8B Door Sill Plate Lamp - Passenger

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E8J	Instrument Panel Courtesy Lamp - Left	-	In the passenger compartment, left front, at bottom of instrument panel forward of knee air bag	Instrument Panel Components - Front	E8J Instrument Panel Courtesy Lamp - Left
E8K	Instrument Panel Courtesy Lamp - Right	-	In the passenger compartment, right front, at bottom of instrument panel forward of knee air bag	Instrument Panel Components - Front	E8K Instrument Panel Courtesy Lamp - Right
E8S	Rear Compartment Courtesy Lamp	-	In the luggage compartment, top center, in trim	-	E8S Rear Compartment Courtesy Lamp
E13LA	Headlamp Assembly - Left	-	At left front corner of vehicle	Front of Vehicle Components	-
E13RA	Headlamp Assembly - Right	-	At right front corner of vehicle	Front of Vehicle Components	-
E14A	Seat Heating Element - Driver Back	KA1	In the passenger compartment, in the driver seat back	Driver Seat Components	E14A Seat Heating Element - Driver Back
E14B	Seat Heating Element - Driver Cushion	KA1	In the passenger compartment, in the driver seat cushion	Driver Seat Components	E14B Seat Heating Element - Driver Cushion
E14C	Seat Heating Element - Passenger Back	KA1	In the passenger compartment, in the passenger seat back	Passenger Seat Components	E14C Seat Heating Element - Passenger Back
E14D	Seat Heating Element - Passenger Cushion	KA1	In the passenger compartment, in the passenger	Passenger Seat Components	E14D Seat Heating Element - Passenger Cushion

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			seat cushion		
E15	Steering Wheel Heater	UVD	In the passenger compartment, left front, within the steering wheel rim	-	E15 Steering Wheel Heater
E17D	Outside Rearview Mirror Glass - Driver	-	On outside of driver door, front middle, forward of window opening, part of outside rearview mirror assembly	-	-
E17P	Outside Rearview Mirror Glass - Passenger	-	On outside of passenger door, front middle, forward of window opening, part of outside rearview mirror assembly	-	-
E18	Rear Defogger Grid	-	In the passenger compartment, rear, on rear window	-	-
E29R	Fog Lamp - Rear	T90	At rear of vehicle, lower center, center of lamp assembly	-	-
E31L	Sunshade Mirror Lamp - Left	-	In the passenger compartment, at left front attached to the headliner, part of sunshade	-	-
E31R	Sunshade Mirror Lamp - Right	-	In the passenger compartment, at right front attached to the headliner, part	-	-

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			of sunshade		
E37LF	Dome/Reading Lamps - Left Front	-	In the passenger compartment, front, near center, on the left side of the overhead console	• Headliner Components (Convertible) • Headliner Components (Coupe)	E37LF Dome/Reading Lamps - Left Front
E37RF	Dome/Reading Lamps - Right Front	-	In the passenger compartment, front, near center, on the right side of the overhead console	• Headliner Components (Coupe) • Headliner Components (Convertible)	E37RF Dome/Reading Lamps - Right Front
E38	Flood Lamp - Center Console	-	In the passenger compartment, front, center, in the overhead console, near rear	• Headliner Components (Coupe) • Headliner Components (Convertible)	E38 Flood Lamp - Center Console
E42L	Tail Lamp Assembly - Left	-	At left rear corner of vehicle	Rear of Vehicle Components	-
E42R	Tail Lamp Assembly - Right	-	At right rear corner of vehicle	Rear of Vehicle Components	-
E63D	Flood Lamp - Driver Door Handle	-	On the driver door, upper middle, near release handle	Driver Door Trim Components	E63D Flood Lamp - Driver Door Handle
E63P	Flood Lamp - Passenger Door Handle	-	On the passenger door, upper middle, near release handle	Passenger Door Trim Components	E63P Flood Lamp - Passenger Door Handle
E83	Backup/Rear Fog Lamp	T90	At the bottom center of the rear fascia	-	E5 Backup Lamp
F100L	Hood Hinge Actuator - Left	B3T	In the engine compartment, part of the left	Engine Compartment Components	F100L Hood Hinge Actuator - Left

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			hood hinge		
F100R	Hood Hinge Actuator - Right	B3T	In the engine compartment, part of the right hood hinge	Engine Compartment Components	F100R Hood Hinge Actuator - Right
F101	Passenger Instrument Panel Air Bag	-	In the passenger compartment, under the right side of the instrument panel	Instrument Panel Components - Rear	• F101 Passenger Instrument Panel Air Bag X1 • F101 Passenger Instrument Panel Air Bag X2
F105L	Roof Rail Air Bag - Left	Without CM8	In the passenger compartment, along the left side of the roof	Passenger Compartment Components - Left Rear	F105L Roof Rail Air Bag - Left
F105R	Roof Rail Air Bag - Right	Without CM8	In the passenger compartment, along the right side of the roof	Passenger Compartment Components - Right Rear	F105R Roof Rail Air Bag - Right
F106LF	Seat Side Air Bag - Left Front	-	In the passenger compartment, at the outboard side of the driver seat	Driver Seat Components	F106LF Seat Side Air Bag - Left Front
F106RF	Seat Side Air Bag - Right Front	-	In the passenger compartment, at the outboard side of the passenger seat	Passenger Seat Components	F106RF Seat Side Air Bag - Right Front
F107	Steering Wheel Air Bag	-	In the passenger compartment, in the middle of the steering wheel	-	-

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F112D	Seat Belt Retractor Pretensioner - Driver	-	In the passenger compartment, at the base of the B-Pillar	-	F112D Seat Belt Retractor Pretensioner-Driver
F112P	Seat Belt Retractor Pretensioner - Passenger	-	In the passenger compartment, at the base of the B-Pillar	-	F112P Seat Belt Retractor Pretensioner-Passenger
F113D	Seat Belt Anchor Pretensioner - Driver	-	In the passenger compartment, mounted the the base of the driver seat	Driver Seat Components	F113D Seat Belt Anchor Pretensioner - Driver
F113P	Seat Belt Anchor Pretensioner - Passenger	-	In the passenger compartment, mounted the the base of the passenger seat	Passenger Seat Components	F113P Seat Belt Anchor Pretensioner - Passenger
F114D	Knee Air Bag - Driver	-	In the passenger compartment, above the left front footwell	Instrument Panel Components - Front	F114D Knee Air Bag - Driver
F114P	Knee Air Bag - Passenger	-	In the passenger compartment, above the right front footwell	Instrument Panel Components - Front	F114P Knee Air Bag - Passenger
G1	A/C Compressor	-	In the engine compartment, front, left of center, mounted to lower left side of engine block	• Engine Components - Left Front (LT1) • Engine Components - Left Front (LTG)	-
G10	Cooling Fan Motor	-	In the engine compartment, front center, behind radiator	-	-

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G11	Folding Top Pump Motor Assembly	CM8	In the luggage compartment, part of the hydraulic unit	-	-
G12	Fuel Pump	-	Under the vehicle, mounted inside the fuel tank	Fuel Tank Components	-
G13	Generator	-	In the engine compartment, right of center, near front, mounted to right side of engine block	• Engine Components - Right Rear (LGX) • Engine Components - Left Front (LT1) • Engine Components - Right Side (LT1) • Engine Components - Right Side on Intake Manifold (LTG)	• G13 Generator X1 • G13 Generator X2
G18	High Pressure Fuel Pump	-	In the engine compartment, at the back of the engine, driven by a camshaft	• Engine Components - Right Side on Intake Manifold (LTG) • Engine Components - Right Rear (LGX) • Top of Engine Components (LT1)	G18 High Pressure Fuel Pump
G24	Windshield Washer Pump	-	In the right front wheel well, rear of the wheel,	Engine Compartment Components	G24 Windshield Washer Pump

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			attached to the washer fluid reservoir, lower rear		
K9	Body Control Module	-	In the passenger compartment, left front, within the instrument panel, at left side	• Instrument Panel Components - Front • Passenger Compartment Components - Left Front	• 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 rear, behind strut tower	Engine Compartment Components	• K17 Electronic Brake Control Module (LT1) • K17 Electronic Brake Control Module (LTG/LGX)
K19	Suspension Control Module	F55	In the luggage compartment, left side, near middle, above left rear wheel well, rear of chassis control module	-	K19 Suspension Control Module

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K20	Engine Control Module	-	In the engine compartment, right front, below fuse block underhood	Engine Compartment Components	• K20 Engine Control Module X1 (LGX) • K20 Engine Control Module X2 (LGX) • K20 Engine Control Module X3 (LGX) • K20 Engine Control Module X1 (LT1) • K20 Engine Control Module X2 (LT1) • K20 Engine Control Module X3 (LT1) • K20 Engine Control Module X1 • K20 Engine Control Module X2 • K20 Engine Control Module X3
K22	Cooling Fan Control Module	-	In the engine compartment, front, left of center, behind radiator	Engine Compartment Components	• K22 Cooling Fan Control Module (Y4Q) • K22 Cooling Fan Control Module (-Y4Q) • K22 Cooling Fan Control Module (LT1)
K23	Folding Top Control Module	CM8	In the luggage compartment	Folding Top Components - Controls	• K23 Folding Top Control Module X1 (CM8)

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					• K23 Folding Top Control Module X2 (CM8) • K23 Folding Top Control Module X3
K29F	Seat Heating Control Module - Front	KA1/KQV	In the passenger compartment, under the passenger seat cushion, at front	Passenger Seat Components	• K29F Seat Heating Control Module - Front X1 • K29F Seat Heating Control Module - Front X2
K31	Navigation Control Module	IO6 with MAW	In the passenger compartment, rear near center, at front of rear window shelf	Instrument Panel Components - Rear	• K31 Navigation Control Module X1 • K31 Navigation Control Module X2 • K31 Navigation Control Module X3 • K31 Navigation Control Module X5 • K31 Navigation Control Module X6 • K31 Navigation Control Module X7
K32	Steering Wheel Heating Control Module	-	In the passenger compartment, left front, attached to front steering wheel cover left of center	-	K32 Steering Wheel Heating Control Module (UVD)

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K33	HVAC Control Module	-	In the passenger compartment, right front, at bottom of instrument panel above closeout panel, near A-pillar	Instrument Panel Components - Rear	• 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, center near middle, below floor console, attached to tunnel	Instrument Panel Components - Front	• K36 Inflatable Restraint Sensing and Diagnostic Module X1 • K36 Inflatable Restraint Sensing and Diagnostic Module X2
K38	Chassis Control Module	LTG/LT1 /(LGX+NPP)	In the luggage compartment, left side, near front, above left rear wheel well	-	K38 Chassis Control Module
K40D	Seat Memory Control Module - Driver	A45	In the passenger compartment, under the driver seat cushion, at front	Driver Seat Components	• K40D Seat Memory Control Module - Driver X1 • K40D Seat Memory Control Module - Driver X2 • K40D Seat Memory Control Module - Driver X3 • K40D Seat

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					Memory Control Module - Driver X5 • K40D Seat Memory Control Module - Driver X6
K43	Power Steering Control Module	-	In the vehicle underbody, near front, near center, mounted to power steering motor on steering gear	Below Engine Compartment Components	• K43 Power Steering Control Module X1 • K43 Power Steering Control Module X2
K56	Serial Data Gateway Module	-	In the passenger compartment, above the passenger footwell	Instrument Panel Components - Rear	• K56 Serial Data Gateway Module X1 • K56 Serial Data Gateway Module X2
K60	Steering Column Lock Module	N06	In the passenger compartment, left front, attached to steering column, lower front	Instrument Panel Components - Front	K60 Steering Column Lock Module
K71	Transmission Control Module	-	In the right front wheel well, attached to the outboard side of frame rail, forward of the wheel	-	K71 Transmission Control Module
K73	Telematics Communication Interface Control Module	-	In the passenger compartment, behind the right side of the instrument panel, above	-	• K73 Telematics Communication Interface Control Module X1

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			the passenger footwell		• K73 Telematics Communication Interface Control Module X2 • K73 Telematics Communication Interface Control Module X5 • K73 Telematics Communication Interface Control Module X7 (CZ2) • K73 Telematics Communication Interface Control Module X7 (U2K)
K74	Human Machine Interface Control Module	IO5 or IO6	In the passenger compartment, right front, within the instrument panel, above closeout panel	Instrument Panel Components - Rear	• K74 Human Machine Interface Control Module X1 • K74 Human Machine Interface Control Module X2 • K74 Human Machine Interface Control Module X3 • K74 Human Machine Interface Control Module X5 • K74 Human Machine Interface Control Module X7

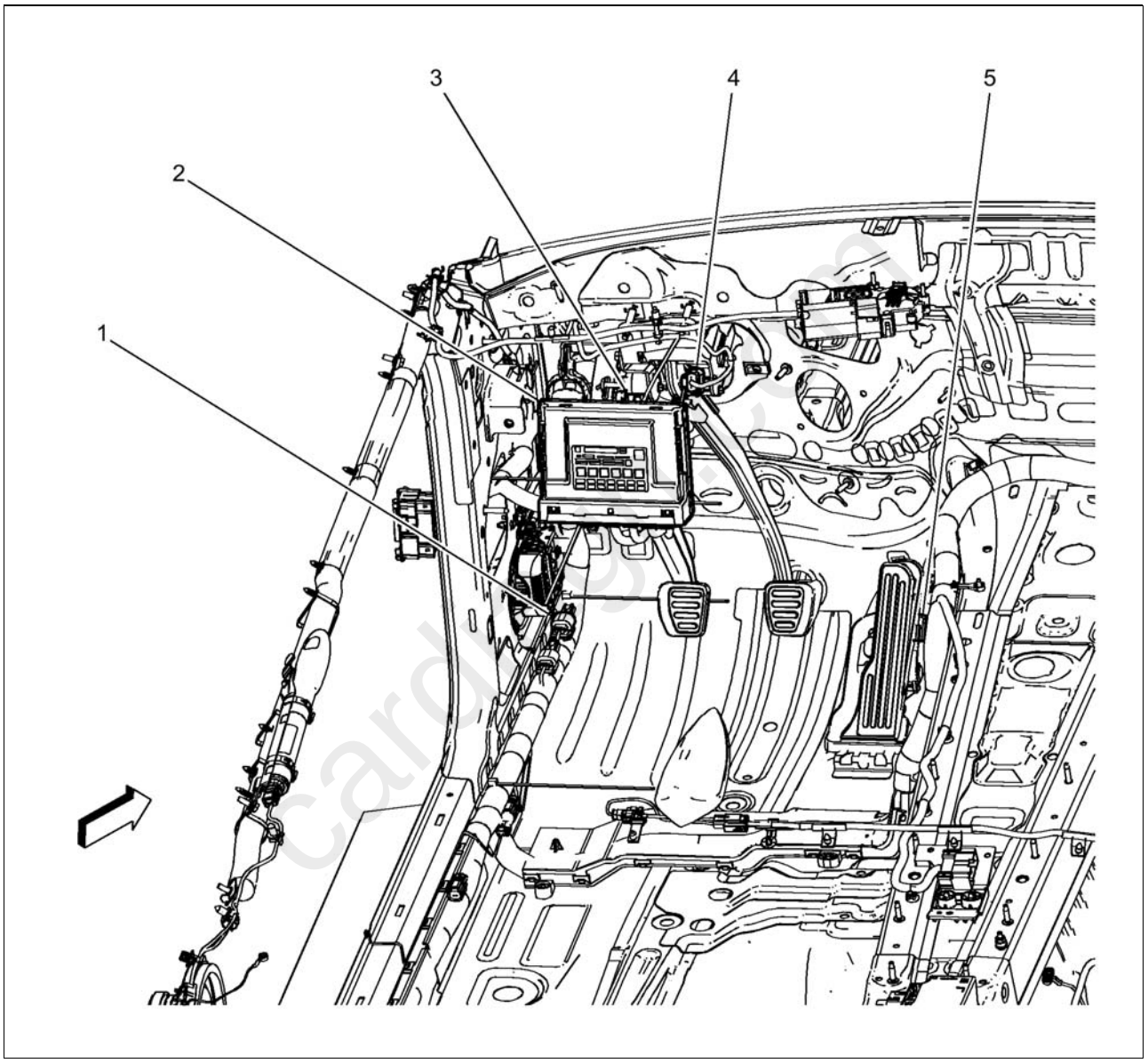
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Service Manual: WIRING SYSTEMS AND POWER MANAGEMENT - COMPONENT LOCATOR - PASSENGER COMPARTMENT/ROOF COMPONENT VIEWS

PASSENGER COMPARTMENT/ROOF COMPONENT VIEWS > PASSENGER COMPARTMENT COMPONENTS - LEFT FRONT

Fig 1: Passenger Compartment Components - Left Front



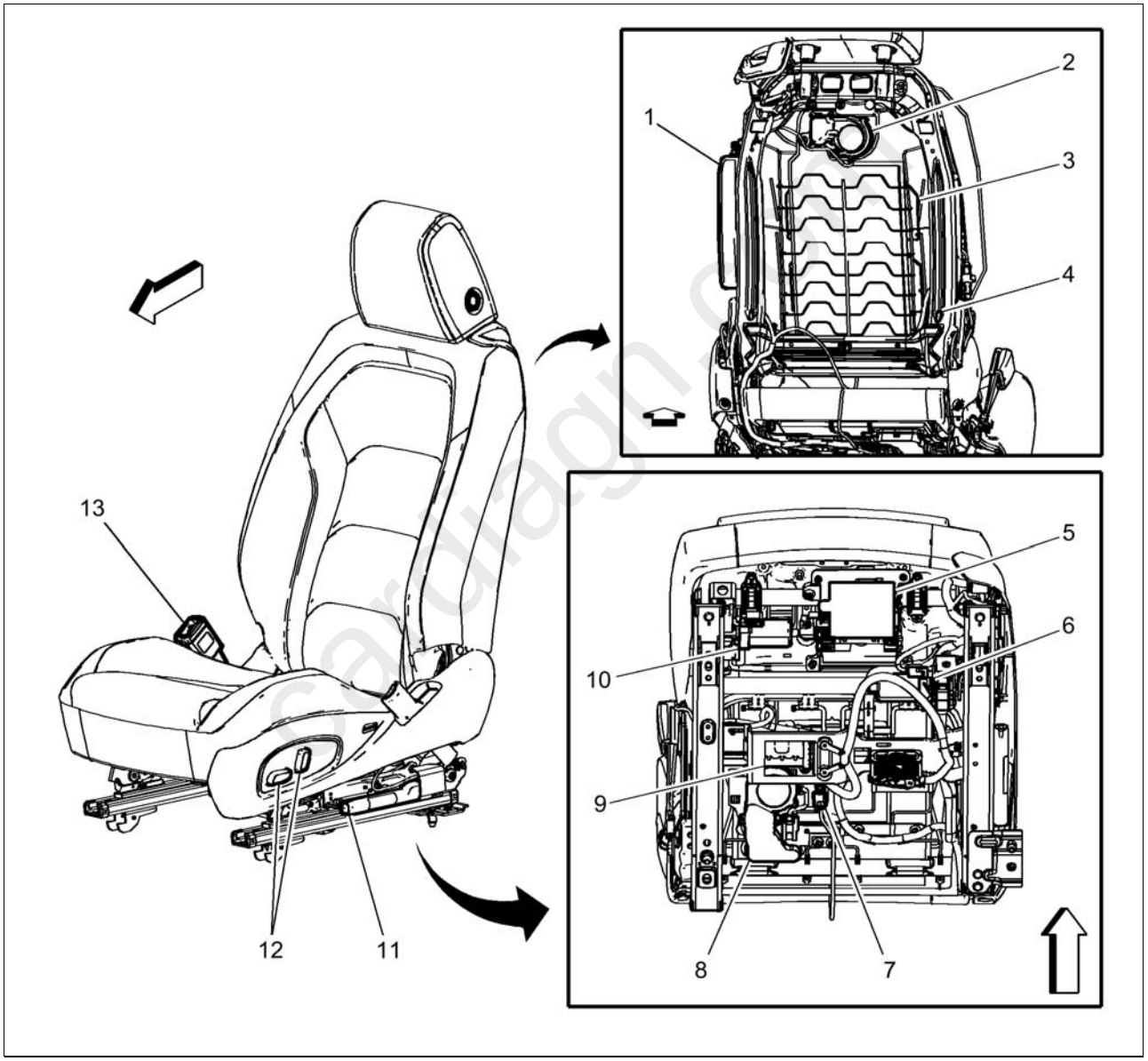
Courtesy of GENERAL MOTORS COMPANY

Items
R6C R6C Terminating Resistor 1 - High Speed Bus
2: K9 Body Control Module K9 Body Control Module X1K9 Body Control Module X2K9 Body Control Module X3K9 Body Control Module X4

3: B25B Clutch Pedal Position Sensor (MN6) B25B Clutch Pedal Position Sensor
4: B22 Brake Pedal Position Sensor B22 Brake Pedal Position Sensor
5: B107 Accelerator Pedal Position Sensor B107 Accelerator Pedal Position Sensor (MN6)B107 Accelerator Pedal Position Sensor (MX0)

PASSENGER COMPARTMENT/ROOF COMPONENT VIEWS > DRIVER SEAT COMPONENTS

Fig 1: Driver Seat Components



Courtesy of GENERAL MOTORS COMPANY

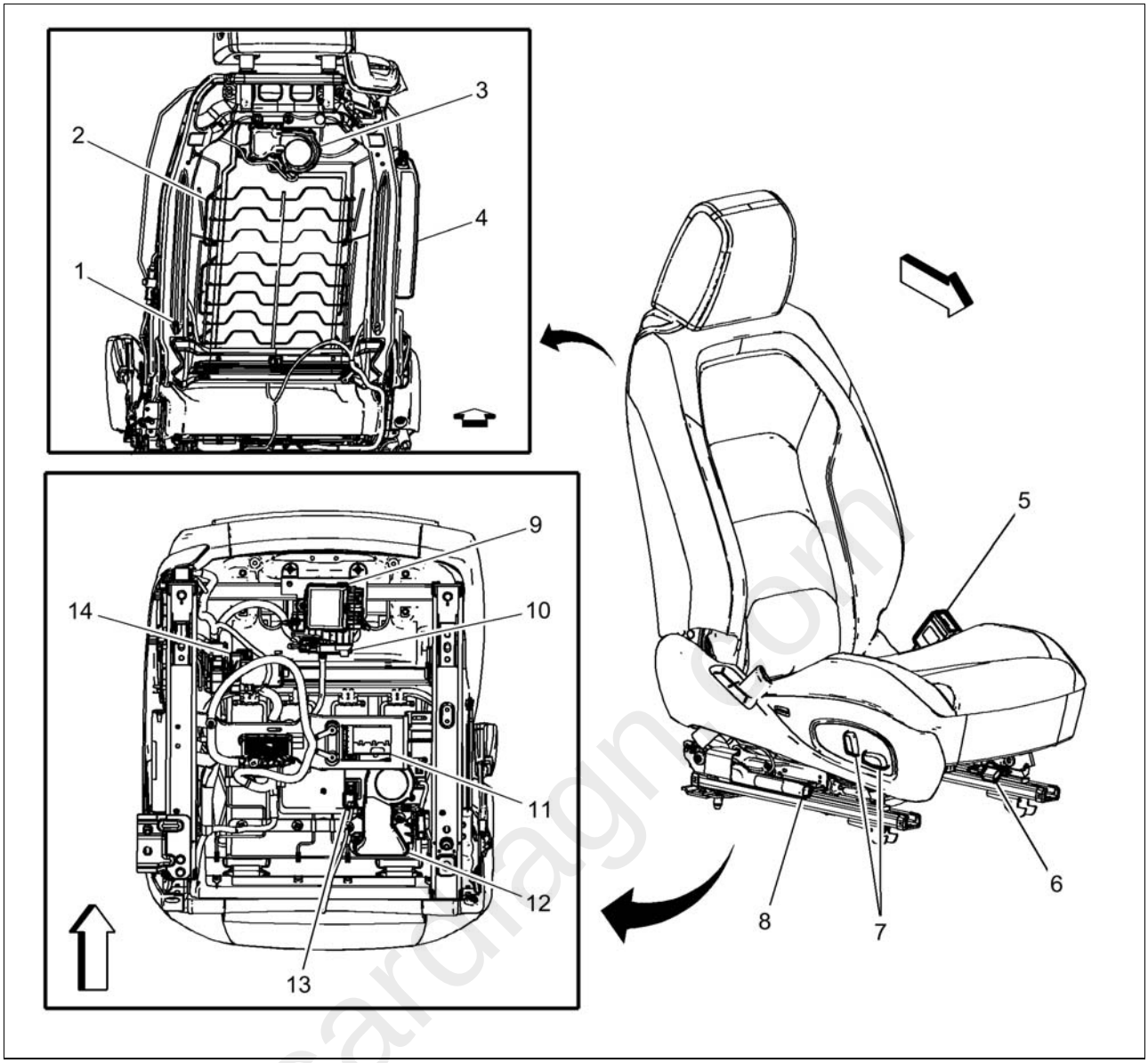
Items
1: F106LF Seat Side Air Bag - Left Front F106LF Seat Side Air Bag - Left Front

2: M73A Seat Blower Motor - Driver Back (KQV) M73A Seat Blower Motor - Driver Back ()
3: E14A Seat Heating Element - Driver Back (KA1) E14A Seat Heating Element - Driver Back
4: M56D Seat Recline Motor - Driver M56D Seat Recline Motor - Driver
5: K40D Seat Memory Control Module - Driver (A45) K40D Seat Memory Control Module - Driver X1K40D Seat Memory Control Module - Driver X2K40D Seat Memory Control Module - Driver X3K40D Seat Memory Control Module - Driver X5K40D Seat Memory Control Module - Driver X6
6: M55D Seat Rear Vertical Motor - Driver M55D Seat Rear Vertical Motor - Driver
7: E14B Seat Heating Element - Driver Cushion (KA1) E14B Seat Heating Element - Driver Cushion
8: M73C Seat Blower Motor - Driver Cushion (KQV) M73C Seat Blower Motor - Driver Cushion ()
9: M51D Seat Horizontal Motor - Driver M51D Seat Horizontal Motor - Driver
10: M50D Seat Front Vertical Motor - Driver M50D Seat Front Vertical Motor - Driver
11: F113D Seat Belt Anchor Pretensioner - Driver
12: S64D Seat Adjuster Switch - Driver S64D Seat Adjuster Switch - Driver ()
13: B153D Seat Belt Buckle - Driver

PASSENGER COMPARTMENT/ROOF COMPONENT VIEWS > PASSENGER SEAT COMPONENTS

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Fig 1: Passenger Seat Components



Courtesy of GENERAL MOTORS COMPANY

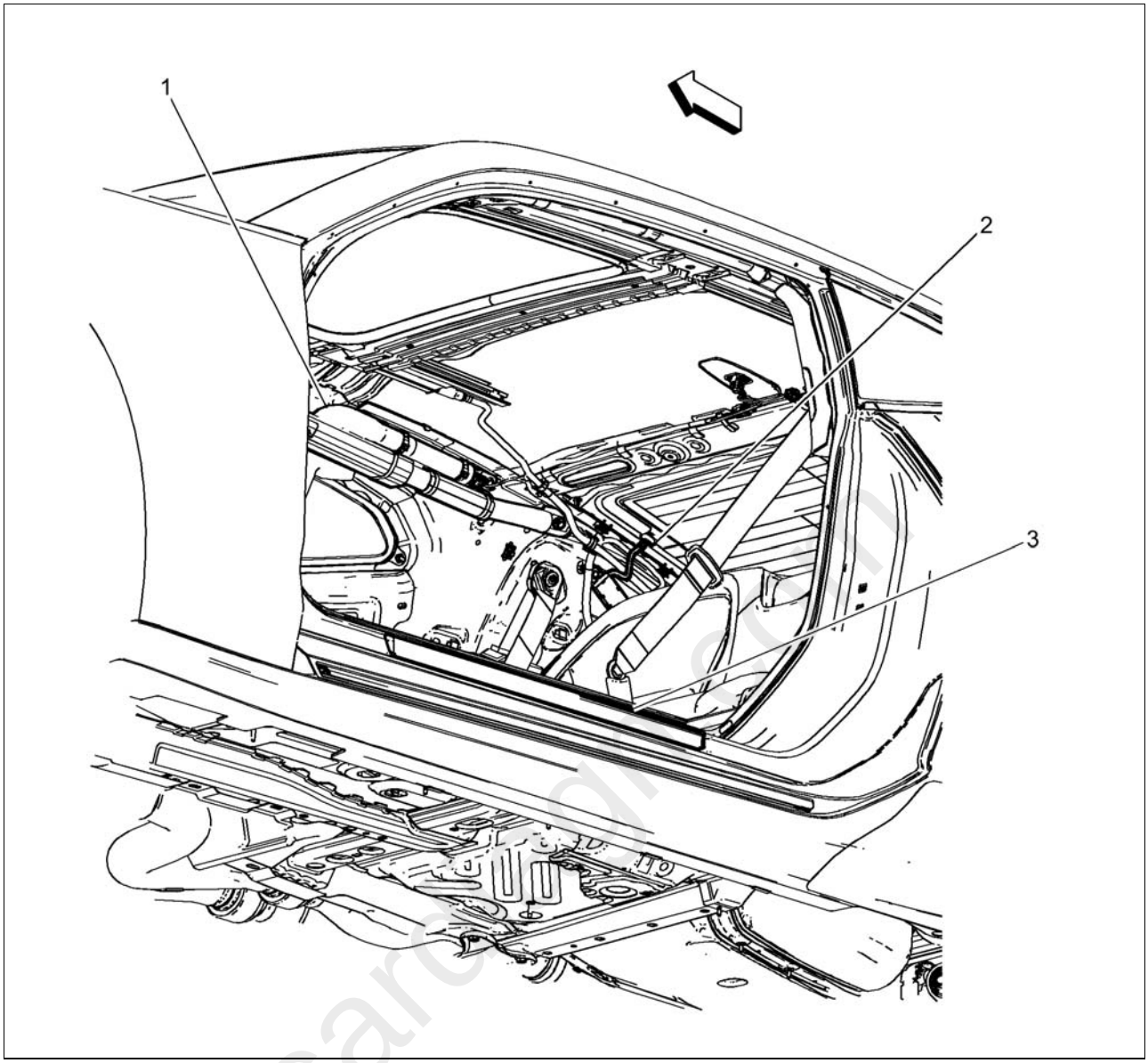
Items
1: M56P Seat Recline Motor - Passenger M56P Seat Recline Motor - Passenger
2: E14C Seat Heating Element - Passenger Back (KA1) E14C Seat Heating Element - Passenger Back
3: M73B Seat Blower Motor - Passenger Back (KQV) M73B Seat Blower Motor - Passenger Back ()
4: F106RF Seat Side Air Bag - Right Front F106RF Seat Side Air Bag - Right Front
5: B153P Seat Belt Buckle - Passenger
6: B62P Seat Position Sensor - Passenger B62P Seat Position Sensor - Passenger
7: S64P Seat Adjuster Switch - Passenger S64P Seat Adjuster Switch - Passenger
8: F113P Seat Belt Anchor Pretensioner - Passenger

9: K29F Seat Heating Control Module - Front (KA1/KQV) K29F Seat Heating Control Module - Front X1K29F Seat Heating Control Module - Front X2
10: K85 Passenger Presence Module K85 Passenger Presence Module
11: M51P Seat Horizontal Motor - Passenger M51P Seat Horizontal Motor - Passenger
12: M73D Seat Blower Motor - Passenger Cushion (KQV) M73D Seat Blower Motor - Passenger Cushion ()
13: E14D Seat Heating Element - Passenger Cushion (KA1) E14D Seat Heating Element - Passenger Cushion
14: M57P Seat Vertical Motor - Passenger M57P Seat Vertical Motor - Passenger

PASSENGER COMPARTMENT/ROOF COMPONENT VIEWS > PASSENGER COMPARTMENT COMPONENTS - RIGHT REAR

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Fig 1: Passenger Compartment Components - Right Rear

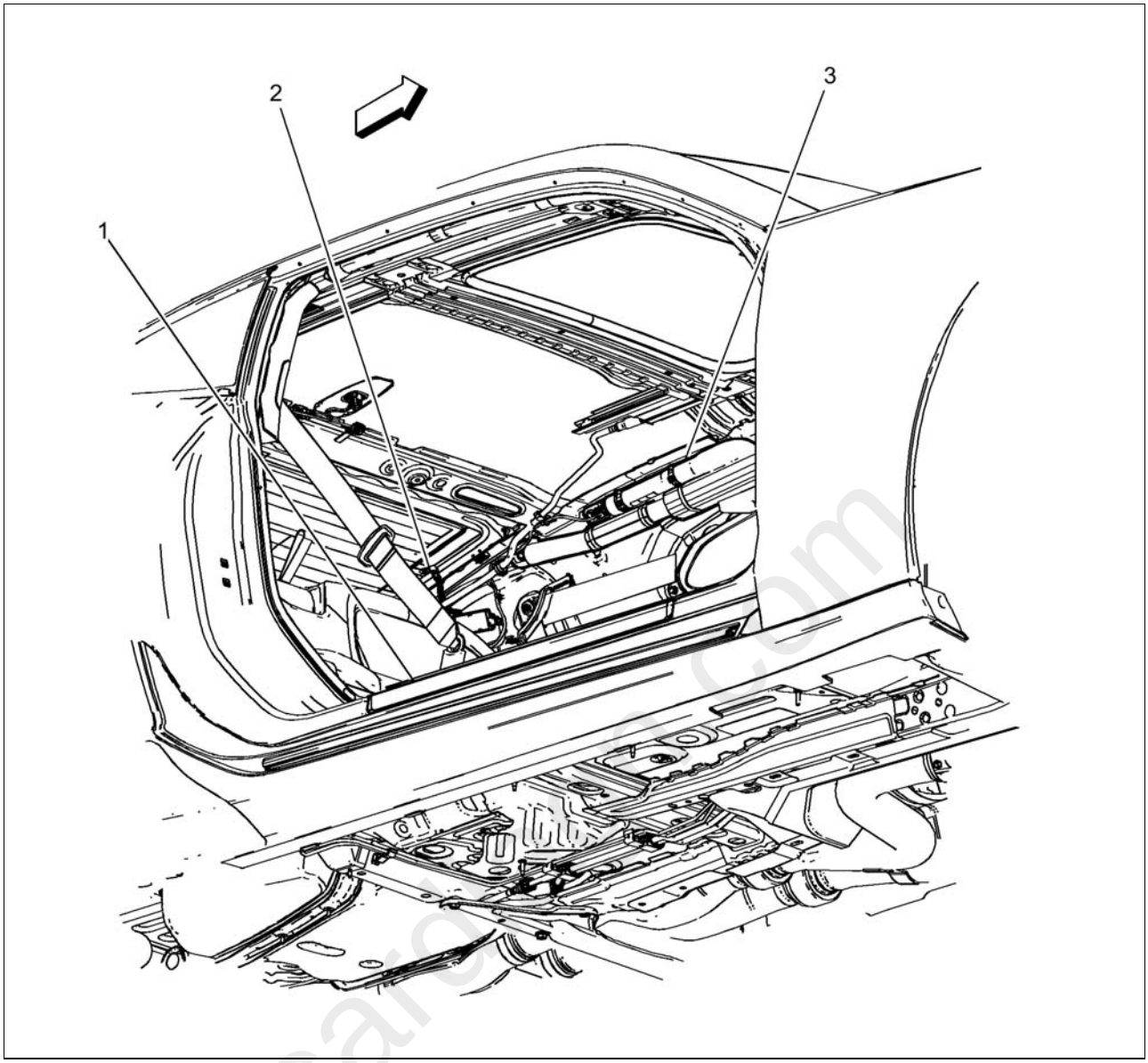


Courtesy of GENERAL MOTORS COMPANY

Items
1: F105R Roof Rail Air Bag - Right (Without CM8) F105R Roof Rail Air Bag - Right
2: T23R Radio Antenna Amplifier - Right T23R Radio Antenna Amplifier - Right (-CM8)T23R Radio Antenna Amplifier - Right (CM8)
3: E8A Door Sill Plate Lamp - Driver E8A Door Sill Plate Lamp - Driver

PASSENGER COMPARTMENT/ROOF COMPONENT VIEWS > PASSENGER COMPARTMENT COMPONENTS - LEFT REAR

Fig 1: Passenger Compartment Components - Left Rear

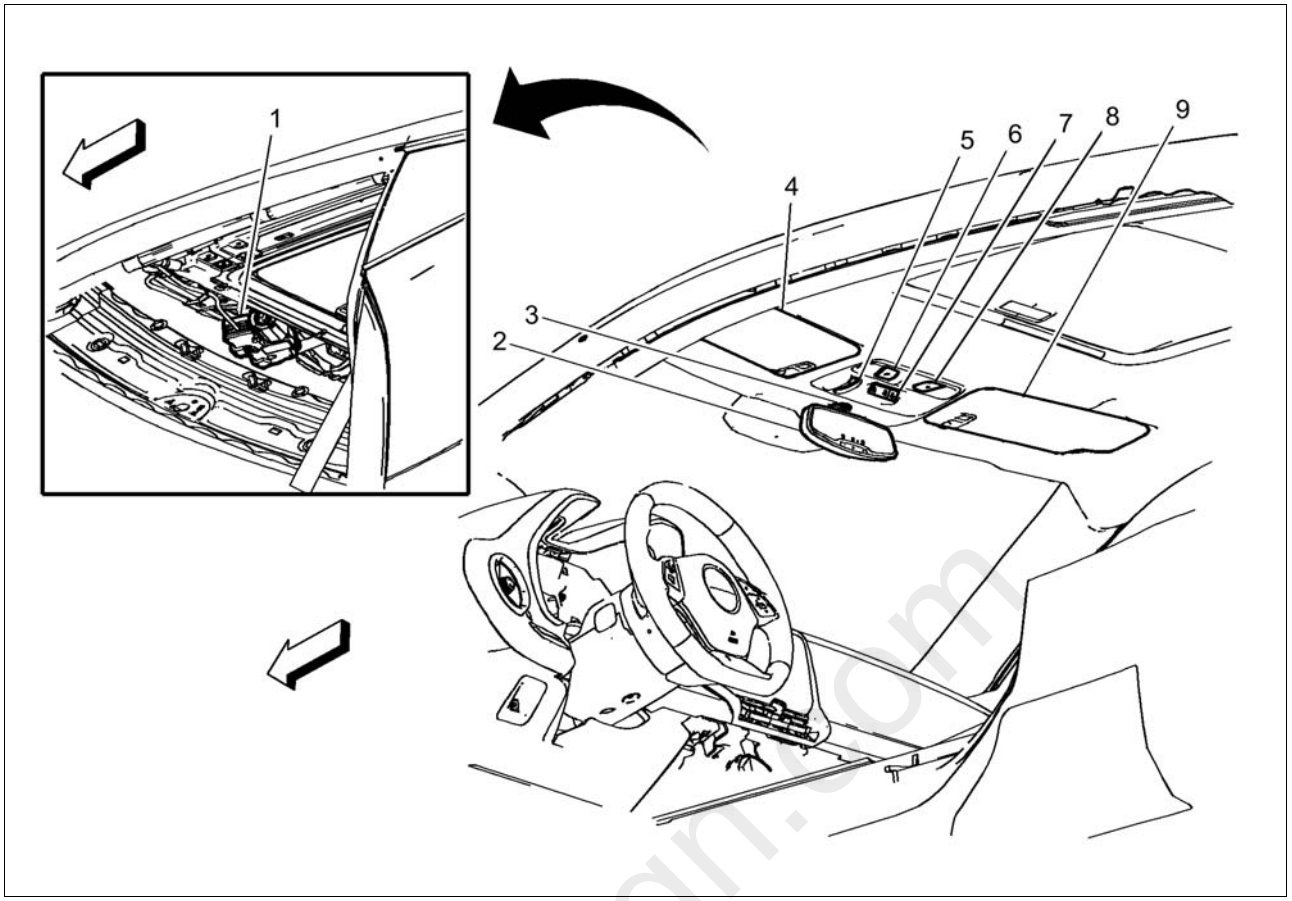


Courtesy of GENERAL MOTORS COMPANY

Items
1: E8B Door Sill Plate Lamp - Passenger E8B Door Sill Plate Lamp - Passenger
2: T23L Radio Antenna Amplifier - Left T23L Radio Antenna Amplifier - Left (-CM8)T23L Radio Antenna Amplifier - Left X1 (CM8)T23L Radio Antenna Amplifier - Left X2 (CM8)
3: F105L Roof Rail Air Bag - Left (Without CM8) F105L Roof Rail Air Bag - Left

PASSENGER COMPARTMENT/ROOF COMPONENT VIEWS > HEADLINER COMPONENTS (COUPE)

Fig 1: Headliner Components (Coupe)



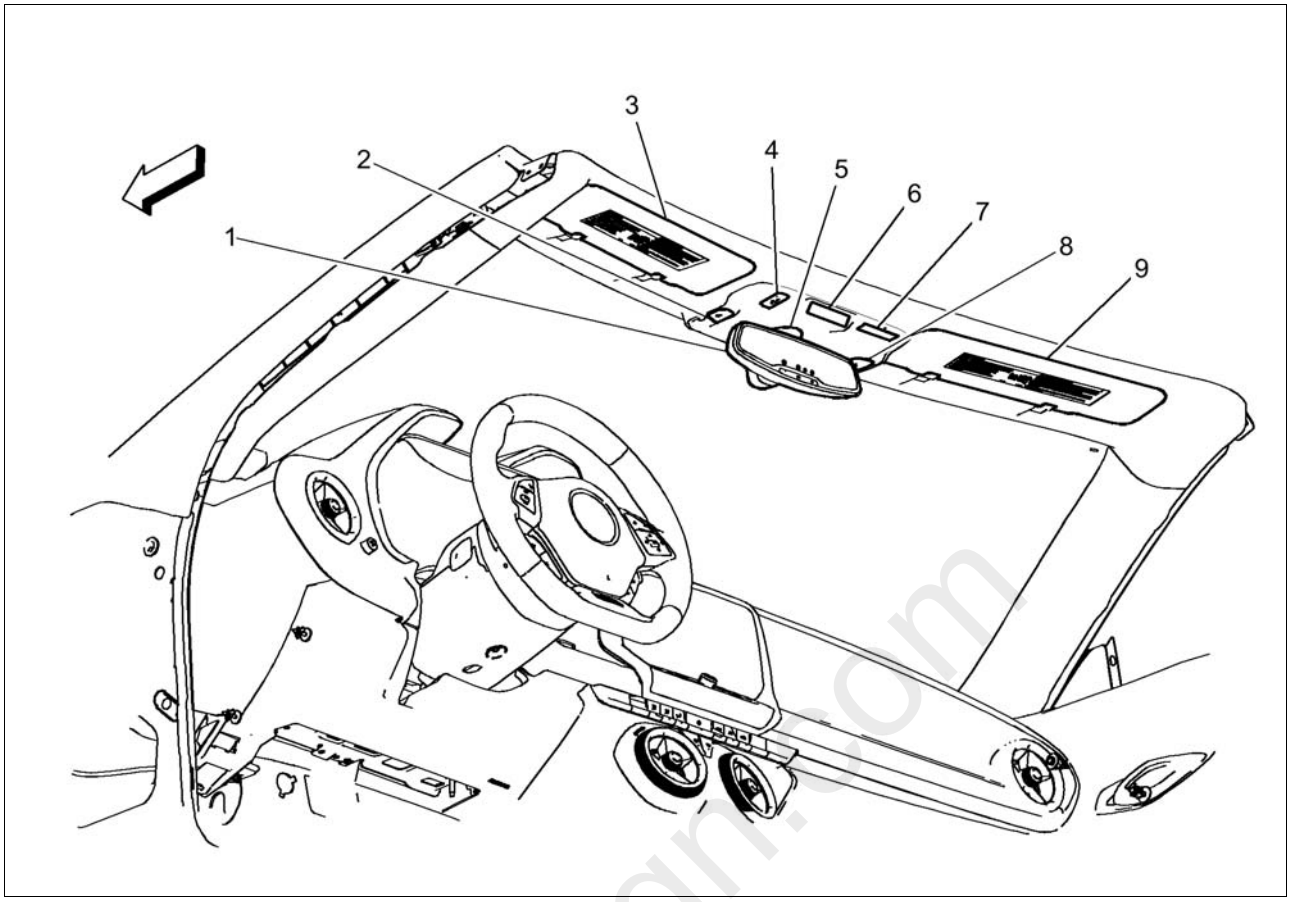
Courtesy of GENERAL MOTORS COMPANY

Items
1: M69 Sunroof Motor (CE5) M69 Sunroof Motor
2: A10 Inside Rearview Mirror A10 Inside Rearview Mirror
3: E38 Flood Lamp - Center Console E38 Flood Lamp - Center Console
4: A3L Sunshade - Left A3L Sunshade - Left
5: S72 Sunroof Switch (CE5) S72 Sunroof Switch
6: E37LF Dome/Reading Lamps - Left Front E37LF Dome/Reading Lamps - Left Front
7: P14 Passenger Air Bag Disabled Indicator P14 Passenger Air Bag Disabled Indicator
8: E37RF Dome/Reading Lamps - Right Front E37RF Dome/Reading Lamps - Right Front
9: A3R Sunshade - Right A3R Sunshade - Right

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PASSENGER COMPARTMENT/ROOF COMPONENT VIEWS > HEADLINER COMPONENTS (CONVERTIBLE)

Fig 1: Headliner Components (Convertible)



Courtesy of GENERAL MOTORS COMPANY

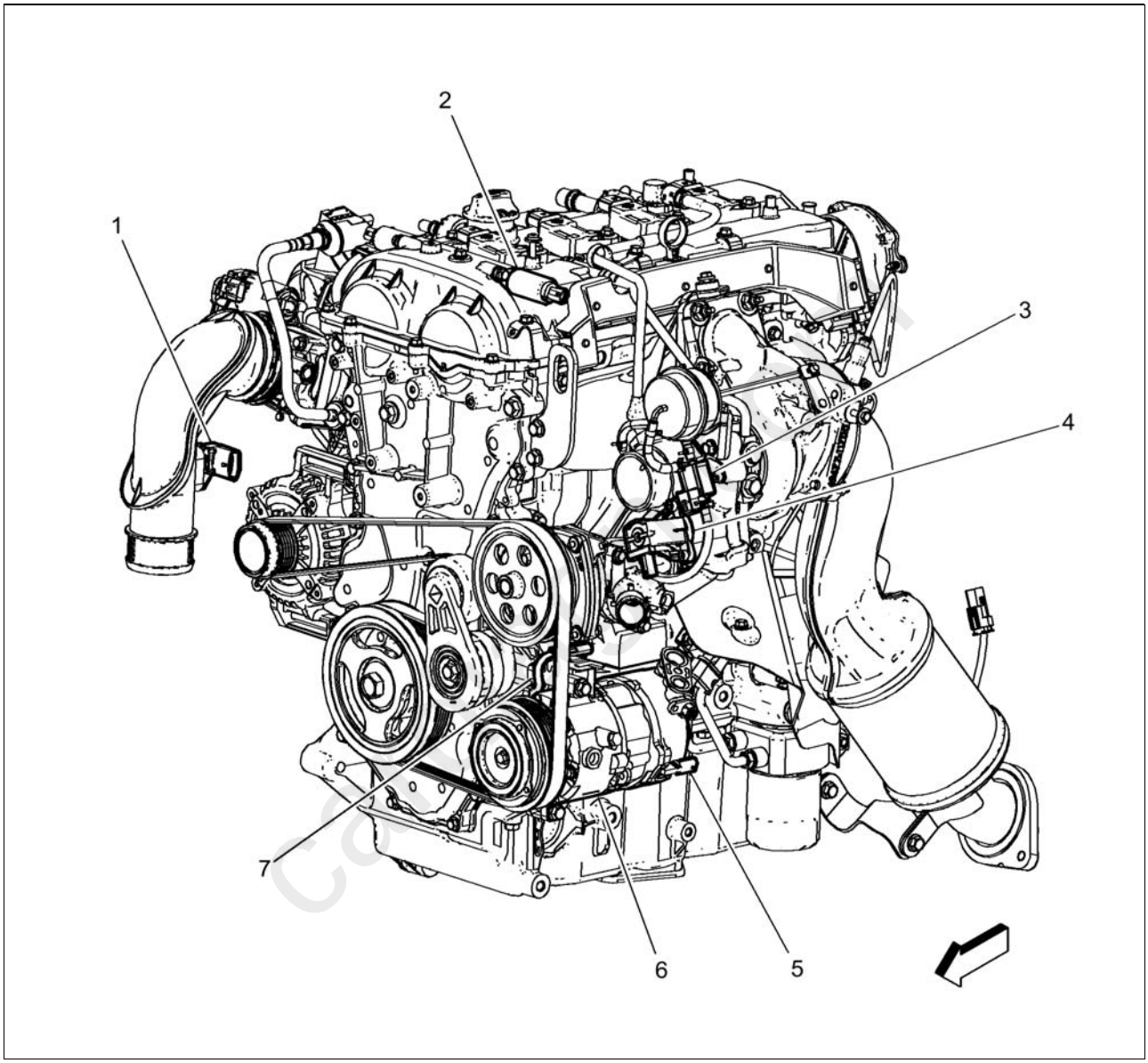
Items
1: A10 Inside Rearview Mirror A10 Inside Rearview Mirror
2: E37LF Dome/Reading Lamps - Left Front E37LF Dome/Reading Lamps - Left Front
3: A3L Sunshade - Left A3L Sunshade - Left
4: S22B Folding Top Control Switch (CM8) S22B Folding Top Control Switch
5: E38 Flood Lamp - Center Console E38 Flood Lamp - Center Console
6: P14 Passenger Air Bag Disabled Indicator P14 Passenger Air Bag Disabled Indicator
7: S25 Garage Door Opener S25 Garage Door Opener
8: E37RF Dome/Reading Lamps - Right Front E37RF Dome/Reading Lamps - Right Front
9: A3R Sunshade - Right A3R Sunshade - Right

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Service Manual: WIRING SYSTEMS AND POWER MANAGEMENT - COMPONENT LOCATOR - POWERTRAIN COMPONENT VIEWS

POWERTRAIN COMPONENT VIEWS > ENGINE COMPONENTS - LEFT FRONT (LTG)

Fig 1: Engine Components - Left Front (LTG)



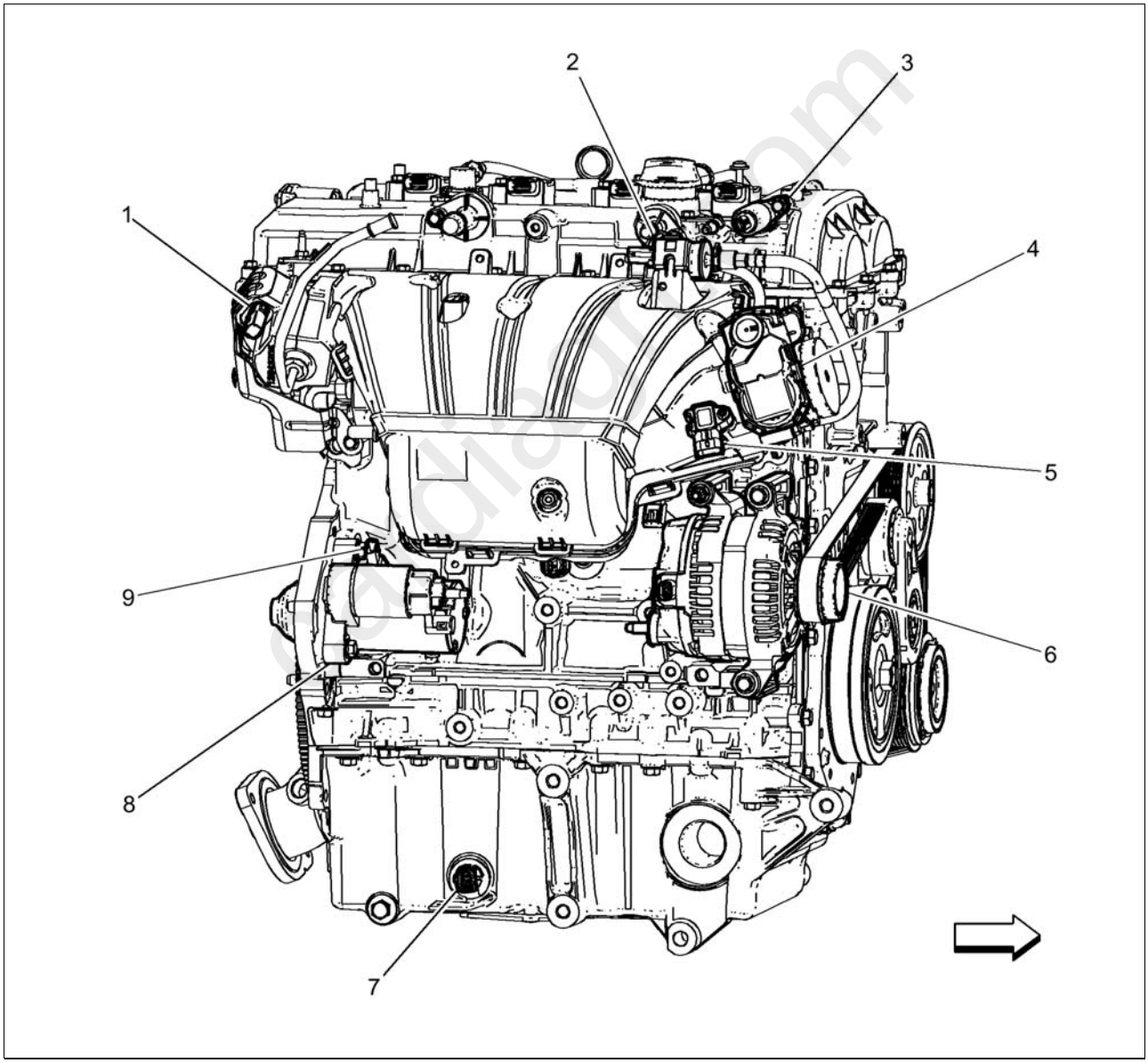
Courtesy of GENERAL MOTORS COMPANY

Items
1: B111B Turbocharger Boost/Intake Air Temperature Sensor (LTG) B111B Turbocharger Boost/Intake Air Temperature Sensor
2: Q6E Camshaft Position Actuator Solenoid Valve - Exhaust (LTG) Q6E Camshaft Position Actuator Solenoid Valve - Exhaust

3: Q42 Turbocharger Wastegate Solenoid Valve (LTG) Q42 Turbocharger Wastegate Solenoid Valve
4: Q40 Turbocharger Bypass Solenoid Valve (LTG) Q40 Turbocharger Bypass Solenoid Valve
5: Q46 A/C Compressor Solenoid Valve Q46 A/C Compressor Solenoid Valve
6: G1 A/C Compressor
7: Q2 A/C Compressor Clutch Q2 A/C Compressor Clutch

POWERTRAIN COMPONENT VIEWS > ENGINE COMPONENTS - RIGHT SIDE ON INTAKE MANIFOLD (LTG)

Fig 1: Engine Components - Right Side on Intake Manifold (LTG)



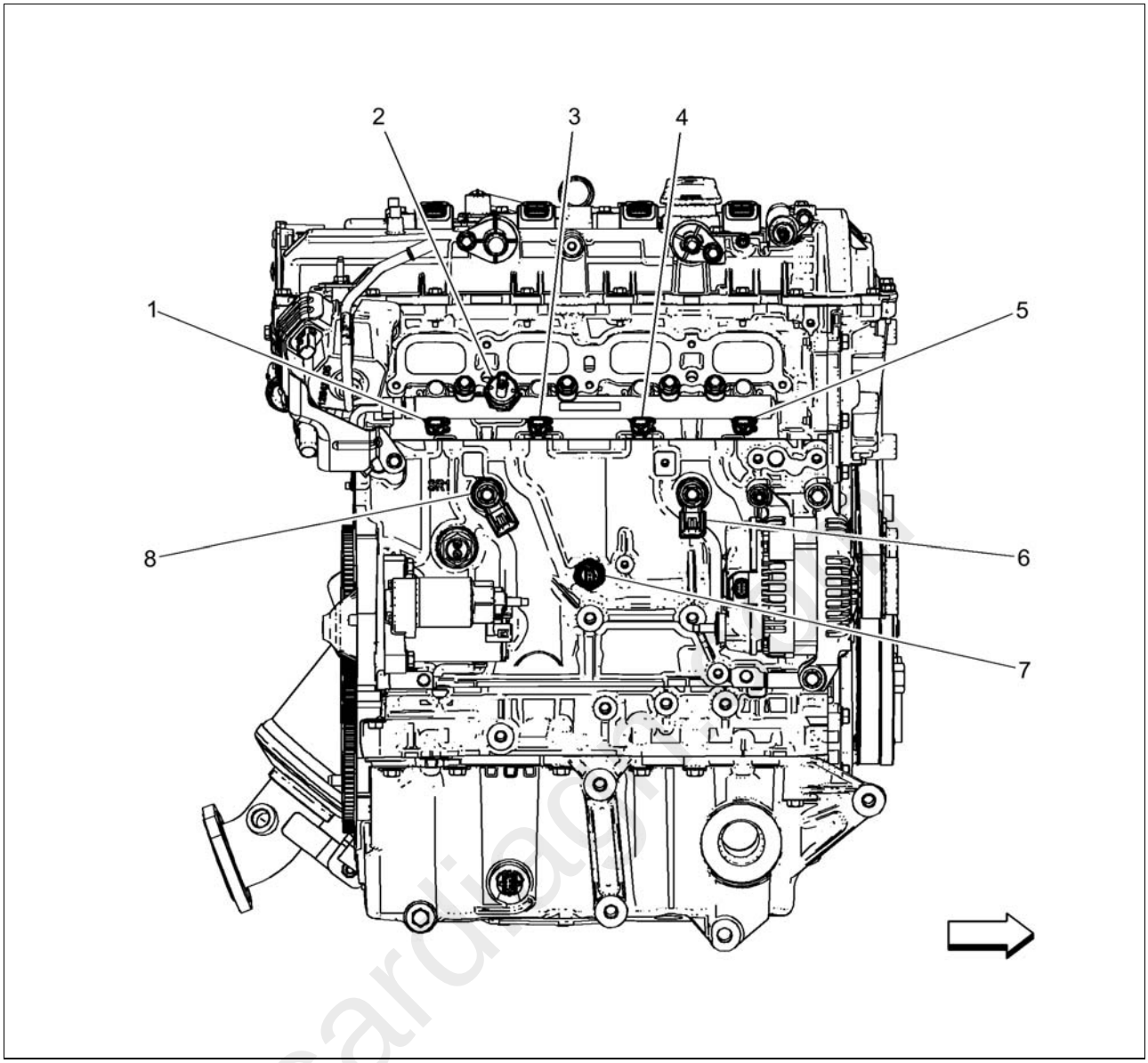
Courtesy of GENERAL MOTORS COMPANY

Items
1: G18 High Pressure Fuel Pump G18 High Pressure Fuel Pump
2: Q12 Evaporative Emission Purge Solenoid Valve Q12 Evaporative Emission Purge Solenoid Valve
3: Q6F Camshaft Position Actuator Solenoid Valve - Intake (LTG) Q6F Camshaft Position Actuator Solenoid Valve - Intake
4: Q38 Throttle Body Q38 Throttle Body
5: B74 Manifold Absolute Pressure Sensor B74 Manifold Absolute Pressure Sensor (LT1)
6: G13 Generator G13 Generator X1G13 Generator X2
7: B35 Engine Oil Level Switch B35 Engine Oil Level Switch
8: M64 Starter Motor M64 Starter Motor
9: B26 Crankshaft Position Sensor B26 Crankshaft Position Sensor (LT1/LTG)

POWERTRAIN COMPONENT VIEWS > ENGINE COMPONENTS - RIGHT SIDE BEHIND INTAKE MANIFOLD (LTG)

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Fig 1: Engine Components - Right Side Behind Intake Manifold (LTG)

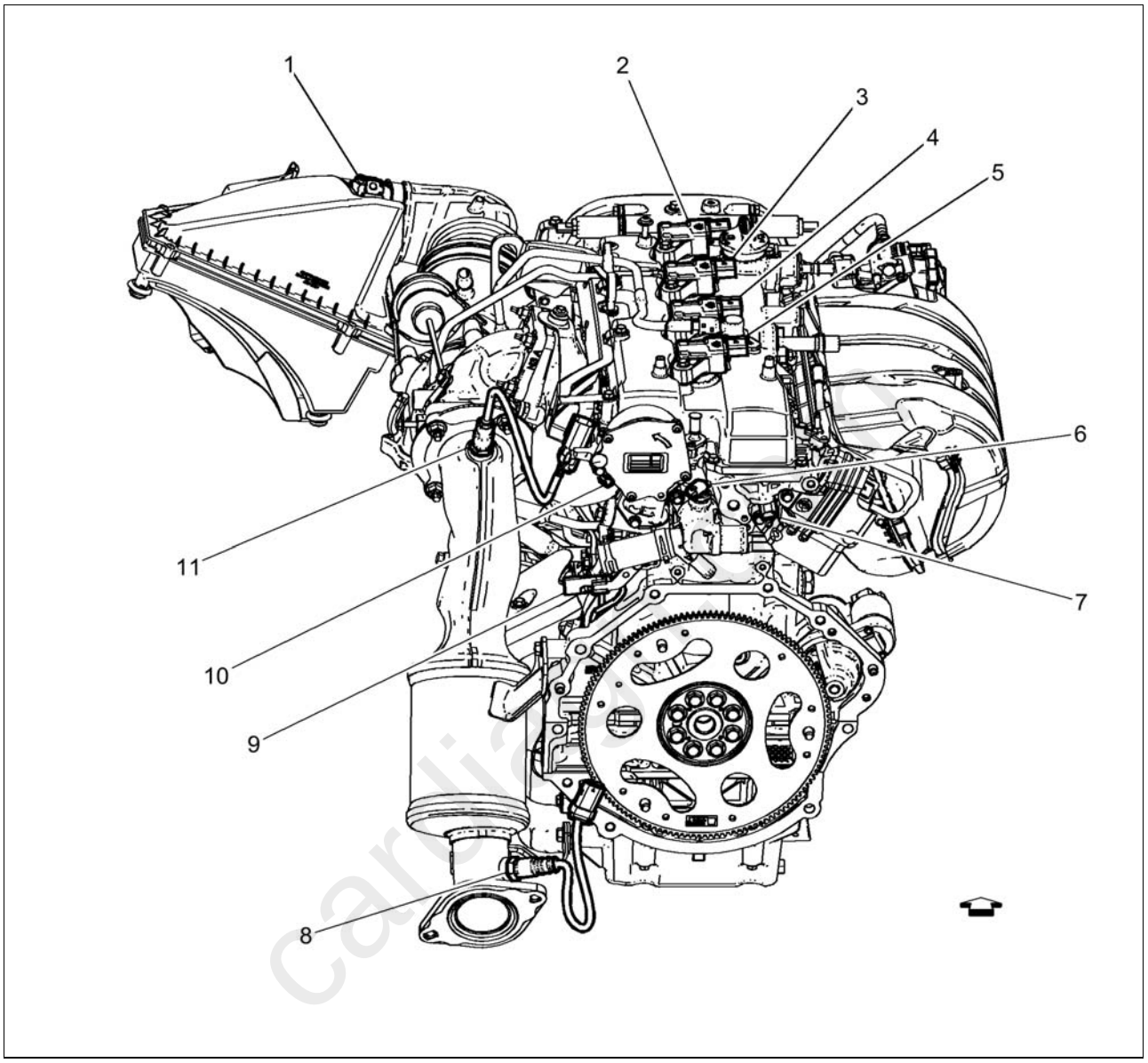


Courtesy of GENERAL MOTORS COMPANY

Items
1: Q17D Fuel Injector 4 Q17D Fuel Injector 4 (LTG)
2: B47B Fuel Rail Pressure Sensor B47B Fuel Rail Pressure Sensor (LTG)
3: Q17C Fuel Injector 3 Q17C Fuel Injector 3 (LT1)
4: Q17B Fuel Injector 2 Q17B Fuel Injector 2 (LTG)
5: Q17A Fuel Injector 1 Q17A Fuel Injector 1 (LTG)
6: B68A Knock Sensor 1 B68A Knock Sensor 1
7: B37B Engine Oil Pressure Sensor B37B Engine Oil Pressure Sensor (LTG)
8: B68B Knock Sensor 2 B68B Knock Sensor 2

POWERTRAIN COMPONENT VIEWS > ENGINE COMPONENTS - REAR (LTG)

Fig 1: Engine Components - Rear (LTG)



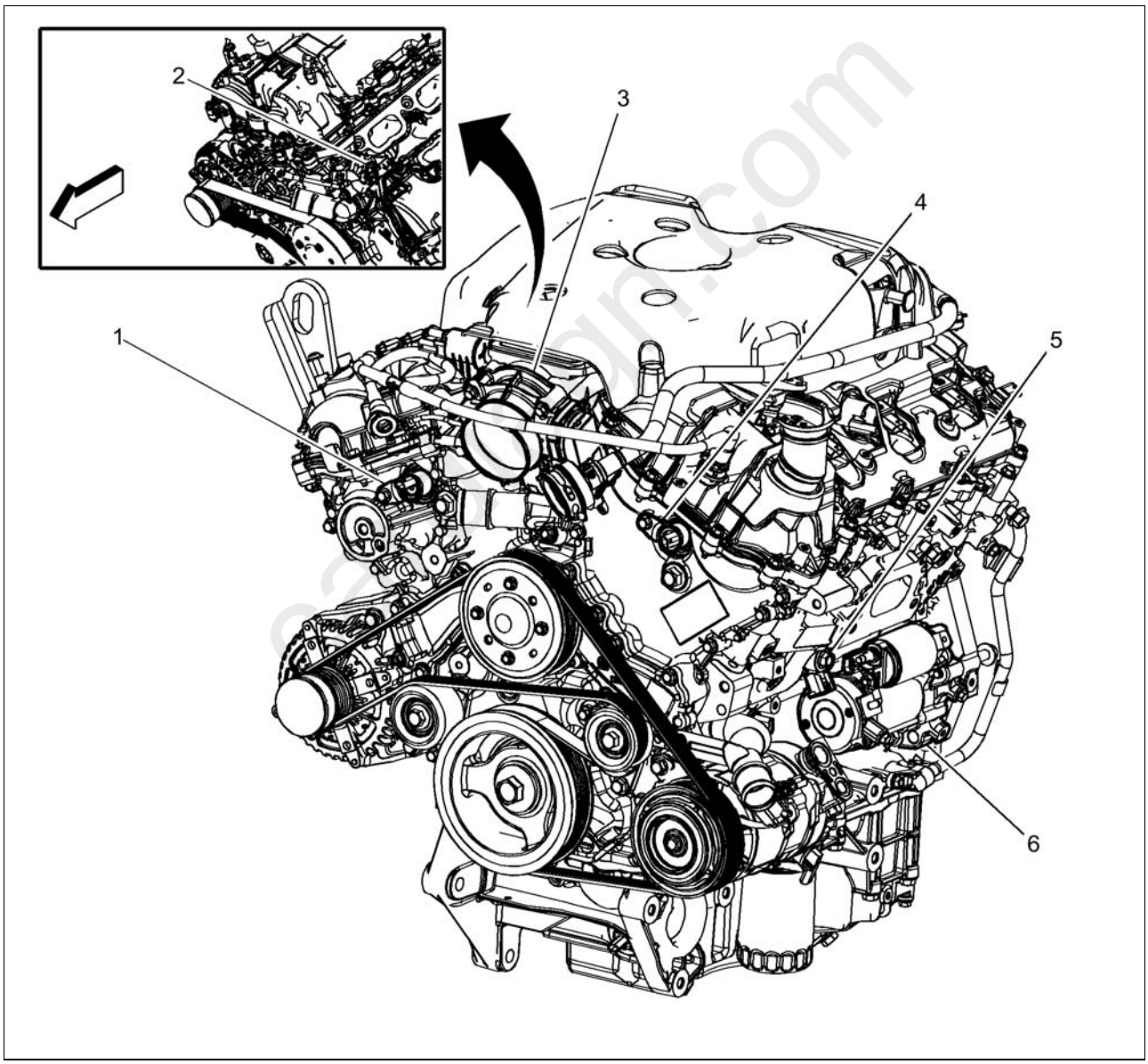
Courtesy of GENERAL MOTORS COMPANY

Items
1: B75C Multifunction Intake Air Sensor B75C Multifunction Intake Air Sensor
2: T8A Ignition Coil 1 T8A Ignition Coil 1 (LGX)
3: T8B Ignition Coil 2 T8B Ignition Coil 2 (LTG)
4: T8C Ignition Coil 3 T8C Ignition Coil 3 (LTG)
5: T8D Ignition Coil 4 T8D Ignition Coil 4 (LGX)

6: B34 Engine Coolant Temperature Sensor B34 Engine Coolant Temperature Sensor
7: B23F Camshaft Position Sensor - Intake (LTG) B23F Camshaft Position Sensor - Intake
8: B52B Heated Oxygen Sensor 2 (LTG) B52B Heated Oxygen Sensor 2
9: Q44 Engine Oil Pressure Control Solenoid Valve Q44 Engine Oil Pressure Control Solenoid Valve
10: B23E Camshaft Position Sensor - Exhaust (LTG) B23E Camshaft Position Sensor - Exhaust
11: B52A Heated Oxygen Sensor 1 (LTG) B52A Heated Oxygen Sensor 1

POWERTRAIN COMPONENT VIEWS > ENGINE COMPONENTS - FRONT (LGX)

Fig 1: Engine Components - Front (LGX)



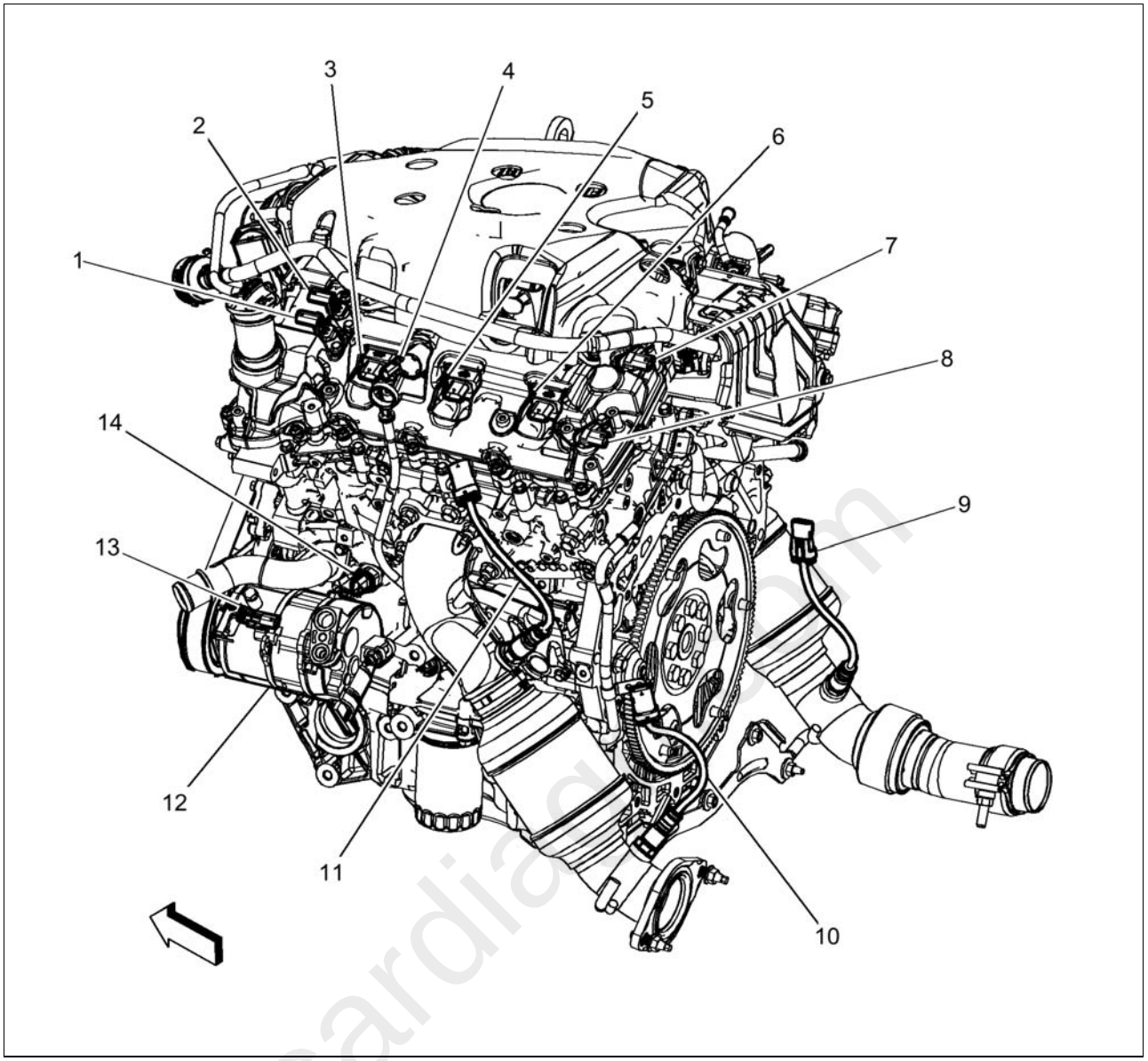
Courtesy of GENERAL MOTORS COMPANY

Items
1: Q83A Valve Lifter Oil Solenoid Valve - Bank 1 (LGX) Q84A Camshaft Position Actuator Park Lock Solenoid Valve - Bank 1 Intake
2: B34 Engine Coolant Temperature Sensor B34 Engine Coolant Temperature Sensor
3: Q38 Throttle Body Q38 Throttle Body
4: Q83B Valve Lifter Oil Solenoid Valve - Bank 2 (LGX) Q84B Camshaft Position Actuator Park Lock Solenoid Valve - Bank 2 Intake
5: B68B Knock Sensor 2 B68B Knock Sensor 2
6: M64 Starter Motor M64 Starter Motor

POWERTRAIN COMPONENT VIEWS > ENGINE COMPONENTS - LEFT REAR (LGX)

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Fig 1: Engine Components - Left Rear (LGX)



Courtesy of GENERAL MOTORS COMPANY

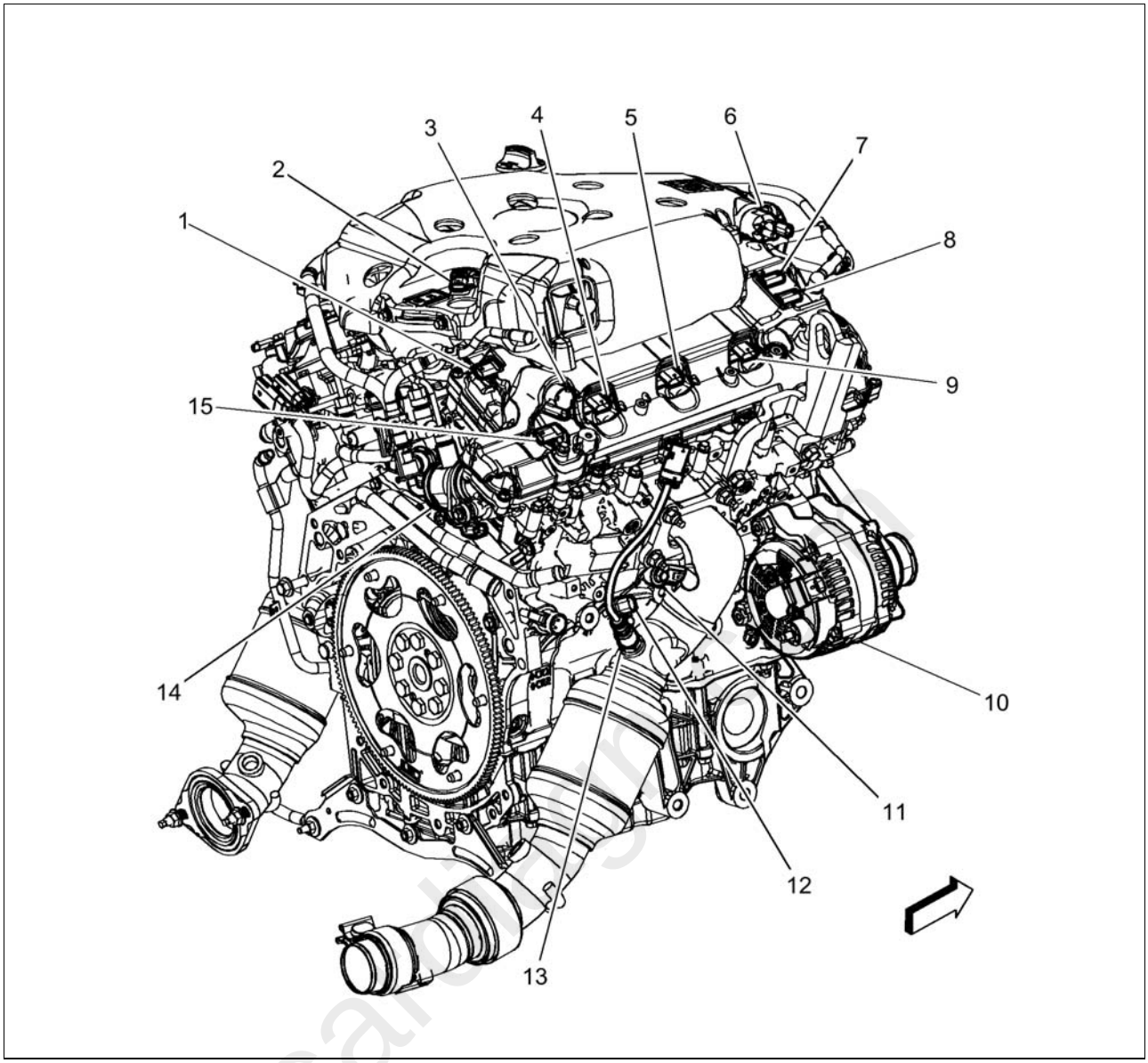
Items
1: Q6C Camshaft Position Actuator Solenoid Valve - Bank 2 Exhaust (LGX) Q6C Camshaft Position Actuator Solenoid Valve - Bank 2 Exhaust
2: Q6D Camshaft Position Actuator Solenoid Valve - Bank 2 Intake (LGX) Q6D Camshaft Position Actuator Solenoid Valve - Bank 2 Intake
3: T8B Ignition Coil 2 T8B Ignition Coil 2 (LGX)
4: Q83B Valve Lifter Oil Solenoid Valve - Bank 2 (LGX) Q83B Valve Lifter Oil Solenoid Valve - Bank 2
5: T8D Ignition Coil 4 T8D Ignition Coil 4 (LGX)
6: T8F Ignition Coil 6 (LGX or LT1) T8F Ignition Coil 6 (LGX)

7: B23D Camshaft Position Sensor - Bank 2 Intake (LGX) B23D Camshaft Position Sensor - Bank 2 Intake
8: B23C Camshaft Position Sensor - Bank 2 Exhaust (LGX) B23C Camshaft Position Sensor - Bank 2 Exhaust
9: B52D Heated Oxygen Sensor - Bank 1 Sensor 2 (LGX or LT1) B52D Heated Oxygen Sensor - Bank 1 Sensor 2 (LGX)
10: B52F Heated Oxygen Sensor - Bank 2 Sensor 2 (LGX or LT1) B52F Heated Oxygen Sensor - Bank 2 Sensor 2 (LGX)
11: B52E Heated Oxygen Sensor - Bank 2 Sensor 1 (LGX or LT1) B52E Heated Oxygen Sensor - Bank 2 Sensor 1 (LGX)
12: Q46 A/C Compressor Solenoid Valve Q46 A/C Compressor Solenoid Valve
13: Q2 A/C Compressor Clutch Q2 A/C Compressor Clutch
14: B37B Engine Oil Pressure Sensor B37B Engine Oil Pressure Sensor (LGX)

POWERTRAIN COMPONENT VIEWS > ENGINE COMPONENTS - RIGHT REAR (LGX)

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Fig 1: Engine Components - Right Rear (LGX)



Courtesy of GENERAL MOTORS COMPANY

Items
1: B23B Camshaft Position Sensor - Bank 1 Intake (LGX) B23B Camshaft Position Sensor - Bank 1 Intake
2: B74 Manifold Absolute Pressure Sensor B74 Manifold Absolute Pressure Sensor (LGX)
3: Q83A Valve Lifter Oil Solenoid Valve - Bank 1 (LGX) Q83A Valve Lifter Oil Solenoid Valve - Bank 1
4: T8E Ignition Coil 5 (LGX or LT1) T8E Ignition Coil 5 (LGX)
5: T8C Ignition Coil 3 T8C Ignition Coil 3 (LGX)
6: Q12 Evaporative Emission Purge Solenoid Valve Q12 Evaporative Emission Purge Solenoid Valve
7: Q6B Camshaft Position Actuator Solenoid Valve - Bank 1 Intake (LGX) Q6B Camshaft Position Actuator Solenoid Valve - Bank 1 Intake

8: Q6A Camshaft Position Actuator Solenoid Valve - Bank 1 Exhaust (LGX) Q6A Camshaft Position Actuator Solenoid Valve - Bank 1 Exhaust
9: T8A Ignition Coil 1 T8A Ignition Coil 1 (LGX)
10: G13 Generator G13 Generator X1G13 Generator X2
11: B68A Knock Sensor 1 B68A Knock Sensor 1
12: B26 Crankshaft Position Sensor B26 Crankshaft Position Sensor (LGX)
13: B52C Heated Oxygen Sensor - Bank 1 Sensor 1 (LGX or LT1) B52C Heated Oxygen Sensor - Bank 1 Sensor 1 (LGX)
14: G18 High Pressure Fuel Pump G18 High Pressure Fuel Pump
15: B23A Camshaft Position Sensor - Bank 1 Exhaust (LGX) B23A Camshaft Position Sensor - Bank 1 Exhaust

POWERTRAIN COMPONENT VIEWS > ENGINE COMPONENTS - ENGINE OIL LEVEL SENSOR (LGX)

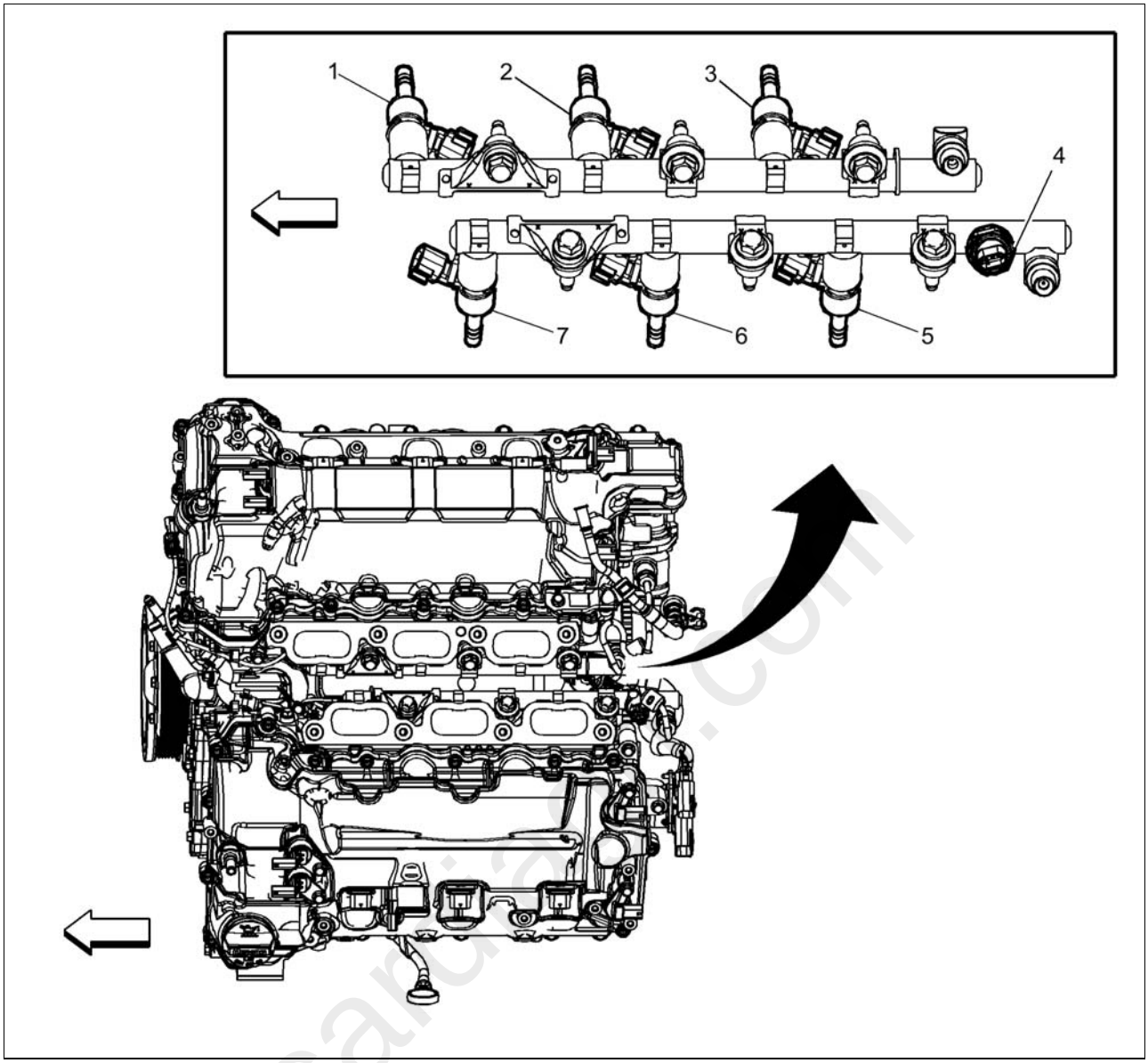
Engine Oil Level Sensor is located in the engine compartment, center, near front, mounted to front of oil pan. No illustration available.

Items
1: B35 Engine Oil Level Switch B35 Engine Oil Level Switch

POWERTRAIN COMPONENT VIEWS > ENGINE COMPONENTS - FUEL RAIL COMPONENTS (LGX)

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Fig 1: Engine Components - Fuel Rail Components (LGX)

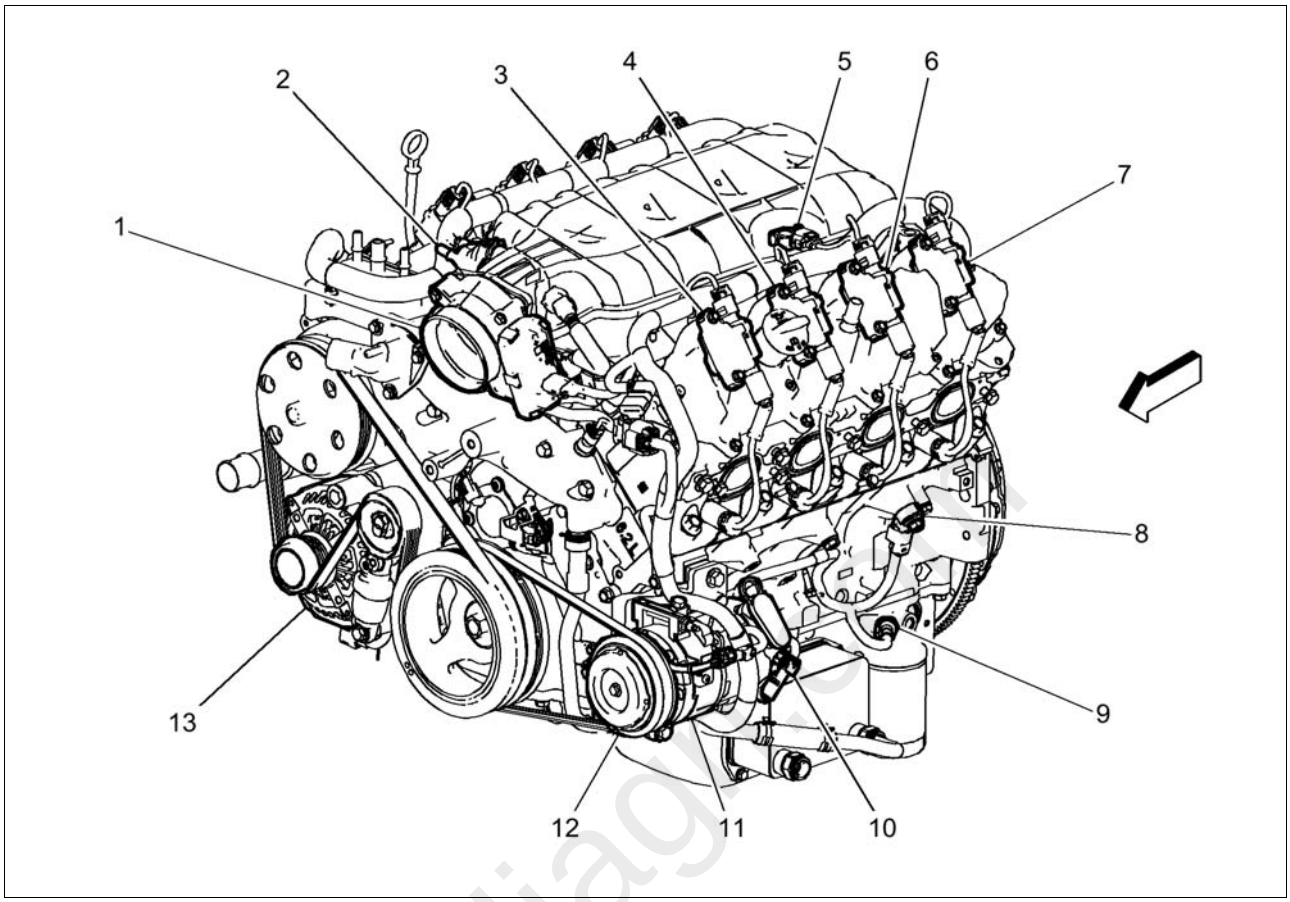


Courtesy of GENERAL MOTORS COMPANY

Items
1: Q17A Fuel Injector 1 Q17A Fuel Injector 1 (LGX)
2: Q17C Fuel Injector 3 Q17C Fuel Injector 3 (LGX)
3: Q17E Fuel Injector 5 (LGX or LT1) Q17E Fuel Injector 5 (LGX)
4: B47B Fuel Rail Pressure Sensor B47B Fuel Rail Pressure Sensor (LGX)
5: Q17F Fuel Injector 6 (LGX or LT1) Q17F Fuel Injector 6 (LGX)
6: Q17D Fuel Injector 4 Q17D Fuel Injector 4 (LGX)
7: Q17B Fuel Injector 2 Q17B Fuel Injector 2 (LGX)

POWERTRAIN COMPONENT VIEWS > ENGINE COMPONENTS - LEFT FRONT (LT1)

Fig 1: Engine Components - Left Front (LT1)



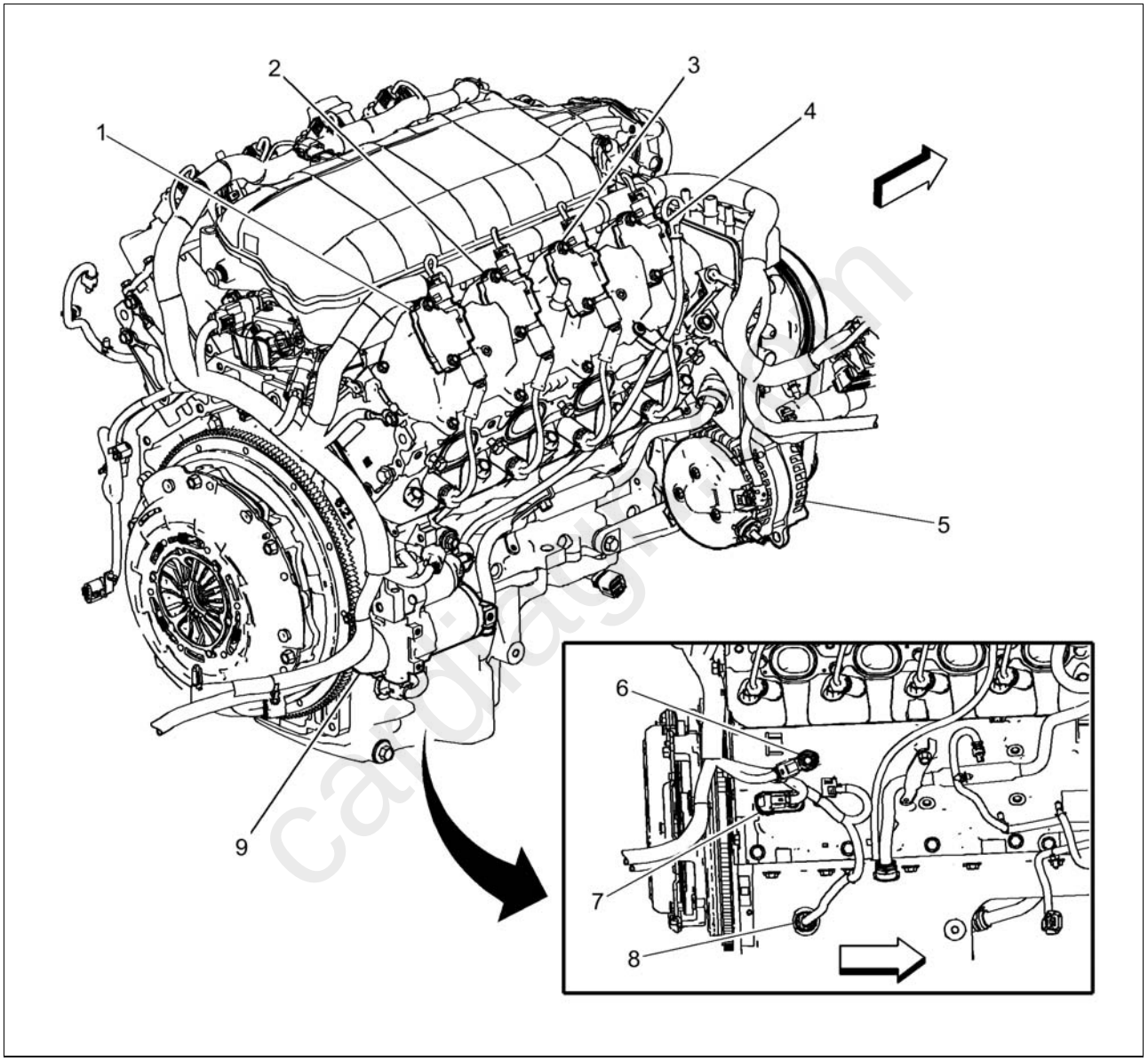
Courtesy of GENERAL MOTORS COMPANY

Items
1: Q38 Throttle Body Q38 Throttle Body
2: Q12 Evaporative Emission Purge Solenoid Valve Q12 Evaporative Emission Purge Solenoid Valve
3: T8A Ignition Coil 1 T8A Ignition Coil 1 (LGX)
4: T8C Ignition Coil 3 T8C Ignition Coil 3 (LT1)
5: B74 Manifold Absolute Pressure Sensor B74 Manifold Absolute Pressure Sensor (LT1)
6: T8E Ignition Coil 5 (LGX or LT1) T8E Ignition Coil 5 (LT1)
7: T8G Ignition Coil 7 (LT1) T8G Ignition Coil 7
8: B68A Knock Sensor 1 B68A Knock Sensor 1
9: B36 Engine Oil Temperature Sensor B36 Engine Oil Temperature Sensor
10: Q46 A/C Compressor Solenoid Valve Q46 A/C Compressor Solenoid Valve
11: G1 A/C Compressor

12: Q2 A/C Compressor Clutch Q2 A/C Compressor Clutch
13: G13 Generator G13 Generator X1G13 Generator X2

POWERTRAIN COMPONENT VIEWS > ENGINE COMPONENTS - RIGHT SIDE (LT1)

Fig 1: Engine Components - Right Side (LT1)



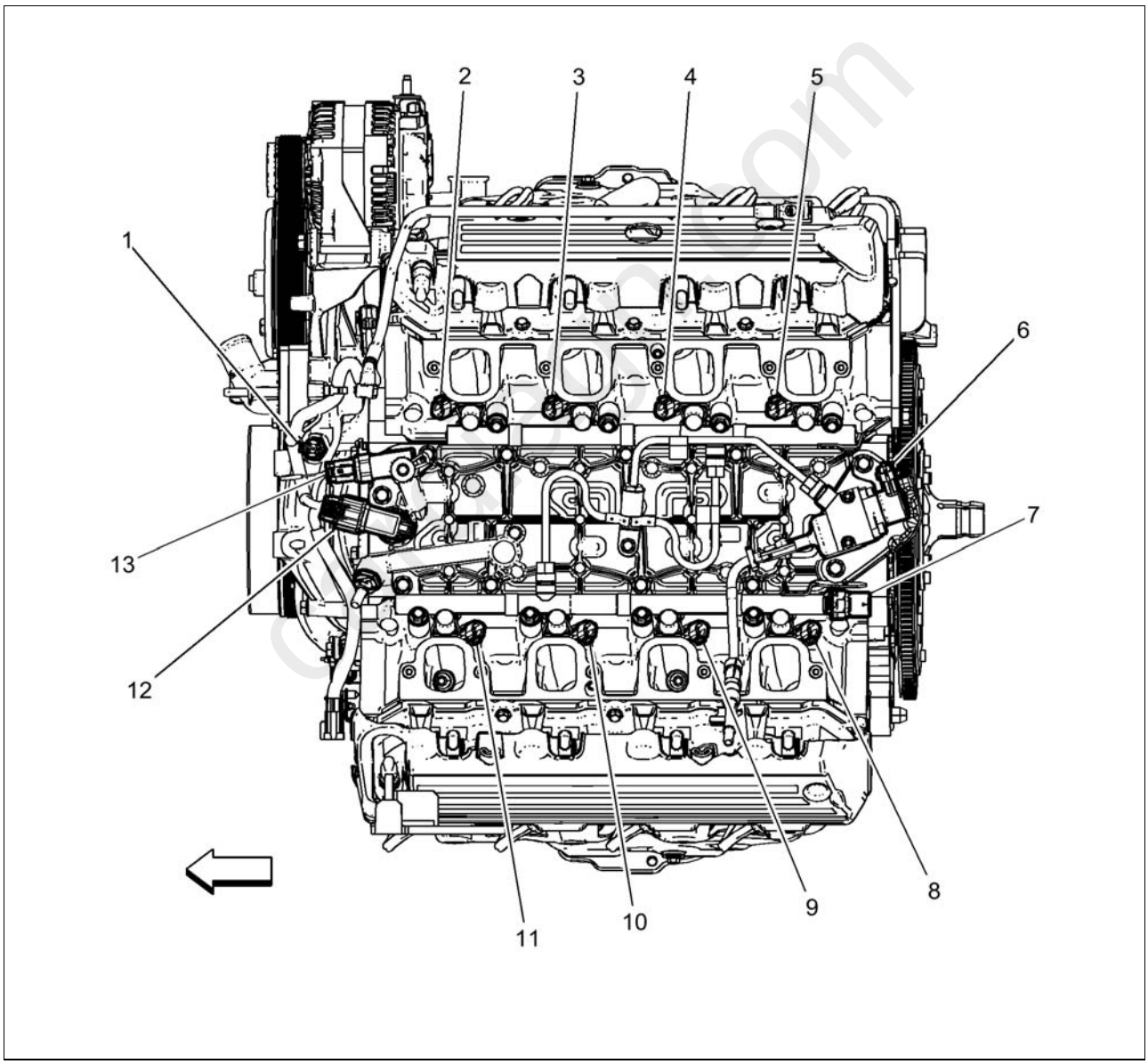
Courtesy of GENERAL MOTORS COMPANY

Items
1: T8H Ignition Coil 8 (LT1) T8H Ignition Coil 8
2: T8F Ignition Coil 6 (LGX or LT1) T8F Ignition Coil 6 (LT1)
3: T8D Ignition Coil 4 T8D Ignition Coil 4 (LGX)

4: T8B Ignition Coil 2 T8B Ignition Coil 2 (LT1)
5: G13 Generator G13 Generator X1G13 Generator X2
6: B68B Knock Sensor 2 B68B Knock Sensor 2
7: B26 Crankshaft Position Sensor B26 Crankshaft Position Sensor (LT1/LTG)
8: B35 Engine Oil Level Switch B35 Engine Oil Level Switch
9: M64 Starter Motor M64 Starter Motor

POWERTRAIN COMPONENT VIEWS > TOP OF ENGINE COMPONENTS (LT1)

Fig 1: Top of Engine Components (LT1)



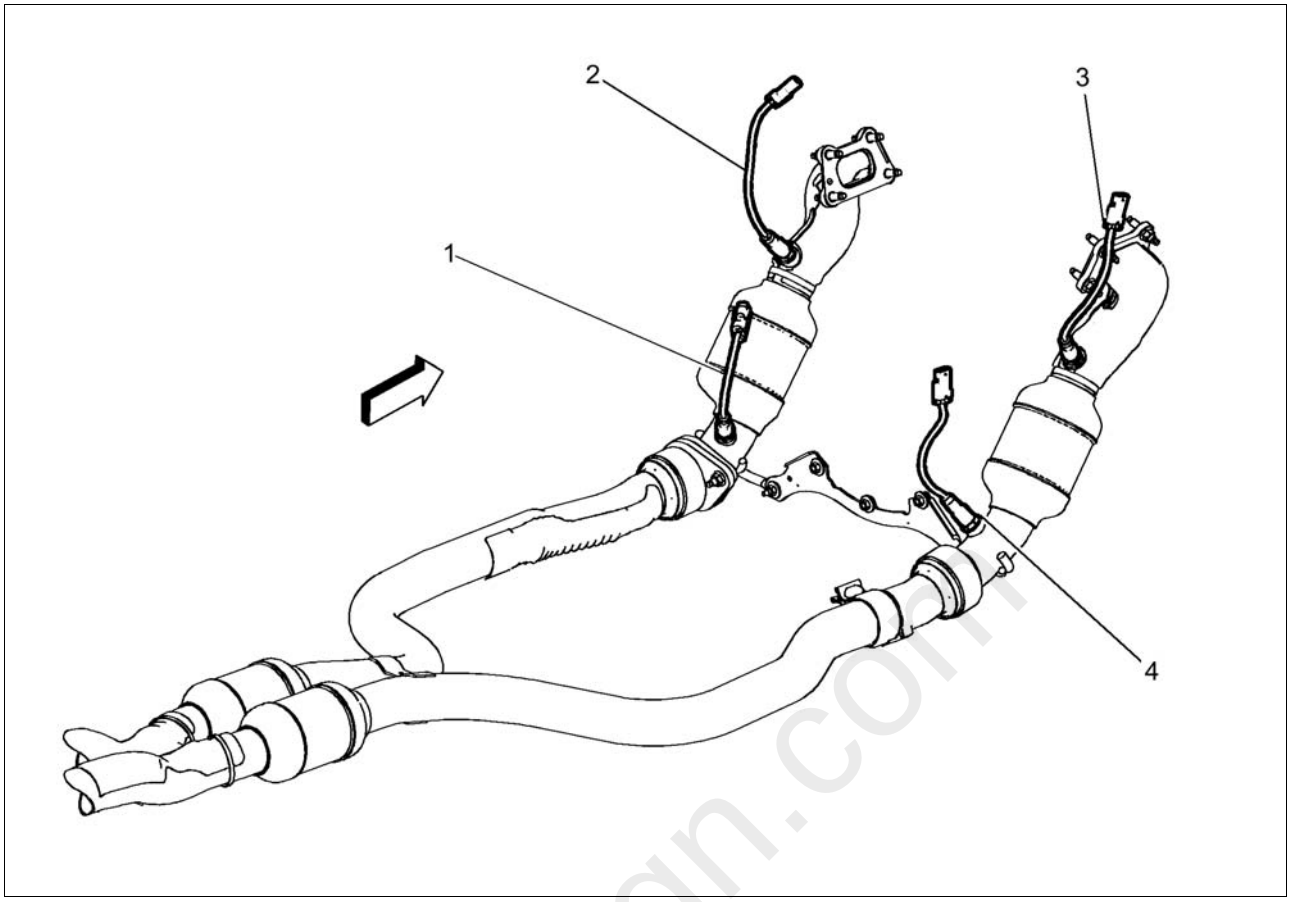
Courtesy of GENERAL MOTORS COMPANY

Items
1: B34 Engine Coolant Temperature Sensor B34 Engine Coolant Temperature Sensor
2: Q17B Fuel Injector 2 Q17B Fuel Injector 2 (LT1)
3: Q17D Fuel Injector 4 Q17D Fuel Injector 4 (LT1)
4: Q17F Fuel Injector 6 (LGX or LT1)
5: Q17H Fuel Injector 8 (LT1) Q17H Fuel Injector 8 (LT1)
6: G18 High Pressure Fuel Pump G18 High Pressure Fuel Pump
7: B47B Fuel Rail Pressure Sensor B47B Fuel Rail Pressure Sensor (LT1)
8: Q17G Fuel Injector 7 (LT1) Q17G Fuel Injector 7 (LT1)
9: Q17E Fuel Injector 5 (LGX or LT1) Q17E Fuel Injector 5 (LT1)
10: Q17C Fuel Injector 3 Q17C Fuel Injector 3 (LT1)
11: Q17A Fuel Injector 1 Q17A Fuel Injector 1 (LT1)
12: Q43 Valve Lifter Oil Manifold Assembly (LT1)
13: B37B Engine Oil Pressure Sensor B37B Engine Oil Pressure Sensor (LGX)

POWERTRAIN COMPONENT VIEWS > OXYGEN SENSORS (LGX)

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Fig 1: Oxygen Sensors (LGX)



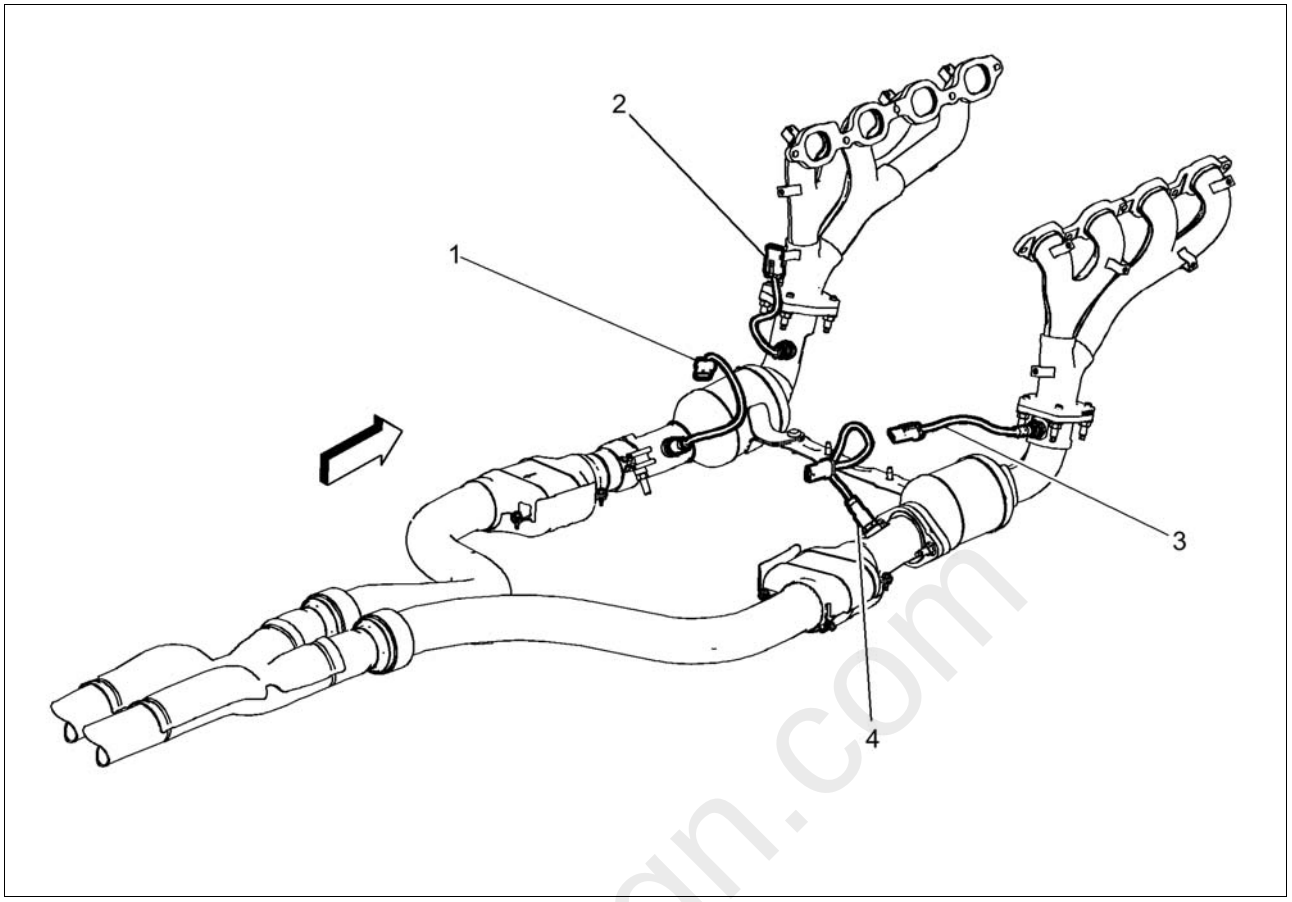
Courtesy of GENERAL MOTORS COMPANY

Items
1: B52F Heated Oxygen Sensor - Bank 2 Sensor 2 (LGX or LT1) B52F Heated Oxygen Sensor - Bank 2 Sensor 2 (LGX)
2: B52E Heated Oxygen Sensor - Bank 2 Sensor 1 (LGX or LT1) B52E Heated Oxygen Sensor - Bank 2 Sensor 1 (LGX)
3: B52C Heated Oxygen Sensor - Bank 1 Sensor 1 (LGX or LT1) B52C Heated Oxygen Sensor - Bank 1 Sensor 1 (LGX)
4: B52D Heated Oxygen Sensor - Bank 1 Sensor 2 (LGX or LT1) B52D Heated Oxygen Sensor - Bank 1 Sensor 2 (LGX)

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POWERTRAIN COMPONENT VIEWS > OXYGEN SENSORS (LT1)

Fig 1: Oxygen Sensors (LT1)



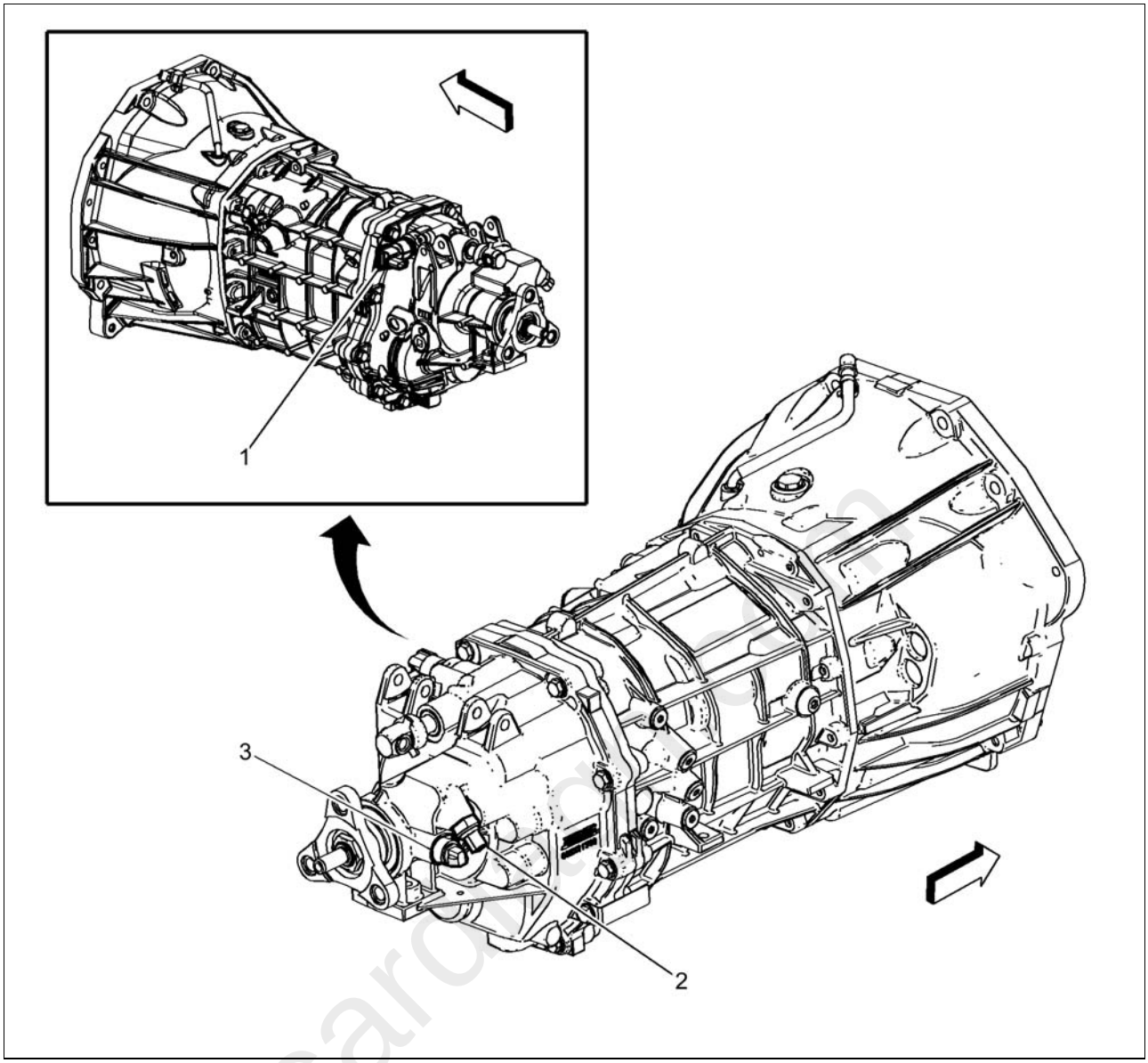
Courtesy of GENERAL MOTORS COMPANY

Items
1: B52E Heated Oxygen Sensor - Bank 2 Sensor 1 (LT1) B52E Heated Oxygen Sensor - Bank 2 Sensor 1 (LT1)
2: B52F Heated Oxygen Sensor - Bank 2 Sensor 2 (LT1) B52F Heated Oxygen Sensor - Bank 2 Sensor 2 (LT1)
3: B52C Heated Oxygen Sensor - Bank 1 Sensor 1 (LT1) B52C Heated Oxygen Sensor - Bank 1 Sensor 1 (LT1)
4: B52D Heated Oxygen Sensor - Bank 1 Sensor 2 (LT1) B52D Heated Oxygen Sensor - Bank 1 Sensor 2 (LT1)

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POWERTRAIN COMPONENT VIEWS > MANUAL TRANSMISSION COMPONENTS (M13)

Fig 1: Manual Transmission Components (M13)

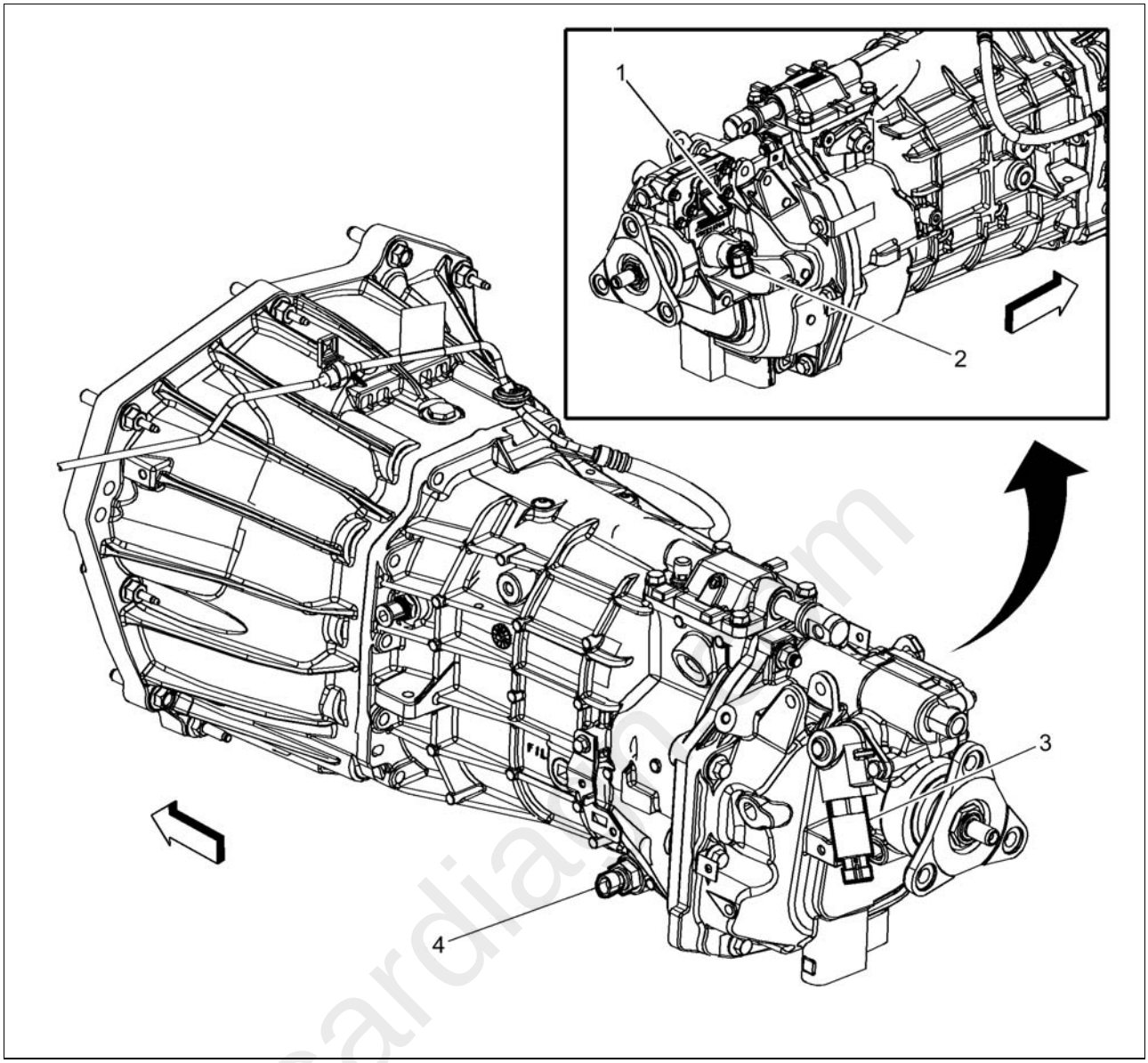


Courtesy of GENERAL MOTORS COMPANY

Items
1: B227 Gear Position Sensor (MN6) B227 Gear Position Sensor
2: B16 Backup Lamp Switch (MN6) B16 Backup Lamp Switch
3: B14A Transmission Output Shaft Speed Sensor B14A Transmission Output Shaft Speed Sensor

POWERTRAIN COMPONENT VIEWS > MANUAL TRANSMISSION COMPONENTS (MM6)

Fig 1: Manual Transmission Components (MM6)

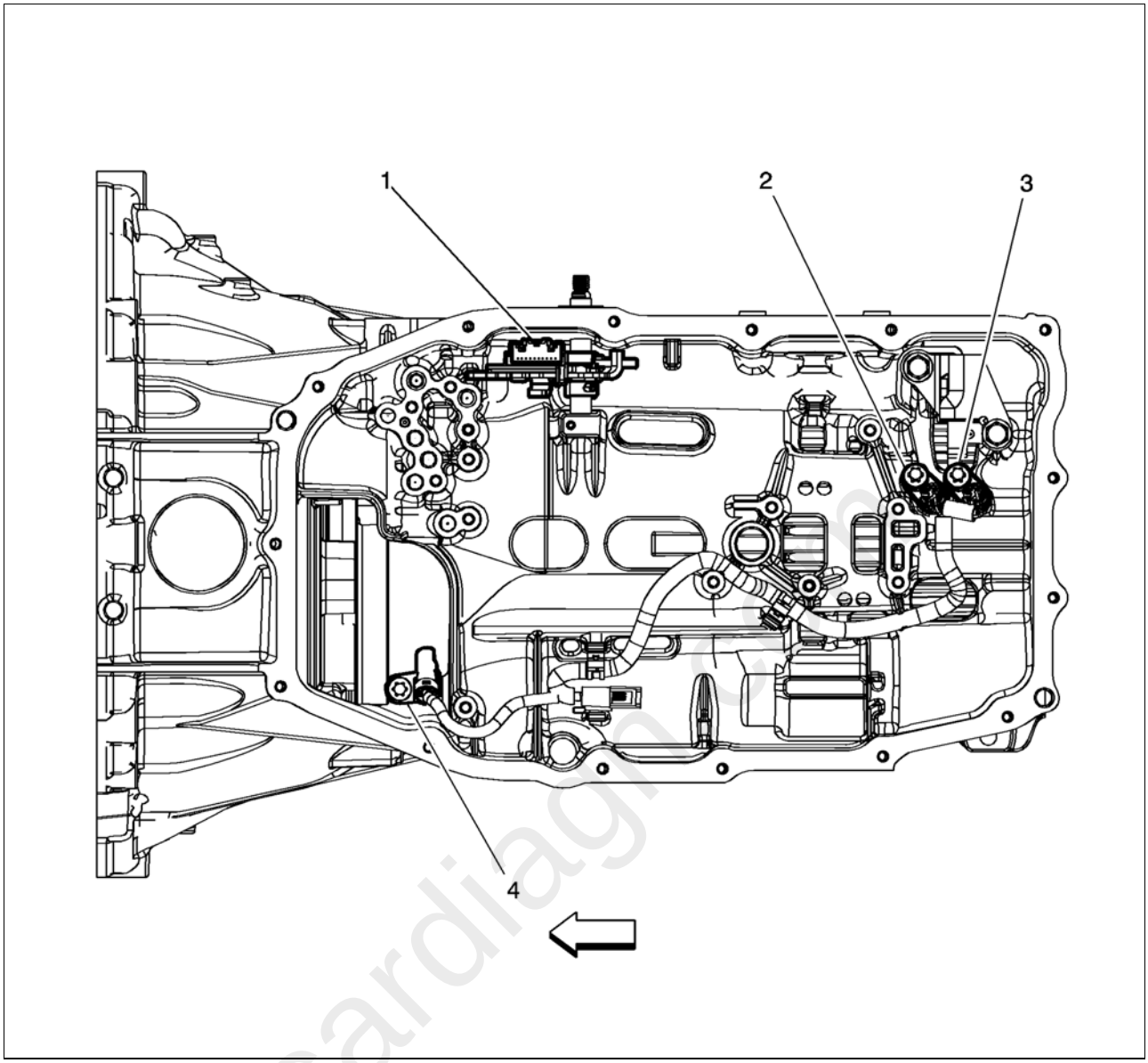


Courtesy of GENERAL MOTORS COMPANY

Items
1: B227 Gear Position Sensor (MN6) B227 Gear Position Sensor
2: B14A Transmission Output Shaft Speed Sensor B14A Transmission Output Shaft Speed Sensor
3: M47 Reverse Inhibit Solenoid Actuator (MN6) M47 Reverse Inhibit Solenoid Actuator
4: B173 Manual Transmission Fluid Temperature Sensor (MN6) B173 Manual Transmission Fluid Temperature Sensor

POWERTRAIN COMPONENT VIEWS > AUTOMATIC TRANSMISSION CASE COMPONENTS (M5T OR M5U)

Fig 1: Automatic Transmission Case Components (M5T or M5U)

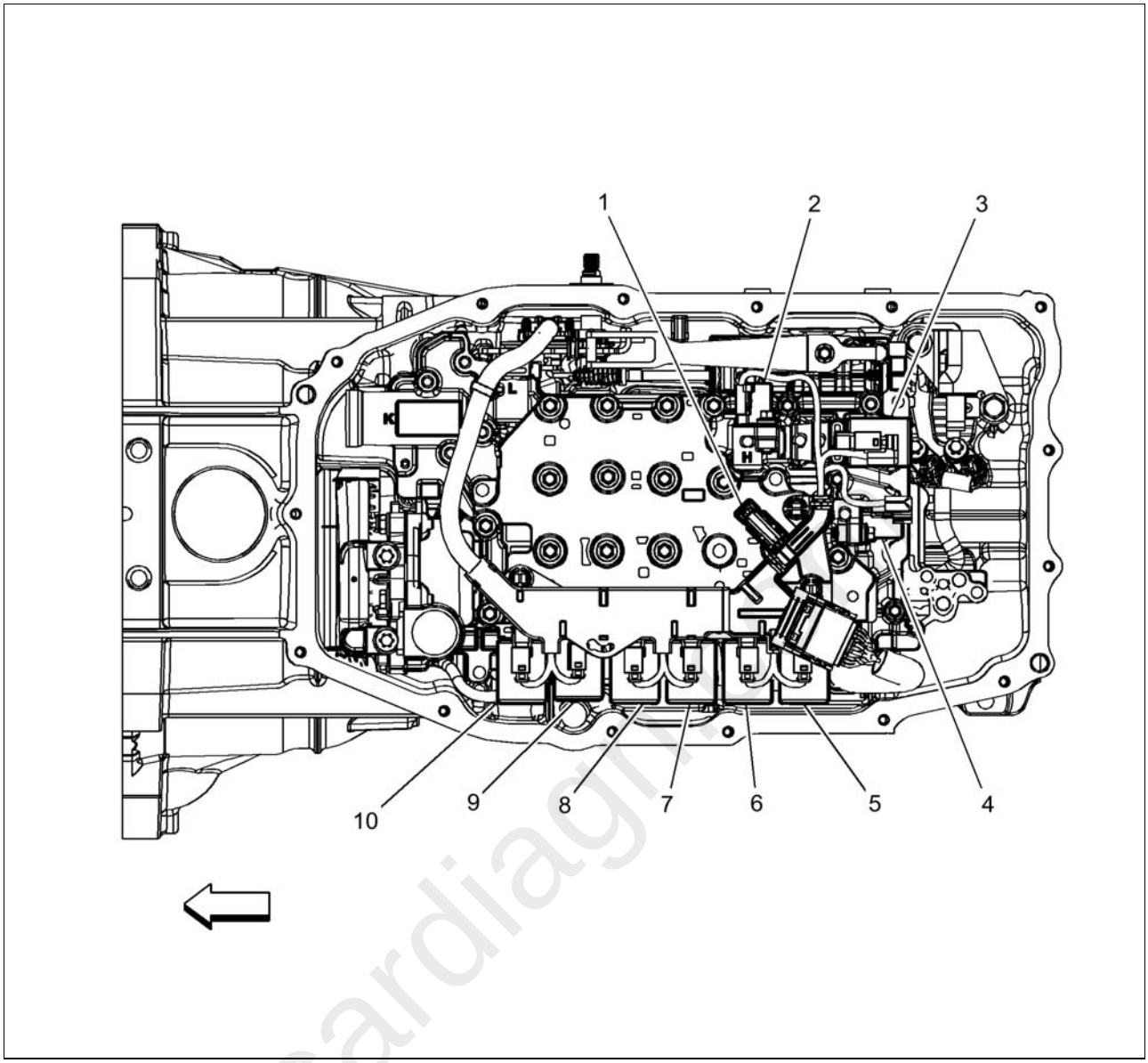


Courtesy of GENERAL MOTORS COMPANY

Items
1: B15 Transmission Internal Mode Switch (MX0) B15 Transmission Internal Mode Switch
2: B14D Transmission Intermediate Shaft Speed Sensor (MX0)
3: B14A Transmission Output Shaft Speed Sensor B14A Transmission Output Shaft Speed Sensor
4: B14C Transmission Input Shaft Speed Sensor (MX0)

POWERTRAIN COMPONENT VIEWS > AUTOMATIC TRANSMISSION VALVE BODY COMPONENTS (M5T OR M5U)

Fig 1: Automatic Transmission Valve Body Components (M5T or M5U)



Courtesy of GENERAL MOTORS COMPANY

Items
1: B13 Transmission Fluid Temperature Sensor (MX0) B13 Transmission Fluid Temperature Sensor
2: Q77H Transmission Control Solenoid Valve 8 (MX0) Q77H Transmission Control Solenoid Valve 8
3: Q77F Transmission Control Solenoid Valve 6 (MX0) Q77F Transmission Control Solenoid Valve 6
4: Q77J Transmission Control Solenoid Valve 9 (MX0) Q77J Transmission Control Solenoid Valve 9
5: Q77B Transmission Control Solenoid Valve 2 (MX0) Q77B Transmission Control Solenoid Valve 2
6: Q77A Transmission Control Solenoid Valve 1 (MX0) Q77A Transmission Control Solenoid Valve 1
7: Q77E Transmission Control Solenoid Valve 5 (MX0) Q77E Transmission Control Solenoid Valve 5
8: Q77C Transmission Control Solenoid Valve 3 (MX0) Q77C Transmission Control Solenoid Valve 3

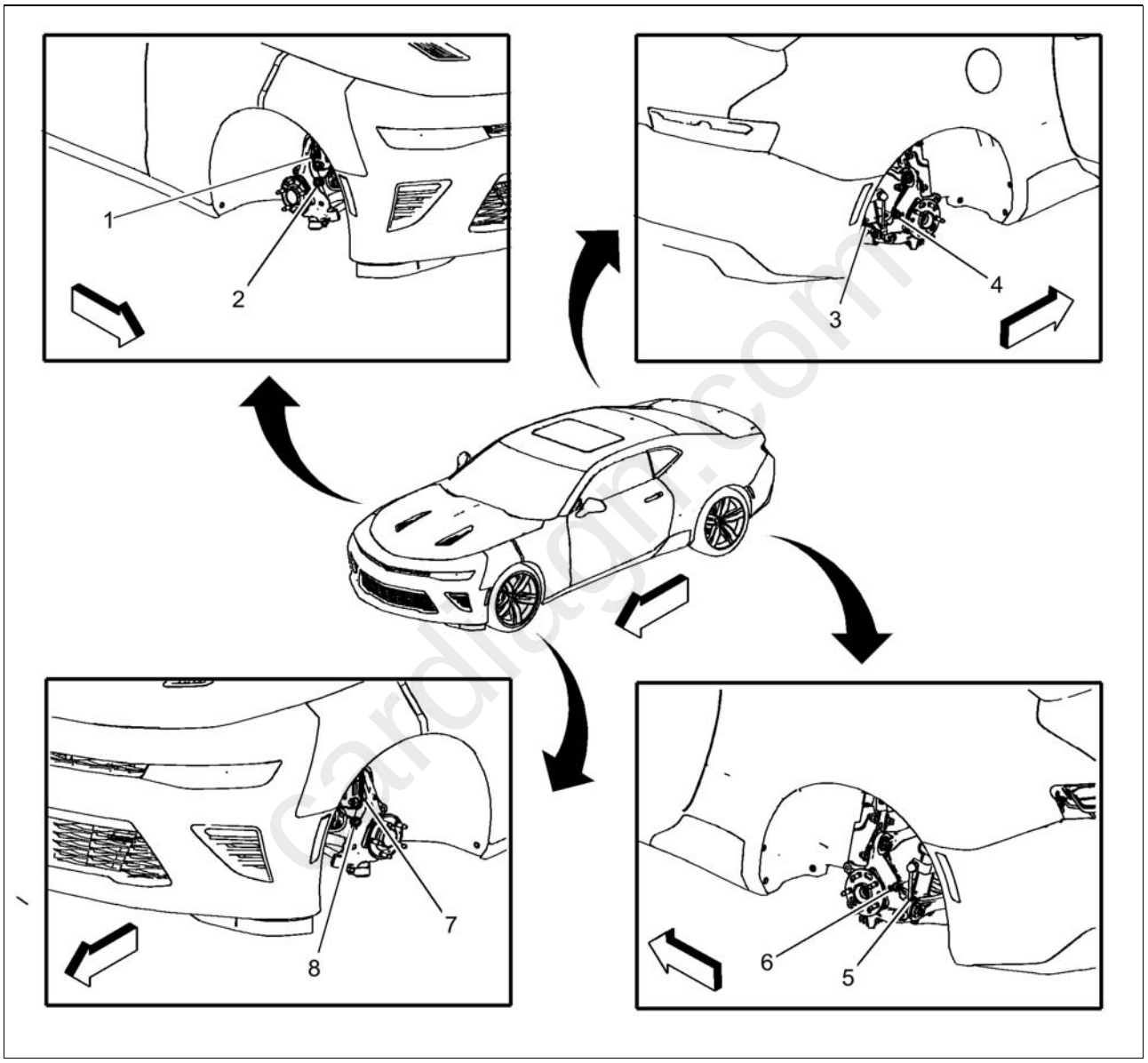
9: Q77D Transmission Control Solenoid Valve 4 (MX0) Q77D Transmission Control Solenoid Valve 4
10: Q77G Transmission Control Solenoid Valve 7 (MX0) Q77G Transmission Control Solenoid Valve 7

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Service Manual: WIRING SYSTEMS AND POWER MANAGEMENT - COMPONENT LOCATOR - WHEELS/VEHICLE UNDERBODY COMPONENT VIEWS

WHEELS/VEHICLE UNDERBODY COMPONENT VIEWS > WHEELWELL COMPONENTS

Fig 1: Wheelwell Components



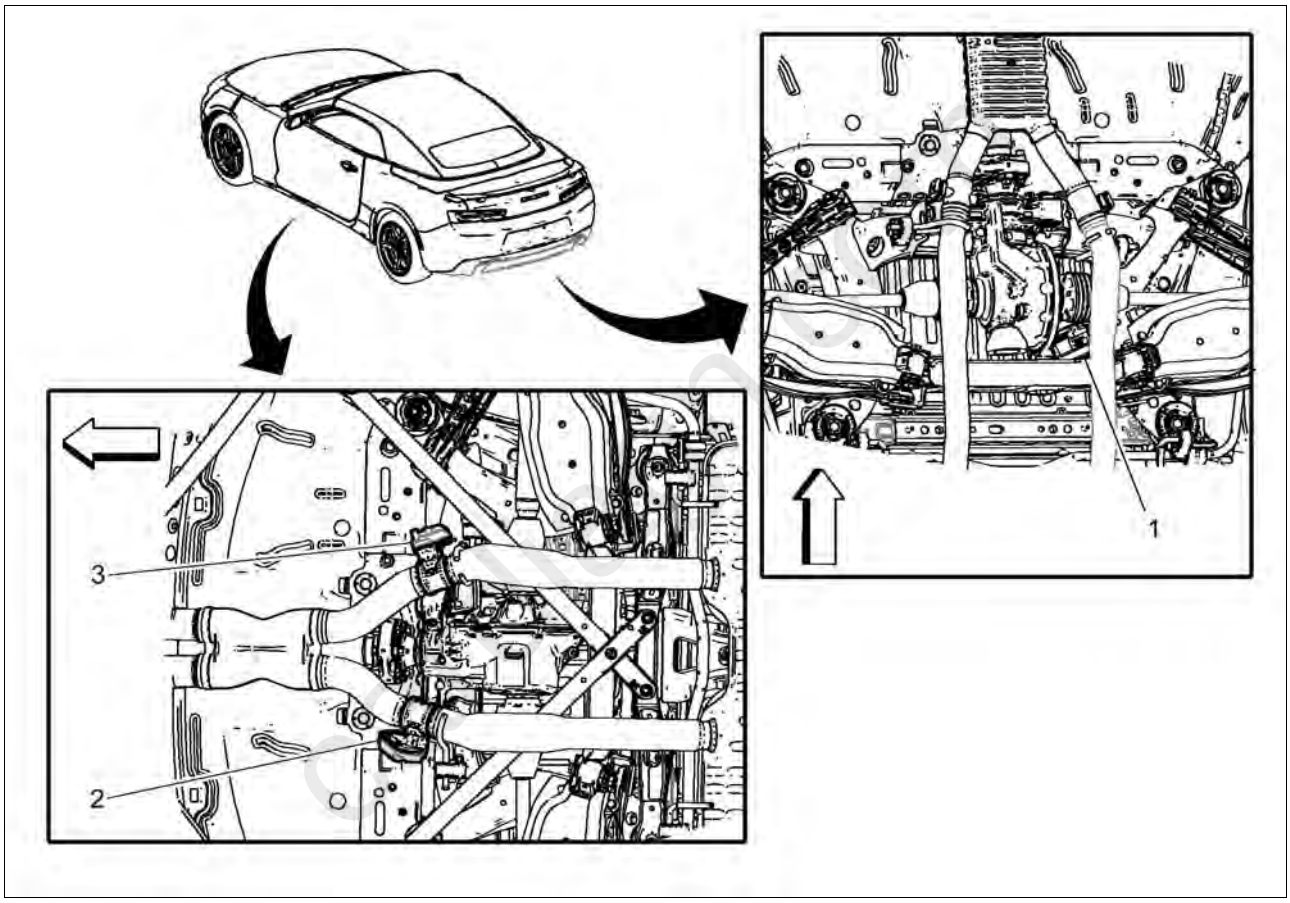
Courtesy of GENERAL MOTORS COMPANY

Items
1: Q37RF Shock Absorber Actuator - Right Front (F55) Q37RF Shock Absorber Actuator - Right Front
2: B5RF Wheel Speed Sensor - Right Front B5RF Wheel Speed Sensor - Right Front
3: Q37RR Shock Absorber Actuator - Right Rear (F55) Q37RR Shock Absorber Actuator - Right Rear

4: B5RR Wheel Speed Sensor - Right Rear B5RR Wheel Speed Sensor - Right Rear
5: Q37LR Shock Absorber Actuator - Left Rear (F55) Q37LR Shock Absorber Actuator - Left Rear
6: B5LR Wheel Speed Sensor - Left Rear B5LR Wheel Speed Sensor - Left Rear
7: Q37LF Shock Absorber Actuator - Left Front (F55) Q37LF Shock Absorber Actuator - Left Front
8: B5LF Wheel Speed Sensor - Left Front B5LF Wheel Speed Sensor - Left Front

WHEELS/VEHICLE UNDERBODY COMPONENT VIEWS > UNDER REAR OF VEHICLE

Fig 1: Under Rear of Vehicle

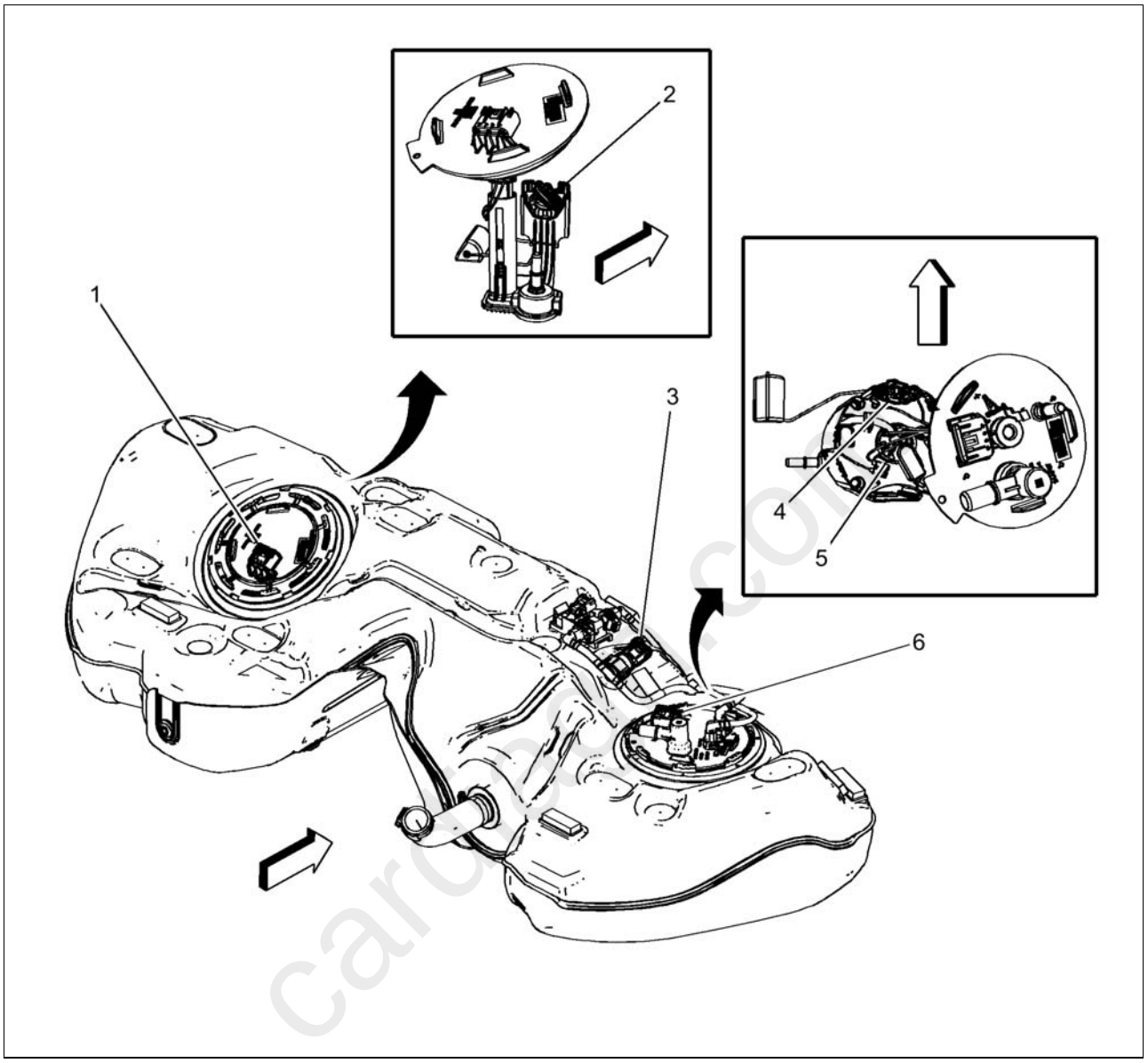


Courtesy of GENERAL MOTORS COMPANY

Items
1: K111 Fuel Pump Driver Control Module (LGX-NPP) K111 Fuel Pump Driver Control Module
2: Q15A Exhaust Flow Control Valve - Cylinder Deactivation Left (MX0) Q15A Exhaust Flow Control Valve - Cylinder Deactivation Left
3: Q15B Exhaust Flow Control Valve - Cylinder Deactivation Right (MX0) Q15B Exhaust Flow Control Valve - Cylinder Deactivation Right

WHEELS/VEHICLE UNDERBODY COMPONENT VIEWS > FUEL TANK COMPONENTS

Fig 1: Fuel Tank Components



Courtesy of GENERAL MOTORS COMPANY

Items
1: B187 Fuel Level Sensor Assembly
2: B46B Fuel Level Sensor - Secondary
3: B47 Fuel Pressure Sensor
4: B46A Fuel Level Sensor - Primary
5: G12 Fuel Pump
6: A7 Fuel Pump and Level Sensor Assembly

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Service Manual: WIRING SYSTEMS AND POWER
MANAGEMENT - DESCRIPTION AND OPERATION

DESCRIPTION AND OPERATION > ELECTRONIC PARK LOCK DESCRIPTION AND OPERATION

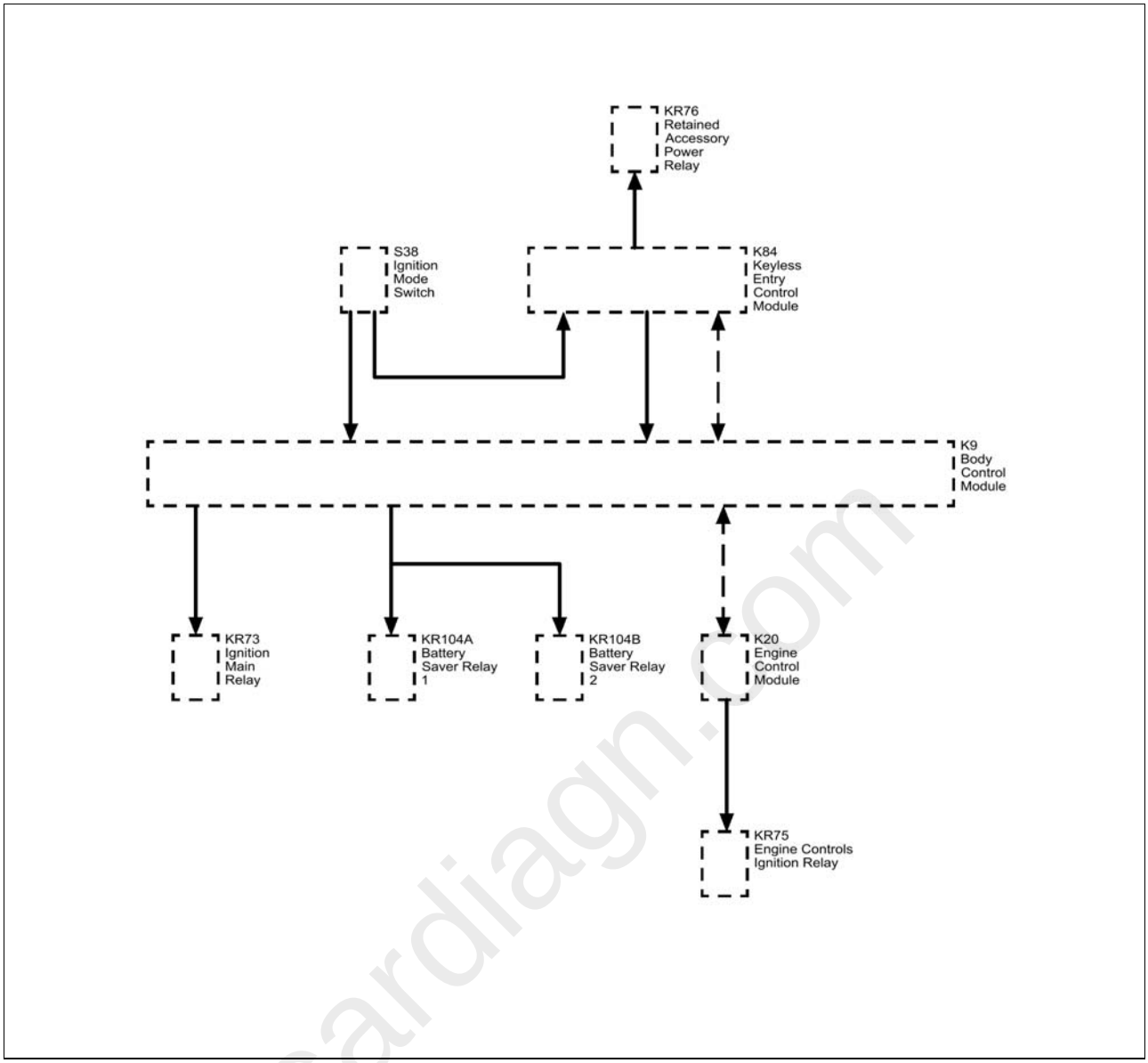
If the vehicle is equipped with automatic transmission and a floor mounted console gear shift, it has an electronic park lock system. The electronic park lock system purpose is to prevent the ignition from being switched to the OFF position when the transmission is in any position other than PARK and 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.

DESCRIPTION AND OPERATION > POWER MODE DESCRIPTION AND OPERATION

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Fig 1: Power Mode Description and Operation



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Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
KR76	KR76 Retained Accessory Power Relay
K84	K84 Keyless Entry Control Module
S38	S38 Ignition Mode Switch
K9	K9 Body Control Module
KR73	KR73 Ignition Main Relay
K20	K20 Engine Control Module
KR75	KR75 Engine Controls Ignition Relay
KR104A	KR104A Battery Saver Relay 1

KR104B	KR104B Battery Saver Relay 2

DESCRIPTION AND OPERATION > POWER MODE DESCRIPTION AND OPERATION > SERIAL DATA POWER MODE MASTER

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 mode switch is a low current switch with a discrete ignition signal 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 needed. The power mode master determines which power mode (Off, Accessory, Run/Start) 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 mode switch signals to identify the operators desired power mode. The Power Mode Parameter table below illustrates the correct state of these input parameters in correspondence to the ignition mode switch with the transmitter to vehicle range:

Power Mode Parameters

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 Power Button	Accessory Mode	Active (pushed) / Inactive (not pushed)	5-6 V (pressed)	Yes

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Switch with foot off the Brake Pedal; Transmitter in Vehicle				
Vehicle Off Power Mode, then Press the Power Button Switch with foot on the Brake Pedal; Transmitter in Vehicle	Vehicle in Run/Start Mode (Ignition ON engine running.)	Active (pushed) / Inactive (not pushed)	5-6 V (pressed)	Yes
Vehicle OFF Power Mode, then Press and Hold the Power Button Switch for 5 s with foot OFF the Brake Pedal; Transmitter in Vehicle	Vehicle in Run/Start Mode (Ignition ON without the engine running)	Active (pushed) / Inactive (not pushed)	5-6 V (pressed)	Yes
Vehicle OFF Power Mode, then Press and Hold the Power Button Switch for 10 s with foot OFF the Brake Pedal; Transmitter in Vehicle	Vehicle In Service Mode (Ignition ON without the engine running)	Active (pushed) / Inactive (not pushed)	5-6 V (pressed)	Yes

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DESCRIPTION AND OPERATION > POWER MODE DESCRIPTION AND OPERATION > RELAY CONTROLLED POWER MODE

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.

DESCRIPTION AND OPERATION > POWER MODE DESCRIPTION AND OPERATION > PUSH BUTTON START

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. Momentarily pressing the ignition mode switch button once (brake pedal not applied), will enter the vehicle into accessory mode and the amber LED (ACC) will illuminate.

The accessory mode has a 10 min time out to reduce battery drain. With the ignition OFF (brake pedal not applied) then pressing and holding the push button start switch for 5 s will place the vehicle in run/start mode (Ignition ON without the engine running). The vehicle will stay powered up for 3 hours and the green LED (Run/Start) will illuminate. After being in run/start mode (ignition ON without the engine running) for 1.5 hours, the vehicle will look to see if the transmitter is still present. If the transmitter is not present in the vehicle, it will power down instead of staying powered up for the full 3 hours. With the ignition OFF, (brake pedal not applied) then pressing and holding the push button start switch for at least 10 s will place the vehicle into Vehicle In Service Mode (Ignition ON without the engine running) and the green LED (Run/Start) will illuminate. Vehicle In Service Mode is used for service and diagnostics not requiring the operation of the gas engine. The vehicle will stay in Vehicle In Service mode until the vehicle is manually turned OFF.

With the ignition OFF (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. If the vehicle is left in PARK with the engine running and the transmitter out of the vehicle, the vehicle will automatically turn off after 1.5 hours. If the vehicle is left in PARK with the engine running and the transmitter in the vehicle, the vehicle will automatically turn OFF after 3 hours. The timer will stop when the vehicle is shifted out of PARK and the timer will reset after the vehicle is placed back in PARK with the engine running.

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.

DESCRIPTION AND OPERATION > POWER MODE DESCRIPTION AND OPERATION > 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 s. The mode is disengaged by repeating the previous process. The DIC (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 DIC, 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.

DESCRIPTION AND OPERATION > POWER MODE DESCRIPTION AND OPERATION >

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:

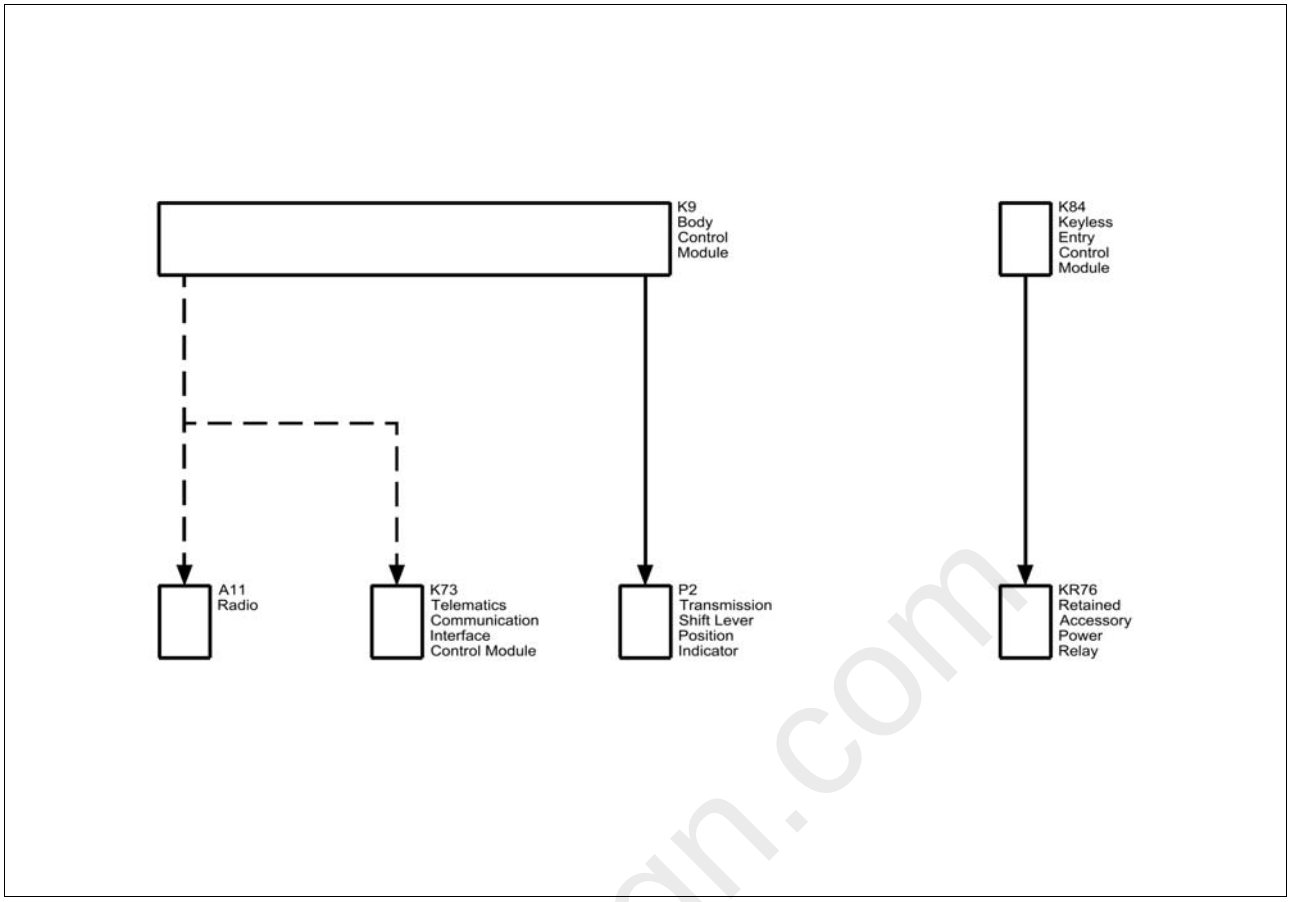
- The ignition switch is OFF, key out.
- Ignition OFF, transmitter is out of range
- No activity exists on the serial data line.
- No outputs are commanded.
- No delay timers are actively counting.
- No wake-up inputs are present.

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

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DESCRIPTION AND OPERATION > RETAINED ACCESSORY POWER DESCRIPTION AND OPERATION

Fig 1: Retained Accessory Power Description and Operation



Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
K9	K9 Body Control Module
A11	A11 Radio
K73	K73 Telematics Communication Interface Control Module
P2	P2 Transmission Shift Lever Position Indicator
K84	K84 Keyless Entry Control Module
KR76	KR76 Retained Accessory Power Relay

DESCRIPTION AND OPERATION > RETAINED ACCESSORY POWER DESCRIPTION AND OPERATION > RETAINED ACCESSORY POWER

The body control module (BCM) monitors the vehicle power modes, 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

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retained accessory power mode operation. Other subsystems are activated directly. Components and systems that are active in retained accessory power are also activated anytime the vehicle power mode is any state other than ignition OFF regardless of the door switch signals.

DESCRIPTION AND OPERATION > RETAINED ACCESSORY POWER DESCRIPTION AND OPERATION > INTERRUPTIBLE RETAINED ACCESSORY POWER RELAY CONTROLLED RETAINED ACCESSORY POWER

The Keyless entry control module keeps the relay energized during all power modes, except ignition Off. The relay is also energized for approximately 10 minutes after moving to the ignition OFF state and moving the transmitter out of range, providing no door is opened. The keyless entry control module controls components in the same manner as BCM direct controlled retained accessory power with one exception; interruptible retained accessory power is deactivated during transmitter authentication. The keyless entry control module will deactivate components that may cause radio frequency (RF) interference when the ignition mode switch is pressed which may result in "NO REMOTE DETECTED" displayed on the driver information center.

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

- The keyless entry control module receives a message that any door ajar or open switch indicating the opening of any door after entering the ignition Off state and the transmitter is out of range.

> *NOTE:*
>
> *If the keyless entry control module is receiving any door ajar or open signal from those switches when the ignition Off state is entered and the transmitter is out of range, retained accessory power will not initiate.*

-
- The keyless entry control module 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:

- Accessory Power Receptacle
- Cigarette Lighter Receptacle

DESCRIPTION AND OPERATION > RETAINED ACCESSORY POWER DESCRIPTION AND OPERATION > 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

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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 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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Service Manual: WIRING SYSTEMS AND POWER MANAGEMENT - DIAGNOSTIC INFORMATION AND PROCEDURES

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B097B: POWER MODE START SWITCH CIRCUIT > 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 INFORMATION AND PROCEDURES > DTC B097B: POWER MODE START SWITCH CIRCUIT > DTC DESCRIPTORS

DTC B097B

Power Mode Start Switch Circuit

For symptom byte information refer to Symptom Byte List

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B097B: POWER MODE START SWITCH CIRCUIT > DIAGNOSTIC FAULT INFORMATION

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Signal - Terminal 3	B097B 02*	B097B 05*	B097B 05*, B097B 08*	-
Signal - Terminal 6	B097B 02	B097B 04	B097B 04	-
Low Reference	-	B097B 05*, B097B 08*	-	-
Ground	-	B097B 04	-	-
* DTC set in keyless entry control module				

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B097B: POWER MODE START SWITCH CIRCUIT > CIRCUIT/SYSTEM DESCRIPTION

The ignition mode switch has two LEDs that indicate the vehicle power mode. When the vehicle is in the off mode, both LEDs 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 10 min time-out to reduce battery drain. Pressing and holding the push button

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start switch (without the brake pedal applied) for 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 LEDs have the voltage supplied from the body control module. The ignition mode switch sends the ignition mode switch status to the keyless entry control module and to the body control module. The keyless entry control module sends a redundant signal to the body control module with the ignition mode switch status.

The ignition mode switch contains two individual switches that provide redundant switch inputs to both the body control module and the keyless entry control module. The body control module supplies the ignition mode switch a constant B+ signal. The body control module 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 body control module 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 body control module, but monitors the other individual switch in the ignition mode switch.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B097B: POWER MODE START SWITCH CIRCUIT > CONDITIONS FOR RUNNING THE DTC

Control module voltage is 9-16 V.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B097B: POWER MODE START SWITCH CIRCUIT > CONDITIONS FOR SETTING THE DTC

B097B 00

- The voltage seen at the BCM monitored switch does not match the voltage seen at the keyless entry control module monitored switch.
- The above condition exists for more than 1 s.

B097B 02

- The control module detects a short to ground in the ignition mode switch signal circuit.
- The above condition exists for more than 1 s.

B097B 04

- The control module detects a open in the ignition mode switch signal circuit.
- The above condition exists for more than 1 s.

B097B 05

- The control module detects an open in the ignition mode switch signal circuit.
- The above condition exists for more than 1 s.

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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.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B097B: POWER MODE START SWITCH CIRCUIT > ACTION TAKEN WHEN THE DTC SETS

B097B 00, B097B 04, B097B 05, B097B 08, B097B 61

No action is taken.

B097B 02

The module output driver will be shut down and not supply voltage to the circuit.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B097B: POWER MODE START SWITCH CIRCUIT > 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.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B097B: POWER MODE START SWITCH CIRCUIT > REFERENCE INFORMATION

Schematic Reference

- Power Moding Schematics
- Power Distribution Schematics

Connector End View Reference

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- Wiring Repairs

Scan Tool Reference

Control Module References for scan tool information

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B097B: POWER MODE START SWITCH CIRCUIT > CIRCUIT/SYSTEM VERIFICATION

1. Verify DTC B097B 61 is not set.
    1. **If DTC B097B 61 is set**

       Test or replace the S38 Ignition Mode Switch.

    1. **If DTC B097B 61 is not set**
2. Refer to Circuit/System Testing.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B097B: POWER MODE START SWITCH CIRCUIT > CIRCUIT/SYSTEM TESTING

1. Ignition OFF and all 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.
    1. **If 10 Ω or greater**
        1. Test for less than 2 Ω in the ground circuit end to end.
            1. If 2 Ω or greater, repair the open/high resistance in the circuit.
            2. If less than 2 Ω, repair the open/high resistance in the ground connection.
    1. **If less than 10 Ω**
3. Test for less than 10 Ω between the low reference circuit terminal 7 and ground.
    1. **If 10 Ω or greater**
        1. Test for less than 2 Ω in the ground circuit end to end.
            1. If 2 Ω or greater, repair the open/high resistance in the circuit.
            2. If less than 2 Ω, replace the K84 Keyless Entry Control Module.

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1. **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 Body Control Module Push Button Ignition Switch Voltage parameter is greater than 11 V.
    1. **If 11 V or less**
        1. Connect the S38 Ignition Mode Switch.
        2. Ignition OFF, disconnect the harness connector at the K9 Body Control Module and S38 Ignition Mode Switch.
        3. Test for infinite resistance between the signal circuit terminal 6 and ground.
            1. If less than infinite resistance, repair the short to ground on the circuit.
            2. If infinite resistance, replace the K9 Body Control Module.
    1. **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 Body Control Module Push Button Ignition Switch Voltage parameter is less than 1 V.
    1. **If 1 V or greater**
        1. Disconnect the harness connector at the K9 Body Control Module.
        2. Test for less than 1 V between the signal circuit and ground.
            1. If 1 V or greater, repair the short to voltage on the circuit.
            1. If less than 1 V
        3. Test for less than 2 Ω in signal circuit end to end.
            1. If 2 Ω or greater, repair the open/high resistance in the circuit.
            2. If less than 2 Ω, replace the K9 Body Control Module.
    1. **If less than 1 V**
9. Connect the harness connector at the S38 Ignition Mode Switch.
10. Verify the scan tool Body Control Module Push Button Ignition Switch Voltage parameter is 8-10 V, with the S38 Ignition Mode Switch released.
    1. **If not between 8-10 V**

        Test or replace the S38 Ignition Mode Switch.

    1. **If between 8-10 V**
11. Verify the scan tool Body Control Module Push Button Ignition Switch Voltage parameter is 4-7

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V, with the S38 Ignition Mode Switch pressed.

1. **If not between 4-7 V**

   Test or replace the S38 Ignition Mode Switch.

1. **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.

    1. **If less than infinite resistance**

       Repair the short to ground on the circuit.

    1. **If infinite resistance**

14. Ignition ON.
15. Test for less than 1 V between the signal circuit terminal 11 and ground.

    1. **If 1 V or greater**

       Repair the short to voltage on the circuit.

    1. **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.

    1. **If not between 4.5-5.5 kΩ**

       1. Ignition OFF, disconnect the harness connector at the S38 Ignition Mode Switch.
       2. Test for less than 2 Ω in signal circuit end to end.

          1. If 2 Ω or greater, repair the open/high resistance in the circuit.
          2. If less than 2 Ω, test or replace the S38 Ignition Mode Switch.

    1. **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.

    1. **If not between 1-1.5 kΩ**

       Test or replace the S38 Ignition Mode Switch.

    1. **If between 1-1.5 kΩ**

18. Replace the K84 Keyless Entry Control Module.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B097B: POWER MODE START SWITCH CIRCUIT > COMPONENT TESTING

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1. Ignition OFF, disconnect the harness connector at the S38 Ignition Mode Switch.
2. Test for 4.5-5.5 kΩ between the terminals listed below with the S38 Ignition Mode Switch released,
    1. Signal terminal 6 and ground terminal 4
    2. Signal terminal 3 and low reference terminal 7
        1. **If not between 4.5-5.5 kΩ**

            Replace the S38 Ignition Mode Switch.
        1. **If between 4.5-5.5 kΩ**
3. Test for 1-1.5 kΩ between the terminals listed below with the S38 Ignition Mode Switch pressed.
    1. Signal terminal 6 and ground terminal 4
    2. Signal terminal 3 and low reference terminal 7
        1. **If not between 1-1.5 kΩ**

            Replace the S38 Ignition Mode Switch.
        1. **If between 1-1.5 kΩ**
4. All OK.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B097B: POWER MODE START SWITCH CIRCUIT > REPAIR INSTRUCTIONS

Perform the Diagnostic Repair Verification after completing the repair.

- Control Module References for control module replacement, programming and setup.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B097C: POWER MODE RUN/START INDICATOR CIRCUIT > 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 INFORMATION AND PROCEDURES > DTC B097C: POWER MODE RUN/START INDICATOR CIRCUIT > DTC DESCRIPTORS

DTC B097C

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Power Mode Run/Start Indicator Circuit

For symptom byte information refer to Symptom Byte List

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B097C: POWER MODE RUN/START INDICATOR CIRCUIT > DIAGNOSTIC FAULT INFORMATION

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Control	B097C 02	1	2	-
Ground	-	1	-	-
1. Ignition mode switch indicator always off 2. Ignition mode switch indicator always on				

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B097C: POWER MODE RUN/START INDICATOR CIRCUIT > CIRCUIT/SYSTEM DESCRIPTION

The ignition mode switch has two LEDs that indicate the vehicle power mode. When the vehicle is in the off mode, both LEDs 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 10 min time-out to reduce battery drain. Pressing and holding the push button start switch (without the brake pedal applied) for 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 LEDs have the voltage supplied from the body control module.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B097C: POWER MODE RUN/START INDICATOR CIRCUIT > CONDITIONS FOR RUNNING THE DTC

Control module voltage is 9-16 V

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B097C: POWER MODE RUN/START INDICATOR CIRCUIT > CONDITIONS FOR SETTING THE DTC

B097C 02

- The BCM detects a short to ground in the control circuit.
- The above condition exists for more than 1 min.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B097C: POWER MODE RUN/START INDICATOR CIRCUIT > ACTION TAKEN WHEN THE DTC SETS

The BCM disables the control output.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B097C: POWER MODE RUN/START INDICATOR CIRCUIT > 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.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B097C: POWER MODE RUN/START INDICATOR CIRCUIT > REFERENCE INFORMATION

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Power Distribution Schematics

Connector End View Reference

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- Wiring Repairs

Scan Tool Reference

Control Module References for scan tool information

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B097C: POWER MODE RUN/START INDICATOR CIRCUIT > CIRCUIT/SYSTEM VERIFICATION

1. Ignition ON.
2. Verify the green LED turns ON and OFF when commanding the Run/Start Power Mode

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Indicator On and Off with the scan tool.

1. **If the green LED does not turn ON and OFF**

   Refer to Circuit/System Testing.

1. **If the green LED turns ON and OFF**

3. All OK.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B097C: POWER MODE RUN/START INDICATOR CIRCUIT > 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.
2. Test for less than 10 Ω between the ground circuit terminal 4 and ground.
   1. **If 10 Ω or greater**
      1. Ignition OFF.
      2. Test for less than 2 Ω in the ground circuit end to end.
         1. If 2 Ω or greater, repair the open/high resistance in the circuit.
         2. If less than 2 Ω, repair the open/high resistance in the ground connections.
   1. **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.
   1. **If the test lamp is always ON**
      1. Connect the harness connector at the S38 Ignition Mode Switch.
      2. Ignition OFF, remove the test lamp, disconnect the harness connector at the K9 Body Control Module.
      3. Ignition ON, disconnect the harness connector at the S38 Ignition Mode Switch.
      4. Test for less than 1 V between the control circuit and ground.
         1. If 1 V or greater, repair the short to voltage on the circuit.
         2. If less than 1 V, replace the K9 Body Control Module.
   1. **If the test lamp is always OFF**

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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.
    1. **If 3 V or less**
        1. Ignition OFF, disconnect the harness connector at the K9 Body Control Module.
        2. Test for infinite resistance between the control circuit and ground.
            1. If less than infinite resistance, repair the short to ground on the circuit.
            1. If infinite resistance
        3. Test for less than 2 Ω in the control circuit end to end.
            1. If 2 Ω or greater, repair the open/high resistance in the circuit.
            2. If less than 2 Ω, replace the K9 Body Control Module.
    1. **If 3 V or greater**
8. Test or replace the S38 Ignition Mode Switch.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B097C: POWER MODE RUN/START INDICATOR CIRCUIT > 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.
    1. **If the LED does not illuminate**

        Replace the S38 Ignition Mode Switch.
    1. **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.
    1. **If the LED does not illuminate**

        Replace the S38 Ignition Mode Switch.
    1. **If the LED illuminates**
7. All OK.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B097C: POWER MODE

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RUN/START INDICATOR CIRCUIT > REPAIR INSTRUCTIONS

Perform the Diagnostic Repair Verification after completing the repair.

- Control Module References for control module replacement, programming and setup.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B1445: CONTROL MODULE VOLTAGE OUTPUT CIRCUIT > 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 INFORMATION AND PROCEDURES > DTC B1445: CONTROL MODULE VOLTAGE OUTPUT CIRCUIT > DTC DESCRIPTOR

DTC B1445

Control Module Voltage Output Circuit

For symptom byte information refer to Symptom Byte List

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B1445: CONTROL MODULE VOLTAGE OUTPUT CIRCUIT > DIAGNOSTIC FAULT INFORMATION

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Relay Coil Control	B1445 02	-	-	-

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B1445: CONTROL MODULE VOLTAGE OUTPUT CIRCUIT > CIRCUIT/SYSTEM DESCRIPTION

The body control module (BCM) controls the ignition circuit by applying voltage to the retained accessory power relay coil control circuit. The ignition circuit is energized when the ignition switch is in the ACCESSORY or the ON position. The ignition circuit is also energized for approximately 10 min after shutting the ignition OFF, providing no door is opened.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B1445: CONTROL MODULE VOLTAGE OUTPUT CIRCUIT > CONDITIONS FOR RUNNING THE DTC

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- The system voltage is between 9-16 V.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B1445: CONTROL MODULE VOLTAGE OUTPUT CIRCUIT > 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.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B1445: CONTROL MODULE VOLTAGE OUTPUT CIRCUIT > ACTION TAKEN WHEN THE DTC SETS

The module output driver will be shut down and not supply voltage to the circuit.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B1445: CONTROL MODULE VOLTAGE OUTPUT 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.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B1445: CONTROL MODULE VOLTAGE OUTPUT CIRCUIT > REFERENCE INFORMATION

Schematic Reference

Power Moding Schematics

Connector End View Reference

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Retained Accessory Power Description and Operation

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- Testing for Intermittent Conditions and Poor Connections
- Wiring Repairs

Scan Tool Reference

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DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B1445: CONTROL MODULE VOLTAGE OUTPUT CIRCUIT > CIRCUIT/SYSTEM TESTING

1. Ignition OFF and all vehicle systems OFF, disconnect the P2 Transmission Shift Lever Position Indicator.
2. Connect a test lamp between the ignition circuit terminal 1 and ground, Ignition ON.
3. Verify the test lamp turns ON and OFF when commanding the Accessory/Retained Accessory Power Relay On and Off with a scan tool.
    1. **If the test lamp is always OFF**
        1. Ignition OFF, remove test lamp, disconnect the harness connector at the K9 Body Control Module.
        2. Test for infinite resistance between the ignition circuit and ground.
            1. If less than infinite resistance, repair the short to ground on the circuit.
            1. If infinite resistance.
        3. Test for less than 2 Ω in the control circuit end to end.
            1. If 2 Ω or greater, repair the open/high resistance in the circuit.
            2. If less than 2 Ω, replace the K9 Body Control Module.
    1. **If the test lamp is always ON**
        1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K9 Body Control Module, ignition ON.
        2. Test for less than 1 V between the control circuit and ground.
            1. If 1 V or greater, repair the short to voltage on the circuit.
            2. If less than 1 V, replace the K9 Body Control Module.
    1. **If the test lamp turns ON and OFF**
4. Test or replace the P2 Transmission Shift Lever Position Indicator.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B1445: CONTROL MODULE VOLTAGE OUTPUT CIRCUIT > 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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DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B144B: RUN/CRANK POWER RELAY CIRCUIT > 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 INFORMATION AND PROCEDURES > DTC B144B: RUN/CRANK POWER RELAY CIRCUIT > DTC DESCRIPTORS

DTC B144B

Run/Crank Power Relay Circuit

For symptom byte information refer to Symptom Byte List

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B144B: RUN/CRANK POWER RELAY CIRCUIT > DIAGNOSTIC FAULT INFORMATION

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Ignition	B144B 02*	B144B 05*	B144B 01*	-
Control	B144B 02**	1	2	-

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

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B144B: RUN/CRANK POWER RELAY CIRCUIT > 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 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.

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DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B144B: RUN/CRANK POWER RELAY CIRCUIT > CONDITIONS FOR RUNNING THE DTC

System voltage greater than 6 V.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B144B: RUN/CRANK POWER RELAY CIRCUIT > 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.

B144B 02

A short to ground is detected on the ignition main relay coil control circuit.

B144B 05

The ignition output is not active and an open is detected 20 consecutive times on the ignition voltage circuit.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B144B: RUN/CRANK POWER RELAY CIRCUIT > ACTION TAKEN WHEN THE DTC SETS

B144B 01, B144B 05

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.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B144B: RUN/CRANK POWER RELAY CIRCUIT > 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 50 malfunction-free ignition cycles.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B144B: RUN/CRANK POWER

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RELAY 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.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B144B: RUN/CRANK POWER RELAY CIRCUIT > REFERENCE INFORMATION

Schematic Reference

Power Moding Schematics

Connector End View Reference

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- Wiring Repairs

Scan Tool Reference

Control Module References for scan tool information

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DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B144B: RUN/CRANK POWER RELAY CIRCUIT > CIRCUIT/SYSTEM VERIFICATION

1. Verify the KR73 Ignition Main Relay clicks ON and OFF when commanding the Run/Crank Relay On and Off with a scan tool.
    1. **If the KR73 Ignition Main Relay does not click ON and OFF**

       Refer to Circuit/System Testing.

    1. **If the KR73 Ignition Main Relay clicks ON and OFF**
2. All OK.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B144B: RUN/CRANK POWER

RELAY CIRCUIT > CIRCUIT/SYSTEM TESTING

1. Ignition ON, disconnect the X1 harness connector at the K84 Keyless Entry Control Module.
2. Verify a test lamp illuminates between the B+ circuit terminal 2 and ground.
    1. **If the test lamp does not illuminate and the circuit fuse is good**
        1. Ignition OFF, remove the test lamp.
        2. Test for less than 2 Ω in the B+ circuit end to end.
            1. If 2 Ω or greater, repair the open/high resistance in the circuit.
            2. If less than 2 Ω, verify the fuse is good and there is voltage at the fuse.
    1. **If the test lamp does not illuminate and the circuit fuse is open**
        1. Ignition OFF, remove the test lamp.
        2. Test for infinite resistance between the ignition circuit and ground.
            1. If less than infinite resistance, repair the short to ground on the circuit.
            2. If infinite resistance, replace the K84 Keyless Entry Control Module.
    1. **If the test lamp illuminates**
3. Ignition OFF, connect the X1 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 6 and ground.
    1. **If 1 V or greater**

       Repair the short to voltage on the circuit.

    1. **If less than 1 V**
5. Ignition ON.
6. Verify a test lamp illuminates between the ignition circuit terminal 6 and ground.
    1. **If the test lamp does not illuminate**
        1. Ignition OFF, remove the test lamp.
        2. Test for infinite resistance between the ignition circuit and ground.
            1. If less than infinite resistance, repair the short to ground on the circuit.
            1. If infinite resistance.
        3. Test for less than 2 Ω in the ignition circuit end to end.
            1. If 2 Ω or greater, repair the open/high resistance in the circuit.
            2. If less than 2 Ω, replace the K84 Keyless Entry Control Module.

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1. **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.
    1. **If 10 Ω or greater**
        1. Ignition OFF.
        2. Test for less than 2 Ω in the ground circuit end to end.
            1. If 2 Ω or greater, repair the open/high resistance in the circuit.
            2. If less than 2 Ω, repair the open/high resistance in the ground connection.
    1. **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.
    1. **If the test lamp is always OFF**
        1. Ignition OFF, disconnect the harness connector at the K9 Body Control Module.
        2. Test for infinite resistance between the control circuit and ground.
            1. If less than infinite resistance, repair the short to ground on the circuit.
            1. If infinite resistance.
        3. Test for less than 2 Ω in the control circuit end to end.
            1. If 2 Ω or greater, repair the open/high resistance in the circuit.
            2. If less than 2 Ω, replace the K9 Body Control Module.
    1. **If the test lamp is always ON**
        1. Ignition OFF, disconnect the harness connector at the K9 Body Control Module, ignition ON.
        2. Test for less than 1 V between the control circuit and ground.
            1. If 1 V or greater, repair the short to voltage on the circuit.
            2. If less than 1 V, replace the K9 Body Control Module.
    1. **If the test lamp turns ON and OFF**
12. Test or replace the KR73 Ignition Main Relay.

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DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B144B: RUN/CRANK POWER RELAY CIRCUIT > REPAIR INSTRUCTIONS

Perform the Diagnostic Repair Verification after completing the repair.

- Relay Replacement (Attached to Wire Harness) Relay Replacement (Within an Electrical Center)
- Control Module References for body control module or keyless entry control module replacement, programming and setup.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B1451: ACCESSORY POWER CIRCUIT > 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 INFORMATION AND PROCEDURES > DTC B1451: ACCESSORY POWER CIRCUIT > DTC DESCRIPTORS

DTC B1451

Accessory Power Circuit

For symptom byte information refer to Symptom Byte List

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B1451: ACCESSORY POWER CIRCUIT > DIAGNOSTIC FAULT INFORMATION

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Ignition	B1451 02	B1451 05	B1451 01	-

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B1451: ACCESSORY POWER CIRCUIT > 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.

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DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B1451: ACCESSORY POWER CIRCUIT > CONDITIONS FOR RUNNING THE DTC

B1451 01, B1451 05

- Vehicle power mode is Ignition OFF
- Module is awake
- The DTC is only run when the output is deactivated
- DTC B1451 not already set
- System voltage is above 6 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 is above 6 V

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B1451: ACCESSORY POWER CIRCUIT > 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.

B1451 04

Ignition output is not active and an open circuit is detected 20 consecutive times.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B1451: ACCESSORY POWER CIRCUIT > 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.

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B1451 01, B1451 04

No action is taken.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B1451: ACCESSORY POWER CIRCUIT > 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 INFORMATION AND PROCEDURES > DTC B1451: ACCESSORY POWER CIRCUIT > 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.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B1451: ACCESSORY POWER CIRCUIT > REFERENCE INFORMATION

Schematic Reference

- Power Distribution Schematics
- Remote Function Schematics
- Body Control System Schematics

Connector End View Reference

COMPONENT CONNECTOR END VIEWS - INDEX

Description and Operation

Power Mode 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

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B1451: ACCESSORY POWER CIRCUIT > CIRCUIT/SYSTEM VERIFICATION

1. Verify DTC U1814 or B1380 is not set.
    1. **If any of the DTCs are set**

       Refer to Diagnostic Trouble Code (DTC) List - Vehicle .
    1. **If none of the DTCs are set**
2. Refer to Circuit/System Testing.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B1451: ACCESSORY POWER CIRCUIT > CIRCUIT/SYSTEM TESTING

1. Ignition ON, disconnect the X1 harness connector at the K84 Keyless Entry Control Module.
2. Verify a test lamp illuminates between the B+ circuit terminal 2 and ground.
    1. **If the test lamp does not illuminate and the circuit fuse is good**
        1. Ignition OFF, remove the test lamp.
        2. Test for less than 2 Ω in the B+ circuit end to end.
            1. If 2 Ω or greater, repair the open/high resistance in the circuit.
            2. If less than 2 Ω, verify the fuse is good and there is voltage at the fuse.
    1. **If the test lamp does not illuminate and the circuit fuse is open**
        1. Ignition OFF, remove the test lamp.
        2. Test for infinite resistance between the B+ circuit and ground.
            1. If less than infinite resistance, repair the short to ground on the circuit.
            2. If infinite resistance, replace the K84 Keyless Entry Control Module.
    1. **If the test lamp illuminates**
3. Ignition OFF, connect the X1 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.
    1. **If 1 V or greater**

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Repair the short to voltage on the circuit.

1. **If less than 1 V**

5. Ignition ON.
6. Verify a test lamp illuminates between the ignition circuit terminal 5 and ground.
    1. **If the test lamp does not illuminate**
        1. Ignition OFF, remove the test lamp.
        2. Test for infinite resistance between the ignition circuit and ground.
            1. If less than infinite resistance, repair the short to ground on the circuit.
            1. If infinite resistance.
        3. Test for less than 2 Ω in the ignition circuit end to end.
            1. If 2 Ω or greater, repair the open/high resistance in the circuit.
            2. If less than 2 Ω, replace the K84 Keyless Entry Control Module.
    1. **If the test lamp illuminates**
7. Replace the K9 Body Control Module.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B1451: ACCESSORY POWER CIRCUIT > 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.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B305E: INTERRUPTIBLE RAP RELAY CIRCUIT > 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 INFORMATION AND PROCEDURES > DTC B305E: INTERRUPTIBLE RAP RELAY CIRCUIT > DTC DESCRIPTOR

DTC B305E

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Interruptible RAP Relay Circuit

For symptom byte information refer to Symptom Byte List

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B305E: INTERRUPTIBLE RAP RELAY CIRCUIT > DIAGNOSTIC FAULT INFORMATION

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Relay Coil Control	B305E 02	B305E 05	B305E 01, B305E 05	-

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B305E: INTERRUPTIBLE RAP RELAY CIRCUIT > CIRCUIT/SYSTEM DESCRIPTION

The keyless entry control module controls the retained accessory power relay through the control circuit by applying voltage to the interruptible retained accessory power relay coil control circuit. The retained accessory power relay is energized when the ignition is in the ACCESSORY or the ON position. The relay is also energized for approximately 10 min after shutting the ignition OFF, providing no door is opened.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B305E: INTERRUPTIBLE RAP RELAY CIRCUIT > CONDITIONS FOR RUNNING THE DTC

- System voltage is greater than 6 V.
- The DTC can only set when the output is actively being requested by the module.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B305E: INTERRUPTIBLE RAP RELAY CIRCUIT > CONDITIONS FOR SETTING THE DTC

B305E 01

The ignition output is not active and a short to battery is detected 3 consecutive times on the ignition voltage circuit.

B305E 02

The ignition output is active and a short to ground is detected on the ignition voltage circuit.

B305E 05

The ignition output is active and an open or short to battery is detected on the ignition voltage circuit.

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DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B305E: INTERRUPTIBLE RAP RELAY CIRCUIT > ACTION TAKEN WHEN THE DTC SETS

B305E 01, B305E 05

No action is taken.

B305E 02

The module output driver will be shut down and not supply voltage to the circuit.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B305E: INTERRUPTIBLE RAP RELAY CIRCUIT > CONDITIONS FOR CLEARING THE DTC

- The current DTC will clear when the malfunction is no longer present and the ignition output is active.
- A history DTC clears when the module ignition cycle counter reaches the reset threshold of 50, without a repeat of the malfunction.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B305E: INTERRUPTIBLE RAP RELAY CIRCUIT > REFERENCE INFORMATION

Schematic Reference

Power Moding Schematics

Connector End View Reference

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Description and Operation

Retained Accessory Power Description and Operation

Electrical Information Reference

- Circuit Testing
- Connector Repairs
- Relay Replacement (Attached to Wire Harness) Relay Replacement (Within an Electrical Center)
- Testing for Intermittent Conditions and Poor Connections
- Wiring Repairs

Scan Tool Reference

Control Module References for scan tool information

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DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B305E: INTERRUPTIBLE RAP RELAY CIRCUIT > CIRCUIT/SYSTEM VERIFICATION

NOTE:

Use schematics to determine which devices are on the K84 Keyless Entry Control Module's ignition circuit terminal 7 X1 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 that the appropriate devices controlled by the KR76 Retained Accessory Power Relay turn ON and OFF when cycling the ignition between ON and OFF.
    1. **If the devices do not turn ON and OFF**

       Refer to Circuit/System Testing - Diagnostic A.

    1. **If the devices turn ON and OFF**
3. Verify that the appropriate devices controlled by the K84 Keyless Entry Control Module's ignition circuit terminal 7 X1 turn ON and OFF when cycling the ignition between ON and OFF.
    1. **If the devices do not turn ON and OFF**

       Refer to Circuit/System Testing - Diagnostic B.

    1. **If the devices turn ON and OFF**
4. All OK.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B305E: INTERRUPTIBLE RAP RELAY CIRCUIT > 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 R3 and ground.
    1. **If 10 Ω or greater**
        1. Ignition OFF.
        2. Test for less than 2 Ω in the ground circuit end to end.
            1. If 2 Ω or greater, repair the open/high resistance in the circuit.

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2. If less than 2 Ω, repair the open/high resistance in the ground connection.

1. **If less than 10 Ω**

3. Ignition ON, connect a test lamp between the control circuit terminal R5 and ground circuit terminal R3.

4. Verify the test lamp turns ON and OFF when cycling the ignition between ON and OFF.

    1. **If the test lamp is always OFF**

        1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K84 Keyless Entry Control Module.

        2. Test for infinite resistance between the control circuit and ground.

            1. If less than infinite resistance, repair the short to ground on the circuit.

            1. If infinite resistance

        3. Test for less than 2 Ω in the control circuit end to end.

            1. If 2 Ω or greater, repair the open/high resistance in the circuit.

            2. If less than 2 Ω, replace the K84 Keyless Entry Control Module.

    1. **If the test lamp is always ON**

        1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K84 Keyless Entry Control Module, ignition ON.

        2. Test for less than 1 V between the control circuit and ground.

            1. If 1 V or greater, repair the short to voltage on the circuit.

            2. If less than 1 V, replace the K84 Keyless Entry Control Module.

    1. **If the test lamp turns ON and OFF**

5. Test or replace the KR76 Retained Accessory Power Relay.

Diagnostic B

1. Ignition OFF and all vehicle systems OFF, disconnect the appropriate X81 Accessory Power Receptacle - 110V AC or X81B Accessory Power Receptacle - 220V AC.

2. Connect a test lamp between the ignition circuits listed below and ground.

    1. X81 Accessory Power Receptacle - 110V AC - Ignition circuit terminal 1 X1

    2. X81B Accessory Power Receptacle - 220V AC - Ignition circuit terminal 1 X1

3. Verify the test lamp turns ON and OFF when cycling the ignition between ON and OFF.

    1. **If the test lamp is always OFF**

        1. Ignition OFF, remove test lamp, disconnect the harness connector at the K84 Keyless Entry Control Module.

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2. Test for infinite resistance between the ignition circuit and ground.
    1. If less than infinite resistance, repair the short to ground on the circuit.
    1. If infinite resistance.
3. Test for less than 2 Ω in the control circuit end to end.
    1. If 2 Ω or greater, repair the open/high resistance in the circuit.
    2. If less than 2 Ω, replace the K84 Keyless Entry Control Module.

1. **If the test lamp is always ON**
    1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K84 Keyless Entry Control Module, ignition ON.
    2. Test for less than 1 V between the control circuit and ground.
        1. If 1 V or greater, repair the short to voltage on the circuit.
        2. If less than 1 V, replace the K84 Keyless Entry Control Module.

1. **If the test lamp turns ON and OFF**

4. Test or replace the appropriate X81 Accessory Power Receptacle - 110V AC or X81B Accessory Power Receptacle - 220V AC.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC B305E: INTERRUPTIBLE RAP RELAY CIRCUIT > REPAIR INSTRUCTIONS

Perform the Diagnostic Repair Verification after completing the repair.

- Control Module References for control module replacement, programming and setup.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC P2534 OR P2535: IGNITION ON/START SWITCH CIRCUIT VOLTAGE > 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 INFORMATION AND PROCEDURES > DTC P2534 OR P2535: IGNITION ON/START SWITCH CIRCUIT VOLTAGE > DTC DESCRIPTORS

DTC P2534

Ignition On/Start Switch Circuit Low Voltage

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DTC P2535

Ignition On/Start Switch Circuit High Voltage

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC P2534 OR P2535: IGNITION ON/START SWITCH CIRCUIT VOLTAGE > DIAGNOSTIC FAULT INFORMATION

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Ignition	P2534	P2534	P2535	-
Ground	-	P2534	-	-

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC P2534 OR P2535: IGNITION ON/START SWITCH CIRCUIT VOLTAGE > 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.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC P2534 OR P2535: IGNITION ON/START SWITCH CIRCUIT VOLTAGE > 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.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC P2534 OR P2535: IGNITION ON/START SWITCH CIRCUIT VOLTAGE > 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.

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DIAGNOSTIC INFORMATION AND PROCEDURES > DTC P2534 OR P2535: IGNITION ON/START SWITCH CIRCUIT VOLTAGE > ACTION TAKEN WHEN THE DTC SETS

DTCs P2534 and P2535 are Type A DTCs.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC P2534 OR P2535: IGNITION ON/START SWITCH CIRCUIT VOLTAGE > CONDITIONS FOR CLEARING THE DTC

DTCs P2534 and P2535 are Type A DTCs.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC P2534 OR P2535: IGNITION ON/START SWITCH CIRCUIT VOLTAGE > DIAGNOSTIC AIDS

A short to voltage in the ignition circuit will keep the vehicle modules awake, which can drain the vehicle's battery.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC P2534 OR P2535: IGNITION ON/START SWITCH CIRCUIT VOLTAGE > REFERENCE INFORMATION

Schematic Reference

Power Distribution Schematics

Connector End View Reference

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- Testing for Intermittent Conditions and Poor Connections
- Wiring Repairs

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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

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DIAGNOSTIC INFORMATION AND PROCEDURES > DTC P2534 OR P2535: IGNITION ON/START SWITCH CIRCUIT VOLTAGE > CIRCUIT/SYSTEM VERIFICATION

1. Engine running.
2. Verify DTC B144B is not set.
    1. **If the DTC is set**

       Refer to DTC B144B .
    1. **If the DTC is not set**
3. Verify the scan tool control module Ignition 1 Signal parameter is between 12.6-15 V.
    1. **If not between 12.6-15 V**

       Refer to Circuit/System Testing.
    1. **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 .

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC P2534 OR P2535: IGNITION ON/START SWITCH CIRCUIT VOLTAGE > 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.
    1. **If 1 V or greater**

       Repair the short to voltage on the circuit.
    1. **If less than 1 V**
3. Ignition ON.
4. Verify a test lamp illuminates between the ignition circuit terminal and ground.
    1. **If the test lamp does not illuminate and the circuit fuse is good**
        1. Ignition OFF remove the test lamp.
        2. Test for less than 2 Ω in the ignition circuit end to end.

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1. If 2 Ω or greater, repair the open/high resistance in the circuit.
2. If less than 2 Ω, refer to Power Mode Mismatch .

1. **If the test lamp does not illuminate and the circuit fuse is open**
    1. Ignition OFF remove the test lamp
    2. Test for infinite resistance between the ignition circuit and ground.
        1. If less than infinite resistance, repair the short to ground on the circuit.

1. **If the test lamp illuminates**

5. Replace the control module setting the DTC.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC P2534 OR P2535: IGNITION ON/START SWITCH CIRCUIT VOLTAGE > REPAIR INSTRUCTIONS

Perform the Diagnostic Repair Verification after completing the repair.

Refer to Control Module References for control module replacement, programming, and setup.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC P2537: IGNITION ACCESSORY SWITCH CIRCUIT LOW VOLTAGE > 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 INFORMATION AND PROCEDURES > DTC P2537: IGNITION ACCESSORY SWITCH CIRCUIT LOW VOLTAGE > DTC DESCRIPTOR

DTC P2537

Ignition Accessory Switch Circuit Low Voltage

DIAGNOSTIC INFORMATION AND PROCEDURES > 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, U1814,	P2537	-	-

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	U2099			

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC P2537: IGNITION ACCESSORY SWITCH CIRCUIT LOW VOLTAGE > CIRCUIT/SYSTEM DESCRIPTION

The control module continuously monitors the voltage on the Ignition Accessory/Run circuit from the body control module (BCM). When the ignition is in the ACCESSORY or RUN position, the BCM sends a 12 V wake up signal to the control module. This wake up signal allows the control module to power up and start functioning before the engine is started.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC P2537: IGNITION ACCESSORY SWITCH CIRCUIT LOW VOLTAGE > CONDITIONS FOR RUNNING THE DTC

The ignition is in the ACCESSORY or RUN position.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC P2537: IGNITION ACCESSORY SWITCH CIRCUIT LOW VOLTAGE > CONDITIONS FOR SETTING THE DTC

The control module detects the Ignition Accessory/Run circuit is less than 6 V for 1 min.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC P2537: IGNITION ACCESSORY SWITCH CIRCUIT LOW VOLTAGE > ACTION TAKEN WHEN THE DTC SETS

DTC P2537 is a Type B DTC.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC P2537: IGNITION ACCESSORY SWITCH CIRCUIT LOW VOLTAGE > CONDITIONS FOR CLEARING THE DTC

DTC P2537 is a Type B DTC.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC P2537: IGNITION ACCESSORY SWITCH CIRCUIT LOW VOLTAGE > REFERENCE INFORMATION

Schematic Reference

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Data Communication Schematics

Connector End View Reference

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Description and Operation

Data Link Communications Description and Operation

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

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC P2537: IGNITION ACCESSORY SWITCH CIRCUIT LOW VOLTAGE > CIRCUIT/SYSTEM VERIFICATION

1. Verify DTC U1814 or U2099 is not set.
    1. **If any of the DTCs are set**

       Refer to Diagnostic Trouble Code (DTC) List - Vehicle .
    1. **If none of the DTCs are set**
2. Refer to Circuit/System Testing.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC P2537: IGNITION ACCESSORY SWITCH CIRCUIT LOW VOLTAGE > CIRCUIT/SYSTEM TESTING

1. Ignition OFF, disconnect the harness connector at the control module setting the DTC.
2. Ignition ON.
3. Verify a test lamp illuminates between the accessory wake up serial data circuit and ground.
    1. **If the test lamp does not illuminate.**

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1. Ignition OFF remove the test lamp, disconnect the X4 connector at the K9 Body Control Module.
2. Test for less than 2 Ω on the ignition circuit end to end.
    1. If 2 Ω or greater, repair the open/high resistance in the circuit.
    2. If less than 2 Ω, replace the K9 Body Control Module.

1. **If the test lamp illuminates**

4. Replace the control module setting the DTC.

DIAGNOSTIC INFORMATION AND PROCEDURES > DTC P2537: IGNITION ACCESSORY SWITCH CIRCUIT LOW VOLTAGE > REPAIR INSTRUCTIONS

Perform the Diagnostic Repair Verification after completing the repair.

Refer to Control Module References for control module replacement, programming, and setup.

DIAGNOSTIC INFORMATION AND PROCEDURES > 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:
    1. There are no DTCs set.
    2. 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:
    1. Electronic Park Lock Description and Operation
    2. Power Mode Description and Operation
    3. Retained Accessory Power Description and Operation

DIAGNOSTIC INFORMATION AND PROCEDURES > SYMPTOMS - WIRING SYSTEMS > VISUAL/PHYSICAL INSPECTION

- Inspect for aftermarket devices which could affect the operation of the systems. Refer to Checking Aftermarket Accessories .

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- Inspect the easily accessible or visible system components for obvious damage or conditions which could cause the symptom.

DIAGNOSTIC INFORMATION AND PROCEDURES > SYMPTOMS - WIRING SYSTEMS > INTERMITTENT

Faulty electrical connections or wiring may be the cause of intermittent conditions. Refer to Testing for Intermittent Conditions and Poor Connections .

DIAGNOSTIC INFORMATION AND PROCEDURES > SYMPTOMS - WIRING SYSTEMS > 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

DIAGNOSTIC INFORMATION AND PROCEDURES > IGNITION CAN/CANNOT BE TURNED OFF WITH TRANSMISSION IN ANY GEAR > 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 INFORMATION AND PROCEDURES > IGNITION CAN/CANNOT BE TURNED OFF WITH TRANSMISSION IN ANY GEAR > 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				

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DIAGNOSTIC INFORMATION AND PROCEDURES > IGNITION CAN/CANNOT BE TURNED OFF WITH TRANSMISSION IN ANY GEAR > 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 INFORMATION AND PROCEDURES > IGNITION CAN/CANNOT BE TURNED OFF WITH TRANSMISSION IN ANY GEAR > 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.

DIAGNOSTIC INFORMATION AND PROCEDURES > IGNITION CAN/CANNOT BE TURNED OFF WITH TRANSMISSION IN ANY GEAR > REFERENCE INFORMATION

Schematic Reference

Shift Lock Control Schematics

Connector End View Reference

COMPONENT CONNECTOR END VIEWS - INDEX

Description and Operation

Electronic Park Lock Description and Operation

Electrical Information Reference

- Circuit Testing
- Connector Repairs
- Testing for Intermittent Conditions and Poor Connections
- Wiring Repairs

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DIAGNOSTIC INFORMATION AND PROCEDURES > IGNITION CAN/CANNOT BE TURNED OFF WITH TRANSMISSION IN ANY GEAR > 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.
    1. **If the parameter does not change**

       Refer to Circuit/System Testing.

    1. **If the parameter changes**
3. All OK.

DIAGNOSTIC INFORMATION AND PROCEDURES > IGNITION CAN/CANNOT BE TURNED OFF WITH TRANSMISSION IN ANY GEAR > 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.
    1. **If 10 Ω or greater**
        1. Ignition OFF.
        2. Test for less than 2 Ω in the ground circuit end to end.
            1. If 2 Ω or greater, repair the open/high resistance in the circuit.
            2. If less than 2 Ω, repair the open/high resistance in the ground connection.
    1. **If less than 10 Ω**
3. Ignition ON.
4. Verify the scan tool Body Control Module In Park Switch Status parameter is Off.
    1. **If not Off**
        1. Ignition OFF, disconnect the harness connector at the K9 Body Control Module.
        2. Test for infinite resistance between the signal circuit terminal 6 and ground.
            1. If less than infinite resistance, repair the short to ground on the circuit.
            1. If infinite resistance, replace the K9 Body Control Module.
    1. **If Off**
5. Install a 3 A fused jumper wire between the signal circuit terminal 6 and the ground circuit terminal 2.

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6. Verify the scan tool Body Control Module In Park Switch Status parameter is On.
    1. **If not On**
        1. Ignition OFF, remove the jumper wire, disconnect the harness connector at the K9 Body Control Module, ignition ON.
        2. Test for less than 1 V between the signal circuit and ground.
            1. If 1 V or greater, repair the short to voltage on the circuit.
            1. If less than 1 V
        3. Test for less than 2 Ω in the signal circuit end to end.
            1. If 2 Ω or greater, repair the open/high resistance in the circuit.
            2. If less than 2 Ω, replace the K9 Body Control Module.
    1. **If On**
7. Test or replace the S3 Transmission Shift Lever.

DIAGNOSTIC INFORMATION AND PROCEDURES > IGNITION CAN/CANNOT BE TURNED OFF WITH TRANSMISSION IN ANY GEAR > 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.

DIAGNOSTIC INFORMATION AND PROCEDURES > 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 INFORMATION AND PROCEDURES > IGNITION MODE SWITCH INDICATOR MALFUNCTION > DIAGNOSTIC FAULT INFORMATION

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Control	2	2	1	-

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Ground	-	2	-	-
1. Ignition mode switch indicator always On 2. Ignition mode switch indicator inoperative				

DIAGNOSTIC INFORMATION AND PROCEDURES > IGNITION MODE SWITCH INDICATOR MALFUNCTION > CIRCUIT/SYSTEM DESCRIPTION

The ignition mode switch has two LEDs that indicate the vehicle power mode. When the vehicle is in the off mode, both LEDs 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 10 min time-out to reduce battery drain. Pressing and holding the push button start switch (without the brake pedal applied) for 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 LEDs have the voltage supplied from the body control module.

DIAGNOSTIC INFORMATION AND PROCEDURES > IGNITION MODE SWITCH INDICATOR MALFUNCTION > REFERENCE INFORMATION

Schematic Reference

- Power Distribution Schematics
- Power Moding Schematics

Connector End View Reference

COMPONENT CONNECTOR END VIEWS - INDEX

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

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DIAGNOSTIC INFORMATION AND PROCEDURES > IGNITION MODE SWITCH INDICATOR MALFUNCTION > 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.
    1. **If the green LED does not turn ON and OFF**

       Refer to Circuit/System Testing - Green LED Test.

    1. **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.
    1. **If the amber LED does not turn ON and OFF**

       Refer to Circuit/System Testing - Amber LED Test.

    1. **If the amber LED turns ON and OFF**
4. All OK.

DIAGNOSTIC INFORMATION AND PROCEDURES > IGNITION MODE SWITCH INDICATOR MALFUNCTION > 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.
    1. **If 10 Ω or greater**
        1. Ignition OFF.
        2. Test for less than 2 Ω in the ground circuit end to end.
            1. If 2 Ω or greater, repair the open/high resistance in the circuit.
            2. If less than 2 Ω, repair the open/high resistance in the ground connections.
    1. **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.

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1. **If the test lamp is always ON**
    1. Connect the harness connector at the S38 Ignition Mode Switch.
    2. Ignition OFF, remove the test lamp, disconnect the harness connector at the K9 Body Control Module.
    3. Ignition ON, disconnect the harness connector at the S38 Ignition Mode Switch.
    4. Test for less than 1 V between the control circuit and ground.
        1. If 1 V or greater, repair the short to voltage on the circuit.
        2. If less than 1 V, replace the K9 Body Control Module.
1. **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.
    1. **If 3 V or less**
        1. Ignition OFF, disconnect the harness connector at the K9 Body Control Module.
        2. Test for infinite resistance between the control circuit and ground.
            1. If less than infinite resistance, repair the short to ground on the circuit.
            1. If infinite resistance
        3. Test for less than 2 Ω in the control circuit end to end.
            1. If 2 Ω or greater, repair the open/high resistance in the circuit.
            2. If less than 2 Ω, replace the K9 Body Control Module.
    1. **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.
    1. **If 10 Ω or greater**
        1. Ignition OFF.
        2. Test for less than 2 Ω in the ground circuit end to end.
            1. If 2 Ω or greater, repair the open/high resistance in the circuit.
            2. If less than 2 Ω, repair the open/high resistance in the ground connections.
    1. **If less than 10 Ω**

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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.
    1. **If the test lamp is always ON**
        1. Connect the harness connector at the S38 Ignition Mode Switch.
        2. Ignition OFF, remove the test lamp, disconnect the harness connector at the K9 Body Control Module.
        3. Ignition ON, disconnect the harness connector at the S38 Ignition Mode Switch.
        4. Test for less than 1 V between the control circuit and ground.
            1. If 1 V or greater, repair the short to voltage on the circuit.
            2. If less than 1 V, replace the K9 Body Control Module.
    1. **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.
    1. **If 3 V or less**
        1. Ignition OFF, disconnect the harness connector at the K9 Body Control Module.
        2. Test for infinite resistance between the control circuit and ground.
            1. If less than infinite resistance, repair the short to ground on the circuit.
            1. If infinite resistance
        3. Test for less than 2 Ω in the control circuit end to end.
            1. If 2 Ω or greater, repair the open/high resistance in the circuit.
            2. If less than 2 Ω, replace the K9 Body Control Module.
    1. **If 3 V or greater**
8. Test or replace the S38 Ignition Mode Switch.

DIAGNOSTIC INFORMATION AND PROCEDURES > IGNITION MODE SWITCH INDICATOR MALFUNCTION > 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.

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3. Connect a 3 A fused jumper wire between the S38 Ignition Mode Switch terminal 5 and B+.
4. Verify the green LED illuminates.
    1. **If the LED does not illuminate**

       Replace the S38 Ignition Mode Switch.

    1. **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.
    1. **If the LED does not illuminate**

       Replace the S38 Ignition Mode Switch.

    1. **If the LED illuminates**
7. All OK.

DIAGNOSTIC INFORMATION AND PROCEDURES > IGNITION MODE SWITCH INDICATOR MALFUNCTION > 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.

DIAGNOSTIC INFORMATION AND PROCEDURES > 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.

DIAGNOSTIC INFORMATION AND PROCEDURES > POWER MODE MISMATCH > CIRCUIT/SYSTEM DESCRIPTION

> *NOTE:*
>
> *The vehicle may not be equipped with all components as listed below.*

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The body control module (BCM) controls the ignition main relay by applying voltage to its individual relay control circuits. The ignition main relay is energized when the ignition is in the ON or the CRANK position.

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 relay that when enabled disconnect some modules from their ignition power or memory power sources.

The keyless entry control module controls the retained accessory power relay by applying voltage to the relay coil control circuit. The retained accessory power relay is energized during all power modes, except OFF-awake, CRANK and during transmitter authentication. The keyless entry control module will deactivate components that may cause radio frequency (RF) interference when the ignition mode switch is pressed which may result in NO REMOTE DETECTED displayed on the driver information center. The relay is also energized for approximately 10 min after shutting the ignition OFF, providing no door is opened.

The engine control module (ECM) controls the engine controls ignition relay by applying voltage to the engine controls relay control circuit.

DIAGNOSTIC INFORMATION AND PROCEDURES > POWER MODE MISMATCH > DIAGNOSTIC AIDS

A short to voltage on the ignition main relay coil control will cause the engine to remain running after the mode is changed to OFF.

DIAGNOSTIC INFORMATION AND PROCEDURES > POWER MODE MISMATCH > REFERENCE INFORMATION

Schematic Reference

- Power Distribution Schematics
- Power Moding Schematics

Connector End View Reference

COMPONENT CONNECTOR END VIEWS - INDEX

Electrical Center Identification View Reference

Electrical Center Identification Views

Description and Operation

Power Mode Description and Operation

Electrical Information Reference

- Circuit Testing
- Connector Repairs

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- Relay Replacement (Attached to Wire Harness) Relay Replacement (Within an Electrical Center)
- Testing for Intermittent Conditions and Poor Connections
- Wiring Repairs

Scan Tool Reference

Control Module References for scan tool information

DIAGNOSTIC INFORMATION AND PROCEDURES > POWER MODE MISMATCH > 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 switching the ignition between ON and OFF.
    1. **If the devices do not turn ON and OFF**

       Refer to Circuit/System Testing - Diagnostic A.

