WIRING DIAGRAMS

CONTENTS

	page		page
8W-01 GENERAL INFORMATION	8W-01-1	8W-46 TRAVELER	8W-46-1
8W-02 COMPONENT INDEX	8W-02-1	8W-47 AUDIO SYSTEM	8W-47-1
8W-10 POWER DISTRIBUTION	8W-10-1	8W-48 REAR WINDOW DEFOGGER	8W-48-1
8W-12 JUNCTION BLOCK	8W-12-1	8W-50 FRONT LIGHTING	8W-50-1
8W-15 GROUND DISTRIBUTION	8W-15-1	8W-51 REAR LIGHTING	8W-51-1
8W-20 CHARGING SYSTEM	8W-20-1	8W-52 TURN SIGNALS	8W-52-1
8W-21 STARTING SYSTEM	8W-21-1	8W-53 WIPERS	8W-53-1
8W-30 FUEL/IGNITION SYSTEM	8W-30-1	8W-60 POWER WINDOWS	8W-60-1
8W-31 TRANSMISSION CONTROL SYSTEM	8W-31-1	8W-61 POWER DOOR LOCKS	8W-61-1
8W-33 VEHICLE SPEED CONTROL	8W-32-1	8W-62 POWER MIRRORS	8W-62-1
8W-35 ANTI-LOCK BRAKES	8W-35-1	8W-63 POWER SEAT	8W-63-1
8W-40 INSTRUMENT CLUSTER	8W-40-1	8W-66 POWER TOP	8W-66-1
8W-41 HORN/CIGAR LIGHTER/POWER OUTLET	8W-41-1	8W-67 RESTRAINT SYSTEM	8W-67-1
8W-42 AIR CONDITIONING-HEATER	8W-42-1	8W-70 SPLICE INFORMATION	8W-70-1
8W-43 AIRBAG SYSTEM	8W-43-1	8W-80 CONNECTOR PIN-OUTS	8W-80-1
8W-44 INTERIOR LIGHTING	8W-44-1	8W-90 CONNECTOR/GROUND LOCATIONS	8W-90-1
8W-45 BODY CONTROL MODULE	8W-45-1	8W-95 SPLICE LOCATIONS	8W-95-1

8W-01 GENERAL INFORMATION

INDEX

page

DESCRIPTION AND OPERATION
- CIRCUIT IDENTIFICATION 2
- CONNECTOR/GROUND LOCATIONS 1
- CONNECTORS 3
- ELECTROSTATIC DISCHARGE (ESD) SENSITIVE DEVICES 5
- FASTENERS 5
- HOW TO USE THIS GROUP 1
- NOTES, CAUTIONS, and WARNINGS 1
- SECTION IDENTIFICATION 1
- SPLICE LOCATIONS 1
- SYMBOLS 3
- TAKE OUTS 3
- WIRE CODE IDENTIFICATION 2

DIAGNOSIS AND TESTING
- CHECKING FOR TERMINAL SPREADING 6
- INTERMITTENT AND POOR CONNECTIONS 6
- TROUBLESHOOTING TESTS 6
- TROUBLESHOOTING TOOLS 5
- TROUBLESHOOTING WIRING PROBLEMS 7

SERVICE PROCEDURES
- CONNECTOR AND TERMINAL REPLACEMENT . 10
- CONNECTOR REPLACEMENT 8
- DIODE REPLACEMENT 12
- TERMINAL REPLACEMENT 10
- TERMINAL/CONNECTOR REPAIR- AUGAT CONNECTORS 10
- TERMINAL/CONNECTOR REPAIR-MOLEX CONNECTORS 8
- WIRING REPAIR 7

SPECIAL TOOLS
- WIRING/TERMINAL 12

DESCRIPTION AND OPERATION

HOW TO USE THIS GROUP

The purpose of this group is to show the electrical circuits in a clear, simple fashion and to make troubleshooting easier. Components that work together are shown together. All electrical components used in a specific system are shown on one diagram. The feed for a system is shown at the top of the page. All wires, connectors, splices, and components are shown in the flow of current to the bottom of the page. Wiring which is not part of the circuit represented is referenced to another page/section, where the complete circuit is shown. In addition, all switches, components, and modules are shown in the **at rest position with the doors closed and the key removed from the ignition.**

If a component is part of several different circuits, it is shown in the diagram for each. For example, the headlamp switch is the main part of the exterior lighting, but it also affects the interior lighting and the chime warning system. **It is important to realize that no attempt is made on the diagrams to represent components and wiring as they appear on the vehicle. For example, a short piece of wire is treated the same as a long one. In addition, switches and other components are shown as simply as possible, with regard to function only.**

SECTION IDENTIFICATION

Sections in Group 8W are organized by sub-systems. The sections contain circuit operation descriptions, helpful information, and system diagrams. The intention is to organize information by system, consistently from year to year.

CONNECTOR/GROUND LOCATIONS

Section 8W-90 contains connector/ground location illustrations. The illustrations contain the connector name (or number)/ground number and component identification. Connector/ground location charts in Section 8W-90 reference the illustration number for components and connectors.

Section 8W-80 shows each connector and the circuits involved with that connector. The connectors are identified using the name/number on the Diagram pages.

SPLICE LOCATIONS

Splice Location charts in Section 8W-70 show the entire splice, and provide references to other sections the splice serves.

Section 8W-95 contains illustrations that show the general location of the splices in each harness. The illustrations show the splice by number, and provide a written location.

NOTES, CAUTIONS, and WARNINGS

Throughout this group additional important information is presented in three ways; Notes, Cautions, and Warnings.

DESCRIPTION AND OPERATION (Continued)

NOTES are used to help describe how switches or components operate to complete a particular circuit. They are also used to indicate different conditions that may appear on the vehicle. For example, an up-to and after condition.

CAUTIONS are used to indicate information that could prevent making an error that may damage the vehicle.

WARNINGS provide information to prevent personal injury and vehicle damage. Below is a list of general warnings that should be followed any time a vehicle is being serviced.

WARNING: ALWAYS WEAR SAFETY GLASSES FOR EYE PROTECTION.

WARNING: USE SAFETY STANDS ANYTIME A PROCEDURE REQUIRES BEING UNDER A VEHICLE.

WARNING: BE SURE THAT THE IGNITION SWITCH ALWAYS IS IN THE OFF POSITION, UNLESS THE PROCEDURE REQUIRES IT TO BE ON.

WARNING: SET THE PARKING BRAKE WHEN WORKING ON ANY VEHICLE. AN AUTOMATIC TRANSMISSION SHOULD BE IN PARK. A MANUAL TRANSMISSION SHOULD BE IN NEUTRAL.

WARNING: OPERATE THE ENGINE ONLY IN A WELL-VENTILATED AREA.

WARNING: KEEP AWAY FROM MOVING PARTS WHEN THE ENGINE IS RUNNING, ESPECIALLY THE FAN AND BELTS.

WARNING: TO PREVENT SERIOUS BURNS, AVOID CONTACT WITH HOT PARTS SUCH AS THE RADIATOR, EXHAUST MANIFOLD(S), TAIL PIPE, CATALYTIC CONVERTER, AND MUFFLER.

WARNING: DO NOT ALLOW FLAME OR SPARKS NEAR THE BATTERY. GASES ARE ALWAYS PRESENT IN AND AROUND THE BATTERY.

WARNING: ALWAYS REMOVE RINGS, WATCHES, LOOSE HANGING JEWELRY, AND LOOSE CLOTHING.

WIRE CODE IDENTIFICATION

Each wire shown in the diagrams contains a code (Fig. 1) which identifies the main circuit, part of the main circuit, gauge of wire, and color. The color is shown as a two letter code which can be identified by referring to the Wire Color Code Chart (Fig. 2)

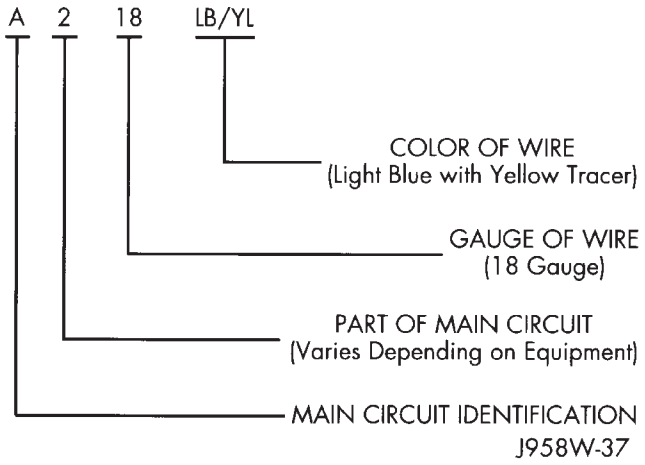


Fig. 1 Wire Code Identification

COLOR CODE	COLOR	STANDARD TRACER COLOR	COLOR CODE	COLOR	STANDARD TRACER CODE
BL	BLUE	WT	OR	ORANGE	BK
BK	BLACK	WT	PK	PINK	BK OR WT
BR	BROWN	WT	RD	RED	WT
DB	DARK BLUE	WT	TN	TAN	WT
DG	DARK GREEN	WT	VT	VIOLET	WT
GY	GRAY	BK	WT	WHITE	BK
LB	LIGHT BLUE	BK	YL	YELLOW	BK
LG	LIGHT GREEN	BK	*	WITH TRACER	

918W-136

Fig. 2 Wire Color Code Chart

CIRCUIT IDENTIFICATION

All circuits in the diagrams use an alpha/numeric code to identify the wire and its function (Fig. 3). To identify which circuit code applies to a system, refer to the Circuit Identification Code Chart. This chart shows the main circuits only and does not show the secondary codes that may apply to some models.

DESCRIPTION AND OPERATION (Continued)

CIRCUIT	FUNCTION
A	Battery Feed
B	Brake Controls
C	Climate Controls
D	Diagnostic Circuits
E	Dimming Illumination Circuits
F	Fused Circuits (Secondary Feed)
G	Monitoring Circuits (Gauges)
H	Open
I	Not Used
J	Open
K	Powertrain Control Module
L	Exterior Lighting
M	Interior Lighting
N	ESA Module
O	Not Used
P	Power Option (Battery Feed)
Q	Power Options (Battery Feed)
R	Passive Restraint
S	Suspension/Steering
T	Transmission/Transaxle/Transfer Case
U	Open
V	Speed Control, Washer/Wiper
W	Open
X	Audio Systems
Y	Open
Z	Grounds

948W-190

Fig. 3 Circuit Identification

CONNECTORS

Connectors shown in the diagrams are identified using the international standard arrows for male and female terminals (Fig. 4). A connector identifier is placed next to the arrows to indicate the connector number (Fig. 4).

For viewing connector pin outs, with two terminals or greater, refer to section 8W-80. This section identifies in-line connectors by number, and component connectors by name. If a component has two or more connectors they will be identified as C1, C2, C3...etc. This sections also provides terminal numbering, circuit identification, wire colors, and functions.

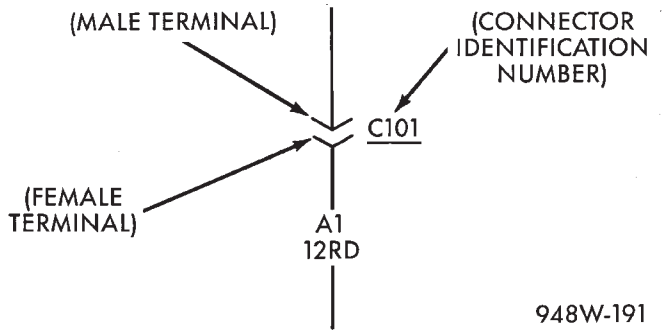


Fig. 4 Connector Identification

All connectors are viewed from the terminal end unless otherwise specified. To find the connector location in the vehicle refer to section 8W-90. This section uses the connector identification number from the wiring diagrams to provide a figure number reference.

TAKE OUTS

The abbreviation T/O is used in the component location section to indicate a point in which the wiring harness branches out to a component.

SYMBOLS

Various symbols are used throughout the Wiring Diagrams. These symbols can be identified by referring to the symbol identification chart (Fig. 5).

DESCRIPTION AND OPERATION (Continued)

LEGEND OF SYMBOLS USED ON WIRING DIAGRAMS			
+	POSITIVE		BY-DIRECTIONAL ZENER DIODE
–	NEGATIVE		MOTOR
	GROUND		ARMATURE AND BRUSHES
	FUSE	C100	CONNECTOR IDENTIFICATION
	GANG FUSES WITH BUSS BAR		MALE CONNECTOR
	CIRCUIT BREAKER		FEMALE CONNECTOR
	CAPACITOR		DENOTES WIRE CONTINUES ELSEWHERE
Ω	OHMS		DENOTES WIRE GOES TO ONE OF TWO CIRCUITS
	RESISTOR		SPLICE
	VARIABLE RESISTOR	S100	SPLICE IDENTIFICATION
	SERIES RESISTOR		THERMAL ELEMENT
	COIL	TIMER	TIMER
	STEP UP COIL		MULTIPLE CONNECTOR
	OPEN CONTACT		OPTIONAL WIRING WITH / WIRING WITHOUT
	CLOSED CONTACT		"Y" WINDINGS
	CLOSED SWITCH	88:88	DIGITAL READOUT
	OPEN SWITCH		SINGLE FILAMENT LAMP
	CLOSED GANGED SWITCH		DUAL FILAMENT LAMP
	OPEN GANGED SWITCH		L.E.D. — LIGHT EMITTING DIODE
	TWO POLE SINGLE THROW SWITCH		THERMISTOR
	PRESSURE SWITCH		GAUGE
	SOLENOID SWITCH		SENSOR
	MERCURY SWITCH		FUEL INJECTOR
	DIODE OR RECTIFIER		948W-192

Fig. 5 Symbol Identification

DESCRIPTION AND OPERATION (Continued)

ELECTROSTATIC DISCHARGE (ESD) SENSITIVE DEVICES

All ESD sensitive components are solid state and a symbol (Fig. 6) is used to indicate this. When handling any component with this symbol comply with the following procedures to reduce the possibility of electrostatic charge build up on the body and inadvertent discharge into the component. If it is not known whether the part is ESD sensitive, assume that it is.

(1) Always touch a known good ground before handling the part. This should be repeated while handling the part and more frequently after sliding across a seat, sitting down from a standing position, or walking a distance.

(2) Avoid touching electrical terminals of the part, unless instructed to do so by a written procedure.

(3) When using a voltmeter, be sure to connect the ground lead first.

(4) Do not remove the part from its protective packing until it is time to install the part.

(5) Before removing the part from its package, ground the package to a known good ground on the vehicle.

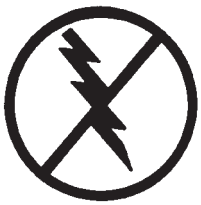


Fig. 6 Electrostatic Discharge Symbol

FASTENERS

CAUTION: At no time when servicing a vehicle, can a sheet metal screw, bolt, or other metal fastener be installed in the strut tower to take the place of an original plastic clip. Also, NO holes can be drilled into the front strut tower in the area shown in (Fig. 7) for the installation of any metal fasteners into the strut tower. Because of the minimum clearance in this area (Fig. 7) installation of metal fasteners could damage the coil spring coating and lead to a corrosion failure of the spring. If a plastic clip is missing, or is lost or broken during servicing a vehicle, replace only with the equivalent part listed in the parts catalog.

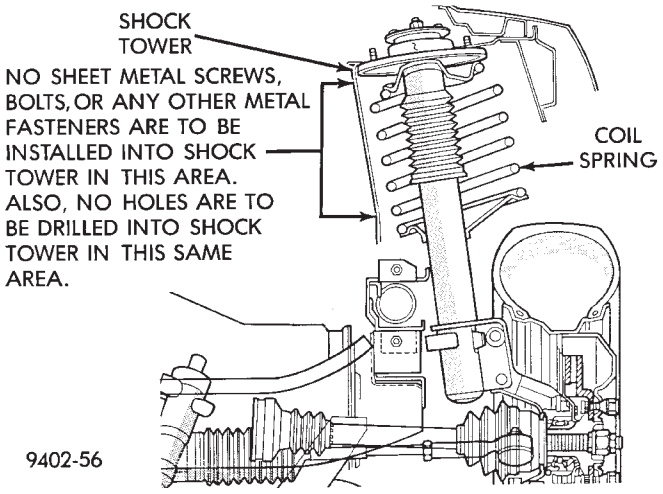


Fig. 7 Shock Tower to Spring Minimum Clearance Area

DIAGNOSIS AND TESTING

TROUBLESHOOTING TOOLS

When diagnosing a problem in an electrical circuit there are several common tools necessary. These tools are listed and explained below.

- Jumper Wire - This is a test wire used to connect two points of a circuit. It can be used to bypass an open in a circuit.

WARNING: NEVER USE A JUMPER WIRE ACROSS A LOAD, SUCH AS A MOTOR, CONNECTED BETWEEN A BATTERY FEED AND GROUND.

- Voltmeter - Used to check for voltage on a circuit. Always connect the black lead to a known good ground and the red lead to the positive side of the circuit.

CAUTION: Most of the electrical components used in today's vehicle are solid state. When checking voltages in these circuits use a meter with a 10-megohm or greater impedance.

- Ohmmeter - Used to check the resistance between two points of a circuit. Low or no resistance in a circuit means good continuity.

CAUTION: - Most of the electrical components used in today's vehicle are Solid State. When checking resistance in these circuits use a meter with a 10-megohm or greater impedance. In addition, make sure the power is disconnected from the circuit. Circuits that are powered up by the vehicle electrical system can cause damage to the equipment and provide false readings.

- Probing Tools - These tools are used for probing terminals in connectors (Fig. 8). Select the proper

DIAGNOSIS AND TESTING (Continued)

size tool from Special Tool Package 6807, and insert it into the terminal being tested. Use the other end of the tool to insert the meter probe.

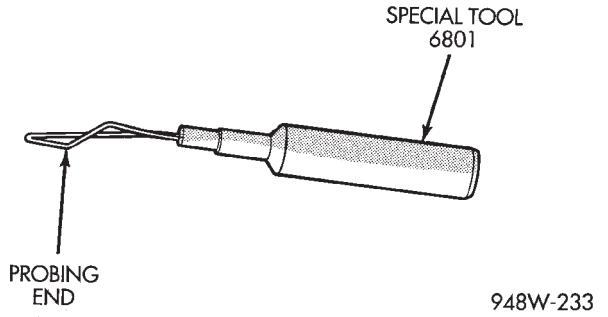


Fig. 8 Probing Tool

INTERMITTENT AND POOR CONNECTIONS

Most intermittent electrical problems are caused by faulty electrical connections or wiring. It is also possible for a sticking component or relay to cause a problem. Before condemning a component or wiring assembly check the following items.

- Connectors are fully seated
- Spread terminals, or terminal push out
- Terminals in the wiring assembly are fully seated into the connector/component and locked in position
- Dirt or corrosion on the terminals. Any amount of corrosion or dirt could cause an intermittent problem
- Damaged connector/component casing exposing the item to dirt and moisture
- Wire insulation that has rubbed through causing a short to ground
- Wiring broke inside of the insulation

CHECKING FOR TERMINAL SPREADING

When an intermittent or open circuit is suspected it is important to check for a spread terminal. To accomplish this remove the suspect female terminal from its connector.

Check the female terminal for drag when mated with the appropriate male terminal. If the terminal is spread (no or little drag felt) replace the terminal using the procedures covered in this section of the wiring diagrams.

TROUBLESHOOTING TESTS

Before beginning any tests on a vehicles electrical system use the Wiring Diagrams and study the circuit. Also refer to the Troubleshooting Wiring Problems section in this section.

TESTING FOR VOLTAGE

(1) Connect the ground lead of a voltmeter to a known good ground (Fig. 9).

(2) Connect the other lead of the voltmeter to the selected test point. The vehicle ignition may need to be turned ON to check voltage. Refer to the appropriate test procedure.

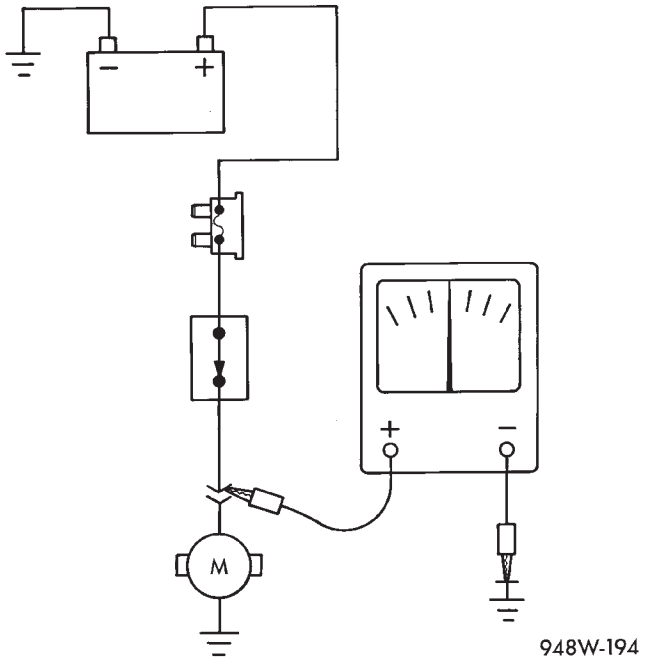


Fig. 9 Testing for Voltage

TESTING FOR CONTINUITY

(1) Remove the fuse for the circuit being checked or, disconnect the battery.

(2) Connect one lead of the ohmmeter to one side of the circuit being tested (Fig. 10).

(3) Connect the other lead to the other end of the circuit being tested. Low or no resistance means good continuity.

TESTING FOR A SHORT TO GROUND

(1) Remove the fuse and disconnect all items involved with the fuse.

(2) Connect a test light or a voltmeter across the terminals of the fuse.

(3) Starting at the fuse block, wiggle the wiring harness about six to eight inches apart and watch the voltmeter/test lamp.

(4) If the voltmeter registers voltage or the test lamp glows, there is a short to ground in that general area of the wiring harness.

TESTING FOR A SHORT TO GROUND ON FUSES POWERING SEVERAL LOADS

(1) Refer to the wiring diagrams and disconnect or isolate all items on the fused circuit.

(2) Replace the blown fuse.

(3) Supply power to the fuse by turning ON the ignition switch or re-connecting the battery.

DIAGNOSIS AND TESTING (Continued)

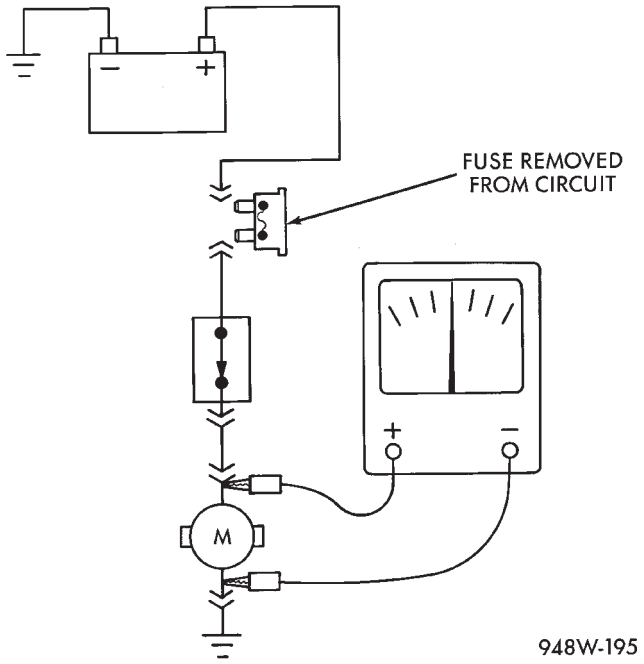


Fig. 10 Testing for Continuity

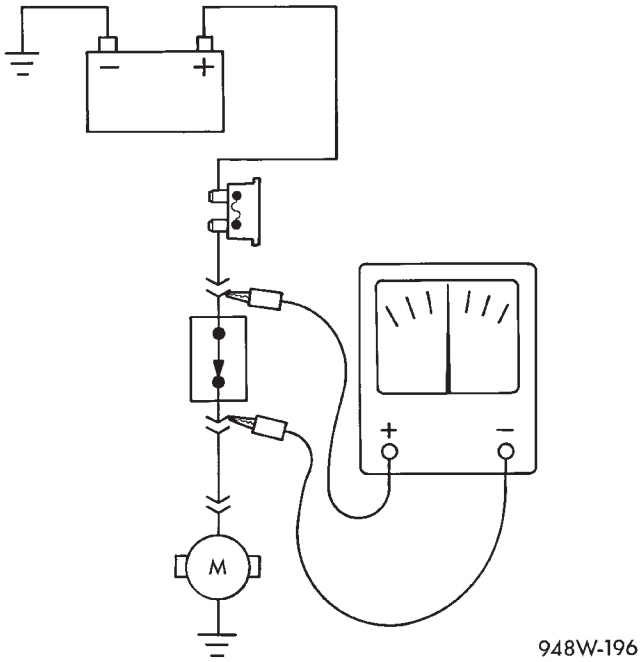


Fig. 11 Testing for Voltage Drop

(4) Start connecting the items in the fuse circuit one at a time. When the fuse blows the circuit with the short to ground has been isolated.

TESTING FOR A VOLTAGE DROP

(1) Connect the positive lead of the voltmeter to the side of the circuit closest to the battery (Fig. 11).

(2) Connect the other lead of the voltmeter to the other side of the switch or component.

(3) Operate the item.

(4) The voltmeter will show the difference in voltage between the two points.

TROUBLESHOOTING WIRING PROBLEMS

When troubleshooting wiring problems there are six steps which can aid in the procedure. The steps are listed and explained below. Always check for non-factory items added to the vehicle before doing any diagnosis. If the vehicle is equipped with these items, disconnect them to verify these add-on items are not the cause of the problem.

(1) Verify the problem.

(2) Verify any related symptoms. Do this by performing operational checks on components that are in the same circuit. Refer to the wiring diagrams.

(3) Analyze the symptoms. Use the wiring diagrams to determine what the circuit is doing, where the problem most likely is occurring and where the diagnosis will continue.

(4) Isolate the problem area.

(5) Repair the problem.

(6) Verify proper operation. For this step check for proper operation of all items on the repaired circuit. Refer to the wiring diagrams.

SERVICE PROCEDURES

WIRING REPAIR

When replacing or repairing a wire, it is important that the correct gauge be used as shown in the wiring diagrams. The wires must also be held securely in place to prevent damage to the insulation.

(1) Disconnect battery negative cable

(2) Remove 1 inch of insulation from each end of the wire.

(3) Place a piece of heat shrink tubing over one side of the wire. Make sure the tubing will be long enough to cover and seal the entire repair area.

(4) Spread the strands of the wire apart on each part of the exposed wire (example 1). (Fig. 12)

(5) Push the two ends of wire together until the strands of wire are close to the insulation (example 2) (Fig. 12)

(6) Twist the wires together (example 3) (Fig. 12)

(7) Solder the connection together using rosin core type solder only. **Do not use acid core solder.**

(8) Center the heat shrink tubing over the joint, and heat using a heat gun. Heat the joint until the tubing is tightly sealed and sealant comes out of both ends of the tubing.

(9) Secure the wire to the existing ones to prevent chafing or damage to the insulation

SERVICE PROCEDURES (Continued)

(10) Connect battery and test all affected systems.

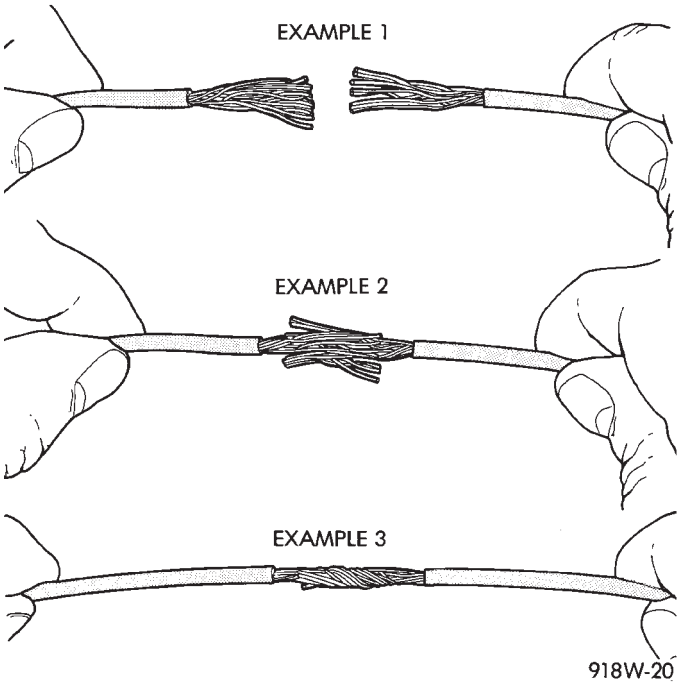


Fig. 12 Wire Repair

TERMINAL/CONNECTOR REPAIR-MOLEX CONNECTORS

(1) Disconnect battery.

(2) Disconnect the connector from its mating half/component.

(3) Insert the terminal releasing special tool 6742 into the terminal end of the connector (Fig. 13).

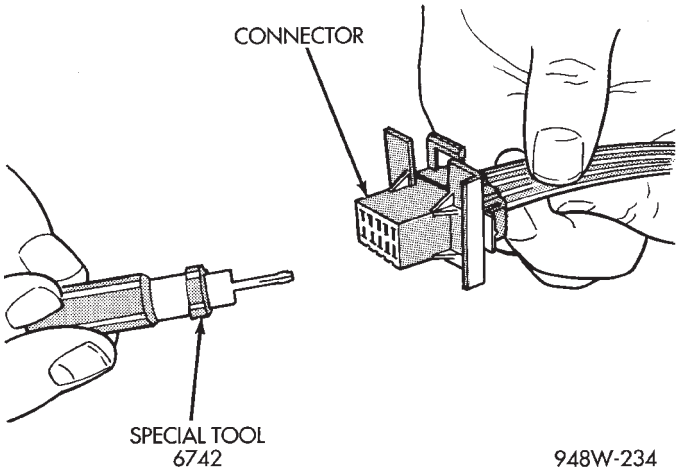


Fig. 13 Molex Connector Repair

(4) Using special tool 6742 release the locking fingers on the terminal (Fig. 14).

(5) Pull on the wire to remove it from the connector.

(6) Repair or replace the connector or terminal, as necessary.

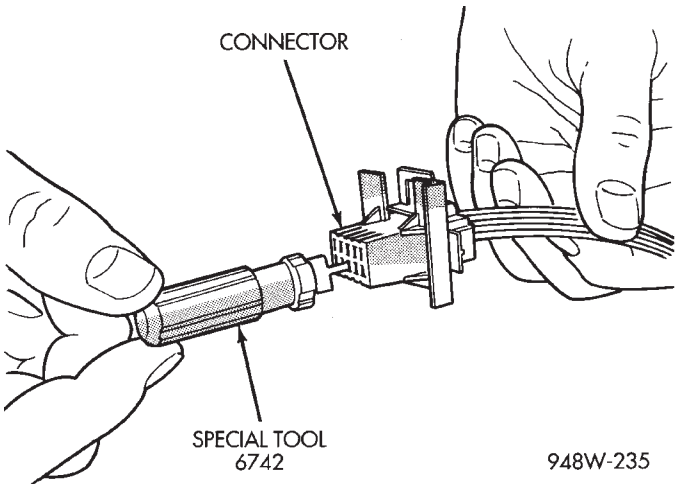


Fig. 14 Using Special Tool 6742

CONNECTOR REPLACEMENT

(1) Disconnect battery.

(2) Disconnect the connector that is to be repaired from its mating half/component

(3) Remove the connector locking wedge, if required (Fig. 15)

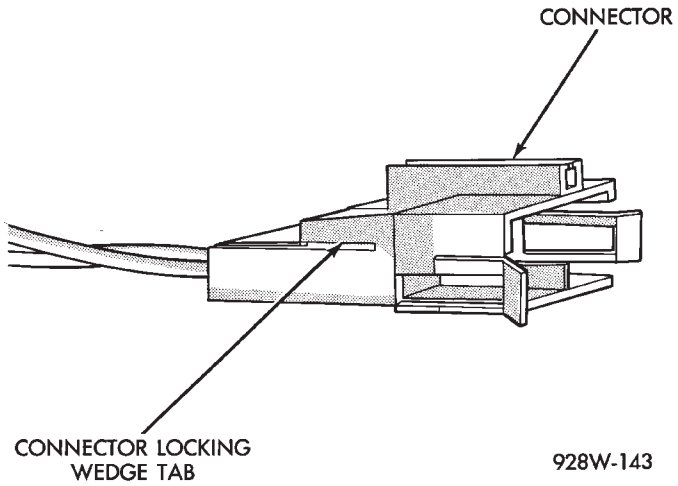


Fig. 15 Connector Locking Wedge

(4) Position the connector locking finger away from the terminal using the proper pick from special tool kit 6680. Pull on the wire to remove the terminal from the connector (Fig. 16) (Fig. 17).

(5) Reset the terminal locking tang, if it has one.

(6) Insert the removed wire in the same cavity on the repair connector.

(7) Repeat steps four through six for each wire in the connector, being sure that all wires are inserted into the proper cavities. For additional connector pinout identification, refer to the wiring diagrams.

(8) Insert the connector locking wedge into the repaired connector, if required.

(9) Connect connector to its mating half/component.

SERVICE PROCEDURES (Continued)

(10) Connect battery and test all affected systems.

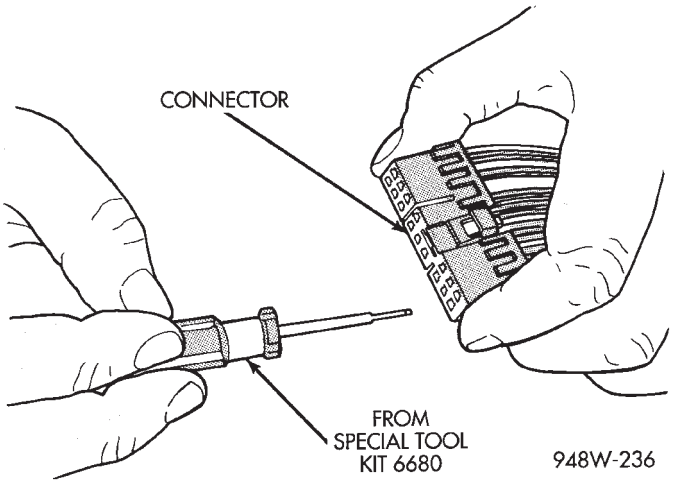


Fig. 16 Terminal Removal

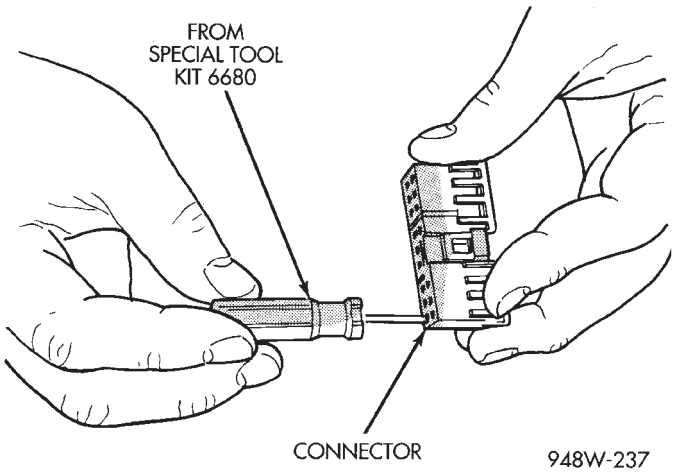


Fig. 17 Terminal Removal Using Special Tool

CONNECTOR AND TERMINAL REPLACEMENT

(1) Disconnect battery.

(2) Disconnect the connector (that is to be repaired) from its mating half/component.

(3) Cut off the existing wire connector directly behind the insulator. Remove six inches of tape from the harness.

(4) Stagger cut all wires on the harness side at 1/2 inch intervals (Fig. 18).

(5) Remove 1 inch of insulation from each wire on the harness side.

(6) Stagger cut the matching wires on the repair connector assembly in the opposite order as was done on the harness side of the repair. Allow extra length for soldered connections. Check that the overall length is the same as the original (Fig. 18).

(7) Remove 1 inch of insulation from each wire.

(8) Place a piece of heat shrink tubing over one side of the wire. Be sure the tubing will be long enough to cover and seal the entire repair area.

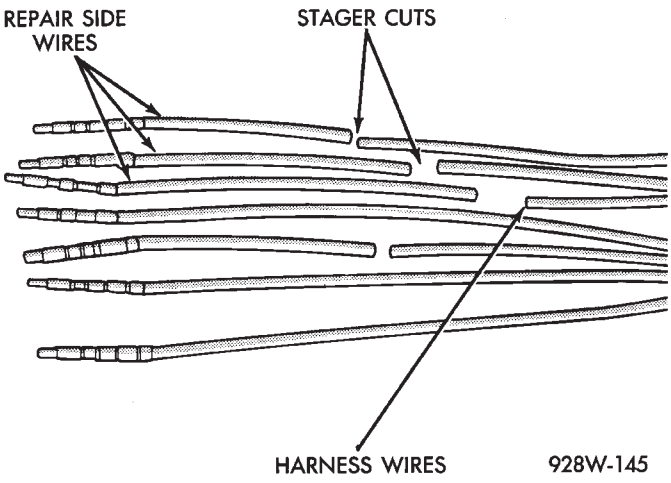


Fig. 18 Stagger Cutting Wires

(9) Spread the strands of the wire apart on each part of the exposed wires.

(10) Push the two ends of wire together until the strands of wire are close to the insulation.

(11) Twist the wires together.

(12) Solder the connection together using rosin core type solder only. **Do not use acid core solder.**

(13) Center the heat shrink tubing over the joint and heat using a heat gun. Heat the joint until the tubing is tightly sealed and sealant comes out of both ends of the tubing

(14) Repeat steps 8 through 13 for each wire.

(15) Re-tape the wire harness starting 1-1/2 inches behind the connector and 2 inches past the repair.

(16) Re-connect the repaired connector.

(17) Connect the battery, and test all affected systems.

TERMINAL/CONNECTOR REPAIR- AUGAT CONNECTORS

(1) Disconnect battery.

(2) Disconnect the connector from its mating half/component.

(3) Push down on the yellow connector locking tab to release the terminals (Fig. 19).

(4) Using special tool 6932, push the terminal to remove it from the connector (Fig. 20).

(5) Repair or replace the connector or terminal as necessary.

(6) When re-assembling the connector, the locking wedge must be placed in the locked position to prevent terminal push out.

TERMINAL REPLACEMENT

(1) Disconnect battery.

(2) Disconnect the connector being repaired from its mating half. Remove connector locking wedge, if required (Fig. 21).

SERVICE PROCEDURES (Continued)

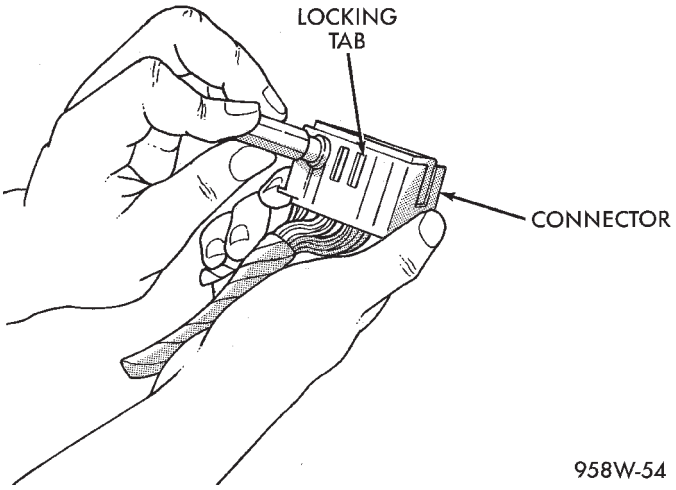


Fig. 19 Augat Connector Repair

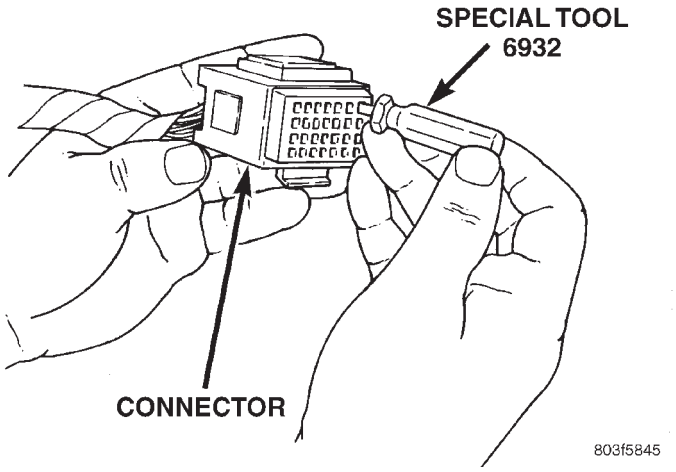


Fig. 20 Using Special Tool 6932

(3) Remove connector locking wedge, if required (Fig. 21).

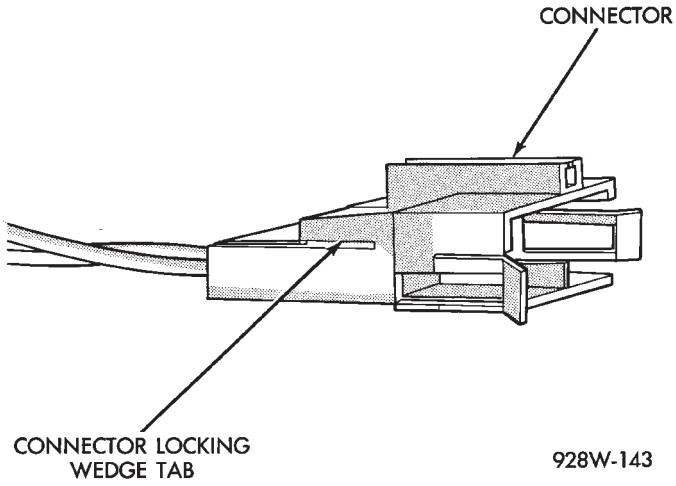


Fig. 21 Connector Locking Wedge Tab (Typical)

(4) Position the connector locking finger away from the terminal using the proper pick from special tool kit 6680. Pull on the wire to remove the terminal from the connector (Fig. 22) (Fig. 23).

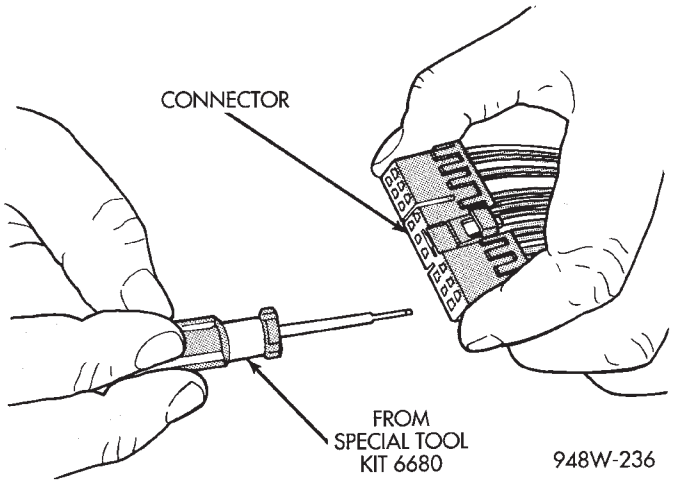


Fig. 22 Terminal Removal

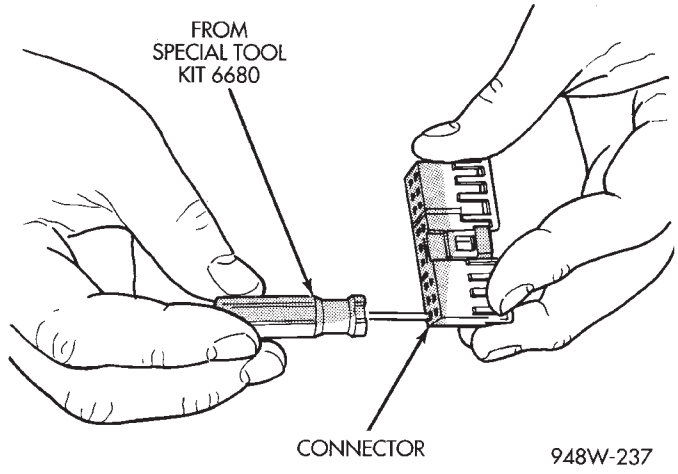


Fig. 23 Terminal Removal Using Special Tool

(5) Cut the wire 6 inches from the back of the connector.

(6) Remove 1 inch of insulation from the wire on the harness side.

(7) Select a wire from the terminal repair assembly that best matches the color wire being repaired.

(8) Cut the repair wire to the proper length and remove 1 inch of insulation.

(9) Place a piece of heat shrink tubing over one side of the wire. Make sure the tubing will be long enough to cover and seal the entire repair area.1

(10) Spread the strands of the wire apart on each part of the exposed wires.

(11) Push the two ends of wire together until the strands of wire are close to the insulation.

(12) Twist the wires together.

(13) Solder the connection together using rosin core type solder only. **Do not use acid core solder.**

SERVICE PROCEDURES (Continued)

(14) Center the heat shrink tubing over the joint and heat using a heat gun. Heat the joint until the tubing is tightly sealed and sealant comes out of both ends of the tubing.

(15) Insert the repaired wire into the connector.

(16) Install the connector locking wedge, if required, and reconnect the connector to its mating half/component.

(17) Re-tape the wire harness starting 1-1/2 inches behind the connector and 2 inches past the repair.

(18) Connect battery, and test all affected systems.

DIODE REPLACEMENT

(1) Disconnect the battery.

(2) Locate the diode in the harness, and remove the protective covering.

(3) Remove the diode from the harness, pay attention to the current flow direction (Fig. 24).

(4) Remove the insulation from the wires in the harness. Only remove enough insulation to solder in the new diode.

(5) Install the new diode in the harness, making sure current flow is correct. If necessary refer to the appropriate wiring diagram for current flow.

(6) Solder the connection together using rosin core type solder only. **Do not use acid core solder.**

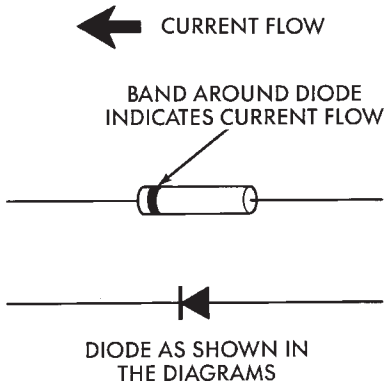


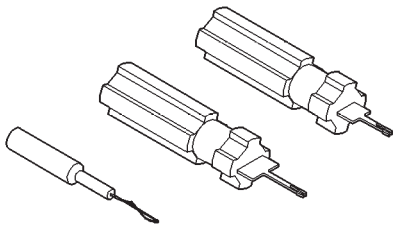
Fig. 24 Diode Identification

(7) Tape the diode to the harness using electrical tape making, sure the diode is completely sealed from the elements.

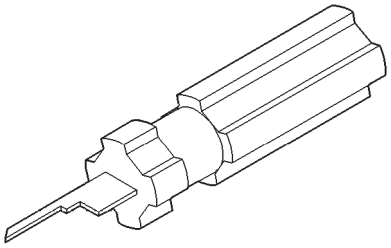
(8) Re-connect the battery, and test affected systems.

SPECIAL TOOLS

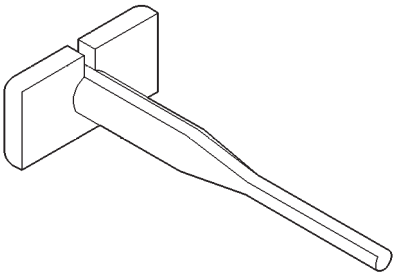
WIRING/TERMINAL



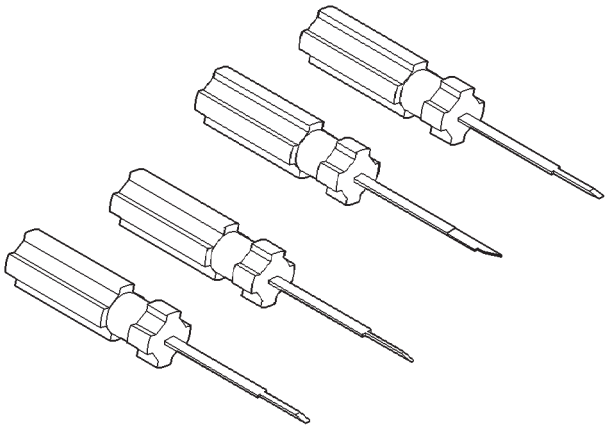
Probing Tool Package 6807



Terminal Removing Tool 6932



Terminal Removing Tool 6934



Terminal Pick 6680

8W-02 COMPONENT INDEX

INDEX

page

GENERAL INFORMATION 3

COMPONENT INDEX

Component	Page
A/C Compressor Clutch	8W-42
A/C Compressor Clutch Relay	8W-42
A/C Evaporator Temperature Sensor	8W-42, 45
A/C Heater Control	8W-42
A/C Pressure Transducer	8W-30, 42
ABS Hydraulic Modulator	8W-35
ABS Pump Motor	8W-35
ABS Pump Motor Relay	8W-35
ABS Relay Box	8W-35
ABS System Relay	8W-35
ABS Warning Lamp	8W-35, 40
Airbag Control Module	8W-43
Antennas	8W-47
Ash Receiver Lamp	8W-44
Automatic Day/Night Mirror	8W-44
Automatic Shut Down Relay	8W-20, 30
Autostick Switch	8W-31
Back-Up Lamps	8W-51
Battery	8W-20
Battery Temperature Sensor	8W-30
Blower Motor Resistor Block	8W-42
Body Control Module	8W-45
Brake Warning Pressure Switch	8W-35, 40
Camshaft Position Sensor	8W-30
Center High Mounted Stop Lamp	8W-51
Cigar Lighter/Power Outlet	8W-41
Circuit Breakers (PDC)	8W-12
Clockspring	8W-12, 33, 41
Cluster Illumination Lamps	8W-40, 44
Clutch Interlock Switch	8W-10, 21, 31
Combination Flasher	8W-52
Controller Anti-Lock Brake	8W-35
Crankshaft Position Sensor	8W-30
Data Link Connector	8W-30
Daytime Running Lamp Module	8W-50
Decay Solenoids	8W-35
Decklid Release Relay	8W-12, 61
Decklid Release Switch	8W-45, 61
Decklid Solenoid	8W-61
Distributor	8W-30
Door Ajar Switches	8W-39, 45, 67
Door Arm/Disarm Switches	8W-39
Door Courtesy Lamps	8W-44
Door Speakers	8W-47
Door Window Motor Relays	8W-60
Driver Seat Belt Solenoid	8W-67
Driver Side Airbag	8W-43
Duty Cycle Evap/Purge Solenoid	8W-30
Electronic EGR Transducer Solenoid	8W-30
Engine Coolant Temperature Sensor	8W-30
Engine Starter Motor	8W-21
Engine Starter Motor Relay	8W-21
Fog Lamp Switch	8W-50
Fog Lamps	8W-50, 51
Front Vertical Motor	8W-63
Fuel Gauge	8W-40
Fuel Injectors	8W-30
Fuel Pump Module	8W-30
Fuel Pump Relay	8W-30
Fuses (JB)	8W-12
Fuses (PDC)	8W-10
Fusible Link	8W-20
Generator	8W-20
Glove Box Lamp	8W-44
Ground Distribution	8W-15
Headlamp Delay Relay	8W-45, 50
Headlamp Leveling Motors	8W-50
Headlamp Leveling Switch	8W-50
Headlamp Switch	8W-50
Headlamps	8W-50
Heated Oxygen Sensors	8W-30
High Speed Radiator Fan Relay	8W-42
Horn Relay	8W-41
Horn Switches	8W-12, 41, 45
Horns	8W-41
Idle Air Control Motor	8W-30
Ignition Coil Pack	8W-30
Ignition Switch	8W-10
Illuminated Entry Relay	8W-44
Immobilizer	8W-61
Indicator Lamps	8W-40
Instrument Cluster	8W-40
Instrument Panel Speakers	8W-47
Intake Air Temperature Sensor	8W-30
Intermittent Wiper Relay	8W-53
Intermittent Wiper Switch	8W-53
Junction Block	8W-12
Key-In Halo Lamp	8W-44
Key-In Switch	8W-45
Knock Sensor	8W-30

Component	Page
License Lamp	8W-51, 51-2
Low Speed Radiator Fan Relay	8W-42
Malfunction Indicator Lamp (Check Engine)	8W-40
Manifold Absolute Pressure Sensor	8W-30
Master Power Window Switch	8W-60
Mode Door Actuator	8W-42
Noise Suppressor	8W-30
Odometer	8W-40
Oil Pressure Lamp	8W-40
Oil Pressure Switch	8W-40
Output Shaft Speed Sensor	8W-31
Overhead Map Lamp	8W-44
Panel Lamps Dimmer Switch	8W-44
Park Brake Switch	8W-35, 40, 50
Park/Turn Signal Lamps	8W-50
Passenger Seat Belt Solenoid	8W-67
Passenger Side Airbag	8W-43
Power Amplifier	8W-47
Power Distribution Center	8W-10
Power Door Lock Motors	8W-45, 61
Power Door Lock Switches	8W-61
Power Mirror Switch	8W-62
Power Mirrors	8W-47, 62
Power Seat Switch	8W-63
Power Steering Pressure Switch	8W-30
Power Top Pump Motor	8W-66
Power Top Switch	8W-66
Power Top Up/Down Relays	8W-66
Power Window Motors	8W-60
Power Window Switches	8W-60
Powertrain Control Module	8W-30
PRNDL LED	8W-44
Radiator Fan Motor Assembly	8W-42
Radio	8W-47
Rear Floor Courtesy Lamp	8W-44
Rear Fog Lamp Switch	8W-51
Rear Window Defogger	8W-47
Rear Window Defogger Relay	8W-47
Remote Keyless Entry Antenna	8W-45, 61
Seat Belt Control Module	8W-67
Seat Belt Switch	8W-40, 45
Side Repeaters	8W-52
Speakers	8W-47
Speedometer	8W-40
Splice Details	8W-70
Stop Lamp Switch	8W-33
Tachometer	8W-40
Tail/Stop Lamps	8W-51
Throttle Position Sensor	8W-30
Transmission Control Module	8W-31
Transmission Range Switch	8W-31
Transmission Relay	8W-31
Transmission Solenoid And Pressure Switch Assembly	8W-31
Traveler	8W-46
Trip Odometer	8W-40
Trunk Ajar Switch	8W-40, 44
Trunk Key Cylinder Switch	8W-39
Trunk Lamp	8W-44
Turbine Speed Sensor	8W-31
Turn Signal Lamps	8W-52
Turn Signal/Hazard Warning Switch	8W-52
Universal Garage Door Opener	8W-44
Vehicle Speed Control Servo	8W-33
Vehicle Speed Control/Horn Switch	8W-33, 41
Visor/Vanity Lamps	8W-44
Warning Lamps	8W-40
Washer Fluid Level Switch	8W-40, 53
Wheel Speed Sensors	8W-35
Window Timer Module	8W-60
Windshield Washer Pump Motor	8W-53
Windshield Wiper Motor	8W-53
Wiper High/Low Relay	8W-53

8W-02 COMPONENT INDEX

GENERAL INFORMATION

INTRODUCTION

This section provides an alphabetical listing of all the components covered in group 8W. For information on system operation, refer to the appropriate section of the wiring diagrams.

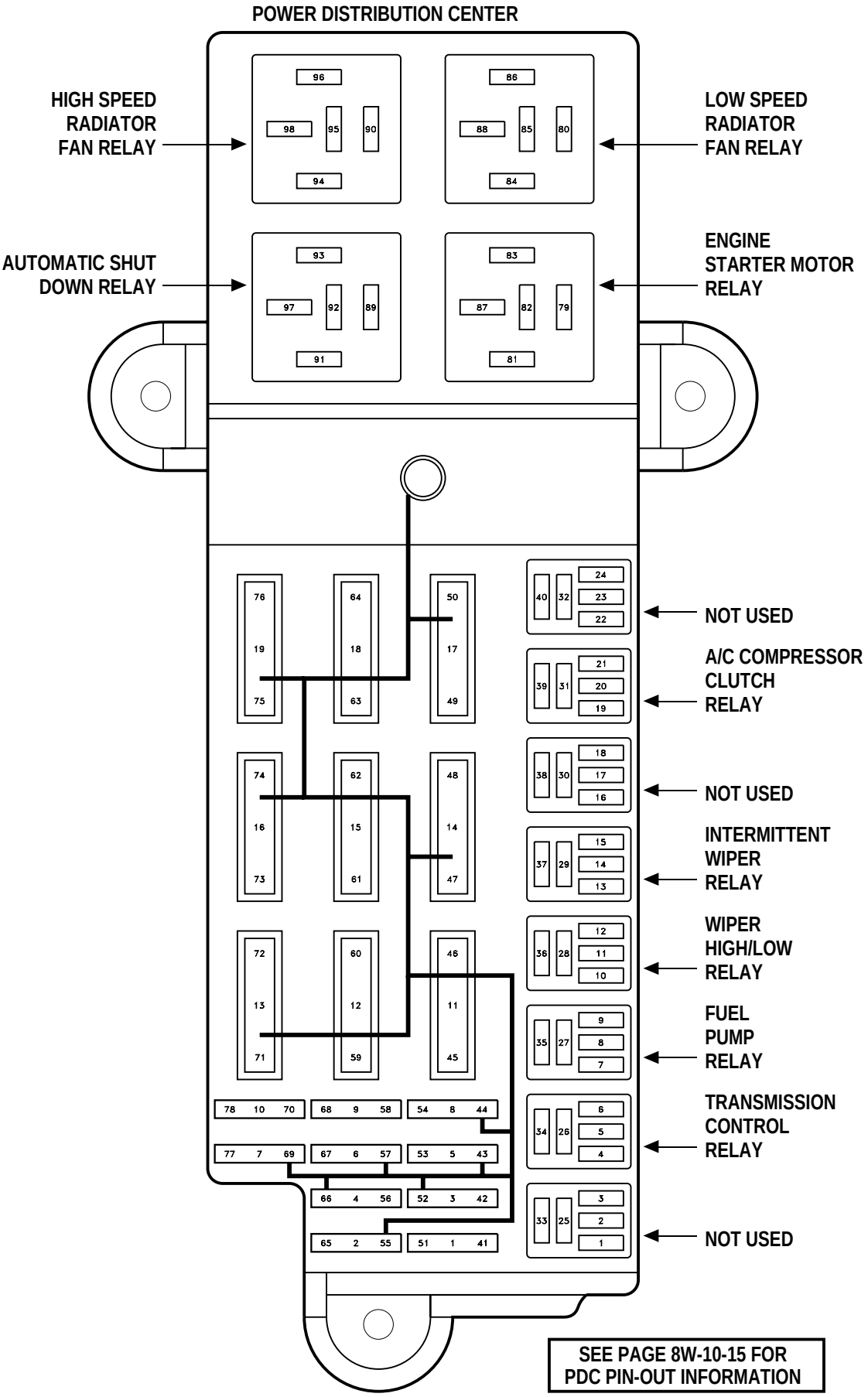
8W-10 POWER DISTRIBUTION

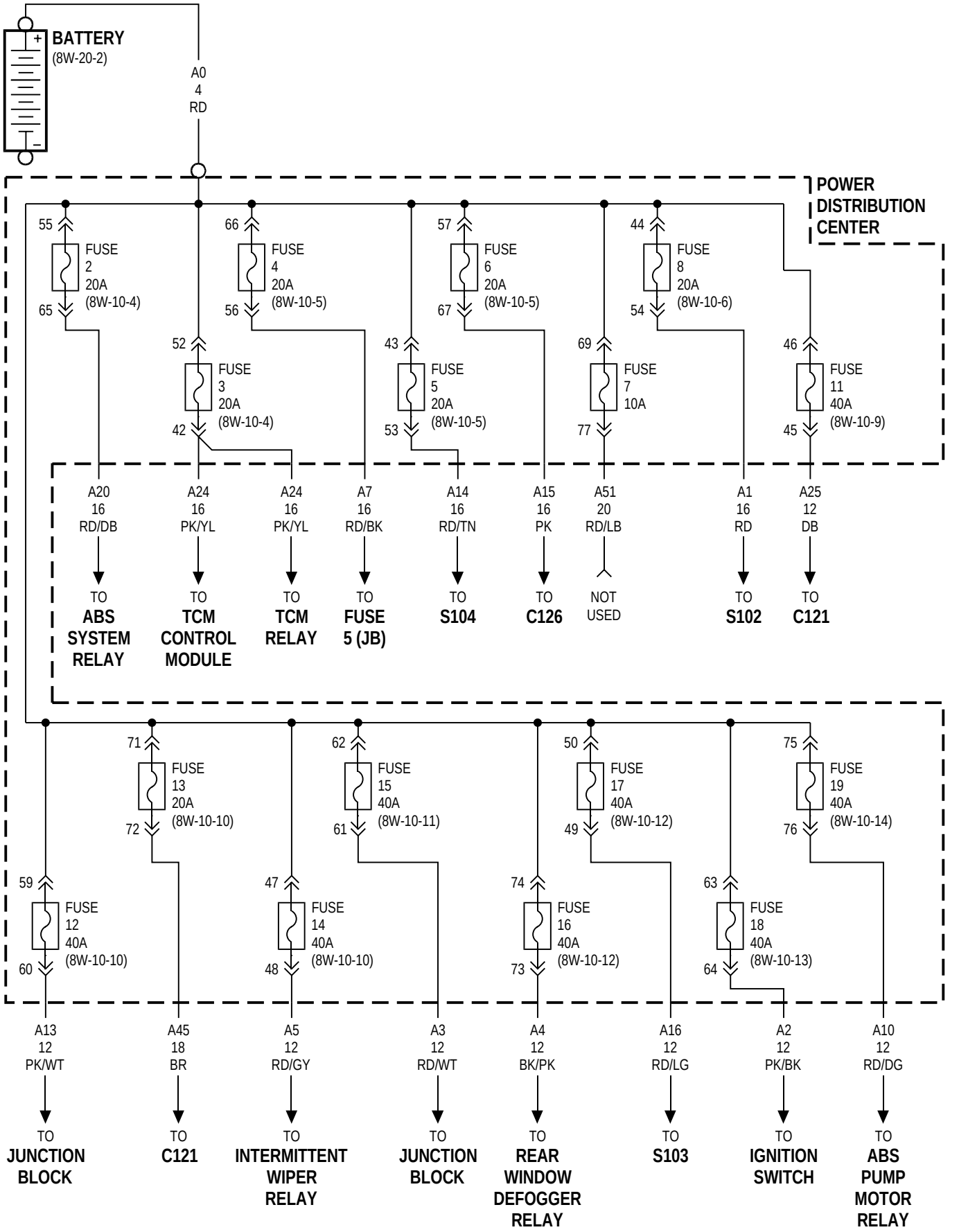
INDEX

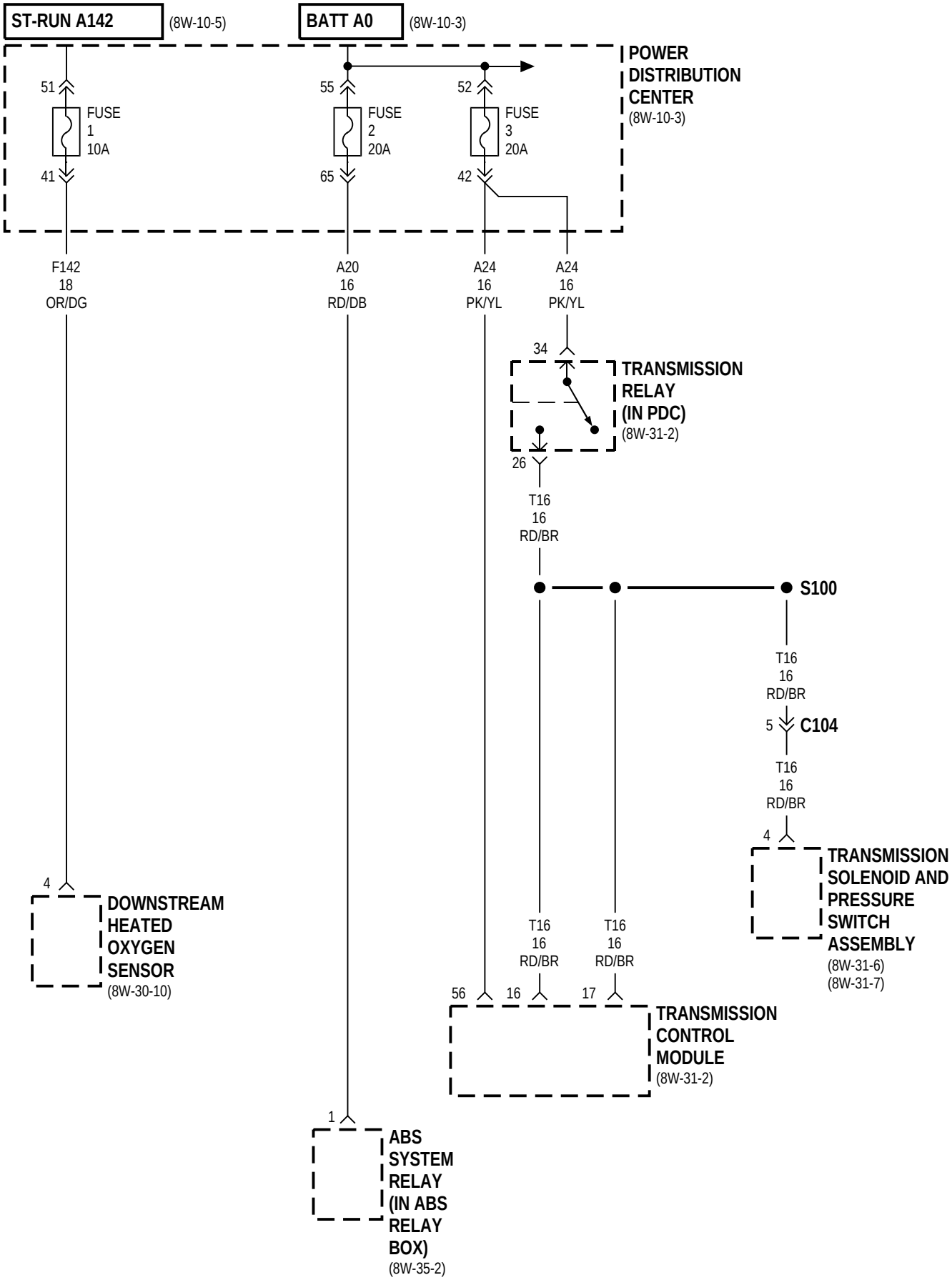
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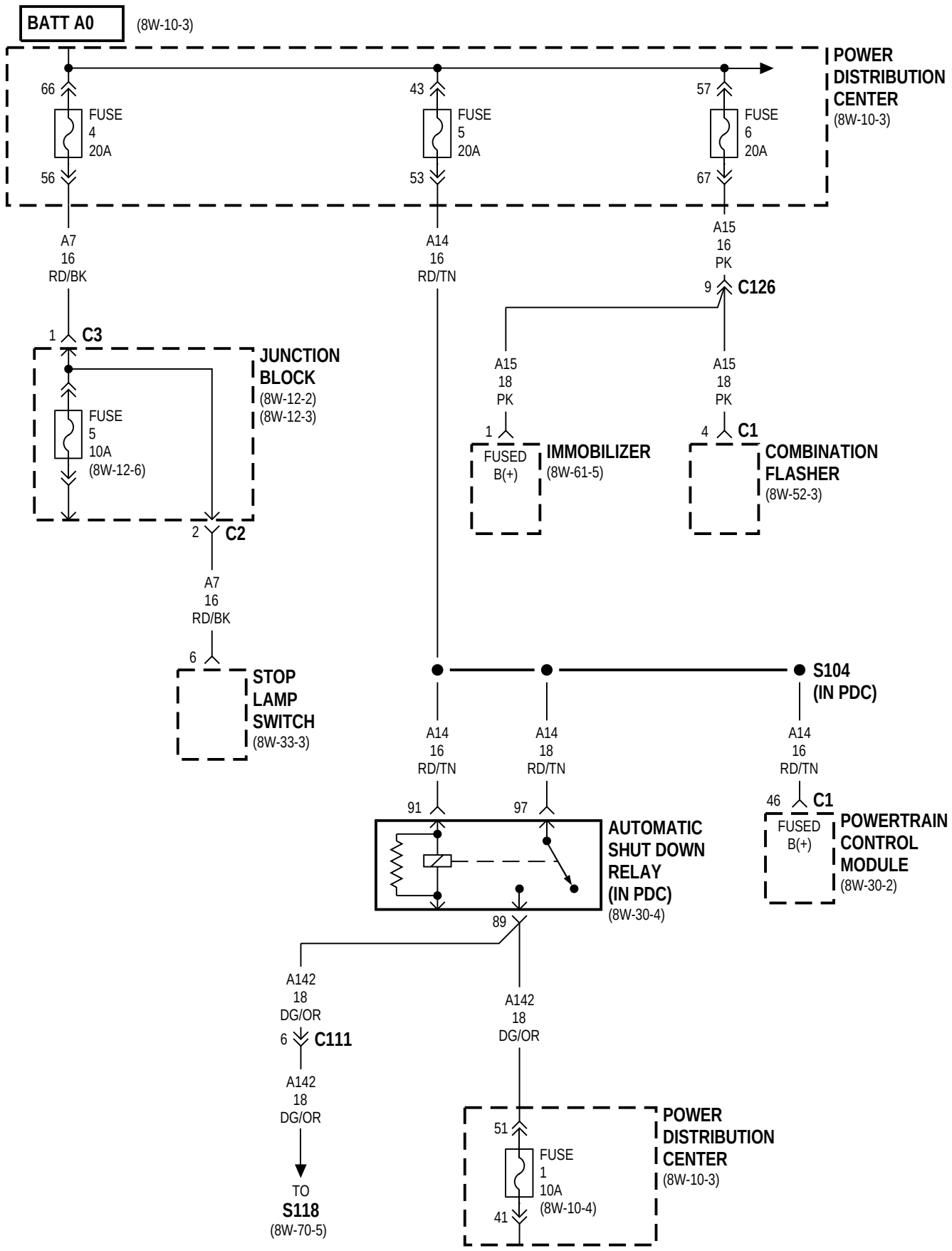
SCHEMATICS AND DIAGRAMS 1
DESCRIPTION AND OPERATION 18

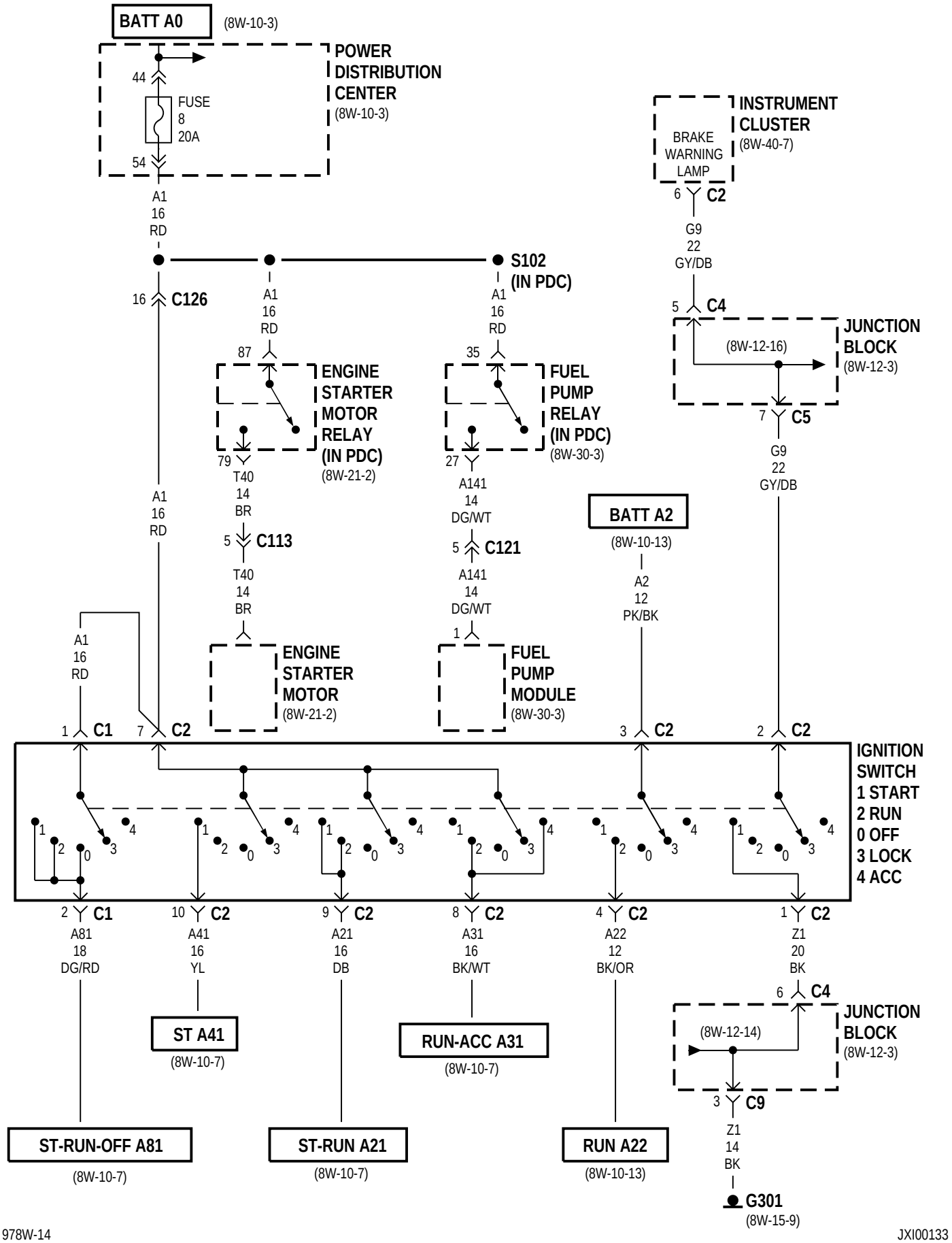
Component	Page
A/C Compressor Clutch	8W-10-12
A/C Compressor Clutch Relay	8W-10-8, 12
ABS Pump Motor	8W-10-14
ABS Pump Motor Relay	8W-10-14
ABS Relay Box	8W-10-14
ABS System Relay	8W-10-4
Automatic Shut Down Relay	8W-10-5
Battery	8W-10-3
Body Control Module	8W-10-7, 11
Circuit Breaker 18	8W-10-11
Circuit Breaker 19	8W-10-13
Clutch Inter Lock Switch	8W-10-7
Combination Flasher	8W-10-5
Controller Anti-Lock Brake	8W-10-9, 14
Delay	8W-10-11
Downstream Heated Oxygen Sensor	8W-10-4
Duty Cycle Evap/Purge Solenoid	8W-10-8
Engine Starter Motor	8W-10-6
Engine Starter Motor Relay	8W-10-6, 7
Fuel Pump Module	8W-10-6
Fuel Pump Relay	8W-10-6, 9
Fuse 1	8W-10-4, 5, 13
Fuse 2	8W-10-3, 4
Fuse 3	8W-10-3, 4
Fuse 4	8W-10-3, 5, 13
Fuse 5	8W-10-3, 5
Fuse 6	8W-10-3, 5, 12
Fuse 7	8W-10-3, 10
Fuse 8	8W-10-3, 6, 10
Fuse 9	8W-10-7, 8, 11
Fuse 10	8W-10-7, 9, 11
Fuse 11	8W-10-3, 7, 9
Fuse 12	8W-10-3, 10, 11
Fuse 13	8W-10-3, 10, 11
Fuse 14	8W-10-3, 7, 10
Fuse 15	8W-10-3, 7, 11
Fuse 16	8W-10-3, 12, 13
Fuse 17	8W-10-3, 7, 12
Fuse 18	8W-10-3, 13
Fuse 19	8W-10-3, 14
G301	8W-10-6
Headlamp	8W-10-11
Headlamp Switch	8W-10-11
High Speed Radiator Fan Relay	8W-10-8, 12
Ignition Switch	8W-10-6, 7, 13
Immobilizer	8W-10-5, 8
Instrument Cluster	8W-10-6, 8
Intermittent Wiper Relay	8W-10-10
Junction Block	8W-10-5, 6, 7, 10, 11, 12, 13
Low Speed Radiator Fan Relay	8W-10-8, 12
Power Distribution Center	8W-10-3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14
Power Top Up/Down Relays	8W-10-9
Powertrain Control Module	8W-10-5, 9
Radiator Fan Motor Assembly	8W-10-12
Rear Window Defogger	8W-10-12
Rear Window Defogger Relay	8W-10-12
S100	8W-10-4
S102	8W-10-6
S103	8W-10-12
S104	8W-10-5
S105	8W-10-9
S106	8W-10-8
S118	8W-10-5
Seat Belt Control Module	8W-10-10
Stop Lamp Switch	8W-10-5
Transmission Control Module	8W-10-4, 7
Transmission Relay	8W-10-4
Transmission Solenoid And Pressure Switch Assembly	8W-10-4
Windshield Wiper Motor	8W-10-10
Wiper High/Low Relay	8W-10-10

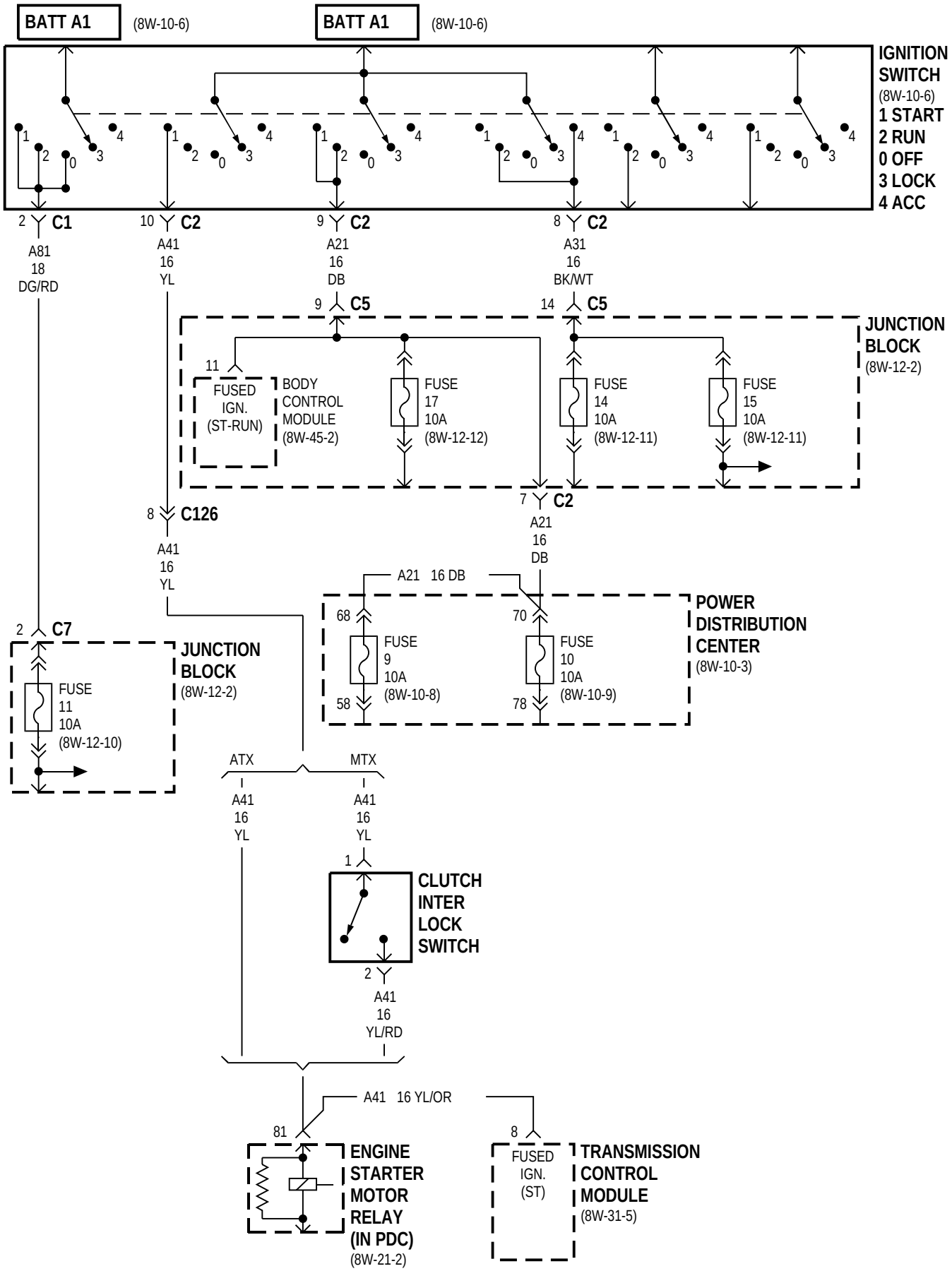

POWER DISTRIBUTION CENTER
HIGH SPEED RADIATOR FAN RELAY
LOW SPEED RADIATOR FAN RELAY
AUTOMATIC SHUT DOWN RELAY
ENGINE STARTER MOTOR RELAY
NOT USED
A/C COMPRESSOR CLUTCH RELAY
NOT USED
INTERMITTENT WIPER RELAY
WIPER HIGH/LOW RELAY
FUEL PUMP RELAY
TRANSMISSION CONTROL RELAY
NOT USED
SEE PAGE 8W-10-15 FOR PDC PIN-OUT INFORMATION

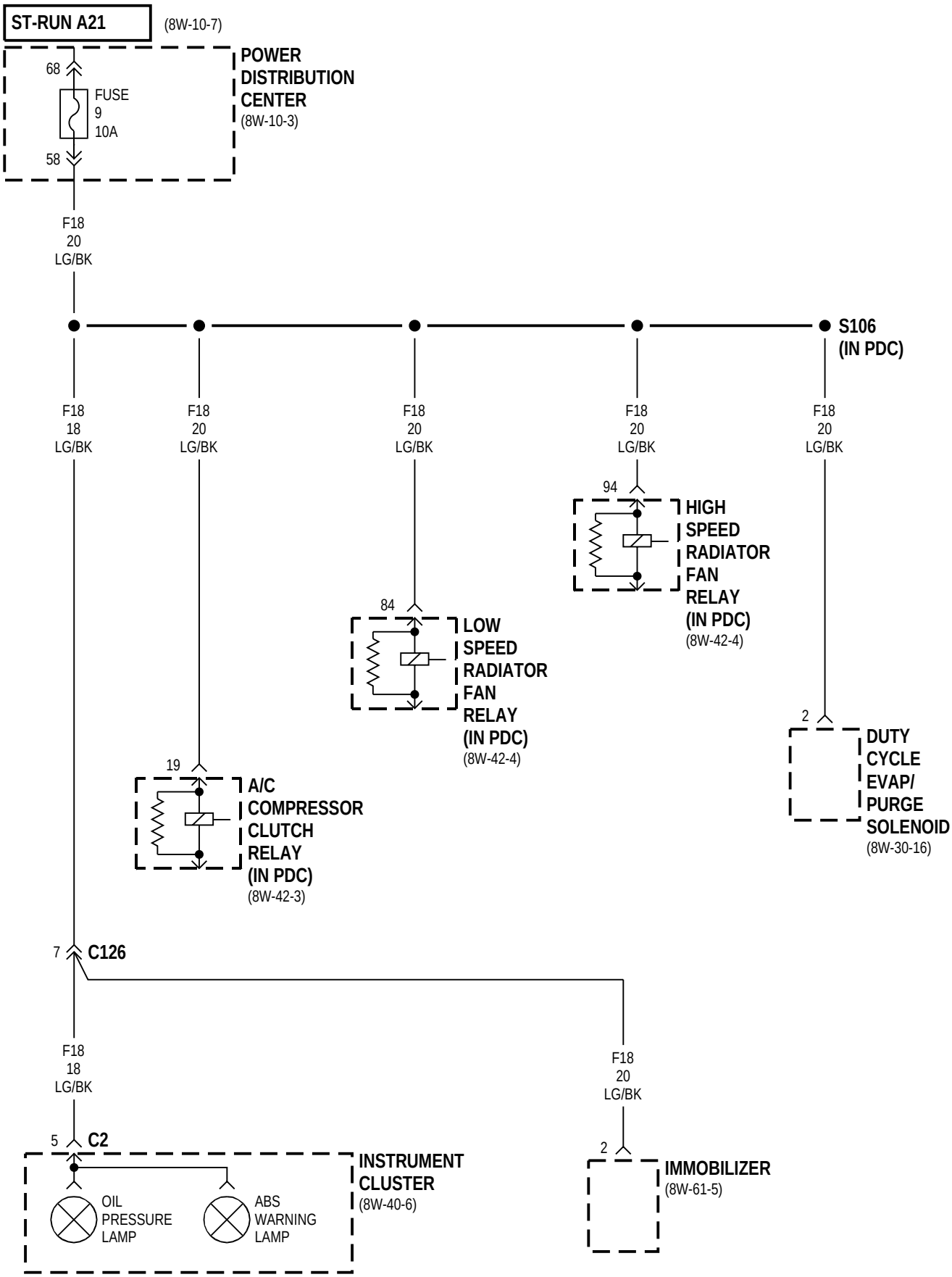

BATTERY
(8W-20-2)
A0
4
RD
POWER
DISTRIBUTION
CENTER
55
FUSE
2
20A
(8W-10-4)
65
66
FUSE
4
20A
(8W-10-5)
56
57
FUSE
6
20A
(8W-10-5)
67
44
FUSE
8
20A
(8W-10-6)
54
52
FUSE
3
20A
(8W-10-4)
42
43
FUSE
5
20A
(8W-10-5)
53
69
FUSE
7
10A
77
46
FUSE
11
40A
(8W-10-9)
45
A20
16
RD/DB
TO
ABS
SYSTEM
RELAY
A24
16
PK/YL
TO
TCM
CONTROL
MODULE
A24
16
PK/YL
TO
TCM
RELAY
A7
16
RD/BK
TO
FUSE
5 (JB)
A14
16
RD/TN
TO
S104
A15
16
PK
TO
C126
A51
20
RD/LB
NOT
USED
A1
16
RD
TO
S102
A25
12
DB
TO
C121
71
FUSE
13
20A
(8W-10-10)
72
62
FUSE
15
40A
(8W-10-11)
61
50
FUSE
17
40A
(8W-10-12)
49
75
FUSE
19
40A
(8W-10-14)
76
59
FUSE
12
40A
(8W-10-10)
60
47
FUSE
14
40A
(8W-10-10)
48
74
FUSE
16
40A
(8W-10-12)
73
63
FUSE
18
40A
(8W-10-13)
64
A13
12
PK/WT
TO
JUNCTION
BLOCK
A45
18
BR
TO
C121
A5
12
RD/GY
TO
INTERMITTENT
WIPER
RELAY
A3
12
RD/WT
TO
JUNCTION
BLOCK
A4
12
BK/PK
TO
REAR
WINDOW
DEFOGGER
RELAY
A16
12
RD/LG
TO
S103
A2
12
PK/BK
TO
IGNITION
SWITCH
A10
12
RD/DG
TO
ABS
PUMP
MOTOR
RELAY

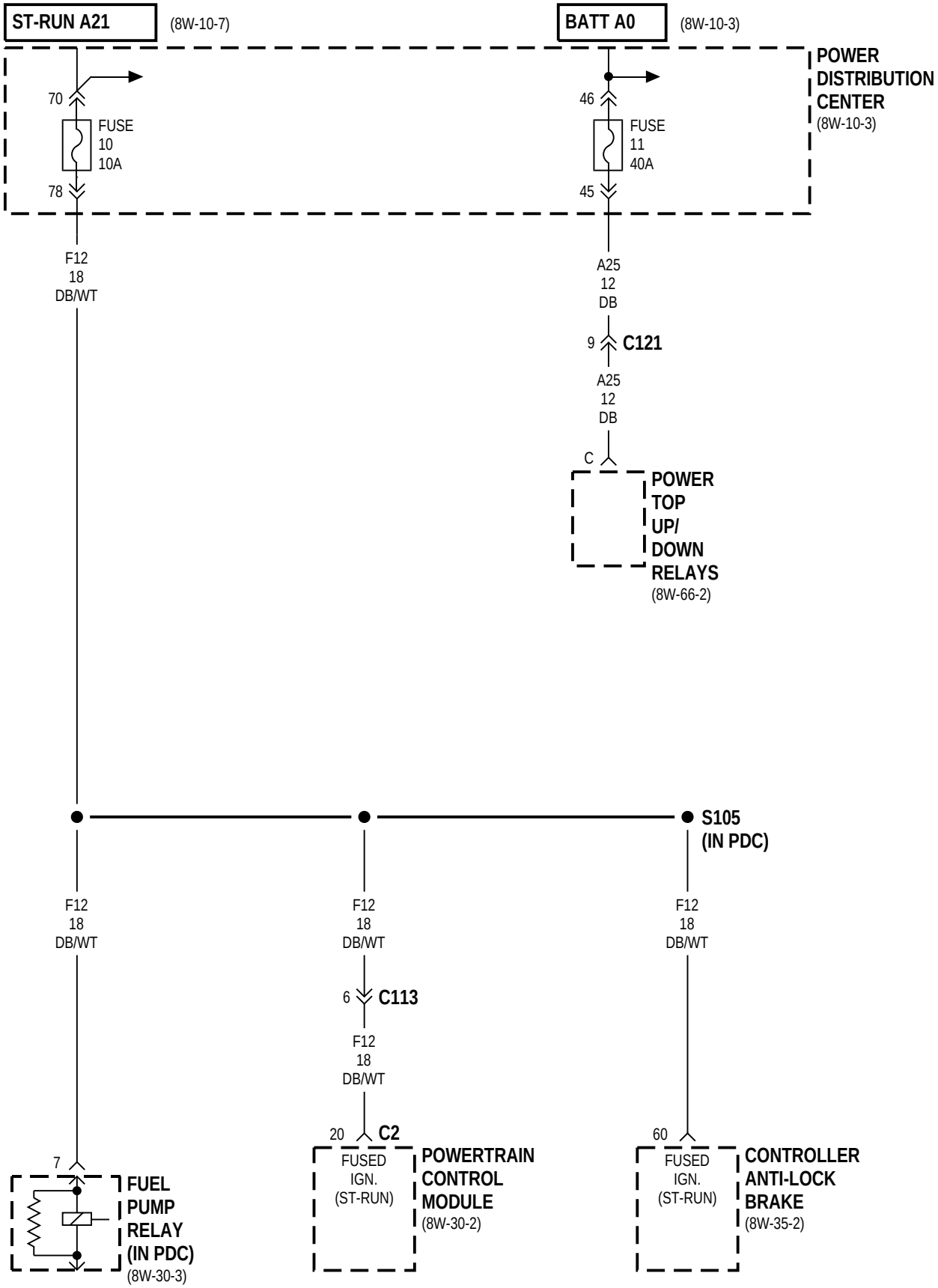

ST-RUN A142
(8W-10-5)
BATT A0
(8W-10-3)
POWER DISTRIBUTION CENTER
(8W-10-3)
51
FUSE 1 10A
41
55
FUSE 2 20A
65
52
FUSE 3 20A
42
F142 18 OR/DG
A20 16 RD/DB
A24 16 PK/YL
A24 16 PK/YL
34
TRANSMISSION RELAY (IN PDC)
(8W-31-2)
26
T16 16 RD/BR
S100
T16 16 RD/BR
5
C104
T16 16 RD/BR
4
TRANSMISSION SOLENOID AND PRESSURE SWITCH ASSEMBLY
(8W-31-6)
(8W-31-7)
4
DOWNSTREAM HEATED OXYGEN SENSOR
(8W-30-10)
T16 16 RD/BR
T16 16 RD/BR
56
16
17
TRANSMISSION CONTROL MODULE
(8W-31-2)
1
ABS SYSTEM RELAY (IN ABS RELAY BOX)
(8W-35-2)

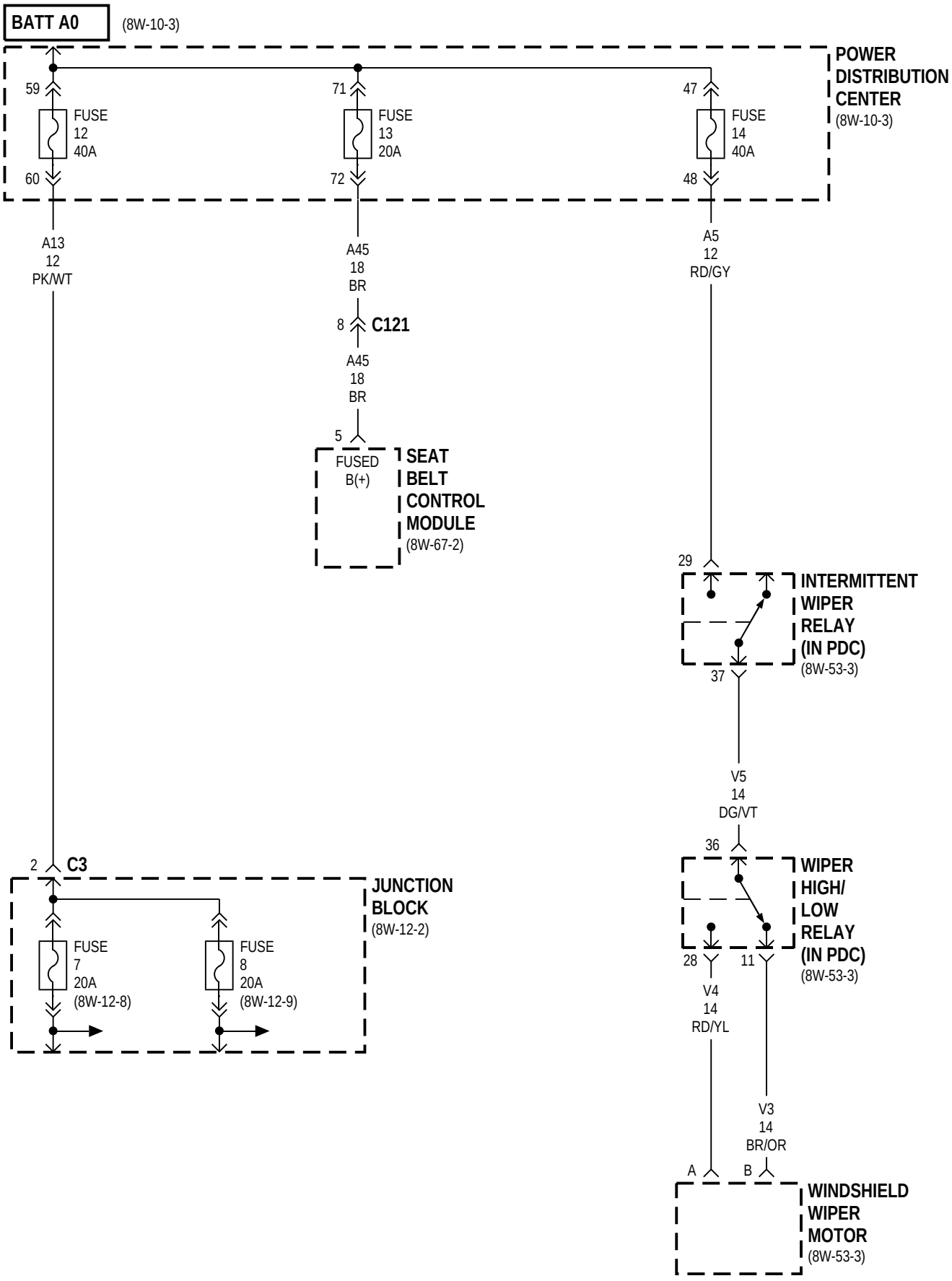

BATT A0
(8W-10-3)
POWER DISTRIBUTION CENTER
(8W-10-3)
66
FUSE 4 20A
56
43
FUSE 5 20A
53
57
FUSE 6 20A
67
A7 16 RD/BK
A14 16 RD/TN
A15 16 PK
9 C126
1 C3
JUNCTION BLOCK
(8W-12-2)
(8W-12-3)
FUSE 5 10A
(8W-12-6)
2 C2
A15 18 PK
1
FUSED B(+)
IMMOBILIZER
(8W-61-5)
A15 18 PK
4 C1
COMBINATION FLASHER
(8W-52-3)
A7 16 RD/BK
6
STOP LAMP SWITCH
(8W-33-3)
S104
(IN PDC)
A14 16 RD/TN
A14 18 RD/TN
A14 16 RD/TN
91
97
AUTOMATIC SHUT DOWN RELAY
(IN PDC)
(8W-30-4)
46 C1
FUSED B(+)
POWERTRAIN CONTROL MODULE
(8W-30-2)
89
A142 18 DG/OR
6 C111
A142 18 DG/OR
A142 18 DG/OR
TO S118
(8W-70-5)
51
FUSE 1 10A
(8W-10-4)
41
POWER DISTRIBUTION CENTER
(8W-10-3)

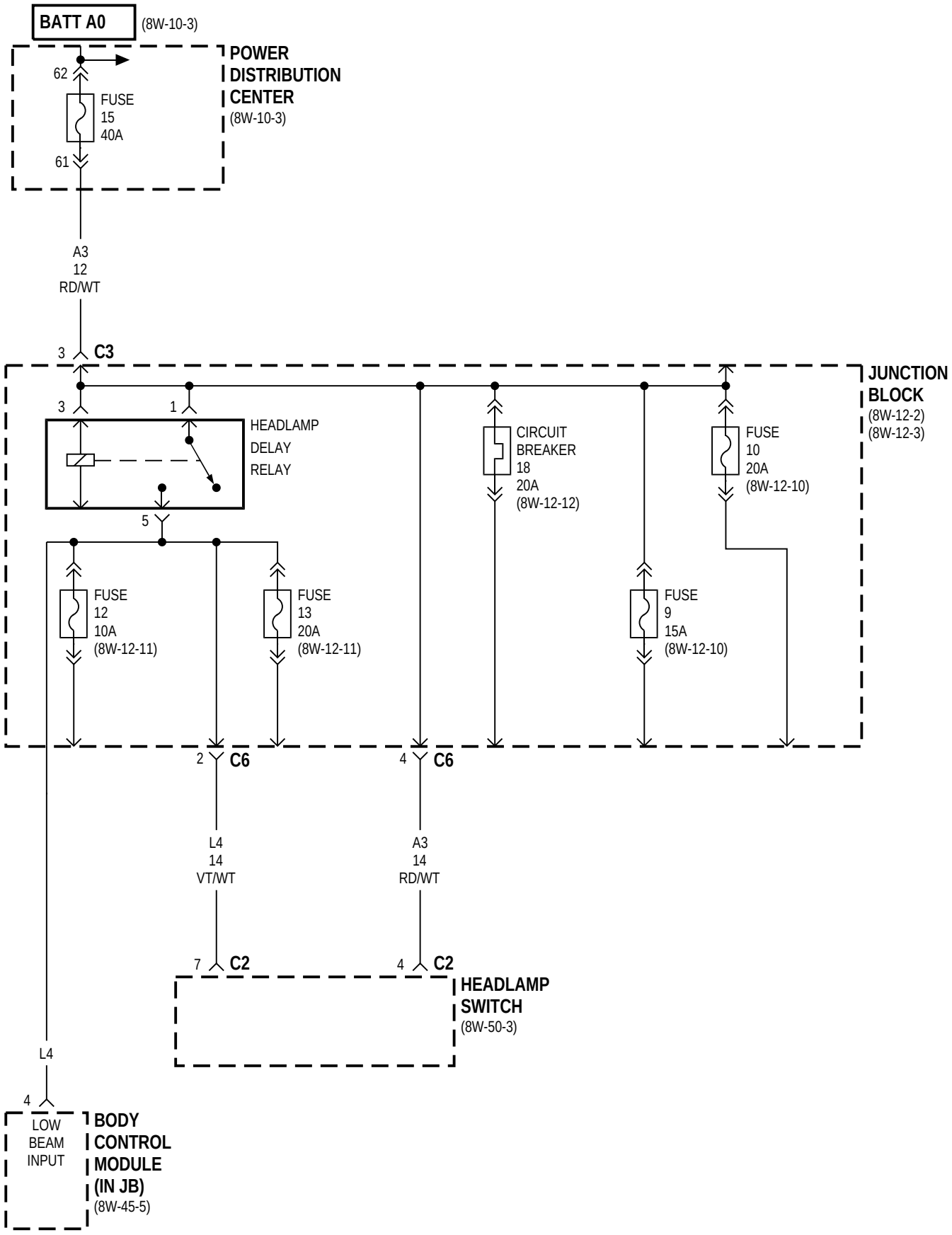

BATT A0
(8W-10-3)
POWER DISTRIBUTION CENTER
(8W-10-3)
44
FUSE 8 20A
54
A1 16 RD
16 C126
S102 (IN PDC)
A1 16 RD
87
ENGINE STARTER MOTOR RELAY (IN PDC)
(8W-21-2)
79
T40 14 BR
5 C113
ENGINE STARTER MOTOR
(8W-21-2)
A1 16 RD
35
FUEL PUMP RELAY (IN PDC)
(8W-30-3)
27
A141 14 DG/WT
5 C121
A141 14 DG/WT
1
FUEL PUMP MODULE
(8W-30-3)
INSTRUMENT CLUSTER
(8W-40-7)
BRAKE WARNING LAMP
6 C2
G9 22 GY/DB
5 C4
JUNCTION BLOCK
(8W-12-3)
(8W-12-16)
7 C5
G9 22 GY/DB
BATT A2
(8W-10-13)
A2 12 PK/BK
3 C2
2 C2
A1 16 RD
1 C1
7 C2
IGNITION SWITCH
1 START
2 RUN
0 OFF
3 LOCK
4 ACC
2 C1
A81 18 DG/RD
ST-RUN-OFF A81
(8W-10-7)
10 C2
A41 16 YL
ST A41
(8W-10-7)
9 C2
A21 16 DB
ST-RUN A21
(8W-10-7)
8 C2
A31 16 BK/WT
RUN-ACC A31
(8W-10-7)
4 C2
A22 12 BK/OR
RUN A22
(8W-10-13)
1 C2
Z1 20 BK
6 C4
JUNCTION BLOCK
(8W-12-3)
(8W-12-14)
3 C9
Z1 14 BK
G301
(8W-15-9)

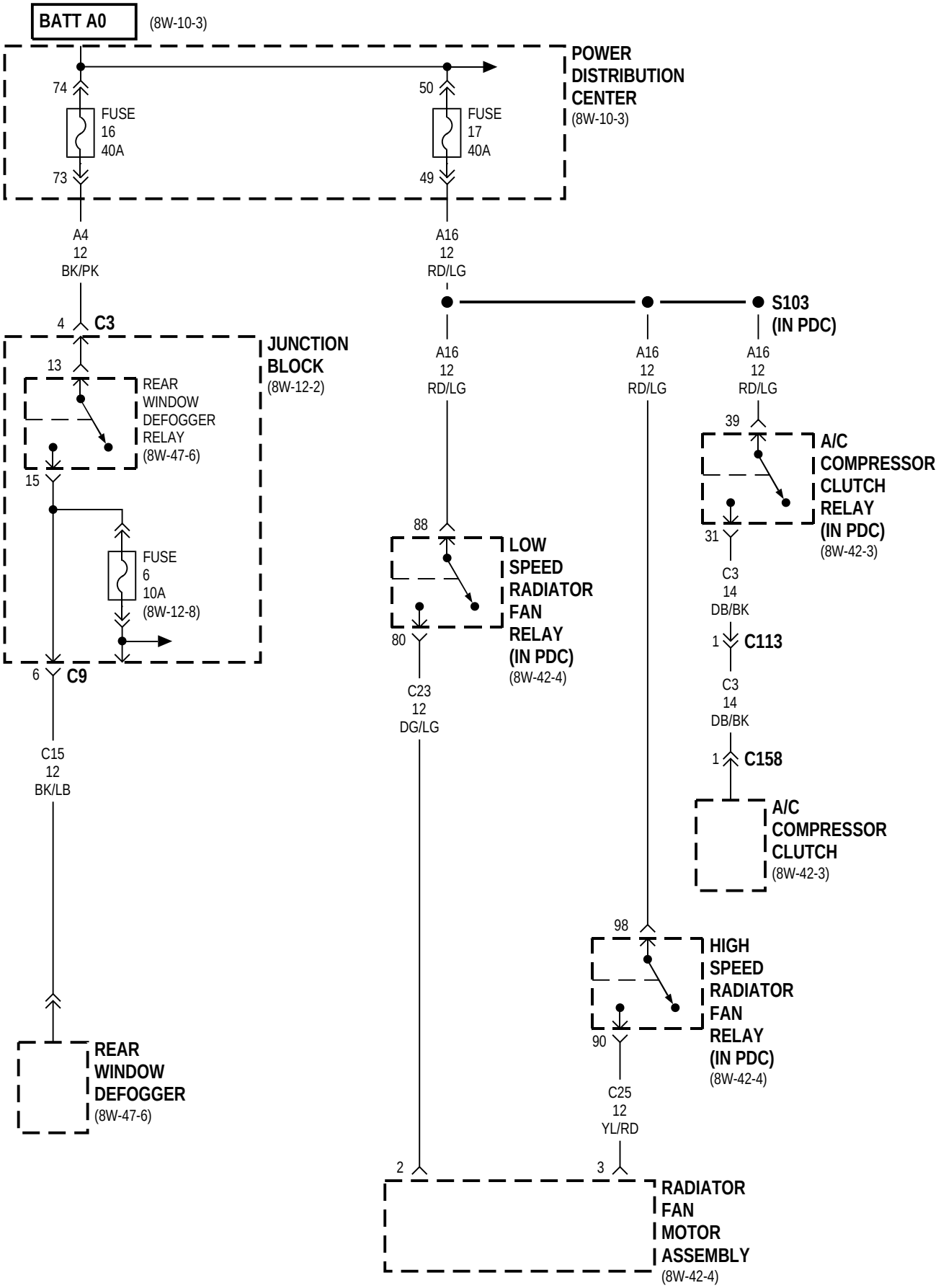

BATT A1
(8W-10-6)
BATT A1
(8W-10-6)
IGNITION SWITCH
(8W-10-6)
1 START
2 RUN
0 OFF
3 LOCK
4 ACC
2 C1
A81
18
DG/RD
10 C2
A41
16
YL
9 C2
A21
16
DB
8 C2
A31
16
BK/WT
9 C5
14 C5
JUNCTION BLOCK
(8W-12-2)
11
FUSED IGN. (ST-RUN)
BODY CONTROL MODULE
(8W-45-2)
FUSE 17 10A
(8W-12-12)
FUSE 14 10A
(8W-12-11)
FUSE 15 10A
(8W-12-11)
8 C126
A41
16
YL
7 C2
A21
16
DB
A21 16 DB
68
FUSE 9 10A
(8W-10-8)
58
70
FUSE 10 10A
(8W-10-9)
78
POWER DISTRIBUTION CENTER
(8W-10-3)
2 C7
JUNCTION BLOCK
(8W-12-2)
FUSE 11 10A
(8W-12-10)
ATX
MTX
A41
16
YL
A41
16
YL
1
CLUTCH INTER LOCK SWITCH
2
A41
16
YL/RD
A41 16 YL/OR
81
ENGINE STARTER MOTOR RELAY (IN PDC)
(8W-21-2)
8
FUSED IGN. (ST)
TRANSMISSION CONTROL MODULE
(8W-31-5)

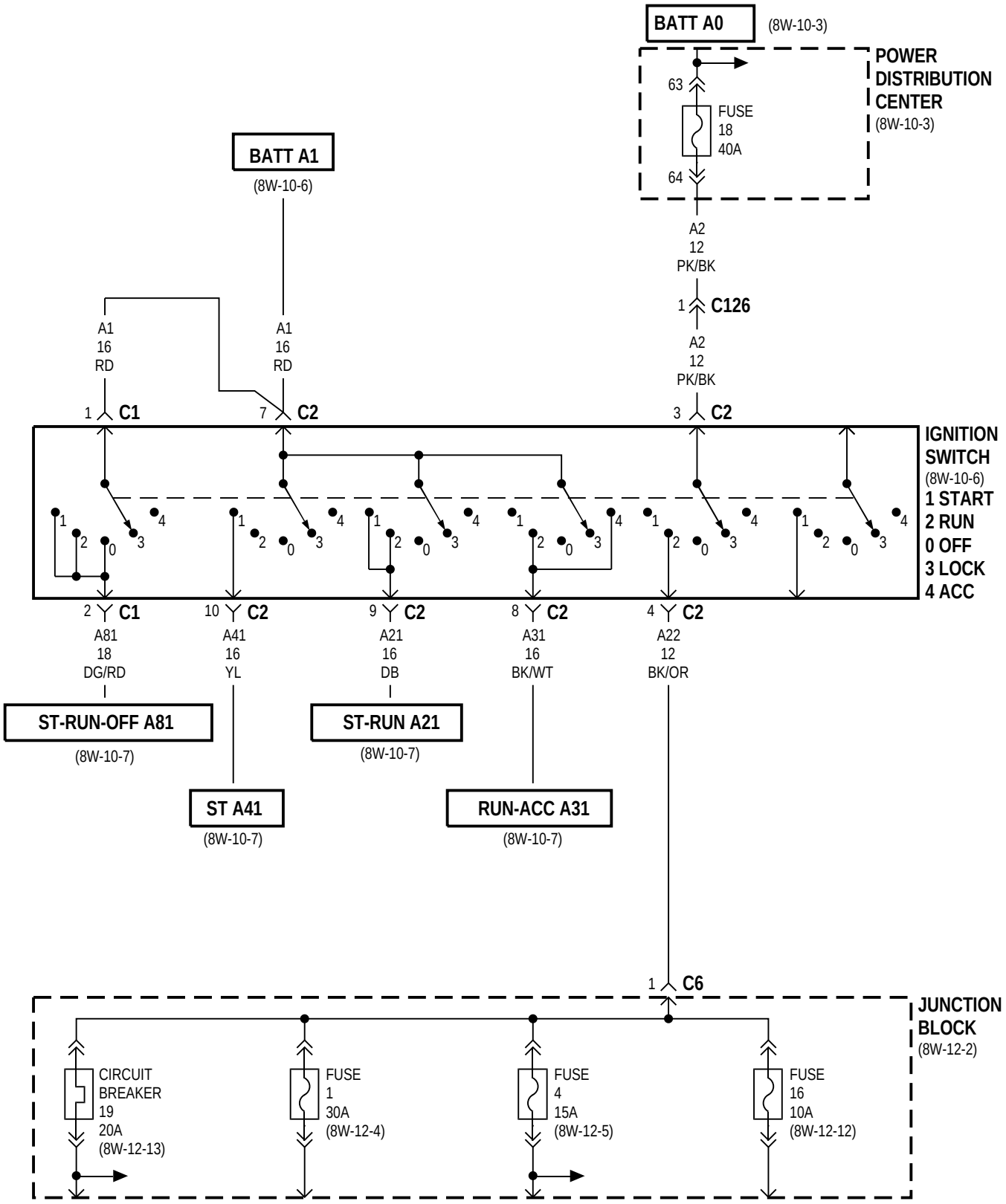

ST-RUN A21
(8W-10-7)
68
FUSE
9
10A
58
POWER
DISTRIBUTION
CENTER
(8W-10-3)
F18
20
LG/BK
S106
(IN PDC)
F18
18
LG/BK
F18
20
LG/BK
F18
20
LG/BK
F18
20
LG/BK
F18
20
LG/BK
94
HIGH
SPEED
RADIATOR
FAN
RELAY
(IN PDC)
(8W-42-4)
84
LOW
SPEED
RADIATOR
FAN
RELAY
(IN PDC)
(8W-42-4)
2
DUTY
CYCLE
EVAP/
PURGE
SOLENOID
(8W-30-16)
19
A/C
COMPRESSOR
CLUTCH
RELAY
(IN PDC)
(8W-42-3)
7
C126
F18
18
LG/BK
F18
20
LG/BK
5
C2
2
INSTRUMENT
CLUSTER
(8W-40-6)
OIL
PRESSURE
LAMP
ABS
WARNING
LAMP
IMMOBILIZER
(8W-61-5)

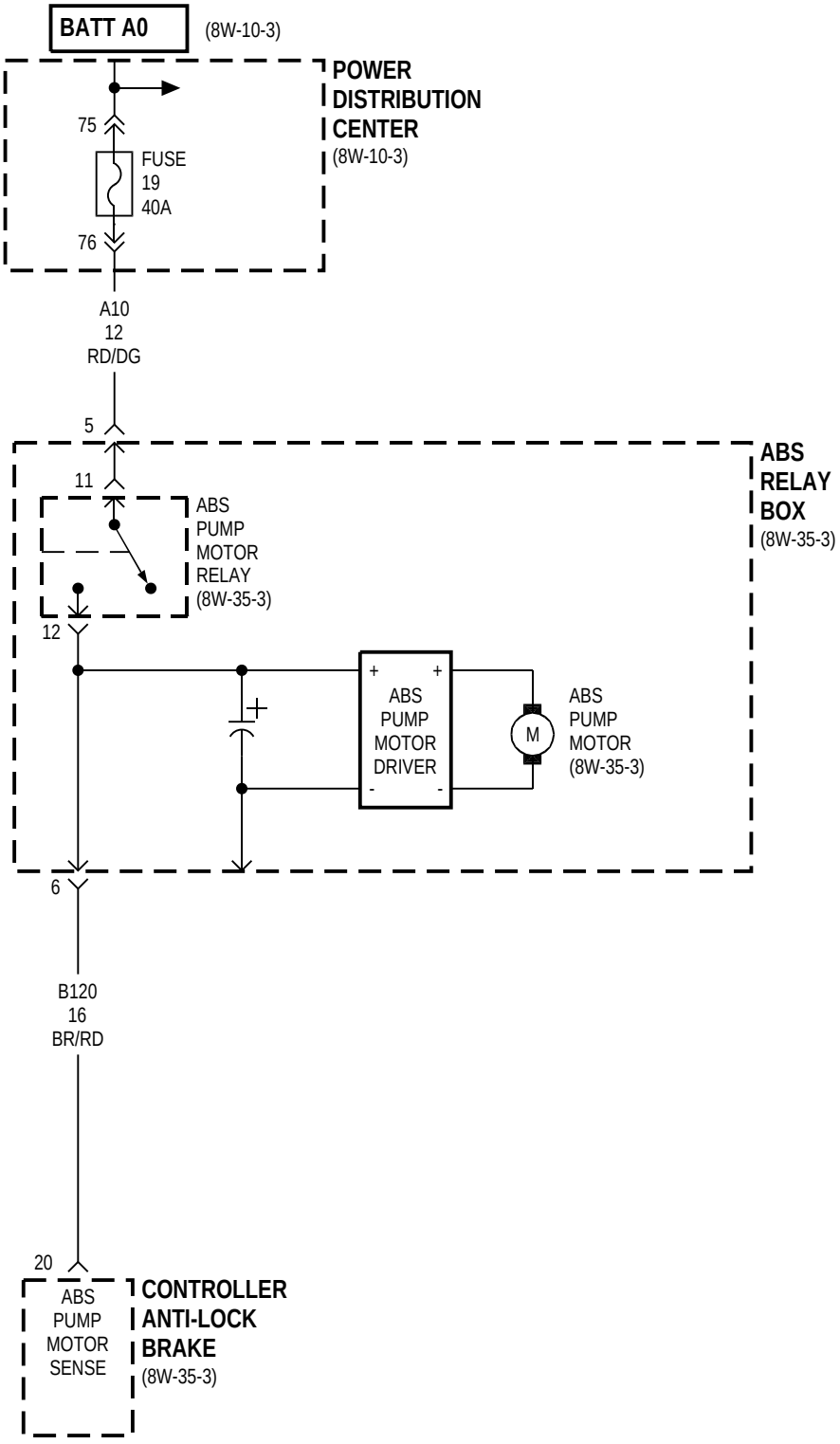

ST-RUN A21
(8W-10-7)
BATT A0
(8W-10-3)
POWER DISTRIBUTION CENTER
(8W-10-3)
70
FUSE 10 10A
78
46
FUSE 11 40A
45
F12 18 DB/WT
A25 12 DB
9
C121
A25 12 DB
C
POWER TOP UP/ DOWN RELAYS
(8W-66-2)
S105 (IN PDC)
F12 18 DB/WT
F12 18 DB/WT
F12 18 DB/WT
6
C113
F12 18 DB/WT
20
C2
FUSED IGN. (ST-RUN)
POWERTRAIN CONTROL MODULE
(8W-30-2)
60
FUSED IGN. (ST-RUN)
CONTROLLER ANTI-LOCK BRAKE
(8W-35-2)
7
FUEL PUMP RELAY (IN PDC)
(8W-30-3)


BATT A0
(8W-10-3)
POWER DISTRIBUTION CENTER
(8W-10-3)
59
FUSE 12 40A
60
71
FUSE 13 20A
72
47
FUSE 14 40A
48
A13 12 PK/WT
A45 18 BR
8
C121
A45 18 BR
5
FUSED B(+)
SEAT BELT CONTROL MODULE
(8W-67-2)
A5 12 RD/GY
29
INTERMITTENT WIPER RELAY (IN PDC)
(8W-53-3)
37
V5 14 DG/VT
36
WIPER HIGH/ LOW RELAY (IN PDC)
(8W-53-3)
28
11
V4 14 RD/YL
V3 14 BR/OR
A
B
WINDSHIELD WIPER MOTOR
(8W-53-3)
2
C3
JUNCTION BLOCK
(8W-12-2)
FUSE 7 20A
(8W-12-8)
FUSE 8 20A
(8W-12-9)


BATT A0
(8W-10-3)
POWER DISTRIBUTION CENTER
(8W-10-3)
62
FUSE 15 40A
61
A3 12 RD/WT
3 C3
JUNCTION BLOCK
(8W-12-2)
(8W-12-3)
3
1
HEADLAMP DELAY RELAY
5
CIRCUIT BREAKER 18 20A
(8W-12-12)
FUSE 10 20A
(8W-12-10)
FUSE 12 10A
(8W-12-11)
FUSE 13 20A
(8W-12-11)
FUSE 9 15A
(8W-12-10)
2 C6
4 C6
L4 14 VT/WT
A3 14 RD/WT
7 C2
4 C2
HEADLAMP SWITCH
(8W-50-3)
L4
4
LOW BEAM INPUT
BODY CONTROL MODULE (IN JB)
(8W-45-5)


BATT A0
(8W-10-3)
POWER DISTRIBUTION CENTER
(8W-10-3)
74
FUSE 16 40A
73
50
FUSE 17 40A
49
A4 12 BK/PK
A16 12 RD/LG
4
C3
JUNCTION BLOCK
(8W-12-2)
13
REAR WINDOW DEFOGGER RELAY
(8W-47-6)
15
FUSE 6 10A
(8W-12-8)
6
C9
C15 12 BK/LB
REAR WINDOW DEFOGGER
(8W-47-6)
S103
(IN PDC)
A16 12 RD/LG
A16 12 RD/LG
A16 12 RD/LG
88
LOW SPEED RADIATOR FAN RELAY
(IN PDC)
(8W-42-4)
80
C23 12 DG/LG
39
A/C COMPRESSOR CLUTCH RELAY
(IN PDC)
(8W-42-3)
31
C3 14 DB/BK
1
C113
C3 14 DB/BK
1
C158
A/C COMPRESSOR CLUTCH
(8W-42-3)
98
HIGH SPEED RADIATOR FAN RELAY
(IN PDC)
(8W-42-4)
90
C25 12 YL/RD
2
3
RADIATOR FAN MOTOR ASSEMBLY
(8W-42-4)


BATT A0
(8W-10-3)
POWER DISTRIBUTION CENTER
(8W-10-3)
63
FUSE 18 40A
64
BATT A1
(8W-10-6)
A2 12 PK/BK
1 C126
A2 12 PK/BK
3 C2
A1 16 RD
1 C1
A1 16 RD
7 C2
IGNITION SWITCH
(8W-10-6)
1 START
2 RUN
0 OFF
3 LOCK
4 ACC
2 C1
A81 18 DG/RD
10 C2
A41 16 YL
9 C2
A21 16 DB
8 C2
A31 16 BK/WT
4 C2
A22 12 BK/OR
ST-RUN-OFF A81
(8W-10-7)
ST-RUN A21
(8W-10-7)
ST A41
(8W-10-7)
RUN-ACC A31
(8W-10-7)
1 C6
JUNCTION BLOCK
(8W-12-2)
CIRCUIT BREAKER 19 20A
(8W-12-13)
FUSE 1 30A
(8W-12-4)
FUSE 4 15A
(8W-12-5)
FUSE 16 10A
(8W-12-12)


BATT A0
(8W-10-3)
POWER DISTRIBUTION CENTER
(8W-10-3)
75
FUSE 19 40A
76
A10 12 RD/DG
5
11
ABS PUMP MOTOR RELAY
(8W-35-3)
12
ABS RELAY BOX
(8W-35-3)
ABS PUMP MOTOR DRIVER
M
ABS PUMP MOTOR
(8W-35-3)
6
B120 16 BR/RD
20
ABS PUMP MOTOR SENSE
CONTROLLER ANTI-LOCK BRAKE
(8W-35-3)

FUSES

FUSE #	AMPS	FUSED CIRCUIT	FEED CIRCUIT
1	10A	F142 18DG/OR	A142 18DG/OR
2	20A	A20 16RD/DB	A0 4RD
3	20A	A24 16PK/YL A24 16PK/YL	A0 4RD
4	20A	A7 16RD/BK	A0 4RD
5	20A	A14 16RD/TN	A0 4RD
6	20A	A15 16PK	A0 4RD
7	10A	A51 20RD/LB	A0 4RD
8	20A	A1 16RD	A0 4RD
9	10A	F18 20LG/BK	A21 16DB
10	10A	F12 18DB/WT	A21 16DB A21 16DB
11	20A	A25 12DB	A0 4RD
12	40A	A13 12PK/WT	A0 4RD
13	40A	A45 18BR	A0 4RD
14	40A	A5 12RD/GY	A0 4RD
15	40A	A3 12RD/WT	A0 4RD
16	40A	A4 12BK/PK	A0 4RD
17	40A	A16 12RD/LG	A0 4RD
18	40A	A2 12PK/BK	A0 4RD
19	40A	A10 12RD/DG	A0 4RD

RELAYS

NOT USED (1)

CAVITY	CIRCUIT	FUNCTION
1	-	-
2	-	-
3	-	-
25	-	-
33	-	-

TRANSMISSION RELAY (2)

CAVITY	CIRCUIT	FUNCTION
4	T15 20LG/YL	12 VOLT SUPPLY
5	-	-
6	Z13 20BK/RD	GROUND
26	T16 16RD/BR	TRANS CONTROL RELAY OUTPUT (SWITCHED B(+))
34	A24 16PK/YL	FUSED B(+)

FUEL PUMP RELAY (3)

CAVITY	CIRCUIT	FUNCTION
7	F12 18DB/WT	FUSED IGNITION SWITCH OUTPUT (RUN/START)
8	-	-
9	K31 20BR/LG	FUEL PUMP RELAY CONTROL
27	A141 14DG/WT	FUEL PUMP RELAY CONTROL
35	A1 16RD	FUSED B(+)

WIPER HIGH/LOW RELAY (4)

CAVITY	CIRCUIT	FUNCTION
10	F13 18DB/GY	FUSED IGNITION SWITCH OUTPUT (ACC/RUN)
11	V3 14BR/OR	WIPER HIGH/LOW RELAY LOW SPEED OUTPUT
12	V16 20VT/PK	WIPER HIGH/LOW RELAY CONTROL
28	V4 14RD/YL	WIPER HIGH/LOW RELAY HIGH SPEED OUTPUT
36	V5 14DG/VT	WIPER RELAY COMMON

INTERMITTENT WIPER RELAY (5)

CAVITY	CIRCUIT	FUNCTION
13	F13 18DB/GY	FUSED IGNITION SWITCH OUTPUT (ACC/RUN)
	F13 18DB/GY	FUSED IGNITION SWITCH OUTPUT (ACC/RUN)
14	Z1 16BK	GROUND
15	V14 20PK/WT	WIPER ON/OFF RELAY CONTROL
29	A5 12RD/GY	FUSED B(+)
37	V5 14DG/VT	WIPER RELAY COMMON

NOT USED (6)

CAVITY	CIRCUIT	FUNCTION
16	-	-
17	-	-
18	-	-
30	-	-
38	-	-

A/C COMPRESSOR CLUTCH RELAY (7)

CAVITY	CIRCUIT	FUNCTION
19	F18 20LG/BK	FUSED IGNITION SWITCH OUTPUT (RUN/START)
20	-	-
21	C28 20DB/OR	A/C COMPRESSOR CLUTCH RELAY CONTROL
31	C3 14DB/BK	A/C COMPRESSOR CLUTCH RELAY OUTPUT
39	A16 12RD/LG	FUSED B(+)

NOT USED (9)

CAVITY	CIRCUIT	FUNCTION
22	-	-
23	-	-
24	-	-
32	-	-
40	-	-

ENGINE STARTER MOTOR RELAY (9)

CAVITY	CIRCUIT	FUNCTION
79	T40 14BR	STARTER RELAY OUTPUT
81	A41 26YL	IGNITION SWITCH OUTPUT (START)
	T141 16YL/RD*	IGNITION SWITCH OUTPUT (START)
82	-	-
83	T41 20BK/WT	PARK/NEUTRAL POSITON SWITCH SENSE
	T41 20BK/LB	PARK/NEUTRAL POSITION SWITCH SENSE
97	A14 18RD/TN	FUSED B(+)

AUTOMATIC SHUT DOWN RELAY (10)

CAVITY	CIRCUIT	FUNCTION
89	A142 18DG/OR	AUTOMATIC SHUT DOWN RELAY OUTPUT
	A142 18DG/OR	AUTOMATIC SHUT DOWN RELAY OUTPUT
91	A14 16RD/TN	FUSED B(+)
92	-	-
93	K51 20DB/VT	AUTOMATIC SHUT DOWN RELAY CONTROL
87	A1 16RD	FUSED B(+)

LOW SPEED RADIATOR FAN RELAY (11)

CAVITY	CIRCUIT	FUNCTION
80	C23 12DG/LG	LOW SPEED RADIATOR FAN RELAY OUTPUT
84	F18 20LG/BK	FUSED IGNITION SWITCH OUTPUT (RUN/START)
85	-	-
86	C24 20DB/TN	LOW SPEED RADIATOR FAN RELAY CONTROL
88	A16 12RD/LG	FUSED B(+)

HIGH SPEED RADIATOR FAN RELAY (12)

CAVITY	CIRCUIT	FUNCTION
90	C25 12YL/RD	HIGH SPEED RADIATOR FAN RELAY OUTPUT
94	F18 20LG/BK	FUSED IGNITION SWITCH OUTPUT (RUN/START)
95	-	-
96	C27 20DB/PK	LOW SPEED RADIATOR FAN RELAY CONTROL
98	A16 12RD/LG	FUSED B(+)

* MTX

8W-10 POWER DISTRIBUTION

DESCRIPTION AND OPERATION

INTRODUCTION

This section covers the power distribution center and all circuits involved with it. For additional information on system operation, refer to the appropriate section of the wiring diagrams.

