

WIRING DIAGRAMS

CONTENTS

	page		page
8W-01 GENERAL INFORMATION	8W-01-1	8W-46 MESSAGE CENTER	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-49 OVERHEAD CONSOLE	8W-49-1
8W-15 GROUND DISTRIBUTION	8W-15-1	8W-50 FRONT LIGHTING	8W-50-1
8W-20 CHARGING SYSTEM	8W-20-1	8W-51 REAR LIGHTING	8W-51-1
8W-21 STARTING SYSTEM	8W-21-1	8W-52 TURN SIGNALS	8W-52-1
8W-30 FUEL/IGNITION SYSTEMS	8W-30-1	8W-53 WIPERS	8W-53-1
8W-31 TRANSMISSION CONTROL SYSTEM	8W-31-1	8W-54 TRAILER TOW	8W-54-1
8W-33 VEHICLE SPEED CONTROL	8W-33-1	8W-60 POWER WINDOWS	8W-60-1
8W-35 ALL-WHEEL ANTI-LOCK BRAKES	8W-35-1	8W-61 POWER DOOR LOCKS	8W-61-1
8W-39 VEHICLE THEFT SECURITY SYSTEM	8W-39-1	8W-62 POWER MIRRORS	8W-62-1
8W-40 INSTRUMENT CLUSTER	8W-40-1	8W-63 POWER SEAT	8W-36-1
8W-41 HORN/CIGAR LIGHTER	8W-41-1	8W-64 POWER SUNROOF	8W-64-1
8W-42 AIR CONDITIONING/HEATER	8W-42-1	8W-65 SPEED PROPORTIONAL STEERING	8W-65-1
8W-43 AIRBAG SYSTEM	8W-43-1	8W-70 SPLICE INFORMATION	8W-70-1
8W-44 INTERIOR LIGHTING	8W-44-1	8W-80 CONNECTOR PIN-OUTS	8W-80-1
8W-45 BODY CONTROL MODULE	8W-45-1	8W-90 CONNECTOR LOCATIONS	8W-90-1
		8W-95 SPLICE LOCATIONS	8W-95-1

8W-01 GENERAL INFORMATION

INDEX

	page		page
DESCRIPTION AND OPERATION		TROUBLESHOOTING TESTS	6
CIRCUIT IDENTIFICATION	3	TROUBLESHOOTING TOOLS	5
CONNECTOR/GROUND LOCATIONS	1	TROUBLESHOOTING WIRING PROBLEMS	6
CONNECTORS	3	SERVICE PROCEDURES	
ELECTROSTATIC DISCHARGE (ESD)		CONNECTOR AND TERMINAL REPLACEMENT .	9
SENSITIVE DEVICES	5	CONNECTOR REPLACEMENT	8
HOW TO USE THIS GROUP	1	DIODE REPLACEMENT	10
NOTES, CAUTIONS, and WARNINGS	1	TERMINAL REPLACEMENT	9
SECTION IDENTIFICATION	1	TERMINAL/CONNECTOR REPAIR-MOLEX	
SPLICE LOCATIONS	1	CONNECTORS	7
SYMBOLS	3	TERMINAL/CONNECTOR REPAIR—THOMAS	
TAKE OUTS	3	AND BETTS CONNECTORS	8
WIRE CODE IDENTIFICATION	2	WIRING REPAIR	7
DIAGNOSIS AND TESTING		SPECIAL TOOLS	
INTERMITTENT AND POOR CONNECTIONS ...	5	WIRING/TERMINAL	11

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 descrip-

tions, 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.

NOTES are used to help describe how switches or components operate to complete a particular circuit. They are also used to indicate different conditions

DESCRIPTION AND OPERATION (Continued)

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)

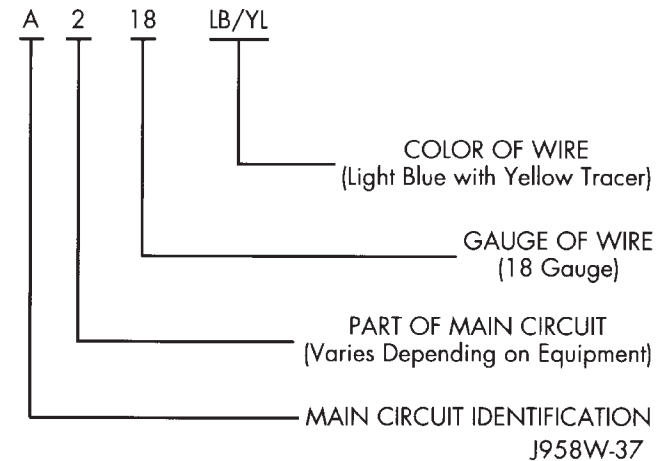


Fig. 1 Wire Code Identification

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	

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Fig. 2 Wire Color Code Chart

DESCRIPTION AND OPERATION (Continued)

CIRCUIT IDENTIFICATION

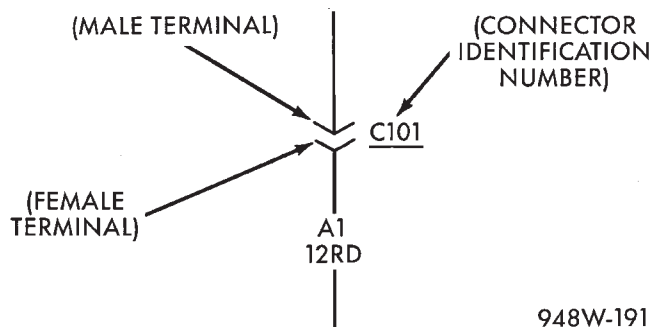
All circuits in the diagrams use an alpha/numeric code to identify the wire and its function (Fig. 3). To identify which circuit code applies to a system, refer to the Circuit Identification Code Chart. This chart shows the main circuits only and does not show the secondary codes that may apply to some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

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).

**Fig. 4 Connector Identification**

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.

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.






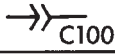



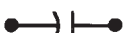































TAKE OUTS

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		CONNECTOR IDENTIFICATION
	GANG FUSES WITH BUSS BAR		MALE CONNECTOR
	CIRCUIT BREAKER		FEMALE CONNECTOR
	CAPACITOR		DENOTES WIRE CONTINUES ELSEWHERE
	OHMS		DENOTES WIRE GOES TO ONE OF TWO CIRCUITS
	RESISTOR		SPLICE
	VARIABLE RESISTOR		SPLICE IDENTIFICATION
	SERIES RESISTOR		THERMAL ELEMENT
	COIL		TIMER
	STEP UP COIL		MULTIPLE CONNECTOR
	OPEN CONTACT		OPTIONAL WIRING WITH WIRING WITHOUT
	CLOSED CONTACT		"Y" WINDINGS
	CLOSED SWITCH		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.

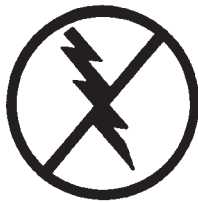
(1) Always touch a known good ground before handling the part. This should be repeated while handling the part and more frequently after sliding across a seat, sitting down from a standing position, or walking a distance.

(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.



948W-193

Fig. 6 Electrostatic Discharge Symbol**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.

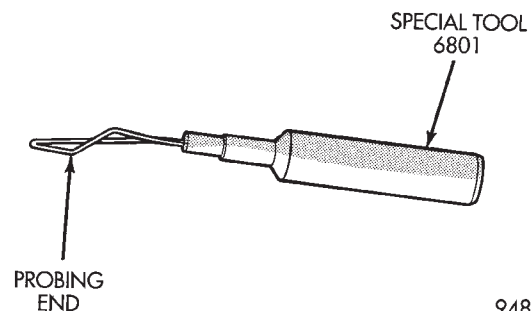
- **Voltmeter** - Used to check for voltage on a circuit. Always connect the black lead to a known good ground and the red lead to the positive side of the circuit.

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. 7). Select the proper 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.



948W-233

Fig. 7 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

DIAGNOSIS AND TESTING (Continued)

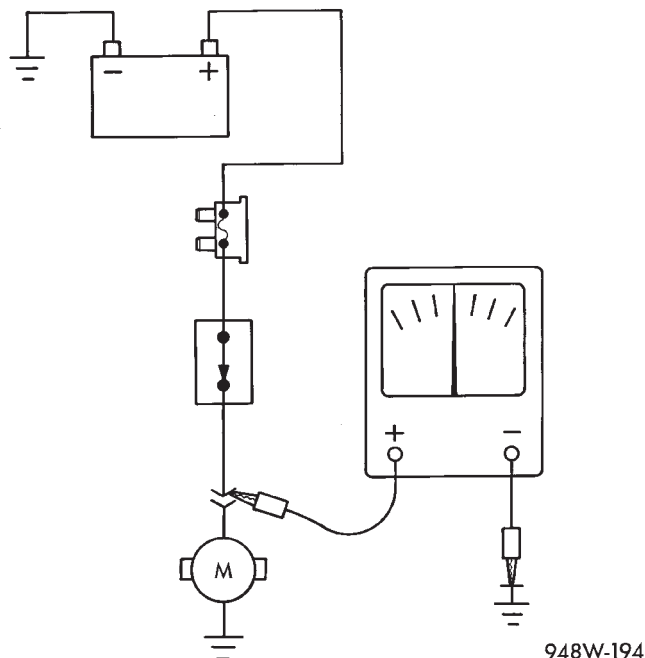
TROUBLESHOOTING TESTS

Before beginning any tests on a vehicle's 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. 8).

(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.



948W-194

Fig. 8 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. 9).

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

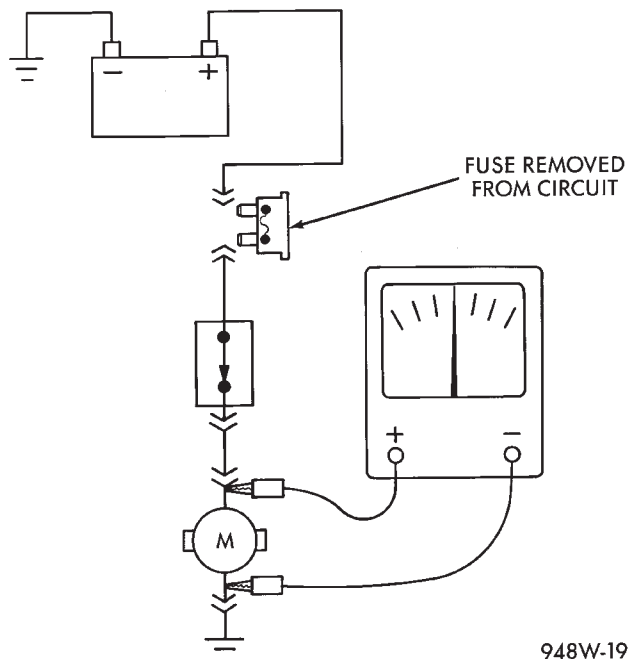
TESTING FOR A SHORT TO GROUND

(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.



948W-195

Fig. 9 Testing for Continuity

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.

(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. 10).

(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.

DIAGNOSIS AND TESTING (Continued)

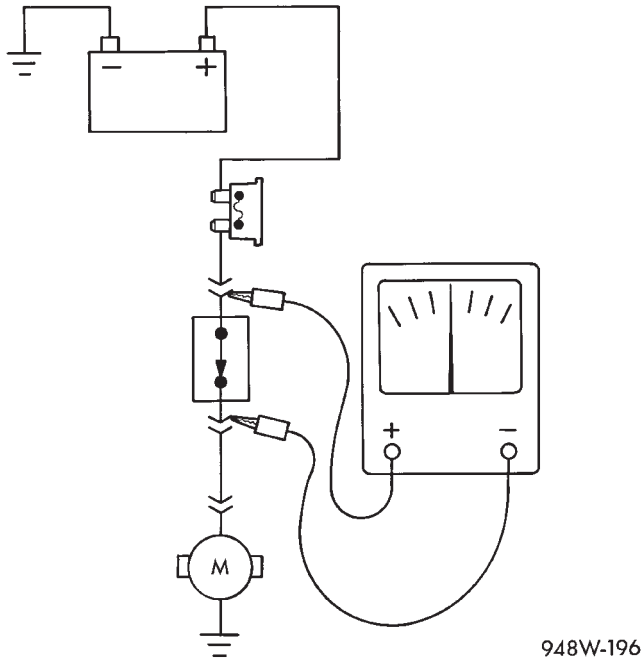


Fig. 10 Testing for Voltage Drop

(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. 11)

(5) Push the two ends of wire together until the strands of wire are close to the insulation (example 2) (Fig. 11)

(6) Twist the wires together (example 3) (Fig. 11)

(7) Solder the connection together using rosin core type solder. **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

(10) Connect battery and test all affected systems.

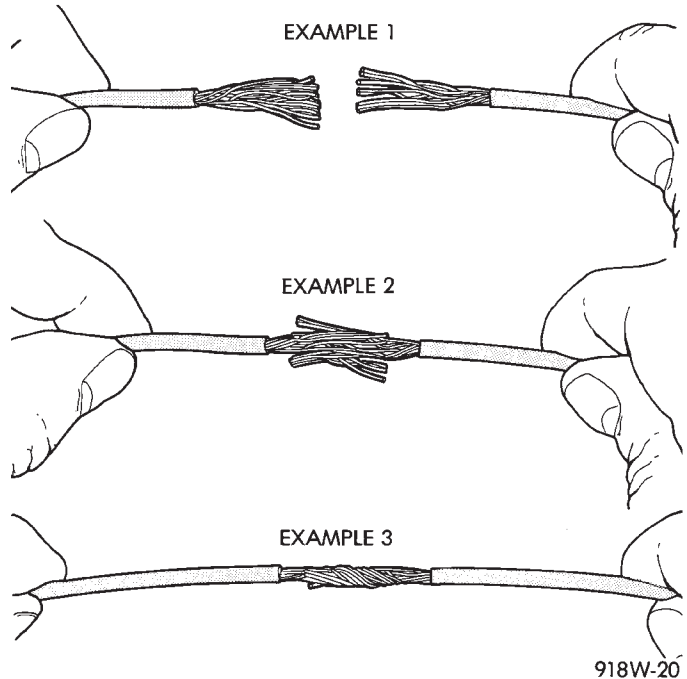


Fig. 11 Wire Repair

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. 12).

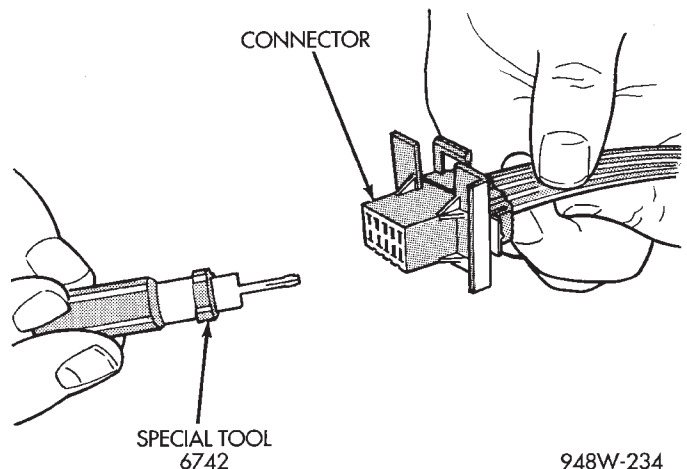


Fig. 12 Molex Connector Repair

SERVICE PROCEDURES (Continued)

(4) Using special tool 6742 release the locking fingers on the terminal (Fig. 13).

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

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

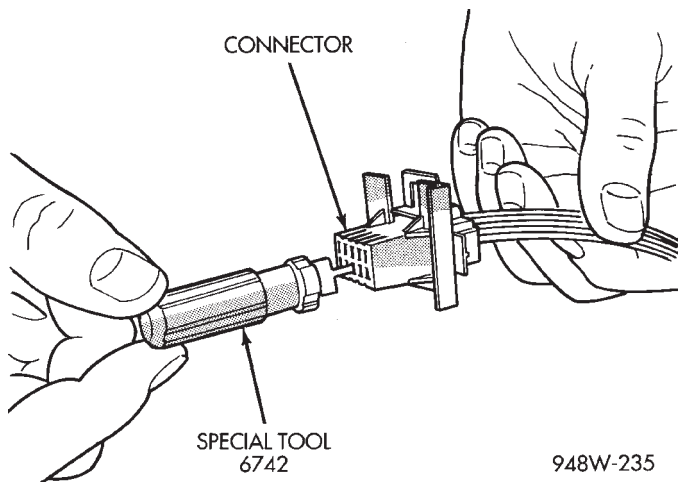


Fig. 13 Using Special Tool 6742

TERMINAL/CONNECTOR REPAIR—THOMAS AND BETTS CONNECTORS

- (1) Disconnect battery.
- (2) Disconnect the connector from its mating half/component.
- (3) Push in the two lock tabs on the side of the connector (Fig. 14).

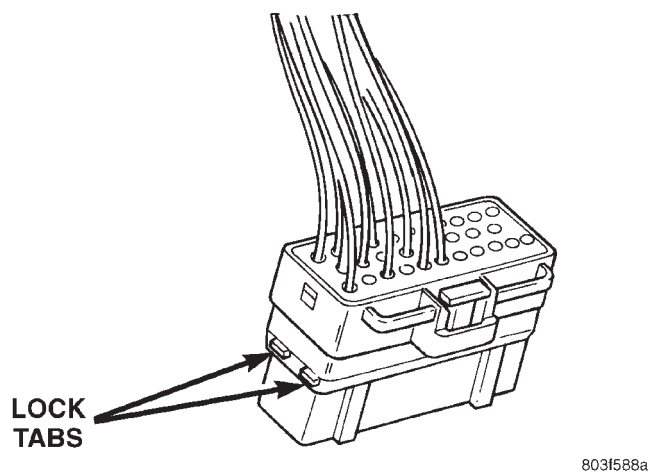


Fig. 14 Thomas and Betts Connector Lock Release Tabs

(4) Insert the probe end of special tool 6934 into the back of the connector cavity (Fig. 15).

(5) Grasp the wire and tool 6934 and slowly remove the wire and terminal from the connector.

(6) Repair or replace the terminal.

(7) Install the wire and terminal in the connector. Fully seat the terminal in the connector.

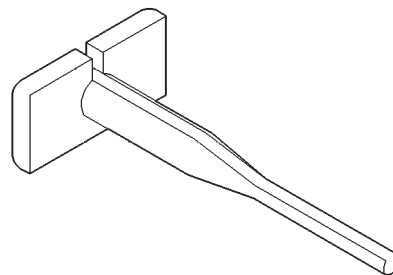


Fig. 15 Removing Wire Terminal

(8) Push in the single lock tab on the side of the connector (Fig. 16).

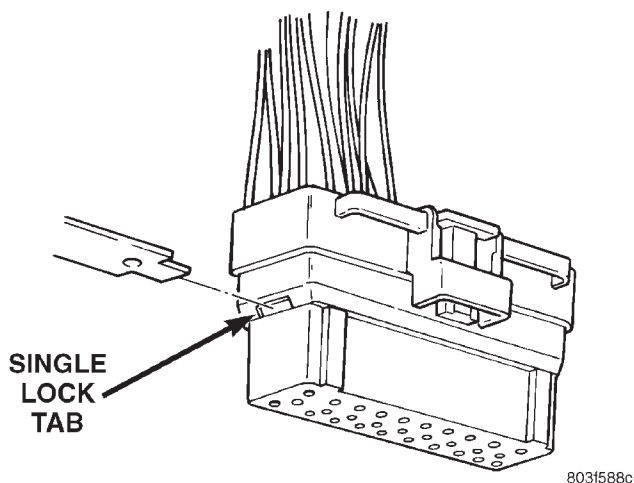


Fig. 16 Single Lock Tab

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. 17)

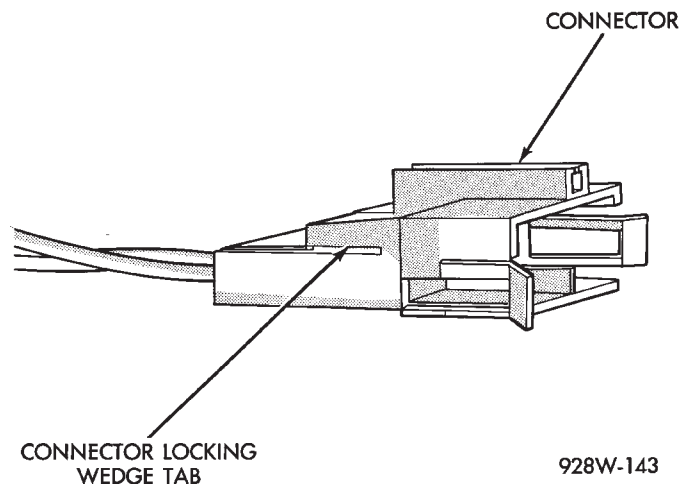


Fig. 17 Connector Locking Wedge

SERVICE PROCEDURES (Continued)

(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. 18) (Fig. 19).

(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 pin-out 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.

(10) Connect battery and test all affected systems.

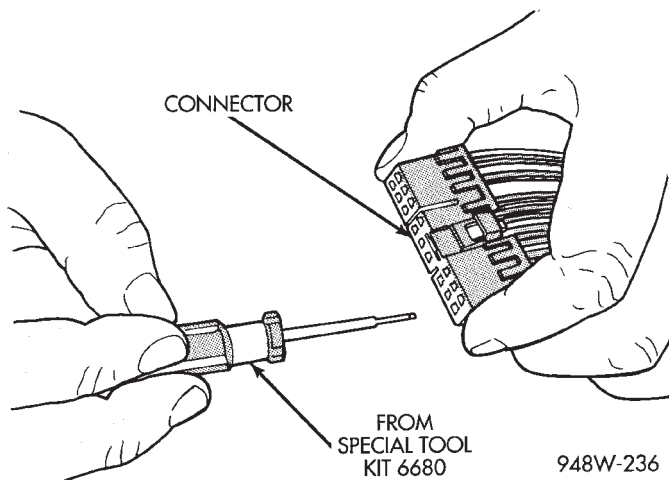


Fig. 18 Terminal Removal

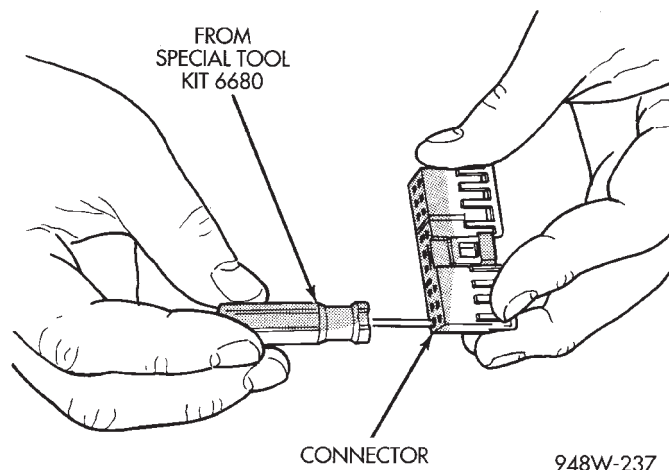


Fig. 19 Terminal Removal Using Special Tool

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. 20).

(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. 20).

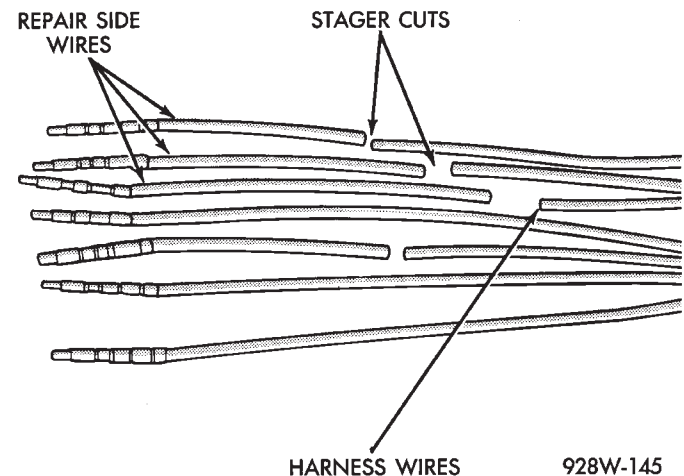


Fig. 20 Stagger Cutting Wires

(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.

(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 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)

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

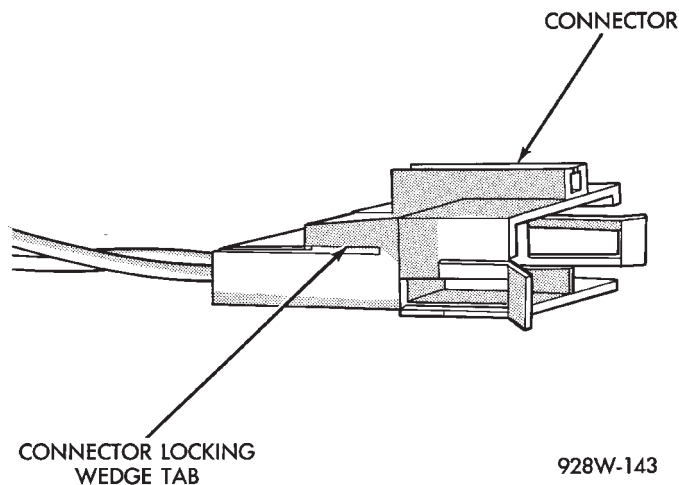


Fig. 21 Connector Locking Wedge Tab (Typical)

(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).

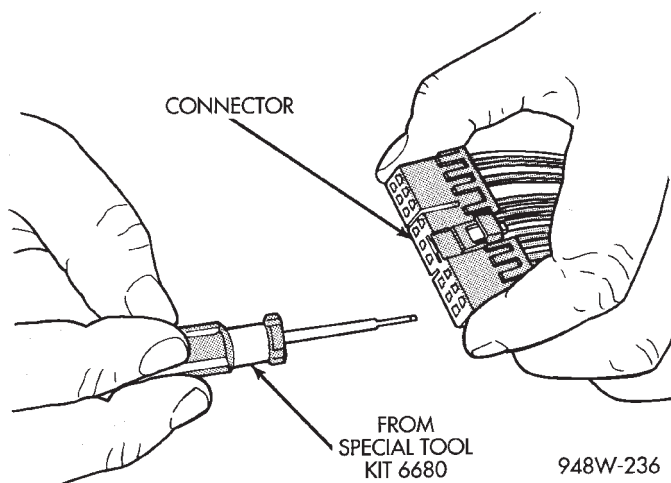


Fig. 22 Terminal Removal

(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.

(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.

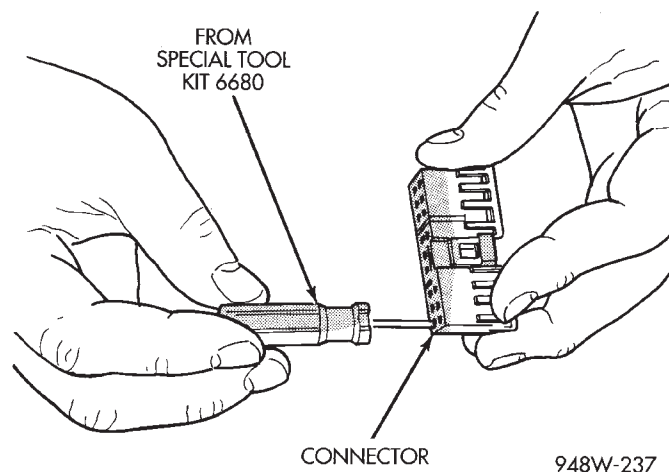


Fig. 23 Terminal Removal Using Special Tool

(12) Twist the wires together.

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

(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).

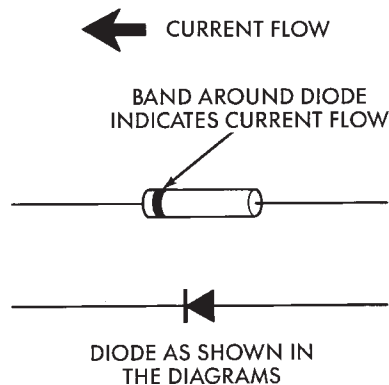


Fig. 24 Diode Identification

SERVICE PROCEDURES (Continued)

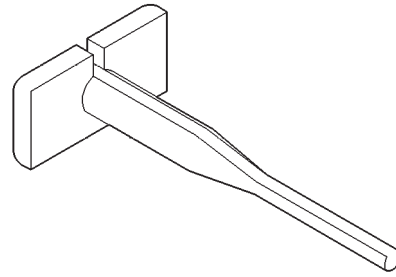
(4) Remove the insulation from the wires in the harness. Only remove enough insulation to solder in the new diode.

(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.**

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

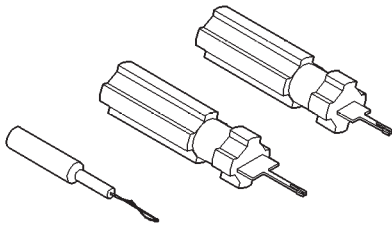
(8) Re-connect the battery, and test affected systems.



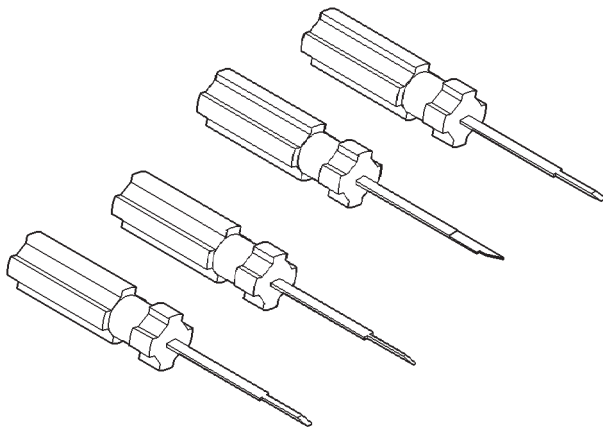
Terminal Removing Tool 6934

SPECIAL TOOLS

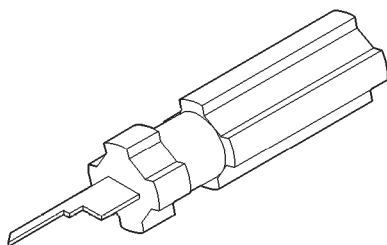
WIRING/TERMINAL



Probing Tool Package 6807



Terminal Pick 6680



Terminal Removing Tool 6932

8W-02 COMPONENT INDEX

INDEX

page

GENERAL INFORMATION 4

Component	Page	Component	Page
A/C Compressor Clutch	8W-42	Cylinder Lock Switches	8W-39
A/C Compressor Clutch Relay	8W-42	Data Link Connector	8W-30
A/C Heater Control	8W-42	Daytime Running Lamp (DRL) Module	8W-50
A/C High Pressure Switch	8W-42	Dome/Reading Lamp	8W-44
A/C Low Pressure Switch	8W-42	Door Ajar Switches	8W-39, 44, 45
ABS Warning Lamp	8W-40	Door Courtesy Lamps	8W-44
Aftermarket Trailer Tow Connector	8W-54	Door Lock Motors	8W-61
Airbag Control Module	8W-43	Door Speakers	8W-47
Airbag Warning Lamp	8W-40, 43	Driver Door Module	8W-60, 61, 62, 63
Ambient Temperature Sensor	8W-42, 45	Driver Heated Seat Back	8W-63
Antenna	8W-47	Driver Heated Seat Cushion	8W-63
Ash Receiver Lamp	8W-44	Driver Lumbar Motor	8W-63
Automatic Day/Night Mirror	8W-44	Driver Lumbar Sensor/Motor	8W-63
Automatic Headlamp Light		Driver Lumbar Switch	8W-63
Sensor/Vtss Led	8W-45, 50	Driver Power Mirror	8W-62
Automatic Headlamp Relay	8W-12, 50	Driver Power Seat Front Riser Motor	8W-63
Automatic Shut Down Relay	8W-10, 20, 30, 42	Driver Power Seat Front Riser Motor Sensor	8W-63
Automatic Temperature Control Module	8W-42	Driver Power Seat Horizontal Motor	8W-63
Back-Up Lamp Switch	8W-51	Driver Power Seat Horizontal Motor Sensor	8W-63
Back-Up Lamps	8W-51	Driver Power Seat Rear Riser Motor	8W-63
Battery	8W-15, 20	Driver Power Seat Rear Riser Motor Sensor	8W-63
Battery Temperature Sensor	8W-30	Driver Power Seat Recliner Motor	8W-63
Blend Door Actuator	8W-42	Driver Power Seat Recliner Motor Sensor	8W-63
Blower Motor	8W-42	Driver Power Seat Switch	8W-63
Blower Motor Resistor Block	8W-42	Driver Seat Heater Control Module	8W-63
Blower Power Module	8W-42	Driver Side Airbag	8W-43
Body Control Module	8W-39, 40, 45	Duty Cycle Evap/Purge Solenoid	8W-30
Brake Warning Lamp	8W-40	EGR Solenoid	8W-30
Brake Warning Switch	8W-40	Electronic Flasher	8W-52
Camshaft Position (CMP) Sensor	8W-30	Engine Coolant Level Sensor	8W-46
Cargo Lamp	8W-44	Engine Coolant Temperature (ECT) Sensor	8W-30
Center High Mounted Stop Lamps (CHMSL)	8W-51	Engine Starter Motor	8W-21
Check Engine Lamp	8W-40	Engine Starter Motor Relay	8W-21
Check Gages Lamp	8W-40	Evaporative System Leak Detection Pump	8W-30
Cigar Lighter	8W-41	Factory Trailer Tow Connector	8W-54
Cigar Lighter Lamp	8W-44	Floor Console Lamps	8W-44
Cigar Lighter Relay	8W-41	Fog Lamp Relay	8W-12, 50
Circuit Breakers	8W-10, 12, 50, 54	Fog Lamp Switch	8W-50
Clockspring	8W-30, 33, 39, 47	Fog Lamps	8W-50, 51
Clutch Interlock Switch	8W-21	Four Wheel Drive Switch	8W-46
Controller Anti-Lock Brake	8W-35	Fuel Gauge	8W-40
Coolant Level Sensor	8W-30	Fuel Heater	8W-30
Courtesy Lamp Relay	8W-44	Fuel Heater Relay	8W-30
Courtesy Lamps	8W-44	Fuel Injectors	8W-30
Crankshaft Position (CKP) Sensor	8W-30	Fuel Pump Module	8W-30
Cruise Lamp	8W-40	Fuel Pump Relay	8W-30

Component	Page	Component	Page
Fuel Sender Unit	8W-30	Oil Pressure Gauge	8W-40
Fuses (JB)	8W-12	Oil Pressure Sensor	8W-30
Fuses (PDC)	8W-10	Output Shaft Speed Sensor	8W-30, 31
G Switch	8W-35	Overhead Console	8W-49
Gauge	8W-40	Park Brake Switch	8W-45, 50
Generator	8W-20	Park Lamp Relay	8W-12, 45, 50, 51
Glove Box Lamp	8W-44	Park Lamps	8W-50, 52
Glow Plug	8W-30	Park/Neutral Position Switch	8W-30, 44
Glow Plug Relay	8W-30	Passenger Door Module	8W-60, 61, 62
Graphic Display Module	8W-46	Passenger Heated Seat Back	8W-63
Ground Distribution	8W-15	Passenger Heated Seat Cushion	8W-63
Headlamp Dimmer Switch	8W-50	Passenger Lumbar Motor	8W-63
Headlamp Leveling Motors	8W-50	Passenger Lumbar Switch	8W-63
Headlamp Leveling Switch	8W-50	Passenger Power Mirror	8W-62
Headlamp Switch	8W-50	Passenger Power Seat Front Riser Motor	8W-63
Headlamps	8W-50	Passenger Power Seat Horizontal Motor	8W-63
Heated Oxygen Sensors	8W-30	Passenger Power Seat Rear Riser Motor	8W-63
Heated Seat Switch	8W-63	Passenger Power Seat Recliner Motor	8W-63
High Beam Indicator Lamp	8W-40	Passenger Power Seat Switch	8W-63
High Speed Blower Motor Relay	8W-42	Passenger Seat Heater Control Module	8W-63
Hood Switch	8W-39	Passenger Side Airbag	8W-43
Horn Relay	8W-39, 41	Pedal Position Sensor	8W-30, 31
Horn Switch	8W-39, 41	Power Amplifier	8W-47
Horns	8W-39, 41	Power Antenna	8W-47
Idle Air Control (IAC) Motor	8W-30	Power Antenna Relay	8W-12, 47
Ignition Coil	8W-30	Power Distribution Center	8W-10
Ignition Switch	8W-10	Power Outlet	8W-41
Illumination Lamps	8W-40, 44	Power Window Motors	8W-60
In-Car Temperature Sensor	8W-42	Power Window Switches	8W-60
Instrument Cluster	8W-40	Powertrain Control Module	8W-20, 30, 33
Instrument Panel Speakers	8W-47	Radio	8W-47
Intake Air Temperature (IAT) Sensor	8W-30	Radio Remote Switches	8W-47
Intermittent Wiper Relay	8W-53	Rear Fog Lamp Relay A	8W-51
Intermittent Wiper Switch	8W-53	Rear Speakers	8W-47
Junction Block	8W-12	Rear Washer Pump Motor	8W-53
Key-In Switch/Halo Lamp	8W-44, 45	Rear Window Defogger	8W-48
Lamp Outage Module	8W-51	Rear Window Defogger Relay	8W-12, 48
License Lamps	8W-51	Rear Window Defogger Switch	8W-48
Liftgate Ajar Switch	8W-39, 44, 45, 53	Rear Wiper Module	8W-53
Liftgate Cylinder Lock Switch	8W-39	Rear Wiper Motor	8W-53
Liftgate Lock Motor	8W-61	Rear Wiper/Washer Switch	8W-53
Liftglass Ajar Switch	8W-39, 44, 45	Recirculation Door Actuator	8W-42
Liftglass Limit Switch	8W-61	Seat Belt Switch	8W-45
Liftglass Push Button	8W-61	Seat Belt Warning Lamp	8W-40
Liftglass Release Solenoid	8W-61	Shift Interlock	8W-31
Low Fuel Warning Lamp	8W-40	Side Marker Lamps	8W-52
Manifold Absolute Pressure (MAP) Sensor ...	8W-30	Side Repeaters	8W-52
Mass Air Flow Module	8W-30	Sliding Roof Motor	8W-64
Memory Seat Module	8W-63	Sliding Roof Position Switch	8W-64
Memory Set Switch 1 Set	8W-63	Solar Sensor	8W-42
Mercury Switch	8W-44	Speed Proportional Steering Control Module .	8W-65
Mode Door Actuator	8W-42	Speed Proportional Steering Module	8W-65
MSA Controller	8W-10, 30, 33	Speed Proportional Steering Solenoid	8W-65
Needle Sensor	8W-30	Speedometer	8W-40

Component	Page	Component	Page
Splice Information	8W-70	Turn Signal Indicator Lamps	8W-40
Steering Wheel Speed Sensor	8W-65	Turn Signal Lamps	8W-40, 50, 52
Stop Lamp Switch	8W-33	Turn Signal/Hazard Warning Switch	8W-52
Sunroof Control Module	8W-64	Underhood Lamp	8W-44
Sunroof Switch	8W-64	Universal Garage Door Opener	8W-44
Switch Pod	8W-44	Variable Force Solenoid	8W-31
Tachometer	8W-40	Vehicle Information Center	8W-46
Tail/Stop Lamps	8W-51	Vehicle Speed Control Servo	8W-33
Throttle Position (TP) Sensor	8W-30, 31	Vehicle Speed Control/Horn	
Torque Converter Clutch Solenoid	8W-31	Switch	8W-30, 33, 39, 41, 47
Trailer Brake Provision	8W-54	Vehicle Speed Sensor	8W-30, 31, 33
Trailer Tow Circuit Breaker	8W-54	Visor/Vanity Lamps	8W-44
Trailer Tow Stop Lamp Relay	8W-54	Volt Meter	8W-40
Trailer Tow Turn Relays	8W-54	Water In Fuel Sensor	8W-30
Transmission Control Relay	8W-30, 31	Wheel Speed Sensors	8W-35
Transmission Solenoid Assembly	8W-30, 31	Windshield Washer Pump Motor	8W-53
		Windshield Wiper Motor	8W-53
		Wiper Fluid Level Sensor	8W-46, 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.

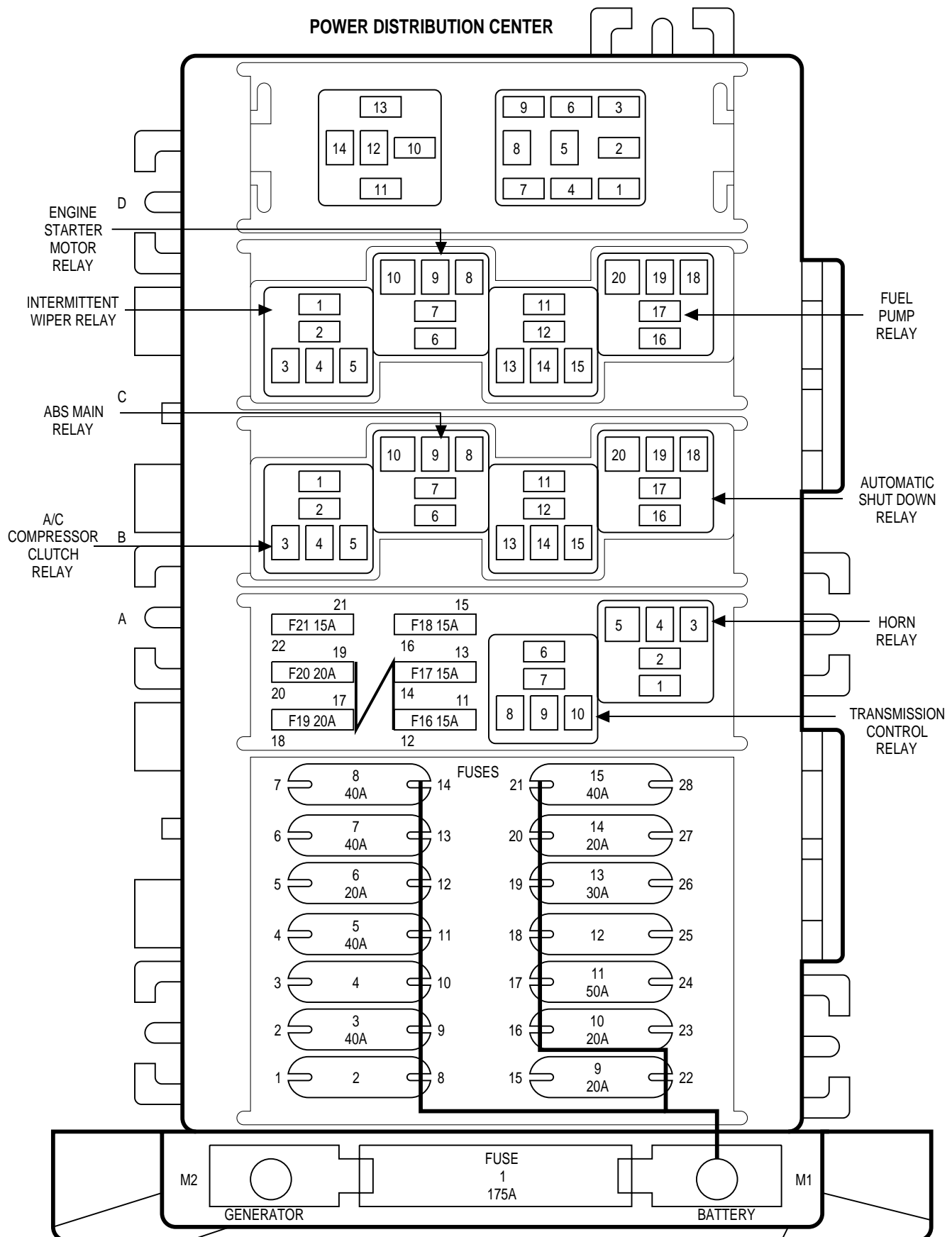
8W-10 POWER DISTRIBUTION

INDEX

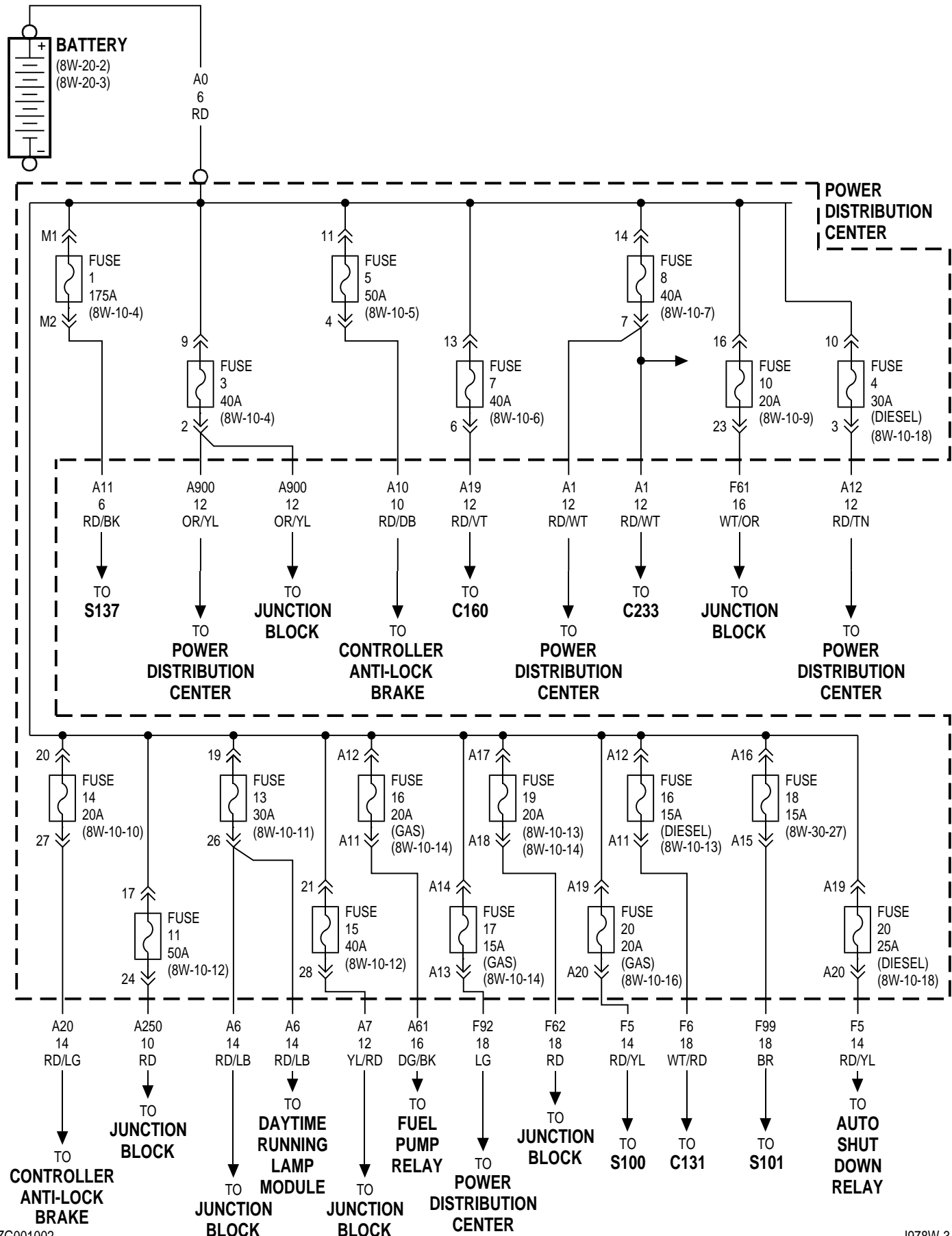
page

SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	24

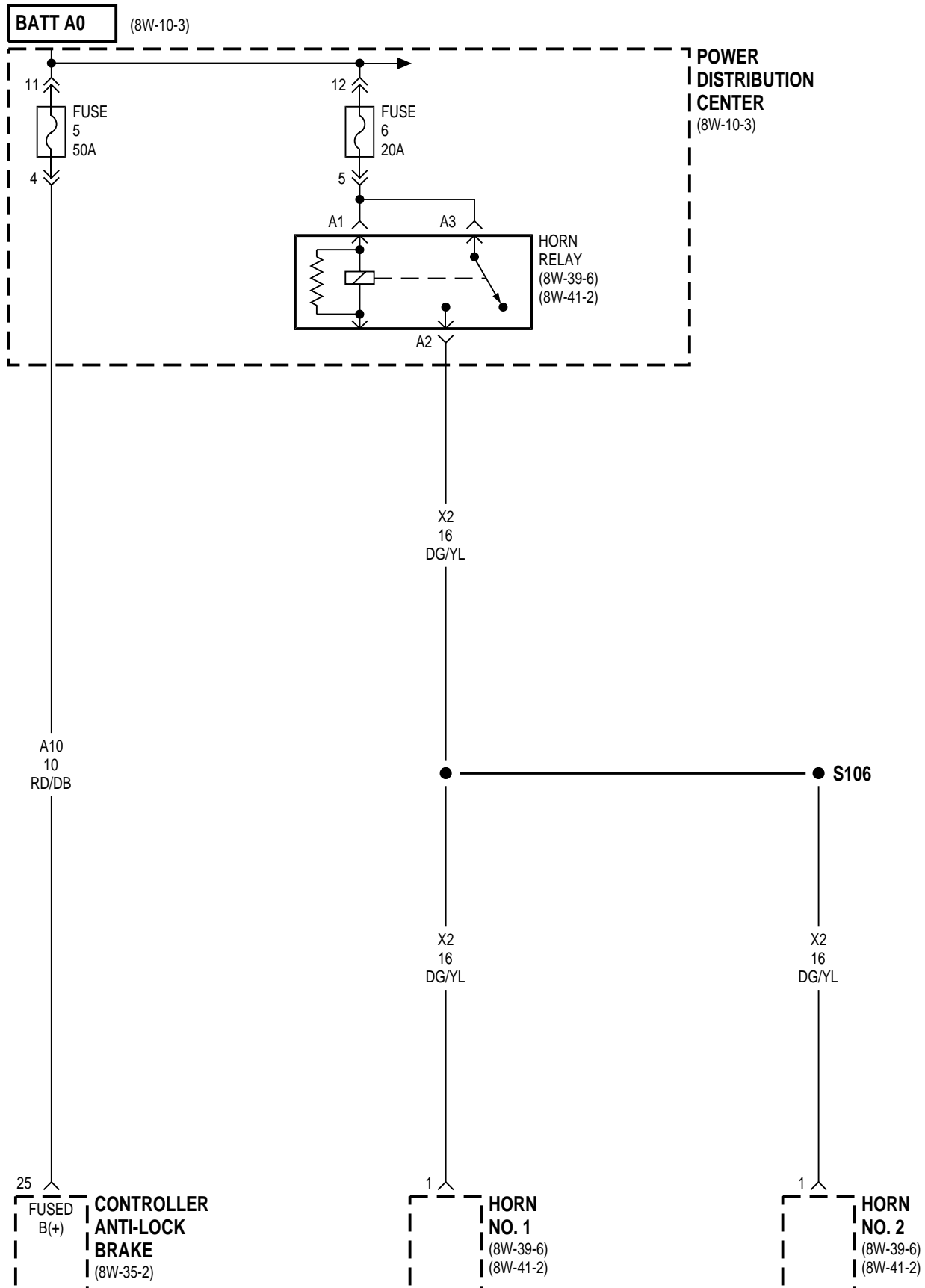
Component	Page	Component	Page
A/C Compressor Clutch	8W-10-4	Fuse 13	8W-10-3, 11, 12
A/C Compressor Clutch Relay	8W-10-4, 15	Fuse 14	8W-10-3, 9, 10
Automatic Headlamp Relay	8W-10-11	Fuse 15	8W-10-3, 12
Automatic Shut Down Relay	8W-10-15, 16, 18	Fuse 16	8W-10-3, 12, 13, 14
Automatic Temperature Control Module	8W-10-6	Fuse 17	8W-10-3, 11, 14
Battery	8W-10-3	Fuse 18	8W-10-8, 13, 14
Blower Motor	8W-10-6	Fuse 19	8W-10-3, 12, 13, 14
Blower Power Module	8W-10-6	Fuse 20	8W-10-3, 12, 16, 18
Body Control Module	8W-10-15	Fuse 21	8W-10-4, 12
Brake Warning Switch	8W-10-7	Fuse 22	8W-10-8
Circuit Breaker	8W-10-11	Generator	8W-10-4, 19
Circuit Breaker 1	8W-10-9	Glow Plug Relay	8W-10-19
Circuit Breaker 2	8W-10-10	Headlamp Dimmer Switch	8W-10-11
Circuit Breaker 3	8W-10-12	Headlamp Switch	8W-10-11, 13, 14
Clutch Interlock Switch	8W-10-7	High Speed Blower Motor Relay	8W-10-6
Controller Anti-Lock Brake	8W-10-5, 10	Horn No. 1	8W-10-5
Daytime Running Lamp Module	8W-10-11	Horn No. 2	8W-10-5
Downstream Heated Oxygen Sensor	8W-10-17	Horn Relay	8W-10-5
Duty Cycle Evap/Purge Solenoid	8W-10-15	Ignition Coil	8W-10-17
EGR Solenoid	8W-10-19	Ignition Switch	8W-10-7, 8, 9
Engine Starter Motor	8W-10-7	Junction Block	8W-10-4, 8, 9, 10, 11, 12, 13, 14
Engine Starter Motor Relay	8W-10-7	Left Fog Lamp	8W-10-13, 14
Evaporative System Leak Detection Pump	8W-10-15	Mass Air Flow Module	8W-10-19
Fog Lamp Relay	8W-10-13, 14	MSA Controller	8W-10-15, 18, 19
Fuel Heater Relay	8W-10-15, 18	Power Distribution Center	8W-10-3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 16, 18
Fuel Injector No. 1	8W-10-17	Powertrain Control Module	8W-10-13, 15, 16, 19
Fuel Injector No. 2	8W-10-17	Rear Window Defogger	8W-10-4
Fuel Injector No. 3	8W-10-17	Rear Window Defogger Relay	8W-10-4
Fuel Injector No. 4	8W-10-17	Right Fog Lamp	8W-10-13, 14
Fuel Injector No. 5	8W-10-17	S100	8W-10-16
Fuel Injector No. 6	8W-10-17	S101	8W-10-15
Fuel Injector No. 7	8W-10-17	S105	8W-10-13, 14
Fuel Injector No. 8	8W-10-17	S106	8W-10-5
Fuel Pump Module	8W-10-14, 19	S128	8W-10-17, 19
Fuel Pump Relay	8W-10-14, 15	S129	8W-10-17, 19
Fuse 1	8W-10-3, 4, 9	S137	8W-10-4
Fuse 2	8W-10-9	S138	8W-10-15
Fuse 3	8W-10-3, 4, 9	S210	8W-10-7
Fuse 4	8W-10-3, 8, 18	S224	8W-10-6
Fuse 5	8W-10-3, 5, 8	S225	8W-10-6
Fuse 6	8W-10-5, 8	S332	8W-10-4
Fuse 7	8W-10-3, 6, 10	Transmission Control Relay	8W-10-14
Fuse 8	8W-10-3, 7, 10	Transmission Solenoid Assembly	8W-10-14
Fuse 9	8W-10-10	Upstream Heated Oxygen Sensor	8W-10-17
Fuse 10	8W-10-3, 4, 9		
Fuse 11	8W-10-3, 8, 10		
Fuse 12	8W-10-8		

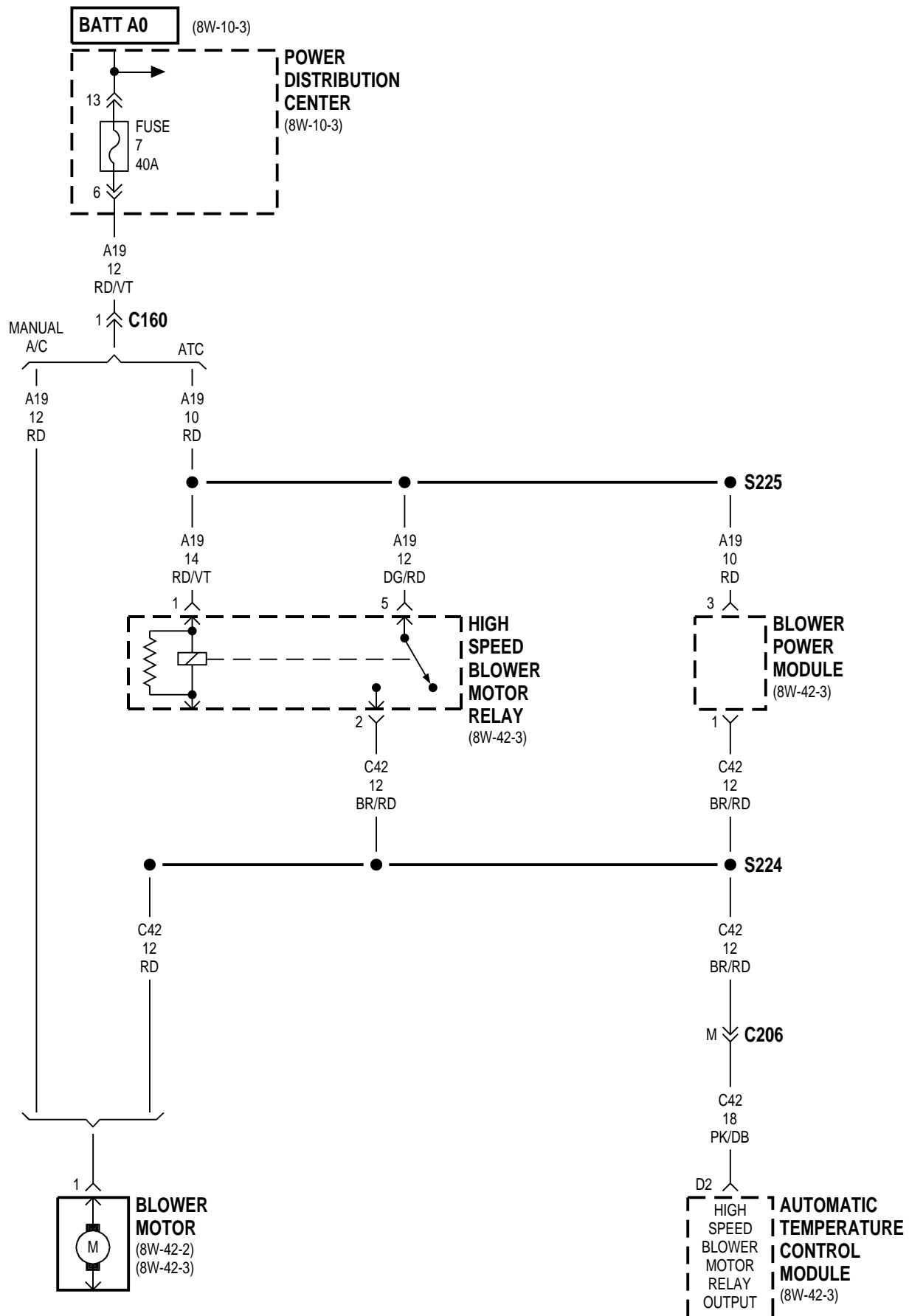


SEE PAGE 8W-10-17 FOR PDC PIN-OUT INFORMATION

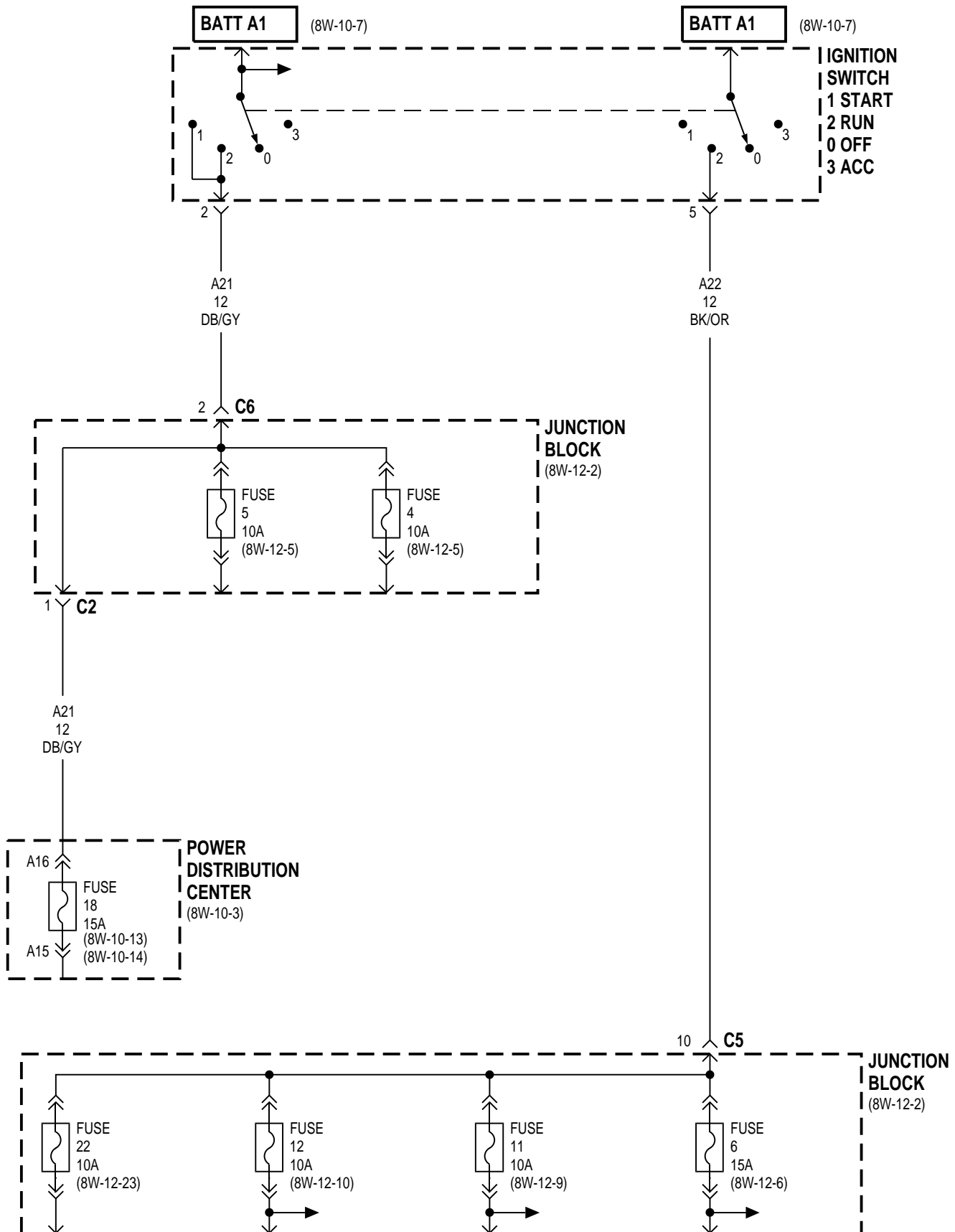


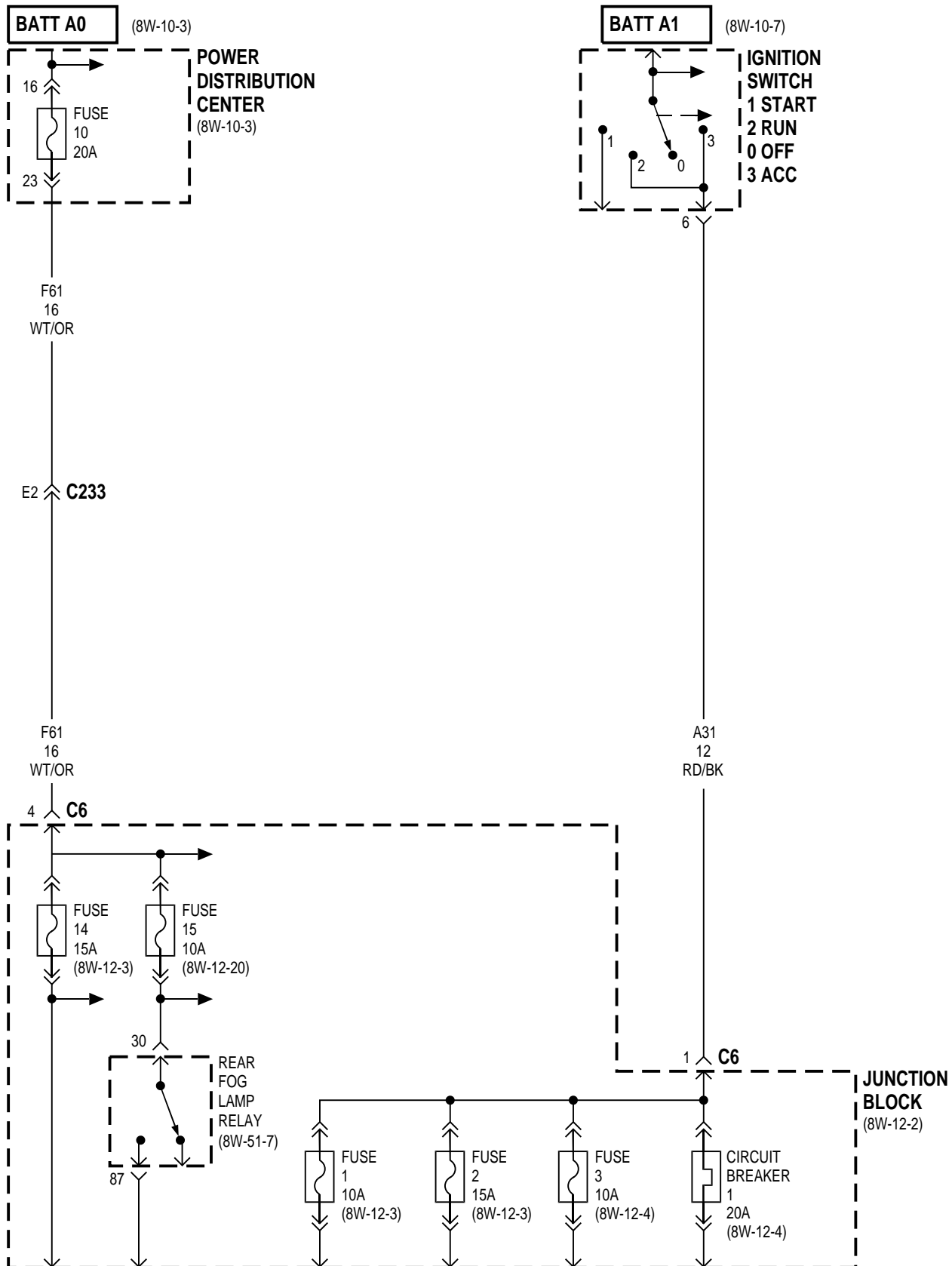


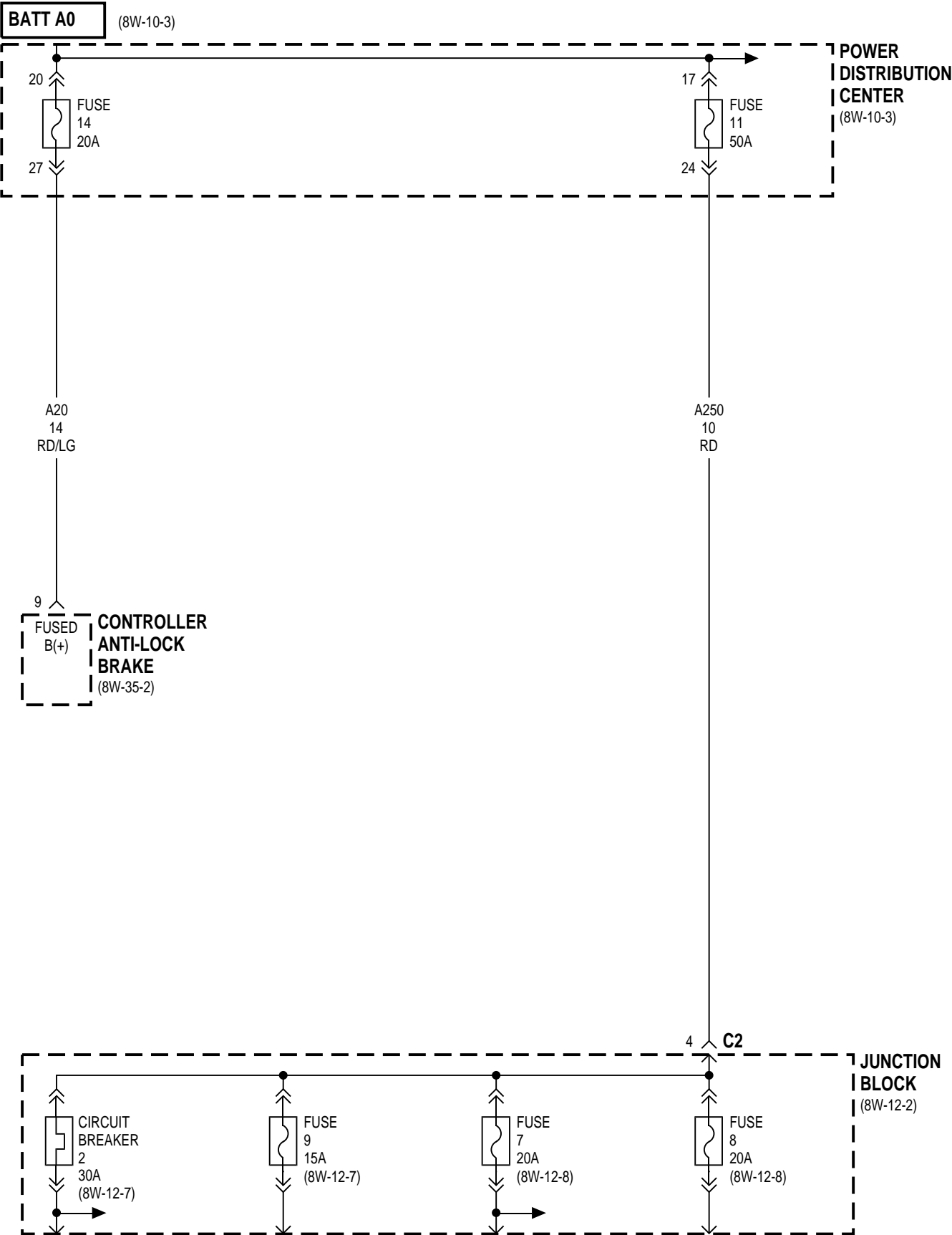


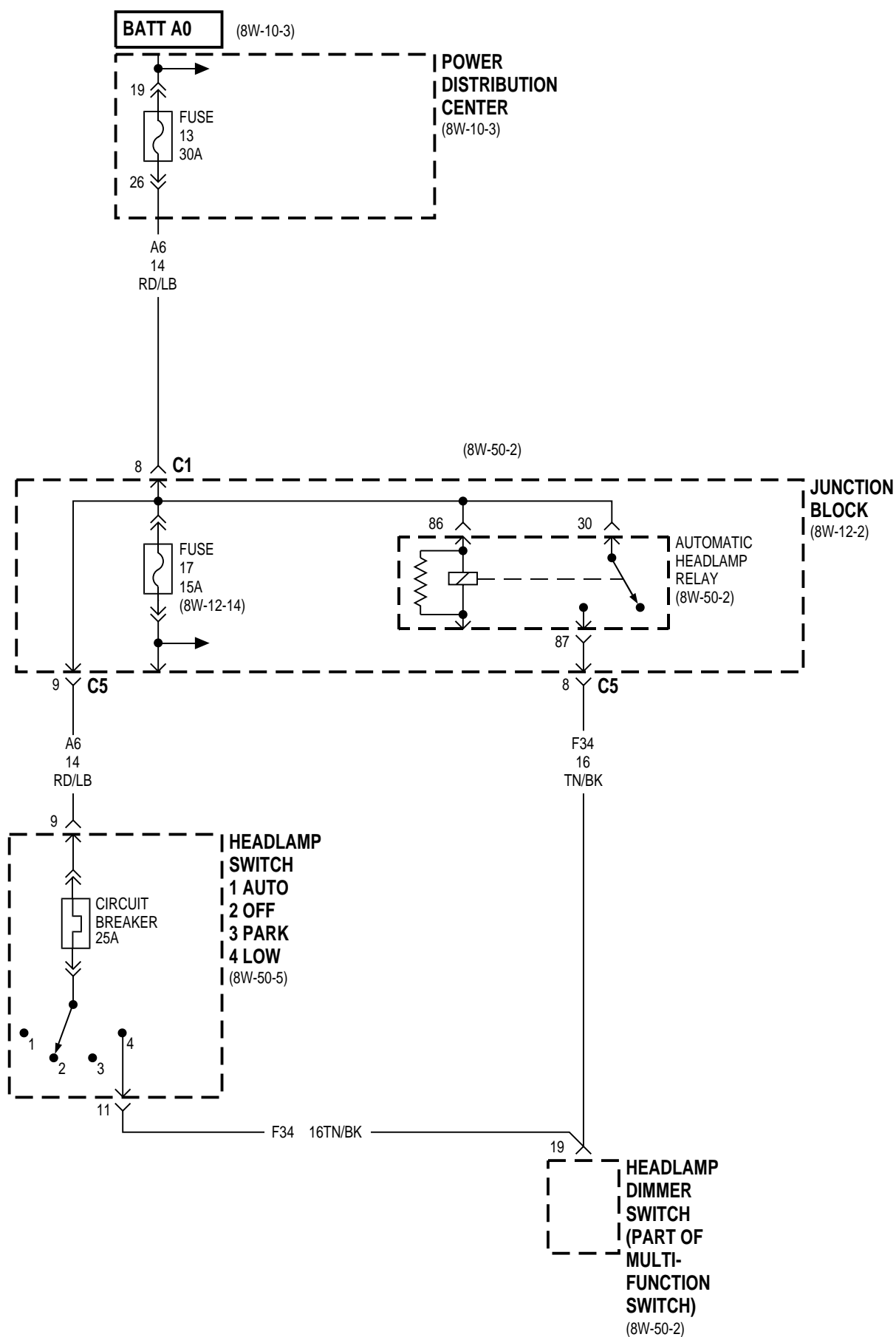


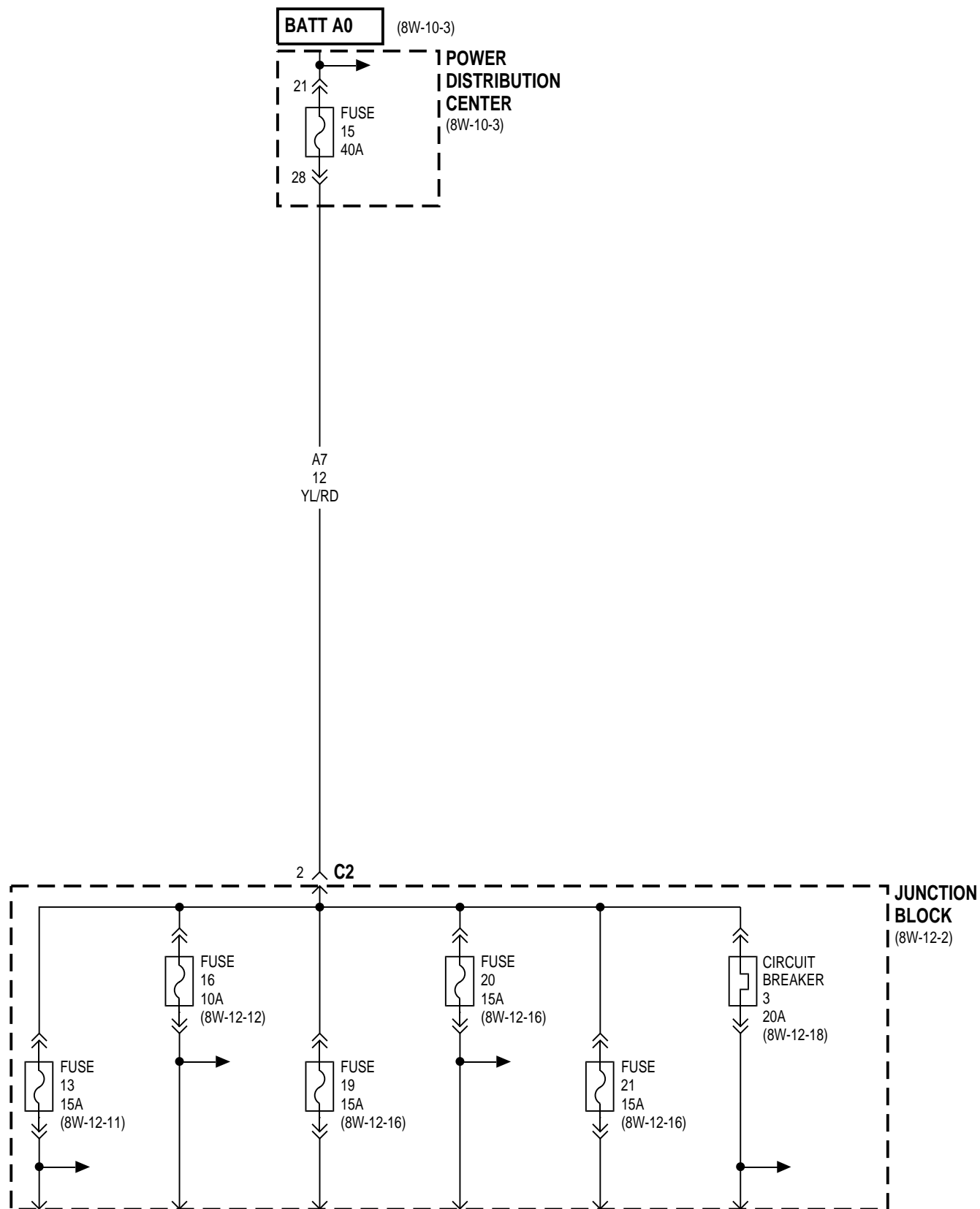


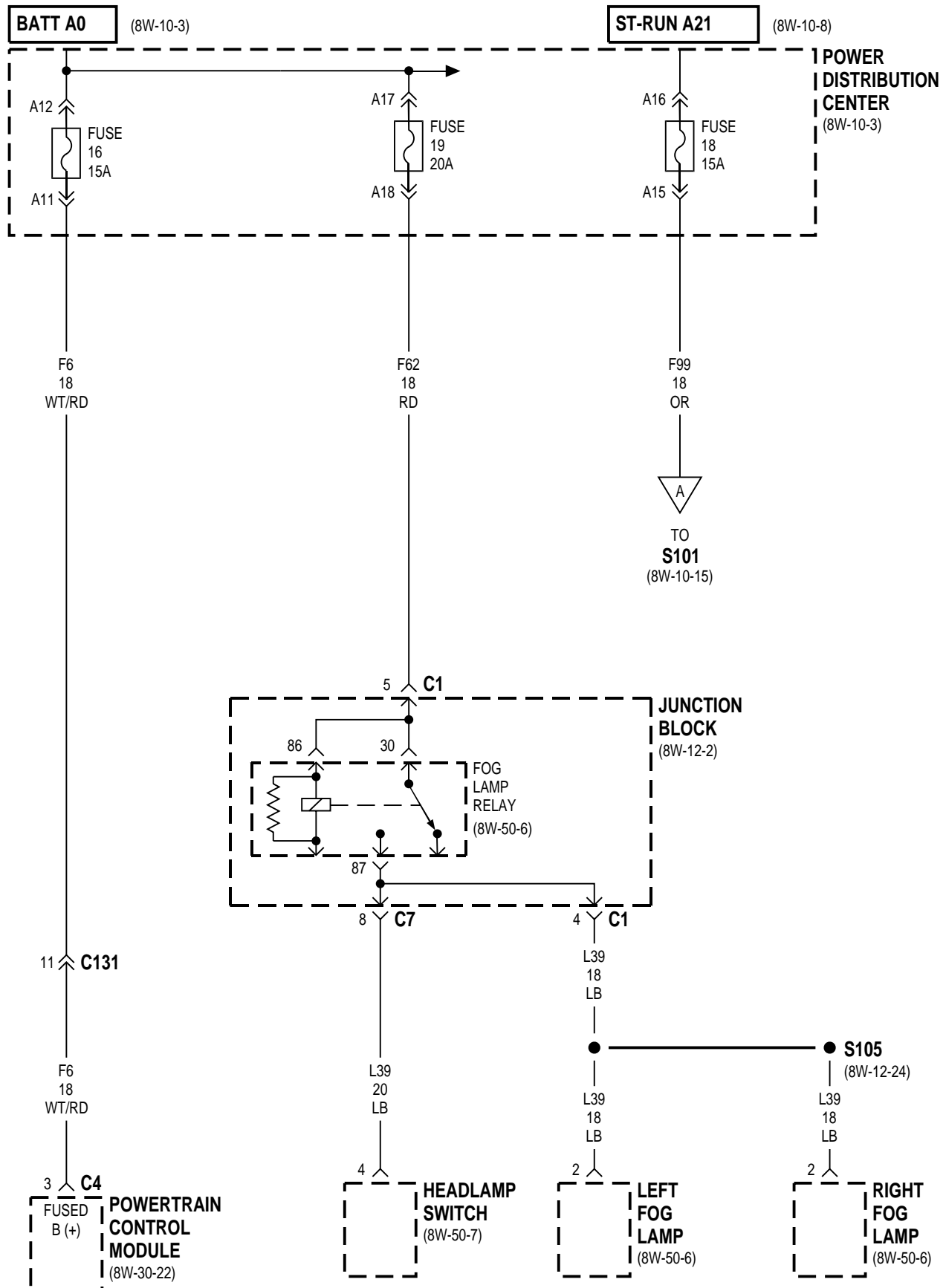


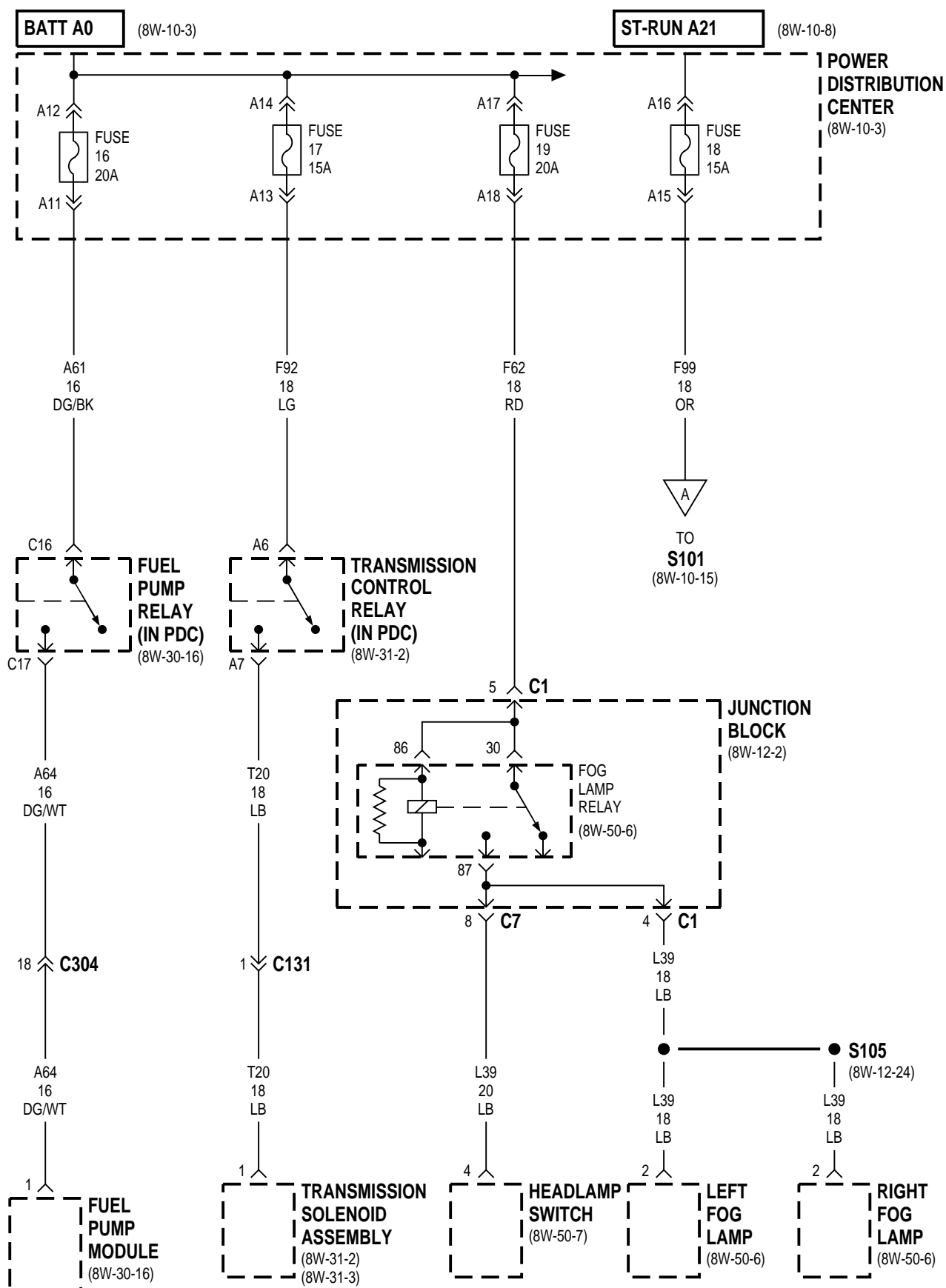




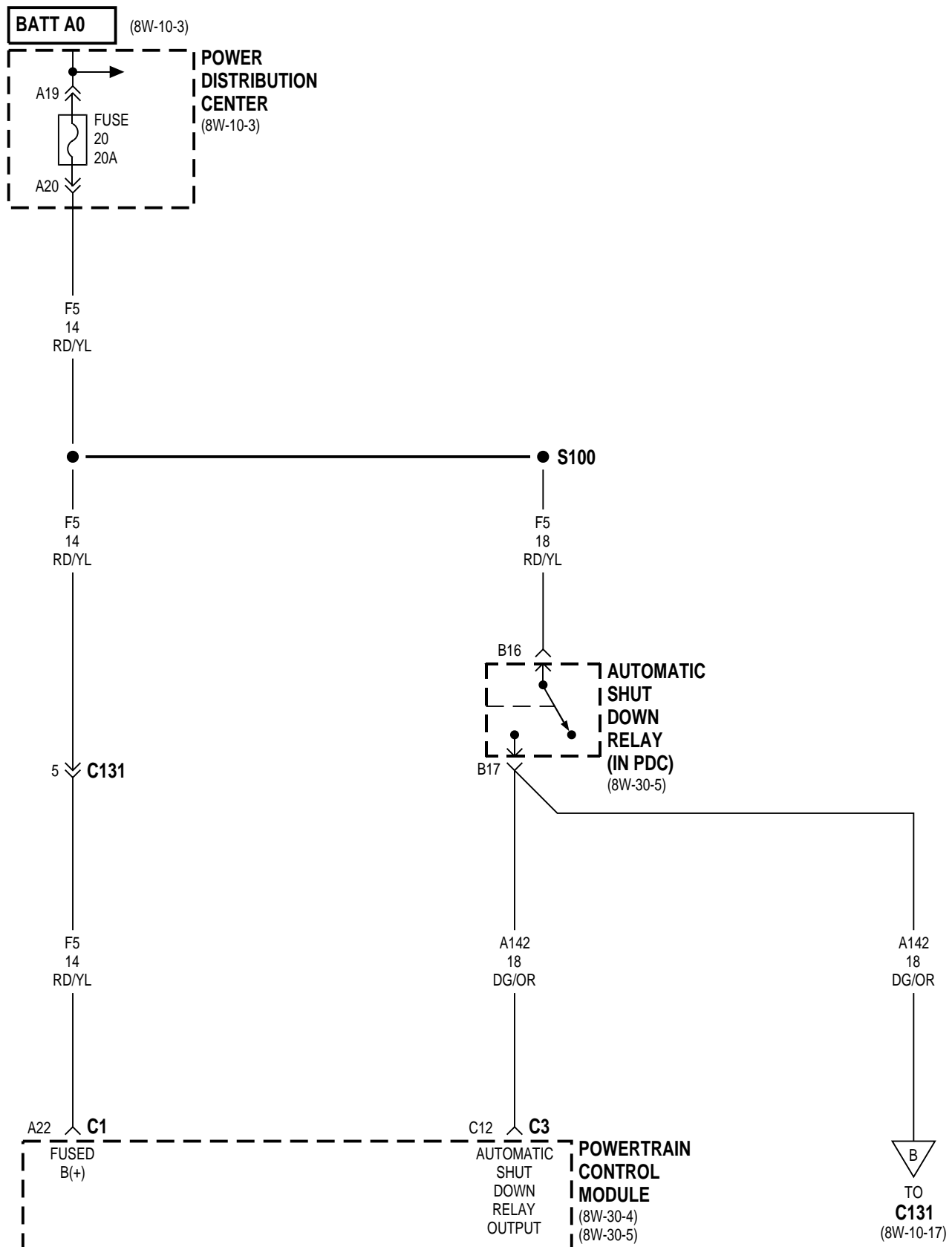


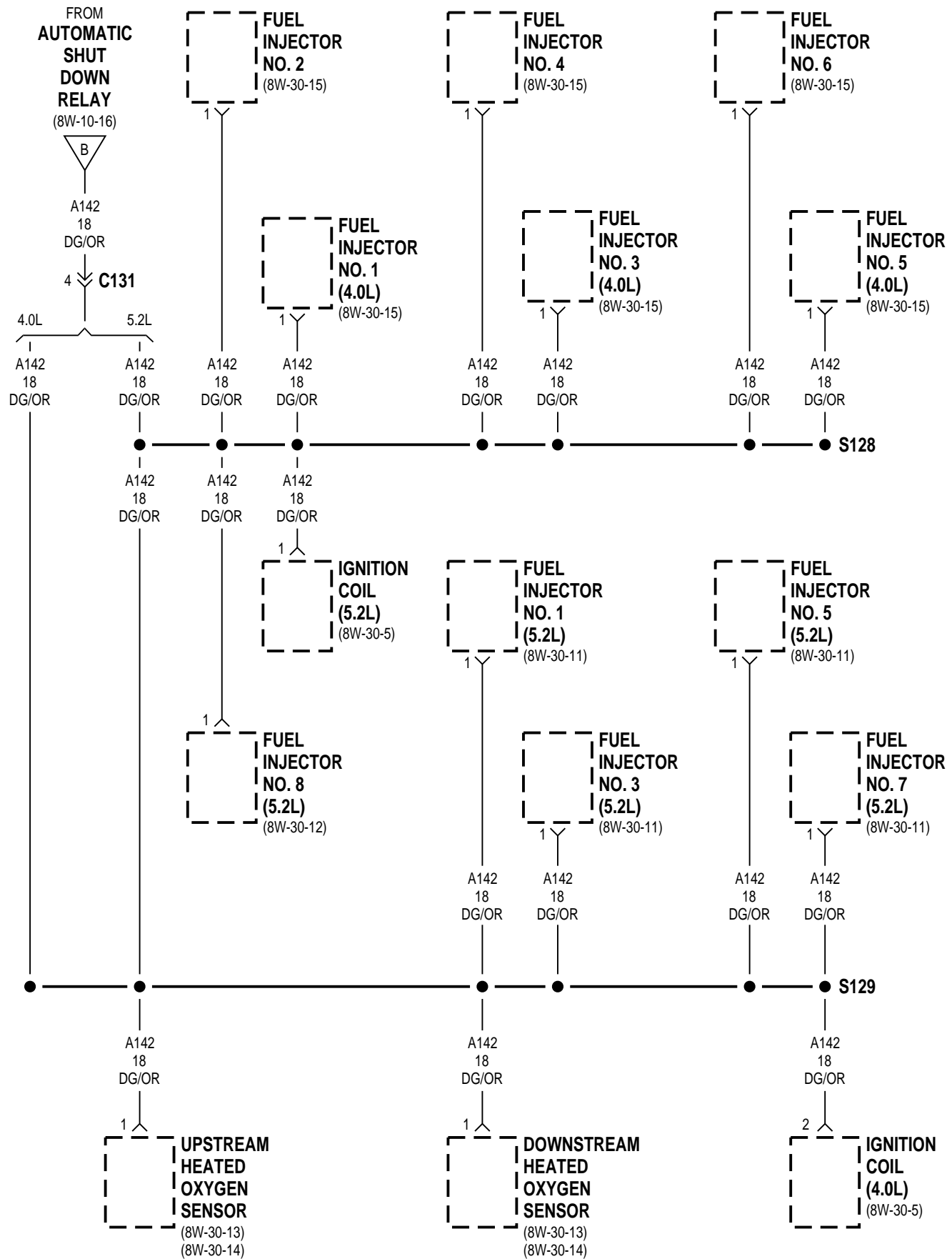


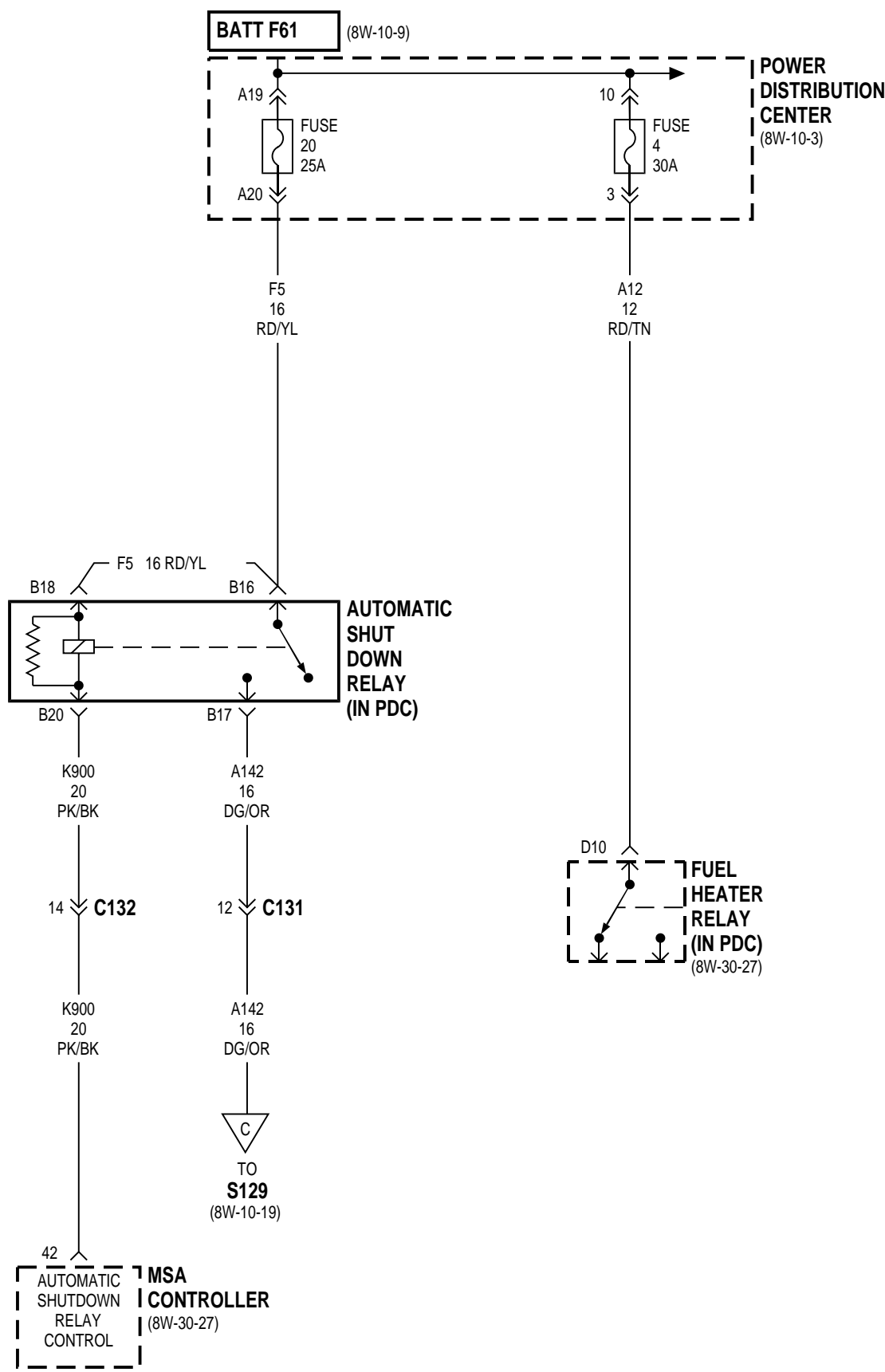


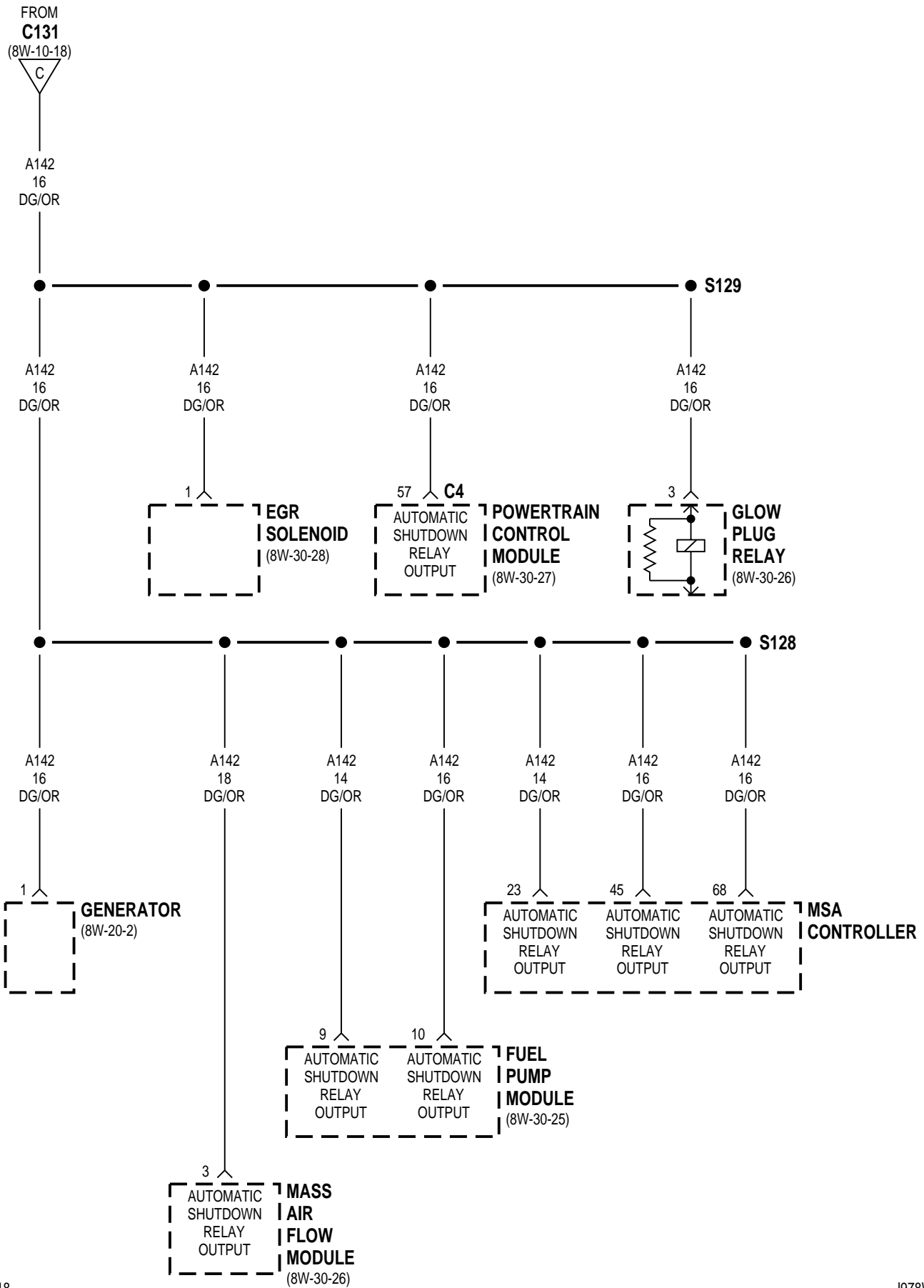












FUSE NO.	AMPS	FEED CIRCUIT	FUSED CIRCUIT	
1	175	A11 6RD/BK	B(+)	
2	-	-	SPARE	
3	40	A900 12OR/YL	FUSED B(+)	
		A900 12OR/YL	FUSED B(+)	
4	30	A12 12RD/TN	FUSED B(+)	*
5	50	A10 10RD/DB	FUSED B(+)	
6	20	F31 16VT	FUSED B(+)	
7	40	A19 12RD/VT	FUSED B(+)	
8	40	A1 12RD/WT	FUSED B(+)	
		A1 12RD/WT	FUSED B(+)	
9	-	-	SPARE	
10	20	F61 16WT/OR	8W-10-7	
11	50	A250 10RD	FUSED B(+)	
12	-	-	SPARE	
13	30	A6 14RD/LB	FUSED B(+)	
		A6 14RD/LB	FUSED B(+)	
14	20	A20 14RD/LG	FUSED B(+)	
15	40	A7 12YL/RD	FUSED B(+)	
		A7 12YL/RD	FUSED B(+)	
16	20	A61 16DG/BK	FUSED B(+)	**
17	15	F92 18LG	FUSED B(+)	**
18	15	F99 18OR	FUSED IGNITION SWITCH OUTPUT (ST/RUN)	
19	20	F62 18RD	FUSED B(+)	
20	20	F5 14RD/YL	FUSED B(+)	**
21	15	F250 18RD/GY	FUSED B(+)	
17	-	-	-	*
20	25	F5 14RD/YL	FUSED B(+)	*
16	15	F6 18WT/RD	FUSED B(+)	*

** GAS

* DIESEL

HORN
RELAY

CAV	CIRCUIT	FUNCTION
A1	F31 16VT	FUSED B(+)
A2	X2 16DG/YL	HORN RELAY OUTPUT
A3	F31 16VT	FUSED B(+)
	F31 16VT	FUSED B(+)
A4	-	-
A5	X4 20GY/OR	HORN RELAYCONTROL

TRANSMISSION
CONTROL
RELAY

CAV	CIRCUIT	FUNCTION
A6	F92 18LG	FUSED B(+)
A7	T20 18LB	TRANSMISSION RELAY OUTPUT
A8	K72 18DG/VT	VOLTAGE REGULATION
A9	-	-
A10	B120 12BR/WT	ABS PUMP MOTOR RELAY OUTPUT

A/C
COMPRESSOR
CLUTCH
RELAY

CAV	CIRCUIT	FUNCTION
B1	F250 18RD/GY	ABS WARNING LAMP RELAY OUTPUT
B2	C2 18DB/YL	AUTOMATIC SHUT DOWN RELAY OUTPUT
B3	F99 20OR	FUSED IGNITION SWITCH OUPUT (RUN)
B4	-	-
B5	C13 18DB/RD	A/C COMPRESSOR CLUTCH RELAY CONTROL

AUTOMATIC
SHUT DOWN
RELAY

CAV	CIRCUIT	FUNCTION
B16	F5 18RD/YL	FUSED B(+)
B16	F5 16RD/YL*	FUSED B(+)*
B16	F5 16RD/YL*	FUSED B(+)*
B17	A142 18DG/OR	FUSED B(+)
B17	A142 16DG/OR*	FUSED B(+)*
B17	A142 16DG/OR	FUSED B(+)
B18	F5 16 RD/YL	FUSED B(+)
B20	K900 20PK/WT	AUTOMATIC SHUT DOWN RELAY CONTROL

INTERMITTENT
WIPER
RELAY

CAV	CIRCUIT	FUNCTION
C1	V6 16DB	WIPER PARK SWITCH SENSE
C2	F86 16LG/RD*	FUSED B(+)
	F86 16LG/RD**	FUSED B(+)
C3	F86 16LG/RD	FUSED B(+)
C4	V66 18VT/WT	WIPER PARK SWITCH SENSE
C5	V18 20YL/LG	INTERMITTENT WIPER RELAY CONTROL

*DIESEL

**GAS

ENGINE
STARTER
MOTOR
RELAY

CAV	CIRCUIT	FUNCTION	
C6	A1 12RD/WT	FUSED B(+)	
C7	T40 12LG/BK	ENGINE STARTER MOTOR RELAY OUTPUT	
C8	T141 14YL/TD	FUSED IGNITION SWITCH OUTPUT (ST)	
C9	-	-	
C10	Z4 20BK	PARK NEUTRAL POSITION SWITCH SENSE	**
C10	T41 20BK/WT	PARK NEUTRAL POSITION SWITCH SENSE	*

FUEL
PUMP
RELAY

CAV	CIRCUIT	FUNCTION	
C16	A61 16DG/BK	FUSED B(+)	
C17	A64 16DG/WT	FUEL PUMP RELAY OUTPUT	
C18	F99 200R	FUSED IGNITION SWITCH OUTPUT (ST/RUN)	
C19	-	-	
C20	K81 18DB	FUEL PUMP RELAY CONTROL	

FUEL
HEATER
RELAY
(DIESEL)

CAV	CIRCUIT	FUNCTION	
D10	A12 12RD/TN	FUSED B(+)	
D11	Z4 20BK	GROUND	
D12	-	-	
D13	F99 200R	FUSED IGNITION SWITCH OUTPUT (START/RUN)	
D14	A64 14OR/DB	FUEL HEATER FEED	

*GAS
**DIESEL

8W-10 POWER DISTRIBUTION

DESCRIPTION AND OPERATION

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

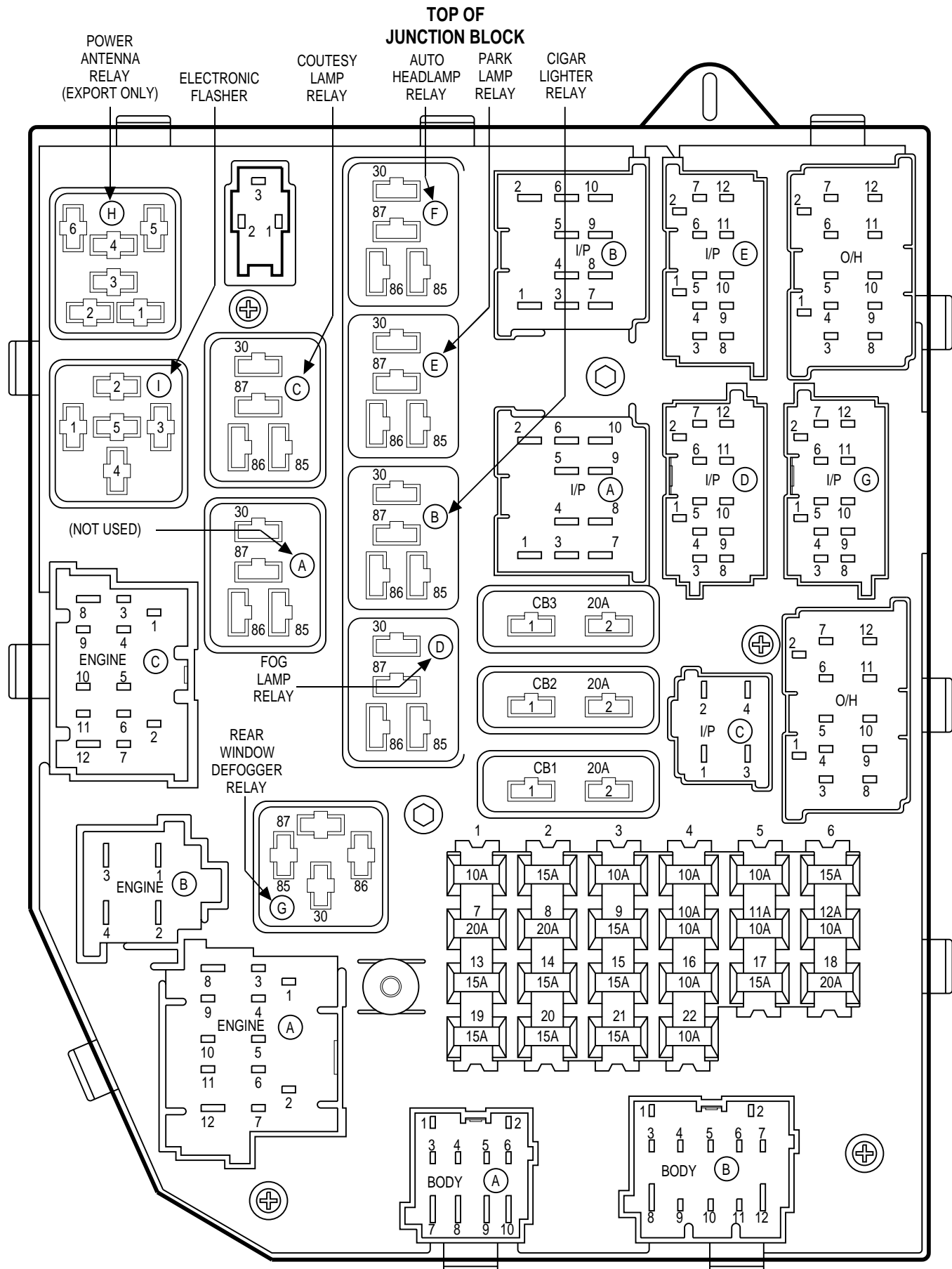
8W-12 JUNCTION BLOCK

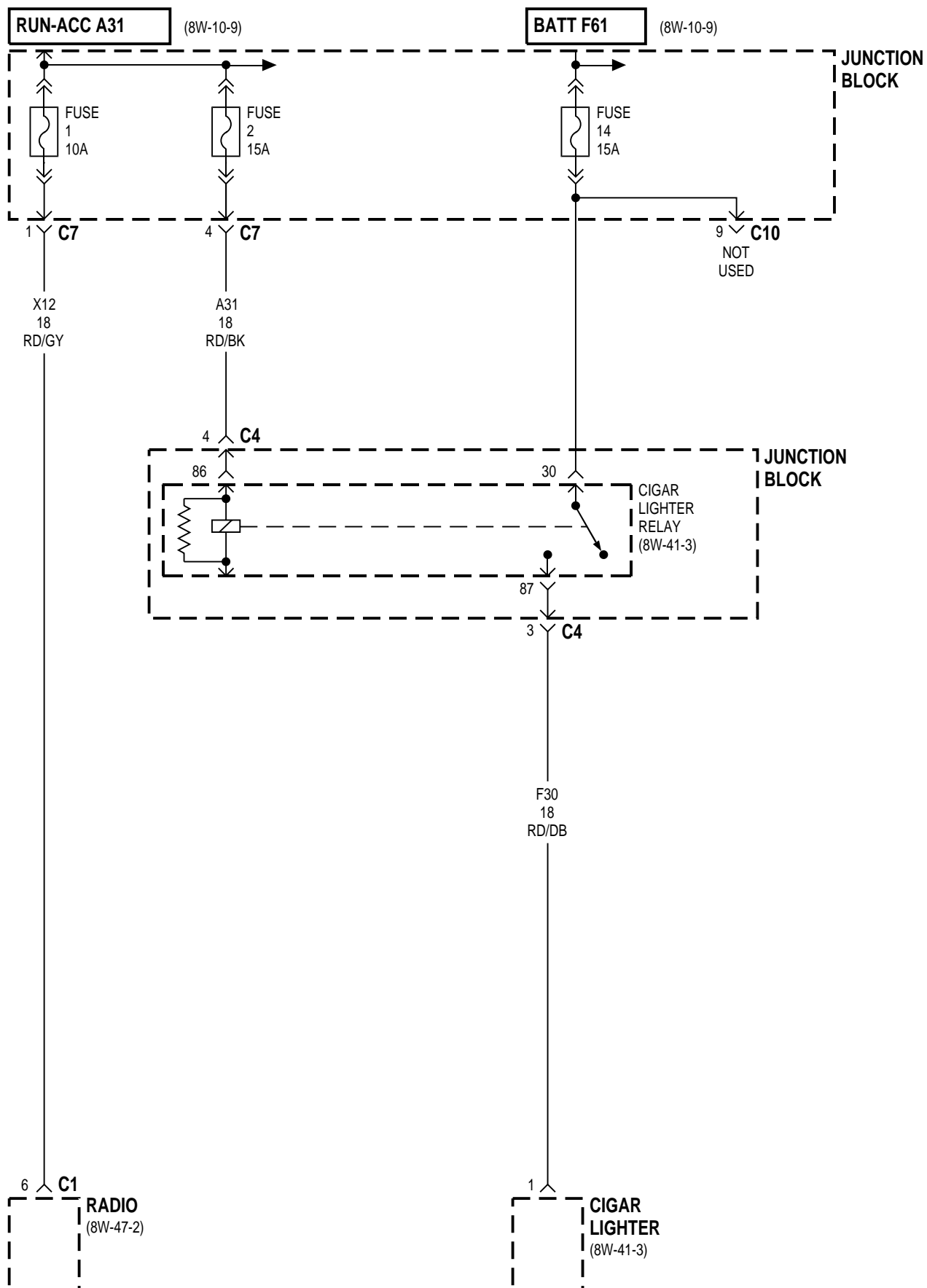
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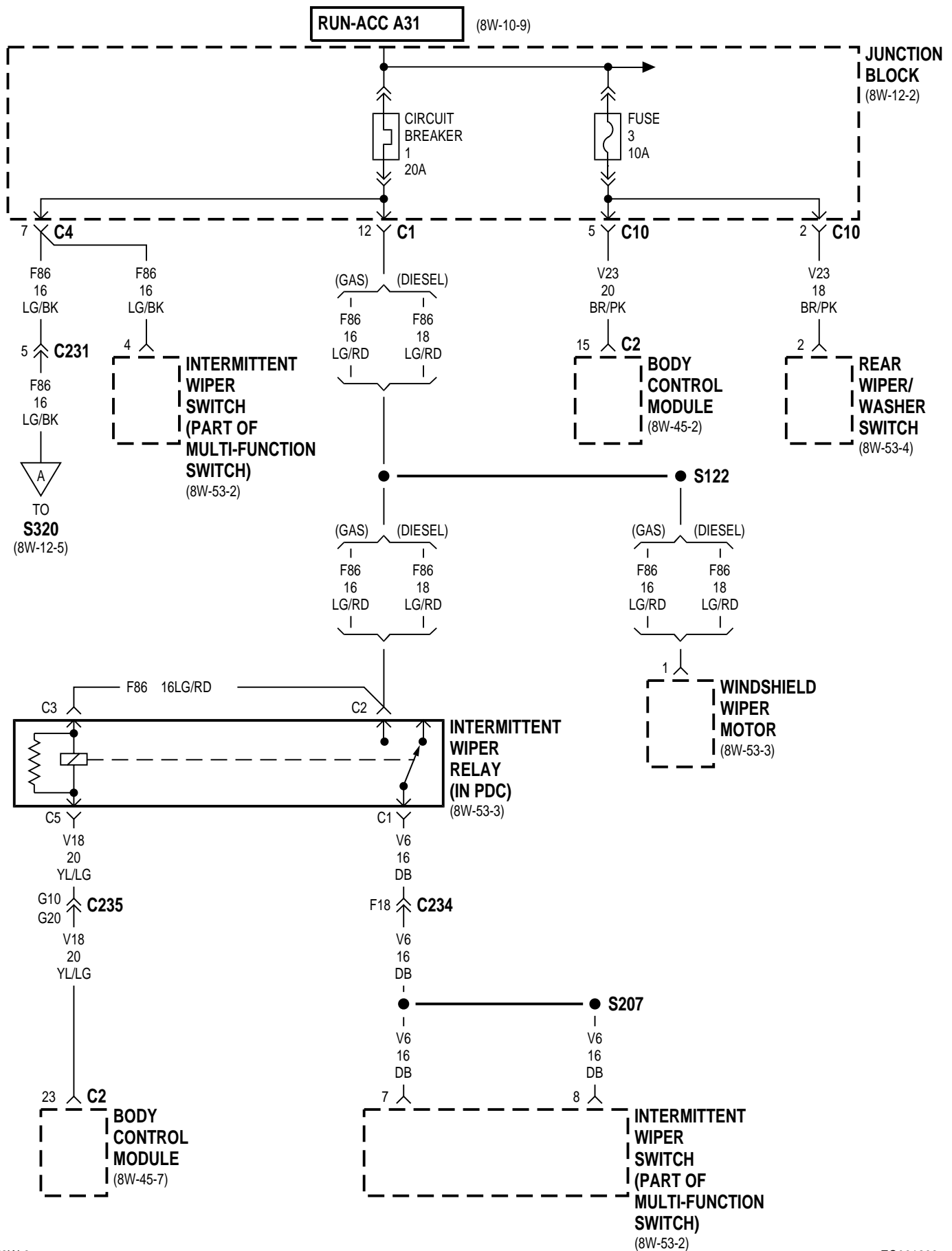
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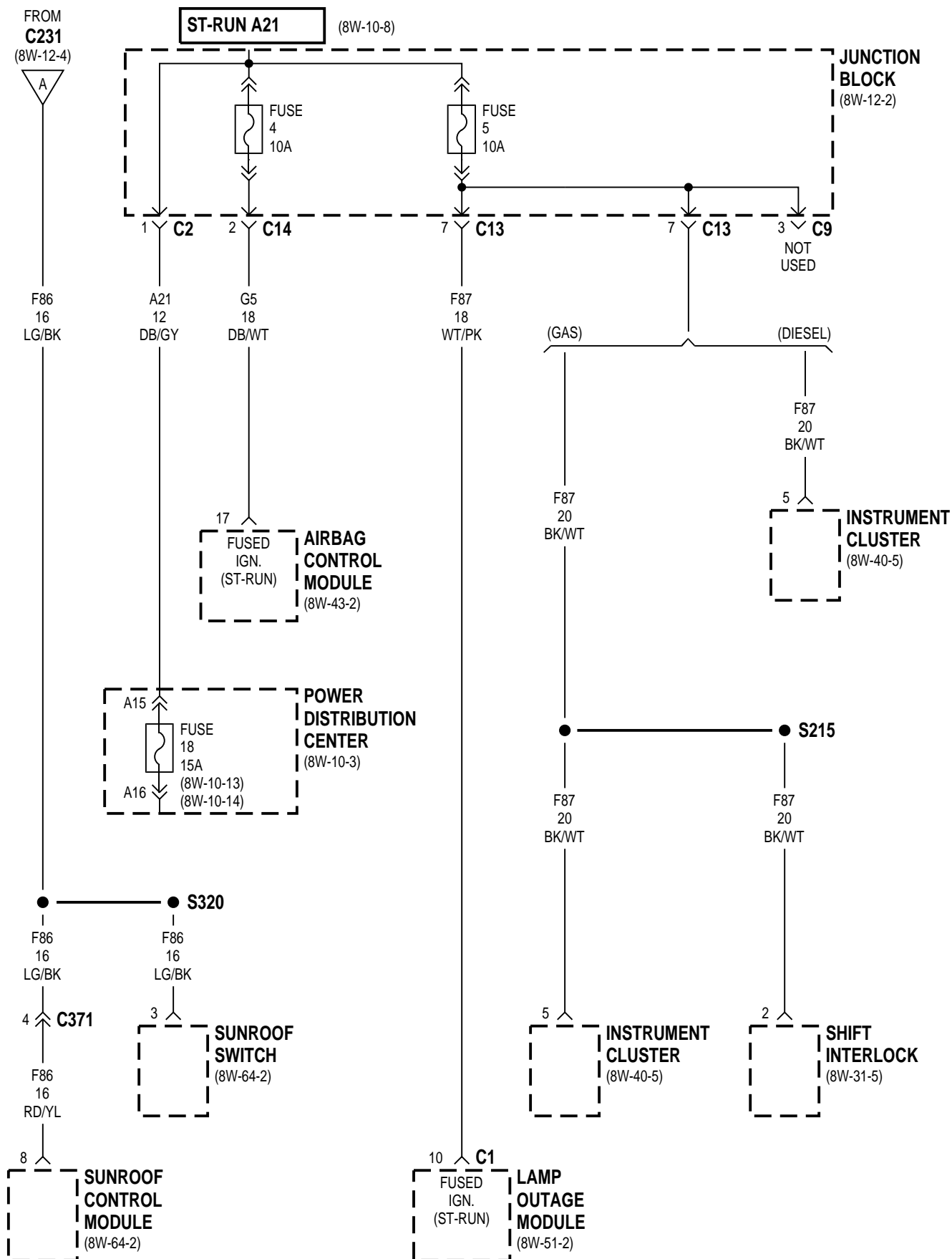
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	29

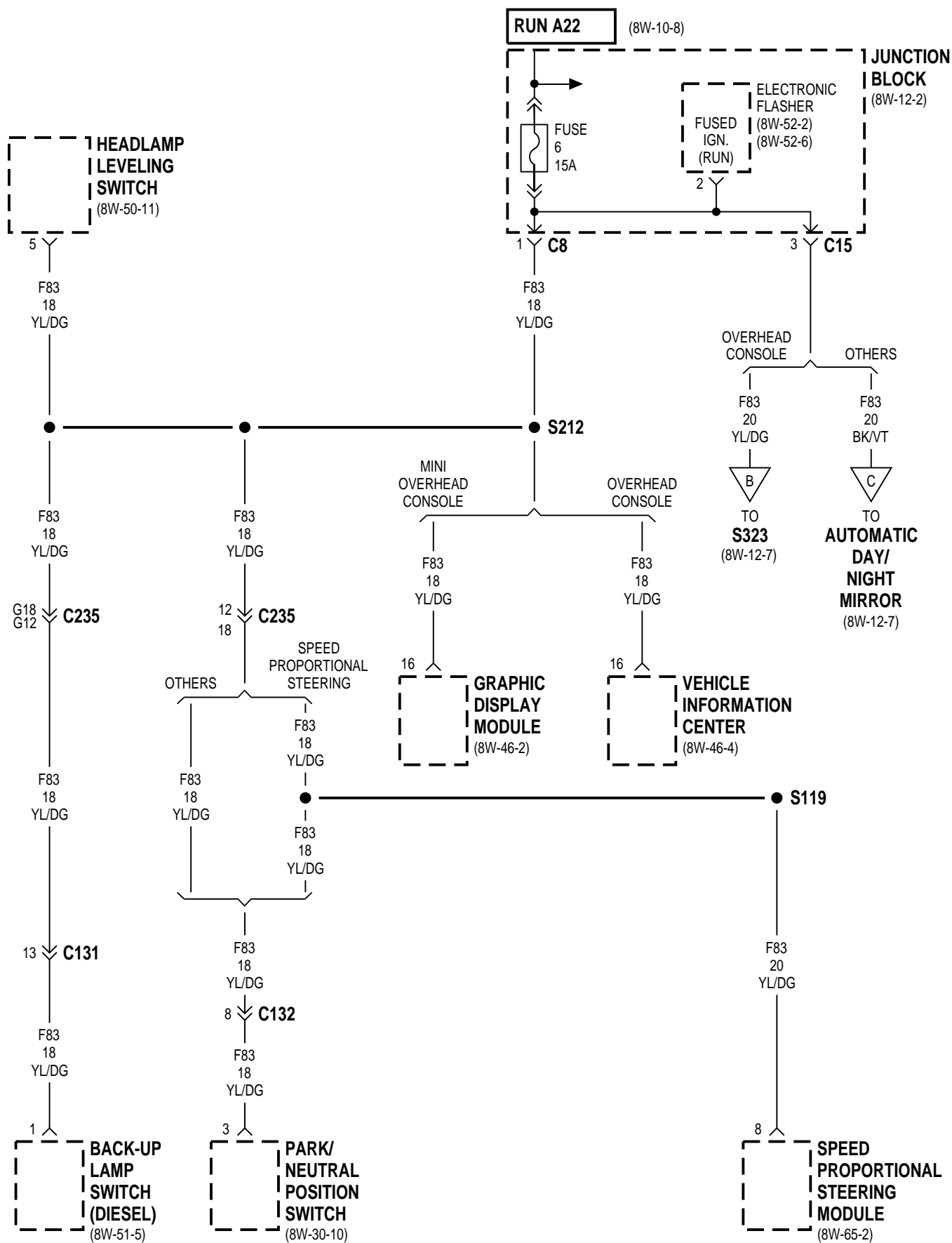
Component	Page	Component	Page
A/C Heater Control	8W-12-10	Horn Relay	8W-12-23
Aftermarket Trailer Tow Connector	8W-12-8	Instrument Cluster	8W-12-5, 8, 17
Airbag Control Module	8W-12-5, 23	Intermittent Wiper Relay	8W-12-4
Automatic Day/Night Mirror	8W-12-7, 17, 21	Intermittent Wiper Switch	8W-12-4
Automatic Headlamp Light Sensor/Vtss Led	8W-12-8	Junction Block	8W-12-2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15, 16, 17, 18, 19, 22, 23, 24
Automatic Headlamp Relay	8W-12-24	Key-In Switch/Halo Lamp	8W-12-12, 22
Automatic Temperature Control Module	8W-12-10, 16	Lamp	8W-12-20
Back-Up Lamp Switch	8W-12-6	Lamp Outage Module	8W-12-5, 15, 20
Blend Door Actuator	8W-12-10	Left Back-Up Lamp	8W-12-17
Body Control Module	8W-12-4, 8, 9, 14, 23, 24	Left Courtesy Lamp	8W-12-12, 22
Cargo Lamp	8W-12-12, 22	Left Fog Lamp	8W-12-24
Cigar Lighter	8W-12-3	Left Front Park Lamp	8W-12-15
Cigar Lighter Relay	8W-12-3	Left Visor/Vanity Lamp	8W-12-13, 21
Circuit Breaker 1	8W-12-4	Liftglass Limit Switch	8W-12-8
Circuit Breaker 2	8W-12-7	Memory Seat Module	8W-12-18
Circuit Breaker 3	8W-12-18	Overhead Console	8W-12-7, 13, 21
Controller Anti-Lock Brake	8W-12-9	Park Lamp Relay	8W-12-14
Courtesy Lamp Relay	8W-12-12, 22	Park/Neutral Position Switch	8W-12-6, 17
Data Link Connector	8W-12-8	Passenger Door Module	8W-12-7
Dome/Reading Lamp	8W-12-13, 21	Passenger Lumbar Switch	8W-12-18
Driver Door Module	8W-12-7	Passenger Power Seat Switch	8W-12-18
Driver Lumbar Switch	8W-12-18	Passenger Seat Heater Control Module	8W-12-10, 18
Driver Power Seat Switch	8W-12-18	Power Amplifier	8W-12-8, 11
Driver Seat Heater Control Module	8W-12-10, 18	Power Antenna	8W-12-11
Electronic Flasher	8W-12-6, 11	Power Antenna Relay	8W-12-11
Factory Trailer Tow Connector	8W-12-17	Power Distribution Center	8W-12-5, 20
Fog	8W-12-20	Power Outlet	8W-12-16
Fog Lamp Relay	8W-12-24	Radio	8W-12-3, 11, 15, 16
Four Wheel Drive Switch	8W-12-19	Rear	8W-12-20
Fuse 1	8W-12-3	Rear Window Defogger	8W-12-9
Fuse 2	8W-12-3	Rear Window Defogger Relay	8W-12-9
Fuse 3	8W-12-4	Rear Window Defogger Switch	8W-12-9
Fuse 4	8W-12-5	Rear Wiper Motor	8W-12-8
Fuse 5	8W-12-5	Rear Wiper/Washer Switch	8W-12-4
Fuse 6	8W-12-6	Recirculation Door Actuator	8W-12-10
Fuse 7	8W-12-8	Relay	8W-12-20
Fuse 8	8W-12-8	Right Back-Up Lamp	8W-12-17
Fuse 9	8W-12-7	Right Courtesy Lamp	8W-12-12, 22
Fuse 10	8W-12-9	Right Fog Lamp	8W-12-24
Fuse 11	8W-12-9	Right Front Park Lamp	8W-12-15
Fuse 12	8W-12-10	Right Front Side Marker Lamp	8W-12-17
Fuse 13	8W-12-11	Right Side Repeater	8W-12-17
Fuse 14	8W-12-3	Right Visor/Vanity Lamp	8W-12-13, 21
Fuse 16	8W-12-12	Shift Interlock	8W-12-5
Fuse 17	8W-12-14	Speed Proportional Steering Module	8W-12-6
Fuse 18	8W-12-5	Stop Lamp Switch	8W-12-7
Fuse 18 (PDC)	8W-12-20	Sunroof Control Module	8W-12-5, 21
Fuse 19	8W-12-16	Sunroof Switch	8W-12-5
Fuse 20	8W-12-16	Switch Pod	8W-12-10
Fuse 21	8W-12-16	Trailer Tow Circuit Breaker	8W-12-8
Fuse 22	8W-12-23	Turn Signal/Hazard Warning Switch	8W-12-11, 17
G304	8W-12-11, 22	Underhood Lamp	8W-12-12
Glove Box Lamp	8W-12-12	Vehicle Information Center	8W-12-6, 11, 15, 16, 19
Graphic Display Module	8W-12-6, 16, 19, 21	Vehicle Speed Control/Horn Switch	8W-12-23
Headlamp Dimmer Switch	8W-12-16, 24	Windshield Wiper Motor	8W-12-4
Headlamp Leveling Switch	8W-12-6		
Headlamp Switch	8W-12-14, 20, 24		