    1. **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.
    1. **If the devices do not turn ON and OFF**

       Refer to Circuit/System Testing - Diagnostic B.

    1. **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.
    1. **If the devices do not turn ON and OFF**

       Refer to Circuit/System Testing - Diagnostic C.

    1. **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 after enabling battery saver mode (transport mode).
    1. **If the devices do not turn ON and OFF**

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Refer to Circuit/System Testing - Diagnostic D.

1. **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 after enabling battery saver mode (transport mode).
    1. **If the devices do not turn ON and OFF**

       Refer to Circuit/System Testing - Diagnostic E.

    1. **If the devices turn ON and OFF**

7. All OK.

DIAGNOSTIC INFORMATION AND PROCEDURES > POWER MODE MISMATCH > 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 R3 and ground.
    1. **If 10 Ω or greater**
        1. Ignition OFF.
        2. Test for less than 2 Ω in the ground circuit end to end.
            1. If 2 Ω or greater, repair the open/high resistance in the circuit.
            2. If less than 2 Ω, repair the open/high resistance in the ground connection.
    1. **If less than 10 Ω**
3. Ignition ON.
4. Verify a test lamp illuminates between the B+ circuit terminal R1 and ground.
    1. **If the test lamp does not illuminate and the circuit breaker is not open**
        1. Ignition OFF, remove the test lamp.
        2. Test for less than 2 Ω in the B+ circuit end to end.
            1. If 2 Ω or greater, repair the open/high resistance in the circuit.
            2. If less than 2 Ω, verify the fuse is not open and there is voltage at the circuit breaker.
    1. **If the test lamp does not illuminate and the circuit breaker is open**
        1. Ignition OFF, remove the test lamp.

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2. Test for infinite resistance between the B+ circuit and ground.
    1. If less than infinite resistance, repair the short to ground on the circuit.
    2. If infinite resistance, test or replace the KR76 Retained Accessory Power Relay.

1. **If the test lamp illuminates**

5. Connect a test lamp between the control circuit terminal R5 and the ground circuit terminal R3.
6. Verify the test lamp turns ON and OFF when switching the ignition between ON and OFF.
    1. **If the test lamp is always OFF**
        1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K84 Keyless Entry Control Module.
        2. Test for infinite resistance between the control circuit and ground.
            1. If less than infinite resistance, repair the short to ground on the circuit.
            1. If infinite resistance
        3. Test for less than 2 Ω in the control circuit end to end.
            1. If 2 Ω or greater, repair the open/high resistance in the circuit.
            2. If less than 2 Ω, replace the K84 Keyless Entry Control Module.
    1. **If the test lamp is always ON**
        1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K84 Keyless Entry Control Module, ignition ON.
        2. Test for less than 1 V between the control circuit and ground.
            1. If 1 V or greater, repair the short to voltage on the circuit.
            2. If less than 1 V, replace the K84 Keyless Entry Control Module.
    1. **If the test lamp turns ON and OFF**
7. Verify that a test lamp does not illuminate between the ignition circuit terminal R2 and ground.
    1. **If the test lamp illuminates**

        Repair the short to voltage on the ignition circuit

    1. **If the test lamp does not illuminate**
8. Ignition ON, connect a 15 A fused jumper wire between the B+ circuit terminal R1 and the ignition circuit terminal R2.
9. Verify device is activated.
    1. **If the device does not activate**
        1. Ignition OFF, disconnect the harness connector at the device.

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2. Test for infinite resistance between the ignition circuit and ground.
    1. If less than infinite resistance, repair the short to ground on the circuit.
    1. If infinite resistance
3. Test for less than 2 Ω in the ignition circuit end to end.
    1. If 2 Ω or greater, repair the open/high resistance in the circuit.
    2. If less than 2 Ω, replace the device.

1. **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 86 and ground.
    1. **If 10 Ω or greater**
        1. Ignition OFF.
        2. Test for less than 2 Ω in the ground circuit end to end.
            1. If 2 Ω or greater, repair the open/high resistance in the circuit.
            2. If less than 2 Ω, repair the open/high resistance in the ground connection.
    1. **If less than 10 Ω**
3. Ignition ON.
4. Verify a test lamp illuminates between the B+ circuit terminal 30 and ground.
    1. **If the test lamp does not illuminate**

        Replace the X50A Fuse Block - Underhood

    1. **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 Run/Crank Relay On and Off with a scan tool.
    1. **If the test lamp is always OFF**
        1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K9 Body Control Module.
        2. Test for infinite resistance between the control circuit and ground.
            1. If less than infinite resistance, repair the short to ground on the circuit.

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        1. If infinite resistance

    3. Test for less than 2 Ω in the control circuit end to end.

        1. If 2 Ω or greater, repair the open/high resistance in the circuit.

        2. If less than 2 Ω, replace the K9 Body Control Module.

1. **If the test lamp is always ON**

    1. Ignition OFF and all vehicle systems OFF, remove the test lamp, disconnect the K9 Body Control Module, ignition ON.

    2. Test for less than 1 V between the control circuit and ground.

        1. If 1 V or greater, repair the short to voltage on the circuit.

        2. If less than 1 V, replace the K9 Body Control Module.

1. **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.

    1. Ignition circuit terminal 87

    2. Ignition circuit terminal 87A

    1. **If the test lamp illuminates**

        Repair the short to voltage on the ignition circuit.

    1. **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.

    1. Ignition circuit terminal 87

    2. Ignition circuit terminal 87A

9. Verify the device is activated.

    1. **If the device is not activated**

        1. Ignition OFF, disconnect the harness connector at the device.

        2. Test for infinite resistance between the ignition circuit and ground.

            1. If less than infinite resistance, repair the short to ground on the circuit.

            1. If infinite resistance

        3. Test for less than 2 Ω in the ignition circuit end to end.

            1. If 2 Ω or greater, repair the open/high resistance in the circuit.

            2. If less than 2 Ω, replace the device.

    1. **If the device activates**

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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.
    1. **If the test lamp does not illuminate**

       Replace the X50A Fuse Block - Underhood

    1. **If the test lamp illuminates**
3. Verify a test lamp illuminates between the B+ circuit terminal 85 and ground.
    1. **If the test lamp does not illuminate**

       Replace the X50A Fuse Block - Underhood

    1. **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.
    1. **If the test lamp is always OFF**
        1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K20 Engine Control Module, ignition ON.
        2. Test for less than 1 V between the control circuit and ground.
            1. If 1 V or greater, repair the short to voltage on the circuit.
            1. If less than 1 V
        3. Ignition OFF.
        4. Test for less than 2 Ω in the control circuit end to end.
            1. If 2 Ω or greater, repair the open/high resistance in the circuit.
            2. If less than 2 Ω, replace the K20 Engine Control Module.
    1. **If the test lamp is always ON**
        1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K20 Engine Control Module.
        2. Test for infinite resistance between the control circuit and ground.
            1. If less than infinite resistance, repair the short to ground on the circuit.
            2. If infinite resistance, replace the K20 Engine Control Module.
    1. **If the test lamp turns ON and OFF**

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6. Verify a test lamp does not illuminate between the ignition circuit terminal 87 and ground.
    1. **If the test lamp illuminates**

       Repair the short to voltage on the circuit.

    1. **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.
    1. **If the device is not activated**
        1. Ignition OFF, disconnect the harness connector at the device.
        2. Test for infinite resistance between the ignition circuit terminal 87 and ground.
            1. If less than infinite resistance, repair the short to ground on the circuit.
            1. If infinite resistance
        3. Test for less than 2 Ω in the ignition circuit end to end.
            1. If 2 Ω or greater, repair the open/high resistance in the circuit.
            2. If less than 2 Ω, replace the device.
    1. **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 R9 and ground.
    1. **If 10 Ω or greater**
        1. Ignition OFF.
        2. Test for less than 2 Ω in the ground circuit end to end.
            1. If 2 Ω or greater, repair the open/high resistance in the circuit.
            2. If less than 2 Ω, repair the open/high resistance in the ground connection.
    1. **If less than 10 Ω**
3. Ignition ON.
4. Verify a test lamp illuminates between the B+ circuit terminal R7 and ground.
    1. **If the test lamp does not illuminate and the circuit fuse is good**
        1. Ignition OFF, remove the test lamp.

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2. Test for less than 2 Ω in the B+ circuit end to end.
    1. If 2 Ω or greater, repair the open/high resistance in the circuit.
    2. If less than 2 Ω, verify the fuse is not open and there is voltage at the fuse.

1. **If the test lamp does not illuminate and the circuit fuse is open**
    1. Ignition OFF, remove the test lamp.
    2. Test for infinite resistance between the B+ circuit and ground.
        1. If less than infinite resistance, repair the short to ground on the circuit.
        1. If infinite resistance, test or replace the KR104A Battery Saver Relay 1.

1. **If the test lamp illuminates**

5. Enable battery saver mode (transport mode).
6. Ignition OFF.
7. Connect a test lamp between the control circuit terminal R8 and ground.
8. Verify the test lamp momentarily flashes ON and OFF when turning the ignition ON.
    1. **If the test lamp is always OFF**
        1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K9 Body Control Module and the KR104B Battery Saver Relay 2.
        2. Test for infinite resistance between the control circuit and ground.
            1. If less than infinite resistance, repair the short to ground on the circuit.
            1. If infinite resistance
        3. Test for less than 2 Ω in the control circuit end to end.
            1. If 2 Ω or greater, repair the open/high resistance in the circuit.
            2. If less than 2 Ω, replace the K9 Body Control Module.
    1. **If the test lamp is always ON**
        1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K9 Body Control Module, ignition ON.
        2. Test for less than 1 V between the control circuit and ground.
            1. If 1 V or greater, repair the short to voltage on the circuit.
            2. If less than 1 V, replace the K9 Body Control Module.
    1. **If the test lamp turns ON and OFF**
9. Connect a test lamp between the control circuit terminal R10 and ground.
10. Verify the test lamp momentarily flashes ON and OFF after turning the ignition OFF.

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> *NOTE:*
>
> *It may take up to 1 min after the ignition is switched OFF and retained accessory power is disabled before the body control module sends a command to unlatch the relay.*

1. **If the test lamp is always OFF**
    1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K9 Body Control Module and the KR104B Battery Saver Relay 2.
    2. Test for infinite resistance between the control circuit and ground.
        1. If less than infinite resistance, repair the short to ground on the circuit.
        1. If infinite resistance
    3. Test for less than 2 Ω in the control circuit end to end.
        1. If 2 Ω or greater, repair the open/high resistance in the circuit.
        2. If less than 2 Ω, replace the K9 Body Control Module.
1. **If the test lamp is always ON**
    1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K9 Body Control Module, ignition ON.
    2. Test for less than 1 V between the control circuit and ground.
        1. If 1 V or greater, repair the short to voltage on the circuit.
        2. If less than 1 V, replace the K9 Body Control Module.
1. **If the test lamp turns ON and OFF**

11. Verify that a test lamp does not illuminate between the ignition circuit terminal R6 and ground.
    1. **If the test lamp illuminates**

       Repair the short to voltage on the ignition circuit
    1. **If the test lamp does not illuminate**
12. Ignition ON, connect a 30 A fused jumper wire between the B+ circuit terminal R7 and the ignition circuit terminal R6.
13. Verify device is activated.
    1. **If the device does not activate**
        1. Ignition OFF, disconnect the harness connector at the device.
        2. Test for infinite resistance between the ignition circuit and ground.
            1. If less than infinite resistance, repair the short to ground on the circuit.

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1. If infinite resistance

3. Test for less than 2 Ω in the ignition circuit end to end.

1. If 2 Ω or greater, repair the open/high resistance in the circuit.

2. If less than 2 Ω, replace the device.

1. **If the device activates**

14. 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.

1. **If 10 Ω or greater**

1. Ignition OFF.

2. Test for less than 2 Ω in the ground circuit end to end.

1. If 2 Ω or greater, repair the open/high resistance in the circuit.

2. If less than 2 Ω, repair the open/high resistance in the ground connection.

1. **If less than 10 Ω**

3. Ignition ON.
4. Verify a test lamp illuminates between the B+ circuit terminal 3 and ground.

1. **If the test lamp does not illuminate**

Replace the X53A Fuse Block - Rear Body

1. **If the test lamp illuminates**

5. Enable battery saver mode (transport mode).
6. Ignition OFF.
7. Connect a test lamp between the control circuit terminal 1 and ground.
8. Verify the test lamp momentarily flashes ON and OFF when turning the ignition ON.

1. **If the test lamp is always OFF**

1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K9 Body Control Module and the KR104A Battery Saver Relay 1.

2. Test for infinite resistance between the control circuit and ground.

1. If less than infinite resistance, repair the short to ground on the circuit.

1. If infinite resistance

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3. Test for less than 2 Ω in the control circuit end to end.
    1. If 2 Ω or greater, repair the open/high resistance in the circuit.
    2. If less than 2 Ω, replace the K9 Body Control Module.

1. **If the test lamp is always ON**
    1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K9 Body Control Module, ignition ON.
    2. Test for less than 1 V between the control circuit and ground.
        1. If 1 V or greater, repair the short to voltage on the circuit.
        2. If less than 1 V, replace the K9 Body Control Module.

1. **If the test lamp turns ON and OFF**

9. Connect a test lamp between the control circuit terminal 2 and ground.
10. Verify the test lamp momentarily flashes ON and OFF after turning the ignition OFF.

> *NOTE:*
>
> *It may take up to 1 min after the ignition is switched OFF and retained accessory power is disabled before the body control module sends a command to unlatch the relay.*

1. **If the test lamp is always OFF**
    1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K9 Body Control Module and the KR104A Battery Saver Relay 1.
    2. Test for infinite resistance between the control circuit and ground.
        1. If less than infinite resistance, repair the short to ground on the circuit.
        1. If infinite resistance
    3. Test for less than 2 Ω in the control circuit end to end.
        1. If 2 Ω or greater, repair the open/high resistance in the circuit.
        2. If less than 2 Ω, replace the K9 Body Control Module.

1. **If the test lamp is always ON**
    1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K9 Body Control Module, ignition ON.
    2. Test for less than 1 V between the control circuit and ground.
        1. If 1 V or greater, repair the short to voltage on the circuit.
        2. If less than 1 V, replace the K9 Body Control Module.

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1. **If the test lamp turns ON and OFF**

11. Verify that a test lamp does not illuminate between the ignition circuit terminal 5 and ground.
    1. **If the test lamp illuminates**

       Repair the short to voltage on the ignition circuit

    1. **If the test lamp does not illuminate**

12. Ignition ON, connect a 30 A fused jumper wire between the B+ circuit terminal 3 and the ignition circuit terminal 5.
13. Verify device is activated.
    1. **If the device does not activate**
       1. Ignition OFF, disconnect the harness connector at the device.
       2. Test for infinite resistance between the ignition circuit and ground.
          1. If less than infinite resistance, repair the short to ground on the circuit.
          1. If infinite resistance
       3. Test for less than 2 Ω in the ignition circuit end to end.
          1. If 2 Ω or greater, repair the open/high resistance in the circuit.
          2. If less than 2 Ω, replace the device.
    1. **If the device activates**
14. Test or replace the KR104B Battery Saver Relay 2.

DIAGNOSTIC INFORMATION AND PROCEDURES > POWER MODE MISMATCH > 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).
   1. **If less than 70 or greater than 150 Ω**

      Replace the relay.

   1. **If between 70-150 Ω**
3. Test for infinite resistance between the terminals listed below:
   1. (30 or 3) and (86 or 2)
   2. (30 or 3) and (87 or 5)

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3. (30 or 3) and (85 or 1)
4. (85 or 1) and (87 or 5)
5. (86 or 2) and (87 or 5)

1. **If less than infinite resistance**

   Replace the relay.

1. **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).

   1. **If 5.0 Ω or greater**

      Replace the relay.

   1. **If less than 5.0 Ω**

6. All OK

Latching 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 terminals 1 and 6.

   1. **If less than 70 or greater than 150 Ω**

      Replace the relay.

   1. **If between 70-150 Ω**

3. Test for 70-150 Ω between terminals 2 and 6.

   1. **If less than 70 or greater than 150 Ω**

      Replace the relay.

   1. **If between 70-150 Ω**

4. Test for infinite resistance between the terminals listed below:

   1. 3 and 1
   2. 3 and 2
   3. 3 and 6
   4. 5 and 1
   5. 5 and 2
   6. 5 and 6

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1. **If less than infinite resistance**

   Replace the relay.

1. **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.

   1. **If 5.0 Ω or greater**

      Replace the relay.

   1. **If less than 5.0 Ω**

7. Install a 3 A fused jumper wire between relay terminal 2 and 12 V. Install a jumper wire between relay terminal 6 and ground.
8. Test infinite resistance between terminals 3 and 5.

   1. **If less than infinite resistance**

      Replace the relay.

   1. **If infinite resistance**

9. All OK

DIAGNOSTIC INFORMATION AND PROCEDURES > POWER MODE MISMATCH > REPAIR INSTRUCTIONS

Perform the Diagnostic Repair Verification after completing the repair.

- Control Module References for control module replacement, programming and setup.

DIAGNOSTIC INFORMATION AND PROCEDURES > 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 INFORMATION AND PROCEDURES > RETAINED ACCESSORY POWER MALFUNCTION > DIAGNOSTIC FAULT INFORMATION

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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	-
Interruptible Retained Accessory Power Relay Coil Control	B305E 02*	B305E 05*	B305E 01*, B305E 05*	-
Retained Accessory Power Relay Coil Control	B1445 02	1	1	-
Relay Coil Ground	-	1	-	-

1. Retained accessory power malfunction
2. Retained accessory power relay always ON
* DTC set in keyless entry control module

DIAGNOSTIC INFORMATION AND PROCEDURES > RETAINED ACCESSORY POWER MALFUNCTION > CIRCUIT/SYSTEM DESCRIPTION

The body control module (BCM) controls certain components through a control circuit by applying voltage to the retained accessory power relay coil control circuit. The keyless entry control module controls the retained accessory power relay by applying voltage to the interruptible retained accessory power relay coil control circuit. The components and retained accessory power relay are energized when the ignition is in the ACCESSORY or ON position. The components and relay are also energized for approximately 10 min after shutting the ignition OFF, providing no door is opened.

The keyless entry control module will deactivate the retained accessory power relay during transmitter authentication. The purpose is to deactivate components that may cause radio frequency (RF) interference when the ignition mode switch is pressed and may result in a "NO REMOTE DETECTED" message displayed on the driver information center.

DIAGNOSTIC INFORMATION AND PROCEDURES > RETAINED ACCESSORY POWER MALFUNCTION > REFERENCE INFORMATION

Schematic Reference

Power Distribution Schematics

Connector End View Reference

COMPONENT CONNECTOR END VIEWS - INDEX

Description and Operation

Retained Accessory Power Description and Operation

Electrical Information Reference

- Circuit Testing
- Connector Repairs
- Relay Replacement (Attached to Wire Harness) Relay Replacement (Within an Electrical Center)
- Testing for Intermittent Conditions and Poor Connections
- Wiring Repairs

Scan Tool Reference

Control Module References for scan tool information

DIAGNOSTIC INFORMATION AND PROCEDURES > RETAINED ACCESSORY POWER MALFUNCTION > CIRCUIT/SYSTEM VERIFICATION

NOTE:

Use schematics to determine which devices are on the K9 Body Control Module's ignition circuit terminal 12 X4, the K84 Keyless Entry Control Module's ignition circuit terminal 7 X1, 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 that the appropriate devices controlled by the KR76 Retained Accessory Power Relay turn ON and OFF when cycling the ignition between ON and OFF.
    1. **If the devices do not turn ON and OFF**

       Refer to Circuit/System Testing - Diagnostic A.

    1. **If the devices turn ON and OFF**
3. Verify that the appropriate devices controlled by the K84 Keyless Entry Control Module's ignition circuit terminal 7 X1 turn ON and OFF when cycling the ignition between ON and OFF.
    1. **If the devices do not turn ON and OFF**

       Refer to Circuit/System Testing - Diagnostic B.

    1. **If the devices turn ON and OFF**
4. Verify that the appropriate devices controlled by the K9 Body Control Module's circuit terminal 12 X4 turn ON and OFF when commanding the Accessory/Retained Accessory Power Relay On and Off with a scan tool.
    1. **If the devices do not turn ON and OFF**

       Refer to Circuit/System Testing - Diagnostic C.

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1. **If the devices turn ON and OFF**

5. All OK.

DIAGNOSTIC INFORMATION AND PROCEDURES > RETAINED ACCESSORY POWER MALFUNCTION > 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 R3 and ground.
    1. **If 10 Ω or greater**
        1. Ignition OFF.
        2. Test for less than 2 Ω in the ground circuit end to end.
            1. If 2 Ω or greater, repair the open/high resistance in the circuit.
            2. If less than 2 Ω, repair the open/high resistance in the ground connection.
    1. **If less than 10 Ω**
3. Ignition ON.
4. Verify a test lamp illuminates between the B+ circuit terminal R1 and ground.
    1. **If the test lamp does not illuminate and the circuit breaker is not open**
        1. Ignition OFF, remove the test lamp.
        2. Test for less than 2 Ω in the B+ circuit end to end.
            1. If 2 Ω or greater, repair the open/high resistance in the circuit.
            2. If less than 2 Ω, verify the circuit breaker is not open and there is voltage at the circuit breaker.
    1. **If the test lamp does not illuminate and the circuit breaker is open**
        1. Ignition OFF, remove the test lamp.
        2. Test for infinite resistance between B+ circuit and ground.
            1. If less than infinite resistance, repair the short to ground on the circuit.
            2. If infinite resistance, test or replace the KR76 Retained Accessory Power Relay.
    1. **If the test lamp illuminates**
5. Connect a test lamp between the control circuit terminal R5 and the ground circuit terminal R3.

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6. Verify the test lamp turns ON and OFF when cycling the ignition between ON and OFF.
    1. **If the test lamp is always OFF**
        1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K84 Keyless Entry Control Module.
        2. Test for infinite resistance between the control circuit and ground.
            1. If less than infinite resistance, repair the short to ground on the circuit.
            1. If infinite resistance
        3. Test for less than 2 Ω in the control circuit end to end.
            1. If 2 Ω or greater, repair the open/high resistance in the circuit.
            2. If less than 2 Ω, replace the K84 Keyless Entry Control Module.
    1. **If the test lamp is always ON**
        1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K84 Keyless Entry Control Module, ignition ON.
        2. Test for less than 1 V between the control circuit and ground.
            1. If 1 V or greater, repair the short to voltage on the circuit.
            2. If less than 1 V, replace the K84 Keyless Entry Control Module.
    1. **If the test lamp turns ON and OFF**
7. Connect the KR76 Retained Accessory Power Relay.
8. Disconnect the appropriate T22 Mobile Device Wireless Charger Module or 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.
    1. T22 Mobile Device Wireless Charger Module - Ignition circuit terminal 1
    2. X80A Accessory Power Receptacle - Center Console 1 - Ignition circuit terminal 1
    3. X80B Accessory Power Receptacle - Center Console 2 - Ignition circuit terminal 1
    4. X80D Accessory Power Receptacle - Center Console Compartment - Ignition circuit terminal 1
    1. **If the test lamp illuminates**

        Repair the short to voltage on the ignition circuit.
    1. **If the test lamp does not illuminate**
11. Ignition ON.

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12. Verify that a test lamp illuminates between each of the ignition circuits listed below and ground.
    1. T22 Mobile Device Wireless Charger Module - Ignition circuit terminal 1
    2. X80A Accessory Power Receptacle - Center Console 1 - Ignition circuit terminal 1
    3. X80B Accessory Power Receptacle - Center Console 2 - Ignition circuit terminal 1
    4. X80D Accessory Power Receptacle - Center Console Compartment - Ignition circuit terminal 1

    1. **If the test lamp does not illuminate and the circuit breaker or fuse is not open**
        1. Ignition OFF remove the test lamp.
        2. Test for less than 2 Ω in the ignition circuit end to end.
            1. If 2 Ω or greater, repair the open/high resistance in the circuit.
            2. If less than 2 Ω, test or replace the KR76 Retained Accessory Power Relay.

    1. **If the test lamp does not illuminate and the circuit breaker or fuse is open**
        1. Ignition OFF remove the test lamp.
        2. Test for infinite resistance between the ignition circuit and ground.
            1. If less than infinite resistance, repair the short to ground on the circuit.
            2. If resistance, test or replace the appropriate T22 Mobile Device Wireless Charger Module or X80 Accessory Power Receptacle.

    1. **If the test lamp illuminates**

13. Test or replace the appropriate T22 Mobile Device Wireless Charger Module or X80 Accessory Power Receptacle.

Diagnostic B

1. Ignition OFF and all vehicle systems OFF, disconnect the appropriate X81 Accessory Power Receptacle - 110V AC or X81B Accessory Power Receptacle - 220V AC.
2. Connect a test lamp between the ignition circuits listed below and ground.
    1. X81 Accessory Power Receptacle - 110V AC - Ignition circuit terminal 1 X1
    2. X81B Accessory Power Receptacle - 220V AC - Ignition circuit terminal 1 X1
3. Verify the test lamp turns ON and OFF when cycling the ignition between ON and OFF.
    1. **If the test lamp is always OFF**
        1. Ignition OFF, remove test lamp, disconnect the harness connector at the K84 Keyless Entry Control Module.
        2. Test for infinite resistance between the ignition circuit and ground.
            1. If less than infinite resistance, repair the short to ground on the circuit.

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1. If infinite resistance.

3. Test for less than 2 Ω in the control circuit end to end.

    1. If 2 Ω or greater, repair the open/high resistance in the circuit.

    2. If less than 2 Ω, replace the K84 Keyless Entry Control Module.

1. **If the test lamp is always ON**

    1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K84 Keyless Entry Control Module, ignition ON.

    2. Test for less than 1 V between the control circuit and ground.

        1. If 1 V or greater, repair the short to voltage on the circuit.

        2. If less than 1 V, replace the K84 Keyless Entry Control Module.

1. **If the test lamp turns ON and OFF**

4. Test or replace the appropriate X81 Accessory Power Receptacle - 110V AC or X81B Accessory Power Receptacle - 220V AC.

Diagnostic C

1. Ignition OFF and all vehicle systems OFF, disconnect the appropriate P2 Transmission Shift Lever Position Indicator, and K69 Sunroof Motor.

2. Connect a test lamp between each of the ignition circuits listed below and ground.

    1. P2 Transmission Shift Lever Position Indicator - Ignition circuit terminal 1

    2. K69 Sunroof Motor - Ignition circuit terminal 7

3. Verify the test lamp turns ON and OFF when commanding the Accessory/Retained Accessory Power Relay On and Off with a scan tool.

    1. **If the test lamp is always OFF**

        1. Ignition OFF, remove test lamp, disconnect the harness connector at the K9 Body Control Module.

        2. Test for infinite resistance between the ignition circuit and ground.

            1. If less than infinite resistance, repair the short to ground on the circuit.

            1. If infinite resistance.

        3. Test for less than 2 Ω in the control circuit end to end.

            1. If 2 Ω or greater, repair the open/high resistance in the circuit.

            2. If less than 2 Ω, replace the K9 Body Control Module.

    1. **If the test lamp is always ON**

        1. Ignition OFF, remove the test lamp, disconnect the harness connector at the K9 Body Control Module, ignition ON.

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2. Test for less than 1 V between the control circuit and ground.
    1. If 1 V or greater, repair the short to voltage on the circuit.
    2. If less than 1 V, replace the K9 Body Control Module.

1. **If the test lamp turns ON and OFF**

4. Test or replace the appropriate P2 Transmission Shift Lever, or K69 Sunroof Motor.

DIAGNOSTIC INFORMATION AND PROCEDURES > RETAINED ACCESSORY POWER MALFUNCTION > 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).
    1. **If less than 70 or greater than 150 Ω**

        Replace the relay.

    1. **If between 70-150 Ω**
3. Test for infinite resistance between the terminals listed below:
    1. (30 or 3) and (86 or 2)
    2. (30 or 3) and (87 or 5)
    3. (30 or 3) and (85 or 1)
    4. (85 or 1) and (87 or 5)
    5. (86 or 2) and (87 or 5)
    1. **If less than infinite resistance**

        Replace the relay.

    1. **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).
    1. **If 5.0 Ω or greater**

        Replace the relay.

    1. **If less than 5.0 Ω**
6. All OK

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DIAGNOSTIC INFORMATION AND PROCEDURES > RETAINED ACCESSORY POWER MALFUNCTION > REPAIR INSTRUCTIONS

Perform the Diagnostic Repair Verification after completing the repair.

- Accessory Power Receptacle Replacement
- Control Module References for control module replacement, programming and setup.

DIAGNOSTIC INFORMATION AND PROCEDURES > 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 INFORMATION AND PROCEDURES > VEHICLE WILL NOT CHANGE POWER MODE > 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	2	B097B 05*	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				

DIAGNOSTIC INFORMATION AND PROCEDURES > VEHICLE WILL NOT CHANGE POWER MODE > CIRCUIT/SYSTEM DESCRIPTION

The ignition mode switch has two LEDs that indicate the vehicle power mode. When the vehicle is in the off mode, both LEDs 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 10 min time-out to reduce battery drain. Pressing and holding the push button start switch (without the brake pedal applied) for 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 LEDs have the voltage supplied from the body control module. The ignition mode switch sends the ignition mode switch status to the keyless entry control module and to the body control module. The keyless entry control module sends a redundant signal to the body control module with the ignition mode switch status.

The ignition mode switch contains two individual switches that provide redundant switch inputs to both the body control module and the keyless entry control module. The body control module supplies the ignition mode switch a constant B+ signal. The body control module 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 body control module 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 body control module, but monitors the other individual switch in the ignition mode switch.

DIAGNOSTIC INFORMATION AND PROCEDURES > VEHICLE WILL NOT CHANGE POWER MODE > REFERENCE INFORMATION

Schematic Reference

Power Distribution Schematics

Connector End View Reference

COMPONENT CONNECTOR END VIEWS - INDEX

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

DIAGNOSTIC INFORMATION AND PROCEDURES > VEHICLE WILL NOT CHANGE POWER MODE > CIRCUIT/SYSTEM VERIFICATION

1. Verify DTC B097B 61 is not set.
    1. **If DTC B097B 61 is set**

        Test or replace the S38 Ignition Mode Switch.

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1. **If DTC B097B 61 is 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.

    1. **If the green LED does not illuminate**

        Refer to Circuit/System Testing

    1. **If the green LED illuminates**

3. All OK.

DIAGNOSTIC INFORMATION AND PROCEDURES > VEHICLE WILL NOT CHANGE POWER MODE > CIRCUIT/SYSTEM TESTING

1. Ignition OFF and all 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.

    1. **If 10 Ω or greater**

        1. Test for less than 2 Ω in the ground circuit end to end.

            1. If 2 Ω or greater, repair the open/high resistance in the circuit.

            2. If less than 2 Ω, repair the open/high resistance in the ground connection.

    1. **If less than 10 Ω**

3. Test for less than 10 Ω between the low reference circuit terminal 7 and ground.

    1. **If 10 Ω or greater**

        1. Test for less than 2 Ω in the ground circuit end to end.

            1. If 2 Ω or greater, repair the open/high resistance in the circuit.

            2. If less than 2 Ω, replace the K84 Keyless Entry Control Module.

    1. **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 Body Control Module Push Button Ignition Switch Voltage parameter is greater than 11 V.

    1. **If 11 V or less**

        1. Connect the S38 Ignition Mode Switch.

        2. Ignition OFF, disconnect the X2 harness connector at the K9 Body Control Module and S38 Ignition Mode Switch.

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3. Test for infinite resistance between the signal circuit terminal 6 and ground.
    1. If less than infinite resistance, repair the short to ground on the circuit.
    2. If infinite resistance, replace the K9 Body Control Module.

1. **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 Body Control Module Push Button Ignition Switch Voltage parameter is less than 1 V.
    1. **If 1 V or greater**
        1. Disconnect the harness connector at the K9 Body Control Module.
        2. Test for less than 1 V between the signal circuit and ground.
            1. If 1 V or greater, repair the short to voltage on the circuit.
            1. If less than 1 V
        3. Test for less than 2 Ω in signal circuit end to end.
            1. If 2 Ω or greater, repair the open/high resistance in the circuit.
            2. If less than 2 Ω, replace the K9 Body Control Module.
    1. **If less than 1 V**
9. Connect the harness connector at the S38 Ignition Mode Switch.
10. Verify the scan tool Body Control Module Push Button Ignition Switch Voltage parameter is 8-10 V, with the S38 Ignition Mode Switch released.
    1. **If not between 8-10 V**

       Test or replace the S38 Ignition Mode Switch.

    1. **If between 8-10 V**
11. Verify the scan tool Body Control Module Push Button Ignition Switch Voltage parameter is 4-7 V, with the S38 Ignition Mode Switch pressed.
    1. **If not between 4-7 V**

       Test or replace the S38 Ignition Mode Switch.

    1. **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.
    1. **If less than infinite resistance**

       Repair the short to ground on the circuit.

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1. **If infinite resistance**

14. Ignition ON.
15. Test for less than 1 V between the signal circuit terminal 11 and ground.
    1. **If 1 V or greater**

       Repair the short to voltage on the circuit.

    1. **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.
    1. **If not between 4.5-5.5 k Ω**
        1. Ignition OFF, disconnect the harness connector at the S38 Ignition Mode Switch.
        2. Test the signal circuit for an open/high resistance.
            1. If open/high resistance, repair the open/high resistance in the circuit.
            2. If not an open/high resistance, test or replace the S38 Ignition Mode Switch.
    1. **If between 4.5-5.5 k Ω**
17. Test for 1-1.5 k Ω between the signal circuit terminal 11 and the low reference circuit terminal 12, with the S38 Ignition Mode Switch pressed.
    1. **If not between 1-1.5 k Ω**

       Test or replace the S38 Ignition Mode Switch.

    1. **If between 1-1.5 k Ω**
18. Replace the K84 Keyless Entry Control Module.

DIAGNOSTIC INFORMATION AND PROCEDURES > VEHICLE WILL NOT CHANGE POWER MODE > COMPONENT TESTING

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 k Ω between the terminals listed below:
    1. Signal terminal 6 and ground terminal 4
    2. Signal terminal 3 and low reference terminal 7
    1. **If not between 4.5-5.5 k Ω**

       Replace the S38 Ignition Mode Switch.

    1. **If between 4.5-5.5 k Ω**

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3. With the S38 Ignition Mode Switch pressed, test for 1-1.5 k Ω between the terminals listed below:
    1. Signal terminal 6 and ground terminal 4
    2. Signal terminal 3 and low reference terminal 7
    1. **If not between 1-1.5 k Ω**

       Replace the S38 Ignition Mode Switch.

    1. **If between 1-1.5 k Ω**
4. All OK.

DIAGNOSTIC INFORMATION AND PROCEDURES > VEHICLE WILL NOT CHANGE POWER MODE > REPAIR INSTRUCTIONS

Perform the Diagnostic Repair Verification after completing the repair.

- Ignition and Start Switch Replacement
- Control Module References for the appropriate control module replacement, programming and setup.

DIAGNOSTIC INFORMATION AND PROCEDURES > 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.

DIAGNOSTIC INFORMATION AND PROCEDURES > CHECKING AFTERMARKET ACCESSORIES

> *WARNING:*
>
> *Refer to SIR Warning .*

Do not connect aftermarket accessories into the SIR circuits, all such circuits are indicated on circuit diagrams with the SIR 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.

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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.

DIAGNOSTIC INFORMATION AND PROCEDURES > 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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DIAGNOSTIC INFORMATION AND PROCEDURES > 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.*

DIAGNOSTIC INFORMATION AND PROCEDURES > 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.*

DIAGNOSTIC INFORMATION AND PROCEDURES > PROBING ELECTRICAL CONNECTORS > FRONT PROBE

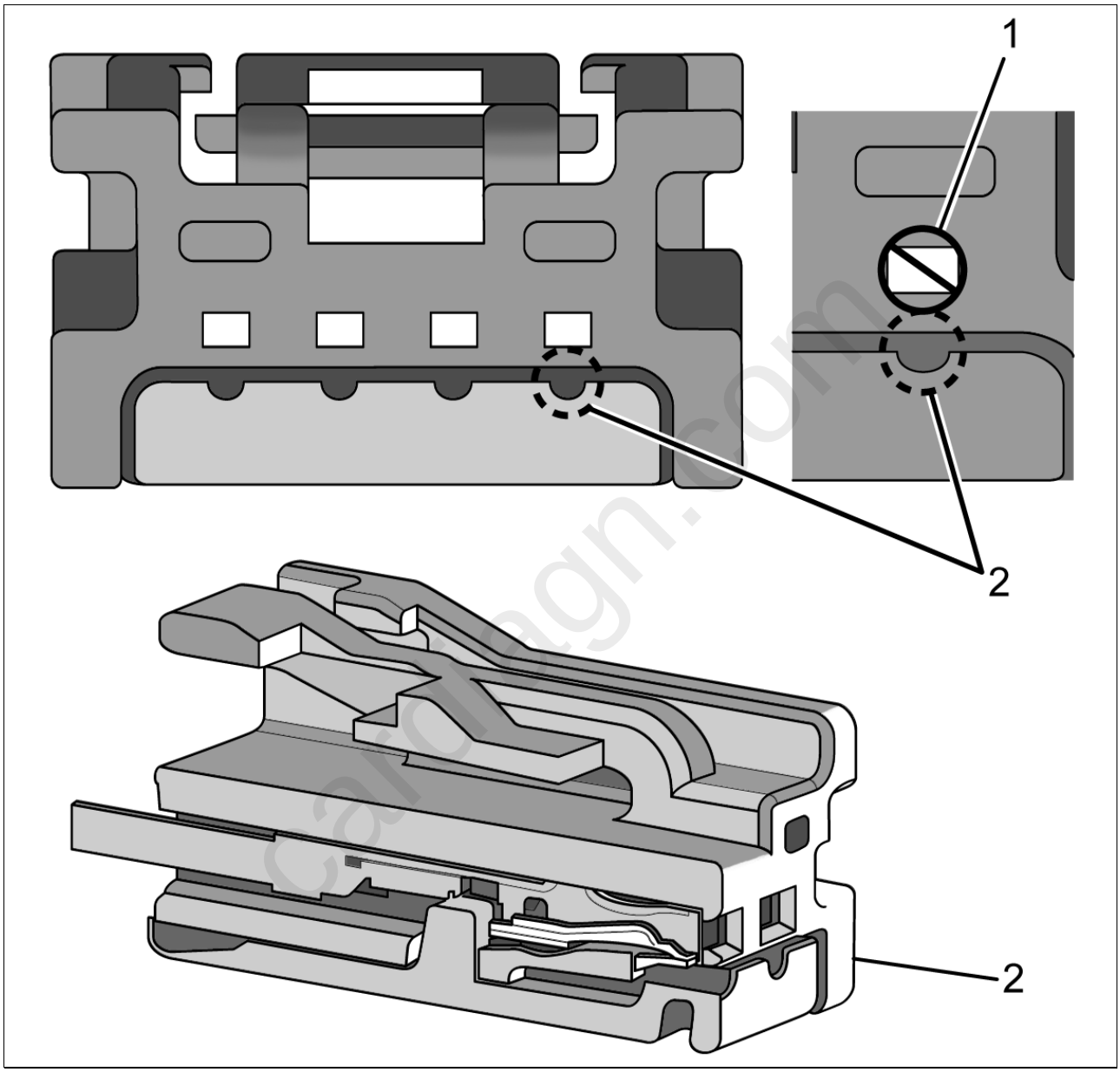
Disconnect the connector and probe the terminals from the mating side (front) of the connector.

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CAUTION:

Refer to Test Probe Caution .

Fig 1: Probing Terminal



Courtesy of GENERAL MOTORS COMPANY

NOTE:

Connectors with 0.50 terminals should not be probed within the female terminal (1). Damage may occur to the terminal and result in improper diagnosis. There is a test point on the connector (2) next to the terminal where testing should be performed.

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)
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)

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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)

DIAGNOSTIC INFORMATION AND PROCEDURES > PROBING ELECTRICAL CONNECTORS > BACKPROBE

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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DIAGNOSTIC INFORMATION AND PROCEDURES > 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 .*

DIAGNOSTIC INFORMATION AND PROCEDURES > TROUBLESHOOTING WITH A DIGITAL MULTIMETER > 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

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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.*

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.

DIAGNOSTIC INFORMATION AND PROCEDURES > TROUBLESHOOTING WITH A TEST LAMP

Special Tools

EL-35616-210 Test Light - Probe Kit

> *NOTE:*
>
> *Always use the proper replacement bulb (6614F Test Light Bulb (not LED)).*

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-35616-210** kit is Micro-Pack compatible and includes a 12 V test lamp.

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.

DIAGNOSTIC INFORMATION AND PROCEDURES > USING FUSED JUMPER WIRES

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Special Tools

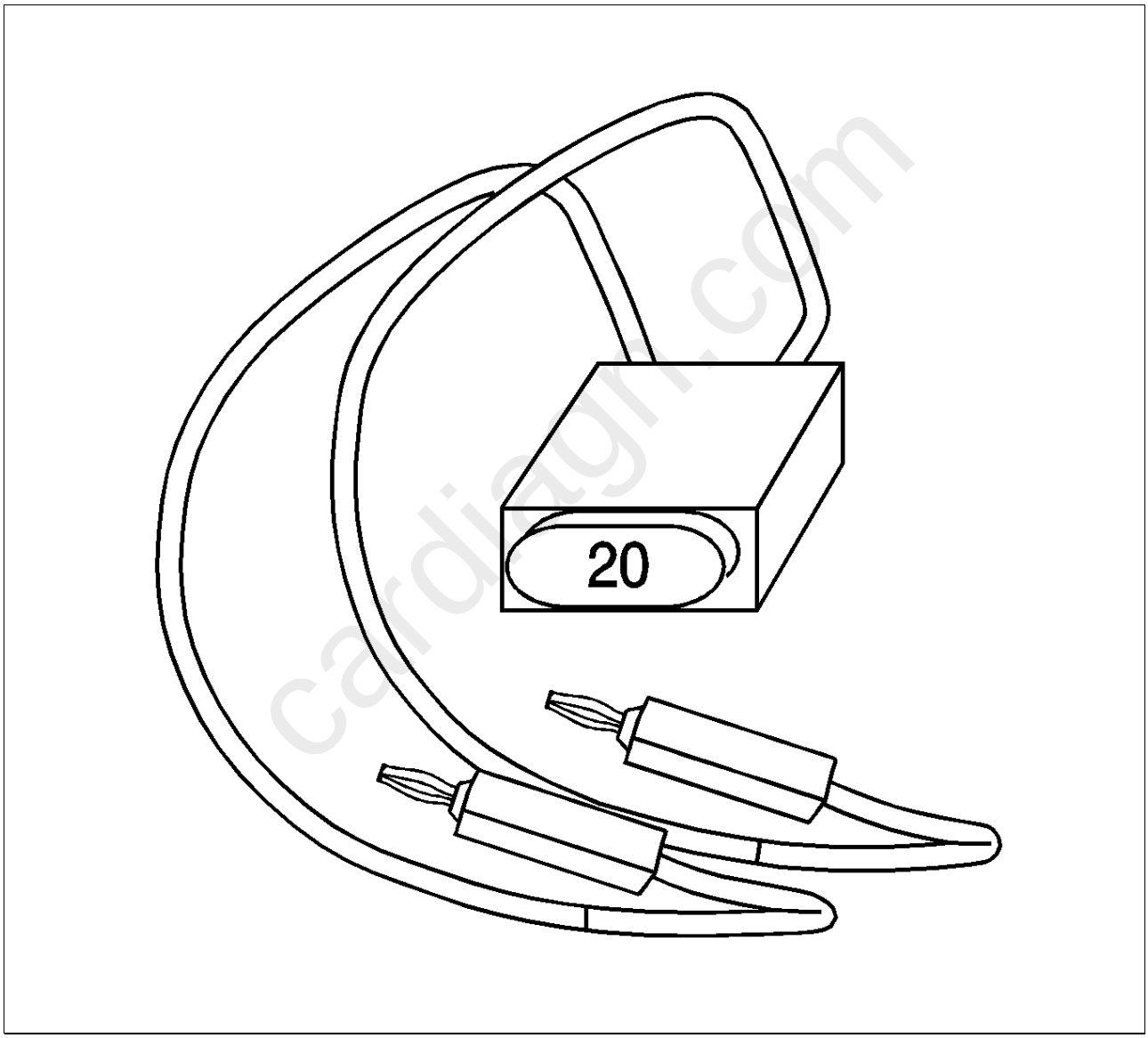
EL 35616-20F Fused Jumper Wire

For equivalent regional tools, refer to Special Tools .

NOTE:

A fused jumper may not protect solid state components from being damaged.

Fig 1: Fused Jumper Wire



Courtesy of GENERAL MOTORS COMPANY

The **EL 35616-20F** Fused Jumper Wire includes 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.

DIAGNOSTIC INFORMATION AND PROCEDURES > 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:
    1. Turn ON the ignition, with the engine OFF.
    2. Turn ON the engine.
    3. Turn ON the circuit and/or system with a scan tool in Output Controls.
    4. 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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DIAGNOSTIC INFORMATION AND PROCEDURES > MEASURING VOLTAGE DROP

Special Tools

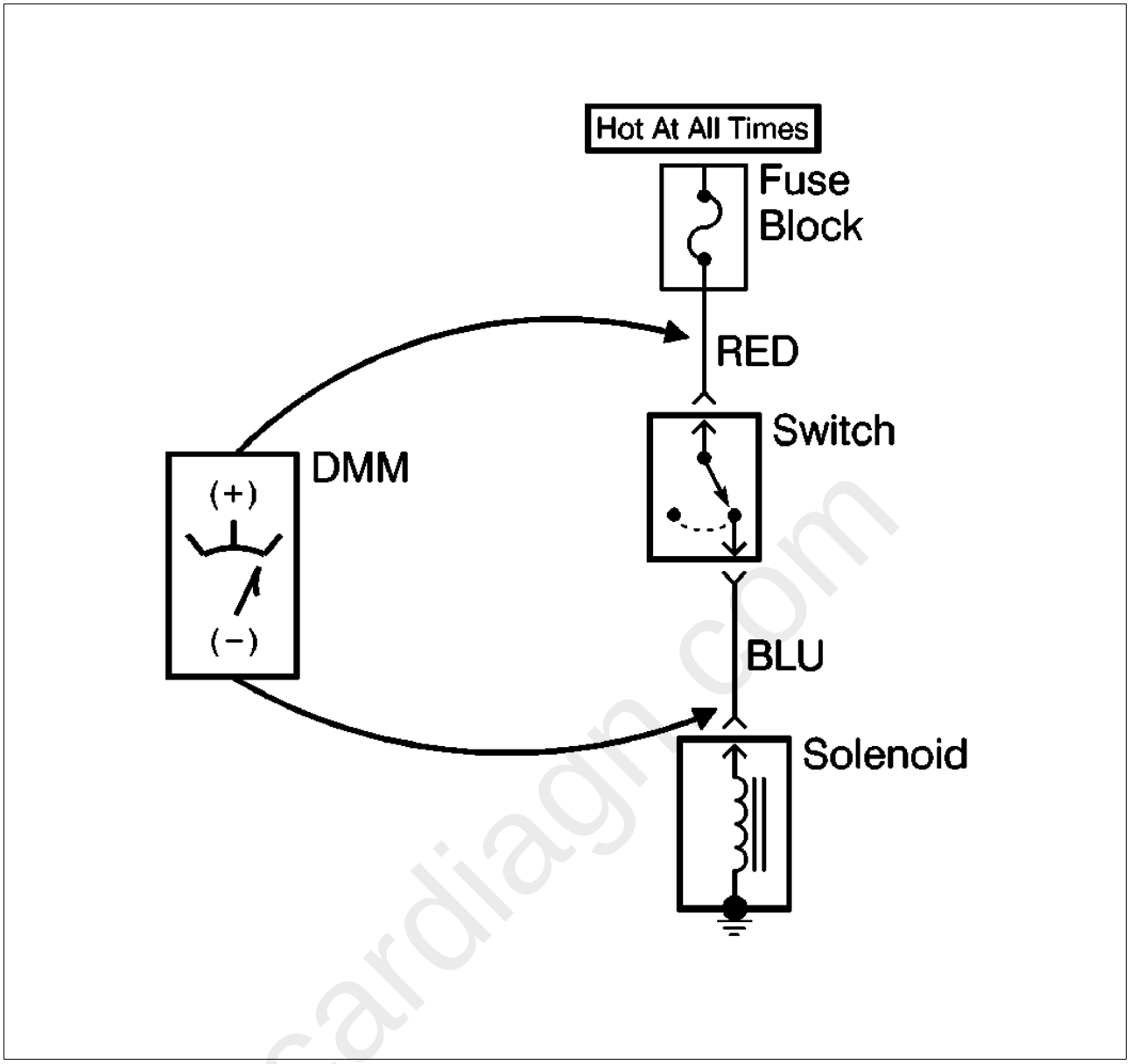
EL-39200 Digital Multimeter (DMM)

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.

Fig 1: Voltage Drop



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Courtesy of GENERAL MOTORS COMPANY

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.

DIAGNOSTIC INFORMATION AND PROCEDURES > 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.

DIAGNOSTIC INFORMATION AND PROCEDURES > 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).

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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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DIAGNOSTIC INFORMATION AND PROCEDURES > 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.

DIAGNOSTIC INFORMATION AND PROCEDURES > TESTING FOR CONTINUITY > 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.

DIAGNOSTIC INFORMATION AND PROCEDURES > TESTING FOR 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.

DIAGNOSTIC INFORMATION AND PROCEDURES > TESTING FOR SHORT TO GROUND

CAUTION:

Refer to Test Probe Caution .

The following procedures test for a short to ground in a circuit.

DIAGNOSTIC INFORMATION AND PROCEDURES > TESTING FOR SHORT TO GROUND > WITH A DIGITAL MULTIMETER (DMM)

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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.

DIAGNOSTIC INFORMATION AND PROCEDURES > TESTING FOR SHORT TO GROUND > 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.

DIAGNOSTIC INFORMATION AND PROCEDURES > TESTING FOR SHORT TO GROUND > 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).
    1. When the DMM displays voltage the short is in the wiring leading to the first connector or switch.
    2. 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.

DIAGNOSTIC INFORMATION AND PROCEDURES > TESTING FOR A SHORT TO VOLTAGE

Special Tools

EL-39200 Digital Multimeter (DMM)

For equivalent regional tools, refer to Special Tools .

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⚠ *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.

DIAGNOSTIC INFORMATION AND PROCEDURES > 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.

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- 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.

DIAGNOSTIC INFORMATION AND PROCEDURES > TESTING FOR INTERMITTENT CONDITIONS AND POOR CONNECTIONS > 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.

DIAGNOSTIC INFORMATION AND PROCEDURES > TESTING FOR INTERMITTENT CONDITIONS AND POOR CONNECTIONS > TESTING FOR PROPER TERMINAL CONTACT

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** kit when 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.

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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** kit can 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.

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DIAGNOSTIC INFORMATION AND PROCEDURES > TESTING FOR INTERMITTENT CONDITIONS AND POOR CONNECTIONS > 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 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 .

DIAGNOSTIC INFORMATION AND PROCEDURES > TESTING FOR INTERMITTENT CONDITIONS AND POOR CONNECTIONS > 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.

DIAGNOSTIC INFORMATION AND PROCEDURES > TESTING FOR INTERMITTENT CONDITIONS AND POOR CONNECTIONS > 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

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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.

DIAGNOSTIC INFORMATION AND PROCEDURES > TESTING FOR INTERMITTENT CONDITIONS AND POOR CONNECTIONS > INCORRECT CONTROL MODULE

- There are only a few situations where reprogramming a control module is appropriate:
    - 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.

DIAGNOSTIC INFORMATION AND PROCEDURES > 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.

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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.

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DIAGNOSTIC INFORMATION AND PROCEDURES > INDUCING INTERMITTENT FAULT 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.

DIAGNOSTIC INFORMATION AND PROCEDURES > INDUCING INTERMITTENT FAULT CONDITIONS > LOW TEMPERATURE CONDITIONS

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.

DIAGNOSTIC INFORMATION AND PROCEDURES > INDUCING INTERMITTENT FAULT CONDITIONS > 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.

DIAGNOSTIC INFORMATION AND PROCEDURES > 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.
   1. 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.
   2. 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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DIAGNOSTIC INFORMATION AND PROCEDURES > SCAN TOOL SNAPSHOT PROCEDURE > REVIEWING STORED DATA 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 is used to analyze the data during the time a vehicle condition is current. In GDS 2 there is not a traditional snapshot as there has been in the past. GDS 2 saves all past VIN and diagnostic data for future viewing. GDS 2 automatically records data 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.

Reviewing Stored Data

The Review Stored Data function allows viewing and playing of previously recorded vehicle 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 multiple parameters to see if a component is functioning properly. Recorded sessions can be selected for viewing by the following two methods:

- From the Home Page, click on Review Stored Data. In the Review Stored Data page, highlight a vehicle in the Sessions screen located in the upper pane and highlight the desired Stored Data in the lower pane, then click the Review button.
- The user can view stored data without ending a current on-vehicle diagnostic session by clicking the Vehicle Menu 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 Stored Data in the lower pane and click the Review button.

Stored Data Review Selections

The following information can be selected in the tabs at the top of the screen:

- Graphical Data Display - Allows a detailed review of parameter data. The buttons on the right side modify the graph data
- Diagnostic Data Display - Displays incoming information from the file. The current value of the parameters is displayed on the screen.
- Line Graph - Allows selected locked parameters to be graphed with parameters overlaid for data comparison. The current value of the parameters is displayed on the screen. Use the buttons on the right side to modify the graph data.
- 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 session was recorded.
- Selected Vehicle Configuration - Displays vehicle identifiers, such as transmission type, for the vehicle selected on the Stored Data Review screen in the Sessions field.
- RPO - Displays vehicle build information.

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Graphical Data Display

On the Graphical Data Display tab there are multiple selections at the top of the page. The selections available are:

- Create Report - Opens and internet browser page where a data display report can be printed or saved for future reference.
- Unit Switch - Toggles graph units between English and metric.
- Lock - When a parameter is selected, clicking the lock button locks a selected parameter for viewing in the Line Graph tab. In the Line Graph tab, locked parameters are isolated and overlaid for data comparison.
- Up Arrow - Click the up arrow to move a highlighted parameter up a position on the list.
- Down Arrow - Click the down arrow to move a highlighted parameter down a position on the list.
- Save As - This selection is available in the Graphical Data Display and Diagnostic Data Display tabs. This allows the user to export the graph data to a worksheet for in depth analysis and to timestamp data.

Review Stored Data Functions

To review the session there are buttons at the bottom of the window to control the cursor. From left to right the buttons are:

- Insert Bookmark - This button allows the user to insert bookmarks anywhere along the timeline. This provision allows the user to record notes regarding the inserted bookmark.
- Return Bookmark - This button moves the cursor to the previous bookmark.
- Back - This button moves the cursor back 1 frame.
- Timeline Slider Control - This allows the user to slide and select any position on the Timeline required.
- Forward - This button moves the cursor forward 1 frame.
- Forward Bookmark - This button moves the cursor forward 1 bookmark.
- Bookmarks - Allows the user to toggle bookmark visibility ON and OFF.

Graphical Preference Selections

The vertical side bar on the right side of the screen in the Graphical Data Display and Line Graph tabs toggles the Graphical Selection Panel from hidden to visible. The graphical preference selections available are:

- Reset - Resets the graph display back to the initial standard GDS 2 setting.
- Grid Line Toggle - This toggle reverses the current state of showing or removing grid lines.
- Hash Mark Toggle - This toggle reverses the current state of showing or removing data acquisition points or hash marks.
- Horizontal Graph Compression - Compresses the scale of the graph horizontally.

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- Horizontal Graph Expansion - Expands the scale of the graph horizontally.
- Vertical Graph Compression - Compresses the scale of the graph vertically.
- Vertical Graph Expansion - Expands the scale of the graph vertically.
- Move Centerline of Graph Up - Moves the centerline of the graph up incrementally.
- Move Centerline of Graph Down - Moves the centerline of the graph down incrementally.

DIAGNOSTIC INFORMATION AND PROCEDURES > CIRCUIT PROTECTION - FUSES

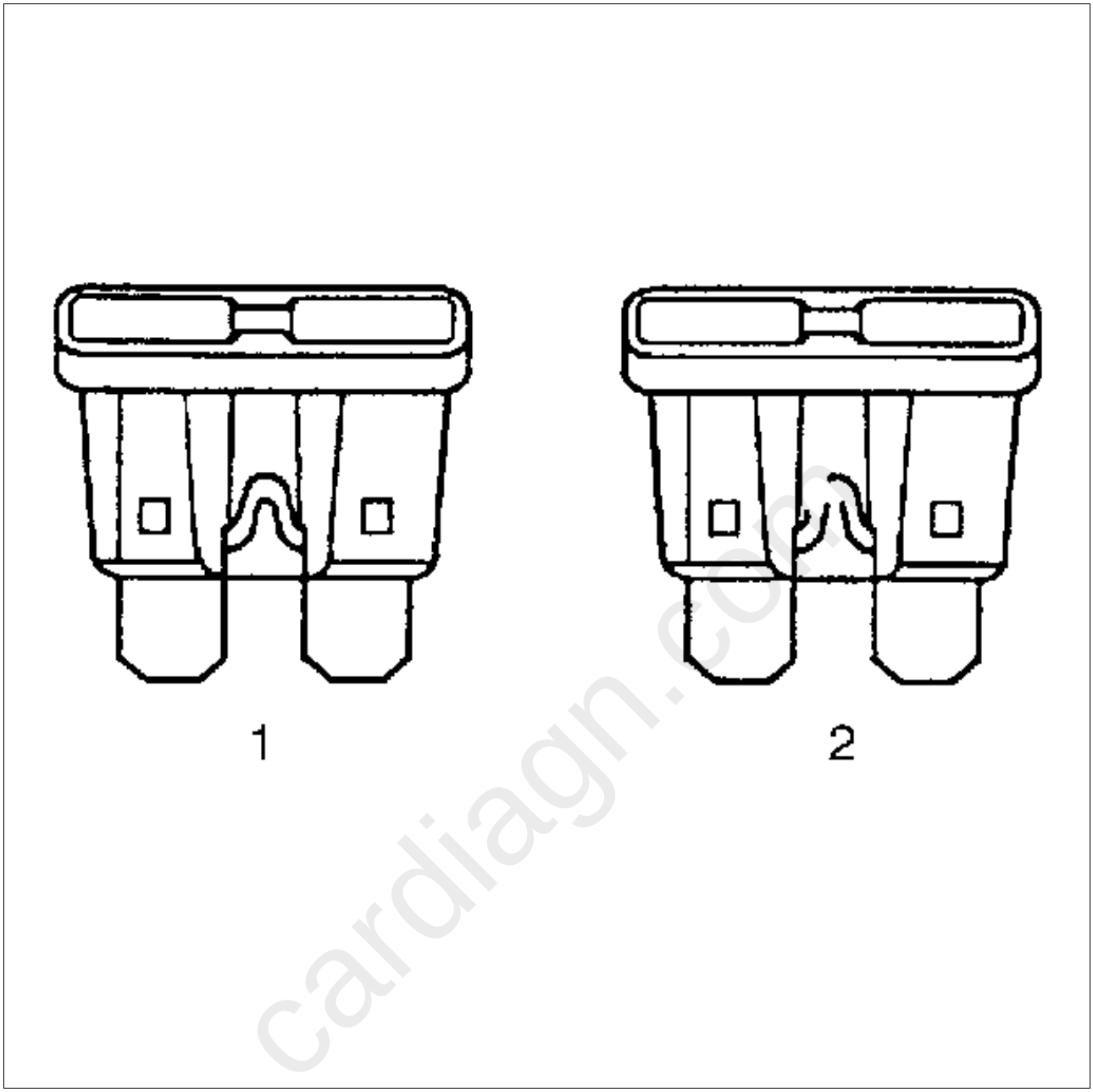
Special Tools

EL-39200 Digital Multimeter (DMM)

For equivalent regional tools, refer to Special Tools .

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Fig 1: Open Fuse Element



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Courtesy of GENERAL MOTORS COMPANY

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
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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DIAGNOSTIC INFORMATION AND PROCEDURES > 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.

DIAGNOSTIC INFORMATION AND PROCEDURES > 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.

DIAGNOSTIC INFORMATION AND PROCEDURES > 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

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- Heated Oxygen Sensor Wiring Repairs
- Splicing Copper Wire Using Splice Sleeves
- Splicing Twisted or Shielded Cable
- Splicing Inline Harness Diodes
- SIR/SRS Wiring Repairs

DIAGNOSTIC INFORMATION AND PROCEDURES > 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
12355010	3.2 mm	0.125 in	Tubing, Shrink 1/8	Black	305 mm	12 in
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

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0.35	22
0.5	20
0.8	18
1.31	16
2.09	14
3.31	12
5.27	10
8.37	8
13.3	6
21.2	4
33.6	2
53.5	1/0

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DIAGNOSTIC INFORMATION AND PROCEDURES > COAXIAL CABLE REPAIRS

The GM global coaxial (coax) 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).

DIAGNOSTIC INFORMATION AND PROCEDURES > COAXIAL CABLE REPAIRS > 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

<table>
<tr><th colspan="2">Repair Kit Name</th><th>Description</th></tr>
<tr><td colspan="2" rowspan="4">Communication Interface Module Antenna Cable Kit (Kit # 13581174)</td><td>RG58 coaxial cable with female/female connectors - 7ft/2.1m</td></tr>
<tr><td>RG58 coaxial cable with female/male connectors - 5ft/1.5m</td></tr>
<tr><td>RG58 coaxial cable with female/male connectors - 3.5ft/1.1m</td></tr>
<tr><td>RG58 coaxial cable with female/male connectors - 3.5ft/1.1m</td></tr>
<tr><td colspan="2" rowspan="3">Digital Radio and Vehicle Locator Antenna Coaxial Cable Kit (Kit # 13581173)</td><td>RG316 coaxial cable with female/female connectors - 7ft/2.1m</td></tr>
<tr><td>RG316 coaxial cable with female/male connectors - 5ft/1.5m</td></tr>
<tr><td>RG316 coaxial cable with female/male connectors - 3.5ft/1.1m</td></tr>
<tr><td rowspan="5">Digital Radio, Mobile Telephone and Vehicle Locator Antenna Coaxial Cable Kit (Kit # 19119056)</td><td rowspan="5">3-way Gen 1 sub-kit</td><td>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</td></tr>
<tr><td>White female connector</td></tr>
<tr><td>White male connector</td></tr>
<tr><td>Blue female connector</td></tr>
<tr><td>Blue male connector</td></tr>
</table>

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	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	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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DIAGNOSTIC INFORMATION AND PROCEDURES > COAXIAL CABLE REPAIRS > 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

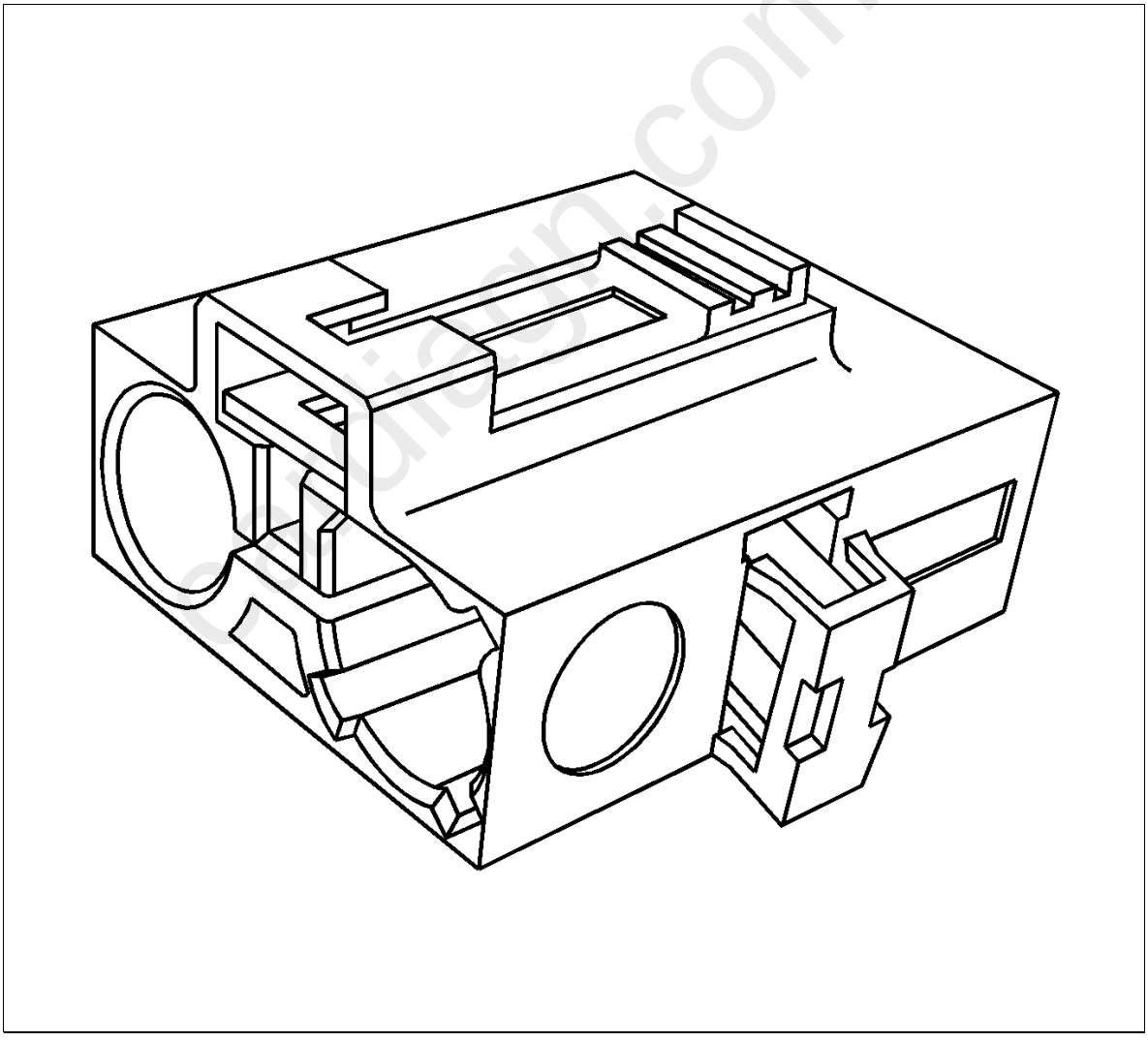
No change to the service coaxial cable is necessary in order to install the new coaxial cable into the vehicle.

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.

   Fig 1: Connector Housing



Courtesy of GENERAL MOTORS COMPANY

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.

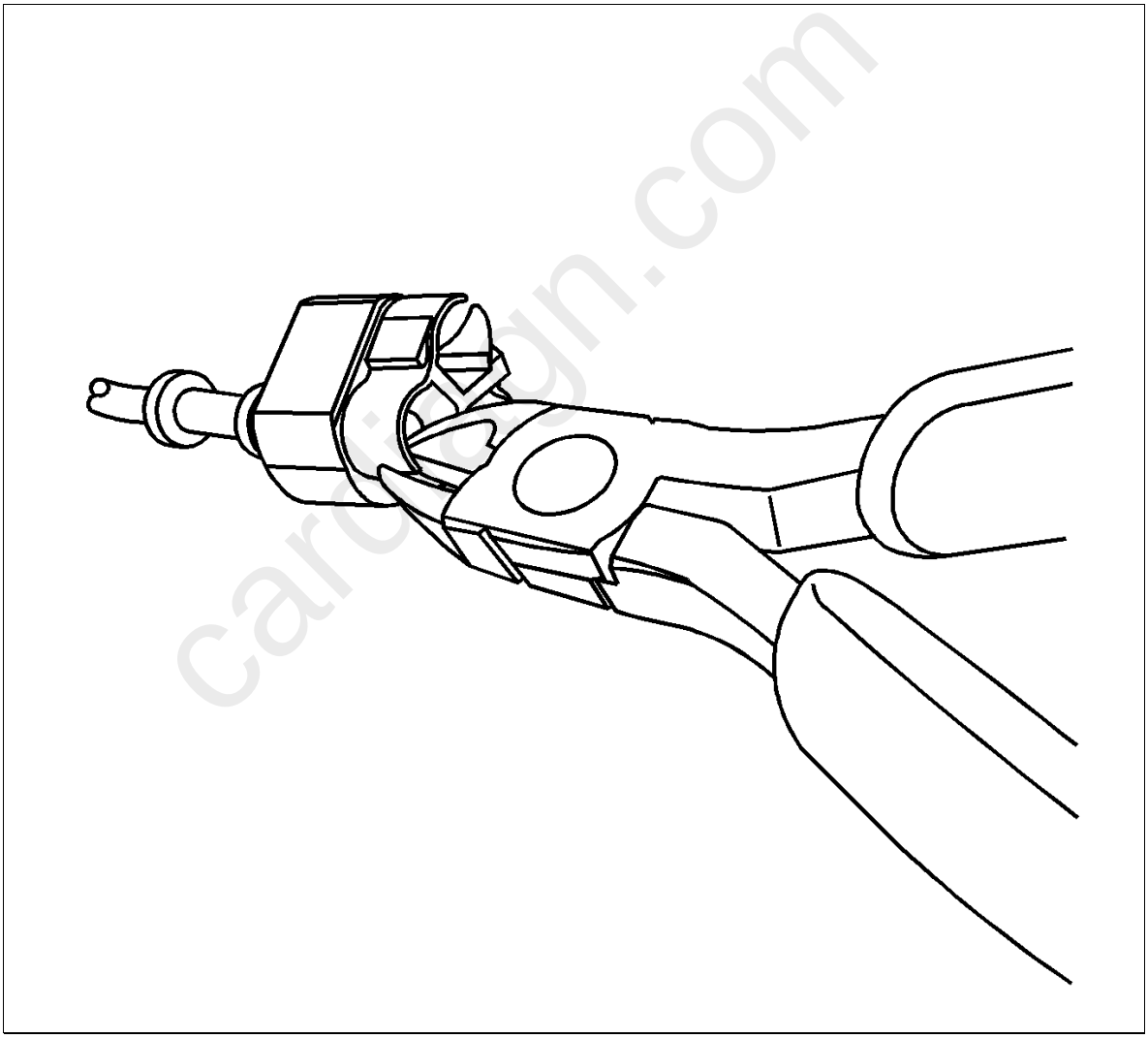
4. If the issue is found to be the connector housing and not cable, a new connector housing may be installed while reusing all other components.

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.

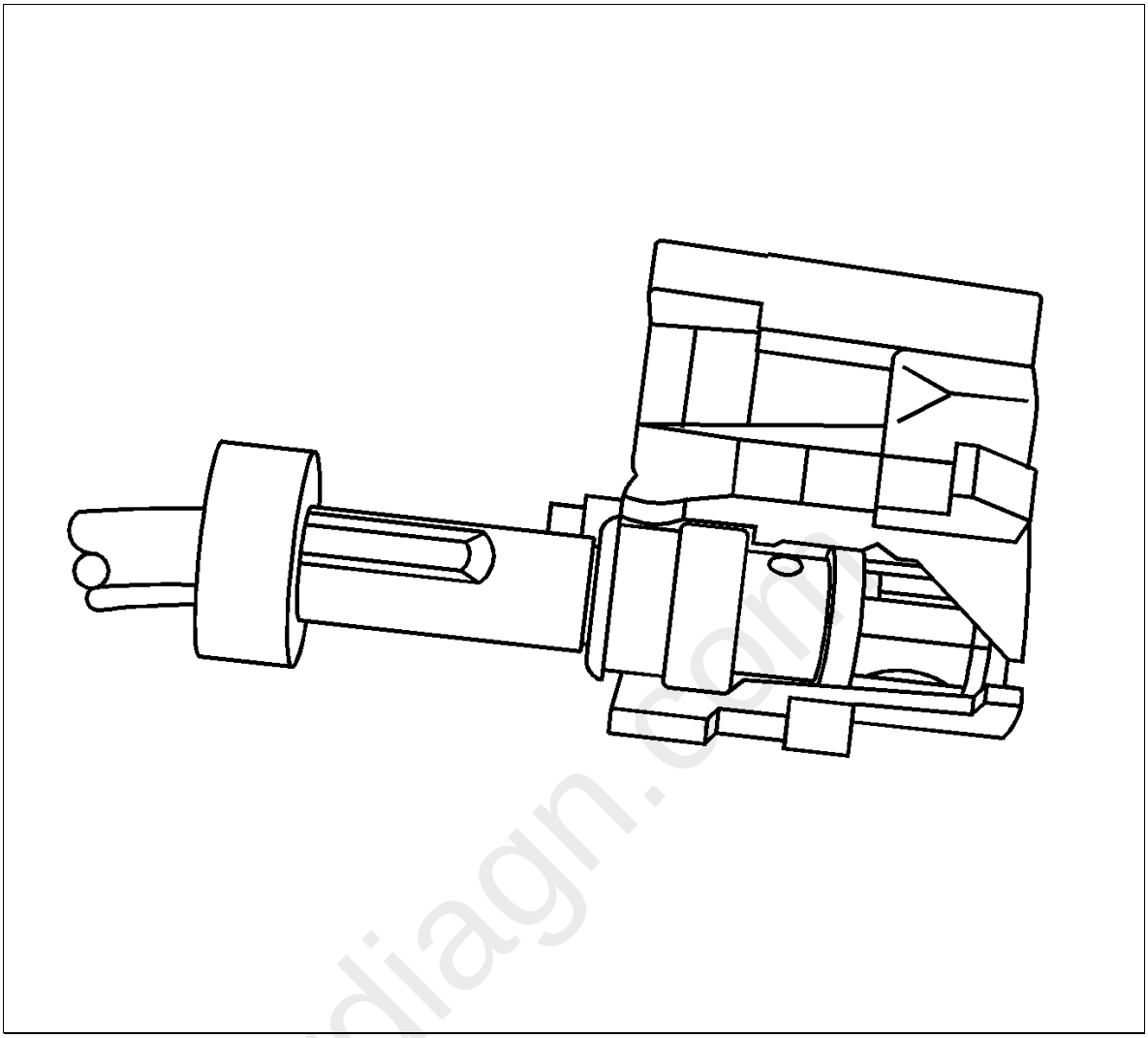
   Fig 2: Side/Diagonal Cutters To Nip And Break Away Connector Housing



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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.

Fig 3: New Service Coaxial Cable To New 3-Way Connector Housing



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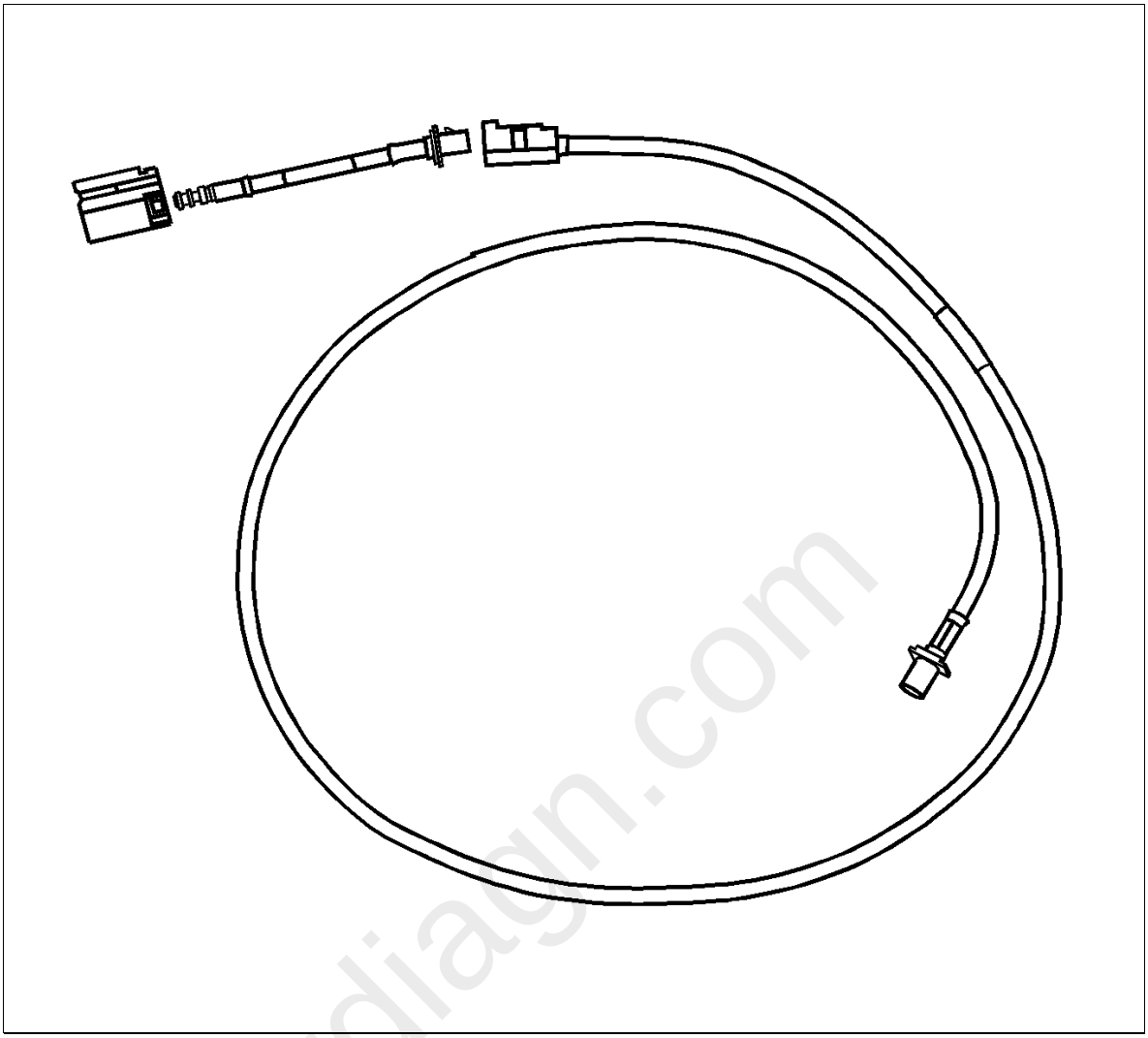
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5. Install the new service coaxial cable into the vehicle. Use the 4-inch jumper for the appropriate color 3-way connector housing to connect the new service coaxial cable to the new 3-way connector housing.
6. If the issue is found to be the connector housing and not cable, a new connector housing may be installed while reusing all other components.

DIAGNOSTIC INFORMATION AND PROCEDURES > COAXIAL CABLE REPAIRS > 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.

Fig 1: Coaxial Cable



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NOTE:

Avoid routing the new coaxial cable near sharp edges that can damage the new coaxial cable.

4. Install the new coaxial cable in the vehicle.

   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.

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.

DIAGNOSTIC INFORMATION AND PROCEDURES > 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.

DIAGNOSTIC INFORMATION AND PROCEDURES > FOLDED-OVER WIRE REPAIR

Special Tools

- **EL-38125-10** Splice Sleeve Crimping Tool (non GMNA)
- **J-38125-5A** Ultra Torch Special Tool
- **J-38125-8** Splice Sleeve Crimping Tool (GMNA)

For equivalent regional tools, refer to Special Tools .

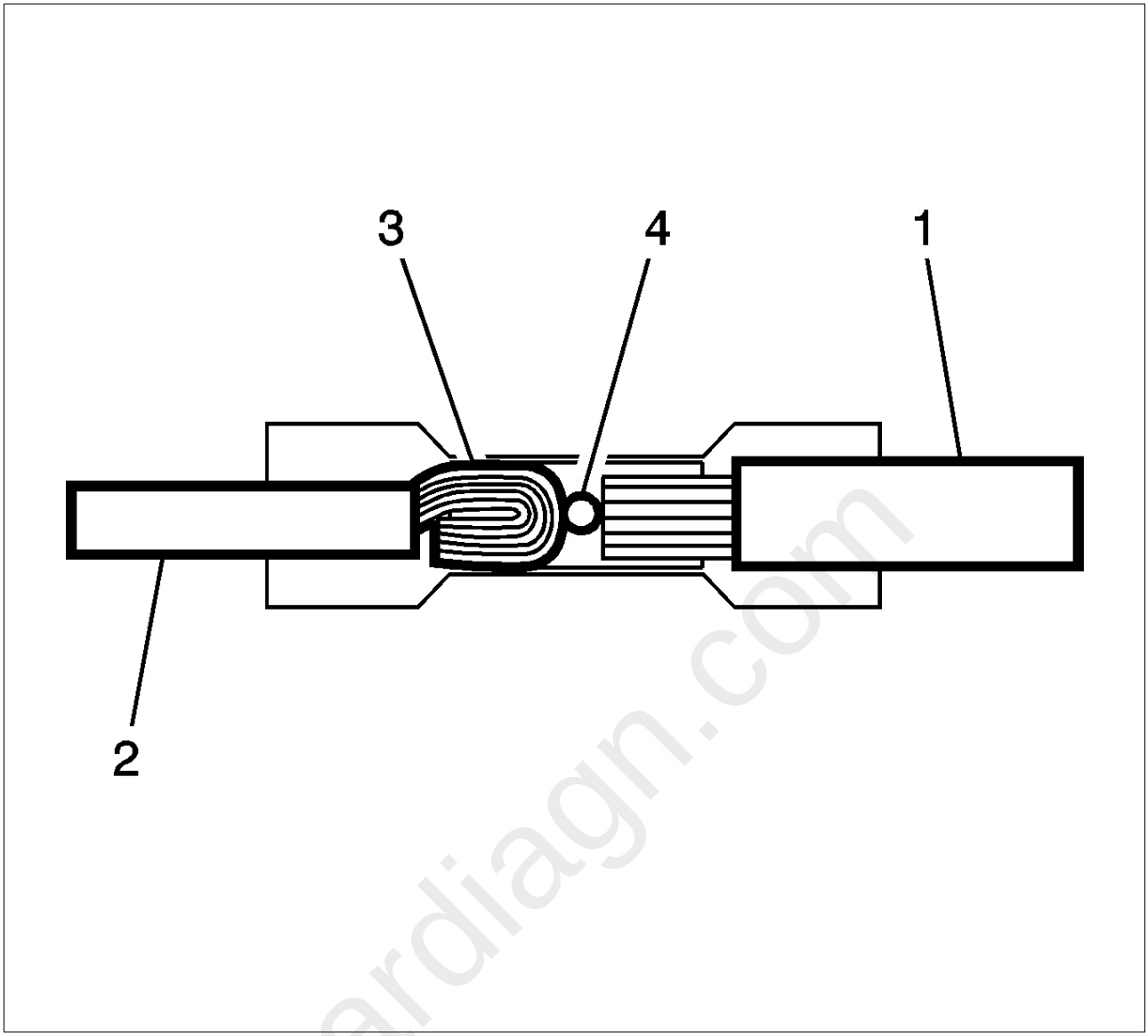
The GM global wire repair strategy uses connector assemblies (pigtails) and terminated leads to repair wiring harnesses.

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.

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Fig 1: Stripped Wires In Splice Sleeve Connector



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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

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

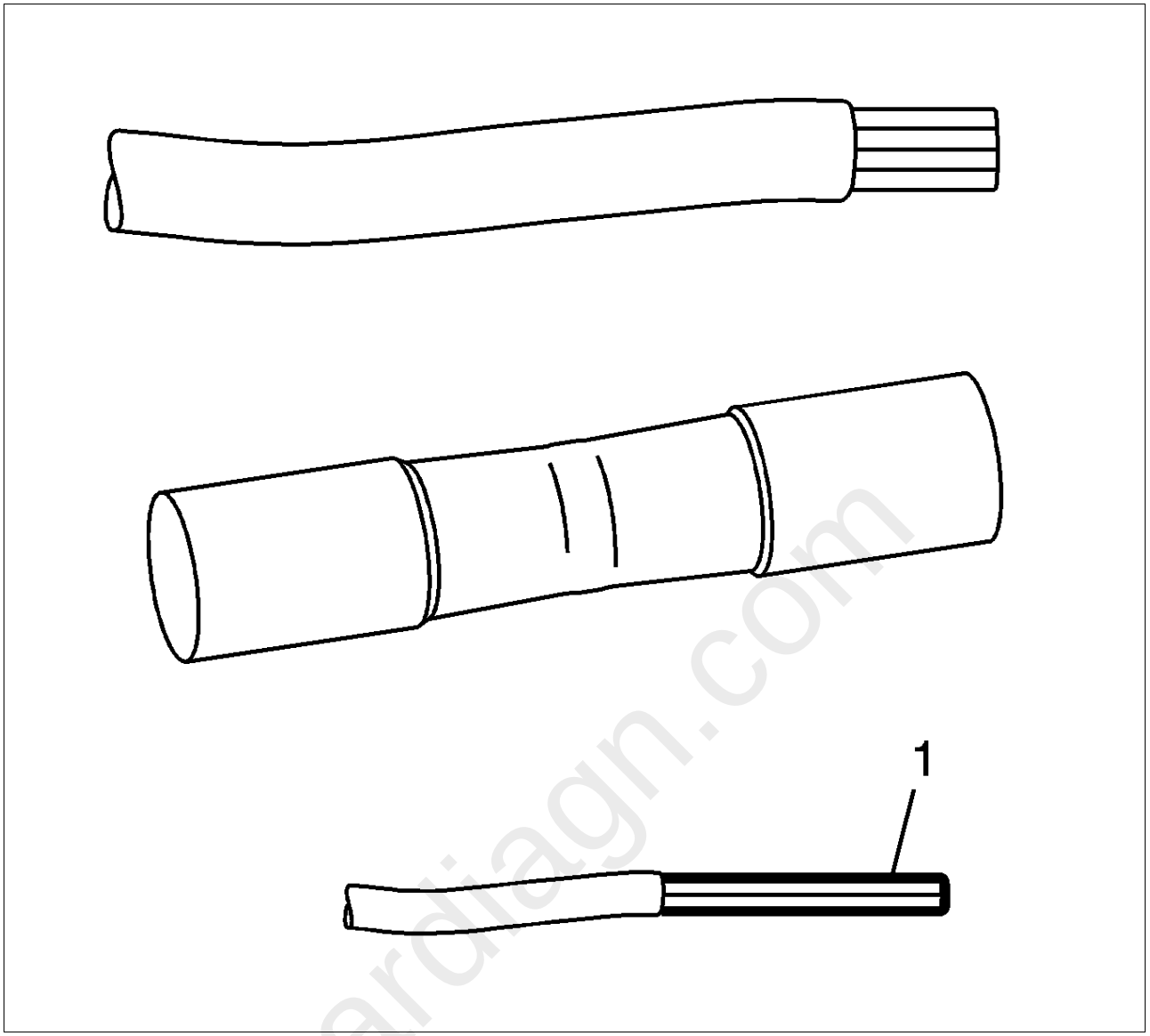
Example

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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Fig 2: Stripped Wires

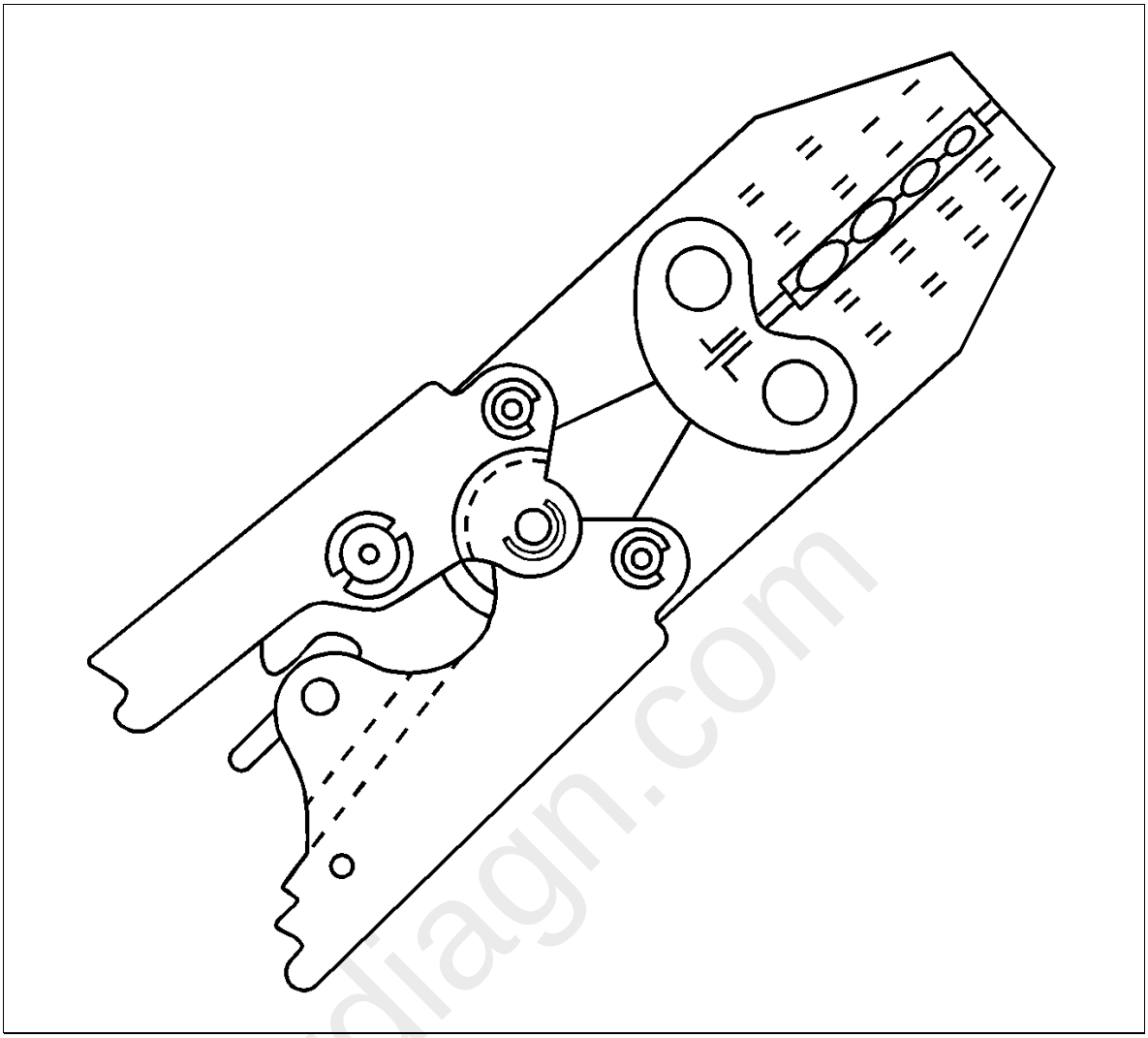


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Strip twice the amount of insulation on the smaller (1) wire (IP Harness is the lower wire) than normally required. Normally, the terminated leads have 5 mm of insulation stripped off the wire.

Fig 3: Splice Sleeve Crimping Tool



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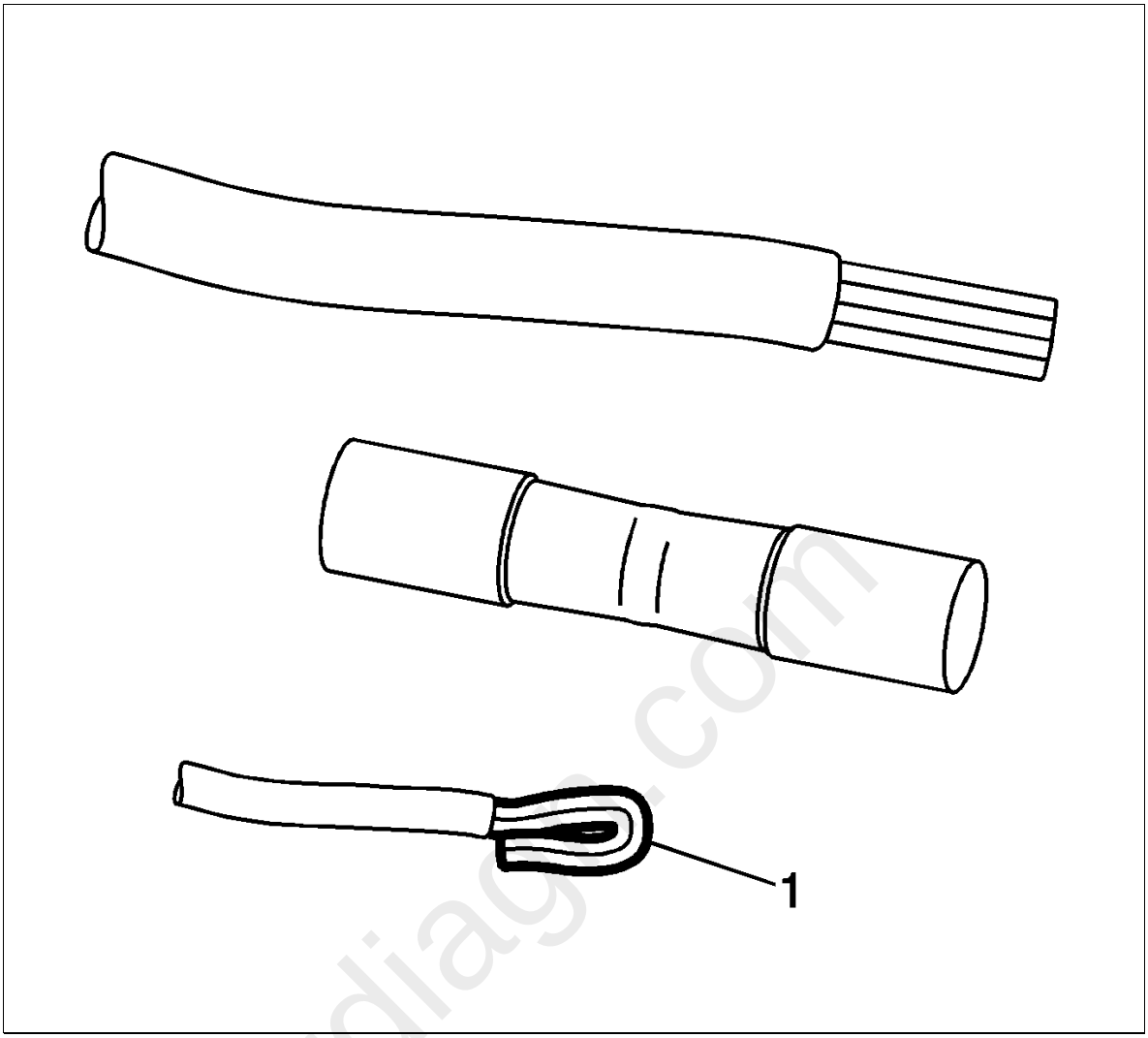
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NOTE:

*Use **EL-38125-10** splice sleeve crimping tool (non GMNA) or **J-38125-8** splice sleeve crimping tool (GMNA).*

1. For wiring repair, refer to Splicing Copper Wire Using Splice Sleeves .

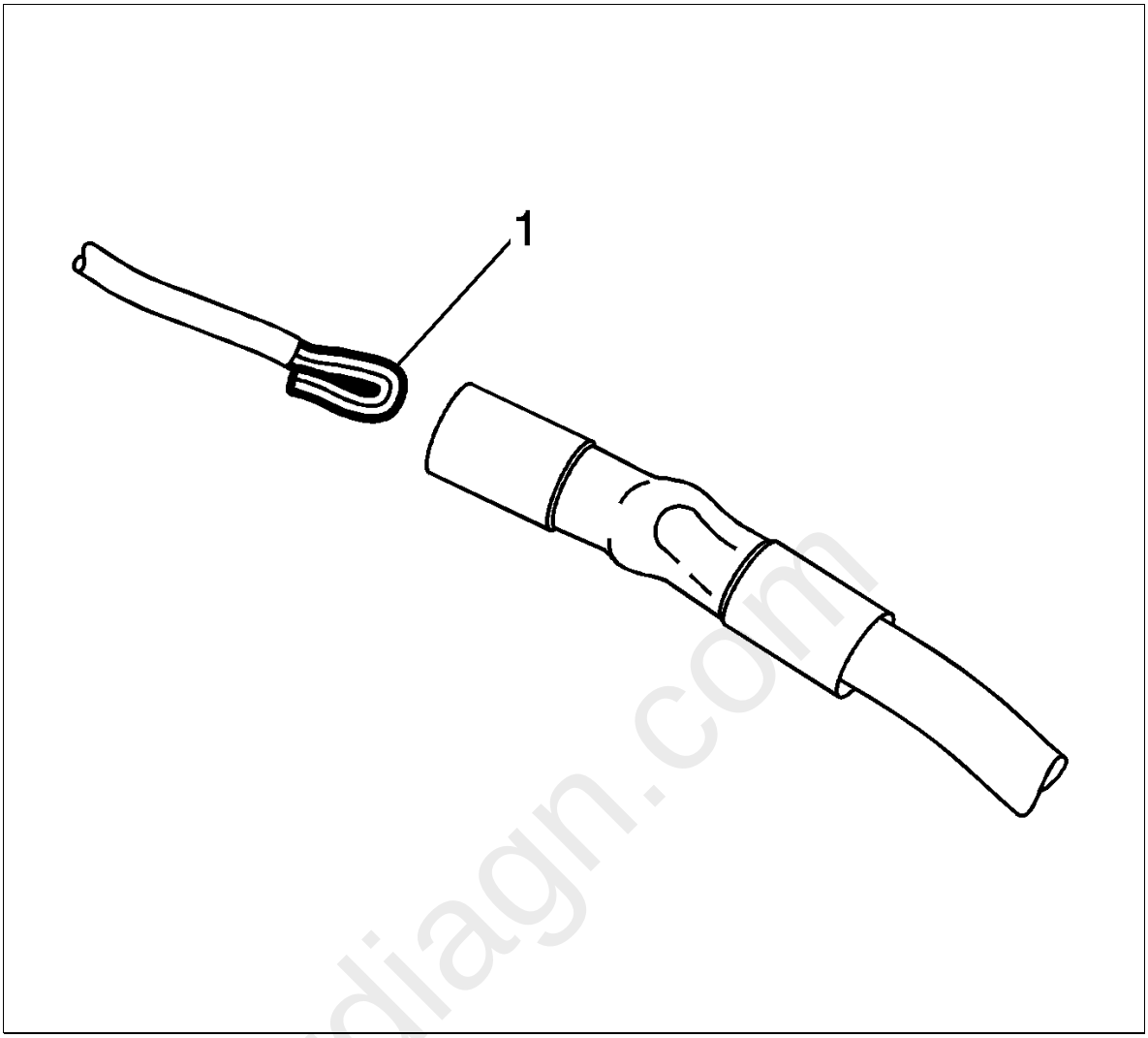
Fig 4: Twisted And Folded Wire To Length



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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.

Fig 5: Folded Wire & Splice Sleeve

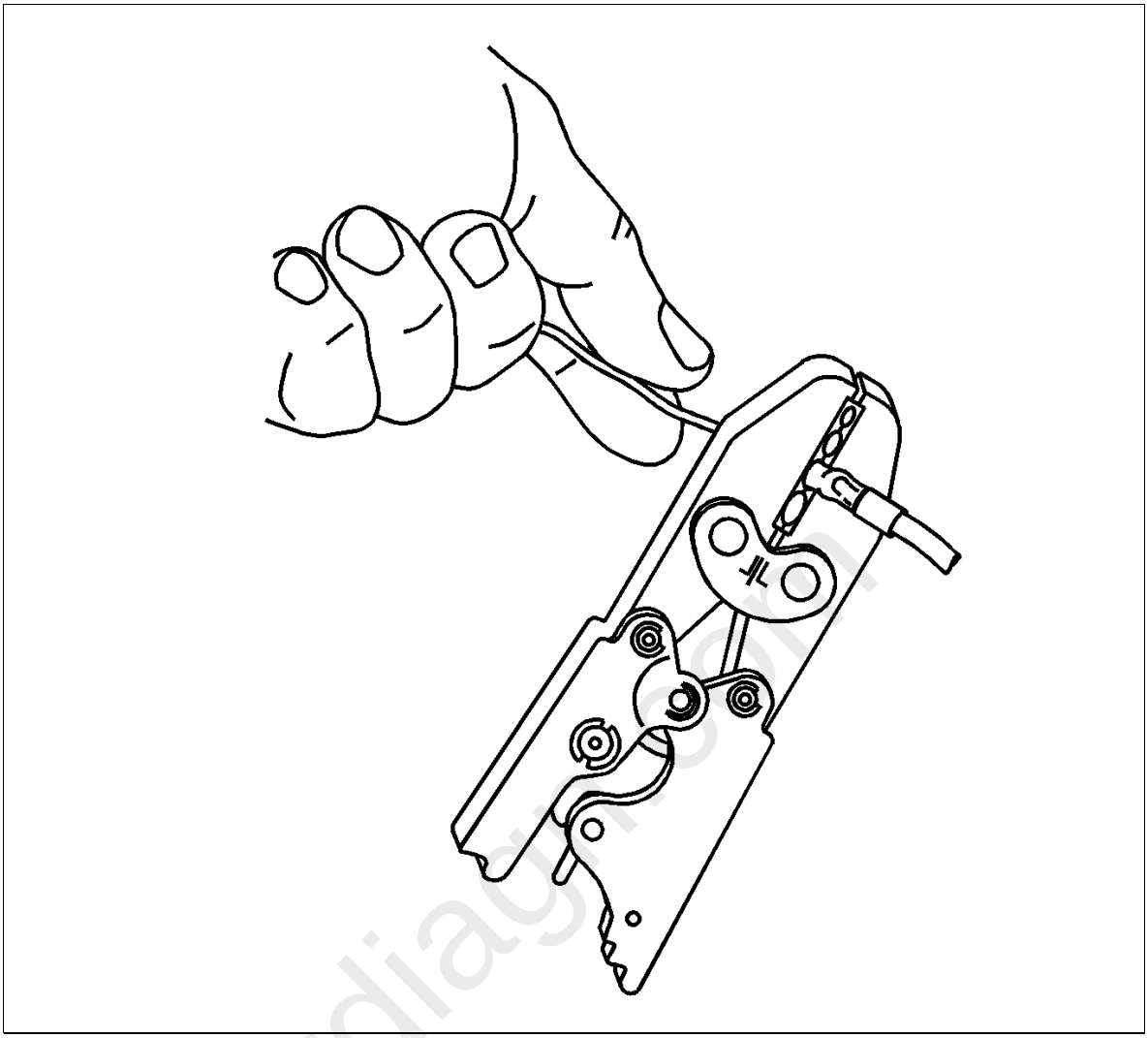


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3. Insert the folded over wire (1) into the splice sleeve.

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Fig 6: Crimping Splice Sleeve



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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).

DIAGNOSTIC INFORMATION AND PROCEDURES > 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.

DIAGNOSTIC INFORMATION AND PROCEDURES > HIGH TEMPERATURE WIRING REPAIRS > 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.

DIAGNOSTIC INFORMATION AND PROCEDURES > HIGH TEMPERATURE WIRING REPAIRS > 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.

DIAGNOSTIC INFORMATION AND PROCEDURES > HEATED OXYGEN SENSOR

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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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DIAGNOSTIC INFORMATION AND PROCEDURES > SPLICING COPPER WIRE USING SPLICE SLEEVES

Special Tools

- **EL-38125-10** Splice Sleeve Crimping Tool (non GMNA)
- **J-38125-5A** Ultra Torch Special Tool
- **J-38125-8** Splice Sleeve Crimping Tool (GMNA)

For equivalent regional tools, refer to Special Tools .

> ⛔ *WARNING:*
>
> *In order to reduce the risk of personal injury, loss of high voltage isolation to ground and higher system impedance, do not attempt to repair any HV wiring, connector, or terminal that is damaged. High voltage coaxial type cables are not repairable. Never attempt to repair a coaxial type cable. The entire cable/harness or component must be replaced. In order to*

maintain system integrity and personal safety, never attempt to repair any high voltage wiring, cables, or terminals. Performing this procedure on high voltage circuits may result in serious injury or death.

NOTE:

If the wiring harness internal to the transmission is damaged, the wiring harness must be replaced. The use of splice sleeves in an attempt to repair the internal transmission wires, connectors, or terminals could result in performance issues.

NOTE:

Do not splice wires in Door Harness Grommets.

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 high voltage and specialty cables. 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 mm^2 / (AWG)
	3 Crimp Nests	4 Crimp Nests	
Salmon (Yellow-Pink) 19300089	Red (1) or Red/Green (1)	Red (2)	0.22-0.8/(18-26)
Blue 19168447	Blue (2)	Blue (3)	1.0-2.0/(14-16)
Yellow 19168448	Yellow (3)	Yellow (4)	3.0-5.0/(10-12)

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NOTE:

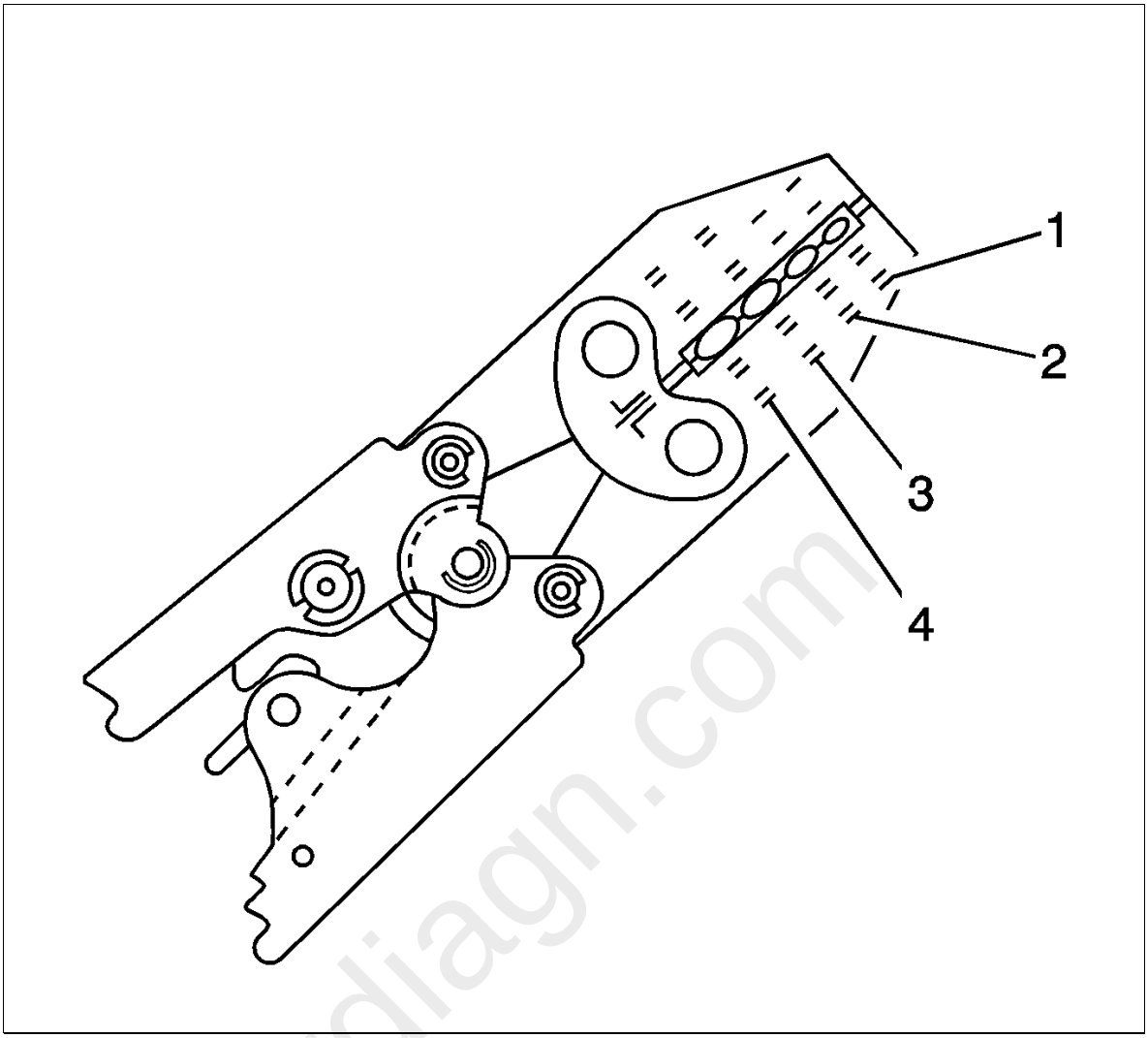
You must perform the following procedures in the listed order. Repeat the procedure if any wire strands are damaged. You must obtain a clean strip with all of the wire strands intact.

1. Open the harness by removing any tape:
    1. Use a sewing seam ripper, available from sewing supply stores, in order to cut open the harness in order to avoid wire insulation damage.
    2. Use the DuraSeal splice sleeves on all types of insulation except Tefzel and coaxial.
    3. 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:
    1. When adding a length of wire to the existing harness, use the same size wire as the original wire.
    2. Perform one of the following items in order to find the correct wire size:
        1. Find the wire on the schematic and convert to regional wiring gauge size.
        2. 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.
    3. Strip approximately 5.0 mm (0.20 in) of insulation from each wire to be spliced.
    4. Do not nick or cut any of the strands. Inspect the stripped wire for nicks or cut strands.
    5. 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.

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Fig 1: Crimping Tool

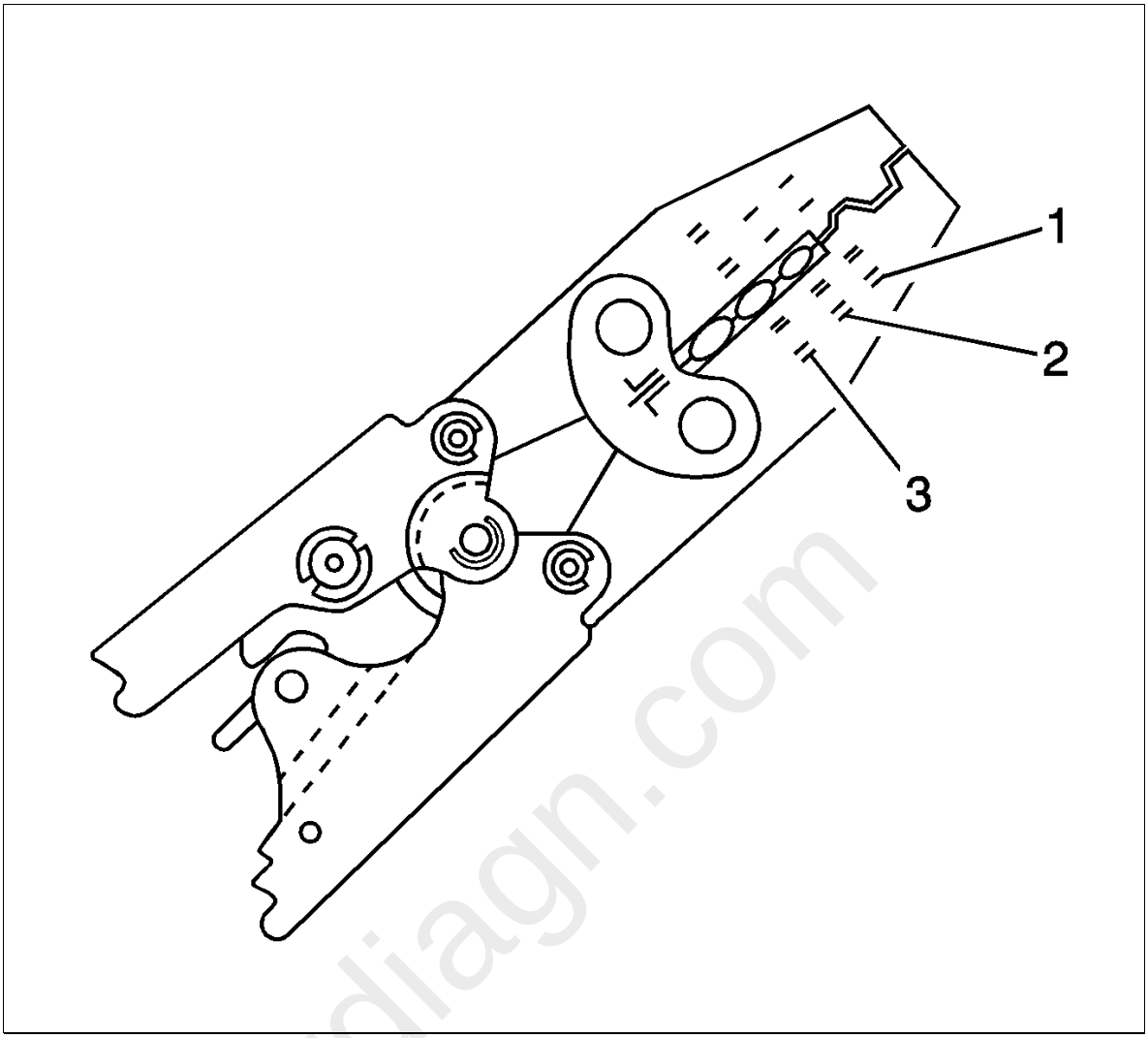


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6. The **EL-38125-10** splice sleeve crimping tool has four crimp nests. The largest crimp nest (4) is used for crimping 10 and 12 gauge wires. The second largest crimp nest (3) is used for crimping 14 and 16 gauge wires. The third largest crimp nest (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.

Fig 2: Splice Crimp Tool Nests Terminal Identification



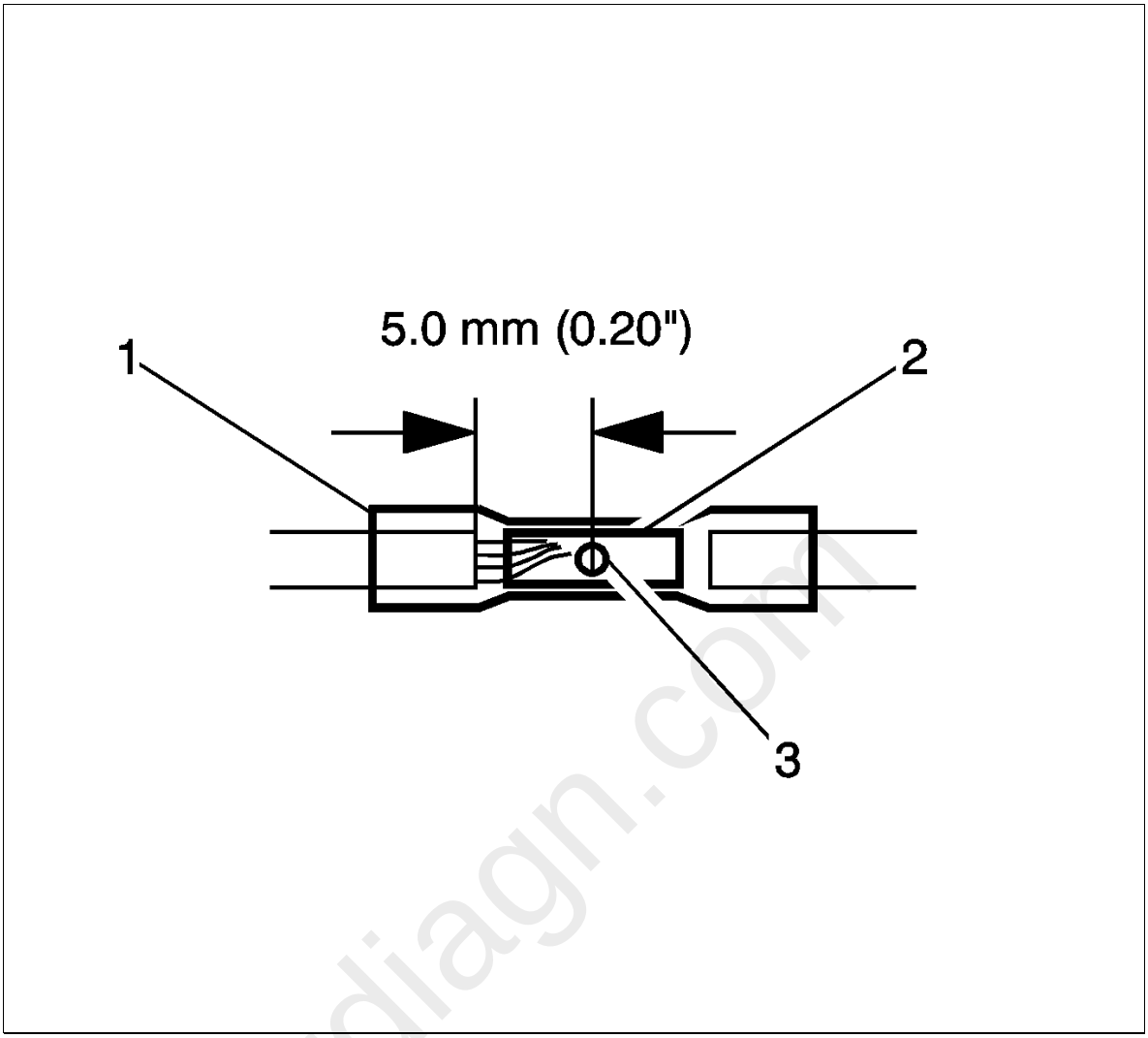
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7. The **J-38125-8** splice sleeve crimping tool has three crimp nests. The largest crimp nest (3) is used for crimping 10 and 12 gauge wires. The second largest crimp nest (2) is used for crimping 14 and 16 gauge wires. The smallest crimp nest (1) 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.

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).

Fig 3: Duraseal Splice Sleeve

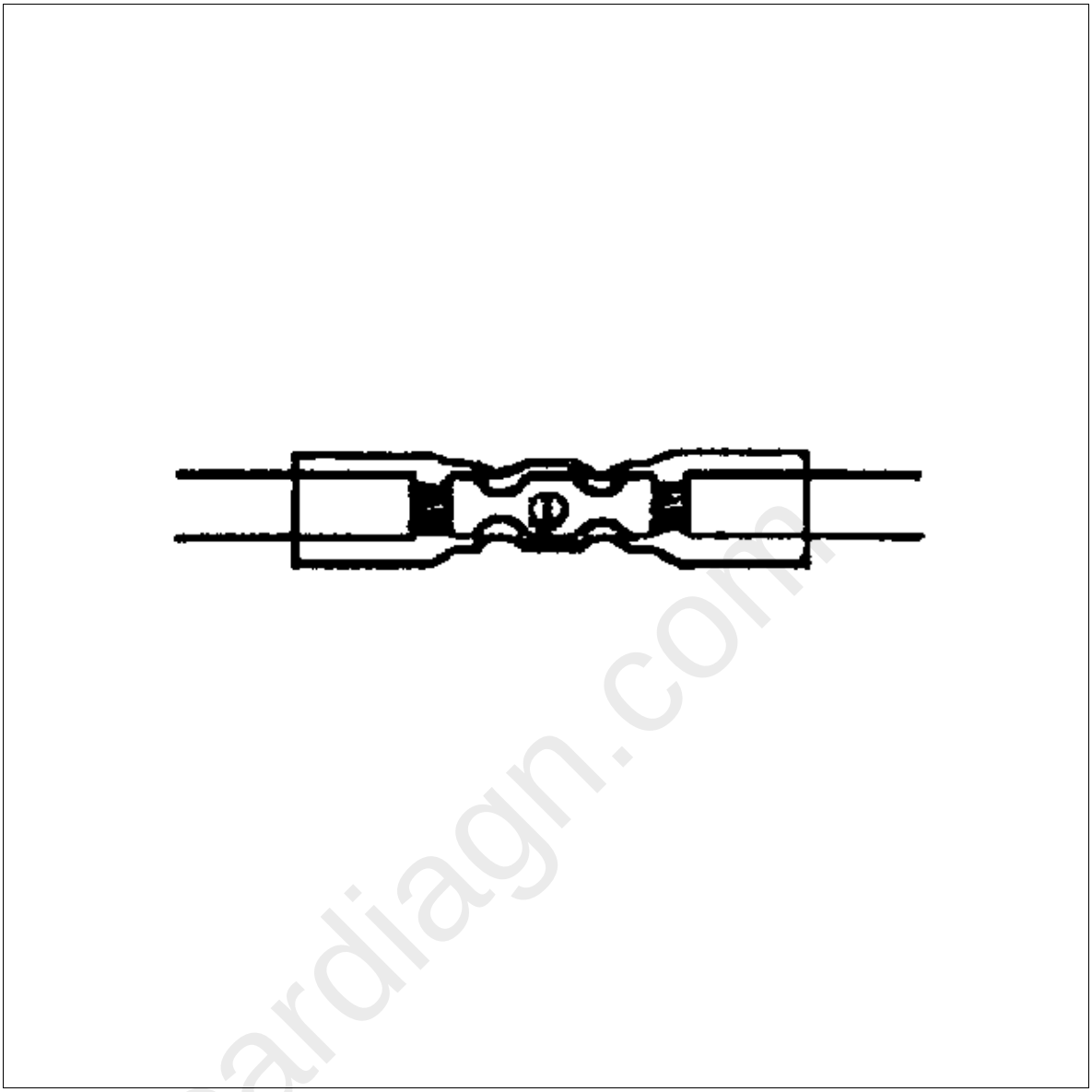


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9. Place the DuraSeal splice sleeve in the nest. Ensure that the crimp falls midway between the end of the barrel and the stop. The sleeve has a stop (3) in the middle of the barrel (2) in order to prevent the wire (1) from going further. Close the hand crimper handles slightly in order to firmly hold the DuraSeal splice sleeve in the proper nest.

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Fig 4: Crimped Duraseal Splice Sleeve



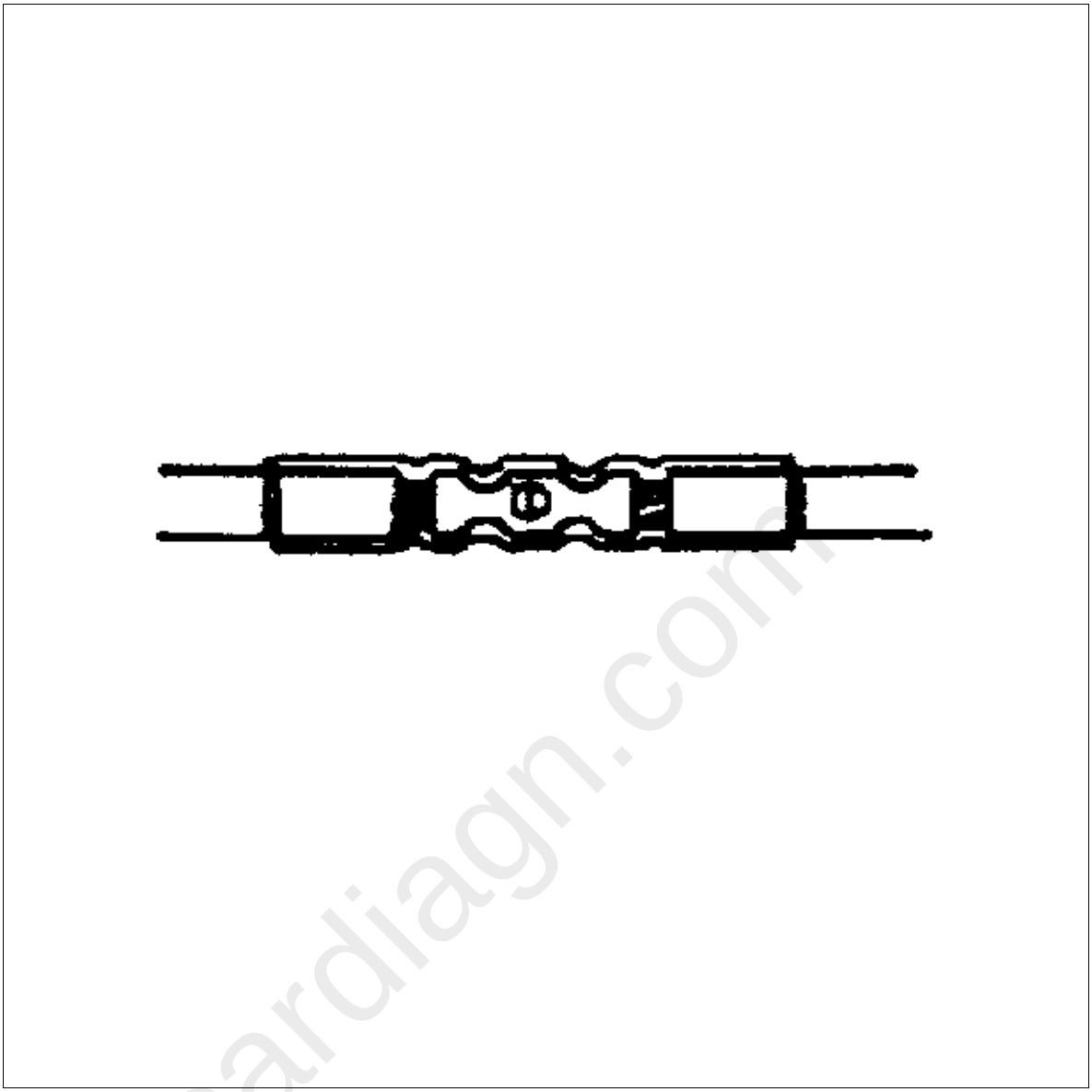
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10. Insert the wire into the splice sleeve barrel until the wire hits the barrel stop. Refer to Folded-Over Wire Repair for splicing wires of 0.35 mm or less (22, 24, 26 gauge sizes) and for splicing wires of different gauges.
11. Tightly close the 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.

Fig 5: Crimped Duraseal Splice Sleeve



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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:
    1. The tubing will shrink completely as the heat is moved along the insulation.
    2. A small amount of sealant will come out of the end of the tubing when sufficient shrinkage is achieved.

DIAGNOSTIC INFORMATION AND PROCEDURES > SPLICING COPPER WIRE USING SPLICE SLEEVES > HIGH TEMPERATURE WIRING REPAIRS

Use the following procedures to perform high temperature wiring repairs:

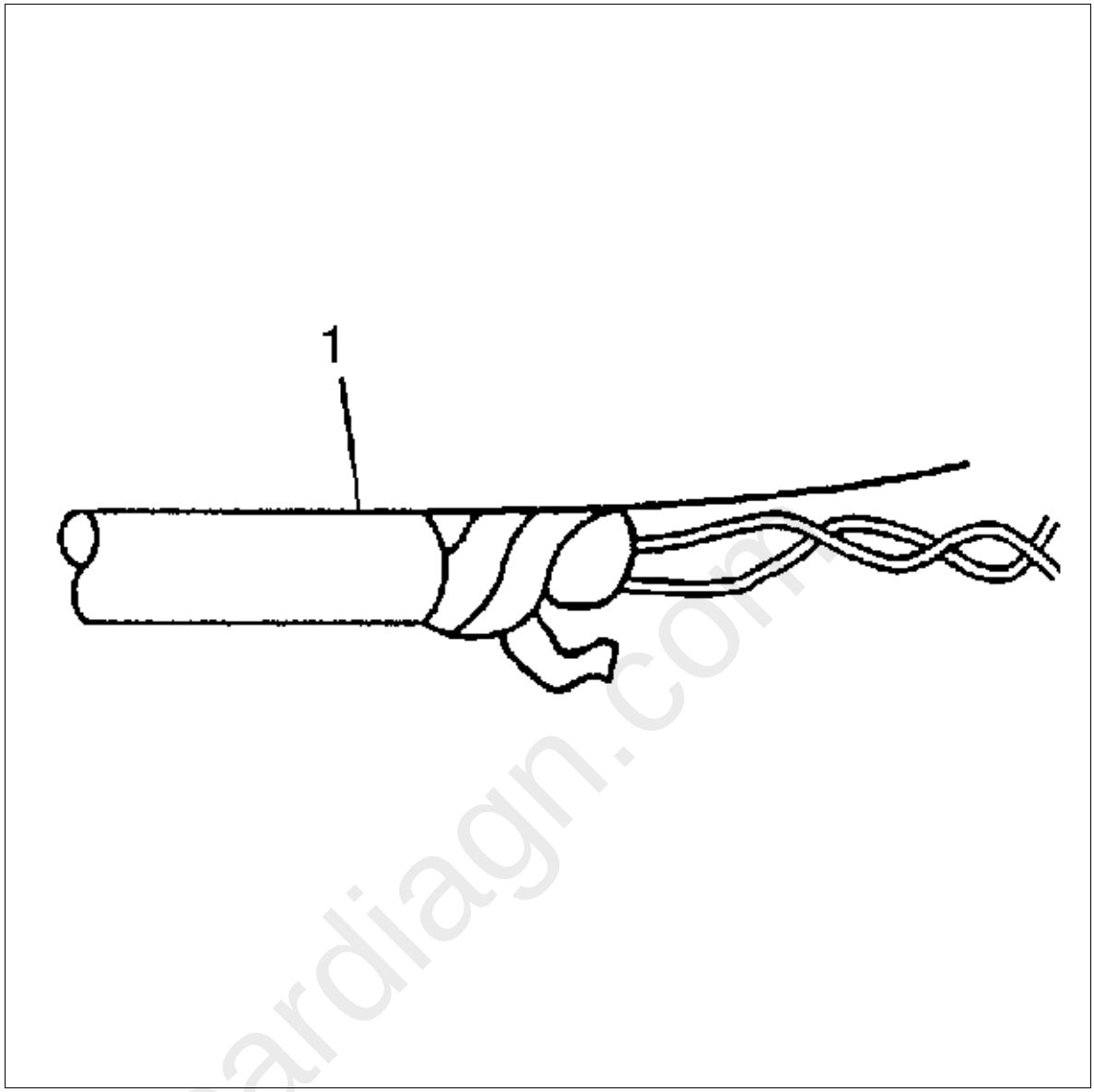
1. Center the high temperature SCT1 shrink tube over the DuraSeal splice sleeve.
2. Using the heat torch, apply heat to the high temperature heat shrink tubing.
3. Gradually move the heat from the center to the open end of the tubing:
    1. The tubing will shrink completely as the heat is moved along the insulation.
    2. 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.

DIAGNOSTIC INFORMATION AND PROCEDURES > 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.

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Fig 1: Outer Wiring Jacket

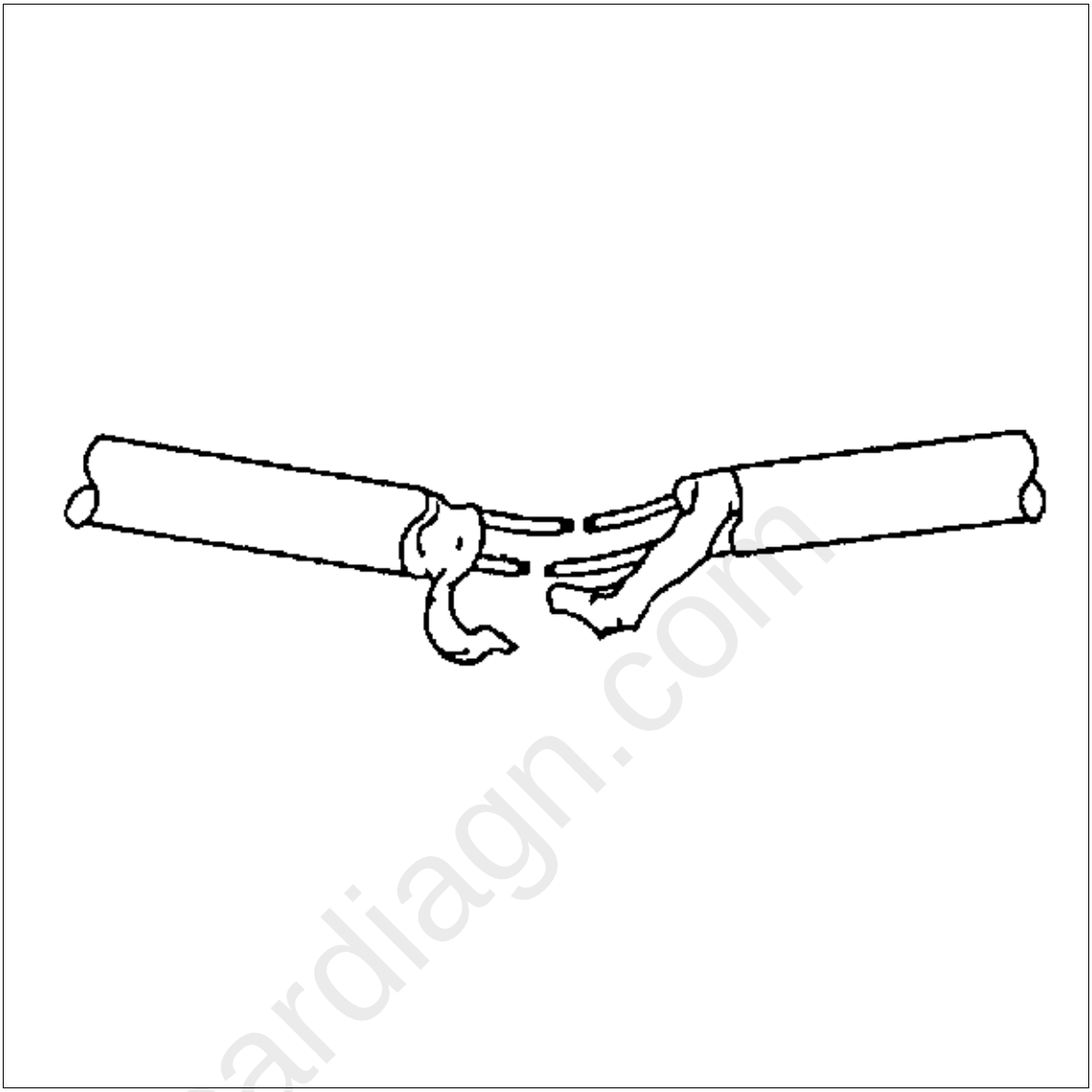


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1. Remove the outer jacket (1). Use care not to cut into the drain wire of the mylar tape.
2. Unwrap the tape. Do not remove the tape. Use the tape in order to rewrap the twisted conductors after the splice is made.

Fig 2: Preparing Splice

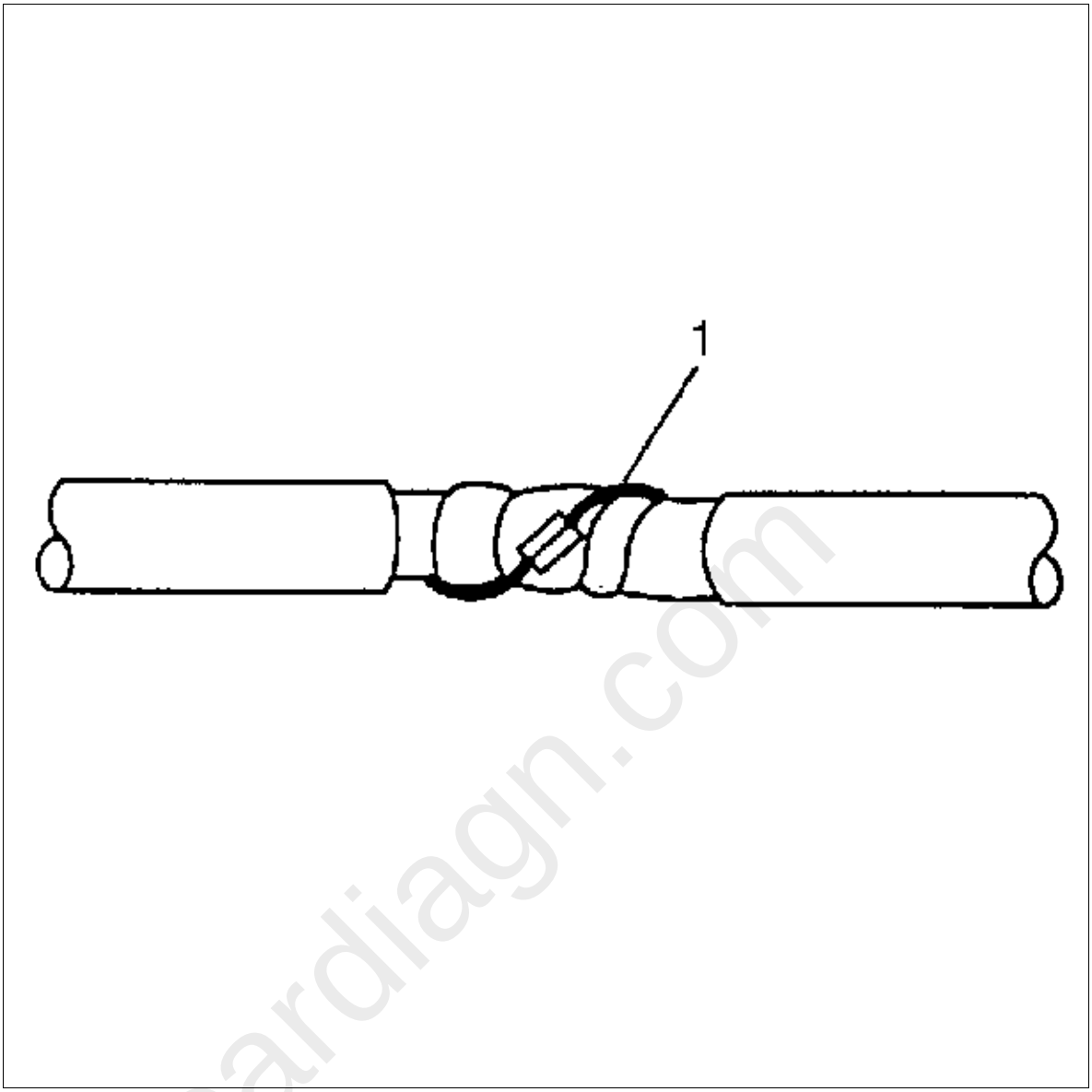


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3. Prepare the splice. Untwist the conductors and follow the instructions for Splicing Copper Wire Using Splice Sleeves . Staggering the splices by 65 mm (2.5 in) is recommended.

Fig 3: Diode On Wire



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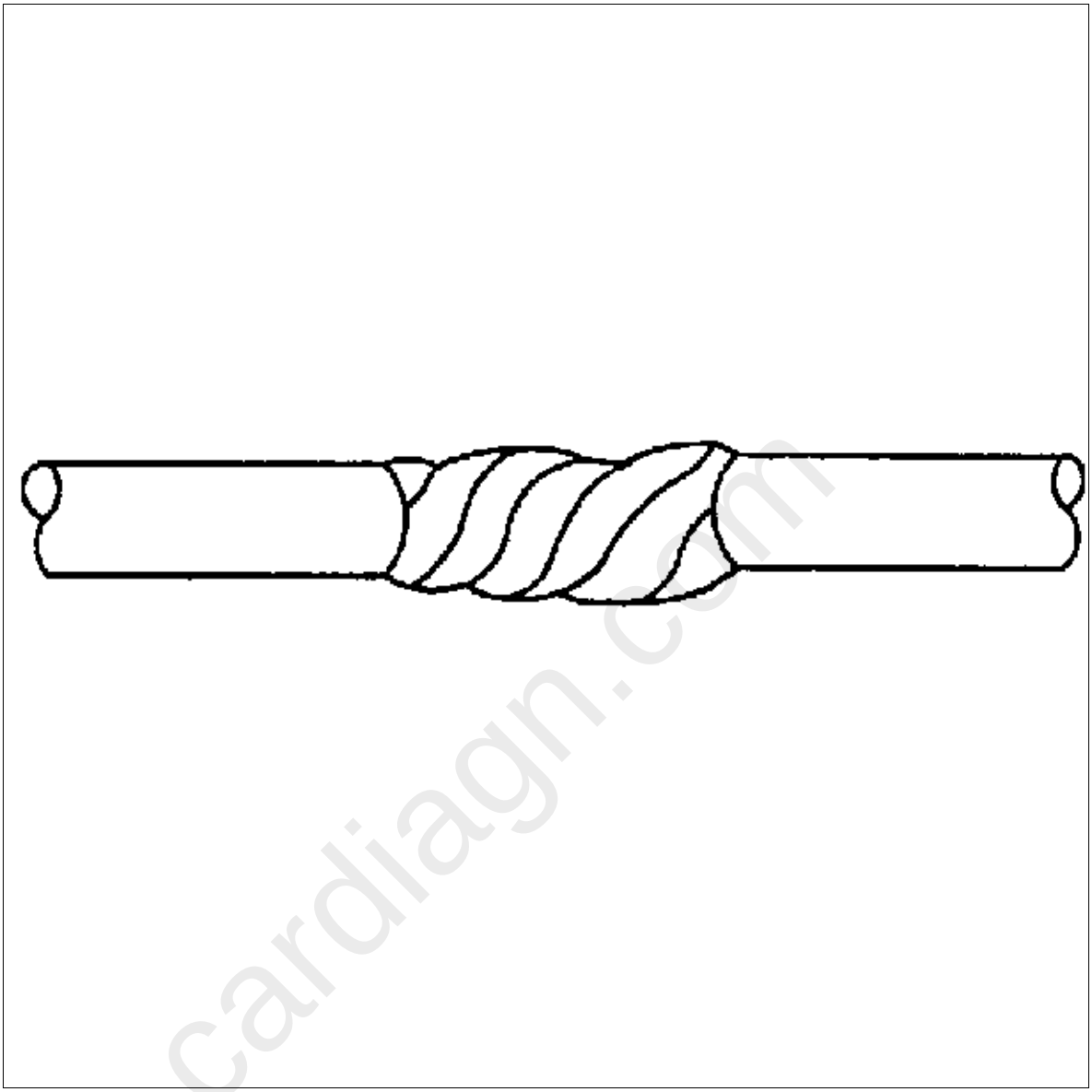
NOTE:

Apply the mylar tape with the aluminum side inward. This ensures good electrical contact with the drain wire.

4. Re-assemble the cable.
    1. Rewrap the conductors with the mylar tape. If the mylar tape is damaged, use 3M product AL-36FR to replace the damaged mylar tape.
    2. Use caution not to wrap the drain wire in the tape (1).
    3. Follow the splicing instructions for copper wire and splice the drain wire.

4. Wrap the drain wire around the conductors and tape with electrical tape to replace the outer insulation.

Fig 4: Repaired Wire Covered With Electrical Tape



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5. Tape over the entire cable. Use a winding motion when you apply the tape.

DIAGNOSTIC INFORMATION AND PROCEDURES > 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.
    1. If the harness is taped, remove the tape.

2. To avoid wiring insulation damage, use a sewing seam ripper (available from sewing supply stores) in order to cut open the harness.
3. 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.

DIAGNOSTIC INFORMATION AND PROCEDURES > SIR/SRS WIRING REPAIRS

> *NOTE:*
>
> *Refer to SIR Service Precautions .*

For European Regions

> *CAUTION:*

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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.

For Non-European Regions

Special Tools

Splice Sleeve Crimping Tool, 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.

DIAGNOSTIC INFORMATION AND PROCEDURES > SIR/SRS WIRING REPAIRS > 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.

DIAGNOSTIC INFORMATION AND PROCEDURES > SIR/SRS WIRING REPAIRS > 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.

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DIAGNOSTIC INFORMATION AND PROCEDURES > SIR/SRS WIRING REPAIRS > 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 the appropriate 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 .

For terminal position assurance (TPA), refer to Terminal Position Assurance Locks .

DIAGNOSTIC INFORMATION AND PROCEDURES > 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 (BSK) Bosch Connectors (0.64) Bosch Connectors (2.8 JPT) Bosch Connectors (ECM)
- Delphi Connectors (Weather Pack) Delphi Connectors (Push To Seat) Delphi Connectors (Pull To Seat) Delphi Connectors (Micro-Pack 100W) Delphi Connectors (Micro.64) Delphi Connectors (12-Way) Delphi Connectors (Steering Gear)
- FCI Connectors (Lever Lock) FCI Connectors (SIR)

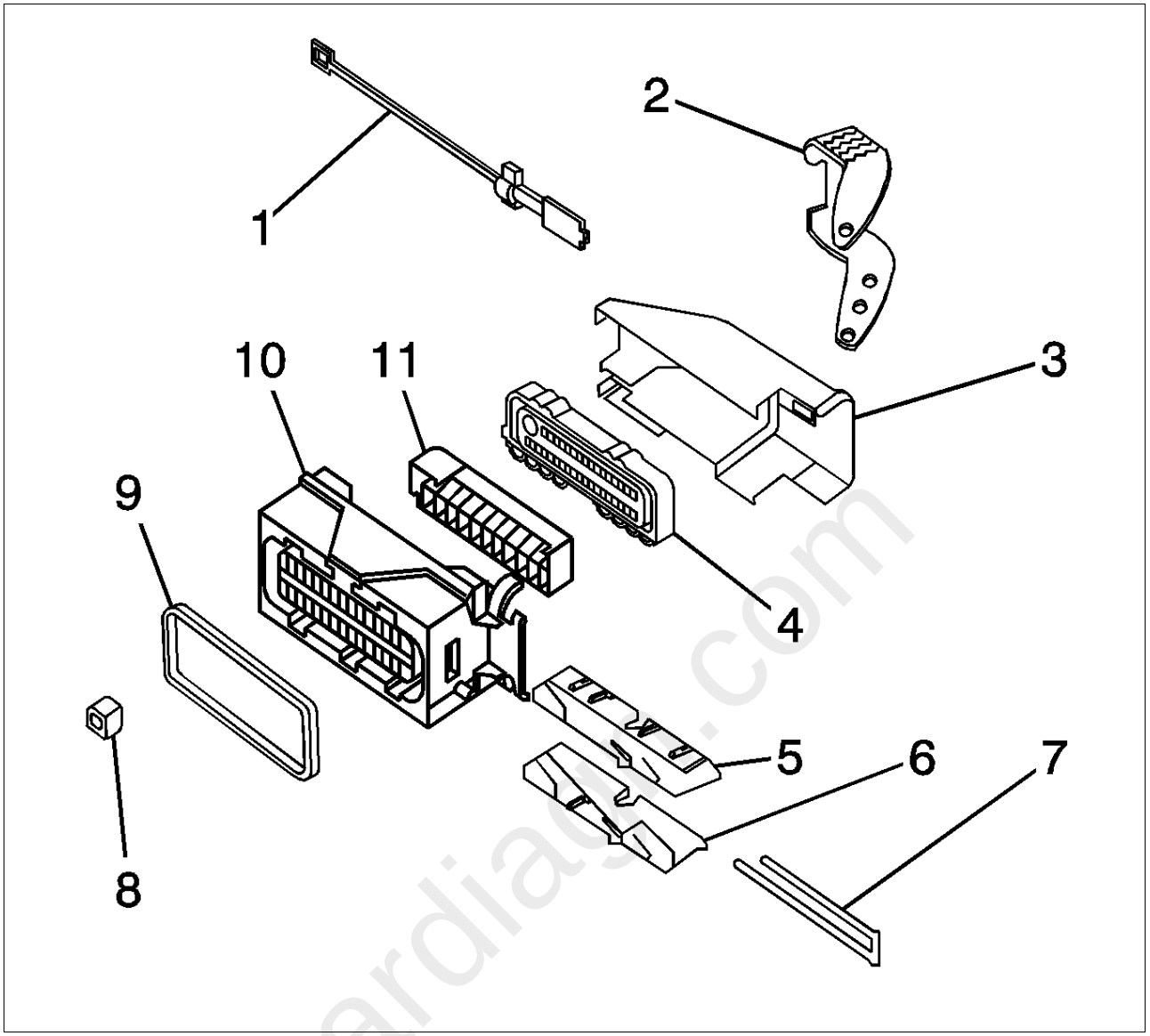
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- FEP Connectors (Steering Gear)
- JST Connectors
- Kostal Connectors (Glow Plug Control Module) Kostal Connectors (Transmission)
- Molex Connectors (Lever Lock) Molex Connectors (SIR)
- Sumitomo Connectors
- Tyco/AMP Connectors (CM 42-Way) Tyco/AMP Connectors (Sensor) Tyco/AMP Connectors (0.25 Cap) Tyco/AMP Connectors (43-Way) Tyco/AMP Connectors (Door Module) Tyco/AMP Connectors (Seat) Tyco/AMP Connectors (102-Way Inline) Tyco/AMP Connectors (SIR)
- Yazaki Connectors (2-Way) Yazaki Connectors (16-Way)
- Repairing Connector Terminals (Terminated Lead Repair) Repairing Connector Terminals (Terminal Repair)

DIAGNOSTIC INFORMATION AND PROCEDURES > CONNECTOR REPAIRS > CONNECTOR ANATOMY

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Fig 1: Typical Connector Components



Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
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)
8	Terminal Positive Assurance (TPA)

9	Connector Seal
10	Connector Housing
11	Inner Connector

DIAGNOSTIC INFORMATION AND PROCEDURES > CONNECTOR REPAIRS > 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.

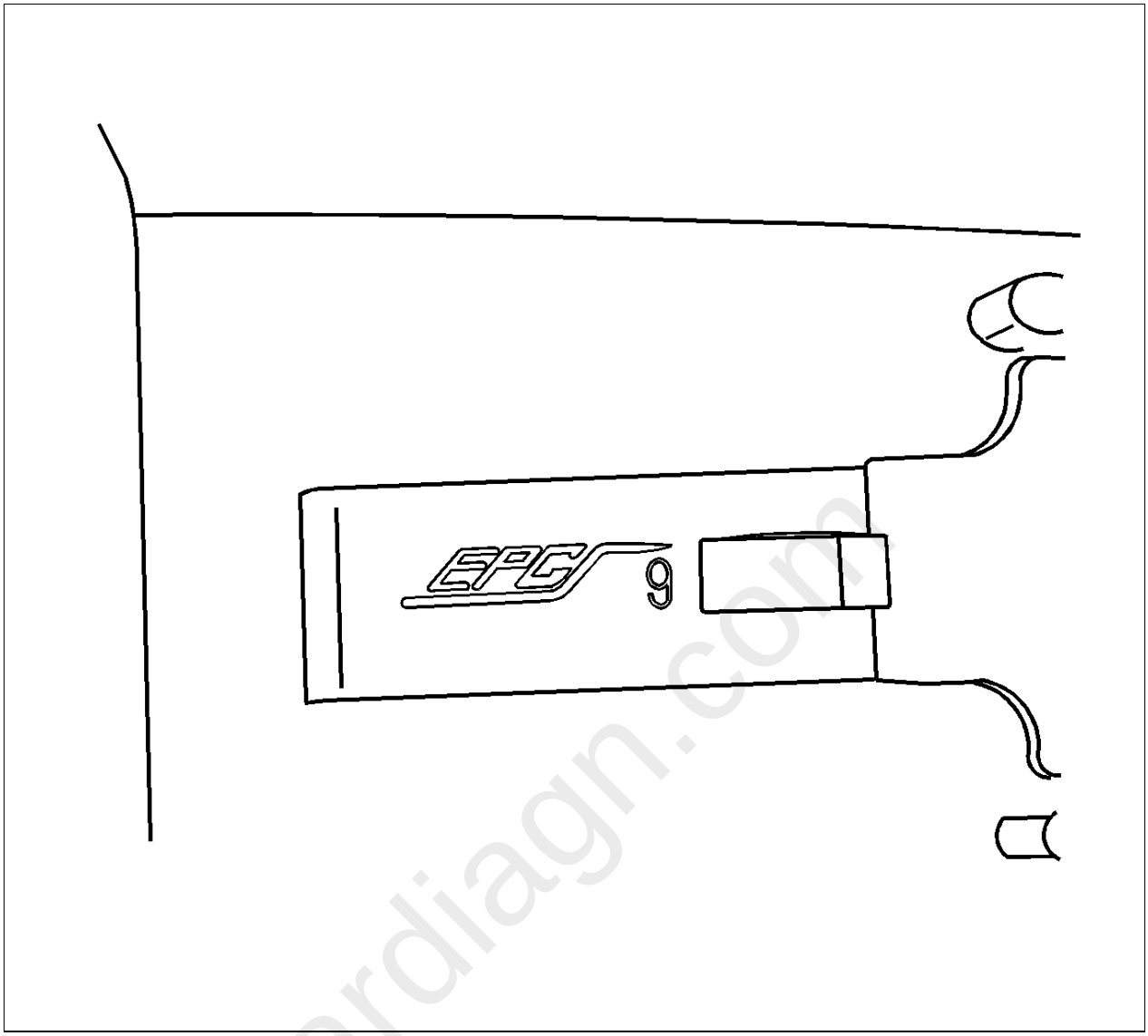
The following connector manufacturers make most of the connectors found in GM vehicles:

- 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.

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Fig 1: EPC Identification On Connector Body

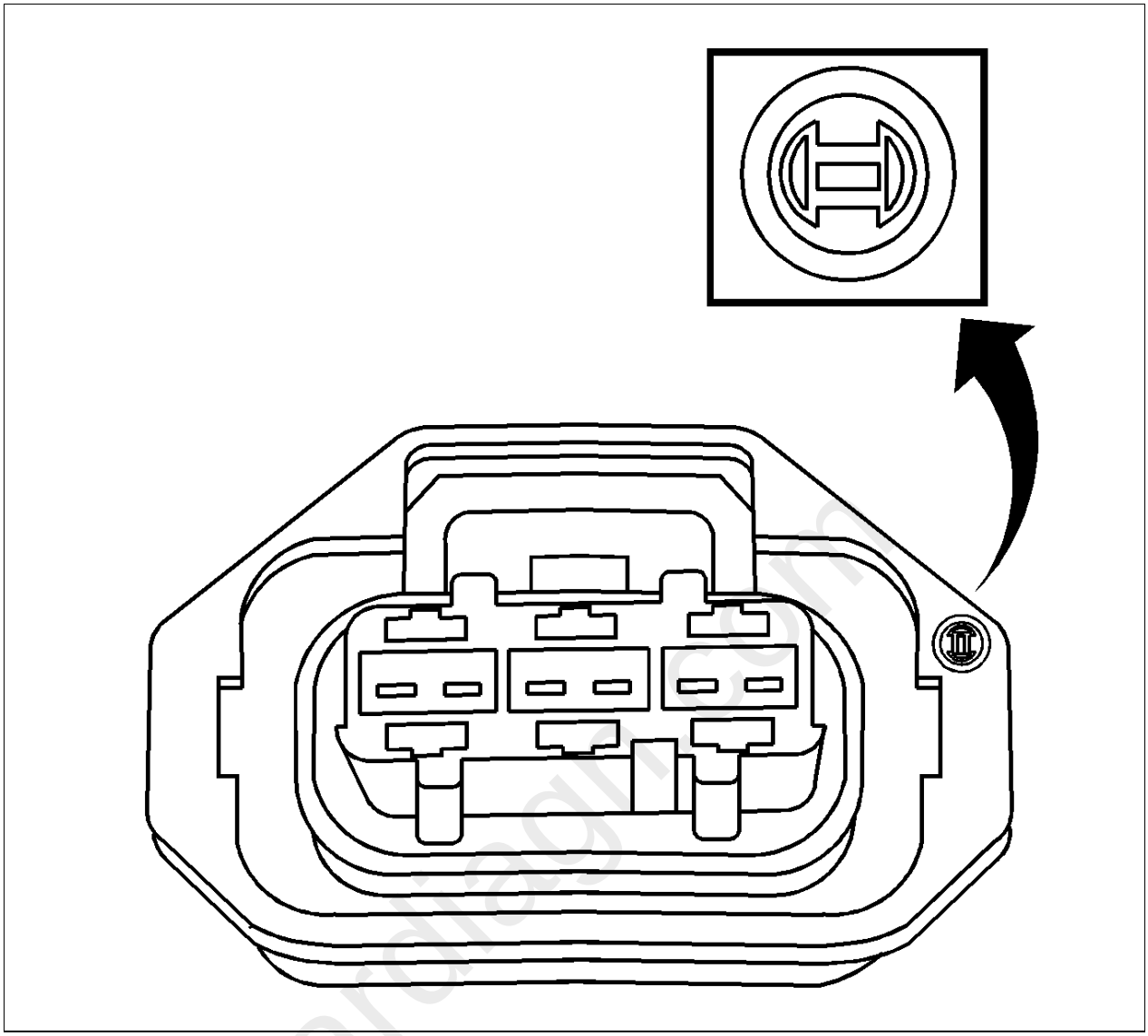


Courtesy of GENERAL MOTORS COMPANY

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- Most of AFL's connectors have EPC on their connector body. Some of the smaller connectors will not have any markings on them.

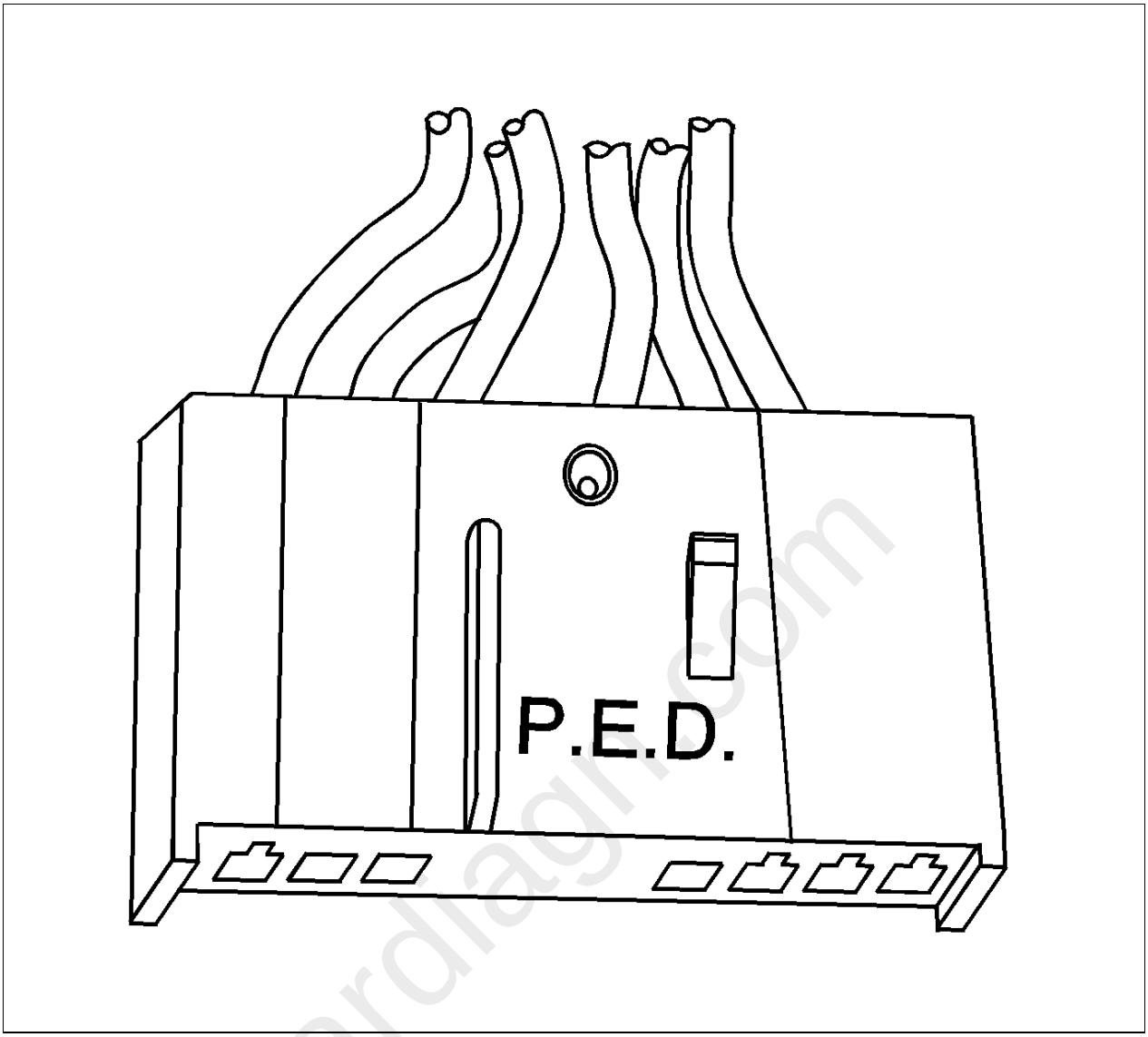
Fig 2: Bosch Identification On Connector Body



Courtesy of GENERAL MOTORS COMPANY

- 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.

Fig 3: PED Identification On Connector Body

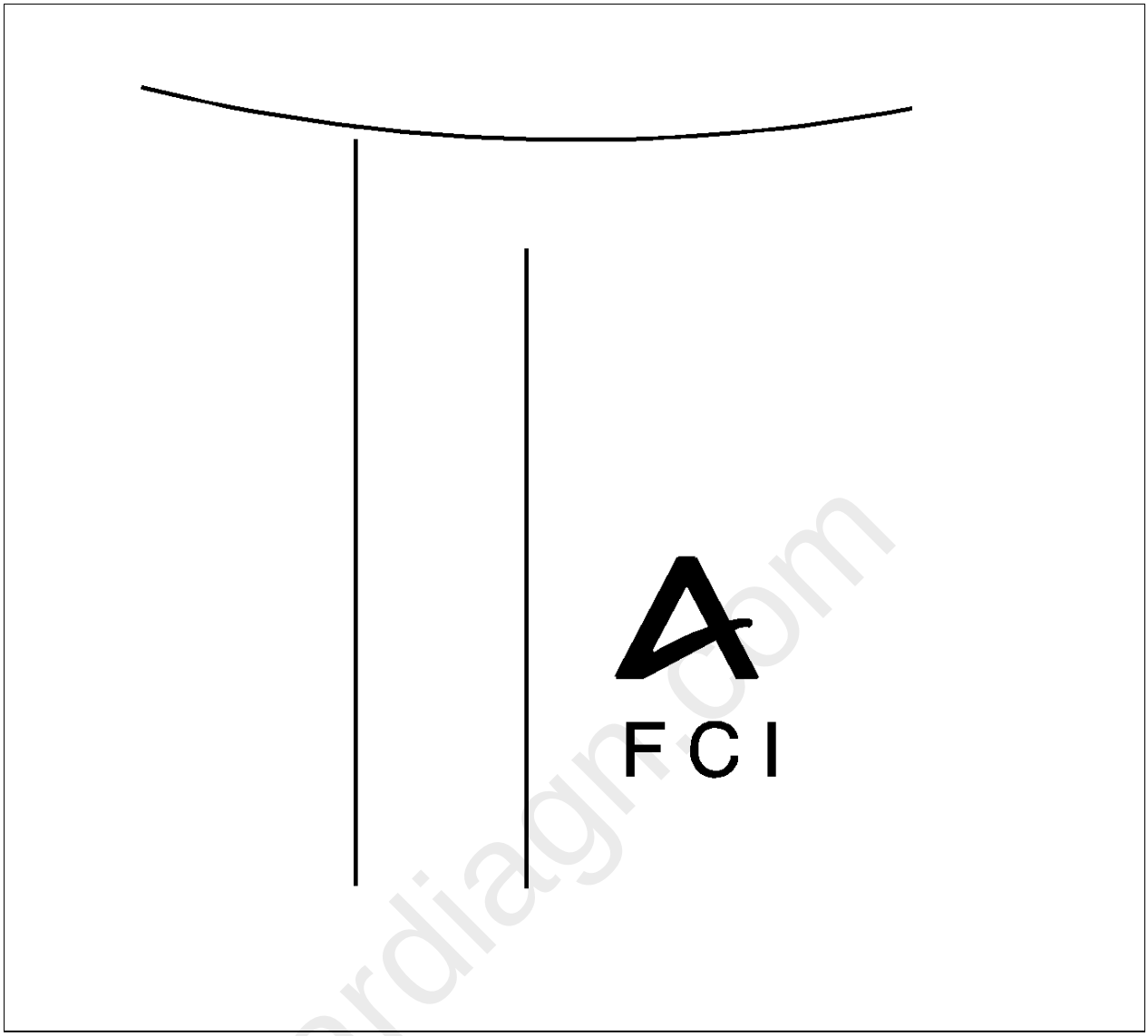


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- In some cases Delphi will actually be printed on the connector. If Delphi is not printed on the connector, look for PED. In both cases there is no specific orientation for Delphi or PED and they can appear anywhere on the connector.

Fig 4: FCI Identification On Connector Body

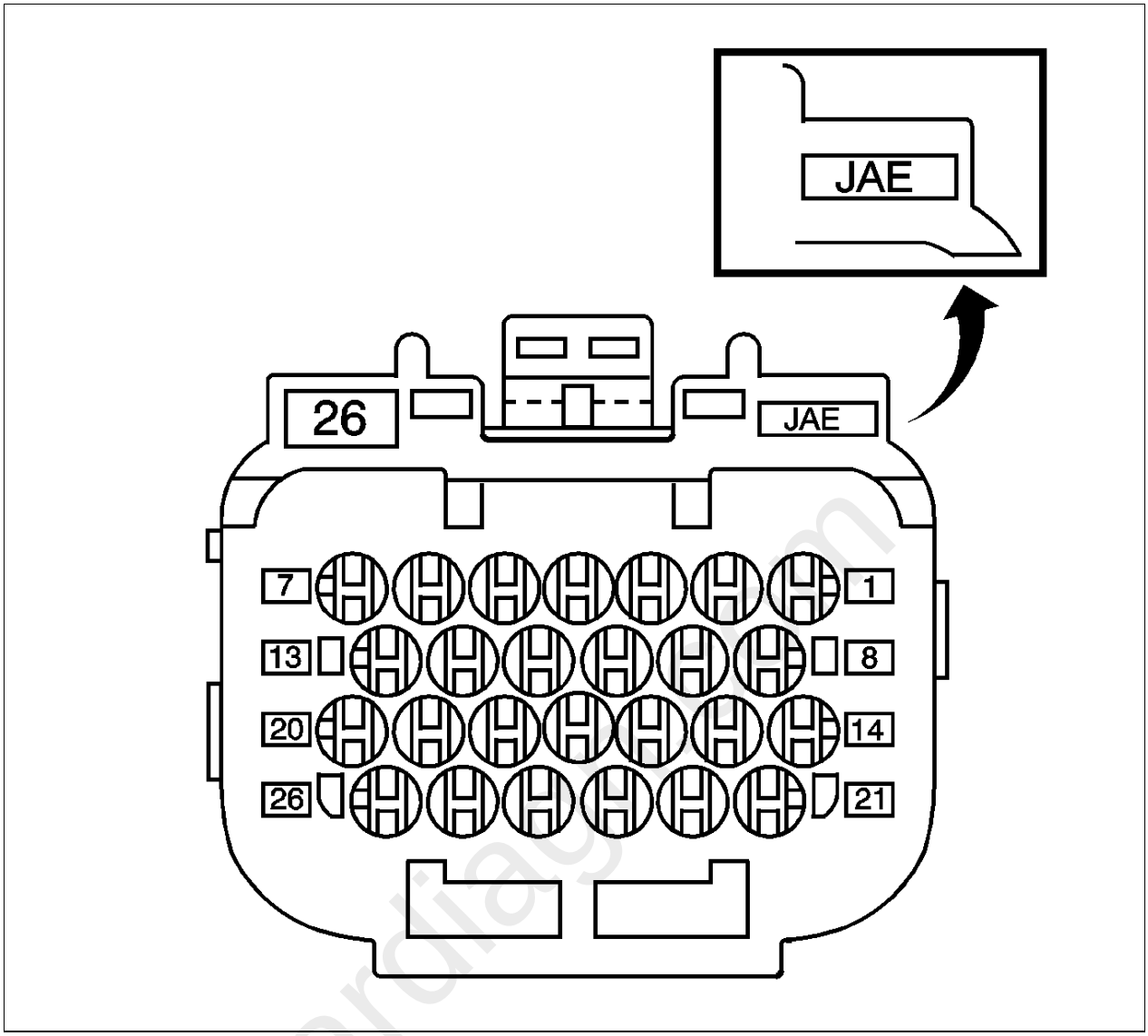


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- FCI connectors may have the FCI logo on their connectors. The logo is the letters FCI with an "A" above it.

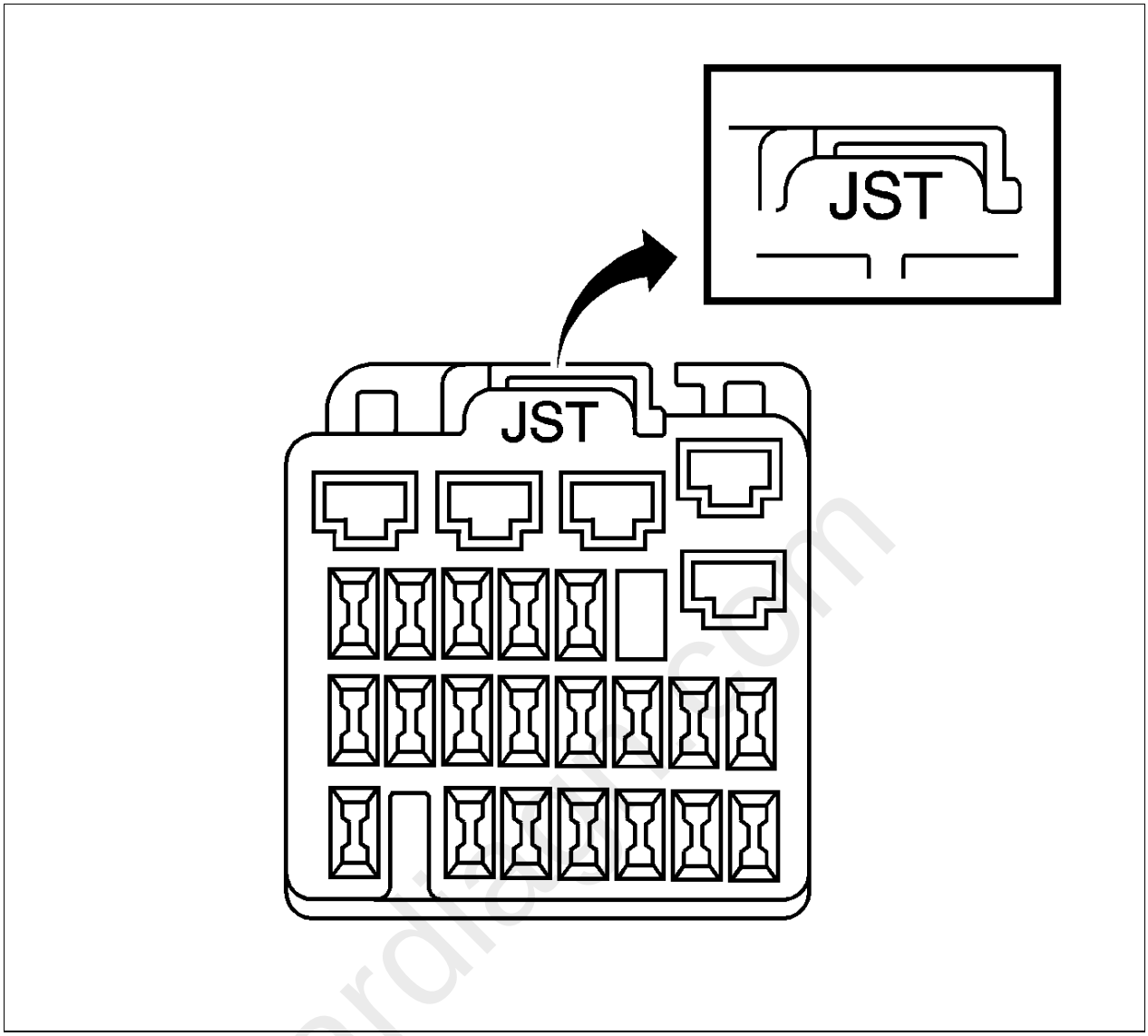
Fig 5: JAF Identification On Connector Body



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- JAE connector have JAE in small letters on their connectors.

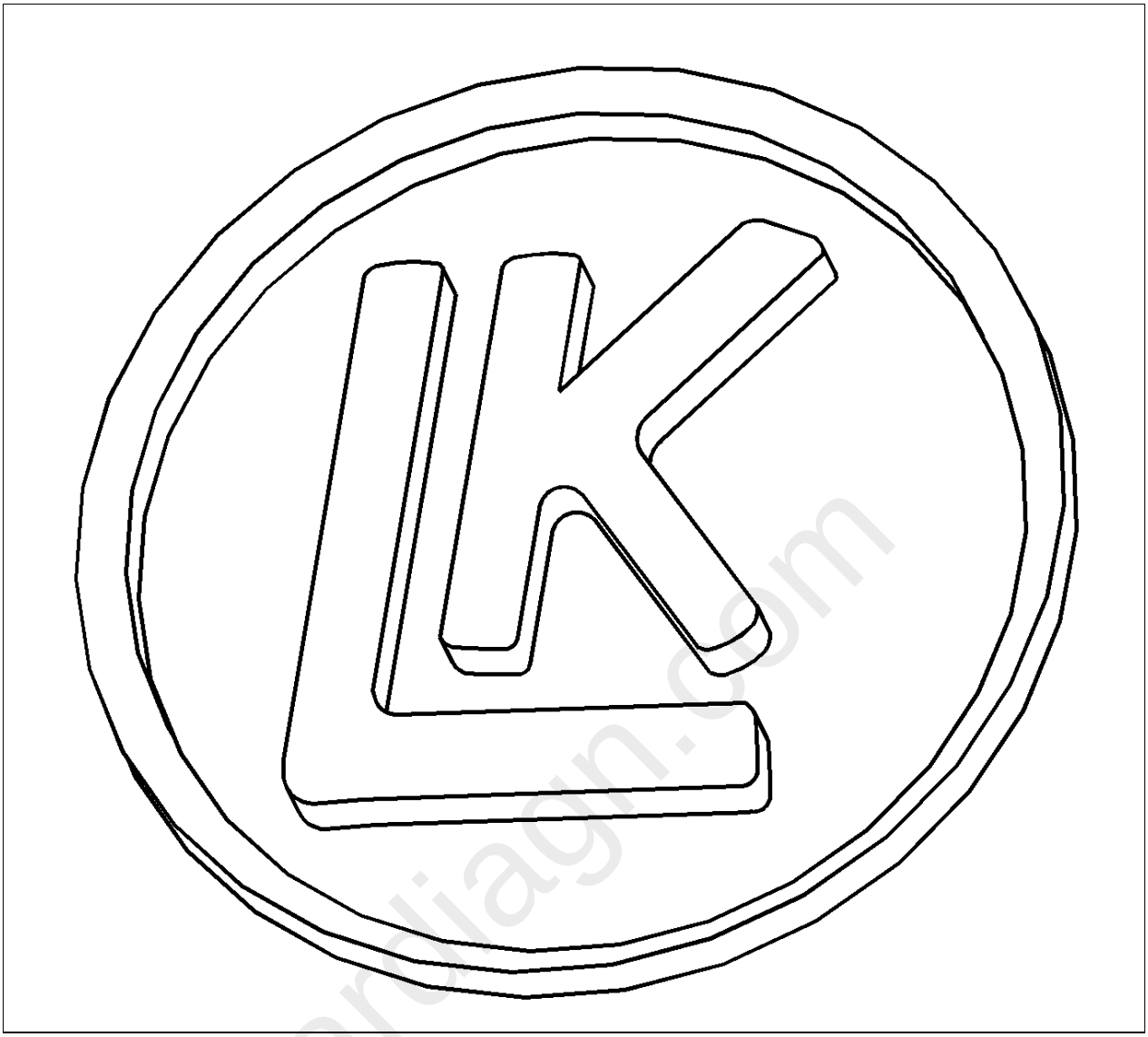
Fig 6: JST Identification On Connector Body



Courtesy of GENERAL MOTORS COMPANY

- 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.

Fig 7: Kostel Connector Identifier

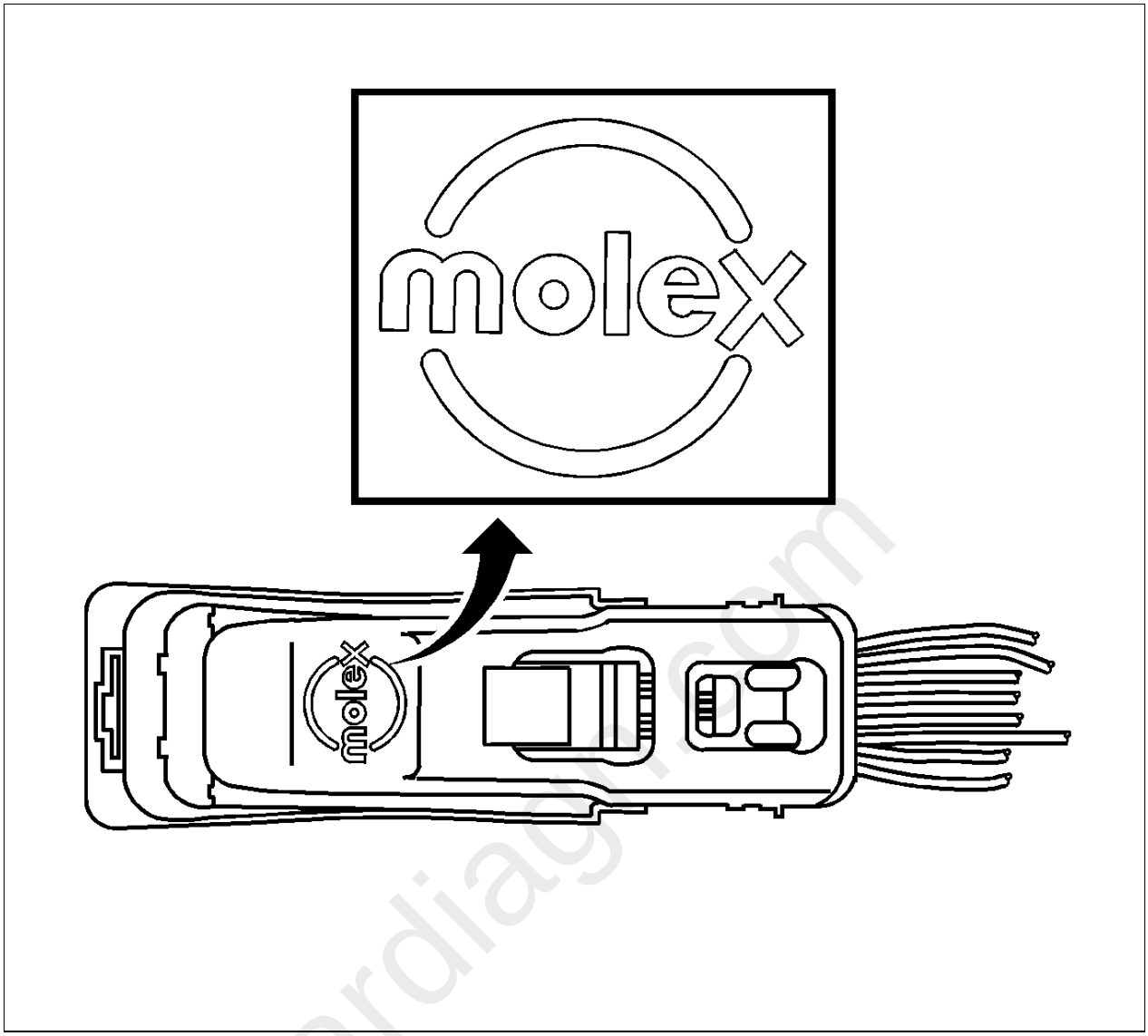


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- Kostel has an "LK" with a circle around it. These connector are usually used as a transmissions connection.

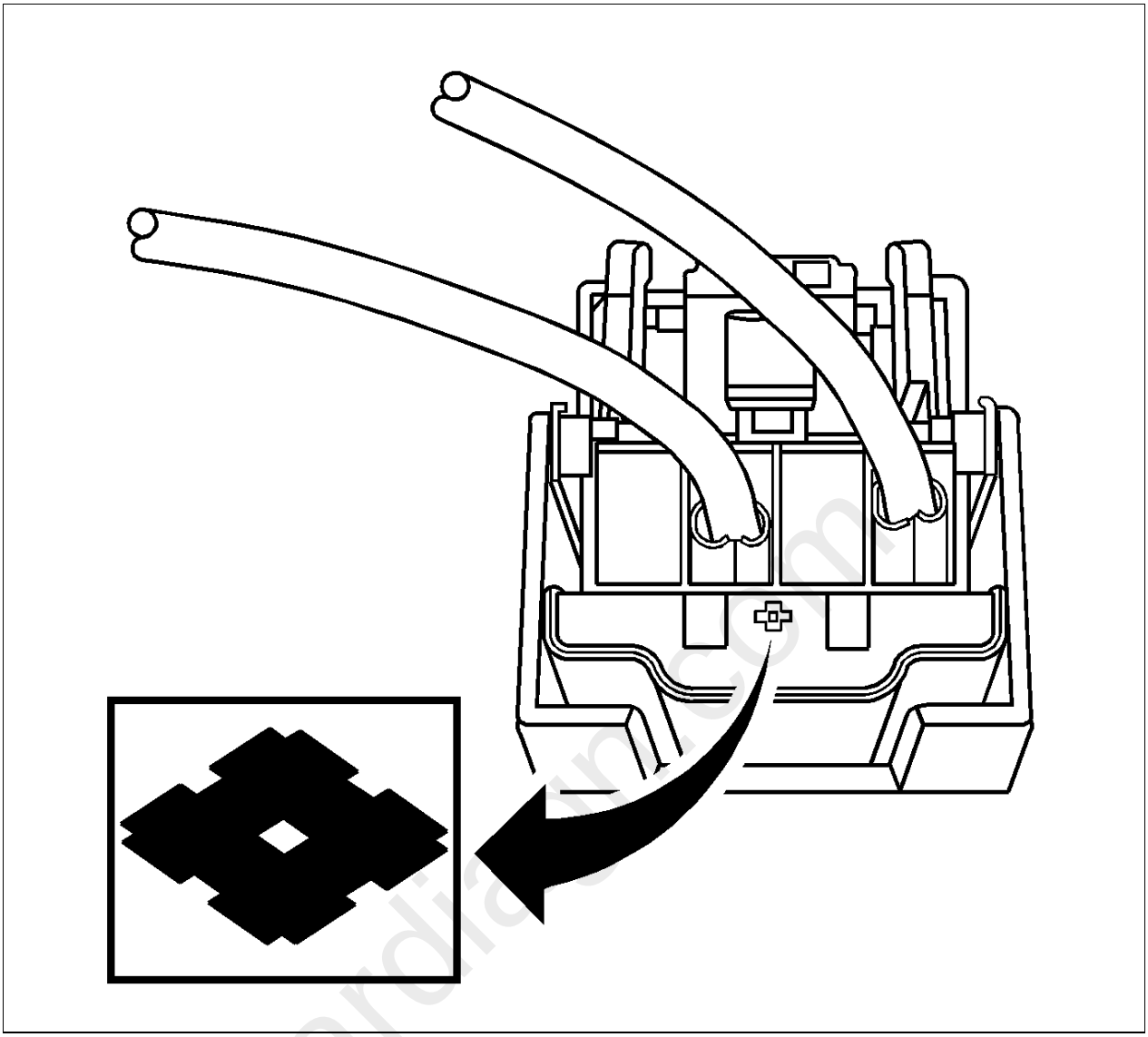
Fig 8: Molex Identification On Connector Body



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Fig 9: Sumitono Identification On Connector Body



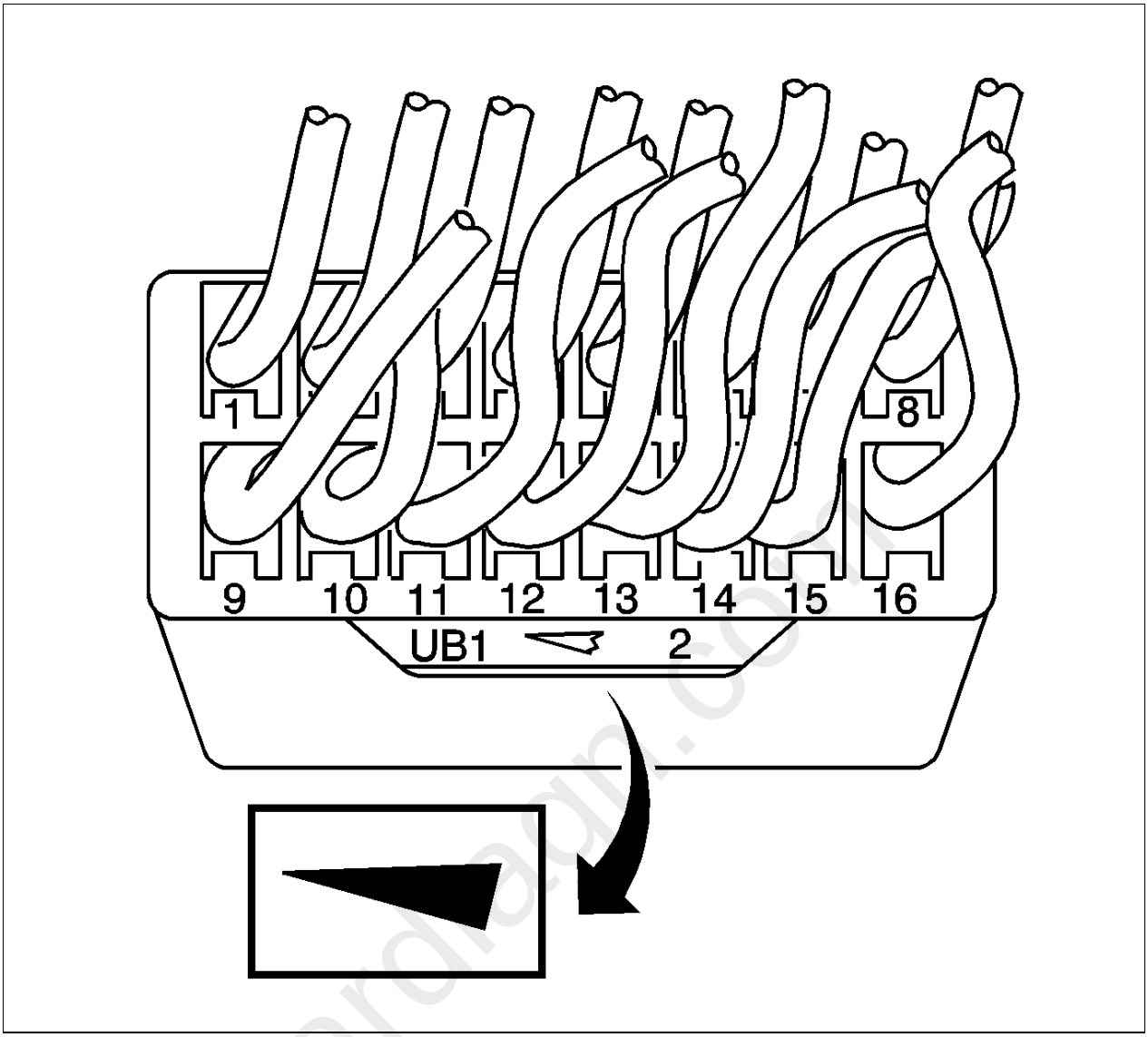
Courtesy of GENERAL MOTORS COMPANY

- 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.

Fig 10: Yazaki Identification On Connector Body



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- Yazaki has a wedge or arrow shape, similar to that shown.

DIAGNOSTIC INFORMATION AND PROCEDURES > 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.

DIAGNOSTIC INFORMATION AND PROCEDURES > 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.

DIAGNOSTIC INFORMATION AND PROCEDURES > 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

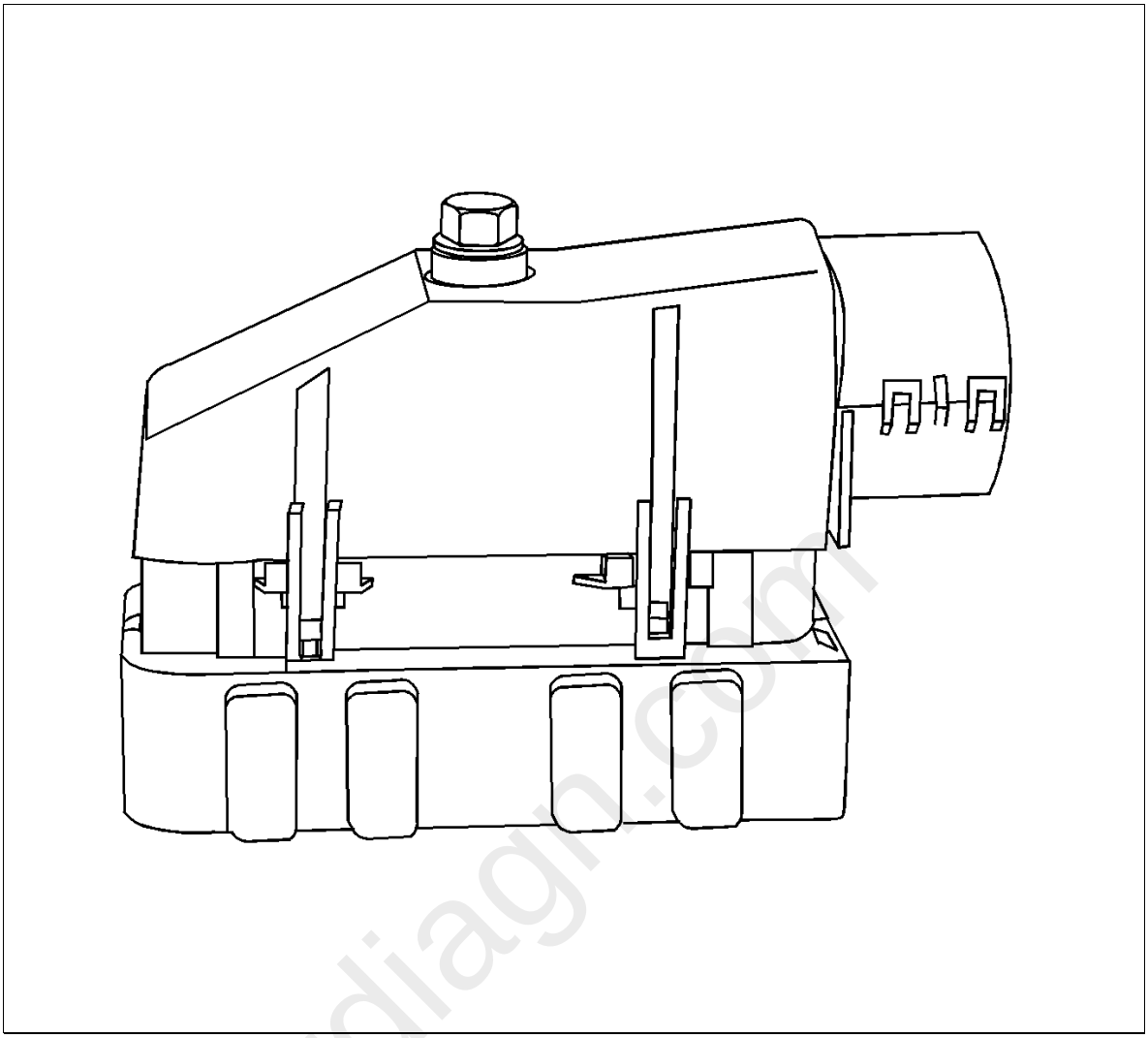
For equivalent regional tools, refer to Special Tools .

DIAGNOSTIC INFORMATION AND PROCEDURES > AFL/EPC CONNECTORS > TERMINAL REMOVAL PROCEDURE

Follow the steps below in order to remove terminals from the connector.

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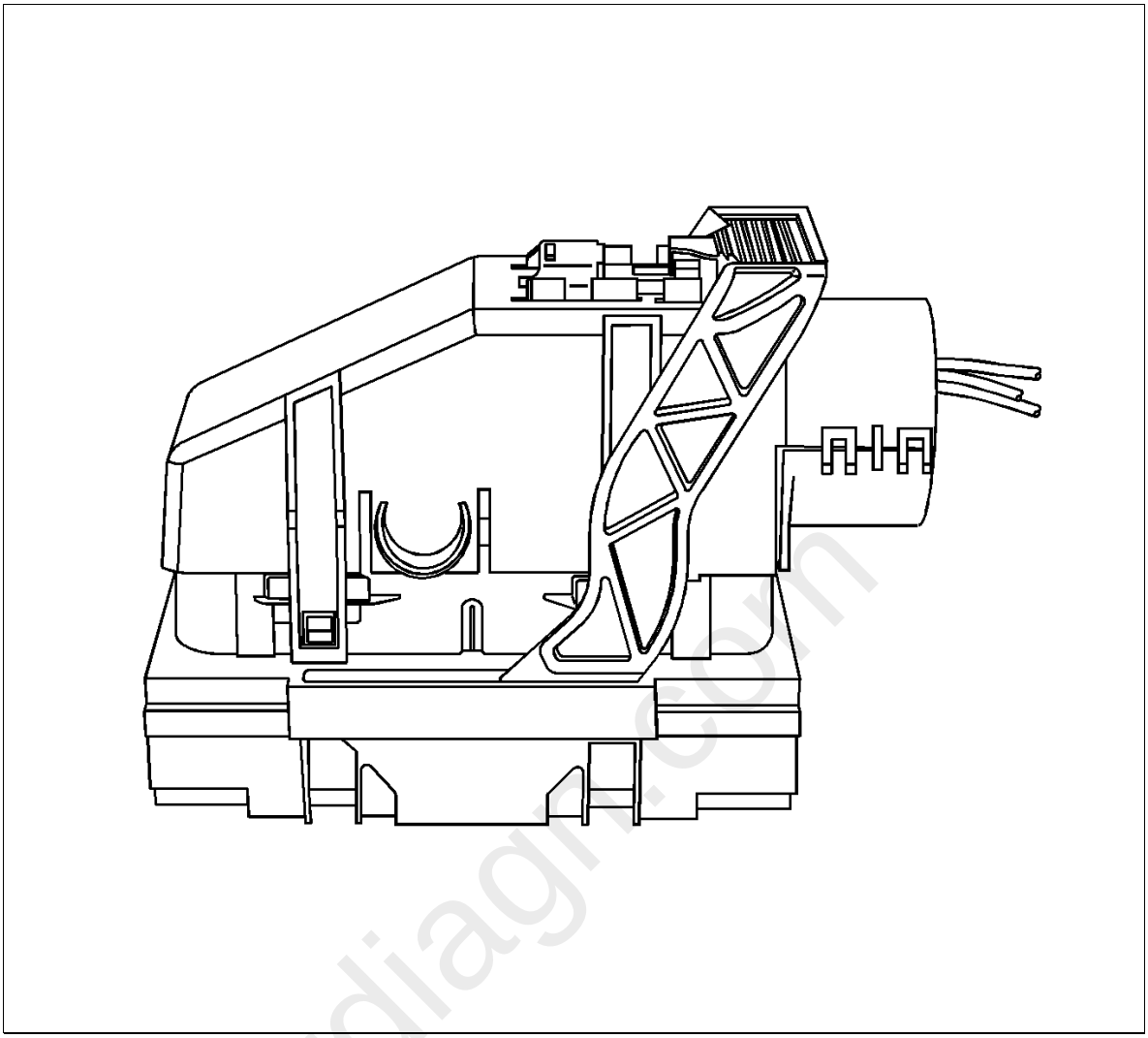
Fig 1: Bolt On Connector Cover



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Fig 2: Connector Position Assurance (CPA)

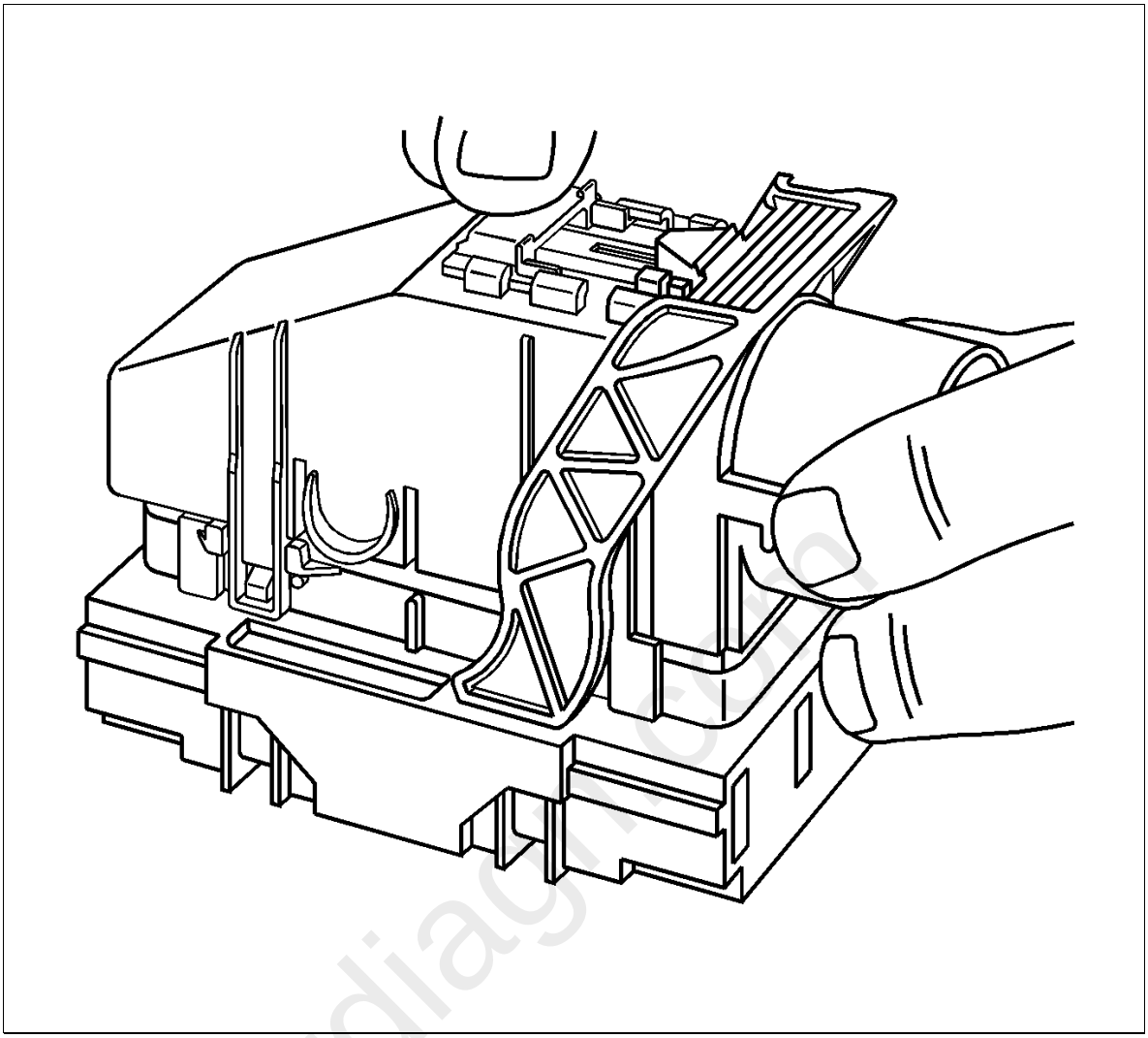


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1. For connectors with a bolt in the dress cover, turn the bolt counterclockwise to remove the connector from the component.
2. Locate the connector position assurance (CPA) on the top of the wire dress cover. Slide the CPA forward.

Fig 3: Lever Lock & Lever Lock Release Tab

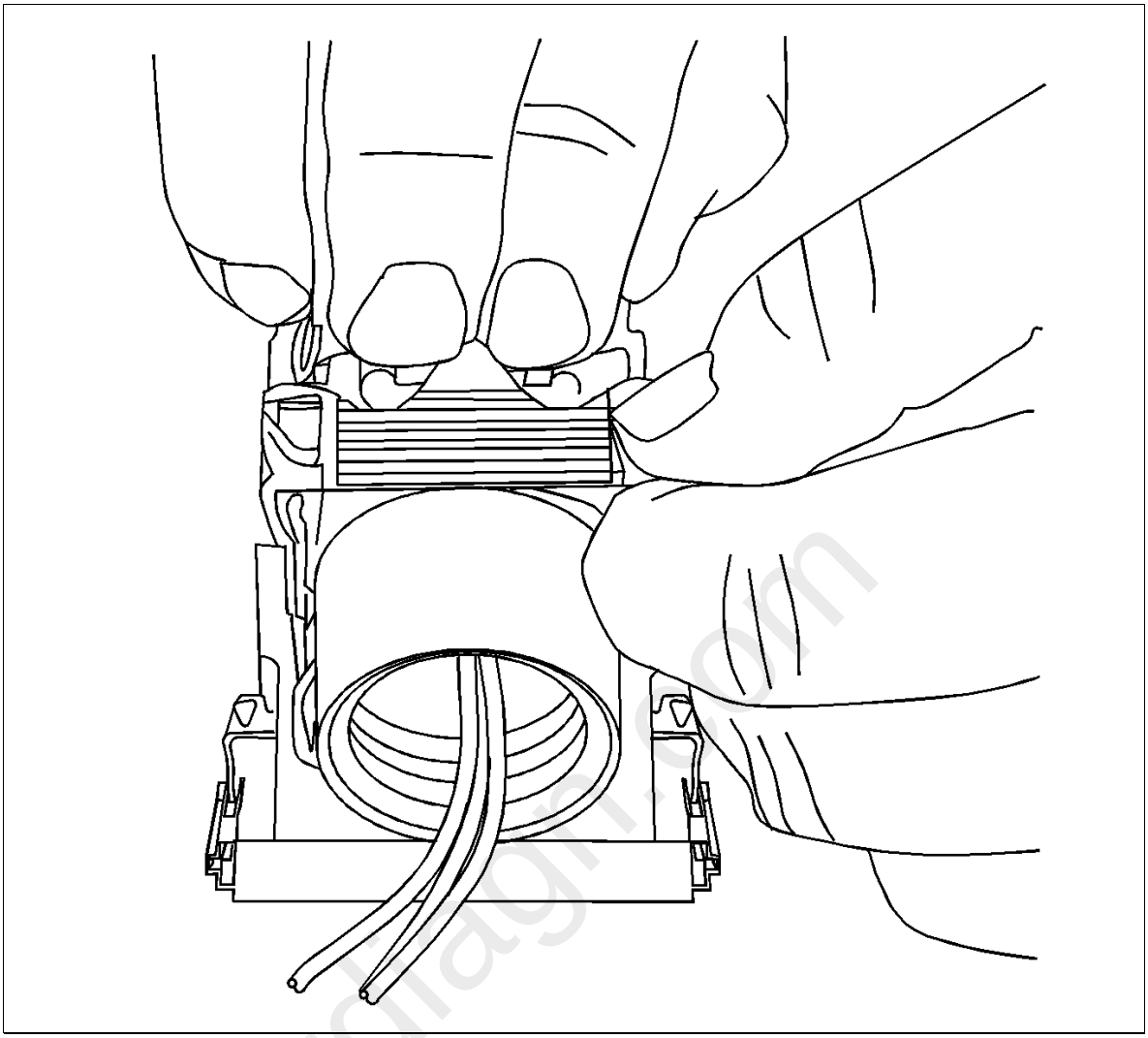


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3. Slide the lever lock forward while pressing down on the lever lock release tab.

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Fig 4: Depressing Lever Lock Release Tab

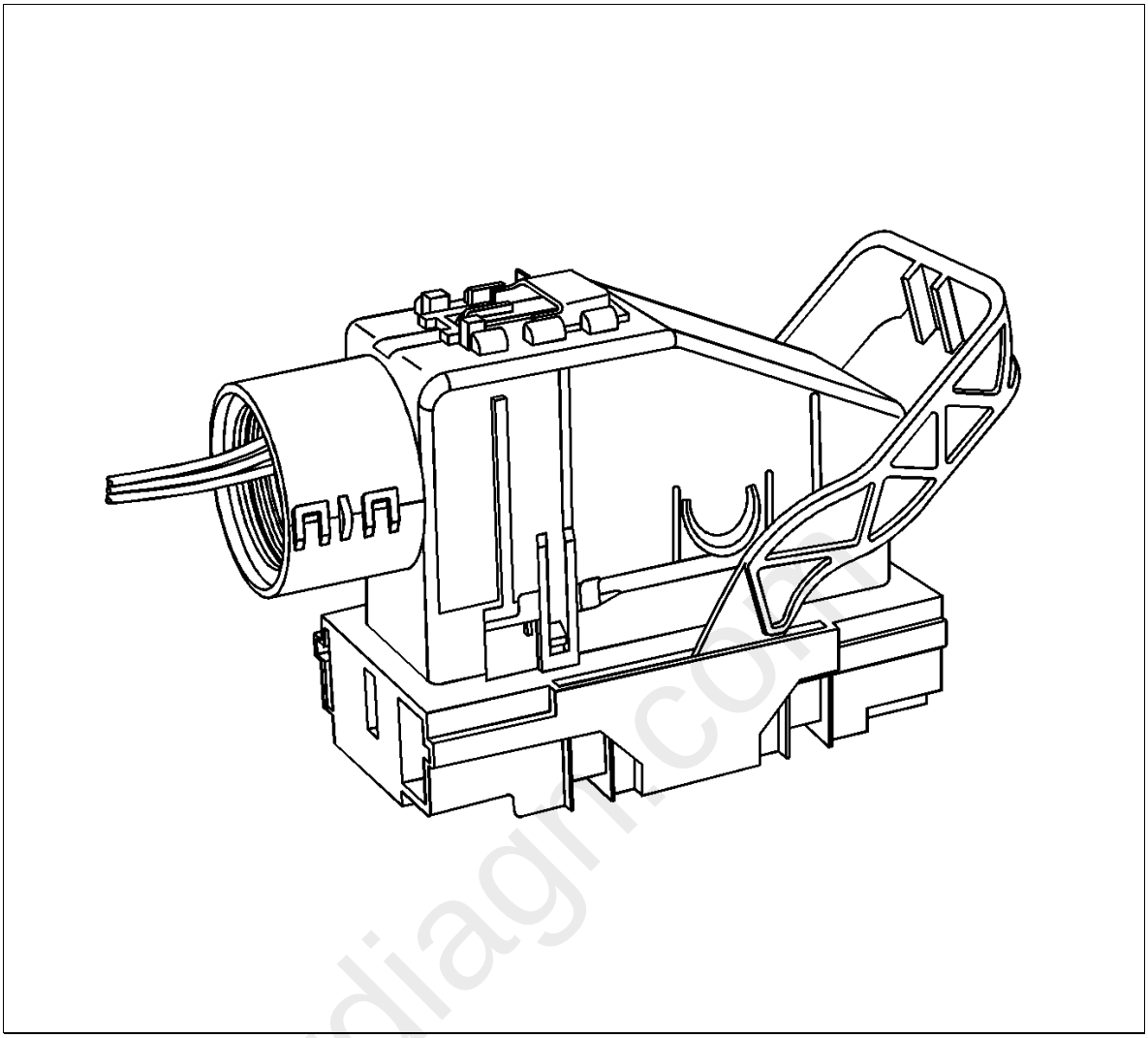


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4. View showing depressing of the lever lock release tab.