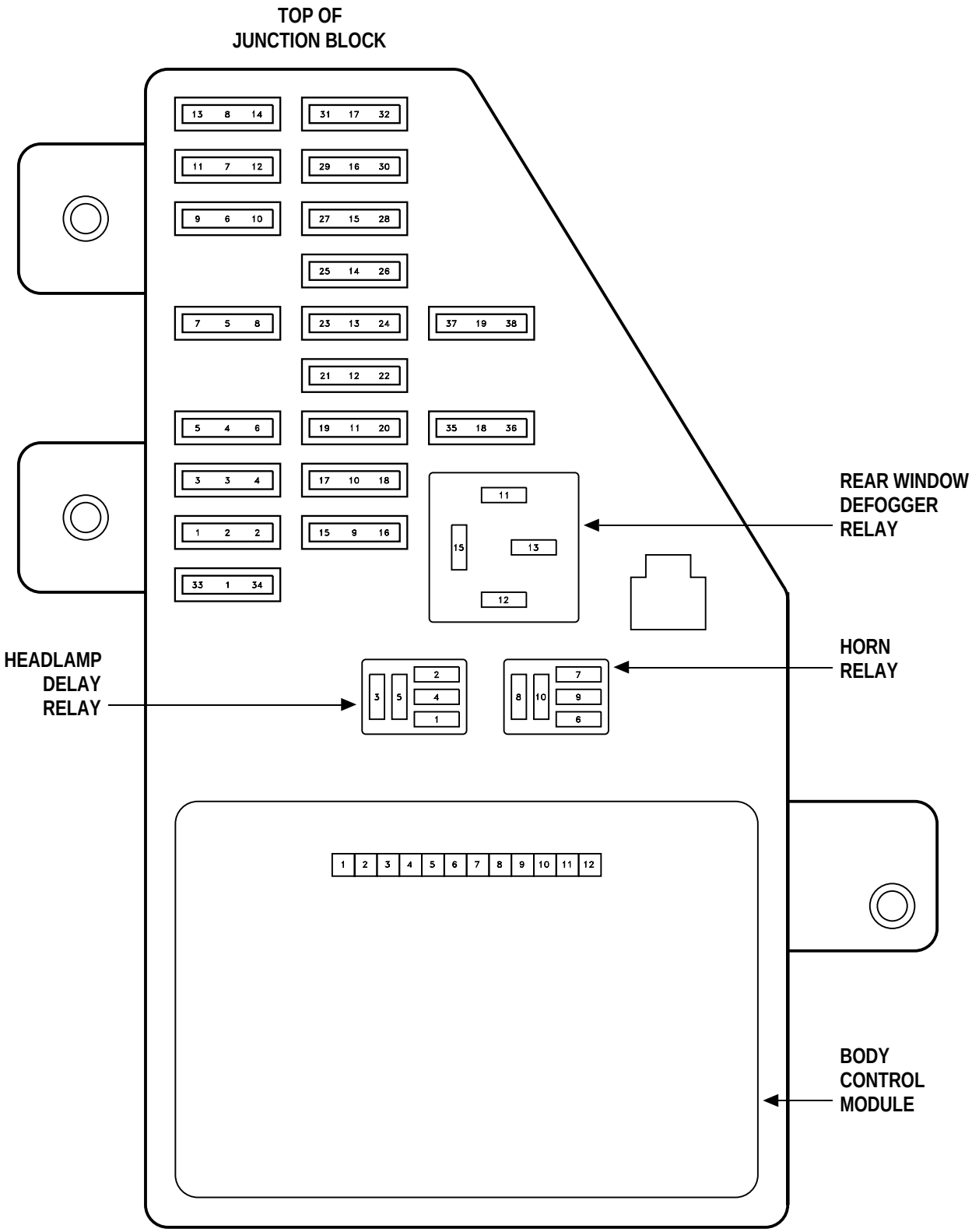
8W-12 JUNCTION BLOCK

INDEX

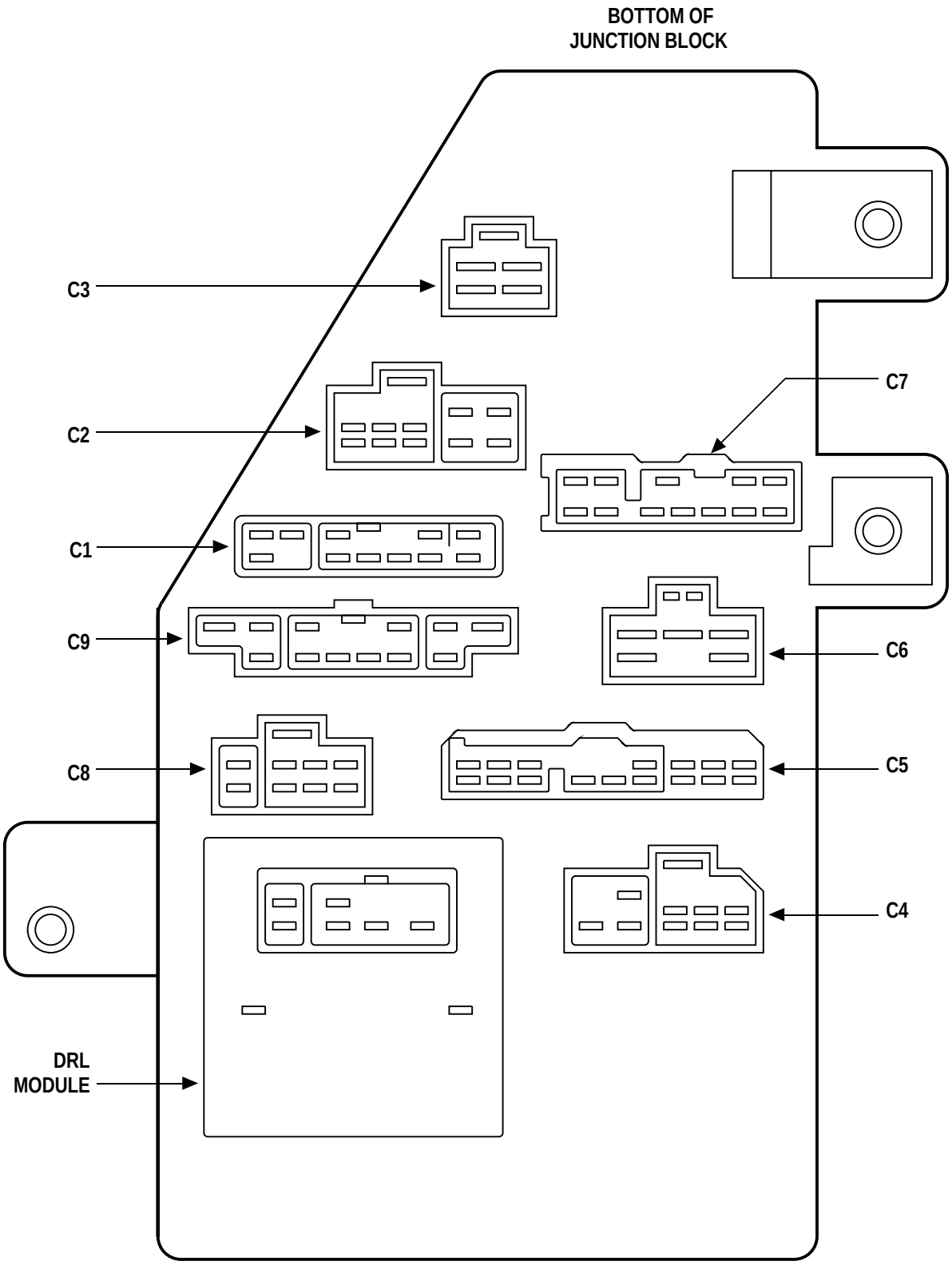
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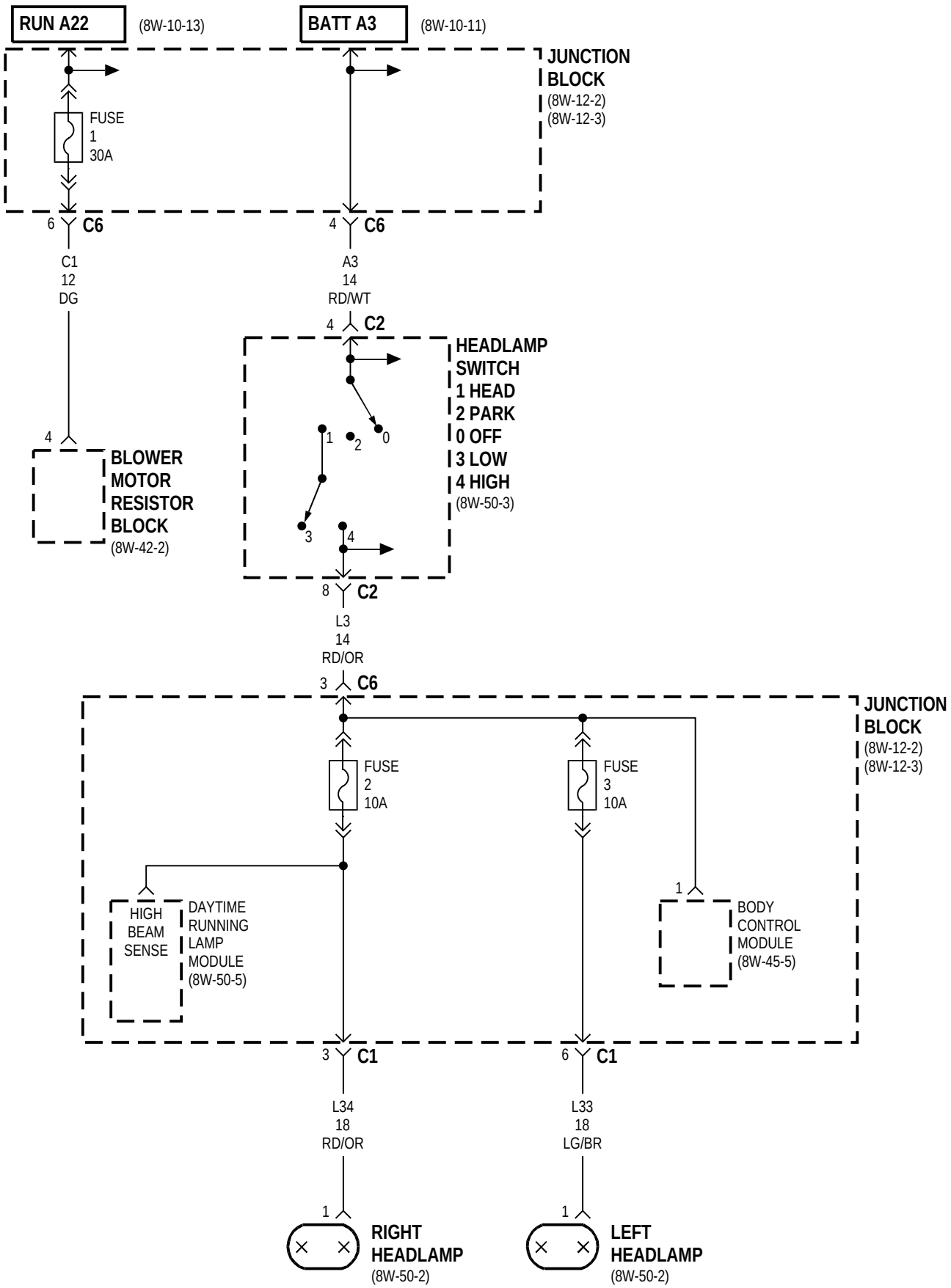
SCHEMATICS AND DIAGRAMS **1**
DESCRIPTION AND OPERATION **20**

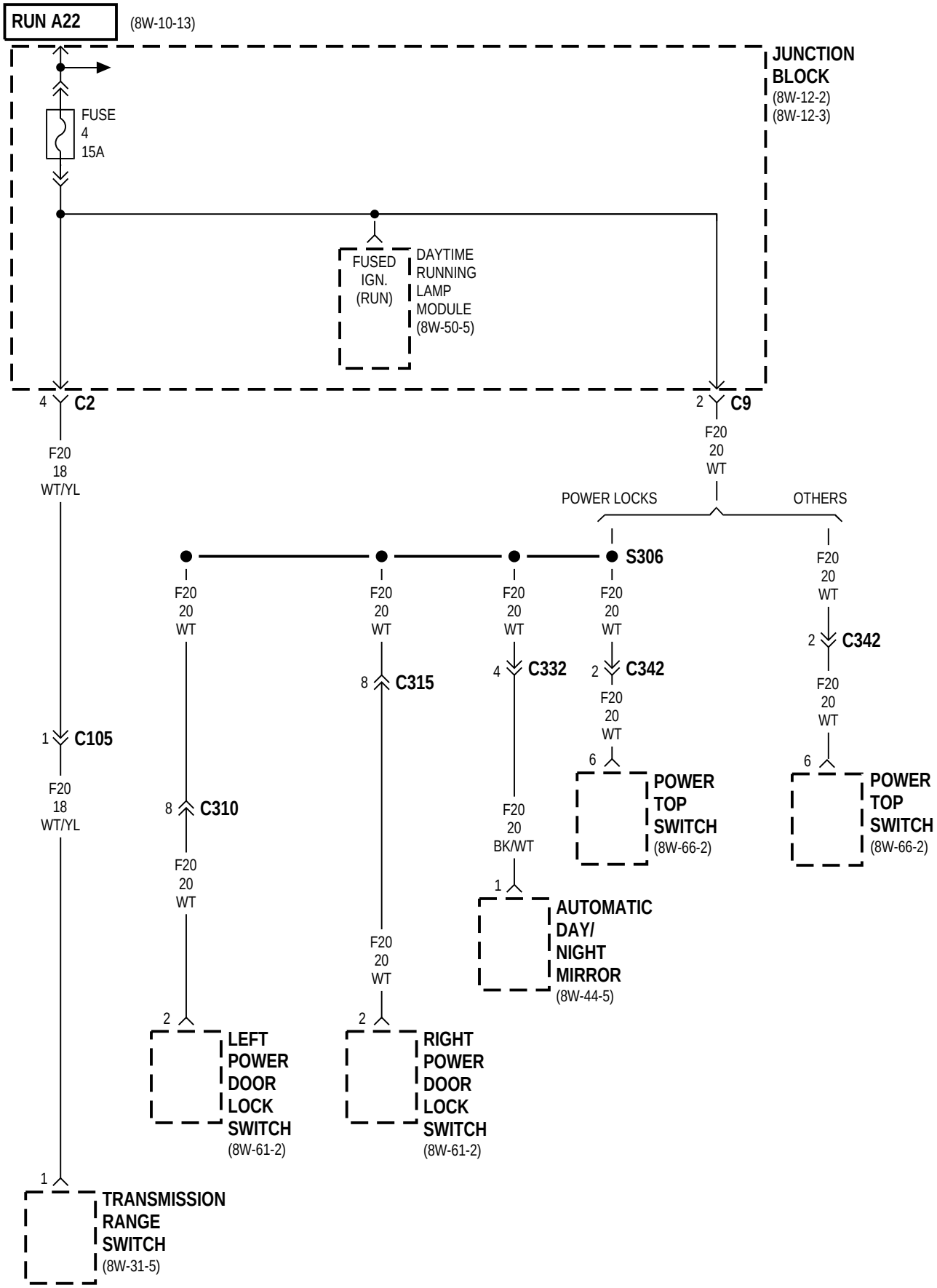
Component	Page
A/C Heater Control	8W-12-8
Airbag Control Module	8W-12-12
Automatic Day/Night Mirror	8W-12-5, 14
Autostick Switch	8W-12-10, 14
Blower Motor Resistor Block	8W-12-4
Body Control Module	8W-12-4, 6, 9, 10, 11, 14, 15
Brake Warning Pressure Switch	8W-12-16
Center High Mounted Stop Lamp	8W-12-17
Cigar Lighter/Power Outlet	8W-12-9
Circuit Breaker 18	8W-12-12
Circuit Breaker 19	8W-12-13
Clockspring	8W-12-9
Combination Flasher	8W-12-11
Controller Anti-Lock Brake	8W-12-16, 17
Data Link Connector	8W-12-6, 14
Daytime Running Lamp Module	8W-12-4, 5, 10, 11, 14, 16
Decklid Release Relay	8W-12-12
Decklid Solenoid	8W-12-12
Fog Lamp Switch	8W-12-10, 16
Fuse 1	8W-12-4
Fuse 2	8W-12-4
Fuse 3	8W-12-4
Fuse 4	8W-12-5
Fuse 5	8W-12-6
Fuse 6	8W-12-8
Fuse 7	8W-12-8
Fuse 8	8W-12-9
Fuse 9	8W-12-10
Fuse 10	8W-12-10
Fuse 11	8W-12-10
Fuse 12	8W-12-11
Fuse 13	8W-12-11
Fuse 14	8W-12-11
Fuse 15	8W-12-11
Fuse 16	8W-12-12
Fuse 17	8W-12-12
G301	8W-12-14
Glove Box Lamp	8W-12-6
Headlamp Delay Relay	8W-12-11
Headlamp Leveling Switch	8W-12-14
Headlamp Switch	8W-12-4, 8, 11, 14, 15
High Note Horn	8W-12-9
Horn Relay	8W-12-9
Ignition Switch	8W-12-14, 16
Illuminated Entry Relay	8W-12-7, 14
Instrument Cluster	8W-12-10, 14, 16, 18
Intermittent Wiper Relay	8W-12-11
Intermittent Wiper Switch	8W-12-11
Junction Block	8W-12-2, 3, 4, 5, 6, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18
Key-In Halo Lamp	8W-12-6
Key-In Switch	8W-12-14
Left Door Arm/Disarm Switch	8W-12-7
Left Door Courtesy Lamp	8W-12-7
Left Door Window Motor Relay	8W-12-13
Left Fog Lamp	8W-12-16
Left Front Power Window Motor	8W-12-13
Left Headlamp	8W-12-4, 11
Left Headlamp Leveling Motor	8W-12-15
Left Horn Switch	8W-12-9
Left Park/Turn Signal Lamp	8W-12-15, 18
Left Power Door Lock Switch	8W-12-5, 7
Left Power Mirror	8W-12-8
Left Rear Turn Signal Lamp	8W-12-18
Left Side Repeater	8W-12-18
Left Tail/Stop Lamp	8W-12-17
Left Visor/Vanity Lamp	8W-12-6
Low Note Horn	8W-12-9
Master Power Window Switch	8W-12-13
Overhead Map Lamp	8W-12-6, 14
Park Brake Switch	8W-12-16
Power Amplifier	8W-12-6, 14
Power Antenna	8W-12-6
Power Mirror Switch	8W-12-7
Power Seat Switch	8W-12-12
Power Top Switch	8W-12-5
Radio	8W-12-6, 11, 15
Rear Floor Courtesy Lamp	8W-12-7
Rear Window Defogger	8W-12-8
Rear Window Defogger Relay	8W-12-8, 11
Right Door Arm/Disarm Switch	8W-12-7
Right Door Courtesy Lamp	8W-12-7
Right Door Window Motor Relay	8W-12-13
Right Fog Lamp	8W-12-16
Right Headlamp	8W-12-4, 11
Right Headlamp Leveling Motor	8W-12-15
Right Horn Switch	8W-12-9
Right Park/Turn Signal Lamp	8W-12-15, 18
Right Power Door Lock Switch	8W-12-5, 7
Right Power Mirror	8W-12-8
Right Power Window Switch	8W-12-13
Right Rear Turn Signal Lamp	8W-12-18
Right Side Repeater	8W-12-18
Right Tail/Stop Lamp	8W-12-15, 17
Right Visor/Vanity Lamp	8W-12-6
S134	8W-12-6
S135	8W-12-18
S136	8W-12-18
S302	8W-12-6
S306	8W-12-5
S312	8W-12-12
S313	8W-12-17
S400	8W-12-7
S401	8W-12-7
S406	8W-12-15
S410	8W-12-13
Seat Belt Control Module	8W-12-11
Stop Lamp Switch	8W-12-17
Transmission Control Module	8W-12-10
Transmission Range Switch	8W-12-5
Traveler	8W-12-6
Trunk Lamp	8W-12-6
Turn Signal/Hazard Warning Switch	8W-12-18
Vehicle Speed Control/Horn Switch	8W-12-9
Window Timer Module	8W-12-13
Wiper High/Low Relay	8W-12-11

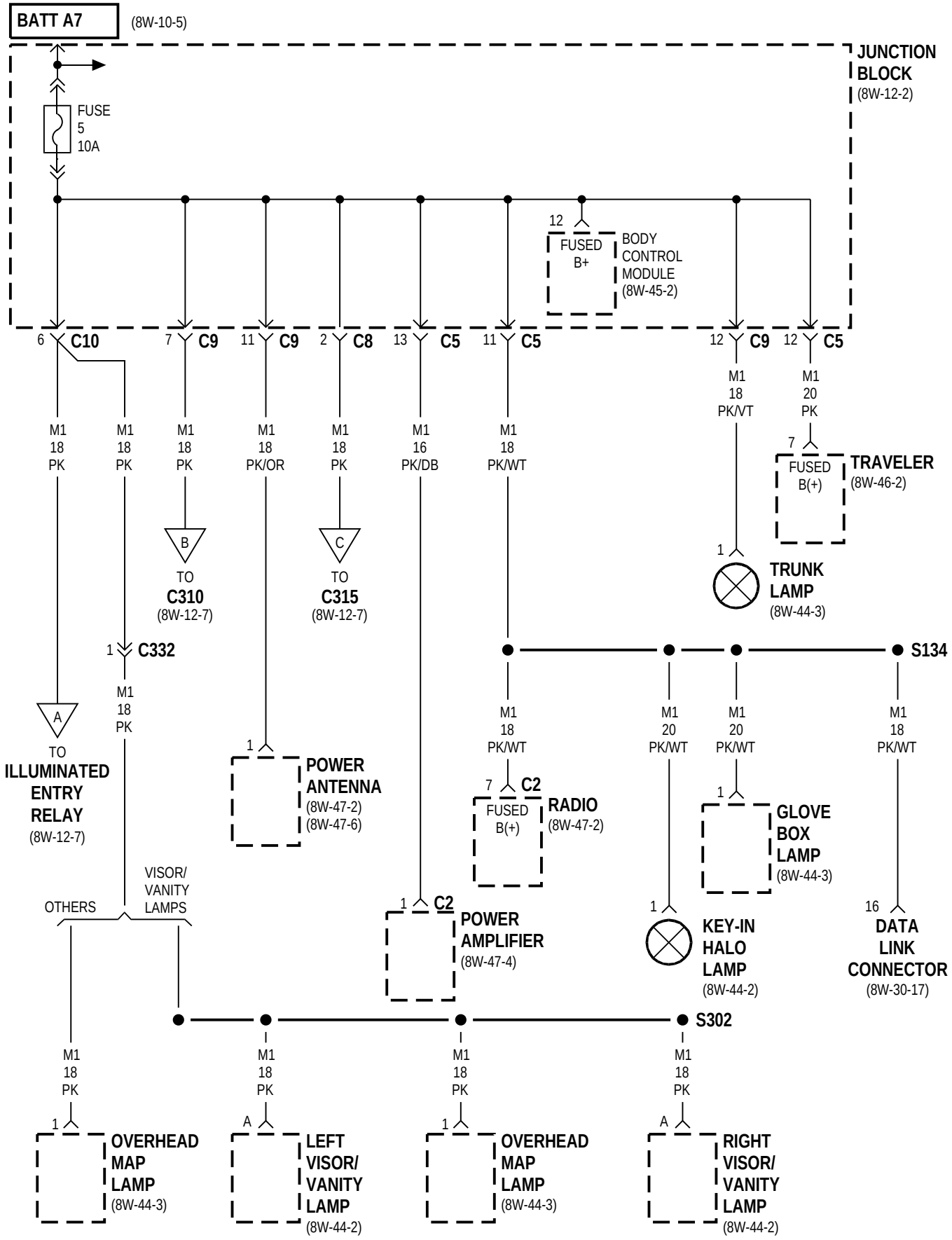


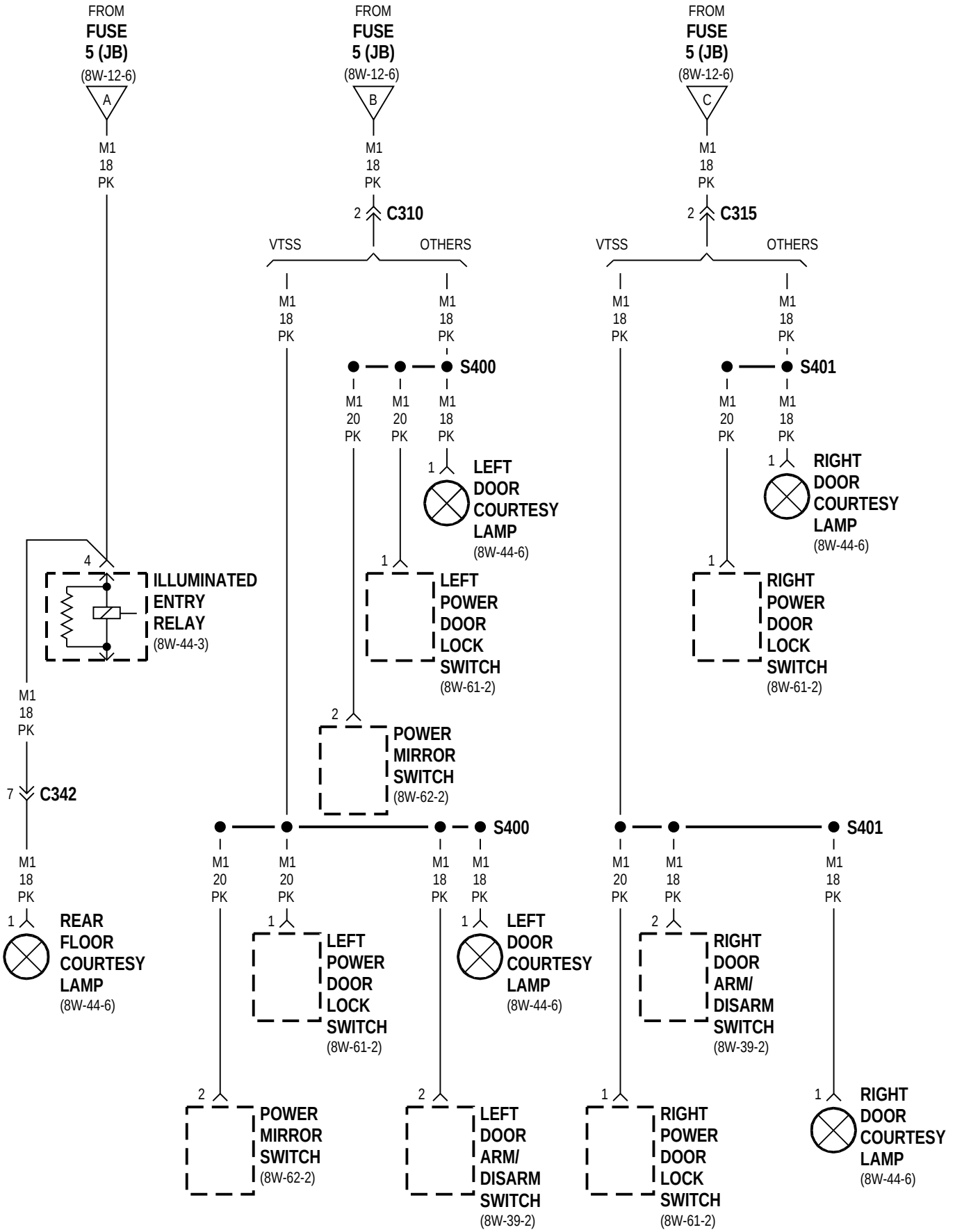
SEE PAGE 8W-12-19 FOR
JUNCTION BLOCK PIN-OUT INFORMATION

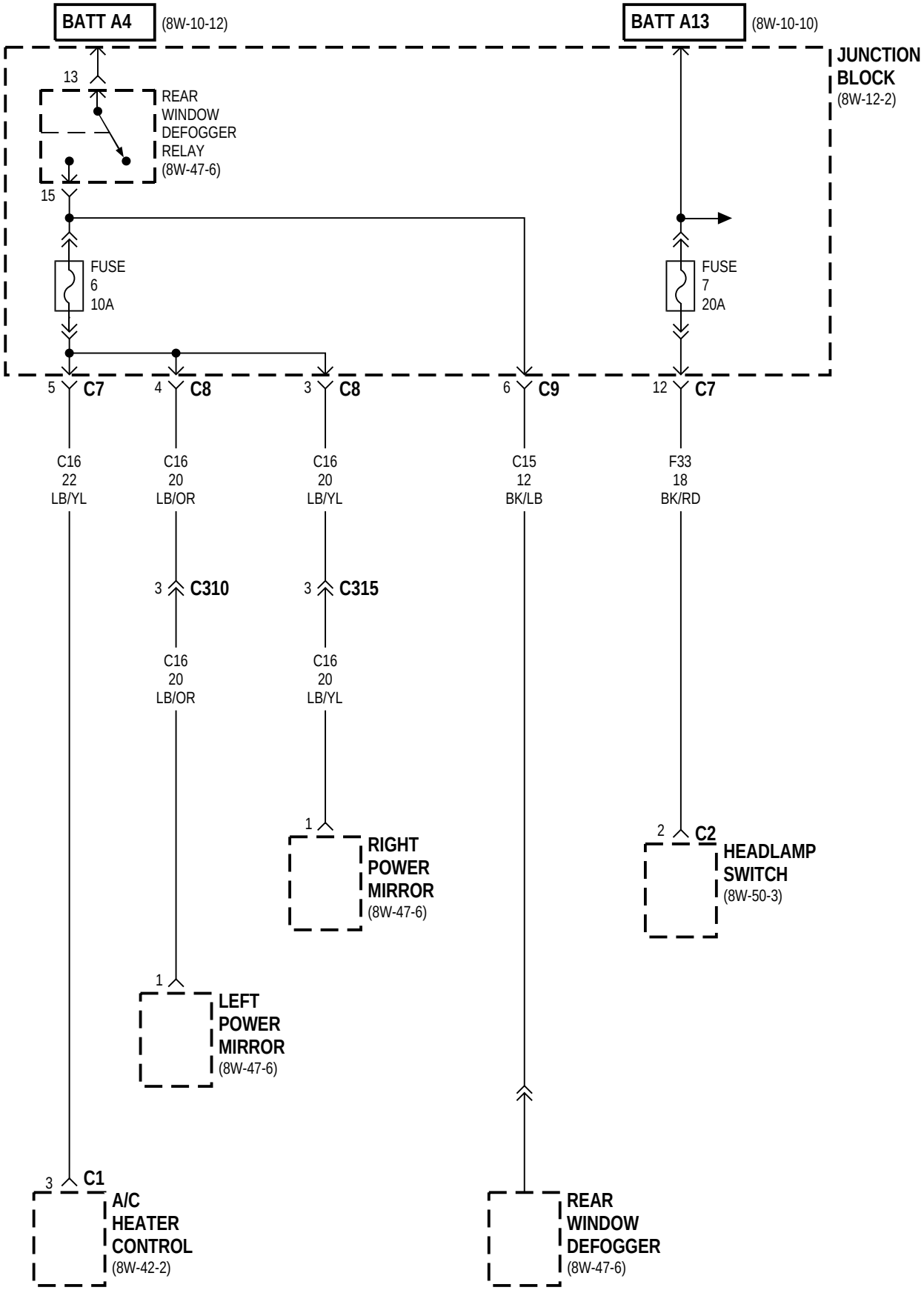

BOTTOM OF
JUNCTION BLOCK
C3
C2
C1
C9
C8
DRL
MODULE
C7
C6
C5
C4

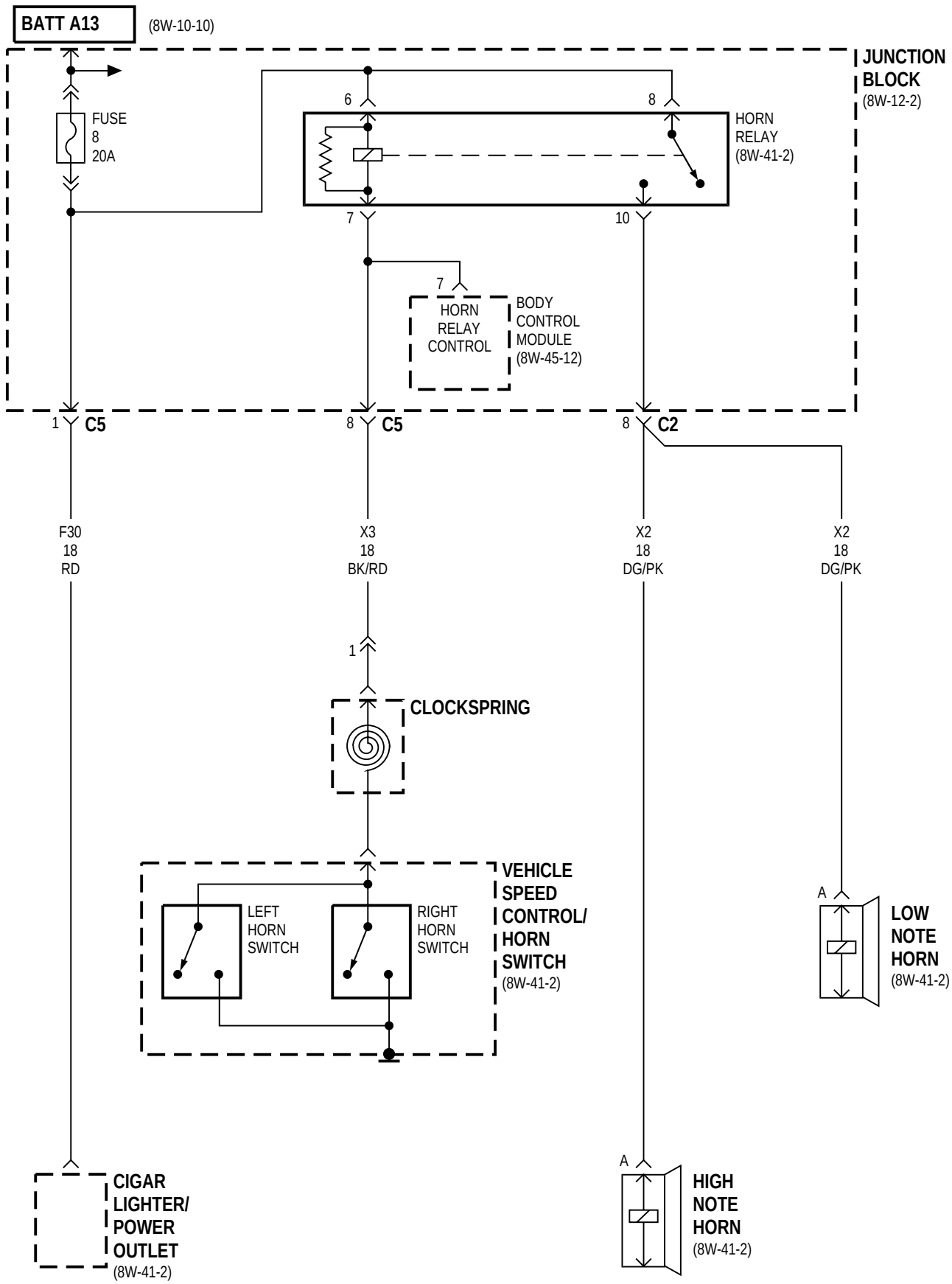

RUN A22
(8W-10-13)
BATT A3
(8W-10-11)
JUNCTION BLOCK
(8W-12-2)
(8W-12-3)
FUSE 1 30A
6 C6
4 C6
C1 12 DG
A3 14 RD/WT
4 C2
HEADLAMP SWITCH
1 HEAD
2 PARK
0 OFF
3 LOW
4 HIGH
(8W-50-3)
1
2
0
3
4
4
BLOWER MOTOR RESISTOR BLOCK
(8W-42-2)
8 C2
L3 14 RD/OR
3 C6
JUNCTION BLOCK
(8W-12-2)
(8W-12-3)
FUSE 2 10A
FUSE 3 10A
HIGH BEAM SENSE
DAYTIME RUNNING LAMP MODULE
(8W-50-5)
1
BODY CONTROL MODULE
(8W-45-5)
3 C1
6 C1
L34 18 RD/OR
L33 18 LG/BR
1
1
RIGHT HEADLAMP
(8W-50-2)
LEFT HEADLAMP
(8W-50-2)

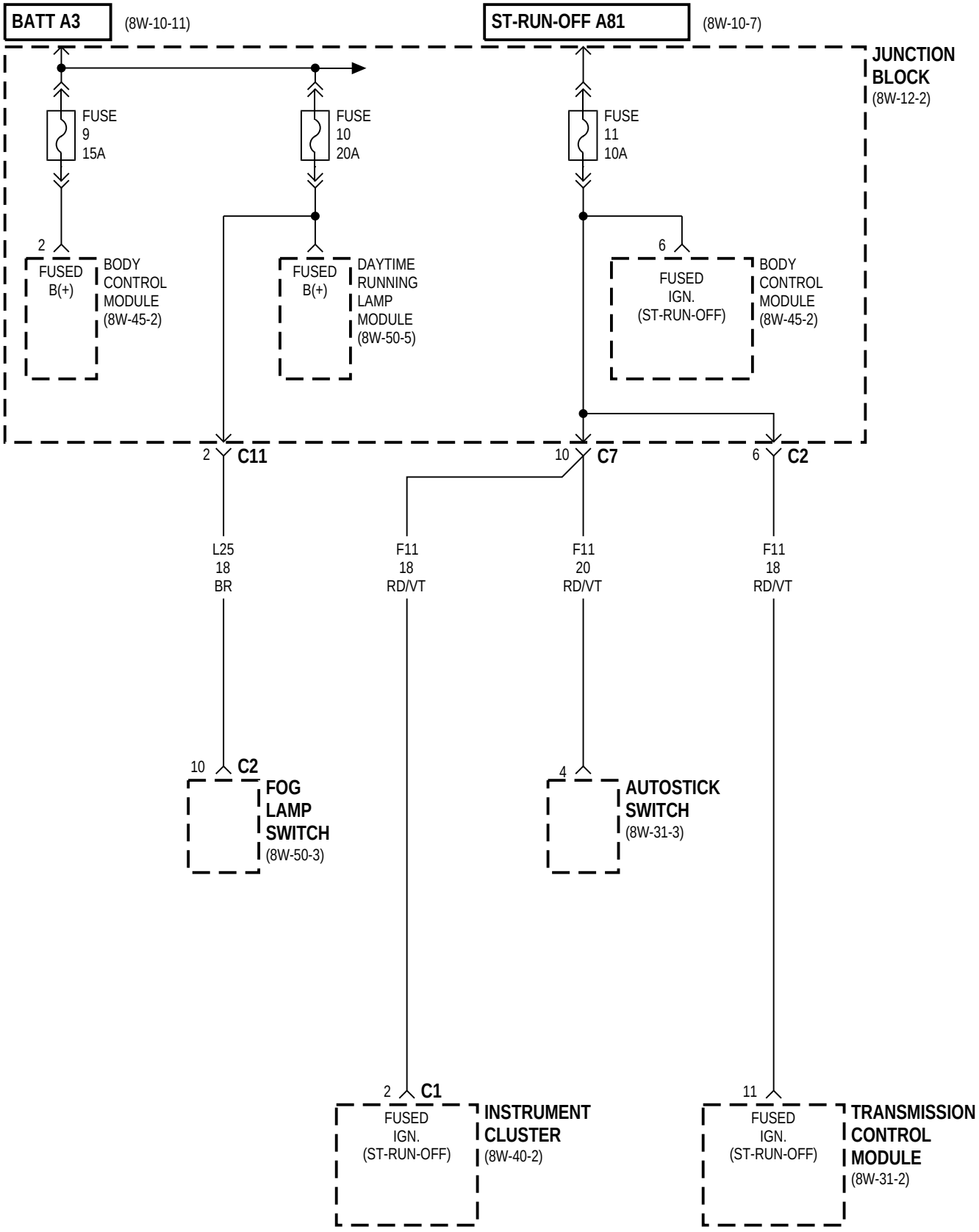

RUN A22
(8W-10-13)
JUNCTION BLOCK
(8W-12-2)
(8W-12-3)
FUSE
4
15A
FUSED IGN. (RUN)
DAYTIME RUNNING LAMP MODULE
(8W-50-5)
4 C2
2 C9
F20
18
WT/YL
F20
20
WT
POWER LOCKS
OTHERS
S306
F20
20
WT
1 C105
F20
18
WT/YL
8 C310
8 C315
4 C332
2 C342
6
POWER TOP SWITCH
(8W-66-2)
F20
20
BK/WT
1
AUTOMATIC DAY/ NIGHT MIRROR
(8W-44-5)
2
LEFT POWER DOOR LOCK SWITCH
(8W-61-2)
RIGHT POWER DOOR LOCK SWITCH
(8W-61-2)
TRANSMISSION RANGE SWITCH
(8W-31-5)

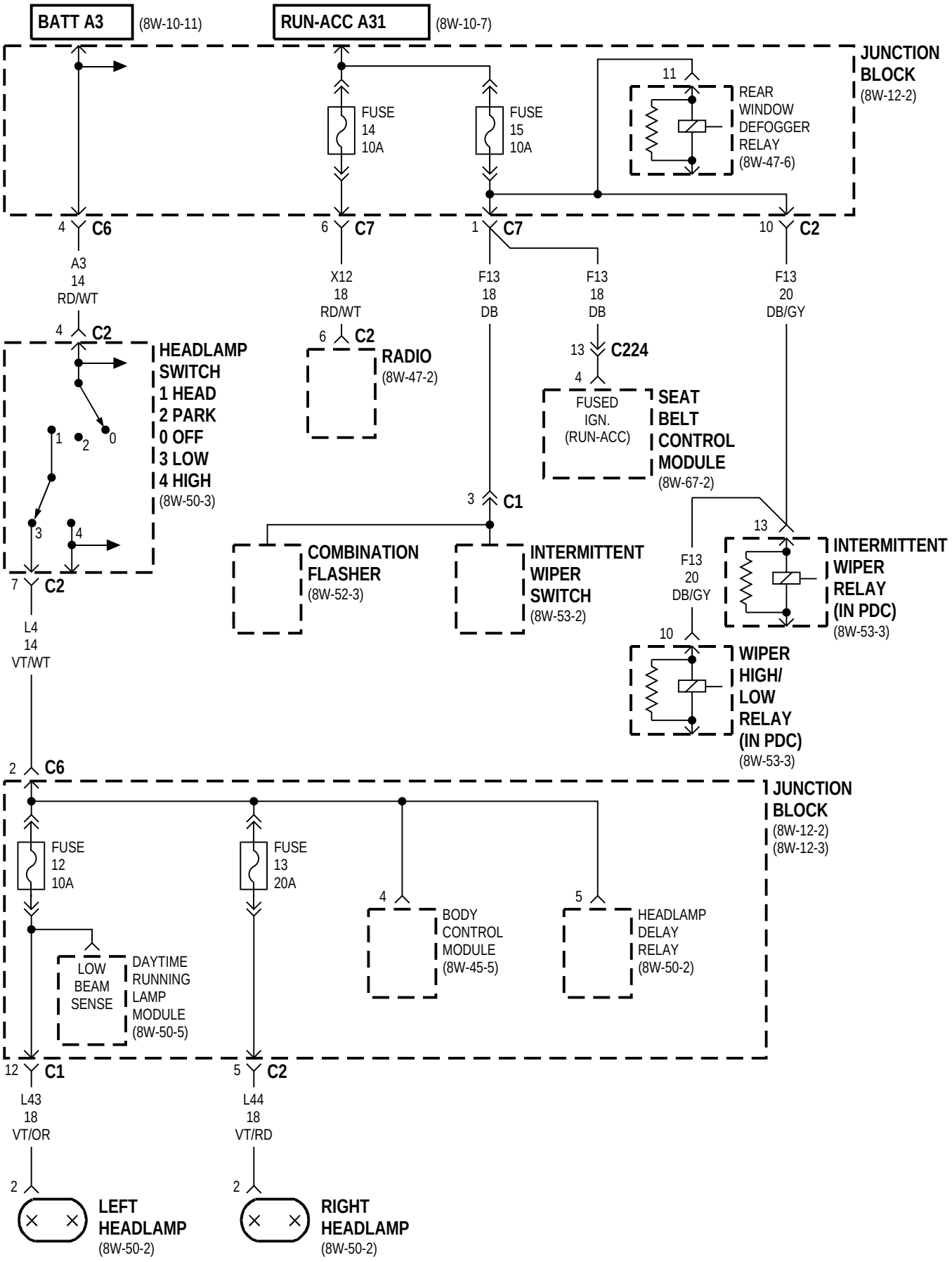

BATT A7
(8W-10-5)
JUNCTION BLOCK
(8W-12-2)
FUSE 5 10A
12 FUSED B+
BODY CONTROL MODULE
(8W-45-2)
6 C10
7 C9
11 C9
2 C8
13 C5
11 C5
12 C9
12 C5
M1 18 PK
M1 18 PK/VT
M1 20 PK
7 FUSED B(+)
TRAVELER
(8W-46-2)
1 TRUNK LAMP
(8W-44-3)
B TO C310
(8W-12-7)
C TO C315
(8W-12-7)
M1 18 PK/OR
M1 16 PK/DB
M1 18 PK/WT
1 C332
S134
A TO ILLUMINATED ENTRY RELAY
(8W-12-7)
1 POWER ANTENNA
(8W-47-2)
(8W-47-6)
7 C2 FUSED B(+)
RADIO
(8W-47-2)
M1 20 PK/WT
1 GLOVE BOX LAMP
(8W-44-3)
16 DATA LINK CONNECTOR
(8W-30-17)
OTHERS
VISOR/ VANITY LAMPS
1 C2
POWER AMPLIFIER
(8W-47-4)
1 KEY-IN HALO LAMP
(8W-44-2)
S302
1 OVERHEAD MAP LAMP
(8W-44-3)
A LEFT VISOR/ VANITY LAMP
(8W-44-2)
1 OVERHEAD MAP LAMP
(8W-44-3)
A RIGHT VISOR/ VANITY LAMP
(8W-44-2)

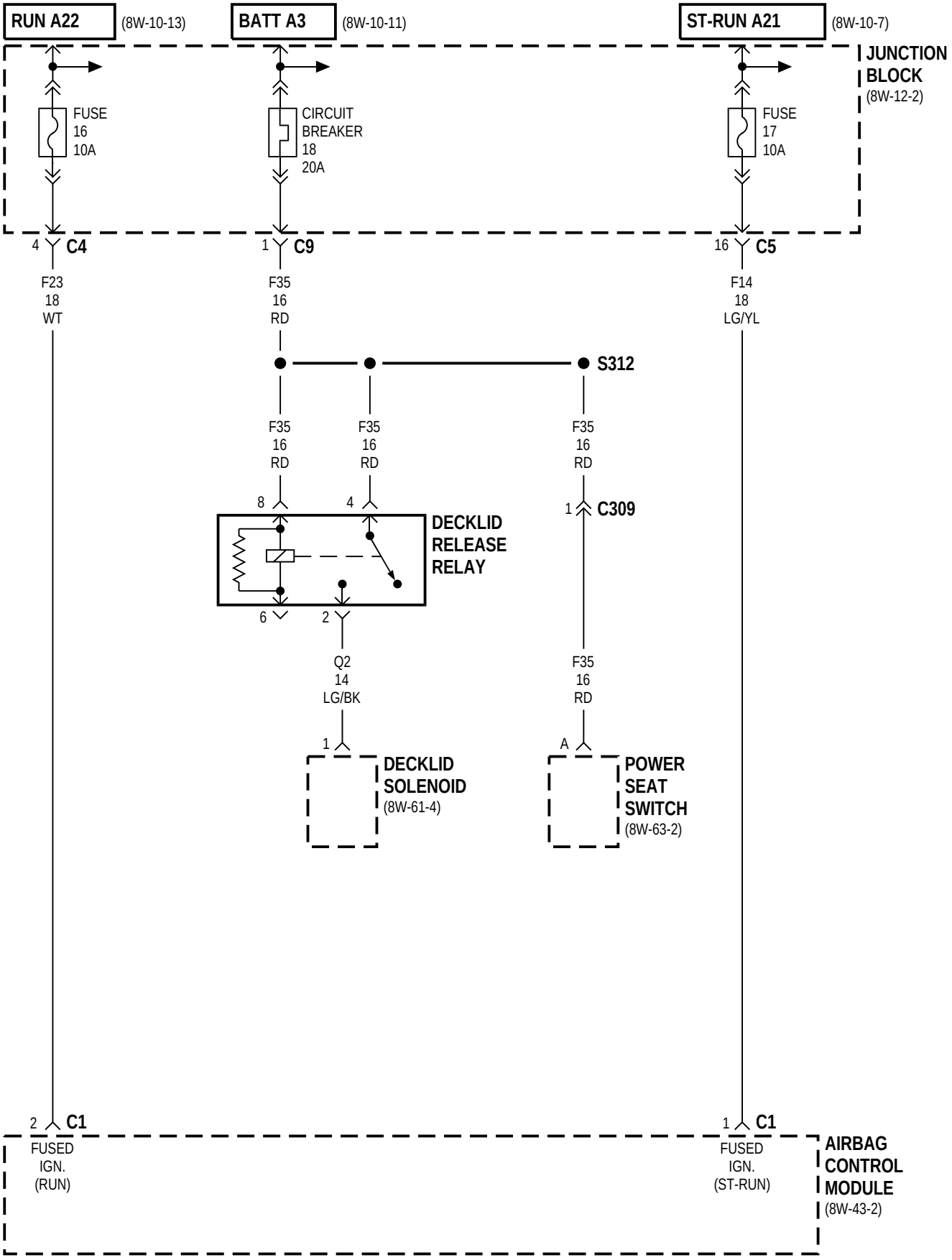

FROM
FUSE
5 (JB)
(8W-12-6)
A
M1
18
PK
4
ILLUMINATED
ENTRY
RELAY
(8W-44-3)
M1
18
PK
7
C342
M1
18
PK
1
REAR
FLOOR
COURTESY
LAMP
(8W-44-6)
FROM
FUSE
5 (JB)
(8W-12-6)
B
M1
18
PK
2
C310
VTSS
OTHERS
M1
18
PK
M1
18
PK
S400
M1
20
PK
M1
20
PK
M1
18
PK
1
LEFT
DOOR
COURTESY
LAMP
(8W-44-6)
1
LEFT
POWER
DOOR
LOCK
SWITCH
(8W-61-2)
2
POWER
MIRROR
SWITCH
(8W-62-2)
S400
M1
20
PK
M1
20
PK
M1
18
PK
M1
18
PK
1
LEFT
POWER
DOOR
LOCK
SWITCH
(8W-61-2)
1
LEFT
DOOR
COURTESY
LAMP
(8W-44-6)
2
POWER
MIRROR
SWITCH
(8W-62-2)
2
LEFT
DOOR
ARM/
DISARM
SWITCH
(8W-39-2)
FROM
FUSE
5 (JB)
(8W-12-6)
C
M1
18
PK
2
C315
VTSS
OTHERS
M1
18
PK
M1
18
PK
S401
M1
20
PK
M1
18
PK
1
RIGHT
DOOR
COURTESY
LAMP
(8W-44-6)
1
RIGHT
POWER
DOOR
LOCK
SWITCH
(8W-61-2)
S401
M1
20
PK
M1
18
PK
M1
18
PK
2
RIGHT
DOOR
ARM/
DISARM
SWITCH
(8W-39-2)
1
RIGHT
POWER
DOOR
LOCK
SWITCH
(8W-61-2)
1
RIGHT
DOOR
COURTESY
LAMP
(8W-44-6)

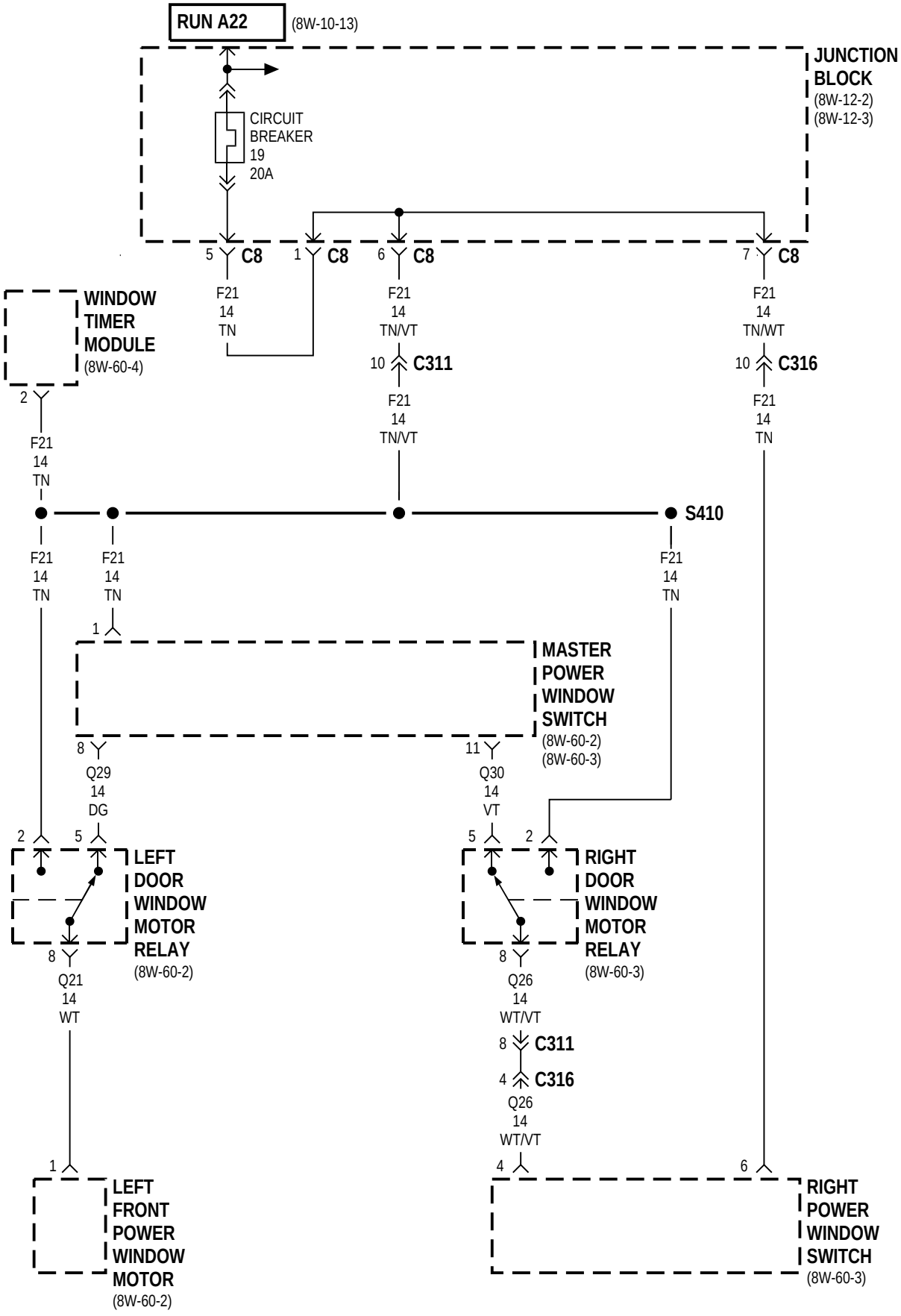

BATT A4
(8W-10-12)
BATT A13
(8W-10-10)
JUNCTION BLOCK
(8W-12-2)
13
REAR WINDOW DEFOGGER RELAY
(8W-47-6)
15
FUSE 6 10A
FUSE 7 20A
5 C7
4 C8
3 C8
6 C9
12 C7
C16 22 LB/YL
C16 20 LB/OR
C16 20 LB/YL
C15 12 BK/LB
F33 18 BK/RD
3 C310
3 C315
C16 20 LB/OR
C16 20 LB/YL
1
RIGHT POWER MIRROR
(8W-47-6)
2 C2
HEADLAMP SWITCH
(8W-50-3)
1
LEFT POWER MIRROR
(8W-47-6)
3 C1
A/C HEATER CONTROL
(8W-42-2)
REAR WINDOW DEFOGGER
(8W-47-6)

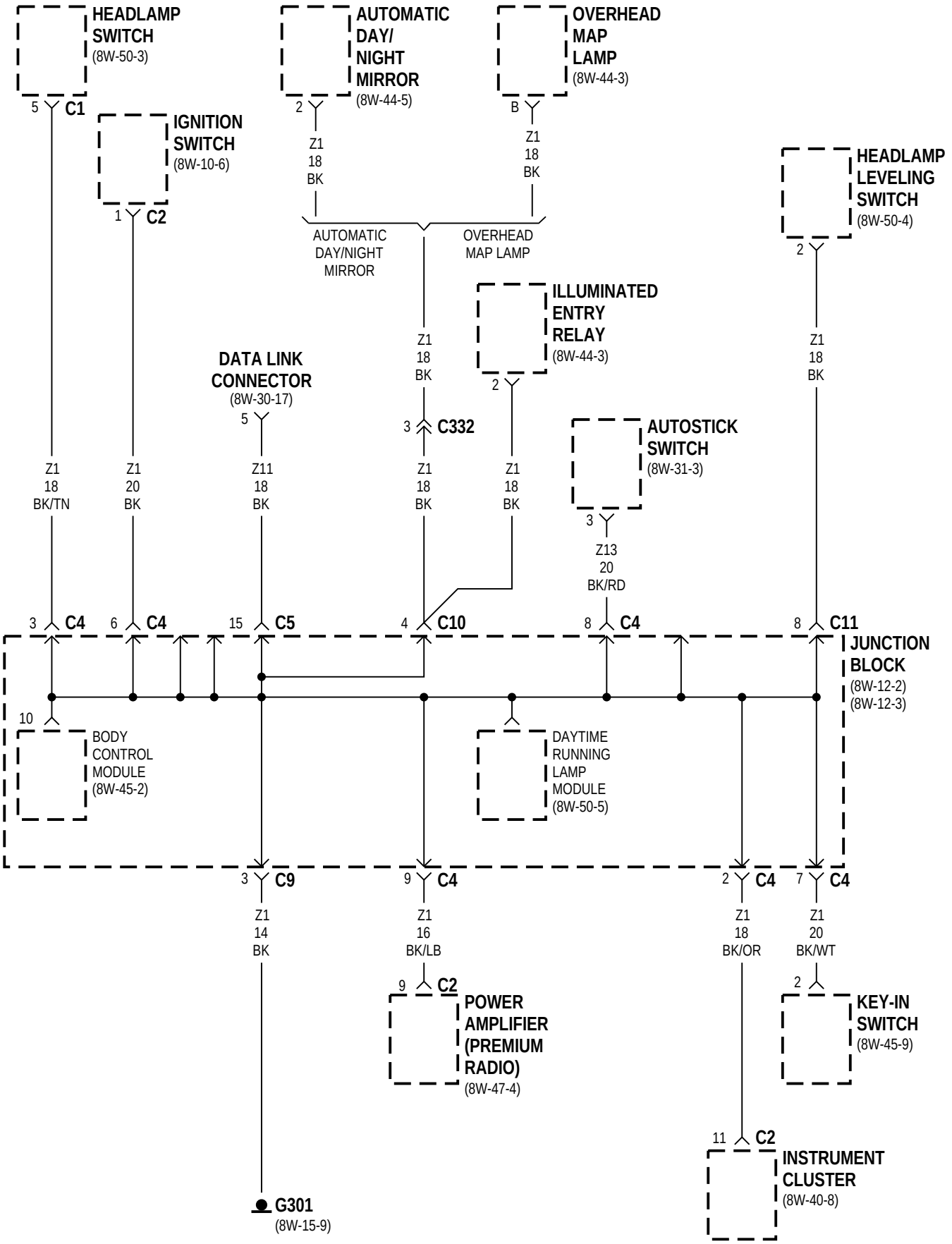

BATT A13
(8W-10-10)
JUNCTION BLOCK
(8W-12-2)
FUSE
8
20A
6
8
HORN
RELAY
(8W-41-2)
7
10
7
HORN
RELAY
CONTROL
BODY
CONTROL
MODULE
(8W-45-12)
1
C5
8
C5
8
C2
F30
18
RD
X3
18
BK/RD
X2
18
DG/PK
X2
18
DG/PK
1
CLOCKSPRING
VEHICLE
SPEED
CONTROL/
HORN
SWITCH
(8W-41-2)
LEFT
HORN
SWITCH
RIGHT
HORN
SWITCH
A
LOW
NOTE
HORN
(8W-41-2)
CIGAR
LIGHTER/
POWER
OUTLET
(8W-41-2)
A
HIGH
NOTE
HORN
(8W-41-2)

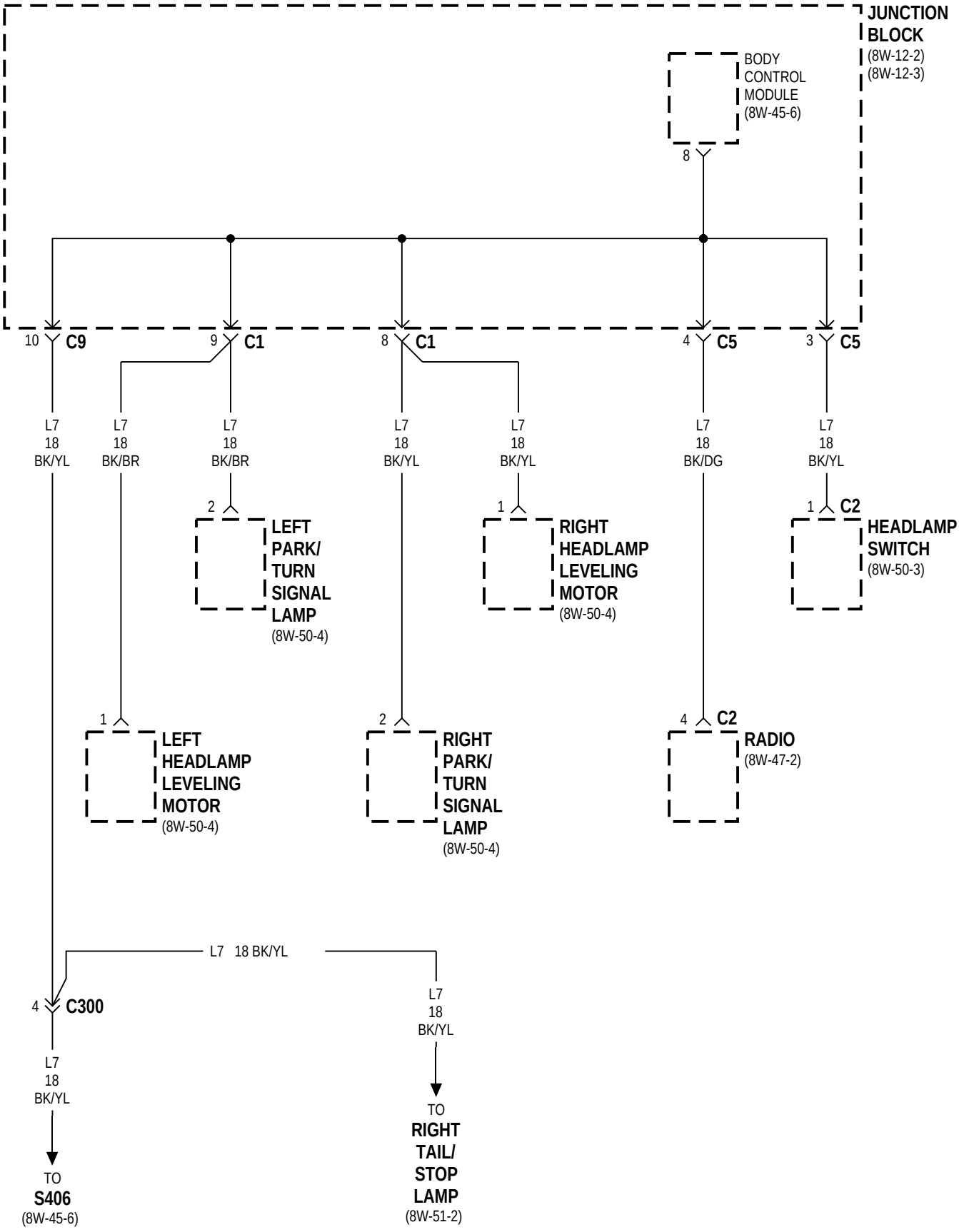

BATT A3
(8W-10-11)
ST-RUN-OFF A81
(8W-10-7)
JUNCTION BLOCK
(8W-12-2)
FUSE 9 15A
FUSE 10 20A
FUSE 11 10A
2
FUSED B(+)
BODY CONTROL MODULE
(8W-45-2)
FUSED B(+)
DAYTIME RUNNING LAMP MODULE
(8W-50-5)
6
FUSED IGN. (ST-RUN-OFF)
BODY CONTROL MODULE
(8W-45-2)
2 C11
10 C7
6 C2
L25 18 BR
F11 18 RD/VT
F11 20 RD/VT
F11 18 RD/VT
10 C2
FOG LAMP SWITCH
(8W-50-3)
4
AUTOSTICK SWITCH
(8W-31-3)
2 C1
FUSED IGN. (ST-RUN-OFF)
INSTRUMENT CLUSTER
(8W-40-2)
11
FUSED IGN. (ST-RUN-OFF)
TRANSMISSION CONTROL MODULE
(8W-31-2)

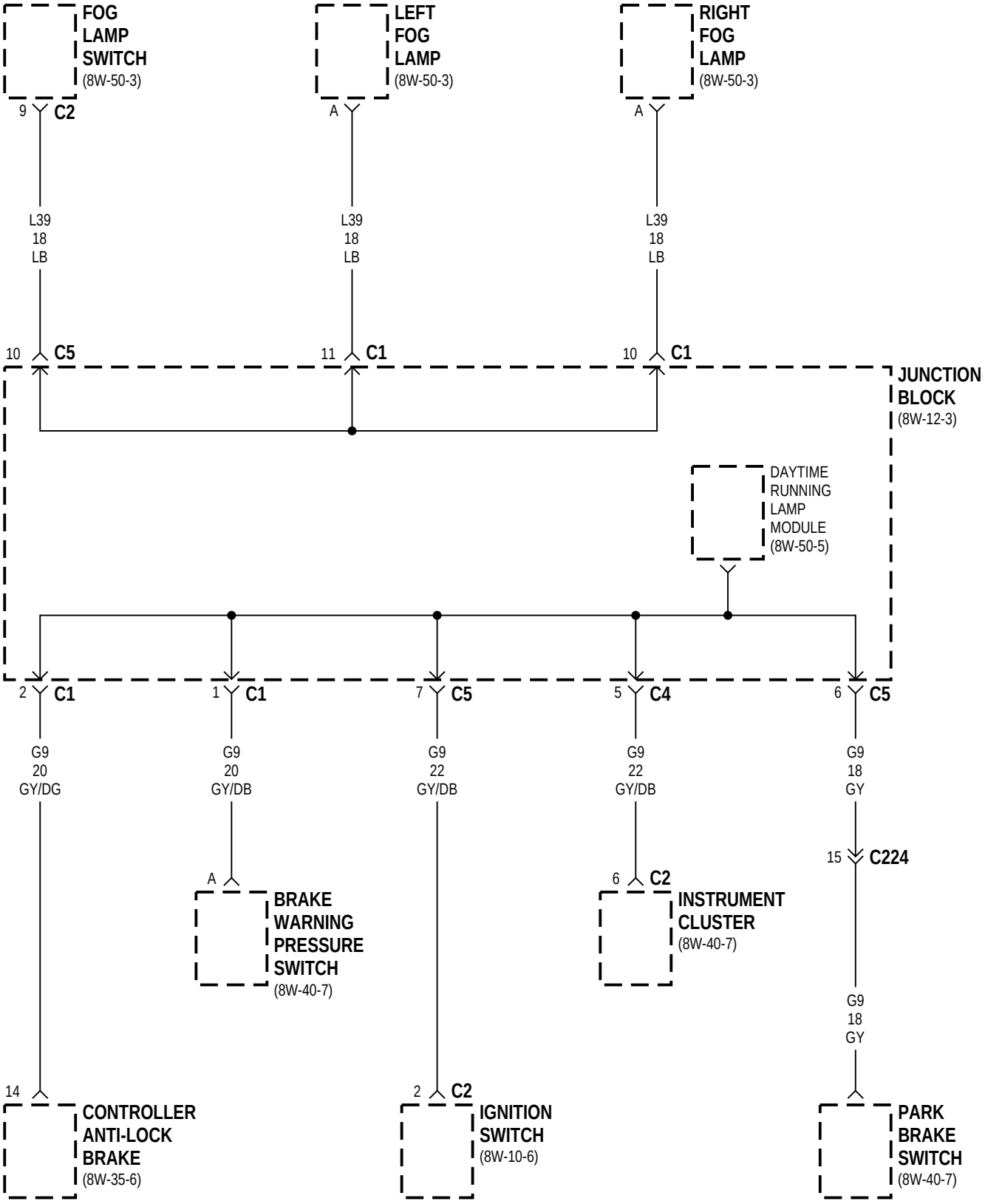

BATT A3
(8W-10-11)
RUN-ACC A31
(8W-10-7)
JUNCTION BLOCK
(8W-12-2)
FUSE 14 10A
FUSE 15 10A
11
REAR WINDOW DEFOGGER RELAY
(8W-47-6)
4 C6
6 C7
1 C7
10 C2
A3 14 RD/WT
X12 18 RD/WT
F13 18 DB
F13 18 DB
F13 20 DB/GY
4 C2
6 C2
RADIO
(8W-47-2)
13 C224
4
FUSED IGN. (RUN-ACC)
SEAT BELT CONTROL MODULE
(8W-67-2)
HEADLAMP SWITCH
1 HEAD
2 PARK
0 OFF
3 LOW
4 HIGH
(8W-50-3)
1
2
0
3
4
3 C1
13
COMBINATION FLASHER
(8W-52-3)
INTERMITTENT WIPER SWITCH
(8W-53-2)
F13 20 DB/GY
INTERMITTENT WIPER RELAY (IN PDC)
(8W-53-3)
10
WIPER HIGH/ LOW RELAY (IN PDC)
(8W-53-3)
7 C2
L4 14 VT/WT
2 C6
JUNCTION BLOCK
(8W-12-2)
(8W-12-3)
FUSE 12 10A
FUSE 13 20A
4
5
BODY CONTROL MODULE
(8W-45-5)
HEADLAMP DELAY RELAY
(8W-50-2)
LOW BEAM SENSE
DAYTIME RUNNING LAMP MODULE
(8W-50-5)
12 C1
5 C2
L43 18 VT/OR
L44 18 VT/RD
2
2
LEFT HEADLAMP
(8W-50-2)
RIGHT HEADLAMP
(8W-50-2)

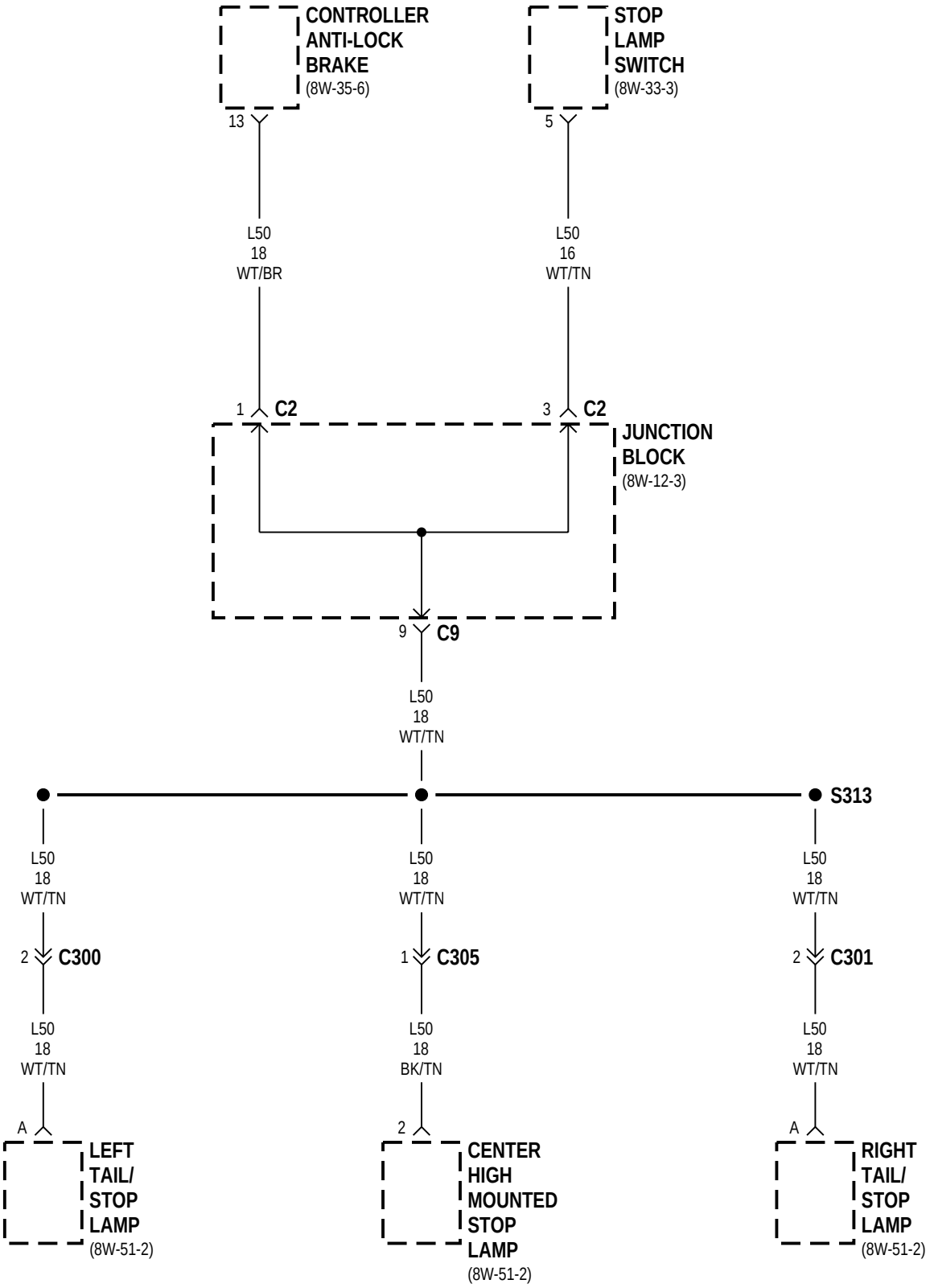

RUN A22
(8W-10-13)
BATT A3
(8W-10-11)
ST-RUN A21
(8W-10-7)
JUNCTION BLOCK
(8W-12-2)
FUSE 16 10A
CIRCUIT BREAKER 18 20A
FUSE 17 10A
4 C4
1 C9
16 C5
F23 18 WT
F35 16 RD
F14 18 LG/YL
S312
F35 16 RD
F35 16 RD
F35 16 RD
8
4
1 C309
DECKLID RELEASE RELAY
6
2
Q2 14 LG/BK
F35 16 RD
1
A
DECKLID SOLENOID
(8W-61-4)
POWER SEAT SWITCH
(8W-63-2)
2 C1
1 C1
FUSED IGN. (RUN)
FUSED IGN. (ST-RUN)
AIRBAG CONTROL MODULE
(8W-43-2)

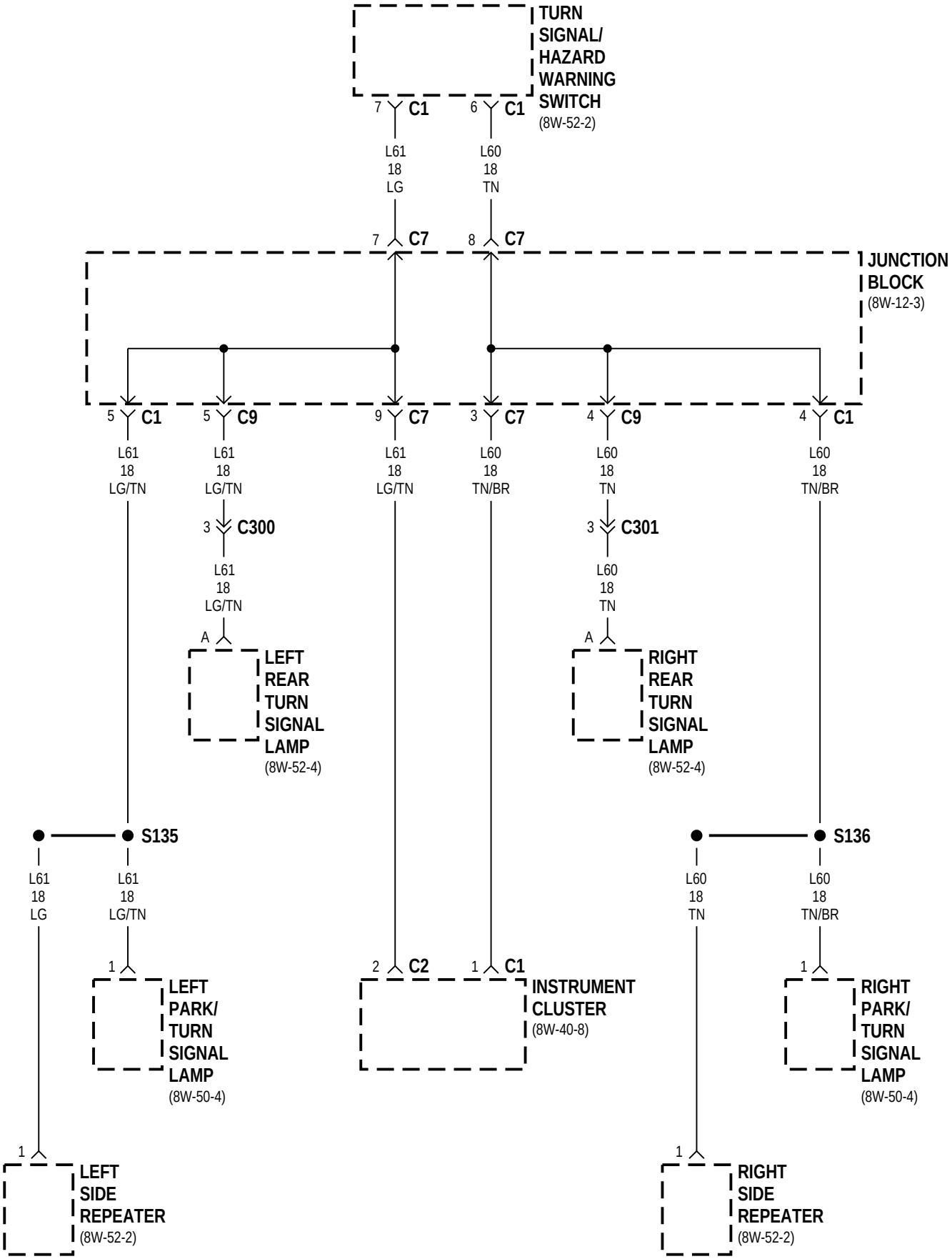

RUN A22
(8W-10-13)
JUNCTION BLOCK
(8W-12-2)
(8W-12-3)
CIRCUIT BREAKER 19 20A
5 C8
1 C8
6 C8
7 C8
F21 14 TN
F21 14 TN/VT
F21 14 TN/WT
WINDOW TIMER MODULE
(8W-60-4)
10 C311
10 C316
2
F21 14 TN
F21 14 TN/VT
F21 14 TN
S410
F21 14 TN
F21 14 TN
F21 14 TN
1
MASTER POWER WINDOW SWITCH
(8W-60-2)
(8W-60-3)
8 Q29 14 DG
11 Q30 14 VT
2 5
LEFT DOOR WINDOW MOTOR RELAY
(8W-60-2)
5 2
RIGHT DOOR WINDOW MOTOR RELAY
(8W-60-3)
8 Q21 14 WT
8 Q26 14 WT/VT
8 C311
4 C316
Q26 14 WT/VT
1
4
6
LEFT FRONT POWER WINDOW MOTOR
(8W-60-2)
RIGHT POWER WINDOW SWITCH
(8W-60-3)


HEADLAMP SWITCH
(8W-50-3)
5 C1
IGNITION SWITCH
(8W-10-6)
1 C2
AUTOMATIC DAY/ NIGHT MIRROR
(8W-44-5)
2
Z1 18 BK
OVERHEAD MAP LAMP
(8W-44-3)
B
Z1 18 BK
AUTOMATIC DAY/NIGHT MIRROR
OVERHEAD MAP LAMP
HEADLAMP LEVELING SWITCH
(8W-50-4)
2
Z1 18 BK
ILLUMINATED ENTRY RELAY
(8W-44-3)
2
Z1 18 BK
3 C332
DATA LINK CONNECTOR
(8W-30-17)
5
AUTOSTICK SWITCH
(8W-31-3)
3
Z13 20 BK/RD
Z1 18 BK/TN
Z1 20 BK
Z11 18 BK
Z1 18 BK
Z1 18 BK
3 C4
6 C4
15 C5
4 C10
8 C4
8 C11
JUNCTION BLOCK
(8W-12-2)
(8W-12-3)
10
BODY CONTROL MODULE
(8W-45-2)
DAYTIME RUNNING LAMP MODULE
(8W-50-5)
3 C9
9 C4
2 C4
7 C4
Z1 14 BK
Z1 16 BK/LB
Z1 18 BK/OR
Z1 20 BK/WT
9 C2
POWER AMPLIFIER (PREMIUM RADIO)
(8W-47-4)
2
KEY-IN SWITCH
(8W-45-9)
11 C2
INSTRUMENT CLUSTER
(8W-40-8)
G301
(8W-15-9)


JUNCTION BLOCK
(8W-12-2)
(8W-12-3)
BODY CONTROL MODULE
(8W-45-6)
8
10 C9
9 C1
8 C1
4 C5
3 C5
L7 18 BK/YL
L7 18 BK/BR
L7 18 BK/BR
L7 18 BK/YL
L7 18 BK/YL
L7 18 BK/DG
L7 18 BK/YL
2
LEFT PARK/ TURN SIGNAL LAMP
(8W-50-4)
1
RIGHT HEADLAMP LEVELING MOTOR
(8W-50-4)
1 C2
HEADLAMP SWITCH
(8W-50-3)
1
LEFT HEADLAMP LEVELING MOTOR
(8W-50-4)
2
RIGHT PARK/ TURN SIGNAL LAMP
(8W-50-4)
4 C2
RADIO
(8W-47-2)
L7 18 BK/YL
4 C300
L7 18 BK/YL
TO S406
(8W-45-6)
L7 18 BK/YL
TO RIGHT TAIL/ STOP LAMP
(8W-51-2)


FOG LAMP SWITCH (8W-50-3)
9 C2
LEFT FOG LAMP (8W-50-3)
A
RIGHT FOG LAMP (8W-50-3)
A
L39 18 LB
L39 18 LB
L39 18 LB
10 C5
11 C1
10 C1
JUNCTION BLOCK (8W-12-3)
DAYTIME RUNNING LAMP MODULE (8W-50-5)
2 C1
1 C1
7 C5
5 C4
6 C5
G9 20 GY/DG
G9 20 GY/DB
G9 22 GY/DB
G9 22 GY/DB
G9 18 GY
A
BRAKE WARNING PRESSURE SWITCH (8W-40-7)
6 C2
INSTRUMENT CLUSTER (8W-40-7)
15 C224
G9 18 GY
14
CONTROLLER ANTI-LOCK BRAKE (8W-35-6)
2 C2
IGNITION SWITCH (8W-10-6)
PARK BRAKE SWITCH (8W-40-7)


CONTROLLER ANTI-LOCK BRAKE
(8W-35-6)
13
STOP LAMP SWITCH
(8W-33-3)
5
L50
18
WT/BR
L50
16
WT/TN
1
C2
3
C2
JUNCTION BLOCK
(8W-12-3)
9
C9
L50
18
WT/TN
S313
L50
18
WT/TN
2
C300
L50
18
WT/TN
A
LEFT TAIL/ STOP LAMP
(8W-51-2)
L50
18
WT/TN
1
C305
L50
18
BK/TN
2
CENTER HIGH MOUNTED STOP LAMP
(8W-51-2)
L50
18
WT/TN
2
C301
L50
18
WT/TN
A
RIGHT TAIL/ STOP LAMP
(8W-51-2)


TURN SIGNAL/ HAZARD WARNING SWITCH
(8W-52-2)
7 C1
6 C1
L61 18 LG
L60 18 TN
7 C7
8 C7
JUNCTION BLOCK
(8W-12-3)
5 C1
5 C9
9 C7
3 C7
4 C9
4 C1
L61 18 LG/TN
L61 18 LG/TN
L61 18 LG/TN
L60 18 TN/BR
L60 18 TN
L60 18 TN/BR
3 C300
3 C301
L61 18 LG/TN
L60 18 TN
A
A
LEFT REAR TURN SIGNAL LAMP
(8W-52-4)
RIGHT REAR TURN SIGNAL LAMP
(8W-52-4)
S135
S136
L61 18 LG
L61 18 LG/TN
L60 18 TN
L60 18 TN/BR
1
1
LEFT PARK/ TURN SIGNAL LAMP
(8W-50-4)
2 C2
1 C1
INSTRUMENT CLUSTER
(8W-40-8)
RIGHT PARK/ TURN SIGNAL LAMP
(8W-50-4)
1
1
LEFT SIDE REPEATER
(8W-52-2)
RIGHT SIDE REPEATER
(8W-52-2)

FUSES

FUSE #	AMPS	COLOR	FUSED CIRCUIT	FEED CIRCUIT
1	30A	GREEN	C1 DG	A22 BK/OR
2	10A	BLUE	L34 RD/OR	L3 RD/OR
3	10A	BLUE	L33 LG/BR	L3 RD/OR
4	15A	RED	F20 WT, F20 WT/YL	A22 BK/OR
5	10A	BLUE	M1 PK	A7 RD/BK
6	10A	BLUE	C16 LB/YL	A4 BK/PK
7	20A	YELLOW	F33 BK/RD	A13 PK/WT
8	20A	YELLOW	F30 RD	A13 PK/WT
9	15A	RED	F135	A3 RD/WT
10	20A	YELLOW	L25, L25 OR	A3 RD/WT
11	10A	BLUE	F11 RD/VT	A81 DG/RD
12	10A	BLUE	L43 VT/OR	L4 VT/WT
13	20A	YELLOW	L44 VT/RD	L4 VT/WT
14	10A	BLUE	X12 RD/WT	A31 BK/WT
15	10A	BLUE	F13 DB, F13 DB/GY	A31 BK/WT
16	10A	BLUE	F23 WT	A22 BK/OR
17	10A	BLUE	F14 LG/YL	A21 DB
18	C.B. 20A	SILVER	F35 RD	A3 RD/WT
19	C.B. 20A	SILVER	F21 TN	A22 BK/OR

HEADLAMP DELAY RELAY

CAVITY	CIRCUIT	FUNCTION	SECTION
1	A3 RD/WT	FUSED B(+)	8W-50
2	G50	RELAY CONTROL (BCM)	8W-50
3	A3 RD/WT	FUSED B(+)	8W-50
4	-	-	-
5	L4	RELAY OUTPUT (BCM)	8W-50

HORN RELAY

CAVITY	CIRCUIT	FUNCTION	SECTION
6	F30 RD	FUSED B(+)	8W-41
7	X3 BK/RD	RELAY CONTROL	8W-41
8	F30 RD	FUSED B(+)	8W-41
9	-	-	-
10	X2 DG/PK	RELAY OUTPUT	8W-41

REAR WINDOW DEFOGGER RELAY

CAVITY	CIRCUIT	FUNCTION	SECTION
11	F13	FUSED IGN. (ACC/RUN)	8W-48
12	C80	RELAY CONTROL (BCM)	8W-48
13	A4 BK/PK	FUSED B(+)	8W-48
14	-	-	-
15	C15 BK/LB	RELAY OUTPUT	8W-48

8W-12 JUNCTION BLOCK

DESCRIPTION AND OPERATION

INTRODUCTION

This section covers the junction block and all circuits involved with it. For additional information on system operation, please refer to the appropriate section of the wiring diagrams.

This section identifies the fuses, relays, modules, and internal circuity of the junction block. For additional information on system operation, refer to the appropriate group of the wiring diagrams.

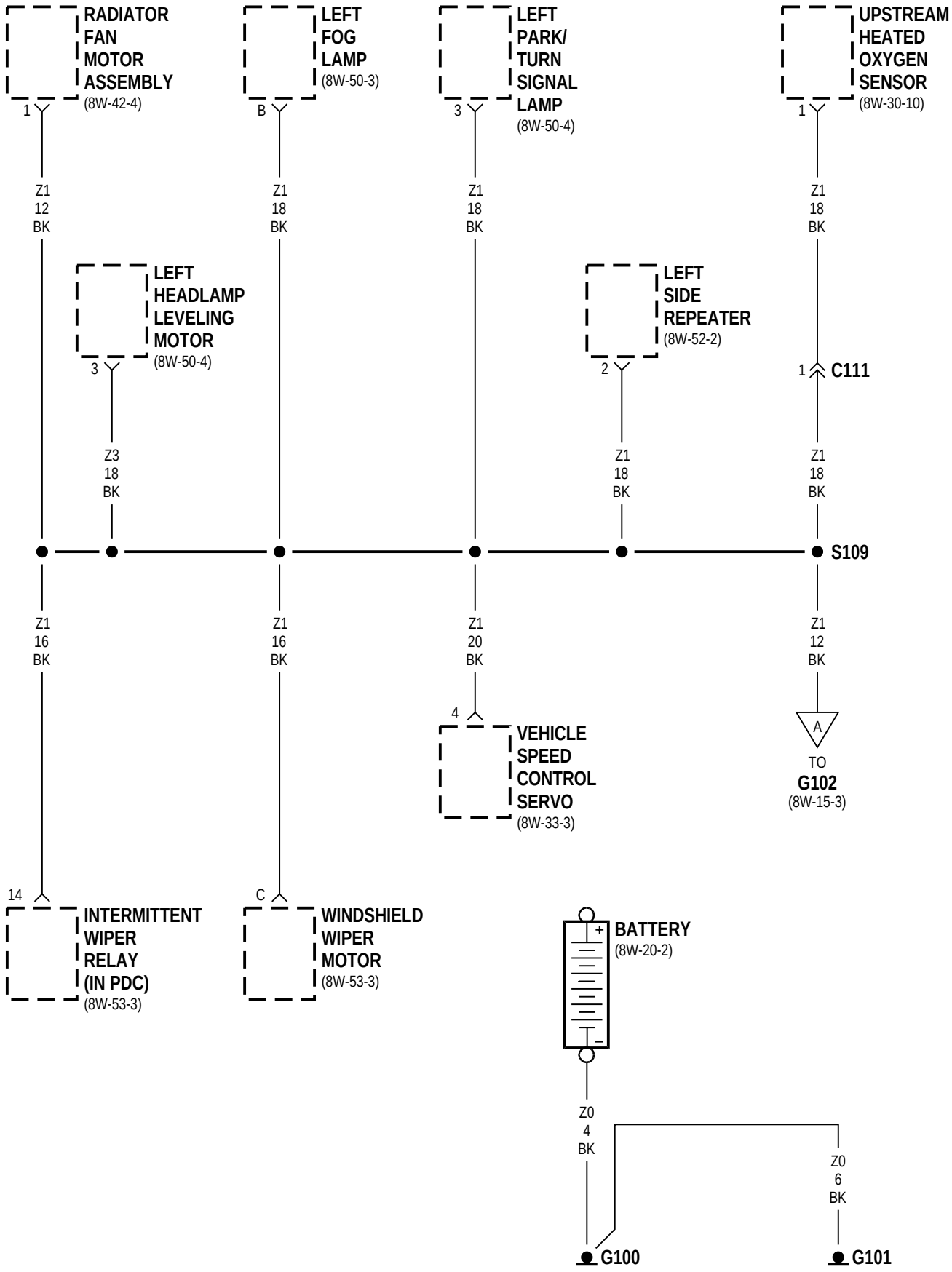
8W-15 GROUND DISTRIBUTION

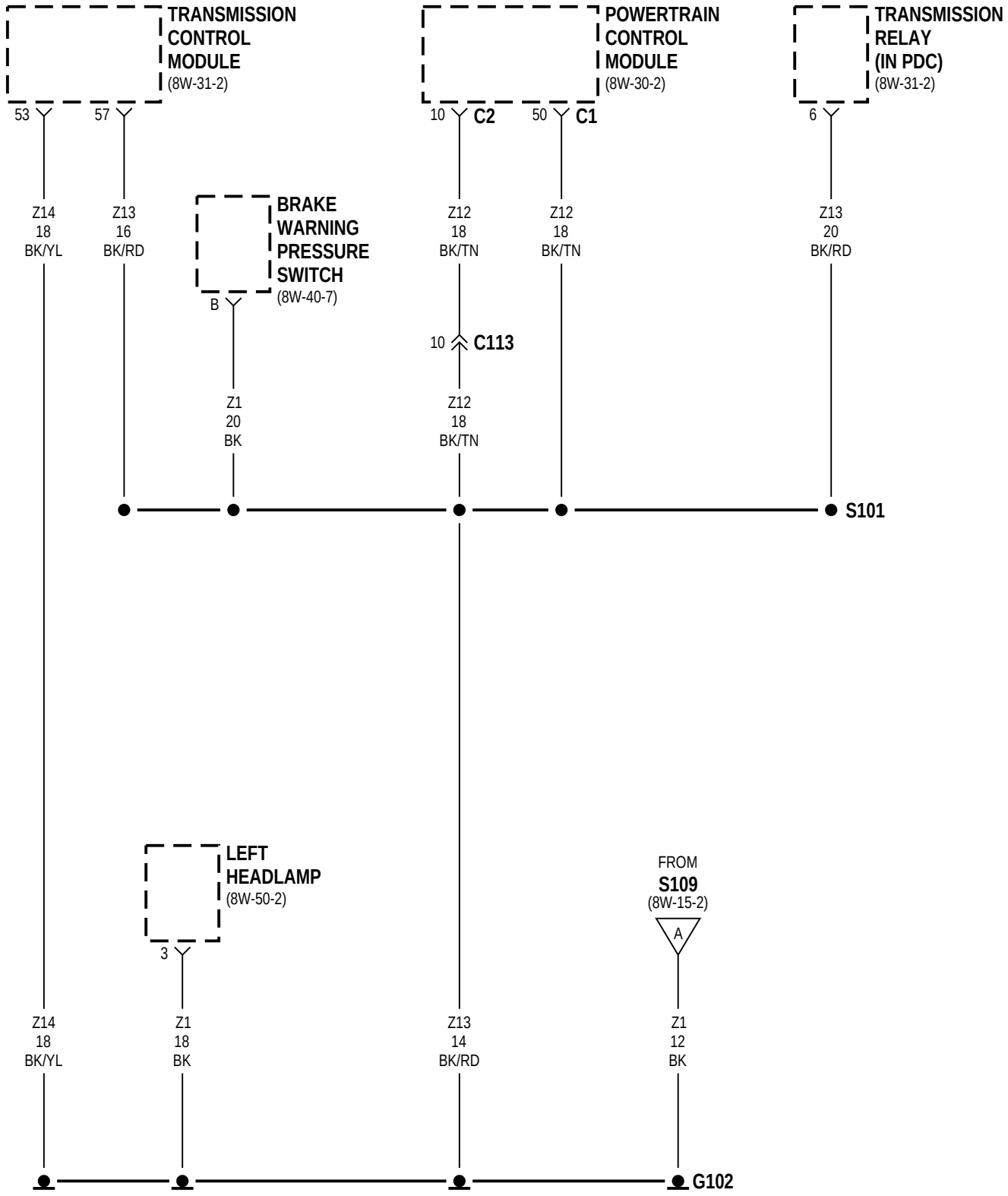
INDEX

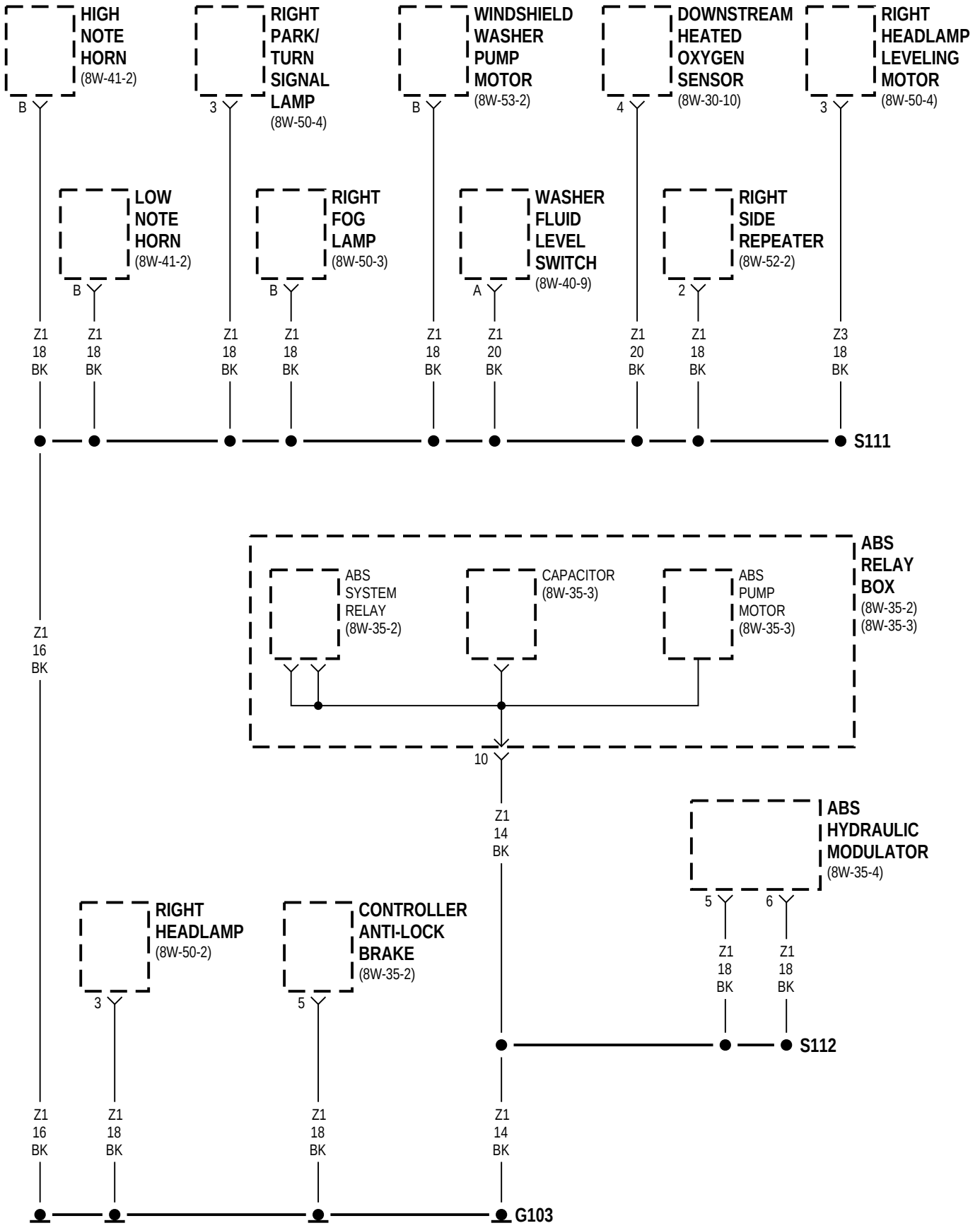
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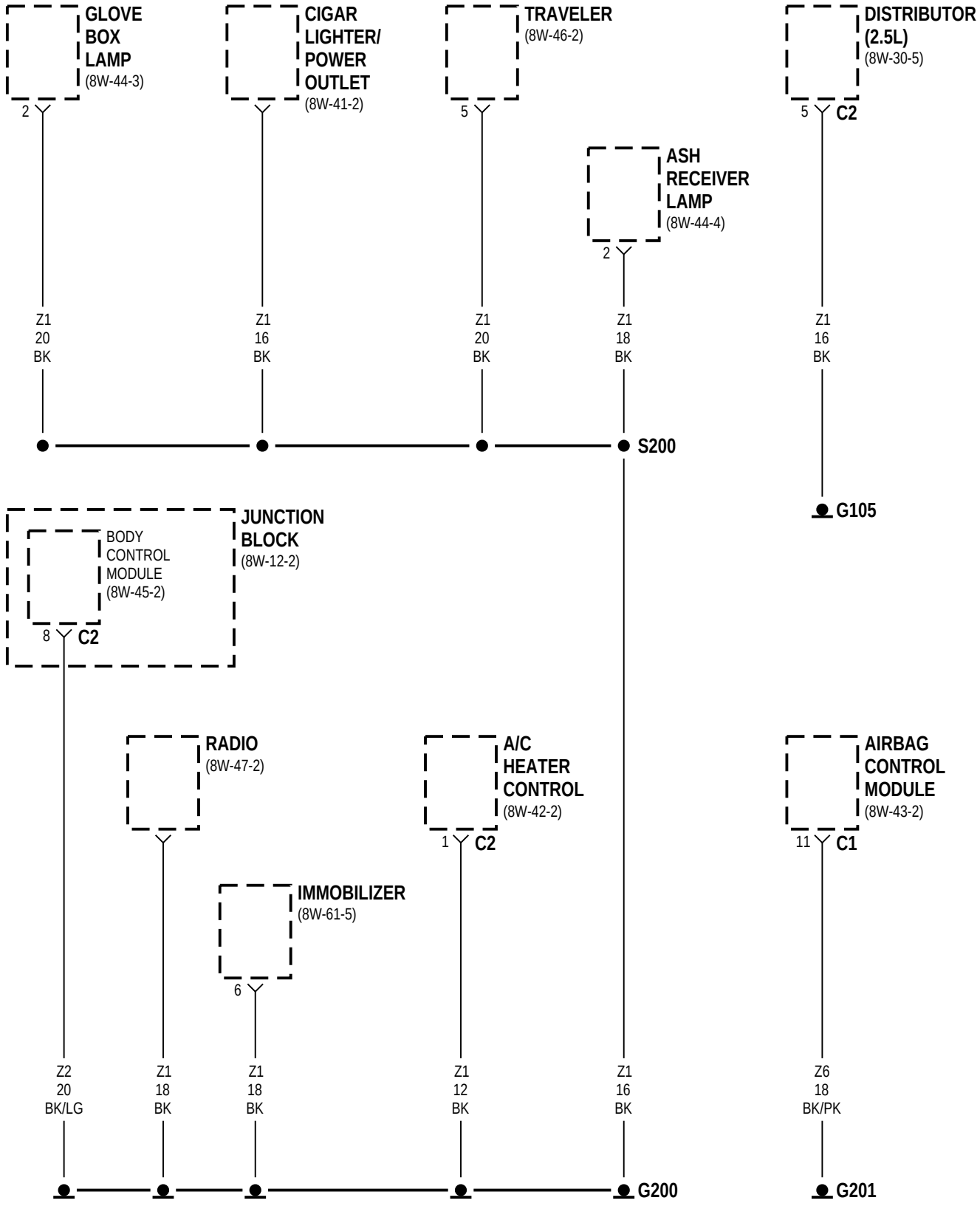
SCHEMATICS AND DIAGRAMS **1**
DESCRIPTION AND OPERATION **11**

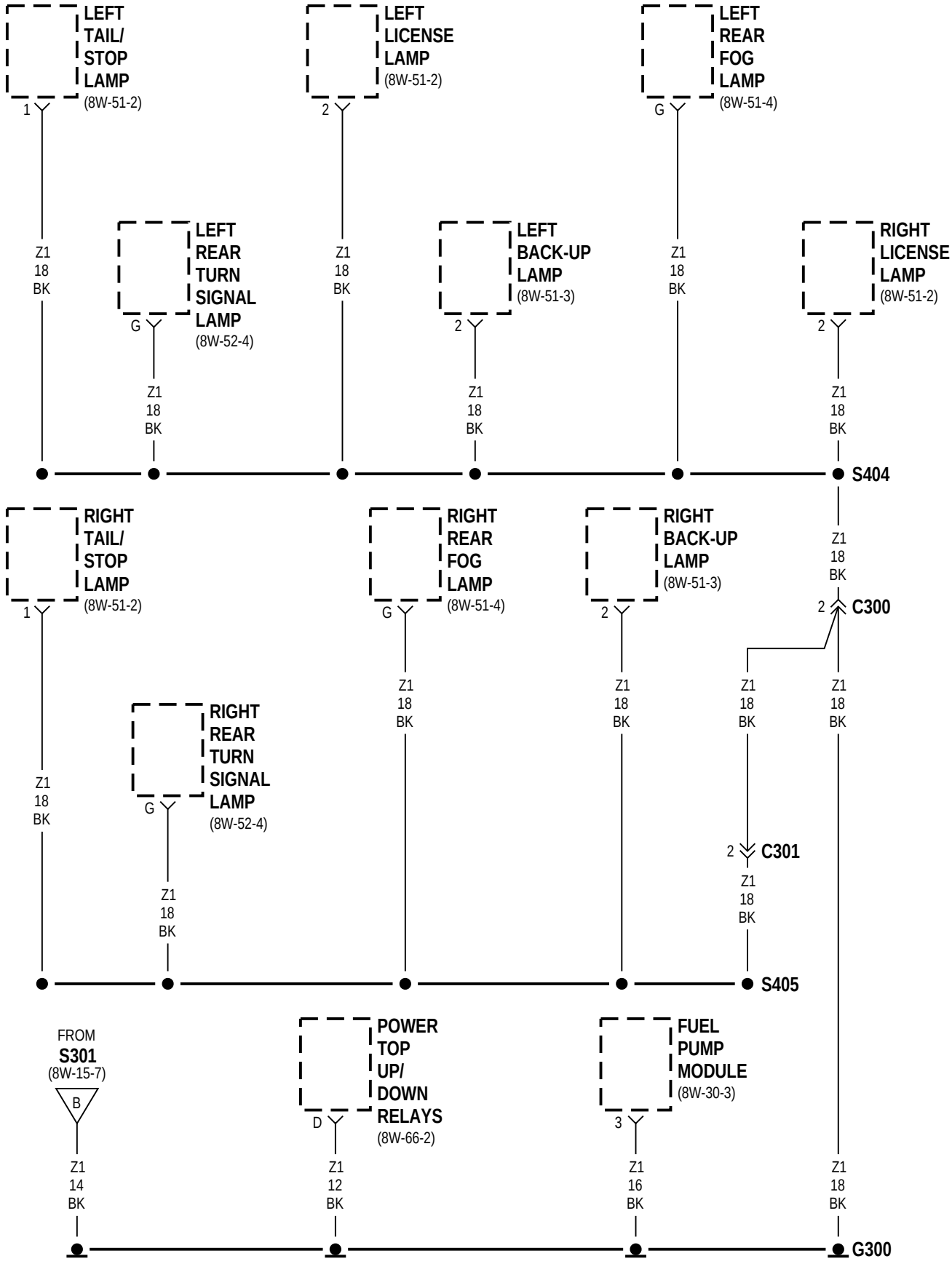
Component	Page
A/C Heater Control	8W-15-5
ABS Hydraulic Modulator	8W-15-4
ABS Pump Motor	8W-15-4
ABS Relay Box	8W-15-4
ABS System Relay	8W-15-4
Airbag Control Module	8W-15-5
Ash Receiver Lamp	8W-15-5
Automatic Day/Night Mirror	8W-15-10
Autostick Switch	8W-15-10
Battery	8W-15-2
Body Control Module	8W-15-5, 9, 10
Brake Warning Pressure Switch	8W-15-3
Capacitor	8W-15-4
Center High Mounted Stop Lamp	8W-15-7
Cigar Lighter/Power Outlet	8W-15-5
Controller Anti-Lock Brake	8W-15-4
Data Link Connector	8W-15-10
Daytime Running Lamp Module	8W-15-10
Decklid Solenoid	8W-15-7
Distributor	8W-15-5
Downstream Heated Oxygen Sensor	8W-15-4
Driver Seat Belt Solenoid	8W-15-9
Fuel Pump Module	8W-15-6, 7
G100	8W-15-2
G101	8W-15-2
G102	8W-15-3
G103	8W-15-4
G105	8W-15-5
G200	8W-15-5
G201	8W-15-5
G300	8W-15-6
G301	8W-15-9
G302	8W-15-7
G303	8W-15-7
G304	8W-15-7
Glove Box Lamp	8W-15-5
Headlamp Switch	8W-15-10
High Note Horn	8W-15-4
Ignition Switch	8W-15-10
Illuminated Entry Relay	8W-15-10
Immobilizer	8W-15-5
Instrument Cluster	8W-15-10
Intermittent Wiper Relay	8W-15-2
Junction Block	8W-15-5, 9, 10
Key-In Switch	8W-15-10
Left Back-Up Lamp	8W-15-6
Left Door Window Motor Relay	8W-15-8
Left Fog Lamp	8W-15-2
Left Headlamp	8W-15-3
Left Headlamp Leveling Motor	8W-15-2
Left License Lamp	8W-15-6
Left Park/Turn Signal Lamp	8W-15-2
Left Power Door Lock Switch	8W-15-8
Left Power Mirror	8W-15-8
Left Rear Fog Lamp	8W-15-6
Left Rear Turn Signal Lamp	8W-15-6
Left Side Repeater	8W-15-2
Left Tail/Stop Lamp	8W-15-6
Low Note Horn	8W-15-4
Master Power Window Switch	8W-15-8
Overhead Map Lamp	8W-15-10
Passenger Seat Belt Solenoid	8W-15-9
Power Amplifier	8W-15-10
Power Antenna	8W-15-7
Power Mirror Switch	8W-15-8
Power Seat Switch	8W-15-9
Power Steering Pressure Switch	8W-15-9
Power Top Switch	8W-15-9
Power Top Up/Down Relays	8W-15-6
Powertrain Control Module	8W-15-3
PRNDL Led	8W-15-9
Radiator Fan Motor Assembly	8W-15-2
Radio	8W-15-5
Rear Window Defogger	8W-15-7
Right Back-Up Lamp	8W-15-6
Right Door Window Motor Relay	8W-15-8
Right Fog Lamp	8W-15-4
Right Headlamp	8W-15-4
Right Headlamp Leveling Motor	8W-15-4
Right License Lamp	8W-15-6
Right Park/Turn Signal Lamp	8W-15-4
Right Power Door Lock Switch	8W-15-9
Right Power Mirror	8W-15-9
Right Rear Fog Lamp	8W-15-6
Right Rear Turn Signal Lamp	8W-15-6
Right Side Repeater	8W-15-4
Right Tail/Stop Lamp	8W-15-6
S101	8W-15-3
S109	8W-15-2
S111	8W-15-4
S112	8W-15-4
S200	8W-15-5
S301	8W-15-7
S308	8W-15-9
S402	8W-15-8
S403	8W-15-9
S404	8W-15-6
S405	8W-15-6
Seat Belt Control Module	8W-15-7, 9
Seat Belt Switch	8W-15-9
Transmission Control Module	8W-15-3
Transmission Relay	8W-15-3
Traveler	8W-15-5
Trunk Key Cylinder Switch	8W-15-7
Upstream Heated Oxygen Sensor	8W-15-2
Vehicle Speed Control Servo	8W-15-2
Washer Fluid Level Switch	8W-15-4
Window Timer Module	8W-15-8
Windshield Washer Pump Motor	8W-15-4
Windshield Wiper Motor	8W-15-2

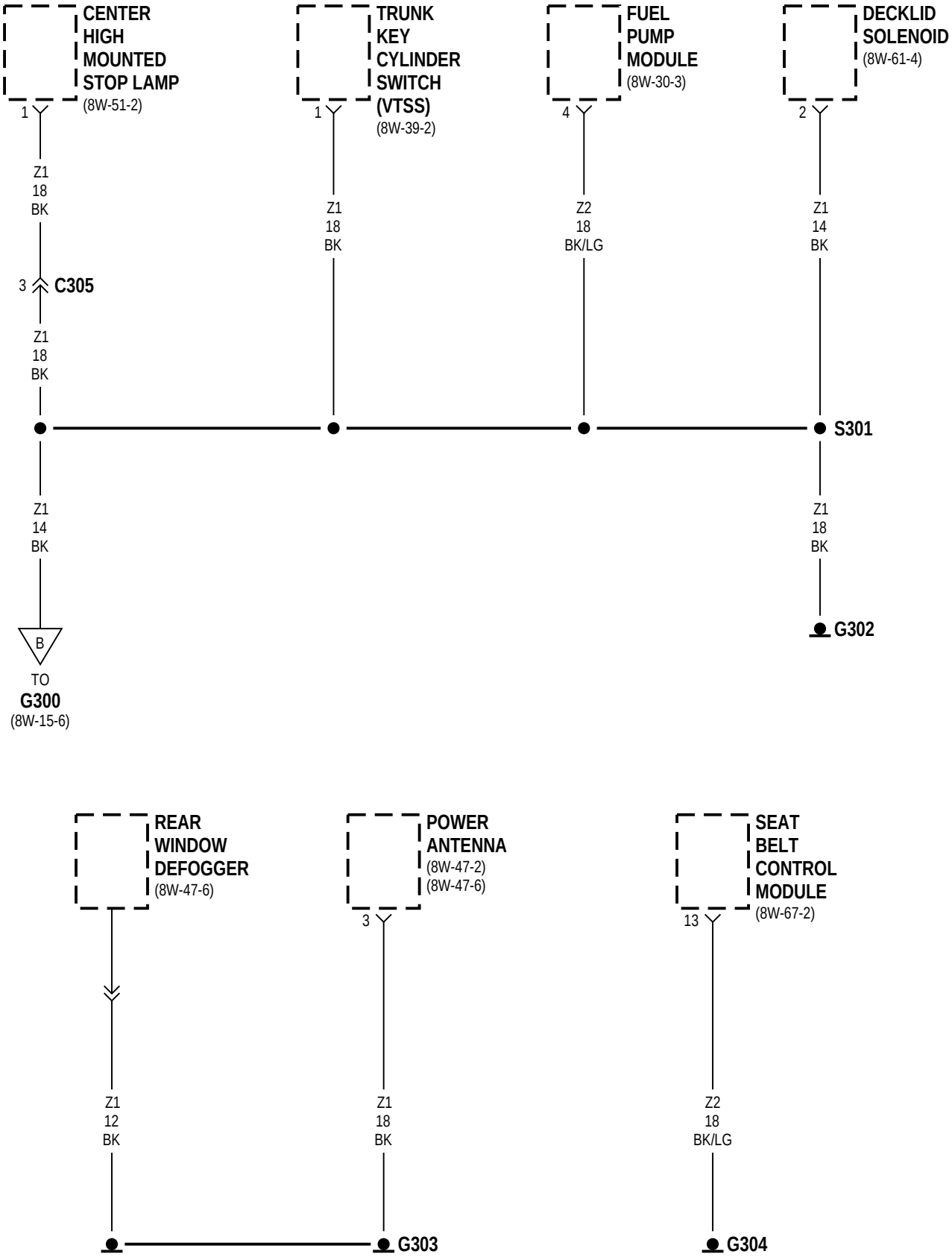

RADIATOR FAN MOTOR ASSEMBLY
(8W-42-4)
1
Z1
12
BK
LEFT FOG LAMP
(8W-50-3)
B
Z1
18
BK
LEFT PARK/ TURN SIGNAL LAMP
(8W-50-4)
3
Z1
18
BK
UPSTREAM HEATED OXYGEN SENSOR
(8W-30-10)
1
Z1
18
BK
1
C111
Z1
18
BK
LEFT HEADLAMP LEVELING MOTOR
(8W-50-4)
3
Z3
18
BK
LEFT SIDE REPEATER
(8W-52-2)
2
Z1
18
BK
S109
Z1
16
BK
Z1
16
BK
Z1
20
BK
4
VEHICLE SPEED CONTROL SERVO
(8W-33-3)
Z1
12
BK
A
TO
G102
(8W-15-3)
14
INTERMITTENT WIPER RELAY (IN PDC)
(8W-53-3)
C
WINDSHIELD WIPER MOTOR
(8W-53-3)
BATTERY
(8W-20-2)
+
–
Z0
4
BK
Z0
6
BK
G100
G101

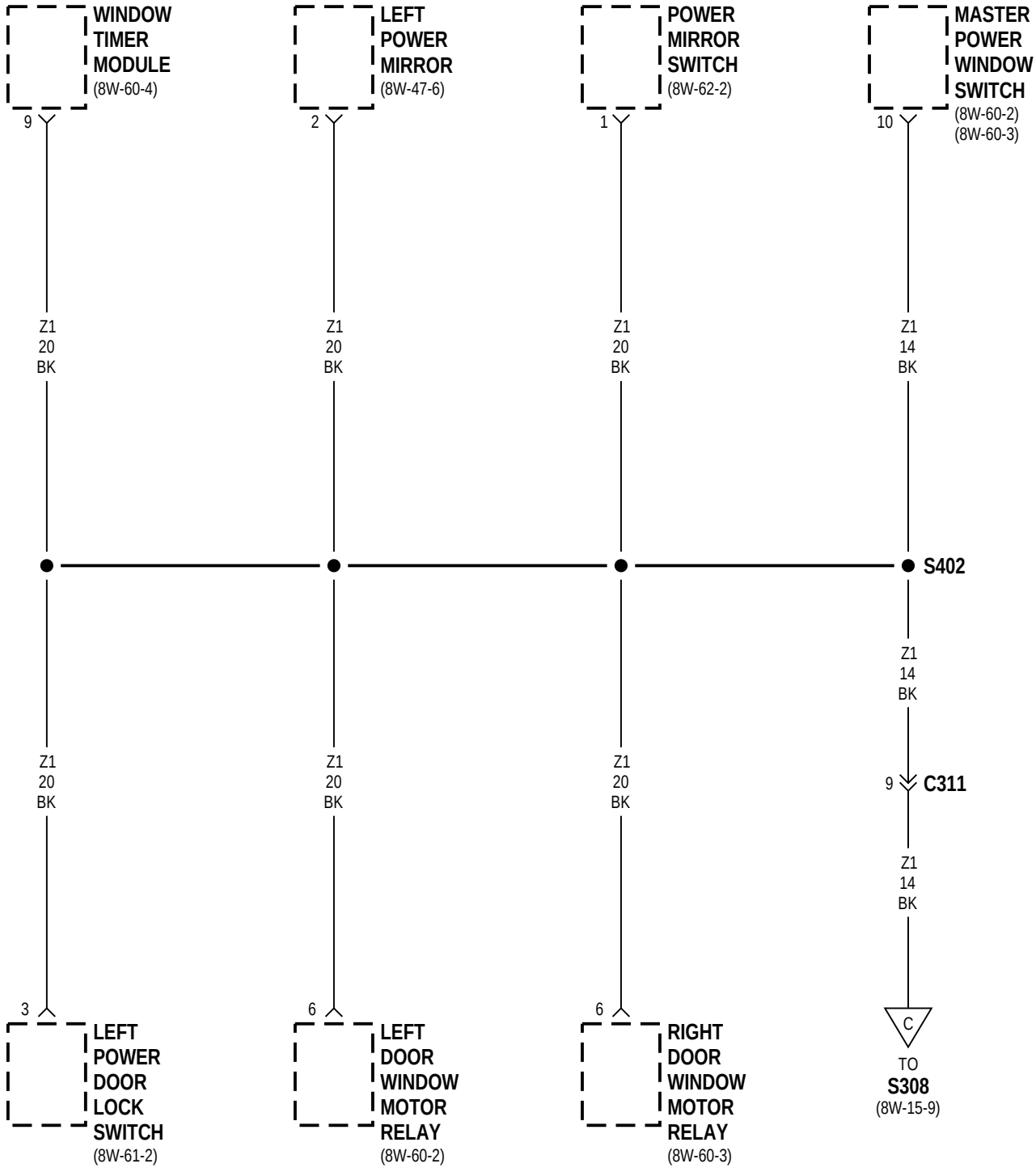

TRANSMISSION CONTROL MODULE
(8W-31-2)
53
57
Z14
18
BK/YL
Z13
16
BK/RD
BRAKE WARNING PRESSURE SWITCH
(8W-40-7)
B
Z1
20
BK
POWERTRAIN CONTROL MODULE
(8W-30-2)
10
C2
50
C1
Z12
18
BK/TN
Z12
18
BK/TN
10
C113
Z12
18
BK/TN
TRANSMISSION RELAY (IN PDC)
(8W-31-2)
6
Z13
20
BK/RD
S101
LEFT HEADLAMP
(8W-50-2)
3
Z1
18
BK
FROM
S109
(8W-15-2)
A
Z1
12
BK
Z14
18
BK/YL
Z13
14
BK/RD
G102

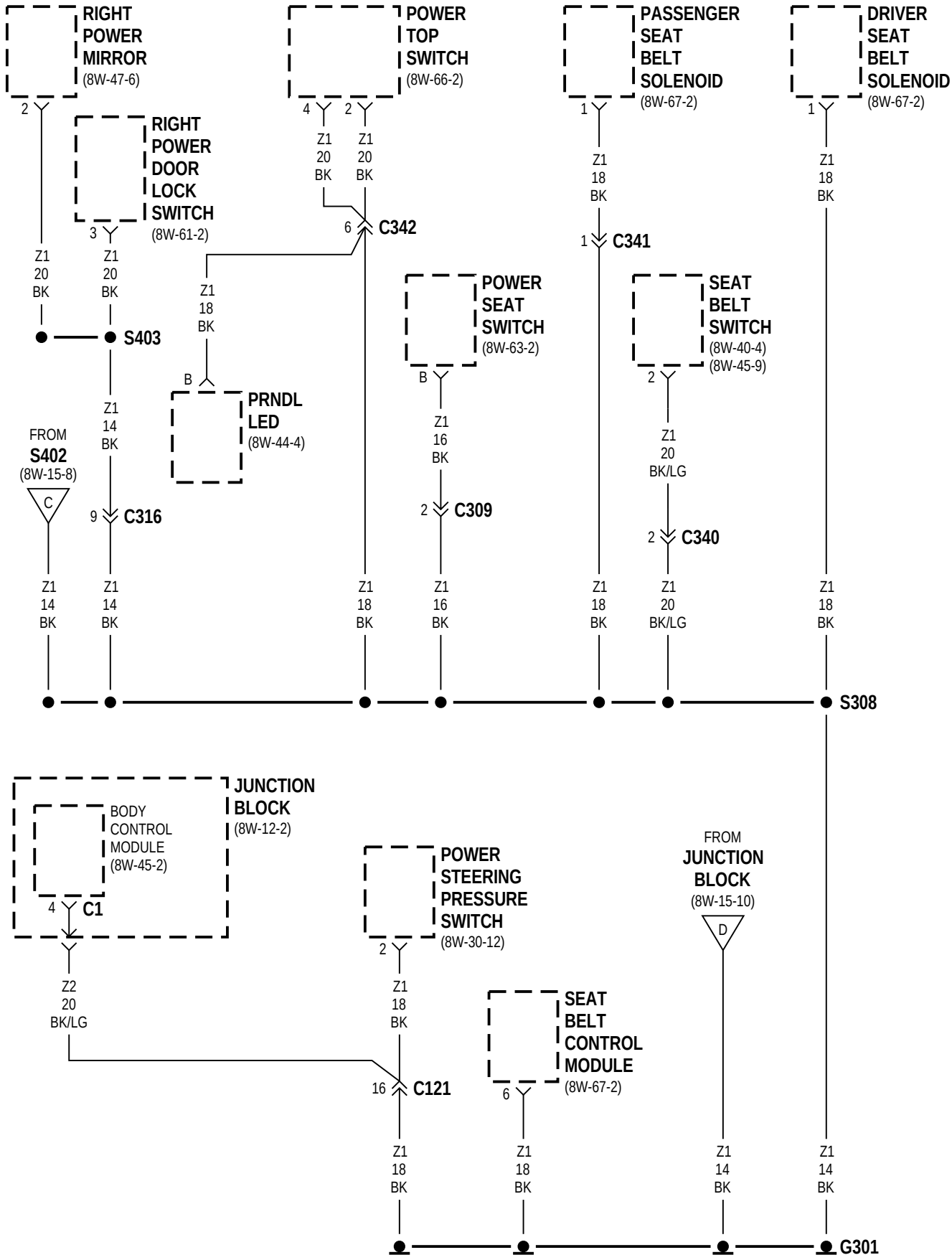

HIGH NOTE HORN (8W-41-2)
RIGHT PARK/ TURN SIGNAL LAMP (8W-50-4)
WINDSHIELD WASHER PUMP MOTOR (8W-53-2)
DOWNSTREAM HEATED OXYGEN SENSOR (8W-30-10)
RIGHT HEADLAMP LEVELING MOTOR (8W-50-4)
LOW NOTE HORN (8W-41-2)
RIGHT FOG LAMP (8W-50-3)
WASHER FLUID LEVEL SWITCH (8W-40-9)
RIGHT SIDE REPEATER (8W-52-2)
S111
ABS RELAY BOX (8W-35-2) (8W-35-3)
ABS SYSTEM RELAY (8W-35-2)
CAPACITOR (8W-35-3)
ABS PUMP MOTOR (8W-35-3)
ABS HYDRAULIC MODULATOR (8W-35-4)
RIGHT HEADLAMP (8W-50-2)
CONTROLLER ANTI-LOCK BRAKE (8W-35-2)
S112
G103

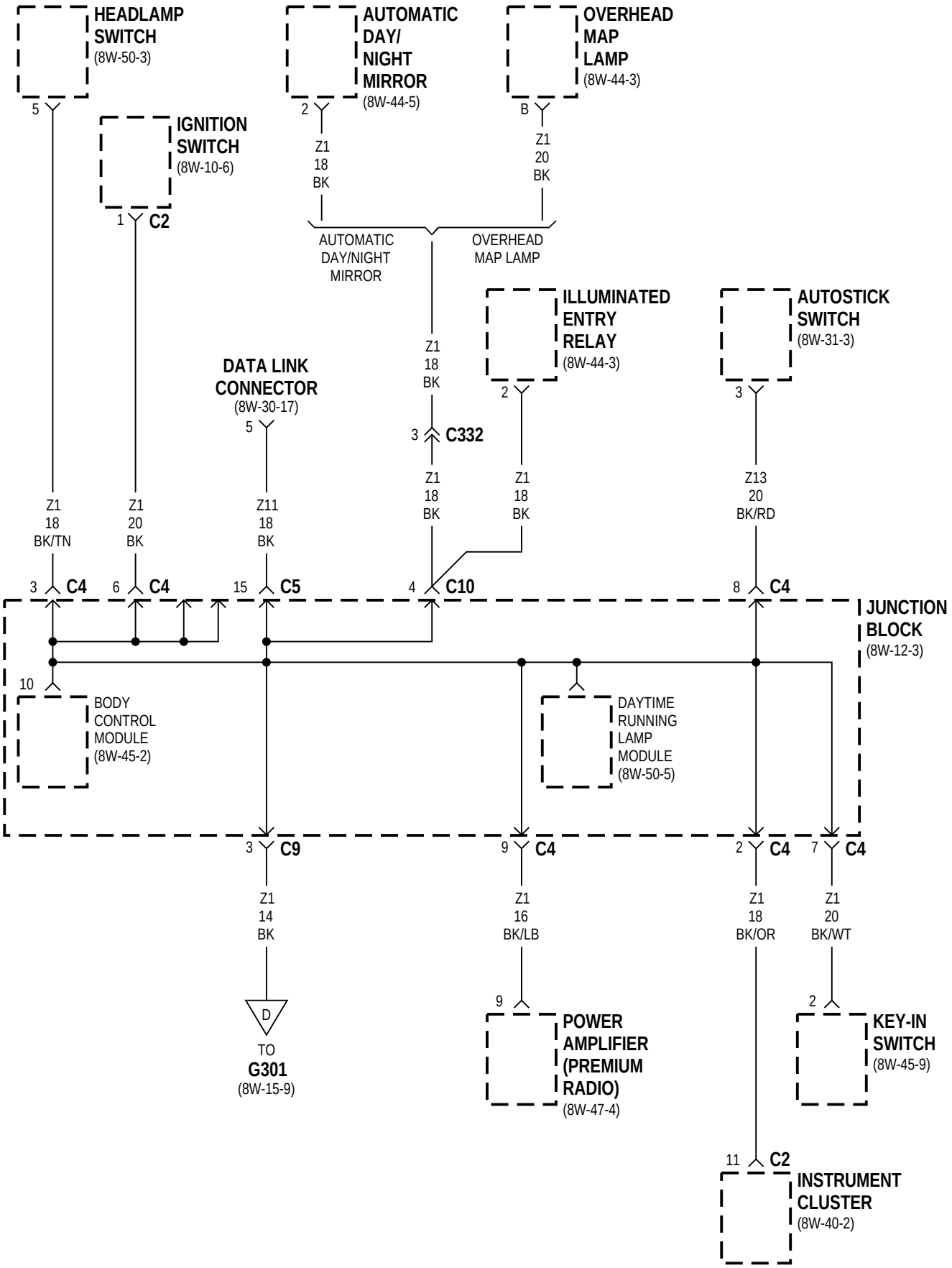

GLOVE BOX LAMP (8W-44-3)
2
CIGAR LIGHTER/ POWER OUTLET (8W-41-2)
TRAVELER (8W-46-2)
5
DISTRIBUTOR (2.5L) (8W-30-5)
5 C2
ASH RECEIVER LAMP (8W-44-4)
2
Z1 20 BK
Z1 16 BK
Z1 20 BK
Z1 18 BK
Z1 16 BK
S200
G105
JUNCTION BLOCK (8W-12-2)
BODY CONTROL MODULE (8W-45-2)
8 C2
RADIO (8W-47-2)
A/C HEATER CONTROL (8W-42-2)
1 C2
AIRBAG CONTROL MODULE (8W-43-2)
11 C1
IMMOBILIZER (8W-61-5)
6
Z2 20 BK/LG
Z1 18 BK
Z1 18 BK
Z1 12 BK
Z1 16 BK
Z6 18 BK/PK
G200
G201


LEFT TAIL/ STOP LAMP (8W-51-2)
1
Z1 18 BK
LEFT REAR TURN SIGNAL LAMP (8W-52-4)
G
Z1 18 BK
LEFT LICENSE LAMP (8W-51-2)
2
Z1 18 BK
LEFT BACK-UP LAMP (8W-51-3)
2
Z1 18 BK
LEFT REAR FOG LAMP (8W-51-4)
G
Z1 18 BK
RIGHT LICENSE LAMP (8W-51-2)
2
Z1 18 BK
S404
Z1 18 BK
2
C300
RIGHT TAIL/ STOP LAMP (8W-51-2)
1
Z1 18 BK
RIGHT REAR TURN SIGNAL LAMP (8W-52-4)
G
Z1 18 BK
RIGHT REAR FOG LAMP (8W-51-4)
G
Z1 18 BK
RIGHT BACK-UP LAMP (8W-51-3)
2
Z1 18 BK
Z1 18 BK
Z1 18 BK
2
C301
Z1 18 BK
S405
FROM S301 (8W-15-7)
B
Z1 14 BK
POWER TOP UP/ DOWN RELAYS (8W-66-2)
D
Z1 12 BK
FUEL PUMP MODULE (8W-30-3)
3
Z1 16 BK
Z1 18 BK
G300


CENTER HIGH MOUNTED STOP LAMP
(8W-51-2)
1
Z1
18
BK
3
C305
Z1
18
BK
Z1
14
BK
B
TO
G300
(8W-15-6)
TRUNK KEY CYLINDER SWITCH (VTSS)
(8W-39-2)
1
Z1
18
BK
FUEL PUMP MODULE
(8W-30-3)
4
Z2
18
BK/LG
DECKLID SOLENOID
(8W-61-4)
2
Z1
14
BK
S301
Z1
18
BK
G302
REAR WINDOW DEFOGGER
(8W-47-6)
Z1
12
BK
POWER ANTENNA
(8W-47-2)
(8W-47-6)
3
Z1
18
BK
G303
SEAT BELT CONTROL MODULE
(8W-67-2)
13
Z2
18
BK/LG
G304


WINDOW TIMER MODULE
(8W-60-4)
9
Z1
20
BK
LEFT POWER MIRROR
(8W-47-6)
2
Z1
20
BK
POWER MIRROR SWITCH
(8W-62-2)
1
Z1
20
BK
MASTER POWER WINDOW SWITCH
(8W-60-2)
(8W-60-3)
10
Z1
14
BK
S402
Z1
14
BK
9
C311
Z1
14
BK
C
TO
S308
(8W-15-9)
Z1
20
BK
3
LEFT POWER DOOR LOCK SWITCH
(8W-61-2)
Z1
20
BK
6
LEFT DOOR WINDOW MOTOR RELAY
(8W-60-2)
Z1
20
BK
6
RIGHT DOOR WINDOW MOTOR RELAY
(8W-60-3)


RIGHT POWER MIRROR (8W-47-6)
RIGHT POWER DOOR LOCK SWITCH (8W-61-2)
POWER TOP SWITCH (8W-66-2)
PASSENGER SEAT BELT SOLENOID (8W-67-2)
DRIVER SEAT BELT SOLENOID (8W-67-2)
C342
C341
S403
PRNDL LED (8W-44-4)
POWER SEAT SWITCH (8W-63-2)
SEAT BELT SWITCH (8W-40-4) (8W-45-9)
FROM S402 (8W-15-8)
C316
C309
C340
S308
JUNCTION BLOCK (8W-12-2)
BODY CONTROL MODULE (8W-45-2)
C1
POWER STEERING PRESSURE SWITCH (8W-30-12)
FROM JUNCTION BLOCK (8W-15-10)
SEAT BELT CONTROL MODULE (8W-67-2)
C121
G301


HEADLAMP SWITCH
(8W-50-3)
5
IGNITION SWITCH
(8W-10-6)
1 C2
AUTOMATIC DAY/ NIGHT MIRROR
(8W-44-5)
2
Z1 18 BK
OVERHEAD MAP LAMP
(8W-44-3)
B
Z1 20 BK
AUTOMATIC DAY/NIGHT MIRROR
OVERHEAD MAP LAMP
ILLUMINATED ENTRY RELAY
(8W-44-3)
2
AUTOSTICK SWITCH
(8W-31-3)
3
DATA LINK CONNECTOR
(8W-30-17)
5
Z1 18 BK
3 C332
Z1 18 BK
Z1 18 BK
Z13 20 BK/RD
Z1 18 BK/TN
Z1 20 BK
Z11 18 BK
3 C4
6 C4
15 C5
4 C10
8 C4
JUNCTION BLOCK
(8W-12-3)
10
BODY CONTROL MODULE
(8W-45-2)
DAYTIME RUNNING LAMP MODULE
(8W-50-5)
3 C9
9 C4
2 C4
7 C4
Z1 14 BK
Z1 16 BK/LB
Z1 18 BK/OR
Z1 20 BK/WT
D
TO G301
(8W-15-9)
9
POWER AMPLIFIER (PREMIUM RADIO)
(8W-47-4)
2
KEY-IN SWITCH
(8W-45-9)
11 C2
INSTRUMENT CLUSTER
(8W-40-2)

8W-15 GROUND DISTRIBUTION

DESCRIPTION AND OPERATION

INTRODUCTION

This section identifies the grounds, splices that connect to those grounds, and the components that connect those grounds. For additional information on system operation, refer to the appropriate section of the wiring diagrams. For an illustration of the physical location of each ground, refer to group 8W-90.

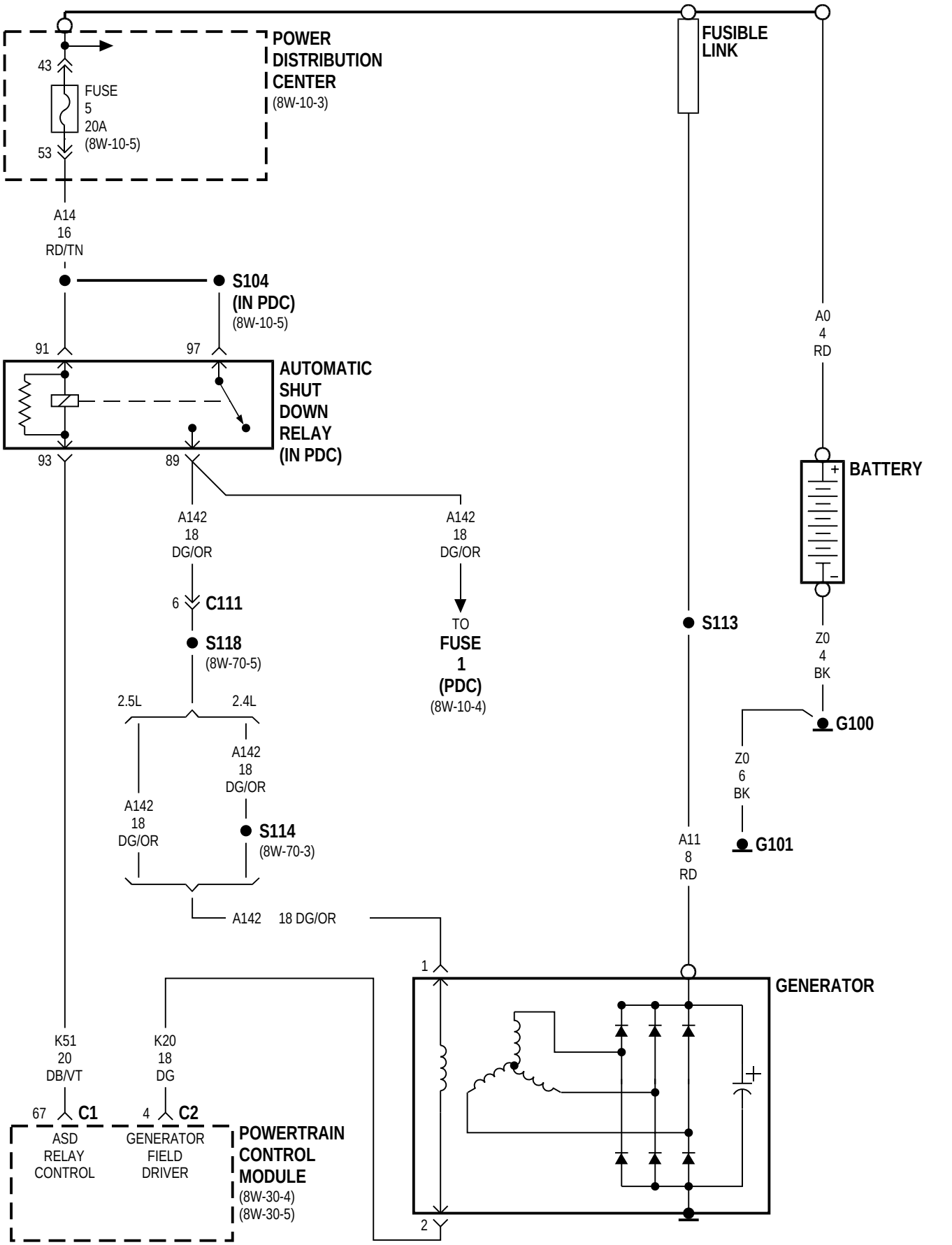
8W-20 CHARGING SYSTEM

INDEX

page

SCHEMATICS AND DIAGRAMS 1
DESCRIPTION AND OPERATION 3

Component	Page
Automatic Shut Down Relay	8W-20-2
Battery	8W-20-2
Fuse 1	8W-20-2
Fuse 5	8W-20-2
Fusible Link	8W-20-2
G100	8W-20-2
G101	8W-20-2
Generator	8W-20-2
Power Distribution Center	8W-20-2
Powertrain Control Module	8W-20-2
S104	8W-20-2
S113	8W-20-2
S114	8W-20-2
S118	8W-20-2


POWER DISTRIBUTION CENTER
(8W-10-3)
43
FUSE 5 20A
(8W-10-5)
53
A14 16 RD/TN
S104 (IN PDC)
(8W-10-5)
91
97
AUTOMATIC SHUT DOWN RELAY (IN PDC)
93
89
A142 18 DG/OR
6
C111
S118
(8W-70-5)
2.5L
2.4L
A142 18 DG/OR
A142 18 DG/OR
S114
(8W-70-3)
A142 18 DG/OR
TO FUSE 1 (PDC)
(8W-10-4)
FUSIBLE LINK
S113
A11 8 RD
A0 4 RD
BATTERY
Z0 4 BK
G100
Z0 6 BK
G101
1
2
GENERATOR
K51 20 DB/VT
K20 18 DG
67
C1
4
C2
ASD RELAY CONTROL
GENERATOR FIELD DRIVER
POWERTRAIN CONTROL MODULE
(8W-30-4)
(8W-30-5)

8W-20 CHARGING SYSTEM

DESCRIPTION AND OPERATION

CHARGING SYSTEM

The charging system is an integral part of the battery and starter systems. Since these systems work together, any diagnosis and testing should be done in conjunction.

The charging system is protected by a 10 gauge fusible link located in the A11 circuit. The fusible link isconnected into the A0 circuit. The A0 circuit is connected to the battery feed terminal of the Power Distribution Center (PDC) and the engine starter motor.

The generator is case-grounded through its attaching bracket. This generator uses a voltage regulator internal to the Powertrain Control Module (PCM).

When the vehicle is running, battery voltage is applied to the generator field terminal through the A142 circuit, on all engine applications. This circuit is controlled by the Automatic Shut-Down (ASD) relay. The ground, or voltage regulated side, of the generator field is controlled by the K20 circuit. Circuit K20 connects to cavity 4 of the PCM.

When there is current present in the field, and the rotor is turning, the stator in the generator produces a B+ voltage that is supplied to the battery through the A11 and A0 circuits. The A11 circuit is connected to the output terminal of the generator and spliced to the A0 circuit. The A0 circuit is a direct feed from the PDC to the engine starter motor.

Grounding for the system is accomplished at the battery negative terminal. These grounds go to the engine and body.

HELPFUL INFORMATION

- Inspect for a blown fusible link in the A11 circuit between the generator and the battery feed terminal at the PDC
- For additional information on charging system diagnosis, refer to the appropriate group of the Service Manual or Diagnostic Test Procedures Manual

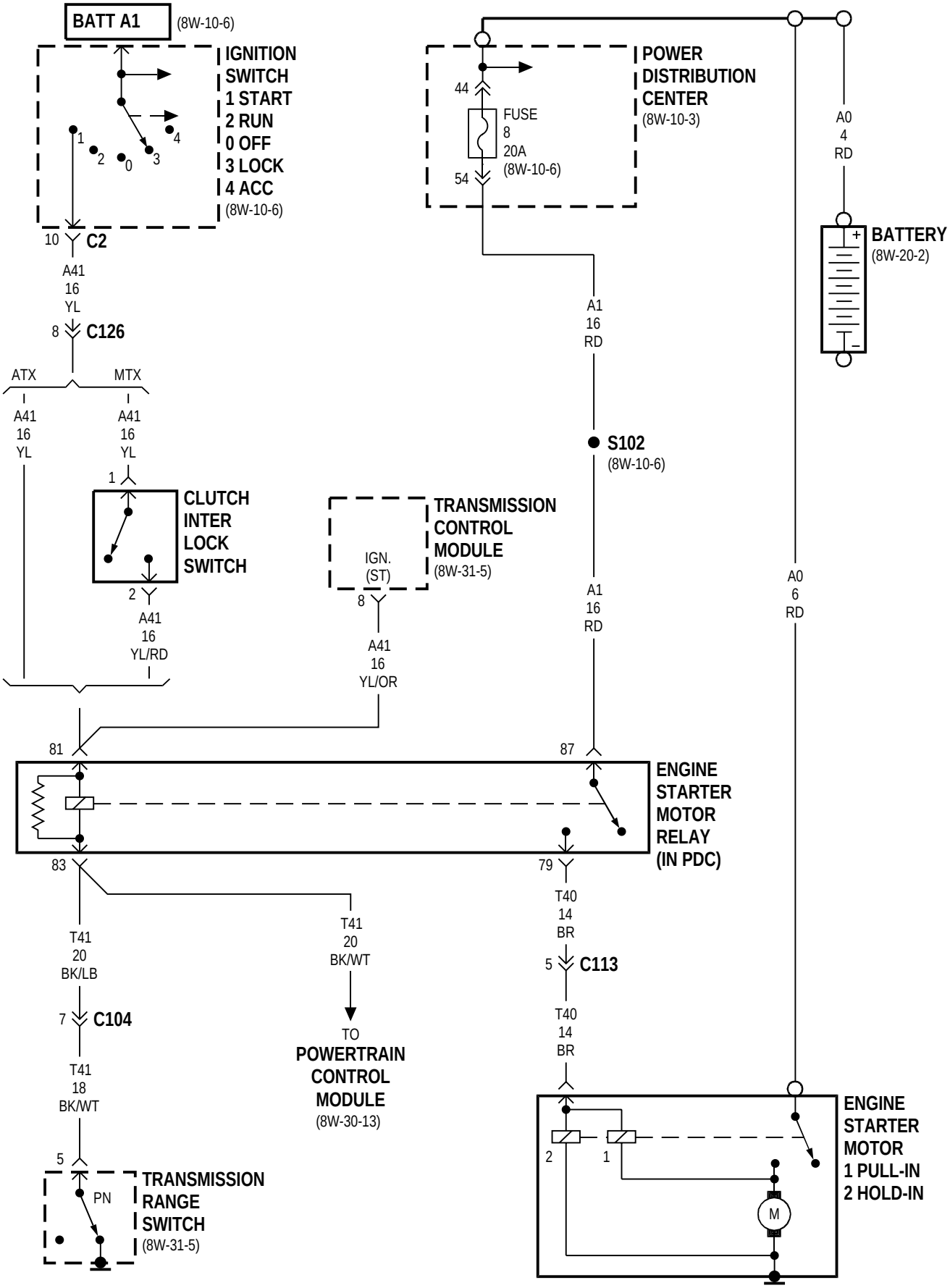
8W-21 STARTING SYSTEM

INDEX

page

SCHEMATICS AND DIAGRAMS **1**
DESCRIPTION AND OPERATION **3**

Component	Page
Battery	8W-21-2
Clutch Inter Lock Switch	8W-21-2
Engine Starter Motor	8W-21-2
Engine Starter Motor Relay	8W-21-2
Fuse 8	8W-21-2
Ignition Switch	8W-21-2
Power Distribution Center	8W-21-2
Powertrain Control Module	8W-21-2
S102	8W-21-2
Transmission Control Module	8W-21-2
Transmission Range Switch	8W-21-2


BATT A1
(8W-10-6)
IGNITION SWITCH
1 START
2 RUN
0 OFF
3 LOCK
4 ACC
(8W-10-6)
1
2
0
3
4
10
C2
A41
16
YL
8
C126
ATX
MTX
A41
16
YL
A41
16
YL
1
CLUTCH INTER LOCK SWITCH
2
A41
16
YL/RD
TRANSMISSION CONTROL MODULE
(8W-31-5)
IGN.
(ST)
8
A41
16
YL/OR
POWER DISTRIBUTION CENTER
(8W-10-3)
44
FUSE
8
20A
(8W-10-6)
54
A1
16
RD
S102
(8W-10-6)
A1
16
RD
A0
4
RD
BATTERY
(8W-20-2)
A0
6
RD
81
87
ENGINE STARTER MOTOR RELAY (IN PDC)
83
79
T41
20
BK/LB
7
C104
T41
18
BK/WT
5
PN
TRANSMISSION RANGE SWITCH
(8W-31-5)
T41
20
BK/WT
TO
POWERTRAIN CONTROL MODULE
(8W-30-13)
T40
14
BR
5
C113
T40
14
BR
2
1
M
ENGINE STARTER MOTOR
1 PULL-IN
2 HOLD-IN

8W-21 STARTING SYSTEM

DESCRIPTION AND OPERATION

STARTING SYSTEM (MANUAL TRANSAXLE)

The Power Distribution Center (PDC) supplies battery voltage to the engine starter motor solenoid through circuit T40 when the coil side of the engine starter motor relay energizes. Circuit A1 contains a 20 amp fuse, and feeds the contact side of the engine starter motor relay. Both the 20 amp fuse and the engine starter motor relay are located in the PDC.

The ignition switch supplies battery voltage to the coil side of the engine starter motor relay on circuit A41 when the key is moved to the START position and the operator has pressed the clutch pedal to CLOSE the clutch pedal position switch. Circuit Z1 is the ground for the coil side of the engine starter motor relay. When the coil side of the relay energizes, the contacts CLOSE, supplying battery voltage to the engine starter motor solenoid.

Circuit A0 (battery positive cable) supplies battery voltage to the engine starter motor when the solenoid energizes. Ground for the engine starter motor is supplied through the starter motor case.

HELPFUL INFORMATION

- Check for blown engine starter motor fuse in cavity 8 of the PDC
- Move the ignition key to the START position and with the clutch pedal pressed, listen for the starter motor relay to click. The engine starter motor relay is located in the PDC
- Check for a good ground at the starter motor

STARTING SYSTEM (AUTOMATIC TRANSAXLE)

The Power Distribution Center (PDC) supplies battery voltage to the engine starter motor solenoid through circuit T40 when the coil side of the engine starter motor relay energizes. Circuit A1 contains a 20 amp fuse, and feeds the contact side of the engine starter motor relay. Both the 20 amp fuse and the engine starter motor relay are located in the PDC.

The ignition switch supplies battery voltage to the coil side of the engine starter motor relay on circuit A41 when the key is moved to the START position and the PARK/NEUTRALportion of the Transmission Range Sensor (TRS) is CLOSED. Circuit A41 also provides an ignition start input to the Transmission Control Module (TCM).

Ground for the coil side of the engine starter motor relay is supplied on the T41 circuit by the TRS, which is case-grounded. The T41 circuit is also an input to the Powertrain Control Module (PCM), cavity 76, and the TCM, cavity 41. This input is used to indicate when the vehicle is in the PARK or NEUTRAL positions.

Circuit A0 (battery positive cable) supplies battery voltage to the engine starter motor when the solenoid energizes. Ground for the engine starter motor is supplied through the starter motor case.