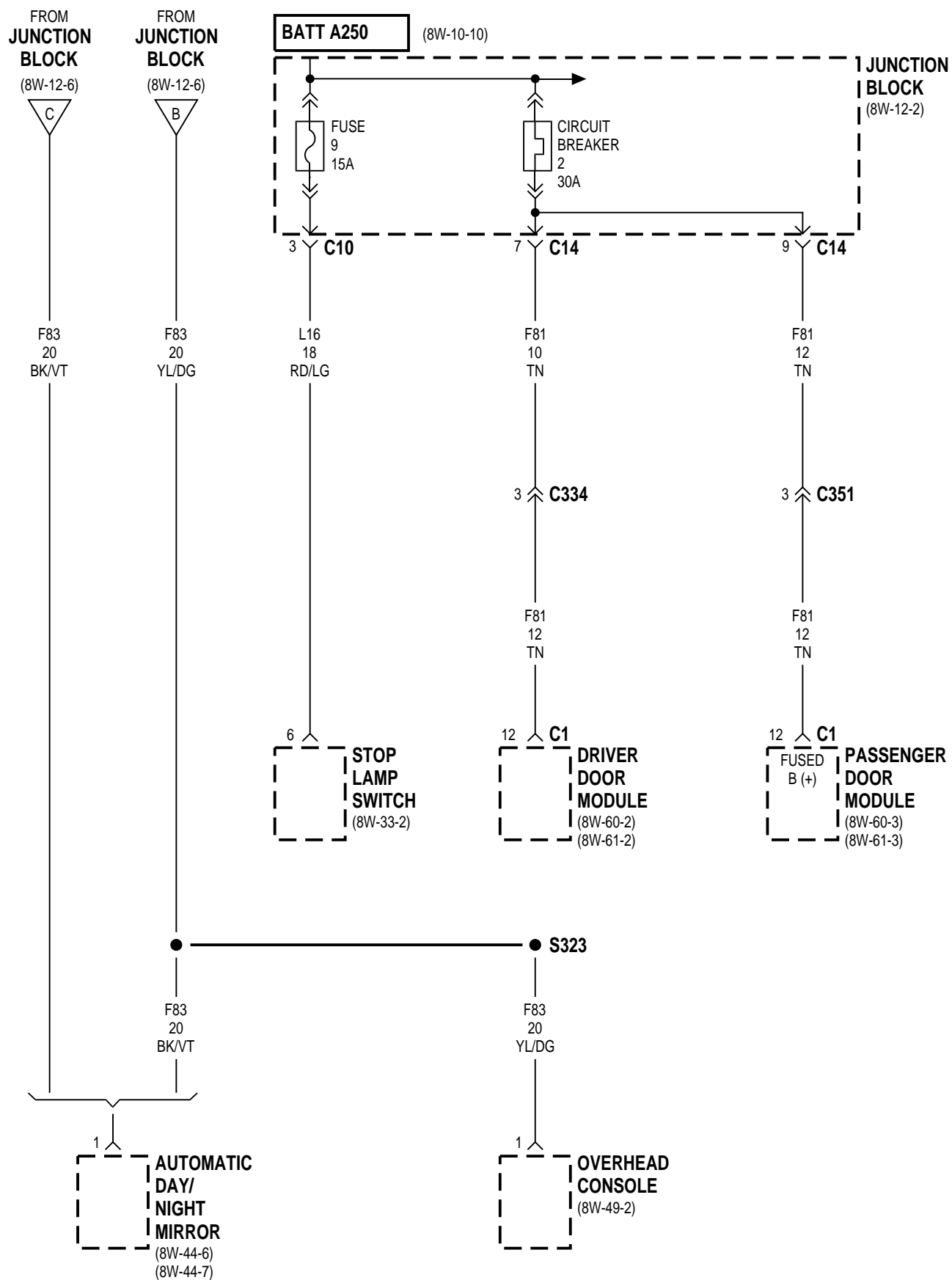


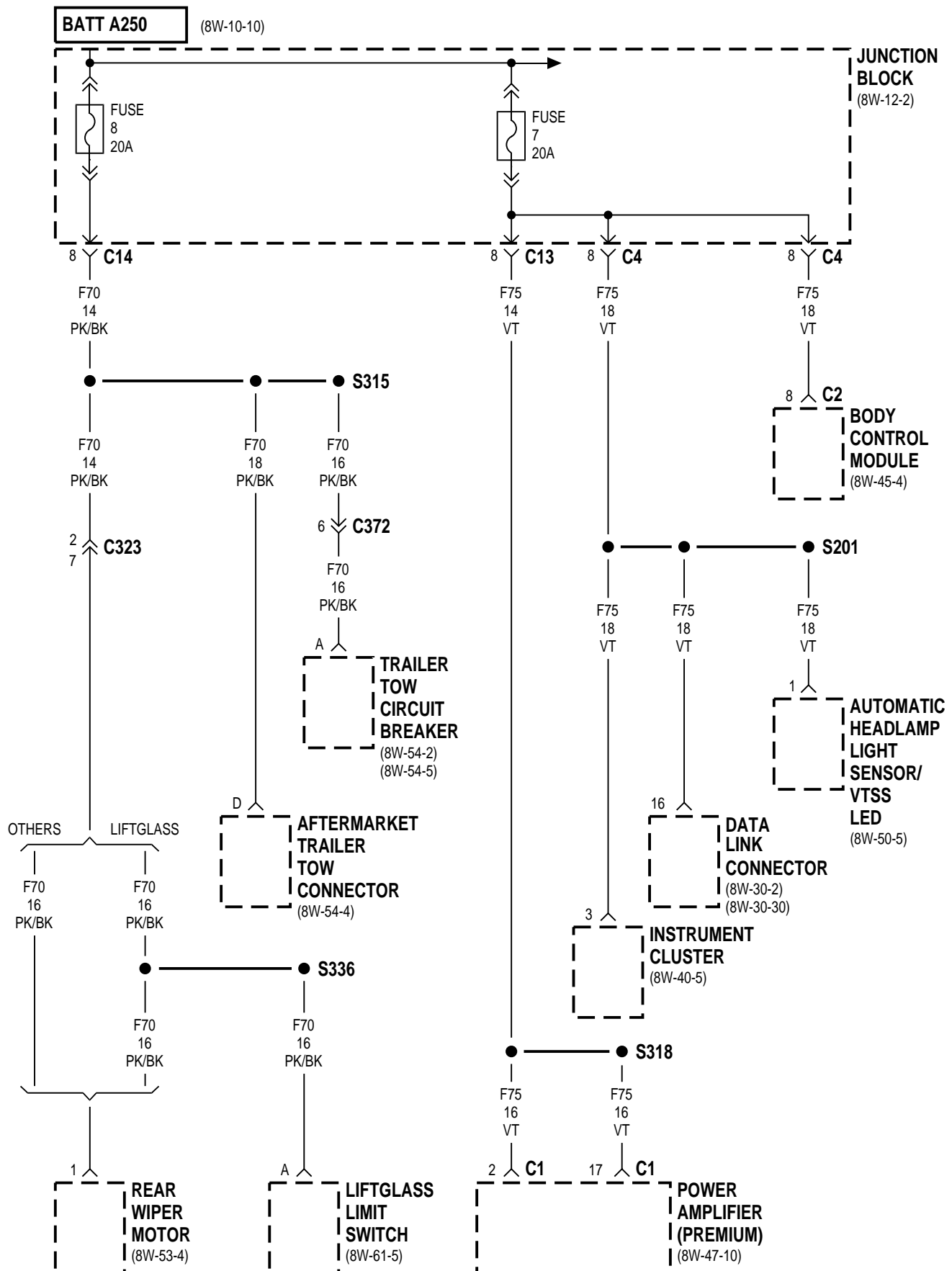


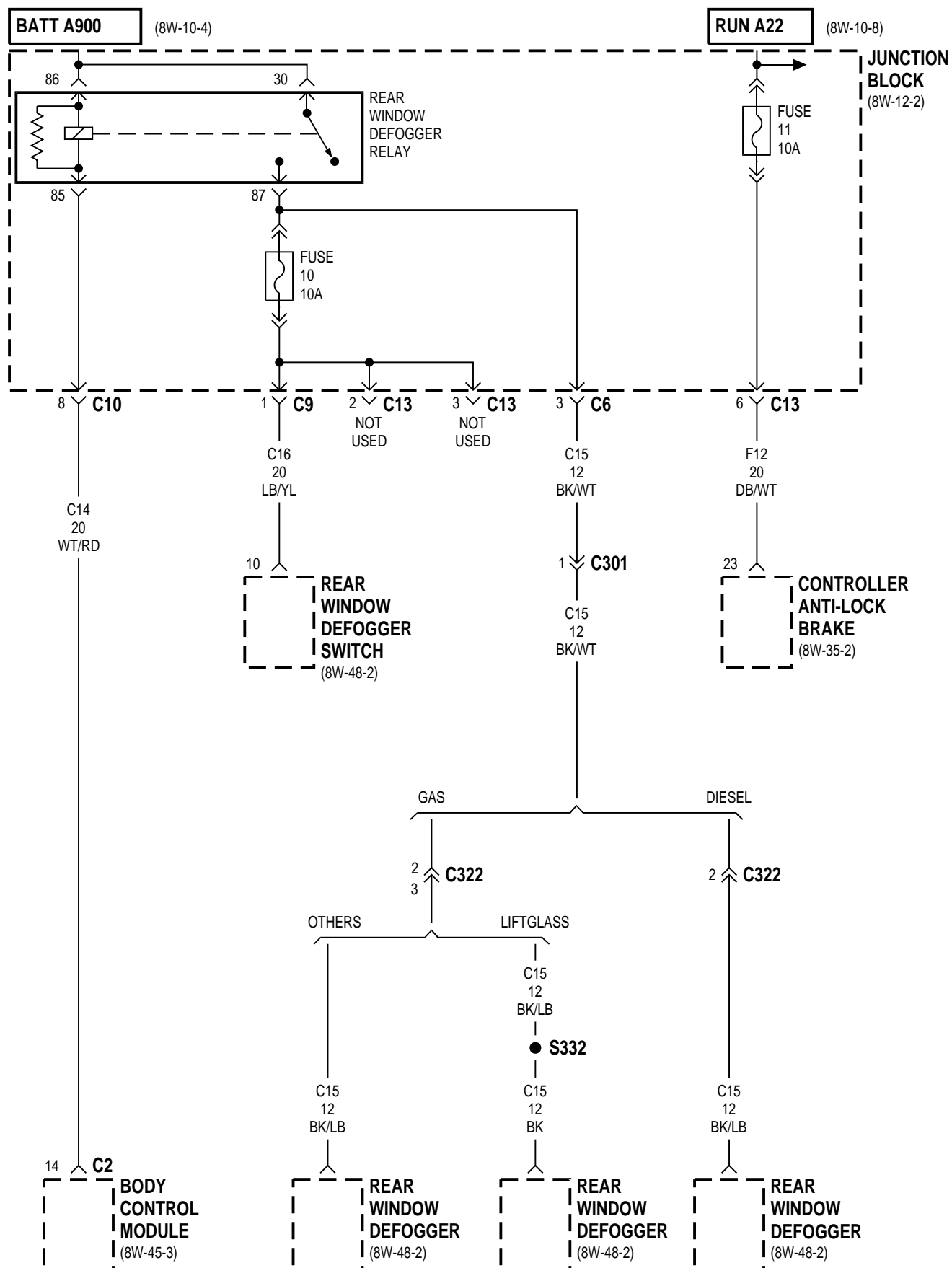


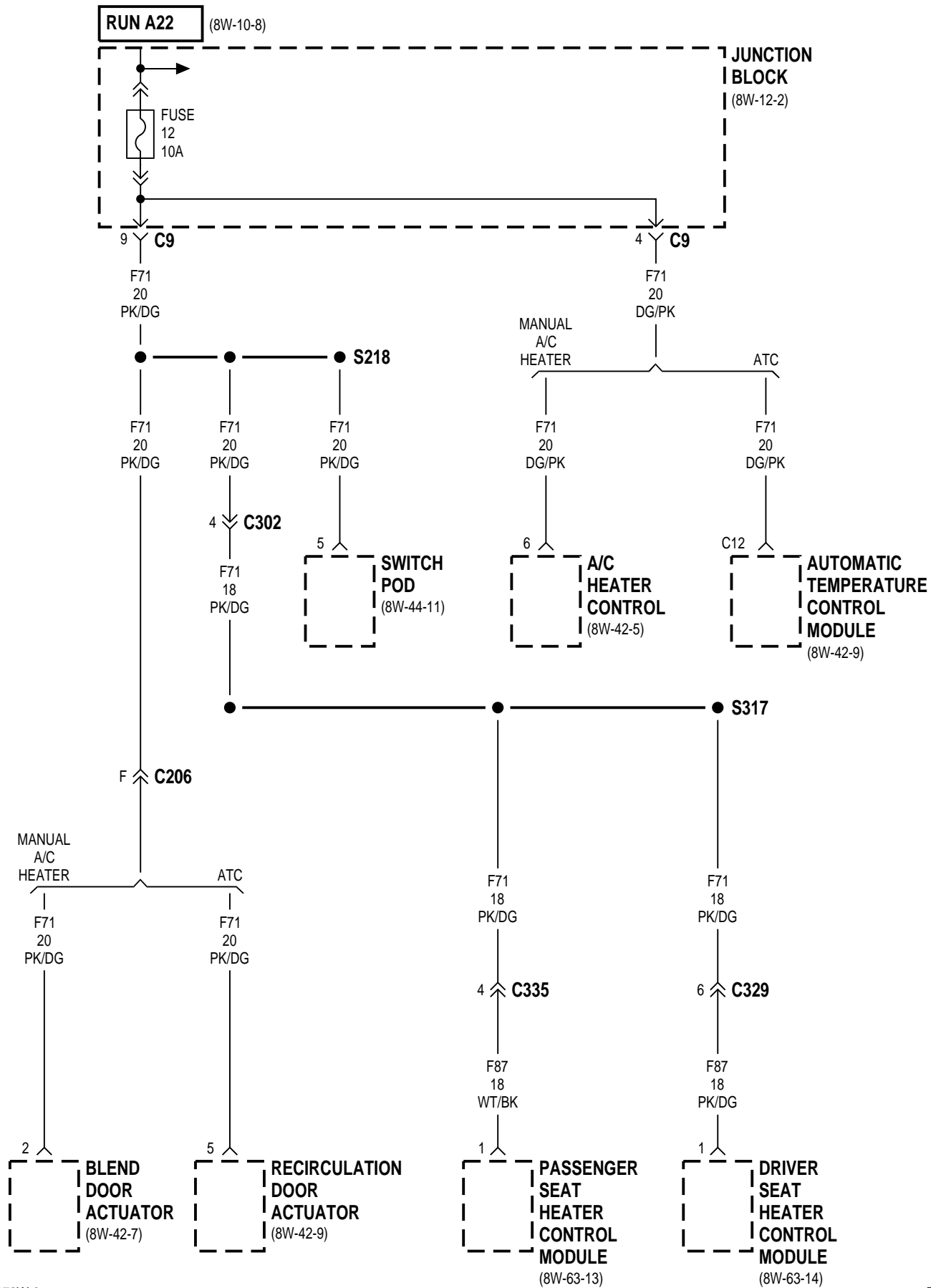


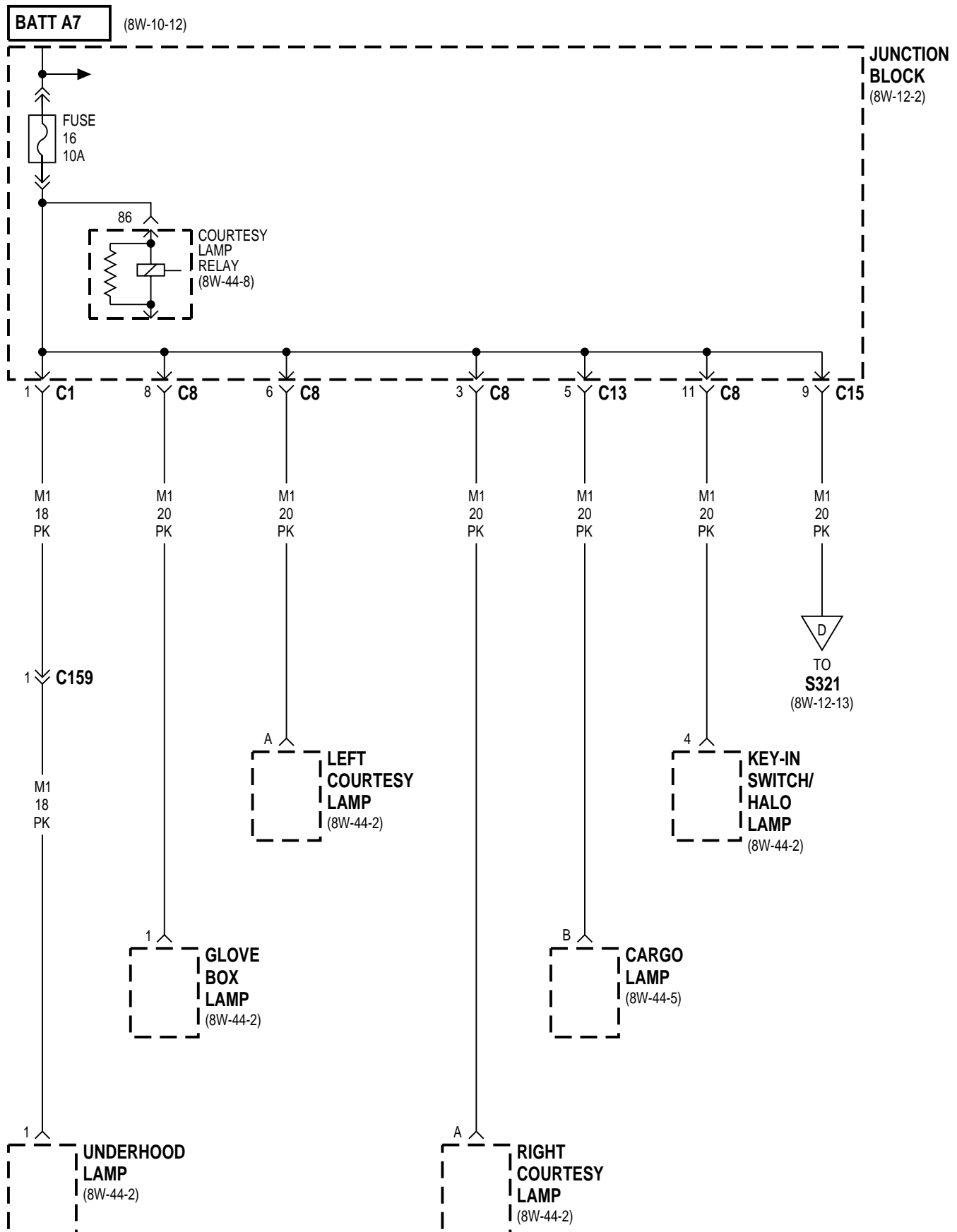


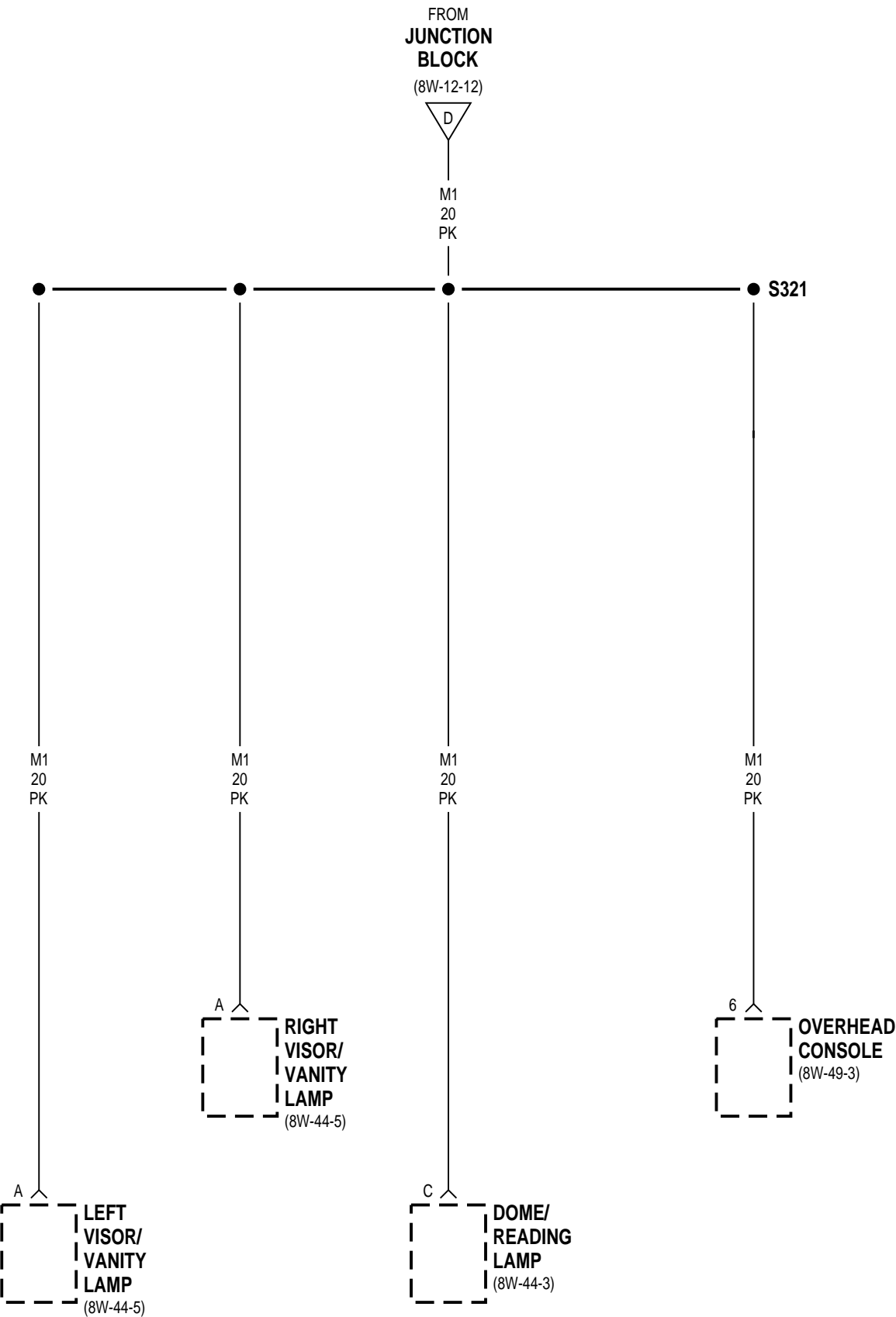


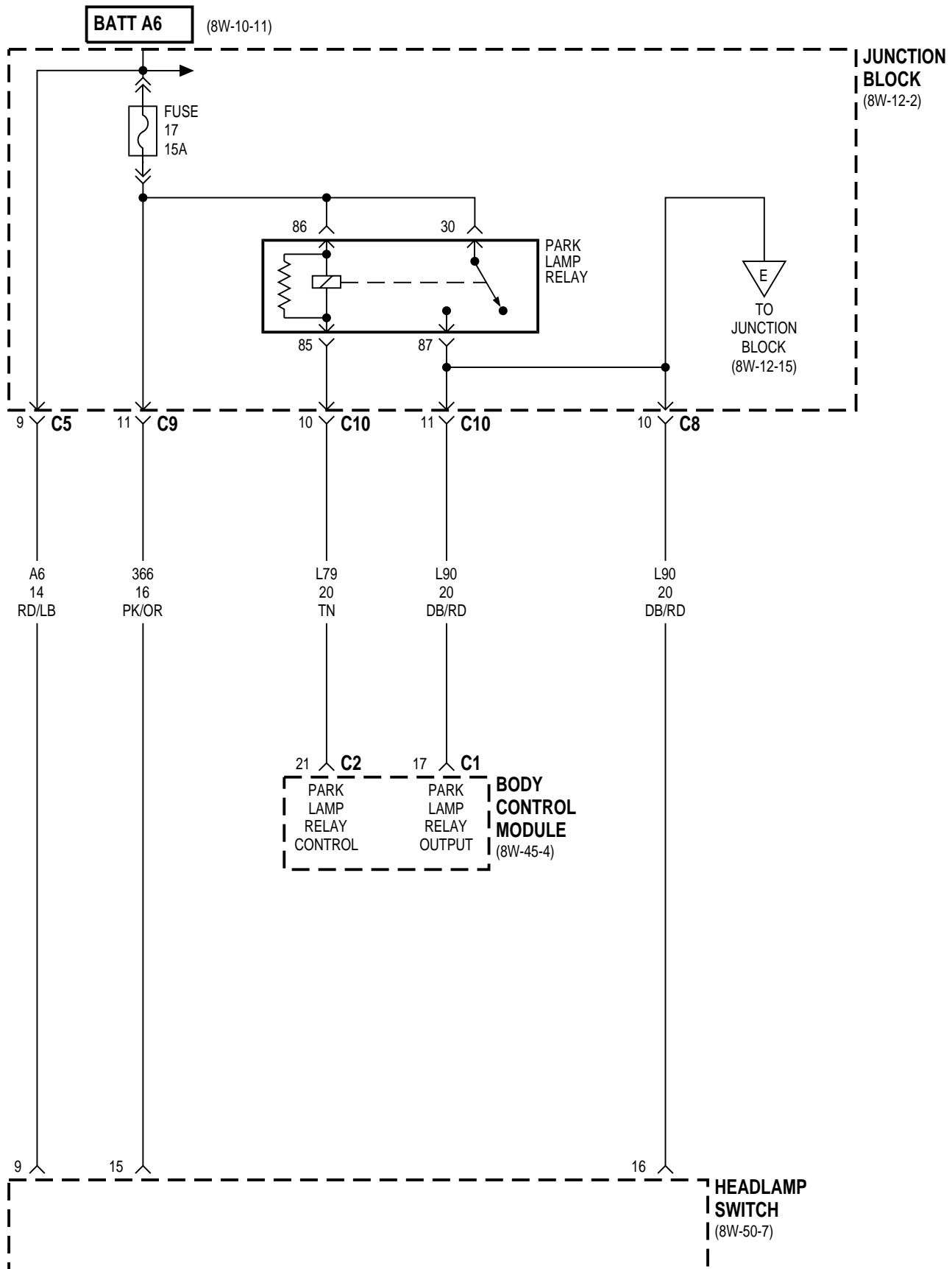


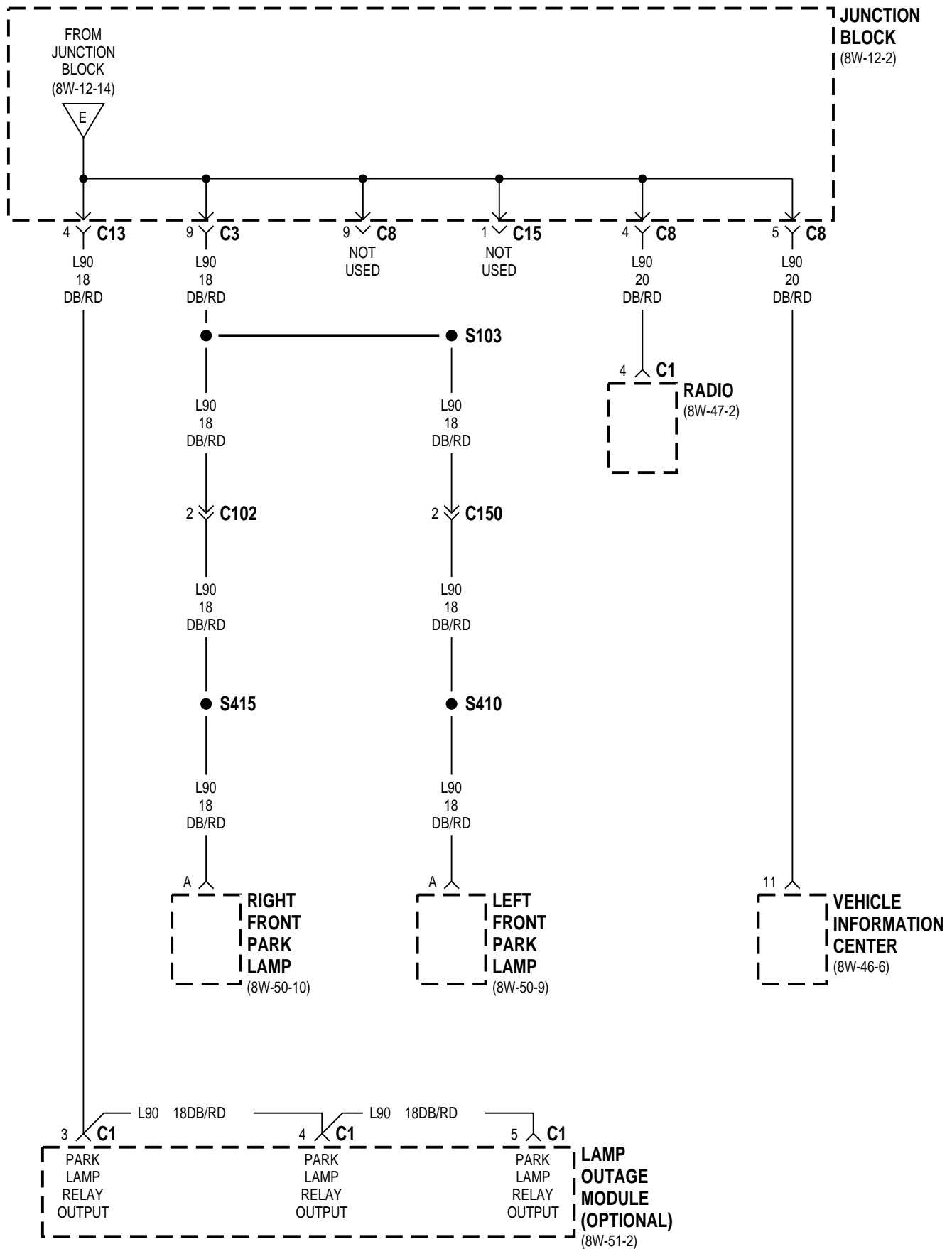


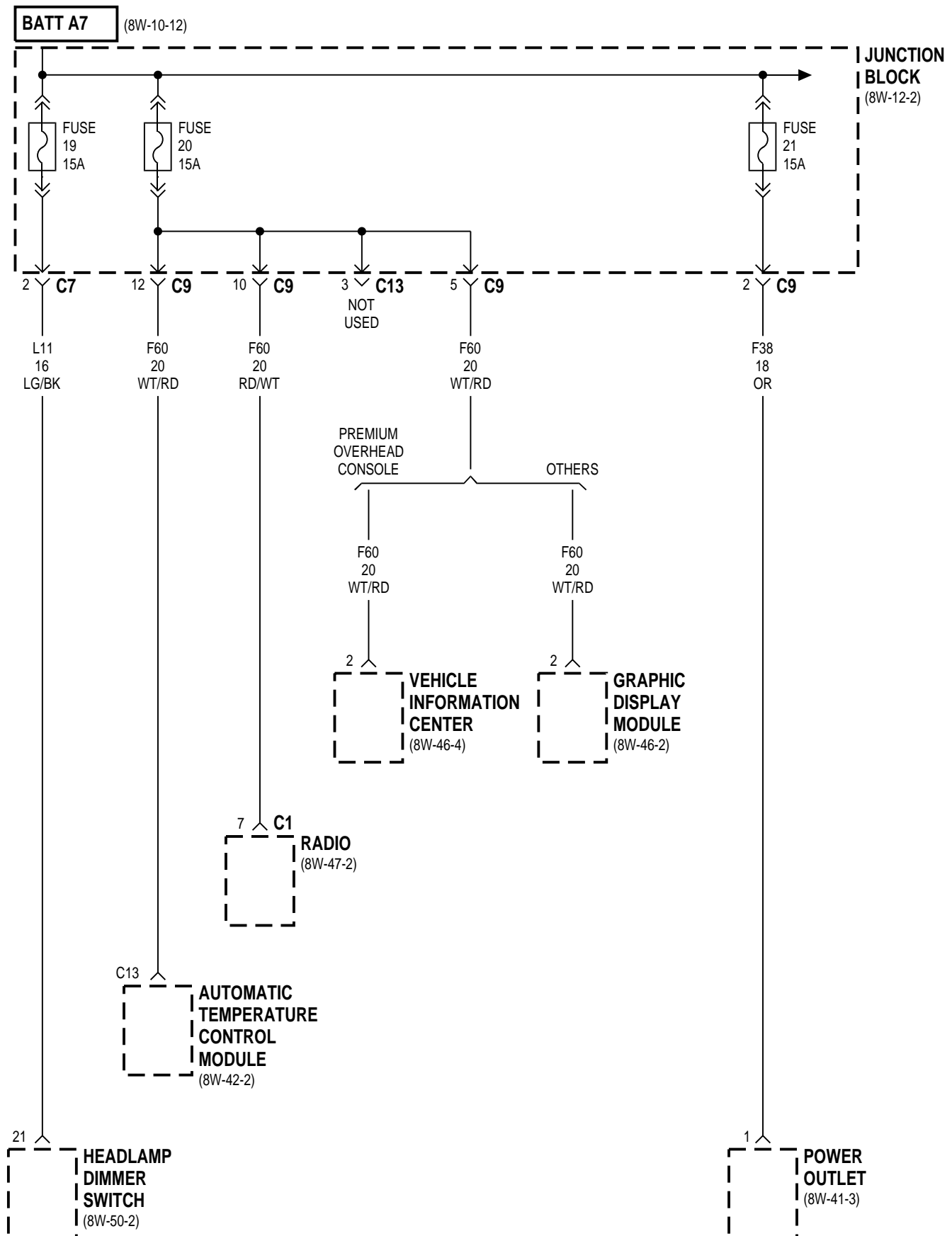


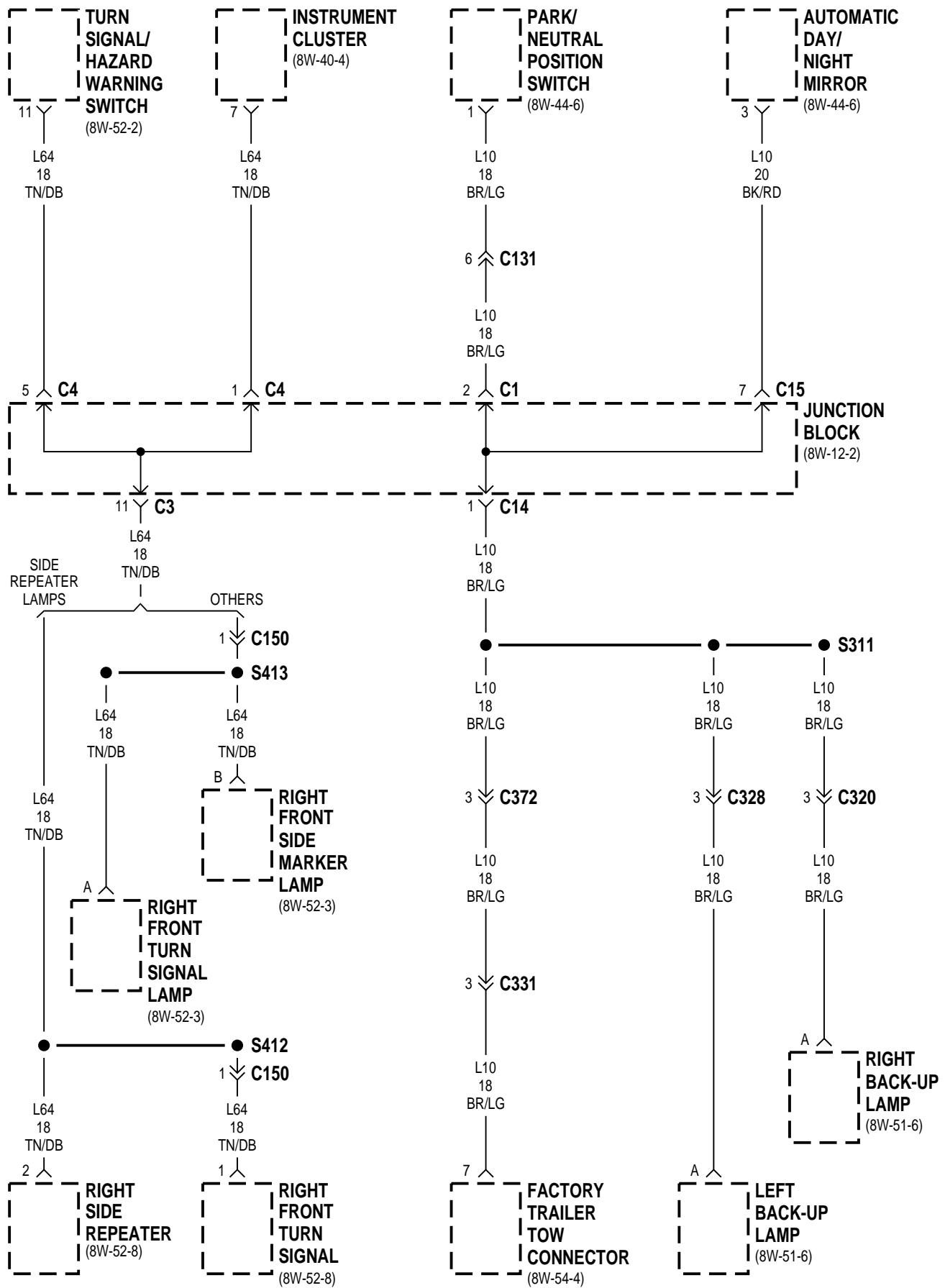


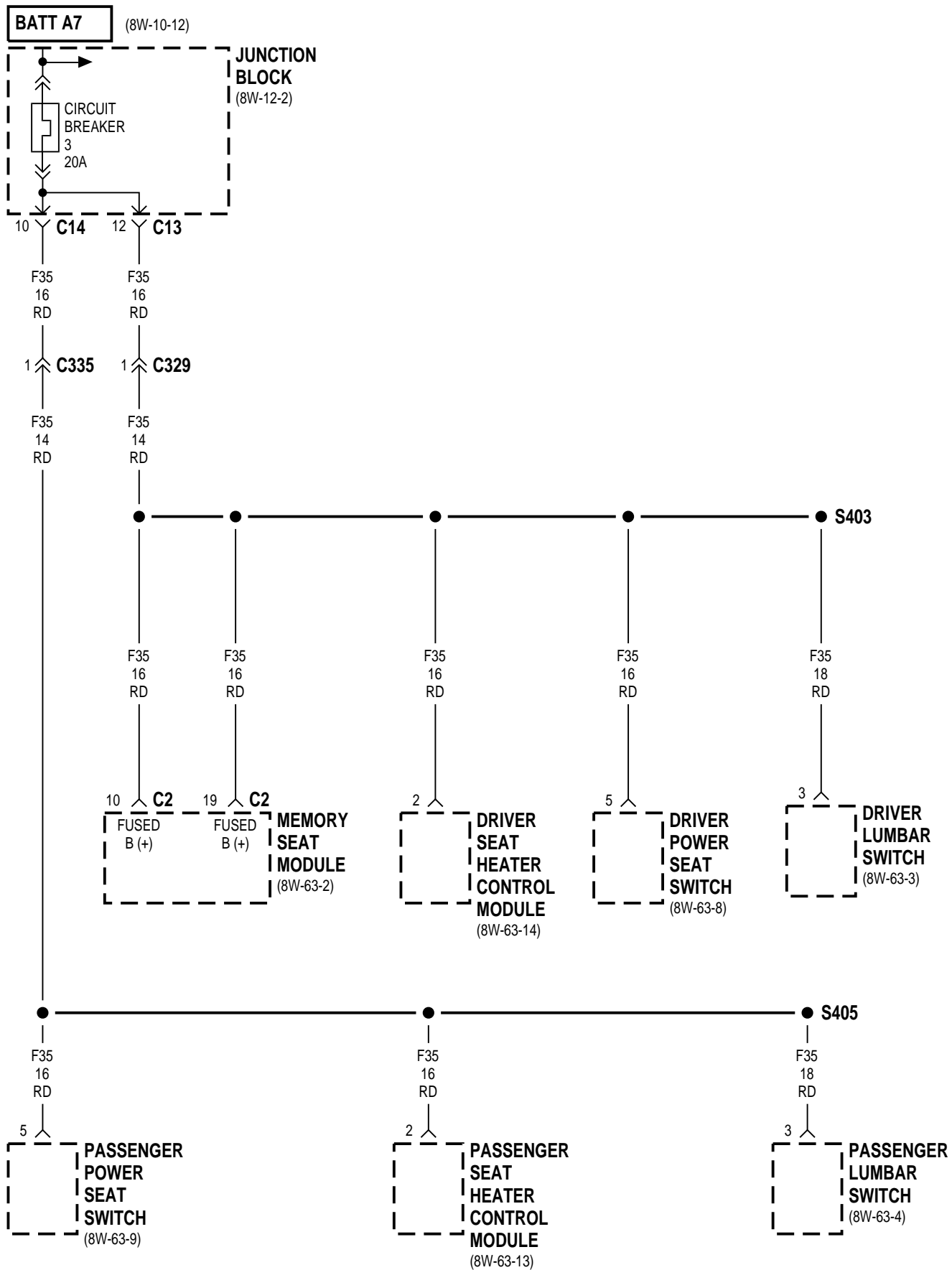


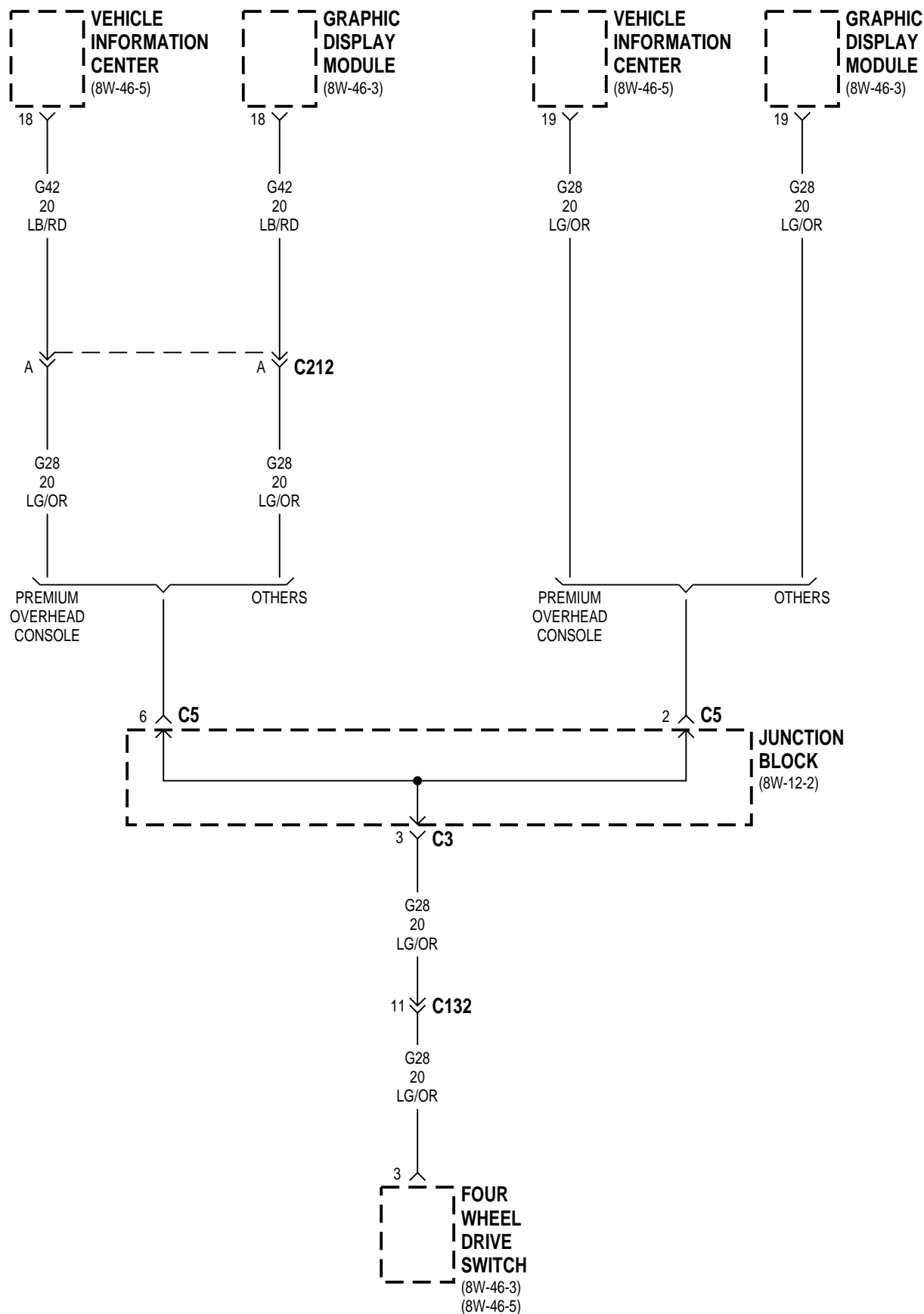


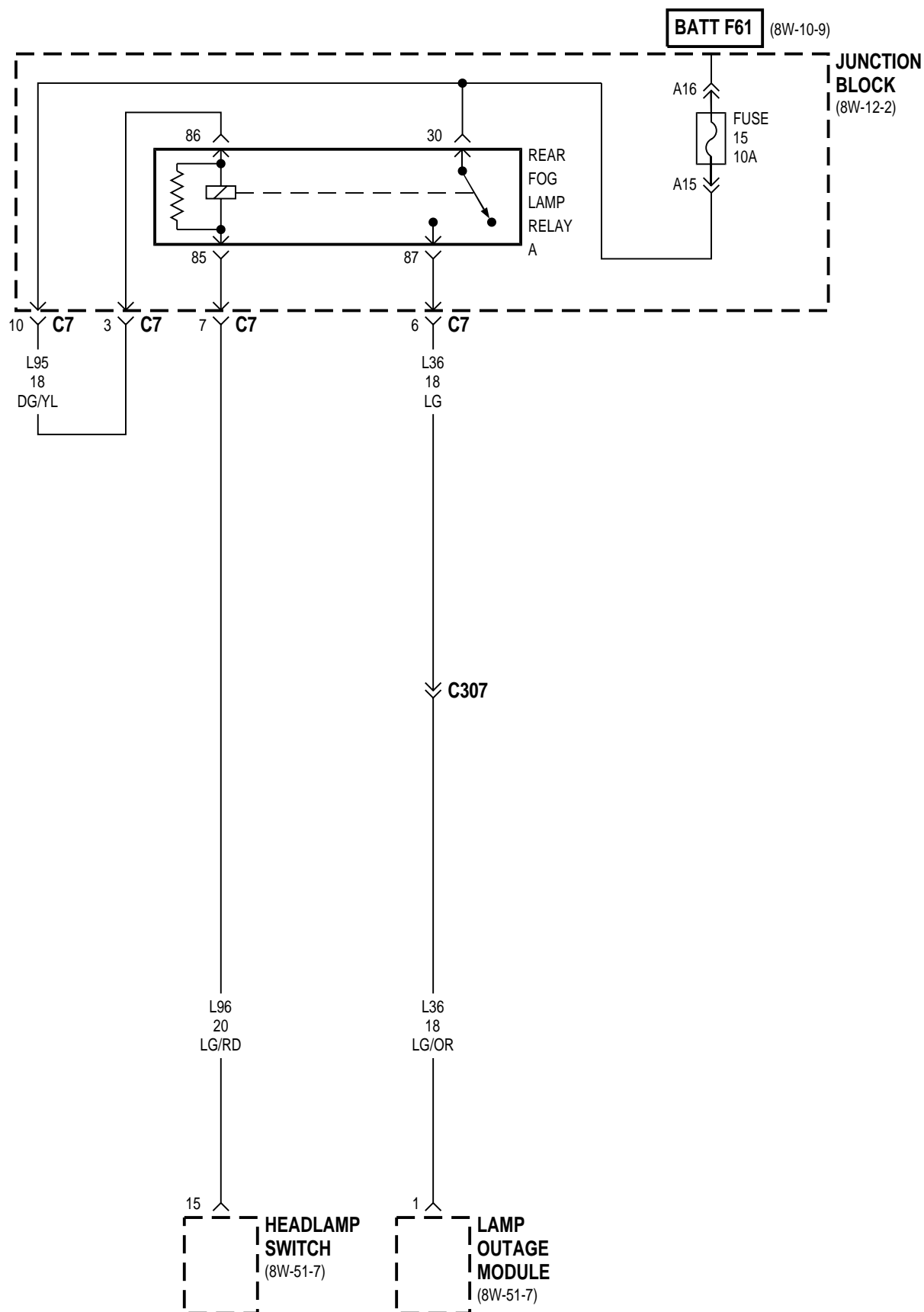


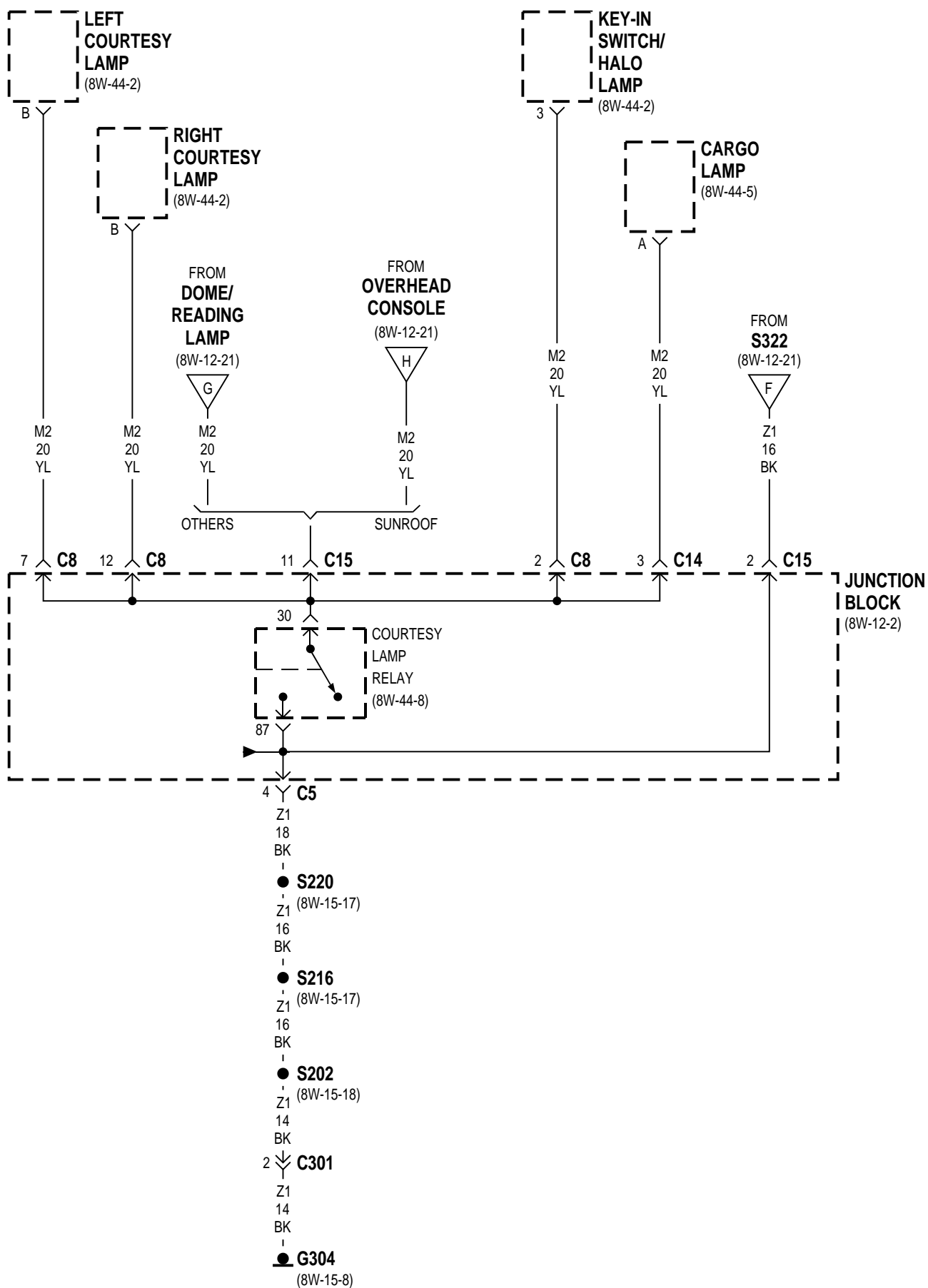


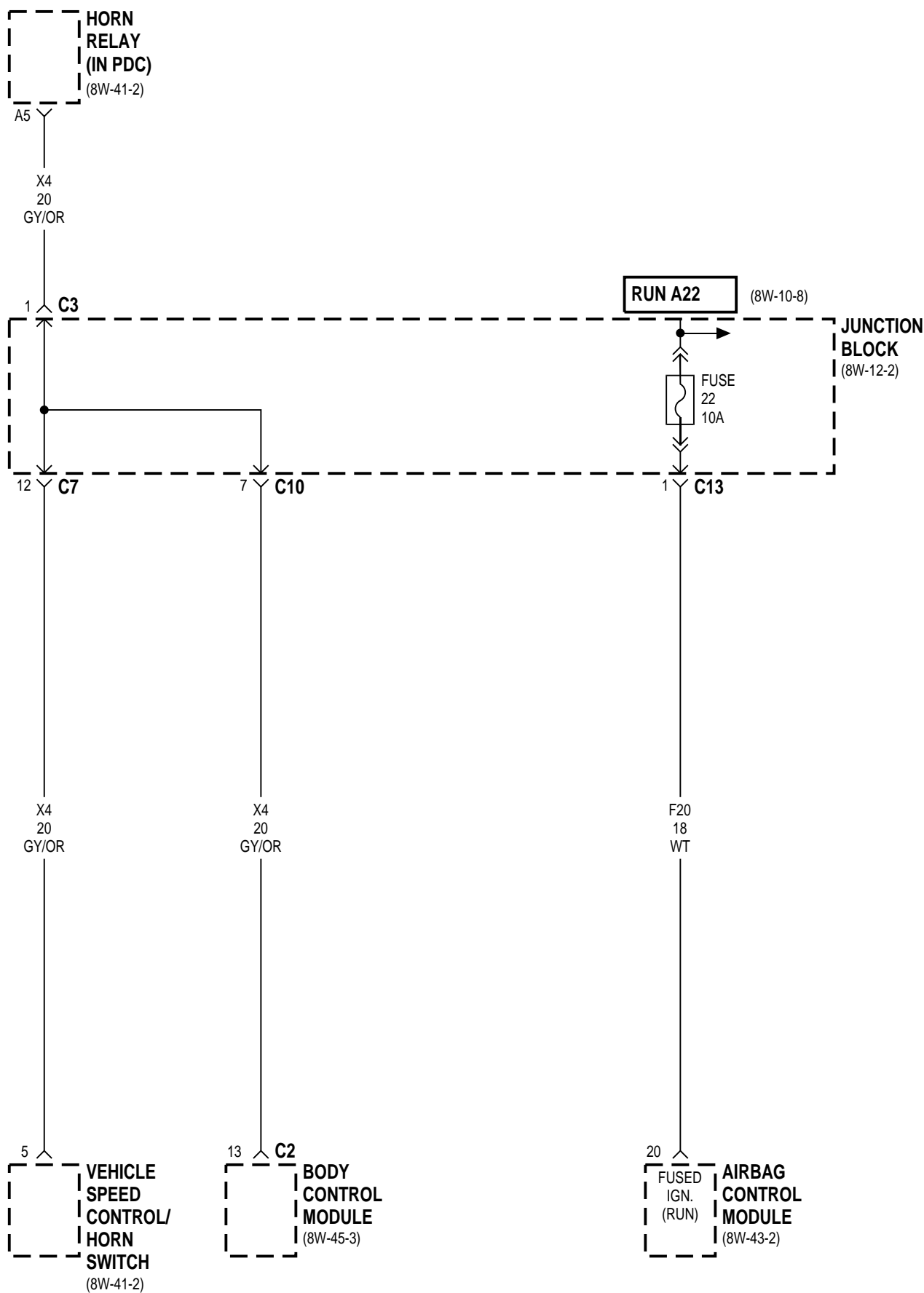














FUSES

FUSE NO.	SIZE	FEED CIRCUIT	FEED CIRCUIT
1	10A	A31 12RD/BK	X12 18RD/GY
2	15A	A31 12RD/BK	A31 18RD/BK
3	10A	A31 12RD/BK	V23 18BR/PK
			V23 20BR/PK
4	10A	A21 12DB/GY	G5 18DB/WT
5	10A	A21 12DB/GY	F87 20BK/WT
			F87 18WT/PK
6	15A	A22 12BK/OR	F83 18YL/DG
			F83 20YL/DG
			F83 20BK/VT
7	20A	A250 10RD	F75 18VT
			F75 18VT
			F75 14VT
8	20A	A250 10RD	F70 14PK/BK
9	15A	A250 10RD	L16 18RD/LG
10	10A	C15 12BK/WT	C16 20LB/YL
11	10A	A22 12BK/OR	F12 20DB/WT
			F12 20DB/WT
12	10A	A22 12BK/OR	F71 20PK/DG
			F71 20PK/DG
13	15A	A7 12YL/RD	INTERNAL
14	15A	F61 12WT/OR	INTERNAL
15	NOT USED	-	-
16	10A	A7 12YL/RD	MI 18PK
			M1 20PK (7 WIRES)
17	15A	A6 14RD/LB	366 16PK/OR
18	NOT USED	-	-
19	15A	A7 12YL/RD	L11 16LG/BK
20	15A	A7 12YL/RD	F60 20RD/WT (3 WIRES)
21	15A	A7 12YL/RD	F38 18OR
22	10A	A22 12BK/OR	F20 18WT

CIRCUIT BREAKERS

CIRCUIT BREAKER NO.	SIZE	FEED CIRCUIT	FUSED CIRCUIT
1*	20A	A31 12RD/BK	F86 16LG/BK
			F86 16LG/BK
			F86 16LG/RD
1**	20A	A31 12RD/BK	F86 18LG/BK
2	30A	A250 10RD	F81 10TN
			F81 12TN
3	20A	A7 12YL/RD	35 16RD
			F35 16RD

RELAYS

REAR
FOG LAMP
RELAY
(A)

CAVITY	CIRCUIT	FUNCTION
30	F61 16WT/OR	FUSED B(+)
85	L96 20LG/RD	GROUND
86	L95 18DG/YL	RELAY OUTPUT
87	L36 18LG	REAR FOG LAMP
87A	-	-

CIGAR
LIGHTER
RELAY
(B)

CAV	CIRCUIT	FUNCTION
30	INTERNAL	FUSED B(+)
85	Z1 20BK	GROUND
86	A31 RD/BK	FUSED IGNITION SWITCH OUPUT (RUN)
87	F30 18RD/DB	FUSED IGNITION SWITCH OUTPUT (ACC/RUN)
87A	-	-

*GAS
**DIESEL

REAR
WINDOW
DEFOGGER
RELAY
(G)

CAVITY	CIRCUIT	FUNCTION
30	A900 OR/YL	FUSED B(+)
85	C14 WT/RD	REAR WINDOW DEFOGGER RELAY CONTROL
86	A900 OR/YL	FUSED B(+)
87	C15 BK/WT	REAR WINDOW DEFOGGER RELAY OUTPUT
87A	-	-

POWER
ANTENNA
RELAY
(H)
(EXPORT ONLY)

CAVITY	CIRCUIT	FUNCTION
1	Z1 BK	GROUND
2	INTERNAL	FUSED B(+)
3	X60 DG/RD	RADIO 12 VOLT OUTPUT
4	X14 WT	POWER ANTENNA DOWN CONTROL
5	X16 GY	POWER ANTENNA DRIVER
6	X17 GN	POWER ANTENNA UP CONTROL

ELECTRONIC
FLASHER
(I)

CAVITY	CIRCUIT	FUNCTION
1	INTERNAL	FUSED B(+)
2	INTERNAL	FUSED IGNITION SWITCH OUTPUT (RUN)
3	L12 18VT/TN	HAZARD SIGNAL
4	L5 18OR/BK	TURN SIGNAL
5	Z1 18BK	GROUND

COURTESY
LAMP
RELAY
(C)

CAVITY	CIRCUIT	FUNCTION
30	M2 YL	COURTESY LAMP RELAY OUTPUT
85	M112 BR/LG	COURTESY LAMP RELAY CONTROL
86	M1 PK	FUSED B(+)
87	Z1 BK	GROUND
87A	-	-

FOG
LAMP
RELAY
(D)

CAVITY	CIRCUIT	FUNCTION
30	F62 RD	FUSED B(+)
85	L95 DG/YL	FOG LAMP RELAY CONTROL
86	F62 RD	FUSED B(+)
87	L39 LB	FOG LAMP RELAY OUTPUT
87A	-	-

PARK
LAMP
RELAY
(E)

CAVITY	CIRCUIT	FUNCTION
30	366 PK/OR	PARK LAMP FEED
85	L79 TN	PARK LAMP RELAY CONTROL
86	366 PK/OR	PARK LAMP FEED
87	L90 DB/RD	PARK LAMP RELAY OUTPUT
87A	-	-

AUTO
HEADLAMP
RELAY
(F)

CAVITY	CIRCUIT	FUNCTION
30	A6 RD/LB	FUSED B(+)
85	714 BK/OR	AUTO HEADLAMP RELAY CONTROL
86	A6 RD/LB	FUSED B(+)
87	F34 TN/BK	AUTO HEADLAMP RELAY OUTPUT
87A	-	-

8W-12 JUNCTION BLOCK

DESCRIPTION AND OPERATION

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.

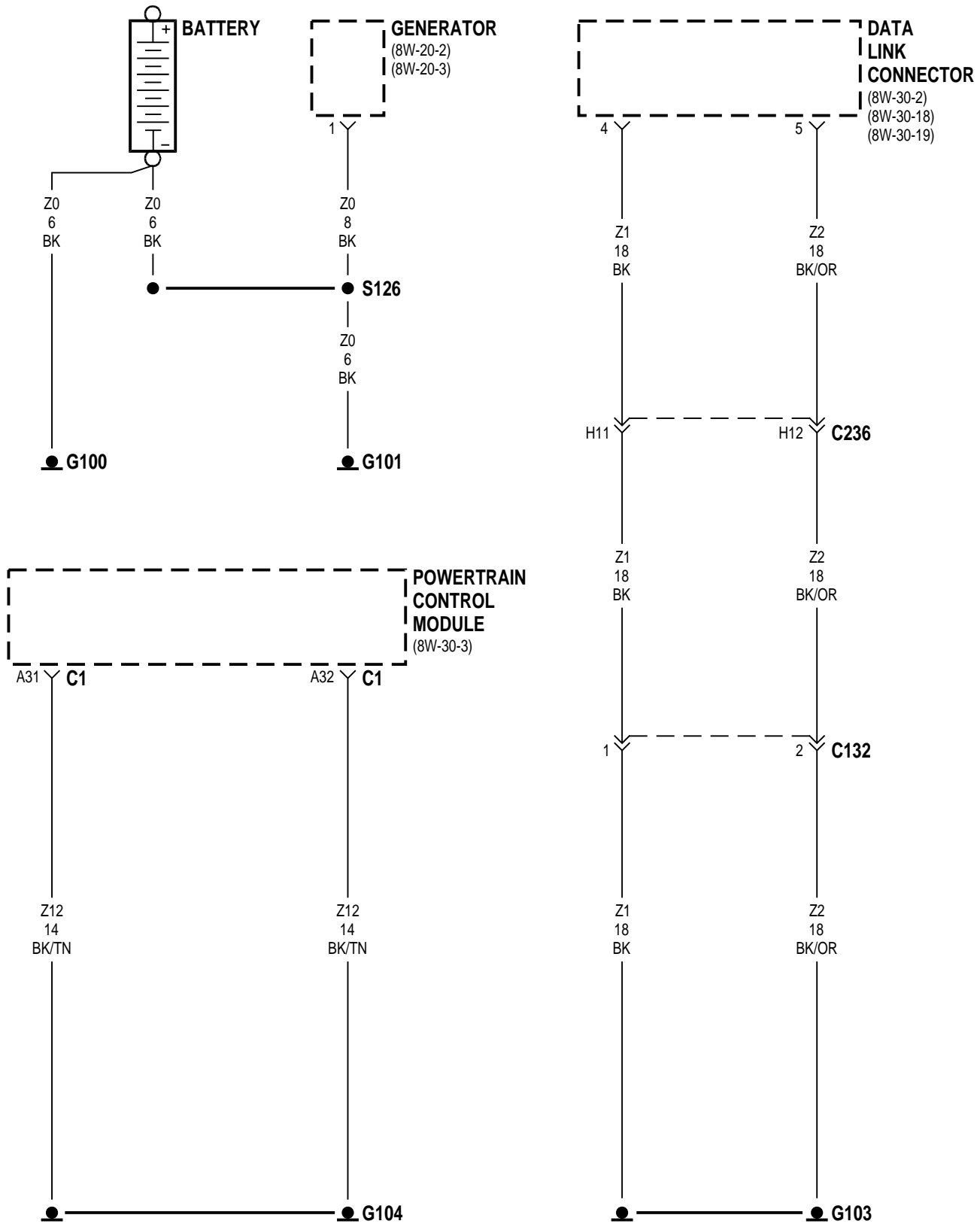
8W-15 GROUND DISTRIBUTION

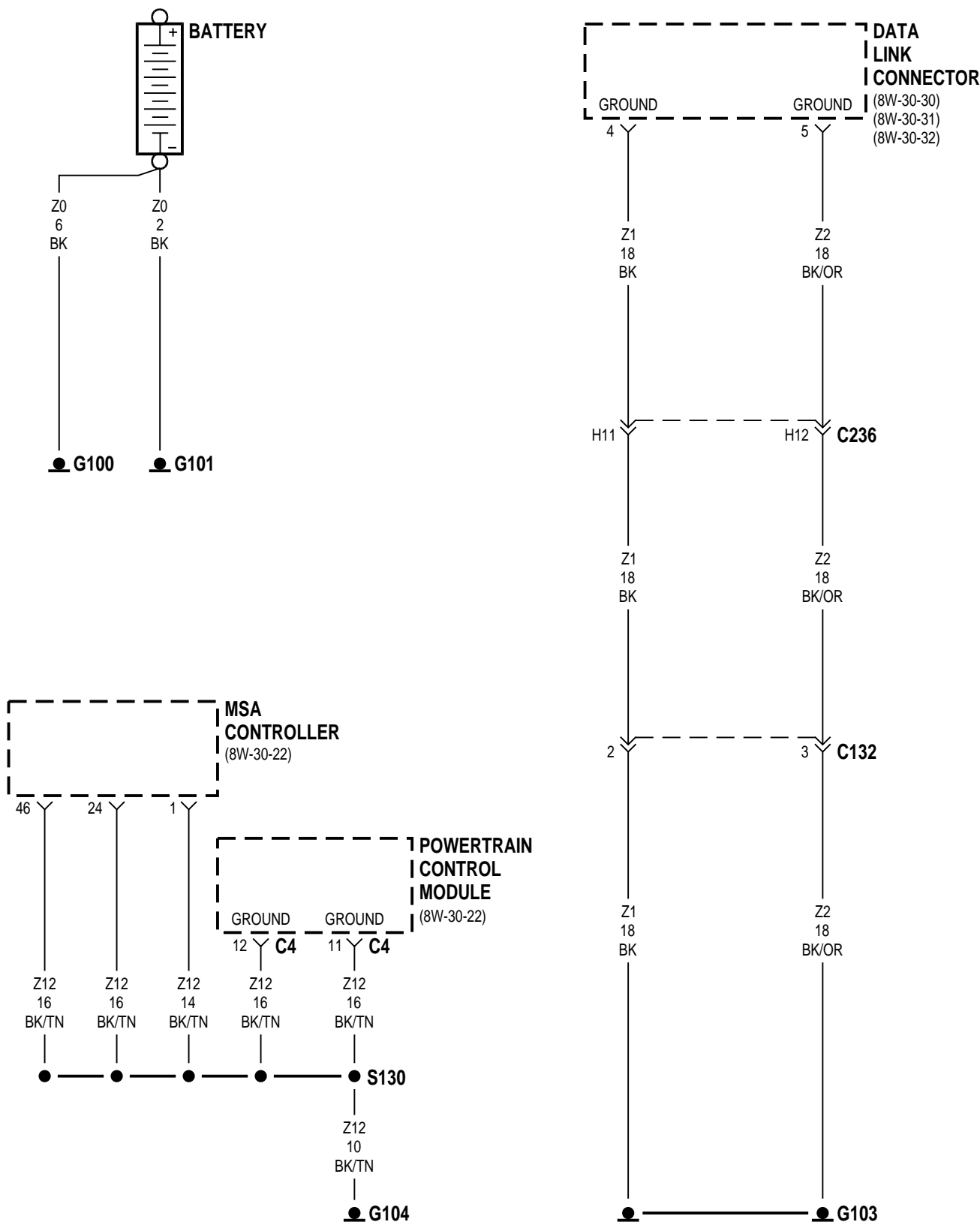
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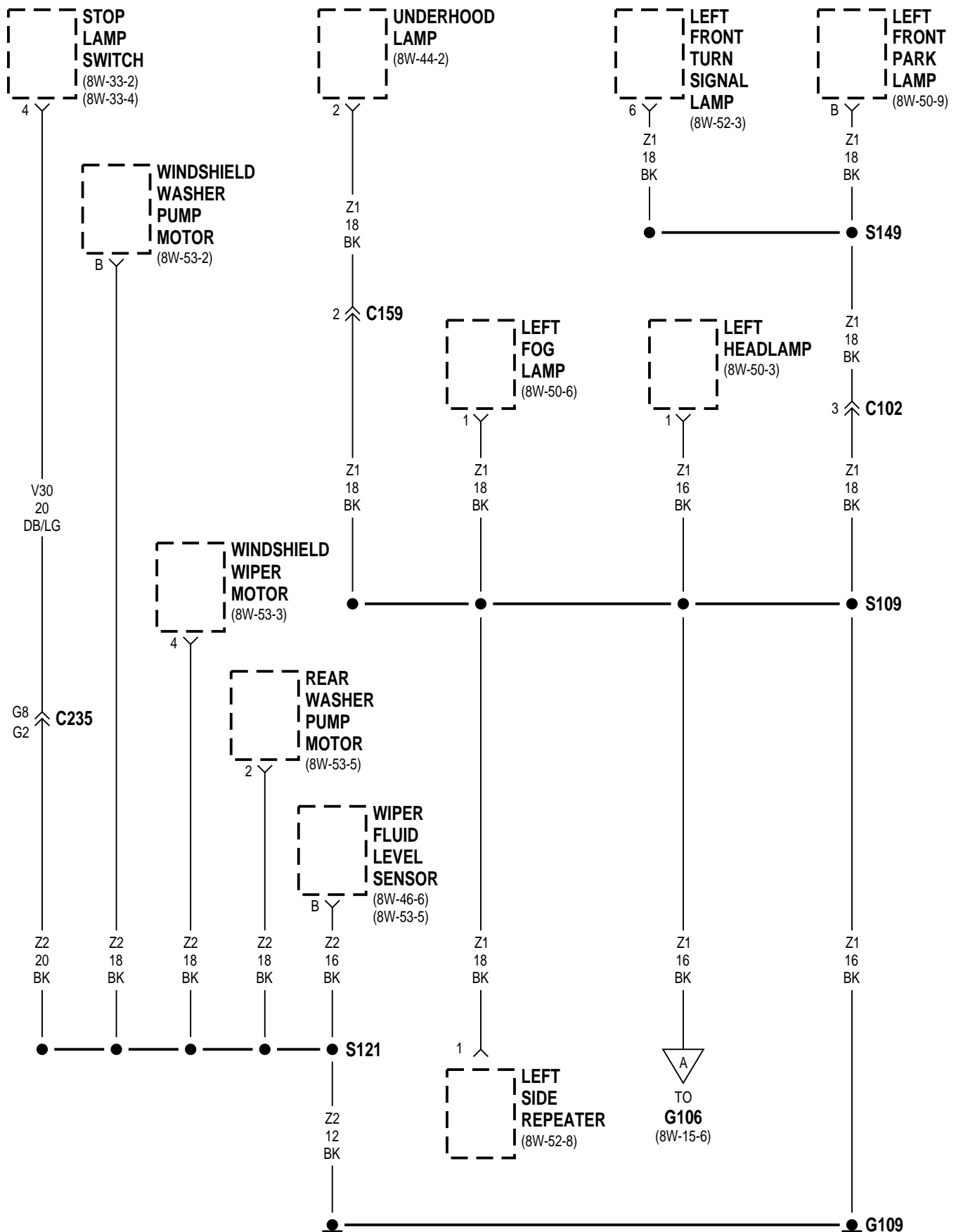
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SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	19

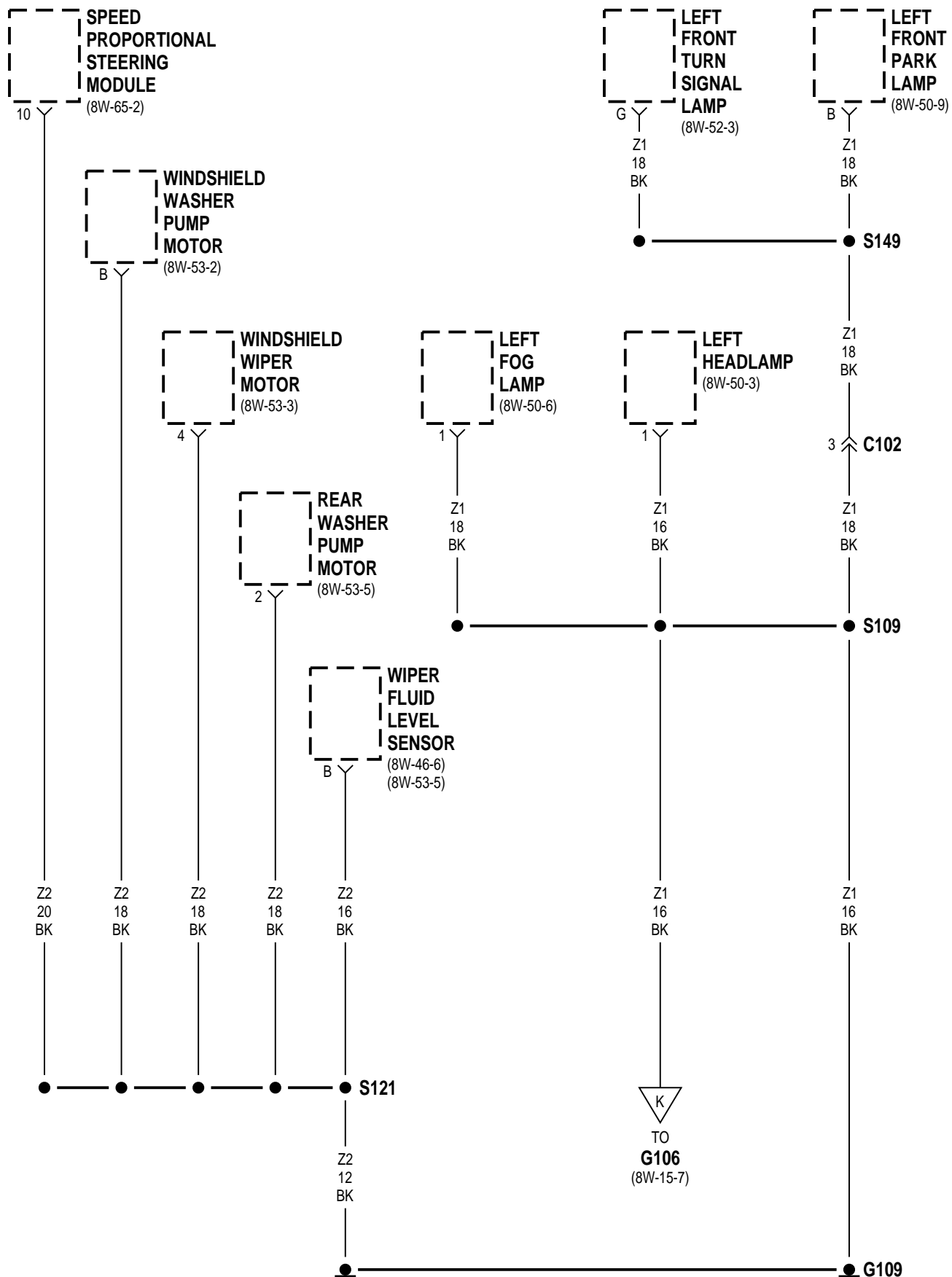
Component	Page	Component	Page
A/C Heater Control	8W-15-8, 17	Left Courtesy Lamp	8W-15-12
A/C High Pressure Switch	8W-15-7	Left Fog Lamp	8W-15-4, 5
Airbag Control Module	8W-15-13	Left Front Park Lamp	8W-15-4, 5
Ash Receiver Lamp	8W-15-17	Left Front Turn Signal Lamp	8W-15-4, 5
Automatic Day/Night Mirror	8W-15-16	Left Headlamp	8W-15-4, 5
Automatic Temperature Control Module	8W-15-8	Left License Lamp	8W-15-10
Battery	8W-15-2, 3	Left Rear Fog Lamp	8W-15-9
Blend Door Actuator	8W-15-17	Left Rear Power Window Switch	8W-15-15
Blower Motor	8W-15-8	Left Rear Turn Signal Lamp	8W-15-9
Blower Power Module	8W-15-8	Left Side Repeater	8W-15-4
Body Control Module	8W-15-18	Left Tail/Stop Lamp	8W-15-9
Center High Mounted Stop Lamp No. 1	8W-15-9	Left Visor/Vanity Lamp	8W-15-16
Center High Mounted Stop Lamp No. 2	8W-15-9	Liftgate Ajar Switch	8W-15-10
Center High Mounted Stop Lamp No. 3	8W-15-9	Liftgate Cylinder Lock Switch	8W-15-10
Cigar Lighter	8W-15-17	Liftglass Ajar Switch	8W-15-10
Cigar Lighter Relay	8W-15-17	Liftglass Release Solenoid	8W-15-10
Controller Anti-Lock Brake	8W-15-8	Mass Air Flow Module	8W-15-6
Courtesy Lamp Relay	8W-15-16	Memory Seat Module	8W-15-15
Data Link Connector	8W-15-2, 3	Msa Controller	8W-15-3
Dome/Reading Lamp	8W-15-16	Overhead Console	8W-15-16
Downstream Heated Oxygen Sensor	8W-15-7	Passenger Door Module	8W-15-14
Driver Door Module	8W-15-12	Passenger Heated Seat Back	8W-15-13
Driver Heated Seat Back	8W-15-15	Passenger Heated Seat Cushion	8W-15-13
Driver Heated Seat Cushion	8W-15-15	Passenger Lumbar Switch	8W-15-13
Driver Lumbar Switch	8W-15-15	Passenger Power Seat Switch	8W-15-13
Driver Power Seat Switch	8W-15-15	Passenger Seat Heater Control Module	8W-15-13
Driver Seat Heater Control Module	8W-15-15	Power Amplifier	8W-15-13
EGR Solenoid	8W-15-6	Power Outlet	8W-15-17
Electronic Flasher	8W-15-16	Powertrain Control Module	8W-15-2, 3
Engine Coolant Level Sensor	8W-15-7	Radio	8W-15-13
Engine Starter Motor Relay	8W-15-8	Rear Washer Pump Motor	8W-15-4, 5
Factory Trailer Tow Connector	8W-15-9	Rear Window Defogger	8W-15-10
Floor Console Lamps	8W-15-15	Rear Wiper Motor	8W-15-10
Four Wheel Drive Switch	8W-15-6, 7	Right Back-Up Lamp	8W-15-11
Fuel Heater	8W-15-6	Right Courtesy Lamp	8W-15-14
Fuel Heater Relay	8W-15-8	Right Fog Lamp	8W-15-6, 7
Fuel Pump Module	8W-15-15	Right Front Park Lamp	8W-15-6, 7
G100	8W-15-2, 3	Right Front Turn Signal Lamp	8W-15-6, 7
G101	8W-15-2, 3	Right Headlamp	8W-15-6, 7
G103	8W-15-2, 3	Right License Lamp	8W-15-10
G104	8W-15-2, 3	Right Rear Fog Lamp	8W-15-11
G105	8W-15-7	Right Rear Power Window Switch	8W-15-14
G106	8W-15-6, 7	Right Rear Turn Signal Lamp	8W-15-11
G107	8W-15-8	Right Side Repeater	8W-15-6, 7
G108	8W-15-8	Right Tail/Stop Lamp	8W-15-11
G109	8W-15-4, 5	Right Visor/Vanity Lamp	8W-15-16
G300	8W-15-11	Seat Belt Switch	8W-15-15
G301	8W-15-14	Speed Proportional Steering Module	8W-15-5
G302	8W-15-12	Stop Lamp Switch	8W-15-4, 18
G303	8W-15-13	Sunroof Control Module	8W-15-16
G304	8W-15-18	Switch Pod	8W-15-17
G305	8W-15-15	Trailer Tow Left Turn Relay	8W-15-9
Generator	8W-15-2	Trailer Tow Right Turn Relay	8W-15-9
Glove Box Lamp	8W-15-17	Trailer Tow Stop Lamp Relay	8W-15-9
Graphic Display Module	8W-15-17, 18	Underhood Lamp	8W-15-4, 8
Headlamp Leveling Switch	8W-15-18	Upstream Heated Oxygen Sensor	8W-15-7
Headlamp Switch	8W-15-18	Vehicle Information Center	8W-15-12, 17, 18
Horn No. 1	8W-15-6, 7	Vehicle Speed Control Servo	8W-15-8
Horn No. 2	8W-15-6, 7	Vehicle Speed Control/Horn Switch	8W-15-18
Instrument Cluster	8W-15-17, 18	Windshield Washer Pump Motor	8W-15-4, 5
Junction Block	8W-15-16, 17	Windshield Wiper Motor	8W-15-4, 5
Key-In Switch/Halo Lamp	8W-15-17	Wiper Fluid Level Sensor	8W-15-4, 5
Lamp Outage Module	8W-15-12		
Left Back-Up Lamp	8W-15-9		

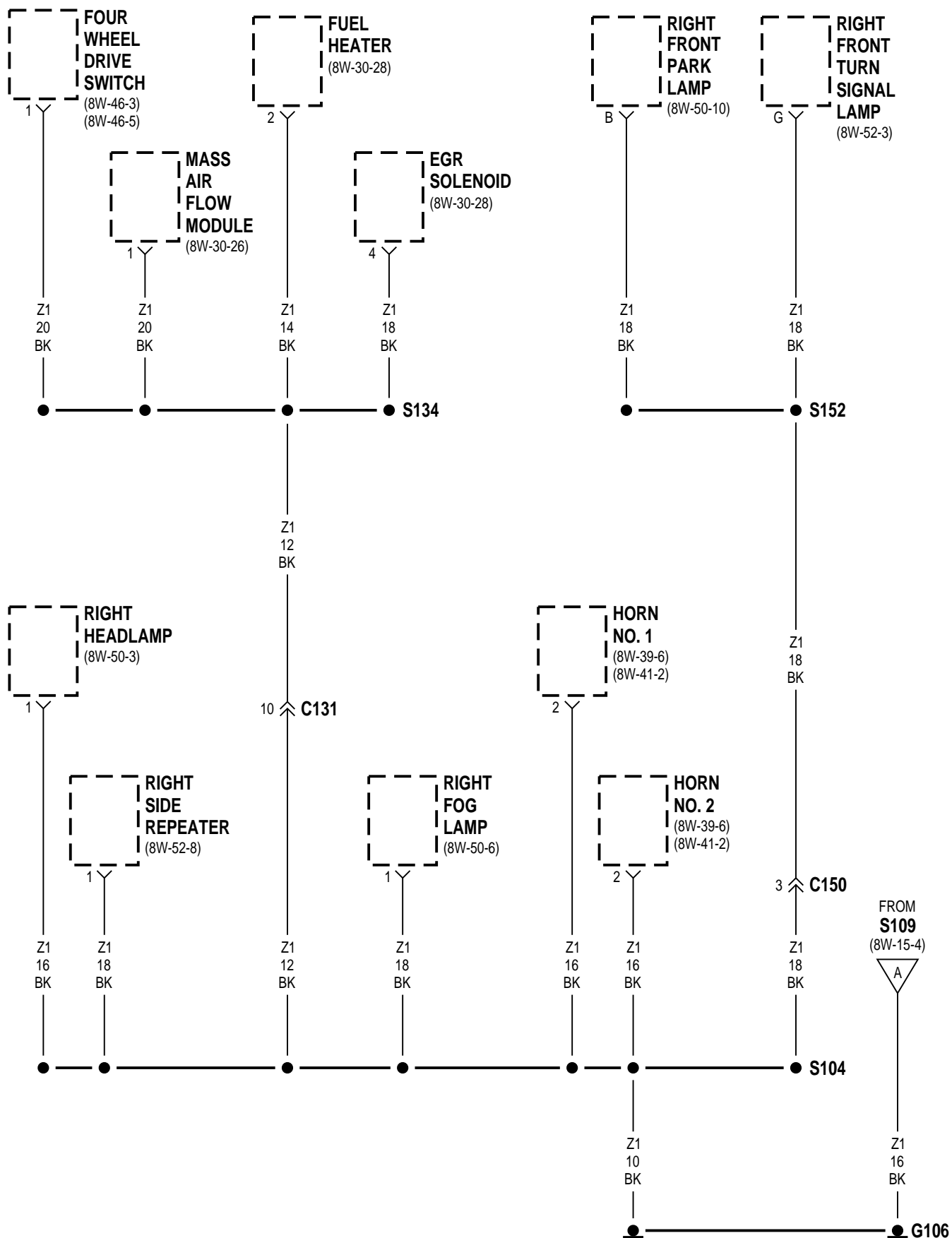




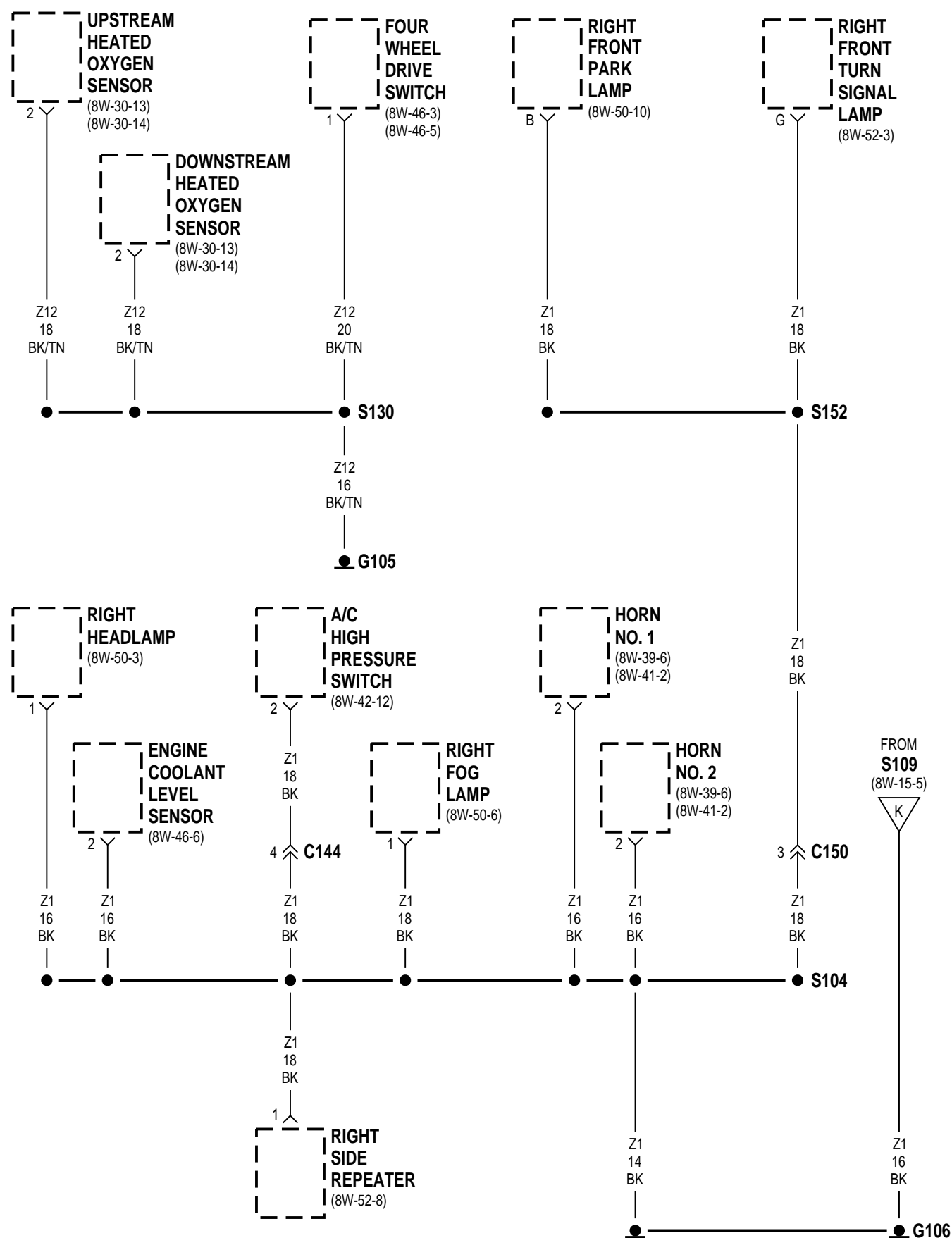


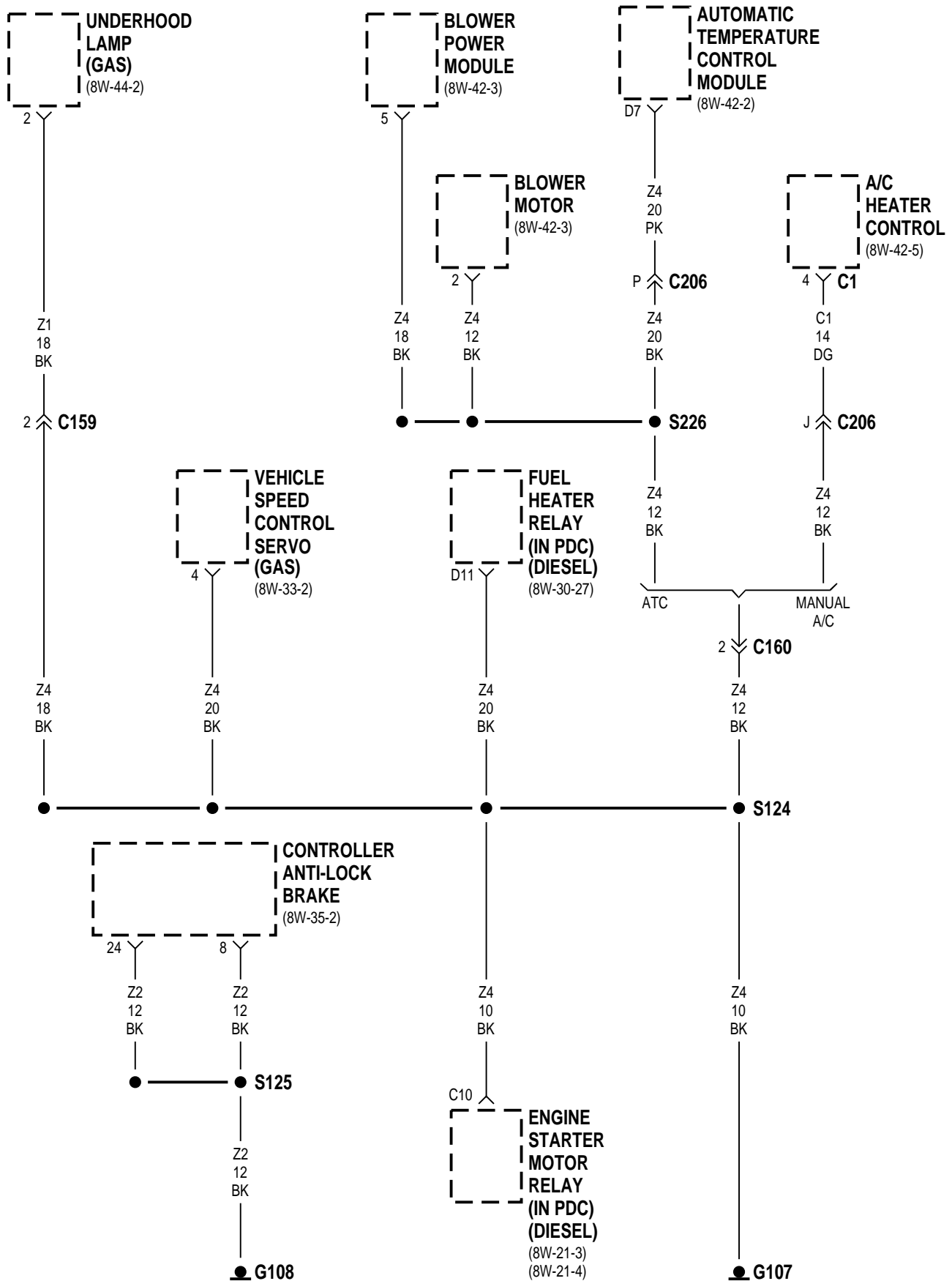
ZG
8W-15 GROUND DISTRIBUTION
GAS ENGINES
8W - 15 - 5

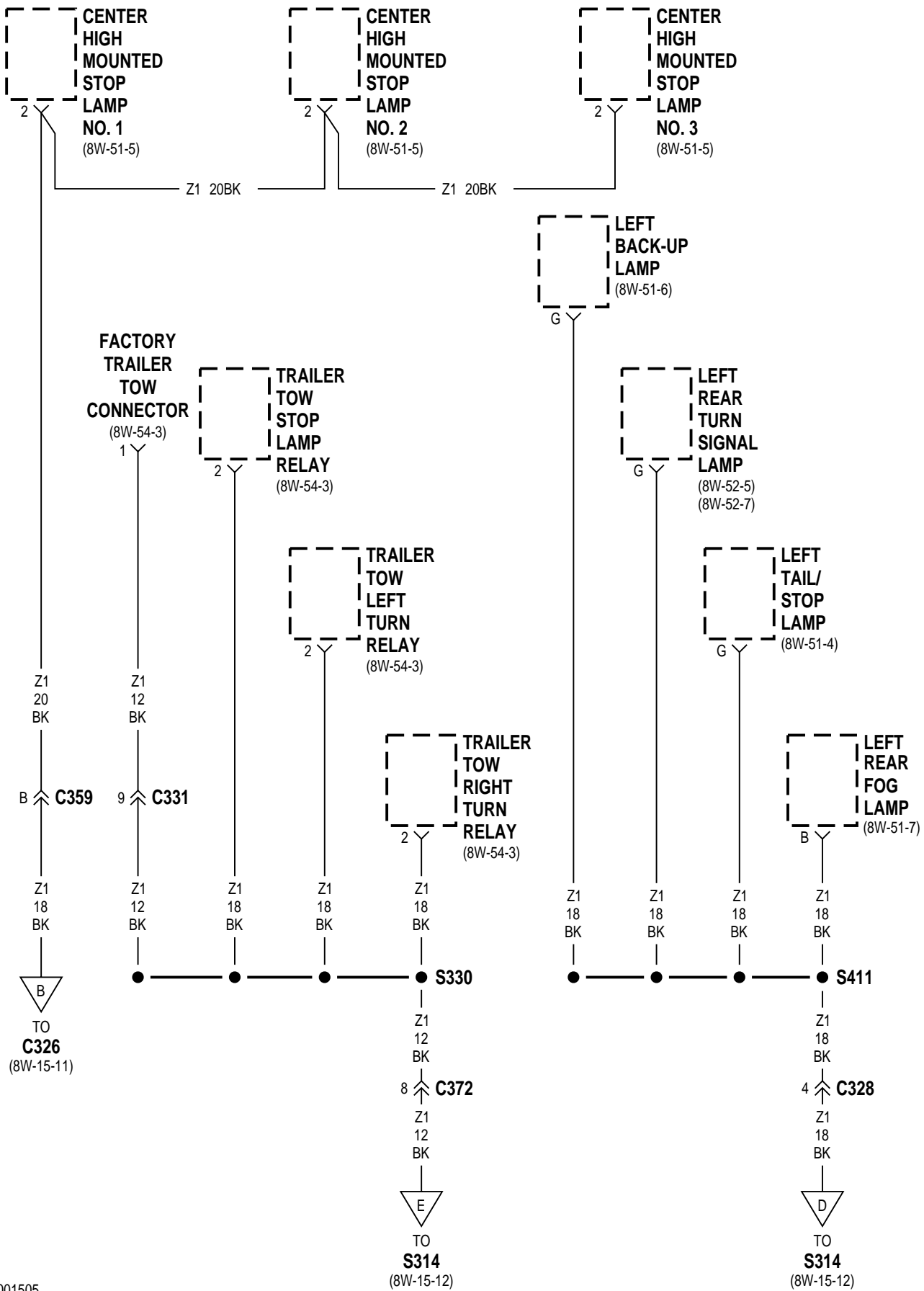


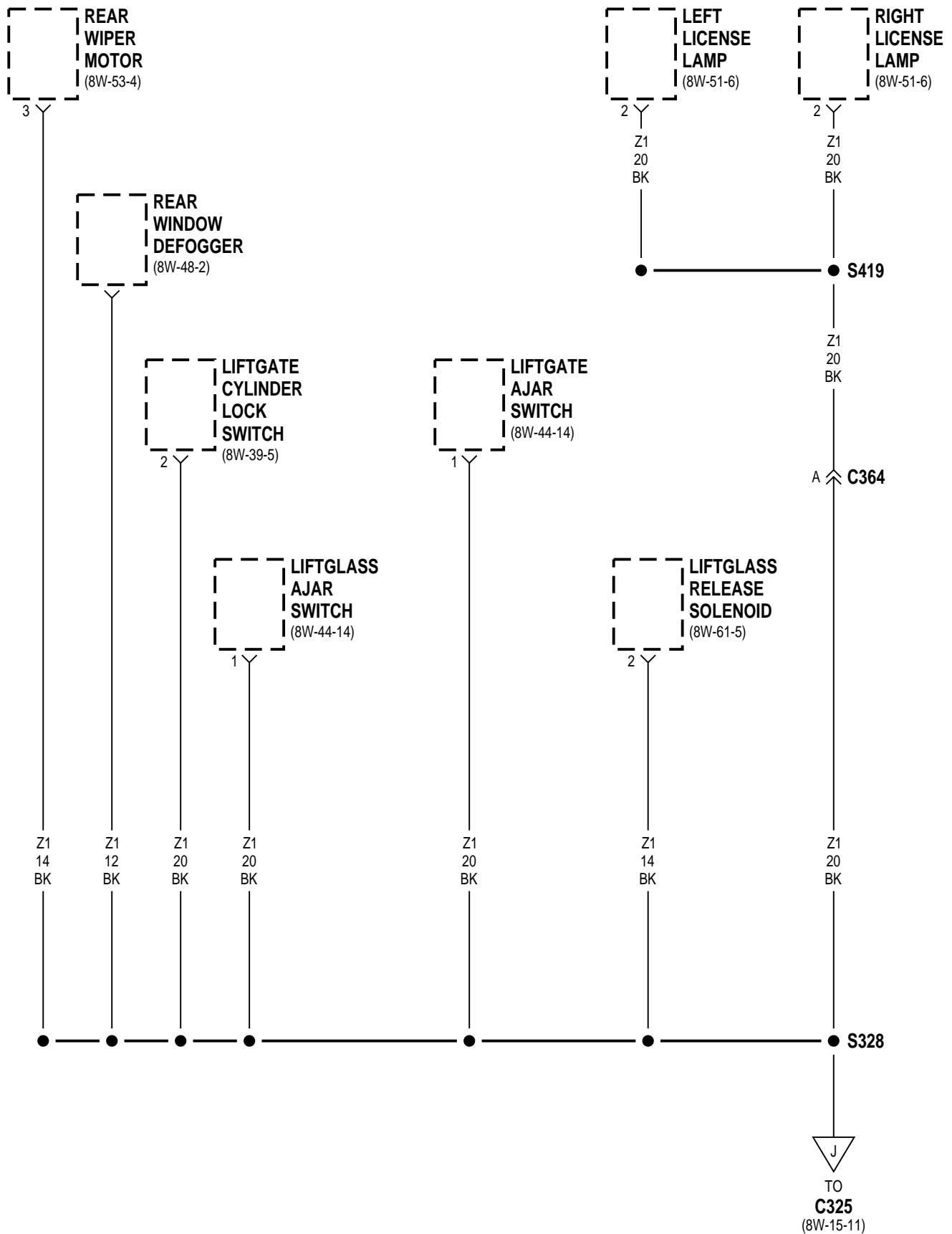


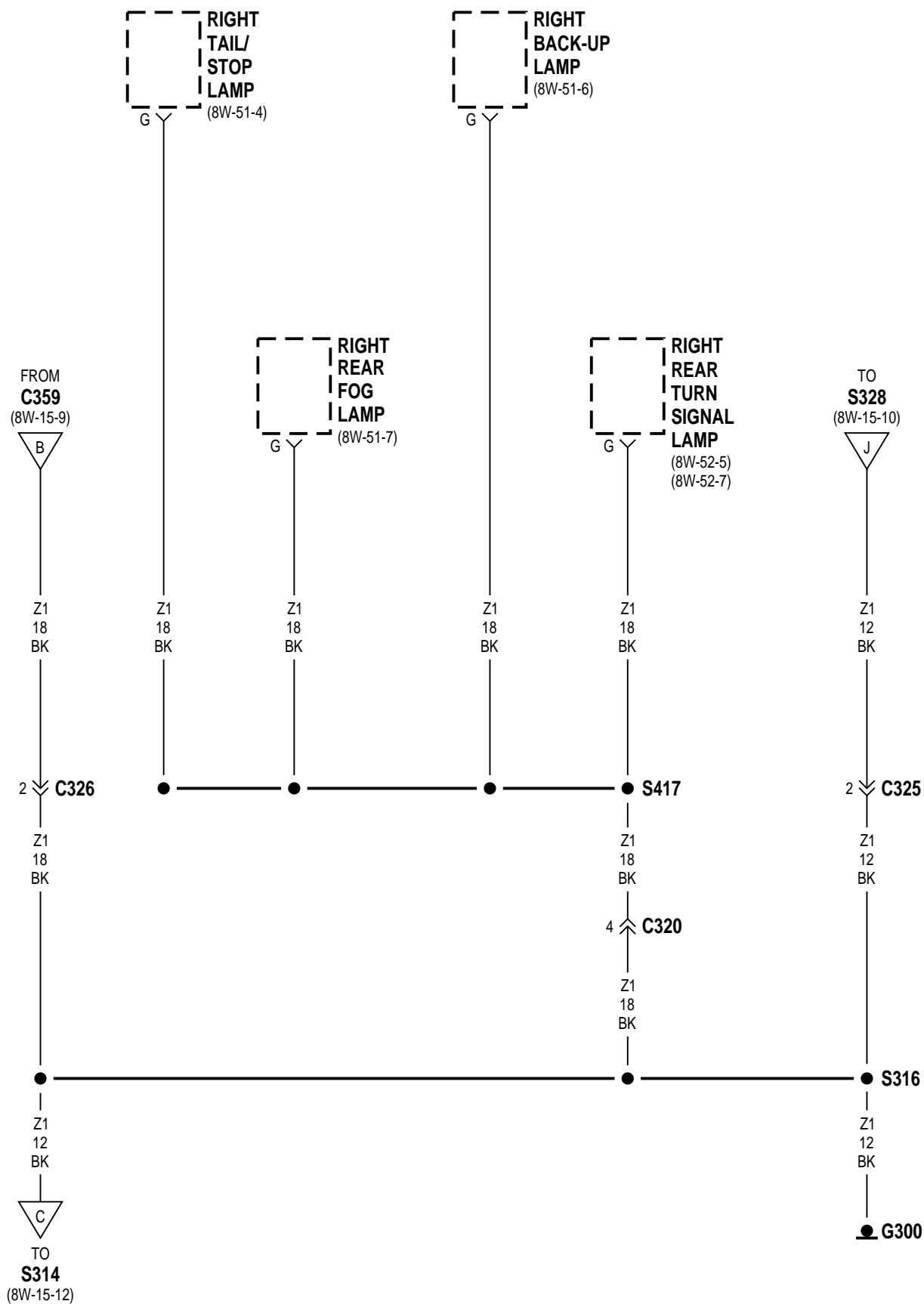
ZG
8W-15 GROUND DISTRIBUTION
GAS ENGINES
8W - 15 - 7

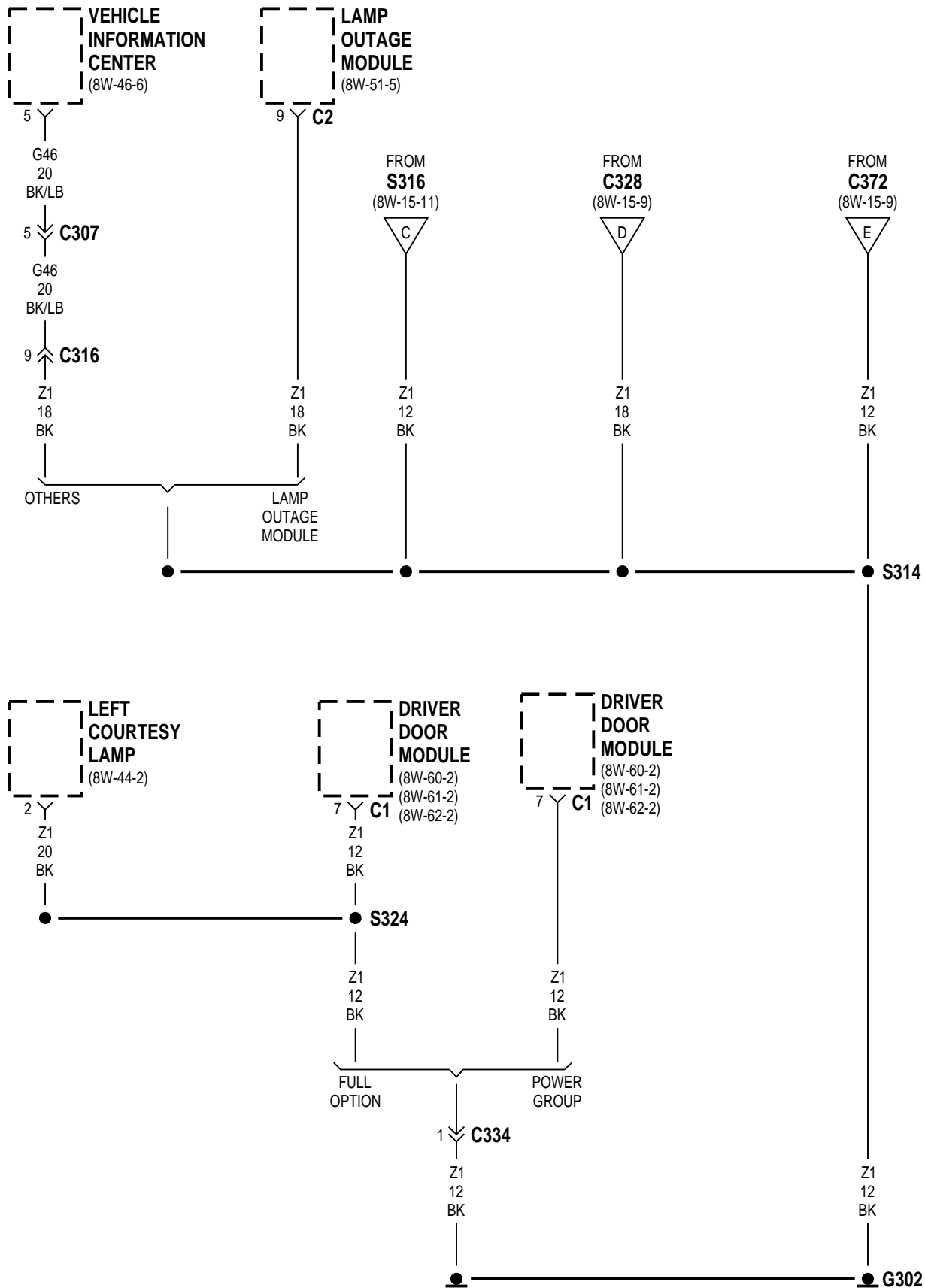


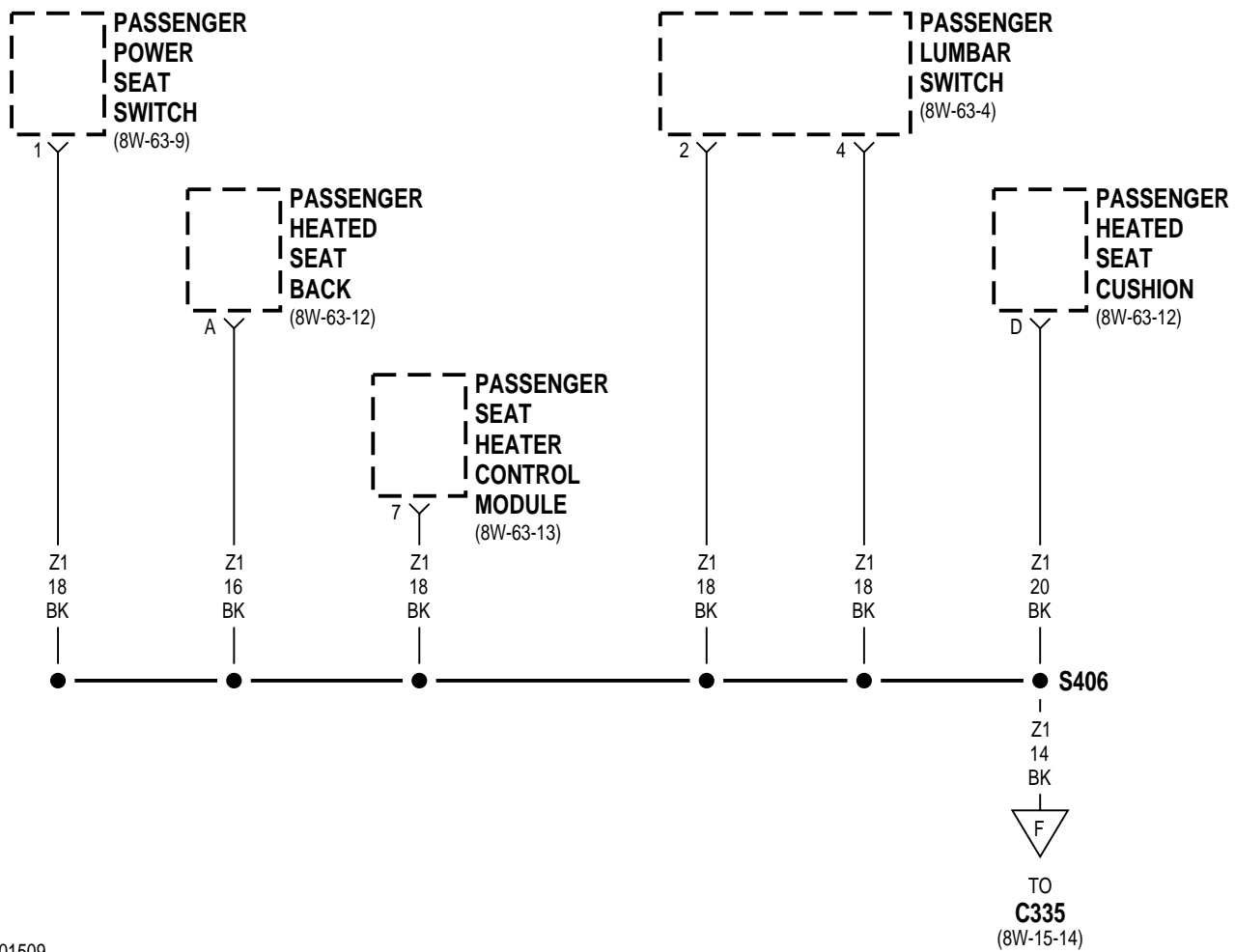
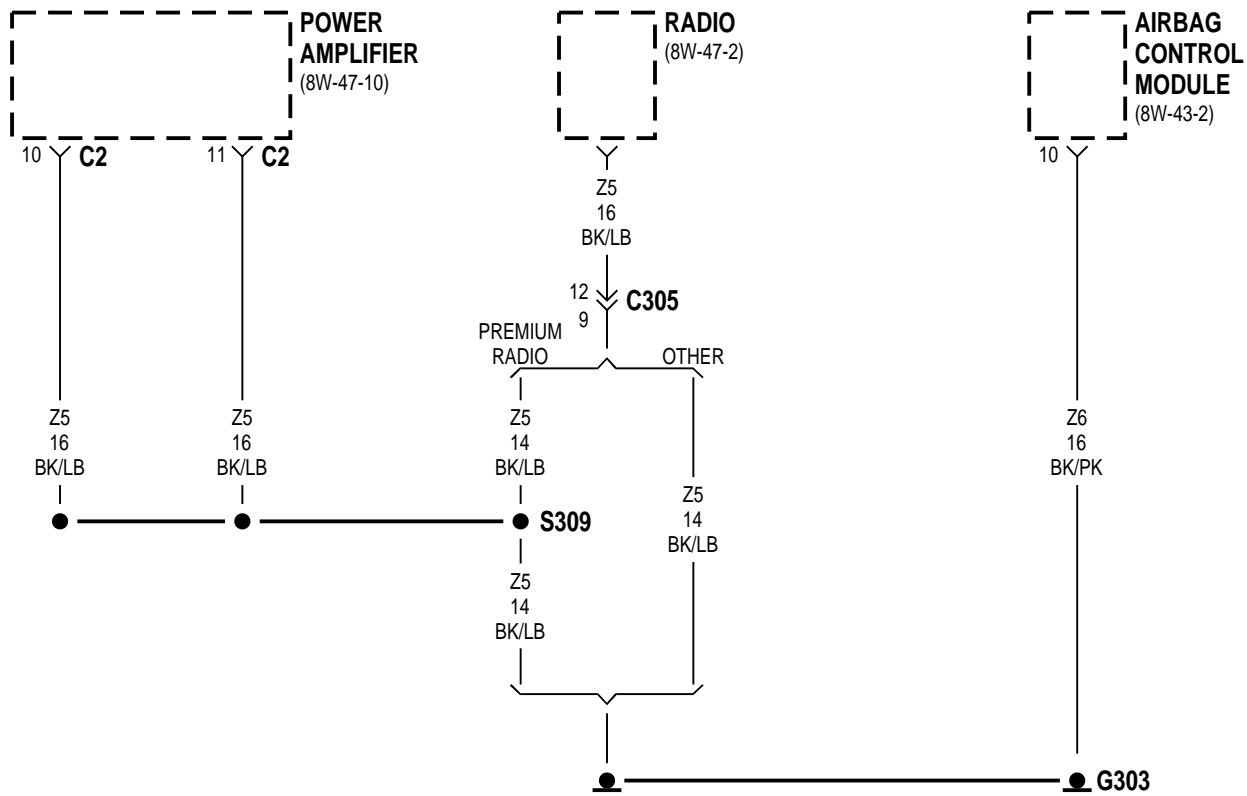