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Fig 5: Connector In Released Position

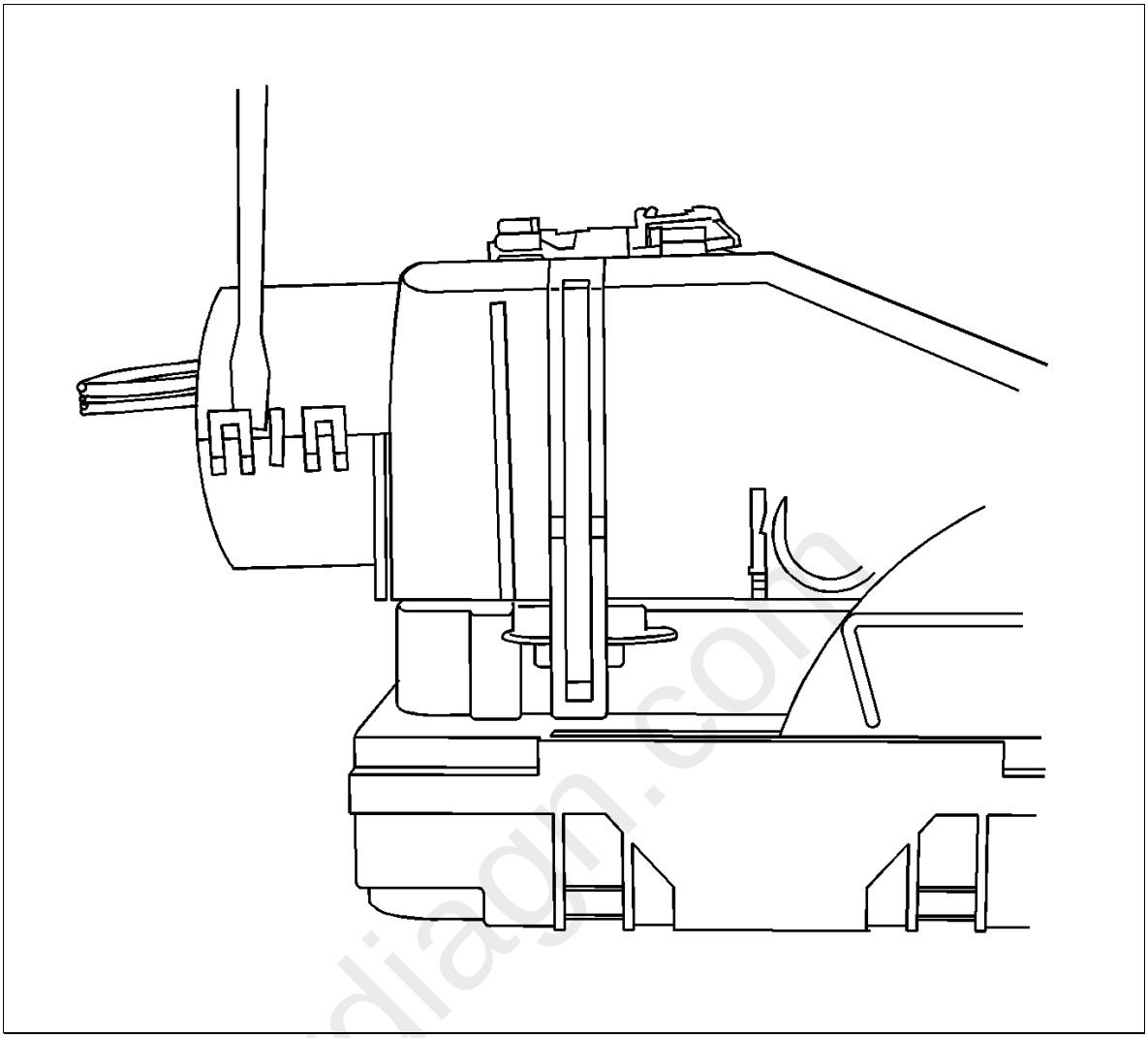


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5. View of connector in released position.
6. Disconnect the connector from the component.
7. Locate the dress cover locking tabs at the corners of the dress cover. Use a small flat-blade tool to release the locking tabs and remove the dress cover.

Fig 6: Connector In Released Position

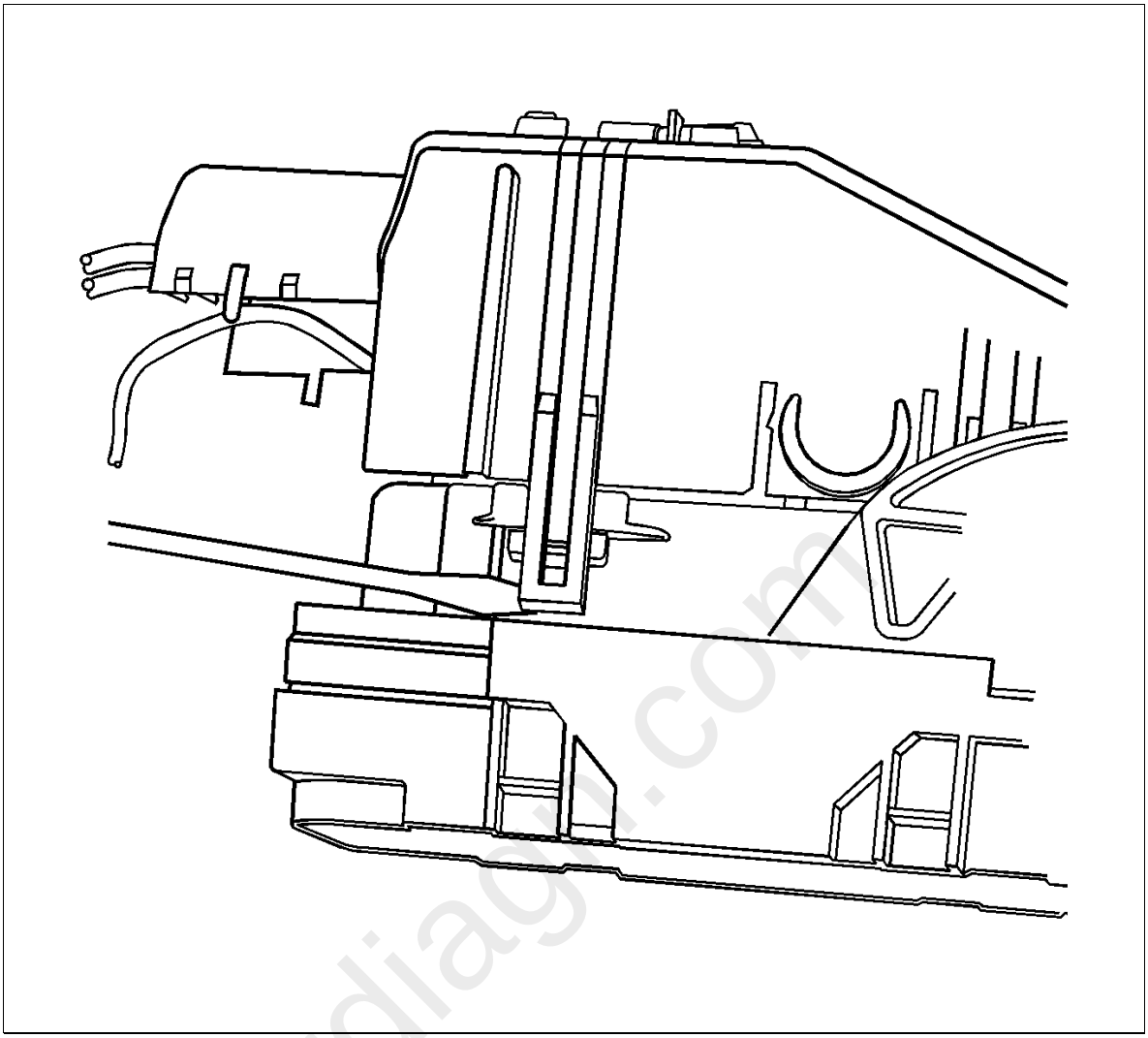


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8. Release the rear lower half of the wiredress cover.

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Fig 7: Tabs Holding Wiredress Cover

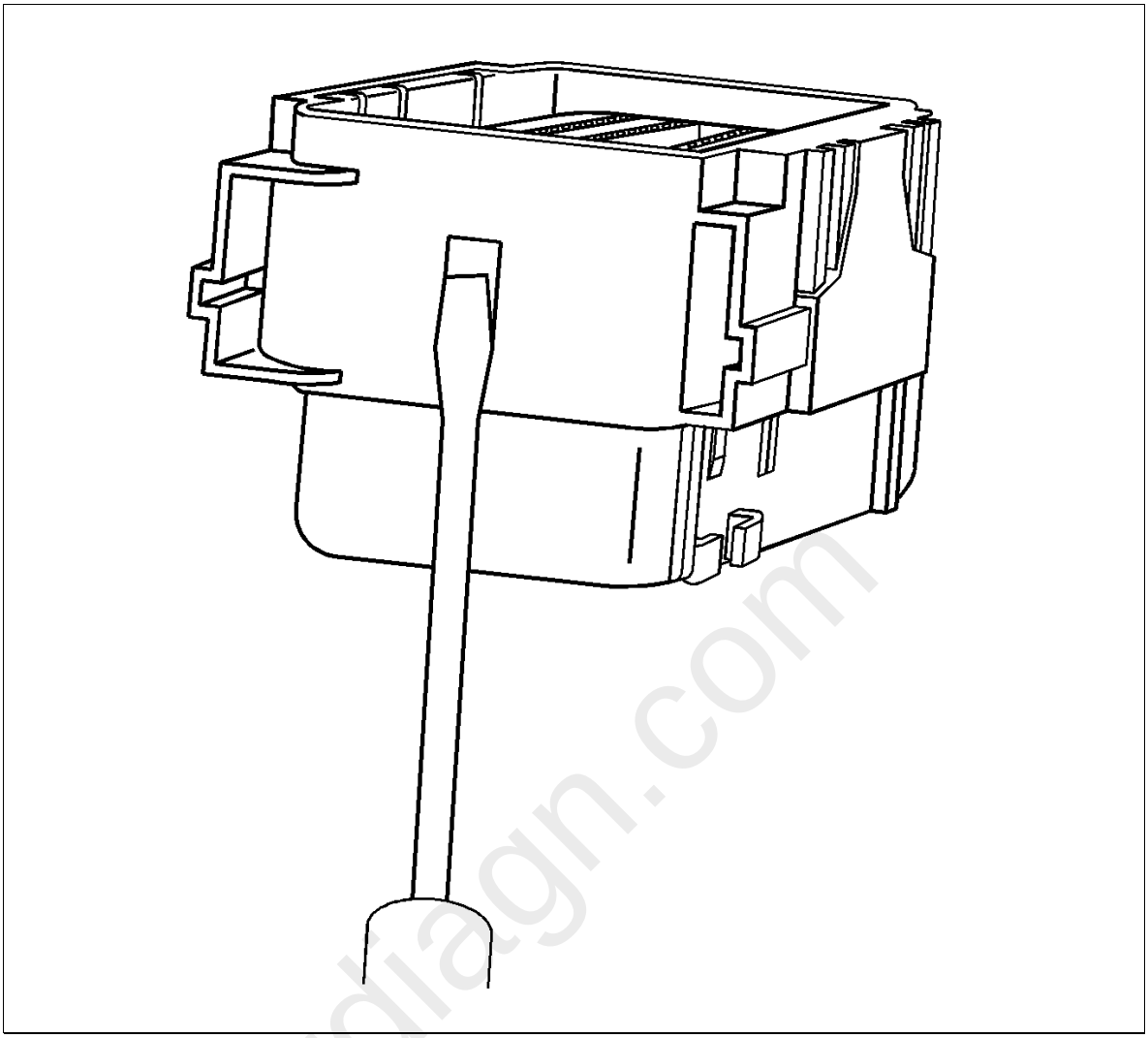


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9. Release the tabs that are holding the wiredress cover to the connector body.
10. Remove the nose piece by inserting a small flat-blade tool into the slots on both ends of the connector body. Gently pry the nose piece out of the connector. J-38125-216 can also be used to remove the nose piece.

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Fig 8: Lifting Terminal Retaining Tabs

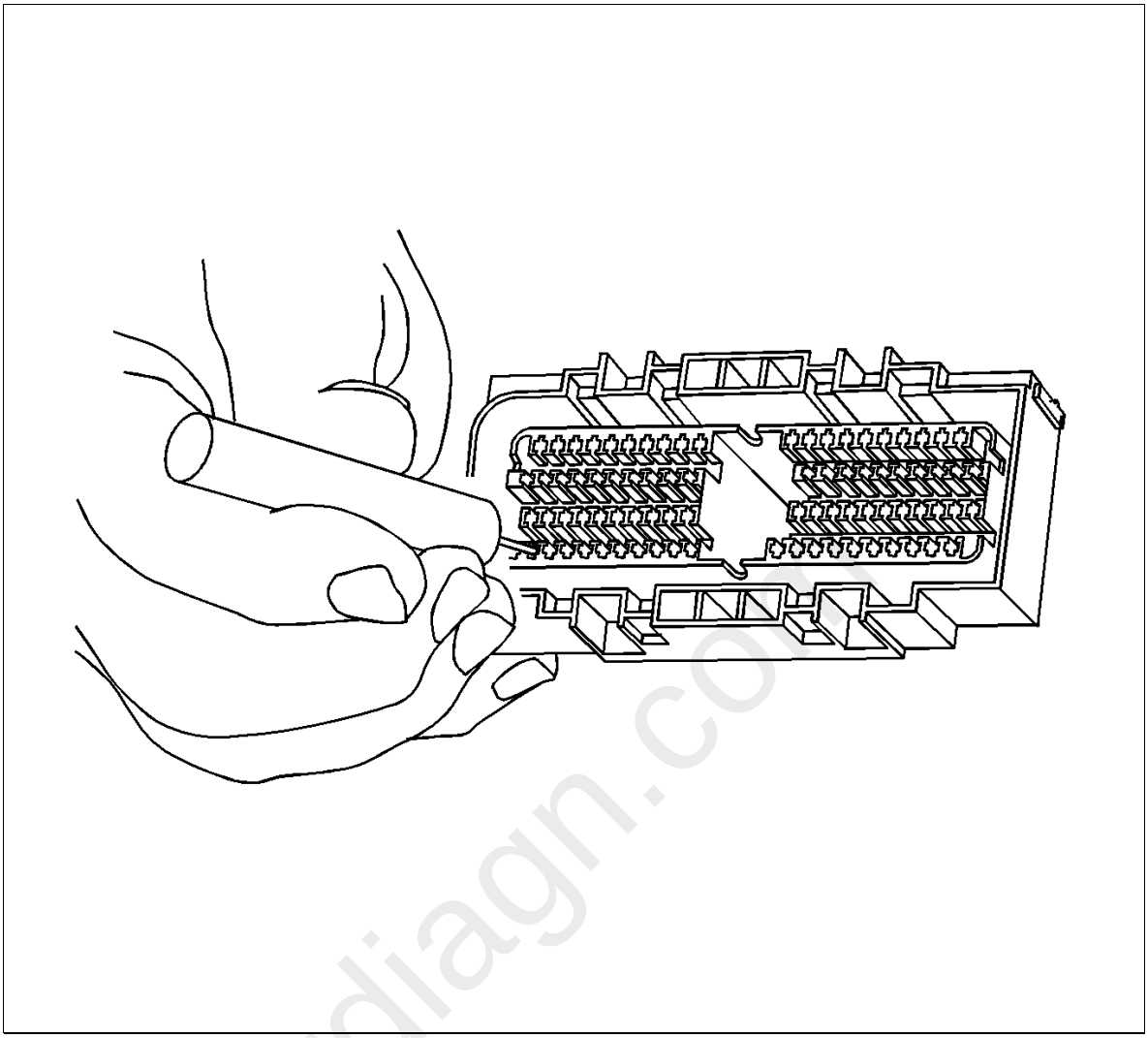


Courtesy of GENERAL MOTORS COMPANY

11. Use the J-38125-12A tool to release the terminals by lifting the terminal retaining tabs on the inside of the connector.

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Fig 9: Wire Out Of Back Of Connector



Courtesy of GENERAL MOTORS COMPANY

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 (Terminated Lead Repair) Repairing Connector Terminals (Terminal Repair) procedure.
14. Insert the repaired terminal back into the cavity. Repeat the diagnostic procedure to verify the repair and reconnect the connector bodies.

DIAGNOSTIC INFORMATION AND PROCEDURES > BOSCH CONNECTORS (BSK)

Special Tools

- **EL-38125-550** Terminal Release Tool Kit
- **EL-38125-580** Terminal Release Tool Kit

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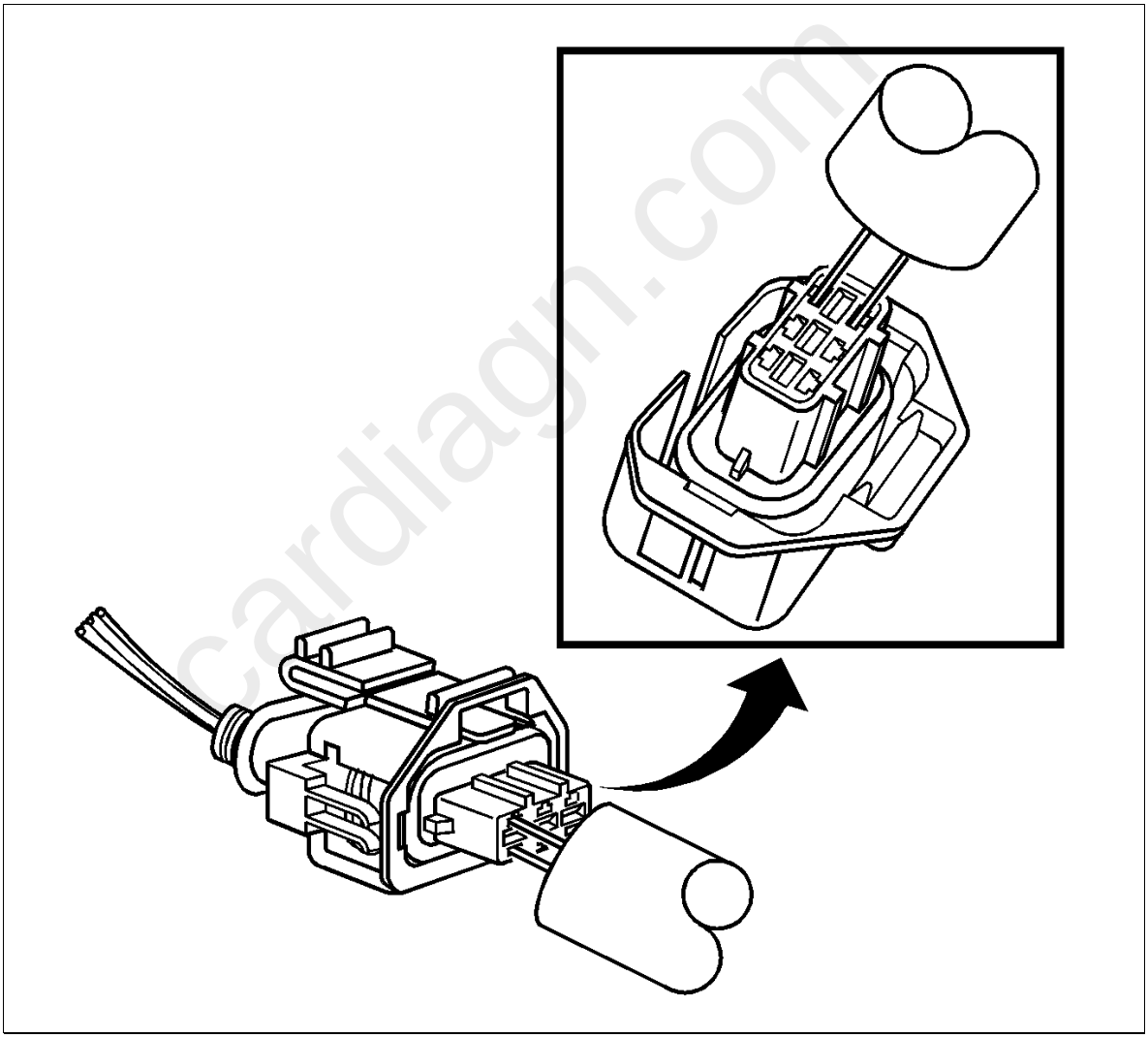
- **J-38125-561** Terminal Release Tool

For equivalent regional tools, refer to Special Tools .

DIAGNOSTIC INFORMATION AND PROCEDURES > BOSCH CONNECTORS (BSK) > 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.

   Fig 1: Bosch Connector Terminals (BSK)



Courtesy of GENERAL MOTORS COMPANY

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

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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 (Terminated Lead Repair) Repairing Connector Terminals (Terminal Repair) procedure.
7. Insert the repaired terminal back into the cavity. Repeat the diagnostic procedure to verify the repair and reconnect the connector bodies.

DIAGNOSTIC INFORMATION AND PROCEDURES > 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

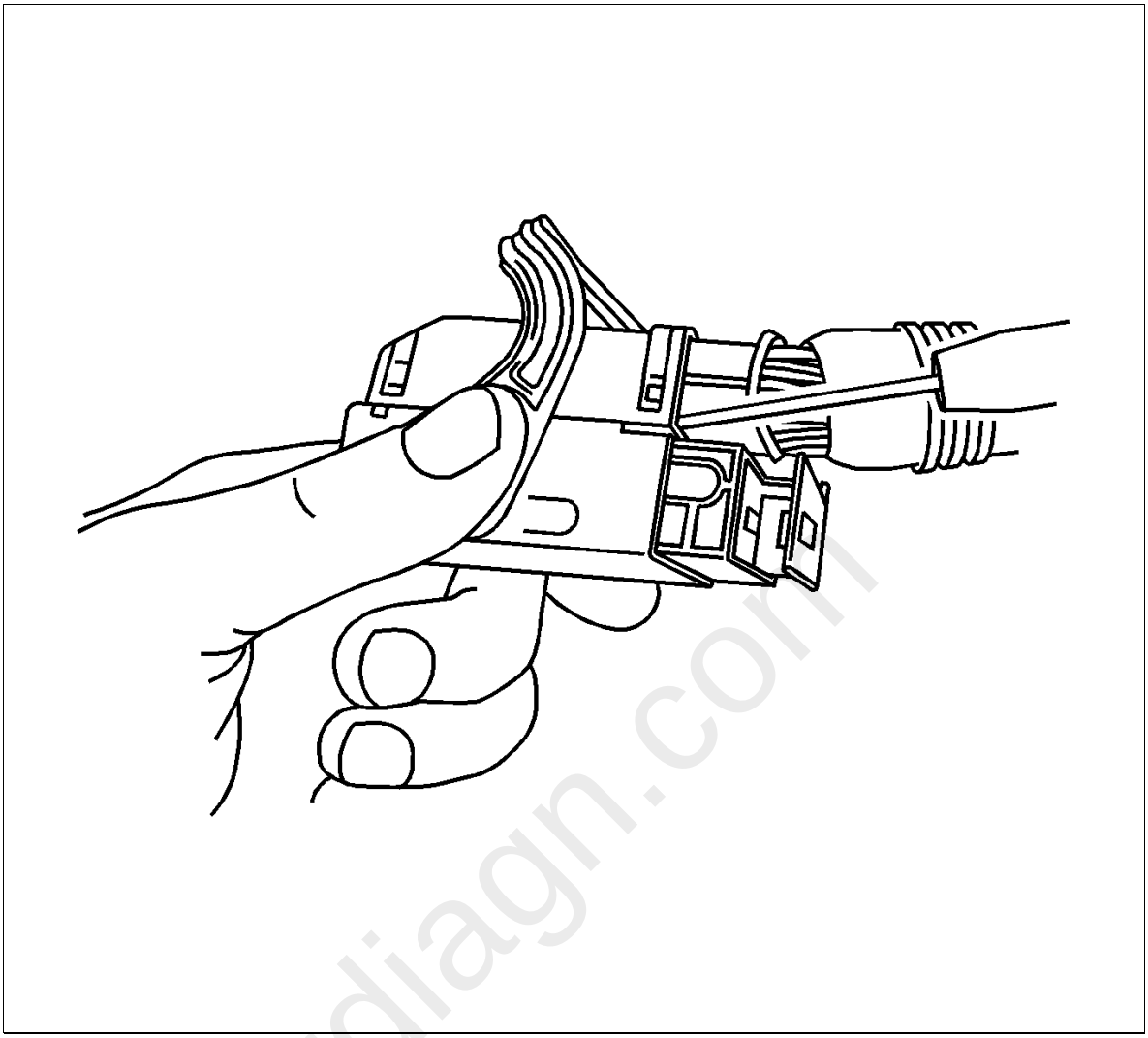
For equivalent regional tools, refer to Special Tools .

DIAGNOSTIC INFORMATION AND PROCEDURES > BOSCH CONNECTORS (0.64) > 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.

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Fig 1: Flat-Bladed Tool Being Inserted Between Cover & Connector Body

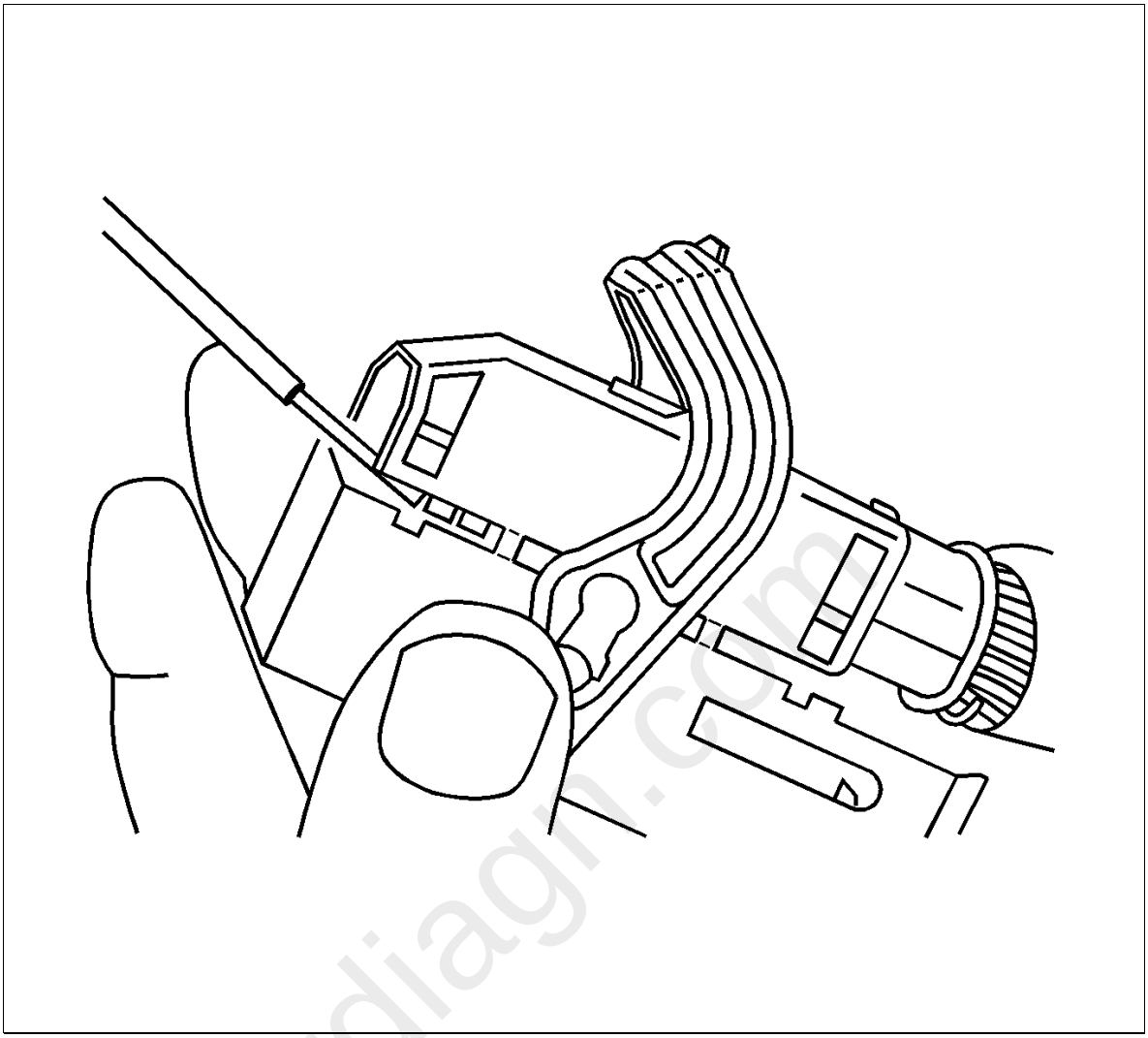


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5. Locate the 2 dress cover locking tabs that are on the wire end of the connector. Insert a small flat-bladed tool between the cover and connector body and pry up.

Fig 2: Flat-Bladed Tool Between Cover & Connector End

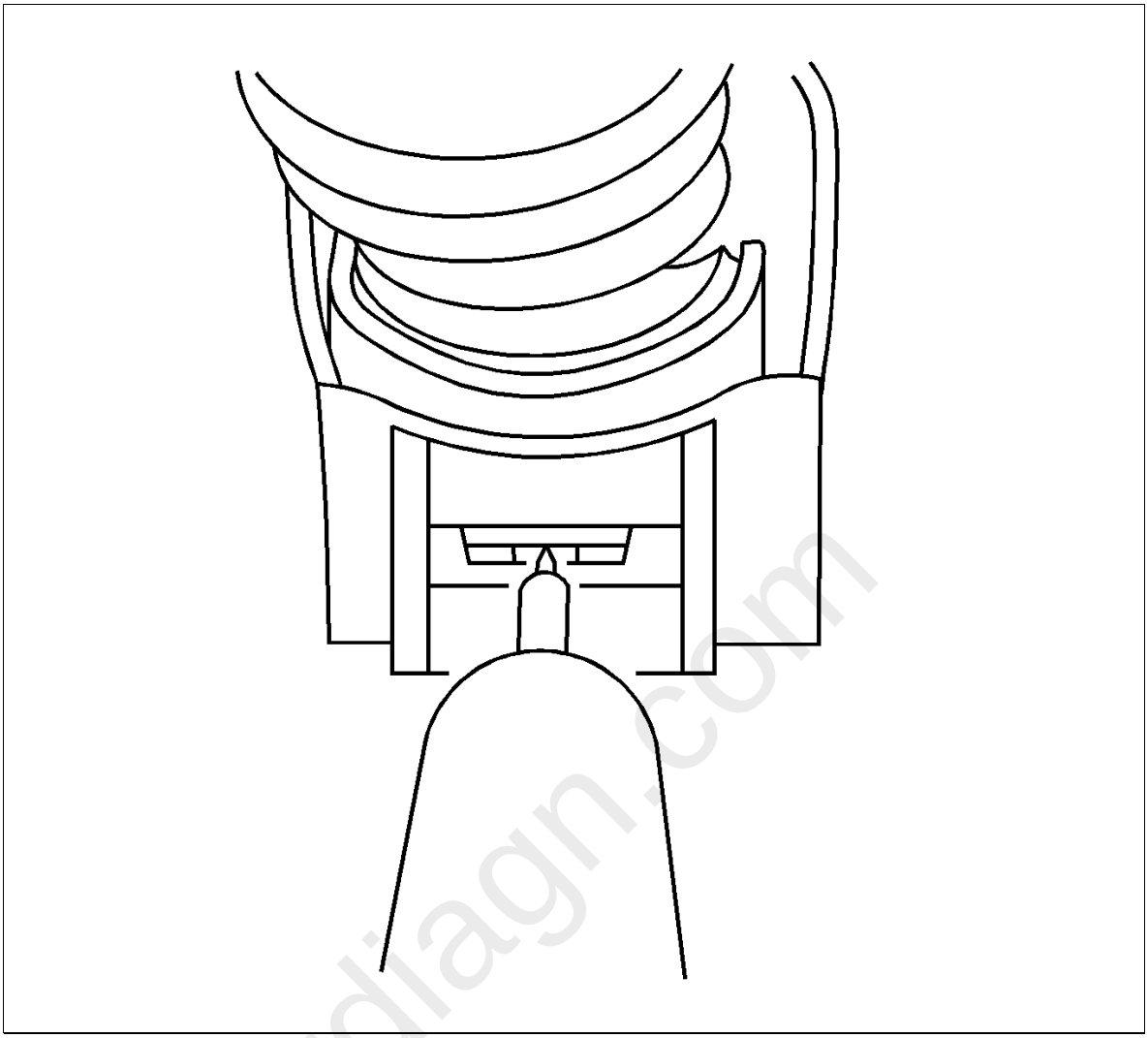


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6. Locate the 2 dress cover locking tabs located on the opposite side of the connector. Insert a small flat-bladed tool between the cover at the connector end and pry up.
7. Remove the dress cover.
8. Cut the tie wrap on the wire bundle.

Fig 3: Terminal Position Assurance (TPA)



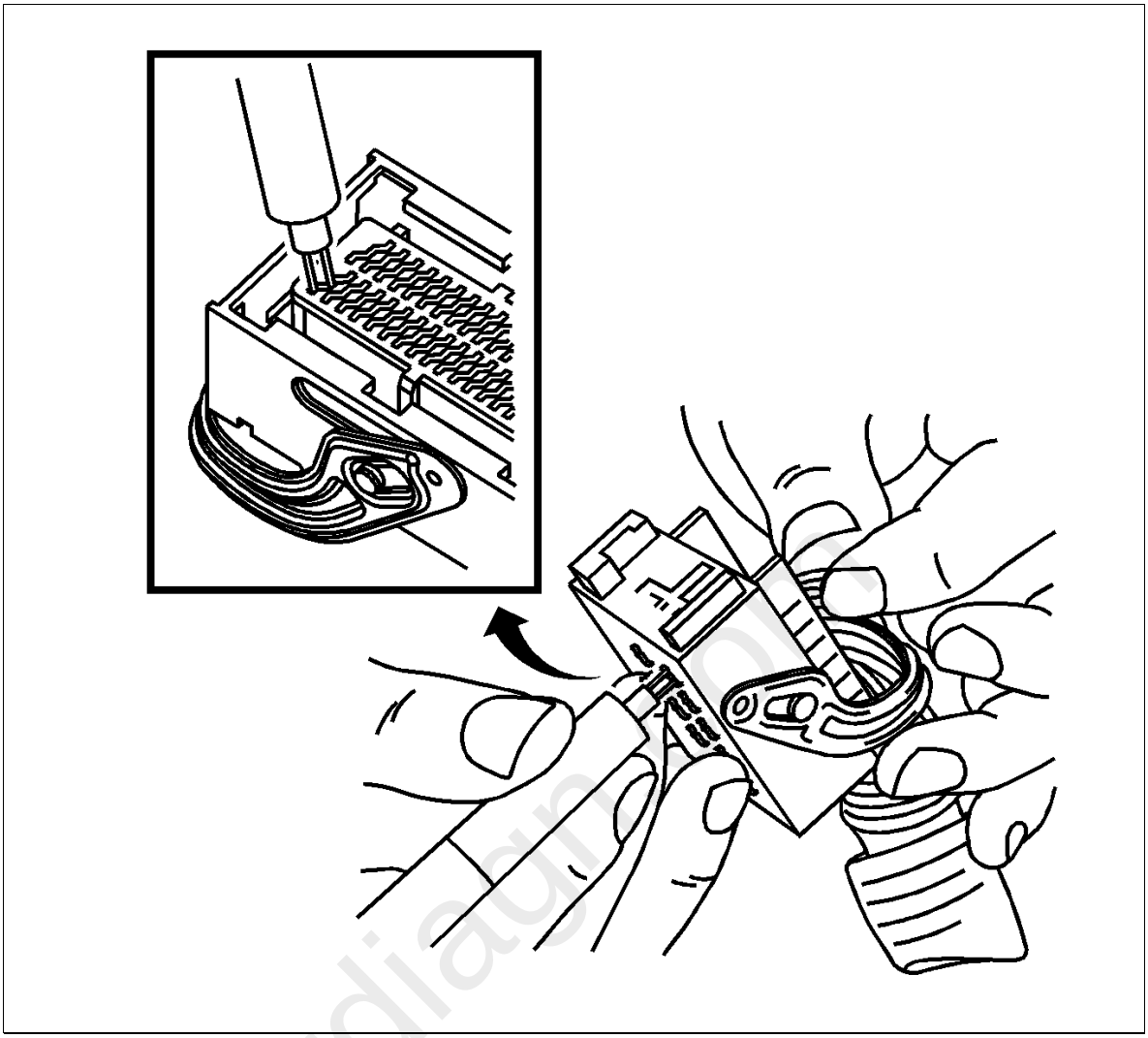
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9. Remove the terminal position assurance (TPA) by inserting a small flat-bladed tool into the small slot in the end of the slider and pushing on the TPA until it comes out of the connector. When the TPA exits the opposite side of the connector, gasp 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.

Fig 4: Inserted Into Triangular Cavities

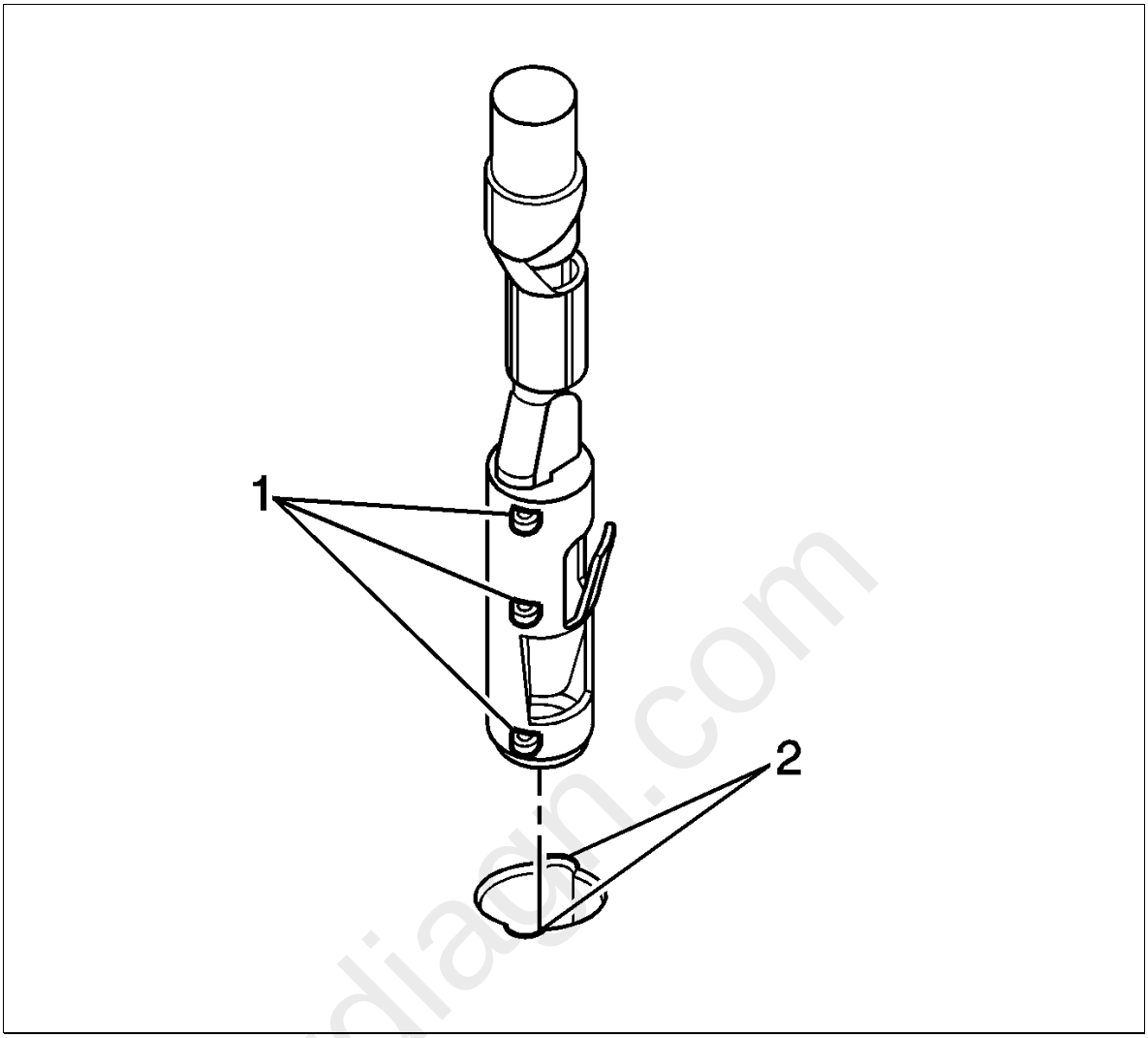


Courtesy of GENERAL MOTORS COMPANY

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 (Terminated Lead Repair) Repairing Connector Terminals (Terminal Repair) procedure.
14. Insert the repaired terminal back into the cavity. Repeat the diagnostic procedure to verify the repair and reconnect the connector bodies.

DIAGNOSTIC INFORMATION AND PROCEDURES > BOSCH CONNECTORS (0.64) > TERMINAL INSERTION PROCEDURE

Fig 1: Aligning Coding Lugs With Connector Coding Grooves



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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.

DIAGNOSTIC INFORMATION AND PROCEDURES > BOSCH CONNECTORS (2.8 JPT)

Special Tools

- **EL-38125-550** Terminal Release Tool Kit

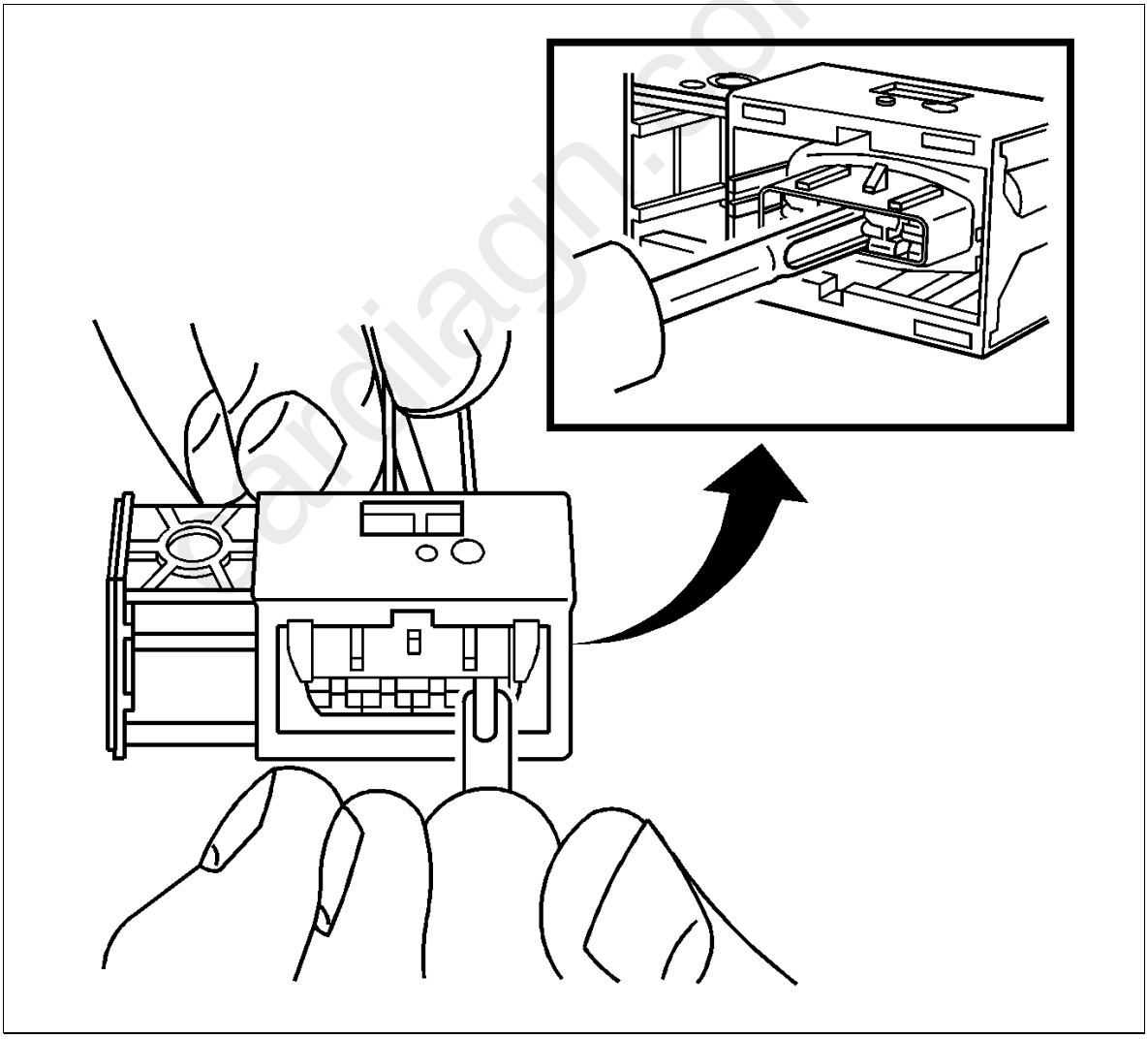
- **EL-38125-580** Terminal Release Tool Kit
- **J-38125-557** Terminal Release Tool

For equivalent regional tools, refer to Special Tools .

DIAGNOSTIC INFORMATION AND PROCEDURES > BOSCH CONNECTORS (2.8 JPT) > 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.

   Fig 1: Bosch Connector Terminals (2.8 JPT)



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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 (Terminated Lead Repair) Repairing Connector Terminals (Terminal Repair) procedure.
8. Insert the repaired terminal back into the cavity. Repeat the diagnostic procedure to verify the repair and reconnect the connector bodies.

DIAGNOSTIC INFORMATION AND PROCEDURES > BOSCH CONNECTORS (ECM)

Special Tools

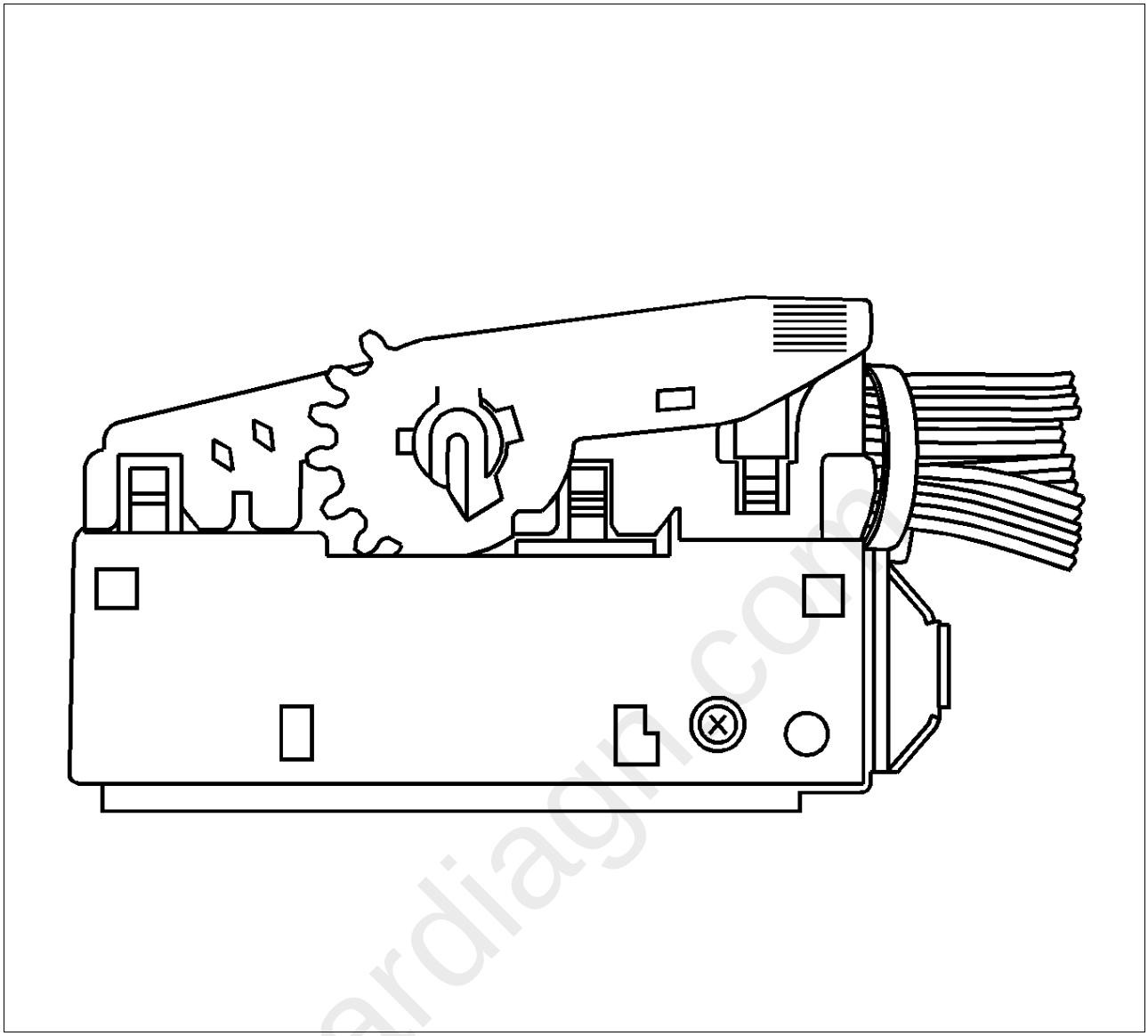
- **EL-38125-550** Terminal Release Tool Kit
- **EL-38125-580** Terminal Release Tool Kit
- **J-38125-213** Terminal Release Tool
- **J-38125-556** Terminal Release Tool

For equivalent regional tools, refer to Special Tools .

DIAGNOSTIC INFORMATION AND PROCEDURES > BOSCH CONNECTORS (ECM) > TERMINAL REMOVAL PROCEDURE

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Fig 1: Bosch Connectors

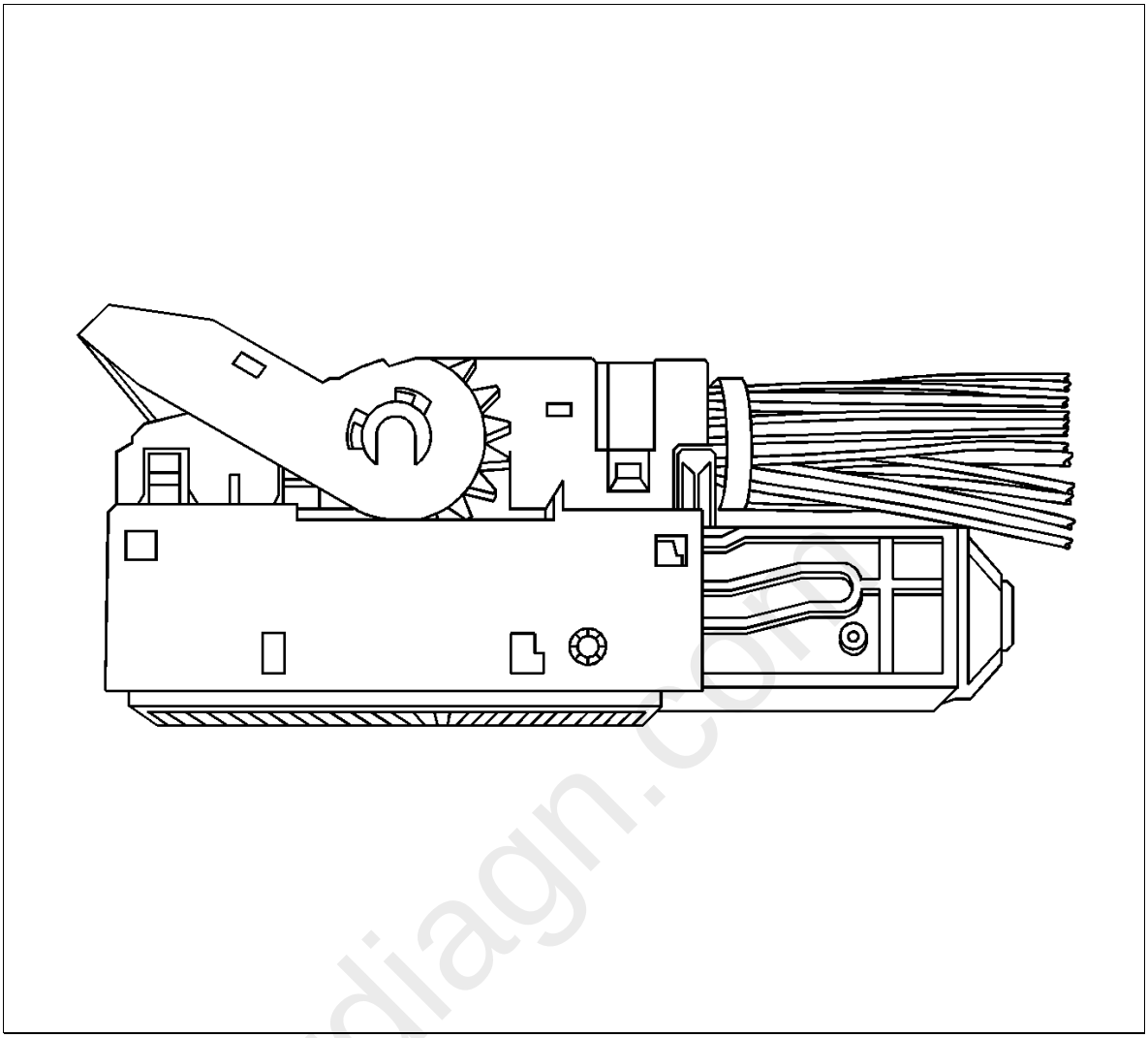


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1. Locate the assist lever on the top of the connector. Move the assist lever to the forward position.

Fig 2: Assist Lever In Forward Position

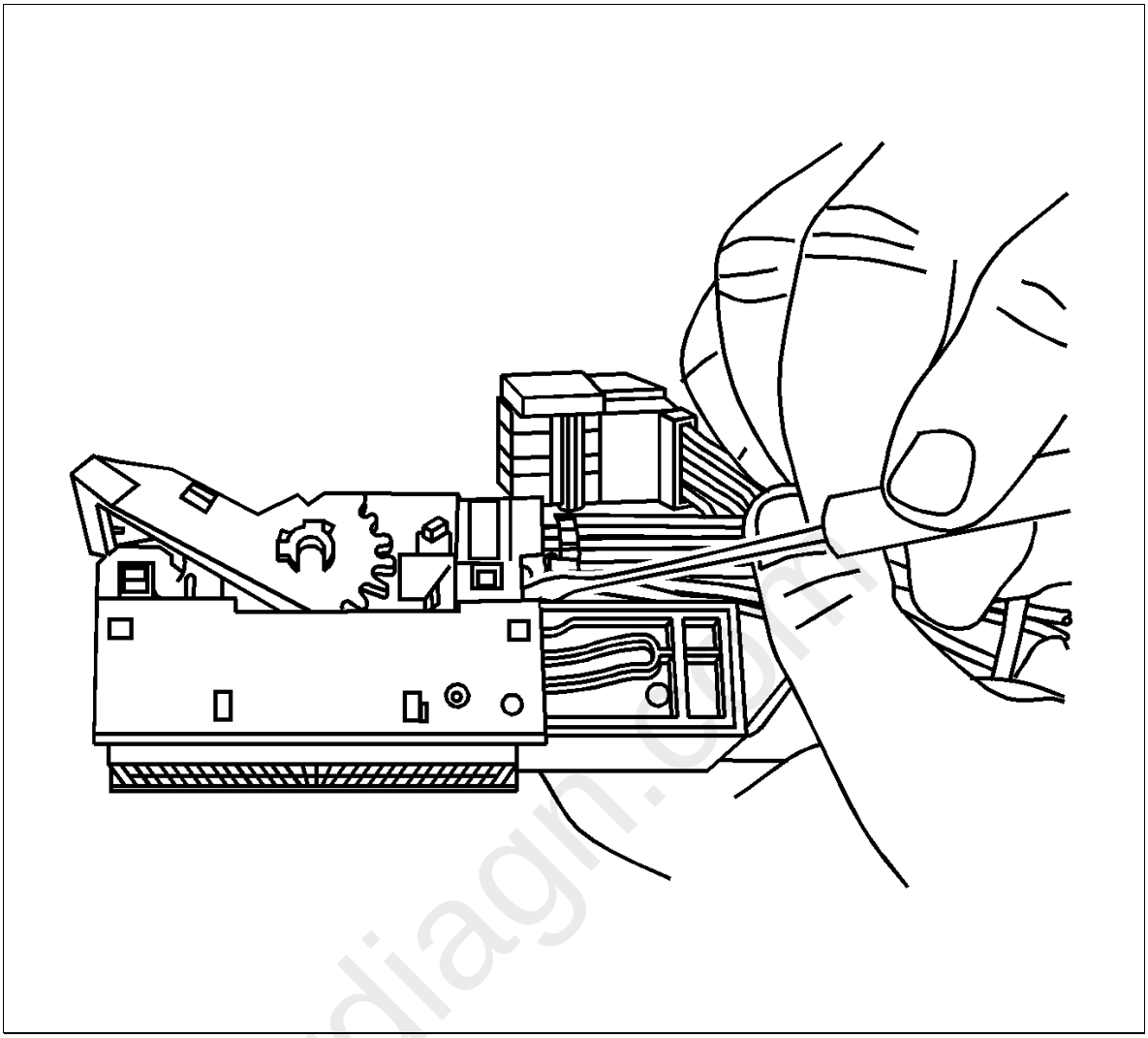


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2. Disconnect the connector from the component.

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Fig 3: Releasing Locking Tabs

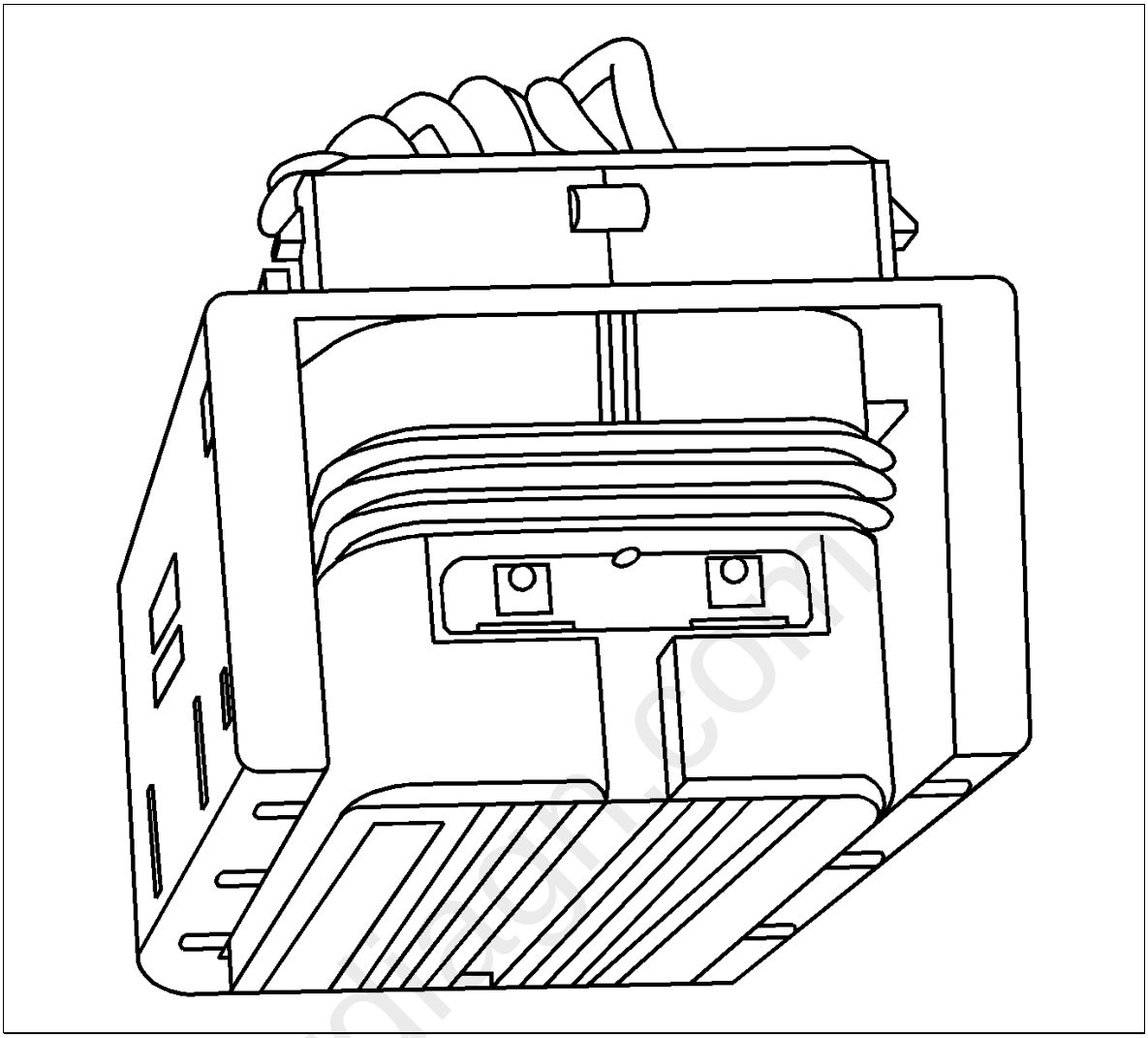


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3. Locate the dress cover locking tabs at the corners of the connector. Use a small flat-blade tool to release the locking tabs and remove the dress cover.

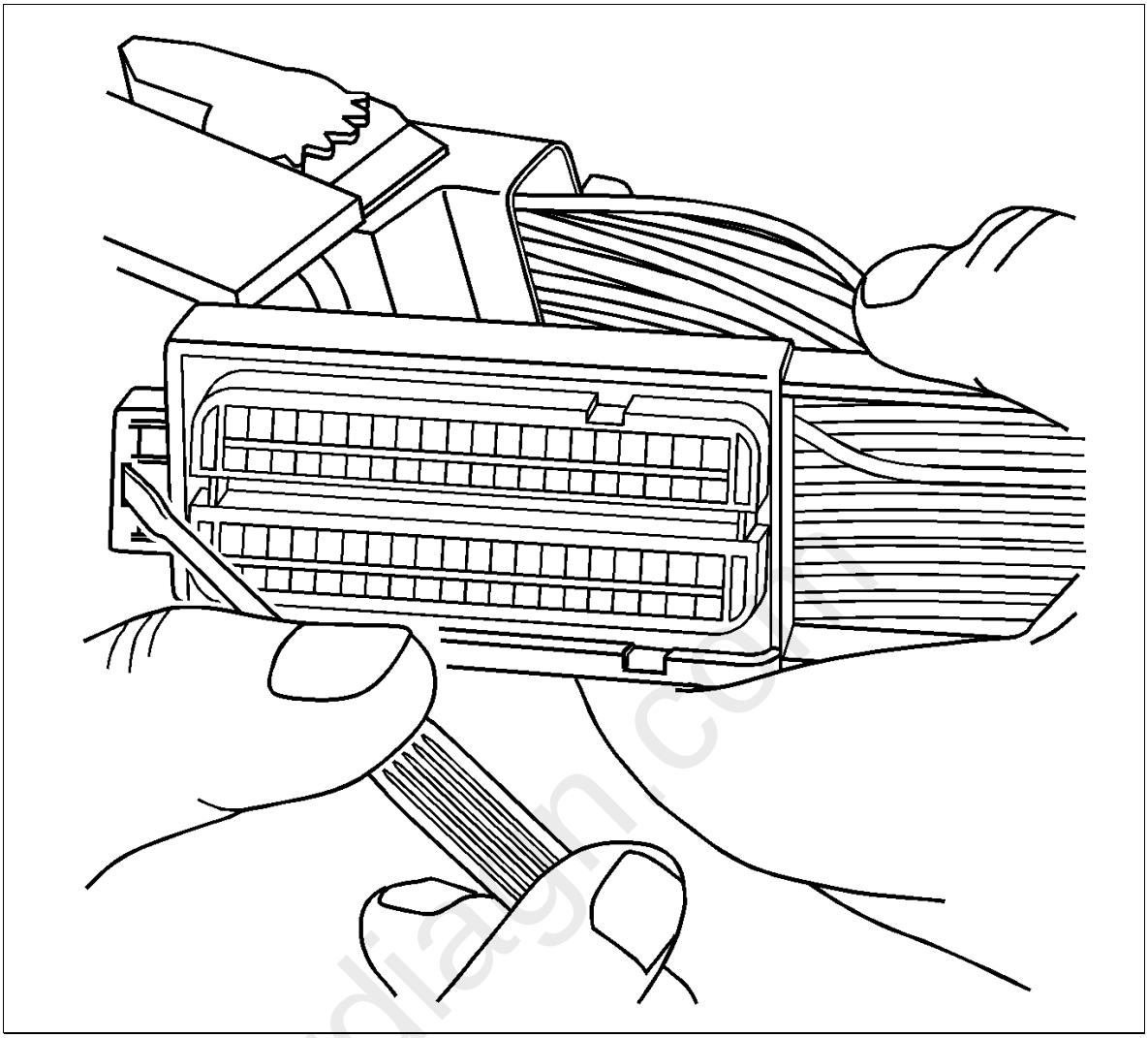
Fig 4: Terminal Positive Assurance (TPA) Connector



Courtesy of GENERAL MOTORS COMPANY

4. The terminal positive assurance (TPA) is located in the front of the connector.

Fig 5: TPA From Connector

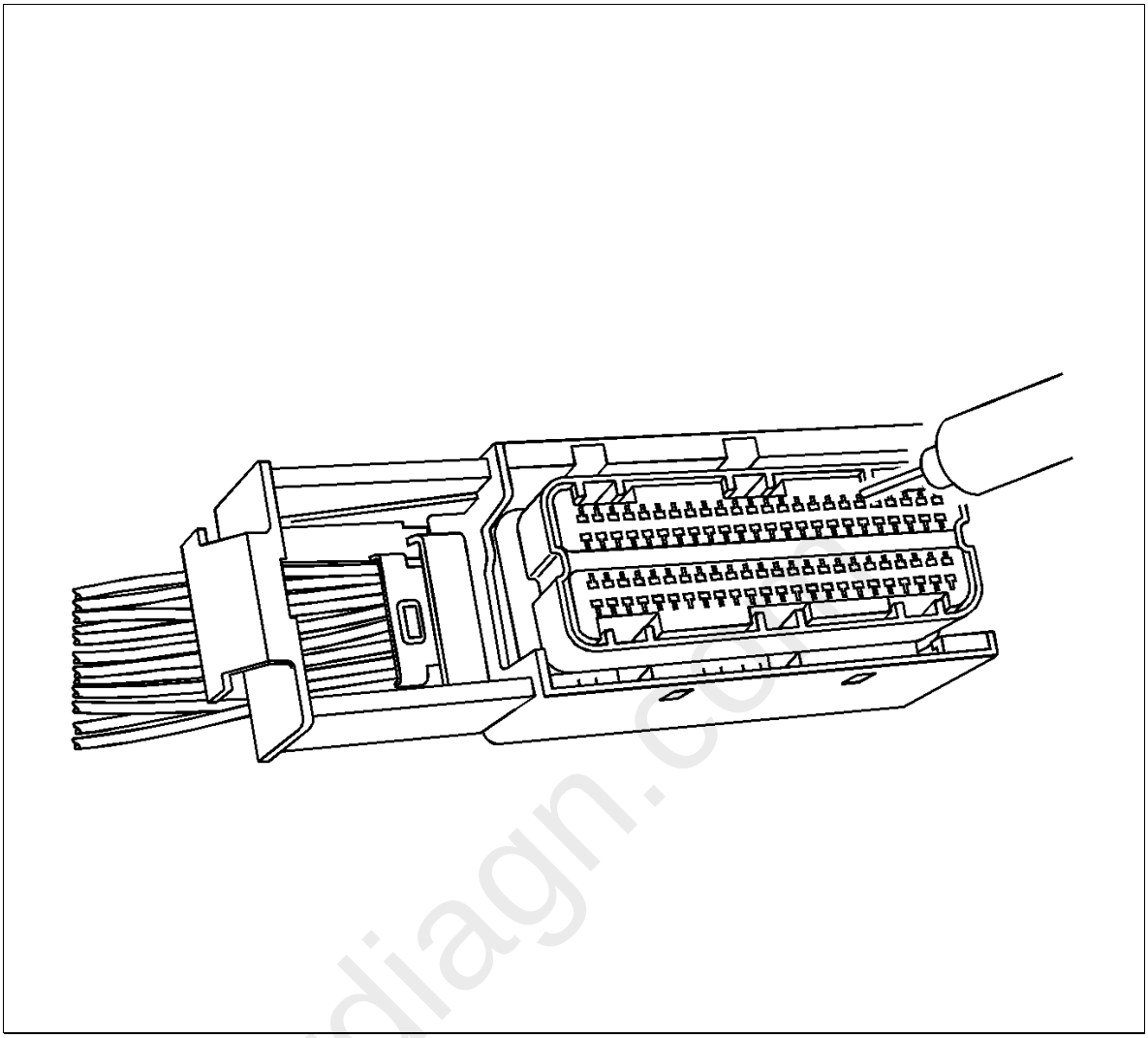


Courtesy of GENERAL MOTORS COMPANY

5. Use a small flat-blade tool to remove TPA from the connector.

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Fig 6: Special Tools And Terminals



Courtesy of GENERAL MOTORS COMPANY

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 (Terminated Lead Repair) Repairing Connector Terminals (Terminal Repair) 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.

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10. Reconnect the connector bodies.

DIAGNOSTIC INFORMATION AND PROCEDURES > 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

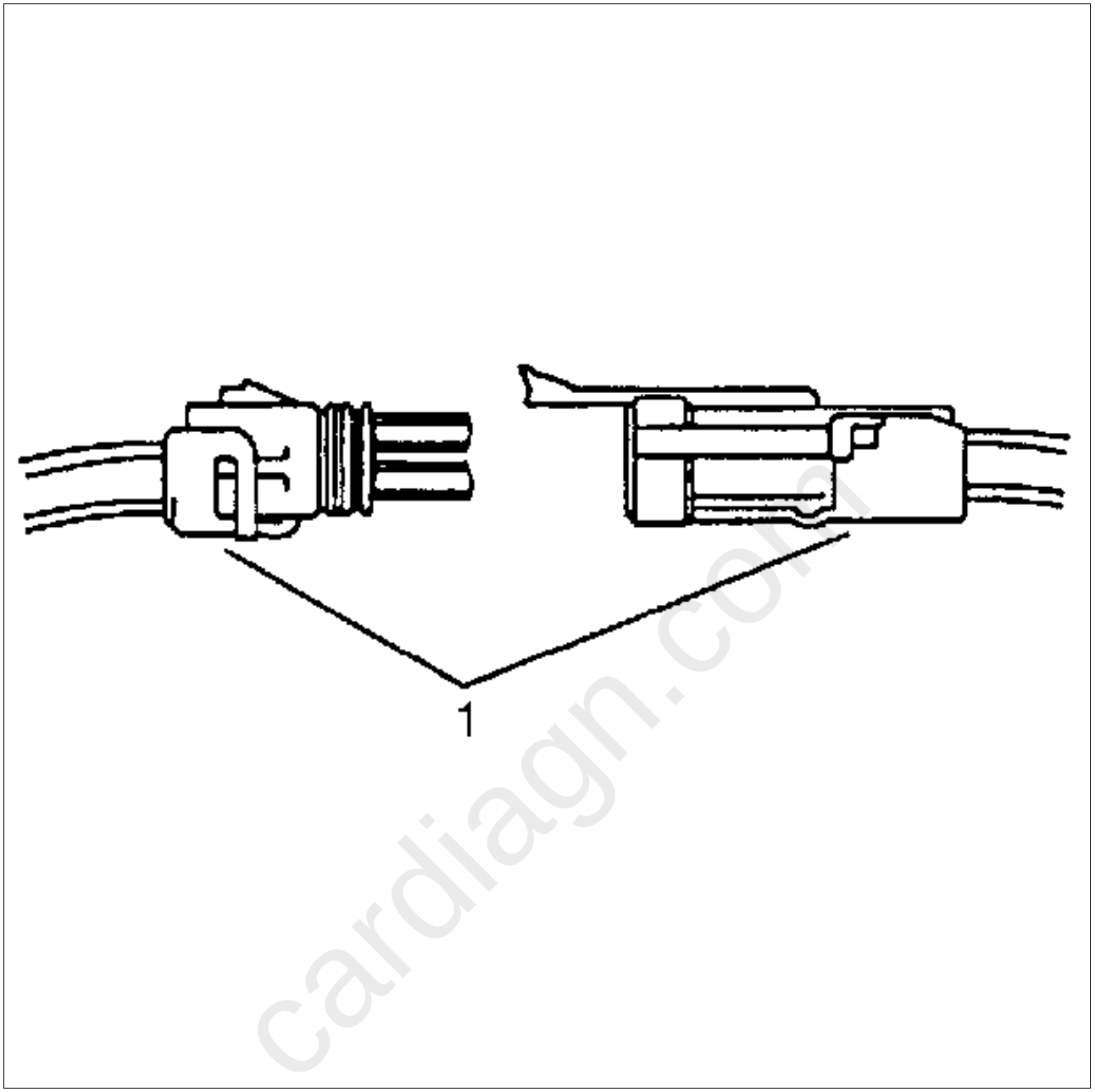
For equivalent regional tools, refer to Special Tools .

DIAGNOSTIC INFORMATION AND PROCEDURES > DELPHI CONNECTORS (WEATHER PACK) > TERMINAL REMOVAL PROCEDURE

The following is the proper procedure for the repair of Weather Pack® Connectors.

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Fig 1: Connector Halves

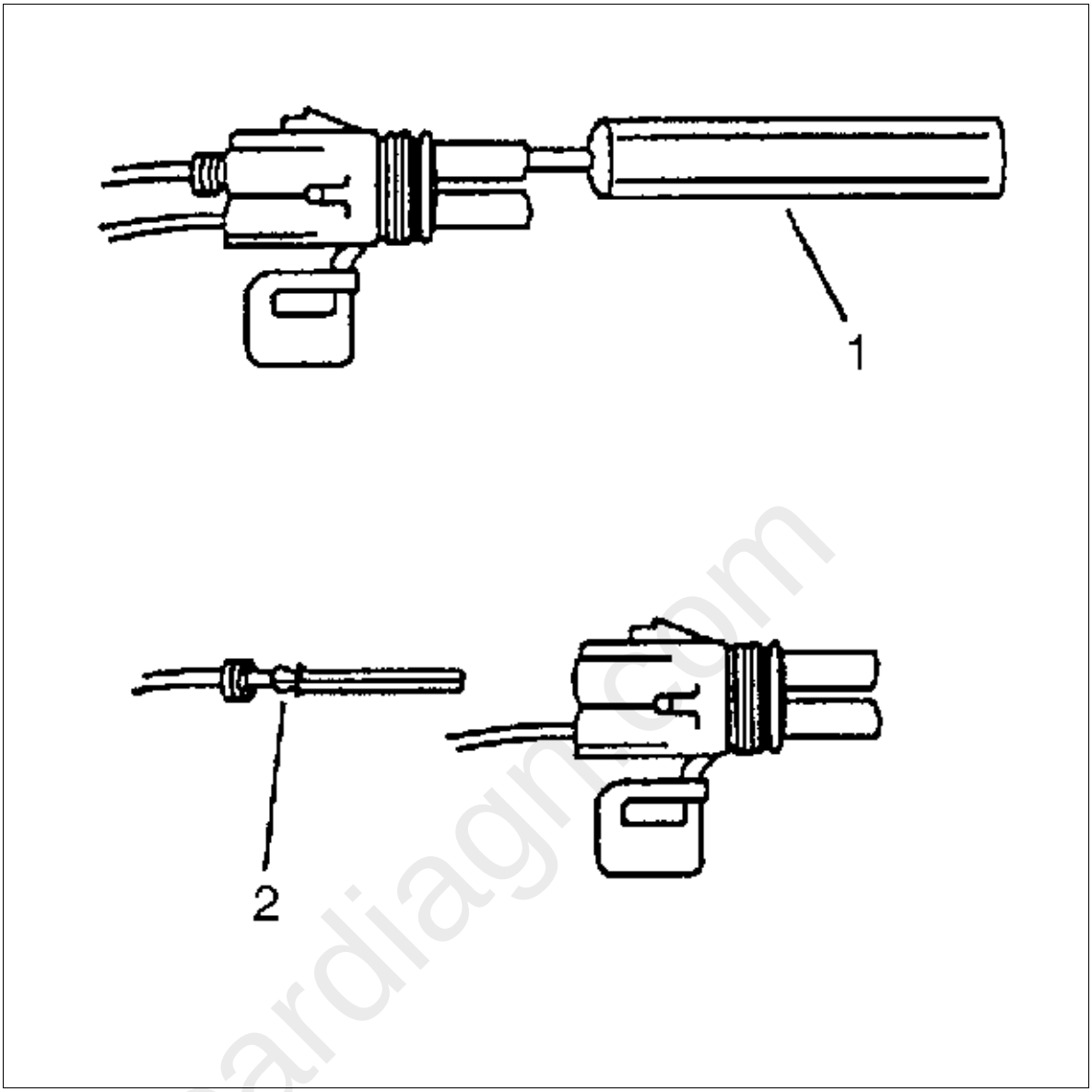


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1. Separate the connector halves (1).
2. Open the secondary lock. A secondary lock aids in terminal retention and is usually molded to the connector (1).
3. Grasp the wire and push the terminal to the forward most position. Hold the wire in this position.

Fig 2: Removal Tool & Terminal



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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).
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 (Terminated Lead Repair) Repairing Connector Terminals (Terminal Repair) .

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 (Terminated Lead Repair) Repairing Connector Terminals (Terminal Repair) procedure.
12. Insert the repaired terminal back into the cavity. Repeat the diagnostic procedure to verify the repair and reconnect the connector bodies.

DIAGNOSTIC INFORMATION AND PROCEDURES > 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 .

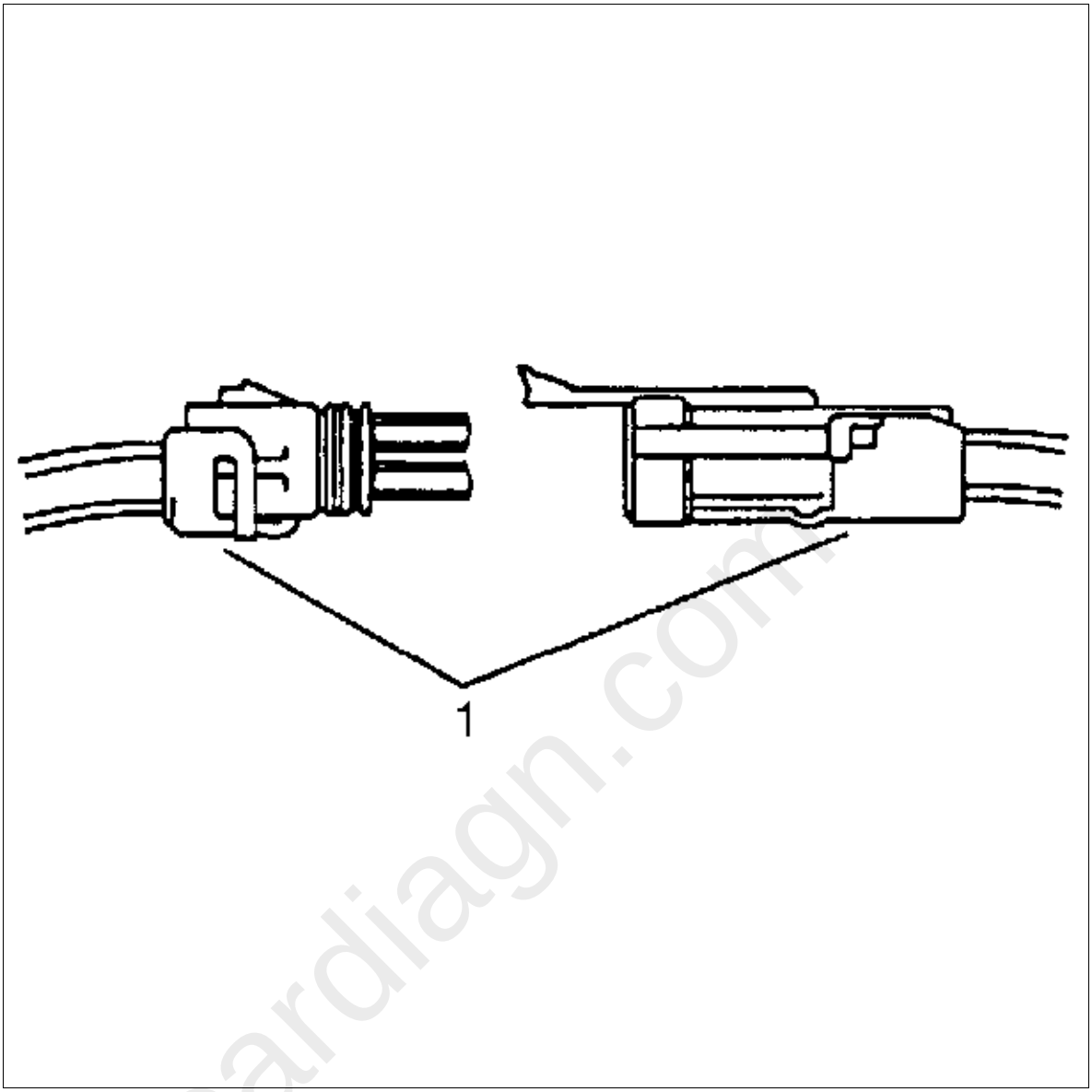
DIAGNOSTIC INFORMATION AND PROCEDURES > DELPHI CONNECTORS (PUSH TO SEAT) > TERMINAL REMOVAL PROCEDURE

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.

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Fig 1: Connector Halves

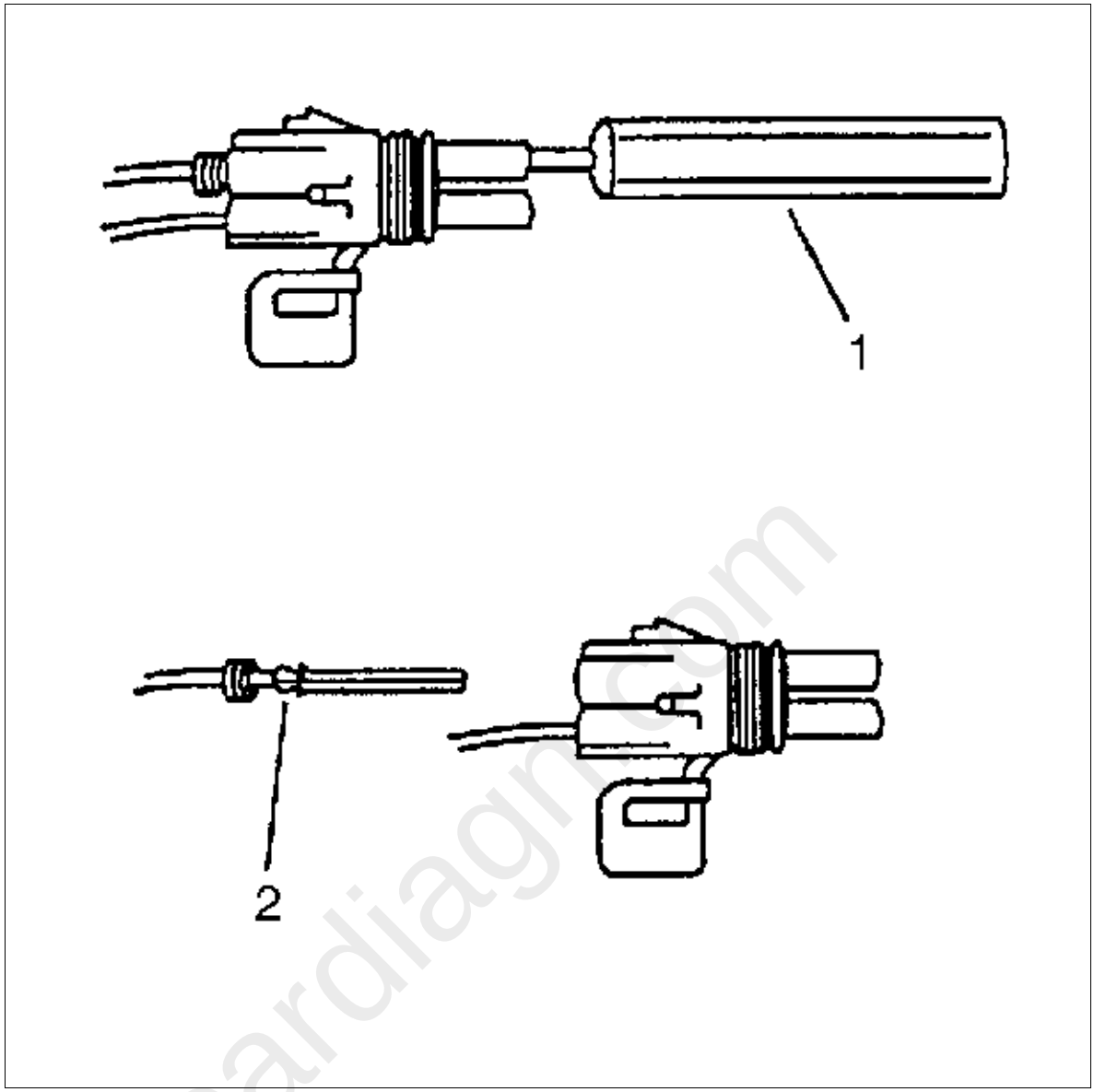


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2. Separate the connector halves (1).

Fig 2: Removal Tool & Terminal

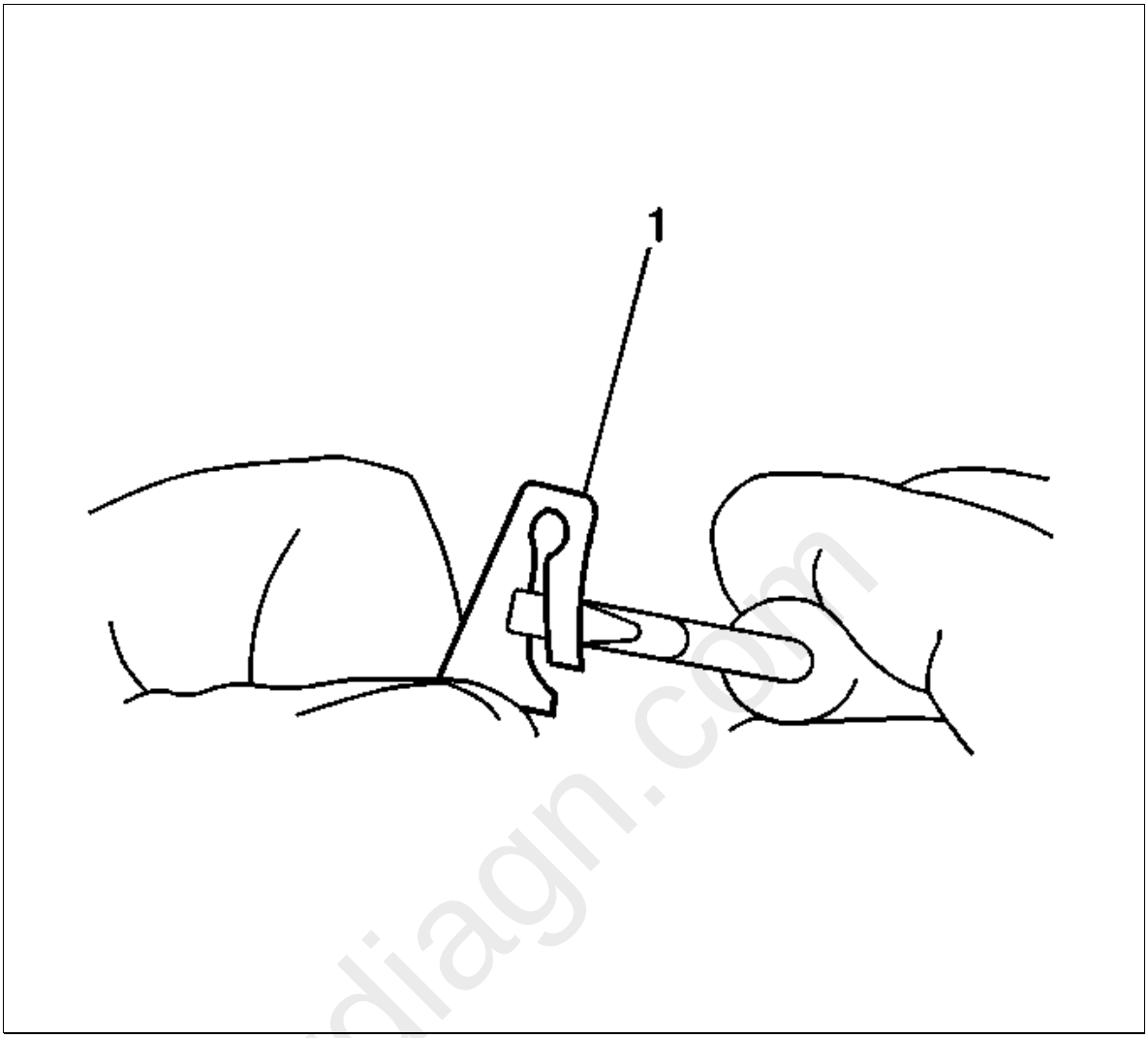


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3. Use the proper pick or removal tool (1) in order to release the terminal.
4. Gently pull the cable and the terminal (2) out of the back of the connector.

Fig 3: Locking Device



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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 (Terminated Lead Repair) Repairing Connector Terminals (Terminal Repair) procedure.
7. Insert the repaired terminal back into the cavity. Repeat the diagnostic procedure to verify the repair and reconnect the connector bodies.

DIAGNOSTIC INFORMATION AND PROCEDURES > DELPHI CONNECTORS (PUSH TO SEAT) > 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.

DIAGNOSTIC INFORMATION AND PROCEDURES > 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

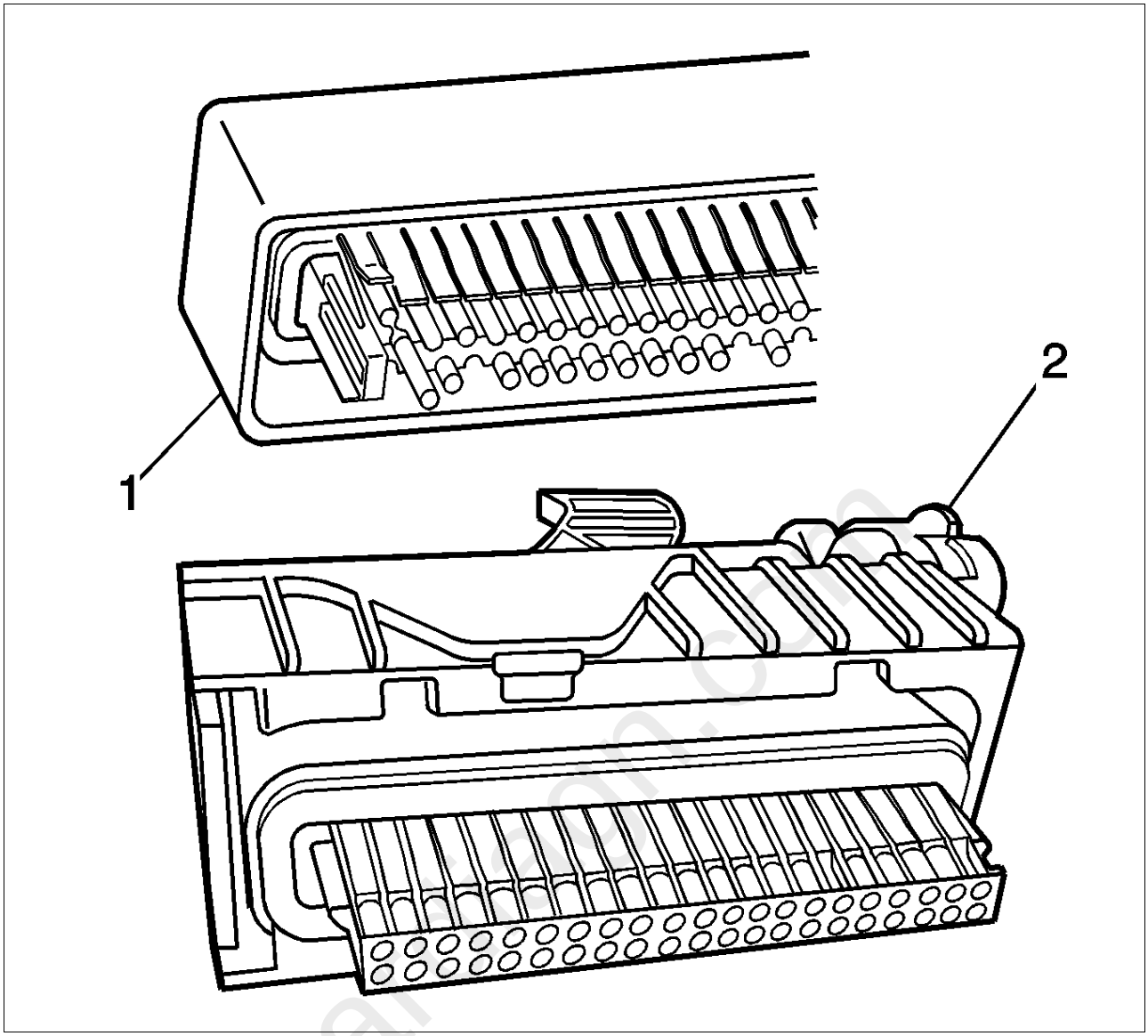
For equivalent regional tools, refer to Special Tools .

DIAGNOSTIC INFORMATION AND PROCEDURES > DELPHI CONNECTORS (MICRO-PACK 100W) > 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.

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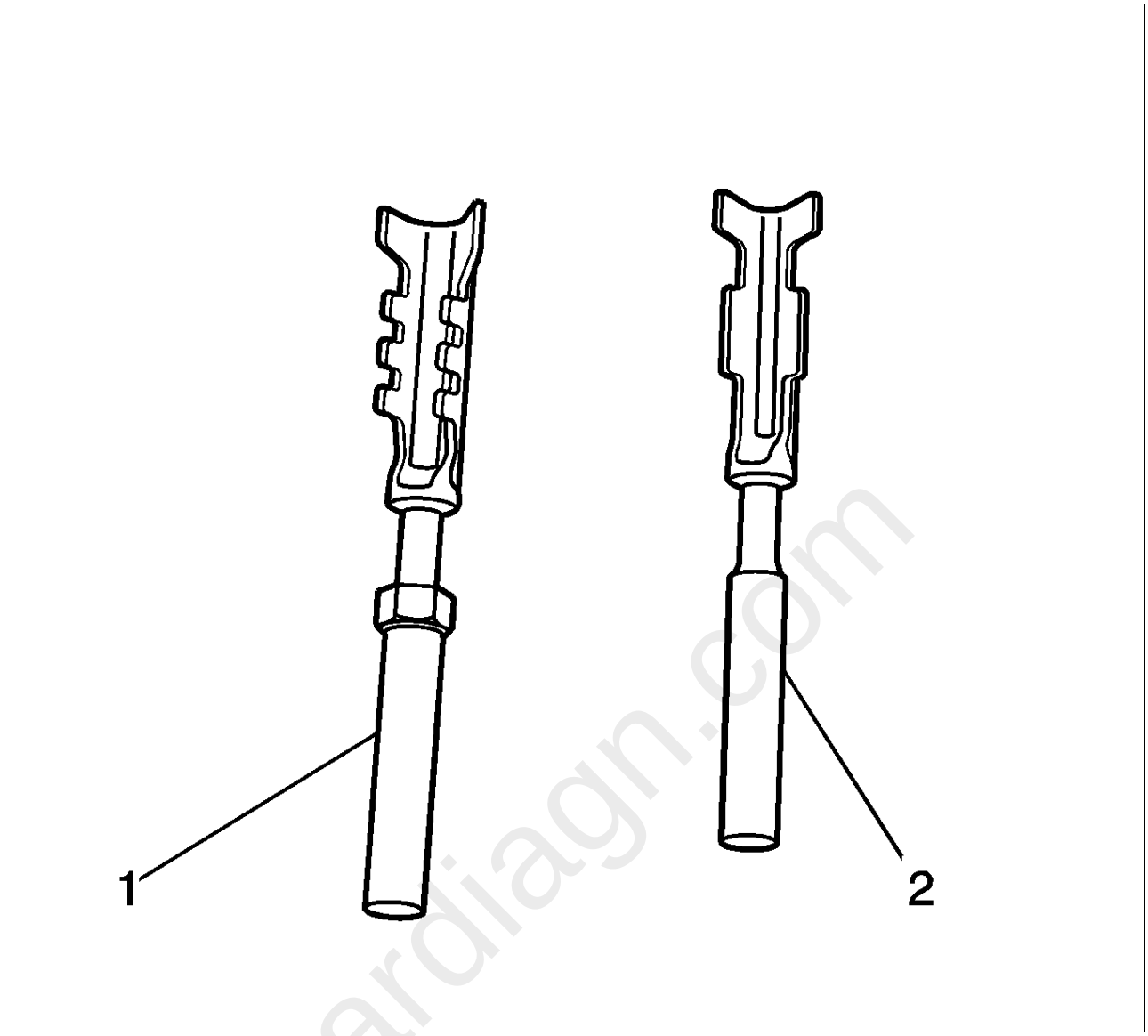
Fig 1: Micro-Pack 100W First & Second Connector Designs



Courtesy of GENERAL MOTORS COMPANY

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.

Fig 2: Micro-Pack 100W Short & Long Terminals



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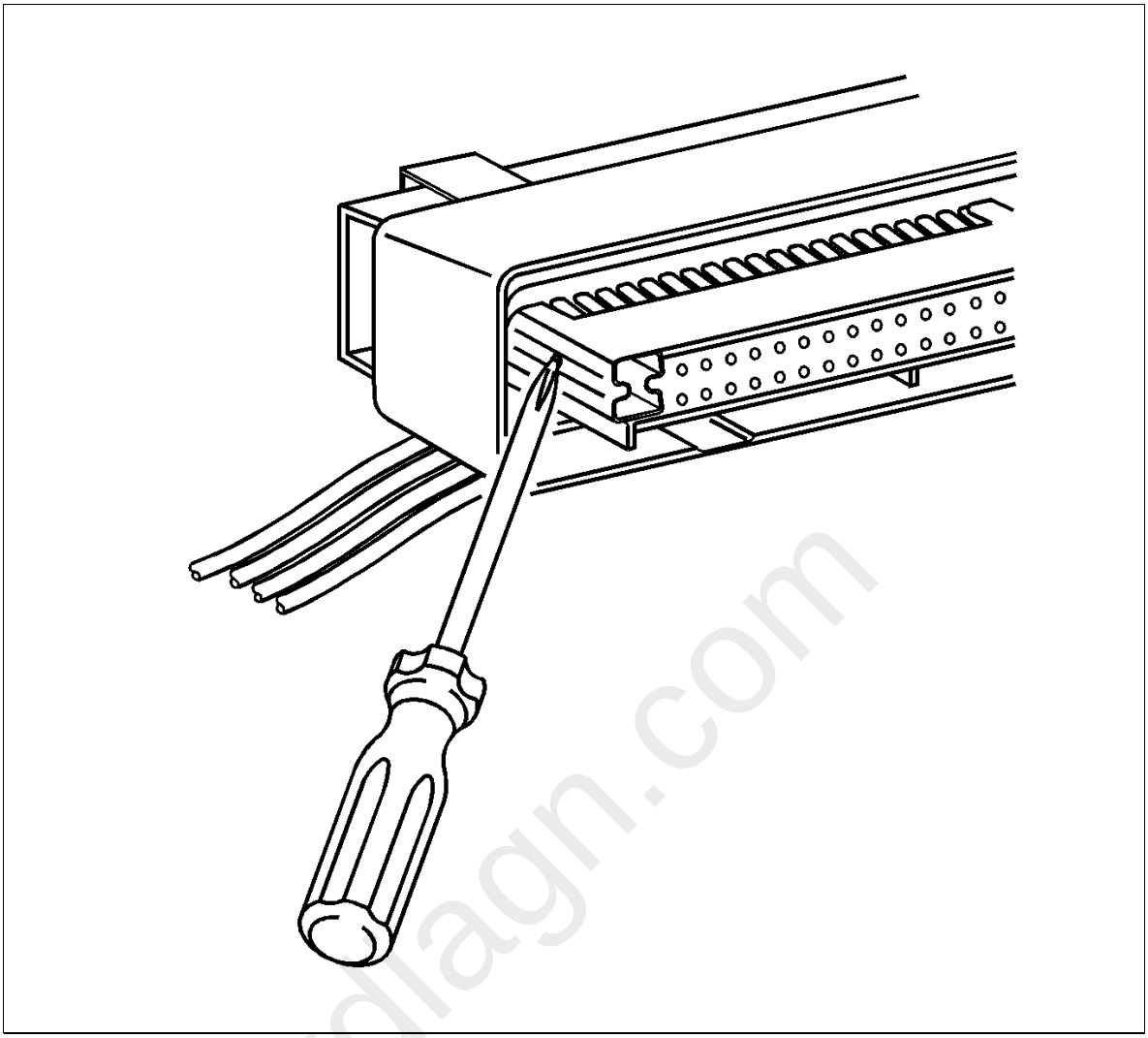
NOTE:

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.

Fig 3: Nose Piece Locking Tabs

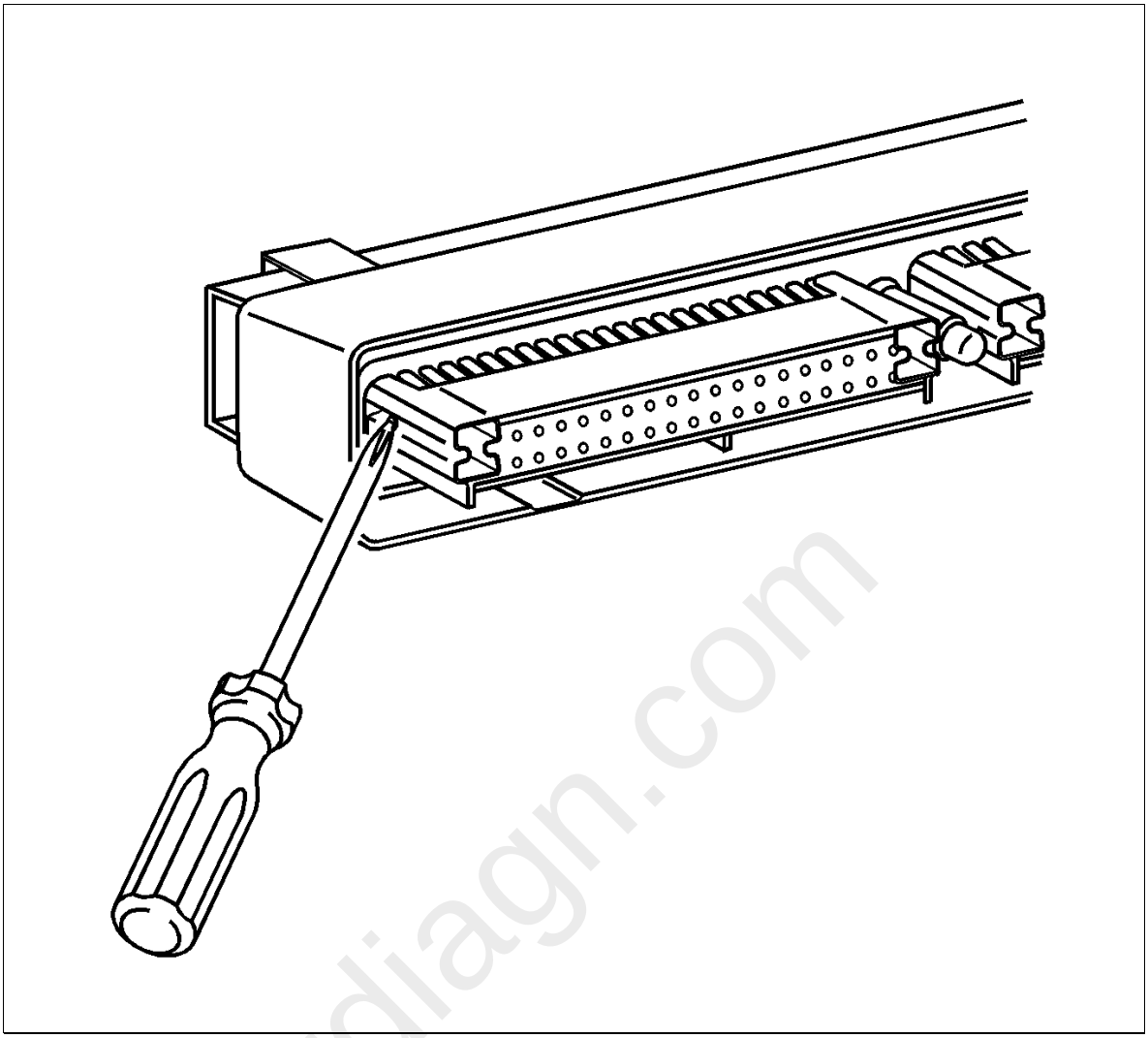


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2. Locate the nose piece locking tabs that are positioned on the side of the connector nose piece. The connector nose piece acts as a terminal positive assurance (TPA) and may be referred to as such.

Fig 4: Loosening Nose Piece Locking Tabs

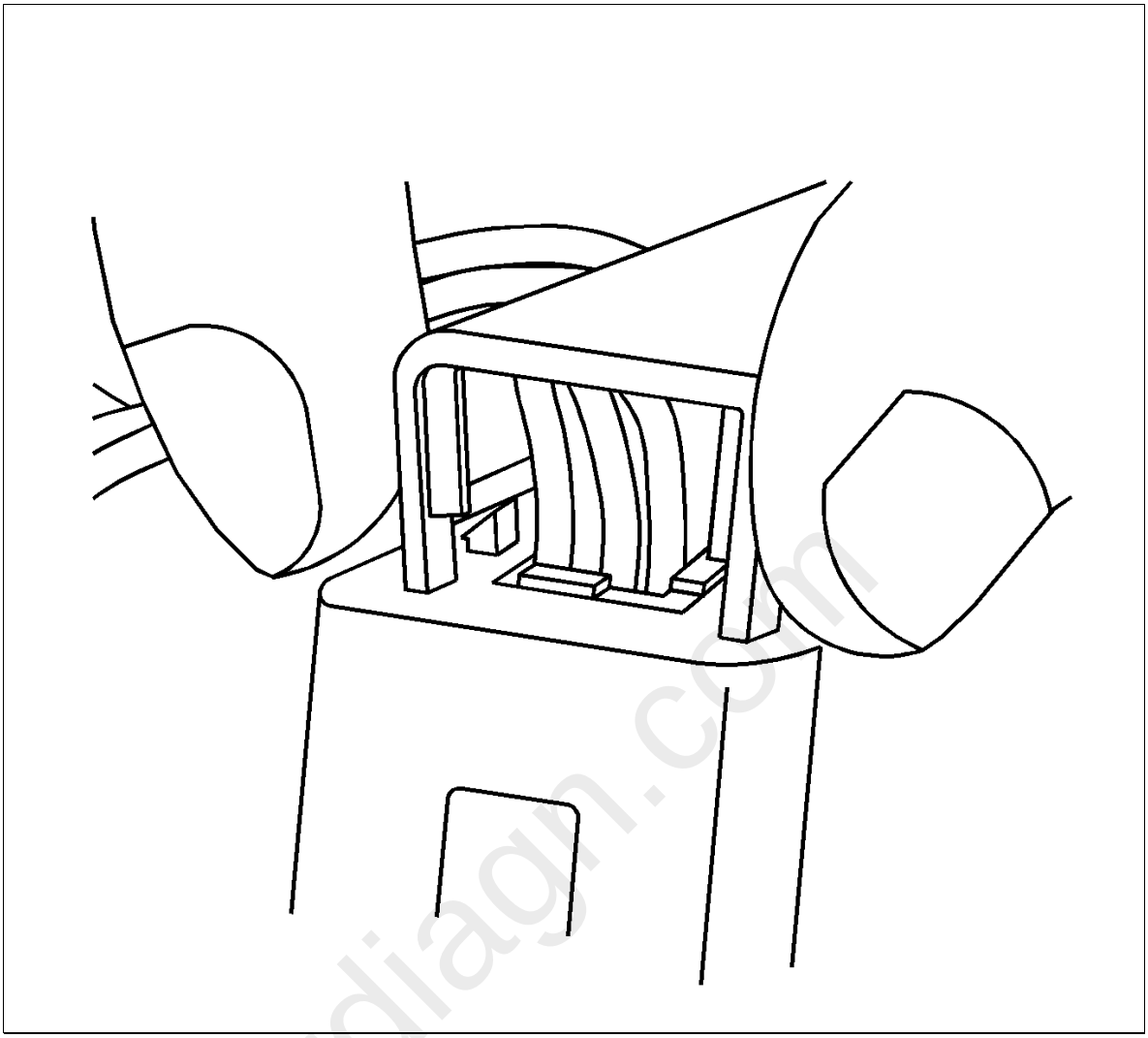


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3. Use a small flat-blade tool to push in one of the locking tabs while gently pulling on the same side of the nose piece.
4. Repeat the procedure for the other locking tab and remove the nose piece.
5. Remove the wire dress cover. The following is a general procedure for wire dress cover removal. Use this procedure as a guide, some dress cover removal procedures may vary.

Fig 5: Squeezing Cover Locking Legs

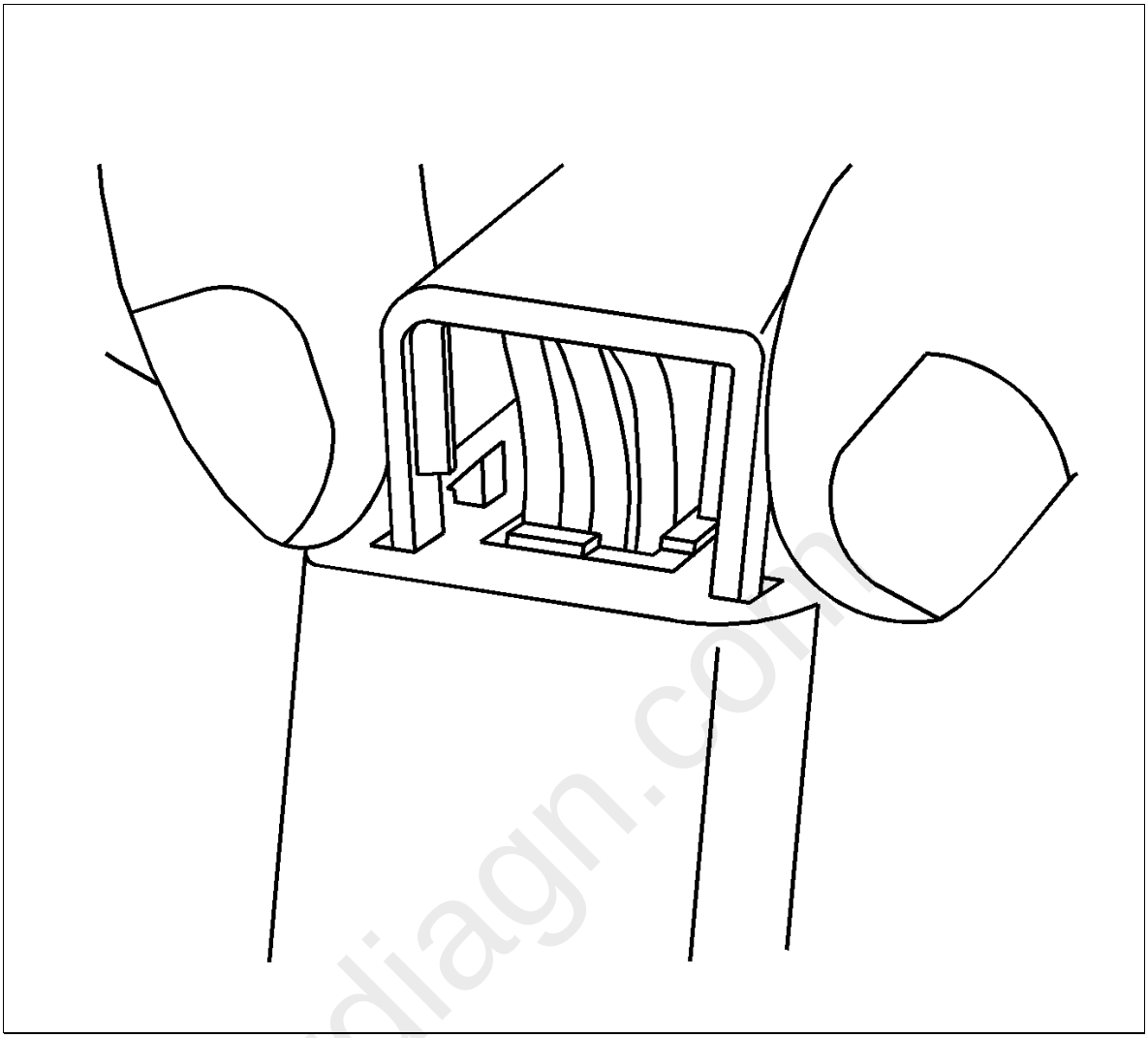


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6. Use fingers to squeeze the 2 locking legs of the cover.

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Fig 6: Unseating Locking Leg

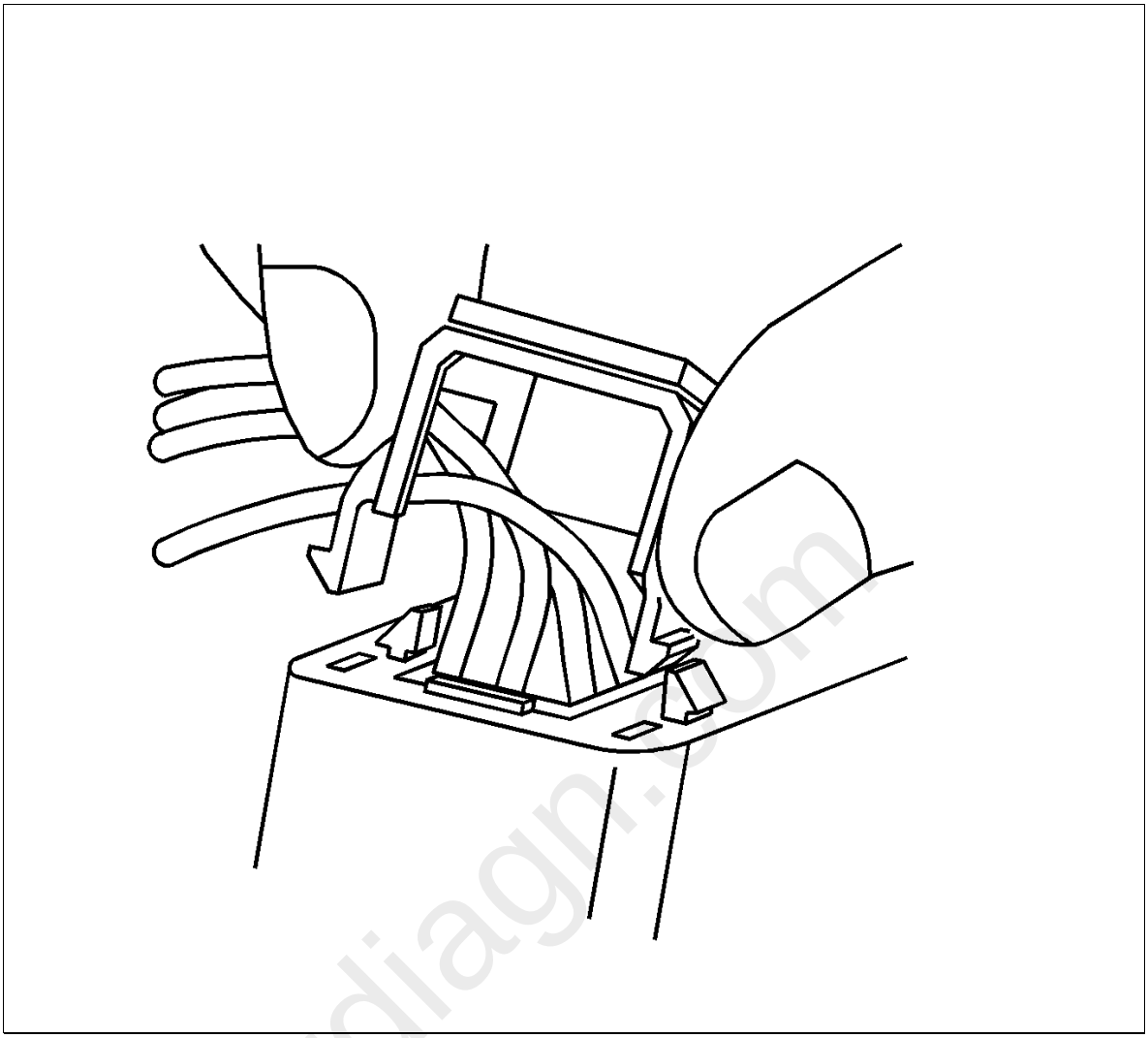


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7. Apply pressure and gently rock the cover until one locking leg is unseated.

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Fig 7: Cover

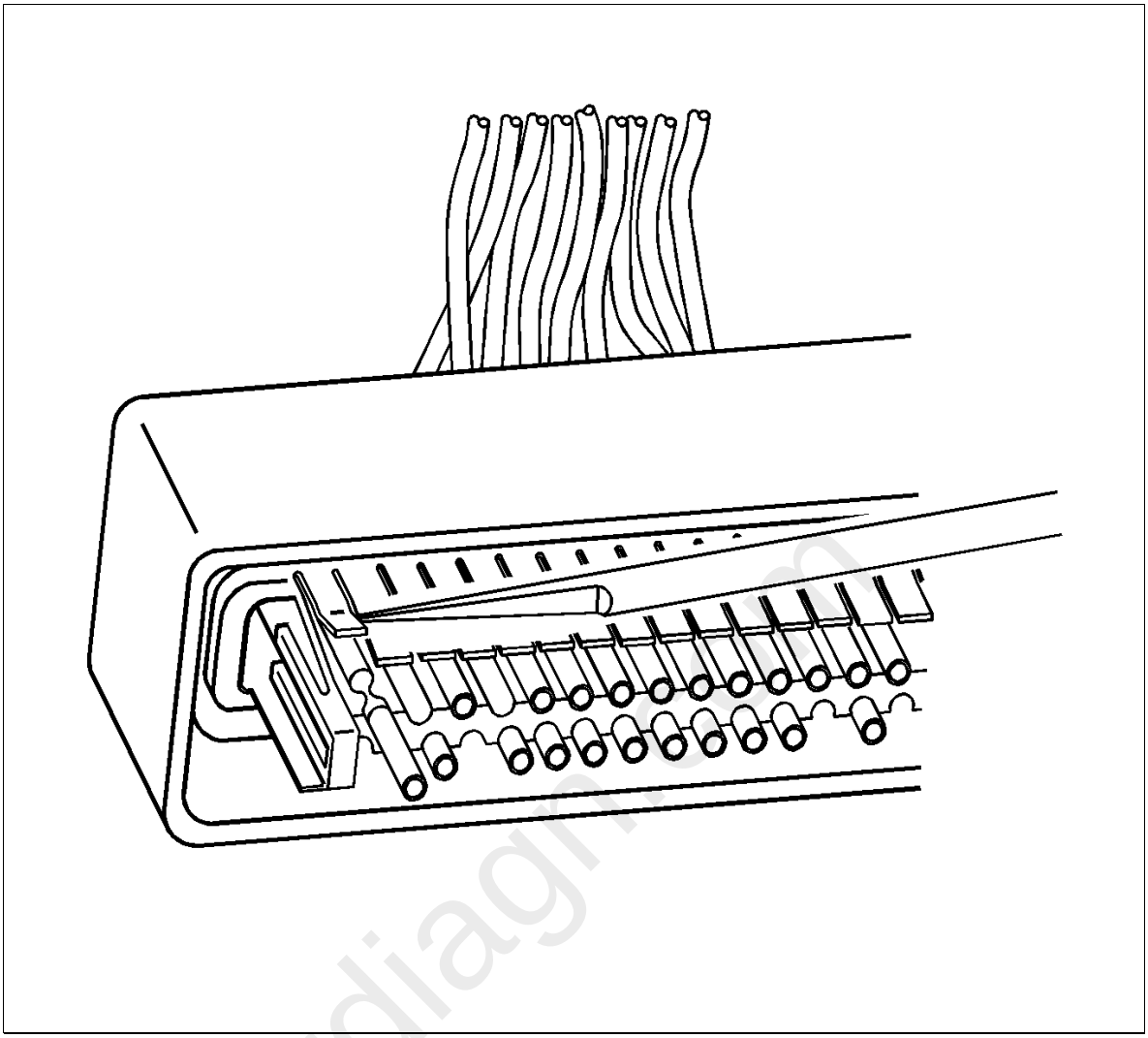


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8. Continue to apply pressure and rock the cover until the second locking leg is unseated. Repeat procedure for the other side of the dress cover and remove the cover.

Fig 8: Terminal Retaining Tab



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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 (Terminated Lead Repair) Repairing Connector Terminals (Terminal Repair) procedure.
12. Insert the repaired terminal back into the cavity. Repeat the diagnostic procedure to verify the repair and reconnect the connector bodies.

DIAGNOSTIC INFORMATION AND PROCEDURES > DELPHI CONNECTORS

(MICRO-PACK 100W) > 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.
3. To assemble the connector, reverse the Terminal Removal Procedure.

DIAGNOSTIC INFORMATION AND PROCEDURES > 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

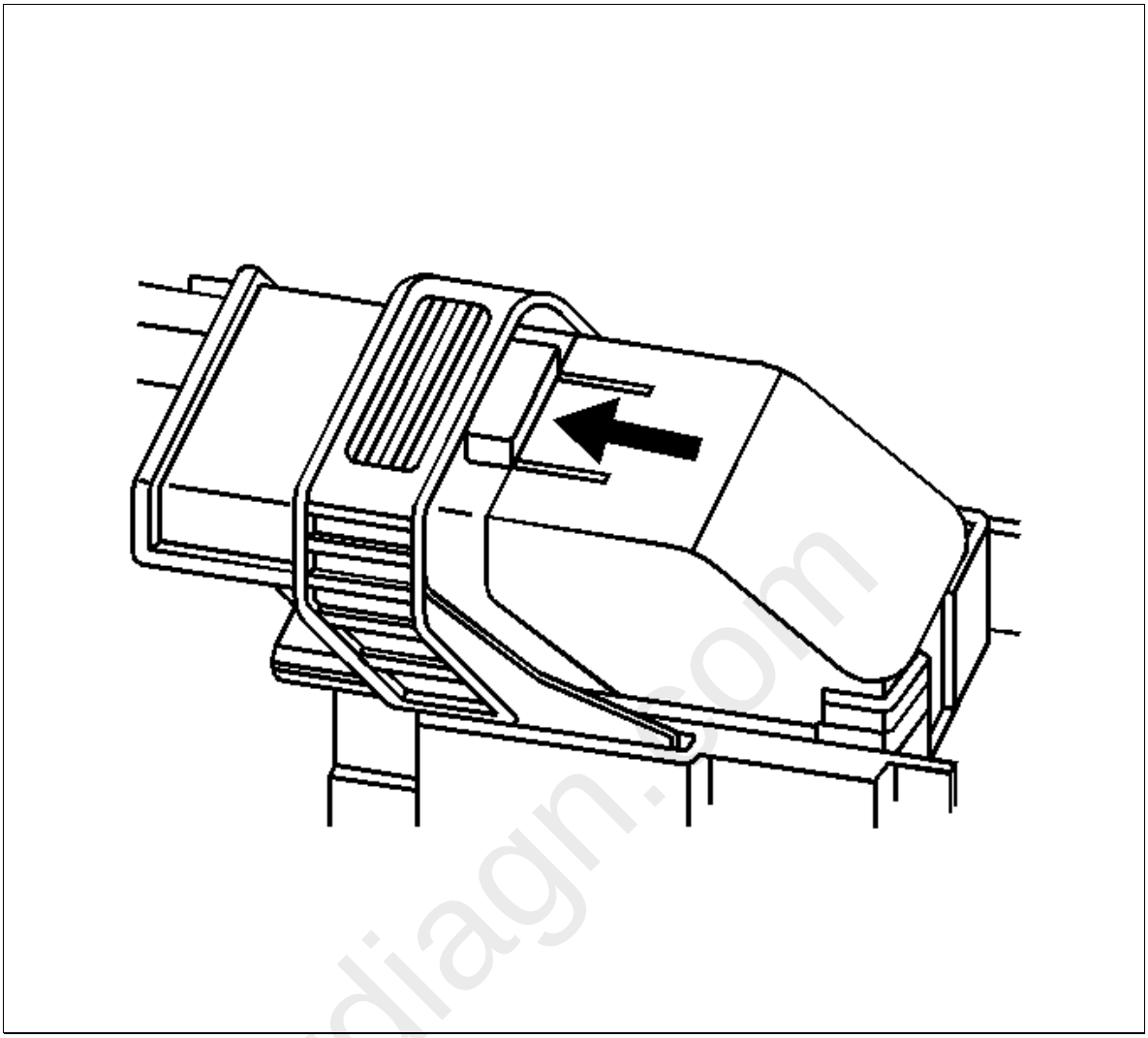
For equivalent regional tools, refer to Special Tools .

DIAGNOSTIC INFORMATION AND PROCEDURES > DELPHI CONNECTORS (MICRO.64) > TERMINAL REMOVAL PROCEDURE

Follow the steps below in order to remove terminals from Micro.64 connectors.

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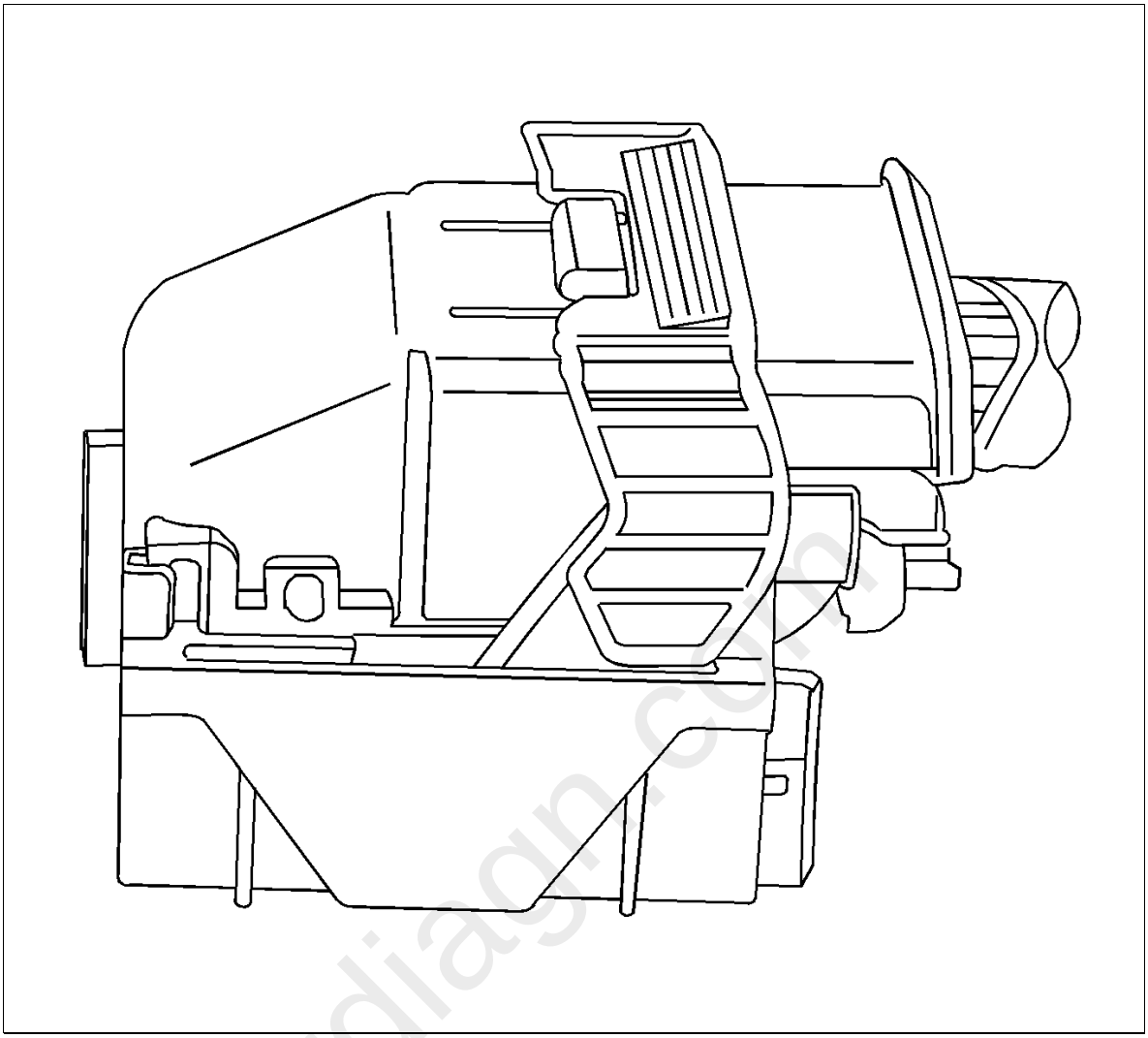
Fig 1: Wire Dress Cover Lever Lock



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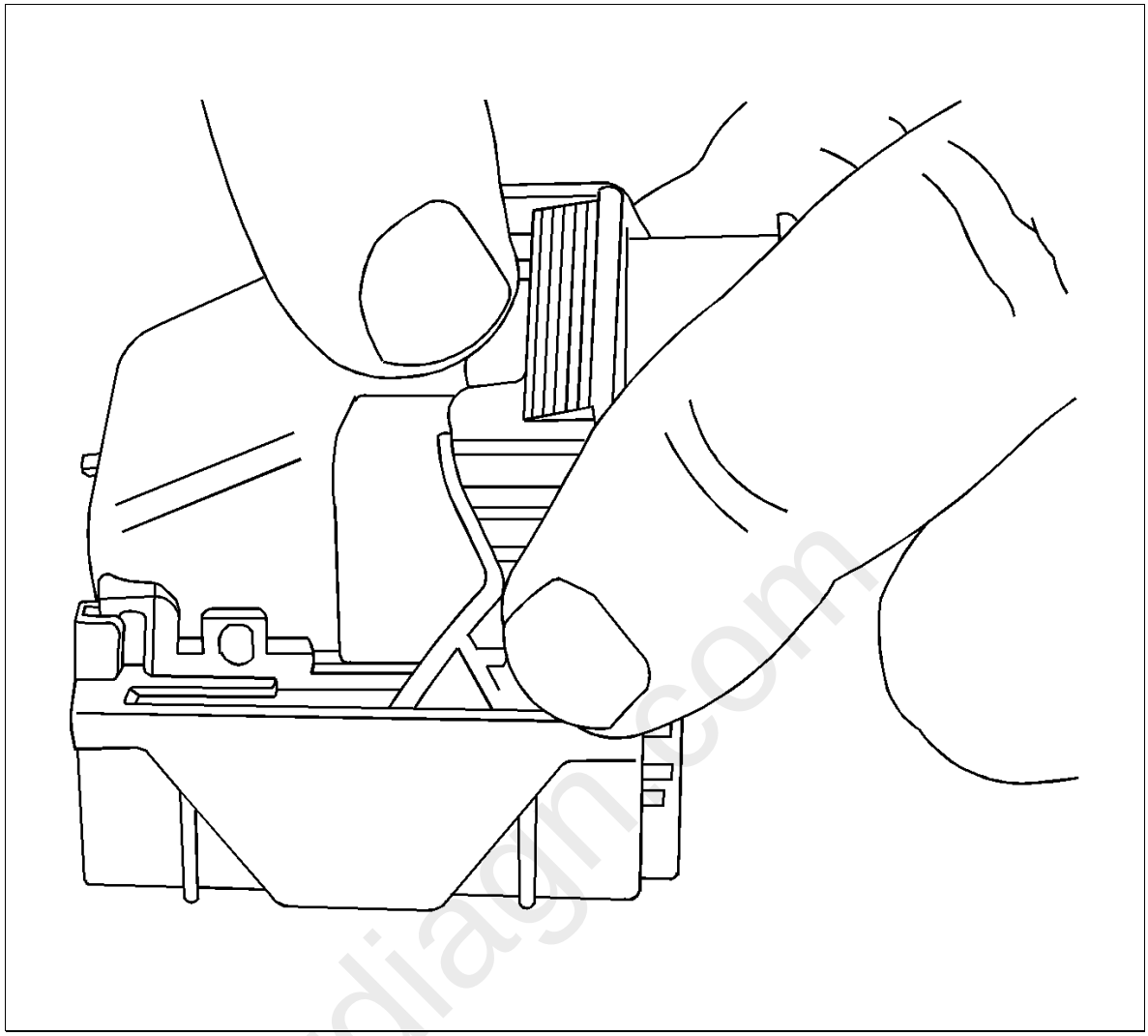
Fig 2: Typical Micro 64 Connector



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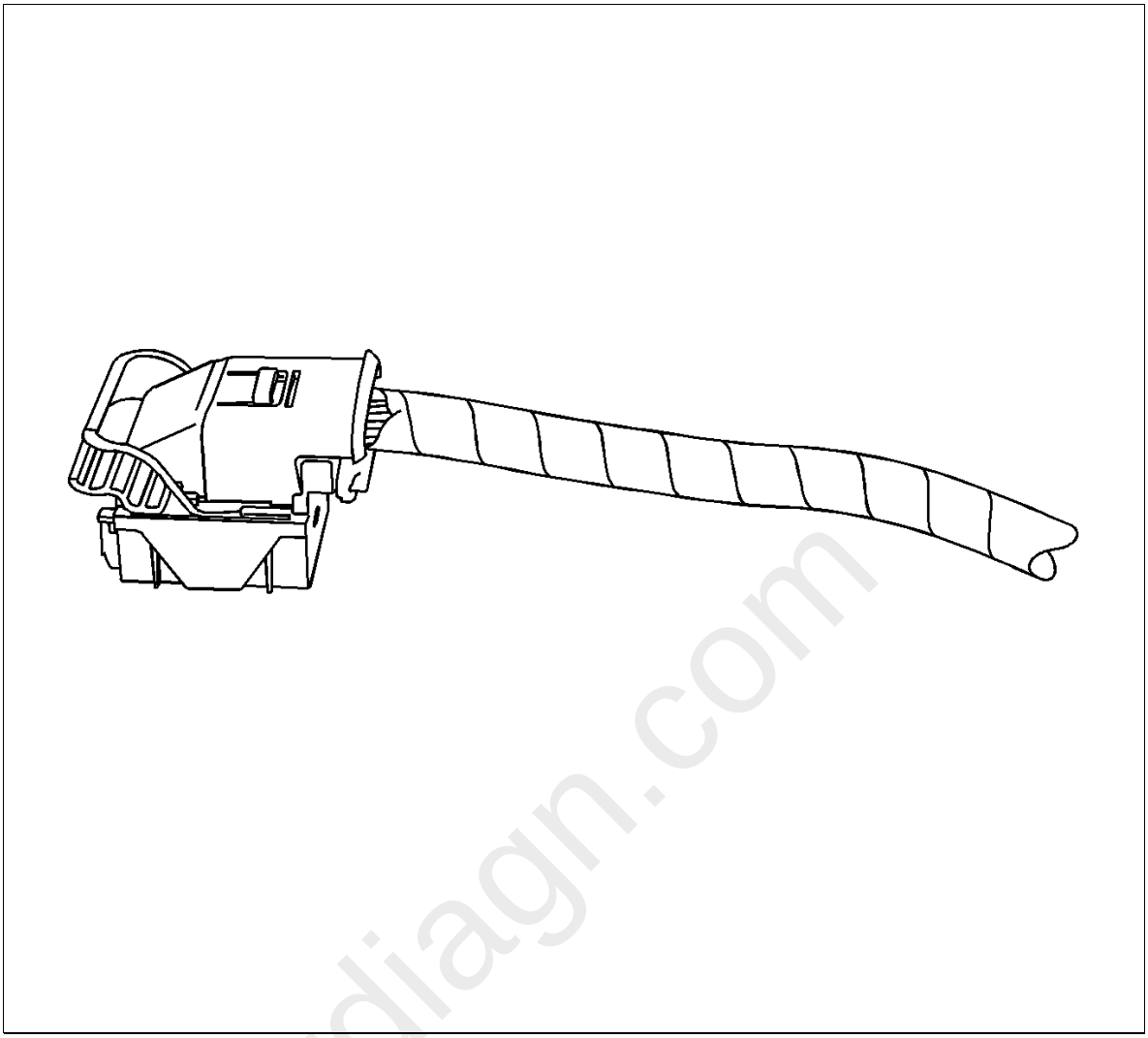
Fig 3: Depressing Lock And Pulling Lever



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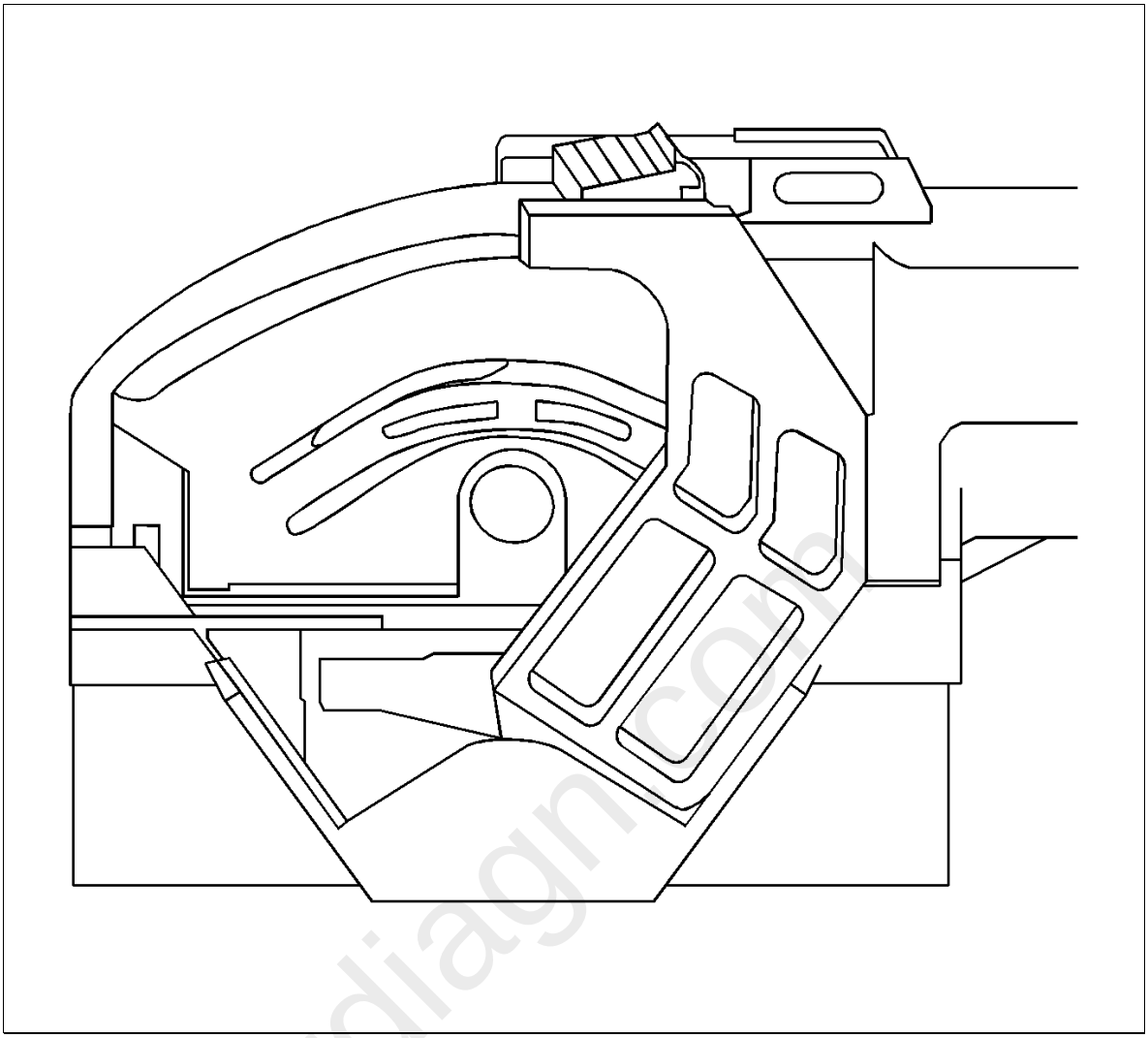
Fig 4: Connector When Released From Component



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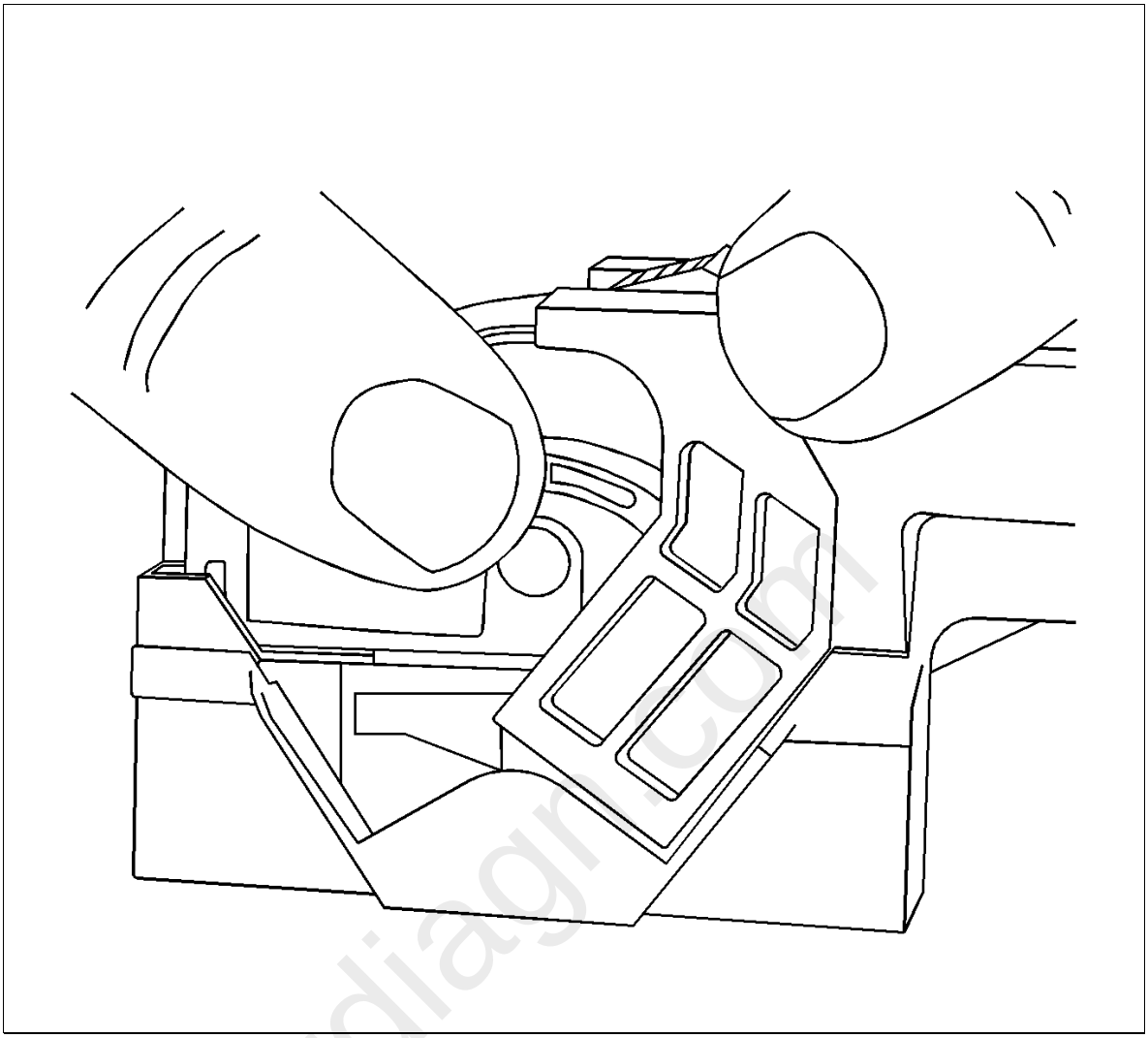
Fig 5: Another Type Of Micro 64 Connector



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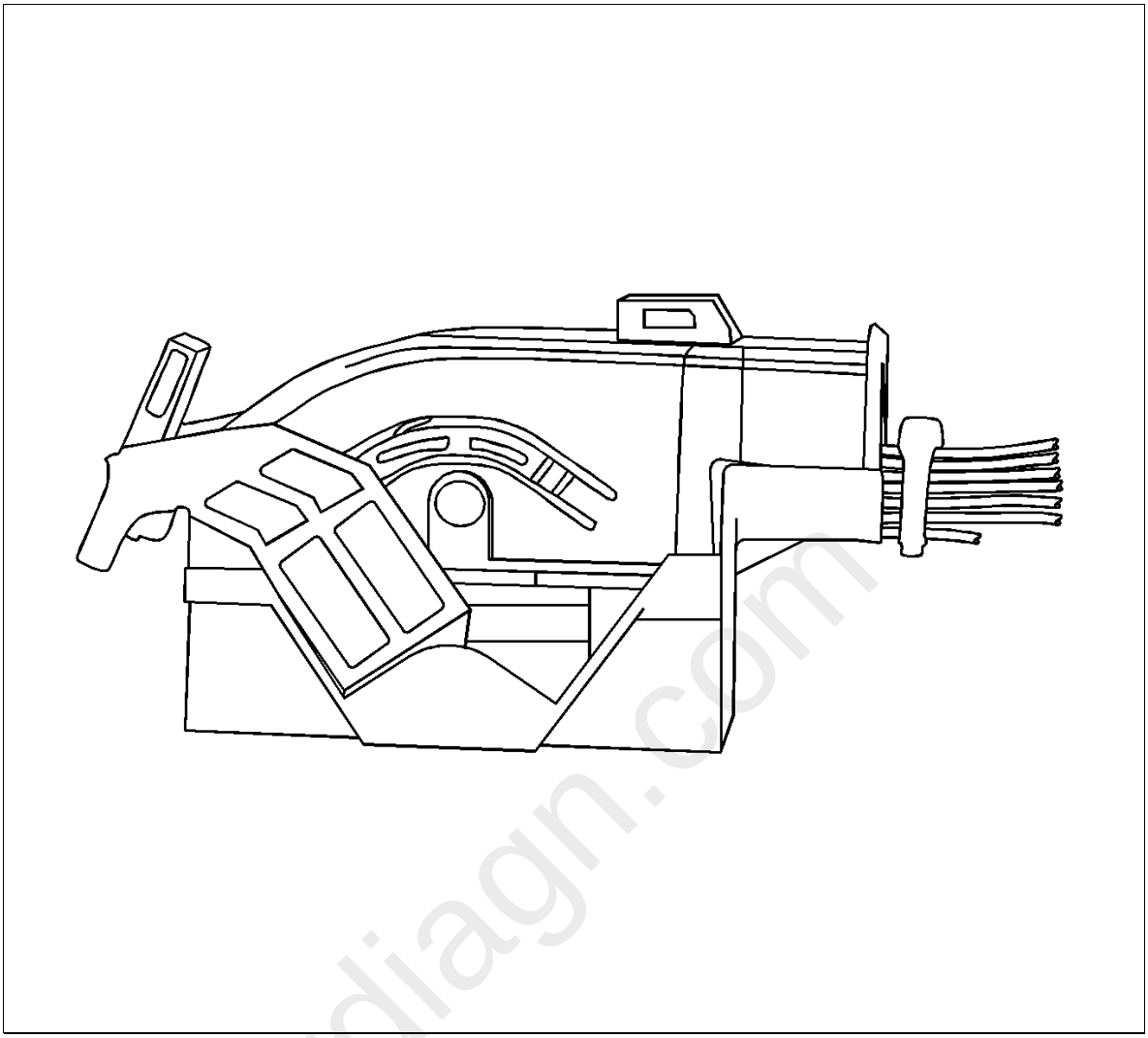
Fig 6: Locks On Both Sides Of Wiredress Cover



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Fig 7: Connector When Released From Component



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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.

   Depress the lock and pull the lever over and past the lock.

   View of the connector when released from the component.

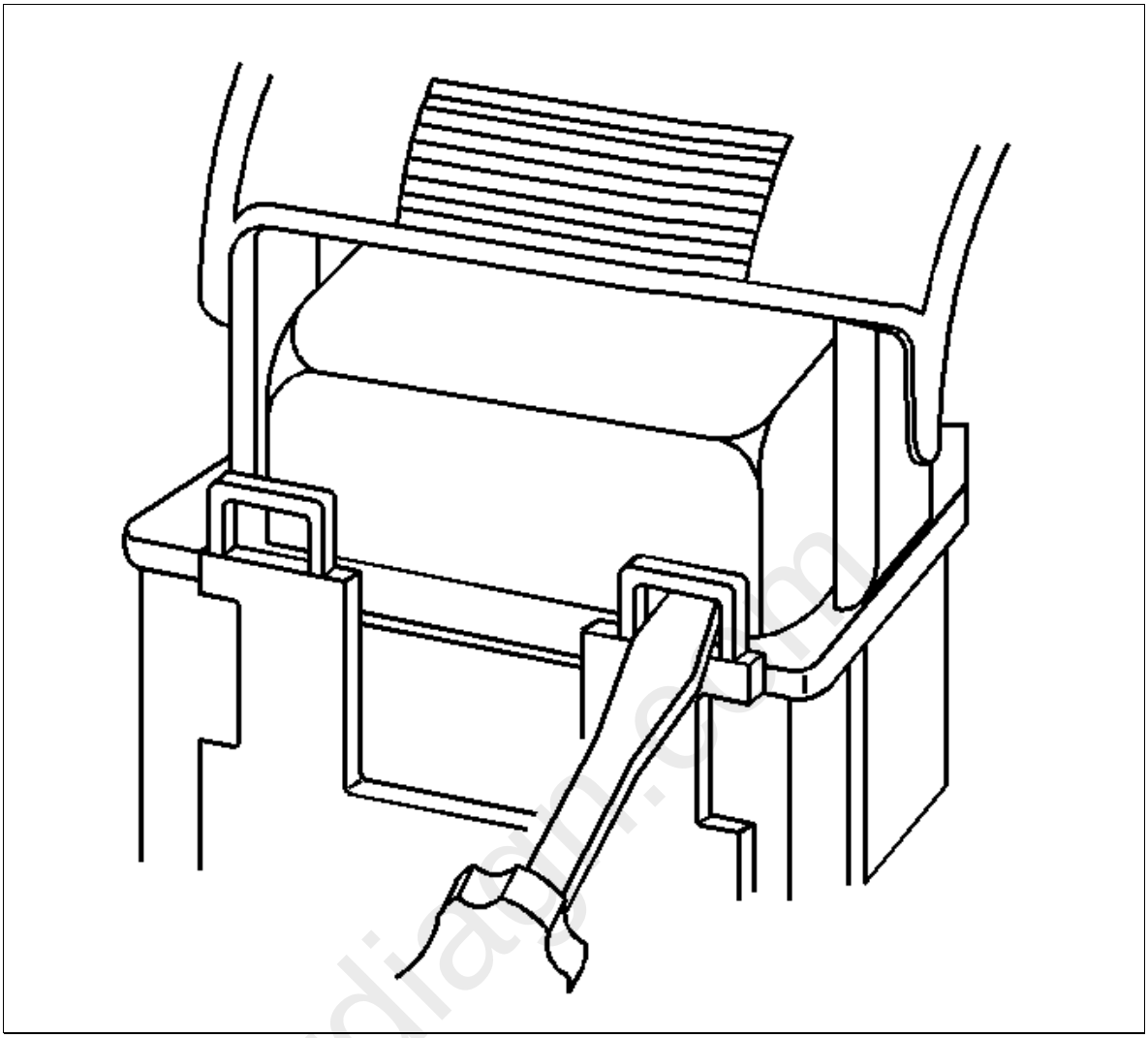
   View of another type of Micro 64 connector.

   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.

Fig 8: Releasing Locking Tabs

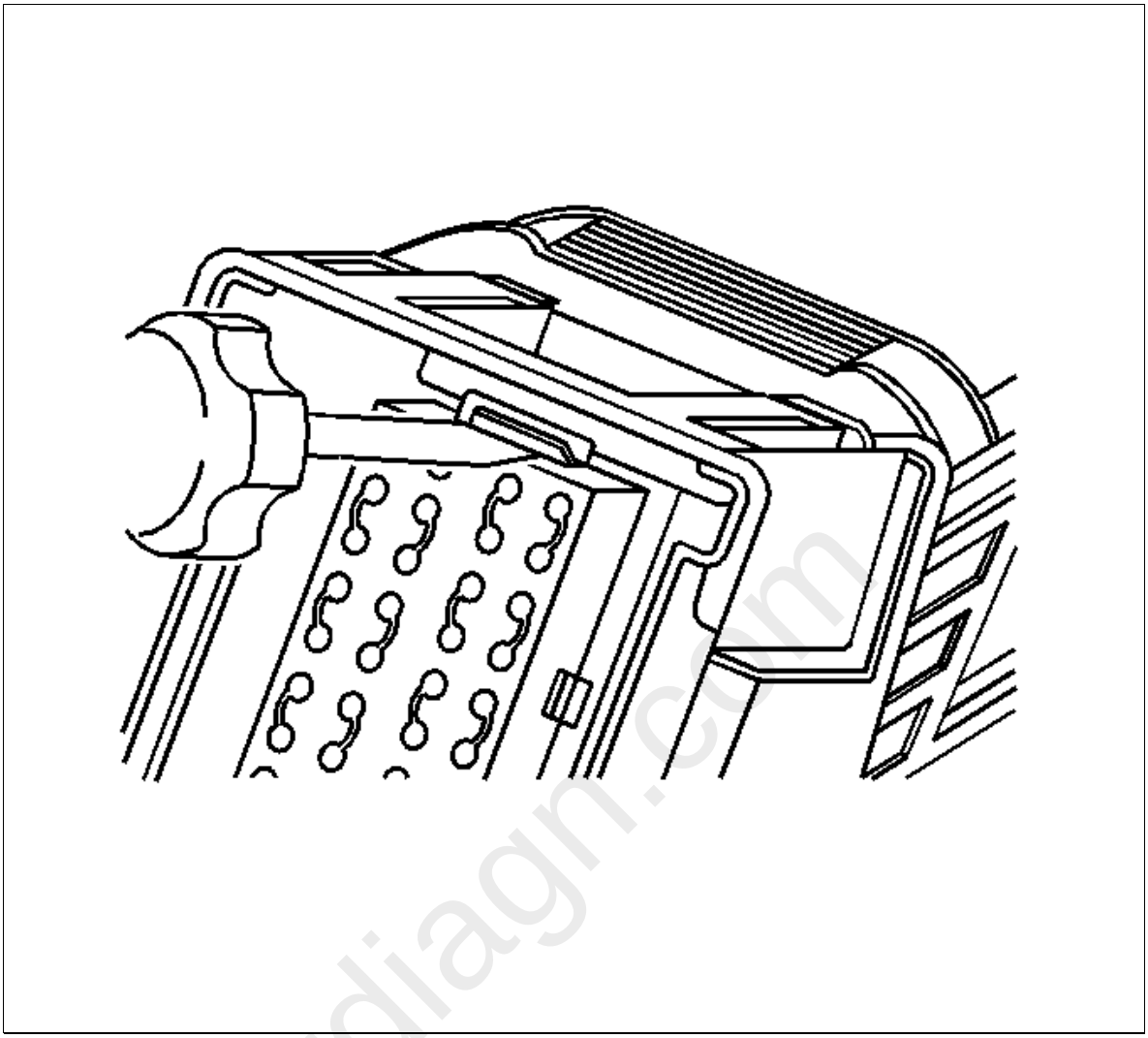


Courtesy of GENERAL MOTORS COMPANY

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.

4. Once the front 2 locks are unlocked, lift the front of the dress cover and pull it forward.

Fig 9: Terminal Position Assurance



Courtesy of GENERAL MOTORS COMPANY

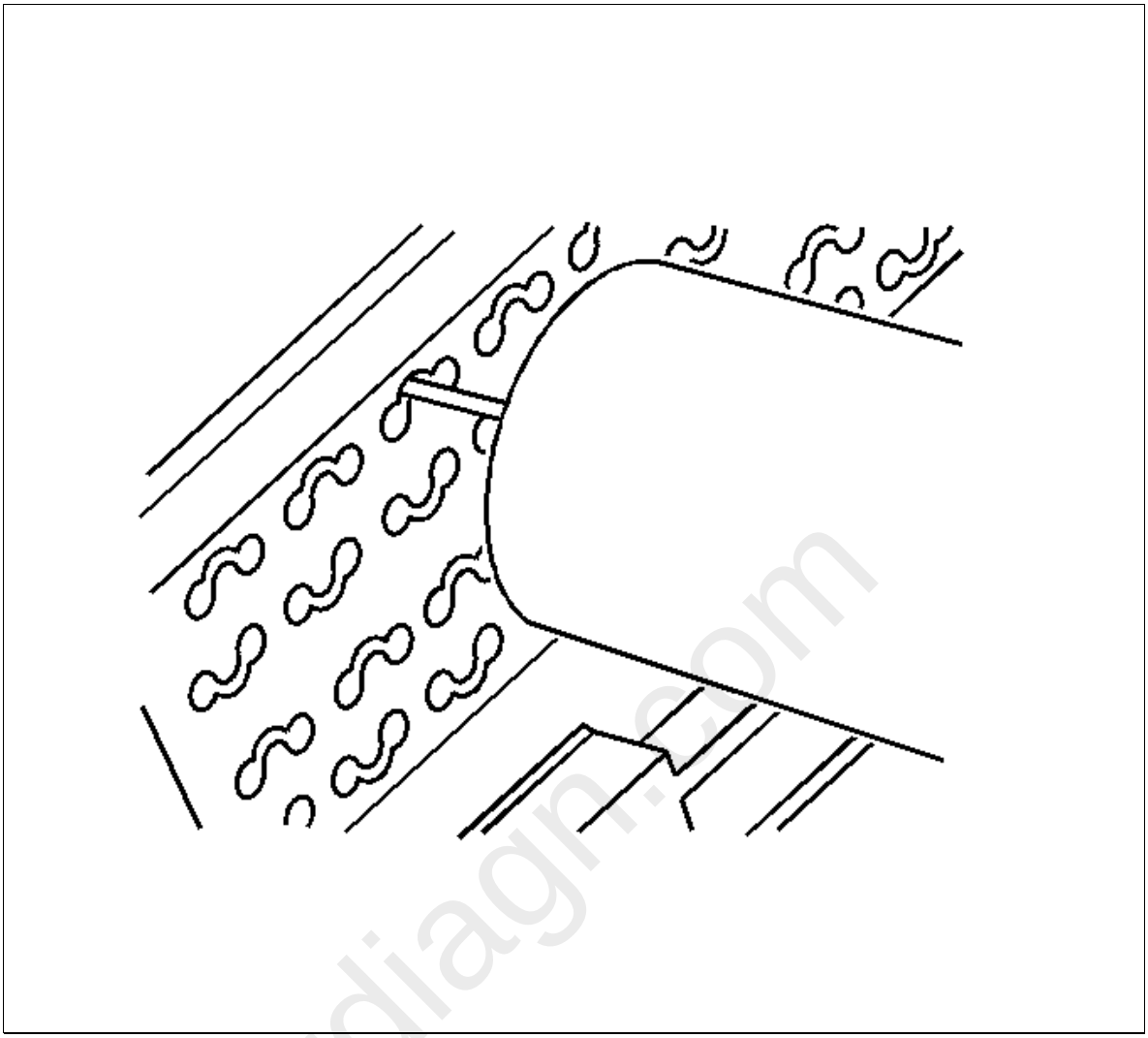
cardiagn.com

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.

Fig 10: Terminal Release Tool



Courtesy of GENERAL MOTORS COMPANY

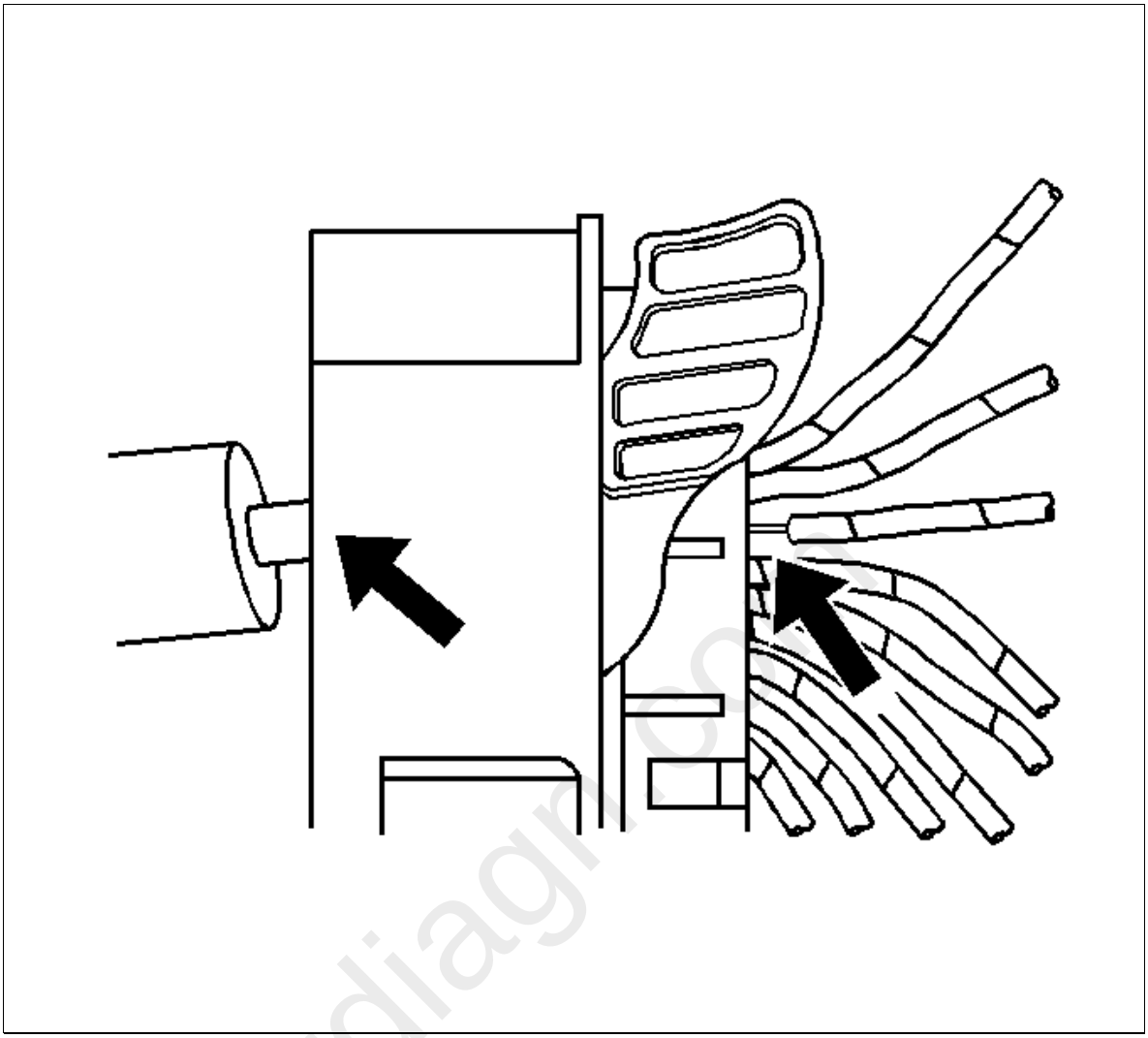
NOTE:

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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Fig 11: Wire From Back Of Connector



Courtesy of GENERAL MOTORS COMPANY

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 (Terminated Lead Repair) Repairing Connector Terminals (Terminal Repair) procedure.
9. Insert the repaired terminal back into the cavity. Repeat the diagnostic procedure to verify the repair and reconnect the connector bodies.

DIAGNOSTIC INFORMATION AND PROCEDURES > DELPHI CONNECTORS (12-WAY)

Special Tools

- **EL-38125-550** Terminal Release Tool Kit
- **EL-38125-580** Terminal Release Tool Kit

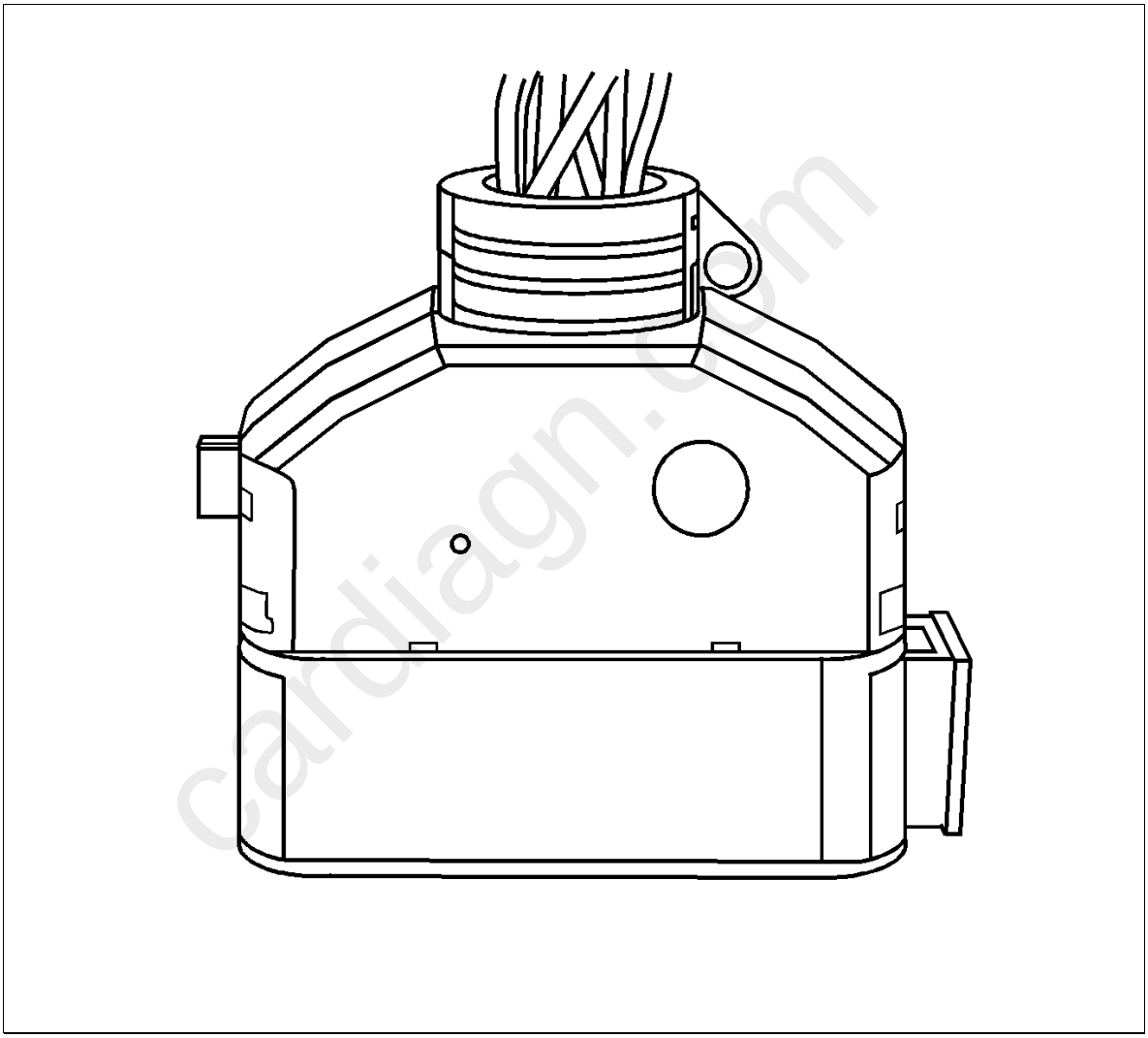
- **J-38125-12A** Terminal Release Tool

For equivalent regional tools, refer to Special Tools .

DIAGNOSTIC INFORMATION AND PROCEDURES > DELPHI CONNECTORS (12-WAY) > TERMINAL REMOVAL PROCEDURE

Follow the steps below in order to remove terminals from the connector.

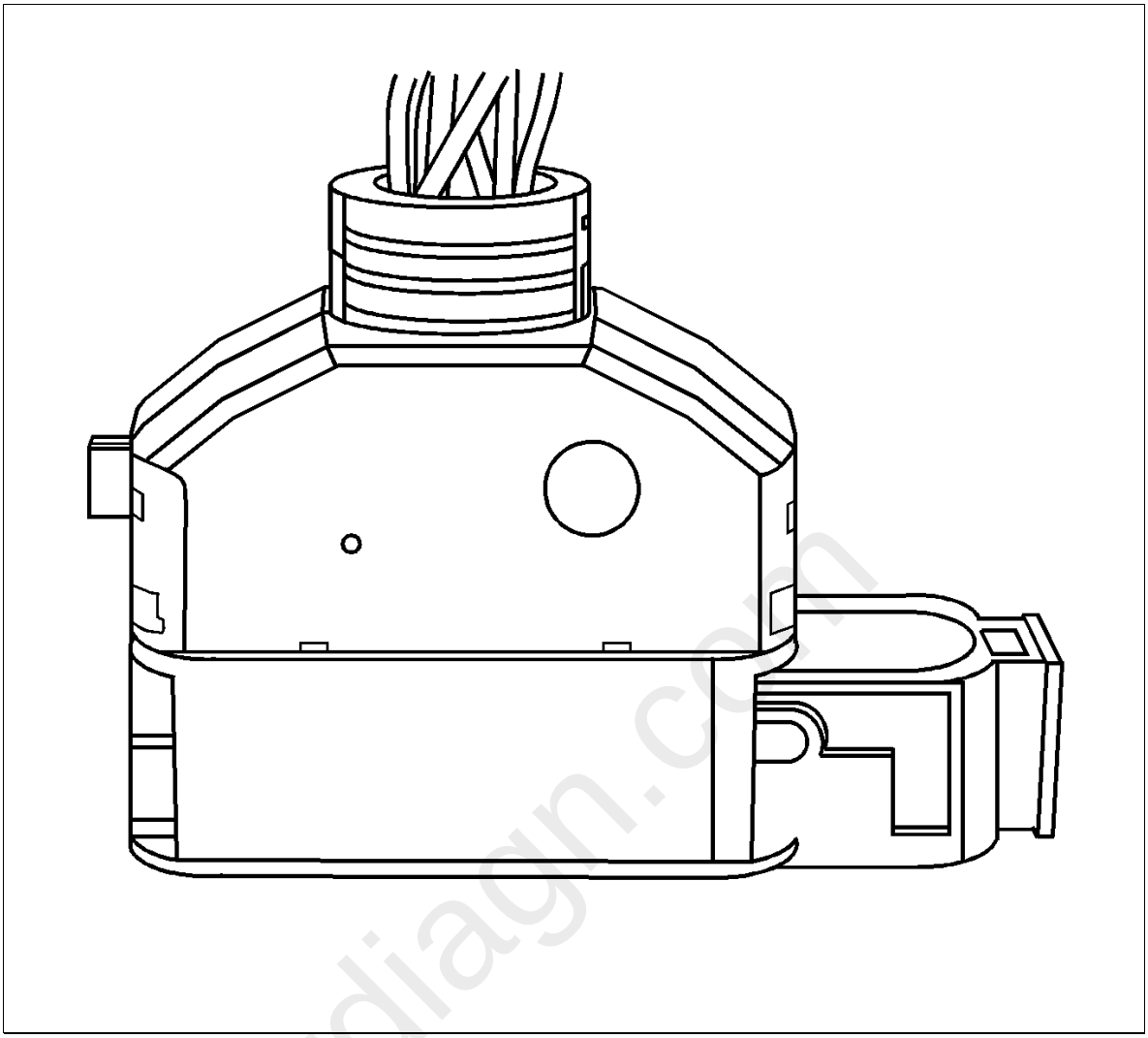
Fig 1: Lever Lock



Courtesy of GENERAL MOTORS COMPANY

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.

Fig 2: Dress Cover Locking Tabs

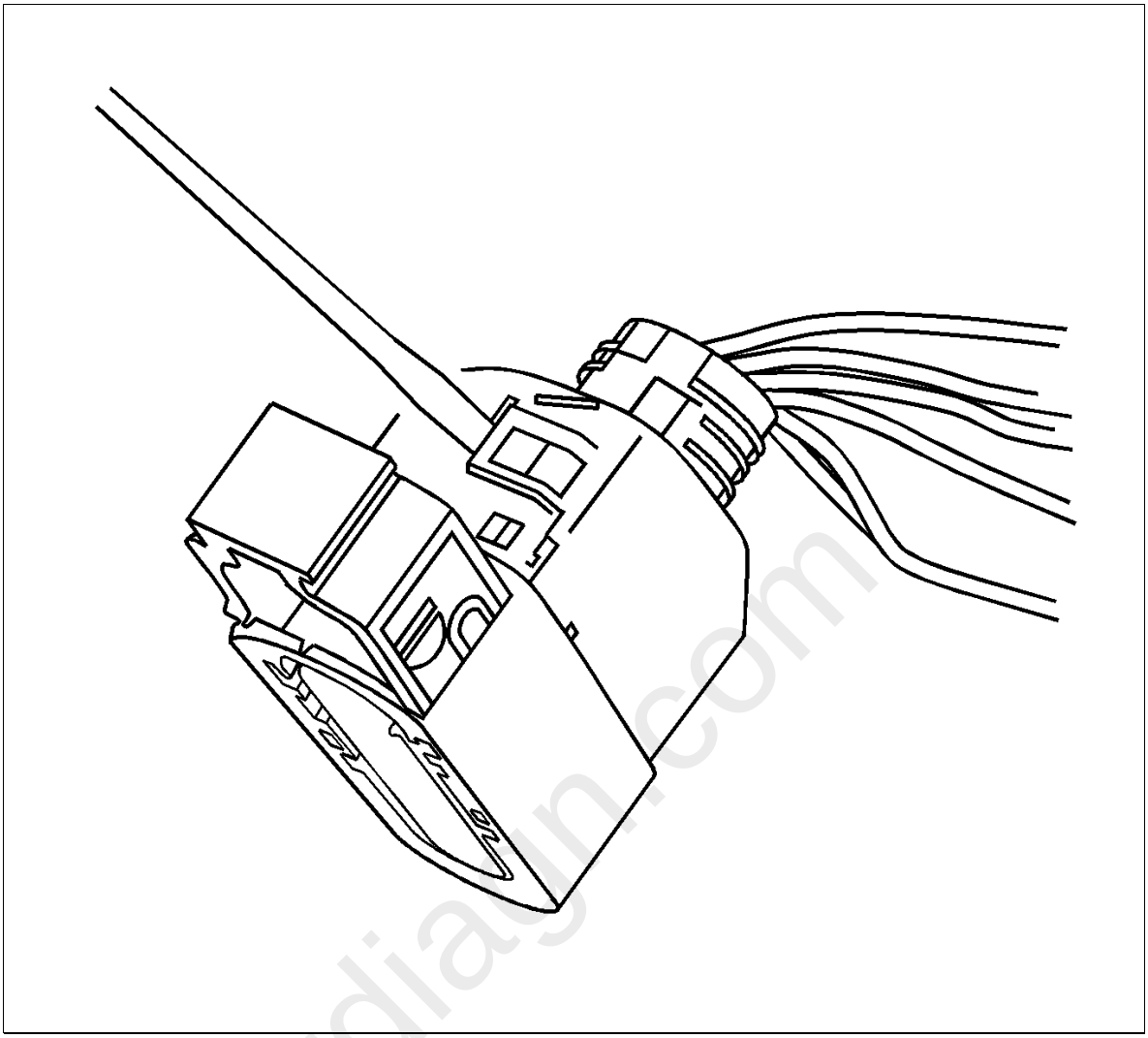


Courtesy of GENERAL MOTORS COMPANY

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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.

Fig 3: Lower Wire Dress Cover Locking Tab

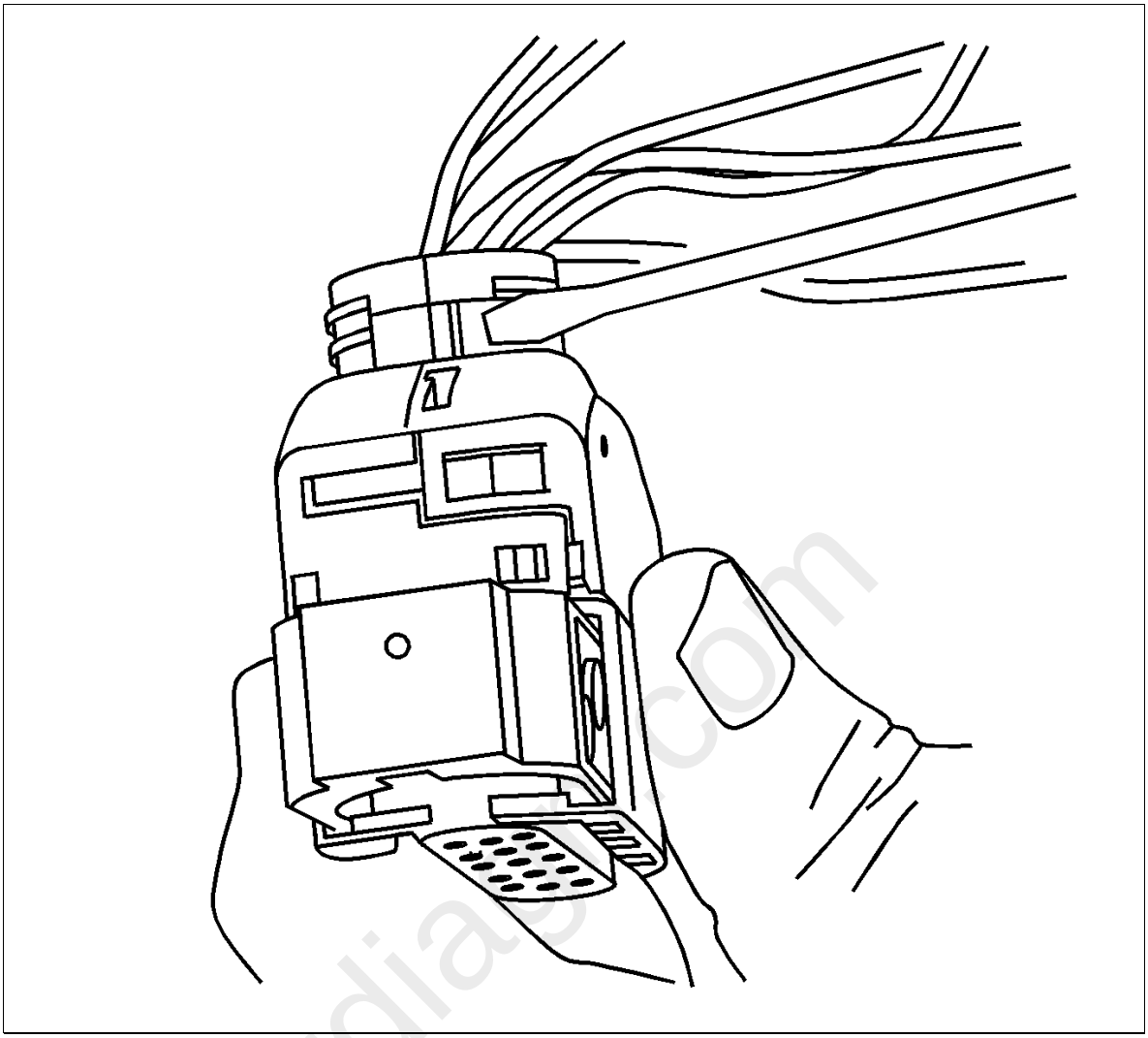


Courtesy of GENERAL MOTORS COMPANY

4. Release the lower wire dress cover locking tab.

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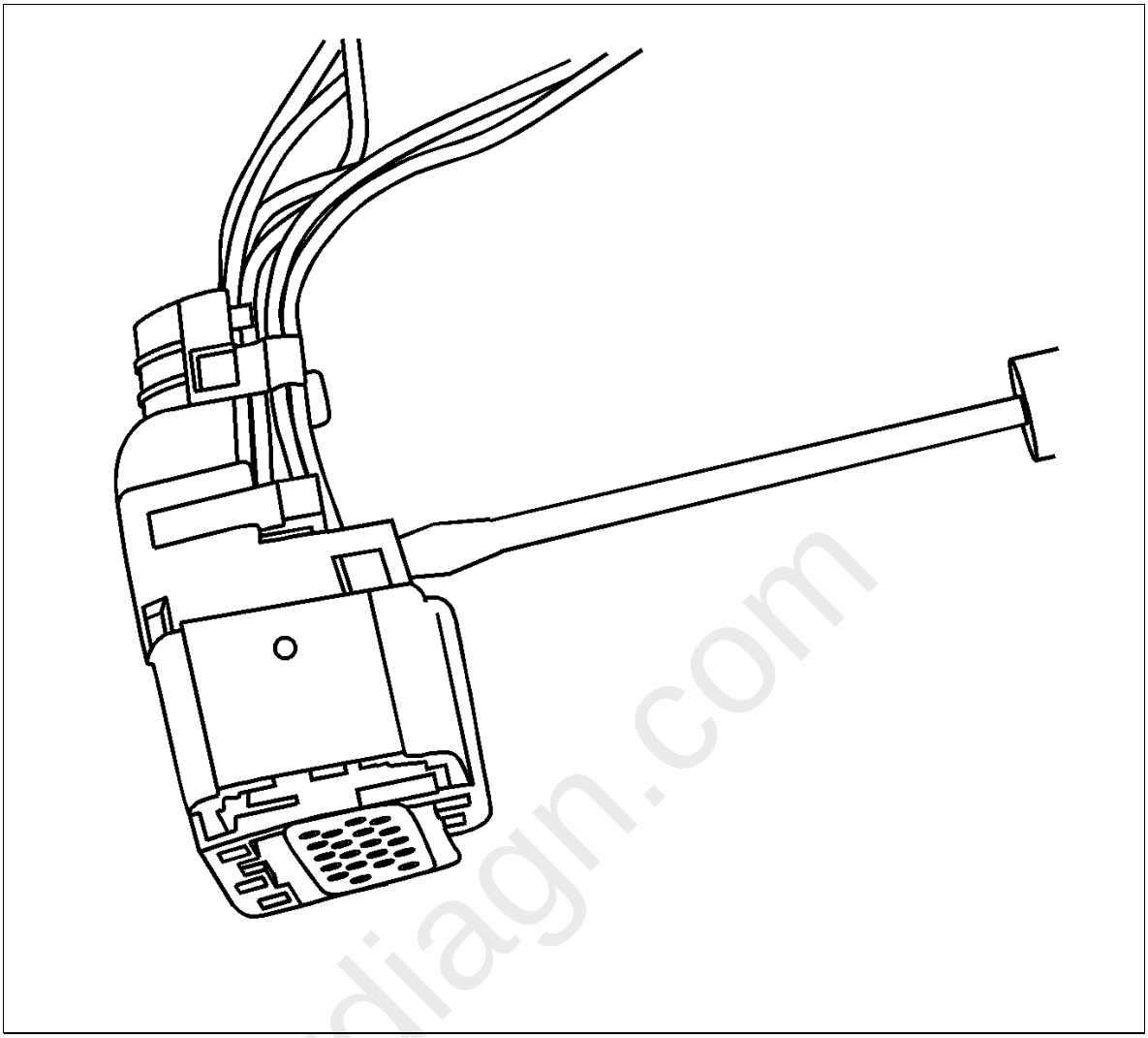
Fig 4: Upper Wire Dress Cover Locking Tab



Courtesy of GENERAL MOTORS COMPANY

5. Release the upper wire dress cover locking tab.
6. Once the locks are unlocked, lift the dress cover off.

Fig 5: TPA Being Pried Out Of Connector



Courtesy of GENERAL MOTORS COMPANY

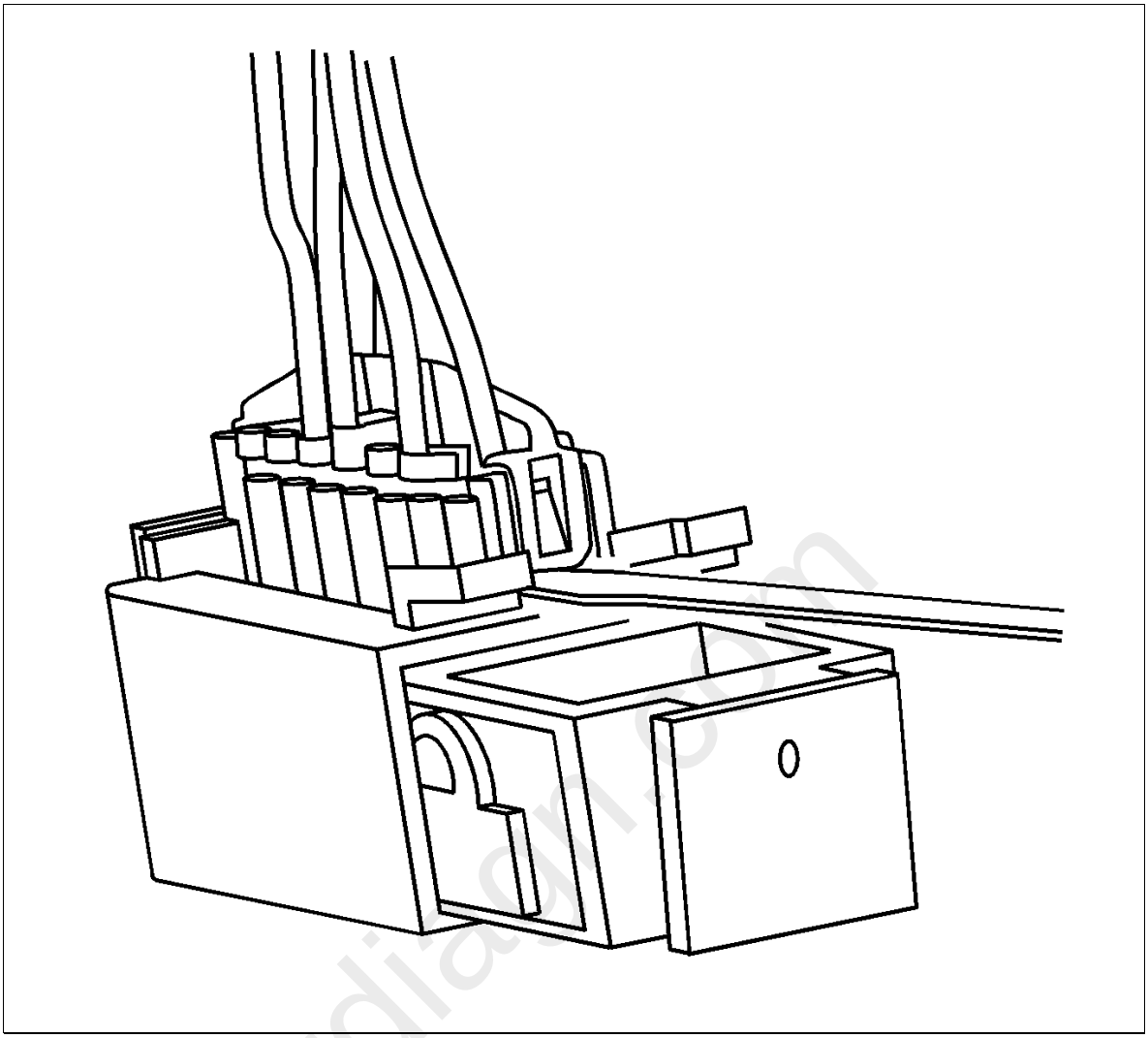
cardiagn.com

NOTE:

Always use care when removing a terminal position assurance (TPA) in order to avoid damaging it.

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.

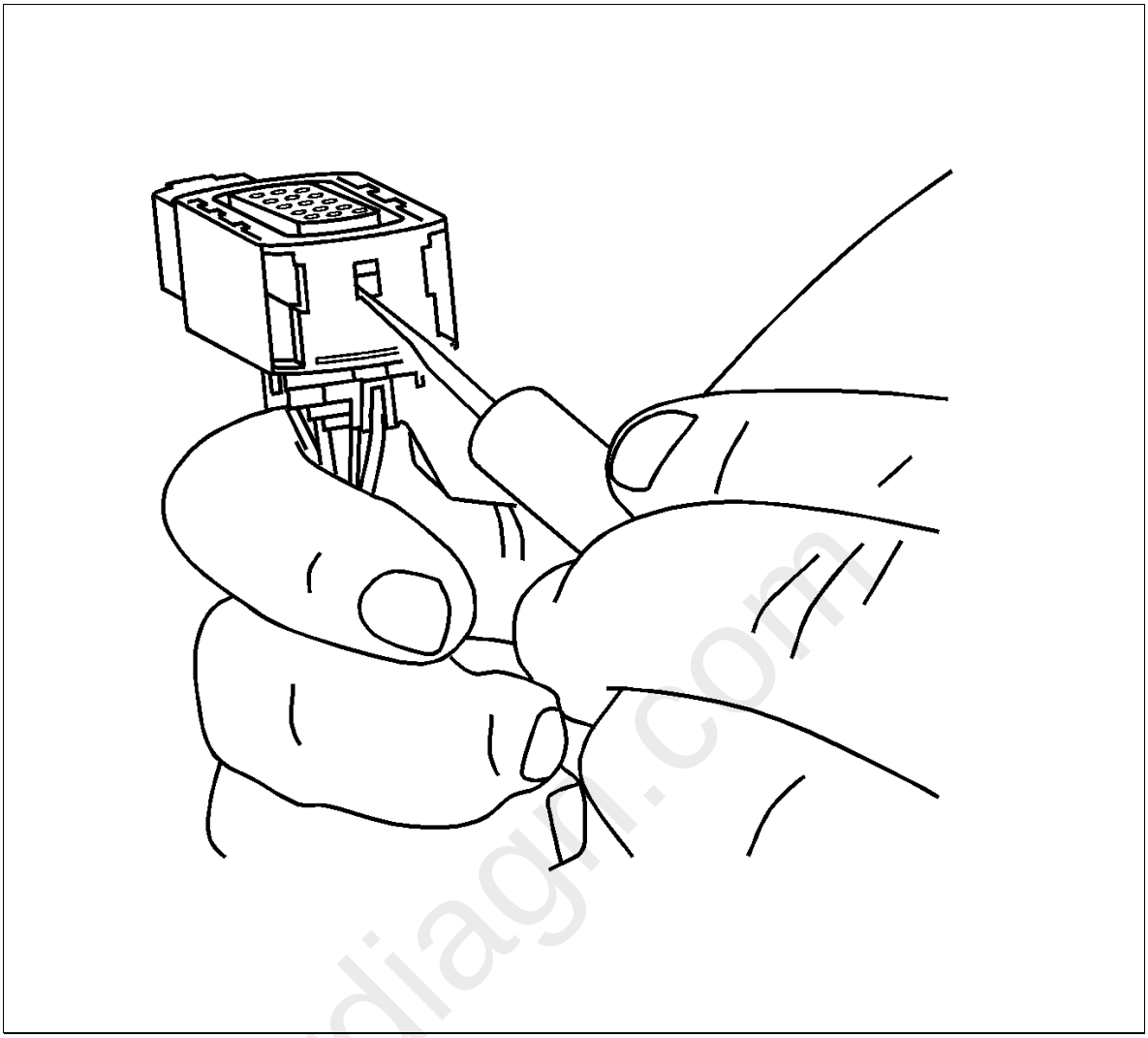
Fig 6: Nose Piece



Courtesy of GENERAL MOTORS COMPANY

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.

Fig 7: Special Tool Into Terminal Release Cavity

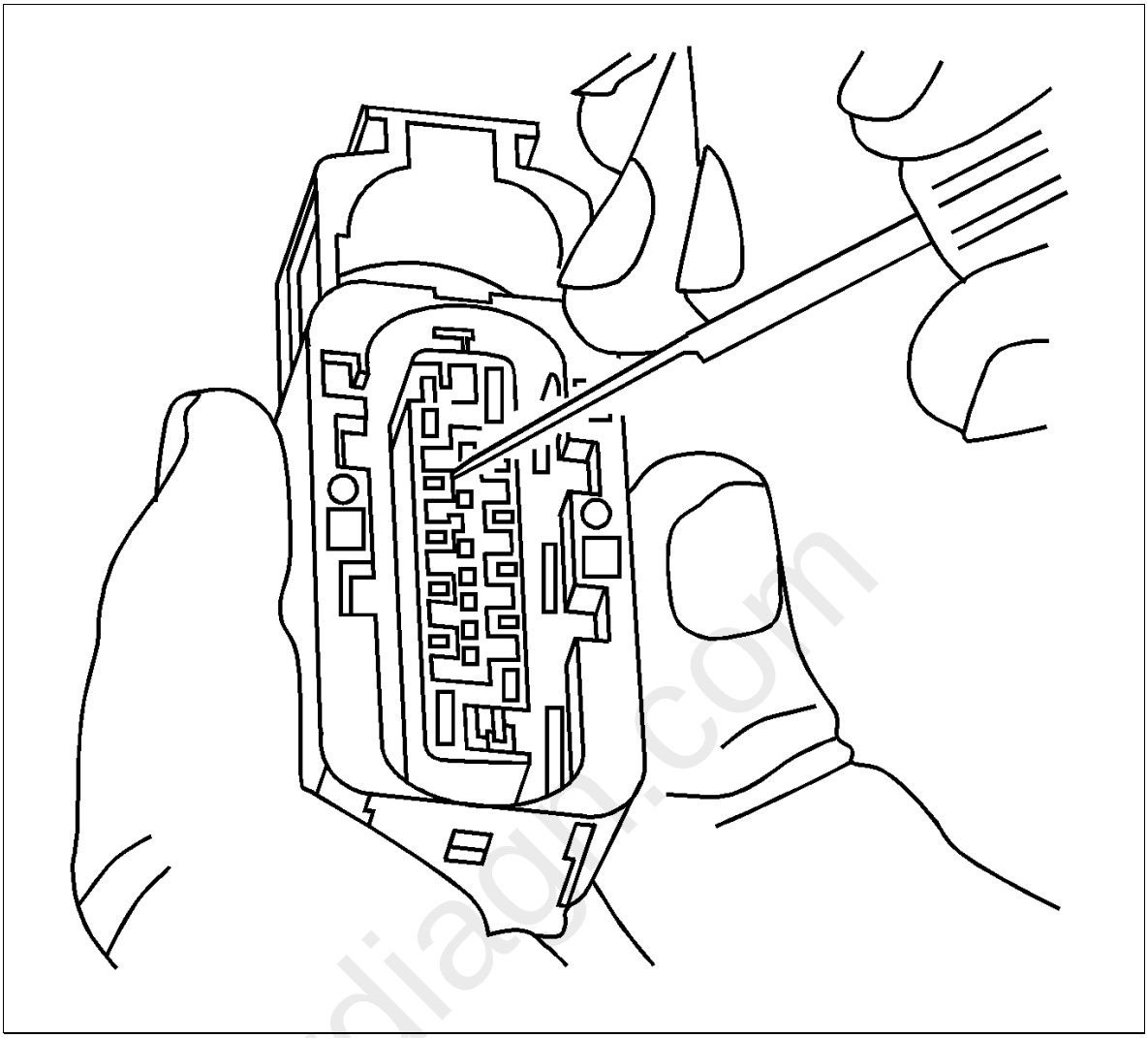


Courtesy of GENERAL MOTORS COMPANY

9. Insert the J-38125-12A tool to release the terminals by inserting the tool into the terminal release cavity.

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Fig 8: Wire Out Of Back Of Connector



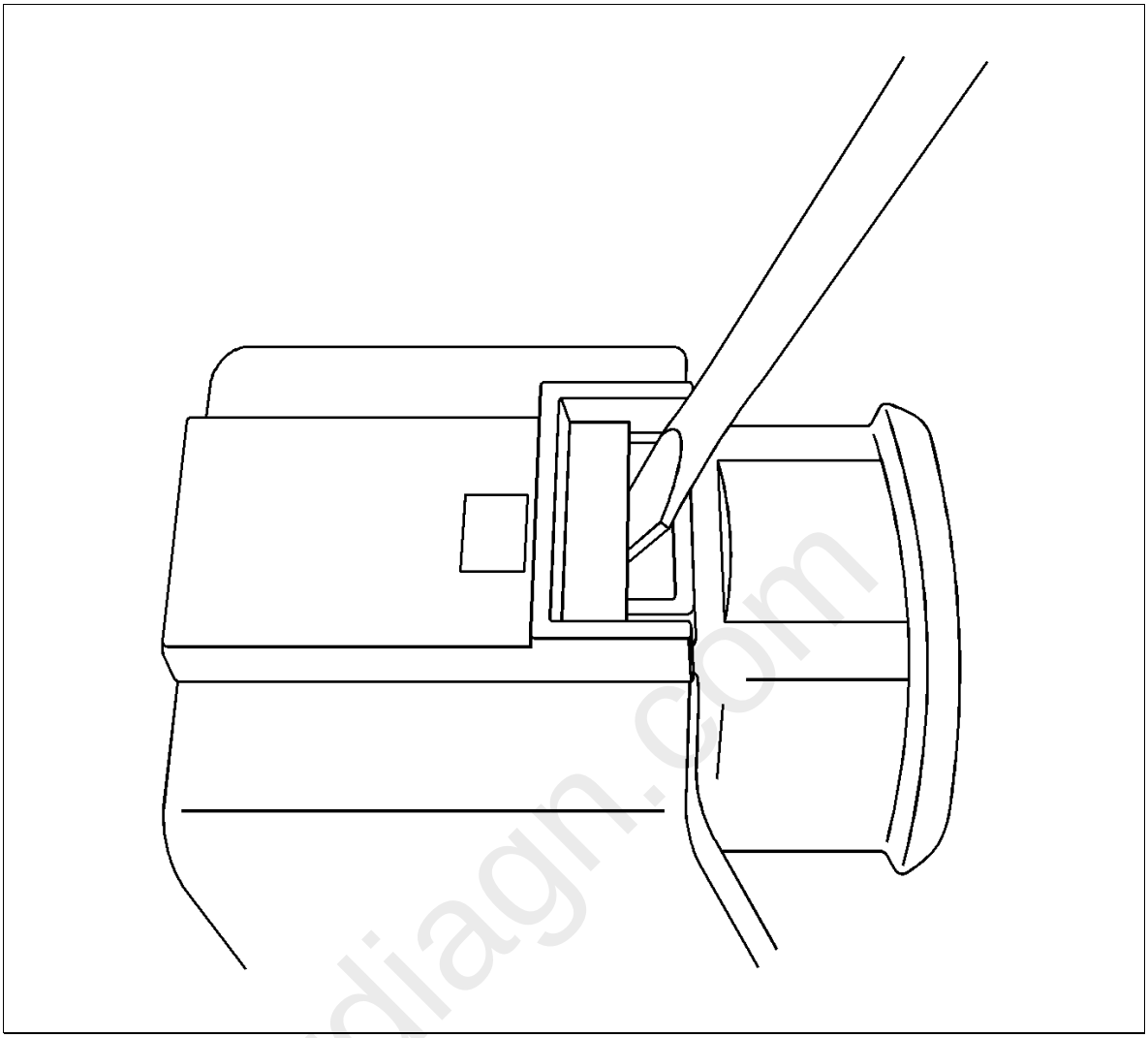
Courtesy of GENERAL MOTORS COMPANY

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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 (Terminated Lead Repair) Repairing Connector Terminals (Terminal Repair) procedure.
12. Insert the repaired terminal back into the cavity. Repeat the diagnostic procedure to verify the repair and reconnect the connector bodies.

DIAGNOSTIC INFORMATION AND PROCEDURES > DELPHI CONNECTORS (STEERING GEAR) > REMOVAL PROCEDURE

Fig 1: Releasing Locking Tab On Connector

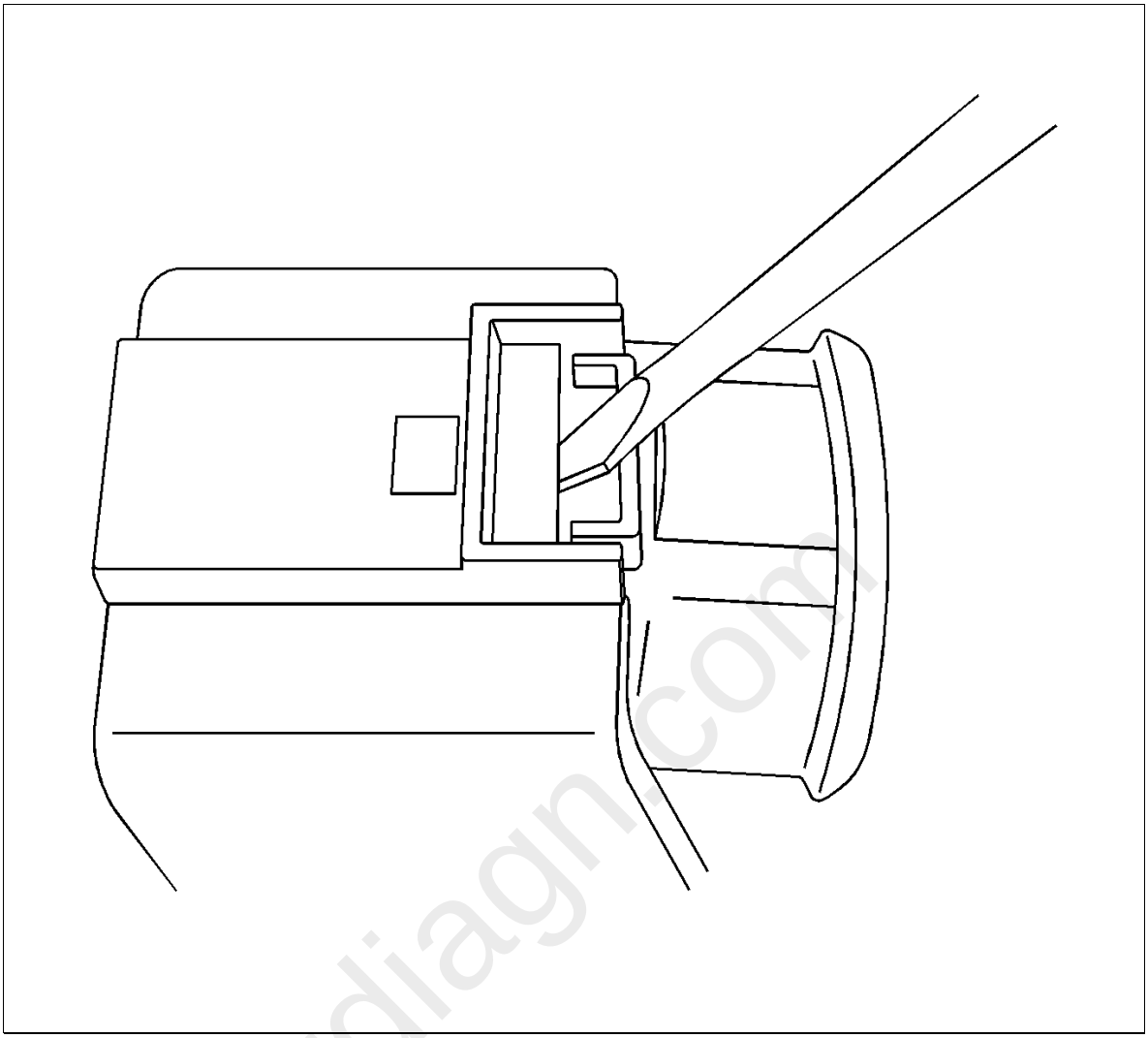


Courtesy of GENERAL MOTORS COMPANY

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1. Use a small flat-bladed tool to release the locking tab on the connector.

Fig 2: Releasing Connector



Courtesy of GENERAL MOTORS COMPANY

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.

DIAGNOSTIC INFORMATION AND PROCEDURES > FCI CONNECTORS (LEVER LOCK)

Special Tools

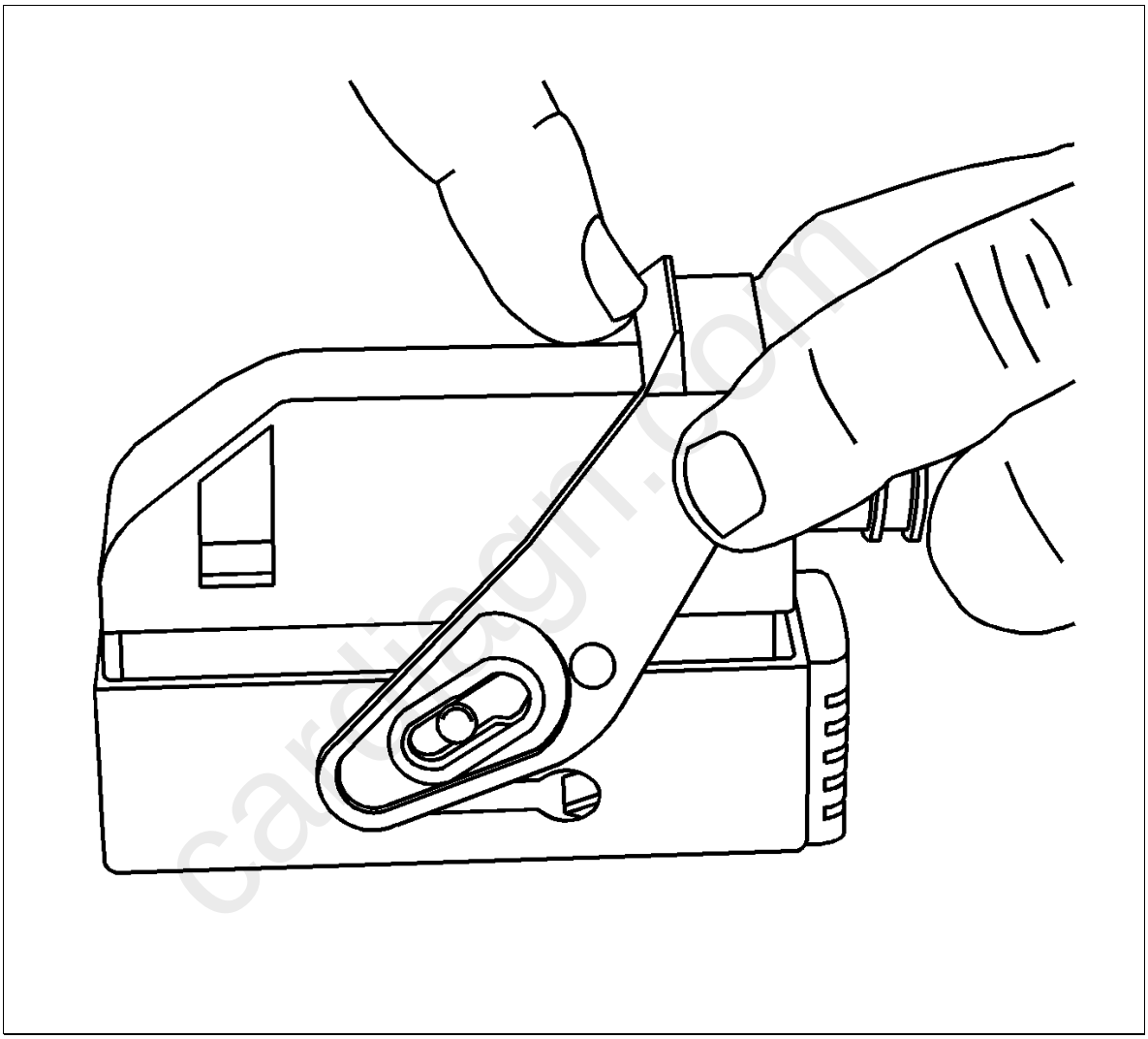
- **EL-38125-550** Terminal Release Tool Kit
- **EL-38125-580** Terminal Release Tool Kit
- **J-38125-556** Terminal Release Tool
- **J-38125-560** Terminal Release Tool

For equivalent regional tools, refer to Special Tools .