HELPFUL INFORMATION

- Check for blown engine starter motor fuse in cavity 8 of the PDC
- With the gear selector in the PARK or NEUTRAL position, move the ignition key to the START position and listen for the starter motor relay to click. The engine starter motor relay is located in the PDC
- Check for a good ground at the starter motor
- The TRS is case-grounded and supplies the ground for the coil side of the starter relay

8W-30 FUEL/IGNITION SYSTEM

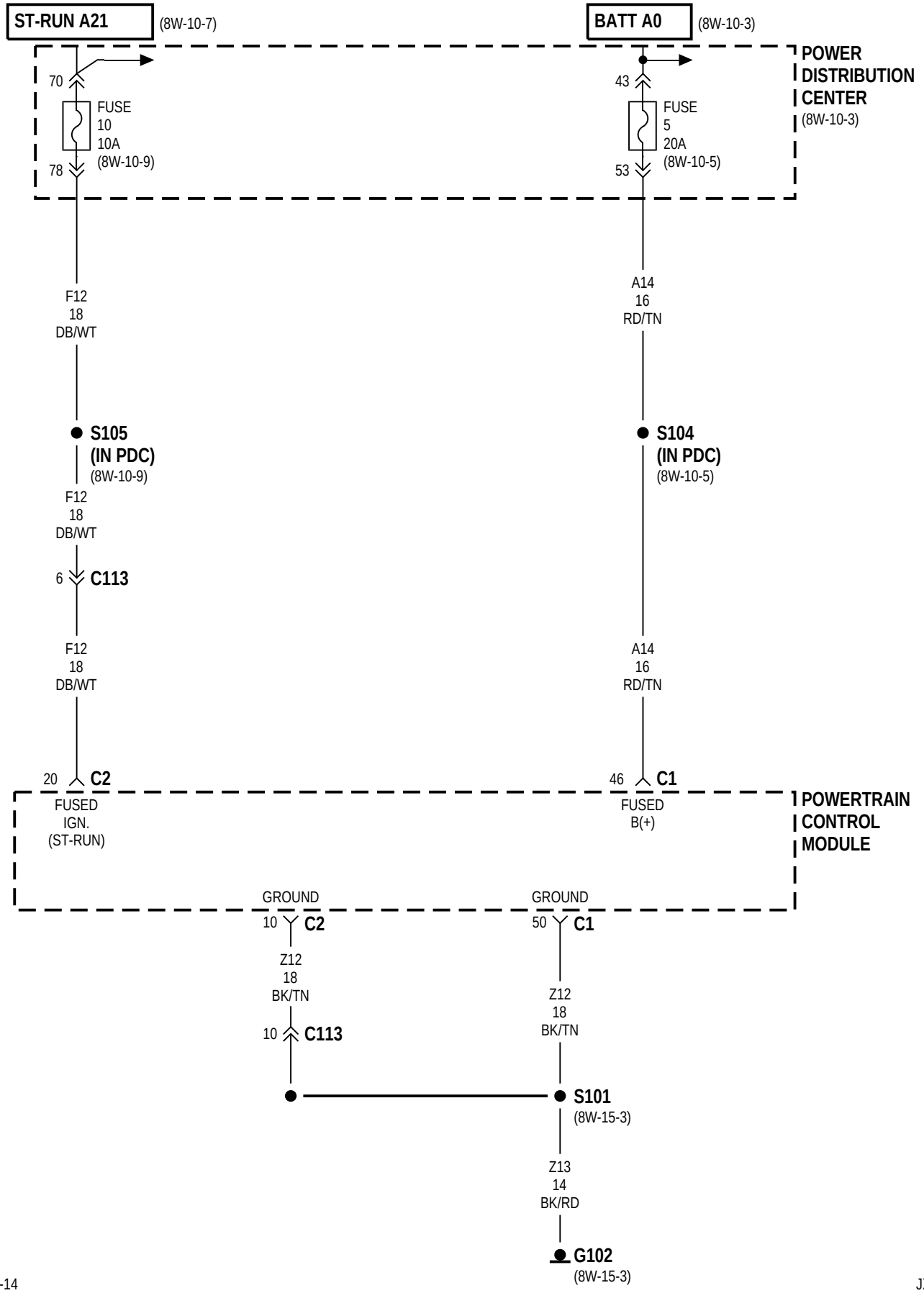
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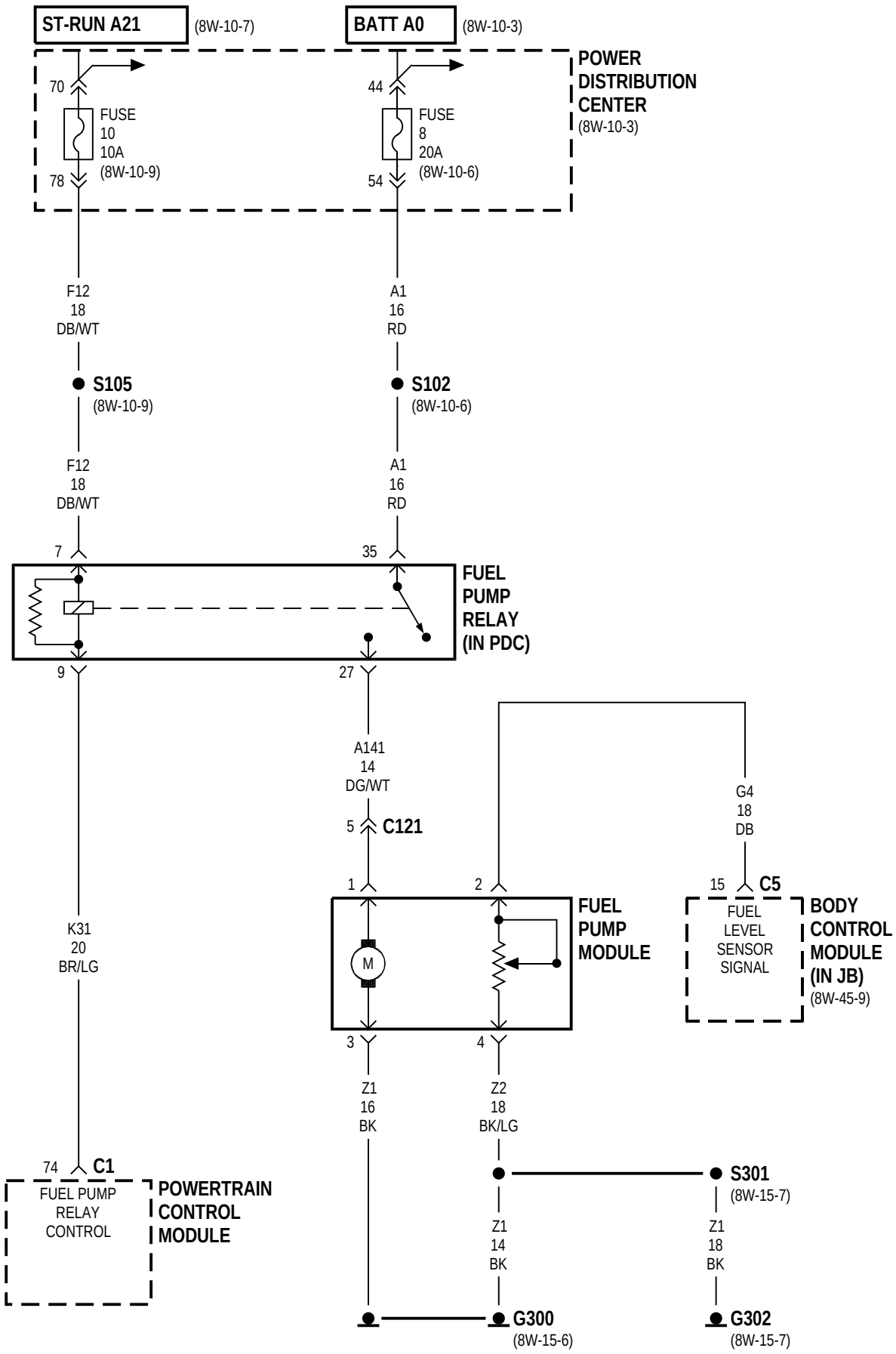
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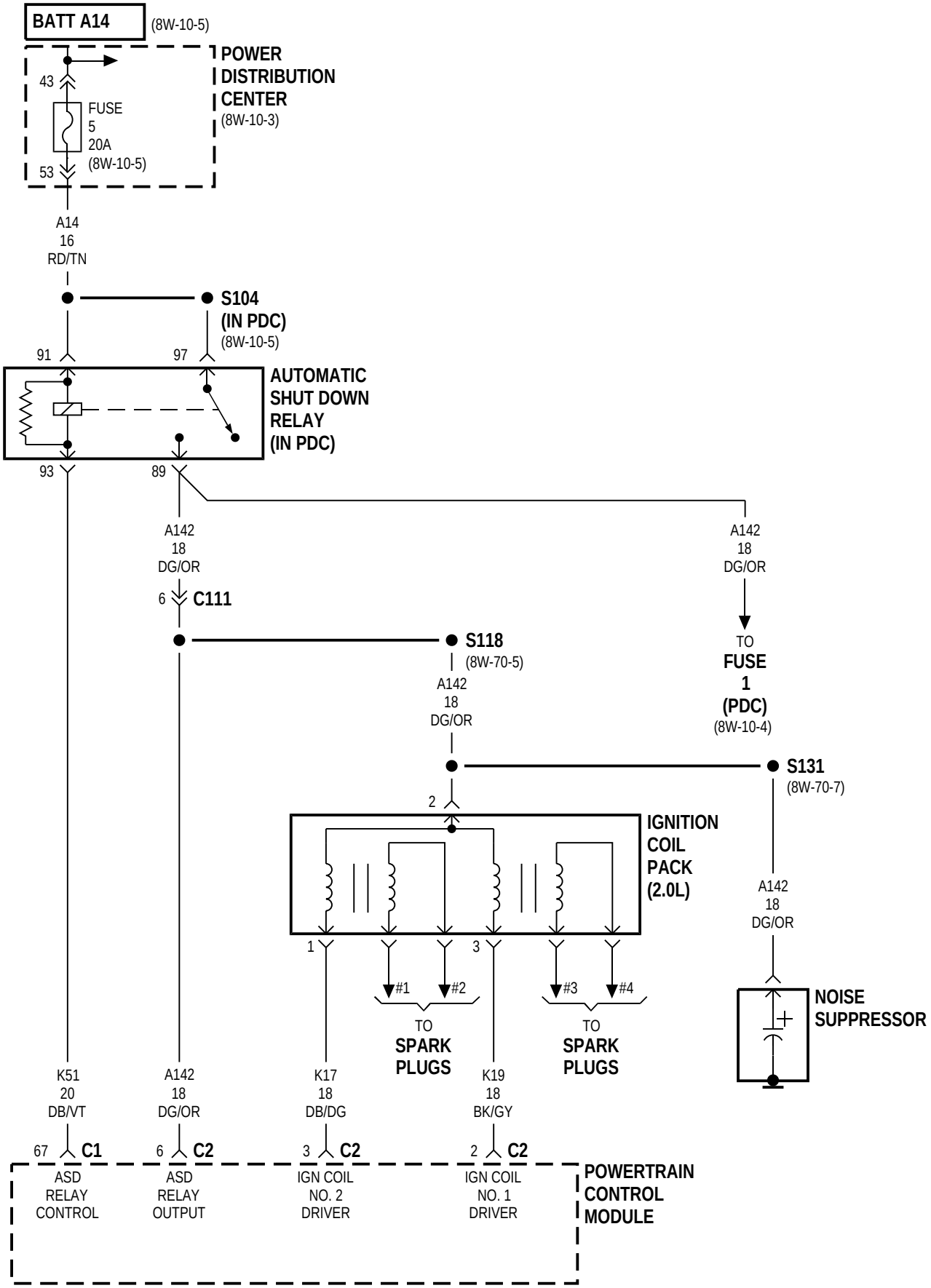
SCHEMATICS AND DIAGRAMS **1**
DESCRIPTION AND OPERATION **18**

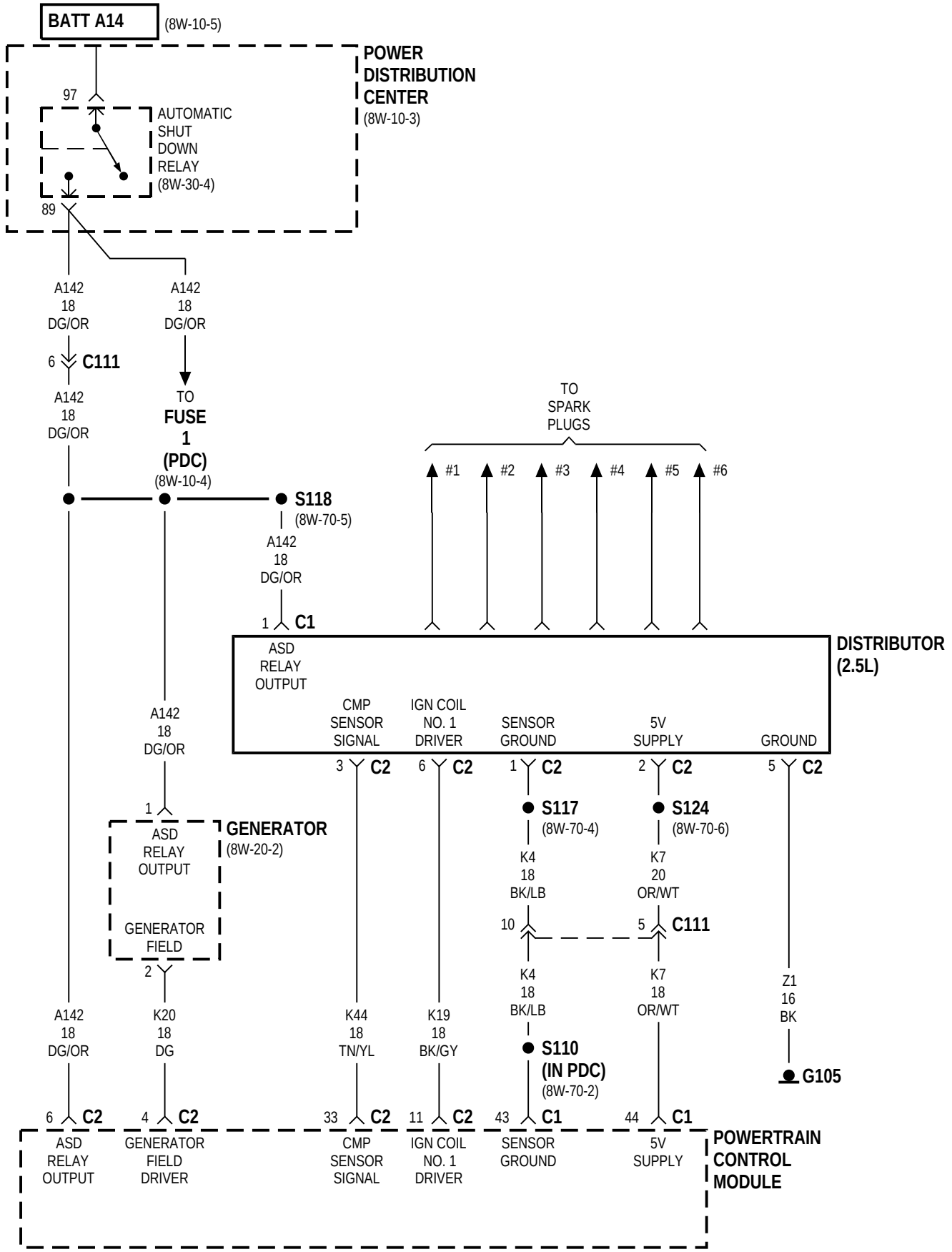
Component	Page
A/C Compressor Clutch Relay	8W-30-15
A/C Pressure Transducer	8W-30-14
Automatic Shut Down Relay	8W-30-4, 5, 6, 7, 10
Battery Temperature Sensor	8W-30-14
Body Control Module	8W-30-3, 12, 17
Camshaft Position Sensor	8W-30-8
Clockspring	8W-30-13
Controller Anti-Lock Brake	8W-30-17
Crankshaft Position Sensor	8W-30-8
Data Link Connector	8W-30-17
Distributor	8W-30-5
Downstream Heated Oxygen Sensor	8W-30-10
Duty Cycle Evap/Purge Solenoid	8W-30-16
Electronic EGR Transducer Solenoid	8W-30-11
Engine Coolant Temperature Sensor	8W-30-12
Engine Starter Motor Relay	8W-30-13
Fuel Injector No. 1	8W-30-6, 7
Fuel Injector No. 2	8W-30-6, 7
Fuel Injector No. 3	8W-30-6, 7
Fuel Injector No. 4	8W-30-6, 7
Fuel Injector No. 5	8W-30-7
Fuel Injector No. 6	8W-30-7
Fuel Pump Module	8W-30-3
Fuel Pump Relay	8W-30-3
Fuse 1	8W-30-4, 5, 6, 7, 10
Fuse 5	8W-30-2, 4, 17
Fuse 8	8W-30-3
Fuse 9	8W-30-15, 16
Fuse 10	8W-30-2, 3
G102	8W-30-2, 10
G103	8W-30-10
G105	8W-30-5
G300	8W-30-3
G301	8W-30-12, 17
G302	8W-30-3
Generator	8W-30-5
High Speed Radiator Fan Relay	8W-30-15
Idle Air Control Motor	8W-30-16
Ignition Coil Pack	8W-30-4
Intake Air Temperature Sensor	8W-30-11
Junction Block	8W-30-17

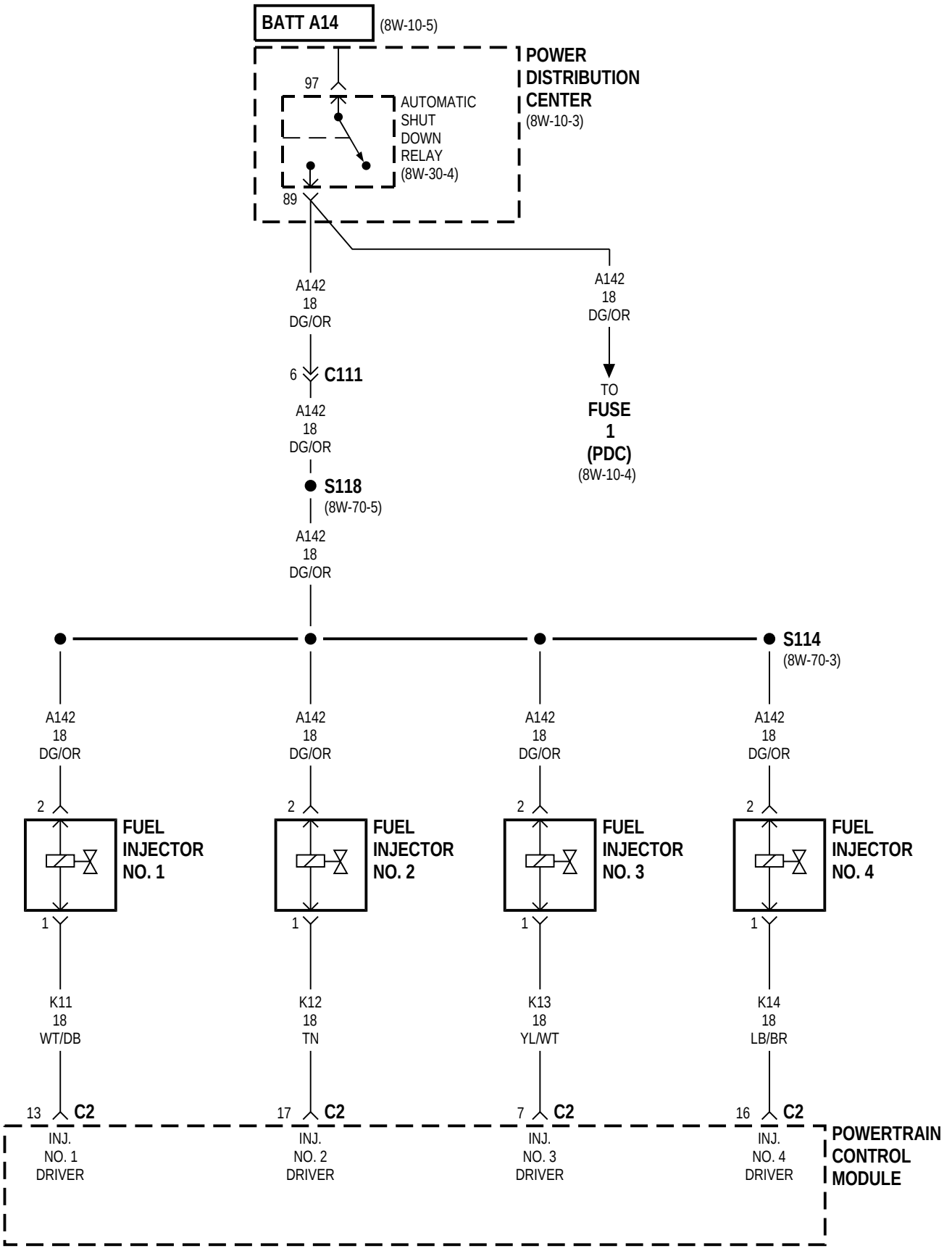
Component	Page
Knock Sensor	8W-30-12
Low Speed Radiator Fan Relay	8W-30-15
Manifold Absolute Pressure Sensor	8W-30-11
Noise Suppressor	8W-30-4
Power Distribution Center	8W-30-2, 3, 4, 5, 6, 7, 10, 13, 15, 16
Power Steering Pressure Switch	8W-30-12
Powertrain Control Module	8W-30-2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17
S101	8W-30-2
S102	8W-30-3
S104	8W-30-2, 4
S105	8W-30-2, 3
S106	8W-30-15, 16
S109	8W-30-10
S110	8W-30-5, 8, 9, 10, 11, 12, 14
S111	8W-30-10
S114	8W-30-6, 7, 10
S115	8W-30-9, 11, 14
S116	8W-30-9, 10, 11, 14
S117	8W-30-5, 8, 9, 10, 11, 12, 14
S118	8W-30-4, 5, 6, 7, 10, 11
S120	8W-30-8
S121	8W-30-9
S123	8W-30-7
S124	8W-30-5, 8
S127	8W-30-17
S130	8W-30-9, 10, 11, 14
S131	8W-30-4
S132	8W-30-17
S133	8W-30-17
S134	8W-30-17
S301	8W-30-3
Stop Lamp Switch	8W-30-13
Throttle Position Sensor	8W-30-9
Transmission Control Module	8W-30-13, 17
Transmission Range Switch	8W-30-13
Upstream Heated Oxygen Sensor	8W-30-10
Vehicle Speed Control Servo	8W-30-13
Vehicle Speed Control/Horn Switch	8W-30-13

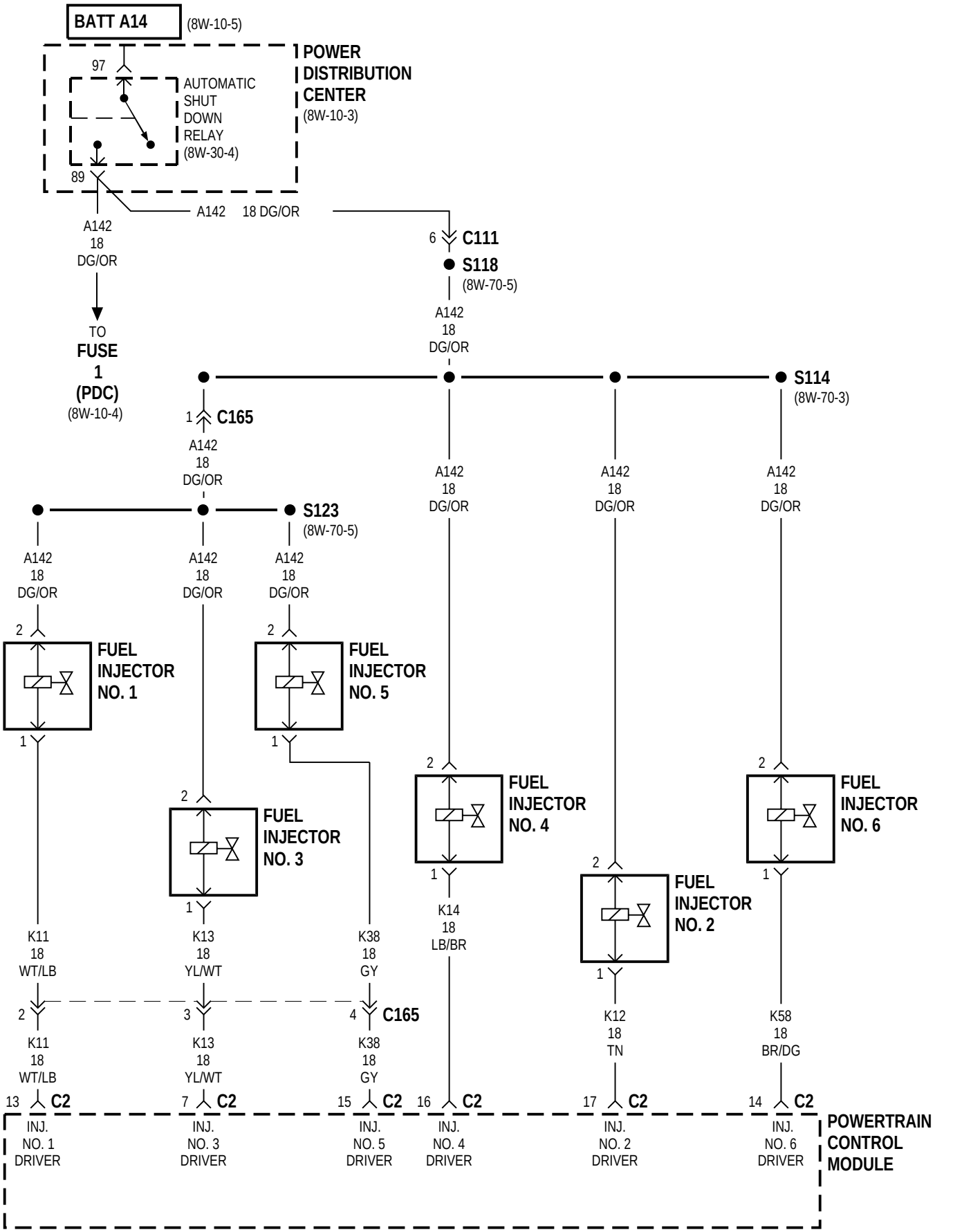

ST-RUN A21
(8W-10-7)
BATT A0
(8W-10-3)
POWER DISTRIBUTION CENTER
(8W-10-3)
70
FUSE 10 10A
(8W-10-9)
78
43
FUSE 5 20A
(8W-10-5)
53
F12 18 DB/WT
A14 16 RD/TN
S105 (IN PDC)
(8W-10-9)
S104 (IN PDC)
(8W-10-5)
F12 18 DB/WT
6 C113
F12 18 DB/WT
A14 16 RD/TN
20 C2
FUSED IGN. (ST-RUN)
46 C1
FUSED B(+)
POWERTRAIN CONTROL MODULE
GROUND
10 C2
GROUND
50 C1
Z12 18 BK/TN
Z12 18 BK/TN
10 C113
S101
(8W-15-3)
Z13 14 BK/RD
G102
(8W-15-3)

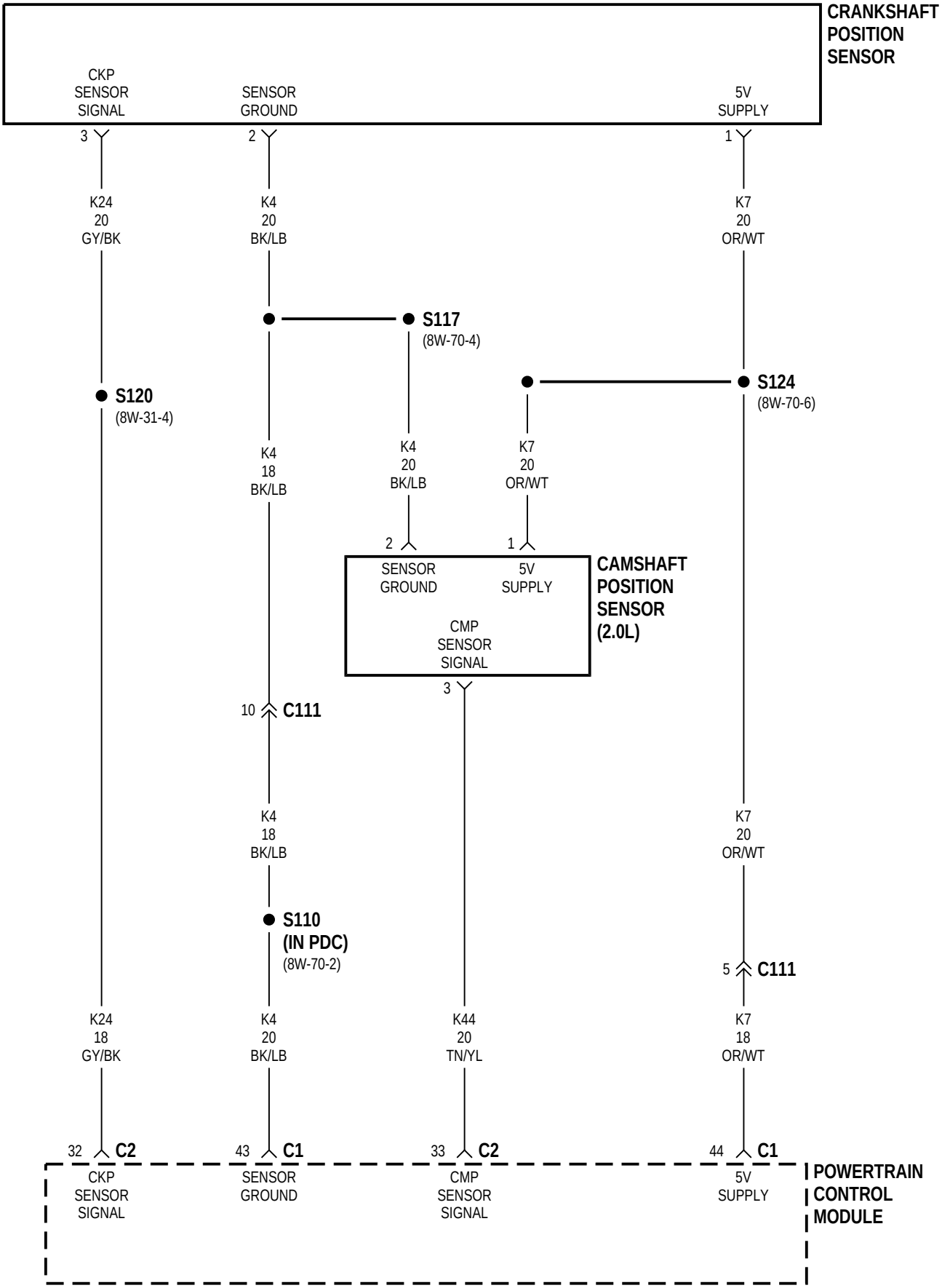

ST-RUN A21
(8W-10-7)
BATT A0
(8W-10-3)
POWER DISTRIBUTION CENTER
(8W-10-3)
70
FUSE 10 10A
(8W-10-9)
78
44
FUSE 8 20A
(8W-10-6)
54
F12 18 DB/WT
A1 16 RD
S105
(8W-10-9)
S102
(8W-10-6)
F12 18 DB/WT
A1 16 RD
7
35
FUEL PUMP RELAY (IN PDC)
9
27
A141 14 DG/WT
5 C121
G4 18 DB
1
2
15 C5
FUEL PUMP MODULE
M
FUEL LEVEL SENSOR SIGNAL
BODY CONTROL MODULE (IN JB)
(8W-45-9)
K31 20 BR/LG
3
4
Z1 16 BK
Z2 18 BK/LG
74 C1
FUEL PUMP RELAY CONTROL
POWERTRAIN CONTROL MODULE
S301
(8W-15-7)
Z1 14 BK
Z1 18 BK
G300
(8W-15-6)
G302
(8W-15-7)

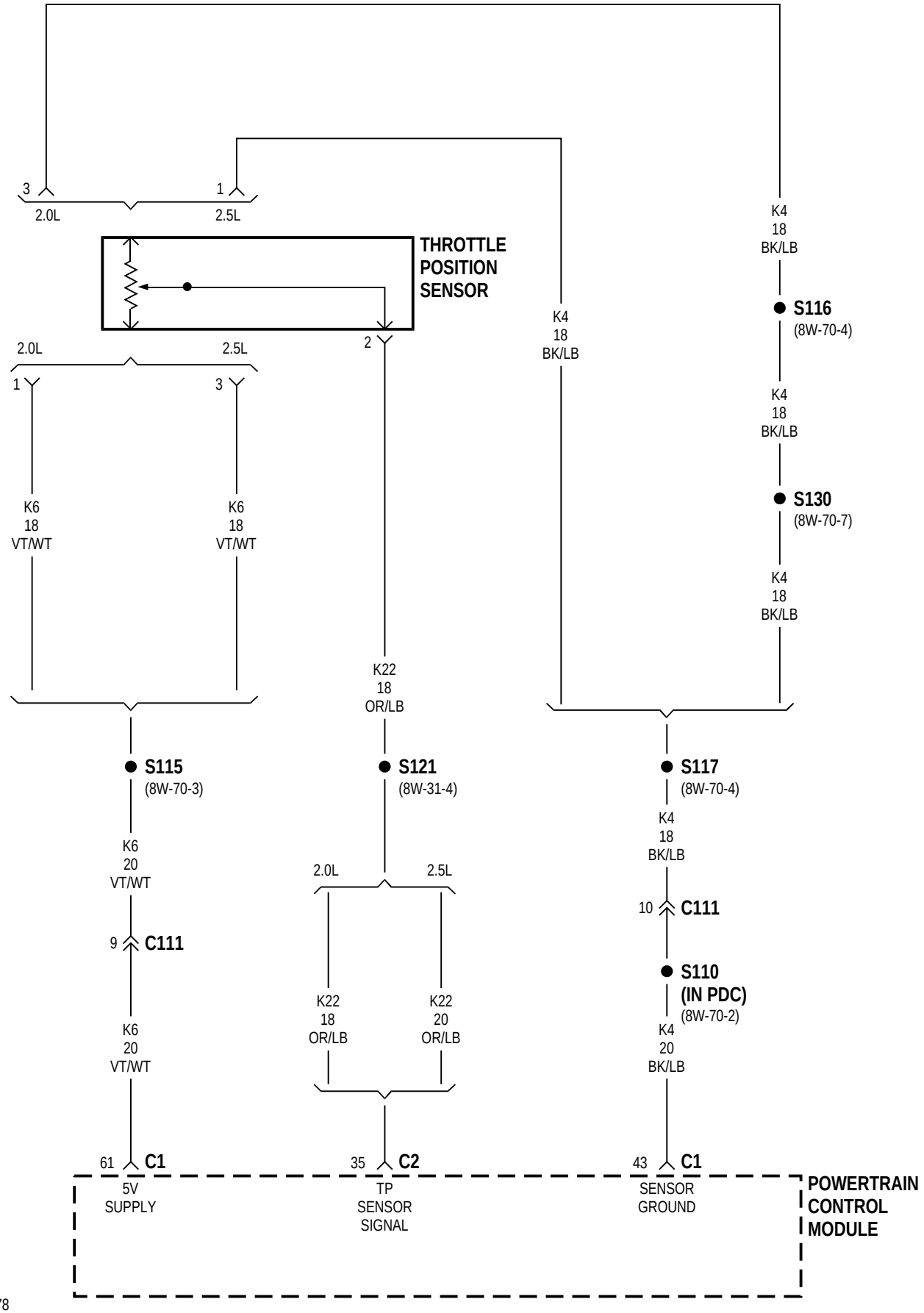

BATT A14
(8W-10-5)
POWER DISTRIBUTION CENTER
(8W-10-3)
43
FUSE 5 20A
(8W-10-5)
53
A14 16 RD/TN
S104 (IN PDC)
(8W-10-5)
91
97
AUTOMATIC SHUT DOWN RELAY (IN PDC)
93
89
A142 18 DG/OR
6 C111
S118
(8W-70-5)
A142 18 DG/OR
TO FUSE 1 (PDC)
(8W-10-4)
S131
(8W-70-7)
2
IGNITION COIL PACK (2.0L)
1
3
#1
#2
#3
#4
TO SPARK PLUGS
TO SPARK PLUGS
A142 18 DG/OR
NOISE SUPPRESSOR
K51 20 DB/VT
A142 18 DG/OR
K17 18 DB/DG
K19 18 BK/GY
67 C1
6 C2
3 C2
2 C2
ASD RELAY CONTROL
ASD RELAY OUTPUT
IGN COIL NO. 2 DRIVER
IGN COIL NO. 1 DRIVER
POWERTRAIN CONTROL MODULE


BATT A14
(8W-10-5)
POWER DISTRIBUTION CENTER
(8W-10-3)
97
AUTOMATIC SHUT DOWN RELAY
(8W-30-4)
89
A142 18 DG/OR
A142 18 DG/OR
6 C111
A142 18 DG/OR
TO FUSE 1 (PDC)
(8W-10-4)
S118
(8W-70-5)
A142 18 DG/OR
1 C1
TO SPARK PLUGS
#1 #2 #3 #4 #5 #6
DISTRIBUTOR (2.5L)
ASD RELAY OUTPUT
CMP SENSOR SIGNAL
IGN COIL NO. 1 DRIVER
SENSOR GROUND
5V SUPPLY
GROUND
3 C2
6 C2
1 C2
2 C2
5 C2
A142 18 DG/OR
1
ASD RELAY OUTPUT
GENERATOR FIELD
GENERATOR
(8W-20-2)
2
S117
(8W-70-4)
S124
(8W-70-6)
K4 18 BK/LB
K7 20 OR/WT
10
5 C111
K4 18 BK/LB
K7 18 OR/WT
Z1 16 BK
A142 18 DG/OR
K20 18 DG
K44 18 TN/YL
K19 18 BK/GY
S110 (IN PDC)
(8W-70-2)
G105
6 C2
4 C2
33 C2
11 C2
43 C1
44 C1
ASD RELAY OUTPUT
GENERATOR FIELD DRIVER
CMP SENSOR SIGNAL
IGN COIL NO. 1 DRIVER
SENSOR GROUND
5V SUPPLY
POWERTRAIN CONTROL MODULE


BATT A14
(8W-10-5)
POWER DISTRIBUTION CENTER
(8W-10-3)
97
AUTOMATIC SHUT DOWN RELAY
(8W-30-4)
89
A142 18 DG/OR
A142 18 DG/OR
TO FUSE 1 (PDC)
(8W-10-4)
6 C111
A142 18 DG/OR
S118
(8W-70-5)
A142 18 DG/OR
S114
(8W-70-3)
A142 18 DG/OR
A142 18 DG/OR
A142 18 DG/OR
A142 18 DG/OR
2
FUEL INJECTOR NO. 1
FUEL INJECTOR NO. 2
FUEL INJECTOR NO. 3
FUEL INJECTOR NO. 4
1
K11 18 WT/DB
K12 18 TN
K13 18 YL/WT
K14 18 LB/BR
13 C2
17 C2
7 C2
16 C2
INJ. NO. 1 DRIVER
INJ. NO. 2 DRIVER
INJ. NO. 3 DRIVER
INJ. NO. 4 DRIVER
POWERTRAIN CONTROL MODULE

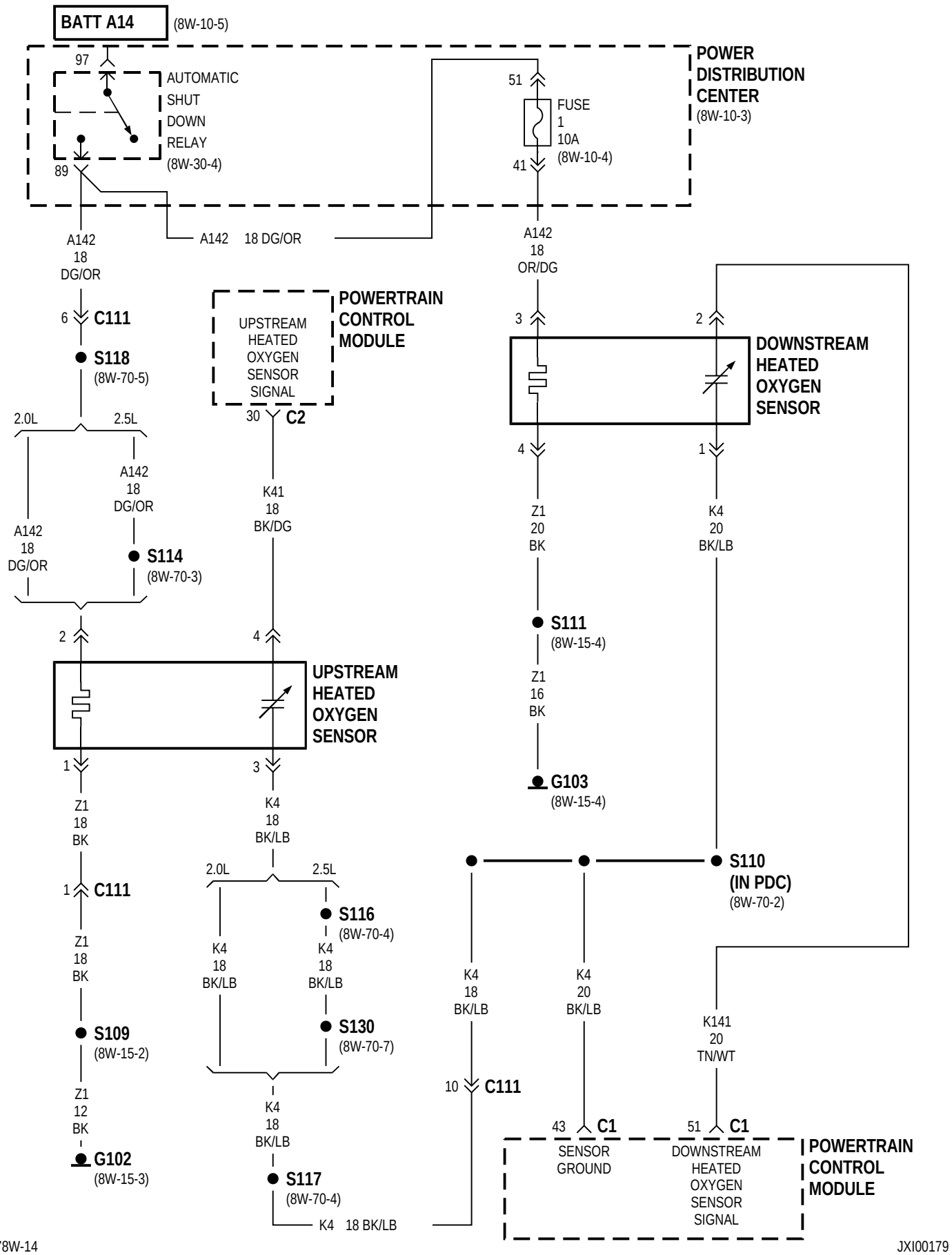

BATT A14
(8W-10-5)
POWER DISTRIBUTION CENTER
(8W-10-3)
97
AUTOMATIC SHUT DOWN RELAY
(8W-30-4)
89
A142 18 DG/OR
6 C111
S118
(8W-70-5)
TO FUSE 1 (PDC)
(8W-10-4)
1 C165
S114
(8W-70-3)
S123
(8W-70-5)
FUEL INJECTOR NO. 1
FUEL INJECTOR NO. 5
FUEL INJECTOR NO. 3
FUEL INJECTOR NO. 4
FUEL INJECTOR NO. 2
FUEL INJECTOR NO. 6
K11 18 WT/LB
K13 18 YL/WT
K38 18 GY
K14 18 LB/BR
K12 18 TN
K58 18 BR/DG
C165
13 C2
7 C2
15 C2
16 C2
17 C2
14 C2
INJ. NO. 1 DRIVER
INJ. NO. 3 DRIVER
INJ. NO. 5 DRIVER
INJ. NO. 4 DRIVER
INJ. NO. 2 DRIVER
INJ. NO. 6 DRIVER
POWERTRAIN CONTROL MODULE

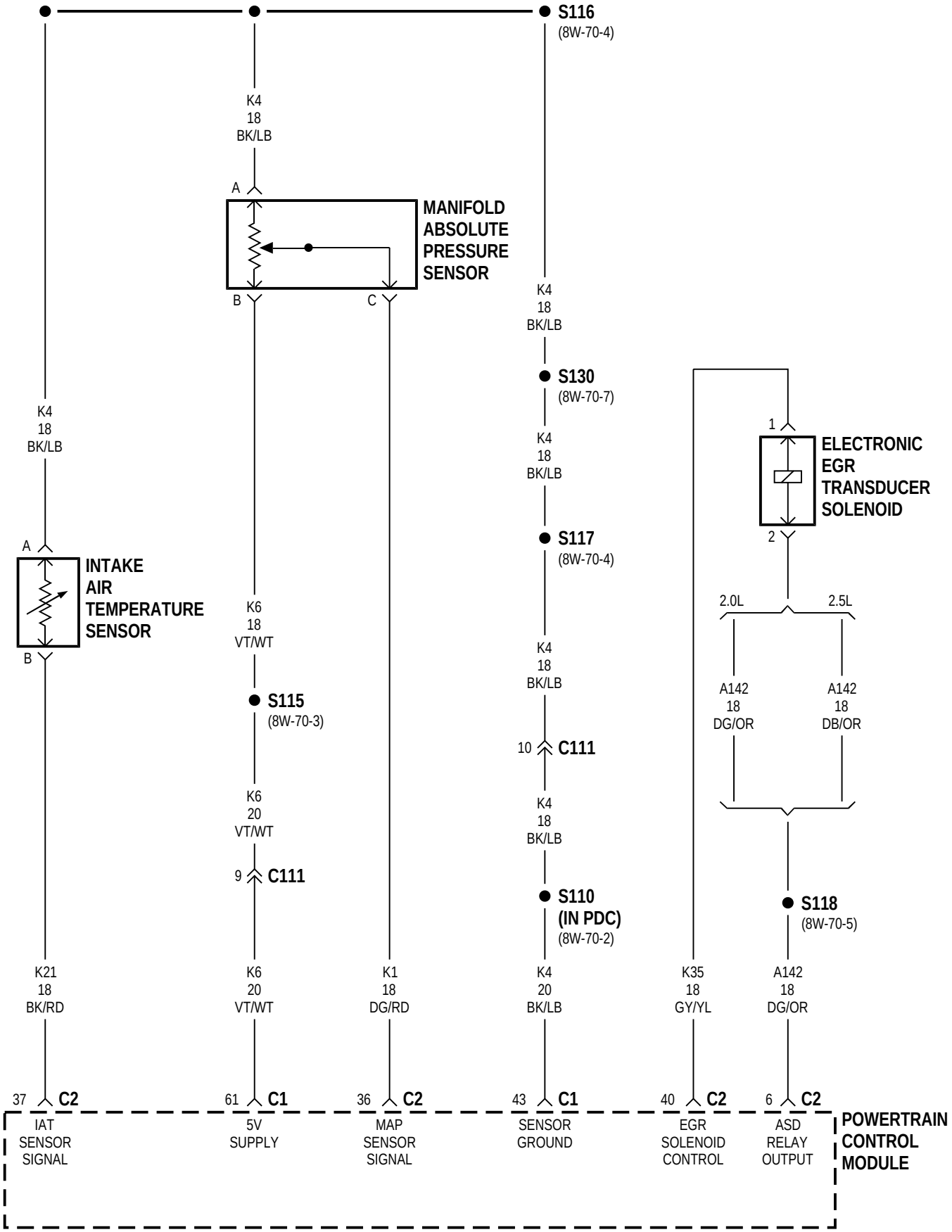

CRANKSHAFT POSITION SENSOR
CKP SENSOR SIGNAL
SENSOR GROUND
5V SUPPLY
3
2
1
K24 20 GY/BK
K4 20 BK/LB
K7 20 OR/WT
S117
(8W-70-4)
S120
(8W-31-4)
S124
(8W-70-6)
K4 18 BK/LB
K4 20 BK/LB
K7 20 OR/WT
2
1
SENSOR GROUND
5V SUPPLY
CMP SENSOR SIGNAL
CAMSHAFT POSITION SENSOR (2.0L)
3
10 C111
K4 18 BK/LB
K7 20 OR/WT
S110 (IN PDC)
(8W-70-2)
5 C111
K24 18 GY/BK
K4 20 BK/LB
K44 20 TN/YL
K7 18 OR/WT
32 C2
43 C1
33 C2
44 C1
CKP SENSOR SIGNAL
SENSOR GROUND
CMP SENSOR SIGNAL
5V SUPPLY
POWERTRAIN CONTROL MODULE

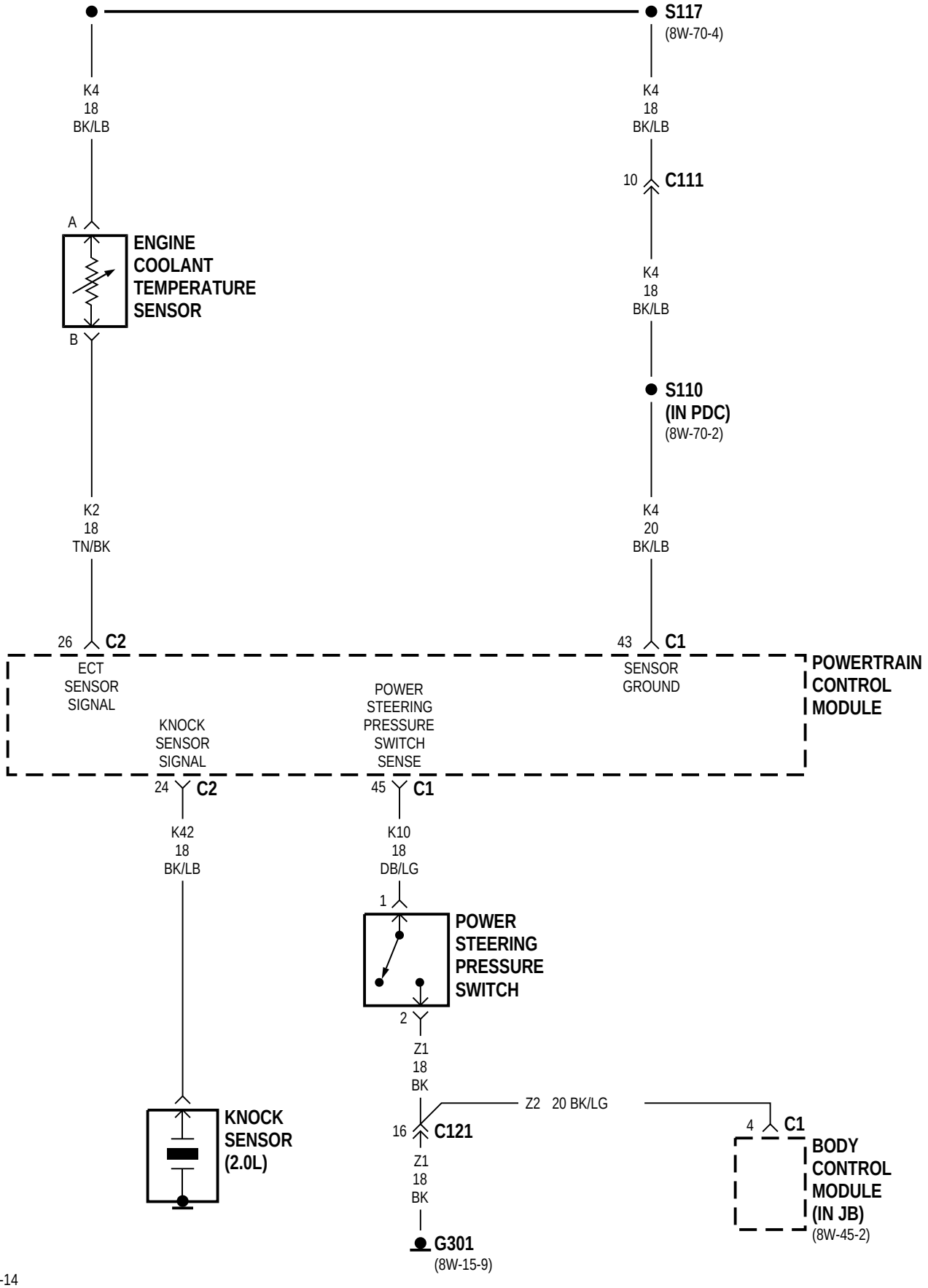


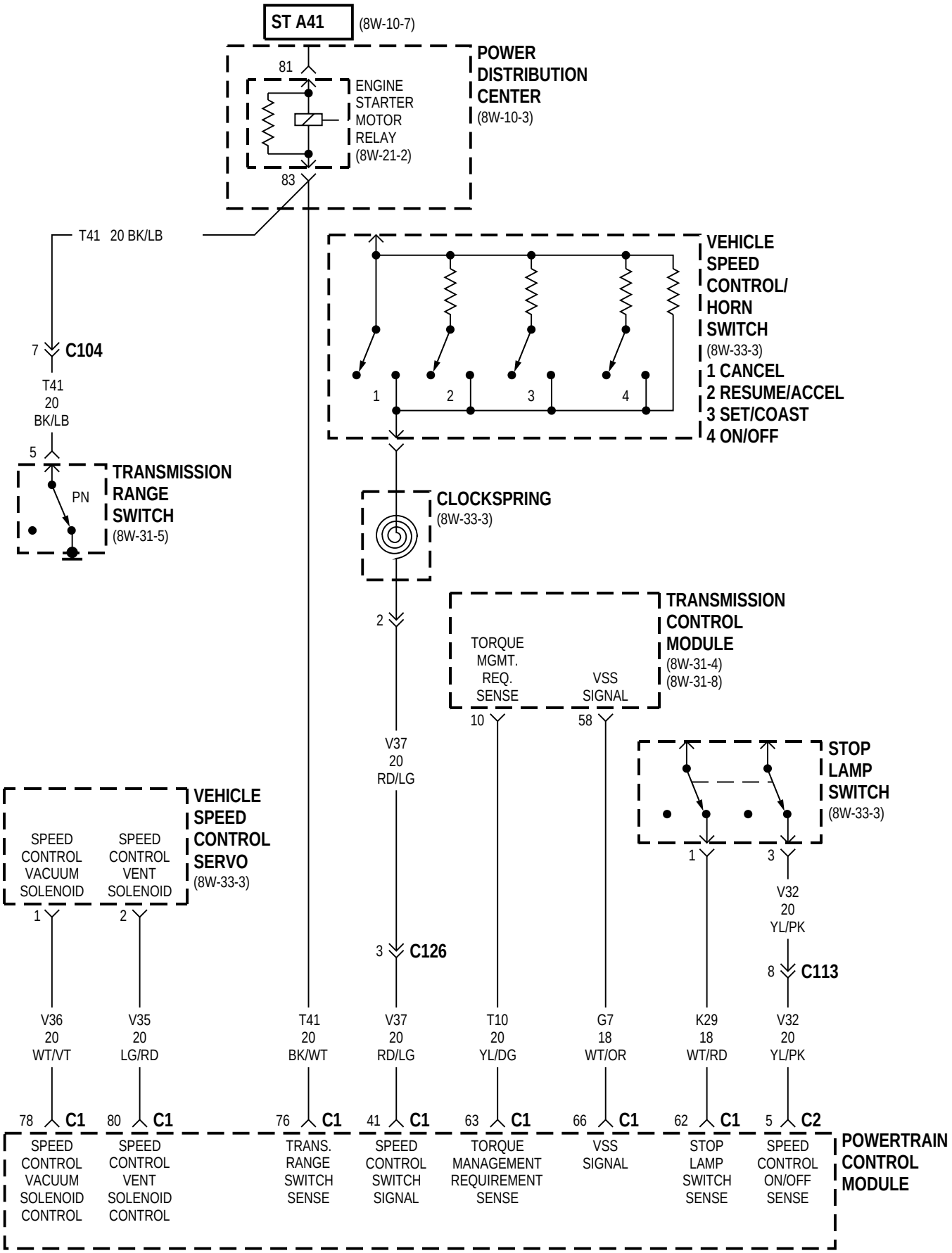
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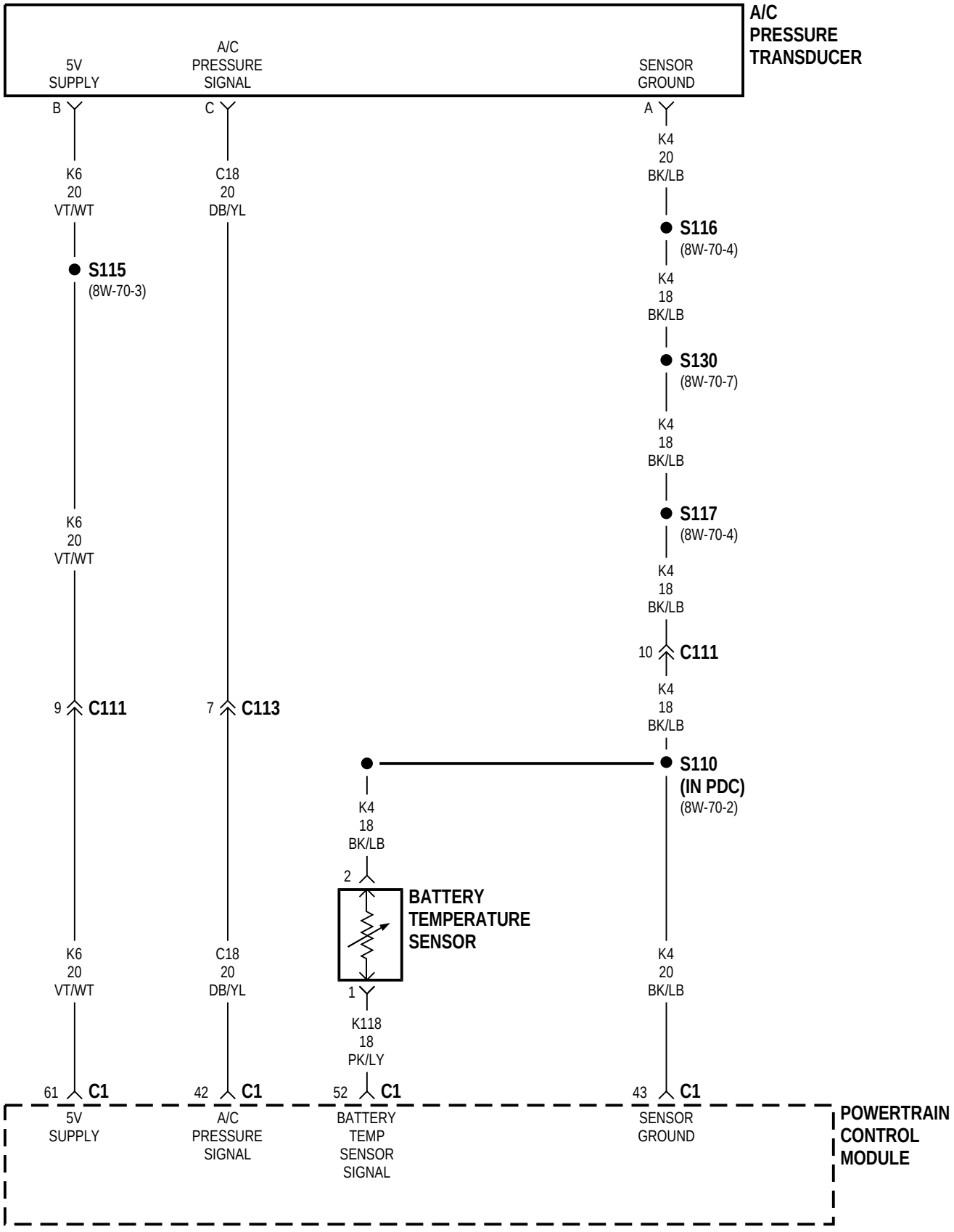
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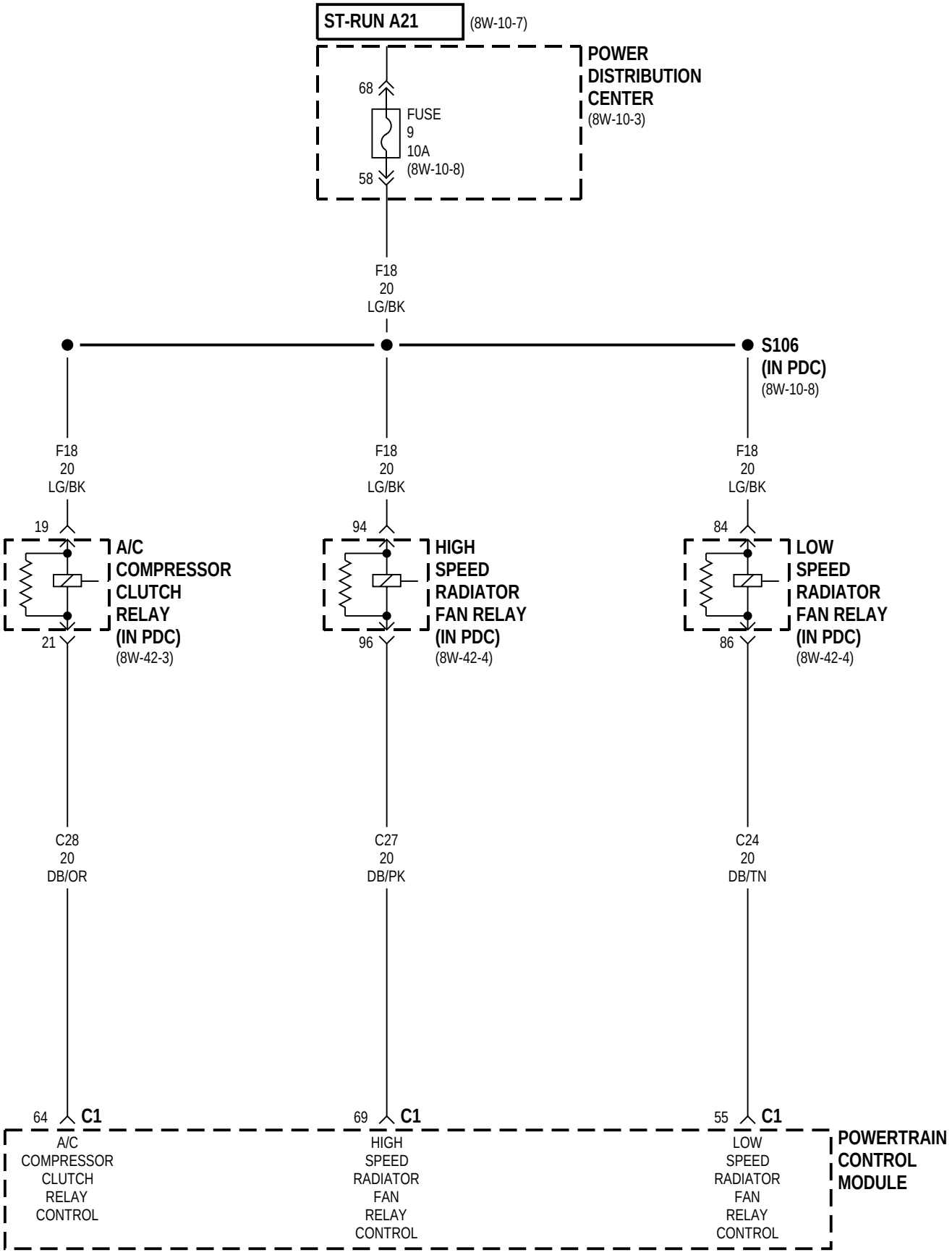

BATT A14
(8W-10-5)
97
AUTOMATIC SHUT DOWN RELAY
(8W-30-4)
89
POWER DISTRIBUTION CENTER
(8W-10-3)
51
FUSE 1 10A
(8W-10-4)
41
A142 18 DG/OR
A142 18 DG/OR
A142 18 OR/DG
6 C111
S118
(8W-70-5)
2.0L
2.5L
A142 18 DG/OR
A142 18 DG/OR
S114
(8W-70-3)
UPSTREAM HEATED OXYGEN SENSOR SIGNAL
30 C2
POWERTRAIN CONTROL MODULE
K41 18 BK/DG
3
2
DOWNSTREAM HEATED OXYGEN SENSOR
4
1
Z1 20 BK
K4 20 BK/LB
S111
(8W-15-4)
Z1 16 BK
G103
(8W-15-4)
2
4
UPSTREAM HEATED OXYGEN SENSOR
1
3
Z1 18 BK
K4 18 BK/LB
1 C111
Z1 18 BK
2.0L
2.5L
S116
(8W-70-4)
K4 18 BK/LB
K4 18 BK/LB
S110 (IN PDC)
(8W-70-2)
K4 18 BK/LB
K4 20 BK/LB
K141 20 TN/WT
S109
(8W-15-2)
S130
(8W-70-7)
Z1 12 BK
G102
(8W-15-3)
K4 18 BK/LB
S117
(8W-70-4)
K4 18 BK/LB
10 C111
43 C1
SENSOR GROUND
51 C1
DOWNSTREAM HEATED OXYGEN SENSOR SIGNAL
POWERTRAIN CONTROL MODULE

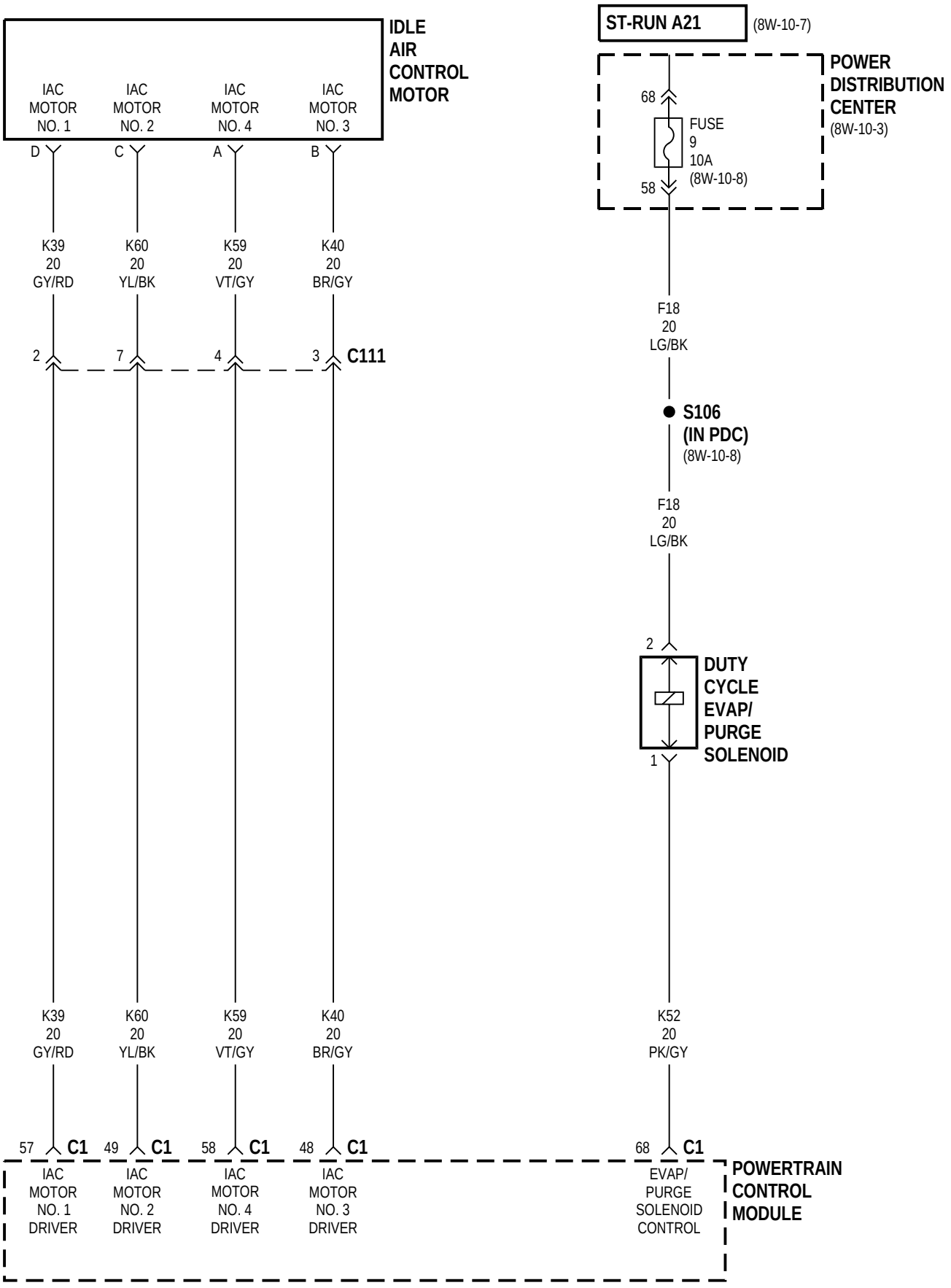

S116
(8W-70-4)
K4
18
BK/LB
A
MANIFOLD
ABSOLUTE
PRESSURE
SENSOR
B
C
K4
18
BK/LB
S130
(8W-70-7)
K4
18
BK/LB
S117
(8W-70-4)
K4
18
BK/LB
10
C111
K4
18
BK/LB
S110
(IN PDC)
(8W-70-2)
K4
20
BK/LB
43
C1
K4
18
BK/LB
A
INTAKE
AIR
TEMPERATURE
SENSOR
B
K21
18
BK/RD
37
C2
IAT
SENSOR
SIGNAL
K6
18
VT/WT
S115
(8W-70-3)
K6
20
VT/WT
9
C111
K6
20
VT/WT
61
C1
5V
SUPPLY
K1
18
DG/RD
36
C2
MAP
SENSOR
SIGNAL
1
ELECTRONIC
EGR
TRANSDUCER
SOLENOID
2
2.0L
2.5L
A142
18
DG/OR
A142
18
DB/OR
S118
(8W-70-5)
K35
18
GY/YL
40
C2
EGR
SOLENOID
CONTROL
A142
18
DG/OR
6
C2
ASD
RELAY
OUTPUT
POWERTRAIN
CONTROL
MODULE

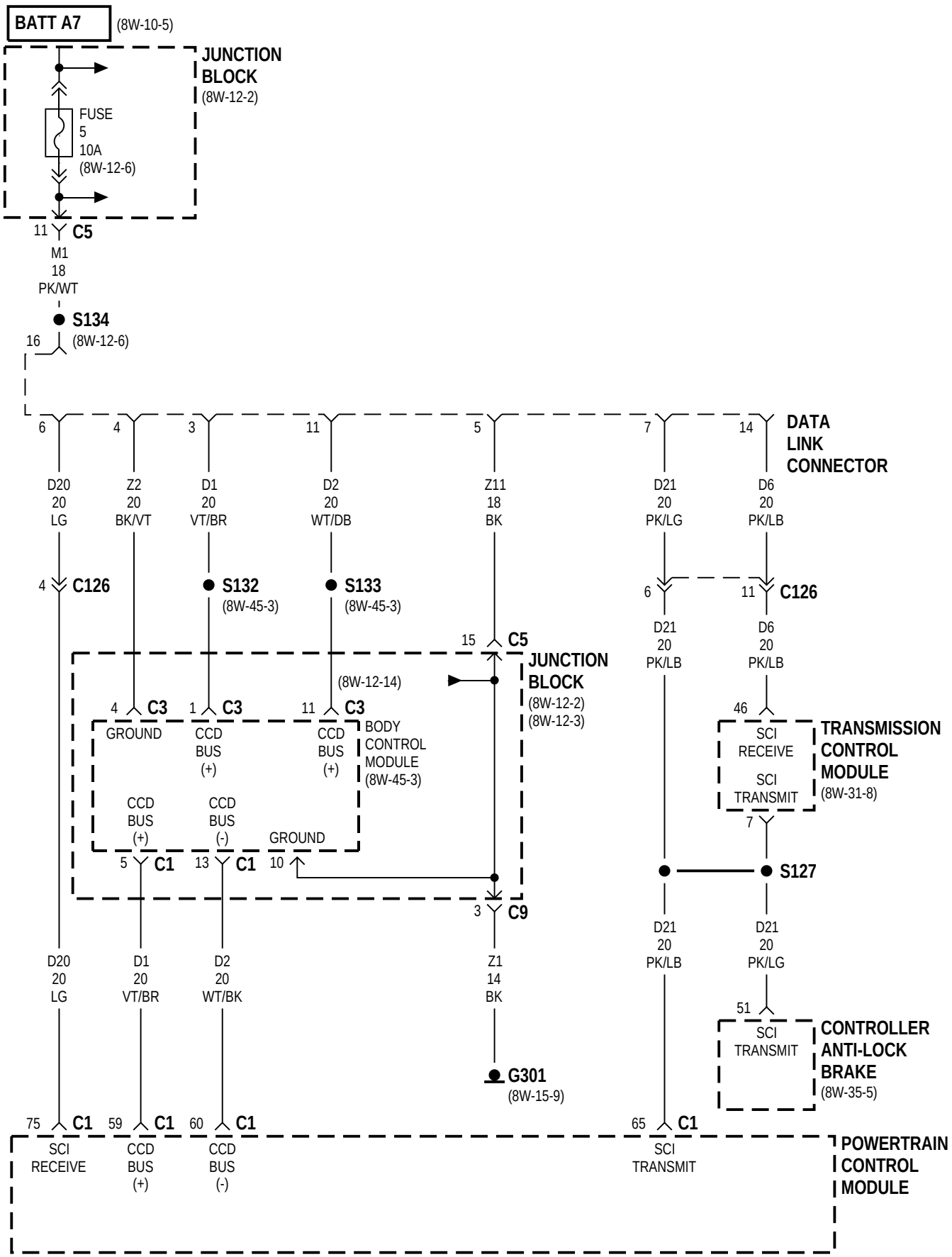

S117
(8W-70-4)
K4
18
BK/LB
10
C111
A
ENGINE
COOLANT
TEMPERATURE
SENSOR
B
S110
(IN PDC)
(8W-70-2)
K2
18
TN/BK
K4
20
BK/LB
26
C2
43
C1
ECT
SENSOR
SIGNAL
SENSOR
GROUND
POWERTRAIN
CONTROL
MODULE
KNOCK
SENSOR
SIGNAL
POWER
STEERING
PRESSURE
SWITCH
SENSE
24
C2
45
C1
K42
18
BK/LB
K10
18
DB/LG
1
POWER
STEERING
PRESSURE
SWITCH
2
Z1
18
BK
Z2 20 BK/LG
16
C121
4
C1
KNOCK
SENSOR
(2.0L)
BODY
CONTROL
MODULE
(IN JB)
(8W-45-2)
G301
(8W-15-9)


ST A41
(8W-10-7)
POWER DISTRIBUTION CENTER
(8W-10-3)
81
ENGINE STARTER MOTOR RELAY
(8W-21-2)
83
T41 20 BK/LB
7 C104
T41
20
BK/LB
5
TRANSMISSION RANGE SWITCH
(8W-31-5)
PN
VEHICLE SPEED CONTROL/ HORN SWITCH
(8W-33-3)
1 CANCEL
2 RESUME/ACCEL
3 SET/COAST
4 ON/OFF
1
2
3
4
CLOCKSPRING
(8W-33-3)
2
TRANSMISSION CONTROL MODULE
(8W-31-4)
(8W-31-8)
TORQUE MGMT. REQ. SENSE
VSS SIGNAL
10
58
V37
20
RD/LG
3 C126
STOP LAMP SWITCH
(8W-33-3)
1
3
V32
20
YL/PK
8 C113
VEHICLE SPEED CONTROL SERVO
(8W-33-3)
SPEED CONTROL VACUUM SOLENOID
SPEED CONTROL VENT SOLENOID
1
2
V36
20
WT/VT
V35
20
LG/RD
T41
20
BK/WT
V37
20
RD/LG
T10
20
YL/DG
G7
18
WT/OR
K29
18
WT/RD
V32
20
YL/PK
78 C1
80 C1
76 C1
41 C1
63 C1
66 C1
62 C1
5 C2
SPEED CONTROL VACUUM SOLENOID CONTROL
SPEED CONTROL VENT SOLENOID CONTROL
TRANS. RANGE SWITCH SENSE
SPEED CONTROL SWITCH SIGNAL
TORQUE MANAGEMENT REQUIREMENT SENSE
VSS SIGNAL
STOP LAMP SWITCH SENSE
SPEED CONTROL ON/OFF SENSE
POWERTRAIN CONTROL MODULE


A/C PRESSURE TRANSDUCER
5V SUPPLY
A/C PRESSURE SIGNAL
SENSOR GROUND
B
C
A
K6 20 VT/WT
C18 20 DB/YL
K4 20 BK/LB
S115 (8W-70-3)
S116 (8W-70-4)
K4 18 BK/LB
S130 (8W-70-7)
K4 18 BK/LB
S117 (8W-70-4)
K4 18 BK/LB
10 C111
K6 20 VT/WT
9 C111
7 C113
K4 18 BK/LB
S110 (IN PDC) (8W-70-2)
K4 18 BK/LB
2
BATTERY TEMPERATURE SENSOR
K6 20 VT/WT
C18 20 DB/YL
K4 20 BK/LB
1
K118 18 PK/LY
61 C1
42 C1
52 C1
43 C1
5V SUPPLY
A/C PRESSURE SIGNAL
BATTERY TEMP SENSOR SIGNAL
SENSOR GROUND
POWERTRAIN CONTROL MODULE


ST-RUN A21
(8W-10-7)
POWER DISTRIBUTION CENTER
(8W-10-3)
68
FUSE 9 10A
(8W-10-8)
58
F18 20 LG/BK
S106 (IN PDC)
(8W-10-8)
F18 20 LG/BK
F18 20 LG/BK
F18 20 LG/BK
19
A/C COMPRESSOR CLUTCH RELAY (IN PDC)
(8W-42-3)
21
94
HIGH SPEED RADIATOR FAN RELAY (IN PDC)
(8W-42-4)
96
84
LOW SPEED RADIATOR FAN RELAY (IN PDC)
(8W-42-4)
86
C28 20 DB/OR
C27 20 DB/PK
C24 20 DB/TN
64 C1
69 C1
55 C1
A/C COMPRESSOR CLUTCH RELAY CONTROL
HIGH SPEED RADIATOR FAN RELAY CONTROL
LOW SPEED RADIATOR FAN RELAY CONTROL
POWERTRAIN CONTROL MODULE


IDLE AIR CONTROL MOTOR
IAC MOTOR NO. 1
IAC MOTOR NO. 2
IAC MOTOR NO. 4
IAC MOTOR NO. 3
D
C
A
B
K39 20 GY/RD
K60 20 YL/BK
K59 20 VT/GY
K40 20 BR/GY
2
7
4
3
C111
ST-RUN A21
(8W-10-7)
POWER DISTRIBUTION CENTER
(8W-10-3)
68
FUSE 9 10A
(8W-10-8)
58
F18 20 LG/BK
S106 (IN PDC)
(8W-10-8)
F18 20 LG/BK
2
DUTY CYCLE EVAP/ PURGE SOLENOID
1
K39 20 GY/RD
K60 20 YL/BK
K59 20 VT/GY
K40 20 BR/GY
K52 20 PK/GY
57 C1
49 C1
58 C1
48 C1
68 C1
IAC MOTOR NO. 1 DRIVER
IAC MOTOR NO. 2 DRIVER
IAC MOTOR NO. 4 DRIVER
IAC MOTOR NO. 3 DRIVER
EVAP/ PURGE SOLENOID CONTROL
POWERTRAIN CONTROL MODULE


BATT A7
(8W-10-5)
JUNCTION BLOCK
(8W-12-2)
FUSE
5
10A
(8W-12-6)
11 C5
M1
18
PK/WT
S134
16 (8W-12-6)
6 4 3 11 5 7 14
DATA LINK CONNECTOR
D20 20 LG
Z2 20 BK/VT
D1 20 VT/BR
D2 20 WT/DB
Z11 18 BK
D21 20 PK/LG
D6 20 PK/LB
4 C126
S132
(8W-45-3)
S133
(8W-45-3)
6 C126
11 C126
15 C5
JUNCTION BLOCK
(8W-12-2)
(8W-12-3)
(8W-12-14)
4 C3 GROUND
1 C3 CCD BUS (+)
11 C3 CCD BUS (+)
BODY CONTROL MODULE
(8W-45-3)
CCD BUS (+)
CCD BUS (-)
GROUND
5 C1
13 C1
10
3 C9
D21 20 PK/LB
D6 20 PK/LB
46
SCI RECEIVE
SCI TRANSMIT
TRANSMISSION CONTROL MODULE
(8W-31-8)
7
S127
D20 20 LG
D1 20 VT/BR
D2 20 WT/BK
Z1 14 BK
D21 20 PK/LB
D21 20 PK/LG
51
SCI TRANSMIT
CONTROLLER ANTI-LOCK BRAKE
(8W-35-5)
G301
(8W-15-9)
75 C1 SCI RECEIVE
59 C1 CCD BUS (+)
60 C1 CCD BUS (-)
65 C1 SCI TRANSMIT
POWERTRAIN CONTROL MODULE

8W-30 FUEL/IGNITION SYSTEM

INDEX

page

DESCRIPTION AND OPERATION
AMBIENT (BATTERY) TEMPERATURE SENSOR 21
AUTOMATIC SHUT-DOWN RELAY 19
BATTERY FEED 18
CAMSHAFT POSITION SENSOR (2.4L) 20
CAMSHAFT POSITION SENSOR (2.5L) 20
CCD BUS 23
CRANKSHAFT POSITION SENSOR 20
DISTRIBUTOR (2.5L) 22
DUTY CYCLE EVAP/PURGE SOLENOID 23
ELECTRONIC EGR TRANSDUCER (EET) SOLENOID 23
ENGINE COOLANT TEMPERATURE SENSOR . . 20
FUEL INJECTORS 22
FUEL PUMP MOTOR 19
HEATED OXYGEN SENSORS 19
IDLE AIR CONTROL MOTOR 22
IGNITION COIL PACK (2.4L) 22
IGNITION SWITCH 18
INTAKE AIR TEMPERATURE SENSOR 21
KNOCK SENSOR (2.4L only) 21
MANIFOLD ABSOLUTE PRESSURE SENSOR . . 21
PARK/NEUTRAL SWITCH INPUT 23
POWER (DEVICE) GROUND 18
POWER STEERING PRESSURE SWITCH 23
THROTTLE POSITION SENSOR 21
UNIVERSAL DATA LINK CONNECTOR 18
VAPOR CANISTER LEAK DETECTOR 23
VEHICLE SPEED INPUT 19

DESCRIPTION AND OPERATION

IGNITION SWITCH

When the ignition switch is in the START/RUN position, it connects circuit A1 from the Power Distribution Center (PDC) to circuit A21 through the ignition switch. A 20 amp fuse in cavity 8 of the PDC protects circuits A1 and A21. Circuit A1 is spliced and provides power to the fuel pump relay, Powertrain Control Module (PCM), and the engine starter motor relay.

The A21 circuit connects from the ignition switch to the junction block on circuit F12. The F12 circuit is protected by a 10 amp fuse located in cavity 10. Circuit F12 is spliced and connects to the Powertrain Control Module (PCM), fuel pump relay, and the ABS Control Module, and distributor (2.5L only).

BATTERY FEED

Circuit A14 is used to provide a constant battery feed to the Powertrain Control Module (PCM). This circuit originates in the Power Distribution Center (PDC) and is protected by a 20 amp fuse located in cavity 5. It is also spliced and provides power for the Automatic Shut- Down (ASD) relay, coil and contact sides.

POWER (DEVICE) GROUND

Circuit Z12 connects to cavities 10 and 50 of the Powertrain Control Module (PCM) connector. The Z12 circuits provides ground for the PCM internal drivers that operate high current devices like fuel injectors and ignition coils.

Internal to the PCM, the power (device) ground circuit connects to the PCM sensor return circuit from circuit K4.

HELPFUL INFORMATION

Circuit Z12 which supplies a ground for the PCM high current drivers, terminates at the left strut tower.

If the system loses ground for the Z12 circuit the vehicle will not operate.

UNIVERSAL DATA LINK CONNECTOR

Circuit M1 supplies battery voltage to the universal data link connector. This circuit is protected by a 10 amp fuse located in cavity 5 of the junction block. Circuit M1 is the Ignition-Off Draw circuit and supplies power to the Body Control Module (BCM), radio memory, interior lamps, and other components.

A twisted pair of wires, circuits D1 and D2, connect to the data link connector. These wires are connected to the CCD Bus. The CCD Bus is used for diagnosing vehicle components and modules.

Circuits D20 and D21 from the Powertrain Control Module (PCM) connect to the data link connector. Circuit D20 connects to cavity 75 of the PCM and is the SCI receive circuit. Circuit D21 connects to cavity 65 of the PCM and is the SCI transmit. The D21 circuit is also spliced and connects to the Transmission Control Module (TCM), and the Controller Anti Lock Brakes (CAB), if equipped.

The D6 circuit is also connected to the universal data link connector. This cirucit is used as a SCI line from the TCM.

DESCRIPTION AND OPERATION (Continued)

The universal data link connector is also interfaced with the CCD Bus. Circuit D1 is used for CCD (+) and D2 is used for CCD (-).

There are also two grounds used for the universal data link connector. One is a power ground and one is a regular ground.

AUTOMATIC SHUT-DOWN RELAY

The Automatic Shut-Down (ASD) relay is located in the Power Distribution Center (PDC). Power for the coil and contact side of the relay is provided by circuit A14. This circuit is HOT at all times and protected by a 20 amp fuse located in cavity 5 of the PDC.

The Powertrain Control Module (PCM) controls the ground path for the relay on circuit K51. This circuit connects to cavity 67 of the PCM connector.

When the relay is energized, the contacts internal to the relay CLOSE connecting circuits A14 and A142. The A142 circuit is spliced and provides power to the fuel injectors, generator, electronic EGR transducer solenoid, and the ignition coil.

The A142 circuit is also spliced and connects to the PCM connector, cavity 6. This input is used for ASD sense by the PCM.

HELPFUL INFORMATION

- Refer to group 14, for system operation.

Check the 20 amp fuse located in cavity 5 of the PDC.

FUEL PUMP MOTOR

The fuel pump motor, located in the fuel tank, is controlled by the fuel pump relay located in the Power Distribution Center (PDC). Power for the coil side of the relay is provided by circuit F12. The F12 circuit is HOT in the START and RUN position only and protected by a 10 amp fuse located in cavity 10 of the PDC.

Circuit A21 is used to power the fuse and is connected between the ignition switch and the PDC. Power for the A21 circuit is provided by circuit A1. This circuit originates in the PDC and is protected by a 20 amp fuse located in cavity 8.

The F12 circuit is spliced and provides voltage to the Powertrain Control Module (PCM) and the Controller Anti-Lock Brake (CAB) module.

The ground for the coil side of the relay is controlled by the PCM through circuit K31. The K31 circuit connects to cavity 74 of the PCM. Logic internal to the PCM determines when the coil side of the relay should be grounded.

When the PCM grounds circuit K31, the contacts in the fuel pump relay CLOSE connecting circuits A1 and A141. Circuit A1 is connected to the BUS bar in the PDC, HOT at all times, and protected by a 20 amp fuse located in cavity 8. Circuit A141 is connected from the relay to the fuel pump motor. Ground for the fuel pump motor is provided on circuit Z1.

HELPFUL INFORMATION

- Check the 20 amp fuse located in cavity 8 of the PDC
- Check the 10 amp fuse located in cavity 10 of the PDC
- Check the ground
- Refer to group 14 of the Service Manual or the appropriate Diagnostic Test Procedures Manual for additional information.

VEHICLE SPEED INPUT

Circuit G7 provides an input to the Powertrain Control Module (PCM) on circuit G7 from the Transmission Control Module (TCM). This circuit connects to cavity 66 of the PCM connector, and cavity 58 of the TCM connector.

If the vehicle is equipped with speed proportional steering, the G7 circuit is spliced and provides an input to the module.

HEATED OXYGEN SENSORS

Circuit A14 is connected to the BUS bar in the Power Distribution Center (PDC), which connects to battery voltage. The contact side of the Automatic Shut-Down (ASD) relay connects circuit A14 and circuit A142. A 20 amp fuse, located in cavity 5 of the PDC, protects circuits A14 and A142.

Circuit A14 also supplies voltage to the coil side of the ASD relay. The Powertrain Control Module (PCM) controls the ground path circuit for the coil side of the ASD relay on circuit K51. Circuit K51 connects to cavity 67 of the PCM.

The A142 circuit also splices to cavity 6 of the PCM connector. The input by circuit A142 tells the PCM that the ASD relay is energized.

The A142 circuit supplies voltage for the upstream heated oxygen sensor and circuit F142 supplies voltage to the downstream heated oxygen sensor. The F142 circuit is protected by a 10 amp fuse located in cavity 1 of the PDC. Power for the fuse is supplied by circuit A142.

Circuit K41 delivers the signal from the upstream heated oxygen sensor to the PCM. Circuit K41 connects to cavity 30 of the PCM connector.

Circuit K141 delivers the signal from the downstream heated oxygen sensor to the PCM. Circuit K141 connects to cavity 51 of the PCM connector.

The PCM provides a ground for the upstream (left) and downstream (right) heated oxygen sensor signals (circuits K41 and K141) through circuit K4. Circuit K4 connects to cavity 43 of the PCM connector.

DESCRIPTION AND OPERATION (Continued)

Circuit Z1 provides the ground path for the heater circuits in the sensors. This ground terminates at the right frame rail.

HELPFUL INFORMATION

Circuit A142 splices to supply voltage to the fuel injectors, ignition coil (2.4L only), distributor (2.5L only), ASD relay, generator, and the EGR solenoid. The PCM controls the ground path for each of the components powered by circuit A142.

Circuit K4 splices to supply ground for the signals for the following:

- Intake air temperature sensor
- Engine coolant temperature sensor
- Manifold absolute pressure sensor
- Throttle position sensor
- A/C pressure switch
- Camshaft position sensor
- Crankshaft position sensor
- Vehicle speed sensor

CRANKSHAFT POSITION SENSOR

All engine packages in this vehicle use a crankshaft position sensor.

Circuit K7 supplies 8 volts from the Powertrain Control Module (PCM) to the crankshaft position sensor. The K7 circuit connects to cavity 44 of the PCM.

Circuit K24 from the sensor provides an input signal to the PCM. The K24 circuit connects to cavity 32 of the PCM. On automatic transmission vehicles this circuit is splices and provides an input to the Transmission Control Module (TCM).

The PCM provides a ground for the crankshaft position sensor signal (circuit K24) through circuit K4. Circuit K4 connects to cavity 43 of the PCM connector.

HELPFUL INFORMATION

On the 2.4L engine the K7 circuit is spliced and provides 8 volts for the camshaft position sensor. On the 2.5L engine the K7 circuit supplies 8 volts to the distributor.

Circuit K4 splices to supply ground for the signals from the following:

- Intake air temperature sensor
- Engine coolant temperature sensor
- Manifold absolute pressure sensor
- Throttle position sensor
- A/C pressure switch
- Camshaft position sensor
- Vehicle speed sensor
- Heated oxygen sensors

CAMSHAFT POSITION SENSOR (2.4L)

Circuit K7 supplies 8 volts from the Powertrain Control Module (PCM) to the camshaft position sensor. The K7 circuit connects to cavity 44 of the PCM connector.

Circuit K44 from the sensor provides an input signal to the PCM. The K44 circuit connects to cavity 33 of the PCM.

The PCM provides a ground for the camshaft position sensor signal (circuit K44) through circuit K4. Circuit K4 connects to cavity 43 of the PCM connector.

HELPFUL INFORMATION

On the 2.4L engine the K7 circuit is spliced and provides 8 volts for the crankshaft position sensor.

Circuit K4 splices to supply ground for the signals from the following:

- Intake air temperature sensor
- Engine coolant temperature sensor
- Manifold absolute pressure sensor
- Throttle position sensor
- A/C pressure switch
- Crankshaft position sensor
- Heated oxygen sensors

CAMSHAFT POSITION SENSOR (2.5L)

This engine uses a camshaft position sensor internal to the distributor. Refer to distributor operation in this section for operation of the sensor.

ENGINE COOLANT TEMPERATURE SENSOR

The engine coolant temperature sensor provides an input to the Powertrain Control Module (PCM) on circuit K2. This sensor input is also used for the instrument cluster coolant temperature gauge. Refer to Section 8W-40 for engine coolant temperature gauge description.

From circuit K2, the engine coolant temperature sensor draws up to 5 volts from the PCM. The sensor is a variable resistor. As coolant temperature changes the resistance in the sensor changes, causing a change in current draw. The K2 circuit connects to cavity 26 of the PCM connector. The PCM provides a ground for the engine coolant temperature sensor signal (circuit K2) through circuit K4. Circuit K4 connects to cavity 43 of the PCM.

HELPFUL INFORMATION

Circuit K4 splices to supply ground for the signals from the following:

- Intake air temperature sensor
- Camshaft position sensor
- Manifold absolute pressure sensor
- Throttle position sensor
- A/C pressure switch
- Crankshaft position sensor
- Vehicle speed sensor
- Heated oxygen sensors

DESCRIPTION AND OPERATION (Continued)

THROTTLE POSITION SENSOR

From the Powertrain Control Module (PCM), circuit K6 supplies 5 volts to the Throttle Position Sensor (TPS). Circuit K6 connects to cavity 61 of the PCM connector.

Circuit K22 delivers the TPS signal to the PCM. Circuit K22 connects to cavity 35 of the PCM connector.

The PCM provides a ground path for the TPS signal (circuit K22) through circuit K4. Circuit K4 connects to cavity 43 of the PCM connector.

HELPFUL INFORMATION

Refer to group 14 for throttle position sensor operation.

Circuit K6 is spliced and provides 5 volts to the A/C pressure switch and the map sensor.

On automatic transmission vehicles, circuit K22 is spliced and provides an input to the Transmission Control Module (TCM).

Circuit K4 splices to supply ground for the signals from the following:

- Intake air temperature sensor
- Camshaft position sensor
- Manifold absolute pressure sensor
- Ambient temperature sensor
- A/C pressure switch
- Crankshaft position sensor
- Vehicle speed sensor
- Heated oxygen sensors

MANIFOLD ABSOLUTE PRESSURE SENSOR

From the Powertrain Control Module (PCM), circuit K6 supplies 5 volts to the Manifold Absolute Pressure (MAP) sensor. Circuit K6 connects to cavity 61 of the PCM connector.

Circuit K1 delivers the MAP signal to the PCM. Circuit K1 connects to cavity 36 of the PCM connector.

The PCM provides a ground path for the MAP signal (circuit K1) through circuit K4. Circuit K4 connects to cavity 43 of the PCM connector.

HELPFUL INFORMATION

Refer to group 14 for MAP sensor operation.

Circuit K6 is spliced and provides 5 volts to the A/C pressure switch and the throttle position sensor.

Circuit K4 splices to supply ground for the signals from the following:

- Intake air temperature sensor
- Camshaft position sensor
- Throttle position sensor
- Ambient temperature sensor
- A/C pressure switch
- Crankshaft position sensor
- Vehicle speed sensor
- Heated oxygen sensors

INTAKE AIR TEMPERATURE SENSOR

On the 2.0L engine the intake air temperature sensor is combination unit with the map sensor.

The intake air temperature sensor provides an input to the Powertrain Control Module (PCM) on circuit K21. The K21 circuit connects to cavity 37 of the PCM connector.

From circuit K21, the intake air temperature sensor draws voltage from the PCM. The sensor is a variable resistor. As intake air temperature changes, the resistance in the sensor changes, causing a change in current draw.

The PCM provides a ground path for the intake air temperature sensor signal (circuit K21) through circuit K4. Circuit K4 connects to cavity 43 of the PCM connector.

HELPFUL INFORMATION

Refer to group 14 for intake air temperature sensor operation.

Circuit K4 splices to supply ground for the signals from the following:

- Manifold absolute pressure sensor
- Camshaft position sensor
- Throttle position sensor
- Ambient temperature sensor
- A/C pressure switch
- Crankshaft position sensor
- Vehicle speed sensor
- Heated oxygen sensors

KNOCK SENSOR (2.4L only)

The knock sensor provides an input to the Powertrain Control Module (PCM) on circuit K42. Circuit K42 connects to cavity 24 of the PCM connector.

The knock sensor is case grounded to the engine block.

HELPFUL INFORMATION

Refer to group 14, for knock sensor operation.

AMBIENT (BATTERY) TEMPERATURE SENSOR

The ambient temperature sensor draws voltage from the Powertrain Control Module (PCM) on circuit K118. The sensor is a variable resistor. As temperature changes, the resistance draw in the sensor changes causing a change in current draw. Circuit K118 connects to cavity 52 of the PCM connector.

The PCM provides a ground for the ambient temperature sensor on circuit K4. Circuit K4 connects to cavity 43 of the PCM connector.

HELPFUL INFORMATION

Circuit K4 splices to supply ground for the signals from the following:

- Intake air temperature sensor
- Camshaft position sensor

DESCRIPTION AND OPERATION (Continued)

- Manifold absolute pressure sensor
- Throttle position sensor
- A/C pressure switch
- Crankshaft position sensor
- Vehicle speed sensor
- Heated oxygen sensors

FUEL INJECTORS

Circuit A14 is connected to the BUS bar in the Power Distribution Center (PDC), and connects to battery voltage. The contact side of the Automatic Shut-Down (ASD) relay connects circuit A14 and A142. A 20 amp fuse, in cavity 5 of the PDC, protects circuits A14 and A142.

Circuit A14 also supplies voltage to the coil side of the ASD relay. The Powertrain Control Module (PCM) controls the ground path circuit for the coil side of the ASD relay on circuit K51. Circuit K51 connects to cavity 67 of the PCM.

Circuit A142 supplies voltage for the fuel injectors. The PCM controls the ground circuit of each injector, as follows:

- Circuit K11 is the ground circuit for Injector #1. Circuit K11 connects to cavity 13 of the PCM.
- Circuit K12 is the ground circuit for Injector #2. Circuit K12 connects to cavity 17 of the PCM.
- Circuit K13 is the ground circuit for Injector #3. Circuit K13 connects to cavity 7 of the PCM.
- Circuit K14 is the ground circuit for Injector #4. Circuit K14 connects to cavity 16 of the PCM.

On the 2.5L engine there are two additional injectors used. The PCM controls the ground path for these injectors as follows:

- Circuit K38 is the ground circuit for Injector #5. Circuit K38 connects to cavity 15 of the PCM.
- Circuit K58 is the ground circuit for Injector #6. Circuit K58 connects to cavity 14 of the PCM.

HELPFUL INFORMATION

Circuit A142 splices to supply voltage to the fuel injectors, ignition coil, ASD relay, generator, and the upstream and downstream (2.5L only) heated oxygen sensors. The PCM controls the ground circuit for each of the components powered by circuit A142.

The injectors operate in sequence. Refer to group 14 for system operation.

IGNITION COIL PACK (2.4L)

Circuit A14 is connected to the BUS bar in the Power Distribution Center (PDC), and connects to battery voltage. The contact side of the Automatic Shut-Down (ASD) relay connects circuit A14 and A142. A 20-amp fuse, in cavity 5 of the PDC, protects circuits A14 and A142.

Circuit A14 also supplies voltage to the coil side of the ASD relay. The Powertrain Control Module (PCM) controls the ground path circuit for the coil side of the ASD relay on circuit K51. Circuit K51 connects to cavity 67 of the PCM.

Circuit A142 supplies voltage for the ignition coil pack. The coil pack consists of two individual coils molded together. The PCM controls the ground circuit of each coil.

- Circuit K17 is the ground circuit for the ignition coil that fires spark plugs #1 and #4. Circuit K17 connects to cavity 3 of the PCM.
- Circuit K19 is the ground circuit for the ignition coil that fires spark plugs #2 and #3. Circuit K19 connects to cavity 2 of the PCM.

HELPFUL INFORMATION

Circuit A142 splices to supply voltage to the fuel injectors, ASD relay, generator, and the upstream and downstream heated oxygen sensors. The PCM controls the ground circuit for each of the components powered by circuit A142.

DISTRIBUTOR (2.5L)

The 2.5L V-6 engine uses a distributor. The distributor is used for firing the spark plugs and for providing camshaft position input to the Powertrain Control Module (PCM). Circuit K44 is used to indicate to the PCM camshaft position and connects to cavity 33 of the PCM. Circuit K4 is used for the sensor return to the PCM and connects to cavity 43.

The K19 circuit is an output from the PCM to the distributor and is used for the coil driver. Grounding for the distributor is provided on the Z1 circuit and terminates at the left strut tower.

Battery voltage for the distributor is provided from two sources, circuits A142 and K7. The K7 circuit is the 8 volt output from the PCM. Circuit A142 is HOT when the contacts in the Automatic Shut Down (ASD) relay are CLOSED.

HELPFUL INFORMATION

- Refer to group 14 for system operation.

IDLE AIR CONTROL MOTOR

The Powertrain Control Module (PCM) operates the idle air control motor through 4 circuits - K39, K40, K59, and K60. Each circuit connects to separate cavities in the PCM connector.

- Circuit K39 connects to cavity 57 of the PCM connector
- Circuit K40 connects to cavity 48 of the PCM connector
- Circuit K59 connects to cavity 58 of the PCM connector
- Circuit K60 connects to cavity 49 of the PCM connector

DESCRIPTION AND OPERATION (Continued)

HELPFUL INFORMATION

- Refer to group 14 of the Service Manual or the appropriate Diagnostic Test Procedures Manual for additional information.

POWER STEERING PRESSURE SWITCH

The power steering pressure switch opens and closes circuit K10 between the Powertrain Control Module (PCM) and ground. Circuit K10 connects to cavity 45 of the PCM connector.

Circuit Z1 provides a ground for the power steering pressure switch. The ground is terminated at the Body Control Module (BCM).

DUTY CYCLE EVAP/PURGE SOLENOID

Circuit F18 supplies battery voltage to the duty cycle EVAP/Purge solenoid. This circuit is HOT in the START and RUN position only. It is also spliced and provides power for the Anti-Lock warning lamp, A/C clutch relay, and high speed radiator fan relay.

Circuit F18 connects to the PDC, cavity 9, and is protected by a 10 amp fuse. Power for the fuse is supplied on circuit A21 from the ignition switch. Circuit A1 provides power for the A21 circuit and is protected by a 20 amp fuse located in cavity 8 of the Power Distribution Center (PDC).

The Powertrain Control Module (PCM) controls the ground path for the solenoid on circuit K52. Circuit K52 connects to cavity 68 of the PCM connector.

HELPFUL INFORMATION

- Refer to group 14 and group 25, for system operation
- Check the 10 amp fuse located in cavity 9 of the PDC.
- Check the 20 amp fuse located in cavity 8 of the PDC

ELECTRONIC EGR TRANSDUCER (EET) SOLENOID

Circuit A142 supplies voltage to the EET solenoid. The Powertrain Control Module (PCM) controls the ground path for the solenoid on circuit K35 and connects to cavity 40 of the PCM connector.

Circuit A142 is spliced and connects with the fuel injectors, generator, and the Automatic Shut-Down (ASD) relay. This circuit is HOT when the ASD relay is energized.

HELPFUL INFORMATION

- Refer to Group 14, for system operation.

VAPOR CANISTER LEAK DETECTOR

Power for the vapor canister leak detector is provided on circuit F18. This circuit is protected by a 10 amp fuse located in cavity 9 of the junction block. Power for the fuse is supplied on circuit A21 from the ignition switch. Circuit A21 is HOT in the START and RUN positions only.

The Powertrain Control Module (PCM) controls the ground path for the leak detection pump solenoid and leak detection pump switch.

Circuit K106 is connected to cavity 77 of the PCM connector and to the leak detection solenoid.

Circuit K107 is connected to cavity 72 of the PCM connector and to the leak detection pump switch.

HELPFUL INFORMATION

- Check the 10 amp fuse located in cavity 9 of the junction block.
- Refer to the appropriate section of the service manual, or the diagnostic test procedures manual.

PARK/NEUTRAL SWITCH INPUT

When CLOSED the Transmission Range Switch (TRS) provides an input to the Powertrain Control Module (PCM) on circuit T41. This circuit connects to cavity 76 of the PCM connector. The T41 circuit is spliced and provides a ground path for the engine starter relay, and the Transmission Control Module (TCM).

CCD BUS

The CCD Bus is used to allow the Powertrain Control Module (PCM) and other modules to communicate with each other and the universal data link connector.

Circuit D1 is used for CCD (+) and connects to cavity 59 of the PCM connector. Circuit D2 is used for CCD (-) and connects to cavity 60 of the PCM connector.

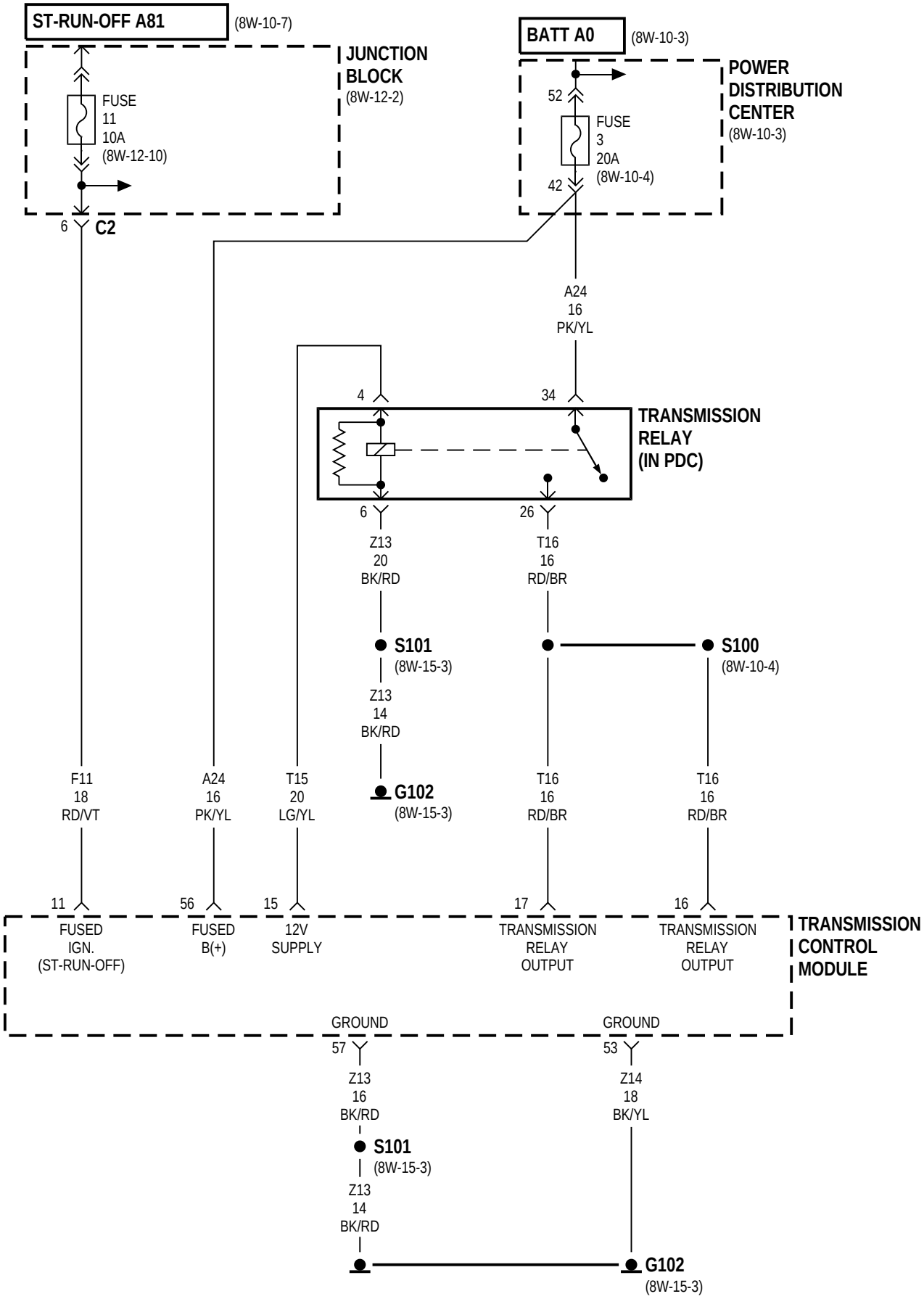
8W-31 TRANSMISSION CONTROL SYSTEM

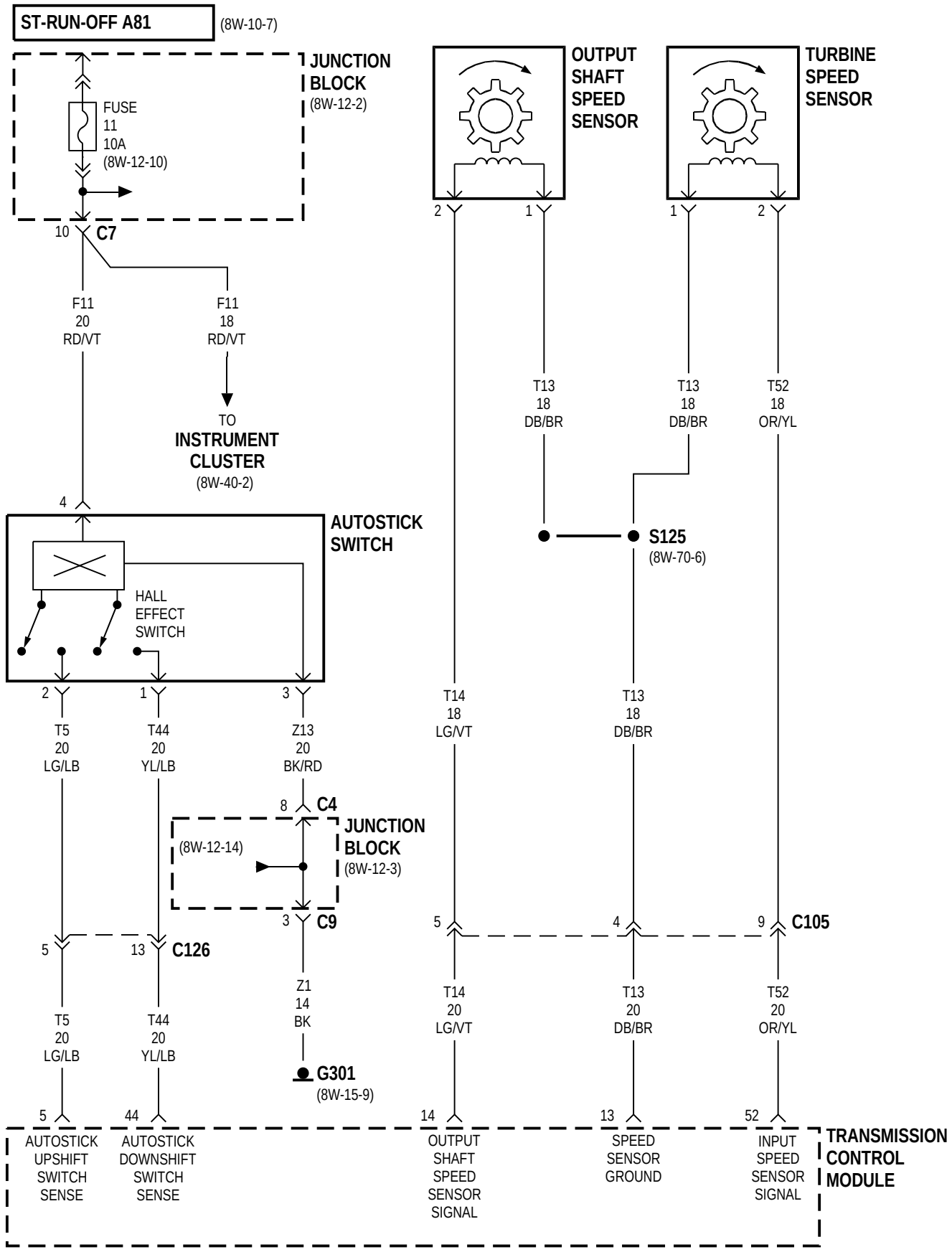
INDEX

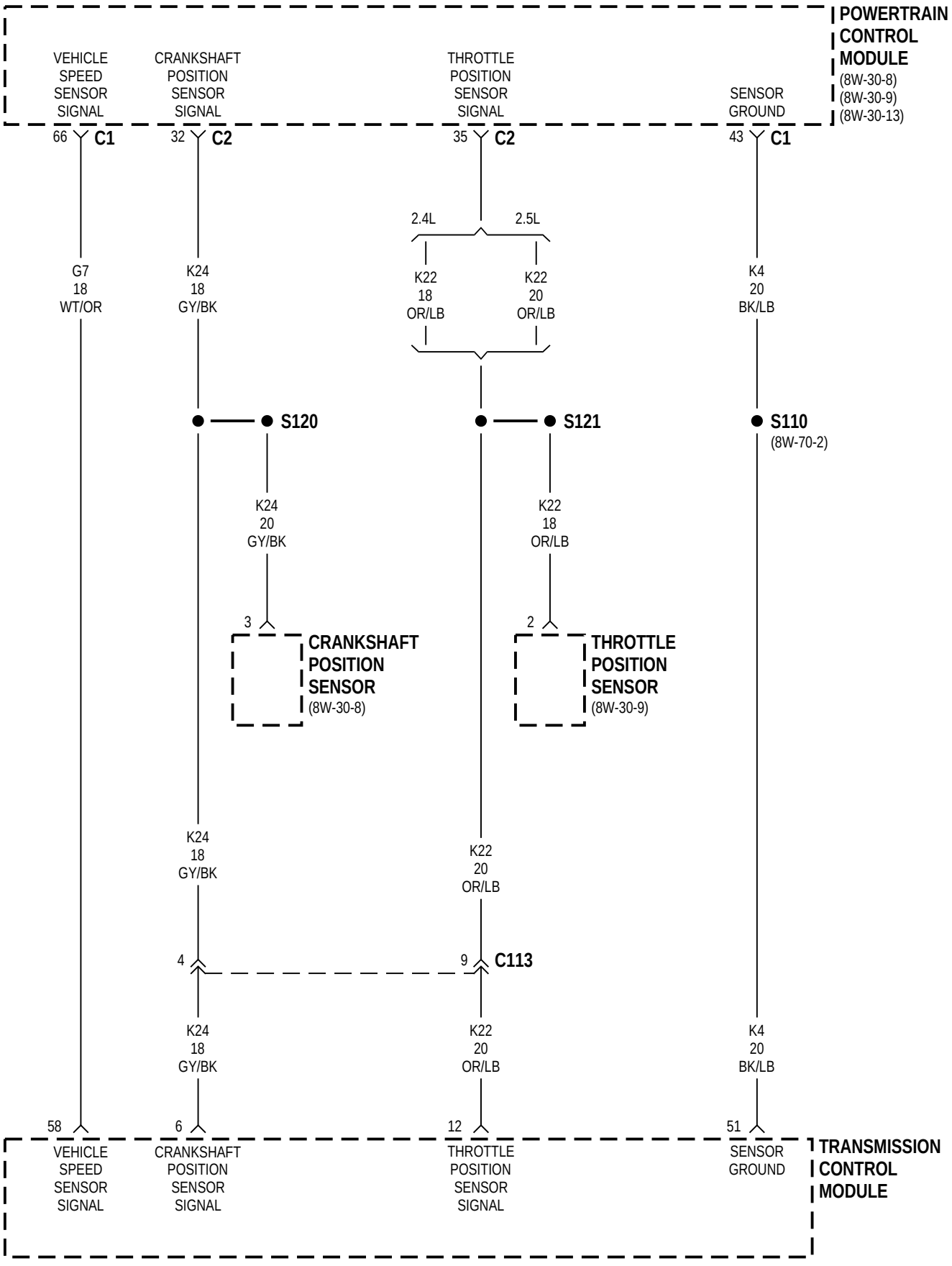
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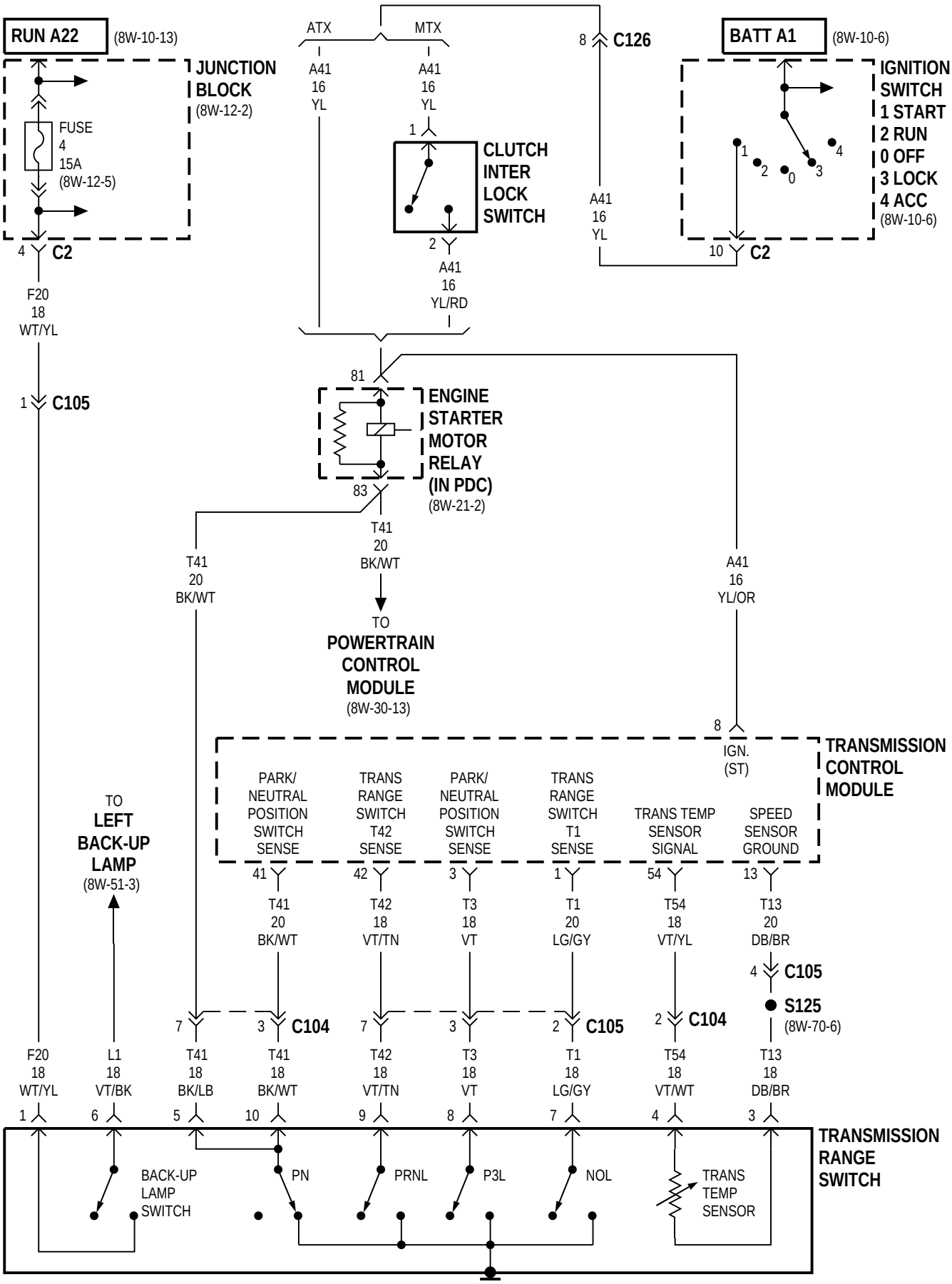
SCHEMATICS AND DIAGRAMS 1
DESCRIPTION AND OPERATION 9

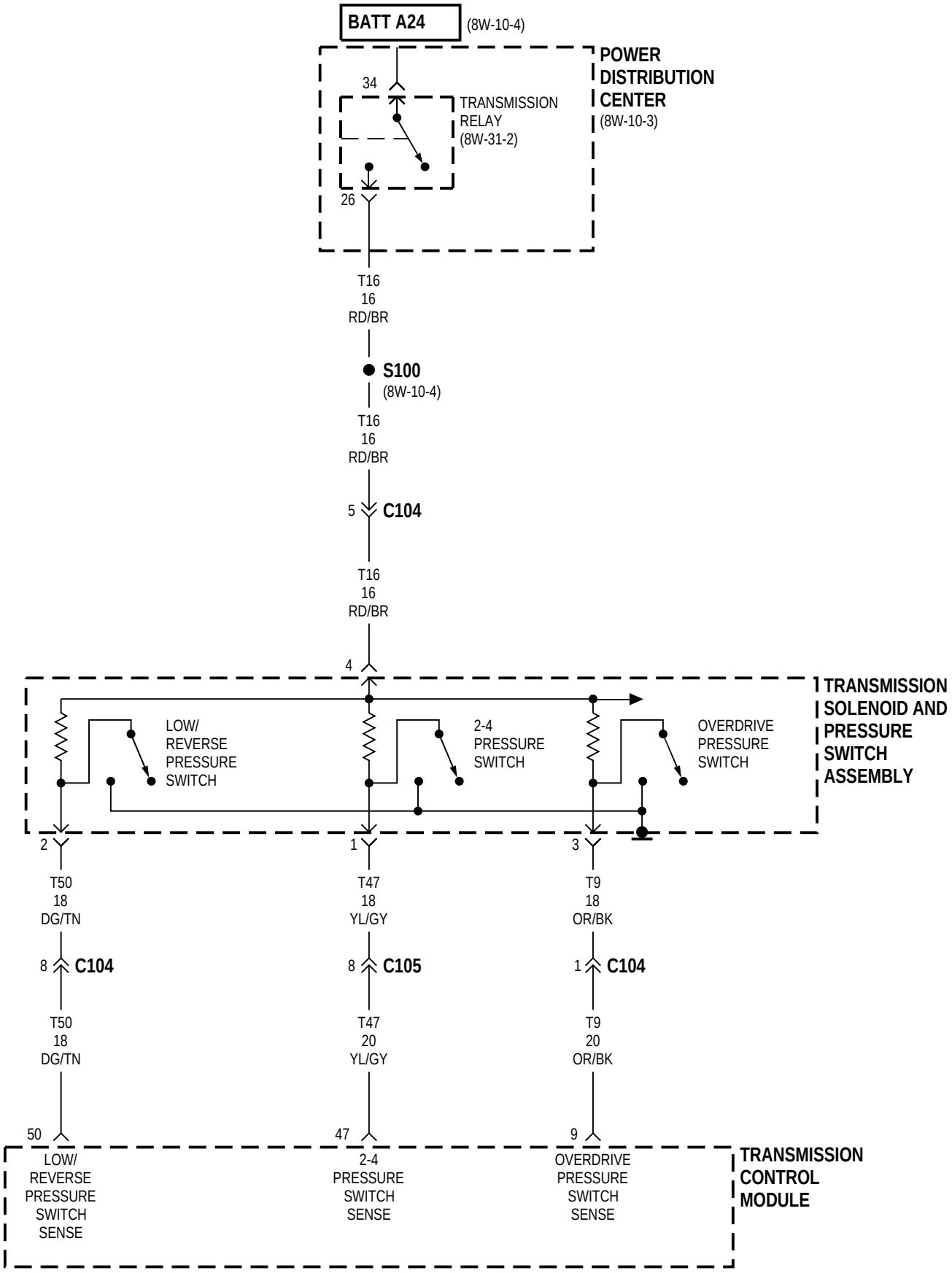
Component	Page
2-4 Pressure Switch	8W-31-6
2-4 Solenoid	8W-31-7
Autostick Switch	8W-31-3
Body Control Module	8W-31-8
Clutch Inter Lock Switch	8W-31-5
Crankshaft Position Sensor	8W-31-4
Data Link Connector	8W-31-8
Engine Starter Motor Relay	8W-31-5
Fuse 11	8W-31-2, 3
Fuse 3	8W-31-2
Fuse 4	8W-31-5
G102	8W-31-2
G301	8W-31-3
Ignition Switch	8W-31-5
Instrument Cluster	8W-31-3
Junction Block	8W-31-2, 3, 5
Left Back-Up Lamp	8W-31-5
Low/Reverse Pressure Switch	8W-31-6
Low/Reverse Solenoid	8W-31-7
Output Shaft Speed Sensor	8W-31-3
Overdrive Pressure Switch	8W-31-6
Overdrive Solenoid	8W-31-7
Power Distribution Center	8W-31-2, 6, 7
Powertrain Control Module	8W-31-4, 5, 8
S100	8W-31-2, 6, 7
S101	8W-31-2
S110	8W-31-4
S120	8W-31-4
S121	8W-31-4
S125	8W-31-3, 5
S127	8W-31-8
S132	8W-31-8
S133	8W-31-8
Throttle Position Sensor	8W-31-4
Transmission Control Module	8W-31-2, 3, 4, 5, 6, 7, 8
Transmission Range Switch	8W-31-5
Transmission Relay	8W-31-2, 6, 7
Transmission Solenoid And Pressure Switch Assembly	8W-31-6, 7
Turbine Speed Sensor	8W-31-3
Underdrive Solenoid	8W-31-7

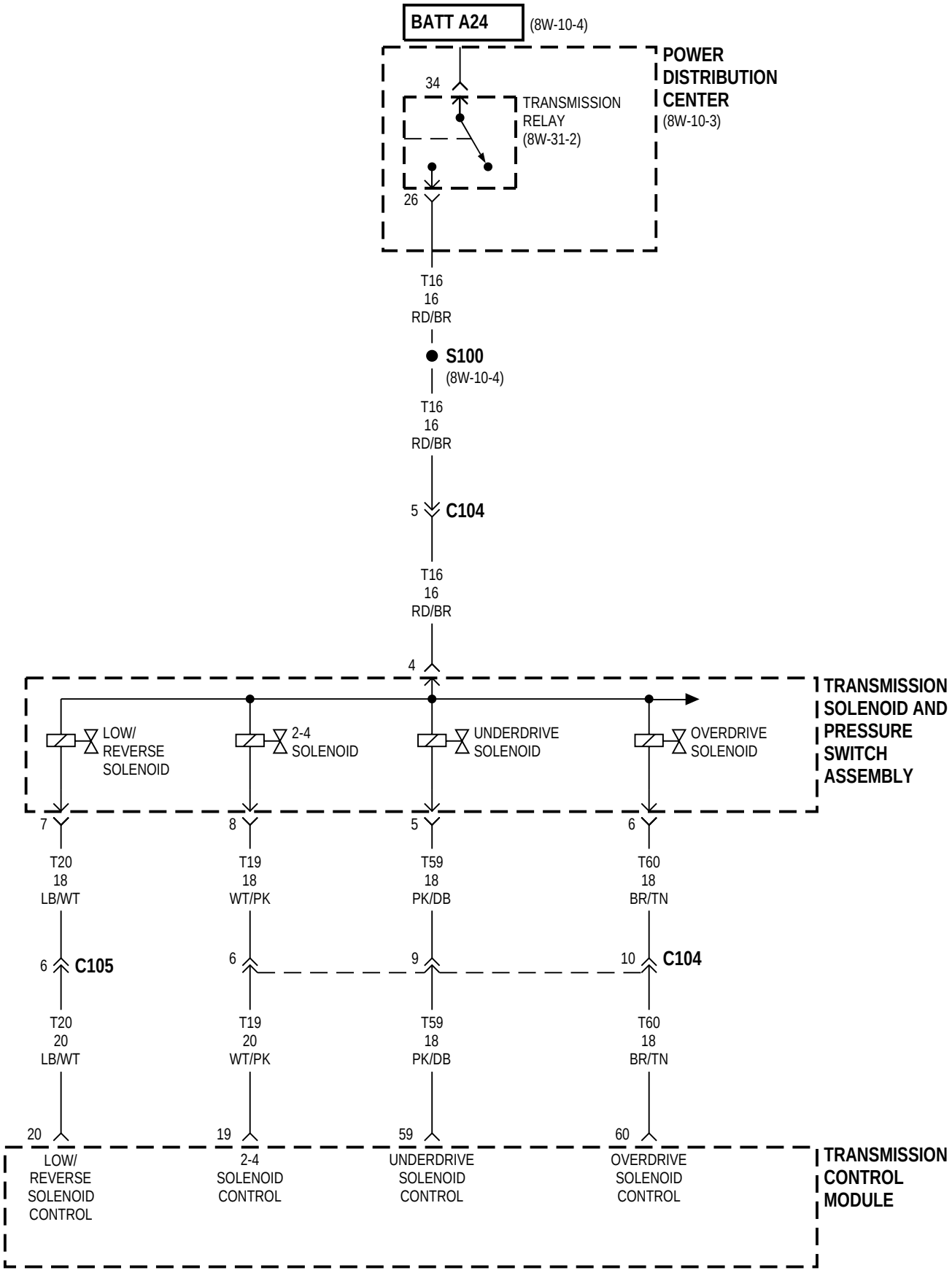

ST-RUN-OFF A81
(8W-10-7)
JUNCTION BLOCK
(8W-12-2)
FUSE 11 10A
(8W-12-10)
6
C2
BATT A0
(8W-10-3)
POWER DISTRIBUTION CENTER
(8W-10-3)
52
FUSE 3 20A
(8W-10-4)
42
A24 16 PK/YL
4
34
TRANSMISSION RELAY (IN PDC)
6
26
Z13 20 BK/RD
T16 16 RD/BR
S101
(8W-15-3)
S100
(8W-10-4)
Z13 14 BK/RD
G102
(8W-15-3)
F11 18 RD/VT
A24 16 PK/YL
T15 20 LG/YL
T16 16 RD/BR
T16 16 RD/BR
11
56
15
17
16
FUSED IGN. (ST-RUN-OFF)
FUSED B(+)
12V SUPPLY
TRANSMISSION RELAY OUTPUT
TRANSMISSION RELAY OUTPUT
TRANSMISSION CONTROL MODULE
GROUND
GROUND
57
53
Z13 16 BK/RD
Z14 18 BK/YL
S101
(8W-15-3)
Z13 14 BK/RD
G102
(8W-15-3)

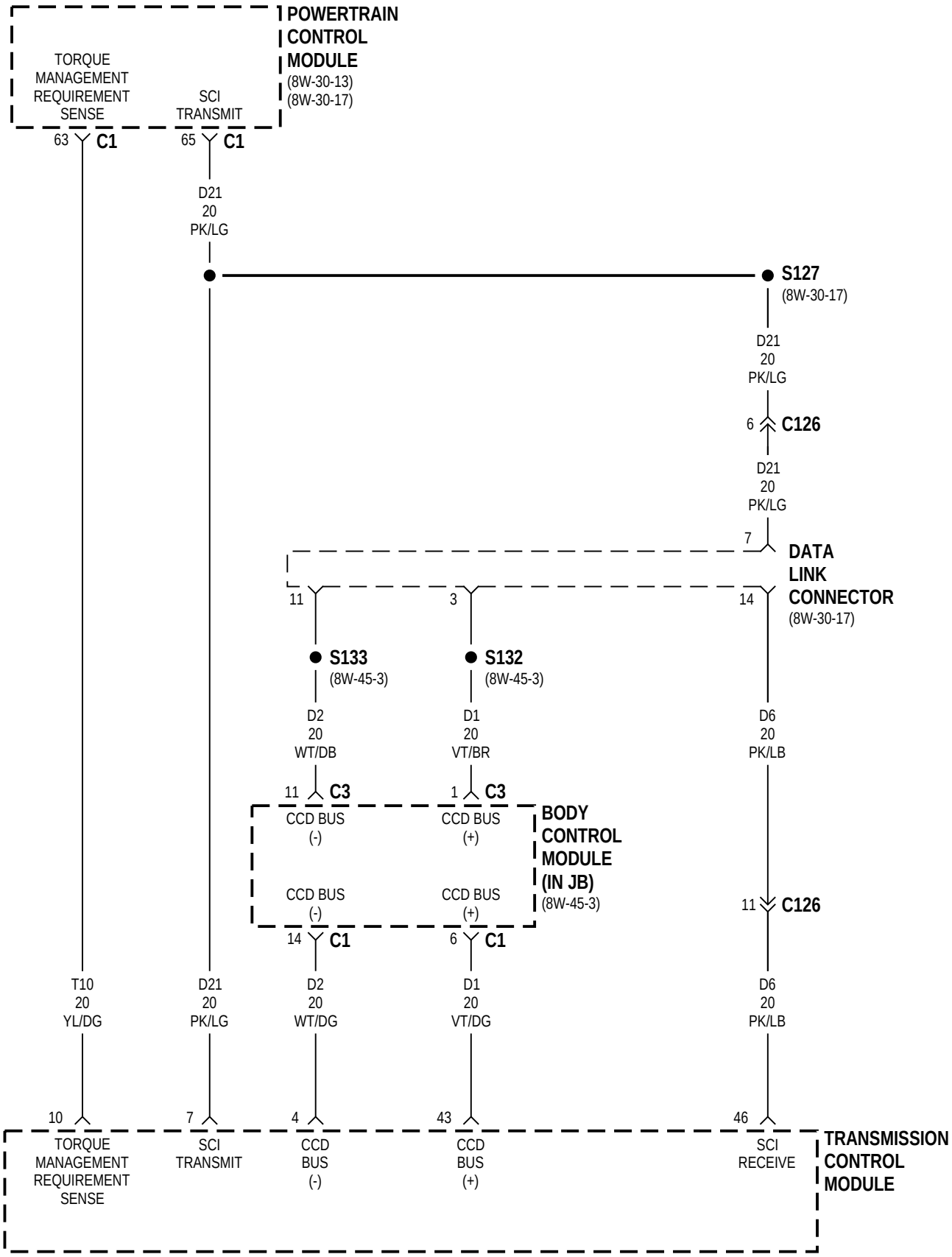

ST-RUN-OFF A81
(8W-10-7)
JUNCTION BLOCK
(8W-12-2)
FUSE 11 10A
(8W-12-10)
10
C7
F11 20 RD/VT
F11 18 RD/VT
TO INSTRUMENT CLUSTER
(8W-40-2)
OUTPUT SHAFT SPEED SENSOR
TURBINE SPEED SENSOR
2
1
1
2
T13 18 DB/BR
T13 18 DB/BR
T52 18 OR/YL
4
AUTOSTICK SWITCH
HALL EFFECT SWITCH
S125
(8W-70-6)
2
1
3
T5 20 LG/LB
T44 20 YL/LB
Z13 20 BK/RD
T14 18 LG/VT
T13 18 DB/BR
8
C4
JUNCTION BLOCK
(8W-12-3)
(8W-12-14)
3
C9
5
13
C126
5
4
9
C105
Z1 14 BK
T5 20 LG/LB
T44 20 YL/LB
T14 20 LG/VT
T13 20 DB/BR
T52 20 OR/YL
G301
(8W-15-9)
5
44
14
13
52
AUTOSTICK UPSHIFT SWITCH SENSE
AUTOSTICK DOWNSHIFT SWITCH SENSE
OUTPUT SHAFT SPEED SENSOR SIGNAL
SPEED SENSOR GROUND
INPUT SPEED SENSOR SIGNAL
TRANSMISSION CONTROL MODULE


POWERTRAIN CONTROL MODULE
(8W-30-8)
(8W-30-9)
(8W-30-13)
VEHICLE SPEED SENSOR SIGNAL
CRANKSHAFT POSITION SENSOR SIGNAL
THROTTLE POSITION SENSOR SIGNAL
SENSOR GROUND
66 C1
32 C2
35 C2
43 C1
2.4L
2.5L
G7 18 WT/OR
K24 18 GY/BK
K22 18 OR/LB
K22 20 OR/LB
K4 20 BK/LB
S120
S121
S110
(8W-70-2)
K24 20 GY/BK
K22 18 OR/LB
3
2
CRANKSHAFT POSITION SENSOR
(8W-30-8)
THROTTLE POSITION SENSOR
(8W-30-9)
K24 18 GY/BK
K22 20 OR/LB
4
9 C113
K24 18 GY/BK
K22 20 OR/LB
K4 20 BK/LB
58
6
12
51
VEHICLE SPEED SENSOR SIGNAL
CRANKSHAFT POSITION SENSOR SIGNAL
THROTTLE POSITION SENSOR SIGNAL
SENSOR GROUND
TRANSMISSION CONTROL MODULE


RUN A22
(8W-10-13)
JUNCTION BLOCK
(8W-12-2)
FUSE 4 15A
(8W-12-5)
4 C2
F20 18 WT/YL
1 C105
ATX
MTX
A41 16 YL
A41 16 YL
1
CLUTCH INTER LOCK SWITCH
2
A41 16 YL/RD
8 C126
A41 16 YL
BATT A1
(8W-10-6)
IGNITION SWITCH
1 START
2 RUN
0 OFF
3 LOCK
4 ACC
(8W-10-6)
10 C2
81
ENGINE STARTER MOTOR RELAY (IN PDC)
(8W-21-2)
83
T41 20 BK/WT
T41 20 BK/WT
TO POWERTRAIN CONTROL MODULE
(8W-30-13)
A41 16 YL/OR
8
IGN. (ST)
TRANSMISSION CONTROL MODULE
PARK/ NEUTRAL POSITION SWITCH SENSE
TRANS RANGE SWITCH T42 SENSE
PARK/ NEUTRAL POSITION SWITCH SENSE
TRANS RANGE SWITCH T1 SENSE
TRANS TEMP SENSOR SIGNAL
SPEED SENSOR GROUND
TO LEFT BACK-UP LAMP
(8W-51-3)
41
42
3
1
54
13
T41 20 BK/WT
T42 18 VT/TN
T3 18 VT
T1 20 LG/GY
T54 18 VT/YL
T13 20 DB/BR
4 C105
S125
(8W-70-6)
7 3 C104
7 3 2 C105
2 C104
F20 18 WT/YL
L1 18 VT/BK
T41 18 BK/LB
T41 18 BK/WT
T42 18 VT/TN
T3 18 VT
T1 18 LG/GY
T54 18 VT/WT
T13 18 DB/BR
1 6 5 10 9 8 7 4 3
TRANSMISSION RANGE SWITCH
BACK-UP LAMP SWITCH
PN
PRNL
P3L
NOL
TRANS TEMP SENSOR


BATT A24
(8W-10-4)
POWER DISTRIBUTION CENTER
(8W-10-3)
34
TRANSMISSION RELAY
(8W-31-2)
26
T16
16
RD/BR
S100
(8W-10-4)
T16
16
RD/BR
5
C104
T16
16
RD/BR
4
TRANSMISSION SOLENOID AND PRESSURE SWITCH ASSEMBLY
LOW/ REVERSE PRESSURE SWITCH
2-4 PRESSURE SWITCH
OVERDRIVE PRESSURE SWITCH
2
1
3
T50
18
DG/TN
T47
18
YL/GY
T9
18
OR/BK
8
C104
8
C105
1
C104
T50
18
DG/TN
T47
20
YL/GY
T9
20
OR/BK
50
47
9
TRANSMISSION CONTROL MODULE
LOW/ REVERSE PRESSURE SWITCH SENSE
2-4 PRESSURE SWITCH SENSE
OVERDRIVE PRESSURE SWITCH SENSE


BATT A24
(8W-10-4)
POWER DISTRIBUTION CENTER
(8W-10-3)
34
TRANSMISSION RELAY
(8W-31-2)
26
T16
16
RD/BR
S100
(8W-10-4)
T16
16
RD/BR
5
C104
T16
16
RD/BR
4
TRANSMISSION SOLENOID AND PRESSURE SWITCH ASSEMBLY
LOW/ REVERSE SOLENOID
2-4 SOLENOID
UNDERDRIVE SOLENOID
OVERDRIVE SOLENOID
7
8
5
6
T20
18
LB/WT
T19
18
WT/PK
T59
18
PK/DB
T60
18
BR/TN
6
C105
6
9
10
C104
T20
20
LB/WT
T19
20
WT/PK
T59
18
PK/DB
T60
18
BR/TN
20
19
59
60
LOW/ REVERSE SOLENOID CONTROL
2-4 SOLENOID CONTROL
UNDERDRIVE SOLENOID CONTROL
OVERDRIVE SOLENOID CONTROL
TRANSMISSION CONTROL MODULE


POWERTRAIN CONTROL MODULE
(8W-30-13)
(8W-30-17)
TORQUE MANAGEMENT REQUIREMENT SENSE
SCI TRANSMIT
63 C1
65 C1
D21 20 PK/LG
S127
(8W-30-17)
D21 20 PK/LG
6 C126
D21 20 PK/LG
7
DATA LINK CONNECTOR
(8W-30-17)
11
3
14
S133
(8W-45-3)
S132
(8W-45-3)
D2 20 WT/DB
D1 20 VT/BR
D6 20 PK/LB
11 C3
1 C3
CCD BUS (-)
CCD BUS (+)
BODY CONTROL MODULE (IN JB)
(8W-45-3)
CCD BUS (-)
CCD BUS (+)
11 C126
14 C1
6 C1
T10 20 YL/DG
D21 20 PK/LG
D2 20 WT/DG
D1 20 VT/DG
D6 20 PK/LB
10
7
4
43
46
TORQUE MANAGEMENT REQUIREMENT SENSE
SCI TRANSMIT
CCD BUS (-)
CCD BUS (+)
SCI RECEIVE
TRANSMISSION CONTROL MODULE

8W-31 TRANSMISSION CONTROL SYSTEM

INDEX

page

DESCRIPTION AND OPERATION
AUTO STICK 10
BACK UP LAMPS 9
FUEL/IGNITION SYSTEM INPUTS 10
HELPFUL INFORMATION 10
OUTPUT SPEED SENSOR 10
SOLENOIDS AND PRESSURE SWITCHES 9
TORQUE MANAGEMENT INPUT 10
TRANSMISSION CONTROL MODULE (TCM) 9
TRANSMISSION CONTROL RELAY 9
TRANSMISSION RANGE SENSOR 10
TRANSMISSION TEMPERATURE SENSOR 10
TURBINE SPEED SENSOR 10
VEHICLE SPEED INPUT 10

DESCRIPTION AND OPERATION

TRANSMISSION CONTROL MODULE (TCM)

The Transmission Control System is used on all automatic transmission applications. It provides smooth and accurate shift points and can adjust as the transmission wears.

Power for the Transmission Control Module (TCM) is supplied from three sources. One is a direct battery feed on circuit A24. This circuit is protected by a 20 amp fuse located in the Power Distribution Center (PDC) cavity 3. It is also spliced and supplies power for the transmission control relay, contact side.

Power is also supplied on circuit A41. This is the power supply is for the engine starter relay, coil side, and is HOT in the START position only. Circuit A1, which connects to the ignition switch, supplies power to circuit A41 in the START position and is protected by a 20 amp fuse located in cavity 8 of the PDC.

Circuit F11 also supplies power to the TCM. This circuit is protected by a 10 amp fuse located in cavity 11 of the junction block. Power for the fuse is supplied on circuit A81. This circuit is protected by a 20 amp fuse located in cavity 8 of the PDC. The F11 circuit also supplies power to the optional Auto Stick switches.

Ground for the TCM is supplied on the Z13 circuit, which is a power ground, and circuit Z14, which is a signal ground. Both grounds terminate at the left strut tower.

The CCD Data Bus is used to allow the controller to communicate with other controllers and the Universal Data Link connector. The circuits involved are, D1 for CCD positive, and D2 for CCD negative.

Circuits D6 and D21 are connected from the TCM to the universal data link connector. The D6 ciruit is used for SCI receive, and the D21 circuit is used for SCI transmit.

TRANSMISSION CONTROL RELAY

The Transmission Control Relay, located in the Power Distribution Center (PDC), is used to power the Transmission Solenoids and Pressure Switches. Power for the coil side of the relay is supplied from the TCM on circuit T15. Ground for the coil side is provided on circuit Z1 and terminates at the left strut tower.

When the relay is energized, contacts inside the relay CLOSE and connect circuits A24, which is a direct battery feed, and circuit T16, which connects to the solenoid and pressure switch assembly. Circuit T16 is also spliced to the TCM and is used to control the switched battery feed.

BACK UP LAMPS

AUTOMATIC TRANSMISSION

Operation of the back-up lamps is controlled by a switch located internal to the Transmission Range Sensor (TRS).

Power for the back-up lamp switch is supplied on circuit F20 which is protected by a 15 amp fuse located in cavity 4 of the junction block. This fuse is HOT in the RUN position only.

Power for the fuse is supplied by cirucit A22. This circuit connects from the ignition switch to the junction block. Power for the A22 circuit is supplied by circuit A2. This circuit originates in the Power Distribution Center and is protected by a 40 amp fuse located in cavity 18.

When the operator places the vehicle in REVERSE circuits F20 and L1 are connected. Circuit L1 connects from the TRS to the back-up lamps.

Ground for the lamps is supplied on circuit Z1.

SOLENOIDS AND PRESSURE SWITCHES

The Solenoid and Pressure Switch assembly, located in the transmission, is used to control the shifting of the transmission. Power for the assembly is provided on circuit T16 from the transmission control relay. The Transmission Control Module (TCM) provides the ground path for the various solenoids depending on operating conditions. This assembly is also case grounded to the

DESCRIPTION AND OPERATION (Continued)

transmission. The case ground supplies the ground path for the pressure switches.

The following circuits are controlled by the TCM for the Solenoid and Pressure Switch Assembly.

- T20- Low/Reverse solenoid
- T19- 2/4 solenoid
- T60- Overdrive solenoid
- T59- Underdrive Pressure Switch
- T50- Low/Reverse pressure switch
- T47- Kick down pressure switch
- T9- Overdrive pressure switch

Circuits T9, T47, and T50 are switch inputs to the TCM.

TURBINE SPEED SENSOR

The Turbine Speed sensor is used to measure the speed of the torque converter turbine. Circuit T52 is an input to the Transmission Control Module (TCM). Ground for the sensor is provided on circuit T13. This ground is spliced and shared with the Output Speed sensor.

OUTPUT SPEED SENSOR

The Output Speed sensor is used to measure the speed of the output shaft of the transmission. Circuit T14 supplies an input to the Transmission Control Module (TCM). Ground for the sensor is provided on circuit T13. This ground is spliced and shared with the Turbine Speed sensor.

AUTO STICK

The auto stick is used to allow the operator to control the shifting of the transmission. This system uses hall effect switched located at the base of the shifter.

There are two hall effect switched used. One is for Upshift. Circuit T5 connects from the Upshift switch to the Transmission Control Module (TCM). Circuit T44 connects from the Downshift switch to the TCM.

Power for the switched is supplied on circuit F11. This circuit is HOT in the OFF/RUN/START position. This circuit is protected by a 10 amp fuse located in cavity 10 of the junction block.

Ground for the switch is supplied on circuit Z1.

TRANSMISSION TEMPERATURE SENSOR

The transmission temperature sensor is used to monitor the temperature of the transmission fluid. The sensor is a variable resistor and is part of the Transmission Range Sensor (TRS).

Power for the sensor is supplied by the Transmission Control Module (TCM) on circuit T54. The T54 circuit connects to cavity 54 of the TCM connector.

Ground for the sensor is supplied on circuit T13. This circuit is spliced with the turbine speed and output speed sensor. This circuit connects to cavity 13 of the TCM connector.

TRANSMISSION RANGE SENSOR

The Transmission Range Sensor (TRS) is located internal to the transmission. This sensor provides the Transmission Control Module (TCM) with information on shift lever position, contains the transmission temperature sensor, and contains the switch for the back-up lamps.

Operation of the transmission temperature sensor and the back-up lamps is covered in this section.

Circuit T1 provides an input to the TCM when the shift lever is in the NEUTRAL/OVERDRIVE or LOW position.

Circuit T3 provides an input to the TCM when the shift lever is in the PARK, 3, or LOW position.

Circuit T42 provides an input to the TCM when the shift lever is in the PARK, REVERSE, NEUTRAL, or LOW position.

Circuit T41 provides an input to the TCM when the shift lever is in the PARK, or NEUTRAL position. This circuit is also the ground circuit for the coil side of the engine starter motor relay.

The TRS is case grounded to the transmission.

TORQUE MANAGEMENT INPUT

Circuit T10 connects from the Transmission Control Module (TCM) to the Powertrain Control Module (PCM) cavity 63. This is the torque management request from the TCM to the PCM.

FUEL/IGNITION SYSTEM INPUTS

The following inputs are used by the Transmission Control Module (TCM) to determine proper vehicle shift points.

- Circuit K22 is used to provide the TCM with the throttle position
- Circuit K4 is used to provide the throttle position sensor ground to the Powertrain Control Module (PCM)
- Circuit K24 is used to provide the TCM with the engine speed input

VEHICLE SPEED INPUT

The Powertrain Control Module (PCM) receives an input on vehicle speed from the Transmission Control Module (TCM).

Circuit G7, from the TCM, provides an input signal to the PCM. The G7 circuit connects to cavity 66 of the PCM connector.

HELPFUL INFORMATION

- Refer to the appropriate group of the Service Manual or the Diagnostic Test Procedures Manual for diagnostic procedures.

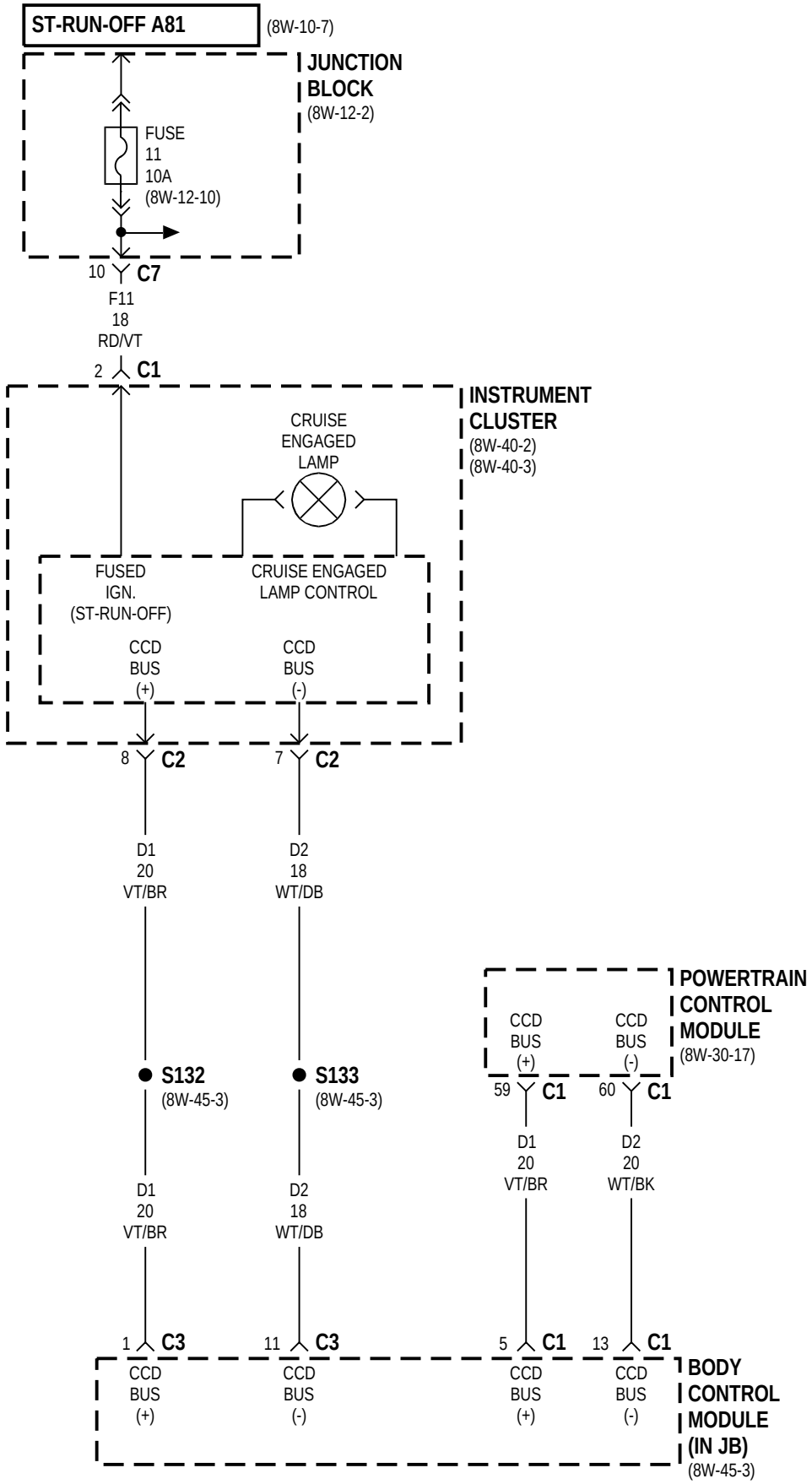
8W-33 VEHICLE SPEED CONTROL

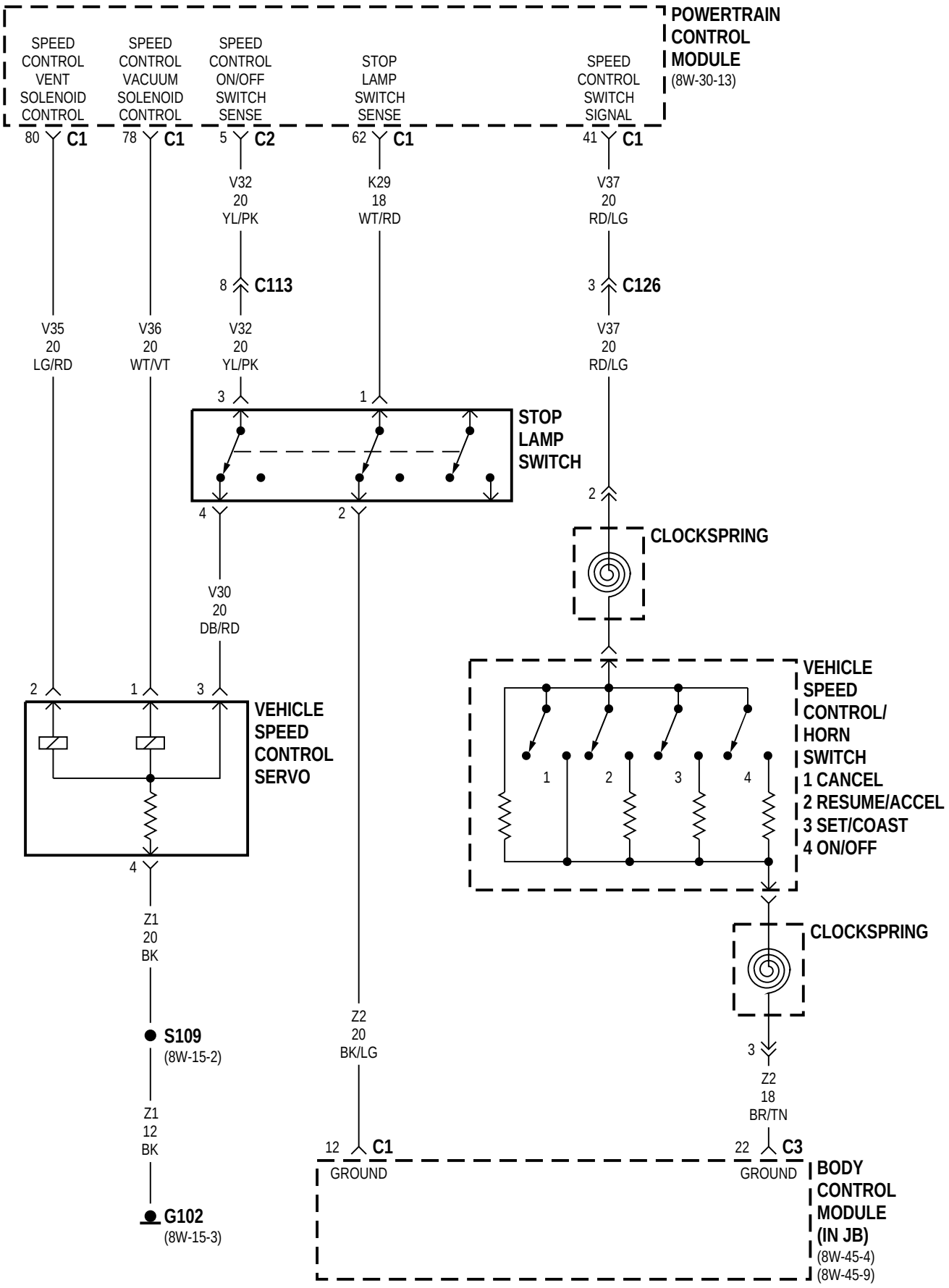
INDEX

page

SCHEMATICS AND DIAGRAMS **1**
DESCRIPTION AND OPERATION **4**

Component	Page
Body Control Module	8W-33-2, 3
Clockspring	8W-33-3
Cruise Engaged Lamp	8W-33-2
Fuse 11	8W-33-2
G102	8W-33-3
Instrument Cluster	8W-33-2
Junction Block	8W-33-2
Powertrain Control Module	8W-33-2, 3
S109	8W-33-3
S132	8W-33-2
S133	8W-33-2
Stop Lamp Switch	8W-33-3
Vehicle Speed Control Servo	8W-33-3
Vehicle Speed Control/Horn Switch	8W-33-3


ST-RUN-OFF A81
(8W-10-7)
JUNCTION BLOCK
(8W-12-2)
FUSE
11
10A
(8W-12-10)
10
C7
F11
18
RD/VT
2
C1
INSTRUMENT CLUSTER
(8W-40-2)
(8W-40-3)
CRUISE ENGAGED LAMP
FUSED IGN. (ST-RUN-OFF)
CRUISE ENGAGED LAMP CONTROL
CCD BUS (+)
CCD BUS (-)
8
C2
7
C2
D1
20
VT/BR
D2
18
WT/DB
S132
(8W-45-3)
S133
(8W-45-3)
D1
20
VT/BR
D2
18
WT/DB
POWERTRAIN CONTROL MODULE
(8W-30-17)
CCD BUS (+)
CCD BUS (-)
59
C1
60
C1
D1
20
VT/BR
D2
20
WT/BK
1
C3
11
C3
5
C1
13
C1
CCD BUS (+)
CCD BUS (-)
CCD BUS (+)
CCD BUS (-)
BODY CONTROL MODULE (IN JB)
(8W-45-3)


POWERTRAIN CONTROL MODULE
(8W-30-13)
SPEED CONTROL VENT SOLENOID CONTROL
SPEED CONTROL VACUUM SOLENOID CONTROL
SPEED CONTROL ON/OFF SWITCH SENSE
STOP LAMP SWITCH SENSE
SPEED CONTROL SWITCH SIGNAL
80 C1
78 C1
5 C2
62 C1
41 C1
V32 20 YL/PK
K29 18 WT/RD
V37 20 RD/LG
8 C113
3 C126
V35 20 LG/RD
V36 20 WT/VT
V32 20 YL/PK
V37 20 RD/LG
STOP LAMP SWITCH
CLOCKSPRING
V30 20 DB/RD
VEHICLE SPEED CONTROL SERVO
VEHICLE SPEED CONTROL/ HORN SWITCH
1 CANCEL
2 RESUME/ACCEL
3 SET/COAST
4 ON/OFF
CLOCKSPRING
Z1 20 BK
S109
(8W-15-2)
Z2 20 BK/LG
Z2 18 BR/TN
Z1 12 BK
12 C1
GROUND
22 C3
GROUND
G102
(8W-15-3)
BODY CONTROL MODULE (IN JB)
(8W-45-4)
(8W-45-9)

8W-33 VEHICLE SPEED CONTROL

INDEX

page

DESCRIPTION AND OPERATION
CRUISE (VEHICLE SPEED CONTROL) ENGAGED LAMP 4
HELPFUL INFORMATION 4
VEHICLE SPEED CONTROL 4

DESCRIPTION AND OPERATION

VEHICLE SPEED CONTROL

The vehicle speed control system is powered by the Powertrain Control Module (PCM). The vehicle speed control switches, located in the steering wheel, use resistors internal to the switch to send a signal to the PCM indicating what the operator is requesting. The V37 circuit, from cavity 41 of the PCM supplies power for the switch. Circuit Z2 is the ground for the switch. The Z2 circuit terminates at the instrument panel left side cowl.