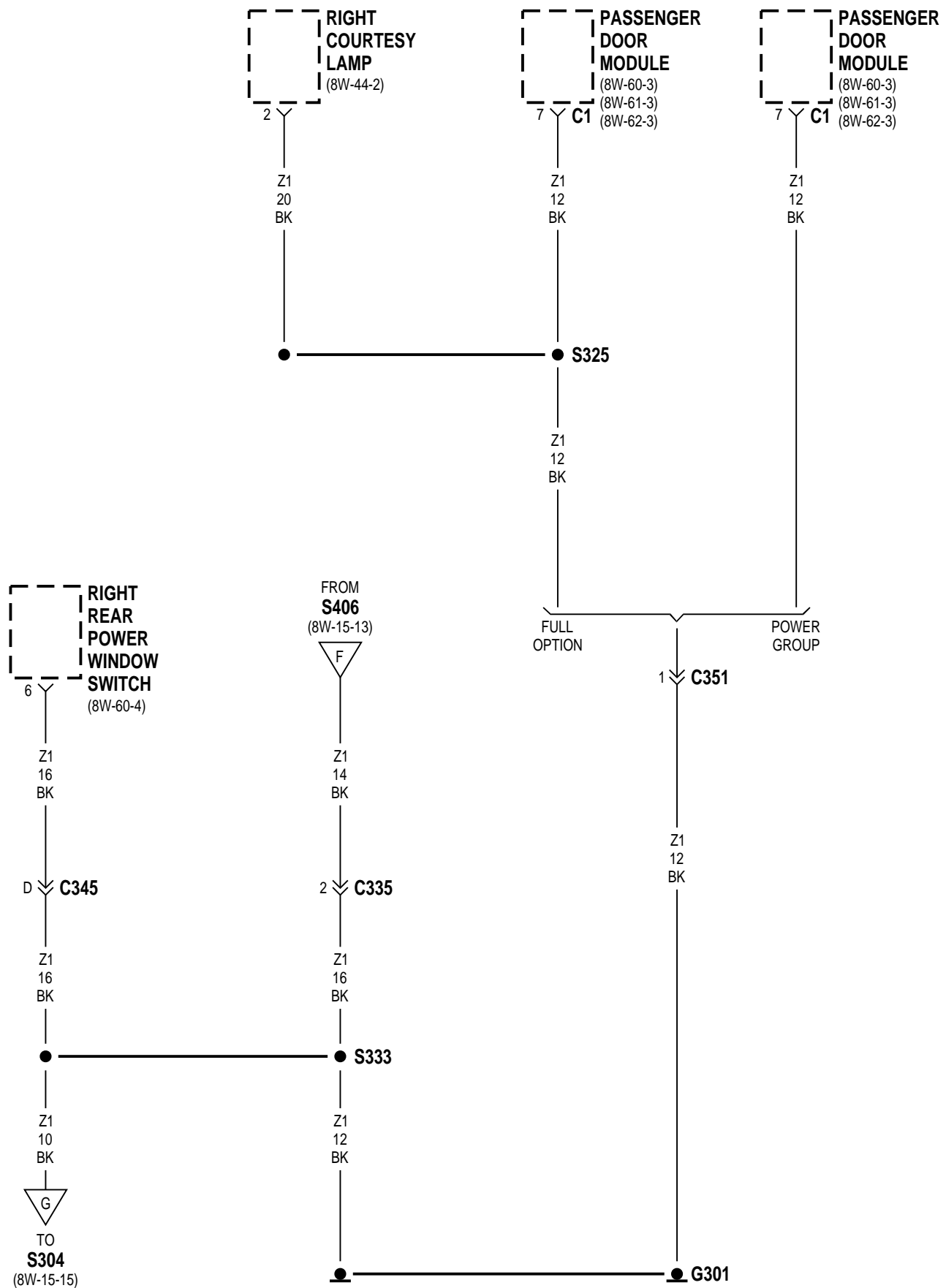


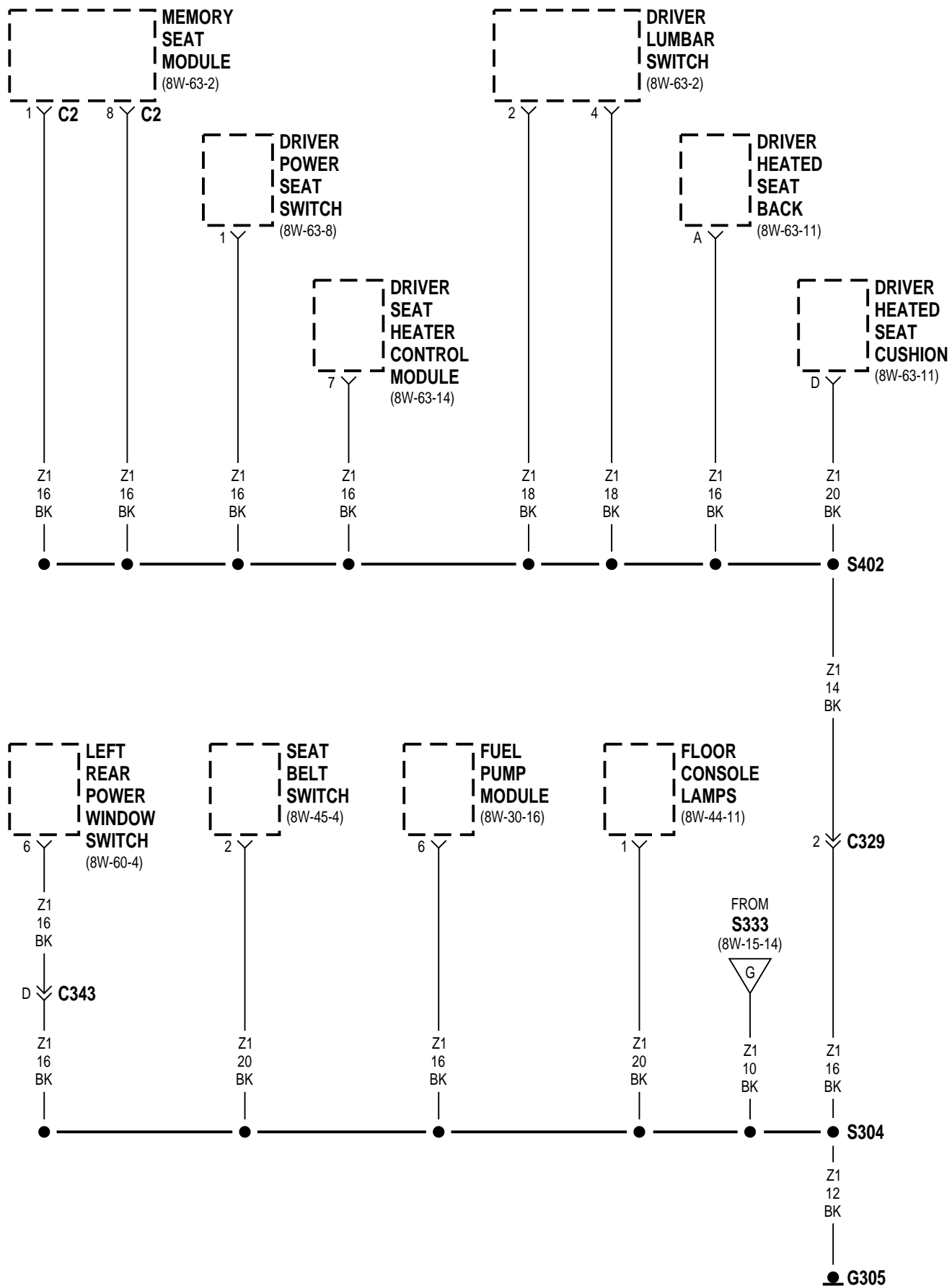


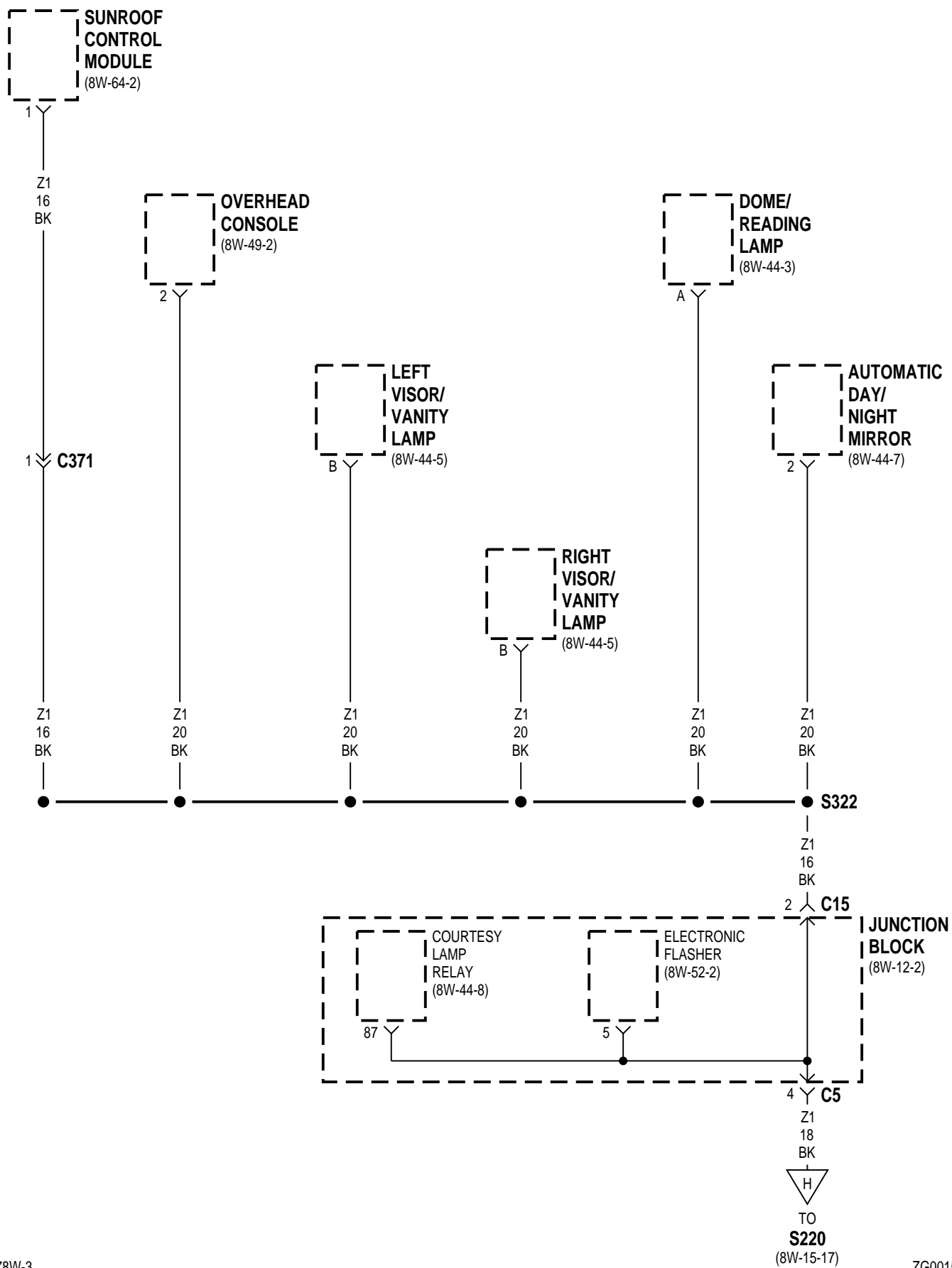


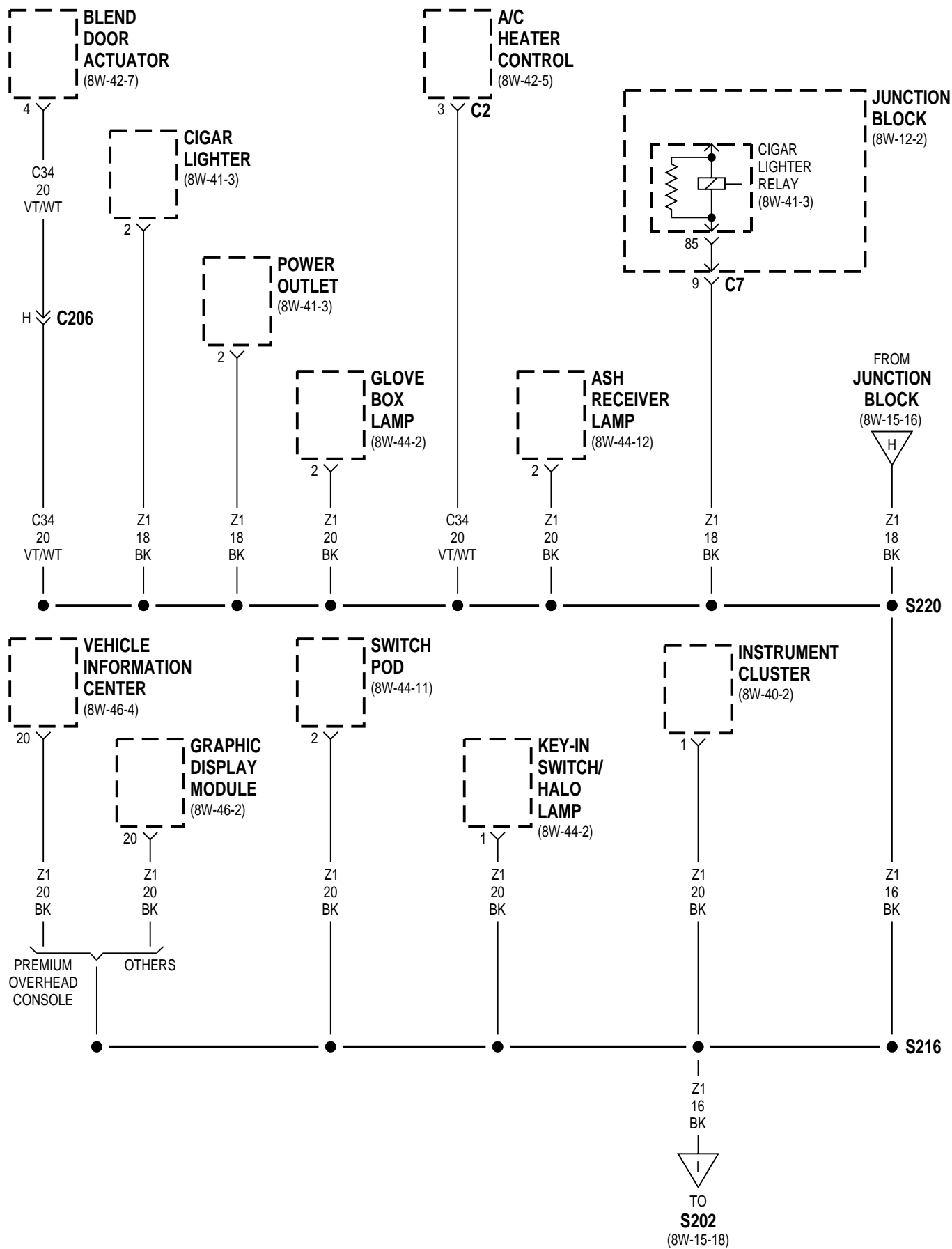


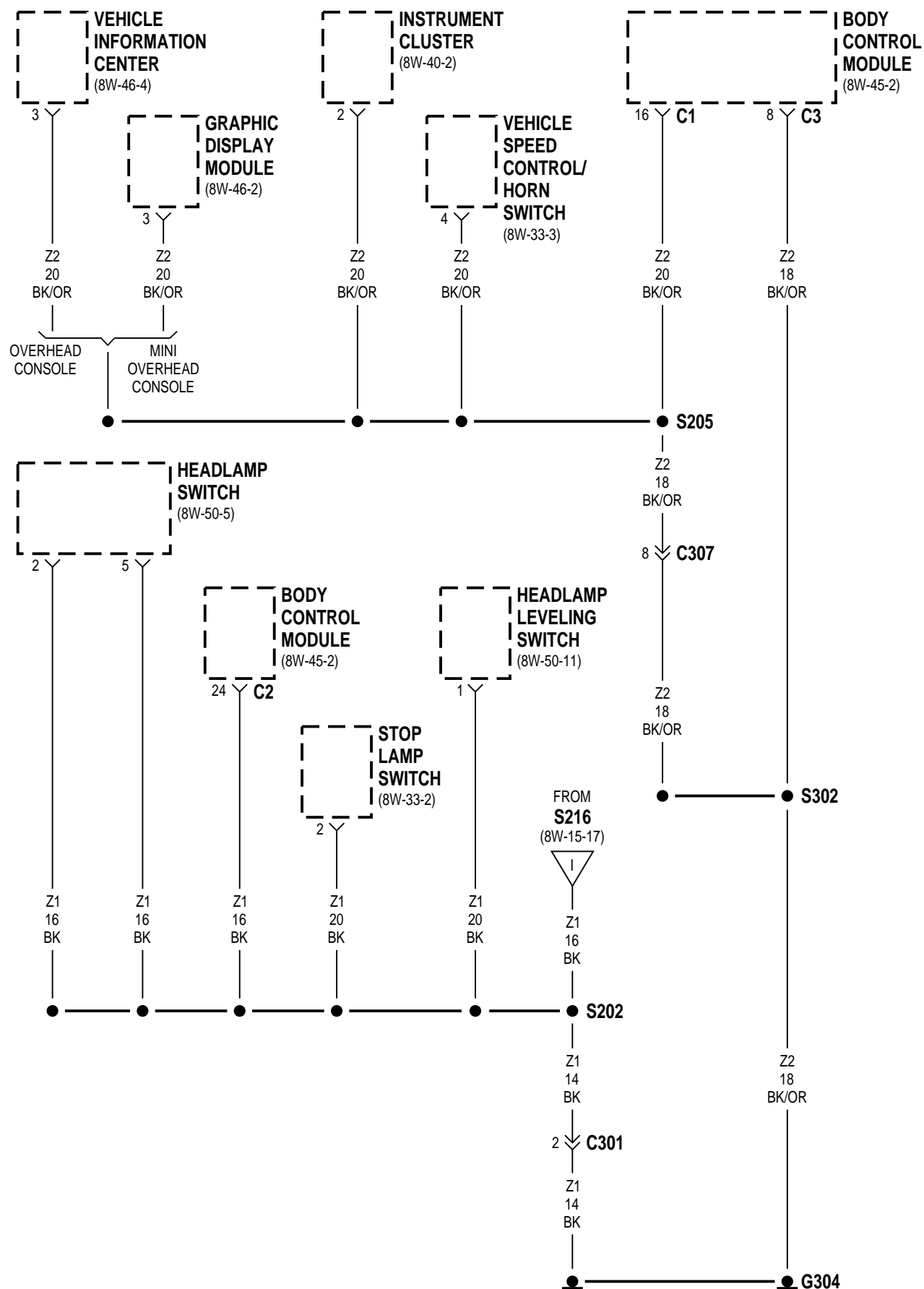












8W-15 GROUND DISTRIBUTION

DESCRIPTION AND OPERATION

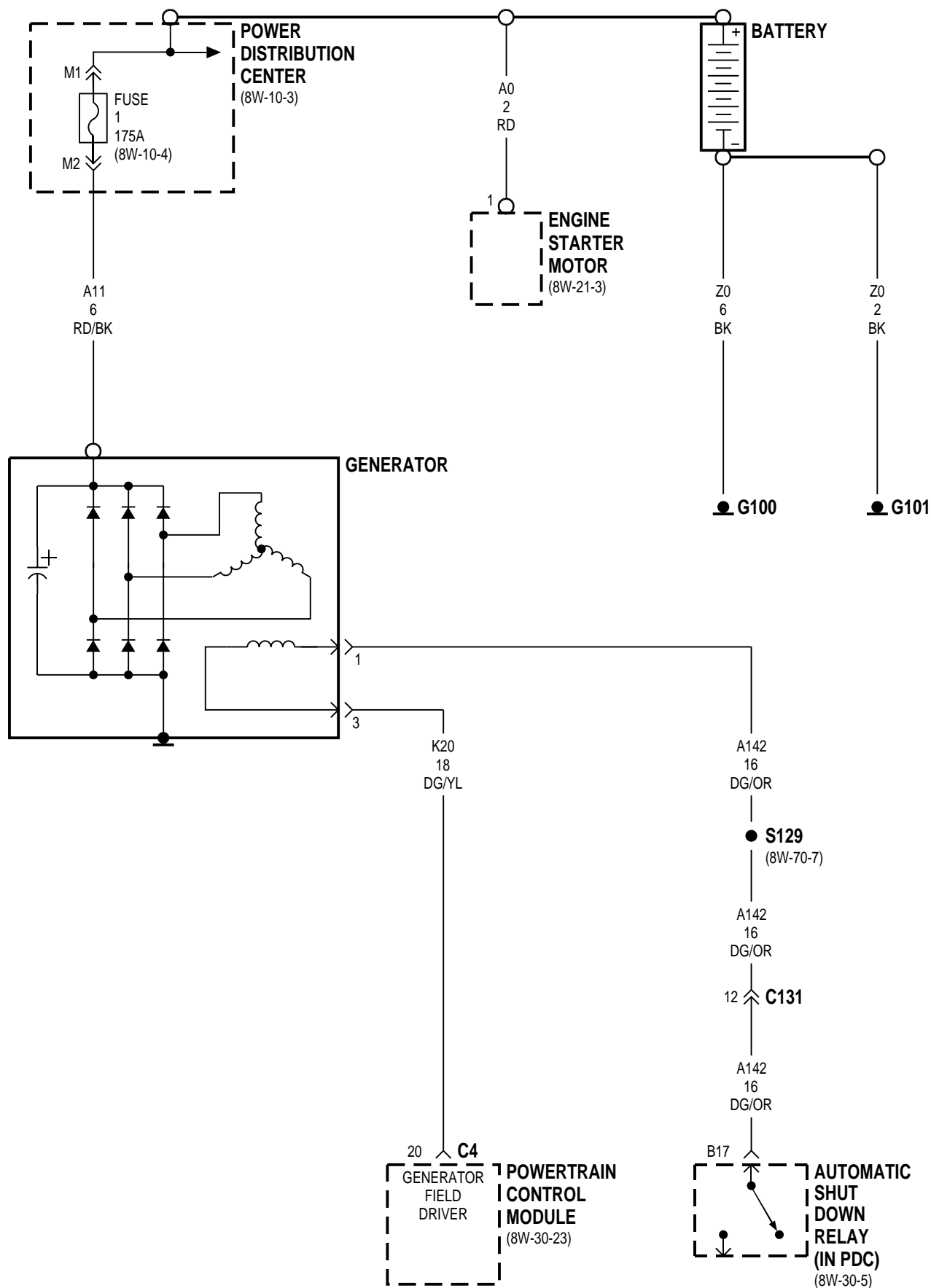
This section identifies the grounds, splices that connect to those grounds, and the components that connect those grounds. For additional information on system operation, refer to the appropriate section of the wiring diagrams. For an illustration of the physical location of each ground, refer to group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

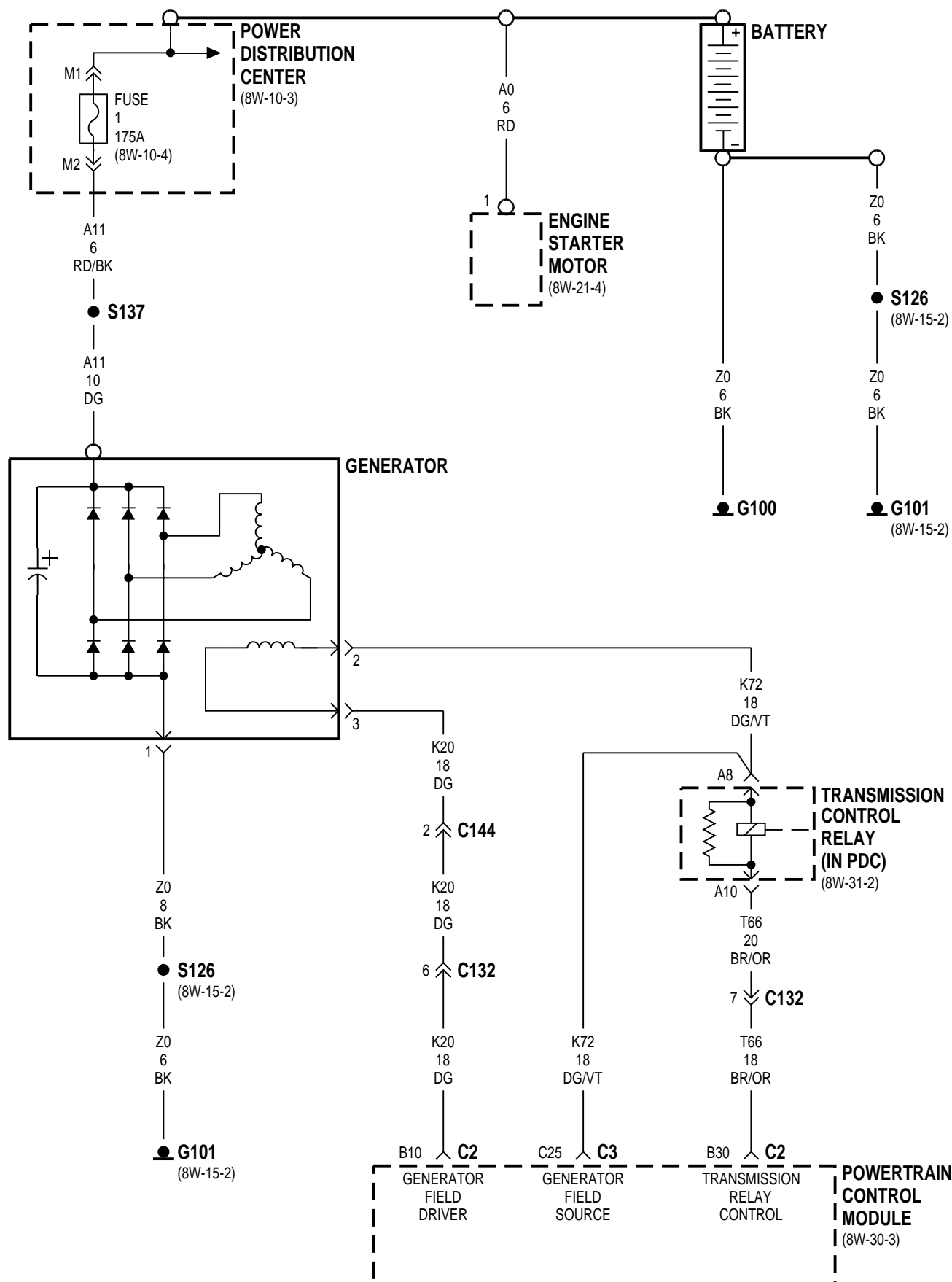
8W-20 CHARGING SYSTEM

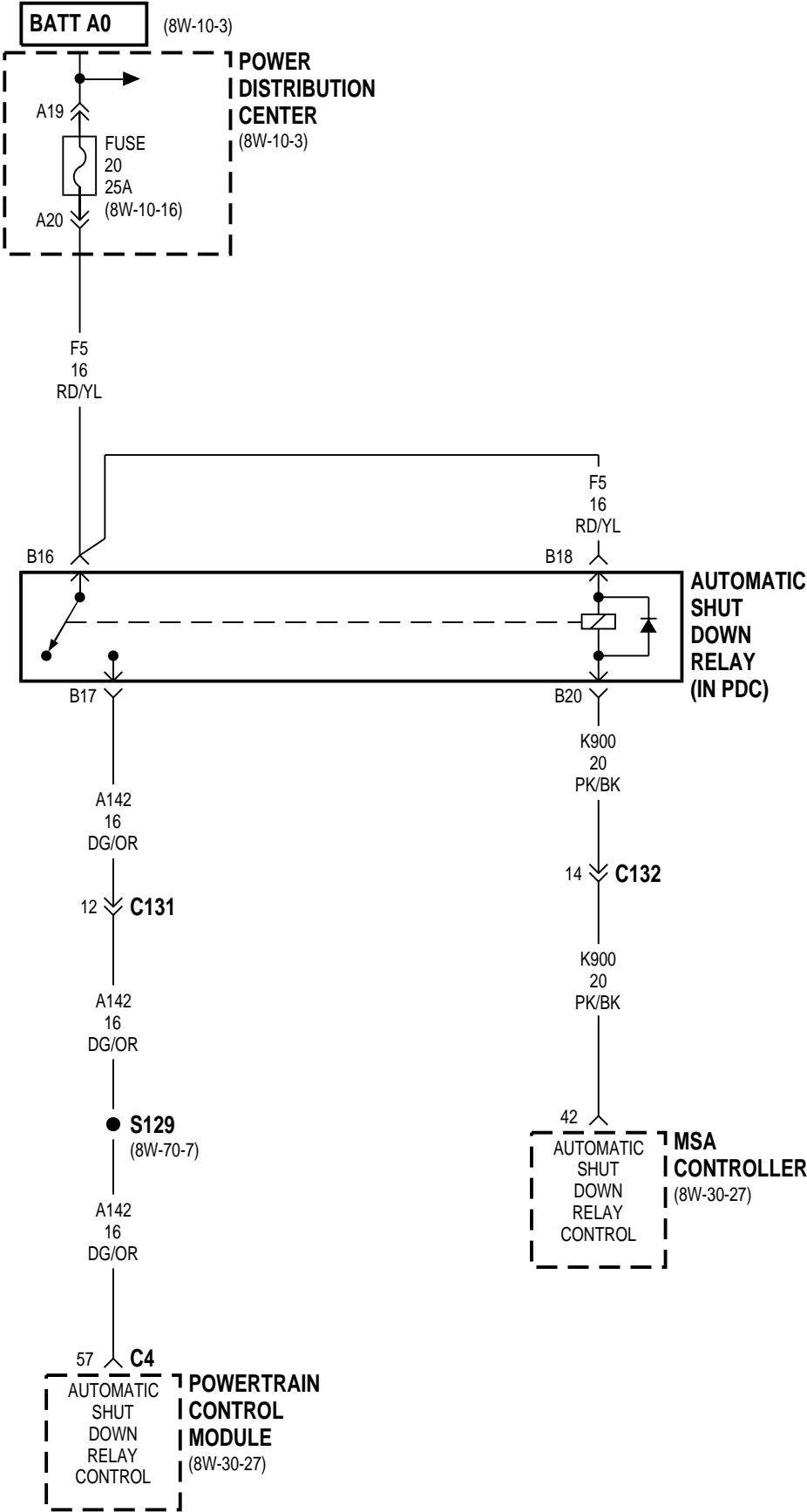
INDEX

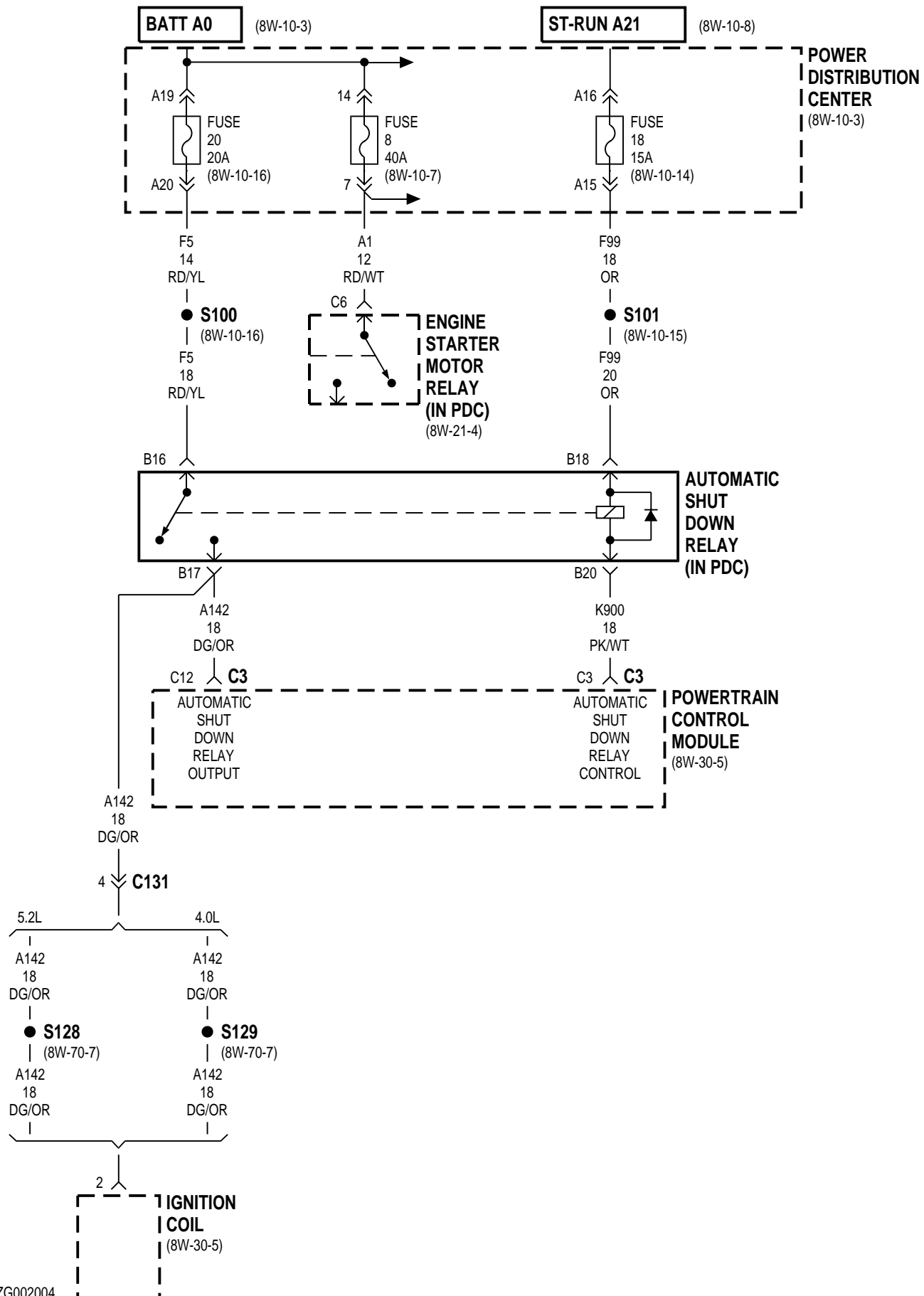
	page
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	6

Component	Page	Component	Page
Automatic Shut Down Relay	8W-20-2, 4, 5	MSA Controller	8W-20-4
Battery	8W-20-2, 3	Power Distribution Center	8W-20-2, 3, 4, 5
Engine Starter Motor	8W-20-2, 3	Powertrain Control Module	8W-20-2, 3, 4, 5
Engine Starter Motor Relay	8W-20-5	S100	8W-20-5
Fuse 1	8W-20-2, 3	S101	8W-20-5
Fuse 8	8W-20-5	S126	8W-20-3
Fuse 18	8W-20-5	S128	8W-20-5
Fuse 20	8W-20-4, 5	S129	8W-20-2, 4, 5
G100	8W-20-2, 3	S137	8W-20-3
G101	8W-20-2, 3	Transmission Control Relay	8W-20-3
Generator	8W-20-2, 3		
Ignition Coil	8W-20-5		









8W-20 CHARGING SYSTEM

DESCRIPTION AND OPERATION

CHARGING SYSTEM

The charging system is an integral part of the battery and starting systems. Because all these systems work in conjunction, diagnose and test them together.

Circuit A11 connects to the generator output terminal and the Power Distribution Center (PDC). Circuit A0 connects the battery to the PDC. Circuit Z0 provides ground for the generator.

When the ignition switch is in either the START or RUN positions, it connects circuit A1 from fuse 8 in the PDC to circuit A21. Circuit A21 powers circuit F99 through fuse 18 in the PDC. Circuit F99 splices to supply current to the coil side of the Automatic Shut Down (ASD) relay. The Powertrain Control Module (PCM) provides ground for the relay on circuit K900. Circuit K900 connects to cavity C3 of the PCM.

When the PCM grounds the ASD relay, contacts inside the relay close and connect circuit F5 from the fuse 20 in the PDC to circuit A142. Circuit A142 splices to supply system voltage to cavity C12 of the PCM. Circuit K72 from Cavity C25 of the PCM supplies current to the generator field terminal..

The PCM has an internal voltage regulator that controls generator output. The PCM controls the generator field on circuit K20. Circuit K20 connects to PCM cavity B10.

When the engine operates and there is current in the generator field, the generator produces a B+ voltage. The generator supplies B+ voltage to the battery through the A11 and A0 circuits.

HELPFUL INFORMATION

- Circuit A21 passes through the junction block before reaching fuse 18 in the PDC.
- The ASD relay supplies battery voltage for the fuel injectors, ignition coil, and the heated oxygen sensors.

CHARGING SYSTEM (DIESEL)

The charging system is an integral part of the battery and starting systems. Because all these systems work in conjunction, diagnose and test them together.

Circuit A11 connects to the generator output terminal and the Power Distribution Center (PDC). Circuit A0 connects the battery to the PDC. The generator is case grounded.

Power for the field terminal in the generator is supplied on circuit A142. This circuit is HOT when the contacts in the Automatic Shut Down (ASD) relay are CLOSED.

The PCM has an internal voltage regulator that controls generator output. The PCM controls the generator field on circuit K20.

When the engine operates and there is current in the generator field, the generator produces a B+ voltage. The generator supplies B+ voltage to the battery through the A11 and A0 circuits.

HELPFUL INFORMATION

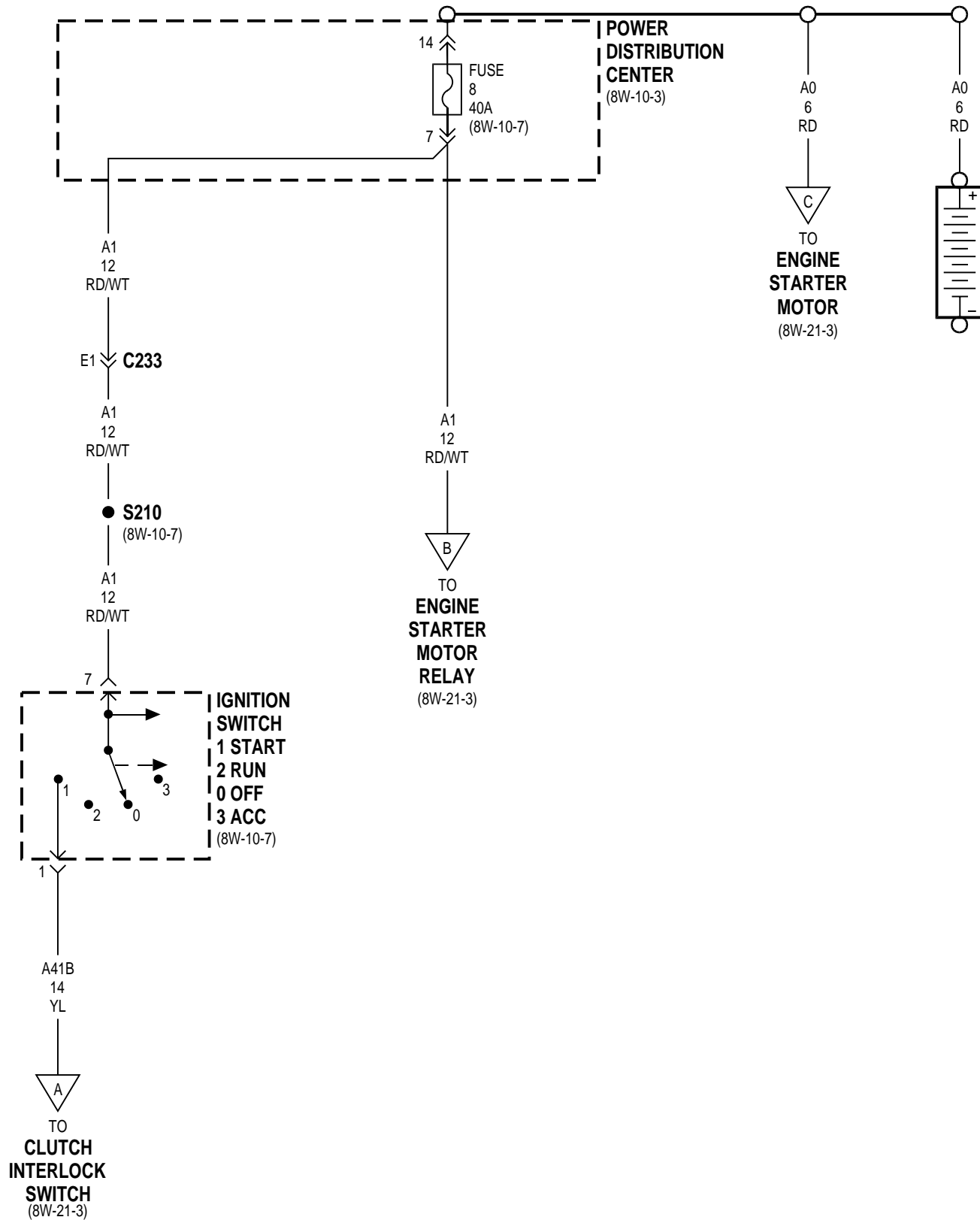
- Check the 175 amp fuse in the PDC
- Check the 25 amp fuse located in cavity F20 of the PDC

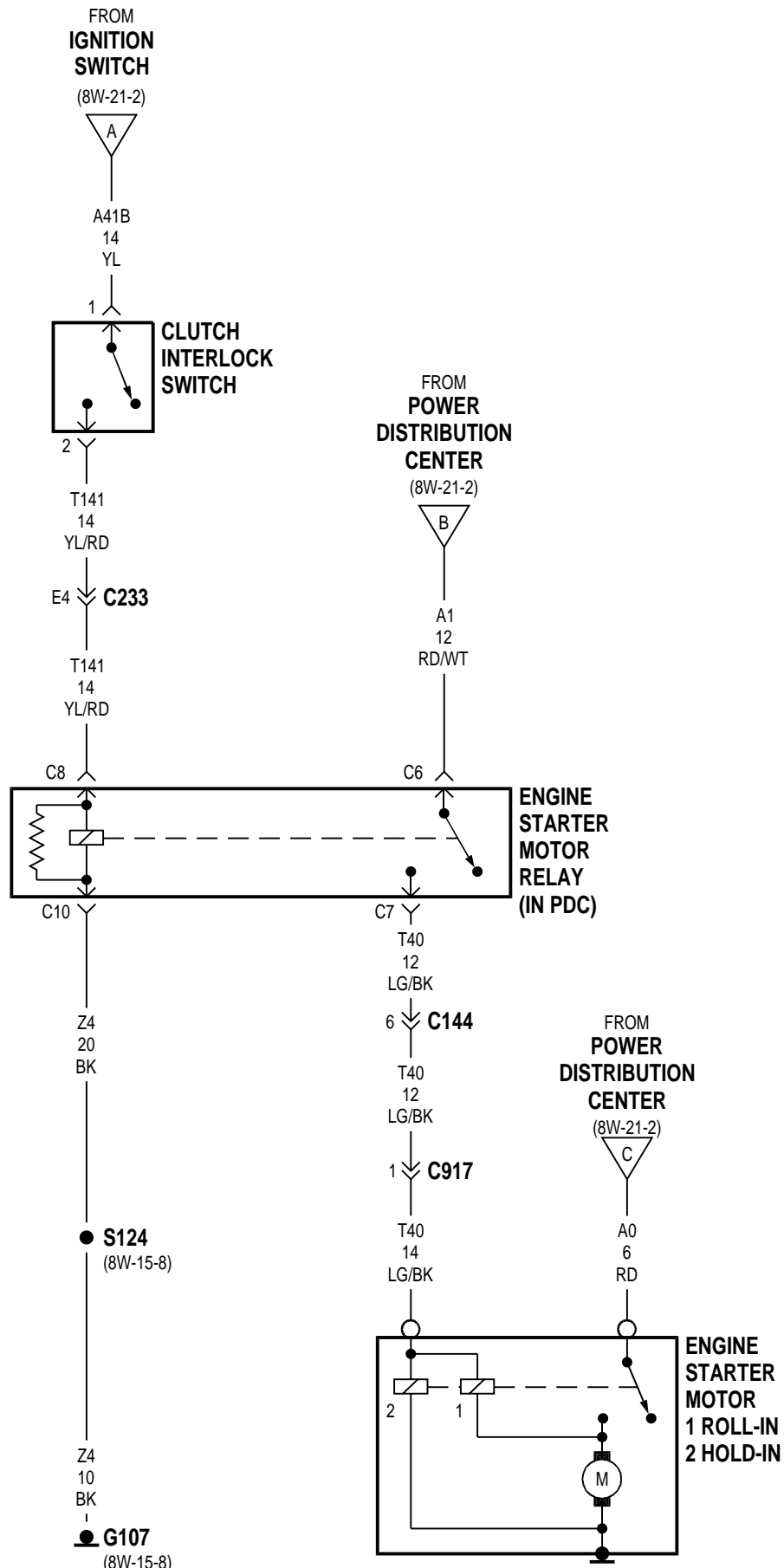
8W-21 STARTING SYSTEM

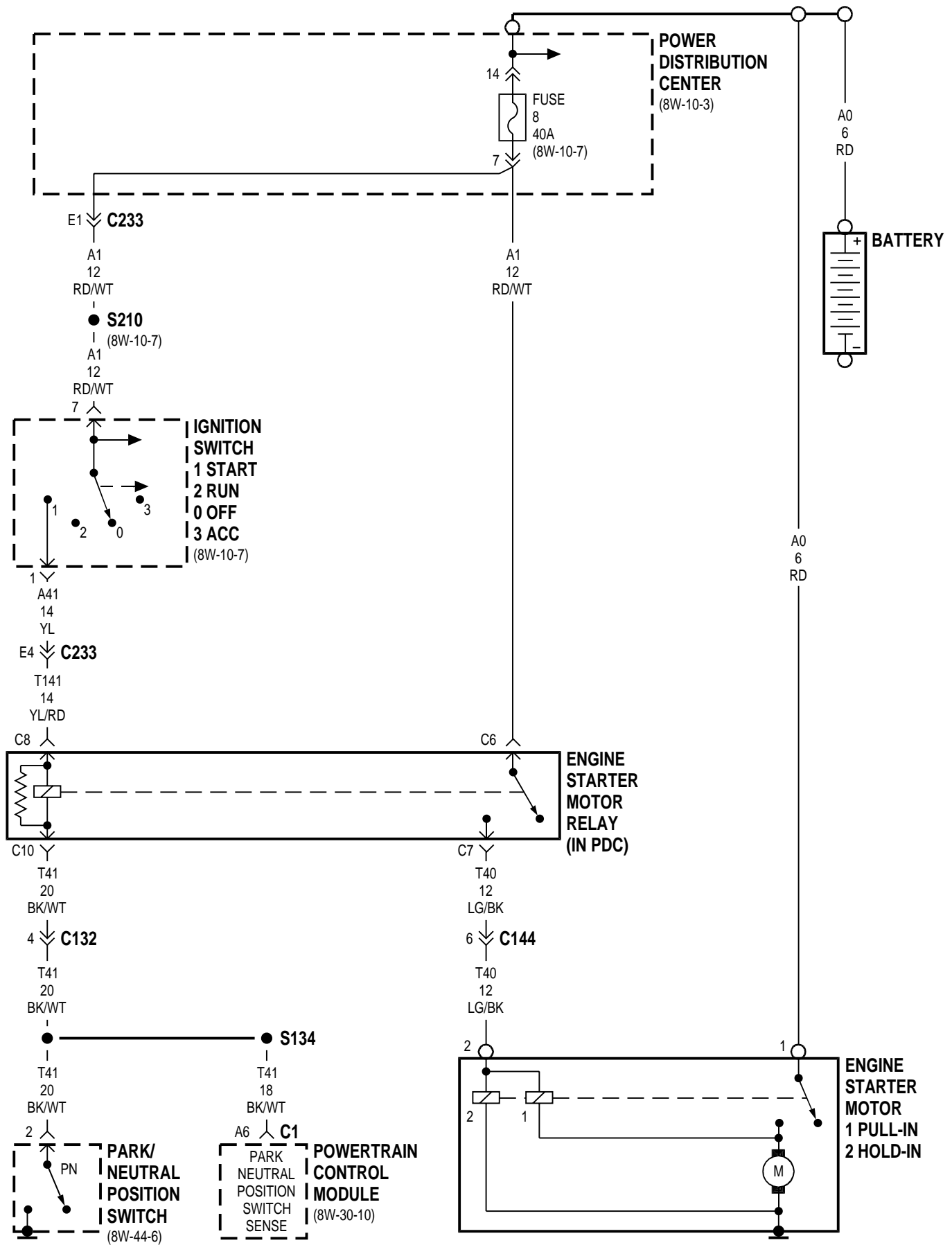
INDEX

	page
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	5

Component	Page	Component	Page
Battery	8W-21-4	Park/Neutral Position Switch	8W-21-4
Clutch Interlock Switch	8W-21-3	Power Distribution Center	8W-21-2, 3, 4
Engine Starter Motor	8W-21-3, 4	Powertrain Control Module	8W-21-4
Engine Starter Motor Relay	8W-21-3, 4	S124	8W-21-3
Fuse 8	8W-21-2, 4	S134	8W-21-4
G107	8W-21-3	S210	8W-21-2, 4
Ignition Switch	8W-21-2, 4		







8W-21 STARTING SYSTEM

DESCRIPTION AND OPERATION

STARTING SYSTEM

Circuit A0 from the battery is double crimped at the positive battery post. One branch of circuit A0 (battery positive cable) connects to the engine starter motor. The other A0 branch supplies voltage to the Power Distribution Center (PDC).

Circuit A1 from fuse 8 in the PDC supplies battery voltage to the contact side of the engine starter motor relay. When the coil side of the engine starter motor relay energizes, the contacts close and connect circuit A1 to circuit T40. Circuit T40 supplies battery voltage to the starter motor solenoid.

The ignition switch supplies battery voltage to the coil side of the starter motor relay on circuit A41 when the key is moved to the START position and the PARK/NEUTRAL position switch is closed. Ground for the coil side of the starter motor relay is supplied by the case grounded PARK/NEUTRAL position switch. Circuit T41 connects the coil side of the relay to the PARK/NEUTRAL position switch.

When the starter motor relay energizes and the contacts close, circuit T40 supplies battery voltage to the starter motor solenoid. Circuit A0 from the battery supplies voltage to the starter motor when the solenoid energizes.

STARTING SYSTEM (DIESEL)

Power for the coil side of the engine starter motor relay is supplied on circuit T141. This circuit is HOT when the operator has moved the ignition key to the START position and the clutch pedal position switch is CLOSED.

Ground for the coil side of the relay is supplied on circuit Z4.

When the coil side of the relay energizes the contacts in the relay CLOSE connecting circuits A1 and T40. The A1 circuit is protected by a 40 amp fuse located in the Power Distribution Center (PDC). Circuit T40 connects from the relay to the solenoid in the engine starter motor.

Power for the motor in the starter is supplied on circuit A0. This is a direct feed from the battery. Ground for the engine starter motor is supplied through a case ground.

HELPFUL INFORMATION (DIESEL)

- Check the 40 amp fuse located in the PDC
- Check the clutch pedal position switch for proper operation
- Check the case ground of the engine starter motor

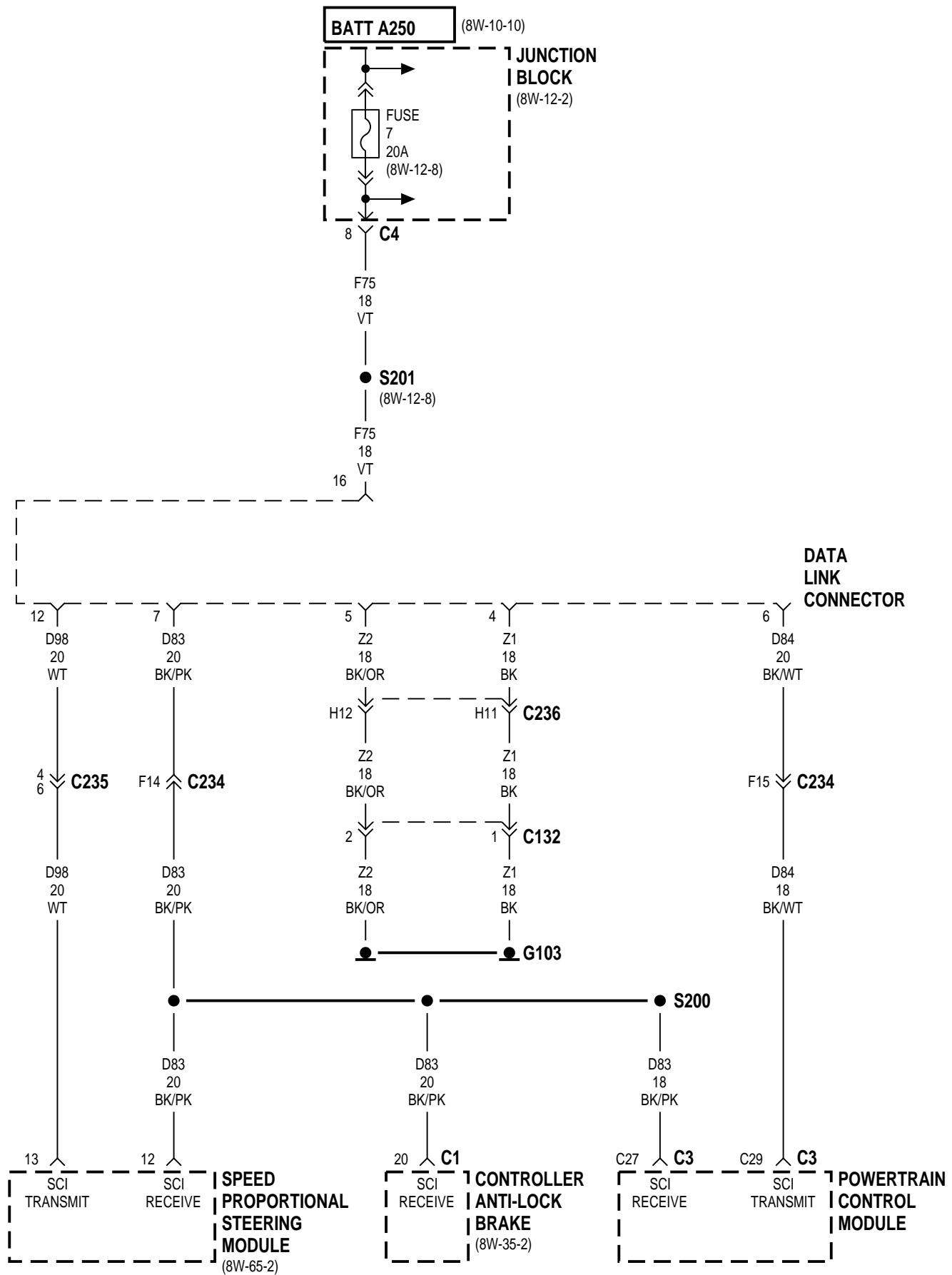
8W-30 FUEL/IGNITION SYSTEMS

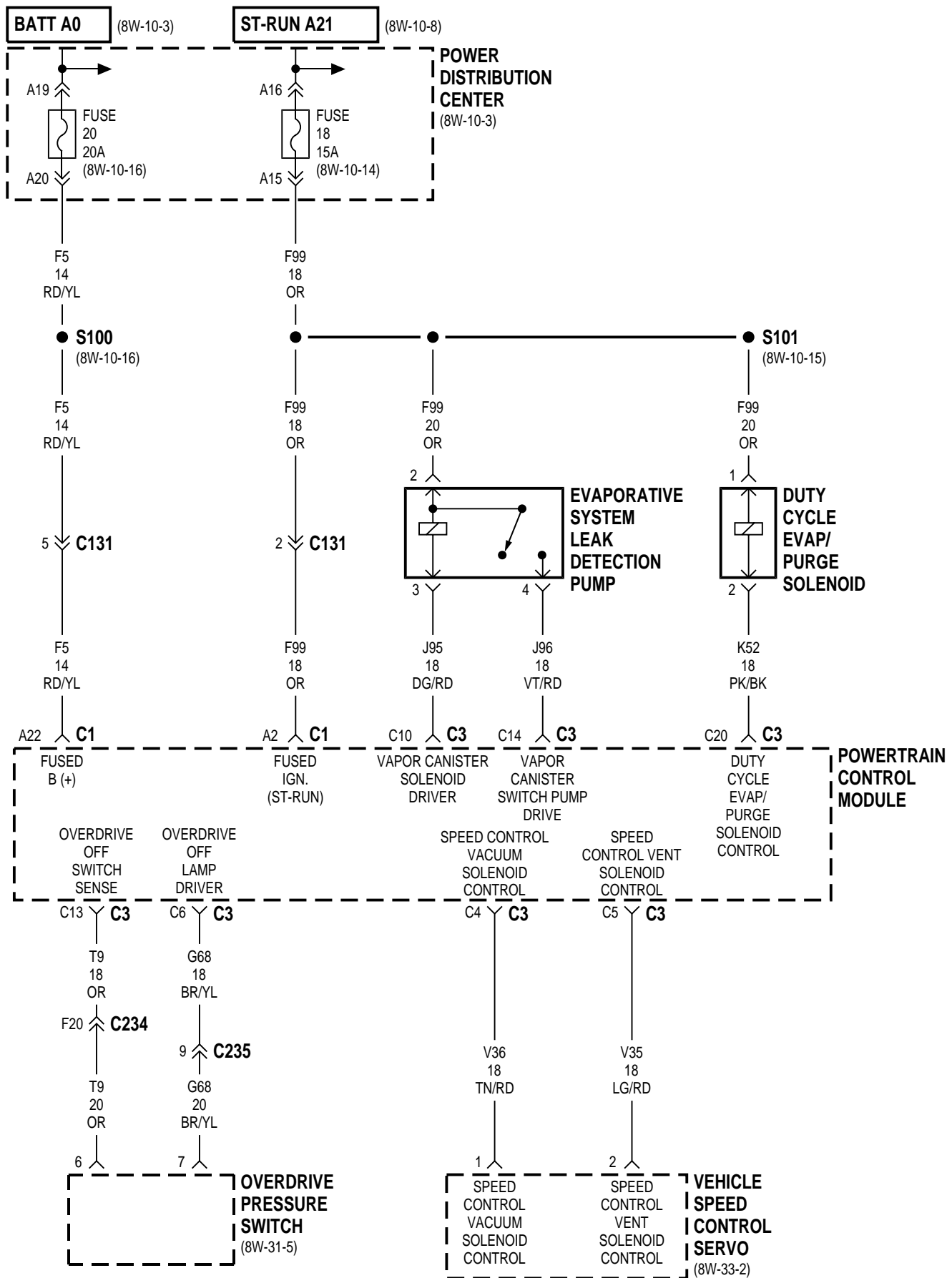
INDEX

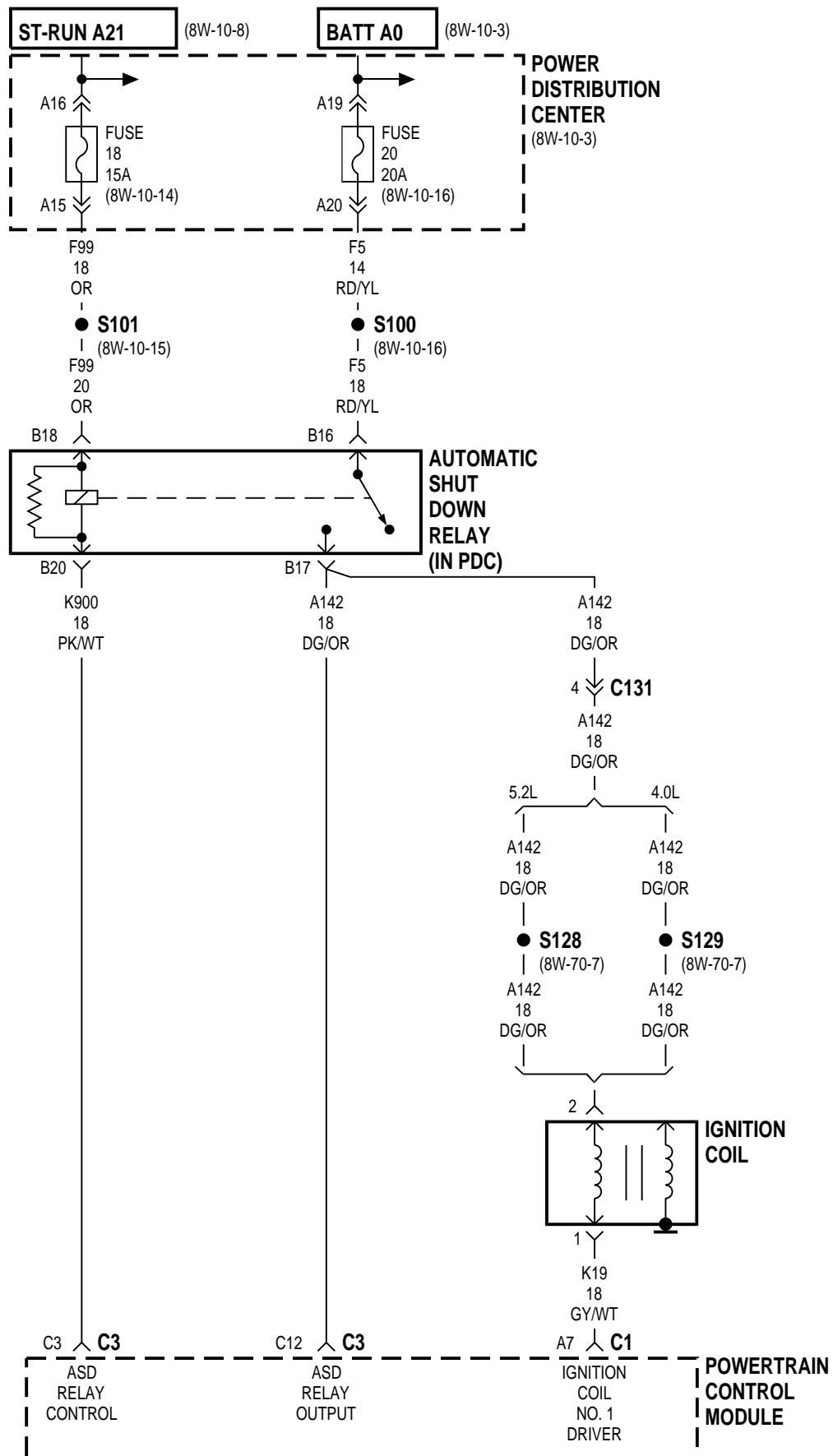
page

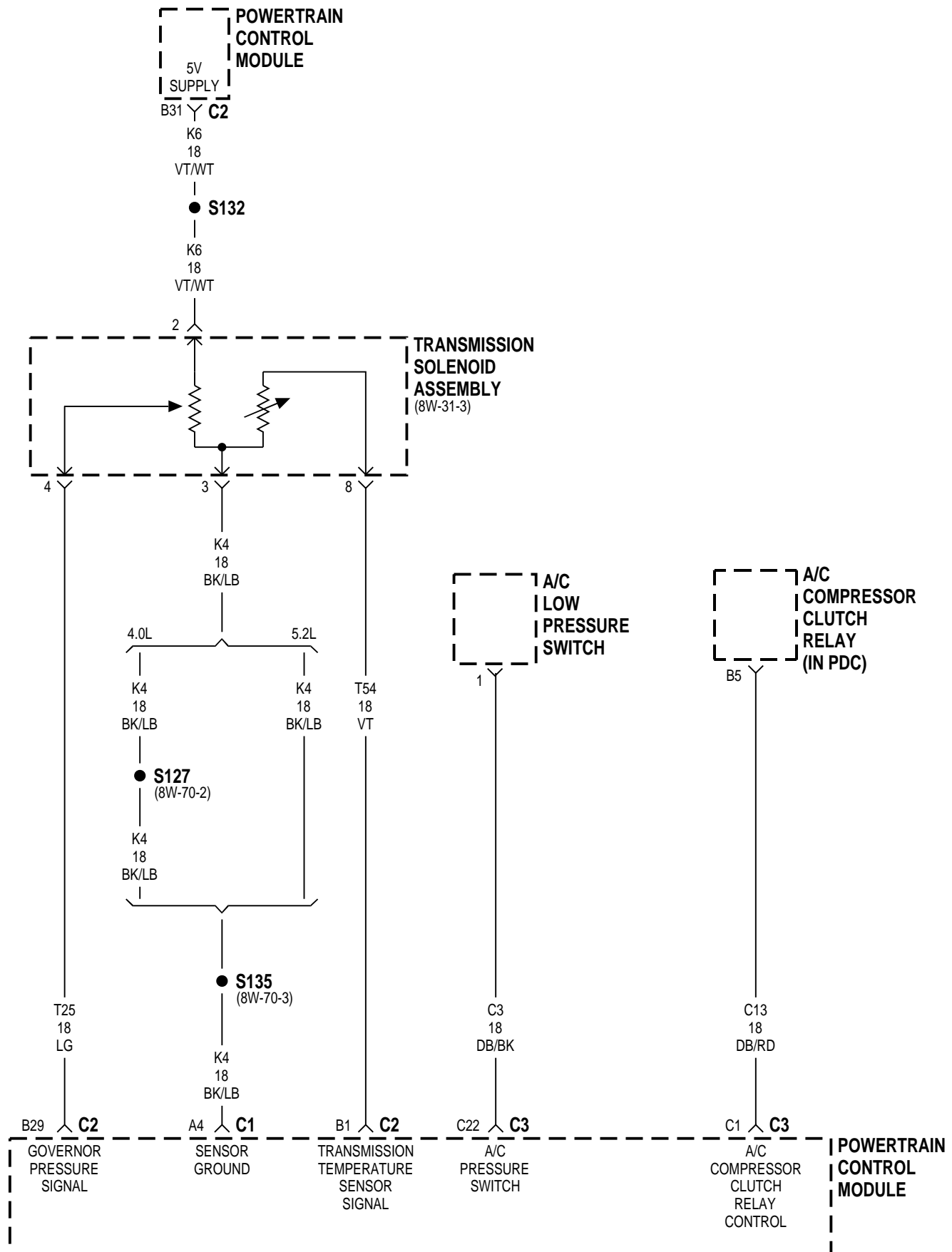
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	33

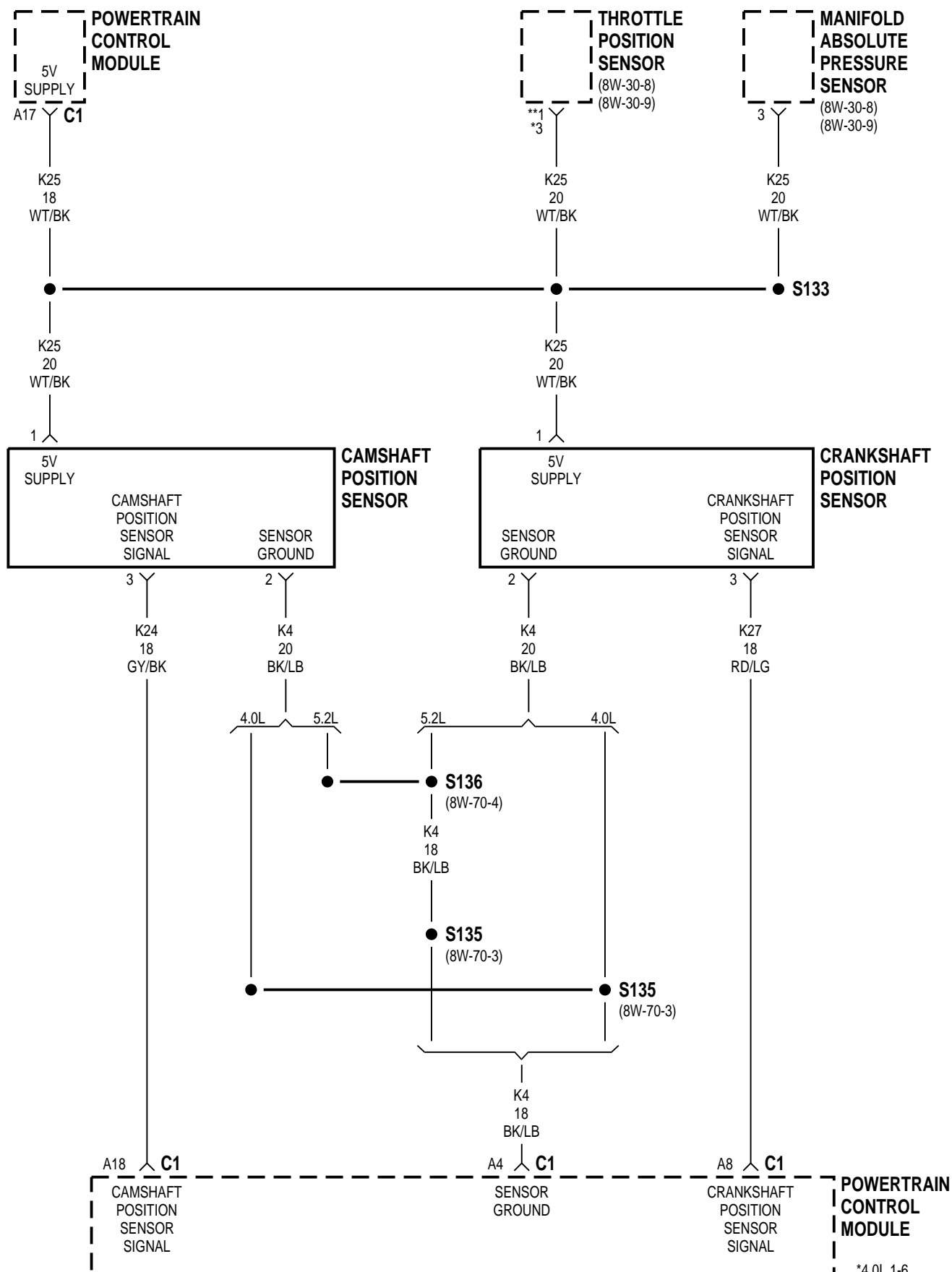
Component	Page	Component	Page
A/C Compressor Clutch Relay Gas Engines	8W-30-6	G104 Gas Engines	8W-30-3
A/C Low Pressure Switch Gas Engines	8W-30-6	G105 4.0L Engine	8W-30-14
Airbag Control Module Diesel Engine	8W-30-31, 32	G105 5.2L Engine	8W-30-13
Airbag Control Module Gas Engines	8W-30-18, 19	G106 Diesel Engine	8W-30-26, 28
Automatic Shut Down Relay 4.0L Engine	8W-30-14, 15	G107 Diesel Engine	8W-30-27
Automatic Shut Down Relay 5.2L Engine	8W-30-11, 12, 13	G123 Diesel Engine	8W-30-24
Automatic Shut Down Relay Diesel Engine	8W-30-27	G304 Gas Engines	8W-30-10
Automatic Shut Down Relay Gas Engines	8W-30-5	G305 Diesel Engine	8W-30-28
Automatic Temperature Control Module Diesel Engine	8W-30-31, 32	G305 Gas Engines	8W-30-16
Automatic Temperature Control Module Gas Engines	8W-30-18, 19	Generator Gas Engines	8W-30-3
Battery Temperature Sensor Gas Engines	8W-30-16	Glow Plug Diesel Engine	8W-30-26
Body Control Module Diesel Engine	8W-30-31, 32	Glow Plug Relay Diesel Engine	8W-30-26
Body Control Module Gas Engines	8W-30-18, 19	Idle Air Control Motor 4.0L Engine	8W-30-21
Camshaft Position Sensor Gas Engines	8W-30-7	Idle Air Control Motor 5.2L Engine	8W-30-20
Clockspring Gas Engines	8W-30-17	Ignition Coil Gas Engines	8W-30-5
Controller Anti-Lock Brake Diesel Engine	8W-30-30	Instrument Cluster Diesel Engine	8W-30-31, 32
Controller Anti-Lock Brake Gas Engines	8W-30-2	Instrument Cluster Gas Engines	8W-30-18, 19
Coolant Level Sensor Diesel Engine	8W-30-29	Intake Air Temperature Sensor 4.0L Engine	8W-30-9
Crankshaft Position Sensor Diesel Engine	8W-30-24	Intake Air Temperature Sensor 5.2L Engine	8W-30-8
Crankshaft Position Sensor Gas Engines	8W-30-7	Junction Block Diesel Engine	8W-30-30
Data Link Connector Diesel Engine	8W-30-30, 31, 32	Junction Block Gas Engines	8W-30-2
Data Link Connector Gas Engines	8W-30-2, 18, 19	Left Switch Gas Engines	8W-30-17
Downstream Heated Oxygen Sensor 4.0L Engine	8W-30-14	Manifold Absolute Pressure Sensor 4.0L Engine	8W-30-9
Downstream Heated Oxygen Sensor 5.2L Engine	8W-30-13	Manifold Absolute Pressure Sensor 5.2L Engine	8W-30-8
Driver Door Module Diesel Engine	8W-30-31, 32	Manifold Absolute Pressure Sensor Gas Engines	8W-30-7
Driver Door Module Gas Engines	8W-30-18, 19	Mass Air Flow Module Diesel Engine	8W-30-26
Duty Cycle Evap/Purge Solenoid Gas Engines	8W-30-4	Memory Seat Module Diesel Engine	8W-30-31, 32
EGR Solenoid Diesel Engine	8W-30-28	Memory Seat Module Gas Engines	8W-30-18, 19
Engine Coolant Temperature Sensor 4.0L Engine	8W-30-9	MSA Controller Diesel Engine	8W-30-22, 23, 24, 25, 26, 27, 29, 30
Engine Coolant Temperature Sensor 5.2L Engine	8W-30-8	Needle Sensor Diesel Engine	8W-30-24
Engine Coolant Temperature Sensor Diesel Engine	8W-30-29	Oil Pressure Sensor Diesel Engine	8W-30-29
Evaporative System Leak Detection Pump Gas Engines	8W-30-4	Oil Pressure Sensor Gas Engines	8W-30-10
Fuel Heater Diesel Engine	8W-30-28	Output Shaft Speed Sensor Gas Engines	8W-30-10
Fuel Heater Relay Diesel Engine	8W-30-27	Overdrive Pressure Switch Gas Engines	8W-30-4
Fuel Injector No. 1 4.0L Engine	8W-30-15	Overhead Console Diesel Engine	8W-30-31, 32
Fuel Injector No. 1 5.2L Engine	8W-30-11	Overhead Console Gas Engines	8W-30-18, 19
Fuel Injector No. 2 4.0L Engine	8W-30-15	Park/Neutral Position Switch Gas Engines	8W-30-10
Fuel Injector No. 2 5.2L Engine	8W-30-12	Passenger Door Module Diesel Engine	8W-30-31, 32
Fuel Injector No. 3 4.0L Engine	8W-30-15	Passenger Door Module Gas Engines	8W-30-18, 19
Fuel Injector No. 3 5.2L Engine	8W-30-11	Pedal Position Sensor Diesel Engine	8W-30-23
Fuel Injector No. 4 4.0L Engine	8W-30-15	Powertrain Control Module 4.0L Engine	8W-30-9, 14, 15, 21
Fuel Injector No. 4 5.2L Engine	8W-30-12	Powertrain Control Module 5.2L Engine	8W-30-8, 11, 12, 13, 20
Fuel Injector No. 5 4.0L Engine	8W-30-15	Powertrain Control Module Diesel Engine	8W-30-22, 23, 24, 27, 28, 29, 30, 31, 32
Fuel Injector No. 5 5.2L Engine	8W-30-11	Powertrain Control Module Gas Engines	8W-30-2, 3, 4, 5, 6, 7, 10, 16, 17, 18, 19
Fuel Injector No. 6 4.0L Engine	8W-30-15	Radio Diesel Engine	8W-30-31, 32
Fuel Injector No. 6 5.2L Engine	8W-30-12	Radio Gas Engines	8W-30-18, 19
Fuel Injector No. 7 5.2L Engine	8W-30-11	Right Switch Gas Engines	8W-30-17
Fuel Injector No. 8 5.2L Engine	8W-30-12	Speed Proportional Steering Module Gas Engines	8W-30-2
Fuel Pump Module Diesel Engine	8W-30-25, 26	Stop Lamp Switch Gas Engines	8W-30-10
Fuel Pump Module Gas Engines	8W-30-16	Throttle Position Sensor 4.0L Engine	8W-30-9
Fuel Pump Relay Gas Engines	8W-30-16	Throttle Position Sensor 5.2L Engine	8W-30-8
Fuel Sender Unit Diesel Engine	8W-30-28	Throttle Position Sensor Gas Engines	8W-30-7
Fuse 4 Diesel Engine	8W-30-27	Transmission Control Relay Gas Engines	8W-30-3
Fuse 7 Diesel Engine	8W-30-30	Transmission Solenoid Assembly Gas Engines	8W-30-3, 6
Fuse 7 Gas Engines	8W-30-2	Upstream Heated Oxygen Sensor 4.0L Engine	8W-30-14
Fuse 16 Diesel Engine	8W-30-22	Upstream Heated Oxygen Sensor 5.2L Engine	8W-30-13
Fuse 16 Gas Engines	8W-30-16	Vehicle Information Center Diesel Engine	8W-30-31, 32
Fuse 17 Gas Engines	8W-30-3	Vehicle Information Center Gas Engines	8W-30-18, 19
Fuse 18 Diesel Engine	8W-30-22, 27	Vehicle Speed Control Servo Gas Engines	8W-30-4, 10
Fuse 18 Gas Engines	8W-30-4, 5, 16	Vehicle Speed Control/Horn Switch Gas Engines	8W-30-17
Fuse 20 Diesel Engine	8W-30-27	Vehicle Speed Sensor Diesel Engine	8W-30-24
Fuse 20 Gas Engines	8W-30-4, 5	Vehicle Speed Sensor Gas Engines	8W-30-17
G103 Diesel Engine	8W-30-30	Water In Fuel Sensor Diesel Engine	8W-30-24
G103 Gas Engines	8W-30-2		
G104 Diesel Engine	8W-30-22		