DIAGNOSTIC INFORMATION AND PROCEDURES > FCI CONNECTORS (LEVER LOCK) > TERMINAL REMOVAL PROCEDURE

Follow the steps below in order to remove terminals from the connector.

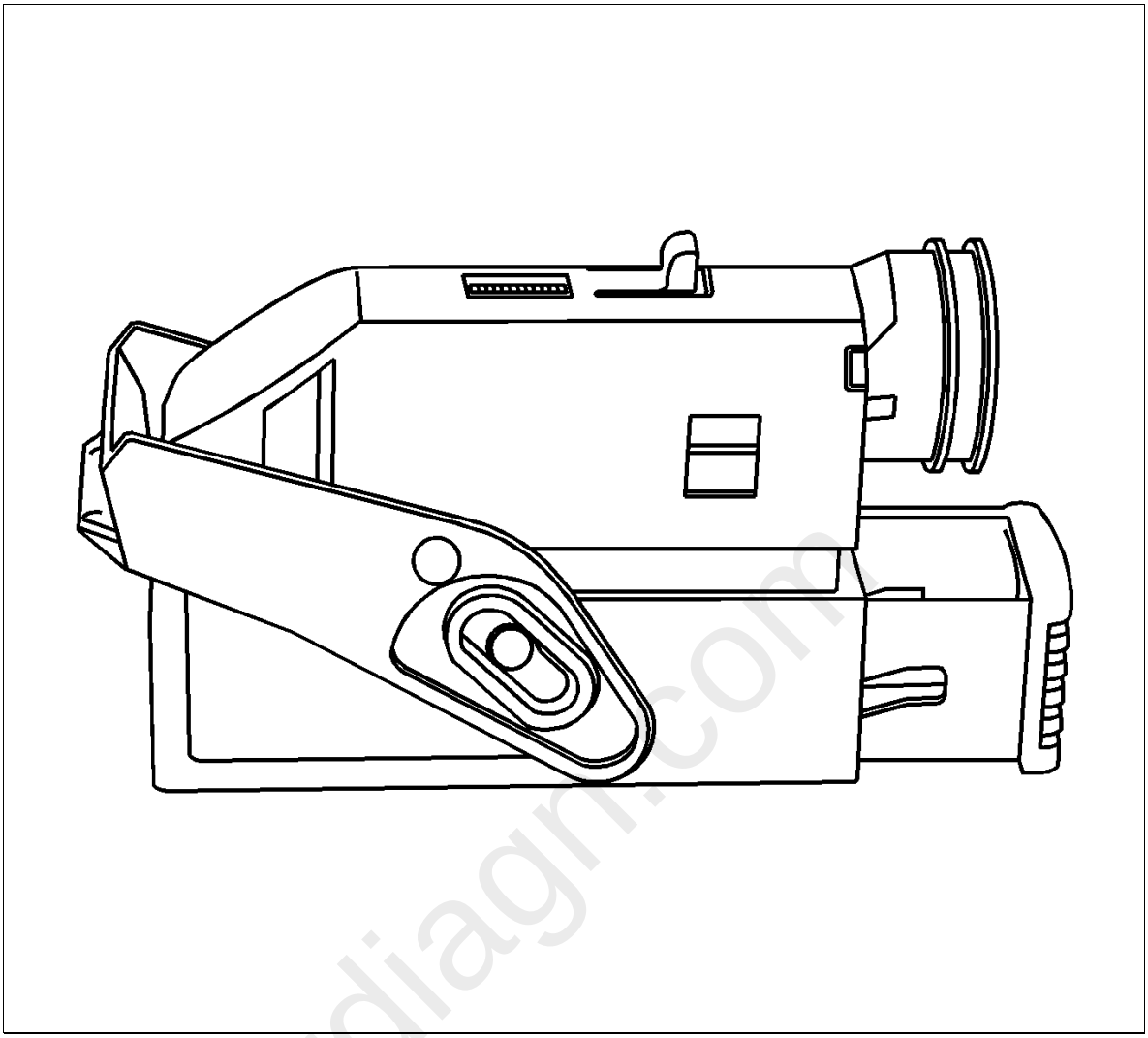
Fig 1: Release Tab



Courtesy of GENERAL MOTORS COMPANY

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.

Fig 2: Connector In Released Position

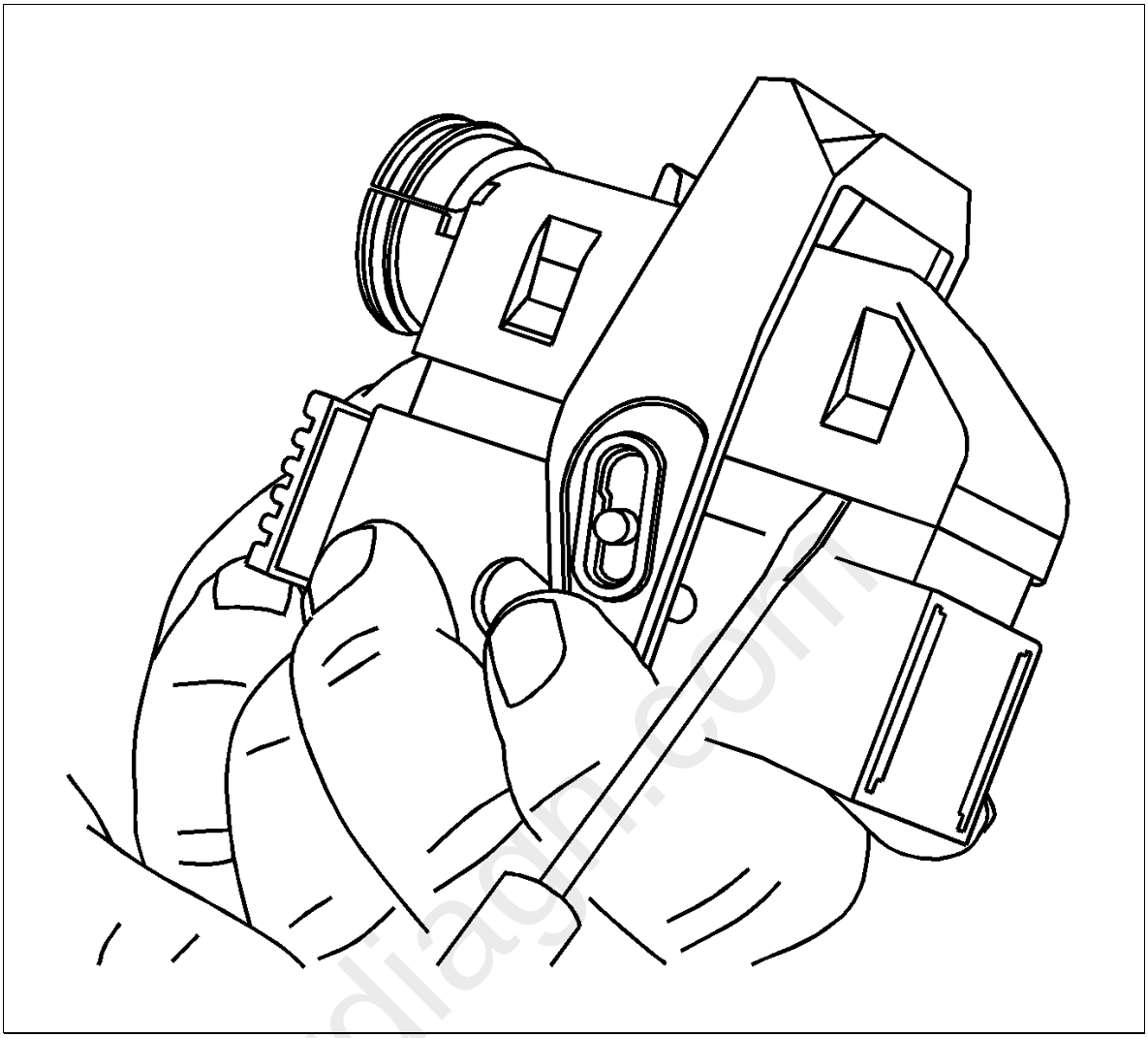


Courtesy of GENERAL MOTORS COMPANY

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3. View of connector in released position.
4. Disconnect the connector from the component.
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.

Fig 3: Sliding Terminal Position Assurance (TPA) Up One Notch

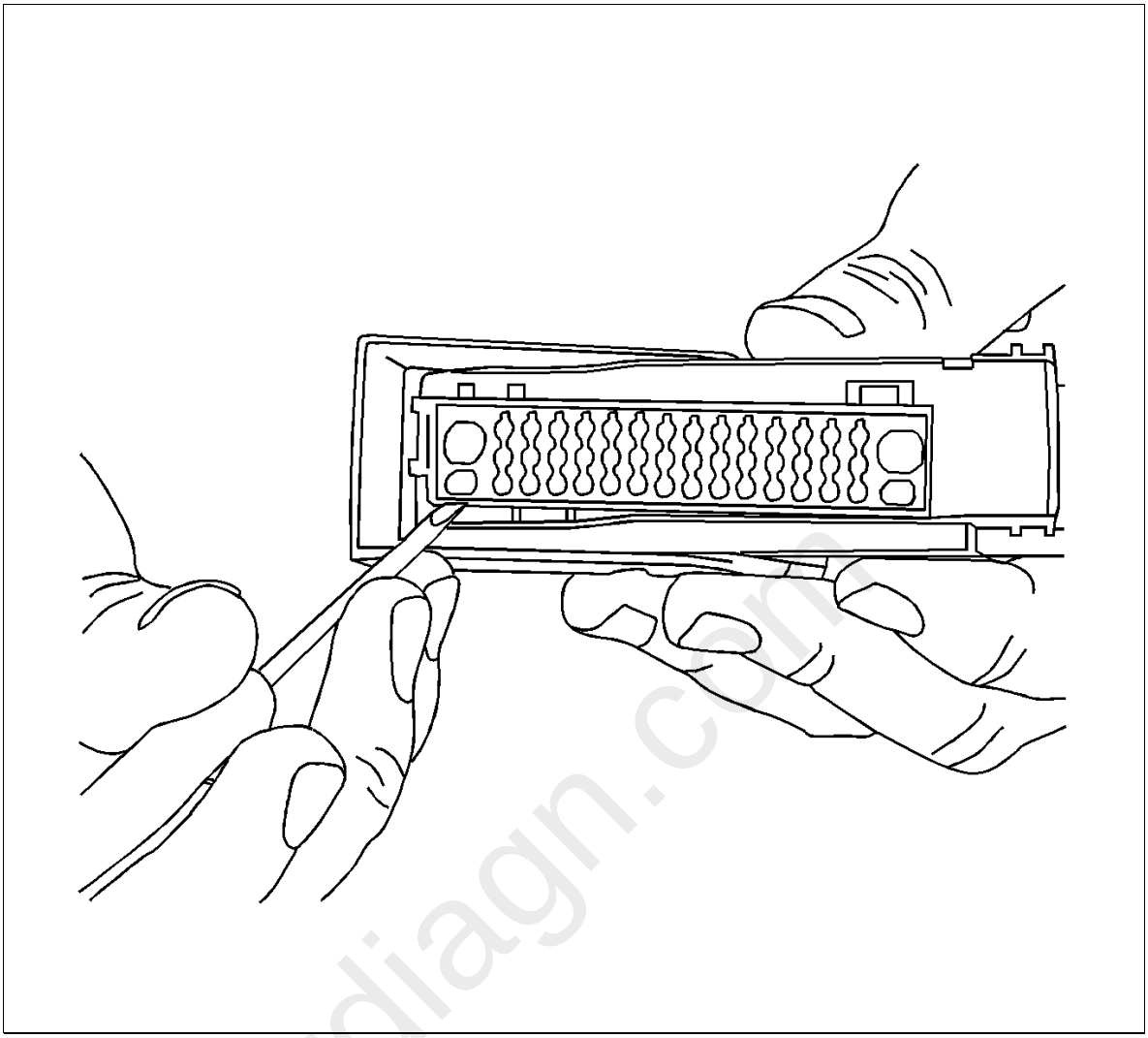


Courtesy of GENERAL MOTORS COMPANY

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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.

Fig 4: Releasing Terminals

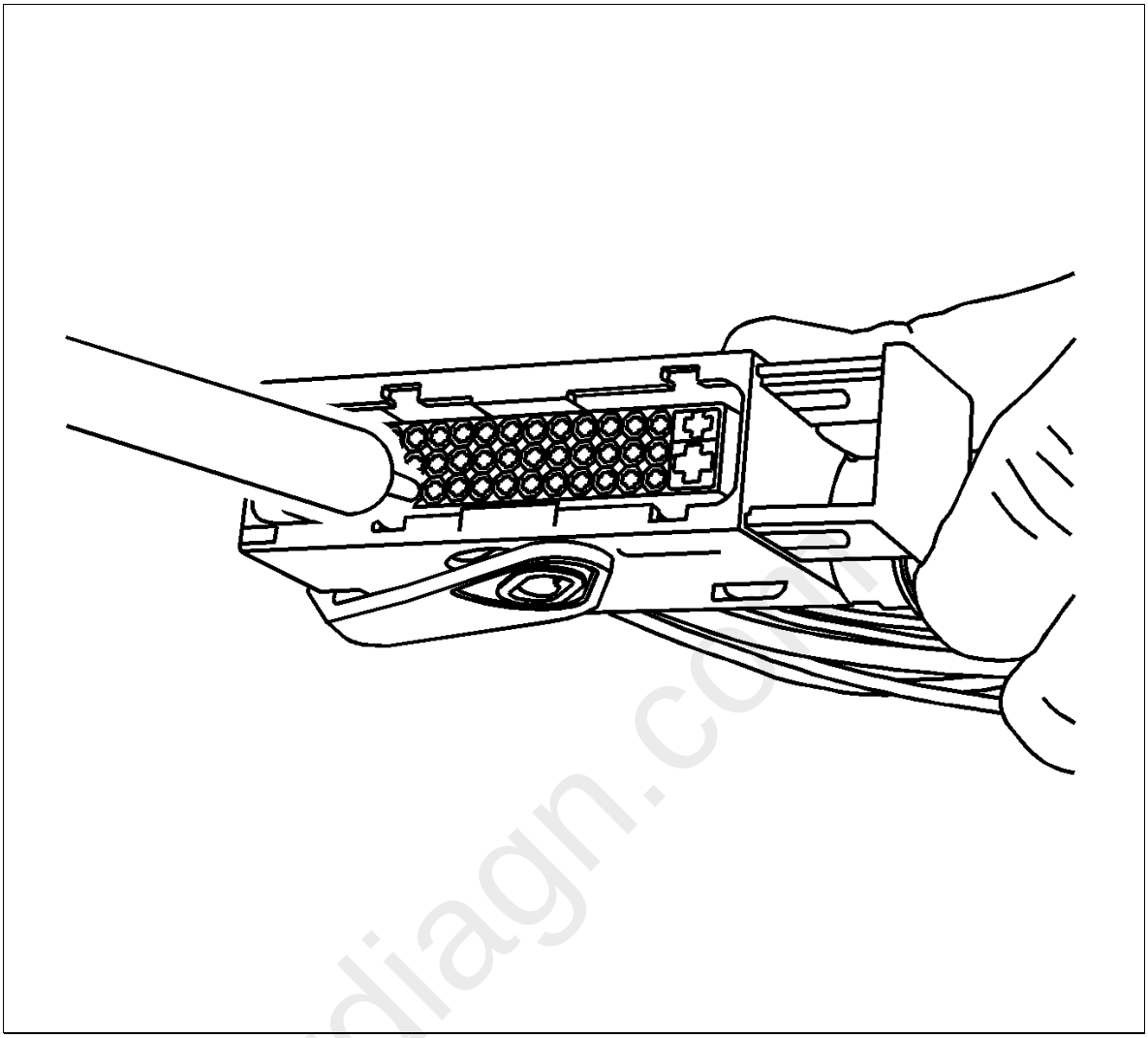


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7. For the larger terminals insert the J-38125-556 tool to release the terminals by inserting the tool into the terminal release cavity. For the smaller terminals insert the J-38125-560 tool to release the terminals by inserting the tool into the terminal release cavity.

Fig 5: Wire Being Pulled Out Of Back Of Connector While Holding Removal Tool In Place



Courtesy of GENERAL MOTORS COMPANY

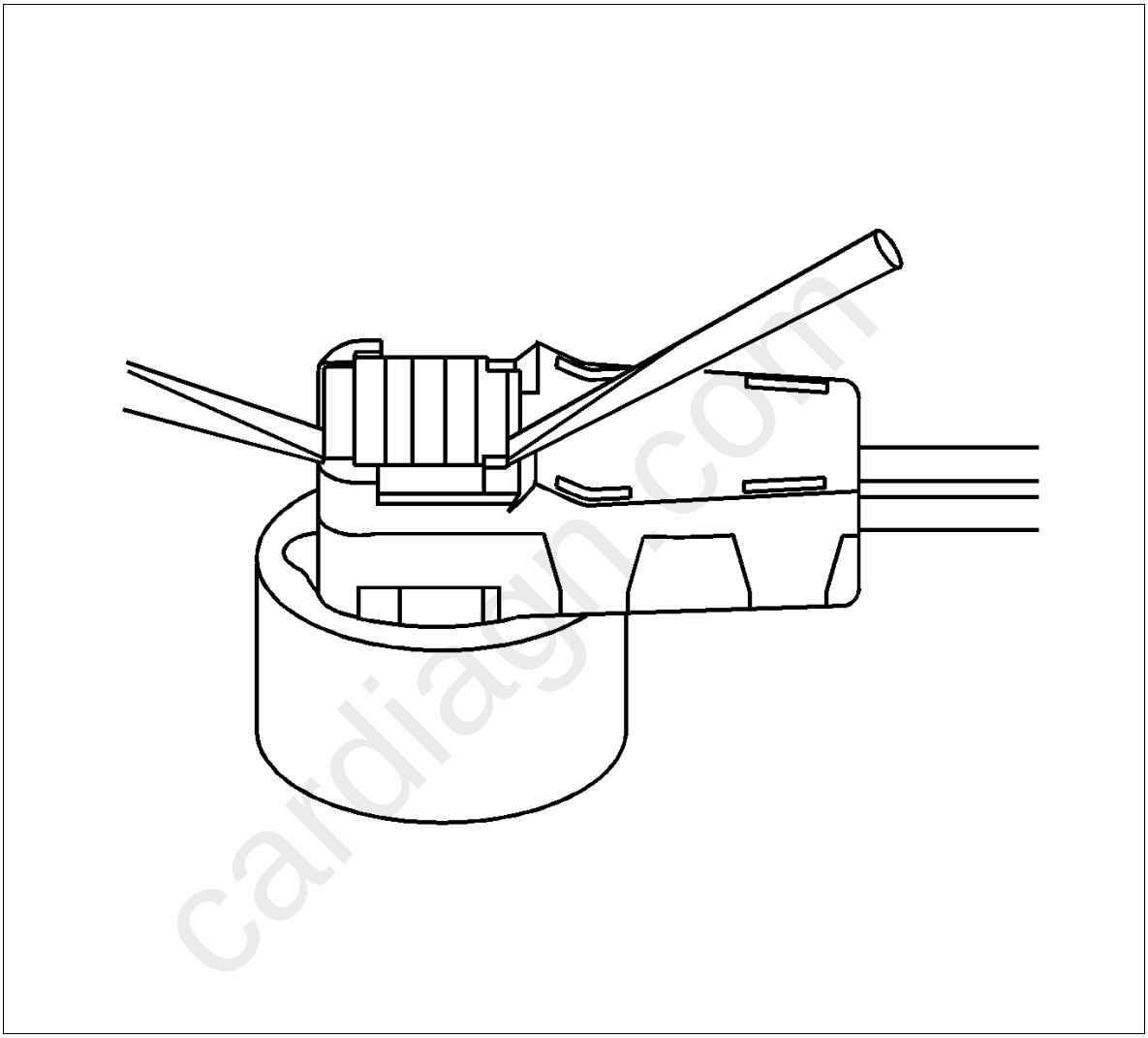
8. While holding the removal tool in place, gently pull the wire out of the back of the connector. Always remember never use force when pulling a terminal out of a connector.
9. Repair the terminal by following the Repairing Connector Terminals (Terminated Lead Repair) Repairing Connector Terminals (Terminal Repair) procedure.
10. Insert the repaired terminal back into the cavity. Repeat the diagnostic procedure to verify the repair and reconnect the connector bodies.

DIAGNOSTIC INFORMATION AND PROCEDURES > 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.

Fig 1: Lifting Orange CPA

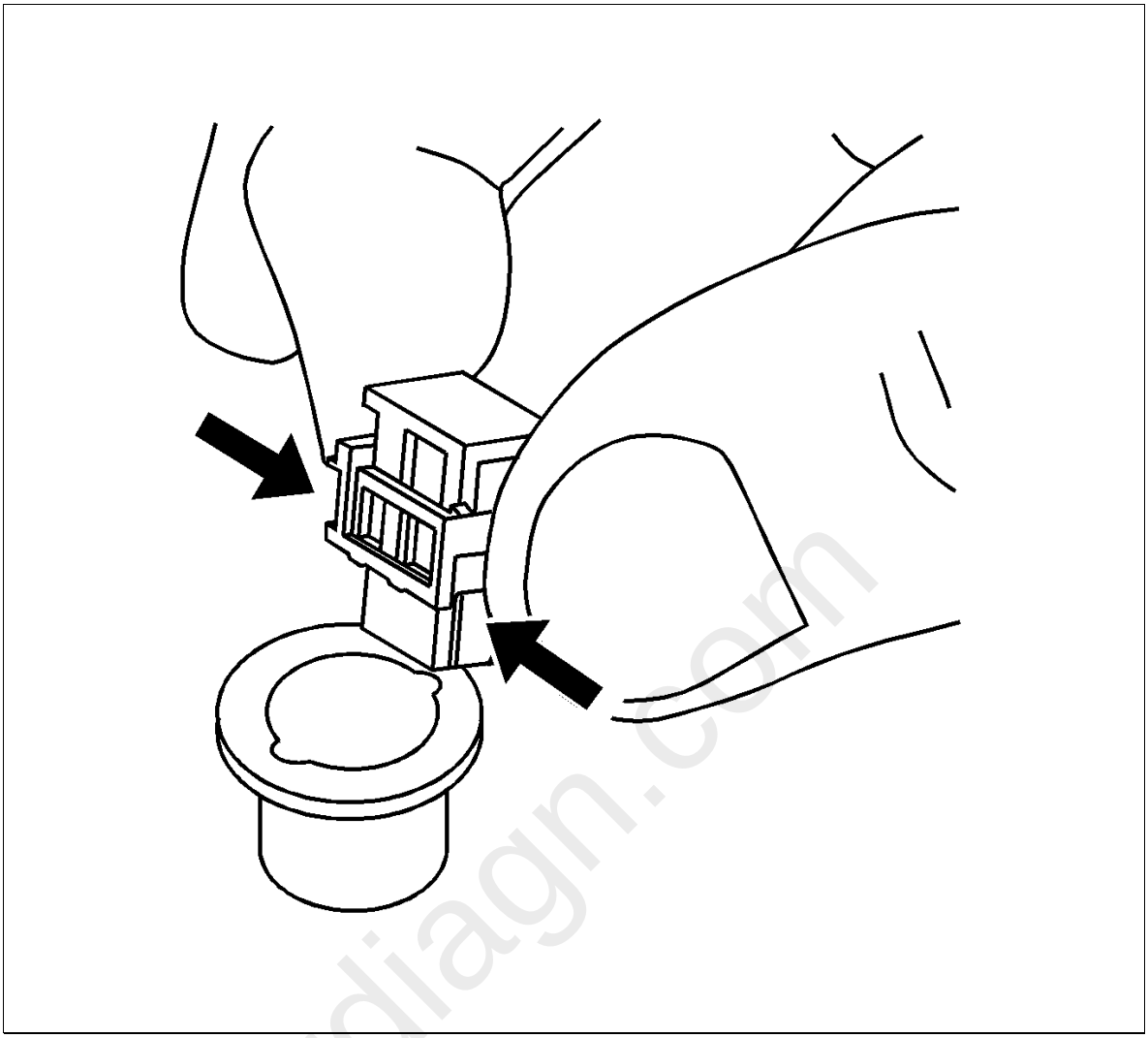


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Courtesy of GENERAL MOTORS COMPANY

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.

Fig 2: Grabbing Connector On Both Sides



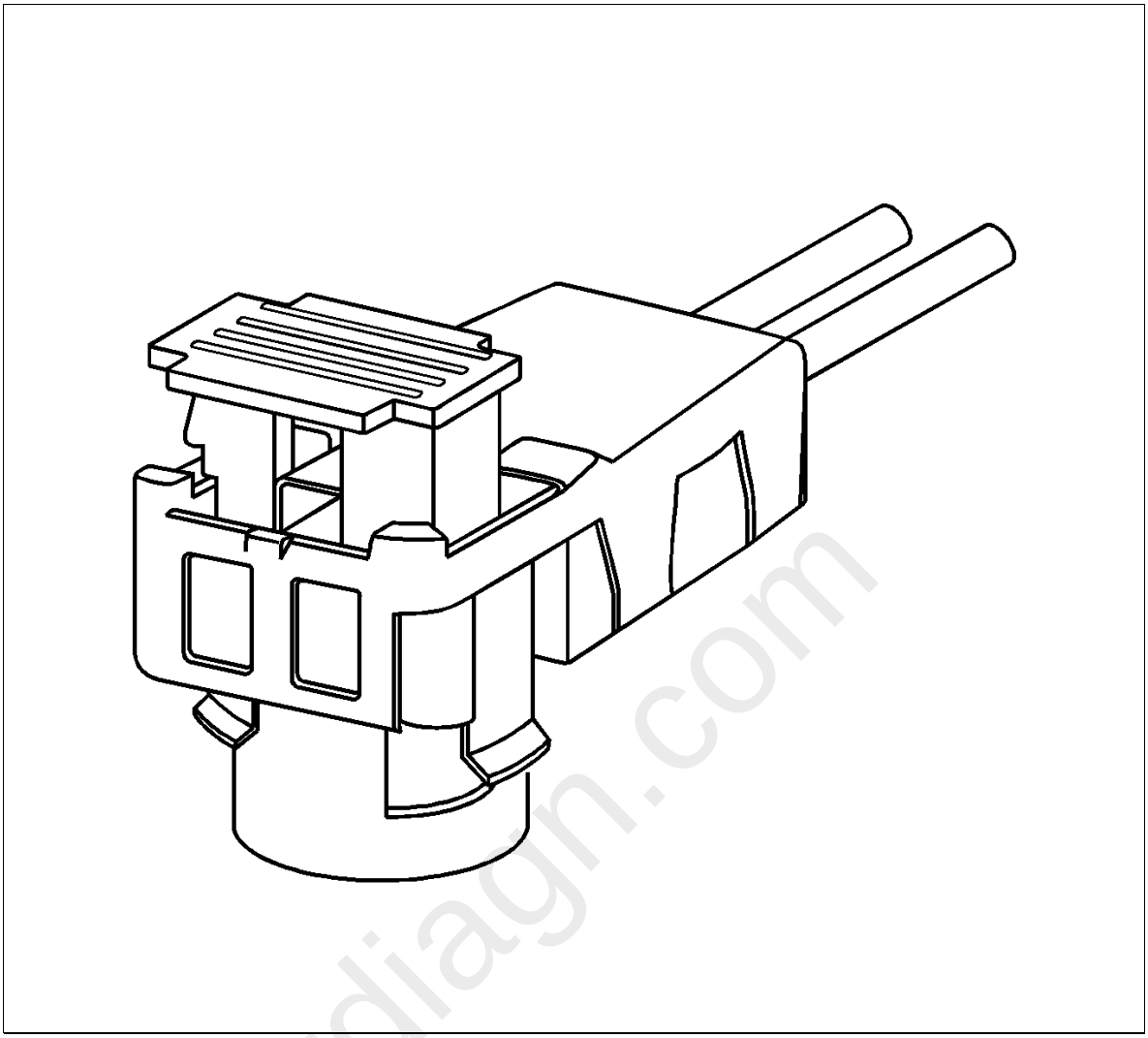
Courtesy of GENERAL MOTORS COMPANY

2. Grab the connector on both sides and lift vertically to disconnect the connector.

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DIAGNOSTIC INFORMATION AND PROCEDURES > FCI CONNECTORS (SIR) > INSTALLATION PROCEDURE

Fig 1: Lifting Orange CPA

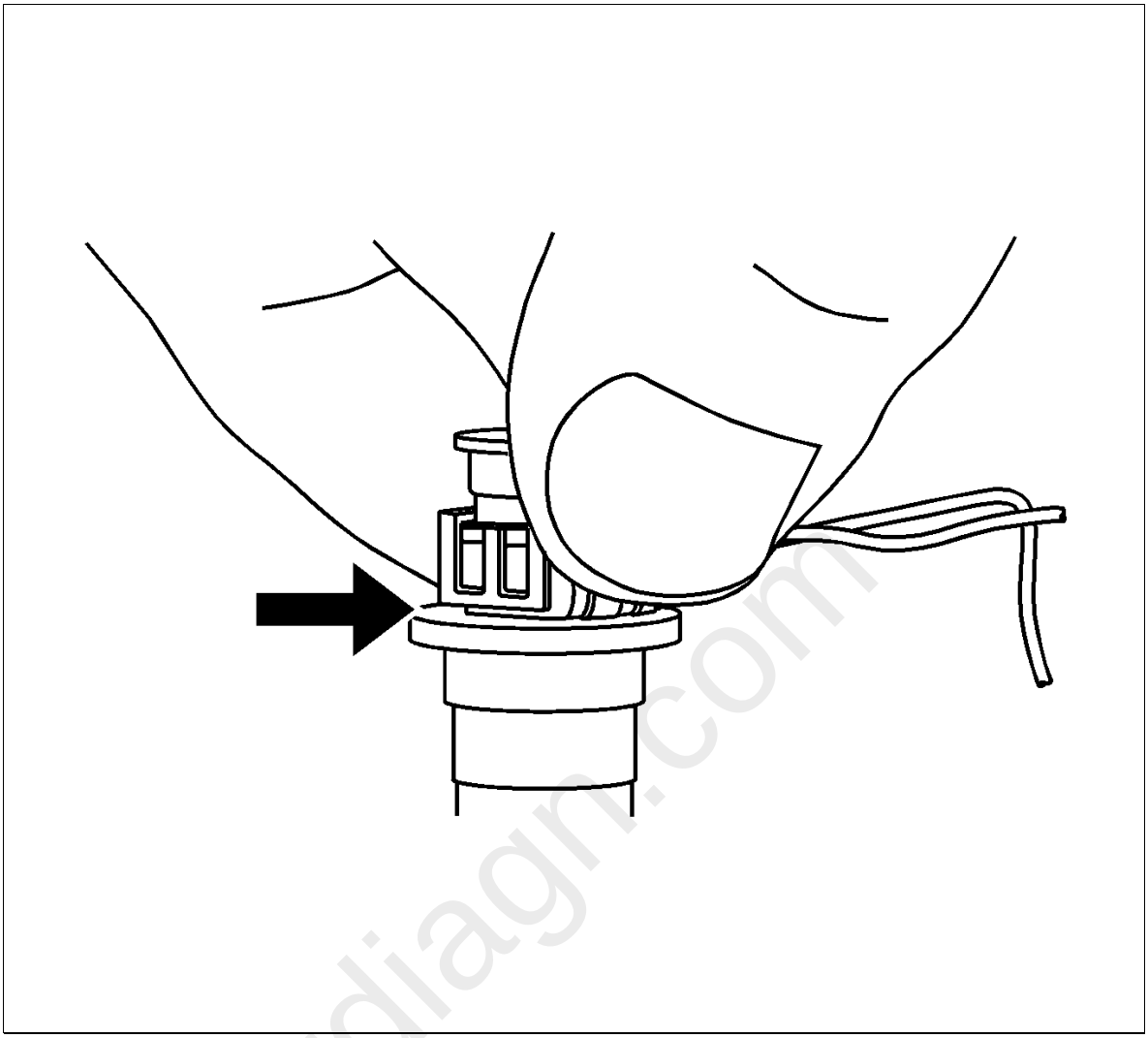


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1. The CPA should be approximately 4 mm above the yellow cover before installing the connector. If not, use a small flat-bladed tool to help release the CPA. The CPA may also be released manually without any tools.

Fig 2: Seating Connector Sub-Assembly

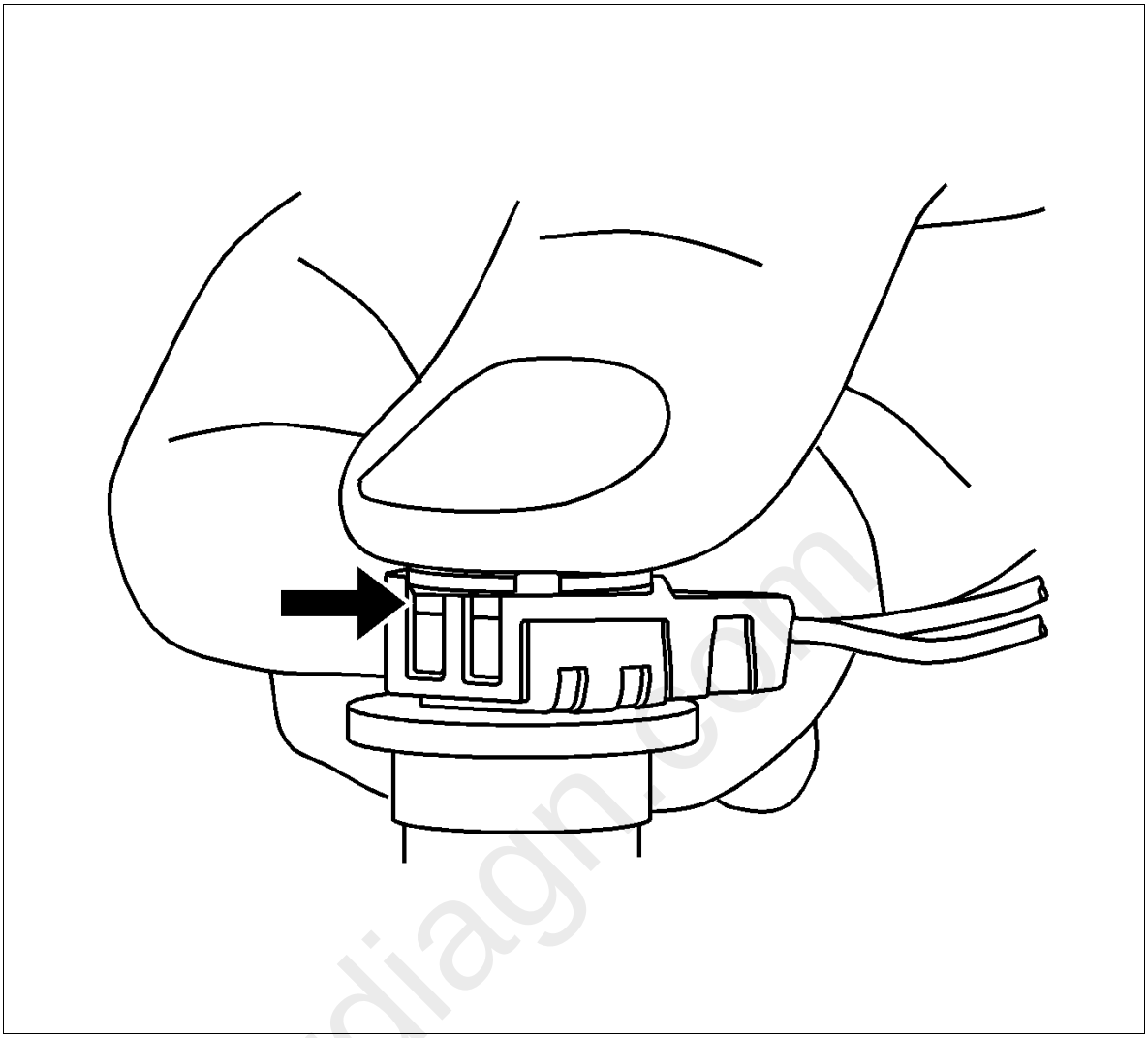


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2. Line up the connector key tabs with the initiator key slots. Grab the connector on both sides and push down into the initiator connector sub assembly until fully seated.

Fig 3: Pushing CPA Down



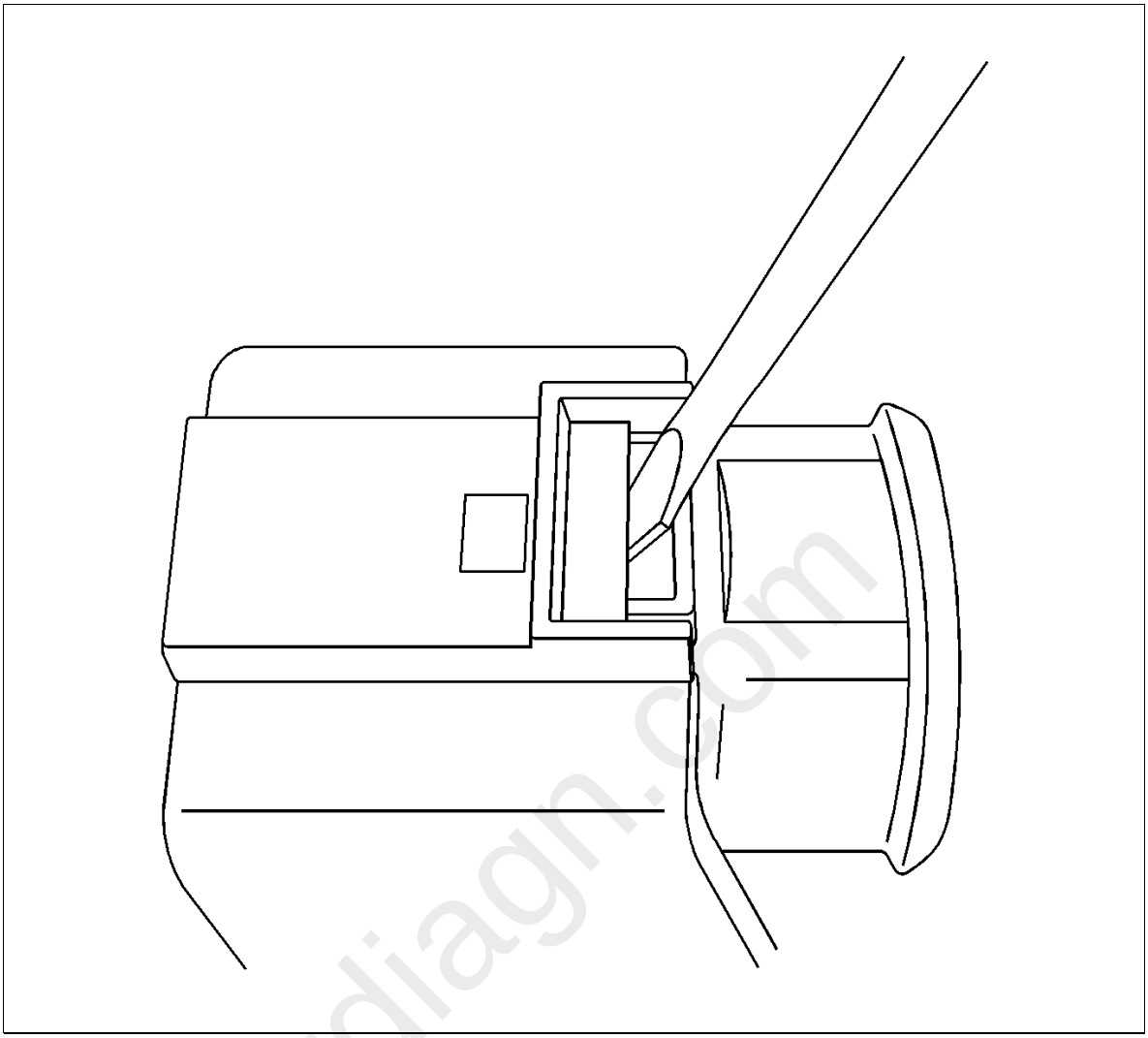
Courtesy of GENERAL MOTORS COMPANY

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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DIAGNOSTIC INFORMATION AND PROCEDURES > FEP CONNECTORS (STEERING GEAR) > REMOVAL PROCEDURE

Fig 1: Releasing Locking Tab On Connector

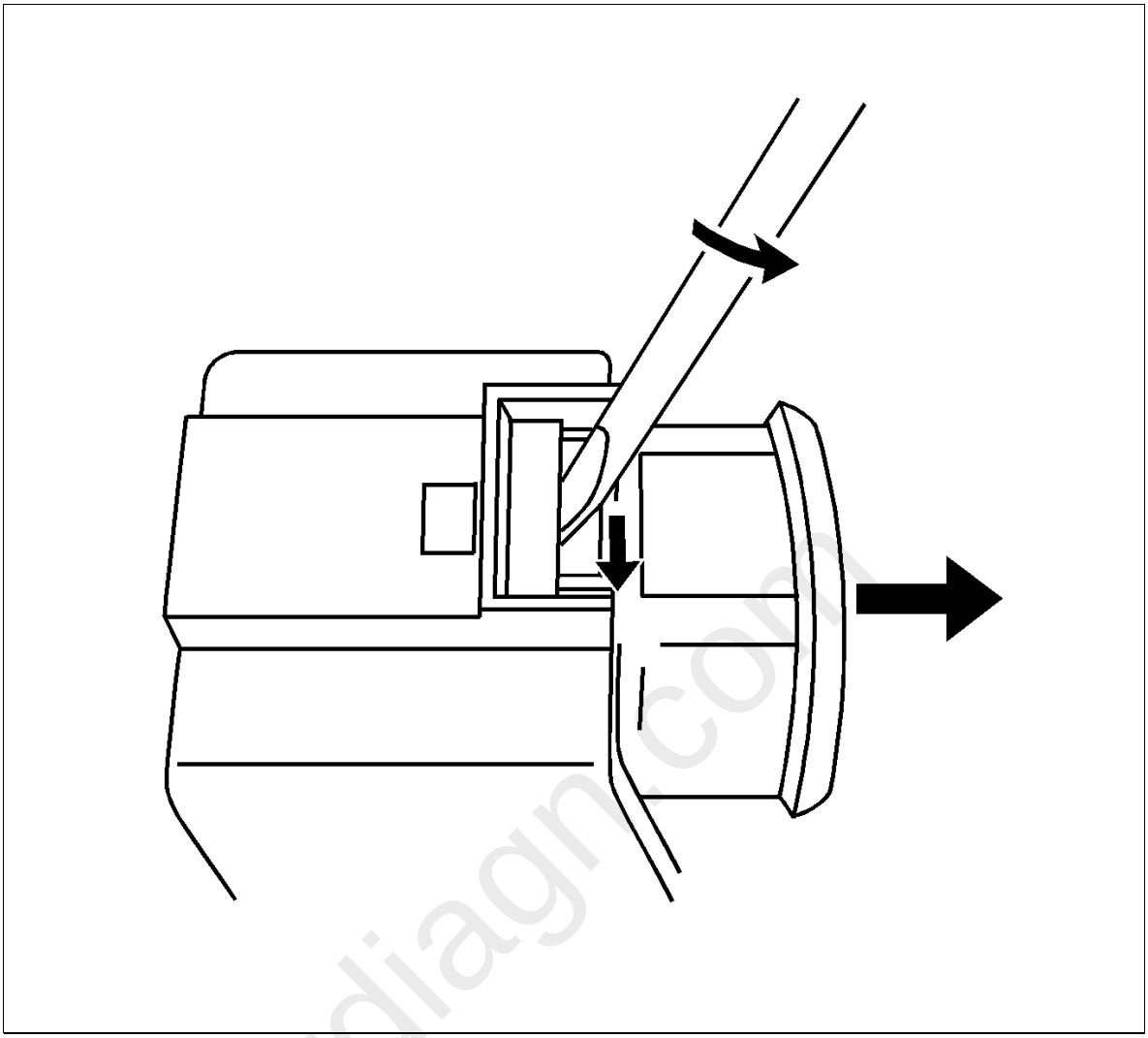


Courtesy of GENERAL MOTORS COMPANY

1. Use a flat-bladed tool to release the locking tab on the connector.

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Fig 2: Flat-Bladed Tool To Push Top Of Locking Tab Inward

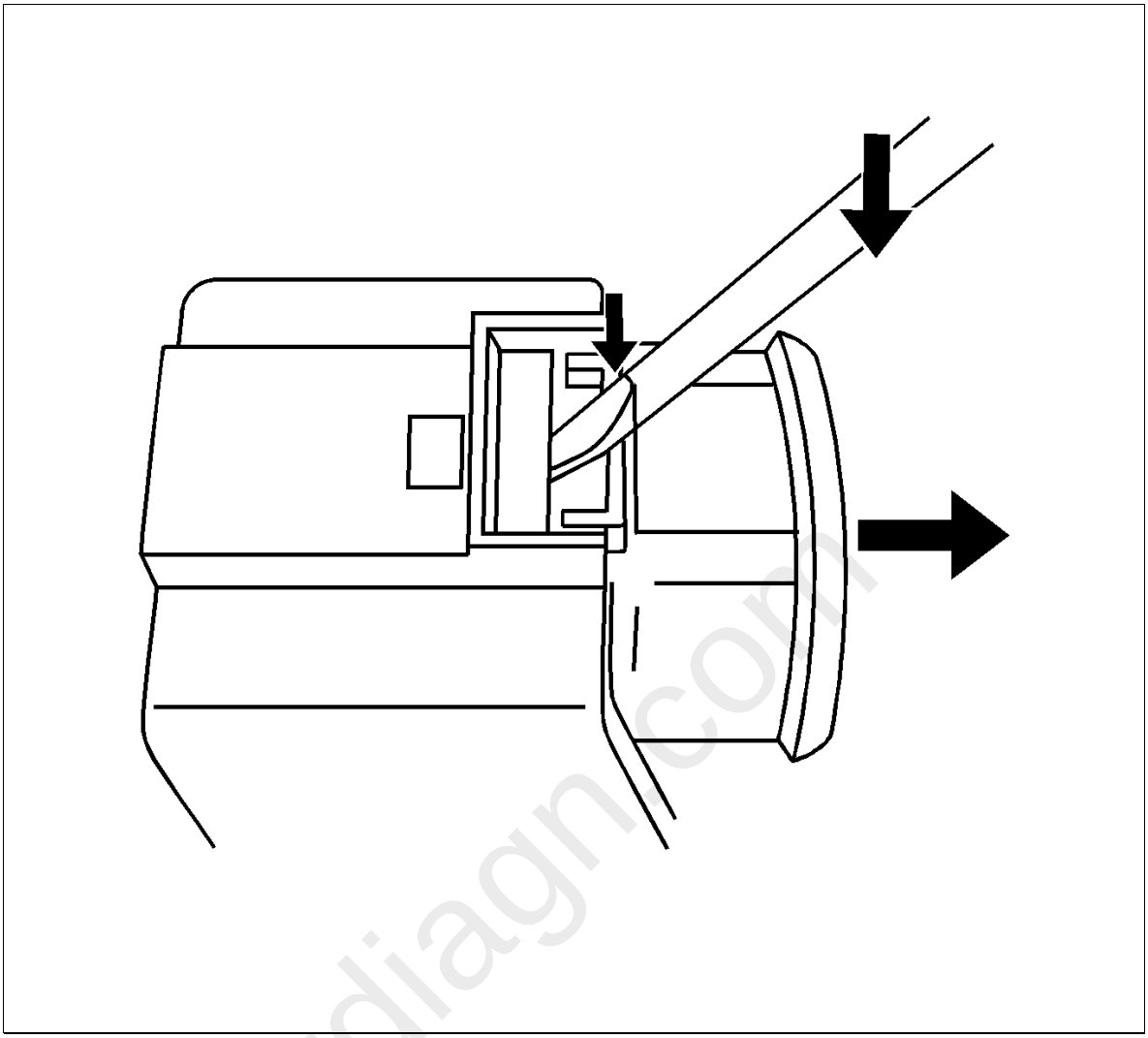


Courtesy of GENERAL MOTORS COMPANY

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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Fig 3: Flat-Bladed Tool To Depress Locking Tab



Courtesy of GENERAL MOTORS COMPANY

3. Option 2: Pry using the flat-bladed tool to depress the locking tab while pulling the connector body out.

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DIAGNOSTIC INFORMATION AND PROCEDURES > 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 .

DIAGNOSTIC INFORMATION AND PROCEDURES > JST CONNECTORS > TERMINAL REMOVAL PROCEDURE

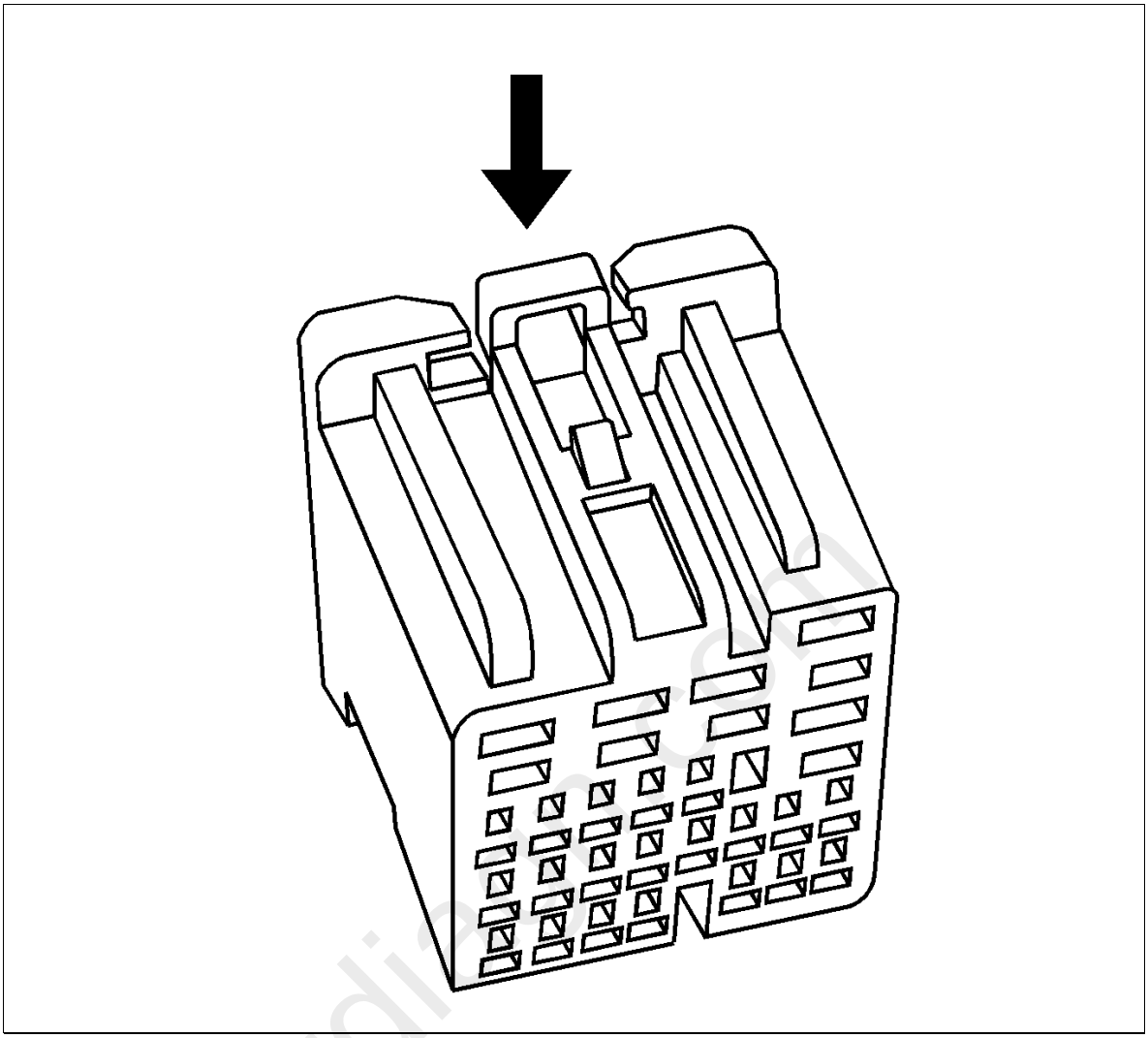
The JST connector family consists of seven unique connector housings differentiated by color and keying. This connector family is designed to use both 0.64 and 2.8 sized terminals.

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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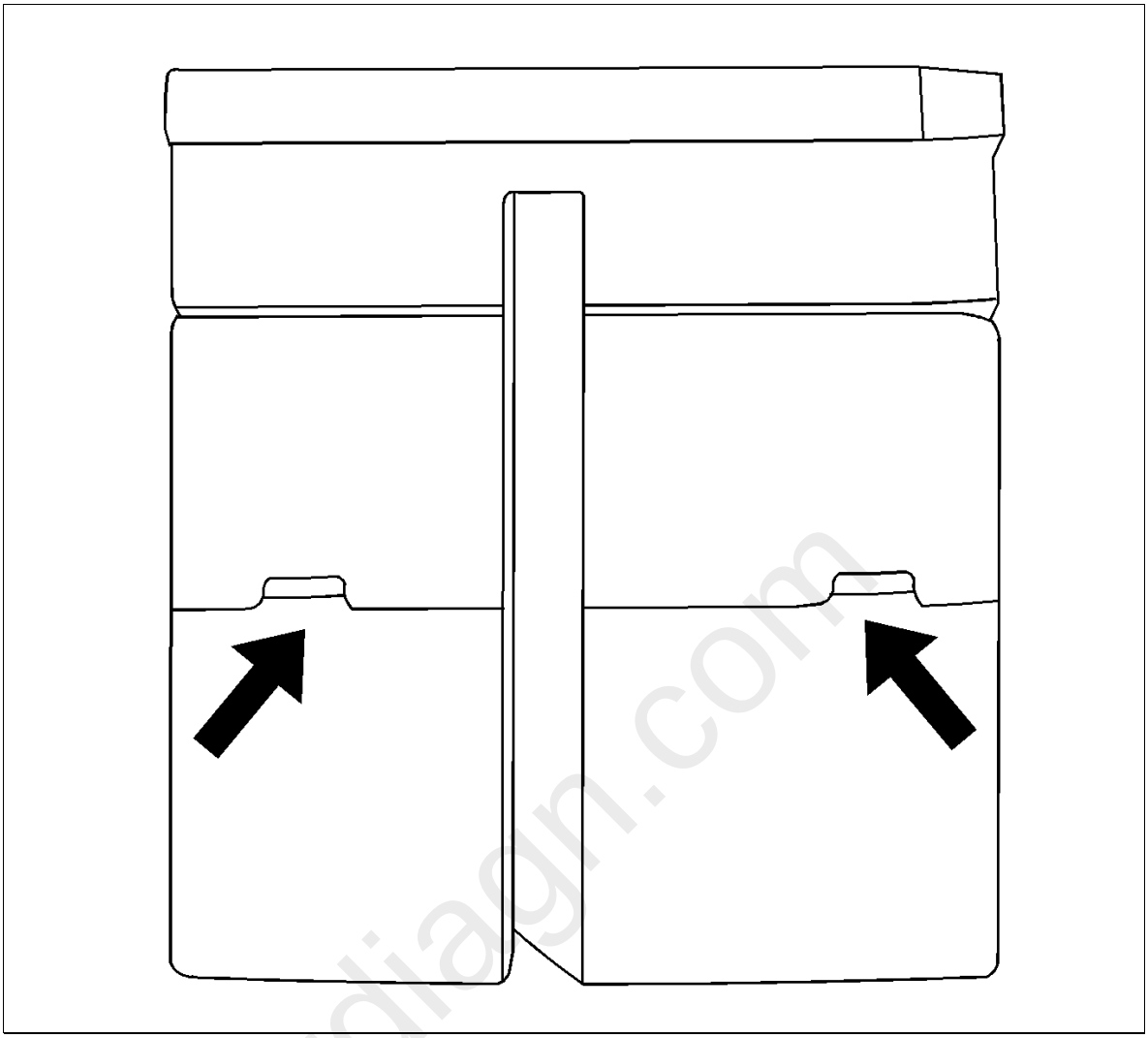
Fig 1: Terminal Position Assurance (TPA)



Courtesy of GENERAL MOTORS COMPANY

1. While depressing the lock, remove the connector from the component.

Fig 2: TPA On Both Sides Of Connector

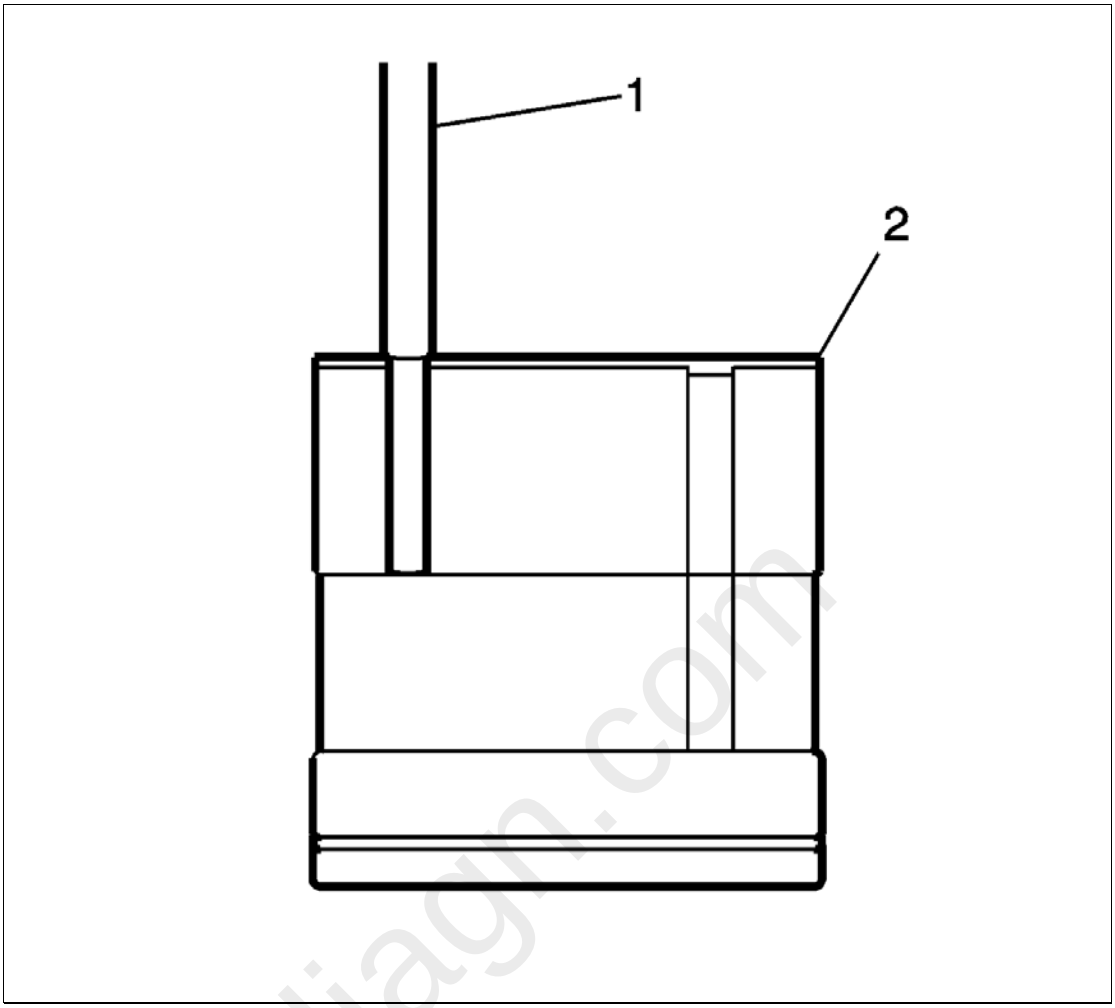


Courtesy of GENERAL MOTORS COMPANY

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2. Unlock the terminal position assurance (TPA):
    1. Position connector as shown (above) and locate TPA staging cavities.

Fig 3: Terminal Release Tool

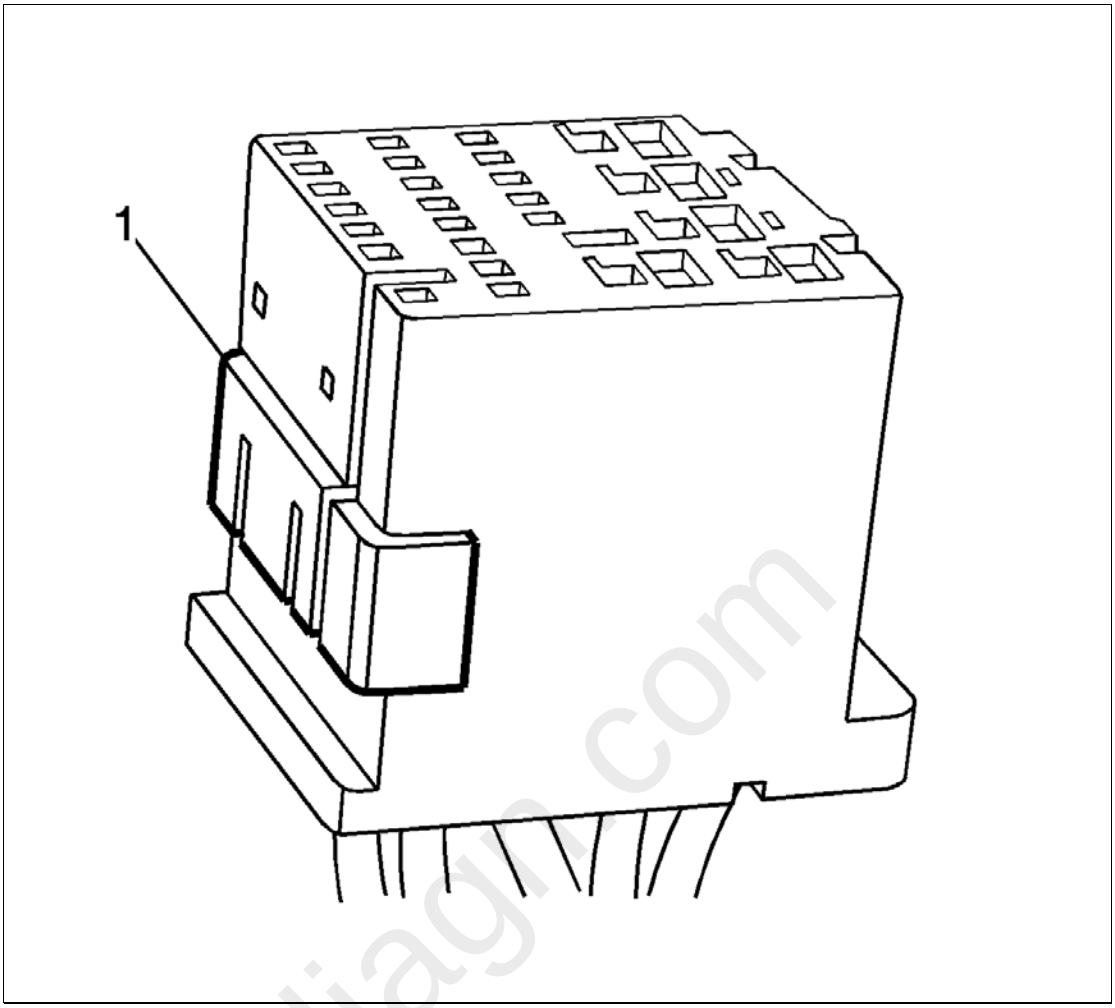


Courtesy of GENERAL MOTORS COMPANY

2. 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.

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Fig 4: TPA In Staged Position

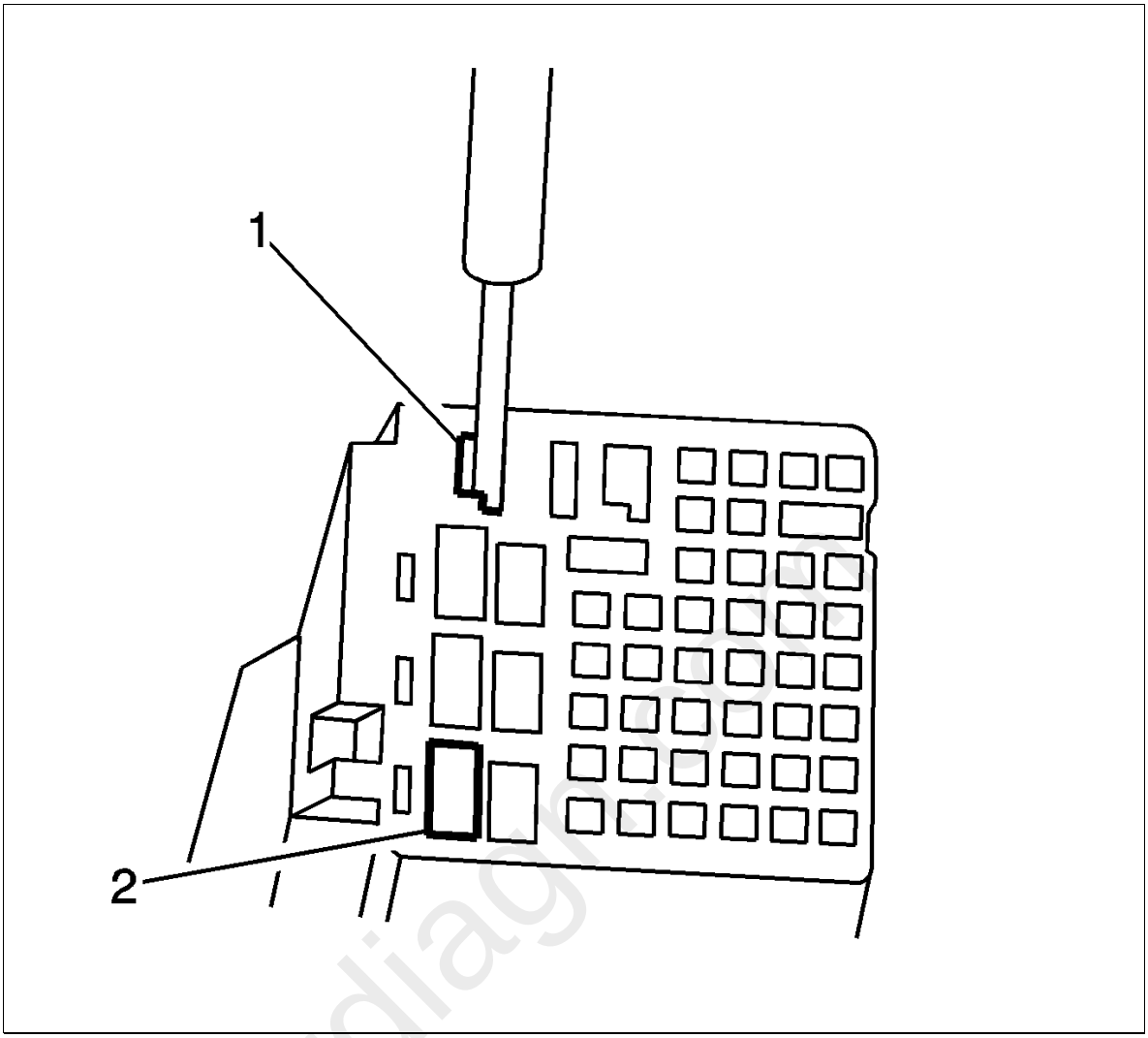


Courtesy of GENERAL MOTORS COMPANY

3. 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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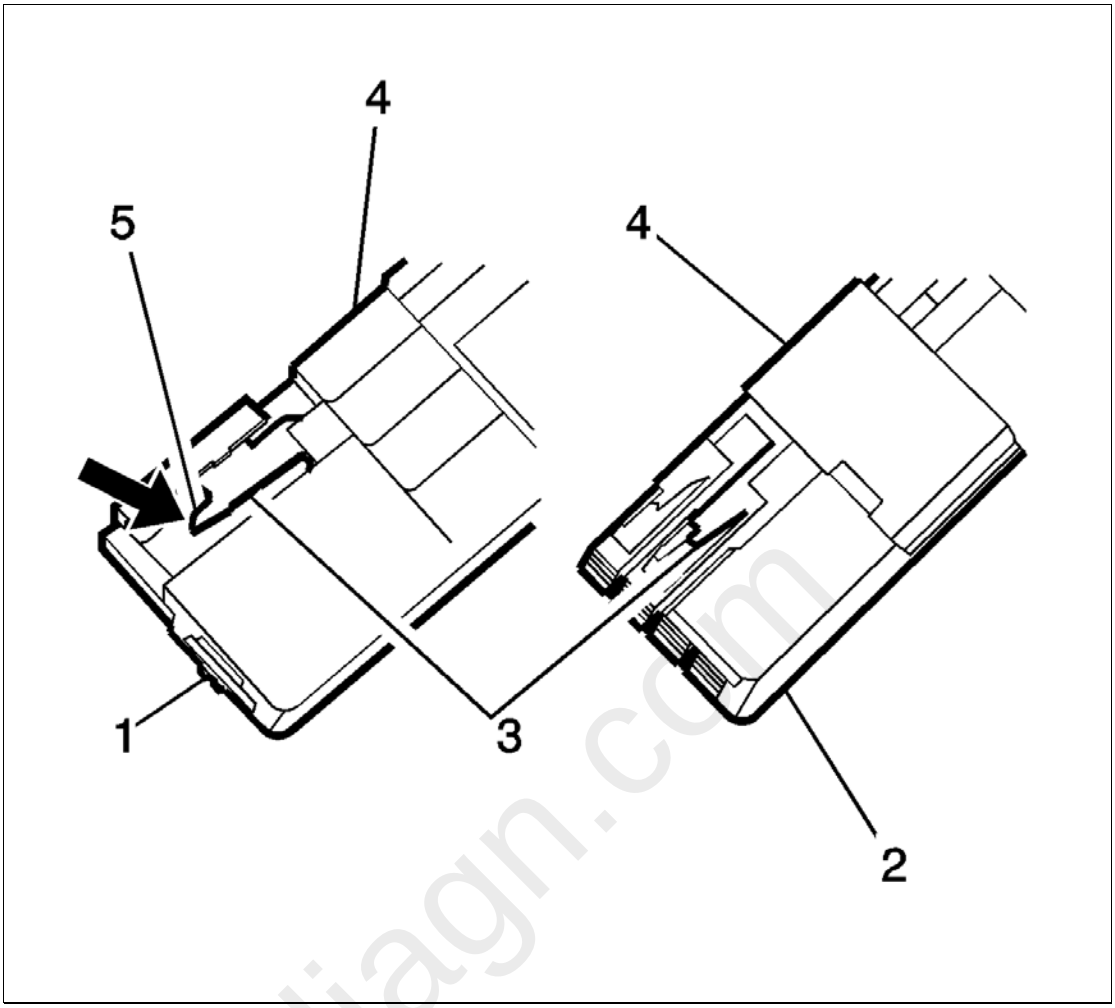
Fig 5: Connector Terminal Release Tool



Courtesy of GENERAL MOTORS COMPANY

3. Release the terminal from the connector:
    1. Position the connector as shown (above) and locate the terminal release entry canal (1) of the suspect terminal.
    2. 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).

Fig 6: Connector Lance And TPA



Courtesy of GENERAL MOTORS COMPANY

3. The cavity on the left (1) is a 2.8 mm^2 cavity and the cavity on the right (2) is a 0.64 mm^2 cavity.
4. 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.
5. 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 (Terminated Lead Repair) Repairing Connector Terminals (Terminal Repair) procedure.
5. Insert the repaired terminal back into the cavity. Repeat the diagnostic procedure to verify the repair and reconnect the connector bodies.

DIAGNOSTIC INFORMATION AND PROCEDURES > KOSTAL CONNECTORS (GLOW PLUG CONTROL MODULE)

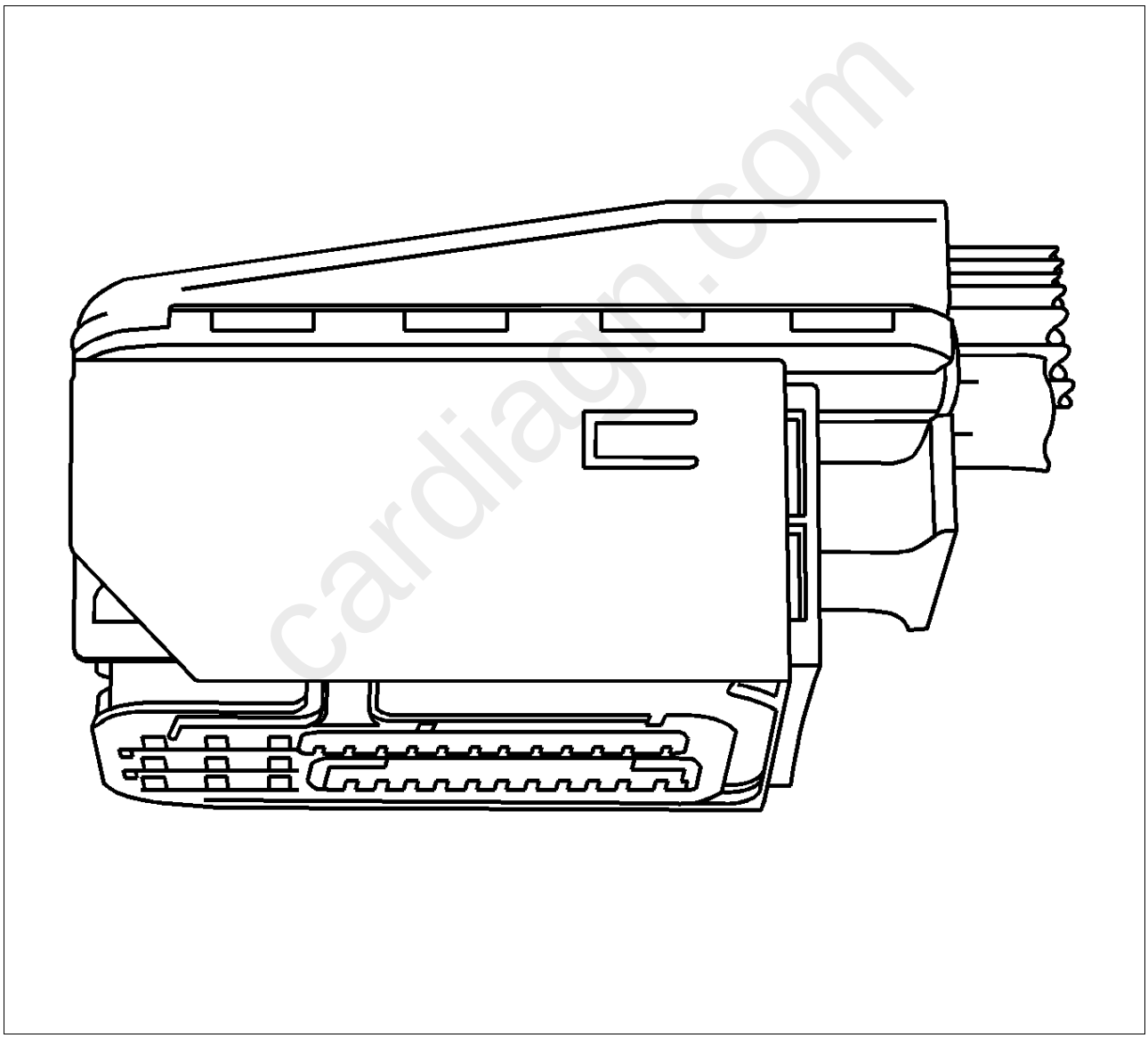
Special Tools

- **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 .

DIAGNOSTIC INFORMATION AND PROCEDURES > KOSTAL CONNECTORS (GLOW PLUG CONTROL MODULE) > TERMINAL REMOVAL PROCEDURE

Fig 1: Typical Kostal Connector

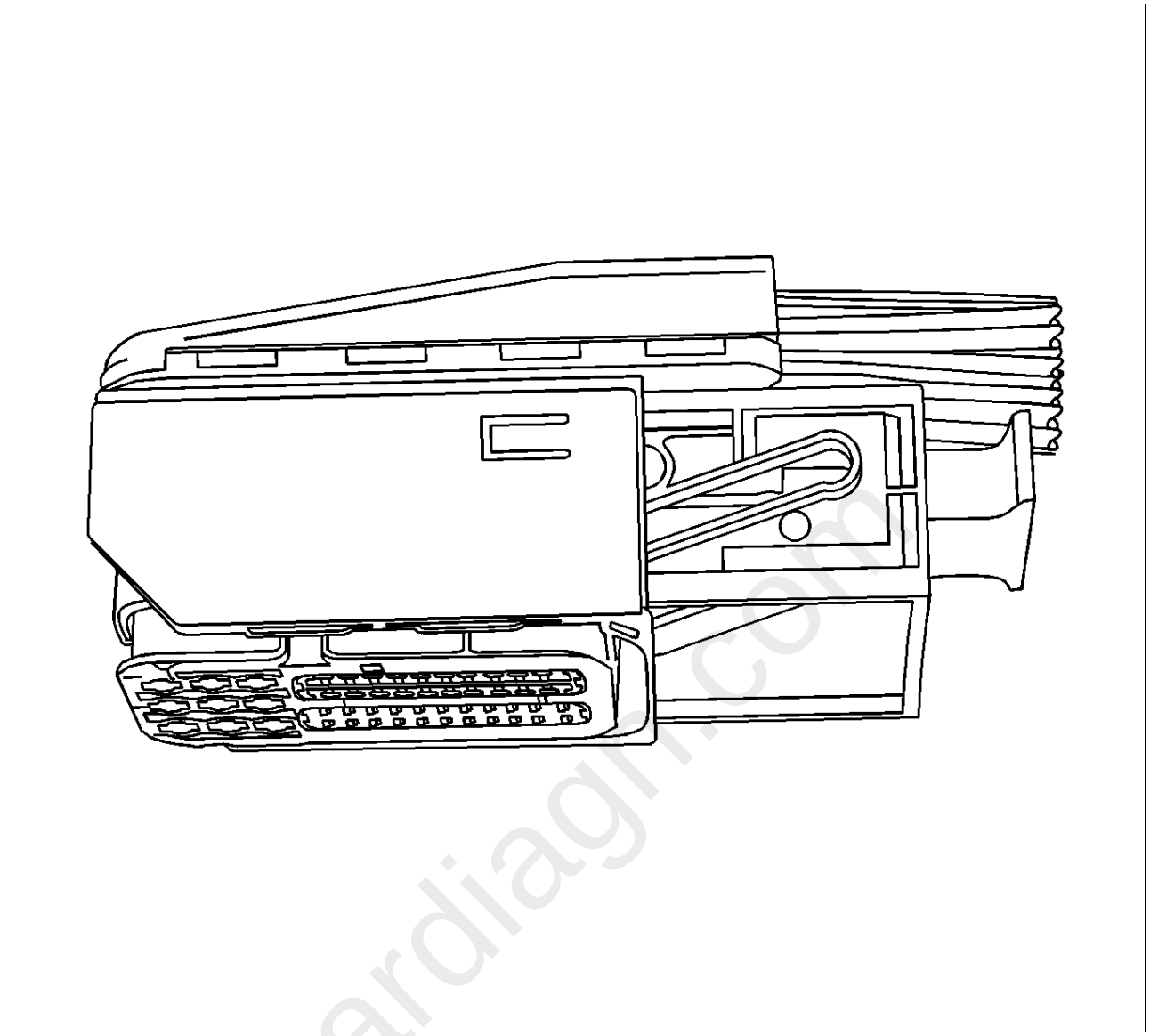


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Courtesy of GENERAL MOTORS COMPANY

View of typical connector.

Fig 2: Connector In Released Position



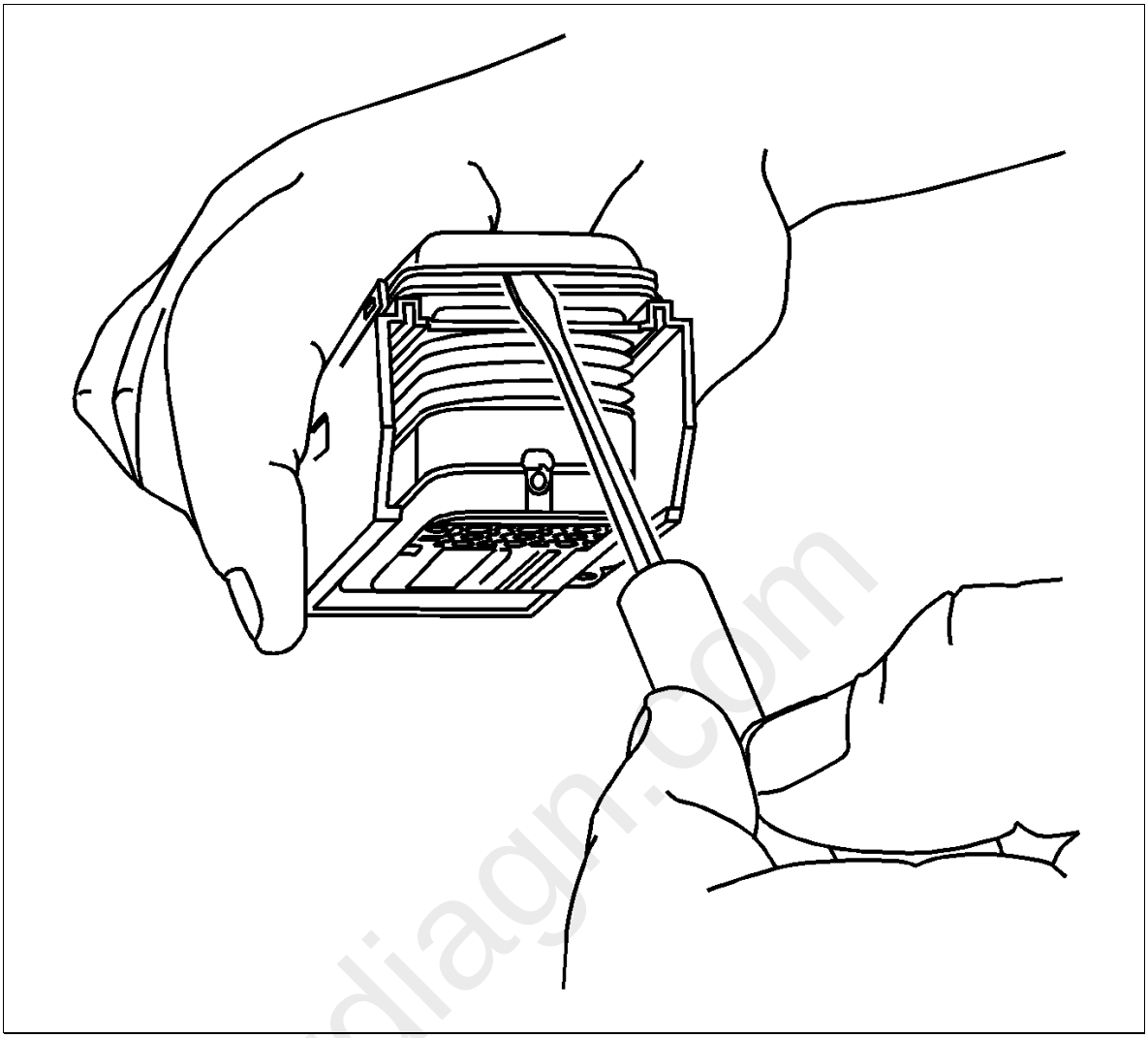
Courtesy of GENERAL MOTORS COMPANY

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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.
2. Disconnect the connector from the component.

Fig 3: Small Flat-Blade Tool To Remove Dress Cover

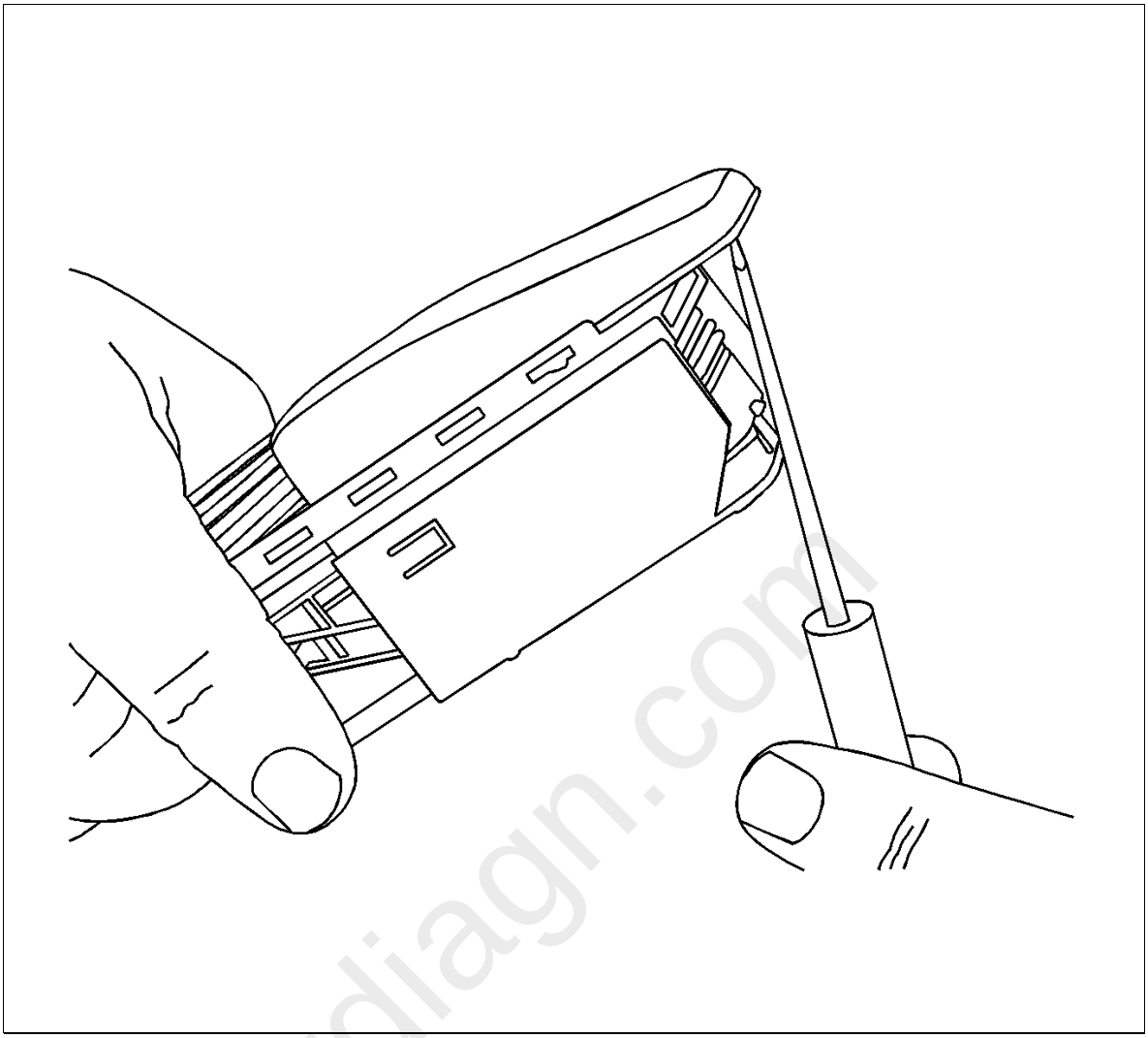


Courtesy of GENERAL MOTORS COMPANY

3. Use a small flat-blade tool to remove the dress cover.

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Fig 4: Sliding Dress Cover Forward & Off Of Kostal Connector (Glow Plug Control Module)

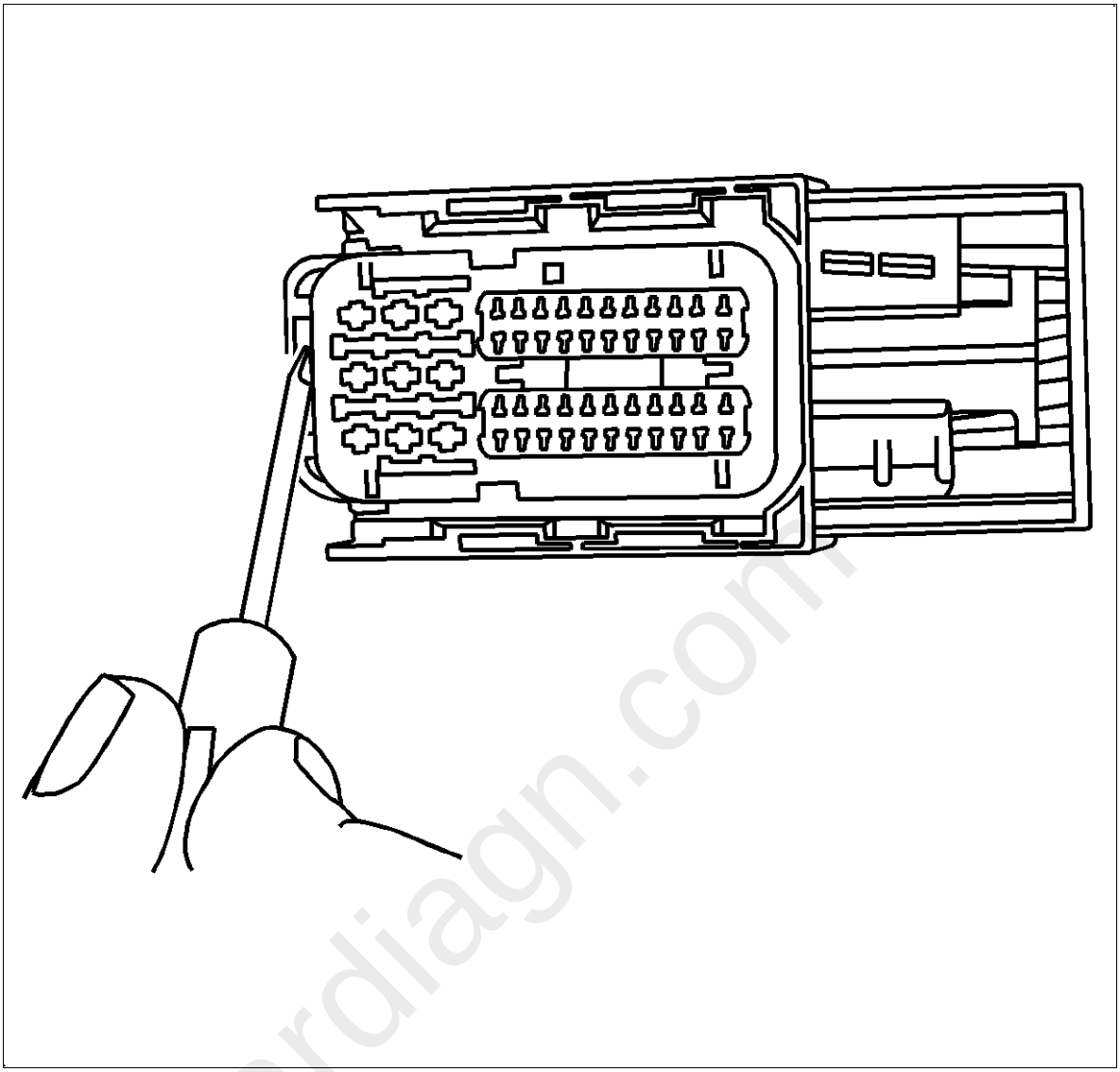


Courtesy of GENERAL MOTORS COMPANY

4. Slide the dress cover forward and off of the connector.

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Fig 5: TPA In Front & Rear Of Connector



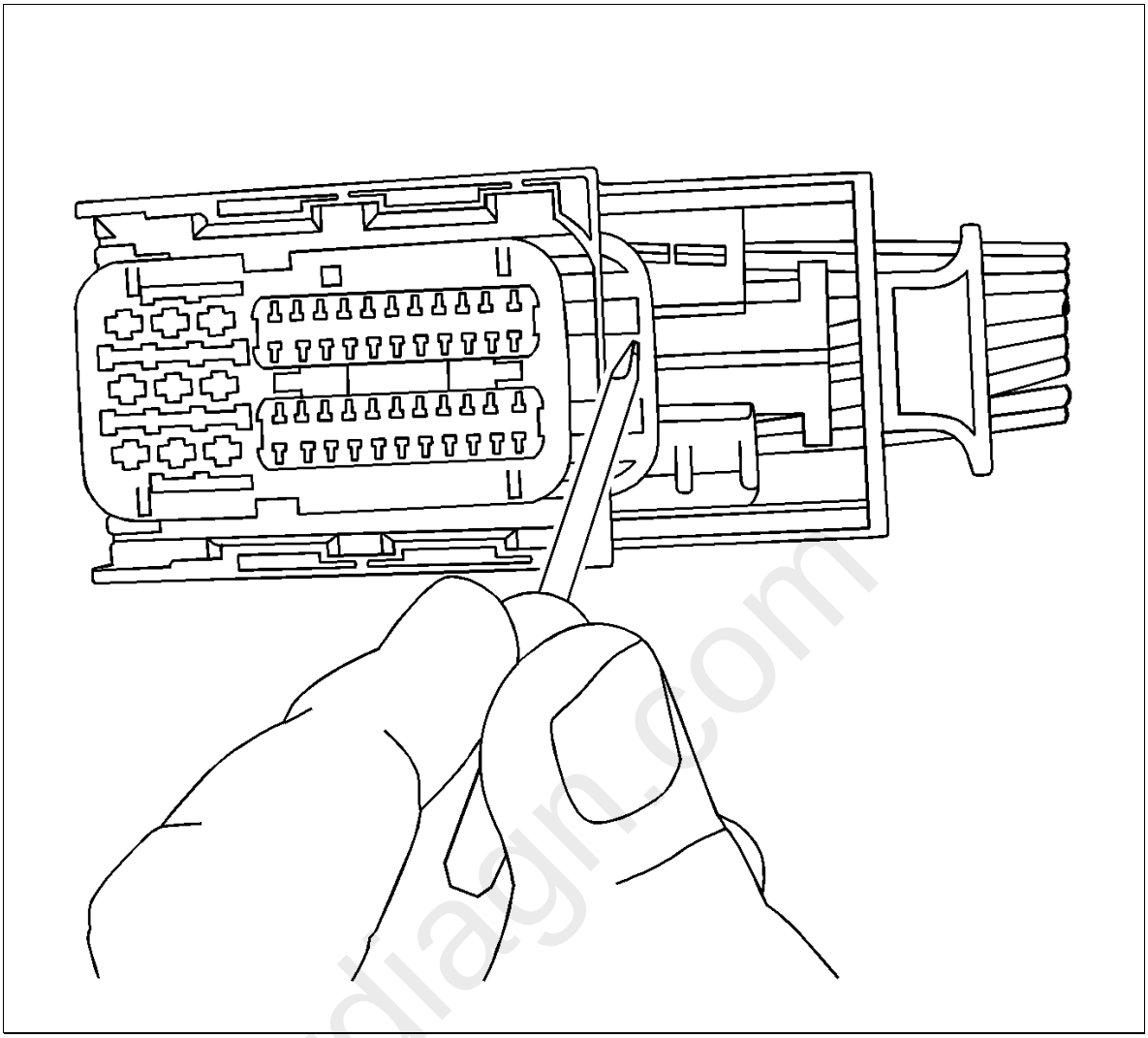
Courtesy of GENERAL MOTORS COMPANY

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.*

6. Use a small flat-blade tool to move the front TPA to the preset position, outboard approximately 0.125 in. (3 mm).

Fig 6: Small Flat-Blade Tool To Remove Rear TPA

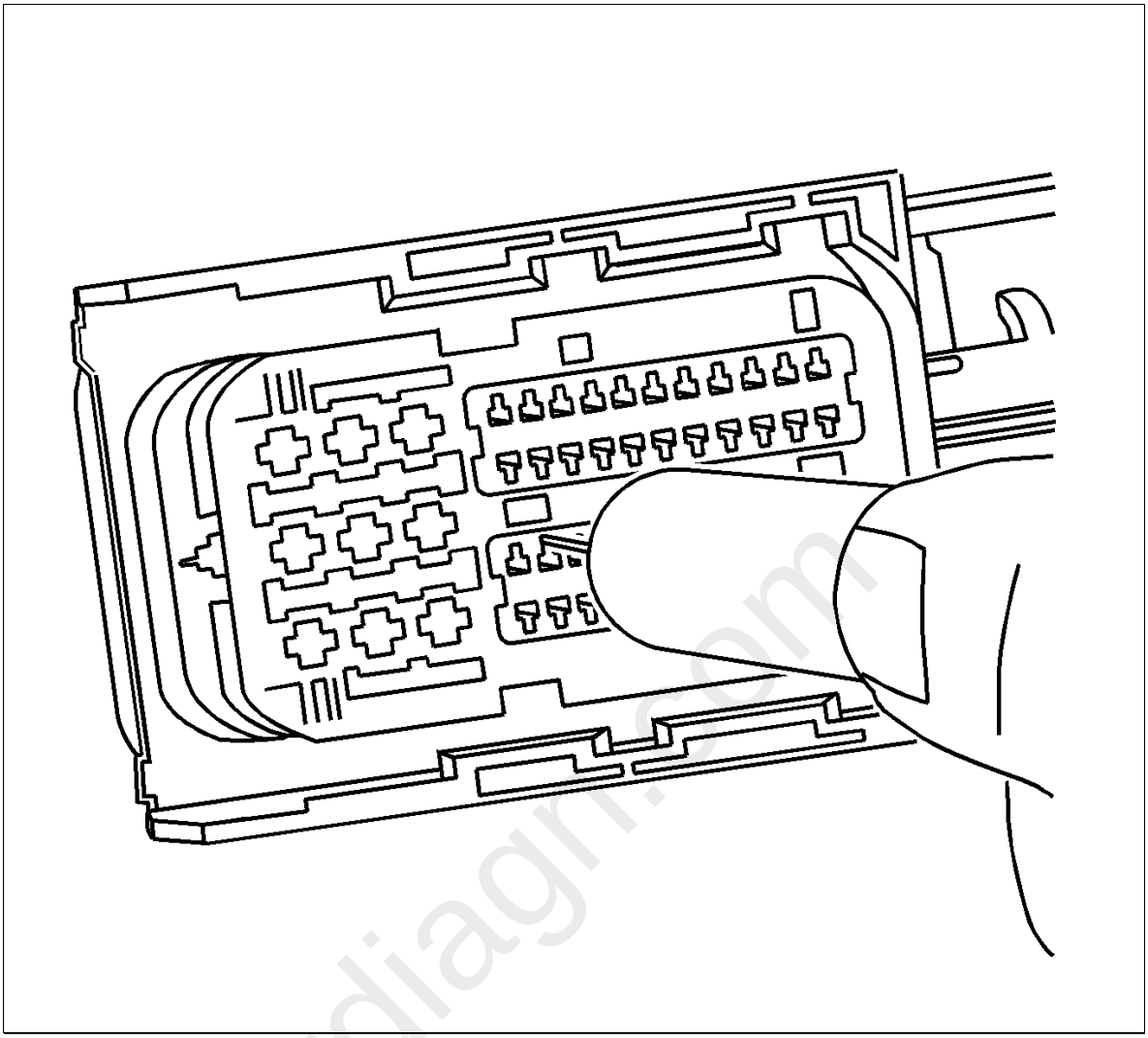


Courtesy of GENERAL MOTORS COMPANY

7. Use a small flat-blade tool to completely remove the rear TPA from the connector.

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Fig 7: Special Tool To Release Terminals



Courtesy of GENERAL MOTORS COMPANY

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 (Terminated Lead Repair) Repairing Connector Terminals (Terminal Repair) procedure.

DIAGNOSTIC INFORMATION AND PROCEDURES > KOSTAL CONNECTORS (TRANSMISSION)

Special Tools

- **EL-38125-550** Terminal Release Tool Kit
- **EL-38125-580** Terminal Release Tool Kit

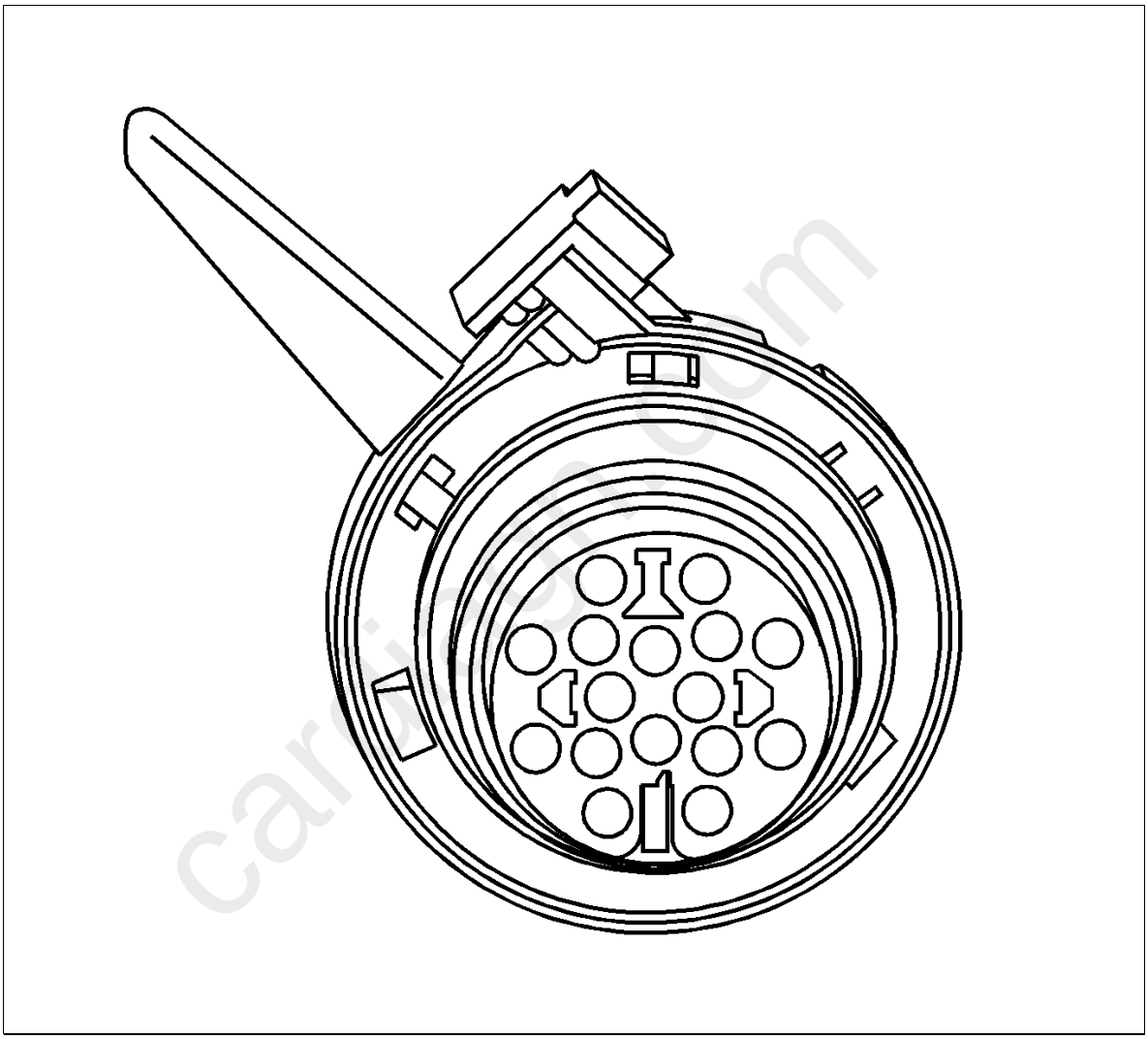
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- **J-38125-28** Terminal Release Tool

For equivalent regional tools, refer to Special Tools .

DIAGNOSTIC INFORMATION AND PROCEDURES > KOSTAL CONNECTORS (TRANSMISSION) > TERMINAL REMOVAL PROCEDURE

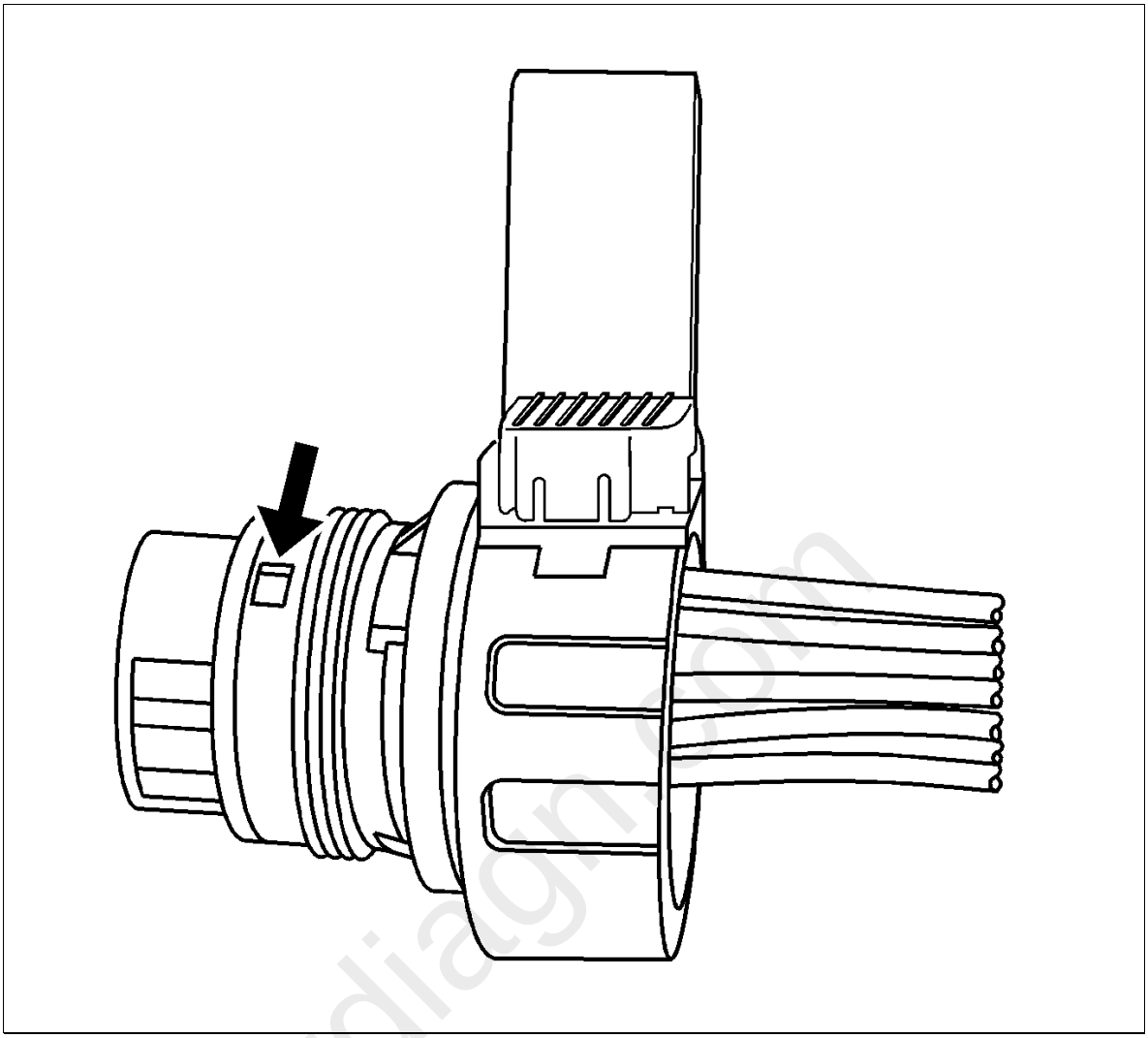
Fig 1: Connector & Lock



Courtesy of GENERAL MOTORS COMPANY

1. While depressing the lock, twist and remove the connector from the component.

Fig 2: Terminal Position Assurance (TPA)

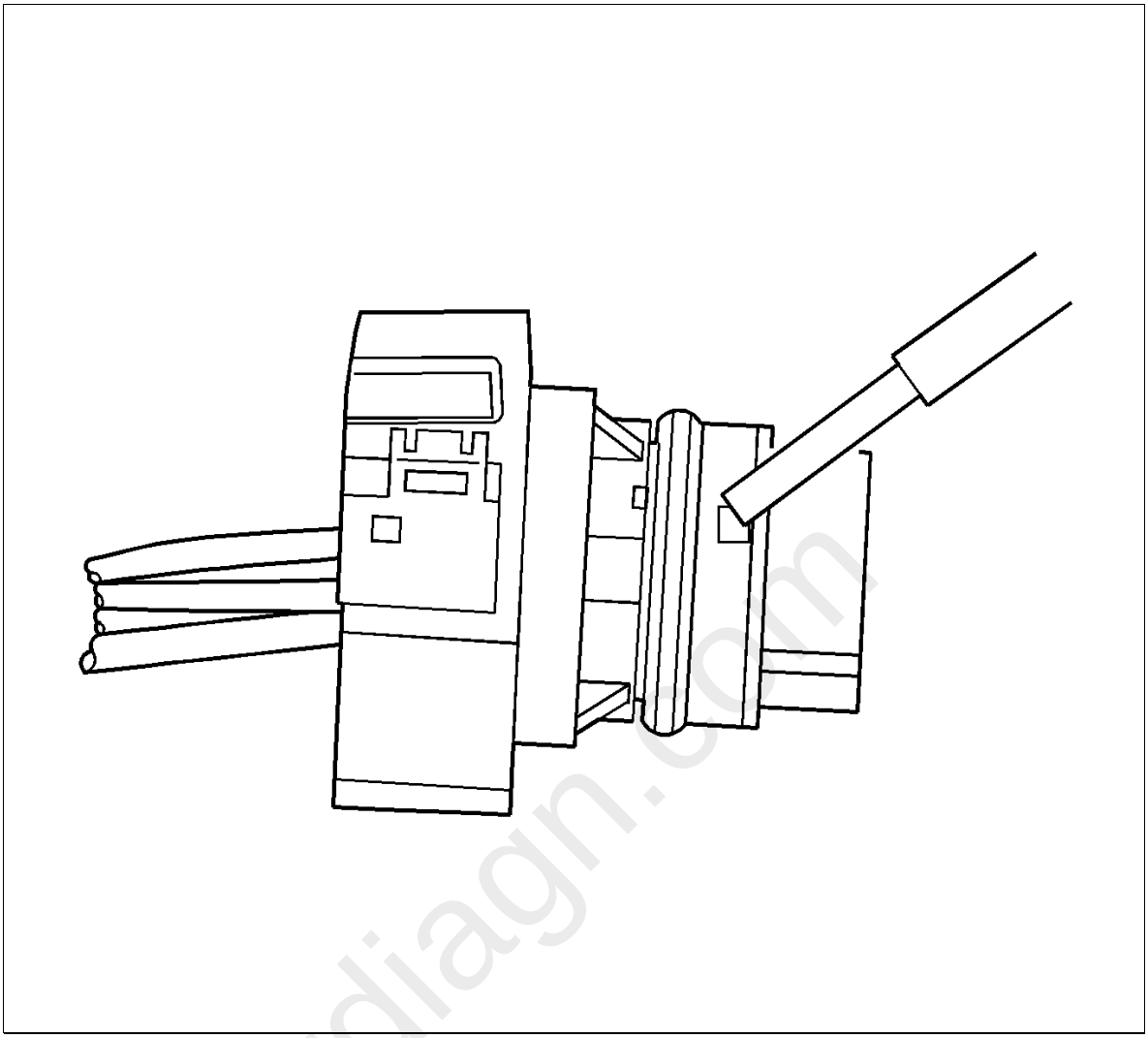


Courtesy of GENERAL MOTORS COMPANY

2. Locate the terminal position assurance (TPA).

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Fig 3: TPA & Flat-Bladed Tool



Courtesy of GENERAL MOTORS COMPANY

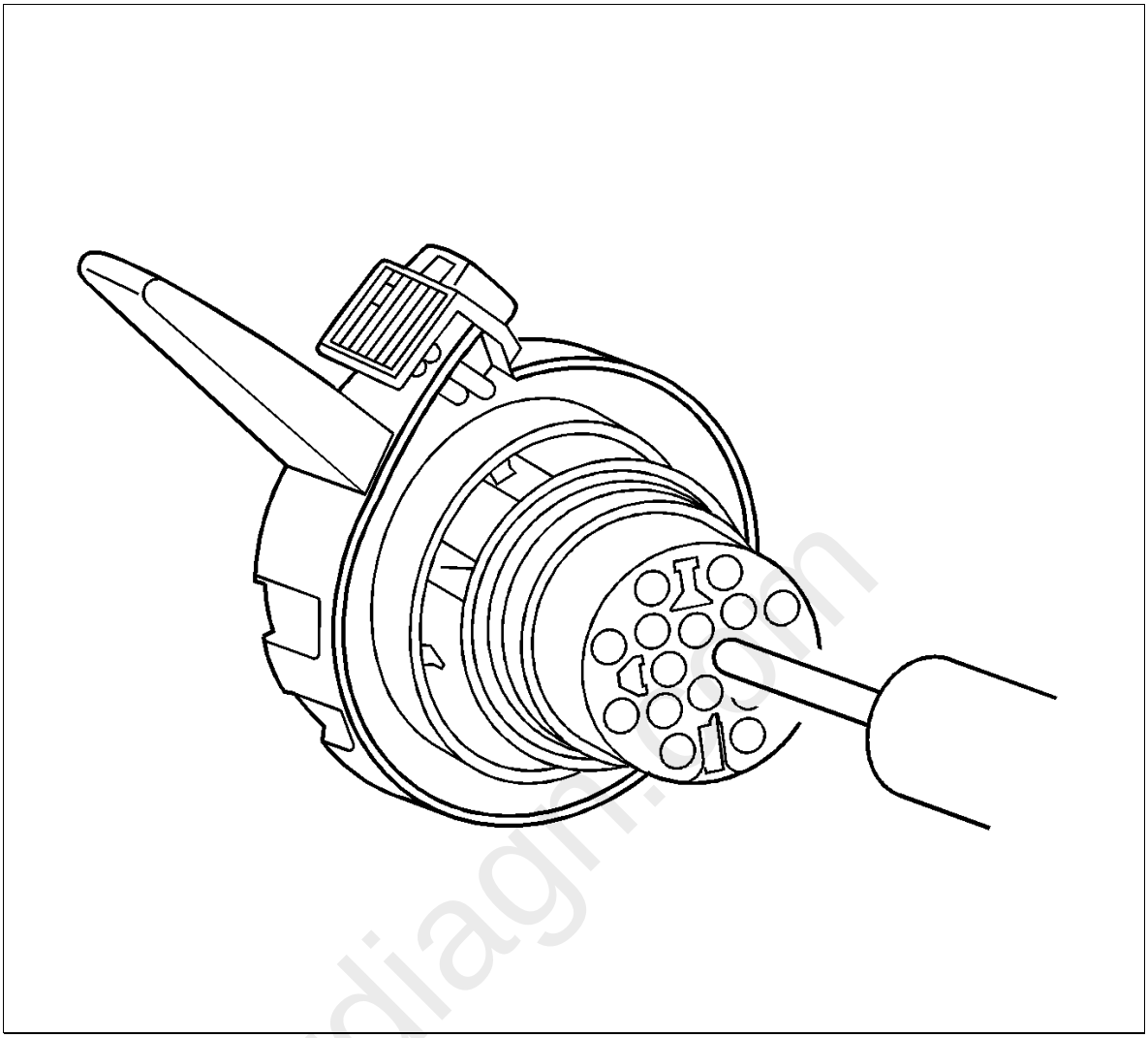
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NOTE:

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.

Fig 4: Tool To Release Terminals



Courtesy of GENERAL MOTORS COMPANY

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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 (Terminated Lead Repair) Repairing Connector Terminals (Terminal Repair) procedure.

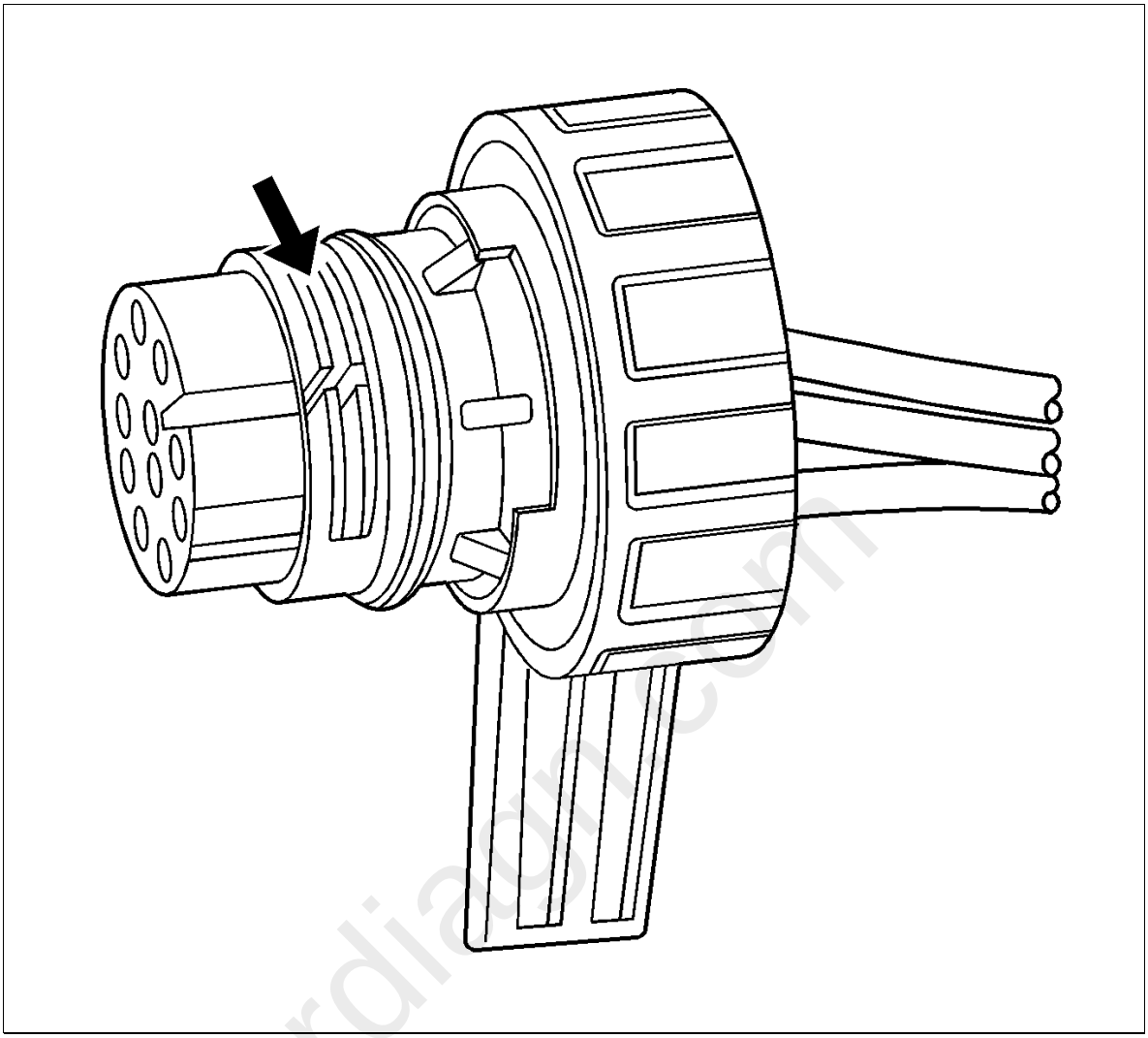
DIAGNOSTIC INFORMATION AND PROCEDURES > KOSTAL CONNECTORS (TRANSMISSION) > TERMINAL INSERTION PROCEDURE

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.

Fig 1: Terminal Position Assurance (TPA)

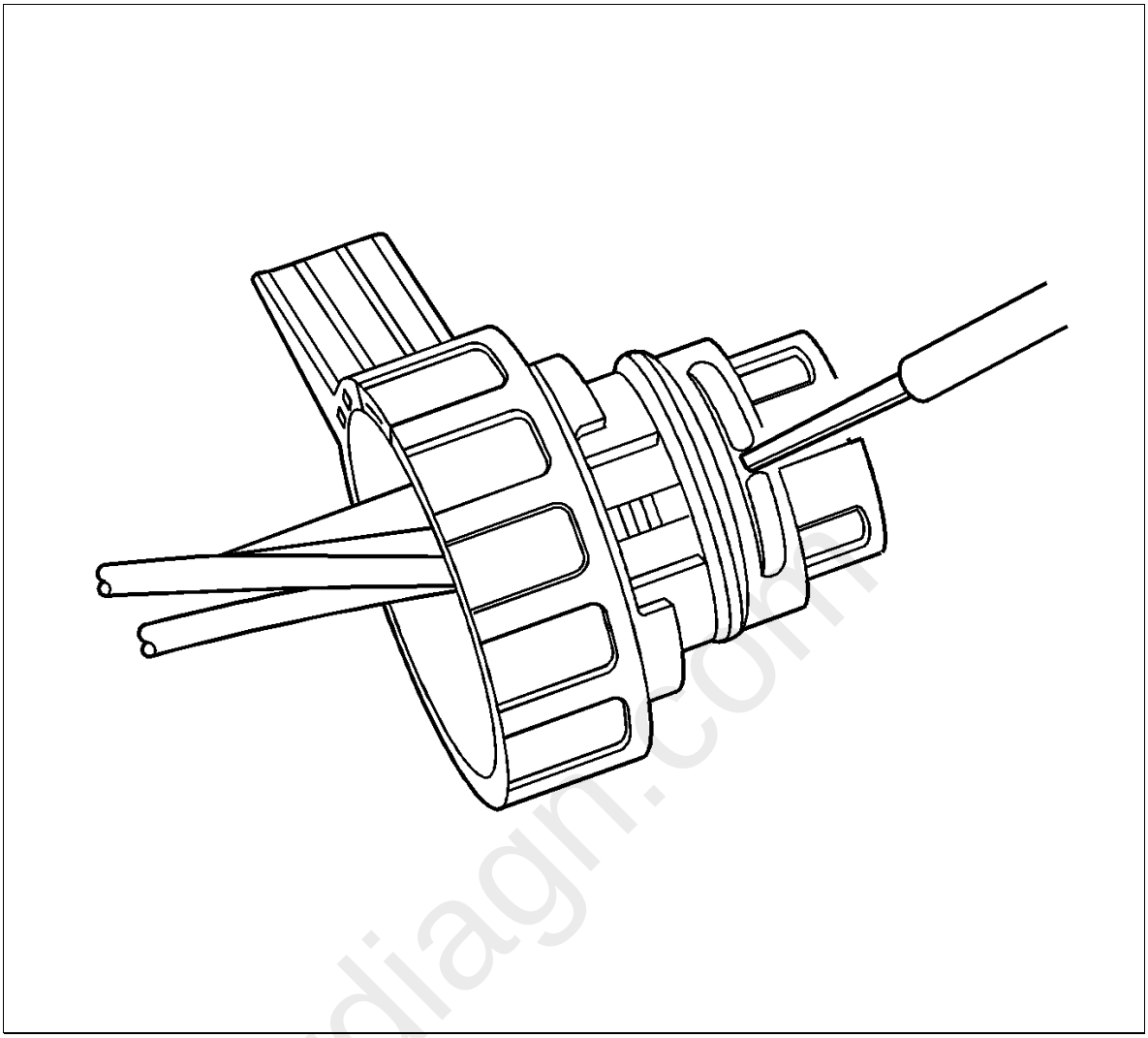


Courtesy of GENERAL MOTORS COMPANY

3. Locate the TPA.

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Fig 2: TPA & Flat-Bladed Tool

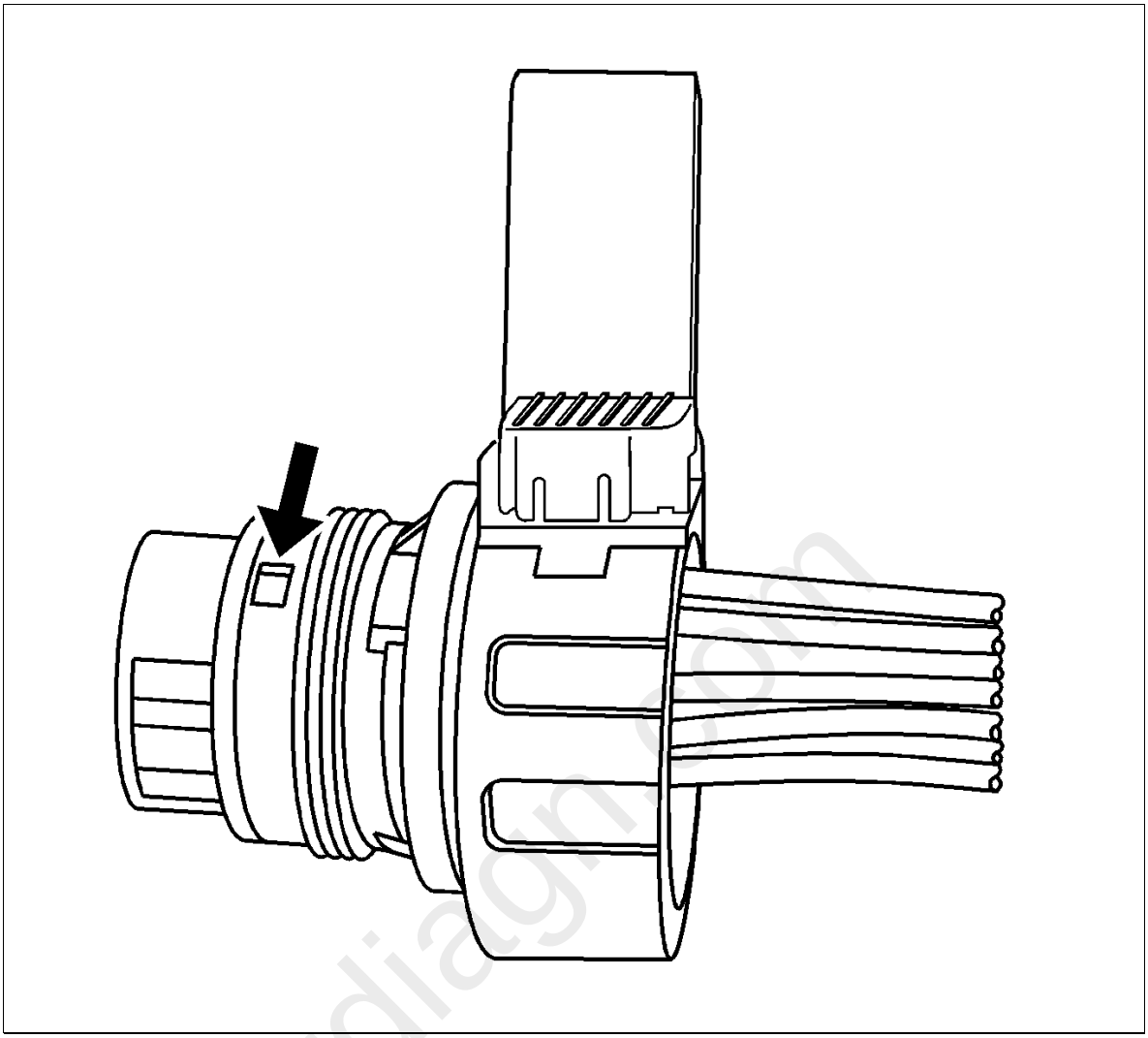


Courtesy of GENERAL MOTORS COMPANY

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4. Use a small flat-blade tool to push the TPA until it bottoms out.

Fig 3: Terminal Position Assurance (TPA)



Courtesy of GENERAL MOTORS COMPANY

5. Ensure the TPA is fully seated. The TPA should be centered and flush with the connector body when viewed.

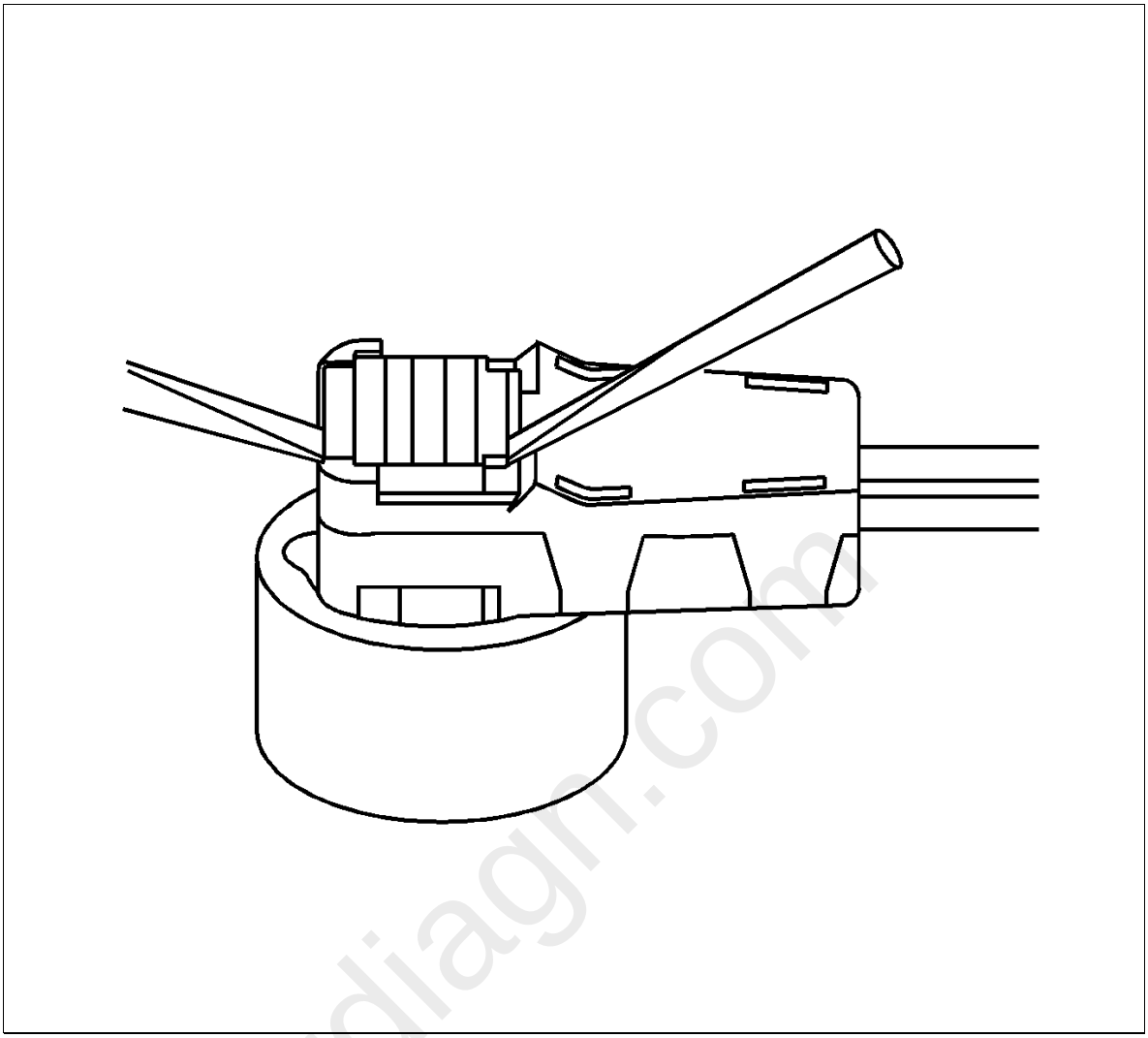
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DIAGNOSTIC INFORMATION AND PROCEDURES > MOLEX CONNECTORS (SIR) > REMOVAL PROCEDURE

NOTE:

The orange or yellow connector position assurance (CPA) must be released first to disconnect or to connect the connector.

Fig 1: Lifting Orange CPA

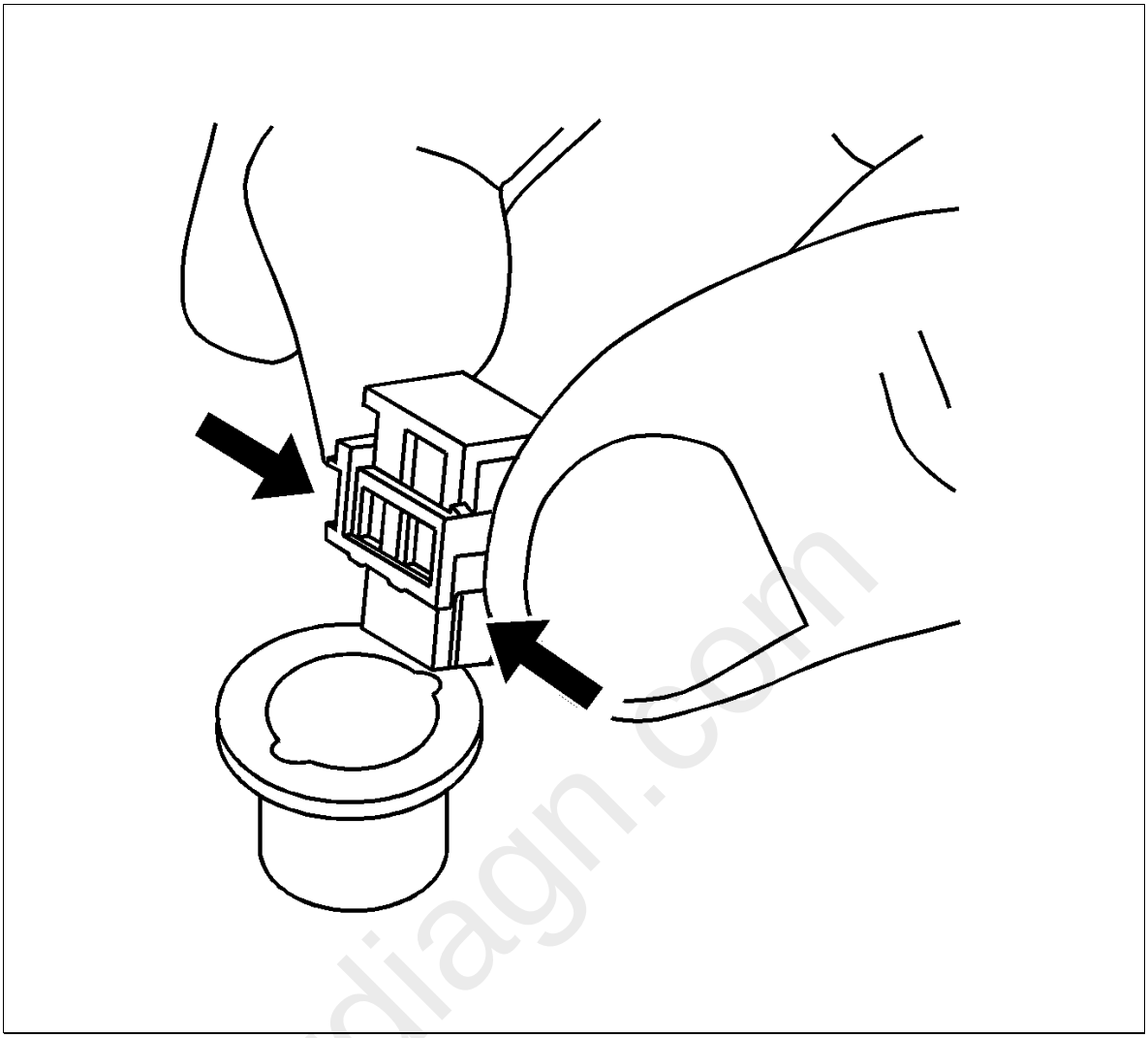


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1. Lift the orange or yellow CPA vertically (avoid lifting on an angle to the connector) approximately 4 mm to release the connector. Use a small flat-bladed tool to help release the CPA. The CPA may also be released manually without any tools.

Fig 2: Grabbing Connector On Both Sides



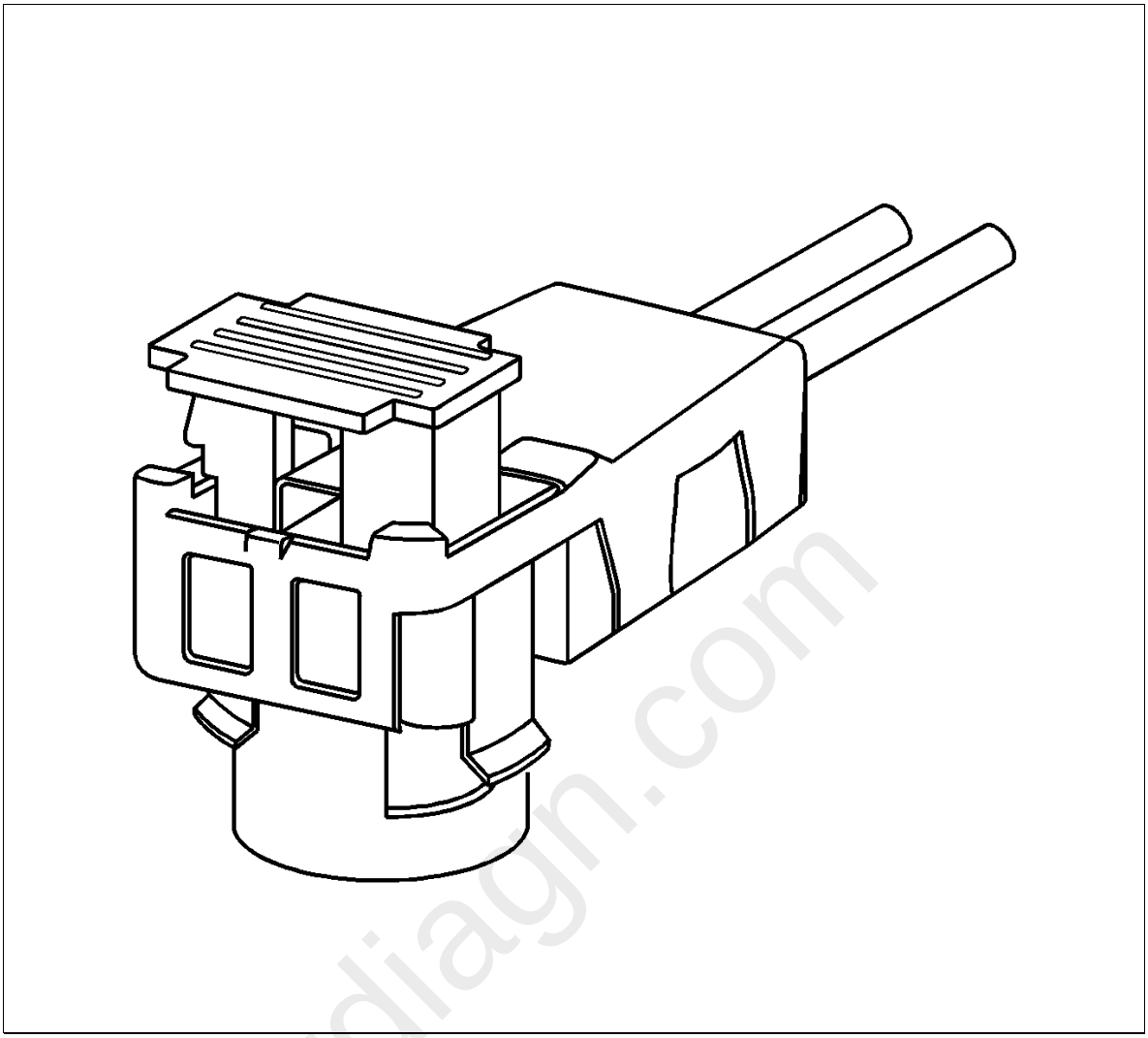
Courtesy of GENERAL MOTORS COMPANY

2. Grab the connector on both sides and lift vertically to disconnect the connector.

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DIAGNOSTIC INFORMATION AND PROCEDURES > MOLEX CONNECTORS (SIR) > INSTALLATION PROCEDURE

Fig 1: Lifting Orange CPA

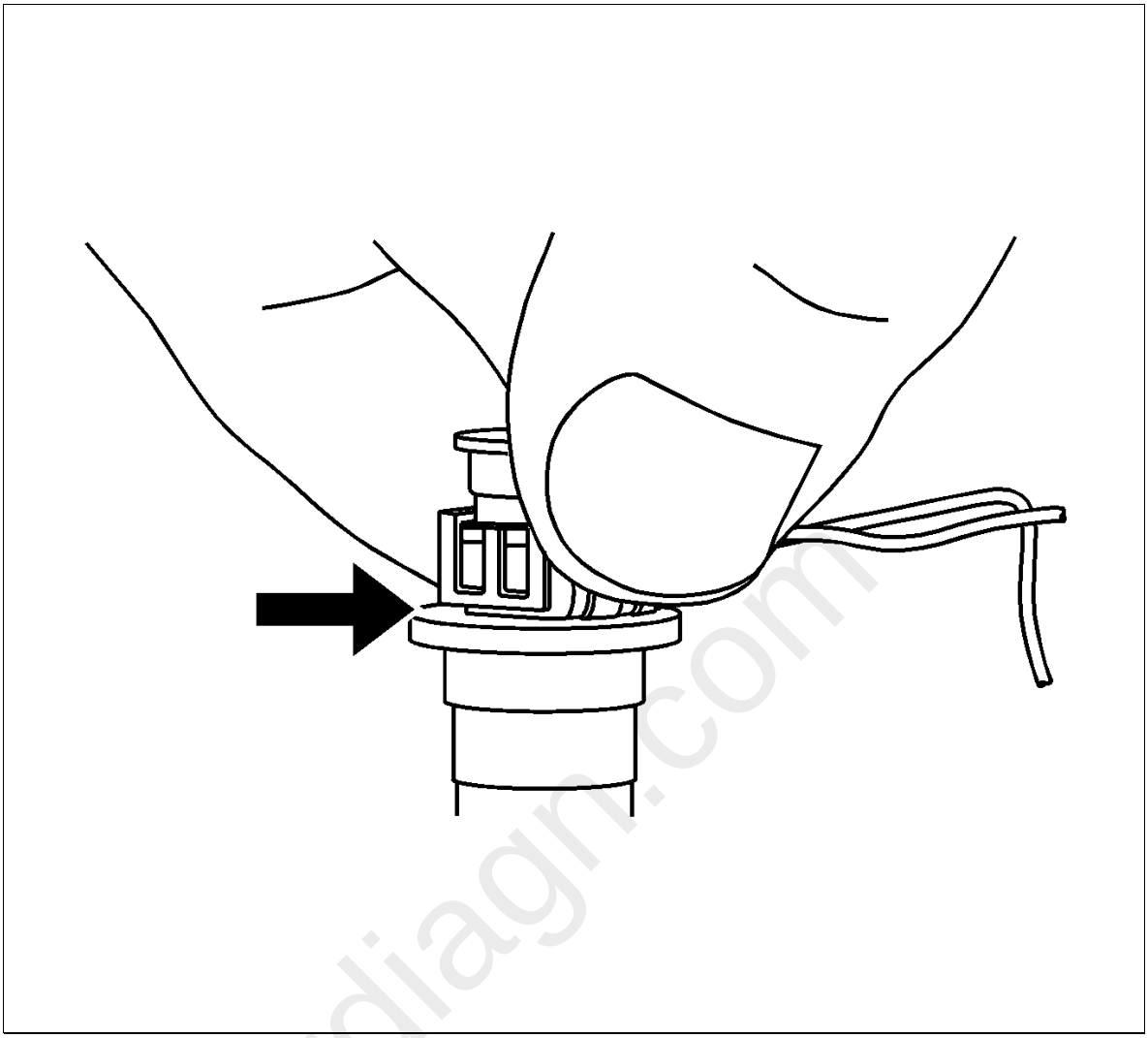


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1. The CPA should be approximately 4 mm above the yellow cover before installing the connector. If not, use a small flat-bladed tool to help release the CPA. The CPA may also be released manually without any tools.

Fig 2: Seating Connector Sub-Assembly

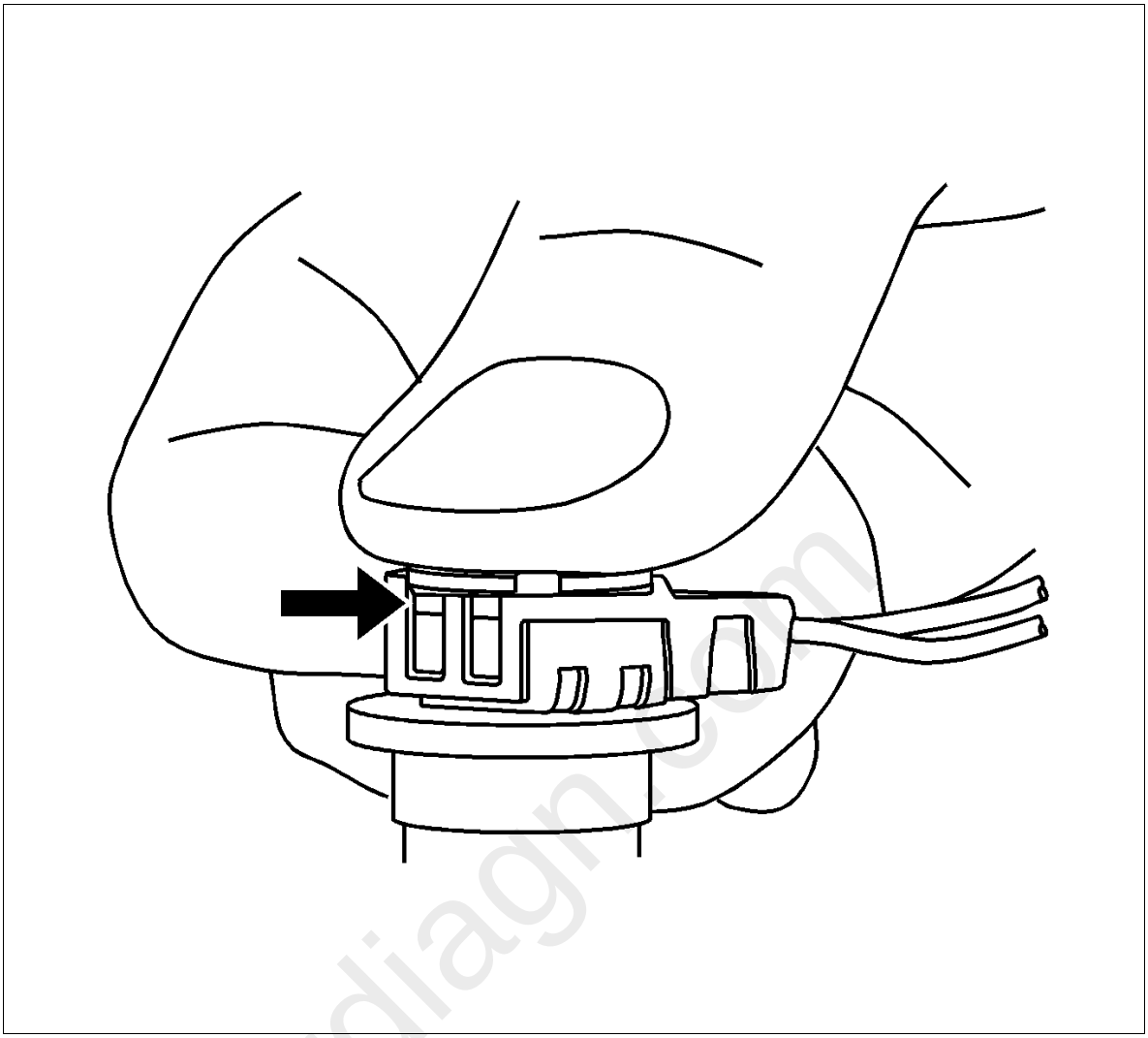


Courtesy of GENERAL MOTORS COMPANY

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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.

Fig 3: Pushing CPA Down



Courtesy of GENERAL MOTORS COMPANY

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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DIAGNOSTIC INFORMATION AND PROCEDURES > SUMITOMO CONNECTORS

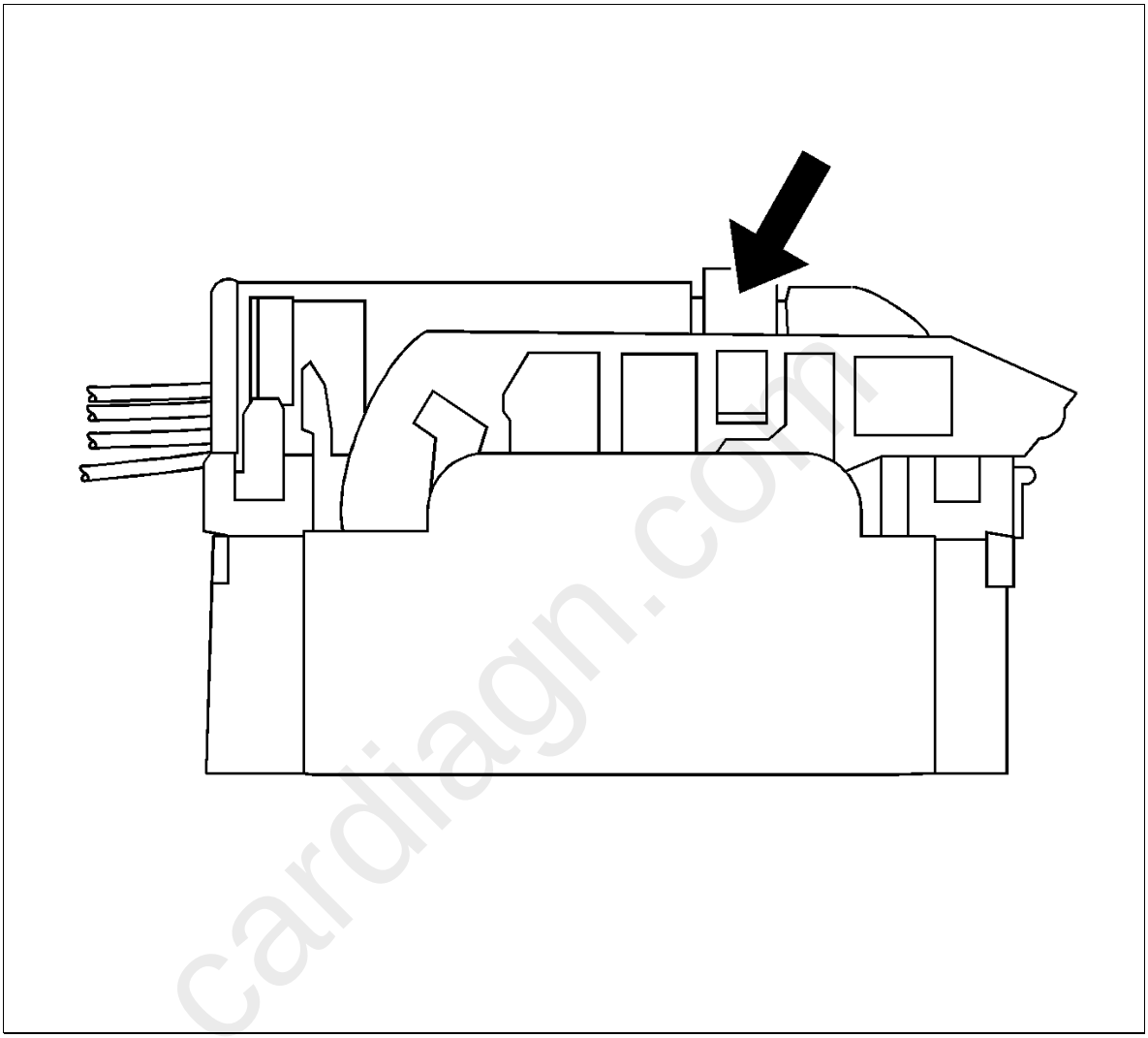
Special Tools

- **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 .

DIAGNOSTIC INFORMATION AND PROCEDURES > SUMITOMO CONNECTORS > TERMINAL REMOVAL PROCEDURE

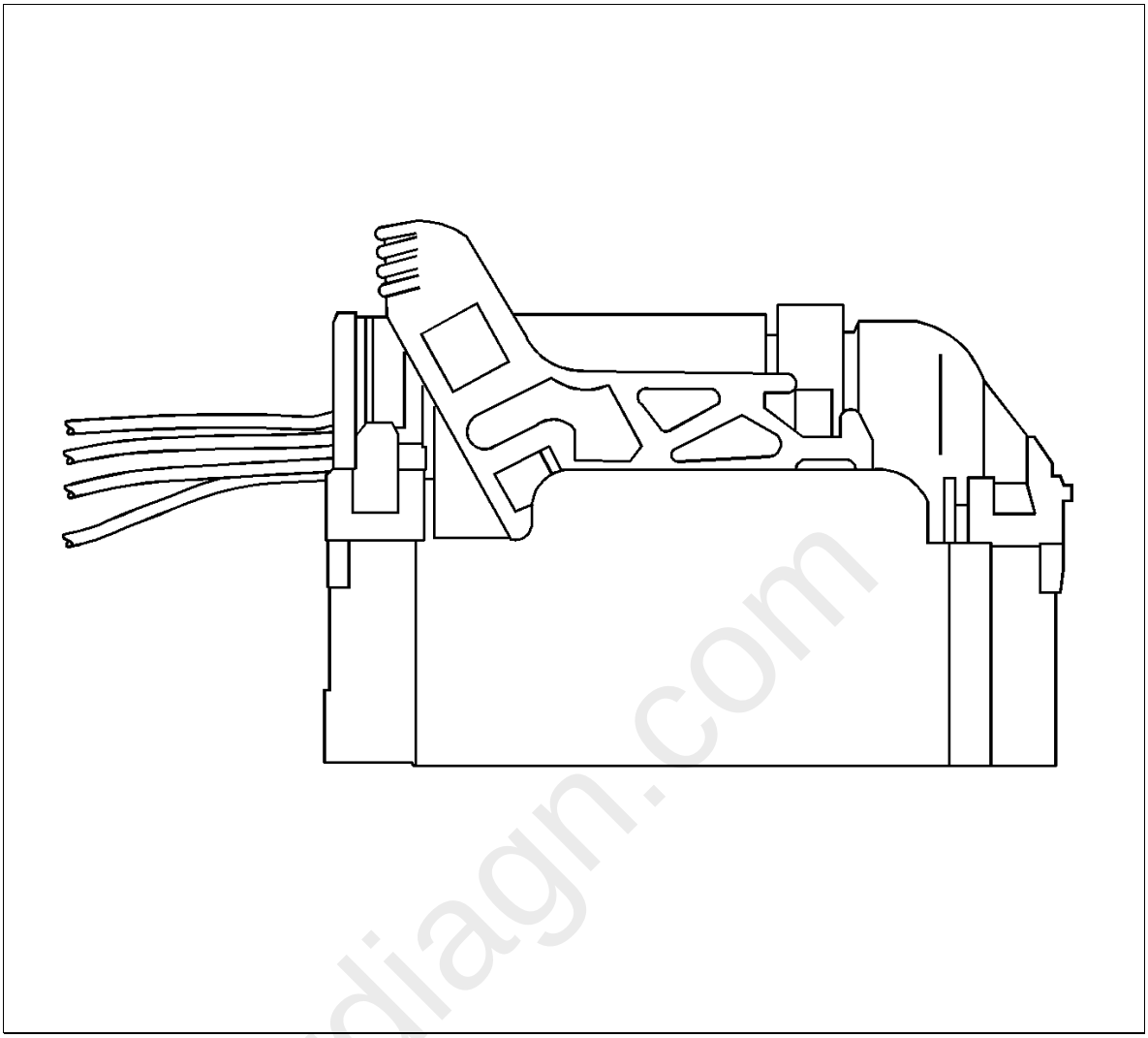
Fig 1: Lever Lock



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Courtesy of GENERAL MOTORS COMPANY

Fig 2: Lever Lock In Forward Position

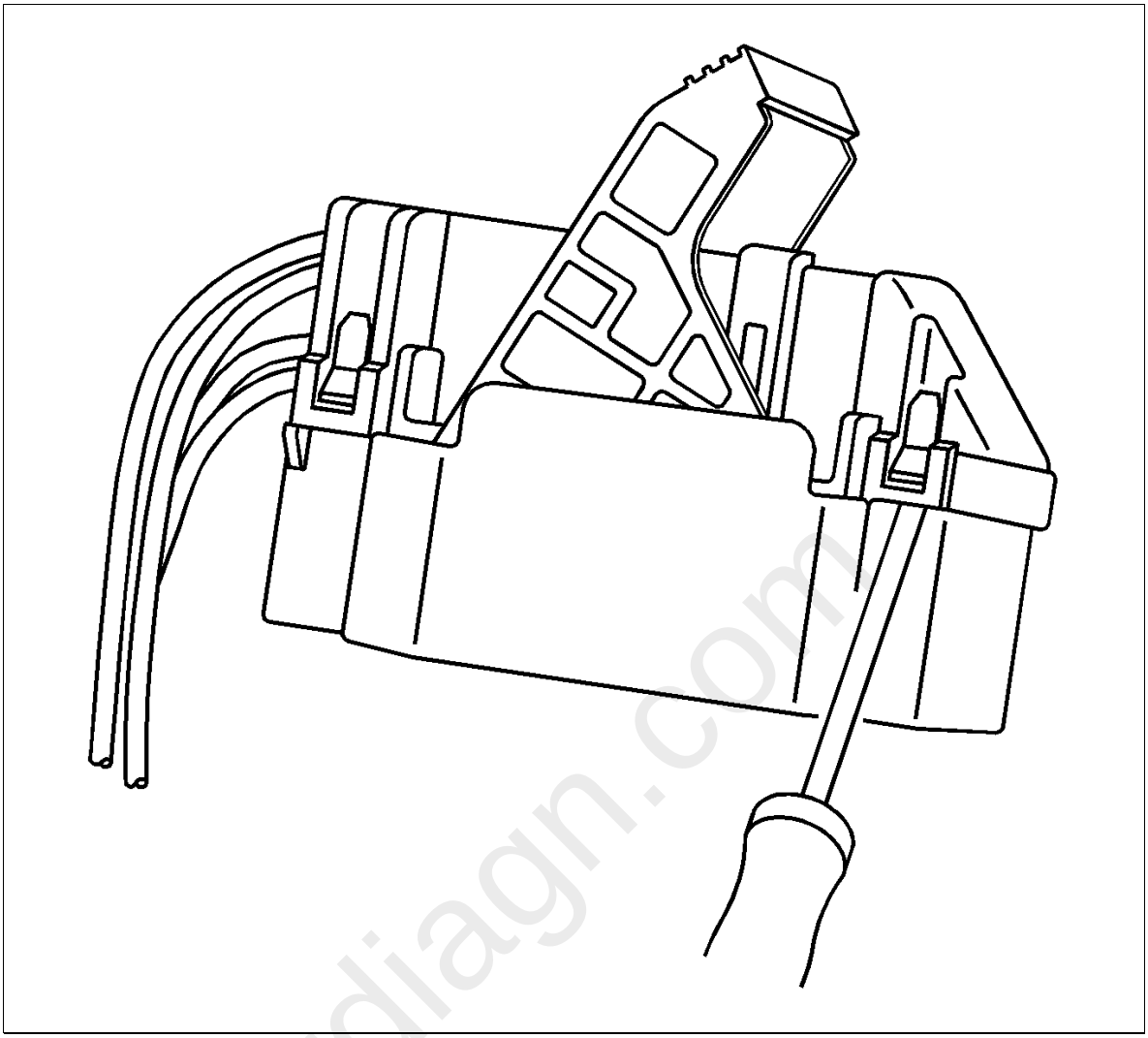


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1. Slide the lever lock forward while pressing down on the lever lock release tab.
2. Disconnect the connector from the component.

Fig 3: Connector Locking Tabs

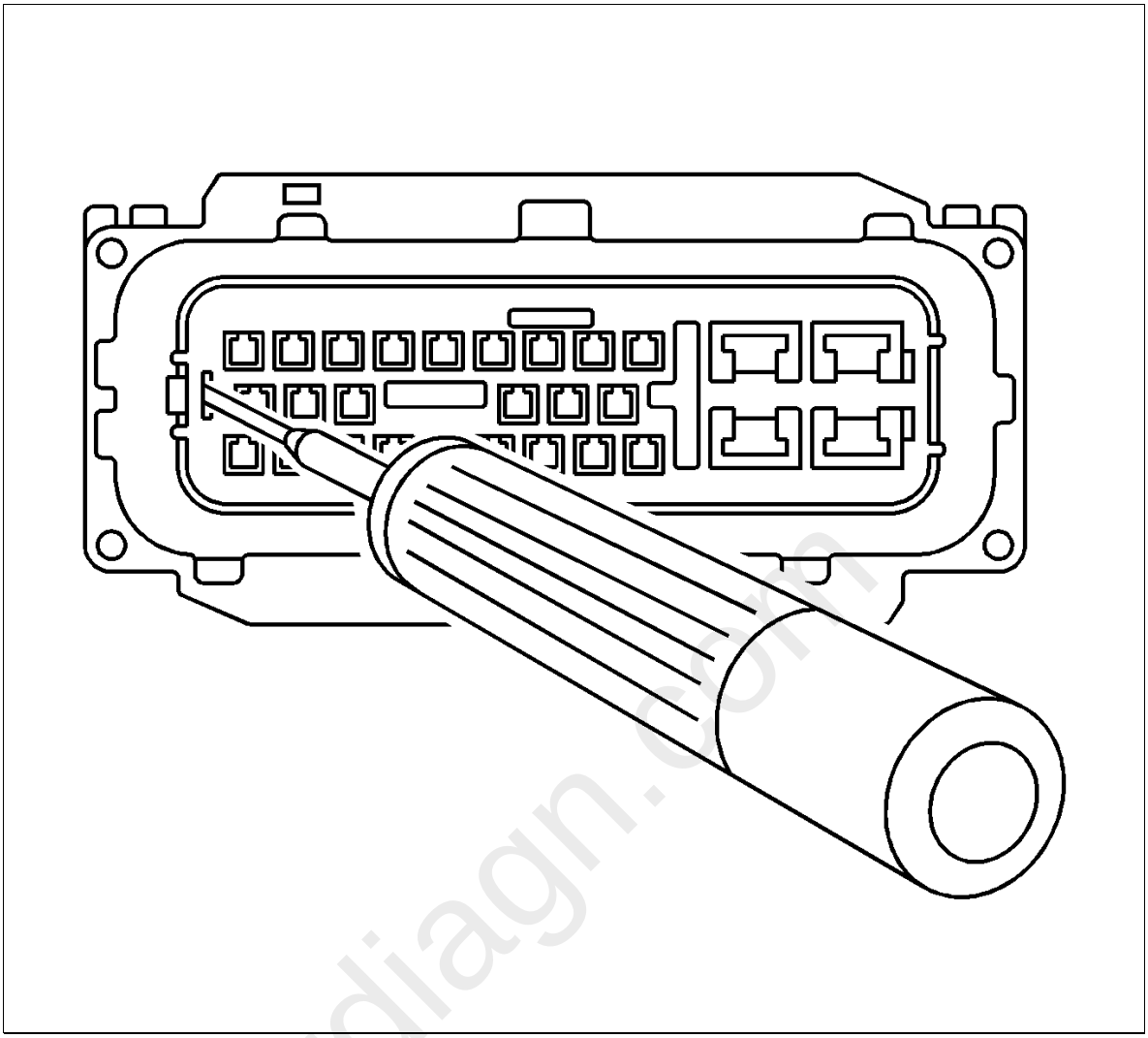


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3. Remove the dress cover by using a flat-blade tool to release the connector locking tabs and pulling off the dress cover.

Fig 4: Nose Piece Locking Tabs

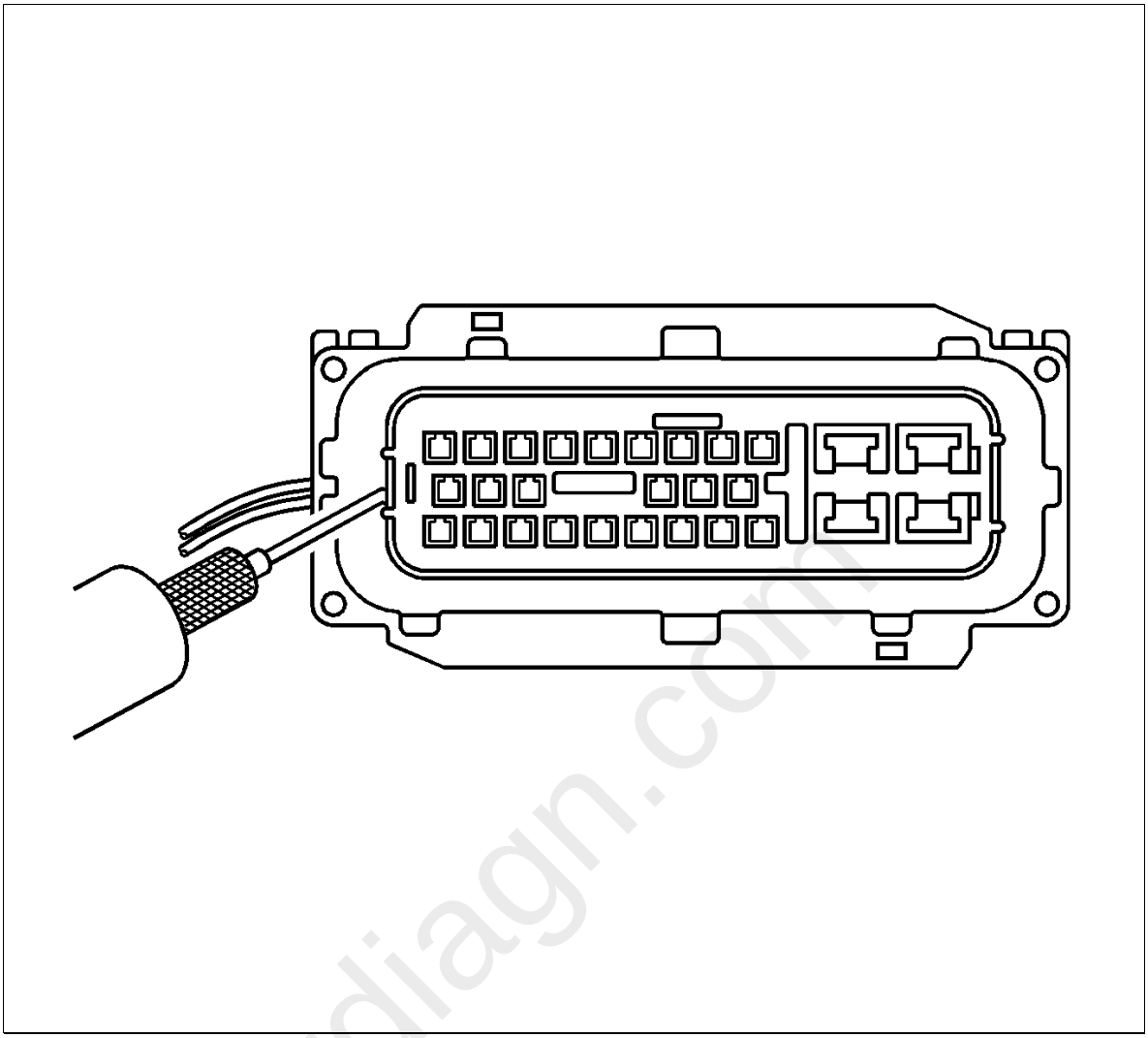


Courtesy of GENERAL MOTORS COMPANY

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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Fig 5: Pulling Up One End Of Nose Piece (1st Side)

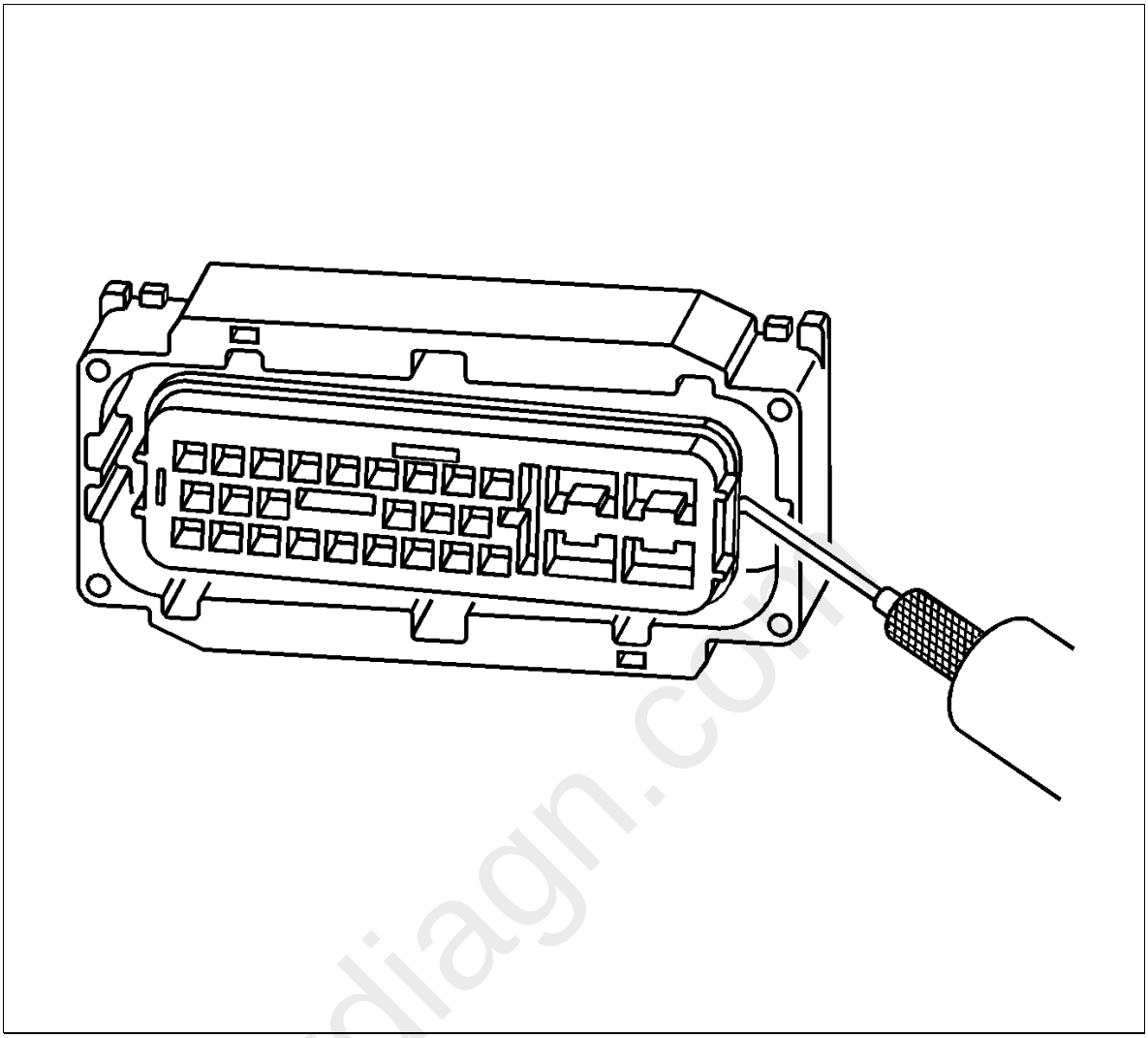


Courtesy of GENERAL MOTORS COMPANY

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.

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Fig 6: Pulling Up One End Of Nose Piece (2nd Side)

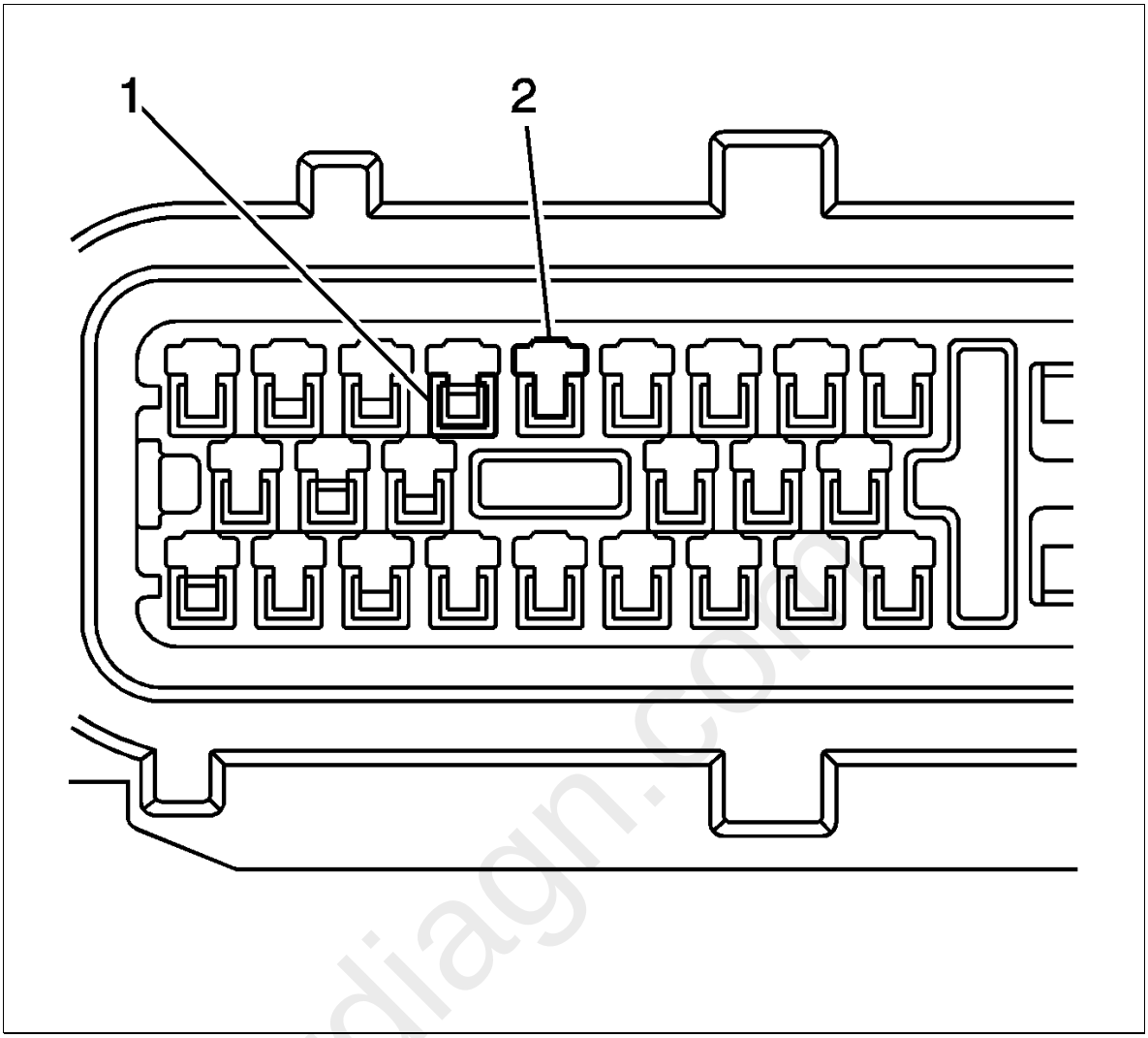


Courtesy of GENERAL MOTORS COMPANY

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.

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Fig 7: Terminal & Entry Canal

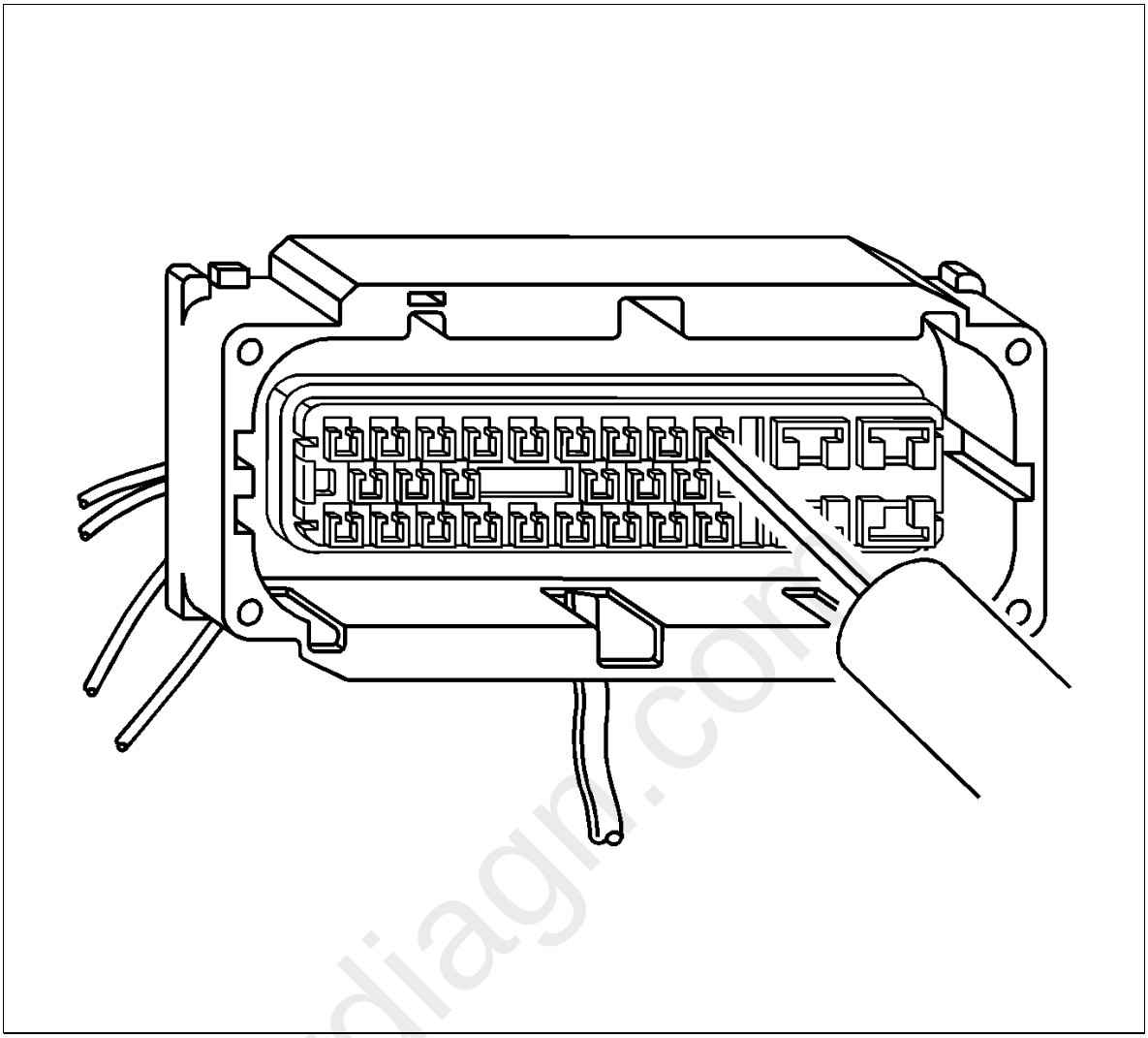


Courtesy of GENERAL MOTORS COMPANY

7. The illustration above identifies the entry canal where the terminal release tool will be inserted, and the terminal cavity.
    1. Terminal (1)
    2. Entry Canal (2)

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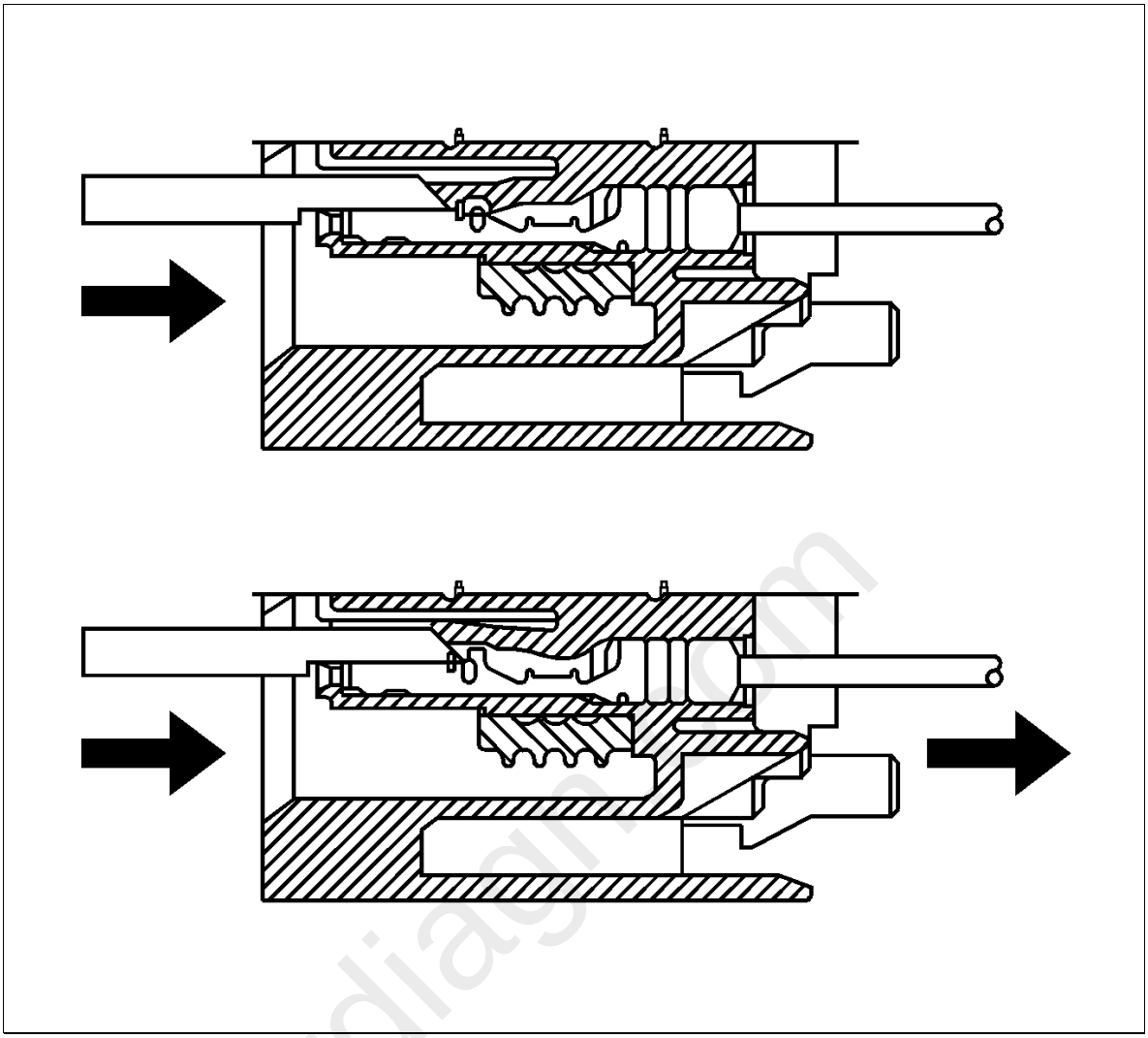
Fig 8: Tool Into Entry Canal



Courtesy of GENERAL MOTORS COMPANY

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.

Fig 9: Cutaway View Of Connector



Courtesy of GENERAL MOTORS COMPANY

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 (Terminated Lead Repair) Repairing Connector Terminals (Terminal Repair) procedure.
11. Insert the repaired terminal back into the cavity. Repeat the diagnostic procedure to verify the repair and reconnect the connector bodies.

DIAGNOSTIC INFORMATION AND PROCEDURES > SUMITOMO CONNECTORS > 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.

DIAGNOSTIC INFORMATION AND PROCEDURES > 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

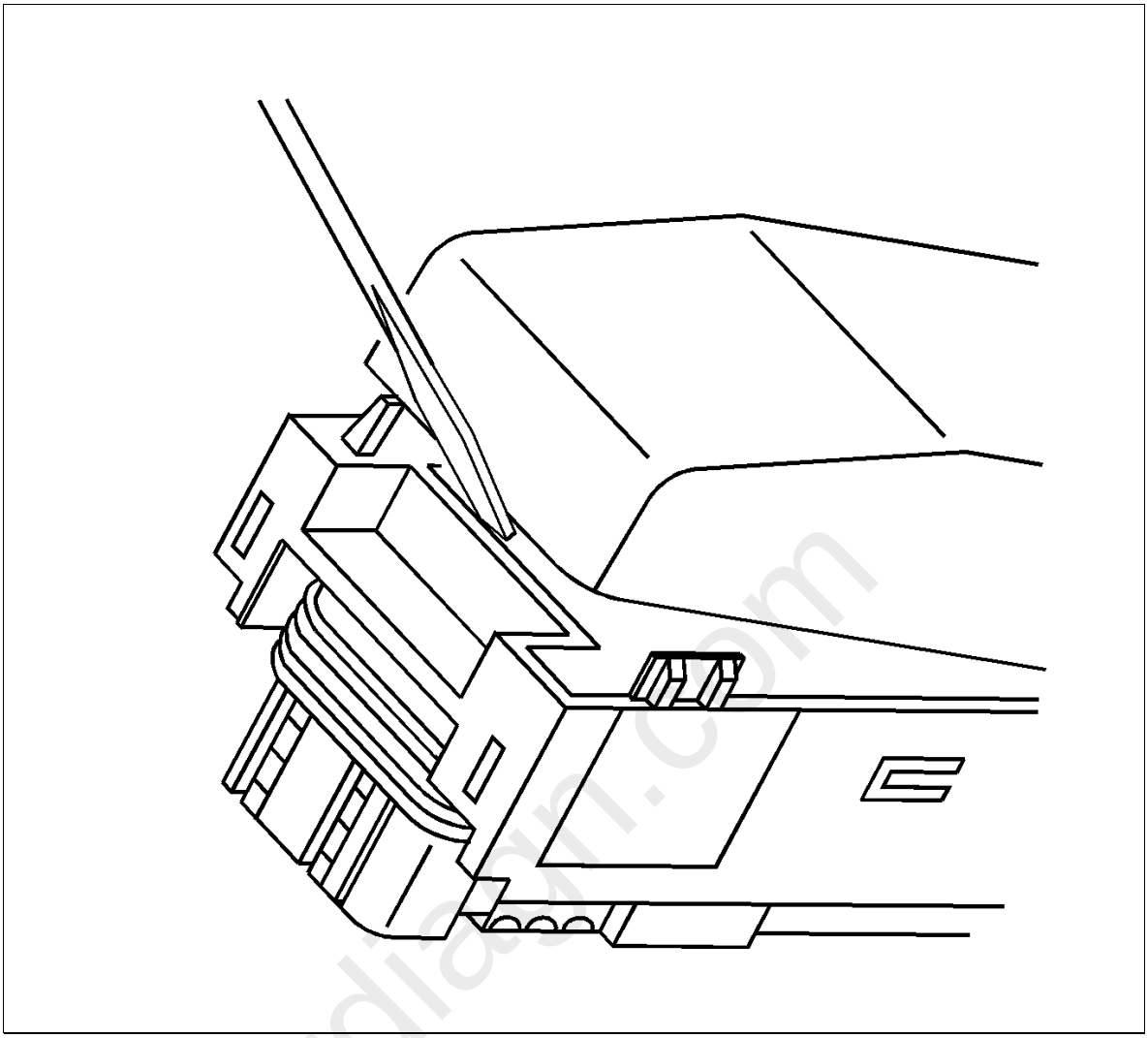
For equivalent regional tools, refer to Special Tools .

DIAGNOSTIC INFORMATION AND PROCEDURES > TYCO/AMP CONNECTORS (CM 42-WAY) > 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.

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Fig 1: Dress Cover

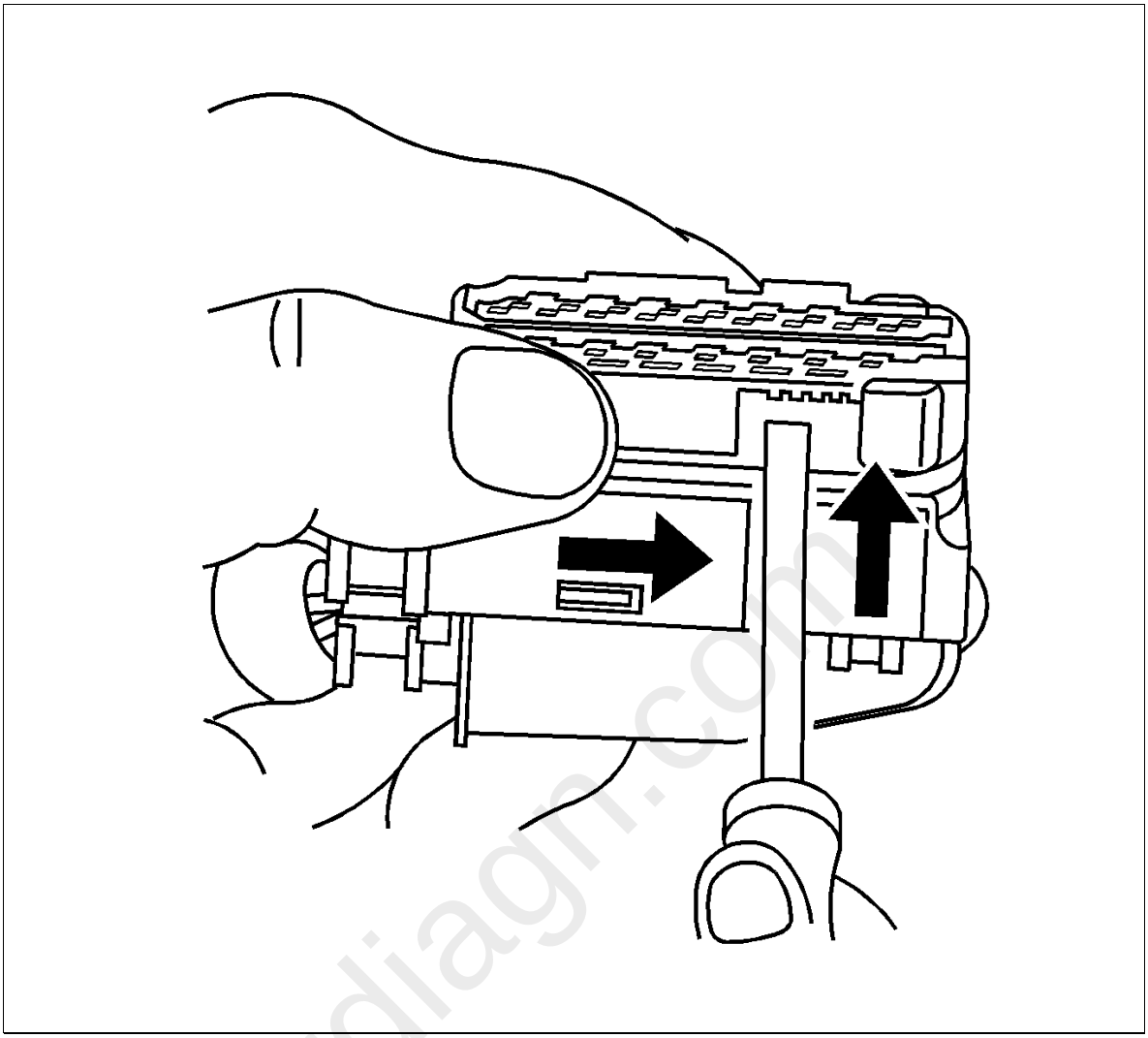


Courtesy of GENERAL MOTORS COMPANY

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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.

Fig 2: Terminal Position Assurance (TPA)

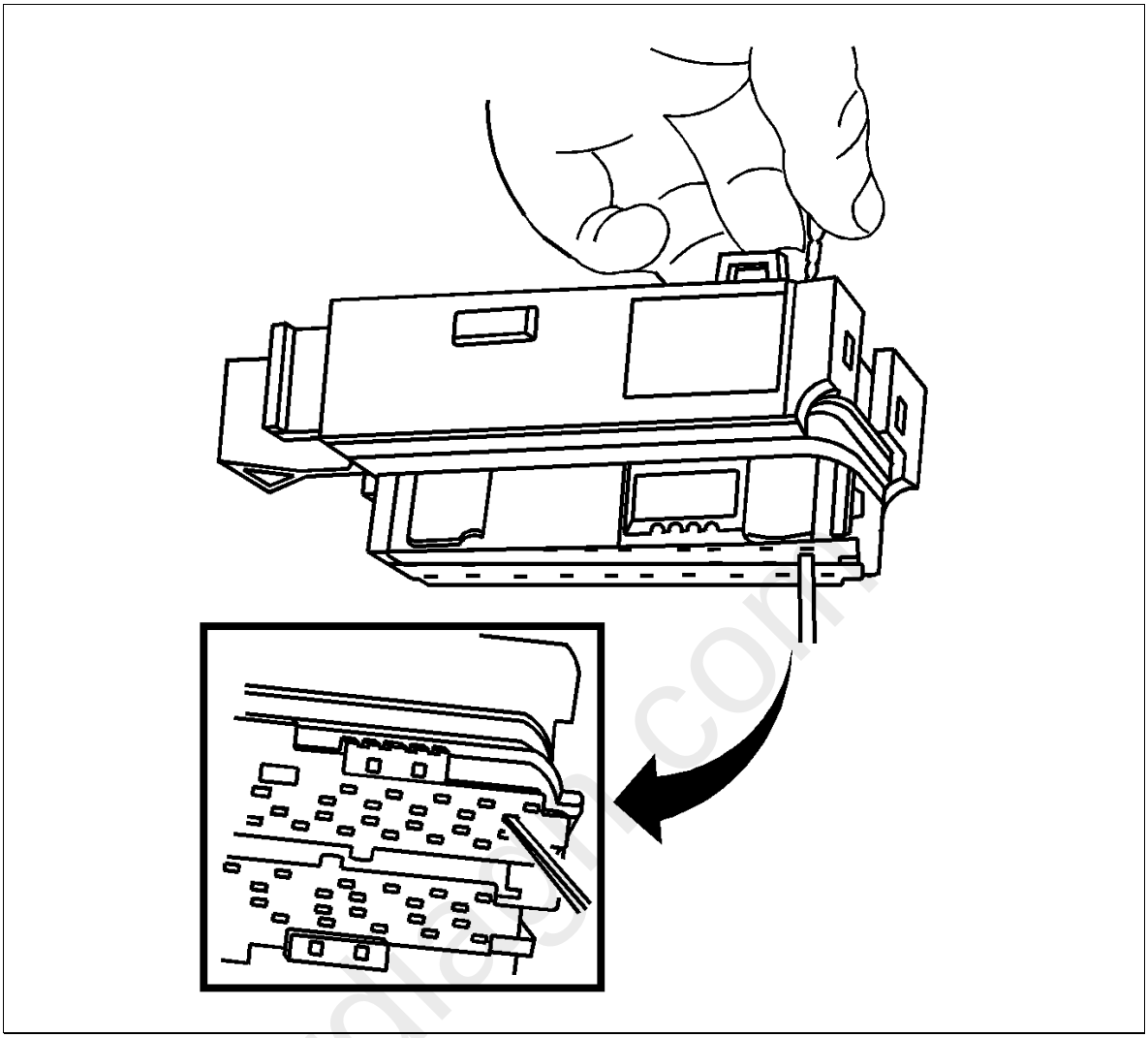


Courtesy of GENERAL MOTORS COMPANY

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).

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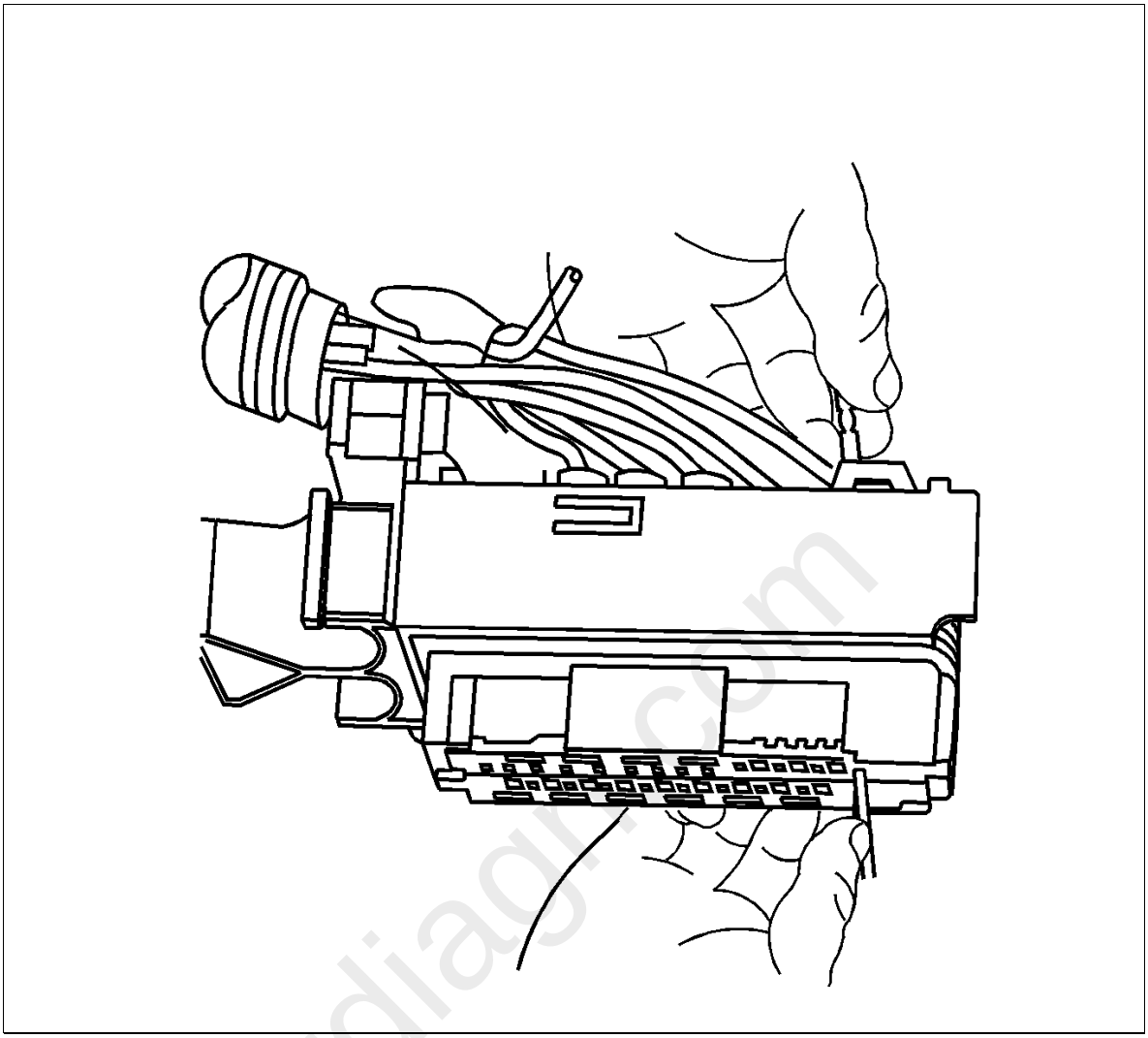
Fig 3: Special Tool Into Terminal Release Cavity



Courtesy of GENERAL MOTORS COMPANY

6. Insert the **J-38125-12A** tool into the corresponding terminal release cavity. The release cavities are the 2 center rows of cavities on one half of the connector.

Fig 4: Special Tool & Release Cavity



Courtesy of GENERAL MOTORS COMPANY

7. Pressing the **J-38125-12A** tool in 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 (Terminated Lead Repair) Repairing Connector Terminals (Terminal Repair) procedure.
9. Insert the repaired terminal back into the cavity. Repeat the diagnostic procedure to verify the repair and reconnect the connector bodies.

DIAGNOSTIC INFORMATION AND PROCEDURES > TYCO/AMP CONNECTORS (0.25 CAP)

Special Tools

- **EL-38125-550** Terminal Release Tool Kit

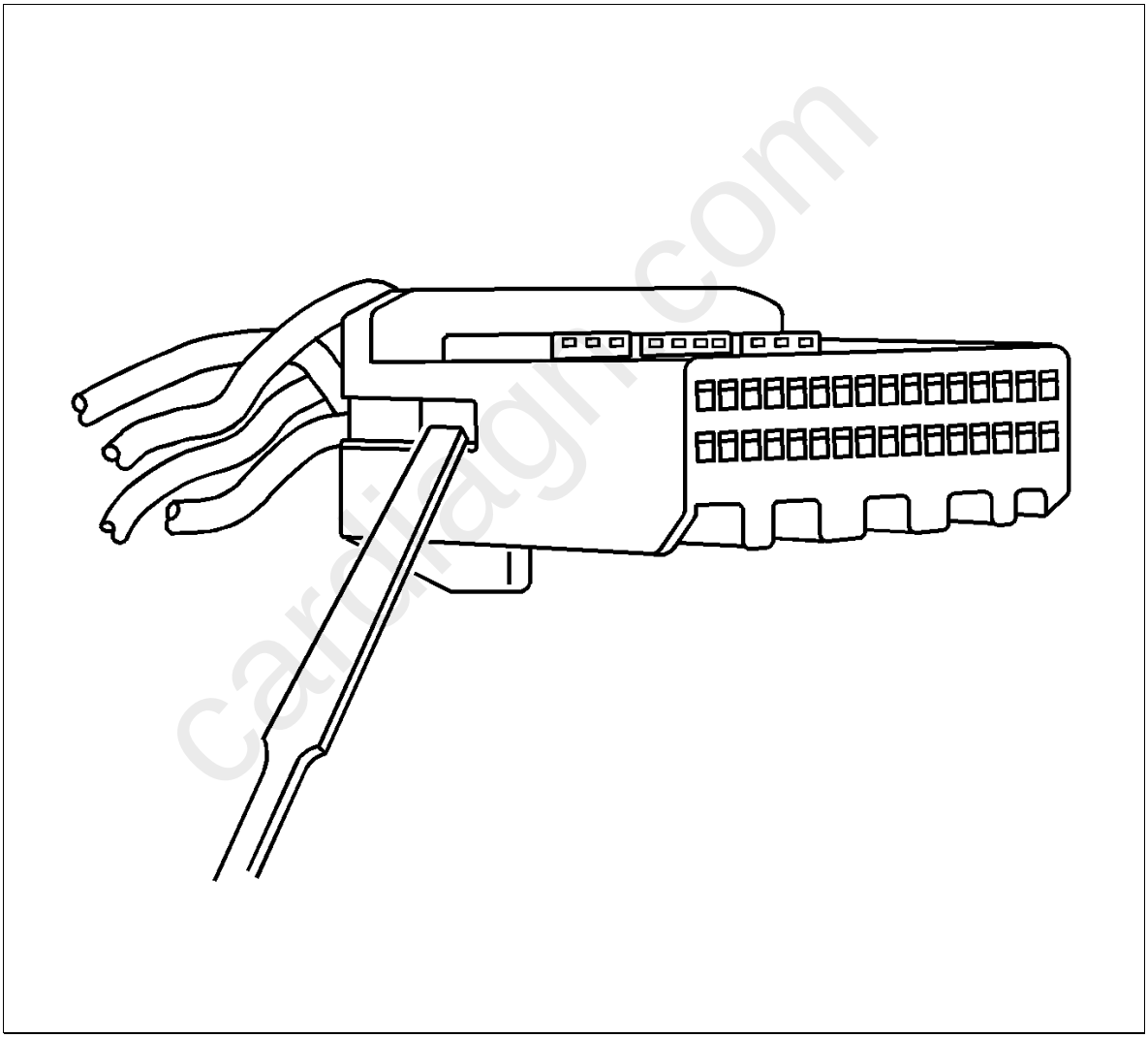
- **EL-38125-580** Terminal Release Tool Kit
- **J-38125-24** Terminal Release Tool

For equivalent regional tools, refer to Special Tools .