The V37 and Z2 circuits are spliced internal to the clockspring to provide power and ground for the two switches.

When the system is turned ON, the vehicle is moving forward, vehicle speed is above 35 mph (50kph), and the SET switch is pressed, the PCM looks at the vehicle speed.

With this information, the PCM sends a signal to the vehicle speed control servo, on the V36 circuit, and the servo applies vacuum to hold the desired speed. Circuit V36 connects to cavity 78 of the PCM.

When the operator selects the COAST feature in the system, the PCM measures the resistance on the V37 circuit and uses this information to apply voltage on the V35 circuit, which is the vent side of the vehicle speed control servo. Circuit V35 connects to cavity 80 of the PCM.

Grounding for the vehicle speed control servo is supplied on the Z2 circuit. Circuit Z2 terminates at the left strut tower. An additional input to the servo is provided by the stop lamp switch on the V30 circuit. When the operator presses on the brakes the ground path for the V30 circuit is broken. This break in the ground path causes the vehicle speed control servo to vent and disengage the system.

Circuits V32 and K29 are used as inputs to the PCM to indicate when the operator is applying the brakes, as vehicle speed control is canceled when this happens. Circuit V32 connects to cavity 5 of the PCM. Circuit K29 connects to cavity 62 of the PCM.

CRUISE (VEHICLE SPEED CONTROL) ENGAGED LAMP

The CRUISE lamp is used to indicate to the operator when the vehicle speed control is engaged. The signal to illuminate the lamp is carried over the CCD Bus from the Body Control Module (BCM).

The BCM receives information on vehicle speed control engagement from the PCM over the CCD Bus. This lamp also is illuminated, for a few seconds, when the ignition switch is moved from the OFF to the RUN position as a bulb check. The bulb check operation is controlled by the PCM.

HELPFUL INFORMATION

- Refer to Group 8H for diagnosis procedures

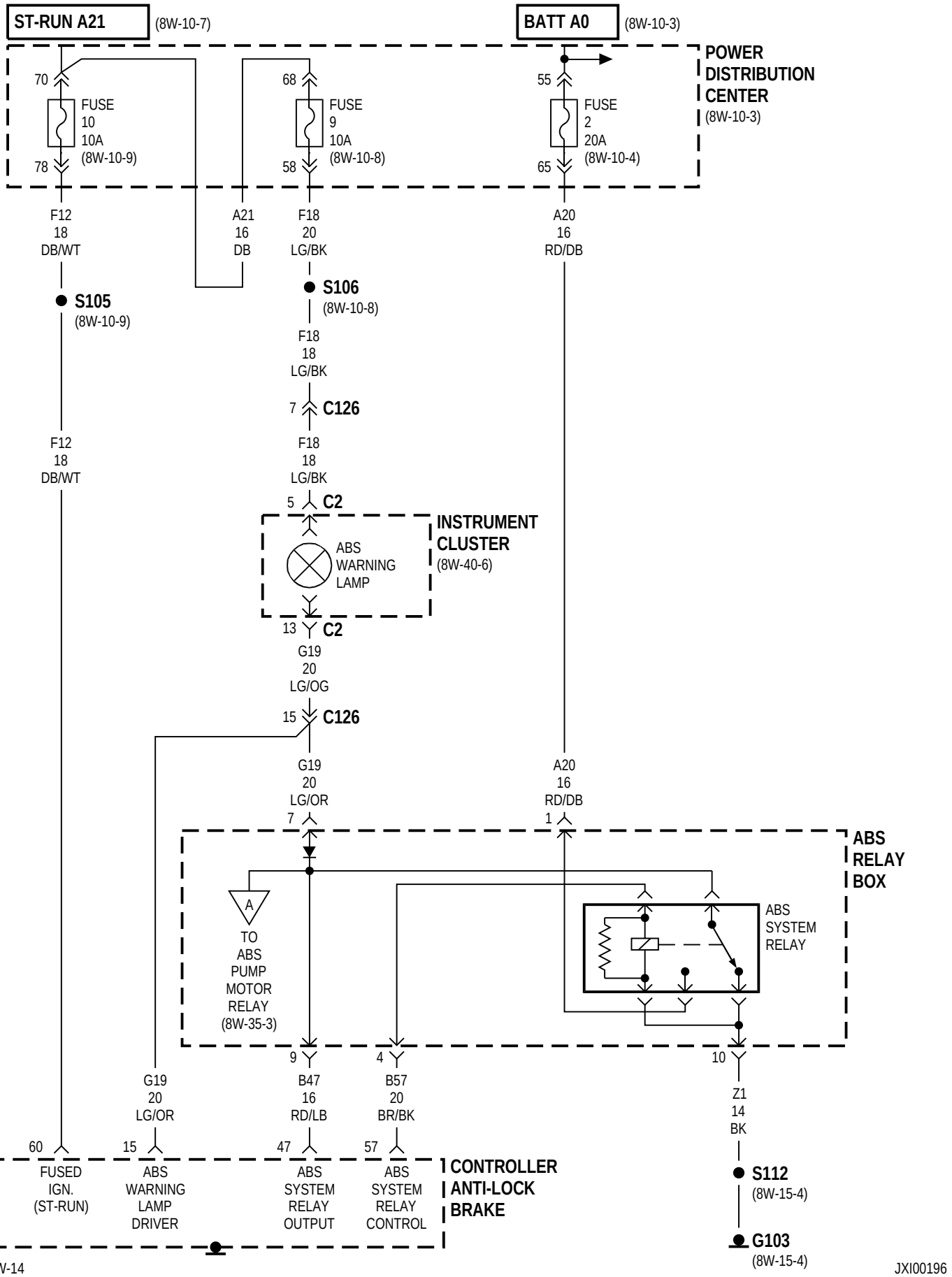
8W-35 ANTI-LOCK BRAKES

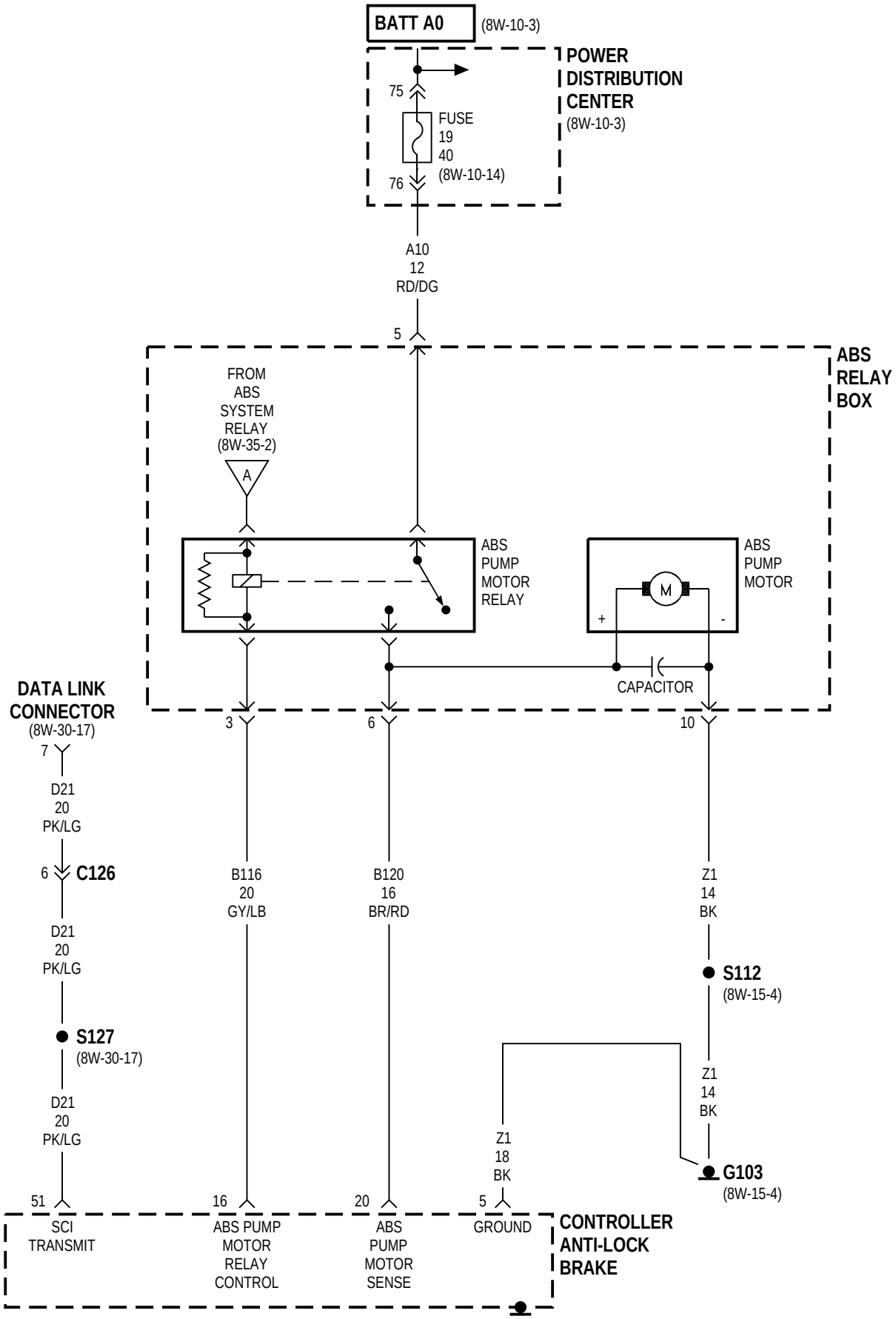
INDEX

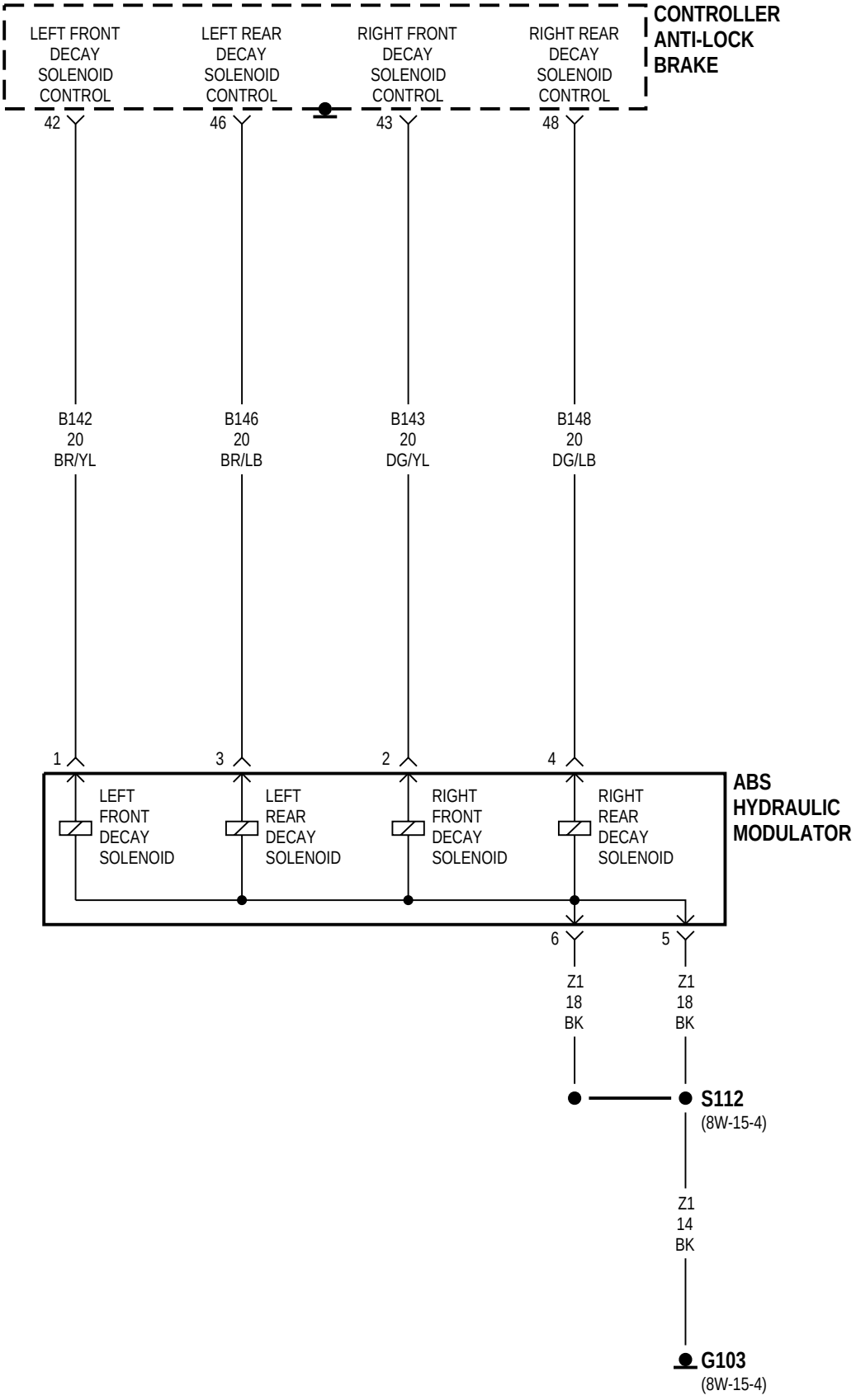
page

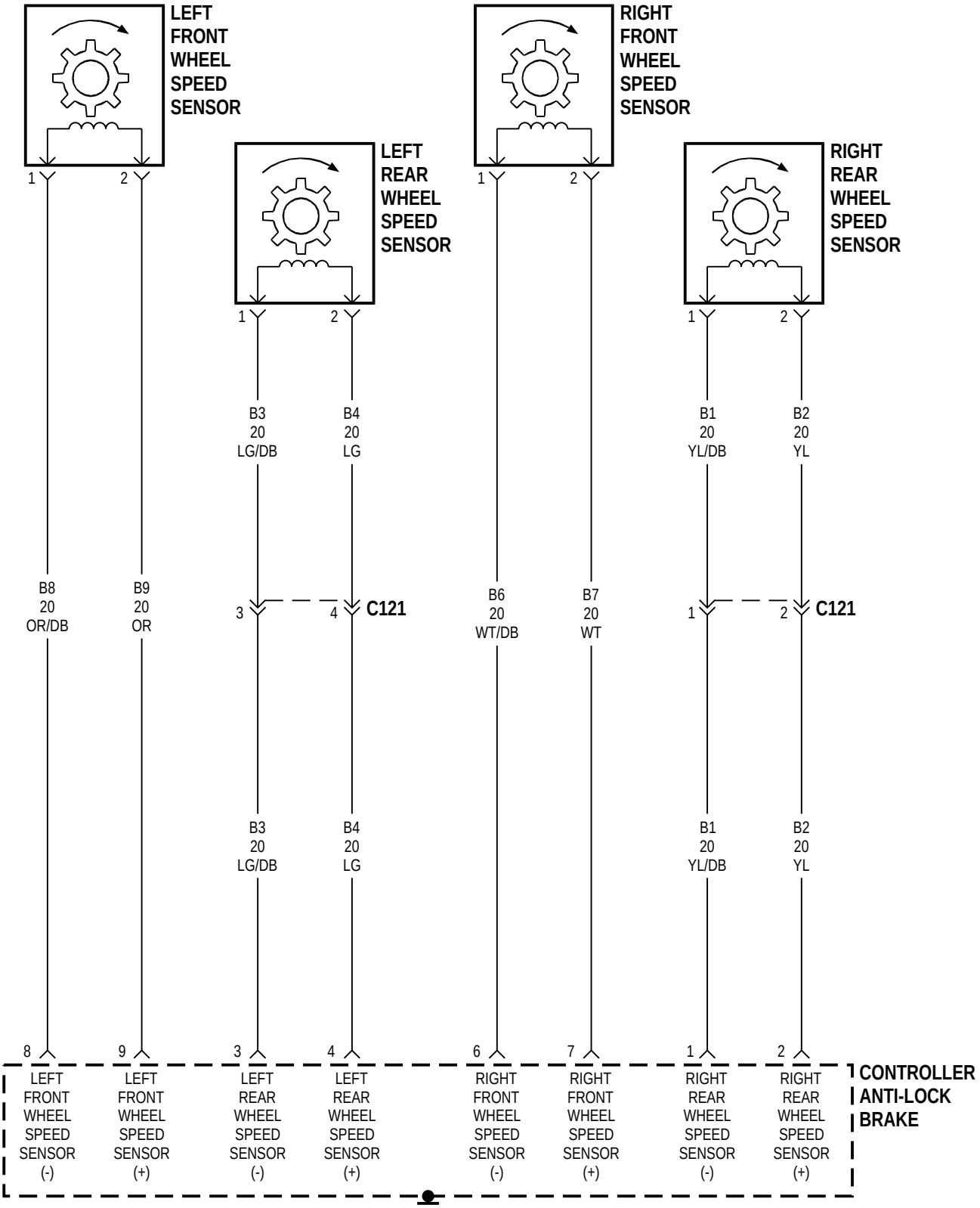
SCHEMATICS AND DIAGRAMS **1**
DESCRIPTION AND OPERATION **7**

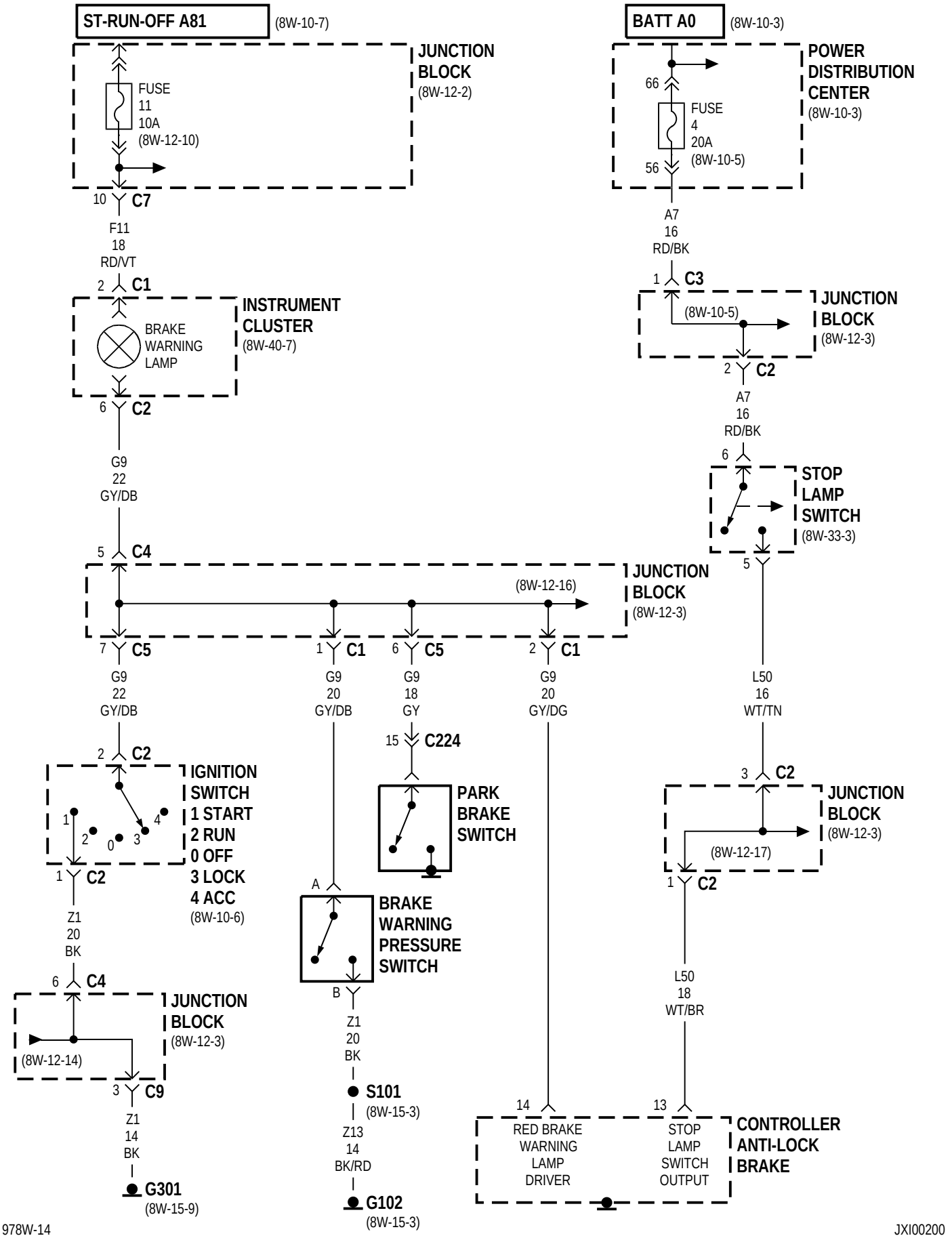
Component	Page
ABS Hydraulic Modulator	8W-35-4
ABS Pump Motor	8W-35-3
ABS Pump Motor Relay	8W-35-3
ABS Relay Box	8W-35-2, 3
ABS System Relay	8W-35-2
ABS Warning Lamp	8W-35-2
Brake Warning Lamp	8W-35-6
Brake Warning Pressure Switch	8W-35-6
Capacitor	8W-35-3
Controller Anti-Lock Brake	8W-35-2, 3, 4, 5, 6
Data Link Connector	8W-35-3
Fuse 2	8W-35-2
Fuse 4	8W-35-6
Fuse 9	8W-35-2
Fuse 10	8W-35-2
Fuse 11	8W-35-6
Fuse 19	8W-35-3
G102	8W-35-6
G103	8W-35-2, 3, 4
G301	8W-35-6
Ignition Switch	8W-35-6
Instrument Cluster	8W-35-2, 6
Junction Block	8W-35-6
Left Front Decay Solenoid	8W-35-4
Left Front Wheel Speed Sensor	8W-35-5
Left Rear Decay Solenoid	8W-35-4
Left Rear Wheel Speed Sensor	8W-35-5
Park Brake Switch	8W-35-6
Power Distribution Center	8W-35-2, 3, 6
Right Front Decay Solenoid	8W-35-4
Right Front Wheel Speed Sensor	8W-35-5
Right Rear Decay Solenoid	8W-35-4
Right Rear Wheel Speed Sensor	8W-35-5
S101	8W-35-6
S105	8W-35-2
S106	8W-35-2
S112	8W-35-2
S112	8W-35-3
S112	8W-35-4
S127	8W-35-3
Stop Lamp Switch	8W-35-6


ST-RUN A21
(8W-10-7)
BATT A0
(8W-10-3)
POWER DISTRIBUTION CENTER
(8W-10-3)
70
FUSE 10 10A
(8W-10-9)
78
68
FUSE 9 10A
(8W-10-8)
58
55
FUSE 2 20A
(8W-10-4)
65
F12 18 DB/WT
A21 16 DB
F18 20 LG/BK
A20 16 RD/DB
S105
(8W-10-9)
S106
(8W-10-8)
F18 18 LG/BK
7
C126
F12 18 DB/WT
F18 18 LG/BK
5
C2
INSTRUMENT CLUSTER
(8W-40-6)
ABS WARNING LAMP
13
C2
G19 20 LG/OG
15
C126
G19 20 LG/OR
A20 16 RD/DB
7
1
ABS RELAY BOX
A
TO ABS PUMP MOTOR RELAY
(8W-35-3)
ABS SYSTEM RELAY
9
4
10
G19 20 LG/OR
B47 16 RD/LB
B57 20 BR/BK
Z1 14 BK
60
15
47
57
FUSED IGN. (ST-RUN)
ABS WARNING LAMP DRIVER
ABS SYSTEM RELAY OUTPUT
ABS SYSTEM RELAY CONTROL
CONTROLLER ANTI-LOCK BRAKE
S112
(8W-15-4)
G103
(8W-15-4)


BATT A0
(8W-10-3)
POWER DISTRIBUTION CENTER
(8W-10-3)
75
FUSE 19 40
(8W-10-14)
76
A10 12 RD/DG
5
ABS RELAY BOX
FROM ABS SYSTEM RELAY (8W-35-2)
A
ABS PUMP MOTOR RELAY
ABS PUMP MOTOR
M
+
-
CAPACITOR
DATA LINK CONNECTOR
(8W-30-17)
7
D21 20 PK/LG
6
C126
D21 20 PK/LG
S127
(8W-30-17)
D21 20 PK/LG
51
SCI TRANSMIT
3
B116 20 GY/LB
16
ABS PUMP MOTOR RELAY CONTROL
6
B120 16 BR/RD
20
ABS PUMP MOTOR SENSE
10
Z1 14 BK
S112
(8W-15-4)
Z1 14 BK
G103
(8W-15-4)
Z1 18 BK
5
GROUND
CONTROLLER ANTI-LOCK BRAKE


CONTROLLER ANTI-LOCK BRAKE
LEFT FRONT DECAY SOLENOID CONTROL
LEFT REAR DECAY SOLENOID CONTROL
RIGHT FRONT DECAY SOLENOID CONTROL
RIGHT REAR DECAY SOLENOID CONTROL
42
46
43
48
B142 20 BR/YL
B146 20 BR/LB
B143 20 DG/YL
B148 20 DG/LB
1
3
2
4
ABS HYDRAULIC MODULATOR
LEFT FRONT DECAY SOLENOID
LEFT REAR DECAY SOLENOID
RIGHT FRONT DECAY SOLENOID
RIGHT REAR DECAY SOLENOID
6
5
Z1 18 BK
Z1 18 BK
S112
(8W-15-4)
Z1 14 BK
G103
(8W-15-4)


LEFT FRONT WHEEL SPEED SENSOR
LEFT REAR WHEEL SPEED SENSOR
RIGHT FRONT WHEEL SPEED SENSOR
RIGHT REAR WHEEL SPEED SENSOR
1
2
B8 20 OR/DB
B9 20 OR
B3 20 LG/DB
B4 20 LG
B6 20 WT/DB
B7 20 WT
B1 20 YL/DB
B2 20 YL
3
4
C121
8
9
6
7
LEFT FRONT WHEEL SPEED SENSOR (-)
LEFT FRONT WHEEL SPEED SENSOR (+)
LEFT REAR WHEEL SPEED SENSOR (-)
LEFT REAR WHEEL SPEED SENSOR (+)
RIGHT FRONT WHEEL SPEED SENSOR (-)
RIGHT FRONT WHEEL SPEED SENSOR (+)
RIGHT REAR WHEEL SPEED SENSOR (-)
RIGHT REAR WHEEL SPEED SENSOR (+)
CONTROLLER ANTI-LOCK BRAKE


ST-RUN-OFF A81
(8W-10-7)
JUNCTION BLOCK
(8W-12-2)
FUSE 11 10A
(8W-12-10)
10 C7
F11 18 RD/VT
2 C1
INSTRUMENT CLUSTER
(8W-40-7)
BRAKE WARNING LAMP
6 C2
G9 22 GY/DB
5 C4
JUNCTION BLOCK
(8W-12-3)
(8W-12-16)
7 C5
G9 22 GY/DB
2 C2
IGNITION SWITCH
1 START
2 RUN
0 OFF
3 LOCK
4 ACC
(8W-10-6)
1 C2
Z1 20 BK
6 C4
JUNCTION BLOCK
(8W-12-3)
(8W-12-14)
3 C9
Z1 14 BK
G301
(8W-15-9)
1 C1
G9 20 GY/DB
6 C5
G9 18 GY
15 C224
PARK BRAKE SWITCH
A
BRAKE WARNING PRESSURE SWITCH
B
Z1 20 BK
S101
(8W-15-3)
Z13 14 BK/RD
G102
(8W-15-3)
2 C1
G9 20 GY/DG
BATT A0
(8W-10-3)
POWER DISTRIBUTION CENTER
(8W-10-3)
66
FUSE 4 20A
(8W-10-5)
56
A7 16 RD/BK
1 C3
JUNCTION BLOCK
(8W-12-3)
(8W-10-5)
2 C2
A7 16 RD/BK
6
STOP LAMP SWITCH
(8W-33-3)
5
L50 16 WT/TN
3 C2
JUNCTION BLOCK
(8W-12-3)
(8W-12-17)
1 C2
L50 18 WT/BR
14
RED BRAKE WARNING LAMP DRIVER
13
STOP LAMP SWITCH OUTPUT
CONTROLLER ANTI-LOCK BRAKE

8W-35 ANTI-LOCK BRAKES

INDEX

page

DESCRIPTION AND OPERATION
ABS PUMP MOTOR RELAY 7
ABS SYSTEM RELAY 7
ABS WARNING LAMP 7
ANTI-LOCK BRAKES 7
BRAKE SWITCH INPUT 8
DATA LINK CONNECTOR 8
HELPFUL INFORMATION 8
HYDRAULIC MODULATOR 7
WHEEL SPEED SENSORS 8

DESCRIPTION AND OPERATION

ANTI-LOCK BRAKES

There are two Anti-Lock Brake Systems (ABS) used in this vehicle.. One is the standard system and the other is equipped with traction control.

Power for either of the Anti-Lock Brake (ABS) system is supplied by three fuses. There is a 15 amp fuse located in the junction block cavity 4. This fuse supplies power to the ABS controller, Powertrain Control Module (PCM) and the fuel pump relay on the F20 circuit. Power for the fuse is supplied on the A22 circuit from the ignition switch. This fuse is HOT when the ignition switch is in the RUN position.

The second fuse is located in the PDC cavity 19. It is a 40 amp fuse and used to supply power to the ABS Pump Motor relay on circuit A10. This relay is located in the ABS relay box. The fuse is HOT at all times and powers the contact side of the relay.

The third fuse is also located in the PDC cavity 2. It is a 20 amp fuse and used to power the contact side of the ABS System relay on circuit A20. The fuse is HOT at all times.

There are 3 grounding points used in the ABS system. One is a case ground on the Controller Anti Lock Brake (CAB). The second is on the Z1 circuit from the ABS Hydraulic Control Unit/ABS Relay Box. This ground terminates at the right frame rail.

The third ground is also on the a Z1 circuit from the CAB and terminates at the right frame rail.

Additional information on circuit functions of the ABS system follows. For diagnostic and testing procedures refer to the appropriate group of the Service Manual or the Diagnostic Test Procedures Manual.

ABS WARNING LAMP

The ABS warning lamp is controlled by the Controller Anti Lock Brake (CAB) and/or the Hydraulic control unit. It is used to alert the operator of a problem in the ABS system. The G19 circuit from the CAB and the ABS system relay is used to detect a problem. If a problem is detected, the CAB grounds the G19 circuit and illuminates the lamp in the instrument cluster.

Circuit G19 is also grounded through the ABS system relay, contact side.

ABS SYSTEM RELAY

The system relay is used for the operation of the ABS system. Power for the relay is supplied on the B57 circuit from cavity 57 of the Controller Anti Lock Brake (CAB).

Ground for the relay is on the Z1 circuit. This ground is spliced in with the pump motor, and terminates at the right strut tower.

When the system is operating normally, power for the contact side of the relay is supplied from the CAB on the B57 circuit. It passes through the relay to the Z1 ground and terminates at the right frame rail. If a problem is detected in the system, the relayis de-energized by circuit B57. This causes the ABS warning lamp in the instrument cluster to illuminate.

ABS PUMP MOTOR RELAY

The ABS pump motor relay controls when the pump motor runs. Power for the coil side of the relay is supplied from cavity 47 of the Controller Anti Lock Brake (CAB) on the B120 circuit. This circuit also supplies voltage for the contact side of the system relay. The ground side of the coil is controlled by the B116 circuit. Circuit B116 connects to cavity 16 of the CAB connector.

Circuit B10 from the relay box powers the ABS pump motor. This circuit is also used as an input to the CAB for pump motor monitoring.

HYDRAULIC MODULATOR

The hydraulic modulator is used for controlling the brake system pressure to the wheels. The modulator is composed of four solenoids.

Circuits involved are: B142 for the left front wheel, B143 for the right front wheel, B146 for the left rear wheel, and B148 for the right rear wheel.

DESCRIPTION AND OPERATION (Continued)

The solenoids use a common ground on the Z1 circuit. There are two Z1 circuits from the modulator. Both of these grounds terminate at the right frame rail, and are spliced in with the ABS pump motor and the ABS system relay.

WHEEL SPEED SENSORS

There are four wheel-speed sensors, one at each wheel. The sensors use a tone wheel to determine wheel speed. Input to the Controller Anti Lock Brakes (CAB) is done on the following circuits, each of which is a twisted pair:

B8 and B9 for the left front wheel (cavity 8 and cavity 9).

B6 and B7 for the right front wheel (cavity 6 and cavity 7).

B3 and B4 for the left rear wheel (cavity 3 and cavity 4).

B1 and B2 for the right rear wheel (cavity 1 and cavity 2).

BRAKE SWITCH INPUT

Circuit L50 is an input to the Controller Anti Lock Brake (CAB). The L50 connects to cavity 13 of the CAB connector. Circuit L50 is spliced in with the stop lamps, and is used to provide the CAB with information on when the brakes are being applied.

DATA LINK CONNECTOR

Circuit D21 is used for diagnostics of a fault within the ABS system. It is spliced in with the Powertrain Control Module (PCM) circuits, and is used as an output from the Controller Anti Lock Brake (CAB). Circuit D21 connects to cavity 51 of the CAB connector.

HELPFUL INFORMATION

- Check the 10 amp fuse located in cavity 10 of the PDC
- Check the 40 amp fuse located in cavity 13 of the PDC
- Check the 20 amp fuse located in cavity 2 of the PDC
- Check for a good ground at the right strut tower
- Check the case ground on the CAB
- Refer to the appropriate group of the Service Manual, or the Diagnostic Test Procedures Manual.

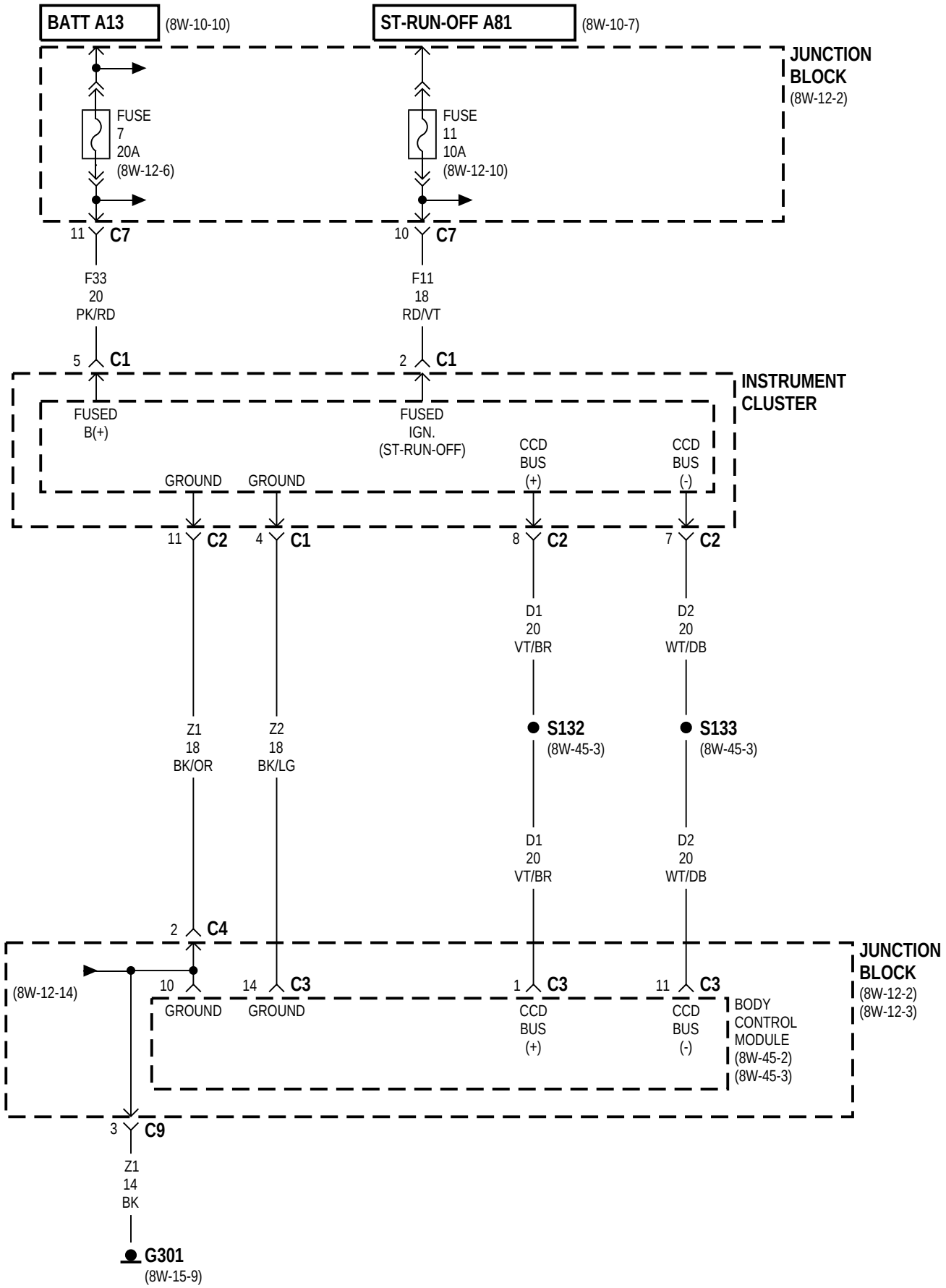
8W-40 INSTRUMENT CLUSTER

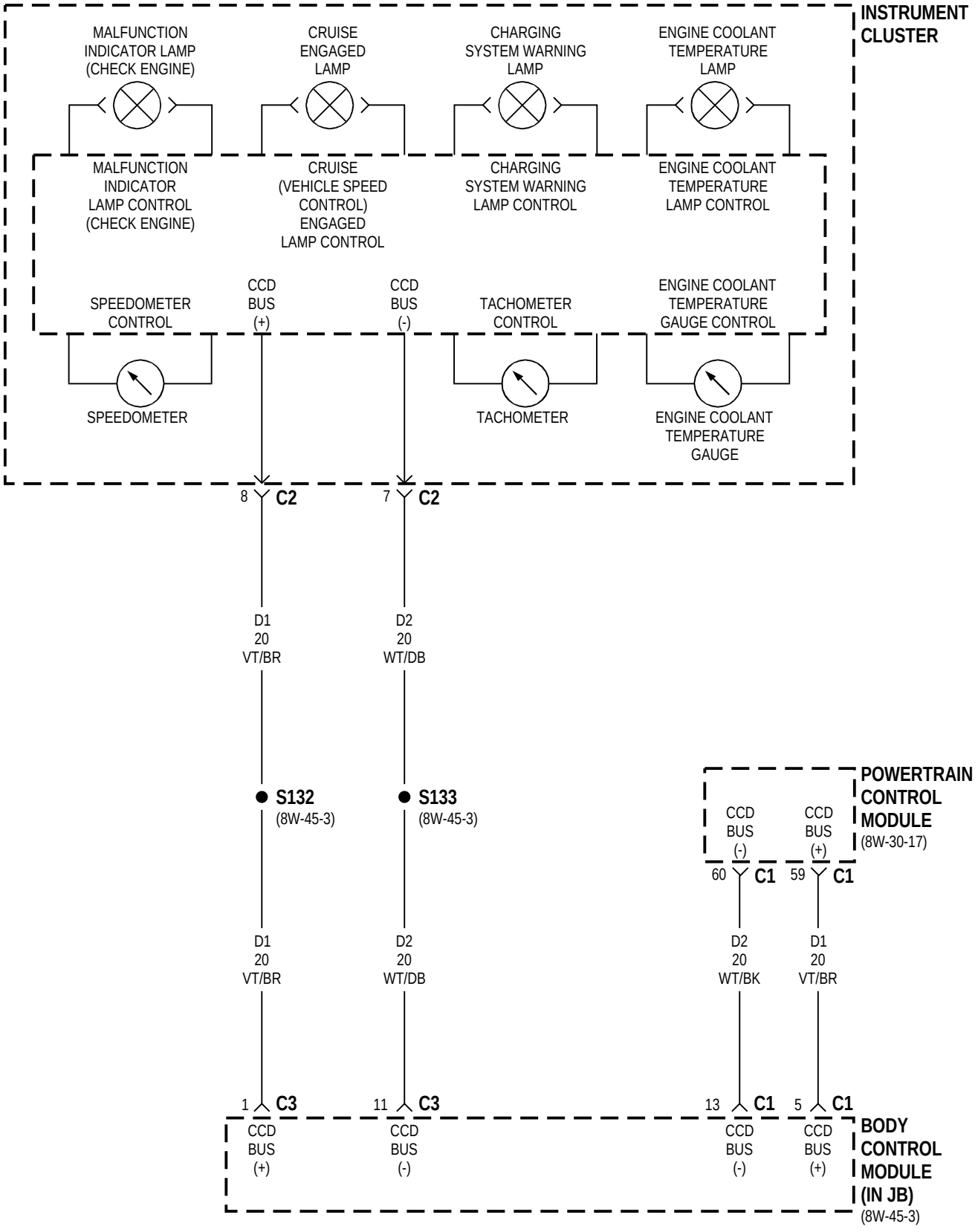
INDEX

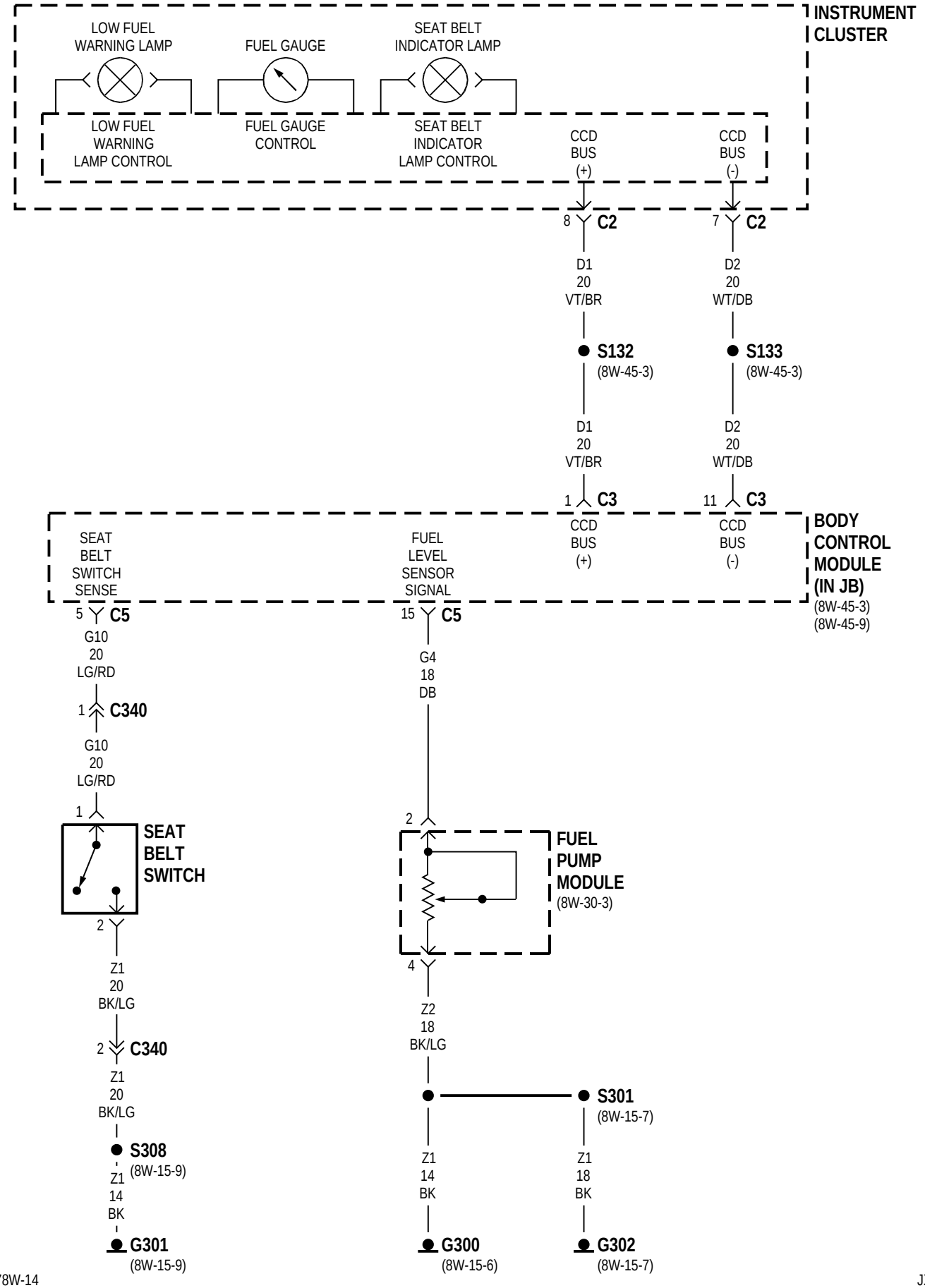
page

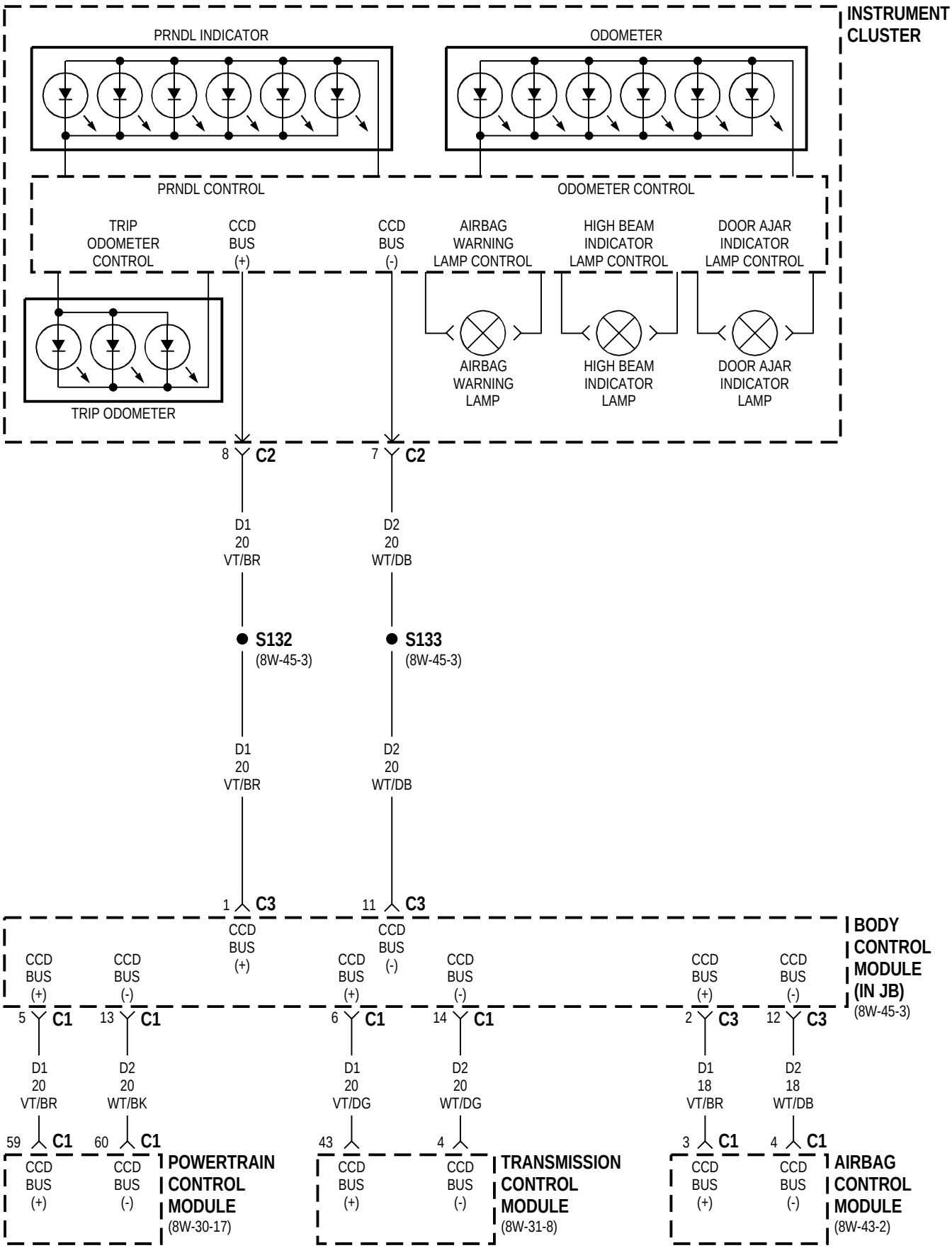
SCHEMATICS AND DIAGRAMS 1
DESCRIPTION AND OPERATION 10

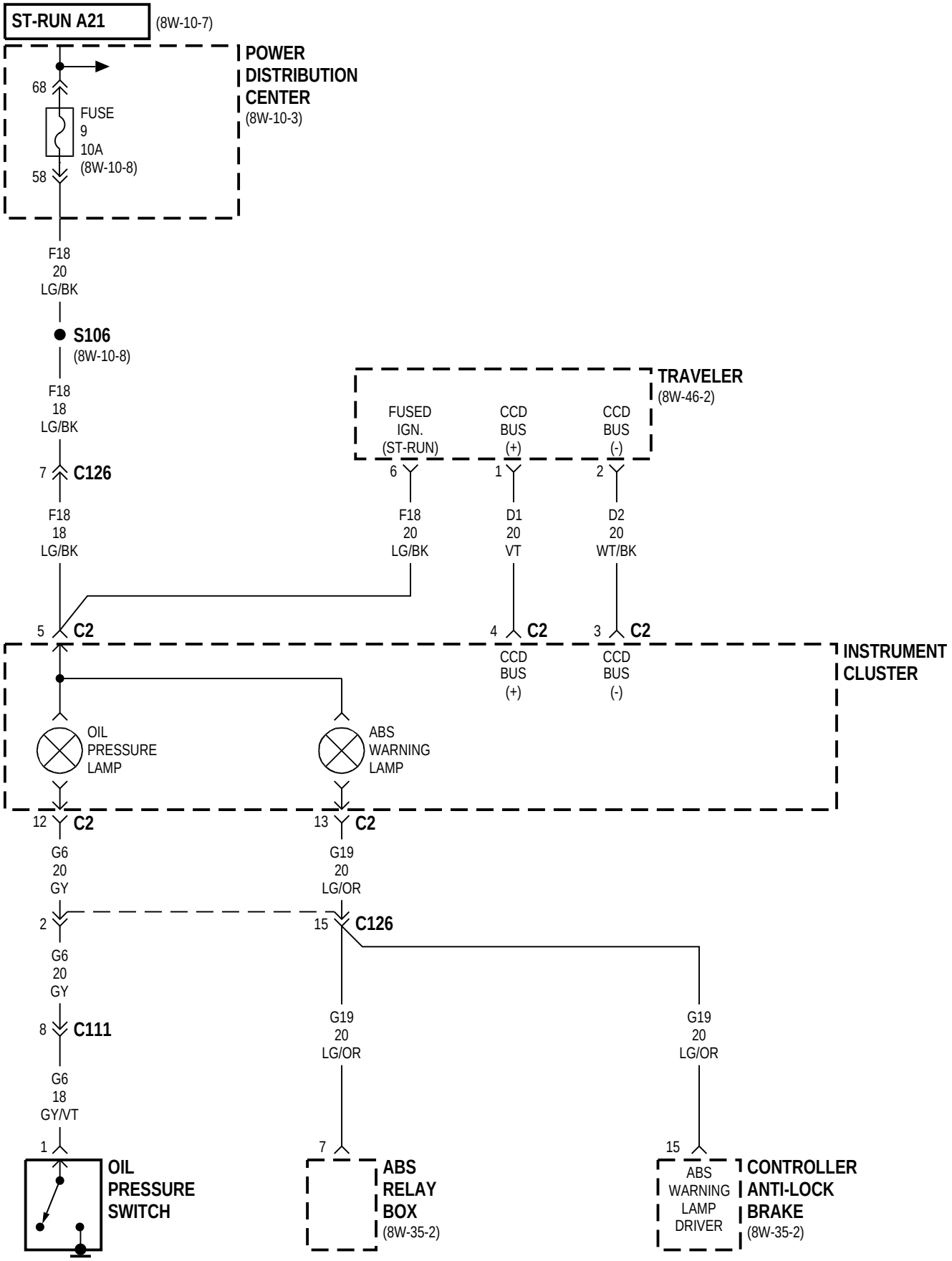
Component	Page
ABS Relay Box	8W-40-6
ABS Warning Lamp	8W-40-6
Airbag Control Module	8W-40-5
Airbag Warning Lamp	8W-40-5
Body Control Module	8W-40-2, 3, 4, 5, 8
Brake Warning Lamp	8W-40-7
Brake Warning Pressure Switch	8W-40-7
Charging System Warning Lamp	8W-40-3
Cluster Illumination Lamps	8W-40-8
Controller Anti-Lock Brake	8W-40-6, 7
Cruise Engaged Lamp	8W-40-3
Daytime Running Lamp Module	8W-40-7
Decklid Ajar Lamp	8W-40-9
Door Ajar Indicator Lamp	8W-40-5
Engine Coolant Temperature	8W-40-3
Fog Lamp Indicator	8W-40-8
Fuel Gauge	8W-40-4
Fuel Pump Module	8W-40-4
Fuse 7	8W-40-2
Fuse 9	8W-40-6
Fuse 11	8W-40-2, 7
G102	8W-40-7
G103	8W-40-9
G300	8W-40-4
G301	8W-40-2
G301	8W-40-4
G301	8W-40-7
G301	8W-40-8
G302	8W-40-4
Gauge	8W-40-3
High Beam Indicator Lamp	8W-40-5
Ignition Switch	8W-40-7
Instrument Cluster	8W-40-2, 3, 4, 5, 6, 7, 8, 9
Junction Block	8W-40-2, 7, 8
Lamp	8W-40-3
Left Turn Signal Indicator	8W-40-8
Low Fuel Warning Lamp	8W-40-4
Low Washer Fluid Level Lamp	8W-40-9
Malfunction Indicator Lamp (Check Engine)	8W-40-3
Odometer	8W-40-5
Oil Pressure Lamp	8W-40-6
Oil Pressure Switch	8W-40-6
Park Brake Switch	8W-40-7
Power Distribution Center	8W-40-6
Powertrain Control Module	8W-40-3, 5
PRNDL Indicator	8W-40-5
Rear Fog Lamp Switch	8W-40-8
Right Turn Signal Indicator	8W-40-8
S101	8W-40-7
S106	8W-40-6
S111	8W-40-9
S132	8W-40-2, 3, 4
S133	8W-40-2, 3, 4, 5
S301	8W-40-4
S304	8W-40-9
S308	8W-40-4
Seat Belt Indicator Lamp	8W-40-4
Seat Belt Switch	8W-40-4
Speedometer	8W-40-3
Tachometer	8W-40-3
Transmission Control Module	8W-40-5
Traveler	8W-40-6
Trip Odometer	8W-40-5
Trunk Ajar Switch	8W-40-9
Trunk Lamp	8W-40-9
Turn Signal/Hazard Warning Switch	8W-40-8
Washer Fluid Level Switch	8W-40-9

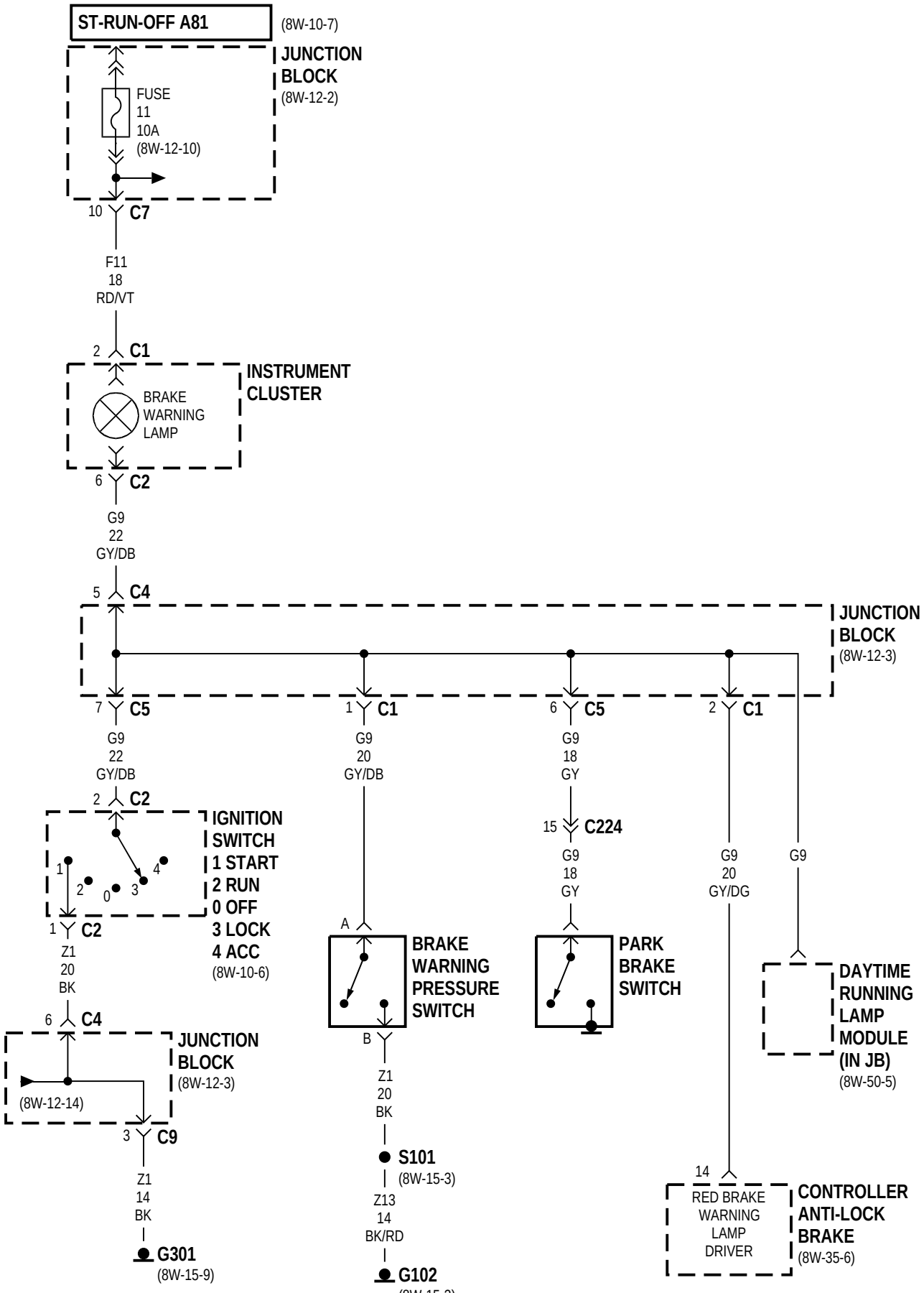

BATT A13
(8W-10-10)
ST-RUN-OFF A81
(8W-10-7)
JUNCTION BLOCK
(8W-12-2)
FUSE 7 20A (8W-12-6)
FUSE 11 10A (8W-12-10)
11 C7
10 C7
F33 20 PK/RD
F11 18 RD/VT
5 C1
2 C1
INSTRUMENT CLUSTER
FUSED B(+)
FUSED IGN. (ST-RUN-OFF)
CCD BUS (+)
CCD BUS (-)
GROUND
GROUND
11 C2
4 C1
8 C2
7 C2
D1 20 VT/BR
D2 20 WT/DB
Z1 18 BK/OR
Z2 18 BK/LG
S132
(8W-45-3)
S133
(8W-45-3)
D1 20 VT/BR
D2 20 WT/DB
2 C4
JUNCTION BLOCK
(8W-12-2)
(8W-12-3)
(8W-12-14)
10 C3
14 C3
1 C3
11 C3
GROUND
GROUND
CCD BUS (+)
CCD BUS (-)
BODY CONTROL MODULE
(8W-45-2)
(8W-45-3)
3 C9
Z1 14 BK
G301
(8W-15-9)


INSTRUMENT CLUSTER
MALFUNCTION INDICATOR LAMP (CHECK ENGINE)
CRUISE ENGAGED LAMP
CHARGING SYSTEM WARNING LAMP
ENGINE COOLANT TEMPERATURE LAMP
MALFUNCTION INDICATOR LAMP CONTROL (CHECK ENGINE)
CRUISE (VEHICLE SPEED CONTROL) ENGAGED LAMP CONTROL
CHARGING SYSTEM WARNING LAMP CONTROL
ENGINE COOLANT TEMPERATURE LAMP CONTROL
SPEEDOMETER CONTROL
CCD BUS (+)
CCD BUS (-)
TACHOMETER CONTROL
ENGINE COOLANT TEMPERATURE GAUGE CONTROL
SPEEDOMETER
TACHOMETER
ENGINE COOLANT TEMPERATURE GAUGE
8 C2
7 C2
D1 20 VT/BR
D2 20 WT/DB
S132 (8W-45-3)
S133 (8W-45-3)
POWERTRAIN CONTROL MODULE (8W-30-17)
CCD BUS (-)
CCD BUS (+)
60 C1
59 C1
D2 20 WT/BK
D1 20 VT/BR
1 C3
11 C3
13 C1
5 C1
BODY CONTROL MODULE (IN JB) (8W-45-3)


INSTRUMENT CLUSTER
LOW FUEL WARNING LAMP
FUEL GAUGE
SEAT BELT INDICATOR LAMP
LOW FUEL WARNING LAMP CONTROL
FUEL GAUGE CONTROL
SEAT BELT INDICATOR LAMP CONTROL
CCD BUS (+)
CCD BUS (-)
8 C2
7 C2
D1 20 VT/BR
D2 20 WT/DB
S132 (8W-45-3)
S133 (8W-45-3)
D1 20 VT/BR
D2 20 WT/DB
1 C3
11 C3
CCD BUS (+)
CCD BUS (-)
BODY CONTROL MODULE (IN JB) (8W-45-3) (8W-45-9)
SEAT BELT SWITCH SENSE
FUEL LEVEL SENSOR SIGNAL
5 C5
15 C5
G10 20 LG/RD
G4 18 DB
1 C340
G10 20 LG/RD
1
2
SEAT BELT SWITCH
FUEL PUMP MODULE (8W-30-3)
2
4
Z1 20 BK/LG
Z2 18 BK/LG
2 C340
Z1 20 BK/LG
S301 (8W-15-7)
S308 (8W-15-9)
Z1 14 BK
Z1 14 BK
Z1 18 BK
G301 (8W-15-9)
G300 (8W-15-6)
G302 (8W-15-7)

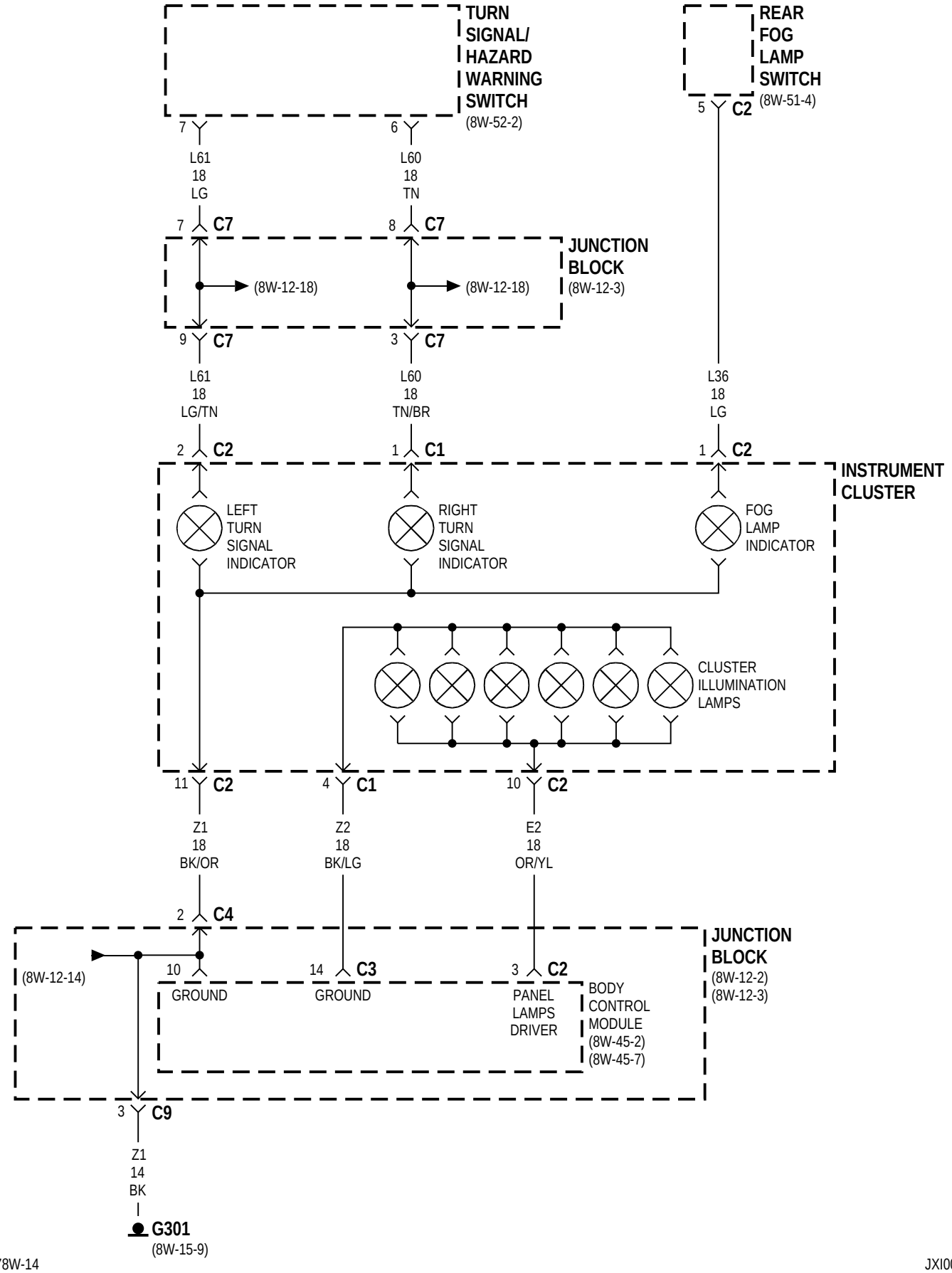

INSTRUMENT CLUSTER
PRNDL INDICATOR
ODOMETER
PRNDL CONTROL
ODOMETER CONTROL
TRIP ODOMETER CONTROL
CCD BUS (+)
CCD BUS (-)
AIRBAG WARNING LAMP CONTROL
HIGH BEAM INDICATOR LAMP CONTROL
DOOR AJAR INDICATOR LAMP CONTROL
TRIP ODOMETER
AIRBAG WARNING LAMP
HIGH BEAM INDICATOR LAMP
DOOR AJAR INDICATOR LAMP
8 C2
7 C2
D1 20 VT/BR
D2 20 WT/DB
S132 (8W-45-3)
S133 (8W-45-3)
1 C3
11 C3
BODY CONTROL MODULE (IN JB) (8W-45-3)
5 C1
13 C1
6 C1
14 C1
2 C3
12 C3
D1 20 VT/BR
D2 20 WT/BK
D1 20 VT/DG
D2 20 WT/DG
D1 18 VT/BR
D2 18 WT/DB
59 C1
60 C1
43
4
3 C1
4 C1
POWERTRAIN CONTROL MODULE (8W-30-17)
TRANSMISSION CONTROL MODULE (8W-31-8)
AIRBAG CONTROL MODULE (8W-43-2)

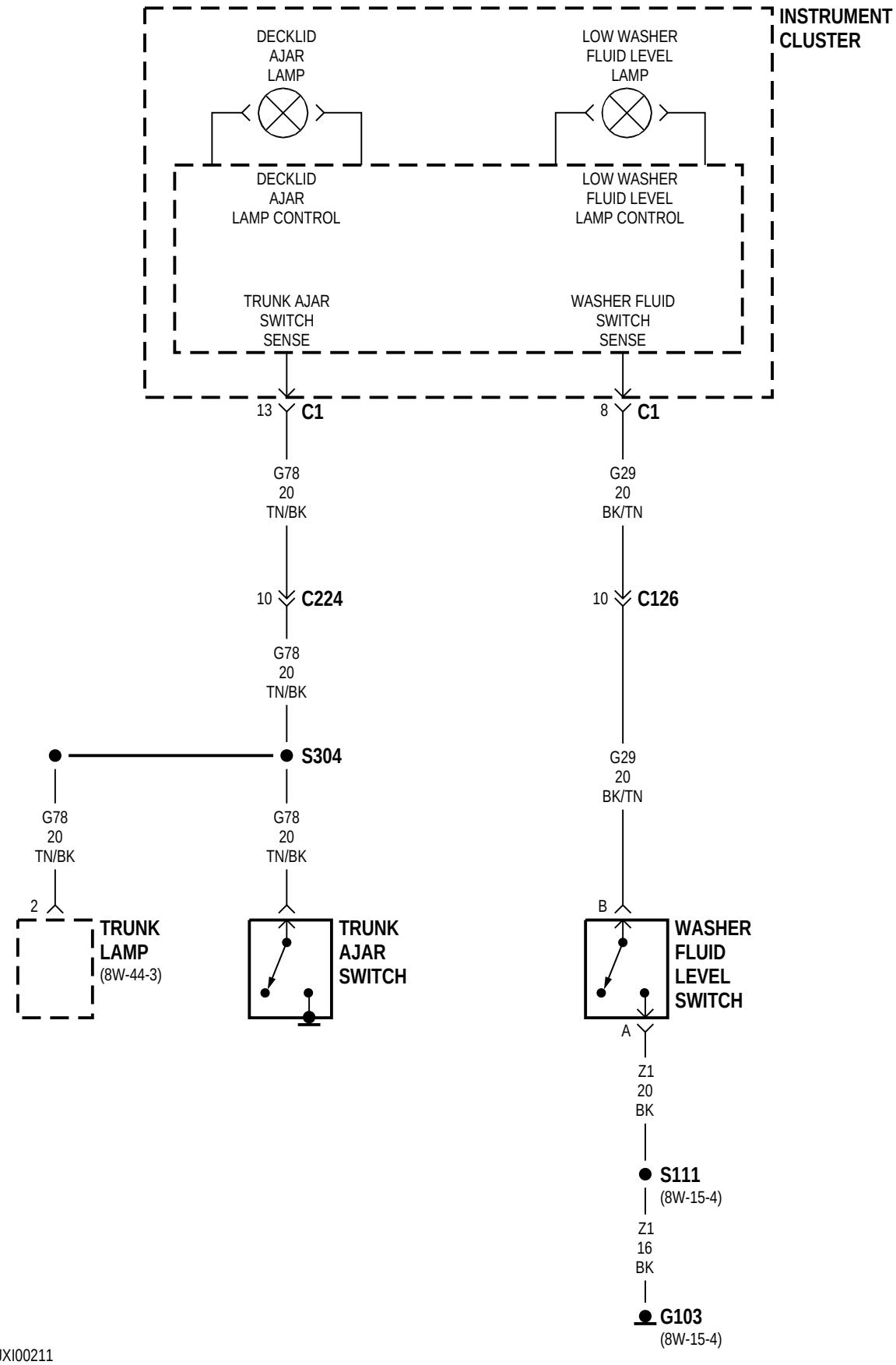

ST-RUN A21
(8W-10-7)
POWER DISTRIBUTION CENTER
(8W-10-3)
68
FUSE 9 10A
(8W-10-8)
58
F18 20 LG/BK
S106
(8W-10-8)
F18 18 LG/BK
7 C126
F18 18 LG/BK
5 C2
TRAVELER
(8W-46-2)
FUSED IGN. (ST-RUN)
CCD BUS (+)
CCD BUS (-)
6
1
2
F18 20 LG/BK
D1 20 VT
D2 20 WT/BK
4 C2
3 C2
CCD BUS (+)
CCD BUS (-)
INSTRUMENT CLUSTER
OIL PRESSURE LAMP
ABS WARNING LAMP
12 C2
13 C2
G6 20 GY
G19 20 LG/OR
2
15 C126
G6 20 GY
8 C111
G6 18 GY/VT
G19 20 LG/OR
G19 20 LG/OR
1
7
15
OIL PRESSURE SWITCH
ABS RELAY BOX
(8W-35-2)
ABS WARNING LAMP DRIVER
CONTROLLER ANTI-LOCK BRAKE
(8W-35-2)



JXI00209

978W-14


TURN SIGNAL/ HAZARD WARNING SWITCH
(8W-52-2)
REAR FOG LAMP SWITCH
(8W-51-4)
7
6
5 C2
L61
18
LG
L60
18
TN
7 C7
8 C7
JUNCTION BLOCK
(8W-12-3)
(8W-12-18)
(8W-12-18)
9 C7
3 C7
L61
18
LG/TN
L60
18
TN/BR
L36
18
LG
2 C2
1 C1
1 C2
INSTRUMENT CLUSTER
LEFT TURN SIGNAL INDICATOR
RIGHT TURN SIGNAL INDICATOR
FOG LAMP INDICATOR
CLUSTER ILLUMINATION LAMPS
11 C2
4 C1
10 C2
Z1
18
BK/OR
Z2
18
BK/LG
E2
18
OR/YL
2 C4
JUNCTION BLOCK
(8W-12-2)
(8W-12-3)
(8W-12-14)
10
GROUND
14 C3
GROUND
3 C2
PANEL LAMPS DRIVER
BODY CONTROL MODULE
(8W-45-2)
(8W-45-7)
3 C9
Z1
14
BK
G301
(8W-15-9)


INSTRUMENT CLUSTER
DECKLID AJAR LAMP
LOW WASHER FLUID LEVEL LAMP
DECKLID AJAR LAMP CONTROL
LOW WASHER FLUID LEVEL LAMP CONTROL
TRUNK AJAR SWITCH SENSE
WASHER FLUID SWITCH SENSE
13 C1
8 C1
G78 20 TN/BK
G29 20 BK/TN
10 C224
10 C126
G78 20 TN/BK
S304
G29 20 BK/TN
G78 20 TN/BK
G78 20 TN/BK
2
B
TRUNK LAMP (8W-44-3)
TRUNK AJAR SWITCH
WASHER FLUID LEVEL SWITCH
A
Z1 20 BK
S111 (8W-15-4)
Z1 16 BK
G103 (8W-15-4)

8W-40 INSTRUMENT CLUSTER

INDEX

page

DESCRIPTION AND OPERATION
ABS WARNING LAMP 12
AIRBAG WARNING LAMP 12
BRAKE WARNING LAMP 12
CCD BUS 10
CHARGING SYSTEM WARNING LAMP 11
CHECK ENGINE (MALFUNCTION INDICATOR) LAMP 11
CRUISE (VEHICLE SPEED CONTROL) ENGAGED LAMP 12
DECK LID AJAR LAMP 11
ENGINE COOLANT TEMPERATURE GAUGE . . . 11
ENGINE COOLANT TEMPERATURE LAMP 12
FUEL GAUGE 11
HELPFUL INFORMATION 13
HIGH BEAM INDICATOR LAMP 13
INSTRUMENT CLUSTER 10
LOW FUEL WARNING LAMP 13
LOW WASHER FLUID LAMP 13
ODOMETER 11
OIL PRESSURE LAMP 12
PRNDL (Electronic) 11
REAR FOG LAMP ON INDICATOR 13
RIGHT AND LEFT TURN SIGNAL INDICATORS . 12
SEAT BELT INDICATOR 11
SPEEDOMETER 10
TACHOMETER 10
TRIP ODOMETER 11

DESCRIPTION AND OPERATION

INSTRUMENT CLUSTER

The Instrument Cluster, located on the left side of the instrument panel, provides the operator with gauges and warning lamps indicating vehicle operation. All gauges, regardless of engine type, are driven by the CCD Bus from the Body Control Module (BCM).

The indicator lamps for the Seat Belt, Charging System, Vehicle Speed Control (Cruise), Airbag, Check Engine (Malfunction Indicator Lamp), Low Fuel, High Beam, Traction Control Active, Traction Control Off, and Engine Coolant Temperature are also driven by the BCM.

Battery voltage for the instrument cluster is provided from two different sources. One is the F33 circuit which supplies battery voltage for the cluster. This circuit is protected by 20 amp fuse and located in cavity 7 of the junction block. Power for the fuse is supplied by circuit A13. This fuse is HOT at all times and protected by a 40 amp fuse located in cavity 12 of the Power Distribution Center (PDC). Circuit A13 also supplies power to the fuses for the horns, and the cigar lighter.

The second power source for the cluster is the F11 circuit. This circuit is HOT in the OFF, START, and RUN positions. The F11 circuit is protected by a 10 amp fuse located in cavity 11 of the junction block.

Illumination lamps, internal to the cluster, receive battery voltage on the E2 circuit. This circuit originates in the BCM and lamp intensity is controlled by the BCM. Ground for the lamps is provided on the Z1 circuit and terminates at the instrument panel left side cowl.

CCD BUS

The CCD Bus is used to supply all of the communications between the Body Control Module (BCM) and the instrument cluster. The bus wires are a twisted pair. There are two different circuits used for the bus.

The positive side of the bus wire is accomplished on the D1 circuit, and the negative is on the D2 circuit.

SPEEDOMETER

The speedometer receives its information across the CCD Bus from the Body Control Module (BCM). Information on vehicle speed is transmitted from the Powertrain Control Module (PCM) across the CCD Bus to the BCM.

The PCM receives its information on vehicle speed on the G7 circuit from the Transmission Control Module (TCM) on automatic transmission vehicles.

The BCM calculates the position of the speedometer pointer based on the input from the PCM and adjusts the position of the gauge pointer as necessary. This signal is sent over the CCD Bus to the instrument cluster.

TACHOMETER

The tachometer receives its information across the CCD Bus from the Body Control Module (BCM). Information on engine RPM is transmitted from the Powertrain Control Module (PCM) across the CCD Bus to the BCM. The BCM calculates the position of

DESCRIPTION AND OPERATION (Continued)

the tachometer pointer based on the input from the PCM and adjusts the position of the gauge pointer to the necessary position. This signal is sent over the CCD Bus to the instrument cluster.

ENGINE COOLANT TEMPERATURE GAUGE

The engine coolant temperature gauge receives its information across the CCD Bus from the Body Control Module (BCM). The engine coolant temperature sensor uses a variable resistor to send a signal to the Powertrain Control Module (PCM) indicating coolant temperature. The PCM then sends this information to the BCM across the CCD Bus.

The BCM calculates the position of the engine coolant temperature gauge and based on the information received from the PCM it adjusts the position of the gauge pointer. This signal is sent over the CCD Bus to the instrument cluster.

FUEL GAUGE

The Body Control Module (BCM) calculates the pointer position of the fuel gauge based on the input of the fuel tank gauge level sending unit relative to fuel tank ground. The G4 circuit sends the signal to the BCM.

The fuel pump module, located in the fuel tank, contains the fuel pump and the variable resistor for the fuel gauge. Ground for the resistor is located on the left rear quarter panel. As the position of the float arm changes, the resistor changes the current flow through the G4 circuit. The change in current flow is then measured by the BCM and pointer position is adjusted to reflect the fuel tank level. The signal is sent over the CCD Bus to the instrument cluster.

PRNDL (Electronic)

On vehicles equipped with an automatic transmission an electronic PRNDL is used to indicate to the operator gearshift position.

When the ignition switch is in the OFF (unlock), RUN, or START position the Body Control Module (BCM) transmits a message over the CCD Bus instructing the instrument cluster to illuminate the proper display.

The BCM receives its information over the CCD Bus from the Transmission Control Module (TCM). When the ignition switch is moved to the RUN position, the BCM instructs the instrument cluster to illuminate all segments of the PRNDL as a check.

ODOMETER

The Odometer function of the instrument cluster is controlled by the Body Control Module (BCM). To calculate the proper milage for the vehicle the BCM receives information from the Powertrain Control Module (PCM) and the Transmission Control Module (TCM) over the CCD Bus. It then calculates this information and sends the proper signal over the CCD Bus to the instrument cluster.

TRIP ODOMETER

The trip odometer function of the instrument cluster is controlled by the Body Control Module (BCM). All information is sent across the CCD Bus.

CHECK ENGINE (MALFUNCTION INDICATOR) LAMP

The check engine lamp is used to indicate to the operator a problem in the engine control system. If a problem is detected, the Powertrain Control Module (PCM) sends a message, over the CCD Bus, to the Body Control Module (BCM).

The BCM interprets this message and sends a signal to the instrument cluster to illuminate the lamp. This lamp also is illuminated, for a few seconds, when the ignition switch is moved from the OFF to the RUN position as a bulb check. The bulb check operation is controlled by the PCM.

SEAT BELT INDICATOR

The fasten seat belt indicator is used with the warning chime to tell the operator to fasten the seat belt. The seat belt switch is normally OPEN when the seat belt is buckled.

If the seat belt is not buckled, the switch CLOSES, and a ground path is completed on the G10 circuit to the Z1 circuit. The G10 circuit is connected to the Body Control Module (BCM). When the ground path is complete a signal is sent over the CCD Bus to the instrument cluster. This illuminates the lamp in the instrument cluster.

When the ignition switch is moved to the START position, the lamp is illuminated as a bulb check. Logic internal to the BCM determines the length of time the lamp remains illuminated.

DECK LID AJAR LAMP

The deck lid ajar lamp is used to indicate to the operator when the deck lid is ajar.

Power for the lamp is supplied by the ground side of the trunk lamp on circuit G78.

When the deck lid is ajar, battery voltage flows through the trunk lamp on circuit M1, to circuit G78, through the CLOSED deck lid ajar switch to ground.

Power for the trunk lamp is supplied on circuit M1. This is the Ignition-Off Draw (IOD) circuit, and is protected by a 10 amp fuse located in cavity 5 of the junction block.

CHARGING SYSTEM WARNING LAMP

The charging system lamp is used to alert the operator that the charging system voltage has risen

DESCRIPTION AND OPERATION (Continued)

above or fallen below the normal operating range. When the Powertrain Control Module (PCM) determines a problem, a message is sent across the CCD Bus to the Body Control Module (BCM).

The BCM processes this message and sends a signal on the CCD Bus to the instrument cluster for lamp illumination. This lamp also is illuminated, for a few seconds, when the ignition switch is moved from the OFF to the RUN position as a bulb check.

ENGINE COOLANT TEMPERATURE LAMP

The engine coolant temperature lamp is used to alert the operator that the coolant temperature has risen above the normal operating range. When the Powertrain Control Module (PCM) determines a problem, a message is sent across the CCD Bus to the Body Control Module (BCM).

The PCM receives coolant temperature information from the engine coolant temperature sensor. This sensor uses a variable resistor to send a signal to the PCM indicating engine coolant temperature.

The BCM processes this message and sends a signal on the CCD Bus to the instrument cluster for lamp illumination. This lamp also is illuminated, for a few seconds, when the ignition switch is moved from the OFF to the RUN position as a bulb check.

CRUISE (VEHICLE SPEED CONTROL) ENGAGED LAMP

The CRUISE lamp is used to indicate to the operator when the vehicle speed control is engaged. The signal to illuminate the lamp is carried over the CCD Bus from the Body Control Module (BCM).

The BCM receives information on vehicle speed control engagement from the PCM over the CCD Bus. This lamp also is illuminated, for a few seconds, when the ignition switch is moved from the OFF to the RUN position as a bulb check. The bulb check operation is controlled by the PCM.

AIRBAG WARNING LAMP

Illumination of the Airbag warning lamp is controlled by the Body Control Module (BCM) and the CCD Bus. When the Airbag Control Module (ACM) detects a problem in the system it sends a signal on the CCD Bus to the BCM. The BCM process the signal and illuminates the AIRBAG lamp in the instrument cluster.

OIL PRESSURE LAMP

The low oil pressure lamp is used to alert the operator that engine oil pressure has dropped below a predetermined pressure. The oil pressure switch uses a switch that CLOSES when the pressure is below the predetermined level. The switch is case grounded to the engine block.

Power for the lamp is supplied on the F18 circuit. This circuit also powers the Anti-Lock lamp, located internal to the cluster, high speed fan relay, A/C Clutch relay, and the Powertrain Control Module (PCM). This circuit is protected by a 10 amp fuse located in cavity 9 of the Power Distribution Center (PDC).

The ground side of the lamp is controlled by the G6 circuit. This circuit is connected from the instrument cluster to the engine oil pressure switch.

RIGHT AND LEFT TURN SIGNAL INDICATORS

These lamps are used to indicate to the operator which turn signal is ON. Power for the lamps is supplied from the turn signal switch. The L60 circuit is used for the right turn indicator, and the L61 is used for the left turn indicator.

Ground for the lamps is provided on the Z1 circuit and terminates at the instrument panel left side cowl panel.

BRAKE WARNING LAMP

The brake warning lamp is used to alert the operator of a problem in the vehicles braking system. This lamp also illuminates when the ignition switch is turned to the START position to perform a self check.

Power for the lamp is supplied on circuit F11. This circuit is HOT when the ignition switch is in the OFF, START, and RUN positions. The F11 circuit is protected by a 10 amp fuse located in cavity 11 of the junction block.

There are two switches used in this system and they are wired in parallel form. A parking brake switch, located on the parking brake mechanism, will illuminate the lamp if the normally OPEN switch is CLOSED. This switch is case grounded.

The second switch used is the brake warning lamp switch. This switch in normally OPEN. When the brake system pressure is below the predetermined level the switch CLOSES and completes a path to ground.

The G9 circuit is used to connect the switches to the cluster. Grounding for the brake warning lamp switch is completed on the Z1 circuit which terminates at the left strut tower.

If the vehicle is built for sale in Canada the parking brake switch is used for the Daytime Running Lamp (DRL) system. For further information on the DRL refer to Section 8W-50.

ABS WARNING LAMP

The ABS warning lamp is controlled by the Controller Anti Lock Brake (CAB) and/or the Hydraulic control unit. It is used to alert the operator of a problem in the ABS system. The G19 circuit from the

DESCRIPTION AND OPERATION (Continued)

CAB and the ABS system relay is used to detect a problem. If a problem is detected, the CAB grounds the G19 circuit and illuminates the lamp in the instrument cluster.

Circuit G19 is also grounded through the ABS system relay, contact side.

REAR FOG LAMP ON INDICATOR

On vehicles equipped with optional Fog Lamps, a lamp internal to the cluster is illuminated when the system is turned ON. The lamp is powered by the fog lamp switch on circuit L36. Ground for the lamp is provided on the Z1 circuit and terminates at the instrument panel left side cowl.

For additional information on fog lamp operation refer to section 8W-51.

LOW FUEL WARNING LAMP

When the Body Control Module (BCM) detects a low fuel condition based on the fuel level sensor input, it transmits a message across the CCD Bus to the instrument cluster to illuminate the low fuel lamp.

LOW WASHER FLUID LAMP

The low washer fluid lamp is used to alert the operator that the washer fluid level is below a predetermined level. Power for the switch is supplied on circuit G29 from the instrument cluster.

When the washer fluid level is low, the switch CLOSES completing a path to ground through the switch, illuminating the lamp.

HIGH BEAM INDICATOR LAMP

Operation of the high beam indicator lamp is controlled by the Body Control Module (BCM). The BCM receives a high beam ON signal from the headlamp switch and sends a message over the CCD bus to the instrument cluster for lamp illumination.

HELPFUL INFORMATION

- Check the 10 amp fuse located in cavity 9 of the PDC.
- Check the 20 amp fuse located in cavity 7 of the junction block.
- Check the 10 amp fuse located in cavity 11 of the junction block.
- Check for a good ground at the instrument panel left side cowl.
- For additional diagnostic test, refer to the appropriate group of the Service Manual or the Diagnostic Test Procedures Manual.

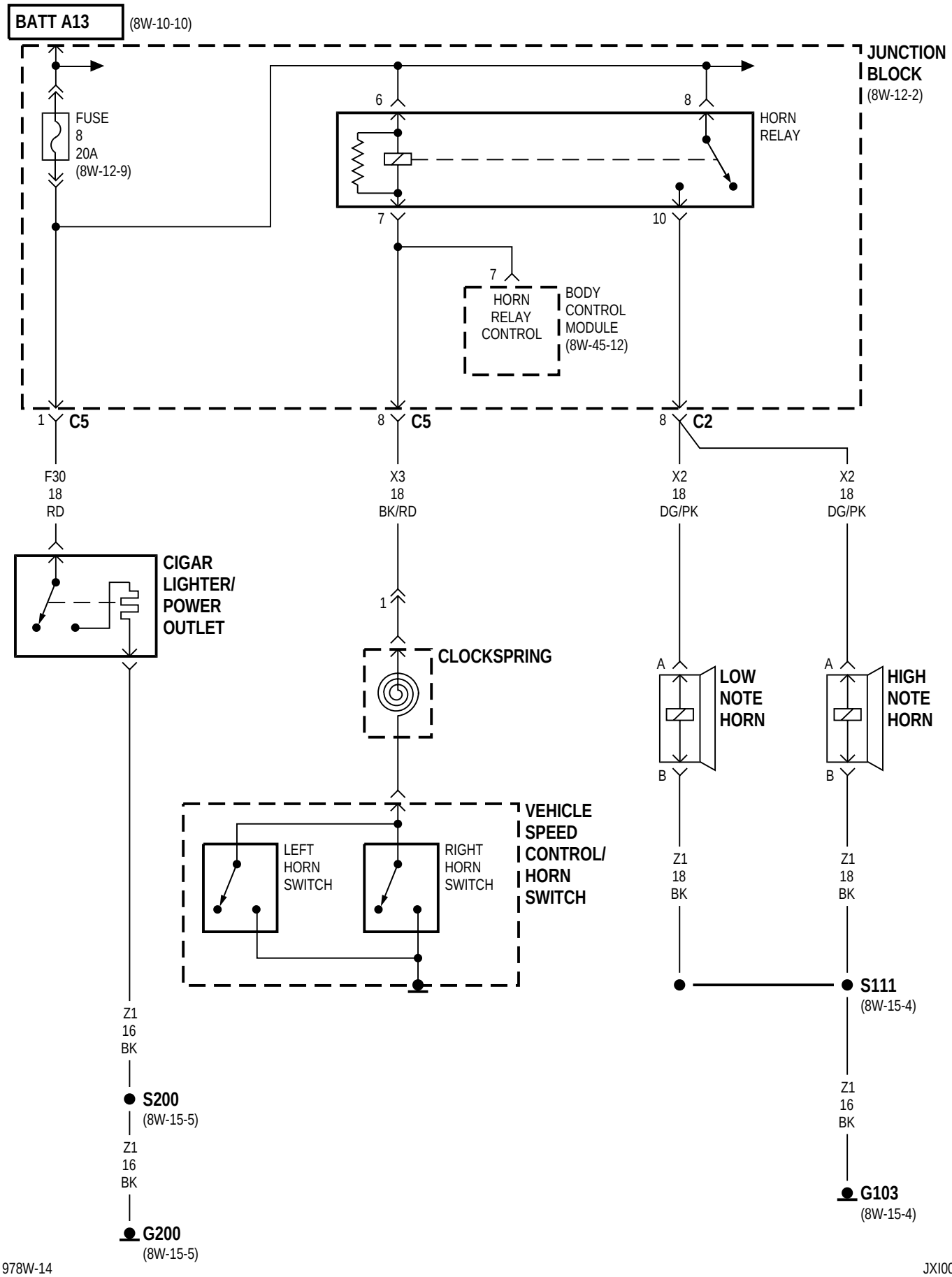
8W-41 HORN/CIGAR LIGHTER/POWER OUTLET

INDEX

page

SCHEMATICS AND DIAGRAMS 1
DESCRIPTION AND OPERATION 3

Component	Page
Body Control Module	8W-41-2
Cigar Lighter/Power Outlet	8W-41-2
Clockspring	8W-41-2
Fuse 8	8W-41-2
G103	8W-41-2
G200	8W-41-2
High Note Horn	8W-41-2
Horn Relay	8W-41-2
Junction Block	8W-41-2
Left Horn Switch	8W-41-2
Low Note Horn	8W-41-2
Right Horn Switch	8W-41-2
S111	8W-41-2
S200	8W-41-2
Vehicle Speed Control/Horn Switch	8W-41-2


BATT A13
(8W-10-10)
JUNCTION BLOCK
(8W-12-2)
FUSE 8 20A (8W-12-9)
6
8
HORN RELAY
7
10
7
HORN RELAY CONTROL
BODY CONTROL MODULE (8W-45-12)
1 C5
8 C5
8 C2
F30 18 RD
X3 18 BK/RD
X2 18 DG/PK
X2 18 DG/PK
CIGAR LIGHTER/ POWER OUTLET
1
CLOCKSPRING
A
LOW NOTE HORN
B
A
HIGH NOTE HORN
B
VEHICLE SPEED CONTROL/ HORN SWITCH
LEFT HORN SWITCH
RIGHT HORN SWITCH
Z1 18 BK
Z1 18 BK
S111
(8W-15-4)
Z1 16 BK
S200
(8W-15-5)
Z1 16 BK
G200
(8W-15-5)
Z1 16 BK
G103
(8W-15-4)

8W-41 HORN/CIGAR LIGHTER/POWER OUTLET

DESCRIPTION AND OPERATION

HORNS

The horn system is powered by a 20 amp fuse located in cavity 8 of the junction block. The fuse is HOT at all times on circuit F30. This circuit supplies voltage to the coil and to the contact side of the horn relay. Circuit F30 is spliced internal to the junction block and supplies voltage to the cigar lighter/power outlet and the power amplifier.

Power for the fuse is supplied on circuit A13 which originates in the Power Distribution Center (PDC) and is protected by a 40 amp fuse located in cavity 14.

When the operator presses the horn switch, a ground path is completed on the coil side of the horn relay through the switch, on circuit X3. The horn relay, located in the junction block, then CLOSES the relay contacts. Voltage is passed through the CLOSED relay contacts on circuit X2 to the horns. Grounding for the horns is on the Z1 circuit.

On vehicles equipped with Vehicle Theft Security System (VTSS), the X3 circuit is spliced to the Body Control Module (BCM). For operation of the VTSS, refer to section 8W-39.

HELPFUL INFORMATION

- Check the 20 amp fuse in cavity 8 of the junction block
- Check the 40 amp fuse located in cavity 12 of the PDC
- Press the horn switch and listen for the horn relay to click. A clicking relay indicates voltage is present up to the switch
- Check for a good ground at the left strut tower for the left horn, and at the right frame rail for the right horn

CIGAR LIGHTER/POWER OUTLET

The cigar lighter/power outlet is powered by a 40 amp fuse located in the Power Distribution Center (PDC). There is also a 20 amp fuse located in cavity 8 of the junction block.

When the operator presses the lighter, the contacts inside of the lighter element CLOSE, and voltage flows through the heating element to ground. Ground for the lighter/power outlet is provided on the Z1 circuit and terminates at the instrument panel ground.

HELPFUL INFORMATION

- Check the 40 amp fuse located in cavity 12 of the PDC
- Check the 20 amp fuse located in cavity 8 of the junction block
- Check for a good ground at the instrument panel ground
- Check the cigar lighter element

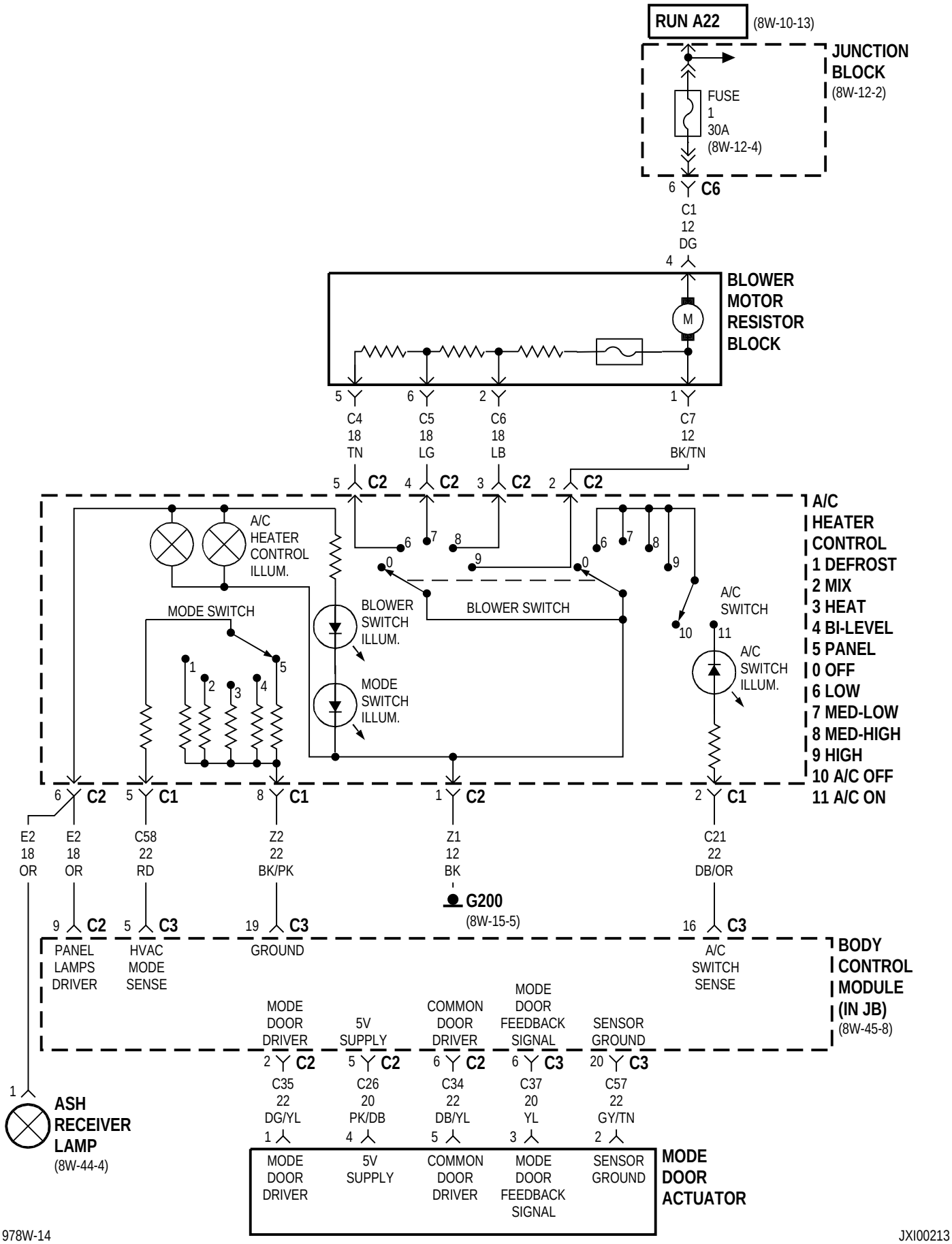
8W-42 AIR CONDITIONING-HEATER

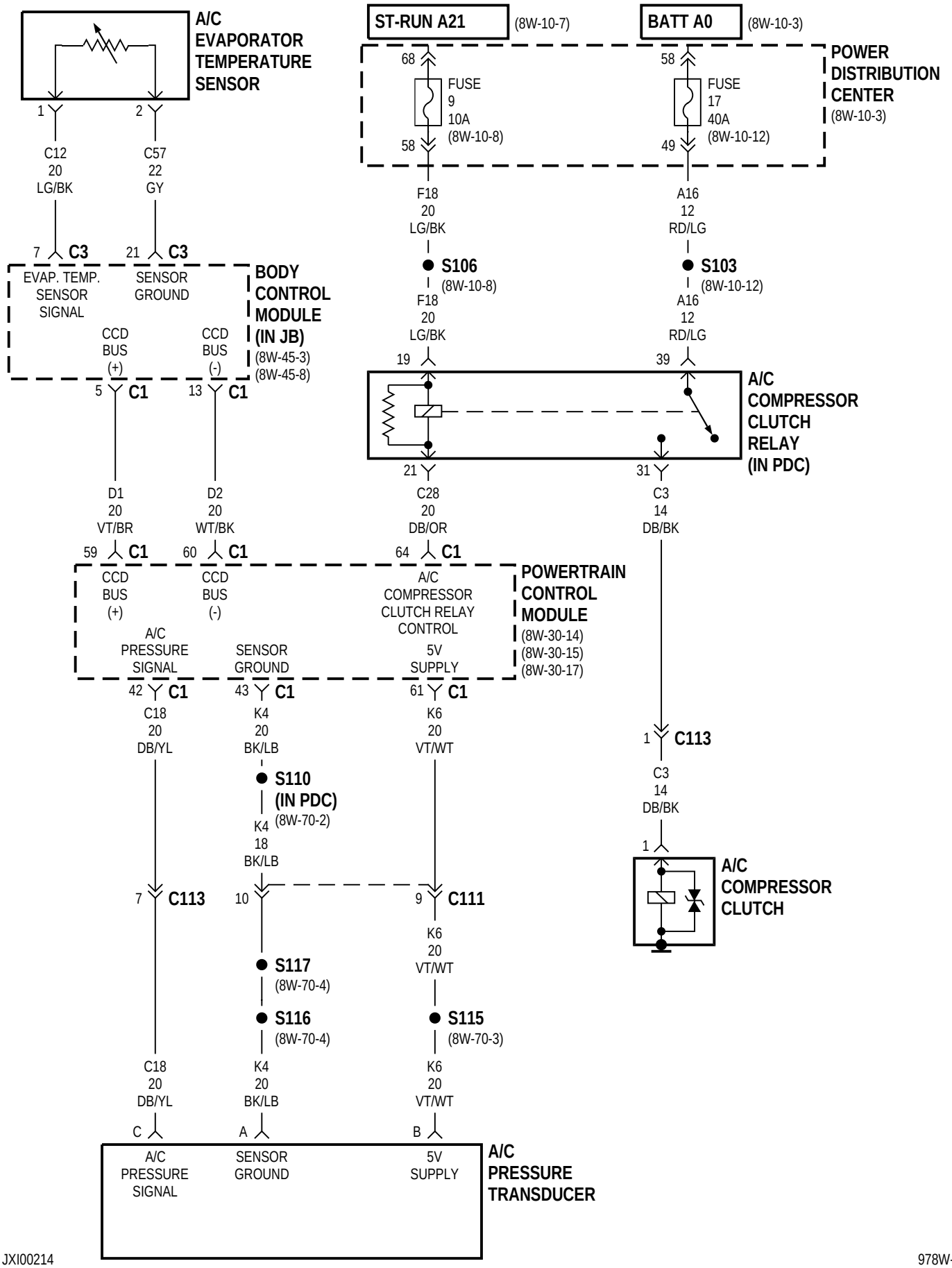
INDEX

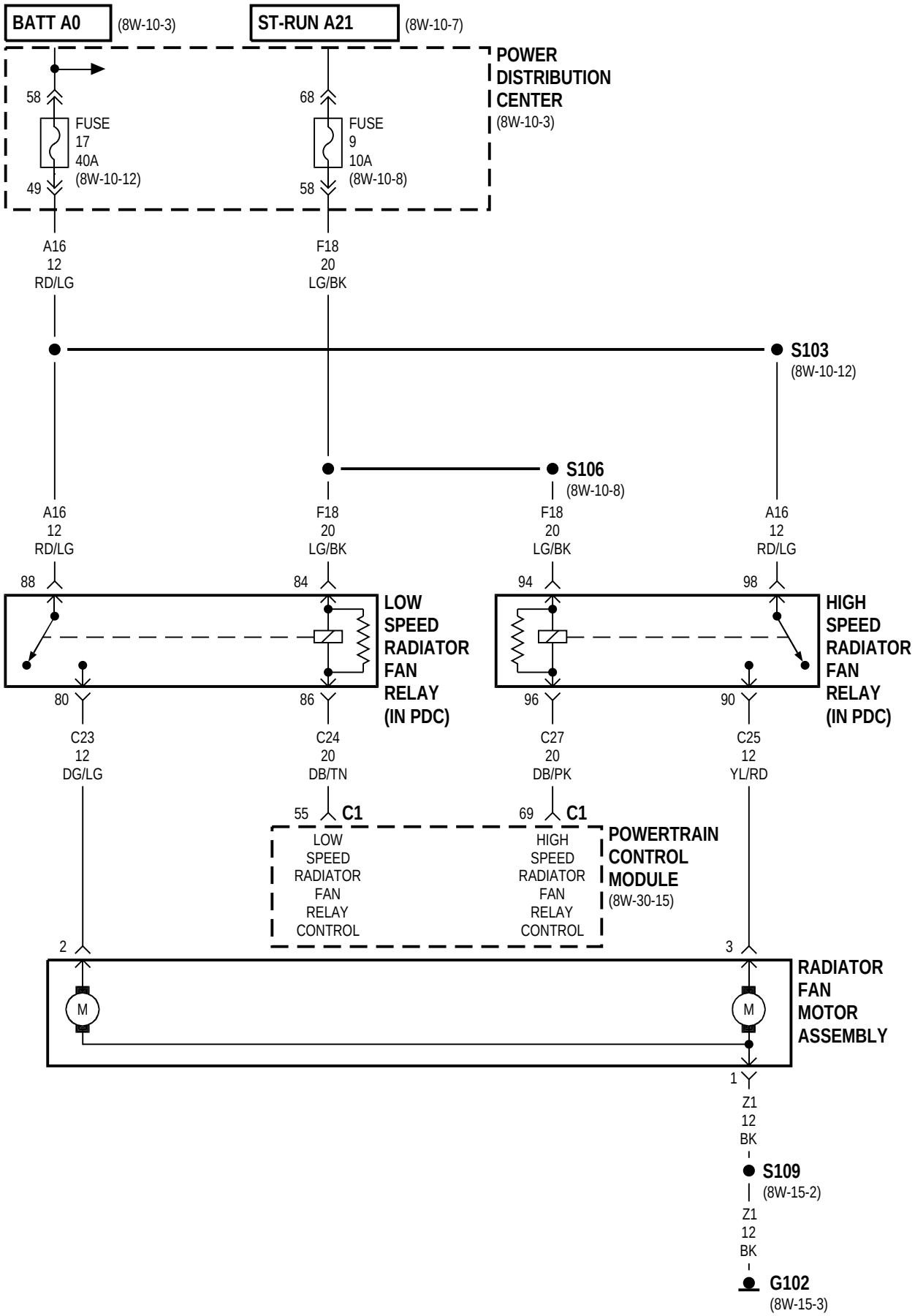
page

SCHEMATICS AND DIAGRAMS 1
DESCRIPTION AND OPERATION 5

Component	Page
A/C Compressor Clutch	8W-42-3
A/C Compressor Clutch Relay	8W-42-3
A/C Evaporator Temperature Sensor	8W-42-3
A/C Heater Control	8W-42-2
A/C Pressure Transducer	8W-42-3
Ash Receiver Lamp	8W-42-2
Blower Motor Resistor Block	8W-42-2
Body Control Module	8W-42-2, 3
Fuse 1	8W-42-2
Fuse 9	8W-42-3, 4
Fuse 17	8W-42-3, 4
G102	8W-42-4
G200	8W-42-2
High Speed Radiator Fan Relay	8W-42-4
Junction Block	8W-42-2
Low Speed Radiator Fan Relay	8W-42-4
Mode Door Actuator	8W-42-2
Power Distribution Center	8W-42-3, 4
Powertrain Control Module	8W-42-3, 4
Radiator Fan Motor Assembly	8W-42-4
S103	8W-42-3, 4
S106	8W-42-3, 4
S109	8W-42-4
S110	8W-42-3
S115	8W-42-3
S116	8W-42-3
S117	8W-42-3


RUN A22
(8W-10-13)
JUNCTION BLOCK
(8W-12-2)
FUSE 1 30A
(8W-12-4)
6 C6
C1 12 DG 4
BLOWER MOTOR RESISTOR BLOCK
M
5 C4 18 TN
6 C5 18 LG
2 C6 18 LB
1 C7 12 BK/TN
5 C2 4 C2 3 C2 2 C2
A/C HEATER CONTROL ILLUM.
MODE SWITCH
BLOWER SWITCH ILLUM.
MODE SWITCH ILLUM.
BLOWER SWITCH
A/C SWITCH
A/C SWITCH ILLUM.
A/C HEATER CONTROL
1 DEFROST
2 MIX
3 HEAT
4 BI-LEVEL
5 PANEL
0 OFF
6 LOW
7 MED-LOW
8 MED-HIGH
9 HIGH
10 A/C OFF
11 A/C ON
6 C2 5 C1 8 C1 1 C2 2 C1
E2 18 OR
E2 18 OR
C58 22 RD
Z2 22 BK/PK
Z1 12 BK
C21 22 DB/OR
G200
(8W-15-5)
9 C2 5 C3 19 C3 16 C3
PANEL LAMPS DRIVER
HVAC MODE SENSE
GROUND
A/C SWITCH SENSE
BODY CONTROL MODULE (IN JB)
(8W-45-8)
MODE DOOR DRIVER
5V SUPPLY
COMMON DOOR DRIVER
MODE DOOR FEEDBACK SIGNAL
SENSOR GROUND
2 C2 5 C2 6 C2 6 C3 20 C3
C35 22 DG/YL
C26 20 PK/DB
C34 22 DB/YL
C37 20 YL
C57 22 GY/TN
1 4 5 3 2
MODE DOOR DRIVER
5V SUPPLY
COMMON DOOR DRIVER
MODE DOOR FEEDBACK SIGNAL
SENSOR GROUND
MODE DOOR ACTUATOR
1
ASH RECEIVER LAMP
(8W-44-4)


A/C EVAPORATOR TEMPERATURE SENSOR
1
2
C12
20
LG/BK
C57
22
GY
7 C3
21 C3
EVAP. TEMP. SENSOR SIGNAL
SENSOR GROUND
BODY CONTROL MODULE (IN JB)
(8W-45-3)
(8W-45-8)
CCD BUS (+)
CCD BUS (-)
5 C1
13 C1
D1
20
VT/BR
D2
20
WT/BK
59 C1
60 C1
CCD BUS (+)
CCD BUS (-)
A/C PRESSURE SIGNAL
SENSOR GROUND
5V SUPPLY
A/C COMPRESSOR CLUTCH RELAY CONTROL
POWERTRAIN CONTROL MODULE
(8W-30-14)
(8W-30-15)
(8W-30-17)
42 C1
43 C1
61 C1
C18
20
DB/YL
K4
20
BK/LB
K6
20
VT/WT
S110
(IN PDC)
(8W-70-2)
K4
18
BK/LB
7 C113
10
9 C111
K6
20
VT/WT
S117
(8W-70-4)
S116
(8W-70-4)
S115
(8W-70-3)
C18
20
DB/YL
K4
20
BK/LB
K6
20
VT/WT
C
A
B
A/C PRESSURE SIGNAL
SENSOR GROUND
5V SUPPLY
A/C PRESSURE TRANSDUCER
ST-RUN A21
(8W-10-7)
BATT A0
(8W-10-3)
68
58
FUSE 9 10A
(8W-10-8)
58
49
FUSE 17 40A
(8W-10-12)
POWER DISTRIBUTION CENTER
(8W-10-3)
F18
20
LG/BK
A16
12
RD/LG
S106
(8W-10-8)
S103
(8W-10-12)
F18
20
LG/BK
A16
12
RD/LG
19
39
A/C COMPRESSOR CLUTCH RELAY (IN PDC)
21
31
C28
20
DB/OR
C3
14
DB/BK
1 C113
C3
14
DB/BK
1
A/C COMPRESSOR CLUTCH


BATT A0
(8W-10-3)
ST-RUN A21
(8W-10-7)
POWER DISTRIBUTION CENTER
(8W-10-3)
58
FUSE 17 40A
(8W-10-12)
49
68
FUSE 9 10A
(8W-10-8)
58
A16 12 RD/LG
F18 20 LG/BK
S103
(8W-10-12)
S106
(8W-10-8)
A16 12 RD/LG
F18 20 LG/BK
F18 20 LG/BK
A16 12 RD/LG
88
84
94
98
LOW SPEED RADIATOR FAN RELAY (IN PDC)
HIGH SPEED RADIATOR FAN RELAY (IN PDC)
80
86
96
90
C23 12 DG/LG
C24 20 DB/TN
C27 20 DB/PK
C25 12 YL/RD
55
C1
69
C1
LOW SPEED RADIATOR FAN RELAY CONTROL
HIGH SPEED RADIATOR FAN RELAY CONTROL
POWERTRAIN CONTROL MODULE
(8W-30-15)
2
3
M
M
RADIATOR FAN MOTOR ASSEMBLY
1
Z1 12 BK
S109
(8W-15-2)
Z1 12 BK
G102
(8W-15-3)

8W-42 AIR CONDITIONING-HEATER

INDEX

page

DESCRIPTION AND OPERATION
A/C EVAPORATOR TEMPERATURE SENSOR . . . 5
A/C OPERATION 5
A/C PRESSURE TRANSDUCER 6
A/C-HEATER CONTROL 5
BLOWER MOTOR OPERATION 6
HELPFUL INFORMATION 6
MODE DOOR ACTUATOR (MANUAL A/C) 5
RADIATOR FAN OPERATION 6

DESCRIPTION AND OPERATION

A/C-HEATER CONTROL

The air conditioning-heater system is controlled by the Body Control Module (BCM). The BCM senses voltage of the A/C-Heater control on circuit C58. The control uses resistors to internal to the control. These resistors are connected to the Z2 ground circuit.

When the operator requests a function in the system the BCM measures the voltage, on circuit C58, and activates the mode actuator door to the proper position.

A separate A/C switch is used in the system. This switch works the same as the mode actuator switches. When the operator presses the switch the BCM measures the voltage on the C21 circuit and activates the proper functions. Internal to the A/C-Heater control the A/C switch is connected to the blower motor switch. This allows the A/C system to only operate when the blower switch in an ON position.

Ground for the A/C switch is provided through the blower motor switch to the Z1 circuit. This circuit terminates at the instrument panel ground. A Light Emitting Diode (LED) is connected in the C21 circuit and illuminates when the A/C system is operating.

Illumination lamps and LED's are internal to the control. These are controlled by the BCM. The E2 circuit from the BCM provides the voltage to the control for lamp and LED illumination. Ground for the lamps and LED's is provided on the Z1 circuit which terminates at the instrument panel left side cowl.

MODE DOOR ACTUATOR (MANUAL A/C)

The mode door actuator is located on the lower left side of the A/C- Heater housing. This actuator controls the position of the panel/bi-level door and the floor/defrost door.

Power for the mode door actuator is provided by the Body Control Module (BCM) on the C26 circuit. This is a 5 volt feed.

Circuit C35 is the mode drive circuit from the BCM to the actuator.

The C37 circuit is the feedback from the actuator to the BCM. The BCM uses this information to adjust the door to the proper position.

Circuit C57 is the sensor return to the BCM. This circuit is spliced with the blend air door actuator.

Circuit C34 is the common line that is spliced, and connects, to the blend air door actuator and the recirculation door actuator.

A/C EVAPORATOR TEMPERATURE SENSOR

The A/C evaporator temperature sensor, located in the A/C-Heater housing, provides the Body Control Module (BCM) with the evaporator temperature to prevent the evaporator from freezing. Power for the sensor is provided from the BCM to the sensor on circuit C12. The ground for the sensor is on circuit C57 to the BCM.

Information on evaporator temperature is sent to the Powertrain Control Module (PCM) across the CCD Bus. The PCM uses this information to control operation of the A/C compressor clutch.

A/C OPERATION

When the A/C switch is CLOSED or the Defrost switch is moved to the ON position, and the evaporator temperature is in the normal limits, the Body Control Module (BCM) sends a signal to the Powertrain Control Module (PCM), over the CCD Bus, requesting A/C operation.

After receiving this input, the PCM activates the A/C compressor by grounding the C28 circuit, which is attached to the coil side of the A/C clutch relay. This relay is located in the Power Distribution Center (PDC). Power for the coil side of the relay is supplied on the F18 circuit. The F18 circuit is protected by a 10 amp fuse located in cavity 9 of the Power Distribution Center (PDC).

When the coil is energized contacts in the relay CLOSE connecting circuits A16 and C3. Circuit A16 is protected by a 40 amp fuse located in cavity 17 of the PDC and also supplies power for the radiator fan relays. The C3 circuit connects from the relay to the A/C compressor clutch.

DESCRIPTION AND OPERATION (Continued)

The A/C compressor clutch receives this current and creates a magnetic field, energizing the clutch. The A/C compressor clutch is case grounded to the A/C compressor.

The A/C compressor clutch has a diode located in it. This diode is used to control the induced voltage resulting from the magnetic field collapsing when the clutch is disengaged.

The A/C compressor clutch relay is also used by the PCM to disengage the compressor in a Wide-Open Throttle (W.O.T.) condition.

A/C PRESSURE TRANSDUCER

The A/C pressure transducer is located on the discharge line near the compressor. Circuit C18 connects from the Powertrain Control Module (PCM), cavity 42, to the transducer. The PCM uses information from the transducer to control operation of the radiator fans.

Ground for the transducer is supplied on circuit K4. This circuit connects to cavity 43 of the PCM. The K4 circuit is spliced in with many of the sensors used in the fuel injection system.

RADIATOR FAN OPERATION

The radiator fan system uses two relays located in the Power Distribution Center (PDC). One relay is used for LOW speed fan operation and the other is for HIGH speed operation. The Powertrain Control Module (PCM) controls the operation of the relays depending on engine coolant temperature or A/C operation.

Power for the coil side of both relays is provided on circuit F18. This circuit is protected by a 10 amp fuse located in cavity 9 of the Power Distribution Center (PDC). Power for the contact side of the relays is provided on circuit A16. This circuit is protected by a 40 amp fuse located in cavity 17 of the PDC.

When LOW speed fan operation is required the PCM grounds circuit C24. This causes the contacts in the relay to CLOSE connecting circuits A16 and C23. Circuit C23 connects from the relay to the low speed portion of the fan motor. Ground for the motor is provided on circuit Z1, which terminates at the left strut tower.

When HIGH speed fan operation is required the PCM grounds circuit C27. This causes the contacts in the relay to CLOSE connecting circuits A16 and C25. Circuit C25 connects from the relay to the high speed portion of the fan motor. Ground for the motor is provided on circuit Z1, which terminates at the left strut tower.

BLOWER MOTOR OPERATION

With the ignition switch is in the RUN position, power flows from the 30 amp fuse located in the junction block, cavity 1, to the blower motor. Blower motor speed is controlled by the fan control switch located in the A/C—Heater control head, and by the resistor block.

Blower motor LOW speed operation is accomplished on the C4 circuit. When the control switch is moved to the LOW speed position, current flows from the C1 circuit to the blower motor resistor. Power flows through the blower motor back to the resistor. Voltage is passed through the resistor to circuit C4. Circuit C4 connects from the resistor block to the fan control switch. Ground flows through the switch to the Z1 circuit. The Z1 circuit terminates at a grounding point located at the instrument panel.

The operation of blower motor M1 and M2 speed operations is the same as the LOW speed except that circuit C5 is used for the M1 speed, and circuit C6 is used for the M2 speed operation.

Blower motor HIGH speed operation is accomplished on the C7 circuit. There are no resistors used in the HIGH speed mode.

HELPFUL INFORMATION

Check the 10 amp fuse located in cavity 9 of the junction block.

Check the 40 amp fuse located in cavity 17 of the PDC.

Check the 30 amp fuse located in cavity 1 of the junction block.

Check for a good ground at the instrument panel left side cowl.

Check for a good ground at the left strut tower.

Check the A/C refrigerant level. The system will not operate with a low level of refrigerant.

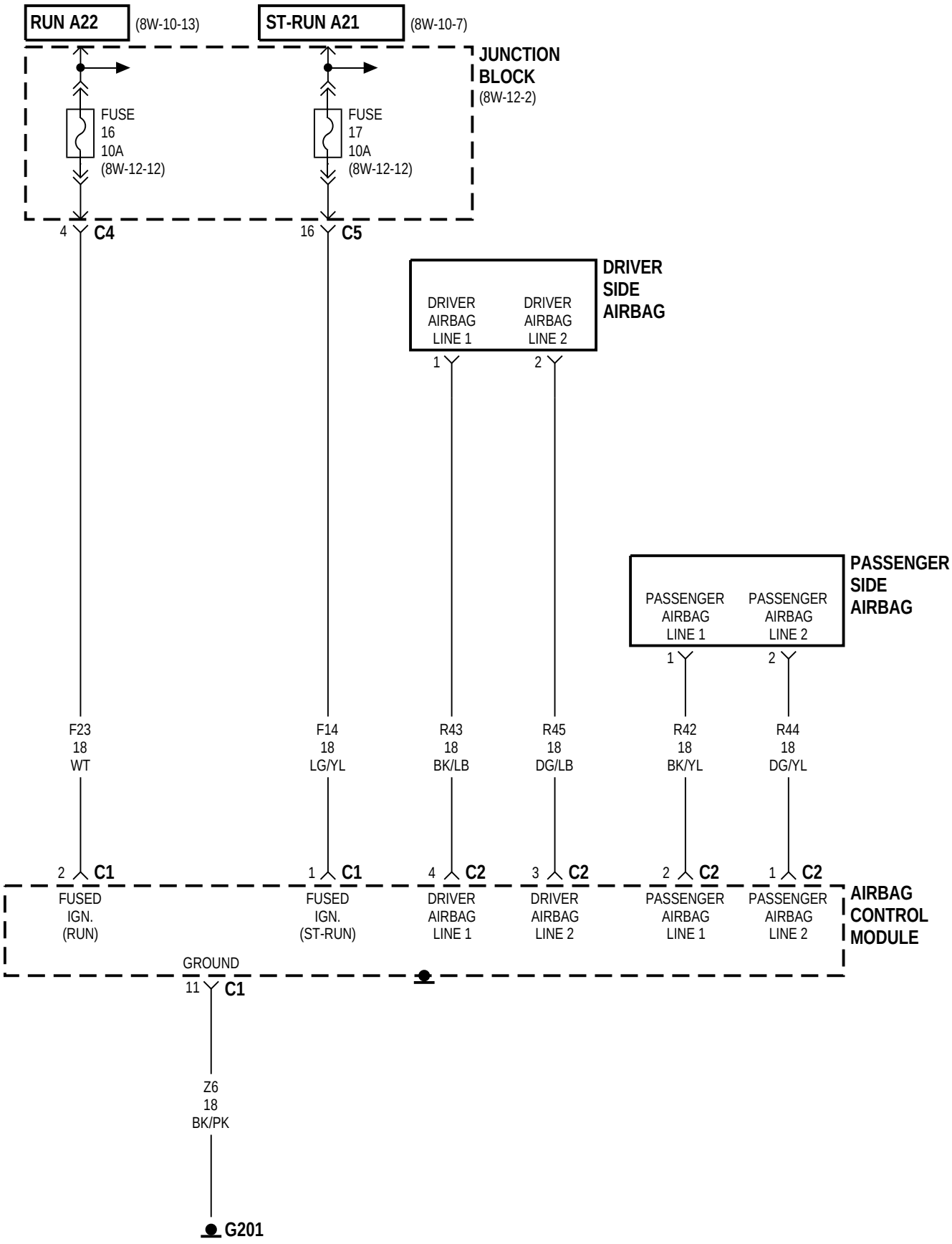
8W-43 AIRBAG SYSTEM

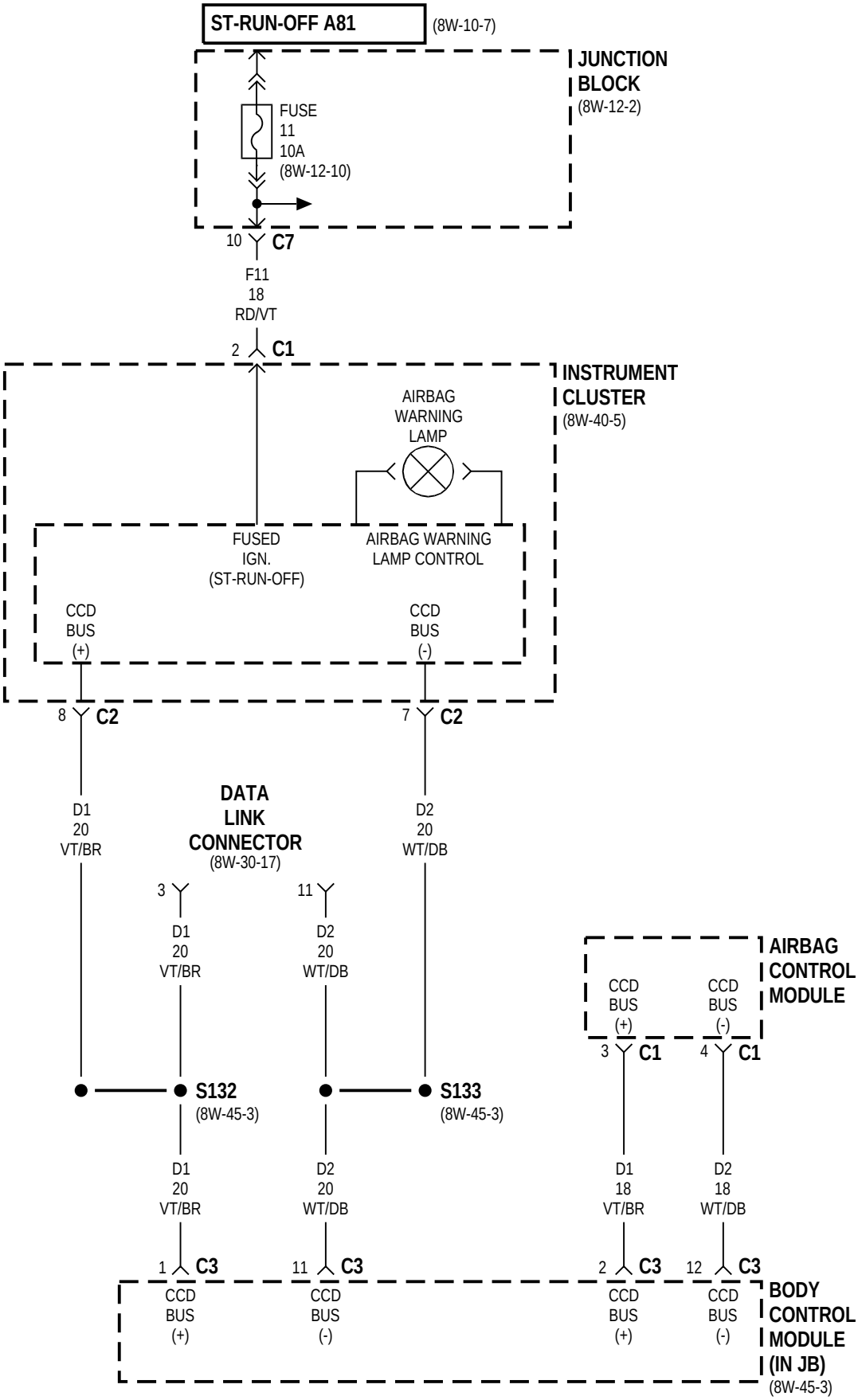
INDEX

page

SCHEMATICS AND DIAGRAMS **1**
DESCRIPTION AND OPERATION **4**

Component	Page
Airbag Control Module	8W-43-2, 3
Airbag Warning Lamp	8W-43-3
Body Control Module	8W-43-3
Data Link Connector	8W-43-3
Driver Side Airbag	8W-43-2
Fuse 11	8W-43-3
Fuse 16	8W-43-2
Fuse 17	8W-43-2
G201	8W-43-2
Instrument Cluster	8W-43-3
Junction Block	8W-43-2, 3
Passenger Side Airbag	8W-43-2
S132	8W-43-3
S133	8W-43-3


RUN A22
(8W-10-13)
ST-RUN A21
(8W-10-7)
JUNCTION BLOCK
(8W-12-2)
FUSE 16 10A (8W-12-12)
FUSE 17 10A (8W-12-12)
4 C4
16 C5
DRIVER SIDE AIRBAG
DRIVER AIRBAG LINE 1
DRIVER AIRBAG LINE 2
1
2
PASSENGER SIDE AIRBAG
PASSENGER AIRBAG LINE 1
PASSENGER AIRBAG LINE 2
1
2
F23 18 WT
F14 18 LG/YL
R43 18 BK/LB
R45 18 DG/LB
R42 18 BK/YL
R44 18 DG/YL
2 C1
1 C1
4 C2
3 C2
2 C2
1 C2
FUSED IGN. (RUN)
FUSED IGN. (ST-RUN)
DRIVER AIRBAG LINE 1
DRIVER AIRBAG LINE 2
PASSENGER AIRBAG LINE 1
PASSENGER AIRBAG LINE 2
AIRBAG CONTROL MODULE
GROUND
11 C1
Z6 18 BK/PK
G201


ST-RUN-OFF A81
(8W-10-7)
JUNCTION BLOCK
(8W-12-2)
FUSE
11
10A
(8W-12-10)
10 C7
F11
18
RD/VT
2 C1
INSTRUMENT CLUSTER
(8W-40-5)
AIRBAG WARNING LAMP
FUSED IGN. (ST-RUN-OFF)
AIRBAG WARNING LAMP CONTROL
CCD BUS (+)
CCD BUS (-)
8 C2
7 C2
D1
20
VT/BR
DATA LINK CONNECTOR
(8W-30-17)
D2
20
WT/DB
3
11
AIRBAG CONTROL MODULE
3 C1
4 C1
S132
(8W-45-3)
S133
(8W-45-3)
D1
18
VT/BR
D2
18
WT/DB
1 C3
11 C3
2 C3
12 C3
BODY CONTROL MODULE (IN JB)
(8W-45-3)

8W-43 AIRBAG SYSTEM

INDEX

page

DESCRIPTION AND OPERATION
AIRBAG CONTROL MODULE (ACM) 4
AIRBAG IMPACT SENSOR 4
AIRBAG SQUIB (AIRBAG IGNITER) 4
AIRBAG WARNING LAMP 4
HELPFUL INFORMATION 4

DESCRIPTION AND OPERATION

AIRBAG CONTROL MODULE (ACM)

Two different circuits supply battery voltage from the junction block to the Airbag Control Module (ACM), they are F14 and F23. The F14 and F23 circuits are connected to separate bus bars internal to the junction block. Different circuits from the Power Distribution Center (PDC) and the ignition switch supply battery voltage to the junction block bus bars.

The F23 circuit supplies battery voltage to the ACM only when the ignition switch is in the RUN position. The F14 circuit powers the ACM when the ignition switch is in either the START or RUN position.

A bus bar internal to the ignition switch connects the A1 circuit from the Power Distribution Center (PDC) to the A21 circuit when the switch is in either the START or RUN position. The A21 circuit supplies battery voltage to the junction block bus bar that feeds the F14 circuit. A 20 amp fuse in the PDC, cavity 8, protects the A1 and A21 circuits. A 10 amp fuse in cavity 17 of the unction block protects the F14 circuit.

When the ignition switch is in the RUN position, it connects the A2 circuit from the PDC to the A22 circuit. The A22 circuit supplies battery voltage to the junction block bus bar that feeds the F23 circuit. A 40 amp fuse in cavity 18 of the PDC protects the A2 and A22 circuits. A 10 amp fuse in cavity 16 of the junction block protects the F23 circuit.

The ACM has a case ground and an external dedicated ground, circuit Z6. The dedicated ground connects to the floor pan near the ACM.

The ACM is also interfaced with the CCD Bus. Circuit D1 is used for CCD (+), and circuit D2 is used for CCD (-).

AIRBAG IMPACT SENSOR

The Airbag system uses a sensor internal to the Airbag Control Module (ACM) to detect impact. For information regarding operation of this sensor, refer to the appropriate group of the Service Manual.

AIRBAG SQUIB (AIRBAG IGNITER)

DRIVER'S SIDE AIRBAG

Two circuits, R43 and R45, connect the Airbag Control Module (ACM) to the driver's side Airbag squib (igniter) after passing through the clock spring connector. Circuit R43 from cavity 4 of the ACM 4-way connector connects to the squib. Circuit R45 from cavity 3 of the ACM 4-way connector connects to the squib. R43 and R45 are a twisted pair of wires.

PASSENGER'S SIDE AIRBAG

Two circuits, R42 and R44, connect the Airbag Control Module (ACM) to the passenger's side Airbag squib (igniter). Circuit R42 from cavity 2 of the ACM 4-way connector connects to the squib. Circuit R44 from cavity 1 of the ACM 4-way connector connects to the squib. R42 and R44 are a twisted pair of wires.

AIRBAG WARNING LAMP

Illumination of the Airbag warning lamp is controlled by the Body Control Module (BCM) and the CCD Bus. When the Airbag Control Module (ACM) detects a problem in the system it sends a signal on the CCD Bus to the BCM. The BCM process the signal and illuminates the AIRBAG lamp in the instrument cluster.