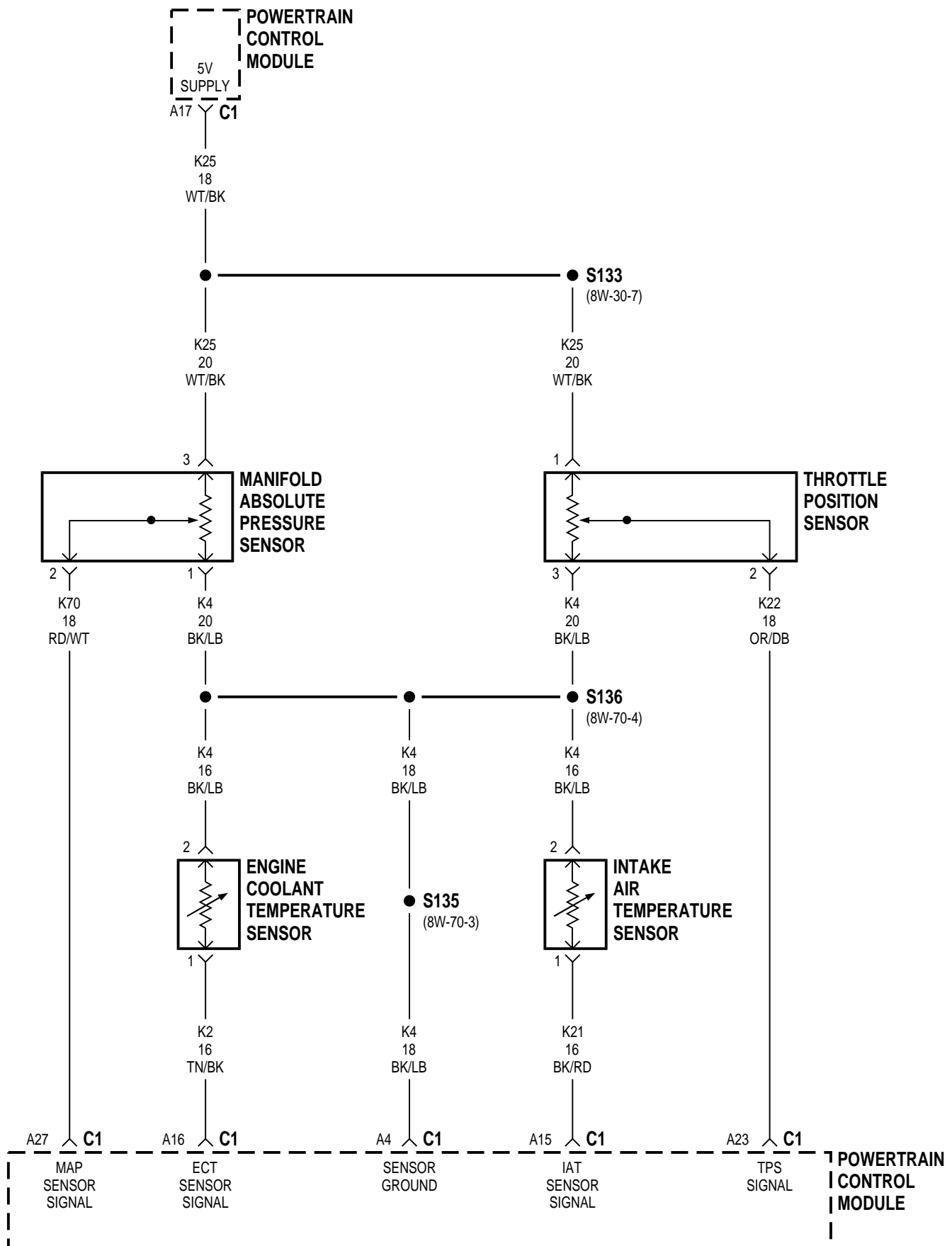


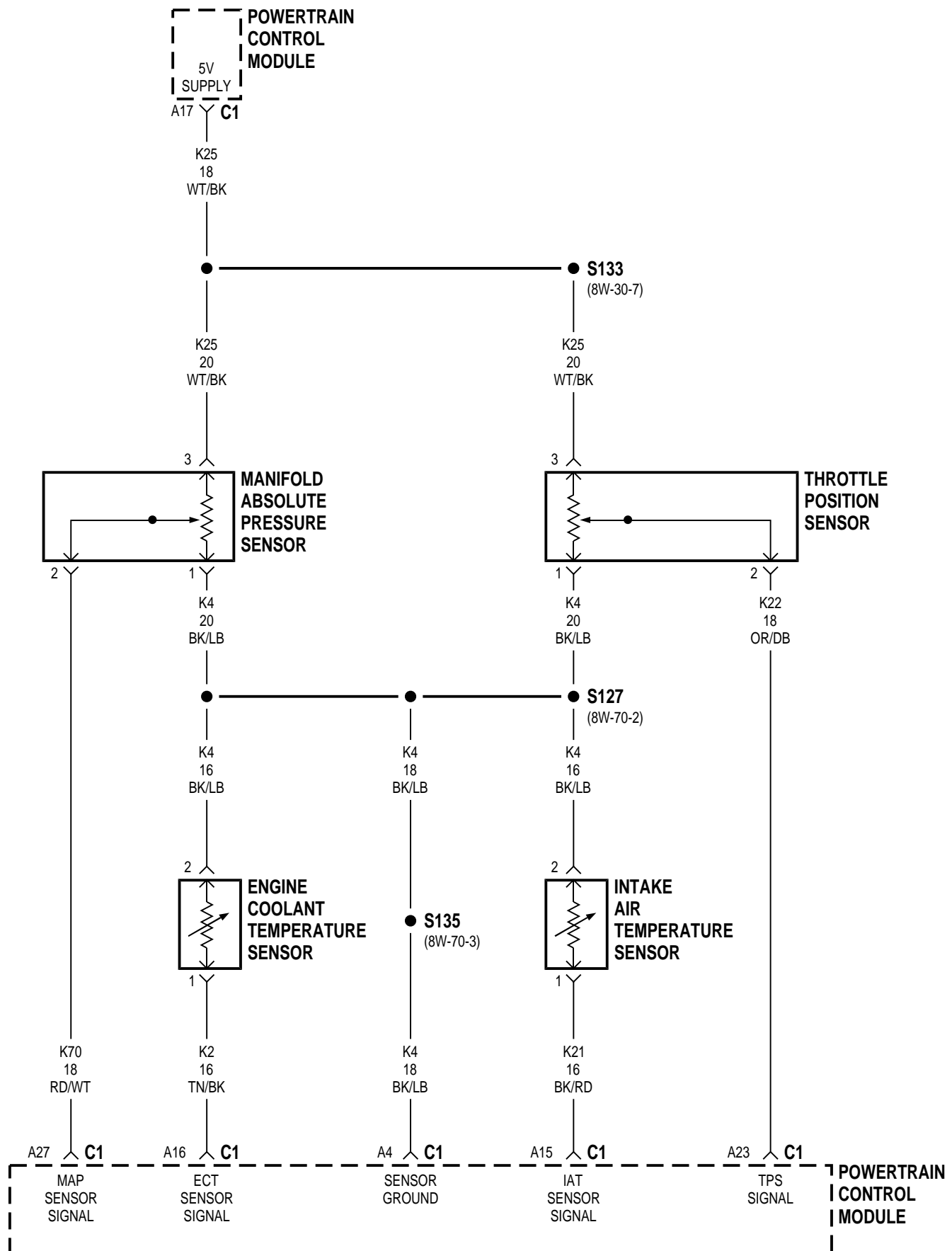


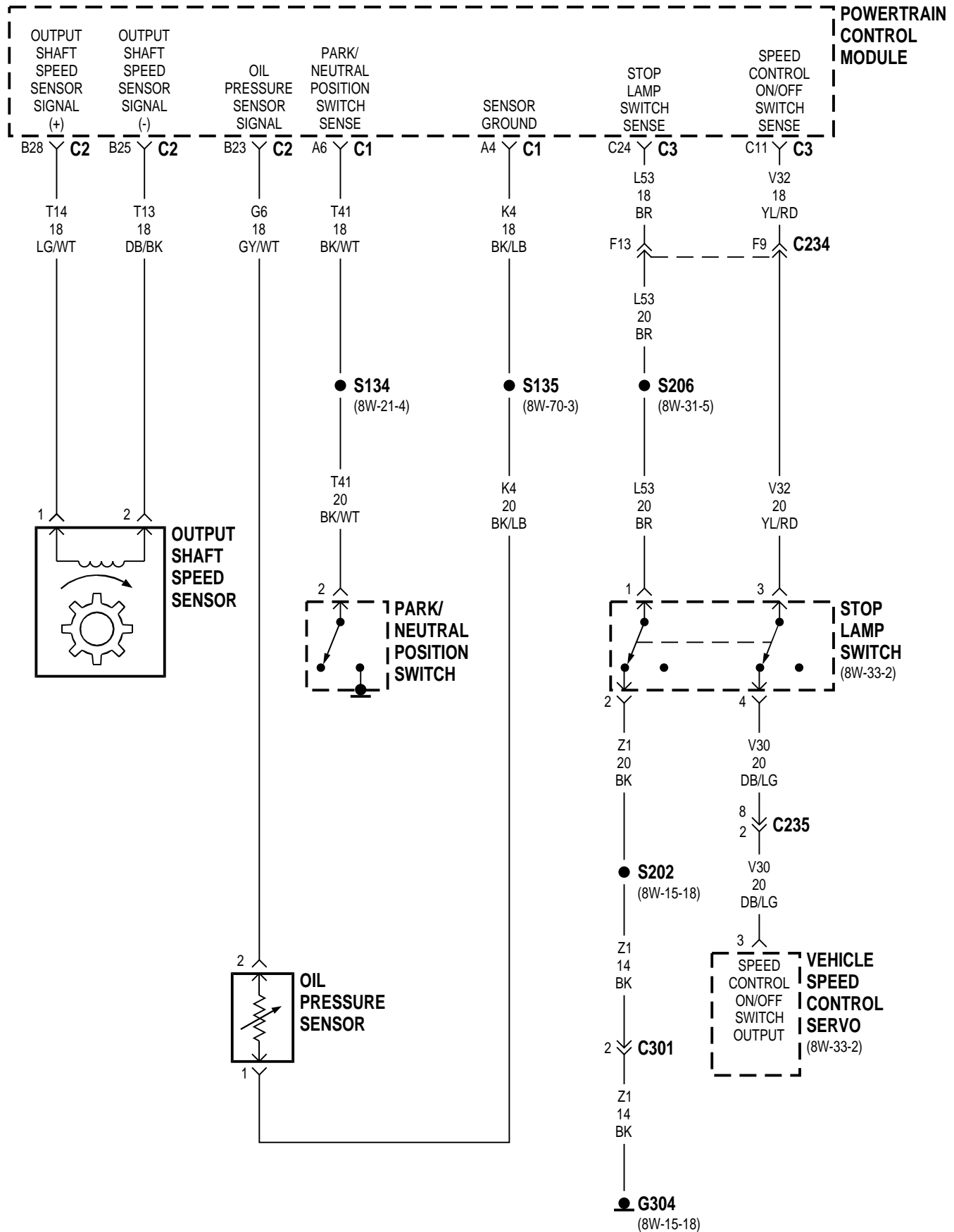


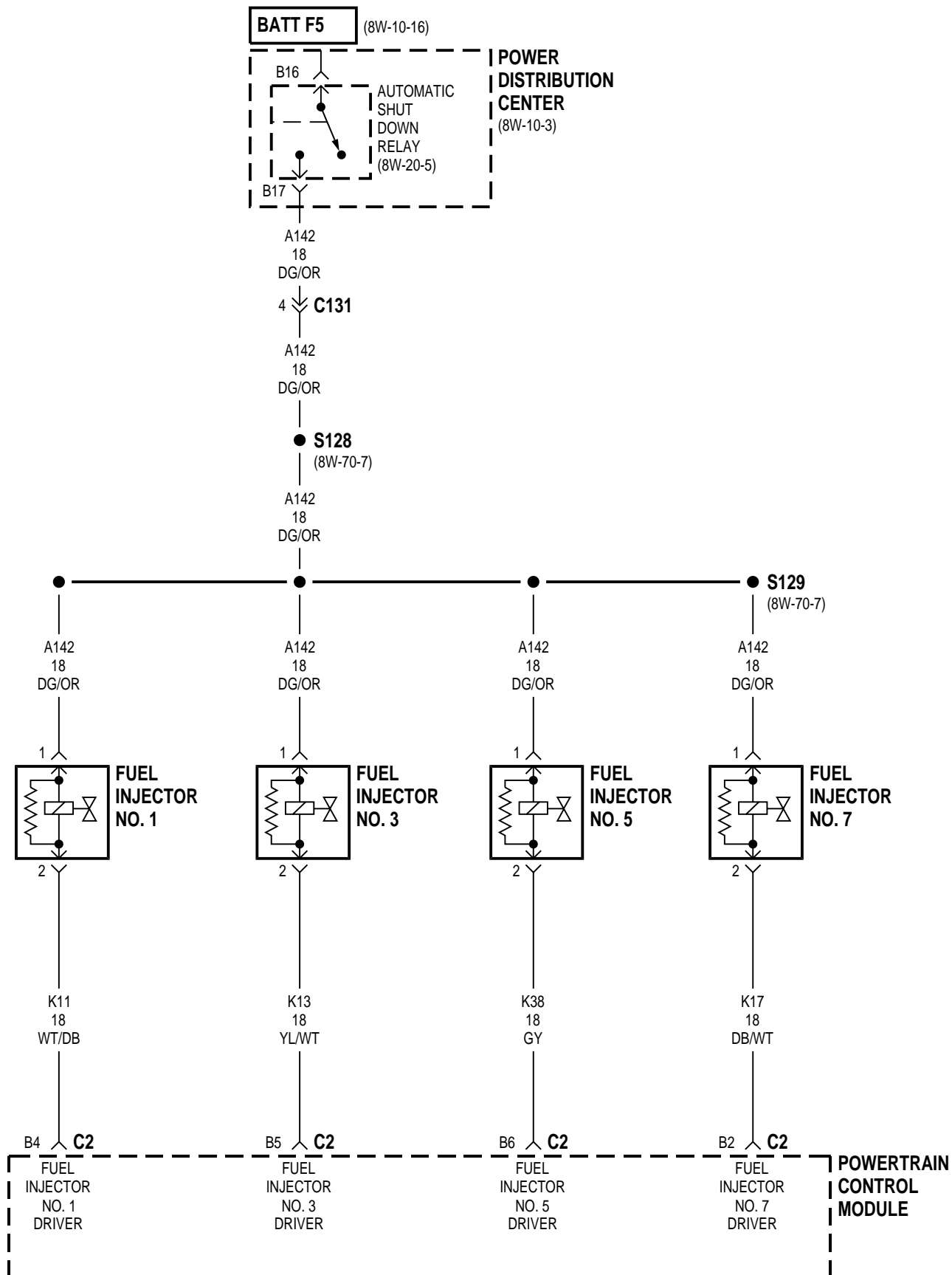


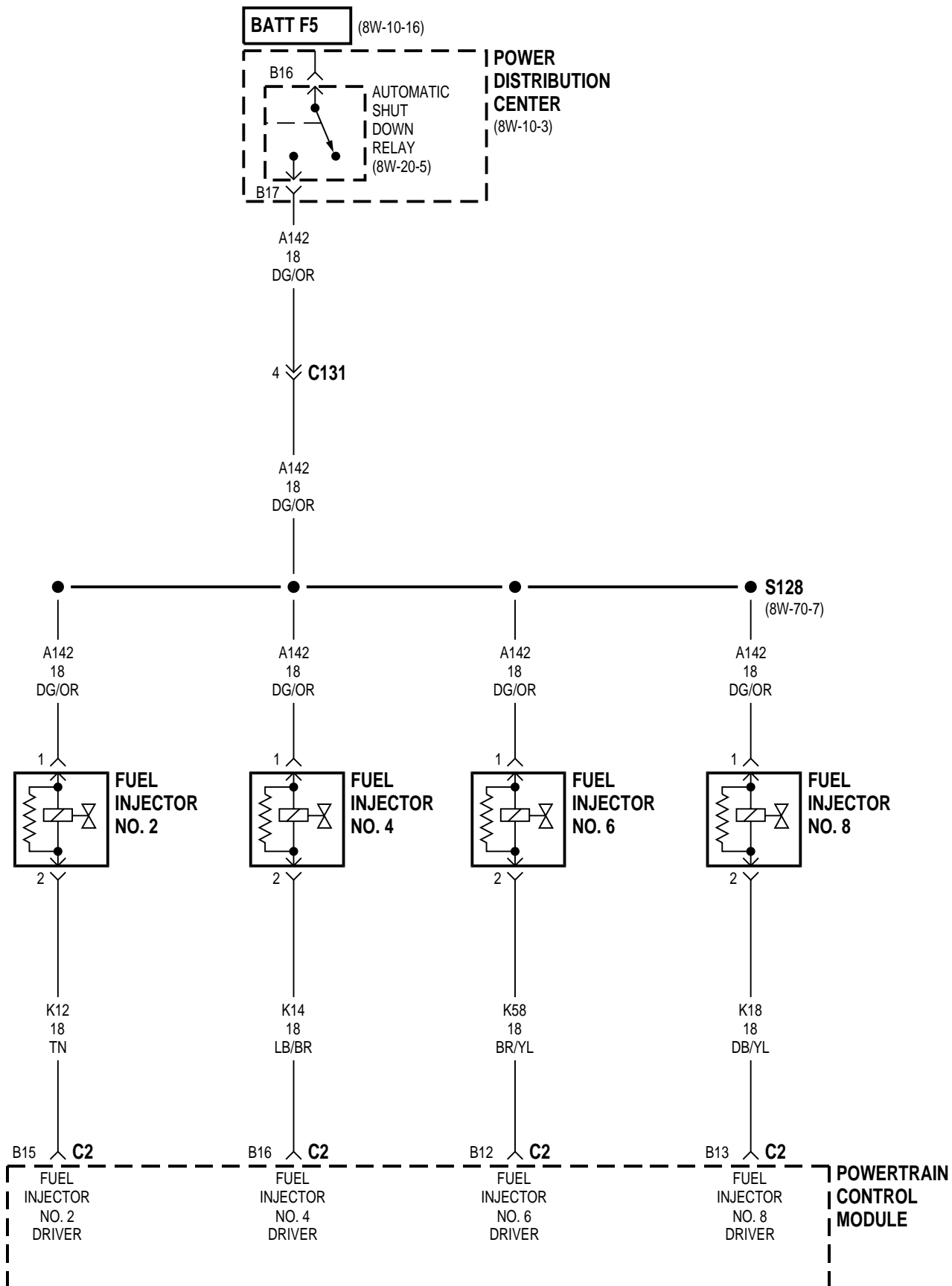


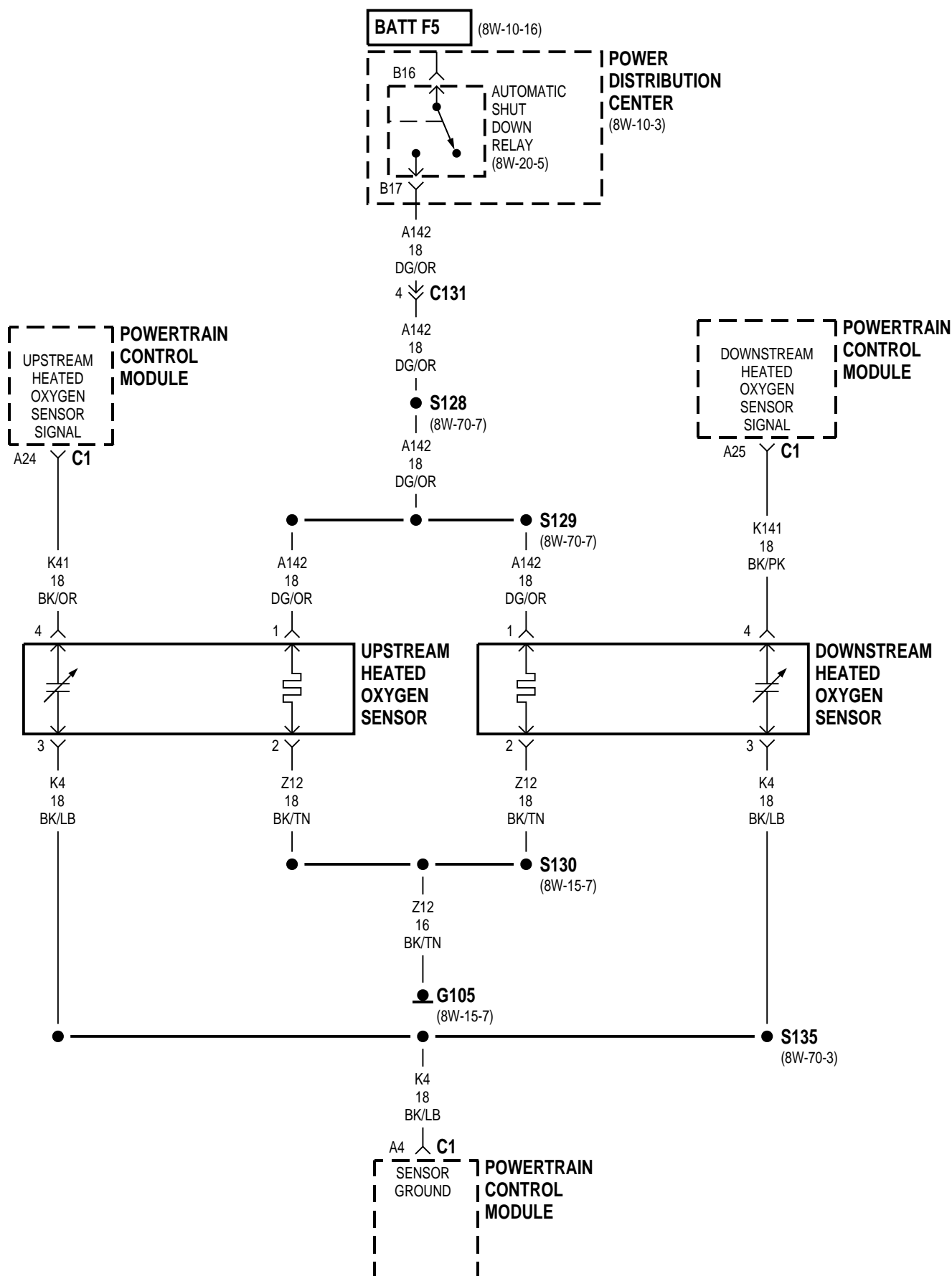


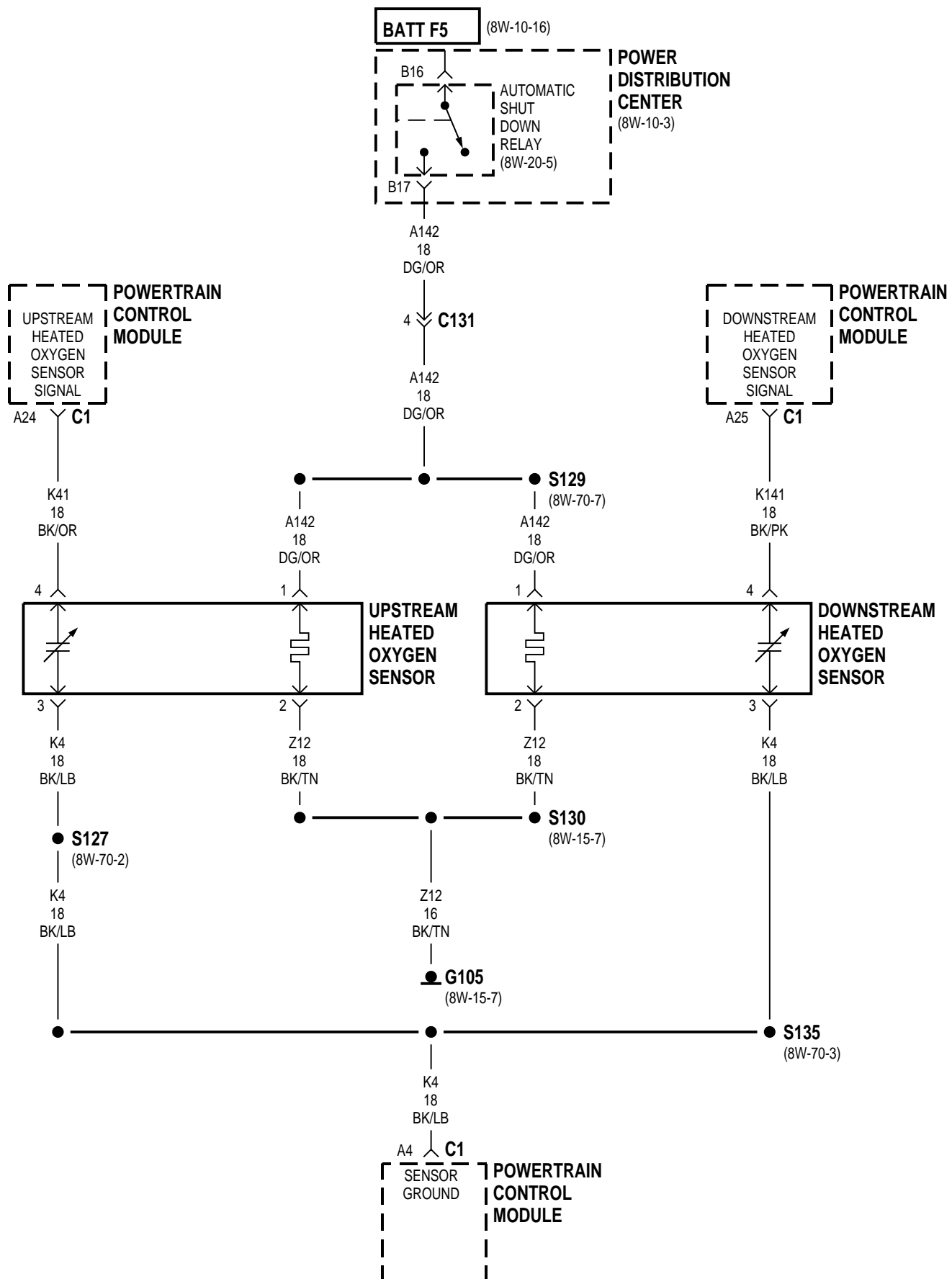


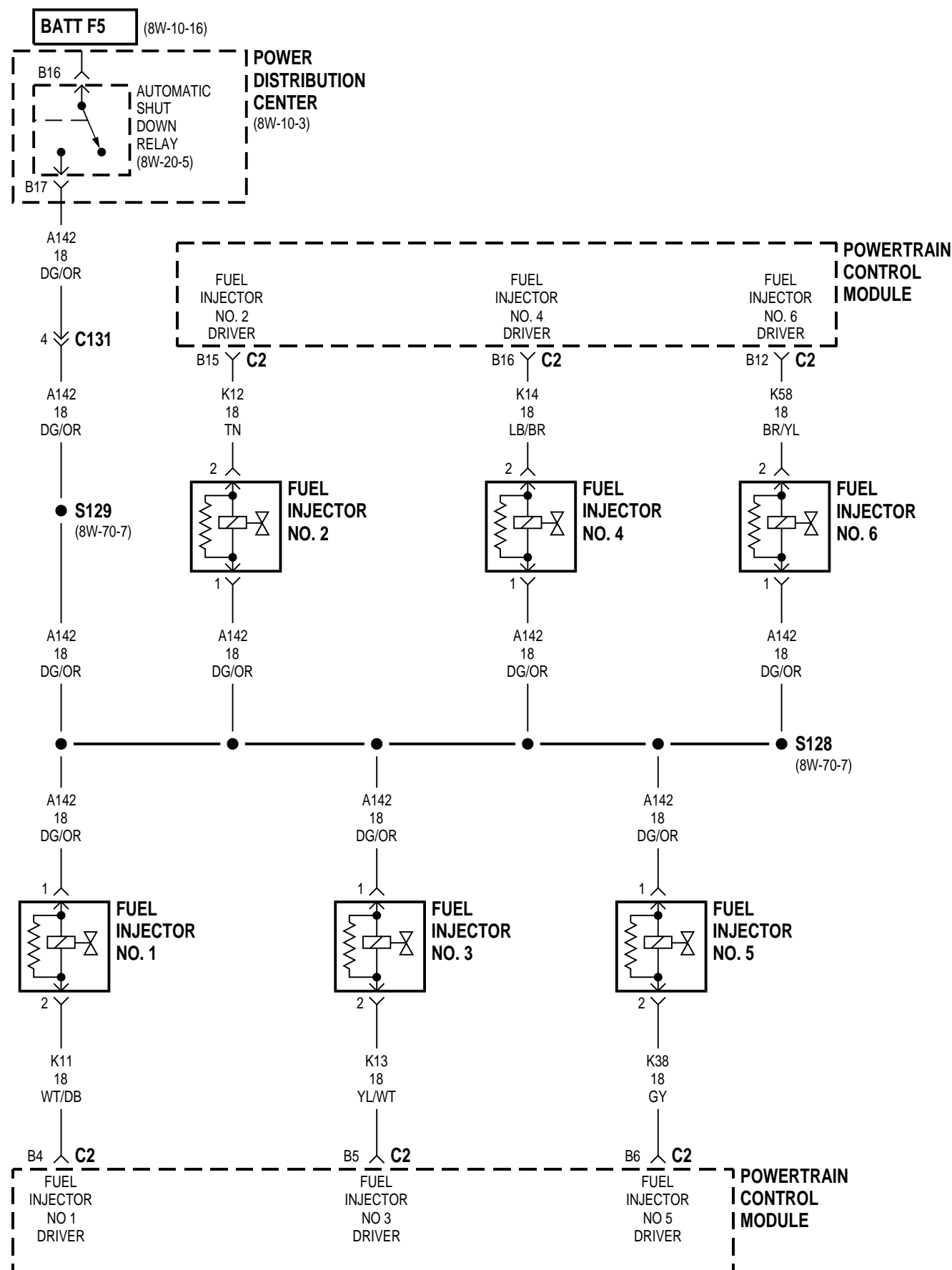


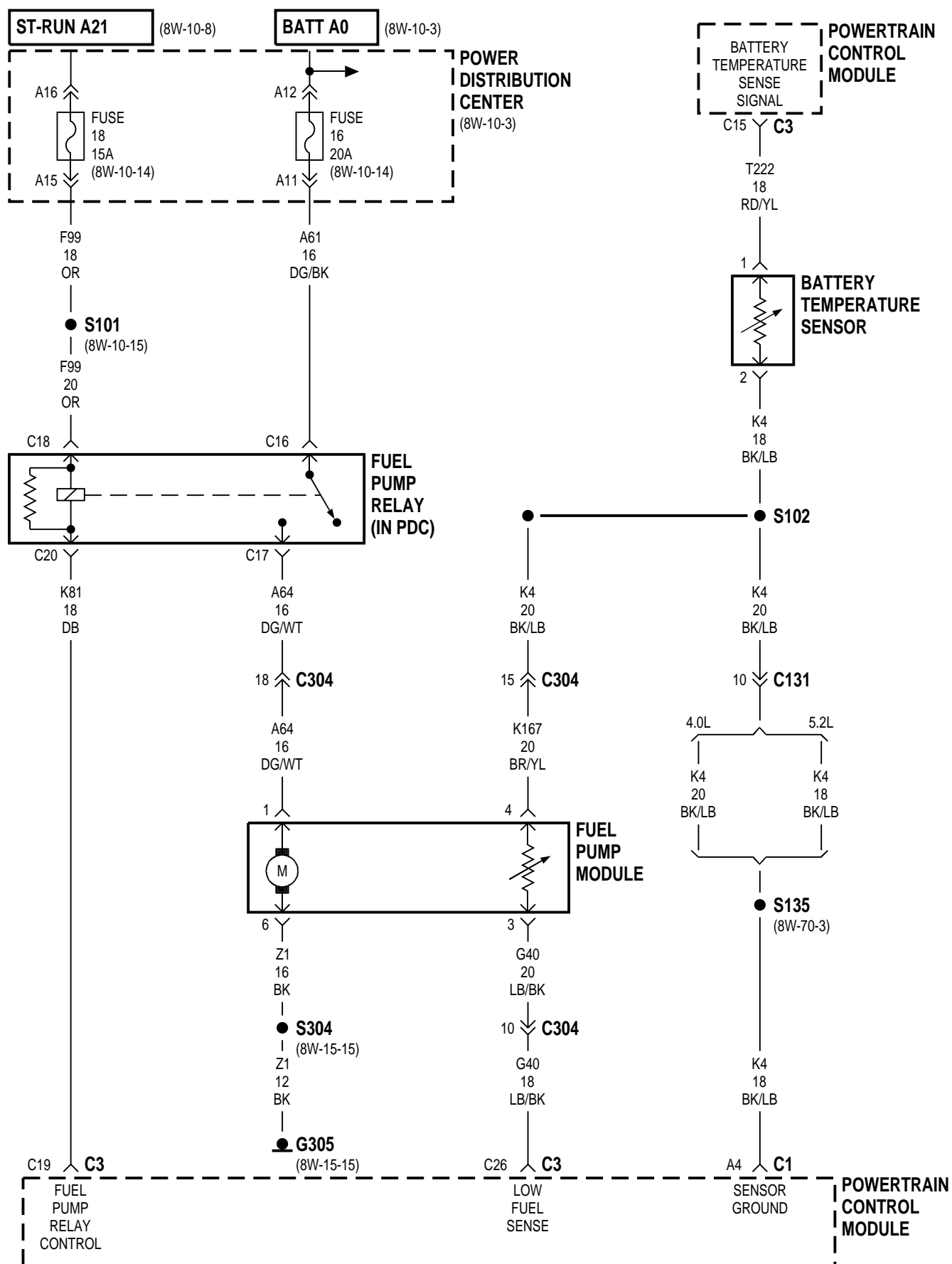


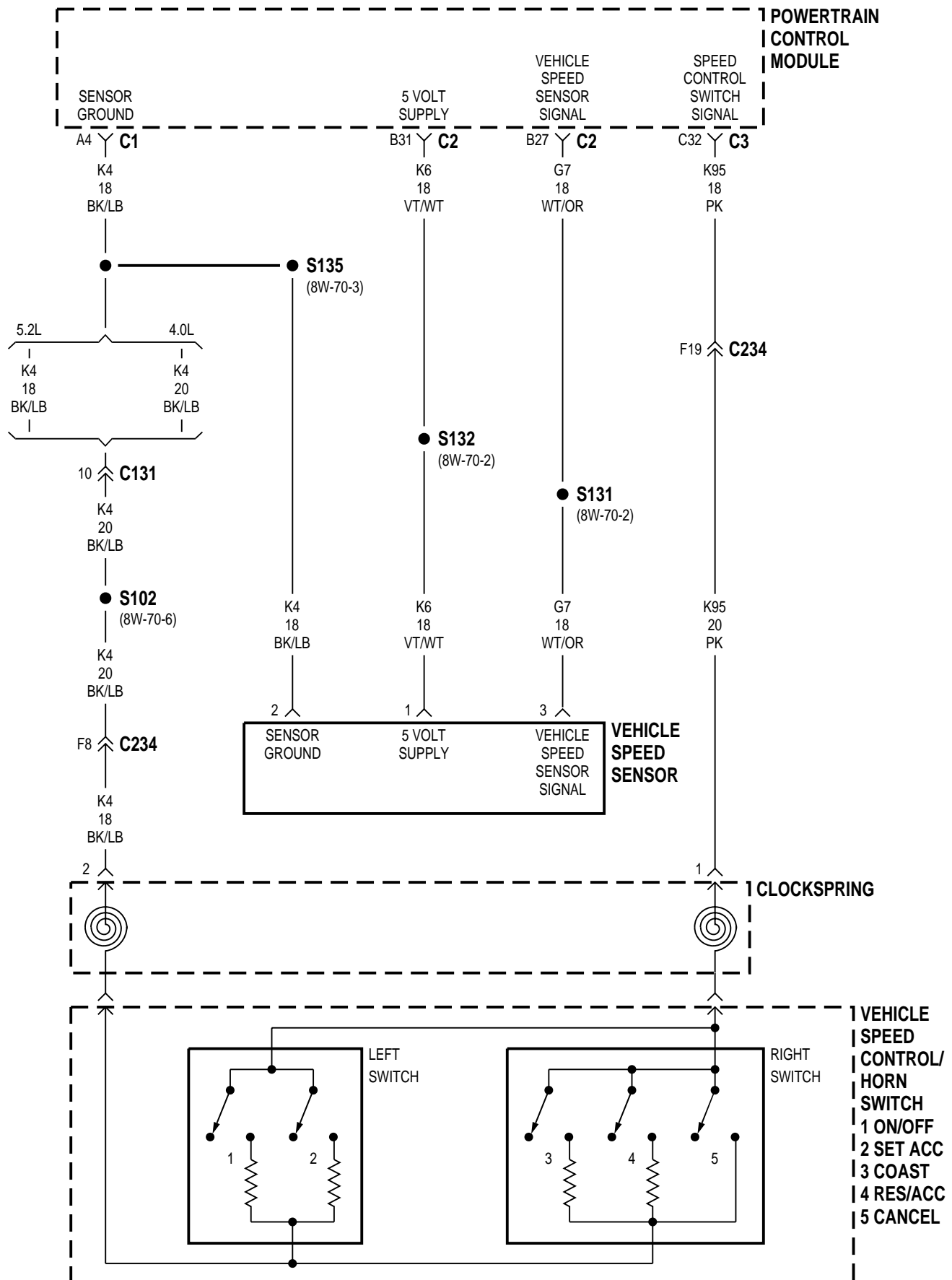


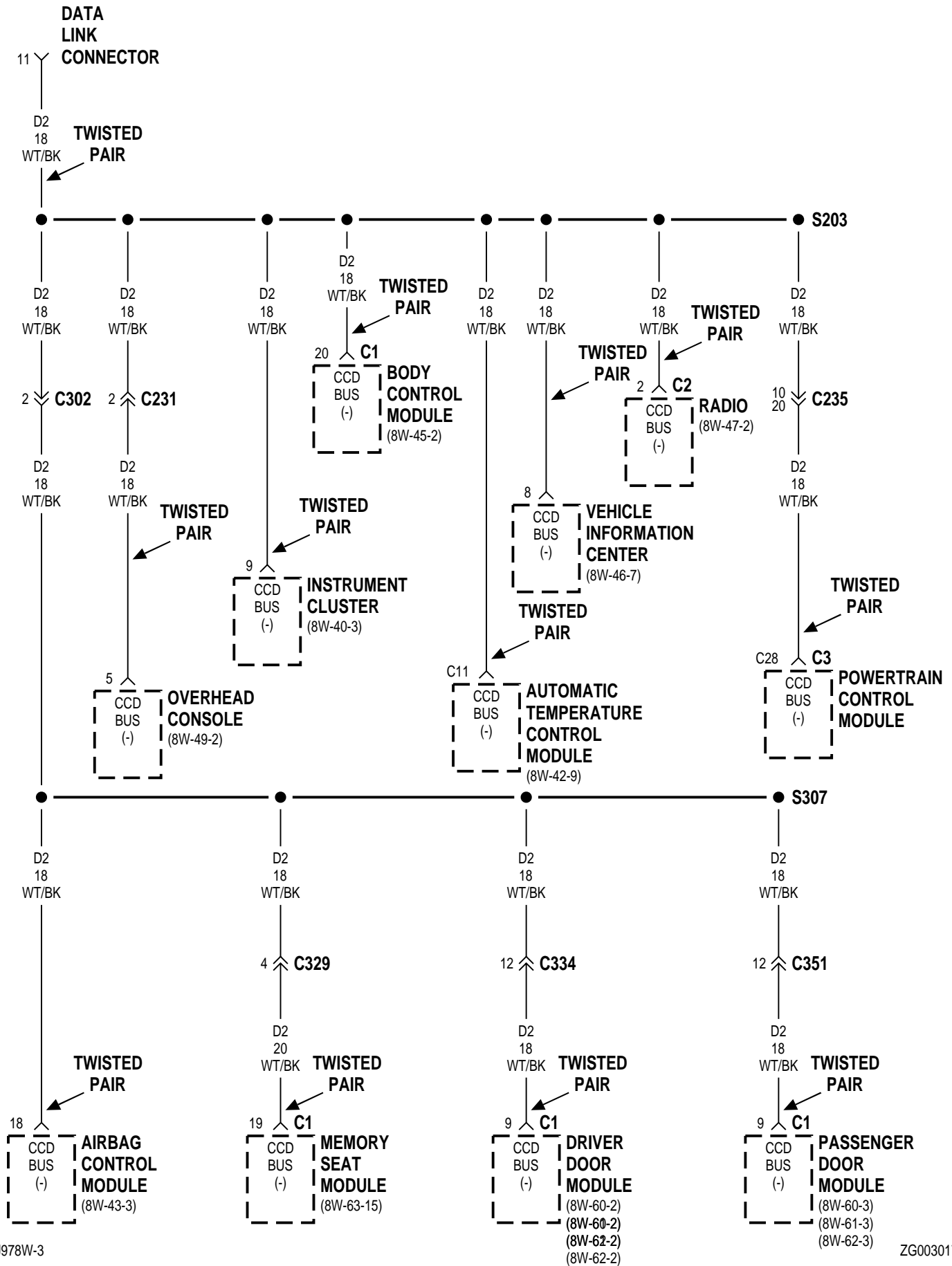


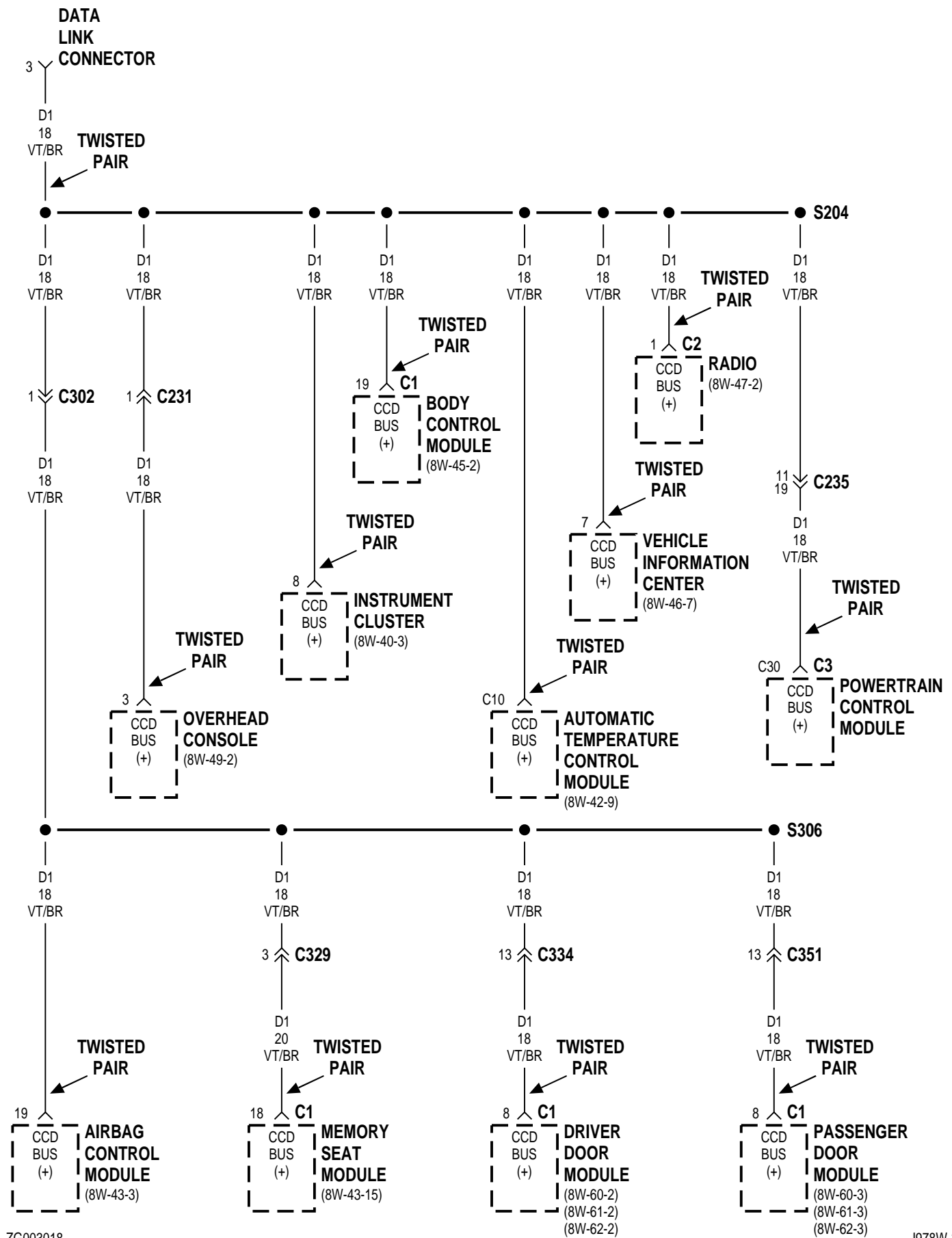


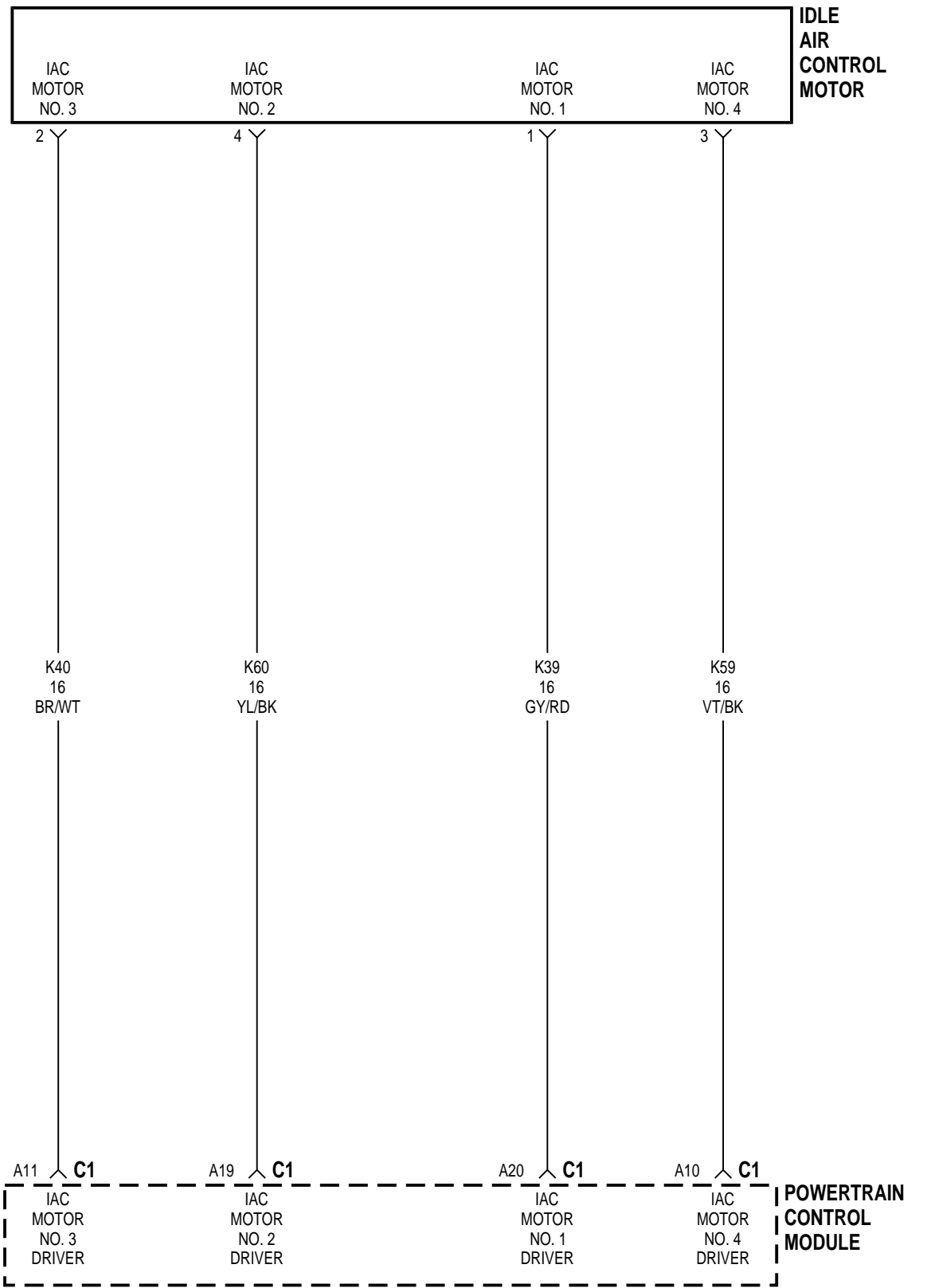


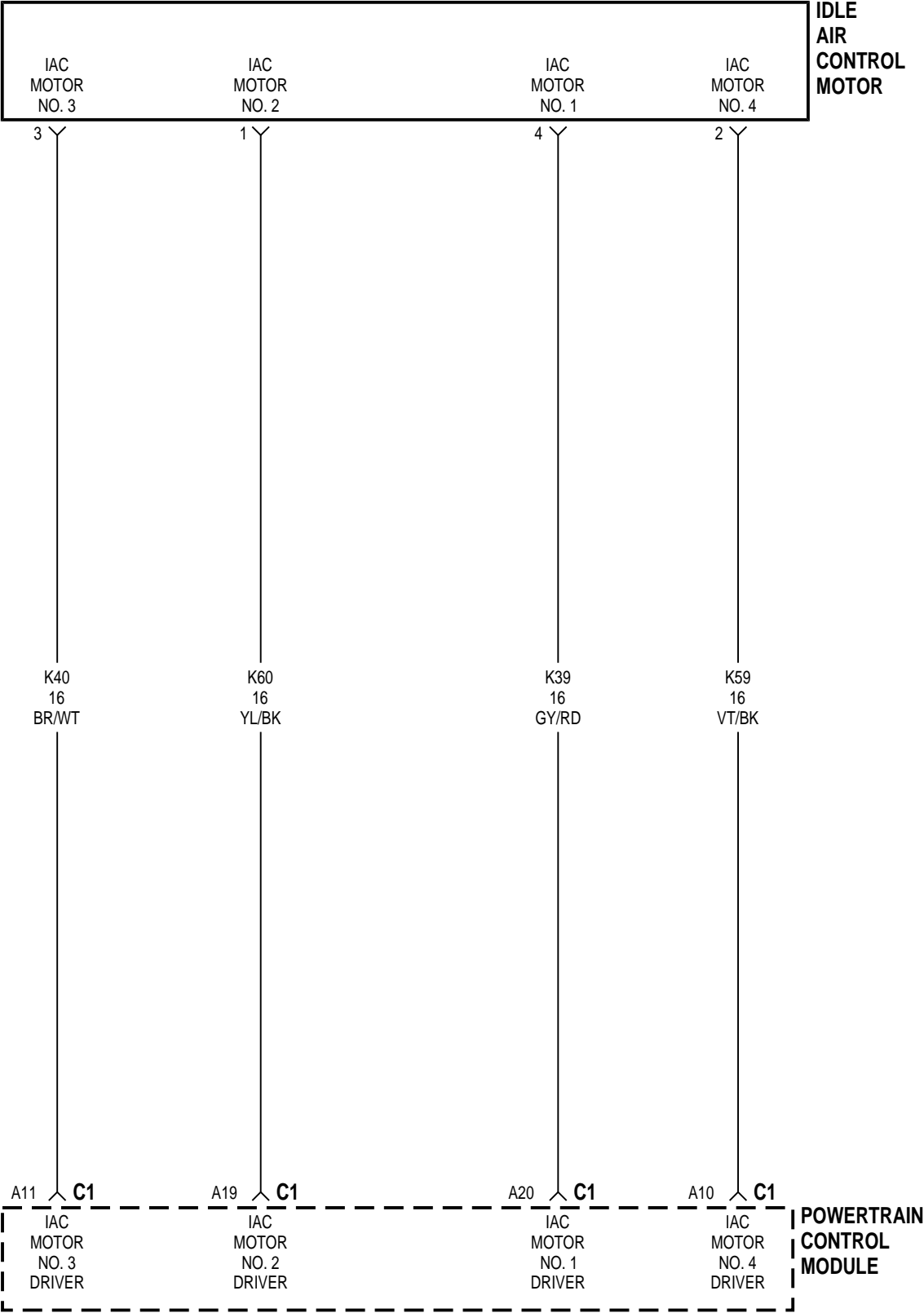


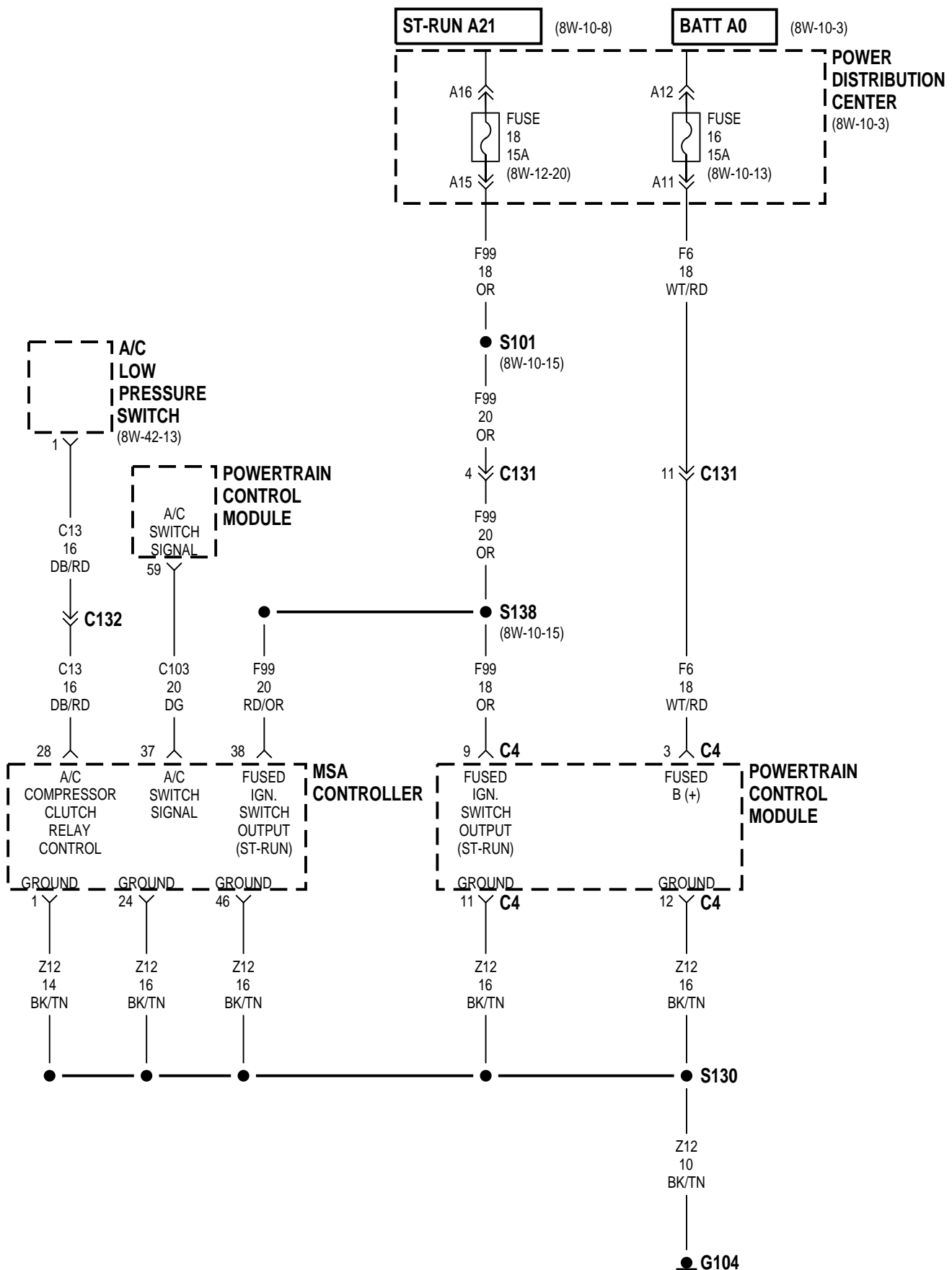


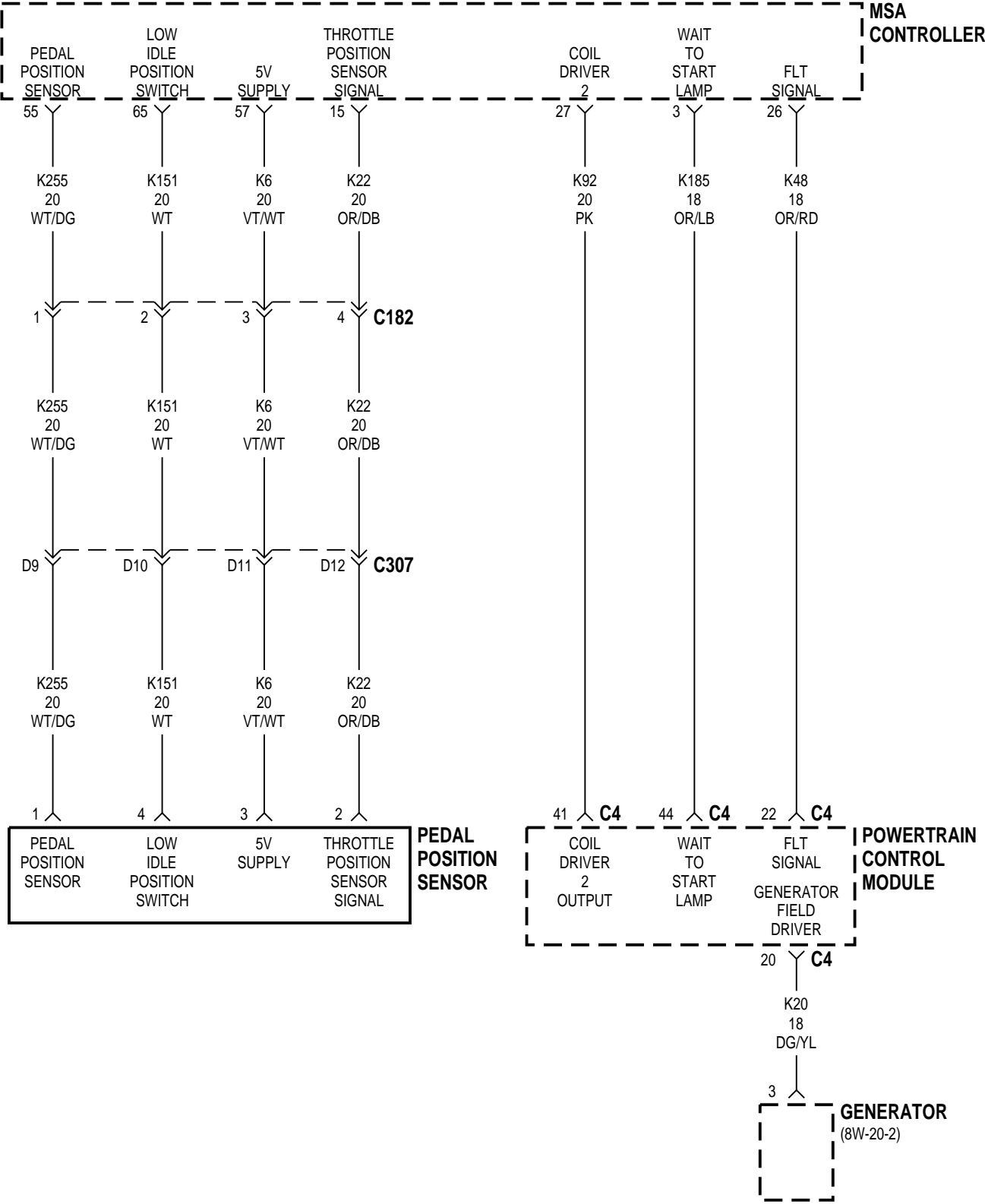


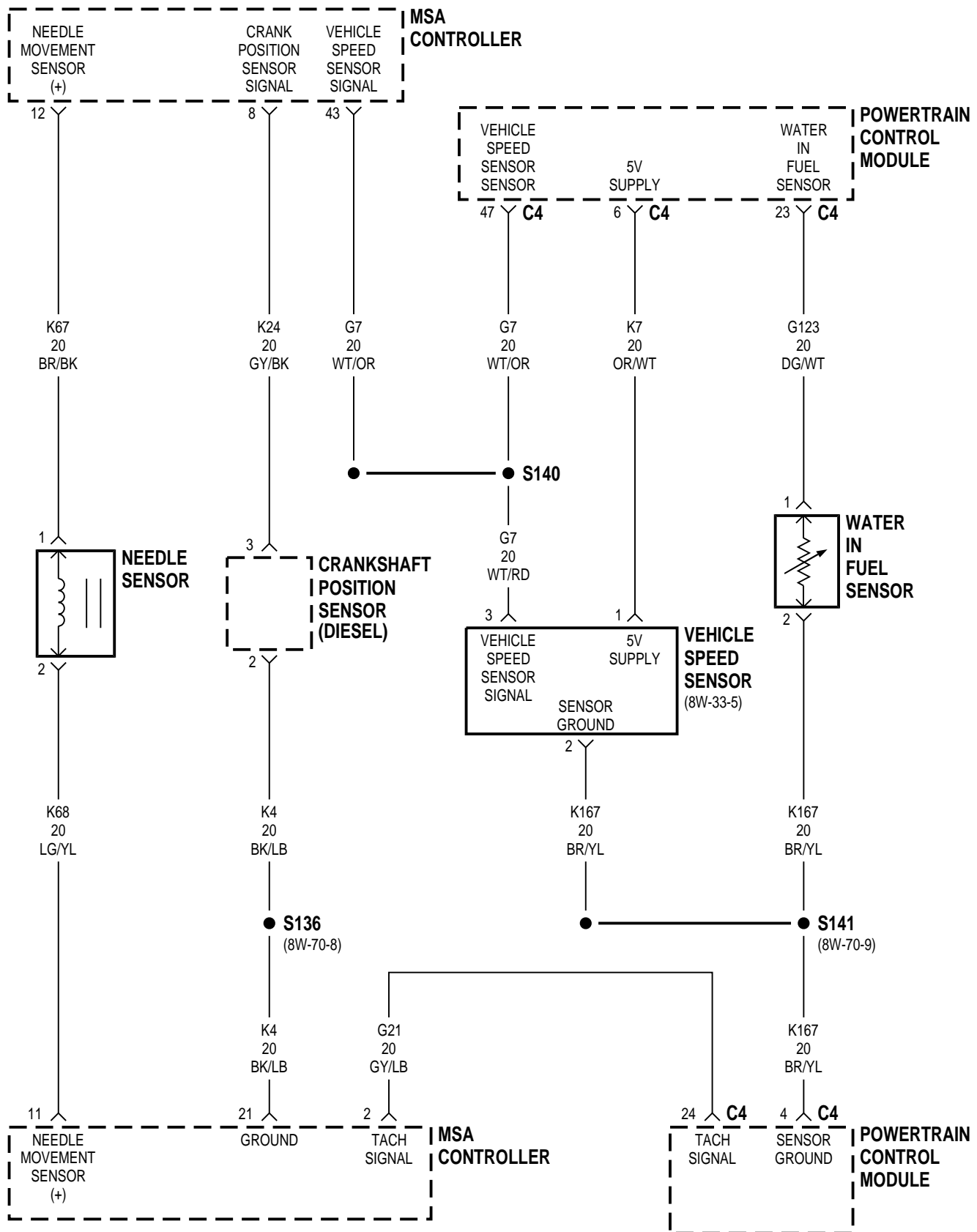


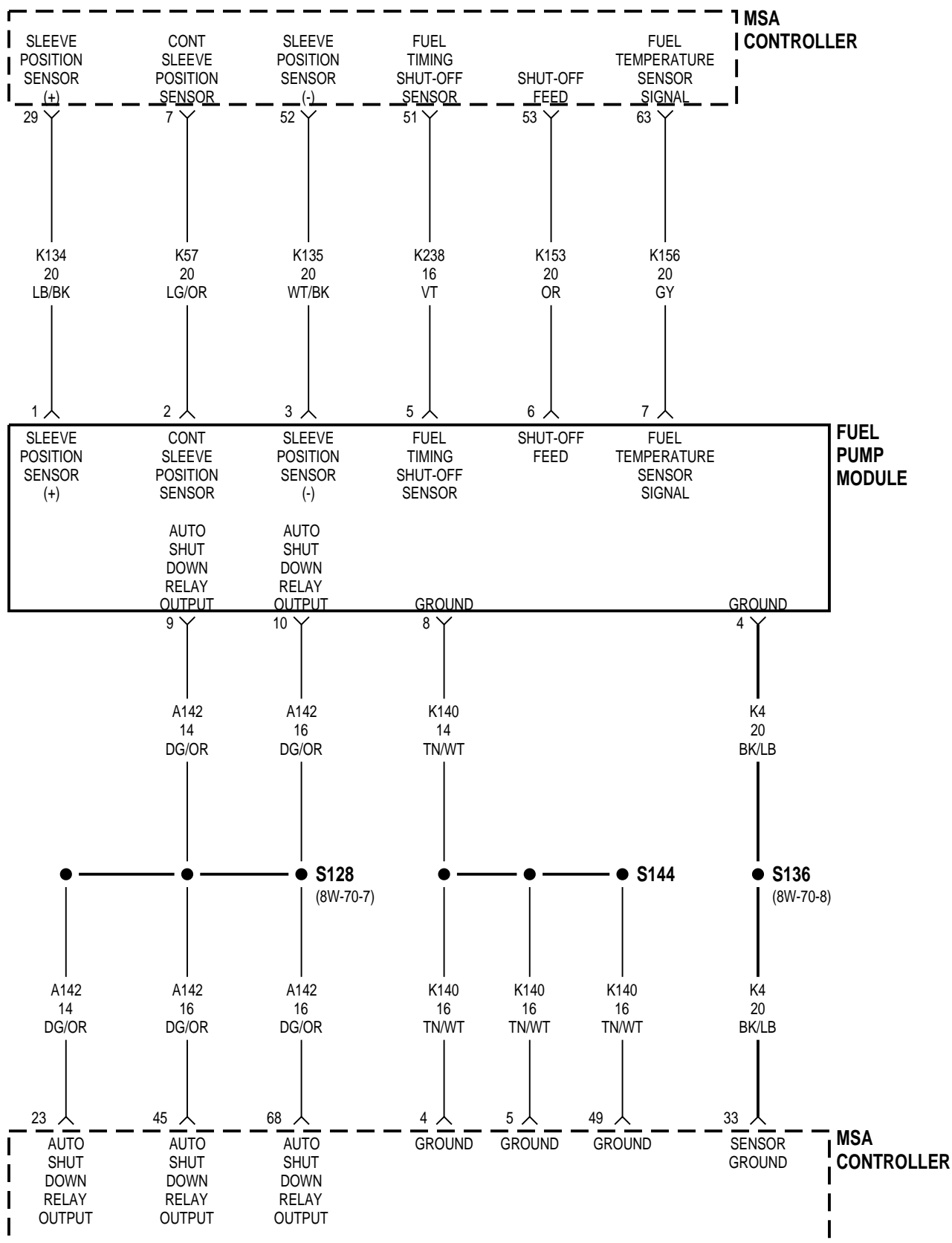


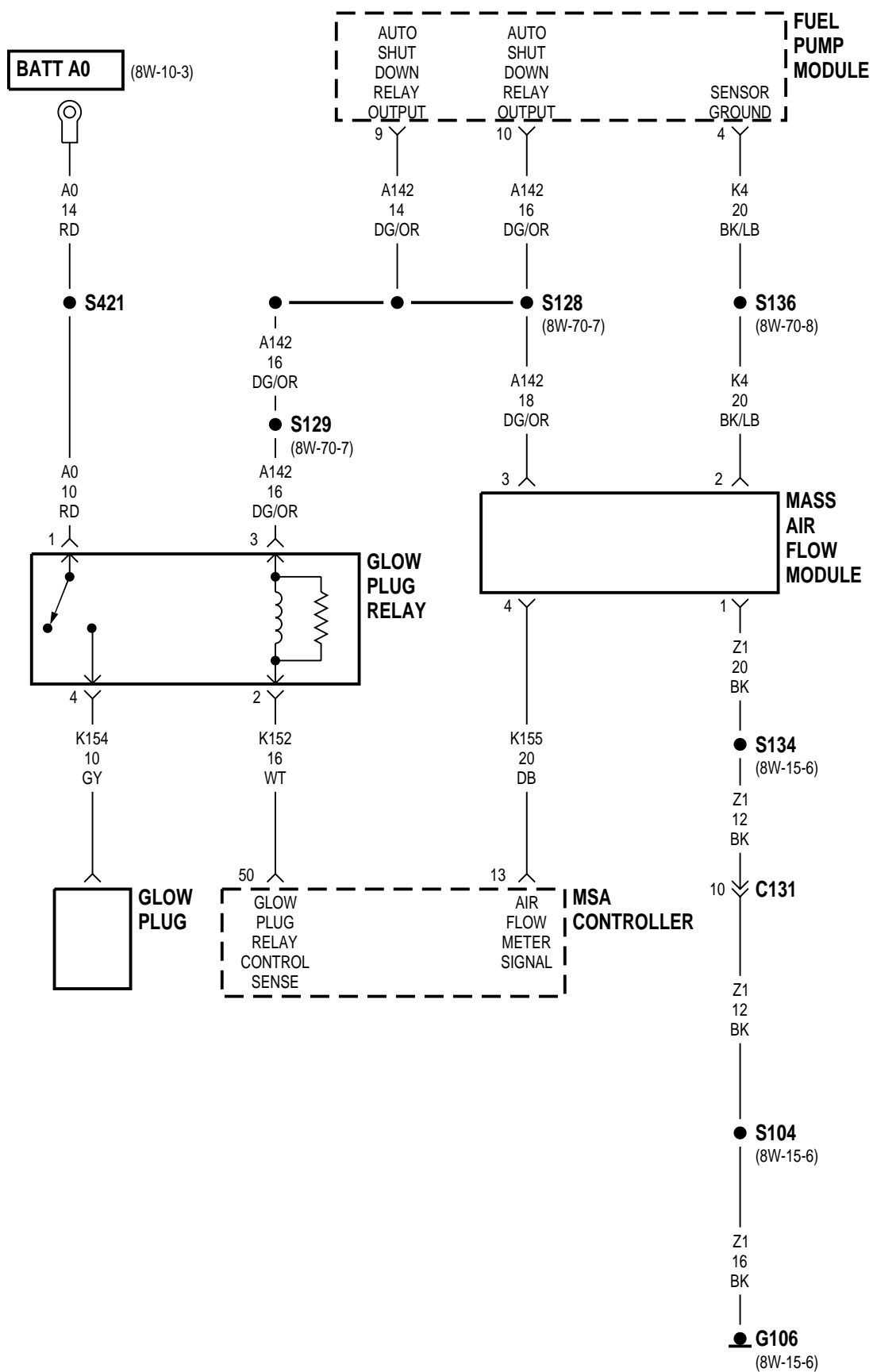


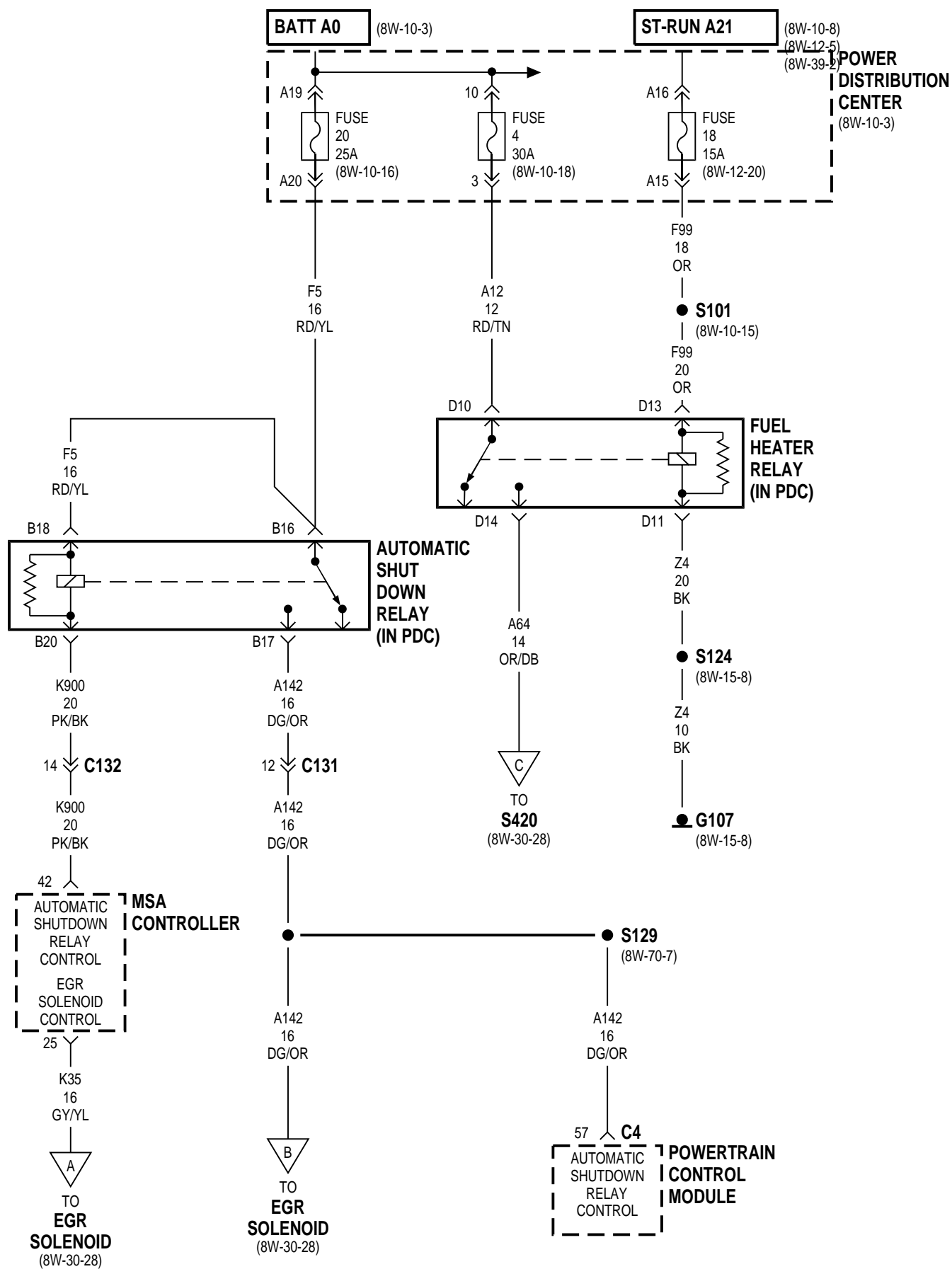


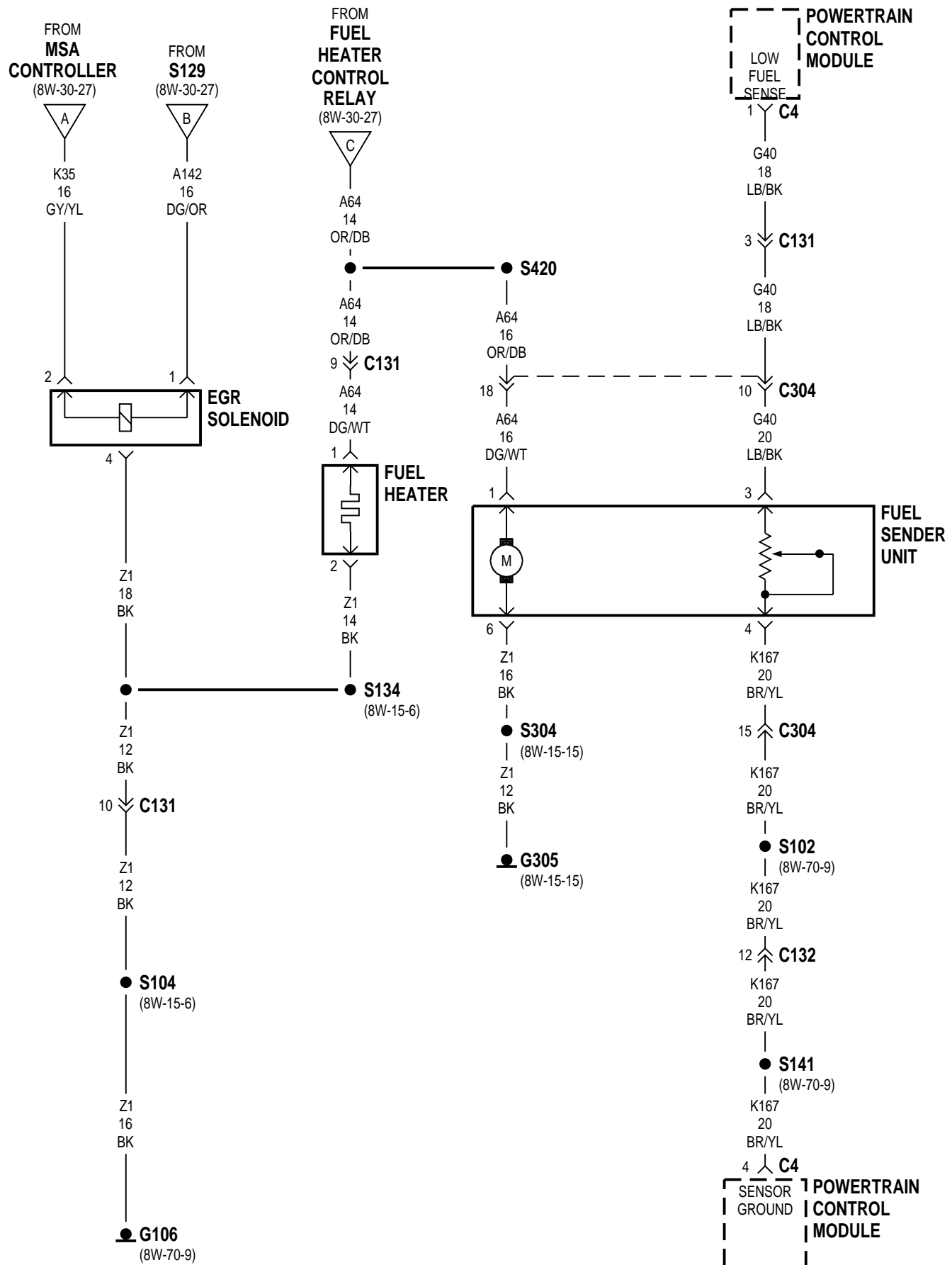




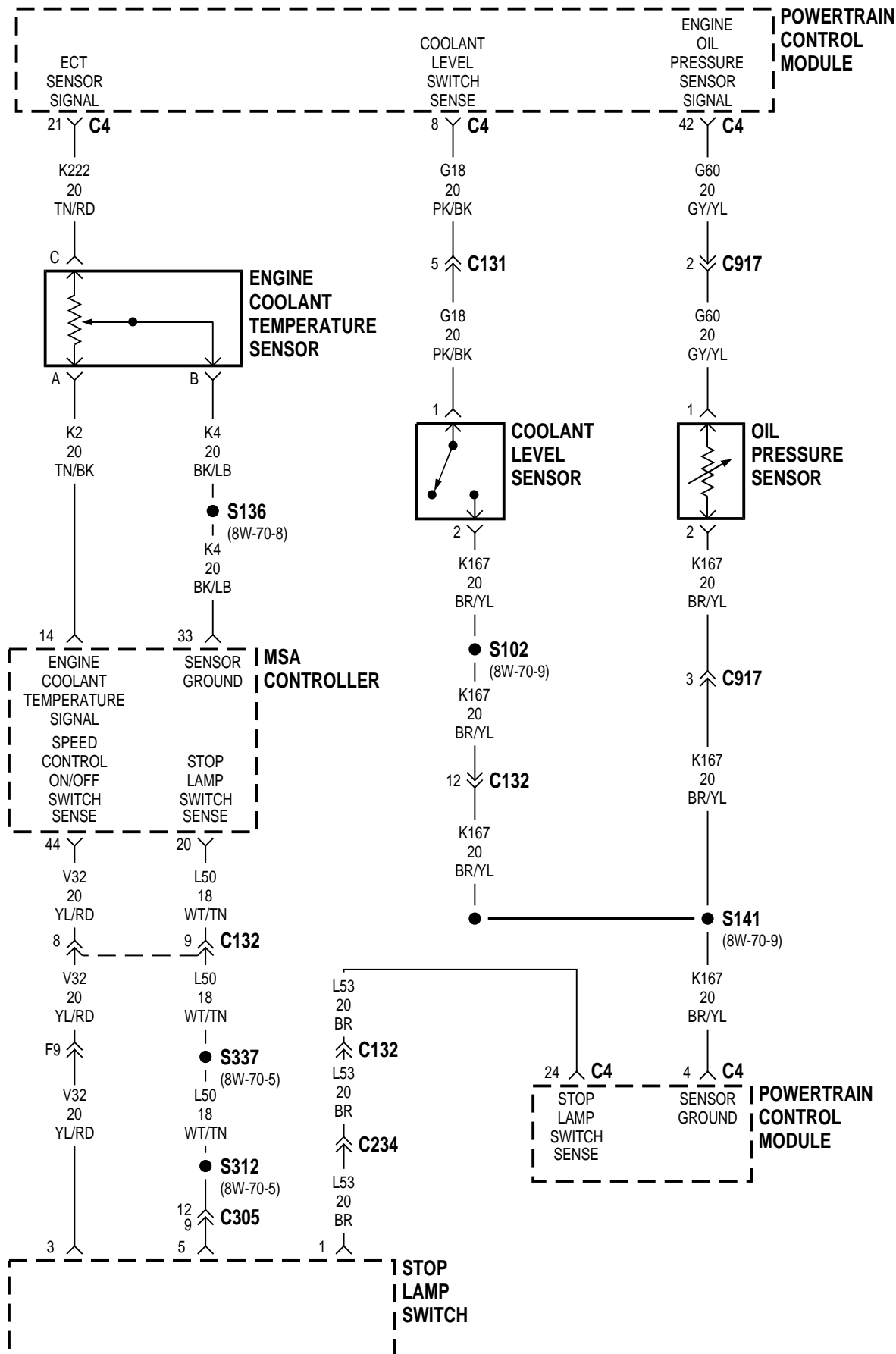


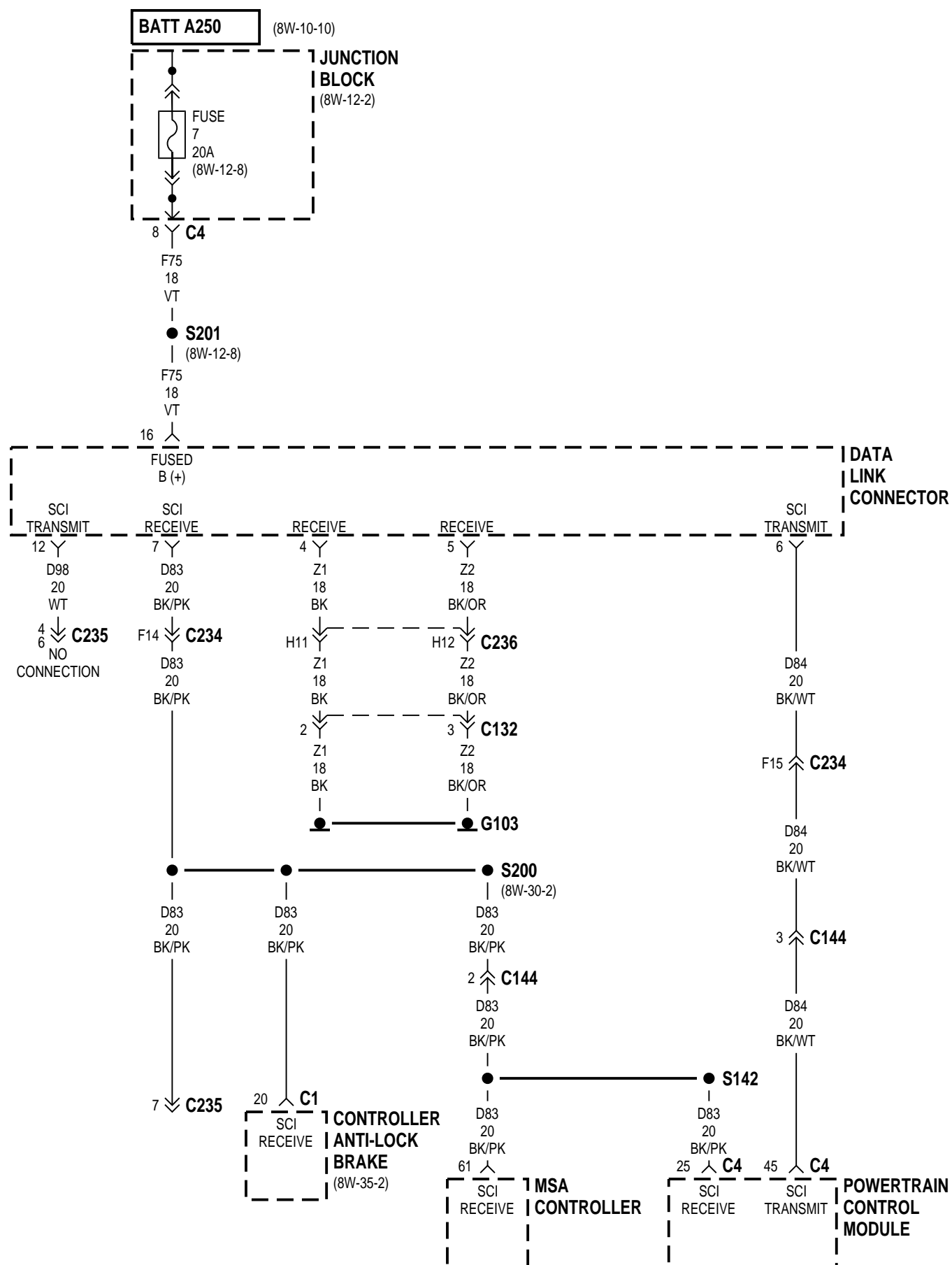


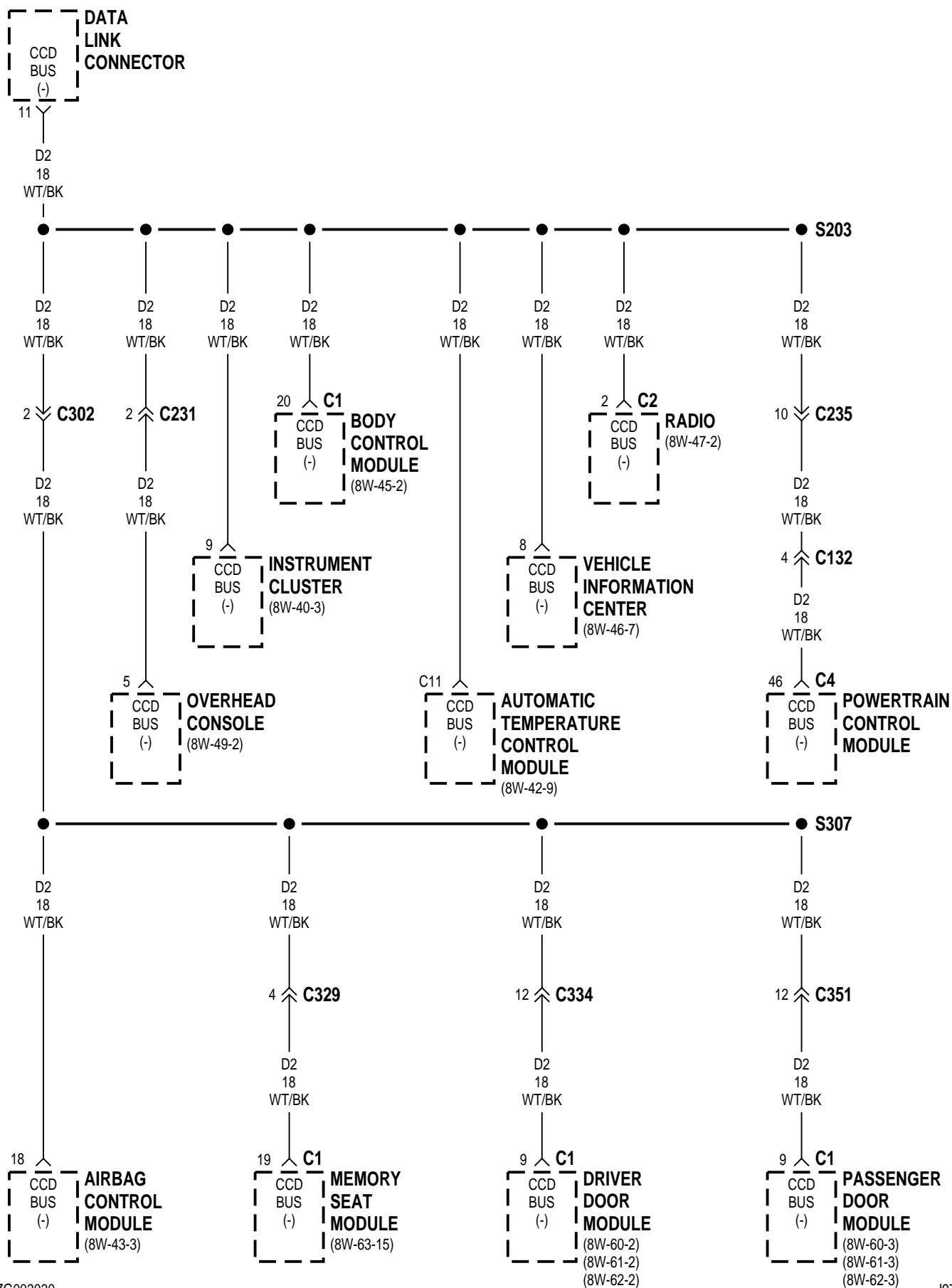


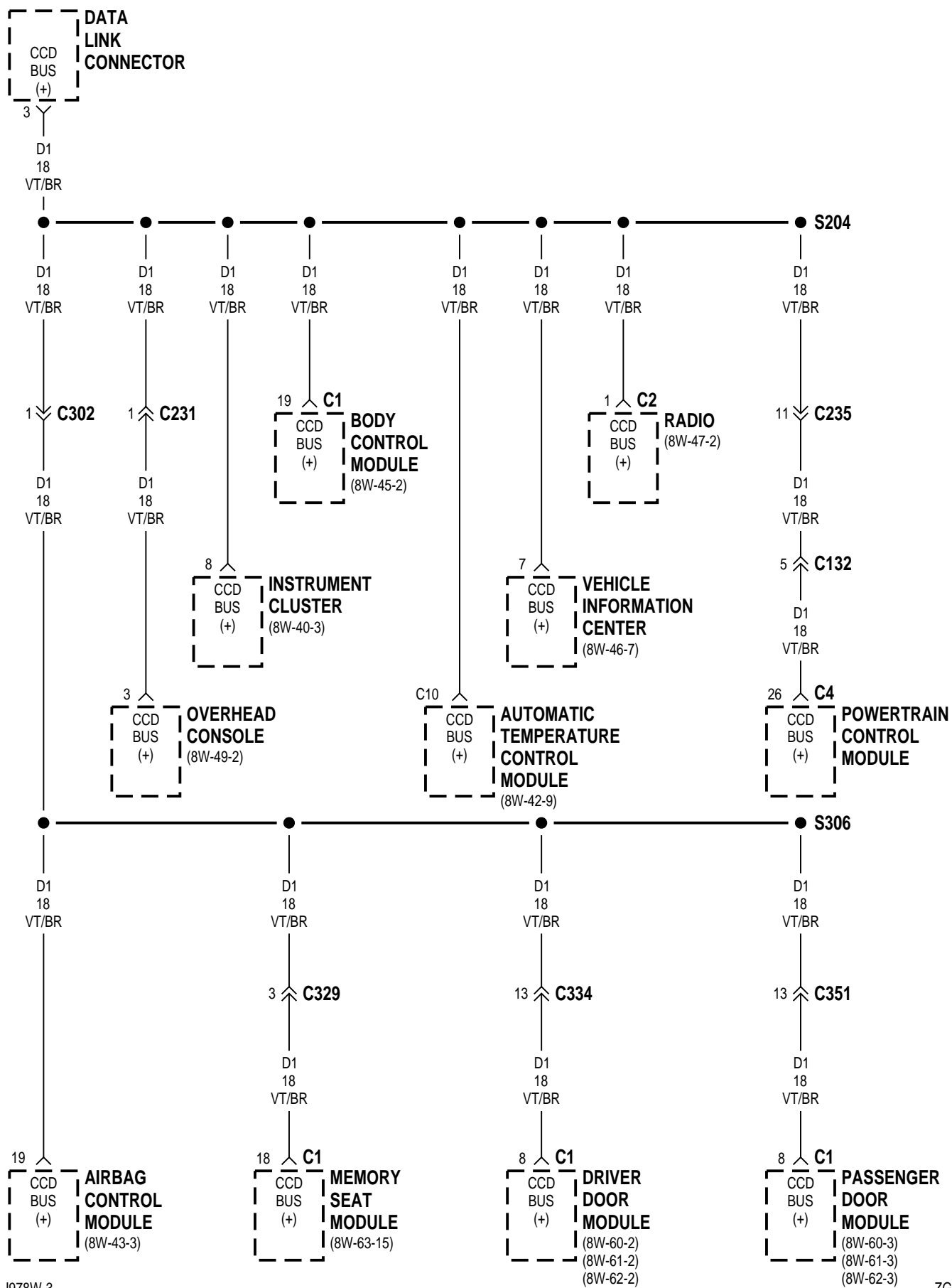


DIESEL ENGINE









8W-30 FUEL/IGNITION SYSTEMS

INDEX

	page		page
DESCRIPTION AND OPERATION			
ACCELERATOR PEDAL POSITION SENSOR (DIESEL)	37	FUEL PUMP MODULE (DIESEL)	34
AUTOMATIC SHUT DOWN (ASD) RELAY	34	FUEL PUMP MODULE	34
AUTOMATIC SHUT DOWN RELAY (DIESEL) ...	34	FUEL PUMP RELAY	34
BATTERY FEED (DIESEL)	33	GLOW PLUGS (DIESEL)	39
BATTERY FEED	33	GROUND	33
BATTERY TEMPERATURE SENSOR	35	HEATED OXYGEN SENSORS	35
CAMSHAFT POSITION SENSOR	36	IDLE AIR CONTROL (IAC) MOTOR	39
CCD BUS	39	IGNITION COIL	39
CRANKSHAFT POSITION SENSOR (DIESEL) ..	36	IGNITION SWITCH	33
CRANKSHAFT POSITION SENSOR	35	INSTRUMENTED FIRST INJECTOR (DIESEL) ..	39
DATA LINK CONNECTOR	34	INTAKE AIR TEMPERATURE SENSOR	37
DUTY CYCLE EVAP/PURGE SOLENOID	39	LOW COOLANT LEVEL SWITCH (DIESEL) ...	39
EGR SOLENOID (DIESEL)	39	LOW IDLE POSITION SWITCH (DIESEL)	37
ENGINE COOLANT TEMPERATURE SENSOR (DIESEL)	36	MANIFOLD ABSOLUTE PRESSURE SENSOR .	37
ENGINE COOLANT TEMPERATURE SENSOR .	36	MASS AIR FLOW SENSOR (DIESEL)	37
EVAPORATIVE SYSTEM LEAK DETECTION PUMP	36	OIL PRESSURE SENSOR (DIESEL)	38
FUEL HEATER (DIESEL)	39	OIL PRESSURE SENSOR	38
FUEL INJECTION PUMP (DIESEL)	38	PCM GROUND (DIESEL)	34
FUEL INJECTORS	38	THROTTLE POSITION SENSOR	36
		VEHICLE SPEED SENSOR (DIESEL)	35
		VEHICLE SPEED SENSOR	35
		WATER IN FUEL SENSOR (DIESEL)	38

DESCRIPTION AND OPERATION

IGNITION SWITCH

Circuit A1 from fuse 8 in the Power Distribution Center (PDC) powers four different circuits through the ignition switch. When the ignition switch is in the START or RUN position, it connects circuit A1 to circuit A21.

In the ACCESSORY or RUN position, the ignition switch connects to circuit A31. In the START position, the ignition switch connects circuit A1 to circuit A41. When the ignition switch is in the RUN position it connects circuit A1 to circuit A22.

Also in the START position, the case grounded ignition switch grounds circuit G9 from the brake warning switch.

BATTERY FEED

Circuit F5 from fuse 20 in the Power Distribution Center (PDC) supplies battery voltage to cavity A22 of the Powertrain Control Module (PCM).

HELPFUL INFORMATION

Circuit F5 also supplies power to the contact sides of the Automatic Shut Down (ASD) relay.

BATTERY FEED (DIESEL)

Battery feed for the Powertrain Control Module (PCM) is supplied from several sources. One is a constant battery feed on circuit F6. This circuit is protected by a 15 amp fuse located in the Power Distribution Center (PDC)

Battery voltage is also provided on circuit F99. This circuit is HOT in the START and RUN position and protected by a 15 amp fuse located in the PDC. Power for the fuse is supplied on circuit A21 from the ignition switch.

GROUND

Circuit Z12 connects to cavities A31 and A32 of the PCM. The Z12 circuit provides ground for PCM internal drivers that operate high current devices like the injectors and ignition coil.

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

HELPFUL INFORMATION

- If the system loses ground for the Z12 circuits, the vehicle will not operate. Check the connection at the ganged-ground circuit eyelet.

DESCRIPTION AND OPERATION (Continued)

PCM GROUND (DIESEL)

Ground for the Powertrain Control Module (PCM) is supplied on the Z12 circuit. This circuit connects to four cavities in the PCM and terminates at the PCM ground location.

DATA LINK CONNECTOR

Circuit A250 from fuse 11 in the Power Distribution Center (PDC) powers circuit F75 through fuse 7 in the junction block. Circuit F75 supplies battery voltage to the data link connector.

Circuit D84 connects to cavity C29 of the PCM. Circuit D84 is the SCI transmit circuit for the Powertrain Control Module (PCM). Circuit D83 connects to cavity C27 of the PCM and cavity A3 of the Controller- Anti Lock Brakes. Circuit D83 is the SCI receive circuit for the PCM.

Circuits D83 and D98 from the speed proportional steering module connect to the data link connector.

Circuits Z1 and Z2 provide ground for the data link connector.

AUTOMATIC SHUT DOWN (ASD) RELAY

When the ignition switch is in either the START or RUN position, it connects circuit A1 from fuse 8 in the Power Distribution Center (PDC) to circuit A21. Circuit A21 powers circuit F99 through PDC fuse 18. Circuit F99 feeds the coil side of the Automatic Shut Down (ASD) relay. The Powertrain Control Module (PCM) provides ground for the relay on circuit K900. Circuit K900 connects to cavity C3 of the PCM.

When the PCM grounds the ASD relay, contacts inside the relay close and connect circuit F5 from fuse 20 in the PDC to circuit A142. Circuit A142 splices to, fuel injectors, ignition coil and the upstream and downstream heated oxygen sensors. Circuit A142 also connects to cavity C12 of the PCM.

HELPFUL INFORMATION

Along with supplying voltage to the coil side of the ASD relay, circuit F99 also supplies voltage to the coil side of the fuel pump relay.

AUTOMATIC SHUT DOWN RELAY (DIESEL)

Power for the coil and contact side of the Automatic Shut Down (ASD) relay is supplied on circuit F5. This circuit is HOT at all times and protected by a 25 amp fuse located in the Power Distribution Center (PDC).

Ground for the coil side of the relay is controlled by the Powertrain Control Module (PCM) on circuit K900.

When the PCM provides a ground for the coil side of the relay the contacts in the relay CLOSE and connect circuits F5 and A142. The A142 circuit sup-

plies power to various components and modules in the fuel system.

HELPFUL INFORMATION

- Check the 25 amp fuse located in the PDC
- Refer to the appropriate section of the service manual or Diagnostic Test Procedures manual

FUEL PUMP RELAY

When the ignition switch is in either the START or RUN positions, it connects circuit A1 from fuse 8 in the Power Distribution Center (PDC) to circuit A21. Circuit A21 powers circuit F99 through PDC fuse 18. Circuit F99 supplies battery voltage to the coil side of the fuel pump relay. The Powertrain Control Module (PCM) provides ground for the relay on circuit K81. Circuit K81 connects to cavity C19 of the PCM.

When the PCM grounds the fuel pump relay, contacts inside the relay close and connect circuit A61 from fuse 16 in the PDC to circuit A64. Circuit A64 feeds the fuel pump motor (part of the in-tank fuel pump module).

HELPFUL INFORMATION

Circuit F99 also powers the coil side of the Automatic Shut Down (ASD) relay.

FUEL PUMP MODULE

The in-tank fuel pump module contains the fuel pump motor and fuel level sensor.

FUEL PUMP MOTOR

When the fuel pump relay contacts close, the relay feeds the fuel pump motor. Circuit A64 from the relay powers the fuel pump module. Circuit Z1 provides ground for the fuel pump motor.

FUEL LEVEL SENSOR

The fuel level sensor is a variable resistor. Circuit G40 provides the fuel level input to cavity C26 of the Powertrain Control Module (PCM). The PCM broadcasts fuel level data on the CCD bus. The micro-processor in the instrument cluster receives the message on the CCD bus, calculates fuel gauge needle position and adjusts the gauge.

FUEL PUMP MODULE (DIESEL)

The in-tank fuel pump module contains the fuel pump motor and fuel level sensor.

FUEL PUMP MOTOR

When the fuel pump relay contacts close, the relay feeds the fuel pump motor. Circuit A64 from the relay powers the fuel pump motor. Circuit Z1 provides ground for the fuel pump motor.

DESCRIPTION AND OPERATION (Continued)

FUEL LEVEL SENSOR

The fuel level sensor is a variable resistor. Circuit G40 provides the fuel level input to the Powertrain Control Module (PCM). The PCM broadcasts fuel level data on the CCD bus. The micro-processor in the instrument cluster receives the message on the CCD bus, calculates fuel gauge needle position and adjusts the gauge.

VEHICLE SPEED SENSOR

Circuit K6 supplies 5 volts from the Powertrain Control Module (PCM) to the vehicle speed sensor. The K6 circuit connects to cavity B31 of the PCM.

Circuit G7 from the vehicle speed sensor provides an input signal to the PCM. The G7 circuit connects to cavity B27 of the PCM.

The PCM provides a ground for the vehicle speed sensor signal (circuit G7) through circuit K4. Circuit K4 connects to cavity A4 of the PCM.

HELPFUL INFORMATION

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

- Battery temperature sensor
- Camshaft position sensor
- Crankshaft position sensor
- Downstream heated oxygen sensor
- Engine coolant temperature sensor
- Fuel pump module
- Intake air temperature sensor
- Manifold absolute pressure sensor
- Oil pressure sensor
- Powertrain control module
- Throttle position sensor
- Transmission solenoid assembly
- Upstream heated oxygen sensor
- Vehicle speed control switch

VEHICLE SPEED SENSOR (DIESEL)

Circuit K7 supplies voltage from the Powertrain Control Module (PCM) to the vehicle speed sensor.

Circuit G7 from the vehicle speed sensor provides an input signal to the PCM.

The PCM provides a ground for the vehicle speed sensor signal (circuit G7) through circuit K4.

HEATED OXYGEN SENSORS

When the Automatic Shut Down (ASD) relay contacts close, circuit A142 supplies voltage to the upstream and downstream heated oxygen sensors.

Circuit K41 delivers the signal from the upstream heated oxygen sensor to the Powertrain Control Module (PCM). Circuit K41 connects to cavity A24 of the PCM. Circuit K141 supplies the signal from the downstream heated oxygen sensor to the PCM. Circuit K141 connects to PCM cavity A25.

The PCM provides a ground for the heated oxygen sensor signals (circuits K41 and K141) through circuit K4. Circuit K4 connects to cavity A4 of the PCM connector.

Circuit Z12 provides ground for the heater circuit in each sensor.

HELPFUL INFORMATION

Circuit A142 also supplies battery voltage to the fuel injectors, ignition coil, and generator.

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

- Battery temperature sensor
- Camshaft position sensor
- Crankshaft position sensor
- Engine coolant temperature sensor
- Fuel pump module
- Intake air temperature sensor
- Manifold absolute pressure sensor
- Oil pressure sensor
- Powertrain control module
- Throttle position sensor
- Transmission solenoid assembly
- Vehicle speed control switch
- Vehicle speed sensor

BATTERY TEMPERATURE SENSOR

The Powertrain Control Module (PCM) determines battery temperature on circuit T222. Circuit T222 connects the PCM to the battery temperature sensor. Circuit T222 connects to cavity C15 of the PCM. Circuit K4 provides ground for the sensor and connects to PCM cavity A4.

CRANKSHAFT POSITION SENSOR

The Powertrain Control Module (PCM) supplies 5 volts to the crankshaft position sensor on circuit K25. Circuit K25 connects to cavity A17 of the PCM.

The PCM receives the crankshaft position sensor signal on circuit K27. Circuit K27 connects to cavity A8 of the PCM.

The PCM provides a ground for the crankshaft position sensor (circuit K27) through circuit K4. Circuit K4 connects to cavity A4 of the PCM.

HELPFUL INFORMATION

• Circuit K25 splices to supply 5 volts to the camshaft position sensor, manifold absolute pressure sensor and throttle position sensor.

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

- Battery temperature sensor
- Camshaft position sensor
- Downstream heated oxygen sensor
- Engine coolant temperature sensor
- Fuel pump module
- Intake air temperature sensor

DESCRIPTION AND OPERATION (Continued)

- Manifold absolute pressure sensor
- Oil pressure sensor
- Powertrain control module
- Throttle position sensor
- Transmission solenoid assembly
- Upstream heated oxygen sensor
- Vehicle speed control switch
- Vehicle speed sensor

CRANKSHAFT POSITION SENSOR (DIESEL)

The Powertrain Control Module (PCM) supplies voltage to the crankshaft position sensor on circuit K24.

The PCM provides a ground for the crankshaft position sensor (circuit K24) through circuit K4.

CAMSHAFT POSITION SENSOR

The Powertrain Control Module (PCM) supplies 5 volts to the camshaft position sensor (in distributor) on circuit K25. Circuit K25 connects to cavity A17 of the PCM.

The PCM receives the camshaft position sensor signal on circuit K24. Circuit K24 connects to cavity A18 of the PCM.

The PCM provides a ground for the camshaft position sensor signal (circuit K24) through circuit K4. Circuit K4 connects to cavity A4 of the PCM.

HELPFUL INFORMATION

• Circuit K25 splices to supply 5 volts to the crankshaft position sensor, manifold absolute pressure sensor, and throttle position sensor.

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

- Battery temperature sensor
- Crankshaft position sensor
- Downstream heated oxygen sensor
- Engine coolant temperature sensor
- Fuel pump module
- Intake air temperature sensor
- Manifold absolute pressure sensor
- Oil pressure sensor
- Powertrain control module
- Throttle position sensor
- Transmission solenoid assembly
- Upstream heated oxygen sensor
- Vehicle speed control switch
- Vehicle speed sensor

ENGINE COOLANT TEMPERATURE SENSOR

The engine coolant temperature sensor provides an input to the Powertrain Control Module (PCM) on circuit K2. 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 A16 of the PCM.

The PCM provides a ground for the engine coolant temperature sensor signal (circuit K2) through circuit K4. Circuit K4 connects to cavity A4 of the PCM connector.

HELPFUL INFORMATION

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

- Battery temperature sensor
- Camshaft position sensor
- Crankshaft position sensor
- Downstream heated oxygen sensor
- Fuel pump module
- Intake air temperature sensor
- Manifold absolute pressure sensor
- Oil pressure sensor
- Powertrain control module
- Throttle position sensor
- Transmission solenoid assembly
- Upstream heated oxygen sensor
- Vehicle speed control switch
- Vehicle speed sensor

ENGINE COOLANT TEMPERATURE SENSOR (DIESEL)

The Engine Coolant Temperature (ECT) sensor on this engine application is a dual function sensor. It provides a engine coolant temperature input to the Powertrain Control Module (PCM) on Circuits K2 and Circuit K222.

Ground for the sensor is supplied on circuit K4.

The sensor is a variable resistor. As engine coolant temperature changes the resistance on the K4 circuit changes.

EVAPORATIVE SYSTEM LEAK DETECTION PUMP

Vehicle built for sale in the State of California are equipped with an evaporative system leak detection pump.

When the ignition switch is in the START or RUN position, it connects circuit A1 from fuse 8 in the Power Distribution Center (PDC) to circuit A21. Circuit A21 powers circuit F99 through PDC fuse 18. Circuit F99 feeds the leak detection pump.

On circuits J96 and J95, the PCM operates the leak detection pump. Circuit J96 connects to cavity C14 of the PCM. Circuit J95 connects to PCM cavity C10.

THROTTLE POSITION SENSOR

From the Powertrain Control Module (PCM), circuit K25 supplies 5 volts to the throttle position sensor (TPS). Circuit K25 connects to cavity A17 of the PCM.

DESCRIPTION AND OPERATION (Continued)

Circuit K22 delivers the TPS signal to the PCM. Circuit K22 connects to cavity A23 of the PCM.

The PCM provides a ground for the throttle position sensor signal (circuit K22) through circuit K4. Circuit K4 connects to cavity A4 of the PCM.

HELPFUL INFORMATION

Refer to Group 14 for throttle position sensor operation.

Circuit K25 splices to supply 5 volts to the manifold absolute pressure sensor, camshaft position sensor, and crankshaft position sensor.

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

- Battery temperature sensor
- Camshaft position sensor
- Crankshaft position sensor
- Downstream heated oxygen sensor
- Engine coolant temperature sensor
- Fuel pump module
- Intake air temperature sensor
- Manifold absolute pressure sensor
- Oil pressure sensor
- Powertrain control module
- Transmission solenoid assembly
- Upstream heated oxygen sensor
- Vehicle speed control switch
- Vehicle speed sensor

ACCELERATOR PEDAL POSITION SENSOR (DIESEL)

Power for the accelerator pedal position sensor is supplied by the Powertrain Control Module (PCM) on circuit K6. This is a 5 volt feed from the PCM.

Circuit K22 provides the pedal position input to the PCM. Ground for the sensor is supplied from the PCM on circuit K4.

LOW IDLE POSITION SWITCH (DIESEL)

Circuit K151 connects from the Powertrain Control Module (PCM) to the low idle position switch. This circuit provides the low idle switch input.

Ground for the switch is provided on circuit K4.

MANIFOLD ABSOLUTE PRESSURE SENSOR

From the Powertrain Control Module (PCM), circuit K25 supplies 5 volts to the manifold absolute pressure (MAP) sensor. Circuit K25 connects to cavity A17 of the PCM.

Circuit K70 delivers the MAP signal to the PCM. Circuit K70 connects to cavity A27 of the PCM.

The PCM provides a ground for the MAP sensor signal (circuit K70) through circuit K4. Circuit K4 connects to cavity A4 of the PCM.

HELPFUL INFORMATION

Refer to Group 14 for MAP sensor operation.

Circuit K25 splices to supply 5 volts to the camshaft position sensor, crankshaft position sensor and throttle position sensor.

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

- Battery temperature sensor
- Camshaft position sensor
- Crankshaft position sensor
- Downstream heated oxygen sensor
- Engine coolant temperature sensor
- Fuel pump module
- Intake air temperature sensor
- Oil pressure sensor
- Powertrain control module
- Throttle position sensor
- Transmission solenoid assembly
- Upstream heated oxygen sensor
- Vehicle speed control switch
- Vehicle speed sensor

MASS AIR FLOW SENSOR (DIESEL)

When the ignition switch is in the START or RUN position, it connects Circuit A1 from fuse 8 in the Power Distribution Center (PDC) to circuit A21. Circuit A21 powers circuit F99 through PDC fuse 18. Circuit F99 feeds the mass air flow sensor.

Circuit K155 provides the input to the PCM. A sensor ground is provided by the PCM on circuit K4.

Ground is also provided on circuit Z1.

INTAKE AIR TEMPERATURE SENSOR

The intake air temperature sensor provides an input to the Powertrain Control Module (PCM) on circuit K21. Circuit K21 connects to cavity A15 of the PCM.

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 for the intake air temperature sensor signal (circuit K21) through circuit K4. Circuit K4 connects to cavity A4 of the PCM.

HELPFUL INFORMATION

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

- Battery temperature sensor
- Camshaft position sensor
- Crankshaft position sensor
- Downstream heated oxygen sensor
- Engine coolant temperature sensor
- Fuel pump module
- Manifold absolute pressure sensor
- Oil pressure sensor
- Powertrain control module
- Throttle position sensor

DESCRIPTION AND OPERATION (Continued)

- Transmission solenoid assembly
- Upstream heated oxygen sensor
- Vehicle speed control switch
- Vehicle speed sensor

OIL PRESSURE SENSOR

The oil pressure sensor is a variable resistor. A change in engine oil pressure changes the resistance in the sending unit which alters the signal sensed by the Powertrain Control Module on circuit G6. Circuit G6 connects to cavity B23 of the PCM.

The PCM provides ground for the oil pressure sensor on circuit K4. Circuit K4 connects to cavity A4 of the PCM.

The PCM broadcasts the oil pressure data on the CCD bus. The micro-processor in the instrument cluster receives the signal from the CCD bus, calculates oil pressure and adjusts the gauge needle position.

The Body Control Module (BCM) also receives the oil pressure data broadcast by the PCM on the CCD bus. If oil pressure drops below a calibrated pressure, the BCM sounds an audible chime and illuminates the oil pressure warning lamp.

OIL PRESSURE SENSOR (DIESEL)

The oil pressure sensor is a variable resistor. A change in engine oil pressure changes the resistance in the sending unit which alters the signal sensed by the Powertrain Control Module on circuit G60.

The PCM provides ground for the oil pressure sensor on circuit K4.

The PCM broadcasts the oil pressure data on the CCD bus. The micro-processor in the instrument cluster receives the signal from the CCD bus, calculates oil pressure and adjusts the gauge needle position.

The Body Control Module (BCM) also receives the oil pressure data broadcast by the PCM on the CCD bus. If oil pressure drops below a calibrated pressure, the BCM sounds an audible chime and illuminates the oil pressure warning lamp.

WATER IN FUEL SENSOR (DIESEL)

The water in fuel sensor provides an input to the Powertrain Control Module (PCM) on circuit G123.

The PCM provides ground for the water in fuel sensor signal (circuit G123) through circuit K4.

FUEL INJECTORS

When the Automatic Shut Down (ASD) relay contacts close, they connect circuits F5 and A142. Circuit A142 supplies voltage to the fuel injectors. Each injector has a separate ground circuit controlled by the Powertrain Control Module (PCM).

Circuit K11 provides ground for injector number one. The K11 circuit connects to cavity B4 of the PCM.

Circuit K12 provides ground for injector number two. The K12 circuit connects to cavity B15 of the PCM.

Circuit K13 provides ground for injector number three. The K13 circuit connects to cavity B5 of the PCM.

Circuit K14 provides ground for injector number four. The K14 circuit connects to cavity B16 of the PCM.

Circuit K38 provides ground for injector number five. The K38 circuit connects to cavity B6 of the PCM.

Circuit K58 provides ground for injector number six. The K58 circuit connects to cavity B12 of the PCM.

On the 5.2L engine, circuit K17 provides ground for injector number seven. The K17 circuit connects to cavity B2 of the PCM.

Also on the 5.2L engine, circuit K18 provides ground for injector number eight. The K18 circuit connects to cavity B13 of the PCM.

HELPFUL INFORMATION

- Circuit A142 splices to supply voltage to the fuel injectors, ignition coil, PCM, generator, and heated oxygen sensors.

- For information about fuel injector operation, refer to Group 14.

FUEL INJECTION PUMP (DIESEL)

The fuel injection pump used on this engine application performs several functions. Each of these is described as follows.

FUEL SHUT-OFF SOLENOID

Power for the fuel shut-off solenoid is supplied on circuit A142. This circuit is HOT when the contacts in the diesel Powertrain Control Module (PCM) relay are CLOSED. Ground for the solenoid is controlled by the PCM on circuit K153.

SOLENOID VALVE

Power for the solenoid is supplied on circuit A142. This circuit is HOT when the contacts in the diesel Powertrain Control Module (PCM) relay are CLOSED. Ground for the solenoid is controlled by the PCM on circuit K238.

FUEL TEMP SENSOR

Circuit K156 connects between the Powertrain Control Module (PCM) and the fuel temperature sensor. The sensor is a variable resistor. As fuel temperature changes the resistance on circuit K156 changes. Ground for the sensor is supplied on circuit K4.

CONTROL SLEEVE POSITION SENSOR

Circuit K134 connects between the Powertrain Control Module (PCM) and the control sleeve position sensor. This circuit is the position input to the PCM.

Circuit K57 is used for the middle tap, and circuit K135 is used for the measure coil.

DESCRIPTION AND OPERATION (Continued)

FUEL QUANTITY ACTUATOR

Power for the fuel quantity Actuator is supplied on circuit A142. This circuit is HOT when the contacts in the diesel Powertrain Control Module (PCM) relay are CLOSED. Ground for the Actuator is controlled by the PCM on circuit K140.

FUEL HEATER (DIESEL)

When the ignition switch is in the START or RUN position, it connects circuit A1 from fuse 8 in the Power Distribution Center (PDC) to circuit A21. Circuit A21 powers circuit F99 through PDC fuse 18. Circuit F99 feeds the coil side of the fuel heater relay. Ground for the relay is supplied by circuit Z4.

When the contacts of the fuel heater relay are closed they connect circuit A12 from fuse 4 of the PDC and circuit A64. Circuit A64 supplies voltage to the fuel heater. Ground for the fuel heater is supplied on circuit Z1.

INSTRUMENTED FIRST INJECTOR (DIESEL)

The instrumented first injector is used to provide a input to the Powertrain Control Module (PCM). Circuit K67 connects from the PCM connector, cavity 12, to the injector and is used as the signal wire.

Circuit K68, from cavity 11 of the PCM connector, is used for a return from the injector.

GLOW PLUGS (DIESEL)

The glow plugs used on this vehicle are controlled by the Powertrain Control Module (PCM) and the glow plug relay. Power for the coil side of the relay is supplied on circuit A142. This circuit is HOT when the contacts in the diesel Powertrain Control Module (PCM) relay are CLOSED.

The ground side of the relay is controlled by the PCM on circuit K152. This circuit connects to cavity 50 of the PCM connector.

When the PCM determines a need for glow plug operation it supplies a ground path on circuit K152. This causes the contacts in the relay to CLOSE connecting circuit A0 and K154. The A0 circuit is HOT at all times. Circuit K154 connects from the relay to the glow plugs.

The glow plugs are case grounded.

IGNITION COIL

When the Automatic Shut Down (ASD) relay contacts close, circuit A142 supplies voltage to the ignition coil. The Powertrain Control Module (PCM) controls the ground path for the ignition coil on circuit K19. Circuit K19 connects to cavity A7 of the PCM.

HELPFUL INFORMATION

Circuit A142 splices to supply voltage to the fuel injectors, PCM, heated oxygen sensors, and generator.

IDLE AIR CONTROL (IAC) 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 A20 of the PCM
- Circuit K40 connects to cavity A11 of the PCM
- Circuit K59 connects to cavity A10 of the PCM
- Circuit K60 connects to cavity A19 of the PCM

DUTY CYCLE EVAP\PURGE SOLENOID

When the ignition switch is in the START or RUN position, it connects circuit A1 from fuse 8 in the Power Distribution Center (PDC) to circuit A21. Circuit A21 powers circuit F99 through PDC fuse 18. Circuit F99 powers to the Duty Cycle EVAP/Purge solenoid.

The Powertrain Control Module (PCM) provides the ground path for the solenoid on circuit K52. Circuit K52 connects to cavity C20 of the PCM.

EGR SOLENOID (DIESEL)

Power for the EGR solenoid is supplied on circuit A142. This circuit is HOT when the contacts in the diesel Powertrain Control Module (PCM) relay are CLOSED. Ground for the solenoid is supplied on circuit Z1.

The PCM controls the operation of the solenoid by supplying a ground path for circuit K35. This circuit connects to cavity 25 of the PCM connector

LOW COOLANT LEVEL SWITCH (DIESEL)

When the low coolant level switch closes, it connects circuit G18 from the Powertrain Control Module (PCM) and circuit K167. Circuit K167 connects to circuit K4 sensor ground circuit.

When the low coolant level switch is closed the PCM receives a signal from circuit G18.

CCD BUS

Circuits D1 and D2 connect the Powertrain Control Module (PCM) to the CCD Bus. Circuit D1 connects to cavity C30 of the PCM. Circuit D2 connects to cavity C28 of the PCM. Circuits D1 and D2 are a twisted pair of wires.

Several modules and controllers broadcast and receive data on the CCD Bus. Each module or controller is enabled to receive only certain messages. The PCM broadcasts the following messages on the CCD bus.

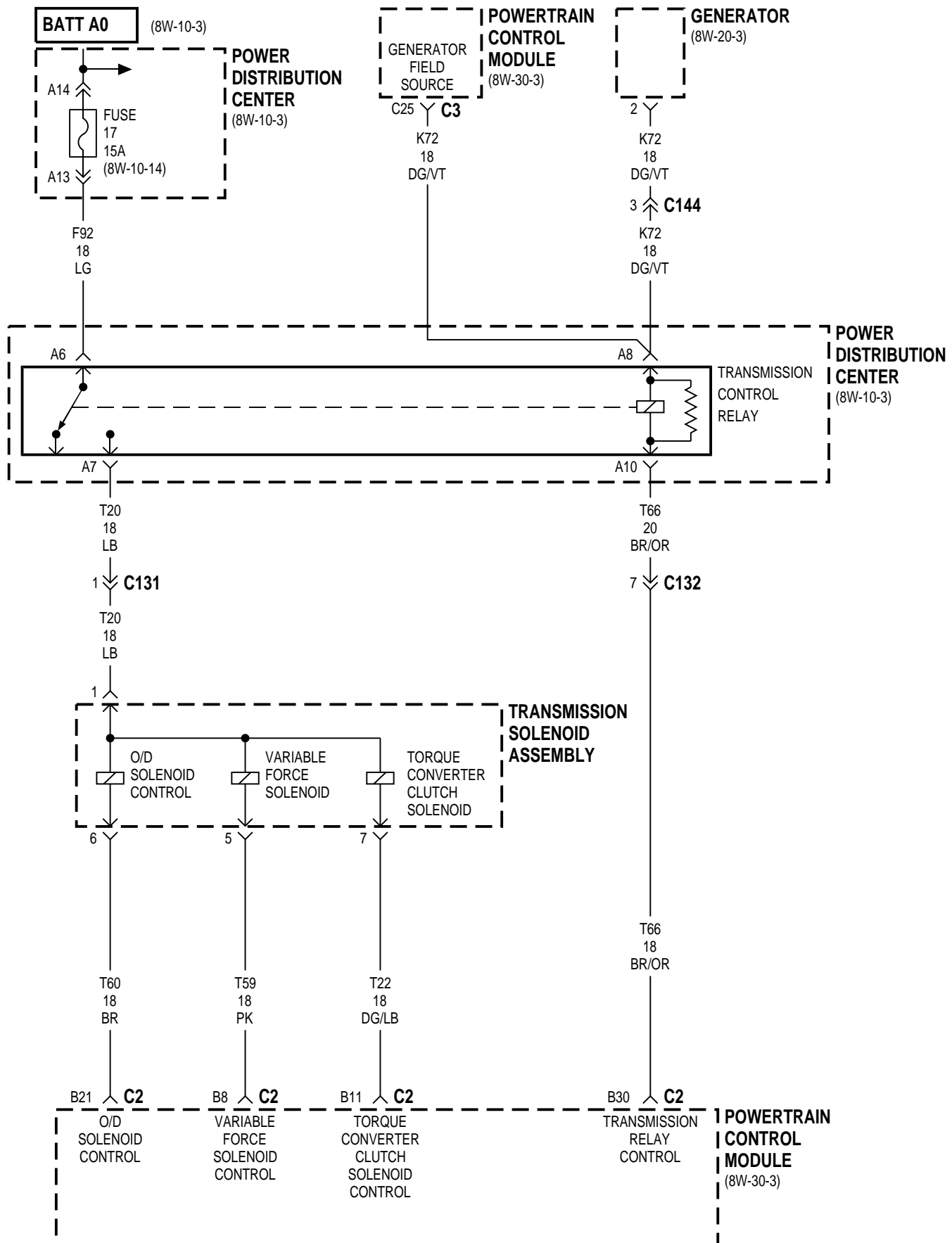
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- Injector on-time and distance pulses
- Vehicle speed
- Engine temperature
- Battery temperature
- Oil pressure

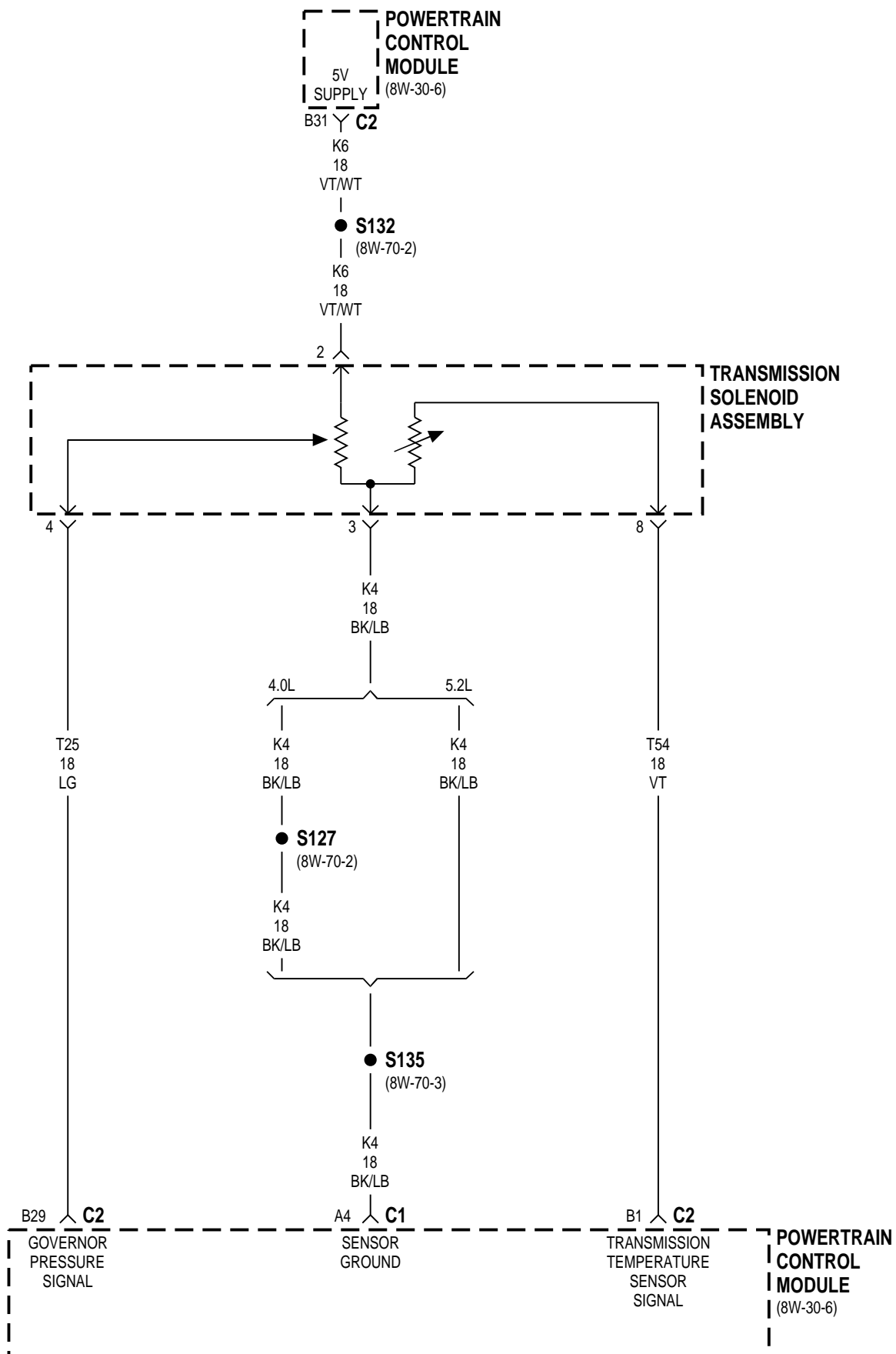
8W-31 TRANSMISSION CONTROL SYSTEM

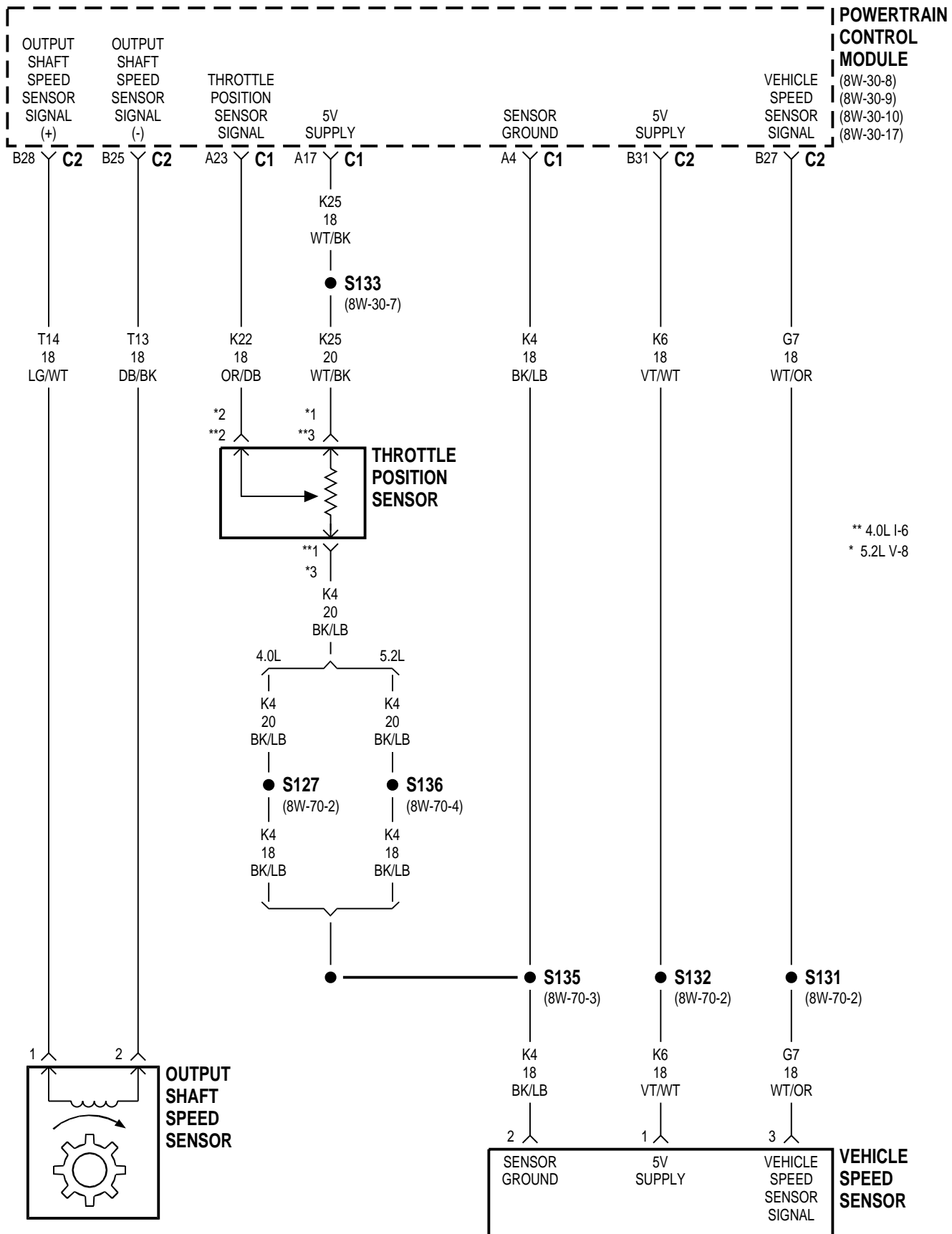
INDEX

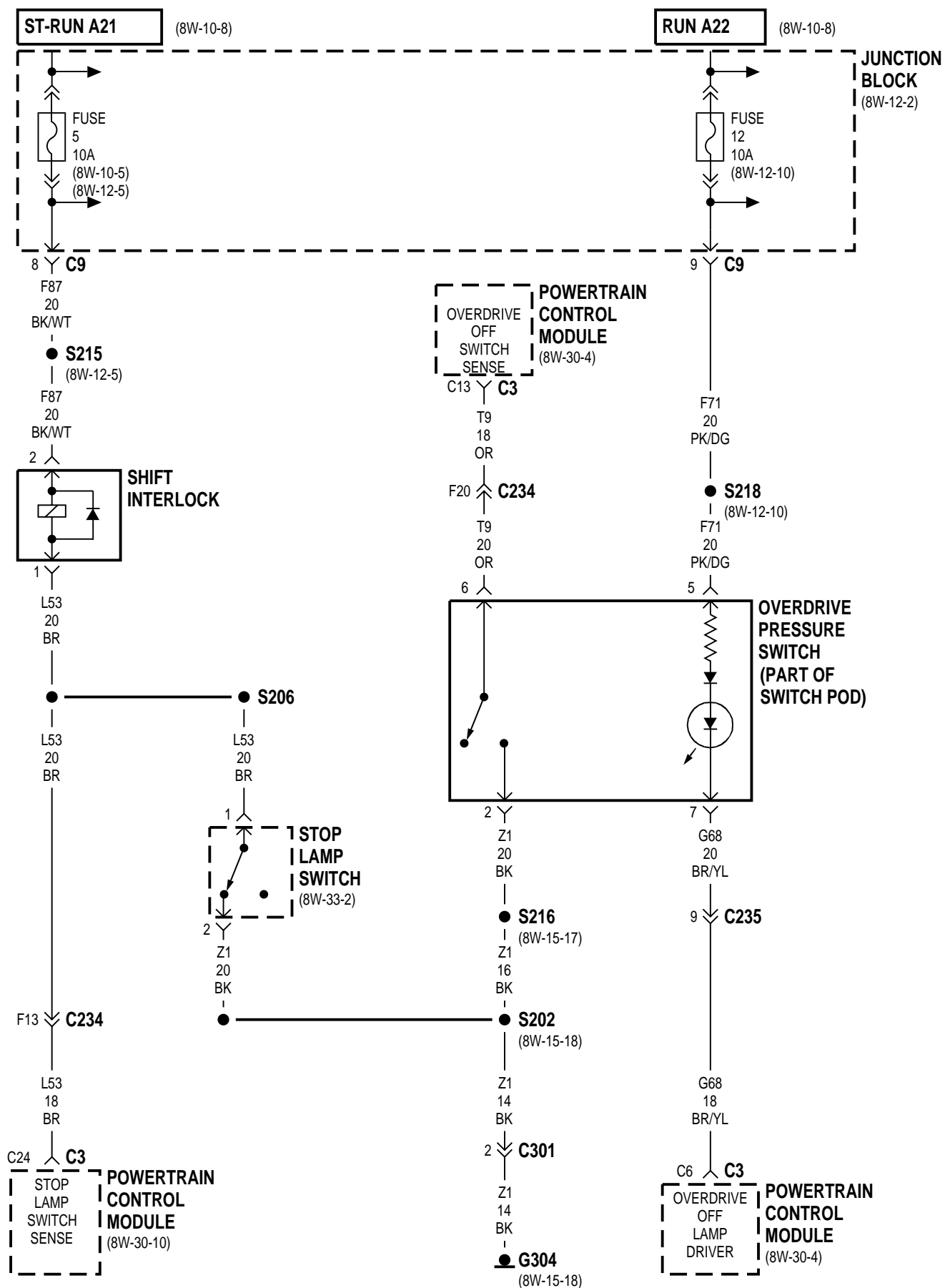
	page
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	7

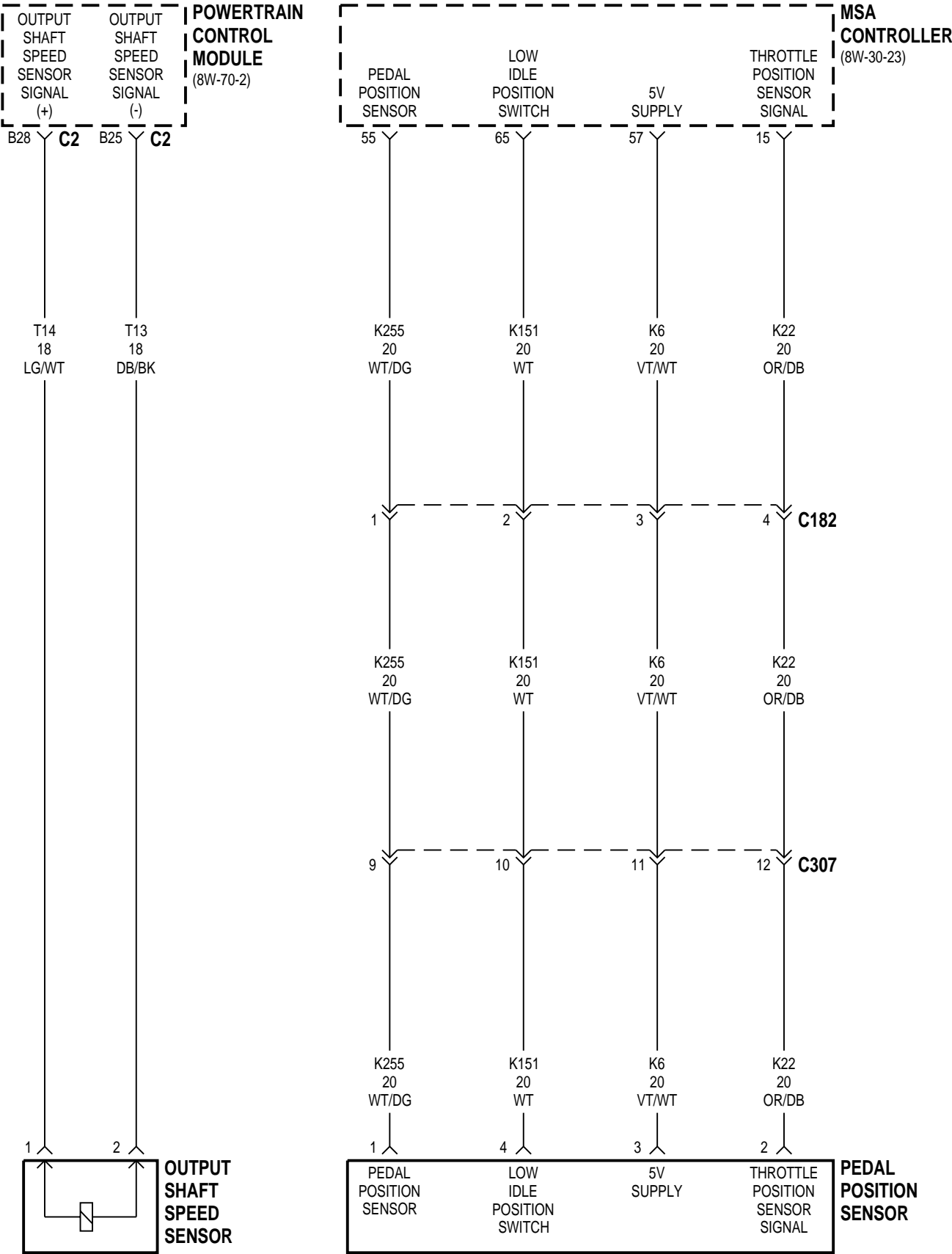
Component	Page	Component	Page
Fuse 5	8W-31-5	S135	8W-31-3, 4
Fuse 12	8W-31-5	S136	8W-31-4
Fuse 17	8W-31-2	S202	8W-31-5
G304	8W-31-5	S206	8W-31-5
Generator	8W-31-2	S215	8W-31-5
Junction Block	8W-31-5	S216	8W-31-5
MSA Controller	8W-31-6	S218	8W-31-5
O/D Solenoid Control	8W-31-2	Shift Interlock	8W-31-5
Output Shaft Speed Sensor	8W-31-4, 6	Stop Lamp Switch	8W-31-5
Overdrive Pressure Switch	8W-31-5	Throttle Position Sensor	8W-31-4
Pedal Position Sensor	8W-31-6	Torque Converter Clutch Solenoid	8W-31-2
Power Distribution Center	8W-31-2	Transmission Control Relay	8W-31-2
Powertrain Control Module	8W-31-2, 3, 4, 5, 6	Transmission Solenoid Assembly	8W-31-2
S127	8W-31-3, 4	Transmission Solenoid Assembly	8W-31-3
S131	8W-31-4	Variable Force Solenoid	8W-31-2
S132	8W-31-3, 4	Vehicle Speed Sensor	8W-31-4
S133	8W-31-4		











8W-31 TRANSMISSION CONTROL SYSTEM

INDEX

	page		page
DESCRIPTION AND OPERATION		SHIFT INTERLOCK	7
GOVERNOR PRESSURE SENSOR	7	TRANSMISSION CONTROL RELAY	7
OUTPUT SHAFT SPEED SENSOR	7	TRANSMISSION SOLENOID ASSEMBLY	7
OVERDRIVE SWITCH	7	TRANSMISSION TEMPERATURE SENSOR	8

DESCRIPTION AND OPERATION

OVERDRIVE SWITCH

Automatic transmission equipped vehicles have an overdrive switch. The operator disables or enables overdrive when the switch is depressed.

The overdrive system consists of a switch connected to the Powertrain Control Module (PCM) and a Light Emitting Diode (LED) which illuminates for the overdrive ON/OFF indicator.

If overdrive is currently enabled, it is disabled when the operator depresses the overdrive switch. Also, if the operator already disabled overdrive, it is enabled when the switch is depressed.

Circuit T9 from the overdrive switch connects to cavity C13 of the PCM and provides the overdrive signal. Circuit Z1 provides ground for the switch.

In the RUN position, the ignition switch connects circuit A1 from fuse 8 in the Power Distribution Center (PDC) with circuit A22. Circuit A22 powers circuit F71 through fuse 12 in the junction block. Circuit F71 supplies power for the overdrive ON/OFF indicator LED. The PCM turns the overdrive ON/OFF indicator ON or OFF by providing ground on circuit G68. Circuit G68 connects to cavity C6 of the PCM.

TRANSMISSION CONTROL RELAY

The transmission control relay powers the overdrive solenoid, torque convertor clutch solenoid, and variable force solenoid. All three solenoids are molded together.

When the ignition switch is in the START or RUN positions, it connects circuit A1 from fuse 8 in the Power Distribution Center (PDC) to circuit A21. Circuit A21 powers circuit F99 through fuse 18 in the PDC. Circuit F99 powers the coil side of the electronic transmission relay. The Powertrain Control Module (PCM) provides ground for the relay on circuit T66. Circuit T66 connects to cavity B30 of the PCM.

When the PCM grounds the relay, the relay contacts connect circuit F92 from fuse 17 in the PDC to circuit T20. Circuit T20 powers the solenoids.

TRANSMISSION SOLENOID ASSEMBLY

The Torque Convertor Clutch (TCC) solenoid, overdrive solenoid and variable force solenoid are molded together. Circuit T20 from the electronic transmission relay supplies power for the solenoids. The Powertrain Control Module (PCM) operates each solenoid individually by providing ground for each solenoid on separate circuits.

- The PCM provides ground for the TCC solenoid on circuit T22. Circuit T22 connects to cavity B11 of the PCM.

- The PCM supplies ground for the overdrive solenoid on circuit T60. Circuit T60 connects to cavity B21 of the PCM.

- On circuit T59, the PCM provides ground for the variable force solenoid. Circuit T59 connects to cavity B8 of the PCM.

SHIFT INTERLOCK

The shift interlock prevents the operator from shifting the vehicle out of PARK unless the brake pedal is pressed. When the ignition switch is in the START or RUN position, circuit A21 feeds circuit F87 through fuse 5 in the junction block. Circuit F87 splices to power the shift interlock.

When the brake pedal is not depressed, the stop lamp switch provides ground for interlock by connecting circuit L53 to ground. When grounded, the interlock prevents shifting the transmission out of PARK. When the brake pedal is pressed, the stop lamp switch disconnects circuit L53 from ground.

OUTPUT SHAFT SPEED SENSOR

The output shaft speed sensor generates a signal indicating the speed of the transmission output shaft. Circuits T13 and T14 connect the sensor to the Powertrain Control Module (PCM). Circuit T13 connects to cavity B25 of the PCM. Circuit T14 connects to cavity B28.

GOVERNOR PRESSURE SENSOR

The governor pressure sensor supplies the transmission pressure input to the Powertrain Control Module on circuit T25. Circuit T25 connects to cavity

DESCRIPTION AND OPERATION (Continued)

B29 of the PCM. Circuit K6 from cavity B31 of the PCM supplies 5 volts to the sensor. The PCM provides ground for the governor pressure sensor on circuit K4. Circuit K4 connects to cavity A4 of the PCM.

The governor pressure sensor is part of the transmission solenoid assembly.

TRANSMISSION TEMPERATURE SENSOR

The transmission temperature sensor is located in the transmission solenoid assembly. The Powertrain Control Module (PCM) supplies 5 volts to the sensor on circuit K6. Circuit T54 from the sensor connects to cavity B1 of the PCM and provides the transmission temperature input. The PCM provides ground for the sensor on cavity K4.

If transmission temperature exceeds a calibrated temperature, the PCM sends a signal to the Vehicle Information Center (VIC) over the CCD bus. In response, the VIC displays a message to the driver.

HELPFUL INFORMATION

Circuit K6 also supplies 5 volts to the vehicle speed sensor.

Circuit K4 also provides ground for the signals from the following:

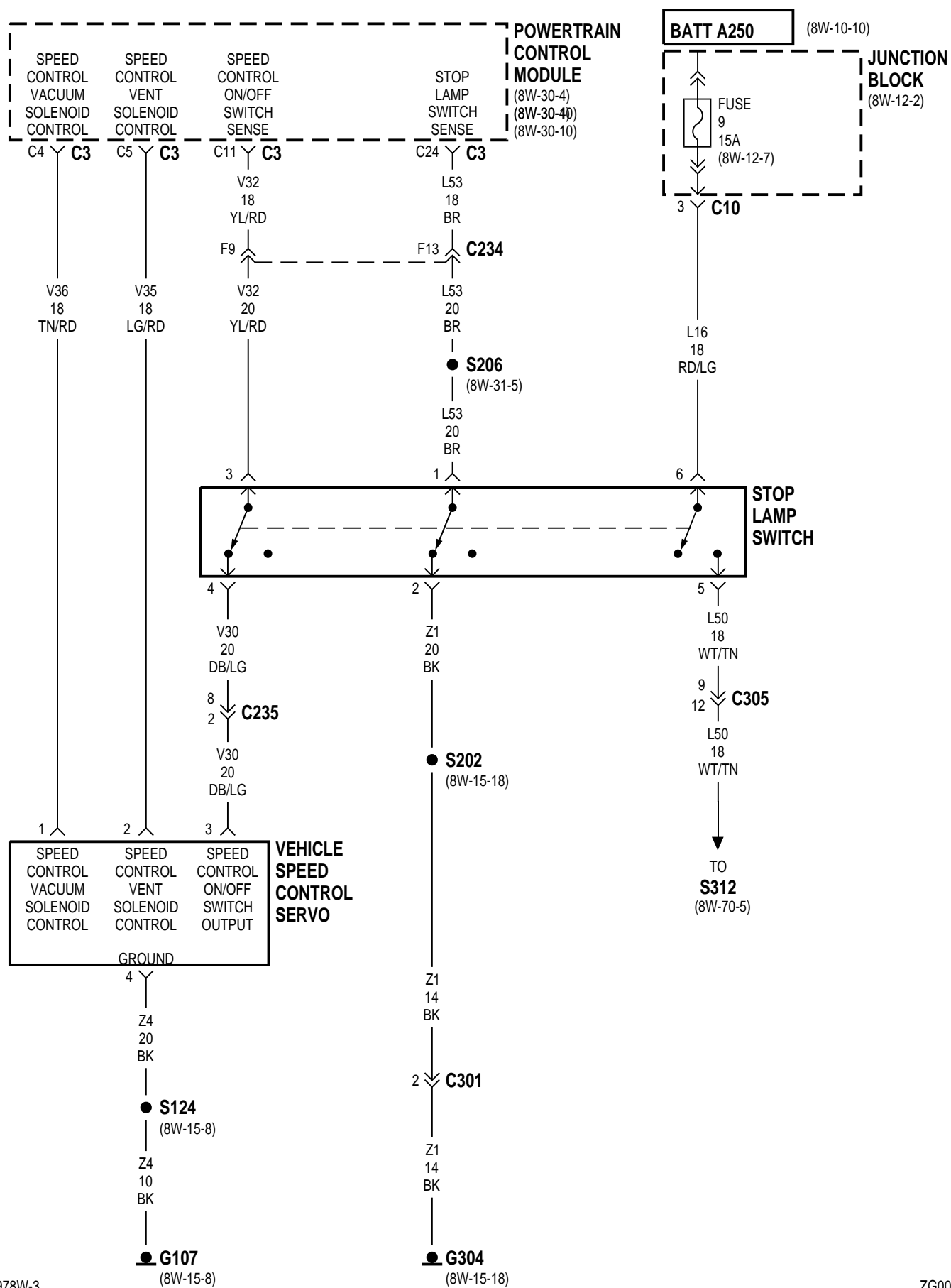
- Battery temperature sensor
- Camshaft position sensor
- Crankshaft position sensor
- Downstream heated oxygen sensor
- Engine coolant temperature sensor
- Fuel pump module
- Intake air temperature sensor
- Manifold absolute pressure sensor
- Oil pressure sensor
- Powertrain control module
- Throttle position sensor
- Transmission solenoid assembly
- Upstream heated oxygen sensor
- Vehicle speed control switch
- Vehicle speed sensor

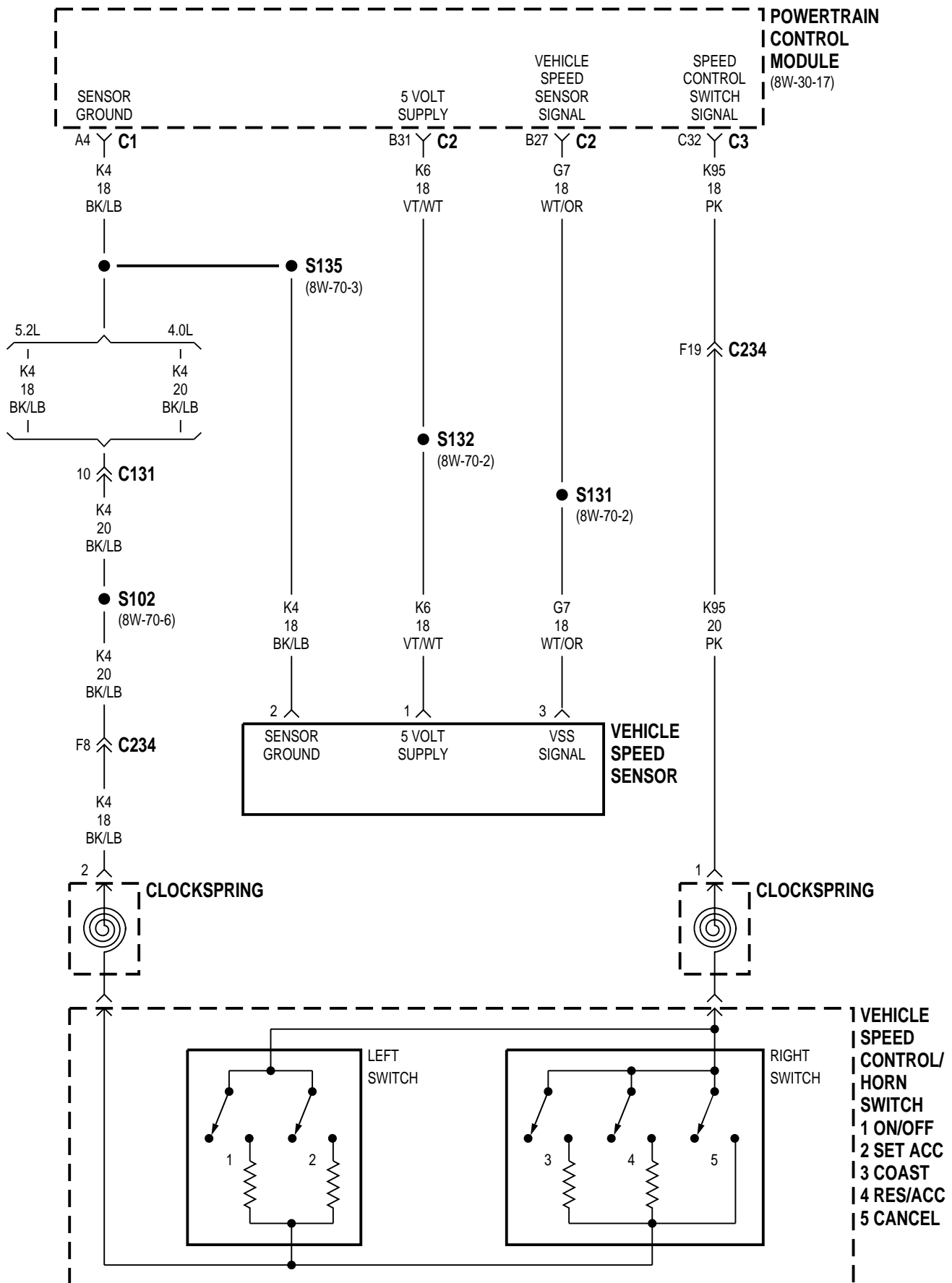
8W-33 VEHICLE SPEED CONTROL

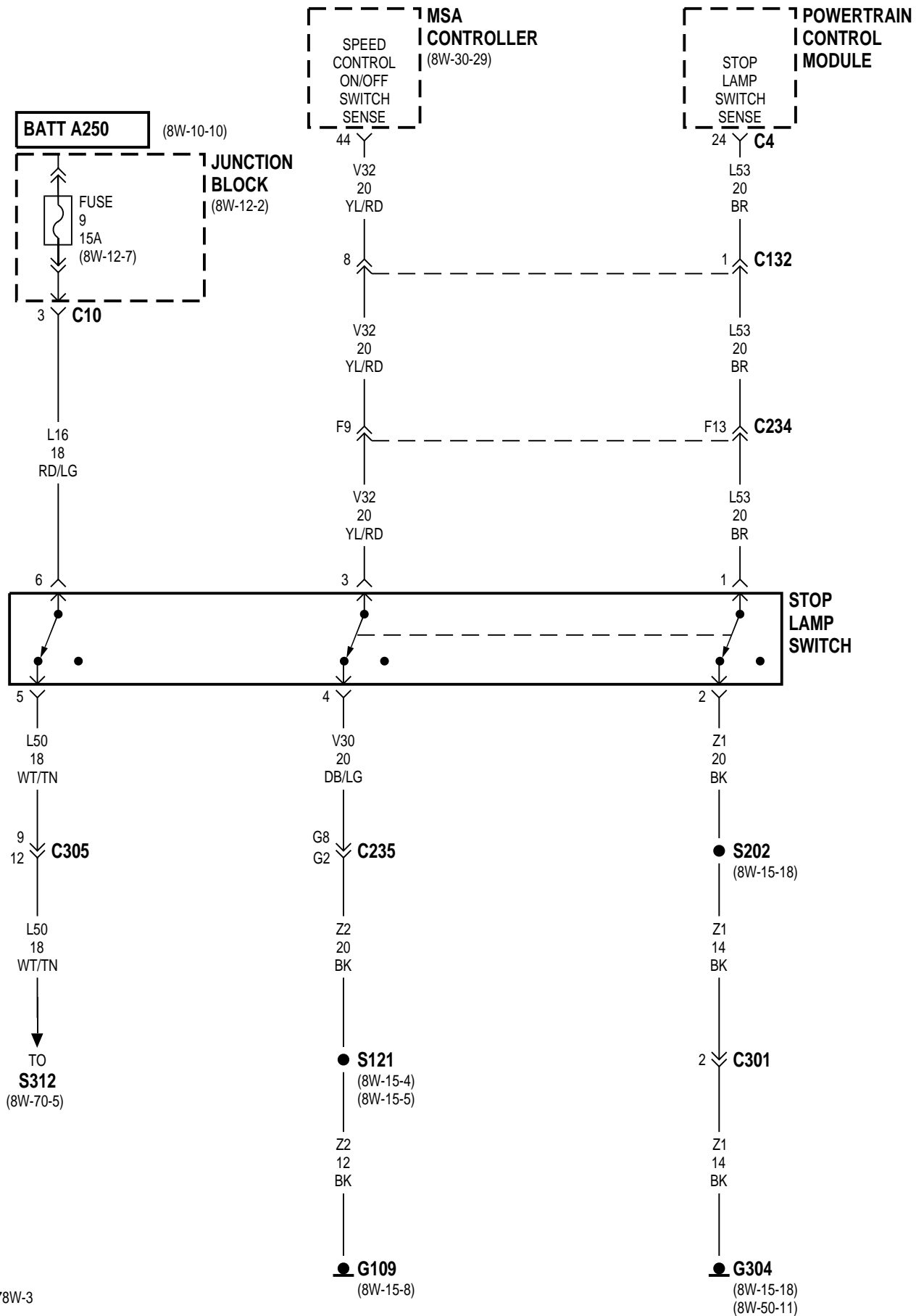
INDEX

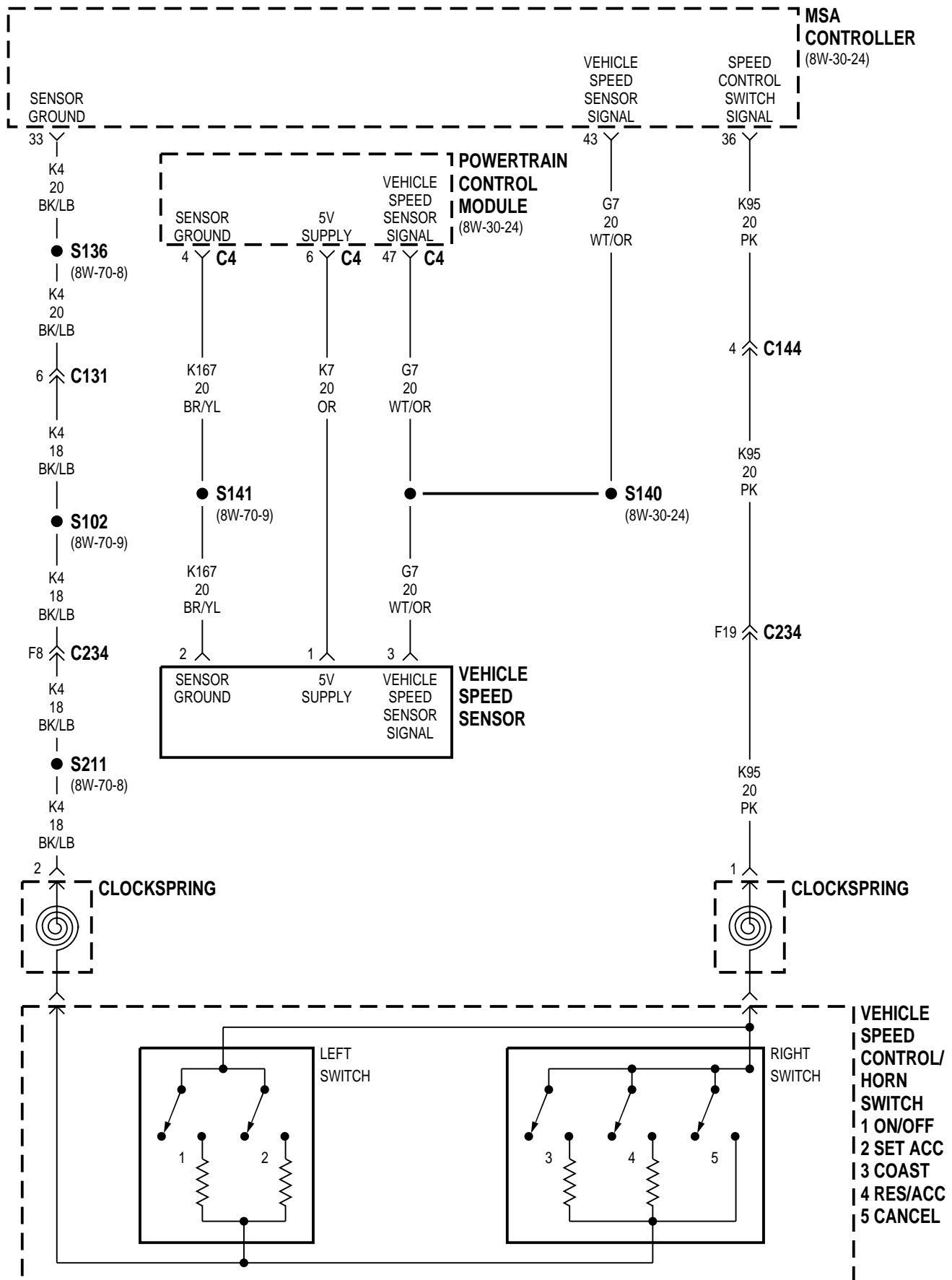
	page
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	6

Component	Page	Component	Page
Clockspring	8W-33-3, 5	S132	8W-33-3
Fuse 9	8W-33-2, 4	S135	8W-33-3
G107	8W-33-2	S136	8W-33-5
G109	8W-33-4	S140	8W-33-5
G304	8W-33-2, 4	S141	8W-33-5
Junction Block	8W-33-2, 4	S202	8W-33-2, 4
Left Switch	8W-33-3, 5	S206	8W-33-2
MSA Controller	8W-33-4, 5	S211	8W-33-5
Powertrain Control Module	8W-33-2, 3, 4, 5	S312	8W-33-2, 4
Right Switch	8W-33-3, 5	Stop Lamp Switch	8W-33-2, 4
S102	8W-33-3, 5	Vehicle Speed Control Servo	8W-33-2
S121	8W-33-4	Vehicle Speed Control/Horn Switch	8W-33-3, 5
S124	8W-33-2	Vehicle Speed Sensor	8W-33-3, 5
S131	8W-33-3		









8W-33 VEHICLE SPEED CONTROL

DESCRIPTION AND OPERATION

VEHICLE SPEED CONTROL

The Powertrain Control Module (PCM) operates the vehicle speed control system. The vehicle speed control switches are located in the steering wheel.

Circuit V32 from cavity C11 of the PCM connects to circuit V30 through the stop lamp switch. Circuit V30 powers the vehicle speed control servo.

Circuit K95 from PCM cavity C32 connects to the vehicle speed control switches. The switches are wired in parallel and each contains a separate resistor. The voltage level present on circuit K95 (at PCM cavity C32) depends on which speed control switch is selected. Circuit K4 from PCM cavity A4 supplies ground for the speed control switches.

- When the ON/OFF switch is open, the voltage level on circuit K95 at PCM cavity C32 has a nominal value of 5.0 volts with a range from 4.8 to 5.0 volts.

- When the ON/OFF switch closes, the voltage level on circuit K95 at PCM cavity C32 has nominal value of 1.51 volts with a range from 1.31 to 1.61 volts.

- When the SET switch closes, the voltage level on circuit K95 at PCM cavity C32 has nominal value of 3.8 volts with a range from 3.6 to 3.9 volts.

- When the RESUME/ACCEL switch closes, the voltage level on circuit K95 at PCM cavity C32 has nominal value of 4.4 volts with a range from 4.2 to 4.5 volts.

- When the COAST switch closes, the voltage level on circuit K95 at PCM cavity C32 has nominal value of 2.92 volts with a range from 2.72 to 3.02 volts.

- When the CANCEL switch closes, the voltage level on circuit K95 at PCM cavity C32 has is 0.1 volts or less.

The PCM controls the vent and vacuum functions of the vehicle speed control servo on circuits V35 and V36. Depending on the signal it receives from vehicle speed control switches, the PCM either applies vacuum to or vents vacuum from the servo. Circuit V36 from cavity C4 of the PCM sends the vacuum signal to the servo. Circuit V35 from cavity C5 sends the vent signal.

Circuit L53 provides the stop lamp switch sense input to the PCM at cavity C24. The stop lamp switch connects circuit L53 to ground on circuit Z1. When the brake pedal is depressed, the stop lamp switch opens and disconnects circuits L53 and Z1, and circuits V32 and V30. When the stop lamp

switch disconnects circuits V32 and V30, power is removed from the speed control servo.

HELPFUL INFORMATION

Circuit K4 also provides ground for some of the engine control sensors that provide inputs to the PCM.

VEHICLE SPEED CONTROL (DIESEL)

The Powertrain Control Module (PCM) operates the vehicle speed control system. The vehicle speed control switches are located in the steering wheel.

Circuit V32 from the PCM connects to circuit V30 through the stop lamp switch. Circuit V30 connects to circuit Z2 ground. Circuit L53 from the PCM connects to Circuit Z1 ground, through the stop lamp switch.

Circuit K95 from the PCM connects to the vehicle speed control switches. The switches are wired in parallel and each contains a separate resistor. The voltage level present on circuit K95 at the PCM depends on which speed control switch is selected. Circuit K4 from PCM supplies ground for the speed control switches.

- When the ON/OFF switch is open, the voltage level on circuit K95 at the PCM has a nominal value of 5.0 volts with a range from 4.8 to 5.0 volts.

- When the ON/OFF switch closes, the voltage level on circuit K95 at the PCM has nominal value of 1.51 volts with a range from 1.31 to 1.61 volts.

- When the SET switch closes, the voltage level on circuit K95 at the PCM has nominal value of 3.8 volts with a range from 3.6 to 3.9 volts.

- When the RESUME/ACCEL switch closes, the voltage level on circuit K95 at the PCM has nominal value of 4.4 volts with a range from 4.2 to 4.5 volts.

- When the COAST switch closes, the voltage level on circuit K95 at the PCM has nominal value of 2.92 volts with a range from 2.72 to 3.02 volts.

- When the CANCEL switch closes, the voltage level on circuit K95 at the PCM is 0.1 volts or less.

Circuit L53 and V32 provide stop lamp switch sense input to the PCM. When the brake pedal is depressed, the stop lamp switch opens and disconnects circuits L53 and Z1, and circuits V32 and V30 indicating brakes are applied.

HELPFUL INFORMATION

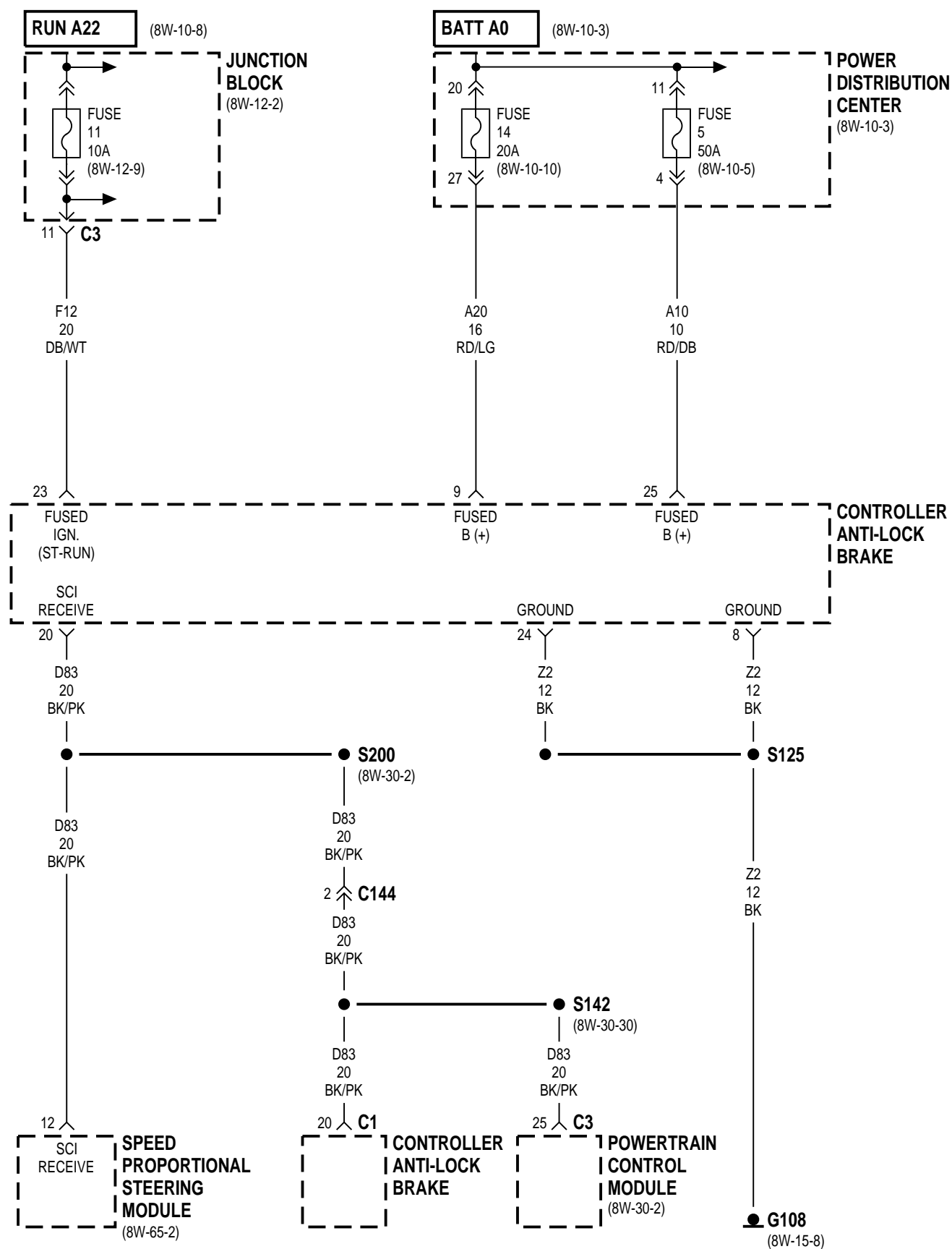
Circuit K4 also provides ground for some of the engine control sensors that provide inputs to the PCM.

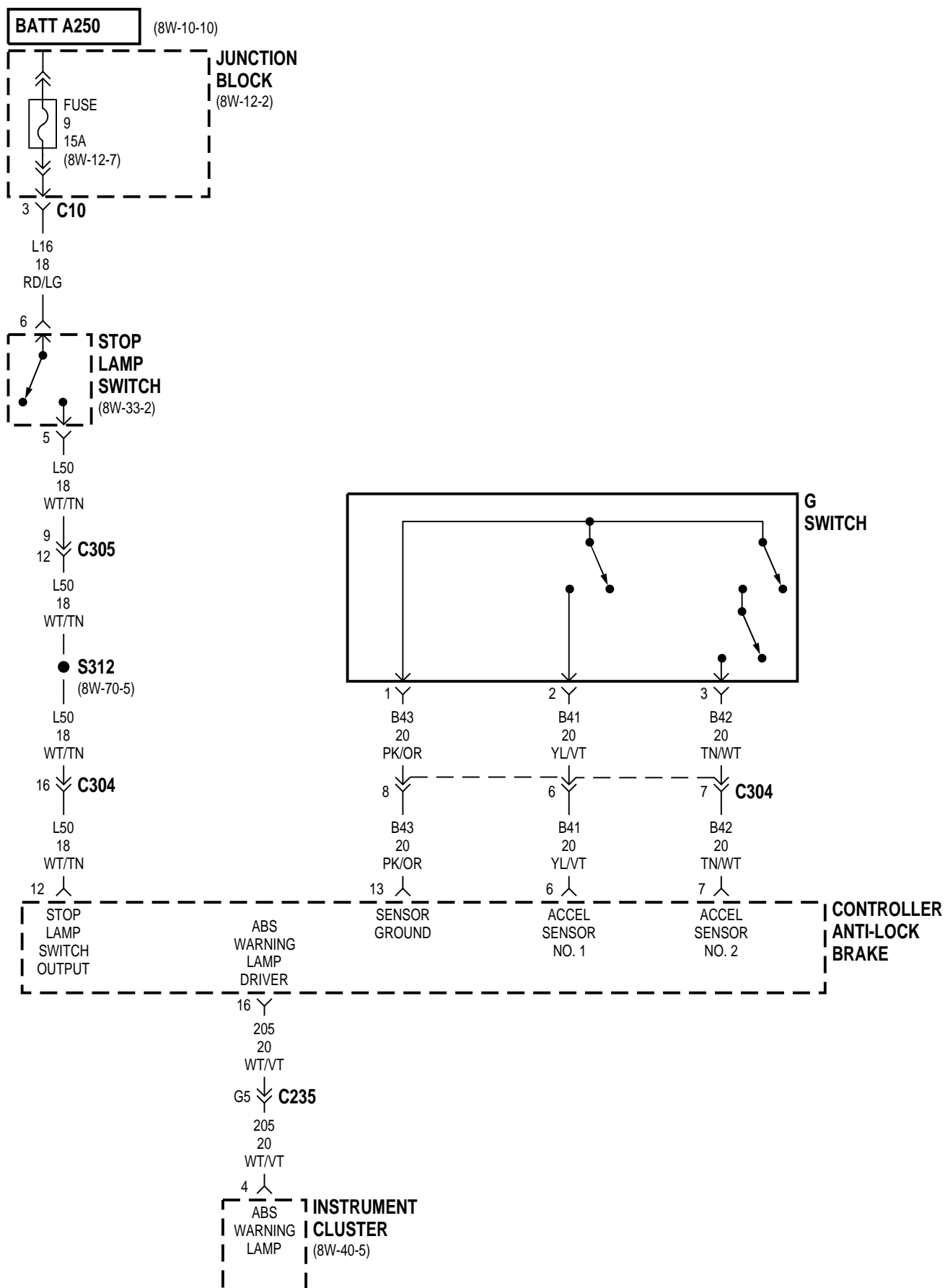
8W-35 ALL-WHEEL ANTI-LOCK BRAKES

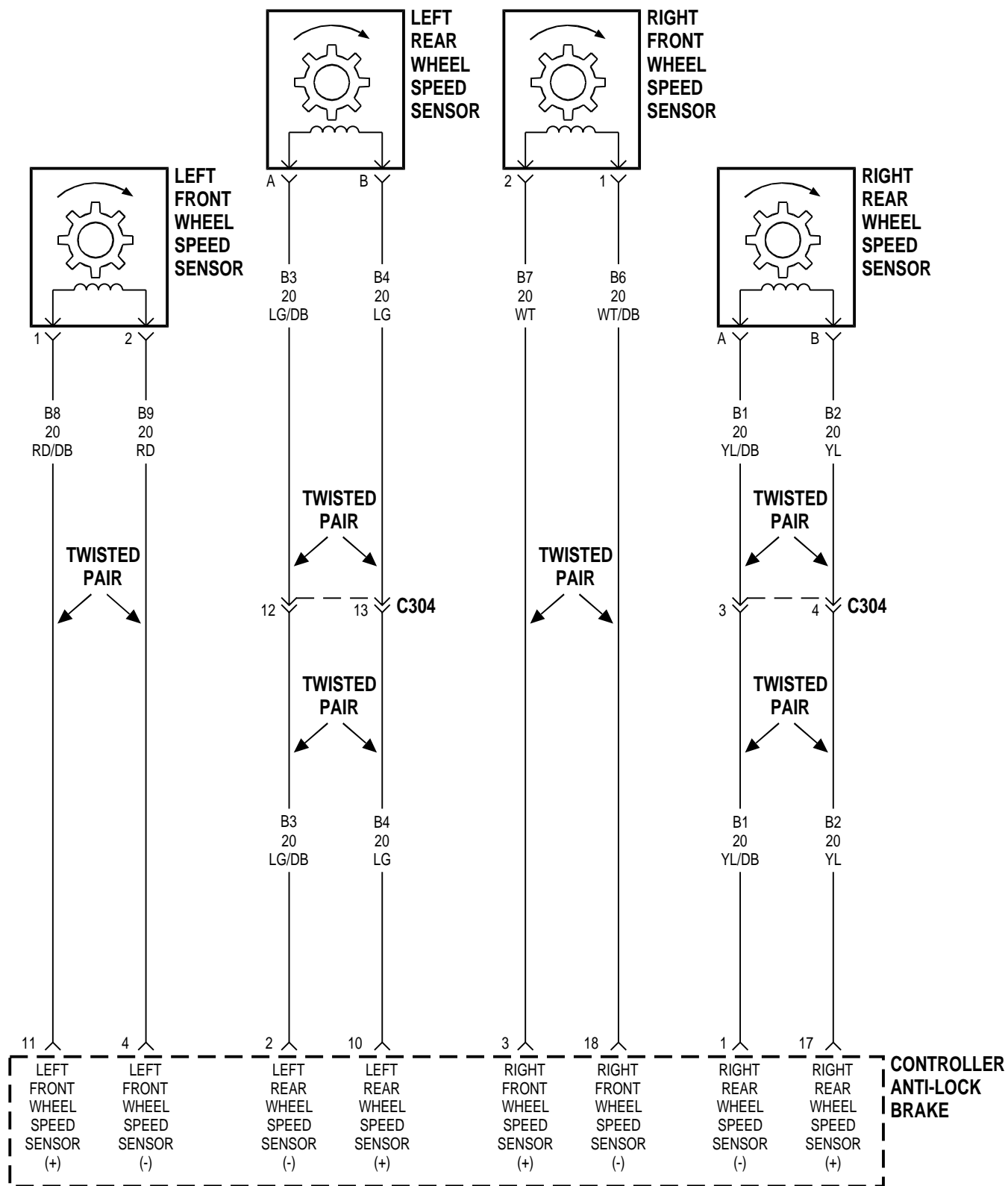
INDEX

	page
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	5

Component	Page	Component	Page
Controller Anti-Lock Brake	8W-35-2, 3, 4	Power Distribution Center	8W-35-2
Fuse 5	8W-35-2	Powertrain Control Module	8W-35-2
Fuse 9	8W-35-3	Right Front Wheel Speed Sensor	8W-35-4
Fuse 11	8W-35-2	Right Rear Wheel Speed Sensor	8W-35-4
Fuse 14	8W-35-2	S125	8W-35-2
G Switch	8W-35-3	S142	8W-35-2
G108	8W-35-2	S200	8W-35-2
Instrument Cluster	8W-35-3	S312	8W-35-3
Junction Block	8W-35-2, 3	Speed Proportional Steering Module	8W-35-2
Left Front Wheel Speed Sensor	8W-35-4	Stop Lamp Switch	8W-35-3
Left Rear Wheel Speed Sensor	8W-35-4		







8W-35 ALL-WHEEL ANTI-LOCK BRAKES

INDEX

	page		page
DESCRIPTION AND OPERATION		INTRODUCTION	5
ABS WARNING LAMP	5	STOP LAMP SWITCH INPUT	5
DATA LINK CONNECTOR	5	WHEEL SPEED SENSORS	5
G-SWITCH	5		

DESCRIPTION AND OPERATION

INTRODUCTION

Several fuses supply power for the Anti-Lock Brake System (ABS); fuses 5, 8, 11, and 14 in the Power Distribution Center (PDC) and fuse 9 and 11 in the junction block. Fuses 5, 8, 11, and 14 in the PDC are connected directly to battery voltage and are HOT all times. Fuse 11 in the junction block is HOT when the ignition switch is in the RUN position. Fuse 9 in the junction block is Hot at all times.

In the RUN position, the ignition switch connects circuit A1 from fuse 8 in the PDC with circuit A22. Circuit A22 feeds circuit F12 through fuse 11 in the junction block. Circuit F12 connects to the Controller, Anti-Lock Brakes (CAB).

Circuit Z2 provides ground for the CAB.

Refer to group 5, Brakes for operational descriptions of ABS system components.

WHEEL SPEED SENSORS

The all wheel anti-lock system uses four wheel speed sensors; one for each wheel. Each sensor converts wheel speed into an electrical signal that it transmits to the Controller, Anti-Lock Brakes (CAB). A pair of twisted wires connect to each sensor to provide signals to the CAB.

Circuits B6 and B7 provide signals to the CAB from the right front wheel speed sensor.

Circuits B8 and B9 provide signals to the CAB from the left front wheel speed sensor.

Circuits B1 and B2 provide signals to the CAB from right rear wheel speed sensor.

Circuits B4 and B3 provide signals to the CAB from the left rear wheel speed sensor.

G-SWITCH

During four-wheel drive operation, the G-switch provides deceleration data to the Controller, Anti-Lock Brakes (CAB). Refer to Group 5, Brakes for additional information.

Circuits B41, B42, and B43 connect the G-switch to the CAB. Circuits B41 and B42 provide switch states while circuit B43 provides ground.

ABS WARNING LAMP

Circuit F87 from fuse 5 in the junction block provides power for the ABS warning lamp in the instrument cluster. Ground for the ABS warning lamp is provided by the Controller, Anti-Lock Brakes (CAB). The CAB illuminates the lamp by providing ground on circuit 205.

HELPFUL INFORMATION

When the ignition switch is in the START or RUN position, it connects circuit A1 from fuse 8 in the Power Distribution Center (PDC) to circuit A21. Circuit A21 powers circuit F87 through fuse 5 in the junction block.

STOP LAMP SWITCH INPUT

Circuit L50 from the stop lamp switch provides the brake switch input to the Controller, Anti-Lock Brakes (CAB). When the brake pedal is depressed, the stop lamp switch closes to supply battery voltage from circuit L16 to circuit L50. Circuit L50 connects to the CAB. Circuit L16 originates at fuse 9 in the junction block. Circuit A250 from fuse 11 in the Power Distribution Center (PDC) supplies power to junction block fuse 9.

DATA LINK CONNECTOR

Circuit D83 from cavity A3 of the Controller, Anti-Lock Brakes (CAB) transmits data to the DRB scan tool through the data link connector. Through the data link connector, circuits Z1 and Z2 provide ground for the DRB scan tool.

Circuit F75 supplies battery voltage to the scan tool through the diagnostic connector.