DIAGNOSTIC INFORMATION AND PROCEDURES > TYCO/AMP CONNECTORS (0.25 CAP) > TERMINAL REMOVAL PROCEDURE

1. Disconnect the connector from the component by pressing down on the connector position assurance (CPA).

   Fig 1: Releasing TPA Using Small Flat-Bladed Tool



Courtesy of GENERAL MOTORS COMPANY

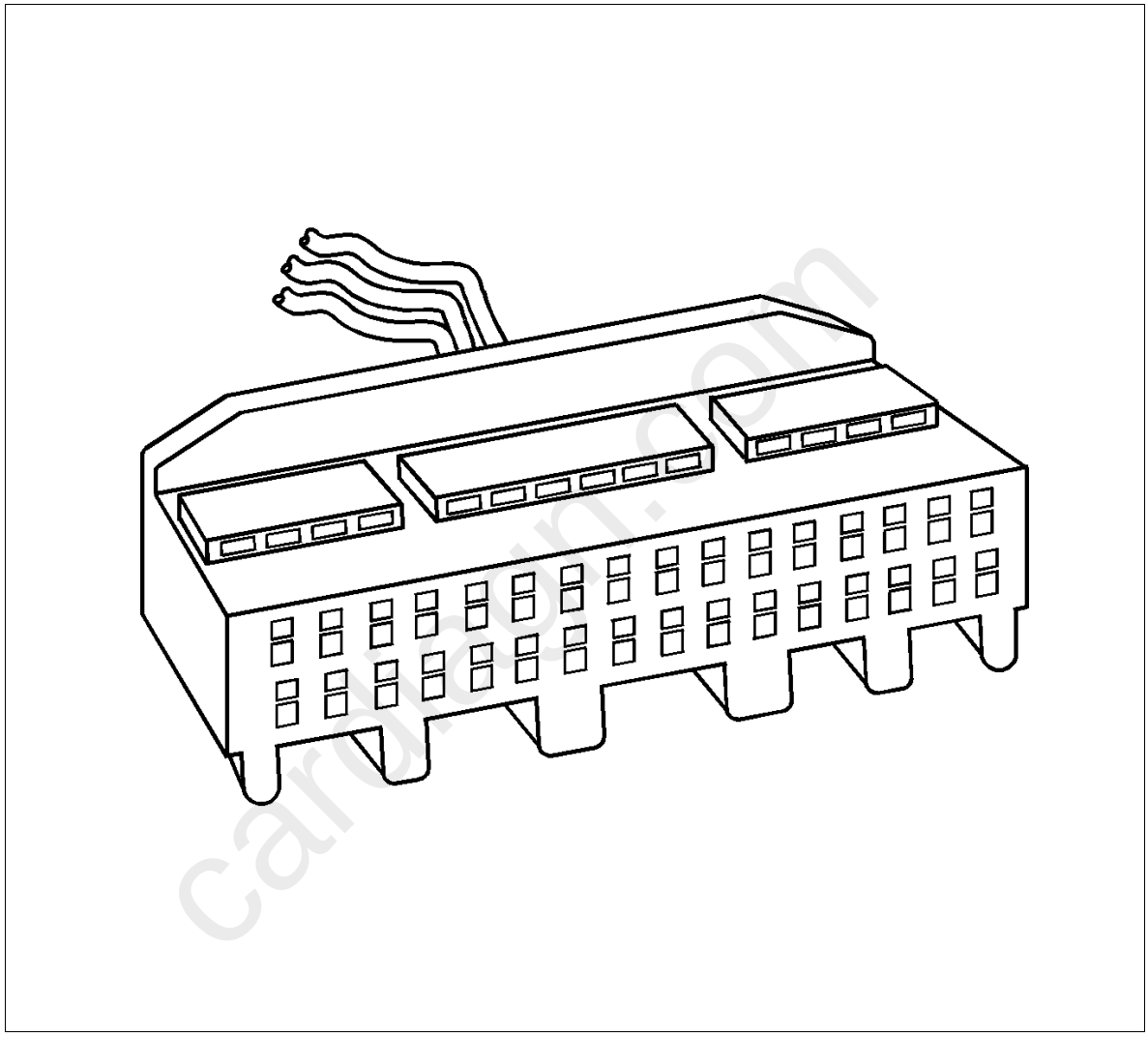
NOTE:

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.

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.
3. Repeat the process for the other side of the connector.

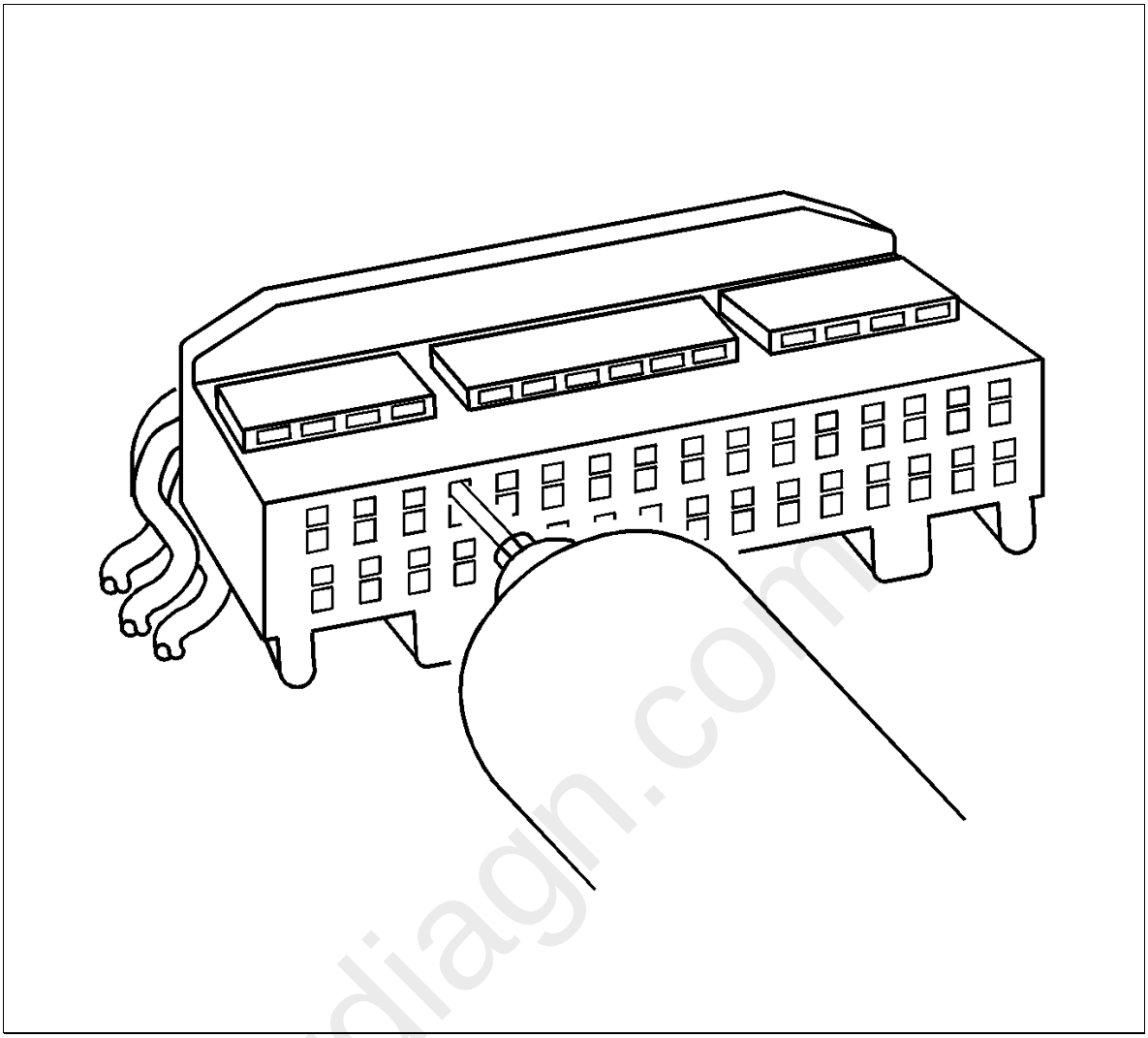
Fig 2: Terminal Position Assurance



Courtesy of GENERAL MOTORS COMPANY

4. Ensure that the TPA is in the proper position to remove the terminals.

Fig 3: Special Tool & Release Cavity



Courtesy of GENERAL MOTORS COMPANY

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 (Terminated Lead Repair) Repairing Connector Terminals (Terminal Repair) procedure.
7. Insert the repaired terminal back into the cavity. Repeat the diagnostic procedure to verify the repair and reconnect the connector bodies.

DIAGNOSTIC INFORMATION AND PROCEDURES > TYCO/AMP CONNECTORS (SEAT)

Special Tools

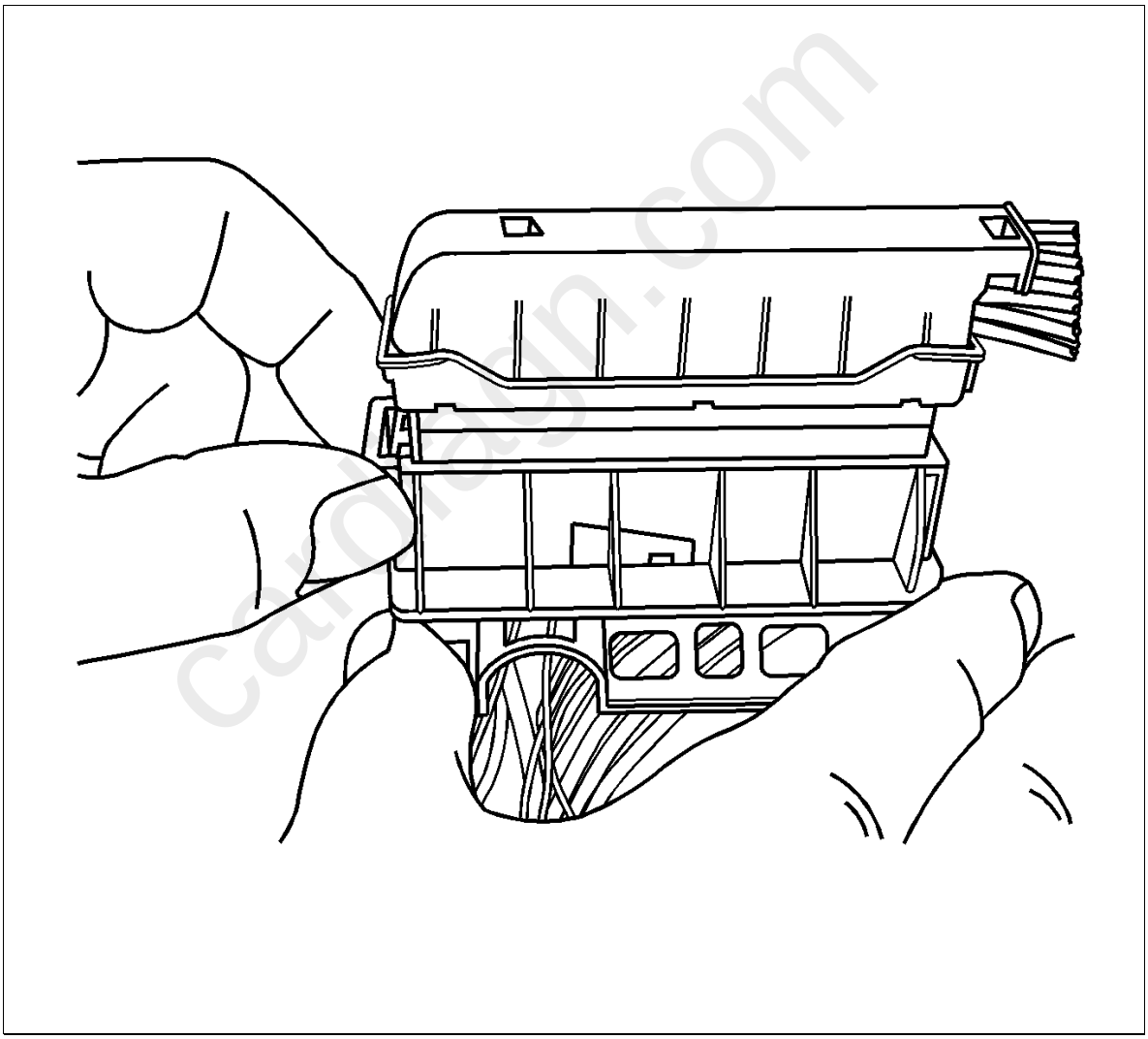
- **EL-38125-550** Terminal Release Tool Kit
- **EL-38125-580** Terminal Release Tool Kit

- **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 .

DIAGNOSTIC INFORMATION AND PROCEDURES > TYCO/AMP CONNECTORS (SEAT) > TERMINAL REMOVAL PROCEDURE

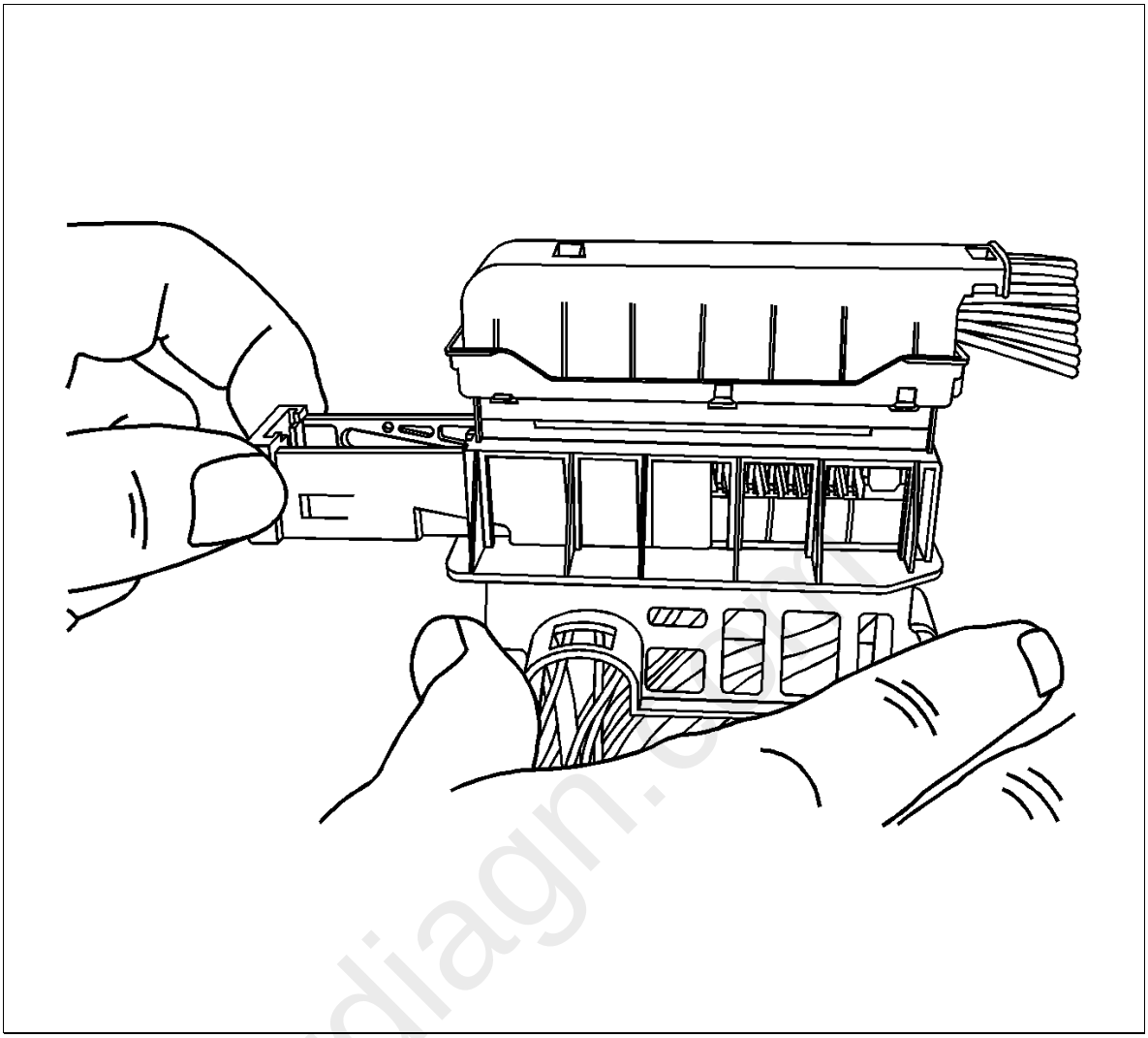
Fig 1: Locking Slide Lever



Courtesy of GENERAL MOTORS COMPANY

1. Grasp the locking slide lever and pull outward from the end of the connector.

Fig 2: Slide Lever Out Of Mating Connector

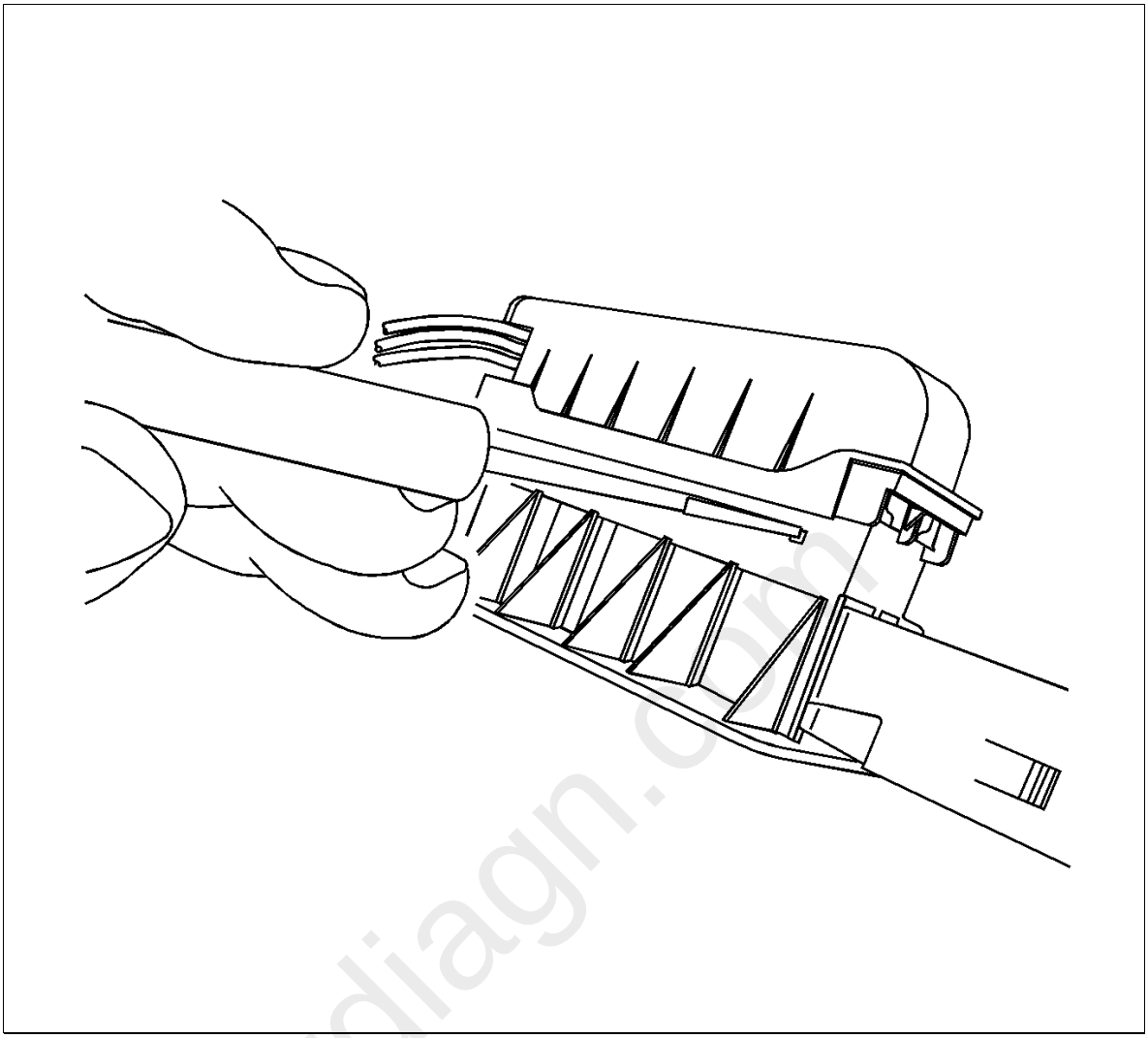


Courtesy of GENERAL MOTORS COMPANY

2. As the slide lever is pulled out the mating connector is lifted from the seated position.

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Fig 3: TPA Tabs Into Connector Body



Courtesy of GENERAL MOTORS COMPANY

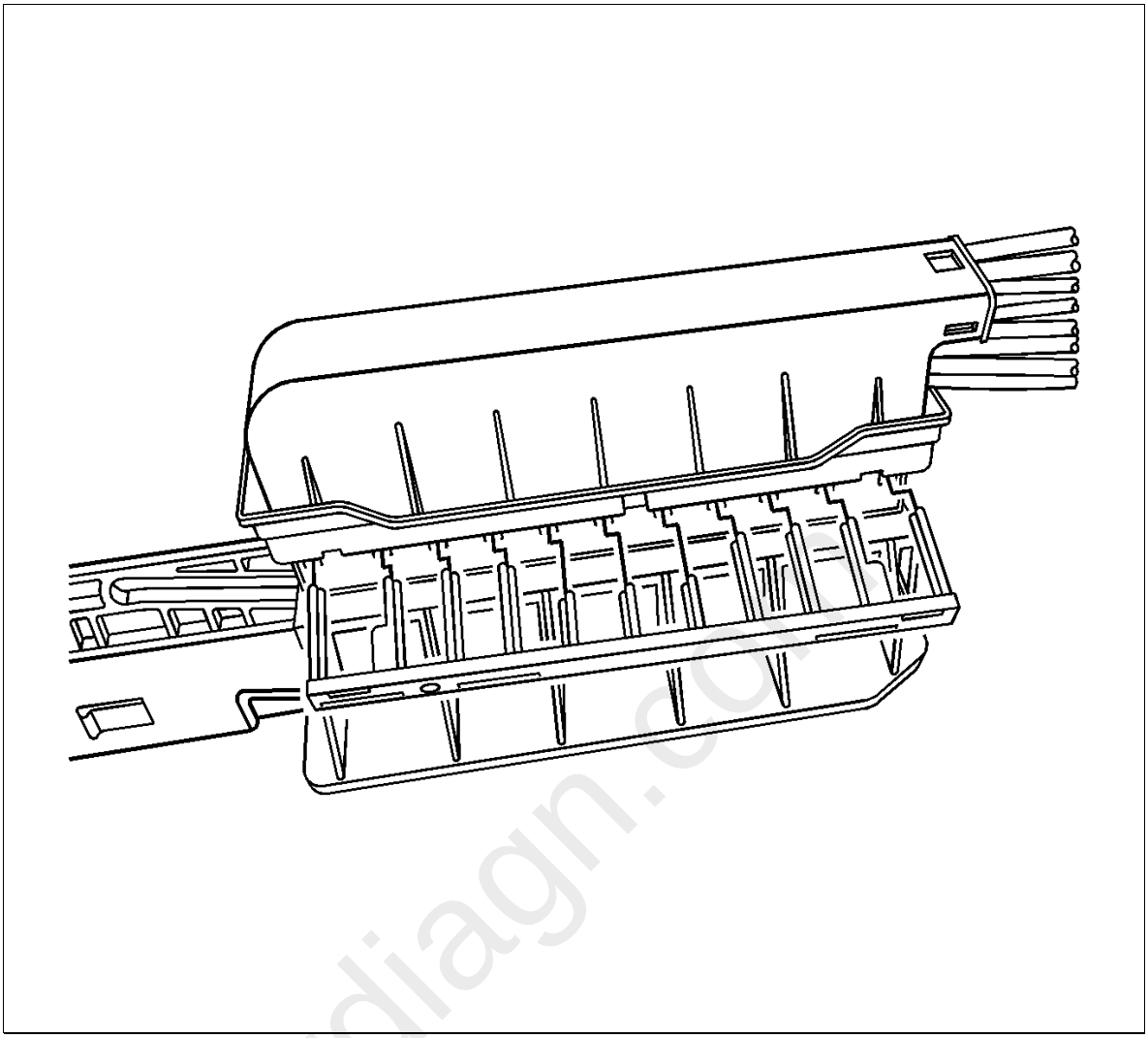
NOTE:

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.

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Fig 4: TPA From Connector Body

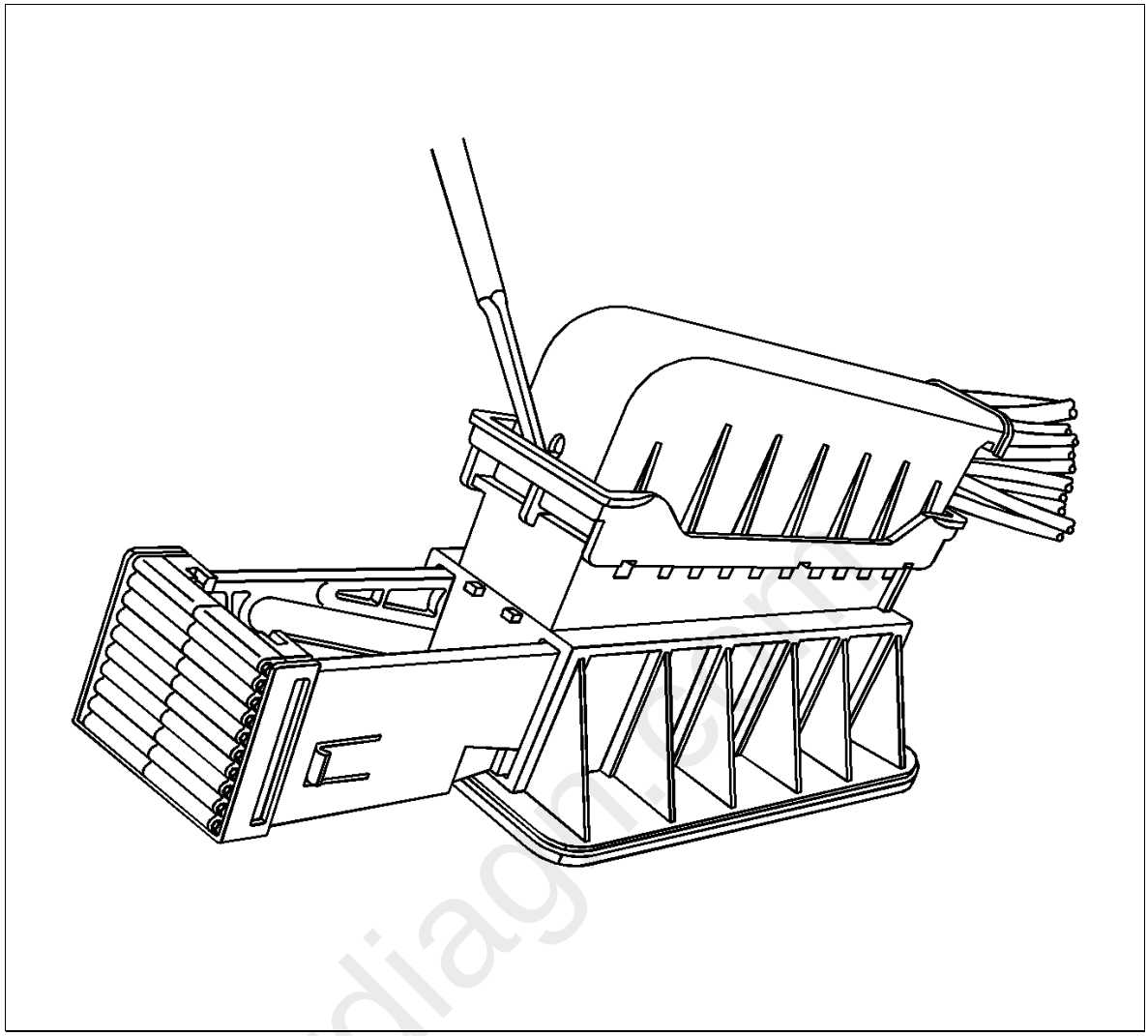


Courtesy of GENERAL MOTORS COMPANY

4. Pull the TPA from the connector body.

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Fig 5: Releasing Connector Wire Dress Cover Locking Tab

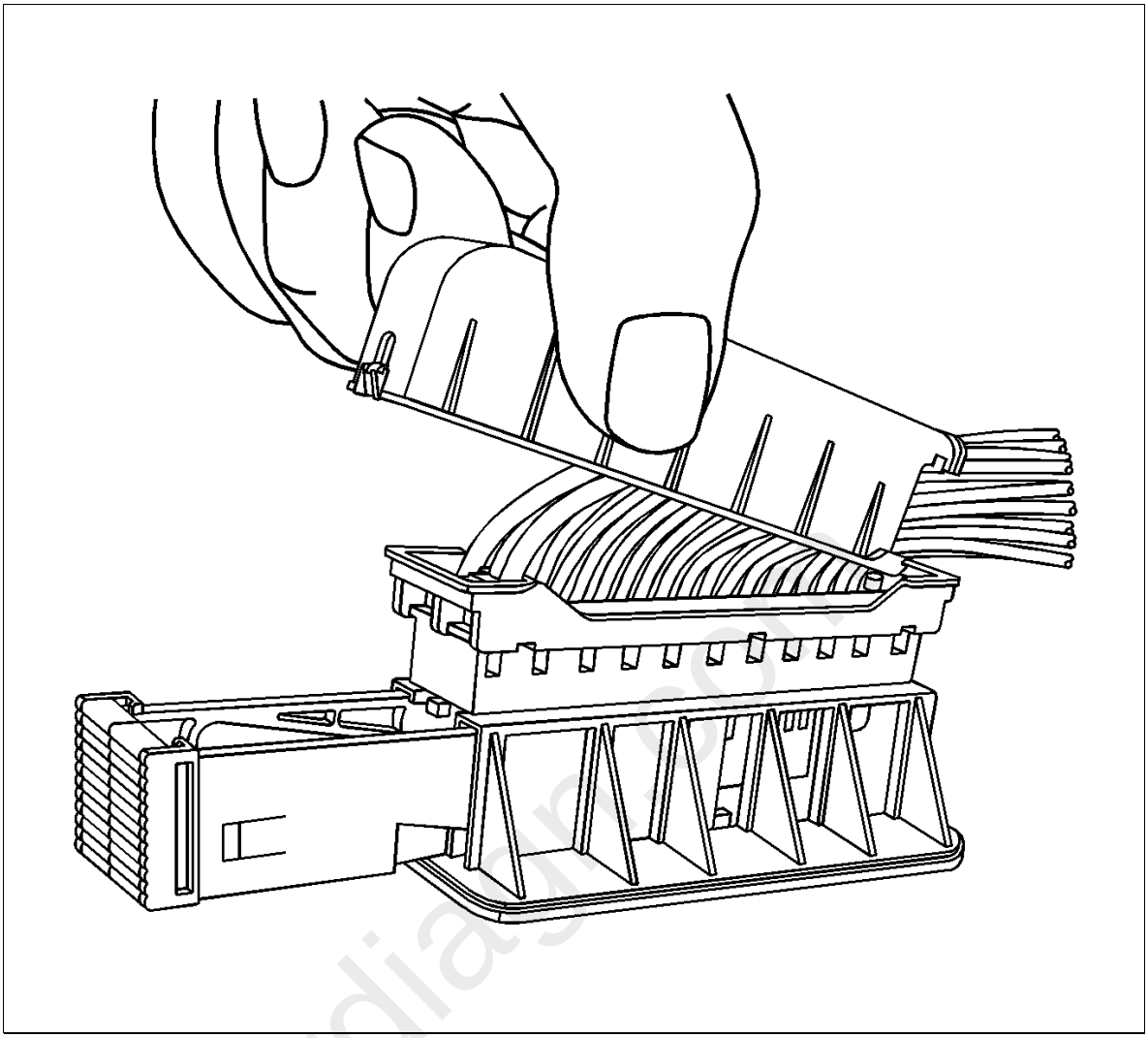


Courtesy of GENERAL MOTORS COMPANY

5. Using terminal release tool J-38125-11A or equivalent, release the connector wire dress cover locking tab.

cardiagn.com

Fig 6: Lifting Connector Wire Dress Cover From Connector Body

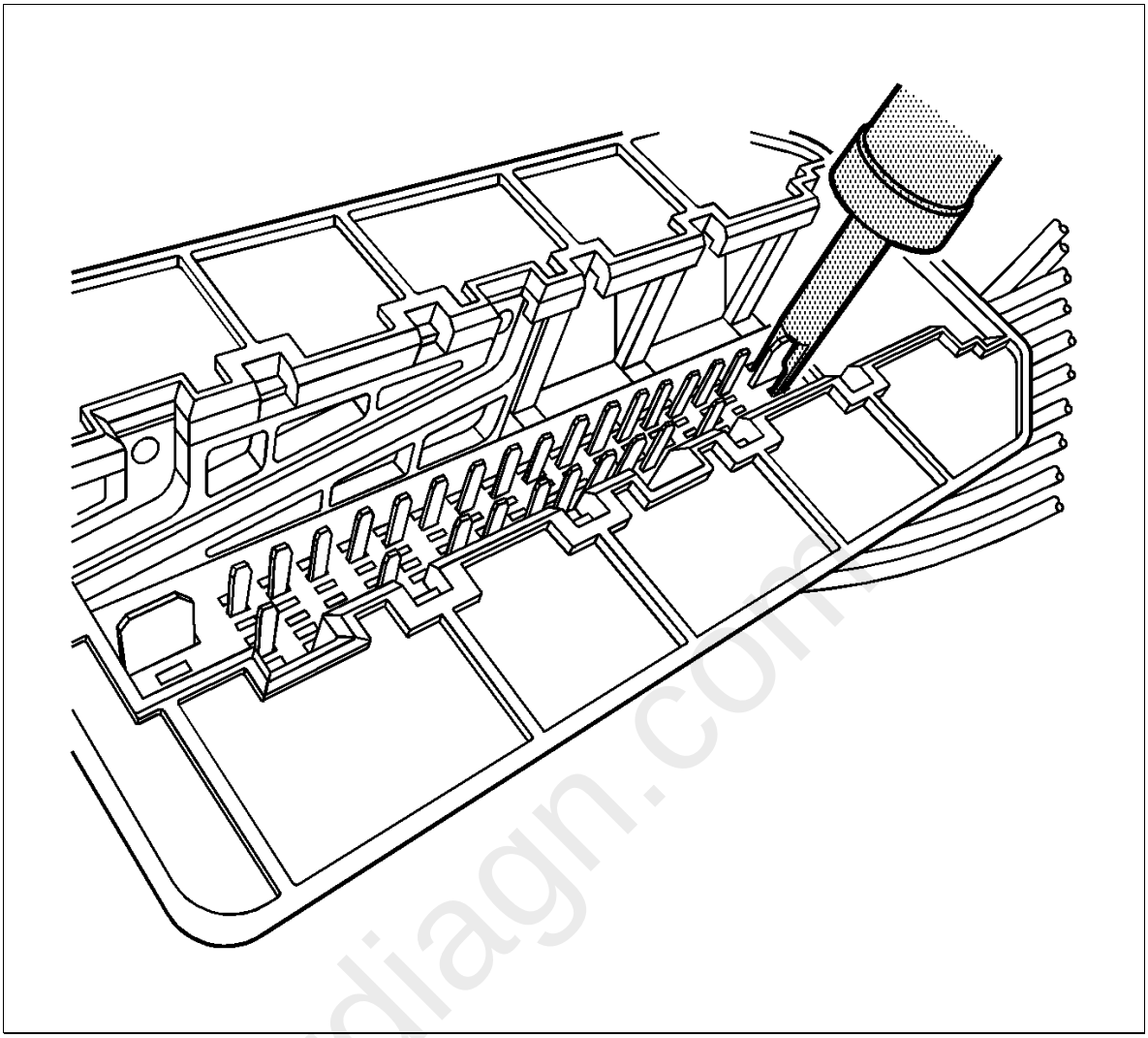


Courtesy of GENERAL MOTORS COMPANY

6. With the lock tab released, lift the connector wire dress cover from the connector body.

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Fig 7: Terminal Release Tool

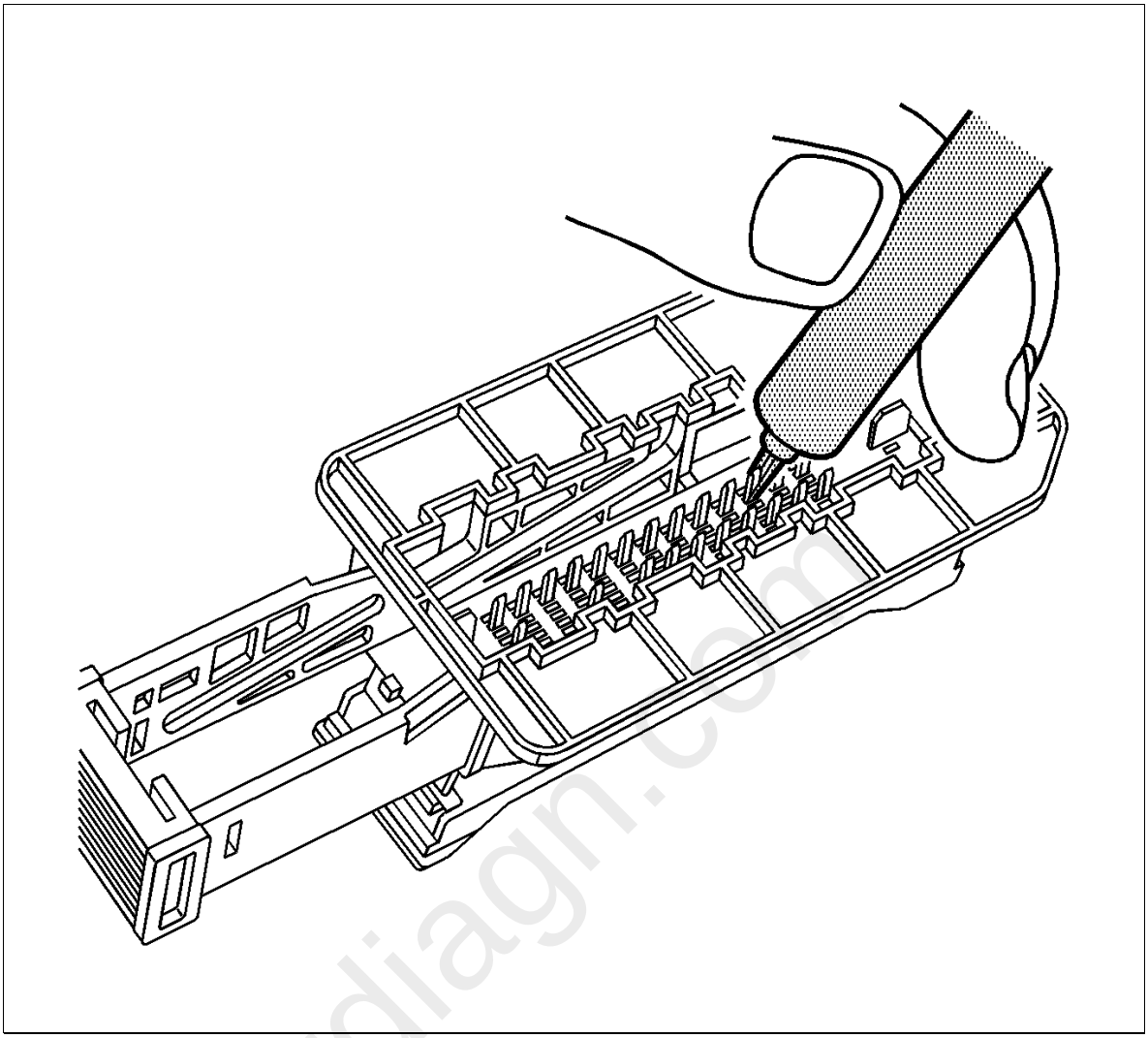


Courtesy of GENERAL MOTORS COMPANY

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.

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Fig 8: Terminal Release Tool

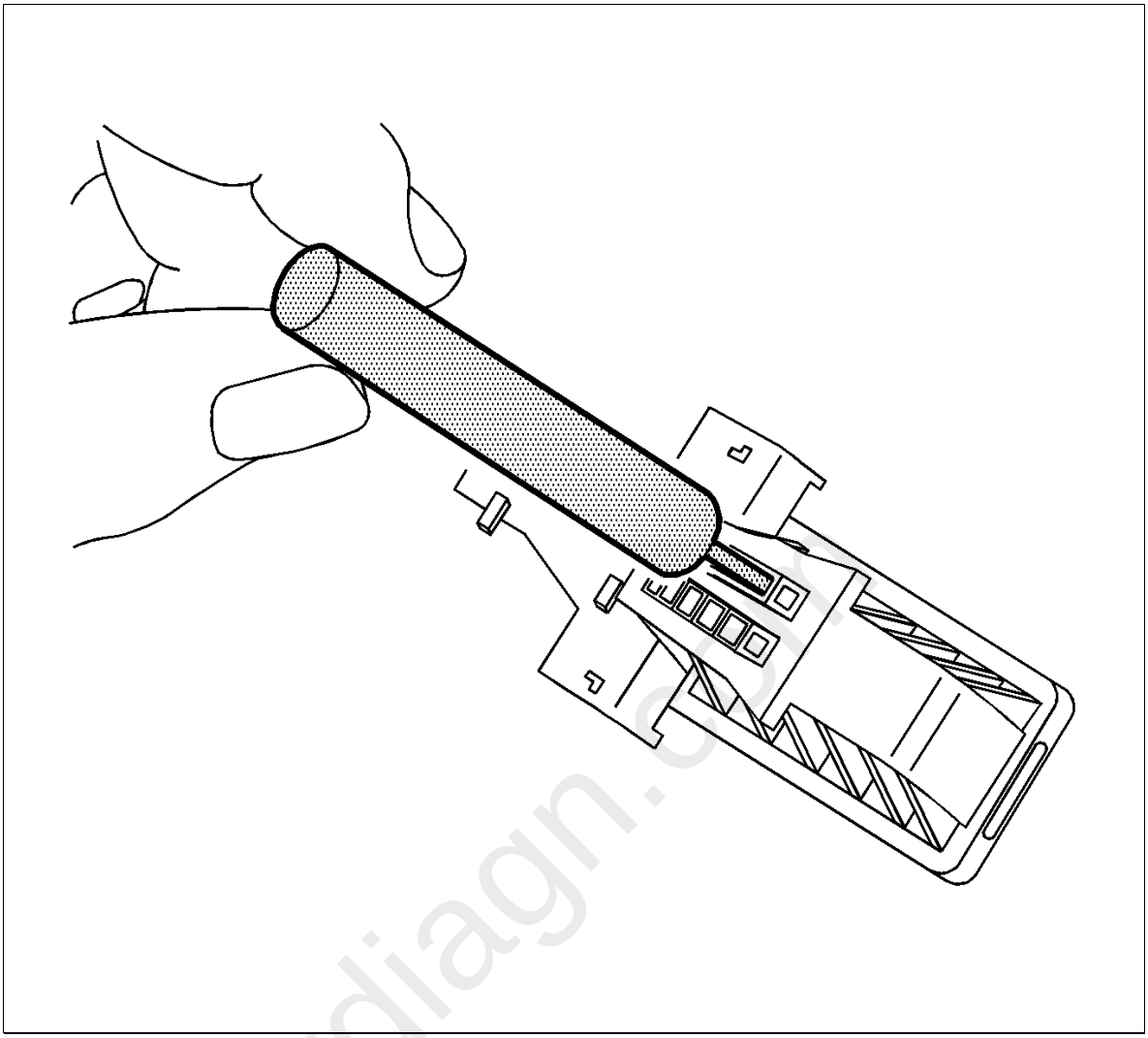


Courtesy of GENERAL MOTORS COMPANY

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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Fig 9: Terminal Release Tool



Courtesy of GENERAL MOTORS COMPANY

cardiagn.com

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 (Terminated Lead Repair) Repairing Connector Terminals (Terminal Repair) procedure.
11. Insert the repaired terminal back into the cavity. Repeat the diagnostic procedure to verify the repair and reconnect the connector bodies.

DIAGNOSTIC INFORMATION AND PROCEDURES > TYCO/AMP CONNECTORS (102-WAY INLINE)

Special Tools

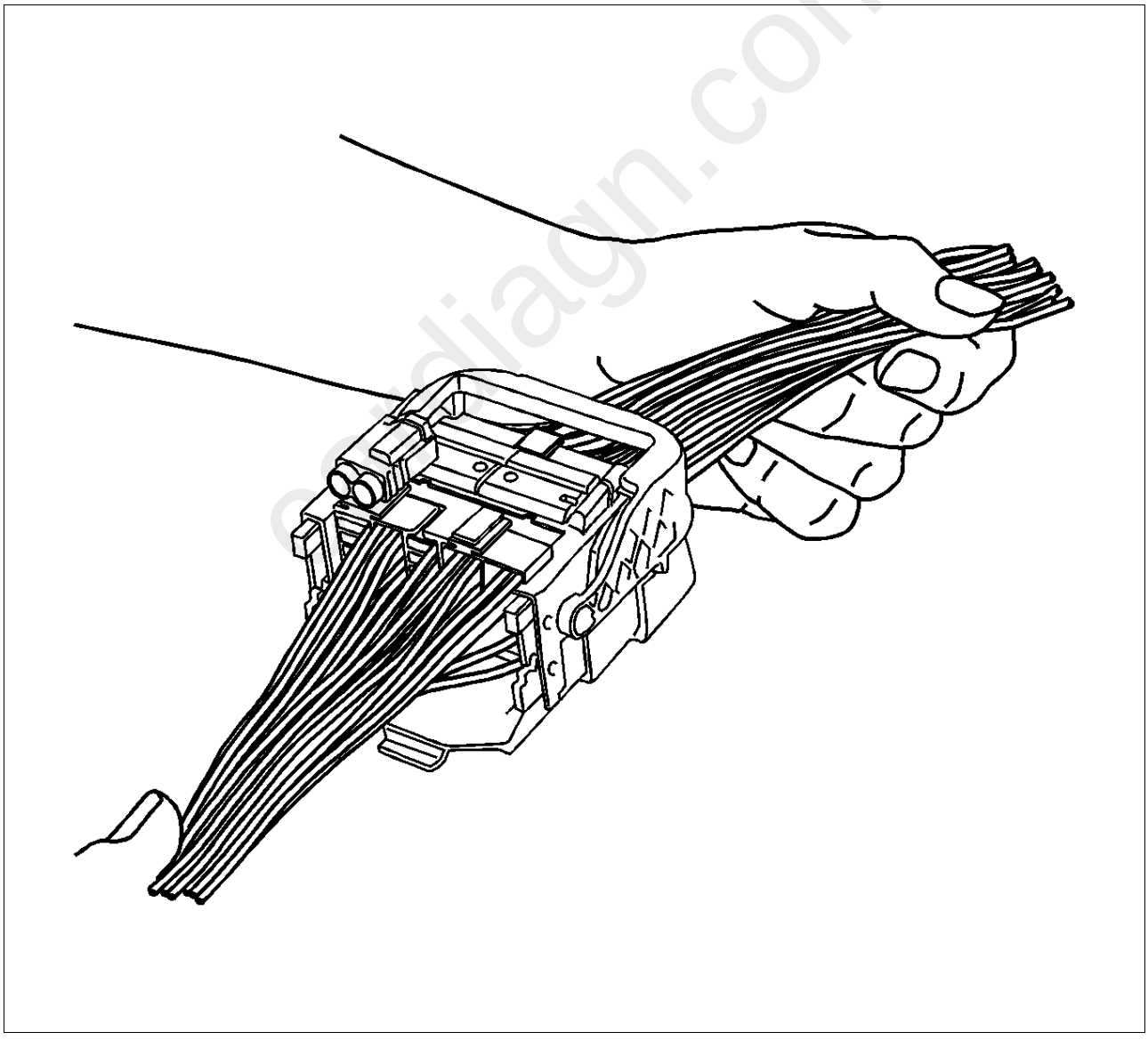
- **EL-38125-550** Terminal Release Tool Kit
- **EL-38125-580** Terminal Release Tool Kit

- **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 .

DIAGNOSTIC INFORMATION AND PROCEDURES > TYCO/AMP CONNECTORS (102-WAY INLINE) > TERMINAL REMOVAL PROCEDURE

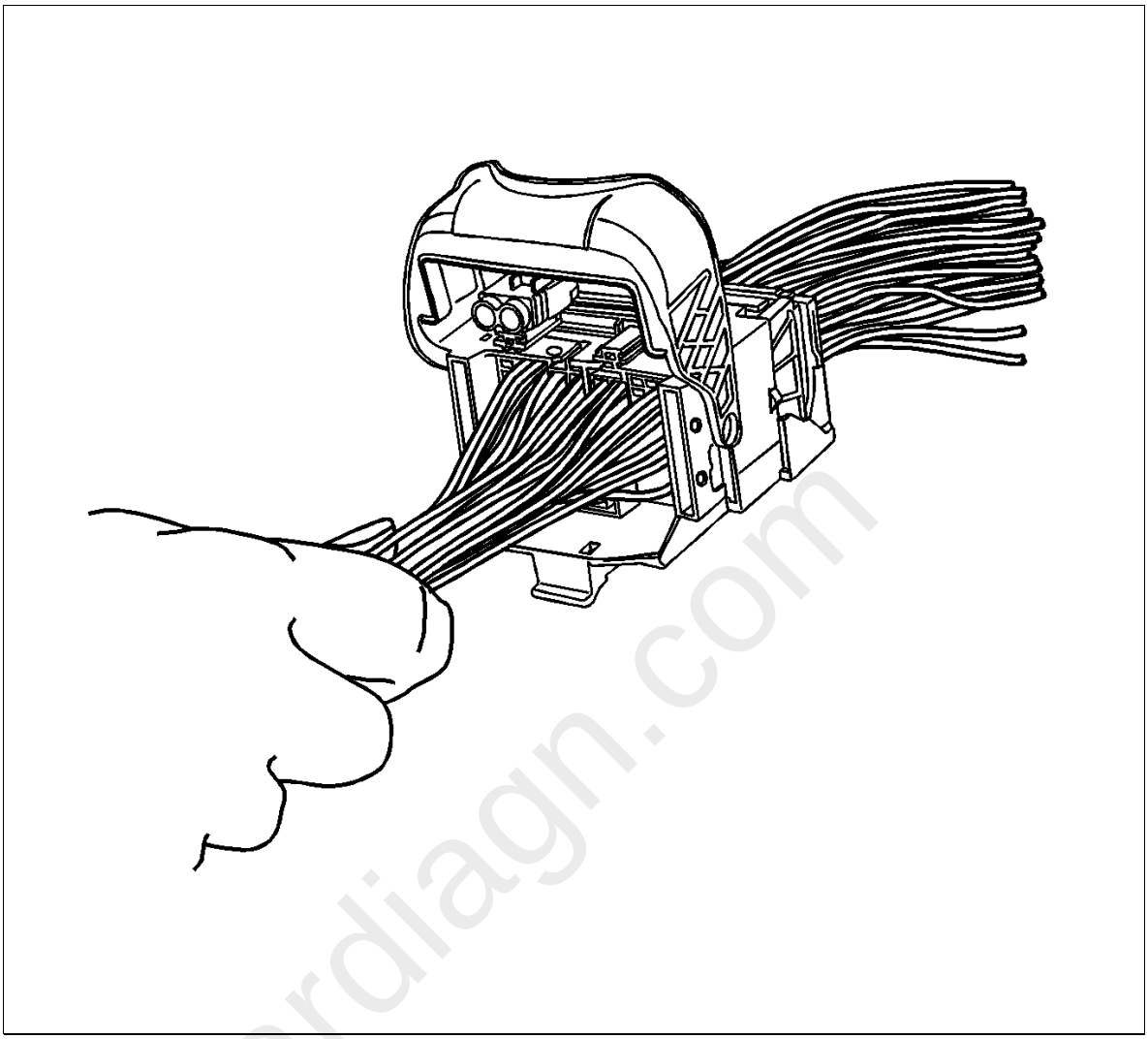
Fig 1: Typical Connector In Assembled Position



Courtesy of GENERAL MOTORS COMPANY

View of a typical connector in the assembled position.

Fig 2: Locking Lever At 90 Degrees From Connector Body

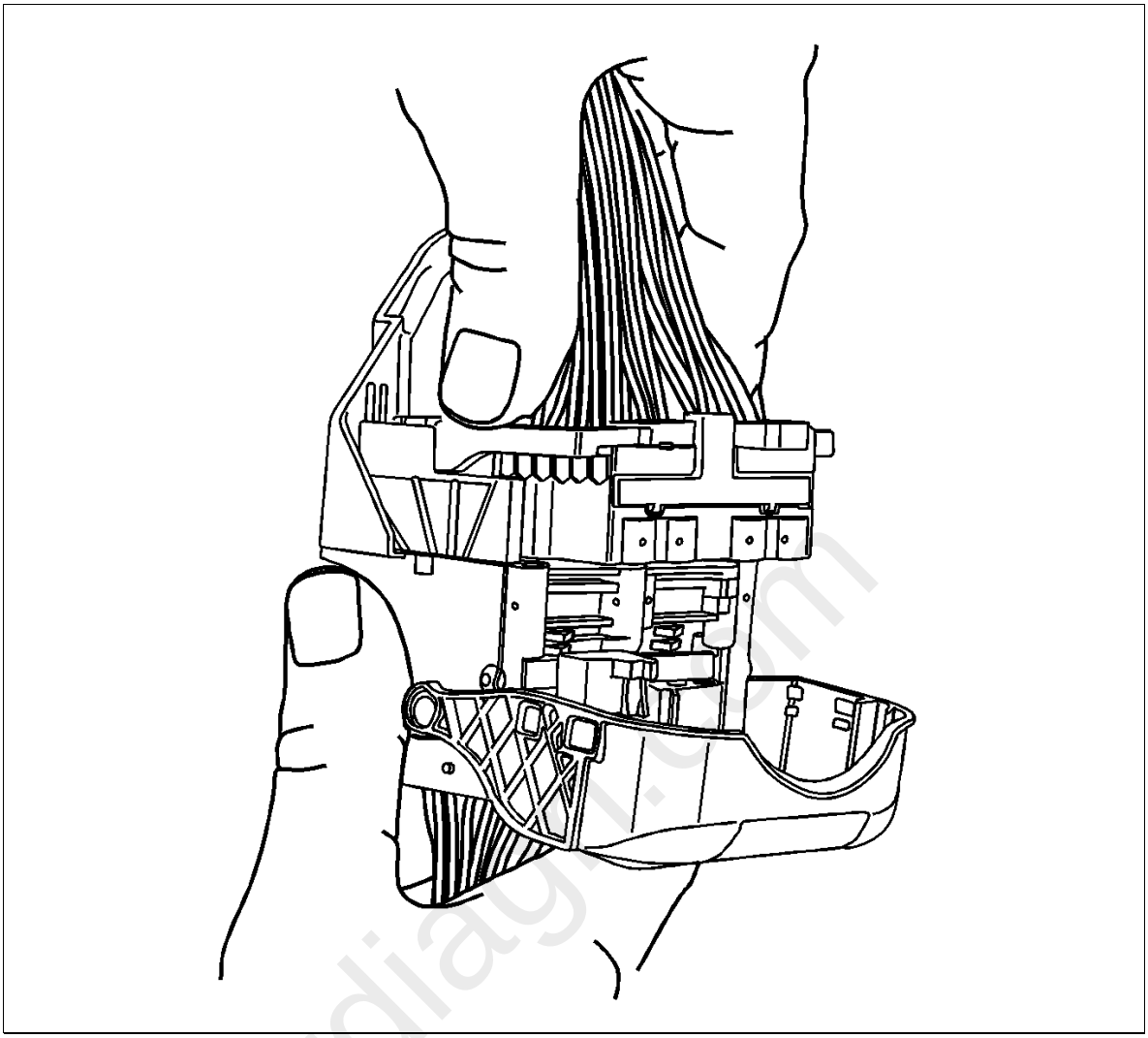


Courtesy of GENERAL MOTORS COMPANY

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1. Pull the locking lever to the 90 degree position from the connector body.

Fig 3: Connector - Tyco/AMP (102-Way Inline)

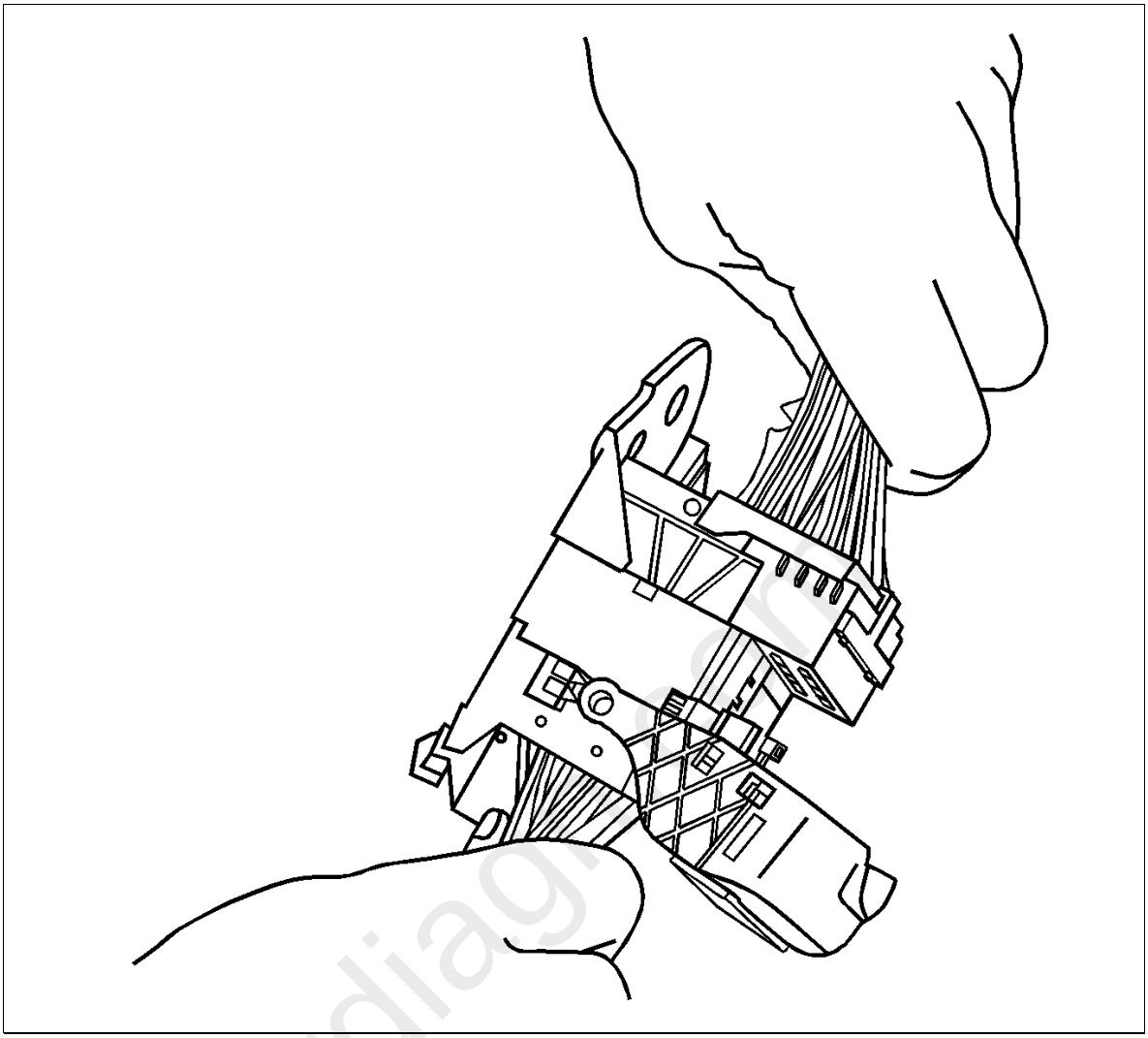


Courtesy of GENERAL MOTORS COMPANY

2. With the locking lever in the 90 degree position and the male connector body separated, it can be slid outward for removal.

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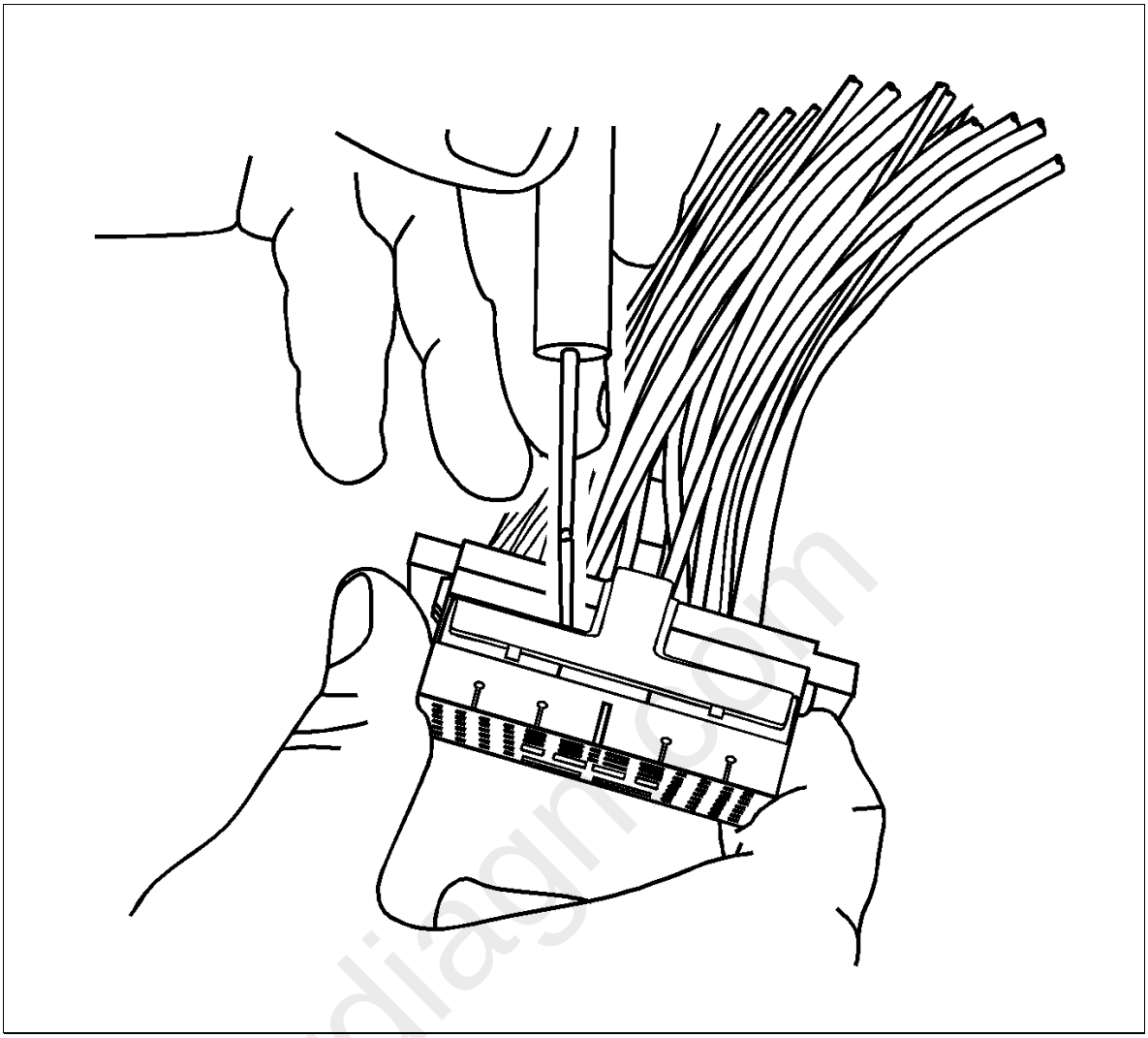
Fig 4: Sliding Male Connector Body Away From Guide Plates



Courtesy of GENERAL MOTORS COMPANY

3. Slide the male connector body out away from the guide plates.

Fig 5: Terminal Release Tool And TPA



Courtesy of GENERAL MOTORS COMPANY

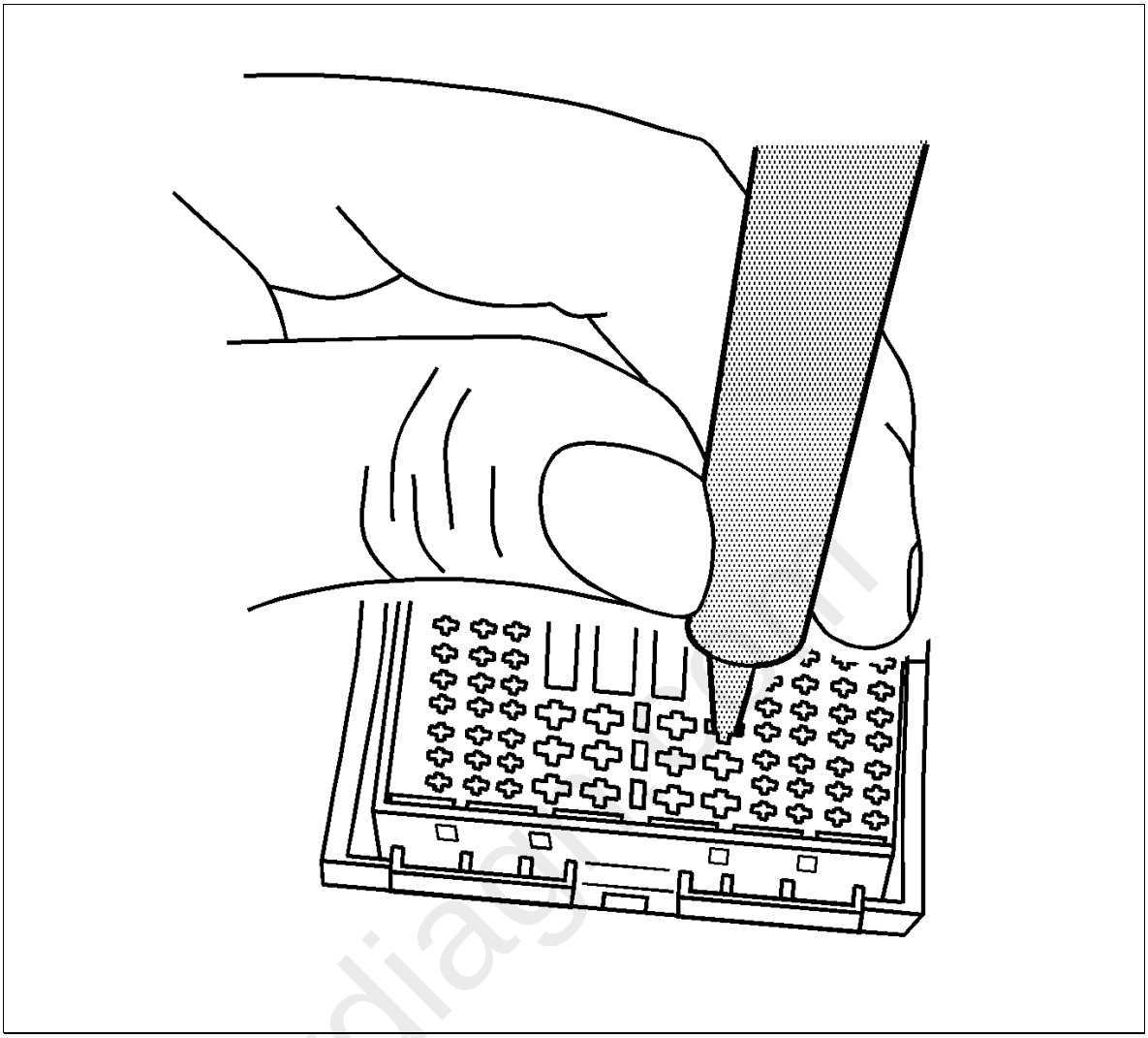
NOTE:

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.

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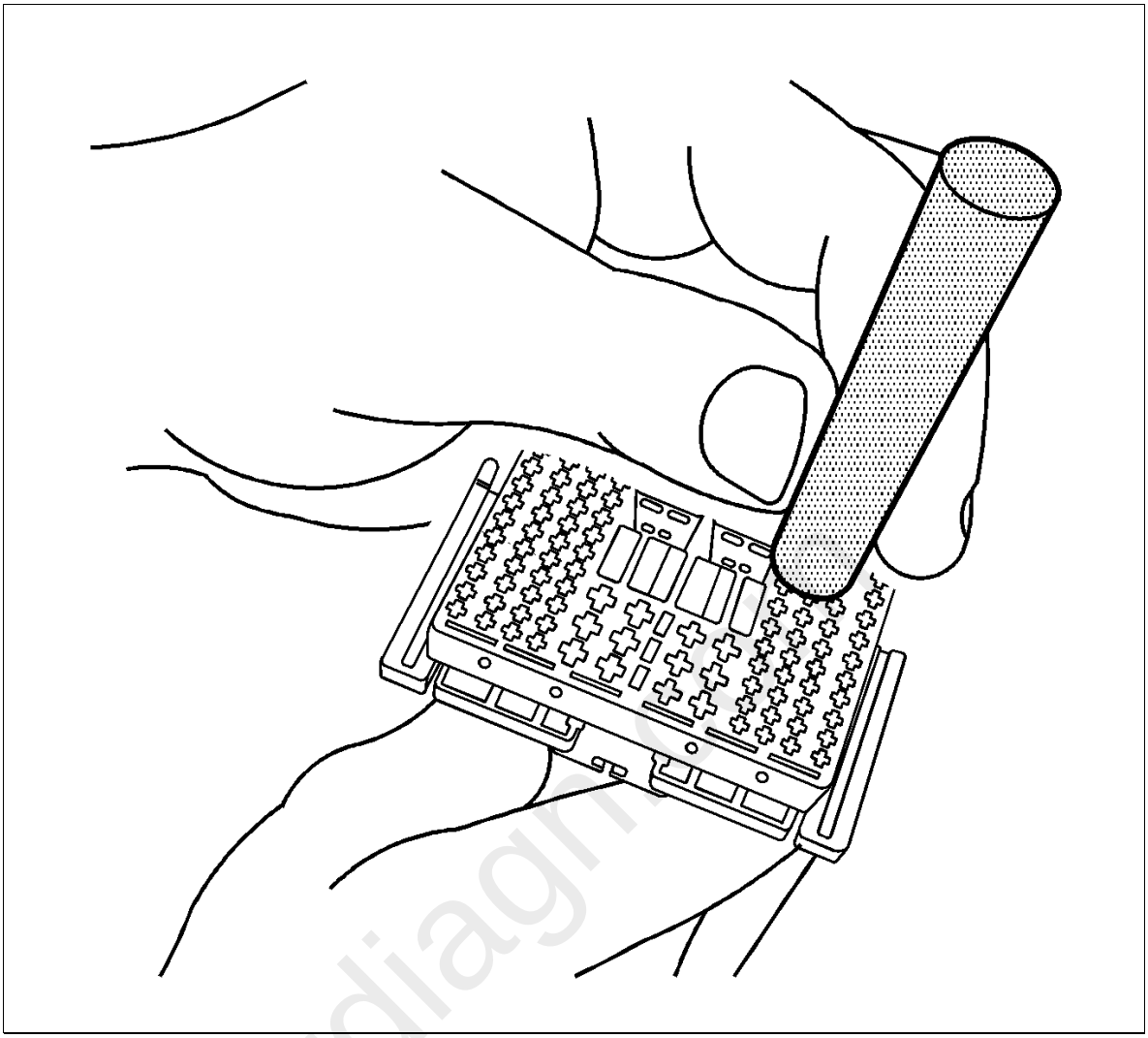
Fig 6: Releasing Lock Tabs



Courtesy of GENERAL MOTORS COMPANY

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.

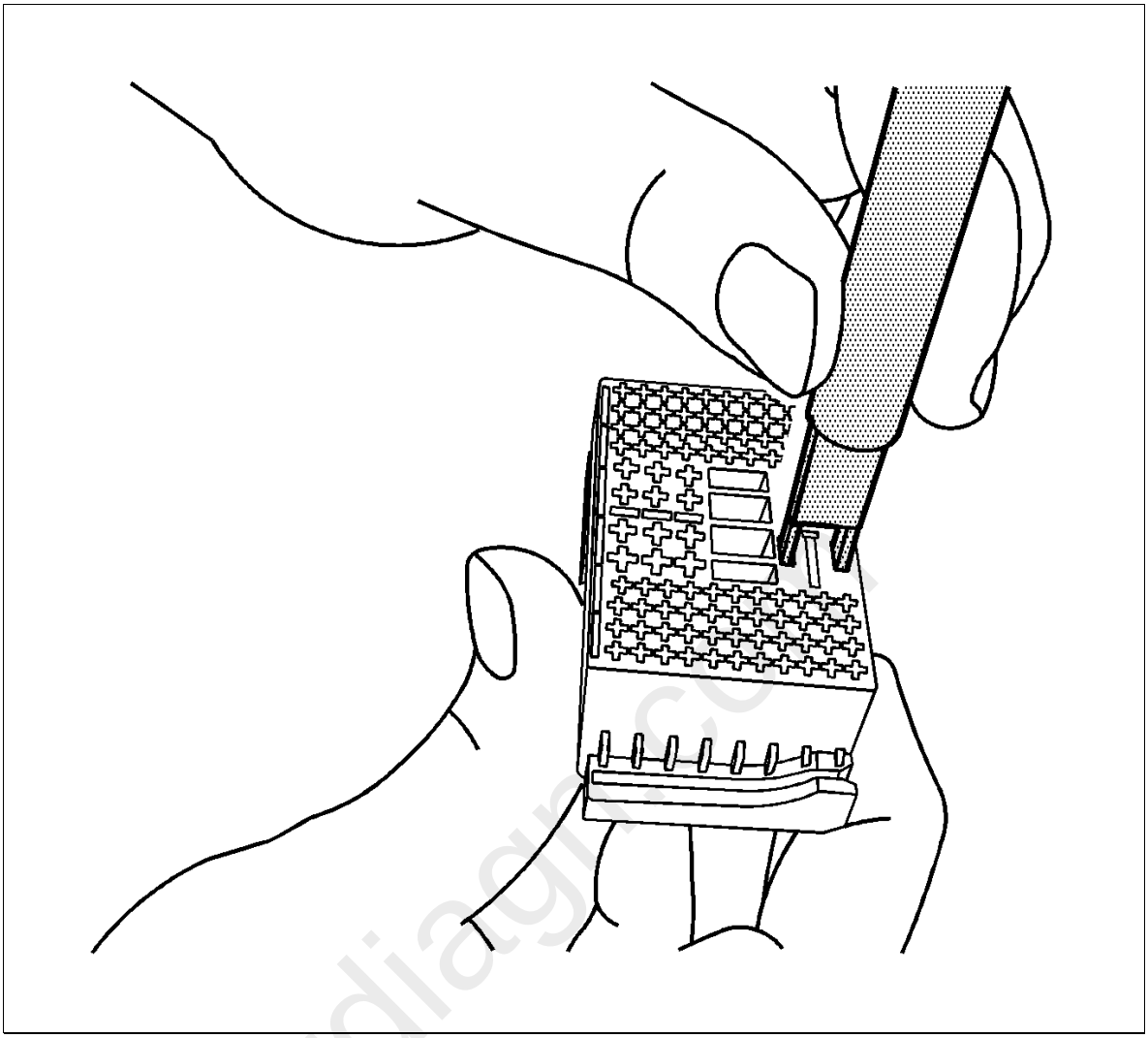
Fig 7: Terminal Release Tool



Courtesy of GENERAL MOTORS COMPANY

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.

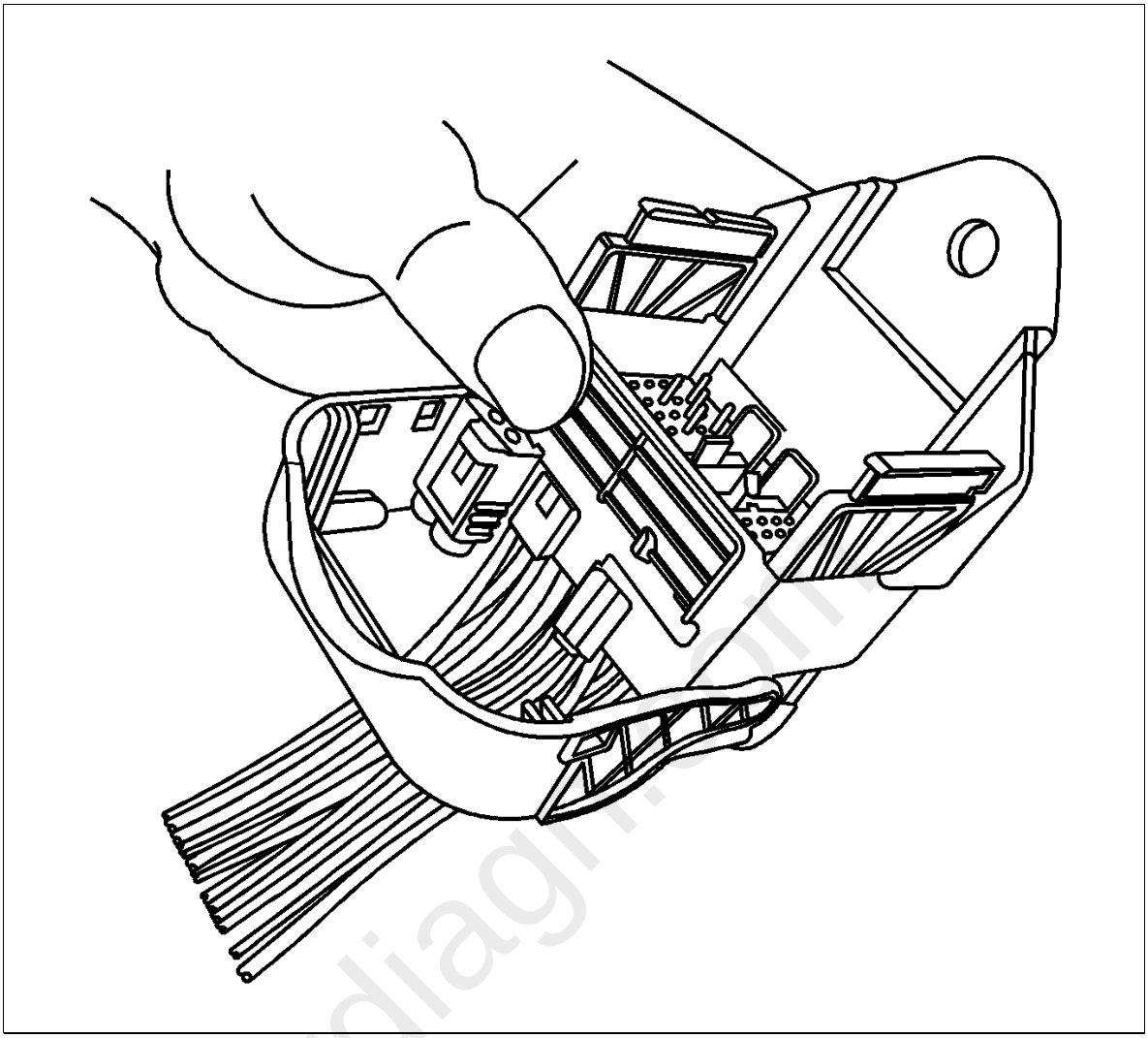
Fig 8: Releasing Lock Tabs - Tyco/AMP (102-Way Inline)



Courtesy of GENERAL MOTORS COMPANY

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.

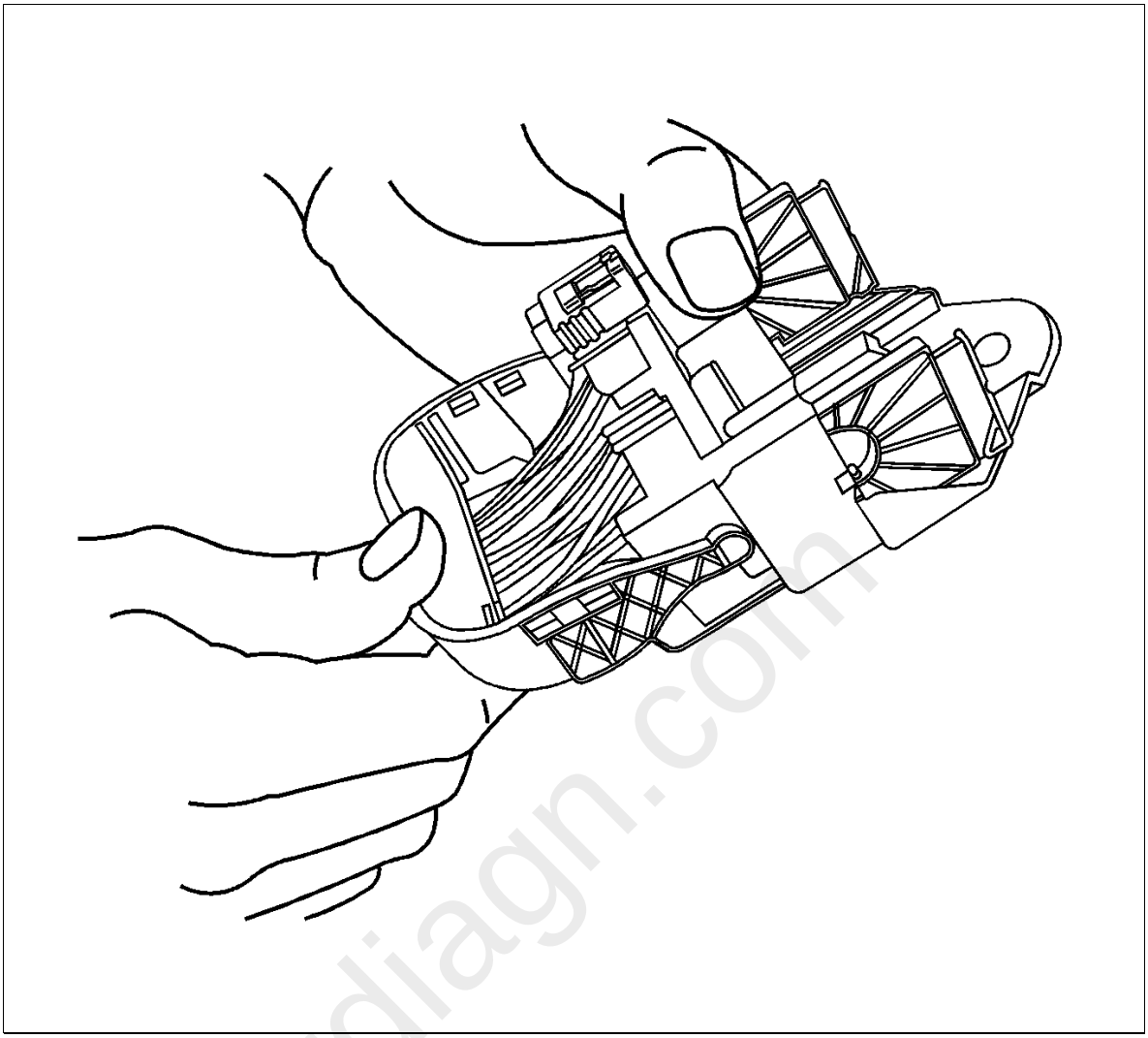
Fig 9: Female Connector Body - Tyco/AMP (102-Way Inline)



Courtesy of GENERAL MOTORS COMPANY

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.

Fig 10: Moving Locking Lever

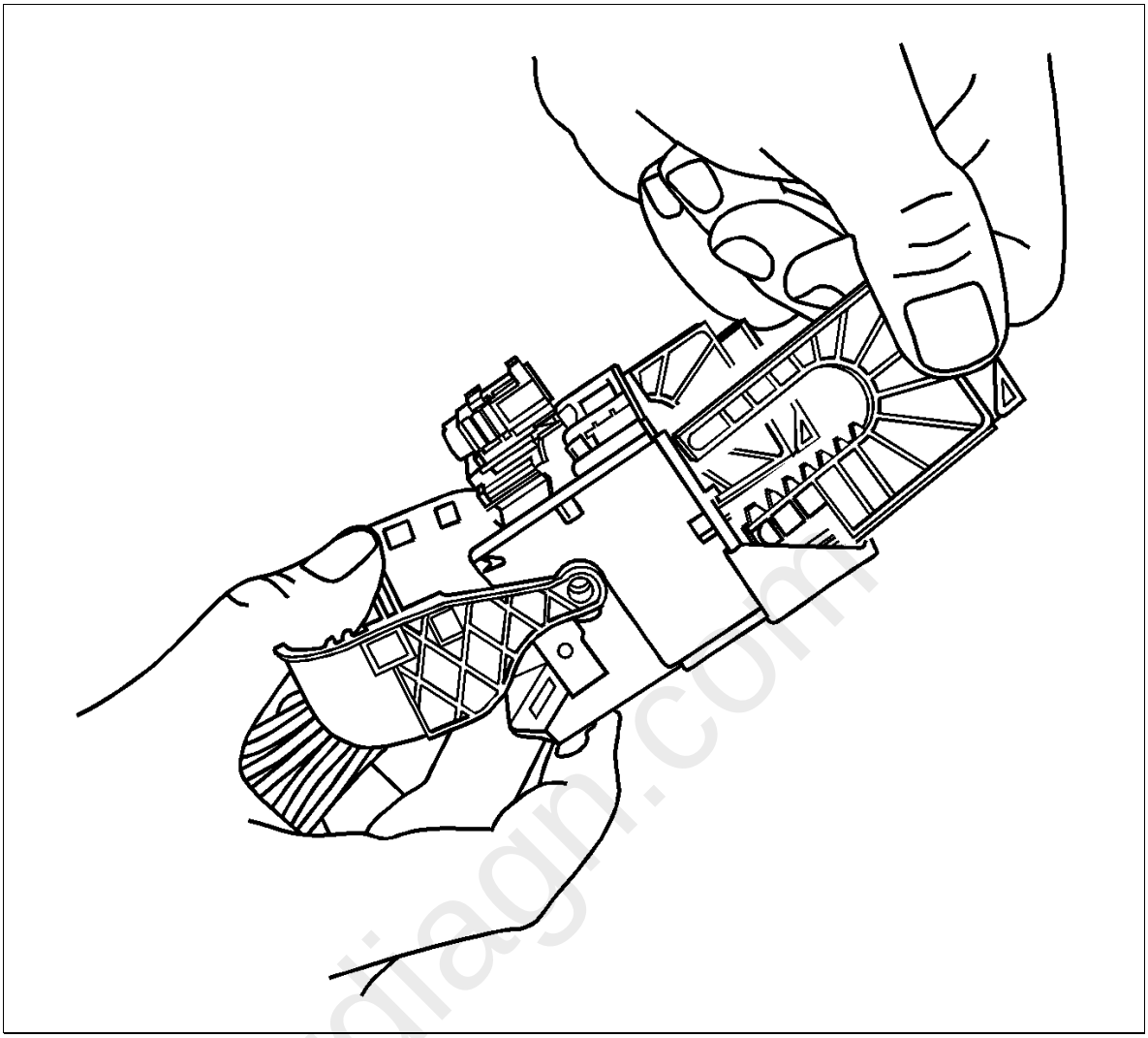


Courtesy of GENERAL MOTORS COMPANY

9. Move the locking lever 180 degrees from the connected position.

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Fig 11: Guide Plates From Connector Body

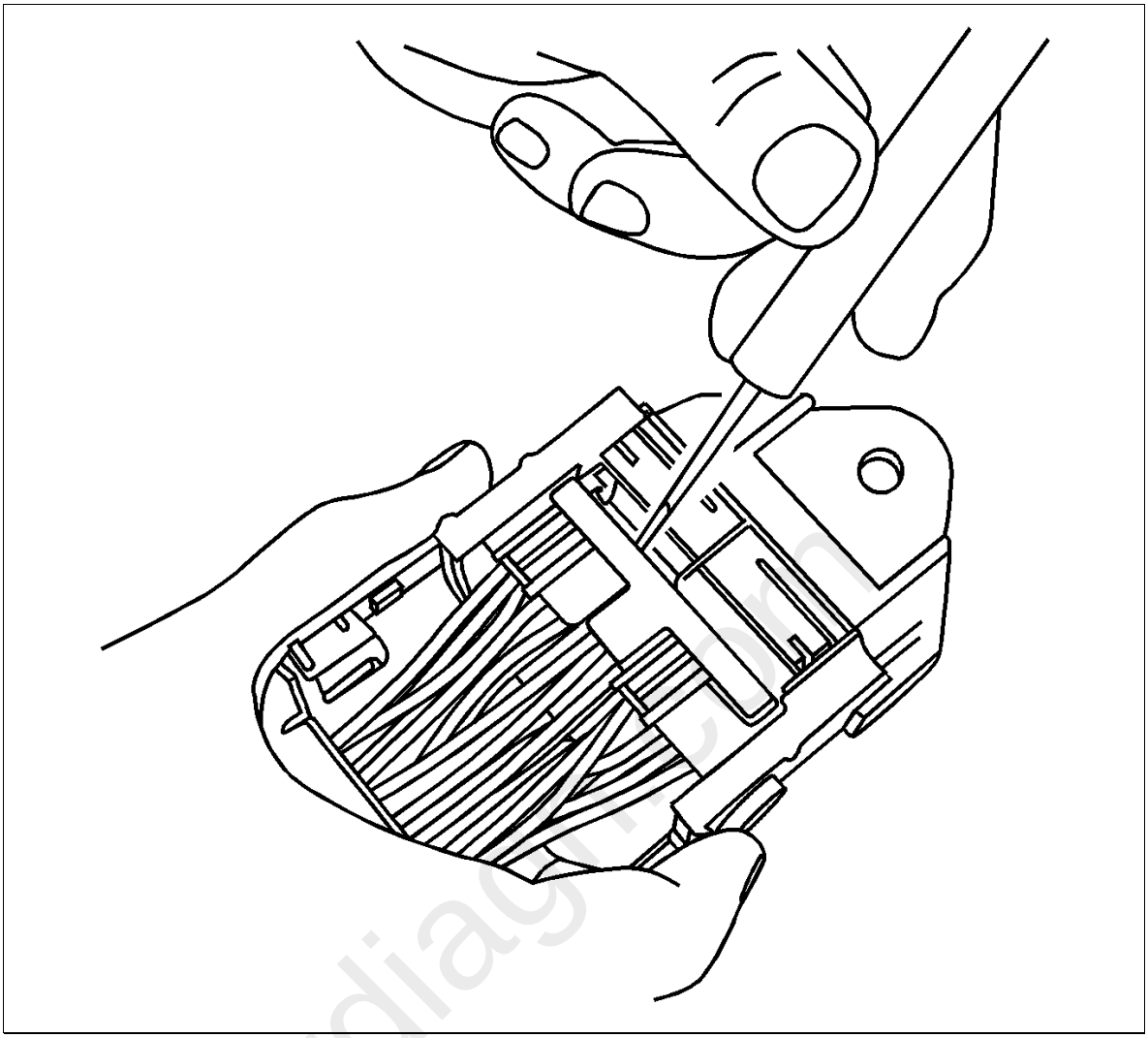


Courtesy of GENERAL MOTORS COMPANY

10. With the locking lever in the 180 degree position the guide plates can be removed from the connector body.

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Fig 12: Removing TPA



Courtesy of GENERAL MOTORS COMPANY

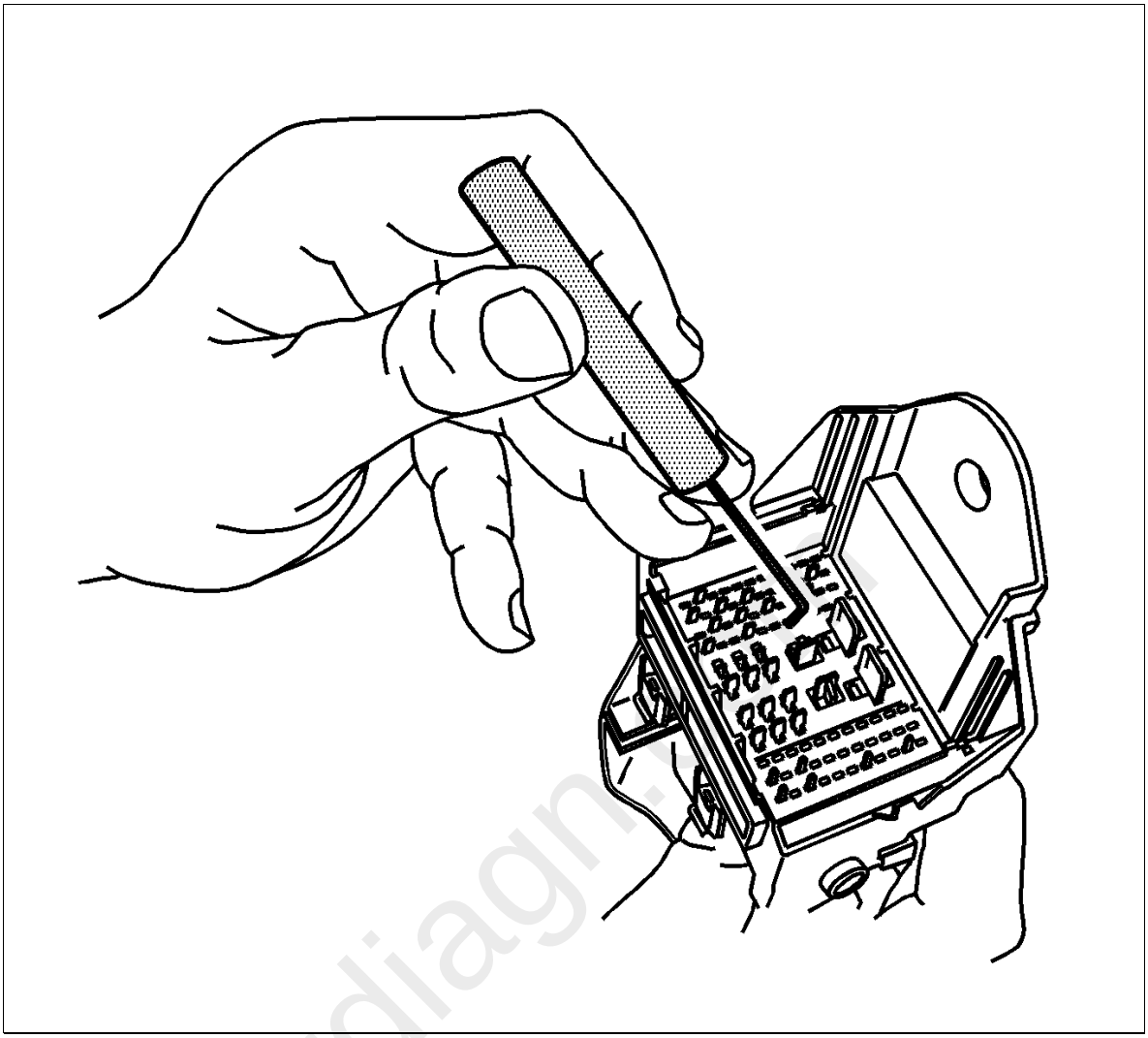
cardiagn.com

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.

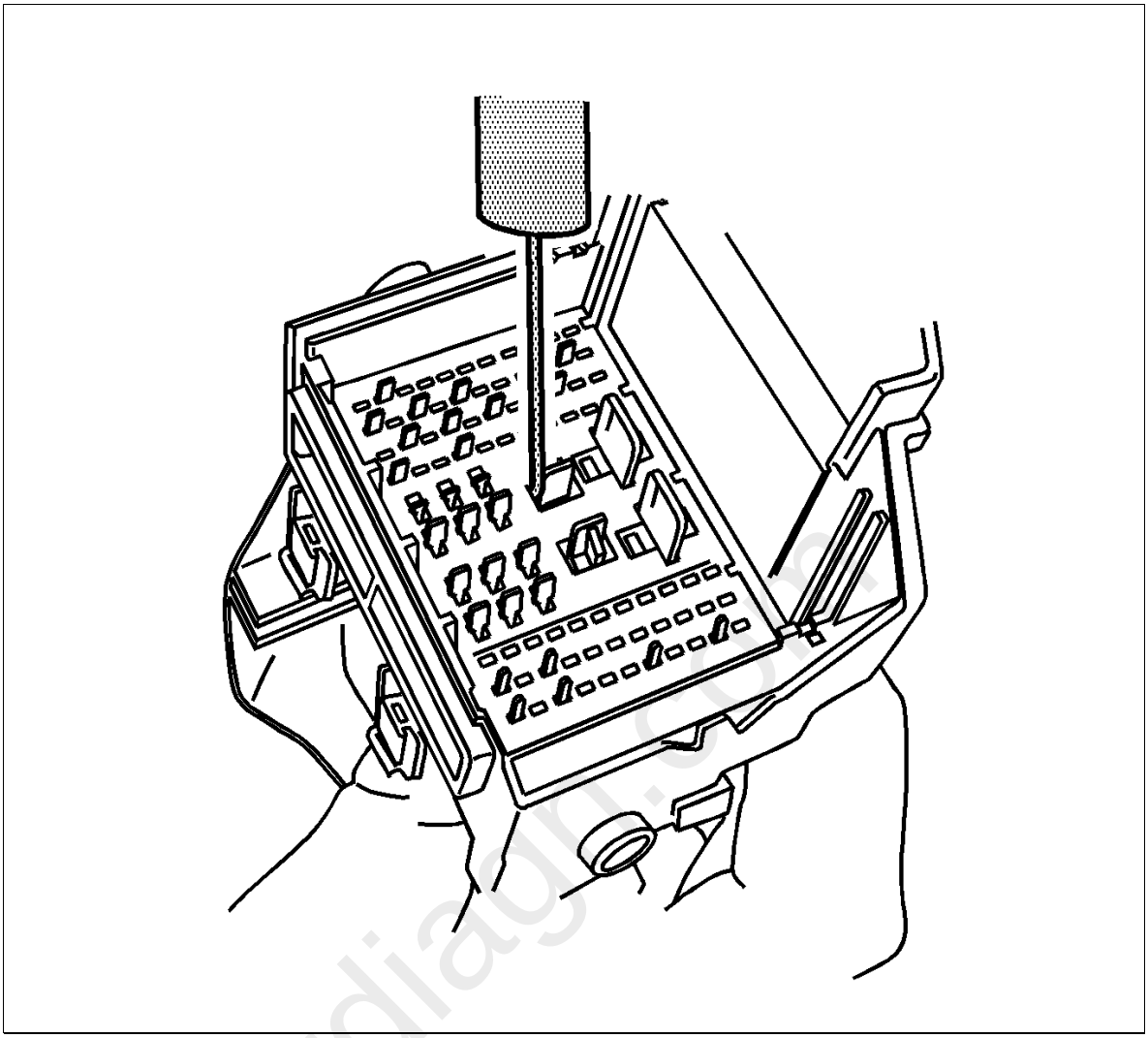
Fig 13: Lifting Terminal Plate Past The Terminals



Courtesy of GENERAL MOTORS COMPANY

12. Using terminal release tool J-38125-216, lift the terminal plate past the terminals and out of the connector body cavity.

Fig 14: Terminal Plate

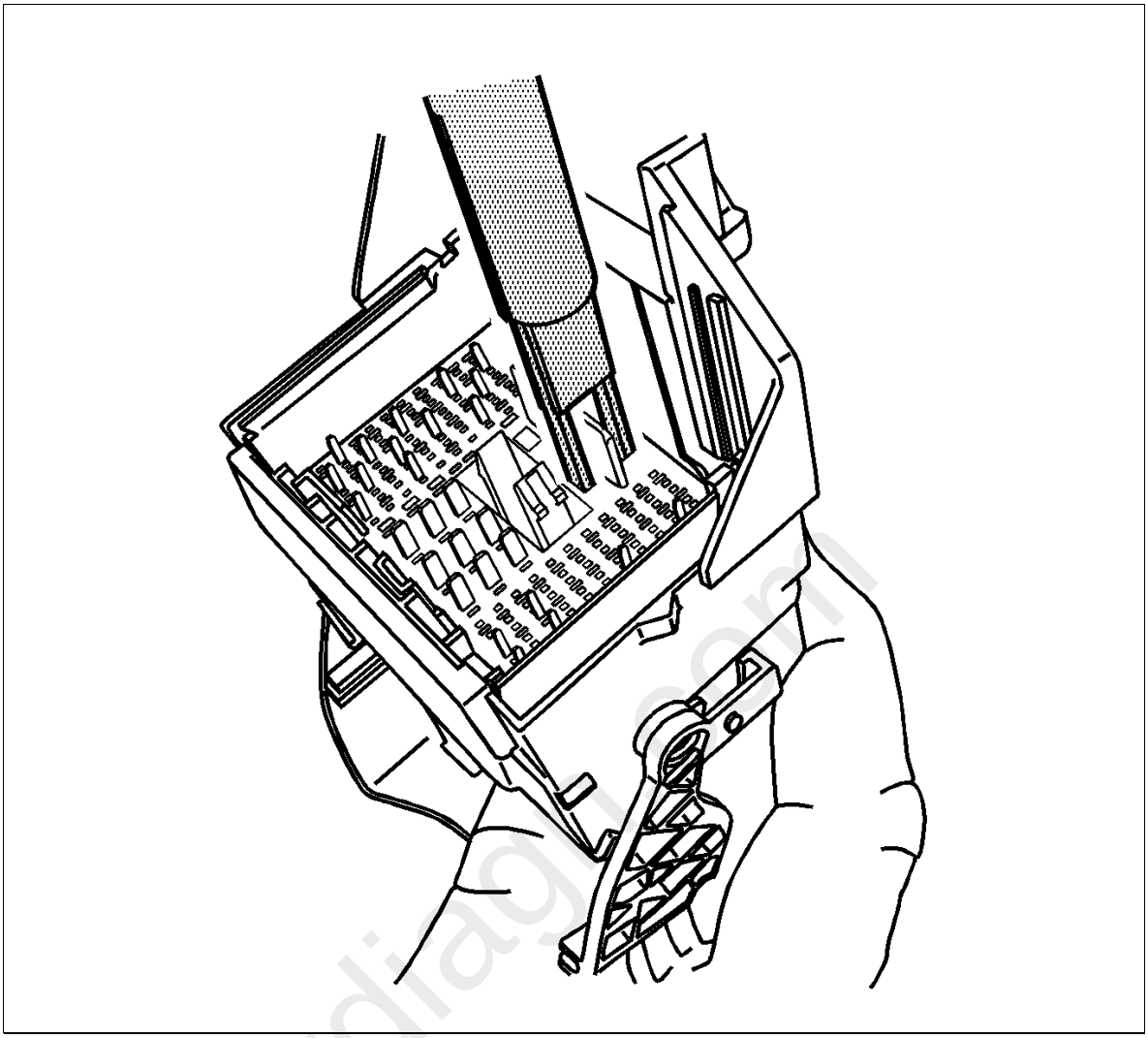


Courtesy of GENERAL MOTORS COMPANY

13. Terminal plate will bind slightly on each corner.

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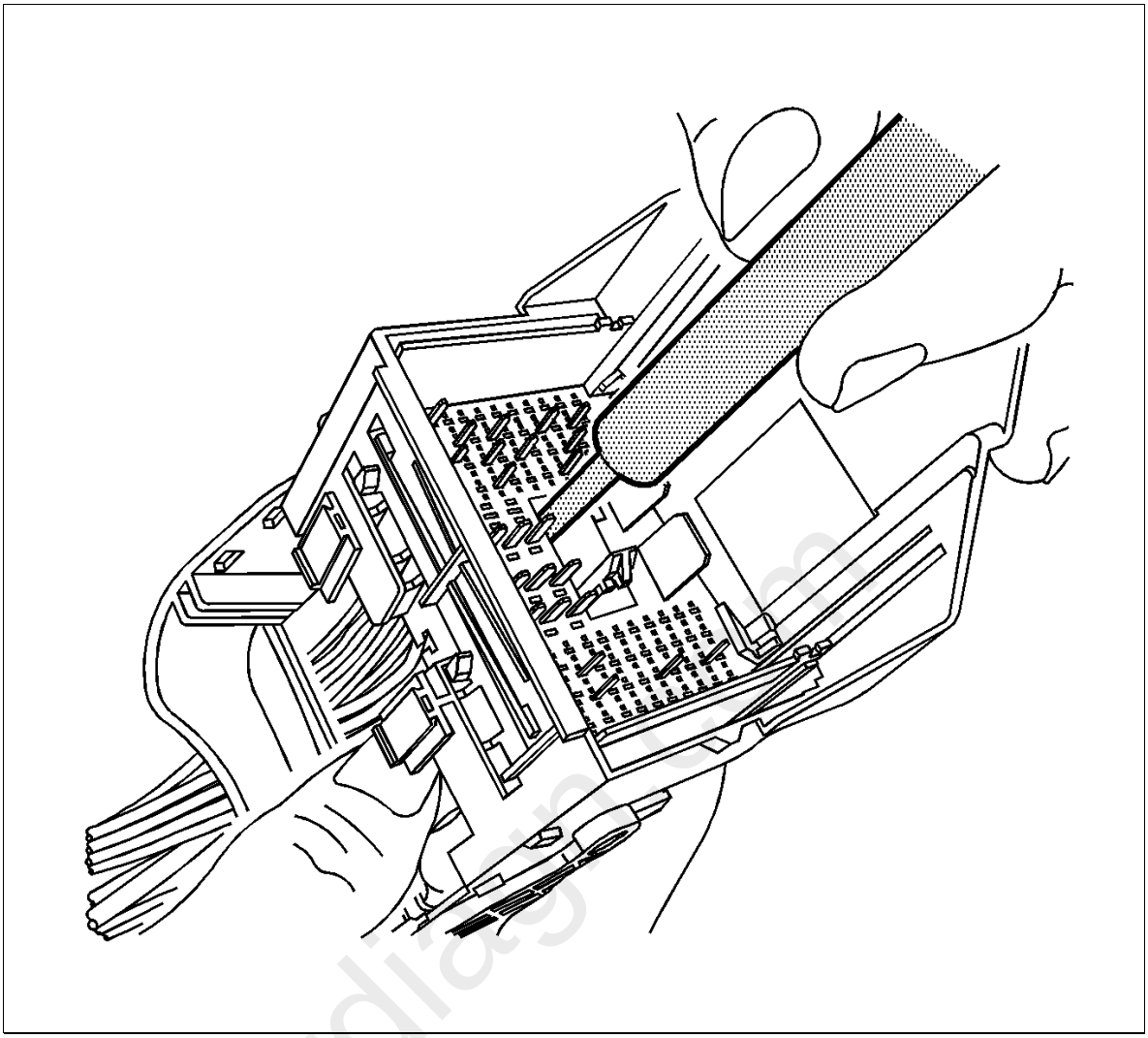
Fig 15: Releasing Lock Tabs



Courtesy of GENERAL MOTORS COMPANY

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.

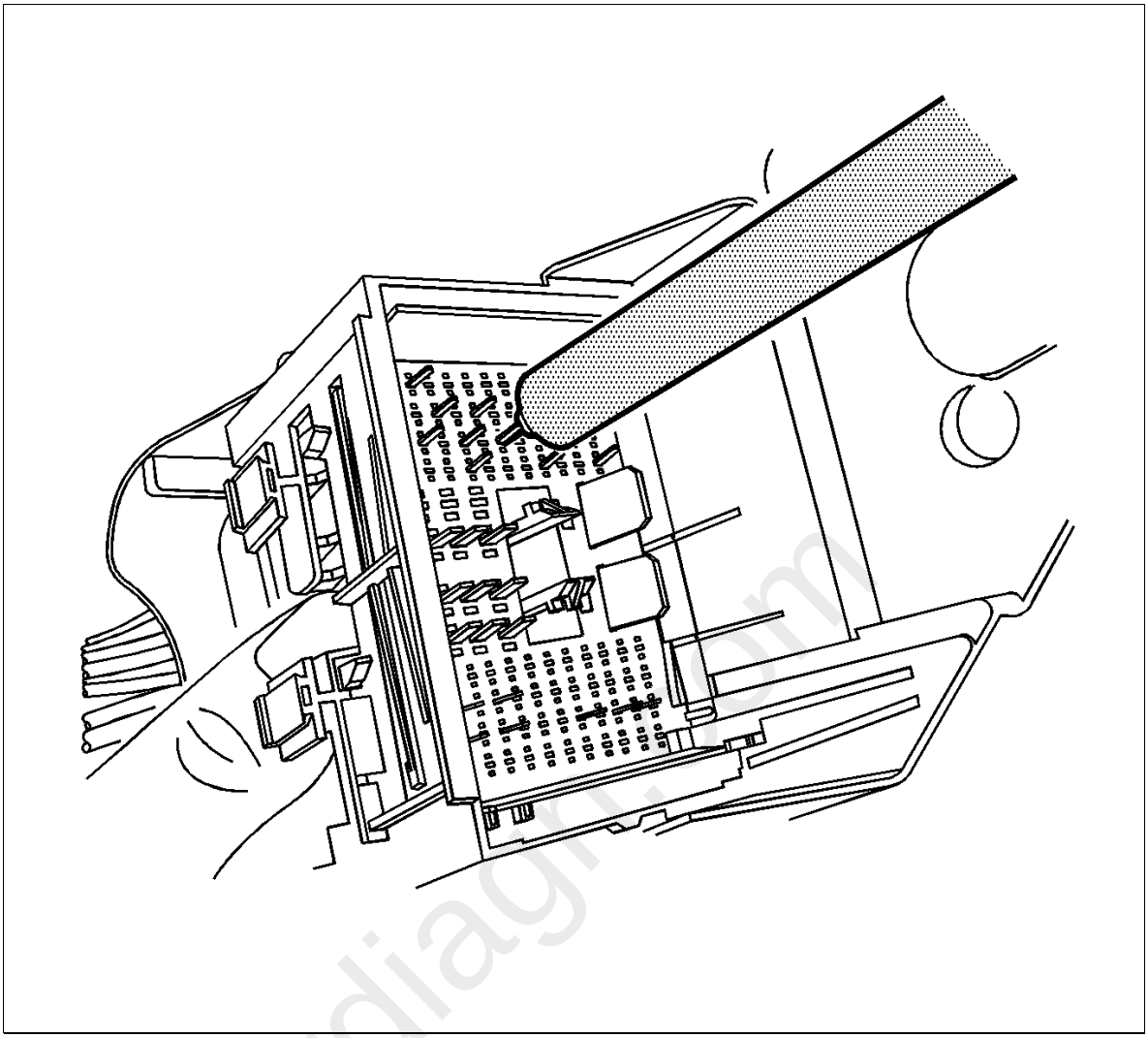
Fig 16: Prongs On Each Side Of Terminal



Courtesy of GENERAL MOTORS COMPANY

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.

Fig 17: Prongs On Each Side Of Terminal - Tyco/AMP (102-Way Inline)

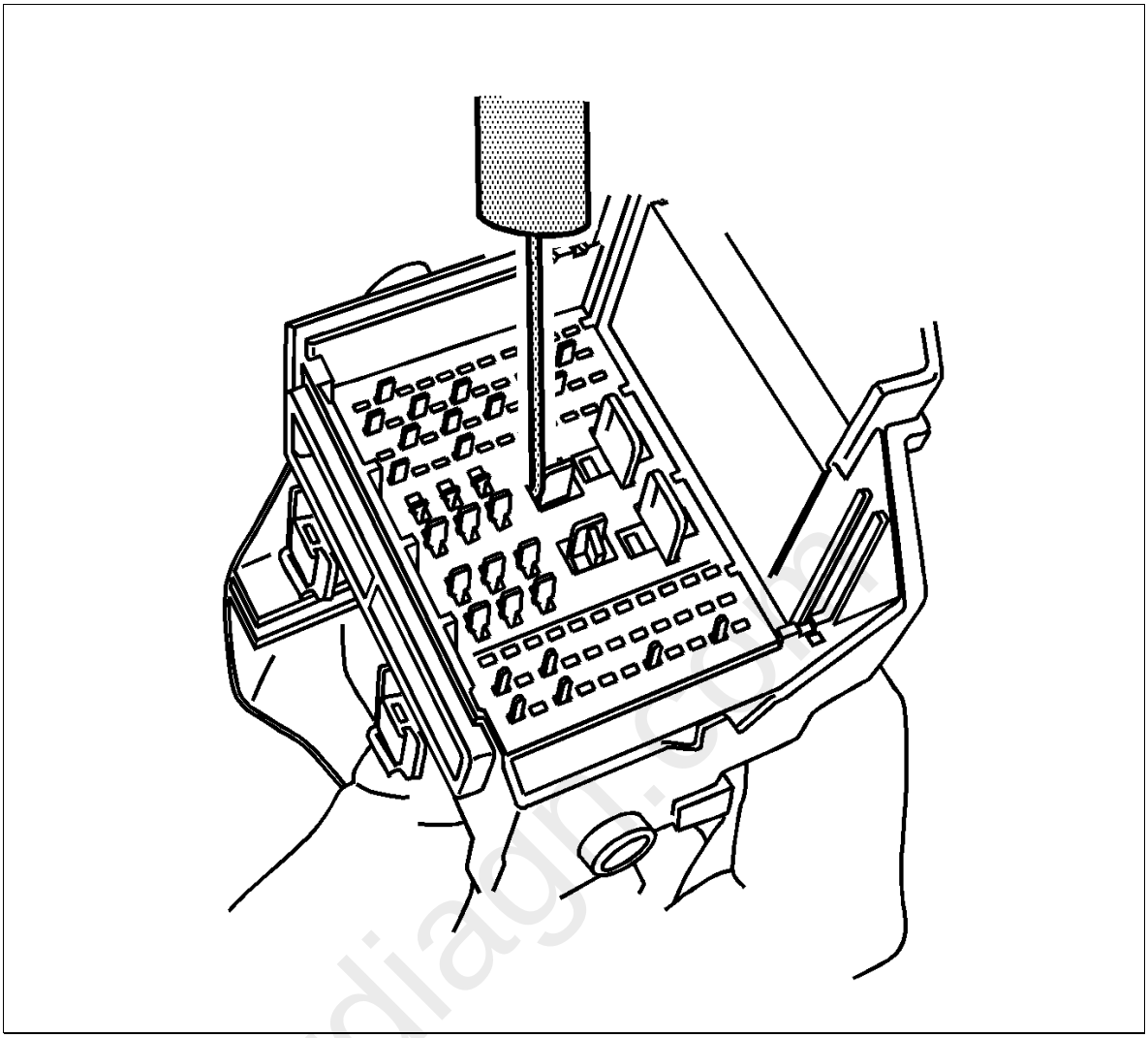


Courtesy of GENERAL MOTORS COMPANY

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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Fig 18: Terminal Plate

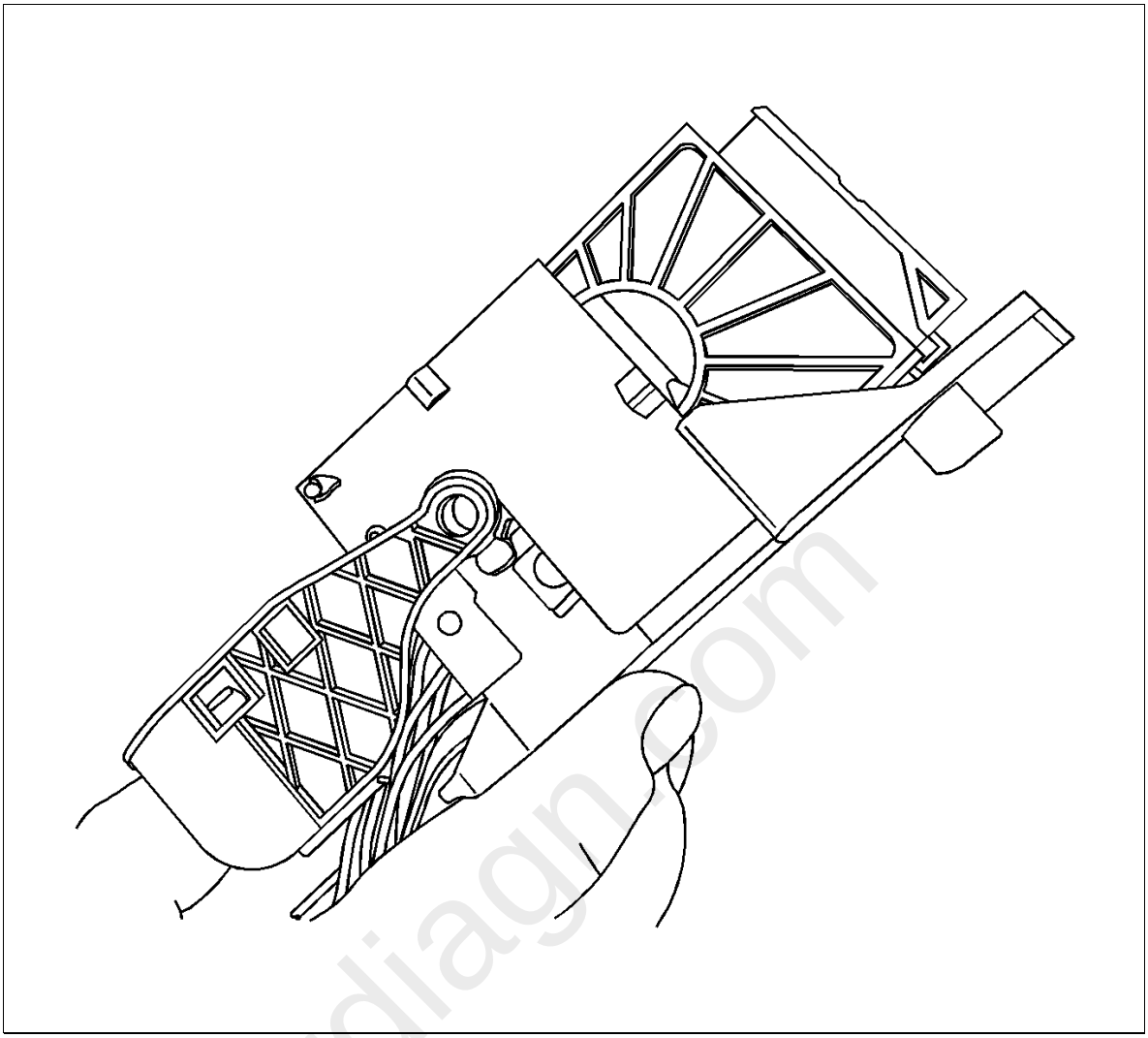


Courtesy of GENERAL MOTORS COMPANY

17. Press the terminal plate back into the female connector to the preset position. The plate will bind slightly on each corner.

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Fig 19: Guide Plates To Mesh With Locking Lever Gears

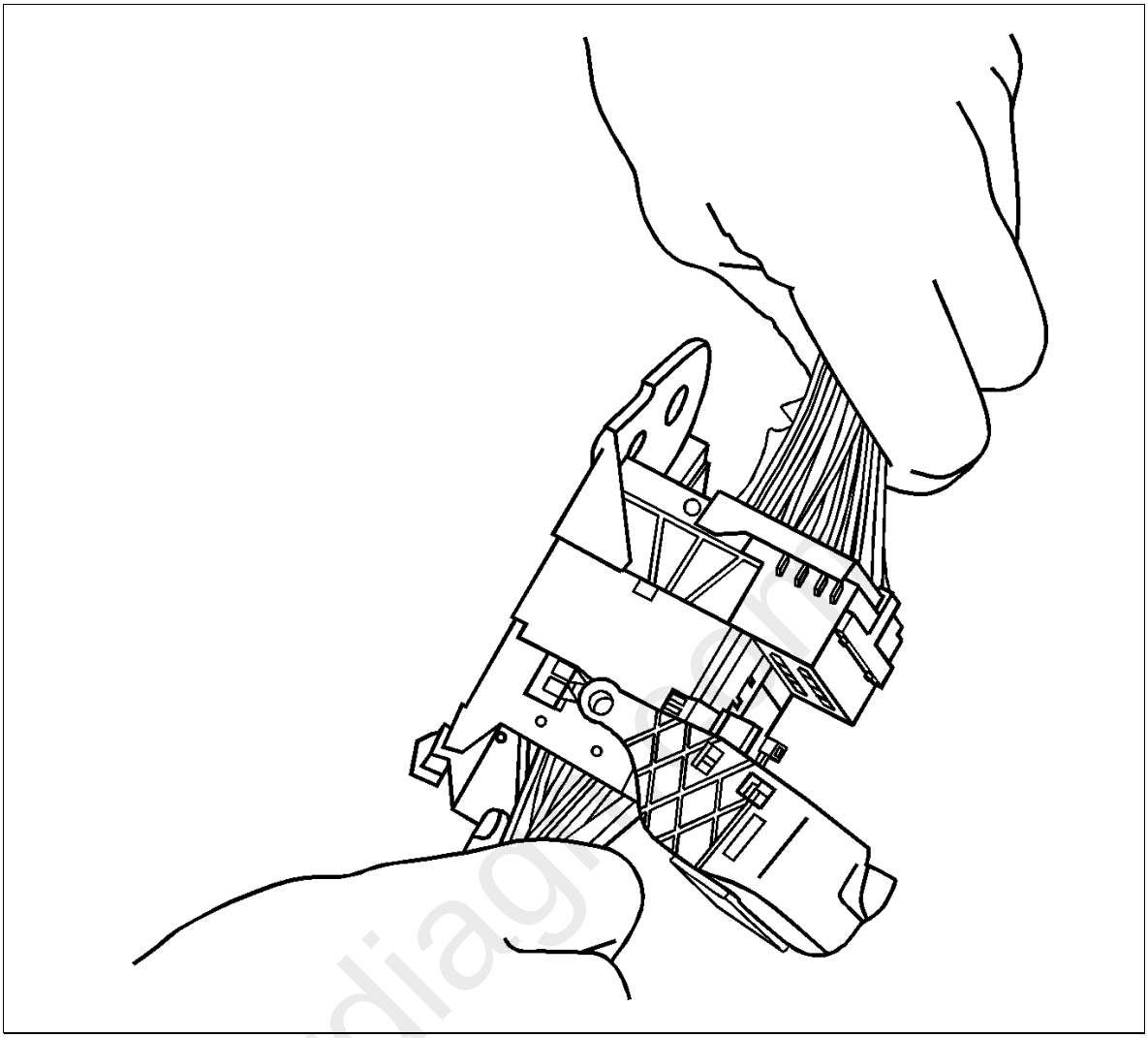


Courtesy of GENERAL MOTORS COMPANY

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18. With the locking lever in the 180 degree position, align the guide plates to mesh with the gears on the locking lever.

Fig 20: Male Connector Body Away From Guide Plates

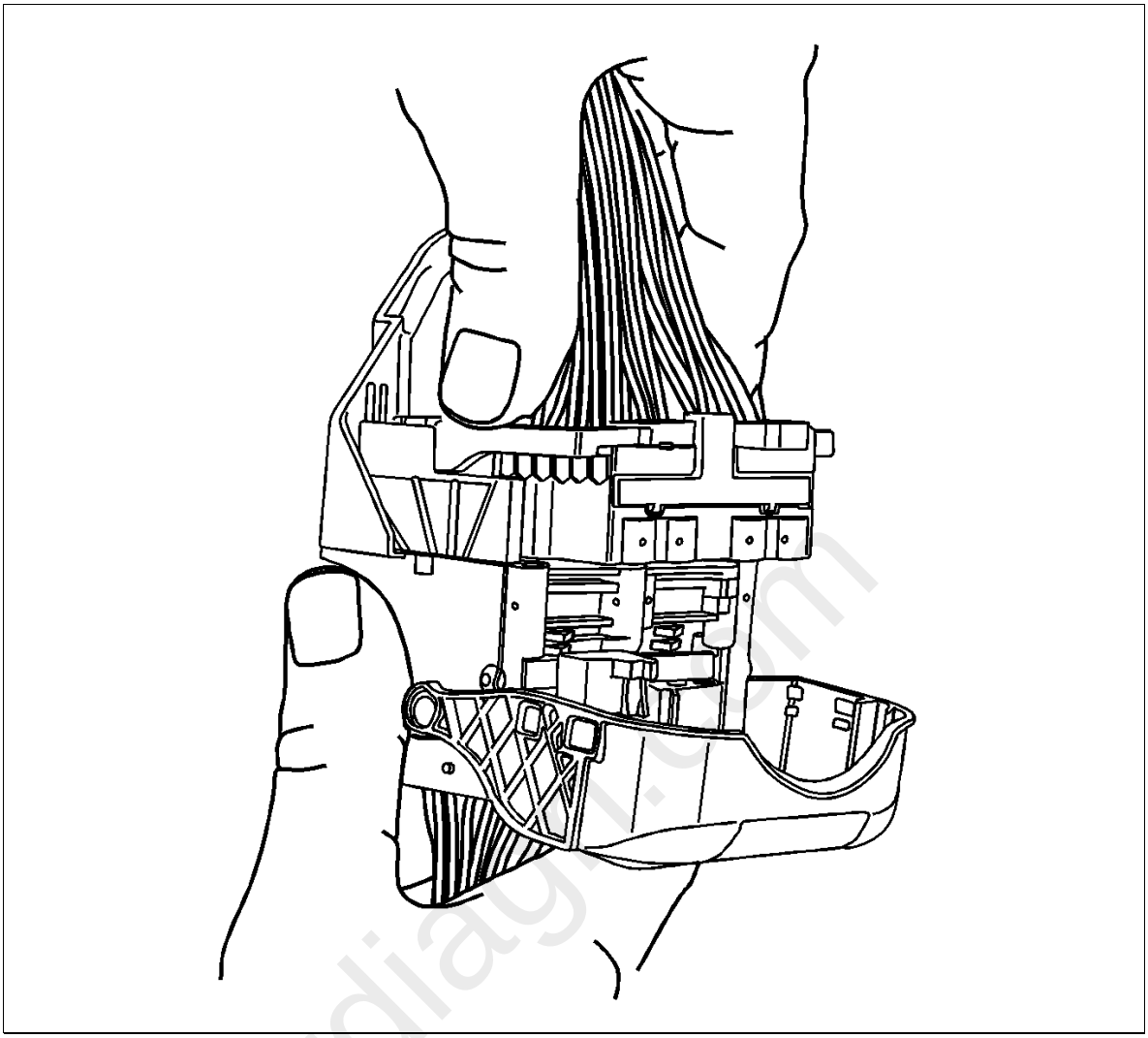


Courtesy of GENERAL MOTORS COMPANY

19. Slide the male connector body back inward toward the guide plates.

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Fig 21: Connector - Tyco/AMP (102-Way Inline)

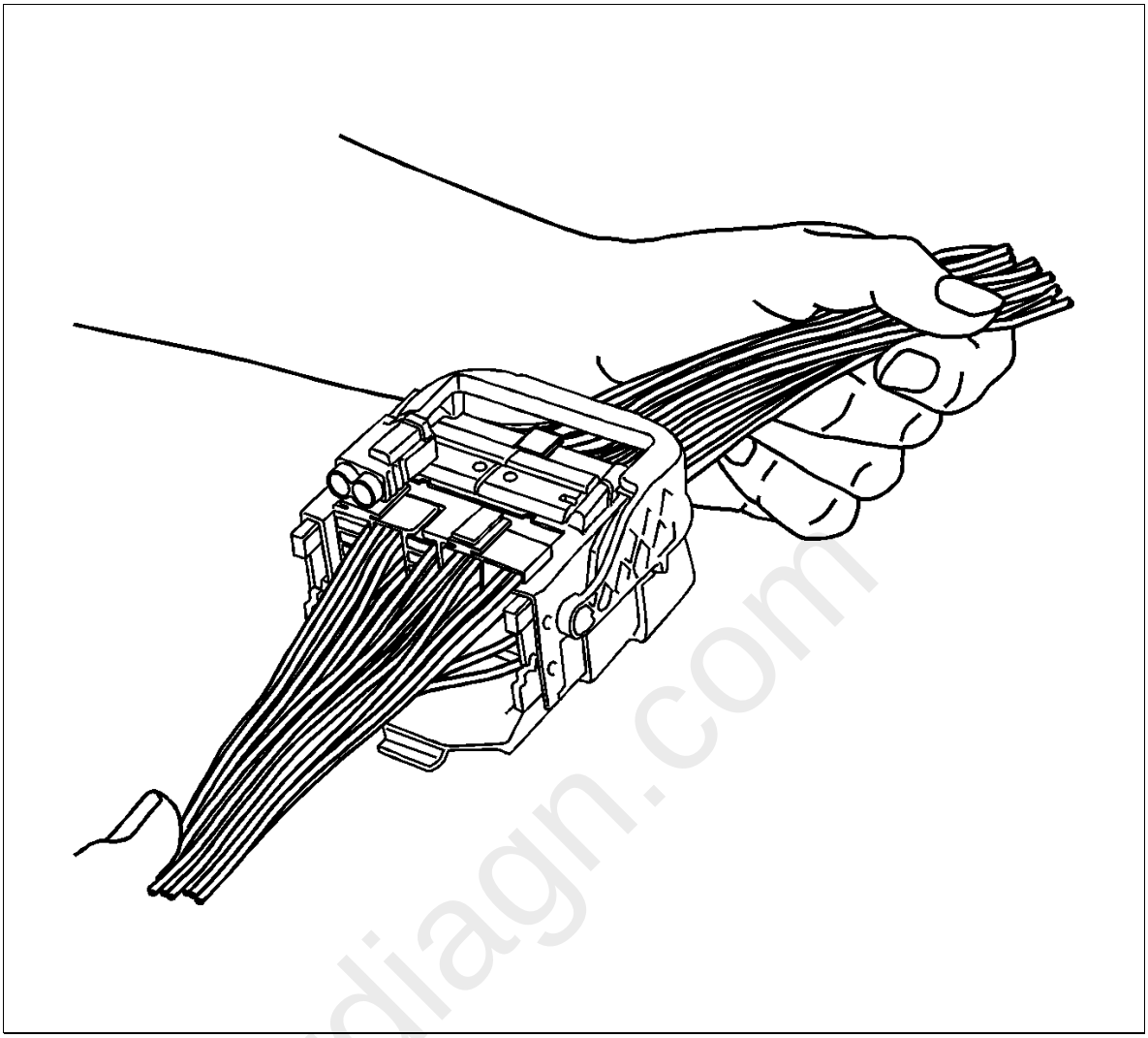


Courtesy of GENERAL MOTORS COMPANY

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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Fig 22: Connector In Assembled Position



Courtesy of GENERAL MOTORS COMPANY

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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 (Terminated Lead Repair) Repairing Connector Terminals (Terminal Repair) procedure.
23. Insert the repaired terminal back into the cavity. Repeat the diagnostic procedure to verify the repair and reconnect the connector bodies.

DIAGNOSTIC INFORMATION AND PROCEDURES > TYCO/AMP CONNECTORS (SIR)

Special Tools

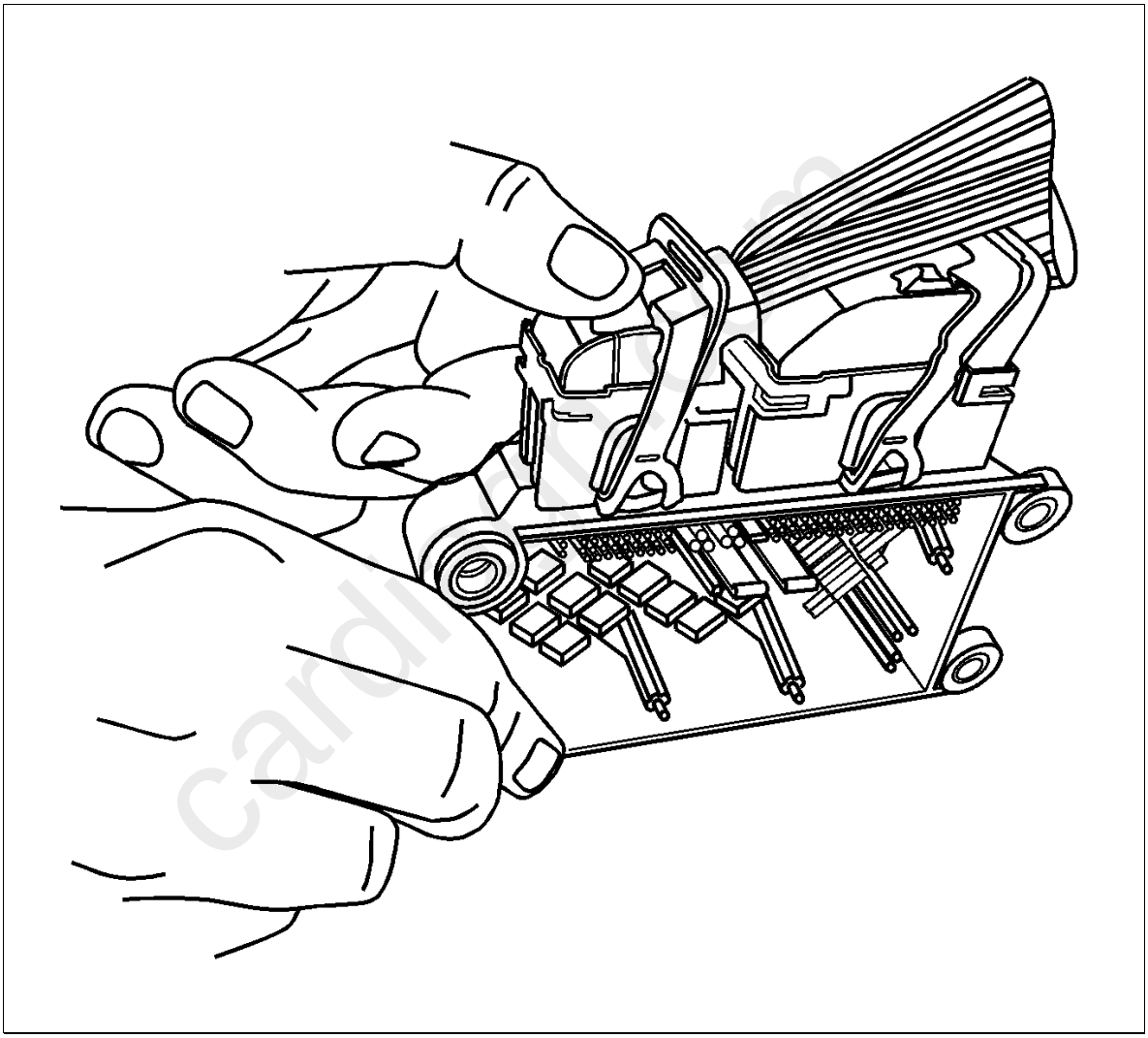
- **EL-38125-550** Terminal Release Tool Kit
- **EL-38125-580** Terminal Release Tool Kit

- **J-38125-11A** Terminal Release Tool
- **J-38125-215A** Terminal Release Tool

For equivalent regional tools, refer to Special Tools .

DIAGNOSTIC INFORMATION AND PROCEDURES > TYCO/AMP CONNECTORS (SIR) > REMOVAL PROCEDURE

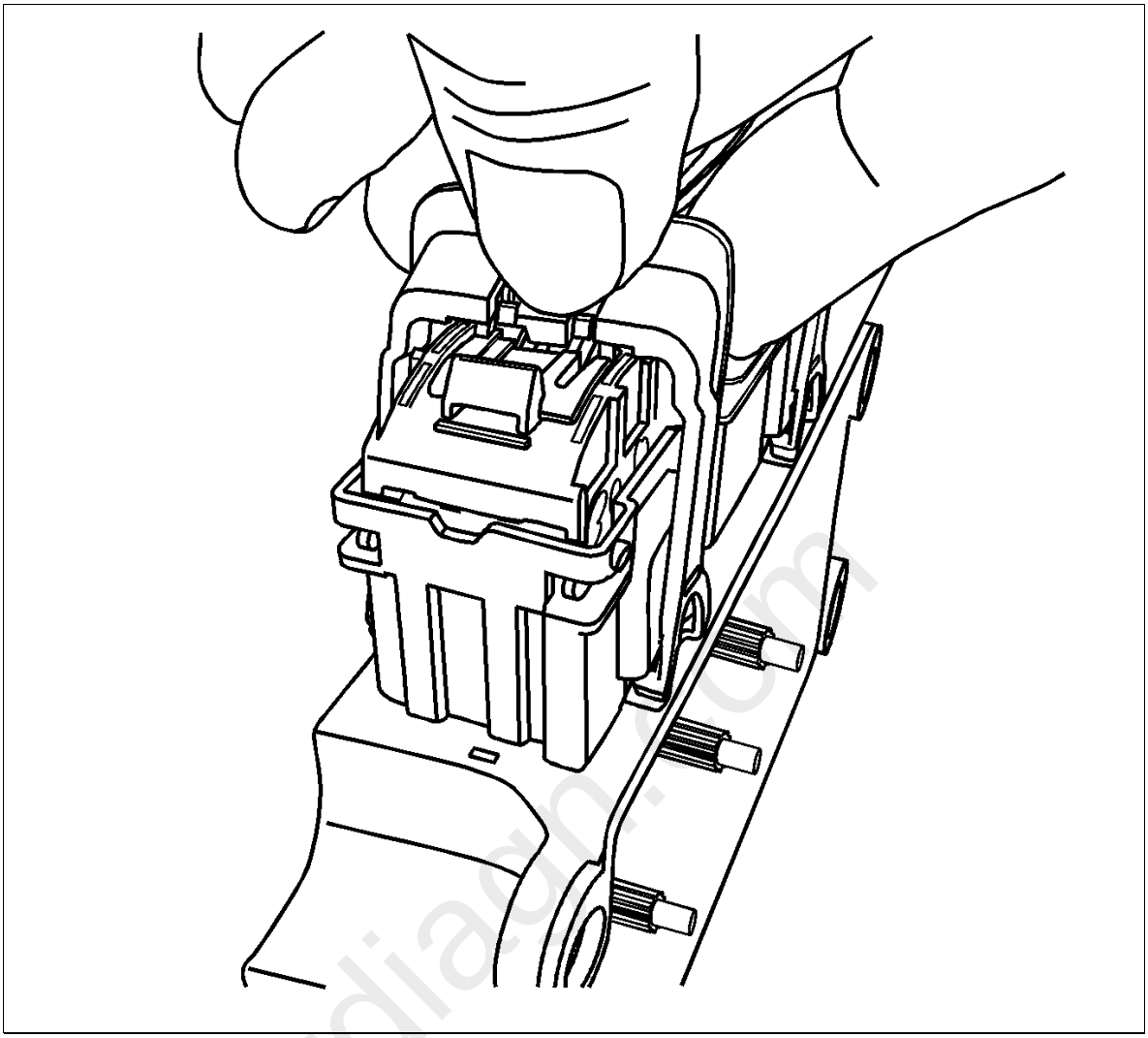
Fig 1: Red CPA Away From Connector Lever



Courtesy of GENERAL MOTORS COMPANY

1. Using your thumbs press down and slide the red CPA away from the connector lever.

Fig 2: Down On Locking Tab - Tyco/AMP Connectors (SIR)



Courtesy of GENERAL MOTORS COMPANY

2. Using your thumb press down on the locking tab and move the lever to the released position.

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Fig 3: Wire Dress Cover Locking Tabs

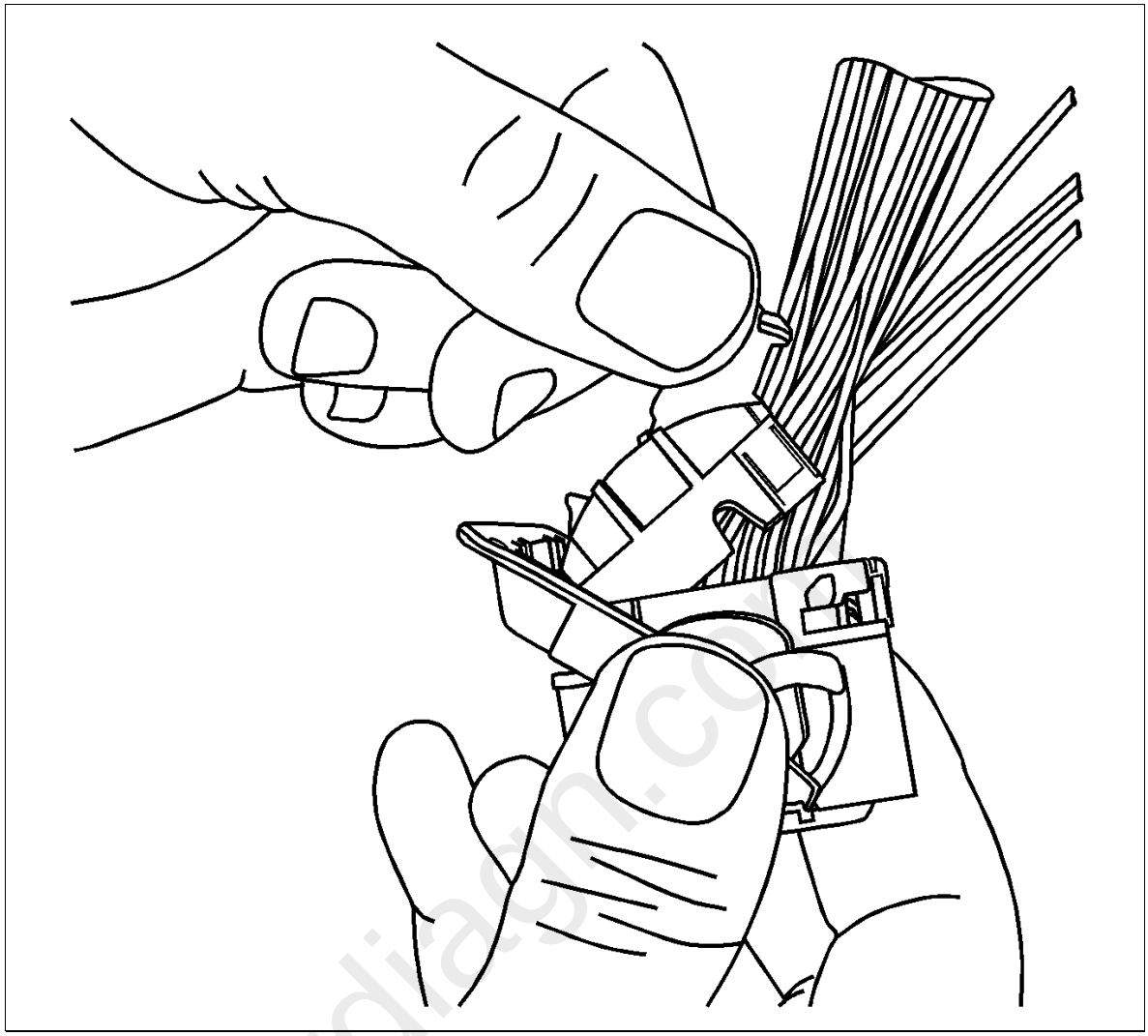


Courtesy of GENERAL MOTORS COMPANY

3. Using terminal tool J-38125-11A or equivalent, release the wire dress cover locking tabs.

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Fig 4: Pivoting Connector Wire Dress Cover

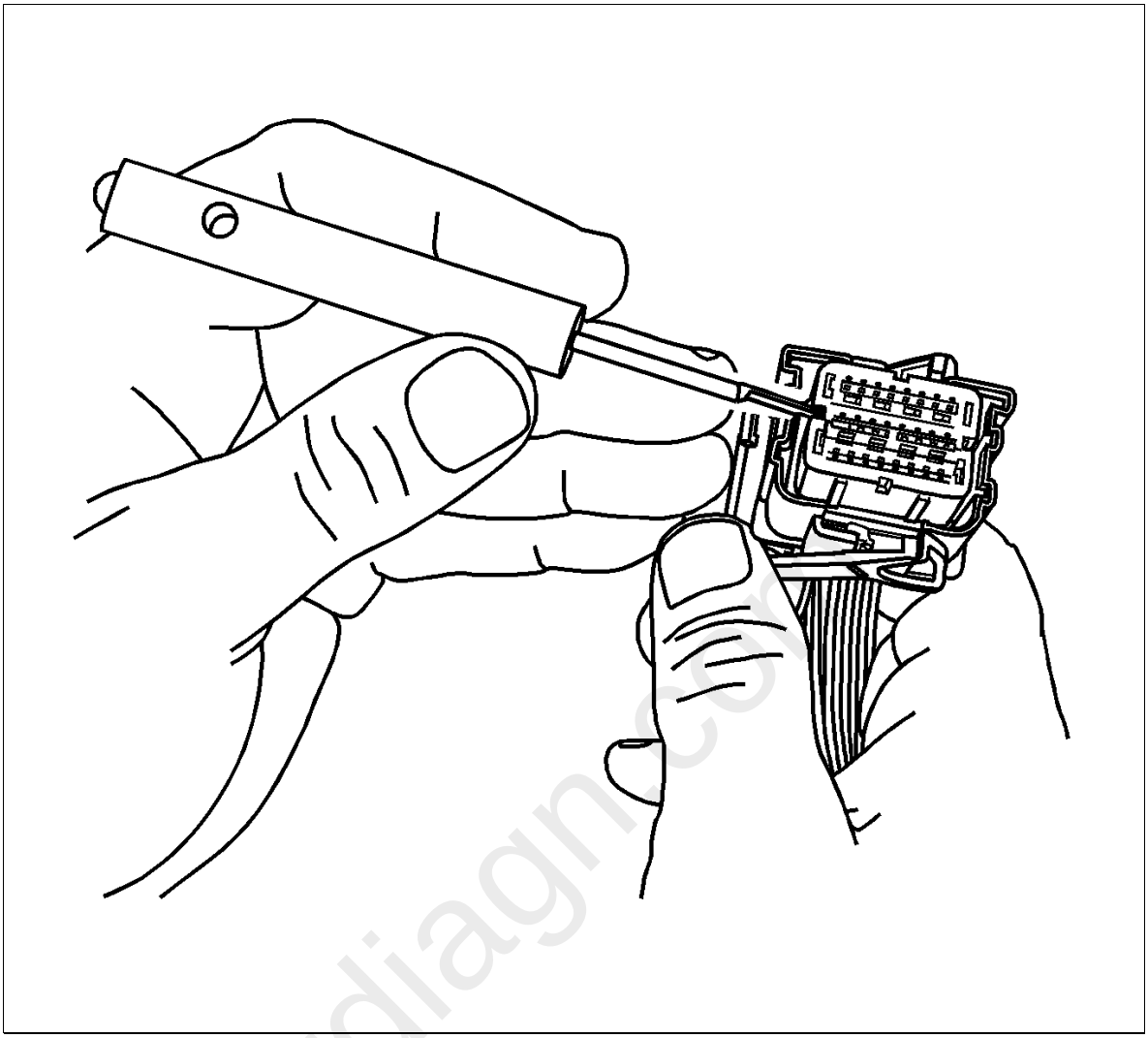


Courtesy of GENERAL MOTORS COMPANY

4. Pivot connector wire dress cover while removing from the connector body.

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Fig 5: Removing TPA

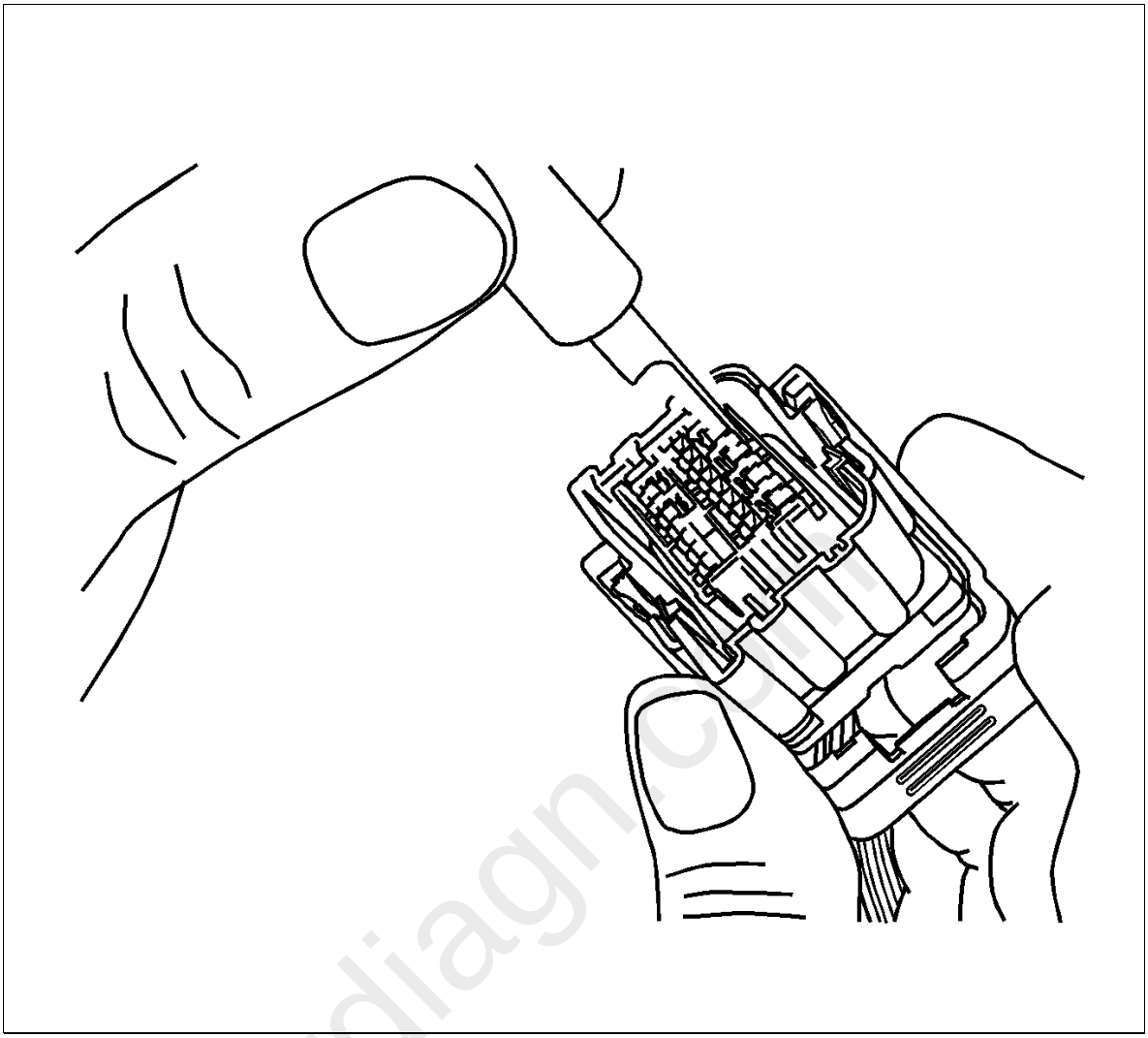


Courtesy of GENERAL MOTORS COMPANY

5. Using terminal tool J-38125-11A or equivalent, remove the TPA by lifting straight off the connector body.

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Fig 6: Terminal Release Tool & Rear of Connector Body



Courtesy of GENERAL MOTORS COMPANY

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.

DIAGNOSTIC INFORMATION AND PROCEDURES > TYCO/AMP CONNECTORS (SIR) > TERMINAL REPAIR PROCEDURE

Use the appropriate terminal and crimper in order to replace the terminal.

DIAGNOSTIC INFORMATION AND PROCEDURES > YAZAKI CONNECTORS (2-WAY)

Special Tools

- **EL-38125-550** Terminal Release Tool Kit
- **EL-38125-580** Terminal Release Tool Kit

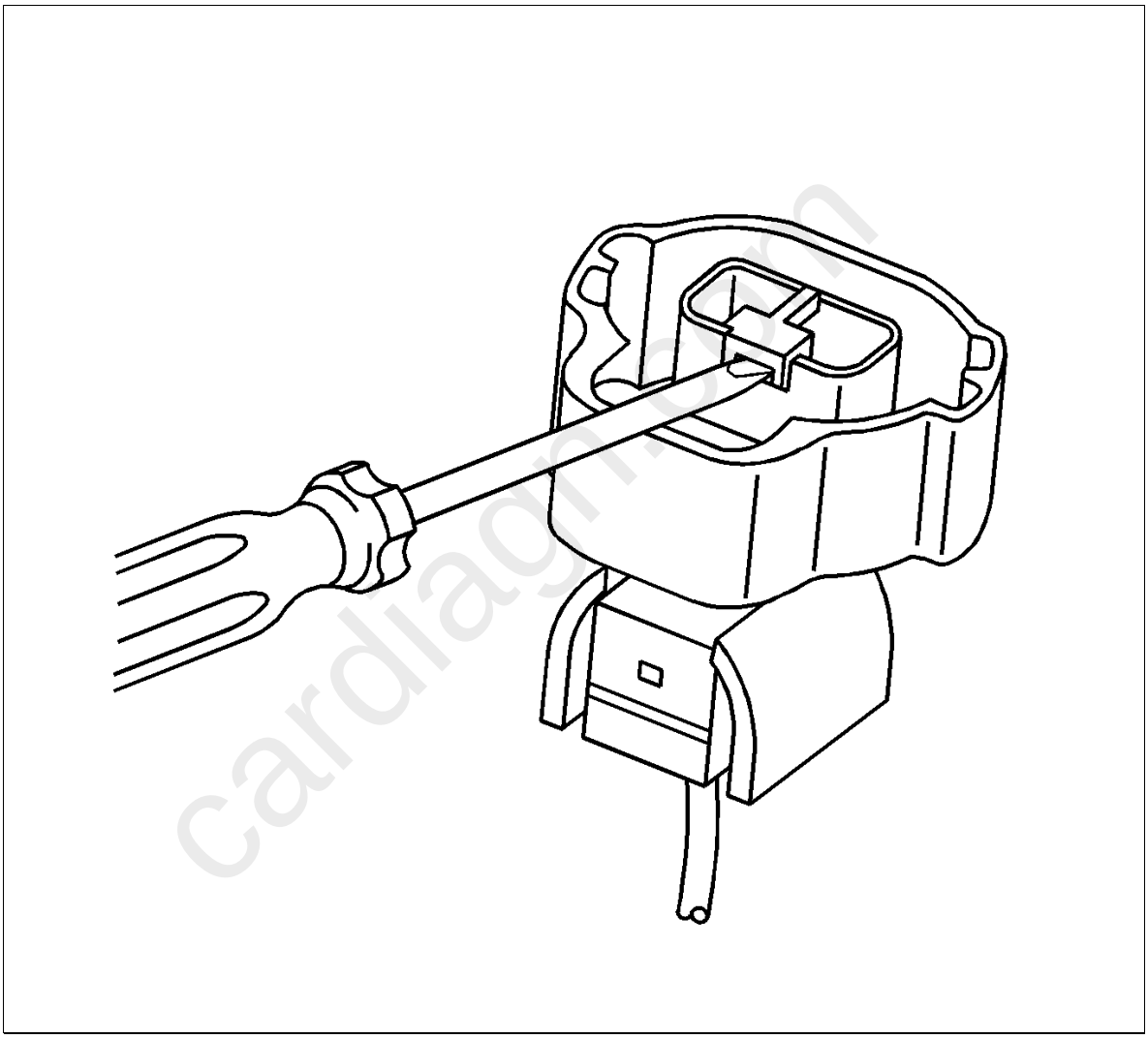
- **J-38125-553** Terminal Release Tool

For equivalent regional tools, refer to Special Tools .

DIAGNOSTIC INFORMATION AND PROCEDURES > YAZAKI CONNECTORS (2-WAY) > TERMINAL REMOVAL PROCEDURE

1. Disconnect the connector from the component.

   Fig 1: Terminal Position Assurance (Yakazi)

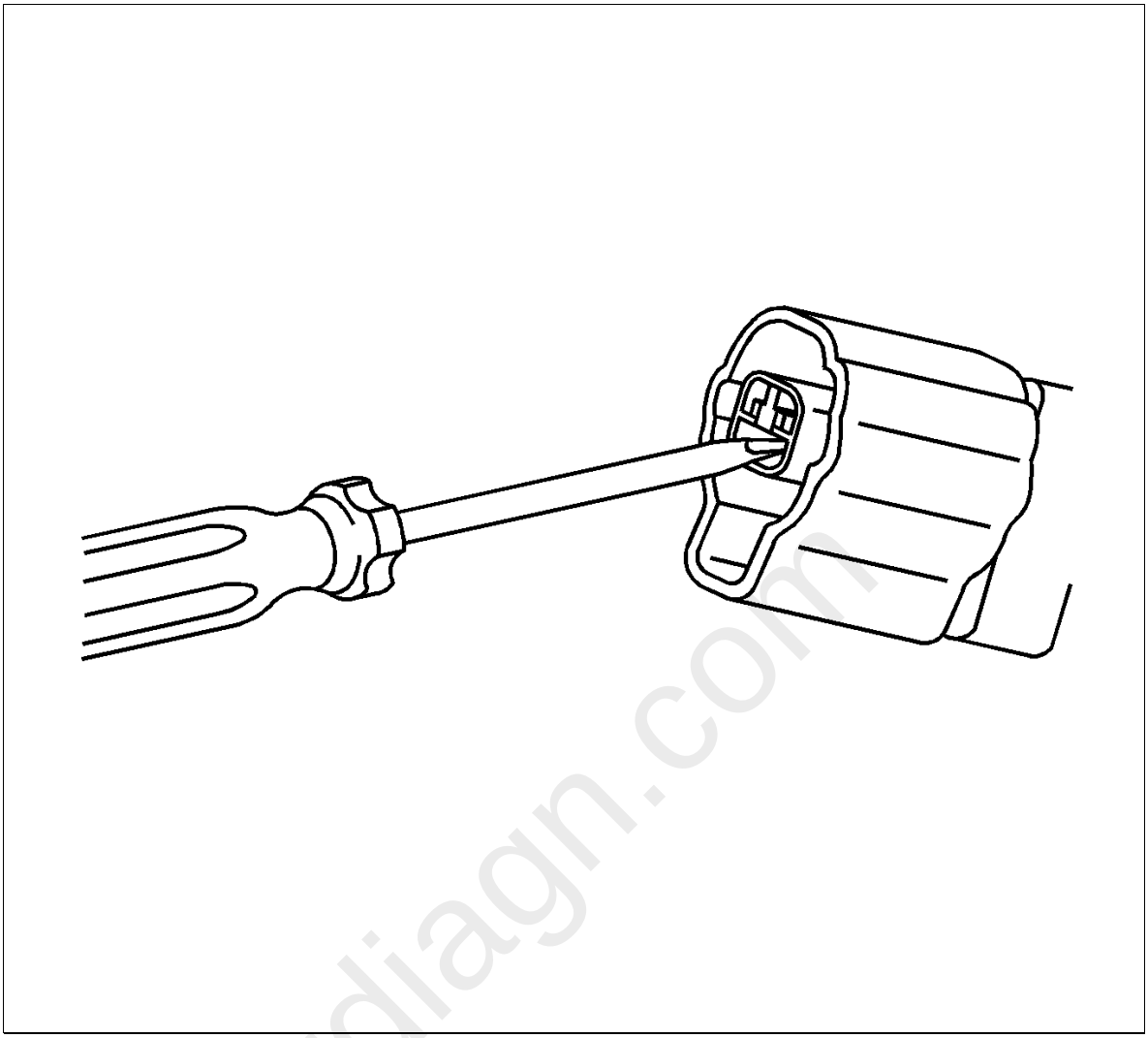


Courtesy of GENERAL MOTORS COMPANY

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.

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Fig 2: Tool Into Terminal Cavity (Yakazi)

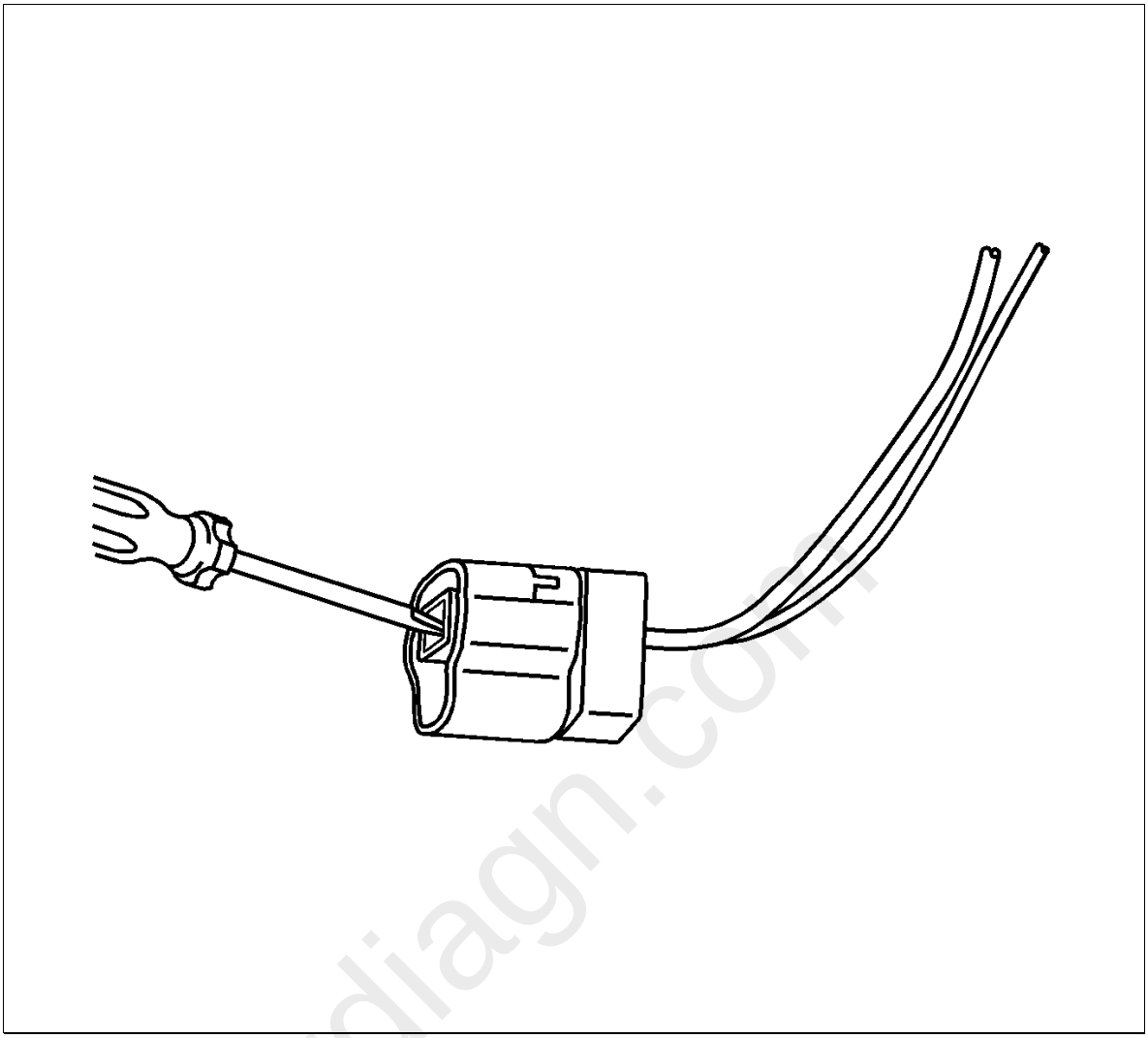


Courtesy of GENERAL MOTORS COMPANY

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 terminal and it stays in contact with the terminal until it stops on the plastic terminal retainer.

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Fig 3: Terminal Out Of Connector (Yakazi)



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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 (Terminated Lead Repair) Repairing Connector Terminals (Terminal Repair) procedure.
8. Insert the repaired terminal back into the cavity. Repeat the diagnostic procedure to verify the repair and reconnect the connector bodies.

DIAGNOSTIC INFORMATION AND PROCEDURES > YAZAKI CONNECTORS (16-WAY)

Special Tools

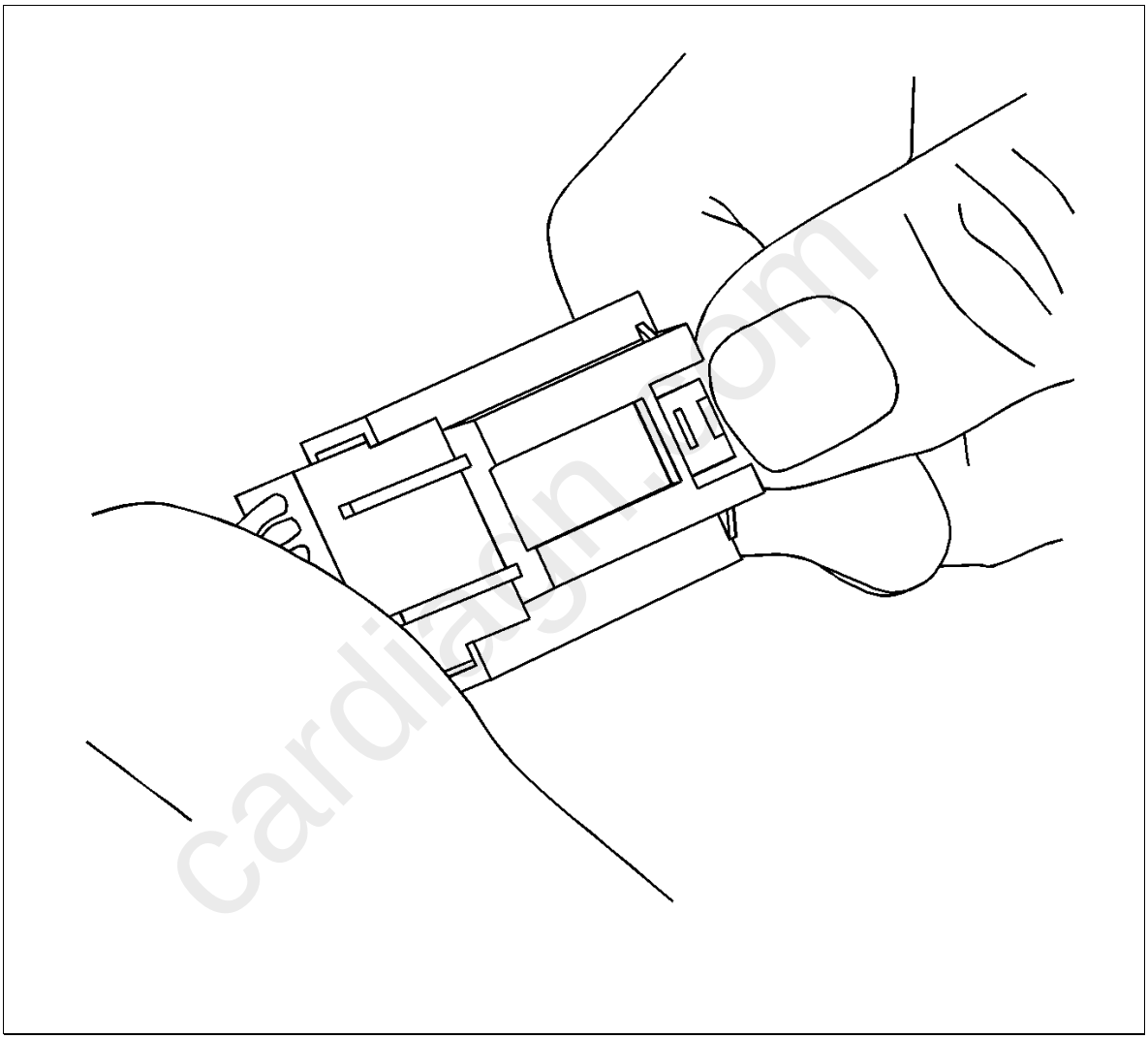
- **EL-38125-550** Terminal Release Tool Kit
- **EL-38125-580** Terminal Release Tool Kit

- **J-38125-215** Terminal Release Tool

For equivalent regional tools, refer to Special Tools .

DIAGNOSTIC INFORMATION AND PROCEDURES > YAZAKI CONNECTORS (16-WAY) > TERMINAL REMOVAL PROCEDURE

Fig 1: Two Connector Halves Apart



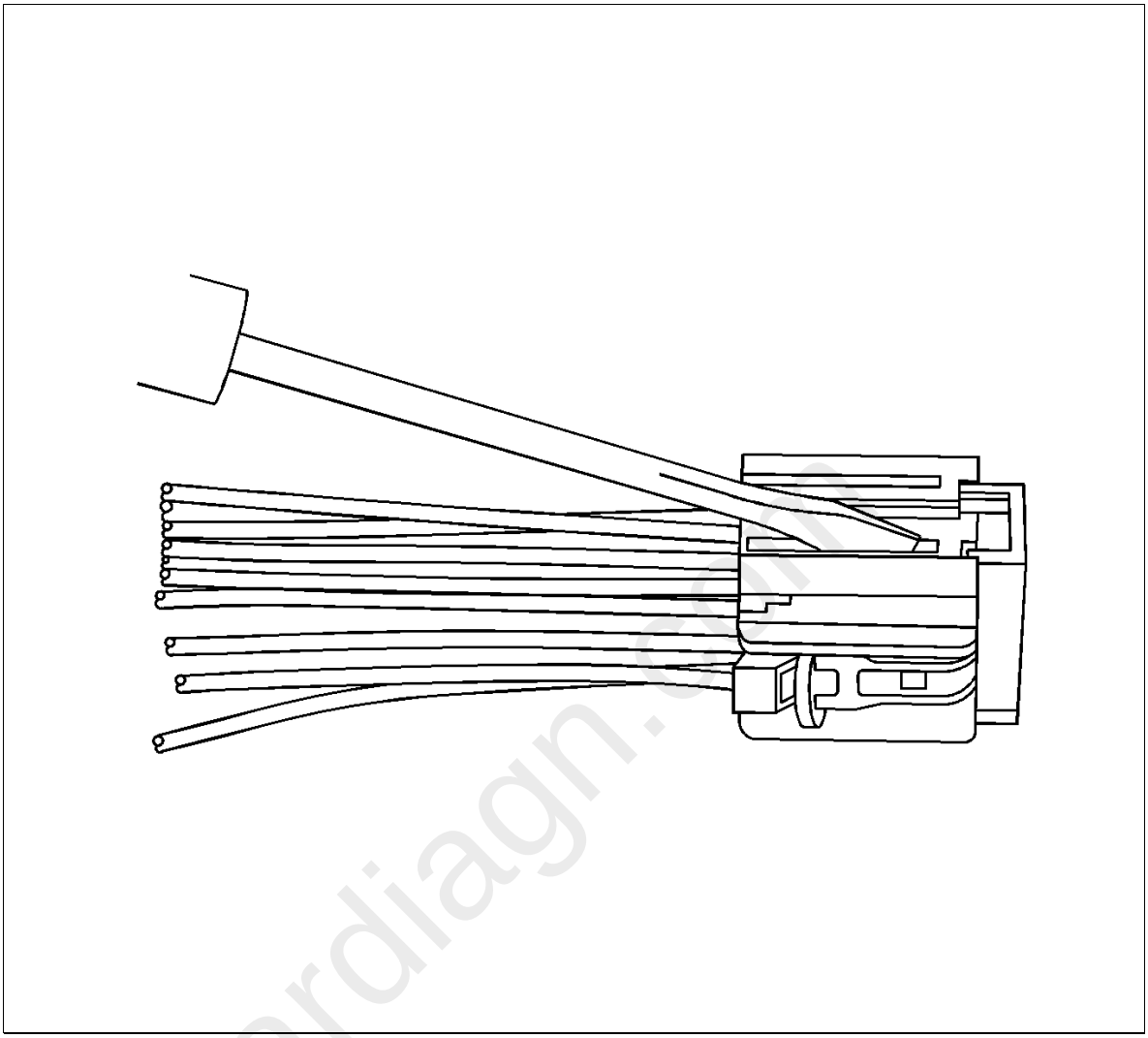
Courtesy of GENERAL MOTORS COMPANY

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.

Fig 2: Male Connector Half & Female Terminals

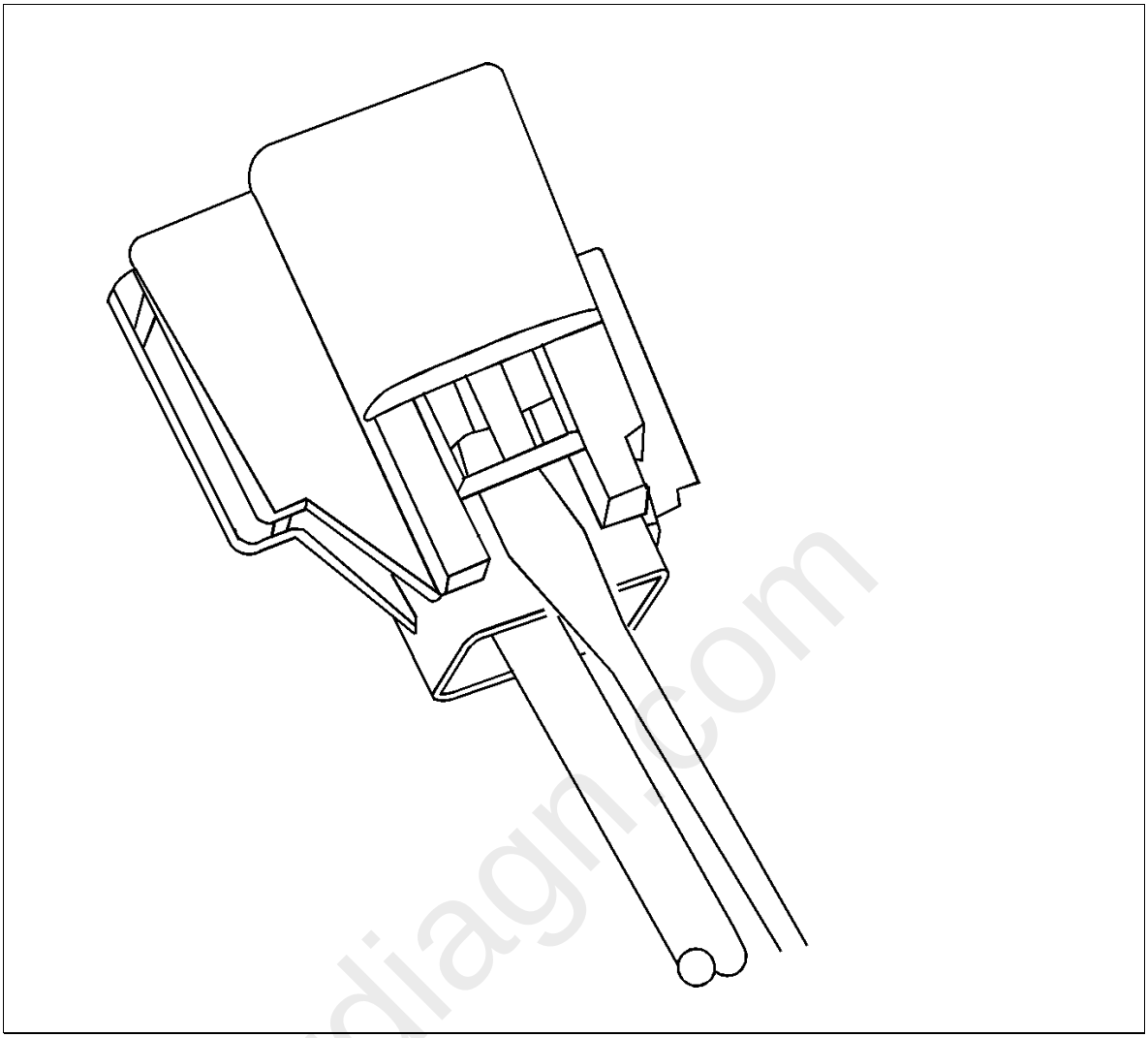


Courtesy of GENERAL MOTORS COMPANY

3. View of the male half of the connector with female terminals.

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Fig 3: Female Half Of Connector With Male Terminals

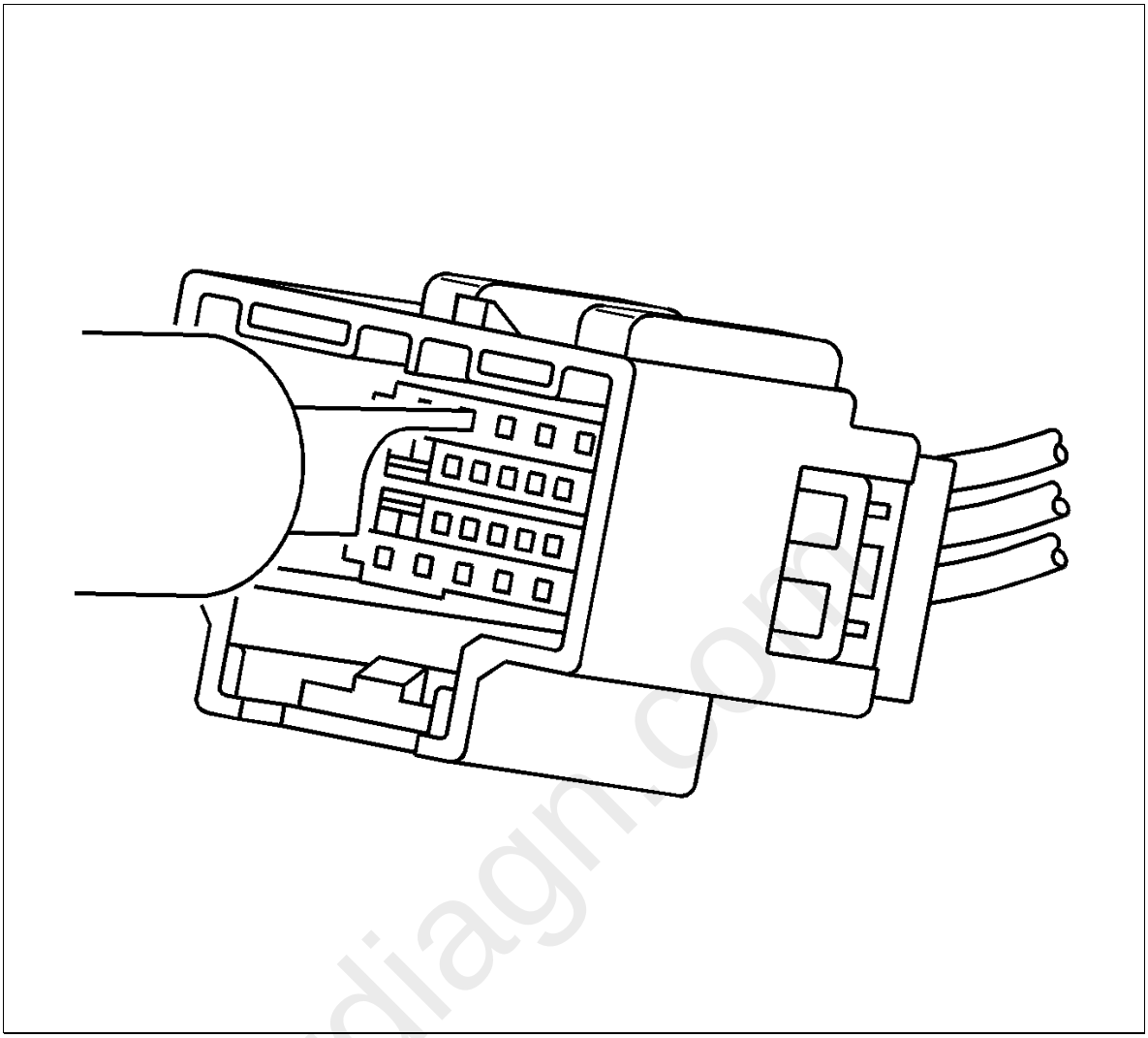


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4. View of the female half of the connector with male terminals.
5. Use the J-38125-215 tool to release the terminals by inserting the tool into the terminal release cavity.

Fig 4: Removal Tool On Female Half Of Connector

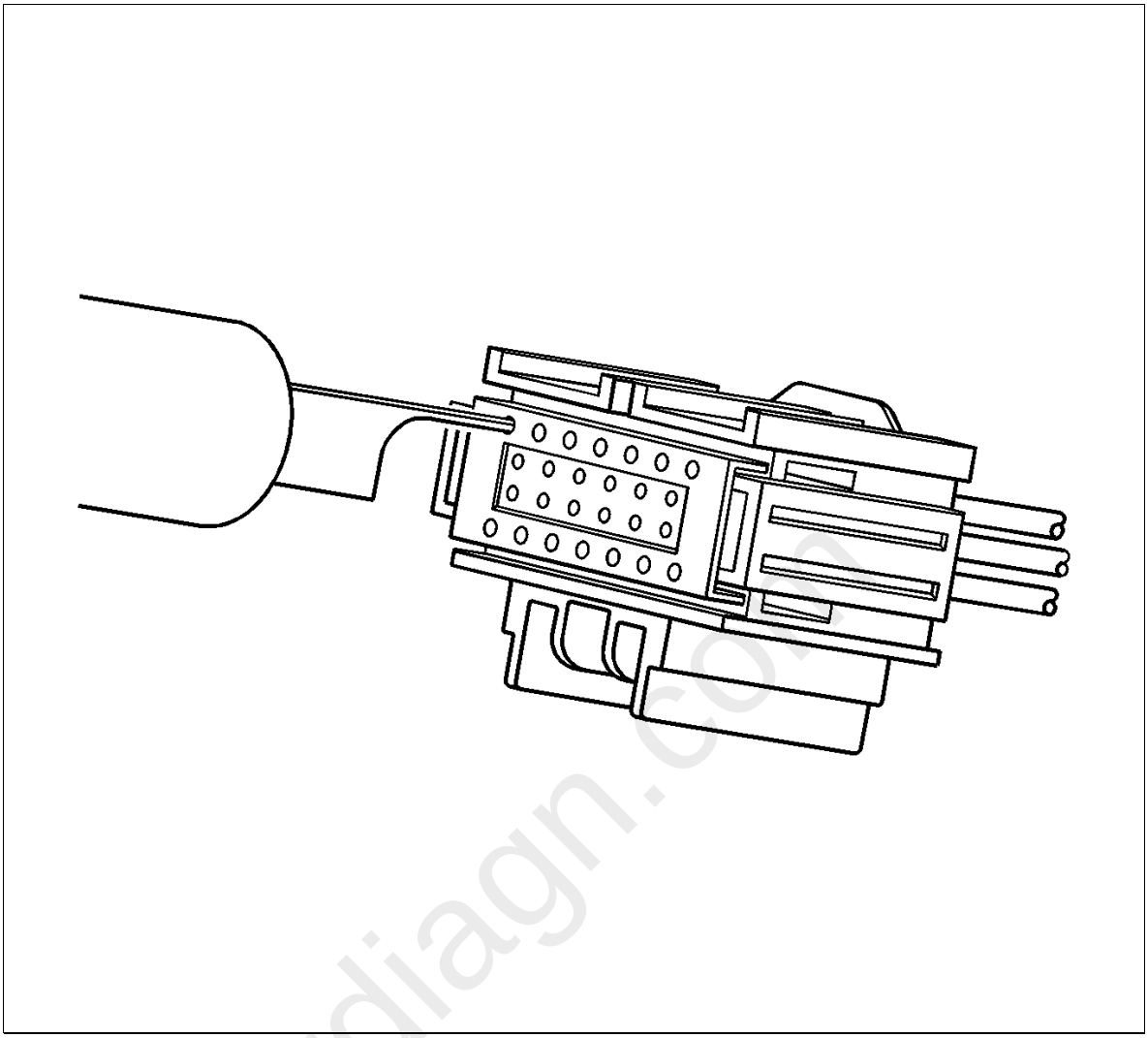


Courtesy of GENERAL MOTORS COMPANY

6. View of the female half of the connector with male terminals.

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Fig 5: Removal Tool On Male Half Of Connector



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7. View of the male half of the connector with female terminals.
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 (Terminated Lead Repair) Repairing Connector Terminals (Terminal Repair) procedure.
10. Insert the repaired terminal back into the cavity. Repeat the diagnostic procedure to verify the repair and reconnect the connector bodies.

DIAGNOSTIC INFORMATION AND PROCEDURES > 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 .

DIAGNOSTIC INFORMATION AND PROCEDURES > 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 (Weather Pack) Delphi Connectors (Push To Seat) Delphi Connectors (Pull To Seat) Delphi Connectors (Micro-Pack 100W) Delphi Connectors (Micro.64) Delphi Connectors (12-Way) Delphi Connectors (Steering Gear) .
- For pull to seat terminals, refer to Delphi Connectors (Weather Pack) Delphi Connectors (Push To Seat) Delphi Connectors (Pull To Seat) Delphi Connectors (Micro-Pack 100W) Delphi Connectors (Micro.64) Delphi Connectors (12-Way) Delphi Connectors (Steering Gear) .

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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.

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.

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DIAGNOSTIC INFORMATION AND PROCEDURES > REPAIRING CONNECTOR TERMINALS (TERMINAL REPAIR) > 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-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.

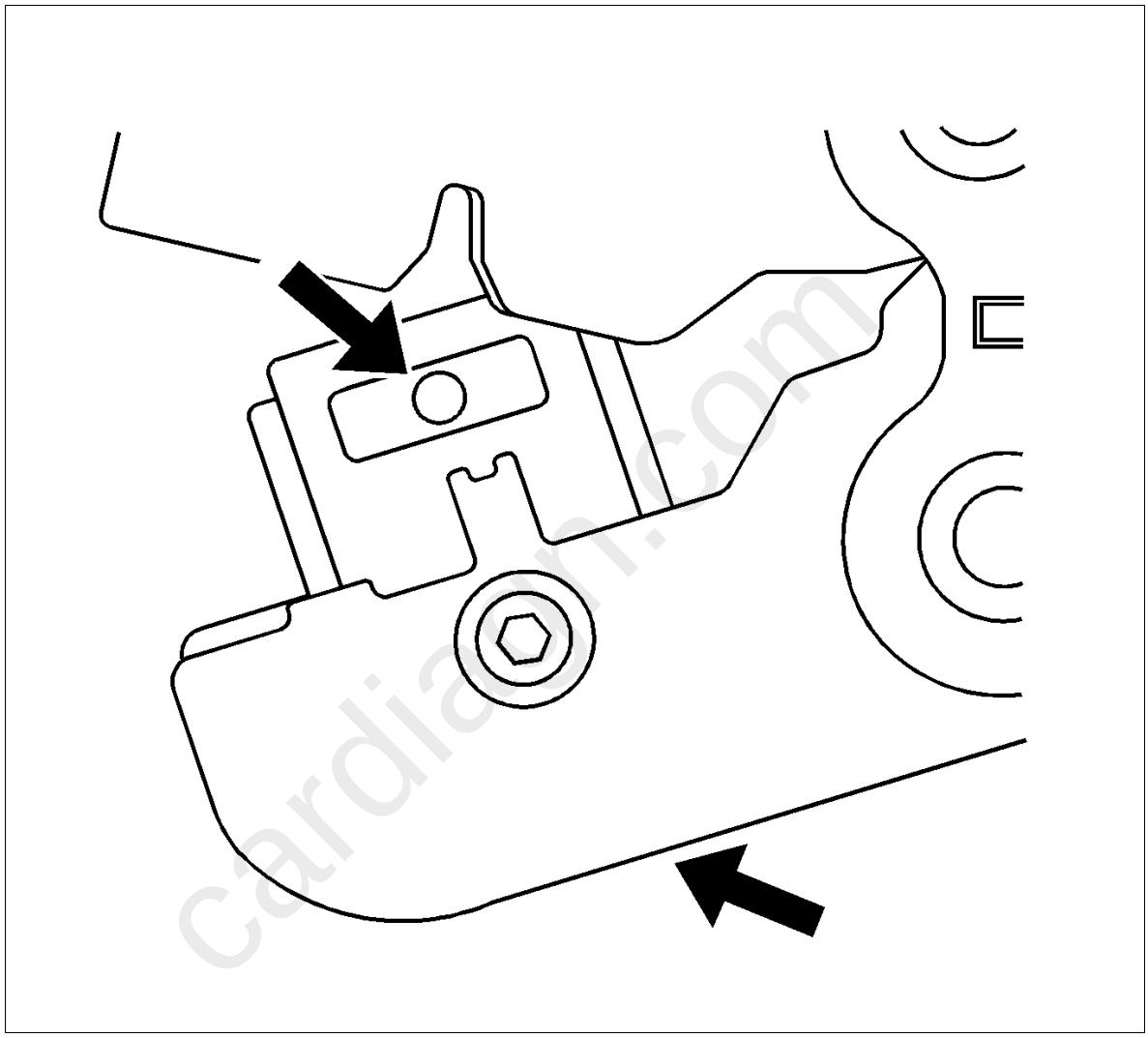
1. Cut the wire as close to the terminal as possible.

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.

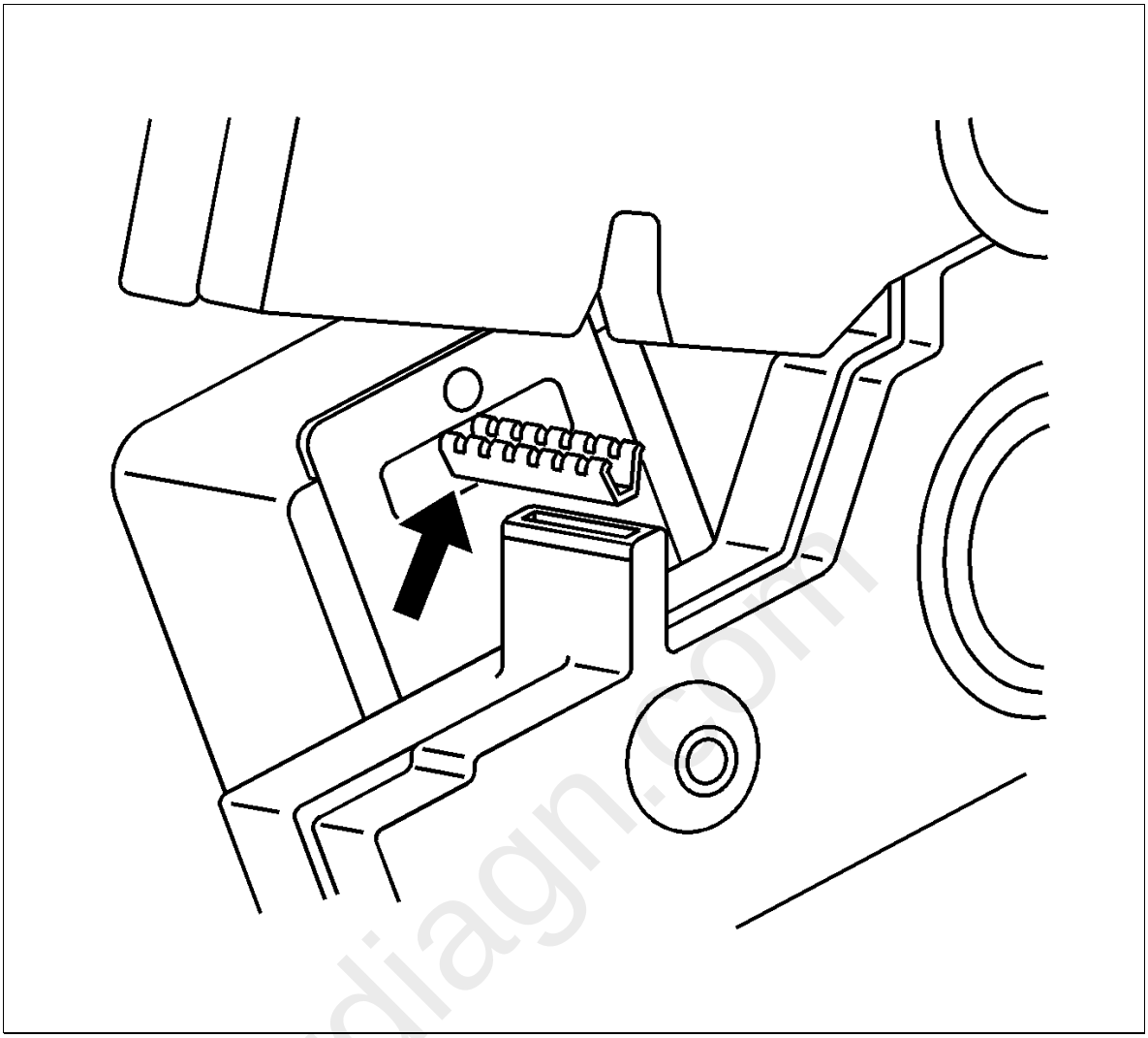
Fig 1: Crimping Tool Spring Loaded Locator



Courtesy of GENERAL MOTORS COMPANY

3. Depress the spring loaded locator of the J 38125-101 (W jaw) crimping tool until the terminal holder is completely visible.

Fig 2: Terminal In Crimping Tool



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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.

DIAGNOSTIC INFORMATION AND PROCEDURES > REPAIRING CONNECTOR TERMINALS (TERMINAL REPAIR) > MICRO 0.64 SIZE TERMINAL

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

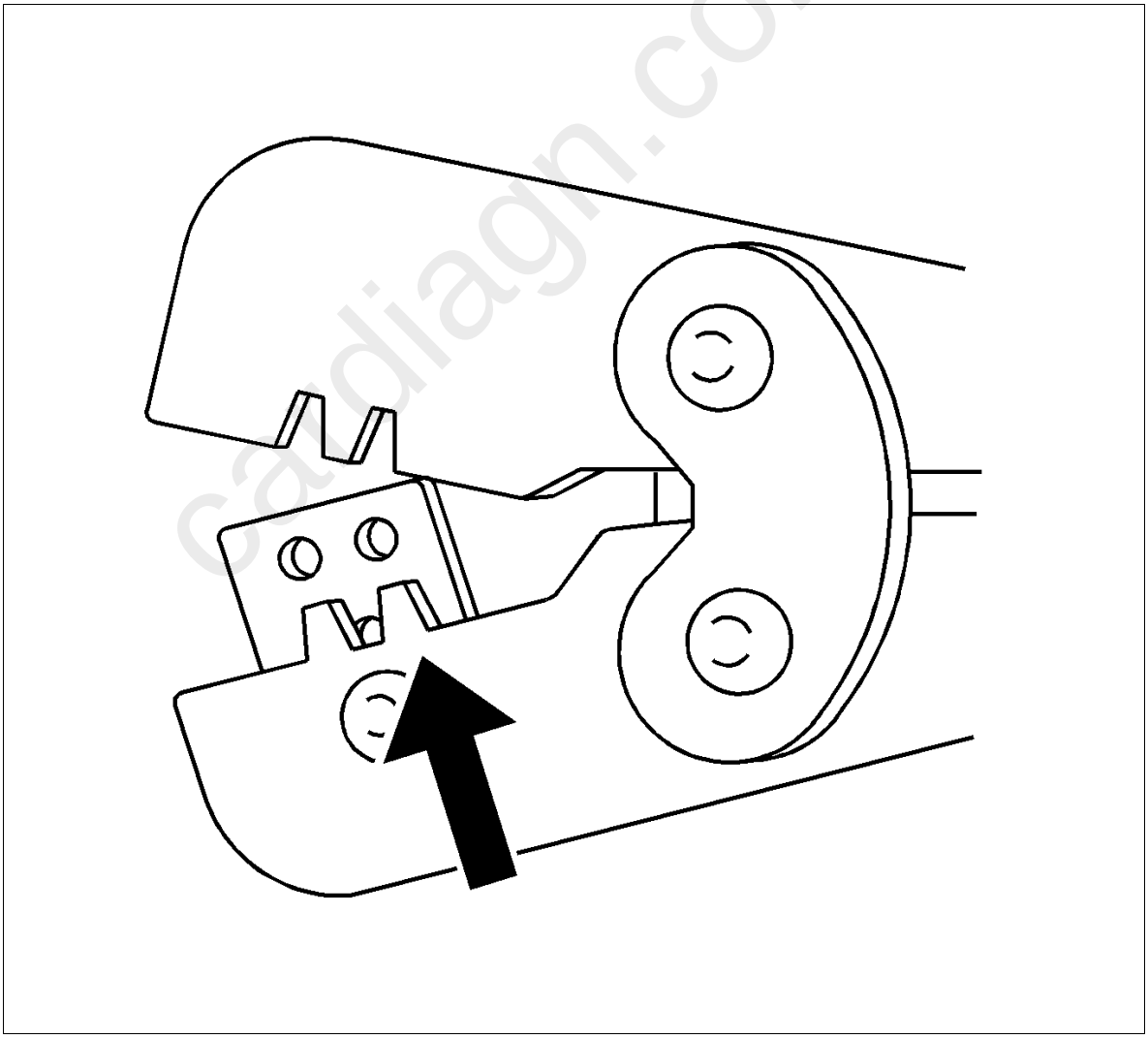
38125-64 (M jaw) was developed to crimp Micro 64 terminals. The J-38125-64 crimping tool has a terminal holding block that will hold the terminal in place while the terminal is being crimped. The J-38125-64 crimping tool is also designed to crimp both the wire and the insulation at the same time.

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.

Fig 1: Crimping Tool Spring Loaded Locator

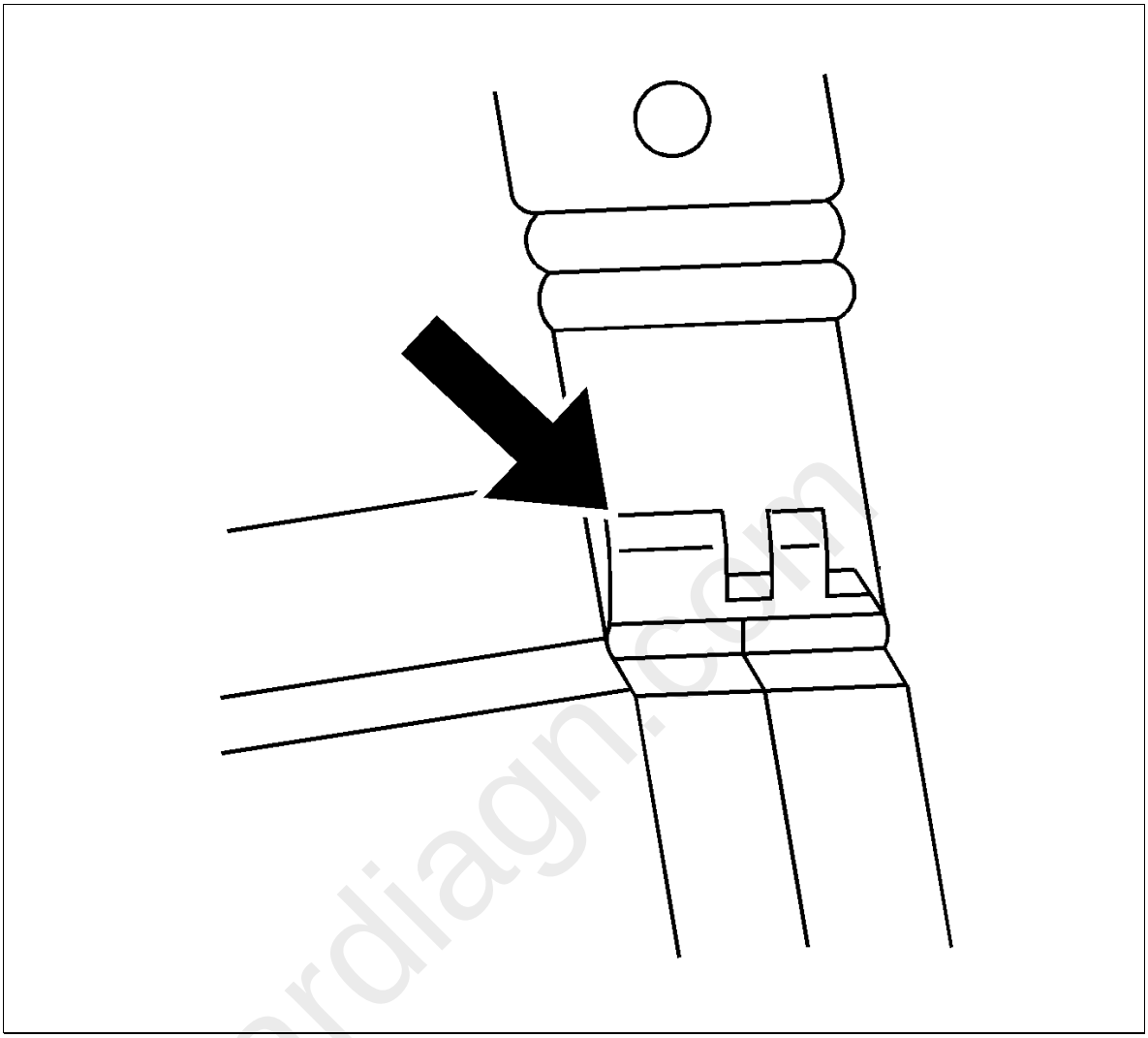


Courtesy of GENERAL MOTORS COMPANY

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3. Depress the spring loaded locator of the crimping tool until the terminal holder is completely visible.

Fig 2: Terminal Holder



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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.
7. Place the terminal into the appropriate cavity and assemble the connector.

DIAGNOSTIC INFORMATION AND PROCEDURES > 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:
    1. Diagnostic probe tool
    2. Terminal release tool
    3. 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.
    1. 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.
    2. Connect the probe tool to the Digital Multimeter.
    3. 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.*

    1. The terminal position assurance (TPA) and connector position assurance (CPA) should be removed before releasing the terminal for the connector body.

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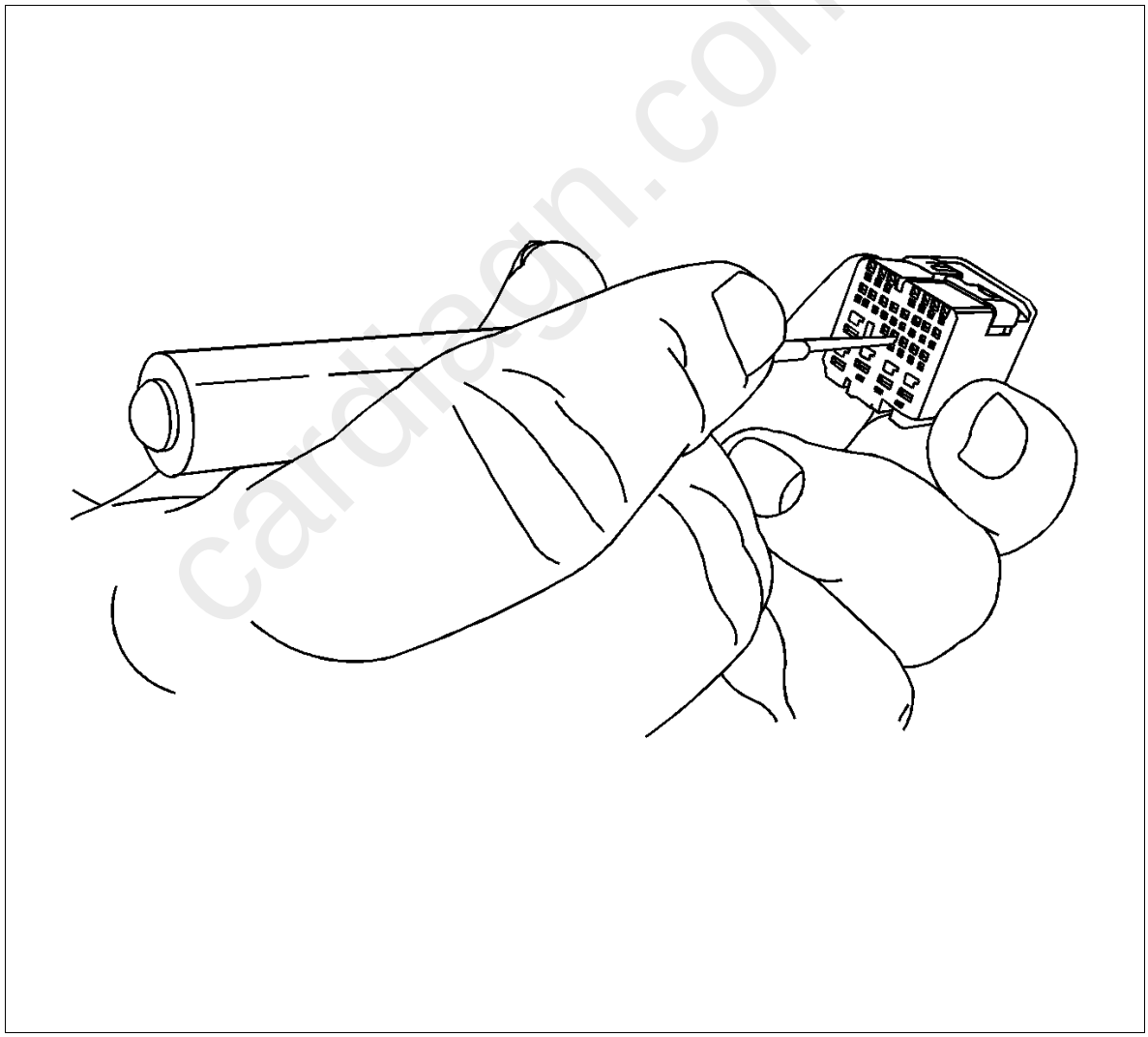
2. Look at the connector end view to locate the cavity of the damaged terminal and find the proper terminal release tool from the terminal release tool kit.

> *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.*

3. Insert the terminal release tool into the cavity.

Fig 1: Wire Out Of Back Of Connector



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5. Gently pull the wire out of the back of the connector.