HELPFUL INFORMATION

- Check for blown fuses in the circuits that connect to the ignition switch and in those that connect to the ACM
- While the bus bars in the junction block power the ACM, they also feed additional components on separate fuse-protected circuits
- The ACM has a case ground and an external dedicated ground. The dedicated ground connects to the floor pan near the ACM

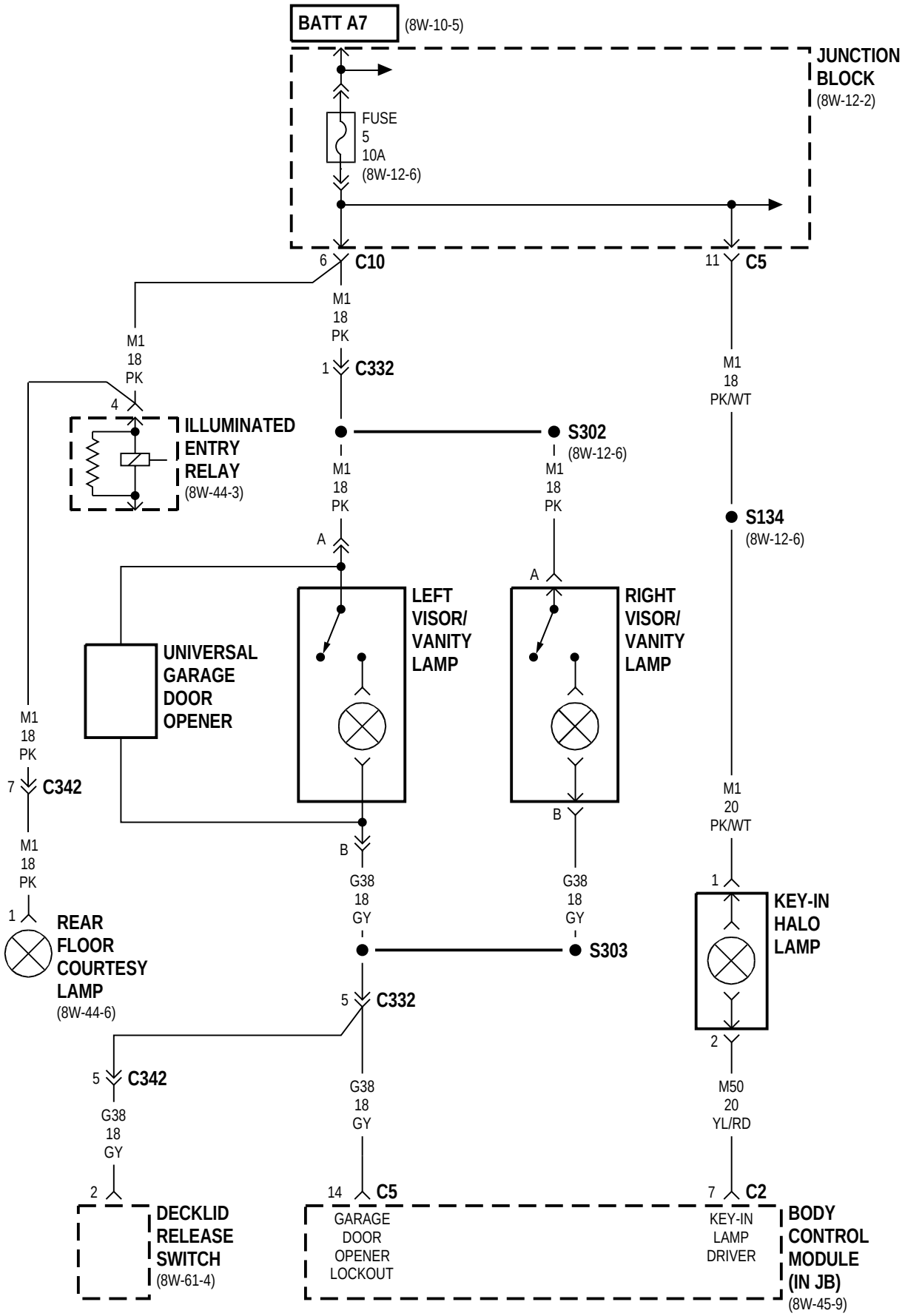
8W-44 INTERIOR LIGHTING

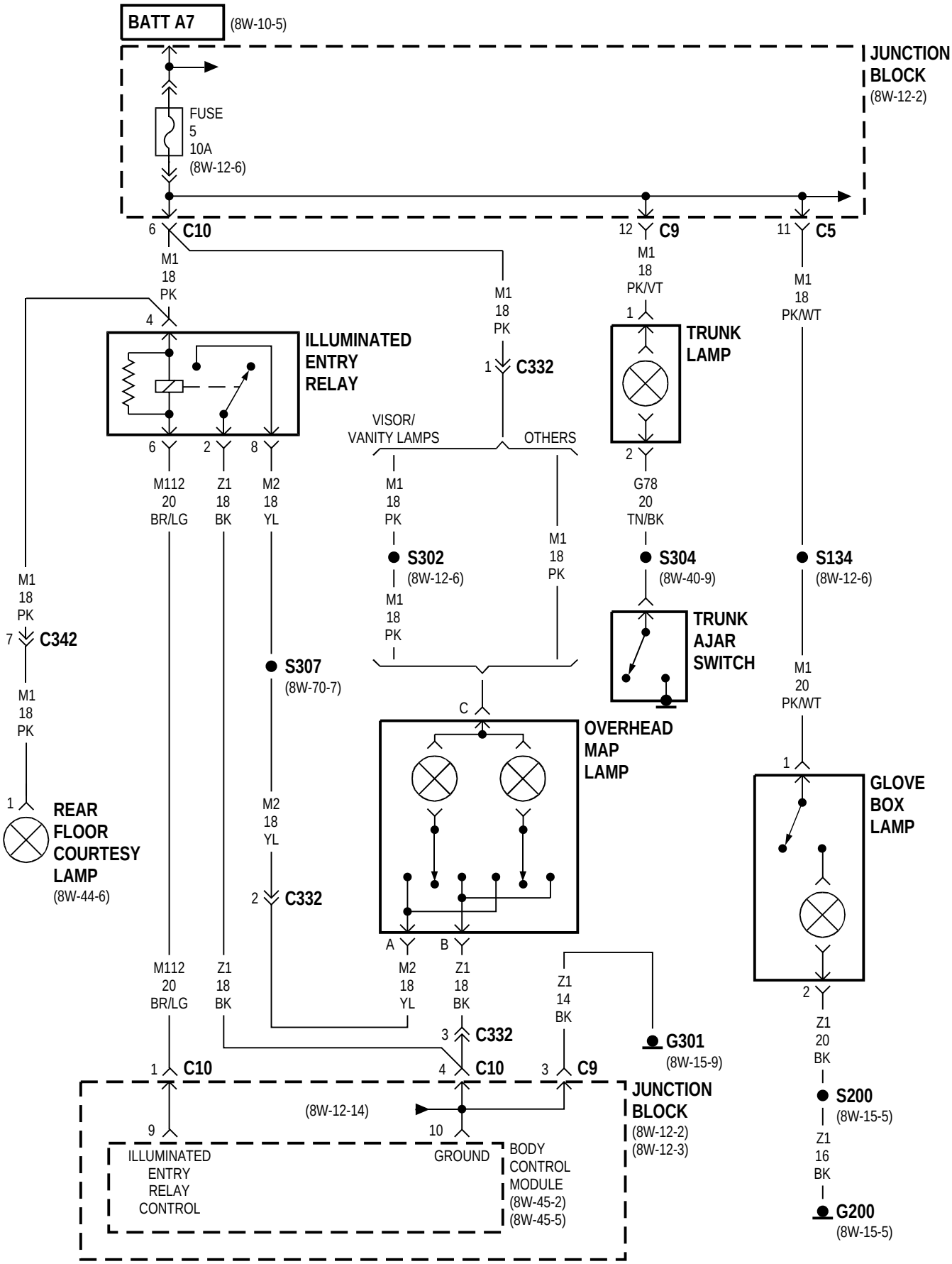
INDEX

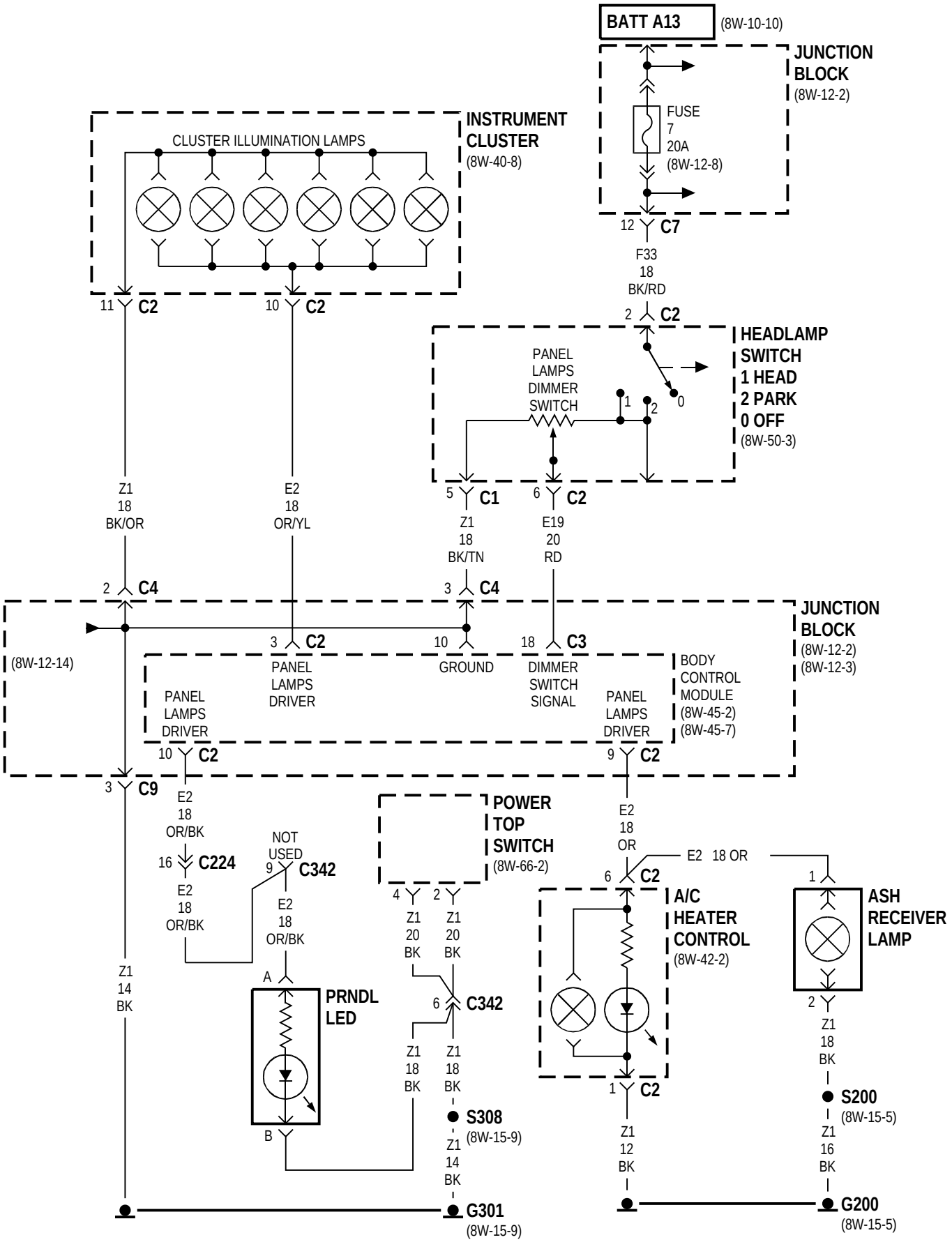
page

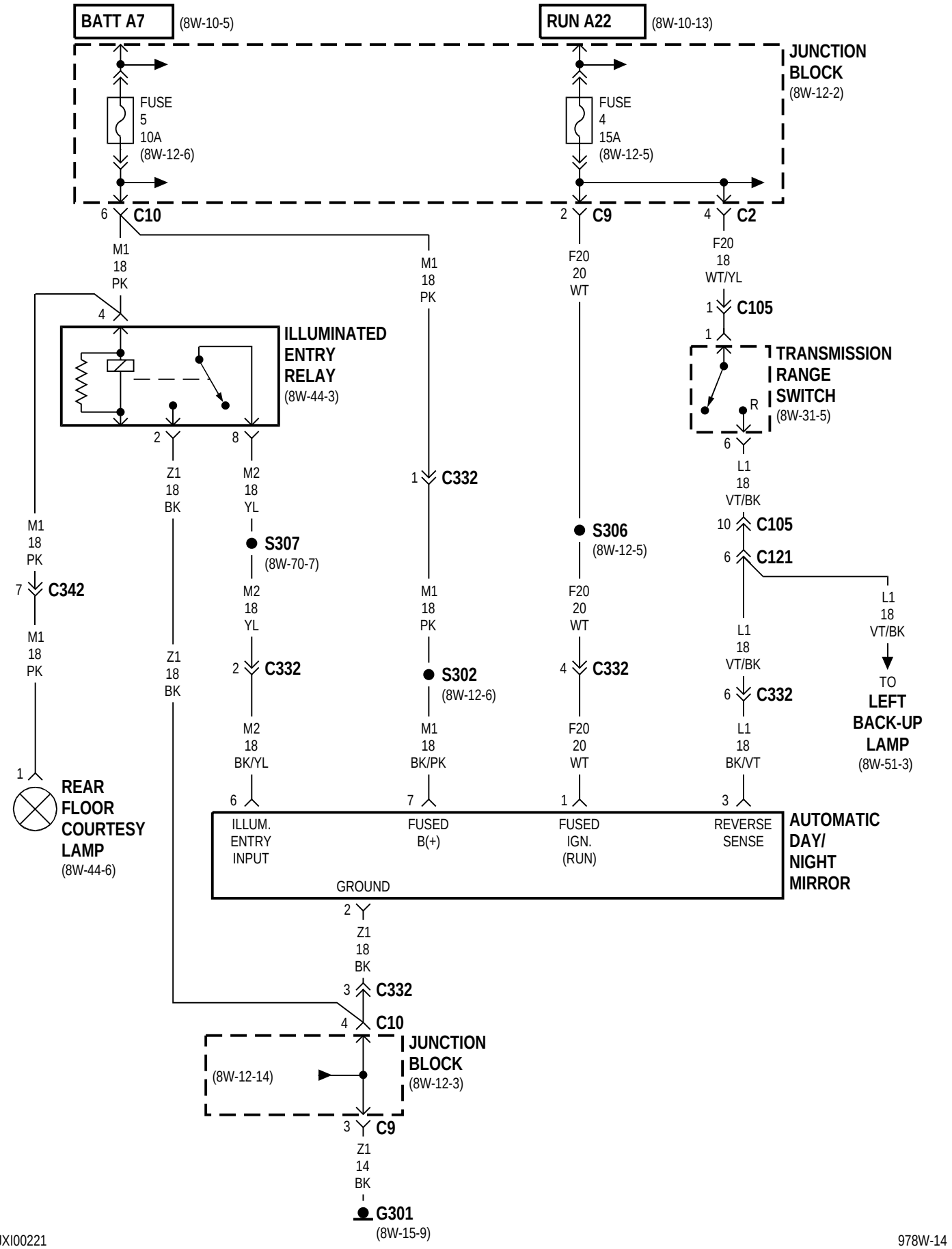
SCHEMATICS AND DIAGRAMS **1**
DESCRIPTION AND OPERATION **7**

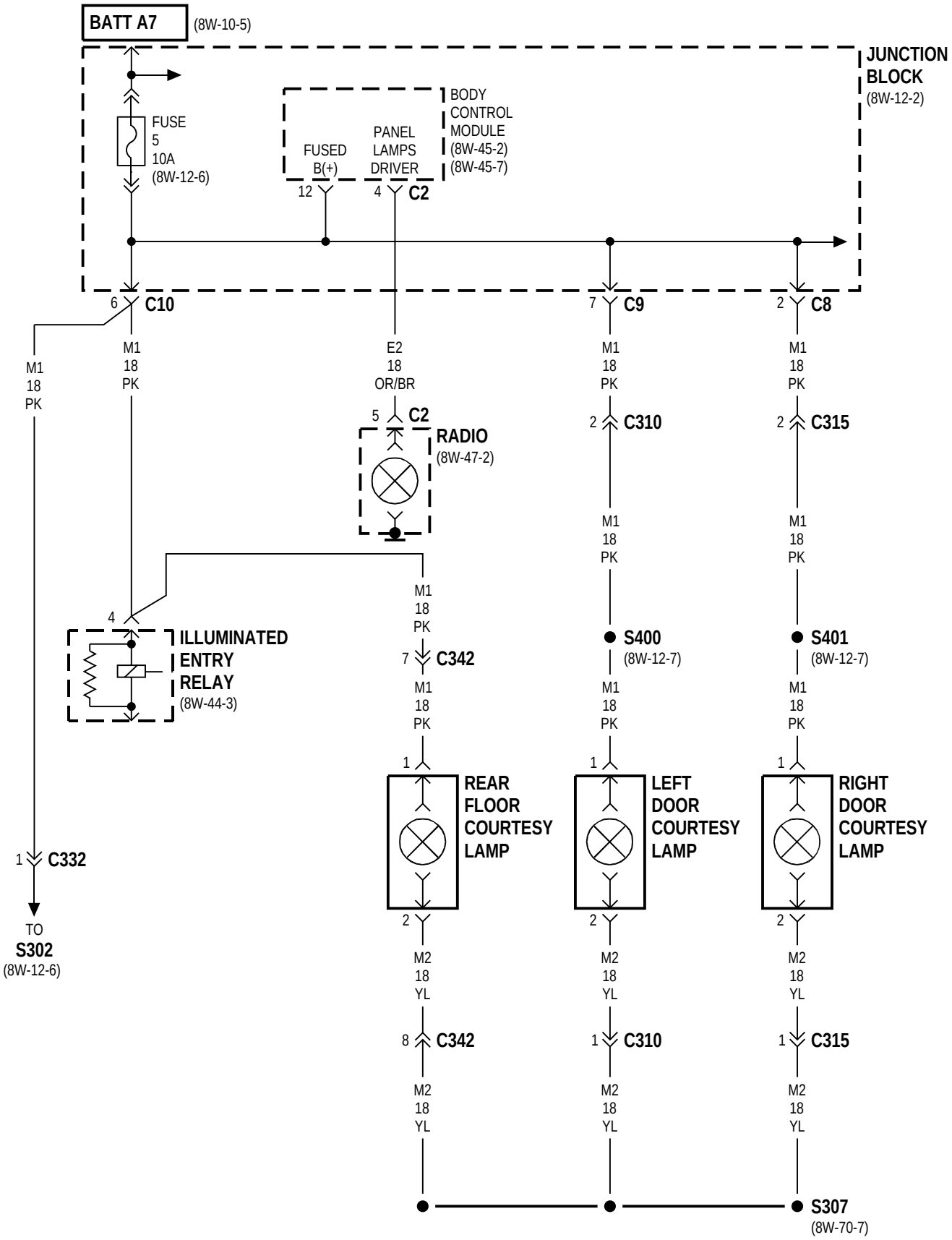
Component	Page
A/C Heater Control	8W-44-4
Ash Receiver Lamp	8W-44-4
Automatic Day/Night Mirror	8W-44-5
Body Control Module	8W-44-2, 3, 4, 6
Cluster Illumination Lamps	8W-44-4
Decklid Release Switch	8W-44-2
Fuse 4	8W-44-5
Fuse 5	8W-44-2, 3, 5, 6
Fuse 7	8W-44-4
G200	8W-44-3, 4
G301	8W-44-3, 4, 5
Glove Box Lamp	8W-44-3
Headlamp Switch	8W-44-4
Illuminated Entry Relay	8W-44-2, 3, 5, 6
Instrument Cluster	8W-44-4
Junction Block	8W-44-2, 3, 4, 5, 6
Key-In Halo Lamp	8W-44-2
Left Back-Up Lamp	8W-44-5
Left Door Courtesy Lamp	8W-44-6
Left Visor/Vanity Lamp	8W-44-2
Overhead Map Lamp	8W-44-3
Panel Lamps Dimmer Switch	8W-44-4
Power Top Switch	8W-44-4
PRNDL Led	8W-44-4
Radio	8W-44-6
Rear Floor Courtesy Lamp	8W-44-2, 3, 5, 6
Right Door Courtesy Lamp	8W-44-6
Right Visor/Vanity Lamp	8W-44-2
S134	8W-44-2, 3
S200	8W-44-3, 4
S302	8W-44-2, 3, 5, 6
S303	8W-44-2
S304	8W-44-3
S306	8W-44-5
S307	8W-44-3, 5, 6
S308	8W-44-4
S400	8W-44-6
S401	8W-44-6
Transmission Range Switch	8W-44-5
Trunk Ajar Switch	8W-44-3
Trunk Lamp	8W-44-3
Universal Garage Door Opener	8W-44-2


BATT A7
(8W-10-5)
JUNCTION BLOCK
(8W-12-2)
FUSE
5
10A
(8W-12-6)
6
C10
11
C5
M1
18
PK
1
C332
M1
18
PK/WT
M1
18
PK
4
ILLUMINATED ENTRY RELAY
(8W-44-3)
S302
(8W-12-6)
S134
(8W-12-6)
M1
18
PK
A
A
LEFT VISOR/ VANITY LAMP
RIGHT VISOR/ VANITY LAMP
UNIVERSAL GARAGE DOOR OPENER
M1
18
PK
7
C342
M1
20
PK/WT
B
B
G38
18
GY
G38
18
GY
1
KEY-IN HALO LAMP
M1
18
PK
1
REAR FLOOR COURTESY LAMP
(8W-44-6)
S303
5
C332
2
5
C342
G38
18
GY
G38
18
GY
M50
20
YL/RD
2
14
C5
7
C2
DECKLID RELEASE SWITCH
(8W-61-4)
GARAGE DOOR OPENER LOCKOUT
KEY-IN LAMP DRIVER
BODY CONTROL MODULE (IN JB)
(8W-45-9)


BATT A7
(8W-10-5)
JUNCTION BLOCK
(8W-12-2)
FUSE 5 10A
(8W-12-6)
6 C10
12 C9
11 C5
M1 18 PK
M1 18 PK/VT
M1 18 PK/WT
4
ILLUMINATED ENTRY RELAY
1 C332
TRUNK LAMP
VISOR/ VANITY LAMPS
OTHERS
6
2
8
2
M112 20 BR/LG
Z1 18 BK
M2 18 YL
M1 18 PK
G78 20 TN/BK
S302
(8W-12-6)
S304
(8W-40-9)
S134
(8W-12-6)
M1 18 PK
M1 18 PK
M1 18 PK
7 C342
TRUNK AJAR SWITCH
M1 20 PK/WT
S307
(8W-70-7)
C
OVERHEAD MAP LAMP
M1 18 PK
1
REAR FLOOR COURTESY LAMP
(8W-44-6)
M2 18 YL
2 C332
1
GLOVE BOX LAMP
2
A
B
M112 20 BR/LG
Z1 18 BK
M2 18 YL
Z1 18 BK
Z1 14 BK
Z1 20 BK
3 C332
G301
(8W-15-9)
S200
(8W-15-5)
1 C10
4 C10
3 C9
JUNCTION BLOCK
(8W-12-2)
(8W-12-3)
(8W-12-14)
Z1 16 BK
9
10
ILLUMINATED ENTRY RELAY CONTROL
GROUND
BODY CONTROL MODULE
(8W-45-2)
(8W-45-5)
G200
(8W-15-5)


BATT A13
(8W-10-10)
JUNCTION BLOCK
(8W-12-2)
FUSE 7 20A
(8W-12-8)
12 C7
F33 18 BK/RD
2 C2
INSTRUMENT CLUSTER
(8W-40-8)
CLUSTER ILLUMINATION LAMPS
11 C2
10 C2
HEADLAMP SWITCH
1 HEAD
2 PARK
0 OFF
(8W-50-3)
PANEL LAMPS DIMMER SWITCH
5 C1
6 C2
Z1 18 BK/OR
E2 18 OR/YL
Z1 18 BK/TN
E19 20 RD
2 C4
3 C4
JUNCTION BLOCK
(8W-12-2)
(8W-12-3)
(8W-12-14)
3 C2
10 C2
18 C3
PANEL LAMPS DRIVER
GROUND
DIMMER SWITCH SIGNAL
BODY CONTROL MODULE
(8W-45-2)
(8W-45-7)
PANEL LAMPS DRIVER
10 C2
9 C2
3 C9
E2 18 OR/BK
16 C224
NOT USED
9 C342
POWER TOP SWITCH
(8W-66-2)
E2 18 OR
6 C2
E2 18 OR
1
ASH RECEIVER LAMP
2
Z1 18 BK
S200
(8W-15-5)
Z1 16 BK
G200
(8W-15-5)
A/C HEATER CONTROL
(8W-42-2)
1 C2
Z1 12 BK
4 Z1 20 BK
2 Z1 20 BK
6 C342
Z1 18 BK
S308
(8W-15-9)
Z1 14 BK
G301
(8W-15-9)
A
B
PRNDL LED
Z1 14 BK


BATT A7
(8W-10-5)
RUN A22
(8W-10-13)
JUNCTION BLOCK
(8W-12-2)
FUSE 5 10A (8W-12-6)
FUSE 4 15A (8W-12-5)
6 C10
2 C9
4 C2
M1 18 PK
F20 20 WT
F20 18 WT/YL
1 C105
1
TRANSMISSION RANGE SWITCH
(8W-31-5)
R
6
L1 18 VT/BK
10 C105
6 C121
ILLUMINATED ENTRY RELAY
(8W-44-3)
4
2
8
Z1 18 BK
M2 18 YL
1 C332
S307
(8W-70-7)
S306
(8W-12-5)
M1 18 PK
7 C342
F20 20 WT
4 C332
L1 18 VT/BK
6 C332
TO LEFT BACK-UP LAMP
(8W-51-3)
S302
(8W-12-6)
2 C332
1
REAR FLOOR COURTESY LAMP
(8W-44-6)
M2 18 BK/YL
M1 18 BK/PK
F20 20 WT
L1 18 BK/VT
6
7
1
3
ILLUM. ENTRY INPUT
FUSED B(+)
FUSED IGN. (RUN)
REVERSE SENSE
AUTOMATIC DAY/ NIGHT MIRROR
GROUND
2
Z1 18 BK
3 C332
4 C10
JUNCTION BLOCK
(8W-12-3)
(8W-12-14)
3 C9
Z1 14 BK
G301
(8W-15-9)


BATT A7
(8W-10-5)
JUNCTION BLOCK
(8W-12-2)
FUSE 5 10A
(8W-12-6)
BODY CONTROL MODULE
(8W-45-2)
(8W-45-7)
FUSED B(+)
PANEL LAMPS DRIVER
12
4
C2
6
C10
7
C9
2
C8
M1 18 PK
E2 18 OR/BR
5
C2
RADIO
(8W-47-2)
2
C310
2
C315
4
ILLUMINATED ENTRY RELAY
(8W-44-3)
7
C342
S400
(8W-12-7)
S401
(8W-12-7)
1
C332
TO
S302
(8W-12-6)
1
REAR FLOOR COURTESY LAMP
LEFT DOOR COURTESY LAMP
RIGHT DOOR COURTESY LAMP
2
M2 18 YL
8
C342
1
C310
1
C315
S307
(8W-70-7)

8W-44 INTERIOR LIGHTING

INDEX

page

DESCRIPTION AND OPERATION
ASH RECEIVER LAMP 8
COURTESY LAMPS 7
DIMMER CONTROL 7
GLOVE BOX LAMP 8
HELPFUL INFORMATION 8
IGNITION KEY HALO LAMP 7
ILLUMNATED ENTRY 7
INTRODUCTION 7
OVERHEAD MAP LAMPS 8
PRNDL ILLUMINATION 8
TRUNK LAMP 8
VISOR/VANITY LAMPS 7

DESCRIPTION AND OPERATION

INTRODUCTION

The interior lamps system is powered at all times by the 10 amp fuse located in cavity 5 of the junction block. This is the Ignition-Off Draw (IOD) fuse. Circuit M1 is connected from the fuse to the trunk lamp, vanity lamps, dome lamp, and overhead lamps.

Power for the fuse is supplied on circuit A7 from the Power Distribution Center (PDC). The A7 circuit is protected by a 20 amp fuse located in cavity 4 of the PDC.

DIMMER CONTROL

The dimmer control is used to control the intensity of the instrument panel lamps. It is located in the left multi-function switch. Power for the control is supplied from the L7 circuit, which is the feed for the parking lamps. This circuit is HOT when the parking lamp switch is in the ON position. Ground for the control is provided on the Z1 circuit which terminates at the instrument panel left side cowl.

The control uses a variable resistor and is connected to circuit E19. Circuit E19 connects to the Body Control Module (BCM). When the operator moves the control, resistance in the circuit changes and the signal sent to the BCM changes. With the change is resistance the BCM sends a signal over the CCD Bus to the instrument panel changing the lamp intensity.

For the other lamps the E2 circuit is connected from the BCM to the lamps. The operation of these lamps is the same as the instrument cluster lamps.

ILLUMNATED ENTRY

The illuminated entry relay located in the junction block is used to control the ground path for the interior lamps. Power for the relay is supplied on circuit M1. This is the Ignition-Off Draw (IOD) circuit and is protected by a 10 amp fuse located in cavity 5 of the junction block.

Ground for the relay is supplied on circuit M112. This circuit connects from the relay to the Body Control Module (BCM). When the BCM provides a ground path for the relay, circuits M2 and Z1 are connected illuminating the interior lamps.

IGNITION KEY HALO LAMP

The Body Control Module (BCM) controls the operation of the halo lamp upon vehicle entry. When the drivers door is OPENED the door ajar switch CLOSES and circuit G75 is grounded. The BCM sees that the door is ajar and provides a ground path for circuit M50 from the lamp. Power for the lamp is provided on circuit M1. This is the Ignition-Off Draw (IOD) circuit and is protected by a 10 amp fuse located in cavity 5 of the junction block.

VISOR/VANITY LAMPS

The visor/vanity lamps are operated by a switch internal to the assembly. Power for the lamps is provided by circuit M1. The M1 circuit is spliced and provides power to both lamps and is HOT at all times.

When the operator lifts the cover on the lamp, the switch CLOSES, completing a path to ground on circuit Z1. This circuit terminates at the instrument panel left side cowl after passing through the ground joint in the junction block.

On vehicles equipped with the optional garage door opener the ground circuit is changed from Z1 to G38. The G38 circuit connects from the lamps to the Body Control Module (BCM). This input to the BCM allows for a garage door opener lock-out feature.

COURTESY LAMPS

The door and rear floor courtesy lamps are powered by a 10 amp fuse located in cavity 5 of the junction block. This is the Ignition-Off Draw (IOD) fuse and HOT at all times. Circuit M1 connects from the fuse to the lamps.

DESCRIPTION AND OPERATION (Continued)

Ground for the lamps is supplied on circuit M2. This circuit connects from the lamps to the illuminated entry relay located in the junction block.

The Body Control Module (BCM) controls the operation of the relay on circuit M112. When the relay is energized, the contacts in the relay CLOSE connecting circuits M2 and Z1. This completes the ground path for the lamps. The Z1 circuit terminates at the instrument panel left side cowl.

OVERHEAD MAP LAMPS

The overhead map lamps are powered by the 10 amp fuse located in the junction block on the M1 circuit. This fuse is the Ignition-Off Draw (IOD) fuse and is located in cavity 5. This circuit is HOT at all times.

Ground for the lamps is supplied on two different circuits. One way is when the operator turns the lamp ON by CLOSING the switch. A ground path is completed on circuit Z1. This ground terminates at the instrument panel left side cowl.

Ground for the lamp(s) can also be supplied on circuit M2 when the Body Control Module (BCM) supplies a ground path for the illuminated entry relay.

GLOVE BOX LAMP

The glove box lamp is powered by the 10 amp fuse located in the junction block on the M1 circuit. This is the Ignition-Off Draw (IOD) fuse and is located in cavity 5. This circuit is HOT at all times.

The glove box switch is normally OPEN. When the operator opens the glove box door the switch CLOSES completing a path to ground through the switch and the lamp on circuit Z1. This ground terminates at the instrument panel left side cowl.

ASH RECEIVER LAMP

The ash receiver lamp receives power on the E2 circuit from the Body Control Module (BCM). This circuit is HOT when the operator has turned the headlamp switch to the PARK or ON position. Lamp intensity is controlled by the input of the dimmer switch to the BCM on circuit E19.

Ground for the lamp is provided by the Z1 circuit. This circuit terminates at the instrument panel left side cowl after passing through the ground joint in the junction block.

PRNDL ILLUMINATION

Power for the PRNDL illumination diode is supplied on circuit E2. This circuit is controlled by the Body Control Module (BCM) based on input from the headlamp dimmer switch on circuit E19.

Ground for the diode is supplied on circuit Z1. This ground terminates at the left side cowl.

TRUNK LAMP

The trunk lamp uses a switch located in the trunk latch which is case grounded. The switch is normally OPEN. When the trunk is opened, the switch CLOSES, completing a path to ground on circuit G78. The M1 circuit provides power to the lamp, and is HOT at all times.

Circuit G78 is spliced and provides an input to the instrument cluster indicating the trunk is ajar.

HELPFUL INFORMATION

Check the 10 amp fuse located in cavity 5 of the PDC.

Check for a good ground located at the instrument panel left side cowl.

Check the door switches for a good ground.

Check the illuminated entry relay located in the junction block.

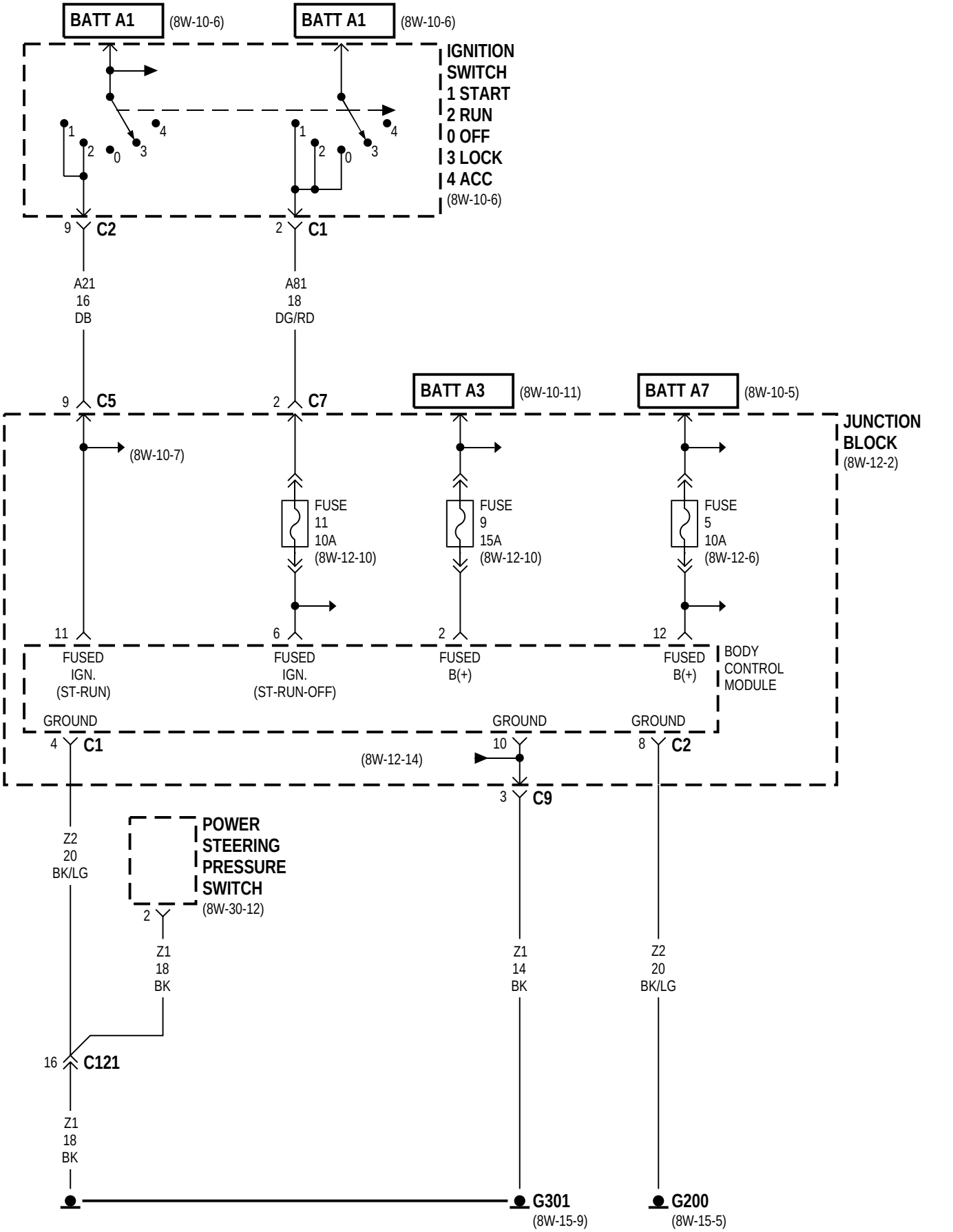
8W-45 BODY CONTROL MODULE

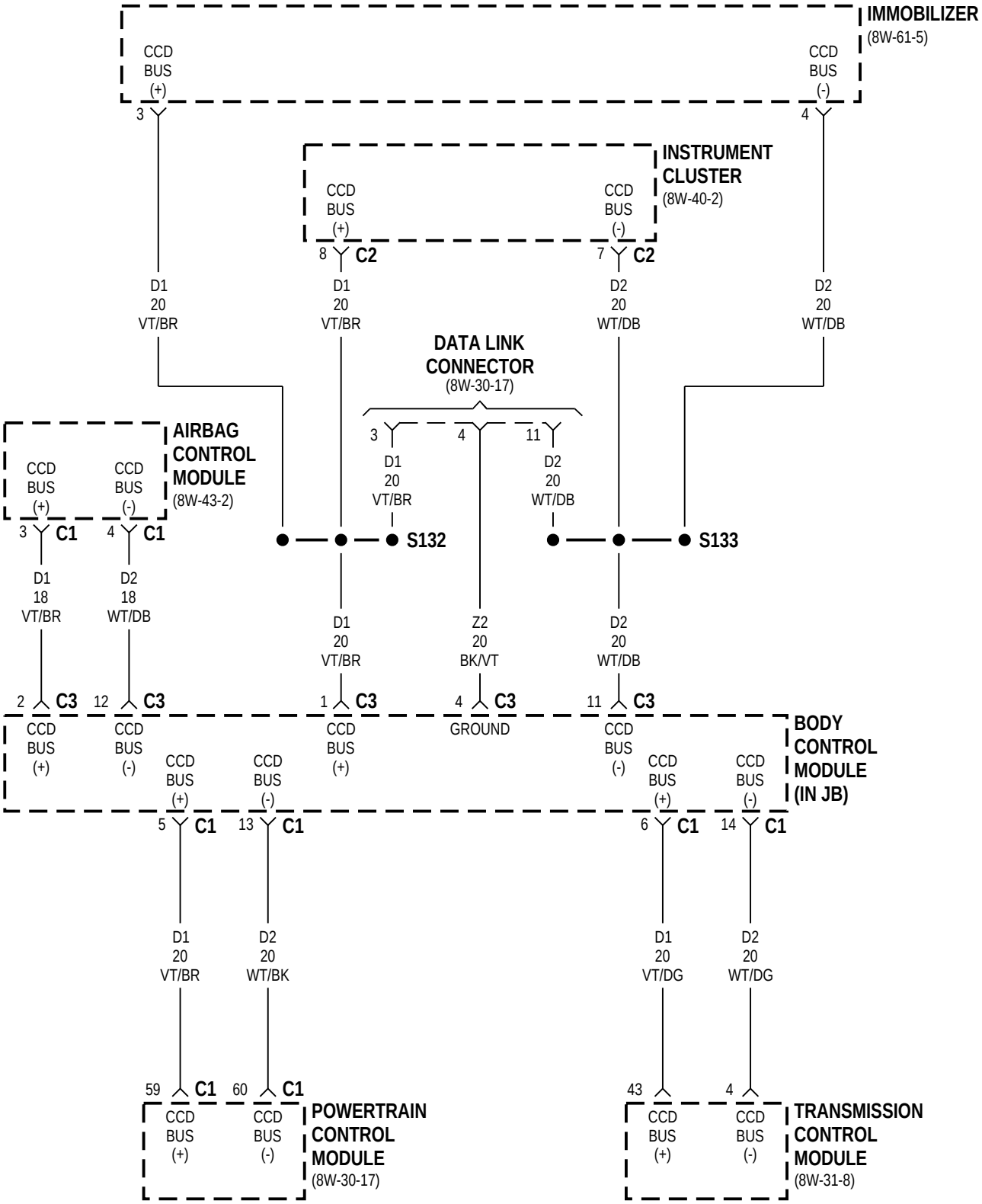
INDEX

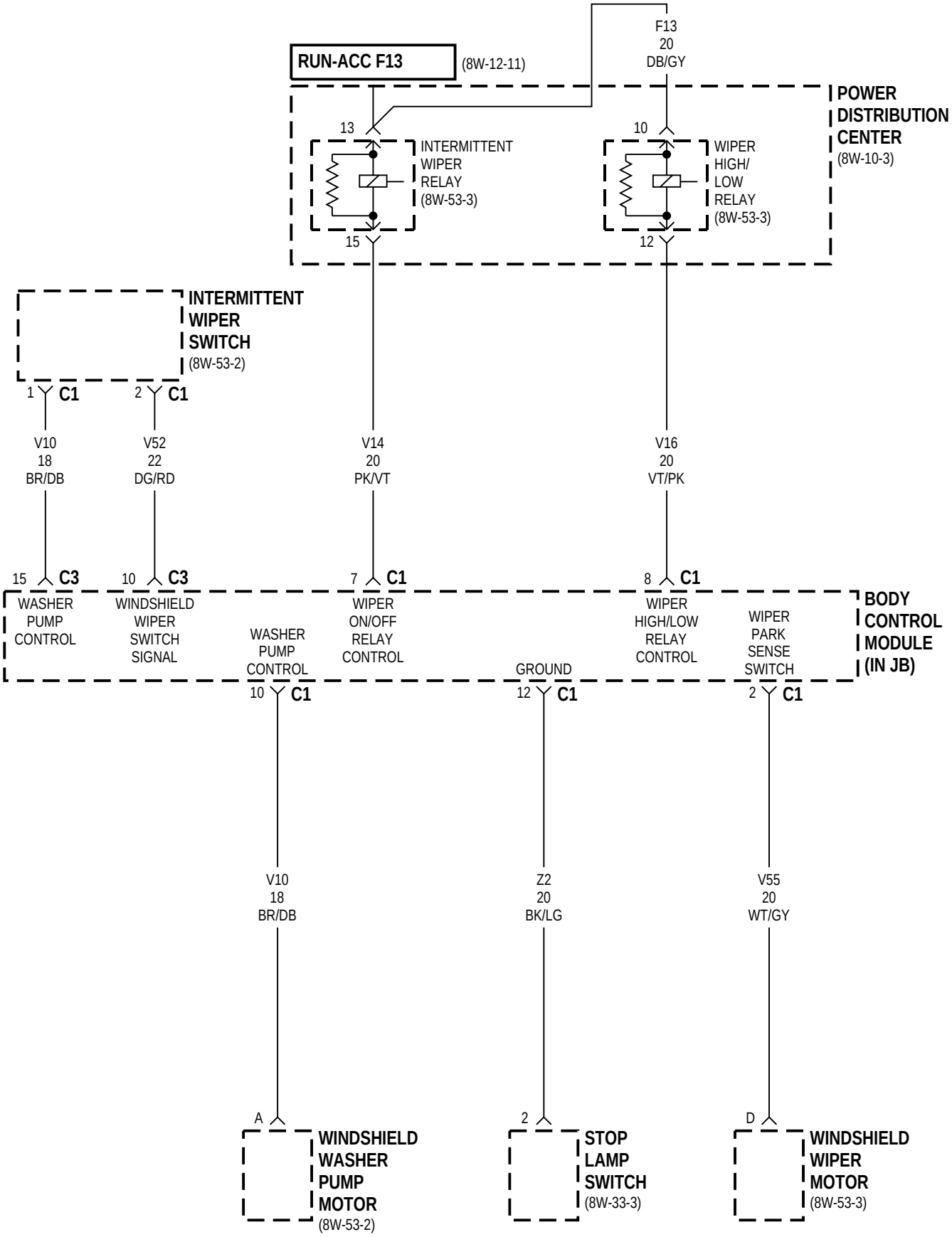
page

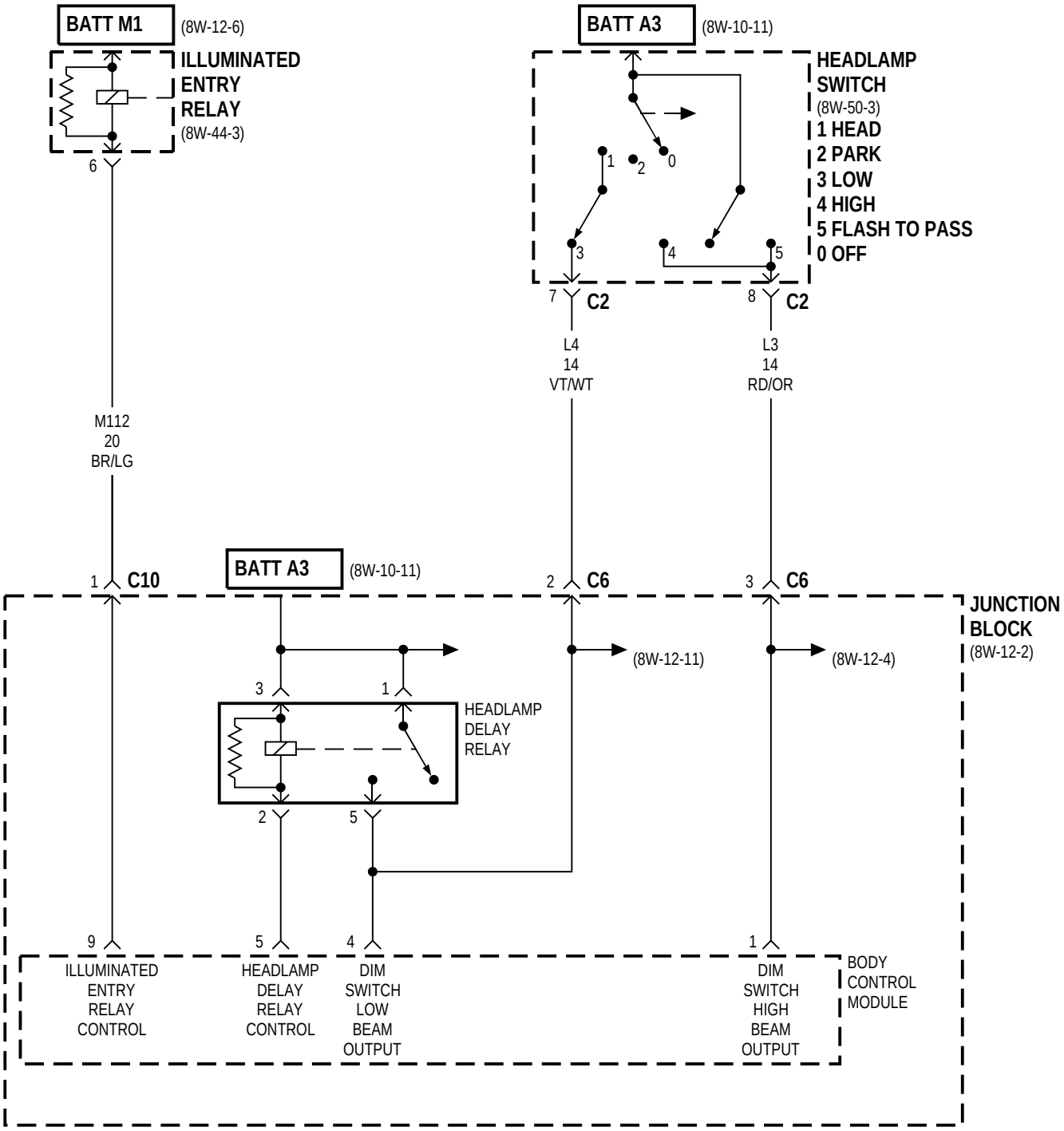
SCHEMATICS AND DIAGRAMS **1**
DESCRIPTION AND OPERATION **13**

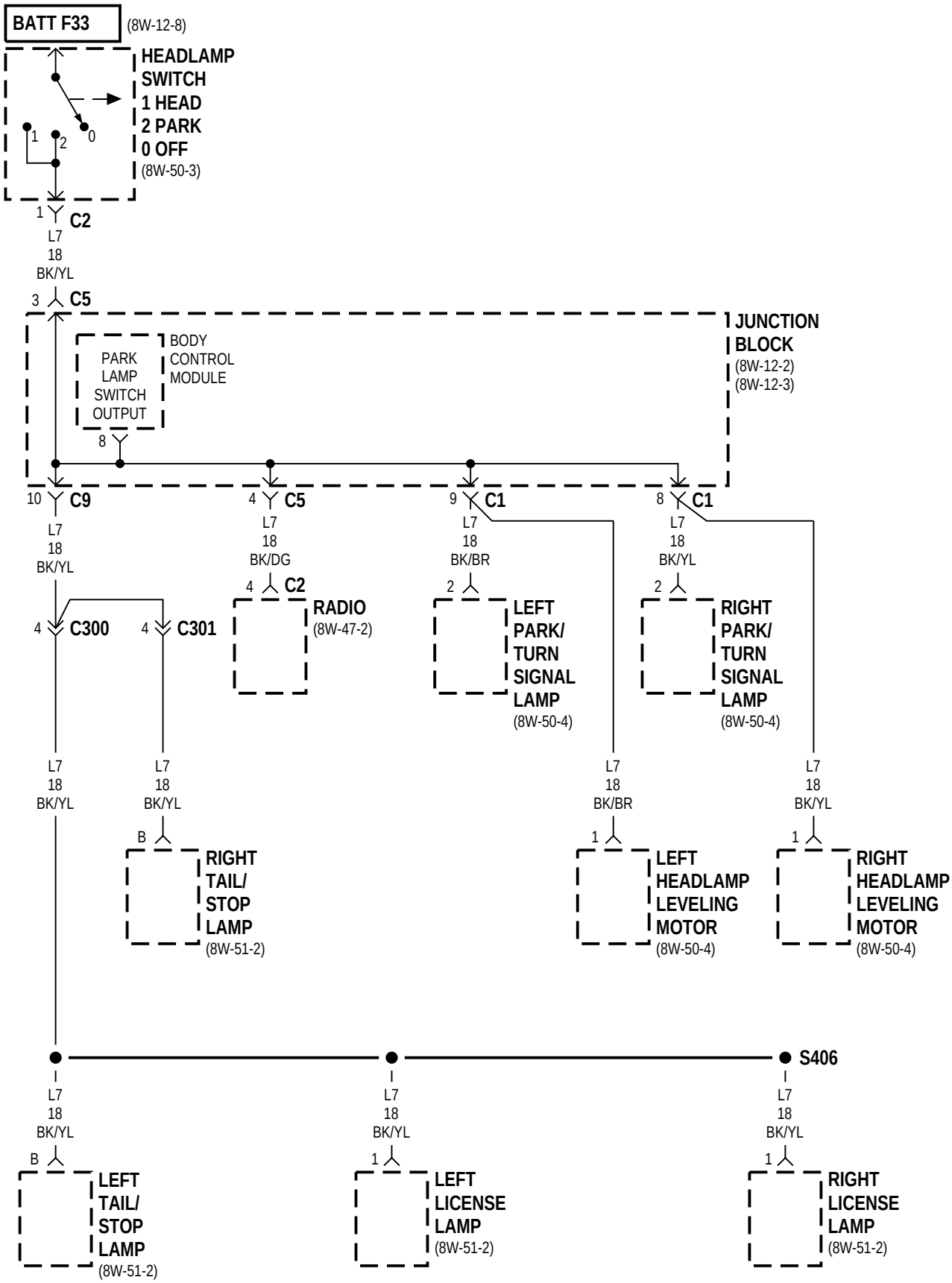
Component	Page
A/C Evaporator Temperature Sensor	8W-45-8
A/C Heater Control	8W-45-7, 8
Airbag Control Module	8W-45-3
Ash Receiver Lamp	8W-45-7
Body Control Module	8W-45-2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
Data Link Connector	8W-45-3
Decklid Release Relay	8W-45-9
Decklid Release Switch	8W-45-9
Fuel Pump Module	8W-45-9
Fuse 5	8W-45-2
Fuse 8	8W-45-12
Fuse 9	8W-45-2
Fuse 11	8W-45-2
Fuse 15	8W-45-12
G200	8W-45-2
G301	8W-45-2, 9
General Illumination	8W-45-7
Headlamp Delay Relay	8W-45-5
Headlamp Switch	8W-45-5, 6, 7
Horn Relay	8W-45-12
Ignition Switch	8W-45-2
Illuminated Entry Relay	8W-45-5
Immobilizer	8W-45-3
Instrument Cluster	8W-45-3, 7
Intermittent Wiper Relay	8W-45-4
Intermittent Wiper Switch	8W-45-4
Junction Block	8W-45-2, 5, 6, 7, 9, 12
Key-In Halo Lamp	8W-45-9
Key-In Switch	8W-45-9
Left Door Ajar Switch	8W-45-11
Left Door Arm/Disarm Switch	8W-45-11
Left Headlamp Leveling Motor	8W-45-6
Left Horn Switch	8W-45-12
Left License Lamp	8W-45-6
Left Park/Turn Signal Lamp	8W-45-6
Left Power Door Lock Motor	8W-45-10
Left Power Door Lock Switch	8W-45-10
Left Remote Keyless Entry Antenna	8W-45-10
Left Tail/Stop Lamp	8W-45-6
Left Visor/Vanity Lamp	8W-45-9
Mode Door Actuator	8W-45-8
Panel Lamps Dimmer Switch	8W-45-7
Power Distribution Center	8W-45-4, 9
Power Steering Pressure Switch	8W-45-2
Powertrain Control Module	8W-45-3
PRNDL Led	8W-45-7
Radio	8W-45-6, 7
Rear Window Defogger Relay	8W-45-12
Right Door Ajar Switch	8W-45-11
Right Door Arm/Disarm Switch	8W-45-11
Right Headlamp Leveling Motor	8W-45-6
Right Horn Switch	8W-45-12
Right License Lamp	8W-45-6
Right Park/Turn Signal Lamp	8W-45-6
Right Power Door Lock Motor	8W-45-10
Right Power Door Lock Switch	8W-45-10
Right Remote Keyless Entry Antenna	8W-45-10
Right Tail/Stop Lamp	8W-45-6
Right Visor/Vanity Lamp	8W-45-9
S132	8W-45-3
S133	8W-45-3
S303	8W-45-9
S305	8W-45-11
S308	8W-45-9
S406	8W-45-6
Seat Belt Control Module	8W-45-11
Seat Belt Switch	8W-45-9
Stop Lamp Switch	8W-45-4
Transmission Control Module	8W-45-3
Trunk Key Cylinder Switch	8W-45-11
Universal Garage Door Opener	8W-45-9
Vehicle Speed Control/Horn Switch	8W-45-9, 12
Windshield Washer Pump Motor	8W-45-4
Windshield Wiper Motor	8W-45-4
Wiper High/Low Relay	8W-45-4

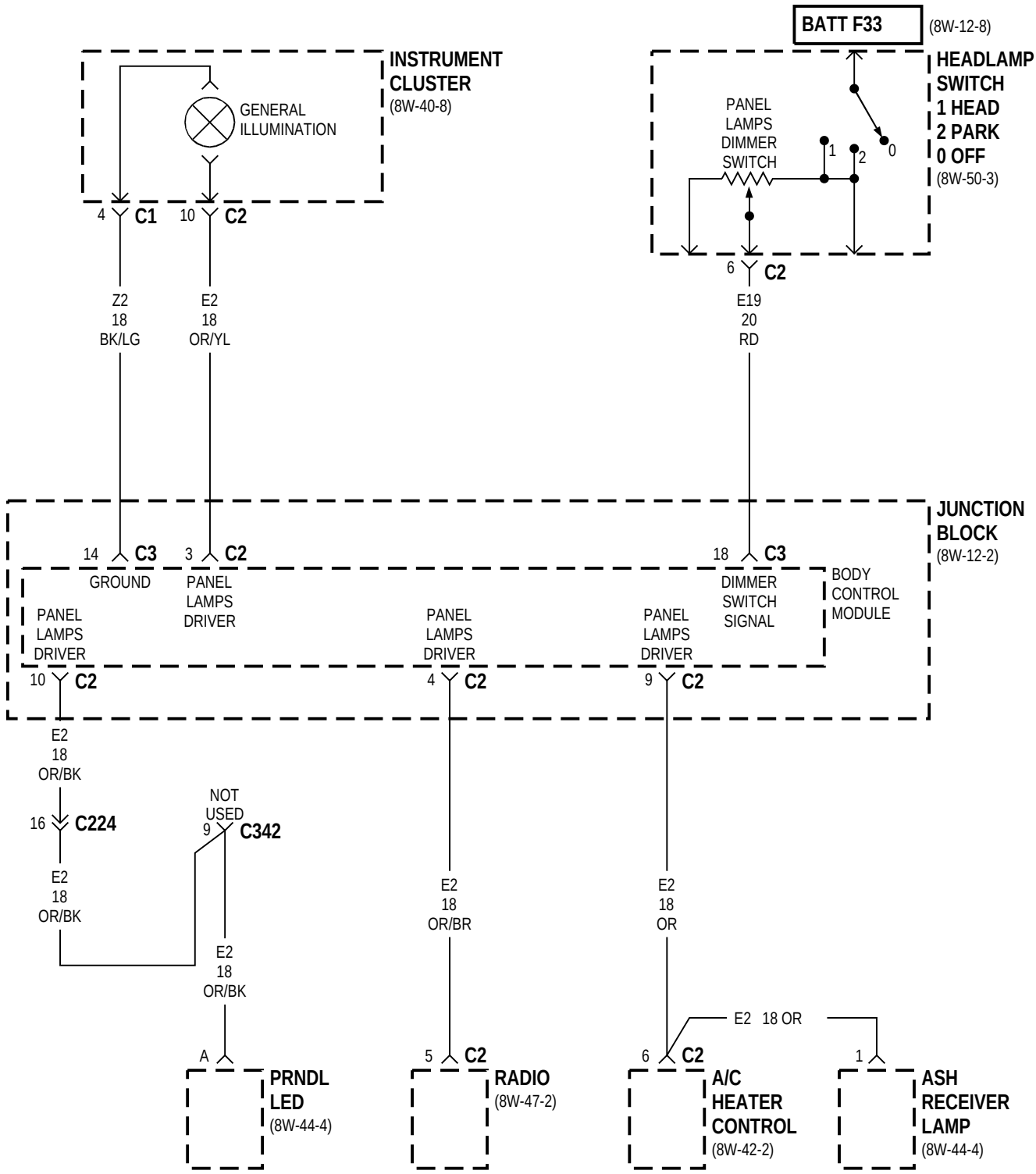

BATT A1
(8W-10-6)
BATT A1
(8W-10-6)
IGNITION SWITCH
1 START
2 RUN
0 OFF
3 LOCK
4 ACC
(8W-10-6)
9 C2
2 C1
A21
16
DB
A81
18
DG/RD
9 C5
2 C7
BATT A3
(8W-10-11)
BATT A7
(8W-10-5)
JUNCTION BLOCK
(8W-12-2)
(8W-10-7)
FUSE
11
10A
(8W-12-10)
FUSE
9
15A
(8W-12-10)
FUSE
5
10A
(8W-12-6)
11
6
2
12
FUSED IGN. (ST-RUN)
FUSED IGN. (ST-RUN-OFF)
FUSED B(+)
FUSED B(+)
BODY CONTROL MODULE
GROUND
GROUND
GROUND
4 C1
(8W-12-14)
10
8 C2
3 C9
Z2
20
BK/LG
POWER STEERING PRESSURE SWITCH
(8W-30-12)
2
Z1
18
BK
Z1
14
BK
Z2
20
BK/LG
16 C121
Z1
18
BK
G301
(8W-15-9)
G200
(8W-15-5)

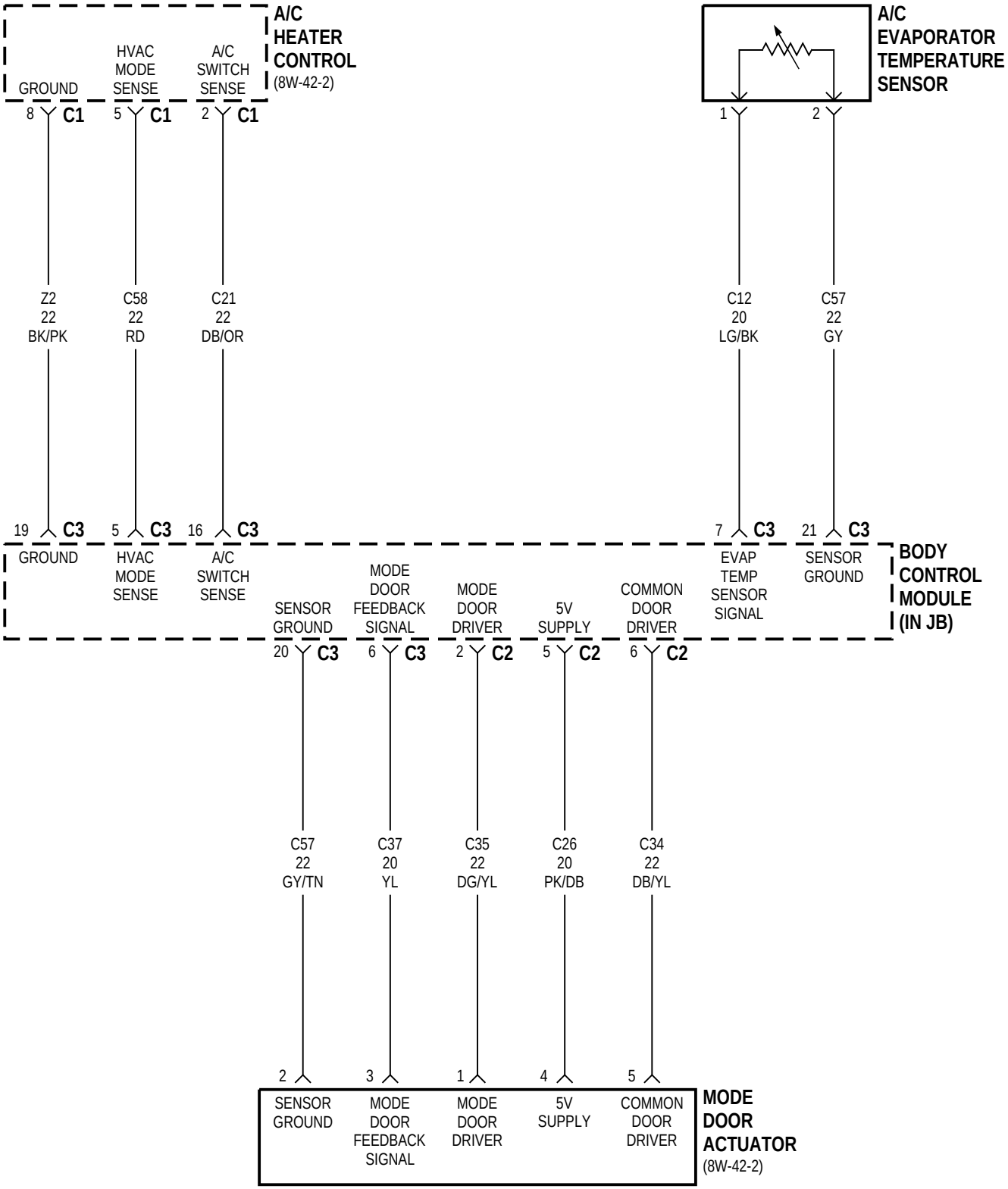

IMMOBILIZER
(8W-61-5)
CCD BUS (+)
CCD BUS (-)
3
4
INSTRUMENT CLUSTER
(8W-40-2)
8 C2
7 C2
D1 20 VT/BR
D2 20 WT/DB
DATA LINK CONNECTOR
(8W-30-17)
AIRBAG CONTROL MODULE
(8W-43-2)
3 C1
4 C1
S132
S133
D1 18 VT/BR
D2 18 WT/DB
Z2 20 BK/VT
2 C3
12 C3
1 C3
4 C3
11 C3
GROUND
BODY CONTROL MODULE (IN JB)
5 C1
13 C1
6 C1
14 C1
59 C1
60 C1
D2 20 WT/BK
D1 20 VT/DG
D2 20 WT/DG
43
POWERTRAIN CONTROL MODULE
(8W-30-17)
TRANSMISSION CONTROL MODULE
(8W-31-8)

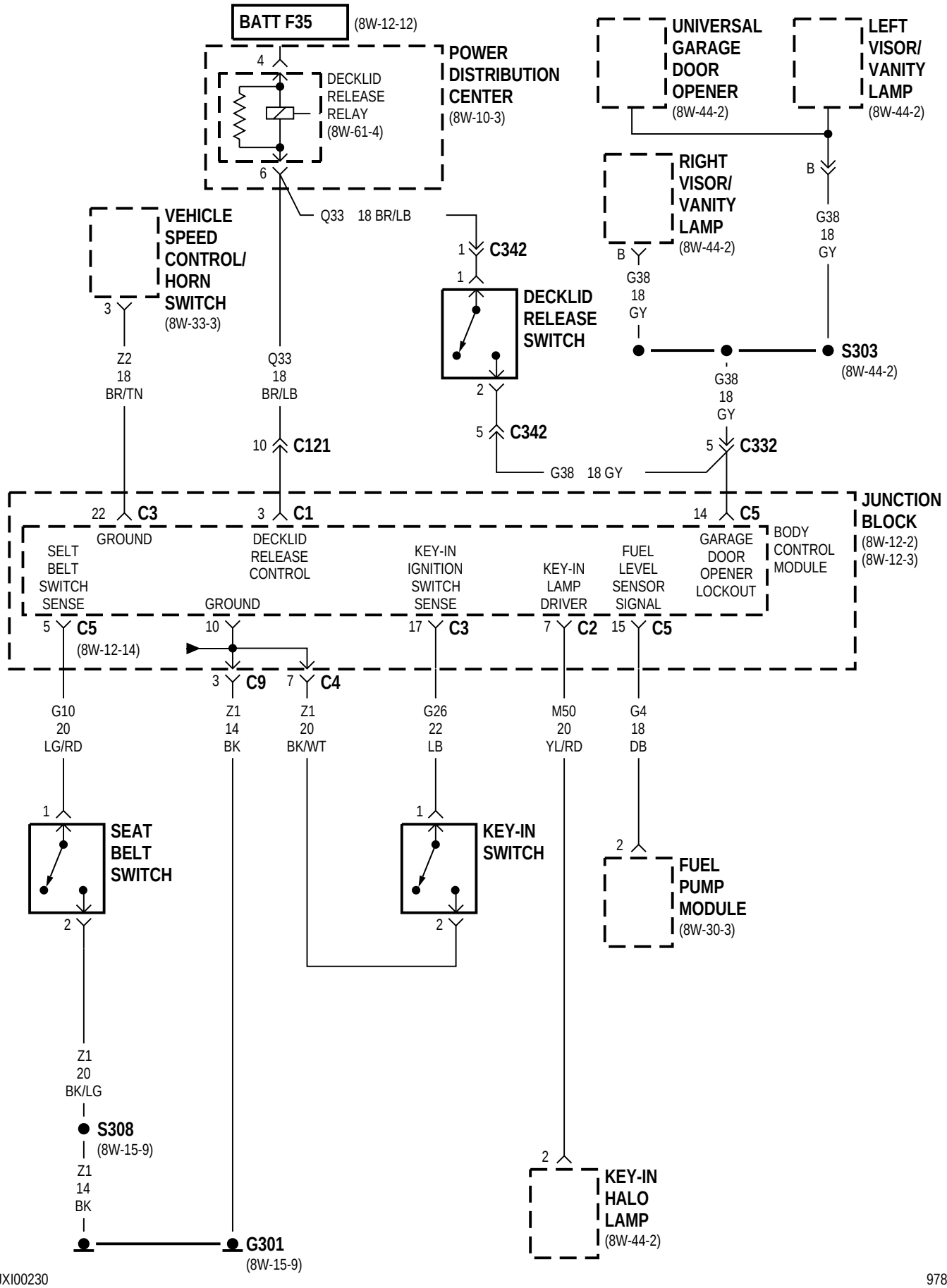

RUN-ACC F13
(8W-12-11)
F13
20
DB/GY
POWER
DISTRIBUTION
CENTER
(8W-10-3)
13
INTERMITTENT
WIPER
RELAY
(8W-53-3)
10
WIPER
HIGH/
LOW
RELAY
(8W-53-3)
15
12
INTERMITTENT
WIPER
SWITCH
(8W-53-2)
1 C1
2 C1
V10
18
BR/DB
V52
22
DG/RD
V14
20
PK/VT
V16
20
VT/PK
15 C3
10 C3
7 C1
8 C1
WASHER
PUMP
CONTROL
WINDSHIELD
WIPER
SWITCH
SIGNAL
WASHER
PUMP
CONTROL
WIPER
ON/OFF
RELAY
CONTROL
GROUND
WIPER
HIGH/LOW
RELAY
CONTROL
WIPER
PARK
SENSE
SWITCH
BODY
CONTROL
MODULE
(IN JB)
10 C1
12 C1
2 C1
V10
18
BR/DB
Z2
20
BK/LG
V55
20
WT/GY
A
2
D
WINDSHIELD
WASHER
PUMP
MOTOR
(8W-53-2)
STOP
LAMP
SWITCH
(8W-33-3)
WINDSHIELD
WIPER
MOTOR
(8W-53-3)


BATT M1
(8W-12-6)
ILLUMINATED
ENTRY
RELAY
(8W-44-3)
6
M112
20
BR/LG
1
C10
BATT A3
(8W-10-11)
3
1
HEADLAMP
DELAY
RELAY
2
5
BATT A3
(8W-10-11)
HEADLAMP
SWITCH
(8W-50-3)
1 HEAD
2 PARK
3 LOW
4 HIGH
5 FLASH TO PASS
0 OFF
1
2
0
3
4
5
7
C2
8
C2
L4
14
VT/WT
L3
14
RD/OR
2
C6
3
C6
(8W-12-11)
(8W-12-4)
JUNCTION
BLOCK
(8W-12-2)
9
5
4
1
ILLUMINATED
ENTRY
RELAY
CONTROL
HEADLAMP
DELAY
RELAY
CONTROL
DIM
SWITCH
LOW
BEAM
OUTPUT
DIM
SWITCH
HIGH
BEAM
OUTPUT
BODY
CONTROL
MODULE


BATT F33
(8W-12-8)
HEADLAMP SWITCH
1 HEAD
2 PARK
0 OFF
(8W-50-3)
1
2
0
1 C2
L7
18
BK/YL
3 C5
JUNCTION BLOCK
(8W-12-2)
(8W-12-3)
BODY CONTROL MODULE
PARK LAMP SWITCH OUTPUT
8
10 C9
4 C5
9 C1
8 C1
L7
18
BK/YL
L7
18
BK/DG
L7
18
BK/BR
4 C2
RADIO
(8W-47-2)
2
LEFT PARK/ TURN SIGNAL LAMP
(8W-50-4)
RIGHT PARK/ TURN SIGNAL LAMP
(8W-50-4)
4 C300
4 C301
B
RIGHT TAIL/ STOP LAMP
(8W-51-2)
1
LEFT HEADLAMP LEVELING MOTOR
(8W-50-4)
RIGHT HEADLAMP LEVELING MOTOR
(8W-50-4)
S406
LEFT TAIL/ STOP LAMP
(8W-51-2)
LEFT LICENSE LAMP
(8W-51-2)
RIGHT LICENSE LAMP
(8W-51-2)

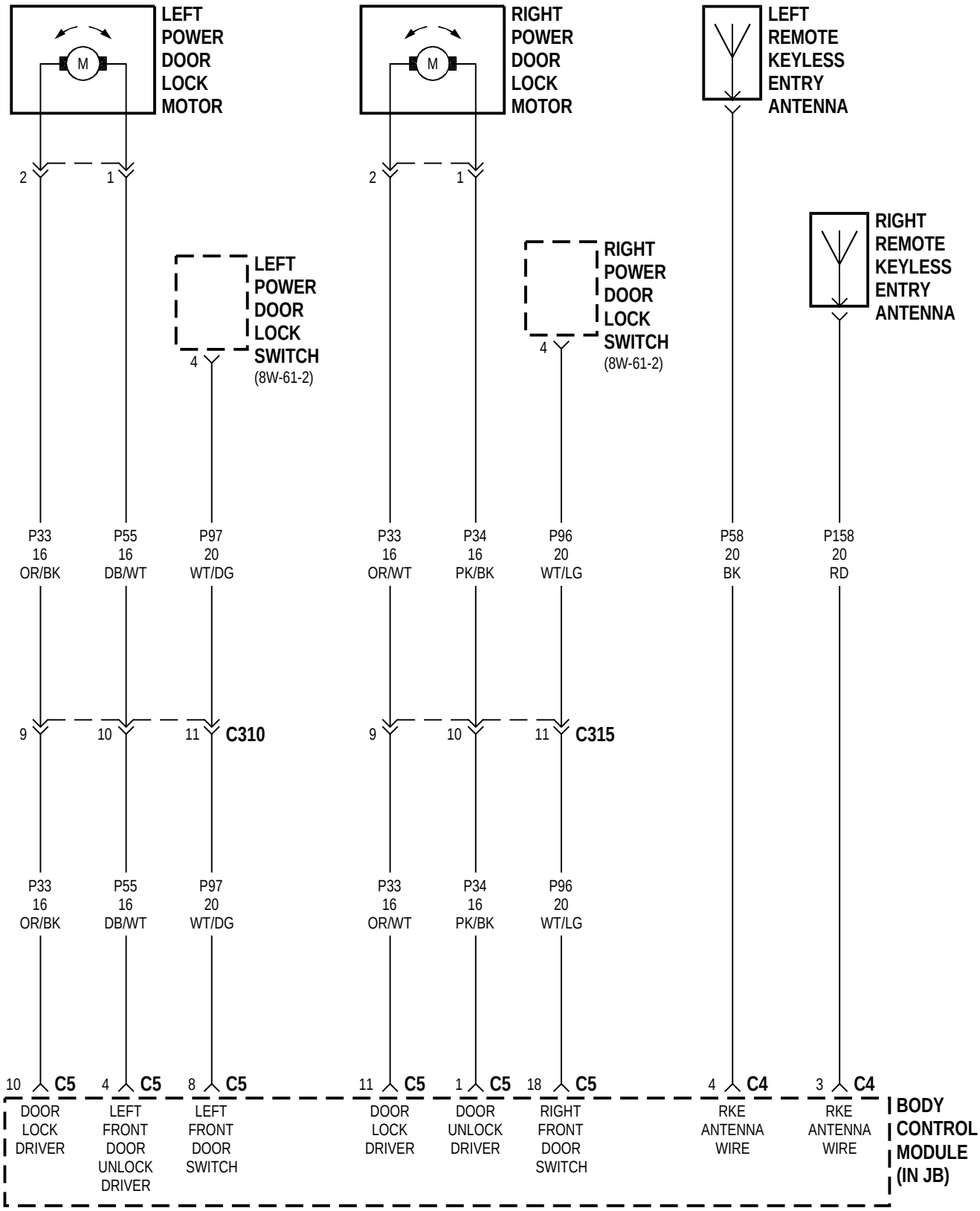

BATT F33
(8W-12-8)
INSTRUMENT CLUSTER
(8W-40-8)
GENERAL ILLUMINATION
4 C1
10 C2
Z2 18 BK/LG
E2 18 OR/YL
HEADLAMP SWITCH
1 HEAD
2 PARK
0 OFF
(8W-50-3)
PANEL LAMPS DIMMER SWITCH
1
2
0
6 C2
E19 20 RD
JUNCTION BLOCK
(8W-12-2)
14 C3
GROUND
3 C2
PANEL LAMPS DRIVER
18 C3
DIMMER SWITCH SIGNAL
BODY CONTROL MODULE
PANEL LAMPS DRIVER
10 C2
4 C2
9 C2
E2 18 OR/BK
16 C224
NOT USED
9 C342
E2 18 OR/BK
E2 18 OR/BK
E2 18 OR/BR
E2 18 OR
E2 18 OR
A
PRNDL LED
(8W-44-4)
5 C2
RADIO
(8W-47-2)
6 C2
A/C HEATER CONTROL
(8W-42-2)
1
ASH RECEIVER LAMP
(8W-44-4)

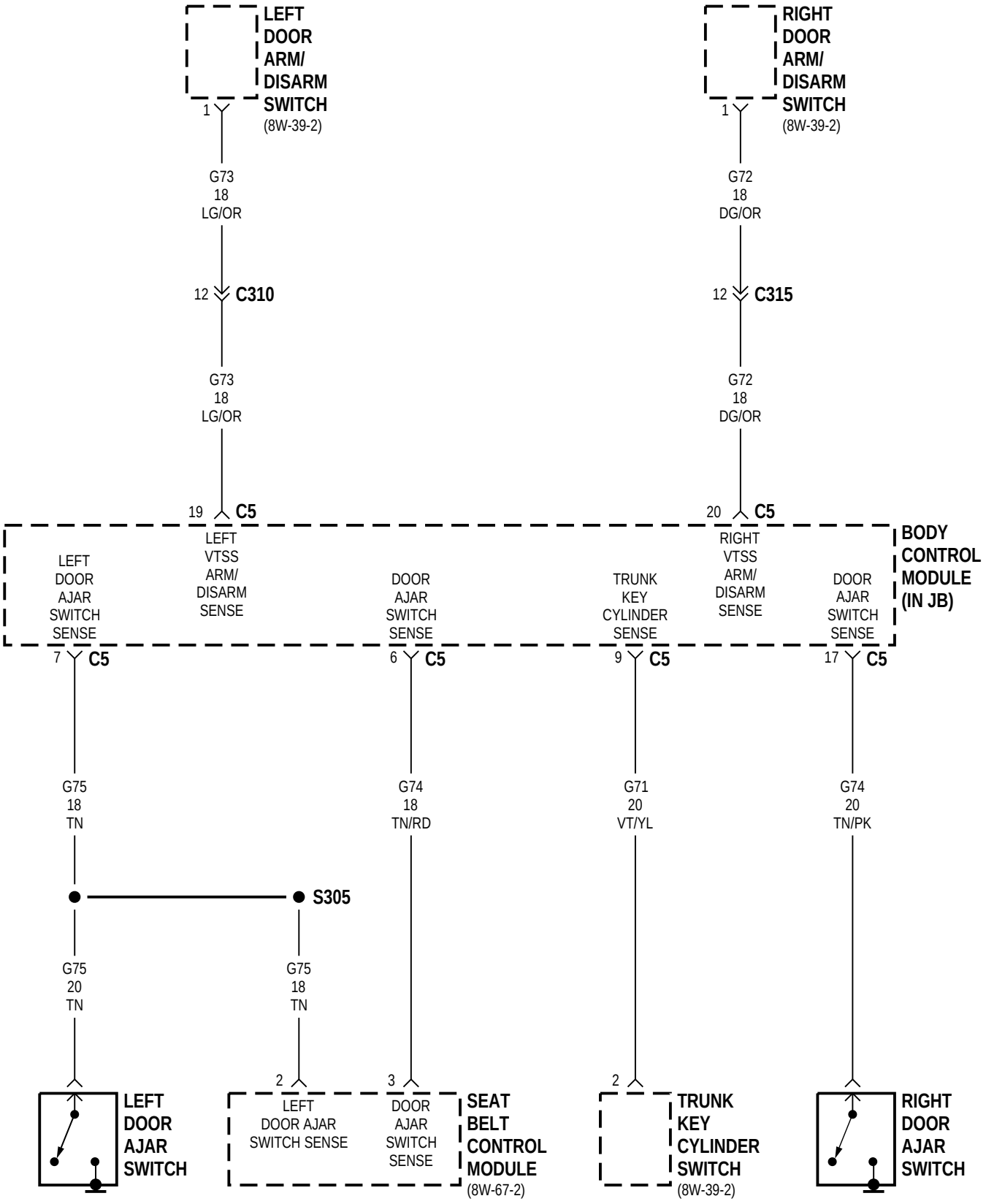

A/C HEATER CONTROL
(8W-42-2)
GROUND
HVAC MODE SENSE
A/C SWITCH SENSE
8 C1
5 C1
2 C1
Z2 22 BK/PK
C58 22 RD
C21 22 DB/OR
A/C EVAPORATOR TEMPERATURE SENSOR
1
2
C12 20 LG/BK
C57 22 GY
19 C3
5 C3
16 C3
7 C3
21 C3
GROUND
HVAC MODE SENSE
A/C SWITCH SENSE
EVAP TEMP SENSOR SIGNAL
SENSOR GROUND
BODY CONTROL MODULE (IN JB)
SENSOR GROUND
MODE DOOR FEEDBACK SIGNAL
MODE DOOR DRIVER
5V SUPPLY
COMMON DOOR DRIVER
20 C3
6 C3
2 C2
5 C2
6 C2
C57 22 GY/TN
C37 20 YL
C35 22 DG/YL
C26 20 PK/DB
C34 22 DB/YL
2
3
1
4
5
SENSOR GROUND
MODE DOOR FEEDBACK SIGNAL
MODE DOOR DRIVER
5V SUPPLY
COMMON DOOR DRIVER
MODE DOOR ACTUATOR
(8W-42-2)

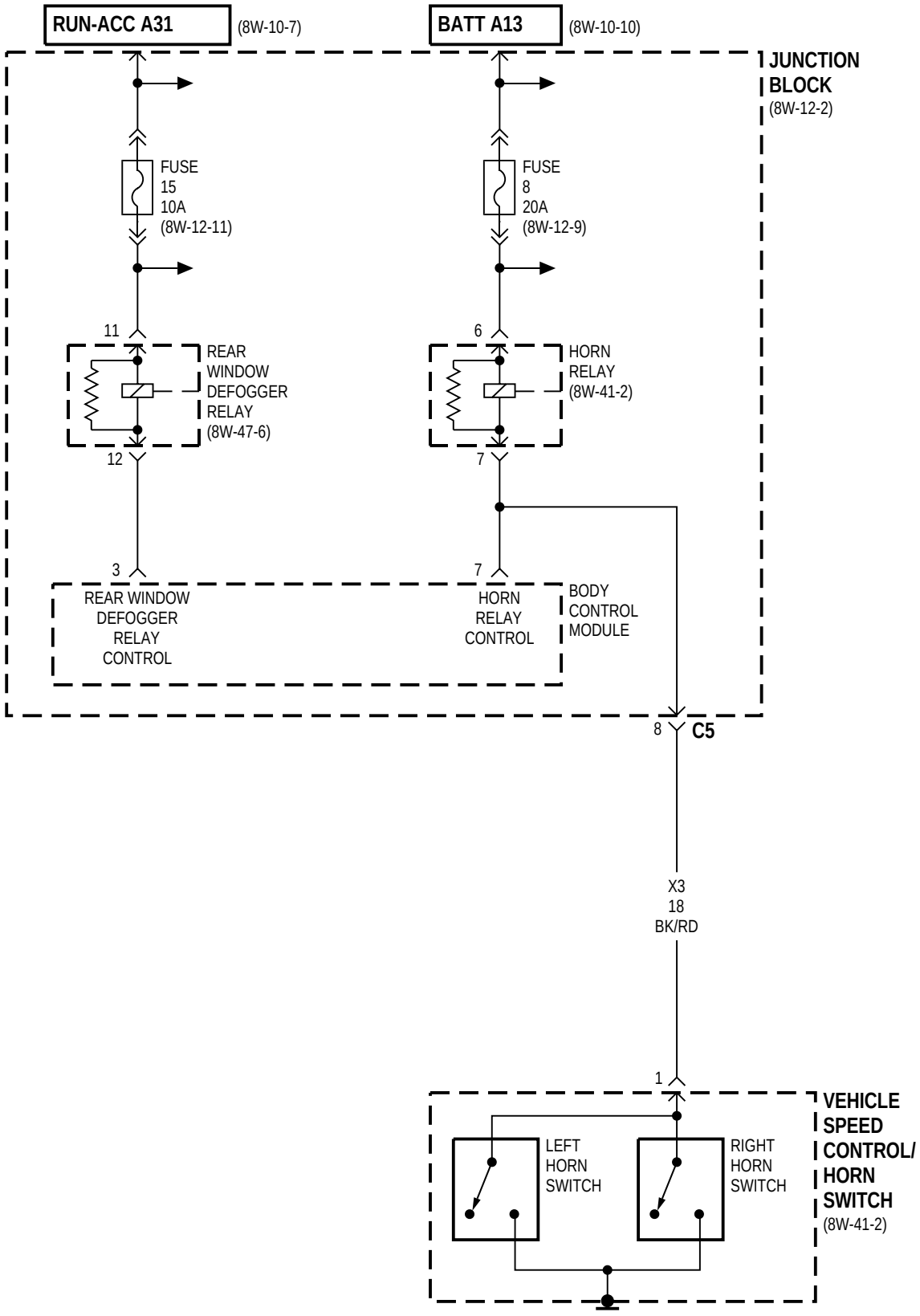


JXI00230

978W-14


LEFT POWER DOOR LOCK MOTOR
RIGHT POWER DOOR LOCK MOTOR
LEFT REMOTE KEYLESS ENTRY ANTENNA
RIGHT REMOTE KEYLESS ENTRY ANTENNA
LEFT POWER DOOR LOCK SWITCH (8W-61-2)
RIGHT POWER DOOR LOCK SWITCH (8W-61-2)
P33 16 OR/BK
P55 16 DB/WT
P97 20 WT/DG
P33 16 OR/WT
P34 16 PK/BK
P96 20 WT/LG
P58 20 BK
P158 20 RD
C310
C315
C5
C4
DOOR LOCK DRIVER
LEFT FRONT DOOR UNLOCK DRIVER
LEFT FRONT DOOR SWITCH
DOOR UNLOCK DRIVER
RIGHT FRONT DOOR SWITCH
RKE ANTENNA WIRE
BODY CONTROL MODULE (IN JB)


LEFT DOOR ARM/ DISARM SWITCH
(8W-39-2)
1
G73
18
LG/OR
12 C310
G73
18
LG/OR
19 C5
RIGHT DOOR ARM/ DISARM SWITCH
(8W-39-2)
1
G72
18
DG/OR
12 C315
G72
18
DG/OR
20 C5
BODY CONTROL MODULE (IN JB)
LEFT DOOR AJAR SWITCH SENSE
7 C5
LEFT VTSS ARM/ DISARM SENSE
DOOR AJAR SWITCH SENSE
6 C5
TRUNK KEY CYLINDER SENSE
9 C5
RIGHT VTSS ARM/ DISARM SENSE
DOOR AJAR SWITCH SENSE
17 C5
G75
18
TN
G74
18
TN/RD
G71
20
VT/YL
G74
20
TN/PK
S305
G75
20
TN
G75
18
TN
LEFT DOOR AJAR SWITCH
2
3
LEFT DOOR AJAR SWITCH SENSE
DOOR AJAR SWITCH SENSE
SEAT BELT CONTROL MODULE
(8W-67-2)
2
TRUNK KEY CYLINDER SWITCH
(8W-39-2)
RIGHT DOOR AJAR SWITCH


RUN-ACC A31
(8W-10-7)
BATT A13
(8W-10-10)
JUNCTION BLOCK
(8W-12-2)
FUSE 15 10A (8W-12-11)
FUSE 8 20A (8W-12-9)
11
6
REAR WINDOW DEFOGGER RELAY (8W-47-6)
HORN RELAY (8W-41-2)
12
7
3
7
REAR WINDOW DEFOGGER RELAY CONTROL
HORN RELAY CONTROL
BODY CONTROL MODULE
8
C5
X3
18
BK/RD
1
LEFT HORN SWITCH
RIGHT HORN SWITCH
VEHICLE SPEED CONTROL/ HORN SWITCH
(8W-41-2)

8W-45 BODY CONTROL MODULE

INDEX

page

DESCRIPTION AND OPERATION
DOOR AJAR WARNING 13
DOOR LOCK INHIBIT 14
EXTERIOR LAMP-ON WARNING 13
FUNERAL MODE DISPLAY ILLUMINATION 14
HELPFUL INFORMATION 14
ILLUMNATED ENTRY 13
INSTRUMENT PANEL LAMP DIMMING 14
INTRODUCTION 13
KEY-IN IGNITION WARNING 14
SEAT BELT WARNING 13
VEHICLE IMMOBILIZER MODULE 14

DESCRIPTION AND OPERATION

INTRODUCTION

The Body Control Module (BCM) is used to supply the vehicles occupants with visual and audible information, control various vehicle functions, and provide a centralized power distribution for the passenger compartment. To both provide and receive vehicle information the BCM is interfaced to the CCD Bus.

Power for the BCM is supplied from four sources. One is the M1 circuit. This circuit is HOT at all times, and is the Ignition-Off Draw (IOD) circuit. This circuit is protected by a 10 amp fuse located in cavity 5 of the junction block.

Power is also supplied to the BCM on circuit A21. This circuit is HOT when the ignition switch is in the START/RUN position only, and connects from the ignition switch to the BCM. Power for the A21 circuit is supplied by circuit A1. Circuit A1 is connected between the PDC and the ignition switch and is protected by a 20 amp fuse located in cavity 8 of the PDC.

Circuit F11, which is HOT when the ignition switch is in the OFF/RUN/START position, supplies a constant feed to the BCM. This circuit is protected by a 10 amp fuse located in cavity 11 of the junction block. Power for the fuse is supplied on circuit A81 from the ignition switch. Circuit A81 receives its power from circuit A1 which originates in the PDC and is protected by a 20 amp fuse located in cavity 8.

Circuit F135 also supplies power to the BCM and is protected by a 15 amp fuse located in cavity 9 of the junction block. This circuit is used for the feed to the power door lock motors.

Ground for the BCM is provided by circuits Z1 and Z2. These circuits terminate at the instrument panel left side cowl.

CCD Bus interface is accomplished on circuits D1 and D2. The D1 circuit is used for Bus (+), and D2 is for Bus (-).

ILLUMNATED ENTRY

The illuminated entry relay located in the junction block is used to control the ground path for the interior lamps. Power for the relay is supplied on circuit M1. This is the Ignition-Off Draw (IOD) circuit and is protected by a 10 amp fuse located in cavity 5 of the junction block.

Ground for the relay is supplied on circuit M112. This circuit connects from the relay to the Body Control Module (BCM). When the BCM provides a ground path for the relay, circuits M2 and Z1 are connected illuminating the interior lamps.

SEAT BELT WARNING

The seat belt chime is used to indicate to the operator that the seat belt is not fastened when the ignition switch is in the RUN position. The seat belt switch, located in the left B-Pillar, is normally OPEN with the seat belt buckled. Circuit G10 is connected between the Body Control Module (BCM) and the switch. Ground for the switch is provided on circuit Z1. The Z1 circuit terminates at the deck lid ground.

EXTERIOR LAMP-ON WARNING

The exterior lamp ON chime is used to indicate to the operator that the lamps are ON with the drivers door OPEN and the key removed from the ignition. The Body Control Module (BCM) uses information from circuit L7 to determine if the lamps are ON, and circuit G75 for drivers door ajar. The chime function will not operate when the headlamp delay feature is active.

DOOR AJAR WARNING

This feature is used to alert the operator the drivers door is ajar while the vehicle is in motion. The Body Control Module (BCM) uses information on vehicle speed from the CCD Bus and circuit G75 which connects to the drivers door ajar switch.

DESCRIPTION AND OPERATION (Continued)

DOOR LOCK INHIBIT

When the Key-In switch is CLOSED (circuit G26 connected to circuit Z1) the Body Control Module (BCM) ignores the operators request for power door lock operation.

KEY-IN IGNITION WARNING

The Key-In chime is used to indicate to the operator that the key is in the ignition with the driver's door OPEN. If the key is in the ignition, a ground path is completed from the G26 circuit at the Body Control Module (BCM), through the CLOSED switch, to the Z1 circuit. The Z1 circuit is the ground circuit and terminates at the body ground located at the left kick panel.

When the driver's door is open the normally OPEN door ajar switch CLOSES completing a path to ground on circuit G75. The BCM processes this information and turns on the chime.

FUNERAL MODE DISPLAY ILLUMINATION

The Body Control Module (BCM) controls the intensity of the instrument cluster vacuum florescent displays. This is accomplished using the input from the headlamp dimmer switch on circuit E19. When the exterior lamps are ON, and the dimmer switch is moved to the high end of it's travel, the BCM sends a message over the CCD Bus to the instrument cluster for full lamp intensity.

INSTRUMENT PANEL LAMP DIMMING

The Body Control Module (BCM) controls the instrument panel lamp intensity using input from the dimmer switch, circuit E19. The BCM uses the CCD Bus to send a signal to the instrument cluster for proper lamp intensity.

VEHICLE IMMOBILIZER MODULE

The vehicle immobilizer module is interfaces with the Body Control Module (BCM). Circuits D1 and D2 are used to provide CCD communications between the BCM and the module. Ground for the module is supplied on circuit Z1.

Battery voltage for the module is supplied on circuit A15. This circuit is HOT at all times and protected by a 20 amp fuse located in the Power Distribution Center (PDC). Circuit F18 is used to provide a RUN/START input to the module.

Circuit G37 is connected between the module and the Powertrain Control Module (PCM). Circuit P102 is used as a wake up signal from the BCM.

HELPFUL INFORMATION

Refer to the appropriate group of the Service Manual of the Diagnostic Test Procedures Manual.

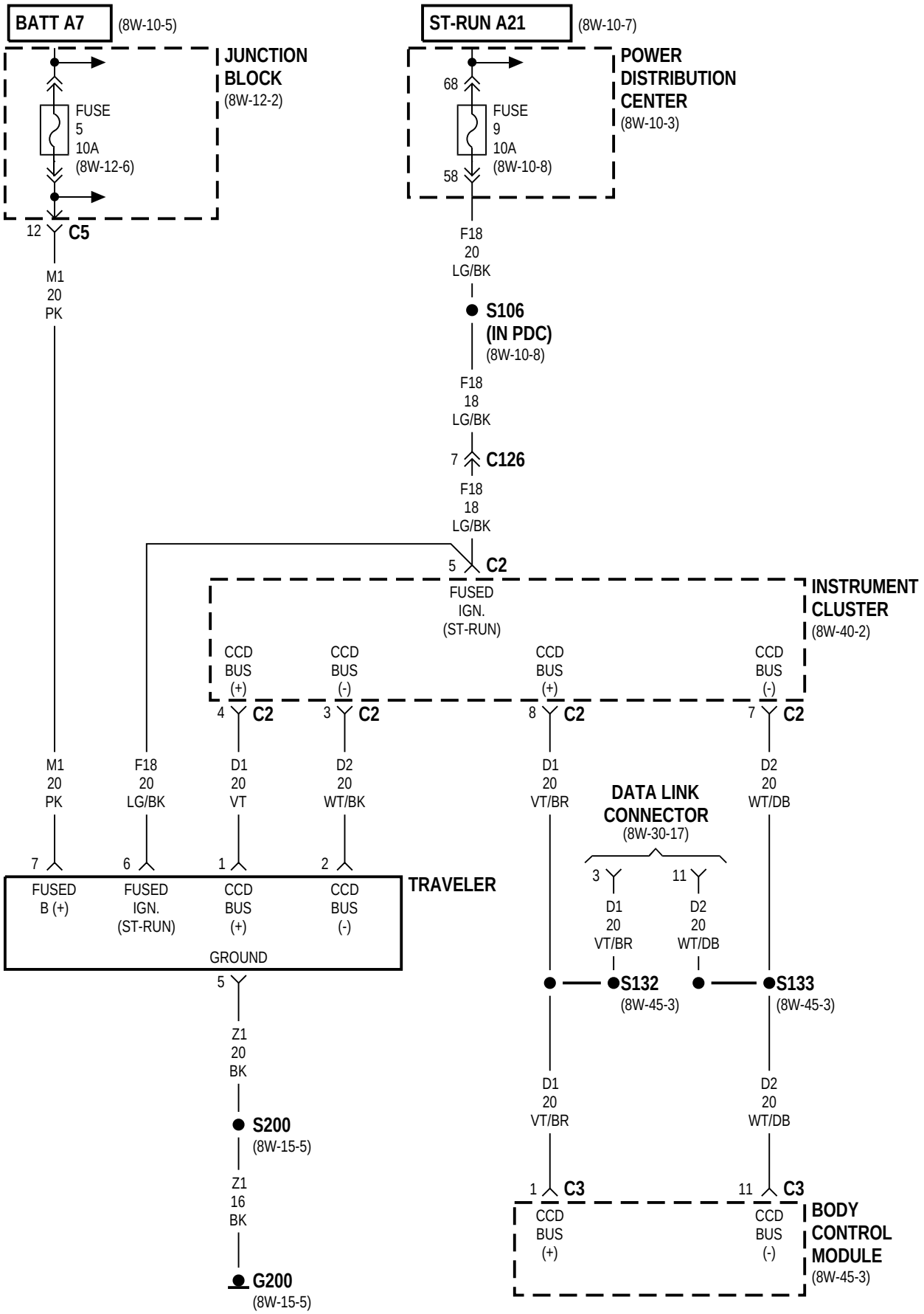
8W-46 TRAVELER

INDEX

page

SCHEMATICS AND DIAGRAMS **1**
DESCRIPTION AND OPERATION **3**

Component	Page
Body Control Module	8W-46-2
Data Link Connector	8W-46-2
Fuse 5	8W-46-2
Fuse 9	8W-46-2
G200	8W-46-2
Instrument Cluster	8W-46-2
Junction Block	8W-46-2
Power Distribution Center	8W-46-2
S106	8W-46-2
S132	8W-46-2
S133	8W-46-2
S200	8W-46-2
Traveler	8W-46-2


BATT A7
(8W-10-5)
JUNCTION BLOCK
(8W-12-2)
FUSE 5 10A
(8W-12-6)
12
C5
M1 20 PK
ST-RUN A21
(8W-10-7)
POWER DISTRIBUTION CENTER
(8W-10-3)
68
FUSE 9 10A
(8W-10-8)
58
F18 20 LG/BK
S106 (IN PDC)
(8W-10-8)
F18 18 LG/BK
7
C126
F18 18 LG/BK
5
C2
FUSED IGN. (ST-RUN)
INSTRUMENT CLUSTER
(8W-40-2)
CCD BUS (+)
CCD BUS (-)
CCD BUS (+)
CCD BUS (-)
4 C2
3 C2
8 C2
7 C2
M1 20 PK
F18 20 LG/BK
D1 20 VT
D2 20 WT/BK
D1 20 VT/BR
D2 20 WT/DB
DATA LINK CONNECTOR
(8W-30-17)
7
6
1
2
3
11
FUSED B (+)
FUSED IGN. (ST-RUN)
CCD BUS (+)
CCD BUS (-)
TRAVELER
GROUND
5
Z1 20 BK
S200
(8W-15-5)
Z1 16 BK
G200
(8W-15-5)
S132
(8W-45-3)
S133
(8W-45-3)
D1 20 VT/BR
D2 20 WT/DB
1 C3
11 C3
CCD BUS (+)
CCD BUS (-)
BODY CONTROL MODULE
(8W-45-3)

8W-46 TRAVELER

DESCRIPTION AND OPERATION

TRAVELER

Battery voltage for the traveler is supplied from two (2) sources. One is the M1 circuit. This is the Ignition-Off Draw (IOD) circuit and is protected by a 10 amp fuse located in the junction block. This circuit is HOT at all times.

Circuit A21 also supplies battery voltage to the traveler when the ignition switch is in the START/RUN position.

Ground for the traveler is supplied on circuit Z1.

To allow the traveler to send and receive information it is interfaced with the CCD Bus. Circuit D1 is used for CCD (+), and circuit D2 is used for CCD (-).

Illumination lamps internal to the traveler are controlled by circuit E2. This circuit is an output form the Body Control Module (BCM).

Circuit C4 supplies a blower motor ON/OFF sense to the traveler.

8W-47 AUDIO SYSTEM

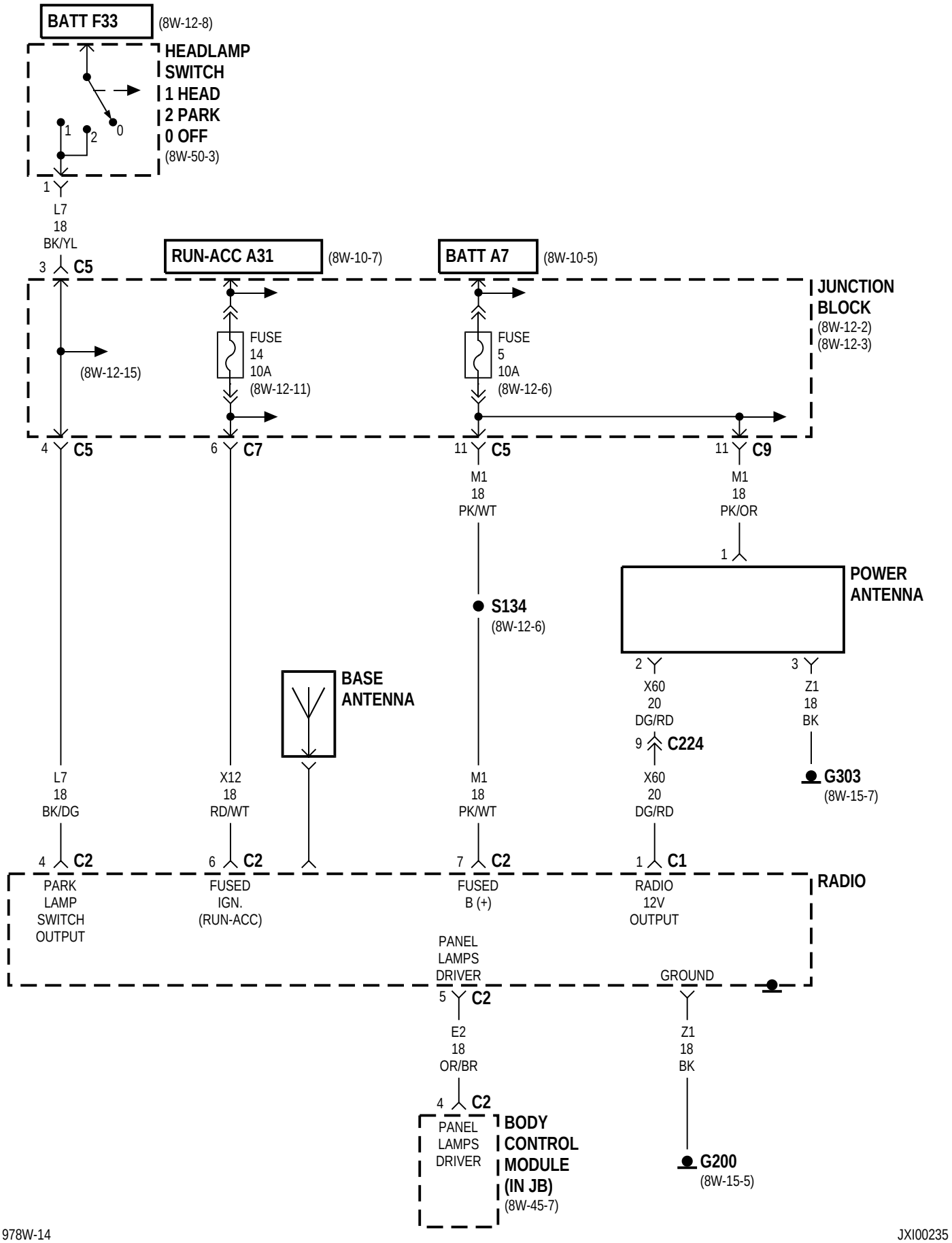
INDEX

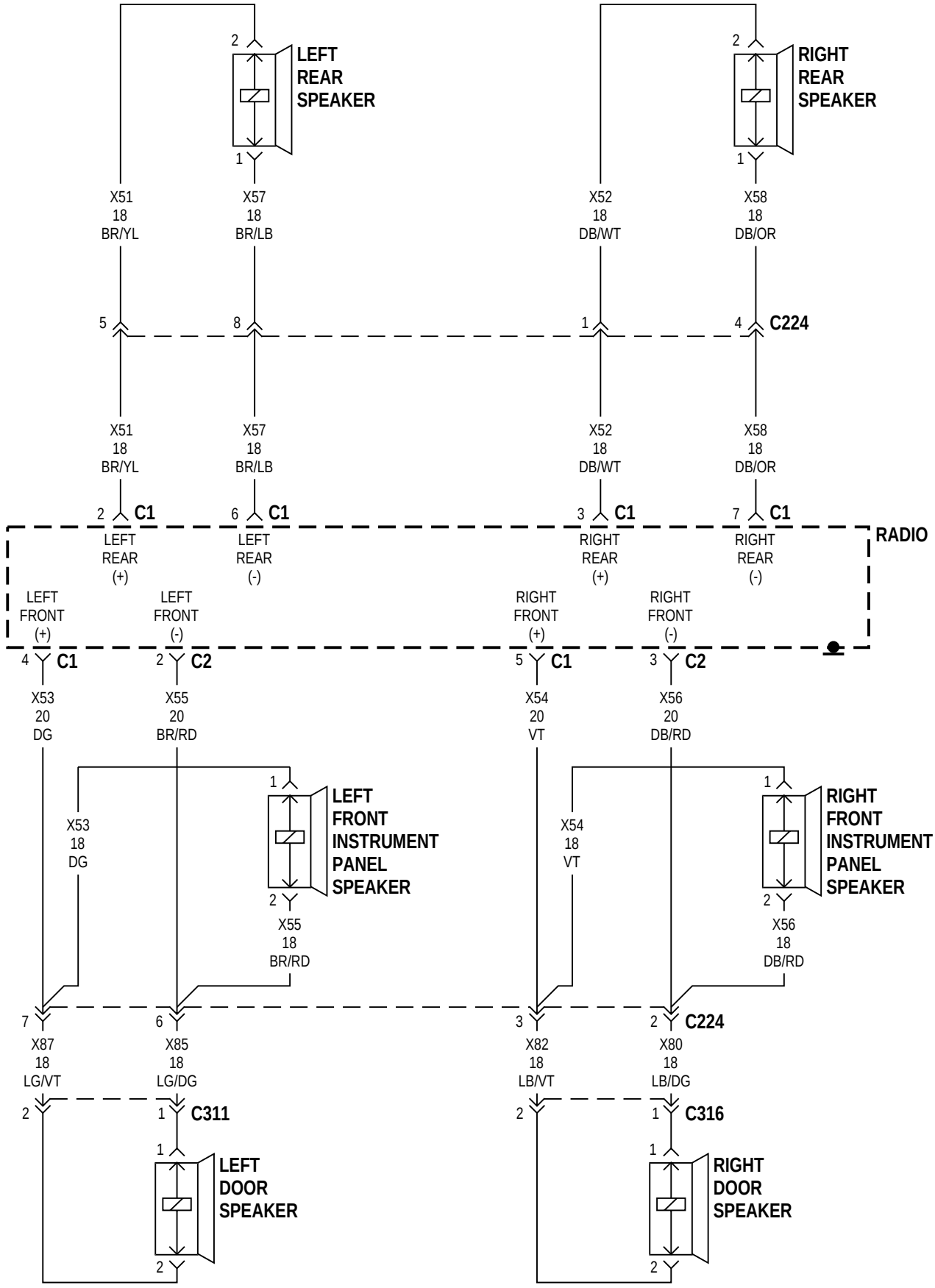
page

SCHEMATICS AND DIAGRAMS 1
DESCRIPTION AND OPERATION 7

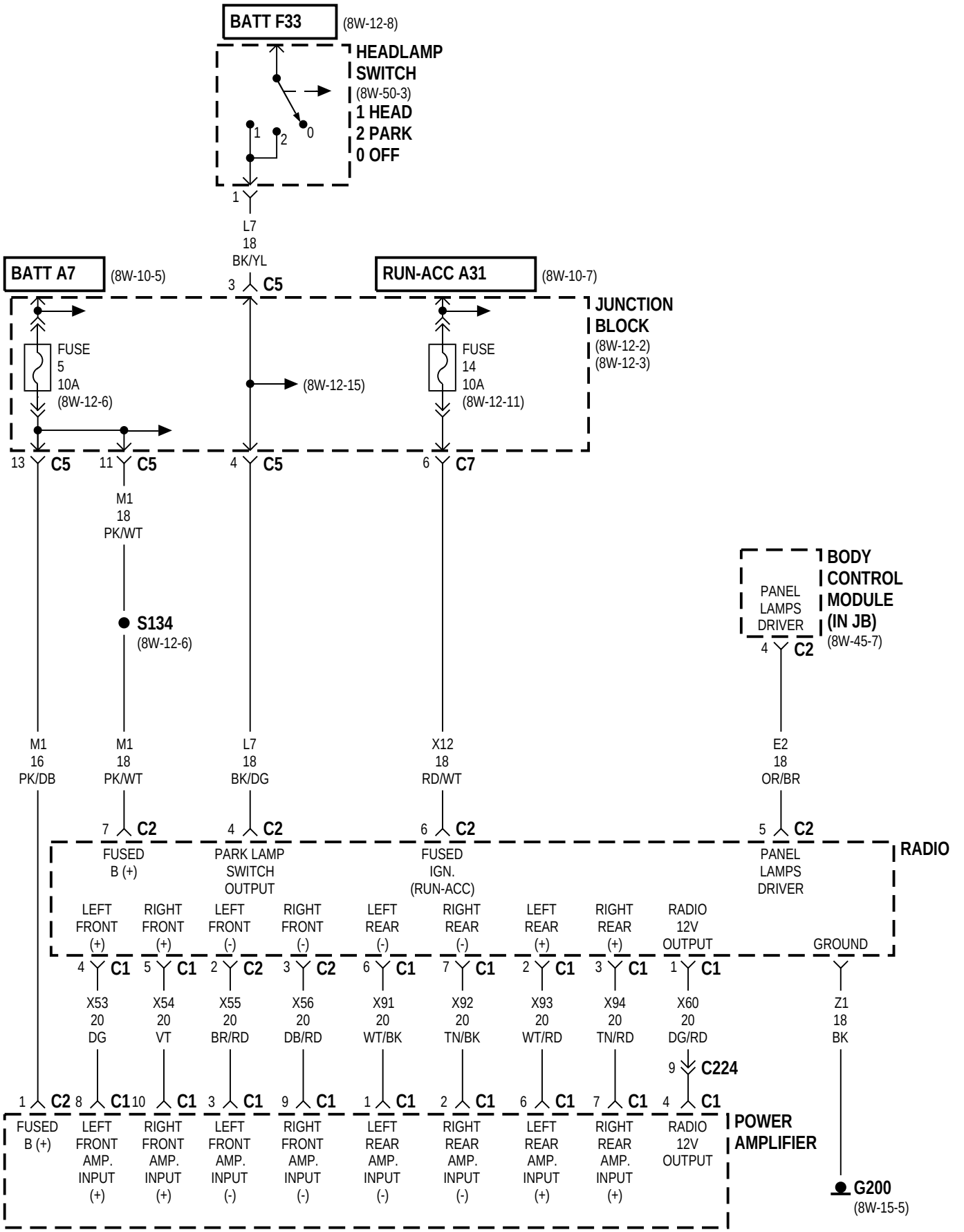
Component	Page
A/C Heater Control	8W-47-6
Base Antenna	8W-47-2
Body Control Module	8W-47-2, 4, 6
Fuse 5	8W-47-2, 4, 6
Fuse 6	8W-47-6
Fuse 14	8W-47-2, 4
Fuse 15	8W-47-6
Fuse 16	8W-47-6
G200	8W-47-2, 4, 6
G301	8W-47-6
G303	8W-47-2, 6
Headlamp Switch	8W-47-2, 4
Junction Block	8W-47-2, 4, 6
Left Door Speaker	8W-47-3, 5
Left Front Instrument Panel Speaker	8W-47-3, 5
Left Power Mirror	8W-47-6
Left Rear Speaker	8W-47-3, 5
Power Amplifier	8W-47-4, 5, 6
Power Antenna	8W-47-2, 6
Power Distribution Center	8W-47-6
Radio	8W-47-2, 3, 4, 6
Rear Window Defogger	8W-47-6
Rear Window Defogger Relay	8W-47-6
Right Door Speaker	8W-47-3, 5
Right Front Instrument Panel Speaker	8W-47-3, 5
Right Power Mirror	8W-47-6
Right Rear Speaker	8W-47-3, 5
S134	8W-47-2, 4
S308	8W-47-6
S310	8W-47-6
S311	8W-47-6
S402	8W-47-6
S403	8W-47-6
Window Timer Module	8W-47-6

STANDARD

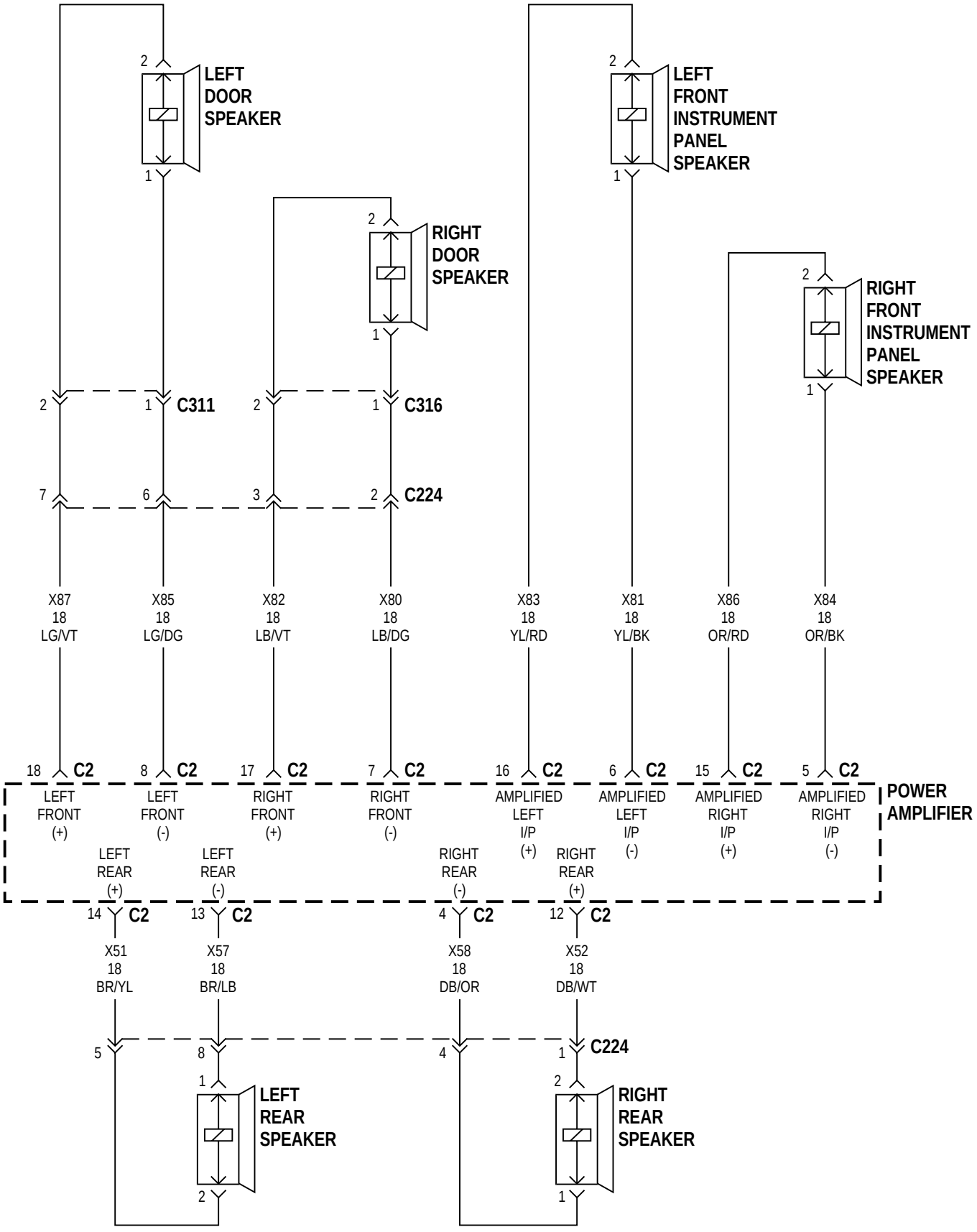

BATT F33
(8W-12-8)
HEADLAMP SWITCH
1 HEAD
2 PARK
0 OFF
(8W-50-3)
1
2
0
1
L7
18
BK/YL
3 C5
RUN-ACC A31
(8W-10-7)
BATT A7
(8W-10-5)
JUNCTION BLOCK
(8W-12-2)
(8W-12-3)
(8W-12-15)
FUSE
14
10A
(8W-12-11)
FUSE
5
10A
(8W-12-6)
4 C5
6 C7
11 C5
11 C9
M1
18
PK/WT
M1
18
PK/OR
1
POWER ANTENNA
S134
(8W-12-6)
BASE ANTENNA
2
X60
20
DG/RD
9 C224
3
Z1
18
BK
G303
(8W-15-7)
L7
18
BK/DG
X12
18
RD/WT
M1
18
PK/WT
X60
20
DG/RD
4 C2
6 C2
7 C2
1 C1
RADIO
PARK LAMP SWITCH OUTPUT
FUSED IGN. (RUN-ACC)
FUSED B (+)
RADIO 12V OUTPUT
PANEL LAMPS DRIVER
GROUND
5 C2
E2
18
OR/BR
Z1
18
BK
4 C2
PANEL LAMPS DRIVER
BODY CONTROL MODULE (IN JB)
(8W-45-7)
G200
(8W-15-5)

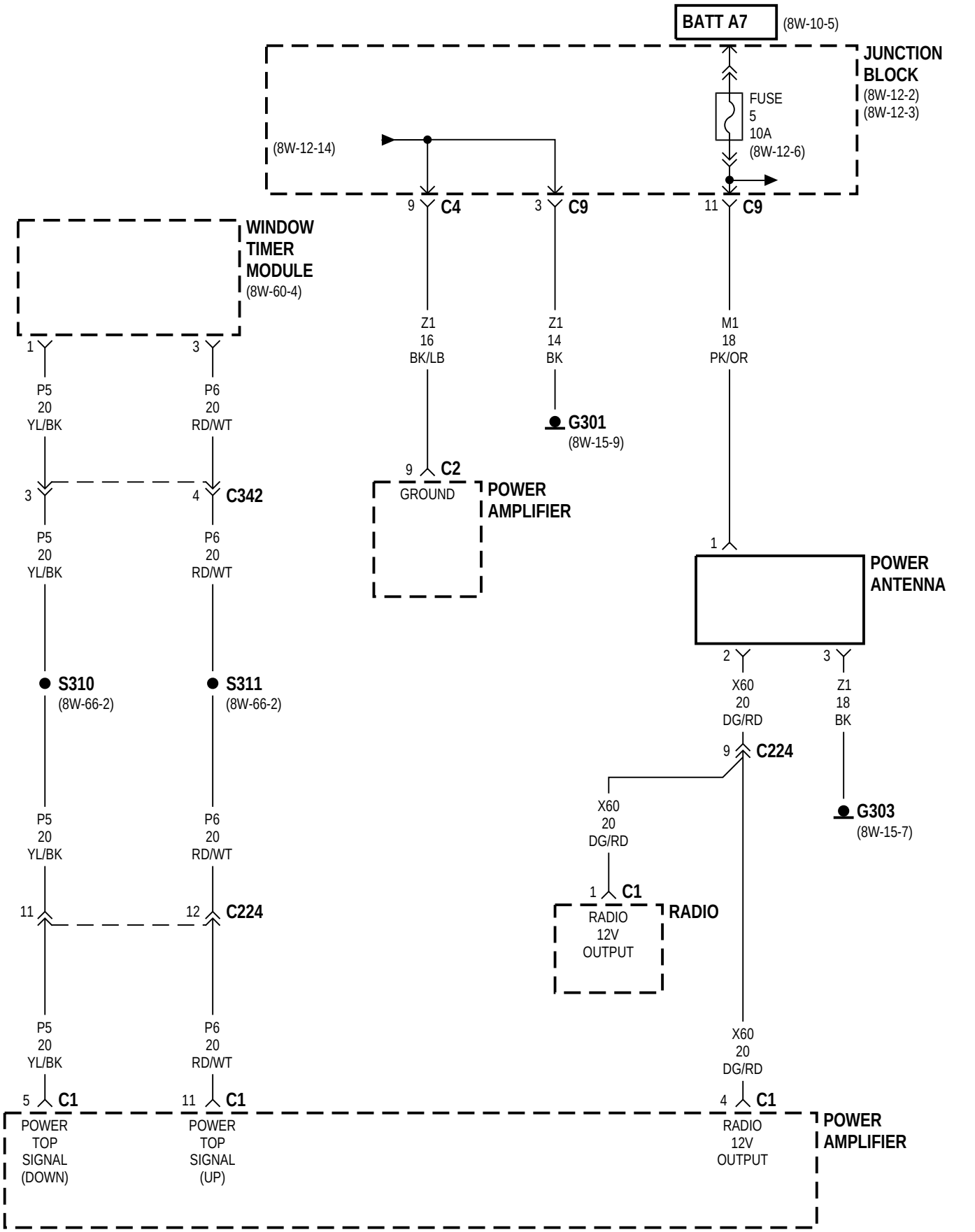

LEFT REAR SPEAKER
RIGHT REAR SPEAKER
X51 18 BR/YL
X57 18 BR/LB
X52 18 DB/WT
X58 18 DB/OR
C224
C1
RADIO
LEFT REAR (+)
LEFT REAR (-)
RIGHT REAR (+)
RIGHT REAR (-)
LEFT FRONT (+)
LEFT FRONT (-)
RIGHT FRONT (+)
RIGHT FRONT (-)
C2
X53 20 DG
X55 20 BR/RD
X54 20 VT
X56 20 DB/RD
LEFT FRONT INSTRUMENT PANEL SPEAKER
RIGHT FRONT INSTRUMENT PANEL SPEAKER
X87 18 LG/VT
X85 18 LG/DG
X82 18 LB/VT
X80 18 LB/DG
C311
C316
LEFT DOOR SPEAKER
RIGHT DOOR SPEAKER

PREMIUM


BATT F33
(8W-12-8)
HEADLAMP SWITCH
(8W-50-3)
1 HEAD
2 PARK
0 OFF
1
2
0
1
L7
18
BK/YL
3 C5
BATT A7
(8W-10-5)
RUN-ACC A31
(8W-10-7)
JUNCTION BLOCK
(8W-12-2)
(8W-12-3)
FUSE
5
10A
(8W-12-6)
(8W-12-15)
FUSE
14
10A
(8W-12-11)
13 C5
11 C5
4 C5
6 C7
M1
18
PK/WT
S134
(8W-12-6)
BODY CONTROL MODULE (IN JB)
(8W-45-7)
PANEL LAMPS DRIVER
4 C2
M1
16
PK/DB
M1
18
PK/WT
L7
18
BK/DG
X12
18
RD/WT
E2
18
OR/BR
7 C2
4 C2
6 C2
5 C2
RADIO
FUSED B (+)
PARK LAMP SWITCH OUTPUT
FUSED IGN. (RUN-ACC)
PANEL LAMPS DRIVER
LEFT FRONT (+)
RIGHT FRONT (+)
LEFT FRONT (-)
RIGHT FRONT (-)
LEFT REAR (-)
RIGHT REAR (-)
LEFT REAR (+)
RIGHT REAR (+)
RADIO 12V OUTPUT
GROUND
4 C1
5 C1
2 C2
3 C2
6 C1
7 C1
2 C1
3 C1
1 C1
X53
20
DG
X54
20
VT
X55
20
BR/RD
X56
20
DB/RD
X91
20
WT/BK
X92
20
TN/BK
X93
20
WT/RD
X94
20
TN/RD
X60
20
DG/RD
Z1
18
BK
9 C224
1 C2
8 C1
10 C1
3 C1
9 C1
1 C1
2 C1
6 C1
7 C1
4 C1
POWER AMPLIFIER
FUSED B (+)
LEFT FRONT AMP. INPUT (+)
RIGHT FRONT AMP. INPUT (+)
LEFT FRONT AMP. INPUT (-)
RIGHT FRONT AMP. INPUT (-)
LEFT REAR AMP. INPUT (-)
RIGHT REAR AMP. INPUT (-)
LEFT REAR AMP. INPUT (+)
RIGHT REAR AMP. INPUT (+)
RADIO 12V OUTPUT
G200
(8W-15-5)

PREMIUM


LEFT DOOR SPEAKER
RIGHT DOOR SPEAKER
LEFT FRONT INSTRUMENT PANEL SPEAKER
RIGHT FRONT INSTRUMENT PANEL SPEAKER
C311
C316
C224
X87 18 LG/VT
X85 18 LG/DG
X82 18 LB/VT
X80 18 LB/DG
X83 18 YL/RD
X81 18 YL/BK
X86 18 OR/RD
X84 18 OR/BK
C2
LEFT FRONT (+)
LEFT FRONT (-)
RIGHT FRONT (+)
RIGHT FRONT (-)
AMPLIFIED LEFT I/P (+)
AMPLIFIED LEFT I/P (-)
AMPLIFIED RIGHT I/P (+)
AMPLIFIED RIGHT I/P (-)
POWER AMPLIFIER
LEFT REAR (+)
LEFT REAR (-)
RIGHT REAR (-)
RIGHT REAR (+)
X51 18 BR/YL
X57 18 BR/LB
X58 18 DB/OR
X52 18 DB/WT
LEFT REAR SPEAKER
RIGHT REAR SPEAKER


BATT A7
(8W-10-5)
JUNCTION BLOCK
(8W-12-2)
(8W-12-3)
FUSE 5 10A
(8W-12-6)
(8W-12-14)
9 C4
3 C9
11 C9
WINDOW TIMER MODULE
(8W-60-4)
Z1 16 BK/LB
Z1 14 BK
M1 18 PK/OR
G301
(8W-15-9)
9 C2
GROUND
POWER AMPLIFIER
1
3
P5 20 YL/BK
P6 20 RD/WT
3 C342
4 C342
S310
(8W-66-2)
S311
(8W-66-2)
11 C224
12 C224
1
POWER ANTENNA
2
3
X60 20 DG/RD
Z1 18 BK
9 C224
G303
(8W-15-7)
X60 20 DG/RD
1 C1
RADIO 12V OUTPUT
RADIO
5 C1
11 C1
4 C1
POWER TOP SIGNAL (DOWN)
POWER TOP SIGNAL (UP)
RADIO 12V OUTPUT
POWER AMPLIFIER

8W-47 AUDIO SYSTEM

INDEX

page

DESCRIPTION AND OPERATION
CCD BUS 7
HELPFUL INFORMATION 8
POWER AMPLIFIER 7
POWER ANTENNA 8
RADIO ILLUMINATION 7
RADIO MEMORY 7
RADIO OPERATION 7
SPEAKERS (BASE SYSTEM) 7
SPEAKERS (PREMIUM SYSTEM) 8

DESCRIPTION AND OPERATION

RADIO OPERATION

There are two audio systems offered on this vehicle. The base system uses six speakers and a standard antenna. The optional system has six speakers, power amplifier, and a power antenna.

Both systems are powered by a 10 amp fuse located in cavity 14 of the junction block on circuit X12. This fuse is HOT when the ignition switch is in the ACCESSORY or RUN position.

The A31 circuit, which receives it's power from the ignition switch, on circuit A1, is protected by a 20 amp fuse located in cavity 8 of the Power Distribution Center (PDC).

Both the standard and optional radios use an external case ground. This case ground attaches to the rear of the radio and the instrument panel. There is also a ground for the radio provided on circuit Z1. This circuit attaches to the rear of the radio and terminates at the instrument panel ground.

RADIO MEMORY

Both the base and premium systems use the M1 circuit to maintain radio memory. This circuit is connected to the battery through the Power Distribution Center (PDC), and protected by a 10 amp Ignition-Off Draw (IOD) fuse. The M1 circuit is used to supply power to the Body Control Module (BCM), Power Mirrors, and the Power Door Locks. This fuse is also used in several other circuits, refer to section 8W-12 for additional information on the IOD fuse. The IOD fuse is removed during vehicle shipping to prevent excessive battery draw.

RADIO ILLUMINATION

When the parking lamps or the headlamps are ON, circuits E2 and L7 are used to power the radio illumination lamps. Circuit E2 is controlled by the Body Control Module (BCM). Circuit L7 is controlled by the park lamp switch.

CCD BUS

The CCD Bus and the universal data link connector are used for access to the diagnostic capabilities of the radio. Circuits D1 and D2 are used.

The D1 circuit is used for CCD (+) and circuit D2 is used for CCD (-).

SPEAKERS (BASE SYSTEM)

Circuits X53 and X87 are the feeds to the left front door and instrument panel speakers. Circuits X55 and X85 are the returns from the speakers to the radio.

Circuits X54 and X82 are the feeds to the right front door and instrument panel speaker. Circuits X56 and X80 are the returns from the speakers to the radio.

Circuit X51 is the feed to the left rear speaker. Circuit X57 is the return from the speaker to the radio.

Circuit X52 is the feed to the right rear speaker. Circuit X58 is the return from the speaker to the radio.

POWER AMPLIFIER

The power amplifier is used in the premium system only. It is placed between the radio and the speakers. The feed for the amplifier is provided on the F30 circuit.

The F30 circuit is protected by a 20 amp fuse located in cavity 8 of the junction block. Circuit F30 is spliced and provides power to the horns and the cigar lighter. Ground is provided on the Z1 circuit and terminates at the instrument panel left side cowl.

An additional feed input to the power amplifier is on circuit X60. This circuit is HOT when the radio is in the ON position.

Circuits P5 and P6 also connect to the power amplifier. These circuits are spliced in with the power top switch.

DESCRIPTION AND OPERATION (Continued)

SPEAKERS (PREMIUM SYSTEM)

Circuit X53 is the feed for the left front speaker to the power amplifier. Circuit X55 is the return from the amplifier to the radio.

Circuit X54 is the feed for the right front speaker to the power amplifier. Circuit X55 is the return from the amplifier to the radio.

Circuit X51 is the feed for the left rear speaker from the radio. Circuit X57 is the return from the speaker to the radio.

Circuit X52 is the feed for the right rear speaker from the radio. Circuit X58 is the return from the speaker to the radio.

Circuits X84 and X86 supply power and ground for the right front instrument panel speaker.

Circuits X83 and X81 supply power and ground for the left front instrument panel speaker.

Circuits X87 and X85 supply power and ground for the left front door speaker.

Circuits X82 and X80 supply power and ground for the right front door speaker.

POWER ANTENNA

The power antenna is used on the premium systems only. Battery feed for the antenna is provided from two different circuits.

One is the M1 circuit. The M1 circuit is used to supply power to the Body Control Module (BCM), Power Mirrors, and the Power Door Locks. This fuse is also used in several other circuits, refer to section 8W-10 for additional information on the IOD fuse. The IOD fuse is removed during vehicle shipping to prevent excessive battery draw.

The other circuit is the X60 circuit from the radio. This circuit is HOT when the radio is in the ON position. Ground for the antenna is a case ground.

HELPFUL INFORMATION

- Check for a blown 10 amp fuse in cavity 14 of the junction block
- Check the 20 amp fuse located in cavity 8 of the PDC
- Check the case ground attached to the rear of the radio
- Check the 10 amp IOD fuse located in cavity 5 of the junction block

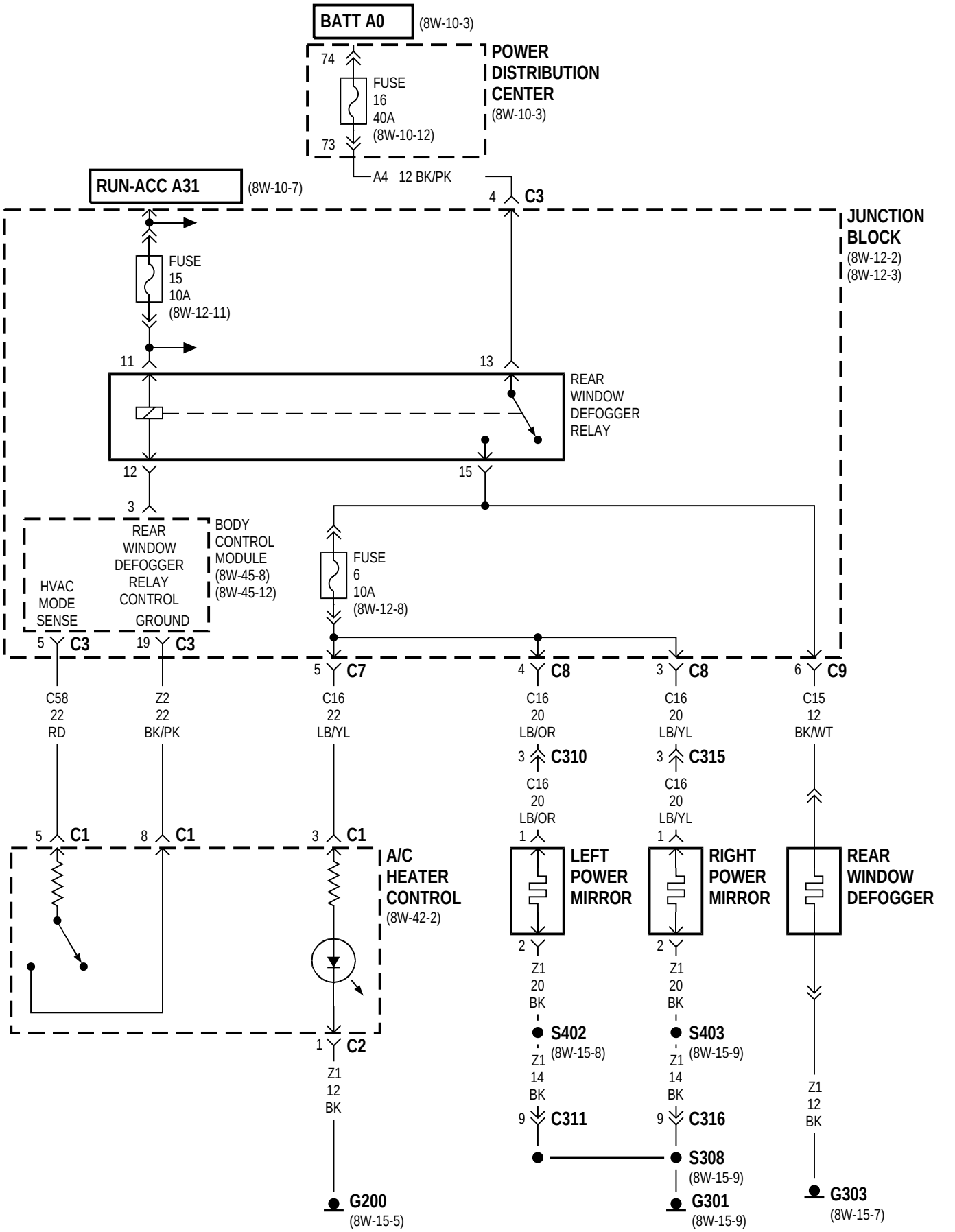
8W-48 REAR WINDOW DEFOGGER

INDEX

page

SCHEMATICS AND DIAGRAMS **1**
DESCRIPTION AND OPERATION **3**

Component	Page
A/C Heater Control	8W-48-2
Body Control Module	8W-48-2
Fuse 6	8W-48-2
Fuse 15	8W-48-2
Fuse 16	8W-48-2
G200	8W-48-2
G301	8W-48-2
G303	8W-48-2
Junction Block	8W-48-2
Left Power Mirror	8W-48-2
Power Distribution Center	8W-48-2
Rear Window Defogger	8W-48-2
Rear Window Defogger Relay	8W-48-2
Right Power Mirror	8W-48-2
S308	8W-48-2
S402	8W-48-2
S403	8W-48-2


BATT A0
(8W-10-3)
74
FUSE
16
40A
(8W-10-12)
73
POWER
DISTRIBUTION
CENTER
(8W-10-3)
A4 12 BK/PK
RUN-ACC A31
(8W-10-7)
4 C3
JUNCTION
BLOCK
(8W-12-2)
(8W-12-3)
FUSE
15
10A
(8W-12-11)
11
13
REAR
WINDOW
DEFOGGER
RELAY
12
15
3
BODY
CONTROL
MODULE
(8W-45-8)
(8W-45-12)
REAR
WINDOW
DEFOGGER
RELAY
CONTROL
HVAC
MODE
SENSE
GROUND
FUSE
6
10A
(8W-12-8)
5 C3
19 C3
5 C7
4 C8
3 C8
6 C9
C58
22
RD
Z2
22
BK/PK
C16
22
LB/YL
C16
20
LB/OR
C16
20
LB/YL
C15
12
BK/WT
3 C310
3 C315
C16
20
LB/OR
C16
20
LB/YL
5 C1
8 C1
3 C1
A/C
HEATER
CONTROL
(8W-42-2)
1
LEFT
POWER
MIRROR
1
RIGHT
POWER
MIRROR
REAR
WINDOW
DEFOGGER
2
2
Z1
20
BK
Z1
20
BK
S402
(8W-15-8)
S403
(8W-15-9)
Z1
14
BK
Z1
14
BK
9 C311
9 C316
S308
(8W-15-9)
1 C2
Z1
12
BK
Z1
12
BK
G200
(8W-15-5)
G301
(8W-15-9)
G303
(8W-15-7)

8W-48 REAR WINDOW DEFOGGER

DESCRIPTION AND OPERATION

REAR WINDOW DEFOGGER

The rear window defogger system uses a relay located in the junction block. This relay is protected by two fuses and controlled by the Body Control Module (BCM). When the operator pushes the ON switch for the rear window defogger a signal is sent to the BCM on circuit C58. The A/C- Heater control uses resistors internal to the unit and the BCM measures the voltage on the circuit to determine operator request. Ground for the control is provided on circuit Z2.

When the signal is processed by the BCM it grounds circuit C80. This is the coil of the relay. Power for the coil is provided on circuit F13. This circuit also supplies power for the windshield wipers and combo flasher. Circuit F13 is protected by a 10 amp fuse in cavity 15 of the junction block and is HOT in the ACCESSORY and RUN position only. Power for the fuse is provided on circuit A31 from the ignition switch.

The A31 circuit receives power from the A1 circuit which originates in the Power Distribution Center (PDC) and is protected by a 20 amp fuse located in cavity 8.

As current flows through the relay, contacts in the relay CLOSE connecting circuits A4 and C15. The A4 circuit is protected by a 40 amp fuse located in cavity 16 of the PDC. Circuit C15 connects from the relay to the rear window defogger grid and the heated mirrors.

The rear window defogger grid consists of two BUS bars and grid lines that form a parallel circuit. When current flows through the grid the grid lines heat up and transfer the heat to the window. Ground for the grid is provided on circuit Z1 and terminates at the right rear wheel well.

When the system is in operation a Light Emitting Diode (LED) located in the A/C-Heater control is illuminated.

HELPFUL INFORMATION

- Check the 10 amp fuse located in the junction block cavity 15
- Check the 40 amp fuse located in cavity 16 of the PDC
- Check for broken grid lines on the window
- Check for a broken BUS bar or disconnected leads at the window
- Check for a good ground at the right rear wheel well

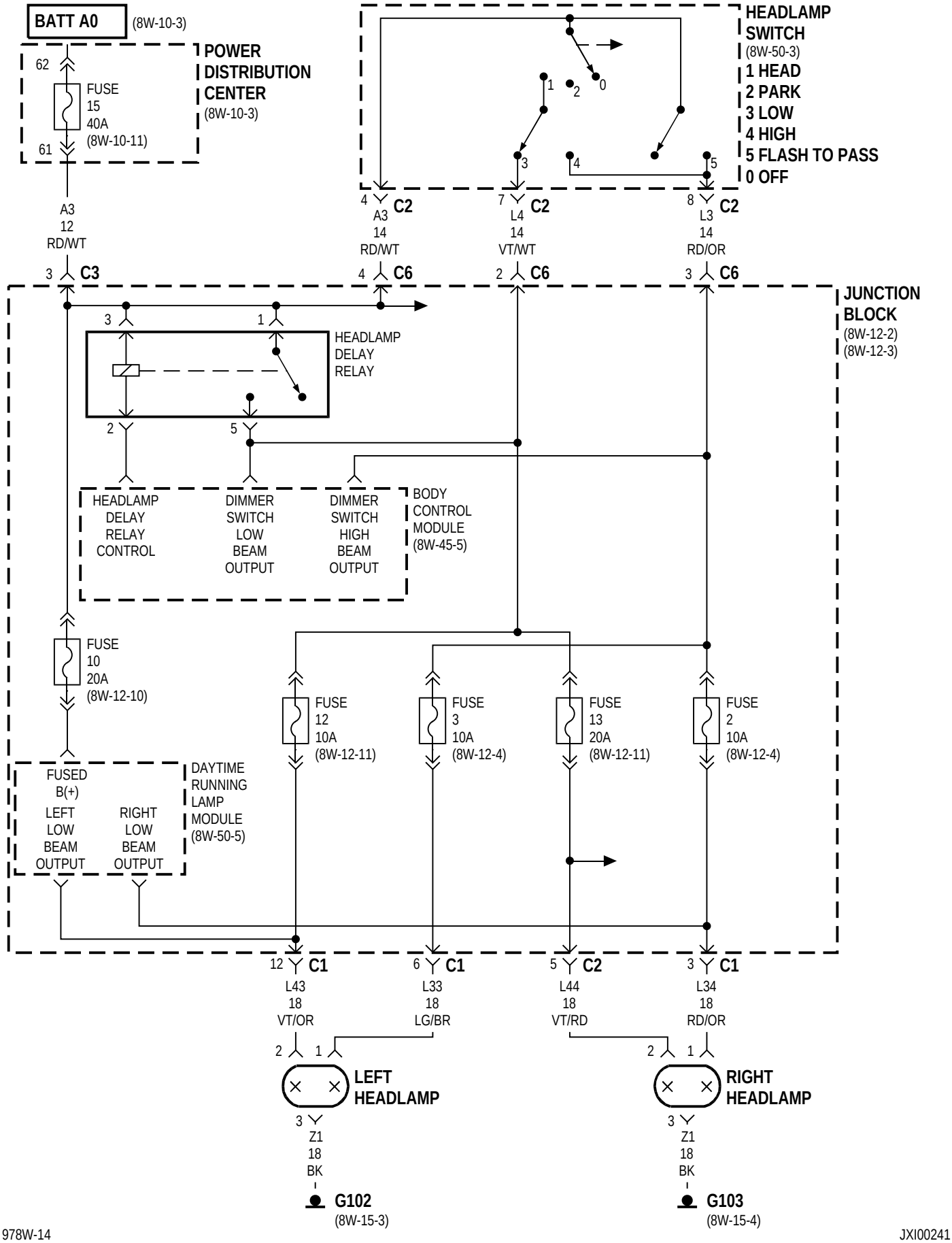
8W-50 FRONT LIGHTING

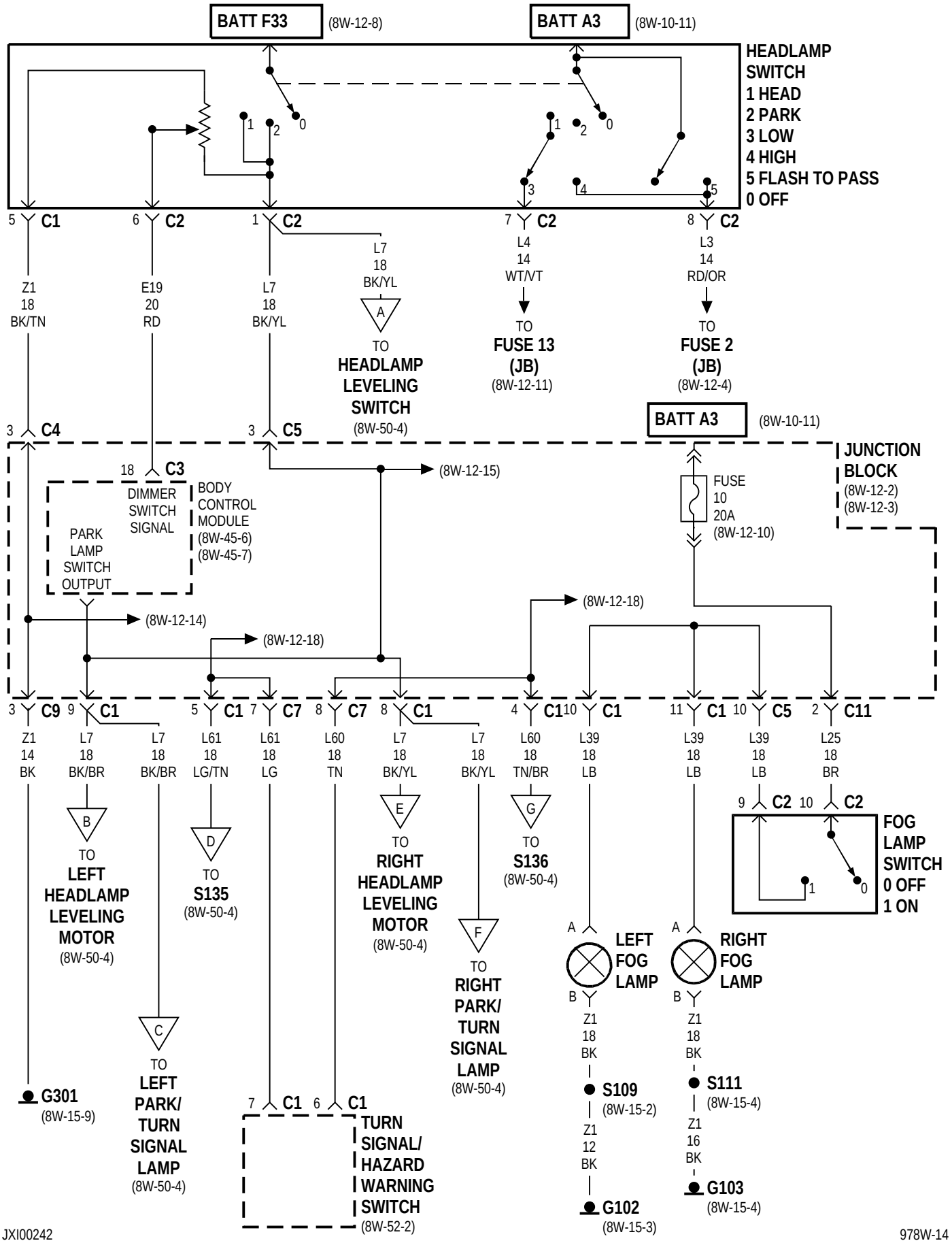
INDEX

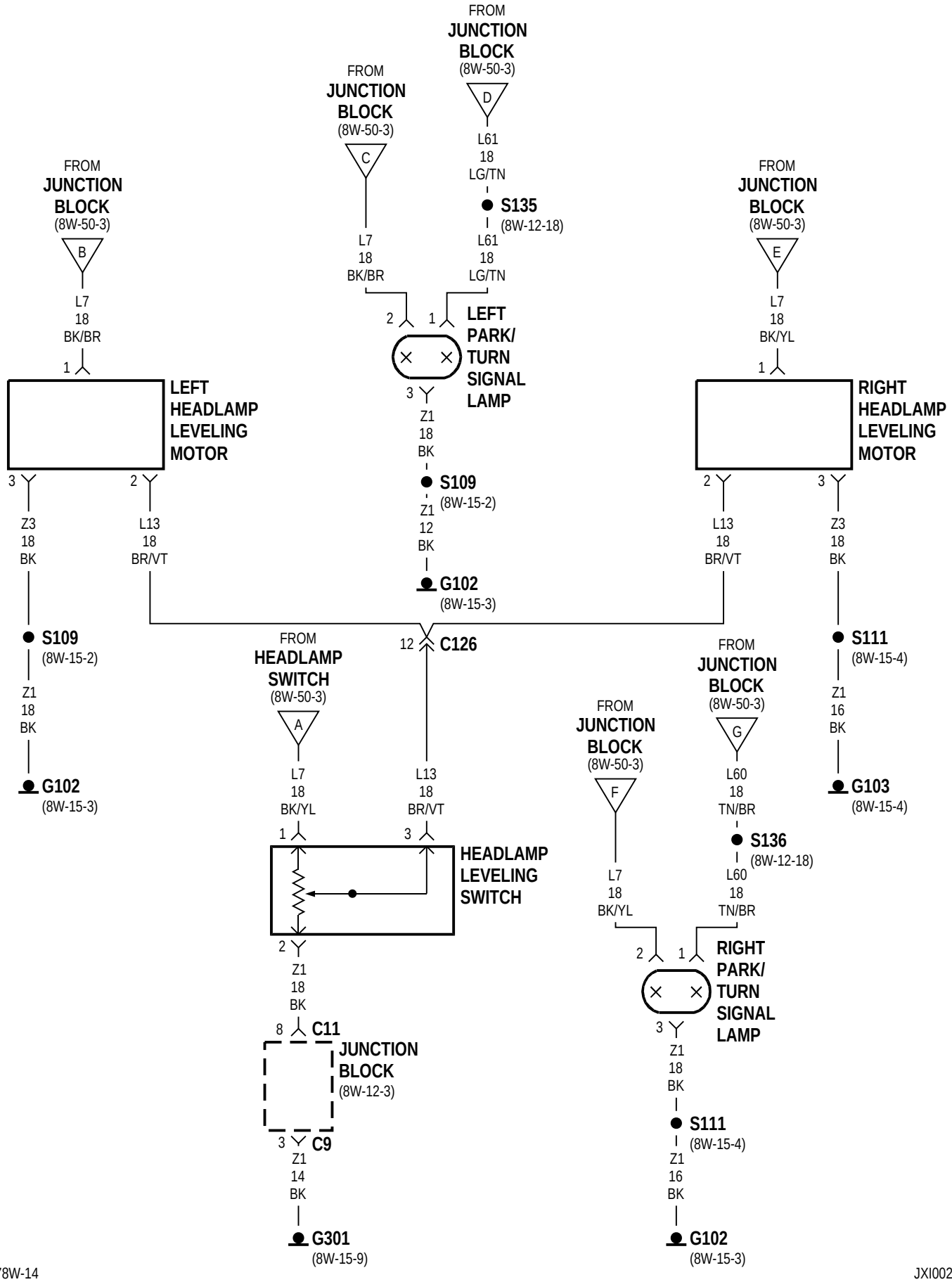
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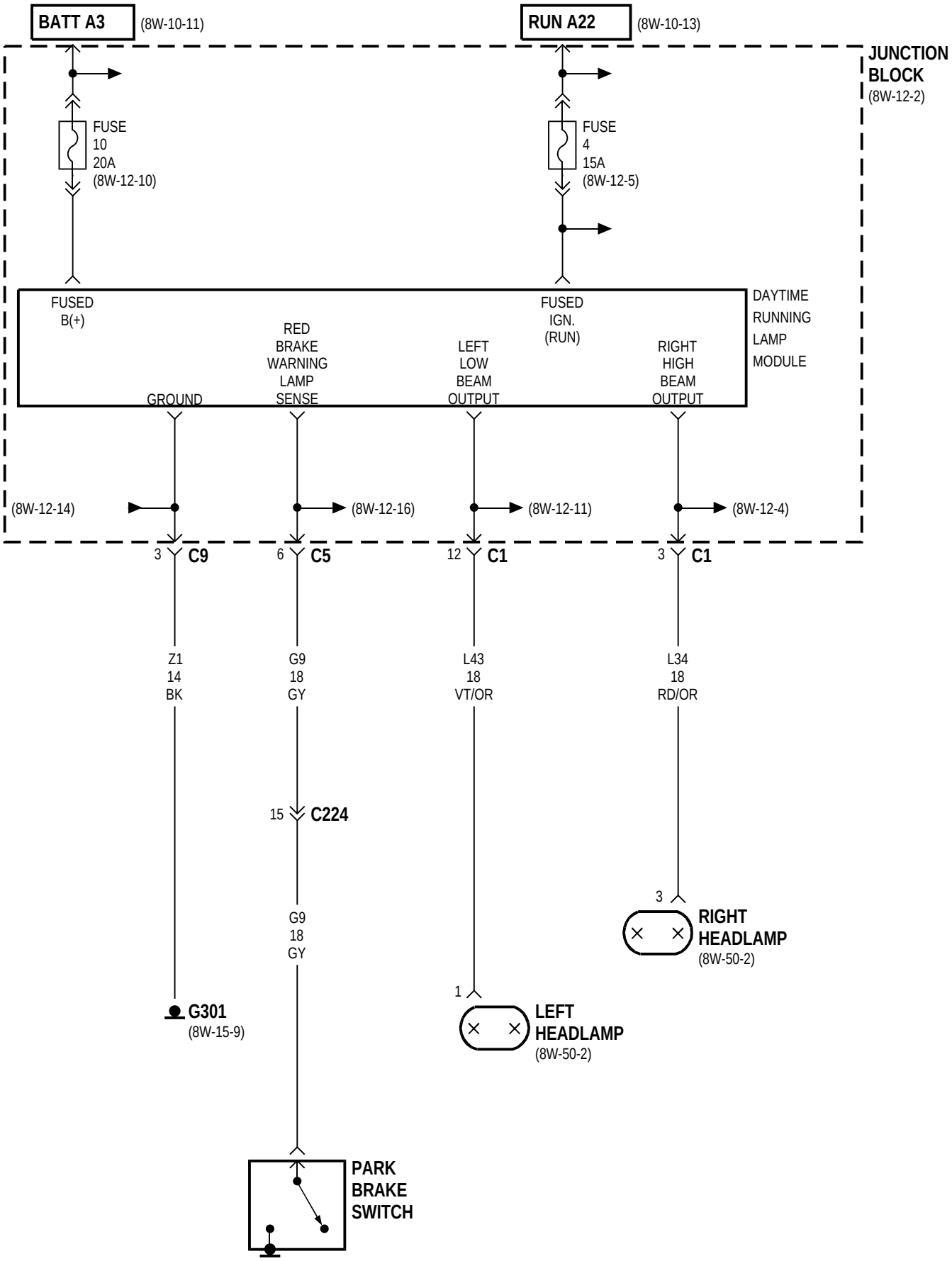
SCHEMATICS AND DIAGRAMS 1
DESCRIPTION AND OPERATION 6

Component	Page
Body Control Module	8W-50-2, 3
Daytime Running Lamp Module	8W-50-2, 5
Fog Lamp Switch	8W-50-3
Fuse 2	8W-50-2, 3
Fuse 3	8W-50-2
Fuse 4	8W-50-5
Fuse 10	8W-50-2, 3, 5
Fuse 12	8W-50-2
Fuse 13	8W-50-2, 3
Fuse 15	8W-50-2
G102	8W-50-2, 3, 4
G103	8W-50-2, 3, 4
G301	8W-50-3, 4, 5
Headlamp Delay Relay	8W-50-2
Headlamp Leveling Switch	8W-50-4
Headlamp Switch	8W-50-2, 3
Junction Block	8W-50-2, 3, 4, 5
Left Fog Lamp	8W-50-3
Left Headlamp	8W-50-2, 5
Left Headlamp Leveling Motor	8W-50-4
Left Park/Turn Signal Lamp	8W-50-4
Park Brake Switch	8W-50-5
Power Distribution Center	8W-50-2
Right Fog Lamp	8W-50-3
Right Headlamp	8W-50-2, 5
Right Headlamp Leveling Motor	8W-50-4
Right Park/Turn Signal Lamp	8W-50-4
S109	8W-50-3, 4
S111	8W-50-3, 4
S135	8W-50-4
S136	8W-50-4
Turn Signal/Hazard Warning Switch	8W-50-3


BATT A0
(8W-10-3)
POWER DISTRIBUTION CENTER
(8W-10-3)
62
FUSE 15 40A
(8W-10-11)
61
A3 12 RD/WT
3 C3
HEADLAMP SWITCH
(8W-50-3)
1 HEAD
2 PARK
3 LOW
4 HIGH
5 FLASH TO PASS
0 OFF
4 A3 14 RD/WT C2
7 L4 14 VT/WT C2
8 L3 14 RD/OR C2
4 C6
2 C6
3 C6
JUNCTION BLOCK
(8W-12-2)
(8W-12-3)
HEADLAMP DELAY RELAY
HEADLAMP DELAY RELAY CONTROL
DIMMER SWITCH LOW BEAM OUTPUT
DIMMER SWITCH HIGH BEAM OUTPUT
BODY CONTROL MODULE
(8W-45-5)
FUSE 10 20A
(8W-12-10)
FUSE 12 10A
(8W-12-11)
FUSE 3 10A
(8W-12-4)
FUSE 13 20A
(8W-12-11)
FUSE 2 10A
(8W-12-4)
FUSED B(+)
LEFT LOW BEAM OUTPUT
RIGHT LOW BEAM OUTPUT
DAYTIME RUNNING LAMP MODULE
(8W-50-5)
12 C1 L43 18 VT/OR
6 C1 L33 18 LG/BR
5 C2 L44 18 VT/RD
3 C1 L34 18 RD/OR
LEFT HEADLAMP
RIGHT HEADLAMP
3 Z1 18 BK
G102
(8W-15-3)
G103
(8W-15-4)


BATT F33
(8W-12-8)
BATT A3
(8W-10-11)
HEADLAMP SWITCH
1 HEAD
2 PARK
3 LOW
4 HIGH
5 FLASH TO PASS
0 OFF
5 C1
6 C2
1 C2
7 C2
8 C2
Z1 18 BK/TN
E19 20 RD
L7 18 BK/YL
L7 18 BK/YL
A
TO HEADLAMP LEVELING SWITCH
(8W-50-4)
L4 14 WT/VT
TO FUSE 13 (JB)
(8W-12-11)
L3 14 RD/OR
TO FUSE 2 (JB)
(8W-12-4)
3 C4
3 C5
BATT A3
(8W-10-11)
JUNCTION BLOCK
(8W-12-2)
(8W-12-3)
18 C3
DIMMER SWITCH SIGNAL
BODY CONTROL MODULE
(8W-45-6)
(8W-45-7)
PARK LAMP SWITCH OUTPUT
(8W-12-15)
FUSE 10 20A
(8W-12-10)
(8W-12-14)
(8W-12-18)
(8W-12-18)
3 C9
9 C1
5 C1
7 C7
8 C7
8 C1
4 C1
10 C1
11 C1
10 C5
2 C11
Z1 14 BK
L7 18 BK/BR
L7 18 BK/BR
L61 18 LG/TN
L61 18 LG
L60 18 TN
L7 18 BK/YL
L7 18 BK/YL
L60 18 TN/BR
L39 18 LB
L39 18 LB
L39 18 LB
L25 18 BR
B
TO LEFT HEADLAMP LEVELING MOTOR
(8W-50-4)
D
TO S135
(8W-50-4)
E
TO RIGHT HEADLAMP LEVELING MOTOR
(8W-50-4)
F
TO RIGHT PARK/ TURN SIGNAL LAMP
(8W-50-4)
G
TO S136
(8W-50-4)
9 C2
10 C2
FOG LAMP SWITCH
0 OFF
1 ON
A
B
LEFT FOG LAMP
RIGHT FOG LAMP
Z1 18 BK
Z1 18 BK
S109
(8W-15-2)
S111
(8W-15-4)
Z1 12 BK
Z1 16 BK
G102
(8W-15-3)
G103
(8W-15-4)
G301
(8W-15-9)
C
TO LEFT PARK/ TURN SIGNAL LAMP
(8W-50-4)
7 C1
6 C1
TURN SIGNAL/ HAZARD WARNING SWITCH
(8W-52-2)


FROM JUNCTION BLOCK (8W-50-3) D
L61 18 LG/TN
S135 (8W-12-18)
FROM JUNCTION BLOCK (8W-50-3) C
L7 18 BK/BR
L61 18 LG/TN
2 1
LEFT PARK/ TURN SIGNAL LAMP
3
Z1 18 BK
S109 (8W-15-2)
Z1 12 BK
G102 (8W-15-3)
FROM JUNCTION BLOCK (8W-50-3) B
L7 18 BK/BR
1
LEFT HEADLAMP LEVELING MOTOR
3 2
Z3 18 BK
L13 18 BR/VT
S109 (8W-15-2)
Z1 18 BK
G102 (8W-15-3)
FROM JUNCTION BLOCK (8W-50-3) E
L7 18 BK/YL
1
RIGHT HEADLAMP LEVELING MOTOR
2 3
L13 18 BR/VT
Z3 18 BK
S111 (8W-15-4)
Z1 16 BK
G103 (8W-15-4)
12 C126
FROM HEADLAMP SWITCH (8W-50-3) A
L7 18 BK/YL
L13 18 BR/VT
1 3
HEADLAMP LEVELING SWITCH
2
Z1 18 BK
8 C11
JUNCTION BLOCK (8W-12-3)
3 C9
Z1 14 BK
G301 (8W-15-9)
FROM JUNCTION BLOCK (8W-50-3) F
L7 18 BK/YL
FROM JUNCTION BLOCK (8W-50-3) G
L60 18 TN/BR
S136 (8W-12-18)
L60 18 TN/BR
2 1
RIGHT PARK/ TURN SIGNAL LAMP
3
Z1 18 BK
S111 (8W-15-4)
Z1 16 BK
G102 (8W-15-3)


BATT A3
(8W-10-11)
RUN A22
(8W-10-13)
JUNCTION BLOCK
(8W-12-2)
FUSE 10 20A
(8W-12-10)
FUSE 4 15A
(8W-12-5)
FUSED B(+)
FUSED IGN. (RUN)
DAYTIME RUNNING LAMP MODULE
GROUND
RED BRAKE WARNING LAMP SENSE
LEFT LOW BEAM OUTPUT
RIGHT HIGH BEAM OUTPUT
(8W-12-14)
(8W-12-16)
(8W-12-11)
(8W-12-4)
3 C9
6 C5
12 C1
3 C1
Z1 14 BK
G9 18 GY
L43 18 VT/OR
L34 18 RD/OR
15 C224
G9 18 GY
3
RIGHT HEADLAMP
(8W-50-2)
1
LEFT HEADLAMP
(8W-50-2)
G301
(8W-15-9)
PARK BRAKE SWITCH

8W-50 FRONT LIGHTING

INDEX

page

GENERAL INFORMATION
INTRODUCTION 6
DESCRIPTION AND OPERATION
FOG LAMPS 7
HEADLAMP DELAY 7
HEADLAMP LEVELING MOTORS 7
HEADLAMPS 6
PARKING LAMPS 6

GENERAL INFORMATION

INTRODUCTION

The headlamp switch has three positions, OFF, PARK (parking lamps), and ON. Power for the headlamp portion of the headlamp switch is provided on circuit A3. This circuit originates in the Power Distribution Center (PDC) and is protected by a 40 amp fuse located in cavity 15. The headlamp switch has a LOW beam and HIGH beam select position.