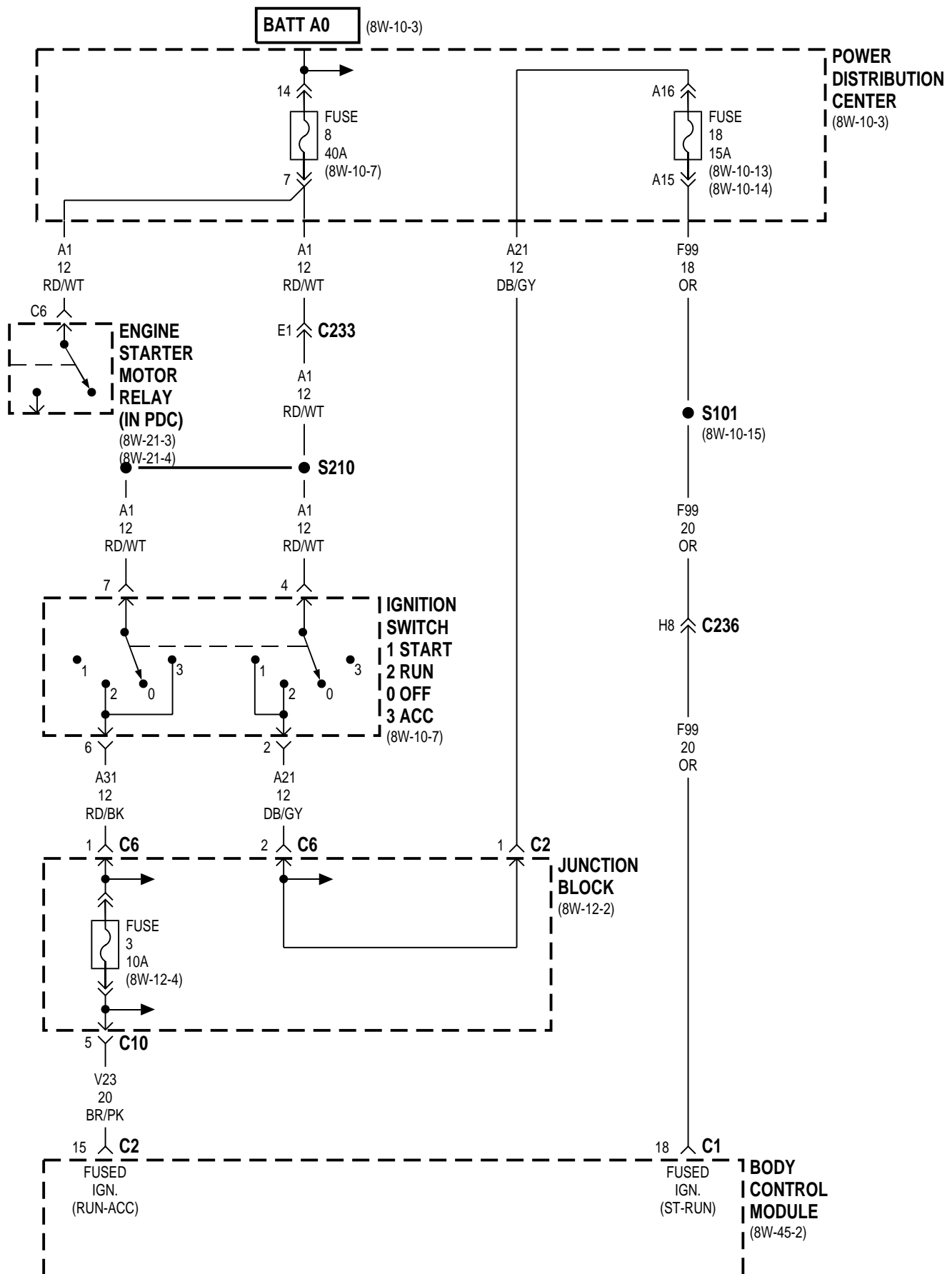
8W-39 VEHICLE THEFT SECURITY SYSTEM

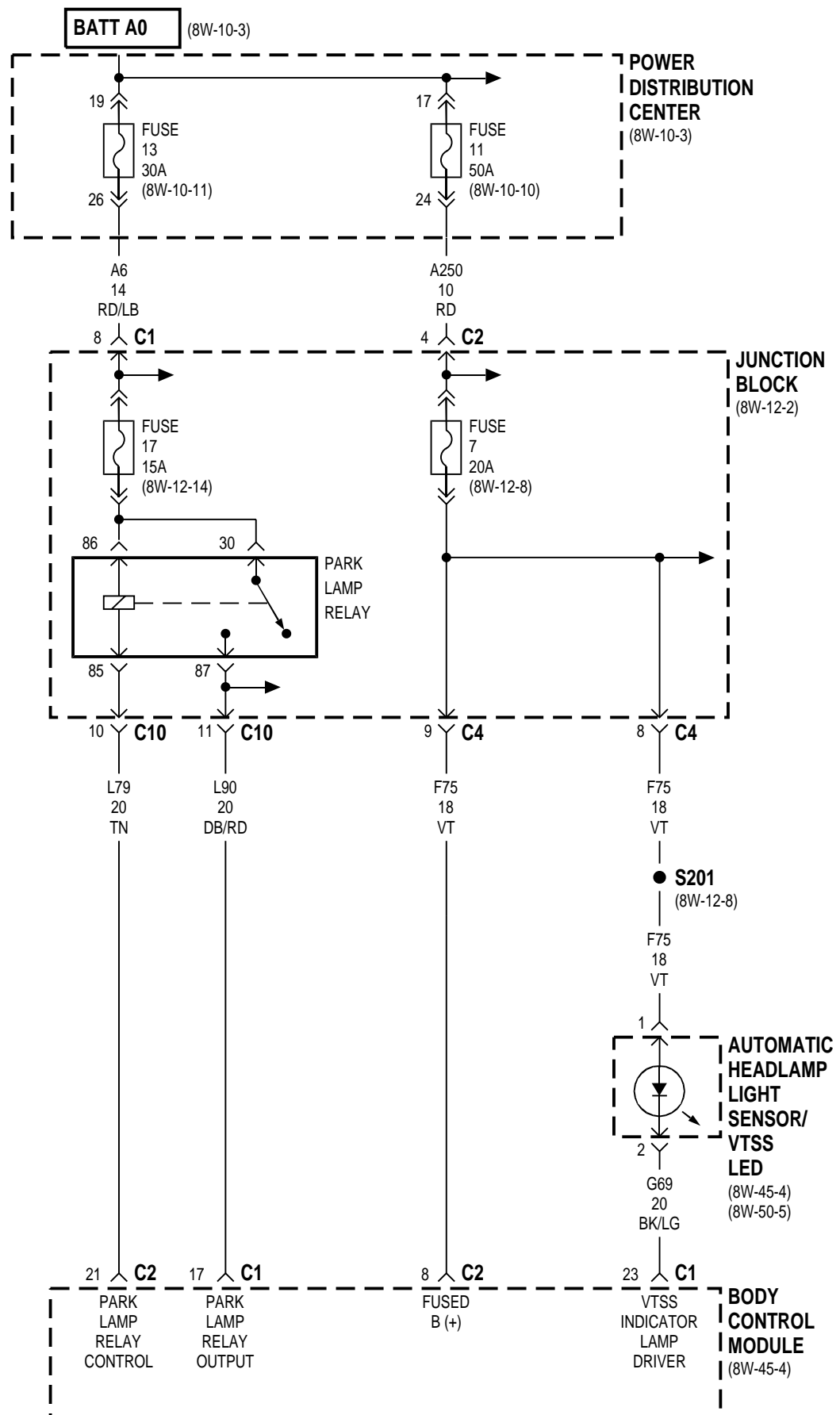
INDEX

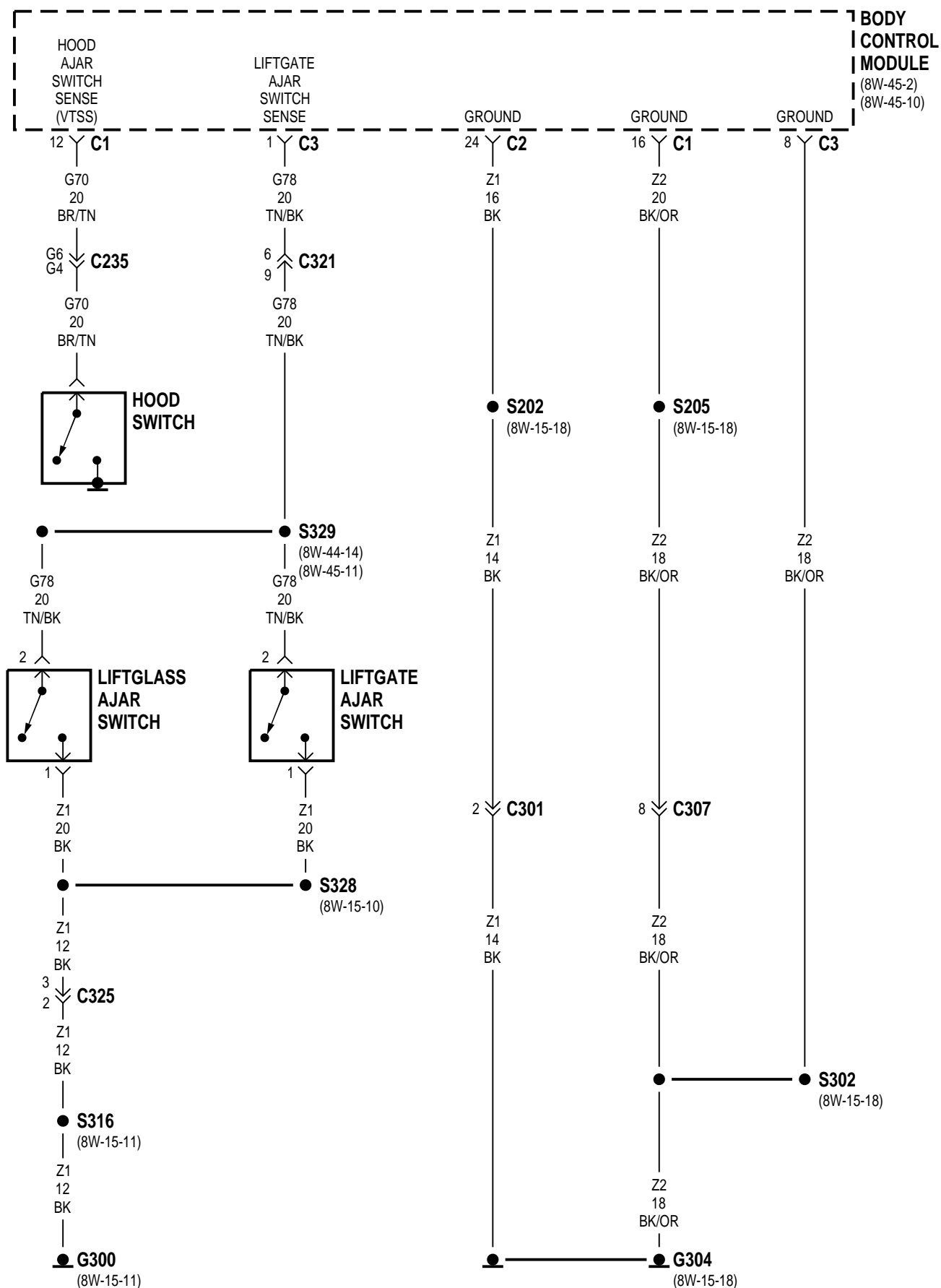
page

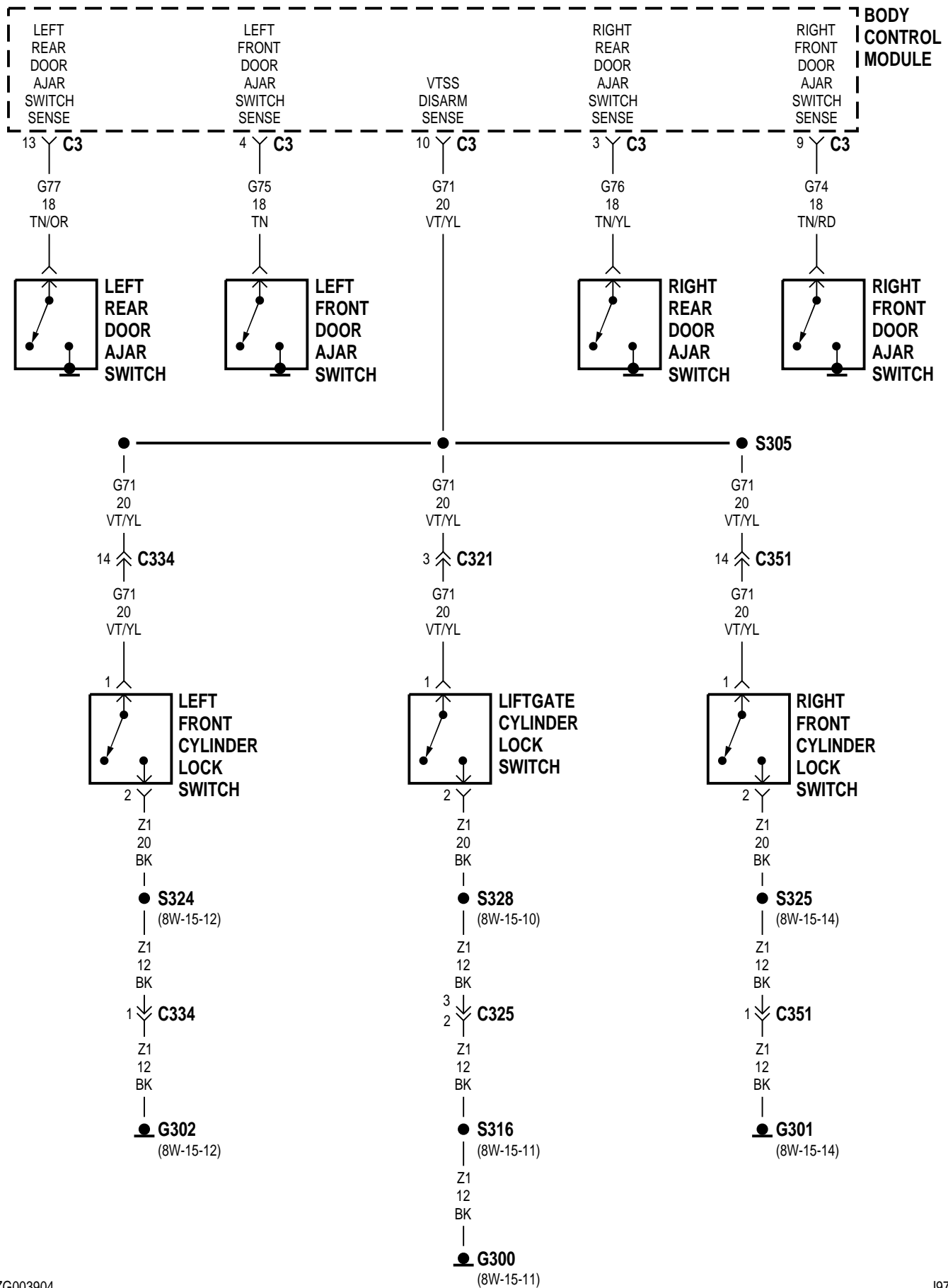
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	7

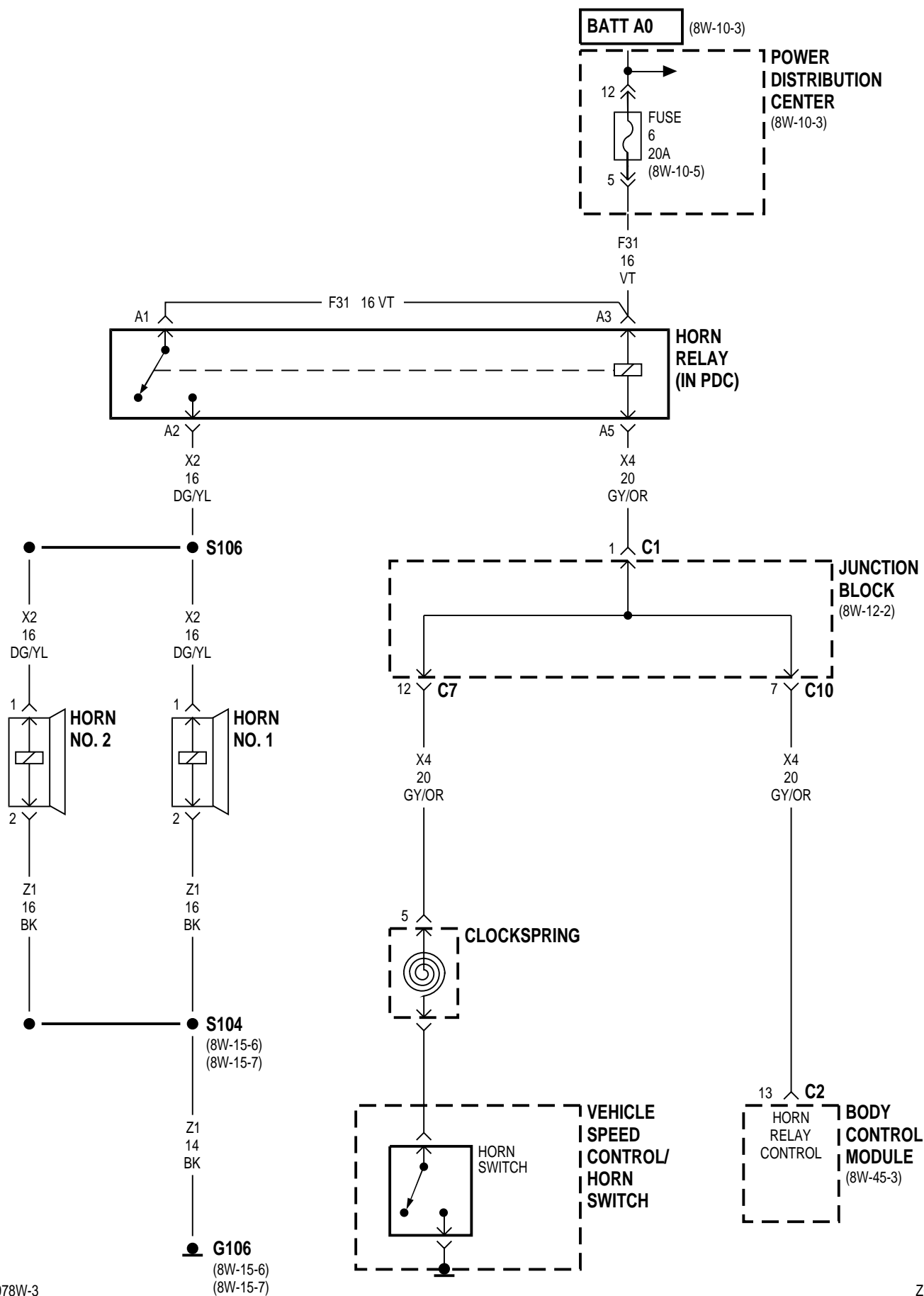
Component	Page	Component	Page
Automatic Headlamp Light Sensor/Vtss		Left Rear Door Ajar Switch	8W-39-5
Led	8W-39-3	Liftgate Ajar Switch	8W-39-4
Body Control Module	8W-39-2, 3, 4, 5, 6	Liftgate Cylinder Lock Switch	8W-39-5
Clockspring	8W-39-6	Liftglass Ajar Switch	8W-39-4
Engine Starter Motor Relay	8W-39-2	Park	8W-39-3
Fuse 3	8W-39-2	Power Distribution Center	8W-39-2, 3, 6
Fuse 6	8W-39-6	Relay	8W-39-3
Fuse 7	8W-39-3	Right Front Cylinder Lock Switch	8W-39-5
Fuse 8	8W-39-2	Right Front Door Ajar Switch	8W-39-5
Fuse 11	8W-39-3	Right Rear Door Ajar Switch	8W-39-5
Fuse 13	8W-39-3	S101	8W-39-2
Fuse 17	8W-39-3	S104	8W-39-6
Fuse 18	8W-39-2	S106	8W-39-6
G106	8W-39-6	S201	8W-39-3
G300	8W-39-4, 5	S202	8W-39-4
G301	8W-39-5	S205	8W-39-4
G302	8W-39-5	S210	8W-39-2
G304	8W-39-4	S302	8W-39-4
Hood Switch	8W-39-4	S305	8W-39-5
Horn No. 1	8W-39-6	S316	8W-39-4, 5
Horn No. 2	8W-39-6	S324	8W-39-5
Horn Relay	8W-39-6	S325	8W-39-5
Horn Switch	8W-39-6	S328	8W-39-4, 5
Ignition Switch	8W-39-2	S329	8W-39-4
Junction Block	8W-39-2, 3, 6	Vehicle Speed Control/Horn Switch	8W-39-6
Left Front Cylinder Lock Switch	8W-39-5		
Left Front Door Ajar Switch	8W-39-5		











8W-39 VEHICLE THEFT SECURITY SYSTEM

INDEX

	page		page
DESCRIPTION AND OPERATION		VEHICLE THEFT SECURITY SYSTEM	
INTRODUCTION	7	OPERATION	7

DESCRIPTION AND OPERATION

INTRODUCTION

The Body Control Module (BCM) operates the Vehicle Theft Security System (VTSS). The BCM monitors the vehicle doors, hood, liftglass in the liftgate, liftgate, and ignition for unauthorized operation.

When the BCM detects unauthorized operation, it operates the horn repeatedly for three minutes and flashes the headlamps and tail lamps for 15 minutes. Also, the engine will not operate until the VTSS is disarmed.

The vehicle operator can activate the alarm by pushing the panic button on the Remote Keyless Entry (RKE) transmitter. When the operator pushes the panic button, the radio frequency receiver in the Passenger Door Module (PDM) receives the PANIC signal and broadcasts a message on the CCD bus. When the BCM sees the PANIC message on the CCD bus, it operates the horn repeatedly, turns on the interior lights, and flashes the headlamps and tail lamps. The BCM activates the panic alarm for three minutes unless the operator starts the vehicle and drives at a speed above 15 MPH or pushes the panic button on the RKE transmitter a second time.

When the ignition switch is in the START or RUN position, it connects circuit A1 from fuse 8 in the PDC to circuit A21. Circuit A21 powers circuit F99 through PDC fuse 18. Circuit F99 feeds the BCM.

In the ACCESSORY or RUN position, the ignition switch connects circuit A1 to circuit A31. Circuit A31 powers circuit V23 through fuse 3 in the junction block. Circuit V23 feeds the BCM.

VEHICLE THEFT SECURITY SYSTEM OPERATION

Each door, the liftgate, hood, and the liftglass in the liftgate have an ajar switch that connects to the Body Control Module (BCM). The ajar switches are normally open when the doors, liftgate, liftglass and hood are closed. When one of them open, its ajar switch closes and connects the BCM to ground. In response, if the Vehicle Theft Security System is armed, the BCM starts the alarm. Refer to the Introduction in this section for alarm information.

The BCM receives the ajar switch signals on the following circuits.

- Circuit G75 provides the left front door ajar switch signal

- Circuit G74 provides the right front door ajar switch signal
- Circuit G77 provides the left rear door ajar switch signal
- Circuit G76 provides the right rear door ajar switch signal
- Circuit G78 provides the liftgate ajar and lift-glass ajar signals

SYSTEM ARMING

The system alarm sets after the operator uses the power door locks or Remote Keyless Entry (RKE) transmitter to lock the doors and liftgate. After all doors and the liftgate are locked and closed, the BCM illuminates a red Light Emitting Diode (LED) (VTSS indicator light) on circuit G69. The red LED is located on the top of the instrument panel. The LED flashes rapidly signalling the system is arming. It flashes at slower rate after approximately 15 seconds, indicating the BCM has set the VTSS.

SYSTEM DISARMING

The operator can disarm the system by unlocking a front door or the liftgate with the key or the RKE transmitter. The BCM monitors the lock cylinder switch in each front door and the liftgate lock cylinder switches on circuit G71.

HORNS

When the BCM activates the horns, it energizes the horn relay by providing a ground path for the relay coil on circuit X4. Circuit F31 from fuse 6 in the Power Distribution Center (PDC) powers the coil and contact sides of the relay.

When the horn relay energize, its contact close and connect circuit F31 to circuit X2. Circuit X2 feeds the horns. Circuit Z1 provides ground for the horns.

PARKING LAMPS

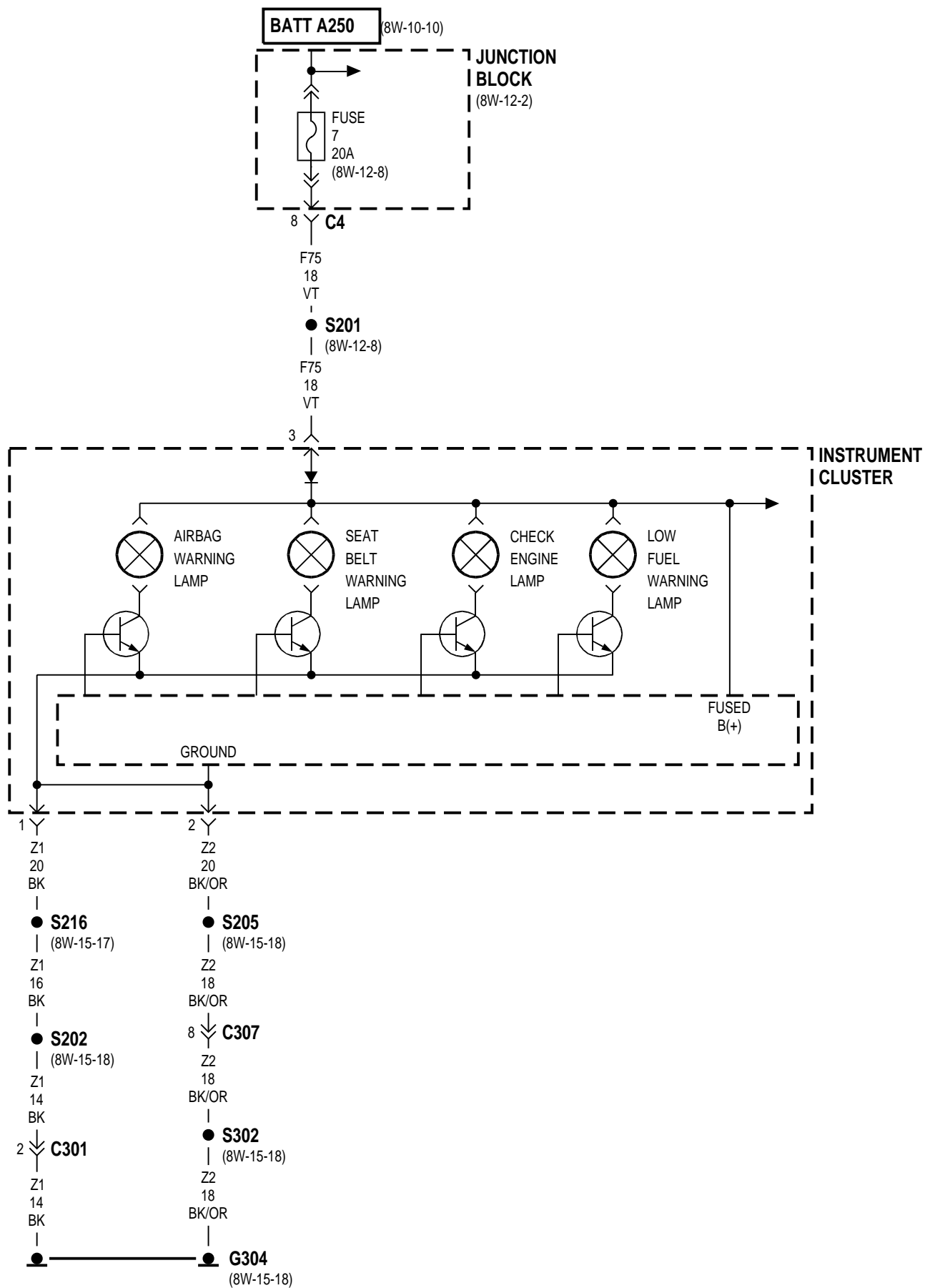
The BCM operates the park lamps when it senses unauthorized entry to the vehicle while the Vehicle Theft Security System is armed. When it senses unauthorized entry, the BCM energizes the park lamp relay by providing ground for the relay coil on circuit L79. Circuit 366 powers the relay coil and contacts. When the relay energizes, it connects circuit 366 to circuit L90. Circuit L90 powers the park lamps, side marker lamps and tail lamps.

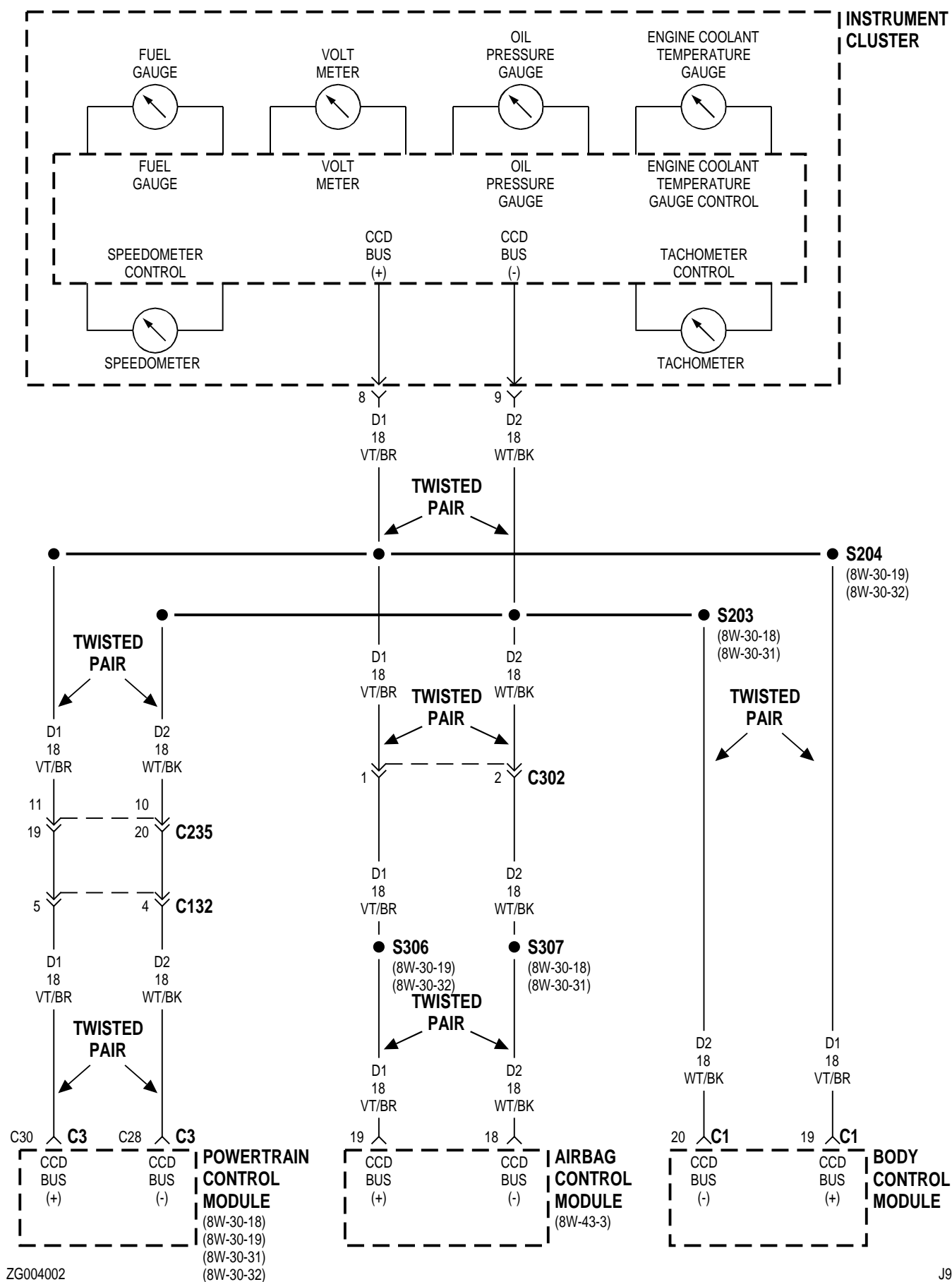
8W-40 INSTRUMENT CLUSTER

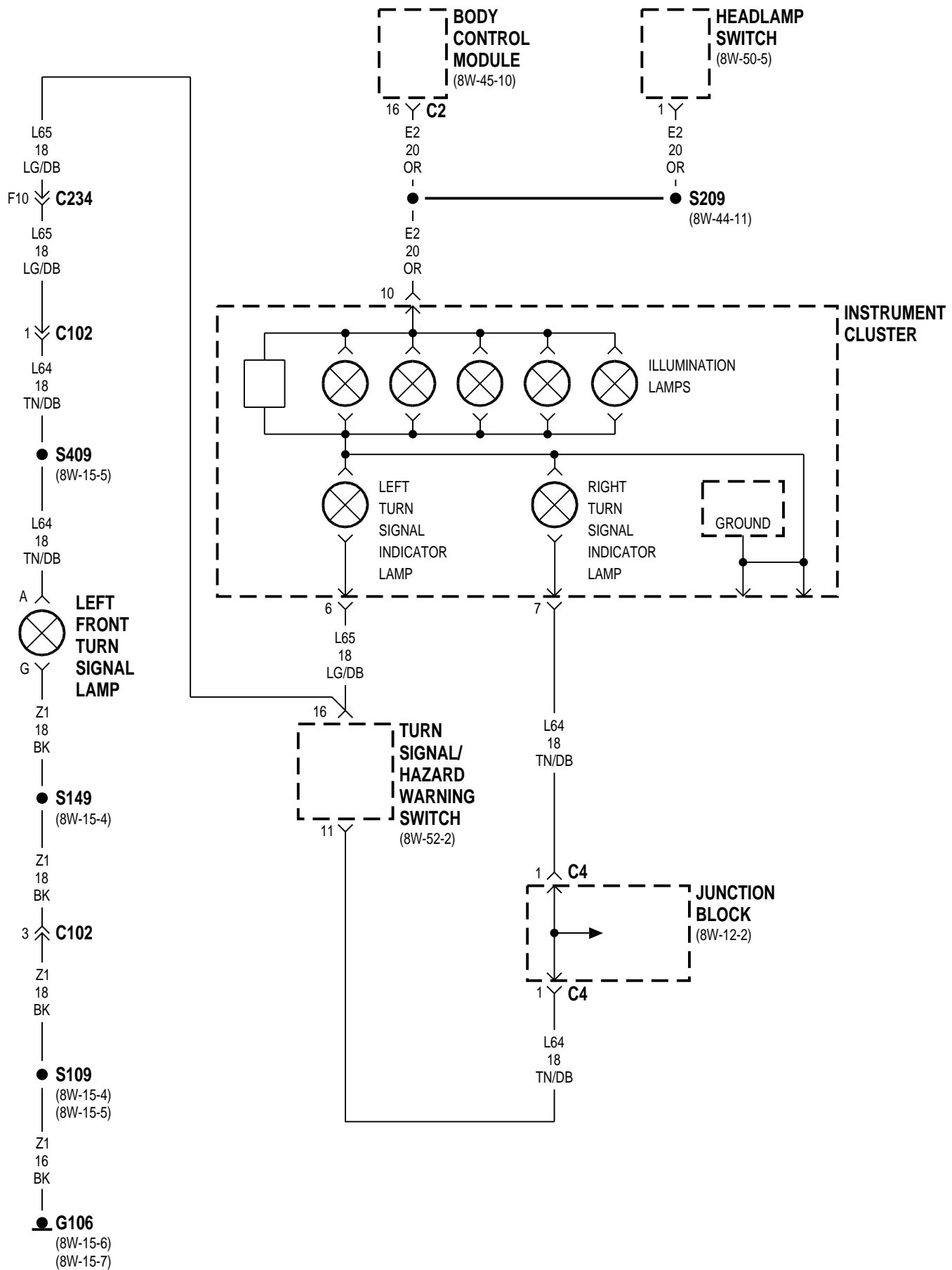
INDEX

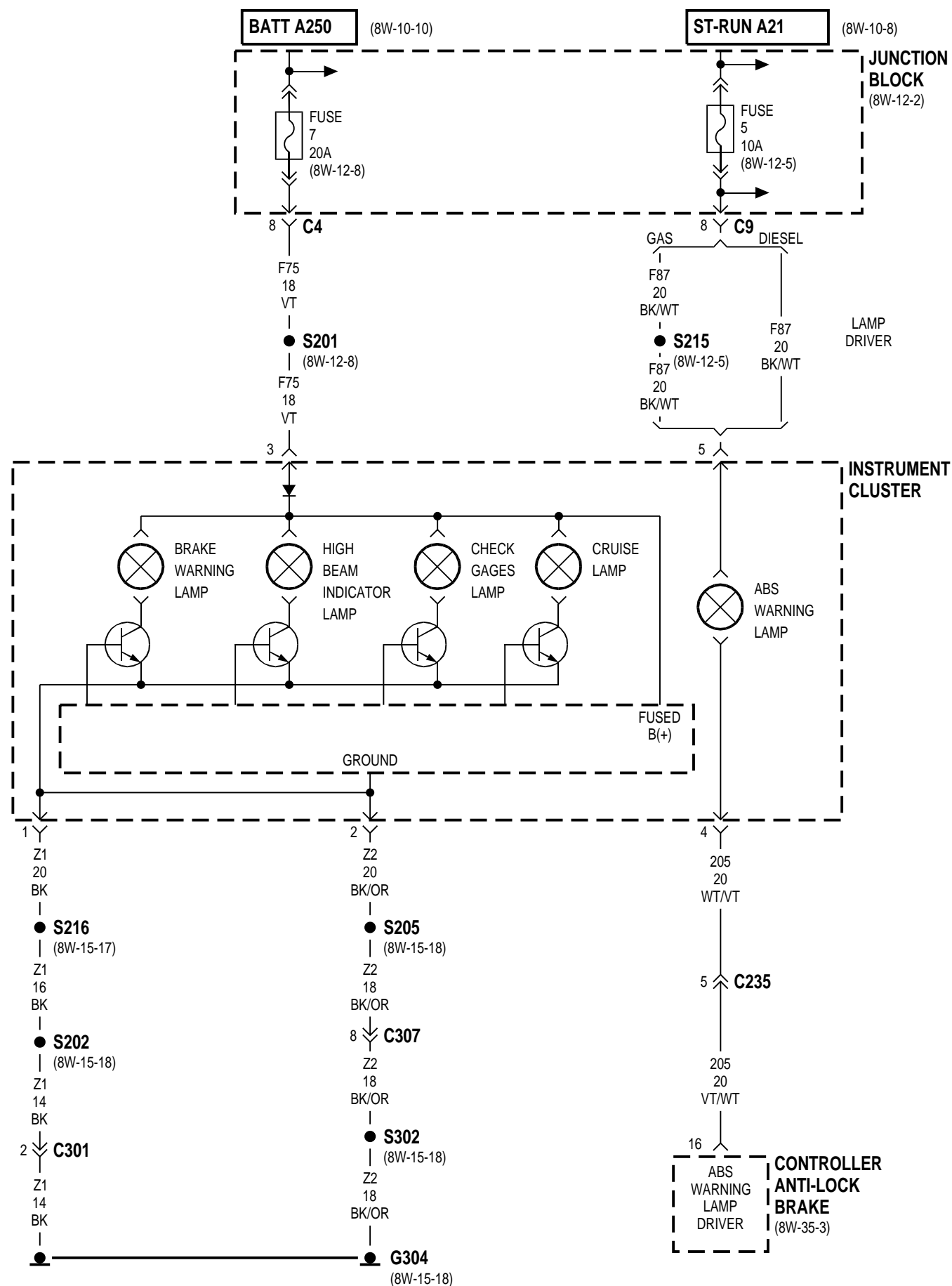
	page
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	7

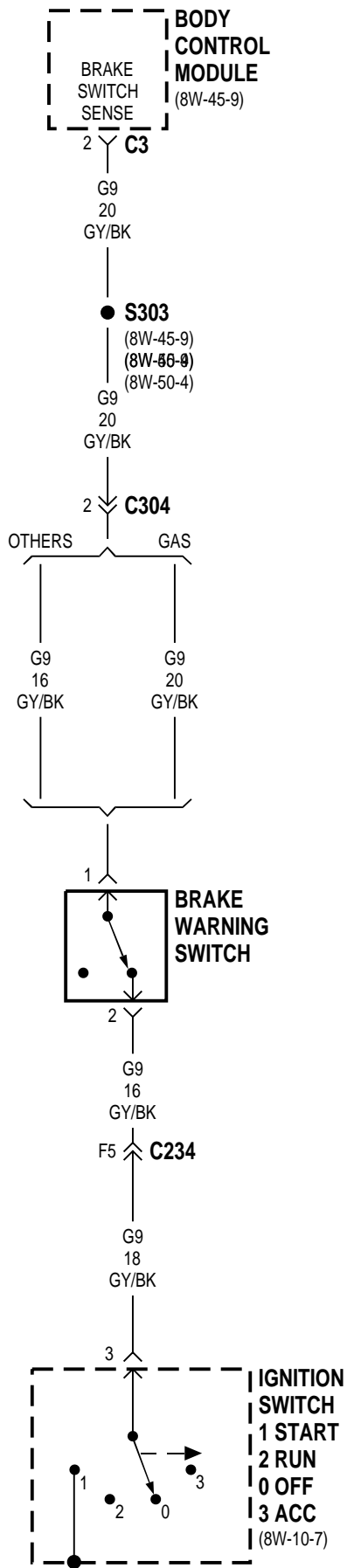
Component	Page	Component	Page
ABS Warning Lamp	8W-40-5	Low Fuel Warning Lamp	8W-40-2
Airbag Control Module	8W-40-3	Oil Pressure Gauge	8W-40-3
Airbag Warning Lamp	8W-40-2	Powertrain Control Module	8W-40-3
Body Control Module	8W-40-3, 4, 6	Right Turn Signal Indicator Lamp	8W-40-4
Brake Warning Lamp	8W-40-5	S109	8W-40-4
Brake Warning Switch	8W-40-6	S149	8W-40-4
Check Engine Lamp	8W-40-2	S201	8W-40-2, 5
Check Gages Lamp	8W-40-5	S202	8W-40-2, 5
Controller Anti-Lock Brake	8W-40-5	S203	8W-40-3
Cruise Lamp	8W-40-5	S204	8W-40-3
Engine Coolant Temperature	8W-40-3	S205	8W-40-2, 5
Fuel Gauge	8W-40-3	S209	8W-40-4
Fuse 5	8W-40-5	S215	8W-40-5
Fuse 7	8W-40-2, 5	S216	8W-40-2, 5
G106	8W-40-4	S302	8W-40-2, 5
G304	8W-40-2, 5	S303	8W-40-6
Gauge	8W-40-3	S306	8W-40-3
Headlamp Switch	8W-40-4	S307	8W-40-3
High Beam Indicator Lamp	8W-40-5	S409	8W-40-4
Ignition Switch	8W-40-6	Seat Belt Warning Lamp	8W-40-2
Illumination Lamps	8W-40-4	Speedometer	8W-40-3
Instrument Cluster	8W-40-2, 3, 4, 5	Tachometer	8W-40-3
Junction Block	8W-40-2, 4, 5	Turn Signal/Hazard Warning Switch	8W-40-4
Left Front Turn Signal Lamp	8W-40-4	Volt Meter	8W-40-3
Left Turn Signal Indicator Lamp	8W-40-4		











8W-40 INSTRUMENT CLUSTER

INDEX

	page		page
DESCRIPTION AND OPERATION		OIL PRESSURE GAUGE	7
ABS WARNING LAMP	7	SPEEDOMETER	7
ENGINE COOLANT TEMPERATURE GAUGE ...	7	TACHOMETER	7
FUEL GAUGE	7	TURN SIGNAL INDICATOR LAMPS	8
HIGH BEAM INDICATOR LAMP	8	VOLTMETER	7
ILLUMINATION LAMPS	8	WARNING LAMPS—EXCEPT ABS	7
INTRODUCTION	7		

DESCRIPTION AND OPERATION

INTRODUCTION

The electronic instrument cluster contains a micro-processor which controls cluster functions based on data it receives from the CCD bus. Circuit A250 from fuse 11 in the Power Distribution Center (PDC) powers circuit F75 through fuse 7 in the junction block. Circuit F75 powers the cluster micro-processor plus the warning lamps (except the ABS warning lamp) and the high beam indicator lamp. The cluster micro-processor switches the warning lamps and high beam indicator lamps on and off by controlling a transistor in the ground path for each lamp.

WARNING LAMPS—EXCEPT ABS

Circuit F75 feeds all the warning lamps in the instrument cluster except the ABS warning lamp. The micro-processor in the cluster controls each lamp (except the ABS lamp) through a transistor in the ground path of each lamp. The cluster micro-processor turns the warning lamps ON and OFF based on inputs received on the CCD bus. Circuits Z1 and Z2 provide ground for the lamps and micro-processor.

SPEEDOMETER

The micro-processor in the instrument cluster calculates the position of the speedometer needle based on the vehicle speed signal broadcast on the CCD bus by the Powertrain Control Module. The PCM determines vehicle speed from the input provided by the vehicle speed sensor.

TACHOMETER

The Powertrain Control Module (PCM) transmits the engine RPM data on the CCD bus. From the bus, the instrument cluster calculates tachometer needle position based on the engine RPM signal.

VOLTMETER

The Powertrain Control Module (PCM) broadcasts system voltage data on the CCD bus. The micro-processor in the instrument cluster calculate voltmeter needle position base on the signal received from the CCD bus.

FUEL GAUGE

The Powertrain Control Module (PCM) transmits the fuel percentage data over the CCD bus. The micro-processor in the instrument cluster calculates position of the fuel gauge needle based on the signal from the PCM.

ENGINE COOLANT TEMPERATURE GAUGE

The Powertrain Control Module (PCM) broadcasts the engine coolant temperature data over the CCD bus. From the data signal on the CCD bus, the instrument cluster micro-processor calculates coolant temperature gauge needle position.

ABS WARNING LAMP

Circuit F87 from fuse 5 in the junction block provides power for the ABS warning lamp in the instrument cluster. Ground for the ABS warning lamp is provided by the Controller, Anti-Lock Brakes (CAB). The CAB illuminates the lamp by providing ground on circuit 205.

HELPFUL INFORMATION

When the ignition switch is in the START or RUN position, it connects circuit A1 from fuse 8 in the Power Distribution Center (PDC) to circuit A21. Circuit A21 powers circuit F87 through fuse 5 in the junction block.

OIL PRESSURE GAUGE

The instrument cluster micro-processor calculates engine oil pressure gauge needle position based on the oil pressure data received over the CCD bus. The

DESCRIPTION AND OPERATION (Continued)

Powertrain Control Module (PCM) transmits the data over the CCD bus.

HIGH BEAM INDICATOR LAMP

The micro-processor in the instrument cluster switches the high beam indicator lamp ON and OFF through a transistor in lamps ground circuit. The Body Control Module (BCM) signals the instrument cluster micro-processor over the CCD bus to turn the high beam indicator ON or OFF. Circuit F75 powers the lamp.

TURN SIGNAL INDICATOR LAMPS

Circuits L65 and L64 from the turn signal/hazard flasher circuitry in the multi-function switch power

the turn signal indicator lamps. Circuit L64 powers the right turn signal indicator lamp. Circuit L65 powers the left indicator lamp. Circuits Z1 and Z2 provide ground for the lamps.

ILLUMINATION LAMPS

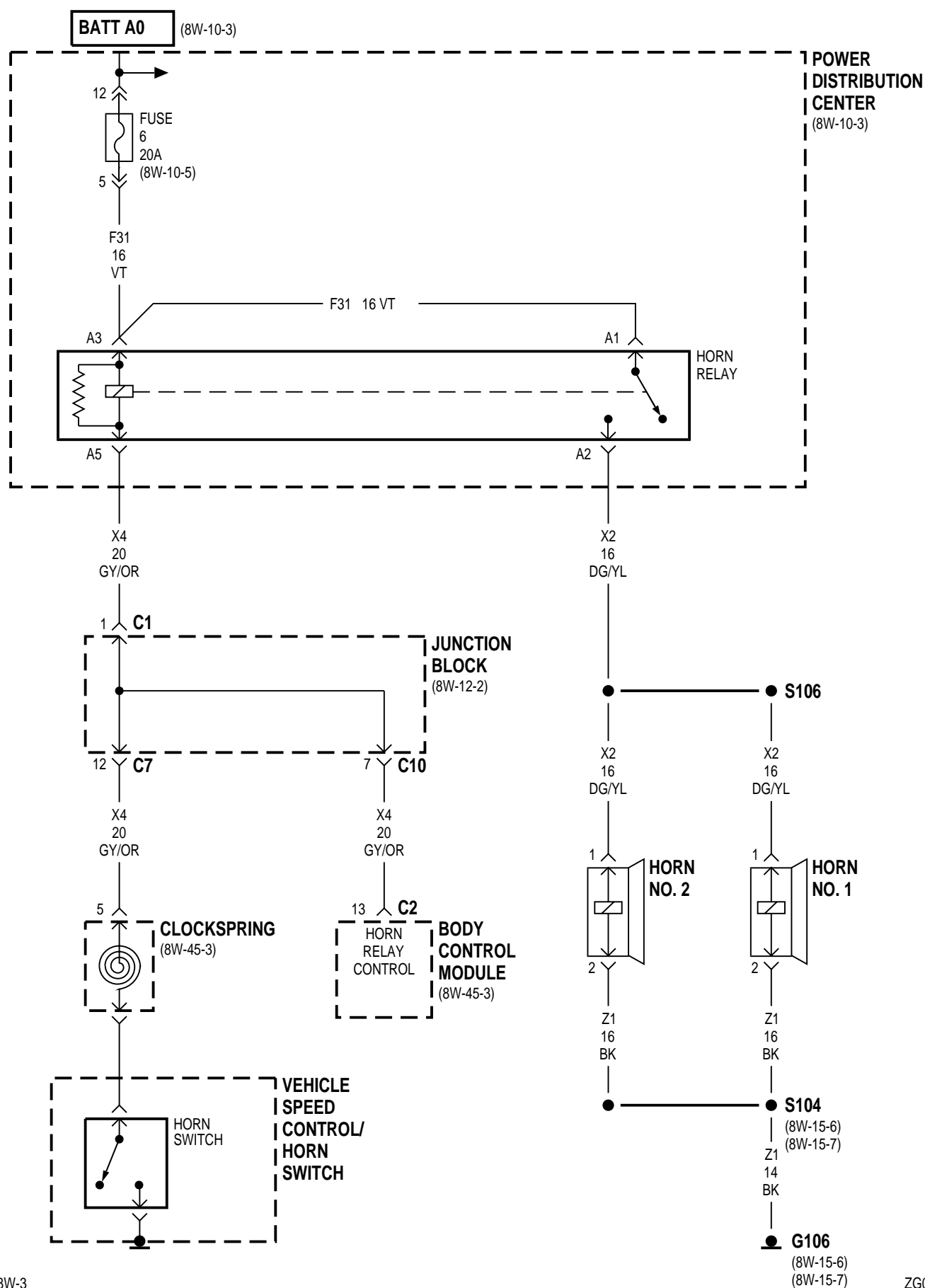
Circuit E2 from the headlamp switch powers the illumination lamps in the instrument cluster. Circuits Z1 and Z2 provide ground for the lamps.

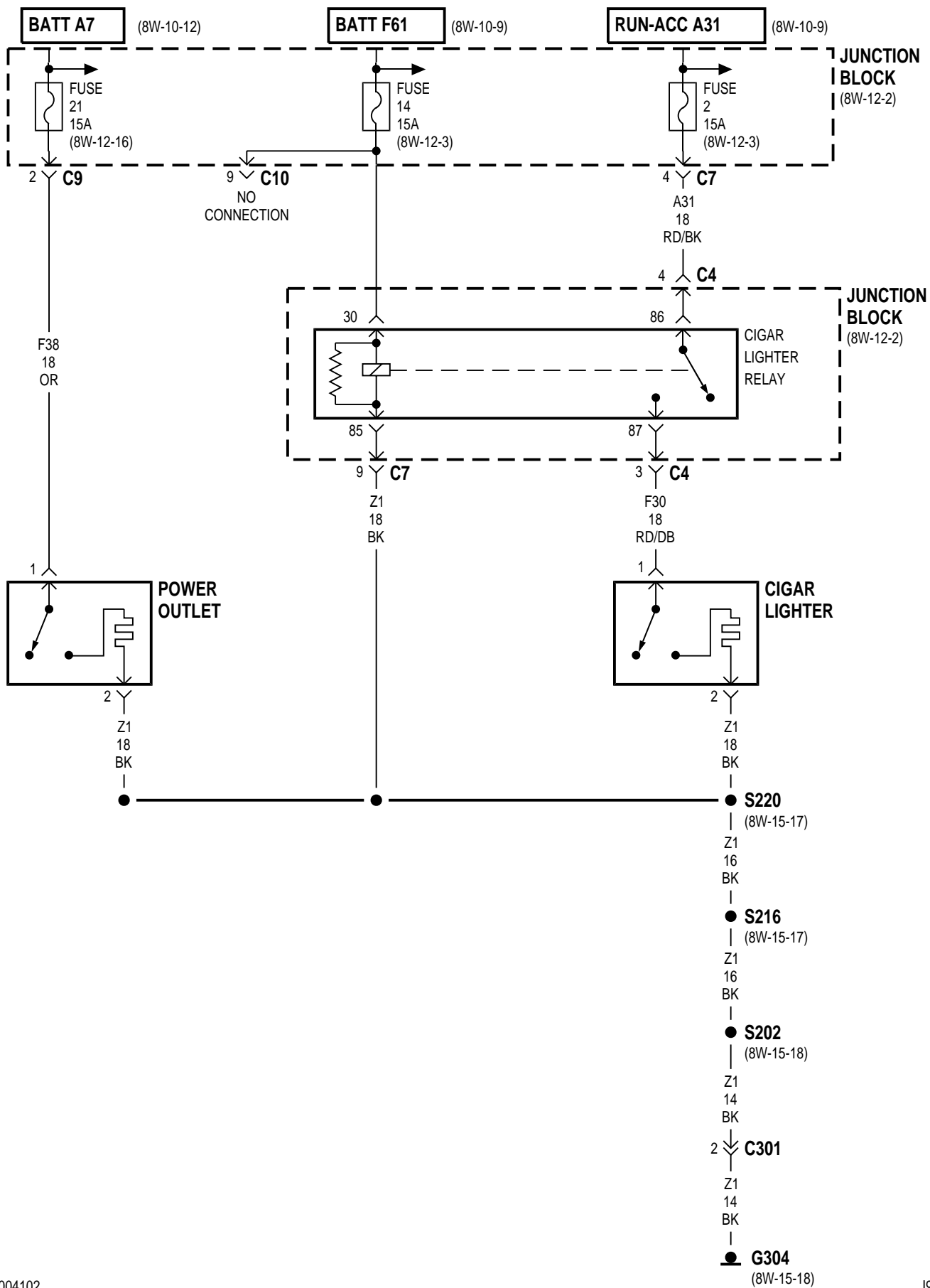
8W-41 HORN/CIGAR LIGHTER

INDEX

	page
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	4

Component	Page	Component	Page
Body Control Module	8W-41-2	Horn Relay	8W-41-2
Cigar Lighter	8W-41-3	Horn Switch	8W-41-2
Cigar Lighter Relay	8W-41-3	Junction Block	8W-41-2, 3
Clockspring	8W-41-2	Power Distribution Center	8W-41-2
Fuse 2	8W-41-3	Power Outlet	8W-41-3
Fuse 6	8W-41-2	S104	8W-41-2
Fuse 14	8W-41-3	S106	8W-41-2
Fuse 21	8W-41-3	S202	8W-41-3
G106	8W-41-2	S216	8W-41-3
G304	8W-41-3	S220	8W-41-3
Horn No. 1	8W-41-2	Vehicle Speed Control/Horn Switch	8W-41-2
Horn No. 2	8W-41-2		





8W-41 HORN/CIGAR LIGHTER

DESCRIPTION AND OPERATION

HORN

The horn system is powered by circuit F31 from fuse 6 in the Power Distribution Center (PDC). Circuit F31 supplies voltage to the coil and contact sides of the horn relay in the PDC.

When the operator presses the horn switch, a ground path is completed on the coil side of the horn relay through the case grounded switch, on circuit X4. The horn relay contacts then closes to connect circuit F31 to circuit X2. Circuit X2 powers the horns. Circuit Z1 provides ground for the horns.

On vehicles equipped with Vehicle Theft Security System (VTSS), the X4 circuit is spliced to the Body Control Module (BCM). For operation of the VTSS, refer to section 8W-39.

CIGAR LIGHTER

The cigar lighter relay powers the cigar lighter. The relay energizes when the ignition switch is in the ACCESSORY or RUN position. In the ACCES-

SORY or RUN position, the switch connects circuit A1 from fuse 8 in the Power Distribution Center (PDC) to circuit A31. Circuit A31 powers relay coil. Circuit Z1 provides ground for the relay coil.

When the relay energizes, it connects circuit F61 from fuse 10 in the PDC to circuit F30. Circuit F30 powers the cigar lighter.

When the operator depresses the lighter, contacts inside the lighter element close, and voltage from circuit F30 flows through the heating element to ground. Circuit Z1 provides ground for the lighter.

HELPFUL INFORMATION

Circuit Z1 also grounds the power outlet.

POWER OUTLET

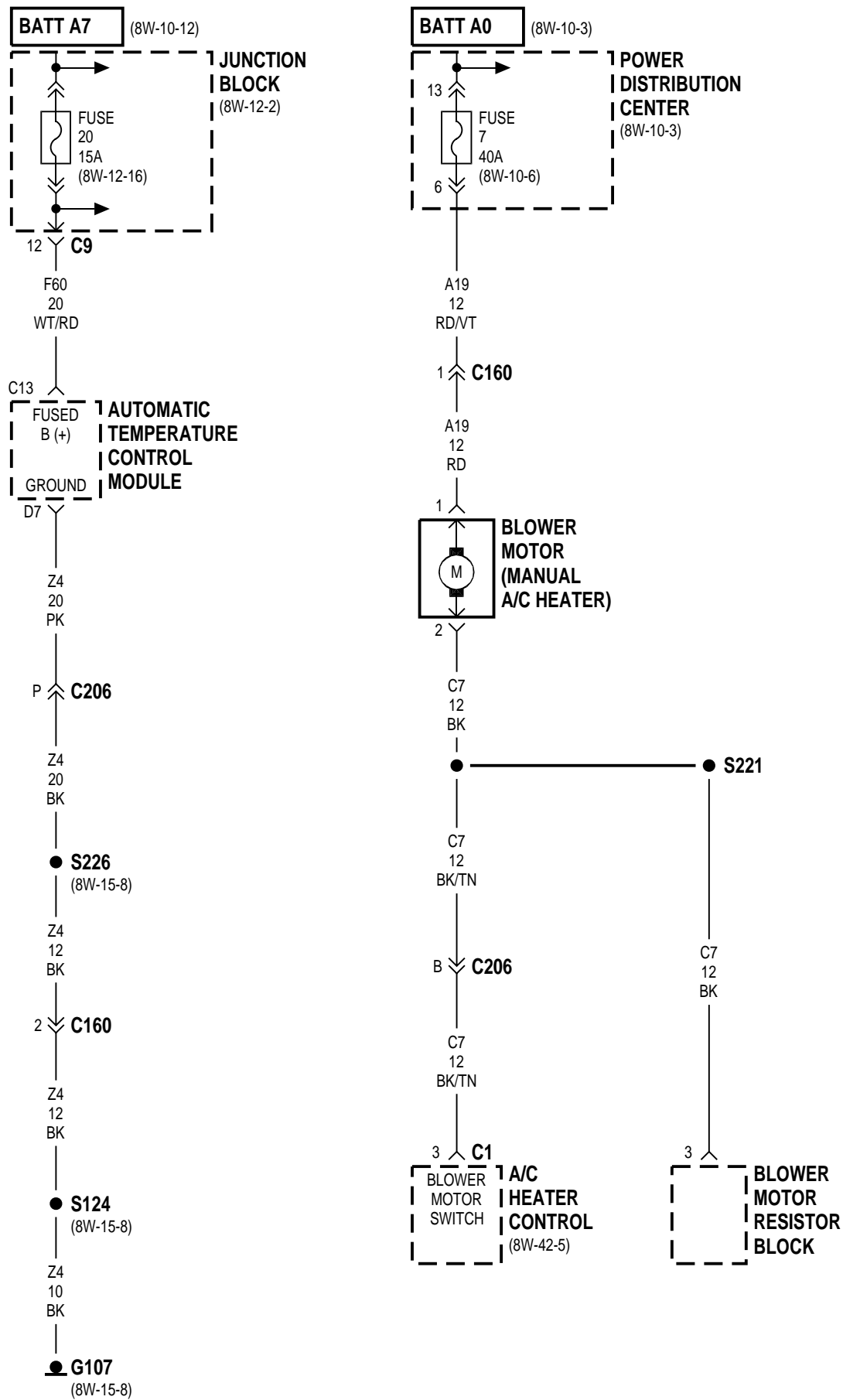
Circuit A7 from 15 in the Power Distribution Center (PDC) powers circuit F38 through fuse 21 in the junction block. Circuit F38 feeds the power outlet. Circuits A7 and F38 are HOT at all times. Circuit Z1 provides ground for the power outlet.

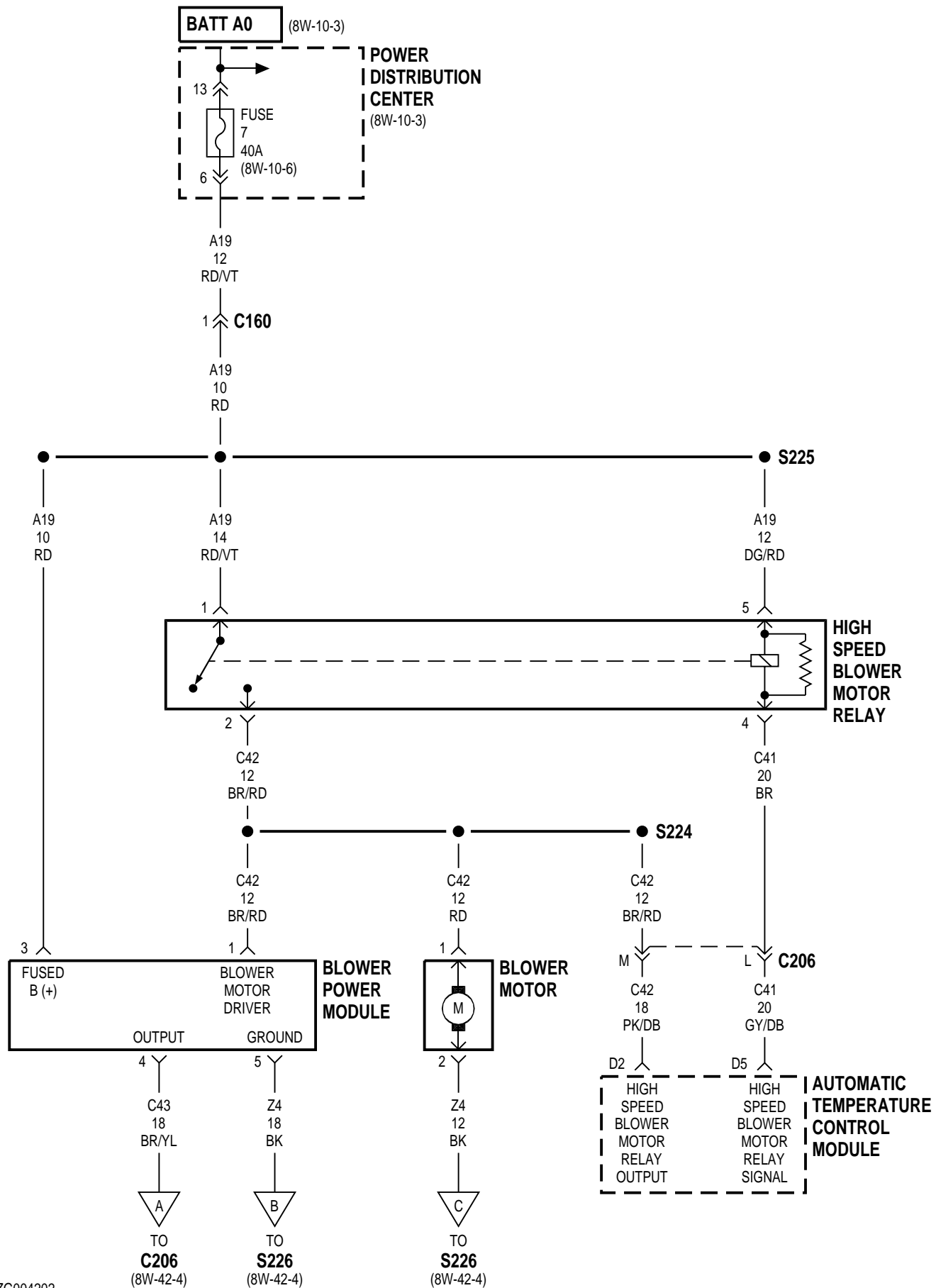
8W-42 AIR CONDITIONING/HEATER

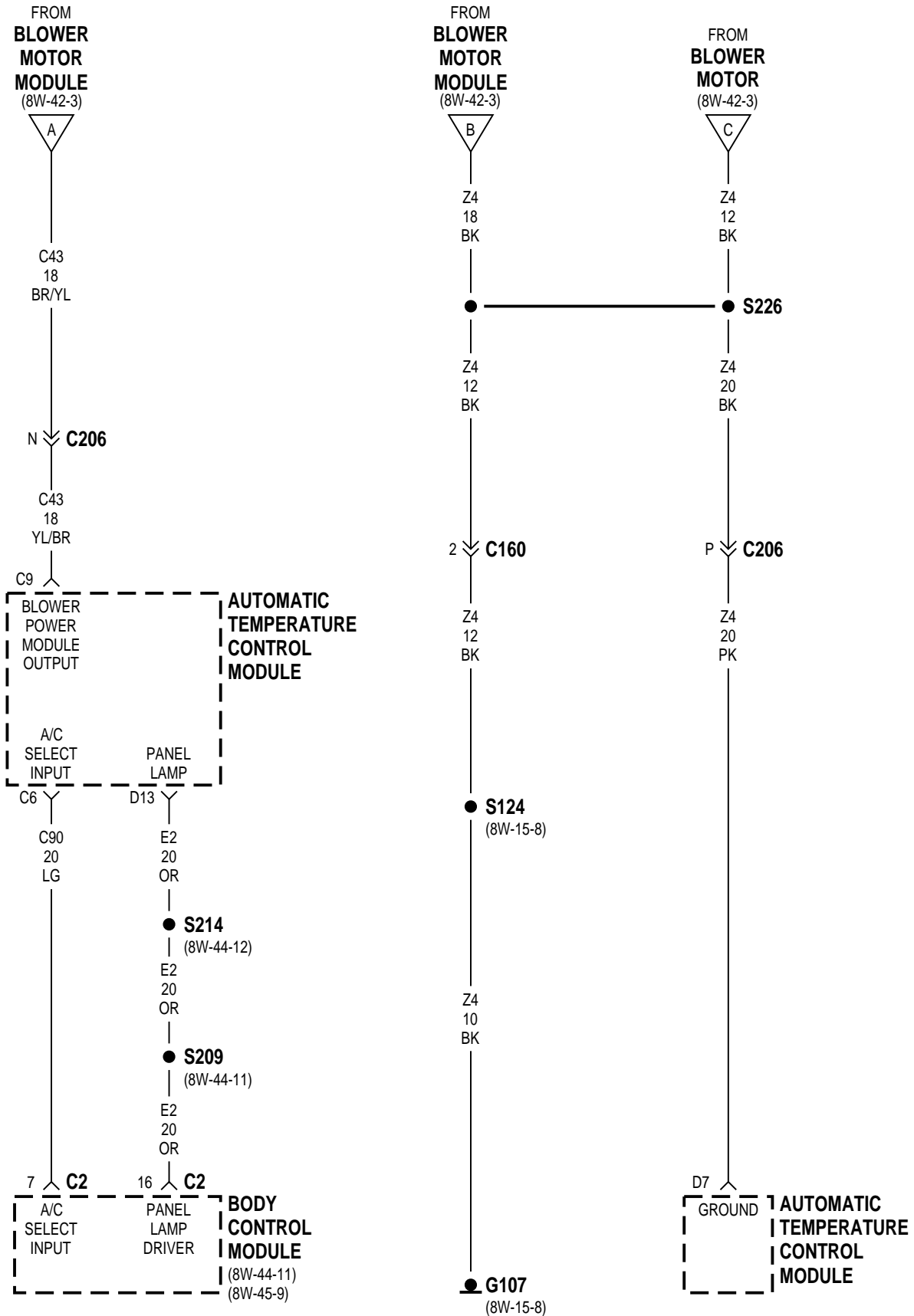
INDEX

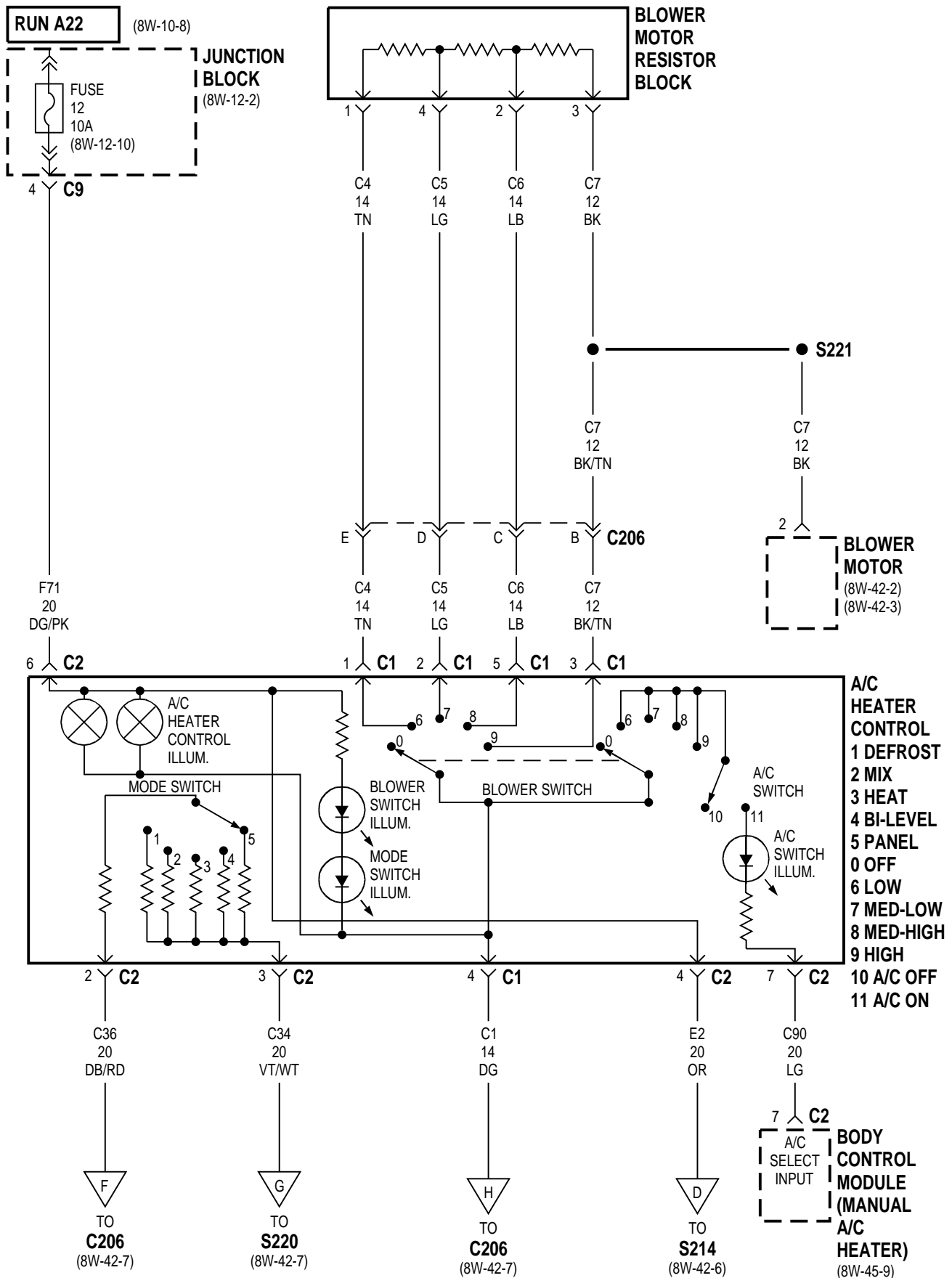
	page
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	14

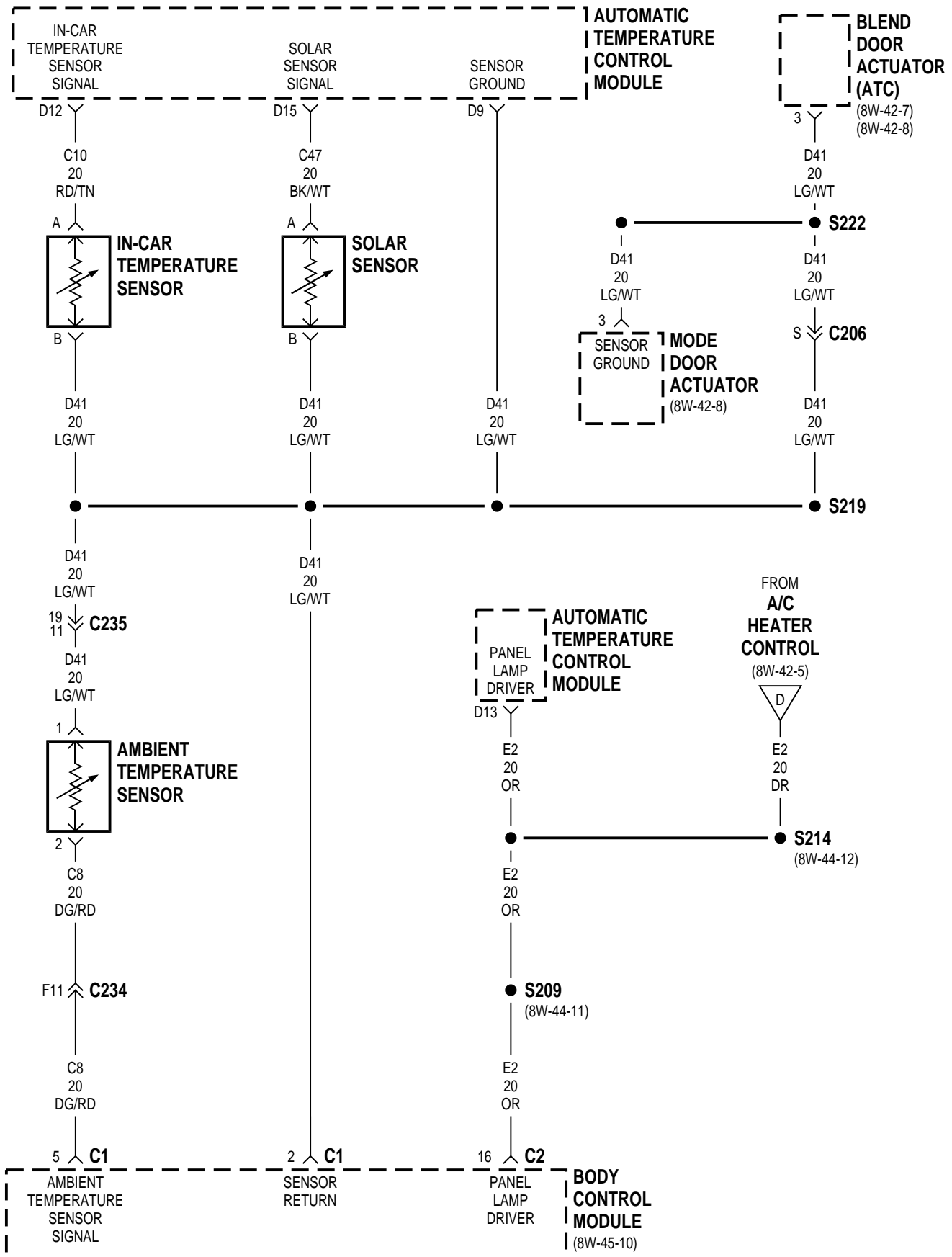
Component	Page	Component	Page
A/C Compressor Clutch	8W-42-10, 11	Junction Block	8W-42-2, 5, 7, 9
A/C Compressor Clutch Relay	8W-42-10, 11	Mode Door Actuator	8W-42-6, 8
A/C Heater Control	8W-42-2, 5	MSA Controller	8W-42-13
A/C High Pressure Switch	8W-42-12, 13	Power Distribution Center	8W-42-2, 3, 10, 11
A/C Low Pressure Switch	8W-42-12, 13	Powertrain Control Module	8W-42-12
Ambient Temperature Sensor	8W-42-6	Recirculation Door Actuator	8W-42-9
Automatic Shut Down Relay	8W-42-11	S101	8W-42-10
Automatic Temperature Control		S104	8W-42-12
Module	8W-42-2, 3, 4, 6, 8, 9	S124	8W-42-2, 4, 7
Blend Door Actuator	8W-42-6, 7, 8	S202	8W-42-7
Blower Motor	8W-42-2, 3, 5	S203	8W-42-9
Blower Motor Resister Block	8W-42-2, 5	S204	8W-42-9
Blower Power Module	8W-42-3	S209	8W-42-4, 6
Body Control Module	8W-42-4, 5, 6	S214	8W-42-4, 6
Data Link Connector	8W-42-9	S216	8W-42-7
Fuse 3	8W-42-11	S218	8W-42-7, 9
Fuse 7	8W-42-2, 3	S219	8W-42-6, 8
Fuse 12	8W-42-5, 7, 9	S220	8W-42-7
Fuse 18	8W-42-10	S221	8W-42-2, 5
Fuse 20	8W-42-2, 11	S222	8W-42-6, 8
Fuse 21	8W-42-10, 11	S223	8W-42-8
G106	8W-42-12	S224	8W-42-3
G107	8W-42-2, 4, 7	S225	8W-42-3
G304	8W-42-7	S226	8W-42-2, 4
High Speed Blower Motor Relay	8W-42-3	Solar Sensor	8W-42-6
In-Car Temperature Sensor	8W-42-6		

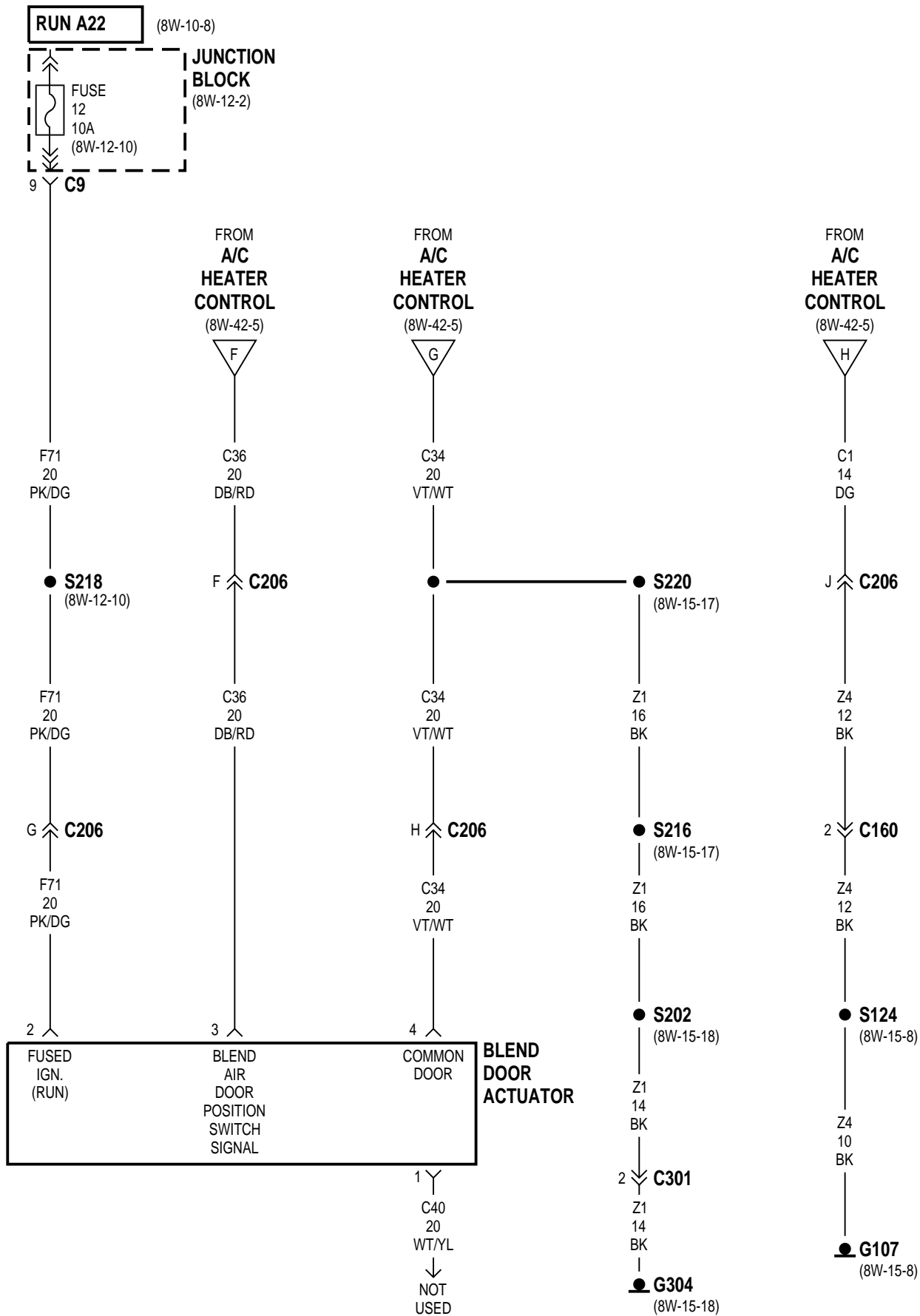


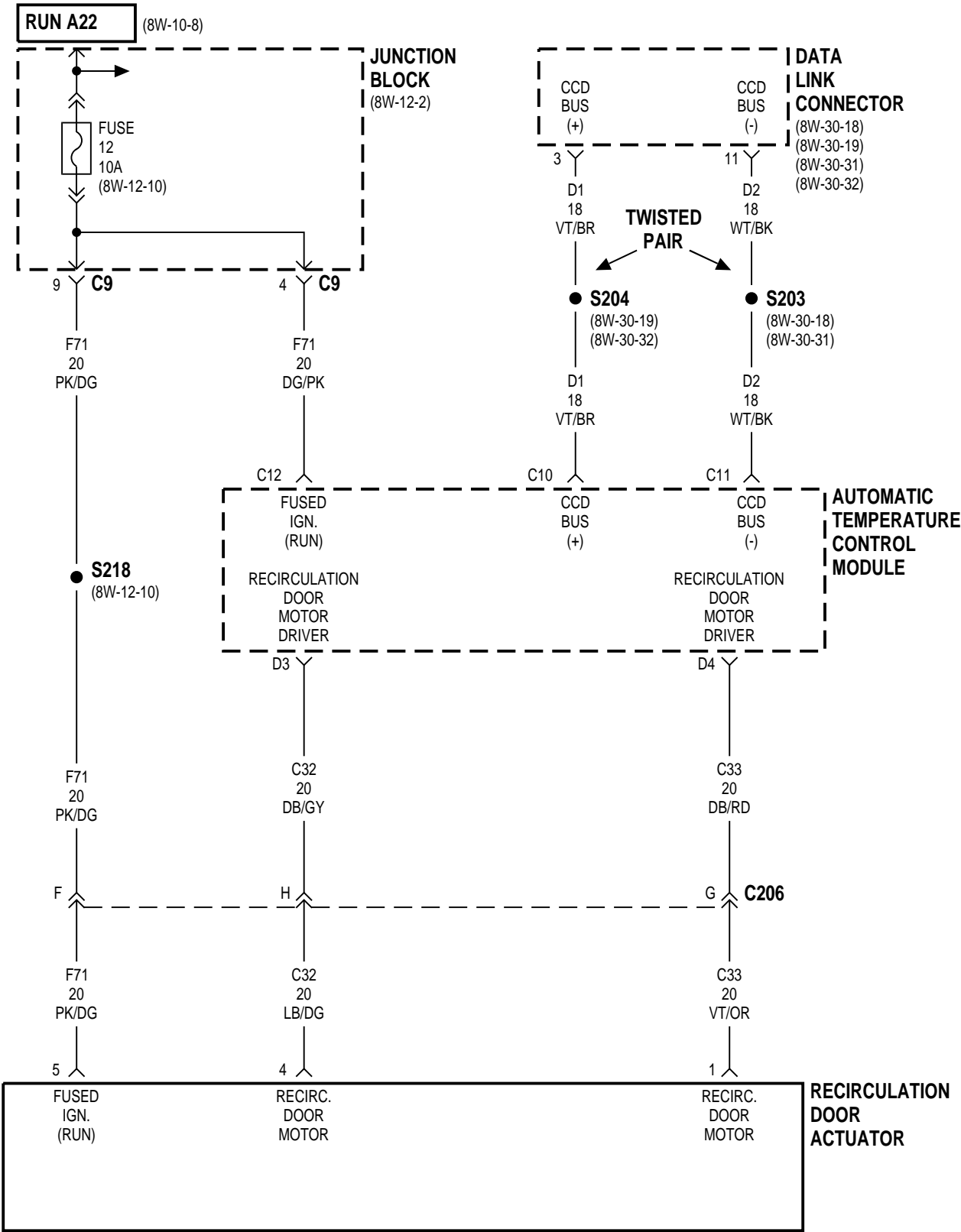


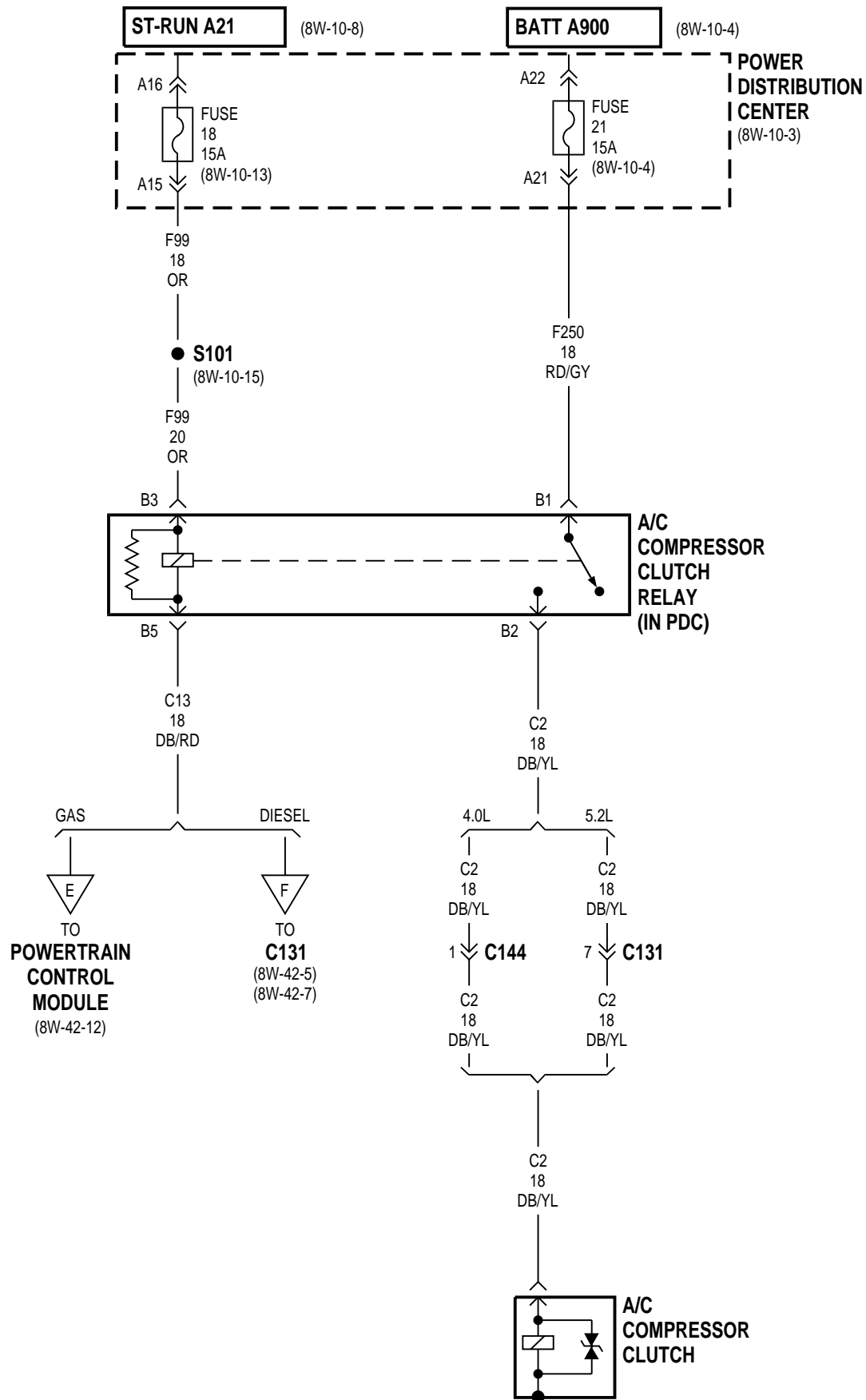


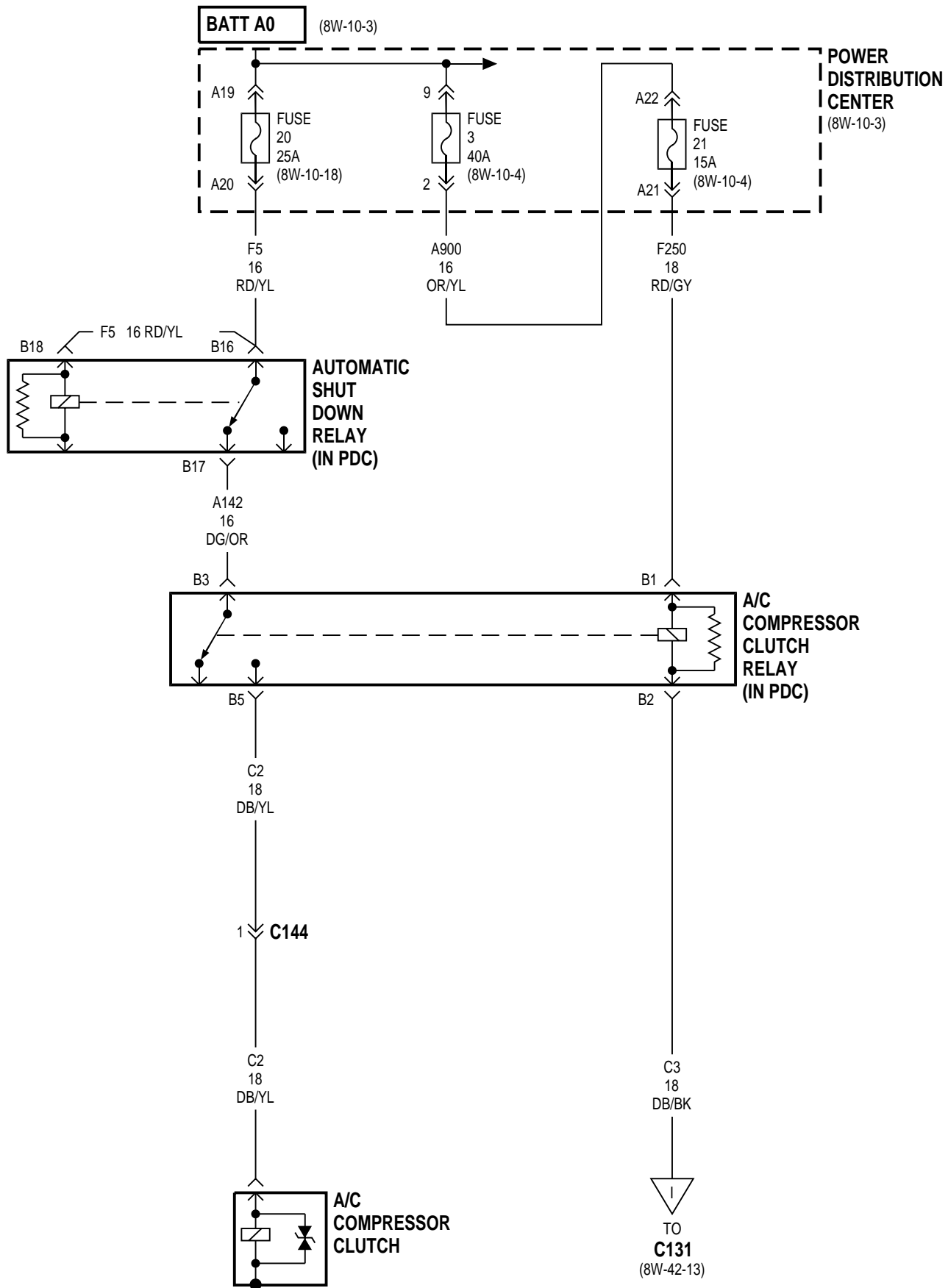


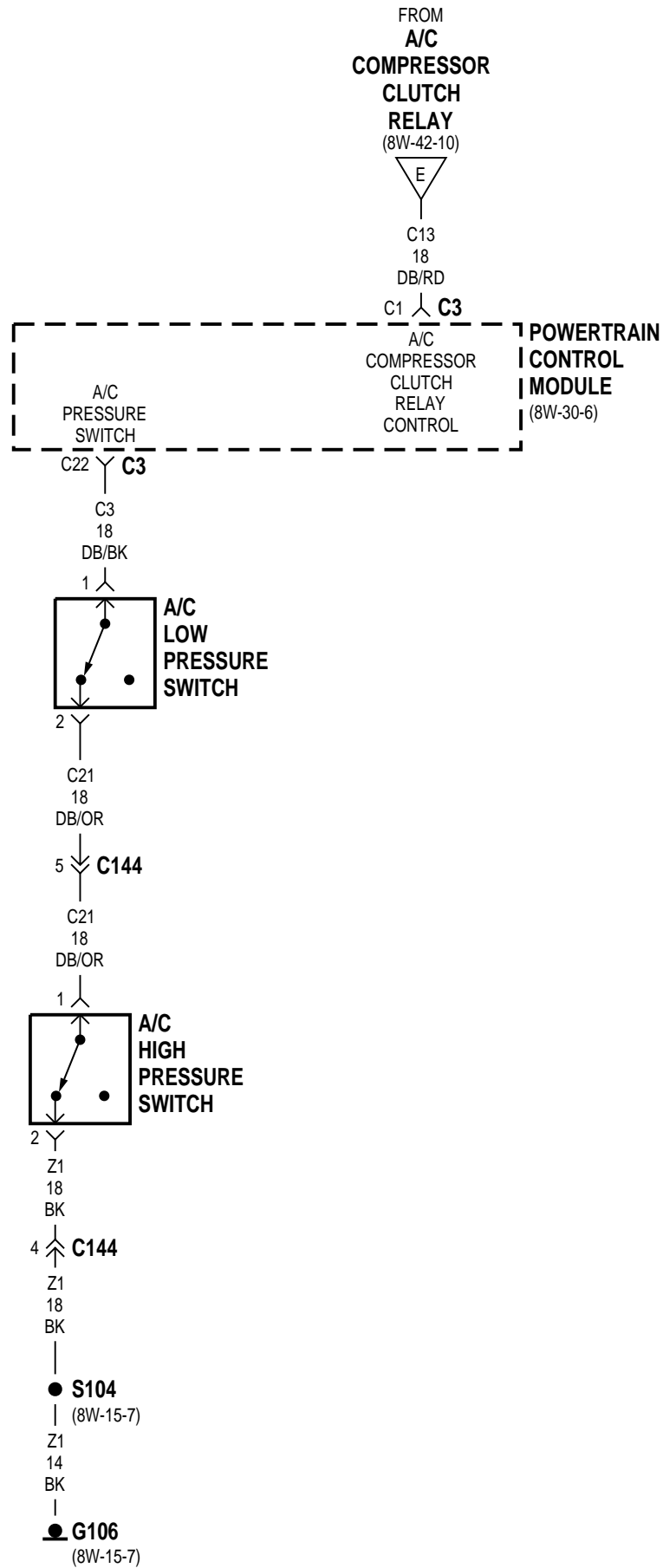


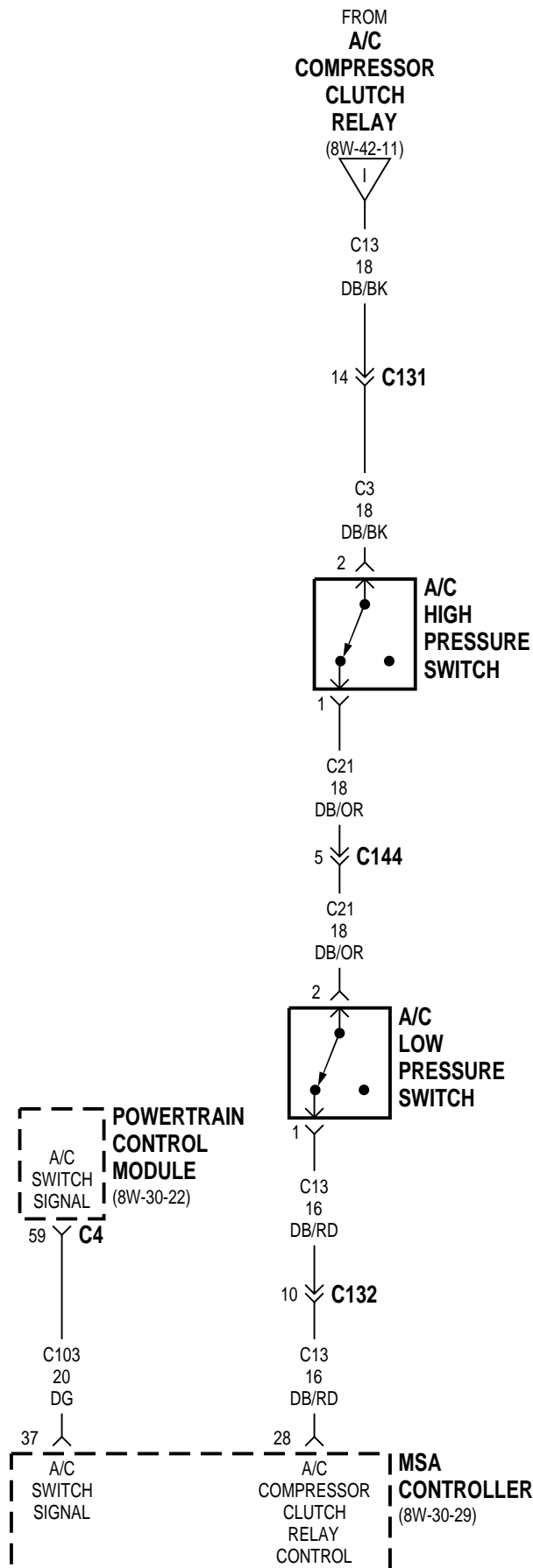












8W-42 AIR CONDITIONING/HEATER

INDEX

	page		page
GENERAL INFORMATION			
INTRODUCTION	14	BLEND DOOR MOTOR—AUTOMATIC	
DESCRIPTION AND OPERATION			
A/C OPERATION—AUTOMATIC TEMPERATURE		TEMPERATURE CONTROL	16
CONTROL	15	BLOWER MOTOR—AUTOMATIC	
A/C OPERATION—MANUAL A/C	14	TEMPERATURE CONTROL	16
AMBIENT TEMPERATURE SENSOR	15	BLOWER MOTOR—MANUAL A/C-HEATER	14
AUTOMATIC TEMPERATURE CONTROL (ATC)		IN-CAR TEMPERATURE SENSOR	15
MODULE	15	MANUAL A/C-HEATER	14
AUTOMATIC TEMPERATURE CONTROL (ATC)	15	MODE DOOR MOTOR—AUTOMATIC	
BLEND AIR DOOR MOTOR ACTUATOR—		TEMPERATURE CONTROL	16
MANUAL A/C-HEATER	15	RECIRCULATION DOOR MOTOR—AUTOMATIC	
		TEMPERATURE CONTROL	16
		SOLAR SENSOR	15

GENERAL INFORMATION

INTRODUCTION

This section of the wiring diagrams is divided into two sub-sections; Manual A/C-Heater, and Automatic Temperature Control (ATC). When referring to the circuit descriptions or wiring diagrams, ensure that you use the correct one.

DESCRIPTION AND OPERATION

MANUAL A/C-HEATER

Several fuses supply power for the manual air conditioning/heater system. When the ignition switch is in the RUN position, it connects circuit A1 from fuse 8 in the Power Distribution Center (PDC) to circuit A22. Circuit A22 powers circuit F71 through fuse 12 in the junction block. Circuit F71 connects to the A/C control switches and the blend air door motor.

When the ignition switch is in the START or RUN position, it connects circuit A1 to circuit A21. Circuit A21 powers circuit F99 through fuse 18 in the PDC. Circuit F99 powers the coil side of the A/C compressor clutch relay.

Circuit A900 from fuse 3 in the PDC powers circuit F250 through fuse 21 in the PDC. Circuit F250 powers the contact side of the A/C compressor clutch relay.

Circuit E2 from the headlamp dimmer switch powers the case grounded illumination lamp in the A/C-heater control switch.

BLOWER MOTOR—MANUAL A/C-HEATER

The blower motor switch has four positions; LOW, MEDIUM 1, MEDIUM 2, AND HIGH. Circuit A19

from fuse 7 in the PDC supplies power to the blower motor. Ground for the blower motor is supplied on circuit C7 through the blower motor resistor block to the blower motor switch, through an internal relay in the A/C-Heater Control head. When the internal relay energizes, it connects the blower motor switch to circuit C1. Circuit C1 connects to ground circuit Z4.

In the HIGH position, the blower motor switch connects circuit C7 from the blower motor directly to ground on circuits C1 and Z4. In the LOW or MEDIUM positions, the ground path passes through the blower motor resistor block to the switch. The switch connects the circuit C1.

The blower motor resistor block consists of three resistors connected in series. Depending on blower motor switch position, the ground path on circuit C7 from the blower motor passes through one or more resistors to circuit C1.

When the blower motor switch is in the LOW position, the ground path passes through all three resistors in the blower motor resistor block to circuit C4. The blower motor switch connects circuit C4 to circuits C1 and Z4.

In the MEDIUM 1 position, the ground path passes through two resistors in the resistor block to circuit C5. The blower motor switch connects circuit C5 to circuits C1 and Z4.

In the MEDIUM 2 position, the ground path passes through one resistor in the resistor block to circuit C6. The blower motor switch connects circuit C6 to circuits C1 and Z4.

A/C OPERATION—MANUAL A/C

When the A/C-heater control switch is moved to an A/C position or the defrost position, the Body Control

DESCRIPTION AND OPERATION (Continued)

Module (BCM) receives the A/C select signal on circuit C90. After receiving the input, the BCM signals the Powertrain Control Module (PCM) on the CCD bus.

The A/C low pressure and high pressure switches are wired in series and connect to ground on circuit Z1. Circuit C3 from the PCM connects to the low pressure switch. Circuit C21 connects the low pressure switch to the high pressure switch. The high pressure switch connects circuit C21 to ground circuit Z1. If the A/C low pressure and high pressure switches are closed, the PCM senses the A/C request signal on circuit C3.

After sensing the A/C request signal, the PCM supplies ground for the coil side of A/C compressor clutch relay on circuit C13. Circuit F99 from fuse 18 in the PDC powers the coil side of the relay.

When the PCM grounds the A/C compressor clutch relay, the contacts close and connect circuit F250 from fuse 21 in the PDC to circuit C2. Circuit C2 supplies power to the case grounded A/C compressor clutch.

The A/C compressor clutch has a built-in diode. The diode controls the induced voltage that results from the magnetic field collapsing when the clutch disengages. The diode provides a current path to protect other components and systems.

HELPFUL INFORMATION

Circuit A900 from fuse 3 in the PDC powers circuit F250 through PDC fuse 21.

BLEND AIR DOOR MOTOR ACTUATOR—MANUAL A/C-HEATER

The A/C-Heater control head contains a blend door position sensor. The sensor is a variable resistor that provides the blend door position input to the blend door motor actuator on circuit C36.

Circuit F71 from fuse 12 in the junction block powers the actuator when the ignition switch is in the RUN position. Circuit C34 splices to connect the blend door actuator to ground circuit Z1.

AUTOMATIC TEMPERATURE CONTROL (ATC)

Several fuses supply power for the Automatic Temperature Control (ATC) system. When the ignition switch is in the RUN position, it connects circuit A1 from fuse 8 in the Power Distribution Center (PDC) to circuit A22. Circuit A22 powers circuit F71 through fuse 12 in the junction block. Circuit F71 connects to the ATC module and the recirculation door motor.

Circuit A7 from fuse 15 in the PDC powers circuit F60 through fuse 20 in the junction block. Circuit F60 supplies power to the ATC module.

When the ignition switch is in the START or RUN position, it connects circuit A1 from PDC fuse 8 to circuit A21. Circuit A21 powers circuit F99 through fuse 18 in the PDC. Circuit F99 powers the coil side of the A/C compressor clutch relay.

Circuit A19 from fuse 7 in the PDC connects to the blower power module and to the coil and contact sides of the high speed blower motor relay.

AUTOMATIC TEMPERATURE CONTROL (ATC) MODULE

Circuit F71 supplies battery voltage to the Automatic Temperature Control (ATC) module when the ignition switch is in the RUN position. Circuit F60 from fuse 20 in the junction block connects to the ATC module. Circuit F60 is HOT at all times. Circuit Z4 provides ground for the ATC module.

Circuit E2 from the headlamp dimmer switch connects to the ATC module.

The ATC module communicates with other vehicle modules and controllers on the CCD bus. Circuits D1 and D2 for the CCD Bus connect to the ATC module.

AMBIENT TEMPERATURE SENSOR

The ambient temperature sensor is a variable resistor. Circuit C8 provides the ambient temperature sensor signal to the ATC module. Circuit D41 provides ground for the sensor. Circuit D41 connects to the ATC module.

IN-CAR TEMPERATURE SENSOR

The in-car temperature sensor is a variable resistor. Circuit C10 provides the in-car temperature sensor signal to the ATC module. Circuit D41 provides ground for the sensor. Circuit D41 connects to the ATC module.

SOLAR SENSOR

The solar sensor is a variable resistor. Circuit C47 from the ATC module connects to the solar sensor. Circuit D41 provides ground for the sensor. Circuit D41 connects to the ATC module.

A/C OPERATION—AUTOMATIC TEMPERATURE CONTROL

When the A/C select switch in the Automatic Temperature Control (ATC) control head closes circuit C90 provides the A/C select signal to the Body Control Module (BCM). After receiving the input, the BCM signals the Powertrain Control Module (PCM) on the CCD bus.

The A/C low pressure and high pressure switches are wired in series and connect to ground on circuit Z1. Circuit C3 from the PCM connects to the low pressure switch. Circuit C21 connects the low pressure switch to the high pressure switch. The high

DESCRIPTION AND OPERATION (Continued)

pressure switch connects circuit C21 to ground circuit Z1. If the A/C low pressure and high pressure switches are closed, the PCM senses the A/C request signal on circuit C3.

After sensing the A/C request signal, the PCM supplies ground for the coil side of A/C compressor clutch relay on circuit C13. Circuit F99 from fuse 18 in the PDC powers the coil side of the relay.

When the PCM grounds the A/C compressor clutch relay, the contacts close and connects circuit F250 from fuse 21 in the PDC to circuit C2. Circuit C2 supplies power to the case grounded A/C compressor clutch.

The A/C compressor clutch has a built-in diode. The diode controls the induced voltage that results from the magnetic field collapsing when the clutch disengages. The diode provides a current path to protect other components and systems.

HELPFUL INFORMATION

Circuit A900 from fuse 3 in the PDC powers circuit F250 through PDC fuse 21.

RECIRCULATION DOOR MOTOR—AUTOMATIC TEMPERATURE CONTROL

When the ignition switch is in the RUN position, it connects circuit A1 from fuse 8 in the Power Distribution Center (PDC) to circuit A22. Circuit A22 powers circuit F71 through fuse 12 in the junction block. Circuit F71 feeds the recirculation door motor. Circuit F71 also connects to the Automatic Temperature Control (ATC) module.

Circuits C32 and C33 from the ATC module connect to the recirculation door motor. Circuits C32 and C33 provide ground for the motor.

MODE DOOR MOTOR—AUTOMATIC TEMPERATURE CONTROL

Circuit C40 from the Automatic Temperature Control (ATC) module supplies 5 volts to the position switch in the mode door motor. The ATC module receives the sensor signal from the mode door motor on circuit C39. Circuit D41 provides ground for the mode door position sensor. Circuit D41 connects to the ATC module.

The ATC module operates the mode door motor on circuits C37 and C38.

BLEND DOOR MOTOR—AUTOMATIC TEMPERATURE CONTROL

Circuit C40 from the Automatic Temperature Control (ATC) module supplies 5 volts to the position

switch in the blend door motor. The ATC module receives the sensor signal from the blend door motor on circuit C36. Circuit D41 provides ground for the mode door position sensor. Circuit D41 connects to the ATC module.

The ATC module operates the mode door motor on circuits C35 and C34.

BLOWER MOTOR—AUTOMATIC TEMPERATURE CONTROL

When the operator selects blower motor HIGH speed operation, the Automatic Temperature Control (ATC) module grounds high speed blower motor relay. For any speed other than HIGH, the blower power module supplies battery voltage for the blower motor.

BLOWER MOTOR POWER MODULE

When the operator selects any blower motor speed other than HIGH, the blower motor power module supplies voltage for the blower motor. Circuit A19 from fuse 7 in the Power Distribution Center (PDC) supplies battery voltage to the blower motor power module.

The voltage level fed to the blower motor depends on the blower speed selected by the operator. Slower speed selections provide lower voltage to the motor. The blower motor power module feeds the blower motor on circuit C42. Circuit Z4 provides ground for the blower motor and the blower motor power module.

Circuit C43 from the power module connects to the ATC module. The ATC module controls feedback on circuit C43.

HIGH SPEED BLOWER MOTOR RELAY

Circuit A19 from fuse 7 in the Power Distribution Center supplies battery voltage to the coil and contacts sides of the high speed blower motor relay. The ATC module provides ground for the coil side of the relay on circuit C41.

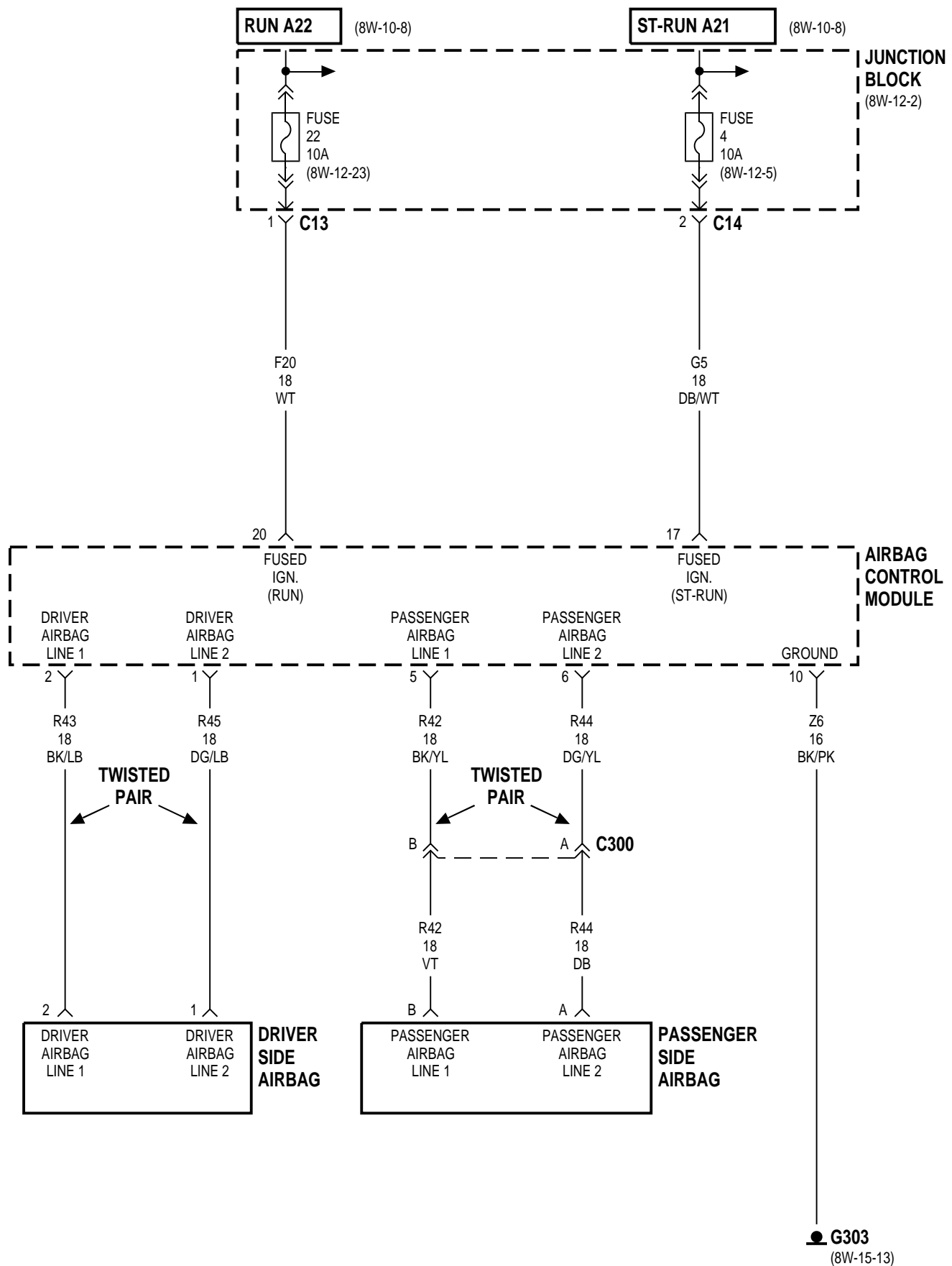
When the ATC module grounds the high speed blower motor relay, the relay contacts close and connect circuit A19 to circuit C42. Circuit C42 connects to the blower motor and the ATC module. Circuit Z4 provides ground for the blower motor.

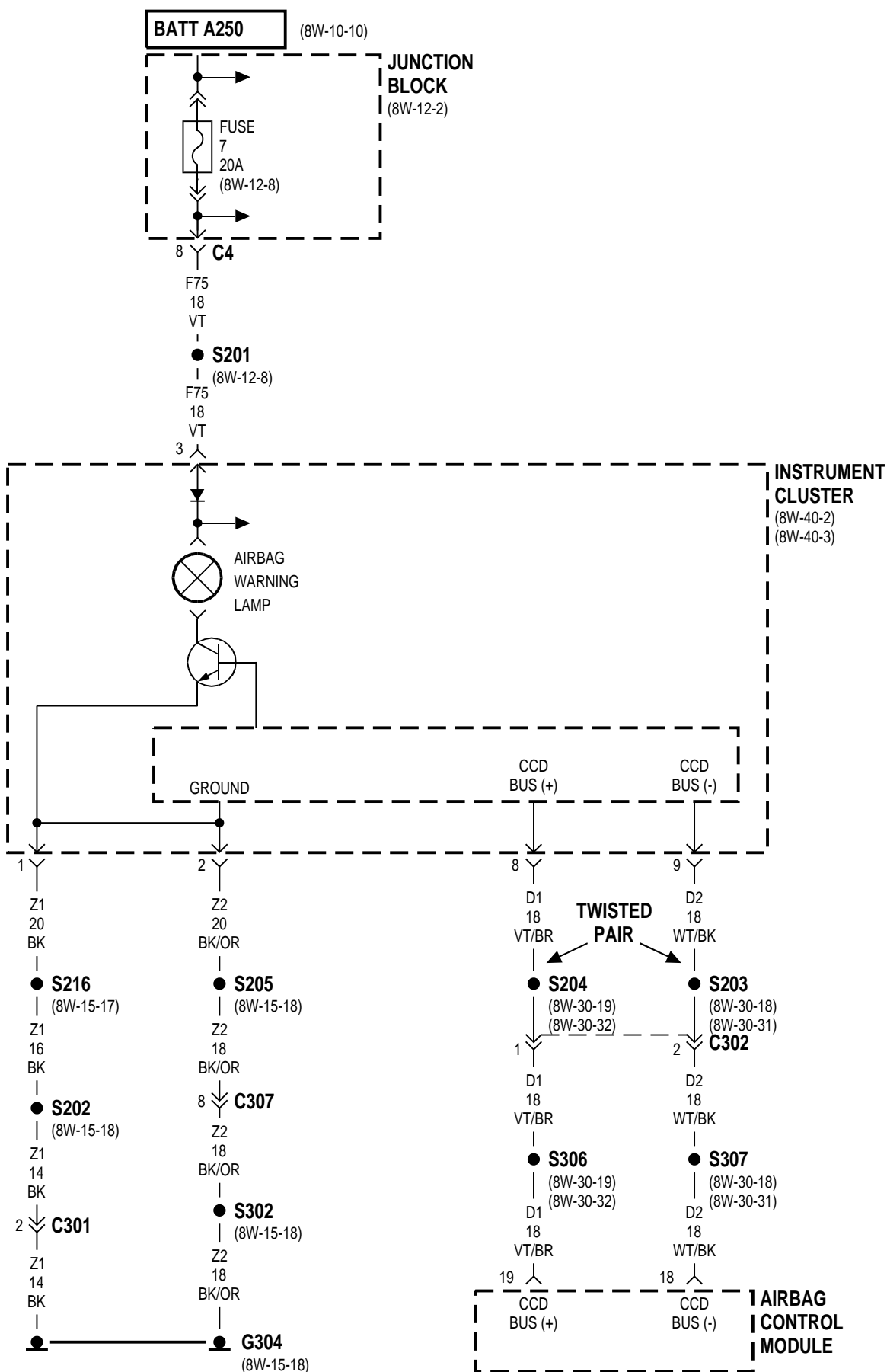
8W-43 AIRBAG SYSTEM

INDEX

	page
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	4

Component	Page	Component	Page
Airbag Control Module	8W-43-2, 3	S201	8W-43-3
Airbag Warning Lamp	8W-43-3	S202	8W-43-3
Driver Side Airbag	8W-43-2	S203	8W-43-3
Fuse 4	8W-43-2	S204	8W-43-3
Fuse 7	8W-43-3	S205	8W-43-3
Fuse 22	8W-43-2	S216	8W-43-3
G303	8W-43-2	S302	8W-43-3
G304	8W-43-3	S306	8W-43-3
Instrument Cluster	8W-43-3	S307	8W-43-3
Junction Block	8W-43-2, 3		
Passenger Side Airbag	8W-43-2		





8W-43 AIRBAG SYSTEM

INDEX

	page		page
DESCRIPTION AND OPERATION		AIRBAG WARNING LAMP	4
AIRBAG IMPACT SENSOR	4	INTRODUCTION	4
AIRBAG SQUIB (AIRBAG IGNITER)	4		

DESCRIPTION AND OPERATION

INTRODUCTION

This vehicle has a drivers airbag and a passengers airbag. The Airbag Control Module (ACM) operates both. The airbag system has two sensors, located at the left front and right front of the engine compartment.

In the START or RUN position, the ignition switch connects circuit A1 from fuse 8 in the Power Distribution Center (PDC) to circuit A22. Circuit A22 powers circuit F20 through fuse 22 in the junction block. Circuit F20 connects to the ACM.

When the ignition switch is in the RUN position, it connects circuit A1 to circuit A21. Circuit A21 powers circuit G5 through fuse 4 in the junction block. Circuit G5 connects to the ACM. Circuit Z6 provides ground for the ACM.

Circuit A250 from fuse 11 in the PDC powers circuit F75 through fuse 7 in the junction block. Circuit F75 powers the airbag warning lamp in the instrument cluster.

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)

Circuits, R43 and R45, connect the ACM to the drivers airbag squib (igniter) after passing through the clock spring connector. Circuit R43 from cavity 2 of the ACM 4-way connector connects to the squib. Circuit R45 from cavity 1 of the ACM 4-way connector connects to the squib.

Circuits, R42 and R44, connect the ACM to the passenger airbag squib (igniter). Circuit R42 from cavity 5 of the ACM 4-way connector connects to the squib. Circuit R44 from cavity 6 of the ACM 4-way connector connects to the squib.

AIRBAG WARNING LAMP

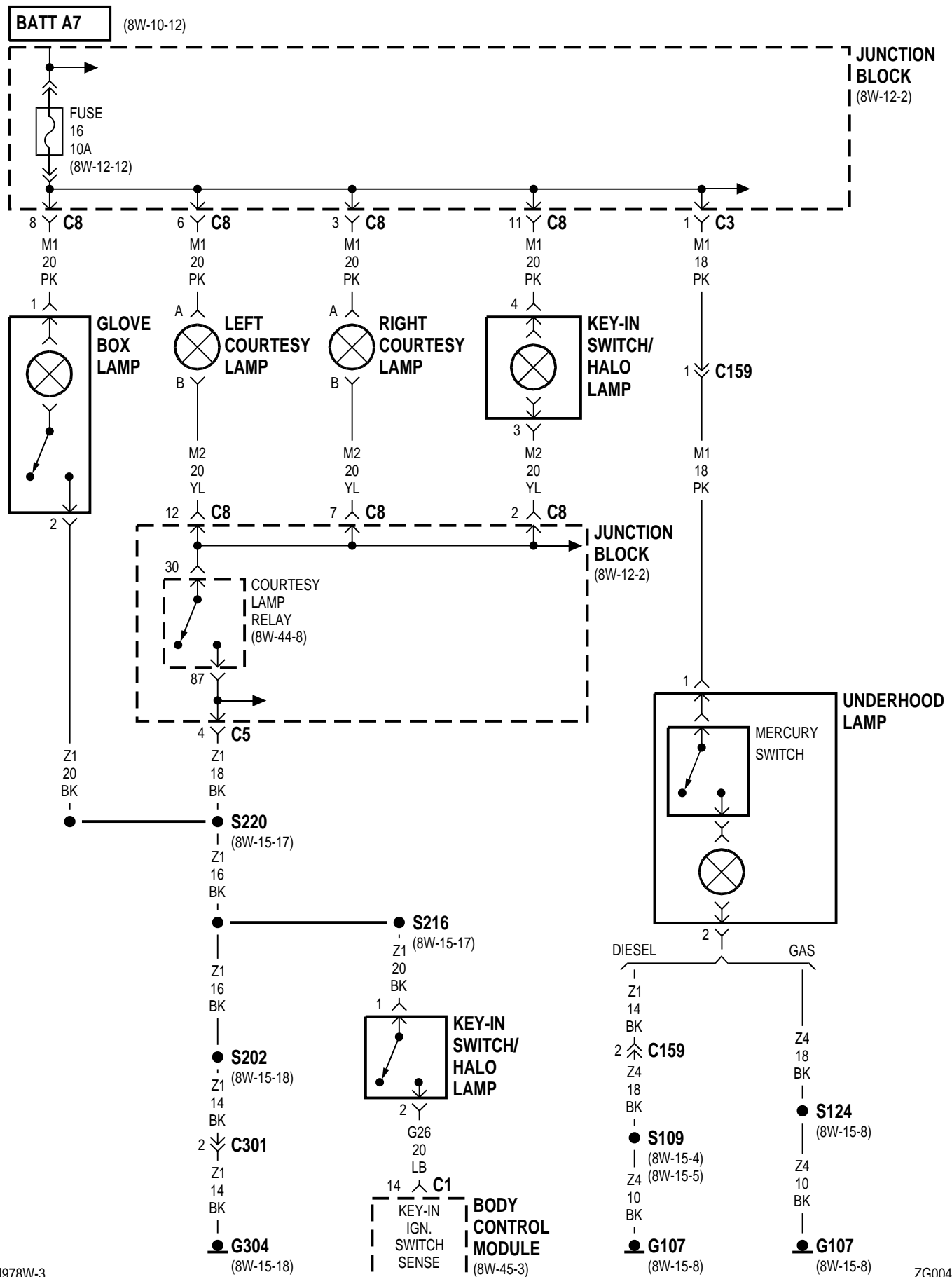
Circuit F75 from fuse 7 in the junction block feeds the airbag warning lamp. Ground circuit Z1 connects to the warning lamp through a transistor controlled by the microprocessor in the instrument cluster. When the microprocessor receives a signal from Airbag Control Module (ACM) on the CCD bus, it switches the transistor to connect the lamp to ground.