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6. Repair the terminal by following the Repairing Connector Terminals (Terminated Lead Repair) Repairing Connector Terminals (Terminal Repair) 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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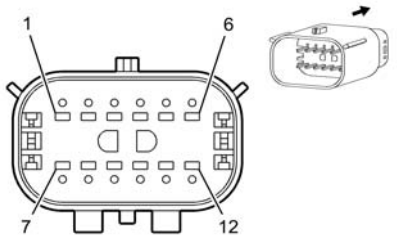
Service Manual: WIRING SYSTEMS AND POWER MANAGEMENT - FASTENER SPECIFICATIONS

SPECIFICATIONS > FASTENER SPECIFICATIONS

Application	Specification	
	Metric	English
Battery Positive Cable Extension Cable Nut	12 N.m	106 lb in
Battery Terminal Clamp Nut	7 N.m	62 lb in
Body Wiring Harness Junction Block Nut	9 N.m	80 lb in
Body Wiring Harness Terminal Nut	12 N.m	106 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

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INLINE HARNESS CONNECTOR END VIEWS > X100 FRONT FASCIA HARNESS TO FORWARD LAMP HARNESS

-	
Connector Part Information • Harness Type: Front Fascia • OEM Connector: Not Available • Service Connector: Service by Harness - See Part Catalog • Description: 12-Way F	Connector Part Information • Harness Type: Forward Lamp • OEM Connector: 33482-1201 • Service Connector: 13503540 • Description: 12-Way M 150 MX Series, Sealed (BK)

Terminal Part Information

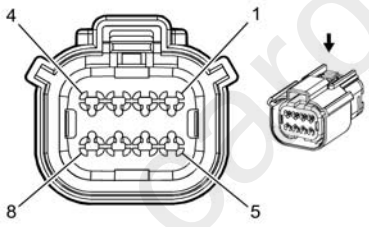
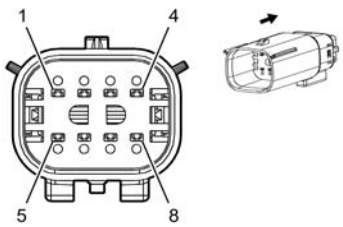
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	19119440	J-35616-3 (GY)	J-38125-217	Not available	Not available	Not available	Not available

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	VT/GY	709	I	(T4F-T90)/(-T4F)	Left Park Lamp Control	1	0.5	VT/GY	709	II	(T4F-T90)/(-T4F)
2	0.5	BK	550	I	(T4F-T90)/(-T4F)	Ground	2	0.5	BK	550	II	(T4F-T90)/(-T4F)
3	0.75	BN	4357	I	(T4F-T90)/(-T4F)	Left Auxiliary DRL Control	3	0.75	BN	4357	II	(T4F-T90)/(-T4F)
4	0.75	GY	4356	I	(T4F-T90)/(-T4F)	Right Auxiliary DRL Control	4	0.75	GY	4356	II	(T4F-T90)/(-T4F)
5	0.5	GY/BN	309	I	(T4F-T90)/(-T4F)	Right Park Lamp Control	5	0.5	GY/BN	309	II	(T4F-T90)/(-T4F)

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7	0.35	BN/YE	4038	I	B3T	Pedestrian Protection Safing Sensor Module Signal	7	0.35	BN/YE	4038	II	B3T
8	0.35	BK/VT	4045	I	B3T	Pedestrian Protection Safing Sensor Module Low Reference	8	0.35	BK/VT	4045	II	B3T
9	0.35	OG/VT	4034	I	B3T	Pedestrian Protection Impact Sensing Module Signal	9	0.35	OG/VT	4034	II	B3T
10	0.35	BN/WH	4035	I	B3T	Pedestrian Protection Impact Sensing Module Low Reference	10	0.35	BN/WH	4035	II	B3T

INLINE HARNESS CONNECTOR END VIEWS > X106 ENGINE HARNESS TO CAMSHAFT POSITION SENSOR JUMPER HARNESS

	
Connector Part Information • Harness Type: Engine • OEM Connector: 13580235 • Service Connector: 19301723 • Description: 8-Way F 1.5 Series, Sealed (BK)	Connector Part Information • Harness Type: Camshaft Position Sensor Jumper • OEM Connector: 13790317 • Service Connector: Service by Harness - See Part Catalog • Description: 8-Way M 150 MX Series, Sealed (BK)

Terminal Part Information

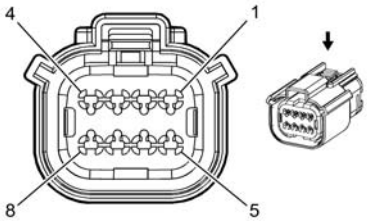
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp

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I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-3 (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	GY/BU	5300	I	LT1	Camshaft Position Intake Sensor Control (1)	1	0.5	GY/D-BU	5300	II	-
2	0.5	BK/GN	5301	I	LT1	Camshaft Position Intake Sensor Low Reference (1)	2	0.5	BK/L-GN	5301	II	-
3	0.5	YE/VT	5275	I	LT1	Camshaft Position Intake Sensor (1)	3	0.5	YE/VT	5275	II	-
4	0.5	BU	179	I	LT1	Oil Pump Command Signal	4	0.5	D-BU	179	II	-
5	0.5	VT/BN	5284	I	LT1	Camshaft Phaser Intake Solenoid (1)	5	0.5	VT/BN	5284	II	-
6	0.5	BK/BN	6753	I	LT1	Cam Phaser W Low Reference	6	0.5	BK/BN	6753	II	-
7	0.5	VT/BU	5293	I	LT1	Powertrain Main Relay Fused Supply (4)	7	0.5	VT/D-BU	5293	II	-
8	-	-	-	-	-	Not Occupied	8	-	-	-	-	-

INLINE HARNESS CONNECTOR END VIEWS > X110 FORWARD LAMP HARNESS TO HEADLAMP HARNESS

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Connector Part Information	Connector Part Information
• Harness Type: Forward Lamp • OEM Connector: 13503524 • Service Connector: 13577527 • Description: 8-Way F 1.5 Series, Sealed (BK)	• Harness Type: Headlamp • OEM Connector: Not Available • Service Connector: Service by Harness - See Part Catalog • Description: 8-Way M

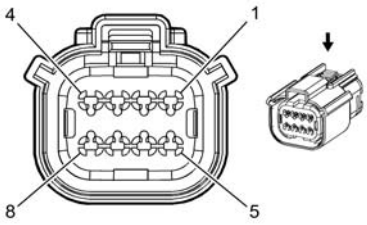
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.75	YE	712	I	-	Left Headlamp Low Beam Control	1	0.75	YE	712	II	-
2	0.75	BK	550	I	-	Ground	2	0.75	BK	550	II	-
3	0.75	WH	711	I	-	Left Headlamp High Beam Control	3	0.75	WH	711	II	-
4	0.35	VT/GN	839	I	TR6	Run/Crank Ignition 1 Voltage	4	0.35	VT/GN	839	II	TR6
5	0.35	BN/YE	189	I	TR6	Headlamp Leveling Motor Control	5	0.35	BN/YE	189	II	TR6
6	0.75 0.35	BK BK	550 550	I	- TR6	Ground	6	0.75 0.35	BK BK	550 550	II	- TR6
7	0.5 0.75	BK YE	550 712	I	- -T4F	Ground Left Headlamp Low Beam Control	7	0.5 0.75	BK YE	550 712	II	- -T4F
8	0.5	GY/BU	7538	I	-	Left Front DRL Control	8	0.5	GY/BU	7538	II	-

INLINE HARNESS CONNECTOR END VIEWS > X120 FORWARD LAMP HARNESS TO HEADLAMP HARNESS

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	-
Connector Part Information • Harness Type: Forward Lamp • OEM Connector: 13503524 • Service Connector: 13577527 • Description: 8-Way F 1.5 Series, Sealed (BK)	Connector Part Information • Harness Type: Headlamp • OEM Connector: Not Available • Service Connector: Service by Harness - See Part Catalog • Description: 8-Way M

Terminal Part Information

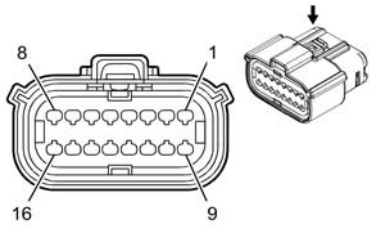
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

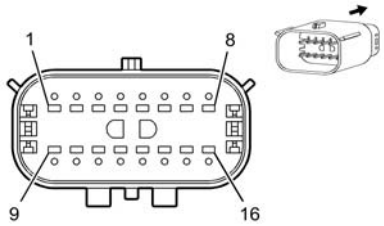
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.75	YE	312	I	-	Right Headlamp Low Beam Control	1	0.75	YE	312	II	-
2	0.75	BK	650	I	-	Ground	2	0.75	BK	650	II	-
3	0.75	WH	311	I	-	Right Headlamp High Beam Control	3	0.75	WH	311	II	-
4	0.35	VT/GN	839	I	TR6	Run/Crank Ignition 1 Voltage	4	0.35	VT/GN	839	II	TR6
5	0.35	BN/YE	189	I	TR6	Headlamp Leveling Motor Control	5	0.35	BN/YE	189	II	TR6
6	0.75 0.35	BK BK	650 650	I	- TR6	Ground	6	0.75 0.35	BK BK	650 650	II	- TR6
7	0.5 0.75	BK YE	650 312	I	- -T4F	Ground Right Headlamp Low Beam	7	0.5 0.75	BK YE	650 312	II	- -T4F

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						Control						
8	0.5	BU/BN	7539	I	-	Right Front DRL Control	8	0.5	BU/BN	7539	II	-

INLINE HARNESS CONNECTOR END VIEWS > X126 BODY HARNESS TO FORWARD LAMP HARNESS





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: Forward Lamp
- OEM Connector: 13503544
- Service Connector: 19300393
- Description: 16-Way M 150 MX Series, Sealed (BK)

Terminal Part Information

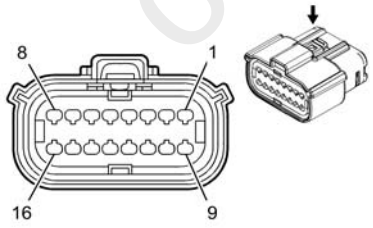
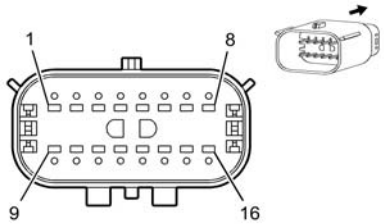
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	19300635	J-35616-2A (GY)	J-38125-217	Not available	Not available	Not available	Not available
II	19119440	J-35616-3 (GY)	J-38125-217	Not available	Not available	Not available	Not available

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	OG/GN	1409	I	-	Right Front Discriminating Sensor Signal	1	0.35	OG/GN	1409	II	-
2	0.35	BK/OG	5600	I	-	Right Front Discriminating Sensor Low Reference	2	0.35	BK/OG	5600	II	-
3	-	-	-	-	-	Not Occupied	3	-	-	-	-	-
4	0.75	YE	312	I	-	Right Front DRL Control Right Headlamp Low Beam	4	0.5 0.75	BU/BN YE	7539 312	II	- -T4F

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						Control						
5	0.35	BU/GY	636	I	-	Outside Ambient Air Temperature Sensor Signal	5					
6	0.35	BK/BU	61	I	-	Outside Ambient Temperature Sensor Low Reference	6					
7	0.35	BN/YE	189	I	TR6	Headlamp Leveling Motor Control	7	0.35	BN/YE	189	II	TR6
8	0.35	WH/BK	2366	I	-	Cooling Fan Control Relay Speed Signal	8	0.5 0.5	BK WH/BK	2366 2366	II	LT1/LT4 -
9	0.5	GN/VT	1315	I	-	Right Front Turn Signal Lamp Control	9	0.5	GN/VT	1315	II	-
10	-	-	-	-	-	Not Occupied	10	-	-	-	-	-
11	0.5	GY/WH	7064	I	-	Wheel Speed Sensor Control Left Front	11	0.5	GY/WH	7064	II	-
12	0.5	GY	830	I	-	Wheel Speed Sensor Signal Left Front	12	0.5	GY	830	II	-
13 - 16	-	-	-	-	-	Not Occupied	13 - 16	-	-	-	-	-

INLINE HARNESS CONNECTOR END VIEWS > X127 BODY HARNESS TO FORWARD LAMP HARNESS

	
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: Forward Lamp • OEM Connector: 13503544 • Service Connector: 19300393 • Description: 16-Way M 150 MX Series, Sealed (BK)

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Terminal Part Information

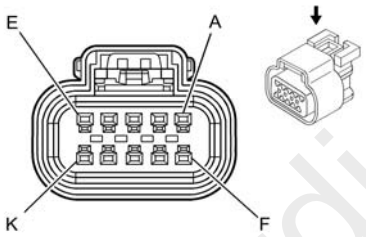
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	19300432	J-35616-2A (GY)	J-38125-217	Not available	Not available	Not available	Not available
II	19300635	J-35616-2A (GY)	J-38125-217	Not available	Not available	Not available	Not available
III	19119440	J-35616-3 (GY)	J-38125-217	Not available	Not available	Not available	Not available
IV	19119842	J-35616-3 (GY)	J-38125-217	Not available	Not available	Not available	Not available

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	BN/YE	4038	II	B3T	Pedestrian Protection Safing Sensor Module Signal	1	0.35	BN/YE	4038	III	B3T
2	1.5	BN/VT	1470	I	LT1/LT4	Brake Booster Pump Motor Control	2	1.5	BN/VT	1470	IV	LT1/LT4
3	0.35	BK/VT	4045	II	B3T	Pedestrian Protection Safing Sensor Module Low Reference	3	0.35	BK/VT	4045	III	B3T
4	0.75	YE	712	II	-	Left Front DRL Control Left Headlamp Low Beam Control	4	0.5 0.75	GY/BU YE	7538 712	III	- -T4F
5	0.35	OG/VT	4034	II	B3T	Pedestrian Protection Impact Sensing Module Signal	5	0.35	OG/VT	4034	III	B3T
6	0.35	BN/WH	4035	II	B3T	Pedestrian Protection Impact Sensing Module Low Reference	6	0.35	BN/WH	4035	III	B3T
7	0.35	BN/GN	4064	II	-	Hood Status B Signal	7	0.35	BN/GN	4064	III	-
8	0.5	GY	4356	II	-	Right Auxiliary DRL Control	8	0.75	GY	4356	III	(T4F-T90)/(-T4

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9	0.5	BN	4357	II	-	Left Auxiliary DRL Control	9	0.75	BN	4357	III	(T4F-T90)/(-T4
10	0.5	BU/WH	1314	II	-	Left Front Turn Signal Lamp Control	10	0.5	BU/WH	1314	III	-
11	0.5	GY/BN	309	II	(T4F-T90)/(-T4F)	Right Park Lamp Control	11	0.5	GY/BN	309	III	(T4F-T90)/(-T4
12 - 13	-	-	-	-	-	Not Occupied	12 - 13	-	-	-	-	-
14	0.5	VT/GY	709	II	(T4F-T90)/(-T4F)	Left Park Lamp Control	14	0.5	VT/GY	709	III	(T4F-T90)/(-T4
15	0.35	BK/OG	5045	II	-	Left Front Discriminating Sensor Low Reference	15	0.35	BK/OG	5045	III	-
16	0.35	OG/YE	354	II	-	Left Front Discriminating Sensor Signal	16	0.35	OG/YE	354	III	-

INLINE HARNESS CONNECTOR END VIEWS > X130 ENGINE HARNESS TO OIL CONTROL JUMPER HARNESS

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Connector Part Information • Harness Type: Engine • OEM Connector: 22680471 • Service Connector: 15326843 • Description: 10-Way F 150 GT Series, Sealed (BK)	Connector Part Information • Harness Type: Oil Control Jumper • OEM Connector: Not Available • Service Connector: Service by Harness - See Part Catalog • Description: 10-Way M

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13578895	J-35616-14 (GN)	J-38125-553	12191819	9	E	1
II	13579779	J-35616-14 (GN)	J-38125-553	12191819	9	2	1

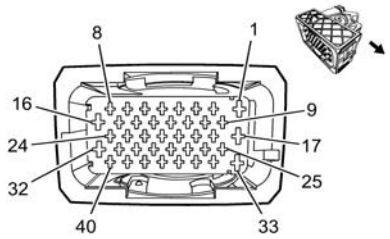
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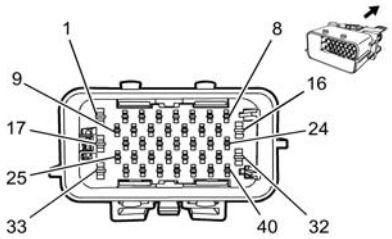
III	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A	0.5	YE/BU	5494	I	LT1	Cylinder Shutoff Solenoid Control (4)	A	0.5	YE/BU	5494	III	LT1
B	0.5	GY	5493	I	LT1	Cylinder Shutoff Solenoid Control (3)	B	0.5	GY	5493	III	LT1
C	0.5	BU	5491	I	LT1	Cylinder Shutoff Solenoid Control (1)	C	0.5	BU	5491	III	LT1
D	0.75	VT/BU	5293	II	LT1	Powertrain Main Relay Fused Supply (4)	D	0.75	VT/BU	5293	III	LT1
E	0.5	GN	5492	I	LT1	Cylinder Shutoff Solenoid Control (2)	E	0.5	GN	5492	III	LT1
F	0.5	BK/BN	2761	I	LT1	Coolant Temperature Sensor Low Reference	F	0.5	BK/BN	2761	III	LT1
G	0.5	GN/VT	2032	I	LT1	Coolant Temperature Sensor Signal	G	0.5	GN/VT	2032	III	LT1
H	0.5	YE/BN	331	I	LT1	Oil Pressure Sensor Signal	H	0.5	YE/BN	331	III	LT1
J	0.5	BK/VT	2755	I	LT1	Oil Pressure Sensor Low Reference	J	0.5	BK/VT	2755	III	LT1
K	0.5	WH/RD	2705	I	LT1	Oil Pressure Sensor 5 Volt Reference	K	0.5	WH/RD	2705	III	LT1

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INLINE HARNESS CONNECTOR END VIEWS > X150 ENGINE HARNESS TO BODY HARNESS





Connector Part Information

- Harness Type: Engine
- OEM Connector: 13589782
- Service Connector: 13576549
- Description: 40-Way F 1.5, 2.8 Series, Sealed (BK)

Connector Part Information

- Harness Type: Body
- OEM Connector: 13308467
- Service Connector: 13576551
- Description: 40-Way M 1.5, 2.8 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	13576369	J-35616-14 (GN)	J-38125-560	Not available	Not available	Not available	Not available
II	13579753	J-35616-14 (GN)	J-38125-560	Not available	Not available	Not available	Not available
III	13580830	J-35616-4A (PU)	J-38125-36	Not available	Not available	Not available	Not available
IV	13580834	J-35616-14 (GN)	J-38125-560	Not available	Not available	Not available	Not available
V	13575233	J-35616-3 (GY)	J-38125-560	Not available	Not available	Not available	Not available
VI	13575380	J-35616-3 (GY)	J-38125-560	Not available	Not available	Not available	Not available
VII	13576397	J-35616-34 (YE)	J-38125-560	964265-2	24	E	2
VIII	13580819	J-35616-5 (PU)	J-38125-36	Not available	Not available	Not available	Not available

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1						Powertrain Relay Coil Control	1	0.5	YE	5991	VIII	ESTOP
2						Powertrain Relay Coil Control	2	0.5	YE	5991	VI	ESTOP
3	0.5	VT/BU	6091	I	-	Crankshaft Position Sensor Replicated	3	0.35 0.5	VT/BU VT/BU	6091 6091	VII VI	- -

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						Signal						
4	0.5	WH	121	I	-	Engine Speed Signal	4	0.35	WH	121	VII	-
5	0.5	BK/BU	61	I	LT1/LT4	Outside Ambient Temperature Sensor Low Reference	5	0.35	BK/BU	61	VII	-
6	0.5	BU/GY	636	I	LT1/LT4	Outside Ambient Air Temperature Sensor Signal	6	0.35	BU/GY	636	VII	-
7						Run/Crank Ignition 1 Voltage	7	0.75	VT/GN	2239	VI	(LGX+M5T+NPP)/(LT
8	0.5	BN/WH	419	I	-	Check Engine Indicator Control	8	0.35	BN/WH	419	VII	-
9	0.5	GY	4109	I	-	Driver Mode Switch 5 Volt Reference	9	0.35	GY	4109	VII	-
10	0.5	WH/VT	4108	I	-	Driver Mode Switch Signal	10	0.35	WH/VT	4108	VII	-
11	0.5	WH	1310	I	-	EVAP Canister Vent Solenoid Control	11	0.5	WH	1310	VI	-
12	0.5	BU/WH	890	I	-	Fuel Tank Pressure Sensor Signal	12	0.35	BU/WH	890	VII	-
13	0.5	YE/RD	2709	I	-	Fuel Tank Pressure Sensor 5 Volt Reference	13	0.35	YE/RD	2709	VII	-
14	0.5	BU/VT	1589	I	-	Primary Fuel Level Sensor Signal	14	0.35	BU/VT	1589	VII	-
15	0.5	BK/WH	2151	I	-	Signal Ground	15	0.35	BK/WH	2151	VII	-
16	0.5	BU/WH	1937	III	-	Secondary Fuel Level Sensor Signal	16	0.35	BU/WH	1937	VIII	-
17	0.5	GN/GY	465	III	-	Fuel Pump Primary Relay Control	17	0.35	GN/GY	465	VIII	-
18	0.5	BU/BK	7493	I	LGX	High Speed GMLAN Serial Data (+) (3)	18	0.5	BU/BK	7493	VI	-
19	0.5	WH	7494	I	LGX	High Speed GMLAN Serial Data (-) (3)	19	0.5	WH	7494	VI	-
20	0.5	BU/RD	1205	I	F55	Left Front Strut Position Sensor 5 Volt Reference	20	0.35	BU/RD	1205	VII	F55

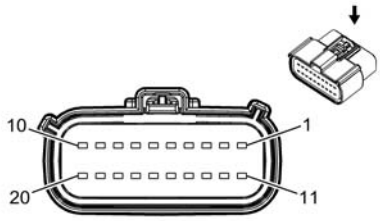
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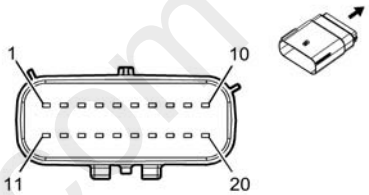
21	0.5	BN/WH	1207	I	F55	Left Front Strut Position Sensor Signal	21	0.35	BN/WH	1207	VII	F55
22	0.5	BK/BU	1206	I	F55	Left Front Strut Position Sensor Low Reference	22	0.35	BK/BU	1206	VII	F55
23	0.5	BN/RD	1211	I	F55	Right Front Strut Position Sensor 5 Volt Reference	23	0.35	BN/RD	1211	VII	F55
24	0.5	YE/WH	1213	I	F55	Right Front Strut Position Sensor Signal	24	0.35	YE/WH	1213	VII	F55
25	0.5	BK/GY	1212	I	F55	Right Front Strut Position Sensor Low Reference	25	0.35	BK/GY	1212	VII	F55
26	0.75	WH/GN	1005	IV	F55	Left Front Strut Motor Decrease Damping Control	26	0.75	WH/GN	1005	VI	F55
27	0.75	WH/GY	1448	IV	F55	Left Front Strut Motor Increase Damping Control	27	0.75	WH/GY	1448	VI	F55
28	0.75	BN	1009	IV	F55	Right Front Strut Motor Decrease Damping Control	28	0.75	BN	1009	VI	F55
29	0.75	WH/BK	1006	IV	F55	Right Front Strut Motor Increase Damping Control	29	0.75	WH/BK	1006	VI	F55
30	0.5	WH/BU	6311	I	-	Cruise/ETC/TCC Brake Signal	30	0.35	WH/BU	6311	VII	-
31	0.5	BU	2500	I	-	High Speed GMLAN Serial Data (+) (1)	31	0.5	BU	2500	VI	-
32	0.5	WH	2501	III	-	High Speed GMLAN Serial Data (-) (1)	32	0.5	WH	2501	VIII	-
33	0.5	BU/YE	6105	III	-	High Speed GMLAN Serial Data (+) (2)	33	0.35	BU/YE	6105	VIII	-
34	0.5	WH	6106	I	-	High Speed GMLAN Serial Data (-) (2)	34	0.35	WH	6106	VII	-
35	0.5	BK/BU	1271	II	-	Accelerator Pedal Position Low Reference (1)	35	0.35	BK/BU	1271	V	-
36	0.5	YE/WH	1161	II	-	Accelerator Pedal Position Signal (1)	36	0.35	BK/YE	1161	V	-
37	0.5	WH/RD	1164	II	-	Accelerator Pedal Position 5 Volt Reference	37	0.35	BK/WH	1164	V	-

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						(1)						
38	0.5	BK/VT	1272	II	-	Accelerator Pedal Position Low Reference (2)	38	0.35	BK/VT	1272	V	-
39	0.5	GN/WH	1162	II	-	Accelerator Pedal Position Signal (2)	39	0.35	BK/GN	1162	V	-
40	0.5	BN/RD	1274	II	-	Accelerator Pedal Position 5 Volt Reference (2)	40	0.35	BK/RD	1274	V	-

INLINE HARNESS CONNECTOR END VIEWS > X152 ENGINE HARNESS TO BODY HARNESS





Connector Part Information

- Harness Type: Engine
- OEM Connector: 13504368
- Service Connector: 19300558
- Description: 20-Way F 1.5 Series, Sealed (L-GY)

Connector Part Information

- Harness Type: Body
- OEM Connector: 13504370
- Service Connector: 19300561
- Description: 20-Way M 1.5 Series, Sealed (GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	19300432	J-35616-2A (GY)	J-38125-217	Not available	Not available	Not available	Not available
II	19300635	J-35616-2A (GY)	J-38125-217	Not available	Not available	Not available	Not available
III	19119440	J-35616-3 (GY)	J-38125-217	Not available	Not available	Not available	Not available
IV	19119842	J-35616-3 (GY)	J-38125-217	Not available	Not available	Not available	Not available

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	BU/YE	6105	II	-	High Speed GMLAN Serial	1	0.5	BU/YE	6105	III	-

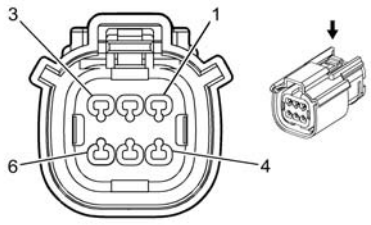
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						Data (+) (2)						
2	0.5	WH	6106	II	-	High Speed GMLAN Serial Data (-) (2)	2	0.5	WH	6106	III	-
3	0.5	WH/BK	2366	II	-	Cooling Fan Control Relay Speed Signal	3	0.35	WH/BK	2366	III	-
4	0.5	WH/RD	5381	II	-	Brake Position Sensor 5 Volt Reference	4	0.35	WH/RD	5381	III	-
5	0.5	WH/GN	5380	II	-	Brake Position Sensor Signal	5	0.35	WH/GN	5380	III	-
6	0.5	BK/YE	5382	II	-	Brake Position Sensor Low Reference	6	0.35	BK/YE	5382	III	-
7	0.5	BU/BN	7573	II	-	Electric Variable Displacement Supply	7	0.5	BU/BN	7573	III	-
8	0.5	BU/YE	7574	II	-	Electric Variable Displacement Control	8	0.5	BU/YE	7574	III	-
9	0.5	VT/GN	439	II	-	Run/Crank Ignition 1 Voltage	9	0.35	GN/VT	5199	III	-
10	0.5	BN/RD	7445	II	LGX	Fuel Line Pressure Sensor 5 Volt Reference	10	0.5	BN/RD	7445	III	LGX-NPP
11	-	-	-	-	-	Not Occupied	11	-	-	-	-	-
12	0.5	RD/BN	440	II	-	Battery Positive Voltage	12	1	RD/BN	440	III	-
13	0.5	VT/YE	5985	II	-	Accessory Wakeup Serial Data	13	0.35	VT/YE	5985	III	-
14	0.5 0.5	BK/WH BN/YE	2151 4066	II	LGX LTG	Signal Ground Powertrain Mount Solenoid Control 2	14	0.5 0.5	BK/WH BN/YE	2151 4066	III	LGX-NPP LTG
15	0.5	GY/RD	6109	II	-	Clutch Apply Sensor 5 Volt Reference	15	0.35	GY/RD	6109	III	MM6/M13/MH3
16	0.5	BK/GY	6110	II	-	Clutch Apply Sensor Low Reference	16	0.35	BK/GY	6110	III	MM6/M13/MH3
17	0.5	YE	6111	II	-	Clutch Apply Sensor Signal	17	0.35	YE	6111	III	MM6/M13/MH3

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18	0.5 0.5	BU/WH BN/BU	7446 4065	II	LGX LTG	Fuel Line Pressure Sensor Signal Powertrain Mount Solenoid Control 1	18	0.5 0.5	BU/WH BN/BU	7446 4065	III	LGX-NPP LTG
19	0.5	WH/BU	5986	II	-	Serial Data Communication Enable	19	0.35	WH/BU	5986	III	-
20	1.5	BN/VT	1470	I	LT1/LT4	Brake Booster Pump Motor Control	20	1.5	BN/VT	1470	IV	LT1/LT4

INLINE HARNESS CONNECTOR END VIEWS > X160 ENGINE HARNESS TO FUEL INJECTOR JUMPER HARNESS (LGX)



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Connector Part Information

- Harness Type: Engine
- OEM Connector: 19178149
- Service Connector: 13585853
- Description: 6-Way F 150 MX Series, Sealed (BK)

Connector Part Information

- Harness Type: Fuel Injector Jumper
- OEM Connector: LGX
- Service Connector: Service by Harness - See Part Catalog
- Description: 6-Way M

Terminal Part Information

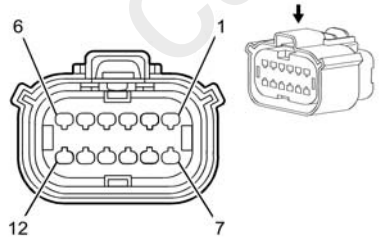
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.75	BN	4801	I	LGX	Direct Fuel Injector (DFI) High Voltage Control	1	0.75	BN	4801	II	LGX

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						Cylinder 1						
2	0.75	BN/WH	4901	I	LGX	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 1	2	0.75	BN/WH	4901	II	LGX
3	0.75	GN	4803	I	LGX	Direct Fuel Injector (DFI) High Voltage Control Cylinder 3	3	0.75	GN	4803	II	LGX
4	0.75	GN/GY	4903	I	LGX	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 3	4	0.75	GN/GY	4903	II	LGX
5	0.75	WH/GN	4805	I	LGX	Direct Fuel Injector (DFI) High Voltage Control Cylinder 5	5	0.75	WH/GN	4805	II	LGX
6	0.75	GN/WH	4905	I	LGX	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 5	6	0.75	GN/WH	4905	II	LGX

INLINE HARNESS CONNECTOR END VIEWS > X160 ENGINE HARNESS TO FUEL INJECTOR JUMPER HARNESS (LT1)

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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: Fuel Injector Jumper • OEM Connector: LT1 • Service Connector: Service by Harness - See Part Catalog • Description: 12-Way M

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Terminal Part Information

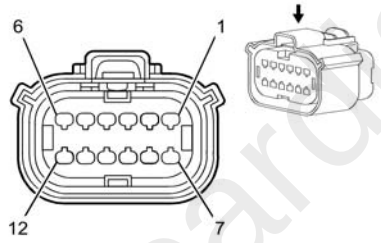
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13578813	J-35616-2A (GY)	J-38125-217	Not available	Not available	Not available	Not available
II	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	BN/WH	4901	I	LT1	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 1	1	0.5	BN/WH	4901	II	LT1
2	0.5	GN/GY	4903	I	LT1	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 3	2	0.5	GN/GY	4903	II	LT1
3	0.5	GN/WH	4905	I	LT1	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 5	3	0.5	GN/WH	4905	II	LT1
4	0.5	WH/YE	4907	I	LT1	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 7	4	0.5	WH/YE	4907	II	LT1
5	0.5	BN	4801	I	LT1	Direct Fuel Injector (DFI) High Voltage Control Cylinder 1	5	0.5	BN	4801	II	LT1
6	0.5	BN/YE	2161	I	LT1	Fuel Rail Pressure Sensor 2 Signal	6	0.5	BN/YE	2161	II	LT1
7	0.5	GN	4803	I	LT1	Direct Fuel Injector (DFI) High Voltage Control Cylinder 3	7	0.5	GN	4803	II	LT1
8	0.5	WH/GN	4805	I	LT1	Direct Fuel Injector	8	0.5	WH/GN	4805	II	LT1

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						(DFI) High Voltage Control Cylinder 5						
9	0.5	YE/GY	4807	I	LT1	Direct Fuel Injector (DFI) High Voltage Control Cylinder 7	9	0.5	YE/GY	4807	II	LT1
10	0.5	BN/RD	2917	I	LT1	Fuel Rail Pressure Sensor 5 Volt Reference	10	0.5	BN/RD	2917	II	LT1
11	0.5	BU/WH	2918	I	LT1	Fuel Rail Pressure Sensor Signal	11	0.5	BU/WH	2918	II	LT1
12	0.5	BK/GN	2919	I	LT1	Fuel Rail Pressure Sensor Low Reference	12	0.5	BK/GN	2919	II	LT1

INLINE HARNESS CONNECTOR END VIEWS > X160 ENGINE HARNESS TO FUEL INJECTOR JUMPER HARNESS (LTG)



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Connector Part Information

- Harness Type: Engine
- OEM Connector: 19150019
- Service Connector: 19150019
- Description: 12-Way F 1.5 Series, Sealed (BK)

Connector Part Information

- Harness Type: Fuel Injector Jumper
- OEM Connector: LTG
- Service Connector: Service by Harness - See Part Catalog
- Description: 12-Way M

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	19300635	J-35616-2A (GY)	J-38125-217	Not available	Not available	Not available	Not available

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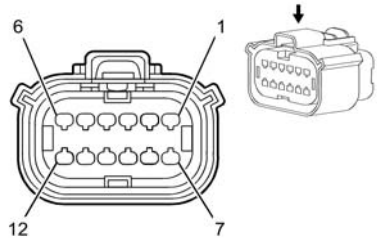
II	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.75	BN	4801	I	LTG	Direct Fuel Injector (DFI) High Voltage Control Cylinder 1	1	0.75	BN	4801	II	LTG
2	0.75	BU	4802	I	LTG	Direct Fuel Injector (DFI) High Voltage Control Cylinder 2	2	0.75	BU	4802	II	LTG
3	0.75	GN	4803	I	LTG	Direct Fuel Injector (DFI) High Voltage Control Cylinder 3	3	0.75	GN	4803	II	LTG
4	0.75	GY/BU	4804	I	LTG	Direct Fuel Injector (DFI) High Voltage Control Cylinder 4	4	0.75	GY/BU	4804	II	LTG
5	0.5	BK/GN	2919	I	LTG	Fuel Rail Pressure Sensor Low Reference	5	0.5	BK/GN	2919	II	LTG
6	-	-	-	-	-	Not Occupied	6	-	-	-	-	-
7	0.75	BN/WH	4901	I	LTG	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 1	7	0.75	BN/WH	4901	II	LTG
8	0.75	BU/GY	4902	I	LTG	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 2	8	0.75	BU/GY	4902	II	LTG
9	0.75	GN/GY	4903	I	LTG	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 3	9	0.75	GN/GY	4903	II	LTG

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10	0.75	BU/WH	4904	I	LTG	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 4	10	0.75	BU/WH	4904	II	LTG
11	0.5	BN/RD	2917	I	LTG	Fuel Rail Pressure Sensor 5 Volt Reference	11	0.5	BN/RD	2917	II	LTG
12	0.5	BU/WH	2918	I	LTG	Fuel Rail Pressure Sensor Signal	12	0.5	BU/WH	2918	II	LTG

INLINE HARNESS CONNECTOR END VIEWS > X161 ENGINE HARNESS TO FUEL INJECTOR JUMPER HARNESS (LGX)

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Connector Part Information • Harness Type: Engine • OEM Connector: 19178148 • Service Connector: 19178148 • Description: 12-Way F 1.5 Series, Sealed (BK)	Connector Part Information • Harness Type: Fuel Injector Jumper • OEM Connector: LGX • Service Connector: Service by Harness - See Part Catalog • Description: 12-Way M

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13578813	J-35616-2A (GY)	J-38125-217	Not available	Not available	Not available	Not available
II	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	-	-	-	-	-	Not Occupied	1	-	-	-	-	-

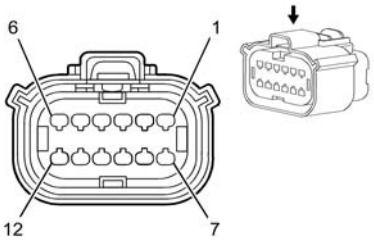
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2	0.75	BU	4802	I	LGX	Direct Fuel Injector (DFI) High Voltage Control Cylinder 2	2	0.75	BU	4802	II	LGX
3	0.75	GY/BU	4804	I	LGX	Direct Fuel Injector (DFI) High Voltage Control Cylinder 4	3	0.75	GY/BU	4804	II	LGX
4	0.75	VT/GN	4806	I	LGX	Direct Fuel Injector (DFI) High Voltage Control Cylinder 6	4	0.75	VT/GN	4806	II	LGX
5	0.5	BK/GN	2919	I	LGX	Fuel Rail Pressure Sensor Low Reference	5	0.5	BK/GN	2919	II	LGX
6 - 7	-	-	-	-	-	Not Occupied	6 - 7	-	-	-	-	-
8	0.75	BU/GY	4902	I	LGX	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 2	8	0.75	BU/GY	4902	II	LGX
9	0.75	BU/WH	4904	I	LGX	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 4	9	0.75	BU/WH	4904	II	LGX
10	0.75	VT/GY	4906	I	LGX	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 6	10	0.75	VT/GY	4906	II	LGX
11	0.5	BN/RD	2917	I	LGX	Fuel Rail Pressure Sensor 5 Volt Reference	11	0.5	BN/RD	2917	II	LGX
12	0.5	BU/WH	2918	I	LGX	Fuel Rail Pressure Sensor Signal	12	0.5	BU/WH	2918	II	LGX

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INLINE HARNESS CONNECTOR END VIEWS > X161 ENGINE HARNESS TO FUEL INJECTOR

JUMPER HARNESS (LT1)

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Connector Part Information • Harness Type: Engine • OEM Connector: 33472-1226 • Service Connector: 13503528 • Description: 12-Way F 150 MX Series, Sealed (BK)	Connector Part Information • Harness Type: Fuel Injector Jumper • OEM Connector: LT1 • Service Connector: Service by Harness - See Part Catalog • Description: 12-Way M

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13578813	J-35616-2A (GY)	J-38125-217	Not available	Not available	Not available	Not available
II	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

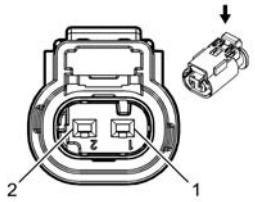
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	BU/GY	4902	I	LT1	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 2	1	0.5	BU/GY	4902	II	LT1
2	0.5	BU/WH	4904	I	LT1	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 4	2	0.5	BU/WH	4904	II	LT1
3	0.5	VT/GY	4906	I	LT1	Direct Fuel Injector (DFI) High Voltage Supply Cylinder 6	3	0.5	VT/GY	4906	II	LT1
4	0.5	GY/WH	4908	I	LT1	Direct Fuel Injector (DFI) High Voltage	4	0.5	GY/WH	4908	II	LT1

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						Supply Cylinder 8						
5	0.5	BU	4802	I	LT1	Direct Fuel Injector (DFI) High Voltage Control Cylinder 2	5	0.5	BU	4802	II	LT1
6 - 7	-	-	-	-	-	Not Occupied	6 - 7	-	-	-	-	-
8	0.5	GY/BU	4804	I	LT1	Direct Fuel Injector (DFI) High Voltage Control Cylinder 4	8	0.5	GY/BU	4804	II	LT1
9	0.5	VT/GN	4806	I	LT1	Direct Fuel Injector (DFI) High Voltage Control Cylinder 6	9	0.5	VT/GN	4806	II	LT1
10	0.5	GY	4808	I	LT1	Direct Fuel Injector (DFI) High Voltage Control Cylinder 8	10	0.5	GY	4808	II	LT1
11	0.75	VT/BK	7300	I	LT1	High Pressure Fuel Pump Actuator Low - Control	11	0.75	VT/BK	7300	II	LT1
12	0.75	YE	7301	I	LT1	High Pressure Fuel Pump Actuator High - Control	12	0.75	YE	7301	II	LT1

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INLINE HARNESS CONNECTOR END VIEWS > X162 ENGINE HARNESS TO OIL CONTROL JUMPER HARNESS (LGX)

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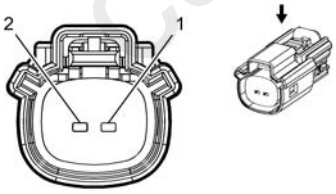
Connector Part Information	Connector Part Information
• Harness Type: Engine • OEM Connector: 13503566 • Service Connector: 13587326 • Description: 2-Way F 1.2 MLK Series, Sealed (BK)	• Harness Type: Oil Control Jumper • OEM Connector: LGX • Service Connector: Service by Harness - See Part Catalog • Description: 2-Way M

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	VT/BU	5293	I	LGX	Powertrain Main Relay Fused Supply (4)	1	0.5	VT/BU	5293	II	LGX
2	0.5	BU	179	I	LGX	Oil Pump Command Signal	2	0.5	BU	179	II	LGX

INLINE HARNESS CONNECTOR END VIEWS > X162 ENGINE HARNESS TO OIL CONTROL JUMPER HARNESS (LTG)

	-
Connector Part Information • Harness Type: Engine • OEM Connector: 33471-0206 • Service Connector: 13577534 • Description: 2-Way F 1.5 Series, Sealed (BK)	Connector Part Information • Harness Type: Oil Control Jumper • OEM Connector: LTG • Service Connector: Service by Harness - See Part Catalog • Description: 2-Way M

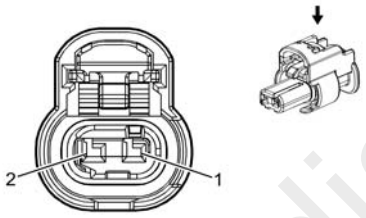
Terminal Part Information

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Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	VT/BU	5293	I	LTG	Powertrain Main Relay Fused Supply (4)	1	0.5	VT/BU	5293	II	LTG
2	0.5	BU	179	I	LTG	Oil Pump Command Signal	2	0.5	BU	179	II	LTG

INLINE HARNESS CONNECTOR END VIEWS > X164 ENGINE HARNESS TO COOLANT TEMPERATURE JUMPER HARNESS



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Connector Part Information

- Harness Type: Engine
- OEM Connector: 13591334
- Service Connector: 19330898
- Description: 2-Way F 1.2 MCON Series, Sealed (BK)

Connector Part Information

- Harness Type: Coolant Temperature Jumper
- OEM Connector: Not Available
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way M

Terminal Part Information

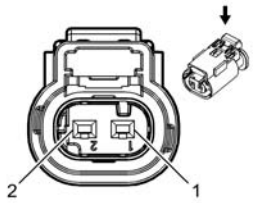
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Terminal	Option	Function	Pin	Size	Color	Circuit	Terminal	Option

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				Type ID							Type ID	
1	0.5	BU	410	I	LGX	Engine Coolant Temperature Sensor Signal	1	0.5	BU	410	II	LGX
2	0.5	BK/WH	2051	I	LGX	Signal Ground	2	0.5	BK/WH	2051	II	LGX

INLINE HARNESS CONNECTOR END VIEWS > X167 ENGINE HARNESS TO OIL LEVEL JUMPER HARNESS

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Connector Part Information • Harness Type: Engine • OEM Connector: 13503566 • Service Connector: 13587326 • Description: 2-Way F 1.2 MLK Series, Sealed (BK)	Connector Part Information • Harness Type: Oil Level Jumper • OEM Connector: Not Available • Service Connector: Service by Harness - See Part Catalog • Description: 2-Way M

Terminal Part Information

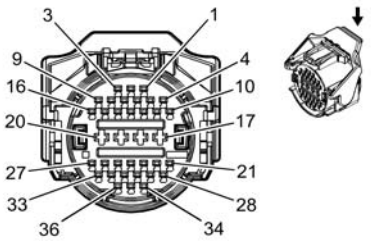
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	BN/GN	1174	I	LGX	Oil Level Switch Signal	1	0.5	BN/GN	1174	II	LGX
2	0.5	BK/WH	451	I	LGX	Signal Ground	2	0.5	BK/WH	451	II	LGX

INLINE HARNESS CONNECTOR END VIEWS > X175 ENGINE HARNESS TO TRANSMISSION

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Connector Part Information • Harness Type: Engine • OEM Connector: 13580320 • Service Connector: 19329922 • Description: 36-Way F 1.2 MCON-CB, 2.8 MCP Series, Sealed (BK)	Connector Part Information • Harness Type: Transmission • OEM Connector: Not Available • Service Connector: Service by Harness - See Part Catalog • Description: 36-Way M

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	19119772	J-35616-35 (VT)	J-38125-557	1241388-1	7	E	C
II	19300445	J-35616-16 (LT GN)	J-38125-12A	Not available	Not available	Not available	Not available
III	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	GN/WH	6380	II	M5T/M5U	TCC On/Off Solenoid A Control	1	0.5	GN/WH	6380	III	M5T/M5U
2	-	-	-	-	-	Not Occupied	2	-	-	-	-	-
3	0.5	YE/BN	6404	II	M5T/M5U	Clutch E Control	3	0.5	YE/BN	6404	III	M5T/M5U
4	0.5	GY/GN	6403	II	M5T/M5U	Clutch D Control	4	0.5	GY/GN	6403	III	M5T/M5U
5	0.5	BN	6400	II	M5T/M5U	Clutch A Control	5	0.5	BN	6400	III	M5T/M5U
6	0.5	BU	6401	II	M5T/M5U	Clutch B Control	6	0.5	BU	6401	III	M5T/M5U
7	0.5	YE/BN	6210	II	M5T/M5U	TCC On/Off Solenoid B Control	7	0.5	YE/BN	6210	III	M5T/M5U
8 - 9	-	-	-	-	-	Not Occupied	8 - 9	-	-	-	-	-

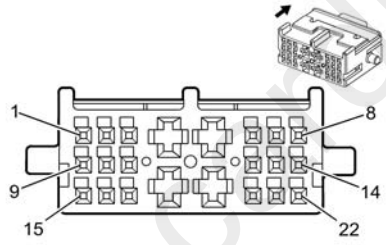
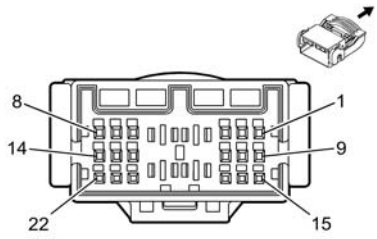
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10	0.5	GY	6402	II	M5T/M5U	Clutch C Control	10	0.5	GY	6402	III	M5T/M5U
11	0.5	BK/BN	586	II	M5T/M5U	Transmission Oil Temperature Sensor Low Reference	11	0.5	BK/BN	586	III	M5T/M5U
12	0.5	BN/WH	585	II	M5T/M5U	Transmission Oil Temperature Sensor Signal	12	0.5	BN/WH	585	III	M5T/M5U
13	0.5	WH	4508	II	M5T/M5U	Transmission Clutch G Control	13	0.5	WH	4508	III	M5T/M5U
14	0.5	WH/BU	4507	II	M5T/M5U	Transmission Clutch H Control	14	0.5	WH/BU	4507	III	M5T/M5U
15 - 17	-	-	-	-	-	Not Occupied	15 - 17	-	-	-	-	-
18	0.75	GN/GY	6387	I	M5T/M5U	Transmission High Side Driver 1 Signal Driver	18	0.75	GN/GY	6387	III	M5T/M5U
19	0.75	GY/BN	6388	I	M5T/M5U	Transmission High Side Driver 2 Signal	19	0.75	GY/BN	6388	III	M5T/M5U
20	-	-	-	-	-	Not Occupied	20	-	-	-	-	-
21	0.5	WH/BK	5983	II	M5T/M5U	PRNDL C Signal	21	0.5	WH/BK	5983	III	M5T/M5U
22	0.5	VT/WH	5981	II	M5T/M5U	PRNDL A Signal	22	0.5	VT/WH	5981	III	M5T/M5U
23	0.5	GY/WH	4168	II	M5T/M5U	PRNDL P Signal	23	0.5	GY/WH	4168	III	M5T/M5U
24	0.5	GY/BU	6358	II	M5T/M5U	Output Speed Signal	24	0.5	GY/BU	6358	III	M5T/M5U
25	0.5	YE/GN	4170	II	M5T/M5U	Transmission Position Sensor B 9 Volt Reference	25	0.5	YE/GN	4170	III	M5T/M5U
26	0.5	GN/YE	6353	II	M5T/M5U	Input Speed Signal	26	0.5	GN/YE	6353	III	M5T/M5U
27	0.5	YE/BU	4171	II	M5T/M5U	Transmission Position Sensor A 9 Volt Reference	27	0.5	YE/BU	4171	III	M5T/M5U
28	0.5	GY/BN	5982	II	M5T/M5U	PRNDL B Signal	28	0.5	GY/BN	5982	III	M5T/M5U

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29	0.5	YE/BU	4171	II	M5T/M5U	Transmission Position Sensor A 9 Volt Reference	29	0.5	YE/BU	4171	III	M5T/M5U
30	0.5	BK/GY	3927	II	M5T/M5U	IMS Mode Switch Low Reference	30	0.5	BK/GY	3927	III	M5T/M5U
31	0.5	YE/GN	4170	II	M5T/M5U	Transmission Position Sensor B 9 Volt Reference	31	0.5	YE/GN	4170	III	M5T/M5U
32	0.5	GN/VT	4510	II	M5T/M5U	Transmission Intermediate Speed Signal	32	0.5	GN/VT	4510	III	M5T/M5U
33	-	-	-	-	-	Not Occupied	33	-	-	-	-	-
34	0.5	GY/YE	4169	II	M5T/M5U	PRNDL S Signal	34	0.5	GY/YE	4169	III	M5T/M5U
35	0.5	WH/GY	1786	II	-	Transmission Park/Neutral Signal (1)	35	0.5	WH/GY	1786	III	-
36	-	-	-	-	-	Not Occupied	36	-	-	-	-	-

INLINE HARNESS CONNECTOR END VIEWS > X176 TRANSMISSION HARNESS TO TRANSMISSION JUMPER HARNESS

	
Connector Part Information • Harness Type: Transmission • OEM Connector: 1897543-1 • Service Connector: Service by Harness - See Part Catalog • Description: 22-Way F 0.64 Micro-Quadlock, 2.8 Micro-Power Series (NA)	Connector Part Information • Harness Type: Transmission Jumper • OEM Connector: 1897540-1 • Service Connector: Service by Harness - See Part Catalog • Description: 22-Way M 0.64 Micro-Quadlock, 2.8 Micro-Power Series (NA)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp

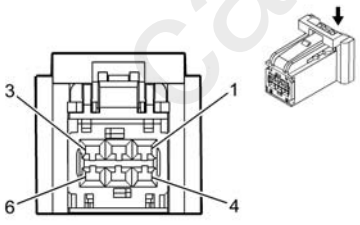
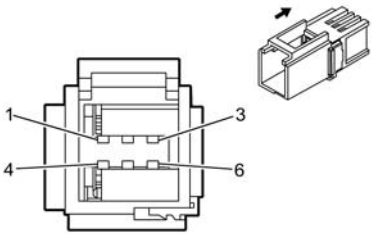
I	Not Required	J-35616-35 (VT)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-64B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
III	Not Required	J-35616-5 (PU)	No Tool Required	Not Required	Not Required	Not Required	Not Required
IV	Not Required	J-35616-65B (LT BU)	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	GN/WH	6380	II	-	TCC On/Off Solenoid A Control	1	0.5	GN/WH	6380	IV	-
2	0.5	VT/WH	5981	II	-	PRNDL A Signal	2	0.5	VT/WH	5981	IV	-
3	0.5	GY/BN	5982	II	-	PRNDL B Signal	3	0.5	GY/BN	5982	IV	-
4	2.5	GN/GY	6387	I	-	Transmission High Side Driver 1 Signal Driver	4	2.5	GN/GY	6387	III	-
5	0.5	YE/BU	4171	II	-	Transmission Position Sensor A 9 Volt Reference	5	0.5	YE/BU	4171	IV	-
6	0.5	GY/YE	4169	II	-	PRNDL S Signal	6	0.5	GY/YE	4169	IV	-
7	0.5	WH/BU	4507	II	-	Transmission Clutch H Control	7	0.5	WH/BU	4507	IV	-
8	0.5	GY/GN	6403	II	-	Clutch D Control	8	0.5	GY/GN	6403	IV	-
9	0.5	WH	4508	II	-	Transmission Clutch G Control	9	0.5	WH	4508	IV	-
10	0.5	YE/BN	6210	II	-	TCC On/Off Solenoid B Control	10	0.5	YE/BN	6210	IV	-
11	0.5	WH/BK	5983	II	-	PRNDL C Signal	11	0.5	WH/BK	5983	IV	-
12	0.5	WH/GY	1786	II	-	Transmission Park/Neutral Signal (1)	12	0.5	WH/GY	1786	IV	-
13	0.5	GY	6402	II	-	Clutch C Control	13	0.5	GY	6402	IV	-
14	0.5	YE/BN	6404	II	-	Clutch E Control	14	0.5	YE/BN	6404	IV	-

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15	0.5	BN/WH	585	II	-	Transmission Oil Temperature Sensor Signal	15	0.5	BK/BN	585	IV	-
16	0.5	BK/BN	586	II	-	Transmission Oil Temperature Sensor Low Reference	16	0.5	BK/BN	586	IV	-
17	0.5	GY/WH	4168	II	-	PRNDL P Signal	17	0.5	GY/WH	4168	IV	-
18	2.5	GY/BN	6388	I	-	Transmission High Side Driver 2 Signal	18	2.5	GY/BN	6388	III	-
19	0.5	YE/GN	4170	II	-	Transmission Position Sensor B 9 Volt Reference	19	0.5	YE/GN	4170	IV	-
20	0.5	BK/GY	3927	II	-	IMS Mode Switch Low Reference	20	0.5	BK/GY	3927	IV	-
21	0.5	BN	6400	II	-	Clutch A Control	21	0.5	BN	6400	IV	-
22	0.5	BU	6401	II	-	Clutch B Control	22	0.5	BU	6401	IV	-

INLINE HARNESS CONNECTOR END VIEWS > X177 TRANSMISSION HARNESS TO TRANSMISSION SPEED SENSOR JUMPER HARNESS

	
Connector Part Information • Harness Type: Transmission • OEM Connector: 33134940 • Service Connector: Service by Harness - See Part Catalog • Description: 6-Way F 1.2 OCS Series (NA)	Connector Part Information • Harness Type: Transmission Speed Sensor Jumper • OEM Connector: 13955963 • Service Connector: Service by Harness - See Part Catalog • Description: 6-Way M 0.64 II Series (GY)

Terminal Part Information

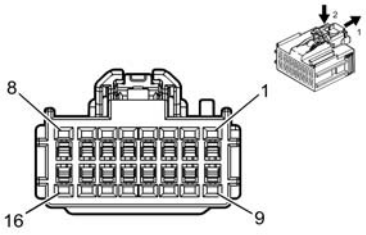
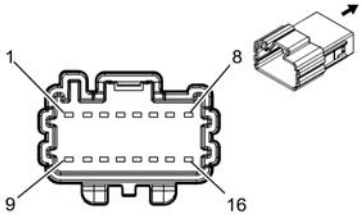
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Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	GY/BU	6358	I	-	Output Speed Signal	1	0.5	YE	6358	II	-
2	0.5	YE/GN	4170	I	-	Transmission Position Sensor B 9 Volt Reference	2	0.5	RD	4170	II	-
3	0.5	YE/GN	4170	I	-	Transmission Position Sensor B 9 Volt Reference	3	0.5	WH	4170	II	-
4	0.5	YE/BU	4171	I	-	Transmission Position Sensor A 9 Volt Reference	4	0.5	WH	4171	II	-
5	0.5	GN/YE	6353	I	-	Input Speed Signal	5	0.5	GN	6353	II	-
6	0.5	GN/VT	4510	I	-	Transmission Intermediate Speed Signal	6	0.5	BK	4510	II	-

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INLINE HARNESS CONNECTOR END VIEWS > X250 FLOOR CONSOLE HARNESS TO INSTRUMENT PANEL HARNESS

	
Connector Part Information • Harness Type: Floor Console • OEM Connector: 6095-7733 • Service Connector: Service by Harness - See Part Catalog	Connector Part Information • Harness Type: Instrument Panel • OEM Connector: 6098-7725 • Service Connector: 13597330

• Description: 16-Way F 1.2 Series (BK)	• Description: 16-Way M 1.2 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 Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required
II	19333324	J-35616-13 (BU)	J-38125-12A	Not available	Not available	Not available	Not available
III	19333325	J-35616-13 (BU)	J-38125-12A	Not available	Not available	Not available	Not available

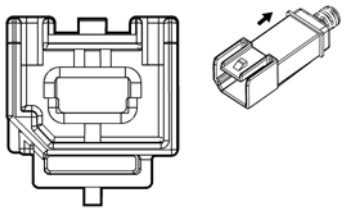
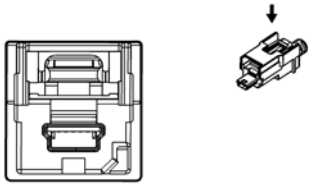
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	RD/VT	340	I	-	Battery Positive Voltage	1	0.5	RD/VT	340	III	-
2	-	-	-	-	-	Not Occupied	2	-	-	-	-	-
3	0.35	BU/VT	1788	I	-	Traction Control Switch Signal (1)	3	0.35	BU/VT	1788	II	-
4	0.35	GY/BK	3276	I	-	Vehicle Anti-Theft System Immobilizer Control	4	0.35	GY/BK	3276	II	-
5	0.35	GN/VT	7533	I	-	Local Interconnect Network Serial Data Bus 11	5	0.35	GN/VT	7533	II	-
6	0.35	GN/GY	3277	I	-	Vehicle Anti-Theft System Immobilizer Low Reference	6	0.35	GN/GY	3277	II	-
7 - 9	-	-	-	-	-	Not Occupied	7 - 9	-	-	-	-	-
10	0.5	BK/WH	1551	I	-	Signal Ground	10	0.5	BK/WH	1551	III	-
11	0.35	YE	6817	I	-	LED Backlight Dimming Control	11	0.5	YE	6817	III	-
12	0.35	GN/WH	111	I	-	Hazard Switch Signal	12	0.35	GN/WH	111	II	-

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13	0.5	YE	6817	I	-	LED Backlight Dimming Control	13	0.5	YE	6817	III	-
14	0.35	RD/BN	910	I	C70	-	14	0.35	RD/BN	910	II	C70
15	0.35	VT/GN	900	I	C70	-	15	0.35	VT/GN	900	II	C70
16	-	-	-	-	-	Not Occupied	16	-	-	-	-	-

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INLINE HARNESS CONNECTOR END VIEWS > X251 INSTRUMENT PANEL HARNESS TO FLOOR CONSOLE HARNESS

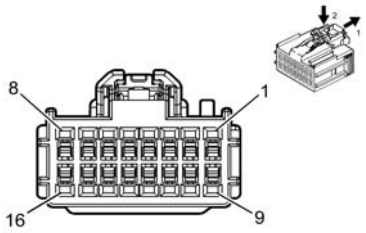
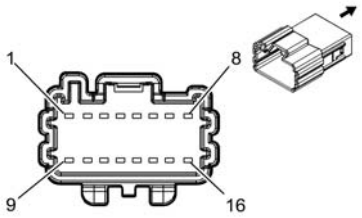
	
Connector Part Information • Harness Type: Instrument Panel USB • OEM Connector: 13576693 • Service Connector: Service by Cable Assembly - See Part Catalog • Description: 5-Way F 2.0 Mini-B USB Type (BK)	Connector Part Information • Harness Type: Floor Console USB • OEM Connector: 13576672 • Service Connector: Service by Cable Assembly - See Part Catalog • Description: 5-Way M 2.0 Mini-B USB Type (GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
-	-	USB	-	I	-	USB Serial Data	-	-	USB	-	I	-

INLINE HARNESS CONNECTOR END VIEWS > X215 INSTRUMENT PANEL HARNESS TO HEADLINER HARNESS

	
Connector Part Information	Connector Part Information

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- Harness Type: Headliner
- OEM Connector: 6098-7733
- Service Connector: 13597328
- Description: 16-Way F 1.2 Series (BK)

- Harness Type: Instrument Panel
- OEM Connector: 6098-7725
- Service Connector: 13597330
- Description: 16-Way M 1.2 Series (BK)

Terminal Part Information

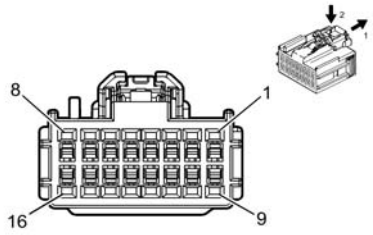
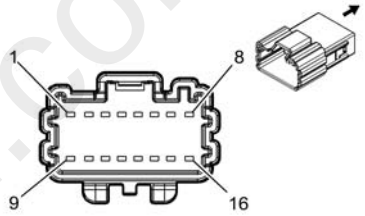
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	19333322	J-35616-16 (LT GN)	J-38125-21	Not available	Not available	Not available	Not available
II	19333323	J-35616-13 (BU)	J-38125-12A	Not available	Not available	Not available	Not available
III	19333324	J-35616-13 (BU)	J-38125-12A	Not available	Not available	Not available	Not available
IV	19333325	J-35616-13 (BU)	J-38125-12A	Not available	Not available	Not available	Not available

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	WH/BN	6815	II	-	Inadvertent Power Control	1	0.5	WH/BN	6815	IV	-
2	0.35	VT/WH	1139	I	-	Run/Crank Ignition 1 Voltage	2	0.35	VT/WH	1139	III	-
3	0.35	VT	5234	I	-	Passenger Seat Belt Indicator Control	3	0.35	VT	5234	III	-
4	0.35	VT/GY	539	I	(D31+UE1/UI3) /(DD8-UE1-UI3)	Run/Crank Ignition 1 Voltage	4	0.35	VT/GY	539	III	(D31+UE1/UI3 /(DD8-UE1-UI3
5	0.35	BU	2307	I	-	Passenger Air Bag On Indicator Control	5	0.35	BU	2307	III	-
6	0.35	GN	2308	I	-	Passenger Air Bag Off Indicator Control	6	0.35	GN	2308	III	-
7	0.35	GN/BK	2515	I	D31/DD8+UE1/UI3	Keypad Control	7	0.35	GN/BK	2515	III	D31/DD8+UE1/
8	0.35	GN/WH	2514	I	D31/DD8+UE1/UI3	Keypad Signal	8	0.35	GN/WH	2514	III	D31/DD8+UE1/
9	0.35	YE/VT	2516	I	D31+UE1/UI3	Keypad Green LED Control	9	0.35	YE/VT	2516	III	D31+UE1/UI3

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10	0.5	YE	6817	II	-	LED Backlight Dimming Control	10	0.5	YE	6817	IV	-
11	0.35	BN/WH	2517	I	D31+UE1/UI3	Keypad Red LED Control	11	0.35	BN/WH	2517	III	D31+UE1/UI3
12	0.5	VT/GN	7558	II	-	LED Ambient Lighting Control 2	12	0.5	VT/GN	7558	IV	-
13	0.75	BK	1350	II	-	Ground	13	0.75	BK	1350	IV	-
14 - 16	-	-	-	-	-	Not Occupied	14 - 16	-	-	-	-	-

INLINE HARNESS CONNECTOR END VIEWS > X216 HEADLINER HARNESS TO BODY HARNESS (-CM8)

	
Connector Part Information • Harness Type: Headliner • OEM Connector: 6098-7735 • Service Connector: 13597329 • Description: 16-Way F 1.2 Series (GY)	Connector Part Information • Harness Type: Body • OEM Connector: 6098-7727 • Service Connector: 13597331 • Description: 16-Way M 1.2 Series (GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	19333322	J-35616-16 (LT GN)	J-38125-21	Not available	Not available	Not available	Not available
II	19333323	J-35616-13 (BU)	J-38125-12A	Not available	Not available	Not available	Not available
III	19333324	J-35616-13 (BU)	J-38125-12A	Not available	Not available	Not available	Not available
IV	19333325	J-35616-13 (BU)	J-38125-12A	Not available	Not available	Not available	Not available

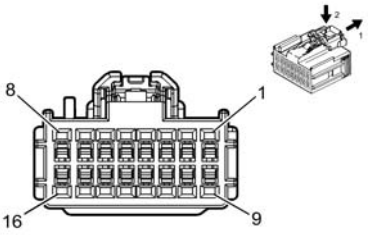
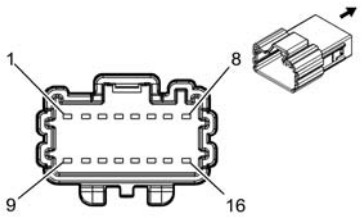
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option

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1	0.35	VT	4608	I	A1AC	Sunroof Switch Signal	1					
2	0.35	YE	6817	I	A1AC	LED Backlight Dimming Control	2					
3	0.35	BK	2150	I	A1AC	Ground	3					
4	0.35	RD/BU	4540	I	UG1	Battery Positive Voltage	4	0.35	RD/BU	4540	III	UG1
5	0.35	RD/WH	5440	I	DD8+UE1	Battery Positive Voltage	5	0.35	RD/WH	5440	III	DD8+UE1
6	0.35	YE/BN	7603	I	A1AC	Retractable Roof Sensor Control	6					
7	0.35	GN/WH	24	I	DD8-UE1	Backup Lamp Control	7	0.5	GN/WH	24	IV	-
8	0.35	GN	5060	I	DD8+UE1	Low Speed GMLAN Serial Data	8	0.35	GN	5060	III	DD8+UE1
9	0.35	YE/WH	1690	I	DD8	Automatic Day/Night Mirror Signal	9	0.35	YE/WH	1690	III	A1BC+DD8
10	0.35	BK/YE	1691	I	DD8	Automatic Day/Night Mirror Low Reference	10	0.35	BK/YE	1691	III	A1BC+DD8
11	0.35	BK/GY	128	I	CF5	Sunroof Switch Low Reference	11	0.35	BK/GY	128	III	CF5
12	0.35	BU/VT	5027	I	CF5	Sunroof Switch Data (1) Signal	12	0.35	BU/VT	5027	III	CF5
13	0.5	GY	157	II	-	Interior Lamp Control	13	0.5	GY	157	IV	-
14	0.35	VT/WH	5933	I	A1AC	Folding Top Position Sensor Signal	14					
15	0.35	BN	5935	I	A1AC	Folding Top Unlatch Switch Signal	15					

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INLINE HARNESS CONNECTOR END VIEWS > X216 HEADLINER HARNESS TO BODY HARNESS (CM8)

	
Connector Part Information • Harness Type: Headliner • OEM Connector: 13597329 • Service Connector: 13597329 • Description: 16-Way F 1.2 Series (GY)	Connector Part Information • Harness Type: Body • OEM Connector: 13597331 • Service Connector: 13597331 • Description: 16-Way M 1.2 Series (GY)

Terminal Part Information

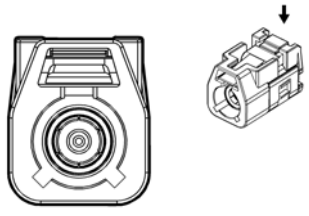
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	19333322	J-35616-16 (LT GN)	J-38125-21	Not Available	Not Available	Not Available	Not Available
II	19333323	J-35616-13 (BU)	J-38125-12A	Not Available	Not Available	Not Available	Not Available
III	19333324	J-35616-13 (BU)	J-38125-12A	Not Available	Not Available	Not Available	Not Available
IV	19333325	J-35616-13 (BU)	J-38125-12A	Not Available	Not Available	Not Available	Not Available
V	19352074	J-35616-17 (L-GN)	J-38125-12A	Not Available	Not Available	Not Available	Not Available

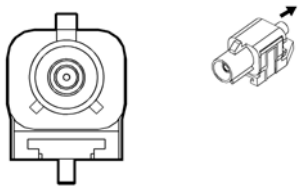
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	VT	4608	I	CM8	Sunroof Switch Signal	1	0.35	VT	4608	III	CM8
2	0.35	YE	6817	I	CM8	LED Backlight Dimming Control	2	0.35	YE	6817	III	CM8
3	0.35	BK	2150	I	CM8	Ground	3	0.35	BK	2150	III	CM8
4	0.35	RD/BU	4540	I	UG1	Battery Positive Voltage	4	0.35	RD/BU	4540	III	UG1
5	0.35	RD/WH	5440	I	DD8+UE1	Battery Positive	5	0.35	RD/WH	5440	III	DD8+UE1

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						Voltage						
6	0.35	YE/BN	7603	I	CM8	Retractable Roof Sensor Control	6	0.35	YE/BN	7603	III	CM8
7	0.35	GN/WH	24	I	DD8-UE1	Backup Lamp Control	7	0.5 0.5	GN/WH GN/WH	24 24	IV V	- -
8	0.35	GN	5060	I	DD8+UE1	Low Speed GMLAN Serial Data	8	0.35	GN	5060	III	DD8+UE1
9	0.35	YE/WH	1690	I	DD8	Automatic Day/Night Mirror Signal	9	0.35	YE/WH	1690	III	-
10	0.35	BK/YE	1691	I	DD8	Automatic Day/Night Mirror Low Reference	10	0.35	BK/YE	1691	III	-
11	0.35	BK/GY	128	I	CF5	Sunroof Switch Low Reference	11	0.35	BK/GY	128	III	CF5
12	0.35	BU/VT	5027	I	CF5	Sunroof Switch Data (1) Signal	12	0.35	BU/VT	5027	III	CF5
13	0.5	GY	157	II	-	Interior Lamp Control	13	0.5 0.5	GY GY	157 157	IV V	- -
14	0.35	VT/WH	5933	I	CM8	Folding Top Position Sensor Signal	14	0.35	VT/WH	5933	III	CM8
15	0.35	BN	5935	I	CM8	Folding Top Unlatch Switch Signal	15	0.35	BN	5935	III	CM8
16	-	-	-	-	-	Not Occupied	16	-	-	-	-	-

INLINE HARNESS CONNECTOR END VIEWS > X220 INSTRUMENT PANEL HARNESS TO BODY HARNESS





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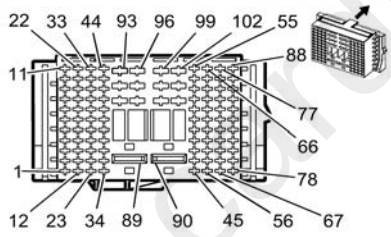
Connector Part Information	Connector Part Information
• Harness Type: Instrument Panel COAX • OEM Connector: 13586878 • Service Connector: Service by Cable Assembly - See Part Catalog • Description: 1-Way F Coax Type (CU)	• Harness Type: Body COAX • OEM Connector: 13580754 • Service Connector: Service by Cable Assembly - See Part Catalog • Description: 1-Way M Coax Type (CU)

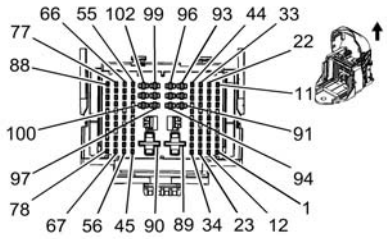
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
-	-	COAX	-	I	-	(XM +/-HD) Coaxial Antenna XM Signal	-	-	COAX	-	I	-

INLINE HARNESS CONNECTOR END VIEWS > X225 INSTRUMENT PANEL HARNESS TO BODY HARNESS





Connector Part Information	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)	• Harness Type: Body • OEM Connector: 13582927 • Service Connector: 19331025 • Description: 102-Way M 1.6, 2.8, 8.0 Mixed Series

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13575760	J-35616-14	J-38125-560	964274-2	3	E	1

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		(GN)					
II	13578858	J-35616-4A (PU)	J-38125-36	964280-2	22	E	2
III	13578858	J-35616-4A (PU)	J-38125-36	Not available	Not available	Not available	Not available
IV	19300640	J-35616-14 (GN)	J-38125-560	964274-2	3	E	1
V	13505359	J-35616-5 (PU)	J-38125-36	Not available	Not available	Not available	Not available
VI	13575529	J-35616-5 (PU)	J-38125-36	Not available	Not available	Not available	Not available
VII	13575574	J-35616-5 (PU)	J-38125-36	Not available	Not available	Not available	Not available
VIII	13575593	J-35616-34 (YE)	J-38125-560	964265-2	24	C	A
IX	13575593	J-35616-34 (YE)	J-38125-560	964265-2	24	E	2
X	13575593	J-35616-34 (YE)	J-38125-560	964265-2	24	E	C

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	RD/BN	4940	IV	C70	Battery Positive Voltage	1	0.35	RD/BN	4940	IX	-
2	0.35	VT/GN	916	IV	C70	-	2	0.5	VT/GN	916	IX	-
3	0.35	GY/VT	3998	IV	-	MOST Serial Data (+)	3	0.5 0.35	GY/VT GY/VT	3998 3998	IX	UQ3 -
4	0.35	WH/GN	3997	IV	-	MOST Serial Data (-)	4	0.5 0.35	WH/GN WH/GN	3997 3997	IX	UQ3 -
5	0.35	BU	655	IV	-	Cellular Telephone Microphone Signal	5	0.35	BU	655	IX	-
6	0.35	BK/BN	654	IV	-	Cellular Telephone Microphone Low Reference	6	0.35	BK/BN	654	IX	-
7	0.35	BN/YE	189	IV	TR6	Headlamp Leveling Motor Control	7	0.35	BN/YE	189	IX	TR6
8	0.35 0.35	WH/YE WH/YE	7557 7557	I IV	C70+IO5/IO6 IO5/IO6-C70	LED Ambient Lighting Control 1	8	0.5	WH/YE	7557	IX	-
9	0.5	RD/BU	3240	I	-	Battery Positive Voltage	9	0.5	RD/BU	3240	IX	-
10	0.35	VT/BK	3	IV	-	Run/Crank Ignition 1	10	0.35	VT/BK	3	IX	-

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						Voltage						
11	0.35	VT/YE	4	IV	-	Accessory Ignition Voltage	11	0.35	VT/YE	4	IX	-
12	0.35	WH	5359	IV	-	Brake Apply Sensor Control	12	0.35	WH	5359	IX	-
13	0.35	BK/BN	5360	IV	-	Brake Apply Sensor Low Reference	13	0.35	BK/BN	5360	IX	-
14	0.35	BU/YE	5361	IV	-	Brake Apply Sensor Signal	14	0.35	BU/YE	5361	IX	-
15	0.35	GY/VT	3998	IV	UQA+IO5/IO6	MOST Serial Data (+)	15	0.5	GY/VT	3998	IX	-
16	0.35	BN/YE	780	IV	-	Driver Door Lock Switch Lock Signal	16	0.35	BN/YE	780	IX	-
17	0.35	VT/YE	5985	IV	M5T/M5U/MGL	Accessory Wakeup Serial Data	17	0.35	VT/YE	5985	IX	-
18	0.35	RD/WH	6440	IV	-	Battery Positive Voltage	18	0.35	RD/WH	6440	IX	-
19	0.35	BN/WH	781	IV	-	Driver Door Lock Switch Unlock Signal	19	0.35	BN/WH	781	IX	-
20	0.35	WH/GN	3997	IV	UQA+IO5/IO6	MOST Serial Data (-)	20	0.5	WH/GN	3997	IX	-
21	0.5	RD/BU	3240	I	IO5/IO6	Battery Positive Voltage	21	0.35 0.5	RD/BU RD/BU	3240 3240	IX	IO5/IO6 IO5/IO6
22	0.5	RD/BU	3240	I	UV6	Battery Positive Voltage	22	0.5	RD/BU	3240	IX	UV6
23	0.5	RD/BU	3240	I	-	Battery Positive Voltage	23	0.5	RD/BU	3240	IX	-
24	0.35	RD/BN	910	IV	C70	-	24	0.35	RD/BN	910	IX	-
25	-	-	-	-	-	Not Occupied	25	-	-	-	-	-
26	0.35	GY/WH	3272	IV	-	Remote Function Actuator Control	26	0.35	GY/WH	3272	IX	-
27	0.5	WH	6816	I	-	Indicator Dimming Control	27	0.5	WH	6816	IX	-
28	0.35	WH/BU	5986	IV	-	Serial Data Communication Enable	28	0.35	WH/BU	5986	IX	-
29	0.35	WH/VT	3999	IV	UQA+IO5/IO6	MOST Control	29	0.35	WH/VT	3999	IX	-
30	0.35	VT/GN	900	IV	C70	-	30	0.35	WH/YE	900	IX	-

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31	0.35	BU	2500	IV	-	High Speed GMLAN Serial Data (+) (1)	31	0.35	BU	2500	IX	-
32	0.35	WH	2501	IV	-	High Speed GMLAN Serial Data (-) (1)	32	0.35	WH	2501	IX	-
33	0.35	WH/BU	5986	IV	-	Serial Data Communication Enable	33	0.35	WH/BU	5986	IX	-
34	-	-	-	-	-	Not Occupied	34	-	-	-	-	-
35	0.35	BN/BK	3552	IV	-	Passive Start Interior Antenna 1 Signal Hi	35	0.35	BN/BK	3552	IX	-
36	0.35	WH	3553	IV	-	Passive Start Interior Antenna 1 Signal Lo	36	0.35	WH	3553	IX	-
37	0.35	BU/GN	1304	IV	-	High Speed GMLAN Serial Data (+) (9)	37	0.35	BU/GN	1304	IX	-
38	0.35	WH/GN	1305	IV	-	High Speed GMLAN Serial Data (-) (9)	38	0.35	WH/GN	1305	IX	-
39	0.35	GN	5060	IV	-	Low Speed GMLAN Serial Data	39	0.35	GN	5060	IX	-
40 - 46	-	-	-	-	-	Not Occupied	40 - 46	-	-	-	-	-
47	0.35	GY/GN	1102	IV	-	Low Speed GMLAN Serial Data #2	47	0.75	GY/GN	1102	X	-
48	0.35	GN/GY	6135	IV	A1AC	Local Interconnect Network Serial Data Bus 4	48	0.35	GN/GY	6135	IX	A1AC
49 - 51	-	-	-	-	-	Not Occupied	49 - 51	-	-	-	-	-
52	0.35	BU	3275	IV	-	Remote Function Actuator Receive Signal	52	0.35	BU	3275	IX	-
53	0.5	WH/BN	6815	I	-	Inadvertent Power Control	53	0.75	WH/BN	6815	X	-
54	0.35	YE/GN	3274	IV	-	Remote Function Actuator Transmit Signal	54	0.35	YE/GN	3274	IX	-
55	-	-	-	-	-	Not Occupied	55	-	-	-	-	-
56	0.35	GY	3273	IV	-	Remote Function Actuator Low Reference	56	0.35	GY	3273	IX	-

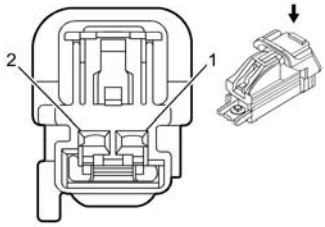
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57	0.5	YE/GY	122	I	T79	Rear Fog Lamp Control	57	0.5	YE/GY	122	IX	T79
58 - 59	-	-	-	-	-	Not Occupied	58 - 59	-	-	-	-	-
60	0.35	GN/VT	1601	IV	N06	Steering Column Lock Signal	60	0.35	GN/VT	1601	IX	N06
61	0.35	WH/VT	5905	IV	M5T/M5U/MGL	Key Capture/Column Lock Shift Position Signal	61	0.35	WH/VT	5905	IX	-
62	-	-	-	-	-	Not Occupied	62	-	-	-	-	-
63	0.35	GN/YE	7066	IV	-	Entertainment Remote Enable Signal	63	0.35	GN/YE	7066	IX	UQ3+NKC
64	0.35	GN/BK	3558	IV	-	Passive Start Switch Signal 2	64	0.35	GN/BK	3558	IX	-
65	0.35	BK/GY	3559	IV	-	Passive Start Switch 2 Low Reference	65	0.35	BK/GY	3559	IX	-
66						Left Front Low Level Audio Signal	66	0.75	BU	511	X	UQ3+NKC
67	0.75	BN/BU	1947	I	-	Left Front Low Level Audio (-) Low Reference	67	0.75	BN/BU	1947	X	UQ3+NKC
68	0.75	BU	511	I	-	Left Front Low Level Audio Signal	68	0.75	BU	511	X	UQ3+NKC
69	-	-	-	-	-	Not Occupied	69	-	-	-	-	-
70	0.75 0.75	GN GN/BK	199 599	I	- -	Left Rear Speaker Control (+) Left Rear Low Level Audio Signal	70	0.75 0.75	GN GN/BK	199 599	X	UQ3-NKC UQ3+NKC
71	0.75 0.75	GN/BK BN/VT	116 1999	I	- -	Left Rear Speaker Signal (-) Left Rear Low Level Audio (-) Low Reference	71	0.75 0.75	GN/BK BN/VT	116 1999	X	UQ3-NKC UQ3+NKC
72	1	BU/YE	1960	I	UQA+A1BC	Front Center Speaker (-) Low Reference	72	1	BU/YE	1960	VIII	-
73	1	YE/WH	1860	I	UQA+A1BC	Front Center Speaker Control (+)	73	1	YE/WH	1860	VIII	-
74	0.5	BARE	6974	IV	-	Camera Low Reference	74	0.35	BARE	6974	IX	UVC

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75						Battery Positive Voltage	75	0.5	RD/GN	3140	IX	UD7+UG7
76 - 92	-	-	-	-	-	Not Occupied	76 - 92	-	-	-	-	-
93	1.5	BK/WH	1551	III	-	Signal Ground	93	1.5	BK/WH	1551	VII	-
94	0.75 1	BN/BU YE/GY	118 1956	III	- UQA+A1BC	Left Front Speaker Signal (-) (1) Left Front Tweeter Speaker (-) Low Reference	94	0.75 1	BN/BU YE/GY	118 1956	V	- -
95	0.75 1	BU YE/BU	201 1856	III	- UQA+A1BC	Left Front Speaker Control (+) (1) Left Front Tweeter Speaker Control (+)	95	0.75 1	BU YE/BU	201 1856	V	- -
96	0.35	GY/YE	6972	II	-	Camera Signal 2 +	96	0.35	GY/YE	6972	VI	UVC
97 - 98	-	-	-	-	-	Not Occupied	97 - 98	-	-	-	-	-
99	0.35	WH/BU	6973	II	-	Camera Signal 2	99	0.35	WH/BU	6973	VI	UVC
100 - 101	-	-	-	-	-	Not Occupied	100 - 101	-	-	-	-	-
102	0.35	VT/BK	7553	II	M5T/M5U/MGL	Park Lock Solenoid Control	102	0.35	VT/BK	7553	VI	-

INLINE HARNESS CONNECTOR END VIEWS > X228 INSTRUMENT PANEL HARNESS TO HVAC HARNESS

	-
Connector Part Information • Harness Type: Instrument Panel • OEM Connector: 19167918 • Service Connector: 88988504	Connector Part Information • Harness Type: HVAC • OEM Connector: Not Available • Service Connector: Service by Harness - See Part Catalog

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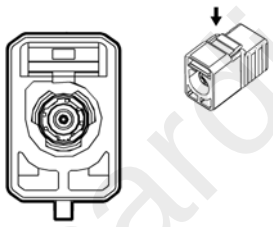
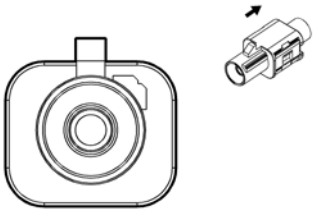
• Description: 2-Way F 1.5 YESC Series (L-GY)	• Description: 2-Way M

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.75	GY/RD	598	I	-	5 Volt Reference	1	0.75	GY/RD	598	II	-
2	0.35	BN	518	I	C68	Lower Left Air Temperature Sensor Signal	2	0.35	BN	518	II	C68

INLINE HARNESS CONNECTOR END VIEWS > X230 BODY HARNESS TO INSTRUMENT PANEL HARNESS (U2Q)

	
Connector Part Information • Harness Type: Body COAX • OEM Connector: 13583899 • Service Connector: Service by Cable Assembly - See Part Catalog • Description: 1-Way F Coax Type (GN)	Connector Part Information • Harness Type: Instrument Panel COAX • OEM Connector: 13583896 • Service Connector: Service by Cable Assembly - See Part Catalog • Description: 1-Way M Coax Type (GN)

Terminal Part Information

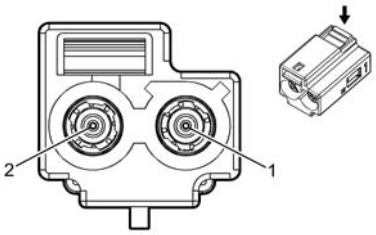
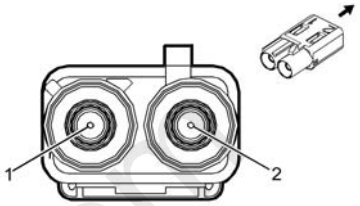
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Available	Not Available	Not Available	Not Available	Not	Not	Not Available

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					Available	Available	

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
-	-	COAX	-	I	-	(DAB/DMB) Coaxial Antenna DAB Signal	-	-	COAX	-	I	-

INLINE HARNESS CONNECTOR END VIEWS > X238 BODY HARNESS TO INSTRUMENT PANEL HARNESS

	
Connector Part Information • Harness Type: Body COAX • OEM Connector: 13581716 • Service Connector: Service by Cable Assembly - See Part Catalog • Description: 2-Way F Coax Type (BK)	Connector Part Information • Harness Type: Instrument Panel COAX • OEM Connector: 13581708 • Service Connector: Service by Cable Assembly - See Part Catalog • Description: 2-Way M Coax Type (BK)

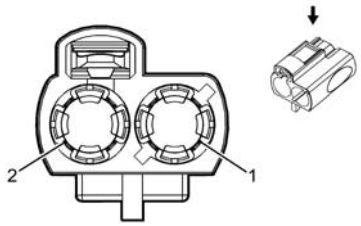
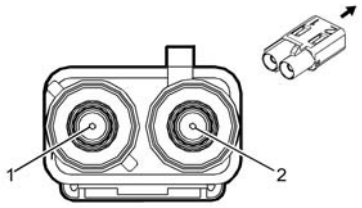
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
-	-	COAX	-	I	-	(AM/FM) Antenna RF Signal	-	-	COAX	-	I	-

INLINE HARNESS CONNECTOR END VIEWS > X252 BODY HARNESS TO INSTRUMENT PANEL HARNESS

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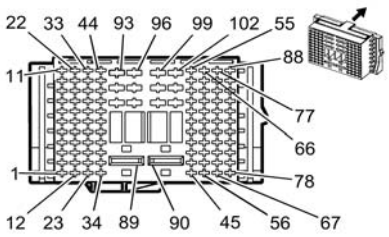
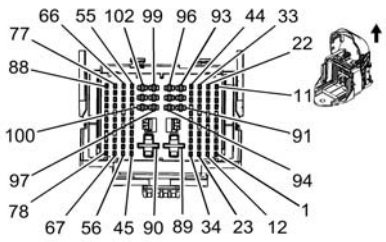
	
Connector Part Information • Harness Type: Body COAX • OEM Connector: 13581717 • Service Connector: Service by Cable Assembly - See Part Catalog • Description: 2-Way F Coax Type (BU)	Connector Part Information • Harness Type: Instrument Panel COAX • OEM Connector: 13581710 • Service Connector: Service by Cable Assembly - See Part Catalog • Description: 2-Way M Coax Type (BU)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
-	-	COAX	-	I	-	(GPS/Cell) Coaxial Antenna Cell/GPS combined Signal	-	-	COAX	-	I	-

INLINE HARNESS CONNECTOR END VIEWS > X275 INSTRUMENT PANEL HARNESS TO BODY HARNESS

	
Connector Part Information • Harness Type: Instrument Panel • OEM Connector: 24414905	Connector Part Information • Harness Type: Body • OEM Connector: 13582927

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• Service Connector: 13574784 • Description: 102-Way F 1.5, 2.5, 9.5 Series (BK)	• Service Connector: 19331025 • Description: 102-Way M 1.6, 2.8, 8.0 Mixed Series

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13575520	J-35616-22 (RD)	J-38125-221	962928-1	22	B	G
II	13575760	J-35616-14 (GN)	J-38125-560	964274-2	3	E	1
III	13578858	J-35616-4A (PU)	J-38125-36	964280-2	22	E	2
IV	13578858	J-35616-4A (PU)	J-38125-36	Not available	Not available	Not available	Not available
V	19300640	J-35616-14 (GN)	J-38125-560	964274-2	3	E	1
VI	13505359	J-35616-5 (PU)	J-38125-36	Not available	Not available	Not available	Not available
VII	13575529	J-35616-5 (PU)	J-38125-36	Not available	Not available	Not available	Not available
VIII	13575574	J-35616-5 (PU)	J-38125-36	Not available	Not available	Not available	Not available
IX	13575593	J-35616-34 (YE)	J-38125-560	964265-2	24	E	2
X	13575593	J-35616-34 (YE)	J-38125-560	964265-2	24	E	C
XI	13575739	J-35616-21 (RD)	J-38125-221	Not available	Not available	Not available	Not available

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	RD/BN	910	V	C70	-	1	0.35	RD/BN	910	IX	-
2	0.35	VT/GN	900	V	C70	-	2	0.35	WH/YE	900	IX	-
3	0.75	YE	512	II	-	Right Front Low Level Audio Signal	3	0.75	YE	512	X	UQ3+NKC
4	0.75	BU/BN	1546	II	-	Front Low Level Audio (-) Low Reference	4	0.75	BU/BN	1546	X	UQ3+NKC
5	0.5	RD/GN	4440	II	-	Battery Positive Voltage	5	0.5	RD/GN	4440	IX	-
6 - 9	-	-	-	-	-	Not Occupied	6 - 9	-	-	-	-	-

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10	0.75 0.75	WH BN/WH	46 546	II	- -	Right Rear Speaker Control (+) Right Rear Low Level Audio Signal	10	0.75 0.75	WH BN/WH	46 546	X	UQ3-NKC UQ3+NKC
11	0.75 0.75	BU/BK BU/BK	115 1946	II	- -	Right Rear Speaker Signal (-) Right Rear Low Level Audio (-) Low Reference	11	0.75 0.75	BU/BK BU/BK	115 1946	X	UQ3-NKC UQ3+NKC
12 - 14	-	-	-	-	-	Not Occupied	12 - 14	-	-	-	-	-
15	0.75	BU/VT	807	II	N06	OFF /Accessory Ignition Voltage	15	0.35	BU/VT	807	IX	N06
16 - 26	-	-	-	-	-	Not Occupied	16 - 26	-	-	-	-	-
27	0.35	VT/GY	139	V	-	Run/Crank Ignition 1 Voltage	27	0.35	VT/GY	139	IX	-
28	0.5	RD/BU	3940	II	-	Battery Positive Voltage	28	0.5	RD/BU	3940	IX	-
29	0.5	VT/WH	239	II	UVD	Run/Crank Ignition 1 Voltage	29	0.5	VT/WH	239	IX	UVD
30	0.75	RD/BN	2240	II	-	Battery Positive Voltage	30	0.75	RD/BN	2240	X	-
31	-	-	-	-	-	Not Occupied	31	-	-	-	-	-
32	0.35	BU	2500	V	-	High Speed GMLAN Serial Data (+) (1)	32	0.35	BU	2500	IX	-
33 - 36	-	-	-	-	-	Not Occupied	33 - 36	-	-	-	-	-
37	0.35	VT/WH	1139	V	-	Run/Crank Ignition 1 Voltage	37	0.35	VT/WH	1139	IX	-
38 - 39	-	-	-	-	-	Not Occupied	38 - 39	-	-	-	-	-
40	0.35	BN/VT	193	V	-	Rear Defog Relay Control	40	0.35	BN/VT	193	IX	-
41 - 42	-	-	-	-	-	Not Occupied	41 - 42	-	-	-	-	-

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43	0.35	WH	2501	V	-	High Speed GMLAN Serial Data (-) (1)	43	0.35	WH	2501	IX	-
44 - 45	-	-	-	-	-	Not Occupied	44 - 45	-	-	-	-	-
46	0.5	BU/YE	7574	II	-	Electric Variable Displacement Control	46	0.5	BU/YE	7574	IX	-
47	0.35	BN/WH	419	V	-	Check Engine Indicator Control	47	0.35	BN/WH	419	IX	-
48	0.35	BK/BN	6045	V	-	Steering Angle Sensor Low Reference	48	0.5	BK/BN	6045	IX	-
49	0.35	VT/GY	539	V	(D31+UE1/UI3) /(DD8)/(TR6)	Run/Crank Ignition 1 Voltage	49	0.5	VT/GY	539	IX	-
50 - 51	-	-	-	-	-	Not Occupied	50 - 51	-	-	-	-	-
52	0.5	BU/BN	7573	II	-	Electric Variable Displacement Supply	52	0.5	BU/BN	7573	IX	-
53 - 56	-	-	-	-	-	Not Occupied	53 - 56	-	-	-	-	-
57	0.75	RD/GY	4140	II	N06	Battery Positive Voltage	57	0.75	RD/GY	4140	X	N06
58 - 59	-	-	-	-	-	Not Occupied	58 - 59	-	-	-	-	-
60	0.35	RD	40	V	-	Battery Positive Voltage	60	0.35	RD	40	IX	-
61	0.35	BK/BU	61	V	LT1/LT4	Outside Ambient Temperature Sensor Low Reference	61	0.35	BK/BU	61	IX	LT1/LT4
62	0.5	BK/WH	1751	II	-	Signal Ground	62	0.35	BK/WH	1751	IX	-
63 - 64	-	-	-	-	-	Not Occupied	63 - 64	-	-	-	-	-
65	0.35	BU/GY	636	V	LT1/LT4	Outside Ambient Air Temperature Sensor Signal	65	0.35	BU/GY	636	IX	LT1/LT4

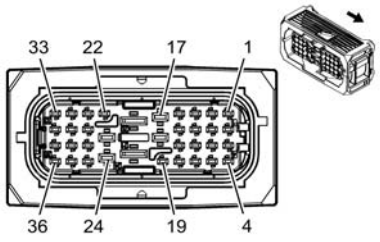
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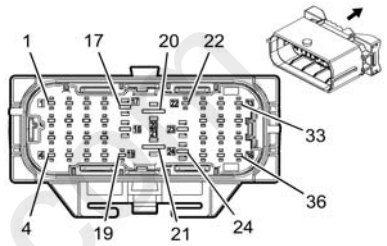
66 - 70	-	-	-	-	-	Not Occupied	66 - 70	-	-	-	-	-
71	0.75	RD/VT	4040	II	-	Battery Positive Voltage	71	0.75	RD/VT	4040	X	-
72 - 81	-	-	-	-	-	Not Occupied	72 - 81	-	-	-	-	-
82	0.35	WH	121	V	-	Engine Speed Signal	82	0.35	WH	121	IX	-
83	0.35	RD/YE	3040	V	-	Battery Positive Voltage	83	0.35	RD/YE	3040	IX	-
84 - 86	-	-	-	-	-	Not Occupied	84 - 86	-	-	-	-	-
87	0.5	RD/VT	3340	II	-	Battery Positive Voltage	87	0.5	RD/YE	3040	IX	-
88	-	-	-	-	-	Not Occupied	88	-	-	-	-	-
89	2.5	RD/VT	542	I	-	Battery Positive Voltage	89	2.5	RD/VT	542	XI	-
90 - 91	-	-	-	-	-	Not Occupied	90 - 91	-	-	-	-	-
92	0.75 1	YE/BK VT/BN	117 1952	IV	- UQA+A1BC	Right Front Speaker Signal (-) (1) Right Front Tweeter Speaker (-) Low Reference	92	0.75 1	YE/BK VT/BN	117 1952	VI	- -
93	2	RD/VT	340	IV	-	Battery Positive Voltage	93	1.5	RD/VT	340	VIII	-
94	-	-	-	-	-	Not Occupied	94	-	-	-	-	-
95	0.75 1	YE BN/GN	200 1852	IV	- UQA+A1BC	Right Front Speaker Control (+) (1) Right Front Tweeter Speaker Control (+)	95	0.75 1	YE BN/GN	200 1852	VI	- -
96	-	-	-	-	-	Not Occupied	96	-	-	-	-	-
97	0.35 0.35	YE BU/YE	6105 6105	III	- -	High Speed GMLAN Serial Data (+) (2)	97	0.35	BU/YE	6105	VII	-
98	0.35	WH	6106	III	-	High Speed GMLAN Serial Data (-) (2)	98	0.35	WH	6106	VII	-

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99	-	-	-	-	-	Not Occupied	99	-	-	-	-	-
100	2.5	RD/GY	642	IV	-	Battery Positive Voltage	100	2.5	RD/GY	642	VIII	-
101	1.5	RD/GY	2140	IV	-	Battery Positive Voltage	101	1.5	RD/GY	2140	VIII	-
102	1.5	RD/BU	2540	IV	-	Battery Positive Voltage	102	1.5	RD/BU	2540	VIII	-

INLINE HARNESS CONNECTOR END VIEWS > X310 DRIVER SEAT HARNESS TO BODY HARNESS ()





Connector Part Information

- Harness Type: Driver Seat
- OEM Connector: 13929980
- Service Connector: Service by Harness - See Part Catalog
- Description: 36-Way F 1.5, 2.8 CTS, 6.3 MCP Series (BK)

Connector Part Information

- Harness Type: Body
- OEM Connector: 13930004
- Service Connector: 19330685
- Description: 36-Way M 1.5, 2.8, 5.8 Series, Sealed

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	13575380	J-35616-3 (GY)	J-38125-560	Not Available	Not Available	Not Available	Not Available
III	13578881	J-35616-5 (PU)	J-38125-36	Not Available	Not Available	Not Available	Not Available
IV	13578882	J-35616-3 (GY)	J-38125-560	Not Available	Not Available	Not Available	Not Available
V	19332367	J-35616-3 (GY)	J-38125-560	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option

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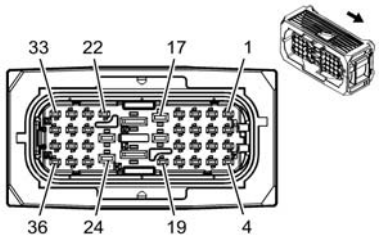
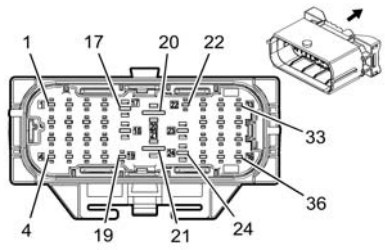
1	0.5	RD/WH	2040	I	A45	Battery Positive Voltage	1	0.5	RD/WH	2040	II	A45
2	-	-	-	-	-	Not Occupied	2	-	-	-	-	-
3	0.35	BK/OG	1363	I	-	Driver Seat Belt Switch Low Reference	3	0.35	BK/OG	1363	IV	-
4	0.35	OG/BN	238	I	-	Driver Seat Belt Switch Signal	4	0.35	OG/BN	238	IV	-
5	0.35	OG/GN	5055	I	-	Driver Seat Position Switch Signal	5	0.35	OG/GN	5055	IV	-
6	-	-	-	-	-	Not Occupied	6	-	-	-	-	-
7	0.35	BU/GN	614	I	A45	Memory Seat Switch Set Signal	7	0.35	BU/GN	614	IV	A45
8	0.35	WH	615	I	A45	Memory Seat Switch Signal 1	8	0.35	WH	615	IV	A45
9	0.35	GN	5060	I	A45	Low Speed GMLAN Serial Data	9	0.35	GN	5060	IV	A45
10	0.35	BK/BU	5978	I	A45	Memory Switch Low Reference	10	0.35	BK/BU	5978	IV	A45
11	0.35	OG/YE	3481	I	-	Driver Seat Belt Anchor Pretensioner High Control	11	0.35	OG/YE	3481	V	-
12	0.35	VT/OG	3482	I	-	Driver Seat Belt Anchor Pretensioner Low Control	12	0.35	VT/OG	3482	V	-
13 - 14	-	-	-	-	-	Not Occupied	13 - 14	-	-	-	-	-
15	0.35	OG/BU	3068	I	-	Driver Side Impact Module High Control	15	0.35	OG/BU	3068	V	-
16	0.35	GN/OG	3069	I	-	Driver Side Impact Module Low Control	16	0.35	GN/OG	3069	V	-
17	2.5	BK	2150	I	-	Ground	17	2.5	BK	2150	III	-
18 - 23	-	-	-	-	-	Not Occupied	18 - 23	-	-	-	-	-

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24	2.5	RD/YE	5040	I	-	Battery Positive Voltage	24	2.5	RD/YE	5040	III	-
25	0.35	GN/VT	5906	I	KA1+KQV	Driver Seat Vent Motor Control 1	25	0.35	GN/VT	5906	IV	KA1+KQV
26	0.5	BN/VT	2077	I	KA1	Driver Heated Seat Element Control	26	0.5	BN/VT	2077	II	KA1
27	0.5	BN/BK	2078	I	KA1	Driver Heated Seat Element Low Reference	27	0.5	BN/BK	2078	II	KA1
28 - 29	-	-	-	-	-	Not Occupied	28 - 29	-	-	-	-	-
30	0.35	BU	2425	I	KA1	Driver Heated Back NTC Signal	30	0.35	BU	2425	IV	KA1
31	0.35	BK/YE	2080	I	KA1	Driver Heated Seat NTC Low Reference	31	0.35	BK/YE	2080	IV	KA1
32	0.35	YE/GY	2079	I	KA1	Driver Heated Seat NTC Signal	32	0.35	YE/GY	2079	IV	KA1
33	0.35	GN/WH	7530	I	A45	Local Interconnect Network Serial Data Bus 8	33	0.35	GN/WH	7530	IV	A45
34 - 35	-	-	-	-	-	Not Occupied	34 - 35	-	-	-	-	-
36	0.5	VT/BK	739	I	KA1+KQV	Run/Crank Ignition 1 Voltage	36	0.5	VT/BK	739	II	KA1+KQV

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INLINE HARNESS CONNECTOR END VIEWS > X320 PASSENGER SEAT HARNESS TO BODY HARNESS ()

	
Connector Part Information • Harness Type: Passenger Seat	Connector Part Information • Harness Type: Body

- OEM Connector: 13929980
- Service Connector: Service by Harness - See Part Catalog
- Description: 36-Way F 1.5, 2.8 CTS, 6.3 MCP Series (BK)

- OEM Connector: 13930004
- Service Connector: 19330685
- Description: 36-Way M 1.5, 2.8, 5.8 Series, Sealed

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	13575380	J-35616-3 (GY)	J-38125-560	Not Available	Not Available	Not Available	Not Available
III	13575425	J-35616-5 (PU)	J-38125-36	Not Available	Not Available	Not Available	Not Available
IV	13576397	J-35616-34 (YE)	J-38125-560	964265-2	Lear 28	E	2
V	13578881	J-35616-5 (PU)	J-38125-36	Not Available	Not Available	Not Available	Not Available
VI	13578882	J-35616-3 (GY)	J-38125-560	Not Available	Not Available	Not Available	Not Available
VII	19332367	J-35616-3 (GY)	J-38125-560	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1 - 2	-	-	-	-	-	Not Occupied	1 - 2	-	-	-	-	-
3	0.35	BK/OG	1361	I	-	Passenger Seat Belt Switch Low Reference	3	0.35	BK/OG	1361	VI	-
4	0.35	OG/VT	1362	I	-	Passenger Seat Belt Switch Signal	4	0.35	OG/VT	1362	VI	-
5	0.35	OG/BU	5056	I	-	Passenger Seat Position Switch Signal	5	0.35	OG/BU	5056	VI	-
6	0.35	BN/OG	3067	I	-	Passenger Side Impact Module Low Control	6	0.35	BN/OG	3067	VII	-
7	0.35	BK/OG	1361	I	-	Passenger Seat Belt Switch Low Reference	7	0.35	BK/OG	1361	VI	-

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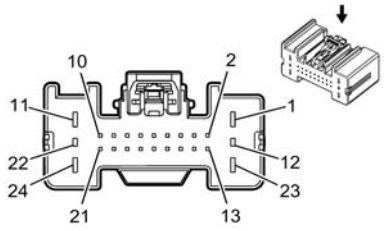
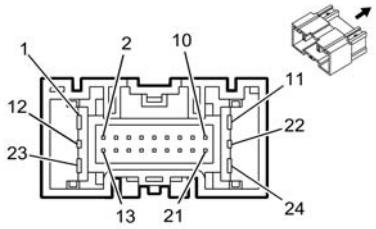
8	0.35	GN/BU	6133	I	KA1	Local Interconnect Network Serial Data Bus 2	8	0.35	GN/BU	6133	IV	KA1
9	0.35	GN	5060	I	-	Low Speed GMLAN Serial Data	9	0.35	GN	5060	IV	-
10	0.35	OG/GY	3066	I	-	Passenger Side Impact Module High Control	10	0.35	OG/GY	3066	VII	-
11	0.35	OG/VT	1362	I	-	Passenger Seat Belt Switch Signal	11	0.35	OG/VT	1362	VI	-
12	0.5	VT/BK	739	I	KA1+KQV	Run/Crank Ignition 1 Voltage	12	0.5	VT/BK	739	II	KA1+KQV
13	0.35	OG/BN	3479	I	-	Passenger Seat Belt Anchor Pretensioner High Control	13	0.35	OG/BN	3479	VII	-
14	0.35	GY/OG	3480	I	-	Passenger Seat Belt Anchor Pretensioner Low Control	14	0.35	GY/OG	3480	VII	-
15	0.5	GY/OG	3946	I	-	Automatic Locking Retractor Switch Low Reference	15	0.5	GY/OG	3946	II	-
16	0.5	OG/BN	3947	I	-	Automatic Locking Retractor Switch Signal	16	0.5	OG/BN	3947	II	-
17	1	VT/WH	639	I	KA1+KQV+UVC	Run/Crank Ignition 1 Voltage	17	1	VT/WH	639	III	KA1+KQV+UVC
18	1	RD/BU	5240	I	KA1	Battery Positive Voltage	18	1	RD/BU	5240	III	KA1
19 - 22	-	-	-	-	-	Not Occupied	19 - 22	-	-	-	-	-
23	2.5	BK	2250	I	-	Ground	23	2.5	BK	2250	V	-
24	2.5	RD/GY	1042	I	-	Battery Positive Voltage	24	2.5	RD/GY	1042	V	-
25	0.35	GN/VT	5906	I	KA1+KQV	Driver Seat Vent Motor	25	0.35	GN/VT	5906	VI	KA1+KQV

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						Control 1						
26	-	-	-	-	-	Not Occupied	26	-	-	-	-	-
27	0.35	BU	2425	I	KA1	Driver Heated Back NTC Signal	27	0.35	BU	2425	VI	KA1
28	0.5	BN/BK	2078	I	KA1	Driver Heated Seat Element Low Reference	28	0.5	BN/BK	2078	II	KA1
29	-	-	-	-	-	Not Occupied	29	-	-	-	-	-
30	0.35	RD/GN	4440	I	-	Battery Positive Voltage	30	0.35	RD/GN	4440	VI	-
31	0.35	BK/YE	2080	I	KA1	Driver Heated Seat NTC Low Reference	31	0.35	BK/YE	2080	VI	KA1
32	-	-	-	-	-	Not Occupied	32	-	-	-	-	-
33	0.35	BK/WH	1751	I	-	Signal Ground	33	0.35	BK/WH	1751	IV	-
34	-	-	-	-	-	Not Occupied	34	-	-	-	-	-
35	0.35	YE/GY	2079	I	KA1	Driver Heated Seat NTC Signal	35	0.35	YE/GY	2079	VI	KA1
36	0.5	BN/VT	2077	I	KA1	Driver Heated Seat Element Control	36	0.5	BN/VT	2077	II	KA1

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INLINE HARNESS CONNECTOR END VIEWS > X330 FLOOR CONSOLE HARNESS TO BODY HARNESS

	
Connector Part Information • Harness Type: Floor Console • OEM Connector: 13581061 • Service Connector: Service by Harness - See Part	Connector Part Information • Harness Type: Body • OEM Connector: 13581063 • Service Connector: 13581063

Catalog • Description: 24-Way F 0.64, 1.5, 2.8 Series (BK)	• Description: 24-Way M 0.64, 1.5, 2.8 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 Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-35 (VT)	Not Required	Not Required	Not Required	Not Required	Not Required
III	Not Required	J-35616-64B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required
IV	13575818	J-35616-3 (GY)	J-38125-553	Not available	Not available	Not available	Not available
V	13575821	J-35616-5 (PU)	J-38125-11A	7114-4110-02	9	E	C
VI	13575823	J-35616-5 (PU)	J-38125-11A	7114-4111-02	10	C	A
VII	13578907	J-35616-3 (GY)	J-38125-553	Not available	Not available	Not available	Not available
VIII	19333326	J-35616-65B (LT BU)	J-38125-12A	Not available	Not available	Not available	Not available

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	GN	4512	II	K4C	Wireless Charging System Charge Indicator Control	1	0.35	GN	4512	V	K4C
2	0.35	VT	4601	III	K4C	Retained Accessory Power Fused Control	2	0.35	VT	4601	VIII	K4C
3	0.35	GY/VT	755	III	M5T/M5U/MGL	RAP Relay Coil Control	3	0.35	GY/VT	755	VIII	-
4	0.35	WH/VT	4108	III	-	Driver Mode Switch Signal	4	0.35	WH/VT	4108	VIII	-
5	0.35	GY	4109	III	-	Driver Mode Switch 5 Volt Reference	5	0.35	GY	4109	VIII	-
6	-	-	-	-	-	Not Occupied	6	-	-	-	-	-
7	0.5	BK	2250	III	-	Ground	7	0.5	BK	2250	VIII	-

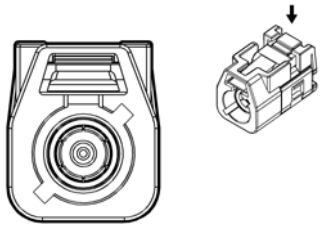
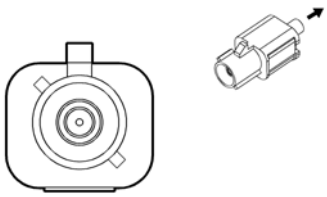
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8 - 10	-	-	-	-	-	Not Occupied	8 - 10	-	-	-	-	-
11	1	BK	2250	II	-	Ground	11	1	BK	2250	VI	-
12	0.35	YE	1492	I	J77	Park Brake Switch Supply Voltage	12	0.35	YE	1492	IV	-
13	0.35	YE/RD	7683	III	J77	Park Brake Release Switch Voltage Reference	13	0.35	YE/RD	7683	VIII	-
14	0.35	BU/BK	6108	III	J77	Park Brake Release Switch Signal	14	0.35	BU/BK	6108	VIII	-
15	0.35	GN/BU	6133	III	M5U/M5T/MGL	Local Interconnect Network Serial Data Bus 2	15	0.35	GN/BU	6133	VIII	-
16	-	-	-	-	-	Not Occupied	16	-	-	-	-	-
17	0.35	BN	6107	III	J77	Park Brake Apply Switch Signal	17	0.35	BN	6107	VIII	-
18	0.35	GY/RD	7684	III	J77	Park Brake Apply Switch Voltage Reference	18	0.35	GY/RD	7684	VIII	-
19	0.35	BU/VT	1134	III	J77	Park Brake Switch Signal	19	0.35	BU/VT	1134	VIII	-
20	0.35	BU	3554	III	-	Passive Start Interior Antenna 2 Signal Hi	20	0.35	BU	3554	VIII	-
21	0.35	GY/BK	3555	III	-	Passive Start Interior Antenna 2 Signal Lo	21	0.35	GY/BK	3555	VIII	-
22	1	VT	1001	I	-	Retained Accessory Power Ignition	22	1.5	VT	1001	VII	-
23 - 24	-	-	-	-	-	Not Occupied	23 - 24	-	-	-	-	-

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INLINE HARNESS CONNECTOR END VIEWS > X341 BODY HARNESS TO INSTRUMENT PANEL

HARNESS

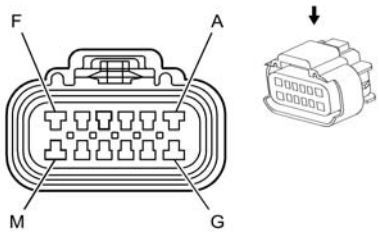
	
Connector Part Information • Harness Type: Body COAX • OEM Connector: 13586875 • Service Connector: Service by Cable Assembly - See Part Catalog • Description: 1-Way F Coax Type (BU)	Connector Part Information • Harness Type: Instrument Panel COAX • OEM Connector: 13580569 • Service Connector: Service by Cable Assembly - See Part Catalog • Description: 1-Way M Coax Type (BU)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
-	-	COAX	-	I	-	(GPS only) Coaxial Antenna GPS Signal	-	-	COAX	-	I	-

INLINE HARNESS CONNECTOR END VIEWS > X350 BODY HARNESS TO FUEL TANK HARNESS

	-
Connector Part Information • Harness Type: Body • OEM Connector: 19177597	Connector Part Information • Harness Type: Fuel Tank • OEM Connector: Not Available

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- Service Connector: 88988440
- Description: 12-Way F 150, 280 GT Series, Sealed (BK)

- Service Connector: Service by Harness - See Part Catalog
- Description: 12-Way M

Terminal Part Information

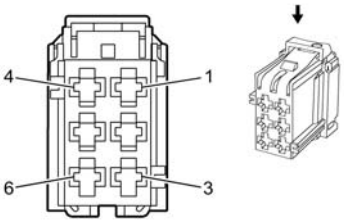
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13575412	J-35616-2A (GY)	J-38125-553	Not available	Not available	Not available	Not available
II	13576356	J-35616-4A (PU)	J-38125-553	15304719	14	E	5
III	13576356	J-35616-4A (PU)	J-38125-553	Not available	Not available	Not available	Not available
IV	13579782	J-35616-4A (PU)	J-38125-553	Not available	Not available	Not available	Not available
V	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

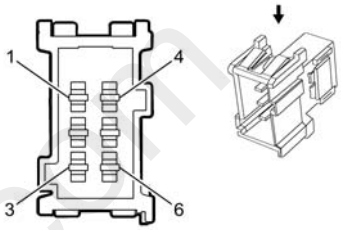
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
A - C	-	-	-	-	-	Not Occupied	A - C	-	-	-	-	-
D	0.35 0.5	BK/YE BK/WH	7447 2151	I	- LGX-NPP	Fuel Line Pressure Sensor Low Reference Signal Ground	D	0.35 0.5	BK/YE BK/WH	7447 2151	V	- LGX-NPP
E	0.5	BU	7443	I	-	Fuel System Control Module Shield Ground Extension	E	0.5	BU	7443	V	-
F	2 2.5	GY GY	120 120	IV	- -	Fuel Pump Control	F	2 2.5	GY GY	120 120	V	- -
G	0.35 0.35	BU/WH BU/WH	1937 1937	II III	- -	Secondary Fuel Level Sensor Signal	G	0.35	BU/WH	1937	V	-
H	0.35 0.5	BU/WH BU/WH	7446 7446	I	- LGX-NPP	Fuel Line Pressure Sensor Signal	H	0.35 0.5	BU/WH BU/WH	7446 7446	V	- LGX-NPP
J	0.35 0.5	BN/RD BN/RD	7445 7445	I	- LGX-NPP	Fuel Line Pressure Sensor 5 Volt	J	0.35 0.5	BN/RD BN/RD	7445 7445	V	- LGX-NPP

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						Reference						
K	0.35	BU/VT	1589	I	-	Primary Fuel Level Sensor Signal	K	0.35	BU/VT	1589	V	-
L	0.35	BK/WH	2151	I	-	Signal Ground	L	0.35	BK/WH	2151	V	-
M	2 2.5	BK/GN BK/GN	1580 1580	IV	- -	Fuel Pump Low Reference	M	2 2.5	BK/GN BK/GN	1580 1580	V	- -

INLINE HARNESS CONNECTOR END VIEWS > X359 FOLDING TOP HARNESS TO HEADER LATCH JUMPER (CM8)





Connector Part Information

- Harness Type: Folding Top
- OEM Connector: 8-0968970-1
- Service Connector: Service by Harness - See Part Catalog
- Description: 6-Way F

Connector Part Information

- Harness Type: Header Latch Jumper
- OEM Connector: 1-0965641-1
- Service Connector: Service by Harness - See Part Catalog
- Description: 6-Way M

Terminal Part Information

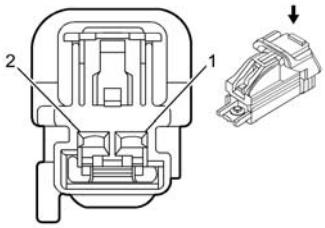
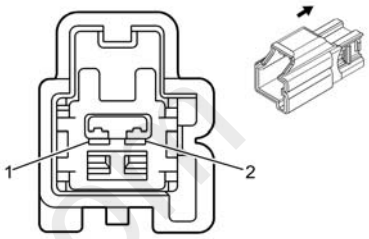
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	2.5	RD	931	I	-	-	1	2.5	RD	931	II	-
2	2.5	BK	930	I	-	-	2	2.5	BK	930	II	-
4	0.5	BN	7162	I	-	Left Latch Sensor Retractable Roof Open	4	0.5	BN	7162	II	-

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						Signal						
5	0.5	BN	7163	I	-	Right Latch Sensor Retractable Roof Open Signal	5	0.5	BN	7163	II	-
6	0.5	YE	3249	I	-	Folding Top Position Sensor Control	6	0.5	YE	3249	II	-

INLINE HARNESS CONNECTOR END VIEWS > X399 BODY HARNESS TO BODY HARNESS

	
Connector Part Information • Harness Type: Body • 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

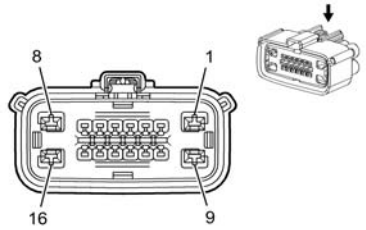
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-3 (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

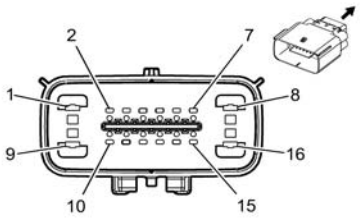
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	GY/VT	3998	I	-	MOST Serial Data (+)	1	0.5	GY/VT	3998	II	-
2	0.5	WH/GN	3997	I	-	MOST Serial Data (-)	2	0.5	WH/GN	3997	II	-

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Service Manual: WIRING SYSTEMS AND POWER MANAGEMENT -
INLINE HARNESS CONNECTOR END VIEWS - X405 TO X610

INLINE HARNESS CONNECTOR END VIEWS > X405 BODY HARNESS TO REAR CHASSIS HARNESS





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: Rear Chassis
- OEM Connector: 13593409
- Service Connector: Service by Harness - See Part Catalog
- 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	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13505803	J-35616-35 (VT)	J-38125-12A	1326030-8	13	4	D
II	19300635	J-35616-2A (GY)	J-38125-217	Not available	Not available	Not available	Not available
III	Not Required	J-35616-3 (GY)	Not Required	Not Required	Not Required	Not Required	Not Required
IV	Not Required	J-35616-5 (PU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	2.5 2.5	WH RD/VT	2001 1640	I	J71 J77	Park Brake Motor Apply Left Rear Control Battery Positive Voltage	1	2.5 2.5	WH RD/VT	2001 1640	IV	J71 J77
2	0.5	GY/BK	7127	II	-	Wheel Speed Sensor Control Left Rear	2	0.5	GY/BK	7127	III	-

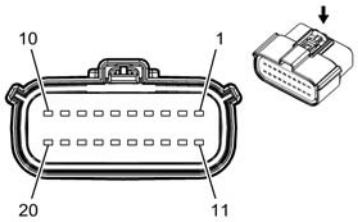
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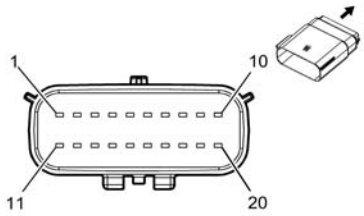
3	0.5	BU	884	II	-	Wheel Speed Sensor Signal Left Rear	3	0.5	BU	884	III	-
4	0.5	GY/YE	7128	II	-	Wheel Speed Sensor Control Right Rear	4	0.5	GY/YE	7128	III	-
5	0.5	VT	882	II	-	Wheel Speed Sensor Signal Right Rear	5	0.5	VT	882	III	-
6 - 7	-	-	-	-	-	Not Occupied	6 - 7	-	-	-	-	-
8	2.5	GY/BK	4369	I	J71	Park Brake Motor Low Reference Left Rear	8	2.5	GY/BK	4369	IV	J71
9	2.5 2.5	GN/VT BK	1988 2550	I	J71 J77	Park Brake Motor Apply Right Rear Control Ground	9	2.5 2.5	GN/VT BK	1988 2550	IV	J71 J77
10	0.75	VT/GN	2239	II	-	Run/Crank Ignition 1 Voltage	10	0.75	VT/GN	2239	III	(LGX+M5T+NPP)/(LT1-G96)
11	0.5	BU/WH	4306	II	-	Exhaust Flapper Valve 1 Feedback Signal	11	0.5	BU/WH	4306	III	(LGX+M5T+NPP)/(LT1-G96)
12	0.5	BN/GN	4305	II	-	Exhaust Flapper Valve Control 1	12	0.5	BN/GN	4305	III	(LGX+M5T+NPP)/(LT1-G96)
13	0.5	VT/YE	4317	II	-	Exhaust Flapper Valve 2 Feedback Signal	13	0.5	VT/YE	4317	III	(LGX+M5T+NPP)/(LT1-G96)
14	0.75	BK	2550	II	-	Ground	14	0.75	BK	2550	III	(LGX+M5T+NPP)/(LT1-G96)
15	-	-	-	-	-	Not Occupied	15	-	-	-	-	-
16	2.5	GY	4368	I	J71	Park Brake Motor Low	16	2.5	GY	4368	IV	J71

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						Reference Right Rear						

INLINE HARNESS CONNECTOR END VIEWS > X406 BODY HARNESS TO REAR CHASSIS 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 Chassis
- 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	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	19300635	J-35616-2A (GY)	J-38125-217	Not available	Not available	Not available	Not available
II	Not Required	J-35616-3 (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

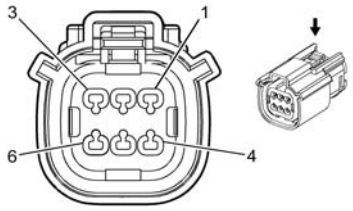
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	GN/GY	1216	I	F55	Right Rear Strut Position Sensor Signal	1	0.5	GN/GY	1216	II	F55
2	0.35	GN/RD	1214	I	F55	Right Rear Strut Position Sensor 5 Volt Reference	2	0.5	GN/RD	1214	II	F55
3	0.35	BK/YE	1215	I	F55	Right Rear Strut Position Sensor Low Reference	3	0.5	BK/YE	1215	II	F55
4	0.35	GN/WH	1210	I	F55	Left Rear Strut Position Sensor Signal	4	0.5	GN/WH	1210	II	F55
5	0.35	YE/RD	1208	I	F55	Left Rear Strut Position Sensor 5 Volt	5	0.5	YE/RD	1208	II	F55

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						Reference						
6	0.35	BK/GN	1209	I	F55	Left Rear Strut Position Sensor Low Reference	6	0.5	BK/GN	1209	II	F55
7	0.35	BU/VT	1134	I	J77	Park Brake Switch Signal	7	0.5	BU/VT	1134	II	J77
8	0.35	GY/RD	7684	I	J77	Park Brake Apply Switch Voltage Reference	8	0.5	GY/RD	7684	II	J77
9	0.35	BN	6107	I	J77	Park Brake Apply Switch Signal	9	0.5	BN	6107	II	J77
10	0.35	BU/BK	6108	I	J77	Park Brake Release Switch Signal	10	0.5	BU/BK	6108	II	J77
11	0.35	YE/RD	7683	I	J77	Park Brake Release Switch Voltage Reference	11	0.5	YE/RD	7683	II	J77
12	0.35	YE	1492	I	J77	Park Brake Switch Supply Voltage	12	0.5	YE	1492	II	J77
13	0.5	WH/BU	5986	I	J77	Serial Data Communication Enable	13	0.5	WH/BU	5986	II	J77
14	0.5	BU	2500	I	-	High Speed GMLAN Serial Data (+) (1)	14	0.5	BU	2500	II	J77
15	0.5	WH	2501	I	-	High Speed GMLAN Serial Data (-) (1)	15	0.5	WH	2501	II	J77
16 - 20	-	-	-	-	-	Not Occupied	16 - 20	-	-	-	-	-

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INLINE HARNESS CONNECTOR END VIEWS > E5E TAIL LAMP - LEFT



Connector Part Information

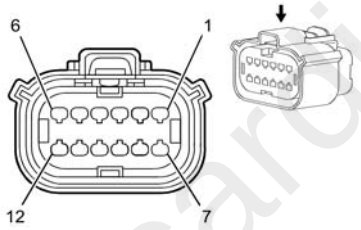
- Harness Type: Body
- OEM Connector: 19178149
- Service Connector: 13585853
- Description: 6-Way F 150 MX Series, Sealed (BK)

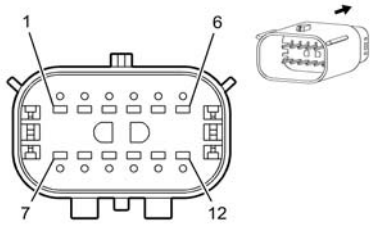
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75 0.5	BU/WH VT/WH	1334 5065	Left Rear Turn Signal Lamp Control Stop Lamp Relay Coil Control	I	- TW7
2	0.5	WH/VT	6567	Rear Turn Lamp Feedback Signal	I	WRS-TW7
3	0.5 0.75	GN/WH BU/WH	24 1334	Backup Lamp Control Left Rear Turn Signal Lamp Control	I	- TW7
4	0.75 0.5	BK BK	2550 2550	Ground	I	- WRS-TW7
5	0.5	VT/GY	709	Left Park Lamp Control	I	-
6	0.5 0.75	BK BK	2550 2550	Ground	I	- WRS-TW7

INLINE HARNESS CONNECTOR END VIEWS > X415 REAR FASCIA HARNESS TO BODY HARNESS (CM8)





Connector Part Information

- Harness Type: Rear Fascia
- 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: 33482-1201
- 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 Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

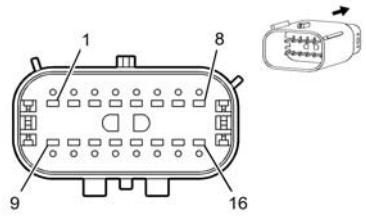
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II	19119440	J-35616-3 (GY)	J-38125-217	Not available	Not available	Not available	Not available

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1 - 2	-	-	-	-	-	Not Occupied	1 - 2	-	-	-	-	-
3	0.35	YE/VT	2378	I	UD7	Right Rear Corner Object Sensor Signal	3	0.35	YE/VT	2378	II	UD7
4	0.35	YE/WH	2377	I	UD7	Right Rear Middle Object Sensor Signal	4	0.35	YE/WH	2377	II	UD7
5	0.35	BK/GY	2379	I	UD7	Object Sensor Low Reference	5	0.35	BK/GY	2379	II	UD7
6 - 7	-	-	-	-	-	Not Occupied	6 - 7	-	-	-	-	-
8	0.35	BN/WH	2374	I	UD7	Object Sensor Control	8	0.35	BN/WH	2374	II	UD7
9	0.35	YE	2375	I	UD7	Left Rear Corner Object Sensor Signal	9	0.35	YE	2375	II	UD7
10	0.35	YE/BU	2376	I	UD7	Left Rear Middle Object Sensor Signal	10	0.35	YE/BU	2376	II	UD7
11 - 12	-	-	-	-	-	Not Occupied	11 - 12	-	-	-	-	-

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INLINE HARNESS CONNECTOR END VIEWS > X415 REAR FASCIA HARNESS TO BODY HARNESS (-CM8)

-	
Connector Part Information • Harness Type: Rear Fascia	Connector Part Information • Harness Type: Body

- OEM Connector: -CM8
- Service Connector: Service by Harness - See Part Catalog
- Description: 16-Way F

- OEM Connector: 33482-1602
- Service Connector: 19333320
- Description: 16-Way M 150 MX Series, Sealed (GY)

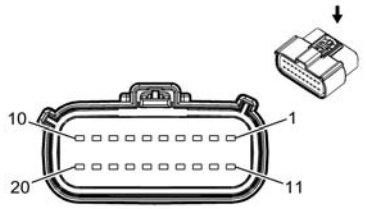
Terminal Part Information

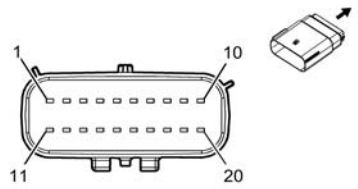
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	19119440	J-35616-3 (GY)	J-38125-217	Not available	Not available	Not available	Not available

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	BK	2550	I	(T4F-T90)/(-T4F)	Ground	1	0.5	BK	2550	II	(T4F-T90)/(-T4F)
2	0.35	VT/GN	1339	I	UVC	Run/Crank Ignition 1 Voltage	2	0.35	VT/GN	1339	II	UVC
3	0.35	BK/WH	1551	I	UVC	Signal Ground	3	0.35	BK/WH	1551	II	UVC
4	0.75	BK	2550	I	-	Ground	4	0.75	BK	2550	II	-
5	0.35	GN	5060	I	UKC	Low Speed GMLAN Serial Data	5	0.35	GN	5060	II	UKC
6	0.5	VT/GY	709	I	(T4F-T90)/(-T4F)	Left Park Lamp Control	6	0.5	VT/GY	709	II	(T4F-T90)/(-T4F)
7	0.5	GY/BN	309	I	(T4F-T90)/(-T4F)	Right Park Lamp Control	7	0.5	GY/BN	309	II	(T4F-T90)/(-T4F)
8	0.35	BN/WH	2374	I	UD7	Object Sensor Control	8	0.35	BN/WH	2374	II	UD7
9	0.35	YE	2375	I	UD7	Left Rear Corner Object Sensor Signal	9	0.35	YE	2375	II	UD7
10	0.35	YE/BU	2376	I	UD7	Left Rear Middle Object Sensor Signal	10	0.35	YE/BU	2376	II	UD7

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INLINE HARNESS CONNECTOR END VIEWS > X416 BODY HARNESS TO REAR FASCIA HARNESS (CM8)





Connector Part Information

- Harness Type: Body
- OEM Connector: 33472-2007
- Service Connector: 19300558
- Description: 20-Way F 150 MX Series, Sealed (L-GY)

Connector Part Information

- Harness Type: Rear Fascia
- OEM Connector: 13504370
- Service Connector: Service by Harness - See Part Catalog
- Description: 20-Way M 1.5 Series, Sealed (GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	19300635	J-35616-2A (GY)	J-38125-217	Not available	Not available	Not available	Not available
II	Not Required	J-35616-3 (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

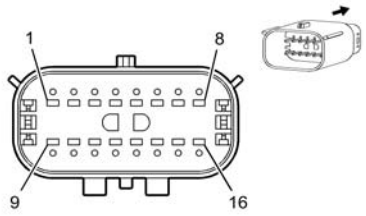
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	BN/GN	3568	I	-	Passive Entry Rear Closure Antenna Signal Hi	1	0.35	BN/GN	3568	II	-
2	0.35	GN/GY	3569	I	-	Passive Entry Rear Closure Antenna Signal Lo	2	0.35	GN/GY	3569	II	-
3	0.5	GN/YE	6846	I	-	Rear License Lamp Control	3	0.5	GN/YE	6846	II	-
4	0.35	RD/GN	3840	I	UKC	Battery Positive Voltage	4	0.35	RD/GN	3840	II	UKC
5	0.5	GY/YE	5853	I	UKC+DD1/DAZ	Driver Side Object Detection LED Signal (1)	5	0.35	GY/YE	5853	II	UKC
6	0.5	GY	5861	I	UKC+DD1/DAZ	Passenger Side Object	6	0.35	GY	5861	II	UKC

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						Detection LED Signal (1)						
7	0.5	YE/GY	122	I	T79	Rear Fog Lamp Control	7	0.5	YE/GY	122	II	T79
8	0.35	YE/BU	5797	I	-	Rear Closure Handle Switch Open Signal	8	0.5	YE/BU	5797	II	-
9	0.5	BK	2350	I	-	Ground	9	0.5	BK	2350	II	-
10	0.75	GN/WH	24	I	T79	Backup Lamp Control	10	0.75	GN/WH	24	II	T79
11	0.35	WH	6974	I	UVC	Camera Low Reference	11	0.35	WH	6974	II	UVC
12	0.35	GY/YE	6972	I	UVC	Camera Signal 2 +	12	0.35	GY/YE	6972	II	UVC
13	0.35	WH/BU	6973	I	UVC	Camera Signal 2	13	0.35	WH/BU	6973	II	UVC
14	0.5	BK	2550	I	(T4F-T90)/(-T4F)	Ground	14	0.5	BK	2550	II	(T4F-T90)/(-T4F)
15	0.35	VT/GN	1339	I	UVC	Run/Crank Ignition 1 Voltage	15	0.35	VT/GN	1339	II	UVC
16	0.35	BK/WH	1551	I	UVC	Signal Ground	16	0.35	BK/WH	1551	II	UVC
17	0.75	BK	2550	I	-	Ground	17	0.75	BK	2550	II	-
18	0.35	GN	5060	I	UKC	Low Speed GMLAN Serial Data	18	0.35	GN	5060	II	UKC
19	0.5	VT/GY	709	I	(T4F-T90)/(-T4F)	Left Park Lamp Control	19	0.5	VT/GY	709	II	(T4F-T90)/(-T4F)
20	0.5	GY/BN	309	I	(T4F-T90)/(-T4F)	Right Park Lamp Control	20	0.5	GY/BN	309	II	(T4F-T90)/(-T4F)

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INLINE HARNESS CONNECTOR END VIEWS > X416 REAR FASCIA HARNESS TO BODY HARNESS (-CM8)

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Connector Part Information • Harness Type: Rear Fascia • OEM Connector: -CM8 • Service Connector: Service by Harness - See Part Catalog • Description: 16-Way F	Connector Part Information • Harness Type: Body • OEM Connector: 13503544 • Service Connector: 19300393 • Description: 16-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 Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	19119440	J-35616-3 (GY)	J-38125-217	Not available	Not available	Not available	Not available

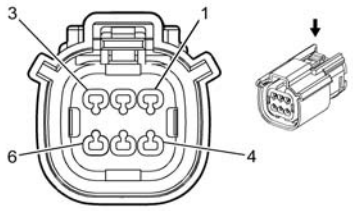
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	BN/GN	3568	I	-	Passive Entry Rear Closure Antenna Signal Hi	1	0.35	BN/GN	3568	II	-
2	0.35	GN/GY	3569	I	-	Passive Entry Rear Closure Antenna Signal Lo	2	0.35	GN/GY	3569	II	-
3	0.5	GN/YE	6846	I	-	Rear License Lamp Control	3	0.5	GN/YE	6846	II	-
4	0.35	RD/GN	3840	I	UKC	Battery Positive Voltage	4	0.35	RD/GN	3840	II	UKC
5	0.5	GY/YE	5853	I	A1BC+UKC+DD1/DAZ	Driver Side Object Detection LED Signal (1)	5	0.5	GY/YE	5853	II	A1BC+UKC+DD
6	0.5	GY	5861	I	A1BC+UKC+DD1/DAZ	Passenger Side Object	6	0.5	GY	5861	II	A1BC+UKC+DD

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						Detection LED Signal (1)						
7	0.5	YE/GY	122	I	T79	Rear Fog Lamp Control	7	0.5	YE/GY	122	II	T79
8	0.35	YE/BU	5797	I	-	Rear Closure Handle Switch Open Signal	8	0.35	YE/BU	5797	II	-
9	0.5	BK	2350	I	-	Ground	9	0.5	BK	2350	II	-
10	0.75	GN/WH	24	I	T79	Backup Lamp Control	10	0.75	GN/WH	24	II	T79
11	0.35	WH	6974	I	UVC	Camera Low Reference	11	0.35	WH	6974	II	UVC
12	0.35	GY/YE	6972	I	UVC	Camera Signal 2 +	12	0.35	GY/YE	6972	II	UVC
13	0.35	WH/BU	6973	I	UVC	Camera Signal 2	13	0.35	WH/BU	6973	II	UVC
14	0.35	YE/VT	2378	I	UD7	Right Rear Corner Object Sensor Signal	14	0.35	YE/VT	2378	II	UD7
15	0.35	YE/WH	2377	I	UD7	Right Rear Middle Object Sensor Signal	15	0.35	YE/WH	2377	II	UD7
16	0.35	BK/GY	2379	I	UD7	Object Sensor Low Reference	16	0.35	BK/GY	2379	II	UD7

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INLINE HARNESS CONNECTOR END VIEWS > E5F TAIL LAMP - RIGHT



Connector Part Information

- Harness Type: Body
- OEM Connector: 19178149
- Service Connector: 13585853

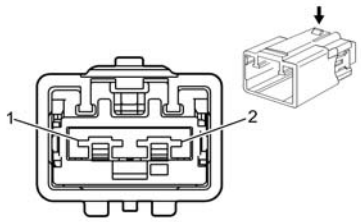
- Description: 6-Way F 150 MX Series, Sealed (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	0.75 0.5	BU/VT VT/WH	1335 5065	Right Rear Turn Signal Lamp Control Stop Lamp Relay Coil Control	I	- TW7
2	0.5	WH/BK	7544	Right Rear Turn Lamp Feedback Signal	I	WRS-TW7
3	0.5 0.75	GN/WH BU/VT	24 1335	Backup Lamp Control Right Rear Turn Signal Lamp Control	I	- TW7
4	0.75 0.5	BK BK	2450 2450	Ground	I	- WRS-TW7
5	0.5	GY/BN	309	Right Park Lamp Control	I	-
6	0.5 0.75	BK BK	2450 2450	Ground	I	- WRS-TW7

INLINE HARNESS CONNECTOR END VIEWS > X424 REAR DEFOGGER JUMPER HARNESS TO BODY HARNESS

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Connector Part Information • Harness Type: Rear Defogger Jumper • OEM Connector: Not Available • Service Connector: Service by Harness - See Part Catalog • Description: 2-Way F	Connector Part Information • Harness Type: Body • OEM Connector: 7282-6458-40 • Service Connector: 13577788 • Description: 2-Way M Kaizen YESC Series (L-GY)

Terminal Part Information

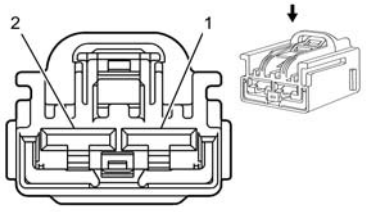
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal	Service Terminal	Tray	Core Crimp	Insulation Crimp

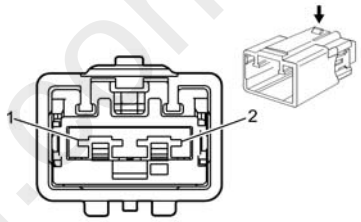
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			Tool				
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-43 (RD)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	2.5	BN/VT	293	I	A1AC	Rear Defog Element Control	1	2.5	BN/VT	293	II	A1AC
2	2.5	BK	1150	I	A1AC	Ground	2	2.5	BK	1150	II	A1AC

INLINE HARNESS CONNECTOR END VIEWS > X428 BODY HARNESS TO FOLDING TOP HARNESS





Connector Part Information

- Harness Type: Body
- OEM Connector: 7283-6458-40
- Service Connector: 88988507
- Description: 2-Way F 6.3 Series (L-GY)

Connector Part Information

- Harness Type: Folding Top
- OEM Connector: Not Available
- Service Connector: Service by Harness - See Part Catalog
- Description: 2-Way M

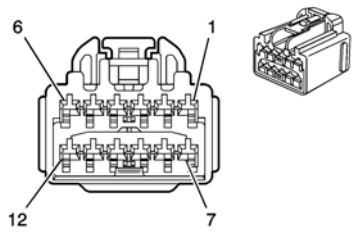
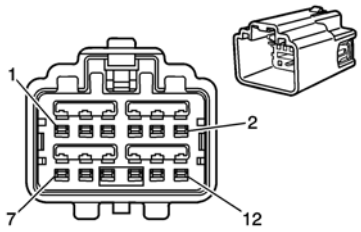
Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	J-35616-42 (RD)	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	4	RD/VT	842	I	CM8	Battery Positive Voltage	1	4	RD/VT	842	II	CM8
2	4	BK	1150	I	CM8	Ground	2	4	BK	1150	II	CM8

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INLINE HARNESS CONNECTOR END VIEWS > X429 FOLDING TOP HARNESS TO FOLDING TOP MOTOR ASSEMBLY (CM8)

	
Connector Part Information • Harness Type: Folding Top • OEM Connector: 13581054 • Service Connector: Service by Harness - See Part Catalog • Description: 12-Way F	Connector Part Information • Harness Type: Folding Top Motor Assembly • OEM Connector: 13583759 • Service Connector: Service by Harness - See Part Catalog • Description: 12-Way M

Terminal Part Information

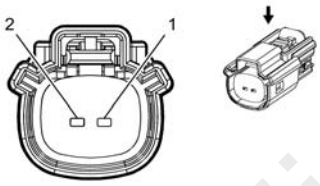
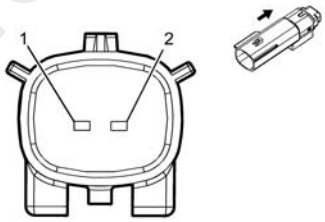
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray Name	Core Crimp	Insulation Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.5	BU	7087	I	-	Roof Door Module Pump Valve Manifold Roof Door Module Valve 1	1	0.5	BU	7087	II	-
2	0.5	WH	7091	I	-	Power Roof Module Roof Door Module Pump Valve 2	2	0.5	WH	7091	II	-
3	0.5	GN	7092	I	-	Roof Door Module Roof Door Module Pump Manifold Valve 3	3	0.5	GN	7092	II	-

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7	0.5	GY	163	I	-	Folding Top Motor Down Control	7	0.5	GY	163	II	-
8	0.5	BN	162	I	-	Folding Top Motor Up Control	8	0.5	BN	162	II	-
11	4.0	YE	7086	I	-	Roof Door Module Driver Door Window Regulator Signal	11	4.0	YE	7086	II	-
12	4.0	GY	7088	I	-	Roof Door Module Pass Door Window Regulator Signal	12	4.0	GY	7088	II	-

INLINE HARNESS CONNECTOR END VIEWS > X460 FUEL DOOR JUMPER HARNESS TO BODY HARNESS

	
Connector Part Information • Harness Type: Fuel Door Lock Jumper • OEM Connector: 33471-0206 • Service Connector: Service by Harness - See Part Catalog • Description: 2-Way F 1.5 Series, Sealed (BK)	Connector Part Information • Harness Type: Body • OEM Connector: 33481-0201 • Service Connector: 19119346 • Description: 2-Way M 1.5 MX Series, Sealed (BK)

Terminal Part Information

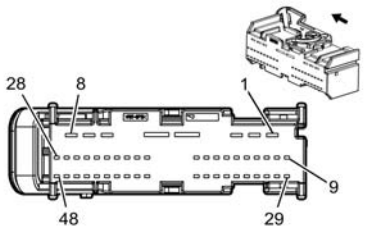
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-2A (GY)	Not Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-3 (GY)	Not Required	Not Required	Not Required	Not Required	Not Required

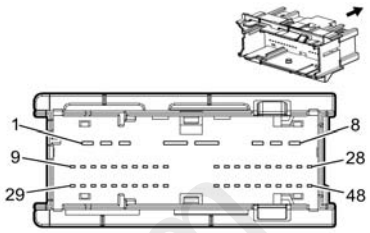
Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option

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1	0.75	BN/YE	294	I	A1BC+N08	Door Lock Actuator Unlock Control	1	0.75	BN/YE	294	II	A1BC+N08
2	0.75	BU	6800	I	A1BC+N08	Fuel Door Lock/Unlock (1) Signal	2	0.75	BU	6800	II	A1BC+N08

INLINE HARNESS CONNECTOR END VIEWS > X500 DRIVER DOOR HARNESS TO BODY HARNESS





Connector Part Information

- Harness Type: Driver Door
- OEM Connector: 13581977
- Service Connector: Service by Harness - See Part Catalog
- Description: 48-Way F 1.2 MLK, 2.8, 6.3 YESC Series (BK)

Connector Part Information

- Harness Type: Body
- OEM Connector: 7286-9414-30
- Service Connector: 13581976
- Description: 48-Way M 1.2 MLK, 2.8, 6.3 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 Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-35 (VT)	Not Required	Not Required	Not Required	Not Required	Not Required
III	Not Required	J-35616-42 (RD)	Not Required	Not Required	Not Required	Not Required	Not Required
IV	13575821	J-35616-5 (PU)	J-38125-11A	7114-4110-02	9	E	C
V	13575823	J-35616-5 (PU)	J-38125-11A	7114-4111-02	10	C	A
VI	13575823	J-35616-5 (PU)	J-38125-11A	Not available	Not available	Not available	Not available
VII	13575824	J-35616-5 (PU)	J-38125-11A	7114-4112-02	11	C	D
VIII	13578908	J-35616-5 (PU)	J-38125-11A	7114-4112-02	11	C	D
IX	13580023	J-35616-43 (RD)	J-38125-11A	7114-4122-02	23	A	B

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X	13580023	J-35616-43 (RD)	J-38125-11A	Not available	Not available	Not available	Not available
XI	19329749	J-35616-13 (BU)	J-38125-12A	Not available	Not available	Not available	Not available

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	1.5	BN/BU	118	II	-	Left Front Speaker Signal (-) (1)	1	2 3 0.75	BN/BU BN/BU BN/BU	118 118 118	VII VIII VI	UQA+A1BC UQA+A1AC -
2	1.5	BU	201	II	-	Left Front Speaker Control (+) (1)	2	2 3 0.75	BU BU BU	201 201 201	VII VIII VI	UQA+A1BC UQA+A1AC -
3	0.75	GY	5911	II	-	Door Lock Actuator Lock Control 2	3	1	GY	5911	V	-
4	4	BK	2150	III	-	Ground	4	4	BK	2150	IX	-
5	2.5	RD/BU	1842	III	-	Battery Positive Voltage	5	2.5	RD/BU	1842	X	-
6	0.5	BN/YE	2267	II	-	Mirror Heating Element Control	6	0.35	BN/YE	2267	IV	-
7						Battery Positive Voltage	7	2.5 0.5	RD/YE GY/YE	5040 5853	VII IV	A1BC UKC+DD1/DAZ
8	0.35	GN/BK	3396	II	-	Passenger Mirror Motor Right (+) Left (-) Control	8	0.35	GN/BK	3396	IV	-
9	0.35	YE/VT	3397	I	-	Passenger Mirror Motor Up (+) Down (-) Control	9	0.35	YE/VT	3397	XI	-
10	0.5	YE/WH	1690	I	-	Automatic Day/Night Mirror Signal	10	0.35	YE/WH	1690	XI	-
11	0.35	WH	3398	I	-	Passenger Mirror Motor Common Control	11	0.35	WH	3398	XI	-
12						-	12	0.35	RD/BN	910	XI	ZN2
13	0.35	GN/YE	6134	I	-	- Local Interconnect Network Serial Data Bus 3	13	0.35 0.35	WH/YE GN/YE	900 6134	XI	ZN2 A1BC
14	-	-	-	-	-	Not Occupied	14	-	-	-	-	-

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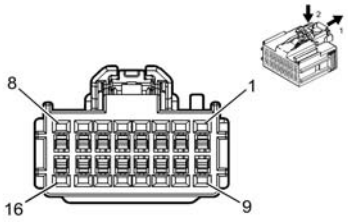
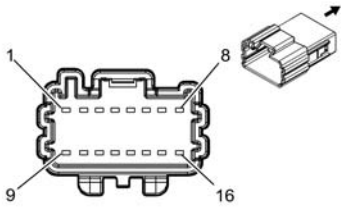
15	0.5	GY/YE	5853	I	-	Driver Side Object Detection LED Signal (1)	15	0.5	GY/YE	5853	XI	A1BC+UKC+DD1/DAZ
16	0.35	WH/YE	3574	I	-	Driver Door Open Switch Signal	16	0.35	WH/YE	3574	XI	-
17	0.35	BN/WH	781	I	-	Driver Door Lock Switch Unlock Signal	17	0.35	BN/WH	781	XI	-
18	0.35	BU/GN	614	I	-	Memory Seat Switch Set Signal	18	0.35	BU/GN	614	XI	-
19	0.35	BK/BU	5978	I	-	Memory Switch Low Reference	19	0.35	BK/BU	5978	XI	-
20	0.35	WH	615	I	-	Memory Seat Switch Signal (1)	20	0.35	WH	615	XI	-
21	0.35	BN/YE	780	I	-	Driver Door Lock Switch Lock Signal	21	0.35	BN/YE	780	XI	-
22	0.35	VT/BU	6189	I	-	Lift Glass/Rear Compartment Lid Interior Release Signal	22	0.35	VT	6189	XI	-
23	0.75	BN/YE	294	I	-	Door Lock Actuator Unlock Control	23	0.75	BN/YE	294	XI	-
24	0.5	BK	750	I	-	Ground	24	0.5	BK	750	XI	-
25	0.5	RD/VT	1940	I	-	Battery Positive Voltage	25	0.5	RD/VT	1940	XI	-
26	0.5	BK/YE	1691	I	-	Automatic Day/Night Mirror Low Reference	26	0.35	BK/YE	1691	XI	-
27	0.5	OG/GN	2132	I	-	Left Front Side Impact Sensing Module Signal	27	0.35	OG/GN	2132	XI	-
28	0.5	BK/OG	6628	I	-	Left Front Side Impact Sensing Module Low Reference	28	0.35	BK/OG	6628	XI	-
29	0.35	WH	6816	I	-	Indicator Dimming Control	29	0.35	WH	6816	XI	-

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30	0.35	YE	6817	I	-	LED Backlight Dimming Control	30	0.5	YE	6817	XI	-
31						Local Interconnect Network Serial Data Bus 3	31	0.35 0.5	GN/YE RD/WH	6134 2040	XI	- A1BC+A45
32	0.35	WH/YE	7557	I	-	LED Ambient Lighting Control 1	32	0.35	WH/YE	7557	XI	-
33	0.5	BU/WH	1314	I	-	Left Front Turn Signal Lamp Control	33	0.5	BU/WH	1314	XI	-
34 - 35	-	-	-	-	-	Not Occupied	34 - 35	-	-	-	-	-
36	0.5	GN/BK	3008	I	-	Noise Reduction Microphone 1 Low Reference	36	0.35	GN/BK	3008	XI	-
37	0.5	GN/BN	3005	I	-	Noise Reduction Microphone 1 Signal	37	0.35	GN/BN	3005	XI	-
38	0.35	GN/WH	7530	I	-	Local Interconnect Network Serial Data Bus 8	38	0.35	GN/WH	7530	XI	-
39	0.5	GN/WH	3570	I	-	Driver Door Handle Switch Signal	39	0.35	GN/WH	3570	XI	-
40	0.5	VT	3560	I	-	Passive Entry Driver Door Antenna Signal Hi	40	0.35	VT	3560	XI	-
41	0.5	VT/GY	3561	I	-	Passive Entry Driver Door Antenna Signal Lo	41	0.35	VT/GY	3561	XI	-
42	0.35	RD/BN	910	I	-	-	42	0.35	RD/BN	910	XI	A1BC+C70
43	0.35	WH/YE	900	I	-	-	43	0.35	WH/YE	900	XI	A1BC+C70
44 - 48	-	-	-	-	-	Not Occupied	44 - 48	-	-	-	-	-

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INLINE HARNESS CONNECTOR END VIEWS > X505 DRIVER DOOR HARNESS TO DRIVER DOOR TRIM HARNESS

	
Connector Part Information • Harness Type: Driver Door • OEM Connector: 6098-7733 • Service Connector: Service by Harness - See Part Catalog • Description: 16-Way F 1.2 Series (BK)	Connector Part Information • Harness Type: Driver Door Trim • OEM Connector: 6098-7725 • Service Connector: Service by Harness - See Part Catalog • Description: 16-Way M 1.2 Series (BK)

Terminal Part Information

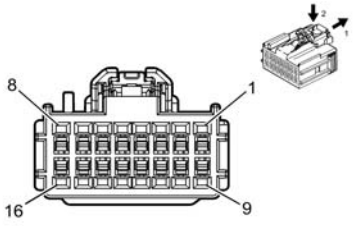
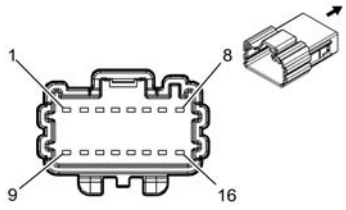
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-13 (BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	BN/WH	781	I	-	Driver Door Lock Switch Unlock Signal	1	0.35	BN/WH	781	II	-
2	0.35	BN/YE	780	I	-	Driver Door Lock Switch Lock Signal	2	0.35	BN/YE	780	II	-
3	0.35	YE	6817	I	-	LED Backlight Dimming Control	3	0.35	YE	6817	II	-
4	0.35	WH/VT	3270	I	-	Driver Door Lock Motor Status Signal	4	0.35	WH/VT	3270	II	-
5	0.35	BU/VT	1124	I	-	Door Lock Key Switch Unlock Signal	5	0.35	BU/VT	1124	II	-
6	0.35	WH	6816	I	-	Indicator Dimming Control	6	0.35	WH	6816	II	-
7	0.35	GN/YE	6134	I	-	Local Interconnect Network Serial Data Bus 3	7	0.35	GN/YE	6134	II	-

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8	0.35	WH/YE	7557	I	-	LED Ambient Lighting Control 1	8	0.35	WH/YE	7557	II	-
9	0.5	RD/VT	1940	I	-	Battery Positive Voltage	9	0.5	RD/VT	1940	II	-
10	0.35	VT/BU	6189	I	-	Lift Glass/Rear Compartment Lid Interior Release Signal	10	0.35	VT/BU	6189	II	-
11	0.35	GN/WH	3379	I	-	Power Window Switch Driver Up Signal	11	0.35	GN/WH	3379	II	-
12	0.35	GY	3380	I	-	Power Window Switch Driver Down Signal	12	0.35	GY	3380	II	-
13	0.35	GN	3381	I	-	Power Window Switch Driver Express Signal	13	0.35	GN	3381	II	-
14	0.35	VT/BU	3390	I	-B45	Driver Mirror Motor Up (+) Down (-) Control	14	0.35	VT/BU	3390	II	-B45
15	0.35	BN/BK	3389	I	-B45	Driver Mirror Motor Right (+) Left (-) Control	15	0.35	BN/BK	3389	II	-B45
16	0.75	BK	2150	I	-	Ground	16	0.75	BK	2150	II	-

INLINE HARNESS CONNECTOR END VIEWS > X506 DRIVER DOOR HARNESS TO DRIVER DOOR TRIM HARNESS

	
Connector Part Information • Harness Type: Driver Door • OEM Connector: 6098-7735 • Service Connector: Service by Harness - See Part Catalog • Description: 16-Way F 1.2 Series (GY)	Connector Part Information • Harness Type: Driver Door Trim • OEM Connector: 6098-7727 • Service Connector: Service by Harness - See Part Catalog • Description: 16-Way M 1.2 Series (GY)

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Terminal Part Information

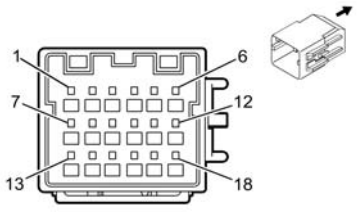
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-13 (BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
3	0.5	GN/BK	3008	I	-	Noise Reduction Microphone 1 Low Reference	3	0.5	GN/BK	3008	II	A1BC+UQA+NKC/NKE
4	0.5	GN/BN	3005	I	-	Noise Reduction Microphone 1 Signal	4	0.5	GN/BN	3005	II	A1BC+UQA+NKC/NKE
5	0.35 0.35	WH WH/YE	3398 3395	I	- A45+DD1/DAZ	Passenger Mirror Motor Common Control Driver Mirror Position Sensor Left (-) Right (+) Signal	5	0.35 0.35	WH WH/YE	3398 3395	II	-B45 A45+DD1/DAZ
6	0.35 0.35	GN/BK BK/BN	3396 3393	I	- A45+DD1/DAZ	Passenger Mirror Motor Right (+) Left (-) Control Driver Mirror Position Sensor Low Reference	6	0.35 0.35	GN/BK BK/BN	3396 3393	II	-B45 A45+DD1/DAZ
7	0.35 0.35	YE/VT VT/RD	3397 3392	I	- A45+DD1/DAZ	Passenger Mirror Motor Up (+) Down (-) Control Driver Mirror Position Sensor 5 Volt Reference	7	0.35 0.35	YE/VT VT/RD	3397 3392	II	-B45 A45+DD1/DAZ
8	0.35	GN/WH	7530	I	-	Local Interconnect Network Serial Data Bus 8	8	0.35	GN/WH	7530	II	A45+DD1/DAZ

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9	0.35	BU/GN	614	I	-	Memory Seat Switch Set Signal	9	0.35	BU/GN	614	II	A45
10	0.35	BK/BU	5978	I	-	Memory Switch Low Reference	10	0.35	BK/BU	5978	II	A45
11	0.35	WH	615	I	-	Memory Seat Switch Signal (1)	11	0.35	WH	615	II	A45
12	0.35	GY/BN	3394	I	A45+DD1/DAZ	Driver Mirror Position Sensor Up (+) Down (-) Signal	12	0.35	GY/BN	3394	II	A45+DD1/DAZ
13	0.35	BN/BK	3389	I	A45+DD1/DAZ	Driver Mirror Motor Right (+) Left (-) Control	13	0.35	BN/BK	3389	II	A45+DD1/DAZ
14	0.35	VT/BU	3390	I	A45+DD1/DAZ	Driver Mirror Motor Up (+) Down (-) Control	14	0.35	VT/BU	3390	II	A45+DD1/DAZ
15	0.35	YE/BN	3391	I	-	Driver Mirror Motor Common Control	15	0.35	YE/BN	3391	II	-
16	0.5	BK	2150	I	-	Ground	16	0.35	BK	2150	II	-

INLINE HARNESS CONNECTOR END VIEWS > X510 OUTSIDE REARVIEW MIRROR HARNESS TO DRIVER DOOR HARNESS

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Connector Part Information • Harness Type: Outside Rearview Mirror • OEM Connector: Not Available • Service Connector: Service by Harness - See Part Catalog • Description: 18-Way F	Connector Part Information • Harness Type: Driver Door • OEM Connector: 13583084 • Service Connector: Service by Harness - See Part Catalog • Description: 18-Way M 0.64 Series (BK)

Terminal Part Information

Terminal	Terminated	Diagnostic	Terminal	Service	Tray	Core	Insulation

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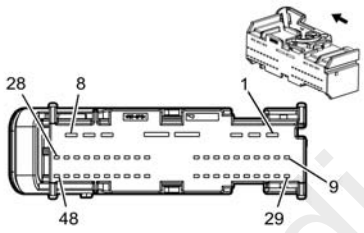
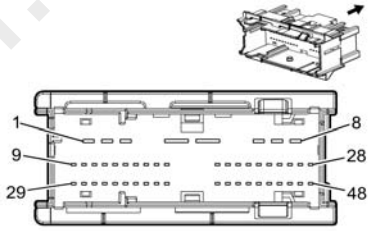
Type ID	Lead	Test Probe	Removal Tool	Terminal		Crimp	Crimp
I	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-65B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
2	0.5	YE/WH	1690	I	-	Automatic Day/Night Mirror Signal	2	0.5	YE/WH	1690	II	-
3	0.35	BK/BN	3393	I	A45+DD1/DAZ	Driver Mirror Position Sensor Low Reference	3	0.35	BK/BN	3393	II	A45+DD1/DAZ
5	0.5	BK	750	I	-	Ground	5	0.5	BK	750	II	-
7	0.35	WH/YE	3395	I	A45+DD1/DAZ	Driver Mirror Position Sensor Left (-) Right (+) Signal	7	0.35	WH/YE	3395	II	A45+DD1/DAZ
8	0.5	BN/YE	2267	I	-	Mirror Heating Element Control	8	0.5	BN/YE	2267	II	-
9	0.35	VT/BU	3390	I	-	Driver Mirror Motor Up (+) Down (-) Control	9	0.35	VT/BU	3390	II	-
10	0.35	BN/BK	3389	I	-	Driver Mirror Motor Right (+) Left (-) Control	10	0.35	BN/BK	3389	II	-
11	0.5	BK	2150	I	(A45+DAZ/DD1) /(-A45)	Ground	11	0.5	BK	2150	II	(A45+DAZ/DD1) /(-A45)
12	0.35	YE/BN	3391	I	-	Driver Mirror Motor Common Control	12	0.35	YE/BN	3391	II	-
13	0.5	BU/WH	1314	I	-	Left Front Turn Signal Lamp Control	13	0.5	BU/WH	1314	II	-
14	0.35	GY/BN	3394	I	A45+DD1/DAZ	Driver Mirror	14	0.35	GY/BN	3394	II	A45+DD1/DAZ

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						Position Sensor Up (+) Down (-) Signal						
15	0.5	GY/YE	5853	I	-	Driver Side Object Detection LED Signal (1)	15	0.5	GY/YE	5853	II	-
16	0.5	BK/YE	1691	I	-	Automatic Day/Night Mirror Low Reference	16	0.5	BK/YE	1691	II	-
17	0.35	VT/RD	3392	I	A45+DD1/DAZ	Driver Mirror Position Sensor 5 Volt Reference	17	0.35	VT/RD	3392	II	A45+DD1/DAZ

INLINE HARNESS CONNECTOR END VIEWS > X600 PASSENGER DOOR HARNESS TO BODY HARNESS

	
Connector Part Information • Harness Type: Passenger Door • OEM Connector: 13581977 • Service Connector: Service by Harness - See Part Catalog • Description: 48-Way F 1.2 MLK, 2.8, 6.3 YESC Series (BK)	Connector Part Information • Harness Type: Body • OEM Connector: 7286-9414-30 • Service Connector: 13581976 • Description: 48-Way M 1.2 MLK, 2.8, 6.3 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 Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-35 (VT)	Not Required	Not Required	Not Required	Not Required	Not Required
III	Not Required	J-35616-42 (RD)	Not Required	Not Required	Not Required	Not Required	Not Required

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IV	13575821	J-35616-5 (PU)	J-38125-11A	7114-4110-02	9	E	C
V	13575823	J-35616-5 (PU)	J-38125-11A	Not available	Not available	Not available	Not available
VI	13575824	J-35616-5 (PU)	J-38125-11A	7114-4112-02	11	C	D
VII	13578908	J-35616-5 (PU)	J-38125-11A	7114-4112-02	11	C	D
VIII	13580023	J-35616-43 (RD)	J-38125-11A	7114-4122-02	23	A	B
IX	13580023	J-35616-43 (RD)	J-38125-11A	Not available	Not available	Not available	Not available
X	19329749	J-35616-13 (BU)	J-38125-12A	Not available	Not available	Not available	Not available

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.75 1.5	YE/BK YE/BK	117 117	II	- -	Right Front Speaker Signal (-) (1)	1	0.75 2 3	YE/BK YE/BK YE/BK	117 117 117	V VI VII	- UQA+A1BC UQA+A1AC
2	0.75 1.5	YE YE	200 200	II	- -	Right Front Speaker Control (+) (1)	2	0.75 2 3	YE YE YE	200 200 200	V VI VII	- UQA+A1BC UQA+A1AC
3	-	-	-	-	-	Not Occupied	3	-	-	-	-	-
4	4	BK	2250	III	-	Ground	4	4	BK	2250	VIII	-
5	2.5	RD/WH	4042	III	-	Battery Positive Voltage	5	2.5	RD/WH	4042	IX	-
6	0.5	BN/YE	2267	II	-	Mirror Heating Element Control	6	0.35	BN/YE	2267	IV	-
7	0.5	GY	5861	II	-	Passenger Side Object Detection LED Signal (1)	7	0.5	GY	5861	IV	-
8	0.35	GN/BK	3396	II	-	Passenger Mirror Motor Right (+) Left (-) Control	8	0.35	GN/BK	3396	IV	-
9	0.35	YE/VT	3397	I	-	Passenger Mirror Motor Up (+) Down (-) Control	9	0.35	YE/VT	3397	X	-
10	-	-	-	-	-	Not Occupied	10	-	-	-	-	-
11	0.35	WH	3398	I	-	Passenger Mirror Motor Common Control	11	0.35	WH	3398	X	-

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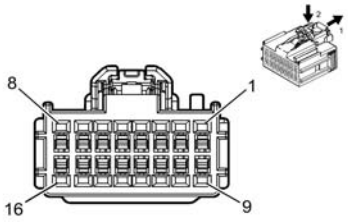
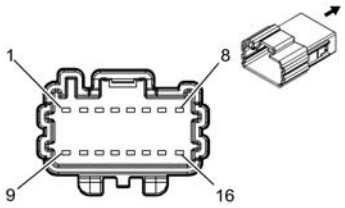
12	-	-	-	-	-	Not Occupied	12	-	-	-	-	-
13	0.35	GN/YE	6134	I	-	Local Interconnect Network Serial Data Bus 3	13	0.35	GN/YE	6134	X	A1BC
14 - 16	-	-	-	-	-	Not Occupied	14 - 16	-	-	-	-	-
17	0.35	BN/VT	245	I	-	Passenger Door Lock Switch Unlock Control	17	0.35	BN/VT	245	X	-
18 - 20	-	-	-	-	-	Not Occupied	18 - 20	-	-	-	-	-
21	0.35	YE/VT	244	I	-	Passenger Door Lock Switch Lock Control	21	0.35	YE/VT	244	X	-
22	0.75	GY	295	I	-	Door Lock Actuator Lock Control	22	0.75	GY	295	X	-
23	0.75	BN/YE	294	I	-	Door Lock Actuator Unlock Control	23	0.75	BN/YE	294	X	-
24	0.5	BK	850	I	-	Ground	24	0.5	BK	850	X	-
25	0.35	RD/BU	840	I	-	Battery Positive Voltage	25	0.35	RD/BU	840	X	-
26	-	-	-	-	-	Not Occupied	26	-	-	-	-	-
27	0.5	BN/OG	2134	I	-	Right Front Side Impact Sensing Module Signal	27	0.35	BN/OG	2134	X	-
28	0.5	BK/OG	6629	I	-	Right Front Side Impact Sensing Module Low Reference	28	0.35	BK/OG	6629	X	-
29	0.35	WH	6816	I	-	Indicator Dimming Control	29	0.35	WH	6816	X	-
30	0.35	YE	6817	I	-	LED Backlight Dimming Control	30	0.5	YE	6817	X	-
31	-	-	-	-	-	Not Occupied	31	-	-	-	-	-
32	0.35	WH/YE	7557	I	-	LED Ambient Lighting	32	0.35	WH/YE	7557	X	-

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						Control 1						
33	0.5	GN/VT	1315	I	-	Right Front Turn Signal Lamp Control	33	0.5	GN/VT	1315	X	-
34	-	-	-	-	-	Not Occupied	34	-	-	-	-	-
35						Local Interconnect Network Serial Data Bus 3	35	0.35	GN/YE	6134	X	-
36	0.5	BU/BK	3009	I	-	Noise Reduction Microphone 2 Low Reference	36	0.35	BU/BK	3009	X	-
37	0.5	BU/YE	3006	I	-	Noise Reduction Microphone 2 Signal	37	0.35	BU/YE	3006	X	-
38	0.35	GN/WH	7530	I	-	Local Interconnect Network Serial Data Bus 8	38	0.35	GN/WH	7530	X	-
39	0.5	VT/WH	3571	I	-	Passenger Door Handle Switch Signal	39	0.35	VT	3571	X	-
40	0.5	GN/YE	3562	I	-	Passive Entry Passenger Door Antenna Signal Hi	40	0.35	GN/YE	3562	X	-
41	0.5	GN/BK	3563	I	-	Passive Entry Passenger Door Antenna Signal Lo	41	0.35	GN/BK	3563	X	-
42 - 48	-	-	-	-	-	Not Occupied	42 - 48	-	-	-	-	-

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INLINE HARNESS CONNECTOR END VIEWS > X605 PASSENGER DOOR HARNESS TO PASSENGER DOOR TRIM HARNESS

	
Connector Part Information • Harness Type: Passenger Door • OEM Connector: 6098-7733 • Service Connector: Service by Harness - See Part Catalog • Description: 16-Way F 1.2 Series (BK)	Connector Part Information • Harness Type: Passenger Door Trim • OEM Connector: 6098-7725 • Service Connector: Service by Harness - See Part Catalog • Description: 16-Way M 1.2 Series (BK)

Terminal Part Information

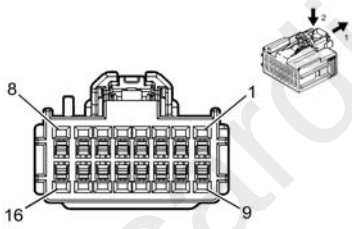
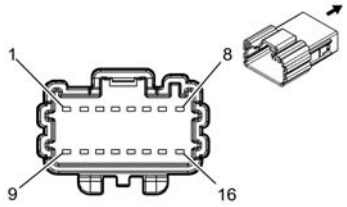
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-13 (BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
1	0.35	RD/BN	910	I	-	-	1	0.35	RD/BN	910	II	C70
2	0.35	WH/YE	900	I	-	-	2	0.35	WH/YE	900	II	C70
3	0.35	BN/YE	3385	I	-	Power Window Switch Passenger Down Signal	3	0.35	BN/YE	3385	II	-
4	0.35	YE/BK	3384	I	-	Power Window Switch Passenger Up Signal	4	0.35	YE/BK	3384	II	-
5	0.35	YE	6817	I	-	LED Backlight Dimming Control	5	0.35	YE	6817	II	-
6	0.35	YE/VT	244	I	-	Passenger Door Lock Switch Lock Control	6	0.35	YE/VT	244	II	-
7	0.35	VT	4009	I	-	Passenger Door Lock	7	0.35	VT	4009	II	-

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						Status						
8 - 9	-	-	-	-	-	Not Occupied	8 - 9	-	-	-	-	-
10	0.35	WH/YE	7557	I	-	LED Ambient Lighting Control 1	10	0.35	WH/YE	7557	II	-
11	0.35	BN/VT	245	I	-	Passenger Door Lock Switch Unlock Control	11	0.35	BN/VT	245	II	-
12	0.35	VT/GY	3386	I	-	Power Window Switch Passenger Express Signal	12	0.35	VT/GY	3386	II	-
13	0.35	WH	6816	I	-	Indicator Dimming Control	13	0.35	WH	6816	II	-
14 - 15	-	-	-	-	-	Not Occupied	14 - 15	-	-	-	-	-
16	0.5	BK	2250	I	-	Ground	16	0.35	BK	2250	II	-

INLINE HARNESS CONNECTOR END VIEWS > X606 PASSENGER DOOR HARNESS TO PASSENGER DOOR TRIM HARNESS

	
Connector Part Information • Harness Type: Passenger Door • OEM Connector: 6098-7735 • Service Connector: Service by Harness - See Part Catalog • Description: 16-Way F 1.2 Series (GY)	Connector Part Information • Harness Type: Passenger Door Trim • OEM Connector: 6098-7727 • Service Connector: Service by Harness - See Part Catalog • Description: 16-Way M 1.2 Series (GY)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	Not Required	J-35616-16 (LT GN)	Not Required	Not Required	Not Required	Not Required	Not Required

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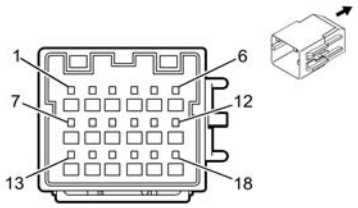
II	Not Required	J-35616-13 (BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
3	0.5	BU/BK	3009	I	-	Noise Reduction Microphone 2 Low Reference	3	0.5	BU/BK	3009	II	A1BC+UQA+NKC/NKE
4	0.5	BU/YE	3006	I	-	Noise Reduction Microphone 2 Signal	4	0.5	BU/YE	3006	II	A1BC+UQA+NKC/NKE
5	0.35	BK/GN	3400	I	A45+DD1/DAZ	Passenger Mirror Position Sensor Low Reference	5	0.35	BK/GN	3400	II	A45+DD1/DAZ
6	0.35	VT/WH	3403	I	A45+DD1/DAZ	Passenger Mirror Position Sensor Left (-) Right (+) Signal	6	0.35	VT/WH	3403	II	A45+DD1/DAZ
7	0.35	YE/VT	3397	I	A45+DD1/DAZ	Passenger Mirror Motor Up (+) Down (-) Control	7	0.35	YE/VT	3397	II	A45+DD1/DAZ
8	0.35	GN/WH	7530	I	-	Local Interconnect Network Serial Data Bus 8	8	0.35	GN/WH	7530	II	A45+DD1/DAZ
9	0.35	RD/BU	840	I	-	Battery Positive Voltage	9	0.35	RD/BU	840	II	A45+DD1/DAZ
12	0.35	BU/YE	3401	I	A45+DD1/DAZ	Passenger Mirror Position Sensor Up (+) Down (-) Signal	12	0.35	BU/YE	3401	II	A45+DD1/DAZ
13	0.35	GN/BK	3396	I	A45+DD1/DAZ	Passenger Mirror Motor Right (+) Left (-) Control	13	0.35	GN/BK	3396	II	A45+DD1/DAZ
14	0.35	YE/RD	3399	I	A45+DD1/DAZ	Passenger Mirror Position Sensor 5 Volt Reference	14	0.35	YE/RD	3399	II	A45+DD1/DAZ
15	0.35	WH	3398	I	A45+DD1/DAZ	Passenger Mirror Motor Common	15	0.35	WH	3398	II	A45+DD1/DAZ

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						Control						

INLINE HARNESS CONNECTOR END VIEWS > X610 OUTSIDE REARVIEW MIRROR HARNESS TO PASSENGER DOOR HARNESS

-	
Connector Part Information • Harness Type: Outside Rearview Mirror • OEM Connector: Not Available • Service Connector: Service by Harness - See Part Catalog • Description: 18-Way F	Connector Part Information • Harness Type: Passenger Door • OEM Connector: 13583084 • Service Connector: Service by Harness - See Part Catalog • Description: 18-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	Not Required	Pending	No Tool Required	Not Required	Not Required	Not Required	Not Required
II	Not Required	J-35616-65B (LT BU)	Not Required	Not Required	Not Required	Not Required	Not Required

Pin	Size	Color	Circuit	Terminal Type ID	Option	Function	Pin	Size	Color	Circuit	Terminal Type ID	Option
3	0.35	BK/GN	3400	I	A45+DD1/DAZ	Passenger Mirror Position Sensor Low Reference	3	0.35	BK/GN	3400	II	A45+DD1/DAZ
5	0.5	BK	850	I	-	Ground	5	0.5	BK	850	II	-
7	0.35	VT/WH	3403	I	A45+DD1/DAZ	Passenger Mirror Position Sensor Left (-) Right (+) Signal	7	0.35	VT/WH	3403	II	A45+DD1/DAZ
8	0.5	BN/YE	2267	I	-	Mirror Heating Element Control	8	0.5	BN/YE	2267	II	-

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9	0.35	YE/VT	3397	I	-	Passenger Mirror Motor Up (+) Down (-) Control	9	0.35	YE/VT	3397	II	-
10	0.35	GN/BK	3396	I	-	Passenger Mirror Motor Right (+) Left (-) Control	10	0.35	GN/BK	3396	II	-
11	0.5	BK	2250	I	(A45+DAZ/DD1) /(-A45)	Ground	11	0.5	BK	2250	II	(A45+DAZ/DD1) /(-A45)
12	0.35	WH	3398	I	-	Passenger Mirror Motor Common Control	12	0.35	WH	3398	II	-
13	0.5	GN/VT	1315	I	-	Right Front Turn Signal Lamp Control	13	0.5	GN/VT	1315	II	-
14	0.35	BU/YE	3401	I	A45+DD1/DAZ	Passenger Mirror Position Sensor Up (+) Down (-) Signal	14	0.35	BU/YE	3401	II	A45+DD1/DAZ
15	0.5	GY	5861	I	-	Passenger Side Object Detection LED Signal (1)	15	0.5	GY	5861	II	-
17	0.35	YE/RD	3399	I	A45+DD1/DAZ	Passenger Mirror Position Sensor 5 Volt Reference	17	0.35	YE/RD	3399	II	A45+DD1/DAZ

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Service Manual: WIRING SYSTEMS AND POWER
MANAGEMENT - REPAIR INSTRUCTIONS

REPAIR INSTRUCTIONS > 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.

REPAIR INSTRUCTIONS > GMLAN AND MEDIA ORIENTED SYSTEMS TRANSPORT (MOST) WIRING REPAIRS > 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 .

REPAIR INSTRUCTIONS > GMLAN AND MEDIA ORIENTED SYSTEMS TRANSPORT (MOST) WIRING REPAIRS > GMLAN CONNECTOR TERMINAL REPAIR

NOTE:

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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.

REPAIR INSTRUCTIONS > GMLAN AND MEDIA ORIENTED SYSTEMS TRANSPORT (MOST) WIRING REPAIRS > 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 .

REPAIR INSTRUCTIONS > GMLAN AND MEDIA ORIENTED SYSTEMS TRANSPORT (MOST) WIRING REPAIRS > MEDIA ORIENTED SYSTEMS TRANSPORT (MOST) WIRING REPAIR

NOTE:

If harness repair/analysis is performed, MOST bus Twist Pair unshielded wire should be 0.35 mm^2 (22 AWG) 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).

The following conditions need to be met to ensure a valid continuity:

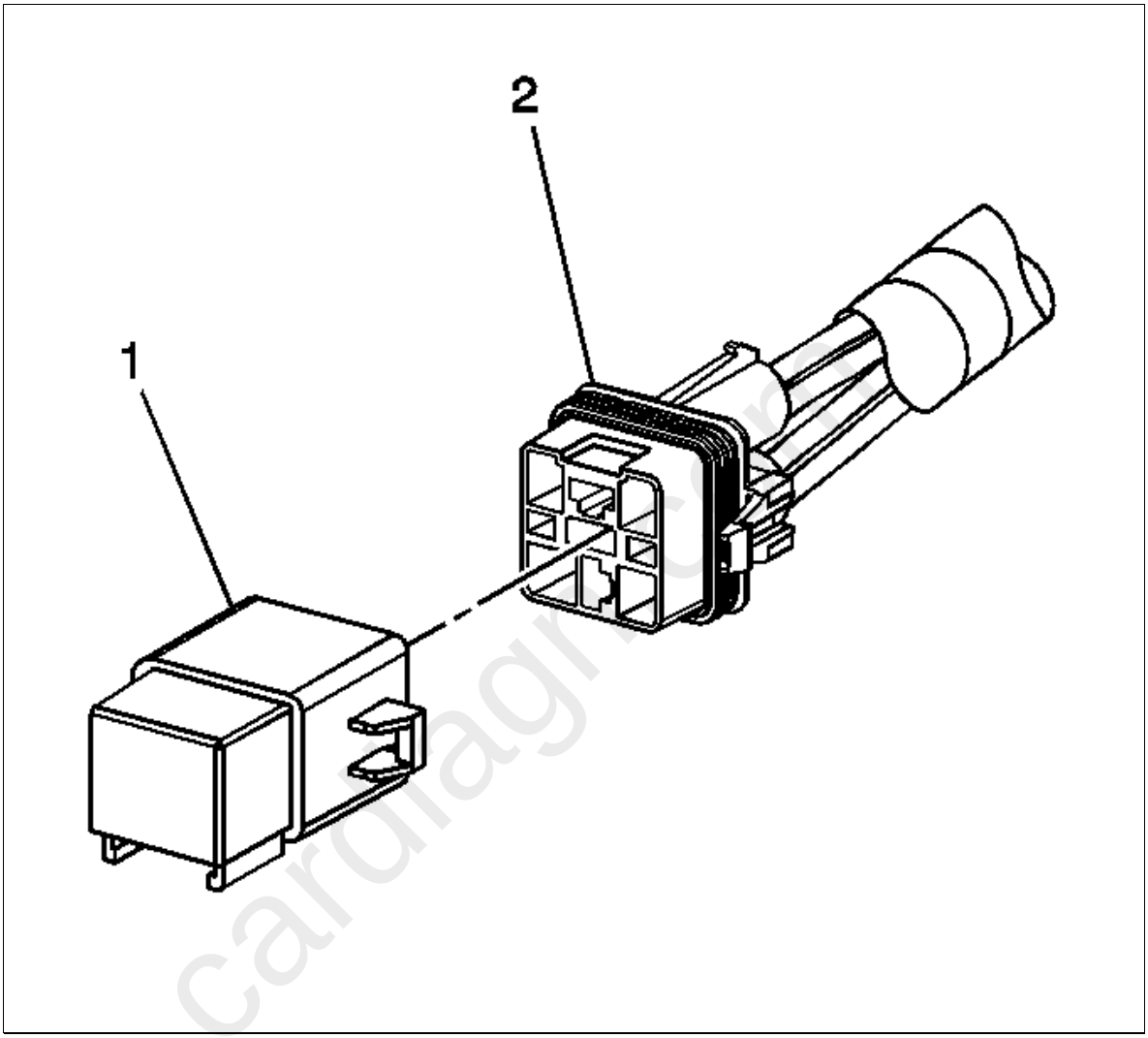
- Untwisted length for all MOST 50 circuits at each wire harness connector should be no longer 50 mm max (25 mm preferred).
- When wire repairs are made, a minimum 25 twists/meter for all MOST 50 circuits.
- MOST 50 has specific receive and transmit I/O.

The transmit of one module is connected to receive of the next module in ring topology.

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REPAIR INSTRUCTIONS > RELAY REPLACEMENT (ATTACHED TO WIRE HARNESS) > REMOVAL PROCEDURE

Fig 1: Relay & Wire Harness Connector



Courtesy of GENERAL MOTORS COMPANY

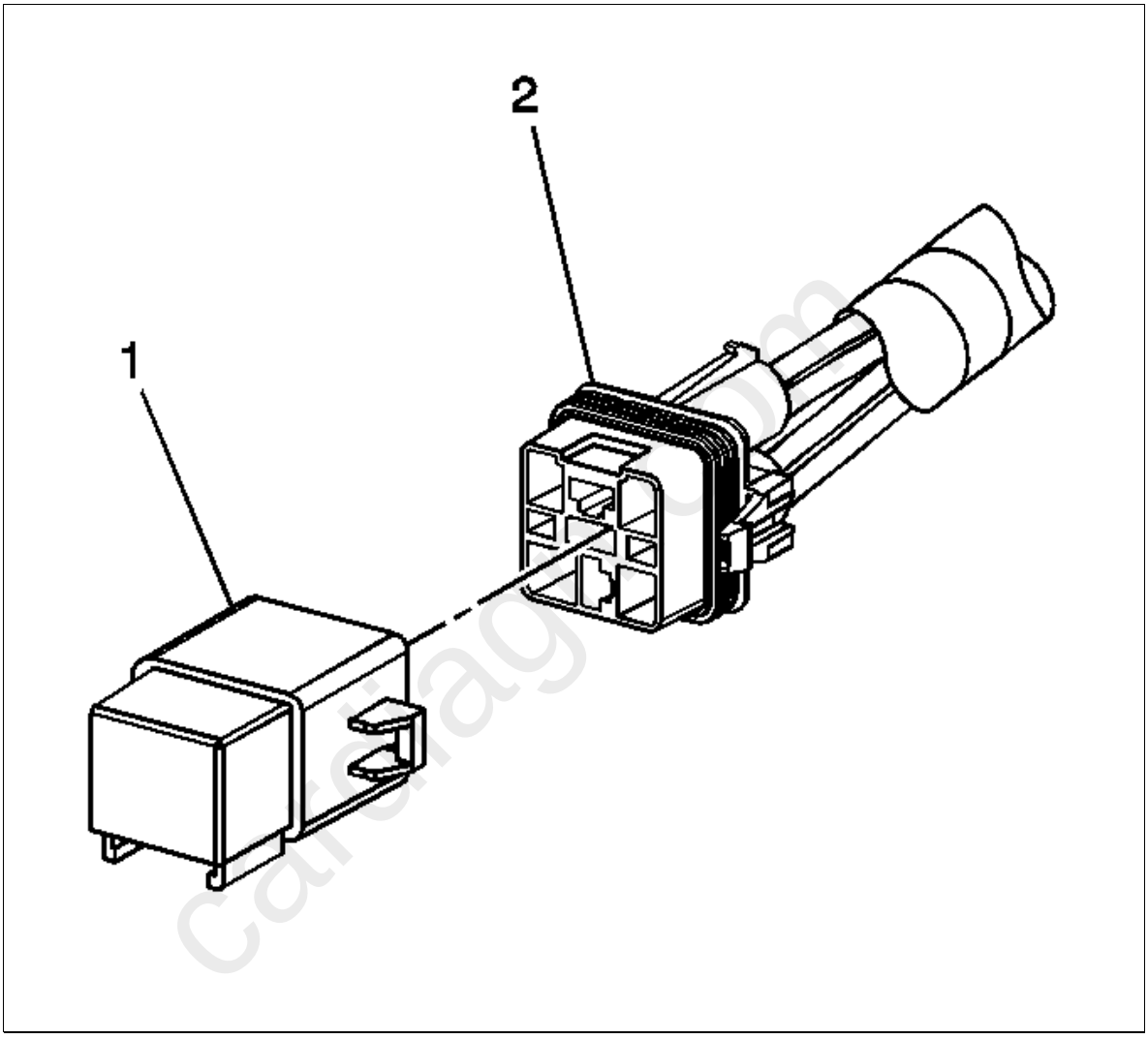
1. Locate the relay. Refer to the Master Electrical Component List to locate the relay in the vehicle.
2. Remove any fasteners which hold the relay in place.
3. Remove any connector position assurance (CPA) devices or secondary locks.

> *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).

REPAIR INSTRUCTIONS > RELAY REPLACEMENT (ATTACHED TO WIRE HARNESS) > INSTALLATION PROCEDURE

Fig 1: Relay & Wire Harness Connector



Courtesy of GENERAL MOTORS COMPANY

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.

REPAIR INSTRUCTIONS > RELAY REPLACEMENT (WITHIN AN ELECTRICAL CENTER)

Special Tools

EL-43244 Relay Puller Pliers

REPAIR INSTRUCTIONS > RELAY REPLACEMENT (WITHIN AN ELECTRICAL CENTER) > REMOVAL PROCEDURE

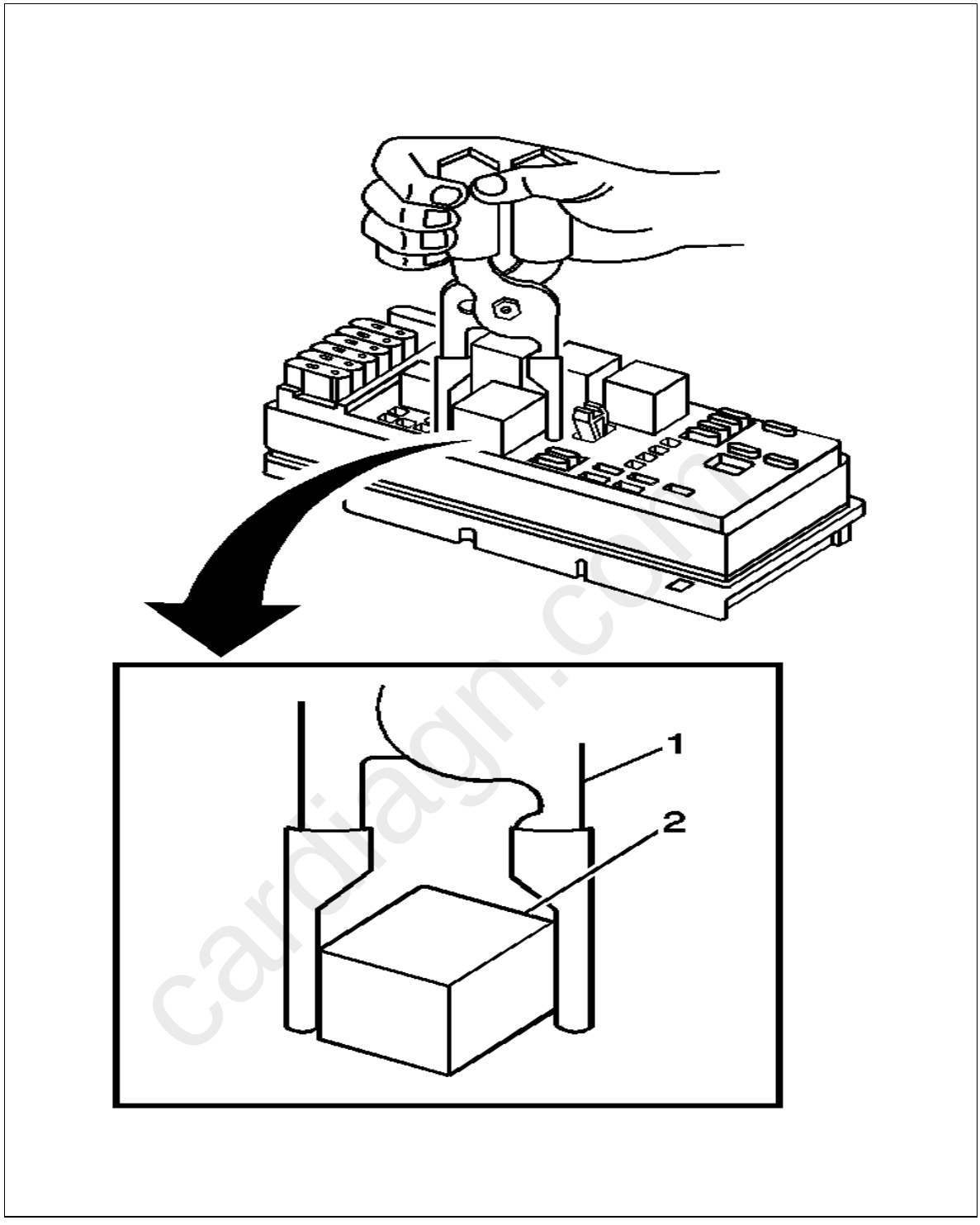
1. Remove the electrical center cover.

> *NOTE:*
>
> 1. *Always note the orientation of the relay.*
> 2. *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.*
> 3. *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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Fig 1: Relay



Courtesy of GENERAL MOTORS COMPANY

3. Using the EL-43244 (1) position the tool on opposing corners of the relay (2).

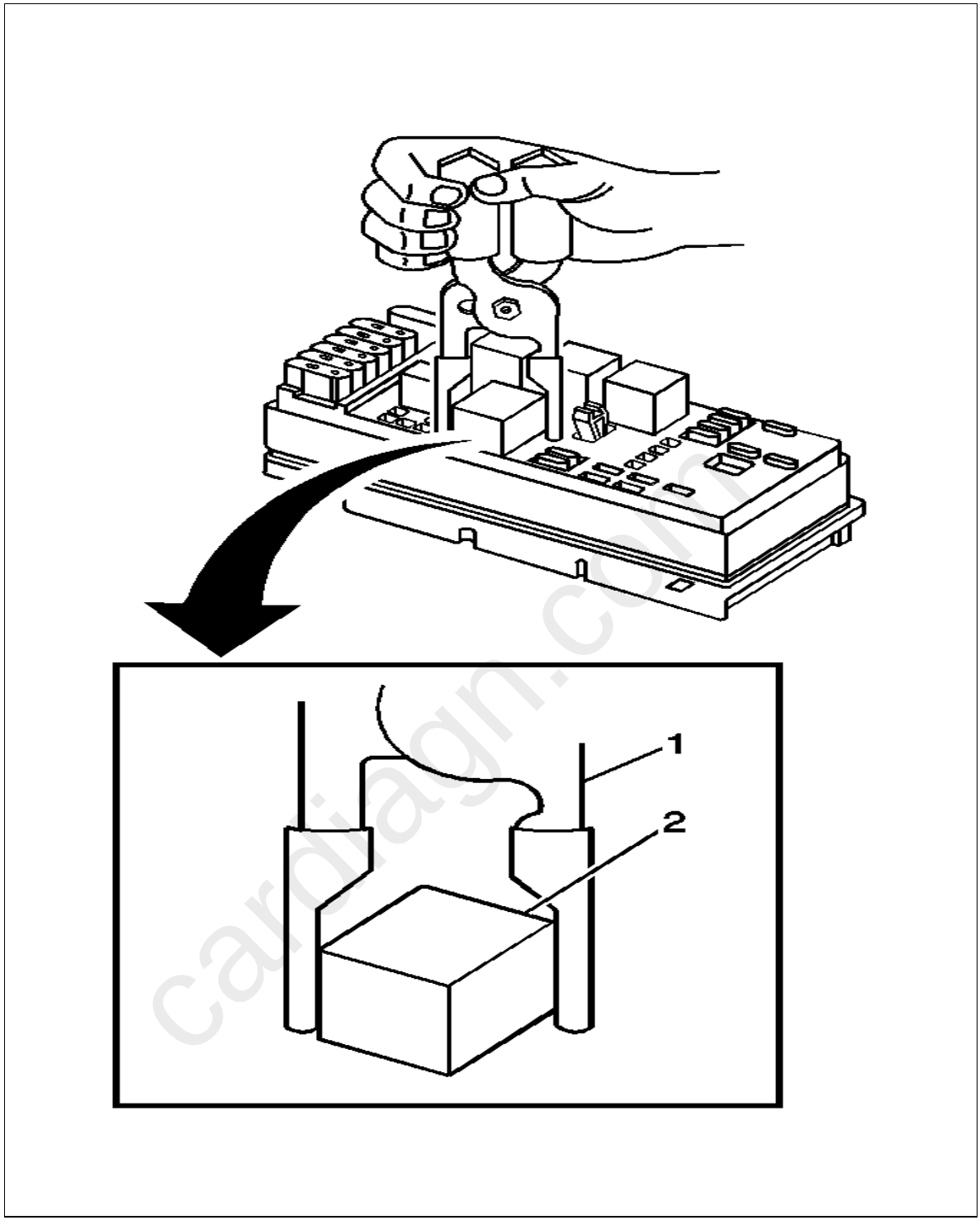
> ⚠ *CAUTION:*
>
> *Use **EL-43244** to pull the relay straight out from the electrical center terminals. The use of pliers or a flat bladed tool could damage the electrical center.*

4. Remove the relay (2) from the electrical center.

REPAIR INSTRUCTIONS > RELAY REPLACEMENT (WITHIN AN ELECTRICAL CENTER) > INSTALLATION PROCEDURE

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Fig 1: Relay



Courtesy of GENERAL MOTORS COMPANY

1. Install the relay (2) in the same position as removed.
2. Install the electrical center cover.

REPAIR INSTRUCTIONS > GROUND REPAIR > ELECTRICAL GROUNDS

Proper electrical system function relies on secure, positive, corrosion-free ground connections. Loose, stripped, or corroded connections increase the possibility of improper system function and loss of module communication. These conditions may also lead to unnecessary repairs and component replacements.

In general, electrical ground connections are accomplished using one, or a combination of, three attachment methods:

- Welded M6 stud and nut
- Welded M6 nut and bolt
- Welded M8 nut and bolt

> ⚠ *CAUTION:*
>
> *Use GM approved replacement fasteners with conductive finish for electrical ground repair.*

Determine which attachment method is used, and carry out the appropriate repair.

M6 Weld Stud Replacement

1. Select a location adjacent the damaged or missing M6 ground stud having 20 mm (0.79 in) clearance behind the panel surface and 20 mm (0.79 in) clearance surrounding the M6 rivet stud flange.
2. Using GM approved residue-free solvent or equivalent, remove any grease from the repair site and allow to dry.

   > 📌 *NOTE:*
   >
   > *Ensure 20 mm (0.79 in) clearance is maintained behind the panel to be drilled.*

3. Drill a 10 mm (0.40 in) diameter hole through the panel.
4. Carefully remove paint and primer from the area surrounding the rivet stud flange until bare metal is visible.

   > ⚠ *CAUTION:*
   >
   > *Use GM approved replacement fasteners with conductive finish for electrical ground repair.*

5. Select a replacement conductive M6 rivet stud. Reference the GM parts catalog for the correct part number and application.
6. Using a rivet stud installer, install the replacement conductive M6 rivet stud.
7. Ensure the new rivet stud is securely fastened, with no detectable movement.

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> *NOTE:*
>
> *The rivet stud and surrounding panel area must be properly refinished prior to the installation of the ground terminal and nut to maintain positive electrical grounding.*

8. Completely wrap the threads of the rivet stud with painters tape or equivalent.
9. Refinish the repair area using an anti-corrosion primer.
10. Allow the refinished repair area to cure sufficiently before removing the protective material applied to the rivet stud threads.
11. Remove the painters tape or equivalent from the rivet stud threads.
12. Using GM approved residue-free solvent or equivalent, thoroughly clean the rivet stud threads to remove any adhesive and allow to dry.
13. Carefully remove any corrosion from the electrical ground wire terminal. Testing for Intermittent Conditions and Poor Connections
14. Using a small brush, apply Dielectric Lubricant GM P/N 12377900 (Canadian P/N 10953529) to the new conductive M6 rivet stud threads.
15. Install the ground terminal to the new rivet stud.
16. Select a new, conductive M6 nut. Reference the GM parts catalog for the correct part number and application.

> *CAUTION:*
>
> *Fastener Caution*

17. Install the M6 nut and tighten to 8 N.m (71 lb in).
18. Check for proper system operation.

M6 Weld Nut

> *CAUTION:*
>
> *Use GM approved replacement fasteners with conductive finish for electrical ground repair.*

1. If the M6 weld nut at the electrical ground location is damaged or stripped, a new, conductive self-threading M7 bolt may be used to secure the ground terminal. Reference the GM parts catalog for the correct part number and application.
2. Using GM approved residue-free solvent or equivalent, remove any grease from the surface surrounding the weld nut and allow to dry.

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3. Remove any loose metal particles from the damaged or stripped weld nut with a stiff brush.
4. Using a small brush, apply Dielectric Lubricant GM P/N 12377900 (Canadian P/N 10953529) to the new, conductive, self-threading M7 bolt threads.
5. Carefully remove any corrosion from the electrical ground terminal. Testing for Intermittent Conditions and Poor Connections
6. Install the electrical ground terminal to the new, conductive M7 bolt.

> ⚠ *CAUTION:*
>
> *Fastener Caution*

7. Install the M7 bolt and tighten to 9 N.m (80 lb in).
8. Check for proper system operation.

M6 Weld Nut (Alternative Repair)

> ⚠ *CAUTION:*
>
> *Use GM approved replacement fasteners with conductive finish for electrical ground repair.*

1. If the electrical ground location is accessible from both sides of the panel, a conductive M6 bolt and a conductive M6 nut may be used to secure the electrical ground terminal. Reference the GM parts catalog for the correct part number and application.
2. Select a location adjacent the damaged M6 weld nut having 20 mm (0.79) clearance behind the panel surface and 20 mm (0.79 in) clearance surrounding the new electrical ground site.
3. Using GM approved residue-free solvent or equivalent, remove any grease from the surface surrounding the ground location and allow to dry.

> 📌 *NOTE:*
>
> *Ensure 20 mm (0.79 in) clearance is maintained behind the panel to be drilled.*

4. Drill a 10 mm (0.40 in) diameter hole through the panel.
5. Carefully remove paint and primer from the area surrounding the new ground site until bare metal is visible.
6. Using a small brush, apply Dielectric Lubricant GM P/N 12377900 (Canadian P/N 10953529) to the new, conductive M6 bolt threads.
7. Carefully remove any corrosion from the electrical ground terminal. Testing for Intermittent Conditions and Poor Connections

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8. Install the electrical ground terminal and new, conductive M6 bolt to the ground location.

> *CAUTION:*
>
> *Fastener Caution*

9. Install the conductive M6 nut and tighten to 8 N.m (71 lb in).

> *NOTE:*
>
> *The repair area must be properly refinished to maintain positive electrical grounding.*

10. Refinish the repair area using an anti-corrosion primer.
11. Check for proper system operation.

M8 Weld Nut

> *CAUTION:*
>
> *Use GM approved replacement fasteners with conductive finish for electrical ground repair.*

1. If the M8 weld nut electrical ground location is accessible from both sides of the panel, a conductive M8 bolt and a conductive M8 nut may be used to secure the ground terminal. Reference the GM parts catalog for the correct part number and application.
2. Select a location adjacent to M8 weld nut having 20 mm (0.79 in) clearance behind the panel surface and 20 mm (0.79 in) clearance surrounding the new electrical ground site.
3. Using GM approved residue-free solvent or equivalent, remove any grease from the surface surrounding the ground location and allow to dry.

> *NOTE:*
>
> *Ensure 20 mm (0.79 in) clearance is maintained behind the panel to be drilled.*

4. Drill a 10 mm (0.40 in) diameter hole through the panel.
5. Carefully remove paint and primer from the area surrounding the new ground site until bare metal is visible.
6. Using a small brush, apply Dielectric Lubricant GM P/N 12377900 (Canadian P/N 10953529) to the new, conductive M8 bolt threads.

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7. Carefully remove any corrosion from the electrical ground terminal. Testing for Intermittent Conditions and Poor Connections
8. Install the electrical ground terminal and new, conductive M8 bolt to the ground location.

> ⚠ *CAUTION:*
>
> *Fastener Caution*

9. Install the conductive M8 nut and tighten to 22 N.m (16 lb ft).

> *NOTE:*
>
> *The repair area must be properly refinished to maintain positive electrical grounding.*

10. Refinish the repair area using an anti-corrosion primer.
11. Check for proper system operation.

M8 Weld Nut (Alternative Repair)

> ⚠ *CAUTION:*
>
> *Use GM approved replacement fasteners with conductive finish for electrical ground repair.*

1. If the M8 weld nut electrical ground location is not accessible from both sides of the panel, a conductive M6 rivet stud and a conductive M6 nut may be used to secure the ground terminal. Reference the GM parts catalog for the correct part number and application.
2. Select a location adjacent the damaged M8 weld nut having 20 mm (0.79 in) clearance behind the panel surface and 20 mm (0.79 in) clearance surrounding the new, conductive M6 rivet stud flange.
3. Using GM approved residue-free solvent or equivalent, remove any grease from the repair site and allow to dry.

> *NOTE:*
>
> *Ensure 20 mm (0.79 in) clearance is maintained behind the panel to be drilled.*

4. Drill a 10 mm (0.40 in) diameter hole through the panel.
5. Carefully remove paint and primer from the area surrounding the rivet stud flange until bare metal is visible.

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6. Using a rivet stud installer, install the replacement conductive M6 rivet stud.
7. Ensure the new rivet stud is securely fastened, with no detectable movement.

> *NOTE:*
>
> *The rivet stud and surrounding panel area must be properly refinished prior to the installation of the ground terminal and nut to maintain positive electrical grounding.*

8. Completely wrap the threads of the rivet stud with painters tape or equivalent.
9. Refinish the repair area using an anti-corrosion primer.
10. Allow the refinished repair area to cure sufficiently before removing the protective material applied to the rivet stud threads.
11. Remove the painters tape or equivalent from the rivet stud threads.
12. Using GM approved residue-free solvent or equivalent, thoroughly clean the rivet stud threads to remove any adhesive and allow to dry.
13. Carefully remove any corrosion from the electrical ground wire terminal. Testing for Intermittent Conditions and Poor Connections
14. Using a small brush, apply Dielectric Lubricant GM P/N 12377900 (Canadian P/N 10953529) to the new conductive M6 rivet stud threads.
15. Install the ground terminal to the new, conductive M6 rivet stud.

> *CAUTION:*
>
> *Fastener Caution*

16. Install the conductive M6 nut and tighten to 8 N.m (71 lb in).
17. Check for proper system operation.

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REPAIR INSTRUCTIONS > GROUND REPAIR > SECURING LOOSE ELECTRICAL GROUND CONNECTIONS

If the electrical ground connection is loose and the ground attachments are not damaged, properly securing the loose electrical ground may be all that is necessary. Carry out the following procedure to secure loose electrical ground connections.

CAUTION:

Use GM approved replacement fasteners with conductive finish for electrical ground repair.

1. Using GM approved residue-free solvent or equivalent, thoroughly clean the ground stud threads and allow to dry.
2. Carefully remove any corrosion from the electrical ground wire terminal. Testing for Intermittent Conditions and Poor Connections
3. Using a small brush, apply Dielectric Lubricant GM P/N 12377900 (Canadian P/N 10953529) to the ground stud threads.
4. Install the ground wire terminal to the ground stud.

   CAUTION:

   Fastener Caution

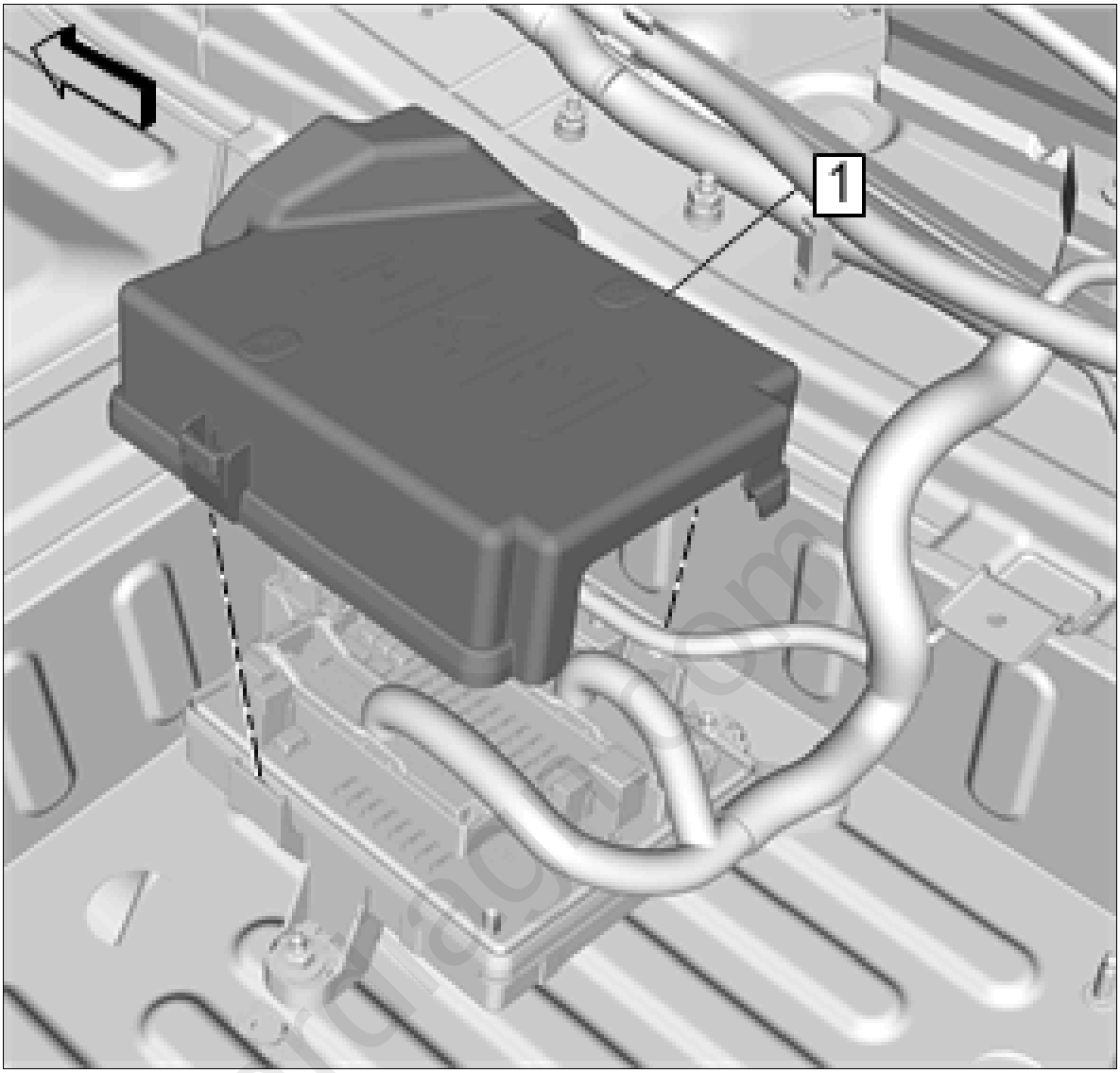
5. Install the ground stud nut.
   1. M6 ground stud nut: Tighten to 8 N.m (71 lb in).
   2. M8 ground stud nut: Tighten to 22 N.m (16 lb ft).
   3. M10 ground stud nut: Tighten to 45 N.m (33 lb ft).
6. Check for proper system operation.