Power for the parking lamp portion of the headlamp switch is provided on circuit F33. Circuit A13 in the Power Distribution Center (PDC) powers a 20 amp fuse located in cavity 7 of the junction block. The A13 circuit is protected by a 40 amp fuse located in cavity 12 of the PDC. Circuit F33, which connects to the other side of the fuse in the junction block, connects to the headlamp switch and is spliced to provide power for the instrument cluster.

DESCRIPTION AND OPERATION

PARKING LAMPS

Power for the parking lamp portion of the headlamp switch is provided on circuit F33. Circuit A13 in the Power Distribution Center (PDC) powers a 20 amp fuse located in cavity 7 of the junction block. The A13 circuit is protected by a 40 amp fuse located in cavity 12 of the PDC. Circuit F33, which connects to the other side of the fuse in the junction block, connects to the headlamp switch and is spliced to provide power for the instrument cluster.

When the headlamp switch is in the PARK or ON position, it connects circuit F33 to circuit L7. From the headlamp switch, circuit L7 splices to power the front parking lamps, rear tail lamps, and the license lamp. It also provides an input to the Body Control Module (BCM) indicating the lamps are ON, to the radio for illumination, and to the dimmer switch.

HELPFUL INFORMATION

- Check for a blown 40 amp fuse located in cavity 12 of the PDC.
- Check for a blown 20 amp fuse located in cavity 7 of the junction block.
- For the left front lamps check the grounding point at the left strut tower.
- For the right front lamps check the grounding point at the right frame rail.

HEADLAMPS

When the headlamp switch is in the ON position, the A3 circuit from the Power Distribution Center (PDC) connects to circuit L4 (for LOW beam operation). The L4 circuit is spliced and connects a BUS bar in the junction block and to the Body Control Module (BCM). Circuits L43 and L44 connect to the BUS bar in the junction block, and power the low-beam headlamps. Circuit L43 supplies power to the left headlamp. Circuit L44 supplies power to the right headlamp. The L43 and L44 circuits each have separate fuses in the junction block. The L43 circuit is protected by a 10 amp fuse in cavity 12, and L44 is protected by a 20 amp fuse in cavity 13.

When the operator selects high-beam operation, with the turn signal stalk of the multi-function switch, circuit A3 connects to the L3 circuit. Circuit L3 powers high-beam operation. This circuit is spliced and provides an input to the BCM, along with supplying power to the high-beam fuses in the junction block.

Circuit L33 is used for left high-beam operation and is protected by a 10 amp fuse located in cavity 3 of the junction block. Circuit L34 is used for the right high-beam and is protected by a 10 amp fuse located in cavity 2 of the junction block.

HEADLAMP GROUND

Although circuit Z1 provides ground for the right and left headlamps, it has different termination points. For the right headlamp, the Z1 circuit is terminated at the right frame rail. For the left headlamp, the Z1 terminates at the left strut tower.

DESCRIPTION AND OPERATION (Continued)

HELPFUL INFORMATION

- Check for a blown 40 amp fuse located in cavity 15 of the PDC.
- Check for a blown 20 amp fuse located in cavity 7 of the junction block.
- For the left front lamps check the grounding point at the left strut tower.
- For the right front lamps check the grounding point at the right frame rail.

HEADLAMP LEVELING MOTORS

Power fort the headlamp leveling switch is supplied from the headlamp switch on circuit L7. This circuit is HOT when the headlamp switch is in the PARK or ON position. This circuit provides power to the parking lamps. Ground for the switch is supplied on circuit Z1.

The L7 circuit also supplies power to the headlamp leveling motors. Ground for the headlamp leveling motors is supplied on circuit Z3.

Circuit L13 connects from the headlamp leveling motors to the switch. This circuit is used to provide power or ground to the motors depending on switch position.

FOG LAMPS

The fog lamps operate only when the headlamp switch is in the ON position and the operator has selected LOW-beam operation. When the headlamps are in HIGH-beam mode, the fog lamps will not operate.

When the operator tunrs the fog lamps switch ON circuit L44 is connected to circuit L39. The L44 circuit is protected by a 20 amp fuse located in cavity 13 of the junction block, and powers the LOW beam headlamps.

Circuit L39 connects from the switch to the fog lamps.

Ground for the lamps is different for the left and right lamps. For the right fog lamp, the ground is provided on circuit Z1 and terminates at the right frame rail. For the left fog lamp, the ground is provided on circuit Z1 and terminates at the left strut tower.

HELPFUL INFORMATION

- Check for a blown 40 amp fuse in cavity 14, and 15 of the PDC. If this fuse is blown the headlamps will not operate.
- Check for a blown 20 amp fuse in cavity 10 of the junction block. If this fuse is blown the right low-beam headlamp will not operate.
- Check for a good ground at the right frame rail for the right fog lamp.
- Check for a good ground at the left strut tower for the left fog lamp.

HEADLAMP DELAY

The headlamp delay uses a relay located in the junction block. Power for the relay is supplied on circuit A3. This circuit powers the coil and contact sides of the relay and is protected by a 40 amp fuse located in the Power Distribution Center (PDC) cavity 15.

The relay is activated by the operator turning OFF the ignition with the headlamps ON. The Body Control Module (BCM) controls the ground for the coil side of the relay and the amount of time the headlamps stay ON. Circuit G50 connects the coil side of the relay to the BCM.

When the relay is energized, the contacts in the relay CLOSE connecting circuits A3 and L4. Circuit L4 is used to power the fuses used for low-beam headlamp operation.

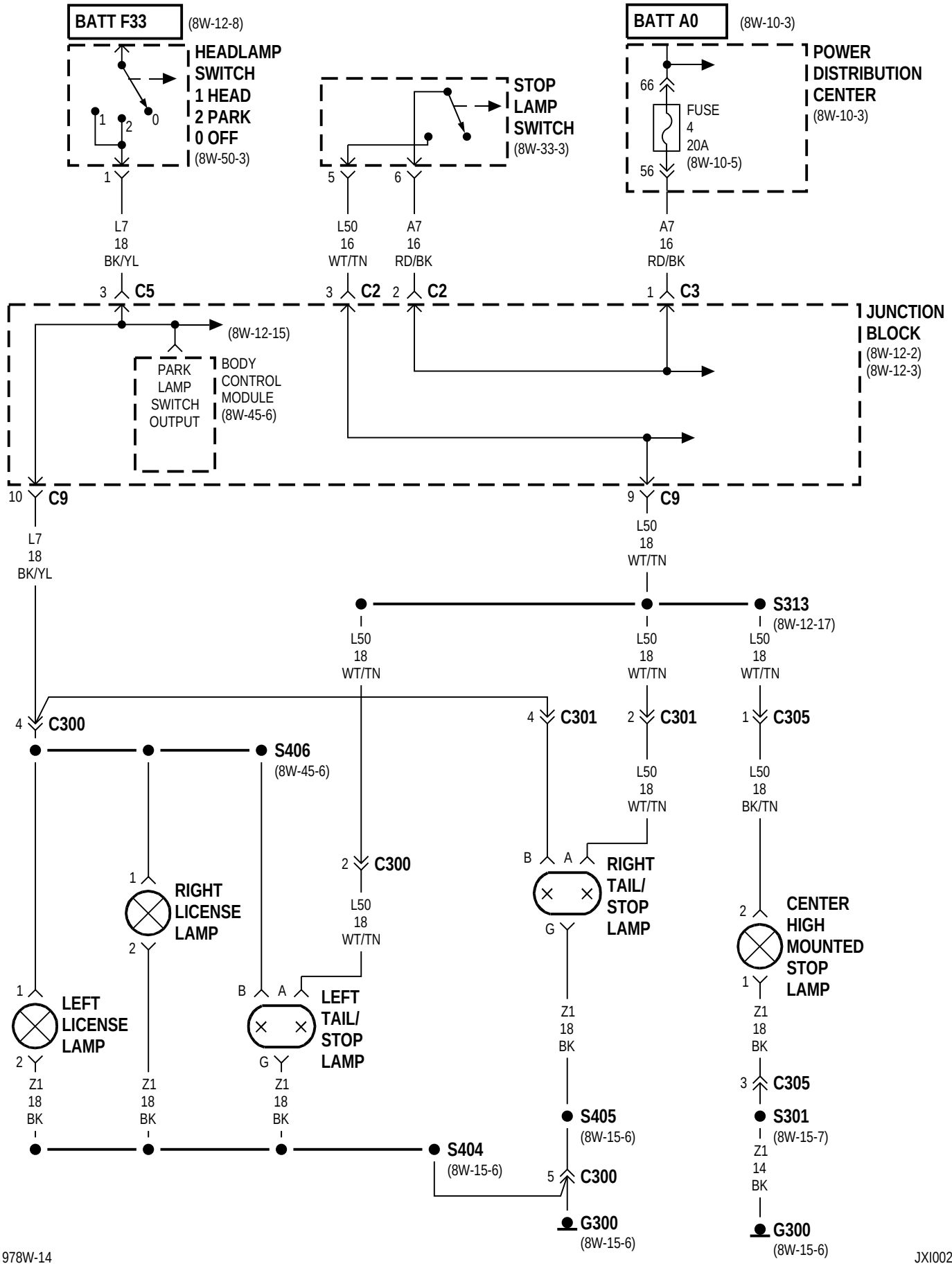
8W-51 REAR LIGHTING

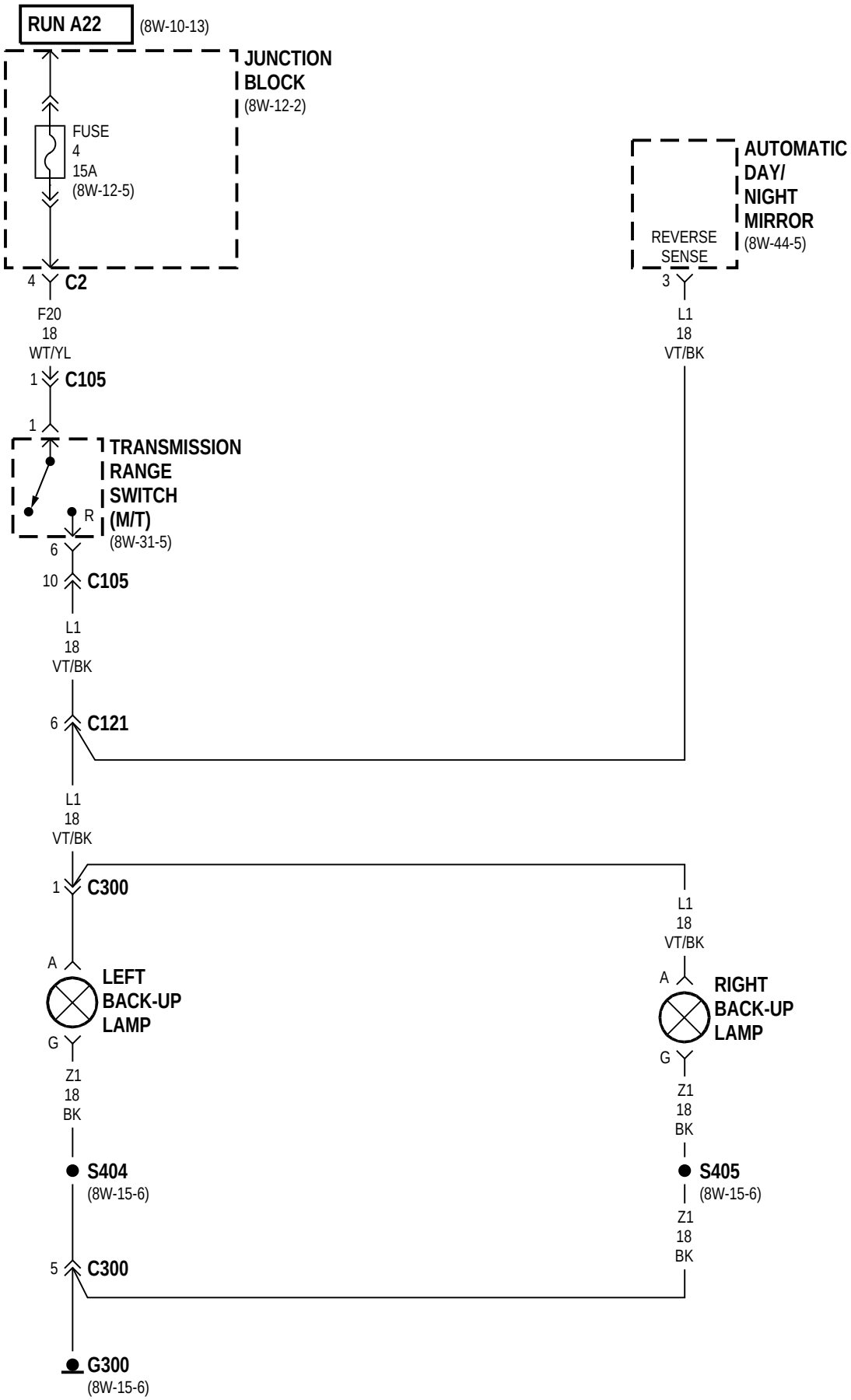
INDEX

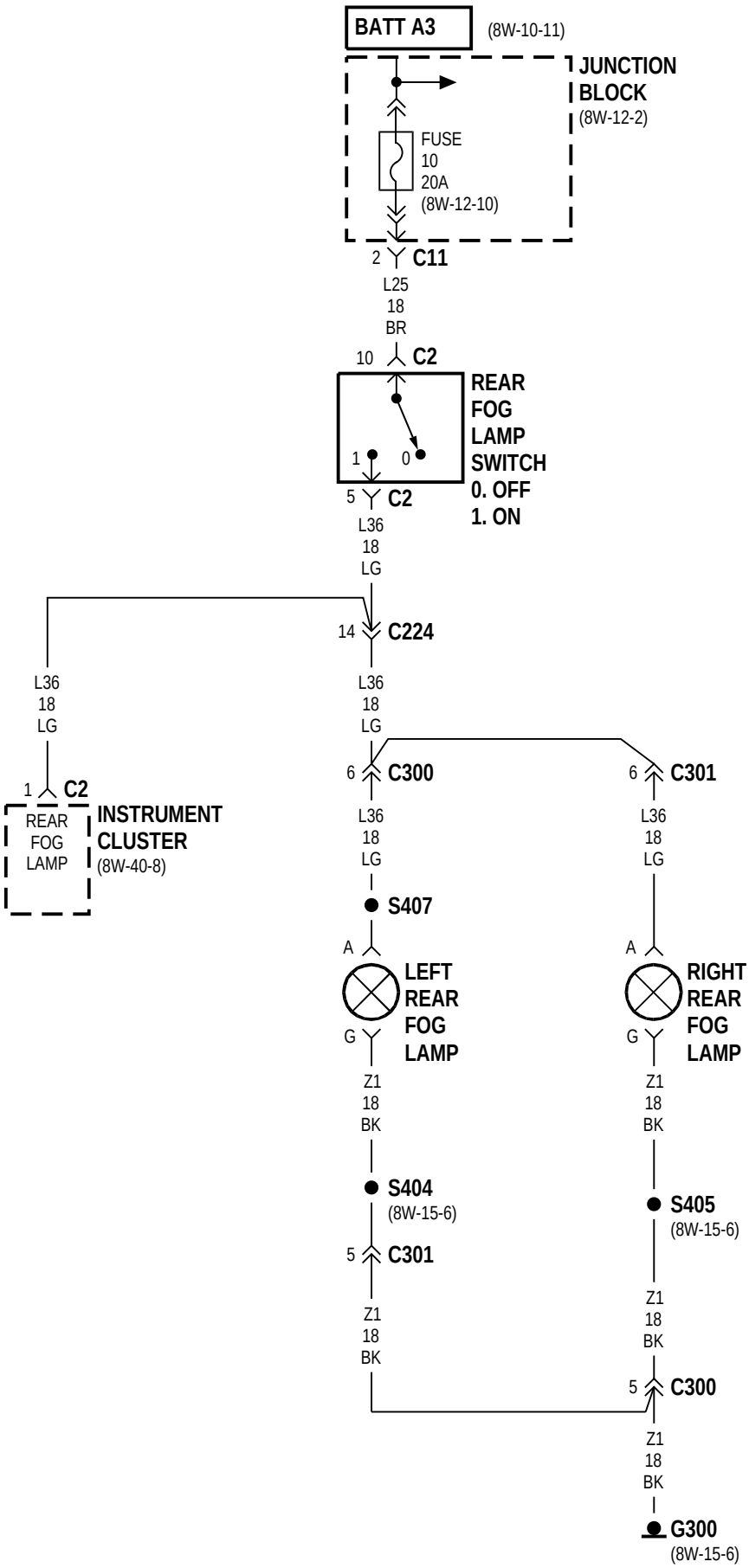
page

SCHEMATICS AND DIAGRAMS 1
DESCRIPTION AND OPERATION 5

Component	Page
Automatic Day/Night Mirror	8W-51-3
Body Control Module	8W-51-2
Center High Mounted Stop Lamp	8W-51-2
Fuse 4	8W-51-2, 3
Fuse 10	8W-51-4
G300	8W-51-2, 3, 4
Headlamp Switch	8W-51-2
Instrument Cluster	8W-51-4
Junction Block	8W-51-2, 3, 4
Left Back-Up Lamp	8W-51-3
Left License Lamp	8W-51-2
Left Rear Fog Lamp	8W-51-4
Left Tail/Stop Lamp	8W-51-2
Power Distribution Center	8W-51-2
Rear Fog Lamp Switch	8W-51-4
Right Back-Up Lamp	8W-51-3
Right License Lamp	8W-51-2
Right Rear Fog Lamp	8W-51-4
Right Tail/Stop Lamp	8W-51-2
S301	8W-51-2
S313	8W-51-2
S404	8W-51-2, 3, 4
S405	8W-51-2, 3, 4
S406	8W-51-2
S407	8W-51-4
Stop Lamp Switch	8W-51-2
Transmission Range Switch	8W-51-3


BATT F33
(8W-12-8)
HEADLAMP SWITCH
1 HEAD
2 PARK
0 OFF
(8W-50-3)
STOP LAMP SWITCH
(8W-33-3)
BATT A0
(8W-10-3)
POWER DISTRIBUTION CENTER
(8W-10-3)
FUSE 4 20A
(8W-10-5)
L7 18 BK/YL
L50 16 WT/TN
A7 16 RD/BK
A7 16 RD/BK
C5
C2
C2
C3
JUNCTION BLOCK
(8W-12-2)
(8W-12-3)
(8W-12-15)
PARK LAMP SWITCH OUTPUT
BODY CONTROL MODULE
(8W-45-6)
C9
C9
L7 18 BK/YL
L50 18 WT/TN
S313
(8W-12-17)
L50 18 WT/TN
L50 18 WT/TN
L50 18 WT/TN
C300
C301
C301
C305
S406
(8W-45-6)
L50 18 WT/TN
L50 18 BK/TN
C300
RIGHT LICENSE LAMP
RIGHT TAIL/ STOP LAMP
CENTER HIGH MOUNTED STOP LAMP
LEFT LICENSE LAMP
LEFT TAIL/ STOP LAMP
Z1 18 BK
Z1 18 BK
Z1 18 BK
Z1 18 BK
Z1 18 BK
Z1 14 BK
C305
S404
(8W-15-6)
S405
(8W-15-6)
S301
(8W-15-7)
C300
G300
(8W-15-6)
G300
(8W-15-6)


RUN A22
(8W-10-13)
JUNCTION BLOCK
(8W-12-2)
FUSE
4
15A
(8W-12-5)
4
C2
F20
18
WT/YL
1
C105
1
TRANSMISSION RANGE SWITCH (M/T)
(8W-31-5)
R
6
10
C105
L1
18
VT/BK
6
C121
L1
18
VT/BK
1
C300
A
LEFT BACK-UP LAMP
G
Z1
18
BK
S404
(8W-15-6)
5
C300
G300
(8W-15-6)
AUTOMATIC DAY/ NIGHT MIRROR
(8W-44-5)
REVERSE SENSE
3
L1
18
VT/BK
L1
18
VT/BK
A
RIGHT BACK-UP LAMP
G
Z1
18
BK
S405
(8W-15-6)
Z1
18
BK


BATT A3
(8W-10-11)
JUNCTION BLOCK
(8W-12-2)
FUSE 10 20A
(8W-12-10)
2 C11
L25 18 BR
10 C2
REAR FOG LAMP SWITCH
0. OFF
1. ON
1
0
5 C2
L36 18 LG
14 C224
L36 18 LG
1 C2
REAR FOG LAMP
INSTRUMENT CLUSTER
(8W-40-8)
6 C300
6 C301
L36 18 LG
S407
A
LEFT REAR FOG LAMP
G
Z1 18 BK
S404
(8W-15-6)
5 C301
Z1 18 BK
A
RIGHT REAR FOG LAMP
G
Z1 18 BK
S405
(8W-15-6)
Z1 18 BK
5 C300
Z1 18 BK
G300
(8W-15-6)

8W-51 REAR LIGHTING

INDEX

page

DESCRIPTION AND OPERATION
BACK-UP LAMPS 5
COMBINED REAR LIGHTING MODULE 5
REAR FOG LAMPS 5
STOP LAMPS 5
TAIL LAMPS AND REAR LICENSE LAMPS 5

DESCRIPTION AND OPERATION

TAIL LAMPS AND REAR LICENSE LAMPS

Circuit A13 in the Power Distribution Center (PDC) powers a 20 amp fuse located in cavity 7 of the junction block. The A13 circuit is protected by a 40 amp fuse located in cavity 12. Circuit F33, which connects to the other side of the fuse in the junction block, connects to the headlamp switch and is spliced to provide power for the instrument cluster.

The headlamp switch has three positions: OFF, PARK (parking lamps), and ON. When the headlamp switch is in the PARK or ON position, it connects circuit F33 to circuit L7. From the headlamp switch, circuit L7 splices to power the front parking lamps, rear tail lamps, and the license lamp. It also provides an input to the Body Control Module (BCM) indicating the lamps are ON, to the radio for illumination, and to the dimmer switch.

GROUND CIRCUIT

Circuit Z1 provides a ground for the tail lamps, parking lamps, headlamps, and the license plate lamp, although different grounding points are used.

HELPFUL INFORMATION

- Check for a blown 40 amp fuse located in cavity 12 of the PDC
- Check for a blown 20 amp fuse located in cavity 7 of the junction block
- For all of the rear lamps check the grounding point at the deck lid ground

COMBINED REAR LIGHTING MODULE

The combined rear lighting module is used to direct the voltage to the proper lamps. Power for the module is supplied on circuit A15. This circuit is protected by a 20 amp fuse located in the Power Distribution Center (PDC), cavity 6.

Ground for the module is supplied on circuit Z1.

STOP LAMPS

Circuit A7 supplies power for the stop lamp switch. This circuit originates in the Power Distribution Center (PDC) and is protected by a 20 amp fuse. The A7 circuit is spliced in the junction block and supplies voltage for the Ignition-Off Draw (IOD) fuse.

When the operator presses the brake pedal, the stop lamp switch CLOSES, and connects circuit A7 to circuit L50. Circuit L50 connects from the stop lamp switch to the stop lamps and the Center High Mounted Stop Lamp (CHMSL). Ground for the lamps is provided on circuit Z1 and terminates at the deck lid ground.

HELPFUL INFORMATION

- Check for a blown 20 amp fuse located in cavity 4 of the PDC.
- Check the grounding point for the rear lamps.
- Check for continuity across the stop lamp switch when it is closed.

BACK-UP LAMPS

Refer to section 8W-31 for lamp operation.

REAR FOG LAMPS

Power for the rear fog lamps is supplied on circuit L36. This circuit connects from the fog lamp switch to the rear fog lamps. Power for this circuit is supplied by circuit L92. The L92 circuit is protected by a 20 amp fuse located in cavity 13 of the junction block.

When the operator turns the switch ON circuits L92 and L36 are connected. Ground for the lamps is supplied on circuit Z1.

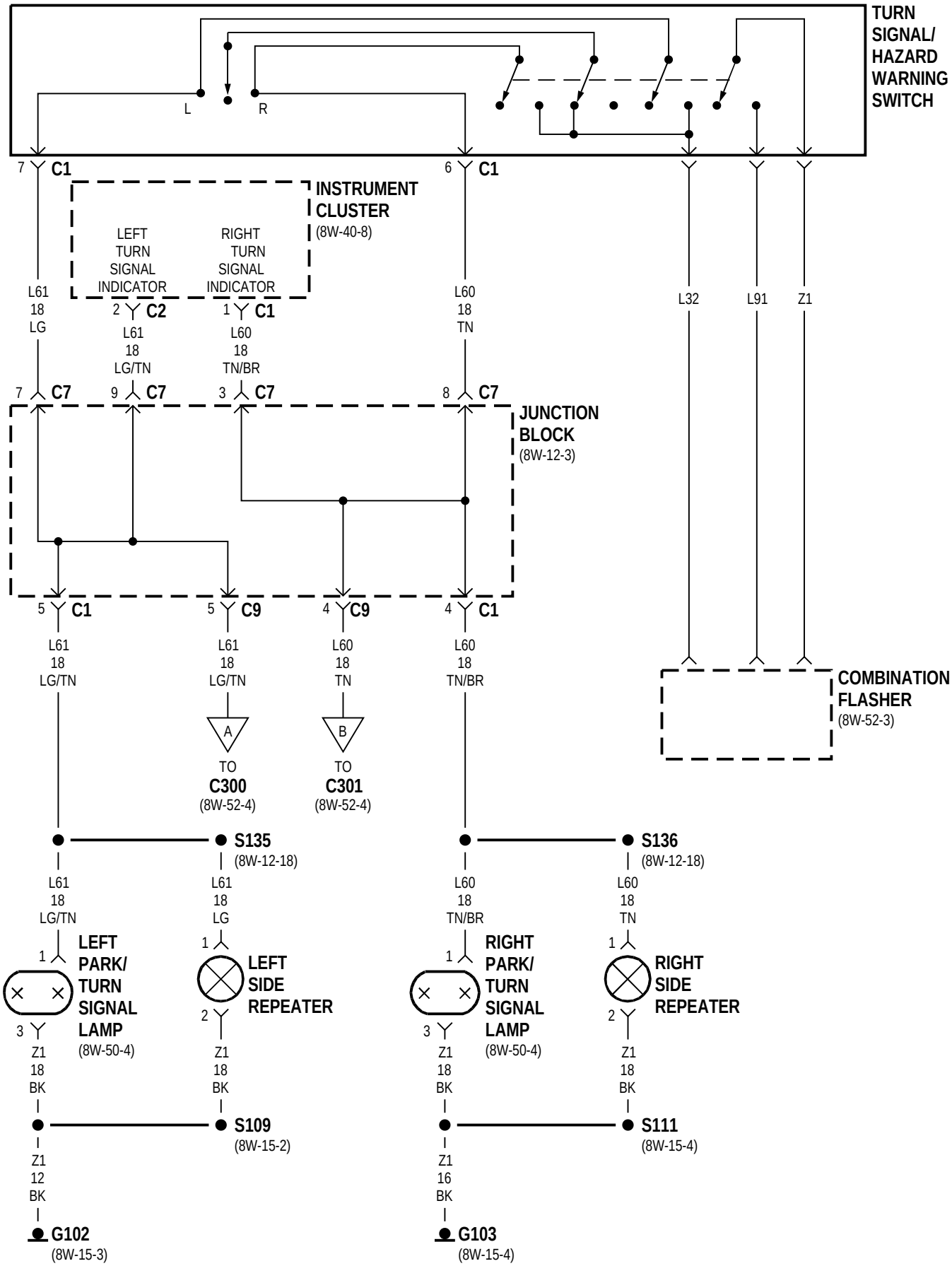
8W-52 TURN SIGNALS

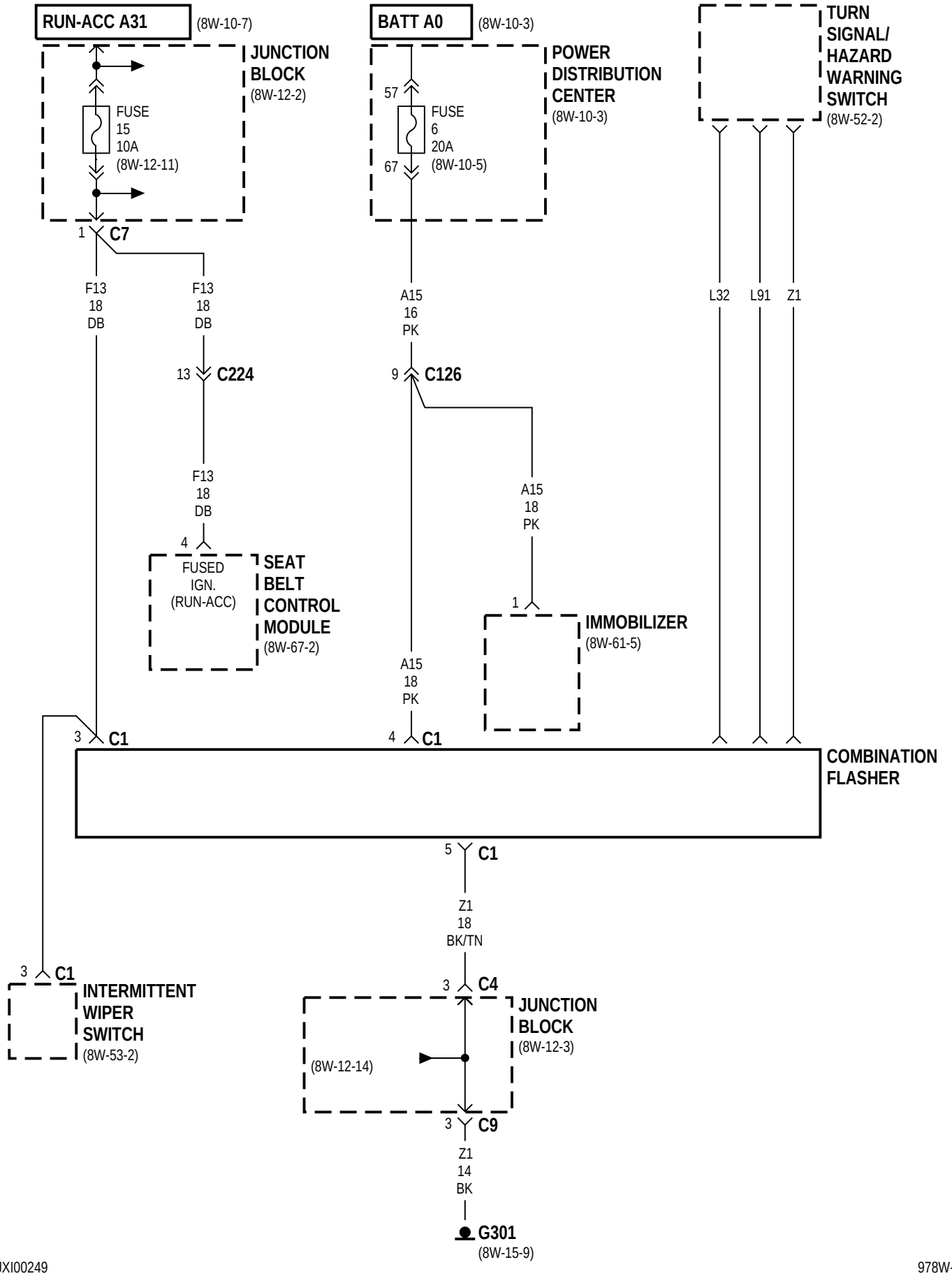
INDEX

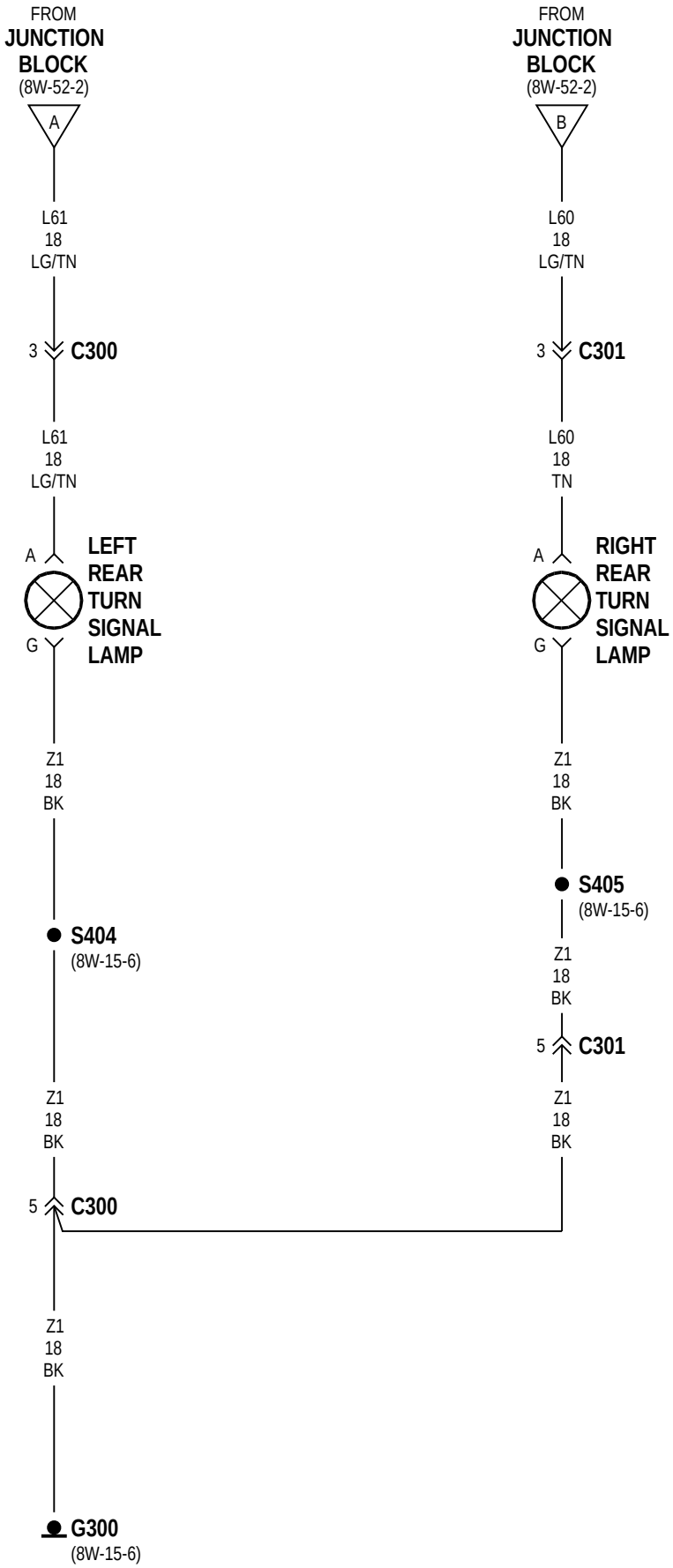
page

SCHEMATICS AND DIAGRAMS **1**
DESCRIPTION AND OPERATION **5**

Component	Page
Combination Flasher	8W-52-2, 3
Fuse 6	8W-52-3
Fuse 15	8W-52-3
G102	8W-52-2
G103	8W-52-2
G300	8W-52-4
G301	8W-52-3
Immobilizer	8W-52-3
Instrument Cluster	8W-52-2
Intermittent Wiper Switch	8W-52-3
Junction Block	8W-52-2, 3
Left Park/Turn Signal Lamp	8W-52-2
Left Rear Turn Signal Lamp	8W-52-4
Left Side Repeater	8W-52-2
Power Distribution Center	8W-52-3
Right Park/Turn Signal Lamp	8W-52-2
Right Rear Turn Signal Lamp	8W-52-4
Right Side Repeater	8W-52-2
S109	8W-52-2
S111	8W-52-2
S135	8W-52-2
S136	8W-52-2
S404	8W-52-4
S405	8W-52-4
Seat Belt Control Module	8W-52-3
Turn Signal/Hazard Warning Switch	8W-52-2, 3


TURN SIGNAL/ HAZARD WARNING SWITCH
L
R
7 C1
6 C1
INSTRUMENT CLUSTER
(8W-40-8)
LEFT TURN SIGNAL INDICATOR
RIGHT TURN SIGNAL INDICATOR
L61 18 LG
2 C2
L61 18 LG/TN
1 C1
L60 18 TN/BR
L60 18 TN
L32
L91
Z1
7 C7
9 C7
3 C7
8 C7
JUNCTION BLOCK
(8W-12-3)
5 C1
5 C9
4 C9
4 C1
L61 18 LG/TN
L61 18 LG/TN
L60 18 TN
L60 18 TN/BR
A
B
TO C300
(8W-52-4)
TO C301
(8W-52-4)
COMBINATION FLASHER
(8W-52-3)
S135
(8W-12-18)
S136
(8W-12-18)
L61 18 LG/TN
L61 18 LG
L60 18 TN/BR
L60 18 TN
1
LEFT PARK/ TURN SIGNAL LAMP
(8W-50-4)
LEFT SIDE REPEATER
RIGHT PARK/ TURN SIGNAL LAMP
(8W-50-4)
RIGHT SIDE REPEATER
3
2
Z1 18 BK
S109
(8W-15-2)
S111
(8W-15-4)
Z1 12 BK
Z1 16 BK
G102
(8W-15-3)
G103
(8W-15-4)


RUN-ACC A31
(8W-10-7)
JUNCTION BLOCK
(8W-12-2)
FUSE 15 10A
(8W-12-11)
1
C7
F13 18 DB
F13 18 DB
13
C224
F13 18 DB
4
FUSED IGN. (RUN-ACC)
SEAT BELT CONTROL MODULE
(8W-67-2)
BATT A0
(8W-10-3)
POWER DISTRIBUTION CENTER
(8W-10-3)
57
FUSE 6 20A
(8W-10-5)
67
A15 16 PK
9
C126
A15 18 PK
1
IMMOBILIZER
(8W-61-5)
A15 18 PK
4
C1
TURN SIGNAL/ HAZARD WARNING SWITCH
(8W-52-2)
L32
L91
Z1
3
C1
COMBINATION FLASHER
5
C1
Z1 18 BK/TN
3
C1
INTERMITTENT WIPER SWITCH
(8W-53-2)
3
C4
JUNCTION BLOCK
(8W-12-3)
(8W-12-14)
3
C9
Z1 14 BK
G301
(8W-15-9)


FROM
JUNCTION
BLOCK
(8W-52-2)
A
L61
18
LG/TN
3
C300
L61
18
LG/TN
A
LEFT
REAR
TURN
SIGNAL
LAMP
G
Z1
18
BK
S404
(8W-15-6)
Z1
18
BK
5
C300
Z1
18
BK
G300
(8W-15-6)
FROM
JUNCTION
BLOCK
(8W-52-2)
B
L60
18
LG/TN
3
C301
L60
18
TN
A
RIGHT
REAR
TURN
SIGNAL
LAMP
G
Z1
18
BK
S405
(8W-15-6)
Z1
18
BK
5
C301
Z1
18
BK

8W-52 TURN SIGNALS

INDEX

page

DESCRIPTION AND OPERATION
HAZARD FLASHERS 5
TURN SIGNALS 5

DESCRIPTION AND OPERATION

TURN SIGNALS

Power for the turn signals flows from the Power Distribution Center (PDC) to the ignition switch on circuit A1. The A1 circuit is protected by a 20 amp fuse located in cavity 8 of the PDC. With the key in the ACCESSORY or RUN position, the ignition switch connects voltage from the A1 circuit to the A31 circuit.

Circuit A31 connects to the junction block and powers fuse 15. This is a 10 amp fuse. From the fuse, circuit F13 supplies voltage to the combination flasher. The F13 circuit also supplies power to the windshield wipers and the rear window defogger relay.

Circuit A15 also supplies voltage to the combination flasher. This circuit is HOT at all times and is protected by a 20 amp fuse located in cavity 6 of the PDC.

The L32 circuit connects between the combination flasher and the turn signal portion of the multi-function switch. Circuit L32 connects to a BUS bar internal to the switch that powers the turn signals and the hazard flasher.

RIGHT TURN SIGNAL

When the operator selects the right turn signal, the multi-function switch connects power from circuit L32 to circuit L60. Circuit L60 supplies power for the front lamp and provides an input to the combined rear lighting module and side repeater lamp. This circuit also splices and supplies power to the instrument cluster indicator lamp.

Circuit L62 connects from the combined rear lighting module to the right rear lamps.

Ground for the rear lamp is provided on circuit Z1 and terminates at the left rear wheel well. The ground for the front lamp is provided on circuit Z1 and terminates at the right frame rail.

LEFT TURN SIGNAL

When the operator selects the left turn signal, the multi-function switch connects power from circuit L32 to circuit L61. Circuit L61 supplies power for the front lamp and also provides an input to the combined rear lighting module and side repeater lamp. This circuit also splices and supplies power to the instrument cluster indicator lamp.

Circuit L63 connects from the combined rear lighting module to the left rear lamps.

Ground for the rear lamp is provided on circuit Z1 and terminates at the left rear wheel well. The ground for the front lamp is provided on circuit Z1 and terminates at the left strut tower.

HELPFUL INFORMATION

- Check the 20 amp fuses located in cavities 6, and 8 of the PDC
- Check the 10 amp fuse located in cavity 15 of the junction block
- For the left front turn signal lamp check the grounding point at the left strut tower
- For the right front turn signal lamp check the grounding point at the right frame rail
- For the left and right rear turn signal lamps check the grounding point at the left rear wheel well.

HAZARD FLASHERS

Power for the hazard flashers flows from the Power Distribution Center (PDC) to the ignition switch on circuit A1. The A1 circuit is protected by a 20 amp fuse located in cavity 8 of the PDC. With the key in the ACCESSORY or RUN position, the ignition switch connects voltage from the A1 circuit to the A31 circuit.

Circuit A31 connects to the junction block and powers fuse 15. This is a 10 amp fuse. From the fuse, circuit F13 supplies voltage to the combination flasher. The F13 circuit also supplies power to the windshield wipers and the rear window defogger relay.

Circuit A15 also supplies voltage to the combination flasher. This circuit is HOT at all times and is protected by a 20 amp fuse located in cavity 6 of the PDC.

The L32 circuit connects between the combination flasher and the BUS bar that powers the turn signals and the hazard flasher internal to the switch.

When the hazard flashers are ON the multi-function switch connects circuit L32 to circuits L60 and L61. It also connects circuits L91 and Z1. Circuit Z1 is the ground path for the combination flasher and terminates at the instrument panel left side cowl.

DESCRIPTION AND OPERATION (Continued)

Circuit L60 supplies voltage for the right front lamps and provides an input to the combined rear lighting module and side repeater lamp. Circuit L61 powers the left front lamps and provides an input to the combined rear lighting module and side repeater lamp. These circuits also splice and supply voltage for the indicator lamps in the instrument cluster.

Circuit L62 connects from the combined rear lighting module to the right rear lamps. Circuit L63 connects from the combined rear lighting module to the left rear lamps.

HELPFUL INFORMATION

- Check the 20 amp fuses located in cavities 6, and 8 of the PDC.
- Check the 10 amp fuse located in cavity 15 of the junction block.
- For the left front lamp check the grounding point at the left strut tower.
- For the right front lamp check the grounding point at the right frame rail.
- For the left and right rear lamps check the grounding point at the left rear wheel well.
- Check the grounding point for the combination flasher located at the instrument panel left side cowl.

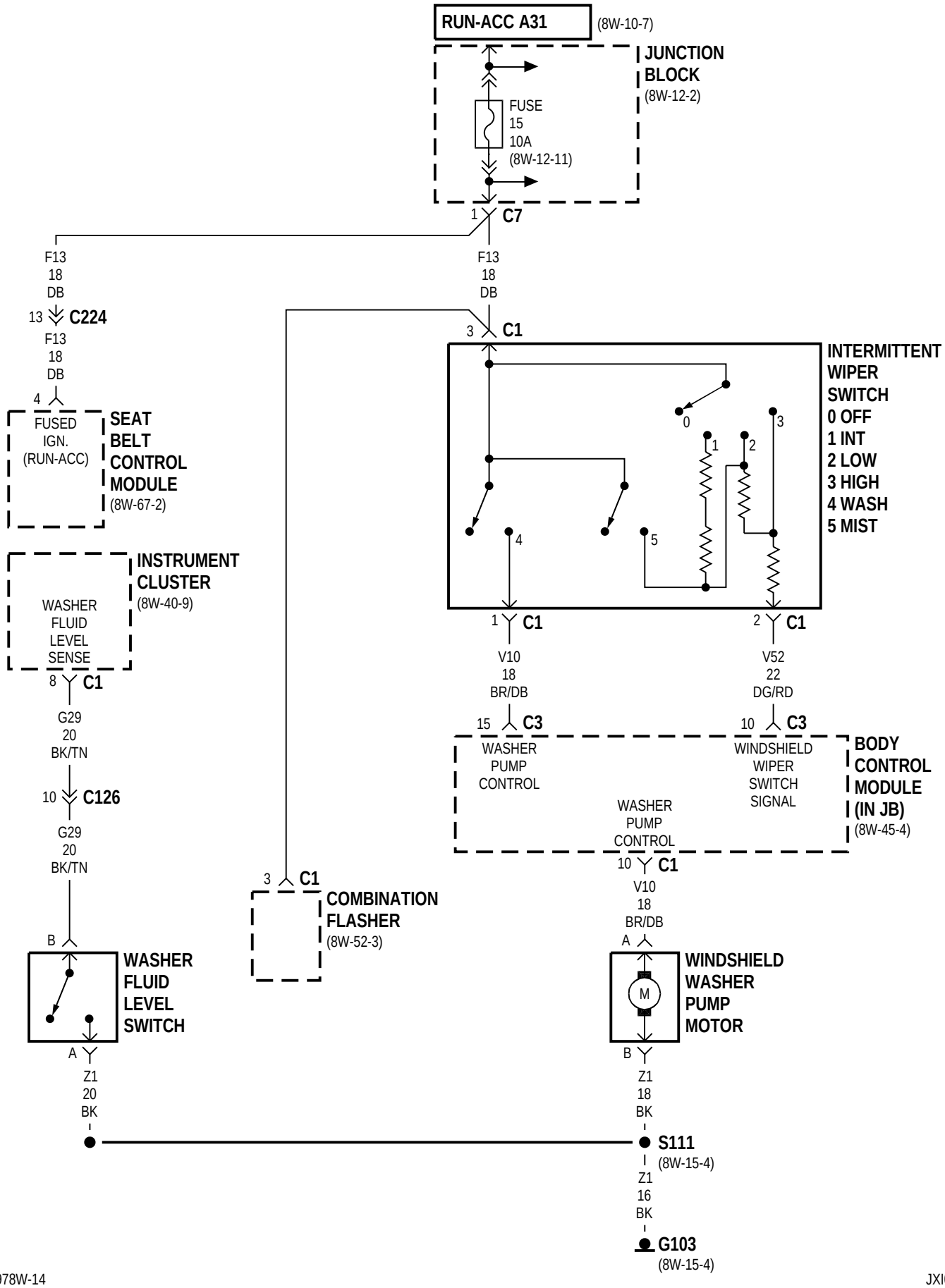
8W-53 WIPERS

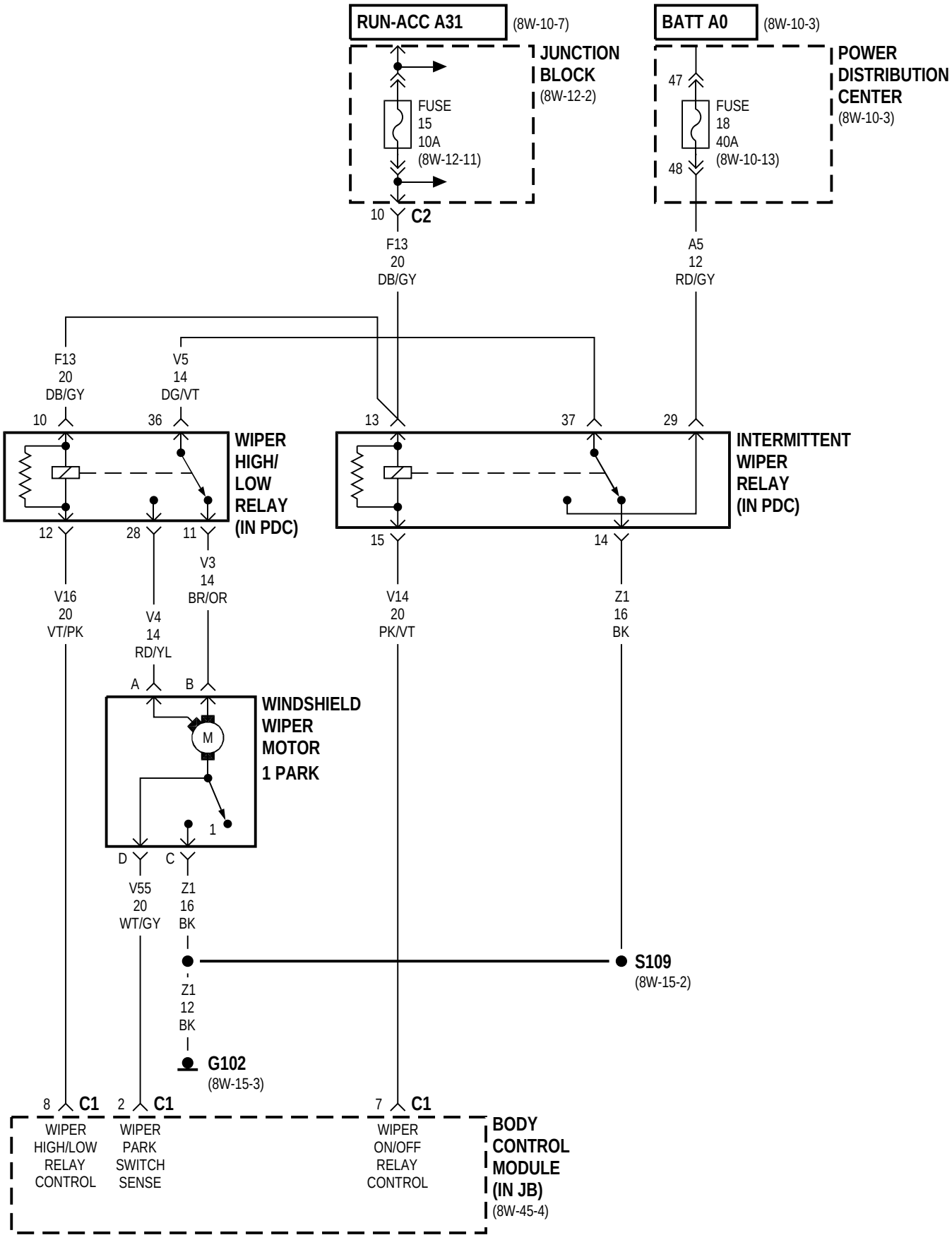
INDEX

page

SCHEMATICS AND DIAGRAMS **1**
DESCRIPTION AND OPERATION **4**

Component	Page
Body Control Module	8W-53-2, 3
Combination Flasher	8W-53-2
Fuse 15	8W-53-2, 3
Fuse 18	8W-53-3
G102	8W-53-3
G103	8W-53-2
Instrument Cluster	8W-53-2
Intermittent Wiper Relay	8W-53-3
Intermittent Wiper Switch	8W-53-2
Junction Block	8W-53-2, 3
Power Distribution Center	8W-53-3
S109	8W-53-3
S111	8W-53-2
Seat Belt Control Module	8W-53-2
Washer Fluid Level Switch	8W-53-2
Windshield Washer Pump Motor	8W-53-2
Windshield Wiper Motor	8W-53-3
Wiper High/Low Relay	8W-53-3


RUN-ACC A31
(8W-10-7)
JUNCTION BLOCK
(8W-12-2)
FUSE 15 10A
(8W-12-11)
1 C7
F13 18 DB
13 C224
F13 18 DB
4
FUSED IGN. (RUN-ACC)
SEAT BELT CONTROL MODULE
(8W-67-2)
INSTRUMENT CLUSTER
(8W-40-9)
WASHER FLUID LEVEL SENSE
8 C1
G29 20 BK/TN
10 C126
G29 20 BK/TN
B
WASHER FLUID LEVEL SWITCH
A
Z1 20 BK
F13 18 DB
3 C1
INTERMITTENT WIPER SWITCH
0 OFF
1 INT
2 LOW
3 HIGH
4 WASH
5 MIST
1 C1
V10 18 BR/DB
15 C3
WASHER PUMP CONTROL
2 C1
V52 22 DG/RD
10 C3
WINDSHIELD WIPER SWITCH SIGNAL
BODY CONTROL MODULE (IN JB)
(8W-45-4)
WASHER PUMP CONTROL
10 C1
V10 18 BR/DB
A
M
WINDSHIELD WASHER PUMP MOTOR
B
Z1 18 BK
3 C1
COMBINATION FLASHER
(8W-52-3)
S111
(8W-15-4)
Z1 16 BK
G103
(8W-15-4)


RUN-ACC A31
(8W-10-7)
BATT A0
(8W-10-3)
JUNCTION BLOCK
(8W-12-2)
FUSE 15 10A (8W-12-11)
POWER DISTRIBUTION CENTER
(8W-10-3)
47
FUSE 18 40A (8W-10-13)
48
10
C2
F13 20 DB/GY
A5 12 RD/GY
F13 20 DB/GY
V5 14 DG/VT
10
36
13
37
29
WIPER HIGH/ LOW RELAY (IN PDC)
INTERMITTENT WIPER RELAY (IN PDC)
12
28
11
15
14
V3 14 BR/OR
V16 20 VT/PK
V4 14 RD/YL
V14 20 PK/VT
Z1 16 BK
A
B
WINDSHIELD WIPER MOTOR 1 PARK
M
1
D
C
V55 20 WT/GY
Z1 16 BK
S109
(8W-15-2)
Z1 12 BK
G102
(8W-15-3)
8
C1
2
C1
7
C1
WIPER HIGH/LOW RELAY CONTROL
WIPER PARK SWITCH SENSE
WIPER ON/OFF RELAY CONTROL
BODY CONTROL MODULE (IN JB)
(8W-45-4)

8W-53 WIPERS

INDEX

page

DESCRIPTION AND OPERATION
HELPFUL INFORMATION 5
HI SPEED OPERATION 5
INTERMITTENT WIPER OPERATION 4
LOW SPEED OPERATION 5
MIST FUNCTION 4
WASHER OPERATION 5
WINDSHIELD WIPERS 4
WIPER AFTER WASH 4

DESCRIPTION AND OPERATION

WINDSHIELD WIPERS

The windshield wiper system is powered by a 10-amp fuse located in cavity 15 of the junction block. This fuse is HOT in the ACCESSORY and RUN positions only. Power for the fuse is supplied on the A31 circuit.

The A31 circuit originates at the ignition switch. Power for the A31 circuit is supplied by circuit A1 from the Power Distribution Center (PDC) and protected by a 20 amp fuse located in cavity 8.

The F13 circuit supplies the power from the fuse in the junction block to the wiper switch, coil side if the intermittent wiper relay, and the coil side of the HI/LOW Wiper relay. This circuit is spliced and also supplies power to the Rear Window Defogger relay, and the Turn Signal Combo Flasher. Both of the relays used in the wiper system are located in the PDC.

The Body Control Module (BCM) controls all functions of the wiper system. This is accomplished through a multi-plexed input from the wiper switch to the BCM on circuit V52.

INTERMITTENT WIPER OPERATION

When the operator selects intermittent wiper operation a multi-plexed signal is sent to the Body Control Module (BCM) on the V52 circuit. The BCM then grounds circuit V14, which is the coil side of the intermittent wiper relay. This causes the relay to switch from its normally grounded position and connect circuit A5 to circuit V5. The A5 circuit is protected by a 40 amp fuse located in cavity 14 of the Power Distribution Center (PDC).

The V5 circuit is connected to the HI/LOW Wiper relay LOW speed side. Voltage is passed through the relay to circuit V3, then to the LOW speed side of the wiper motor. Ground for the wiper motor is provided on circuit Z1.

When the wiper motor completes one cycle, the BCM turns OFF the motor by deactivating the wiper relays. The amount of delay between wipes is dependent on the voltage level being sent to the BCM from the wiper switch.

As the windshield wiper motor turns, the park switch internal to the motor moves from its grounded position to the open RUN position. The BCM uses input from the park switch, on circuit V55, for wiper position and system operation.

The delay times are also compensated for vehicle speed. If the vehicle is moving less than 10 mph, the delay time is doubled. Once the vehicle speed exceeds 10 mph, the normal delay times are used.

WIPER AFTER WASH

When the wash button is pressed momentarily a signal is sent to the Body Control Module (BCM) on circuit V10. The BCM then turns the wipers ON low speed for three consecutive wipes after the button is released.

The BCM turns the wipers ON by providing a ground path for circuit V14. This causes the intermittent wipe relay to switch from its normally grounded position and connect circuit A5 to circuit V5. The A5 circuit is protected by a 40 amp fuse located in cavity 14 of the PDC.

The V5 circuit is connected to the HI/LOW Wiper relay low speed side. Voltage is passed through the relay to circuit V3, then to the LOW speed side of the wiper motor. Ground for the wiper motor is provided on circuit Z1.

As the windshield wiper motor turns, the park switch internal to the motor moves from its grounded position to the open RUN position. The BCM uses input from the park switch, on circuit V55, for wiper position and system operation.

MIST FUNCTION

When the MIST switch is activated, and the wiper switch is in the OFF position, a multi-plexed signal is sent to the Body Control Module (BCM) on circuit V52. The BCM then turns the wipers on LOW speed for as long as the switch is held.

The BCM turns the wipers ON by providing a ground path for circuit V14. This causes the intermit-

DESCRIPTION AND OPERATION (Continued)

tent wipe relay to switch from its normally grounded position and connect circuit A5 to circuit V5. The A5 circuit is protected by a 40 amp fuse located in cavity 14 of the PDC.

The V5 circuit is connected to the HI/LOW Wiper relay low speed side. Voltage is passed through the relay to circuit V3, then to the LOW speed side of the wiper motor. Ground for the wiper motor is provided on circuit Z1.

If after the MIST switch is released and the wiper control switch is no longer in the OFF position, the wipers will enter the mode indicated by the wiper control switch.

As the windshield wiper motor turns, the park switch internal to the motor moves from its grounded position to the open RUN position. The BCM uses input from the park switch, on circuit V55, for wiper position and system operation.

LOW SPEED OPERATION

When the LOW speed switch is activated a multiplexed signal is sent to the Body Control Module (BCM) on circuit V52. The BCM then turns the wipers ON LOW speed by providing a ground path for circuit V14. This causes the intermittent wipe relay to switch from its normally grounded position and connect circuit A5 to circuit V5. The A5 circuit is protected by a 40 amp fuse located in cavity 14 of the PDC.

The V5 circuit is connected to the HI/LOW Wiper relay low speed side. Voltage is passed through the relay to circuit V3, then to the LOW speed side of the wiper motor. Ground for the wiper motor is provided on circuit Z1.

As the windshield wiper motor turns, the park switch internal to the motor moves from its grounded position to the open RUN position. The BCM uses input from the park switch, on circuit V55, for wiper position and system operation.

HI SPEED OPERATION

When HIGH speed operation is selected, a multiplexed signal is sent to the Body Control Module (BCM) on circuit V52. The BCM then turns the wipers ON by grounding the V14 and V16 circuits.

By grounding the V14 circuit the intermittent wiper relay is switched from its normally grounded position to connect circuits A5 and V5. The A5 circuit, which originates in the PDC and is protected by a 40 amp fuse located in cavity 14, then supplies power to the HI/LOW wiper relay through circuit V5.

When the V16 circuit is grounded the HI/LOW relay switches, from its normal position of LOW speed, to the HIGH speed contact. Power for the coil side of the relay is supplied by the F13 circuit. This circuit also is the feed for the wiper switch and the intermittent wiper relay.

Power for the windshield wiper motor is supplied from the HI/LOW wiper relay to the motor on circuit V4. Ground for the wiper motor is provided on circuit Z1.

As the windshield wiper motor turns, the park switch internal to the motor moves from its grounded position to the open RUN position. The BCM uses input from the park switch, on circuit V55, for wiper position and system operation.

WASHER OPERATION

When the operator presses the WASH switch power is supplied on the F13 circuit, through the CLOSED switch contacts, to circuit V10. The V10 circuit is spliced and conects to the Body Control Module (BCM) and the windshield washer pump motor. The pump motor, which is located in the washer fluid reservoir, is grounded at the right frame rail.

HELPFUL INFORMATION

- Check the 10 amp fuse located in cavity 15 of the junction block
- Check the 40 amp fuse located in cavity 14 of the PDC
- Check for a good ground at the instrument panel left side cowl
- Check for a good ground at the right frame rail

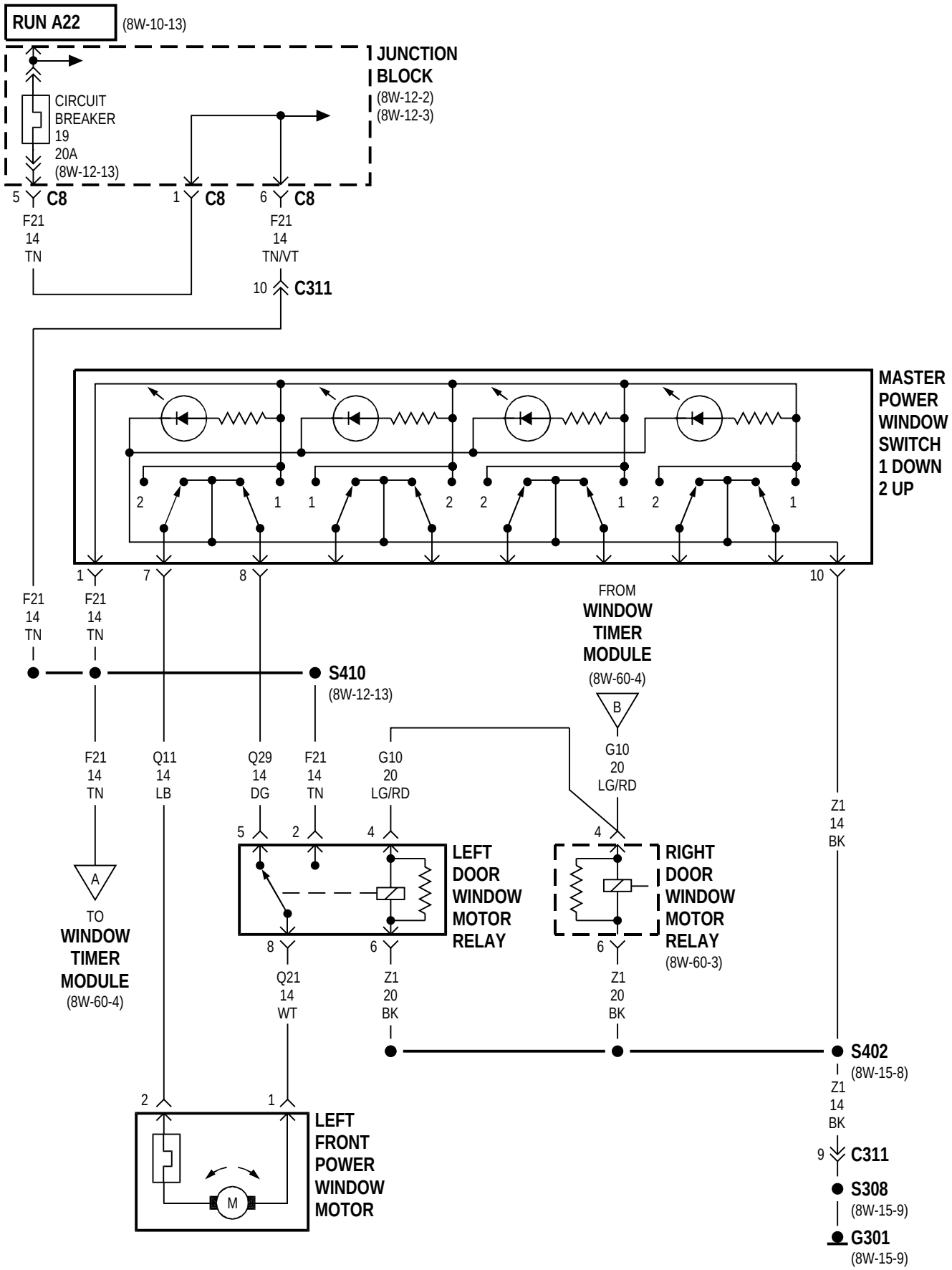
8W-60 POWER WINDOWS

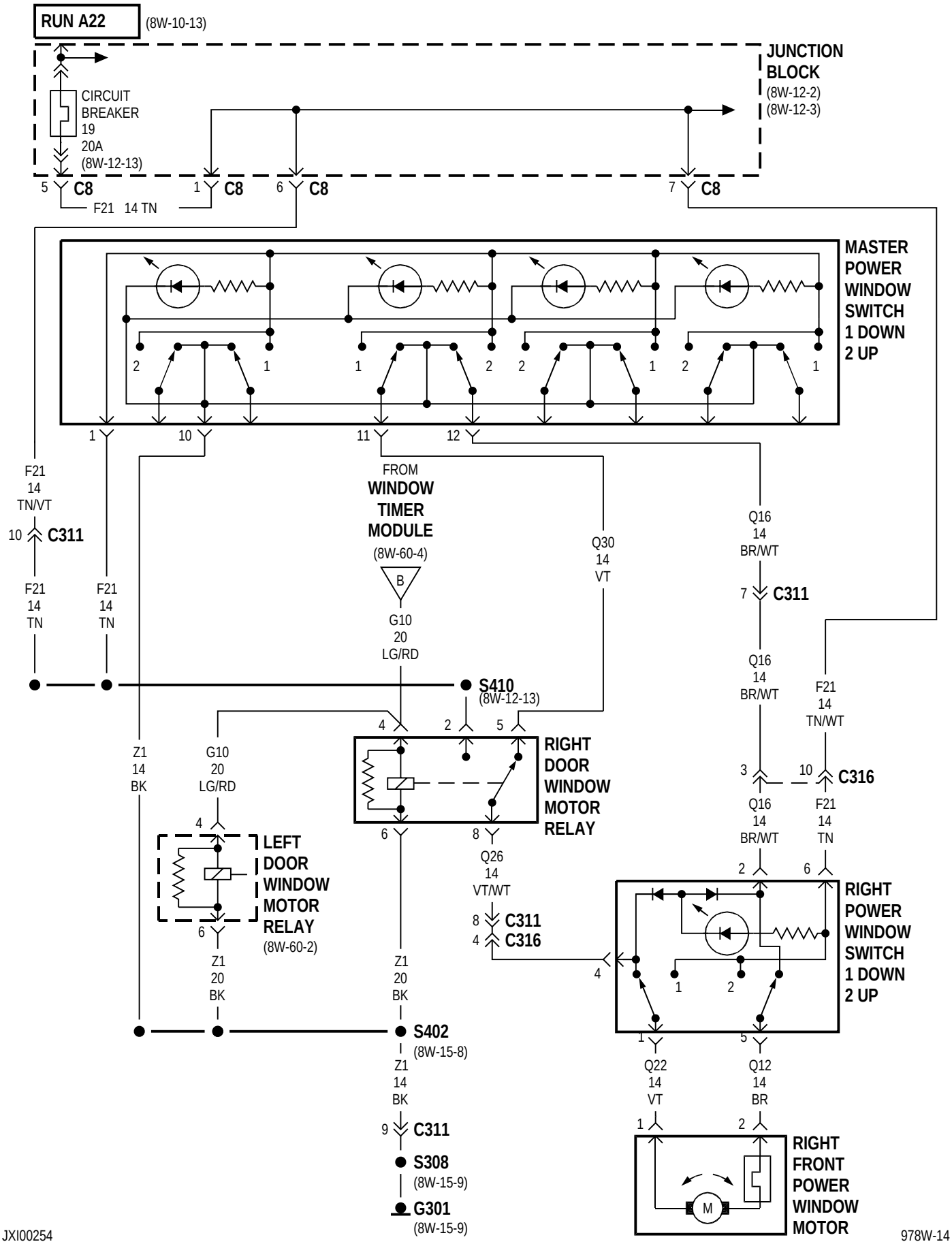
INDEX

page

SCHEMATICS AND DIAGRAMS 1
DESCRIPTION AND OPERATION 5

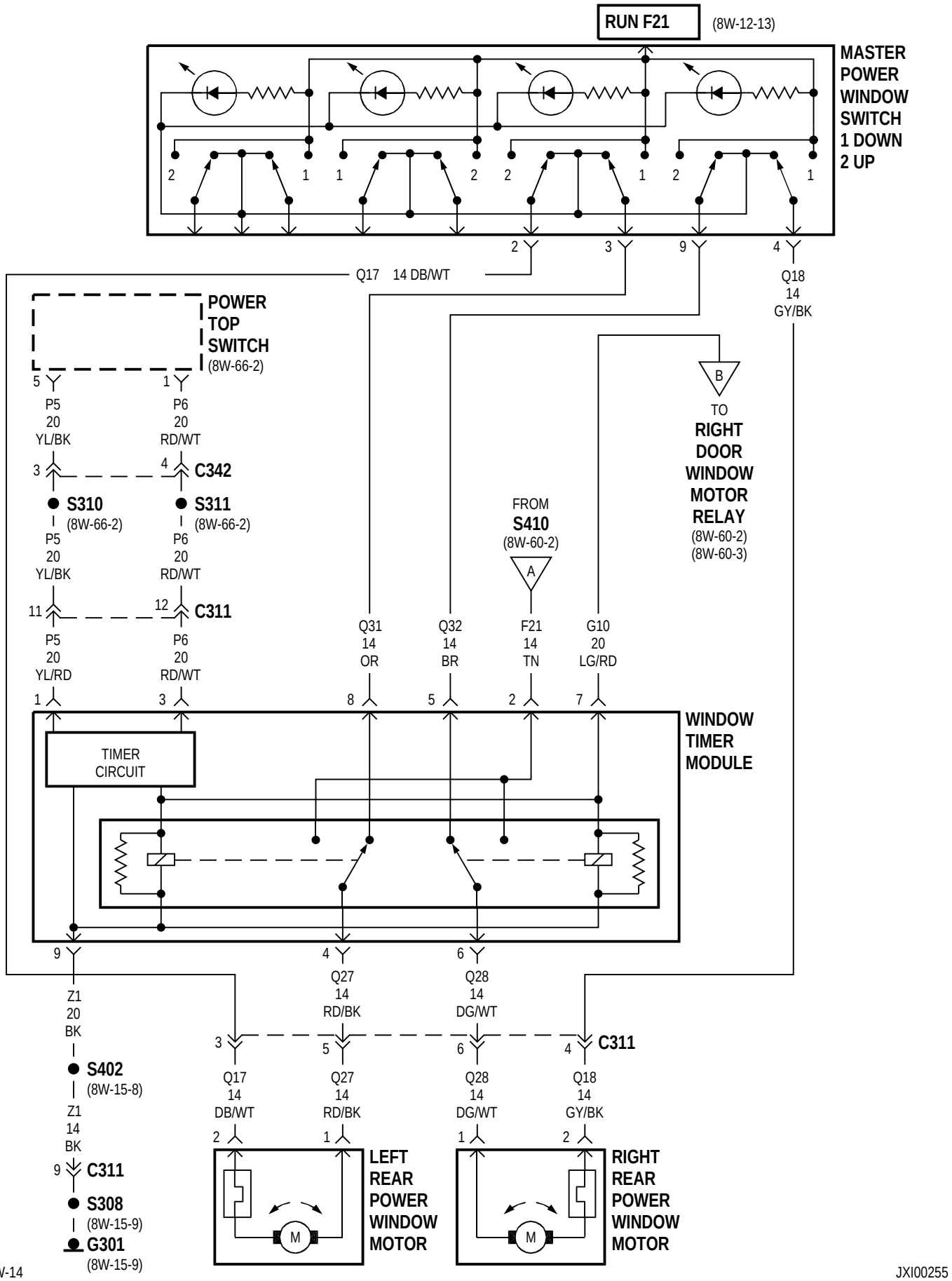
Component	Page
Circuit Breaker 19	8W-60-2, 3
G301	8W-60-2, 3, 4
Junction Block	8W-60-2, 3
Left Door Window Motor Relay	8W-60-2, 3
Left Front Power Window Motor	8W-60-2
Left Rear Power Window Motor	8W-60-4
Master Power Window Switch	8W-60-2, 3, 4
Power Top Switch	8W-60-4
Right Door Window Motor Relay	8W-60-2, 3
Right Front Power Window Motor	8W-60-3
Right Power Window Switch	8W-60-3
Right Rear Power Window Motor	8W-60-4
S308	8W-60-2, 3, 4
S310	8W-60-4
S311	8W-60-4
S402	8W-60-2, 3, 4
S410	8W-60-2, 3
Timer Circuit	8W-60-4
Window Timer Module	8W-60-4


RUN A22
(8W-10-13)
JUNCTION BLOCK
(8W-12-2)
(8W-12-3)
CIRCUIT BREAKER 19 20A
(8W-12-13)
5 C8
F21 14 TN
1 C8
6 C8
F21 14 TN/VT
10 C311
MASTER POWER WINDOW SWITCH
1 DOWN
2 UP
1 7 8 10
F21 14 TN
F21 14 TN
S410
(8W-12-13)
FROM WINDOW TIMER MODULE
(8W-60-4)
B
G10 20 LG/RD
F21 14 TN
Q11 14 LB
Q29 14 DG
F21 14 TN
G10 20 LG/RD
Z1 14 BK
A
TO WINDOW TIMER MODULE
(8W-60-4)
LEFT DOOR WINDOW MOTOR RELAY
RIGHT DOOR WINDOW MOTOR RELAY
(8W-60-3)
Q21 14 WT
Z1 20 BK
Z1 20 BK
S402
(8W-15-8)
Z1 14 BK
9 C311
S308
(8W-15-9)
G301
(8W-15-9)
LEFT FRONT POWER WINDOW MOTOR
M



JXI00254

978W-14


RUN F21
(8W-12-13)
MASTER POWER WINDOW SWITCH
1 DOWN
2 UP
Q17 14 DB/WT
Q18 14 GY/BK
POWER TOP SWITCH
(8W-66-2)
P5 20 YL/BK
P6 20 RD/WT
C342
S310
(8W-66-2)
S311
(8W-66-2)
C311
P5 20 YL/RD
TO RIGHT DOOR WINDOW MOTOR RELAY
(8W-60-2)
(8W-60-3)
FROM S410
(8W-60-2)
Q31 14 OR
Q32 14 BR
F21 14 TN
G10 20 LG/RD
TIMER CIRCUIT
WINDOW TIMER MODULE
Z1 20 BK
S402
(8W-15-8)
Z1 14 BK
S308
(8W-15-9)
G301
(8W-15-9)
Q27 14 RD/BK
Q28 14 DG/WT
Q17 14 DB/WT
Q27 14 RD/BK
Q28 14 DG/WT
Q18 14 GY/BK
LEFT REAR POWER WINDOW MOTOR
RIGHT REAR POWER WINDOW MOTOR
M

8W-60 POWER WINDOWS

INDEX

page

DESCRIPTION AND OPERATION
HELPFUL INFORMATION 6
POWER WINDOW OPERATION (W/POWER TOP OPERATION) 6
POWER WINDOWS (NORMAL OPERATION) 5

DESCRIPTION AND OPERATION

POWER WINDOWS (NORMAL OPERATION)

NOTE: The power window system used in this vehicle is different from other vehicles in that a window timer module along with window down relays are used. This module allows for notmal window operation when the window switches are activated. However, when the power top switch is activated the module will partially lower all windows

The power window system is powered by a 20 amp circuit breaker located in the junction block cavity 19. This circuit breaker also supplies power to the window down module and normally OPEN contacts of the window down relays.

The circuit breaker receives its feed from the ignition switch on the A22 circuit. This circuit breaker is HOT when the ignition switch is in the RUN position only.

Circuit F21 is the feed circuit from the circuit breaker to the power window switches. The ground path for the power windows, window timer module, and window down relays is on the Z1 circuit and terminates at the instrument panel left side cowl.

Both of the door switches have a Light Emitting Diode (L.E.D.) located inside of the switch. This diode allows the operator to see the switch when it is dark. The diodes are powered at all times when the ignition switch is in the RUN position.

Resistors and diodes internal to the switches are used for the L.E.D's. No attempt should be made to repair these items. If the L.E.D. is not working, the switch should be replaced.

Each window motor has an internal circuit breaker to protect the motor from excessive electrical loads. This circuit breaker is not serviceable.

LEFT FRONT WINDOW OPERATION

When the operator selects window DOWN operation power is supplied on the F21 circuit through the switch to circuit Q29. Circuit Q29 connects from the switch to the left power window down relay. The feed is passed through the normally CLOSED contacts in the relay to circuit Q21. Circuit Q21 connects from the relay to the motor. Ground for the motor is supplied on circuit Q11 back to the master switch to the Z1 ground circuit.

For window UP operation the circuits are reversed. Circuit Q11 is the feed and circuits Q21 and Q29 are the ground.

RIGHT FRONT WINDOW OPERATION

When the DRIVER selects window DOWN operation power is supplied on the F21 circuit through the switch to circuit Q30. Circuit Q30 connects from the drivers door switch to the right front down relay. The feed is passed through the normally CLOSED contacts in the relay to circuit Q26. Circuit Q26 connects to the passenger switch. The motor current then runs through th eswitch to circuit Q22 which connects to the motor. The ground returns through circuit Q12 through the passengers switch contacts to circuit Q16. Circuit Q16 connects to th master switch then to the Z1 ground circuit.

For window UP operation the circuits are reversed. Circuit Q16 is the feed and circuits Q26 and Q30 are the ground.

If the switch is being operated from the PASSENGER'S front door, and the operator is requesting window DOWN operation, power is supplied on the F21 circuit through the switch to the Q22 circuit.

Ground for the motor is supplied on the Q12 circuit through the switch and back to the master switch on circuit Q16. A bus bar, internal to the switch, connects the Q16 circuit to the Z1 circuit. The Z1 circuit is terminated at the instrument panel left side cowl.

For window UP operation, the circuits are reversed. Circuit Q12 is the power and circuits Q22 and Q26 are the ground.

LEFT REAR WINDOW

When the DRIVER selects window DOWN operation power is supplied on the F21 circuit through the switch to circuit Q31. Circuit Q31 connects from the drivers door switch to the window timer module. The power is passed though the normally CLOSED contacts in the module to circuit Q27. Circuit Q27 connects from the module to the motor.

DESCRIPTION AND OPERATION (Continued)

Ground for the window motor is supplied on the Q17 circuit. Circuit Q17 connects from the left rear window motor to the master switch. A bus bar, internal to the switch, connects the Q17 circuit to the Z1 circuit. The Z1 circuit is terminated at the instrument panel left side cowl.

For window UP operation the circuits are reversed. Circuit Q17 is the feed, and circuit Q31 and circuit Q27 are the ground.

RIGHT REAR WINDOW

When the DRIVER selects window DOWN operation power is supplied on the F21 circuit through the switch to circuit Q32. Circuit Q32 connects from the drivers door switch to the window timer module. The power is passed though the normally CLOSED contacts in the module to circuit Q28. Circuit Q28 connects from the module to the motor.

Ground for the window motor is supplied on the Q18 circuit. Circuit Q18 connects from the right rear window motor to the master switch. A bus bar, internal to the switch, connects the Q18 circuit to the Z1 circuit. The Z1 circuit is terminated at the Instrument Panel left side cowl.

For window UP operation the circuits are reversed. Circuit Q18 is the feed, and circuit Q32 and circuit Q28 are the ground.

POWER WINDOW OPERATION (W/POWER TOP OPERATION)

NOTE: The power windows on this vehicle operate automatically in the down mode when the power top switch is activated. Refer to the following circuit descriptions for operation in this mode. For regular power window operation refer to the previous circuit description.

The power window system on this vehicle utilizes a pair of external relays (2) and a window timer module located in the left door to control the operation of the windows when the power top is activated.

Power for the window timer module is supplied on circuit P5 or P6. The F21 circuit supplies power for the power window switches, and the contact side of the power window relays. Ground for the module is supplied on circuit Z1.

When the power top switch is activated circuit P6 for top UP, or P5 for top DOWN, sends a voltage signal to the window timer module. The window timer module then provides voltage to the coil side of the relays. This causes the normally OPEN contacts in the relays to CLOSE connecting power to the DOWN side of wach window motor. All windows then operate in the DOWN mode for a pre-determined length of time.

HELPFUL INFORMATION

- Check the 20 amp circuit breaker located in cavity 19 of the junction block
- Check the 40 amp fuse located in cavity 18 of the PDC
- Check for a good ground at the instrument panel left side cowl
- Refer to the appropriate group of the Service Manual for additional test procedures

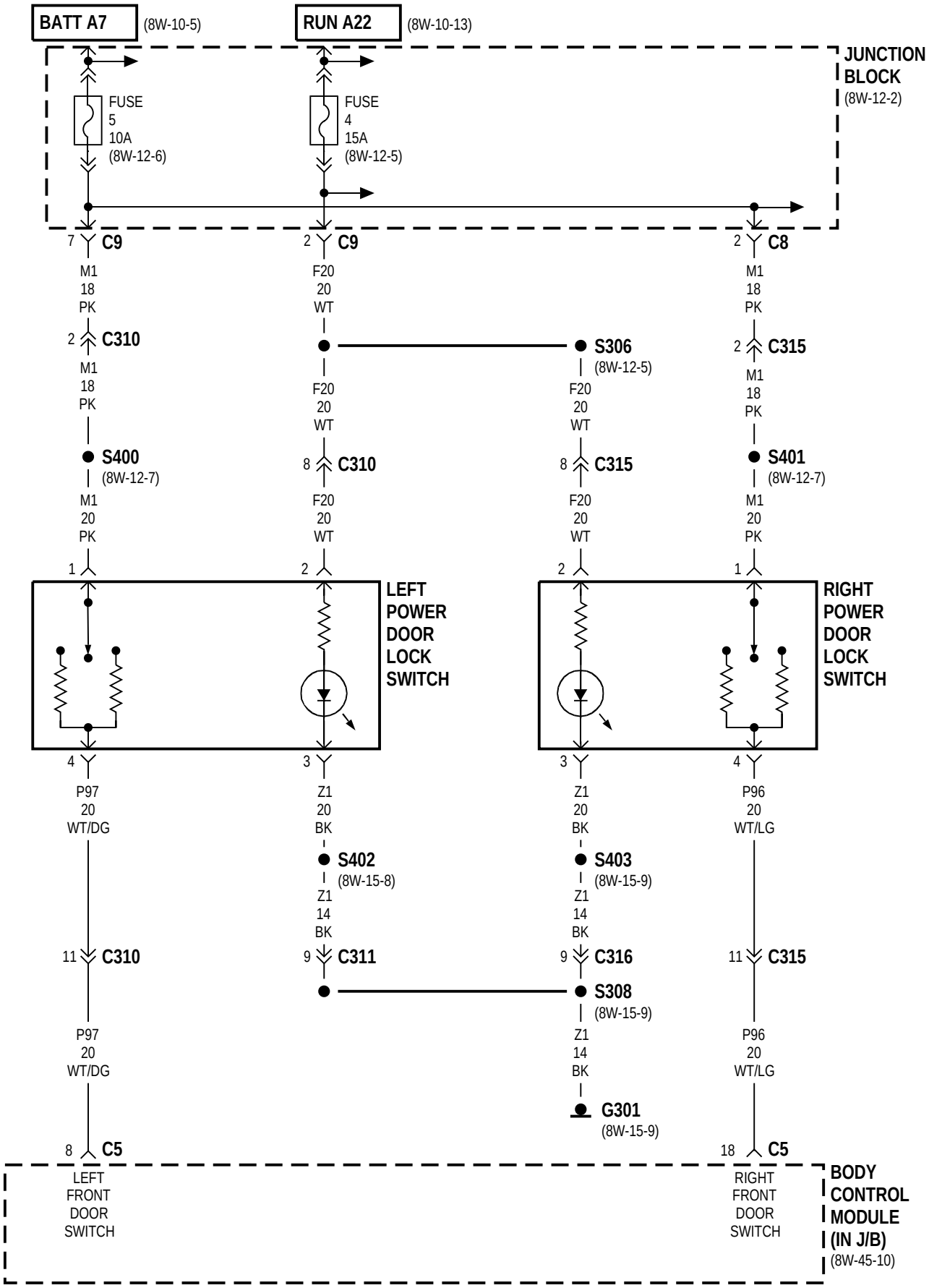
8W-61 POWER DOOR LOCKS

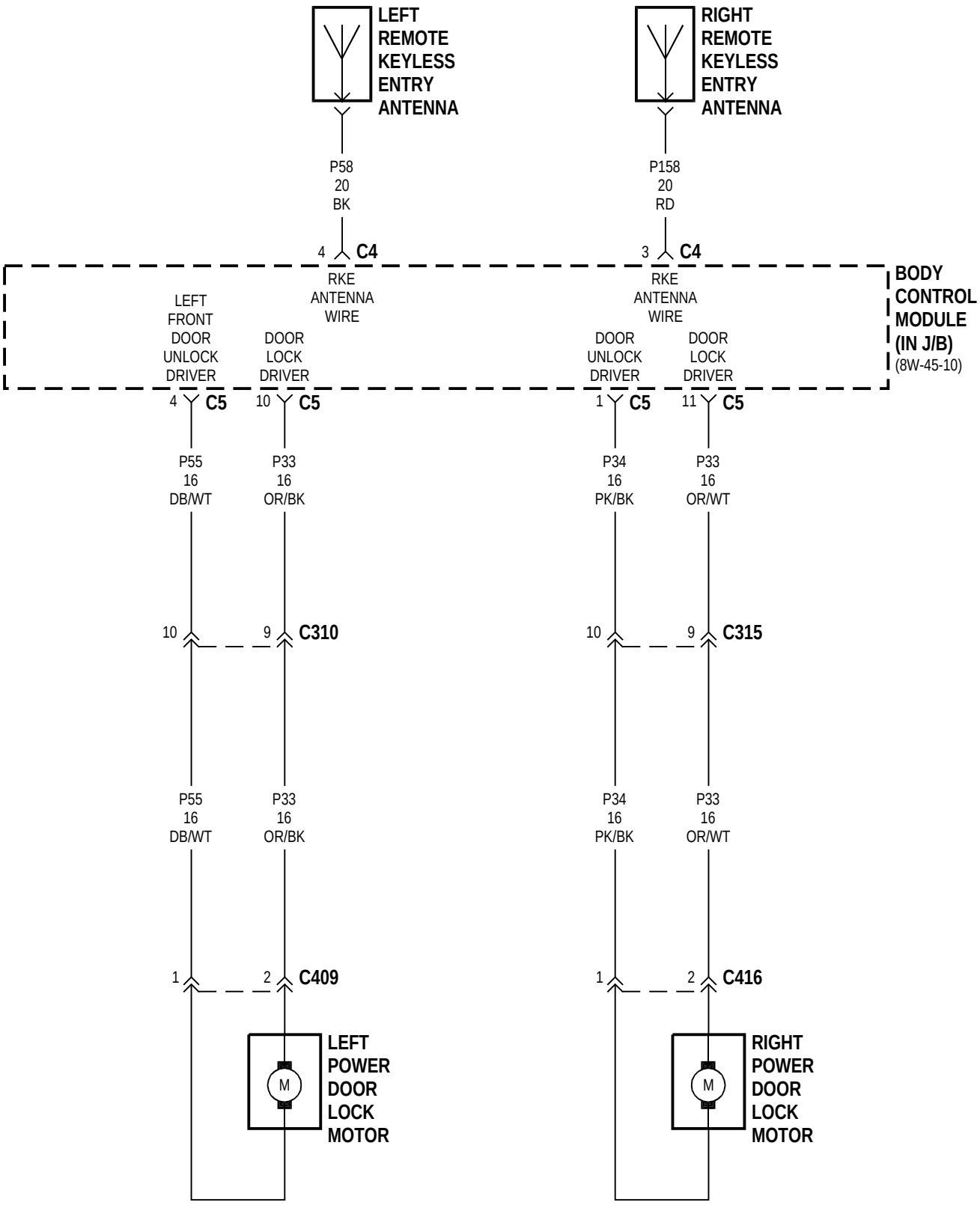
INDEX

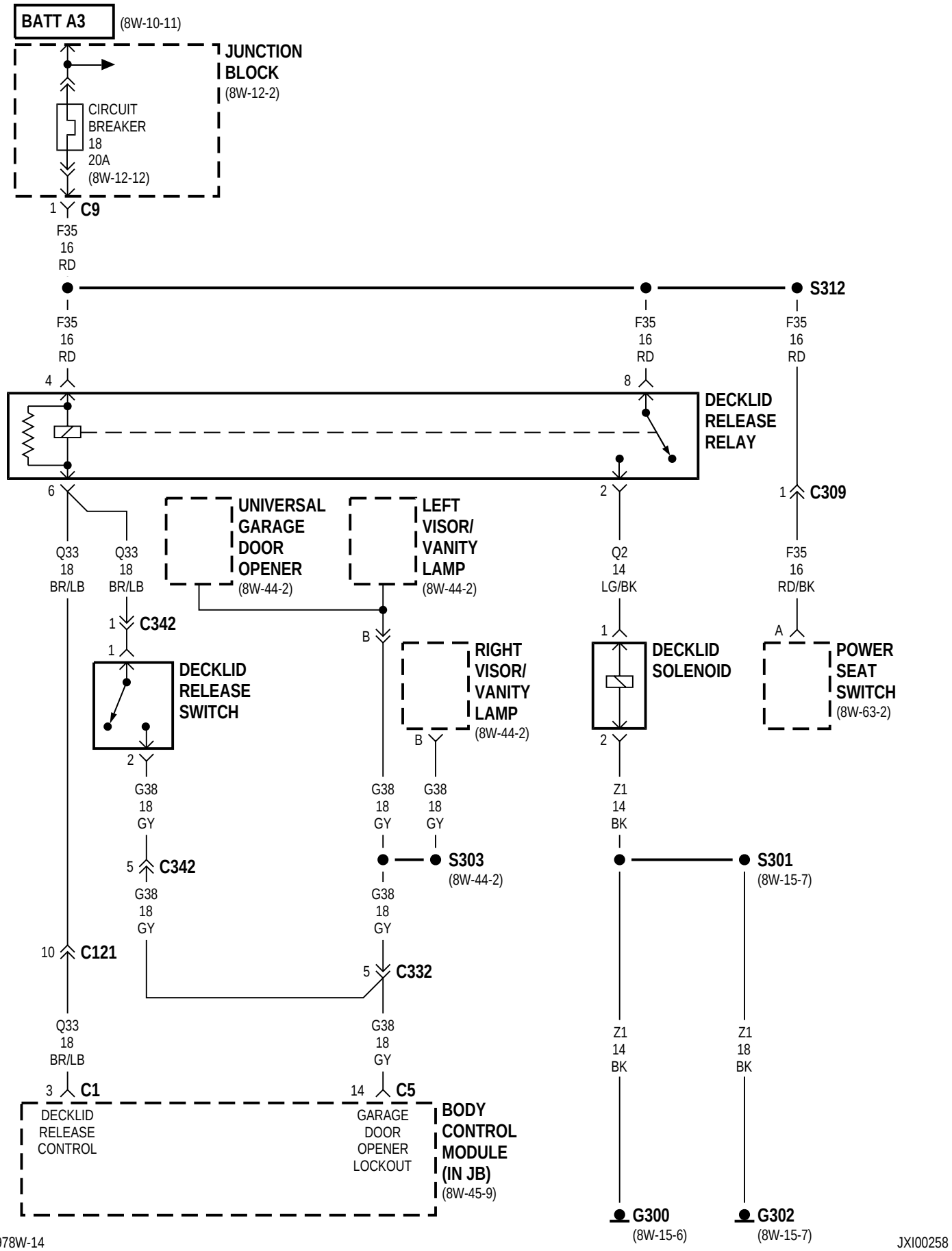
page

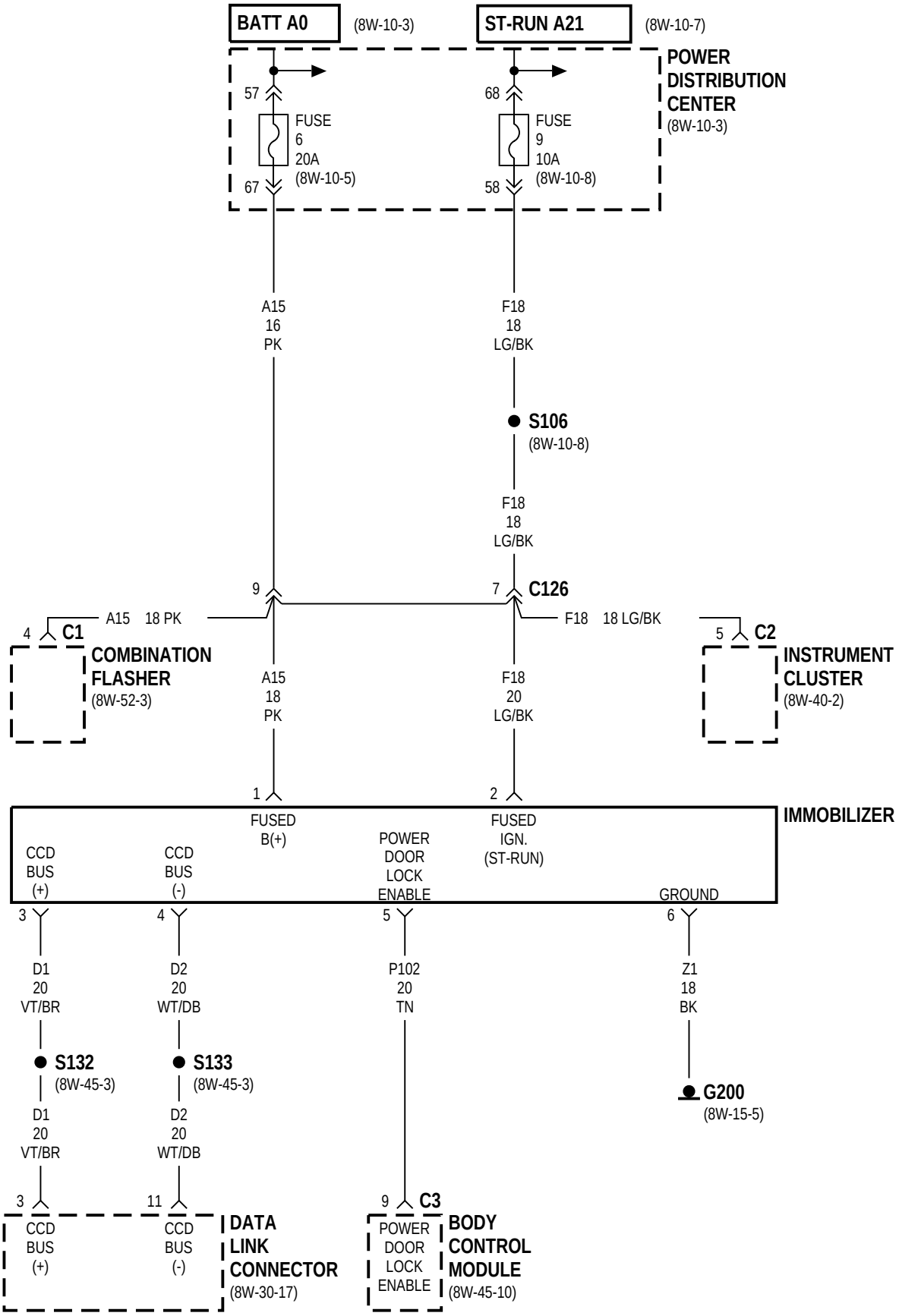
SCHEMATICS AND DIAGRAMS **1**
DESCRIPTION AND OPERATION **6**

Component	Page
Body Control Module	8W-61-2, 3, 4, 5
Circuit Breaker 18	8W-61-4
Combination Flasher	8W-61-5
Data Link Connector	8W-61-5
Decklid Release Relay	8W-61-4
Decklid Release Switch	8W-61-4
Decklid Solenoid	8W-61-4
Fuse 4	8W-61-2
Fuse 5	8W-61-2
Fuse 6	8W-61-5
Fuse 9	8W-61-5
G200	8W-61-5
G300	8W-61-4
G301	8W-61-2
G302	8W-61-4
Immobilizer	8W-61-5
Instrument Cluster	8W-61-5
Junction Block	8W-61-2, 4
Left Power Door Lock Motor	8W-61-3
Left Power Door Lock Switch	8W-61-2
Left Remote Keyless Entry Antenna	8W-61-3
Left Visor/Vanity Lamp	8W-61-4
Power Distribution Center	8W-61-5
Power Seat Switch	8W-61-4
Right Power Door Lock Motor	8W-61-3
Right Power Door Lock Switch	8W-61-2
Right Remote Keyless Entry Antenna	8W-61-3
Right Visor/Vanity Lamp	8W-61-4
S106	8W-61-5
S132	8W-61-5
S133	8W-61-5
S301	8W-61-4
S303	8W-61-4
S306	8W-61-2
S308	8W-61-2
S312	8W-61-4
S400	8W-61-2
S401	8W-61-2
S402	8W-61-2
S403	8W-61-2
Universal Garage Door Opener	8W-61-4


BATT A7
(8W-10-5)
RUN A22
(8W-10-13)
JUNCTION BLOCK
(8W-12-2)
FUSE 5 10A (8W-12-6)
FUSE 4 15A (8W-12-5)
7 C9
2 C9
2 C8
M1 18 PK
F20 20 WT
2 C310
2 C315
S306
(8W-12-5)
S400
(8W-12-7)
S401
(8W-12-7)
8 C310
8 C315
M1 20 PK
F20 20 WT
1
2
2
1
LEFT POWER DOOR LOCK SWITCH
RIGHT POWER DOOR LOCK SWITCH
4
3
3
4
P97 20 WT/DG
Z1 20 BK
P96 20 WT/LG
S402
(8W-15-8)
S403
(8W-15-9)
Z1 14 BK
11 C310
9 C311
9 C316
11 C315
S308
(8W-15-9)
G301
(8W-15-9)
8 C5
18 C5
LEFT FRONT DOOR SWITCH
RIGHT FRONT DOOR SWITCH
BODY CONTROL MODULE (IN J/B)
(8W-45-10)


LEFT REMOTE KEYLESS ENTRY ANTENNA
RIGHT REMOTE KEYLESS ENTRY ANTENNA
P58 20 BK
P158 20 RD
4 C4
3 C4
RKE ANTENNA WIRE
RKE ANTENNA WIRE
BODY CONTROL MODULE (IN J/B)
(8W-45-10)
LEFT FRONT DOOR UNLOCK DRIVER
DOOR LOCK DRIVER
DOOR UNLOCK DRIVER
DOOR LOCK DRIVER
4 C5
10 C5
1 C5
11 C5
P55 16 DB/WT
P33 16 OR/BK
P34 16 PK/BK
P33 16 OR/WT
10 9 C310
10 9 C315
P55 16 DB/WT
P33 16 OR/BK
P34 16 PK/BK
P33 16 OR/WT
1 2 C409
1 2 C416
M
LEFT POWER DOOR LOCK MOTOR
M
RIGHT POWER DOOR LOCK MOTOR


BATT A3
(8W-10-11)
JUNCTION BLOCK
(8W-12-2)
CIRCUIT BREAKER 18 20A
(8W-12-12)
1 C9
F35 16 RD
S312
F35 16 RD
F35 16 RD
F35 16 RD
4
8
DECKLID RELEASE RELAY
6
2
1 C309
UNIVERSAL GARAGE DOOR OPENER
(8W-44-2)
LEFT VISOR/ VANITY LAMP
(8W-44-2)
Q33 18 BR/LB
Q33 18 BR/LB
Q2 14 LG/BK
F35 16 RD/BK
1 C342
1
B
1
A
DECKLID RELEASE SWITCH
RIGHT VISOR/ VANITY LAMP
(8W-44-2)
DECKLID SOLENOID
POWER SEAT SWITCH
(8W-63-2)
2
B
2
G38 18 GY
G38 18 GY
G38 18 GY
Z1 14 BK
5 C342
S303
(8W-44-2)
S301
(8W-15-7)
G38 18 GY
G38 18 GY
10 C121
5 C332
Q33 18 BR/LB
G38 18 GY
Z1 14 BK
Z1 18 BK
3 C1
14 C5
DECKLID RELEASE CONTROL
GARAGE DOOR OPENER LOCKOUT
BODY CONTROL MODULE (IN JB)
(8W-45-9)
G300
(8W-15-6)
G302
(8W-15-7)


BATT A0
(8W-10-3)
ST-RUN A21
(8W-10-7)
POWER DISTRIBUTION CENTER
(8W-10-3)
57
FUSE 6 20A
(8W-10-5)
67
68
FUSE 9 10A
(8W-10-8)
58
A15 16 PK
F18 18 LG/BK
S106
(8W-10-8)
F18 18 LG/BK
9
7
C126
A15 18 PK
F18 18 LG/BK
4
C1
COMBINATION FLASHER
(8W-52-3)
5
C2
INSTRUMENT CLUSTER
(8W-40-2)
A15 18 PK
F18 20 LG/BK
1
2
IMMOBILIZER
FUSED B(+)
FUSED IGN. (ST-RUN)
CCD BUS (+)
CCD BUS (-)
POWER DOOR LOCK ENABLE
GROUND
3
4
5
6
D1 20 VT/BR
D2 20 WT/DB
P102 20 TN
Z1 18 BK
S132
(8W-45-3)
S133
(8W-45-3)
G200
(8W-15-5)
D1 20 VT/BR
D2 20 WT/DB
3
11
9
C3
CCD BUS (+)
CCD BUS (-)
DATA LINK CONNECTOR
(8W-30-17)
POWER DOOR LOCK ENABLE
BODY CONTROL MODULE
(8W-45-10)

8W-61 POWER DOOR LOCKS

INDEX

page

DESCRIPTION AND OPERATION
DECK LID RELEASE 6
HELPFUL INFORMATION 7
POWER DOOR LOCKS 6
REMOTE KEYLESS ENTRY 6

DESCRIPTION AND OPERATION

POWER DOOR LOCKS

The power door lock system is controlled by the Body Control Module (BCM). The door lock switches, located in the front doors, are supplied power on the M1 circuit. This circuit is the Ignition-Off Draw (IOD) circuit. It is protected by a 10 amp fuse located in cavity 5 of the junction block.

Both switches have a Light Emitting Diode (LED) located internal to the switch for night illumination. Power for the LED's is supplied on circuit F20. The F20 circuit is protected by a 15 amp fuse located in cavity 4 of the junction block. Power for the fuse is supplied on circuit A22. The A22 circuit connects to the ignition switch and is HOT in the RUN position only.

Circuit A22 is powered by circuit A2 from the PDC. This circuit is protected by a 40 amp fuse located in cavity 18 of the PDC. Ground for the LED's is supplied on circuit Z1 and terminates at the instrument panel left side cowl.

Power for the door lock motors is supplied to the BCM on circuit F135. This circuit is protected by a 15 amp fuse located in cavity 9 of the junction block. Circuit A3 is used to supply power to the fuse.

Circuit A3 is HOT at all times and is protected by a 40 amp fuse located in cavity 15 of the PDC. This circuit also supplies power for the Power Seat circuit breaker, and the Headlamp Delay Relay.

DOOR SWITCH OPERATION

The door lock switches use resistors internal to the switch. There are different resistors used for the LOCK and UNLOCK functions. Both switches have the same amount of resistance for the LOCK and UNLOCK functions.

When the operator selects the LOCK or UNLOCK function, from either switch, voltage is passed through the CLOSED contacts in the switch, through the appropriate resistor, to the P96 circuit for the right front door, and circuit P97 for the left front door. These circuits then connect to the Body Control Module (BCM).

The BCM then process this request and supplies power and ground to the appropriate circuits. When the LOCK function is selected power is supplied on circuit P33 to all the motors. Ground is supplied on circuit P34 and P55. For the UNLOCK function the circuits are reversed.

REMOTE KEYLESS ENTRY

Operation of the Remote Keyless Entry (RKE) system is controlled by the Body Control Module (BCM).

When the BCM receives a signal from the RKE transmitter it supplies power and ground to the appropriate circuits dependent upon the operators request.

Operation of the door lock motors is the same with or without RKE.

DECK LID RELEASE

W/O REMOTE KEYLESS ENTRY

The deck lid release system uses a switch, located in the center console, and a release solenoid located on the deck lid latch assembly.

Power for the switch is supplied on circuit F35. This circuit is HOT at all times and protected by a 20 amp circuit breaker located in cavity 18 of the junction block. The F35 circuit is spliced and supplies power for the power seats.

Power for the circuit breaker is supplied on circuit A3. This circuit is HOT at all times and protected by a 40 amp fuse located in cavity 15 of the Power Distribution Center (PDC).

When the switch is CLOSED, power flows through the switch to circuit Q2. The Q2 circuit connects from the switch to the deck lid release solenoid. Ground for the solenoid is supplied on circuit Z1.

W/ REMOTE KEYLESS ENTRY

On vehicles equipped with Remote Keyless Entry (RKE) a relay is placed in the F35 and Q2 circuits. This relay allows the operator to unlock the trunk with the RKE transmitter. Power for the coil and contact sides of the relay is supplied on circuit F35. Ground for the coil side of the relay is controlled by the Body Control Module (BCM).

DESCRIPTION AND OPERATION (Continued)

When the RKE transmitter is activated the BCM provides a ground path for circuit Q33. This causes the contacts in the relay to CLOSE connecting circuits F35 and Q2. The Q2 circuit connects to the deck lid release solenoid.

HELPFUL INFORMATION

- Check the 40 amp fuse located in cavity 15 of the PDC
- Check the 15 amp fuse located in cavity 9 of the junction block
- Check the IOD fuse located in cavity 5 of the PDC
- Check for a good door switch ground at the instrument panel left side cowl
- Refer to the appropriate group of the Service Manual or the Diagnostic Test Procedures Manual for further diagnostic procedures

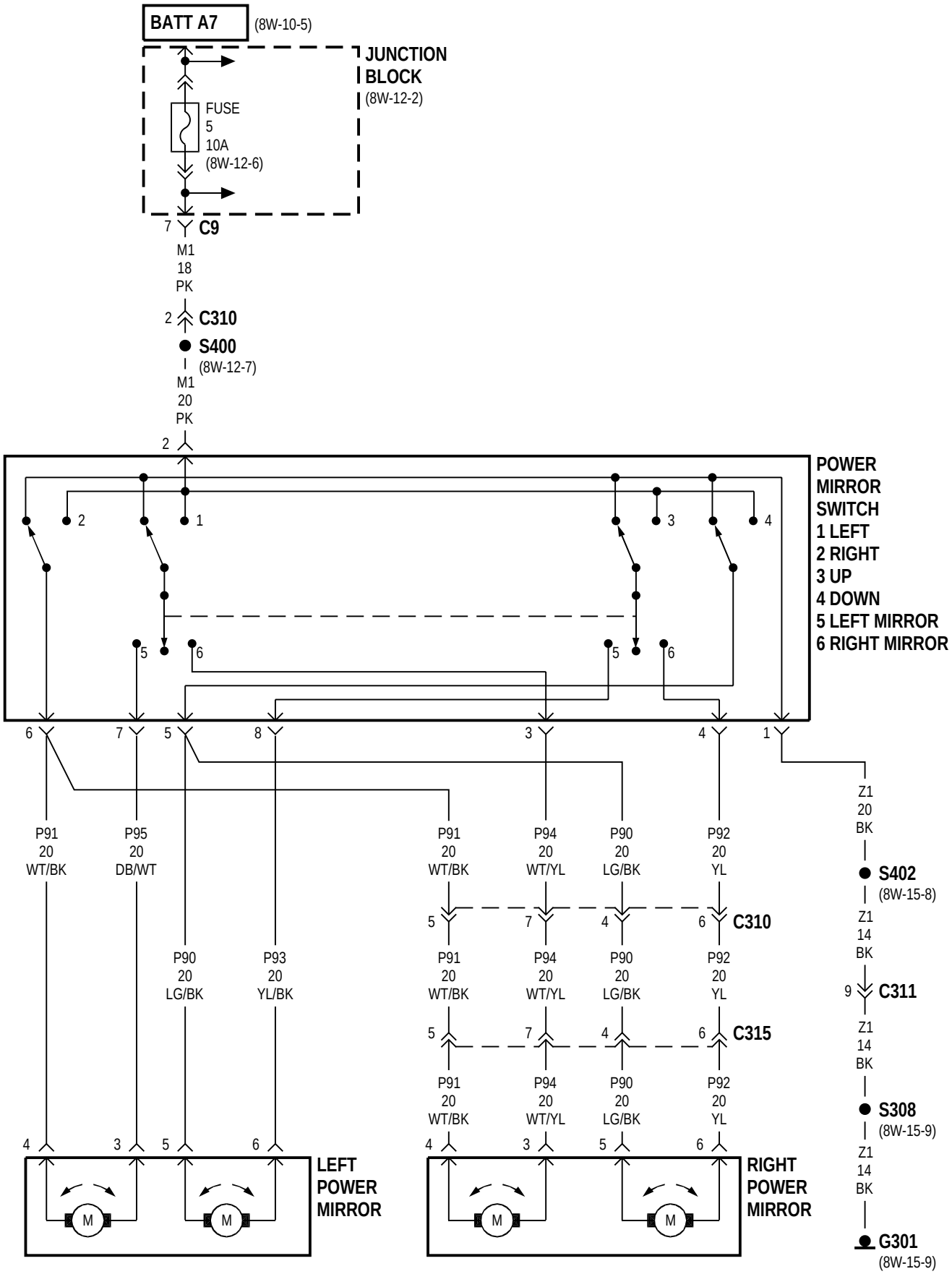
8W-62 POWER MIRRORS

INDEX

page

SCHEMATICS AND DIAGRAMS **1**
DESCRIPTION AND OPERATION **3**

Component	Page
Fuse 5	8W-62-2
G301	8W-62-2
Junction Block	8W-62-2
Left Power Mirror	8W-62-2
Power Mirror Switch	8W-62-2
Right Power Mirror	8W-62-2
S308	8W-62-2
S400	8W-62-2
S402	8W-62-2


BATT A7
(8W-10-5)
JUNCTION BLOCK
(8W-12-2)
FUSE 5 10A
(8W-12-6)
7 C9
M1 18 PK
2 C310
S400
(8W-12-7)
M1 20 PK
2
POWER MIRROR SWITCH
1 LEFT
2 RIGHT
3 UP
4 DOWN
5 LEFT MIRROR
6 RIGHT MIRROR
6 7 5 8 3 4 1
P91 20 WT/BK
P95 20 DB/WT
P90 20 LG/BK
P93 20 YL/BK
P91 20 WT/BK
P94 20 WT/YL
P90 20 LG/BK
P92 20 YL
C310
C315
Z1 20 BK
S402
(8W-15-8)
Z1 14 BK
9 C311
Z1 14 BK
S308
(8W-15-9)
Z1 14 BK
G301
(8W-15-9)
LEFT POWER MIRROR
RIGHT POWER MIRROR
M

8W-62 POWER MIRRORS

INDEX

page

DESCRIPTION AND OPERATION
HELPFUL INFORMATION 3
POWER MIRRORS 3

DESCRIPTION AND OPERATION

POWER MIRRORS

The power mirrors use a single switch located in the left door trim panel. The feed for the system is supplied from the 10 amp Ignition-Off Draw (IOD) fuse located in the junction block cavity 5. This fuse also supplies power for the radio, interior lamps and other components. Grounding for the power mirrors, along with power door locks and A/C Heater control, is provided through the Z1 circuit, which attaches to the left side cowl.

SWITCH AND MIRROR OPERATION

The power mirror switch has a right and a left position. Moving the switch to either of these positions changes the voltage path internal to the switch (changes polarity at the motors).

When the switch is moved to the LEFT position and mirror movement UP is selected, voltage is supplied through the P93 circuit and the ground path is through circuit P90. When the DOWN movement is selected, the power and ground are reversed.

If a LEFT door mirror movement LEFT is selected, voltage is supplied through the P95 circuit and the ground is passed through circuit P91. When the left door mirror RIGHT movement is selected, the power and ground are reversed.

When the switch is moved to the RIGHT position and mirror movement UP is selected, voltage is supplied through the P92 circuit and the ground path is through circuit P90. When the DOWN movement is selected, the power and ground are reversed.

If a RIGHT door mirror movement LEFT is selected, voltage is supplied through the P94 circuit and the ground is passed through circuit P91. When the left door mirror RIGHT movement is selected, the power and ground are reversed.

HEATER OPERATION

The mirrors are also equipped with heating elements. These elements are activated when the operator has turned ON the rear window defogger. Circuit C16 provides power for the heaters. The C15 circuit is the power supply for the rear window defogger grid.

The heated mirrors and rear window defogger switch are protected by a 10 amp fuse located in the junction block cavity 15. Grounding for the mirror heaters is provided on the Z1 circuit and terminates at the left side cowl.

HELPFUL INFORMATION

- Check the IOD fuse located in the junction block
- Circuit M1 supplies voltage to the radio, cargo lamp, dome lamp, time delay relay, glove box lamp, and vanity lamps. Check for proper operation of these items
- Move the switch to its various positions and listen for the motors to click or try to move. Some movement or clicking indicates a poor connection or a mechanical problem with a mirror

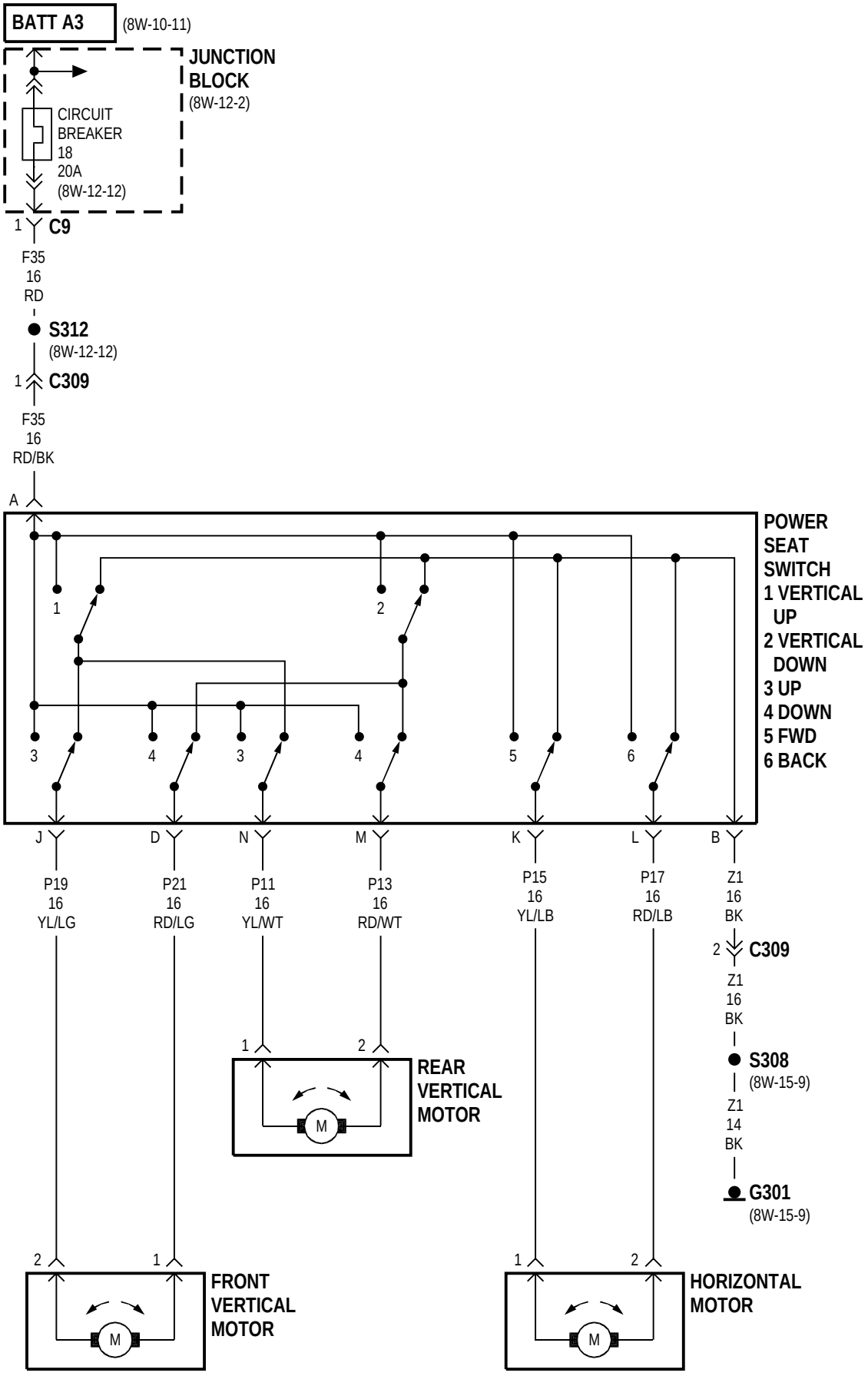
8W-63 POWER SEAT

INDEX

page

SCHEMATICS AND DIAGRAMS **1**
DESCRIPTION AND OPERATION **3**

Component	Page
Circuit Breaker 18	8W-63-2
Front Vertical Motor	8W-63-2
G301	8W-63-2
Horizontal Motor	8W-63-2
Junction Block	8W-63-2
Power Seat Switch	8W-63-2
Rear Vertical Motor	8W-63-2
S308	8W-63-2
S312	8W-63-2


BATT A3
(8W-10-11)
JUNCTION BLOCK
(8W-12-2)
CIRCUIT BREAKER 18 20A
(8W-12-12)
1 C9
F35 16 RD
S312
(8W-12-12)
1 C309
F35 16 RD/BK
A
POWER SEAT SWITCH
1 VERTICAL UP
2 VERTICAL DOWN
3 UP
4 DOWN
5 FWD
6 BACK
J P19 16 YL/LG
D P21 16 RD/LG
N P11 16 YL/WT
M P13 16 RD/WT
K P15 16 YL/LB
L P17 16 RD/LB
B Z1 16 BK
2 C309
Z1 16 BK
S308
(8W-15-9)
Z1 14 BK
G301
(8W-15-9)
REAR VERTICAL MOTOR
FRONT VERTICAL MOTOR
HORIZONTAL MOTOR
M

8W-63 POWER SEAT

INDEX

page

DESCRIPTION AND OPERATION
HELPFUL INFORMATION 3
POWER HEATED SEATS 3
POWER SEAT 3

DESCRIPTION AND OPERATION

POWER SEAT

The power seat system is protected by a 20 amp circuit breaker located in cavity 18 of the junction block. This circuit breaker is HOT at all times. Circuit A3 is the power supply for the circuit breaker.

The A3 circuit originates in the Power Distribution Center (PDC) and is protected by a 40 amp fuse located in cavity 15. This circuit is also the feed for the Daytime Running Lamps, Headlamp Relay, and Power Door Locks.

Circuit F35 is the feed for the switch and the seat motors from the circuit breaker. A BUS bar internal to the switch feeds all the contacts. Grounding for the seat is provided on the Z1 circuit.

When the operator selects the FRONT VERTICAL UP function power is passed on the F35 circuit through the CLOSED contacts in the switch to the P19 circuit. The P19 circuit connects to the motor. Ground is provided on the P21 circuit back to the switch. A ground BUS bar internal to the switch then connects to the Z1 circuit.

For FRONT VERTICAL DOWN function the circuits are reversed. P21 is the feed and P19 is the ground.

When the operator selects the HORIZONTAL FORWARD function power is passed on the F35 circuit through the CLOSED contacts in the switch to the P15 circuit. The P15 circuit connects to the motor. Ground is provided on the P17 circuit back to the switch. A ground BUS bar internal to the switch then connects to the Z1 circuit.

For HORIZONTAL REARWARD function the circuits are reversed. P17 is the feed and P15 is the ground.

When the operator selects the REAR VERTICAL UP function power is passed on the F35 circuit through the CLOSED contacts in the switch to the P11 circuit. The P11 circuit connects to the motor. Ground is provided on the P13 circuit back to the switch. A ground BUS bar internal to the switch then connects to the Z1 circuit.

For REAR VERTICAL DOWN function the circuits are reversed. P13 is the feed and P11 is the ground.

POWER HEATED SEATS

Power for the heated seat switch is supplied on circuit F11. This circuit is protected by a 10 amp fuse located in the junction block. Ground for the switch is supplied on circuit Z3.

Power for the heated seat modules is supplied on circuit P86. This circuit is protected by a 20 amp fuse located in the Power Distribution Center (PDC). Ground for the heated seat modules is supplied on circuit Z3.

HELPFUL INFORMATION

- Check the 20 amp circuit breaker in located in cavity 18 of the junction block
- Check the 40 amp fuse located in cavity 15 of the PDC
- Check for a good ground at the instrument panel left side cowl

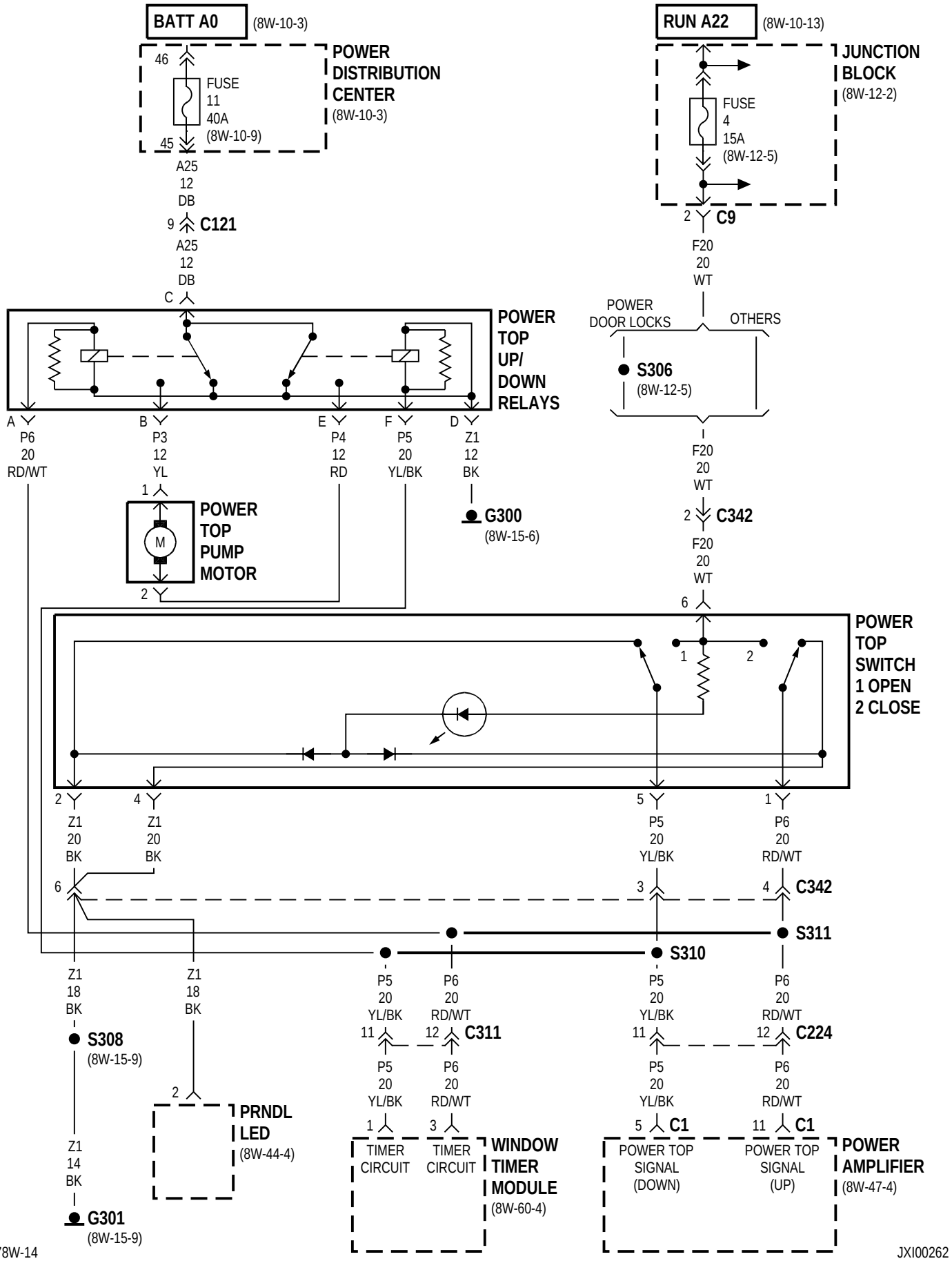
8W-66 POWER TOP

INDEX

page

SCHEMATICS AND DIAGRAMS **1**
DESCRIPTION AND OPERATION **3**

Component	Page
Fuse 4	8W-66-2
Fuse 11	8W-66-2
G300	8W-66-2
G301	8W-66-2
Junction Block	8W-66-2
Power Amplifier	8W-66-2
Power Distribution Center	8W-66-2
Power Top Pump Motor	8W-66-2
Power Top Switch	8W-66-2
Power Top Up/Down Relays	8W-66-2
PRNDL Led	8W-66-2
S306	8W-66-2
S308	8W-66-2
S310	8W-66-2
S311	8W-66-2
Window Timer Module	8W-66-2



978W-14

JXI00262

8W-66 POWER TOP

DESCRIPTION AND OPERATION

POWER TOP OPERATION W/POWER WINDOWS

This vehicle uses a unique power window system that works with the operation of the power top system. The windows will operate in the DOWN mode, for a specified period of time, when the power top switch is activated.

NOTE: Refer to section 8W-60 for circuit operation of this system. For further information on system operation, refer to group 8S-Power Windows in this service manual.

POWER TOP

The power top system uses a switch, a hydraulic pump motor, and two relays.

Power for the switch is supplied on circuit F20. This circuit is HOT when the ignition switch is in the RUN position and is protected by a 15 amp fuse located in cavity 4 of the junction block.

Circuit A22 is connected between the ignition switch and the fuse. Power for the A22 circuit is supplied by circuit A2. This circuit originates in the Power Distribution Center (PDC) and is protected by a 40 amp fuse located in cavity 18.

Ground for the switch is supplied on circuit Z1. This circuit terminates at the instrument panel left side cowl.

The switch has a Light Emitting Diode (LED) for night illumination. The LED is powered by the F20 circuit.

DOWN OPERATION

When the operator selects top DOWN, circuit F20 is connected to circuit P5. The P5 circuit connects from the switch to the power top DOWN relay. Voltage flowing through the coil side of the relay causes the contacts in the relay to CLOSE connecting circuits A25 and P4.

The A25 circuit is protected by a 40 amp fuse located in cavity 11 of the PDC.

Circuit P4 connects from the relay to the pump motor. Voltage flows through the motor to circuit P3. The P3 circuit provides the ground path for the motor back to the relay assembly. Internal to the relay circuit P3 connects to circuit Z1. The Z1 ground circuit terminates at the instrument panel left side cowl.

UP OPERATION

When the operator selects top UP, circuit F20 is connected to circuit P6. The P6 circuit connects from the switch to the power top UP relay. Voltage flowing through the coil side of the relay causes the contacts in the relay to CLOSE connecting circuits A25 and P3.

The A25 circuit is protected by a 40 amp fuse located in cavity 11 of the PDC.

Circuit P3 connects from the relay to the pump motor. Voltage flows through the motor to circuit P4. The P4 circuit provides the ground path for the motor back to the relay assembly. Internal to the relay circuit P4 connects to circuit Z1. The Z1 ground circuit terminates at the instrument panel left side cowl.

HELPFUL INFORMATION

- Check the 40 amp fuses located in cavities 11 and 18 of the PDC
- Check the 15 amp fuse located in cavity 4 of the junction block
- Check for a good ground at the instrument panel left side cowl

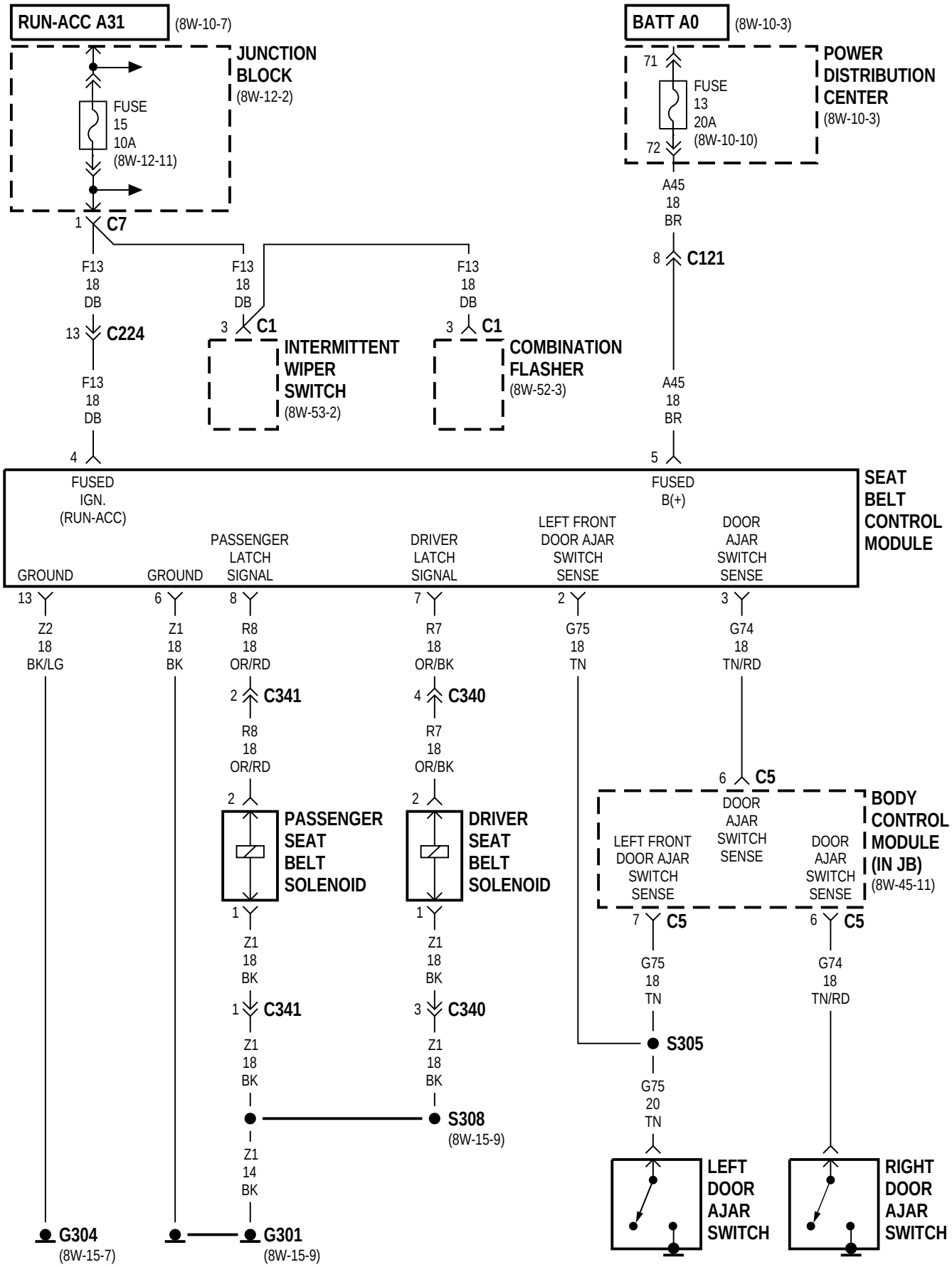
8W-67 RESTRAINT SYSTEM

INDEX

page

SCHEMATICS AND DIAGRAMS **1**
DESCRIPTION AND OPERATION **3**

Component	Page
Body Control Module	8W-67-2
Combination Flasher	8W-67-2
Driver Seat Belt Solenoid	8W-67-2
Fuse 13	8W-67-2
Fuse 15	8W-67-2
G301	8W-67-2
G304	8W-67-2
Intermittent Wiper Switch	8W-67-2
Junction Block	8W-67-2
Left Door Ajar Switch	8W-67-2
Passenger Seat Belt Solenoid	8W-67-2
Power Distribution Center	8W-67-2
Right Door Ajar Switch	8W-67-2
S305	8W-67-2
S308	8W-67-2
Seat Belt Control Module	8W-67-2


RUN-ACC A31
(8W-10-7)
JUNCTION BLOCK
(8W-12-2)
FUSE 15 10A
(8W-12-11)
1 C7
F13 18 DB
13 C224
F13 18 DB
4
F13 18 DB
3 C1
INTERMITTENT WIPER SWITCH
(8W-53-2)
F13 18 DB
3 C1
COMBINATION FLASHER
(8W-52-3)
BATT A0
(8W-10-3)
71
FUSE 13 20A
(8W-10-10)
72
POWER DISTRIBUTION CENTER
(8W-10-3)
A45 18 BR
8 C121
A45 18 BR
5
FUSED IGN. (RUN-ACC)
FUSED B(+)
SEAT BELT CONTROL MODULE
GROUND
GROUND
PASSENGER LATCH SIGNAL
DRIVER LATCH SIGNAL
LEFT FRONT DOOR AJAR SWITCH SENSE
DOOR AJAR SWITCH SENSE
13
6
8
7
2
3
Z2 18 BK/LG
Z1 18 BK
R8 18 OR/RD
R7 18 OR/BK
G75 18 TN
G74 18 TN/RD
2 C341
4 C340
R8 18 OR/RD
R7 18 OR/BK
2
2
PASSENGER SEAT BELT SOLENOID
DRIVER SEAT BELT SOLENOID
1
1
Z1 18 BK
Z1 18 BK
1 C341
3 C340
Z1 18 BK
Z1 18 BK
S308
(8W-15-9)
Z1 14 BK
G304
(8W-15-7)
G301
(8W-15-9)
6 C5
BODY CONTROL MODULE (IN JB)
(8W-45-11)
DOOR AJAR SWITCH SENSE
LEFT FRONT DOOR AJAR SWITCH SENSE
DOOR AJAR SWITCH SENSE
7 C5
6 C5
G75 18 TN
G74 18 TN/RD
S305
G75 20 TN
LEFT DOOR AJAR SWITCH
RIGHT DOOR AJAR SWITCH

8W-67 RESTRAINT SYSTEM

DESCRIPTION AND OPERATION

RESTRAINT SYSTEM

The seat belt system is used to lock and unlock the seat belts. It consists of a seat belt control timer module, door ajar switches, ignition switch, and solenoids located in the seats.