8W-44 INTERIOR LIGHTING

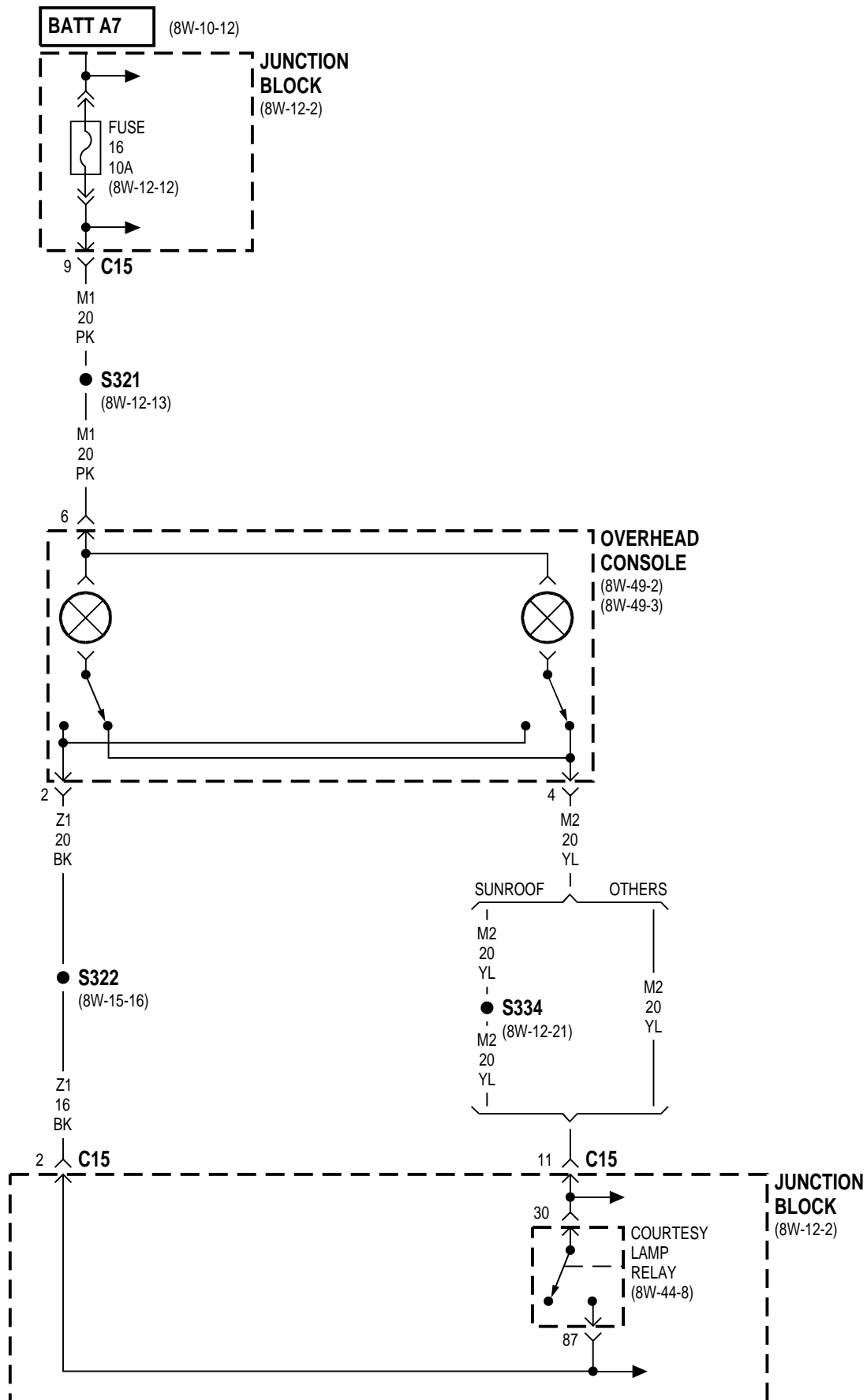
INDEX

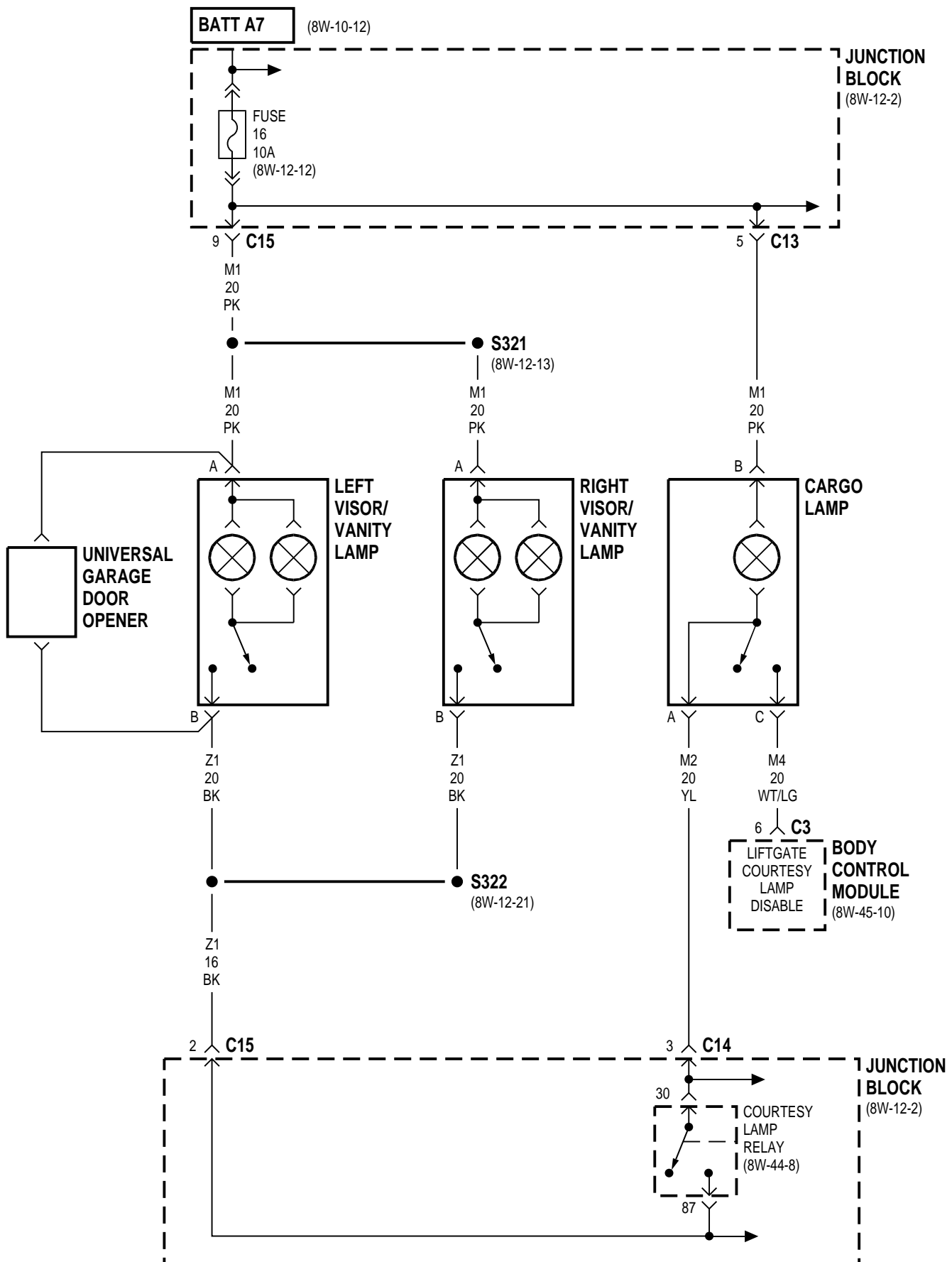
	page
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	15

Component	Page	Component	Page
A/C Heater Control	8W-44-12	Park/Neutral Position Switch	8W-44-6
Ash Receiver Lamp	8W-44-11, 12	Passenger Door Module	8W-44-10
Automatic Day/Night Mirror	8W-44-6, 7	Radio	8W-44-8
Automatic Temperature Control Module ..	8W-44-12	Rear Wiper Module	8W-44-14
Body Control Module	8W-44-2, 5, 8, 9, 10, 11, 12, 13, 14	Right Courtesy Lamp	8W-44-2, 8
Cargo Lamp	8W-44-5	Right Door Courtesy Lamp	8W-44-10
Cigar Lighter Lamp	8W-44-12	Right Front Door Ajar Switch	8W-44-14
Circuit Breaker 2	8W-44-9, 10	Right Rear Door Ajar Switch	8W-44-14
Courtesy Lamp Relay	8W-44-2, 3, 4, 5, 8	Right Visor/Vanity Lamp	8W-44-5
Dome/Reading Lamp	8W-44-3	S109	8W-44-2
Driver Door Module	8W-44-9	S119	8W-44-6
Driver Power Mirror	8W-44-7	S124	8W-44-2
Floor Console Lamps	8W-44-11	S202	8W-44-2, 7, 8, 11, 12, 13
Fuse 6	8W-44-6	S203	8W-44-9, 10
Fuse 16	8W-44-2, 3, 4, 5, 8	S204	8W-44-9, 10
Fuse 17	8W-44-13	S205	8W-44-11
G107	8W-44-2	S209	8W-44-11, 12, 13
G300	8W-44-14	S212	8W-44-6
G301	8W-44-10	S214	8W-44-11, 12
G302	8W-44-9	S216	8W-44-2, 7, 8, 11, 12
G303	8W-44-8	S220	8W-44-2, 7, 8, 12
G304	8W-44-2, 7, 8, 11, 12, 13	S302	8W-44-11
G305	8W-44-11	S304	8W-44-11
Glove Box Lamp	8W-44-2	S306	8W-44-9, 10
Graphic Display Module	8W-44-12	S307	8W-44-9, 10
Headlamp Switch	8W-44-11, 13	S309	8W-44-8
Illumination	8W-44-13	S316	8W-44-14
Instrument Cluster	8W-44-11	S321	8W-44-3, 4, 5
Junction Block ...	8W-44-2, 3, 4, 5, 6, 7, 8, 9, 10, 13	S322	8W-44-3, 4, 5, 7
Key-In Switch/Halo Lamp	8W-44-2	S323	8W-44-6
Lamps	8W-44-13	S324	8W-44-9
Left Courtesy Lamp	8W-44-2, 8	S325	8W-44-10
Left Door Courtesy Lamp	8W-44-9	S328	8W-44-14
Left Front Door Ajar Switch	8W-44-14	S329	8W-44-14
Left Rear Door Ajar Switch	8W-44-14	S334	8W-44-3, 4
Left Visor/Vanity Lamp	8W-44-5	Switch Pod	8W-44-11
Liftgate Ajar Switch	8W-44-14	Underhood Lamp	8W-44-2
Liftglass Ajar Switch	8W-44-14	Universal Garage Door Opener	8W-44-5
Mercury Switch	8W-44-2	Vehicle Information Center	8W-44-12
Overhead Console	8W-44-4		

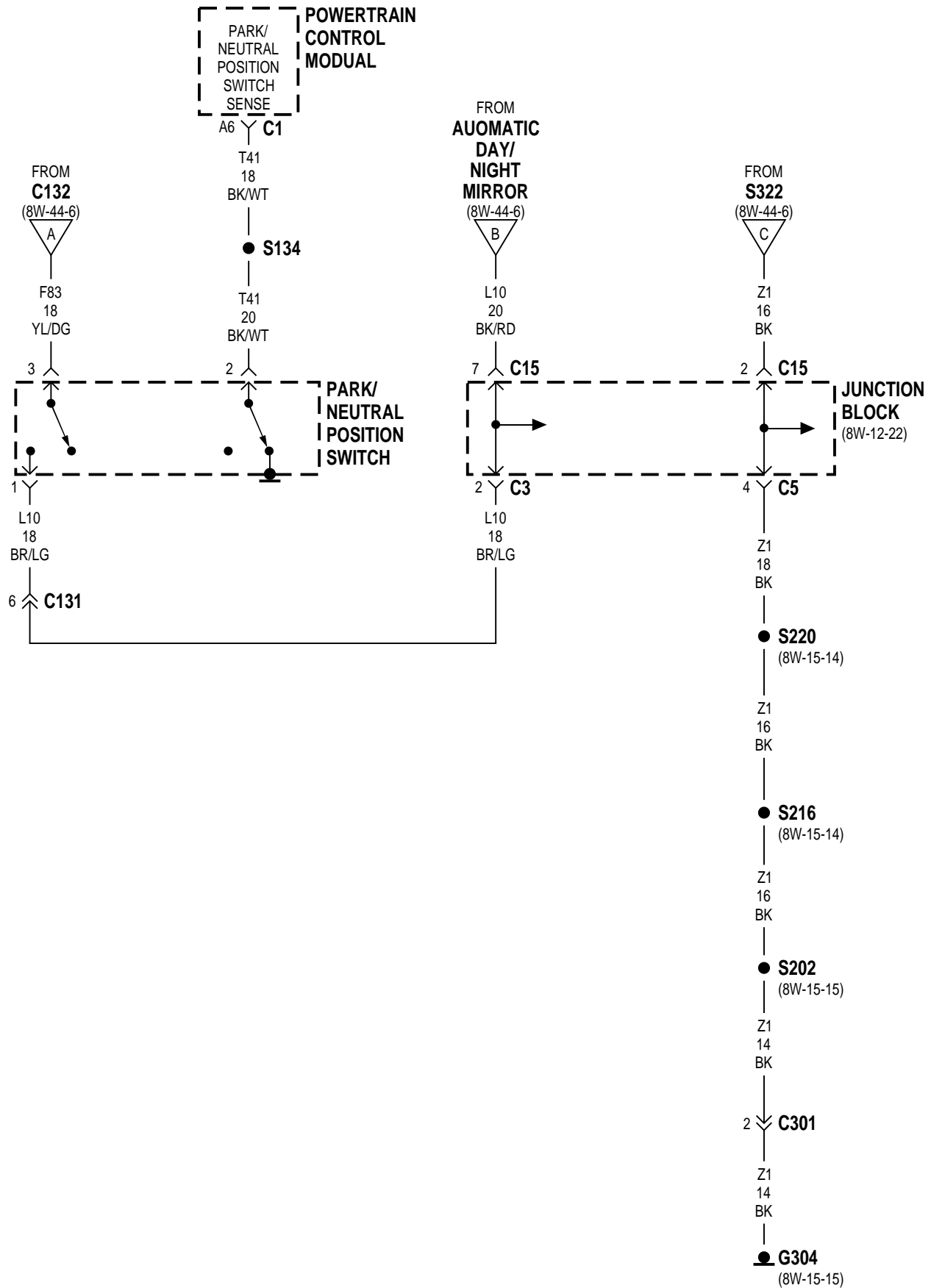


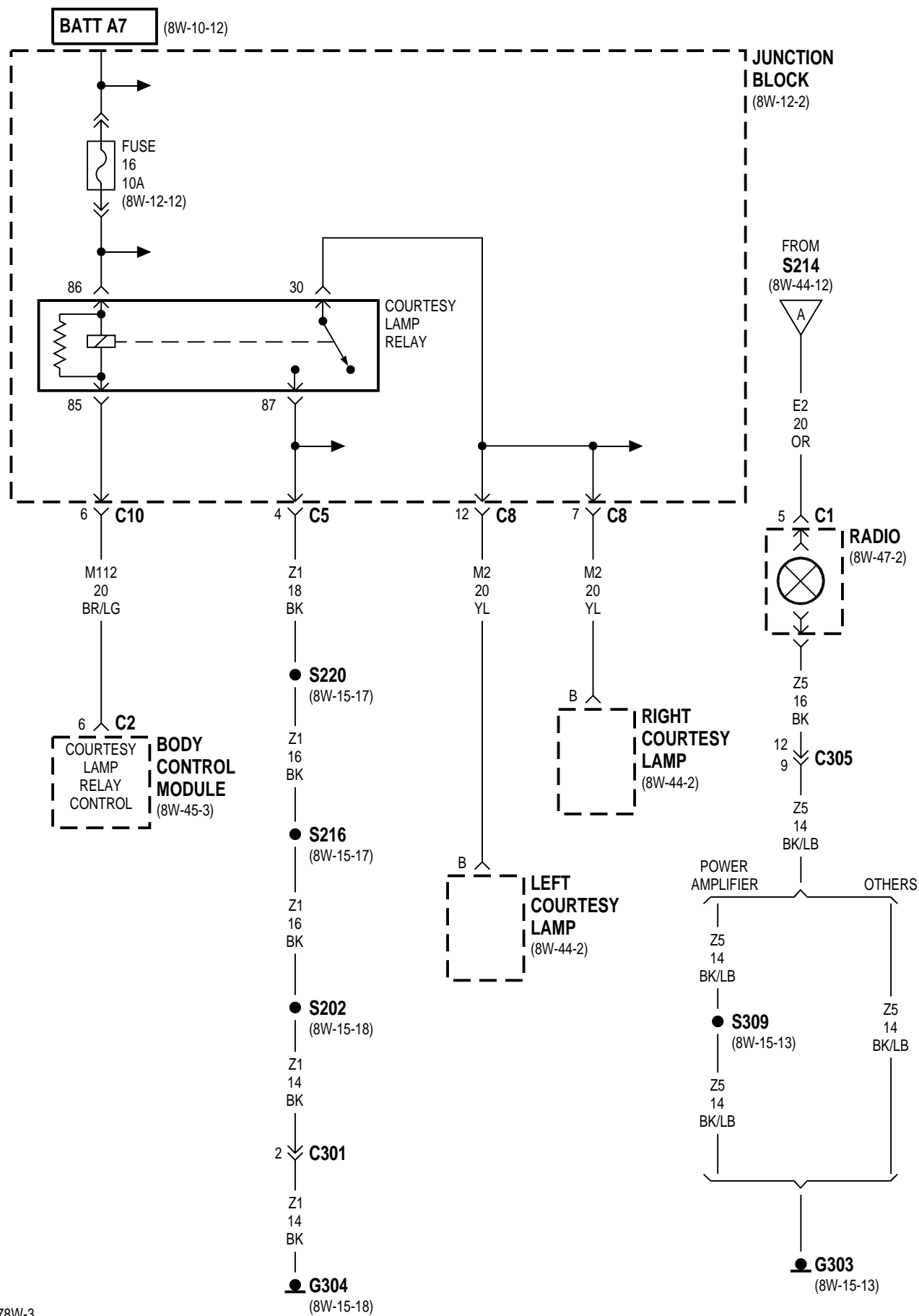


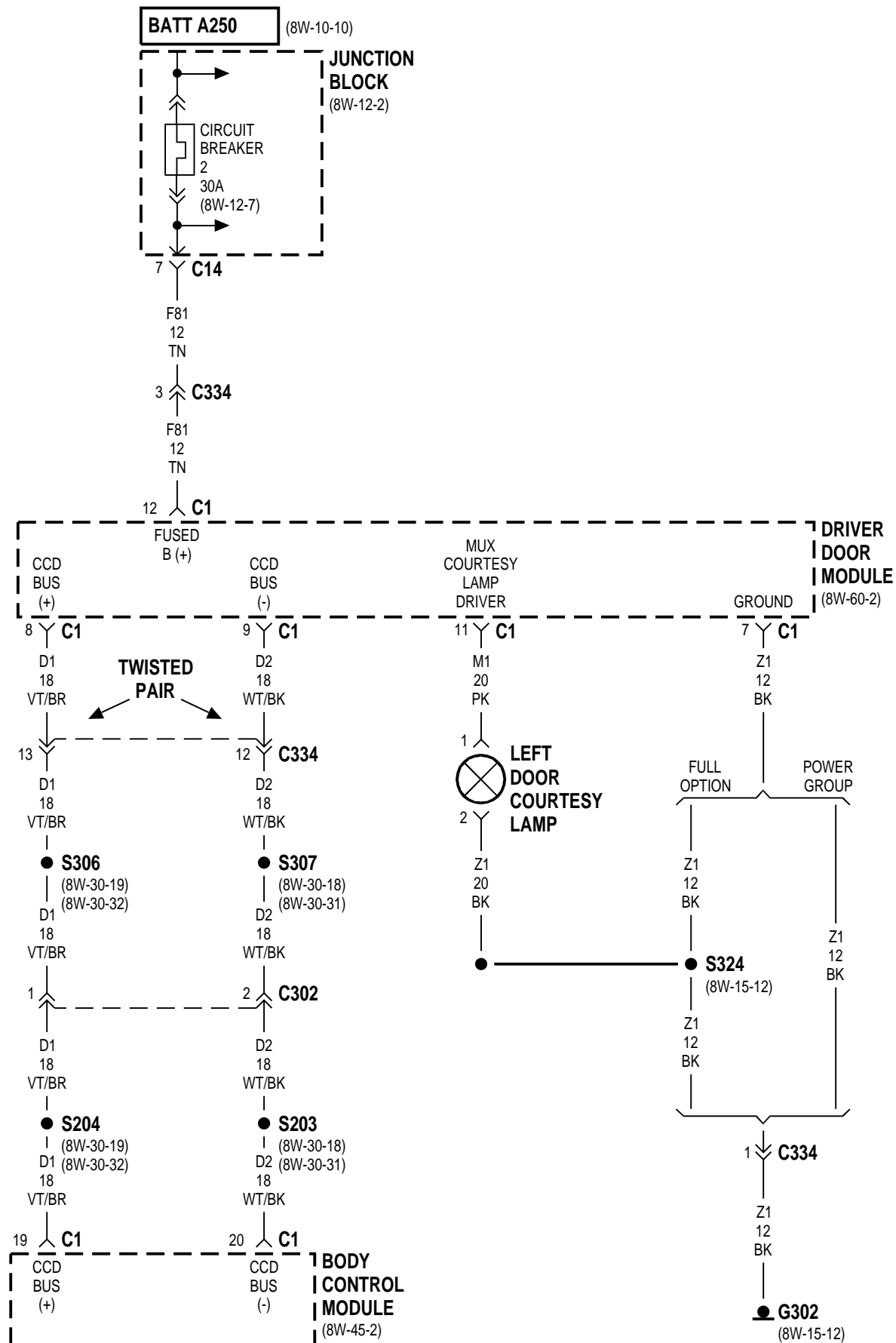




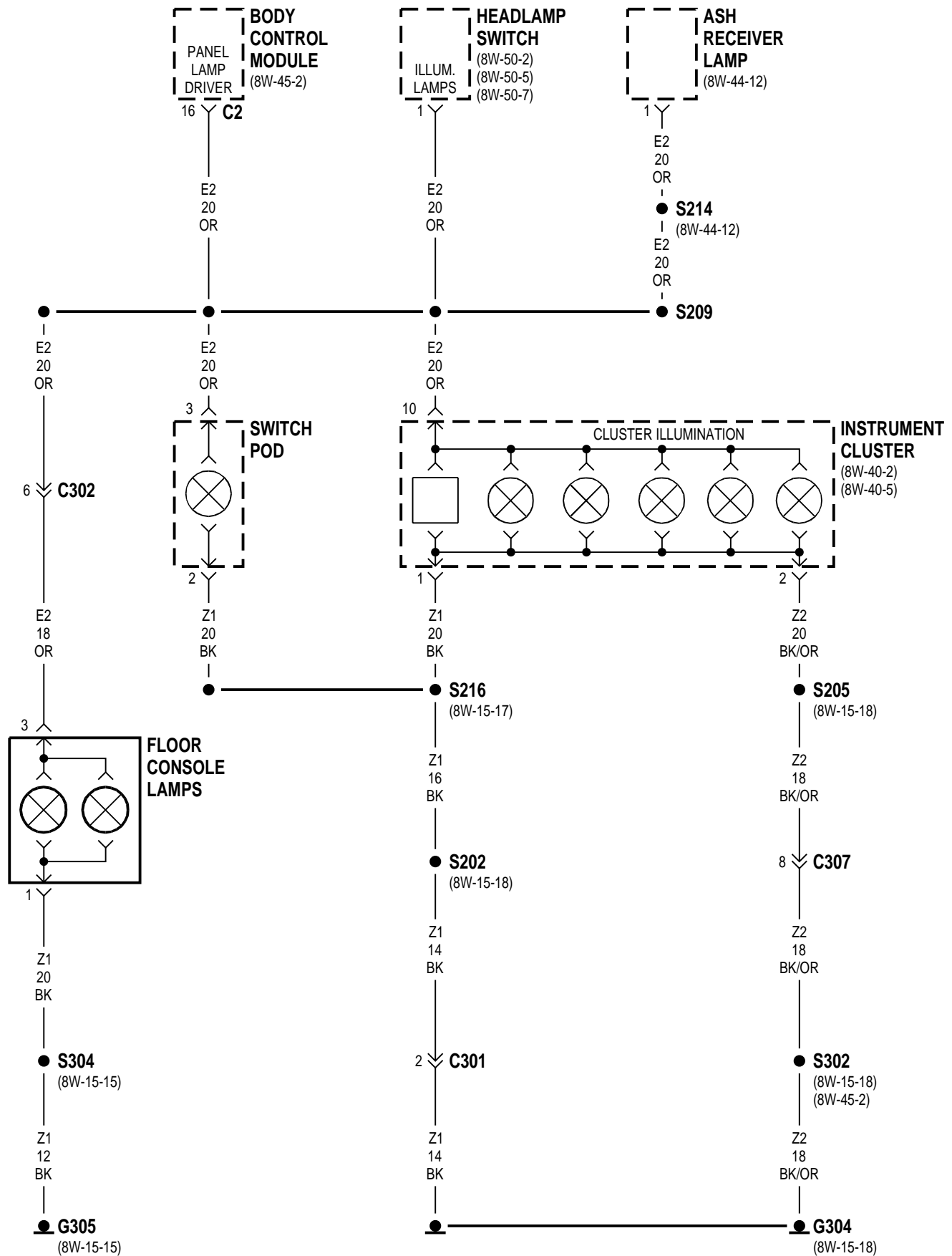


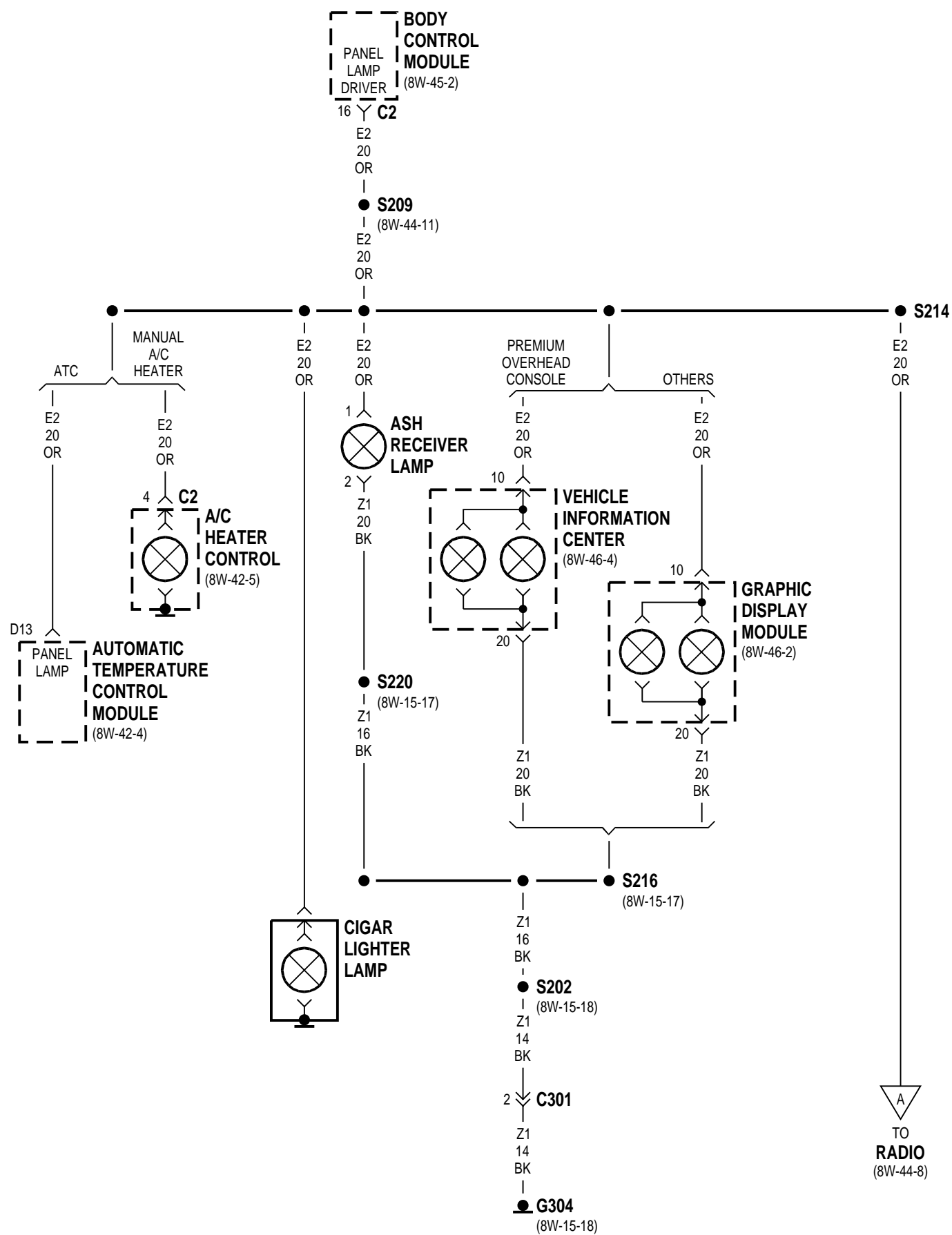


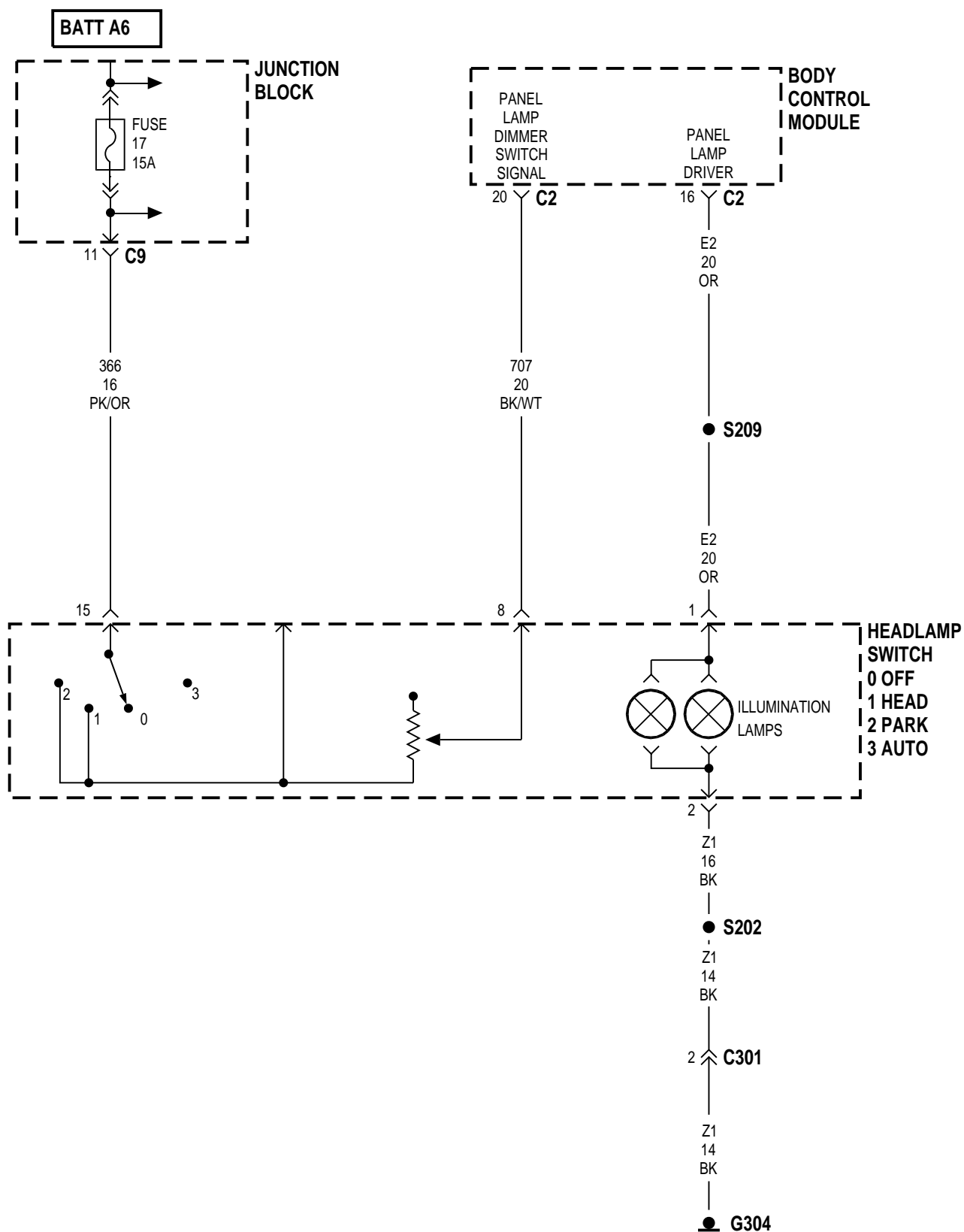


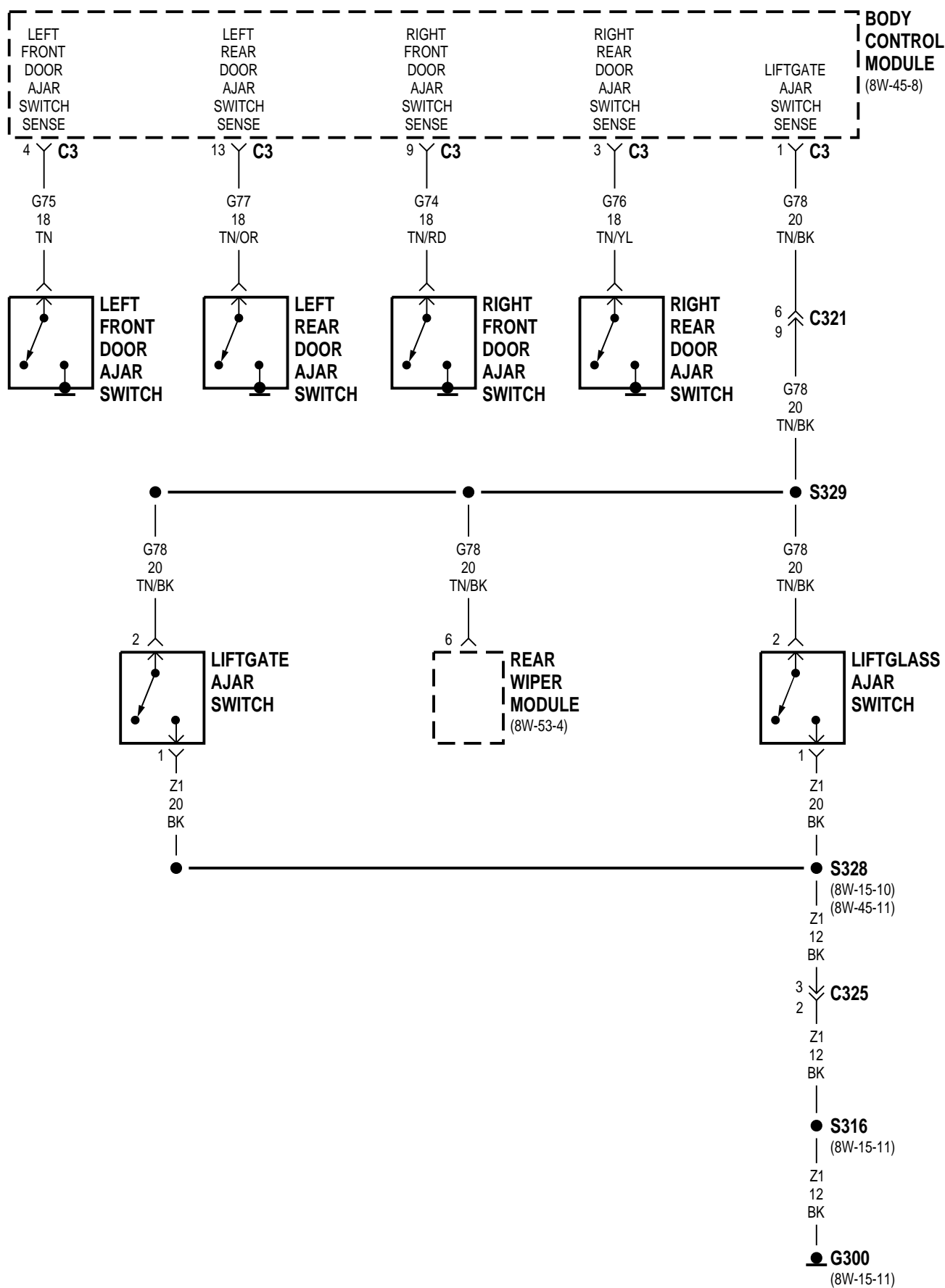












8W-44 INTERIOR LIGHTING

INDEX

	page		page
DESCRIPTION AND OPERATION		INTRODUCTION	15
COURTESY LAMPS, CARGO LAMP, IGNITION		OVERHEAD CONSOLE LAMPS	16
SWITCH KEY-IN HALO LAMP	15	UNDERHOOD LAMP	16
DAY/NIGHT MIRROR	16	UNIVERSAL GARAGE DOOR OPENER	16
GLOVE BOX LAMP	16	VISOR VANITY MIRRORS	16
ILLUMINATION LAMPS	15		

DESCRIPTION AND OPERATION

INTRODUCTION

The Body Control Module (BCM) controls the courtesy lamps and rear cargo lamps. The reading dome/reading lamps in the overhead console act as courtesy lamps as well as containing a switch for independent operation.

Circuit 707 from the dimmer switch circuitry in the head lamp switch provides the illumination lamp intensity signal to the BCM. The BCM powers the illumination lamps on circuit E2.

When the ignition switch is in the START or RUN position, it connects circuit A1 from fuse 8 in the PDC to circuit A21. Circuit A21 powers circuit F99 through PDC fuse 18. Circuit F99 feeds the BCM.

In the ACCESSORY or RUN position, the ignition switch connects circuit A1 to circuit A31. Circuit A31 powers circuit V23 through fuse 3 in the junction block. Circuit V23 feeds the BCM.

ILLUMINATION LAMPS

When the headlamps or parking lamps are ON, the The Body Control Module (BCM) receives the park lamp input on circuit L90 and the illumination lamp intensity signal on circuit 707. Circuit 707 from the dimmer switch circuitry in the head lamp switch provides the illumination lamp intensity signal to the BCM.

After calculating the requested illumination lamp intensity, the BCM powers the following illumination lamps on circuit E2:

- Headlamp switch
- Floor console
- Instrument panel
- Ash receiver
- Graphic Display or Vehicle Information Center (VIC)
- Cigar lighter
- Radio
- A/C-Heater control switch

Circuit Z1 provides ground for the floor console lamps, instrument panel lamps, ash receiver lamp, graphic display or VIC. Circuit Z4 grounds the automatic temperature control switch lamp. Circuit Z5 grounds the radio lamp. The cigar lighter lamp and A/C-Heater control switch lamp (manual A/C-Heater) are case grounded.

COURTESY LAMPS, CARGO LAMP, IGNITION SWITCH KEY-IN HALO LAMP

When the courtesy lamp switch closes, it connects circuit M11 from the Body Control Module to ground on circuit Z1. In response to the courtesy lamp signal, the BCM energizes the courtesy lamp relay by grounding the relay coil on circuit M112. When the relay energizes, it connects circuit M2 to ground on circuit Z1. Circuit M2 provides ground for the right and left courtesy lamps, dome/reading lamps, key-in halo lamp and cargo lamp.

Circuit A7 from fuse 15 in the Power Distribution Center (PDC) powers circuit M1 through fuse 16 in the junction block. Circuit M1 powers the right and left courtesy lamps, ignition switch key-in halo lamp, and cargo lamp. Circuit M1 also powers the glove box lamp and underhood lamp.

DOOR COURTESY LAMPS

When the BCM receives the courtesy lamp signal, it broadcasts a message on the CCD bus. The message signals the Drivers Door Module (DDM) and Passenger Door Module (PDM). In response, the DDM and PDM power the courtesy lamps in the front doors on circuit M1. Circuit Z1 grounds the courtesy lamps in the front doors.

Circuit F81 from the circuit breaker in cavity 2 of the junction block powers the DDM and PDM. Circuit A250 from fuse 11 in the PDC feeds circuit F81 through the circuit breaker.

DESCRIPTION AND OPERATION (Continued)

LIFTGATE COURTESY LAMP DISABLE SWITCH

When closed, the liftgate disable switch provides signal to the BCM on circuit M4 indicating a request to disable the courtesy lamps. To operate, all the doors must be closed with only the liftgate open. Pushing on the liftgate lens activates the switch. Pushing on the lense a second time deactivates the switch.

After receiving the courtesy lamp disable signal, the BCM turns off the courtesy lamps by de-energizing the courtesy lamp relay.

GLOVE BOX LAMP

Circuit A7 from 15 in the Power Distribution Center (PDC) powers circuit M1 through fuse 16 in the junction block. Circuit M1 powers the glove box lamp. The lamp has a switch in series which when closed, connects the lamp to ground on circuit Z1.

UNDERHOOD LAMP

Circuit M1 from fuse 16 in the Power Distribution Center (PDC) feeds the underhood lamp. The lamp contains a mercury switch which connects the lamp to ground on circuit Z1 when the hood is raised.

VISOR VANITY MIRRORS

Circuit A7 from fuse 15 in the Power Distribution Center (PDC) powers circuit M1 through fuse 16 in the junction block. Circuit M1 feeds the visor vanity mirror lamps. Each mirror has a switch grounds the lamps in the mirrors to circuit Z1.

OVERHEAD CONSOLE LAMPS

Circuit A7 from fuse 15 in the Power Distribution Center (PDC) powers circuit M1 through fuse 16 in the junction block. Circuit M1 feeds the overhead console lamps.

Each overhead console lamp has a switch that connects the lamps to ground on circuit Z1. The lamps are also grounded when the Body Control Module (BCM) energizes the courtesy lamp relay to connect circuit M2 to ground on circuit Z1.

DAY/NIGHT MIRROR

When the ignition switch is in the RUN position, it connects circuit A1 from fuse 8 in the Power Distribution Center (PDC) circuit A22. Circuit A22 powers circuit F83 through fuse 6 in the junction block. Circuit F83 feeds the day/night rear view mirror. Circuit Z1 grounds mirror.

Circuits P112 and P114 connect from the day/night mirror to the drivers outside mirror.

Circuit L10 from the park/neutral switch signals the day/night mirror when the vehicle is in reverse. The mirror turns off when the vehicle is in reverse.

UNIVERSAL GARAGE DOOR OPENER

Circuit A7 from fuse 15 in the Power Distribution Center (PDC) powers circuit M1 through fuse 16 in the junction block. Circuit M1 feeds the visor vanity mirrors and the universal garage door opener. The opener is located on the left visor. Circuit Z1 provides ground for the opener.

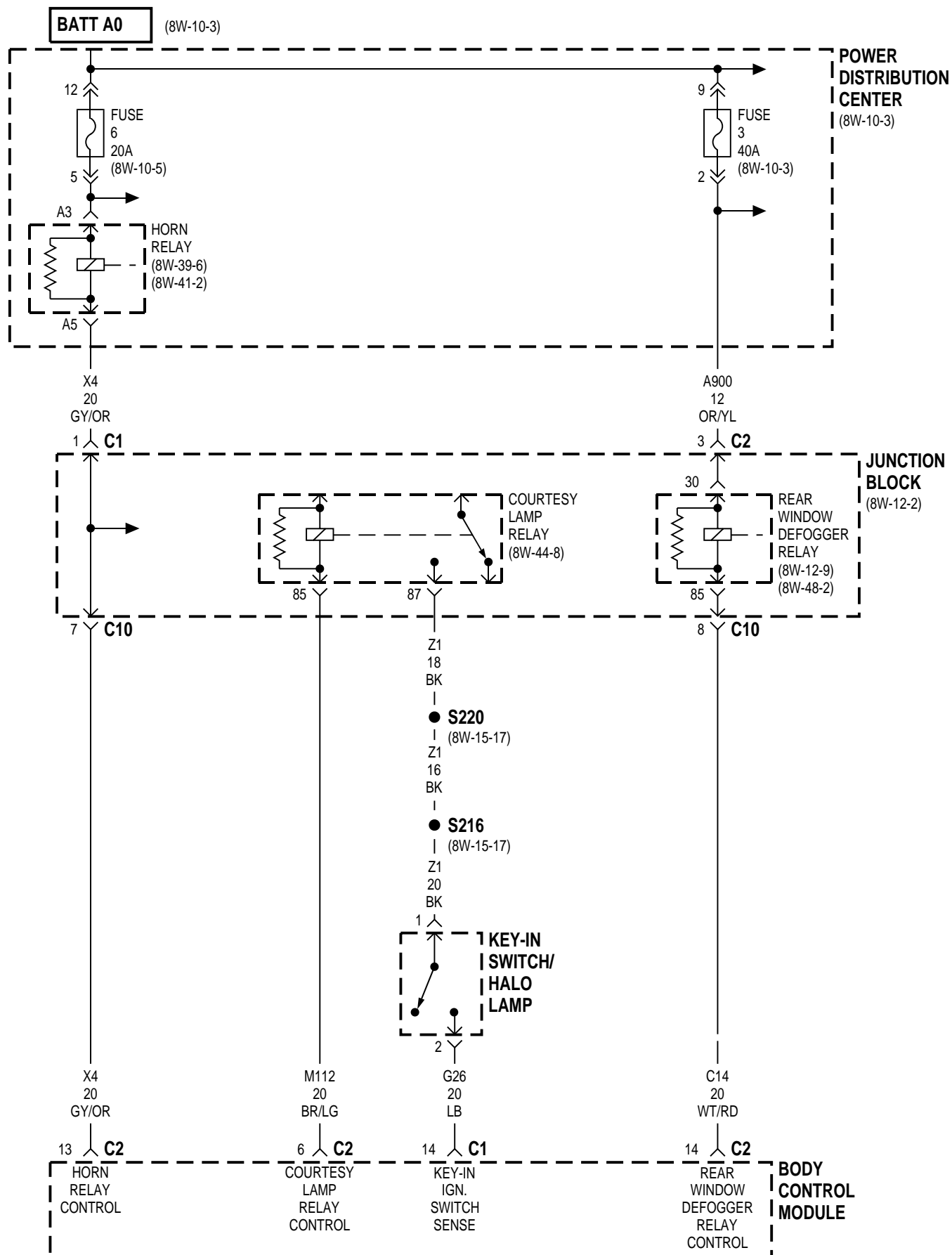
8W-45 BODY CONTROL MODULE

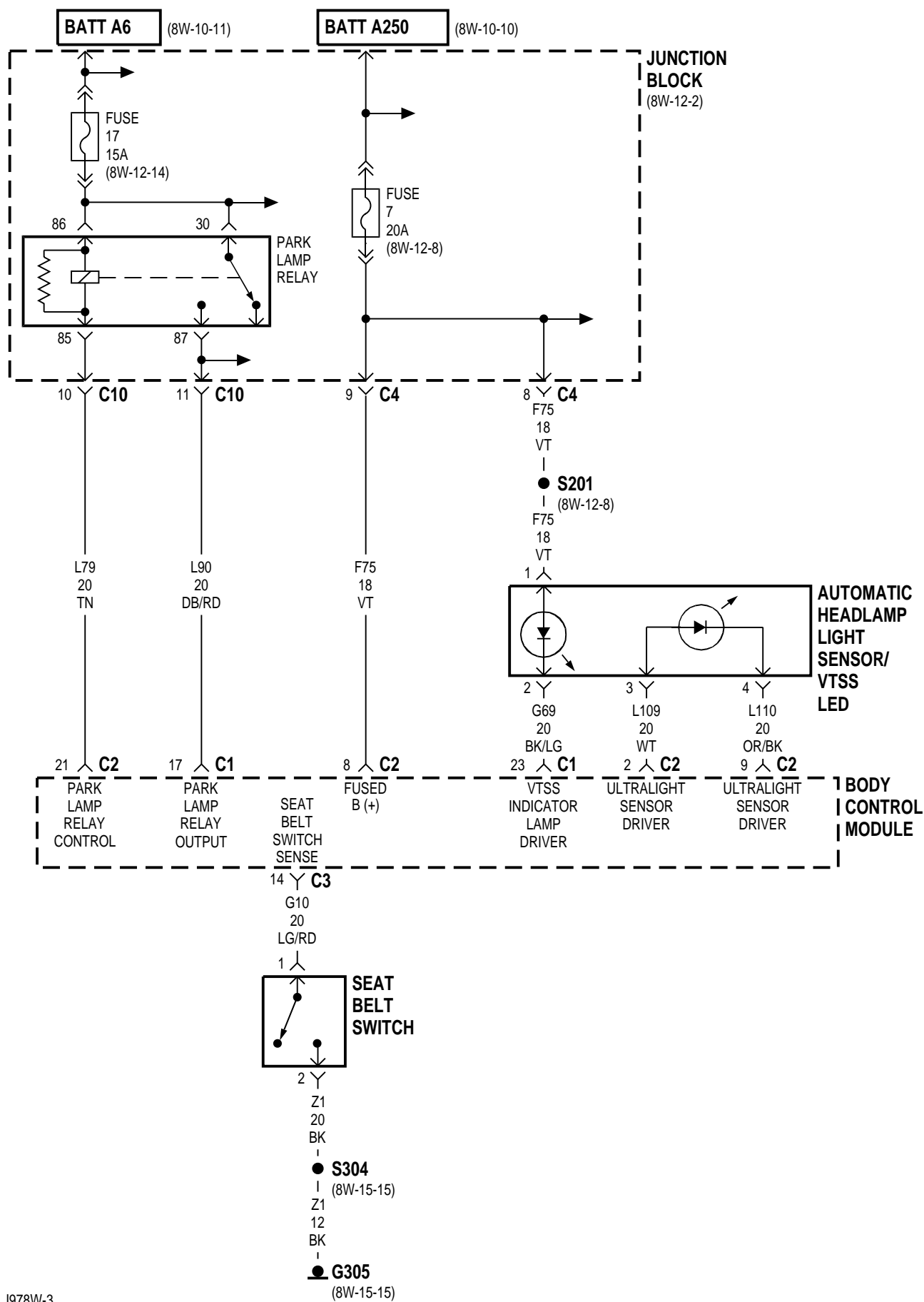
INDEX

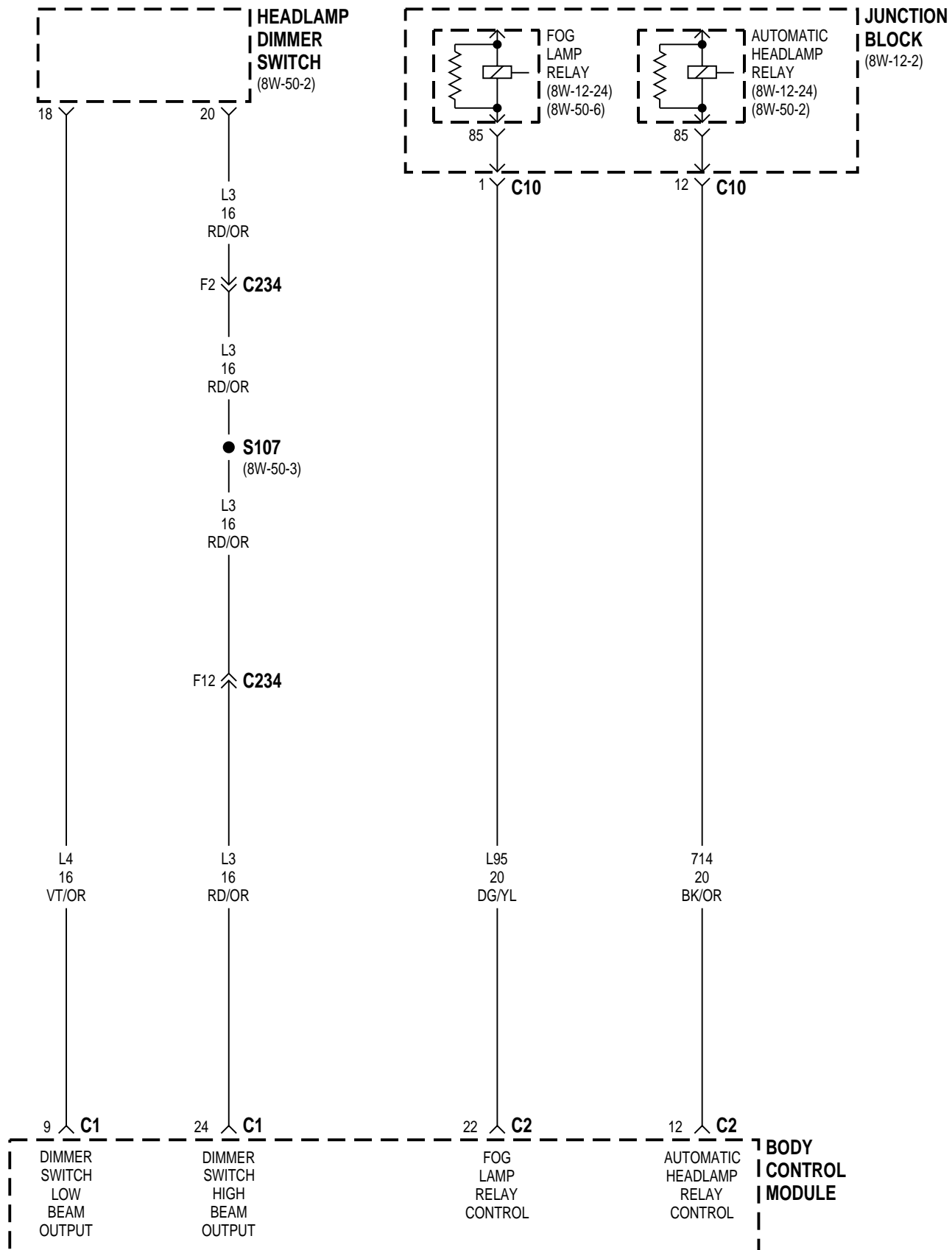
	page
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	12

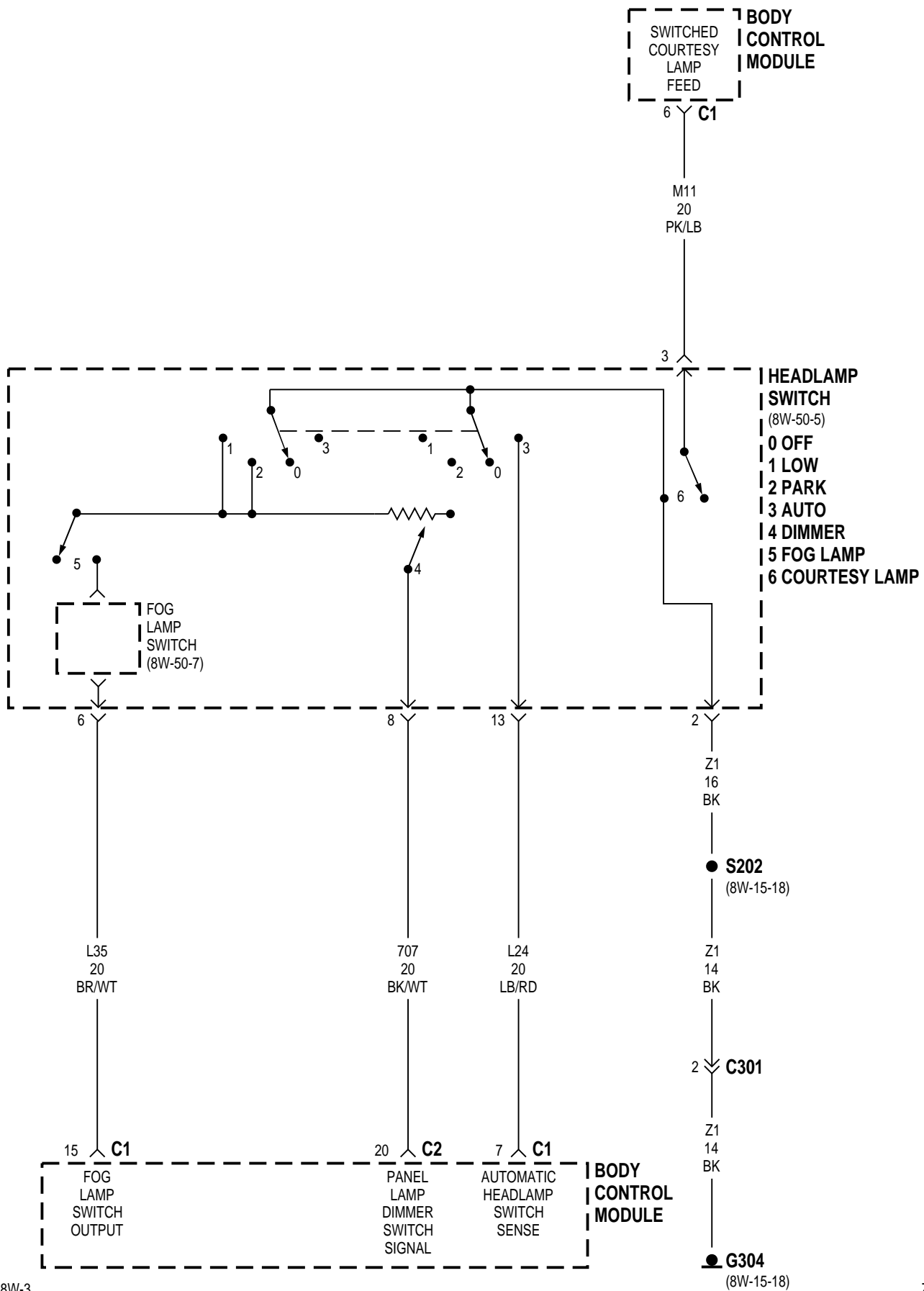
Component	Page	Component	Page
A/C Heater Control	8W-45-9	Liftgate Ajar Switch	8W-45-11
Ambient Temperature Sensor	8W-45-9	Liftgate Cylinder Lock Switch	8W-45-8
Ash Lamp Receiver	8W-45-10	Liftglass Ajar Switch	8W-45-11
Automatic Headlamp Light Sensor/Vtss		Park Brake Switch	8W-45-9
Led	8W-45-4	Park Lamp Relay	8W-45-4
Automatic Headlamp Relay	8W-45-5	Power Distribution Center	8W-45-2, 3
Automatic Temperature Control Module ...	8W-45-9	Rear Window Defogger Relay	8W-45-3
Body Control Module .	8W-45-2, 3, 4, 5, 6, 7, 8, 9, 10	Rear Window Defogger Switch	8W-45-9
Brake Warning Switch	8W-45-9	Rear Wiper Module	8W-45-11
Cargo Lamp	8W-45-10	Right Front Cylinder Lock Switch	8W-45-8
Circuit Breaker 1	8W-45-7	Right Front Door Ajar Switch	8W-45-8
Clockspring	8W-45-7	Right Rear Door Ajar Switch	8W-45-8
Courtesy Lamp Relay	8W-45-3	S101	8W-45-2
Data Link Connector	8W-45-2	S107	8W-45-5
Daytime Running Lamp Module	8W-45-5	S117	8W-45-9
Floor Console Lamps	8W-45-10	S120	8W-45-7
Fog Lamp Relay	8W-45-5	S122	8W-45-7
Fog Lamp Switch	8W-45-6	S201	8W-45-4
Fuse 3	8W-45-2, 3	S202	8W-45-2
Fuse 6	8W-45-3	S202	8W-45-6
Fuse 7	8W-45-4	S203	8W-45-2
Fuse 17	8W-45-4	S204	8W-45-2
Fuse 18	8W-45-2	S205	8W-45-2
G300	8W-45-11	S207	8W-45-7
G304	8W-45-2, 6	S209	8W-45-10
G305	8W-45-4	S214	8W-45-10
Headlamp Dimmer Switch	8W-45-5	S216	8W-45-3
Headlamp Switch	8W-45-6	S219	8W-45-9
Hood Switch	8W-45-10	S220	8W-45-3
Horn Relay	8W-45-3	S302	8W-45-2
Instrument Cluster	8W-45-10	S303	8W-45-9
Intermittent Wiper Relay	8W-45-7	S304	8W-45-4
Intermittent Wiper Switch	8W-45-7	S305	8W-45-8
Junction Block	8W-45-2, 3, 4, 5, 7	S328	8W-45-11
Key-In Switch/Halo Lamp	8W-45-3	S329	8W-45-11
Left Front Cylinder Lock Switch	8W-45-8	Seat Belt Switch	8W-45-4
Left Front Door Ajar Switch	8W-45-8	Switch Pod	8W-45-10
Left Rear Door Ajar Switch	8W-45-8		

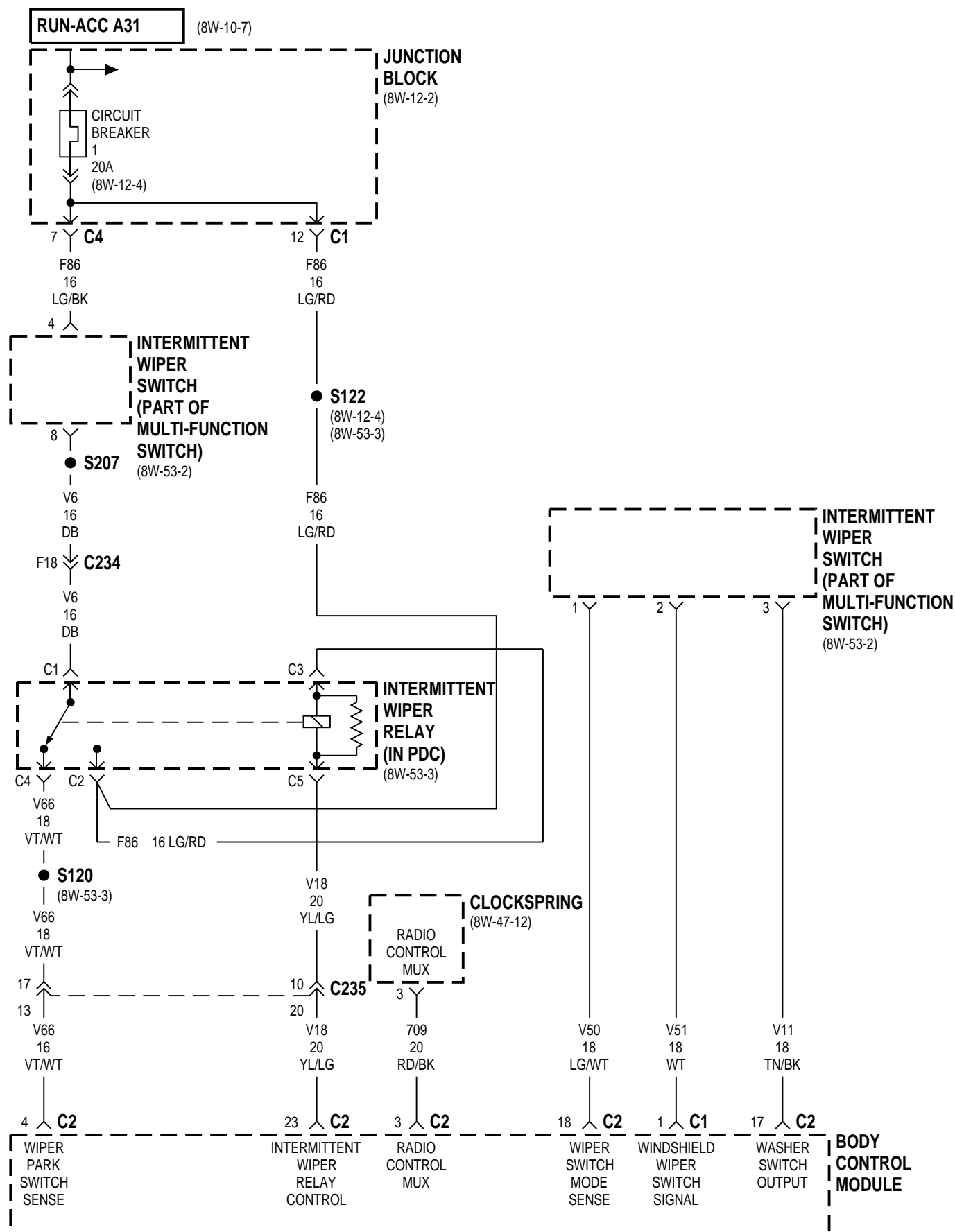


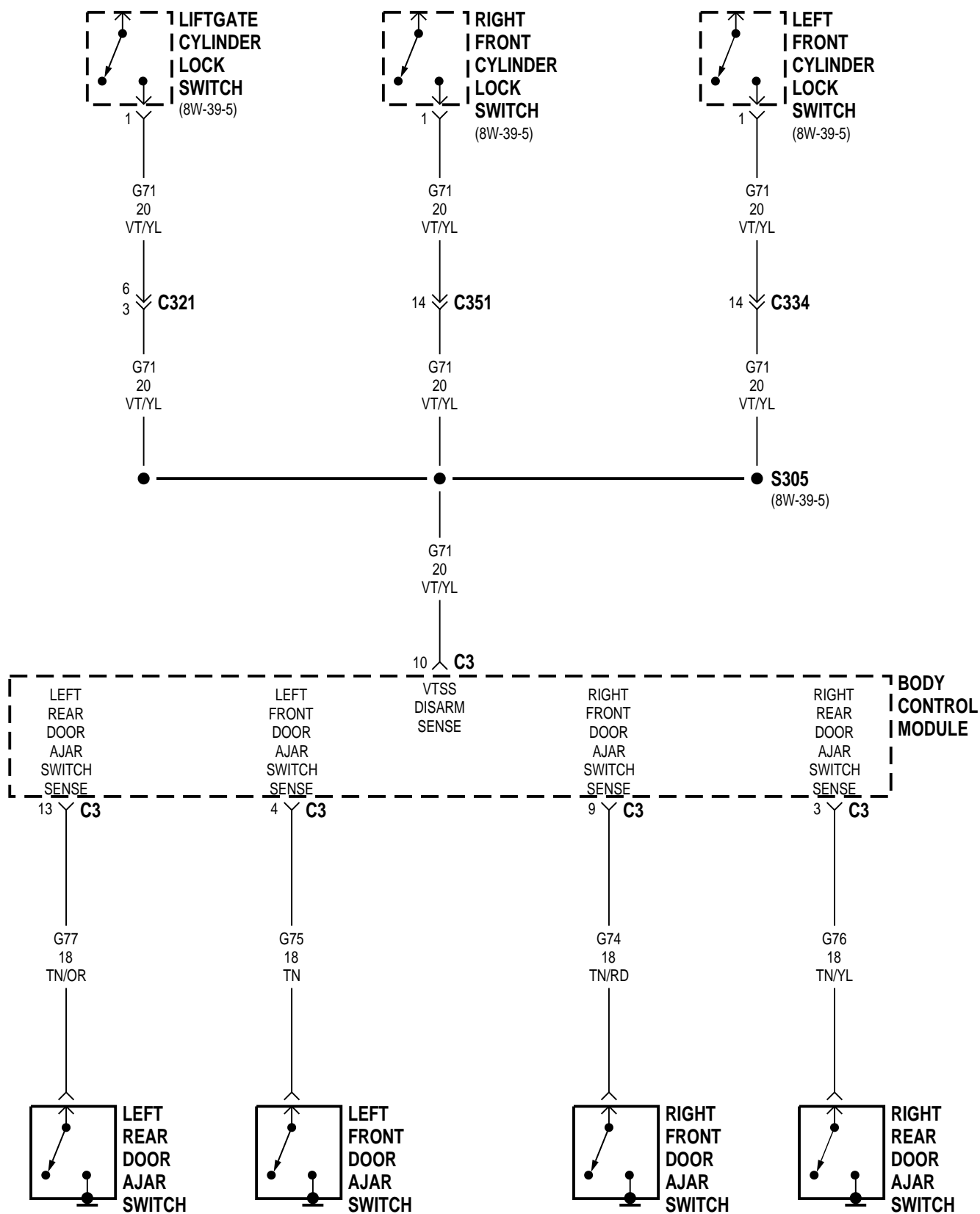


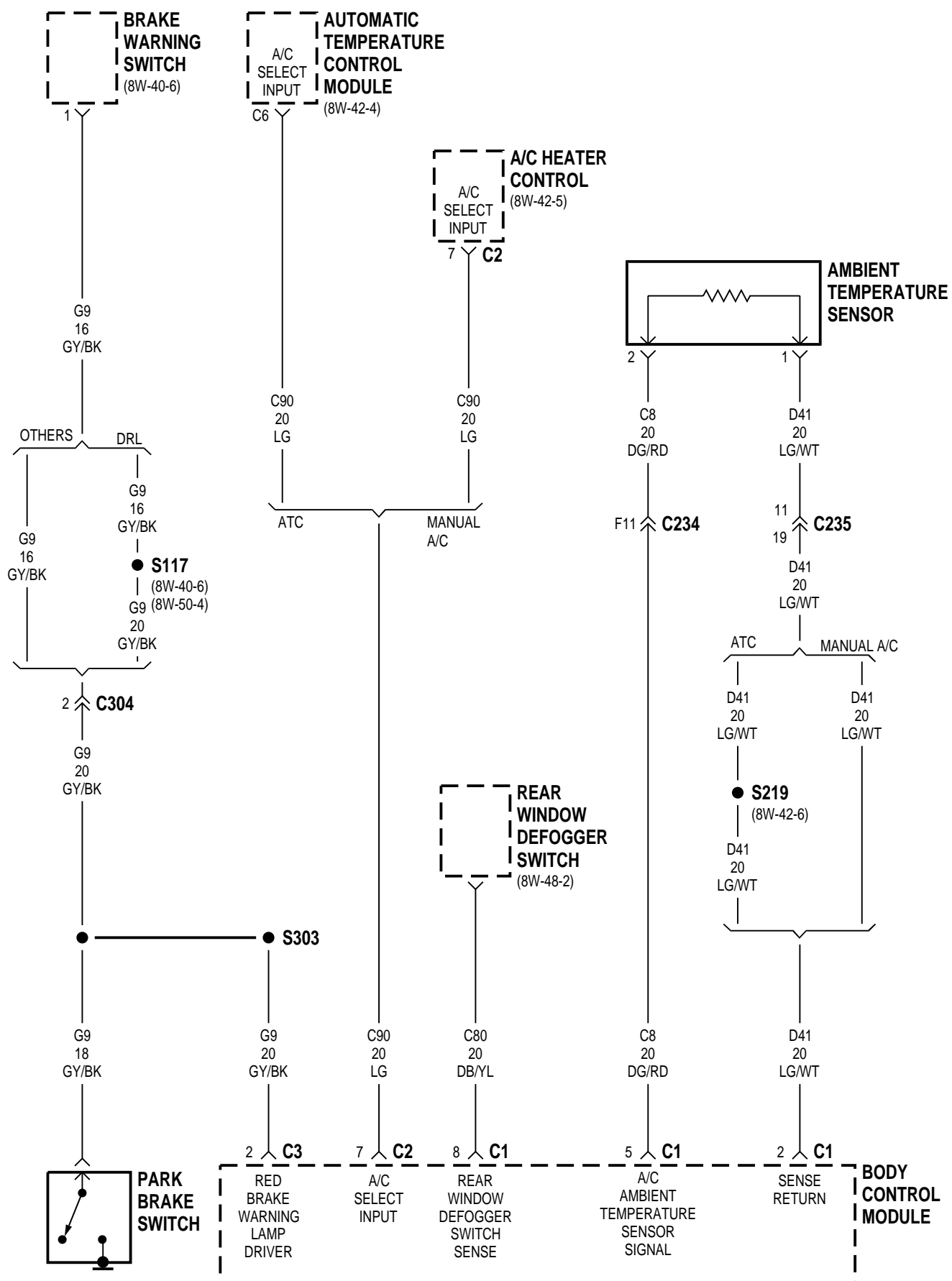




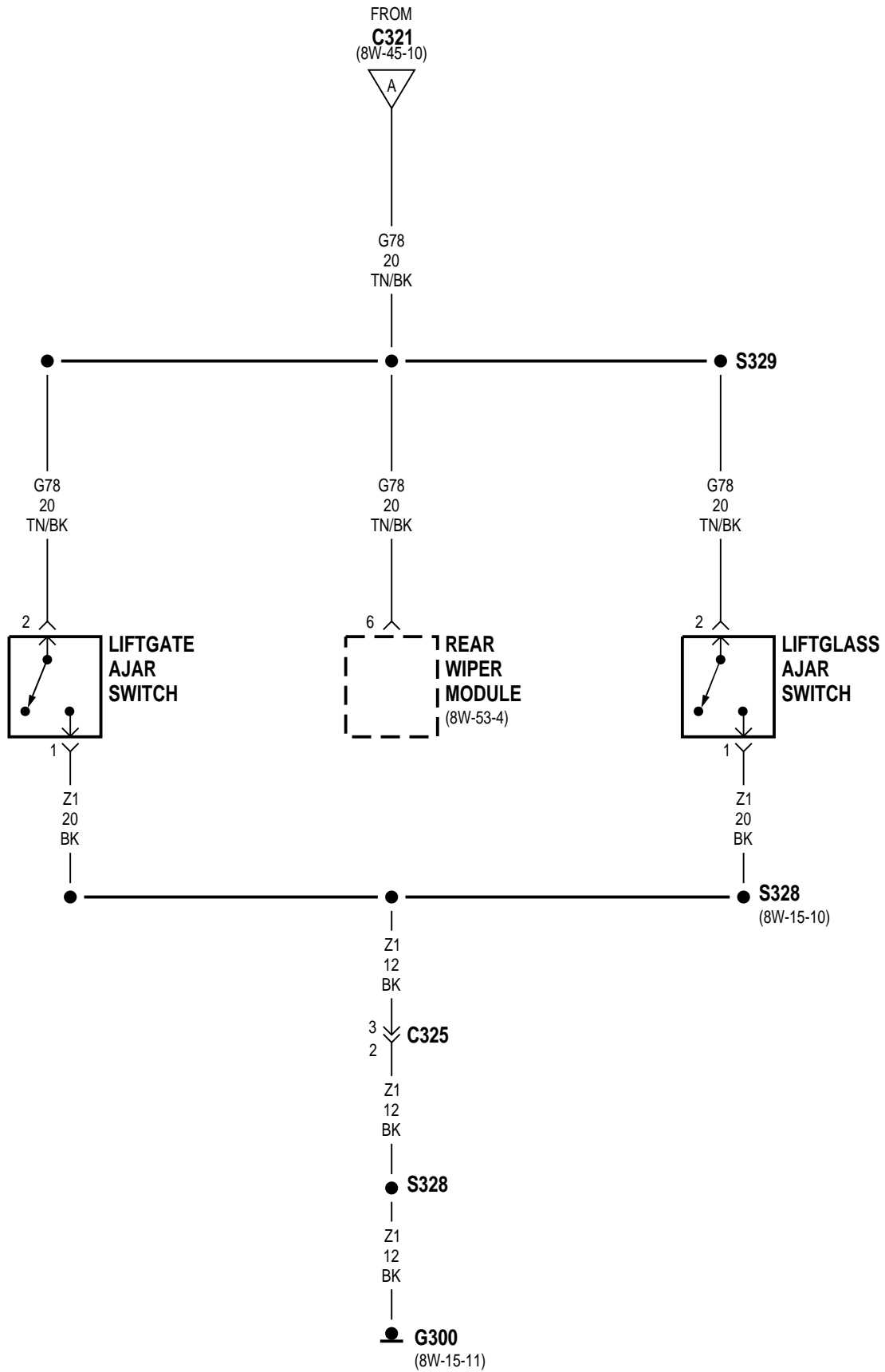












8W-45 BODY CONTROL MODULE

INDEX

	page		page
DESCRIPTION AND OPERATION		INTRODUCTION	12
A/C SELECT SWITCH	12	KEY-IN IGNITION CHIME	13
AJAR CHIME	13	LIFTGATE COURTESY LAMP DISABLE SWITCH	13
AMBIENT TEMPERATURE SENSOR	12	LOW FUEL WARNING LAMP ANNOUNCEMENT CHIME	13
AUTO HEADLAMPS	13	LOW OIL PRESSURE WARNING CHIME	13
COURTESY LAMP SWITCH	12	PARK LAMP SWITCH SENSE	13
ENGINE TEMPERATURE CRITICAL CHIME	13	SEAT BELT SWITCH	13
IGNITION SWITCH SENSE	13		
INSTRUMENT PANEL DIMMING	13		

DESCRIPTION AND OPERATION

INTRODUCTION

The Body Control Module (BCM) used in this vehicle provides a communication interface with other controllers and modules. The BCM also controls various vehicle functions. Circuit operation of specific systems or components controlled by the BCM are found in wiring diagram section covering the component or system.

This section of the wiring diagrams provides an overview of the functions controlled or supported by the BCM. The BCM provides or supports the following features:

- A/C Select Switch Status
- Ambient Temperature
- Automatic Funeral Mode
- Automatic Headlamp Control
- Chime
- Courtesy Lamps with Time Out
- Door, Hood or Liftgate Ajar Status
- Door Lock Inhibit
- Electronic Odometer
- Electronic Vehicle Information Center
- Fog Lamp Control
- Headlamp Delay
- High Beam Indicator
- Illuminated Entry
- Instrument Panel Dimming
- Intermittent Wiper Control
- Liftgate Courtesy Lamp Disable
- Mechanical Instrument Cluster
- Rear Window Defogger Control
- Remote Radio Control
- Seat Belt Reminder
- Speed Sensitive Intermittent Wipe Control
- Vehicle Theft Security System

The BCM communicates with the following controllers and modules over the CCD bus:

- Automatic Temperature Control (ATC) Module
- Compass (Overhead Console)
- Driver Door Module (DDM)
- Mechanical Instrument Cluster
- Memory Seat Module
- Passenger Door Module (PDM)
- Powertrain Control Module
- Vehicle Information Center
- Radio

Circuit A250 from fuse 11 in the Power Distribution Center (PDC) powers circuit F75 through fuse 7 in the junction block. Circuit F75 supplies battery voltage to the BCM. Circuits Z1 and Z2 provide ground for the BCM.

A/C SELECT SWITCH

If the vehicle is equipped with Automatic Temperature Control (ATC), the Automatic Temperature Control Module sends the A/C select switch to the Body Control Module (BCM) on circuit C90. If the vehicle has manual A/C, the A/C-heater control switch sends the A/C select signal to the BCM on circuit C90.

AMBIENT TEMPERATURE SENSOR

The ambient air temperature sensor is a variable resistor. As ambient (outside) temperature varies, the resistance in the sensor changes. Circuit C8 from the Body Control Module (BCM) supplies power to the sensor. Circuit D41 provides the sensor signal to the BCM.

COURTESY LAMP SWITCH

When the courtesy lamp switch inside the headlamp switch closes, it completes a path to ground for circuit M11 from the Body Control Module (BCM). The BCM energizes the courtesy lamp relay in the junction block to power the courtesy lamps. Refer to section 8W-44.

DESCRIPTION AND OPERATION (Continued)

LIFTGATE COURTESY LAMP DISABLE SWITCH

When the courtesy lamp disable switch closes, it provides battery voltage to the Body Control Module (BCM) on circuit M4.

AUTO HEADLAMPS

When the operator puts the headlamp switch in the AUTO position, the auto headlamp switch closes and connects circuit L24 from the Body Control Module to ground. This signals the BCM to operate the headlamps based on the ultralight sensor input. The BCM powers the ultralight sensor on circuit L110. Circuit L109 provides the signal from the sensor to the BCM.

PARK LAMP SWITCH SENSE

When the operator puts the headlamp switch in the park lamp position, the park lamp switch closes and circuit L90 powers the parking lamps. Circuit L90 also provides an input to the Body Control Module (BCM). The BCM monitors the L90 circuit and circuit 707 from the dimmer switch to determine instrument panel lamp intensity

INSTRUMENT PANEL DIMMING

On circuit 707 from the dimmer switch in the headlamp switch, the Body Control Module (BCM) determines selected intensity for the instrument panel lamps. The BCM also transmits a signal representing required lamp intensity over the CCD bus. After receiving the signal from the CCD bus, all other display modules update their brightness level.

IGNITION SWITCH SENSE

On circuit V23, the Body Control Module (BCM) senses when the ignition switch is in the ACCESSORY or RUN position. The BCM senses when the ignition switch is in the START or RUN position on circuit F99.

AJAR CHIME

On models equipped with a Vehicle Information Center (VIC), the Body Control Module (BCM)

sounds an audible chime when the vehicle is moving if one of the doors, the hood, or liftgate opens. The BCM also signals the VIC over the CCD bus. The VIC then displays which component is ajar.

KEY-IN IGNITION CHIME

When the key is inserted into the ignition switch, the key-in switch closes and connects circuit G26 from the Body Control Module to ground on circuit Z1. When the key-in switch closes, the BCM sounds an audible fast rate chime.

SEAT BELT SWITCH

The seat belt switch closes when the seat belt is not buckled. When closed, the switch connects circuit G10 from the Body Control Module (BCM) to ground on circuit Z1. If the switch is closed while the ignition switch is ON, the BCM sounds an audible warning chime.

LOW OIL PRESSURE WARNING CHIME

When oil pressure drops below a calibrated level, the Body Control Module (BCM) sounds an audible chime to alert the operator. The BCM receives the low oil pressure signal on the CCD bus.

ENGINE TEMPERATURE CRITICAL CHIME

When engine temperature exceeds a pre-determined temperature, the Body Control Module (BCM) sounds an audible chime. The Powertrain Control Module (PCM) broadcasts engine coolant temperature to the BCM on the CCD bus.

LOW FUEL WARNING LAMP ANNOUNCEMENT CHIME

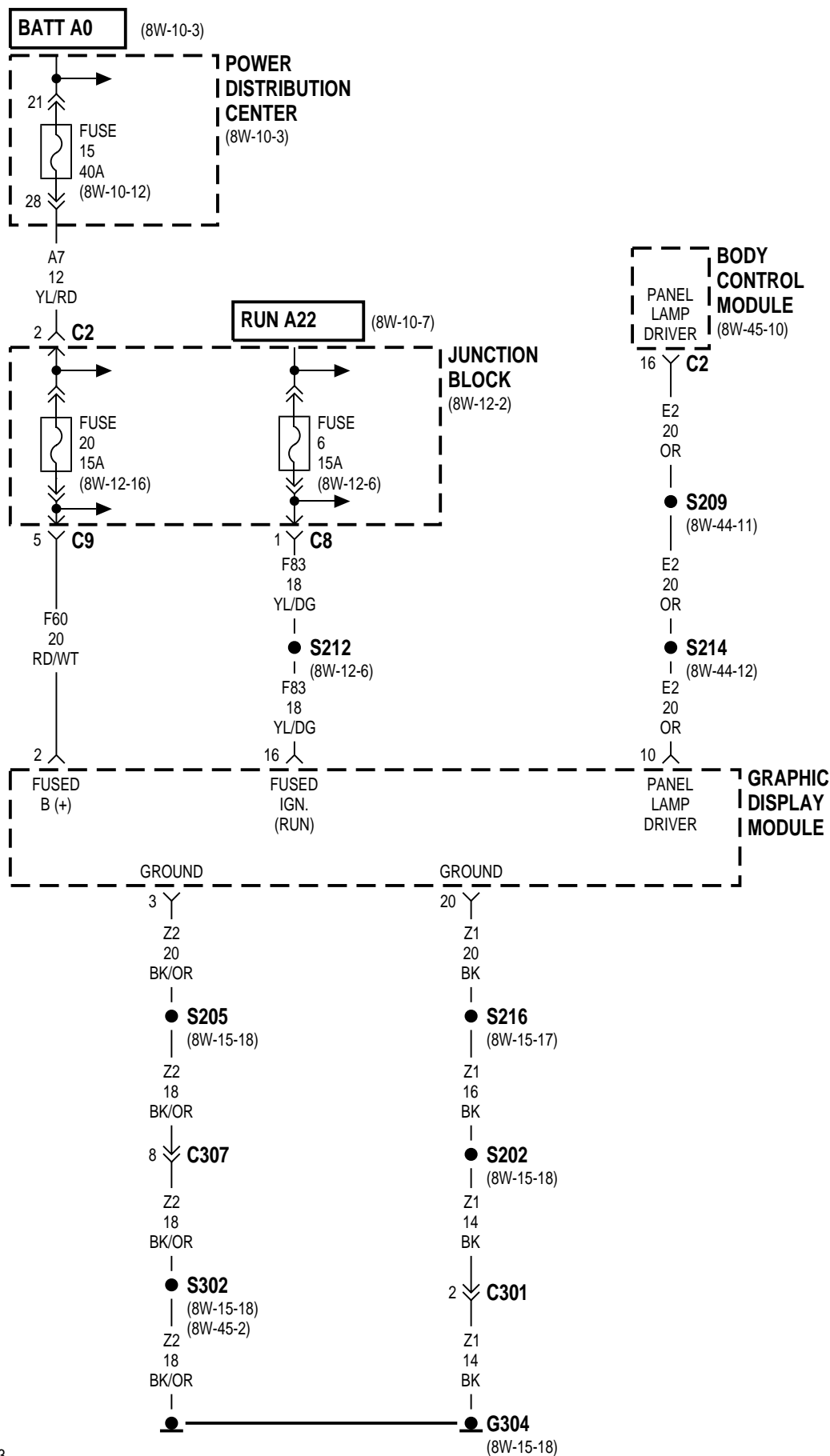
The Body Control Module (BCM) sounds an audible chime when the low fuel warning lamp illuminates.

8W-46 MESSAGE CENTER

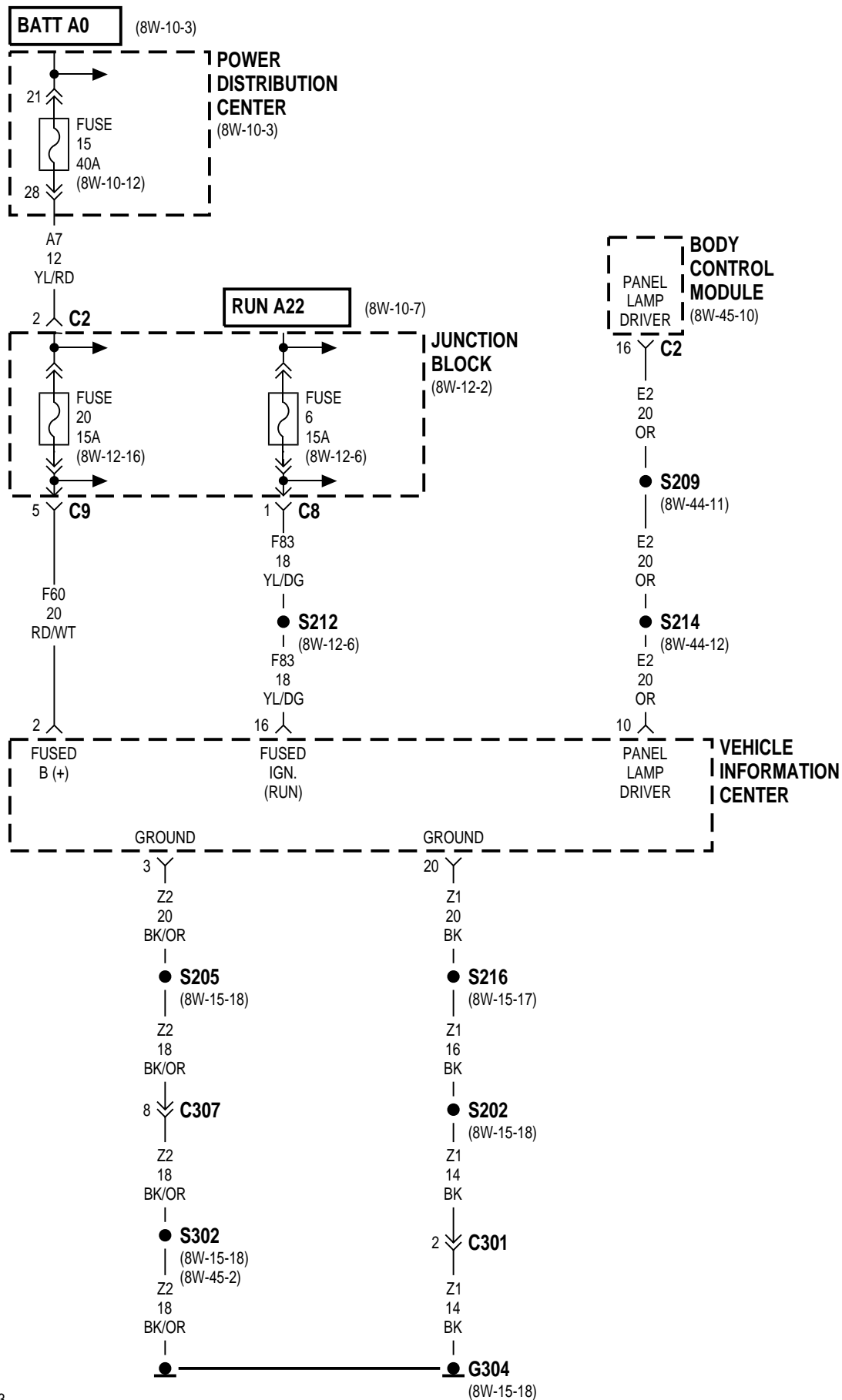
INDEX

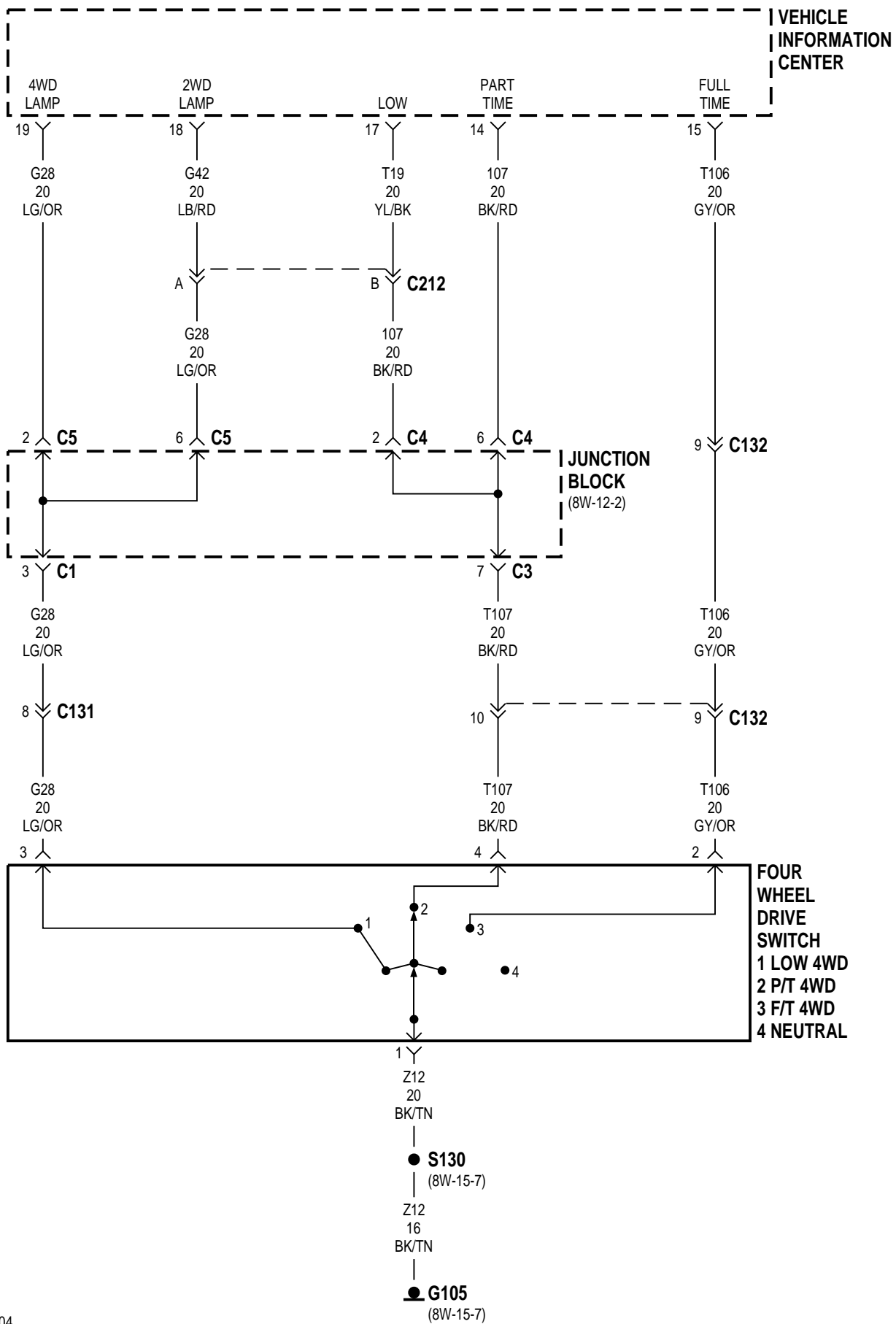
	page
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	8

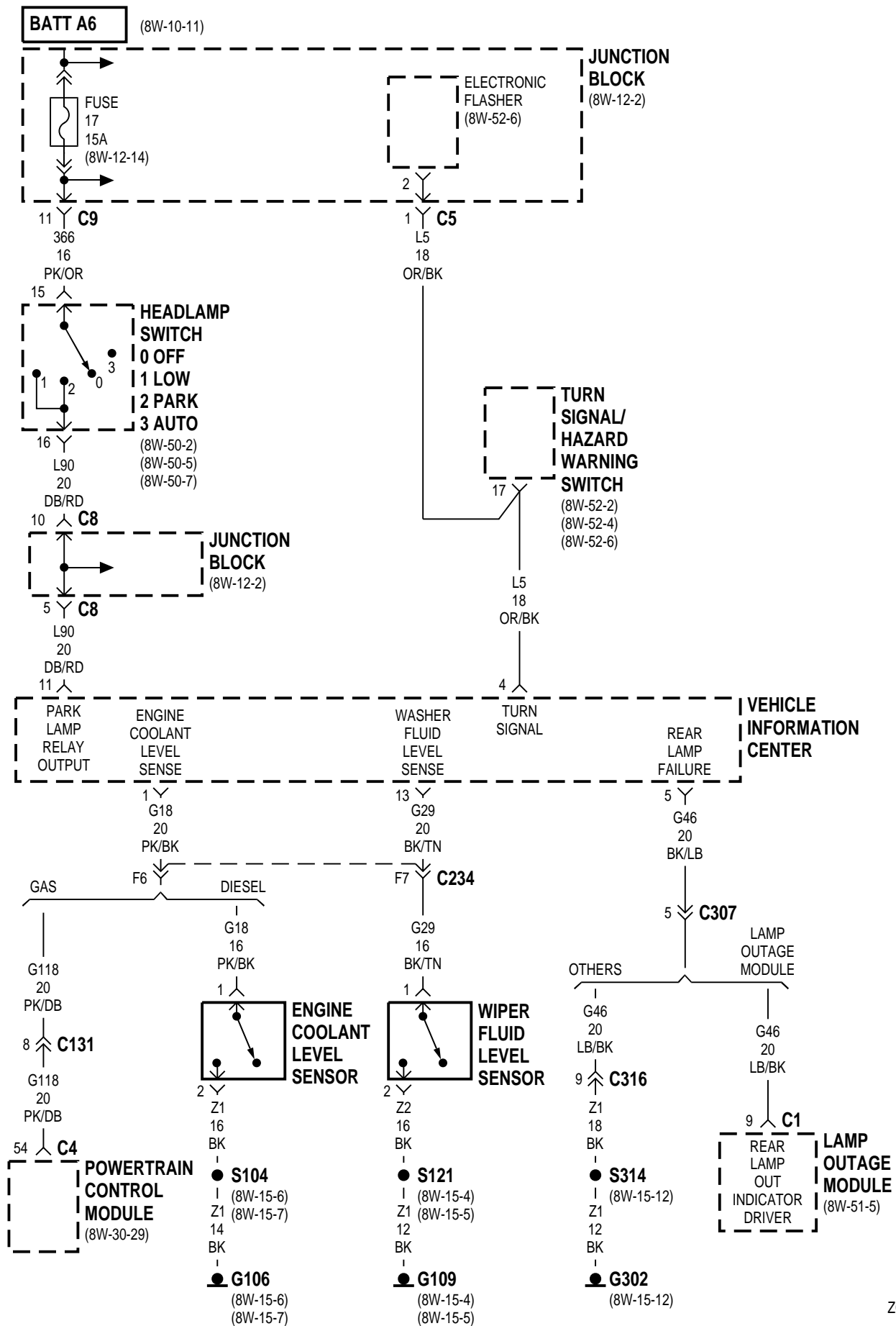
Component	Page	Component	Page
Body Control Module	8W-46-2, 4, 7	Powertrain Control Module	8W-46-6, 7
Electronic Flasher	8W-46-6	S104	8W-46-6
Engine Coolant Level Sensor	8W-46-6	S121	8W-46-6
Four Wheel Drive Switch	8W-46-3, 5	S130	8W-46-3, 5
Fuse 6	8W-46-2, 4	S202	8W-46-2, 4
Fuse 15	8W-46-2, 4	S203	8W-46-7
Fuse 17	8W-46-6	S204	8W-46-7
Fuse 20	8W-46-2, 4	S205	8W-46-2, 4
G105	8W-46-3, 5	S209	8W-46-2, 4
G106	8W-46-6	S212	8W-46-2, 4
G109	8W-46-6	S214	8W-46-2, 4
G118	8W-46-6	S216	8W-46-2, 4
G302	8W-46-6	S302	8W-46-2, 4
G304	8W-46-2, 4	S314	8W-46-6
Graphic Display Module	8W-46-2, 3	Turn Signal/Hazard Warning Switch	8W-46-6
Headlamp Switch	8W-46-6	Vehicle Information Center	8W-46-4, 5, 6, 7
Junction Block	8W-46-2, 3, 4, 5, 6	Wiper Fluid Level Sensor	8W-46-6
Lamp Outage Module	8W-46-6		
Power Distribution Center	8W-46-2, 4		

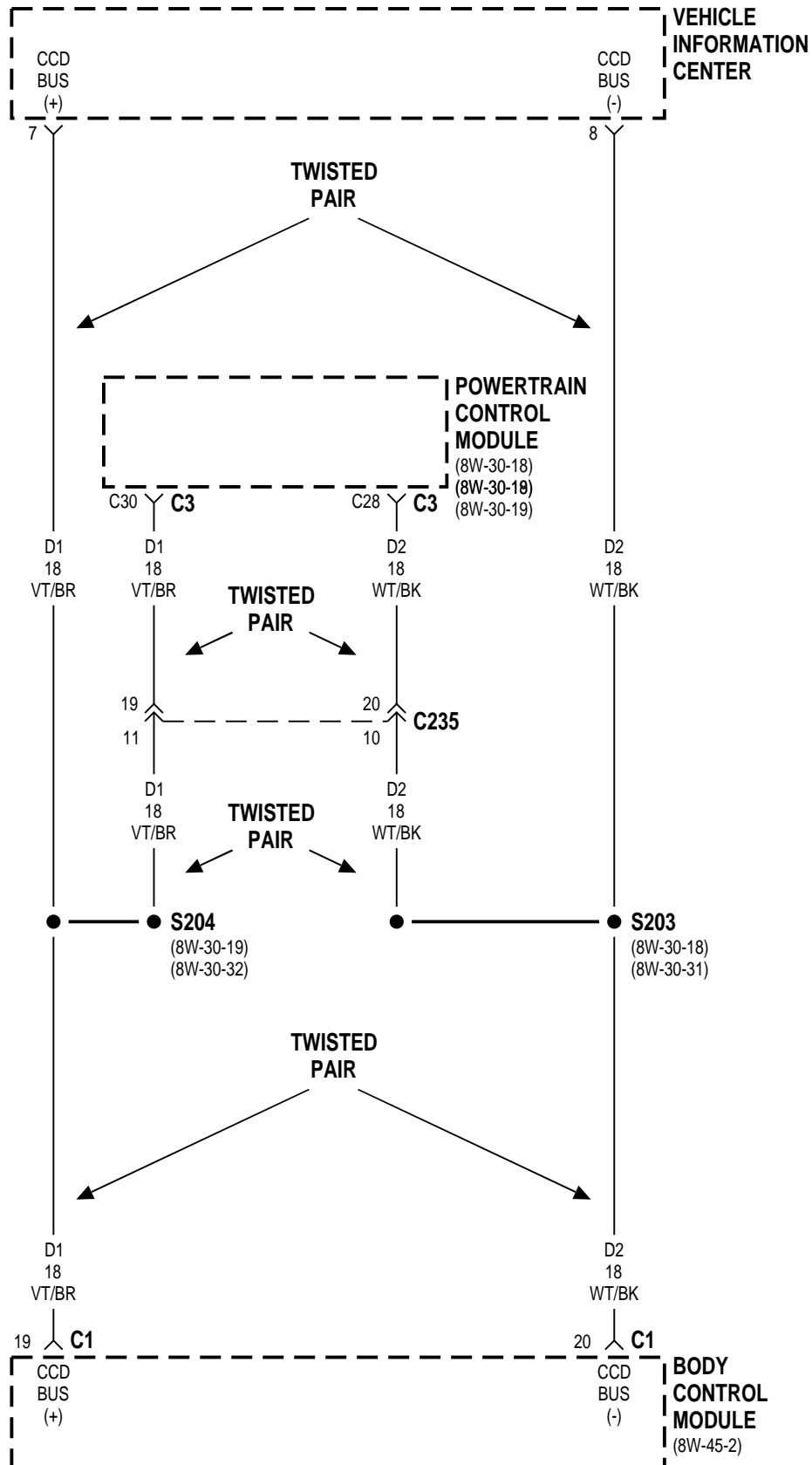












8W-46 MESSAGE CENTER

INDEX

	page		page
GENERAL INFORMATION		VEHICLE INFORMATION CENTER	8
INTRODUCTION	8		
DESCRIPTION AND OPERATION			
GRAPHIC DISPLAY MODULE	8		

GENERAL INFORMATION

INTRODUCTION

Each four-wheel drive equipped Grand Cherokee is equipped with a four-wheel drive Graphic Display Module (GDM). The GDM is located at the bottom of the instrument panel center stack. The GDM displays transfer case mode selection.

Some vehicle are equipped with an optional Vehicle Information Center (VIC). The VIC has several functions:

- Display current time and date.
- Monitor specific vehicle operating systems and alert the driver if a malfunction occurs.
- Display service reminder or indicate distance to service.
- Display 2WD/4WD transfer case modes of operation.

DESCRIPTION AND OPERATION

GRAPHIC DISPLAY MODULE

Several fuses supply power to the Graphic Display Module (GDM). When the ignition switch is in the RUN position it connects circuit A1 from fuse 8 in the PDC to circuit A22. Circuit A22 feeds circuit F83 through fuse 6 in the junction block. Circuit F83 supplies voltage to the GDM.

Circuit A7 from fuse 15 in the PDC powers circuit F60 through fuse 20 in the junction block. Circuits A7 and F60 are HOT at all times. Circuit F60 feeds the GDM. Circuits Z1 and Z2 provide ground for the GDM.

TRANSFER CASE RANGE DISPLAY

When the transfer case is in either 4WD Low, Part Time 4WD, or Full Time it connects circuit G28 from the Graphic Display Module (GDM) to ground on circuit Z12. In response, the GDM illuminates the 4WD display.

When the transfer case switch is in 4WD Low, it connects circuit G28 from the GDM to ground on circuit

Z12. In addition to illuminating the 4WD display, the GDM also illuminates the LOW display.

When the transfer case switch is in Part Time 4WD position, it connects circuit T107 from the GDM to ground on circuit Z12. In addition to illuminating the 4WD display, the GDM also illuminates the PART TIME display.

When the transfer case switch is in Full Time 4WD position, it connects circuit T106 from the GDM to ground on circuit Z12. In addition to illuminating the 4WD display, the GDM also illuminates the FULL TIME display.

VEHICLE INFORMATION CENTER

Several fuses supply power to the Vehicle Information Center (VIC). When the ignition switch is in the RUN position it connects circuit A1 from fuse 8 in the PDC to circuit A22. Circuit A22 feeds circuit F83 through fuse 6 in the junction block. Circuit F83 supplies voltage to the VIC.

Circuit A7 from fuse 15 in the PDC powers circuit F60 through fuse 20 in the junction block. Circuits A7 and F60 are HOT at all times. Circuit F60 feeds the VIC.

Circuit A6 from fuse 13 in the PDC powers circuit 366 through fuse 17 in the junction block. Circuit 366 connects to the headlamp switch. When the headlamp switch is in the PARK or LOW position, it connects circuit 366 to circuit L90. Circuit L90 connects to the VIC. Circuit E2 from the Body Control Module (BCM) powers the illumination lamps in the VIC.

Circuits Z1 and Z2 provide ground for the VIC.

TRANSFER CASE RANGE DISPLAY

When the transfer case is in either 4WD Low, Part Time 4WD, or Full Time it connects circuit G28 from the Vehicle Information Center (VIC) to ground on circuit Z12. In response, the VIC illuminates the 4WD display.

When the transfer case switch is in 4WD Low, it connects circuit G28 from the VIC to ground on circuit Z12. In addition to illuminating the 4WD display, the VIC also illuminates the LOW display.

DESCRIPTION AND OPERATION (Continued)

When the transfer case switch is in Part Time 4WD position, it connects circuit T107 from the VIC to ground on circuit Z12. In addition to illuminating the 4WD display, the VIC also illuminates the PART TIME display.

When the transfer case switch is in Full Time 4WD position, it connects circuit T106 from the VIC to ground on circuit Z12. In addition to illuminating the 4WD display, the VIC also illuminates the FULL TIME display.

LAMP OUTAGE

Circuit G46 connects from the Lamp Outage Module (LOM) to the Vehicle Information Center (VIC). Circuit G46 supplies the rear lamp out signal to the VIC.

LOW WASHER FLUID WARNING

When the low washer fluid switch closes, it connects circuit G29 from the VIC to ground on circuit

Z1. The VIC displays the Low Washer Fluid warning when the switch closes.

LOW ENGINE COOLANT WARNING

When the engine coolant level switch closes, it connects circuit G18 from the VIC to ground on circuit Z1. The VIC displays the Low Coolant Level warning when the switch closes.

DOOR AJAR AND LIFTGATE AJAR DISPLAYS

Each door and the liftgate have an ajar switch that connects to the Body Control Module (BCM). The BCM senses when the liftgate or a door opens, and sends the a signal to the VIC on the CCD bus. In response, the VIC displays which door is open. The VIC communicates with the BCM over the CCD bus on circuits D1 and D2.

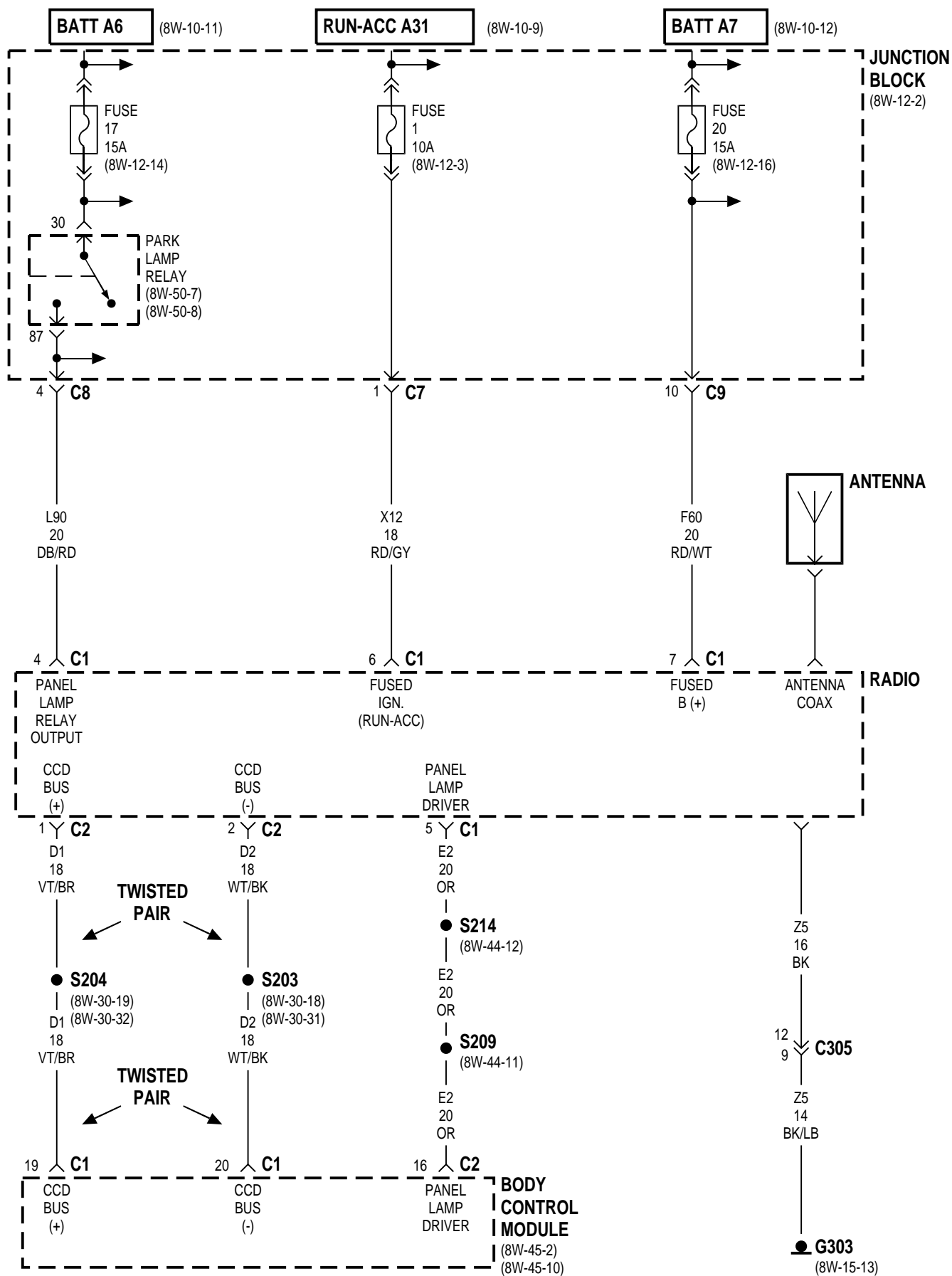
8W-47 AUDIO SYSTEM

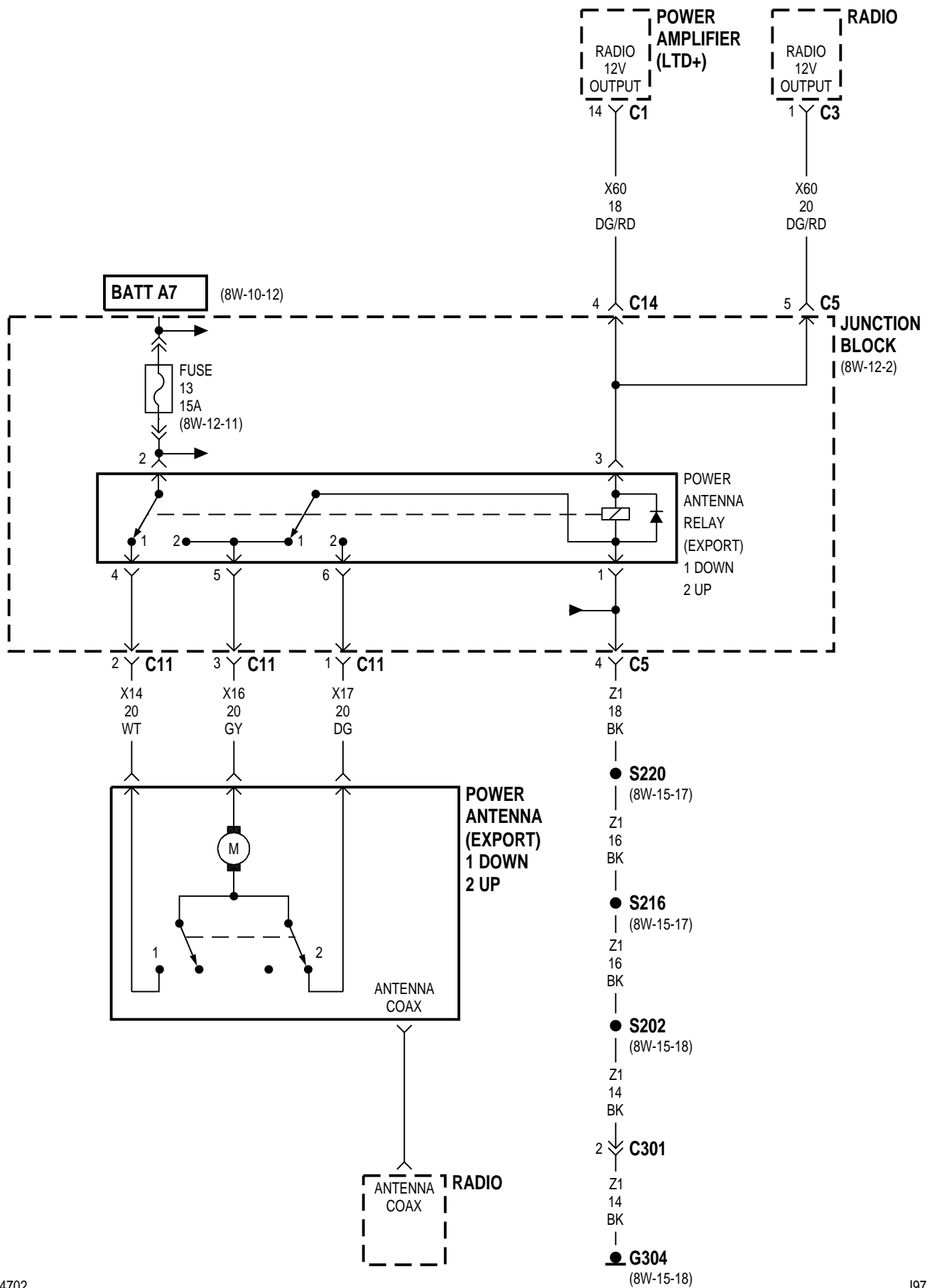
INDEX

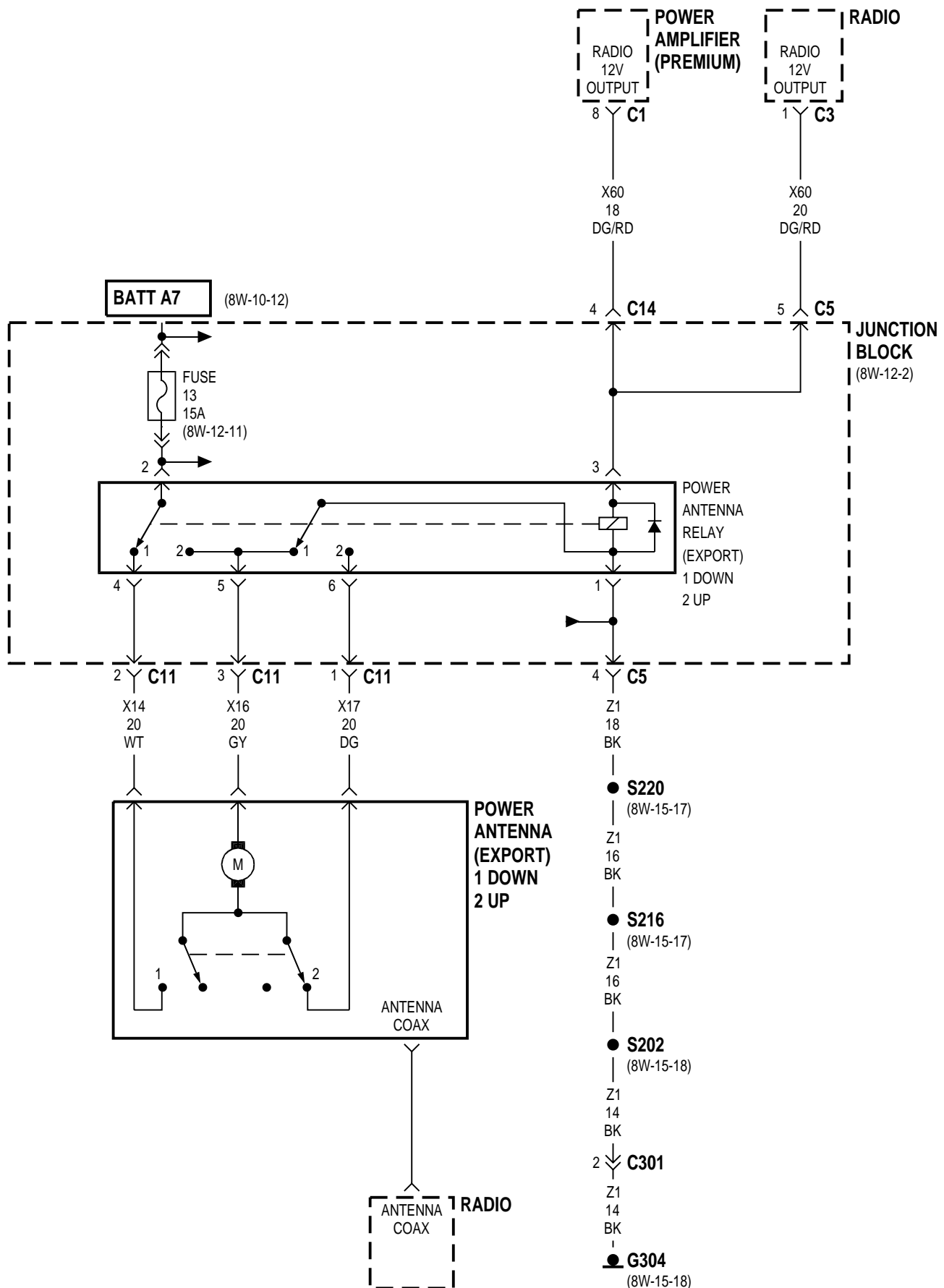
page

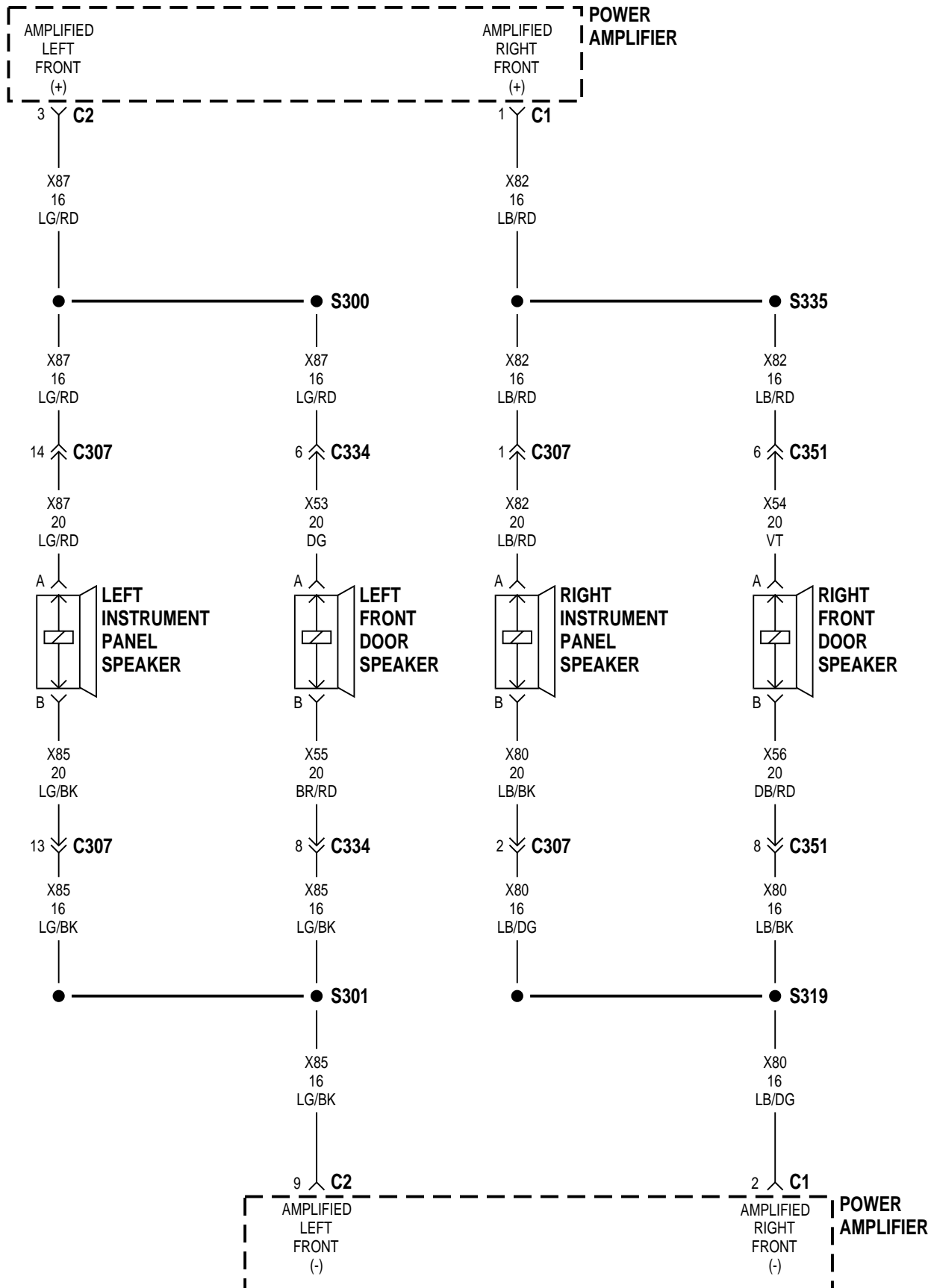
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	14

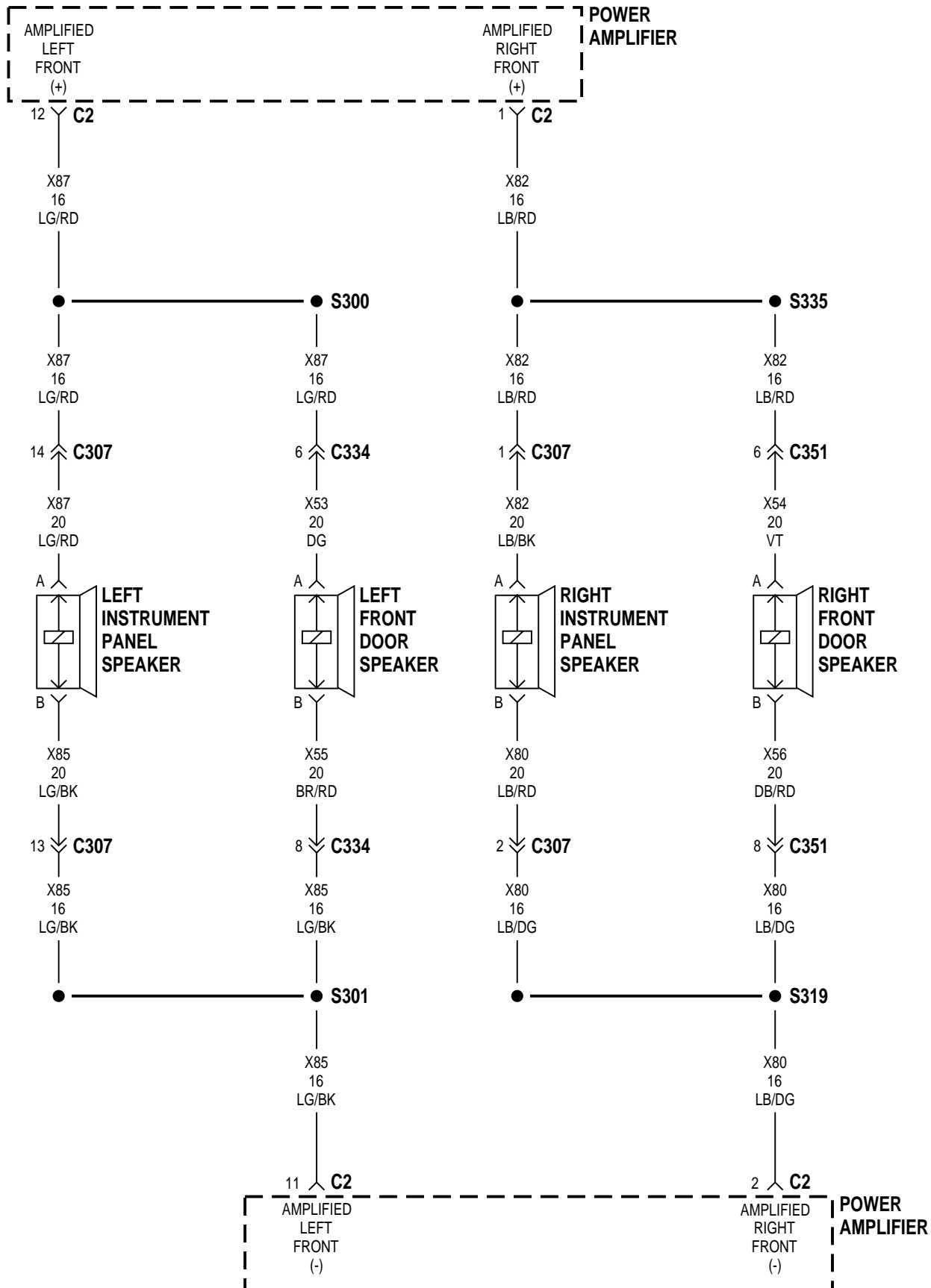
Component	Page	Component	Page
Antenna	8W-47-2, 9, 10	Right Front Door Speaker	8W-47-5, 6, 8
Body Control Module	8W-47-2, 12	Right Instrument Panel Speaker	8W-47-5, 6
Clockspring	8W-47-12	Right Radio Remote Switch	8W-47-12
Fuse 1	8W-47-2	Right Rear Door Speaker	8W-47-7, 8, 11
Fuse 7	8W-47-9, 10	S202	8W-47-3, 4
Fuse 13	8W-47-3, 4	S203	8W-47-2, 12
Fuse 17	8W-47-2	S204	8W-47-2, 12
Fuse 20	8W-47-2	S205	8W-47-12
G303	8W-47-2, 9, 10	S209	8W-47-2
G304	8W-47-3, 4, 12	S214	8W-47-2
Junction Block	8W-47-2, 3, 4, 9, 10	S216	8W-47-3, 4
Left Front Door Speaker	8W-47-5, 6, 8	S220	8W-47-3, 4
Left Instrument Panel Speaker	8W-47-5, 6	S300	8W-47-5, 6
Left Radio Remote Switch	8W-47-12	S301	8W-47-5, 6
Left Rear Door Speaker	8W-47-7, 8, 11	S302	8W-47-12
Park Lamp Relay	8W-47-2	S309	8W-47-9, 10
Power Amplifier ...	8W-47-3, 4, 5, 6, 7, 9, 10, 11, 13	S318	8W-47-9, 10
Power Antenna	8W-47-3, 4	S319	8W-47-5, 6
Power Antenna Relay	8W-47-3, 4	S335	8W-47-5, 6
Powertrain Control Module	8W-47-12	Vehicle Speed Control/Horn Switch	8W-47-12
Radio	8W-47-2, 3, 4, 8, 9, 10, 12		
Rear Speaker	8W-47-11, 13		