REPAIR INSTRUCTIONS > BODY WIRING HARNESS JUNCTION BLOCK REPLACEMENT > REMOVAL PROCEDURE

1. Battery Negative Cable Disconnection and Connection
2. Rear Compartment Floor Panel Trim Replacement

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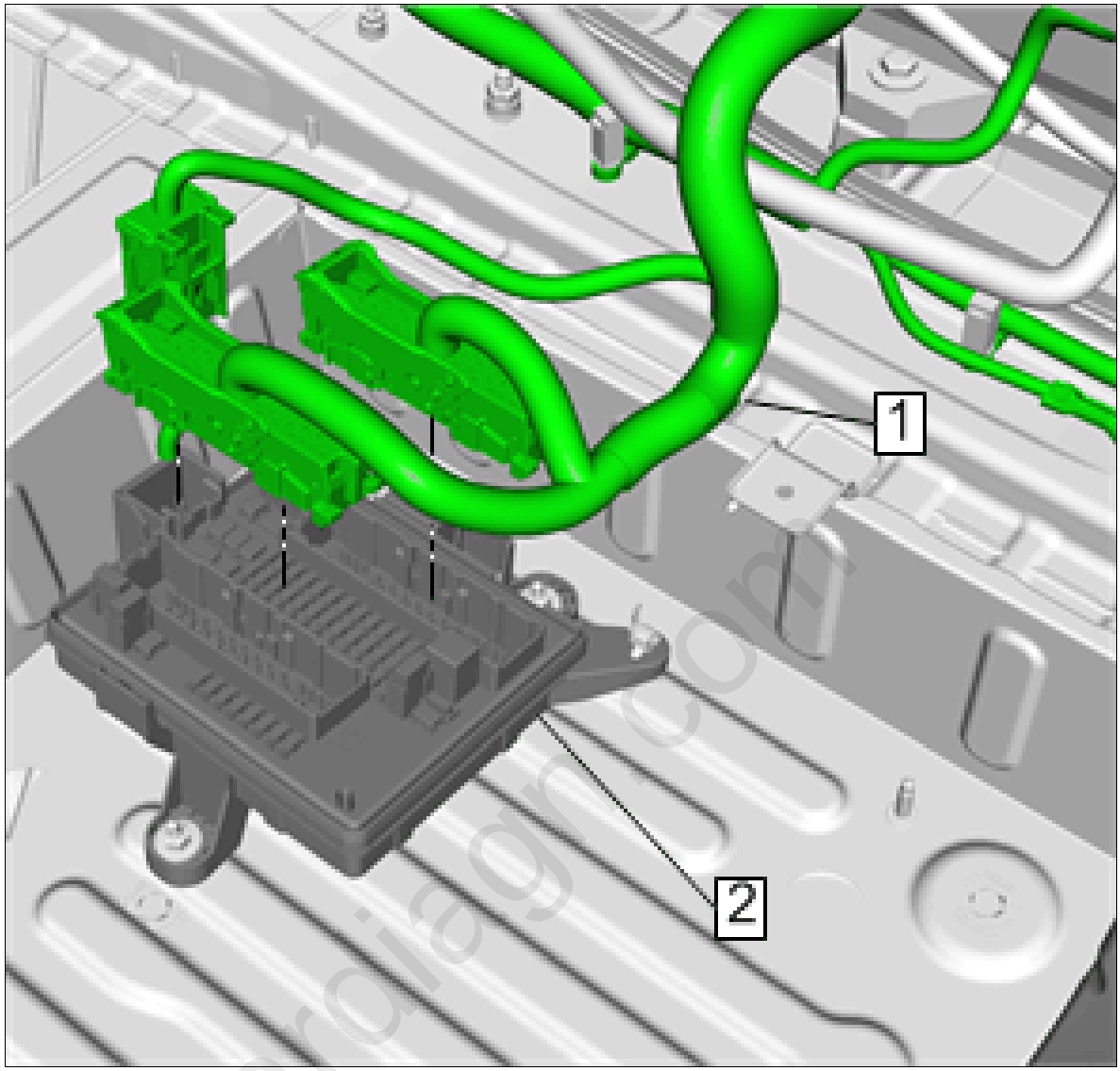
Fig 1: Body Wiring Harness Junction Block Cover



Courtesy of GENERAL MOTORS COMPANY

3. Remove Body Wiring Harness Junction Block Cover (1).

Fig 2: Junction Block Connectors

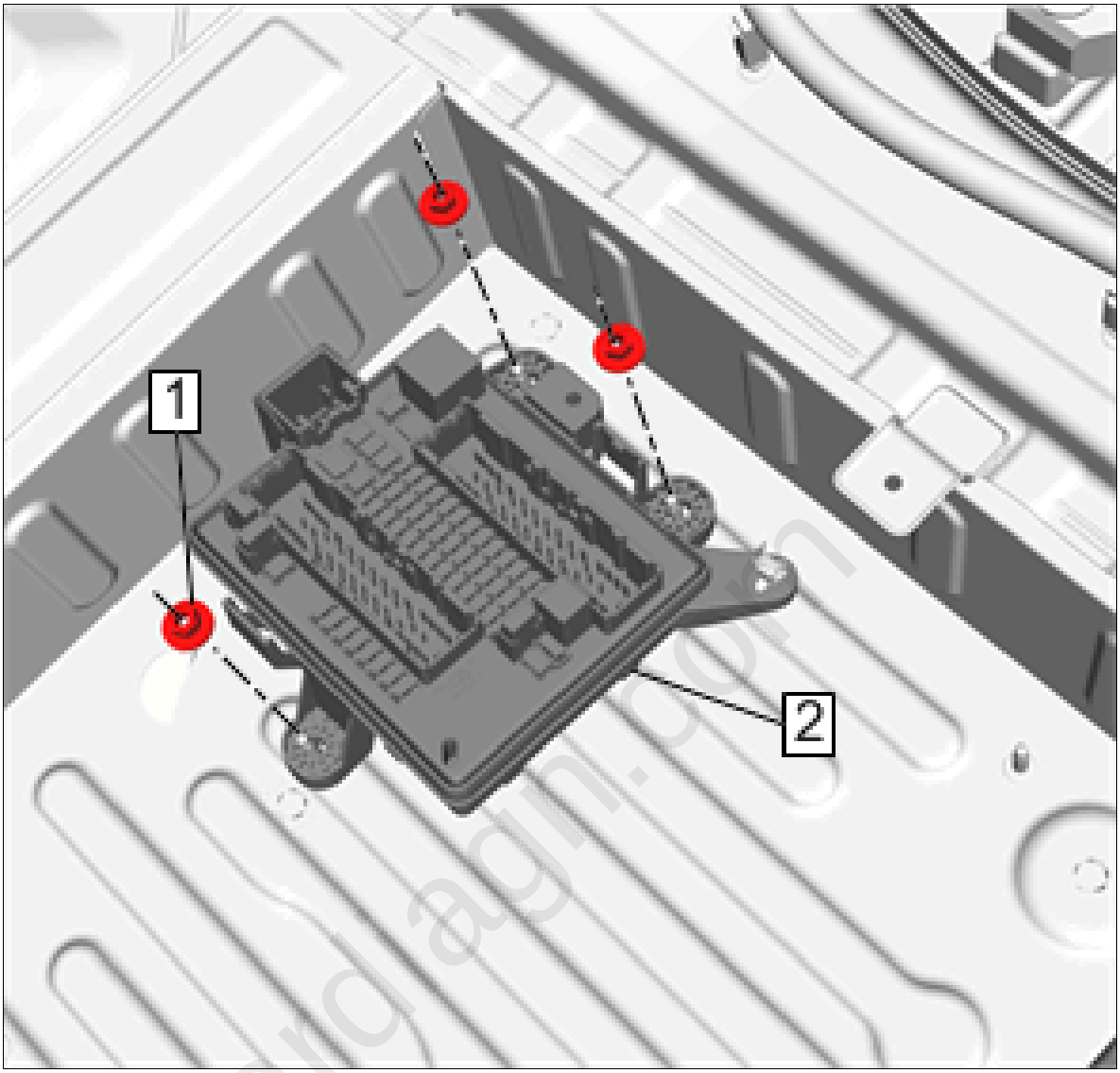


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4. Disconnect the connectors (1) from the junction block (2).

Fig 3: Body Wiring Harness Junction Block And Nuts

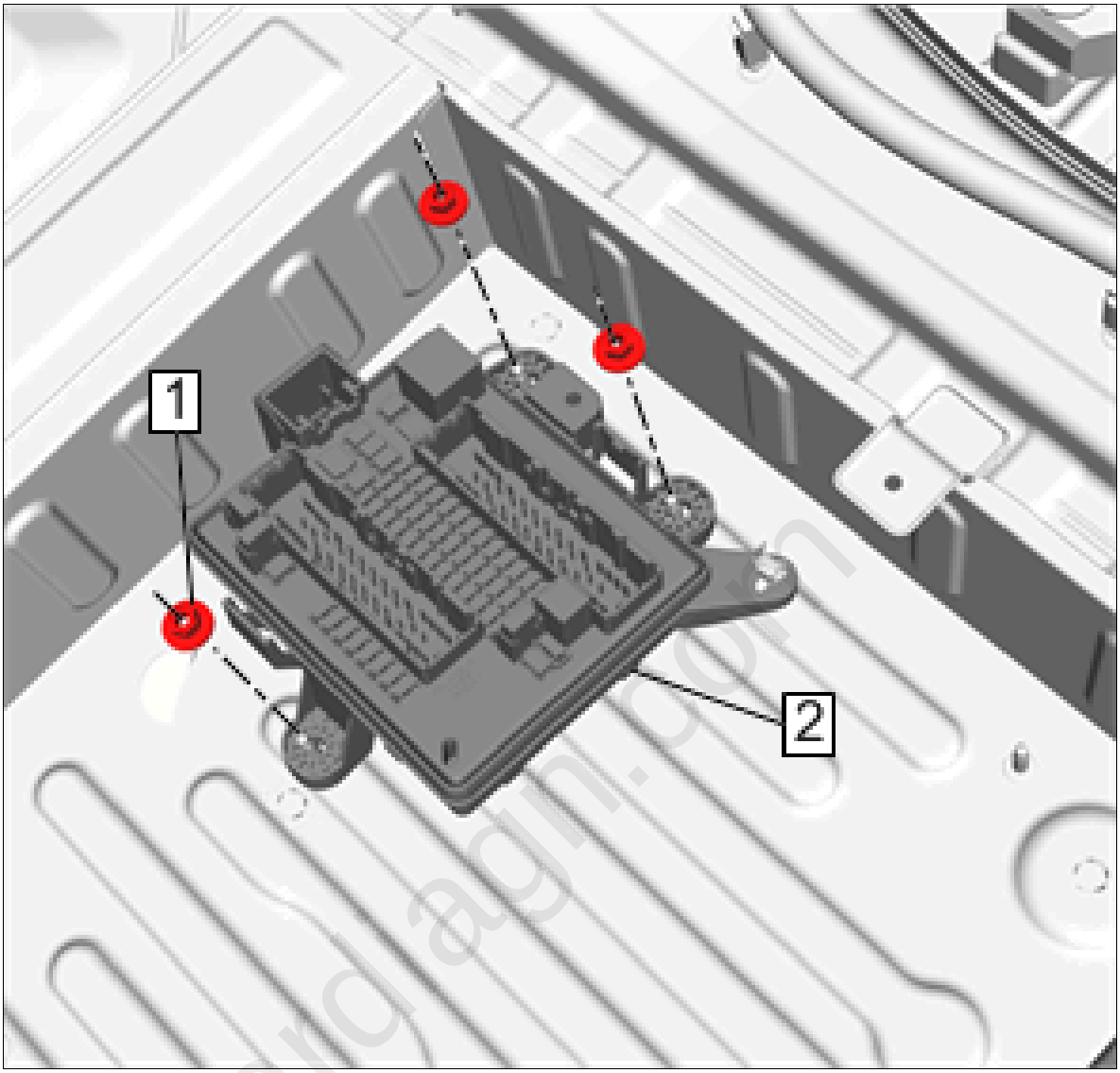


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5. Remove Body Wiring Harness Junction Block Nut. (1) (Qty: 3).
6. Remove Body Wiring Harness Junction Block (2).

REPAIR INSTRUCTIONS > BODY WIRING HARNESS JUNCTION BLOCK REPLACEMENT > INSTALLATION PROCEDURE

Fig 1: Body Wiring Harness Junction Block And Nuts



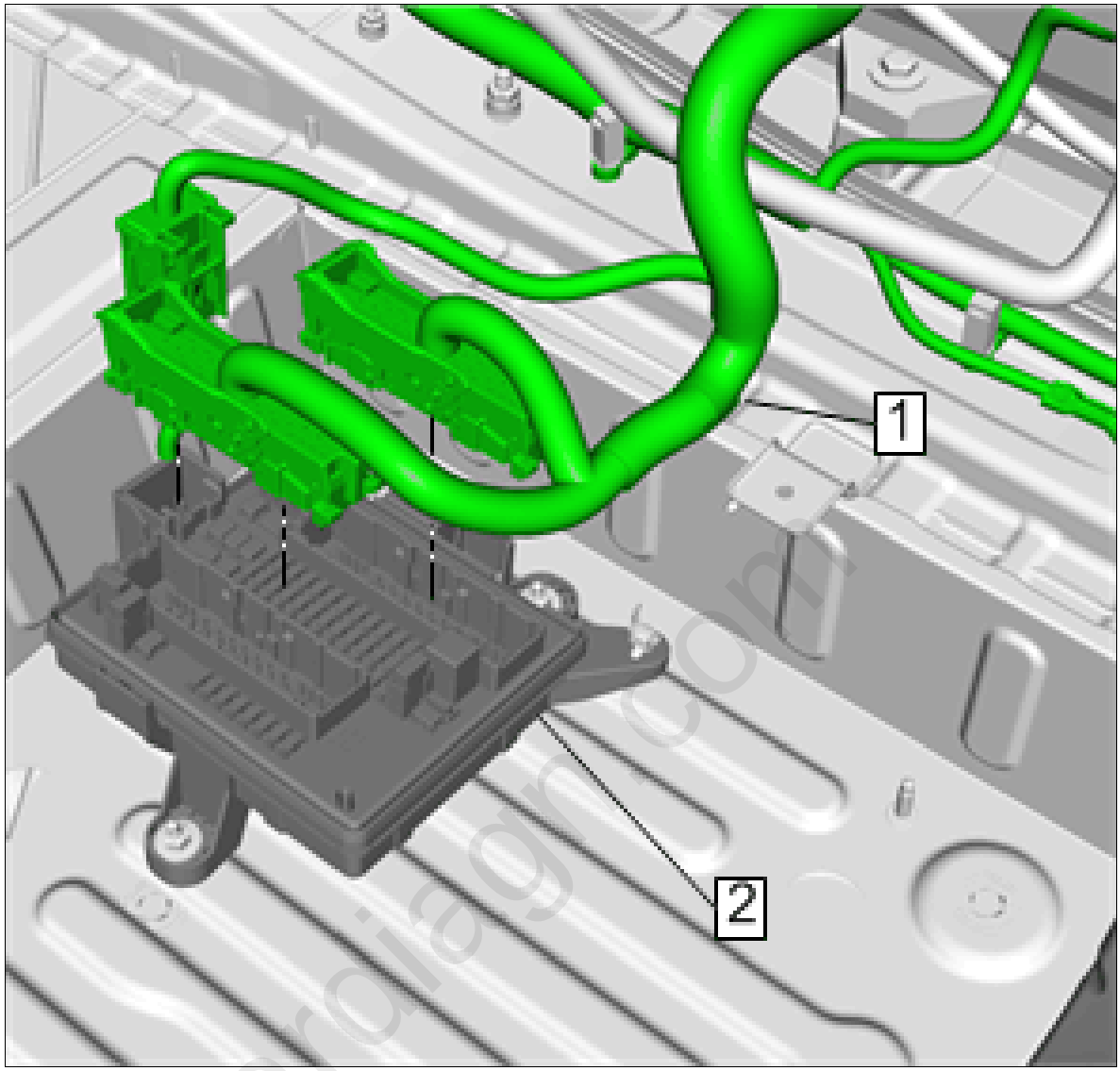
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> ⚠ *CAUTION:*
>
> *Refer to Fastener Caution .*

1. Install Body Wiring Harness Junction Block (2).
2. Install and tighten Body Wiring Harness Junction Block Nut. (1) (Qty: 3) to 9 N.m (80 lb in)

Fig 2: Junction Block Connectors

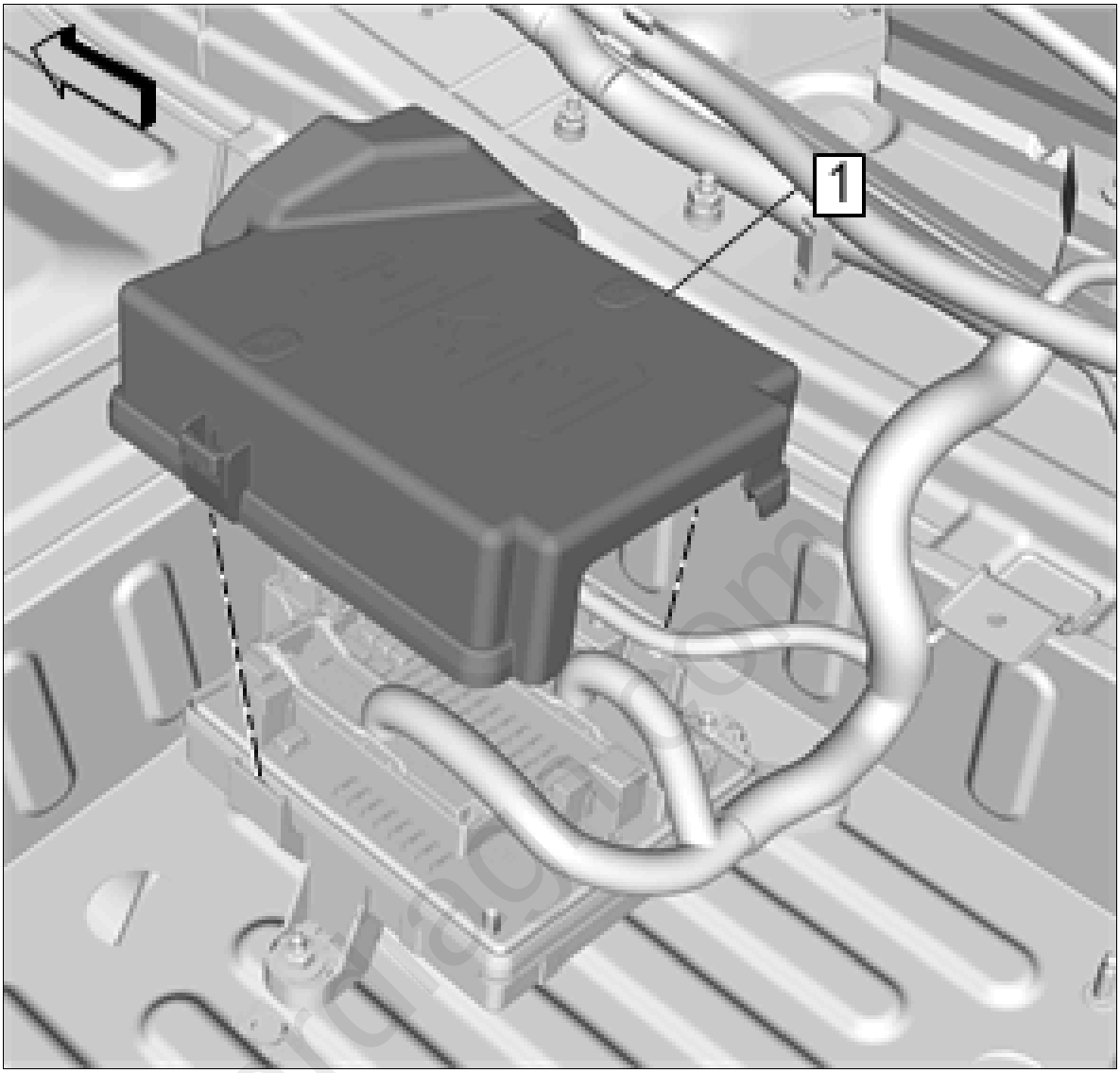


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3. Connect the connectors (1) to the Body Wiring Harness Junction Block (2).

Fig 3: Body Wiring Harness Junction Block Cover



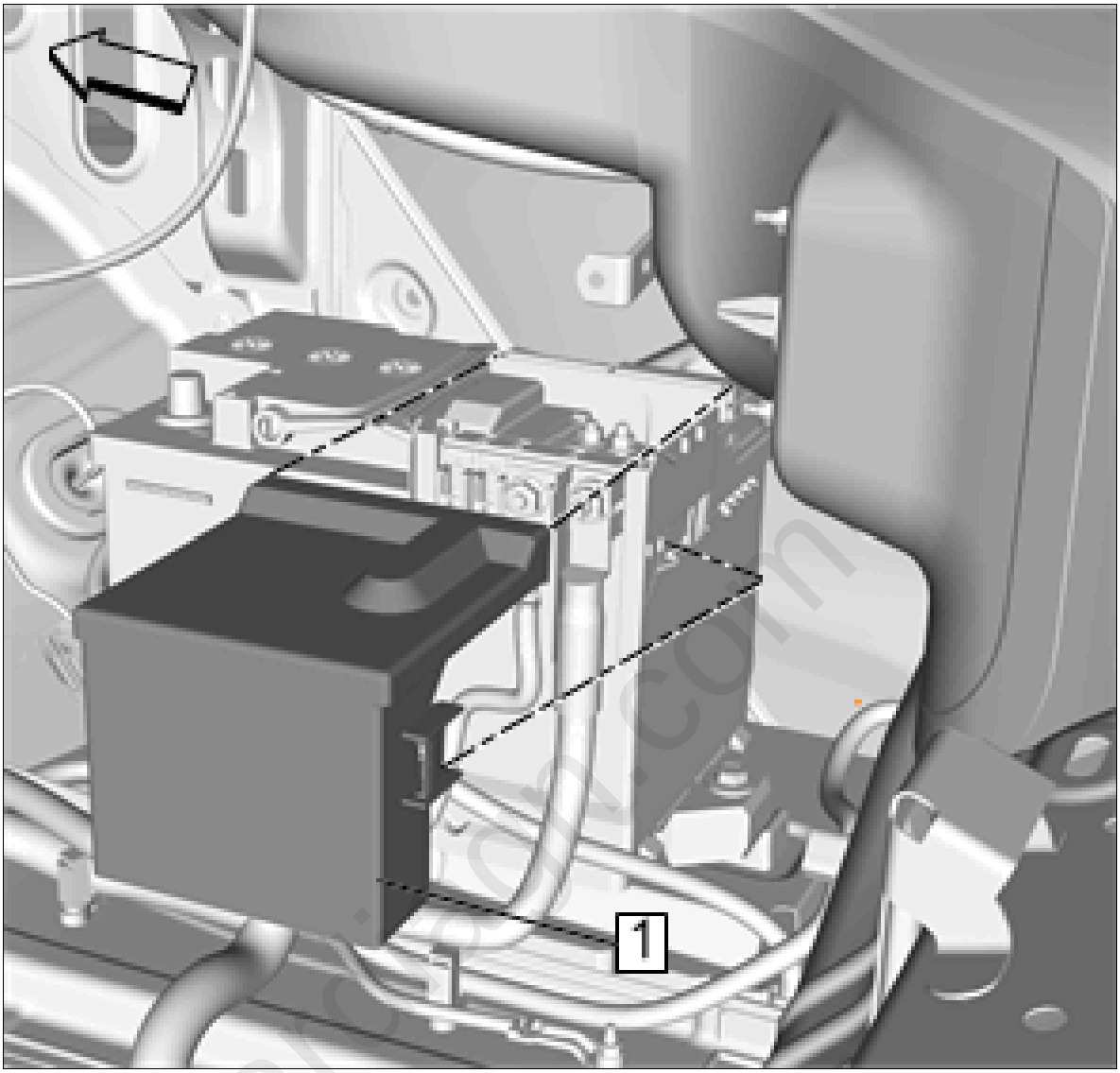
Courtesy of GENERAL MOTORS COMPANY

4. Install Body Wiring Harness Junction Block Cover (1).
5. Rear Compartment Floor Panel Trim Replacement
6. Battery Negative Cable Disconnection and Connection

REPAIR INSTRUCTIONS > REAR BODY FUSE BLOCK REPLACEMENT > REMOVAL PROCEDURE

1. Rear Compartment Side Trim Replacement - Right Side (Coupe) Rear Compartment Side Trim Replacement - Right Side (Convertible)
2. Battery Negative Cable Disconnection and Connection

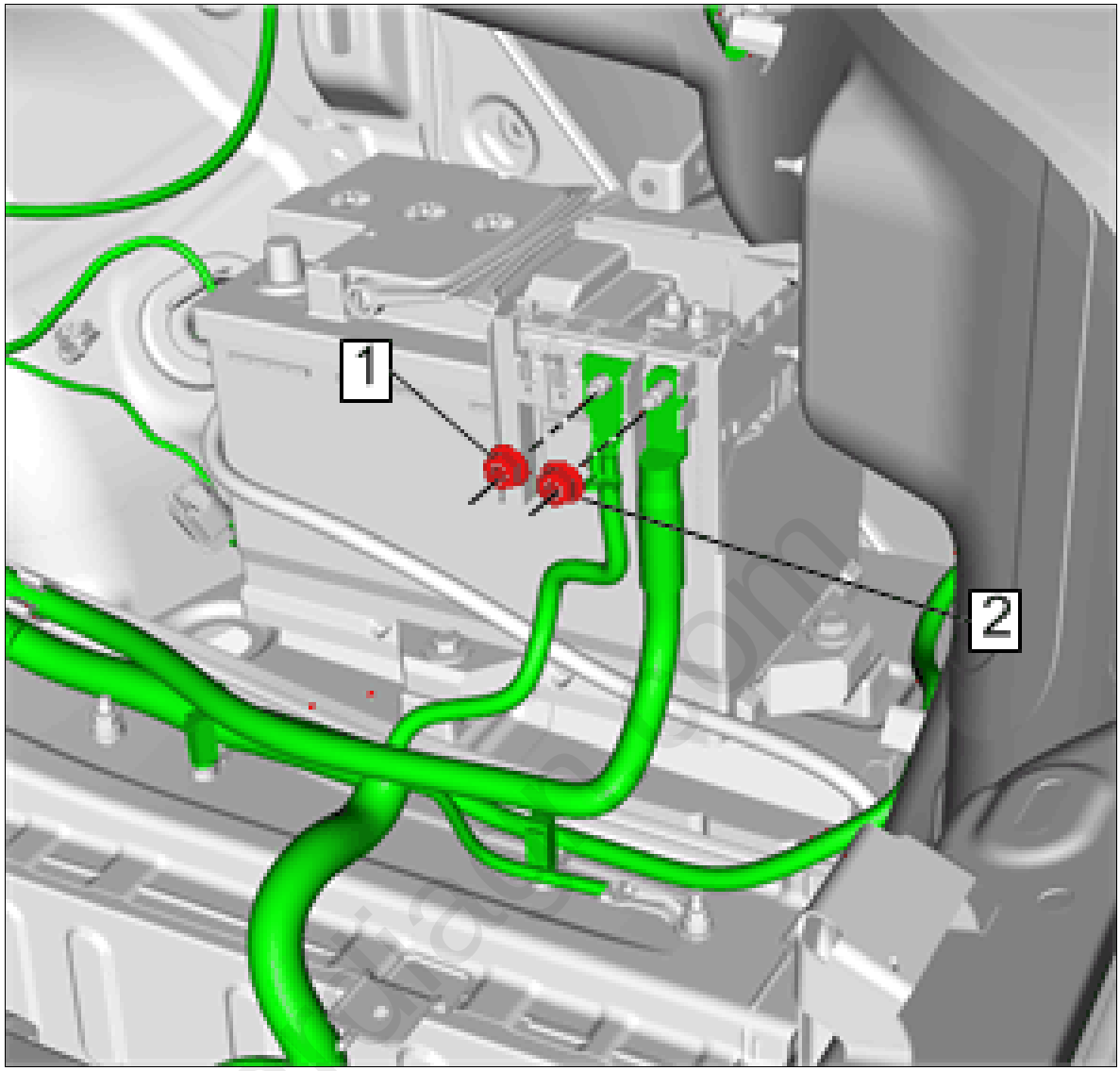
Fig 1: Rear Body Fuse Block Cover



Courtesy of GENERAL MOTORS COMPANY

3. Remove Rear Body Fuse Block Cover (1).

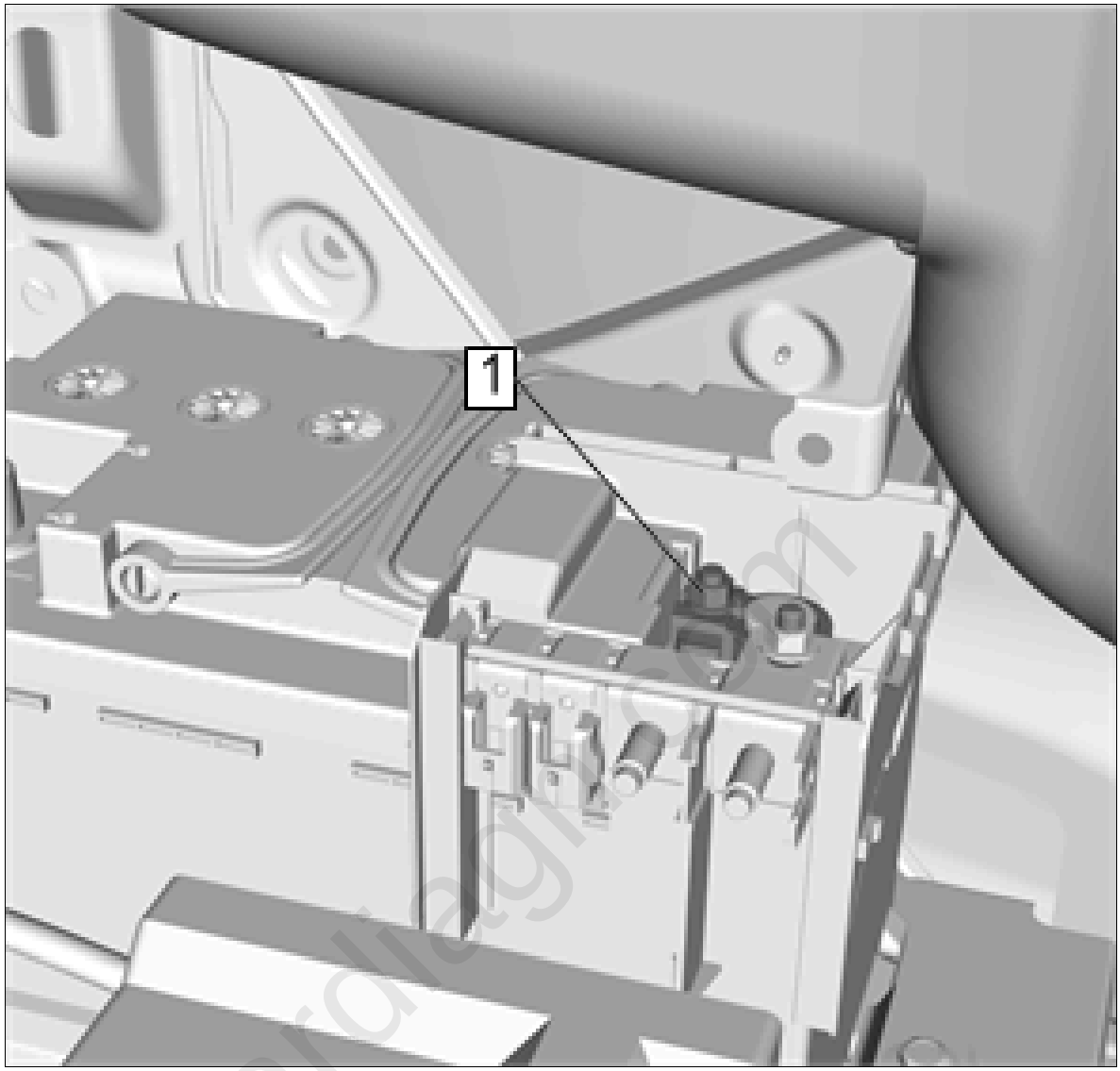
Fig 2: Body Wiring Harness Terminal Nut



Courtesy of GENERAL MOTORS COMPANY

4. Remove Body Wiring Harness Terminal Nut (1).
5. Remove Battery Positive Cable Extension Cable Nut (2).

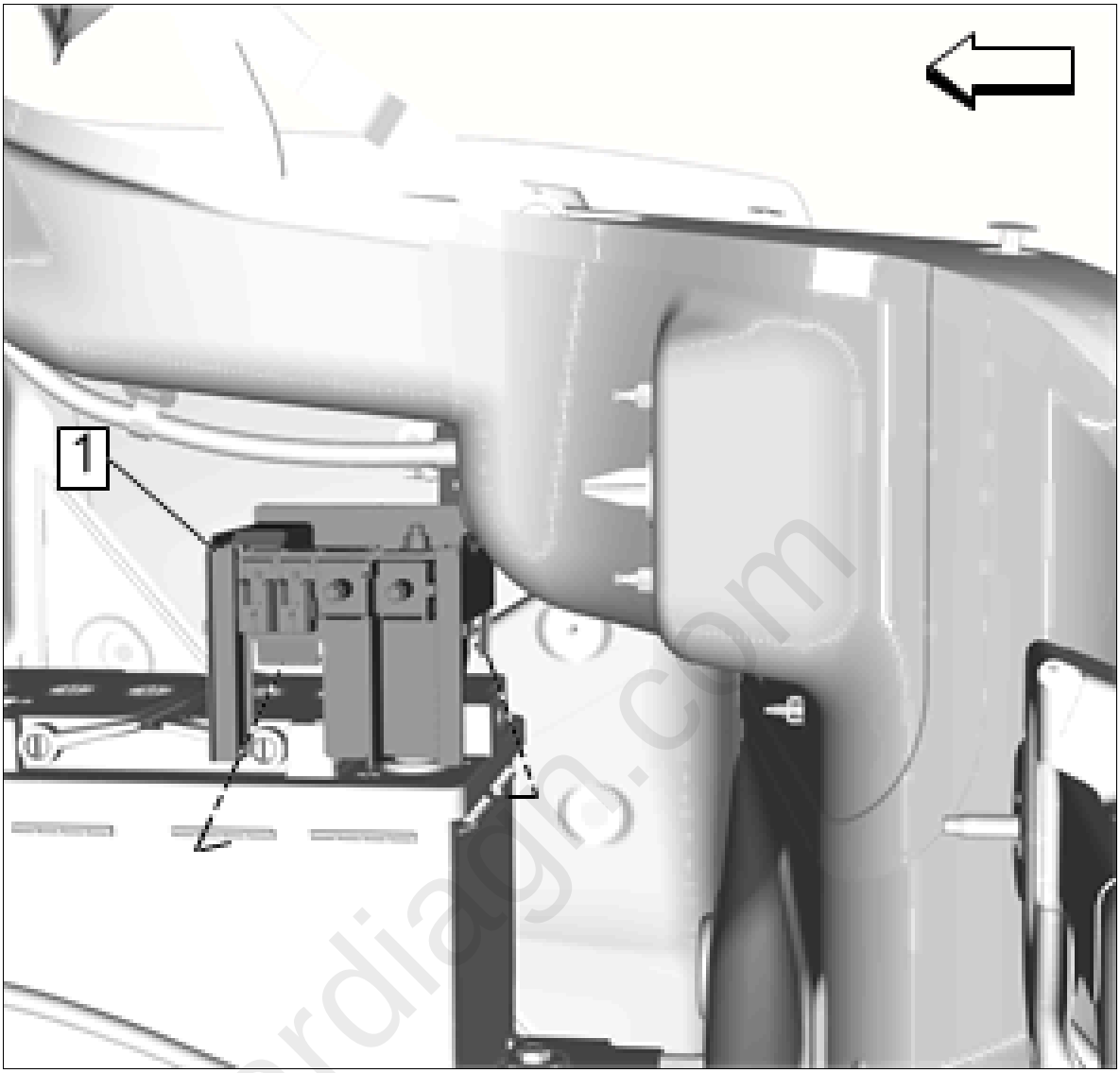
Fig 3: Battery Terminal Clamp Nut



Courtesy of GENERAL MOTORS COMPANY

6. Remove Battery Terminal Clamp Nut (1).

Fig 4: Rear Body Fuse Block

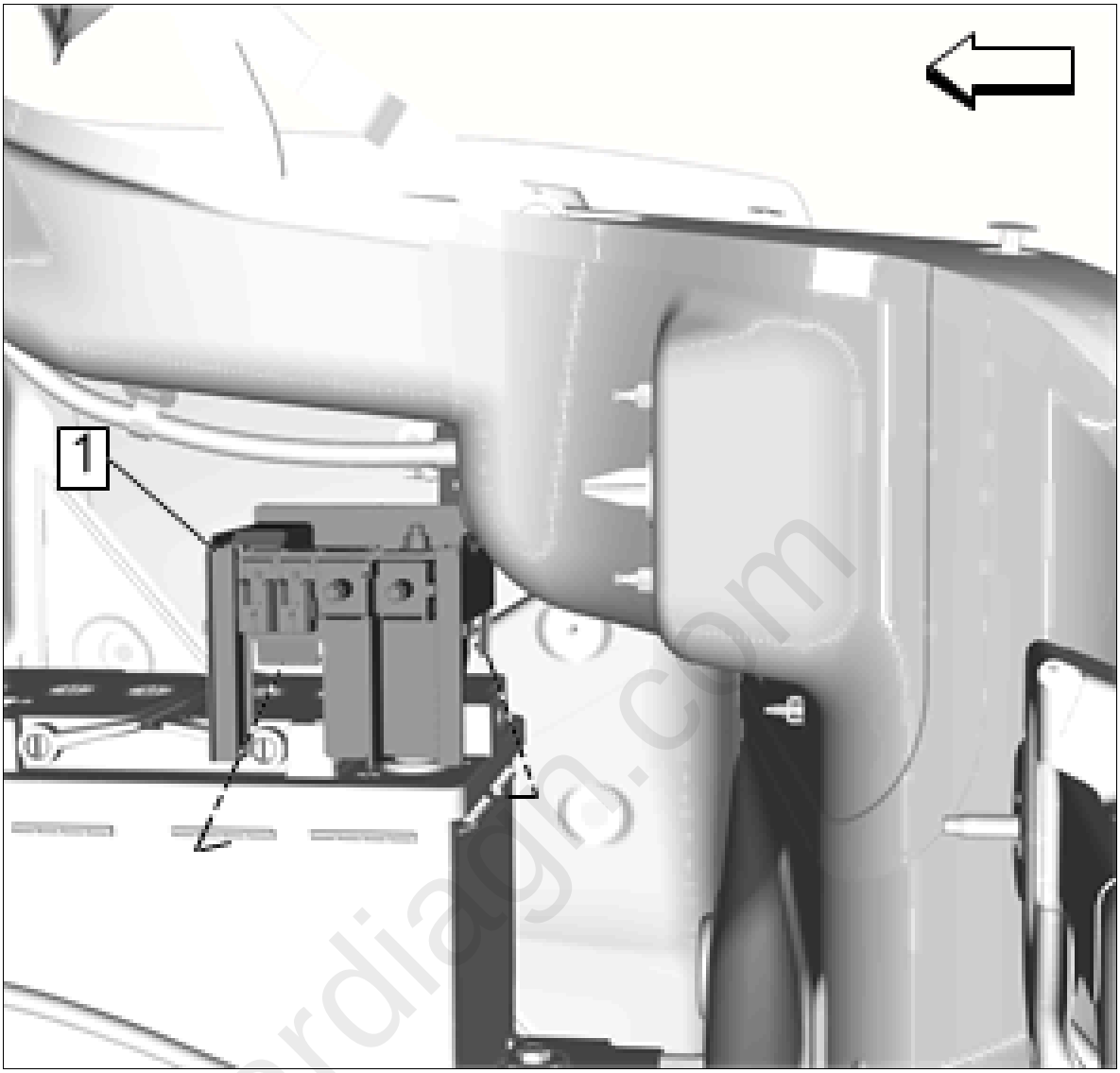


Courtesy of GENERAL MOTORS COMPANY

7. Remove Rear Body Fuse Block (1).

REPAIR INSTRUCTIONS > REAR BODY FUSE BLOCK REPLACEMENT > INSTALLATION PROCEDURE

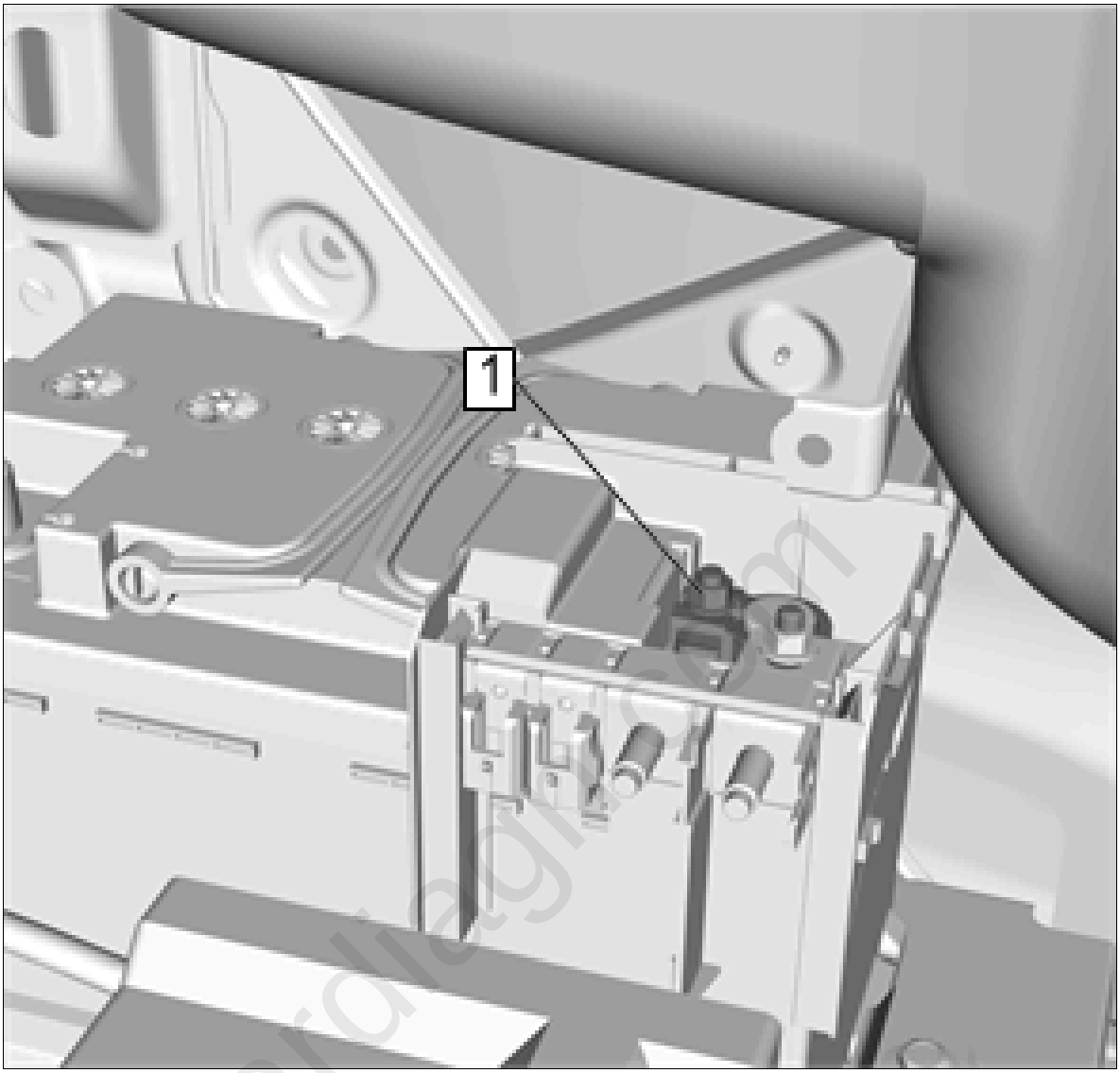
Fig 1: Rear Body Fuse Block



Courtesy of GENERAL MOTORS COMPANY

1. Install Rear Body Fuse Block (1).

Fig 2: Battery Terminal Clamp Nut

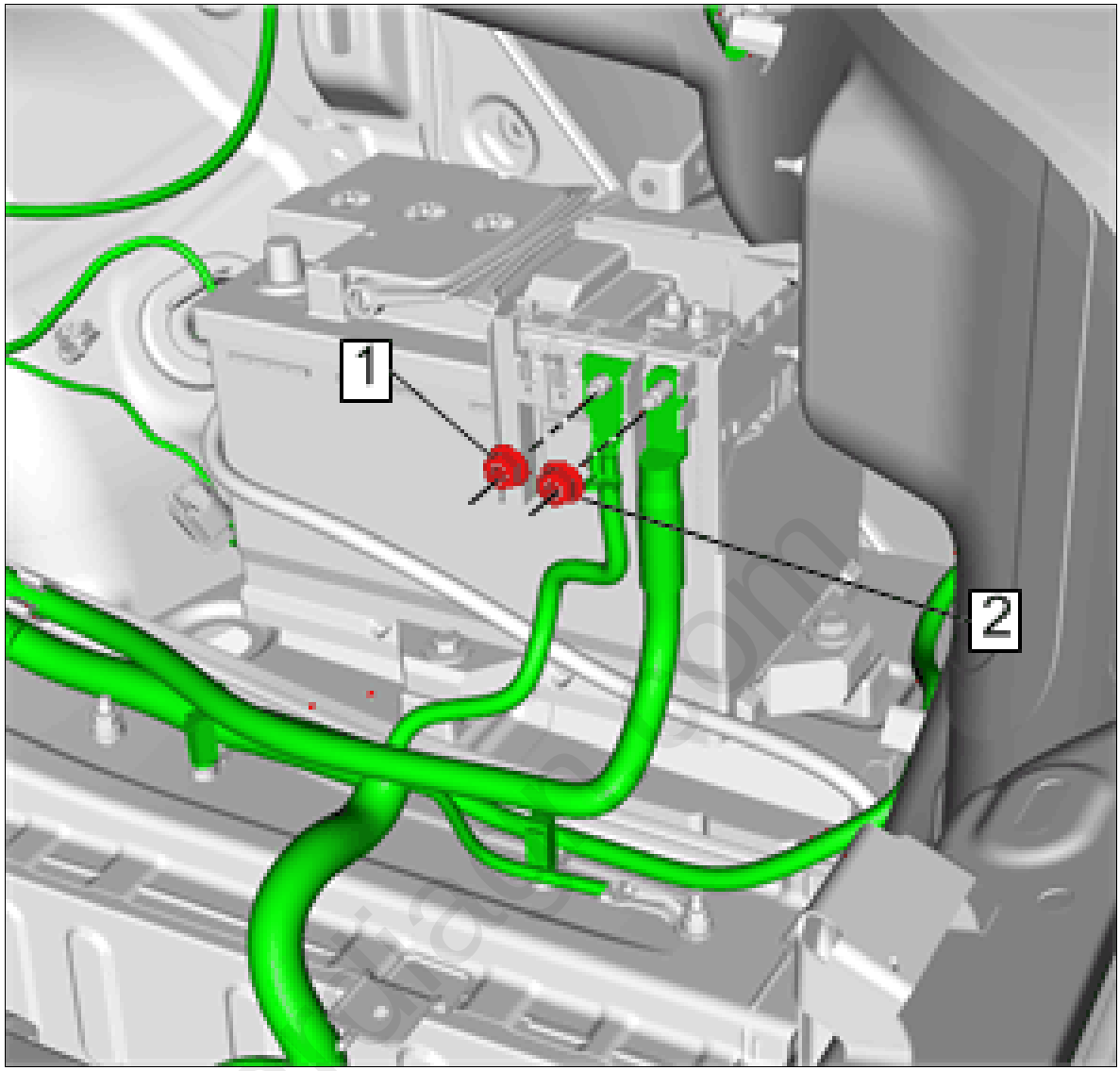


Courtesy of GENERAL MOTORS COMPANY

> ⚠ *CAUTION:*
>
> *Refer to Fastener Caution .*

2. Install and tighten Battery Terminal Clamp Nut (1) to 7 N.m (62 lb in).

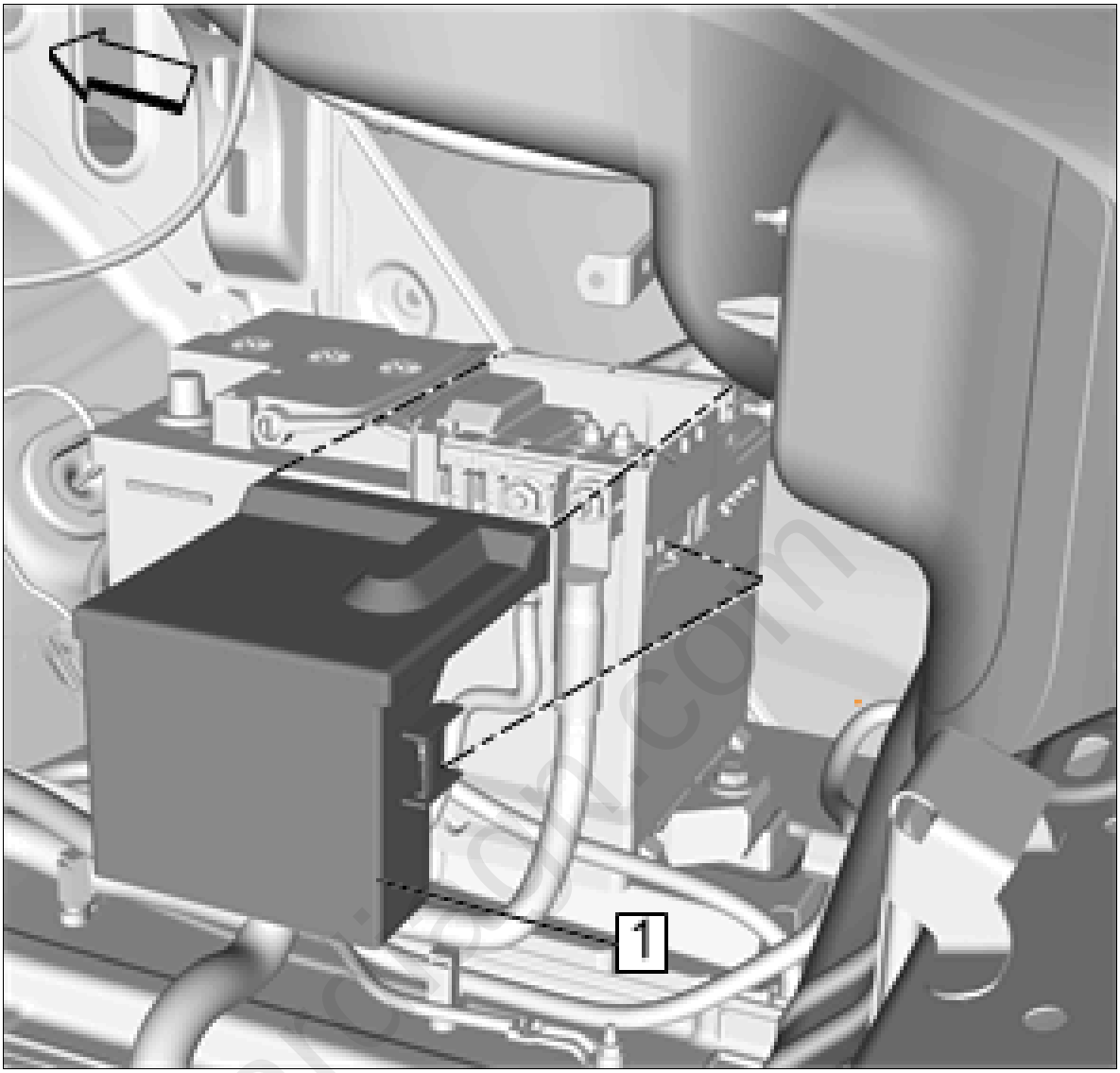
Fig 3: Body Wiring Harness Terminal Nut



Courtesy of GENERAL MOTORS COMPANY

3. Install and tighten Body Wiring Harness Terminal Nut (1) to 12 N.m (106 lb in).
4. Install and tighten Battery Positive Cable Extension Cable Nut (2) to 12 N.m (106 lb in).

Fig 4: Rear Body Fuse Block Cover

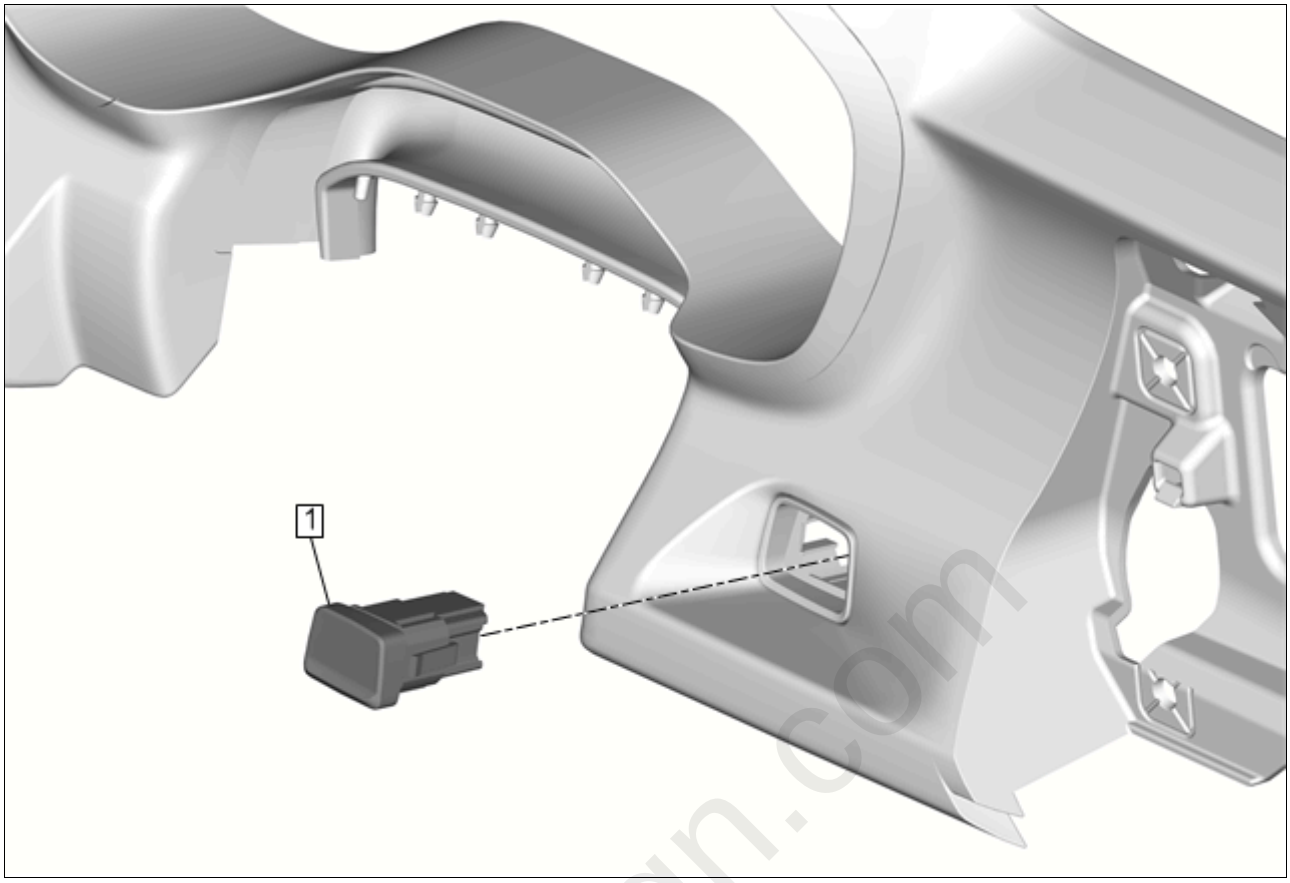


Courtesy of GENERAL MOTORS COMPANY

5. Install Rear Body Fuse Block Cover (1).
6. Battery Negative Cable Disconnection and Connection
7. Rear Compartment Side Trim Replacement - Right Side (Coupe) Rear Compartment Side Trim Replacement - Right Side (Convertible)

REPAIR INSTRUCTIONS > IGNITION AND START SWITCH REPLACEMENT

Fig 1: Ignition And Start Switch



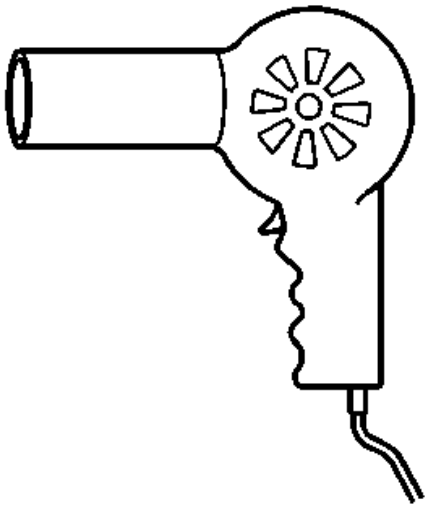
Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure Instrument Panel Cluster Trim Plate Replacement	
1	Ignition and Start Switch **Procedure** Release the retaining tabs and remove the ignition and start switch from the trim piece.

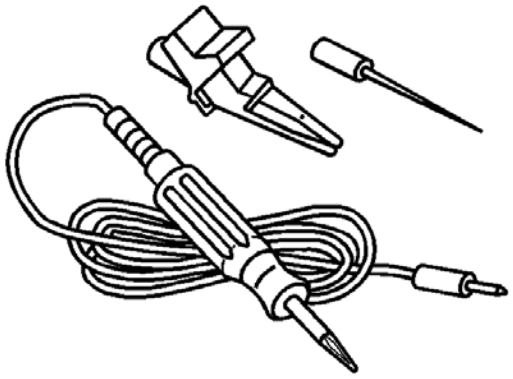
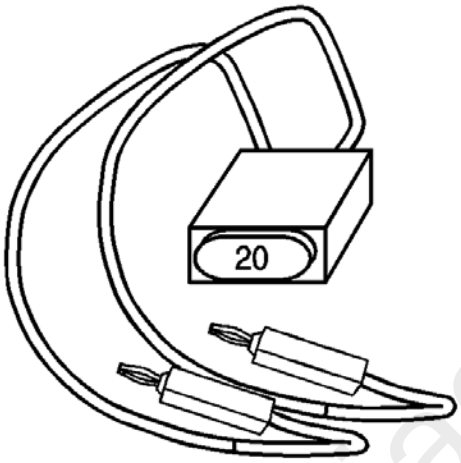
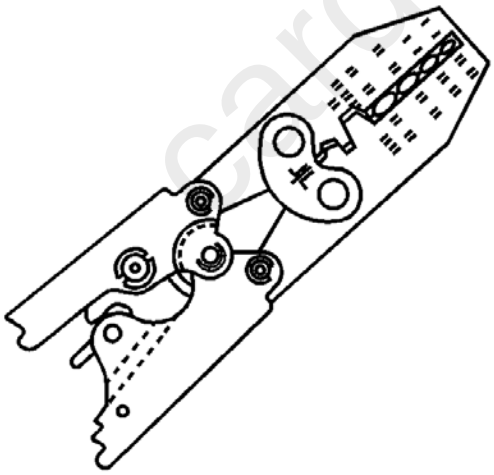
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Service Manual: WIRING SYSTEMS AND POWER MANAGEMENT - SPECIAL TOOLS AND EQUIPMENT

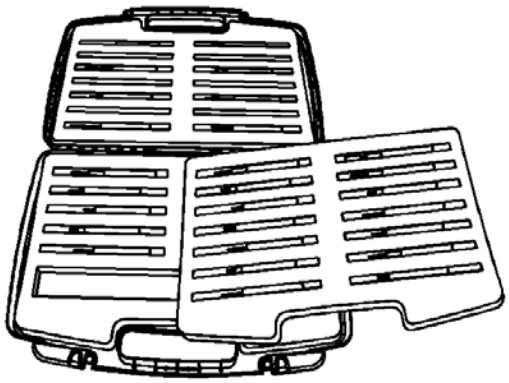
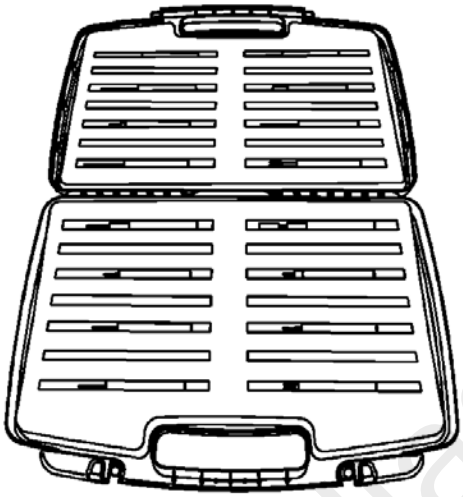
SPECIAL TOOLS AND EQUIPMENT > SPECIAL TOOLS

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

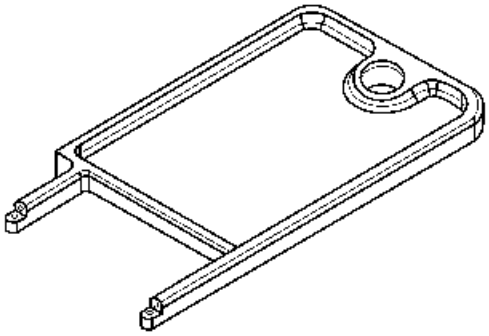
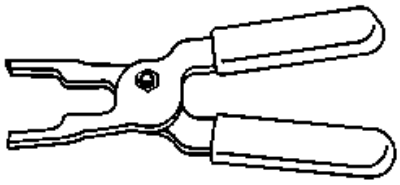
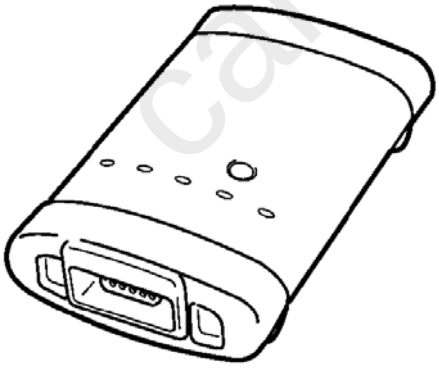
carlagn.com

	EL-35616-200 KM-J-34142-B Test Light- Probe Kit
	EL-35616-20F KM-963 Fused Jumper Wire
	EL-38125-EU (Europe) J-38125-8 (North America Only) EL-38125-10 (Non-North America/Non Europe) Splice Sleeve Crimp Tool

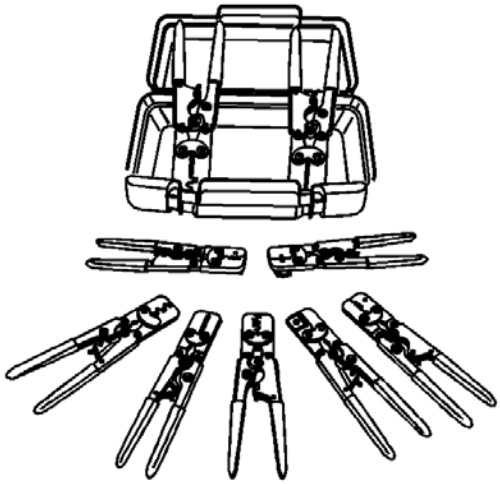
cardiagn.com

	EL-38125-550 (North America Only) Terminal Release Tool Kit
	EL-38125-580 (Non-North America) Terminal Release Tool Kit
	EL-39200 Digital Multimeter

solidign.com

	EL-42759 Ignition Switch Connector Release Tool
	EL-43244 Relay Puller Pliers
	EL-47955 J-2534 Multi Diagnostic Interface MDI

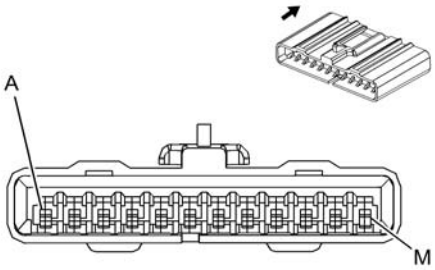
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	EL-50040 (Holden Only) Crimping Tool Kit

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Service Manual: WIRING SYSTEMS AND POWER
MANAGEMENT - SPLICE PACK CONNECTOR END VIEWS

SPLICE PACK CONNECTOR END VIEWS > JX200 SPLICE PACK - INSTRUMENT PANEL



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 12176461
- Service Connector: 15305914
- Description: 12-Way F 150 GT Series (BK)

Terminal Part Information

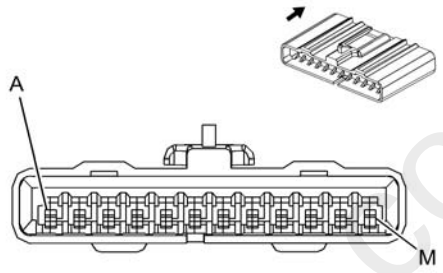
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13575735	J-35616-14 (GN)	J-38125-553	12191812	11	E	C

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	N06
C	0.35	GN	5060	Low Speed GMLAN Serial Data	I	-
D	-	-	-	Not Occupied	-	-
E	0.35	GN	5060	Low Speed GMLAN Serial Data	I	-
F - H	-	-	-	Not Occupied	-	-

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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	-
M	-	-	-	Not Occupied	-	-

SPLICE PACK CONNECTOR END VIEWS > JX201 SPLICE PACK - INSTRUMENT PANEL



Connector Part Information

- Harness Type: Instrument Panel
- OEM Connector: 12176461
- Service Connector: 15305914
- Description: 12-Way F 150 GT Series (BK)

Terminal Part Information

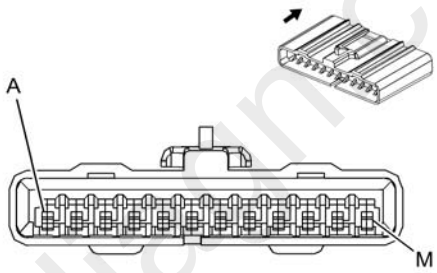
Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13575735	J-35616-14 (GN)	J-38125-553	12191812	11	E	C

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
A	0.35	GY/GN	1102	Low Speed GMLAN Serial Data #2	I	-
B	0.35	GY/GN	1102	Low Speed GMLAN Serial Data #2	I	-

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C	-	-	-	Not Occupied	-	-
D	0.35	GY/GN	1102	Low Speed GMLAN Serial Data #2	I	IO5/IO6
E	0.35	GY/GN	1102	Low Speed GMLAN Serial Data #2	I	-
F	-	-	-	Not Occupied	-	-
G	0.5 0.35	GY/GN GY/GN	1102 1102	Low Speed GMLAN Serial Data #2	I	IO6+MAW UE1/UI3
H	-	-	-	Not Occupied	-	-
J	0.35	GY/GN	1102	Low Speed GMLAN Serial Data #2	I	-
K - M	-	-	-	Not Occupied	-	-

SPLICE PACK CONNECTOR END VIEWS > JX300 SPLICE PACK - BODY



Connector Part Information

- Harness Type: Body
- OEM Connector: 12176461
- Service Connector: 15305914
- Description: 12-Way F 150 GT Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13575735	J-35616-14 (GN)	J-38125-553	12191812	11	E	C

Pin	Size	Color	Circuit	Function	Terminal	Option

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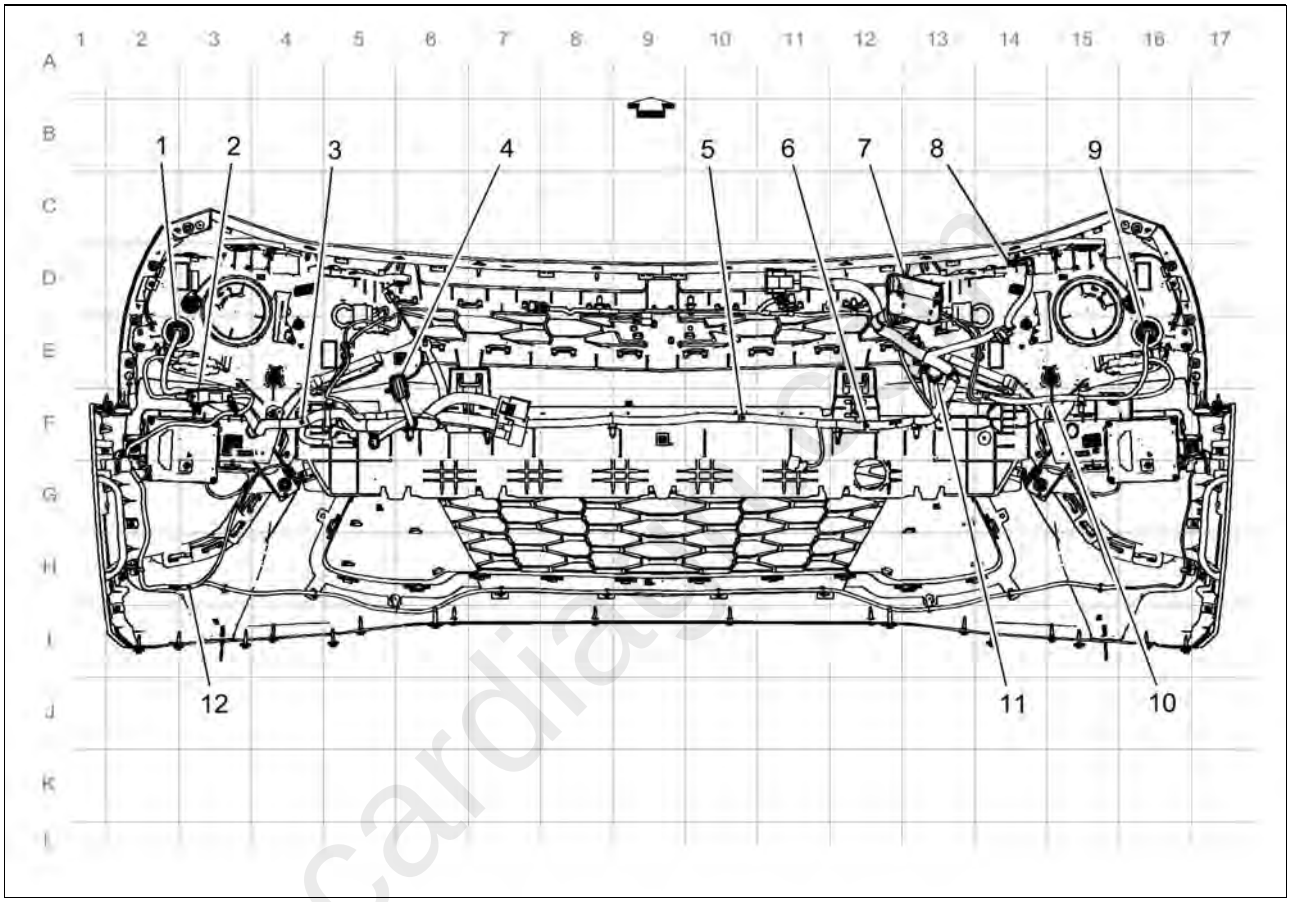
					Type ID	
A	0.35	GN	5060	Low Speed GMLAN Serial Data	I	-
B	0.35	GN	5060	Low Speed GMLAN Serial Data	I	A1AC
C	0.35	GN	5060	Low Speed GMLAN Serial Data	I	UKC
D	0.35	GN	5060	Low Speed GMLAN Serial Data	I	UD7
E	0.35	GN	5060	Low Speed GMLAN Serial Data	I	-
F	0.35	GN	5060	Low Speed GMLAN Serial Data	I	-
G - J	-	-	-	Not Occupied	-	-
K	0.35	GN	5060	Low Speed GMLAN Serial Data	I	DD8+UE1
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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Service Manual: WIRING SYSTEMS AND POWER MANAGEMENT - WIRING SCHEMATICS AND WIRING HARNESS ROUTING DIAGRAMS

SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > WIRING HARNESS ROUTING VIEWS > FRONT FASCIA AND FORWARD LAMP HARNESS ROUTING

Fig 1: Front Fascia and Forward Lamp Harness Routing



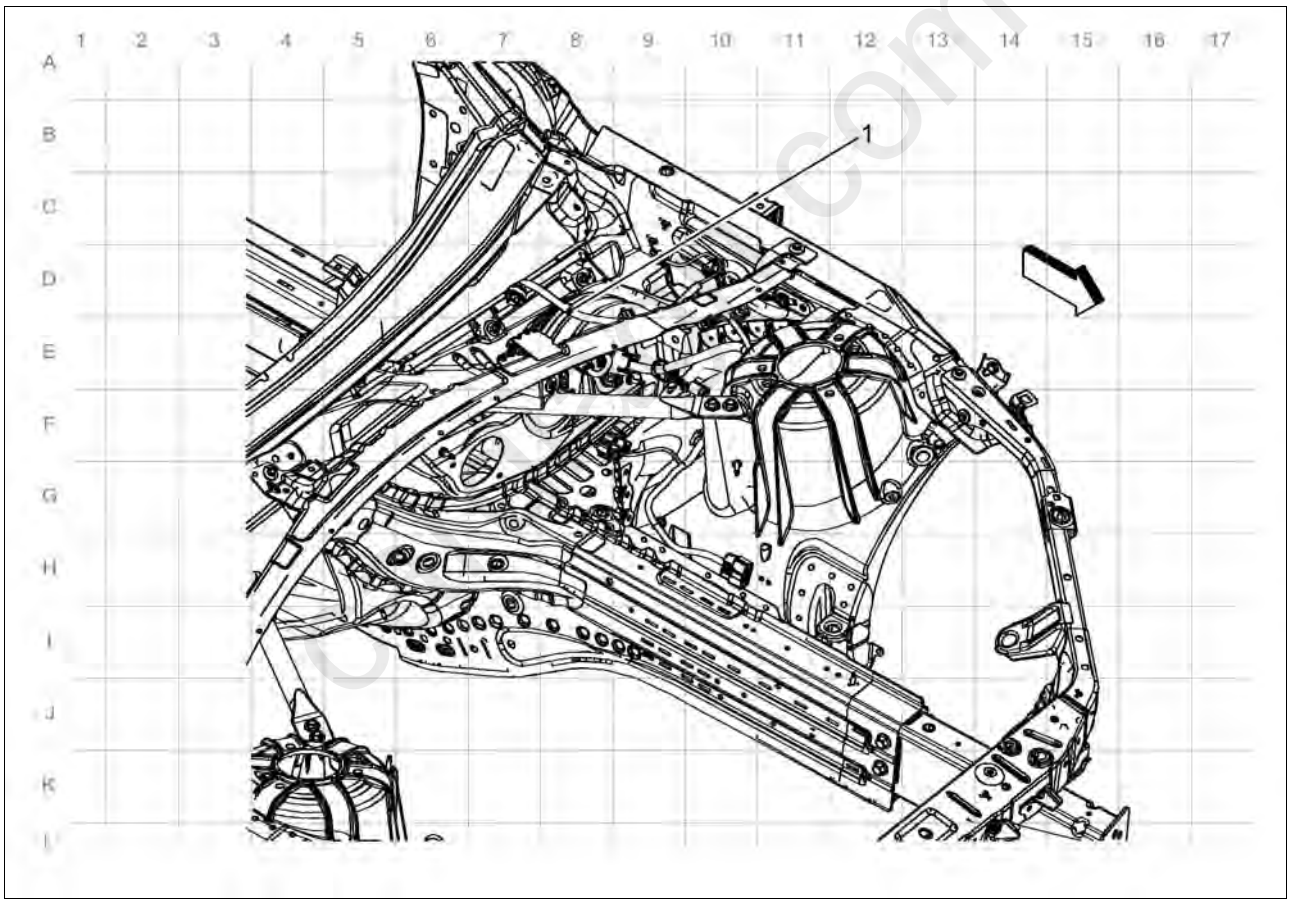
Courtesy of GENERAL MOTORS COMPANY

Items
1:X110 X110 Forward Lamp Harness to Headlamp Harness
2:X100 X100 Front Fascia Harness to Forward Lamp Harness
3:J105
4:X127 X127 Body Harness to Forward Lamp Harness
5:J136
6:J110
7: X50A Fuse Block - Underhood X50A Fuse Block - Underhood X1X50A Fuse Block - Underhood X2

8: X50B Fuse Block - Underhood Auxiliary X50B Fuse Block - Underhood Auxiliary X1X50B Fuse Block - Underhood Auxiliary X3X50B Fuse Block - Underhood Auxiliary X5
9:X120 X120 Forward Lamp Harness to Headlamp Harness
10:J106
11:X126 X126 Body Harness to Forward Lamp Harness
12:J107

SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > WIRING HARNESS ROUTING VIEWS > BODY HARNESS ROUTING - ENGINE COMPARTMENT

Fig 1: Body Harness Routing - Engine Compartment

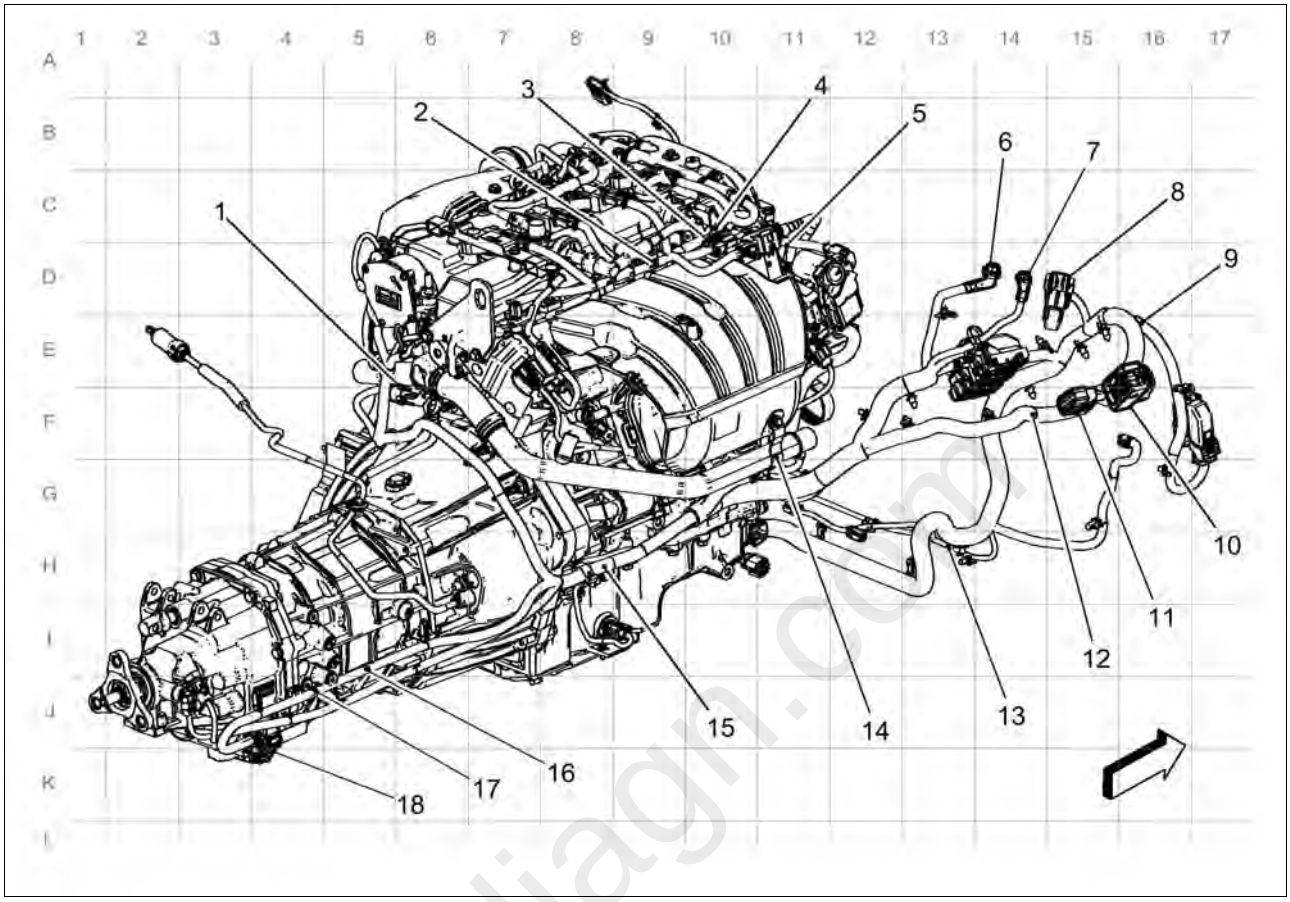


Courtesy of GENERAL MOTORS COMPANY

Items
1:J371

SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > WIRING HARNESS ROUTING VIEWS > ENGINE HARNESS ROUTING (LTG)

Fig 1: Engine Harness Routing (LTG)



Courtesy of GENERAL MOTORS COMPANY

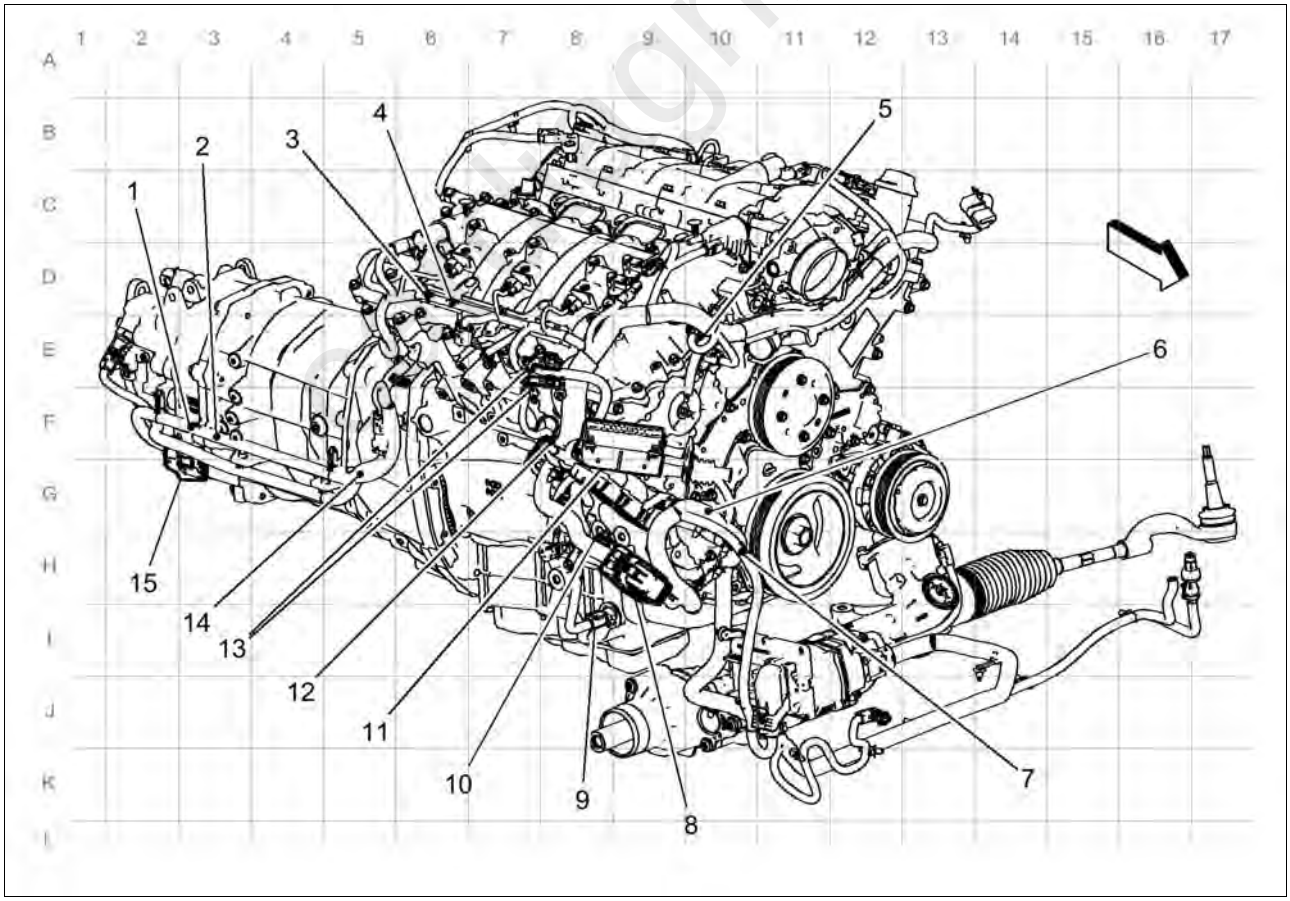
Items
1:X162 (LGX or LTG) X162 Engine Harness to Oil Control Jumper Harness (LGX)X162 Engine Harness to Oil Control Jumper Harness (LTG)
2:J113
3:X160 X160 Engine Harness to Fuel Injector Jumper Harness (LGX)X160 Engine Harness to Fuel Injector Jumper Harness (LT1)X160 Engine Harness to Fuel Injector Jumper Harness (LTG)
4:J121
5:J126
6: X50B Fuse Block - Underhood Auxiliary X50B Fuse Block - Underhood Auxiliary X1X50B Fuse Block - Underhood Auxiliary X3X50B Fuse Block - Underhood Auxiliary X5
7: X50B Fuse Block - Underhood Auxiliary X50B Fuse Block - Underhood Auxiliary X1X50B Fuse Block - Underhood Auxiliary X3X50B Fuse Block - Underhood Auxiliary X5
8: X50A Fuse Block - Underhood X50A Fuse Block - Underhood X1X50A Fuse Block - Underhood X2

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9:J133
10:X150 X150 Engine Harness to Body Harness
11:X152 X152 Engine Harness to Body Harness
12:J116
13:J109 (LTG)
14:J111 (LTG)
15:J129
16:J119
17:J118
18:X175 (MX0) X175 Engine Harness to Transmission Harness

SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > WIRING HARNESS ROUTING VIEWS > ENGINE HARNESS ROUTING RIGHT FRONT (LGX)

Fig 1: Engine Harness Routing Right Front (LGX)



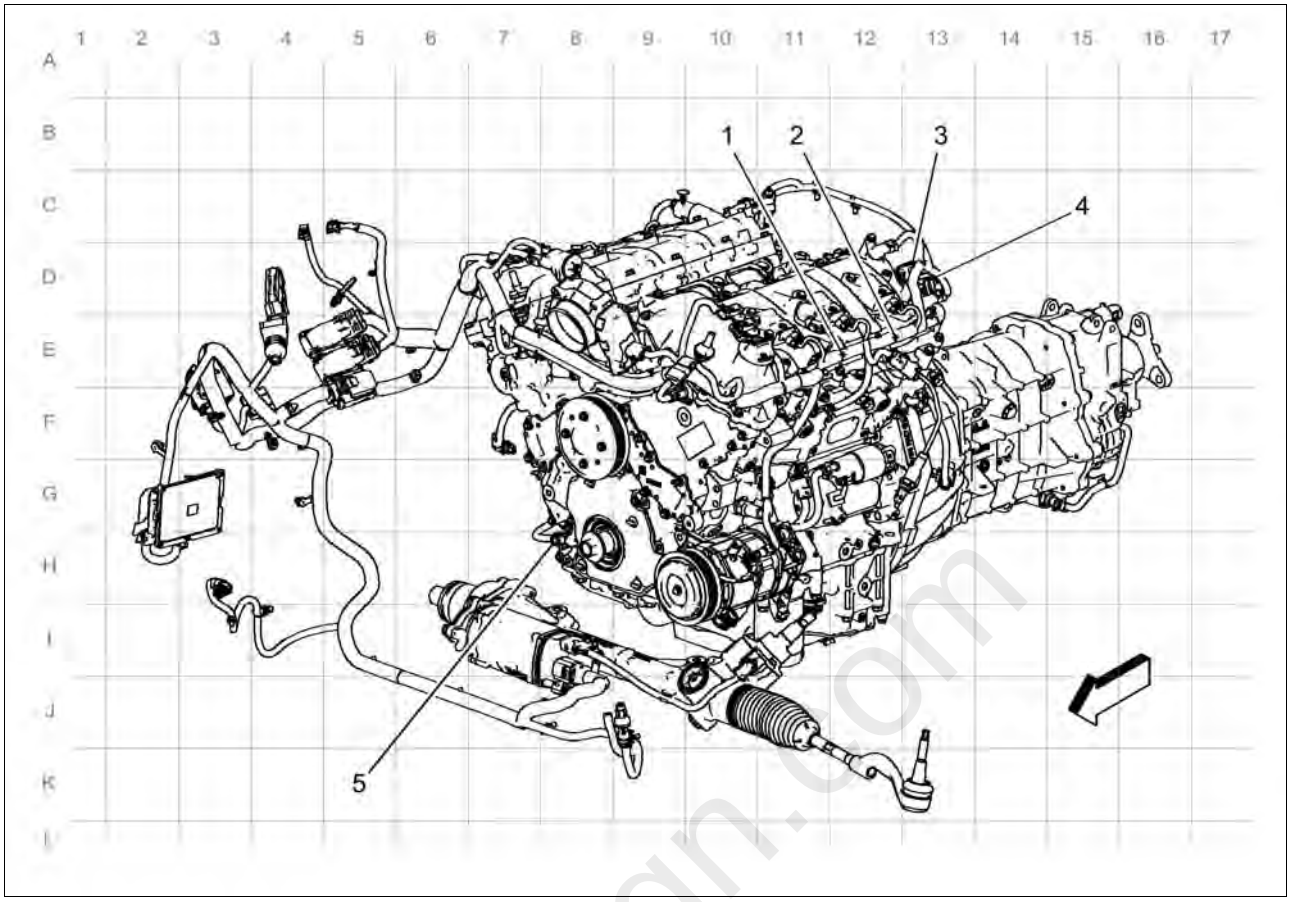
Courtesy of GENERAL MOTORS COMPANY

Items
1:J118
2:J119
3:J121
4:J113
5:X164 X164 Engine Harness to Coolant Temperature Jumper Harness
6:J116
7:J133
8:X152 X152 Engine Harness to Body Harness
9:X167 (LGX) X167 Engine Harness to Oil Level Jumper Harness
10:X150 X150 Engine Harness to Body Harness
11: X50A Fuse Block - Underhood X50A Fuse Block - Underhood X1X50A Fuse Block - Underhood X2
12:J126
13: X50B Fuse Block - Underhood Auxiliary X50B Fuse Block - Underhood Auxiliary X1X50B Fuse Block - Underhood Auxiliary X3X50B Fuse Block - Underhood Auxiliary X5
14:J129
15:X175 (MX0) X175 Engine Harness to Transmission Harness

SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > WIRING HARNESS ROUTING VIEWS > ENGINE HARNESS ROUTING LEFT FRONT (LGX)

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Fig 1: Engine Harness Routing Left Front (LGX)



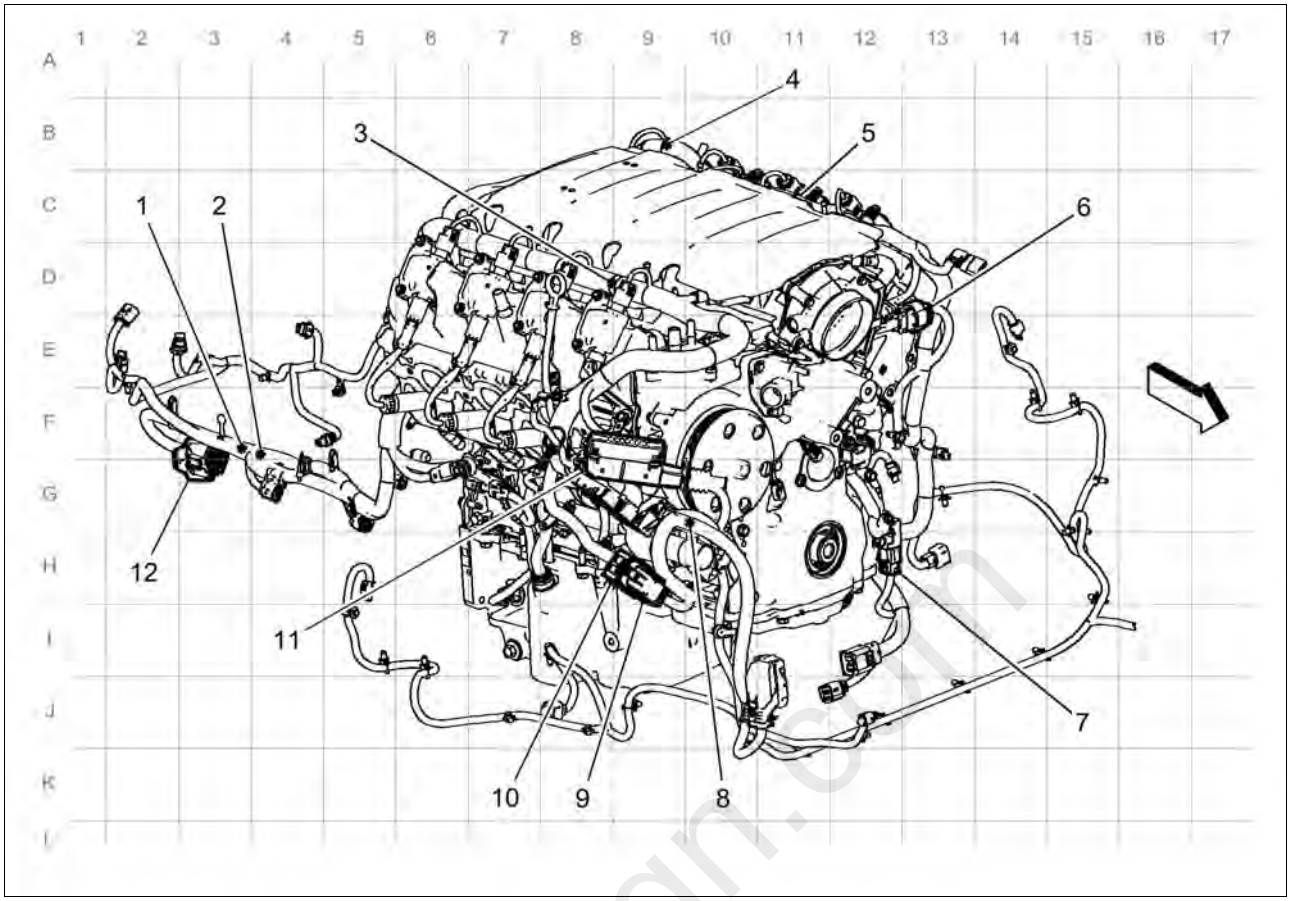
Courtesy of GENERAL MOTORS COMPANY

Items
1:J124
2:J114 (LGX)
3:X160 X160 Engine Harness to Fuel Injector Jumper Harness (LGX)X160 Engine Harness to Fuel Injector Jumper Harness (LT1)X160 Engine Harness to Fuel Injector Jumper Harness (LTG)
4:X161 (LGX or LT1) X161 Engine Harness to Fuel Injector Jumper Harness (LGX)X161 Engine Harness to Fuel Injector Jumper Harness (LT1)
5:X162 (LGX or LTG) X162 Engine Harness to Oil Control Jumper Harness (LGX)X162 Engine Harness to Oil Control Jumper Harness (LTG)

SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > WIRING HARNESS ROUTING VIEWS > ENGINE HARNESS ROUTING RIGHT FRONT (LT1)

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Fig 1: Engine Harness Routing Right Front (LT1)



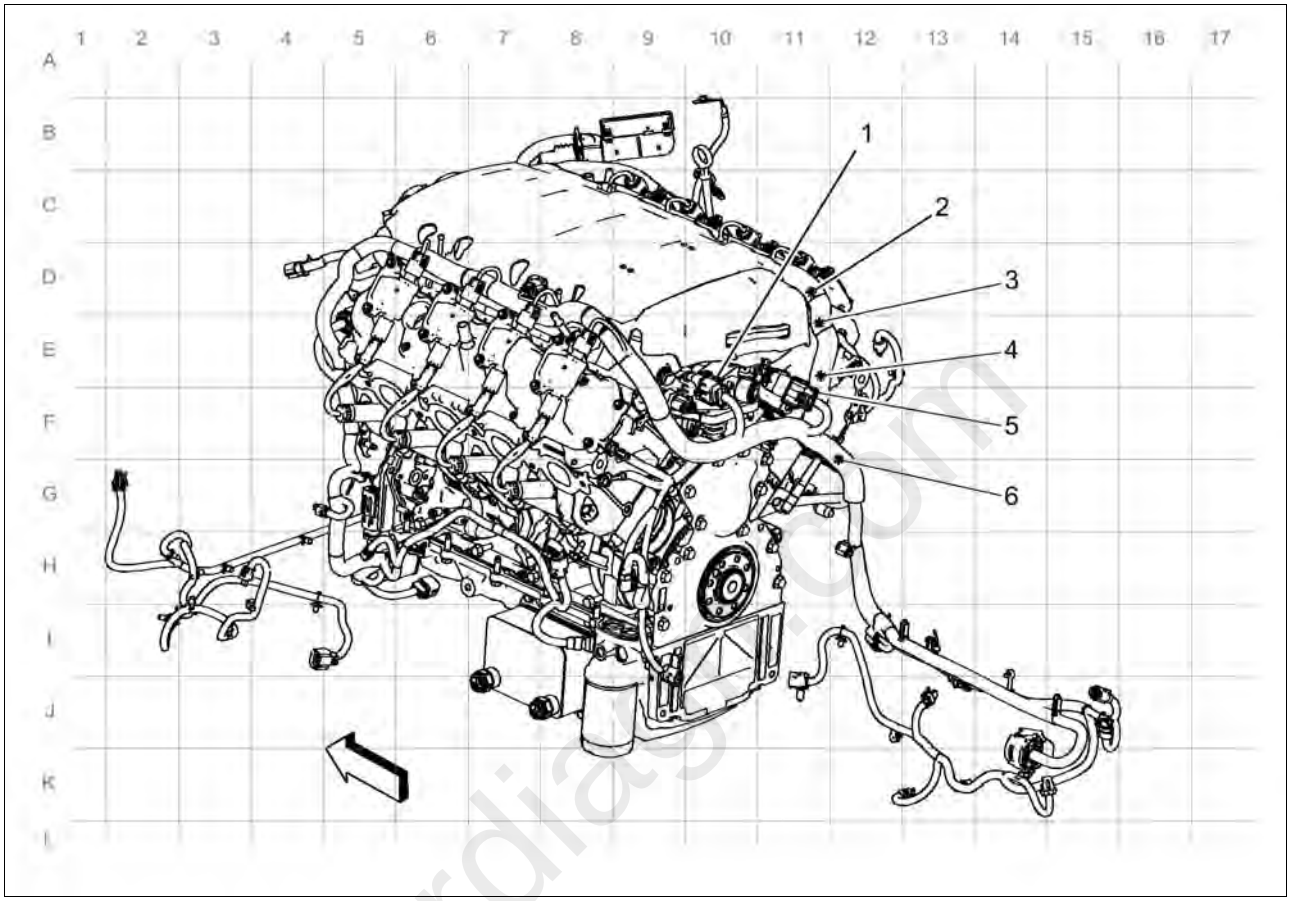
Courtesy of GENERAL MOTORS COMPANY

Items
1:J118
2:J119
3:J124
4:J121
5:J113
6:X130 X130 Engine Harness to Oil Control Jumper Harness
7:X106 X106 Engine Harness to Camshaft Position Sensor Jumper Harness
8:J133
9:X152 X152 Engine Harness to Body Harness
10:X150 X150 Engine Harness to Body Harness
11: X50A Fuse Block - Underhood X50A Fuse Block - Underhood X1X50A Fuse Block - Underhood X2
12:X175 (MX0) X175 Engine Harness to Transmission Harness

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SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > WIRING HARNESS ROUTING VIEWS > ENGINE HARNESS ROUTING LEFT REAR (LT1)

Fig 1: Engine Harness Routing Left Rear (LT1)



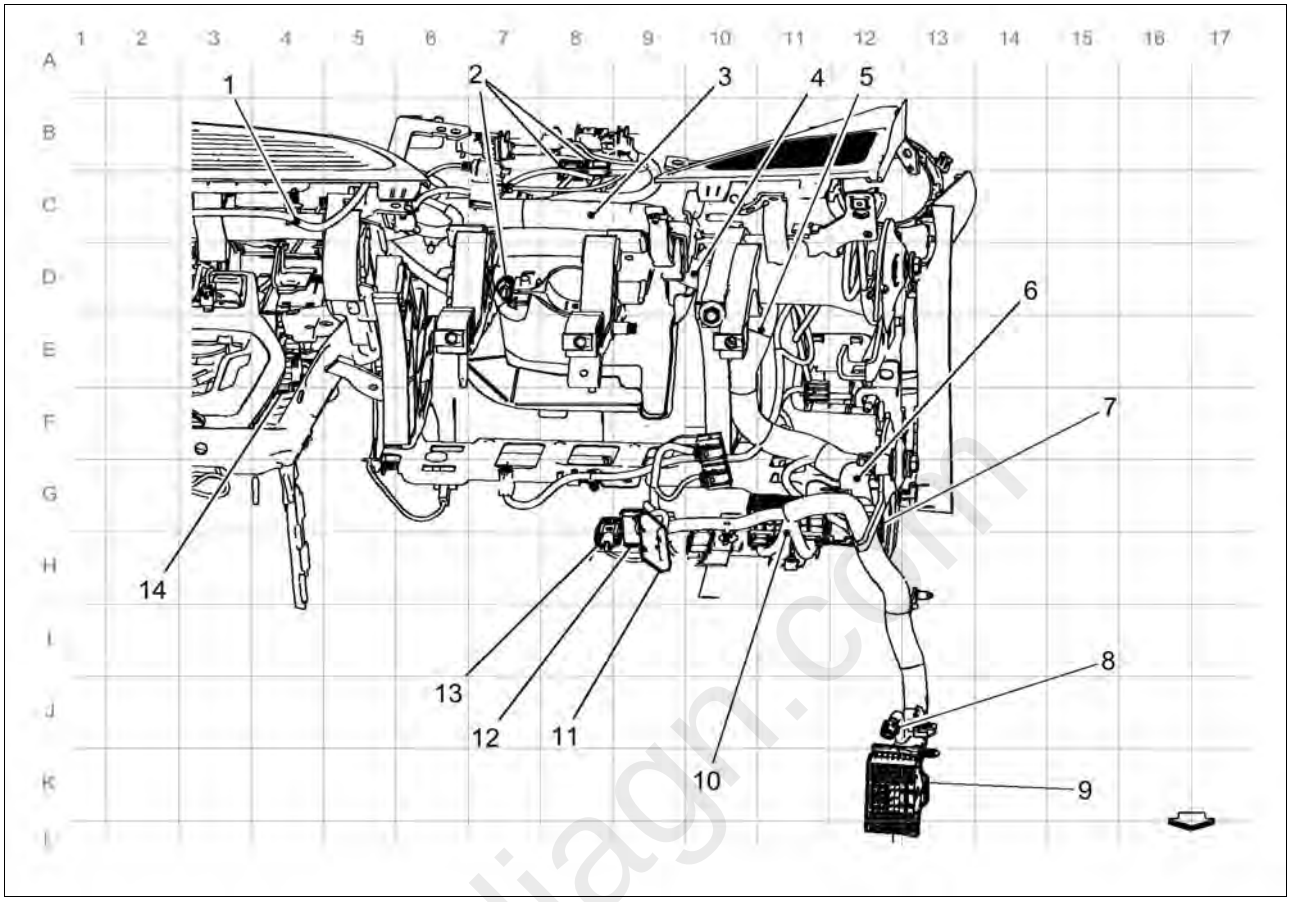
Courtesy of GENERAL MOTORS COMPANY

Items
1:X160 X160 Engine Harness to Fuel Injector Jumper Harness (LGX)X160 Engine Harness to Fuel Injector Jumper Harness (LT1)X160 Engine Harness to Fuel Injector Jumper Harness (LTG)
2:J115 (LT1)
3:J120 (LT1)
4:J128
5:X161 (LGX or LT1) X161 Engine Harness to Fuel Injector Jumper Harness (LGX)X161 Engine Harness to Fuel Injector Jumper Harness (LT1)
6:J131

SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS >

WIRING HARNESS ROUTING VIEWS > INSTRUMENT PANEL HARNESS ROUTING - REAR LEFT

Fig 1: Instrument Panel Harness Routing - Rear Left



Courtesy of GENERAL MOTORS COMPANY

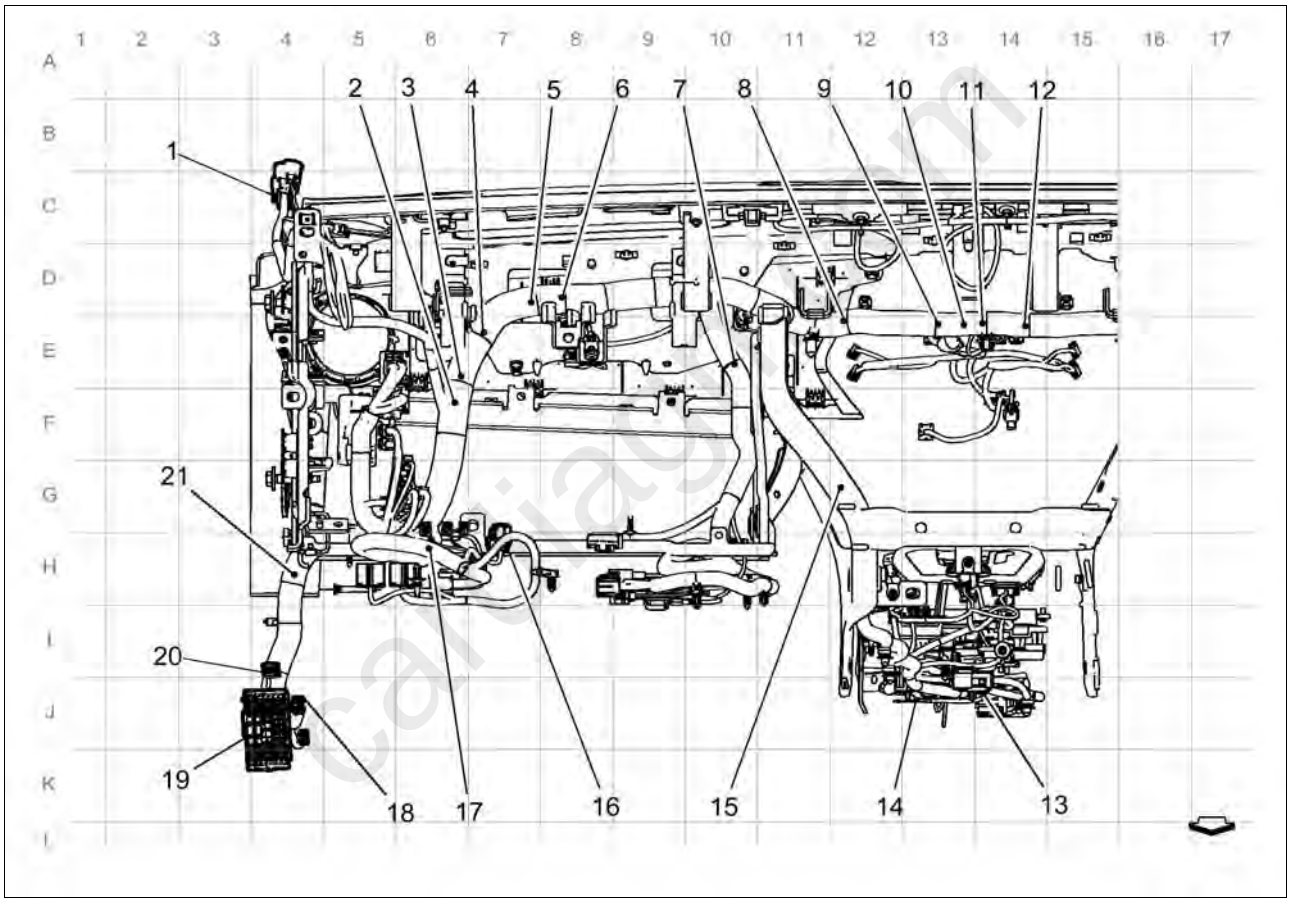
Items
1:J216 (IO6 with MAW)
2: X85 Steering Wheel Air Bag Coil X85 Steering Wheel Air Bag Coil X1X85 Steering Wheel Air Bag Coil X2X85 Steering Wheel Air Bag Coil X3X85 Steering Wheel Air Bag Coil X4X85 Steering Wheel Air Bag Coil X5
3:J202
4:J209
5:J215
6:J207
7: X84 Data Link Connector X84 Data Link Connector
8:X230 X230 Body Harness to Instrument Panel Harness (U2Q)
9:X225 X225 Instrument Panel Harness to Body Harness
10:J205

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11:JX201 JX201 Splice Pack - Instrument Panel
12:JX200 JX200 Splice Pack - Instrument Panel
13: X92 USB Receptacle (UDD or IO6+MAW) X92 USB Receptacle
14:X250

SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > WIRING HARNESS ROUTING VIEWS > INSTRUMENT PANEL HARNESS ROUTING - REAR RIGHT

Fig 1: Instrument Panel Harness Routing - Rear Right



Courtesy of GENERAL MOTORS COMPANY

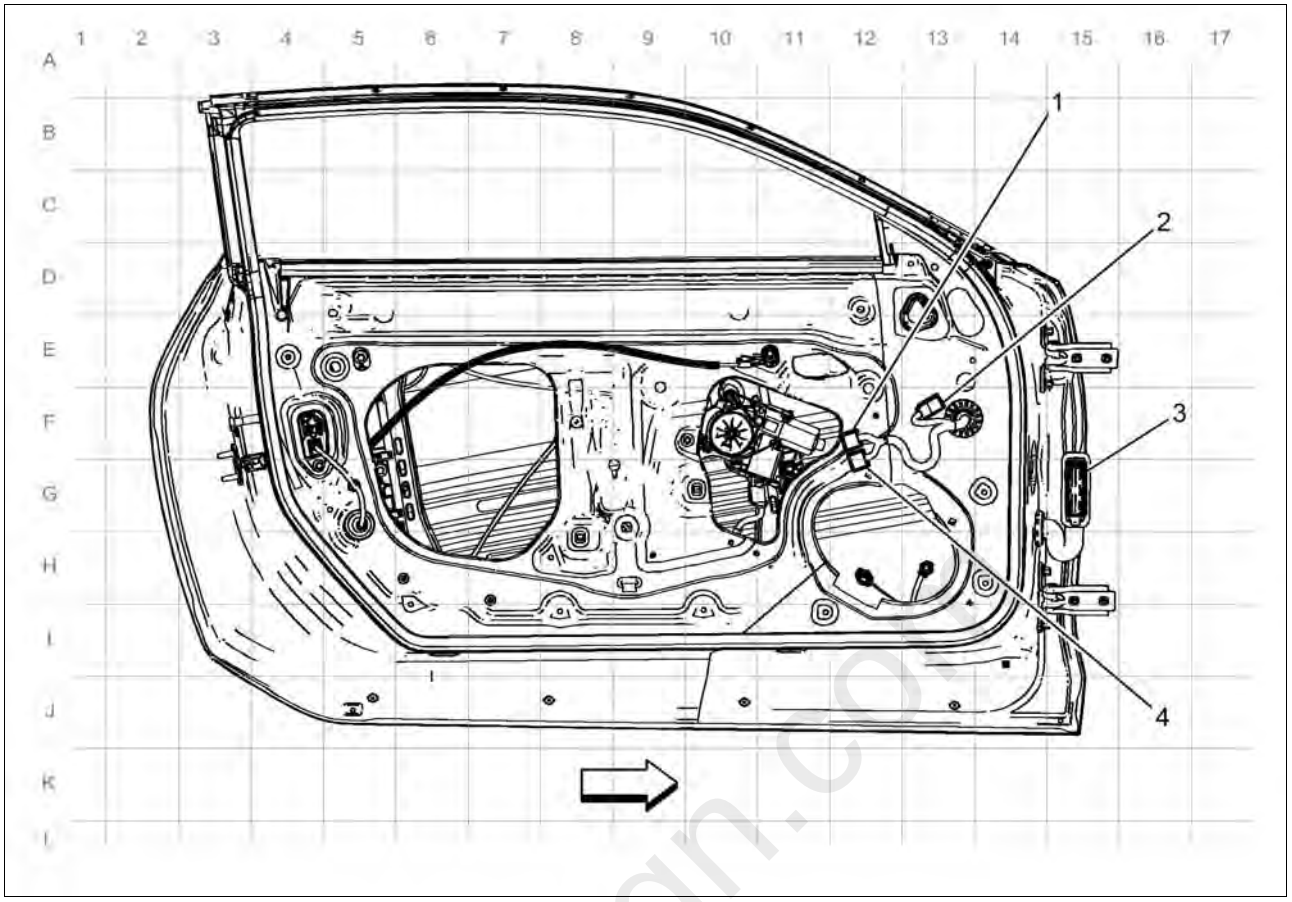
Items
1:X215 X215 Instrument Panel Harness to Headliner Harness
2:J211
3:J212
4:J208

5:J214
6:J204
7:J217 (IO6 with MAW)
8:J203
9:J218
10:J200
11:J210
12:J220
13:X250
14:X205 X251 Instrument Panel Harness to Floor Console Harness
15:J213
16:X228 X228 Instrument Panel Harness to HVAC Harness
17:J206
18:X252 X252 Body Harness to Instrument Panel Harness
19:X275 X275 Instrument Panel Harness to Body Harness
20:X220 X220 Instrument Panel Harness to Body Harness
21:J201

SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > WIRING HARNESS ROUTING VIEWS > DRIVER DOOR HARNESS ROUTING

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Fig 1: Driver Door Harness Routing

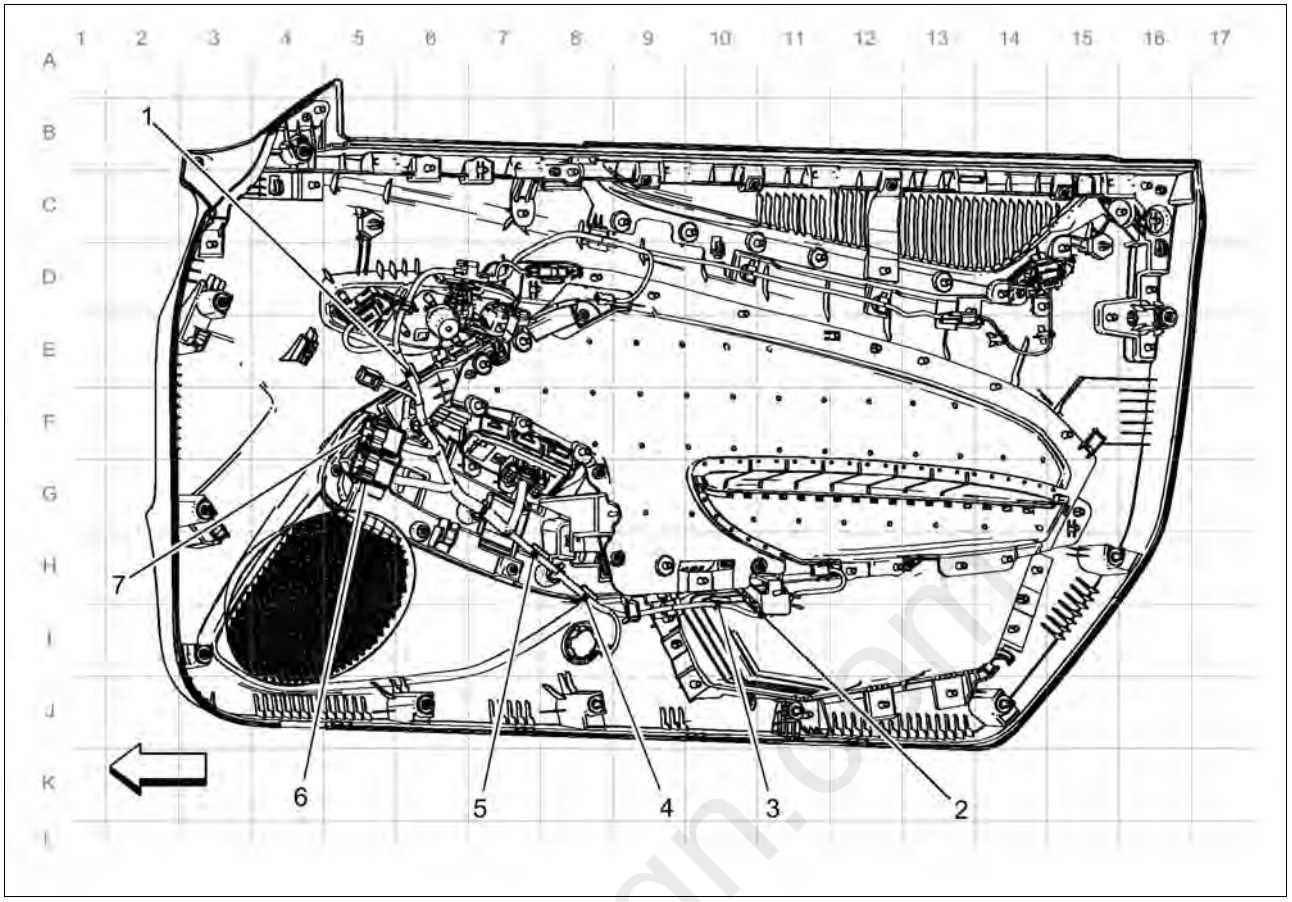


Courtesy of GENERAL MOTORS COMPANY

Items
1:X505 X505 Driver Door Harness to Driver Door Trim Harness
2:X510 X510 Outside Rearview Mirror Harness to Driver Door Harness
3:X500 X500 Driver Door Harness to Body Harness
4:X506 X506 Driver Door Harness to Driver Door Trim Harness

SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > WIRING HARNESS ROUTING VIEWS > DRIVER DOOR TRIM HARNESS ROUTING

Fig 1: Driver Door Trim Harness Routing



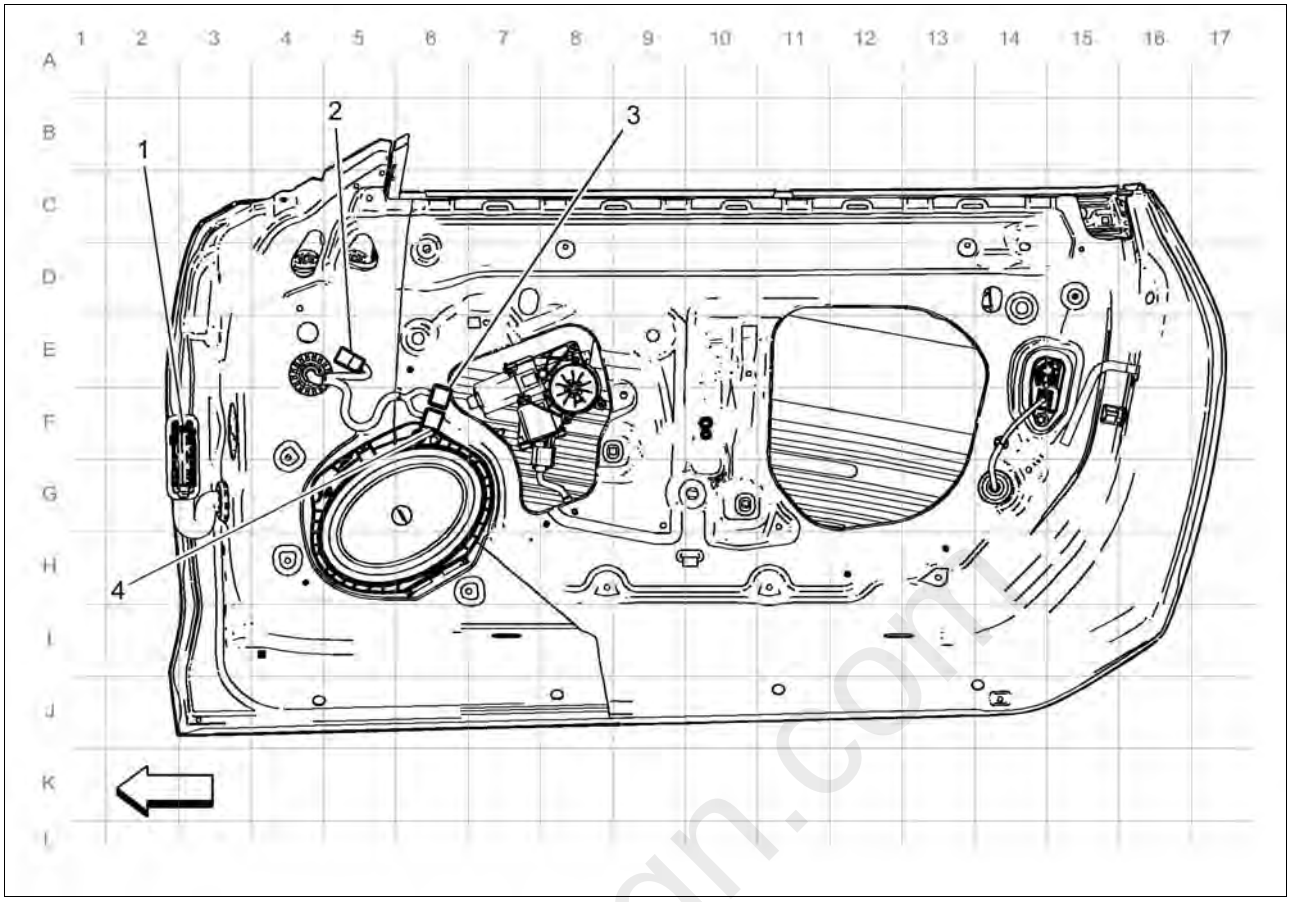
Courtesy of GENERAL MOTORS COMPANY

Items
1:J503
2:J507
3:J506
4:J501
5:J505
6:X506 X506 Driver Door Harness to Driver Door Trim Harness
7:X505 X505 Driver Door Harness to Driver Door Trim Harness

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SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > WIRING HARNESS ROUTING VIEWS > PASSENGER DOOR HARNESS ROUTING

Fig 1: Passenger Door Harness Routing



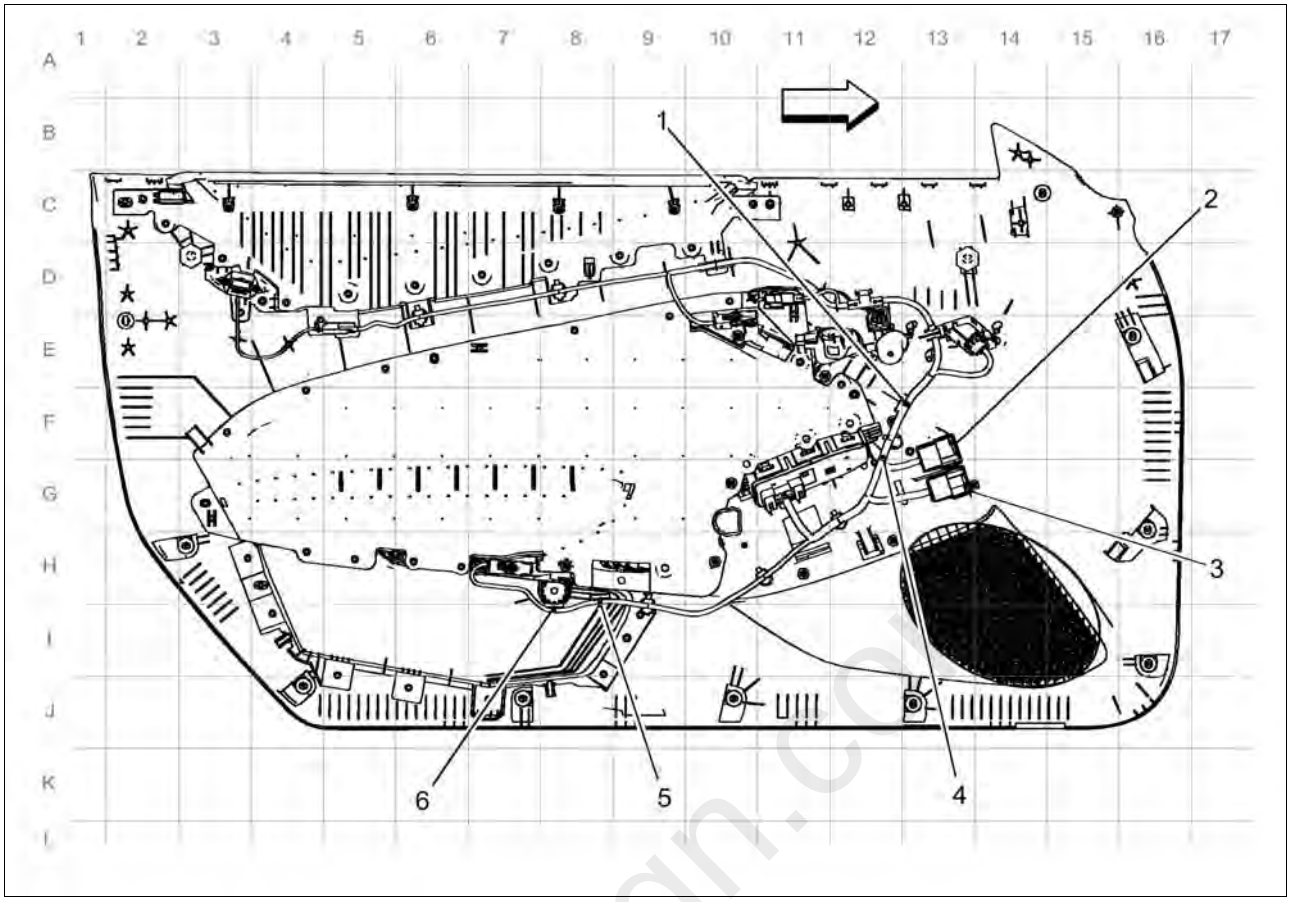
Courtesy of GENERAL MOTORS COMPANY

Items
1:X600 X600 Passenger Door Harness to Body Harness
2:X610 X610 Outside Rearview Mirror Harness to Passenger Door Harness
3:X606 X606 Passenger Door Harness to Passenger Door Trim Harness
4:X605 X605 Passenger Door Harness to Passenger Door Trim Harness

SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > WIRING HARNESS ROUTING VIEWS > PASSENGER DOOR TRIM HARNESS ROUTING

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Fig 1: Passenger Door Trim Harness Routing

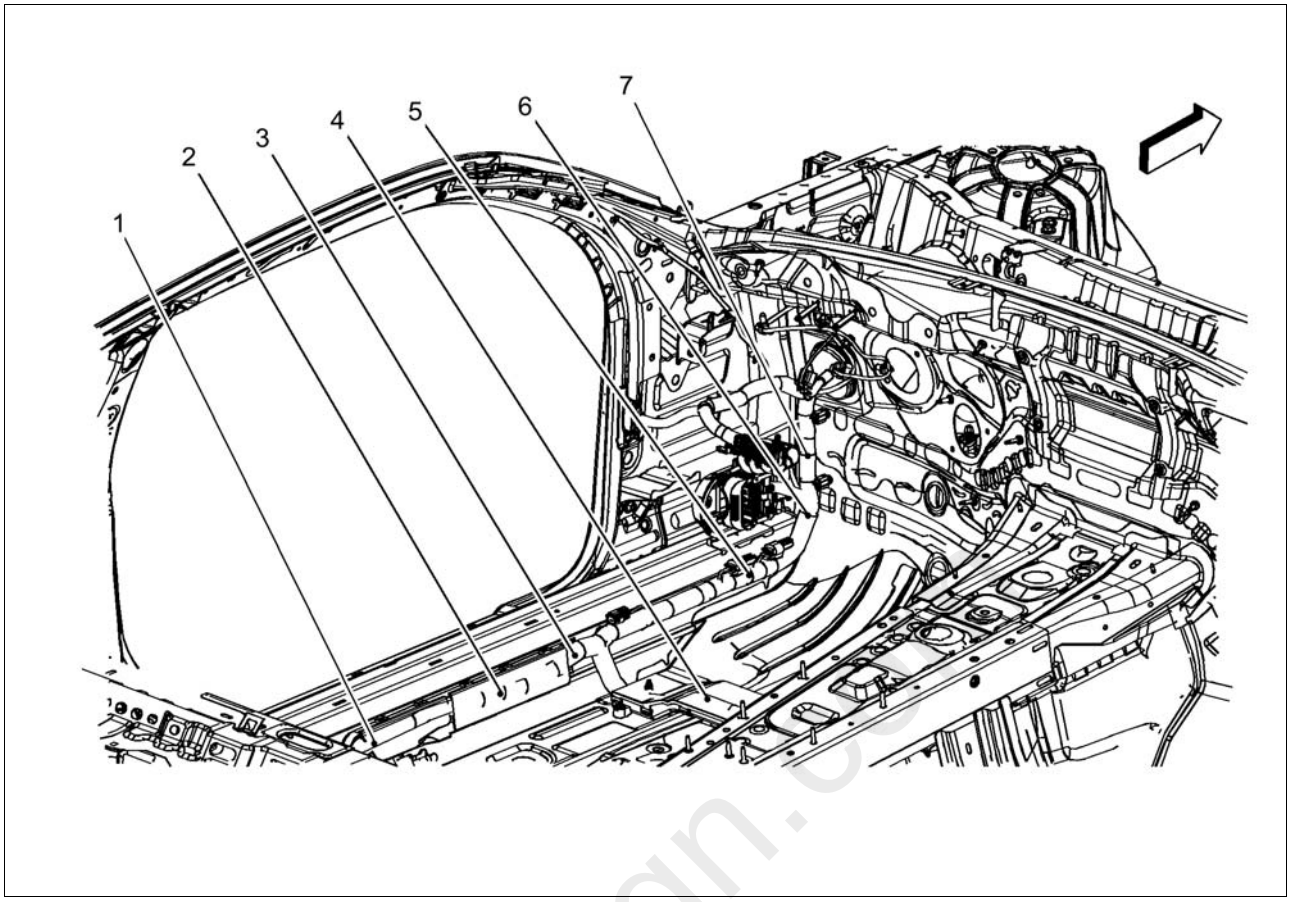


Courtesy of GENERAL MOTORS COMPANY

Items
1:J603
2:X605 X605 Passenger Door Harness to Passenger Door Trim Harness
3:X606 X606 Passenger Door Harness to Passenger Door Trim Harness
4:J602
5:J604
6:J605

SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > WIRING HARNESS ROUTING VIEWS > BODY HARNESS ROUTING - LEFT FRONT OF PASSENGER COMPARTMENT (COUPE)

Fig 1: Body Harness Routing - Left Front of Passenger Compartment (Coupe)

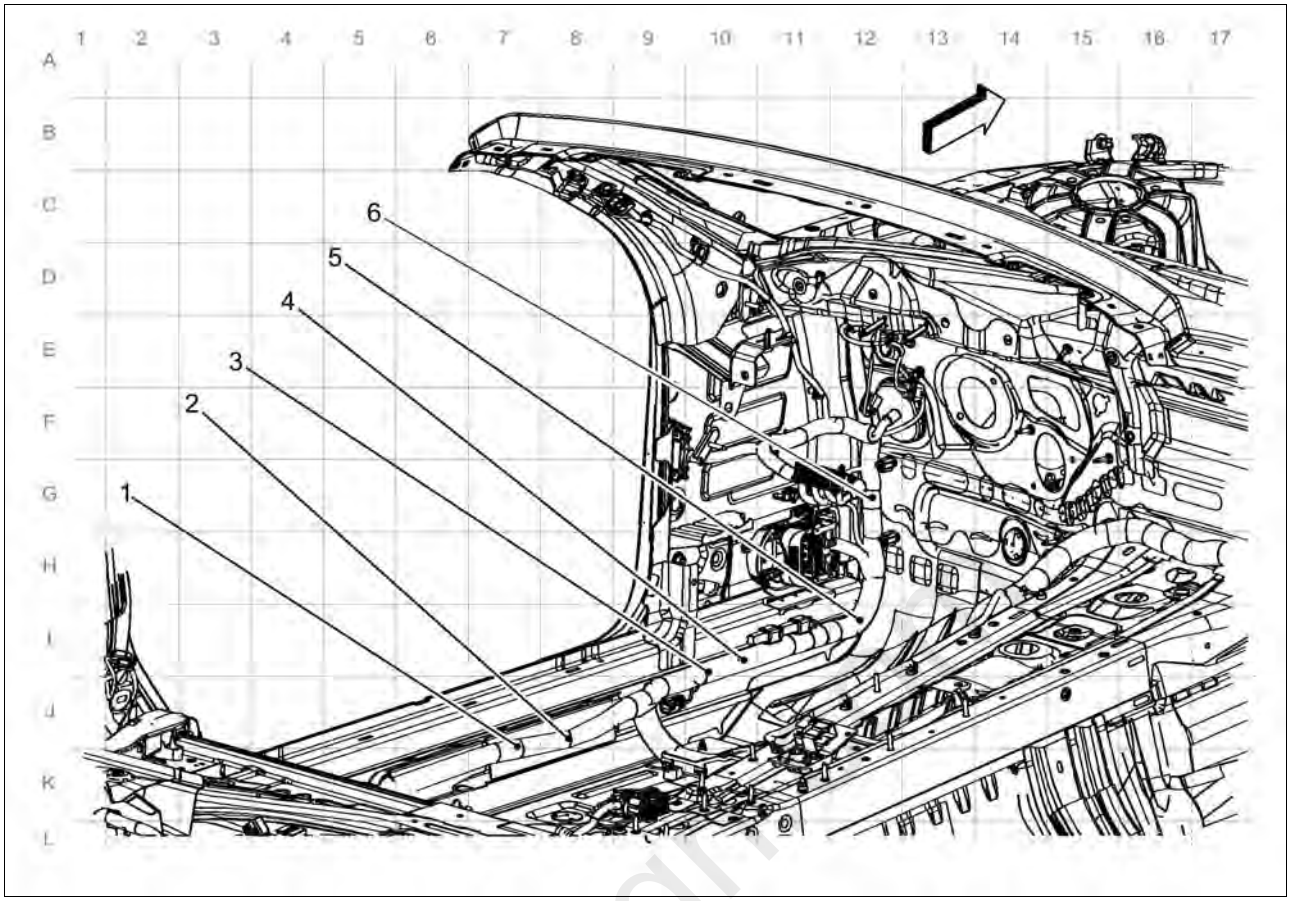


Courtesy of GENERAL MOTORS COMPANY

Items
1:J341 (Without CM8)
2:J361
3:J346
4:J355
5:J317
6:J322
7:J342

SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > WIRING HARNESS ROUTING VIEWS > BODY HARNESS ROUTING - LEFT FRONT OF PASSENGER COMPARTMENT (CONVERTIBLE)

Fig 1: Body Harness Routing - Left Front of Passenger Compartment (Convertible)

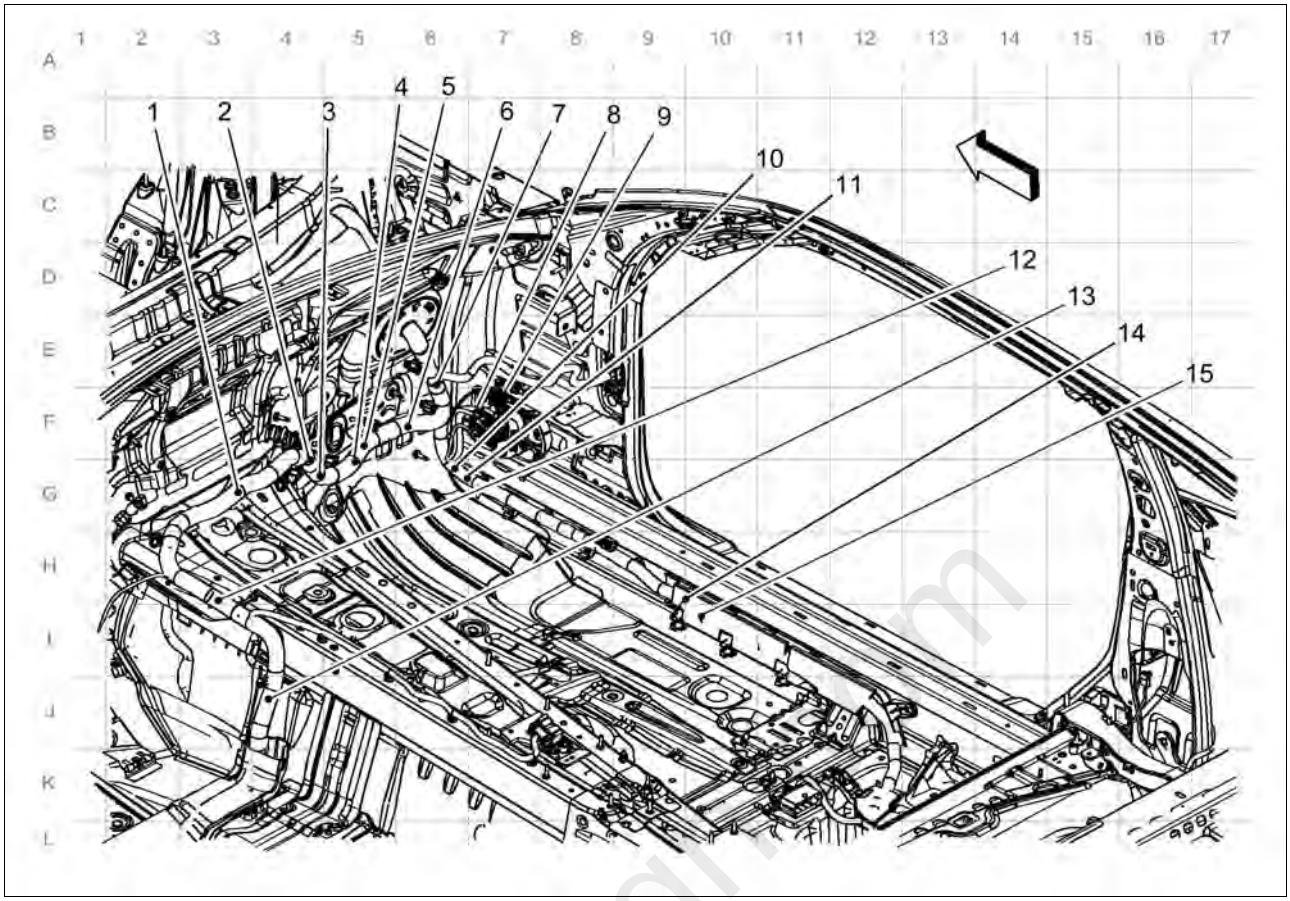


Courtesy of GENERAL MOTORS COMPANY

Items
1:J361
2:J346
3:J376 (CM8)
4:J317
5:J322
6:J342

SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > WIRING HARNESS ROUTING VIEWS > BODY HARNESS ROUTING - RIGHT FRONT OF PASSENGER COMPARTMENT (COUPE)

Fig 1: Body Harness Routing - Right Front of Passenger Compartment (Coupe)



Courtesy of GENERAL MOTORS COMPANY

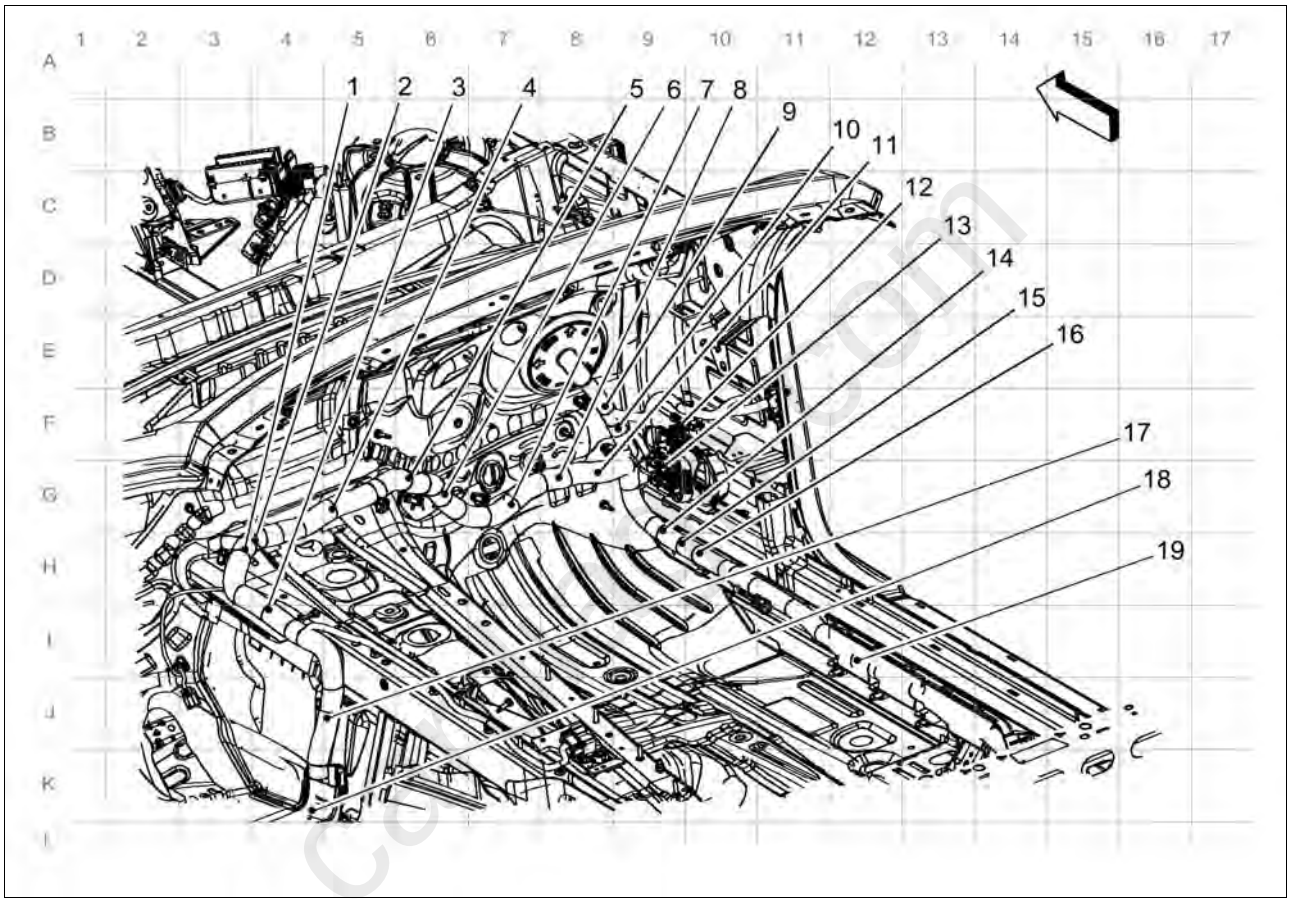
Items
1:J373
2:J354
3:J344
4:J330
5:J307
6:J332
7:J348
8:X238 X238 Body Harness to Instrument Panel Harness
9:X341 X341 Body Harness to Instrument Panel Harness
10:J337
11:J335
12:J375
13:J312

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14:J336
15:J310

SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > WIRING HARNESS ROUTING VIEWS > BODY HARNESS ROUTING - RIGHT FRONT OF PASSENGER COMPARTMENT (CONVERTIBLE)

Fig 1: Body Harness Routing - Right Front of Passenger Compartment (Convertible)



Courtesy of GENERAL MOTORS COMPANY

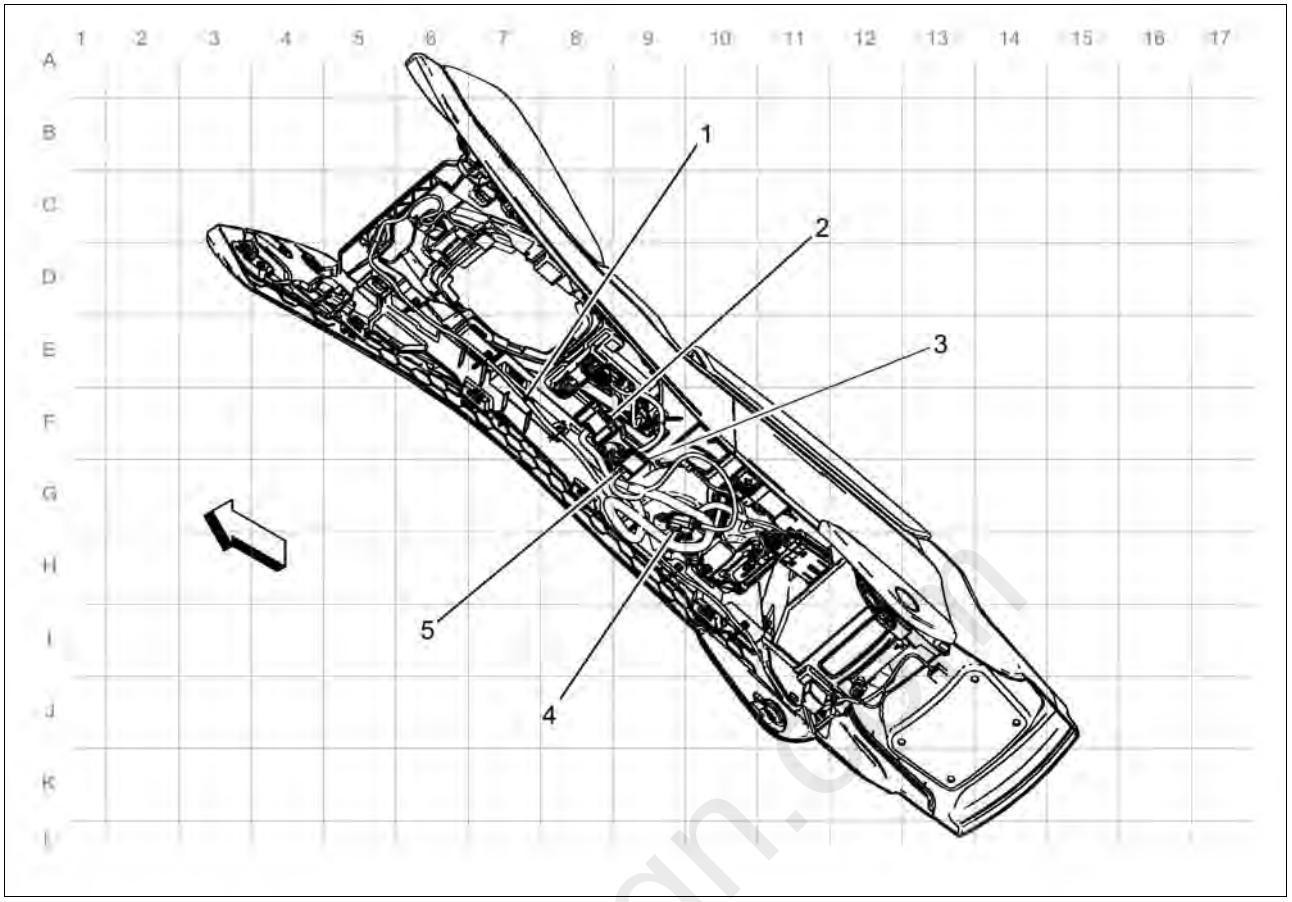
Items
1:J350 (CM8)
2:J373
3:J375
4:J354
5:J344
6:J330

7:J340 (CM8)
8:J307
9:J338
10:J348
11:J332
12:X341 X341 Body Harness to Instrument Panel Harness
13:X238 X238 Body Harness to Instrument Panel Harness
14:J335
16:J336
17:J312
18:J355
19:J310

SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > WIRING HARNESS ROUTING VIEWS > FLOOR CONSOLE HARNESS ROUTING

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Fig 1: Floor Console Harness Routing

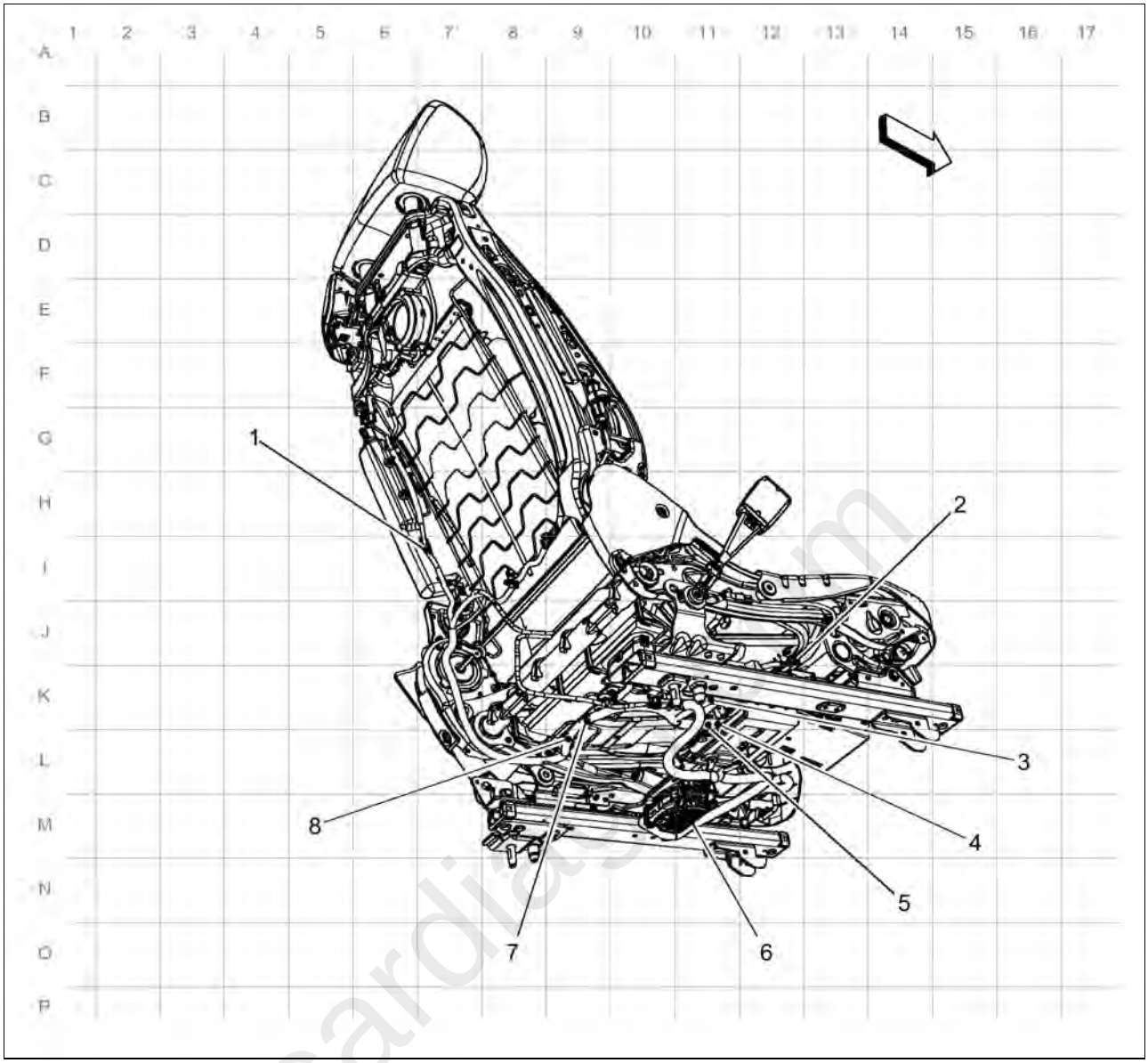


Courtesy of GENERAL MOTORS COMPANY

Items
1:J327
2:X330 X330 Floor Console Harness to Body Harness
3:X250
4:X205 X251 Instrument Panel Harness to Floor Console Harness
5:J359

SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > WIRING HARNESS ROUTING VIEWS > DRIVER SEAT HARNESS ROUTING

Fig 1: Driver Seat Harness Routing

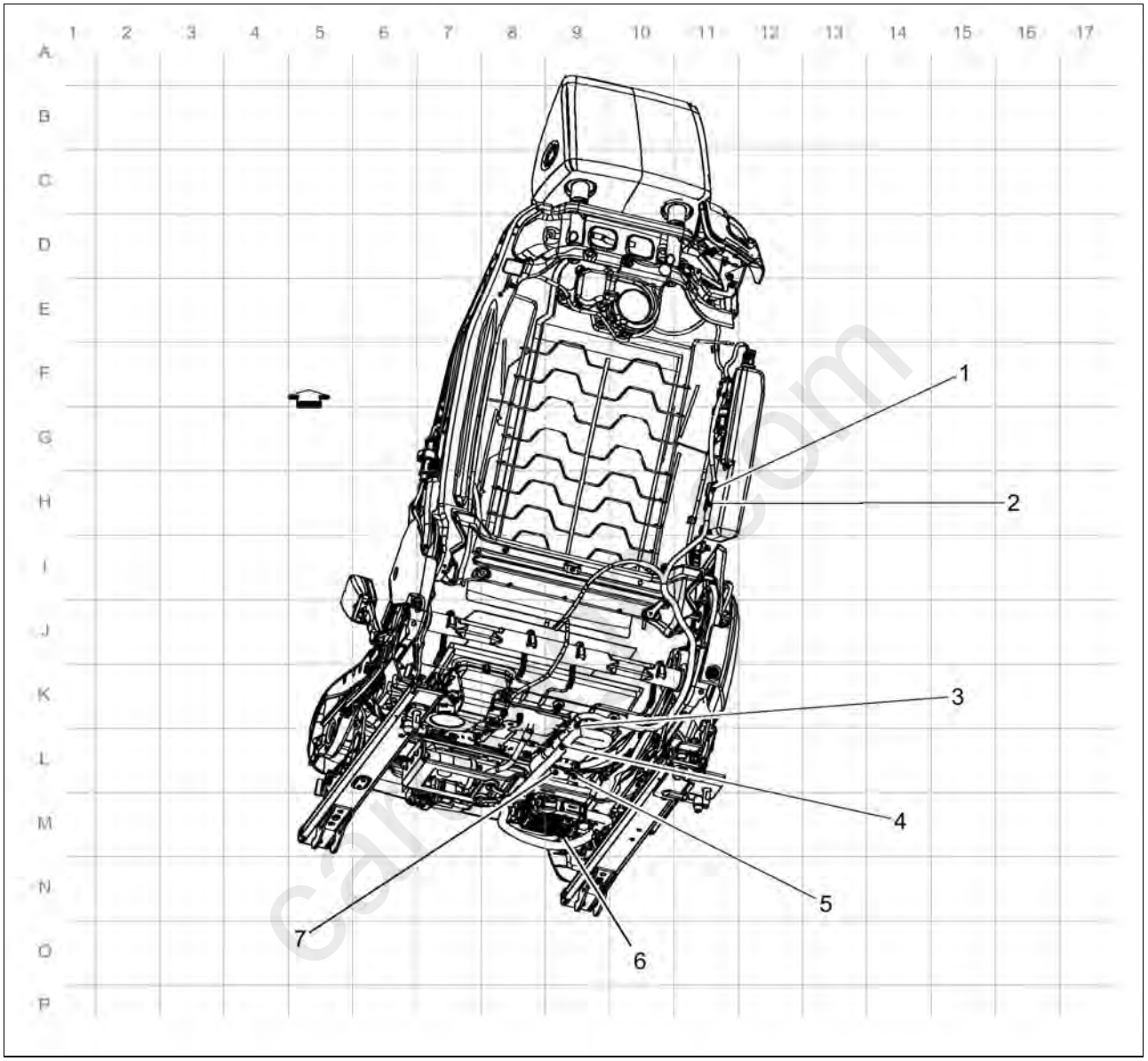


Courtesy of GENERAL MOTORS COMPANY

Items
1:J387
2:J381
3:J380
4:J382
5:J378
6:X310 X310 Driver Seat Harness to Body Harness
7:J383
8:J384

SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > WIRING HARNESS ROUTING VIEWS > PASSENGER SEAT HARNESS ROUTING

Fig 1: Passenger Seat Harness Routing



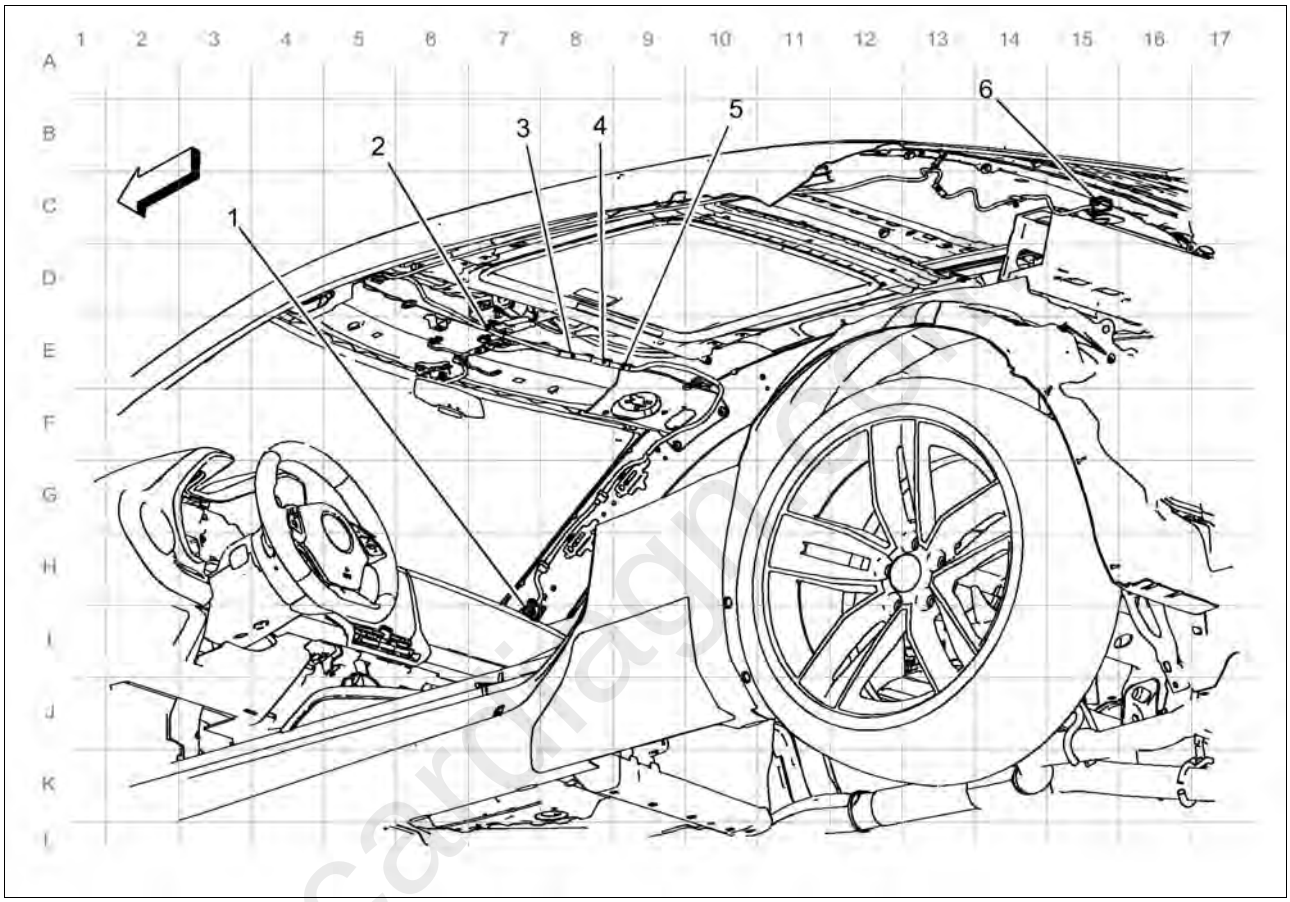
Courtesy of GENERAL MOTORS COMPANY

Items
1:J386
2:J385
3:J391
4:J389
5:J379

6:X320 X320 Passenger Seat Harness to Body Harness ()
7:J392

SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > WIRING HARNESS ROUTING VIEWS > HEADLINER HARNESS ROUTING (COUPE)

Fig 1: Headliner Harness Routing (Coupe)

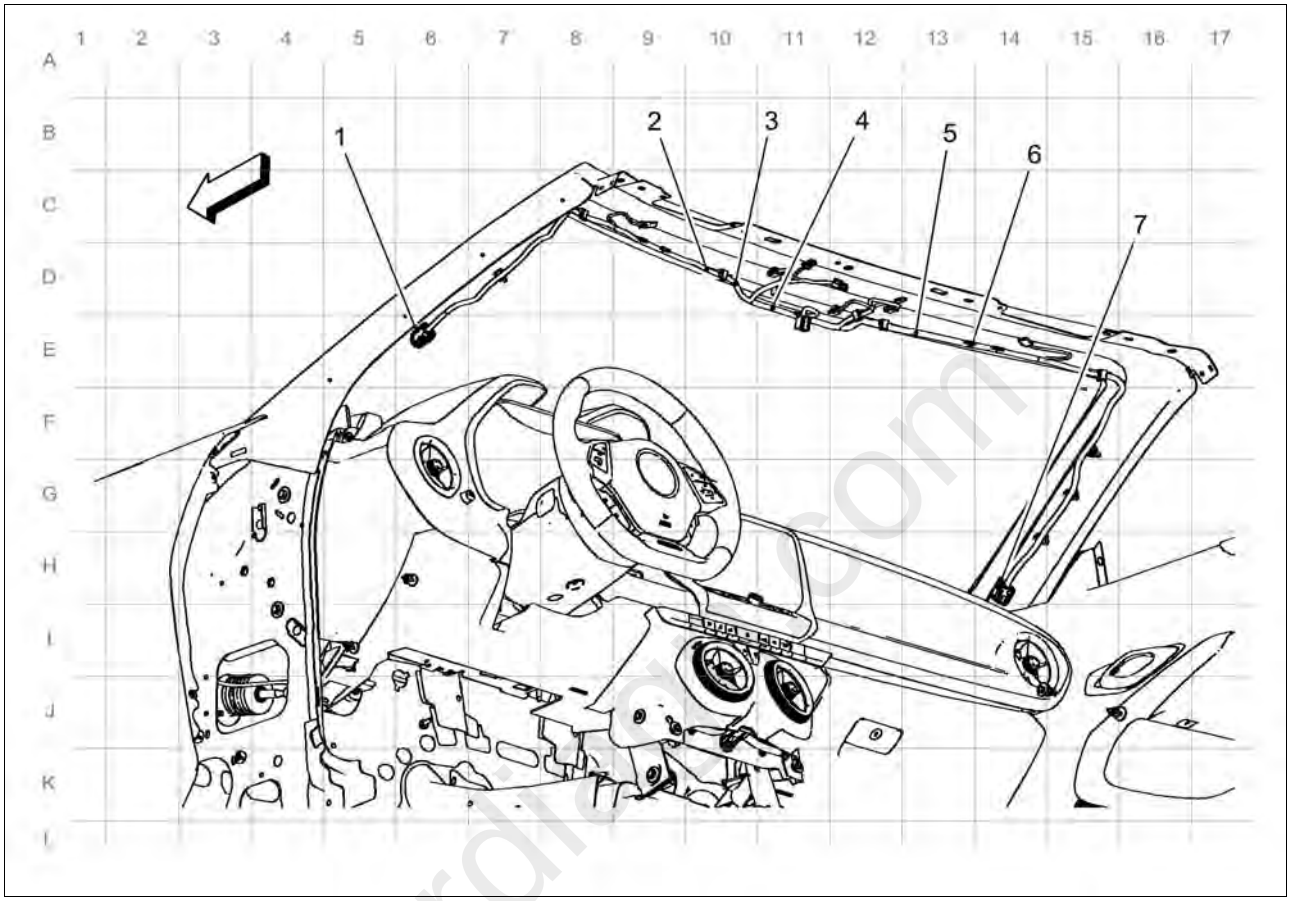


Courtesy of GENERAL MOTORS COMPANY

Items
1:X215 X215 Instrument Panel Harness to Headliner Harness
2:J318
3:J357
4:J314
5:J353
6:X216 X216 Headliner Harness to Body Harness (-CM8)X216 Headliner Harness to Body Harness (CM8)

SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > WIRING HARNESS ROUTING VIEWS > HEADLINER HARNESS ROUTING (CONVERTIBLE)

Fig 1: Headliner Harness Routing (Convertible)

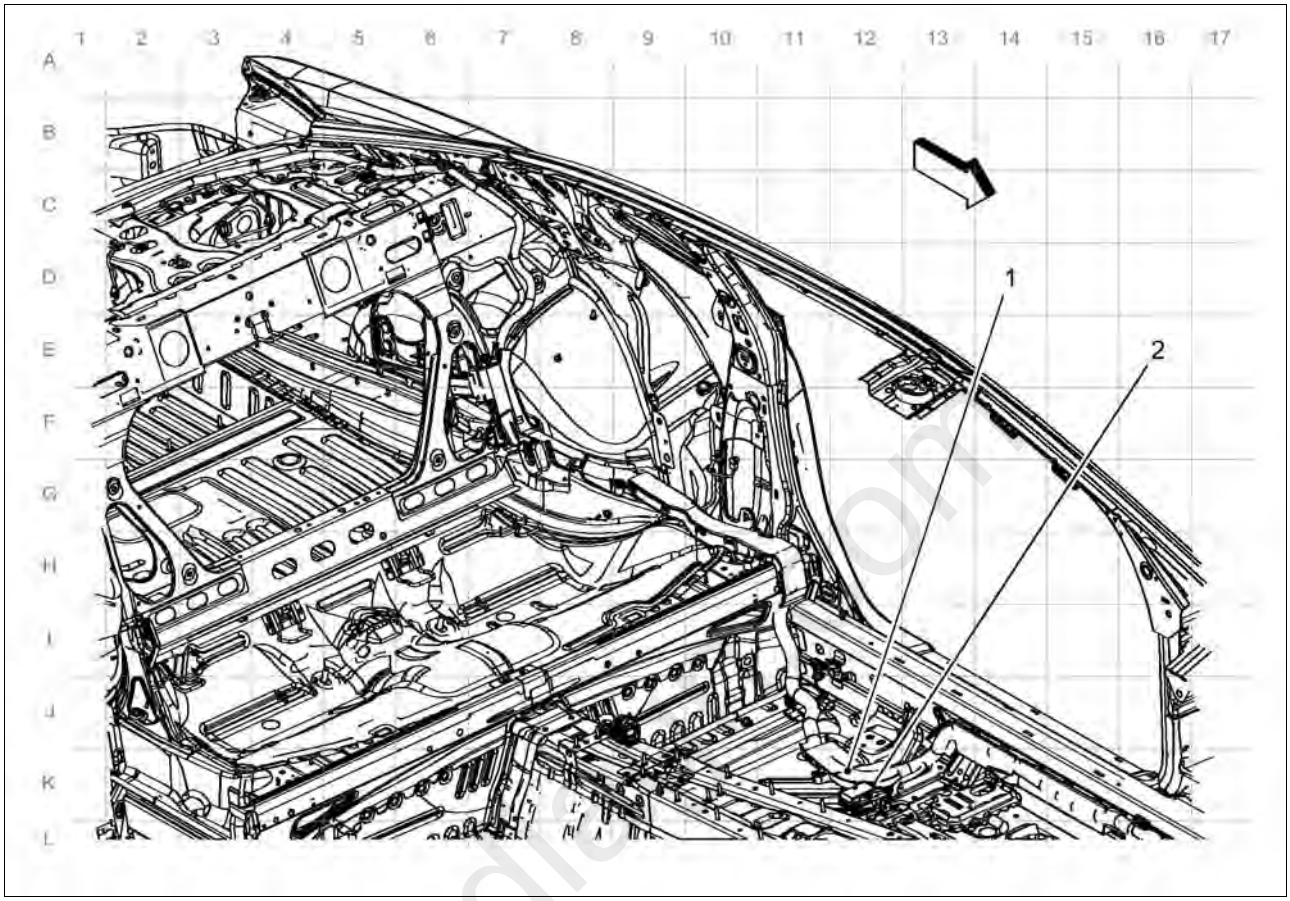


Courtesy of GENERAL MOTORS COMPANY

Items
1:X216 X216 Headliner Harness to Body Harness (-CM8)X216 Headliner Harness to Body Harness (CM8)
2:J318
3:J377 (CM8)
4:J357
5:J314
6:J353
7:X215 X215 Instrument Panel Harness to Headliner Harness

SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > WIRING HARNESS ROUTING VIEWS > BODY HARNESS ROUTING - LEFT REAR OF PASSENGER COMPARTMENT

Fig 1: Body Harness Routing - Left Rear of Passenger Compartment

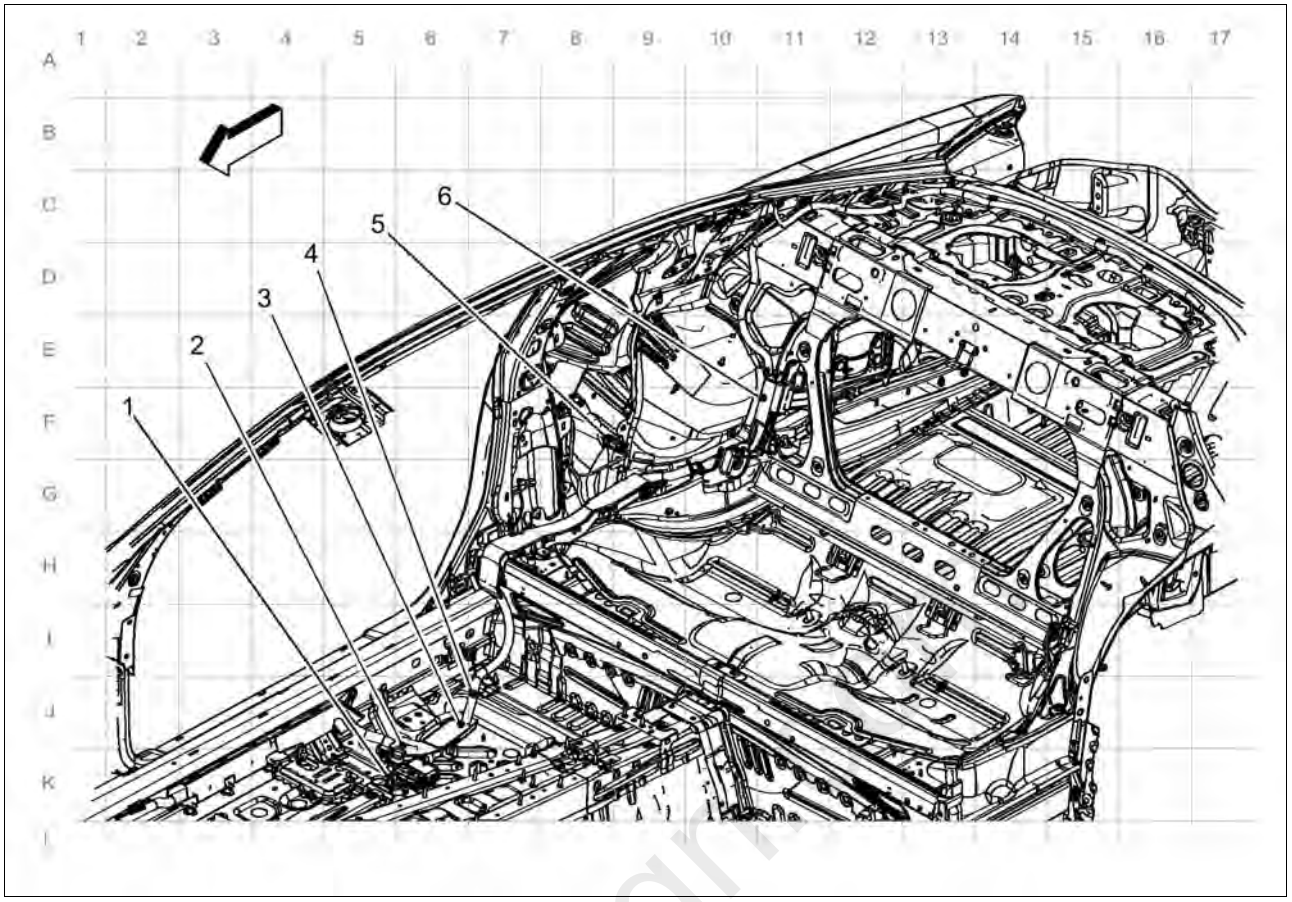


Courtesy of GENERAL MOTORS COMPANY

Items
1:J320
2:X310 X310 Driver Seat Harness to Body Harness

SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > WIRING HARNESS ROUTING VIEWS > BODY HARNESS ROUTING - RIGHT REAR OF PASSENGER COMPARTMENT

Fig 1: Body Harness Routing - Right Rear of Passenger Compartment

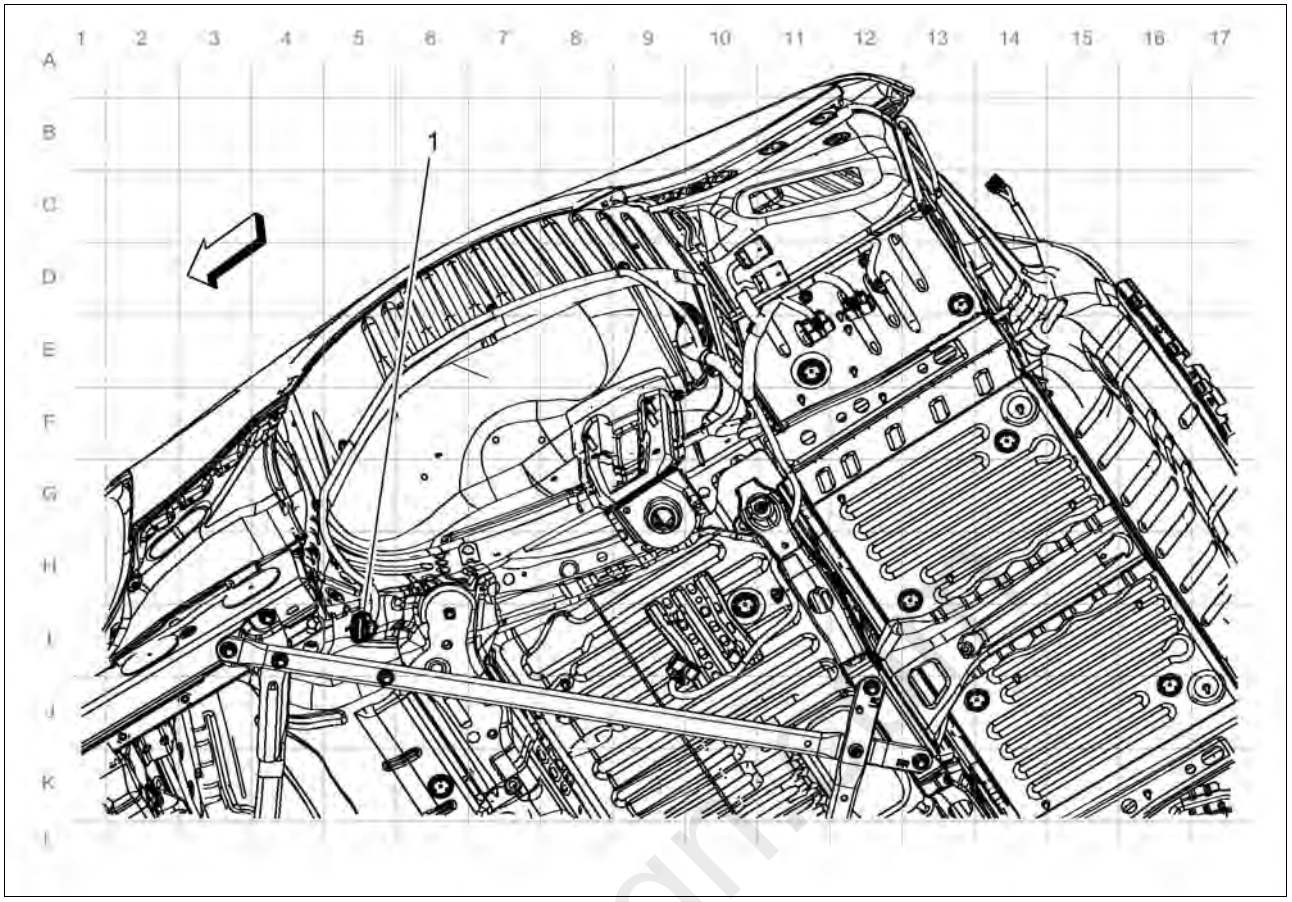


Courtesy of GENERAL MOTORS COMPANY

Items
1:X320 X320 Passenger Seat Harness to Body Harness ()
2:J351
3:J325
4:J328
5:X460 (Without CM8) X460 Fuel Door Jumper harness to Body Harness
6:J306

SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > WIRING HARNESS ROUTING VIEWS > BODY HARNESS ROUTING - LEFT REAR OF UNDERBODY

Fig 1: Body Harness Routing - Left Rear of Underbody

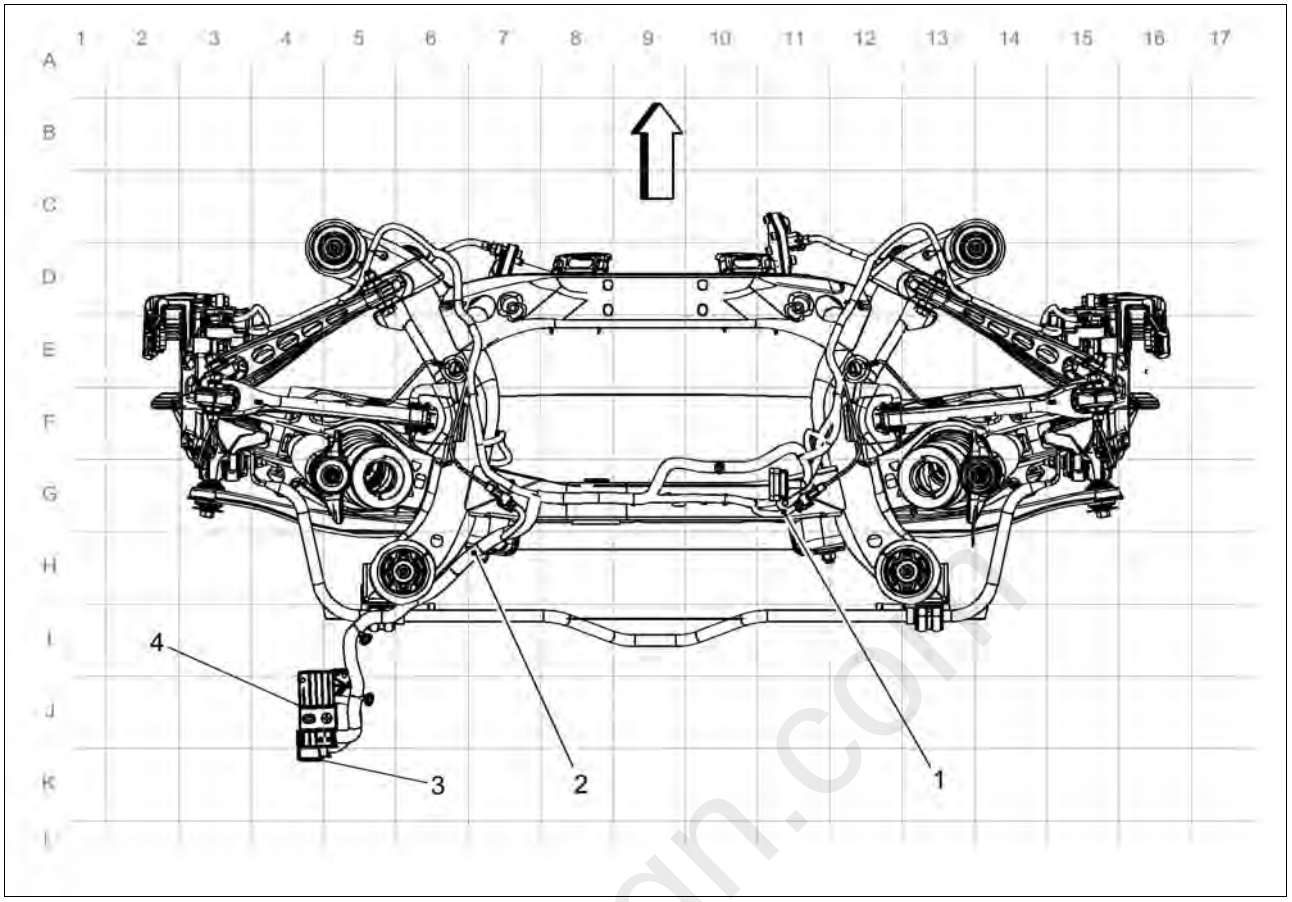


Courtesy of GENERAL MOTORS COMPANY

Items
1:X350 X350 Body Harness to Fuel Tank Harness

SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > WIRING HARNESS ROUTING VIEWS > REAR CHASSIS HARNESS ROUTING

Fig 1: Rear Chassis Harness Routing



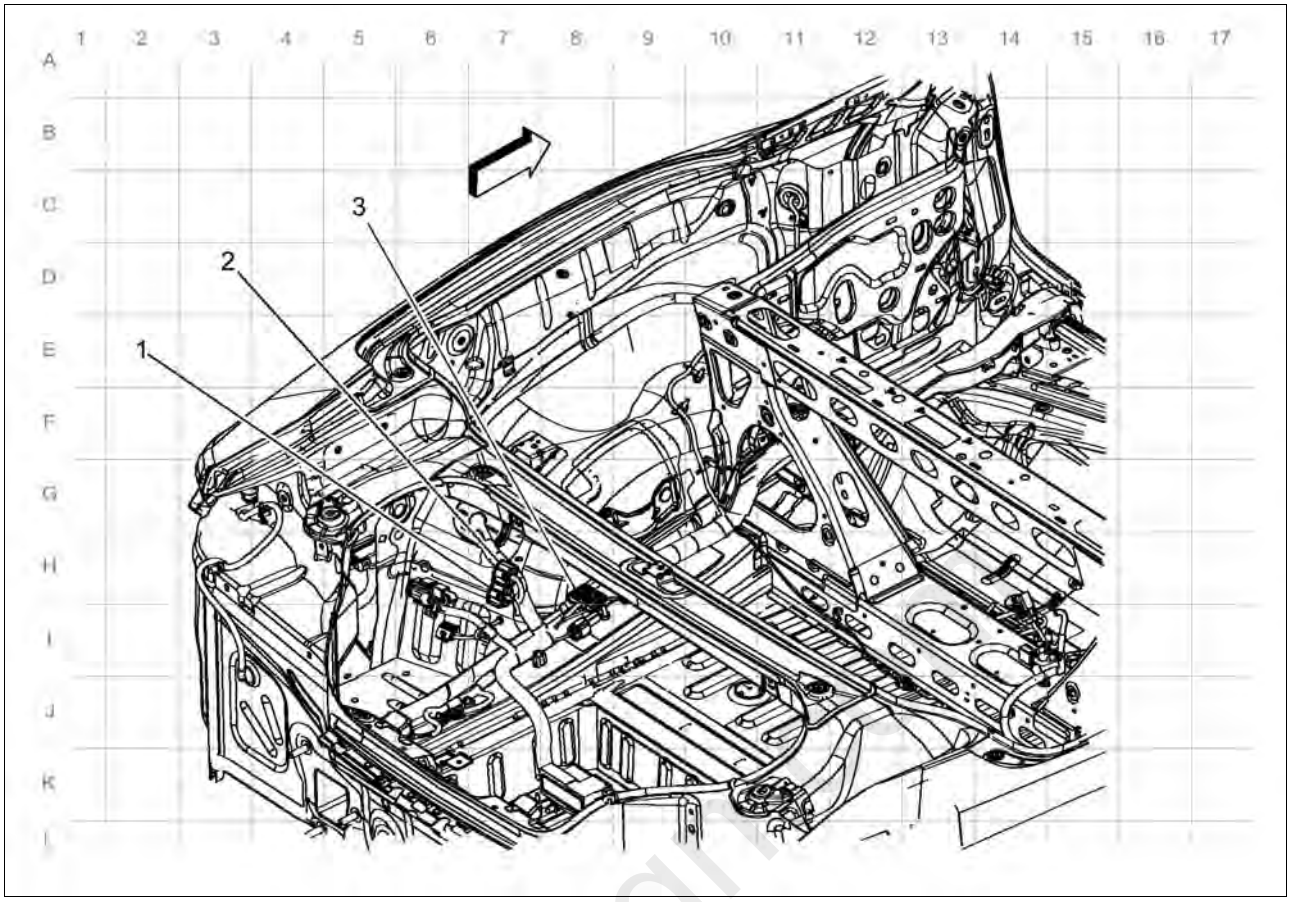
Courtesy of GENERAL MOTORS COMPANY

Items
1:J410
2:J403
3:X406 X406 Body Harness to Rear Chassis Harness
4:X405 X405 Body Harness to Rear Chassis Harness

SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > WIRING HARNESS ROUTING VIEWS > BODY HARNESS ROUTING - LEFT SIDE OF LUGGAGE COMPARTMENT

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Fig 1: Body Harness Routing - Left Side of Luggage Compartment

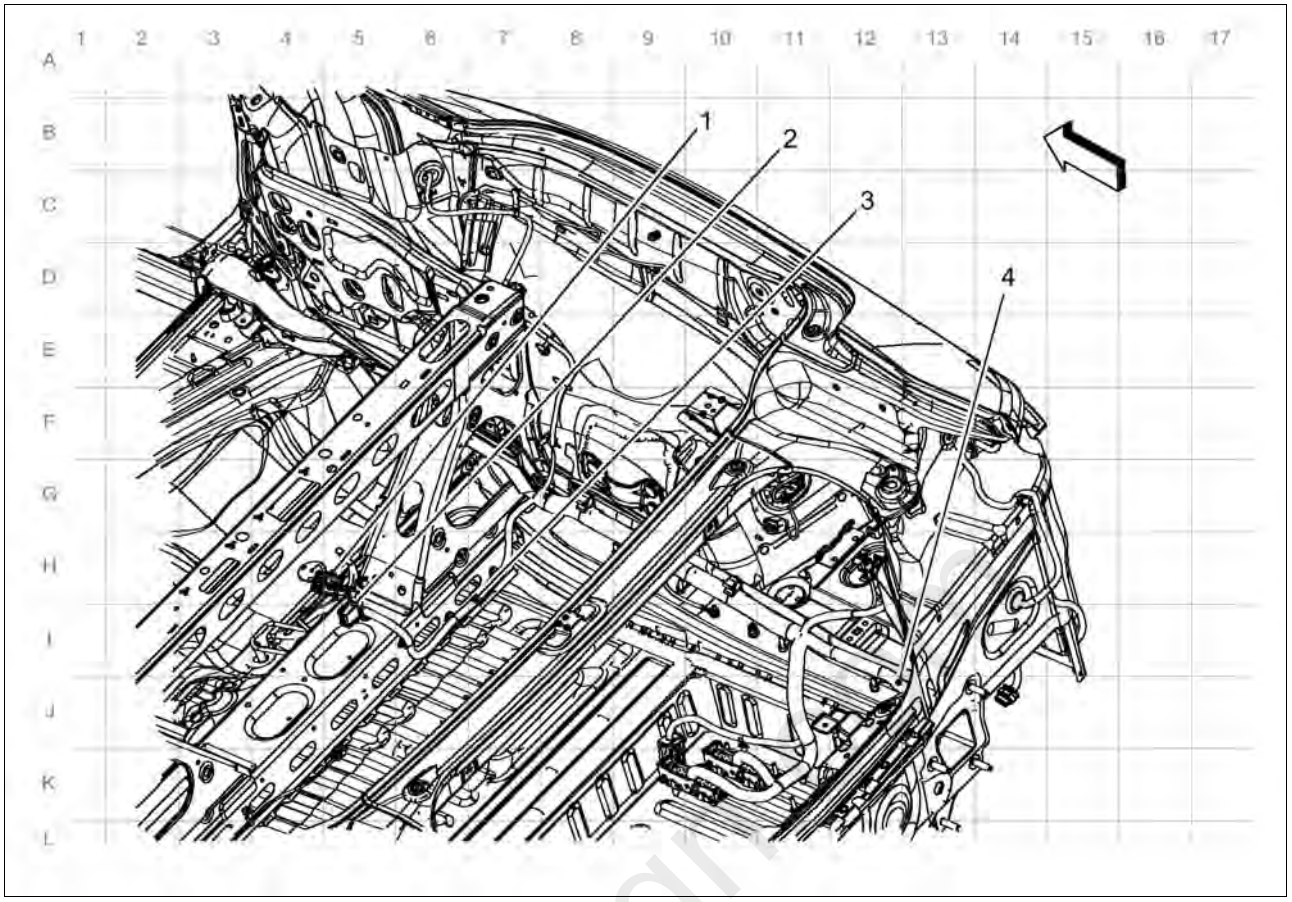


Courtesy of GENERAL MOTORS COMPANY

Items
1:X399 X399 Body Harness to Body Harness
2:X399 X399 Body Harness to Body Harness
3:JX300 JX300 Splice Pack - Body

SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > WIRING HARNESS ROUTING VIEWS > BODY HARNESS ROUTING - RIGHT SIDE OF LUGGAGE COMPARTMENT

Fig 1: Body Harness Routing - Right Side of Luggage Compartment

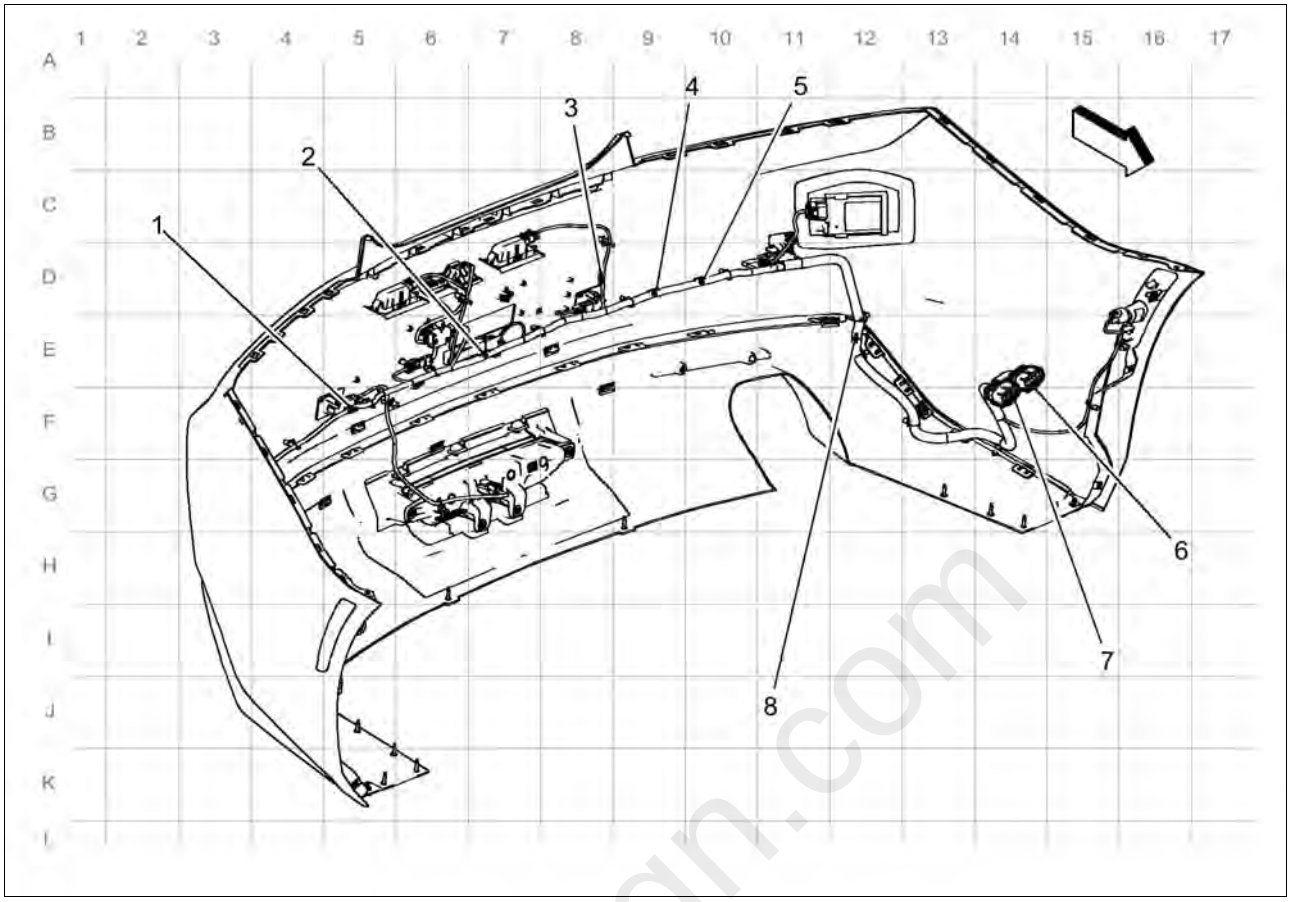


Courtesy of GENERAL MOTORS COMPANY

Items
1:X424 X424 Rear Defogger Jumper Harness to Body Harness
2:X428 X428 Body Harness to Folding Top Harness
3:J309 (CM8)
4:J303

SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > WIRING HARNESS ROUTING VIEWS > REAR FASCIA HARNESS ROUTING

Fig 1: Rear Fascia Harness Routing



Courtesy of GENERAL MOTORS COMPANY

Items
1:J406
2:J408
3:J401
4:J404
5:J409
6:X416 X416 Body Harness to Rear Fascia Harness (CM8)X416 Rear Fascia Harness to Body Harness (-CM8)
7:X415 X415 Rear Fascia Harness to Body Harness (-CM8)X415 Rear Fascia Harness to Body Harness (CM8)
8:J405

SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > HOW TO USE ELECTRICAL SCHEMATICS > INFORMATION OVERVIEW

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The following explains some of the key parts of the GM wiring diagrams. Included are:

- Color Abbreviations

SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > HOW TO USE ELECTRICAL SCHEMATICS > 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

Additionally, industry standard cable types are not identified by color, but are listed by cable type as follows:

Abbreviation	Cable Type
COAX	Coax Cable

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FW	Flat Wire
HDMI	High Definition Multimedia Interface
TWINAX	Twinax Cable
USB	Universal Serial Bus

SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > ELECTRICAL SCHEMATIC SYMBOLS

Voltage Indicators

Symbol	Description
	Battery Voltage
	Ignition Switch- Off Position

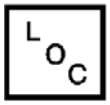
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	Ignition Switch- Accessory Position
	Ignition Switch- Run Position
	Ignition Switch- Start Position

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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.

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	Next Schematic Page Icon 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.

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	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. 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.

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	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

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	Generic Down Arrows
	Generic Left Arrows
	Generic Right Arrows

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	Generic Express Down Arrows
	On/Off Icon
	Generic Lock Icon

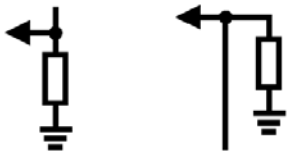
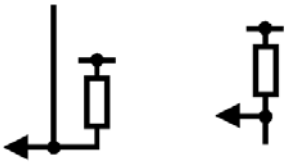
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	Generic Unlock Icon
	Generic Window Switch Positions- 4 Door
	Generic Window Switch Positions- 2 Door

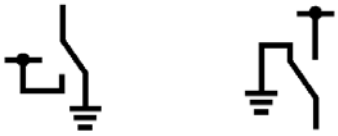
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Module Circuit Function Icons

Symbol	Description

	I/O Pull-Down Resistors (-)
	I/O Pull-Up Resistors (+)
	I/O High-Side Drive Switch (+)

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	I/O Low-Side Drive Switch (+)
	I/O Bidirectional Switch (+/-)
	Pulse-Width Modulation Symbol

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B+	Battery Voltage
IGN	Ignition Voltage
5V	Voltage Reference

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5V AC	A/C Voltage
	Low Reference
 	Ground

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	Serial Data
 	Antenna Signal- In
 	Antenna Signal- Out

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	Brake Apply

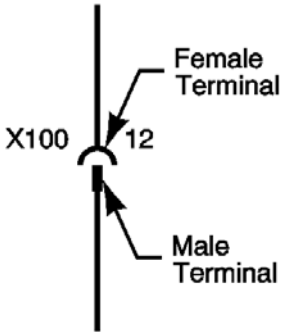
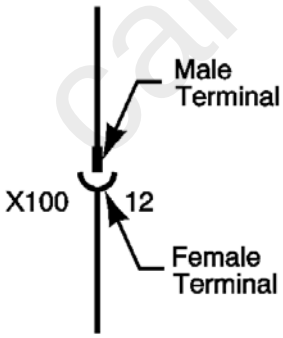
Harness Components

Symbol	Description
	Fuse
	Fuse Supplied by a Relay

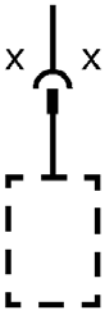
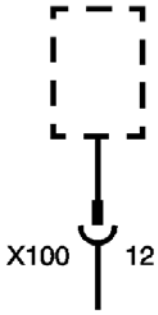
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	Circuit Breaker
	Fusible Link
	Ground

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	Case Ground
	Inline Harness Connector
	Inline Harness Connector

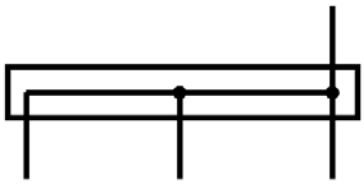
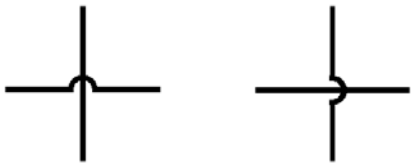
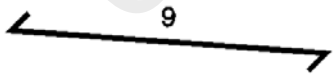
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	Pigtail Connection
	Pigtail Connection
	Provisional or Diagnostic Connector

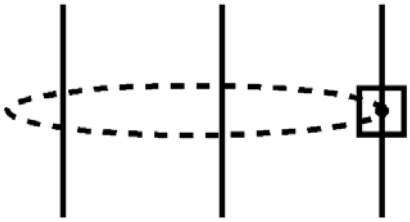
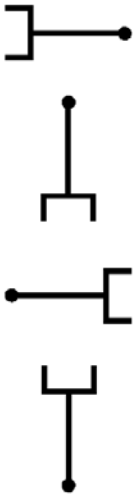
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	Blunt Cut Wire
	Incomplete Physical Splice
	Complete Physical Splice- 2 Wires

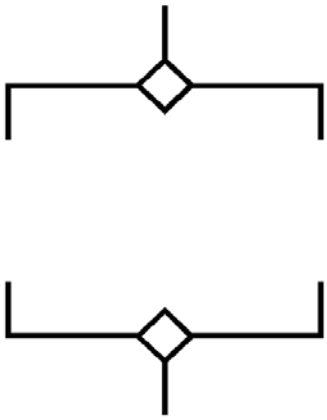
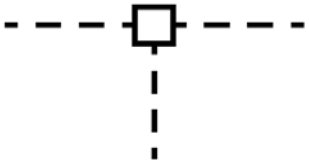
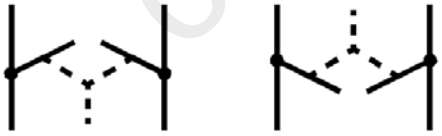
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	Complete Physical Splice- 3 or more wires
	Wire Crosses
	Twisted Wires

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	Shield
	Circuit References
	Circuit Continuation Arrowheads

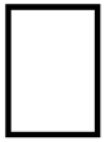
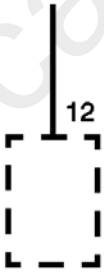
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	Option Breakpoint
	Ground Circuit Connection
	Connector Shorting Clip

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Component Parts

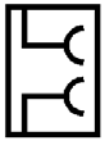
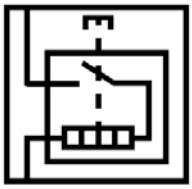
Symbol	Description

	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

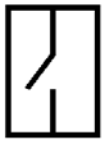
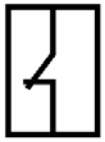
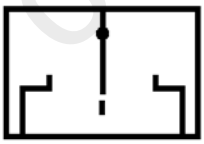
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	Pigtail Connector

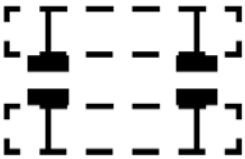
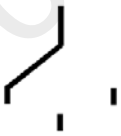
Switches and Relays

Symbol	Description
	Accessory Power Outlet
	Cigar Lighter

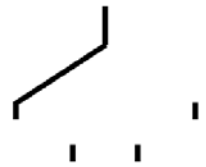
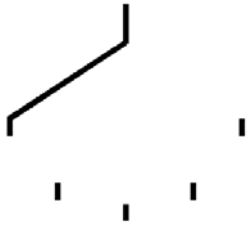
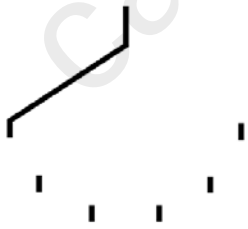
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	Switch- 2 Position Normally Open
	Switch- 2 Position Normally Closed
	Switch- Rocker

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	Switch- Contact Plate (1 Wire)
	Switch- Contact Plate (2 Wire)
	Switch- 3 Position

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	Switch- 4 Position
	Switch- 5 Position
	Switch- 6 Position

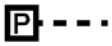
cardiagn.com

	Switch Actuator- Push (Momentary)
	Switch Actuator- Push (Latching)
	Switch Actuator- Pull (Momentary)

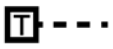
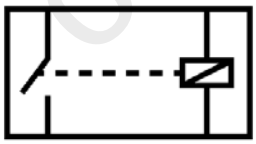
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	Switch Actuator- Pull (Latching)
	Switch Actuator- Rotate (Momentary)
	Switch Actuator- Rotate (Latching)

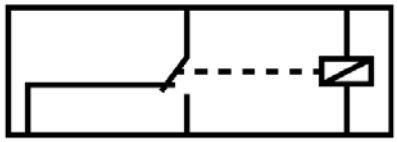
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	Switch Actuator- Slide (Momentary)
	Switch Actuator- Slide (Latching)
	Switch Actuator- Pressure (Momentary)

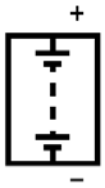
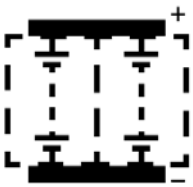
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	Switch Actuator- Temperature (Momentary)
	Switch Actuator- Volume (Latching)
	4-Pin Single Pole/Throw Relay- Normally Open

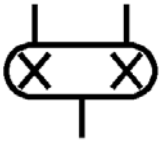
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	5-Pin Relay- Normally Closed

Devices and Sensors

Symbol	Description
	Battery
	Battery Assembly- Hybrid

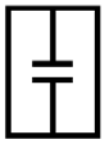
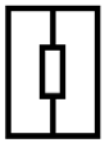
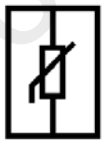
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	Single Filament Light Bulb
	Double Filament Light Bulb
	Light Emitting Diode (LED)

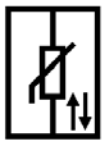
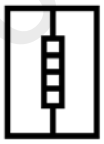
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	Photo Sensor
	Gauge
	Diode

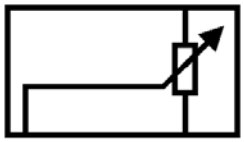
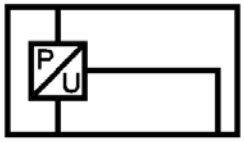
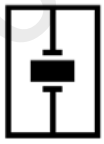
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	Capacitor
	Resistor
	Variable Resistor

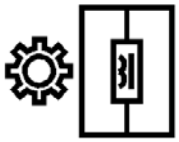
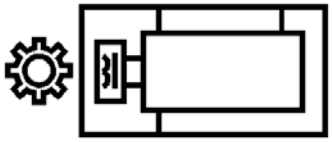
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	Variable Resistor- NTC
	Breakable Wire
	Heating Element

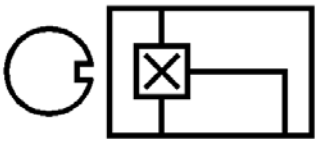
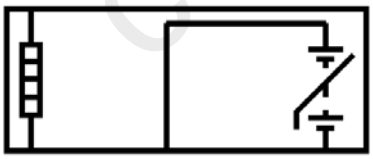
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	Position Sensor
	Pressure Sensor
	Knock Sensor

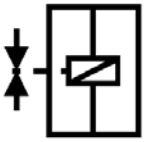
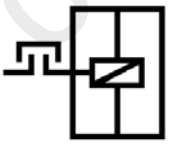
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	Inductive Type Sensor- 2-Wire
	Inductive Type Sensor- 3-Wire
	Hall Effect Sensor- 2-Wire

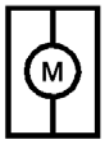
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	Hall Effect Sensor- 3-Wire
	Oxygen Sensor- 2-Wire
	Heated Oxygen Sensor- 4-Wire

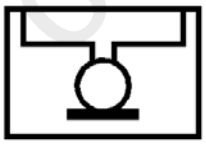
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	Solenoid- Actuator
	Solenoid- Valve
	Clutch

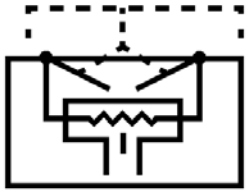
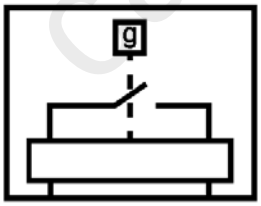
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	Motor
	Motor with PTC
	Antenna

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	Speaker
	Horn
	Microphone

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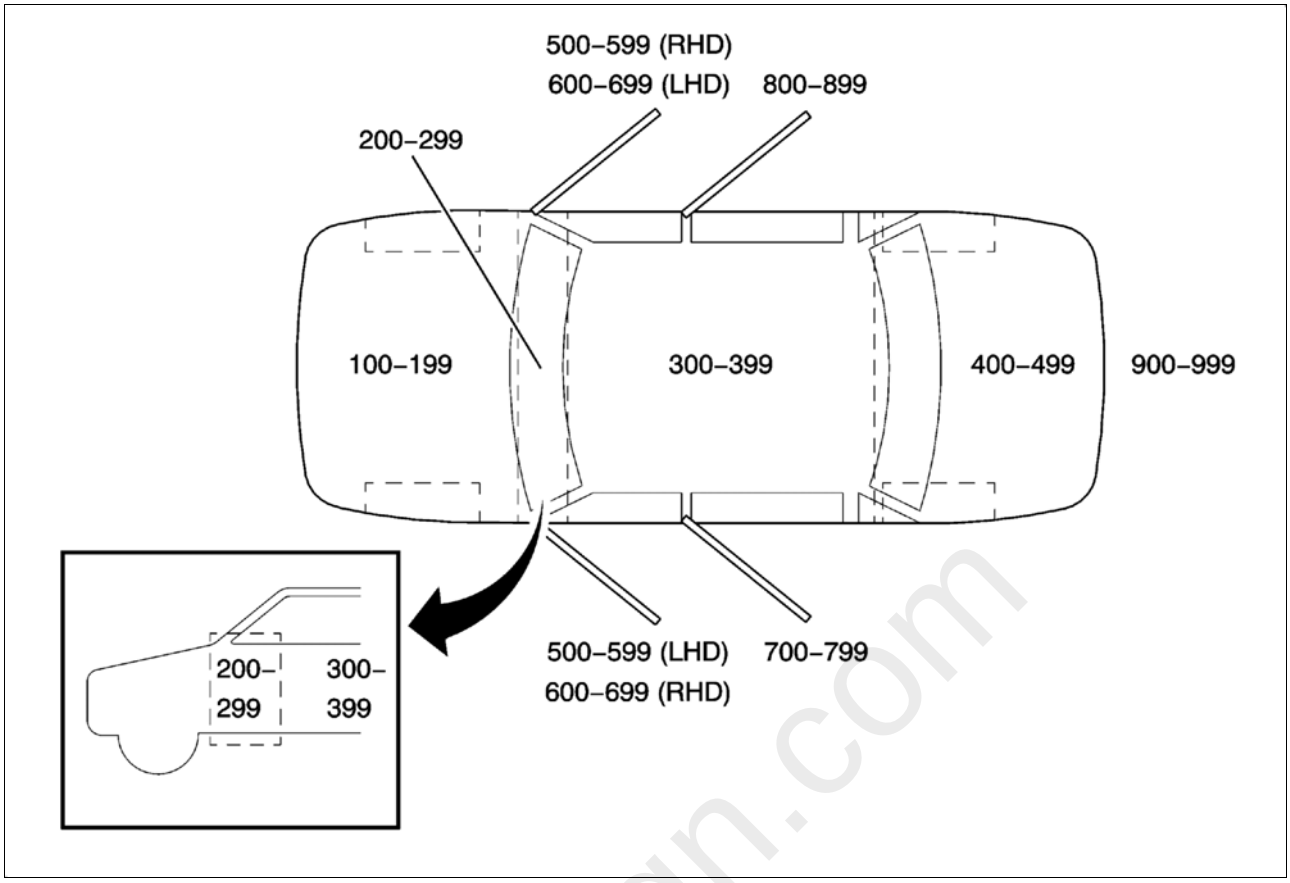
	Airbag
	SIR Coil
	SIR Impact Sensor

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SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > 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.