When the operator OPENS the door, the door ajar switch completes a path to ground on circuit G75 for the drivers door, and G74 for the passengers door. The seatbelt control module then supplies voltage to the solenoids located in the seats, unlocking the seat belts.

Circuit R7 provides power from the module to the drivers seat solenoid, and circuit R8 provides power to the passengers seat solenoid from the control module. Logic internal to the module determines the amount of time the solenoids remain energized. Ground for the solenoids is supplied on circuit Z1.

Power for the seatbelt control module is supplied on circuits A45 and F13. The A45 circuit is a direct battery feed and is protected by a 20 amp fuse located in cavity 13 of the Power Distribution Center (PDC).

Circuit F13 is HOT when the ignition switch is in the ACCESSORY and RUN position only. This circuit is protected by a 10 amp fuse located in cavity 15 of the junction block.

Ground for the module is supplied on circuits Z1 and Z2.

HELPFUL INFORMATION

- Check the 20 amp fuse located in cavity 13 of the PDC
- Check the 10 amp fuse located in cavity 15 of the junction block
- Check the grounding points for the door ajar switches
- Check the grounding point for the seatbelt control module
- Open and close the driver and passenger door, and cycle the ignition switch to reactivate the seatbelt control module is the vehicle has been sitting for an extended period of time

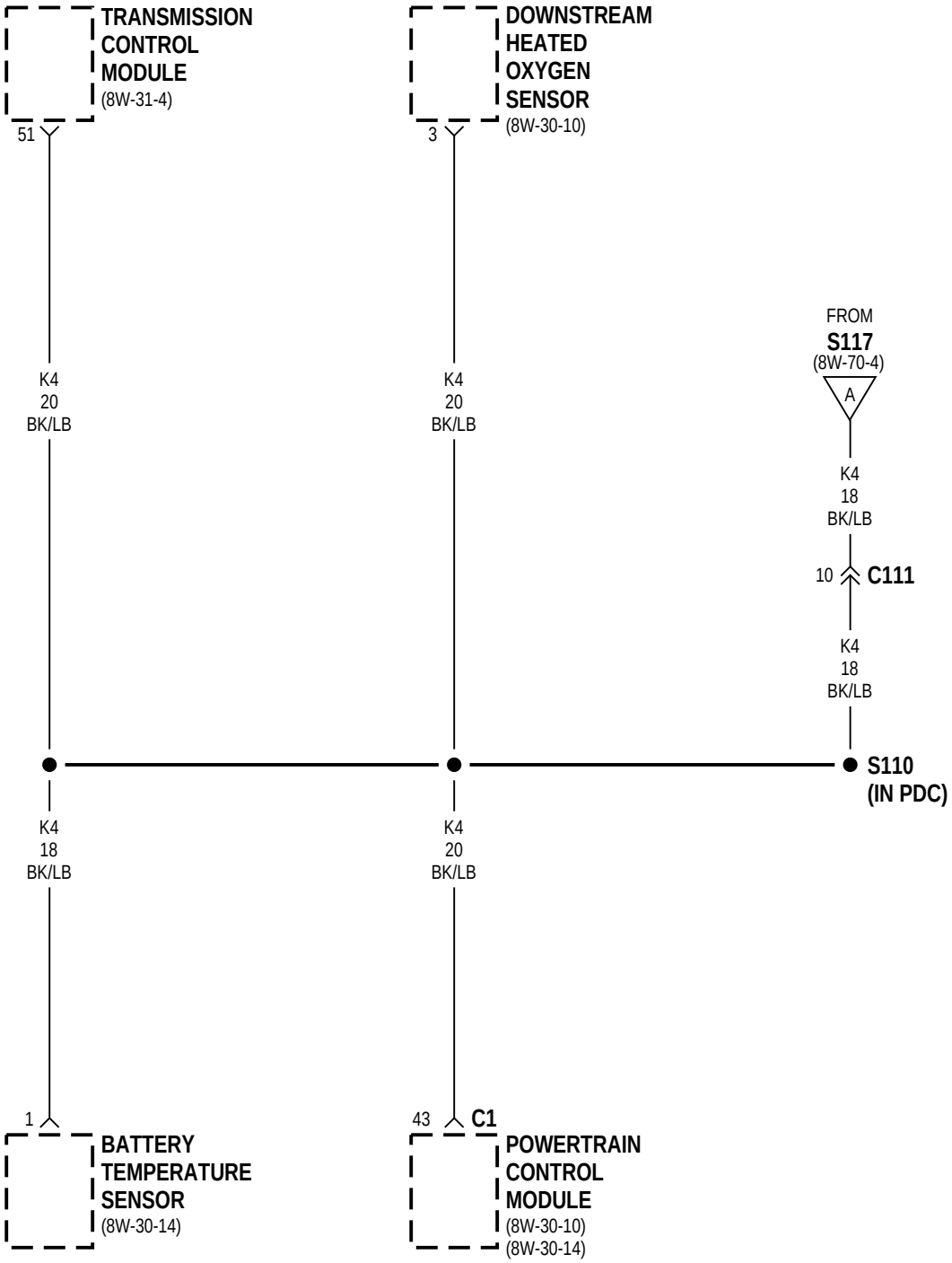
8W-70 SPLICE INFORMATION

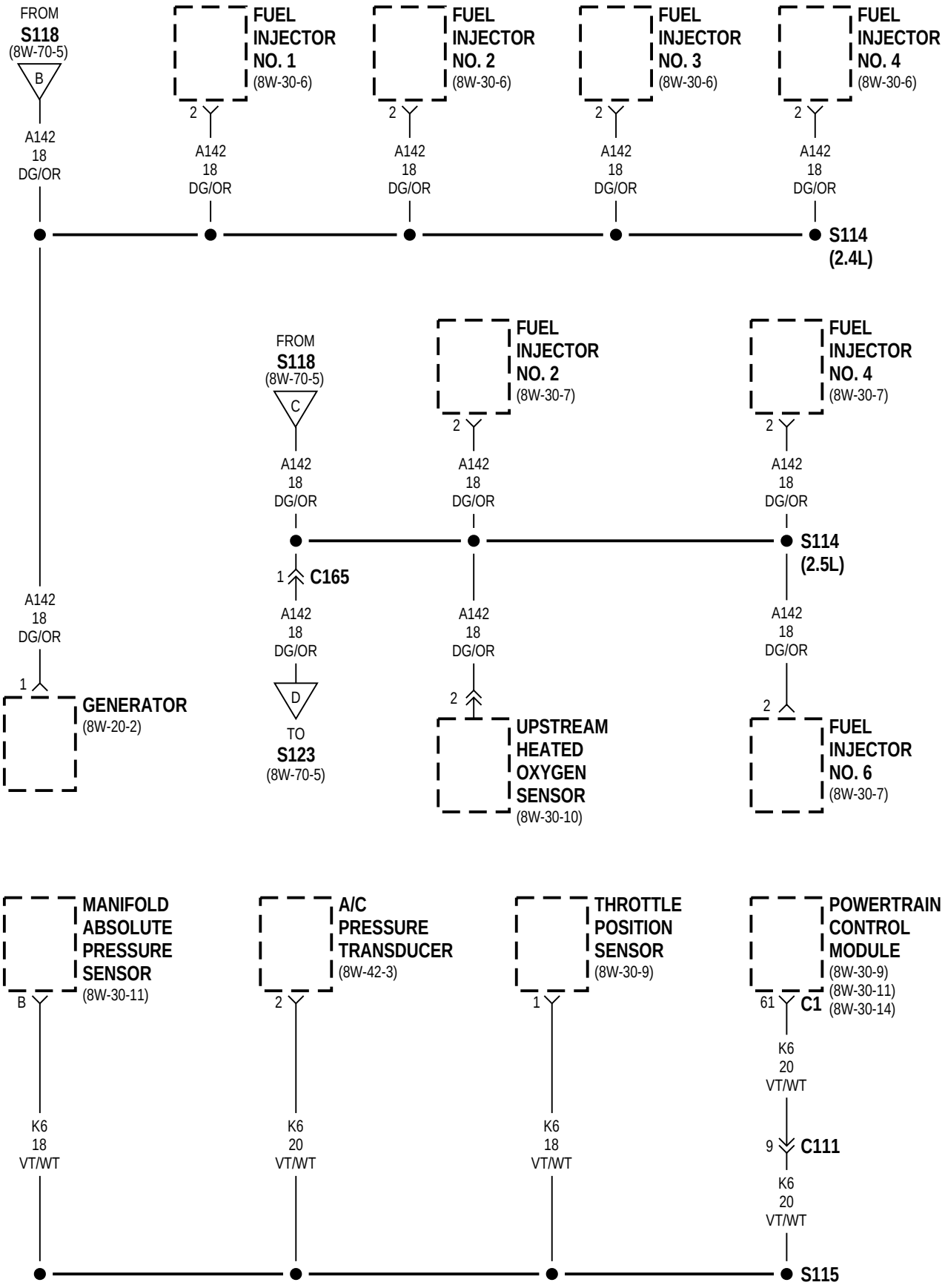
INDEX

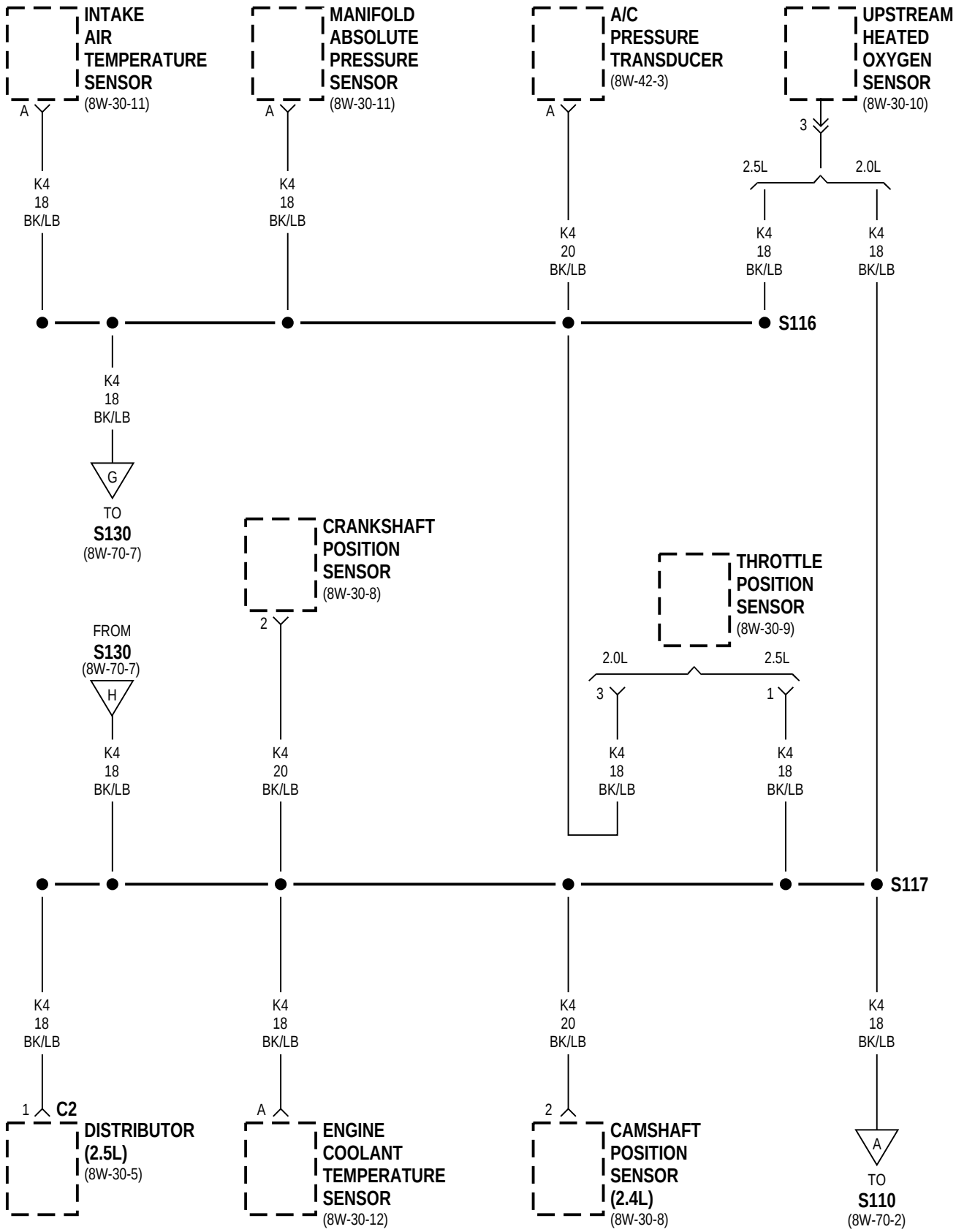
page

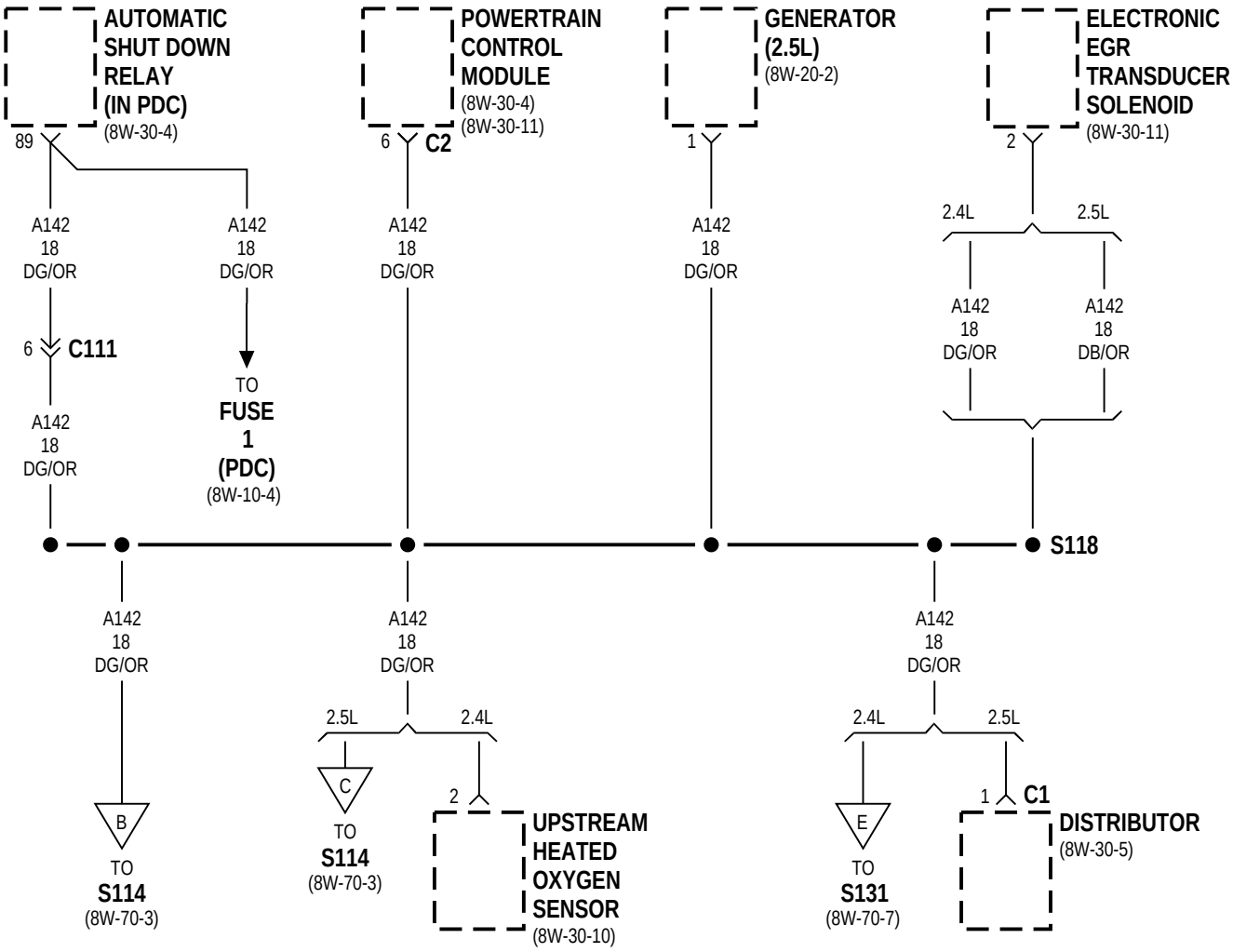
SCHEMATICS AND DIAGRAMS 1
DESCRIPTION AND OPERATION 8

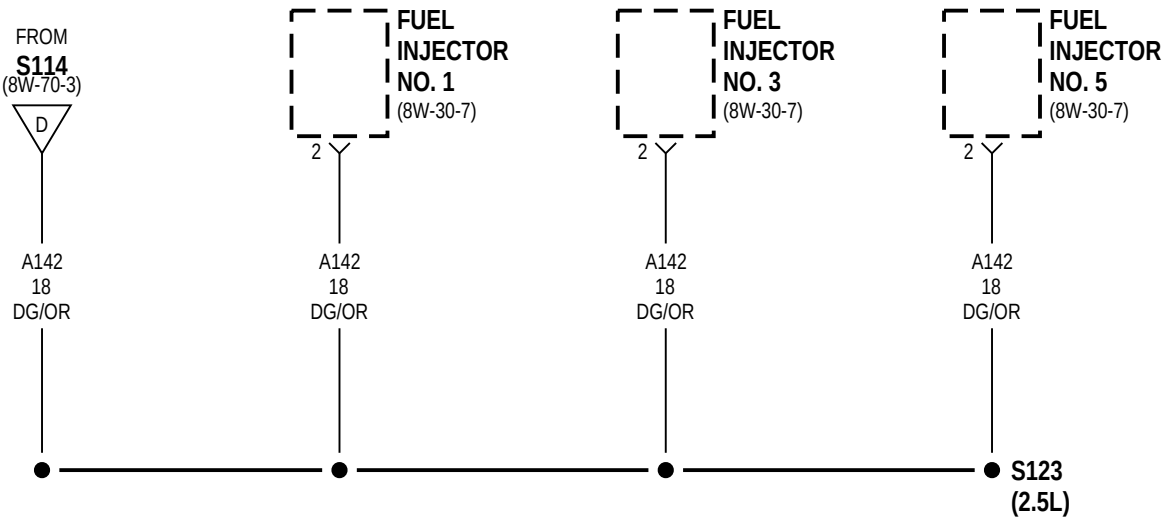
Component	Page
A/C Pressure Transducer	8W-70-3, 4
Automatic Day/Night Mirror	8W-70-7
Automatic Shut Down Relay	8W-70-5
Battery Temperature Sensor	8W-70-2
Camshaft Position Sensor	8W-70-4, 6
Crankshaft Position Sensor	8W-70-4, 6
Distributor	8W-70-4, 5, 6
Downstream Heated Oxygen Sensor	8W-70-2
Electronic EGR Transducer Solenoid	8W-70-5
Engine Coolant Temperature Sensor	8W-70-4
Fuel Injector No. 1	8W-70-3, 5
Fuel Injector No. 2	8W-70-3
Fuel Injector No. 3	8W-70-3, 5
Fuel Injector No. 4	8W-70-3
Fuel Injector No. 5	8W-70-5
Fuel Injector No. 6	8W-70-3
Fuse 1	8W-70-5
Generator	8W-70-3, 5
Ignition Coil Pack	8W-70-7
Illuminated Entry Relay	8W-70-7
Intake Air Temperature Sensor	8W-70-4
Left Door Courtesy Lamp	8W-70-7
Manifold Absolute Pressure Sensor	8W-70-3, 4
Noise Suppressor	8W-70-7
Output Shaft Speed Sensor	8W-70-6
Overhead Map Lamp	8W-70-7
Powertrain Control Module	8W-70-2, 3, 5, 6
Rear Floor Courtesy Lamp	8W-70-7
Right Door Courtesy Lamp	8W-70-7
S110	8W-70-2
S114	8W-70-3
S115	8W-70-3
S116	8W-70-4
S117	8W-70-4
S118	8W-70-5
S123	8W-70-5
S124	8W-70-6
S125	8W-70-6
S130	8W-70-7
S131	8W-70-7
S307	8W-70-7
Throttle Position Sensor	8W-70-3, 4
Transmission Control Module	8W-70-2, 6
Transmission Range Switch	8W-70-6
Turbine Speed Sensor	8W-70-6
Upstream Heated Oxygen Sensor	8W-70-3, 4, 5

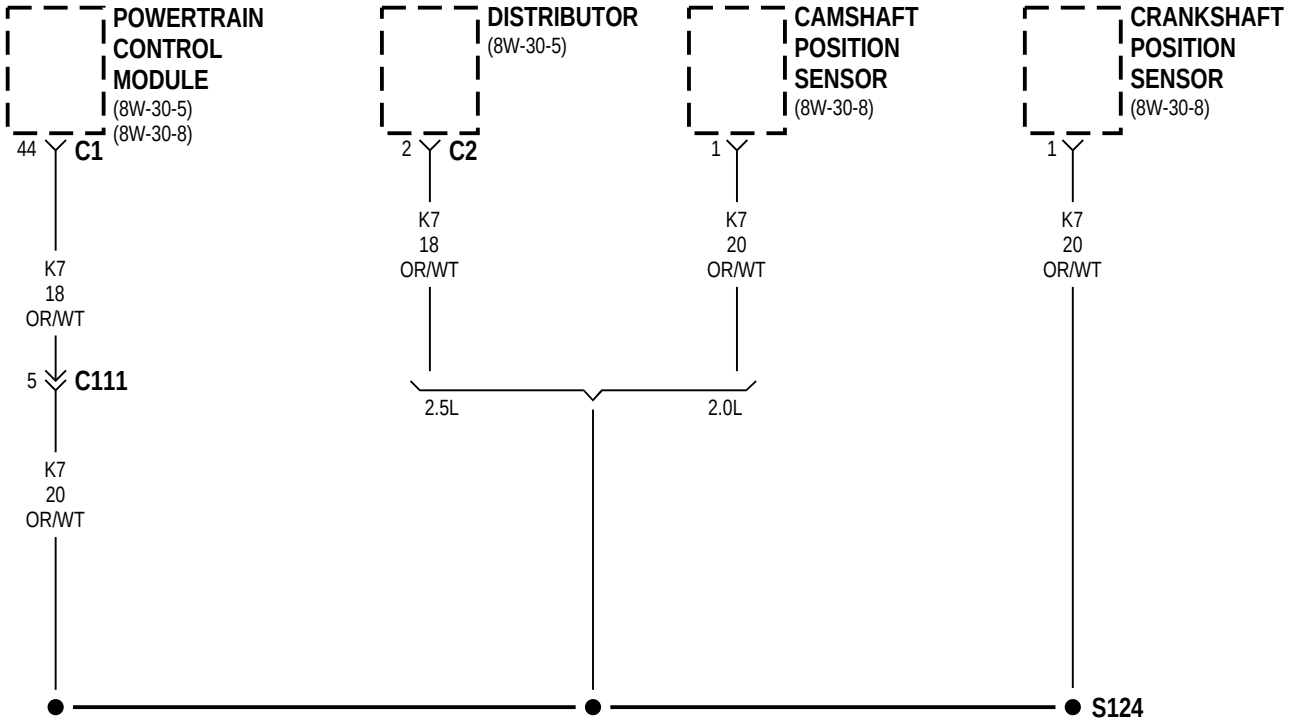

TRANSMISSION CONTROL MODULE
(8W-31-4)
51
DOWNSTREAM HEATED OXYGEN SENSOR
(8W-30-10)
3
FROM
S117
(8W-70-4)
A
K4
20
BK/LB
K4
20
BK/LB
K4
18
BK/LB
10
C111
K4
18
BK/LB
S110
(IN PDC)
K4
18
BK/LB
K4
20
BK/LB
1
43
C1
BATTERY TEMPERATURE SENSOR
(8W-30-14)
POWERTRAIN CONTROL MODULE
(8W-30-10)
(8W-30-14)

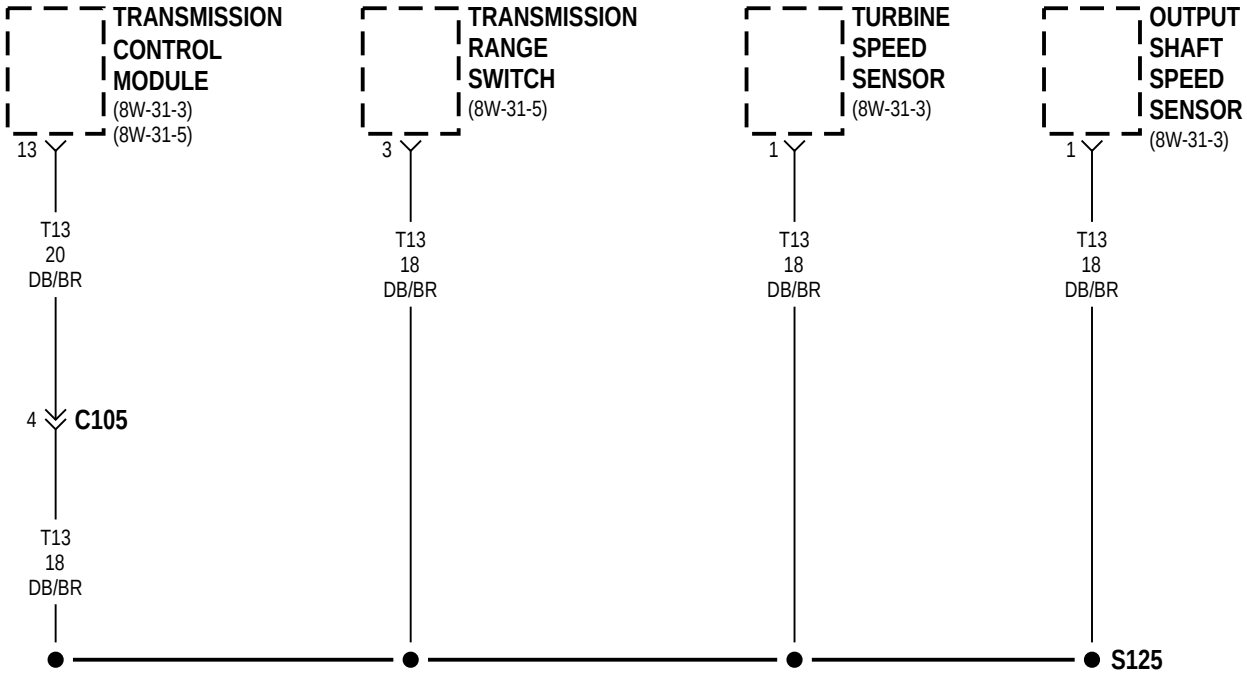

FROM
S118
(8W-70-5)
B
A142
18
DG/OR
FUEL
INJECTOR
NO. 1
(8W-30-6)
FUEL
INJECTOR
NO. 2
(8W-30-6)
FUEL
INJECTOR
NO. 3
(8W-30-6)
FUEL
INJECTOR
NO. 4
(8W-30-6)
2
S114
(2.4L)
FROM
S118
(8W-70-5)
C
FUEL
INJECTOR
NO. 2
(8W-30-7)
FUEL
INJECTOR
NO. 4
(8W-30-7)
S114
(2.5L)
1
C165
GENERATOR
(8W-20-2)
TO
S123
(8W-70-5)
UPSTREAM
HEATED
OXYGEN
SENSOR
(8W-30-10)
FUEL
INJECTOR
NO. 6
(8W-30-7)
MANIFOLD
ABSOLUTE
PRESSURE
SENSOR
(8W-30-11)
A/C
PRESSURE
TRANSDUCER
(8W-42-3)
THROTTLE
POSITION
SENSOR
(8W-30-9)
POWERTRAIN
CONTROL
MODULE
(8W-30-9)
(8W-30-11)
(8W-30-14)
61
C1
K6
20
VT/WT
9
C111
K6
18
VT/WT
S115

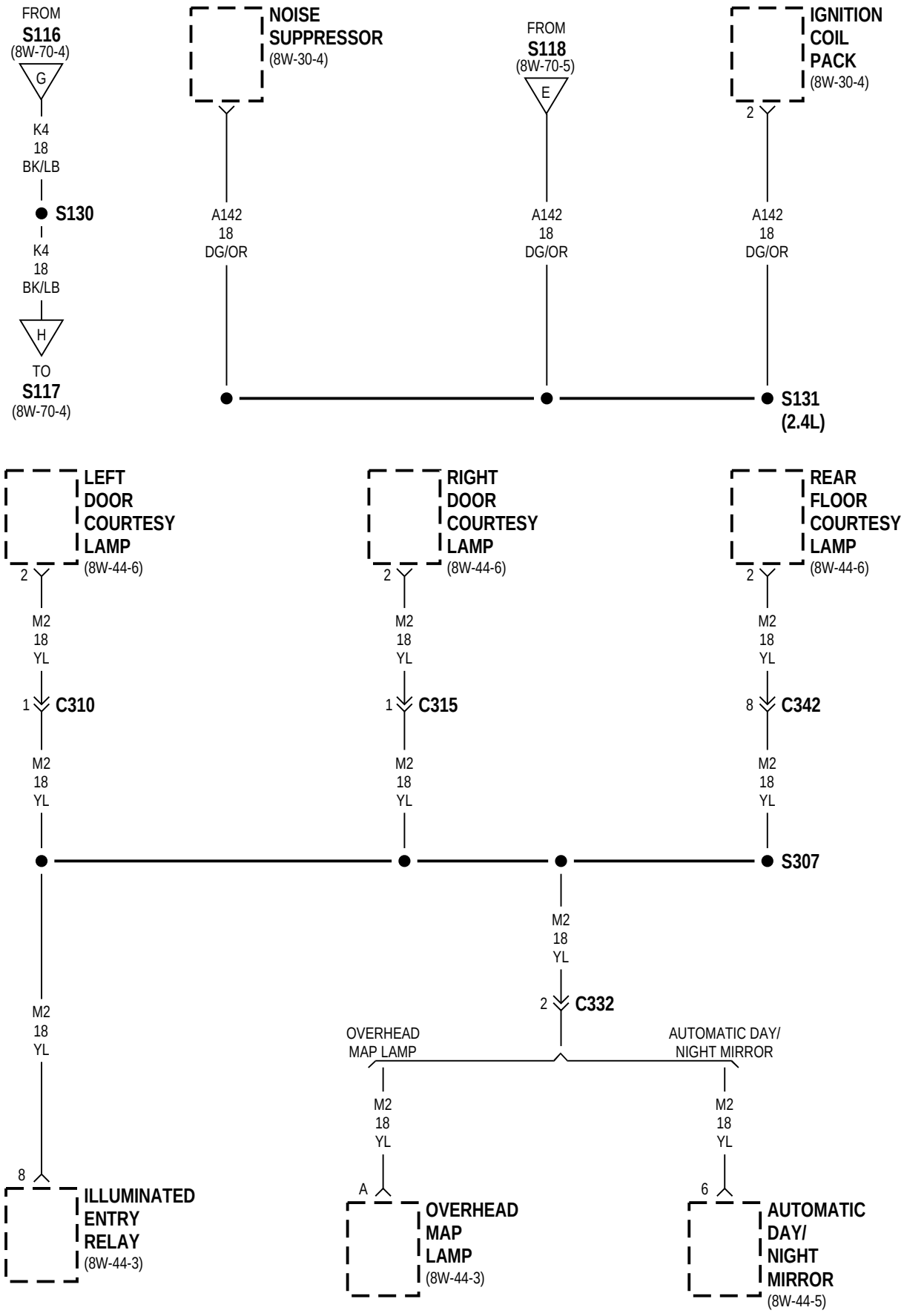

INTAKE AIR TEMPERATURE SENSOR
(8W-30-11)
A
K4
18
BK/LB
MANIFOLD ABSOLUTE PRESSURE SENSOR
(8W-30-11)
A
K4
18
BK/LB
A/C PRESSURE TRANSDUCER
(8W-42-3)
A
K4
20
BK/LB
UPSTREAM HEATED OXYGEN SENSOR
(8W-30-10)
3
2.5L
2.0L
K4
18
BK/LB
K4
18
BK/LB
S116
K4
18
BK/LB
G
TO
S130
(8W-70-7)
CRANKSHAFT POSITION SENSOR
(8W-30-8)
2
THROTTLE POSITION SENSOR
(8W-30-9)
2.0L
2.5L
3
1
FROM
S130
(8W-70-7)
H
K4
18
BK/LB
K4
20
BK/LB
K4
18
BK/LB
K4
18
BK/LB
S117
K4
18
BK/LB
K4
18
BK/LB
K4
20
BK/LB
K4
18
BK/LB
1
C2
DISTRIBUTOR
(2.5L)
(8W-30-5)
A
ENGINE COOLANT TEMPERATURE SENSOR
(8W-30-12)
2
CAMSHAFT POSITION SENSOR
(2.4L)
(8W-30-8)
A
TO
S110
(8W-70-2)


AUTOMATIC SHUT DOWN RELAY (IN PDC)
(8W-30-4)
89
A142 18 DG/OR
A142 18 DG/OR
6 C111
A142 18 DG/OR
TO FUSE 1 (PDC)
(8W-10-4)
POWERTRAIN CONTROL MODULE
(8W-30-4)
(8W-30-11)
6 C2
A142 18 DG/OR
GENERATOR (2.5L)
(8W-20-2)
1
A142 18 DG/OR
ELECTRONIC EGR TRANSDUCER SOLENOID
(8W-30-11)
2
2.4L
2.5L
A142 18 DG/OR
A142 18 DB/OR
S118
A142 18 DG/OR
B
TO S114
(8W-70-3)
A142 18 DG/OR
2.5L
2.4L
C
TO S114
(8W-70-3)
2
UPSTREAM HEATED OXYGEN SENSOR
(8W-30-10)
A142 18 DG/OR
2.4L
2.5L
E
TO S131
(8W-70-7)
1 C1
DISTRIBUTOR
(8W-30-5)


FROM S114
(8W-70-3)
D
A142 18 DG/OR
FUEL INJECTOR NO. 1
(8W-30-7)
2
A142 18 DG/OR
FUEL INJECTOR NO. 3
(8W-30-7)
2
A142 18 DG/OR
FUEL INJECTOR NO. 5
(8W-30-7)
2
A142 18 DG/OR
S123 (2.5L)


POWERTRAIN CONTROL MODULE
(8W-30-5)
(8W-30-8)
44 C1
K7
18
OR/WT
5 C111
K7
20
OR/WT
DISTRIBUTOR
(8W-30-5)
2 C2
K7
18
OR/WT
2.5L
CAMSHAFT POSITION SENSOR
(8W-30-8)
1
K7
20
OR/WT
2.0L
CRANKSHAFT POSITION SENSOR
(8W-30-8)
1
K7
20
OR/WT
S124


TRANSMISSION CONTROL MODULE
(8W-31-3)
(8W-31-5)
13
T13
20
DB/BR
4 C105
T13
18
DB/BR
TRANSMISSION RANGE SWITCH
(8W-31-5)
3
T13
18
DB/BR
TURBINE SPEED SENSOR
(8W-31-3)
1
T13
18
DB/BR
OUTPUT SHAFT SPEED SENSOR
(8W-31-3)
1
T13
18
DB/BR
S125


FROM
S116
(8W-70-4)
G
K4
18
BK/LB
S130
K4
18
BK/LB
H
TO
S117
(8W-70-4)
NOISE
SUPPRESSOR
(8W-30-4)
A142
18
DG/OR
FROM
S118
(8W-70-5)
E
A142
18
DG/OR
IGNITION
COIL
PACK
(8W-30-4)
2
A142
18
DG/OR
S131
(2.4L)
LEFT
DOOR
COURTESY
LAMP
(8W-44-6)
2
M2
18
YL
1
C310
M2
18
YL
RIGHT
DOOR
COURTESY
LAMP
(8W-44-6)
2
M2
18
YL
1
C315
M2
18
YL
REAR
FLOOR
COURTESY
LAMP
(8W-44-6)
2
M2
18
YL
8
C342
M2
18
YL
S307
M2
18
YL
8
ILLUMINATED
ENTRY
RELAY
(8W-44-3)
M2
18
YL
2
C332
OVERHEAD
MAP LAMP
AUTOMATIC DAY/
NIGHT MIRROR
M2
18
YL
A
OVERHEAD
MAP
LAMP
(8W-44-3)
M2
18
YL
6
AUTOMATIC
DAY/
NIGHT
MIRROR
(8W-44-5)

8W-70 SPLICE INFORMATION

DESCRIPTION AND OPERATION

INTRODUCTION

This section identifies all splices shown in the diagrams. It also shows the splices in there entirity. All circuits that are part of the splices are shown and the systems they affect are referanced. For viewing the splices location in the vehicle, refer to section 8W-95.

8W-80 CONNECTOR PIN-OUTS

INDEX

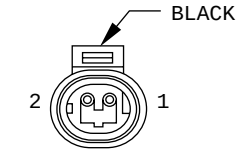
page

SCHEMATICS AND DIAGRAMS **1**
DESCRIPTION AND OPERATION **53**

Component	Page
A/C Compressor Clutch	8W-80-4
A/C Evaporator Temperature Sensor	8W-80-4
A/C Heater Control-C1	8W-80-4
A/C Heater Control-C2	8W-80-4
A/C Pressure Transducer	8W-80-4
ABS Hydraulic Modulator	8W-80-5
ABS Relay Box	8W-80-5
Airbag Control Module-C1	8W-80-5
Airbag Control Module-C2	8W-80-6
Ash Receiver Lamp	8W-80-6
Automatic Day/Night Mirror	8W-80-6
Autostick Switch	8W-80-6
Battery Temperature Sensor	8W-80-7
Blower Motor Resistor Block	8W-80-7
Body Control Module - C1	8W-80-7
Body Control Module - C2	8W-80-8
Body Control Module - C3	8W-80-8
Body Control Module - C4	8W-80-8
Body Control Module - C5	8W-80-9
Brake Warning Pressure Switch	8W-80-9
C104	8W-80-9
C105	8W-80-10
C111	8W-80-10
C113	8W-80-10
C121	8W-80-11
C126	8W-80-11
C165 (2.5l Engine Only)	8W-80-11
C224	8W-80-12
C300	8W-80-12
C301	8W-80-13
C305	8W-80-13
C309 (With Power Seat)	8W-80-13
C310	8W-80-13
C311	8W-80-14
C315	8W-80-14
C316	8W-80-14
C332	8W-80-15
C340	8W-80-15
C341	8W-80-15
C342	8W-80-15
Camshaft Position Sensor (2.4l Engine Only)	8W-80-16
Center High Mounted Stop Lamp (CHMSL)	8W-80-16
Clockspring	8W-80-16
Clutch Interlock Switch	8W-80-16
Controller Anti-Lock Brake	8W-80-17
Crankshaft Position Sensor (2.0L Engine)	8W-80-18
Crankshaft Position Sensor (2.5L Engine)	8W-80-18
Datalink Connector	8W-80-19
Decklid Release Relay	8W-80-19
Decklid Release Switch	8W-80-19
Decklid Solenoid	8W-80-19
Distributor - C1 (2.5L Engine)	8W-80-20
Distributor - C2 (2.5L Engine)	8W-80-20
Downstream Heated Oxygen Sensor	8W-80-20
Driver Seat Belt Solenoid	8W-80-20
Driver Side Airbag Squib	8W-80-20
Duty Cycle Evap/Purge Solenoid	8W-80-21
Electronic EGR Transducer Solenoid	8W-80-21
Engine Coolant Temperature Sensor	8W-80-21
Front Vertical Motor	8W-80-21
Fuel Injector No.1	8W-80-21
Fuel Injector No.2	8W-80-22
Fuel Injector No.3	8W-80-22
Fuel Injector No.4	8W-80-22
Fuel Injector No.5 (2.5L Engine)	8W-80-22
Fuel Injector No.6 (2.5L Engine)	8W-80-22
Fuel Pump Module	8W-80-23
Generator	8W-80-23
Glove Box Lamp	8W-80-23
Headlamp Leveling Switch	8W-80-23
High Note Horn	8W-80-23
Horizontal Motor	8W-80-23
Idle Air Control Motor	8W-80-24
Ignition Coil Pack (2.0L Engine)	8W-80-24
Ignition Switch - C1	8W-80-24
Ignition Switch - C2	8W-80-24
Illuminated Entry Relay	8W-80-25
Immobilizer	8W-80-25
Instrument Cluster - C1	8W-80-25
Instrument Cluster - C2	8W-80-25
Intake Air Temperature Sensor	8W-80-26

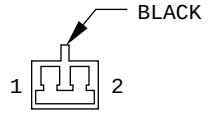
Component	Page
Junction Block - C1	8W-80-26
Junction Block - C2	8W-80-26
Junction Block - C3	8W-80-27
Junction Block - C4	8W-80-27
Junction Block - C5	8W-80-27
Junction Block - C6	8W-80-27
Junction Block - C7	8W-80-28
Junction Block - C8	8W-80-28
Junction Block - C9	8W-80-28
Junction Block - C10	8W-80-29
Junction Block - C11	8W-80-29
Key-In Halo Lamp	8W-80-29
Key-In Switch	8W-80-29
Left Backup Lamp	8W-80-29
Left Door Arm/Disarm Switch	8W-80-29
Left Door Courtesy Lamp	8W-80-30
Left Door Speaker	8W-80-30
Left Door Window Motor Relay	8W-80-30
Left Fog Lamp	8W-80-30
Left Front I.P. Speaker	8W-80-30
Left Front Power Window Motor	8W-80-31
Left Front Wheel Speed Sensor	8W-80-31
Left Headlamp	8W-80-31
Left Headlamp Leveling Motor	8W-80-31
Left License Lamp	8W-80-31
Left Park/Turn Signal Lamp	8W-80-31
Left Power Door Lock Switch	8W-80-32
Left Power Mirror	8W-80-32
Left Rear Fog Lamp	8W-80-32
Left Rear Power Window Motor	8W-80-32
Left Rear Speaker	8W-80-32
Left Rear Turn Signal Lamp	8W-80-33
Left Rear Wheel Speed Sensor	8W-80-33
Left Side Repeater	8W-80-33
Left Tail/Stop Lamp	8W-80-33
Left Visor/Vanity Lamp	8W-80-33
Low Note Horn	8W-80-33
Manifold Absolute Pressure Sensor	8W-80-34
Master Power Window Switch	8W-80-34
Mode Door Actuator	8W-80-34
Multi-Function Switch - C1	8W-80-34
Multi-Function Switch - C2	8W-80-34
Oil Pressure Switch	8W-80-35
Output Shaft Speed Sensor	8W-80-35
Overhead Map Lamp	8W-80-35
Passenger Seat Belt Solenoid	8W-80-35
Passenger Side Airbag Squib	8W-80-35
Power Amplifier - C1 (Premium Sound)	8W-80-36
Power Amplifier - C2 (Premium Sound)	8W-80-36
Power Antenna	8W-80-36
Power Mirror Switch	8W-80-37
Power Seat Switch	8W-80-37
Power Steering Pressure Switch	8W-80-38
Power Top Pump Motor	8W-80-38
Power Top Switch	8W-80-38
Power Top Up/Down Relay	8W-80-38
Powertrain Control Module - C1	8W-80-39
Powertrain Control Module - C2	8W-80-40
PRNDL Feed	8W-80-41
PRNDL Illumination led	8W-80-41
Radiator Fan Motor Assembly	8W-80-41
Radio - C1 (Standard)	8W-80-41
Radio - C1 (Premium)	8W-80-41
Radio - C2	8W-80-41
Rear Floor Courtesy Lamp	8W-80-42
Rear Vertical Motor	8W-80-42
Recline Motor	8W-80-42
Right Backup Lamp	8W-80-42
Right Door Arm/Disarm Switch	8W-80-42
Right Door Courtesy Lamp	8W-80-42
Right Door Speaker	8W-80-43
Right Door Window Motor Relay	8W-80-43
Right Fog Lamp	8W-80-43
Right Front I.P Speaker	8W-80-43
Right Front Power Widow Motor	8W-80-44
Right Front Wheel Speed Sensor	8W-80-44
Right Headlamp	8W-80-44
Right Headlamp Leveling Motor	8W-80-44
Right License Lamp	8W-80-44
Right Park/Turn Signal Lamp	8W-80-44
Right Power Door Lock Motor	8W-80-44
Right Power Mirror	8W-80-45
Right Power Window Switch	8W-80-45
Right Rear Fog Lamp	8W-80-45
Right Rear Power Window Motor	8W-80-45
Right Rear Speaker	8W-80-46
Right Rear Turn Signal Lamp	8W-80-46
Right Rear Wheel Speed Sensor	8W-80-46
Right Side Repeater	8W-80-46
Right Tail/Stop Lamp	8W-80-46
Right Visor Vanity Lamp	8W-80-46
Seat Belt Control Module	8W-80-47
Stop Lamp Switch	8W-80-47

Component	Page
Throttle Position Sensor	8W-80-47
Transmission Control Module	8W-80-48
Transmission Range Switch	8W-80-49
Transmission Solenoid and Pressure Switch Assy.	8W-80-50
Traveler	8W-80-50
Trunk Key Cylinder Switch (with VTSS)	8W-80-50
Trunk Lamp	8W-80-50
Turbine Speed Sensor	8W-80-50
Upstream Heated Oxygen Sensor	8W-80-51
Vapor Canister Leak Detector (2.0L Engine)	8W-80-51
Vehicle Speed Control Servo	8W-80-51
Vehicle Speed Control And Horn Switches	8W-80-51
Washer Fluid Level Switch	8W-80-51
Window Timer Module	8W-80-52
Windshield Washer Pump Motor	8W-80-52
Windshield Wiper Motor	8W-80-52



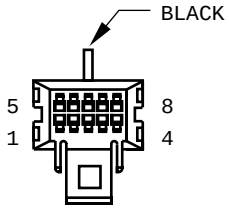
A/C COMPRESSOR CLUTCH

CAV	CIRCUIT	FUNCTION
1	C3 14DB/BK	A/C COMPRESSOR CLUTCH RELAY OUTPUT
2	-	-



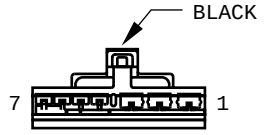
A/C EVAPORATOR TEMPERATURE SENSOR

CAV	CIRCUIT	FUNCTION
1	C12 20LG/BK	EVAPORATOR TEMPERATURE SENSOR SIGNAL
2	C57 22GY	SENSOR GROUND



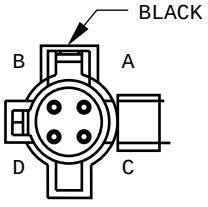
A/C-HEATER CONTROL - C1

CAV	CIRCUIT	FUNCTION
1	-	-
2	C21 22DB/OR	A/C SWITCH SENSE
3	C16 22LB/YL	REAR DEFOGGER LAMP DRIVER
4	-	-
5	C58 22RD	HVAC MODE SENSE
6	-	-
7	-	-
8	Z2 22BK/PK	GROUND



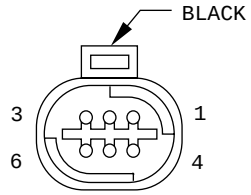
A/C-HEATER CONTROL - C2

CAV	CIRCUIT	FUNCTION
1	Z1 12BK	GROUND
2	C7 12BK/TN	HI BLOWER MOTOR DRIVER
3	C6 18LB	M2 BLOWER MOTOR DRIVER
4	C5 18LG	M1 BLOWER MOTOR DRIVER
5	C4 18TN	LO BLOWER MOTOR DRIVER
6	E2 18OR	PANEL LAMPS DRIVER
	E2 18OR	PANEL LAMPS DRIVER
7	-	-



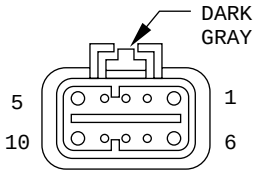
A/C PRESSURE TRANSDUCER

CAV	CIRCUIT	FUNCTION
A	K4 20BK/LB	SENSOR GROUND
B	K6 20VT/WT	5 VOLT SUPPLY
C	C18 20DB/YL	A/C PRESSURE SIGNAL
D	-	-



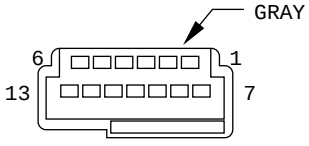
ABS HYDRAULIC MODULATOR

CAV	CIRCUIT	FUNCTION
1	B142 20BR/YL	LEFT FRONT DECAY SOLENOID CONTROL
2	B143 20DG/YL	RIGHT FRONT DECAY SOLENOID CONTROL
3	B146 20BR/LB	LEFT REAR DECAY SOLENOID CONTROL
4	B148 20DG/LB	RIGHT REAR DECAY SOLENOID CONTROL
5	Z1 18BK	GROUND
6	Z1 18BK	GROUND



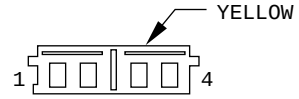
ABS RELAY BOX

CAV	CIRCUIT	FUNCTION
1	A20 16RD/DB	FUSED B(+)
2	-	-
3	B116 20GY/LB	ABS PUMP MOTOR RELAY CONTROL
4	B57 20BR/BK	ABS SYSTEM RELAY CONTROL
5	A10 12RD/DG	FUSED B(+)
6	B120 16BR/RD	ABS PUMP MOTOR SENSE
7	G19 20LG/OR	ABS WARNING LAMP DRIVER
8	-	-
9	B47 16RD/LB	ABS SYSTEM RELAY OUTPUT
10	Z1 14BK	GROUND



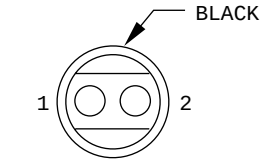
AIRBAG CONTROL MODULE - C1

CAV	CIRCUIT	FUNCTION
1	F14 18LG/YL	FUSED IGNITION SWITCH OUTPUT (RUN/START)
2	F23 18WT	FUSED IGNITION SWITCH OUTPUT (RUN)
3	D1 18VT/BR	CCD BUS (+)
4	D2 18WT\DB	CCD BUS (-)
5	-	-
6	-	-
7	-	-
8	-	-
9	-	-
10	-	-
11	Z6 18BK/PK	GROUND
12	-	-
13	-	-



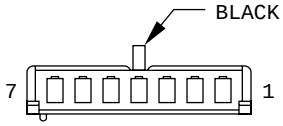
AIRBAG CONTROL MODULE - C2

CAV	CIRCUIT	FUNCTION
1	R44 18DG/YL	PASSENGER AIRBAG LINE 2
2	R42 18BK/YL	PASSENGER AIRBAG LINE 1
3	R45 18DG/LB	DRIVER AIRBAG LINE 2
4	R43 18BK/LB	DRIVER AIRBAG LINE 1



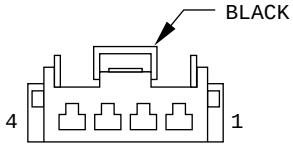
ASH RECEIVER LAMP

CAV	CIRCUIT	FUNCTION
1	E2 18OR	PANEL LAMPS DRIVER
2	Z1 18BK	GROUND



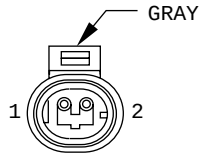
AUTOMATIC DAY/NIGHT MIRROR

CAV	CIRCUIT	FUNCTION
1	F20 20WT	AUTOMATIC DAY/NIGHT MIRROR BATTERY FEED
2	Z1 18BK	MAP LAMP GROUND
3	L1 18VT/BK	BACKUP LAMP SENSE
4	-	-
5	-	-
6	M2 18YL	COURTESY LAMP FEED
7	M1 18BK/PK	LAMP FEED



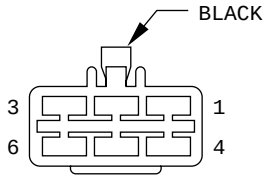
AUTOSTICK SWITCH

CAV	CIRCUIT	FUNCTION
1	T44 20YL/LB	AUTOSTICK DOWNSHIFT SWITCH SENSE
2	T5 20LG/LB	AUTOSTICK UPSHIFT SWITCH SENSE
3	Z13 20BK/RD	GROUND
4	F11 20RD/VT	FUSED IGNITION SWITCH OUTPUT (OFF/RUN/START)



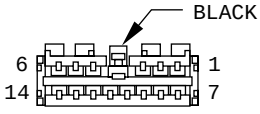
BATTERY
TEMPERATURE
SENSOR

CAV	CIRCUIT	FUNCTION
1	K118 18PK/YL	BATTERY TEMPERATURE SENSOR SIGNAL
2	K4 18BK/LB	SENSOR GROUND



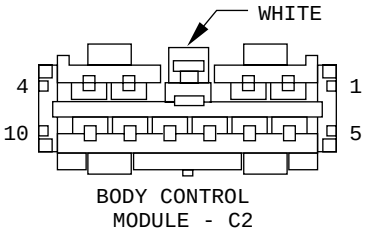
BLOWER MOTOR
RESISTOR BLOCK

CAV	CIRCUIT	FUNCTION
1	C7 12BK/TN	HI BLOWER MOTOR DRIVER
2	C6 18LB	M2 BLOWER MOTOR DRIVER
3	-	-
4	C1 12DG	FUSED IGNITION SWITCH OUTPUT (RUN)
5	C4 18TN	LO BLOWER MOTOR DRIVER
6	C5 18LG	M1 BLOWER MOTOR DRIVER



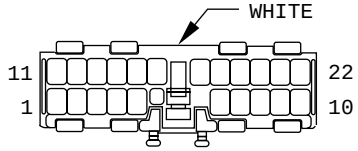
BODY CONTROL
MODULE - C1

CAV	CIRCUIT	FUNCTION
1	-	-
2	V55 20WT/GY	WIPER PARK SWITCH SENSE
3	Q33 18BR/LB	DECKLID RELEASE RELAY CONTROL
4	Z2 20BK/LG	GROUND
5	D1 20VT/BR	CCD BUS (+)
6	D1 20VT/DG	CCD BUS (+)
7	V14 20PK/VT	WIPER ON/OFF RELAY CONTROL
8	V16 20VT/PK	WIPER HI/LO RELAY CONTROL
9	-	-
10	V10 18BR/DB	WASHER PUMP CONTROL
11	-	-
12	Z2 20BK/LG	GROUND
13	D2 20WT/BK	CCD BUS (-)
14	D2 20WT/DG	CCD BUS (-)



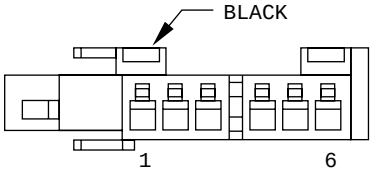
BODY CONTROL MODULE - C2

CAV	CIRCUIT	FUNCTION
1	-	-
2	C35 22DG/YL	MODE DOOR DRIVER
3	E2 18OR/YL	PANEL LAMPS DRIVER
4	E2 18OR/BR	PANEL LAMPS DRIVER
5	C26 20PK/DB	5 VOLT SUPPLY
6	C34 22DB/YL	COMMON DOOR DRIVER
7	M50 20YL/RD	KEY-IN LAMP DRIVER
8	Z2 20BK/LG	GROUND
9	E2 18OR	PANEL LAMPS DRIVER
10	E2 18OR/BK	PANEL LAMPS DRIVER



BODY CONTROL MODULE - C3

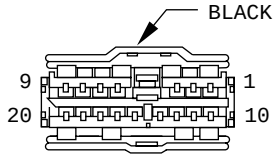
CAV	CIRCUIT	FUNCTION
1	D1 20VT/BR	CCD BUS (+)
2	D1 18VT/BR	CCD BUS (+)
3	-	-
4	Z2 20BK/VT	GROUND
5	C58 22RD	HVAC MODE SENSE
6	C37 20YL	MODE DOOR FEEDBACK SIGNAL
7	C12 20LG/BK	EVAPORATOR TEMPERATURE SENSOR SIGNAL
8	-	-
9	P102 20TN	POWER DOOR LOCK ENABLE
10	V52 22DG/RD	WINDSHIELD WIPER SWITCH SIGNAL
11	D2 20WT/DB	CCD BUS (-)
12	D2 18WT/DB	CCD BUS (-)
13	-	-
14	Z2 18BK/LG	GROUND
15	V10 18 BR/DB	WASHER PUMP CONTROL
16	C21 22DB/OR	A/C SWITCH SENSE
17	G26 22LB	KEY-IN IGNITION SWITCH SENSE
18	E19 20RD	DIMMER SWITCH SIGNAL
19	Z2 22BK/PK	GROUND
20	C57 22GY/TN	SENSOR GROUND
21	C57 22GY	SENSOR GROUND
22	Z2 18BR/TN	GROUND



BODY CONTROL MODULE - C4

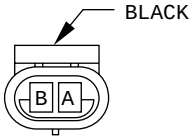
CAV	CIRCUIT	FUNCTION
1	-	-
2	-	-
3	P158 20RD	RIGHT RKE ANTENNA
4	P58 20BK	LEFT RKE ANTENNA
5	-	
6	-	-

* WITH VTSS



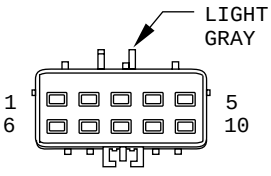
BODY CONTROL MODULE - C5

CAV	CIRCUIT	FUNCTION
1	P34 16PK/BK	RIGHT FRONT DOOR UNLOCK DRIVER
2	-	-
3	-	-
4	P34 16DB/WT*	LEFT FRONT DOOR UNLOCK DRIVER
4	P55 16DB/WT**	LEFT FRONT DOOR UNLOCK DRIVER
5	G10 20LG/RD	SEAT BELT SWITCH SENSE
6	G74 18TN/RD	LEFT REAR DOOR AJAR SWITCH SENSE
7	G75 18TN	LEFT FRONT DOOR AJAR SWITCH SENSE
8	P97 20WT/DG	LEFT FRONT DOOR SWITCH MUX
9	G71 20VT/YL**	TRUNK KEY CYLINDER SWITCH SENSE
10	P33 16OR/BK	LEFT FRONT DOOR LOCK DRIVER
11	P33 16OR/WT	RIGHT FRONT DOOR LOCK DRIVER
12	-	-
13	-	-
14	G38 18GY	GARAGE DOOR OPENER LOCKOUT
15	G4 18DB	FUEL LEVEL SENSOR SIGNAL
16	-	-
17	G74 20TN/PK	RIGHT FRONT DOOR AJAR SWITCH SENSE
18	P96 20WT/LG	RIGHT FRONT DOOR SWITCH MUX
19	G73 18LG/OR**	LEFT VTSS ARM/DISARM SENSE
20	G72 18DG/OR**	RIGHT VTSS ARM/DISARM SENSE



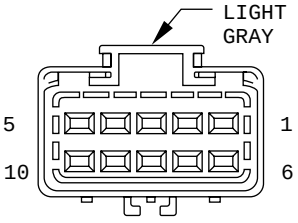
BRAKE WARNING PRESSURE SWITCH

CAV	CIRCUIT	FUNCTION
A	G9 20GY/DB	RED BRAKE WARNING LAMP DRIVER
B	Z1 20BK	GROUND



C104

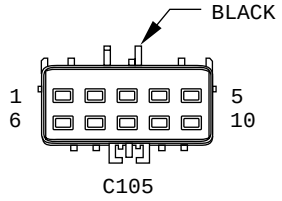
CAV	CIRCUIT
1	T9 18OR/BK
2	T54 18VT/WT
3	T41 18BK/WT
4	-
5	T16 16RD/BR
6	T19 18WT/PK
7	T41 18BK/LB
8	T50 18DG/TN
9	T59 18PK/DB
10	T60 18BR/TN



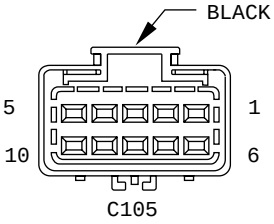
C104

CAV	CIRCUIT
1	T9 20OR/BK
2	T54 18VT/WT
3	T41 20BK/WT
4	-
5	T16 16RD/BR
6	T19 20WT/PK
7	T41 20BK/LB
8	T50 18DG/TN
9	T59 18PK/DB
10	T60 18BR/TN

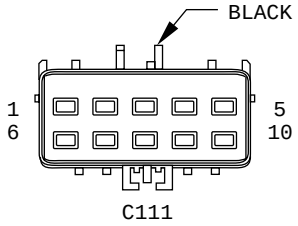
* WITHOUT VTSS
** WITH VTSS



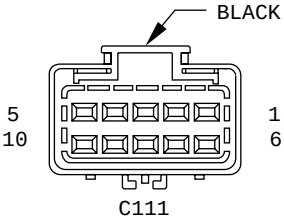
CAV	CIRCUIT
1	F20 18WT/YL
2	T1 18LG/GY
3	T3 18VT
4	T13 20DB/BR
5	T14 18LG/VT
6	T20 18LB/WT
7	T42 18VT/TN
8	T47 18YL/GY
9	T52 18OR/YL
10	L1 18VT/BK



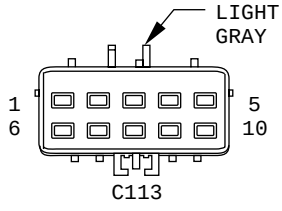
CAV	CIRCUIT
1	F20 18WT/YL
2	T1 20LG/GY
3	T3 18VT
4	T13 20DB/BR
5	T14 20LG/VT
6	T20 20LB/WT
7	T42 18VT/TN
8	T47 20YL/GY
9	T52 20RD/YL
10	L1 18VT/BK



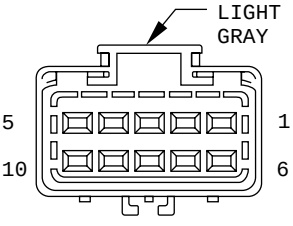
CAV	CIRCUIT
1	Z1 16BK ●
1	Z1 18BK ●●
2	K39 20GY/RD
3	K40 18BR/GY
4	K59 20VT/GY
5	K7 18OR/WT ●
5	K7 20OR/WT ●●
6	A142 18DG/OR
7	K60 20YL/BK
8	G6 18GY/VT
9	K6 20VT/WT
10	K4 18BK/LB



CAV	CIRCUIT
1	Z1 16BK*
1	Z1 18BK**
2	K39 20GY/RD
3	K40 20BR/GY
4	K59 20VT/GY
5	K7 18OR/WT
6	A142 18DG/OR
7	K60 20YL/BK
8	G6 20GY
9	K6 20VT/WT
10	K4 18BK/LB

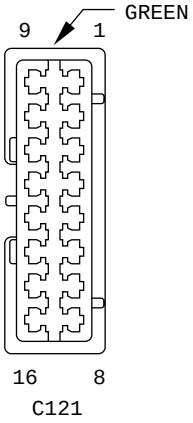


CAV	CIRCUIT
1	C3 14DB/BK
2	-
3	-
4	K24 18GY/BK
5	T40 14BR
6	F12 18DB/WT
7	C18 20DB/YL
8	V32 20YL/PK
9	K22 18OR/LB ●
9	K22 20OR/LB ●●
10	Z12 18BK/TN

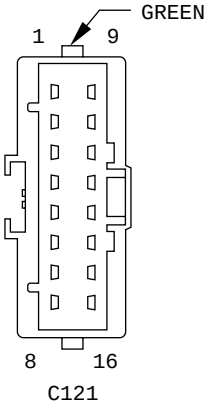


CAV	CIRCUIT
1	C3 14DB/BK
2	-
3	-
4	K24 18GY/BK
5	T40 14BR
6	F12 18DB/WT
7	C18 20DB/YL
8	V32 20YL/PK
9	K22 20OR/LB
10	Z12 18BK/TN

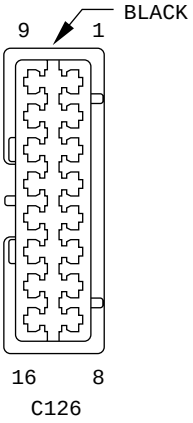
● 2.0L ENG
●● 2.5L ENG



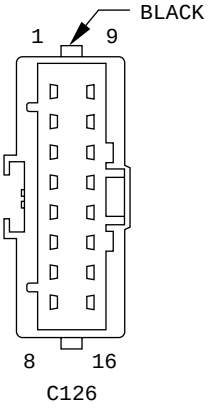
CAV	CIRCUIT
1	B1 20YL/DB
2	B2 20YL
3	B3 20LG/DB
4	B4 20LG
5	A141 14DG/WT
6	L1 18VT/BK
7	-
8	A45 18BR
9	A25 12DB
10	Q33 18BR/LB
11	-
12	-
13	-
14	-
15	-
16	Z1 18BK
	Z2 20BK/LG



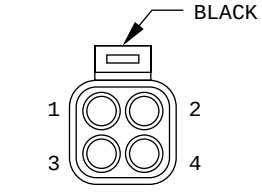
CAV	CIRCUIT
1	B1 20YL/DB
2	B2 20YL
3	B3 20LG/DB
4	B4 20LG
5	A141 14DG/WT
6	L1 18VT/BK
	L1 18VT/BK
7	-
8	A45 18BR
9	A25 12DB
10	Q33 18BR/LB
11	-
12	-
13	-
14	-
15	-
16	Z1 18BK



CAV	CIRCUIT
1	A2 12PK/BK
2	G6 20GY
3	V37 20RD/LG
4	D20 20LG
5	T5 20LG/LB
6	D21 20PK/LG
7	F18 18LG/BK
8	A41 16YL
	A41 16YL/OR*
9	A15 16PK
10	G29 20BK/TN
11	D6 20PK/LB
12	L13 18BR/VT
	L13 18BR/VT
13	T44 20YL/LB
14	
15	G19 20LG/OR
	G19 20LG/OR
16	A1 16RD

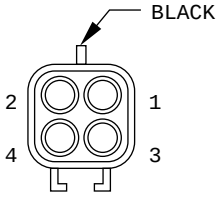


CAV	CIRCUIT
1	A2 12PK/BK
2	G6 20GY
3	V37 20RD/LG
4	D20 20LG
5	T5 20LG/LB ●
6	D21 20PK/LG
7	F18 18LG/BK
	F18 20LG/BK
8	A41 16YL
9	A15 18PK
	A15 18PK
10	G29 20BK/TN
11	D6 20PK/LB
12	L13 18BR/VT
13	T44 20YL/LB ●
14	-
15	G19 20LG/OR
16	A1 16RD



C165 (2.5L ENGINE ONLY)

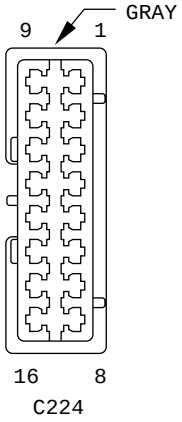
CAV	CIRCUIT
1	A142 18DG/OR
2	K11 18WT/LB
3	K13 18YL/WT
4	K38 18GY



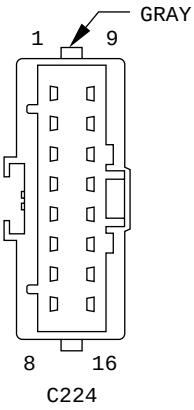
C165 (2.5L ENGINE ONLY)

CAV	CIRCUIT
1	A142 18DG/OR
2	K11 18WT/LB
3	K13 18YL/WT
4	K38 18GY

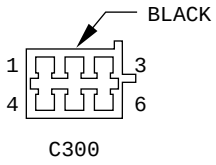
● AUTOSTICK
* MTX



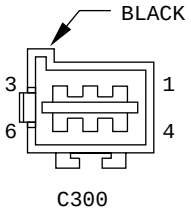
CAV	CIRCUIT
1	X52 18DB/WT
2	X80 18LB/DG
3	X82 18LB/VT
4	X58 18DB/OR
5	X51 18BR/YL
6	X85 18LG/DG
7	X87 18LG/VT
8	X57 18BR/LB
9	X60 20DG/RD**
9	X60 20DG/RD
10	G78 20TN/BK
11	P5 20YL/BK**
12	P6 20RD/WT**
13	F13 18DB
14	L36 18LG
15	G9 18GY
16	E2 18OR\BK



CAV	CIRCUIT
1	X52 18DB/WT
2	X56 20DB/RD*
	X56 18DB/RD*
2	X80 18LB/DG**
3	X54 20VT*
	X54 18VT*
3	X82 18LB/VT**
4	X58 18DB/OR
5	X51 18BR/YL
6	X55 20BR/RD*
	X55 18BR/RD*
6	X85 18LG/DG**
7	X53 20DG*
	X53 18DG*
7	X87 18LG/VT**
8	X57 18BR/LB
9	X60 20DG/RD**
	X60 20DG/RD**
9	X60 20DG/RD
10	G78 20TN/BK
11	P5 20YL/BK**
12	P6 20RD/WT**
13	F13 18DB
14	L36 18LG**
	L36 18LG**
15	G9 18GY
16	E2 18OR/BK

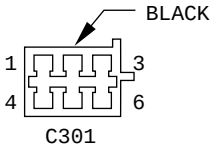


CAV	CIRCUIT
1	L1 18VT/BK
2	L50 18WT/TN
3	L61 18LG/TN
4	L7 18BK/YL
5	Z1 18BK
6	L36 18LG



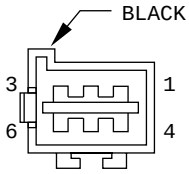
CAV	CIRCUIT
1	L1 18VT/BK
	L1 18VT/BK
2	L50 18WT/TN
3	L61 18LG/TN
4	L7 18BK/YL
	L7 18BK/YL
5	Z1 18BK
	Z1 18BK
6	L36 18LG
	L36 18LG

* STANDARD RADIO
** PREMIUM RADIO



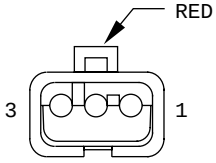
C301

CAV	CIRCUIT
1	L1 18VT/BK
2	L50 18WT/TN
3	L60 18TN
4	L7 18BK/YL
5	Z1 18BK
6	L36 18LG



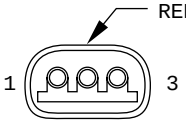
C301

CAV	CIRCUIT
1	L1 18VT/BK
2	L50 18WT/TN
3	L60 18TN
4	L7 18BK/YL
5	Z1 18BK
6	L36 18LG



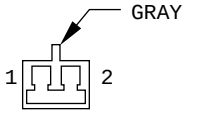
C305

CAV	CIRCUIT
1	L50 18BK/TN
2	-
3	Z1 18BK



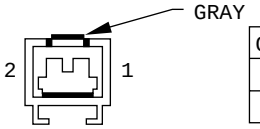
C305

CAV	CIRCUIT
1	L50 18WT/TN
2	-
3	Z1 18BK



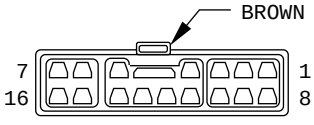
C309 (WITH POWER SEAT)

CAV	CIRCUIT
1	F35 16RD
2	Z1 16BK



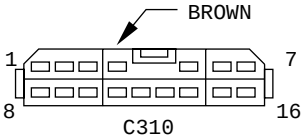
C309 (WITH POWER SEAT)

CAV	CIRCUIT
1	F35 16RD
2	Z1 16BK



C310

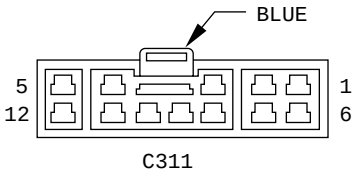
CAV	CIRCUIT
1	M2 18YL
2	M1 18PK
3	C16 20LB/OR
4	P90 20LG/BK
5	P91 20WT/BK
6	P92 20YL
7	P94 20WT/YL
8	F20 20WT
9	P33 16OR/BK
10	P55 16DB/WT
11	P97 20WT/DG
12	G73 18LG/OR●
13	-
14	-
15	-
16	-



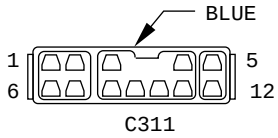
C310

CAV	CIRCUIT
1	M2 18YL
2	M1 18PK
3	C16 LB/OR
4	P90 20LG/BK
5	P91 20WT/BK
6	P92 20YL
7	P94 20WT/YL
8	F20 20WT
9	P33 16OR/BK
10	P55 16DB/WT
11	P97 20WT/DG
12	G73 18LG/OR●
13	-
14	-
15	-
16	-

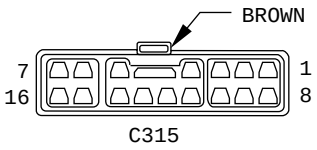
● WITH VTSS



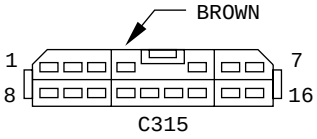
CAV	CIRCUIT
1	X85 18LG/DG
2	X87 18LG/VT
3	Q17 14DB/WT
4	Q18 14GY/BK
5	Q27 14RD/BK
6	Q28 14DG/WT
7	Q16 14BR/WT
8	Q26 14VT/WT
9	Z1 14BK
10	F21 14TN/VT
11	P5 20YL/BK
12	P6 20RD/WT



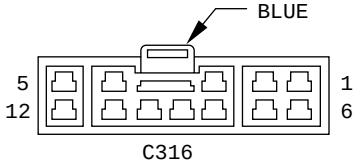
CAV	CIRCUIT
1	X85 18LG/DG
2	X87 18LG/VT
3	Q17 14DB/WT
4	Q18 14GY/BK
5	Q27 14RD/BK
6	Q28 14DG/WT
7	Q16 14BR/WT
8	Q26 14VT/WT
9	Z1 14BK
10	F21 14TN/VT
11	P5 20YL/BK
12	P6 20RD/WT



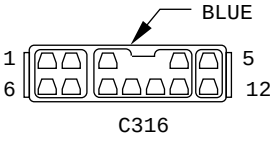
CAV	CIRCUIT
1	M2 18YL
2	M1 18PK
3	C16 20LB/YL
4	P90 20LG/BK
5	P91 20 WT/BK
6	P92 20YL
7	P94 20WT/YL
8	F20 20WT
9	P33 16OR/WT
10	P34 16PK/BK
11	P96 20WT/LG
12	G72 18DG/OR*
13	-
14	-
15	-
16	-



CAV	CIRCUIT
1	M2 18YL
2	M1 18PK
3	C16 20LB/YL
4	P90 20LG/BK
5	P91 20 WT/BK
6	P92 20YL
7	P94 20WT/YL
8	F20 20WT
9	P33 16OR/WT
10	P34 16PK/BK
11	P96 20WT/LG
12	G72 18DG/OR*
13	-
14	-
15	-
16	-

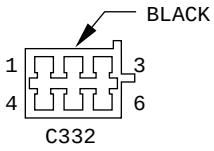


CAV	CIRCUIT
1	X80 18LB/DG
2	X82 18LB/VT
3	Q16 14BR/WT
4	Q26 14VT/WT
5	-
6	-
7	-
8	-
9	Z1 14BK
10	F21 14TN/WT
11	-
12	-

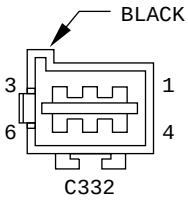


CAV	CIRCUIT
1	X80 18LB/DG
2	X82 18LB/VT
3	Q16 14BR/WT
4	Q26 14VT/WT
5	-
6	-
7	-
8	-
9	Z1 14BK
10	F21 14TN
11	-
12	-

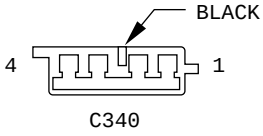
* WITH VTSS



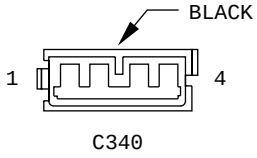
CAV	CIRCUIT
1	M1 18PK
2	M2 18YL
3	Z1 18BK
4	F20 20WT
5	G38 18GY
5	G38 18GY
6	L1 18VT/BK



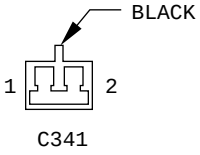
CAV	CIRCUIT
1	M1 18PK
2	M2 18YL
3	Z1 18BK
4	F20 20WT●
5	G38 18GY
5	G38 18GY●●
6	L1 18VT/BK●



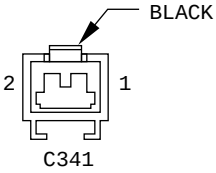
CAV	CIRCUIT
1	G10 20LG/RD
2	Z1 20BK/LG
3	Z1 18BK
4	R7 18OR/BK



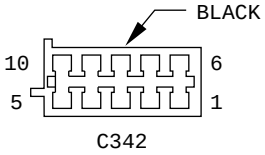
CAV	CIRCUIT
1	G10 20LG/RD
2	Z1 20BK/LG
3	Z1 18BK
4	R7 18OR/BK



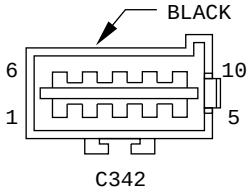
CAV	CIRCUIT
1	Z1 18BK
2	R8 18OR/RD



CAV	CIRCUIT
1	Z1 18BK
2	R8 18OR/RD



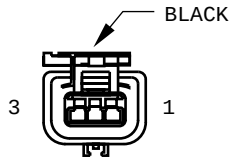
CAV	CIRCUIT
1	Q33 18BR/LB**
2	F20 20WT
3	P5 20YL/BK
4	P6 20RD/WT
5	G38 18GY
5	G38 18GY
6	Z1 20BK
6	Z1 20BK
7	M1 18PK
8	M2 18YL
9	-
10	-



CAV	CIRCUIT
1	Q33 18BR/LB
2	F20 20WT
3	P5 20YL/BK
4	P6 20RD/WT
5	G38 18GY
6	Z1 18BK
6	Z1 18BK
7	M1 18PK
8	M2 18YL
9	E2 18OR/BK
9	E2 18OR/BK
10	-

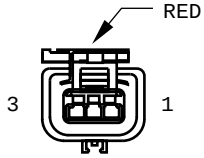
●AUTOMATIC DAY/NIGHT MIRROR

●●REMOTE DECKLID RELEASE



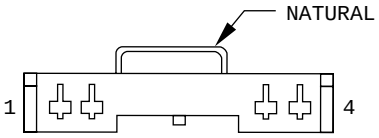
CAMSHAFT POSITION SENSOR (2.0L ENGINE ONLY)

CAV	CIRCUIT	FUNCTION
1	K7 20OR/WT	5 VOLT SUPPLY
2	K4 20BK/LB	SENSOR GROUND
3	K44 20TN/YL	CAMSHAFT POSITION SENSOR SIGNAL



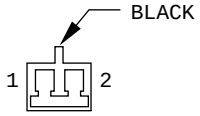
CENTER HIGH MOUNTED STOP LAMP (CHMSL)

CAV	CIRCUIT	FUNCTION
1	L50 18WT/TN	BRAKE LAMP SWITCH OUTPUT
2	-	-
3	Z1 18BK	GROUND



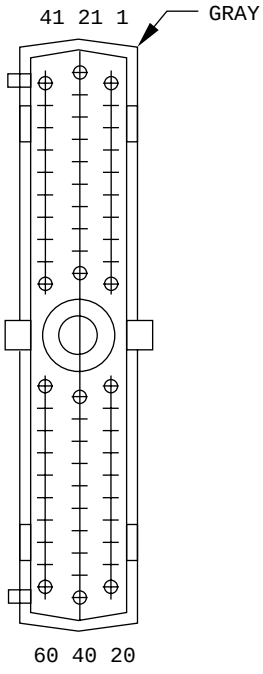
CLOCKSPRING

CAV	CIRCUIT	FUNCTION
1	X3 18BK/RD	HORN RELAY CONTROL
2	V37 20RD/LG	SPEED CONTROL SWITCH SIGNAL
3	Z2 18BR/TN	GROUND
4	-	-



CLUTCH INTERLOCK SWITCH

CAV	CIRCUIT	FUNCTION
1	A41 16YL/OR	IGNITION SWITCH OUTPUT (START)
2	T141 16YL/RD	IGNITION SWITCH OUTPUT (START)



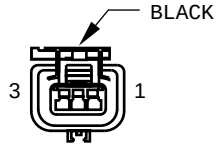
CONTROLLER
ANTILOCK
BRAKE

CAV	CIRCUIT	FUNCTION
1	B1 20YL/DB	RIGHT REAR WHEEL SPEED SENSOR (-)
2	B2 20YL	RIGHT REAR WHEEL SPEED SENSOR (+)
3	B3 20LG/DB	LEFT REAR WHEEL SPEED SENSOR (-)
4	B4 20LG	LEFT REAR WHEEL SPEED SENSOR (+)
5	Z1 18BK	GROUND
6	B6 20WT/DB	RIGHT FRONT WHEEL SPEED SENSOR (-)
7	B7 20WT	RIGHT FRONT WHEEL SPEED SENSOR (+)
8	B8 20OR/DB	LEFT FRONT WHEEL SPEED SENSOR (-)
9	B9 20OR	LEFT FRONT WHEEL SPEED SENSOR (+)
10	-	-
11	-	-
12	-	-
13	L50 18WT/BR	STOP LAMP SWITCH OUTPUT
14	G9 20GY/DG	RED BRAKE WARNING LAMP DRIVER
15	G19 20LG/OR	ABS WARNING LAMP DRIVER
16	B116 20GY/LB	ABS PUMP/MOTOR RELAY CONTROL
17	-	-
18	-	-
19	-	-
20	B120 16BR/RD	ABS PUMP MOTOR SENSE
21	-	-
22	-	-
23	-	-
24	-	-
25	-	-
26	-	-
27	-	-
28	-	-
29	-	-
30	-	-
31	-	-
32	-	-
33	-	-
34	-	-
35	-	-
36	-	-
37	-	-
38	-	-
39	-	-
40	-	-
41	-	-
42	B142 20BR/YL	LEFT FRONT DECAY SOLENOID CONTROL
43	B143 20DG/YL	RIGHT FRONT DECAY SOLENOID CONTROL
44	-	-
45	-	-

(CONTINUED ON NEXT PAGE)

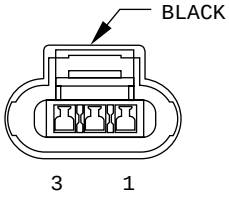
(CONTINUED FROM PREVIOUS PAGE)

CAV	CIRCUIT	FUNCTION
46	B146 20BR/LB	LEFT REAR DECAY SOLENOID CONTROL
47	B47 16RD/LB	ABS SYSTEM RELAY OUTPUT
48	B148 20DG/LB	RIGHT REAR DECAY SOLENOID CONTROL
49	-	-
50	-	-
51	D21 20PK/LG	SCI TRANSMIT -
52	-	-
53	-	-
54	-	-
55	-	-
56	-	-
57	B57 20BR/BK	ABS SYSTEM RELAY CONTROL
58	-	-
59	-	-
60	F12 18DB/WT	FUSED IGNITION SWITCH OUTPUT (RUN/START)



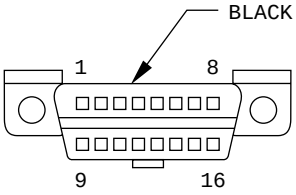
CRANKSHAFT POSITION SENSOR
(2.0L ENGINE ONLY)

CAV	CIRCUIT	FUNCTION
1	K7 20OR/WT	5 VOLT SUPPLY
2	K4 20BK/LB	SENSOR GROUND
3	K24 20GY/BK	CRANKSHAFT POSITION SENSOR SIGNAL



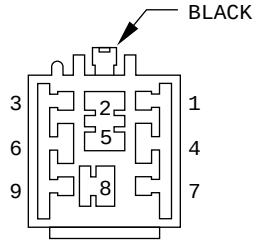
CRANKSHAFT POSITION SENSOR
(2.5L ENG)

CAV	CIRCUIT	FUNCTION
1	K7 20OR/WT	5 VOLT SUPPLY
2	K4 20BK/LB	SENSOR GROUND
3	K24 20GY/BK	CRANKSHAFT POSITION SENSOR SIGNAL



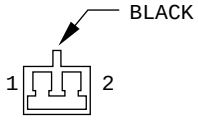
DATA LINK CONNECTOR

CAV	CIRCUIT	FUNCTION
1	-	-
2	-	-
3	D1 20VT/BR	CCD BUS (+)
4	Z2 20BK/VT	GROUND
5	Z11 18BK	GROUND
6	D20 20LG	SCI RECEIVE
7	D21 20PK/LG	SCI TRANSMIT
8	-	-
9	-	-
10	-	-
11	D2 20WT/DB	CCD BUS (-)
12	-	-
13	-	-
14	D6 20PK/LB	SCI RECEIVE
15	-	-
16	M1 18PK/WT	FUSED B(+)



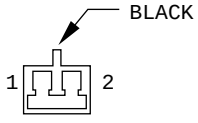
DECKLID RELEASE RELAY

CAV	CIRCUIT	FUNCTION
1	-	-
2	Q2 14LG/BK	DECKLID SOLENOID FEED
3	-	-
4	F35 16RD	FUSED B(+)
5	-	-
6	Q33 18BR/LB	REMOTE DECKLID RELEASE CONTROL
	Q33 18BR/LB	GARAGE DOOR OPENER LOCKOUT
7	-	-
8	F35 16RD	FUSED B(+)
9	-	-



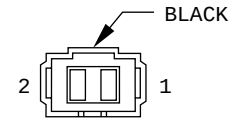
DECKLID RELEASE SWITCH

CAV	CIRCUIT	FUNCTION
1	Q33 18BR/LB	FUSED B(+)
2	G38 18GY	DECKLID RELEASE SWITCH OUTPUT



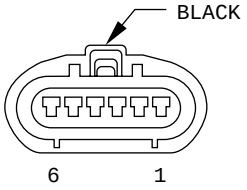
DECKLID SOLENOID

CAV	CIRCUIT	FUNCTION
1	Q2 14LG/BK	DECKLID RELEASE SWITCH OUTPUT
2	Z1 14BK	GROUND



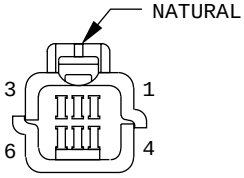
DISTRIBUTOR - C1
(2.5L ENGINE)

CAV	CIRCUIT	FUNCTION
1	A142 18DG/OR	AUTOMATIC SHUT DOWN RELAY OUTPUT
2	-	-



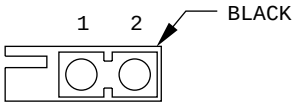
DISTRIBUTOR - C2
(2.5L ENGINE)

CAV	CIRCUIT	FUNCTION
1	K4 18BK/LB	SENSOR GROUND
2	K7 18OR/WT	8 VOLT SUPPLY
3	K44 18TN/YL	CAMSHAFT POSITION SENSOR SIGNAL
4	-	-
5	Z1 16BK	GROUND
6	K19 18BK/GY	IGNITION COIL NO. 1 DRIVER



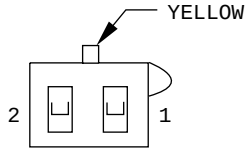
DOWNSTREAM HEATED
OXYGEN SENSOR

CAV	CIRCUIT	FUNCTION
1	K141 20TN/WT	DOWNSTREAM HEATED WXYGEN SENSOR SIGNAL
2	-	-
3	K4 20BK/LB	SENSOR GROUND
4	F142 18OR/DG	FUSED AUTOMATIC SHUT DOWN RELAY OUTPUT
5	-	-
6	Z1 20BK	GROUND



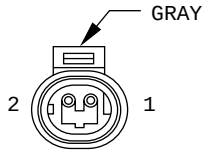
DRIVER SEAT
BELT SOLENOID

CAV	CIRCUIT	FUNCTION
1	Z1 18BK	GROUND
2	R7 18OR/BK	DRIVER LATCH SIGNAL



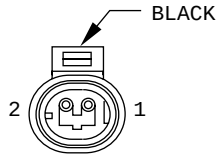
DRIVER SIDE
AIRBAG SQUIB

CAV	CIRCUIT	FUNCTION
1	R43 18BK/LB	DRIVER AIRBAG LINE 1
2	R45 18DG/LB	DRIVER AIRBAG LINE 2



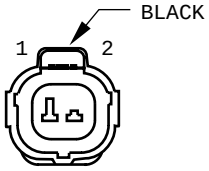
DUTY CYCLE
EVAP/PURGE
SOLENOID

CAV	CIRCUIT	FUNCTION
1	K52 20PK/GY	EVAP/PURGE SOLENOID CONTROL
2	F18 20LG/BK	FUSED IGNITION SWITCH OUTPUT (RUN/START)



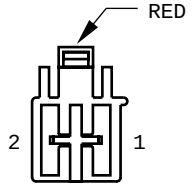
ELECTRONIC EGR
TRANSDUCER SOLENOID

CAV	CIRCUIT	FUNCTION
1	K35 18GY/YL	EGR SOLENOID CONTROL
2	A142 18DG/OR*	AUTOMATIC SHUT DOWN RELAY OUTPUT
2	A142 18DB/OR**	AUTOMATIC SHUT DOWN RELAY OUTPUT



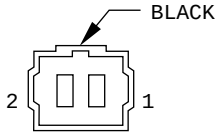
ENGINE COOLANT
TEMPERATURE SENSOR

CAV	CIRCUIT	FUNCTION
1	K4 18BK/LB	SENSOR GROUND
2	K2 18TN/BK	ENGINE COOLANT TEMPERATURE SENSOR SIGNAL



FRONT VERTICAL
MOTOR

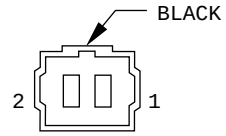
CAV	CIRCUIT	FUNCTION
1	P21 16RD/LG	POWER SEAT FRONT VERTICAL (DOWN)
2	P19 16YL/LG	POWER SEAT FRONT VERTICAL (UP)



FUEL INJECTOR
NO. 1

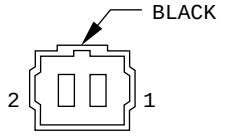
CAV	CIRCUIT	FUNCTION
1	K11 18WT/LB	INJECTOR NO. 1 DRIVER
2	A142 18DG/OR	AUTOMATIC SHUT DOWN RELAY OUTPUT

* 2.0L ENGINE
** 2.5L ENGINE



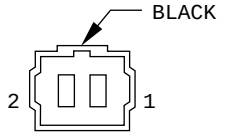
FUEL INJECTOR
NO. 2

CAV	CIRCUIT	FUNCTION
1	K12 18TN	INJECTOR NO. 2 DRIVER
2	A142 18DG/OR	AUTOMATIC SHUT DOWN RELAY OUTPUT



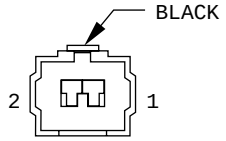
FUEL INJECTOR
NO. 3

CAV	CIRCUIT	FUNCTION
1	K13 18YL/WT	INJECTOR NO. 3 DRIVER
2	A142 18DG/OR	AUTOMATIC SHUT DOWN RELAY OUTPUT



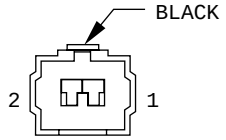
FUEL INJECTOR
NO. 4

CAV	CIRCUIT	FUNCTION
1	K14 18LB/BR	INJECTOR NO. 4 DRIVER
2	A142 18DG/OR	AUTOMATIC SHUT DOWN RELAY OUTPUT



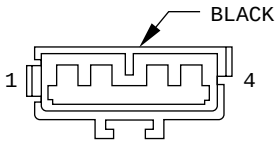
FUEL INJECTOR
NO. 5
(2.5L ENGINE)

CAV	CIRCUIT	FUNCTION
1	K38 18GY	INJECTOR NO. 5 DRIVER
2	A142 18DG/OR	AUTOMATIC SHUT DOWN RELAY OUTPUT



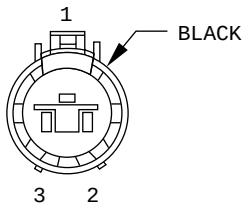
FUEL INJECTOR
NO. 6
(2.5L ENGINE)

CAV	CIRCUIT	FUNCTION
1	K58 18BR/DG	INJECTOR NO. 6 DRIVER
2	A142 18DG/OR	AUTOMATIC SHUT DOWN RELAY OUTPUT



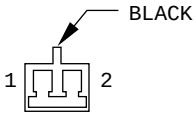
FUEL PUMP MODULE

CAV	CIRCUIT	FUNCTION
1	A141 14DG/WT	FUEL PUMP RELAY OUTPUT
2	G4 18DB	FUEL LEVEL SENSOR SIGNAL
3	Z1 16BK	GROUND
4	Z2 18BK/LG	GROUND



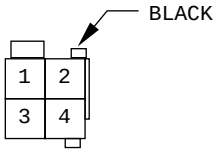
GENERATOR

CAV	CIRCUIT	FUNCTION
1	A142 18DG/OR	AUTOMATIC SHUT DOWN RELAY OUTPUT
2	K20 18DG	GENERATOR FIELD DRIVER
3	-	-



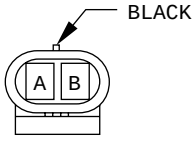
GLOVE BOX LAMP

CAV	CIRCUIT	FUNCTION
1	M1 20PK/WT	FUSED B(+)
2	Z1 20BK	GROUND



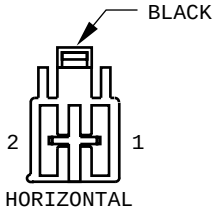
HEADLAMP LEVELING SWITCH

CAV	CIRCUIT	FUNCTION
1	L7 18BK/YL	HD/LP LAMP SWITCH OUTPUT
2	Z1 18BK	GROUND
3	L13 18BR/VT	HEADLAMP ADJUST SIGNAL



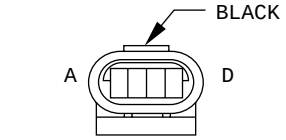
HIGH NOTE HORN

CAV	CIRCUIT	FUNCTION
A	X2 18DG/PK	HORN RELAY OUTPUT
B	Z1 18BK	GROUND



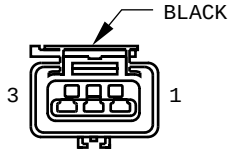
HORIZONTAL MOTOR

CAV	CIRCUIT	FUNCTION
1	P15 16YL/LB	POWER SEAT HORIZONTAL MOTOR
2	P17 16RD/LB	POWER SEAT HORIZONTAL MOTOR



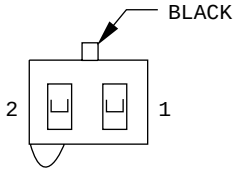
IDLE AIR CONTROL MOTOR

CAV	CIRCUIT	FUNCTION
A	K59 20VT/GY	IAC MOTOR NO. 4 DRIVER
B	K40 20BR/GY	IAC MOTOR NO. 3 DRIVER
C	K60 20YL/BK	IAC MOTOR NO. 2 DRIVER
D	K39 20GY/RD	IAC MOTOR NO. 1 DRIVER



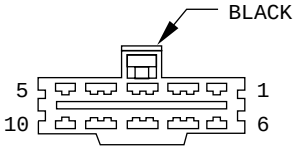
IGNITION COIL PACK
(2.0L ENGINE)

CAV	CIRCUIT	FUNCTION
1	K17 18DB/DG	IGNITION COIL NO. 2 DRIVER
2	A142 18DG/OR	AUTOMATIC SHUT DOWN RELAY OUTPUT
3	K19 18BK/GY	IGNITION COIL NO. 1 DRIVER



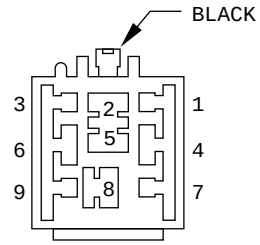
IGNITION SWITCH - C1

CAV	CIRCUIT	FUNCTION
1	A1 16RD	FUSED B(+)
2	A81 18DG/RD	IGNITION SWITCH OUTPUT (OFF/RUN/START)



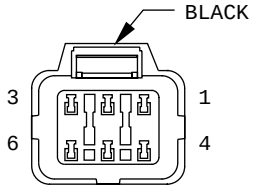
IGNITION SWITCH - C2

CAV	CIRCUIT	FUNCTION
1	Z1 20BK	GROUND
2	G9 22GY/DB	RED BRAKE WARNING LAMP DRIVER
3	A2 12PK/BK	FUSED B(+)
4	A22 12BK/OR	IGNITION SWITCH OUTPUT (RUN)
5	-	-
6	-	-
7	A1 16RD	FUSED B(+)
7	A1 16RD	FUSED B(+)
8	A31 16BK/WT	IGNITION SWITCH OUTPUT (ACC/RUN)
9	A21 16DB	IGNITION SWITCH OUTPUT (RUN/START)
10	A41 16YL	IGNITION SWITCH OUTPUT (START)



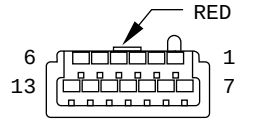
ILLUMINATED ENTRY RELAY

CAV	CIRCUIT	FUNCTION
1	-	-
2	Z1 18BK	GROUND
3	-	-
4	M1 18PK	FUSED B(+)
	M1 18PK	FUSED B(+)
5	-	-
6	M112 20BR/LG	ILLUMINATED ENTRY RELAY CONTROL
7	-	-
8	M2 18YL	COURTESY LAMPS DRIVER
9	-	-



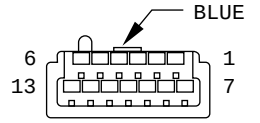
IMMOBILIZER

CAV	CIRCUIT	FUNCTION
1	A15 18PK	FUSED B(+)
2	F18 20LG/BK	FUSED IGNITION SWITCH OUTPUT
3	D1 20VT/BR	CCD BUS(+)
4	D2 20WT/DB	CCD BUS(-)
5	P102 20TN	POWER DOOR LOCK ENABLE
6	Z1 18BK	GROUND



INSTRUMENT CLUSTER - C1

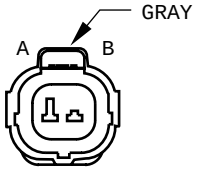
CAV	CIRCUIT	FUNCTION
1	L60 18TN/BR	RIGHT TURN SIGNAL
2	F11 18RD/VT	FUSED IGNITION SWITCH OUTPUT (OFF/RUN/START)
3	-	-
4	Z2 18BK/LG	GROUND
5	F33 20PK/RD	FUSED B(+)
6	-	-
7	-	-
8	G29 20BK/TN	WASHER FLUID SWITCH SENSE
9	-	-
10	-	-
11	-	-
12	-	-
13	G78 20TN/BK	TRUNK AJAR SWITCH SENSE



INSTRUMENT CLUSTER - C2

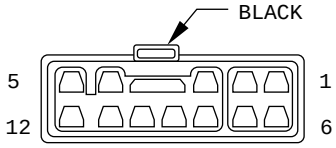
CAV	CIRCUIT	FUNCTION
1	L36 18LG	REAR FOG LAMP
2	L61 18LG/TN	LEFT TURN SIGNAL
3	D2 20WT/BK**	TRAVELER CCD BUS (-)
4	D1 20VT**	TRAVELER CCD BUS (+)
5	F18 18LG/BK	FUSED IGNITION SWITCH OUTPUT (RUN/START)
	F18 20LG/BK	FUSED IGNITION SWITCH OUTPUT (RUN/START)
6	G9 22GY/DB	RED BRAKE WARNING LAMP DRIVER
7	D2 20WT/DB	CCD BUS (-)
8	D1 20VT/BR	CCD BUS (+) -
9		
10	E2 18OR/YL	PANEL LAMPS DRIVER
11	Z1 18BK/OR	GROUND -
12	G6 20GY	OIL PRESSURE SWITCH SENSE
13	G19 20LG/OR	ABS WARNING LAMP DRIVER

* WITH VTSS
** WITH TRAVELER



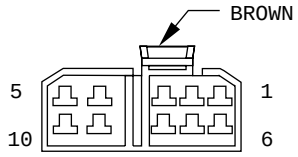
INTAKE AIR
TEMPERATURE SENSOR

CAV	CIRCUIT	FUNCTION
A	K4 18BK/LB	SENSOR GROUND
B	K21 18BK/RD	INTAKE AIR TEMPERATURE SIGNAL



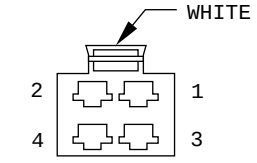
JUNCTION BLOCK - C1

CAV	CIRCUIT	FUNCTION
1	G9 20GY/DB	RED BRAKE WARNING LAMP DRIVER
2	G9 20GY/DG	RED BRAKE WARNING LAMP DRIVER
3	L34 18RD/OR	FUSED RIGHT HIGH BEAM OUTPUT
4	L60 18TN/BR	RIGHT TURN SIGNAL
5	L61 18LG/TN	LEFT TURN SIGNAL
6	L33 18LG/BR	FUSED LEFT HIGH BEAM OUTPUT
7	-	-
8	L7 18BK/YL	PARK LAMP SWITCH OUTPUT
8	L7 18BK/YL	PARK LAMP SWITCH OUTPUT
9	L7 18BK/BR	PARK LAMP SWITCH OUTPUT
9	L7 18BK/BR	PARK LAMP SWITCH OUTPUT
10	L39 18LB	FOG LAMP SWITCH OUTPUT
11	L39 18 LB	FOG LAMP FEED
12	L43 18VT/OR	FUSED LEFT LOW BEAM OUTPUT



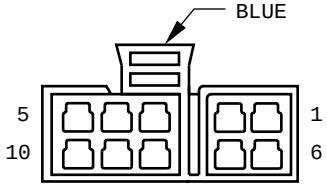
JUNCTION BLOCK - C2

CAV	CIRCUIT	FUNCTION
1	L50 18WT/BR	STOP LAMP SWITCH OUTPUT
2	A7 16RD/BK	FUSED B(+)
3	L50 16WT/TN	BRAKE LAMP SWITCH OUTPUT
4	F20 18WT/YL	FUSED IGNITION SWITCH OUTPUT (RUN)
5	L44 18VT/RD	FUSED RIGHT LOW BEAM OUTPUT
6	F11 18RD/VT	FUSED IGNITION SWITCH OUTPUT (OFF/RUN/START)
7	A21 16DB	IGNITION SWITCH OUTPUT (RUN/START)
8	X2 18DG/PK	HORN RELAY OUTPUT
	X2 18DG/PK	HORN RELAY OUTPUT
9	-	-
10	F13 20DB/GY	FUSED IGNITION SWITCH OUTPUT (ACC/RUN)



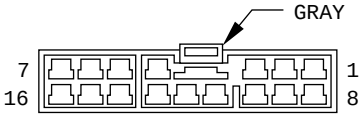
JUNCTION BLOCK - C3

CAV	CIRCUIT	FUNCTION
1	A7 16RD/BK	FUSED B(+)
2	A13 12PK/WT	FUSED B(+)
3	A3 12RD/WT	FUSED B(+)
4	A4 12BK/PK	FUSED B(+)



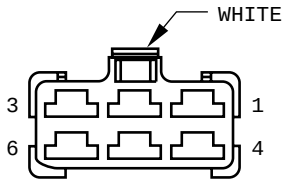
JUNCTION BLOCK - C4

CAV	CIRCUIT	FUNCTION
1	-	-
2	Z1 18BK/OR	GROUND
3	Z1 18BK/TN	GROUND
4	F23 18WT	FUSED IGNITION SWITCH OUTPUT (RUN)
5	G9 22GY/DB	RED BRAKE WARNING LAMP DRIVER
6	Z1 20BK	GROUND
7	Z1 20BK/WT	GROUND
8	Z13 20BK/RD	GROUND -
9	Z1 16BK/LB**	GROUND
10	-	-



JUNCTION BLOCK - C5

CAV	CIRCUIT	FUNCTION
1	F30 18RD	FUSED B(+)
2	-	-
3	L7 18BK/YL	PARK LAMP SWITCH OUTPUT
4	L7 18BK/DG	PARK LAMP SWITCH OUTPUT
5	-	-
6	G9 18GY	RED BRAKE WARNING LAMP DRIVER
7	G9 22GY/DB	RED BRAKE WARNING LAMP DRIVER
8	X3 18BK/RD	HORN RELAY CONTROL
9	A21 16DB	IGNITION SWITCH OUTPUT (RUN/START)
10	L39 18LB*	FOG LAMP SWITCH OUTPUT
11	M1 18PK/WT	FUSED B(+)
12	M1 20PK	FUSED B(+)
13	M1 16PK/DB**	FUSED B(+)
14	A31 16BK/WT	IGNITION SWITCH OUTPUT (ACC/RUN)
15	Z11 18BK	GROUND
16	F14 18LG/YL	FUSED IGNITION SWITCH OUTPUT (RUN/START)

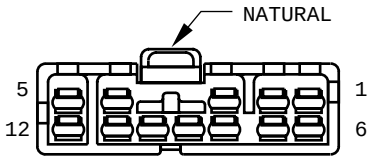


JUNCTION BLOCK - C6

CAV	CIRCUIT	FUNCTION
1	A22 12BK/OR	IGNITION SWITCH OUTPUT (RUN)
2	L4 14VT/WT	DIMMER SWITCH LOW BEAM OUTPUT
3	L3 14RD/OR	DIMMER SWITCH HIGH BEAM OUTPUT
4	A3 14RD/WT	FUSED B(+)
5	-	-
6	C1 12DG	FUSED IGNITION SWITCH OUTPUT (RUN)

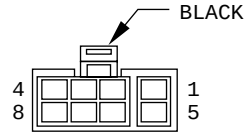
* WITH FOG LAMPS

** WITH PREMIUM SOUND



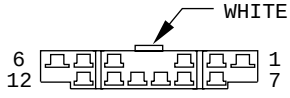
JUNCTION BLOCK - C7

CAV	CIRCUIT	FUNCTION
1	F13 18DB	FUSED IGNITION SWITCH OUTPUT (RUN/ACC)
	F13 18DB	FUSED IGNITION SWITCH OUTPUT (RUN/ACC)
2	A81 18DG/RD	IGNITION SWITCH OUTPUT (OFF/RUN/START)
3	L60 18TN/BR	RIGHT TURN SIGNAL
4	-	-
5	C16 22LB/YL	REAR DEFOGGER LAMP DRIVER
6	X12 18RD/WT	FUSED IGNITION SWITCH OUTPUT (RUN/ACC)
7	L61 18LG	LEFT TURN SIGNAL
8	L60 18TN	RIGHT TURN SIGNAL
9	L61 18LG/TN	LEFT TURN SIGNAL
10	F11 18RD/VT	FUSED IGNITION SWITCH OUTPUT (OFF/RUN/START)
	F11 20RD/VT●	FUSED IGNITION SWITCH OUTPUT (OFF/RUN/START)
11	F33 20PK/RD	FUSED B(+)
12	F33 18BK/RD	FUSED B(+)



JUNCTION BLOCK - C8

CAV	CIRCUIT	FUNCTION
1	F21 14TN	FUSED IGNITION SWITCH OUTPUT (RUN)
2	M1 18PK*	FUSED B(+)
3	C16 20LB/YL**	REAR WINDOW DEFOGGER LAMP DRIVER
4	C16 20LB/OR**	REAR WINDOW DEFOGGER LAMP DRIVER
5	F21 14TN	FUSED IGNITION SWITCH OUTPUT (RUN)
6	F21 14TN/VT	FUSED IGNITION SWTICH OUTPUT (RUN)
7	F21 14TN/WT	FUSED IGNITION SWITCH OUTPUT (RUN)
8	-	-



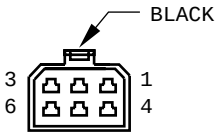
JUNCTION BLOCK - C9

CAV	CIRCUIT	FUNCTION
1	F35 16RD	FUSED B(+)
2	F20 20WT	FUSED IGNITION SWITCH OUTPUT (RUN)
3	Z1 14BK	GROUND
4	L60 18TN	RIGHT TURN SIGNAL
5	L61 18LG/TN	LEFT TURN SIGNAL
6	C15 12BK/LB	REAR DEFOGGER RELAY OUTPUT
7	M1 18PK	FUSED B(+)
8	-	-
9	L50 18WT/TN	STOP LAMP SWITCH OUTPUT
10	L7 18BK/YL	PARK LAMP SWITCH OUTPUT
11	M1 18PK/OR	FUSED B(+)
12	M1 18PK/VT	FUSED B(+)

* WITH POWER LOCKS

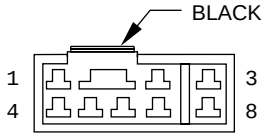
** WITH HEATED MIRRORS

● WITH AUTOSTICK



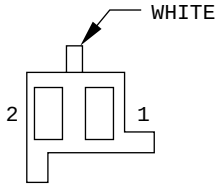
JUNCTION BLOCK - C10

CAV	CIRCUIT	FUNCTION
1	M112 20BR/LG	ILLUMINATED ENTRY RELAY CONTROL
2	-	-
3	-	-
4	Z1 18BK	GROUND
	Z1 18BK	GROUND
5	-	-
6	MI 18PK	FUSED B(+)
	MI 18PK	FUSED B(+)



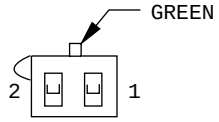
JUNCTION BLOCK - C11

CAV	CIRCUIT	FUNCTION
1	L25 18BR**	FUSED B(+)
2	Z1 18BK	GROUND



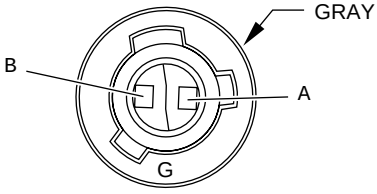
KEY-IN HALO LAMP

CAV	CIRCUIT	FUNCTION
1	M1 20PK/WT	FUSED B(+)
2	M50 20YL/RD	KEY-IN LAMP DRIVER



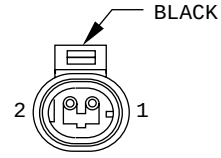
KEY-IN SWITCH

CAV	CIRCUIT	FUNCTION
1	G26 22LB	KEY-IN IGNITION SWITCH SENSE
2	Z1 20BK/WT	GROUND



LEFT BACK-UP LAMP

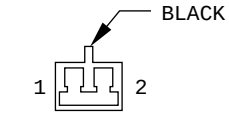
CAV	CIRCUIT	FUNCTION
A	L1 18VT/BK	BACK UP LAMP FEED
G	Z1 18BK	GROUND



LEFT DOOR
ARM/DISARM SWITCH

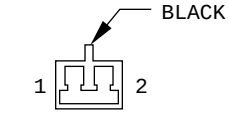
CAV	CIRCUIT	FUNCTION
1	G73 18 LG/OR	LEFT VTSS DISARM SENSE
2	M1 18PK	FUSED B(+)

** PREMIUM SOUND



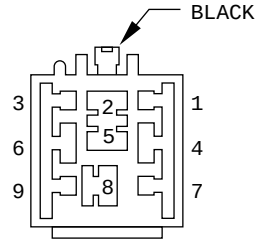
LEFT DOOR
COURTESY LAMP

CAV	CIRCUIT	FUNCTION
1	M1 18PK	FUSED B(+)
2	M2 18YL	COURTESY LAMPS DRIVER



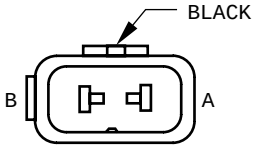
LEFT DOOR
SPEAKER

CAV	CIRCUIT	FUNCTION
1	X85 18LG/DG	LEFT FRONT (+)
2	X87 18LG/VT	LEFT FRONT (-)



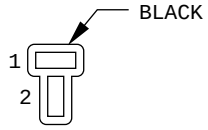
LEFT DOOR WINDOW
MOTOR RELAY

CAV	CIRCUIT	FUNCTION
1	-	-
2	F21 14TN	FUSED IGNITION SWITCH OUTPUT (RUN)
3	-	-
4	G10 20LG/RD	WINDOW MOTOR RELAY CONTROL
5	Q29 14DG	LEFT FRONT WINDOW DRIVER (DOWN)
6	Z1 20BK	GROUND
7	-	-
8	Q21 14WT	LEFT FRONT WINDOW DRIVER (DOWN)
9	-	-



LEFT FOG LAMP

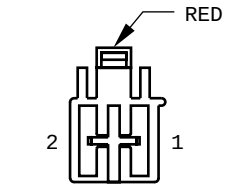
CAV	CIRCUIT	FUNCTION
A	L39 18 LB	FOG LAMP SWITCH OUTPUT
B	Z1 18BK	GROUND



LEFT FRONT
I.P. SPEAKER
(PREMIUM SOUND)

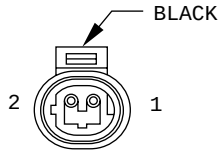
CAV	CIRCUIT	FUNCTION
1	X53 18DG*	LEFT FRONT (+)
	X81 18YL/BK**	AMPLIFIED LEFT INSTRUMENT PANEL (+)
2	X55 18BR/RD*	LEFT FRONT (-)
	X83 18YL/RD**	AMPLIFIED LEFT INSTRUMENT PANEL (-)

* STANDARD SOUND
** PREMIUM SOUND



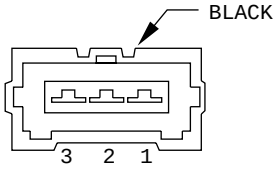
LEFT FRONT POWER WINDOW MOTOR

CAV	CIRCUIT	FUNCTION
1	Q21 14WT	LEFT FRONT WINDOW DRIVER (DOWN)
2	Q11 14LB	LEFT FRONT WINDOW DRIVER (UP)



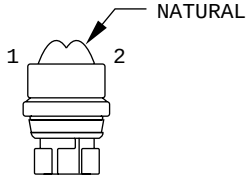
LEFT FRONT WHEEL SPEED SENSOR

CAV	CIRCUIT	FUNCTION
1	B8 20OR/DB	LEFT FRONT WHEEL SPEED SENSOR (-)
2	B9 20OR	LEFT FRONT WHEEL SPEED SENSOR (+)



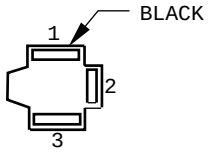
LEFT HEADLAMP LEVELING MOTOR

CAV	CIRCUIT	FUNCTION
1	L7 18BK/BR	HD/LP LAMP SWITCH OUTPUT
2	L13 18BR/VT	HEADLAMP ADJUST SIGNAL
3	Z3 18BK	INSTRUMENT PANEL GROUND



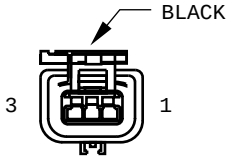
LEFT LICENSE LAMP

CAV	CIRCUIT	FUNCTION
1	L7 18BK/YL	PARK LAMP SWITCH OUTPUT
2	Z1 18BK	GROUND



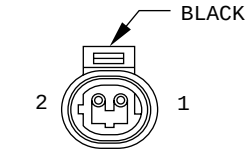
LEFT HEADLAMP

CAV	CIRCUIT	FUNCTION
1	L33 18LG/BR	FUSED LEFT HIGH BEAM OUTPUT
2	L43 18VT/OR	FUSED LEFT LOW BEAM OUTPUT
3	Z1 18BK	GROUND



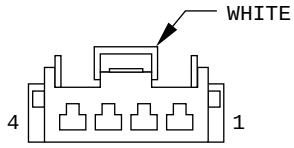
LEFT PARK/TURN SIGNAL LAMP

CAV	CIRCUIT	FUNCTION
1	L61 18LG/TN	LEFT TURN SIGNAL
2	L7 18BK/BR	PARK LAMP RELAY OUTPUT
3	Z1 18BK	GROUND



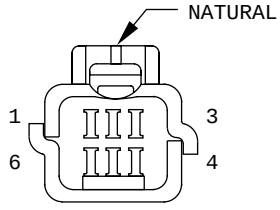
LEFT POWER
DOOR LOCK MOTOR

CAV	CIRCUIT	FUNCTION
1	P55 16DB/WT	LEFT FRONT DOOR UNLOCK DRIVER
2	P33 16OR/BK	LEFT FRONT DOOR LOCK DRIVER



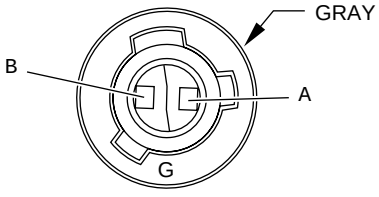
LEFT POWER
DOOR LOCK SWITCH

CAV	CIRCUIT	FUNCTION
1	M1 20 PK	FUSED B(+)
2	F20 20WT	FUSED IGNITION SWITCH OUTPUT
3	Z1 20BK	GROUND
4	P97 22WT/DG	LEFT FRONT DOOR SWITCH MUX



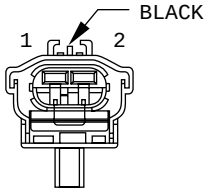
LEFT POWER
MIRROR

CAV	CIRCUIT	FUNCTION
1	C16 20LB/OR	REAR WINDOW DEFOGGER LAMP DRIVER
2	Z1 20BK	GROUND
3	P95 20DB/WT	POWER MIRROR HORIZONTAL (LEFT)
4	P91 20WT/BK	POWER MIRROR HORIZONTAL (RIGHT)
5	P90 20LG/BK	POWER MIRROR VERTICAL (DOWN)
6	P93 20YL/BK	POWER MIRROR VERTICAL (UP)



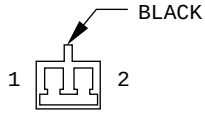
LEFT REAR FOG LAMP

CAV	CIRCUIT	FUNCTION
A	L36 18LG	REAR FOG LAMP
G	Z1 18BK	GROUND



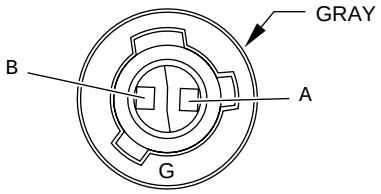
LEFT REAR POWER
WINDOW MOTOR

CAV	CIRCUIT	FUNCTION
1	Q27 14RD/BK	LEFT REAR WINDOW DRIVER (DOWN)
2	Q17 14DB/WT	LEFT REAR WINDOW DRIVER (UP)



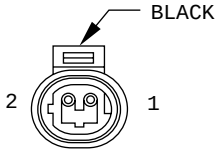
LEFT REAR
SPEAKER

CAV	CIRCUIT	FUNCTION
1	X57 18BR/LB	LEFT REAR (-)
2	X51 18BR/YL	LEFT REAR (+)



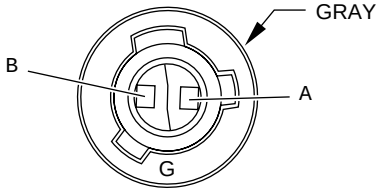
LEFT REAR TURN SIGNAL LAMP

CAV	CIRCUIT	FUNCTION
A	L61 18LG/TN	LEFT TURN SIGNAL
G	Z1 18BK	GROUND



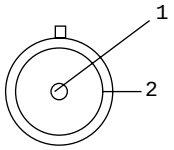
LEFT REAR WHEEL SPEED SENSOR

CAV	CIRCUIT	FUNCTION
1	B3 20LG/DB	LR WHEEL SPEED SENSOR (-)
2	B4 20LG	LR WHEEL SPEED SENSOR (+)



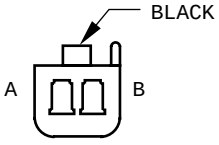
LEFT TAIL/STOP LAMP

CAV	CIRCUIT	FUNCTION
A	L50 18WT/TN	STOP LAMP SWITCH OUTPUT
B	L7 18BK/YL	HD/LP LAMP SWITCH OUTPUT
G	Z1 18BK	GROUND



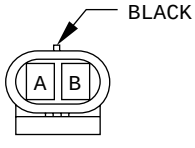
LEFT SIDE REPEATER

CAV	CIRCUIT	FUNCTION
1	L61 18LG	LEFT TURN SIGNAL
2	Z1 18BK	GROUND



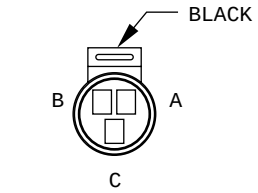
LEFT VISOR/ VANITY LAMP

CAV	CIRCUIT	FUNCTION
A	M1 18PK	FUSED B(+)
B	G38 18GY	LEFT VISOR VANITY LAMP



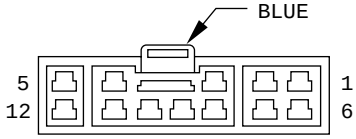
LOW NOTE HORN

CAV	CIRCUIT	FUNCTION
A	X2 18DG/PK	HORN RELAY OUTPUT
B	Z1 18BK	GROUND



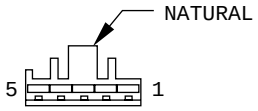
MANIFOLD ABSOLUTE
PRESSURE SENSOR

CAV	CIRCUIT	FUNCTION
A	K4 18BK/LB	SENSOR GROUND
B	K6 18VT/WT	5-VOLT SUPPLY
C	K1 18DG/RD	MAP SENSOR SIGNAL



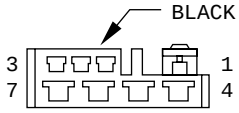
MASTER POWER
WINDOW SWITCH

CAV	CIRCUIT	FUNCTION
1	F21 14TN	FUSED IGNITION SWITCH OUTPUT (RUN)
2	Q17 14DB/WT	LEFT REAR WINDOW DRIVER (UP)
3	Q31 14OR	LEFT REAR WINDOW DRIVER (DOWN)
4	Q18 14GY/BK	RIGHT REAR WINDOW DRIVER (UP)
5	-	-
6	-	-
7	Q11 14LB	LEFT FRONT WINDOW DRIVER (UP)
8	Q29 14DG	LEFT FRONT WINDOW DRIVER (DOWN)
9	Q32 14BR	RIGHT REAR WINDOW DRIVER (DOWN)
10	Z1 14BK	GROUND
11	Q30 14VT	RIGHT FRONT WINDOW DRIVER (DOWN)
12	Q16 14BR/WT	RIGHT FRONT WINDOW DRIVER (UP)



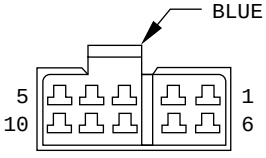
MODE DOOR ACTUATOR

CAV	CIRCUIT	FUNCTION
1	C35 22DG/YL	MODE DOOR DRIVER
2	C57 22GY/TN	SENSOR GROUND
3	C37 20YL	MODE DOOR FEEDBACK SIGNAL
4	C26 20PK/DB	5 VOLT SUPPLY
5	C34 22DB/YL	COMMON DOOR DRIVER



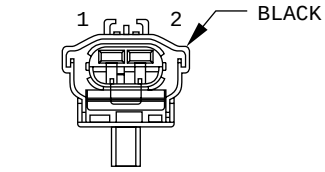
MULTI-FUNCTION
SWITCH - C1

CAV	CIRCUIT	FUNCTION
1	V10 18BR/DB	WASHER PUMP CONTROL
2	V52 22DG/RD	WINDSHIELD WIPER SWITCH SIGNAL
3	F13 18DB	FUSED IGNITION SWITCH OUTPUT (ACC/RUN)
4	A15 18PK	FUSED B(+)
5	Z1 18BK/TN	GROUND
6	L60 18TN	RIGHT TURN SIGNAL
7	L61 18LG	LEFT TURN SIGNAL



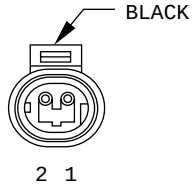
MULTI-FUNCTION
SWITCH - C2

CAV	CIRCUIT	FUNCTION
1	L7 18BK/YL	PARK LAMP SWITCH OUTPUT
	L7 18BK/YL	PARK LAMP SWITCH OUTPUT
2	F33 18BK/RD	FUSED B(+)
3		-
4	A3 14RÐ/WT	FUSED B(+)
5	L36 18LG	REAR FOG LAMP -
6	E19 20RD	DIMMER SWITCH SIGNAL
7	L4 14VT/WT	DIMMER SWITCH LOW BEAM OUTPUT
8	L3 14RD/OR	DIMMER SWITCH HIGH BEAM OUTPUT
9	L39 18LB	FOG LAMP SWITCH OUTPUT
10	L25 18BR	REAR FOG LAMP FEED



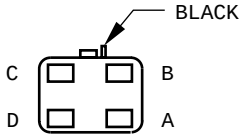
OIL PRESSURE SWITCH

CAV	CIRCUIT	FUNCTION
1	G6 18GY/VT	OIL PRESSURE SWITCH SENSE
2	-	-



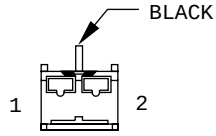
OUTPUT SHAFT
SPEED SENSOR

CAV	CIRCUIT	FUNCTION
1	T13 18DB/BR	SPEED SENSOR GROUND
2	T14 18LG/VT	OUTPUT SHAFT SPEED SENSOR SIGNAL



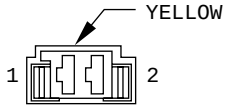
OVERHEAD MAP LAMP

CAV	CIRCUIT	FUNCTION
A	M2 18YL	COURTESY LAMPS DRIVER
B	Z1 18BK	GROUND
C	M1 18PK	FUSED B(+)
D	-	-



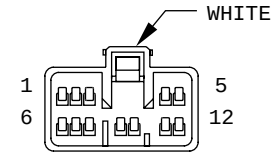
PASSENGER SEAT
BELT SOLENOID

CAV	CIRCUIT	FUNCTION
1	Z1 18BK	GROUND
2	R8 18OR/RD	PASSENGER LATCH SIGNAL



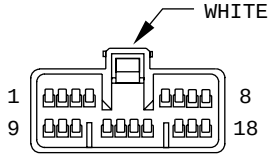
PASSENGER SIDE
AIRBAG SQUIB

CAV	CIRCUIT	FUNCTION
1	R42 18BK/YL	PASSENGER AIRBAG LINE 1
2	R44 18DG/YL	PASSENGER AIRBAG LINE 2



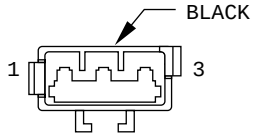
POWER AMPLIFIER - C1

CAV	CIRCUIT	FUNCTION
1	X91 20WT/BK	LEFT REAR AMP INPUT (-)
2	X92 20TN/BK	RIGHT REAR AMP INPUT (-)
3	X55 20BR/RD	LEFT FRONT AMP INPUT (-)
4	X60 20DG/RD	REMOTE ON FOR AMP
5	P5 20YL/BK	POWER TOP SWITCH TO RELAY B(+) DOWN
6	X93 20WT/RD	LEFT REAR AMP INPUT (+)
7	X94 20TN/RD	RIGHT REAR AMP INPUT (+)
8	X53 20DG	LEFT FRONT AMP INPUT (+)
9	X56 20DB/RD	RIGHT FRONT AMP INPUT (-)
10	X54 20VT	RIGHT FRONT AMP INPUT (+)
11	P6 20RD/WT	POWER TOP SWITCH TO RELAY B(+) UP
12	-	-



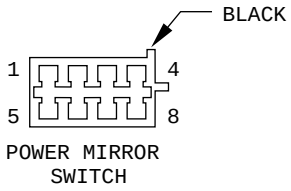
POWER AMPLIFIER - C2

CAV	CIRCUIT	FUNCTION
1	M1 16PK/DB	FUSED BATT FEED TO AMP
2	-	-
3	-	-
4	X58 18DB/OR	RIGHT REAR SPEAKER AMP OUTPUT (-)
5	X84 18OR/BK	RIGHT PANEL SPEAKER (-)
6	X81 18YL/BK	LEFT PANEL SPEAKER (-)
7	X80 18LB/DG	RIGHT DOOR SPEAKER (-)
8	X85 18LG/DG	LEFT DOOR SPEAKER (-)
9	Z1 16BK/LB	AMP GROUND
10	-	-
11	-	-
12	X52 18DB/WT	RIGHT REAR SPEAKER AMP OUTPUT (+)
13	X57 18BR/LB	LEFT REAR SPEAKER AMP OUTPUT (-)
14	X51 18BR/YL	LEFT REAR SPEAKER AMP OUTPUT (+)
15	X86 18OR/RD	RIGHT PANEL SPEAKER (+)
16	X83 18YL/RD	LEFT PANEL SPEAKER (+)
17	X82 18LB/VT	RIGHT DOOR SPEAKER (+)
18	X87 18LG/VT	LEFT DOOR SPEAKER (+)



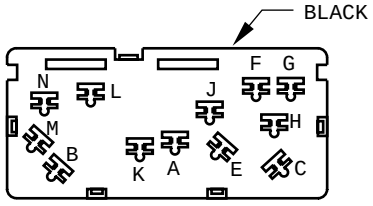
POWER ANTENNA

CAV	CIRCUIT	FUNCTION
1	M1 18PK/OR	FUSED B(+)
2	X60 20DG/RD	RADIO 12 VOLT OUTPUT
3	Z1 18BK	GROUND



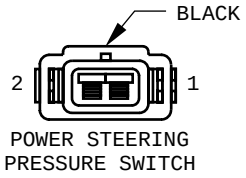
POWER MIRROR SWITCH

CAV	CIRCUIT	FUNCTION
1	Z1 20BK	GROUND
2	M1 20PK	FUSED B(+)
3	P94 20WT/YL	POWER MIRROR HORIZONTAL (RIGHT)
4	P92 20YL	POWER MIRROR VERTICAL (RIGHT)
5	P90 20LG/BK	POWER MIRROR VERTICAL (LEFT/RIGHT)
	P90 20LG/BK	POWER MIRROR VERTICAL (LEFT)
6	P91 20WT/BK	POWER MIRROR HORIZONTAL (LEFT/RIGHT)
	P91 20WT/BK	POWER MIRROR HORIZONTAL (LEFT)
7	P95 20DB/WT	POWER MIRROR HORIZONTAL (LEFT)
8	P93 20YL/BK	POWER MIRROR VERTICAL (LEFT)



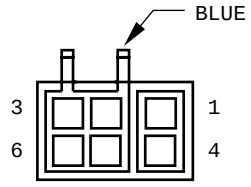
POWER SEAT SWITCH

CAV	CIRCUIT	FUNCTION
A	F35 16RD	FUSED B (+)
B	Z1 16BK	GROUND
C	-	-
D	P21 16RD/LG	POWER SEAT FRONT VERTICAL (DOWN)
E	-	-
F	-	-
G	-	-
H	-	-
J	P19 16YL/LG	POWER SEAT FRONT VERTICAL (UP)
K	P15 16YL/LB	POWER SEAT HORIZONTAL (FORWARD)
L	P17 16RD/LB	POWER SEAT HORIZONTAL (REARWARD)
M	P13 16RD/WT	POWER SEAT REAR VERTICAL (DOWN)
N	P11 16YL/WT	POWER SEAT REAR VERTICAL (UP)



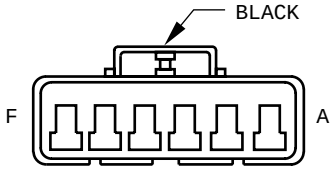
POWER STEERING
PRESSURE SWITCH

CAV	CIRCUIT	FUNCTION
1	K10 18DB/LG	POWER STEERING PRESSURE SWITCH SENSE
2	Z1 18BK	GROUND



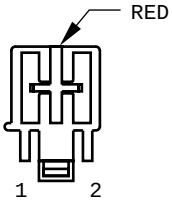
POWER TOP
SWITCH

CAV	CIRCUIT	FUNCTION
1	P6 20RD/WT	POWER TOP SIGNAL (UP)
2	Z1 20BK	GROUND
3	-	-
4	Z1 20BK	GROUND
5	P5 20YL/BK	POWER TOP SIGNAL (DOWN)
6	F20 20WT	FUSED IGNITION SWITCH OUTPUT (RUN)



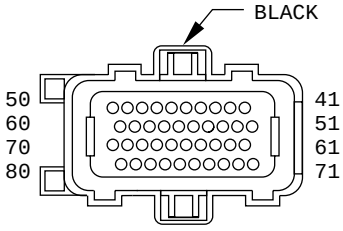
POWER TOP
UP/DOWN RELAYS

CAV	CIRCUIT	FUNCTION
A	P6 20RD/WT	POWER TOP SIGNAL (UP)
B	P3 12YL	PUMP MOTOR CONTROL (UP)
C	A25 12DB	FUSED B(+)
D	Z1 12BK	GROUND
E	P4 12RD	PUMP MOTOR CONTROL (DOWN)
F	P5 20YL/BK	POWER TOP SIGNAL (DOWN)



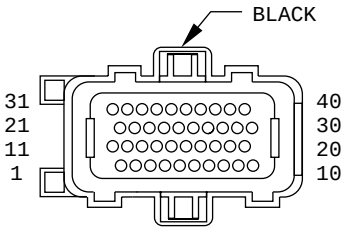
POWER TOP
PUMP MOTOR

CAV	CIRCUIT	FUNCTION
1	P3 12YL	CONVERTIBLE TOP UP
2	P4 12RD	CONVERTIBLE TOP RELAY DOWN B(+)



POWERTRAIN
CONTROL MODULE - C1

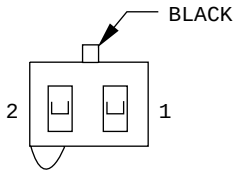
CAV	CIRCUIT	FUNCTION
41	V37 20RD/LG	SPEED CONTROL SWITCH SIGNAL
42	C18 20DB/YL	A/C PRESSURE SIGNAL
43	K4 20BK/LB	SENSOR GROUND
44	K7 18OR/WT	8 VOLT SUPPLY
45	K10 18DB/LG	POWER STEERING PRESSURE SWITCH SENSE
46	A14 16RD/TN	FUSED B(+)
47	-	-
48	K40 20BR/GY	IDLE AIR CONTROL MOTOR NO. 3 DRIVER
49	K60 20YL/BK	IDLE AIR CONTROL MOTOR NO. 2 DRIVER
50	Z12 18BK/TN	GROUND
51	K141 20TN/WT	DOWNSTREAM HEATED OXYGEN SENSOR SIGNAL
52	K118 18PK/YL	BATTERY TEMPERATURE SENSOR SIGNAL
53	-	-
54	-	-
55	C24 20DB/TN	LOW SPEED RADIATOR FAN RELAY CONTROL
56	-	-
57	K39 20GY/RD	IDLE AIR CONTROL MOTOR NO. 1 DRIVER
58	K59 20VT/GY	IDLE AIR CONTROL MOTOR NO. 4 DRIVER
59	D1 20VT/BR	CCD BUS (+)
60	D2 20WT/BK	CCD BUS (-)
61	K6 20VT/WT	5 VOLT SUPPLY
62	K29 18WT/RD	STOP LAMP SWITCH SENSE
63	T10 20YL/DG	TORQUE MANAGEMENT REQUEST SENSE
64	C28 20DB/OR	A/C COMPRESSOR CLUTCH RELAY CONTROL
65	D21 20PK/LG	SCI TRANSMIT
66	G7 18WT/OR	VEHICLE SPEED SENSOR SIGNAL
67	K51 20DB/VT	AUTOMATIC SHUT DOWN RELAY CONTROL
68	K52 20PK/GY	EVAP/PURGE SOLENOID CONTROL
69	C27 20DB/PK	HIGH SPEED RADIATOR FAN RELAY CONTROL
70	-	-
71	-	-
72	-	-
73	-	-
74	K31 20BR/LG	FUEL PUMP RELAY CONTROL
75	D20 20LG	SCI RECEIVE
76	T41 20BK/WT**	PARK/NEUTRAL POSITION SWITCH SENSE
77	-	-
78	V36 20WT/VT	SPEED CONTROL VACUUM SOLENOID CONTROL
79	-	-
80	V35 20LG/RD	SPEED CONTROL VENT SOLENOID CONTROL



POWERTRAIN
CONTROL MODULE - C2

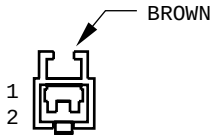
CAV	CIRCUIT	FUNCTION
1	-	-
2	K19 18BK/GY*	IGNITION COIL NO. 1 DRIVER
3	K17 18DB/DG*	IGNITION COIL NO. 2 DRIVER
4	K20 18DG	GERNERATOR FIELD DRIVER
5	V32 20YL/PK	SPEED CONTROL ON/OFF SWITCH SENSE
6	A142 18DG/OR	AUTOMATIC SHUT DOWN RELAY OUTPUT
7	K13 18YL/WT	INJECTOR NO. 3 DRIVER
8	-	-
9	-	-
10	Z12 18BK/TN	GROUND
11	K19 18BK/GY**	IGNITION COIL NO. 1 DRIVER
12	-	-
13	K11 18WT/LB	INJECTOR NO. 1 DRIVER
14	K58 18BR/DG**	INJECTOR NO. 6 DRIVER
15	K38 18GY**	INJECTOR NO. 5 DRIVER
16	K14 18LB/BR	INJECTOR NO. 4 DRIVER
17	K12 18TN	INJECTOR NO. 2 DRIVER
18	-	-
19	-	-
20	F12 18DB/WT	FUSED IGNITION SWITCH OUTPUT (RUN/START)
21	-	-
22	-	-
23	-	-
24	K42 18BK/LB	KNOCK SENSOR SIGNAL
25	-	-
26	K2 18TN/BK	ENGINE COOLANT TEMPERATURE SENSOR SIGNAL
27	-	-
28	-	-
29	-	-
30	K41 18BK/DG	UPSTREAM HEATED OXYGEN SENSOR SIGNAL
31	-	-
32	K24 18GY/BK	CRANKSHAFT POSITION SENSOR SIGNAL
33	K44 20TN/YL*	CAMSHAFT POSITION SENSOR SIGNAL
33	K44 18TN/YL**	CAMSHAFT POSITION SENSOR SIGNAL
34	-	-
35	K22 18OR/LB*	THROTTLE POSITION SENSOR SIGNAL
35	K22 20OR/LB**	THROTTLE POSITION SENSOR SIGNAL
36	K1 18DG/RD	MAP SENSOR SIGNAL
37	K21 18BK/RD	INTAKE AIR TEMPERATURE SENSOR SIGNAL
38	-	-
39	-	-
40	K35 18GY/YL	EGR SOLENOID CONTROL

* WITH 2.0L ENGINE
** WITH 2.5L ENGINE



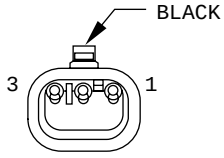
PRNDL FEED

CAV	CIRCUIT	FUNCTION
1	A1 16RD	FUSED B(+)
2	A81 18DG/RD	IGNITION SWITCH OUTPUT



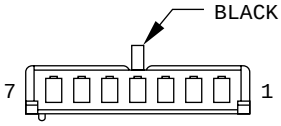
PRNDL ILLUMINATION LED

CAV	CIRCUIT	FUNCTION
1	E2 18OR/BK	PANEL LAMPS DRIVER
2	Z1 18BK	GROUND



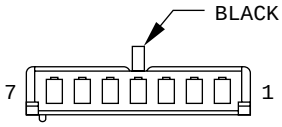
RADIATOR FAN
MOTOR
ASSEMBLY

CAV	CIRCUIT	FUNCTION
1	Z1 12BK	GROUND
2	C23 12DG/LG	LOW SPEED RADIATOR FAN RELAY OUTPUT
3	C25 12YL/RD	HIGH SPEED RADIATOR FAN RELAY OUTPUT



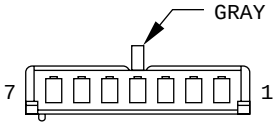
RADIO - C1
(STANDARD)

CAV	CIRCUIT	FUNCTION
1	X60 20DG/RD*	RADIO 12 VOLT OUTPUT
2	X51 18BR/YL	LEFT REAR AMP INPUT(+)
3	X52 18DB/WT	RIGHT REAR AMP INPUT(+)
4	X53 20DG	LEFT FRONT DOOR (+)
5	X54 20VT	RIGHT FRONT DOOR (+)
6	X57 18BR/LB	LEFT REAR AMP INPUT(-)
7	X58 18DB/OR	RIGHT REAR AMP INPUT(-)



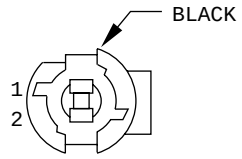
RADIO - C1
(PREMIUM)

CAV	CIRCUIT	FUNCTION
1	X60 20DG/RD*	RADIO 12 VOLT OUTPUT
2	X93 20WT/RD	LEFT REAR AMP INPUT(+)
3	X94 20TN/RD	RIGHT REAR AMP INPUT(+)
4	X53 20DG	LEFT FRONT DOOR (+)
5	X54 20VT	RIGHT FRONT DOOR (+)
6	X91 20WT/BK	LEFT REAR AMP INPUT(-)
7	X92 20TN/BK	RIGHT REAR AMP INPUT(-)



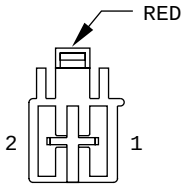
RADIO - C2

CAV	CIRCUIT	FUNCTION
1	-	-
2	X55 20BR/RD	LEFT FRONT DOOR (-)
3	X56 20DB/RD	RIGHT FRONT DOOR (-)
4	L7 18BK/DG	PARK LAMP SWITCH OUTPUT
5	E2 18OR/BR	PANEL LAMPS DRIVER
6	X12 18RD/WT	FUSED IGNITION SWITCH OUTPUT (ACC/RUN)
7	M1 18PK/WT	FUSED B(+)



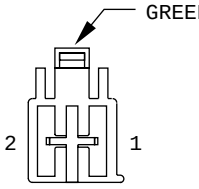
REAR FLOOR
COURTESY LAMP

CAV	CIRCUIT	FUNCTION
1	M1 18PK	FUSED B(+)
2	M2 18YL	COURTESY LAMPS DRIVER



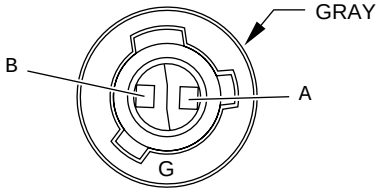
REAR VERTICAL
MOTOR

CAV	CIRCUIT	FUNCTION
1	P11 16YL/WT	POWER SEAT REAR VERTICAL (UP)
2	P13 16RD/WT	POWER SEAT REAR VERTICAL (DOWN)



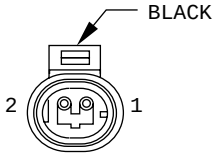
RECLINE MOTOR

CAV	CIRCUIT	FUNCTION
1	P41 16GY/WT	POWER SEAT RECLINER MOTOR
2	P43 16GY/LB	POWER SEAT RECLINER MOTOR



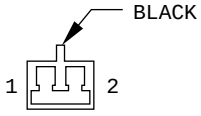
RIGHT BACK-UP LAMP

CAV	CIRCUIT	FUNCTION
A	L1 18VT/BK	BACK UP LAMP FEED
G	Z1 18BK	GROUND



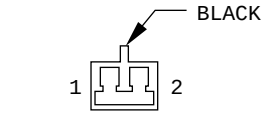
RIGHT DOOR
ARM/DISARM SWITCH

CAV	CIRCUIT	FUNCTION
1	G72 18DG/OR	RIGHT VTSS DISARM SENSE
2	M1 18PK	FUSED B(+)



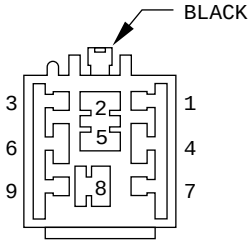
RIGHT DOOR
COURTESY LAMP

CAV	CIRCUIT	FUNCTION
1	M1 18PK	FUSED B(+)
2	M2 18YL	COURTESY LAMPS DRIVER



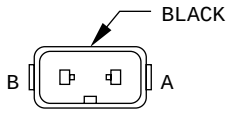
RIGHT DOOR SPEAKER

CAV	CIRCUIT	FUNCTION
1	X80 18LB/DG	RIGHT FRONT (-)
2	X82 18LB/VT	RIGHT FRONT (+)



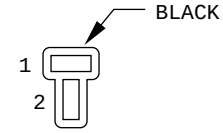
RIGHT DOOR WINDOW MOTOR RELAY

CAV	CIRCUIT	FUNCTION
1	-	-
2	F21 14TN	FUSED IGNITION SWITCH OUTPUT (RUN)
3	-	-
4	G10 20LG/RD	WINDOW MOTOR RELAY CONTROL
	G10 20LG/RD	WINDOW MOTOR RELAY CONTROL
5	Q30 14VT	RIGHT FRONT WINDOW DRIVER (DOWN)
6	Z1 20BK	GROUND
7	-	-
8	Q26 14VT/WT	RIGHT FRONT WINDOW DRIVER (DOWN)
9	-	-