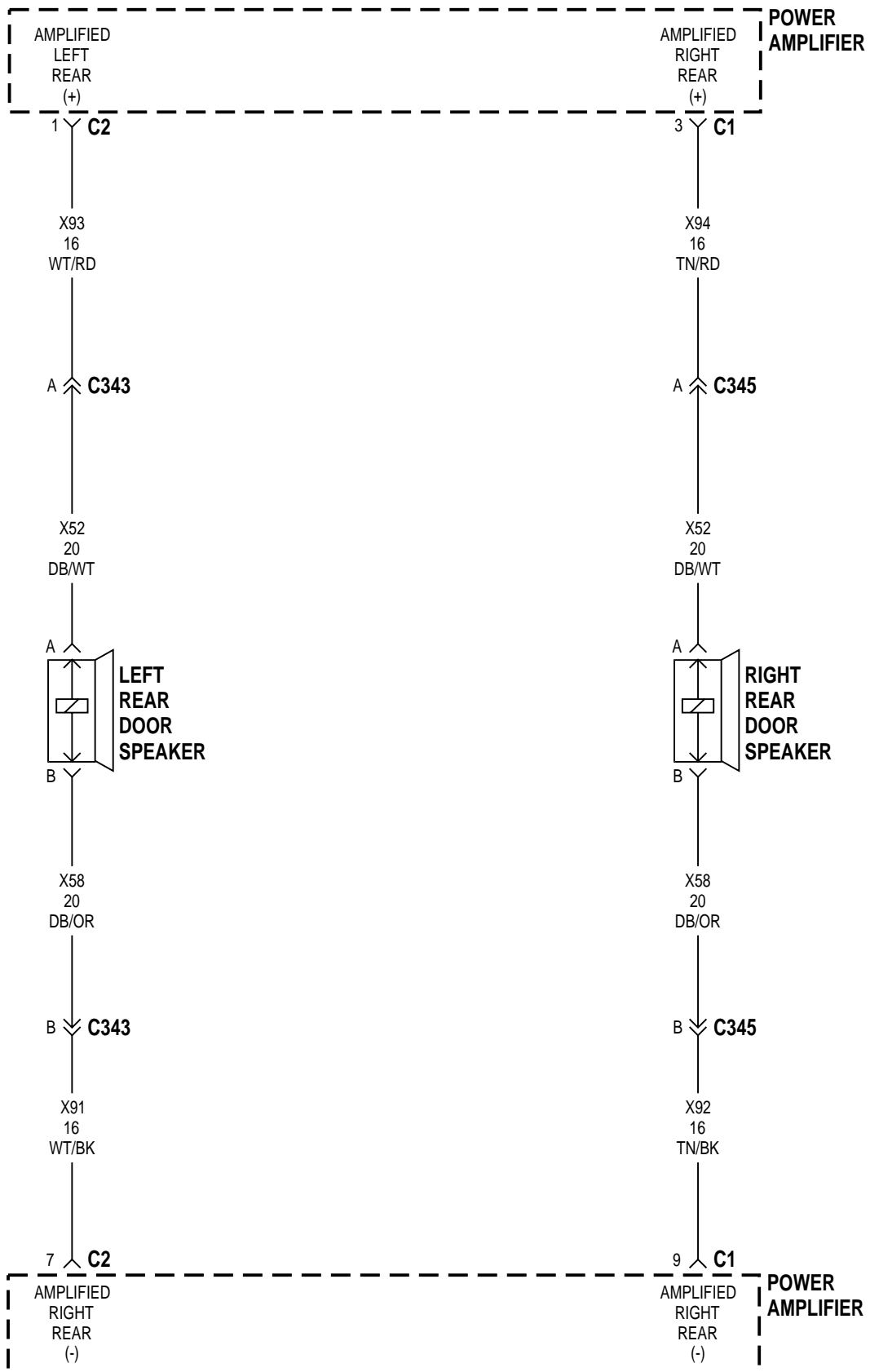


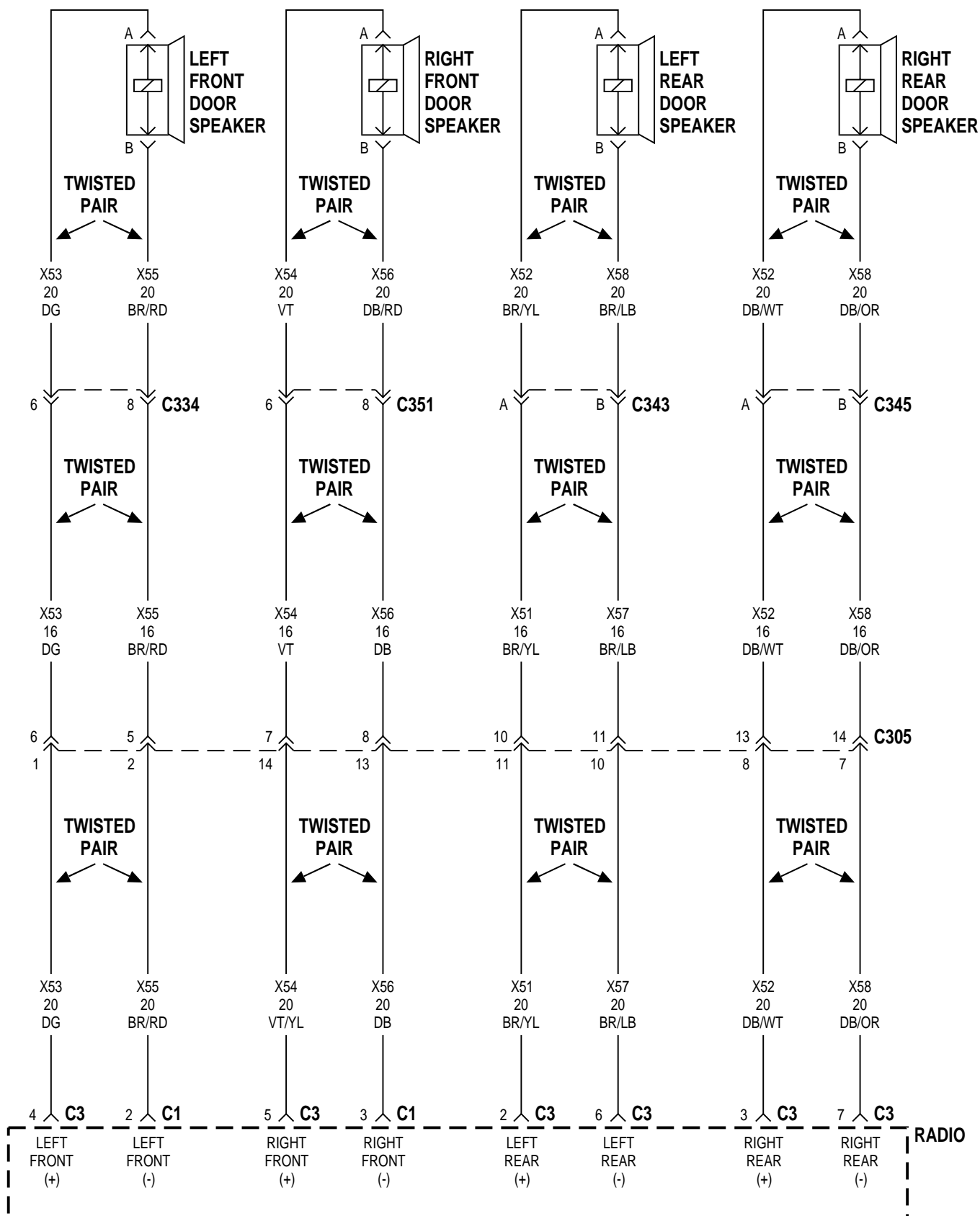


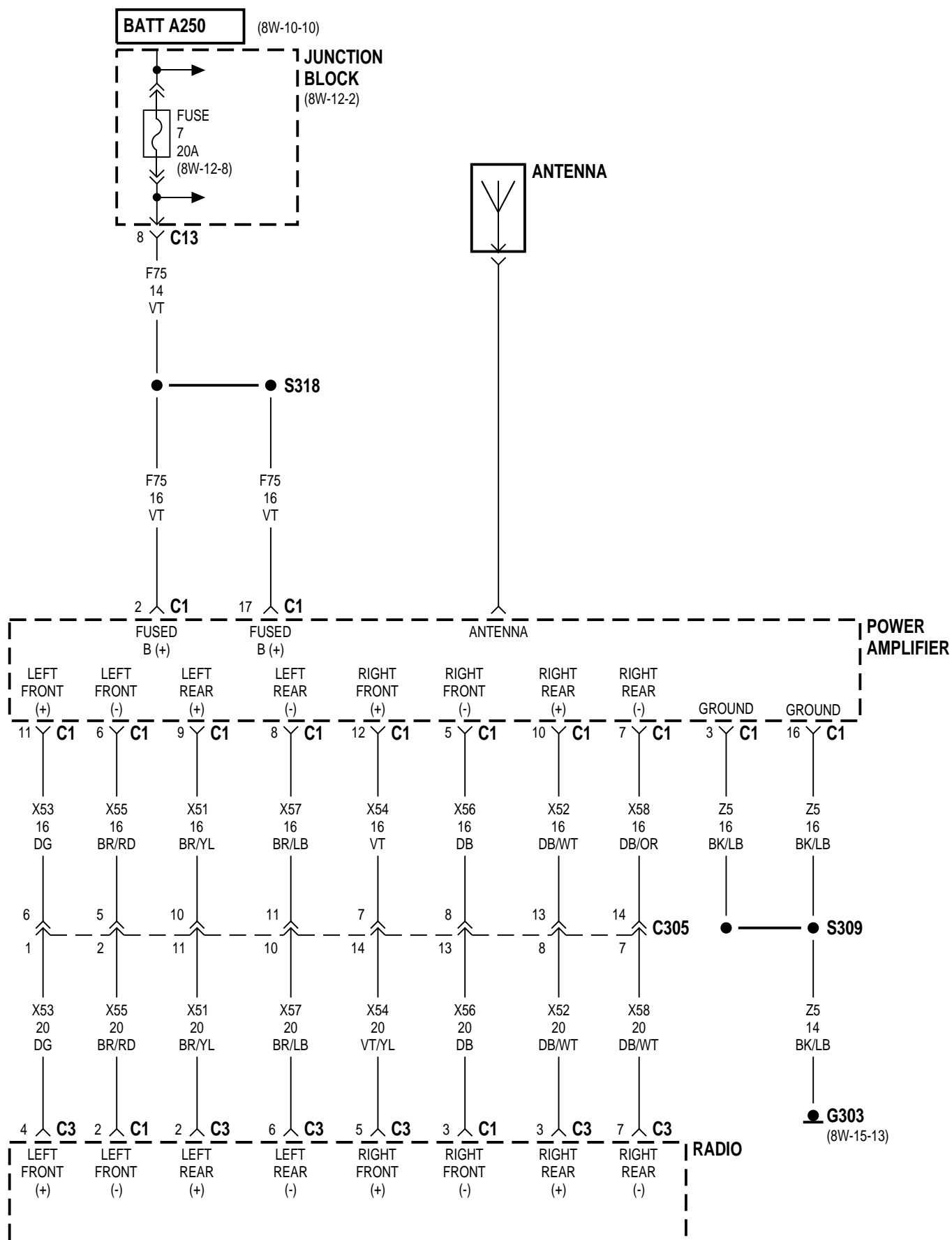


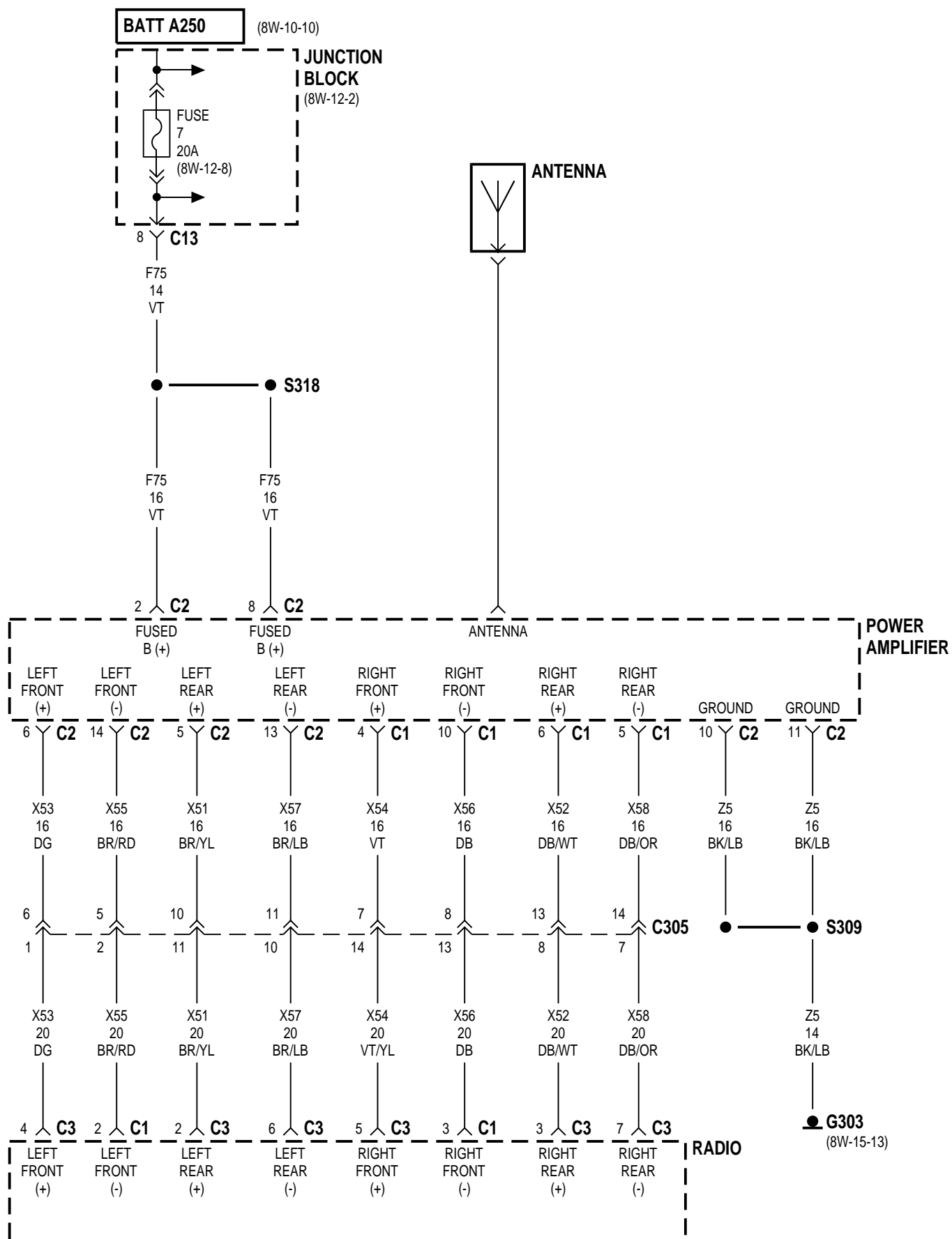


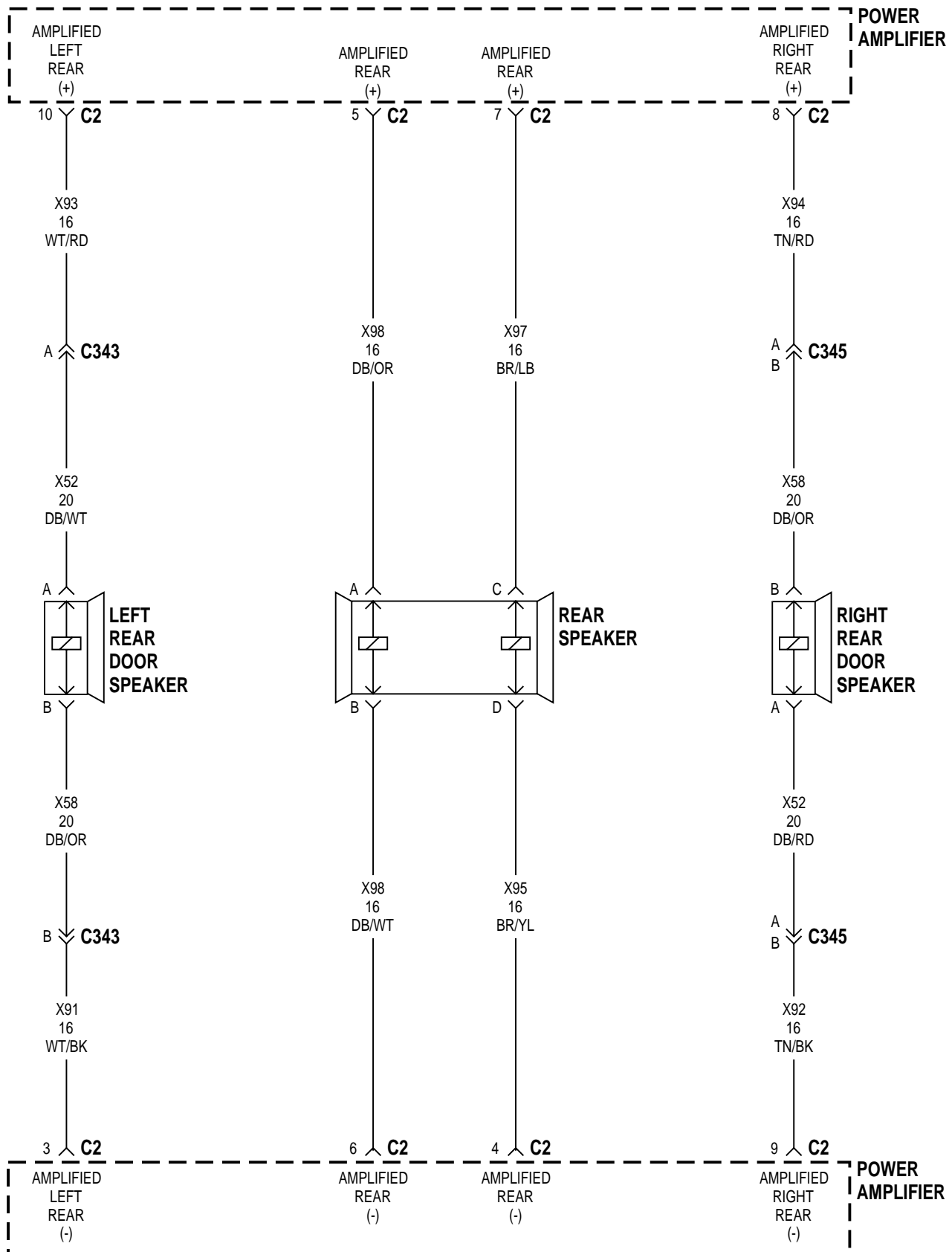




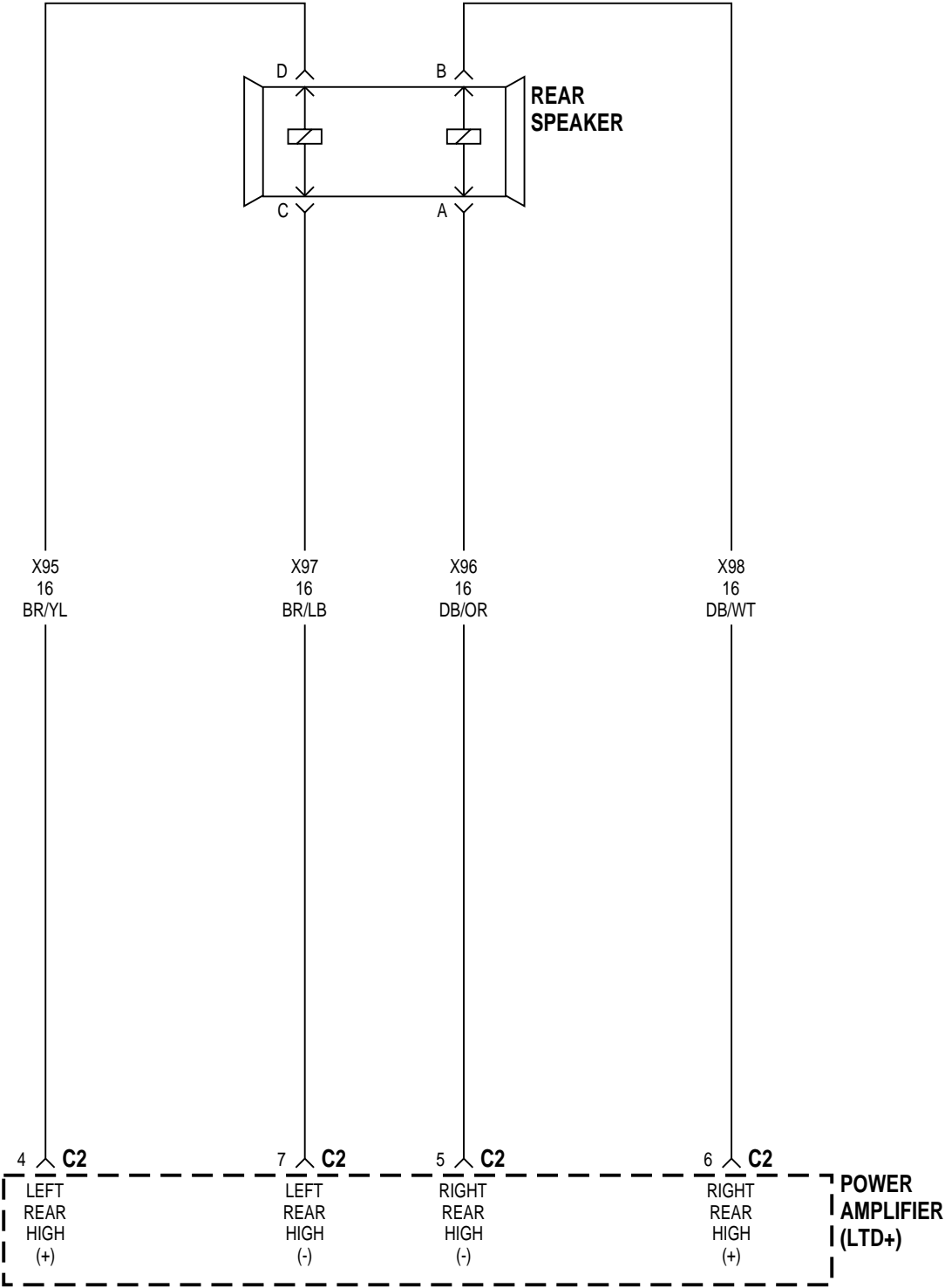












8W-47 AUDIO SYSTEM

INDEX

	page		page
GENERAL INFORMATION		POWER ANTENNA—EXPORT ONLY 15	
INTRODUCTION	14	RADIO ILLUMINATION	14
DESCRIPTION AND OPERATION		RADIO MEMORY	14
AMPLIFIER AND SPEAKERS—PREMIUM	14	RADIO REMOTE SWITCHES	15
LIMITED PLUS SYSTEM	15	SPEAKERS—STANDARD SYSTEM	14

GENERAL INFORMATION

INTRODUCTION

There are three audio systems offered on this vehicle. The standard system uses four speakers. The premium system includes 120 watt amplifier, Infinity coaxial full-range speakers mounted in each rear door, Infinity mid-range speakers mounted in each front door, and Infinity tweeters mounted at each outboard end of the instrument panel cover. The Limited Plus system includes 180 watt amplifier, Infinity woofers mounted in each rear door, Infinity mid-range speakers mounted in each front door, Infinity tweeters mounted at each outboard end of the instrument panel cover, and a sound bar including two Infinity woofers and two Infinity tweeters.

All systems are powered by circuit X12 from fuse 1 in the junction block. When the ignition switch is in the ACCESSORY or RUN position, it connects circuit A1 from fuse 8 in the Power Distribution Center (PDC) to circuit A31. Circuit A31 powers circuit X12 through junction block fuse 1.

Circuit Z5 provides ground for all radios.

All radios connect to the CCD bus on circuits D1 and D2.

DESCRIPTION AND OPERATION

RADIO MEMORY

On the standard and optional radios, circuit F60 from fuse 20 in the junction block powers the radio memory. Circuit A7 from fuse 15 in the Power Distribution Center (PDC) powers junction block fuse 20 and circuit F60.

RADIO ILLUMINATION

When the parking lamps or the headlamps are ON, circuits E2 and L90 are used to power the radio illumination lamps. Circuit E2 is used for the dimmable lamps. Circuit L90 is the parking lamps feed.

SPEAKERS—STANDARD SYSTEM

The standard system uses four speakers. Circuit X53 feeds the speaker in the left front door. Circuit X55 is the return from the speaker to the radio.

Circuit X54 feeds the right front door speaker. Circuit X56 is the return from the speaker to the radio.

From the radio, circuit X51 connects to circuit X52 at the jumper harness for the left rear door speaker. Circuit X51 and X52 feed the speaker. Circuit X58 from the speaker jumper harness connects to circuit X57. Circuit X57 is the return from the speaker to the radio.

Circuit X52 feeds the right rear door speaker. Circuit X58 is the return from the speaker to the radio. Circuits X52 and X58 continue through the jumper harness to the right rear door speaker.

AMPLIFIER AND SPEAKERS—PREMIUM

A power amplifier is used on premium systems only. The amplifier is connected between the radio and the speakers.

Circuit A250 from fuse 11 in the Power Distribution Center (PDC) powers circuit F75 through fuse 7 in the junction block. Circuit F75 feeds the radio amplifier. Circuit Z5 provides ground for the amplifier. Circuit X60 from the radio supplies power to the amplifier.

From the radio, circuits X54 and X56 for the right front speaker and the speaker in the right side of the instrument panel, connect to the power amplifier. Circuit X54 is the feed from the radio to the amplifier. Circuit X82 is the feed from the amplifier to the right instrument panel speaker and right front door speaker. Circuit X80 is the return from the speakers to the amplifier and circuit X56 is the return from the amplifier to the radio. Circuits X80 and X82 from the amplifier connect to circuits X56 and X54 at the jumper harness for the right front door speaker.

For the left front door speaker and the speaker in the left side of the instrument panel, circuits X53 and X55 from the radio connect to the power amplifier. Circuit X53 is the feed from the radio to the amplifier. Circuit X87 is the feed from the amplifier

DESCRIPTION AND OPERATION (Continued)

to the left instrument panel speaker and left front door speaker. Circuit X85 is the return from speakers to the amplifier and circuit X55 is the return from the amplifier to the radio. Circuits X87 and X85 from the amplifier connect to circuits X55 and X53 at the jumper harness for the left front door speaker.

Circuit X51, the feed for the left rear door speaker and circuit X57, the return for the speaker, connect from the radio to the power amplifier. At the jumper harness for the left rear door speaker, circuit X93 from the amplifier connects to circuit X52 and circuit X91 connects to circuit X58. Circuits X93 and X52 feed the speaker. The speaker return is on circuit X58 and circuit X91.

Circuit X52, the feed for the right rear door speaker and circuit X58, the return for the speaker, connect from the radio to the power amplifier. At the jumper harness for the right rear door speaker, circuit X94 from the amplifier connects to circuit X52 and circuit X92 connects to circuit X58. Circuits X94 and X52 feed the speaker. The speaker return is on circuits X58 and X92.

RADIO REMOTE SWITCHES

Premium radios have remote volume, seek, and preset switches on the steering wheel. The remote switches connect to the Body Control Module (BCM) on circuit 709 and ground on circuit Z2. Each switch is wired in parallel. A resistor in series between each switch and ground circuit Z2 determines the signal sensed by the BCM on circuit 709.

After sensing a request from the radio remote switches, the BCM signals the radio over the CCD bus to make the requested selection.

LIMITED PLUS SYSTEM

The circuits for the Limited Plus system are the same as the Premium System except for the sound

bar, mounted on the inside roof headliner just forward of the liftgate.

For the speakers housed in the sound bar, circuit X95 from the amplifier is the feed for the left speakers. Circuit X97 is the return to the amplifier for the left speakers. Circuit X98 from the amplifier is the feed for the right speakers. Circuit X96 is the return to the amplifier for the right speakers.

POWER ANTENNA—EXPORT ONLY

The power antenna is only used on vehicles built for export markets.

The power antenna relay supplies voltage to the power antenna motor. The relay supplies voltage to the antenna motor to either raise or lower the antenna.

Circuit A7 from fuse 15 in the Power Distribution Center (PDC) feeds the relay switch through fuse 13 in the junction block.

When the radio is OFF, the switch in the power antenna relay is in the DOWN position. In DOWN position, the relay switch powers circuit X14. Circuit X14 supplies voltage to power antenna motor to lower the antenna. The ground path is from the motor to the relay on circuit X16, through the switch in the relay to ground on circuit Z1.

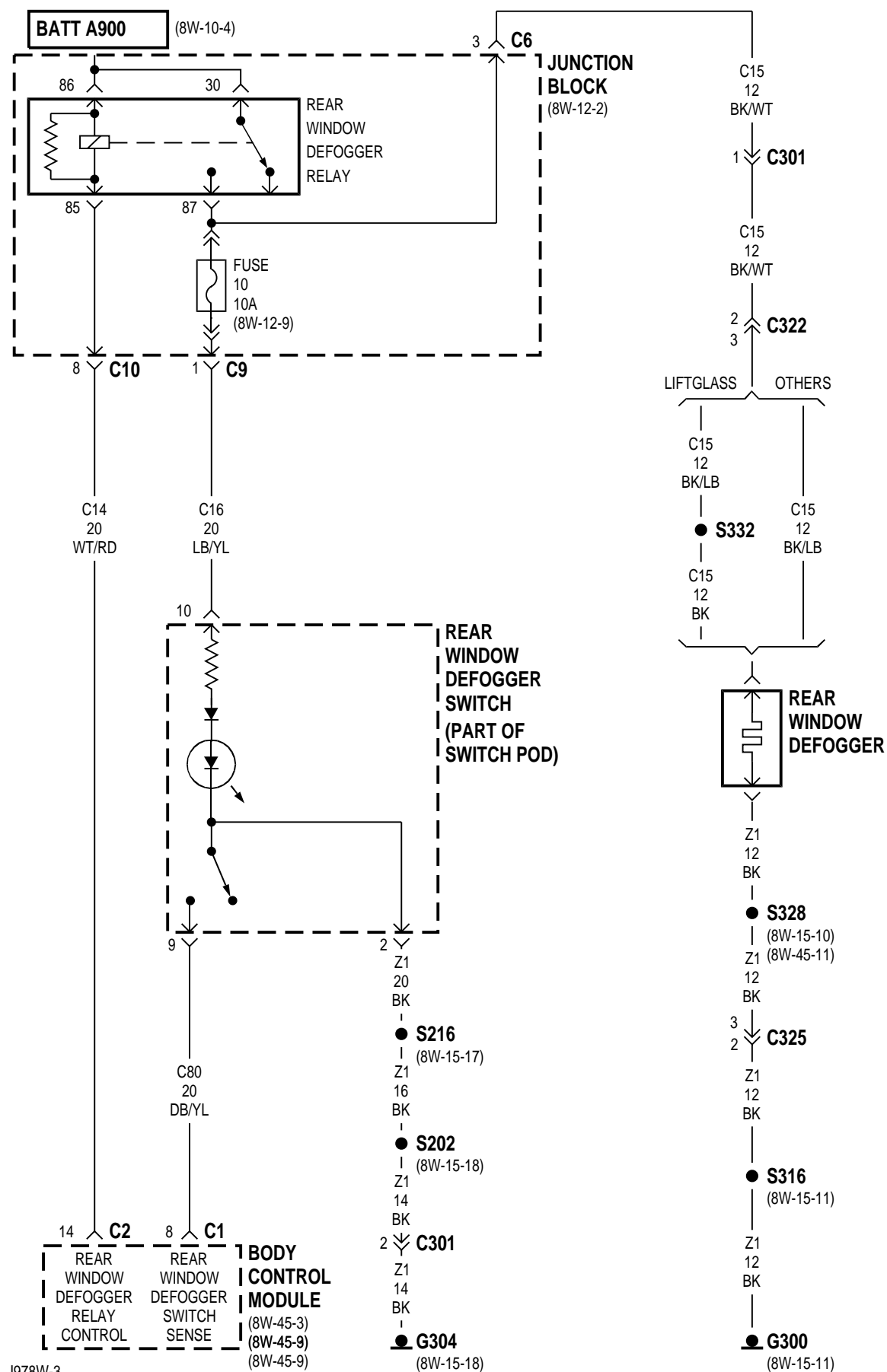
Circuit Z1 also provides ground for the coil side of the power antenna relay. When the radio is turned ON, circuit X60 from the radio supplies power to the coil side of antenna relay and the relay switches to the UP position. In the UP position, the switch powers circuit X16. Circuit X16 supplies voltage to power the antenna motor to raise the antenna. The ground path is from the motor to the relay on circuit X17, through the switch in the relay to ground on circuit Z1.

8W-48 REAR WINDOW DEFOGGER

INDEX

	page
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	3

Component	Page	Component	Page
Body Control Module	8W-48-2	Rear Window Defogger Switch	8W-48-2
Fuse 10	8W-48-2	S202	8W-48-2
G300	8W-48-2	S216	8W-48-2
G304	8W-48-2	S316	8W-48-2
Junction Block	8W-48-2	S328	8W-48-2
Rear Window Defogger	8W-48-2	S332	8W-48-2
Rear Window Defogger Relay	8W-48-2		



8W-48 REAR WINDOW DEFOGGER

DESCRIPTION AND OPERATION

REAR WINDOW DEFOGGER

The Body Control Module (BCM) operates the rear window defogger system through a relay located in the junction block. When the operator presses the rear window defogger switch, the switch connects circuit C80 from the BCM to ground circuit Z1. In response, the BCM grounds the coil side of the rear window defogger relay on circuit C14.

When the BCM grounds the rear window defogger relay coil, the contacts close and connect circuit A900 from fuse 3 in the Power Distribution Center (PDC) to circuit C15. Circuit C15 supplies power to the rear window defogger grid. Circuit A900 also powers the coil side of the relay. Circuit Z1 grounds the rear window defogger grid.

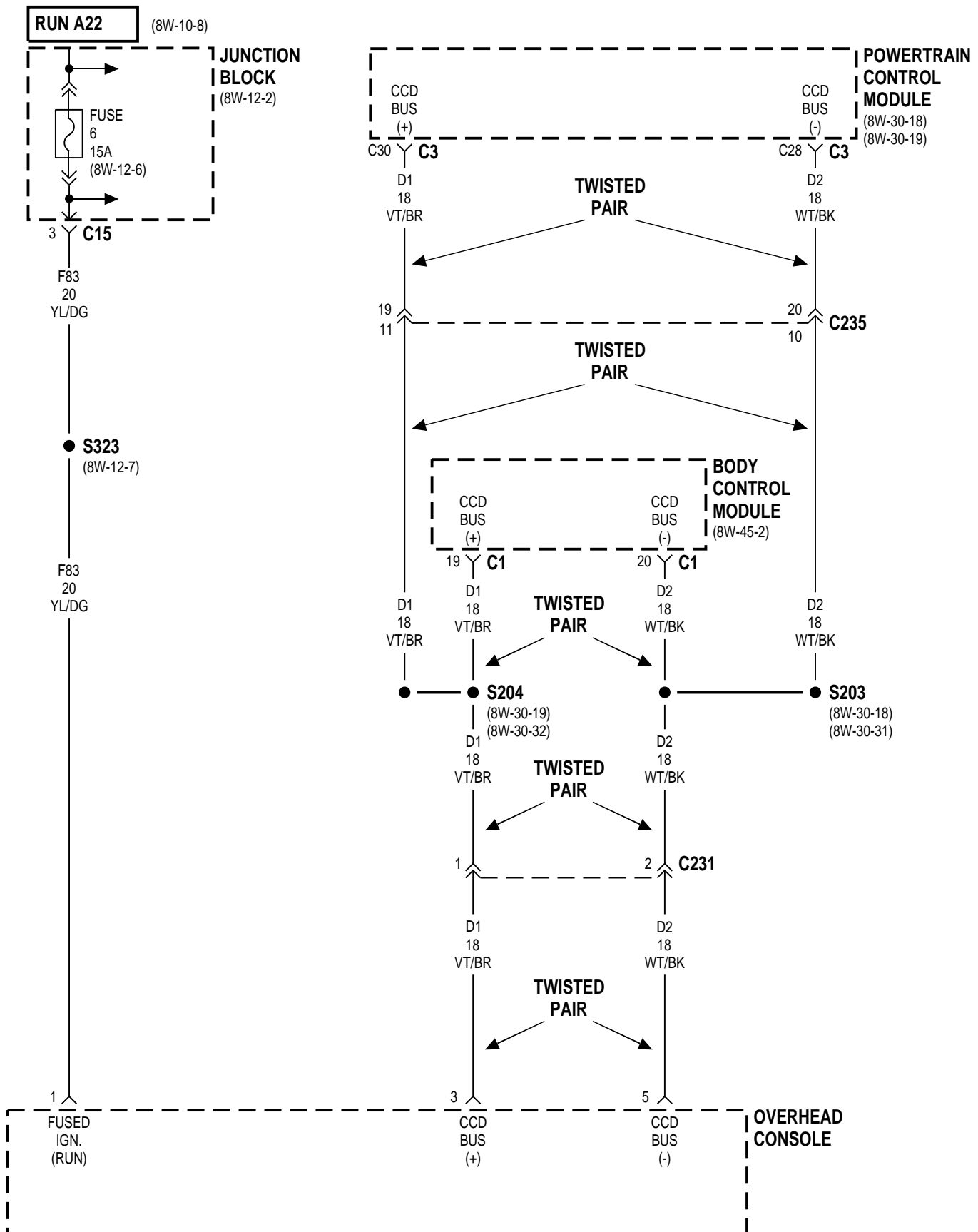
Internal to the junction block, circuit C15 splices to feed circuit C16 through fuse 10. Circuit C16 feeds the Light Emitting Diode (LED) in the rear window defogger switch.

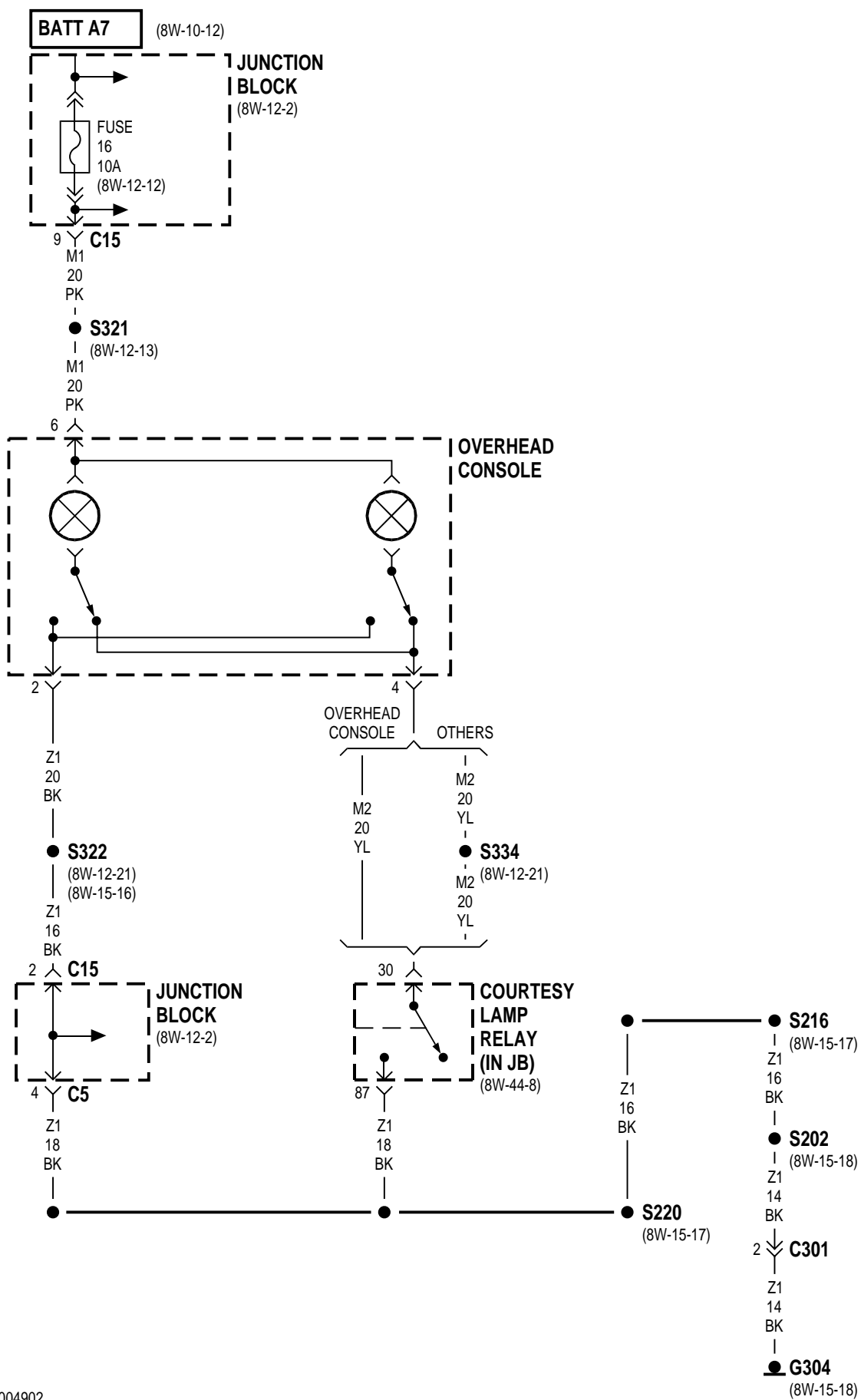
8W-49 OVERHEAD CONSOLE

INDEX

	page
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	4

Component	Page	Component	Page
Body Control Module	8W-49-2	S203	8W-49-2
Courtesy Lamp Relay	8W-49-3	S204	8W-49-2
Fuse 6	8W-49-2	S216	8W-49-3
Fuse 16	8W-49-3	S220	8W-49-3
G304	8W-49-3	S321	8W-49-3
Junction Block	8W-49-2, 3	S322	8W-49-3
Overhead Console	8W-49-2, 3	S323	8W-49-2
Powertrain Control Module	8W-49-2	S334	8W-49-3
S202	8W-49-3		





8W-49 OVERHEAD CONSOLE

DESCRIPTION AND OPERATION

OVERHEAD CONSOLE

When the ignition switch is in the RUN position, it connects circuit A1 from fuse 8 in the Power Distribution Center (PDC) to circuit A22. Circuit A22 powers circuit F83 through fuse 6 in the junction block. Circuit F83 supplies power to the overhead console.

The Body Control Module (BCM) broadcasts the park lamp signal and instrument panel illumination lamp intensity signal on the CCD bus. The overhead console receives the signals over the CCD bus and calculates display illumination intensity.

The overhead console receives the fuel percentage and distance information on the CCD bus from the Powertrain Control Module (PCM).

The overhead console contains a US/Metric switch. The switch selects which units to show on the display. The overhead console broadcasts the US/Metric selection on the CCD bus.

OVERHEAD CONSOLE LAMPS

Circuit A7 from fuse 15 in the Power Distribution Center (PDC) powers circuit M1 through fuse 16 in the junction block. Circuit M1 feeds the overhead console lamps.

Each overhead console lamp has a switch that connects the lamps to ground on circuit Z1. The lamps are also grounded when the Body Control Module (BCM) energizes the courtesy lamp relay to connect circuit M2 to ground on circuit Z1.

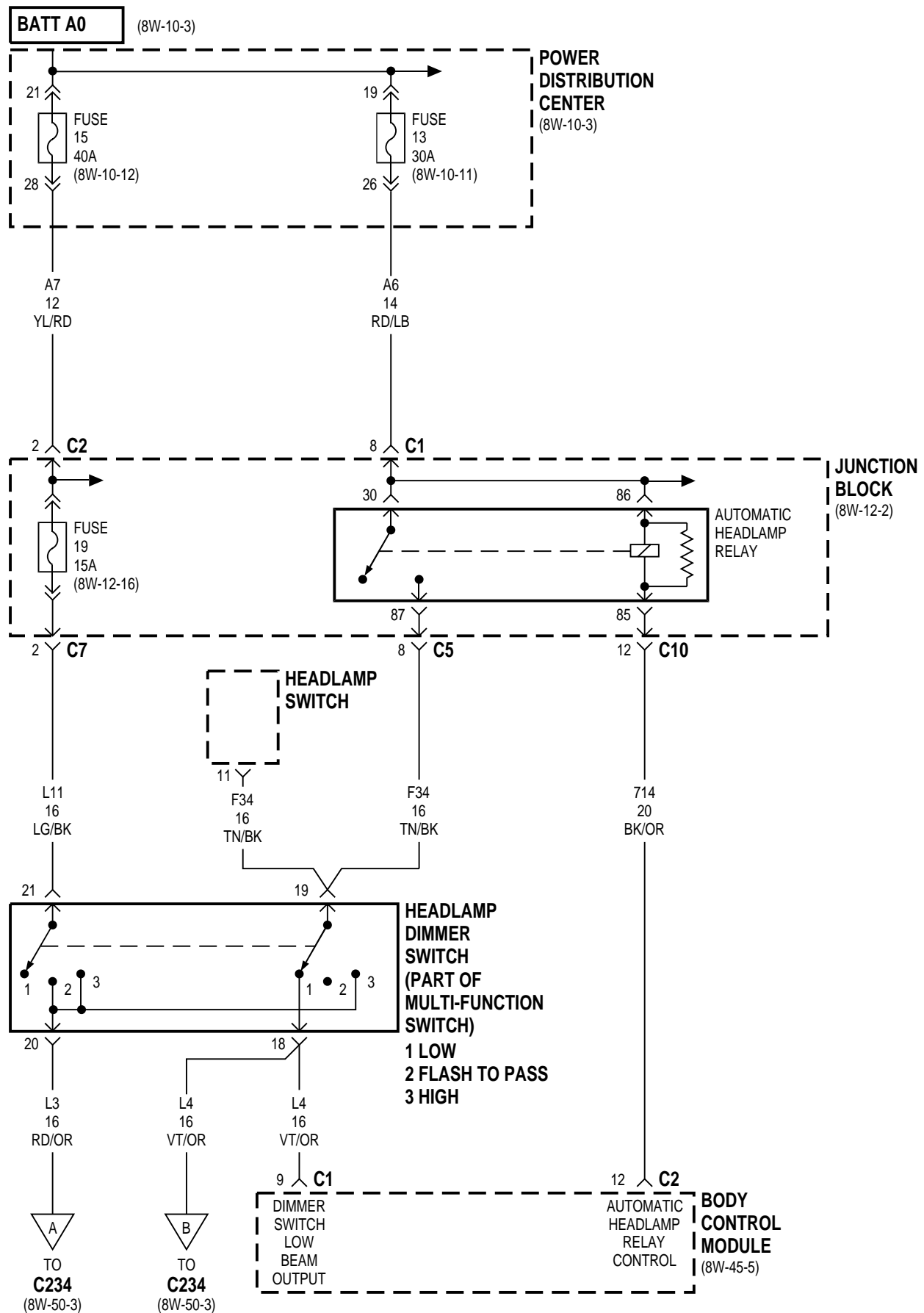
8W-50 FRONT LIGHTING

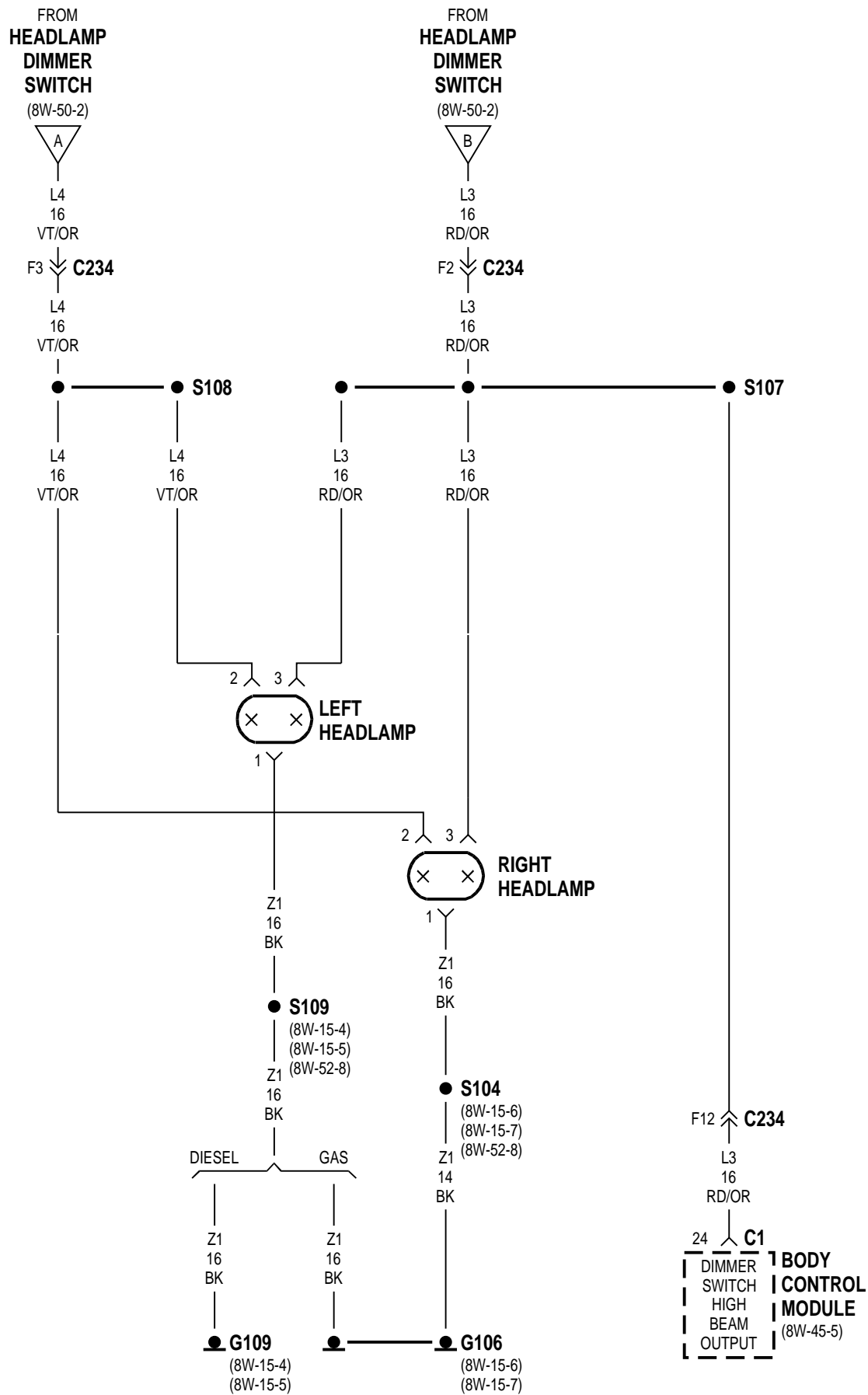
INDEX

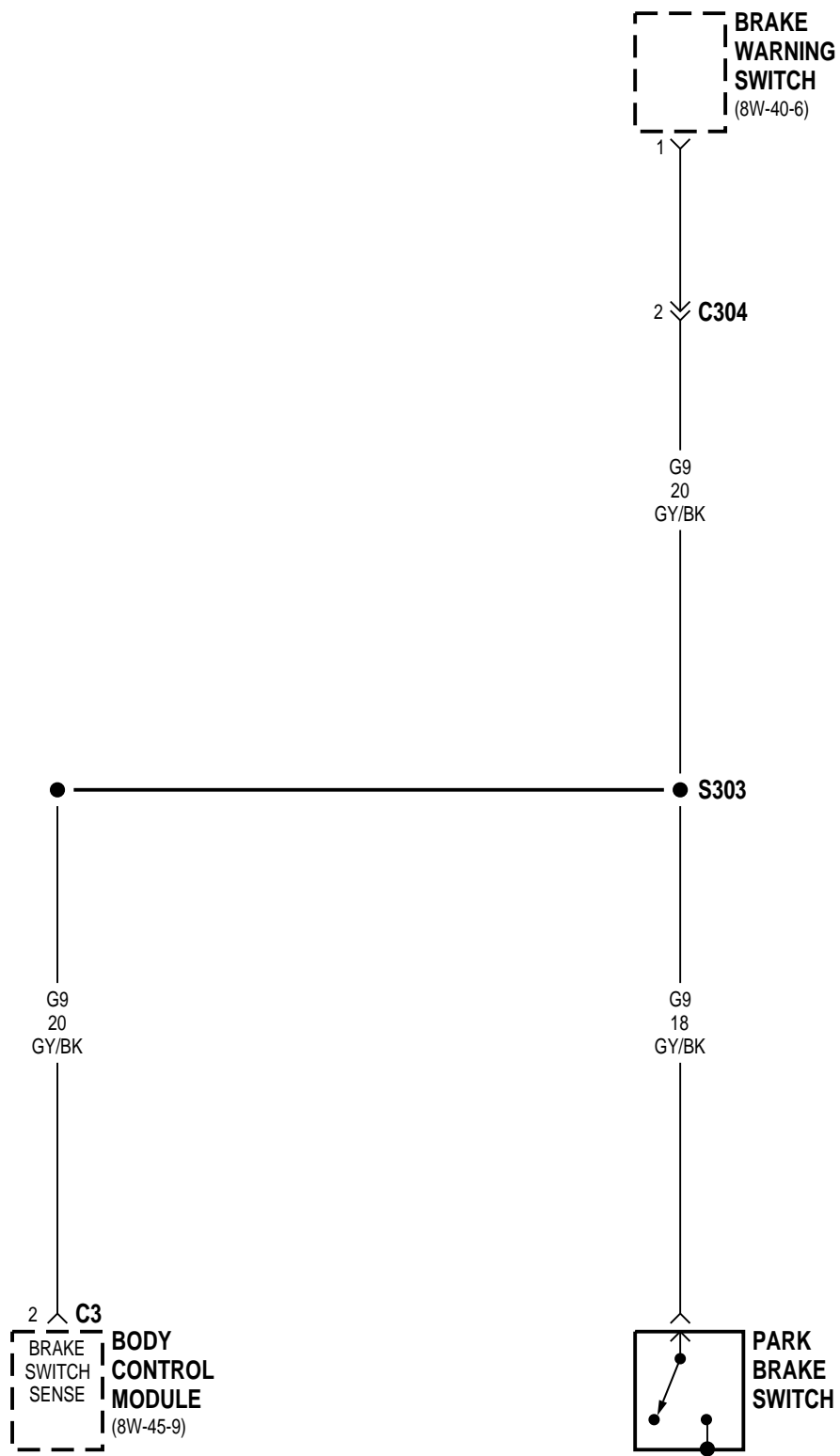
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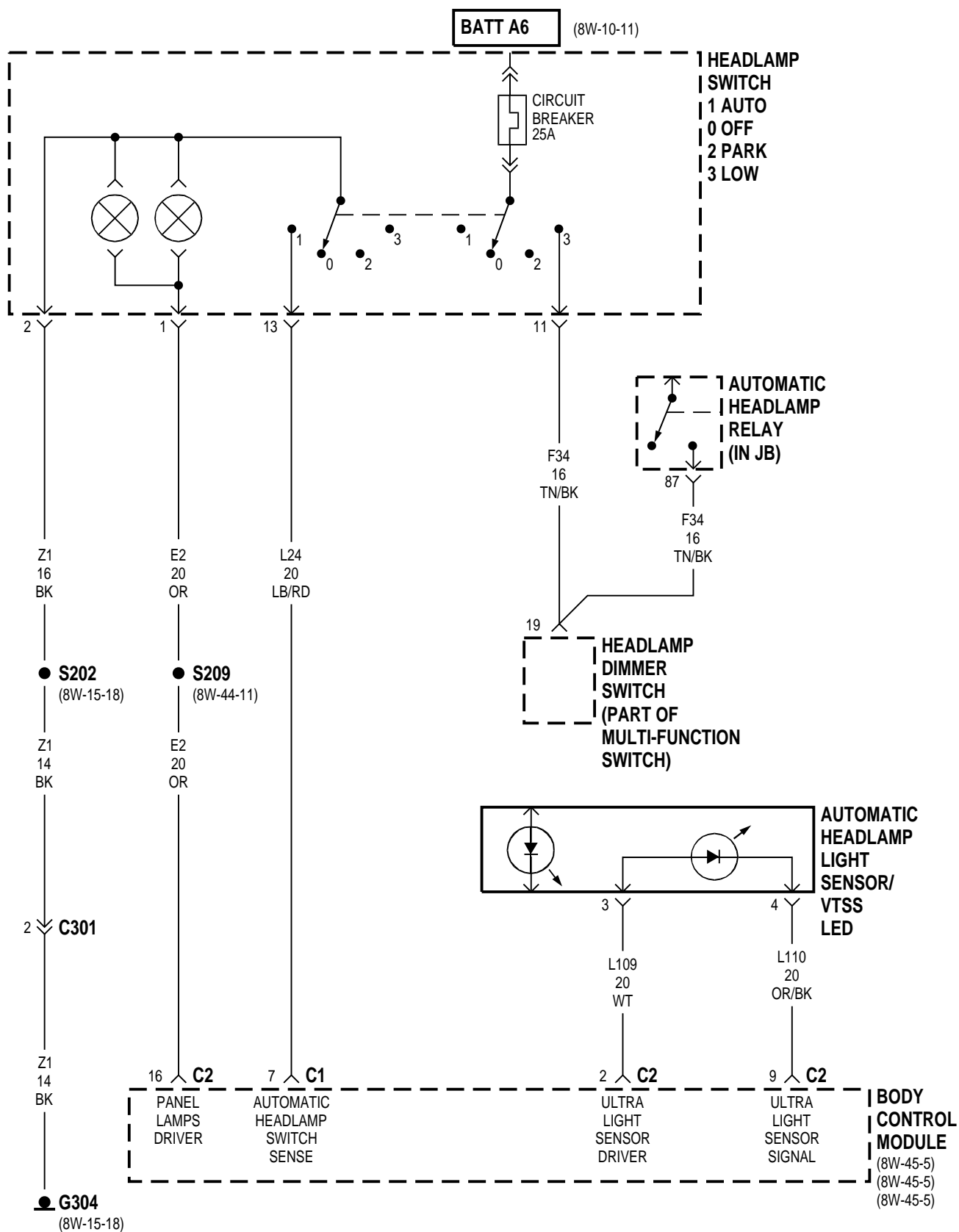
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	12

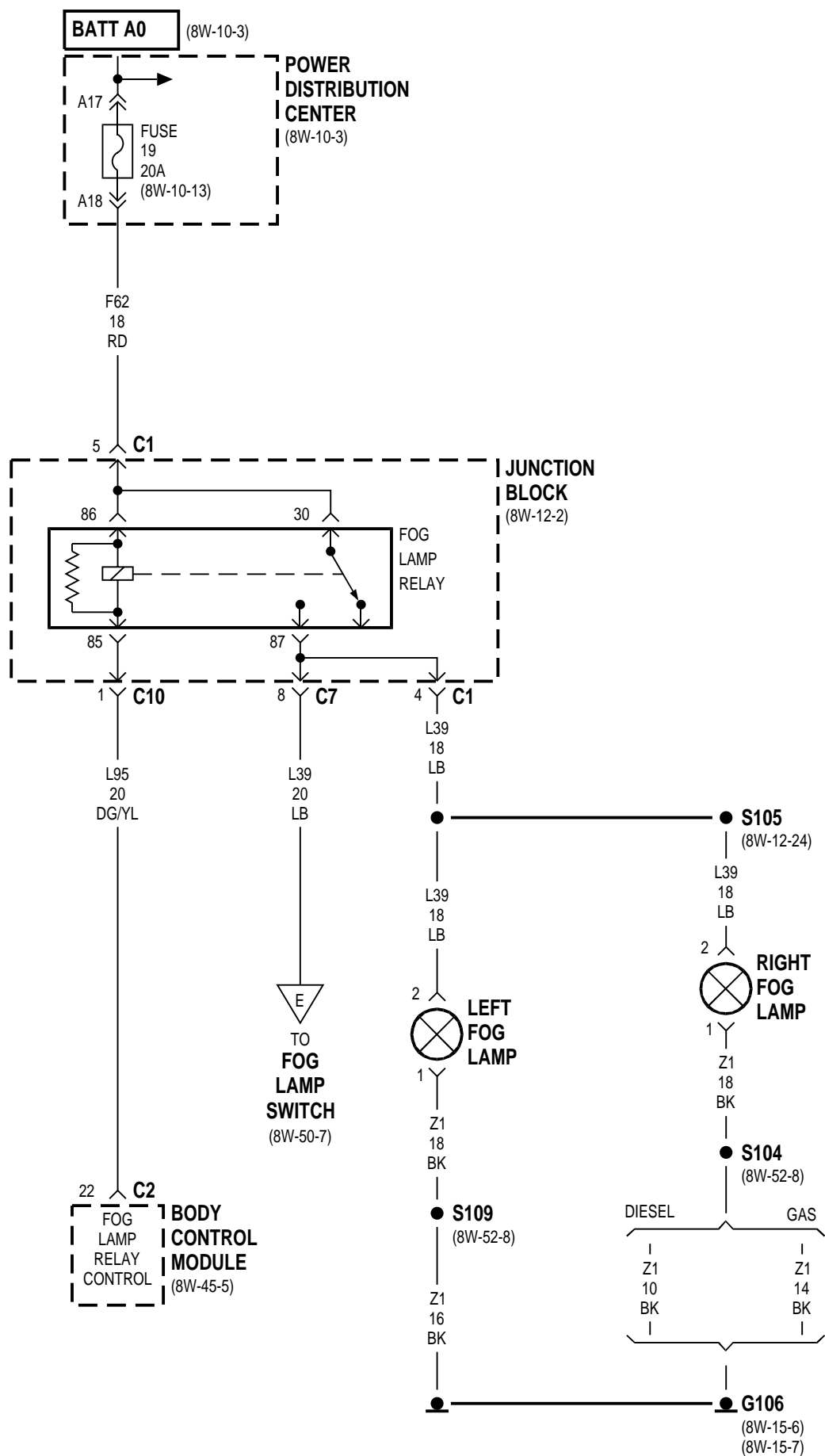
Component	Page	Component	Page
Automatic Headlamp Light Sensor/Vtss Led .	8W-50-5	Right Front Park Lamp	8W-50-10
Automatic Headlamp Relay	8W-50-2, 5	Right Front Turn Signal Lamp	8W-50-10
Body Control Module	8W-50-2, 3, 4, 5, 6, 7, 8	Right Headlamp	8W-50-3
Brake Warning Switch	8W-50-4	Right Headlamp Leveling Motor	8W-50-11
Circuit Breaker	8W-50-5	S103	8W-50-8
Daytime Running Lamp Module	8W-50-3, 4	S104	8W-50-3, 6, 10
Fog Lamp Relay	8W-50-6	S105	8W-50-6
Fog Lamp Switch	8W-50-7	S107	8W-50-3
Fuse 6	8W-50-4	S108	8W-50-3
Fuse 13	8W-50-2, 4	S109	8W-50-3, 6, 9
Fuse 15	8W-50-2	S110	8W-50-11
Fuse 17	8W-50-7, 8	S111	8W-50-11
Fuse 19	8W-50-2, 6	S112	8W-50-11
G106	8W-50-3, 6, 9, 10	S113	8W-50-11
G107	8W-50-4	S114	8W-50-11
G109	8W-50-3	S115	8W-50-11
G304	8W-50-5, 7, 11	S117	8W-50-4
Headlamp Dimmer Switch	8W-50-2, 5	S119	8W-50-4
Headlamp Leveling Switch	8W-50-11	S134	8W-50-4
Headlamp Switch	8W-50-2, 5, 7	S147	8W-50-9
Instrument Cluster	8W-50-9, 10	S149	8W-50-9
Junction Block	8W-50-2, 4, 6, 7, 8, 10	S150	8W-50-10
Lamp Outage Module	8W-50-8	S152	8W-50-10
Left Fog Lamp	8W-50-6	S202	8W-50-5, 7, 11
Left Front Park Lamp	8W-50-9	S209	8W-50-5
Left Front Turn Signal Lamp	8W-50-9	S212	8W-50-4, 11
Left Headlamp	8W-50-3	S303	8W-50-4
Left Headlamp Leveling Motor	8W-50-11	S408	8W-50-10
Park Brake Switch	8W-50-4	S409	8W-50-9
Park Lamp Relay	8W-50-7, 8	Turn Signal/Hazard Warning Switch ...	8W-50-9, 10
Power Distribution Center	8W-50-2, 4, 6	Vehicle Information Center	8W-50-8
Radio	8W-50-8		
Right Fog Lamp	8W-50-6		



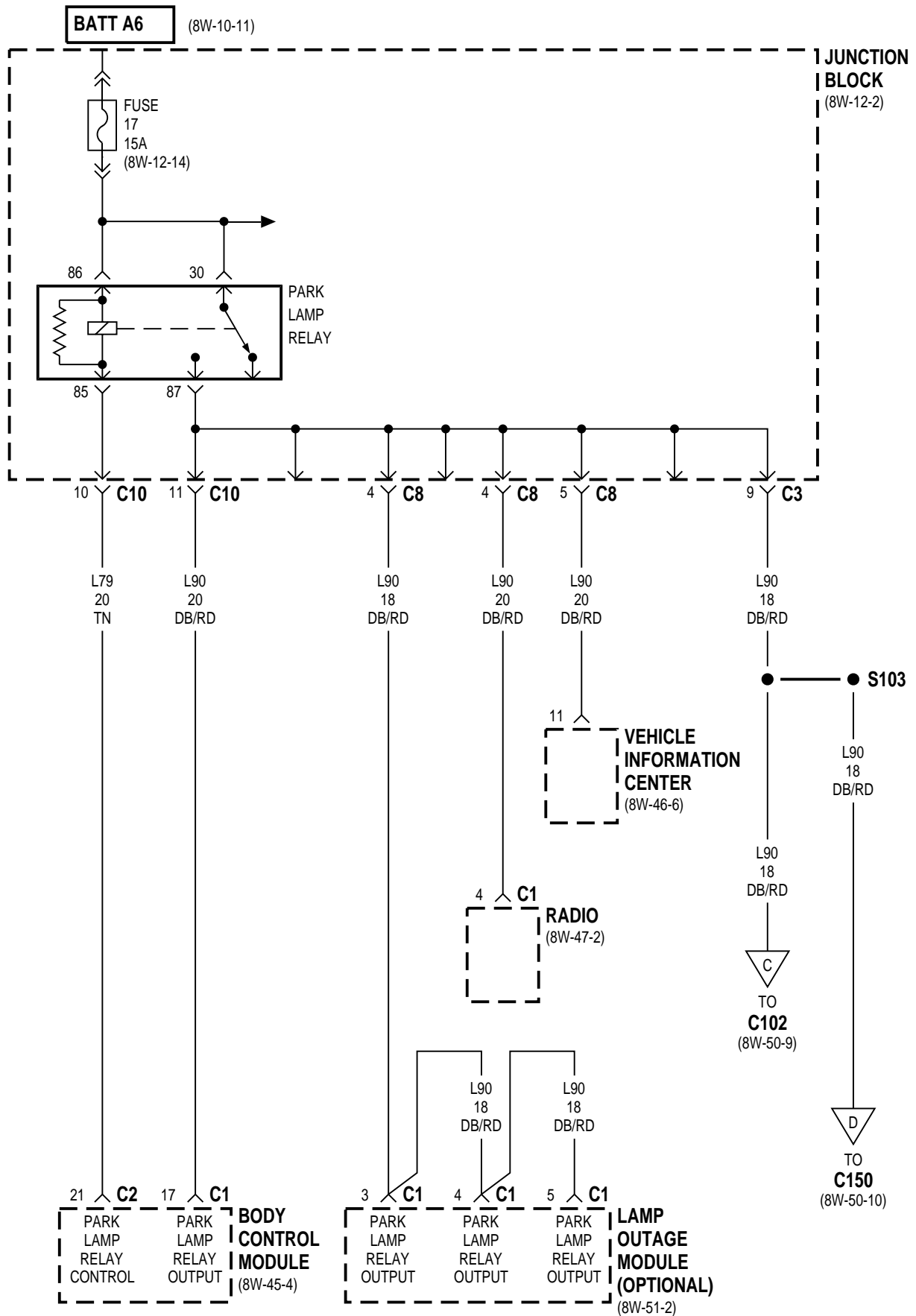


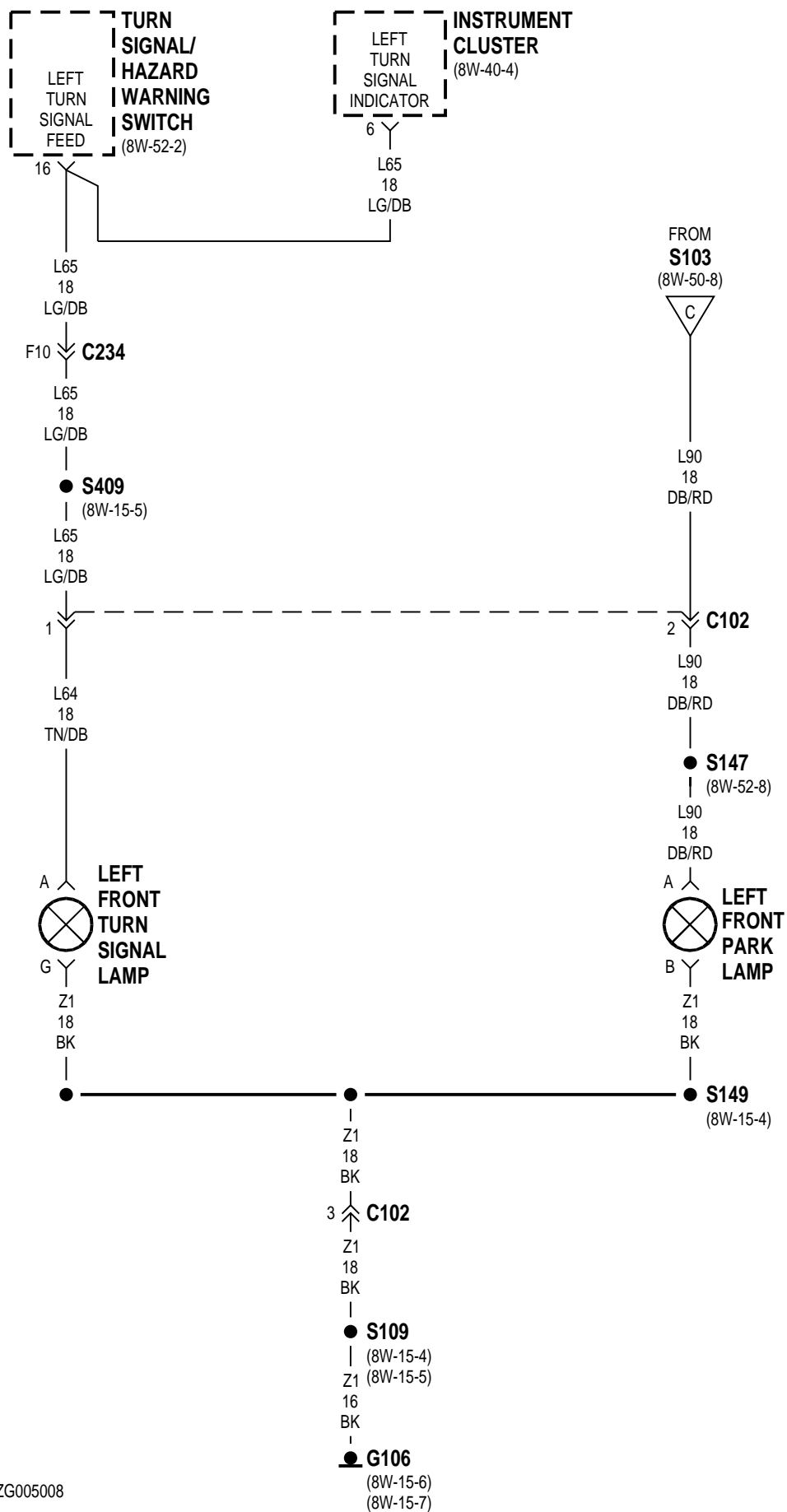


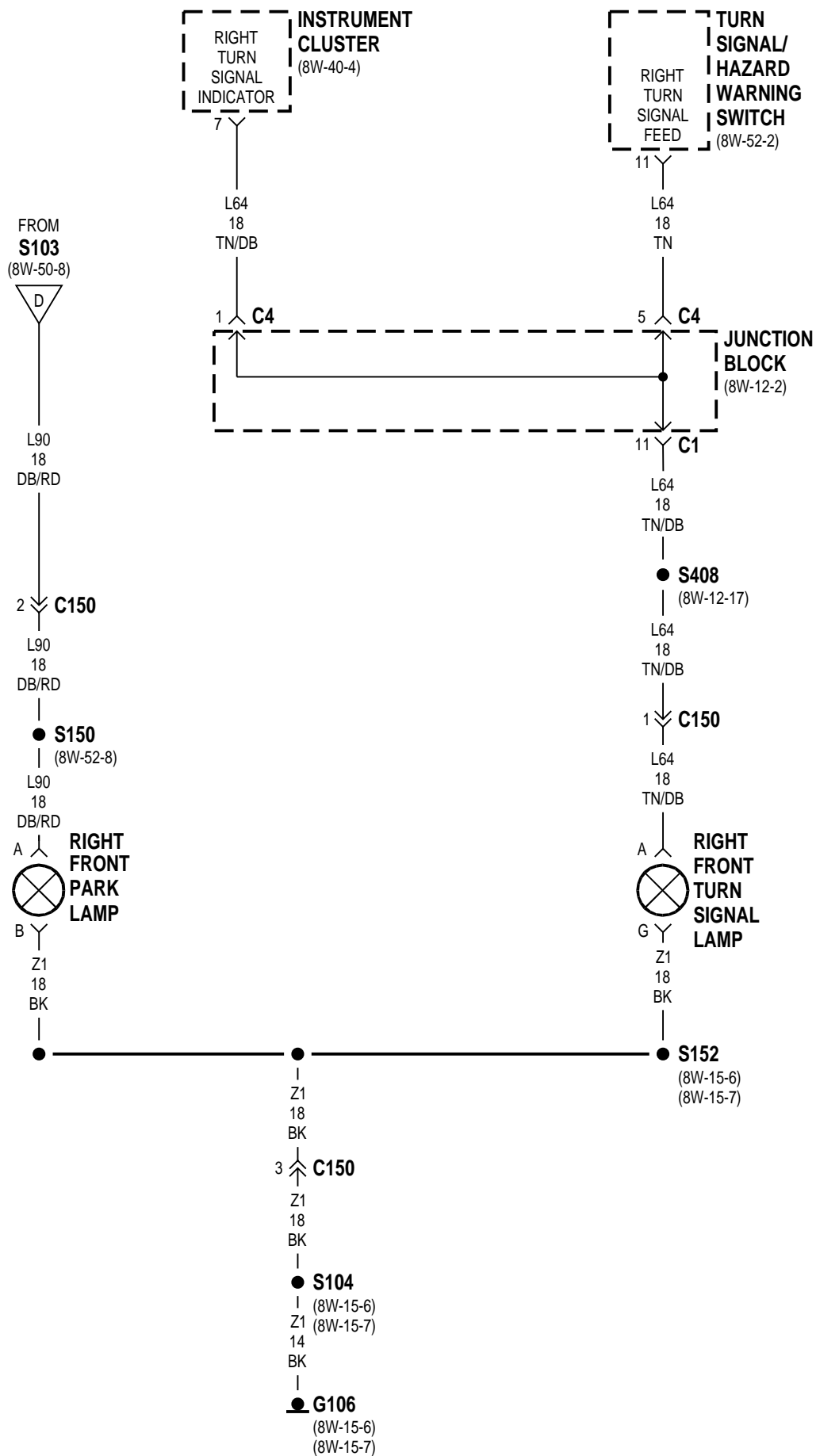


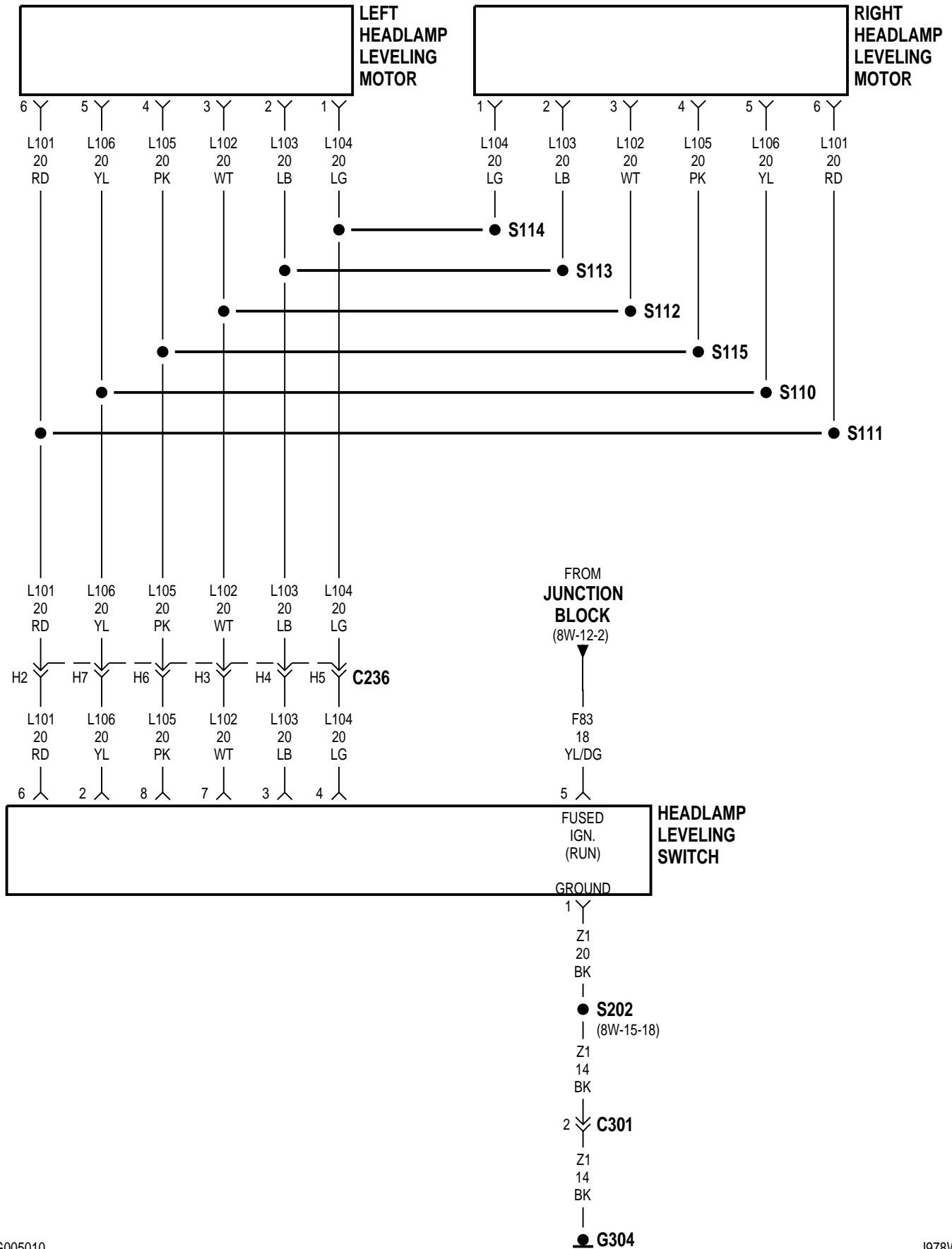












8W-50 FRONT LIGHTING

INDEX

	page		page
DESCRIPTION AND OPERATION		HEADLAMPS	12
AUTO HEADLAMPS	12	INTRODUCTION	12
FOG LAMPS	12	PARKING LAMPS	12
HEADLAMP LEVELING	12		

DESCRIPTION AND OPERATION

INTRODUCTION

The vehicle is equipped with a Body Control Module (BCM). The BCM controls the auto headlamp feature through the auto headlamp relay.

The park lamps operate when the headlamp switch is in the ON or PARK position. Also, if the vehicle is equipped with the Vehicle Theft Security System (VTSS), the BCM powers the park lamps through the park lamp relay if it senses unauthorized vehicle operation.

Circuit A6 from fuse 13 in Power Distribution Center (PDC), powers the headlamp switch through the circuit breaker in the switch.

PARKING LAMPS

Circuit A6 from fuse 13 in the Power Distribution Center (PDC) powers circuit 366 through fuse 17 in the junction block. When the headlamp switch is in the PARK lamp position, it connects circuit 366 to circuit L90. Circuit L90 powers the parking lamps, side marker lamps. Circuit L90 also connects to the Body Control Module (BCM).

The BCM operates the park lamps when it senses unauthorized entry to the vehicle while the Vehicle Theft Security System is armed. When it sense unauthorized entry, the BCM energizes the park lamp relay by providing ground for the relay coil on circuit L79. Circuit 366 powers the relay coil and contacts. When the relay energizes, it connects circuit 366 to circuit L90.

HEADLAMPS

When the headlamp switch is in the LOW position, it connects circuit A6 from fuse 13 in the Power Distribution Center (PDC) to circuit F34. Circuit F34 connects to the dimmer switch portion of the multi-function switch and feeds circuit L4. Circuit L4 powers the low beam of the headlamps.

When the operator selects high beam operation or flash-to-pass with the turn signal stalk of the multi-function switch, circuit L11 from fuse 19 in the junction block connects to circuit L3. Circuit L3 powers

headlamp high beams. Circuit L3 also connects to the Body Control Module (BCM).

If the vehicle was built for sale in the Country of Canada, the Daytime Running Lamps (DRL) module powers the headlamp high beams on circuit L3 when the headlamp switch is off and the ignition switch is in the RUN position.

HEADLAMP LEVELING

When the ignition switch is in the RUN position, it connects circuit A1 from fuse 8 in the Power Distribution Center (PDC) to circuit A22. Circuit A22 powers circuit F83 through fuse 6 in the junction block. Circuit F83 feeds the headlamp leveling switch. Circuit Z1 grounds the switch.

AUTO HEADLAMPS

The Body Control Module (BCM) operates the Auto Headlamp feature. The BCM monitors outside light intensity through the auto headlamp light sensor. Circuit L109 from the BCM provides 5 volts to the sensor. Circuit L110 from the sensor sends the light intensity signal to the BCM.

In the AUTO position, the headlamp switch provides a signal to the BCM by connecting circuit L24 to ground on circuit Z1. If outside light intensity is low enough when the BCM senses the AUTO headlamp request, it energizes the auto headlamp relay by grounding the relay coil on circuit 714. Circuit A6 from fuse 13 in the Power Distribution Center (PDC) powers the relay coil and contacts.

When the relay energizes, it connects circuit A6 to circuit F34. Circuit F34 powers circuit L4 through the headlamp dimmer switch circuitry in the multi-function switch. Circuit L4 powers the headlamps.

FOG LAMPS

The fog lamps only operate when the headlamp high beams are off and the park lamps are on. The fog lamp switch contains a light emitting diode (LED) that illuminates during fog lamp operation.

When the fog lamp switch closes, it signals the Body Control Module (BCM) on circuit L35. If the park lamps are on and the BCM does not sense head-

DESCRIPTION AND OPERATION (Continued)

lamp high beam operation on circuit L3, it energizes the fog lamp relay. The BCM energizes the relay by grounding the relay coil on circuit L95. Circuit F62 from fuse 19 in the Power Distribution Center (PDC) powers the relay coil and contacts.

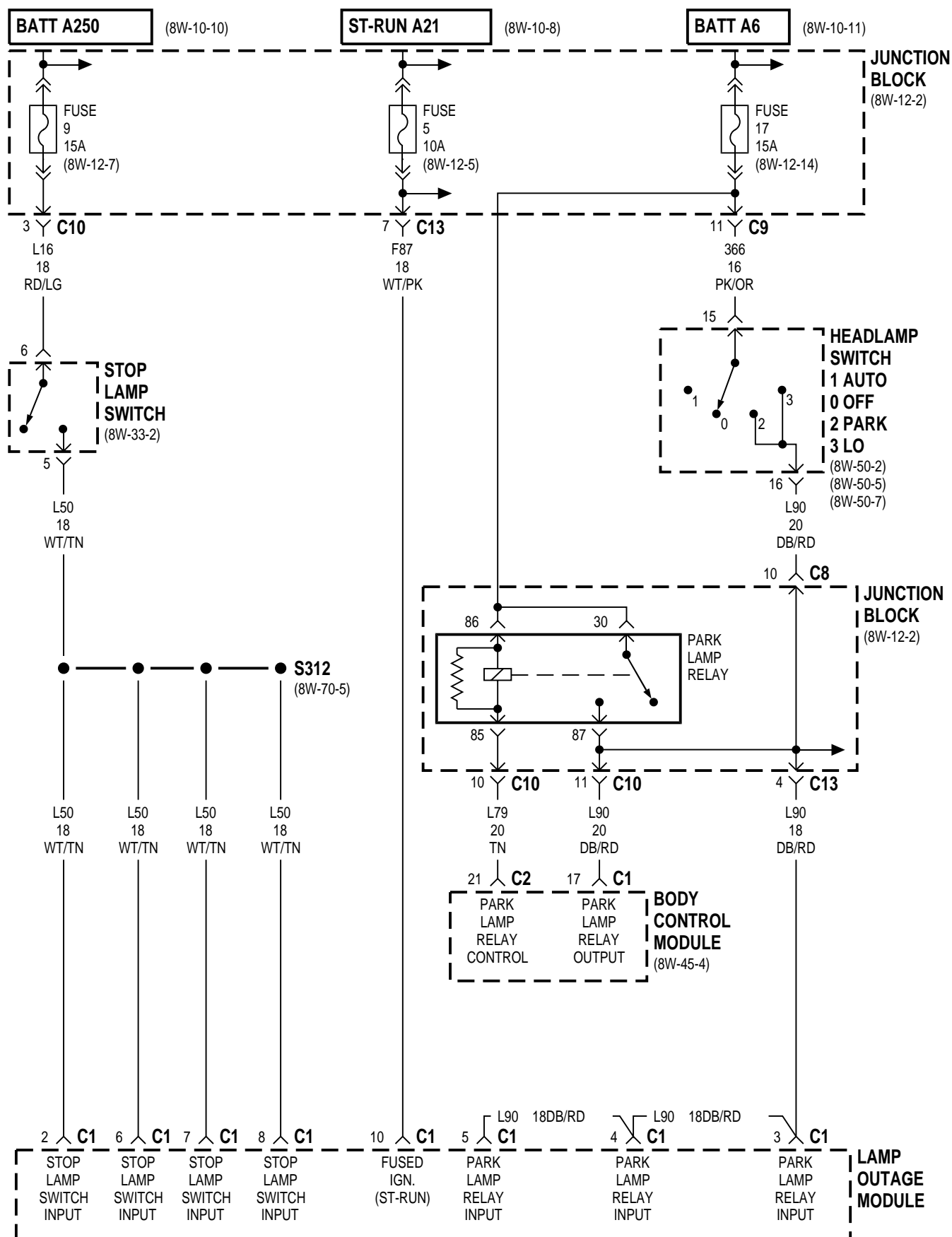
When the fog lamp relay energizes, it connects circuit F62 from fuse 19 in the Power Distribution Center (PDC) to circuit L39. Circuit L39 powers the fog lamps and the fog lamp switch LED. Circuit Z1 provides ground for the lamps and the LED.

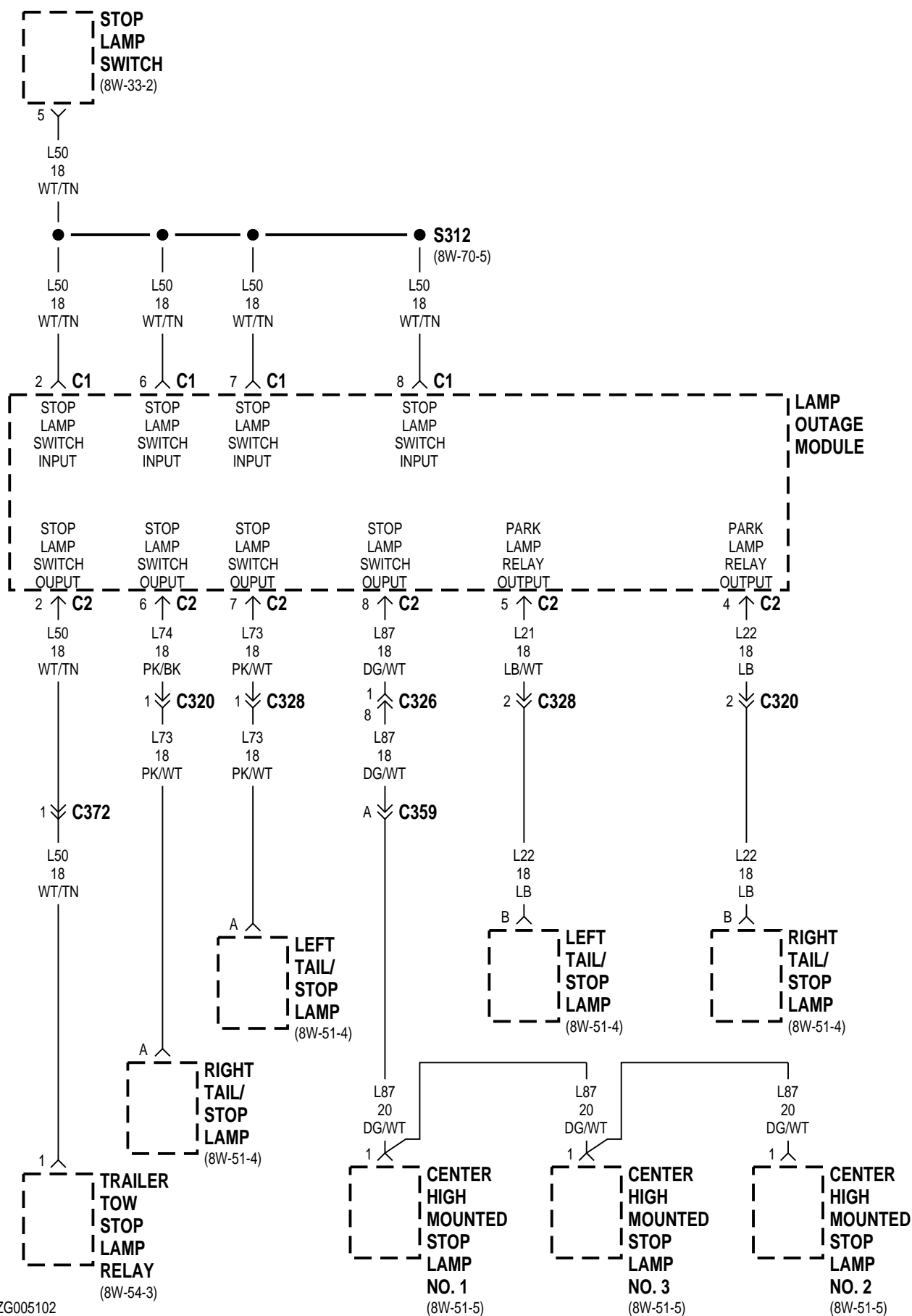
8W-51 REAR LIGHTING

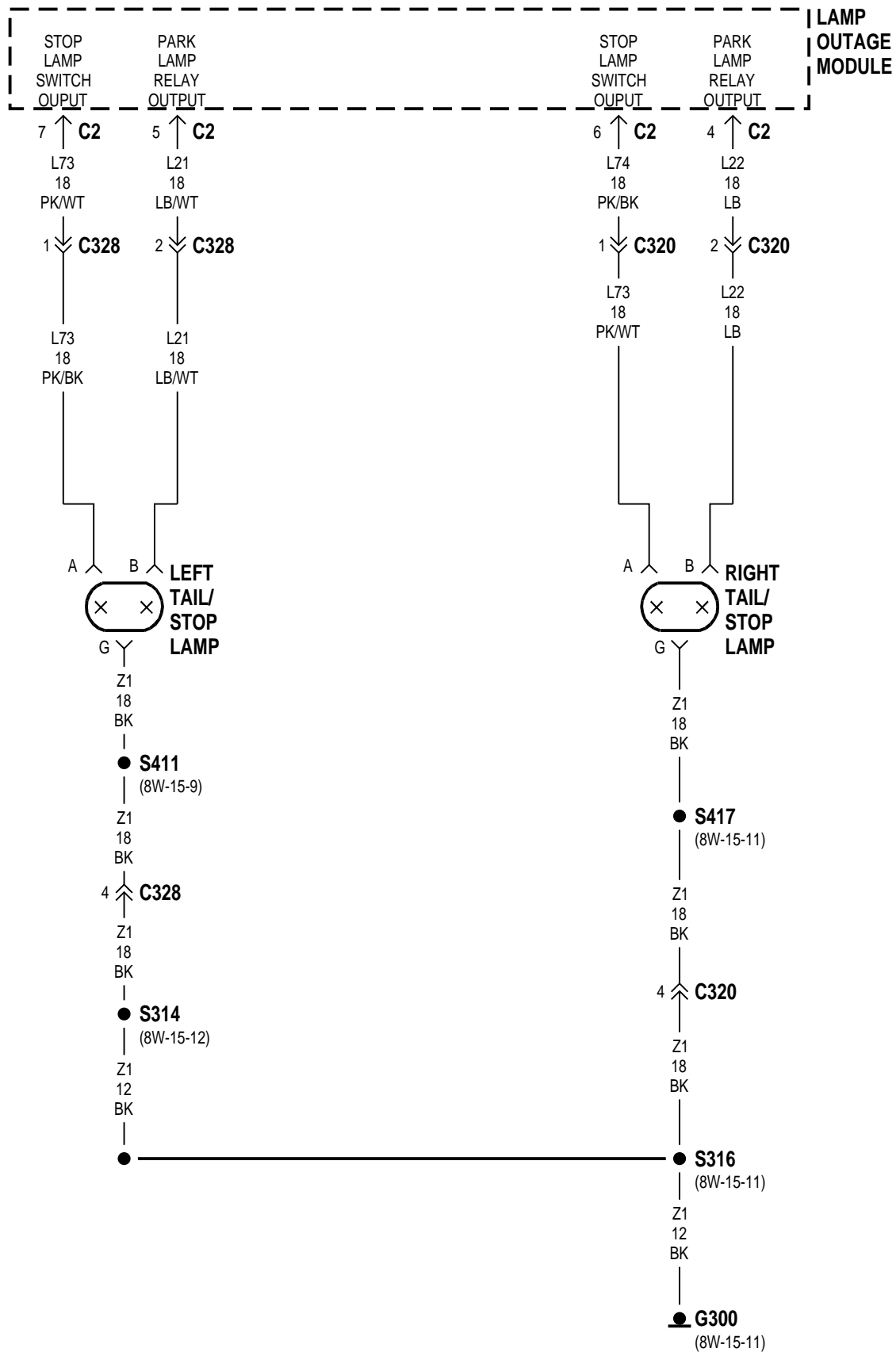
INDEX

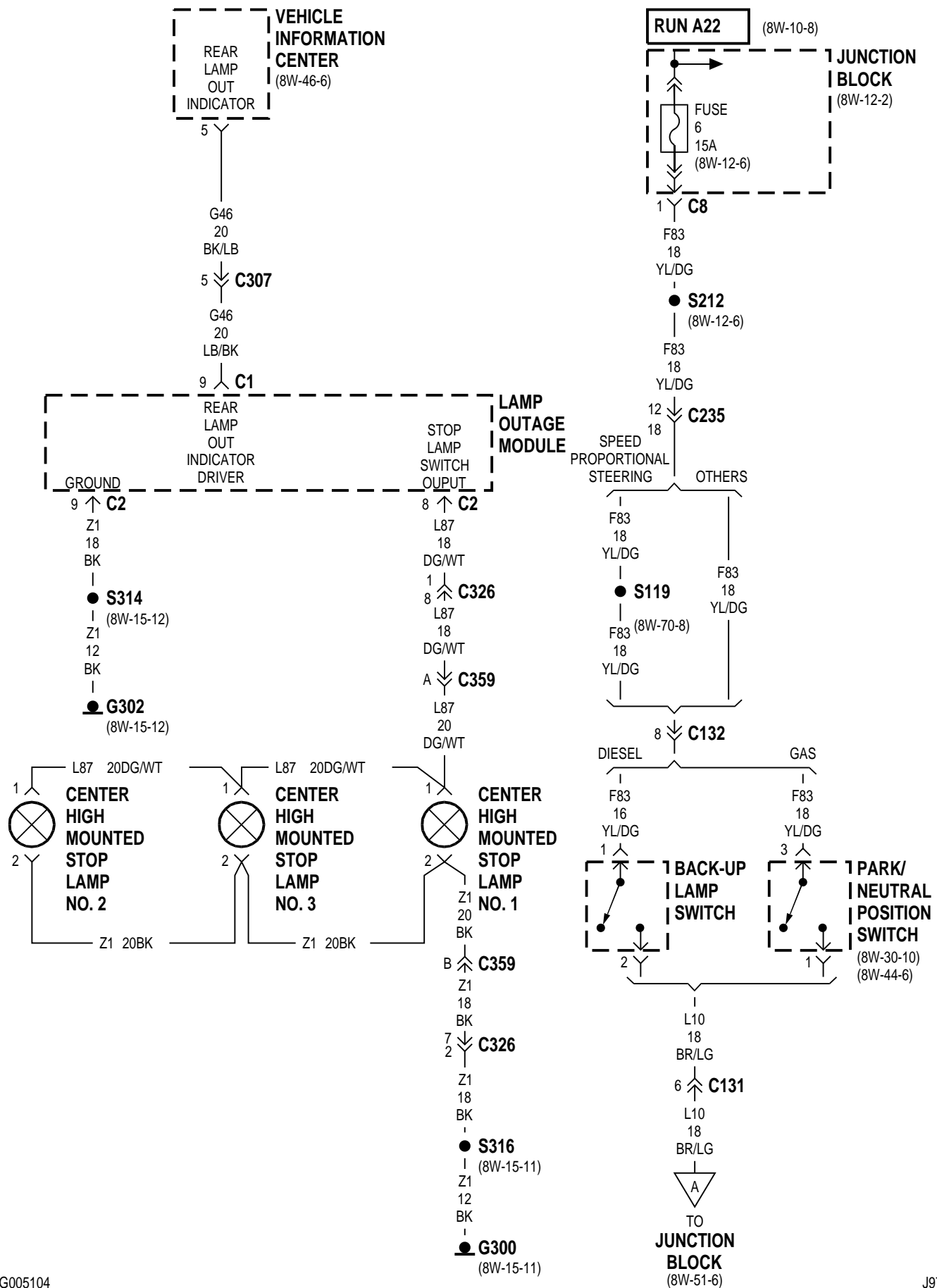
	page
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	8

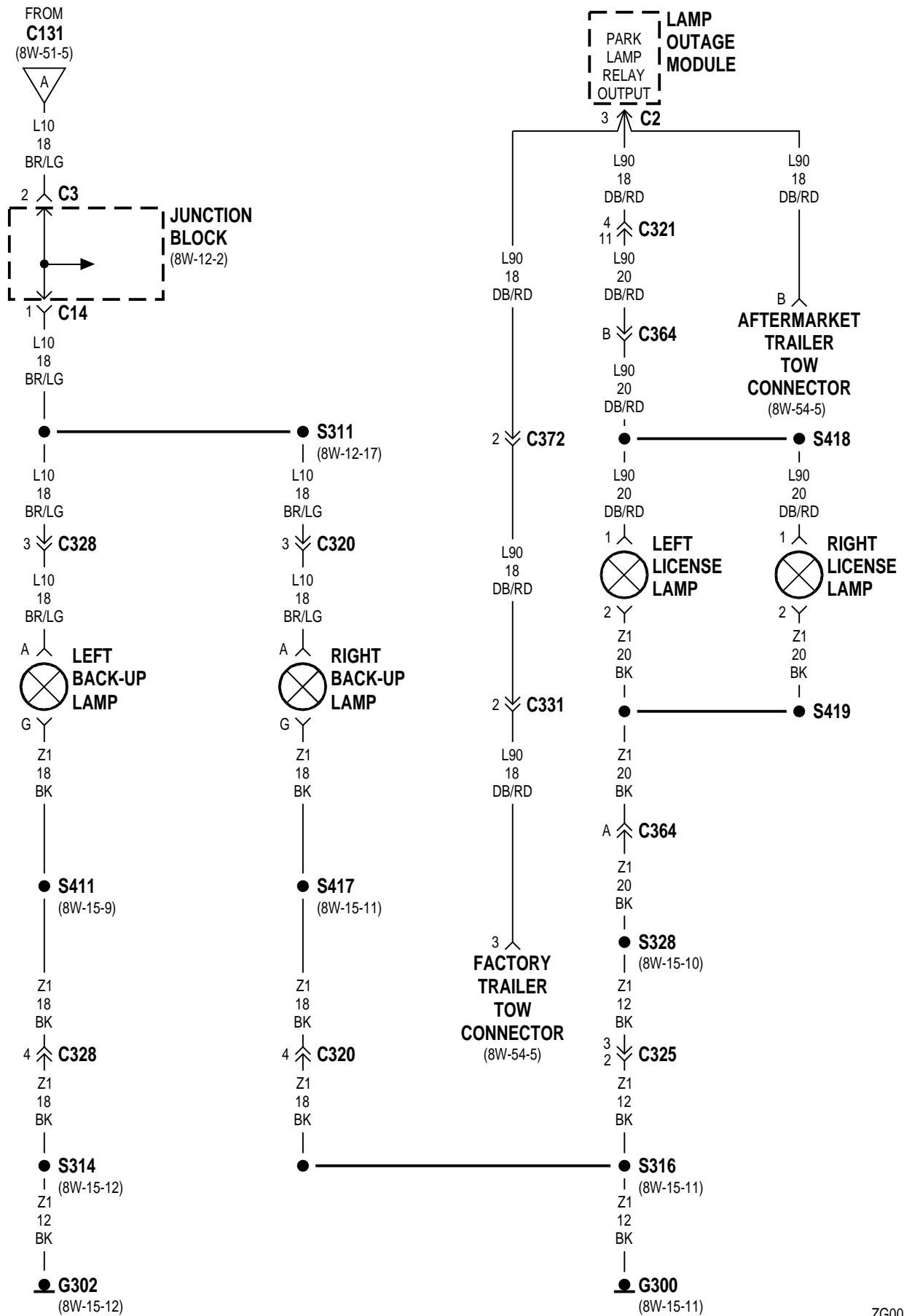
Component	Page	Component	Page
Aftermarket Trailer Tow Connector	8W-51-6	Rear Fog Lamp Relay A	8W-51-7
Back-Up Lamp Switch	8W-51-5	Right Back-Up Lamp	8W-51-6
Body Control Module	8W-51-2	Right License Lamp	8W-51-6
Center High Mounted Stop Lamp No. 1 ..	8W-51-3, 5	Right Rear Fog Lamp	8W-51-7
Center High Mounted Stop Lamp No. 2 ..	8W-51-3, 5	Right Tail/Stop Lamp	8W-51-3, 4
Center High Mounted Stop Lamp No. 3 ..	8W-51-3, 5	S119	8W-51-5
Factory Trailer Tow Connector	8W-51-6	S202	8W-51-7
Fuse 5	8W-51-2	S212	8W-51-5
Fuse 6	8W-51-5	S311	8W-51-6
Fuse 9	8W-51-2	S312	8W-51-2, 3
Fuse 15	8W-51-7	S314	8W-51-4, 5, 6
Fuse 17	8W-51-2, 7	S316	8W-51-4, 5, 6, 7
G300	8W-51-4, 5, 6, 7	S328	8W-51-6
G302	8W-51-5, 6	S411	8W-51-4, 6, 7
G304	8W-51-7	S412	8W-51-3
Headlamp Switch	8W-51-2, 7	S416	8W-51-3
Junction Block	8W-51-2, 5, 6, 7	S417	8W-51-4, 6, 7
Lamp Outage Module	8W-51-2, 3, 4, 5, 6, 7	S418	8W-51-6
Left Back-Up Lamp	8W-51-6	S419	8W-51-6
Left License Lamp	8W-51-6	Stop Lamp Switch	8W-51-2, 3
Left Rear Fog Lamp	8W-51-7	Trailer Tow Stop Lamp Relay	8W-51-3
Left Tail/Stop Lamp	8W-51-3, 4	Vehicle Information Center	8W-51-5
Park Lamp Relay	8W-51-2		
Park/Neutral Position Switch	8W-51-5		

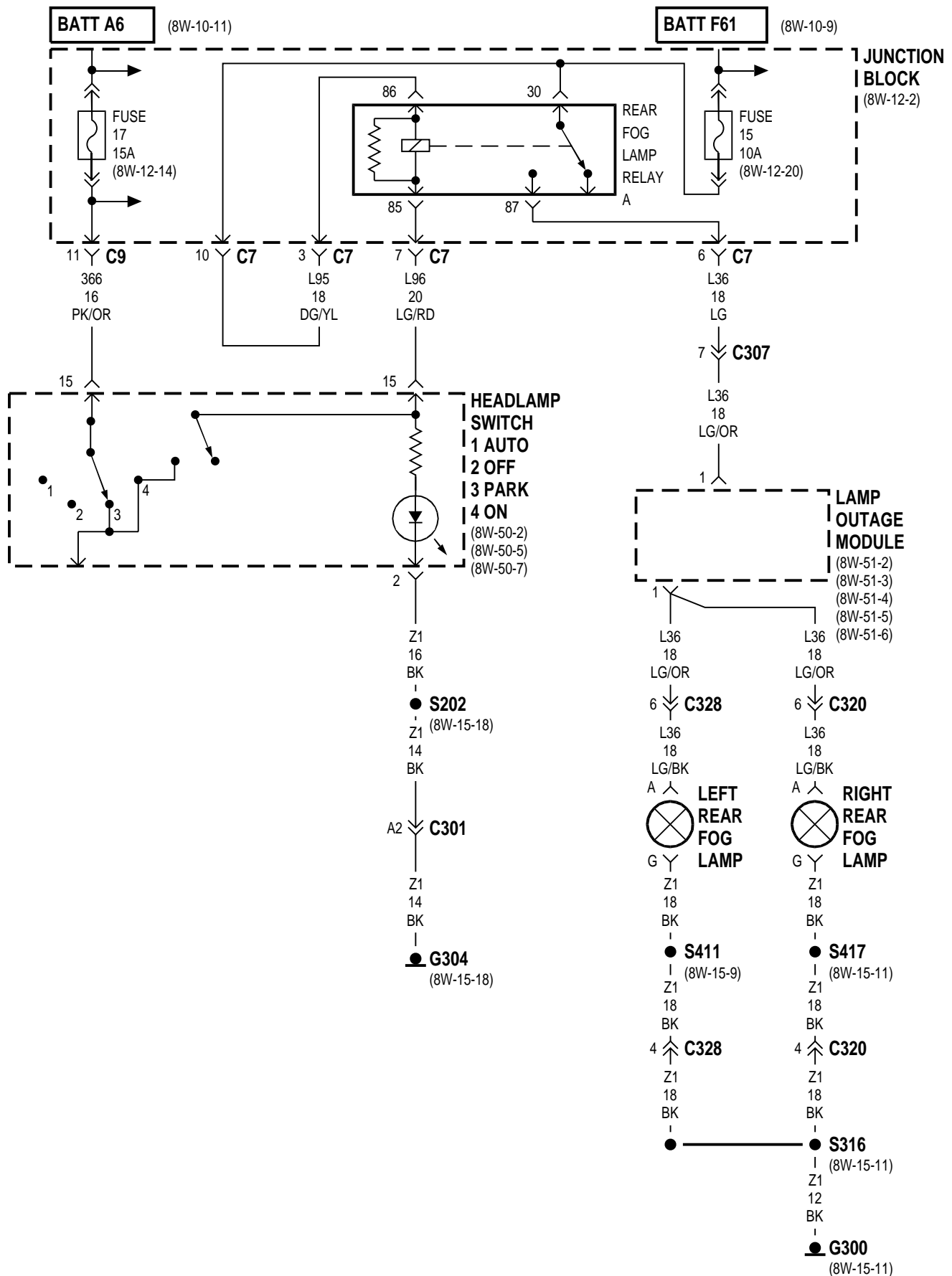












8W-51 REAR LIGHTING

DESCRIPTION AND OPERATION

TAIL LAMPS, REAR LICENSE PLATE LAMPS AND SIDE MARKER LAMPS

Circuit A6 from fuse 13 in the Power Distribution Center (PDC) feeds circuit 366 through fuse 17 in the junction block. Circuit 366 connects to the headlamp switch.

When the headlamp switch is in the PARK or LOW position, the switch connects circuit 366 to circuit L90. From the headlamp switch, circuit L90 branches to power the front parking lamps and rear license plate lamps. Circuit L90 connects to circuits L21 and L22. Circuits L21 and L22 feed the tail lamps and side marker lamps. If the vehicle is equipped with a lamp outage module, circuit L90 feeds the module and the module powers the rear tail, license plate and side marker lamps.

The Body Control Module (BCM) operates the park lamps when it senses unauthorized entry to the vehicle while the Vehicle Theft Security System is armed. When it sense unauthorized entry, the BCM energizes the park lamp relay by providing ground for the relay coil on circuit L79. Circuit 366 powers the relay coil and contacts. When the relay energizes, it connects circuit 366 to circuit L90.

Circuit Z1 provides a ground for the parking lamps, tail lamps, and rear license plate lamps.

HELPFUL INFORMATION

- If the vehicle is equipped with factory installed trailer tow, circuit L90 connects to the trailer tow harness.
- Check fuse 13 in PDC.
- Check fuse 17 in the junction block.

STOP LAMPS AND CHMSL LAMPS

Circuit A250 from fuse 11 in the Power Distribution Center (PDC) supplies voltage to circuit L16 through fuse 9 in the junction block. Circuit L16 connects to the stop lamp switch.

When the operator presses the brake pedal, the stop lamp switch closes and connects circuit L16 to circuit L50. Circuit L50 connects to circuits L73, L74 and L87. Circuit L73 and L74 feed the stop lamps. Circuit L87 powers the Center High Mounted Stop Lamps (CHMSL). Circuit Z1 provides a ground for the stop lamps and CHMSL lamps.

If the vehicle is equipped with a lamp outage module, circuit L50 connects to the module. The lamp outage module powers circuit L73, L74 and L87.

REAR FOG LAMPS

The rear fog lamps are powered by the rear fog lamp relay on circuit L36. The relay coil and contacts are powered by circuit L95 from fuse 15 in the fuse block. The relay coil ground is controlled by the headlamp and rear fog lamp switches on circuit L96.

BACK-UP LAMPS

In the RUN position, the ignition switch connects circuit A1 from fuse 8 in the Power Distribution Center (PDC) to circuit A22. Circuit A22 powers circuit F83 through fuse 6 in the junction block.

Circuit F83 supplies power to the PARK/NEUTRAL position switch. When the operator puts the transmission in REVERSE, the switch connects circuit F83 to circuit L10. Circuit L10 feeds the back-up lamps. Circuit Z1 provides ground for the back-up lamps.

HELPFUL INFORMATION

- Check fuse 8 in the PDC and fuse 6 in the junction block.
- Check for continuity across the back-up lamp switch when it is closed.

LAMP OUTAGE MODULE (LOM)

The Lamp Outage Module (LOM) determines if a rear lighting lamp is not operating. When the ignition switch is in the START or RUN position, circuit A1 from fuse 8 in the Power Distribution Center (PDC) connects to circuit A21. Circuit A21 feeds circuit F87 through fuse 5 in the junction block. Circuit F87 feeds the LOM.

Circuit G46 from the LOM connects to the Vehicle Information Center (VIC). When the LOM senses an inoperative lamp, the VIC displays the data to the vehicle operator.

Circuit L90 which feeds the tail lamps and side marker lamps, connects to the LOM. From the LOM, circuit L90 continues to the license plate lamps. Circuits L21 and L22 from the LOM power the tail lamps and side marker lamps.

Circuit L50 from the stop lamp switch connects to the LOM. From the LOM, circuits L73 and L74 power the stop lamps and circuit L87 powers the Center High Mounted Stop Lamps (CHMSL).

Circuit Z1 grounds the LOM.

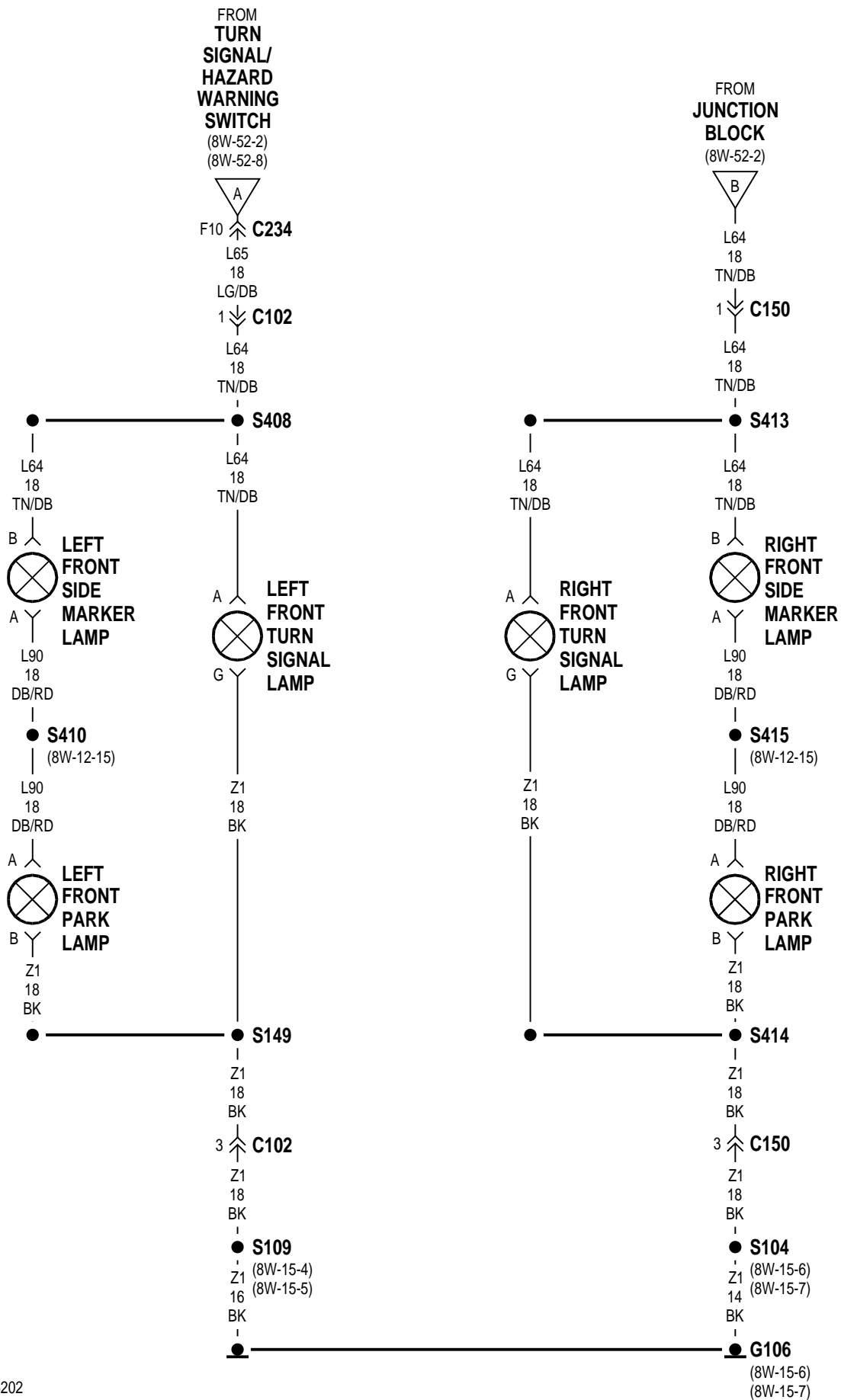
8W-52 TURN SIGNALS

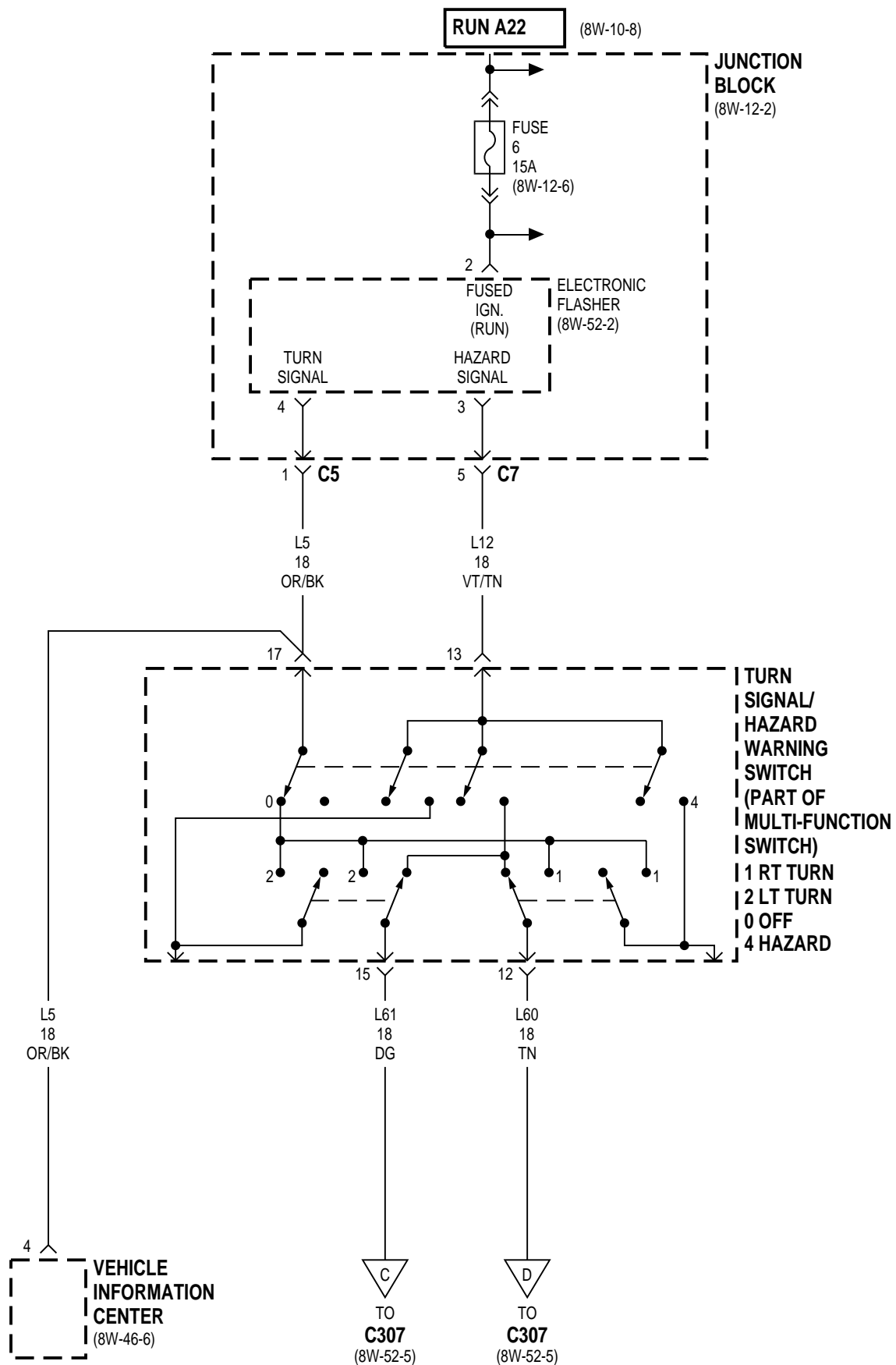
INDEX

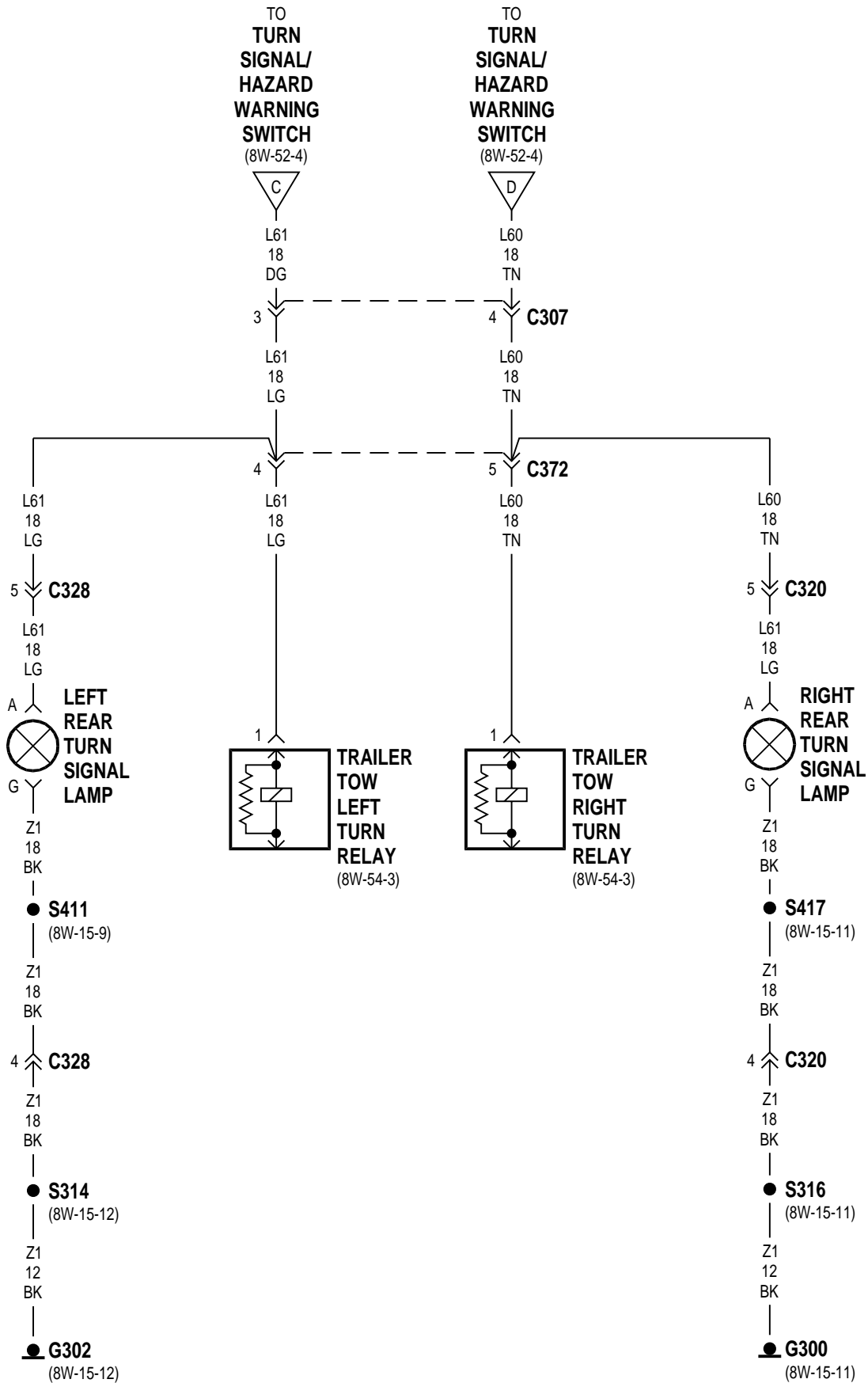
	page
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	9

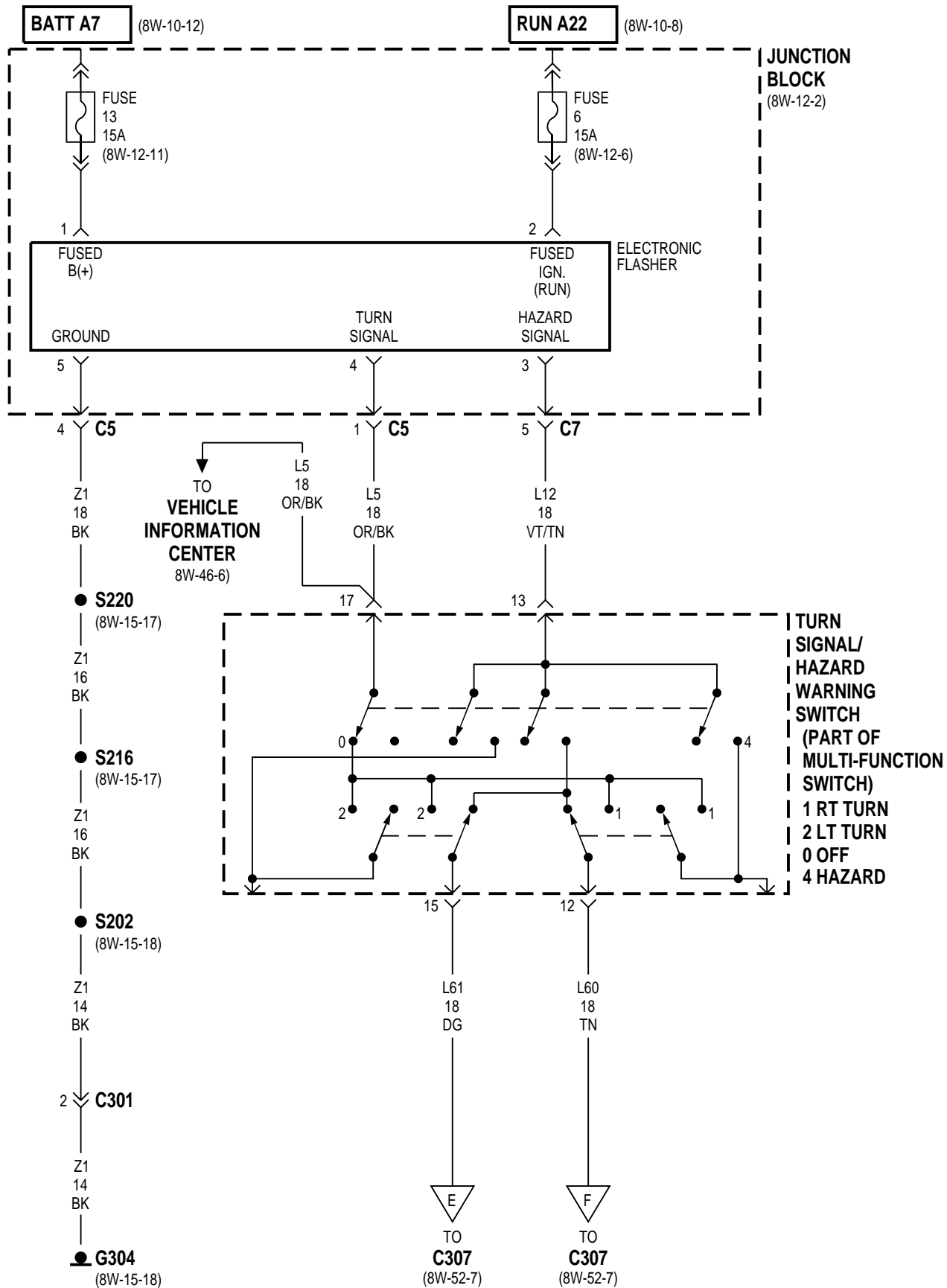
Component	Page	Component	Page
Aftermarket Trailer Tow Connector	8W-52-7	S103	8W-52-8
Electronic Flasher	8W-52-2, 4, 6	S104	8W-52-3, 8
Fuse 6	8W-52-2, 4, 6	S109	8W-52-3, 8
Fuse 8	8W-52-7	S147	8W-52-8
Fuse 13	8W-52-2, 6	S149	8W-52-8
G106	8W-52-3, 8	S150	8W-52-8
G109	8W-52-8	S152	8W-52-8
G300	8W-52-5, 7	S202	8W-52-2, 6
G302	8W-52-5, 7	S216	8W-52-2, 6
G304	8W-52-2, 6	S220	8W-52-2, 6
Instrument Cluster	8W-52-2	S313	8W-52-7
Junction Block	8W-52-2, 4, 6, 7	S314	8W-52-5, 7
Left Front Park Lamp	8W-52-3	S315	8W-52-7
Left Front Side Marker Lamp	8W-52-3	S316	8W-52-5, 7
Left Front Turn Signal	8W-52-8	S408	8W-52-3, 8
Left Front Turn Signal Lamp	8W-52-3	S409	8W-52-3, 8
Left Park Lamp	8W-52-8	S410	8W-52-3
Left Rear Turn Signal Lamp	8W-52-5, 7	S411	8W-52-5, 7
Left Side Repeater	8W-52-8	S413	8W-52-3
Park Lamp Relay	8W-52-8	S414	8W-52-3
Right Front Park Lamp	8W-52-3	S415	8W-52-3
Right Front Side Marker Lamp	8W-52-3	S417	8W-52-5, 7
Right Front Turn Signal	8W-52-8	Trailer Tow Left Turn Relay	8W-52-5
Right Front Turn Signal Lamp	8W-52-3	Trailer Tow Right Turn Relay	8W-52-5
Right Park Lamp	8W-52-8	Turn Signal/Hazard Warning Switch ..	8W-52-2, 4, 6
Right Rear Turn Signal Lamp	8W-52-5, 7	Vehicle Information Center	8W-52-2, 4, 6
Right Side Repeater	8W-52-8		

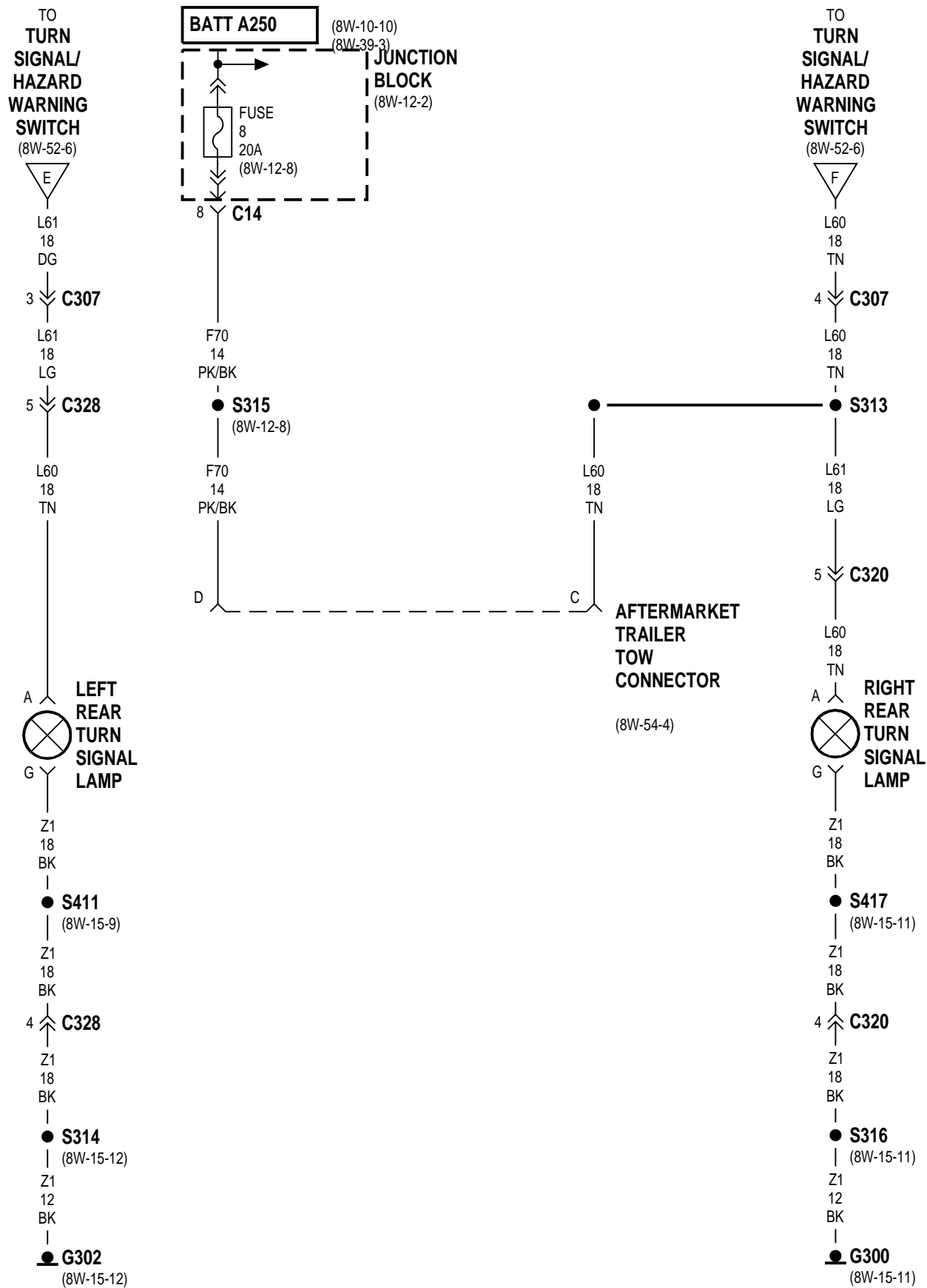


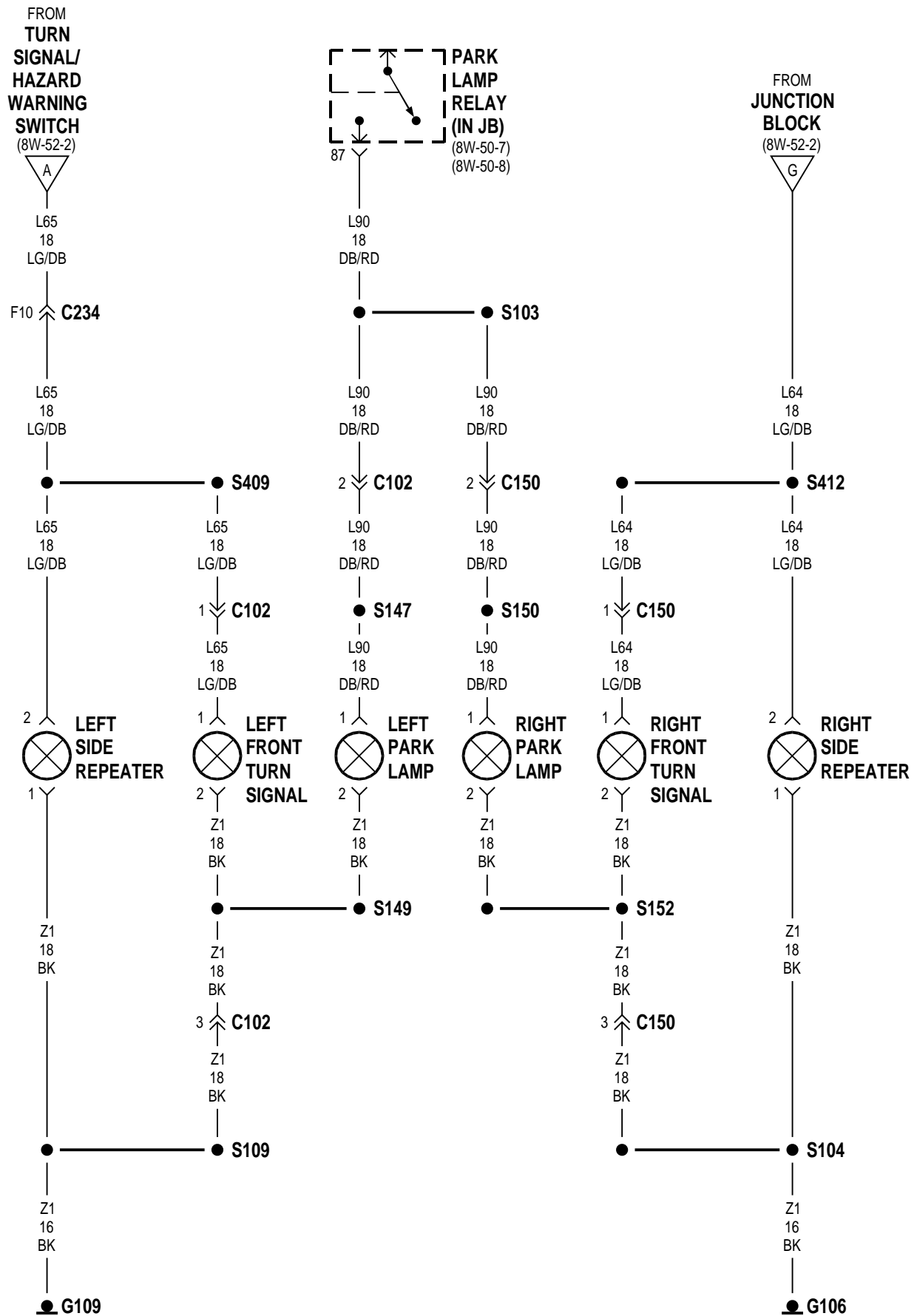












8W-52 TURN SIGNALS

DESCRIPTION AND OPERATION

ELECTRONIC FLASHER RELAY

The electronic flasher relay in the junction block supplies battery voltage to the turn signal/hazard switch circuitry in the multi-function switch. When the ignition switch is OFF, the hazard flashers will operate but the turn signals will not.