Fig 1: Passenger Car Zoning View



Courtesy of GENERAL MOTORS COMPANY

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
800-899	Inline harness connectors to or within the right rear door

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900-999	Inline harness connectors to or within the luggage compartment lid or hatch

SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > SCHEMATICS RPO CODE LIST

RPO	Option Name	Country Group
A45	MEMORY-SEAT ADJUSTER, MIRROR, POWER, DRIVER, PERSONALIZATION	U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Israel (MBI),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM)
C70	LAMP-INTR, AMBIENT, UPLEVEL	U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Israel (MBI),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM)
CF5	ROOF-SUN, GLASS, SLIDING, ELEC	U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Israel (MBI),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM)
CM8	ROOF-CONVERTIBLE, FOLDING, POWER, REMOTE CONTROL	U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Israel (MBI),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM)
CV3	COUNTRY-MEXICO	Mexico (MCX)
DD8	MIRROR I/S R/V-LT SENSITIVE	U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Israel (MBI),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM)
F55	CHASSIS-CONTINOUSLY VARIABLE REAL TIME DAMPING MAGNETO RHEOLOGICAL	U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Mid-East (MAM),S America2 - Andean (MAY),Europe Group (MBM)
IO5	RADIO-INFOTAINMENT SYSTEM - UPLEVEL HMI, ENHANCED CONNECTIVITY	U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Israel (MBI),Mid-East (MAM),S America2 - Andean (MAY),Europe Group (MBM)
IO6	RADIO-INFOTAINMENT SYSTEM - UPLEVEL HMI, ENHANCED CONNECTIVITY, EMBEDDED	U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Israel (MBI),Mid-East (MAM),Brasil/Paraguay

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	NAVIGATION	(MDV),S America2 - Andean (MAY),Europe Group (MBM)
IOB	RADIO-INFOTAINMENT SYSTEM - MIDLEVEL HMI, MIDLEVEL CONNECTIVITY	U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX)
J71	BRAKE PARKING-POWER OPERATED	U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Israel (MBI),Mid-East (MAM),Europe Group (MBM)
J77	BRAKE PARKING-ELECTRONICALLY OPERATED	U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM)
K4C	CHARGER-INDUCTIVE PORTABLE WIRELESS DEVICE	U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Israel (MBI),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM)
KA1	HEATER SEAT FRT-DRVR & PASS	U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Israel (MBI),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM)
KB7	SHIFT CONTROL-MANUAL SHIFT, AUTOMATIC TRANSMISSION	U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Israel (MBI),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM)
LGX	ENGINE-GAS, 6 CYL, 3.6L, V6, DI, DOHC, VVT, ALUM, GEN 2	U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Israel (MBI),Mid-East (MAM)
LT1	ENGINE-GAS, 8 CYL, 6.2L, DI, AFM, VVT, HO, ALUM, GMNA	U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM)
LTG	ENGINE-GAS, 4 CYL, 2.0L, SIDI, L4, ALUM DOHC, VVT, DCVCP, TURBO, E0-E100, ALUM	U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Europe Group (MBM)
M5T	TRANSMISSION-AUTO 8 SPD, 8L45	U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Israel (MBI),Mid-East (MAM),Europe Group (MBM)

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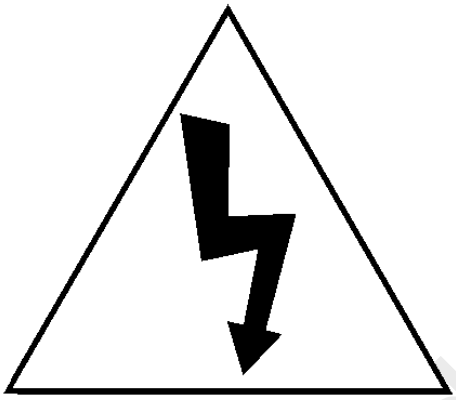
M5U	TRANSMISSION-AUTO 8 SPD, 8L90	U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM)
MN6	MERCHANDISED TRANS-MAN 6 SPD PROVISIONS	U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Mid-East (MAM),Europe Group (MBM)
MX0	MERCHANDISED TRANS-AUTO PROVISIONS, O/D	U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Israel (MBI),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM)
N06	STEERING COLUMN LOCK-ELECTRICAL	Korea (MAW),Brasil/Paraguay (MDV),Europe Group (MBM)
N08	LOCK CONTROL-FUEL FILLER DR, REM CONT	Korea (MAW),Israel (MBI),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM)
NPP	EXHAUST SYSTEM-PERFORMANCE	U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Israel (MBI),Mid-East (MAM),Europe Group (MBM)
T4F	HEADLAMPS-HIGH INTENSITY DISCHARGE	U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM)
T79	LAMP-FOG, RR	Korea (MAW),Brasil/Paraguay (MDV),Europe Group (MBM)
T90	LAMP-SIGNALING & MARKER, EXPORT	Korea (MAW),Brasil/Paraguay (MDV),Europe Group (MBM)
TR6	CONTROL, HEADLAMPS-LEVELING SYSTEM, MANUAL	Korea (MAW),Brasil/Paraguay (MDV),Europe Group (MBM)
U2Q	DIGITAL AUDIO SYSTEM-INTEGRATED TYPE DAB/DAB+/DMB-R	Europe Group (MBM)
UD7	PARK ASSIST-REAR	U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Israel (MBI),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM)
UDD	DISPLAY INSTRUMENT-DRIVER INFO ENHANCED (MULTI COLOR STANDARD GRAPHIC)	U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Mid-East (MAM)

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UE1	COMMUNICATION SYSTEM-VEHICLE, ONSTAR	U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Europe Group (MBM)
UG1	OPENER-GARAGE DOOR, UNIVERSAL	U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX)
UQA	SPEAKER SYSTEM-PREMIUM AUDIO BRANDED WITH AMPLIFIER	U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Israel (MBI),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM)
UV6	DISPLAY-HEAD UP	U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Israel (MBI),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM)
UVC	VISION-REAR VIEW, MONO, ANALOG	U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Israel (MBI),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM)
UVD	STEERING WHEEL HEAT-MANUAL	U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Israel (MBI),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM)
VPH	VEHICLE PREPARATION-OVERSEAS DELIVERY	Korea (MAW),Israel (MBI),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM)
VV4	COMMUNICATION EQUIP-MOBILE INTERNET CONNECTIVITY	U.S.A., PR and USVI (MAH),Canada (MBC),Europe Group (MBM)
Early	Early Production	U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Israel (MBI),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM)
Late	Late Production	U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Israel (MBI),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM)

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SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > MASTER ELECTRICAL SCHEMATIC ICONS

Icon	Icon Definition
	*WARNING:* *When performing service on or near the SIR components or the SIR wiring, the SIR system must be disabled. Refer to SIR Disabling and Enabling . Failure to observe the correct procedure could cause deployment of the SIR components, personal injury, or unnecessary SIR system repairs.*
	*WARNING:* *The high intensity discharge system produces high voltage and current. To reduce the risk of severe shocks and burns:* • *Never open the high intensity discharge system ballast or the arc tube assembly starter.* • *Never probe between the high intensity discharge system ballast output connector and the arc tube assembly.*

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NOTE:

Twisted wires provide an effective shield that helps protect sensitive electronic components from electrical interference.

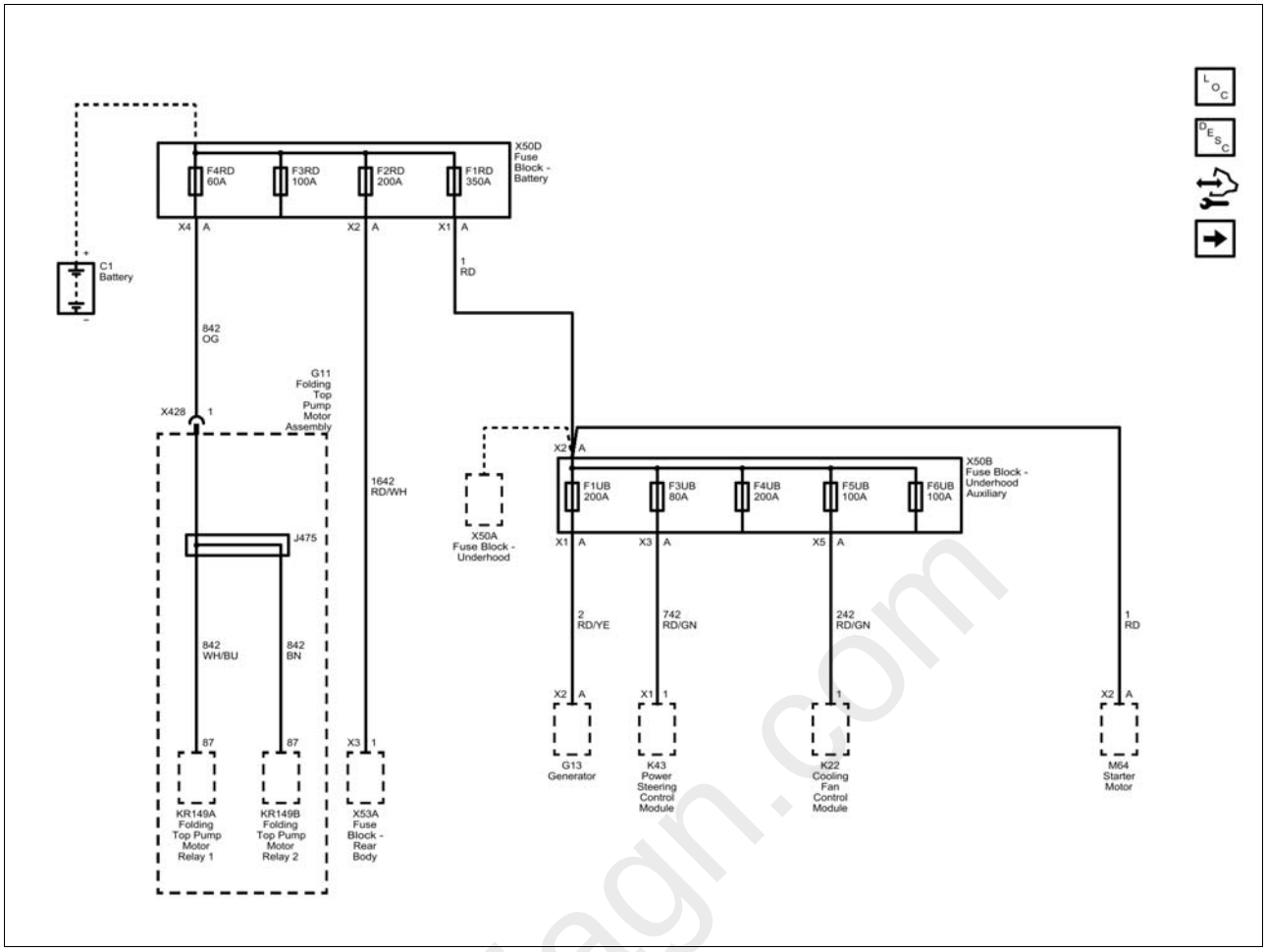
In order to prevent electrical interference from degrading the performance of the connected components, you must maintain the proper specification when making any repairs to the twisted wires shown :

- *The wires must be twisted a minimum of 10 turns per 31 cm (12 in) as measured anywhere along the length of the wires.*
- *The outside diameter of the twisted wires must not exceed 6.0 mm (0.25 in).*

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SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > POWER DISTRIBUTION SCHEMATICS > X50D FUSE BLOCK - BATTERY AND X50B FUSE BLOCK - UNDERHOOD AUXILIARY

Fig 1: X50D Fuse Block - Battery and X50B Fuse Block - Underhood Auxiliary



Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
842	Battery Positive Voltage
842_OG	842 OG
CAV_A	A
CONN_X4	X4
1642	Battery Positive Voltage
1642_RD/WH	1642 RD/WH
CAV_A	A
CONN_X2	X2
CAV_1	1
CONN_X3	X3
1	Unfused Battery Positive Voltage
1_RD	1 RD

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CAV_A	A
CONN_X1	X1
CAV_A	A
CONN_X2	X2
1_RD	1 RD
CAV_A	A
CONN_X2	X2
2	Battery Positive Voltage
2_RD/YE	2 RD/YE
CAV_A	A
CONN_X2	X2
CAV_A	A
CONN_X1	X1
742	Battery Positive Voltage
742_RD/GN	742 RD/GN
CAV_1	1
CONN_X1	X1
CAV_A	A
CONN_X3	X3
242	Battery Positive Voltage
242_RD/GN	242 RD/GN
CAV_1	1
CAV_A	A
CONN_X5	X5
CAV_1	1
CAV_87	87
842_BN	842 BN
CAV_87	87
842_WH/BU	842 WH/BU
F4RD	F4RD 60A
F3RD	F3RD 100A
F2RD	F2RD 200A
F1RD	F1RD 350A

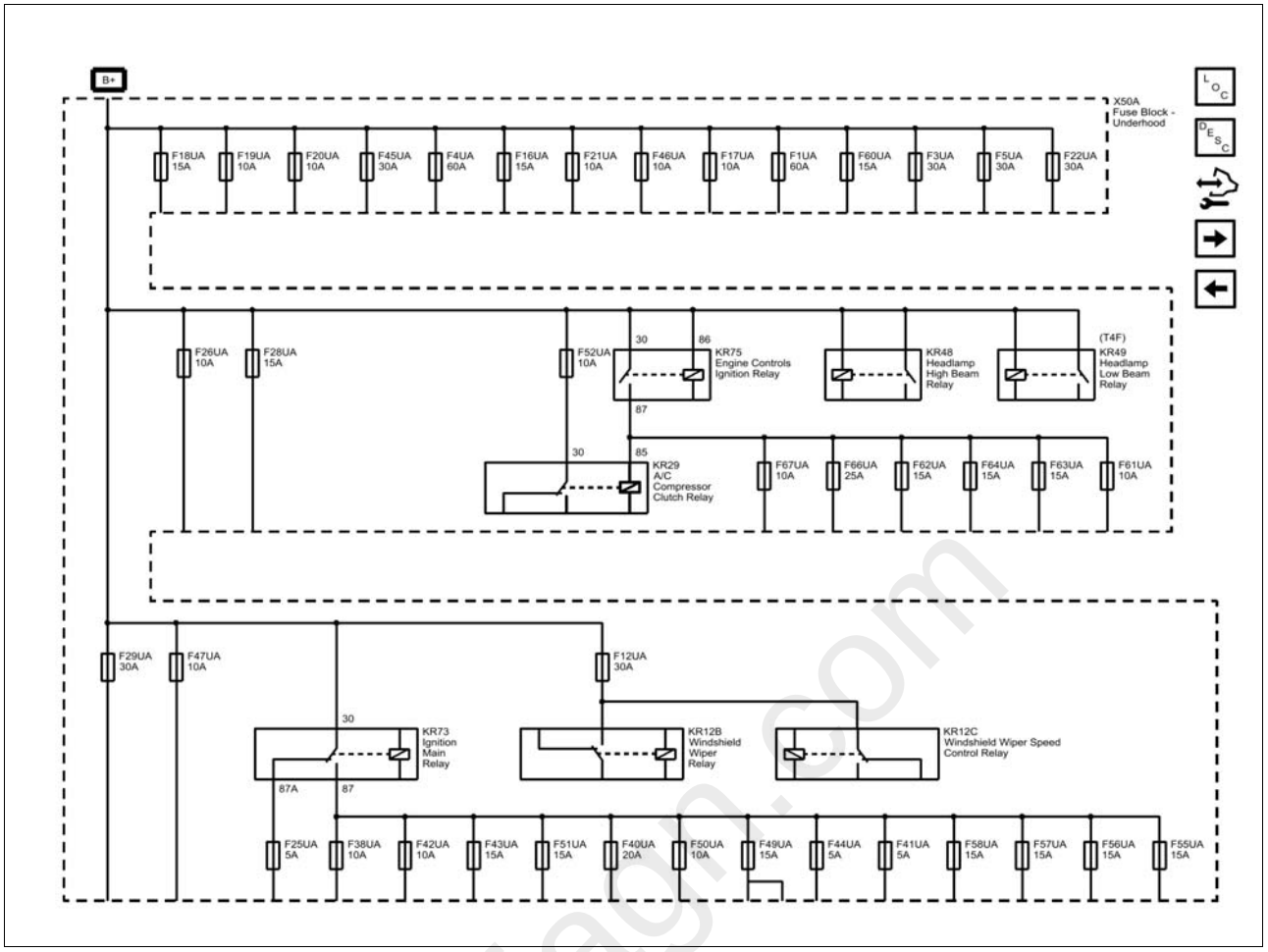
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F1UB	F1UB 200A
F3UB	F3UB 80A
F4UB	F4UB 200A
F5UB	F5UB 100A
F6UB	F6UB 100A
X428	X428
J475	J475
X50D	X50D Fuse Block - Battery
X53A	X53A Fuse Block - Rear Body
X50B	X50B Fuse Block - Underhood Auxiliary
X50A	X50A Fuse Block - Underhood
M64	M64 Starter Motor
G13	G13 Generator
K43	K43 Power Steering Control Module
K22	K22 Cooling Fan Control Module
C1	C1 Battery
KR149A	KR149A Folding Top Pump Motor Relay 1 (CM8)
KR149B	KR149B Folding Top Pump Motor Relay 2 (CM8)
G11	G11 Folding Top Pump Motor Assembly (CM8)

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SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > POWER DISTRIBUTION SCHEMATICS > X50A FUSE BLOCK - UNDERHOOD BUSSING

Fig 1: X50A Fuse Block - Underhood Bussing



Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
CAV_85	85
CAV_87	87
CAV_30	30
CAV_87	87
CAV_87A	87A
CAV_30	30
CAV_30	30
T4F	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
CAV_86	86
F67UA	F67UA 10A

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F66UA	F66UA 25A
F62UA	F62UA 15A
F64UA	F64UA 15A
F63UA	F63UA 15A
F61UA	F61UA 10A
F52UA	F52UA 10A
F38UA	F38UA 10A
F42UA	F42UA 10A
F43UA	F43UA 15A
F51UA	F51UA 15A
F40UA	F40UA 20A
F50UA	F50UA 10A
F49UA	F49UA 15A
F44UA	F44UA 5A
F41UA	F41UA 5A
F58UA	F58UA 15A
F57UA	F57UA 15A
F56UA	F56UA 15A
F55UA	F55UA 15A
F25UA	F25UA 5A
F12UA	F12UA 30A
F22UA	F22UA 30A
F5UA	F5UA 30A
F3UA	F3UA 30A
F60UA	F60UA 15A
F1UA	F1UA 60A
F17UA	F17UA 10A
F46UA	F46UA 10A
F21UA	F21UA 10A
F16UA	F16UA 15A
F4UA	F4UA 60A
F45UA	F45UA 30A
F20UA	F20UA 10A

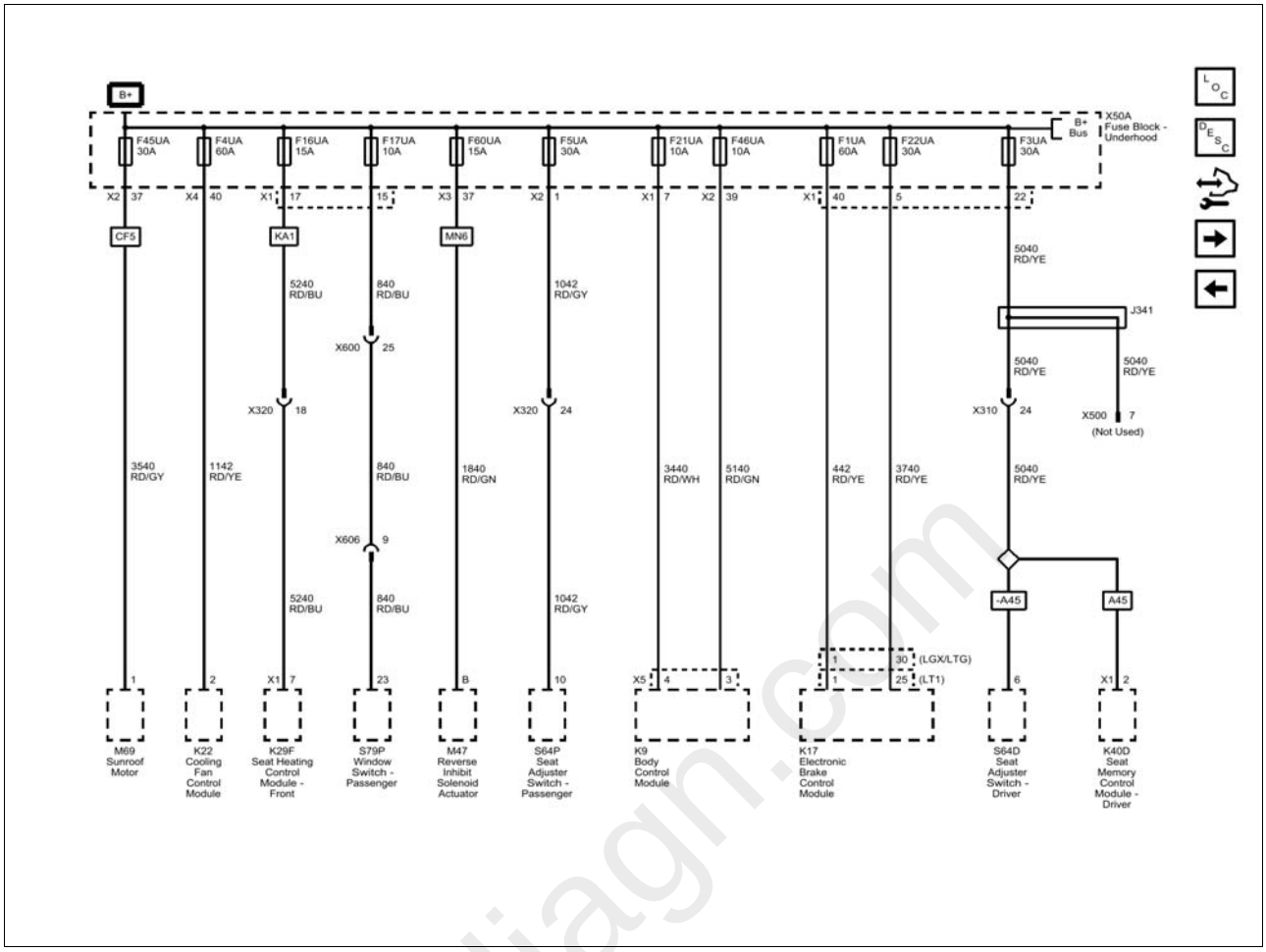
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F19UA	F19UA 10A
F29UA	F29UA 30A
F47UA	F47UA 10A
F18UA	F18UA 15A
F26UA	F26UA 10A
F28UA	F28UA 15A
KR75	KR75 Engine Controls Ignition Relay
KR73	KR73 Ignition Main Relay
KR29	KR29 A/C Compressor Clutch Relay
KR12B	KR12B Windshield Wiper Relay
KR48	KR48 Headlamp High Beam Relay
KR49	KR49 Headlamp Low Beam Relay
KR12C	KR12C Windshield Wiper Speed Control Relay
X50A	X50A Fuse Block - Underhood

SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > POWER DISTRIBUTION SCHEMATICS > F1UA, F3UA, F4UA, F5UA, F16UA, F17UA, F21UA, F22UA, F45UA, F46UA AND F60UA (EARLY PRODUCTION)

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Fig 1: F1UA, F3UA, F4UA, F5UA, F16UA, F17UA, F21UA, F22UA, F45UA, F46UA and F60UA (Early Production)



Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
3540	Battery Positive Voltage
3540_RD/GY	3540 RD/GY
CAV_37	37
CONN_X2	X2
CAV_1	1
1142	Battery Positive Voltage
1142_RD/YE	1142 RD/YE
CAV_40	40
CONN_X4	X4
CAV_2	2
5240	Battery Positive Voltage

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5240_RD/BU	5240 RD/BU
CAV_17	17
CONN_X1	X1
CAV_7	7
CONN_X1	X1
840	Battery Positive Voltage
840_RD/BU	840 RD/BU
CAV_15	15
CAV_23	23
1840	Battery Positive Voltage
1840_RD/GN	1840 RD/GN
CAV_37	37
CONN_X3	X3
CAV_B	B
1042	Battery Positive Voltage
1042_RD/GY	1042 RD/GY
CAV_1	1
CONN_X2	X2
CAV_10	10
5040	Battery Positive Voltage
5040_RD/YE	5040 RD/YE
CAV_22	22
CAV_6	6
CAV_2	2
CONN_X1	X1
CF5	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Israel (MBI),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
KA1	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Israel (MBI),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
MN6	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Mid-East (MAM),Europe Group (MBM))
A45	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Israel (MBI),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean

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	(MAY),Europe Group (MBM))
A45	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Israel (MBI),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
CAV_24	24
CAV_25	25
CAV_9	9
CAV_18	18
CAV_24	24
5240_RD/BU	5240 RD/BU
1042_RD/GY	1042 RD/GY
5040_RD/YE	5040 RD/YE
5040_RD/YE	5040 RD/YE
5040_RD/YE	5040 RD/YE
CAV_7	7
3440	Battery Positive Voltage
3440_RD/WH	3440 RD/WH
CAV_7	7
CONN_X1	X1
CAV_4	4
CONN_X5	X5
5140	Battery Positive Voltage
5140_RD/GN	5140 RD/GN
442	Battery Positive Voltage
442_RD/YE	442 RD/YE
CAV_40	40
CONN_X1	X1
CAV_1	1
3740	Battery Positive Voltage
3740_RD/YE	3740 RD/YE
CAV_5	5
CAV_25	25
CAV_39	39

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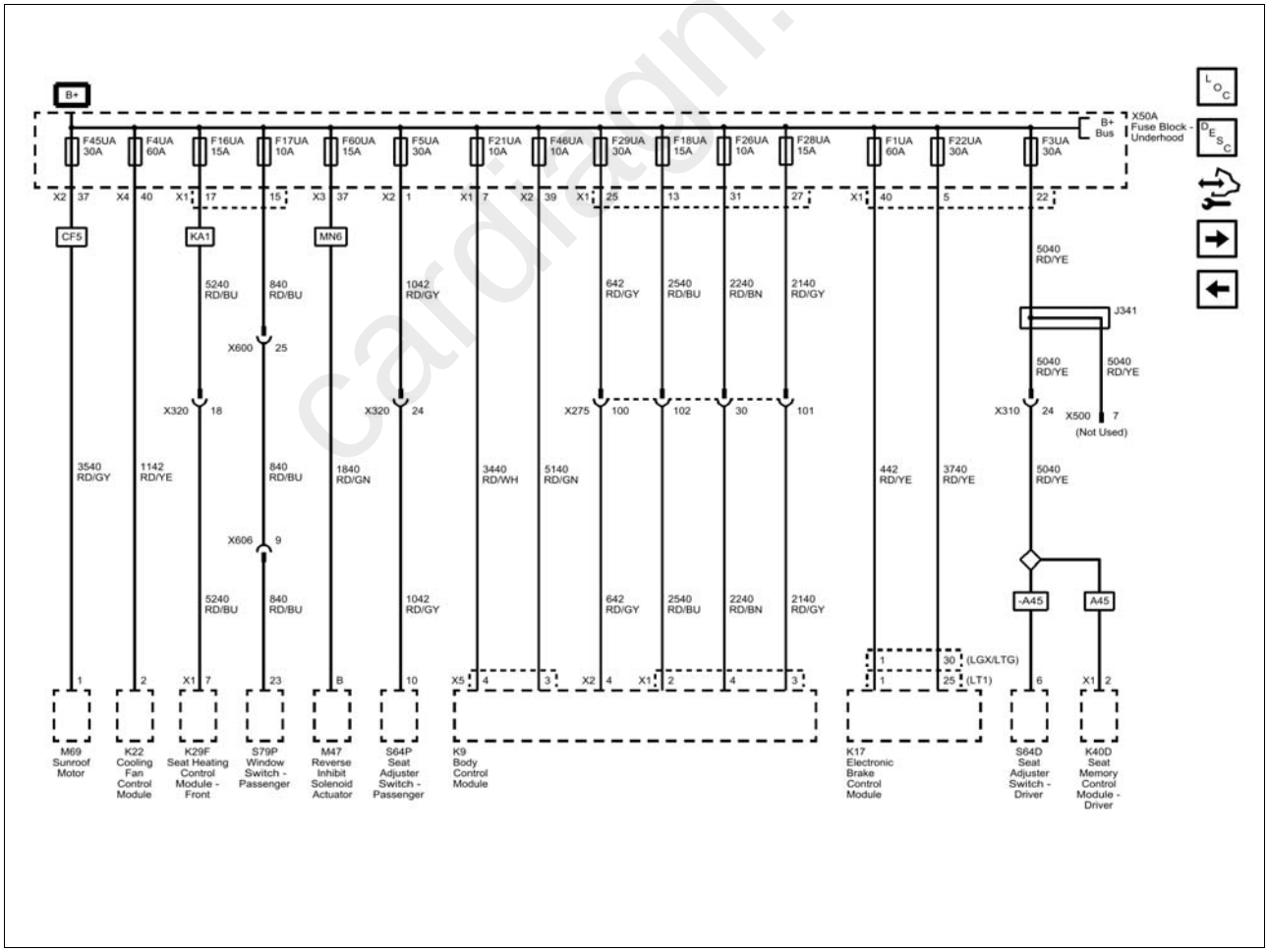
CONN_X2	X2
CAV_3	3
CAV_1	1
CAV_30	30
LT1	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
LGX	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Israel (MBI),Mid-East (MAM))
LTG	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Europe Group (MBM))
840_RD/BU	840 RD/BU
840_RD/BU	840 RD/BU
F45UA	F45UA 30A
F4UA	F4UA 60A
F16UA	F16UA 15A
F17UA	F17UA 10A
F60UA	F60UA 15A
F5UA	F5UA 30A
F3UA	F3UA 30A
X310	X310
X600	X600
X606	X606
X320	X320
X320	X320
J341	J341
X500	X500
F21UA	F21UA 10A
F46UA	F46UA 10A
F1UA	F1UA 60A
F22UA	F22UA 30A
M69	M69 Sunroof Motor (CE5)
K22	K22 Cooling Fan Control Module
K29F	K29F Seat Heating Control Module - Front (KA1/KQV)

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S79P	S79P Window Switch - Passenger
M47	M47 Reverse Inhibit Solenoid Actuator (MN6)
S64P	S64P Seat Adjuster Switch - Passenger
K40D	K40D Seat Memory Control Module - Driver (A45)
S64D	S64D Seat Adjuster Switch - Driver
X50A	X50A Fuse Block - Underhood
K9	K9 Body Control Module
K17	K17 Electronic Brake Control Module

SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > POWER DISTRIBUTION SCHEMATICS > F1UA, F3UA, F4UA, F5UA, F16UA, F17UA, F18UA, F21UA, F22UA, F26UA, F28UA, F29UA, F45UA, F46UA AND F60UA (LATE PRODUCTION)

Fig 1: F1UA, F3UA, F4UA, F5UA, F16UA, F17UA, F18UA, F21UA, F22UA, F26UA, F28UA, F29UA, F45UA, F46UA and F60UA (Late Production)



Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
3540	Battery Positive Voltage
3540_RD/GY	3540 RD/GY
CAV_37	37
CONN_X2	X2
CAV_1	1
1142	Battery Positive Voltage
1142_RD/YE	1142 RD/YE
CAV_40	40
CONN_X4	X4
CAV_2	2
5240	Battery Positive Voltage
5240_RD/BU	5240 RD/BU
CAV_17	17
CONN_X1	X1
CAV_7	7
CONN_X1	X1
840	Battery Positive Voltage
840_RD/BU	840 RD/BU
CAV_15	15
CAV_23	23
1840	Battery Positive Voltage
1840_RD/GN	1840 RD/GN
CAV_37	37
CONN_X3	X3
CAV_B	B
1042	Battery Positive Voltage
1042_RD/GY	1042 RD/GY
CAV_1	1
CONN_X2	X2
CAV_10	10
5040	Battery Positive Voltage

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5040_RD/YE	5040 RD/YE
CAV_22	22
CAV_6	6
CAV_2	2
CONN_X1	X1
CF5	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Israel (MBI),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
KA1	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Israel (MBI),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
MN6	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Mid-East (MAM),Europe Group (MBM))
A45	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Israel (MBI),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
A45	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Israel (MBI),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
CAV_24	24
CAV_25	25
CAV_9	9
CAV_18	18
CAV_24	24
5240_RD/BU	5240 RD/BU
1042_RD/GY	1042 RD/GY
5040_RD/YE	5040 RD/YE
5040_RD/YE	5040 RD/YE
5040_RD/YE	5040 RD/YE
CAV_7	7
3440	Battery Positive Voltage
3440_RD/WH	3440 RD/WH
CAV_7	7
CONN_X1	X1
CAV_4	4
CONN_X5	X5

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5140	Battery Positive Voltage
5140_RD/GN	5140 RD/GN
442	Battery Positive Voltage
442_RD/YE	442 RD/YE
CAV_40	40
CONN_X1	X1
CAV_1	1
3740	Battery Positive Voltage
3740_RD/YE	3740 RD/YE
CAV_5	5
CAV_25	25
CAV_39	39
CONN_X2	X2
CAV_3	3
CAV_1	1
CAV_30	30
LT1	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
LGX	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Israel (MBI),Mid-East (MAM))
LTG	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Europe Group (MBM))
840_RD/BU	840 RD/BU
840_RD/BU	840 RD/BU
642	Battery Positive Voltage
642_RD/GY	642 RD/GY
CAV_4	4
CONN_X2	X2
CAV_25	25
CONN_X1	X1
2540	Battery Positive Voltage
2540_RD/BU	2540 RD/BU
CAV_2	2

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CONN_X1	X1
CAV_13	13
2240	Battery Positive Voltage
2240_RD/BN	2240 RD/BN
CAV_4	4
CAV_31	31
2140	Battery Positive Voltage
2140_RD/GY	2140 RD/GY
CAV_3	3
CAV_27	27
642_RD/GY	642 RD/GY
2540_RD/BU	2540 RD/BU
2240_RD/BN	2240 RD/BN
2140_RD/GY	2140 RD/GY
X275	X275
CAV_100	100
CAV_102	102
CAV_30	30
CAV_101	101
F45UA	F45UA 30A
F4UA	F4UA 60A
F16UA	F16UA 15A
F17UA	F17UA 10A
F60UA	F60UA 15A
F5UA	F5UA 30A
F3UA	F3UA 30A
X310	X310
X600	X600
X606	X606
X320	X320
X320	X320
X500	X500
F21UA	F21UA 10A

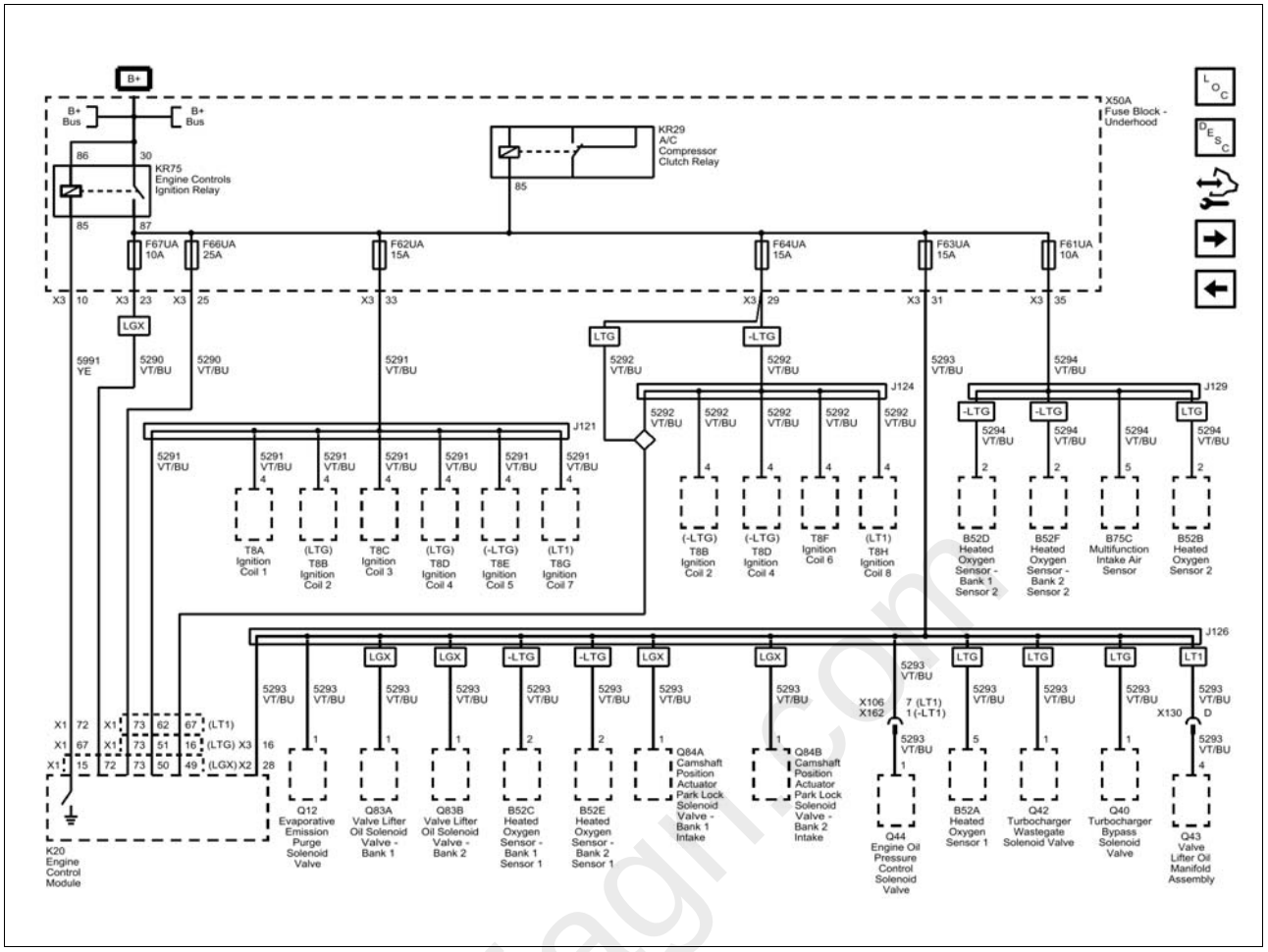
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F46UA	F46UA 10A
F1UA	F1UA 60A
F22UA	F22UA 30A
J341	J341
F29UA	F29UA 30A
F18UA	F18UA 15A
F26UA	F26UA 10A
F28UA	F28UA 15A
X275	X275
M69	M69 Sunroof Motor (CE5)
K22	K22 Cooling Fan Control Module
K29F	K29F Seat Heating Control Module - Front (KA1/KQV)
S79P	S79P Window Switch - Passenger
M47	M47 Reverse Inhibit Solenoid Actuator (MN6)
S64P	S64P Seat Adjuster Switch - Passenger
K40D	K40D Seat Memory Control Module - Driver (A45)
S64D	S64D Seat Adjuster Switch - Driver
X50A	X50A Fuse Block - Underhood
K9	K9 Body Control Module
K17	K17 Electronic Brake Control Module

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SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > POWER DISTRIBUTION SCHEMATICS > F61UA, F62UA, F63UA, F64UA, F66UA AND F67UA

Fig 1: F61UA, F62UA, F63UA, F64UA, F66UA and F67UA



Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
5293	Powertrain Main Relay Fused Supply (4)
5293_VT/BU	5293 VT/BU
CAV_4	4
5293_VT/BU	5293 VT/BU
CAV_1	1
5293_VT/BU	5293 VT/BU
CAV_1	1
5293_VT/BU	5293 VT/BU
CAV_5	5
5293_VT/BU	5293 VT/BU
CAV_1	1
5293_VT/BU	5293 VT/BU

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CAV_1	1
5293_VT/BU	5293 VT/BU
CAV_1	1
5293_VT/BU	5293 VT/BU
5293_VT/BU	5293 VT/BU
5293_VT/BU	5293 VT/BU
CAV_1	1
5293_VT/BU	5293 VT/BU
CAV_1	1
5293_VT/BU	5293 VT/BU
CAV_1	1
5293_VT/BU	5293 VT/BU
CAV_28	28
CONN_X2	X2
CAV_85	85
CAV_87	87
CAV_30	30
CAV_86	86
CAV_16	16
CONN_X3	X3
LGX	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Israel (MBI),Mid-East (MAM))
LGX	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Israel (MBI),Mid-East (MAM))
LTG	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Europe Group (MBM))
LTG	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Europe Group (MBM))
LGX	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Israel (MBI),Mid-East (MAM))
LGX	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Israel (MBI),Mid-East (MAM))
LTG	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Europe Group (MBM))
LT1	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
LTG	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Europe Group (MBM))

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LTG	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Europe Group (MBM))
CAV_2	2
CAV_2	2
CAV_1	1
CAV_D	D
5293_VT/BU	5293 VT/BU
5293_VT/BU	5293 VT/BU
CAV_7	7
LT1	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
LT1	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
5293_VT/BU	5293 VT/BU
CAV_31	31
CONN_X3	X3
LTG	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Europe Group (MBM))
LTG	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Europe Group (MBM))
LT1	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
LTG	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Europe Group (MBM))
LTG	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Europe Group (MBM))
LT1	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
LTG	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Europe Group (MBM))
5294	Powertrain Main Relay Fused Supply (5)
5294_VT/BU	5294 VT/BU
5294_VT/BU	5294 VT/BU
CAV_2	2
5294_VT/BU	5294 VT/BU
CAV_5	5
5294_VT/BU	5294 VT/BU
CAV_2	2

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5294_VT/BU	5294 VT/BU
CAV_2	2
CAV_35	35
CONN_X3	X3
LTG	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Europe Group (MBM))
LTG	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Europe Group (MBM))
LTG	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Europe Group (MBM))
5292	Powertrain Main Relay Fused Supply (3)
5292_VT/BU	5292 VT/BU
CAV_4	4
CAV_29	29
CONN_X3	X3
5292_VT/BU	5292 VT/BU
CAV_4	4
5292_VT/BU	5292 VT/BU
CAV_4	4
5292_VT/BU	5292 VT/BU
CAV_4	4
5292_VT/BU	5292 VT/BU
LTG	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Europe Group (MBM))
LTG	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Europe Group (MBM))
5292_VT/BU	5292 VT/BU
5292_VT/BU	5292 VT/BU
5991	Powertrain Relay Coil Control
5991_YE	5991 YE
CAV_15	15
CAV_10	10
CONN_X3	X3
5290	Powertrain Main Relay Fused Supply (1)
5290_VT/BU	5290 VT/BU
CAV_23	23
CONN_X3	X3
5290_VT/BU	5290 VT/BU

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CAV_25	25
CONN_X3	X3
LGX	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Israel (MBI),Mid-East (MAM))
5291	Powertrain Main Relay Fused Supply (2)
5291_VT/BU	5291 VT/BU
CAV_4	4
CAV_33	33
CONN_X3	X3
5291_VT/BU	5291 VT/BU
CAV_4	4
5291_VT/BU	5291 VT/BU
CAV_4	4
5291_VT/BU	5291 VT/BU
CAV_4	4
5291_VT/BU	5291 VT/BU
CAV_4	4
5291_VT/BU	5291 VT/BU
CAV_4	4
5291_VT/BU	5291 VT/BU
5291_VT/BU	5291 VT/BU
CAV_49	49
CAV_50	50
CAV_73	73
CAV_72	72
CONN_X1	X1
CAV_16	16
CAV_51	51
CAV_73	73
CAV_67	67
CONN_X1	X1
CONN_X1	X1
CAV_67	67

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CAV_62	62
CAV_73	73
CONN_X1	X1
CAV_72	72
CONN_X1	X1
LT1	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
LTG	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Europe Group (MBM))
LGX	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Israel (MBI),Mid-East (MAM))
CAV_85	85
F67UA	F67UA 10A
F61UA	F61UA 10A
F66UA	F66UA 25A
F62UA	F62UA 15A
F64UA	F64UA 15A
F63UA	F63UA 15A
X162	X162
X130	X130
J129	J129
J124	J124
J121	J121
J126	J126
Q43	Q43 Valve Lifter Oil Manifold Assembly (LT1)
Q40	Q40 Turbocharger Bypass Solenoid Valve (LTG)
Q42	Q42 Turbocharger Wastegate Solenoid Valve (LTG)
B52A	B52A Heated Oxygen Sensor 1 (LTG)
Q44	Q44 Engine Oil Pressure Control Solenoid Valve
B52E	B52E Heated Oxygen Sensor - Bank 2 Sensor 1 (LGX or LT1)
B52C	B52C Heated Oxygen Sensor - Bank 1 Sensor 1 (LGX or LT1)
Q83B	Q83B Valve Lifter Oil Solenoid Valve - Bank 2 (LGX)
Q83A	Q83A Valve Lifter Oil Solenoid Valve - Bank 1 (LGX)
Q12	Q12 Evaporative Emission Purge Solenoid Valve

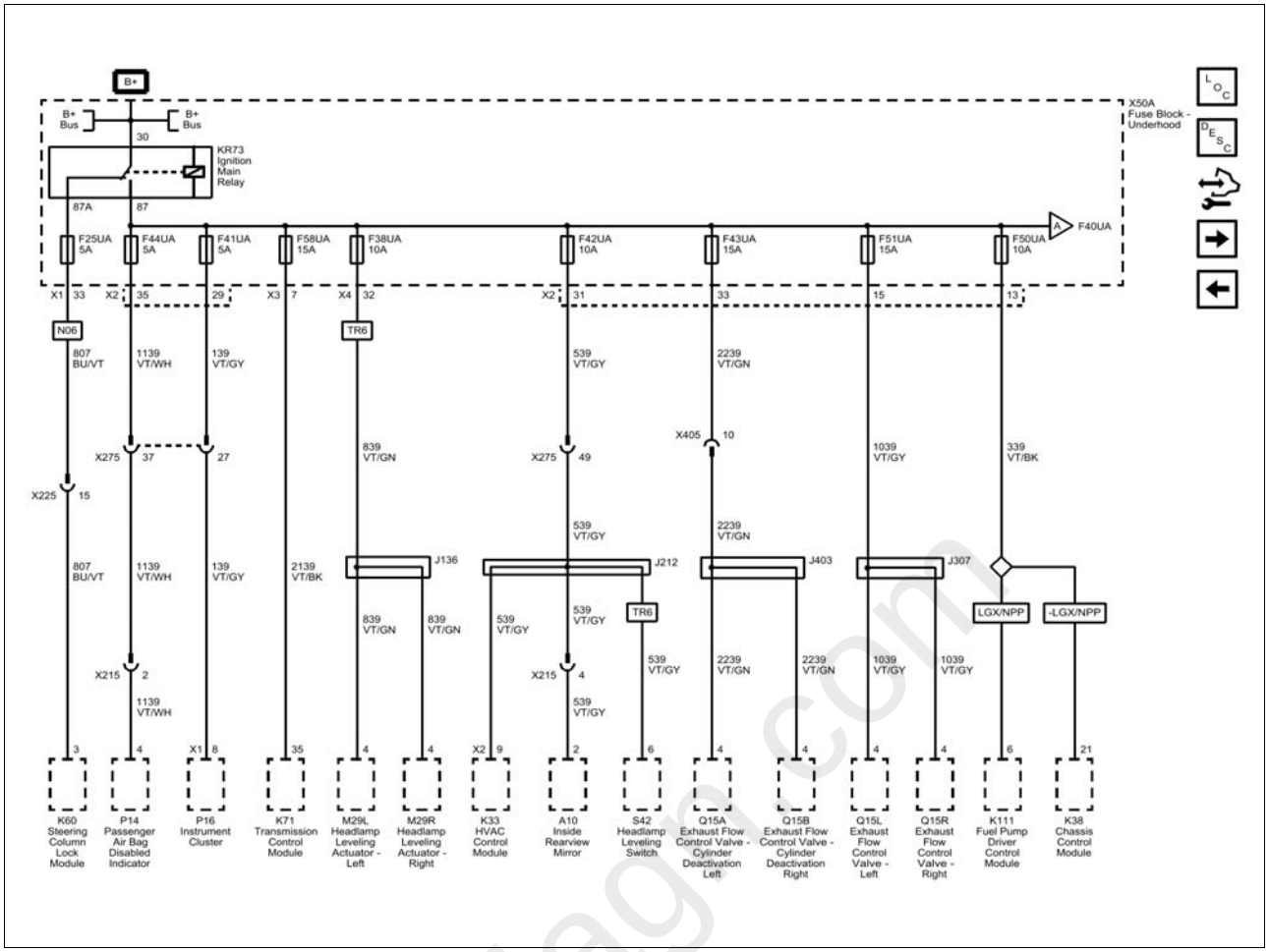
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Q84A	Q83A Valve Lifter Oil Solenoid Valve - Bank 1 (LGX)
Q84B	Q83B Valve Lifter Oil Solenoid Valve - Bank 2 (LGX)
B52B	B52B Heated Oxygen Sensor 2 (LTG)
B75C	B75C Multifunction Intake Air Sensor
B52F	B52F Heated Oxygen Sensor - Bank 2 Sensor 2 (LGX or LT1)
B52D	B52D Heated Oxygen Sensor - Bank 1 Sensor 2 (LGX or LT1)
T8H	T8H Ignition Coil 8 (LT1)
T8F	T8F Ignition Coil 6 (LGX or LT1)
T8D	T8D Ignition Coil 4
T8B	T8B Ignition Coil 2
T8G	T8G Ignition Coil 7 (LT1)
T8E	T8E Ignition Coil 5 (LGX or LT1)
T8D	T8D Ignition Coil 4
T8C	T8C Ignition Coil 3
T8B	T8B Ignition Coil 2
T8A	T8A Ignition Coil 1
X50A	X50A Fuse Block - Underhood
K20	K20 Engine Control Module
KR75	KR75 Engine Controls Ignition Relay
KR29	KR29 A/C Compressor Clutch Relay

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SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > POWER DISTRIBUTION SCHEMATICS > F25UA, F38UA, F41UA, F42UA, F43UA, F44UA, F50UA, F51UA AND F58UA

Fig 1: F25UA, F38UA, F41UA, F42UA, F43UA, F44UA, F50UA, F51UA and F58UA



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Callout	Component Name
807	OFF /Accessory Ignition Voltage
807_BU/VT	807 BU/VT
CAV_3	3
CAV_33	33
CONN_X1	X1
1139	Run/Crank Ignition 1 Voltage
1139_VT/WH	1139 VT/WH
CAV_4	4
CAV_35	35
CONN_X2	X2
139	Run/Crank Ignition 1 Voltage
139_VT/GY	139 VT/GY

CAV_8	8
CONN_X1	X1
CAV_29	29
2139	Run/Crank Ignition 1 Voltage
2139_VT/BK	2139 VT/BK
CAV_35	35
CAV_7	7
CONN_X3	X3
839	Run/Crank Ignition 1 Voltage
839_VT/GN	839 VT/GN
CAV_4	4
CAV_32	32
CONN_X4	X4
539	Run/Crank Ignition 1 Voltage
539_VT/GY	539 VT/GY
CAV_2	2
CAV_31	31
CONN_X2	X2
2239	Run/Crank Ignition 1 Voltage
2239_VT/GN	2239 VT/GN
CAV_4	4
CAV_33	33
1039	Run/Crank Ignition 1 Voltage
1039_VT/GY	1039 VT/GY
CAV_4	4
CAV_15	15
339	Run/Crank Ignition 1 Voltage
339_VT/BK	339 VT/BK
CAV_6	6
CAV_13	13
CAV_15	15
CAV_2	2
CAV_49	49

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CAV_4	4
CAV_10	10
807_BU/VT	807 BU/VT
1139_VT/WH	1139 VT/WH
139_VT/GY	139 VT/GY
539_VT/GY	539 VT/GY
2239_VT/GN	2239 VT/GN
1139_VT/WH	1139 VT/WH
539_VT/GY	539 VT/GY
839_VT/GN	839 VT/GN
CAV_4	4
539_VT/GY	539 VT/GY
CAV_6	6
2239_VT/GN	2239 VT/GN
CAV_4	4
1039_VT/GY	1039 VT/GY
CAV_4	4
CAV_21	21
539_VT/GY	539 VT/GY
539_VT/GY	539 VT/GY
CAV_9	9
CONN_X2	X2
1039_VT/GY	1039 VT/GY
2239_VT/GN	2239 VT/GN
839_VT/GN	839 VT/GN
TR6	(Korea (MAW),Brasil/Paraguay (MDV),Europe Group (MBM))
TR6	(Korea (MAW),Brasil/Paraguay (MDV),Europe Group (MBM))
LGX	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Israel (MBI),Mid-East (MAM))
NPP	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Israel (MBI),Mid-East (MAM),Europe Group (MBM))
LGX	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Israel (MBI),Mid-East (MAM))

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NPP	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Israel (MBI),Mid-East (MAM),Europe Group (MBM))
CAV_87A	87A
CAV_30	30
CAV_87	87
N06	(Korea (MAW),Brasil/Paraguay (MDV),Europe Group (MBM))
X275	X275
CAV_37	37
CAV_27	27
F25UA	F25UA 5A
F44UA	F44UA 5A
F41UA	F41UA 5A
F58UA	F58UA 15A
F38UA	F38UA 10A
F42UA	F42UA 10A
F43UA	F43UA 15A
F51UA	F51UA 15A
F50UA	F50UA 10A
A_REF	A
X225	X225
X215	X215
X275	X275
X215	X215
X405	X405
J136	J136
J212	J212
J403	J403
J307	J307
X275	X275
P14	P14 Passenger Air Bag Disabled Indicator
P16	P16 Instrument Cluster
K71	K71 Transmission Control Module
K60	K60 Steering Column Lock Module (N06)

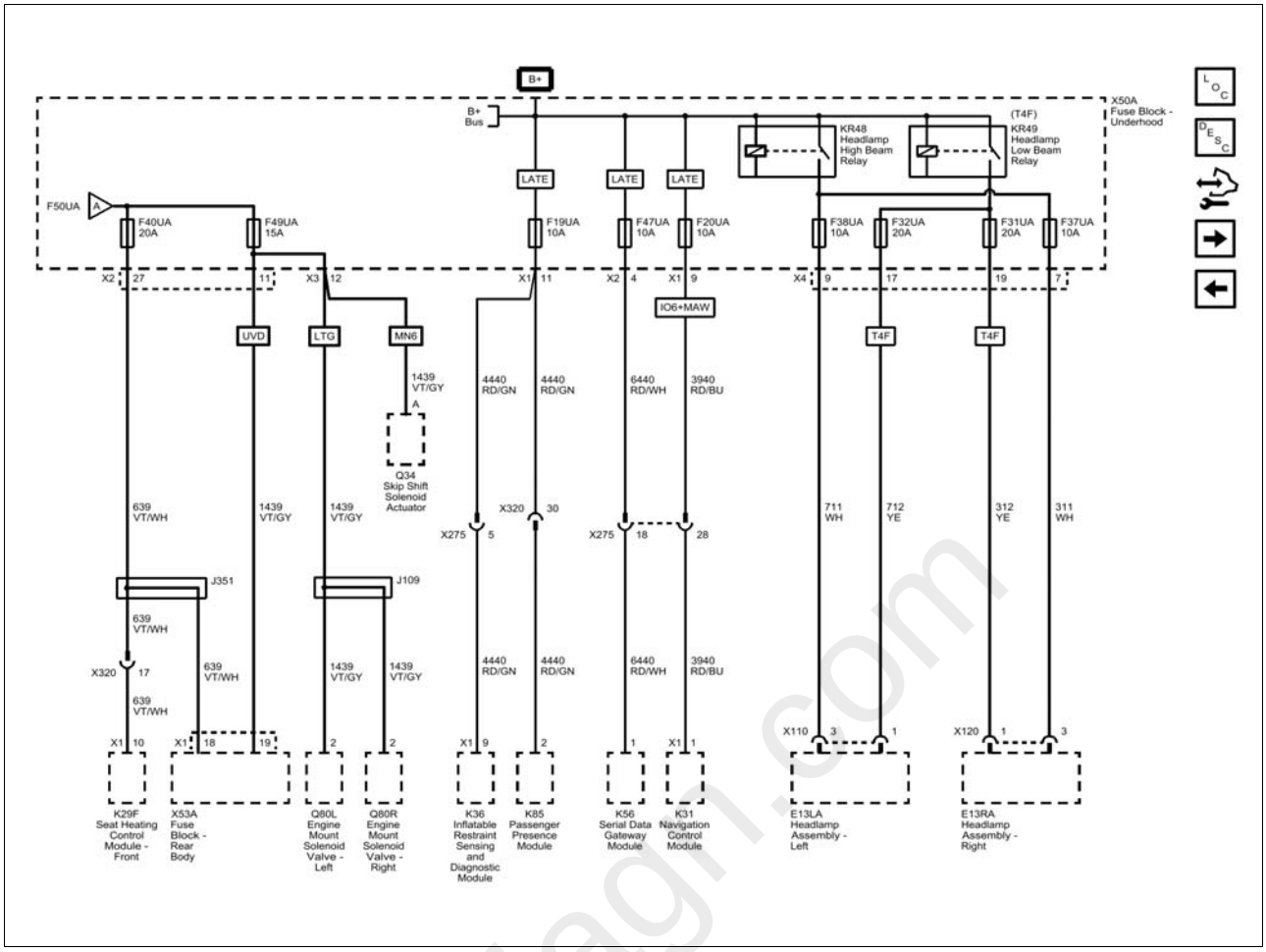
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M29L	M29L Headlamp Leveling Actuator - Left (T90)
M29R	M29R Headlamp Leveling Actuator - Right (T90)
K33	K33 HVAC Control Module
A10	A10 Inside Rearview Mirror
S42	S42 Headlamp Leveling Switch (TR6)
Q15A	Q15A Exhaust Flow Control Valve - Cylinder Deactivation Left (MX0)
Q15B	Q15B Exhaust Flow Control Valve - Cylinder Deactivation Right (MX0)
Q15L	Q15L Exhaust Flow Control Valve - Left (NPP)
Q15R	Q15R Exhaust Flow Control Valve - Right (NPP)
K38	K38 Chassis Control Module (LTG/LT1/(LGX+NPP))
K111	K111 Fuel Pump Driver Control Module (LGX-NPP)
KR73	KR73 Ignition Main Relay
X50A	X50A Fuse Block - Underhood

SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > POWER DISTRIBUTION SCHEMATICS > F19UA, F20UA, F31UA, F32UA, F37UA, F38UA, F40UA, F47UA AND F49UA

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Fig 1: F19UA, F20UA, F31UA, F32UA, F37UA, F38UA, F40UA, F47UA and F49UA



Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
639	Run/Crank Ignition 1 Voltage
639_VT/WH	639 VT/WH
CAV_10	10
CONN_X1	X1
CAV_27	27
CONN_X2	X2
1439	Run/Crank Ignition 1 Voltage
1439_VT/GY	1439 VT/GY
CAV_19	19
CAV_11	11
1439_VT/GY	1439 VT/GY
CAV_12	12

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CONN_X3	X3
CAV_2	2
1439_VT/GY	1439 VT/GY
CAV_A	A
1439_VT/GY	1439 VT/GY
CAV_2	2
639_VT/WH	639 VT/WH
CAV_18	18
CONN_X1	X1
639_VT/WH	639 VT/WH
1439_VT/GY	1439 VT/GY
LTG	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Europe Group (MBM))
MN6	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Mid-East (MAM),Europe Group (MBM))
UVD	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Israel (MBI),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
639_VT/WH	639 VT/WH
CAV_17	17
711	Left Headlamp High Beam Control
711_WH	711 WH
CAV_9	9
CONN_X4	X4
712	Left Headlamp Low Beam Control
712_YE	712 YE
CAV_17	17
312	Right Headlamp Low Beam Control
312_YE	312 YE
CAV_19	19
311	Right Headlamp High Beam Control
311_WH	311 WH
CAV_7	7

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T4F	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
T4F	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
T4F	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
4440	Battery Positive Voltage
4440_RD/GN	4440 RD/GN
CAV_9	9
CONN_X1	X1
4440_RD/GN	4440 RD/GN
CAV_11	11
CONN_X1	X1
CAV_2	2
6440	Battery Positive Voltage
6440_RD/WH	6440 RD/WH
CAV_4	4
CONN_X2	X2
CAV_1	1
3940	Battery Positive Voltage
3940_RD/BU	3940 RD/BU
CAV_9	9
CONN_X1	X1
CAV_1	1
CONN_X1	X1
LATE	
LATE	
LATE	
4440_RD/GN	4440 RD/GN
4440_RD/GN	4440 RD/GN
6440_RD/WH	6440 RD/WH
3940_RD/BU	3940 RD/BU

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CAV_5	5
CAV_30	30
IO6	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Israel (MBI),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
MAW	
X110	X110
CAV_1	1
CAV_3	3
X120	X120
CAV_1	1
CAV_3	3
X275	X275
CAV_18	18
CAV_28	28
F40UA	F40UA 20A
F49UA	F49UA 15A
A_REF	A
X320	X320
F38UA	F38UA 10A
F32UA	F32UA 20A
F31UA	F31UA 20A
F37UA	F37UA 10A
J109	J109
J351	J351
F20UA	F20UA 10A
F47UA	F47UA 10A
F19UA	F19UA 10A
X275	X275
X320	X320
X110	X110
X120	X120
X275	X275

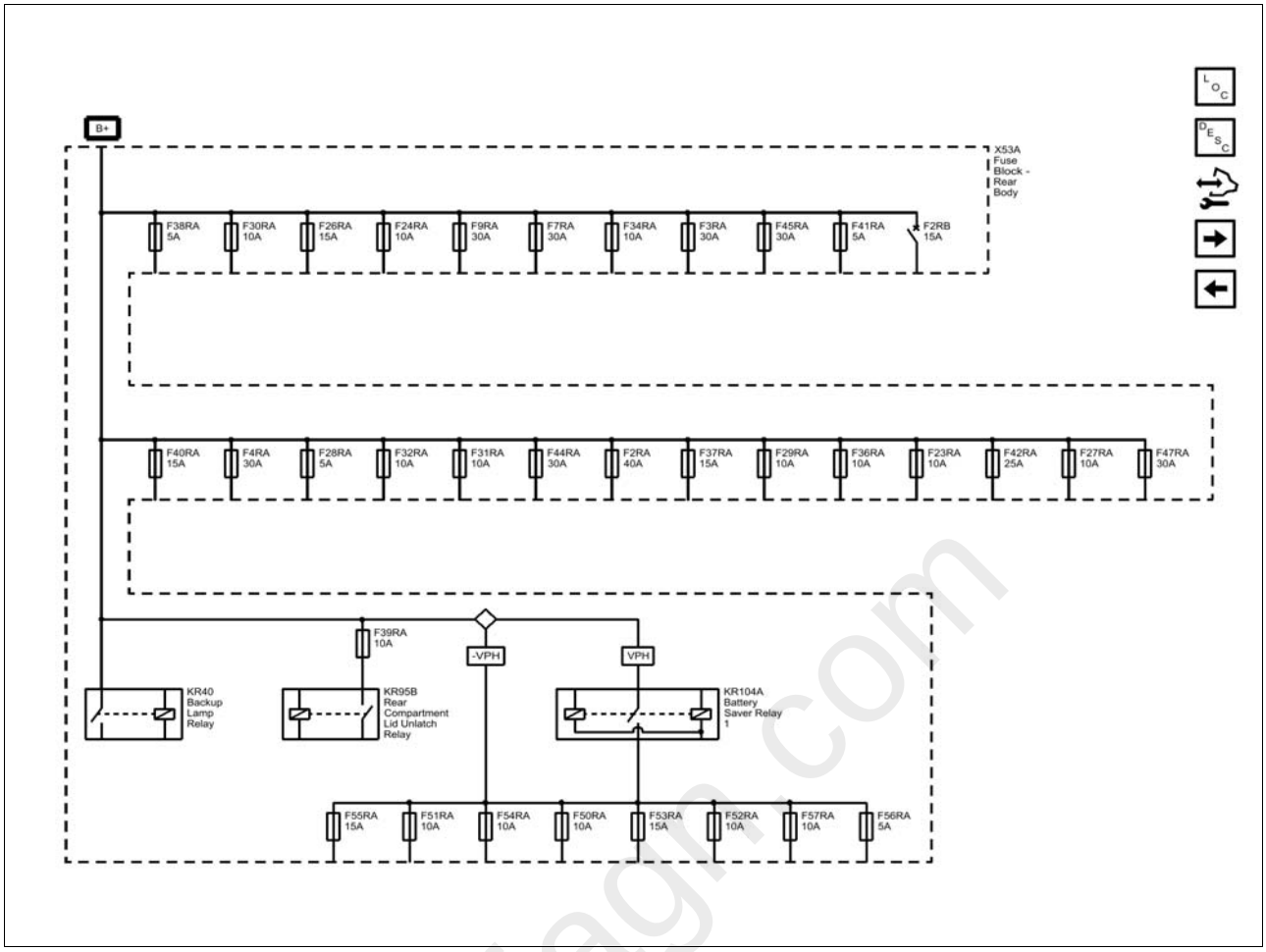
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K29F	K29F Seat Heating Control Module - Front (KA1/KQV)
X53A	X53A Fuse Block - Rear Body
Q80L	Q80L Engine Mount Solenoid Valve - Left (LTG)
Q80R	Q80R Engine Mount Solenoid Valve - Right (LTG)
Q34	Q34 Skip Shift Solenoid Actuator (MN6)
E13LA	E13LA Headlamp Assembly - Left
E13RA	E13RA Headlamp Assembly - Right
KR48	KR48 Headlamp High Beam Relay
KR49	KR49 Headlamp Low Beam Relay
K36	K36 Inflatable Restraint Sensing and Diagnostic Module
K85	K85 Passenger Presence Module
K56	K56 Serial Data Gateway Module
K31	K31 Navigation Control Module (IO6 with MAW)
X50A	X50A Fuse Block - Underhood

SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > POWER DISTRIBUTION SCHEMATICS > X53A FUSE BLOCK - REAR BODY BUSSING

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Fig 1: X53A Fuse Block - Rear Body Bussing



Courtesy of GENERAL MOTORS COMPANY

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Callout	Component Name
VPH	(Korea (MAW),Israel (MBI),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
VPH	(Korea (MAW),Israel (MBI),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
F38RA	F38RA 5A
F30RA	F30RA 10A
F26RA	F26RA 15A
F24RA	F24RA 10A
F9RA	F9RA 30A
F7RA	F7RA 30A
F34RA	F34RA 10A
F3RA	F3RA 30A

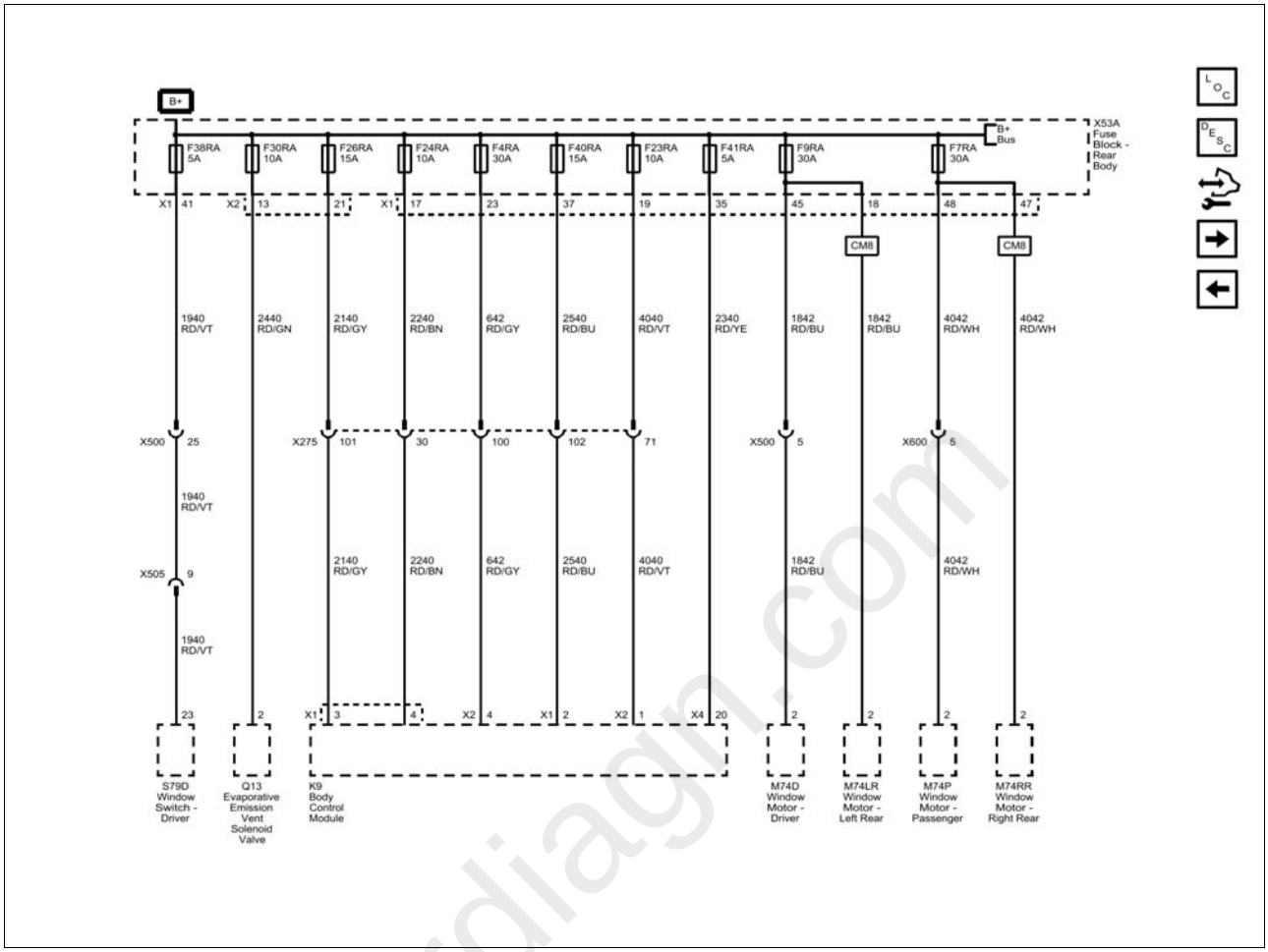
F45RA	F45RA 30A
F41RA	F41RA 5A
F40RA	F40RA 15A
F4RA	F4RA 30A
F28RA	F28RA 5A
F32RA	F32RA 10A
F31RA	F31RA 10A
F44RA	F44RA 30A
F2RA	F2RA 40A
F37RA	F37RA 15A
F29RA	F29RA 10A
F36RA	F36RA 10A
F23RA	F23RA 10A
F42RA	F42RA 25A
F27RA	F27RA 10A
F2RB	F2RB 15A
F47RA	F47RA 30A
F55RA	F55RA 15A
F51RA	F51RA 10A
F54RA	F54RA 10A
F50RA	F50RA 10A
F53RA	F53RA 15A
F52RA	F52RA 10A
F57RA	F57RA 10A
F56RA	F56RA 5A
F39RA	F39RA 10A
X53A	X53A Fuse Block - Rear Body
KR104A	KR104A Battery Saver Relay 1
KR40	KR40 Backup Lamp Relay
KR95B	KR95B Rear Compartment Lid Release Relay

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SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS >

POWER DISTRIBUTION SCHEMATICS > F4RA, F7RA, F9RA, F23RA, F24RA, F30RA, F38RA, F40RA AND F41RA (EARLY PRODUCTION)

Fig 1: F4RA, F7RA, F9RA, F23RA, F24RA, F30RA, F38RA, F40RA and F41RA (Early Production)



Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
1940	Battery Positive Voltage
1940_RD/VT	1940 RD/VT
CAV_23	23
CAV_41	41
CONN_X1	X1
2440	Battery Positive Voltage
2440_RD/GN	2440 RD/GN
CAV_2	2
CAV_13	13
CONN_X2	X2

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2140	Battery Positive Voltage
2140_RD/GY	2140 RD/GY
CAV_3	3
CONN_X1	X1
CAV_21	21
2240	Battery Positive Voltage
2240_RD/BN	2240 RD/BN
CAV_4	4
CAV_17	17
CONN_X1	X1
642	Battery Positive Voltage
642_RD/GY	642 RD/GY
CAV_4	4
CONN_X2	X2
CAV_23	23
2540	Battery Positive Voltage
2540_RD/BU	2540 RD/BU
CAV_2	2
CONN_X1	X1
CAV_37	37
4040	Battery Positive Voltage
4040_RD/VT	4040 RD/VT
CAV_1	1
CONN_X2	X2
CAV_19	19
2340	Battery Positive Voltage
2340_RD/YE	2340 RD/YE
CAV_20	20
CONN_X4	X4
CAV_35	35
1842	Battery Positive Voltage
1842_RD/BU	1842 RD/BU
CAV_2	2

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CAV_45	45
1842_RD/BU	1842 RD/BU
CAV_2	2
CAV_18	18
4042	Battery Positive Voltage
4042_RD/WH	4042 RD/WH
CAV_2	2
CAV_48	48
4042_RD/WH	4042 RD/WH
CAV_2	2
CAV_47	47
CAV_25	25
CAV_5	5
CAV_5	5
CAV_9	9
1940_RD/VT	1940 RD/VT
2140_RD/GY	2140 RD/GY
2240_RD/BN	2240 RD/BN
642_RD/GY	642 RD/GY
2540_RD/BU	2540 RD/BU
4040_RD/VT	4040 RD/VT
1842_RD/BU	1842 RD/BU
4042_RD/WH	4042 RD/WH
1940_RD/VT	1940 RD/VT
CM8	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Israel (MBI),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
CM8	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Israel (MBI),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
X275	X275
CAV_101	101
CAV_30	30
CAV_100	100
CAV_102	102

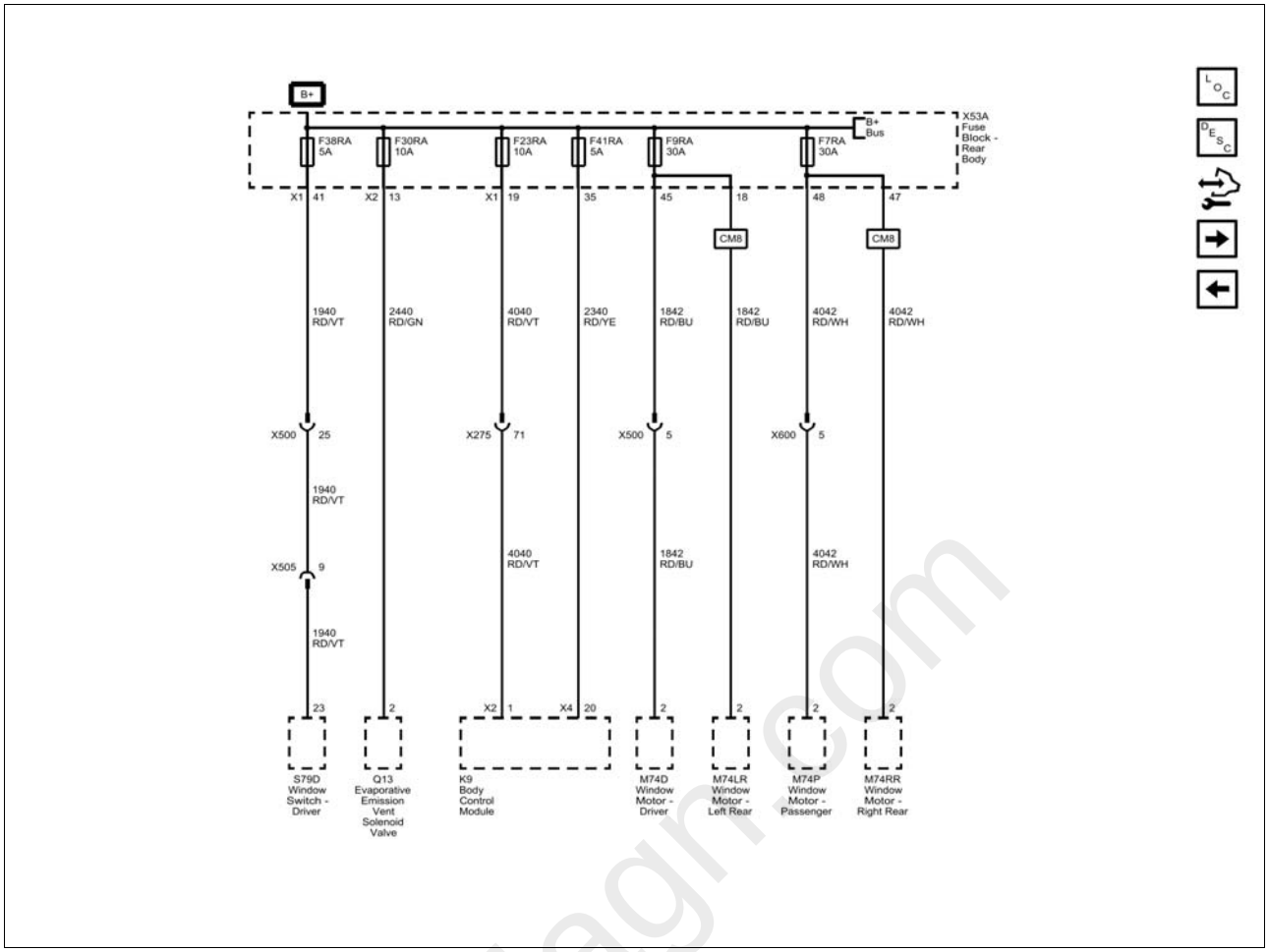
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CAV_71	71
F38RA	F38RA 5A
F30RA	F30RA 10A
F26RA	F26RA 15A
F24RA	F24RA 10A
F4RA	F4RA 30A
F40RA	F40RA 15A
F23RA	F23RA 10A
F41RA	F41RA 5A
F9RA	F9RA 30A
F7RA	F7RA 30A
X500	X500
X500	X500
X600	X600
X505	X505
X275	X275
X53A	X53A Fuse Block - Rear Body
S79D	S79D Window Switch - Driver
Q13	Q13 Evaporative Emission Vent Solenoid Valve
K9	K9 Body Control Module
M74D	M74D Window Motor - Driver
M74LR	M74LR Window Motor - Left Rear (CM8)
M74P	M74P Window Motor - Passenger
M74RR	M74RR Window Motor - Right Rear (CM8)

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SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > POWER DISTRIBUTION SCHEMATICS > F7RA, F9RA, F23RA, F30RA, F38RA, AND F41RA (LATE PRODUCTION)

Fig 1: F7RA, F9RA, F23RA, F30RA, F38RA, and F41RA (Late Production)



Courtesy of GENERAL MOTORS COMPANY

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Callout	Component Name
1940	Battery Positive Voltage
1940_RD/VT	1940 RD/VT
CAV_23	23
CAV_41	41
CONN_X1	X1
2440	Battery Positive Voltage
2440_RD/GN	2440 RD/GN
CAV_2	2
CAV_13	13
4040	Battery Positive Voltage
4040_RD/VT	4040 RD/VT
CAV_1	1

CONN_X2	X2
CAV_19	19
2340	Battery Positive Voltage
2340_RD/YE	2340 RD/YE
CAV_20	20
CONN_X4	X4
CAV_35	35
1842	Battery Positive Voltage
1842_RD/BU	1842 RD/BU
CAV_2	2
CAV_45	45
1842_RD/BU	1842 RD/BU
CAV_2	2
CAV_18	18
4042	Battery Positive Voltage
4042_RD/WH	4042 RD/WH
CAV_2	2
CAV_48	48
4042_RD/WH	4042 RD/WH
CAV_2	2
CAV_47	47
CAV_25	25
CAV_5	5
CAV_5	5
CAV_9	9
1940_RD/VT	1940 RD/VT
4040_RD/VT	4040 RD/VT
1842_RD/BU	1842 RD/BU
4042_RD/WH	4042 RD/WH
1940_RD/VT	1940 RD/VT
CM8	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Israel (MBI),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))

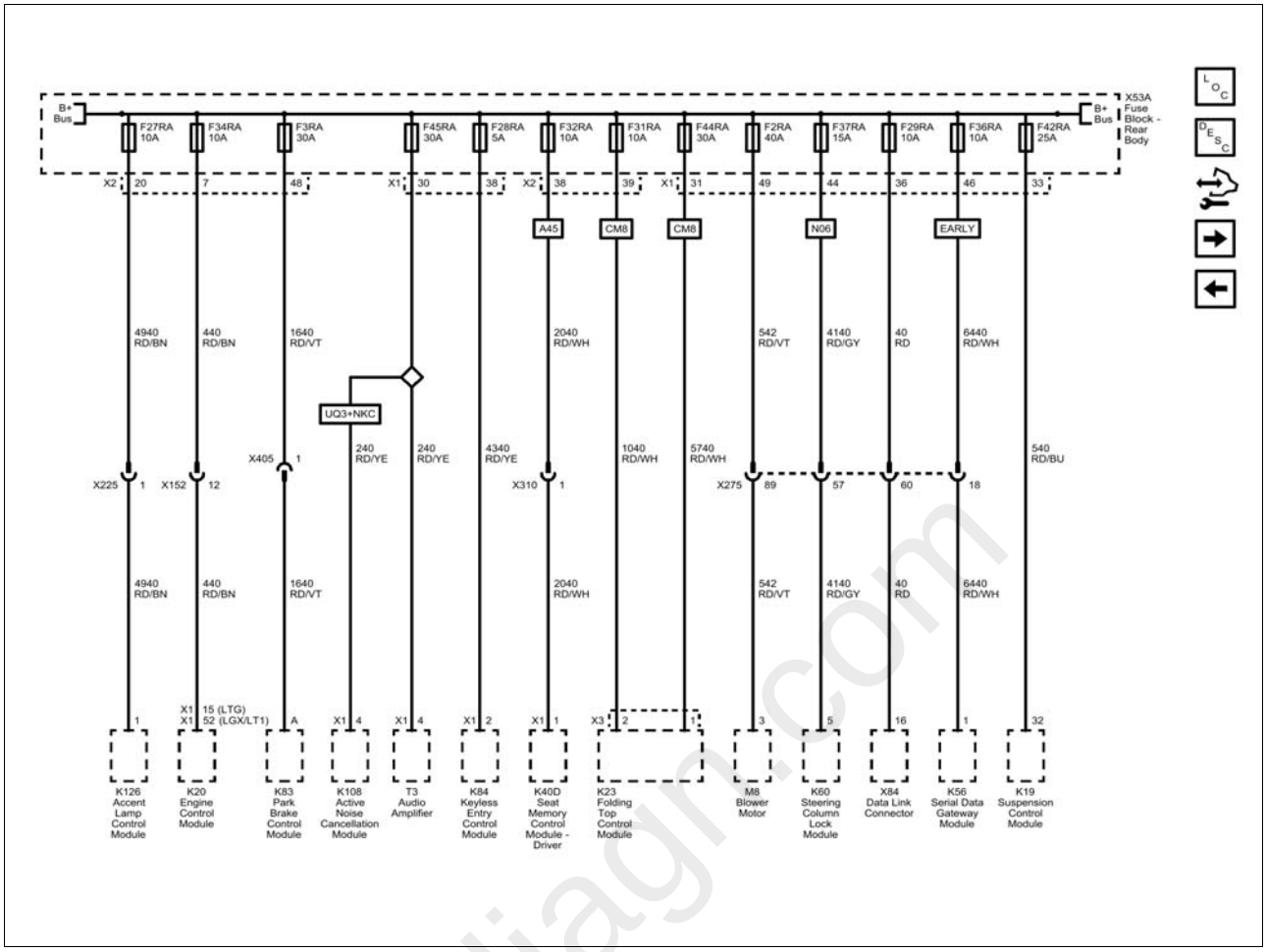
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CM8	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Israel (MBI),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
CAV_71	71
CONN_X1	X1
CONN_X2	X2
F38RA	F38RA 5A
F30RA	F30RA 10A
F23RA	F23RA 10A
F41RA	F41RA 5A
F9RA	F9RA 30A
F7RA	F7RA 30A
X500	X500
X500	X500
X600	X600
X505	X505
X275	X275
X53A	X53A Fuse Block - Rear Body
S79D	S79D Window Switch - Driver
Q13	Q13 Evaporative Emission Vent Solenoid Valve
K9	K9 Body Control Module
M74D	M74D Window Motor - Driver
M74LR	M74LR Window Motor - Left Rear (CM8)
M74P	M74P Window Motor - Passenger
M74RR	M74RR Window Motor - Right Rear (CM8)

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SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > POWER DISTRIBUTION SCHEMATICS > F2RA, F3RA, F27RA, F28RA, F29RA, F31RA, F32RA, F34RA, F36RA, F37RA, F42RA, F44RA AND F45RA

Fig 1: F2RA, F3RA, F27RA, F28RA, F29RA, F31RA, F32RA, F34RA, F36RA, F37RA, F42RA, F44RA and F45RA



Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
4940	Battery Positive Voltage
4940_RD/BN	4940 RD/BN
CAV_1	1
CAV_20	20
CONN_X2	X2
440	Battery Positive Voltage
440_RD/BN	440 RD/BN
CAV_52	52
CONN_X1	X1
CAV_7	7
1640	Battery Positive Voltage

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1640_RD/VT	1640 RD/VT
CAV_A	A
CAV_48	48
240	Battery Positive Voltage
240_RD/YE	240 RD/YE
CAV_4	4
CONN_X1	X1
CAV_30	30
CONN_X1	X1
4340	Battery Positive Voltage
4340_RD/YE	4340 RD/YE
CAV_2	2
CONN_X1	X1
CAV_38	38
2040	Battery Positive Voltage
2040_RD/WH	2040 RD/WH
CAV_1	1
CONN_X1	X1
CAV_38	38
CONN_X2	X2
1040	Battery Positive Voltage
1040_RD/WH	1040 RD/WH
CAV_2	2
CONN_X3	X3
CAV_39	39
5740	Battery Positive Voltage
5740_RD/WH	5740 RD/WH
CAV_1	1
CAV_31	31
CONN_X1	X1
542	Battery Positive Voltage
542_RD/VT	542 RD/VT
CAV_3	3

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CAV_49	49
4140	Battery Positive Voltage
4140_RD/GY	4140 RD/GY
CAV_5	5
CAV_44	44
40	Battery Positive Voltage
40_RD	40 RD
CAV_16	16
CAV_36	36
6440	Battery Positive Voltage
6440_RD/WH	6440 RD/WH
CAV_1	1
CAV_46	46
540	Battery Positive Voltage
540_RD/BU	540 RD/BU
CAV_32	32
CAV_33	33
4940_RD/BN	4940 RD/BN
440_RD/BN	440 RD/BN
1640_RD/VT	1640 RD/VT
2040_RD/WH	2040 RD/WH
542_RD/VT	542 RD/VT
4140_RD/GY	4140 RD/GY
40_RD	40 RD
6440_RD/WH	6440 RD/WH
CAV_1	1
CAV_12	12
CAV_1	1
CAV_1	1
A45	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Israel (MBI),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
CM8	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Israel (MBI),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))

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CM8	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Israel (MBI),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
N06	(Korea (MAW),Brasil/Paraguay (MDV),Europe Group (MBM))
CAV_15	15
CONN_X1	X1
LGX	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Israel (MBI),Mid-East (MAM))
LT1	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
LTG	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Europe Group (MBM))
EARLY	
X275	X275
CAV_89	89
CAV_57	57
CAV_60	60
CAV_18	18
F27RA	F27RA 10A
F34RA	F34RA 10A
F3RA	F3RA 30A
F45RA	F45RA 30A
F28RA	F28RA 5A
F32RA	F32RA 10A
F31RA	F31RA 10A
F44RA	F44RA 30A
F2RA	F2RA 40A
F37RA	F37RA 15A
F29RA	F29RA 10A
F36RA	F36RA 10A
F42RA	F42RA 25A
X225	X225
X152	X152
X405	X405

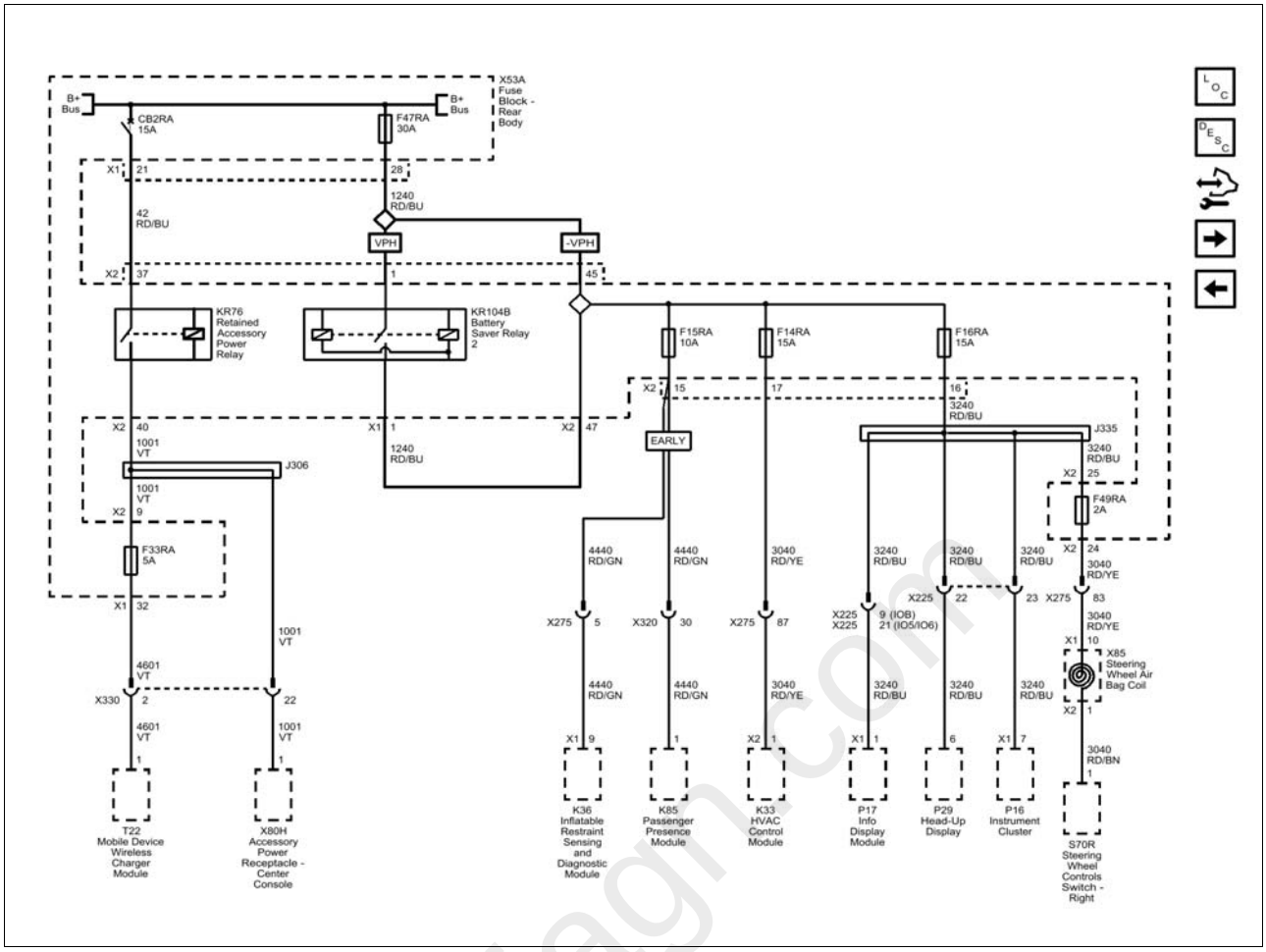
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X310	X310
X275	X275
X53A	X53A Fuse Block - Rear Body
K126	K126 Accent Lamp Control Module (C70)
K20	K20 Engine Control Module
K83	K83 Park Brake Control Module (J77)
T3	T3 Audio Amplifier (UQ3/UQA)
K84	K84 Keyless Entry Control Module
K40D	K40D Seat Memory Control Module - Driver (A45)
K23	K23 Folding Top Control Module (CM8)
M8	M8 Blower Motor
K60	K60 Steering Column Lock Module (N06)
X84	X84 Data Link Connector
K56	K56 Serial Data Gateway Module
K19	K19 Suspension Control Module (F55)

SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > POWER DISTRIBUTION SCHEMATICS > F2RB, F14RA, F15RA, F16RA, F33RA, F47RA AND F49RA

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Fig 1: F2RB, F14RA, F15RA, F16RA, F33RA, F47RA and F49RA



Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
42	Battery Positive Voltage
42_RD/BU	42 RD/BU
CAV_37	37
CONN_X2	X2
CAV_21	21
CONN_X1	X1
1240	Battery Positive Voltage
1240_RD/BU	1240 RD/BU
CAV_1	1
CAV_28	28
CAV_45	45

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VPH	(Korea (MAW),Israel (MBI),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
VPH	(Korea (MAW),Israel (MBI),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
1001	Retained Accessory Power Ignition
1001_VT	1001 VT
CAV_9	9
CONN_X2	X2
CAV_40	40
CONN_X2	X2
1001_VT	1001 VT
4601	Retained Accessory Power Fused Control
4601_VT	4601 VT
CAV_1	1
CAV_32	32
CONN_X1	X1
1001_VT	1001 VT
CAV_1	1
4601_VT	4601 VT
1001_VT	1001 VT
1240_RD/BU	1240 RD/BU
CAV_1	1
CONN_X1	X1
CAV_47	47
CONN_X2	X2
4440	Battery Positive Voltage
4440_RD/GN	4440 RD/GN
CAV_1	1
CAV_15	15
CONN_X2	X2
3040	Battery Positive Voltage
3040_RD/YE	3040 RD/YE
CAV_1	1

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CONN_X2	X2
CAV_17	17
4440_RD/GN	4440 RD/GN
CAV_9	9
CONN_X1	X1
4440_RD/GN	4440 RD/GN
3040_RD/YE	3040 RD/YE
4440_RD/GN	4440 RD/GN
CAV_5	5
CAV_30	30
CAV_87	87
3240	Battery Positive Voltage
3240_RD/BU	3240 RD/BU
CAV_25	25
CONN_X2	X2
3040_RD/YE	3040 RD/YE
CAV_10	10
CONN_X1	X1
CAV_24	24
CONN_X2	X2
3040_RD/YE	3040 RD/YE
CAV_83	83
3040_RD/BN	3040 RD/BN
CAV_1	1
CAV_1	1
CONN_X2	X2
3240_RD/BU	3240 RD/BU
CAV_6	6
CAV_16	16
3240_RD/BU	3240 RD/BU
CAV_1	1
CONN_X1	X1
3240_RD/BU	3240 RD/BU

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CAV_7	7
CONN_X1	X1
3240_RD/BU	3240 RD/BU
3240_RD/BU	3240 RD/BU
3240_RD/BU	3240 RD/BU
CAV_9	9
CAV_21	21
IOB	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX))
IO5	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Israel (MBI),Mid-East (MAM),S America2 - Andean (MAY),Europe Group (MBM))
IO6	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Israel (MBI),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
3240_RD/BU	3240 RD/BU
EARLY	
X330	X330
CAV_2	2
CAV_22	22
X225	X225
CAV_22	22
CAV_23	23
F47RA	F47RA 30A
CB2RA	CB2RA 15A
F33RA	F33RA 5A
J306	J306
F15RA	F15RA 10A
F14RA	F14RA 15A
X275	X275
X320	X320
X275	X275
F16RA	F16RA 15A
F49RA	F49RA 2A
X275	X275
J335	J335

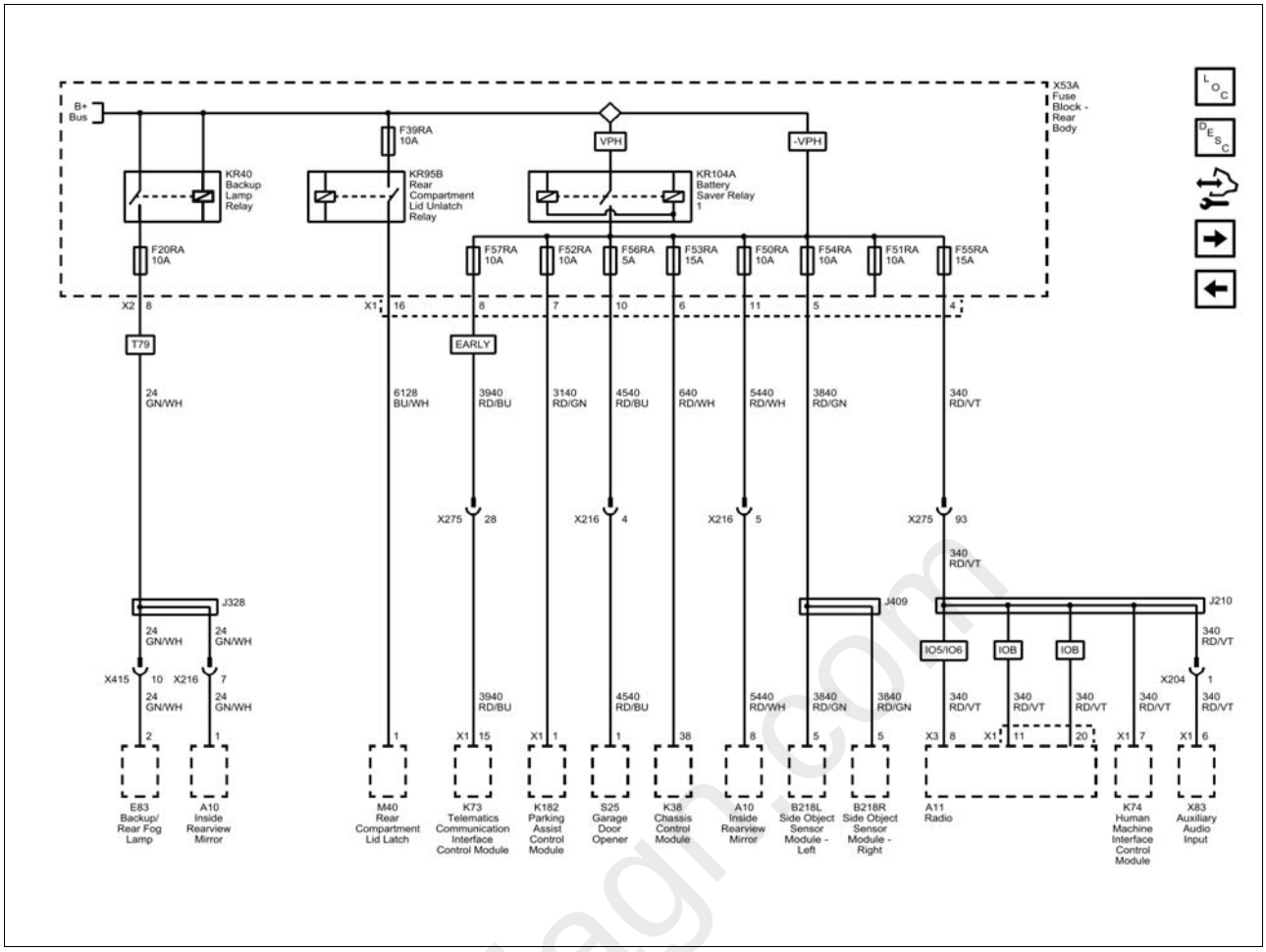
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X225	X225
X330	X330
X225	X225
KR76	KR76 Retained Accessory Power Relay
KR104B	KR104B Battery Saver Relay 2
T22	T22 Mobile Device Wireless Charger Module (K4C)
X80H	X80H Accessory Power Receptacle - Center Console
K36	K36 Inflatable Restraint Sensing and Diagnostic Module
K85	K85 Passenger Presence Module
K33	K33 HVAC Control Module
S70R	S70R Steering Wheel Controls Switch - Right
X85	X85 Steering Wheel Air Bag Coil
P29	P29 Head-Up Display (UV6)
P16	P16 Instrument Cluster
X53A	X53A Fuse Block - Rear Body
A26	A26 HVAC Controls

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SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > POWER DISTRIBUTION SCHEMATICS > F20RA, F39RA, F50RA, F51RA, F52RA, F53RA, F54RA, F55RA, F56RA AND F57RA

Fig 1: F20RA, F39RA, F50RA, F51RA, F52RA, F53RA, F54RA, F55RA, F56RA and F57RA



Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
VPH	(Korea (MAW),Israel (MBI),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
VPH	(Korea (MAW),Israel (MBI),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
24	Backup Lamp Control
24_GN/WH	24 GN/WH
CAV_2	2
CAV_8	8
CONN_X2	X2
3940	Battery Positive Voltage
3940_RD/BU	3940 RD/BU
CAV_15	15

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CONN_X1	X1
CAV_8	8
3140	Battery Positive Voltage
3140_RD/GN	3140 RD/GN
CAV_1	1
CONN_X1	X1
CAV_7	7
4540	Battery Positive Voltage
4540_RD/BU	4540 RD/BU
CAV_1	1
CAV_10	10
640	Battery Positive Voltage
640_RD/WH	640 RD/WH
CAV_38	38
CAV_6	6
5440	Battery Positive Voltage
5440_RD/WH	5440 RD/WH
CAV_8	8
CAV_11	11
3840	Battery Positive Voltage
3840_RD/GN	3840 RD/GN
CAV_5	5
CAV_5	5
340	Battery Positive Voltage
340_RD/VT	340 RD/VT
CAV_8	8
CONN_X3	X3
CAV_4	4
340_RD/VT	340 RD/VT
CAV_11	11
CONN_X1	X1
340_RD/VT	340 RD/VT
CAV_20	20

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340_RD/VT	340 RD/VT
CAV_7	7
CONN_X1	X1
340_RD/VT	340 RD/VT
CAV_6	6
CONN_X1	X1
3840_RD/GN	3840 RD/GN
CAV_5	5
24_GN/WH	24 GN/WH
CAV_1	1
CAV_1	1
CAV_7	7
CAV_10	10
CAV_28	28
CAV_4	4
CAV_5	5
CAV_93	93
24_GN/WH	24 GN/WH
3840_RD/GN	3840 RD/GN
340_RD/VT	340 RD/VT
340_RD/VT	340 RD/VT
24_GN/WH	24 GN/WH
24_GN/WH	24 GN/WH
3940_RD/BU	3940 RD/BU
4540_RD/BU	4540 RD/BU
5440_RD/WH	5440 RD/WH
340_RD/VT	340 RD/VT
T79	(Korea (MAW),Brasil/Paraguay (MDV),Europe Group (MBM))
IO5	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Israel (MBI),Mid-East (MAM),S America2 - Andean (MAY),Europe Group (MBM))
IO6	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Israel (MBI),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
IOB	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX))

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IOB	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX))
6128	Rear Closure Unlatch Motor Unlatch Control
6128_BU/WH	6128 BU/WH
CAV_16	16
CONN_X1	X1
CAV_1	1
EARLY	
F20RA	F20RA 10A
F53RA	F53RA 15A
F50RA	F50RA 10A
F54RA	F54RA 10A
F51RA	F51RA 10A
F55RA	F55RA 15A
F57RA	F57RA 10A
F52RA	F52RA 10A
F56RA	F56RA 5A
J328	J328
J409	J409
J210	J210
X204	X204
X216	X216
X415	X415
X275	X275
X216	X216
X216	X216
X275	X275
F39RA	F39RA 10A
KR40	KR40 Backup Lamp Relay
KR104A	KR104A Battery Saver Relay 1
A10	A10 Inside Rearview Mirror
K73	K73 Telematics Communication Interface Control Module
K182	K182 (UD7)
S25	S25 Garage Door Opener

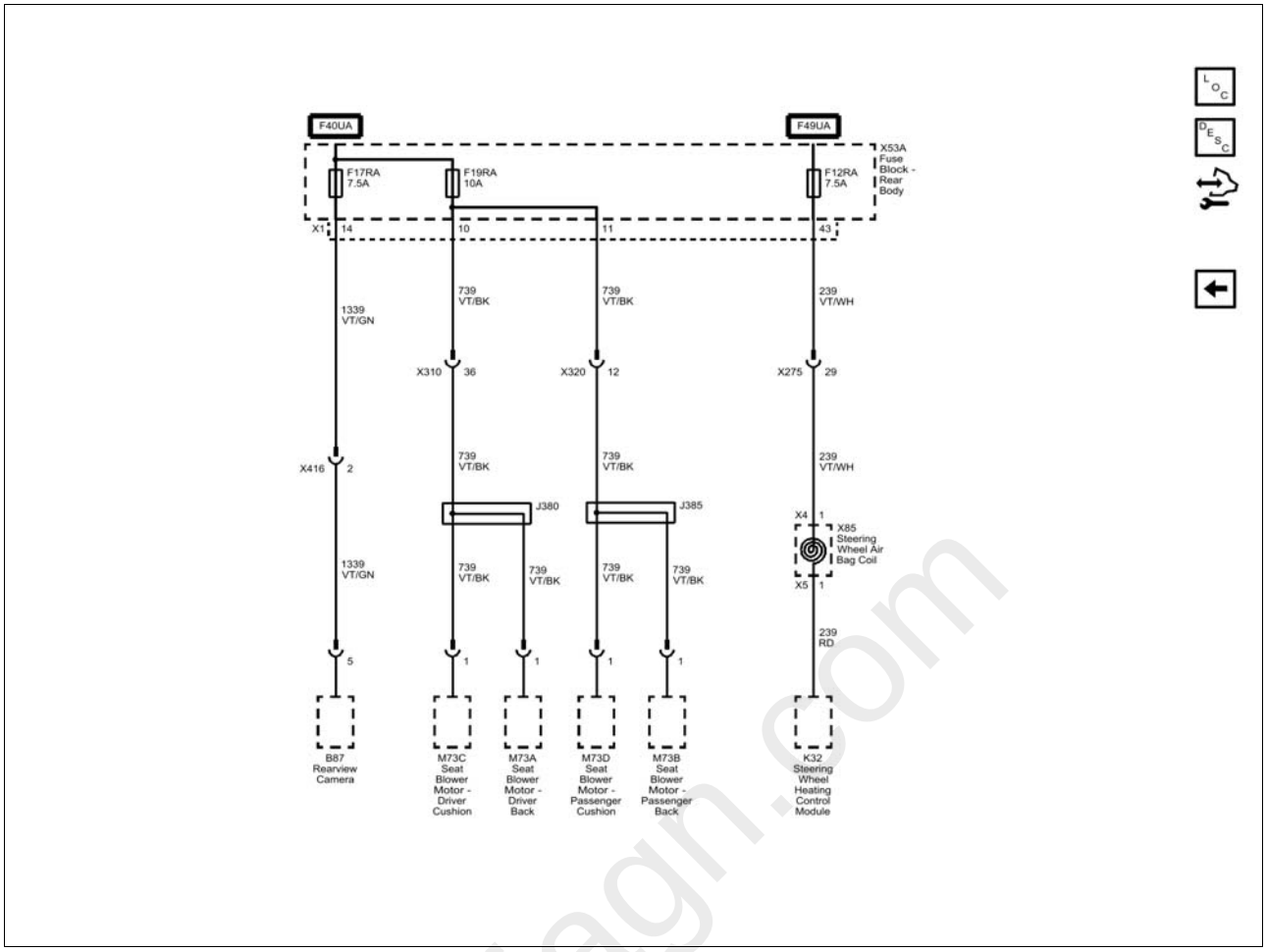
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K38	K38 Chassis Control Module (LTG/LT1/(LGX+NPP))
A10	A10 Inside Rearview Mirror
B218R	B218R Side Object Sensor Module - Right (UKC)
A11	A11 Radio
B218L	B218L Side Object Sensor Module - Left (UKC)
K74	K74 Human Machine Interface Control Module (IO5 or IO6)
X83	X83 Auxiliary Audio Input
X53A	X53A Fuse Block - Rear Body
E83	E83 (T90)
KR95B	KR95B Rear Compartment Lid Release Relay
M40	M40 Rear Compartment Lid Latch

SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > POWER DISTRIBUTION SCHEMATICS > F12RA, F17RA AND F19RA

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Fig 1: F12RA, F17RA and F19RA



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Callout	Component Name
1339	Run/Crank Ignition 1 Voltage
1339_VT/GN	1339 VT/GN
CAV_14	14
CONN_X1	X1
739	Run/Crank Ignition 1 Voltage
739_VT/BK	739 VT/BK
CAV_10	10
739_VT/BK	739 VT/BK
CAV_11	11
239	Run/Crank Ignition 1 Voltage
239_VT/WH	239 VT/WH
CAV_1	1

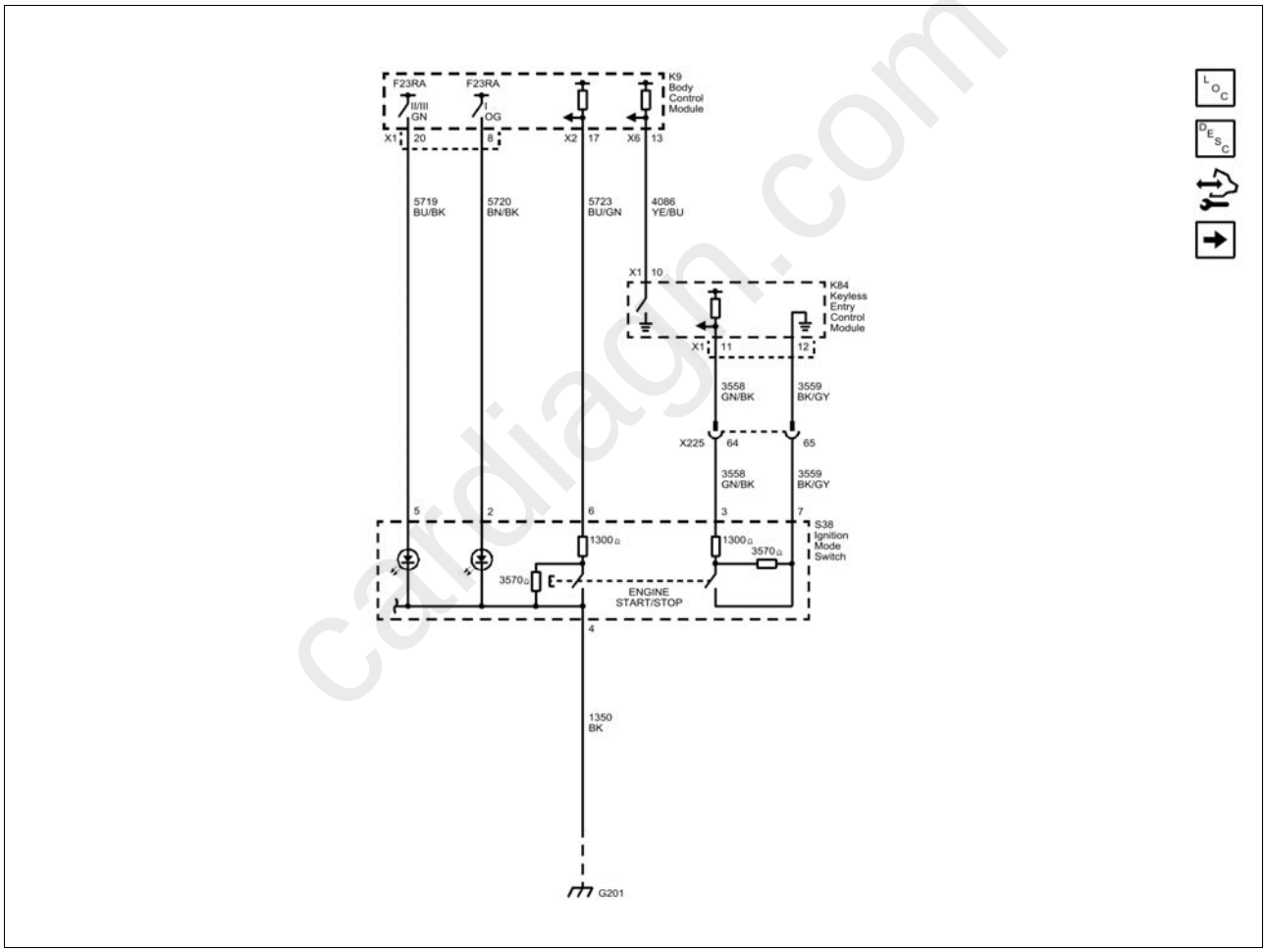
CONN_X4	X4
CAV_43	43
239_RD	239 RD
CAV_1	1
CONN_X5	X5
739_VT/BK	739 VT/BK
739_VT/BK	739 VT/BK
739_VT/BK	739 VT/BK
739_VT/BK	739 VT/BK
CAV_36	36
CAV_12	12
CAV_29	29
739_VT/BK	739 VT/BK
739_VT/BK	739 VT/BK
239_VT/WH	239 VT/WH
CAV_1	1
CAV_1	1
CAV_1	1
CAV_1	1
1339_VT/GN	1339 VT/GN
CAV_2	2
CAV_5	5
F17RA	F17RA 7.5A
F19RA	F19RA 10A
F12RA	F12RA 7.5A
X310	X310
X320	X320
X275	X275
J380	J380
J385	J385
X416	X416
X53A	X53A Fuse Block - Rear Body
B87	B87 Rearview Camera

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M73A	M73A Seat Blower Motor - Driver Back (KQV)
M73D	M73D Seat Blower Motor - Passenger Cushion (KQV)
M73B	M73B Seat Blower Motor - Passenger Back (KQV)
K32	K32 Steering Wheel Heating Control Module
M73C	M73C Seat Blower Motor - Driver Cushion (KQV)
X85	X85 Steering Wheel Air Bag Coil

SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > POWER MODING SCHEMATICS > IGNITION MODE SWITCH

Fig 1: Ignition Mode Switch



Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
5719	Ignition Mode Switch Start LED Signal
CAV_5	5

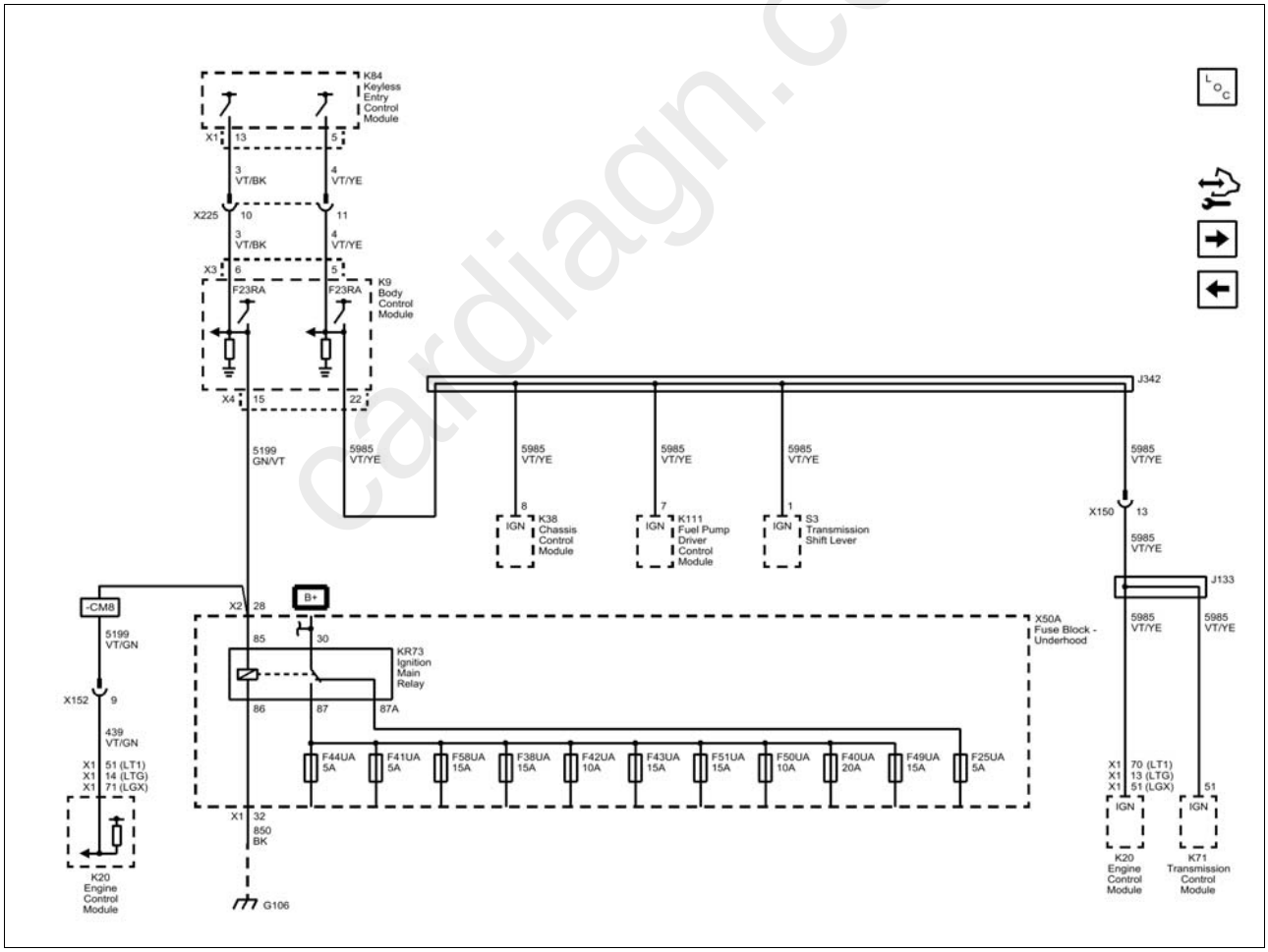
CAV_20	20
CONN_X1	X1
5720	Ignition Mode Switch Accessory LED Signal
5720_BN/BK	5720 BN/BK
CAV_2	2
CAV_8	8
5723	Ignition Mode Switch Mode Voltage
5723_BU/GN	5723 BU/GN
CAV_6	6
CAV_17	17
CONN_X2	X2
1350	Ground
1350_BK	1350 BK
CAV_4	4
3558	Passive Start Switch Signal 2
3558_GN/BK	3558 GN/BK
CAV_3	3
CAV_11	11
CONN_X1	X1
3559_BK/GY	3559 BK/GY
CAV_12	12
3559	Passive Start Switch 2 Low Reference
3559_BK/GY	3559 BK/GY
CAV_7	7
3558_GN/BK	3558 GN/BK
5719_BU/BK	5719 BU/BK
4086	Pushbutton Start Challenge Active Signal
4086_YE/BU	4086 YE/BU
CAV_13	13
CONN_X6	X6
CAV_10	10
CONN_X1	X1
X225	X225

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CAV_65	65
CAV_64	64
G201	G201
F23RA	F23RA
F23RA	F23RA
X225	X225
K9	K9 Body Control Module
S38	S38 Ignition Mode Switch
K84	K84 Keyless Entry Control Module

SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > POWER MODING SCHEMATICS > IGNITION POWER AND IGNITION MAIN RELAY

Fig 1: Ignition Power and Ignition Main Relay



Courtesy of GENERAL MOTORS COMPANY

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Callout	Component Name
CONN_X3	X3
CAV_5	5
5199	Run/Crank Relay Coil Control
5199_GN/VT	5199 GN/VT
CAV_15	15
CONN_X4	X4
CONN_X1	X1
4	Accessory Ignition Voltage
4_VT/YE	4 VT/YE
CAV_5	5
4_VT/YE	4 VT/YE
CAV_28	28
CONN_X2	X2
CAV_85	85
CAV_30	30
CAV_86	86
CAV_87	87
1150	Ground
850_BK	850 BK
CAV_32	32
CONN_X1	X1
CAV_87A	87A
CAV_6	6
CAV_22	22
3	Run/Crank Ignition 1 Voltage
3_VT/BK	3 VT/BK
CAV_13	13
3_VT/BK	3 VT/BK
5985_VT/YE	5985 VT/YE
CAV_51	51
CONN_X1	X1

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5985_VT/YE	5985 VT/YE
5985_VT/YE	5985 VT/YE
5985	Accessory Wakeup Serial Data
5985_VT/YE	5985 VT/YE
CAV_1	1
CAV_8	8
CAV_7	7
5985_VT/YE	5985 VT/YE
5985_VT/YE	5985 VT/YE
5985_VT/YE	5985 VT/YE
5985_VT/YE	5985 VT/YE
CAV_13	13
CAV_51	51
5199_VT/GN	5199 VT/GN
CAV_71	71
CONN_X1	X1
CAV_14	14
CONN_X1	X1
CAV_51	51
CONN_X1	X1
CM8	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Israel (MBI),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
439_VT/GN	439 VT/GN
CAV_9	9
LGX	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Israel (MBI),Mid-East (MAM))
LTG	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Europe Group (MBM))
LT1	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
CAV_13	13
CONN_X1	X1
CAV_70	70
CONN_X1	X1

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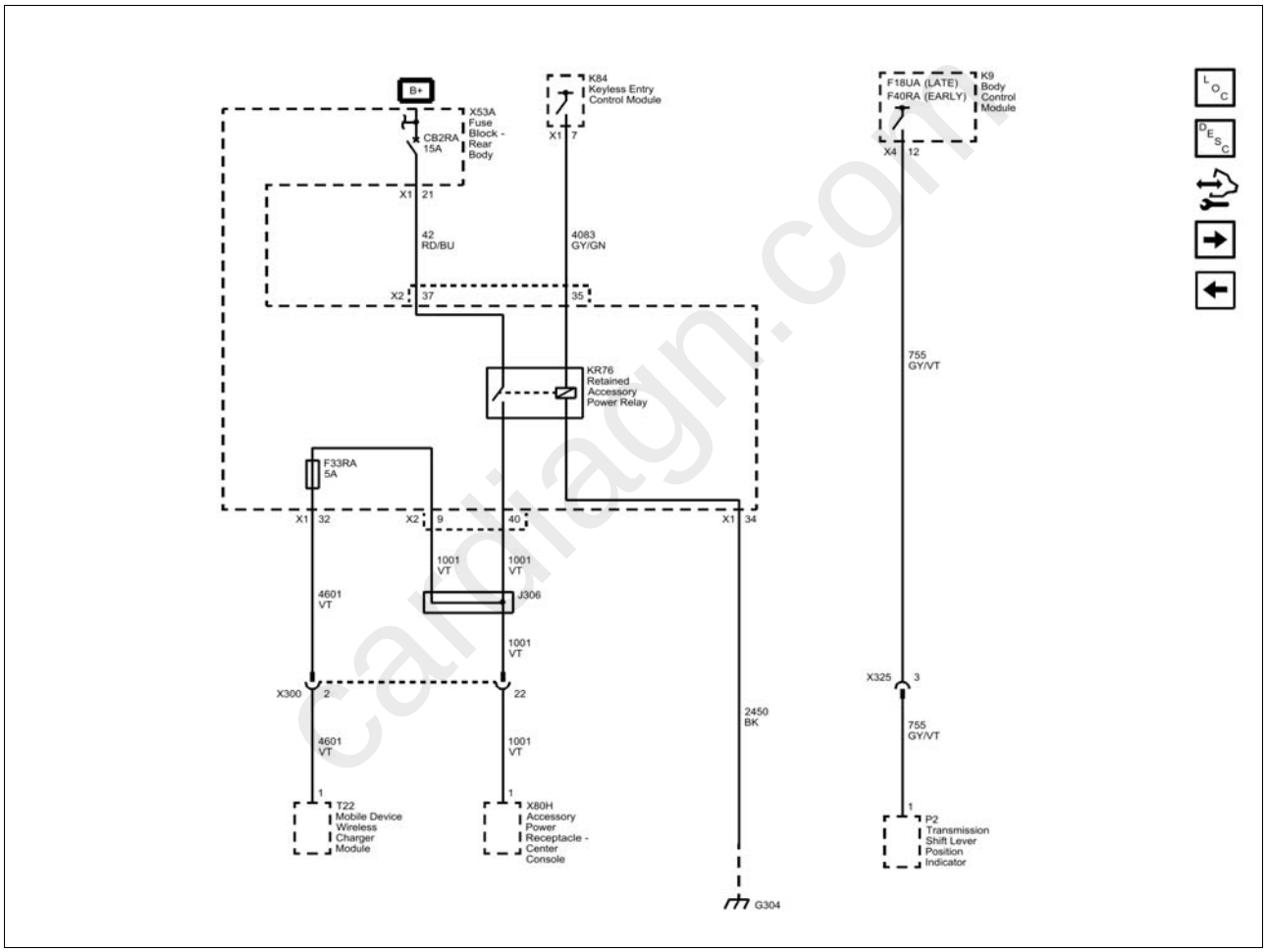
LT1	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
LTG	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Europe Group (MBM))
LGX	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Israel (MBI),Mid-East (MAM))
X225	X225
CAV_10	10
CAV_11	11
G106	G106
F25UA	F25UA 5A
F41UA	F41UA 5A
F58UA	F58UA 15A
F38UA	F38UA 15A
F42UA	F42UA 10A
F43UA	F43UA 15A
F51UA	F51UA 15A
F50UA	F50UA 10A
X150	X150
F23RA	F23RA
F23RA	F23RA
F44UA	F44UA 5A
F40UA	F40UA 20A
F49UA	F49UA 15A
J342	J342
J133	J133
X152	X152
X225	X225
K9	K9 Body Control Module
K84	K84 Keyless Entry Control Module
X50A	X50A Fuse Block - Underhood
KR73	KR73 Ignition Main Relay
K20	K20 Engine Control Module
K38	K38 Chassis Control Module (LTG/LT1/(LGX+NPP))

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K111	K111 Fuel Pump Driver Control Module (LGX-NPP)
K71	K71 Transmission Control Module
S3	S3 Transmission Shift Lever (MX0)
K20	K20 Engine Control Module

SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > POWER MODING SCHEMATICS > ACCESSORY POWER AND RETAINED ACCESSORY POWER RELAY

Fig 1: Accessory Power and Retained Accessory Power Relay



Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
CAV_1	1
CAV_12	12
CONN_X4	X4

755_GY/VT	755 GY/VT
755_GY/VT	755 GY/VT
42	Battery Positive Voltage
42_RD/BU	42 RD/BU
2450_BK	2450 BK
4083_GY/GN	4083 GY/GN
CAV_7	7
CONN_X1	X1
755	RAP Relay Coil Control
4601	Retained Accessory Power Fused Control
4601_VT	4601 VT
CAV_1	1
1001_VT	1001 VT
1001	Retained Accessory Power Ignition
1001_VT	1001 VT
1001_VT	1001 VT
CAV_1	1
1001_VT	1001 VT
2450	Ground
4083	RAP Relay 2 Coil Control
CAV_3	3
CAV_32	32
CONN_X1	X1
CAV_9	9
CONN_X2	X2
CAV_40	40
CAV_34	34
CONN_X1	X1
CAV_35	35
CAV_37	37
CONN_X2	X2
CAV_21	21
CONN_X1	X1

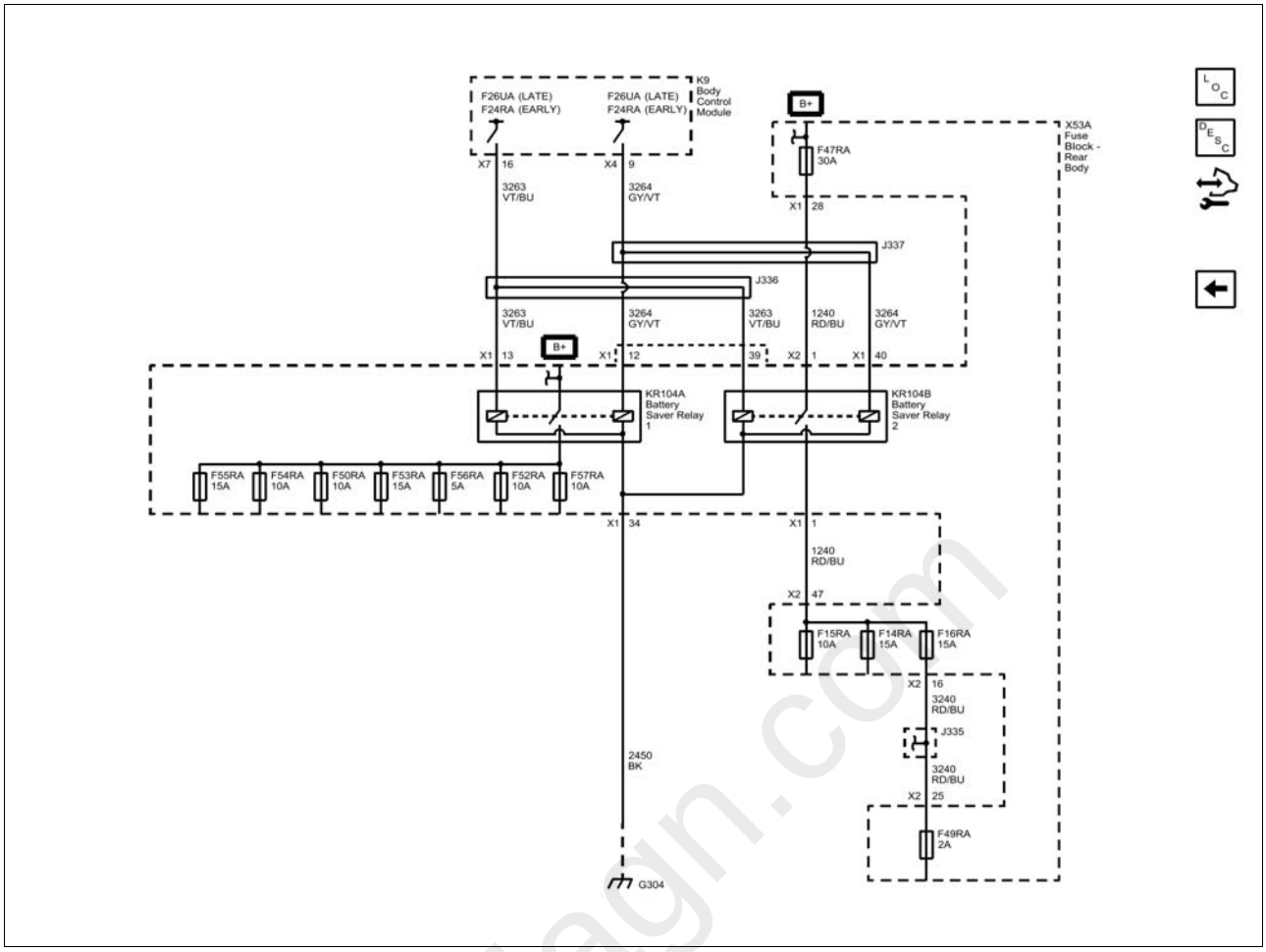
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4601_VT	4601 VT
EARLY	
LATE	
X300	X300
CAV_2	2
CAV_22	22
G304	G304
CB2RA	CB2RA 15A
F33RA	F33RA 5A
J306	J306
X325	X325
F40RA	F40RA
F18UA	F18UA
X300	X300
P2	P2 Transmission Shift Lever Position Indicator
T22	T22 Mobile Device Wireless Charger Module (K4C)
KR76	KR76 Retained Accessory Power Relay
K84	K84 Keyless Entry Control Module
X53A	X53A Fuse Block - Rear Body
X80H	X80H Accessory Power Receptacle - Center Console
K9	K9 Body Control Module

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SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > POWER MODING SCHEMATICS > BATTERY SAVER RELAYS (VPH)

Fig 1: Battery Saver Relays (VPH)



Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
3263	Logistic Mode Relay Open Control
CAV_16	16
CONN_X7	X7
3263_VT/BU	3263 VT/BU
3264	Logistic Mode Relay Close Control
3264_GY/VT	3264 GY/VT
CAV_9	9
CONN_X4	X4
3264_GY/VT	3264 GY/VT
3263_VT/BU	3263 VT/BU
2450	Ground
2450_BK	2450 BK

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CAV_34	34
CONN_X1	X1
3263_VT/BU	3263 VT/BU
3264_GY/VT	3264 GY/VT
1240	Battery Positive Voltage
1240_RD/BU	1240 RD/BU
CAV_28	28
CONN_X1	X1
1240_RD/BU	1240 RD/BU
CAV_1	1
CONN_X1	X1
3240	Battery Positive Voltage
3240_RD/BU	3240 RD/BU
CAV_25	25
CONN_X2	X2
CAV_16	16
CONN_X2	X2
3240_RD/BU	3240 RD/BU
CAV_47	47
CONN_X2	X2
CAV_13	13
CONN_X1	X1
CAV_12	12
CONN_X1	X1
CAV_39	39
CAV_1	1
CONN_X2	X2
CAV_40	40
CONN_X1	X1
EARLY	
LATE	
EARLY	
LATE	

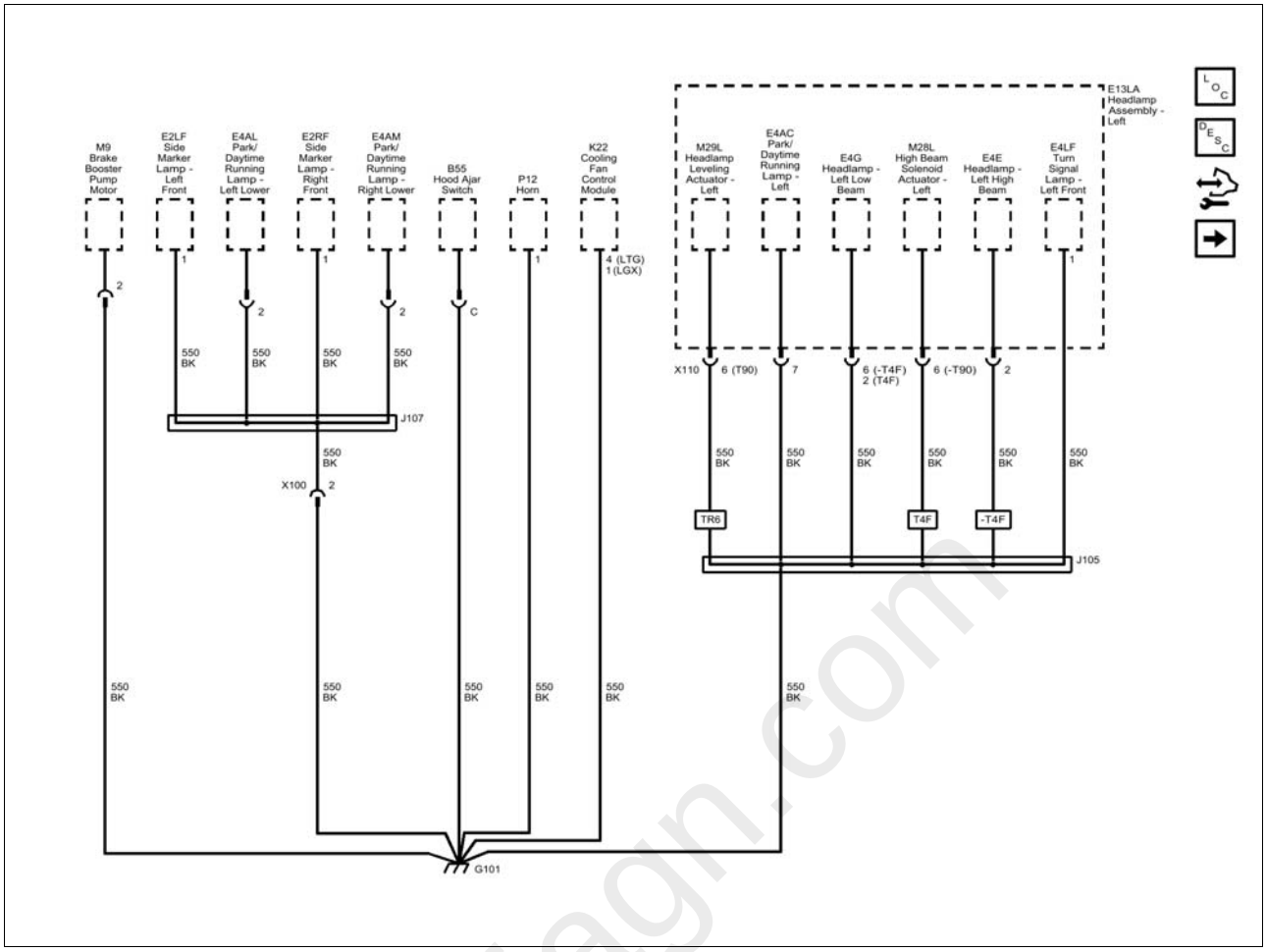
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G304	G304
F15RA	F15RA 10A
F14RA	F14RA 15A
F16RA	F16RA 15A
F24RA	F24RA
F24RA	F24RA
F54RA	F54RA 10A
F50RA	F50RA 10A
F53RA	F53RA 15A
F56RA	F56RA 5A
F52RA	F52RA 10A
F57RA	F57RA 10A
F55RA	F55RA 15A
J337	J337
J336	J336
F47RA	F47RA 30A
J335	J335
F49RA	F49RA 2A
F26UA	F26UA
F26UA	F26UA
KR104B	KR104B Battery Saver Relay 2
KR104A	KR104A Battery Saver Relay 1
X53A	X53A Fuse Block - Rear Body
K9	K9 Body Control Module

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SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > GROUND DISTRIBUTION SCHEMATICS > G101

Fig 1: G101



Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
550	Ground
550_BK	550 BK
550_BK	550 BK
550_BK	550 BK
550_BK	550 BK
550_BK	550 BK
550_BK	550 BK
CAV_6	6
CAV_7	7
CAV_6	6
CAV_6	6
CAV_2	2

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CAV_2	2
T4F	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
T4F	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
T90	(Korea (MAW),Brasil/Paraguay (MDV),Europe Group (MBM))
T90	(Korea (MAW),Brasil/Paraguay (MDV),Europe Group (MBM))
550_BK	550 BK
550_BK	550 BK
550_BK	550 BK
550_BK	550 BK
550_BK	550 BK
550_BK	550 BK
550_BK	550 BK
550_BK	550 BK
CAV_1	1
T4F	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
T4F	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
TR6	(Korea (MAW),Brasil/Paraguay (MDV),Europe Group (MBM))
CAV_2	2
CAV_2	2
CAV_2	2
CAV_2	2
CAV_C	C
CAV_1	1
CAV_1	1
CAV_1	1
CAV_4	4
CAV_1	1
LTG	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Europe Group (MBM))

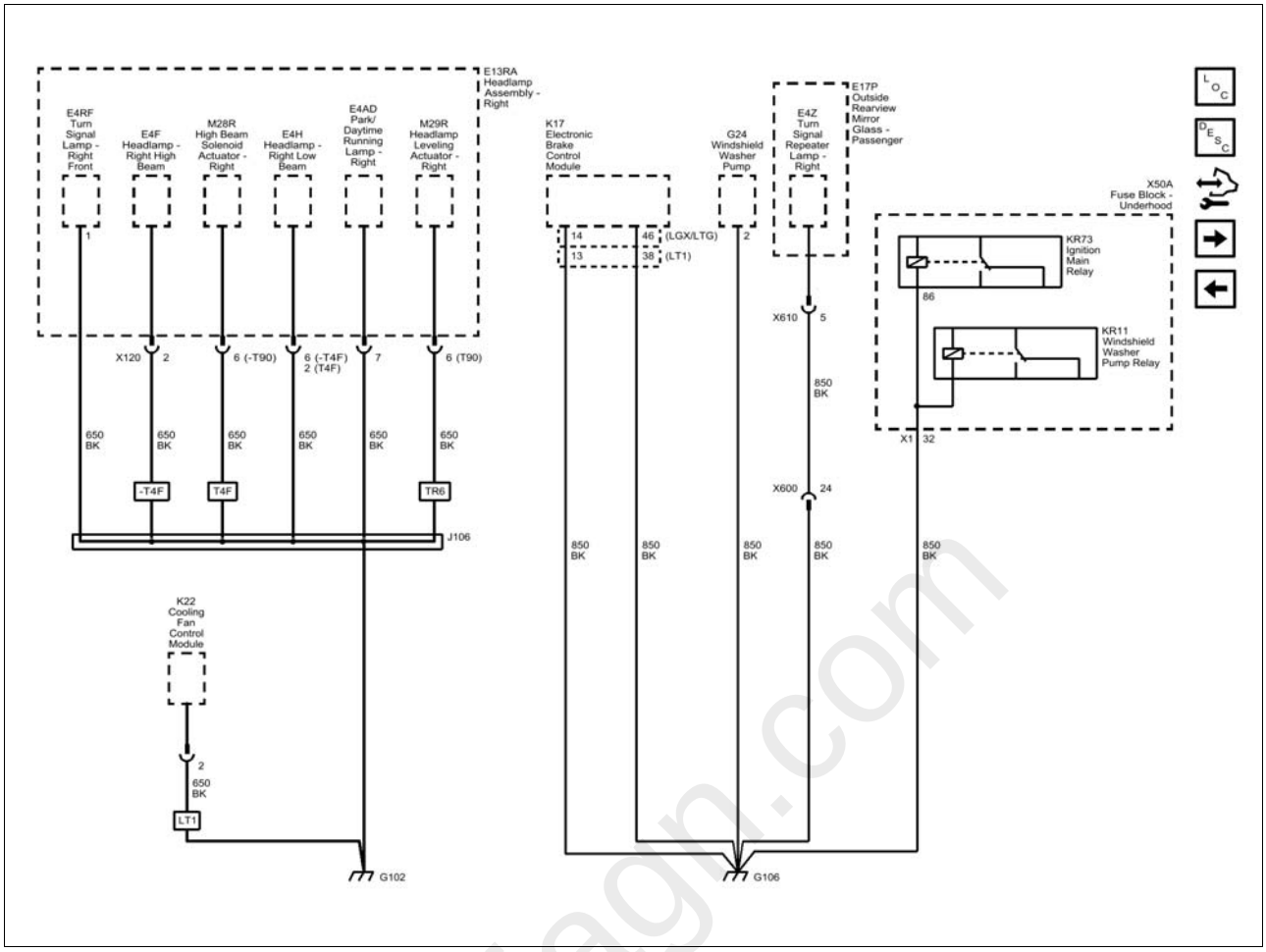
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LGX	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Israel (MBI),Mid-East (MAM))
550_BK	550 BK
550_BK	550 BK
550_BK	550 BK
X110	X110
G101	G101
J105	J105
X100	X100
J107	J107
M9	M9 Brake Booster Pump Motor
E2LF	E2LF Side Marker Lamp - Left Front (except T90)
E4AL	E4AL Park/Daytime Running Lamp - Left Lower
E2RF	E2RF Side Marker Lamp - Right Front (except T90)
E4AM	E4AM Park/Daytime Running Lamp - Right Lower
B55	B55 Hood Ajar Switch
P12	P12 Horn
K22	K22 Cooling Fan Control Module
M29L	M29L Headlamp Leveling Actuator - Left (T90)
E4AC	E4AC Park/Daytime Running Lamp - Left
E4G	E4G Headlamp - Left Low Beam
M28L	M28L High Beam Solenoid Actuator - Left (T4F or T90)
E4E	E4E Headlamp - Left High Beam (without T4F)
E4LF	E4LF Turn Signal Lamp - Left Front
E13LA	E13LA Headlamp Assembly - Left

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SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > GROUND DISTRIBUTION SCHEMATICS > G102 AND G106

Fig 1: G102 and G106



Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
650	Ground
650_BK	650 BK
CAV_1	1
650_BK	650 BK
650_BK	650 BK
650_BK	650 BK
650_BK	650 BK
650_BK	650 BK
650_BK	650 BK
CAV_2	2
CAV_2	2
CAV_6	6

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CAV_6	6
CAV_7	7
CAV_6	6
CAV_2	2
T90	(Korea (MAW),Brasil/Paraguay (MDV),Europe Group (MBM))
T4F	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
T4F	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
T90	(Korea (MAW),Brasil/Paraguay (MDV),Europe Group (MBM))
TR6	(Korea (MAW),Brasil/Paraguay (MDV),Europe Group (MBM))
T4F	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
T4F	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
LT1	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
850	Ground
850_BK	850 BK
850_BK	850 BK
850_BK	850 BK
850_BK	850 BK
850_BK	850 BK
CAV_5	5
CAV_14	14
CAV_46	46
CAV_2	2
CAV_32	32
CONN_X1	X1
CAV_13	13
CAV_38	38

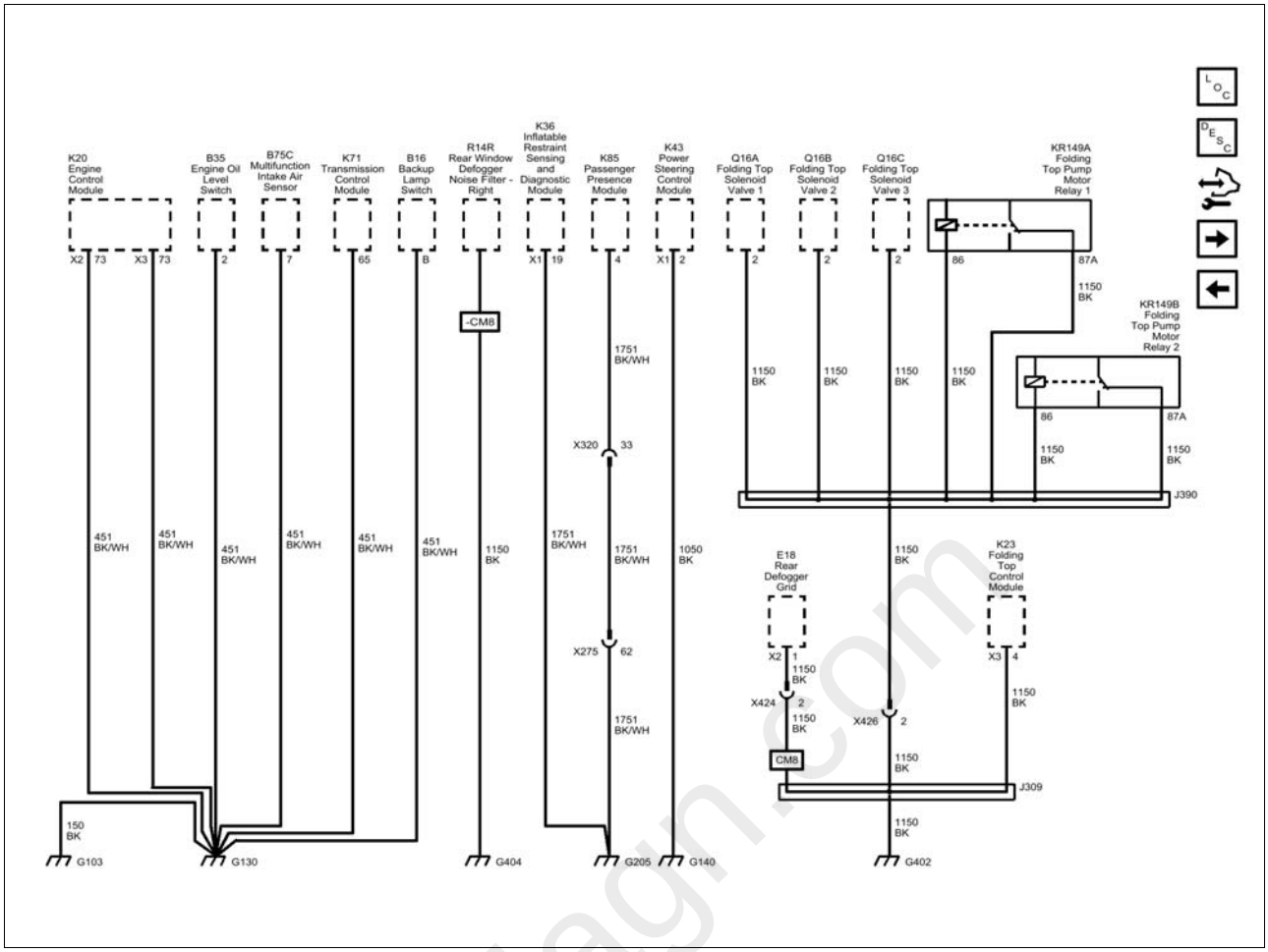
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LT1	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
LGX	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Israel (MBI),Mid-East (MAM))
LTG	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Europe Group (MBM))
CAV_24	24
850_BK	850 BK
CAV_86	86
G102	G102
J106	J106
X120	X120
X610	X610
G106	G106
X600	X600
K17	K17 Electronic Brake Control Module
G24	G24 Windshield Washer Pump
E4RF	E4RF Turn Signal Lamp - Right Front
E4F	E4F Headlamp - Right High Beam (without T4F)
M28R	M28R High Beam Solenoid Actuator - Right (T4F or T90)
E4H	E4H Headlamp - Right Low Beam
E4AD	E4AD Park/Daytime Running Lamp - Right
M29R	M29R Headlamp Leveling Actuator - Right (T90)
E13RA	E13RA Headlamp Assembly - Right
K22	K22 Cooling Fan Control Module
E4Z	E4Z Turn Signal Repeater Lamp - Right (T90)
E17P	E17P Outside Rearview Mirror Glass - Passenger
KR11	KR11 Windshield Washer Pump Relay
KR73	KR73 Ignition Main Relay
X50A	X50A Fuse Block - Underhood

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SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > GROUND DISTRIBUTION SCHEMATICS > G103, G130, G140, G205, G402 AND G404

Fig 1: G103, G130, G140, G205, G402 and G404



Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
451	Signal Ground
451_BK/WH	451 BK/WH
CAV_2	2
150	Ground
150_BK	150 BK
451_BK/WH	451 BK/WH
CAV_73	73
CONN_X3	X3
451_BK/WH	451 BK/WH
CAV_73	73
CONN_X2	X2
451_BK/WH	451 BK/WH

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CAV_7	7
451_BK/WH	451 BK/WH
CAV_65	65
451_BK/WH	451 BK/WH
CAV_B	B
1150	Ground
1150_BK	1150 BK
1751	Signal Ground
1751_BK/WH	1751 BK/WH
CAV_4	4
1751_BK/WH	1751 BK/WH
CAV_19	19
CONN_X1	X1
CAV_62	62
CAV_33	33
1751_BK/WH	1751 BK/WH
1751_BK/WH	1751 BK/WH
1050	Ground
1050_BK	1050 BK
CAV_2	2
CONN_X1	X1
1150_BK	1150 BK
CAV_2	2
CM8	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Israel (MBI),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
1150_BK	1150 BK
CAV_2	2
1150_BK	1150 BK
CAV_87A	87A
1150_BK	1150 BK
CAV_86	86
1150_BK	1150 BK
CAV_86	86

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1150_BK	1150 BK
1150_BK	1150 BK
CAV_2	2
CAV_87A	87A
1150_BK	1150 BK
CAV_1	1
CONN_X2	X2
1150_BK	1150 BK
CAV_4	4
CONN_X3	X3
1150_BK	1150 BK
1150_BK	1150 BK
1150_BK	1150 BK
1150_BK	1150 BK
CAV_2	2
CAV_2	2
CM8	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Israel (MBI),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
G130	G130
G103	G103
G404	G404
G205	G205
X275	X275
X320	X320
G140	G140
G402	G402
J390	J390
J309	J309
X424	X424
X426	X426
K20	K20 Engine Control Module
B35	B35 Engine Oil Level Switch
B75C	B75C Multifunction Intake Air Sensor

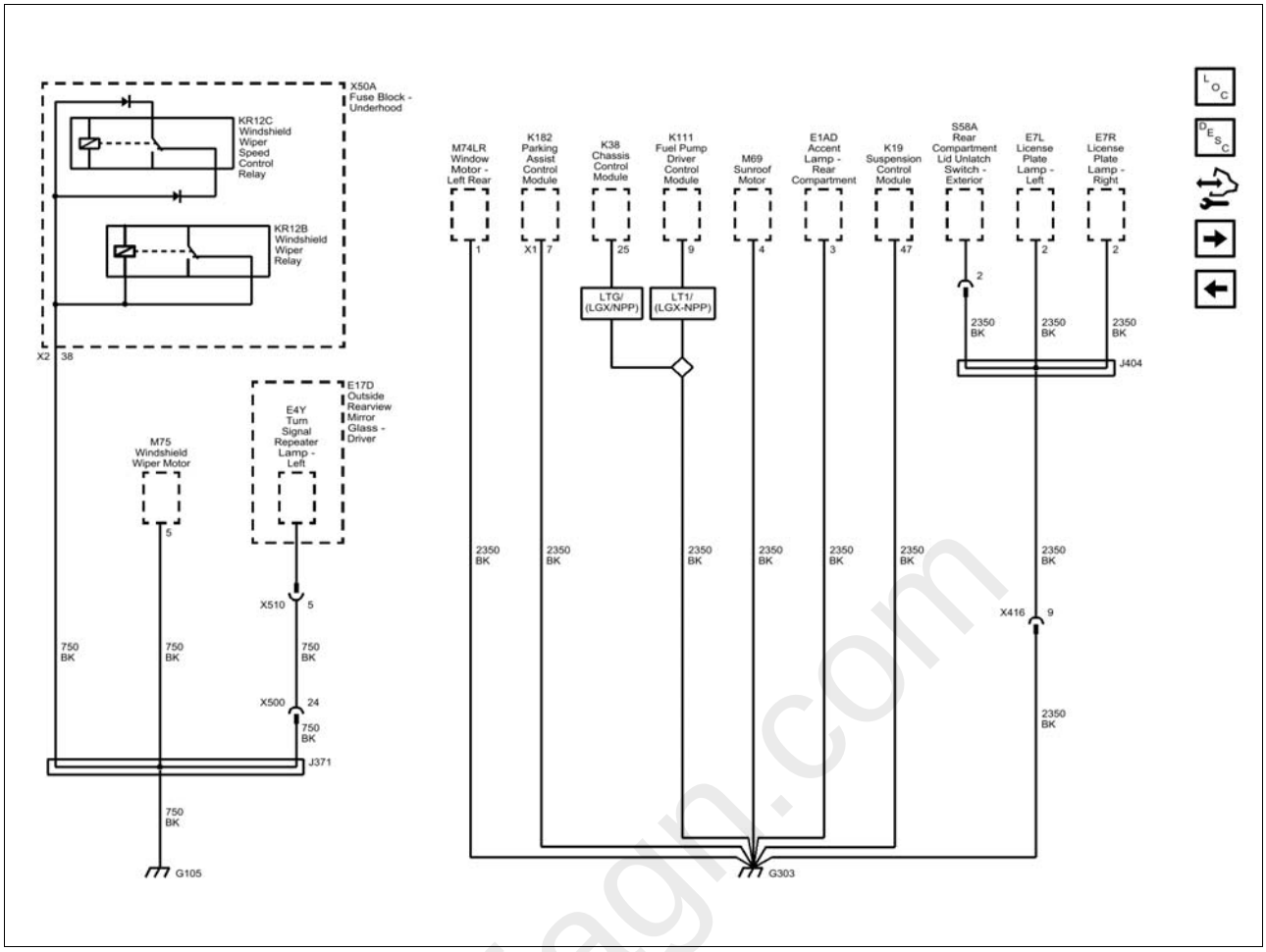
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K71	K71 Transmission Control Module
B16	B16 Backup Lamp Switch (MN6)
R14R	R14R Rear Window Defogger Noise Filter - Right
K36	K36 Inflatable Restraint Sensing and Diagnostic Module
K85	K85 Passenger Presence Module
K43	K43 Power Steering Control Module
Q16A	Q16A Folding Top Solenoid Valve 1 (CM8)
Q16B	Q16B Folding Top Solenoid Valve 2 (CM8)
Q16C	Q16C Folding Top Solenoid Valve 3 (CM8)
E18	E18 Rear Defogger Grid
K23	K23 Folding Top Control Module (CM8)
KR149A	KR149A Folding Top Pump Motor Relay 1 (CM8)
KR149B	KR149B Folding Top Pump Motor Relay 2 (CM8)

SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > GROUND DISTRIBUTION SCHEMATICS > G105 AND G303

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Fig 1: G105 and G303



Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
750	Ground
750_BK	750 BK
CAV_5	5
750_BK	750 BK
CAV_5	5
CAV_24	24
750_BK	750 BK
CAV_38	38
CONN_X2	X2
750_BK	750 BK
750_BK	750 BK
2350	Ground

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2350_BK	2350 BK
2350_BK	2350 BK
2350_BK	2350 BK
2350_BK	2350 BK
2350_BK	2350 BK
2350_BK	2350 BK
2350_BK	2350 BK
CAV_1	1
CAV_7	7
CONN_X1	X1
CAV_25	25
CAV_9	9
CAV_4	4
CAV_3	3
CAV_47	47
CAV_2	2
CAV_2	2
CAV_2	2
2350_BK	2350 BK
2350_BK	2350 BK
2350_BK	2350 BK
LTG	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Europe Group (MBM))
LGX	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Israel (MBI),Mid-East (MAM))
NPP	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Israel (MBI),Mid-East (MAM),Europe Group (MBM))
LT1	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
LGX	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Israel (MBI),Mid-East (MAM))
NPP	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Israel (MBI),Mid-East (MAM),Europe Group (MBM))
CAV_9	9
2350_BK	2350 BK

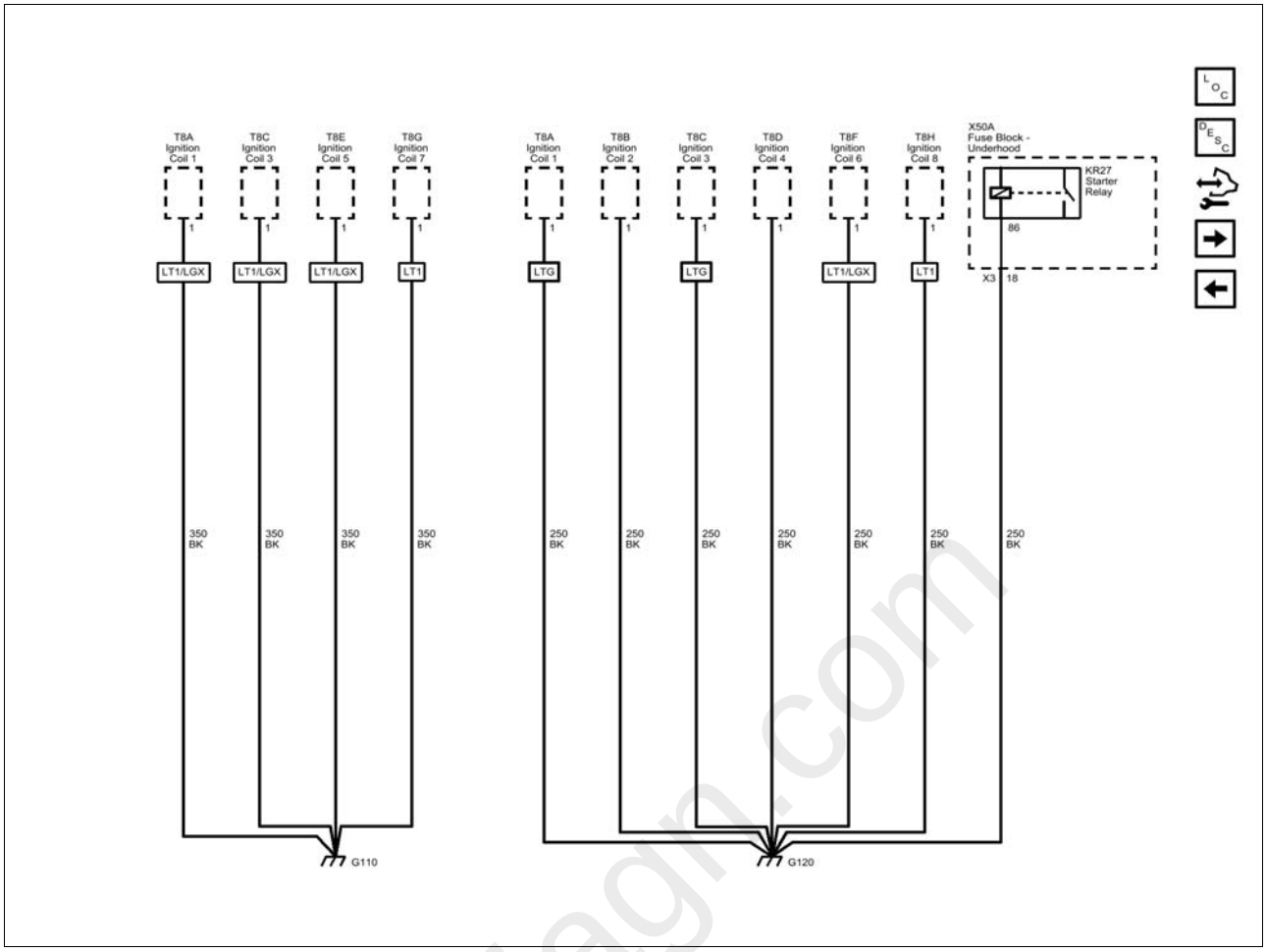
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G105	G105
X510	X510
X500	X500
J371	J371
J404	J404
G303	G303
X416	X416
KR12B	KR12B Windshield Wiper Relay
KR12C	KR12C Windshield Wiper Speed Control Relay
E4Y	E4Y Turn Signal Repeater Lamp - Left (T90)
E17D	E17D Outside Rearview Mirror Glass - Driver
M74LR	M74LR Window Motor - Left Rear (CM8)
K182	K182 (UD7)
K38	K38 Chassis Control Module (LTG/LT1/(LGX+NPP))
K111	K111 Fuel Pump Driver Control Module (LGX-NPP)
M69	M69 Sunroof Motor (CE5)
K19	K19 Suspension Control Module (F55)
S58A	S58A Rear Compartment Lid Unlatch Switch - Exterior
E7L	E7L License Plate Lamp - Left
E7R	E7R License Plate Lamp - Right
X50A	X50A Fuse Block - Underhood
M75	M75 Windshield Wiper Motor

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SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > GROUND DISTRIBUTION SCHEMATICS > G110 AND G120

Fig 1: G110 and G120



Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
350	Ground
350_BK	350 BK
CAV_1	1
350_BK	350 BK
CAV_1	1
350_BK	350 BK
CAV_1	1
350_BK	350 BK
CAV_1	1
250	Ground
250_BK	250 BK
CAV_1	1

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250_BK	250 BK
CAV_1	1
250_BK	250 BK
CAV_1	1
250_BK	250 BK
CAV_1	1
250_BK	250 BK
CAV_1	1
250_BK	250 BK
CAV_1	1
250_BK	250 BK
LTG	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Europe Group (MBM))
LTG	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Europe Group (MBM))
CAV_18	18
CONN_X3	X3
CAV_86	86
LT1	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
LGX	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Israel (MBI),Mid-East (MAM))
LT1	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
LGX	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Israel (MBI),Mid-East (MAM))
LT1	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
LGX	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Israel (MBI),Mid-East (MAM))
LT1	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
LT1	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))

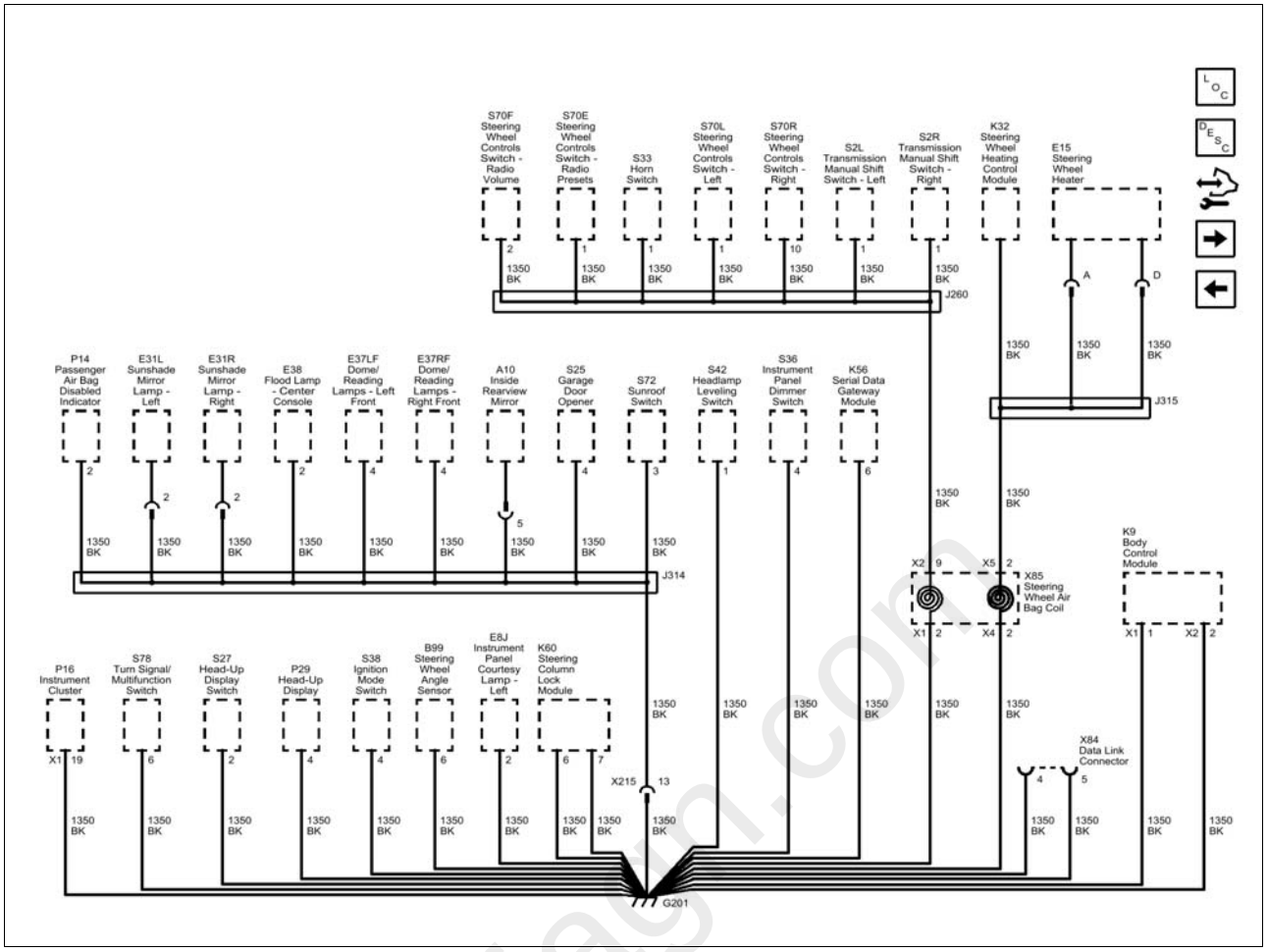
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LGX	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Israel (MBI),Mid-East (MAM))
LT1	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
G110	G110
G120	G120
T8A	T8A Ignition Coil 1
T8C	T8C Ignition Coil 3
T8E	T8E Ignition Coil 5 (LGX or LT1)
T8G	T8G Ignition Coil 7 (LT1)
T8A	T8A Ignition Coil 1
T8B	T8B Ignition Coil 2
T8C	T8C Ignition Coil 3
T8D	T8D Ignition Coil 4
T8F	T8F Ignition Coil 6 (LGX or LT1)
T8H	T8H Ignition Coil 8 (LT1)
KR27	KR27 Starter Relay
X50A	X50A Fuse Block - Underhood

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SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > GROUND DISTRIBUTION SCHEMATICS > G201

Fig 1: G201



Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
1350	Ground
1350_BK	1350 BK
1350_BK	1350 BK
1350_BK	1350 BK
1350_BK	1350 BK
1350_BK	1350 BK
1350_BK	1350 BK
1350_BK	1350 BK
1350_BK	1350 BK
1350_BK	1350 BK
1350_BK	1350 BK
1350_BK	1350 BK

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1350_BK	1350 BK
1350_BK	1350 BK
1350_BK	1350 BK
1350_BK	1350 BK
1350_BK	1350 BK
1350_BK	1350 BK
1350_BK	1350 BK
1350_BK	1350 BK
1350_BK	1350 BK
1350_BK	1350 BK
1350_BK	1350 BK
1350_BK	1350 BK
1350_BK	1350 BK
1350_BK	1350 BK
1350_BK	1350 BK
1350_BK	1350 BK
1350_BK	1350 BK
1350_BK	1350 BK
1350_BK	1350 BK
1350_BK	1350 BK
CAV_4	4
CAV_5	5
1350_BK	1350 BK
CAV_2	2
CAV_2	2
CAV_A	A
CAV_D	D
CAV_13	13
CAV_5	5
CAV_2	2
CAV_2	2
CAV_4	4
CAV_4	4
CAV_4	4

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CAV_3	3
CAV_1	1
CAV_4	4
CAV_6	6
CAV_19	19
CONN_X1	X1
CAV_6	6
CAV_2	2
CAV_4	4
CAV_4	4
CAV_6	6
CAV_2	2
CAV_6	6
CAV_7	7
CAV_2	2
CONN_X5	X5
CAV_2	2
CONN_X4	X4
CAV_1	1
CAV_2	2
1350_BK	1350 BK
1350_BK	1350 BK
1350_BK	1350 BK
CAV_9	9
CONN_X2	X2
CAV_2	2
CONN_X1	X1
1350_BK	1350 BK
CAV_1	1
CAV_1	1
CAV_1	1
CAV_10	10
CAV_1	1

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CAV_1	1
1350_BK	1350 BK
CAV_2	2
1350_BK	1350 BK
1350_BK	1350 BK
1350_BK	1350 BK
1350_BK	1350 BK
1350_BK	1350 BK
CONN_X2	X2
CONN_X1	X1
G201	G201
J314	J314
J315	J315
X215	X215
J260	J260
P14	P14 Passenger Air Bag Disabled Indicator
E31L	E31L Sunshade Mirror Lamp - Left
E31R	E31R Sunshade Mirror Lamp - Right
E38	E38 Flood Lamp - Center Console
E37LF	E37LF Dome/Reading Lamps - Left Front
E37RF	E37RF Dome/Reading Lamps - Right Front
A10	A10 Inside Rearview Mirror
S25	S25 Garage Door Opener
S72	S72 Sunroof Switch (CE5)
S42	S42 Headlamp Leveling Switch (TR6)
S36	S36 Instrument Panel Dimmer Switch
K56	K56 Serial Data Gateway Module
P16	P16 Instrument Cluster
K32	K32 Steering Wheel Heating Control Module
E15	E15 Steering Wheel Heater (UVD)
X85	X85 Steering Wheel Air Bag Coil
K9	K9 Body Control Module
S78	S78 Turn Signal/Multifunction Switch

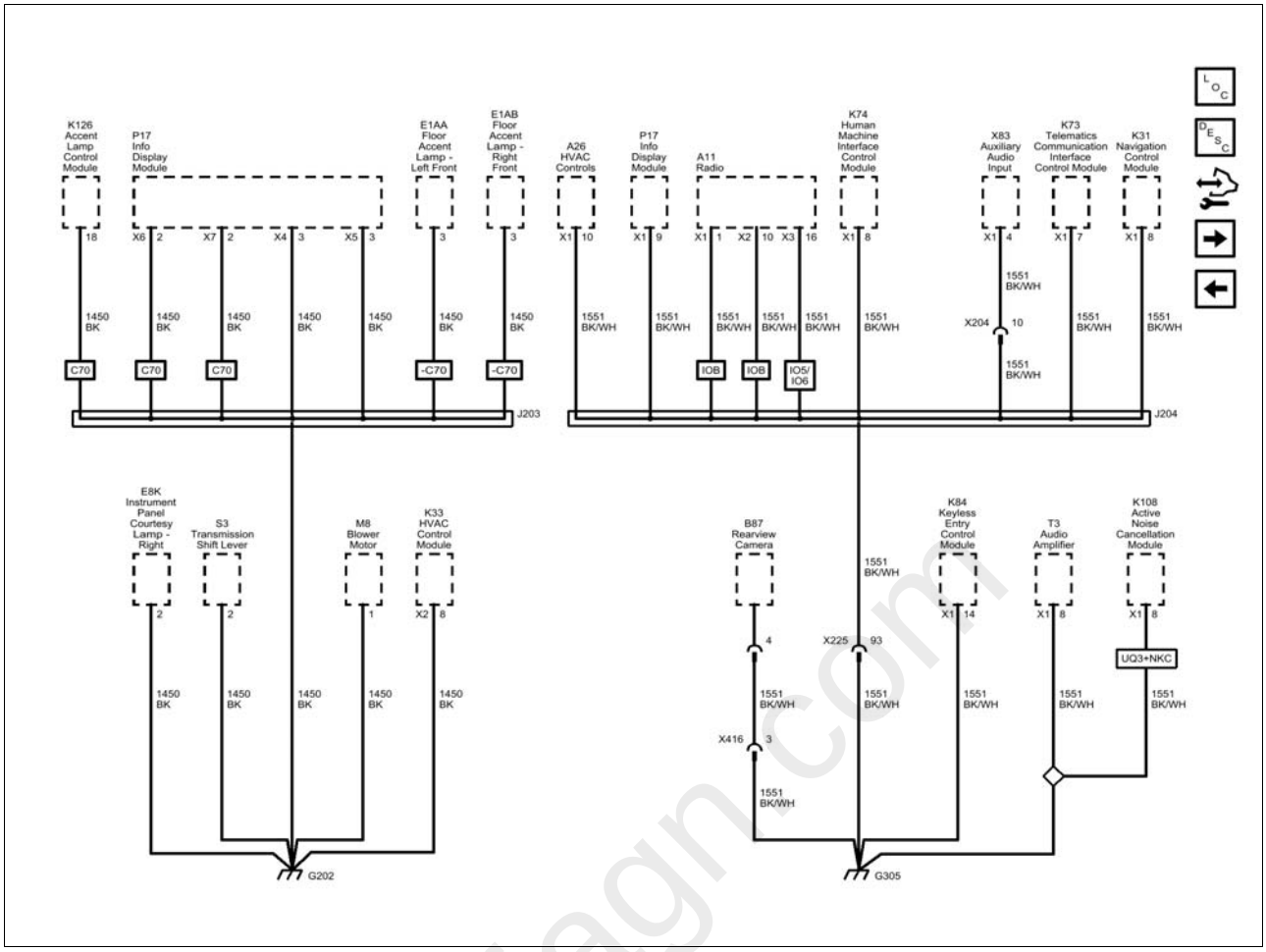
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S27	S27 Head-Up Display Switch (UV6)
P29	P29 Head-Up Display (UV6)
S38	S38 Ignition Mode Switch
B99	B99 Steering Wheel Angle Sensor
E8J	E8J Instrument Panel Courtesy Lamp - Left
K60	K60 Steering Column Lock Module (N06)
X84	X84 Data Link Connector
S70F	S70F Steering Wheel Controls Switch - Radio Volume
S70E	S70E Steering Wheel Controls Switch - Radio Presets
S33	S33 Horn Switch
S70L	S70L Steering Wheel Controls Switch - Left
S70R	S70R Steering Wheel Controls Switch - Right
S2L	S2L Transmission Manual Shift Switch - Left (MX0)
S2R	S2R Transmission Manual Shift Switch - Right (MX0)

SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > GROUND DISTRIBUTION SCHEMATICS > G202 AND G305

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Fig 1: G202 and G305



Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
1450	Ground
1450_BK	1450 BK
1450_BK	1450 BK
1450_BK	1450 BK
1450_BK	1450 BK
1450_BK	1450 BK
1450_BK	1450 BK
1450_BK	1450 BK
1450_BK	1450 BK
1450_BK	1450 BK
1450_BK	1450 BK
1450_BK	1450 BK

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1450_BK	1450 BK
C70	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Israel (MBI),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
C70	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Israel (MBI),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
C70	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Israel (MBI),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
C70	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Israel (MBI),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
C70	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Israel (MBI),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
CAV_18	18
CAV_2	2
CAV_2	2
CAV_3	3
CAV_3	3
CAV_3	3
CAV_3	3
CAV_2	2
CAV_1	1
1551	Signal Ground
1551_BK/WH	1551 BK/WH
1551_BK/WH	1551 BK/WH
1551_BK/WH	1551 BK/WH
1551_BK/WH	1551 BK/WH
1551_BK/WH	1551 BK/WH
1551_BK/WH	1551 BK/WH
1551_BK/WH	1551 BK/WH
1551_BK/WH	1551 BK/WH
1551_BK/WH	1551 BK/WH
1551_BK/WH	1551 BK/WH

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1551_BK/WH	1551 BK/WH
1551_BK/WH	1551 BK/WH
CAV_10	10
CAV_9	9
CAV_1	1
CONN_X1	X1
CAV_10	10
CONN_X2	X2
CONN_X3	X3
IOB	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX))
IOB	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX))
IO5	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Israel (MBI),Mid-East (MAM),S America2 - Andean (MAY),Europe Group (MBM))
IO6	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Israel (MBI),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
CAV_8	8
CONN_X1	X1
CAV_4	4
CONN_X1	X1
CAV_7	7
CONN_X1	X1
CAV_8	8
CONN_X1	X1
CAV_14	14
CONN_X1	X1
CAV_8	8
CONN_X1	X1
CAV_4	4
CAV_3	3
CAV_93	93
CAV_10	10
1551_BK/WH	1551 BK/WH
1551_BK/WH	1551 BK/WH

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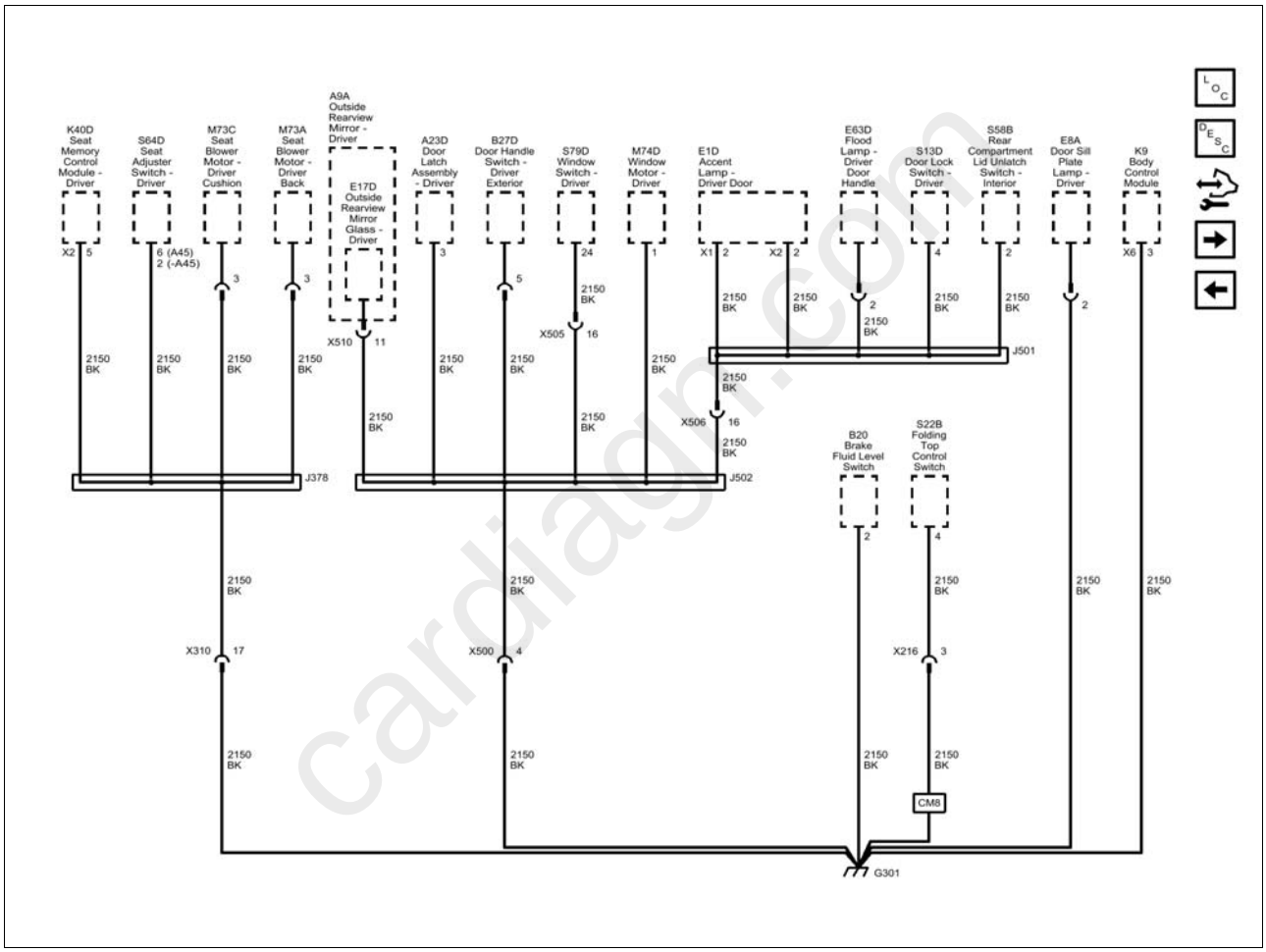
1551_BK/WH	1551 BK/WH
CONN_X6	X6
CONN_X7	X7
1551_BK/WH	1551 BK/WH
CAV_8	8
CONN_X2	X2
CAV_2	2
CAV_16	16
CONN_X1	X1
CONN_X1	X1
CONN_X4	X4
CONN_X5	X5
G202	G202
J203	J203
J204	J204
X416	X416
X225	X225
X204	X204
G305	G305
K126	K126 Accent Lamp Control Module (C70)
E1AA	E1AA Floor Accent Lamp - Left Front
E1AB	E1AB Floor Accent Lamp - Right Front
E8K	E8K Instrument Panel Courtesy Lamp - Right
M8	M8 Blower Motor
A11	A11 Radio
K74	K74 Human Machine Interface Control Module (IO5 or IO6)
X83	X83 Auxiliary Audio Input
K73	K73 Telematics Communication Interface Control Module
K31	K31 Navigation Control Module (IO6 with MAW)
S3	S3 Transmission Shift Lever (MX0)
B87	B87 Rearview Camera
K84	K84 Keyless Entry Control Module
T3	T3 Audio Amplifier (UQ3/UQA)

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K33	K33 HVAC Control Module
A26	A26 HVAC Controls
P17	P17 Info Display Module
P17	P17 Info Display Module

SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > GROUND DISTRIBUTION SCHEMATICS > G301

Fig 1: G301



Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
2150	Ground
2150_BK	2150 BK
2150_BK	2150 BK
2150_BK	2150 BK

2150_BK	2150 BK
2150_BK	2150 BK
2150_BK	2150 BK
2150_BK	2150 BK
2150_BK	2150 BK
2150_BK	2150 BK
2150_BK	2150 BK
2150_BK	2150 BK
2150_BK	2150 BK
2150_BK	2150 BK
2150_BK	2150 BK
2150_BK	2150 BK
2150_BK	2150 BK
2150_BK	2150 BK
CAV_5	5
CONN_X2	X2
CAV_6	6
CAV_2	2
A45	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Israel (MBI),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
A45	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Israel (MBI),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
CAV_3	3
CAV_3	3
CAV_11	11
CAV_3	3
CAV_5	5
CAV_24	24
CAV_1	1
CAV_16	16
CAV_2	2
CONN_X1	X1
CAV_2	2

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CONN_X2	X2
CAV_2	2
CAV_4	4
CAV_2	2
CAV_16	16
CAV_3	3
CONN_X6	X6
CAV_2	2
2150_BK	2150 BK
2150_BK	2150 BK
CAV_2	2
CAV_4	4
2150_BK	2150 BK
2150_BK	2150 BK
CAV_17	17
CAV_4	4
CAV_3	3
2150_BK	2150 BK
2150_BK	2150 BK
2150_BK	2150 BK
2150_BK	2150 BK
2150_BK	2150 BK
2150_BK	2150 BK
CM8	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Israel (MBI),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
J378	J378
X510	X510
X505	X505
J502	J502
X506	X506
J501	J501
G301	G301
X310	X310

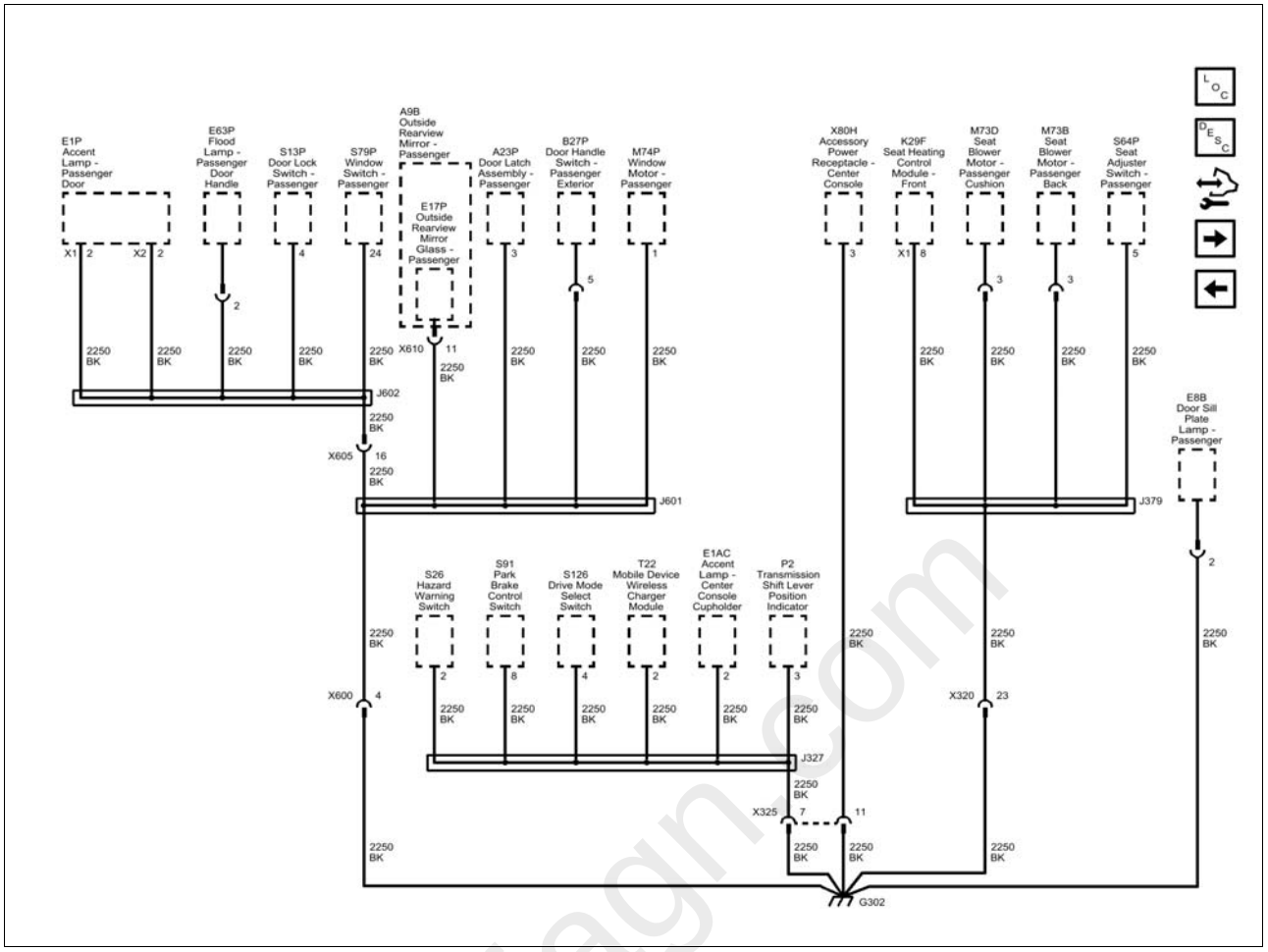
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X500	X500
X216	X216
K40D	K40D Seat Memory Control Module - Driver (A45)
S64D	S64D Seat Adjuster Switch - Driver
M73C	M73C Seat Blower Motor - Driver Cushion (KQV)
M73A	M73A Seat Blower Motor - Driver Back (KQV)
A23D	A23D Door Latch Assembly - Driver
B27D	B27D Door Handle Switch - Driver Exterior
S79D	S79D Window Switch - Driver
M74D	M74D Window Motor - Driver
E1D	E1D Accent Lamp - Driver Door (C70)
E63D	E63D Flood Lamp - Driver Door Handle
S13D	S13D Door Lock Switch - Driver
S58B	S58B Rear Compartment Lid Unlatch Switch - Interior
E8A	E8A Door Sill Plate Lamp - Driver
K9	K9 Body Control Module
B20	B20 Brake Fluid Level Switch
S22B	S22B Folding Top Control Switch (CM8)
E17D	E17D Outside Rearview Mirror Glass - Driver
A9A	A9A Outside Rearview Mirror - Driver

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SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > GROUND DISTRIBUTION SCHEMATICS > G302

Fig 1: G302



Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
2250	Ground
2250_BK	2250 BK
2250_BK	2250 BK
2250_BK	2250 BK
2250_BK	2250 BK
2250_BK	2250 BK
2250_BK	2250 BK
2250_BK	2250 BK
2250_BK	2250 BK
2250_BK	2250 BK
2250_BK	2250 BK
2250_BK	2250 BK

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2250_BK	2250 BK
2250_BK	2250 BK
2250_BK	2250 BK
2250_BK	2250 BK
CAV_2	2
CAV_2	2
CONN_X1	X1
CAV_2	2
CONN_X2	X2
CAV_2	2
CAV_4	4
CAV_24	24
CAV_11	11
CAV_3	3
CAV_5	5
CAV_1	1
CAV_8	8
CONN_X1	X1
CAV_3	3
CAV_3	3
CAV_5	5
2250_BK	2250 BK
2250_BK	2250 BK
2250_BK	2250 BK
2250_BK	2250 BK
2250_BK	2250 BK
2250_BK	2250 BK
CAV_2	2
CAV_8	8
CAV_4	4
CAV_2	2
CAV_2	2
CAV_3	3

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CAV_3	3
CAV_16	16
2250_BK	2250 BK
2250_BK	2250 BK
CAV_4	4
CAV_23	23
2250_BK	2250 BK
2250_BK	2250 BK
2250_BK	2250 BK
2250_BK	2250 BK
2250_BK	2250 BK
2250_BK	2250 BK
2250_BK	2250 BK
X325	X325
CAV_7	7
CAV_11	11
X610	X610
G302	G302
J602	J602
X605	X605
J601	J601
J379	J379
J327	J327
X600	X600
X320	X320
X325	X325
E8B	E8B Door Sill Plate Lamp - Passenger
E1P	E1P Accent Lamp - Passenger Door (C70)
E63P	E63P Flood Lamp - Passenger Door Handle
S13P	S13P Door Lock Switch - Passenger
S79P	S79P Window Switch - Passenger
E17P	E17P Outside Rearview Mirror Glass - Passenger
A9B	A9B Outside Rearview Mirror - Passenger

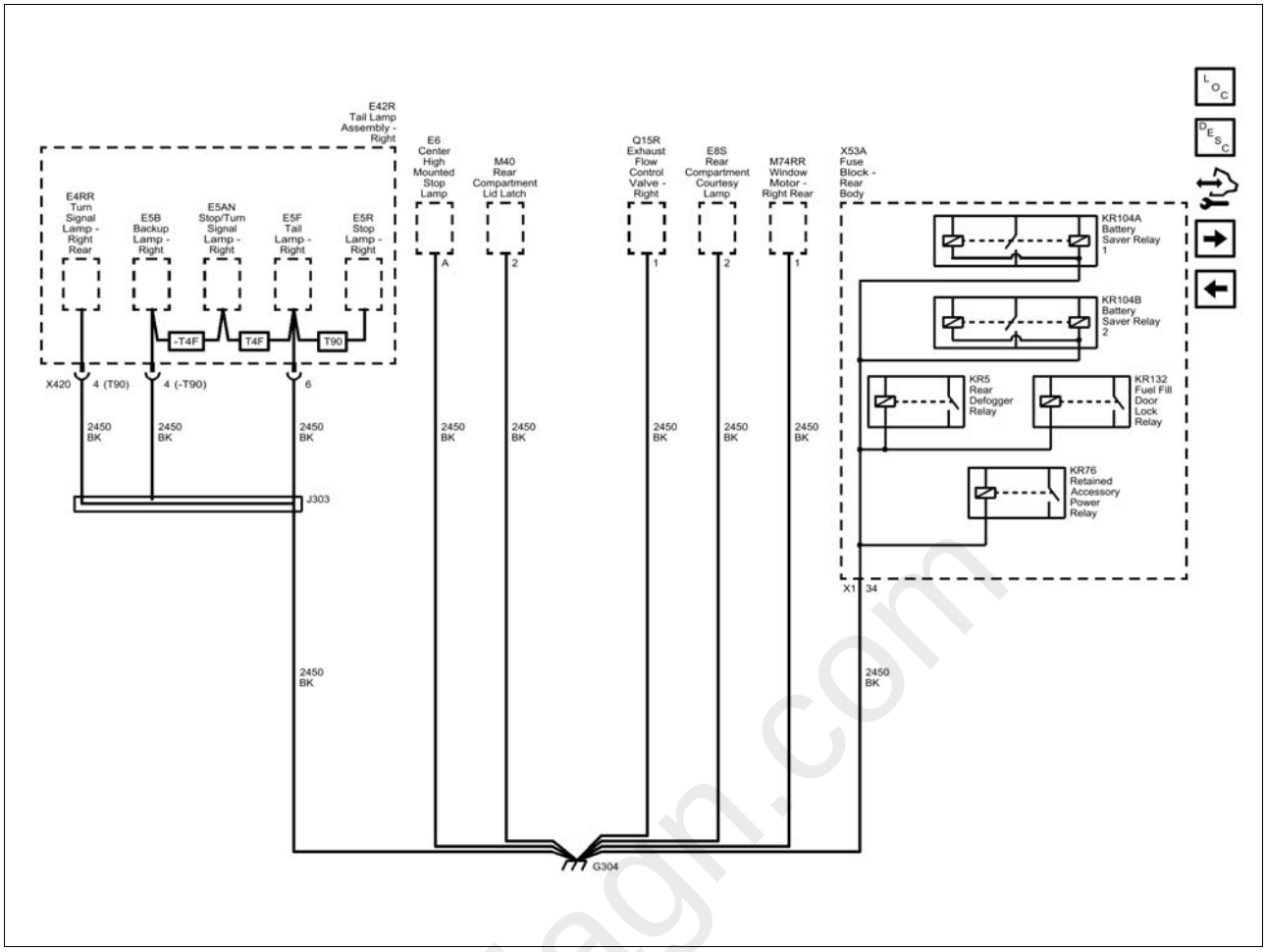
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A23P	A23P Door Latch Assembly - Passenger
B27P	B27P Door Handle Switch - Passenger Exterior
M74P	M74P Window Motor - Passenger
K29F	K29F Seat Heating Control Module - Front (KA1/KQV)
M73D	M73D Seat Blower Motor - Passenger Cushion (KQV)
M73B	M73B Seat Blower Motor - Passenger Back (KQV)
S64P	S64P Seat Adjuster Switch - Passenger
S26	S26 Hazard Warning Switch
S91	S91 Park Brake Control Switch
T22	T22 Mobile Device Wireless Charger Module (K4C)
E1AC	E1AC Accent Lamp - Center Console Cupholder (C70)
P2	P2 Transmission Shift Lever Position Indicator
X80H	X80H Accessory Power Receptacle - Center Console
S126	S126 Drive Mode Select Switch

SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > GROUND DISTRIBUTION SCHEMATICS > G304

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Fig 1: G304



Courtesy of GENERAL MOTORS COMPANY

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Callout	Component Name
2450	Ground
2450_BK	2450 BK
2450_BK	2450 BK
2450_BK	2450 BK
2450_BK	2450 BK
2450_BK	2450 BK
2450_BK	2450 BK
2450_BK	2450 BK
2450_BK	2450 BK
2450_BK	2450 BK
2450_BK	2450 BK

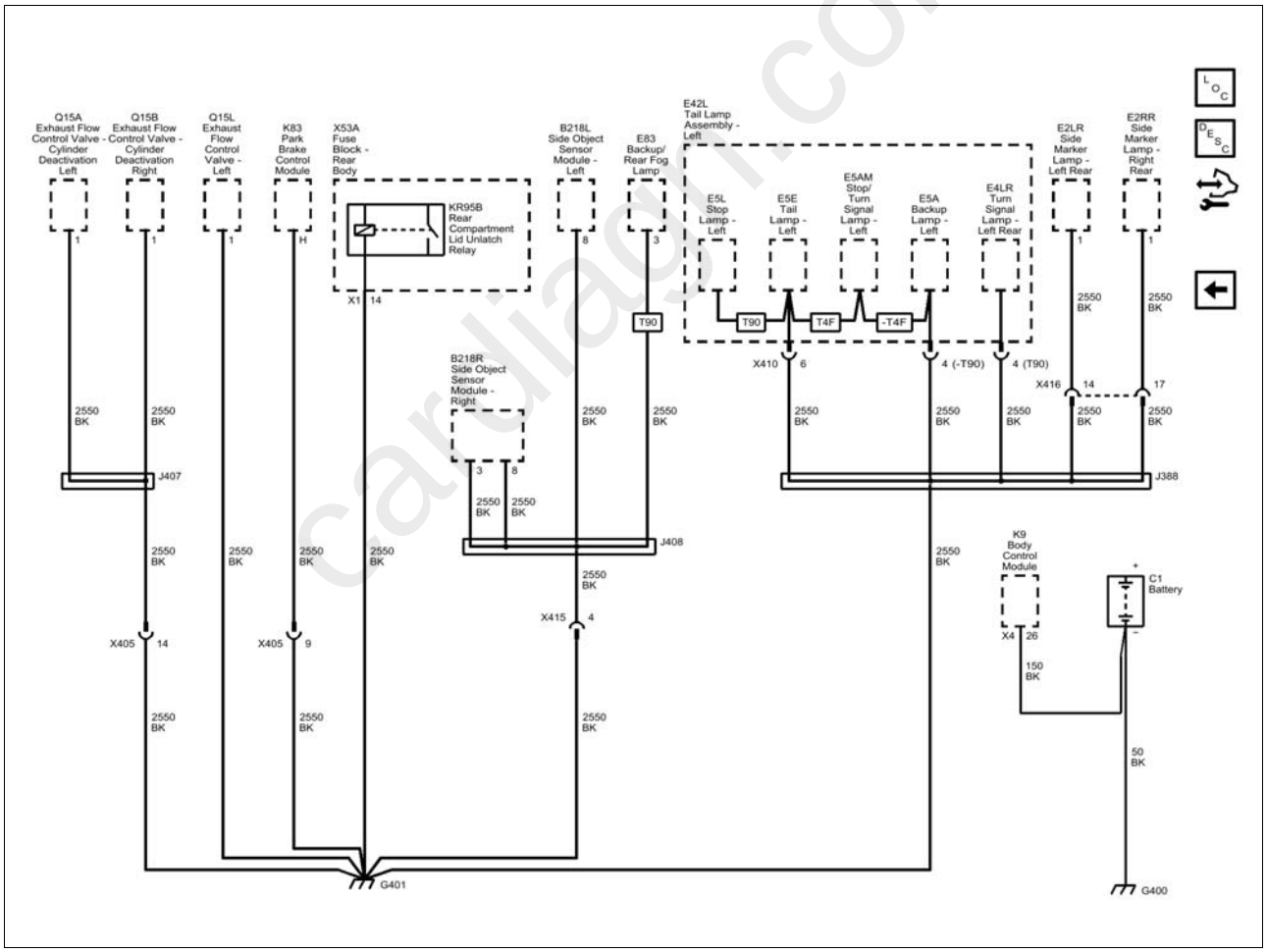
T4F	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
T4F	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
T90	(Korea (MAW),Brasil/Paraguay (MDV),Europe Group (MBM))
2450_BK	2450 BK
CAV_4	4
CAV_4	4
CAV_6	6
T90	(Korea (MAW),Brasil/Paraguay (MDV),Europe Group (MBM))
T90	(Korea (MAW),Brasil/Paraguay (MDV),Europe Group (MBM))
CAV_A	A
CAV_2	2
CAV_13	13
CAV_1	1
CAV_2	2
CAV_1	1
CAV_34	34
CONN_X1	X1
G304	G304
J303	J303
X420	X420
E6	E6 Center High Mounted Stop Lamp
M40	M40 Rear Compartment Lid Latch
K38	K38 Chassis Control Module (LTG/LT1/(LGX+NPP))
Q15R	Q15R Exhaust Flow Control Valve - Right (NPP)
E8S	E8S Rear Compartment Courtesy Lamp
M74RR	M74RR Window Motor - Right Rear (CM8)
X53A	X53A Fuse Block - Rear Body
E4RR	E4RR Turn Signal Lamp - Right Rear (T90)
E5B	E5B Backup Lamp - Right (except T90)
E5AN	E5AN Stop/Turn Signal Lamp - Right (except T90)

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E5F	E5F Tail Lamp - Right
E5R	E5R Stop Lamp - Right (T90)
E42R	E42R Tail Lamp Assembly - Right
KR104A	KR104A Battery Saver Relay 1
KR104B	KR104B Battery Saver Relay 2
KR132	KR132 Fuel Fill Door Lock Relay
KR5	KR5 Rear Defogger Relay
KR76	KR76 Retained Accessory Power Relay

SCHEMATIC WIRING DIAGRAMS AND WIRING HARNESS ROUTING DIAGRAMS > GROUND DISTRIBUTION SCHEMATICS > G400 AND G401

Fig 1: G400 and G401



Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name

2550	Ground
2550_BK	2550 BK
2550_BK	2550 BK
2550_BK	2550 BK
2550_BK	2550 BK
2550_BK	2550 BK
2550_BK	2550 BK
2550_BK	2550 BK
2550_BK	2550 BK
2550_BK	2550 BK
2550_BK	2550 BK
2550_BK	2550 BK
2550_BK	2550 BK
2550_BK	2550 BK
CAV_1	1
CAV_1	1
CAV_1	1
CAV_H	H
CAV_8	8
CAV_8	8
CAV_3	3
CAV_1	1
CAV_1	1
CAV_6	6
CAV_4	4
CAV_4	4
T90	(Korea (MAW),Brasil/Paraguay (MDV),Europe Group (MBM))
T90	(Korea (MAW),Brasil/Paraguay (MDV),Europe Group (MBM))
T90	(Korea (MAW),Brasil/Paraguay (MDV),Europe Group (MBM))
T4F	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Europe Group (MBM))
T4F	(U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Korea (MAW),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean

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	(MAY),Europe Group (MBM))
2550_BK	2550 BK
2550_BK	2550 BK
2550_BK	2550 BK
CAV_14	14
CONN_X1	X1
CAV_14	14
CAV_4	4
2550_BK	2550 BK
2550_BK	2550 BK
T90	(Korea (MAW),Brasil/Paraguay (MDV),Europe Group (MBM))
50	Ground
50_BK	50 BK
150	Ground
150_BK	150 BK
CAV_26	26
CONN_X4	X4
2550_BK	2550 BK
2550_BK	2550 BK
2550_BK	2550 BK
CAV_3	3
CAV_9	9
2550_BK	2550 BK
X416	X416
CAV_14	14
CAV_17	17
X410	X410
J407	J407
J388	J388
G401	G401
X405	X405
X415	X415
G400	G400

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J408	J408
X405	X405
X416	X416
Q15A	Q15A Exhaust Flow Control Valve - Cylinder Deactivation Left (MX0)
Q15B	Q15B Exhaust Flow Control Valve - Cylinder Deactivation Right (MX0)
Q15L	Q15L Exhaust Flow Control Valve - Left (NPP)
B218L	B218L Side Object Sensor Module - Left (UKC)
E2RR	E2RR Side Marker Lamp - Right Rear (except T90)
E2LR	E2LR Side Marker Lamp - Left Rear (except T90)
E5AM	E5AM Stop/Turn Signal Lamp - Left (except T90)
E5L	E5L Stop Lamp - Left (T90)
E5E	E5E Tail Lamp - Left
E5A	E5A Backup Lamp - Left (except T90)
E4LR	E4LR Turn Signal Lamp - Left Rear (T90)
KR95B	KR95B Rear Compartment Lid Release Relay
X53A	X53A Fuse Block - Rear Body
E42L	E42L Tail Lamp Assembly - Left
K9	K9 Body Control Module
C1	C1 Battery
E83	E83 (T90)
B218R	B218R Side Object Sensor Module - Right (UKC)
K83	K83 Park Brake Control Module (J77)

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