RIGHT FOG LAMP

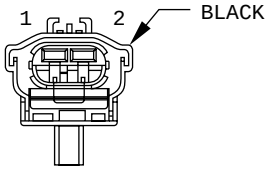
CAV	CIRCUIT	FUNCTION
A	L39 18LB	FOG LAMP SWITCH OUTPUT
B	Z1 18BK	GROUND



RIGHT FRONT I.P. SPEAKER

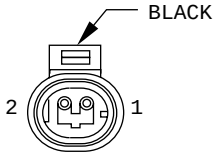
CAV	CIRCUIT	FUNCTION
1	X54 18VT*	RIGHT FRONT (+)
1	X84 18OR/BK**	AMPLIFIED RIGHT INSTRUMENT PANEL (-)
2	X86 18OR/RD**	AMPLIFIED RIGHT INSTRUMENT PANEL (+)
2	X56 18DB/RD*	RIGHT FRONT (-)

* WITH BASE RADIO
** WITH PREMIUM RADIO



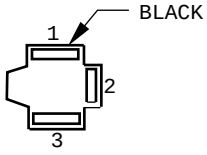
RIGHT FRONT POWER WINDOW MOTOR

CAV	CIRCUIT	FUNCTION
1	Q22 14VT	RIGHT FRONT WINDOW DRIVER (DOWN)
2	Q12 14BR	RIGHT FRONT WINDOW DRIVER (UP)



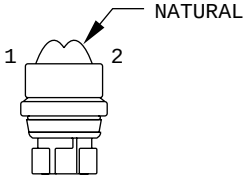
RIGHT FRONT WHEEL SPEED SENSOR

CAV	CIRCUIT	FUNCTION
1	B6 20WT/DB	RIGHT FRONT WHEEL SPEED SENSOR (-)
2	B7 20WT	RIGHT FRONT WHEEL SPEED SENSOR (+)



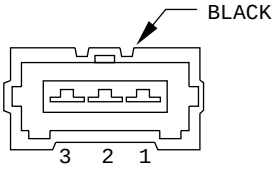
RIGHT HEADLAMP

CAV	CIRCUIT	FUNCTION
1	L34 18RD/OR	FUSED RIGHT HIGH BEAM OUTPUT
2	L44 18VT/RD	FUSED RIGHT LOW BEAM OUTPUT
3	Z1 18BK	GROUND



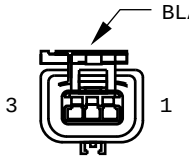
RIGHT LICENSE LAMP

CAV	CIRCUIT	FUNCTION
1	L7 18BK/YL	PARK LAMP SWITCH OUTPUT
2	Z1 18BK	GROUND



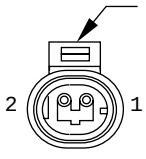
RIGHT HEADLAMP LEVELING MOTOR

CAV	CIRCUIT	FUNCTION
1	L7 18BK/YL	HD/LP LAMP SWITCH OUTPUT
2	L13 18BR/VT	HEADLAMP ADJUST SIGNAL
3	Z3 18BK	INSTRUMENT PANEL GROUND



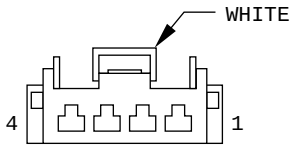
RIGHT PARK/TURN SIGNAL LAMP

CAV	CIRCUIT	FUNCTION
1	L60 18TN/BR	RIGHT TURN SIGNAL
2	L7 18BK/YL	PARK LAMP SWITCH OUTPUT
3	Z1 18BK	GROUND



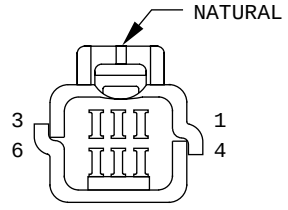
RIGHT POWER DOOR LOCK MOTOR

CAV	CIRCUIT	FUNCTION
1	P34 16PK/BK	RIGHT FRONT DOOR UNLOCK DRIVER
2	P33 16OR/WT	RIGHT FRONT DOOR LOCK DRIVER



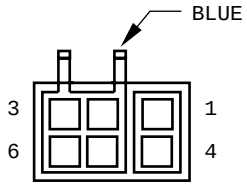
RIGHT POWER
DOOR LOCK SWITCH

CAV	CIRCUIT	FUNCTION
1	M1 20PK	FUSED B(+)
2	F20 20WT	FUSED IGNITION SWITCH OUTPUT
3	Z1 20BK	GROUND
4	P96 20WT/LG	RIGHT FRONT DOOR SWITCH MUX



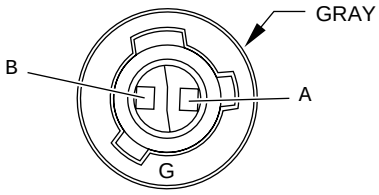
RIGHT POWER
MIRROR

CAV	CIRCUIT	FUNCTION
1	C16 20LB/YL	REAR DEFOGGER LAMP DRIVER
2	Z1 20BK	GROUND
3	P94 20WT/YL	POWER MIRROR VERTICAL (RIGHT)
4	P91 20WT/BK	POWER MIRROR HORIZONTAL (RIGHT)
5	P90 20LG/BK	POWER MIRROR VERTICAL (RIGHT)
6	P92 20YL	POWER MIRROR HORIZINTAL (RIGHT)



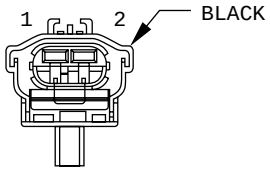
RIGHT POWER
WINDOW SWITCH

CAV	CIRCUIT	FUNCTION
1	Q22 14VT	RIGHT FRONT WINDOW DRIVER (DOWN)
2	Q16 14BR/WT	RIGHT FRONT WINDOW DRIVER (UP)
3	-	-
4	Q26 14VT/WT	RIGHT FRONT WINDOW DRIVER (DOWN)
5	Q12 14BR	RIGHT FRONT WINDOW DRIVER (UP)
6	F21 14TN	FUSED IGNITION SWITCH OUTPUT (RUN)



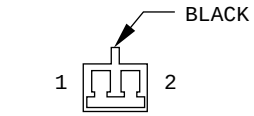
RIGHT REAR FOG LAMP

CAV	CIRCUIT	FUNCTION
A	L36 18LG	REAR FOG LAMP
G	Z1 18BK	GROUND



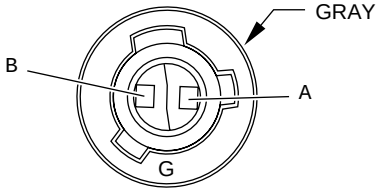
RIGHT REAR POWER
WINDOW MOTOR

CAV	CIRCUIT	FUNCTION
1	Q28 14DG/WT	RIGHT REAR WINDOW DRIVER (DOWN)
2	Q18 14GY/BK	RIGHT REAR WINDOW DRIVER (UP)



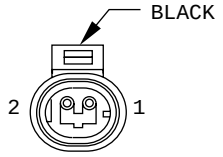
RIGHT REAR SPEAKER

CAV	CIRCUIT	FUNCTION
1	X58 18DB/OR	RIGHT REAR (-)
2	X52 18DB/WT	RIGHT REAR (+)



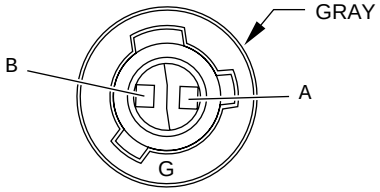
RIGHT REAR TURN SIGNAL LAMP

CAV	CIRCUIT	FUNCTION
A	L60 18TN	BACK UP LAMP FEED
G	Z1 18BK	GROUND



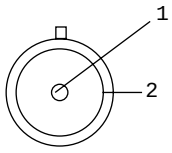
RIGHT REAR WHEEL SPEED SENSOR

CAV	CIRCUIT	FUNCTION
1	B1 20YL/DB	RIGHT REAR WHEEL SPEED SENSOR (-)
2	B2 20YL	RIGHT REAR WHEEL SPEED SENSOR (+)



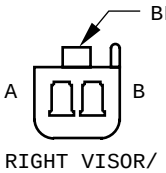
RIGHT TAIL/STOP LAMP

CAV	CIRCUIT	FUNCTION
A	L50 18WT/TN	STOP LAMP SWITCH OUTPUT
B	L7 18BK/YL	HD/LP LAMP SWITCH OUTPUT
G	Z1 18BK	GROUND



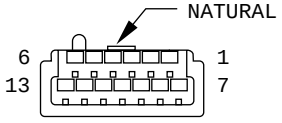
RIGHT SIDE REPEATER

CAV	CIRCUIT	FUNCTION
1	L60 18TN	RIGHT TURN SIGNAL
2	Z1 18BK	GROUND



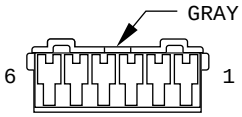
RIGHT VISOR/ VANITY LAMP

CAV	CIRCUIT	FUNCTION
A	M1 18PK	FUSED B(+)
B	G38 18GY	VISOR VANITY LAMP



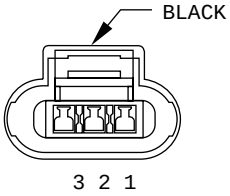
SEAT BELT CONTROL MODULE

CAV	CIRCUIT	FUNCTION
1	-	-
2	G75 18TN	LEFT FRONT DOOR AJAR SWITCH SENSE
3	G74 18TN/RD	DOOR AJAR SWITCH SENSE
4	F13 18DB	FUSED IGNITION SWITCH OUTPUT (RUN/ACC)
5	A45 18BR	FUSED B(+)
6	Z1 18BK	GROUND
7	R7 18OR/BK	DRIVER LATCH SIGNAL
8	R8 18OR/RD	PASSENGER LATCH SIGNAL
9	-	-
10	-	-
11	-	-
12	-	-
13	Z2 18BK/LG	GROUND



STOP LAMP SWITCH

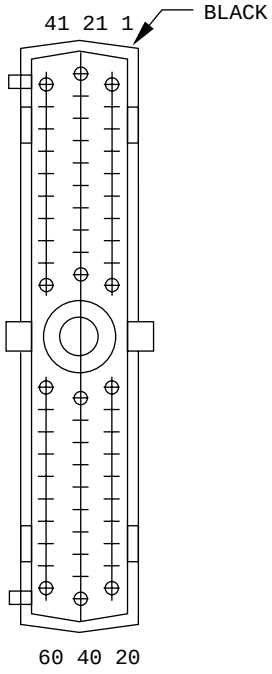
CAV	CIRCUIT	FUNCTION
1	K29 18WT/RD	STOP LAMP SWITCH SENSE
2	Z2 20BK/LG	GROUND
3	V32 20YL/PK	SPEED CONTROL ON/OFF SWITCH SENSE
4	V30 20DB/RD	SPEED CONTROL BRAKE SWITCH OUTPUT
5	L50 16WT/TN	STOP LAMP SWITCH OUTPUT
6	A7 16RD/BK	FUSED B(+)



THROTTLE POSITION SENSOR

CAV	CIRCUIT	FUNCTION
1	K4 18BK/LB**	SENSOR GROUND
1	K6 18VT/WT*	5 VOLT SUPPLY
2	K22 18OR/LB	THROTTLE POSITION SENSOR SIGNAL
3	K6 18VT/WT**	5 VOLT SUPPLY
3	K4 18BK/LB*	SENSOR GROUND

* WITH 2.0L ENGINE
** WITH 2.5L ENGINE



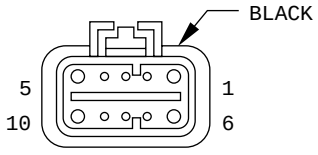
TRANSMISSION CONTROL MODULE

CAV	CIRCUIT	FUNCTION
1	T1 20LG/GY	TRANSMISSION RANGE SWITCH T1 SENSE
2	-	-
3	T3 18VT	PARK/NEUTRAL POSITION SWITCH SENSE
4	D2 20WT/DG	CCD BUS(-)
5	T5 20LG/LB	AUTOSTICK UPSHIFT SWITCH SENSE
6	K24 18GY/BK	CRANKSHAFT POSITION SENSOR SIGNAL
7	D21 20PK/LB	SCI TRANSMIT
8	A41 16YL/OR	IGNITION SWITCH OUTPUT (START)
9	T9 20OR/BK	OVERDRIVE PRESSURE SWITCH SENSE
10	T10 20YL/DG	TORQUE MANAGEMENT REQUEST SENSE
11	F11 18RD/VT	FUSED IGNITION SWITCH OUTPUT (OFF/RUN/START)
12	K22 20OR/LB	THROTTLE POSITION SENSOR SIGNAL
13	T13 20DB/BR	SPEED SENSOR GROUND
14	T14 20LG/VT	OUTPUT SHAFT SPEED SENSOR SIGNAL (+)
15	T15 20LG/YL	12 VOLT SUPPLY
16	T16 16RD/BR	TRANS OUTPUT CTRL RLY (SWITCHED B(+))
17	T16 16RD/BR	TRANS OUTPUT CTRL RLY (SWITCHED B(+))
18	-	-
19	T19 20WT/PK	2-4 SOLENOID CONTROL
20	T20 20LB/WT	LOW/REVERSE SOLENOID CONTROL
21	-	-
22	-	-
23	-	-
24	-	-
25	-	-
26	-	-
27	-	-
28	-	-
29	-	-
30	-	-
31	-	-
32	-	-
33	-	-
34	-	-

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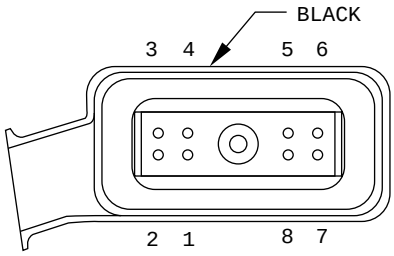
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CAV	CIRCUIT	FUNCTION
35	-	-
36	-	-
37	-	-
38	-	-
39	-	-
40	-	-
41	T41 20BK/WT	PARK/NEUTRAL POSITION SWITCH SENSE
42	T42 18VT/TN	TRANSMISSION RANGE SWITCH T42 SENSE
43	D1 20VT/DG	CCD BUS(+)
44	T44 20YL/LB	AUTOSTICK DOWNSHIFT SWITCH SENSE
45	-	-
46	D6 20PK/LB	SCI RECEIVE
47	T47 20YL/GY	2-4 PRESSURE SWITCH SENSE
48	-	-
49	-	-
50	T50 18DG/TN	LOW/REVERSE PRESSURE SWITCH SENSE
51	K4 20BK/LB	SENSOR GROUND
52	T52 20RD/YL	INPUT SPEED SENSOR SIGNAL
53	Z14 18BK/YL	GROUND
54	T54 18VT/WT	TRANSMISSION TEMPERATURE SENSOR SIGNAL
55	-	-
56	A24 16PK/YL	FUSED B(+)
57	Z13 16BK/RD	GROUND
58	G7 18WT/OR	VEHICLE SPEED SENSOR SIGNAL
59	T59 18PK/DB	UNDERDRIVE SOLENOID CONTROL
60	T60 18BR/TN	OVERDRIVE SOLENOID CONTROL



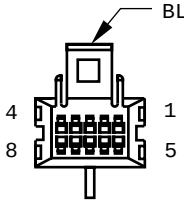
TRANSMISSION
RANGE SWITCH

CAV	CIRCUIT	FUNCTION
1	F20 18WT/YL	FUSED IGNITION SWITCH OUTPUT (RUN)
2	-	-
3	T13 18DB/BR	SPEED SENSOR GROUND
4	T54 18VT/WT	TRANSMISSION TEMPERATURE SENSOR SIGNAL
5	T41 20BK/LB	PARK/NEUTRAL POSITION SWITCH SENSE
6	L1 18VT/BK	REVERSE LAMP SENSE
7	T1 18LG/GY	TRANSMISSION RANGE SWITCH T1 SENSE
8	T3 18VT	PARK/NEUTRAL POSITION SWITCH SENSE
9	T42 18VT/TN	TRANSMISSION RANGE SWITCH T42 SENSE
10	T41 18BK/WT	PARK/NEUTRAL POSITION SWITCH SENSE



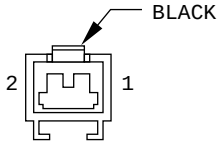
TRANSMISSION SOLENOID AND PRESSURE SWITCH ASSEMBLY

CAV	CIRCUIT	FUNCTION
1	T47 18YL/GY	2-4 PRESSURE SWITCH SENSE
2	T50 18DG/TN	LOW/REVERSE PRESSURE SWITCH SENSE
3	T9 18OR/BK	OVERDRIVE OFF SWITCH SENSE
4	T16 16RD/BR	TRANSMISSION CONTROL RELAY OUTPUT
5	T59 18PK/DB	UNDERDRIVE SOLENOID CONTROL
6	T60 18BR/TN	OVERDRIVE SOLENOID CONTROL
7	T20 18LB/WT	LOW/REVERSE SOLENOID CONTROL
8	T19 18WT/PK	2-4 SOLENOID CONTROL



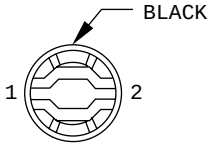
TRAVELER

CAV	CIRCUIT	FUNCTION
1	D1 20VT	TRAVELER CCD BUS (+)
2	D2 20WT/BK	TRAVELER CCD BUS (-)
3	-	-
4	-	-
5	Z1 20BK	GROUND
6	F18 20LG/BK	IGNITION FEED TO TRAVELER
7	M1 20PK	FUSED BATTERY FEED TO TRAVELER
8	-	-



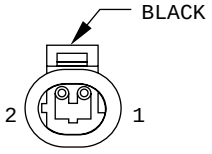
TRUNK KEY CYLINDER SWITCH (WITH VTSS)

CAV	CIRCUIT	FUNCTION
1	Z1 18BK	GROUND
2	G71 20VT/YL	TRUNK KEY CYLINDER SENSE



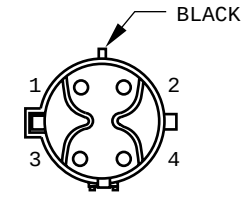
TRUNK LAMP

CAV	CIRCUIT	FUNCTION
1	M1 18PK/VT	FUSED B(+)
2	G78 20TN/BK	TRUNK AJAR SWITCH SENSE



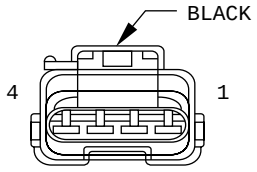
TURBINE SPEED SENSOR

CAV	CIRCUIT	FUNCTION
1	T13 18DB/BR	SPEED SENSOR GROUND
2	T52 18OR/YL	INPUT SPEED SENSOR SIGNAL



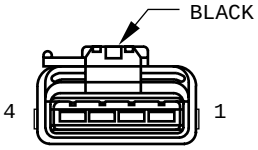
UPSTREAM HEATED
OXYGEN SENSOR

CAV	CIRCUIT	FUNCTION
1	Z1 18BK	GROUND
2	A142 18DG/OR	AUTOMATIC SHUT DOWN RELAY OUTPUT
3	K4 18BK/LB	SENSOR GROUND
4	K41 18BK/DG	UPSTREAM OXYGEN SENSOR SIGNAL



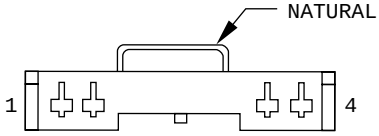
VAPOR
CANISTER
LEAK DETECTOR

CAV	CIRCUIT	FUNCTION
1	-	-
2	F18 18LG/BK	FUSED IGNITION SWITCH OUTPUT (RUN/START)
3	K106 18WT/DG	LEAK DETECTION PUMP SOLENOID CONTROL
4	K107 18OR	LEAK DETECTION PUMP SWITCH SENSE



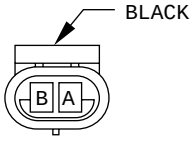
VEHICLE SPEED
CONTROL SERVO

CAV	CIRCUIT	FUNCTION
1	V36 20WT/VT	SPEED CONTROL VACUUM SOLENOID CONTROL
2	V35 20LG/RD	SPEED CONTROL VENT SOLENOID CONTROL
3	V30 20DB/RD	SPEED CONTROL ON/OFF SWITCH OUTPUT
4	Z1 20BK	GROUND



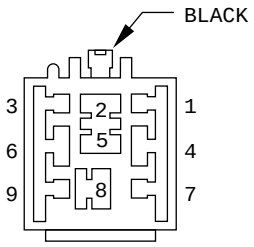
VEHICLE SPEED CONTROL
AND HORN SWITCHES

CAV	CIRCUIT	FUNCTION
1	X3 18BK/RD	HORN RELAY CONTROL
2	V37 20RD/LG	SPEED CONTROL SWITCH SIGNAL
3	Z2 18BK/TN	GROUND
4	-	-



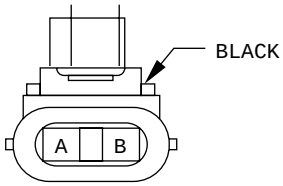
WASHER FLUID
LEVEL SWITCH

CAV	CIRCUIT	FUNCTION
A	Z1 20BK	GROUND
B	G29 20BK/TN	WASHER FLUID LEVEL SWITCH



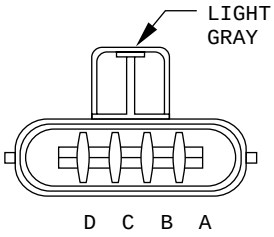
WINDOW TIMER MODULE

CAV	CIRCUIT	FUNCTION
1	P5 20YL/BK	POWER TOP SIGNAL (DOWN)
2	F21 14TN	FUSED IGNITION SWITCH OUTPUT (RUN)
3	P6 20RD/WT	POWER TOP SIGNAL (UP)
4	Q27 14RD/BK	LEFT REAR WINDOW DRIVER (DOWN) (MOTOR)
5	Q32 14BR	RIGHT REAR WINDOW DRIVER (DOWN) (SWITCH)
6	Q28 14DG/WT	RIGHT REAR WINDOW DRIVER (DOWN) (MOTOR)
7	G10 20LG/RD	WINDOW MOTOR RELAY CONTROL
8	Q31 14OR	LEFT REAR WINDOW DRIVER (DOWN) (SWITCH)
9	Z1 20BK	GROUND



WINDSHIELD WASHER PUMP MOTOR

CAV	CIRCUIT	FUNCTION
A	V10 18BR/DB	WASHER PUMP CONTROL
B	Z1 18BK	GROUND



WINDSHIELD WIPER MOTOR

CAV	CIRCUIT	FUNCTION
A	V4 14RD/YL	WIPER SWITCH HIGH SPEED OUTPUT
B	V3 14BR/OR	WIPER SWITCH LOW SPEED OUTPUT
C	Z1 16BK	GROUND
D	V55 20WT/GY	WIPER PARK SWITCH SENSE

8W-80 CONNECTOR PIN-OUTS

DESCRIPTION AND OPERATION

INTRODUCTION

The pages refernced in this section show the connector, the circuits in the connector and what pin the circuit occupies. Individual connector numbers are referenced on diagram pages through out Group 8W.

WIRING DIAGRAM INDEX

The following index covers all components found in this section of the wiring diagrams. If the component you are looking for is not found here, refer to section 8W-02 for a complete list of all components shown in the wiring diagrams.

8W-90 CONNECTOR/GROUND LOCATIONS

DESCRIPTION AND OPERATION

INTRODUCTION

This section provides illustrations identifying the general location of components, grounds, and connectors in the vehicle. A index is provided. Use the wiring diagrams in each section for connector/ground number identification. Refer to the index for the proper figure number.

CONNECTOR/GROUND LOCATIONS

For items not shown in this section a N/S is placed in the Fig. column

Connector Name/Number	Color	Location	Fig.
A/C Compressor Clutch	GY	Top of Compressor	4, 5
A/C Evap Temp Sensor	BK	RT Side of HVAC	11
A/C-Heater Control C1	BK	Rear of Control	11
A/C-Heater Control C2	BK	Rear of Control	11
A/C Pressure Transducer	GY	Top of A/C Compressor	4, 5
ABS Hydraulic Modulator	BK	Right Cowl Panel	3
ABS Relay Box	DK/ GY	Right Cowl Panel	3
Airbag Control Module C1	GY	At Module	14
Airbag Control Module C2	YL	At Module	14
Ash Receiver Lamp	BK	Rear of Lamp	N/S
Automatic Day/Night Mirror	BK	At Mirror	12
Autostick Switch	BK	Base of Shifter	N/S
Back-Up Lamp Switch	GY	Rear of Transmission	6
Battery Temp Sensor	BK	Near Battery	2
Blower Motor Resistor Block	BK	RT Side of HVAC	11
Body Control Module C1	BK	At Module	10
Body Control Module C2	WT	At Module	9
Body Control Module C3	WT	At Module	9

Connector Name/Number	Color	Location	Fig.
Body Control Module C4	BL	At Module	N/S
Body Control Module C5	BK	At Module	10
Brake Warn Press Sw	BK	On Master Cylinder	2
C104	LT/ GY	Under PDC	2
C105	BK	Under PDC	2
C111	BK	Rear of PCM	2
C113	GY	Rear of PCM	2
C121	GN	Left Side Cowl Panel	13
C126	BK	Near Junction Block	10
C165 (2.5L)	BK	Left Side of Intake	5
C224	BK	Left Side of Steering Column	8
C300	BK	At Lamp	N/S
C301	BK	RT Quarter Panel	N/S
C305	BK	Near Trunk Latch	15
C309	BK	Under Seat	14
C310	BR	Left A-Pillar	17
C311	BL	Left A-Pillar	17
C315	BR	Right A-Pillar	18
C316	BL	Right A-Pillar	18
C332	BK	Left Side Cowl	12
C340	BK	Under Drivers Seat	14

DESCRIPTION AND OPERATION (Continued)

Connector Name/Number	Color	Location	Fig.
C341	BK	Under Passengers Seat	14
C342	BK	Front of Floor Console	14
Camshaft Position Sensor	BK	Left Side of Cyl Head	4
CHMSL	BK	At Lamp	16
Clockspring	NAT	Rear of Clockspring	7
Clutch Pedal Position Switch	YL	Top of Clutch Pedal Bracket	N/S
Combined Rear Lighting Module	BK	Left Rear Quarter Panel	15
Controller Anti-Lock Brake	GY	Right Fender Side Shield	3
Crankshaft Position Sensor 2.0L/2.4L	BK	Rear of Cyl Block	4
Crankshaft Position Sensor 2.5L	BK	Under Distributor	5
Data Link	BK	LT Side of Steering Column	9
Decklid Release Relay	BK	RT of Steering Column	N/S
Decklid Release Switch	BK	Center Console	N/S
Decklid Solenoid	BK	On Decklid Latch	16
Distributor C1	BK	On Distributor	5
Distributor C2	BK	On Distributor	5
Downstream Heated O2 Sensor	BK	Rear of Engine	3, 5
Driver Seat Belt Solenoid	BK	In Seat	N/S
Driver Side Airbag Squib	YL	Rear of Clockspring	7
Duty Cycle/ EVAP Purge Solenoid	GY	At Solenoid	2
Electronic EGR Transducer Solenoid	BK	At Solenoid	4, 5

Connector Name/Number	Color	Location	Fig.
Engine Coolant Temp Sensor	BK	At Sensor	4, 5
Front Vertical Motor	BK	At Motor	N/S
Fuel Injector #1 (2.0L/2.4L)	BK	At Injector	4
Fuel Injector #1 (2.5L)	BK	At Injector	N/S
Fuel Injector #2 (2.0L/2.4L)	BK	At Injector	4
Fuel Injector #2 (2.5L)	BK	At injector	5
Fuel Injecotr #3 (2.0L/2.4L)	BK	At Injector	4
Fuel Injector #3 (2.5L)	BK	At Injector	N/S
Fuel Injector #4 (2.0L/2.4L)	BK	At Injector	4
Fuel Injector #4 (2.5L)	BK	At Injector	5
Fuel Injector #5 (2.5L)	BK	At Injector	N/S
Fuel Injector #6 (2.5L)	BK	At Injector	5
Fuel Pump Module	BK	Right Side of Trunk Area	16
G100		Left Strut Tower	2
G101		Rear of Transmission	6
G102		Left Strut Tower	1
G103		Right Strut Tower	3
G200		Right I.P. Center Support	8
G201		Base of Gearshift	14
G300		Left Side of Trunk Opening	15
G301		Left Side Cowl	13
G302		Center of Deck Lid	16
G303		Right Rear Quarter Panel	15
G304		Base of Gearshift	14

DESCRIPTION AND OPERATION (Continued)

Connector Name/Number	Color	Location	Fig.
Generator (2.0L/2.4L)	BK	Rear of Generator	4
Generator (2.5L)	BK	Rear of Generator	5
Glove Box Lamp	BK	At Lamp	N/S
Headlamp Switch	BK	At Switch	N/S
High Note Horn	BK	Right Front Fender	3
Horizontal Motor	BK	At Motor	N/S
Idle Air Control Motor	BK	On Throttle Body	4, 5
Ignition Coil Pack	BK	Top of Valve Cover	4
Ignition Switch C1	BK	At Switch	7
Ignition Switch C2	BK	At Switch	7
Illuminated Entry Relay	BK	RT of Steering Column	13
Instrument Cluster C1	RD	Rear of Clustrer	9
Instrument Cluster C2	BL	Rear of Cluster	9
Intake Air Temp Sensor (2.5L)	GY	Rear of Intake	5
Intake Air Temp/Map Sensor (2.0L/2.4L)	BK	On Intake	4
Junction Block C1	BK	At Junction Block	10
Junction Block C2	BR	At Junction Block	10
Junction Block C3	WT	At Junction Block	10
Junction BLock C4	BL	At Junction Block	9
Junction Block C5	GY	At Junction Block	9
Junction Block C6	WT	At Junction Block	9
Junction Block C7	NAT	At Junction Block	9
Junction Block C8	BK	At Junction Block	10

Connector Name/Number	Color	Location	Fig.
Junction Block C9	WT	At Junction Block	10
Junction Block C10	BK	At Junction Block	13
Key-In Halo Lamp	WT	At Lamp	7
Key-In Switch	GN	At Switch	7
Left Back-Up Lamp	BK	At Lamp	N/S
Left Fog Lamp	GY	At Lamp	1
Left Door Arm/Disarm Switch	BK	At Switch	17
Left Door Courtesy Lamp	BK	At Lamp	17
Left Front Door Speaker	BK	At Speaker	17
Left Front Power Door Lock Motor	BK	At Motor	17
Left Front Power Door Lock Switch	WT	At Switch	17
Left Front Power Window Motor	BK	At Motor	17
Left Front Wheel Speed Sensor	BK	Left Fender Side Shield	1
Left Headlamp	BK	At Lamp	1
Left Park/Trun Signal Lamp	BK	At Lamp	1
Left Power Mirror	RD	At Mirror	17
Left Rear Power Window Motor	RD	At Motor	N/S
Left Rear Speaker	BK	At Speaker	14
Left Rear Wheel Speed Sensor	BK	Left Quarter Panel	16
Left Tail/Stop/ Turn Lamp C1	BK	At Lamp	15
Left Visor/Vanity Lamp	BK	At Lamp	12
License Plate Lamp	BK	At Lamp	N/S

DESCRIPTION AND OPERATION (Continued)

Connector Name/Number	Color	Location	Fig.
Low Note Horn	BK	Right Front Fender	3
MAP Sensor (2.5L)	BK	Rear of Intake	5
Master Power WIndow Switch	BK	At Switch	17
Mode Door Actuator	NAT	LT Side of HVAC	11
Multi-Function Switch (Left)	BK	Left Side of Switch	7
Multi-Function Switch (Right)	BL	Right Side of Switch	7
Oil Pressure Switch	BK	At Switch	4, 5
Output Shaft Speed Sensor	BK	Front of Transmission	6
Overhead Map Lamp	BK	At Lamp	12
Passenger Side Airbag	YL	At Airbag	9
Power Amplifier C1	GY	At Amplifier	N/S
Power Amplifier C2	BK	At Amplifier	N/S
Power Amplifier C3	BL	At Amplifier	14
Power Mirror Switch	BK	At Switch	17
Power Seat Switch	BK	Under Seat	N/S
Power Steering Pressure Switch	BL	Left Side of Steering Gear	1
Power Top Pump Motor	RD	Front Center of Trunk Area	16
Power Top Switch	BK	Center Console	N/S
Power Top Up/Down Relays	BK	Front Center of Trunk Area	16
Powertrain Control Module C1	BK	Side of PDC	1
Powertrain Control Module C2	BK	Side of PDC	2
PRNDL Illumination LED	BK	Base of Gearshifter	N/S

Connector Name/Number	Color	Location	Fig.
Radiator Fan Motor	BK	Rear of Motor	1
Radio C1	BK	Rear of Radio	8
Radio C2	GY	Rear of Radio	8
Radio CCD Bus C3	BK	Rear of Radio	8
Rear Floor Courtesy Lamp	BK	At Lamp	N/S
Rear Vertical Motor	BK	At Motor	N/S
Recline Motor	BK	At Motor	N/S
Right Back-Up Lamp	BK	At Lamp	N/S
Right Fog Lamp	GY	At Lamp	3
Right Front Door Arm/ Disarm Switch	BK	At Switch	18
Right Front Door Courtesy Lamp	BK	At Lamp	N/S
Right Front Door Speaker	BK	At Speaker	18
Right Door Window Motor Relay	BK	In Left Door	N/S
Right Front I.P. Speaker	BK	At Speaker	8
Right Front Power Door Lock Motor	BK	At Motor	18
Right Front Power Door Lock Switch	WT	At Switch	18
Right Front Power Window Motor	BK	At Motor	18
Right Front Power Window Switch	BL	At Switch	18
Right Front Wheel Speed Sensor	BK	Right Fender Side Shield	3
Right Headlamp	BK	At Lamp	3
Right Park/Turn Signal Lamp	BK	At Lamp	3
Right Power Mirror	RD	At Mirror	18

DESCRIPTION AND OPERATION (Continued)

Connector Name/Number	Color	Location	Fig.
Right Rear Power Window Motor	RD	At Motor	N/S
Right Rear Speaker	BK	At Speaker	N/S
Right Rear Wheel Speed Sensor	BK	Right Side Trunk Area	16
Right Tail/Stop/ Turn Lamp	BK	At Lamp	N/S
Right Visor/ Vanity Lamp	BK	At Lamp	15
Seat Belt Control Module	BK	Rear of Center Console	14
Seat Belt Switch	BK	In Buckle	12
Speed Proportional Steering Module	BK	Left Side of Steering Gear	1
Stop Lamp Switch	GY	Top of Brake Pedal	13
Throttle Position Sensor	BK	On Throttle Body	4, 5
Transmission Control Module	BK	Next to PDC	2
Transmission Range Switch	BK	Front of Transmision	6
Transmission Solenoids and Pressure Switches	BK	Front of Transmission	6
Traveler	BK	Rear of Traveler	N/S
Trunk Key Cylinder Switch	BK	At Switch	16
Trunk Lamp	BK	At Lamp	15
Turbine Speed Sensor	BK	Front of Transmission	6
Upstream Heated O2 Sensor	BK	Rear of Generator	4, 5
Vapor Canister/Leak Detection Pump	BK	Right Front Fender	3
Vehicle Speed Control Servo	BK	At Servo	2
Vehicle Speed Control and Horn Switches	BK	Rear of Clockspring	N/S
Windshiel Washer Pump Motor	BK	Bottom of Reservior	3
Windshield Wiper Motor	LT/ GY	Left Strut Tower	1

DESCRIPTION AND OPERATION (Continued)

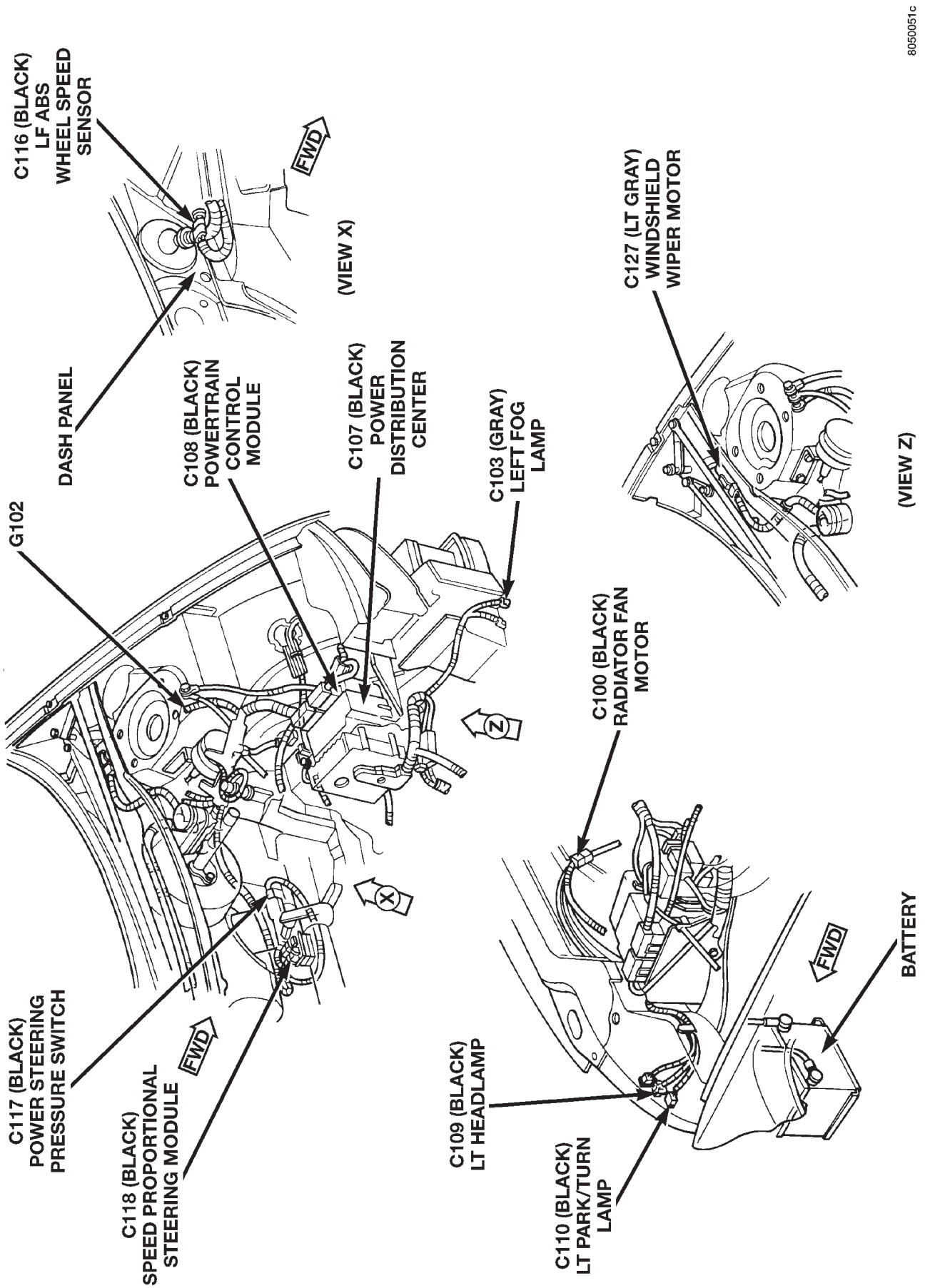


Fig. 1 Engine Compartment Connections (Left Side)

DESCRIPTION AND OPERATION (Continued)

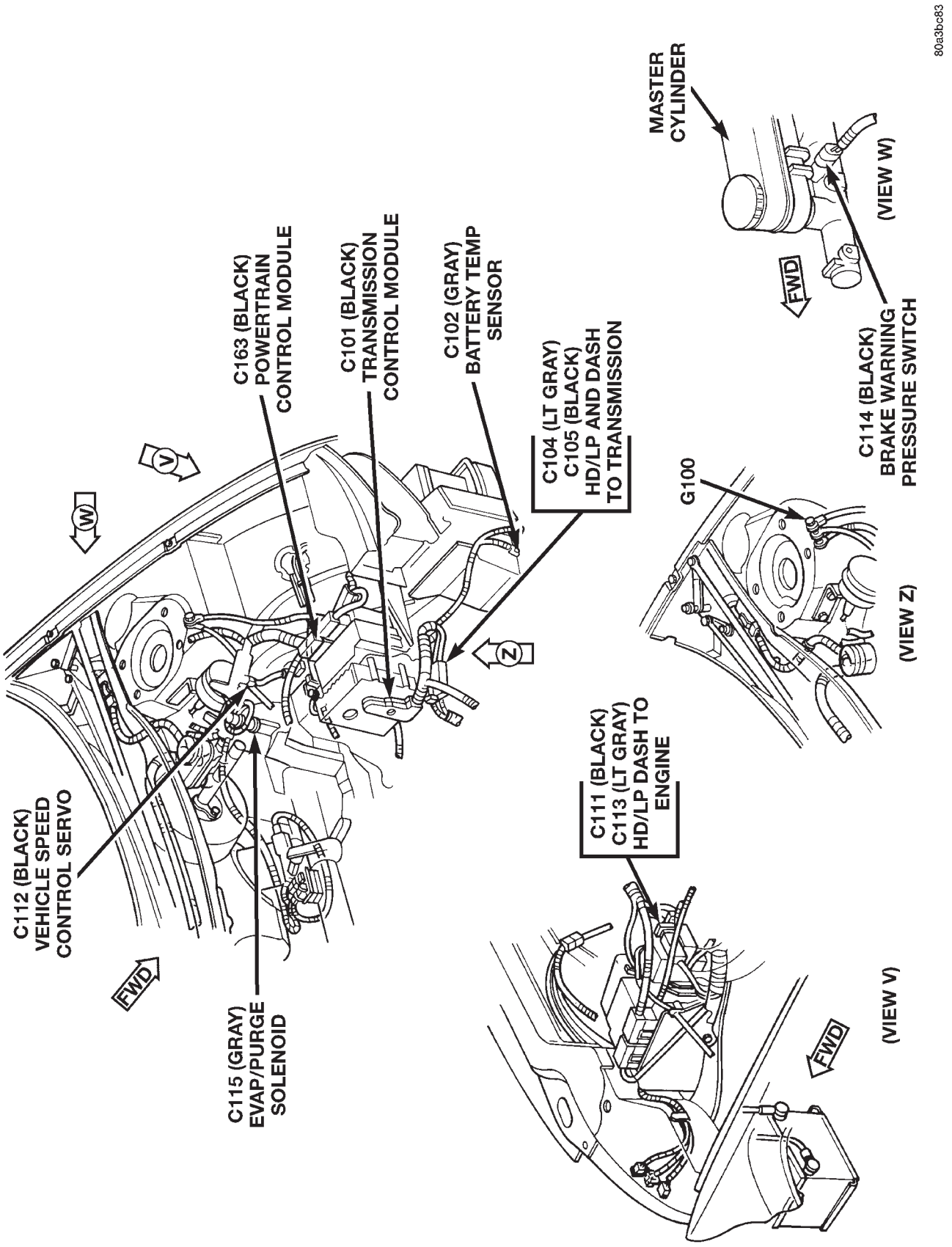


Fig. 2 Engine Compartment Connections (Left Side)

DESCRIPTION AND OPERATION (Continued)

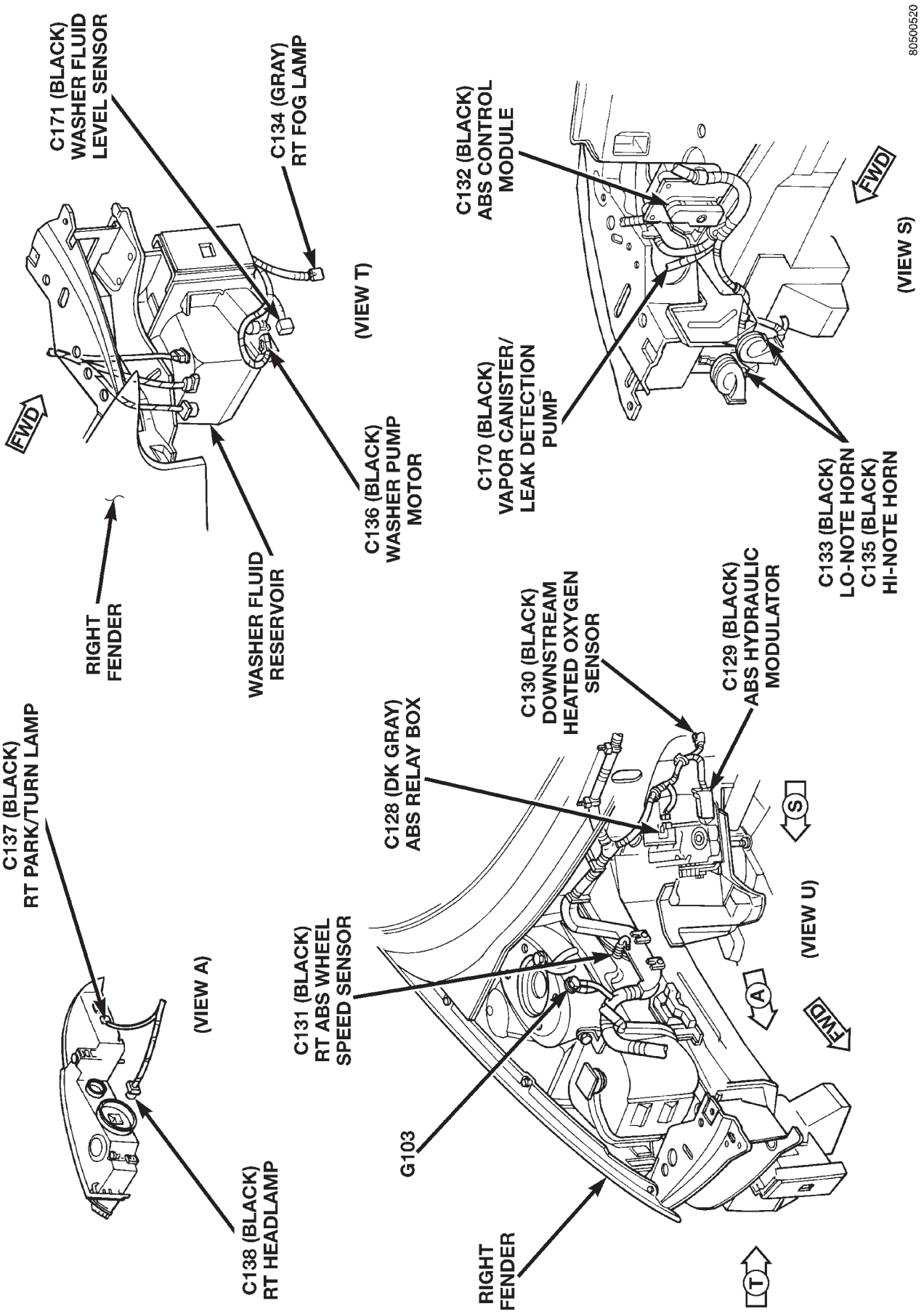


Fig. 3 Engine Compartment Connections (Right Side)

DESCRIPTION AND OPERATION (Continued)

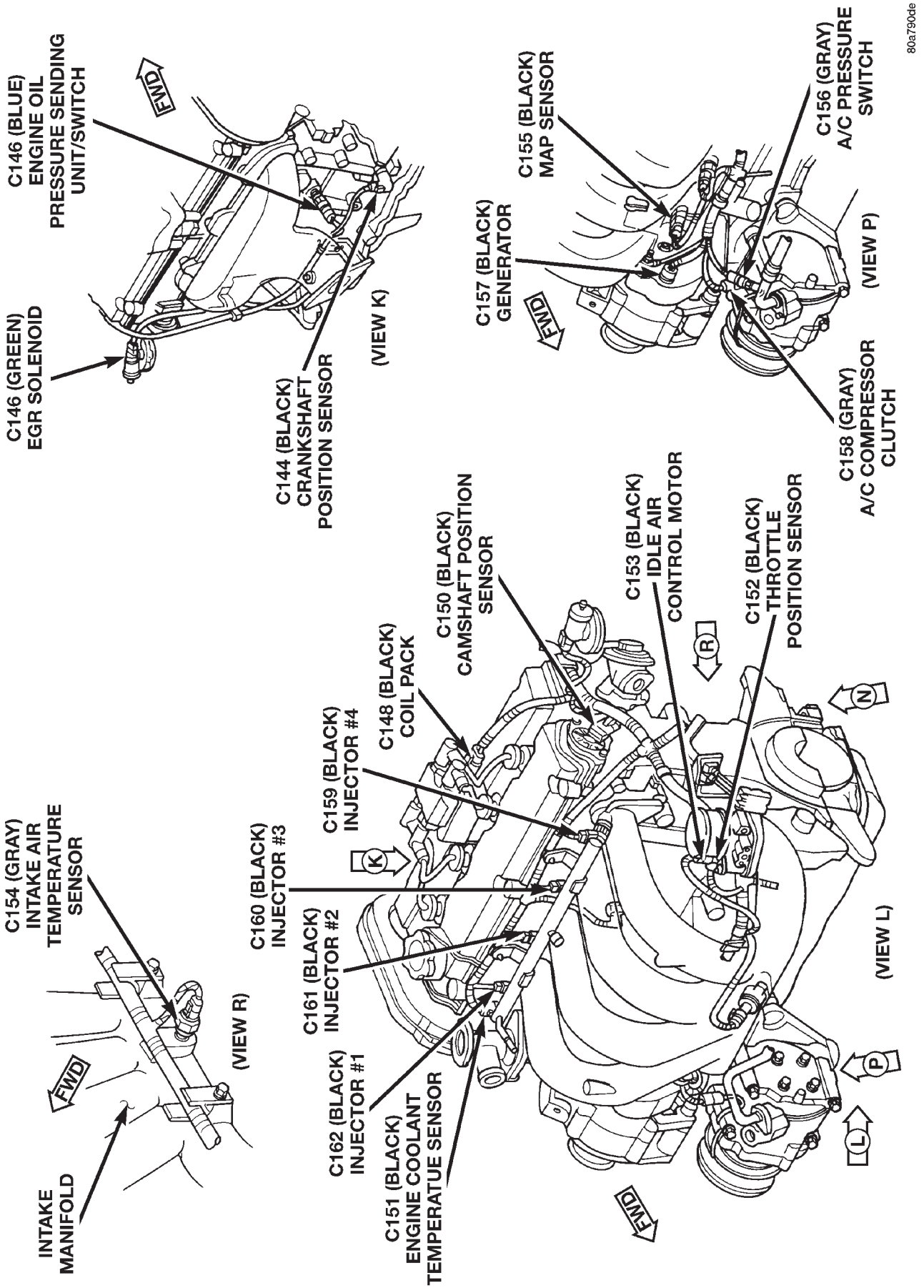


Fig. 4 Engine Connections (2.4L)

DESCRIPTION AND OPERATION (Continued)

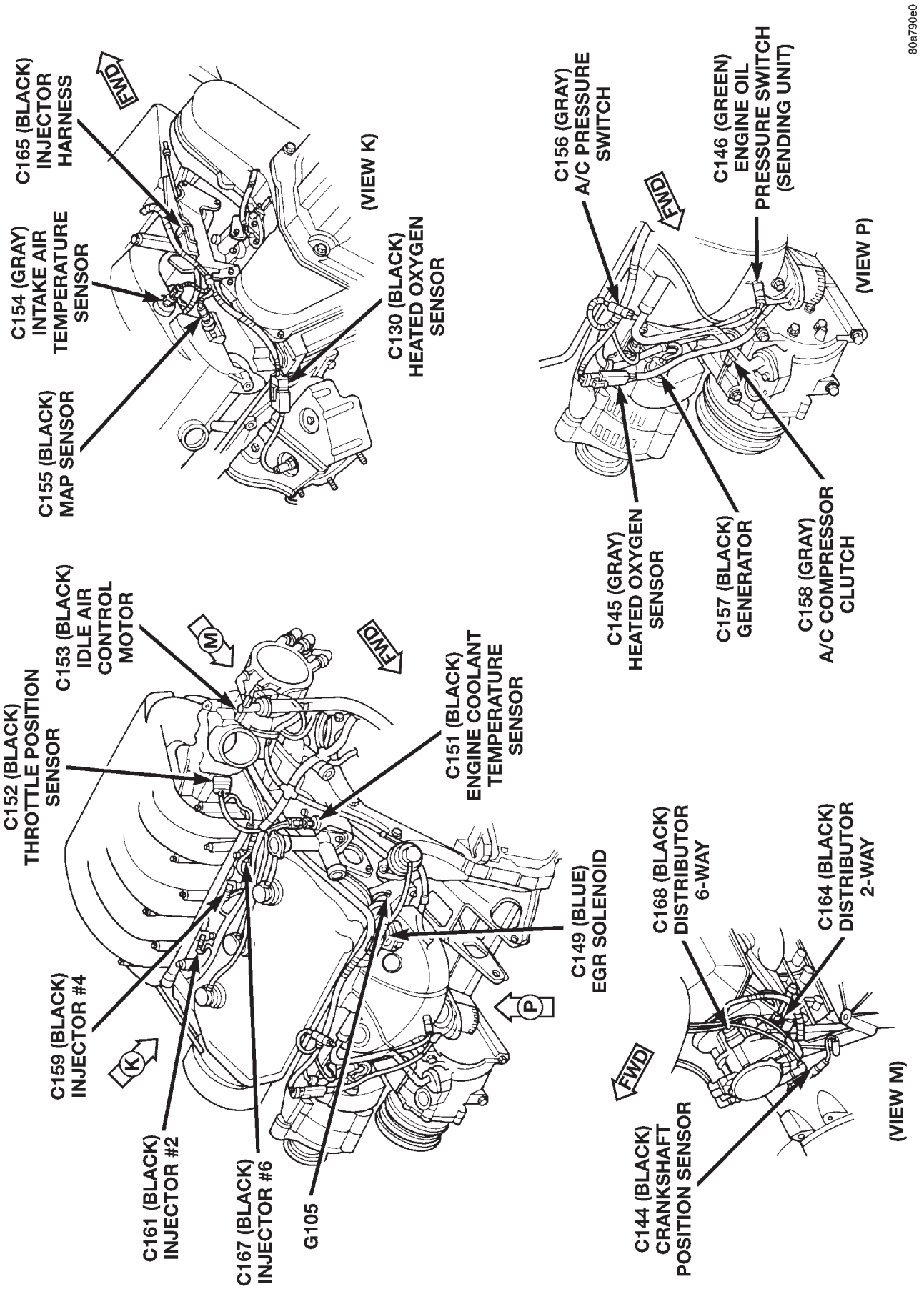


Fig. 5 Engine Connections (2.5L)

DESCRIPTION AND OPERATION (Continued)

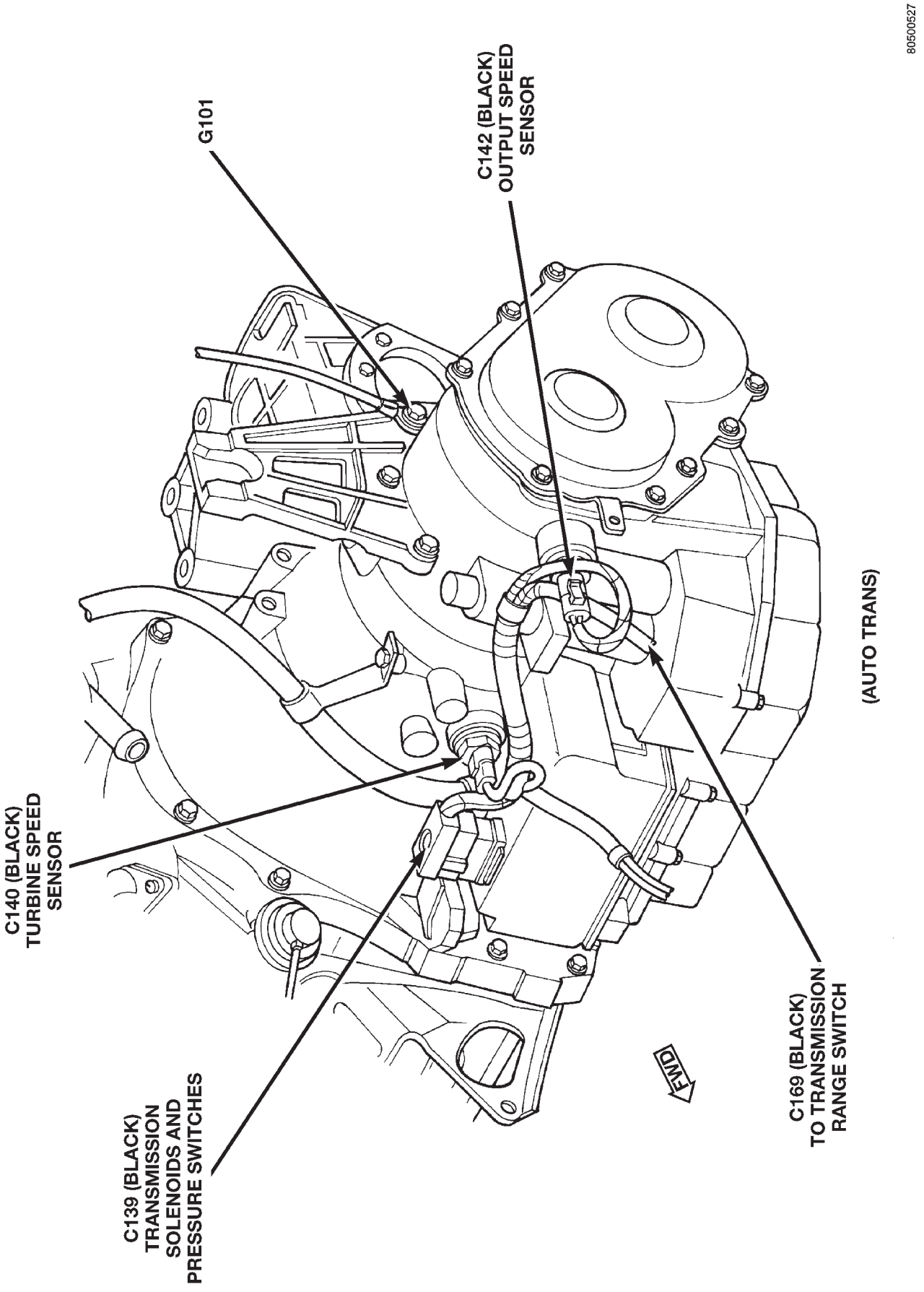


Fig. 6 Transmission Connections

DESCRIPTION AND OPERATION (Continued)

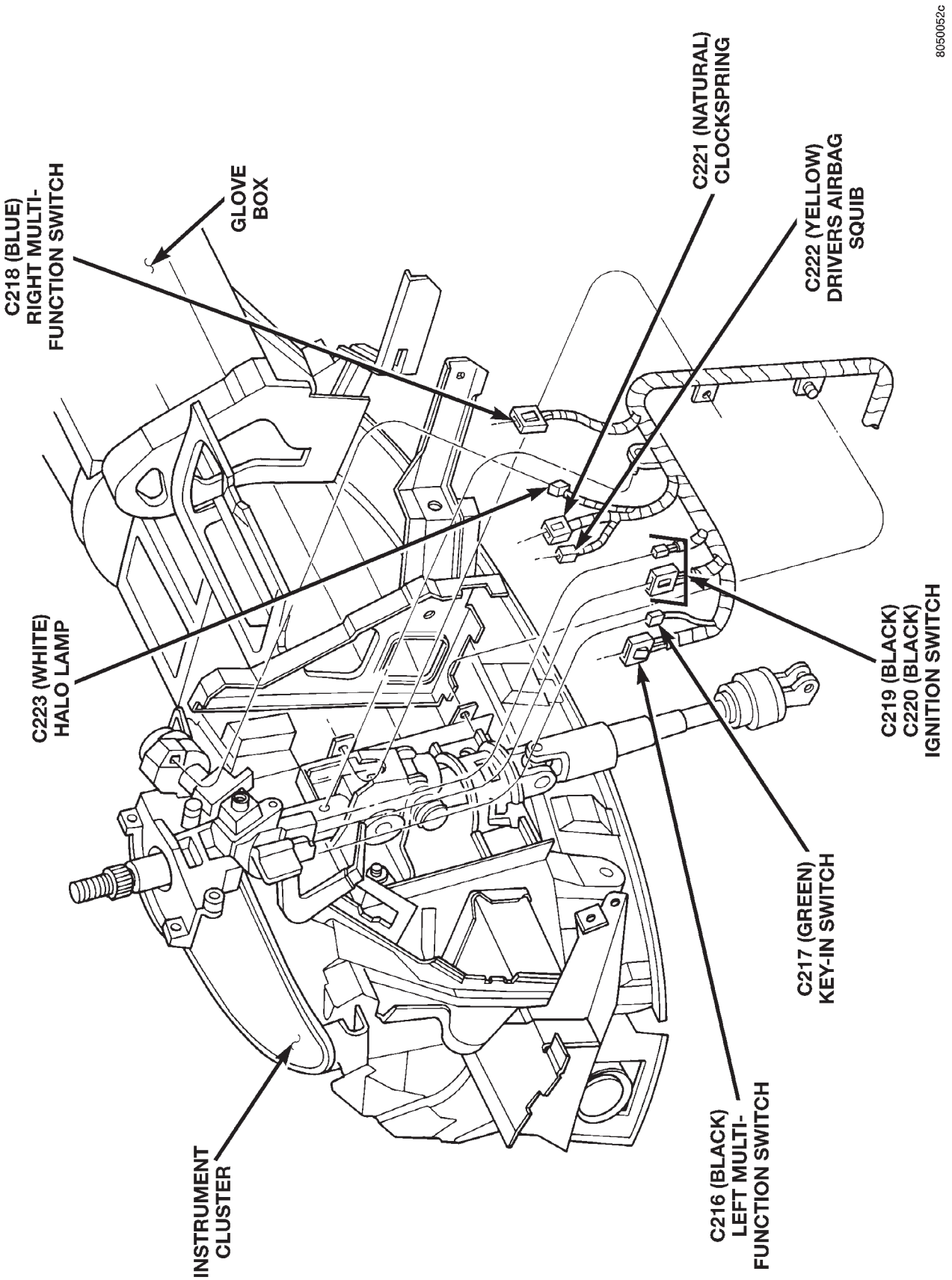


Fig. 7 Steering Column Connections

DESCRIPTION AND OPERATION (Continued)

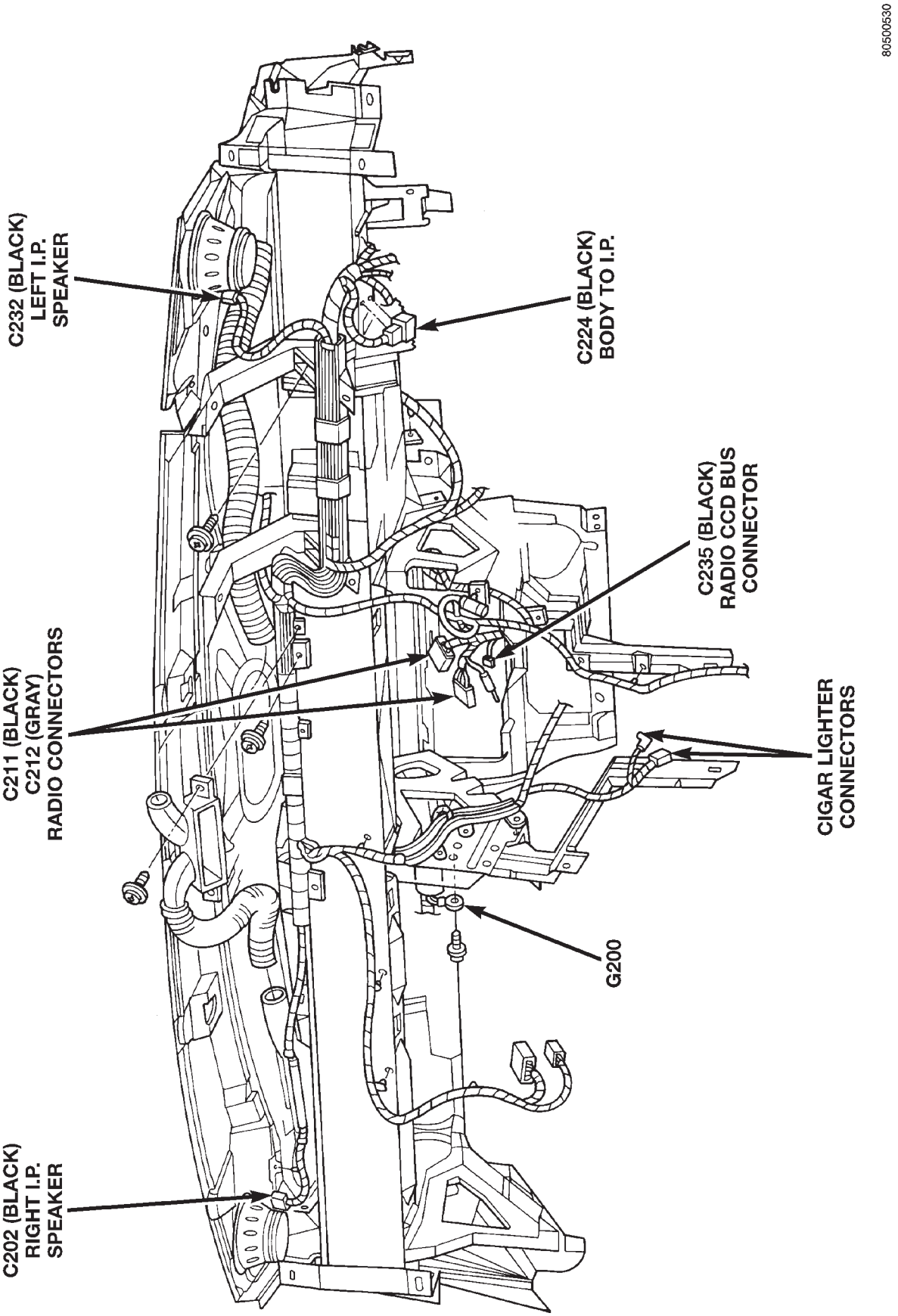


Fig. 8 Instrument Panel Connections

DESCRIPTION AND OPERATION (Continued)

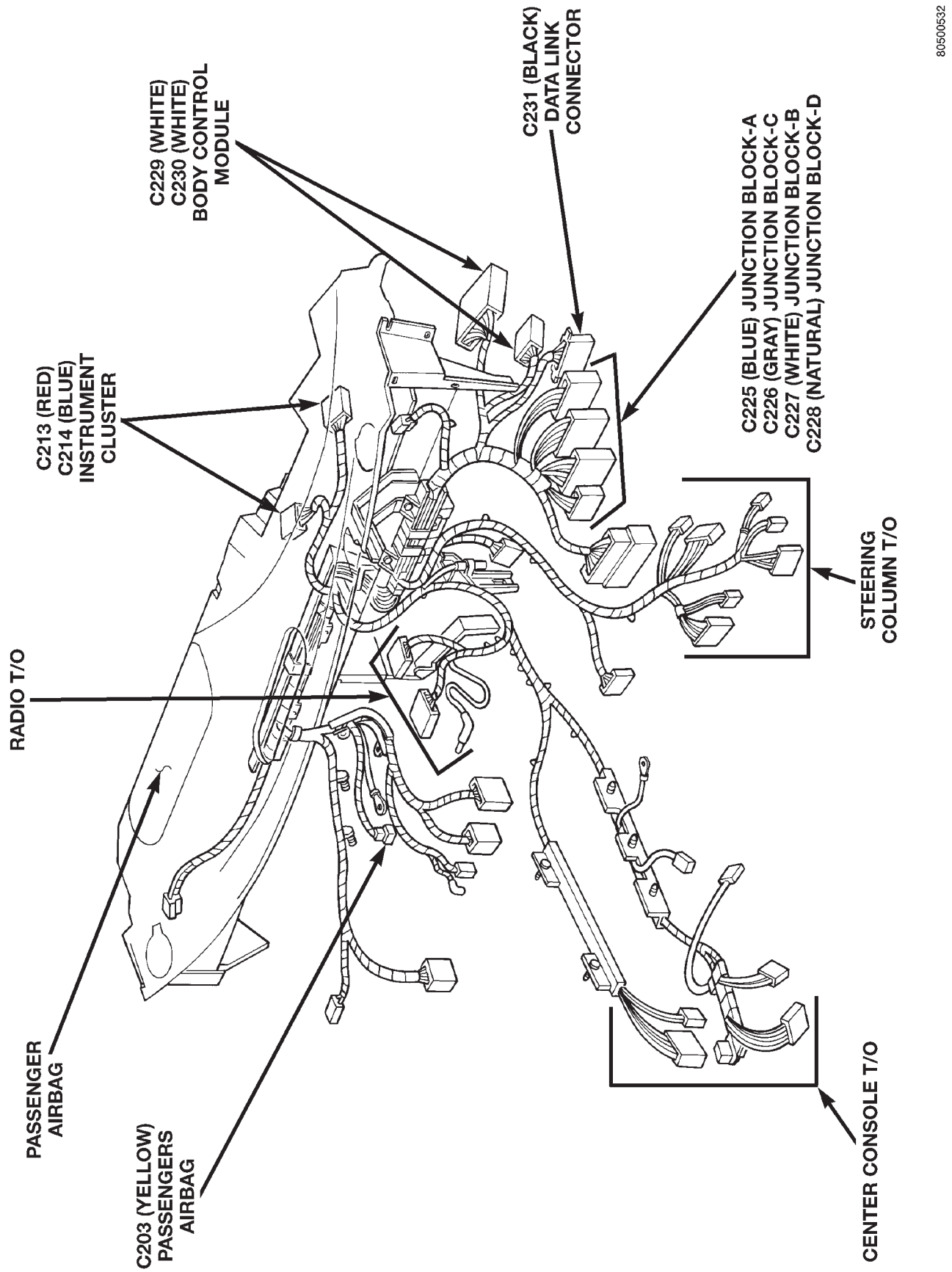


Fig. 9 Instrument Panel Connections

DESCRIPTION AND OPERATION (Continued)

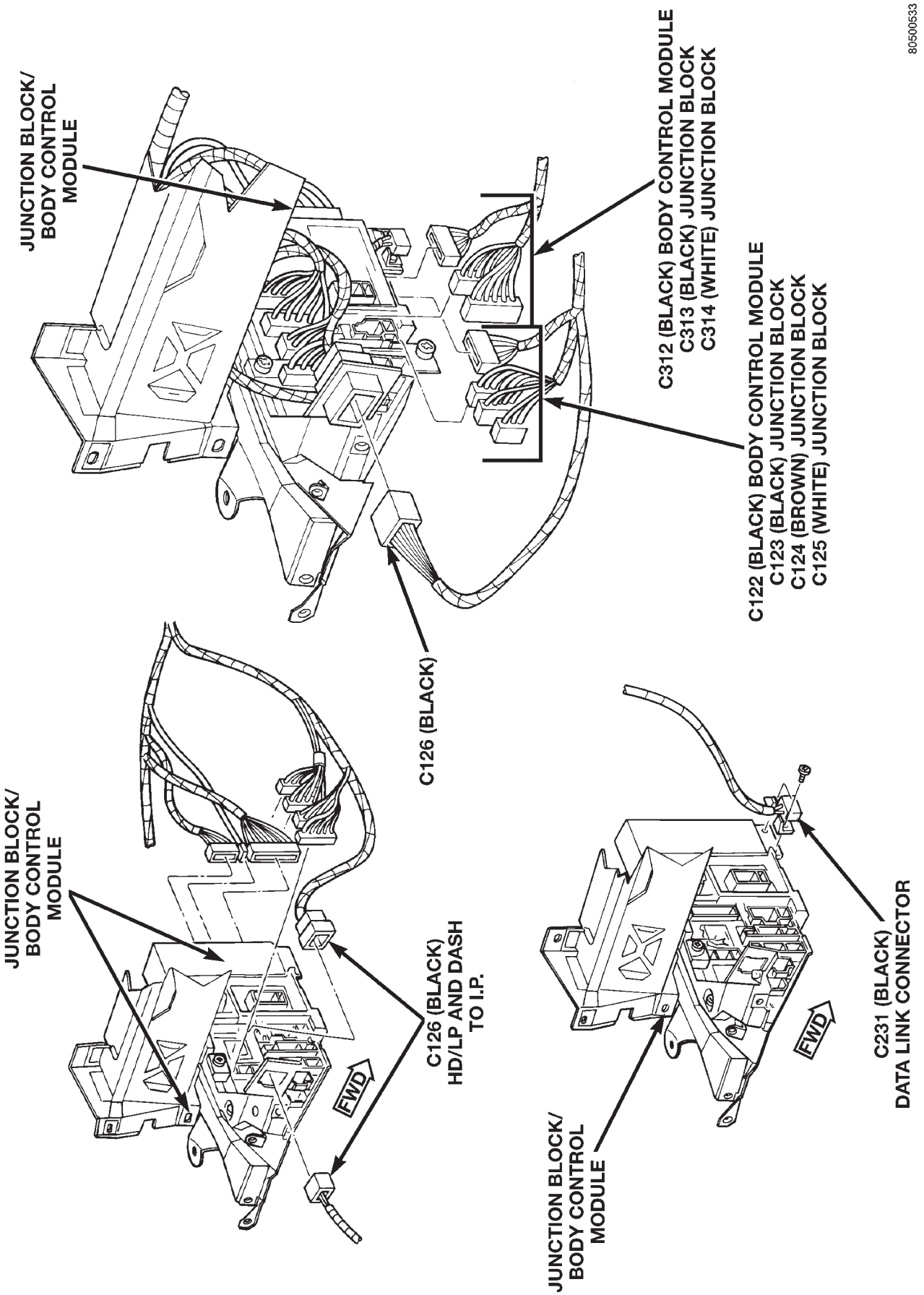


Fig. 10 Junction Block Connections

DESCRIPTION AND OPERATION (Continued)

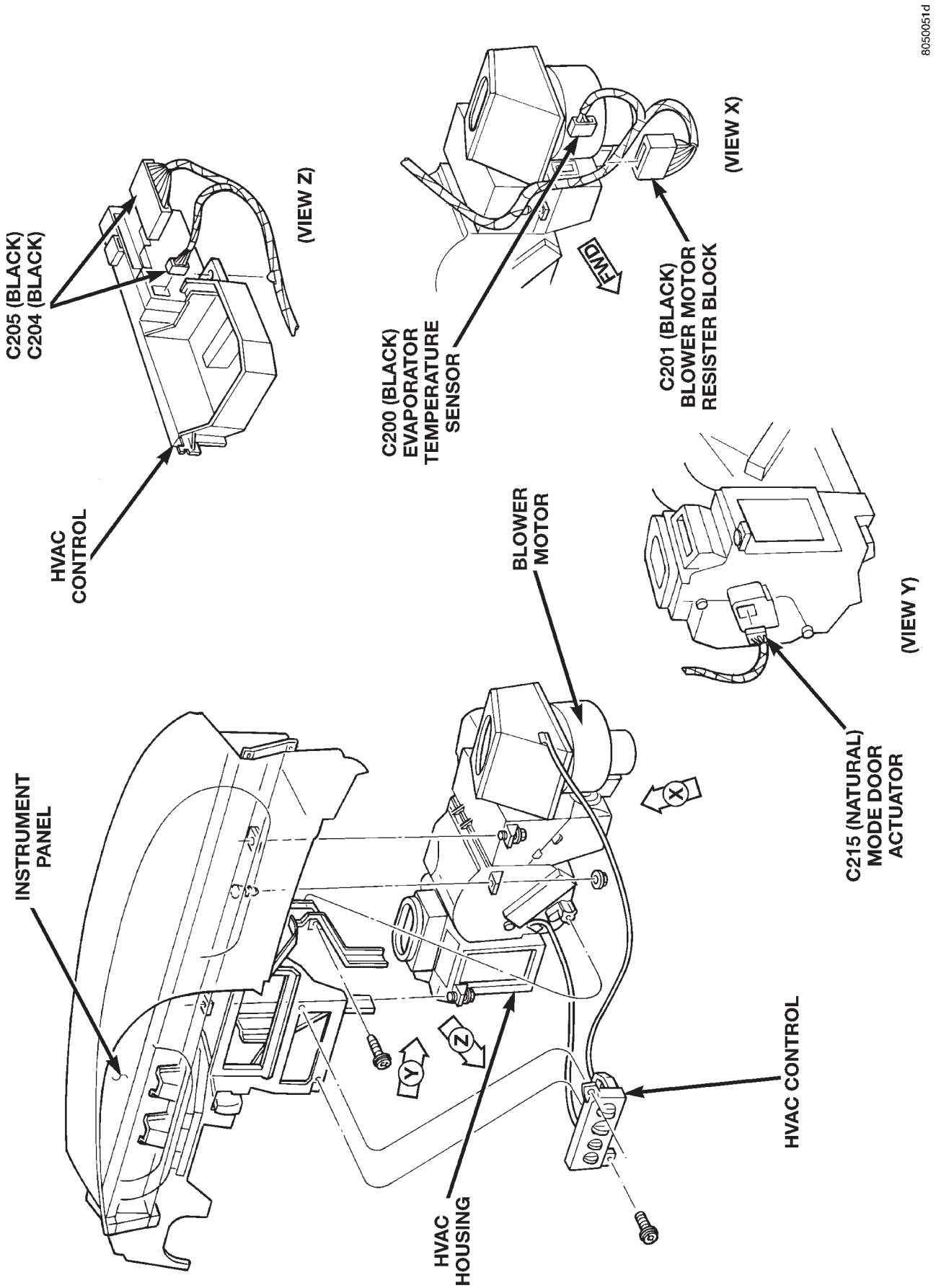


Fig. 11 HVAC Connections

DESCRIPTION AND OPERATION (Continued)

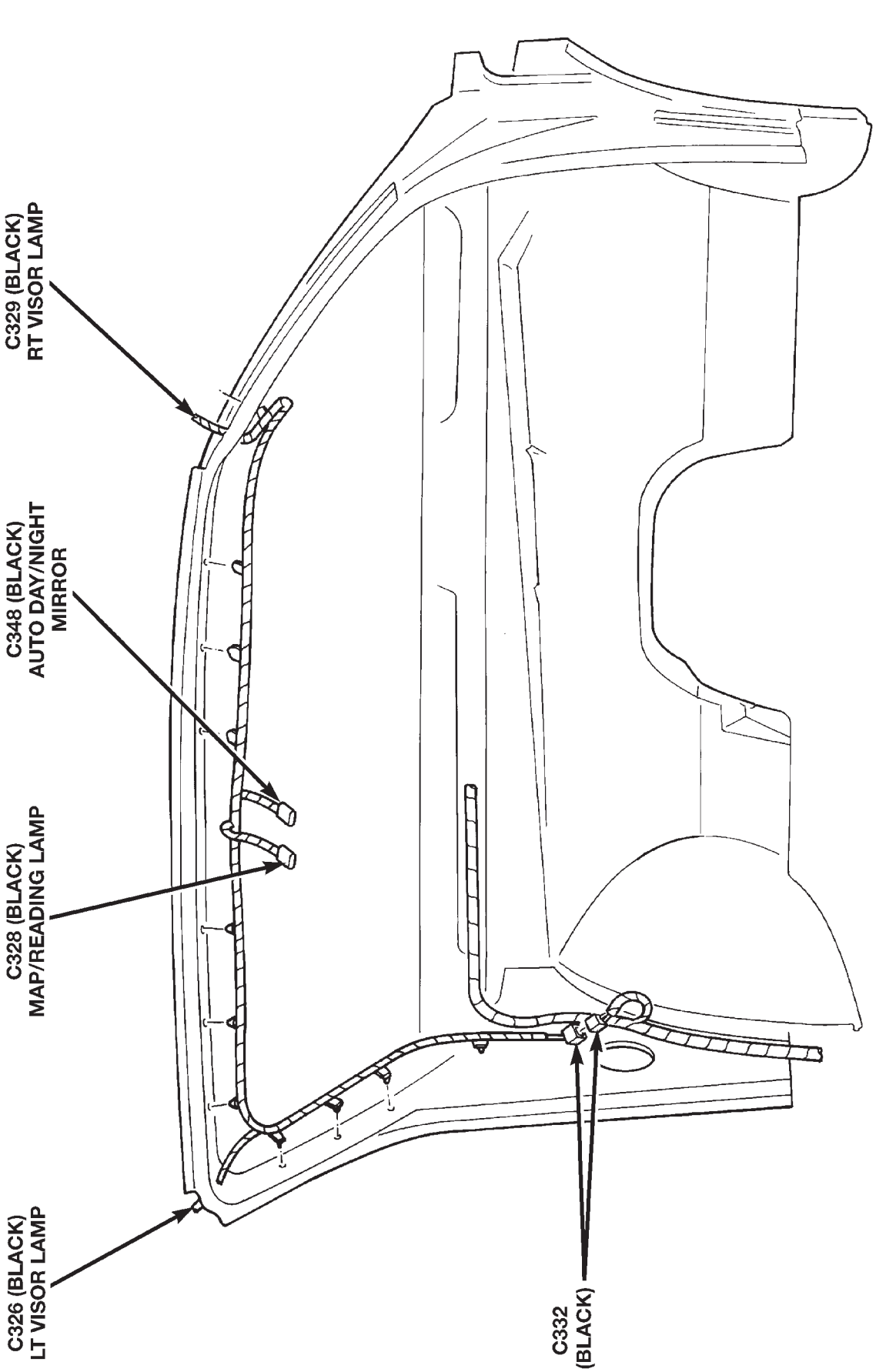


Fig. 12 Windshield Header Connections

DESCRIPTION AND OPERATION (Continued)

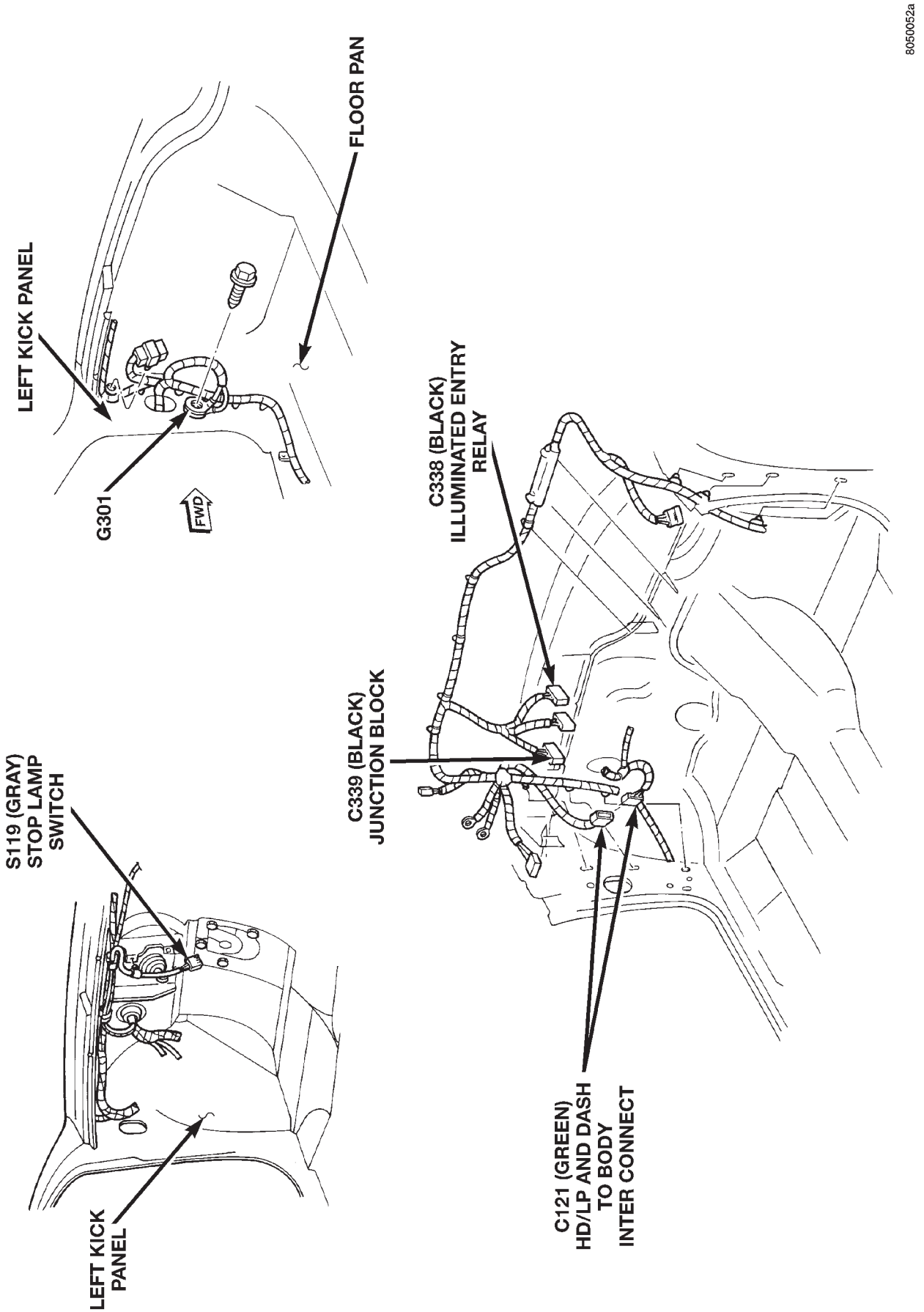


Fig. 13 Cowl Panel Connections

DESCRIPTION AND OPERATION (Continued)

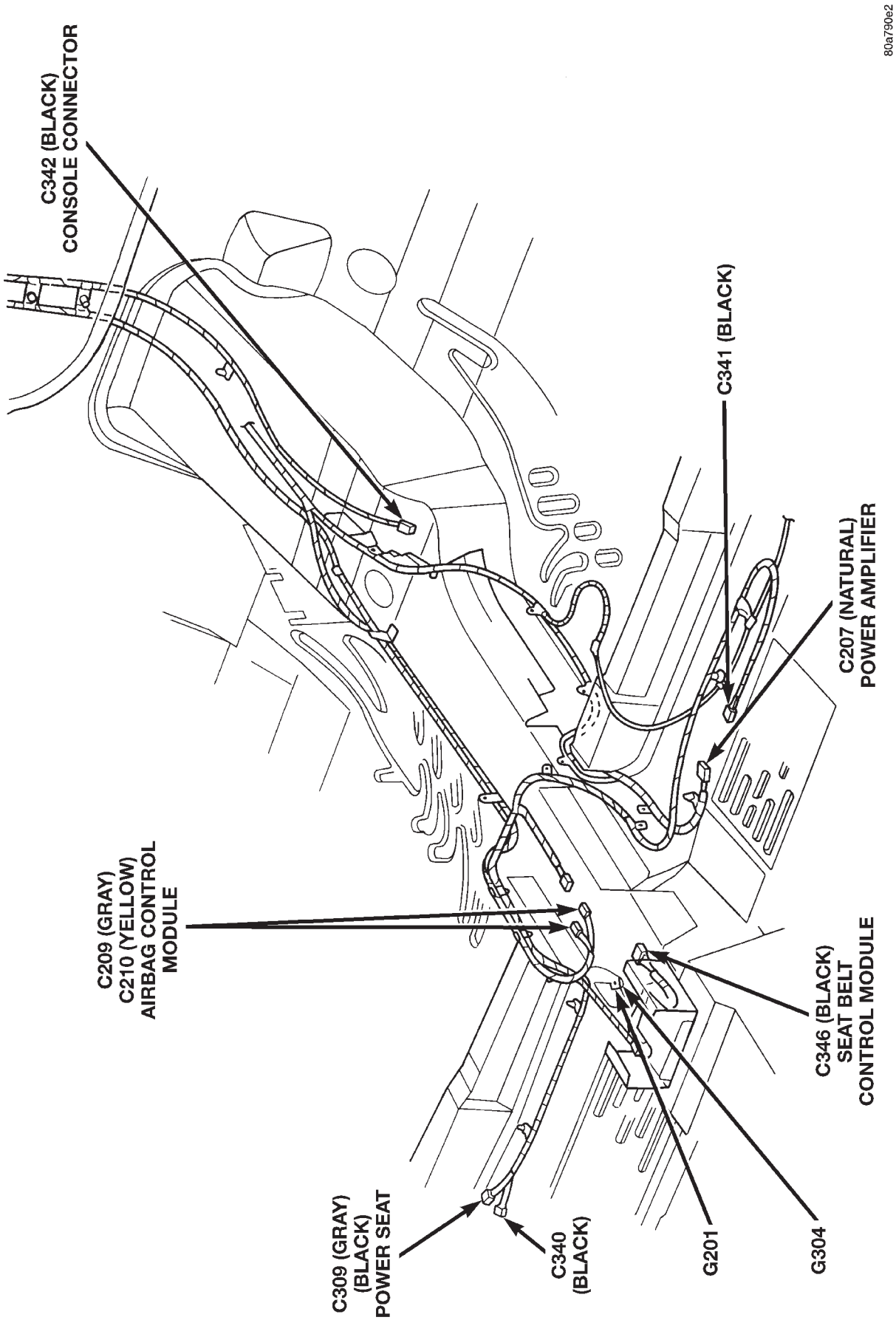


Fig. 14 Console Connections

DESCRIPTION AND OPERATION (Continued)

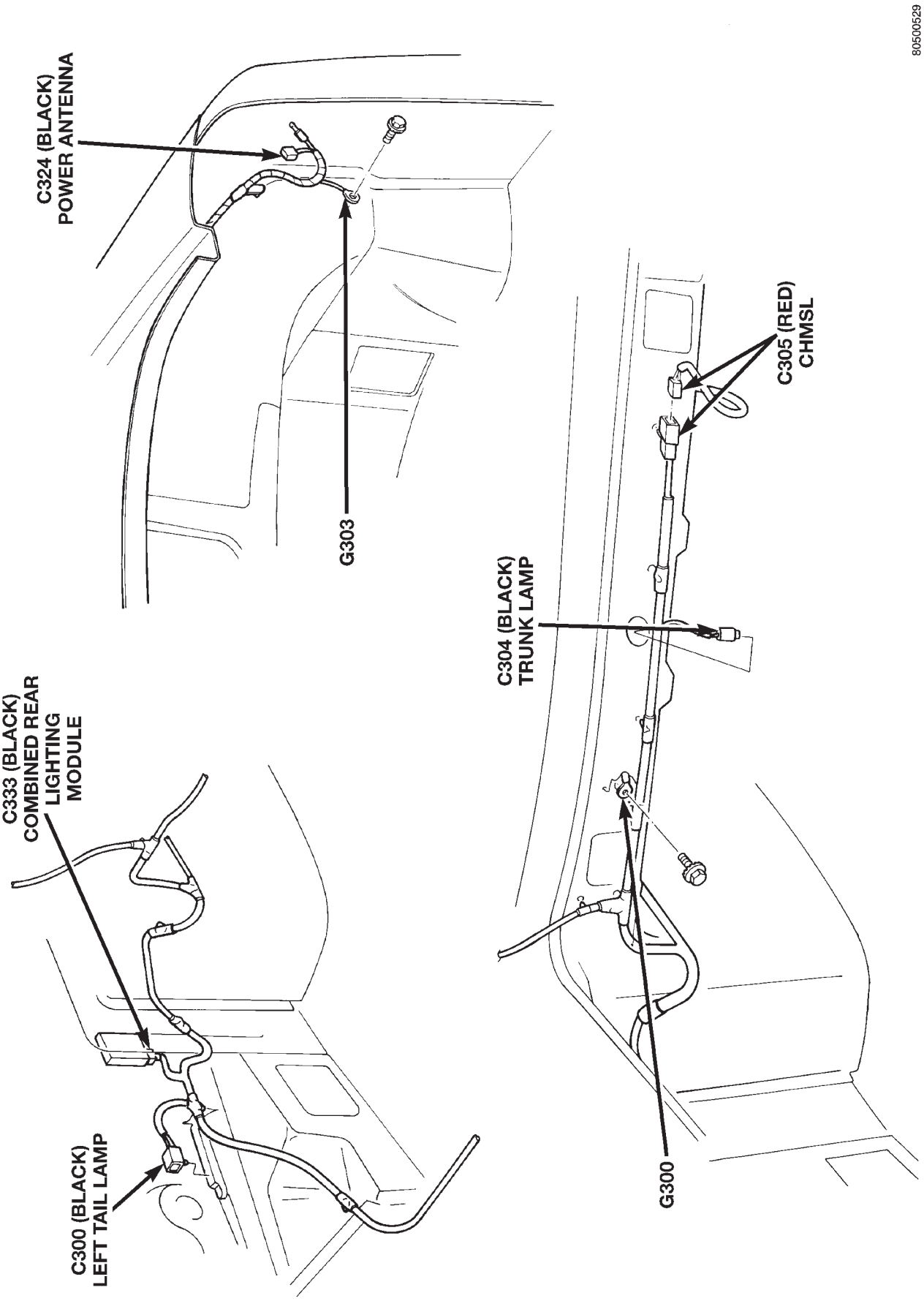


Fig. 15 Trunk Connections

DESCRIPTION AND OPERATION (Continued)

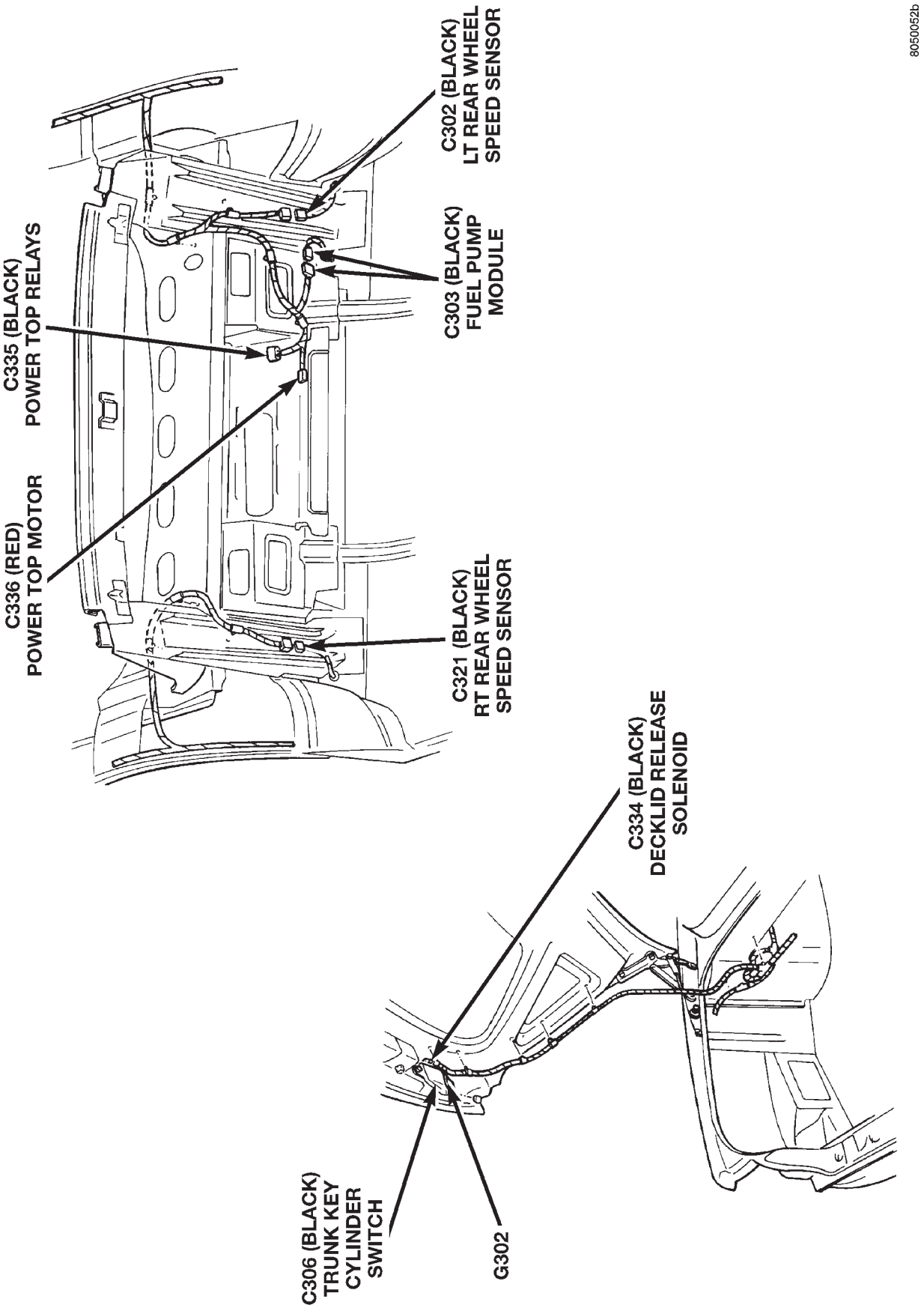


Fig. 16 Body Connections

DESCRIPTION AND OPERATION (Continued)

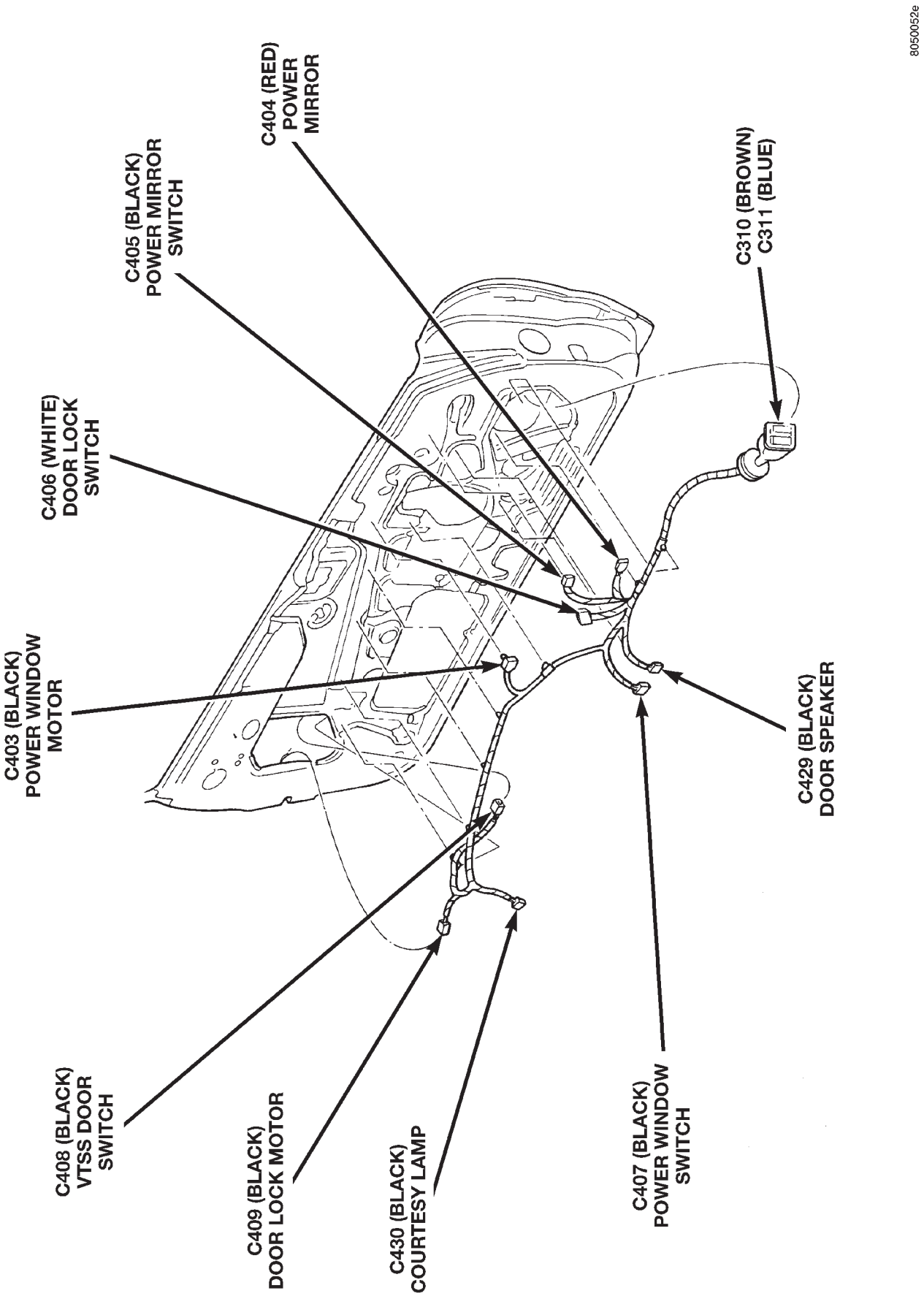


Fig. 17 Door Connections (Left)

DESCRIPTION AND OPERATION (Continued)

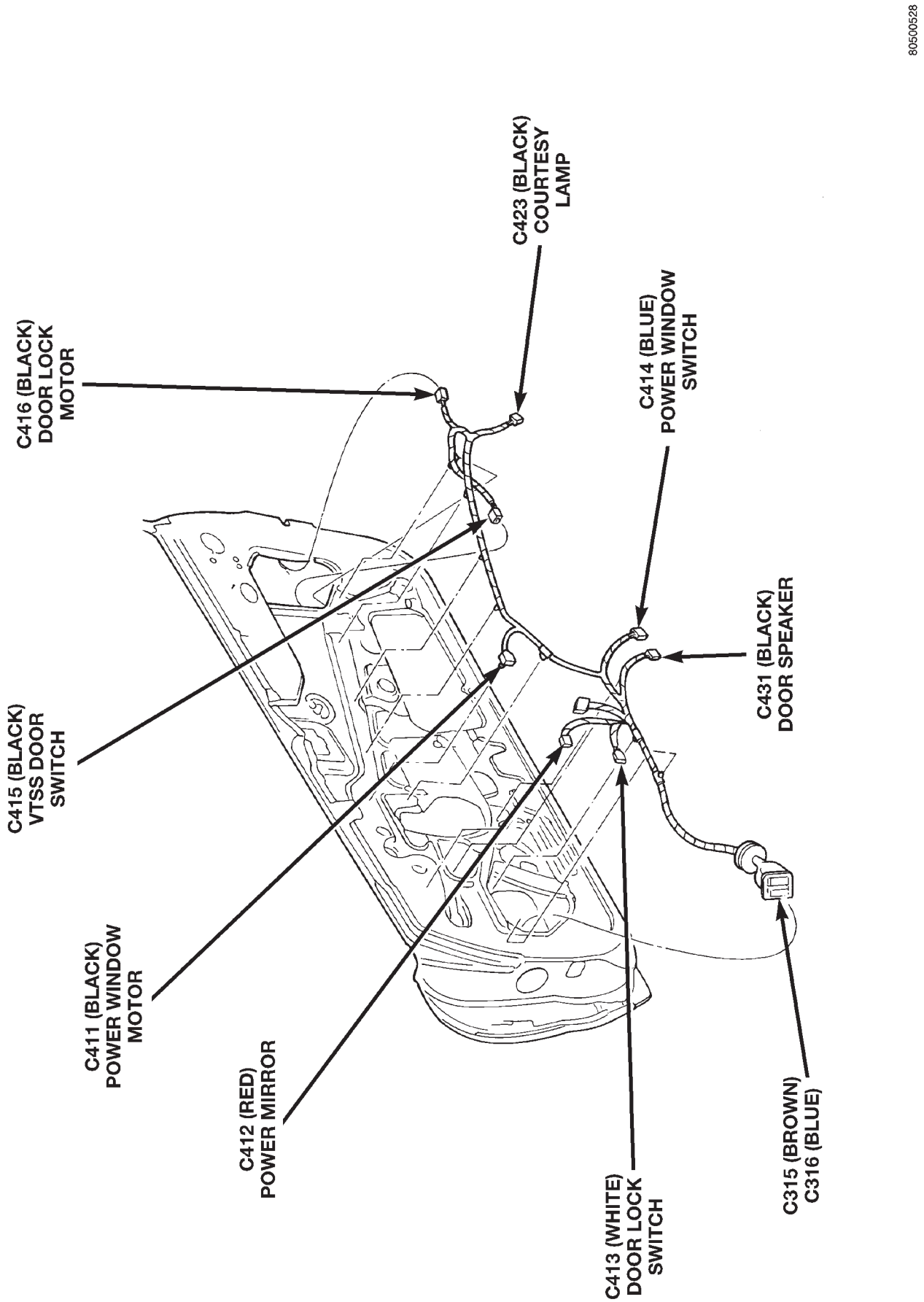


Fig. 18 Door Connections (Right)

8W-95 SPLICE LOCATIONS

DESCRIPTION AND OPERATION

INTRODUCTION

This section provides illustrations identifying the general location of the splices in this vehicle. A splice index is provided. Use the wiring diagrams in each section for splice number identification. Refer to the index for the proper splice number.

SPLICE LOCATIONS

For splices not shown in this section a N/S is placed in the Fig. column.

Splice Number	Location	Fig.
S100	In T/O for TCM	1
S101	Left Strut Tower	1
S102	Internal to the PDC	1
S103	Internal to the PDC	1
S104	Internal to the PDC	1
S105	Internal to the PDC	1
S106	Internal to the PDC	1
S107	Internal to the PDC	1
S108	Near T/O for PCM connector	1
S109	Left Strut Tower	1
S110	Internal to the PDC	1
S111	Right Strut Tower	3
S112	Rt Side of Dash Panel	3
S113 (2.4L)	Near T/O for MAP/IAT Sensor	5
S113 (2.5L)	In Generator T/O	6
S114 (2.4L)	In Injector T/O	5
S114 (2.5L)	Between Inj #2 and #4	N/S
S115 (2.4L)	Near T/O for MAP/IAT Sensor	5
S115 (2.5L)	Near EGR T/O	6
S116 (2.4L)	Near T/O for MAP/IAT Sensor	5
S116 (2.5L)	Near Inj #6 T/O	6
S117 (2.4L)	Near T/O for Cam Sensor	5
S117 (2.5L)	Near IAC Motor T/O	6
S118 (2.4L)	Near Engine Starter Motor T/O	5
S118 (2.5L)	Near T/O for ECT Sensor	6
S119	In Starter Motor T/O	N/S
S120	Near T/O for PCM	2, 6
S121 (2.5L)	In T/O for PCM	2
S122	In T/O for PCM	2
S123	In Fuel Rail Harness	6
S124 (2.4L)	Near T/O for Nosie Suppressor	N/S
S124 (2.5L)	Near Distributor T/O	6
S125	Near T/O for Turbine Speed Sensor	4
S126	Near EGR T/O	N/S
S127	Near T/O for PDC	1
S129	Near Stop Lamp SW T/O	N/S
S130	Near T/O for PCM Connector	2
S131 (2.4L)	In T/O for PCM Connector	2
S132 (2.4L)	In T/O for PCM Connector	2
S133 (2.4L)	In Ignition Coil T/O	5
S200	In T/O for Cigar Lighter	7
S201	Near T/O for Red Cluster Connector	7
S202	Near T/O for Red Cluster Connector	7
S203	Near T/O for Mode Door Actuator	N/S
S301	Near T/O for Combined Rear Lighting Module	9
S302	Near Map/Reading Lamp T/O	8
S303	Near LT Visor Lamp T/O	8
S304	Near T/O for Rear Wdo Defogger Feed T/O	9
S305	In T/O for BCM	8
S306	In T/O for BCM	8
S307	In T/O for BCM	8
S308	Near T/O for Courtesy Lamp Relay	8
S310	Near T/O for Courtesy Lamp Relay	8
S311	Near T/O for Courtesy Lamp Relay	8
S312	Left Kick Panel	8
S400	Near Door Speaker T/O	10
S401	Near Door Speaker T/O	10
S402	Near Door Connector	10
S403	Near Door Connector	10
S404	Near Back Up Lamp T/O	N/S
S405	Near Gromet	N/S
S406	In Tail Lamp	N/S
S407	In Tail Lamp	N/S
S408	In Tail Lamp	N/S
S409	In Tail Lamp	N/S

DESCRIPTION AND OPERATION (Continued)

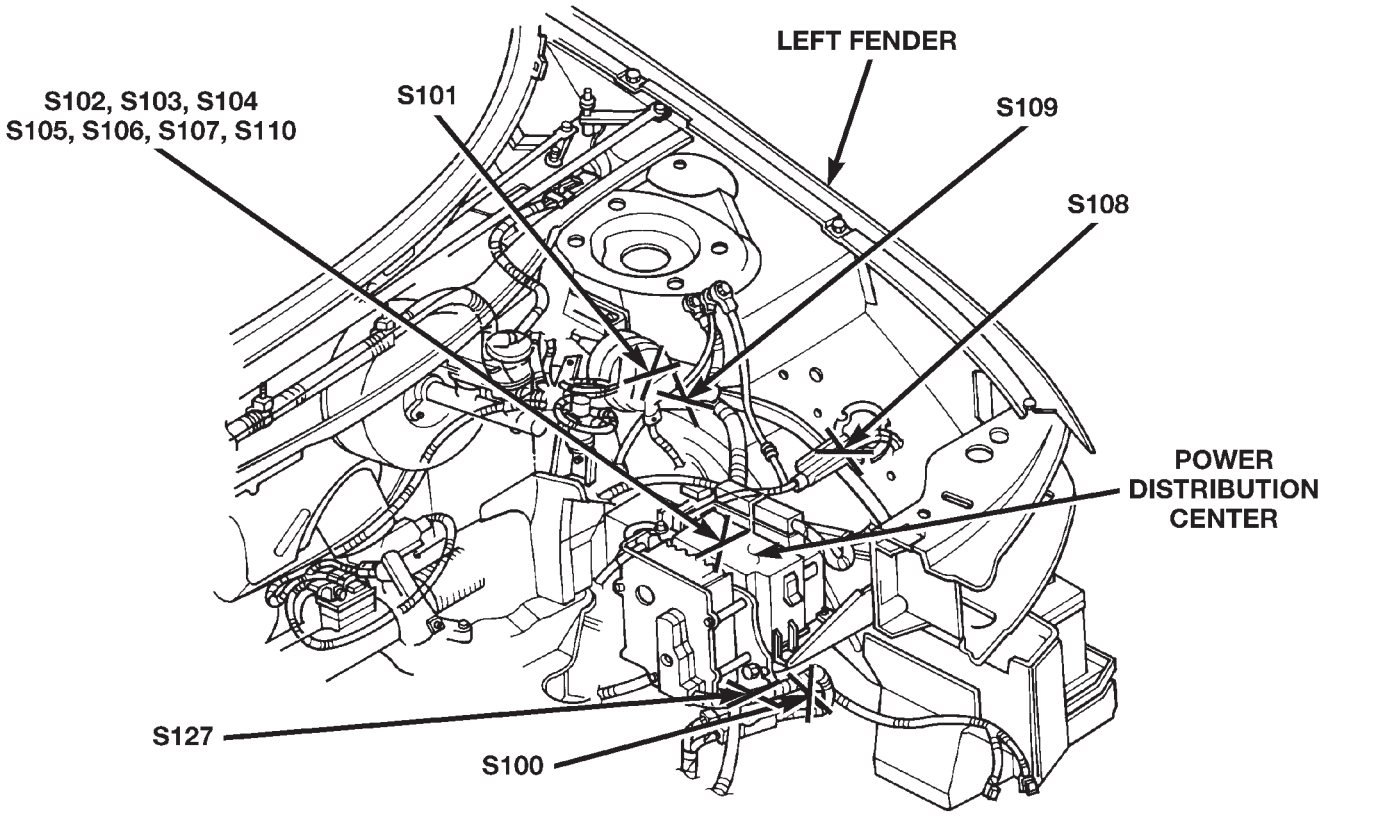


Fig. 1 Engine Compartment Splices

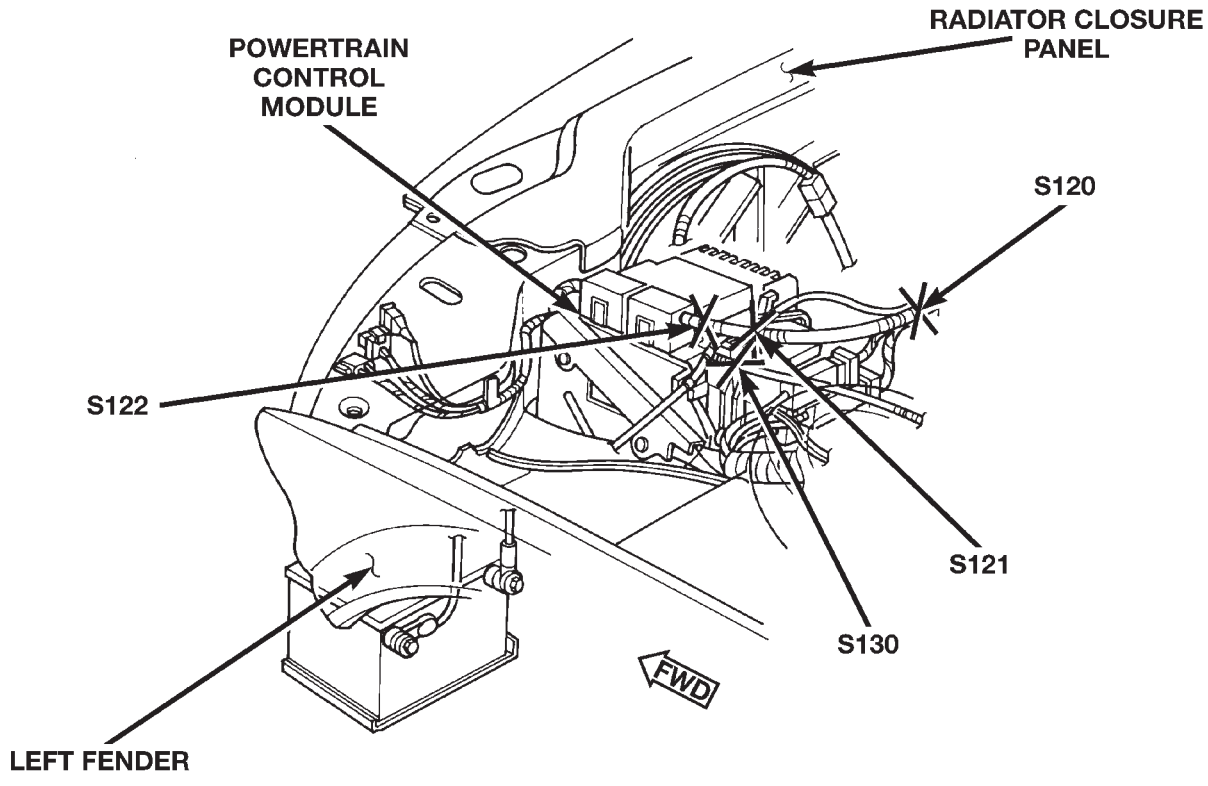


Fig. 2 Engine Compartment Splices

DESCRIPTION AND OPERATION (Continued)

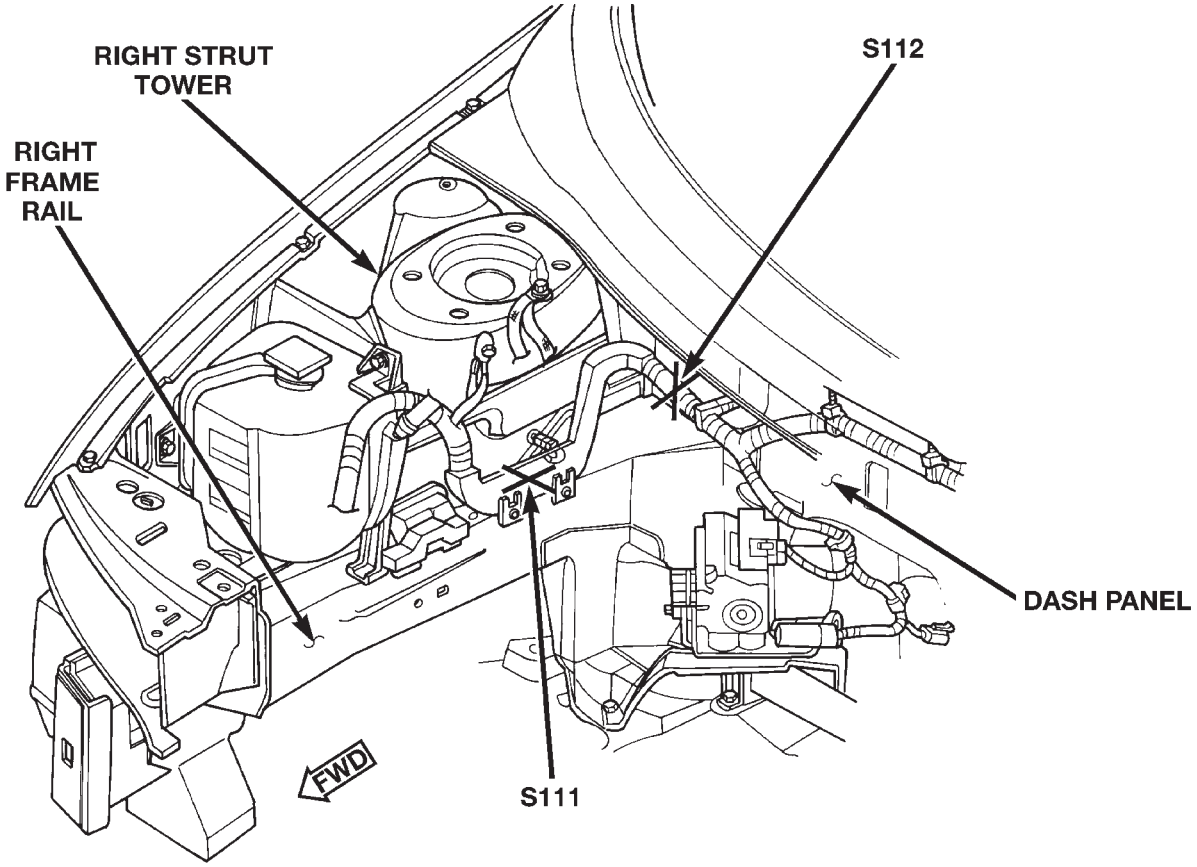


Fig. 3 Engine Compartment Splices

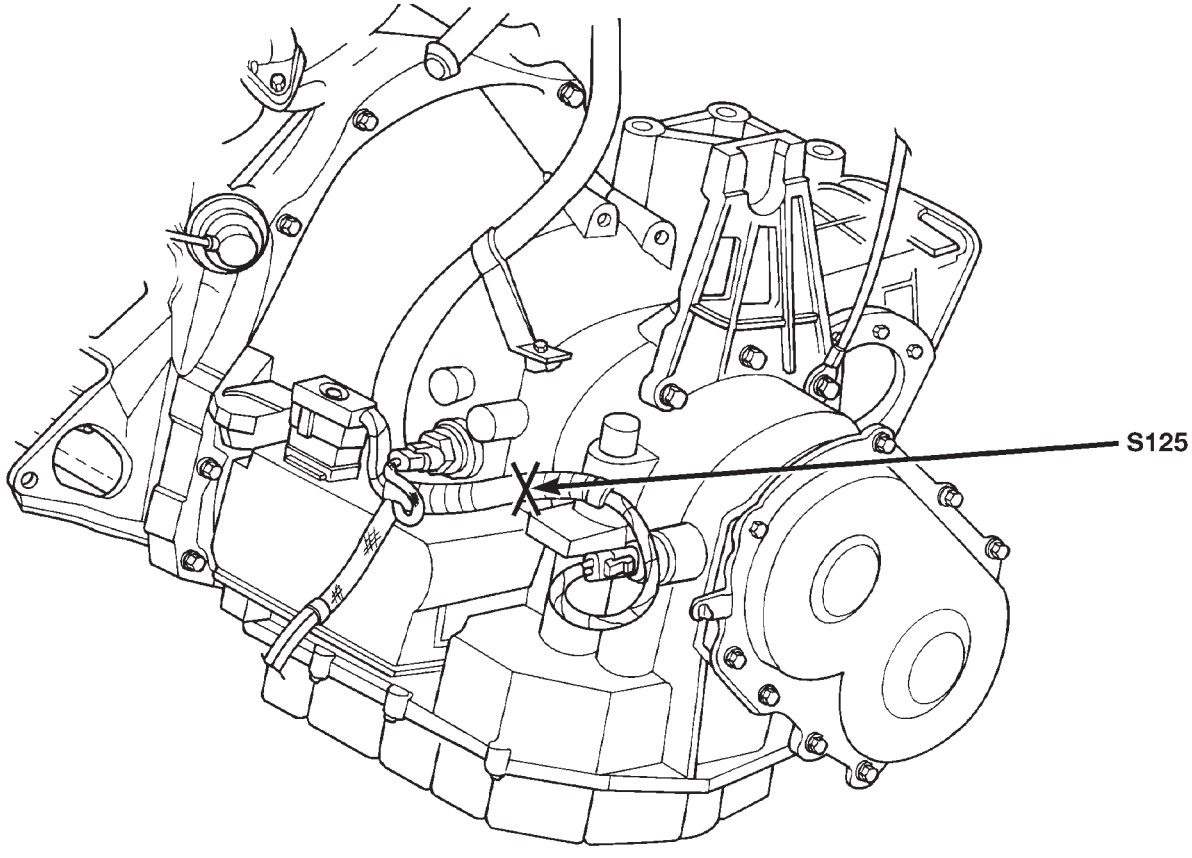


Fig. 4 Transmission Splices

DESCRIPTION AND OPERATION (Continued)

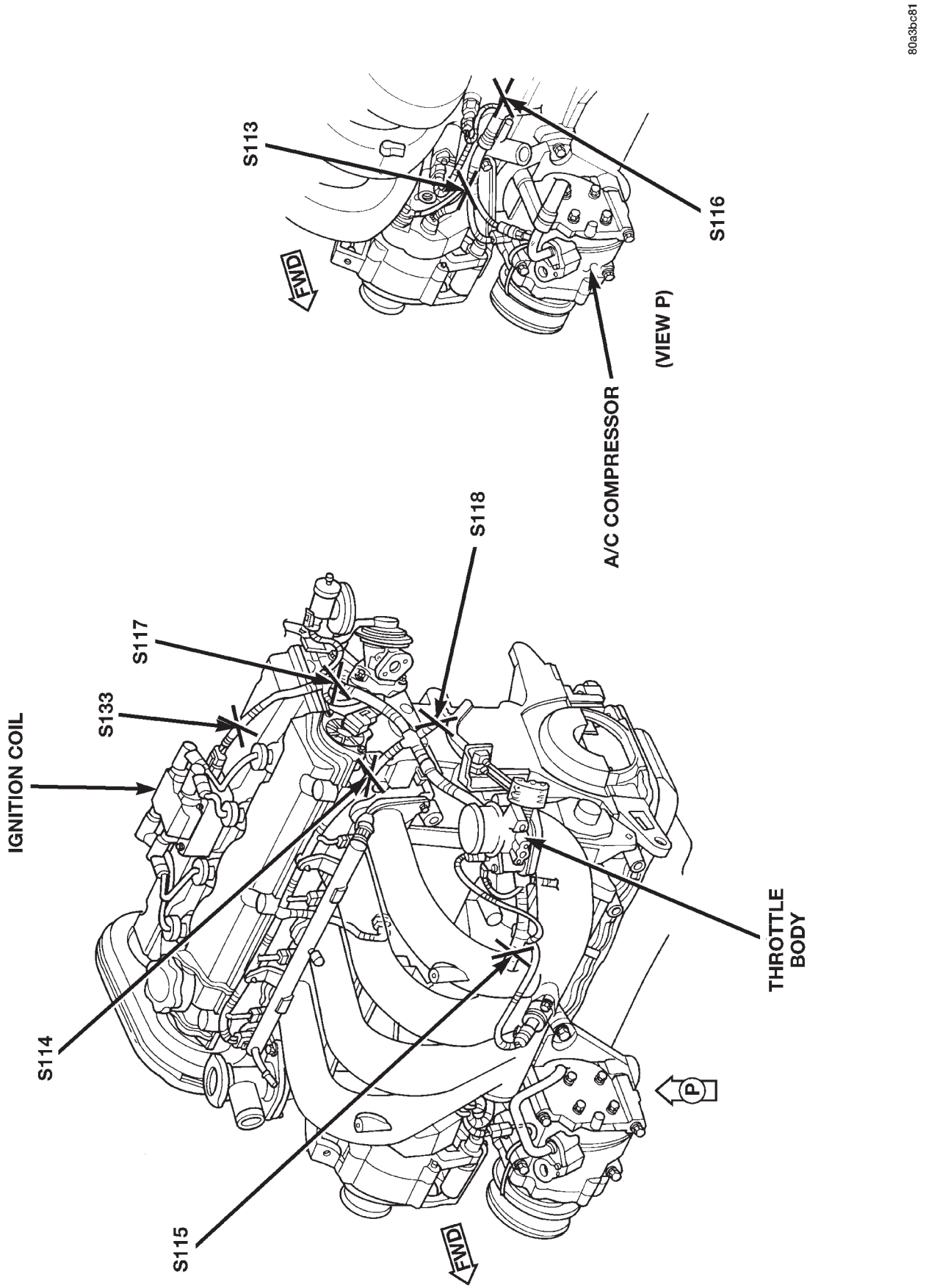


Fig. 5 Engine Splices 2.4L

DESCRIPTION AND OPERATION (Continued)

80500521

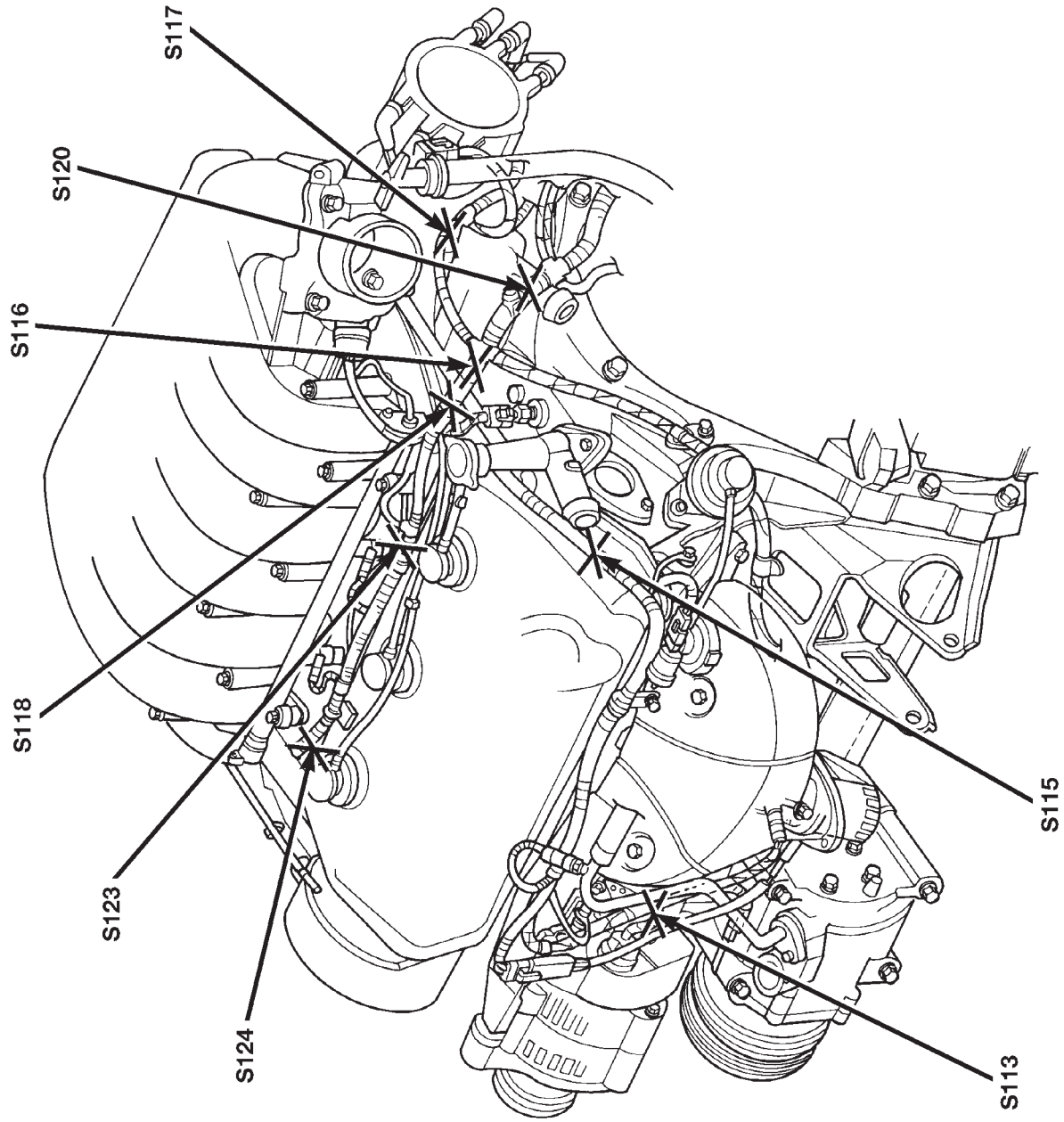


Fig. 6 Engine Splices 2.5L

DESCRIPTION AND OPERATION (Continued)

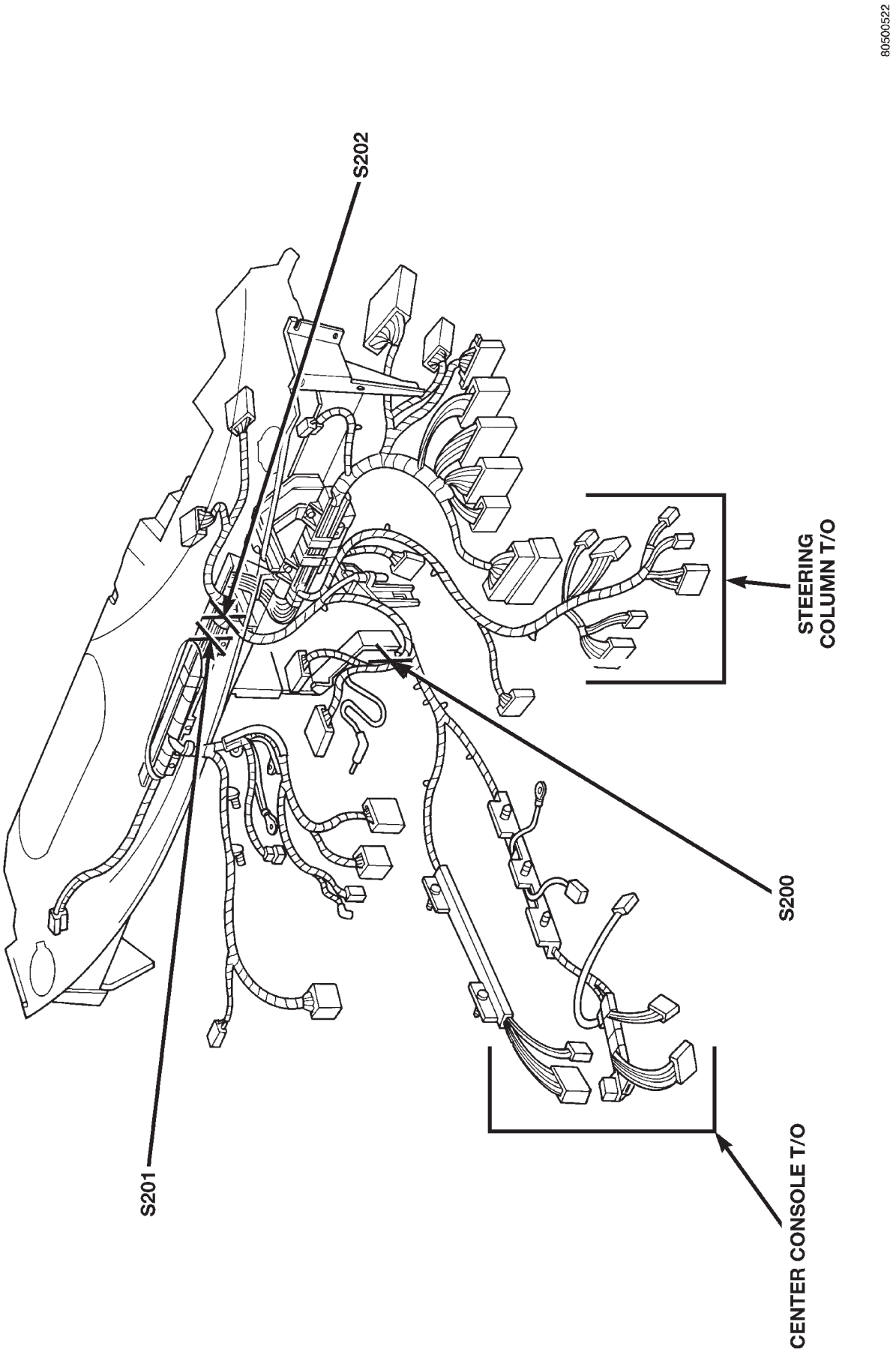


Fig. 7 Instrument Panel Splices

DESCRIPTION AND OPERATION (Continued)

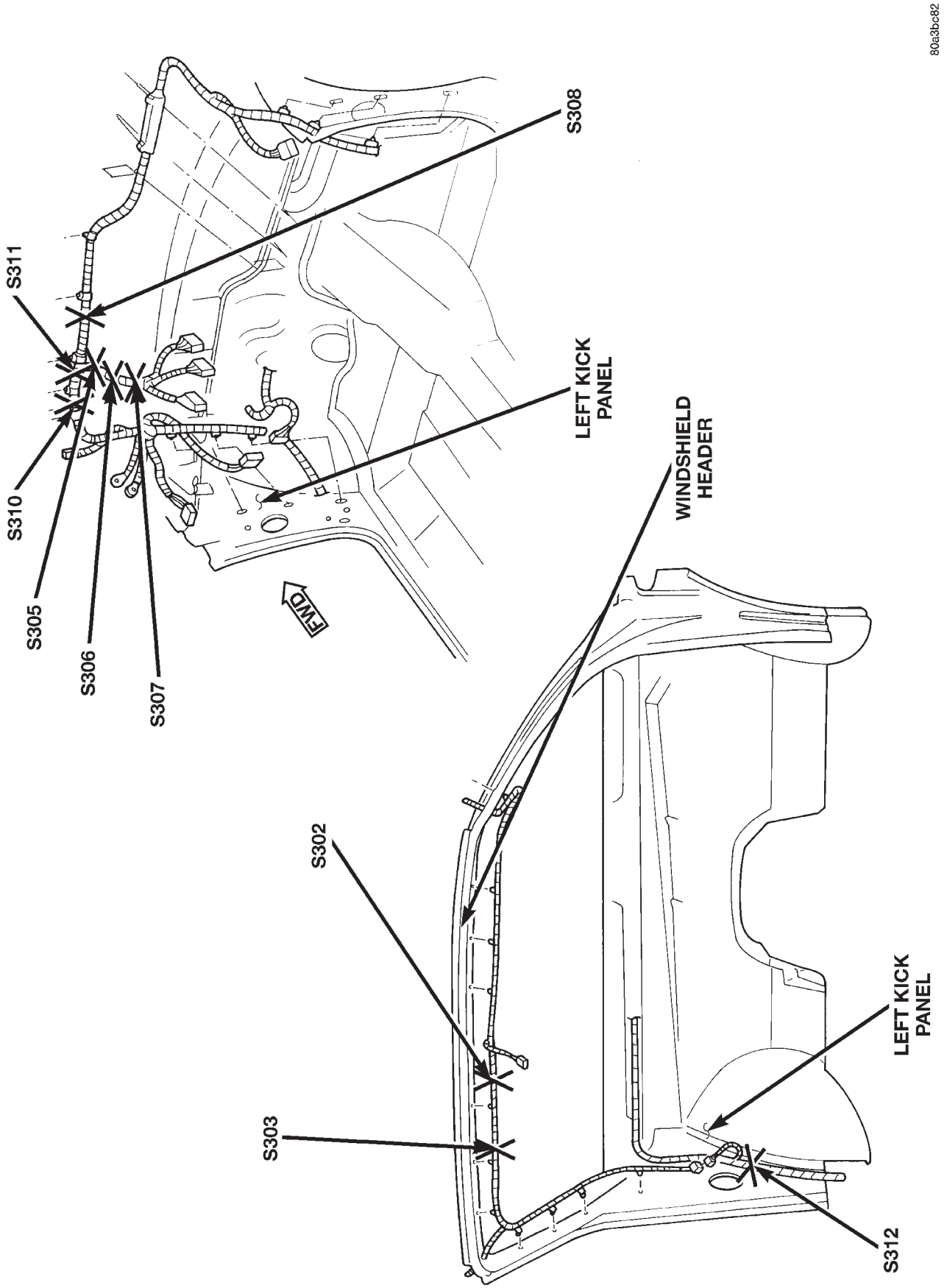


Fig. 8 Body Splices

DESCRIPTION AND OPERATION (Continued)

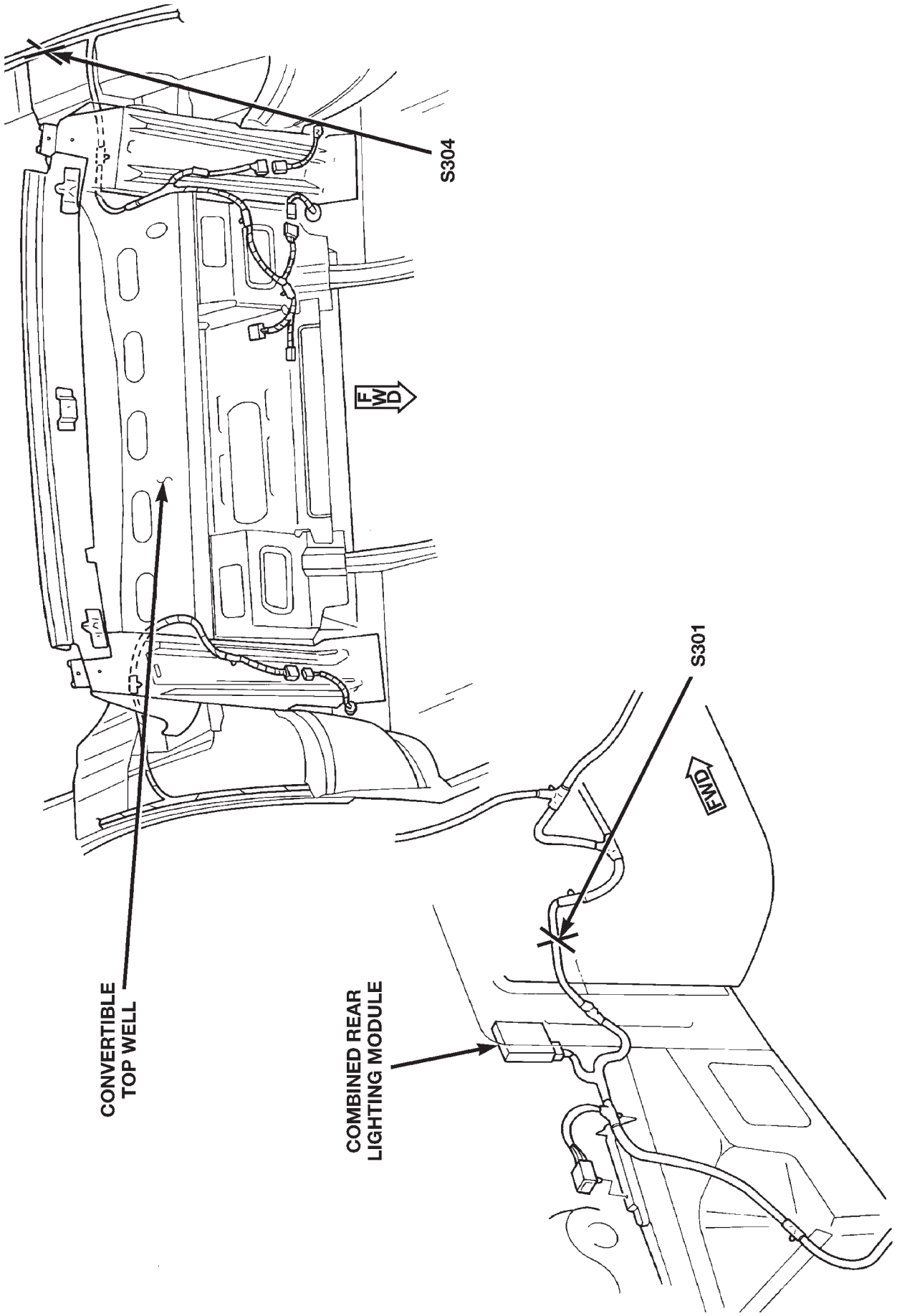


Fig. 9 Rear Body Splices

DESCRIPTION AND OPERATION (Continued)

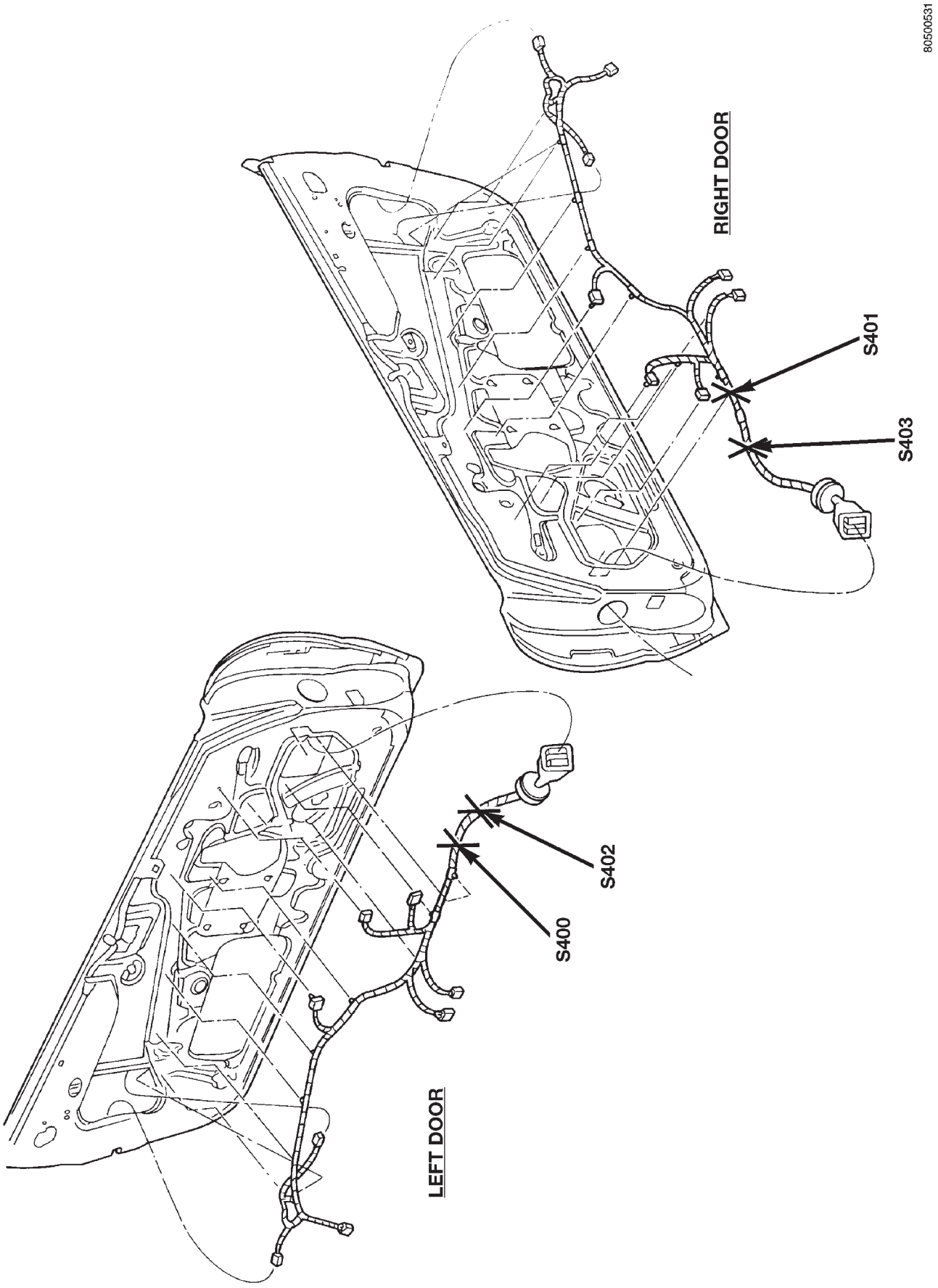


Fig. 10 Door Splices