Circuit A7 from fuse 15 in the Power Distribution Center (PDC) powers the electronic flasher through fuse 13 in the junction block.

In the RUN position, the ignition switch connects circuit A1 from fuse 8 in the Power Distribution Center (PDC) to circuit A22. Circuit A22 feeds the flasher relay through fuse 6 in the junction block. Circuit Z1 provides ground for the relay.

Circuit L5 from the flasher relay connects to the multi-function switch to supply power to the turn signal circuits. The multi-function switch connects to the right rear turn signal lamps on circuit L60 and the left rear turn signal lamp on circuit L61. Circuit L64 from the switch feeds the right front turn signal lamp and side marker lamp. Circuit L65 feeds the left front turn signal lamp and side marker lamp.

Circuit L12 from the flasher relay connects to the multi-function switch to supply power to the hazard flasher circuits. The multi-function switch connects to the rear turn signal lamps on circuits L60 and L61 and the front turn signal and side marker lamps on circuits L64 and L65.

TURN SIGNALS

When the operator selects the right turn signal, the multi-function switch connects circuit L5 from

the flasher relay to circuits L60 and L64. Circuit L64 feeds the right front turn signal lamp and side marker lamp. Circuit L60 feeds the right rear turn signal lamp. Circuit L64 also splices to power the right turn signal indicator lamp in the instrument cluster.

When the operator selects the left turn signal, the multi-function switch connects circuit L5 from the flasher relay to circuits L61 and L65. Circuit L61 feeds the left rear turn signal lamp and side marker lamp. Circuit L65 feeds the left front turn signal lamp. Circuit L65 also splices to power the left turn signal indicator lamp on the instrument cluster.

Circuit Z1 provides ground for the turn signal lamps.

HAZARD FLASHERS

When the operator selects the hazard flashers, the multi-function switch circuit L12 from the flasher relay circuits L60, L61, L64 and L65.

Circuit L61 feeds the left rear turn signal lamp. Circuit L60 feeds the right rear turn signal lamp. Circuit L65 feeds the left front turn signal lamp, side marker lamp and the instrument cluster indicator lamp. Circuit L64 feeds the right front turn signal lamp, side marker lamp and the instrument cluster indicator lamp.

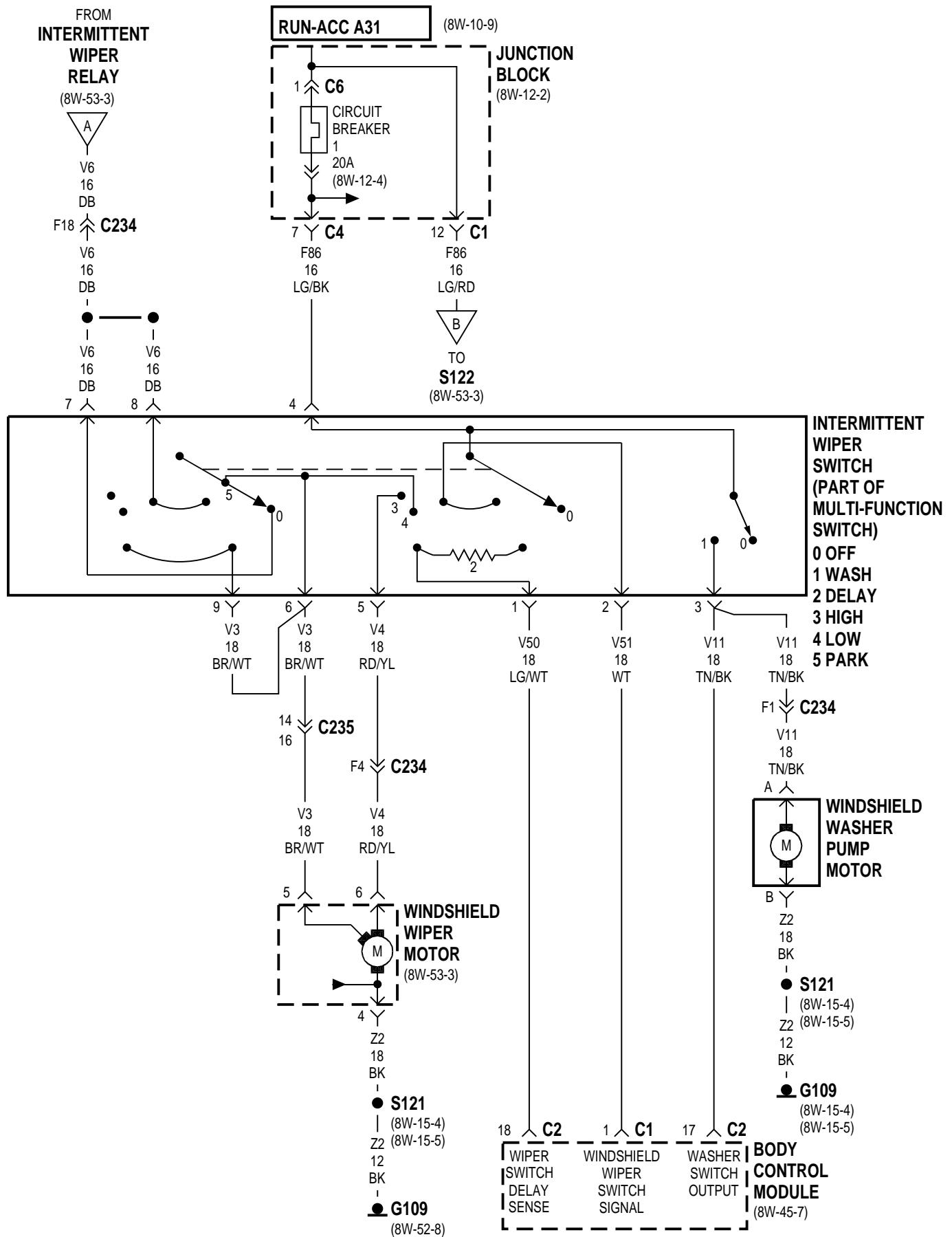
Circuit Z1 provides ground for the hazard flasher lamps.

8W-53 WIPERS

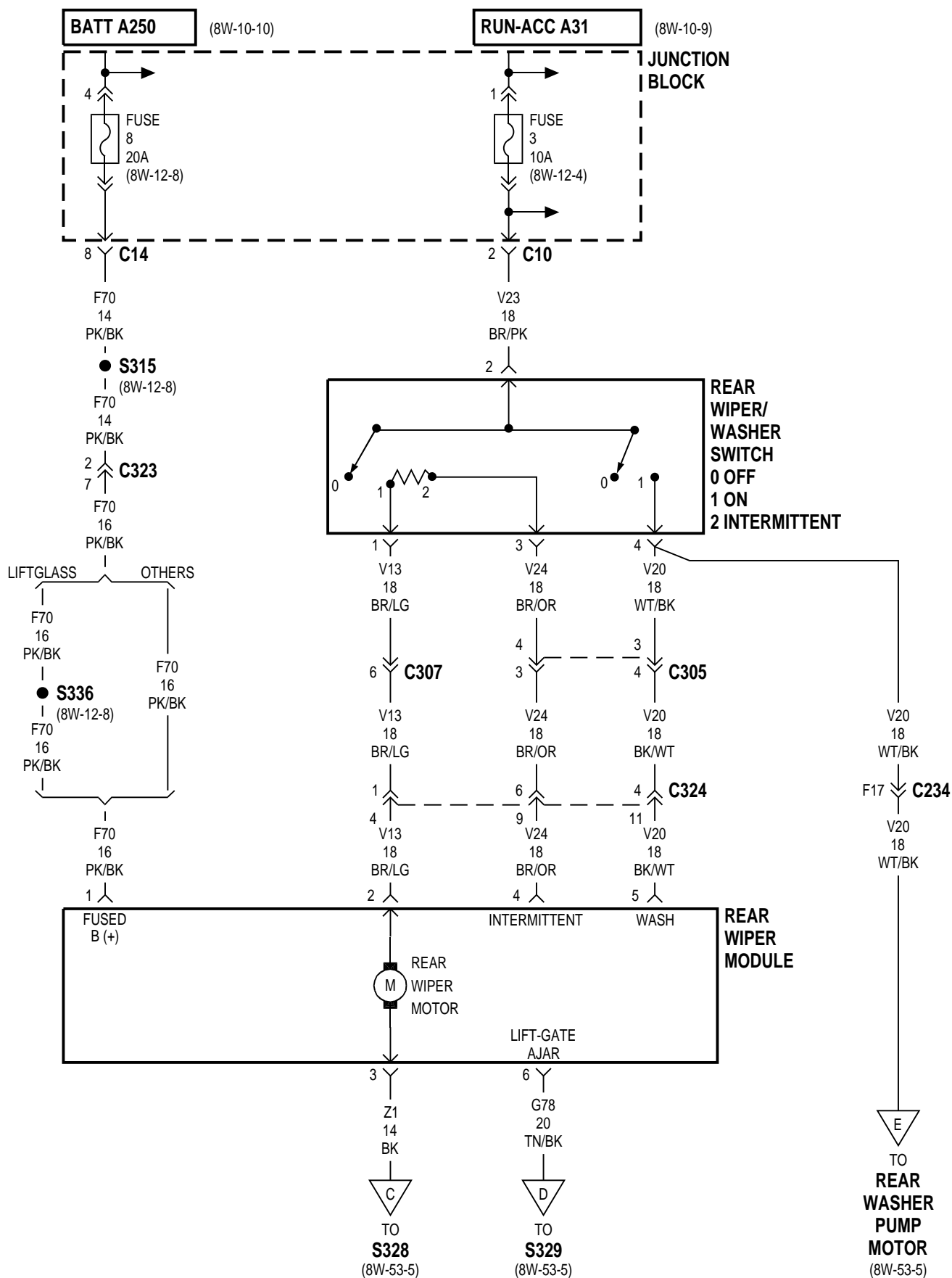
INDEX

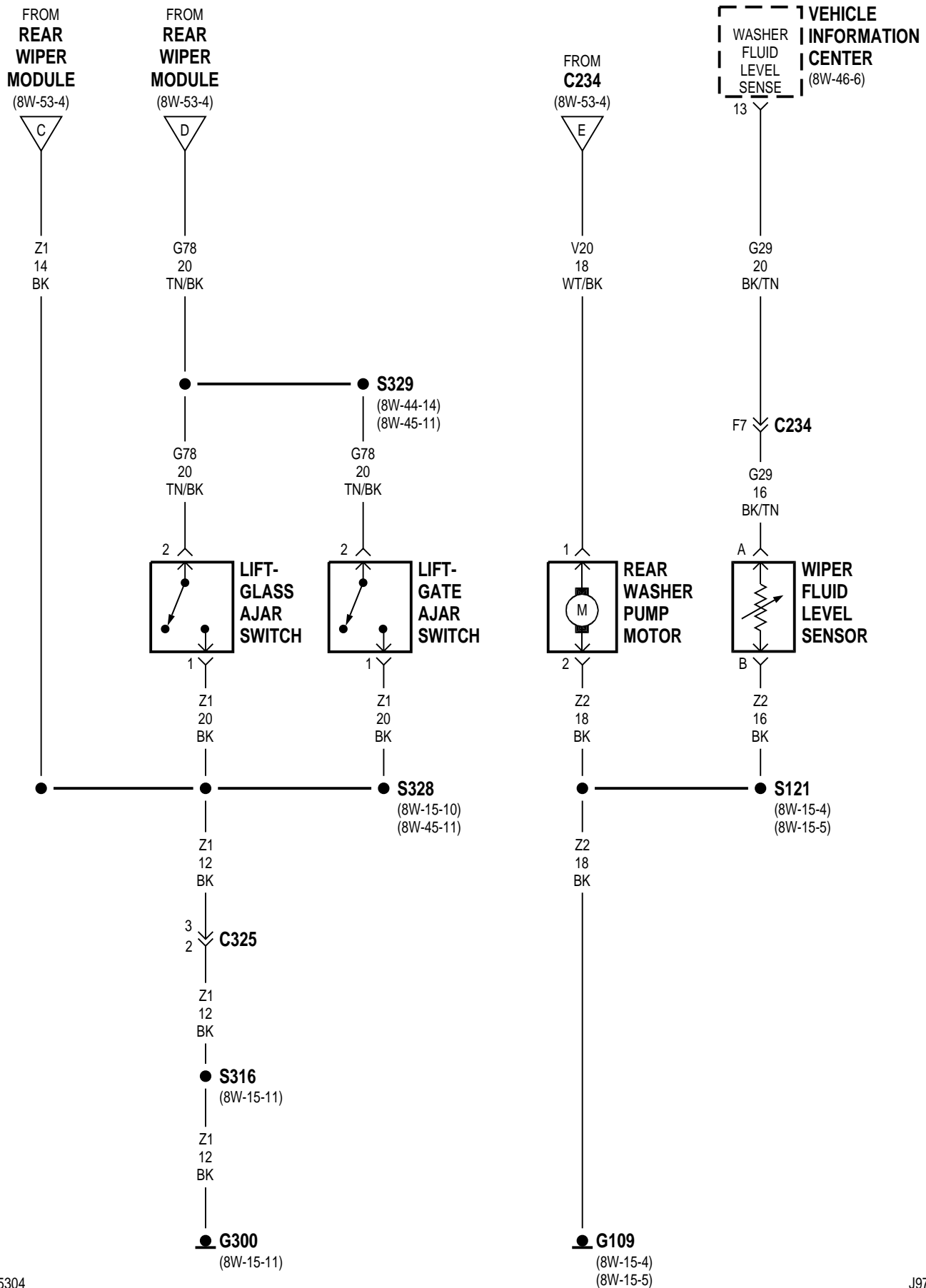
	page
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	6

Component	Page	Component	Page
Body Control Module	8W-53-2, 3	Rear Wiper/Washer Switch	8W-53-4
Circuit Breaker 1	8W-53-2	S120	8W-53-3
Fuse 3	8W-53-4	S121	8W-53-2, 3, 5
Fuse 8	8W-53-4	S122	8W-53-3
G109	8W-53-2, 3, 5	S315	8W-53-4
G300	8W-53-5	S316	8W-53-5
Intermittent Wiper Relay	8W-53-3	S328	8W-53-5
Intermittent Wiper Switch	8W-53-2, 3	S329	8W-53-5
Junction Block	8W-53-2, 4	S336	8W-53-4
Lift- Gate Ajar Switch	8W-53-5	Vehicle Information Center	8W-53-5
Lift- Glass Ajar Switch	8W-53-5	Windshield Washer Pump Motor	8W-53-2
Rear Washer Pump Motor	8W-53-5	Windshield Wiper Motor	8W-53-2, 3
Rear Wiper Module	8W-53-4	Wiper Fluid Level Sensor	8W-53-5
Rear Wiper Motor	8W-53-4		









8W-53 WIPERS

DESCRIPTION AND OPERATION

INTERMITTENT WIPER OPERATION

In the ACCESSORY or RUN position, the ignition switch connects circuit A1 from fuse 8 in the PDC to circuit A31. Circuit A31 powers circuit F86 through the circuit breaker in cavity 1 of the junction block. Circuit F86 supplies power to the intermittent wiper switch.

When the operator selects LOW speed wiper operation, the switch connects circuit F86 to circuit V3. Circuit V3 powers the wiper motor low speed brush.

When the operator selects HIGH speed wiper operation, the switch connects circuit F86 to circuit V4. Circuit V4 powers the wiper motor high speed brush.

When the operator selects intermittent wiper operation the wiper switch sends a signals to the Body Control Module (BCM) on circuit V51. The BCM determines the amount of delay selected on circuit V50 from the switch.

After determining the amount of delay selected, the BCM periodically energizes the intermittent wiper relay on circuit V18. Circuit F86 from the circuit breaker in the junction block powers the relay coil and contacts. Circuit F86 is HOT when the ignition switch is in the ACCESSORY or RUN position.

When the intermittent wiper relay energizes it powers circuit V6. Circuit V6 connects to circuit V3 through the intermittent wiper switch. Circuit V3 powers the wiper motor low speed brush. Circuit Z2 provides ground for the brush. When not energized, the relay connects circuit F86 to circuit V66. Circuit V66 connects to the park switch in the intermittent wiper motor and the BCM.

REAR WIPER/WASHER

The rear wiper and washer system uses a switch assembly located in the right switch pod.

When the ignition switch is in the ACCESSORY or RUN position, it connects circuit A1 from fuse 8 in the Power Distribution Center (PDC) to circuit A31. Circuit A31 powers circuit V23 through fuse 3 in the junction block. Circuit V23 supplies power for the rear wiper/wash switch.

Circuit A250 from fuse 11 in the PDC powers circuit F70 through fuse 8 in the junction block. Circuit F70 powers the rear wiper motor and the control module located internal to the motor assembly.

When the operator selects the ON position, power is supplied through the switch to circuit V13. The V13 circuit connects from the switch to the rear wiper control module.

The module processes this signal and supplies power to the wiper motor. Ground for the wiper motor is supplied on circuit Z1.

When the switch is placed in the DELAY position, power is supplied from the switch to the motor control on circuit V24. The module processes this signal and connects the motor to voltage. The amount of DELAY is controlled by the position of the rear wiper switch.

When the WASH switch is activated, power is passed through the switch to circuit V20. This circuit is double crimped at the switch. One branch of the circuit connects to the rear wiper control module. The other branch connects to the rear washer pump motor.

An additional input to the rear wiper control module is supplied on circuit G78. This circuit is connected to the liftgate and liftglass ajar switches. Circuit G78 signals the control when the liftgate or liftglass opens.

When the liftgate is ajar the wiper control module will not allow the rear wiper or washer to operate.

HELPFUL INFORMATION

- Check fuses 8 and 11 in the PDC
- Check fuses 3 and 8 in the junction block
- Check the operation of the liftgate ajar switch

LOW WASHER FLUID LEVEL SENSOR

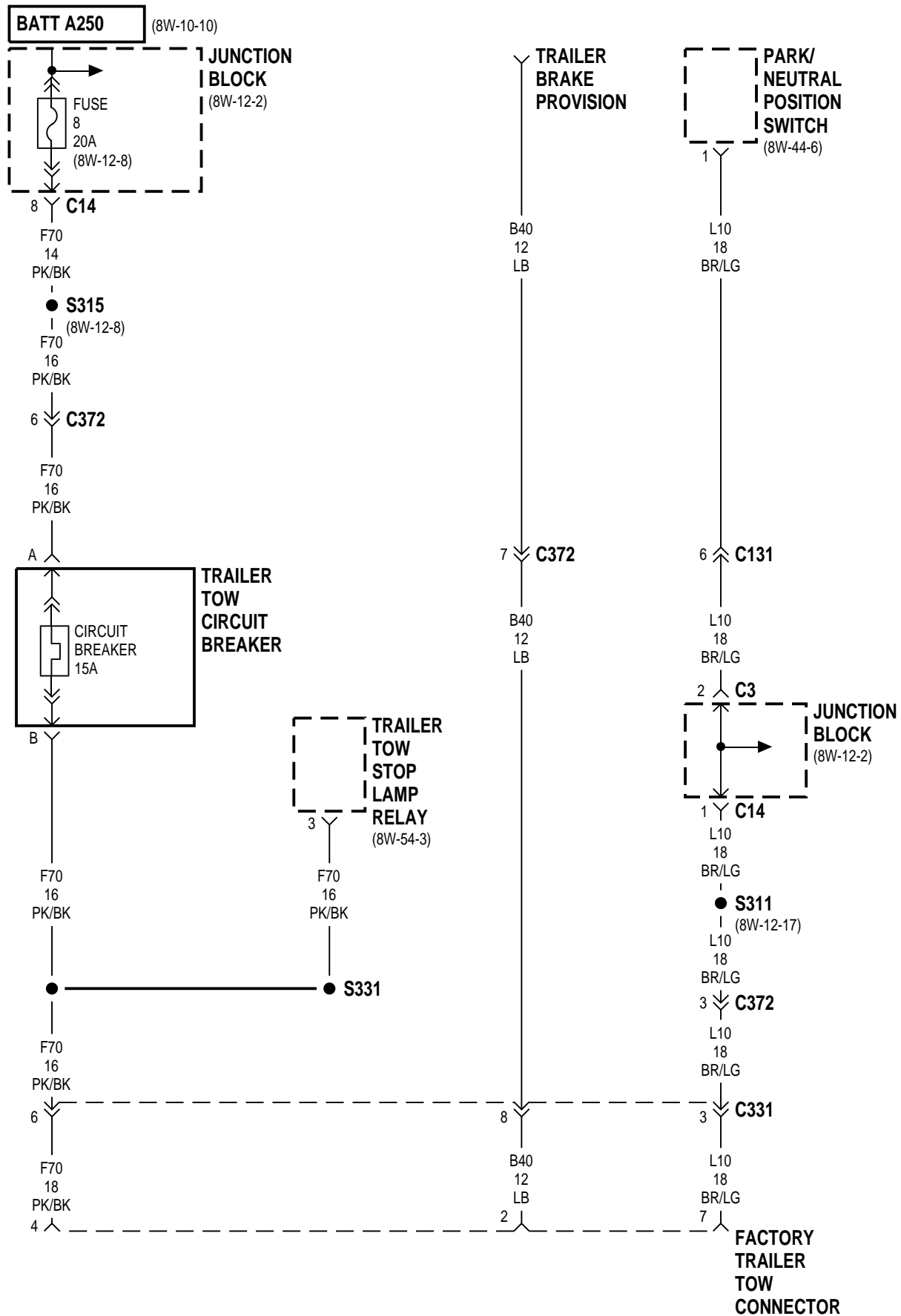
When the switch in the low washer fluid sensor closes, it connects circuit G29 from the Vehicle Information Center (VIC) to ground on circuit Z2. The VIC displays the low washer fluid message.

8W-54 TRAILER TOW

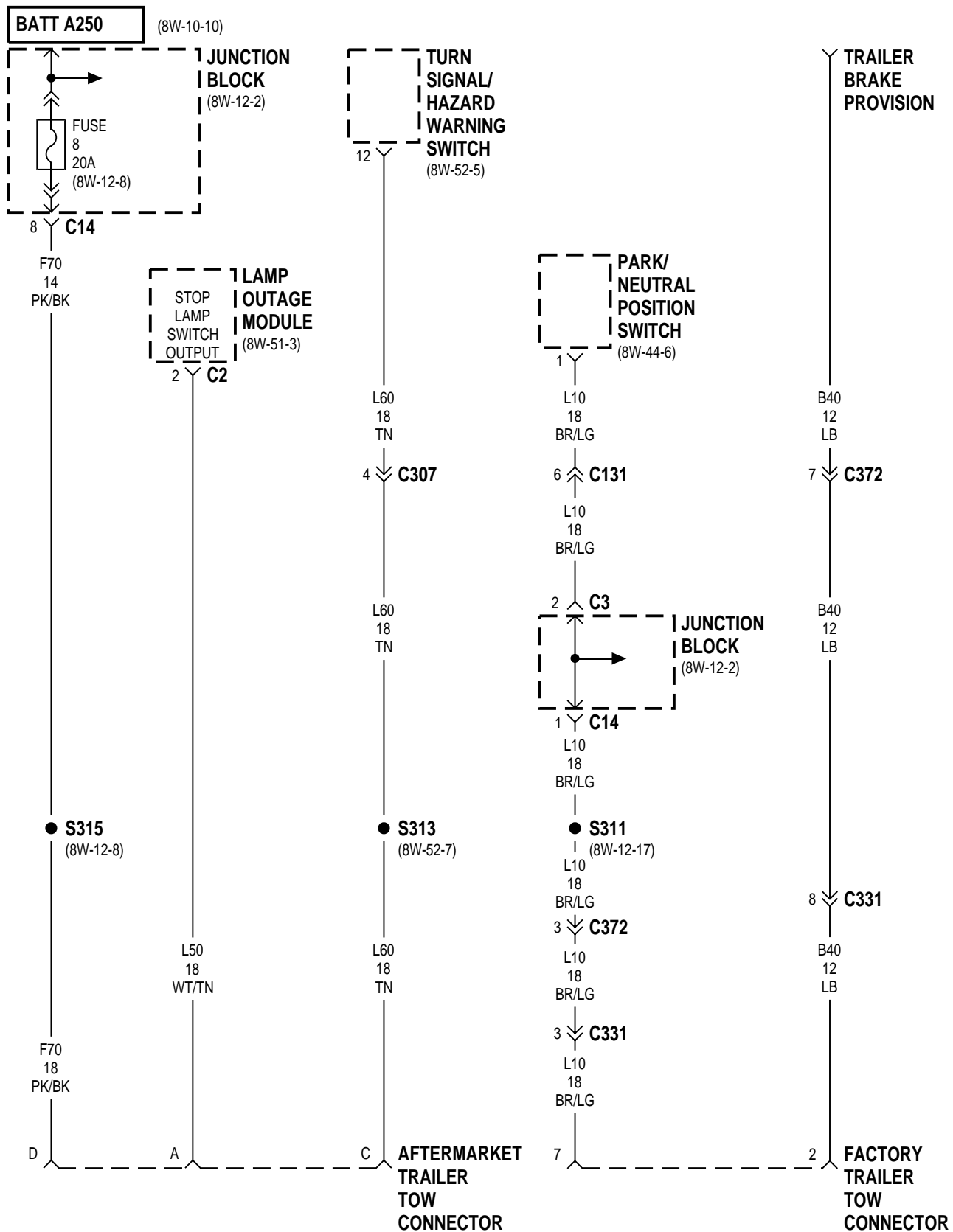
INDEX

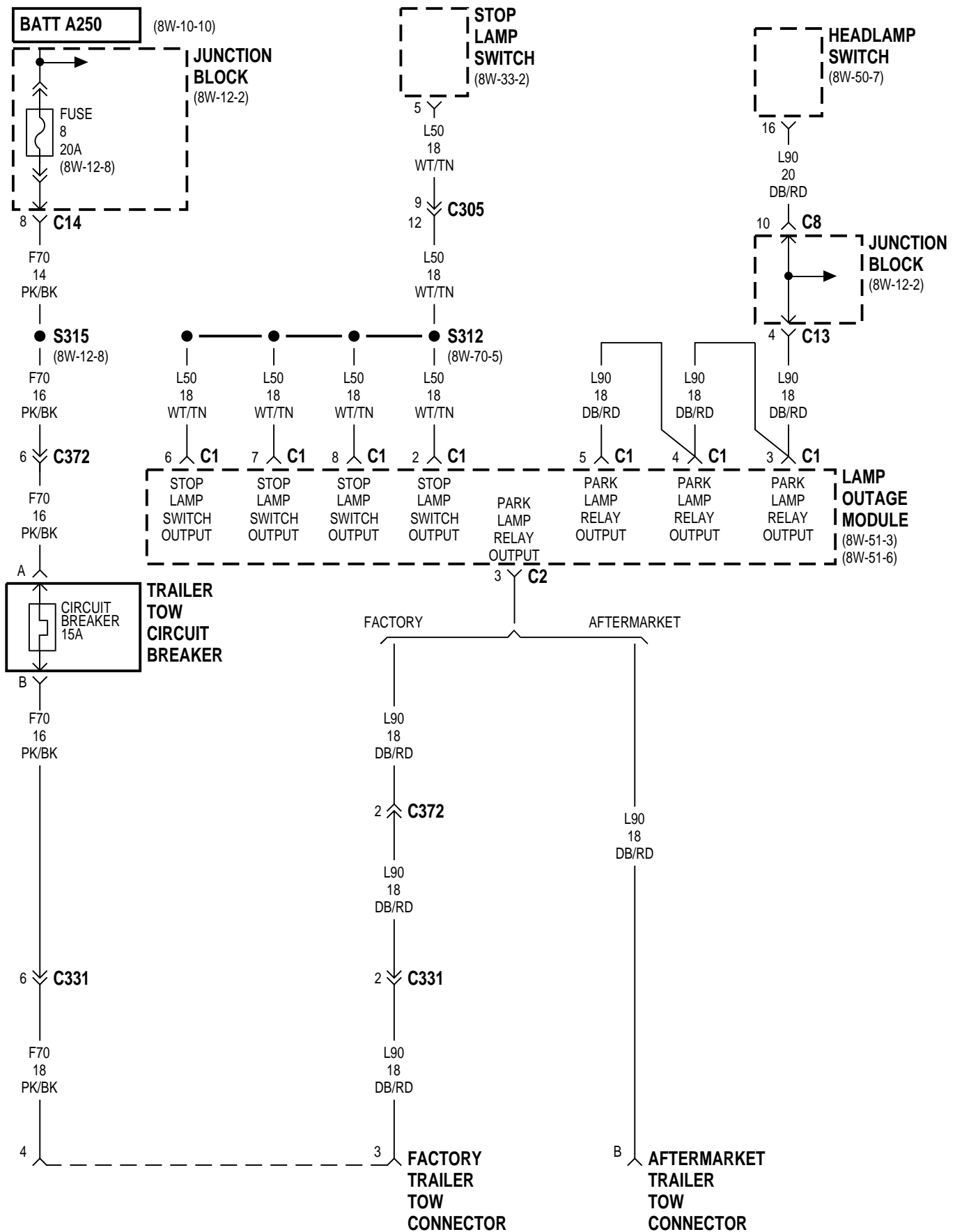
	page
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	6

Component	Page	Component	Page
Aftermarket Trailer Tow Connector	8W-54-4, 5	S314	8W-54-3
Circuit Breaker	8W-54-5	S315	8W-54-2, 4, 5
Circuit Breaker 15a	8W-54-2	S330	8W-54-3
Factory Trailer Tow Connector	8W-54-2, 3, 4, 5	S331	8W-54-2, 3
Fuse 8	8W-54-2, 4, 5	Stop Lamp Switch	8W-54-5
G302	8W-54-3	Trailer Brake Provision	8W-54-2, 4
Headlamp Switch	8W-54-5	Trailer Tow Circuit Breaker	8W-54-2, 5
Junction Block	8W-54-2, 4, 5	Trailer Tow Left Turn Relay	8W-54-3
Lamp Outage Module	8W-54-3, 4, 5	Trailer Tow Right Turn Relay	8W-54-3
Park/Neutral Position Switch	8W-54-2, 4	Trailer Tow Stop Lamp Relay	8W-54-2, 3
S311	8W-54-2, 4	Turn Signal/Hazard Warning Switch	8W-54-3, 4
S312	8W-54-5		
S313	8W-54-4		









8W-54 TRAILER TOW

GENERAL INFORMATION

INTRODUCTION

Two trailer tow packages are available; a factory installed package and a package with after-market provisions. This section provides separate wiring diagrams for each.

DESCRIPTION AND OPERATION

TRAILER TOW—FACTORY INSTALLED

The factory installed trailer tow system in this vehicle uses three relays and a circuit breaker along with the trailer tow wiring connector.

Circuit A250 from fuse 11 in the Power Distribution Center (PDC) powers circuit F70 through fuse 8 in the junction block. Circuit F70 supplies battery voltage for the trailer tow circuit breaker and the contact side of the stop lamp relay.

The trailer tow circuit breaker is taped to the trailer tow harness located in the left rear quarter panel.

STOP LAMP RELAY

Power for the coil side of the stop lamp relay is supplied by circuit L50. This circuit connects to the stop lamps. Ground for the coil side is supplied on circuit Z1.

When the operator presses the brake pedal, voltage flows through the coil of the relay to ground causing the contacts in the relay to connect circuits F70 and 95.

Circuit 95 connects to the left and right turn signal relays. Voltage flows through the closed contacts in the relays to the trailer tow connector.

RIGHT TURN RELAY

Power for the coil side of the right turn relay is supplied by circuit L60. This circuit connects to the right side turn signal lamps. Ground for the coil side of the relay is supplied on circuit Z1.

When the operator turns the right turn signal ON, power flows through the coil in the relay to ground causing the contacts in the relay to switch from the

normally CLOSED position to connect circuits 94 and L60.

Circuit 94 is the feed for the contact side of the relay. Circuit L60 connects from the relay to the trailer tow connector.

Circuit 94 is fed power through the normally CLOSED side of the stop lamp relay by circuit F70. Circuit F70 is HOT at all times and protected by a circuit breaker located in the right rear quarter panel.

LEFT TURN RELAY

Power for the coil side of the left turn relay is supplied by circuit L61. This circuit connects to the left side turn signal lamps. Ground for the coil side of the relay is supplied on circuit Z1.

When the operator turns the left turn signal ON, power flows through the coil in the relay to ground causing the contacts in the relay to switch from the normally CLOSED position to connect circuits 94 and L61.

Circuit 94 is the feed for the contact side of the relay. Circuit L61 connects from the relay to the trailer tow connector.

Circuit 94 is fed power through the normally CLOSED side of the stop lamp relay by circuit F70. Circuit F70 is HOT at all times and protected by a circuit breaker located in the right rear quarter panel.

HELPFUL INFORMATION

- Check fuse 11 in the PDC
- Check fuse 8 in the junction block
- Check the In-Line circuit breaker
- A trailer brake provision is taped to the harness at the lower left of the instrument panel

TRAILER TOW—AFTER-MARKET

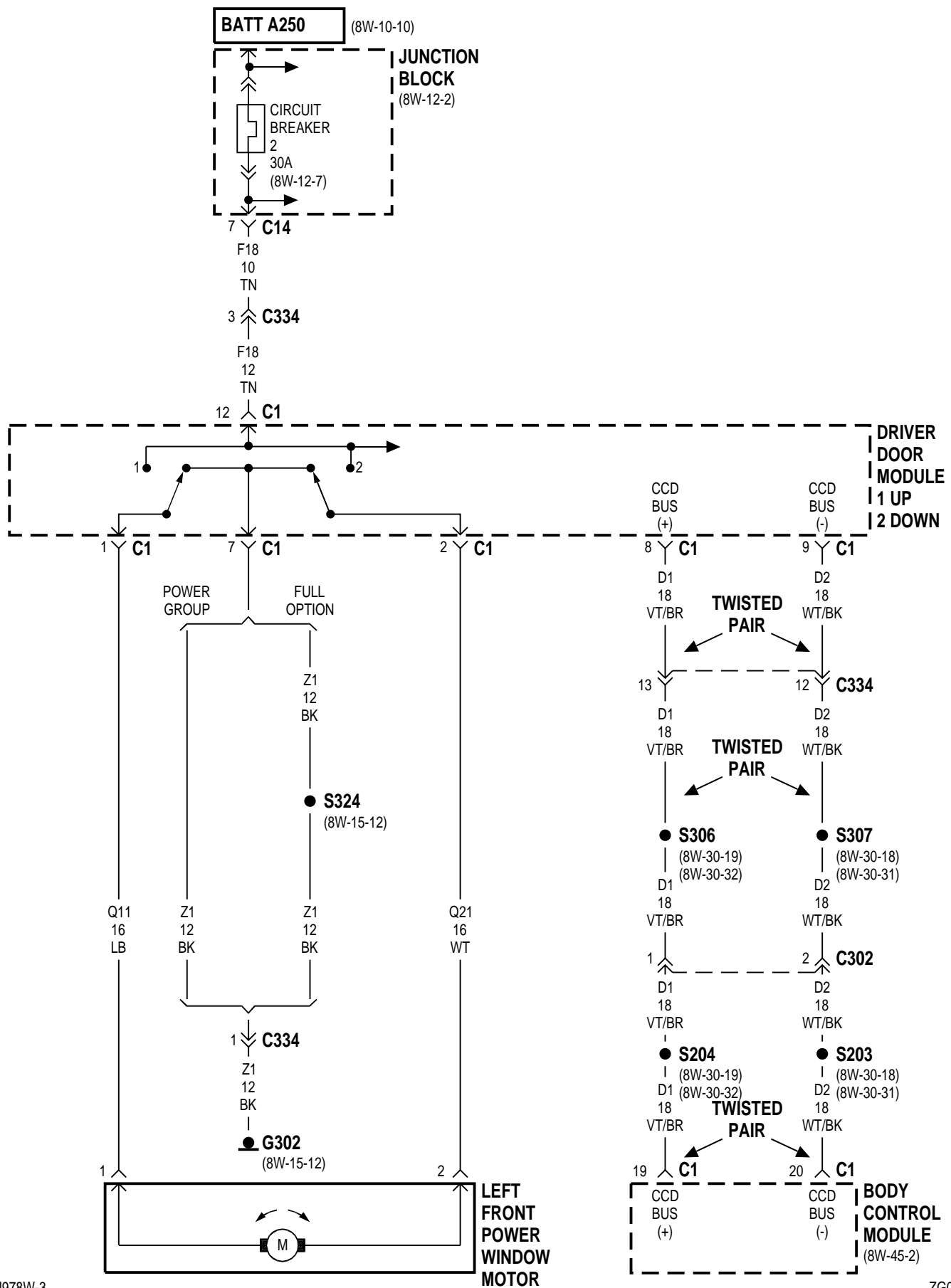
The after-market trailer tow connector is located in the left rear quarter panel. The connector contains feed circuit F70 from fuse 8 in the junction block. Circuit L60 from the right turn signals, circuit L90 for parking lamps, and circuit L50 from the stop lamp switch.

8W-60 POWER WINDOWS

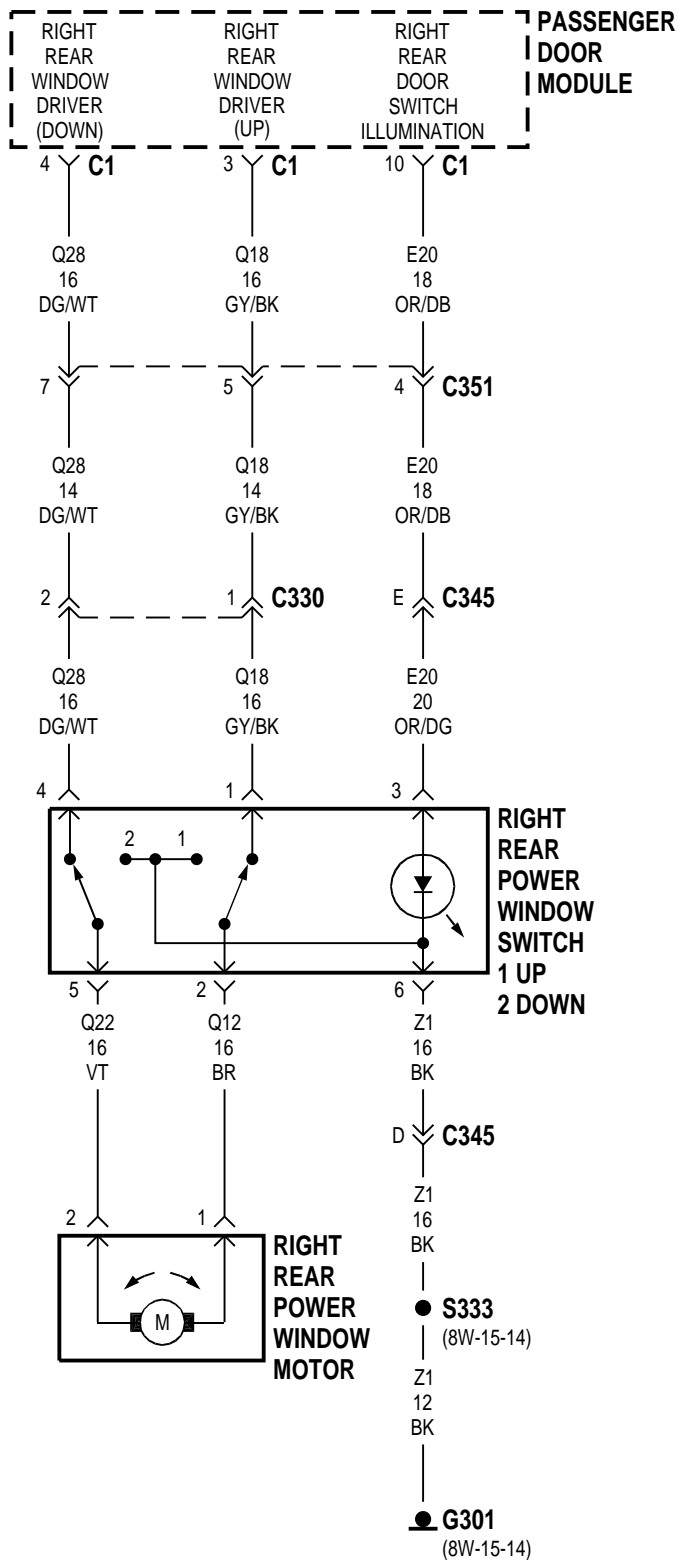
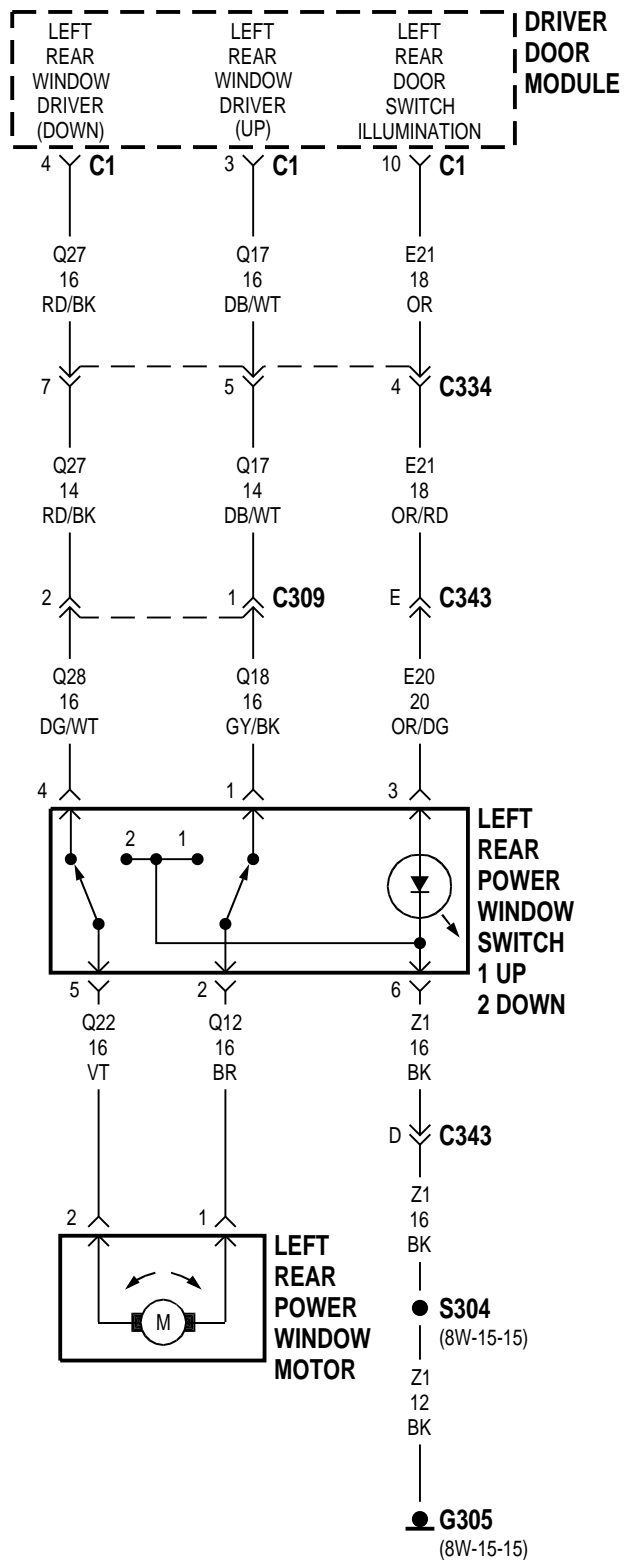
INDEX

	page
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	5

Component	Page	Component	Page
Body Control Module	8W-60-2, 3	Right Rear Power Window Motor	8W-60-4
Circuit Breaker 2	8W-60-2, 3	Right Rear Power Window Switch	8W-60-4
Driver Door Module	8W-60-2, 4	S203	8W-60-2, 3
G301	8W-60-3, 4	S204	8W-60-2, 3
G302	8W-60-2	S304	8W-60-4
G305	8W-60-4	S306	8W-60-2, 3
Junction Block	8W-60-2, 3	S307	8W-60-2, 3
Left Front Power Window Motor	8W-60-2	S324	8W-60-2
Left Rear Power Window Motor	8W-60-4	S325	8W-60-3
Left Rear Power Window Switch	8W-60-4	S333	8W-60-4
Passenger Door Module	8W-60-3, 4		
Right Front Power Window Motor	8W-60-3		







8W-60 POWER WINDOWS

INDEX

	page		page
DESCRIPTION AND OPERATION		POWER WINDOWS	5
INTRODUCTION	5		

DESCRIPTION AND OPERATION

INTRODUCTION

All four power windows can be controlled by the switches on the Drivers Door Module (DDM). Additionally, the left rear window as well as the right front and right rear windows have separate switches.

The switch pod on the DDM contains lock out switch. The lock-out feature prevents the windows from being operated by any switch other than the drivers door switch.

Each rear window switch contains an LED. The DDM prevents illumination of the LEDs when the operator selects the window lock-out feature.

POWER WINDOWS

Circuit A250 from fuse 11 in the Power Distribution Center (PDC) powers circuit F81 through the circuit breaker in cavity 2 of the junction block. Circuit F81 supplies power to the Drivers Door Module (DDM) and the Passengers Door Module (PDM). The DDM and PDM operate the power windows. Circuit Z1 provides ground for the power window system.

LEFT FRONT WINDOW OPERATION

The Drivers Door Module operates the left front window. When the operator selects window DOWN operation, the DDM connects circuit F81 to circuit Q21. Circuit Q21 goes from the switch to the power window motor. Ground for the motor is supplied on the Q11 circuit back to the switch. The DDM connects circuit Q11 to ground circuit Z1.

For window UP operation the circuits are reversed. The DDM connects circuit Q11 to circuit F81 and connects circuit Q21 to ground circuit Z1.

RIGHT FRONT WINDOW OPERATION

The Passengers Door Module (PDM) operates the right front window. If the DRIVER operates the passenger window, the Drivers Door Module signals the Passengers Door Module over the CCD Bus.

For window DOWN operation, the PDM connects circuit F81 to circuit Q22. Circuit Q22 goes from the power window switch circuitry in the PDM to the power window motor. Ground for the motor is supplied

on circuit Q12 back to the switch. The DDM connects circuit Q12 to ground circuit Z1.

For window UP operation the circuits are reversed. The PDM connects circuit Q12 to circuit F81 and connects circuit Q22 to ground circuit Z1.

LEFT REAR WINDOW

Circuits Q17 and Q27 connect the Driver's Door Module (DDM) to the left rear window switch. When the operator has not selected the window lock-out feature, the DDM connects circuits Q17 and Q27 to battery voltage. At the left door harness, circuit Q17 connects to circuit Q18 and circuit Q27 connects to circuit Q28. Circuits Q18 and Q28 connect to the left rear power window switch.

If the window is operated from left rear switch for window DOWN operation, the switch connects circuit Q12 from the power window motor to ground on circuit Z1. The left rear window switch connects circuit Q28 to circuit Q22. Circuit Q22 powers the window motor. Circuits Q12 and Z1 provide ground.

For window UP operation the circuits are reversed. The left rear window switch connects Q22 to ground on circuit Z1. Circuit Q18 powers the rear window motor. Circuits Q22 and Z1 provide ground.

The left rear window switch contains a Light Emitting Diode (LED). The DDM illuminates the LED on circuit E21. Circuit E21 connects to circuit E20 at the left door harness. Circuit E20 connects to the left rear window switch and powers the LED.

If the operator has selected the window lock-out feature, the DDM will not supply power to the left rear window switch on circuits Q27 and Q17. Also, the DDM does not illuminate the LED in the switch.

If the window is operated from DRIVER'S switch for window DOWN operation, the DDM powers circuit Q27 and grounds circuit Q17. Circuit Q27 connects to circuit Q28 at the left rear door harness. From circuit Q28, current passes through the closed contacts in the left rear window switch to circuit Q22. Circuit Q22 powers the window motor. The ground path for the motor is on circuit Q12 from the motor, through the closed contacts in the left rear window switch to circuit Q18, to Q17 back to the DDM.

DESCRIPTION AND OPERATION (Continued)

For window UP operation the circuits are reversed. The DDM powers circuit Q17 and grounds circuit Q27.

RIGHT REAR WINDOW

Circuits Q18 and Q28 connect the Passenger's Door Module (PDM) to the right rear window switch. When the operator has not selected the window lock-out feature, the PDM connects circuits Q18 and Q28 to battery voltage.

If the window is operated from right rear switch for window DOWN operation, the switch connects circuit Q12 from the power window motor to ground on circuit Z1. The right rear window switch connects circuit Q28 to circuit Q22. Circuit Q22 powers the window motor. Circuits Q12 and Z1 provide ground.

For window UP operation the circuits are reversed. The right rear window switch connects Q22 to ground on circuit Z1. Circuit Q18 from the PDM powers circuit Q12 through the closed contacts in the right rear window switch. Circuit Q12 powers the window motor. Circuits Q22 and Z1 provide ground.

The right rear window switch contains a Light Emitting Diode (LED). The PDM illuminates the LED on circuit E20.

If the operator has selected the window lock-out feature, the Driver's Door Module signals the PDM on the CCD bus. In response, the PDM will not supply power to the right rear window switch on circuits Q18 and Q28. Also, the PDM does not illuminate the LED in the switch.

If the window is operated from DRIVER'S switch for window DOWN operation, the DDM signals the PDM over the CCD Bus. In response, the PDM powers circuit Q28 and grounds circuit Q18. From circuit Q28, current passes through the closed contacts in the right rear window switch to circuit Q22. Circuit Q22 powers the window motor. The ground path for the motor is on circuit Q12 from the motor, through the closed contacts in the right rear window switch to the PDM on circuit Q18.

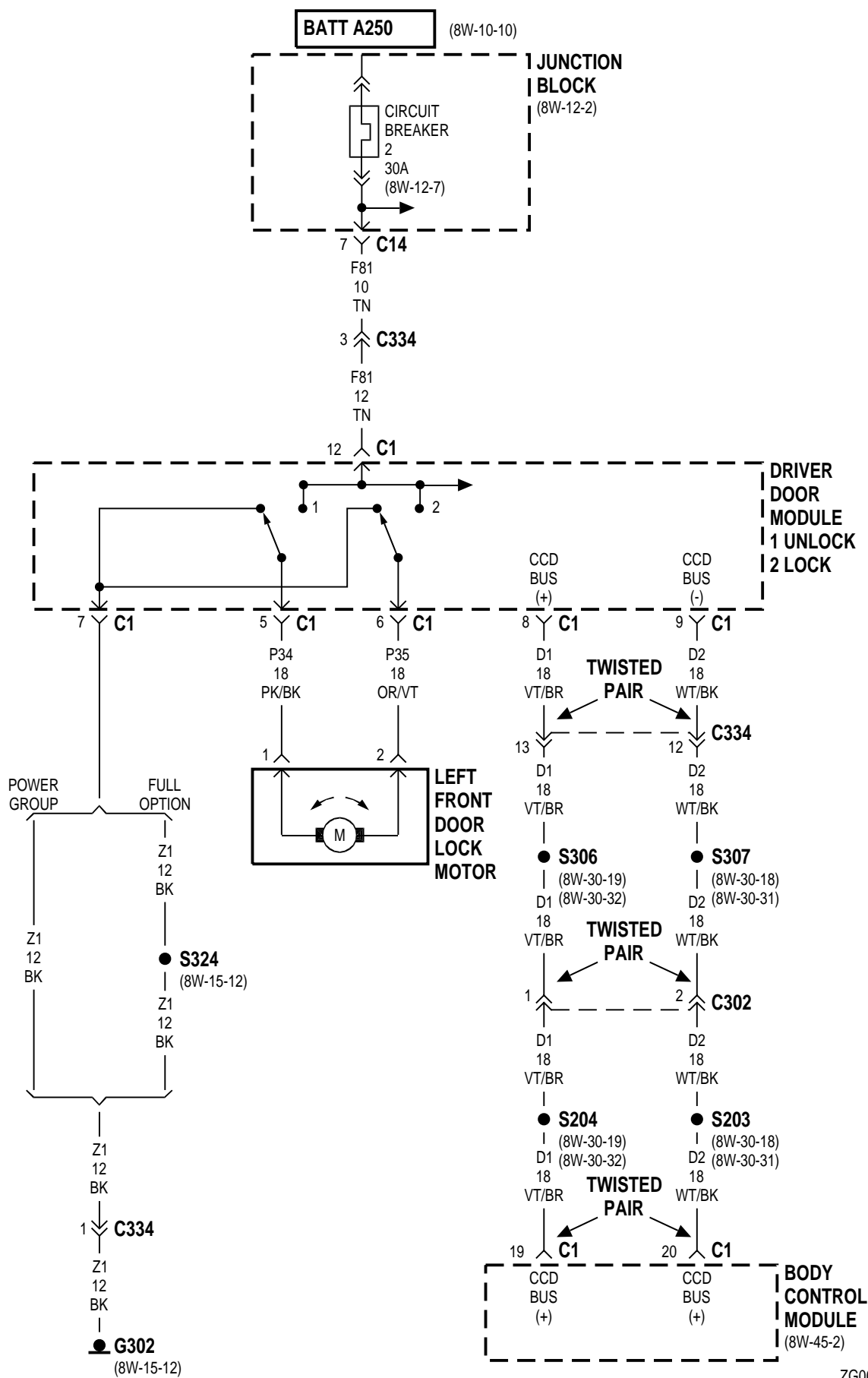
For window UP operation the circuits are reversed. After the DDM signals the PDM on the CCD Bus, the PDM powers circuit Q18 and grounds circuit Q28.

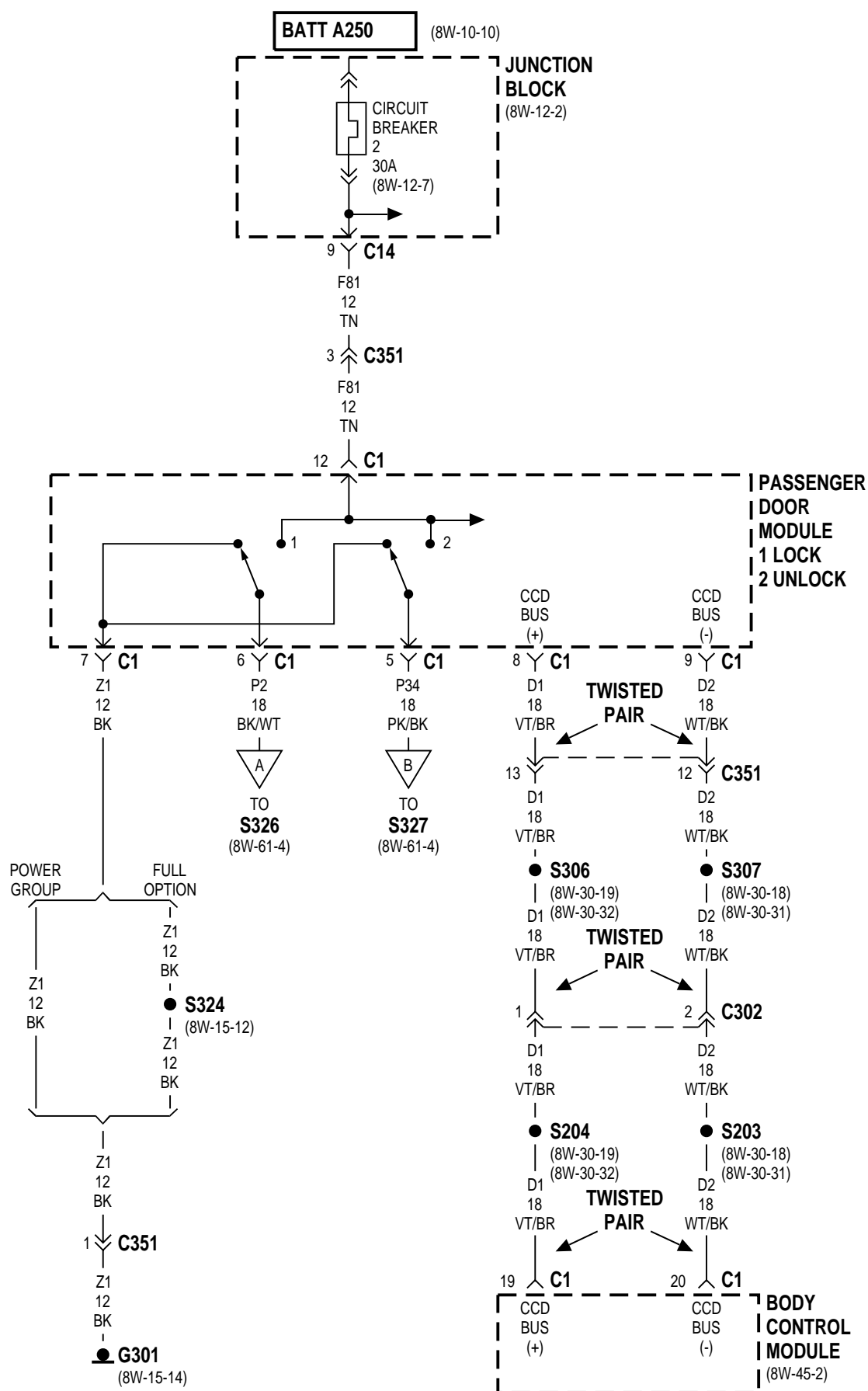
8W-61 POWER DOOR LOCKS

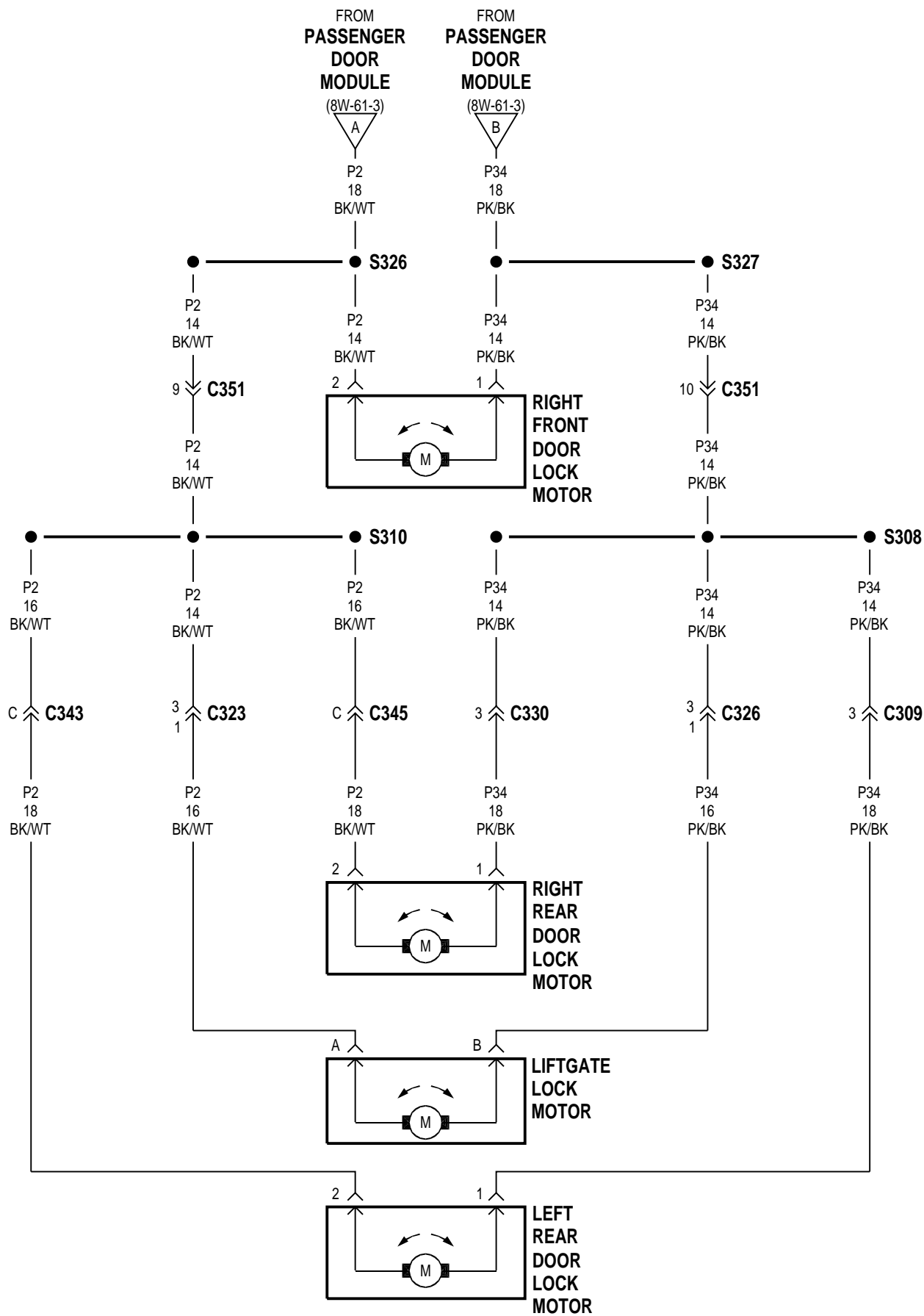
INDEX

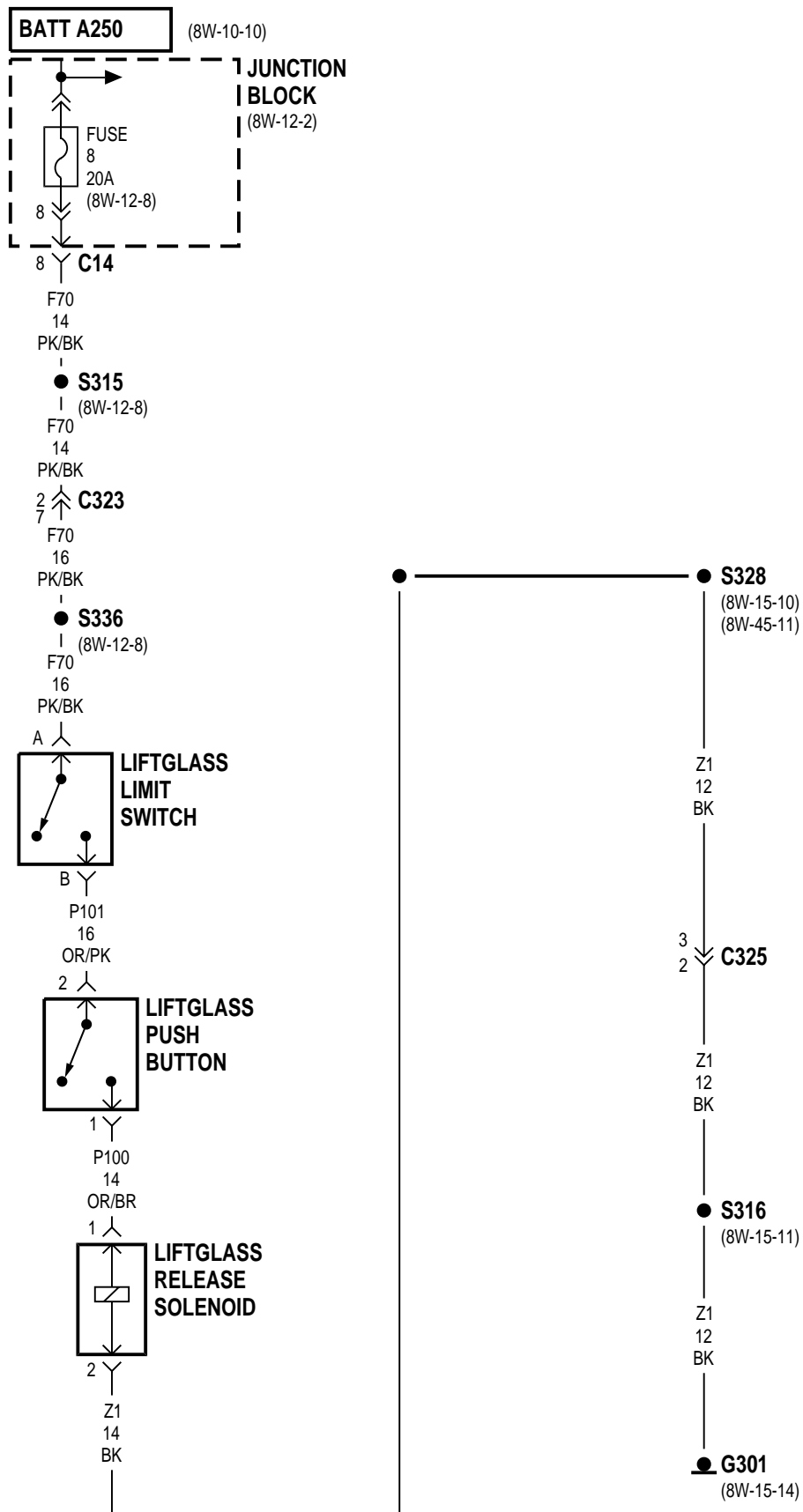
	page
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	6

Component	Page	Component	Page
Body Control Module	8W-61-2, 3	Right Rear Door Lock Motor	8W-61-4
Circuit Breaker 2	8W-61-2, 3	S203	8W-61-2, 3
Driver Door Module	8W-61-2	S204	8W-61-2, 3
Fuse 8	8W-61-5	S306	8W-61-2, 3
G301	8W-61-3, 5	S307	8W-61-2, 3
G302	8W-61-2	S308	8W-61-4
Junction Block	8W-61-2, 3, 5	S310	8W-61-4
Left Front Door Lock Motor	8W-61-2	S315	8W-61-5
Left Rear Door Lock Motor	8W-61-4	S316	8W-61-5
Liftgate Lock Motor	8W-61-4	S324	8W-61-2, 3
Liftglass Limit Switch	8W-61-5	S326	8W-61-4
Liftglass Push Button	8W-61-5	S327	8W-61-4
Liftglass Release Solenoid	8W-61-5	S328	8W-61-5
Passenger Door Module	8W-61-3	S336	8W-61-5
Right Front Door Lock Motor	8W-61-4		









8W-61 POWER DOOR LOCKS

DESCRIPTION AND OPERATION

INTRODUCTION

The Drivers Door Module (DDM) powers the drivers door lock motor. The Passengers Door Module (PDM) powers the passenger, both rear doorlock and the liftgate lock motors. The DDM and PDM each contain a door lock switch. When one of the switches is activated, a signal is sent on the CCD Bus to the other door module (PDM or DDM depending on which switch activated) to either LOCK or UNLOCK the lock motors. The Remote Keyless Entry transmitter can also LOCK or UNLOCK the door lock and liftgate lock motors. The PDM contains the radio frequency receiver that receives the RKE transmitter signals.

The vehicle is equipped with a Rolling Door Lock feature. When this feature is enabled, the PDM will lock the doors and liftgate after the vehicles reaches approximately 15 MPH.

POWER DOOR LOCKS

Circuit A250 from fuse 11 in the Power Distribution Center (PDC) powers circuit F81 through the circuit breaker in cavity 2 of the junction block. Circuit F81 supplies power to the Drivers Door Module (DDM) and the Passengers Door Module (PDM). The DDM and PDM operate the power door locks. Circuit Z1 provides ground for the power door locks.

The PDM contains the radio frequency receiver that receives the radio frequency signals from the Remote Keyless Entry (RKE) transmitter. After either the passenger door lock switch activates or it receives input from the RKE transmitter, the PDM sends the appropriate signal to the DDM over the

CCD Bus. When the DRIVERS door lock switch activates, the DDM sends the appropriate signal to the PDM.

After receiving a LOCK signal, the DDM supplies battery voltage to the left front door lock motor on circuit P36. The DDM also connects circuit P34 from the motor to ground.

When the DDM receives the UNLOCK signal, it powers circuit P34 and grounds circuit P36.

After receiving a LOCK signal, the PDM supplies battery voltage to the right front door lock motor, rear door lock motors and liftgate lock motors on circuit P2. The PDM also connects circuit P34 from the motor to ground.

When the DDM receives the UNLOCK signal, it powers circuit P34 and grounds circuit P2.

REMOTE KEYLESS ENTRY

The Remote Keyless Entry (RKE) transmitter sends three unique signals to the radio frequency receiver in Passengers Door Module (PDM): LOCK, UNLOCK and PANIC. After it receives any one of the three signals, the PDM broadcasts the appropriate signal over the CCD bus.

LIFTGLASS

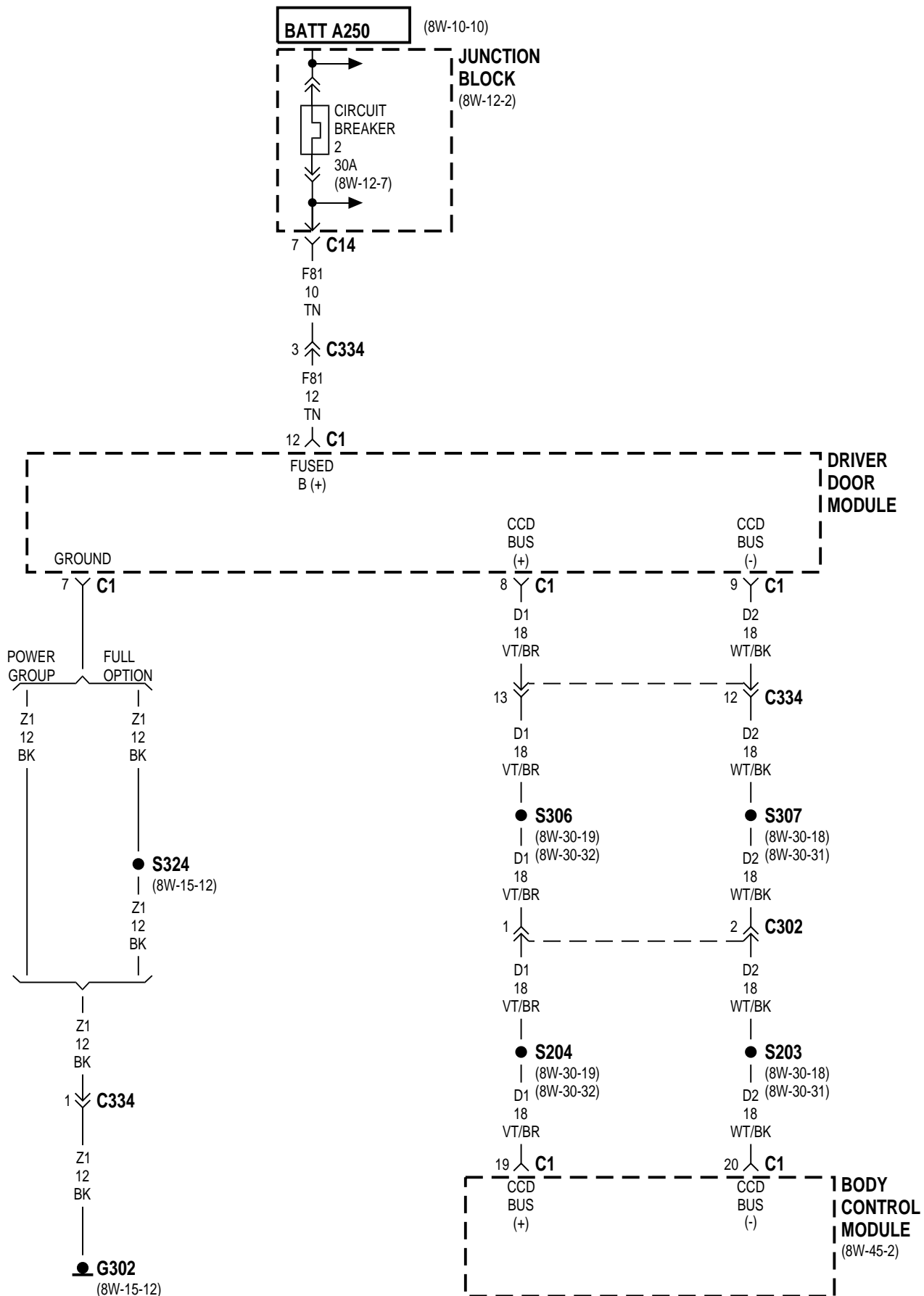
Circuit A250 from fuse 11 in the Power Distribution Center (PDC) powers circuit F70 through fuse 8 in the junction block. If the liftglass limit switch is closed, it connects circuit F70 to the liftglass switch (push button) on circuit P101. When closed, the liftglass switch connects circuit P101 to circuit P100. Circuit P100 feeds the liftglass solenoid. Circuit Z1 grounds the solenoid.

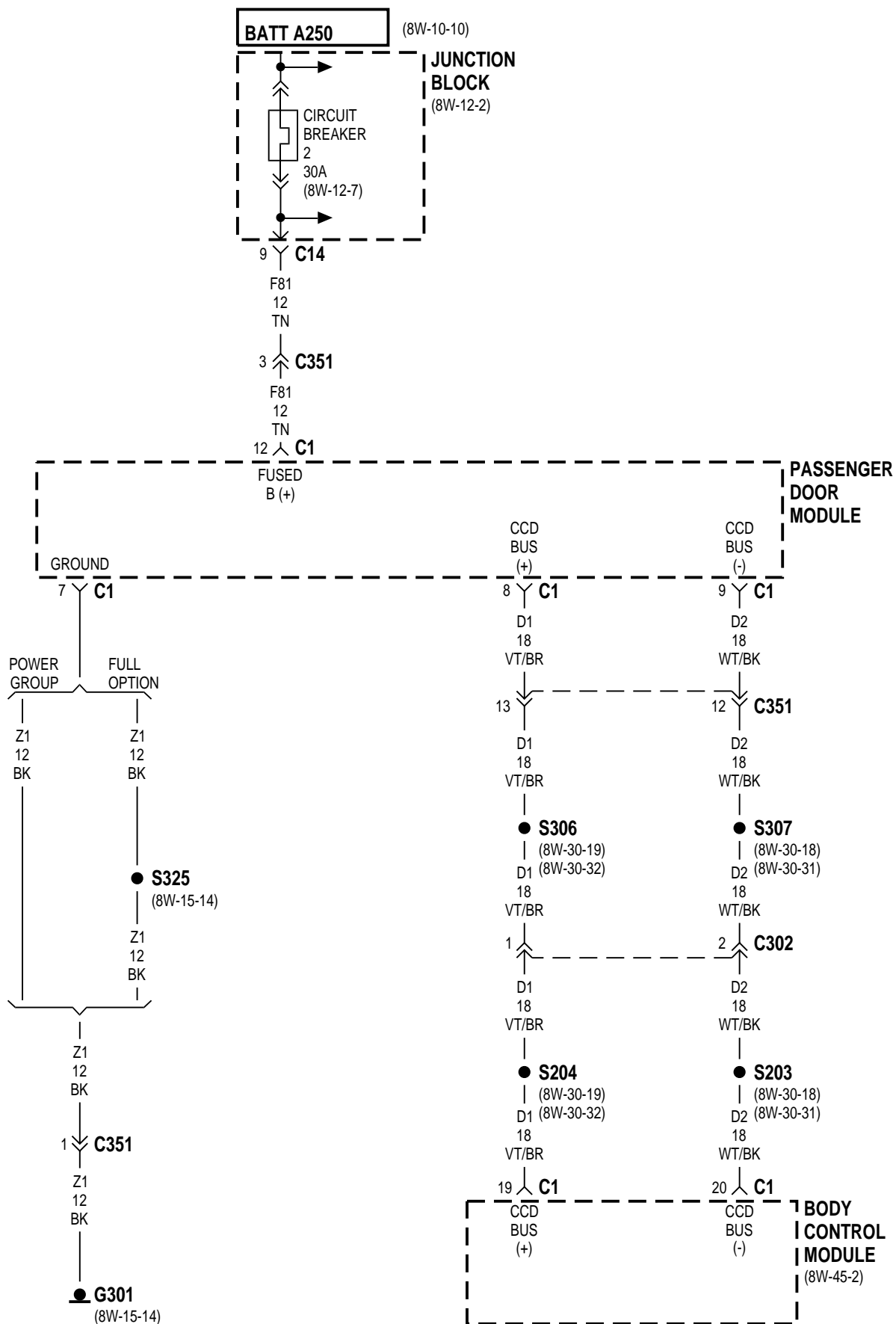
8W-62 POWER MIRRORS

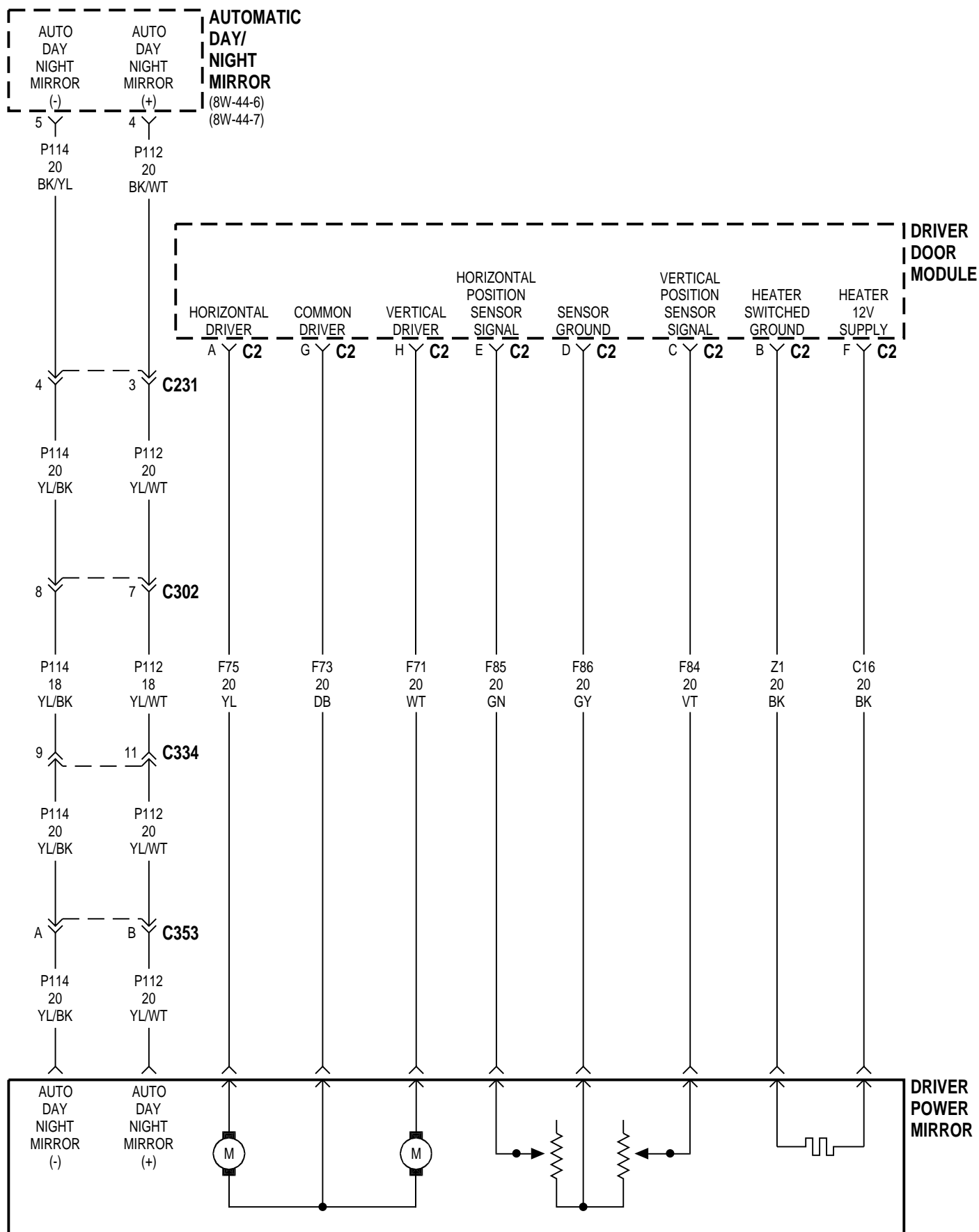
INDEX

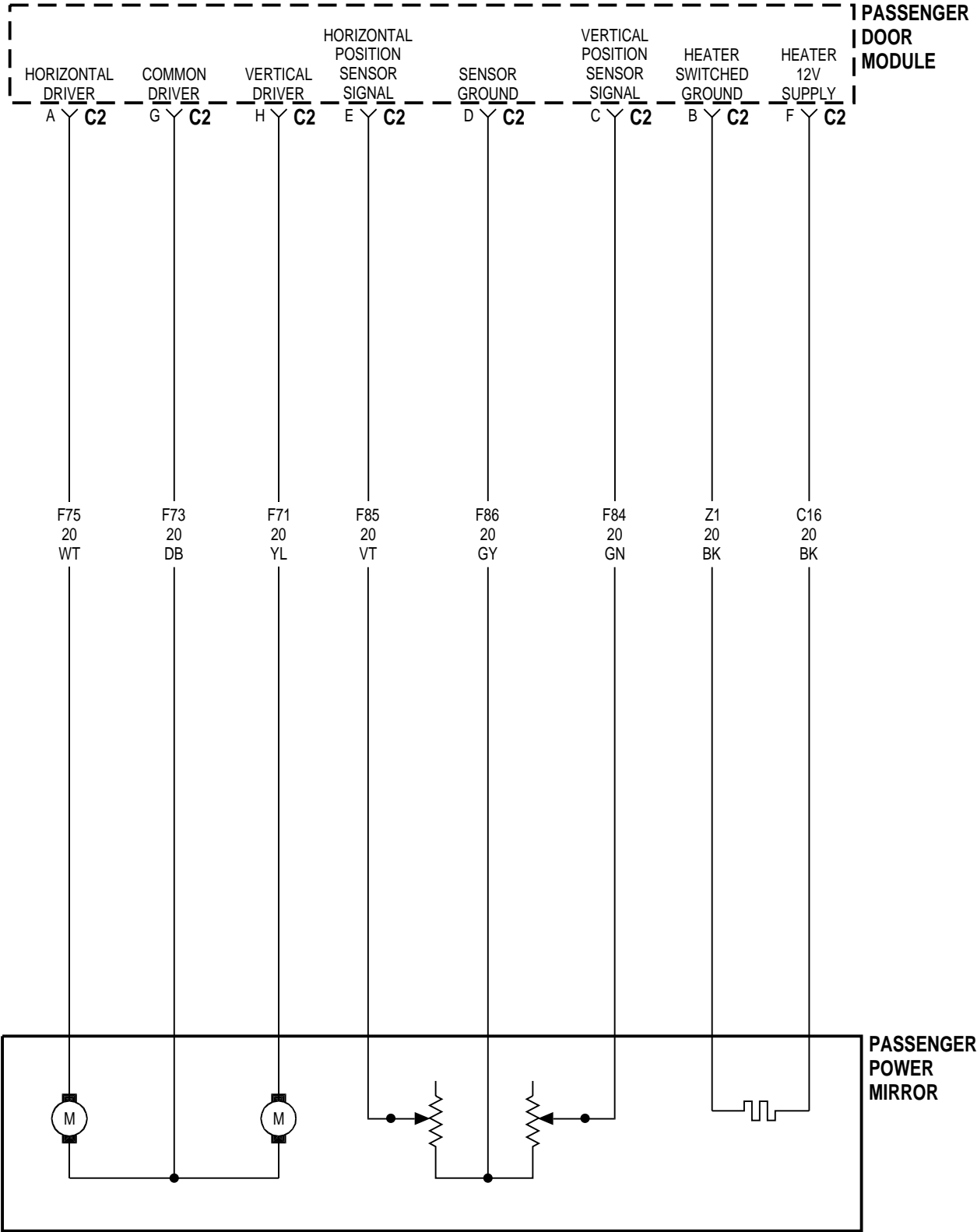
	page
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	6

Component	Page	Component	Page
Automatic Day/Night Mirror	8W-62-4	Passenger Power Mirror	8W-62-5
Body Control Module	8W-62-2, 3	S203	8W-62-2, 3
Circuit Breaker 2	8W-62-2, 3	S204	8W-62-2, 3
Driver Door Module	8W-62-2, 4	S306	8W-62-2, 3
Driver Power Mirror	8W-62-4	S307	8W-62-2, 3
G301	8W-62-3	S324	8W-62-2
G302	8W-62-2	S325	8W-62-3
Junction Block	8W-62-2, 3		
Passenger Door Module	8W-62-3, 5		









8W-62 POWER MIRRORS

DESCRIPTION AND OPERATION

INTRODUCTION

The Drivers Door Module (DDM) controls both power mirrors. The DDM adjusts the left mirror and signals the Passenger Door Module (PDM) over the CCD bus to adjust the right mirror. A push button switch on the outside of the DDM controls the horizontal and vertical position of both mirrors. The DDM also has a selector switch with right, left and center (off) positions for mirror selection.

Some models with Remote Keyless Entry (RKE) have a memory feature that allows the RKE transmitter to move the drivers seat and outside mirrors to a saved positions. The memory feature also can set the radio push buttons to preset stations.

POWER MIRROR

The circuits from the left outside mirror to the Driver Door Module (DDM) and right mirror to Passenger Door Module have identical circuit numbers. Each mirror has two motors; an UP/DOWN motor and a LEFT/RIGHT motor. The motors switch polarity to allow mirror adjustment. The DDM and PDM adjust mirror position by supplying power or ground to the mirror motors.

Each mirror has a vertical position sensor and a horizontal position sensor. The sensors in the left mirror connect to the DDM. Sensors in the right mirror connect to the PDM. The DDM and PDM determine horizontal position on circuit F85 and vertical position on circuit F84. Circuit F86 provides ground for each sensor.

If the vehicle is equipped with an automatic day/night rear view mirror, the left power mirror also automatically adjusts to varying ambient light intensity. Circuits P114 and P112 connect the left power mirror to the automatic day/night rear view mirror.

LEFT MIRROR ADJUSTMENT

The DDM adjusts the position of the left mirror. When an UP adjustment is made, the DDM supplies

power to the left mirror UP/DOWN motor on circuit F71 and grounds circuit F73.

When a DOWN adjustment is made, the polarity reverses. The DDM supplies power to circuit F73 and grounds circuit F71.

During LEFT adjustments, the DDM supplies power to the LEFT/RIGHT motor on circuit F75 and grounds circuit F73.

For RIGHT adjustments, the polarity reverses. The DDM supplies power to circuit F73 and grounds circuit F75.

RIGHT MIRROR ADJUSTMENT

The PDM adjusts the right mirror in response to signals it receives over the CCD bus from the DDM. When an UP adjustment is made, the PDM supplies power to the right mirror UP/DOWN motor on circuit F71 and grounds circuit F73.

When a DOWN adjustment is made, the polarity reverses. The PDM supplies power to circuit F73 and grounds circuit F71.

During LEFT adjustments, the PDM supplies power to the LEFT/RIGHT motor on circuit F75 and grounds circuit F73.

For RIGHT adjustments, the polarity reverses. The PDM supplies power to circuit F73 and grounds circuit F75.

HEATER ELEMENTS

The Driver Door Module (DDM) powers the heater circuit in the left power mirror. The Passenger Door Module powers the heater element in the right mirror. When the Body Control Module (BCM) detects the operator pressed the rear window defogger switch, it broadcasts the appropriate message to the DDM and PDM over the CCD bus. The DDM and PDM activate the heater elements in the mirrors until the BCM no longer broadcasts the message on the CCD bus.

The DDM and PDM power the heater element on circuit C16. On circuit Z1, the DDM and PDM provide ground for the heater elements.

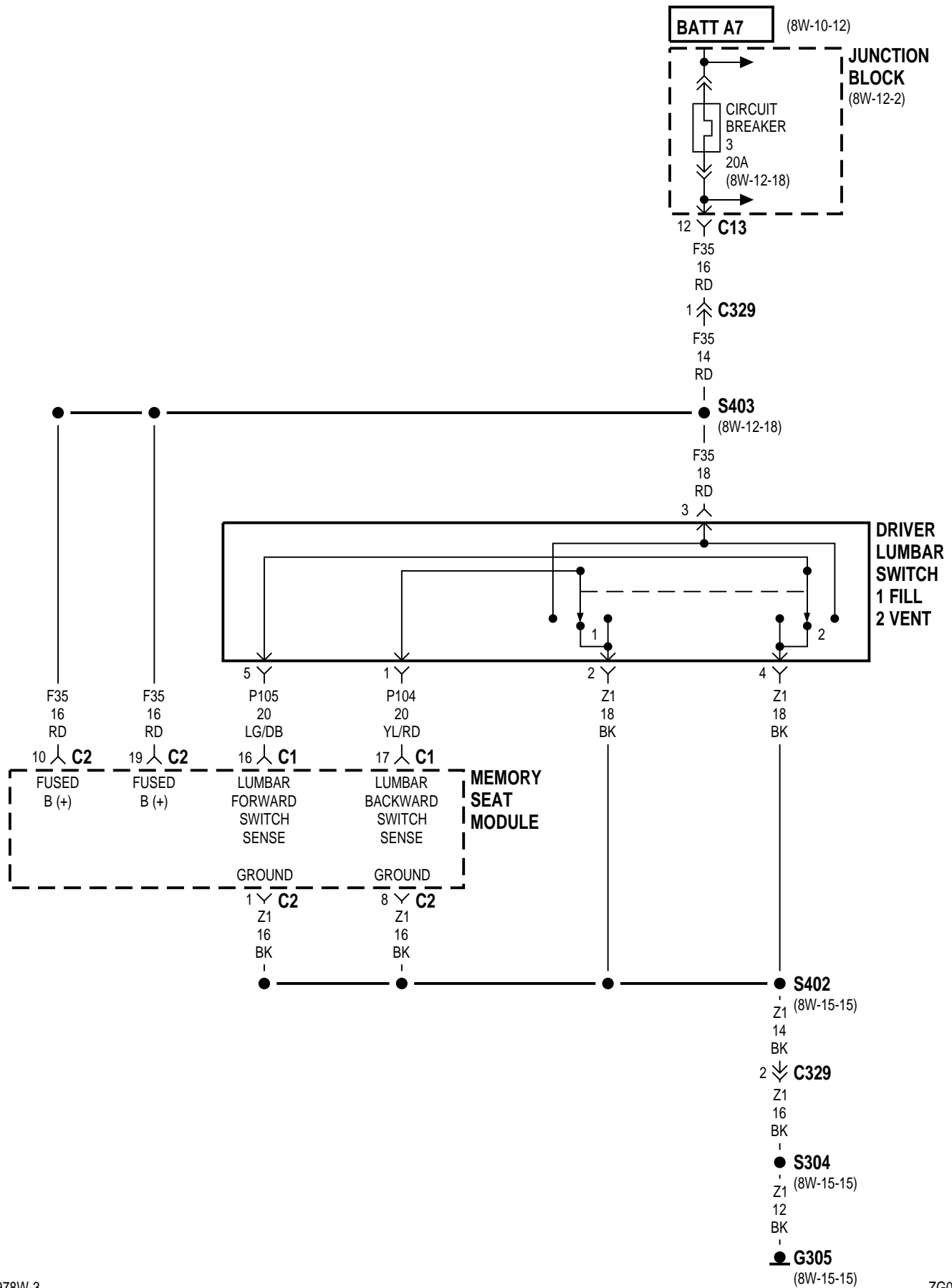
8W-63 POWER SEAT

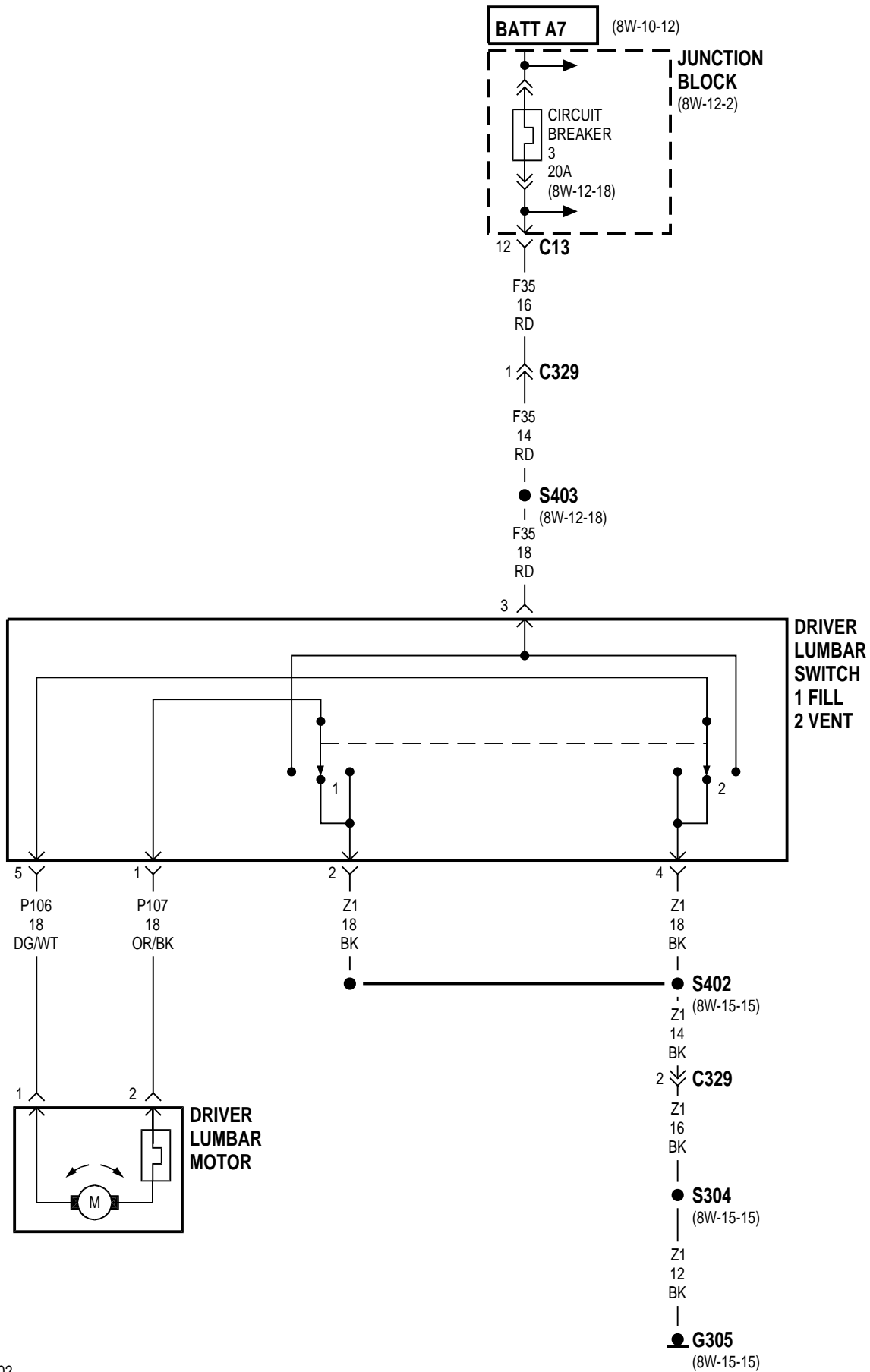
INDEX

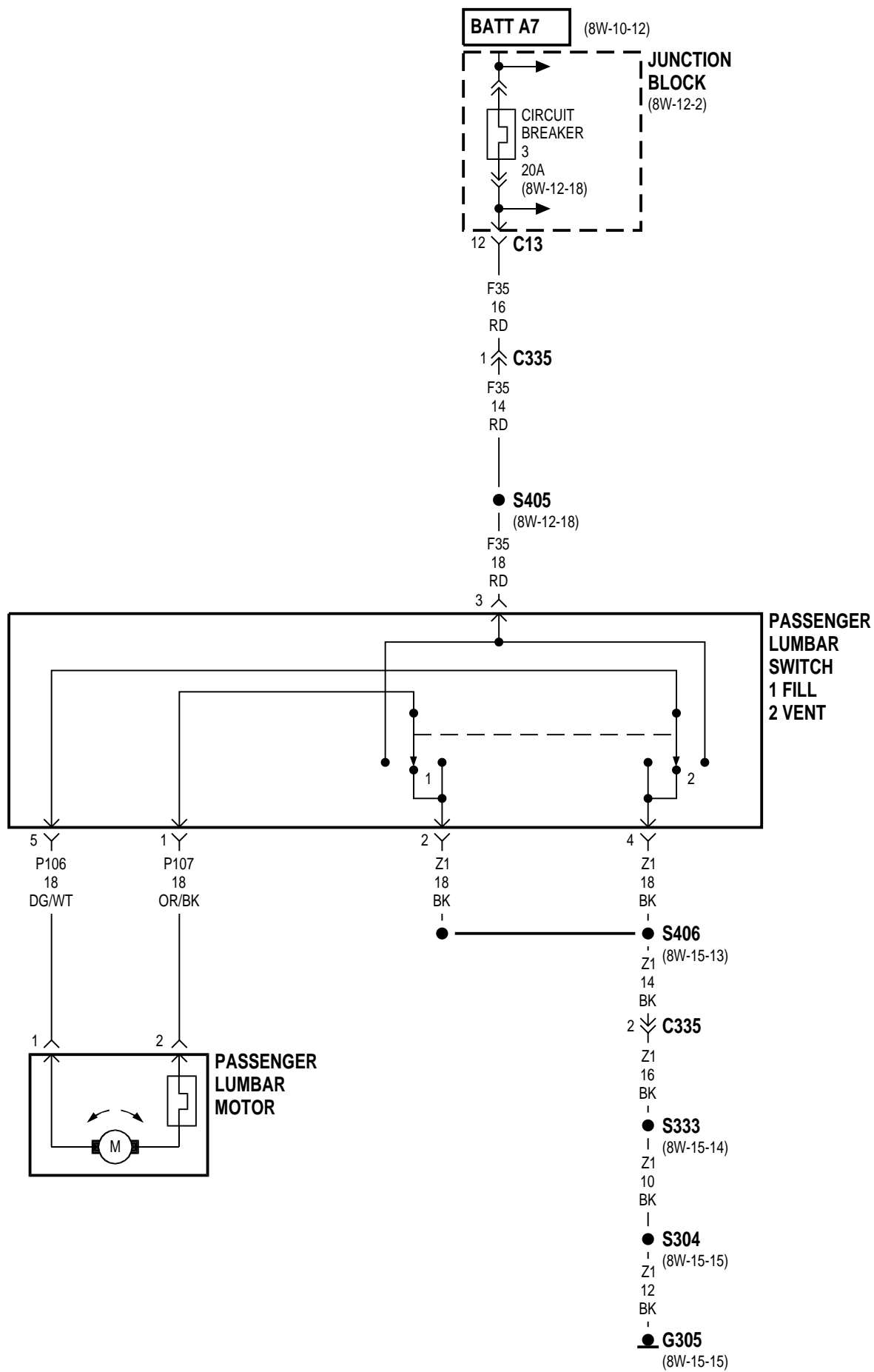
page

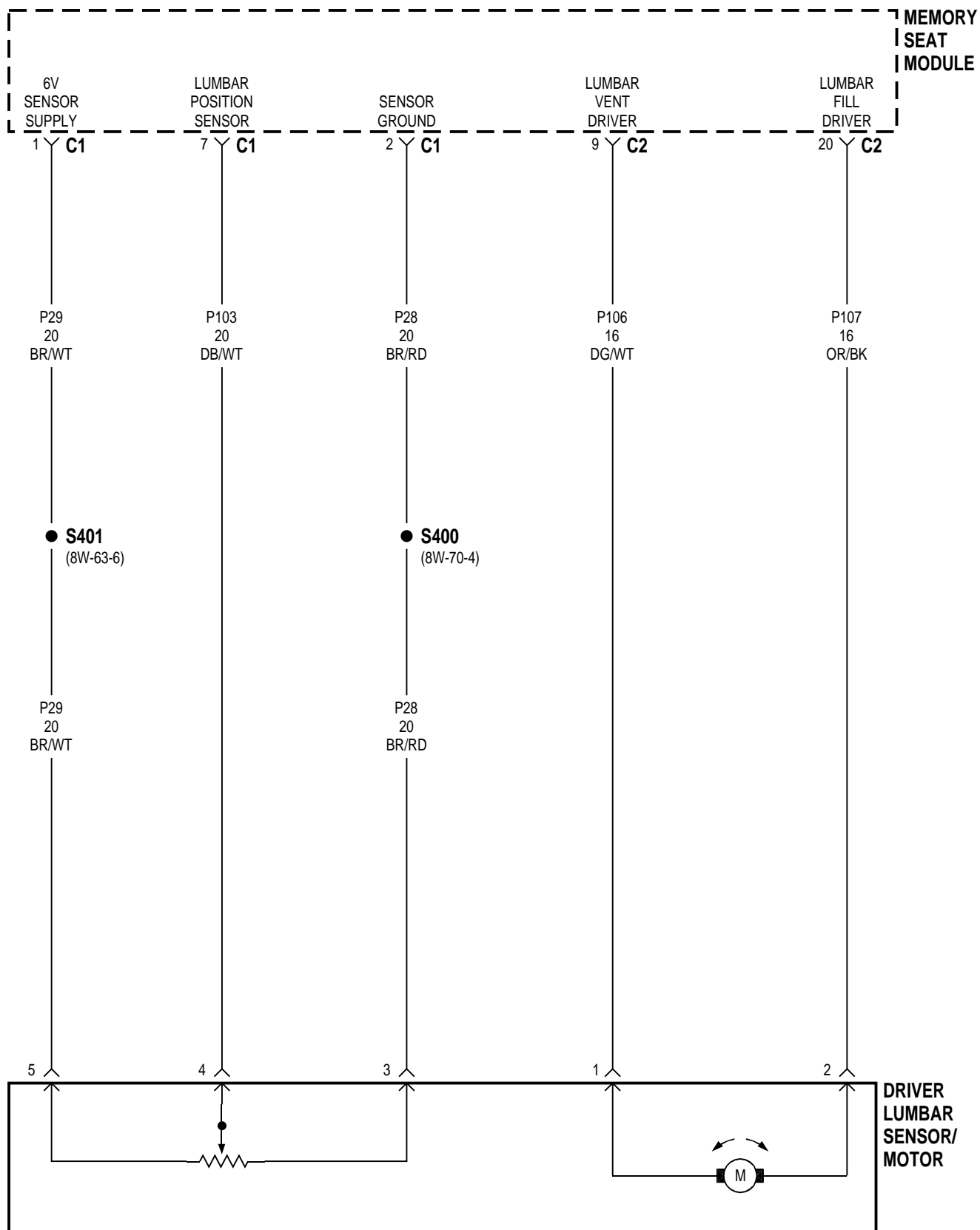
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	16

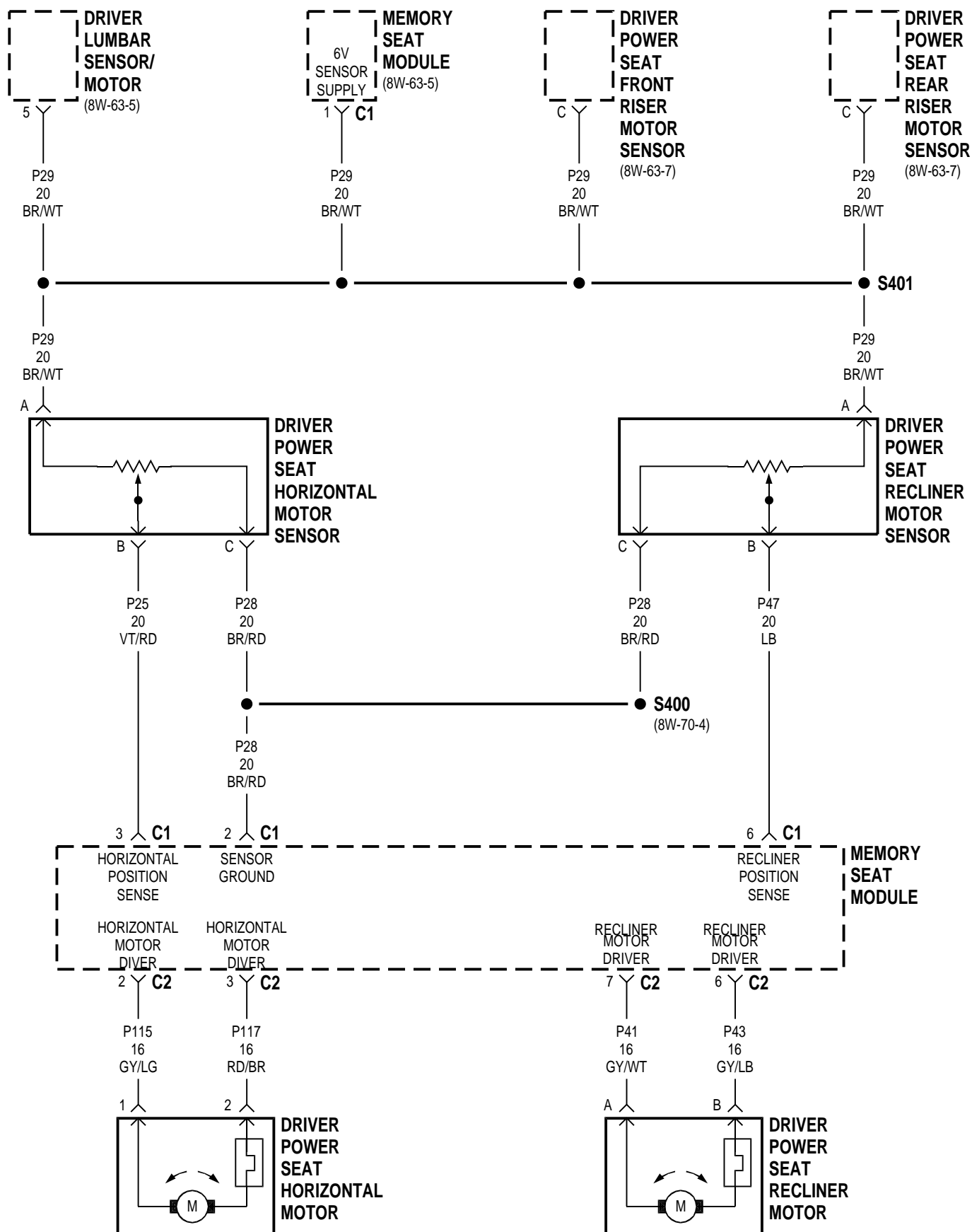
Component	Page	Component	Page
Circuit Breaker 3	8W-63-2, 3, 4, 8, 9, 10, 13, 14	Passenger Heated Seat Back	8W-63-12
Driver Door Module	8W-63-15	Passenger Heated Seat Cushion	8W-63-12
Driver Heated Seat Back	8W-63-11	Passenger Lumbar Motor	8W-63-4
Driver Heated Seat Cushion	8W-63-11	Passenger Lumbar Switch	8W-63-4
Driver Lumbar Motor	8W-63-3	Passenger Power Seat Front Riser Motor . .	8W-63-9
Driver Lumbar Sensor/Motor	8W-63-5, 6	Passenger Power Seat Horizontal Motor . . .	8W-63-9
Driver Lumbar Switch	8W-63-2, 3	Passenger Power Seat Rear Riser Motor . . .	8W-63-9
Driver Power Seat Front Riser Motor . .	8W-63-7, 10	Passenger Power Seat Recliner Motor	8W-63-9
Driver Power Seat Front Riser Motor Sensor	8W-63-6, 7	Passenger Power Seat Switch	8W-63-9
Driver Power Seat Horizontal Motor . . .	8W-63-6, 10	Passenger Seat Heater Control Module	8W-63-12, 13
Driver Power Seat Horizontal Motor Sensor	8W-63-6	S202	8W-63-13, 14
Driver Power Seat Rear Riser Motor . . .	8W-63-7, 10	S216	8W-63-13, 14
Driver Power Seat Rear Riser Motor Sensor	8W-63-6, 7	S218	8W-63-13, 14
Driver Power Seat Recliner Motor	8W-63-6, 10	S304	8W-63-2, 3, 4, 8, 9, 10, 11, 12
Driver Power Seat Recliner Motor Sensor . .	8W-63-6	S306	8W-63-15
Driver Power Seat Switch	8W-63-8, 10	S307	8W-63-15
Driver Seat Heater Control Module . . .	8W-63-11, 14	S317	8W-63-13, 14
Fuse 12	8W-63-13, 14	S333	8W-63-4, 9, 12
G304	8W-63-13, 14	S400	8W-63-5, 6, 7
G305	8W-63-2, 3, 4, 8, 9, 10, 11, 12	S401	8W-63-5, 6, 7
Heated Seat Switch	8W-63-11, 12, 13, 14	S402	8W-63-2, 3, 8, 10, 11
Junction Block	8W-63-2, 3, 4, 8, 9, 10, 13, 14	S403	8W-63-2, 3, 8, 10, 14
Memory Seat Module	8W-63-2, 5, 6, 7, 8, 15	S404	8W-63-12, 13
Memory Set Switch 1 Set	8W-63-15	S405	8W-63-4, 9, 13
Passenger Door Module	8W-63-15	S406	8W-63-4, 9, 12
		S407	8W-63-11, 14

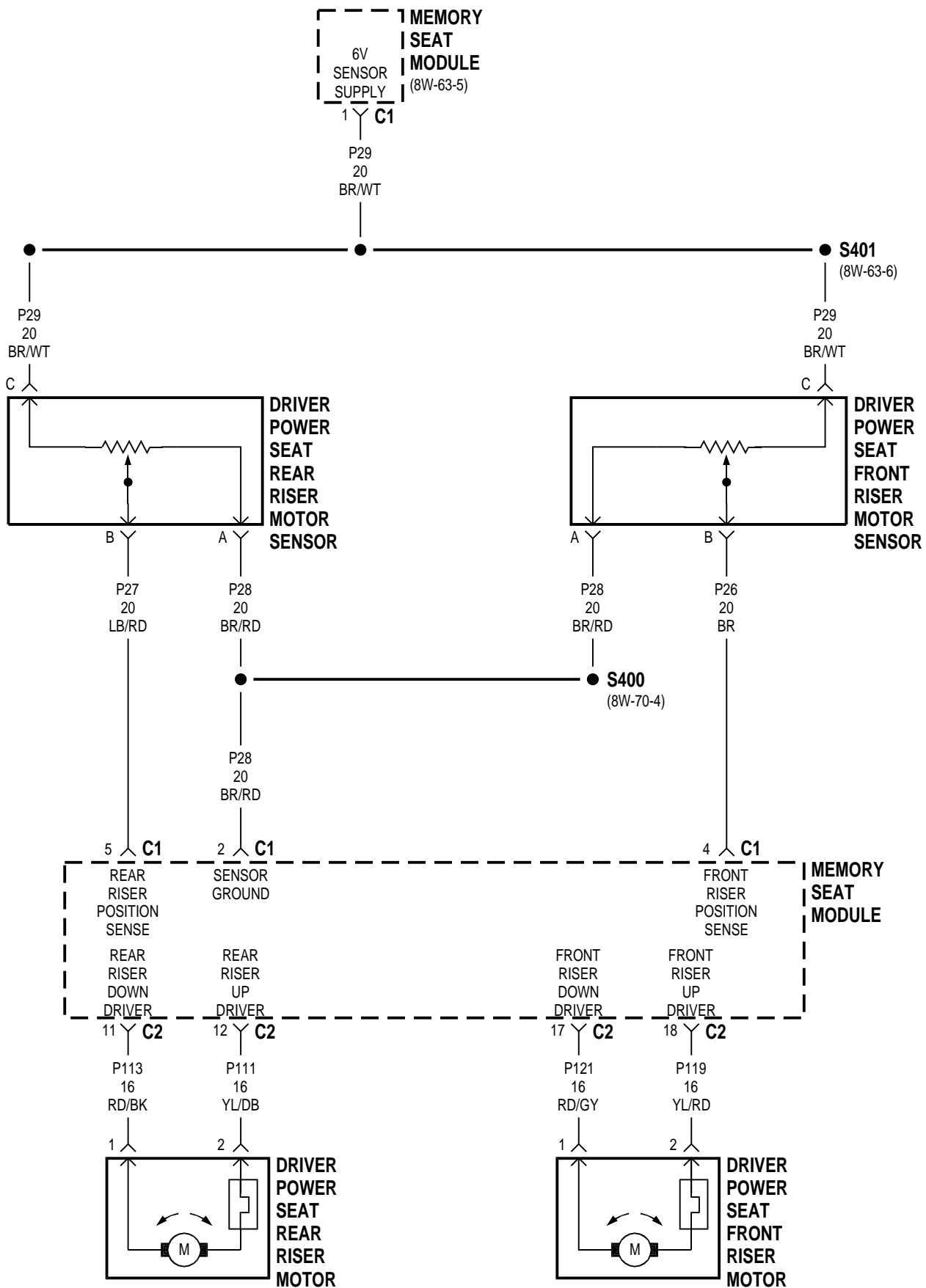


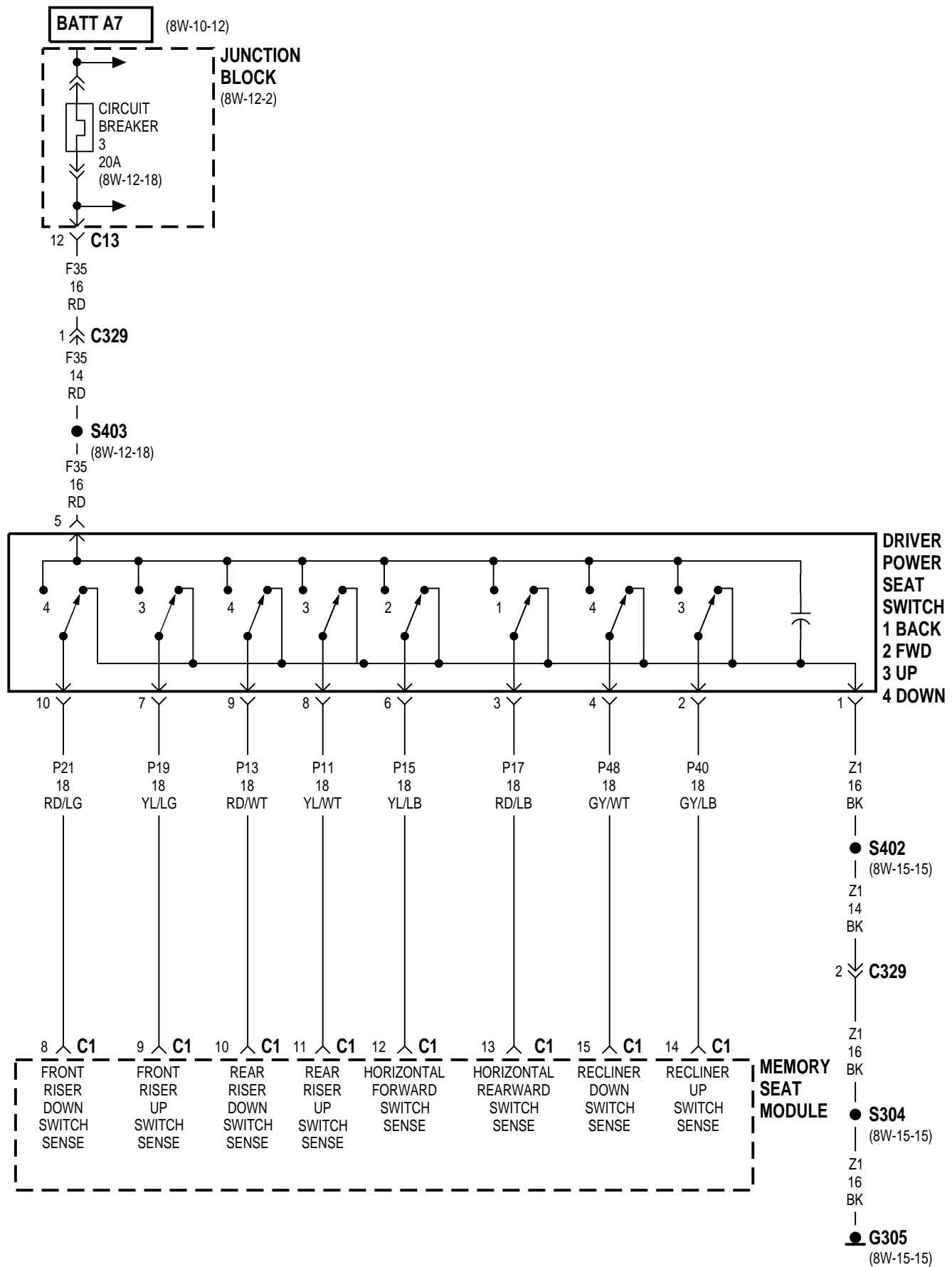


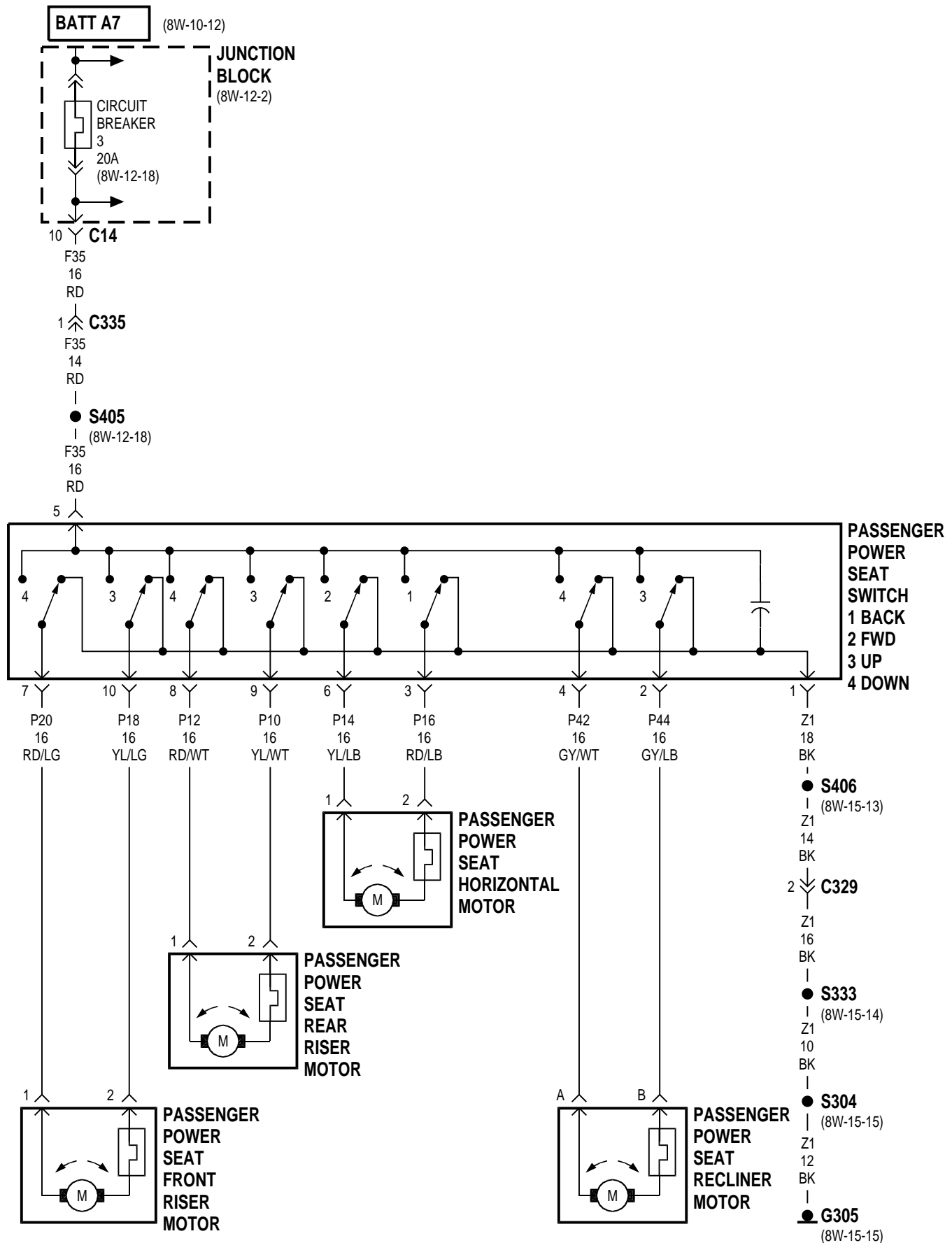


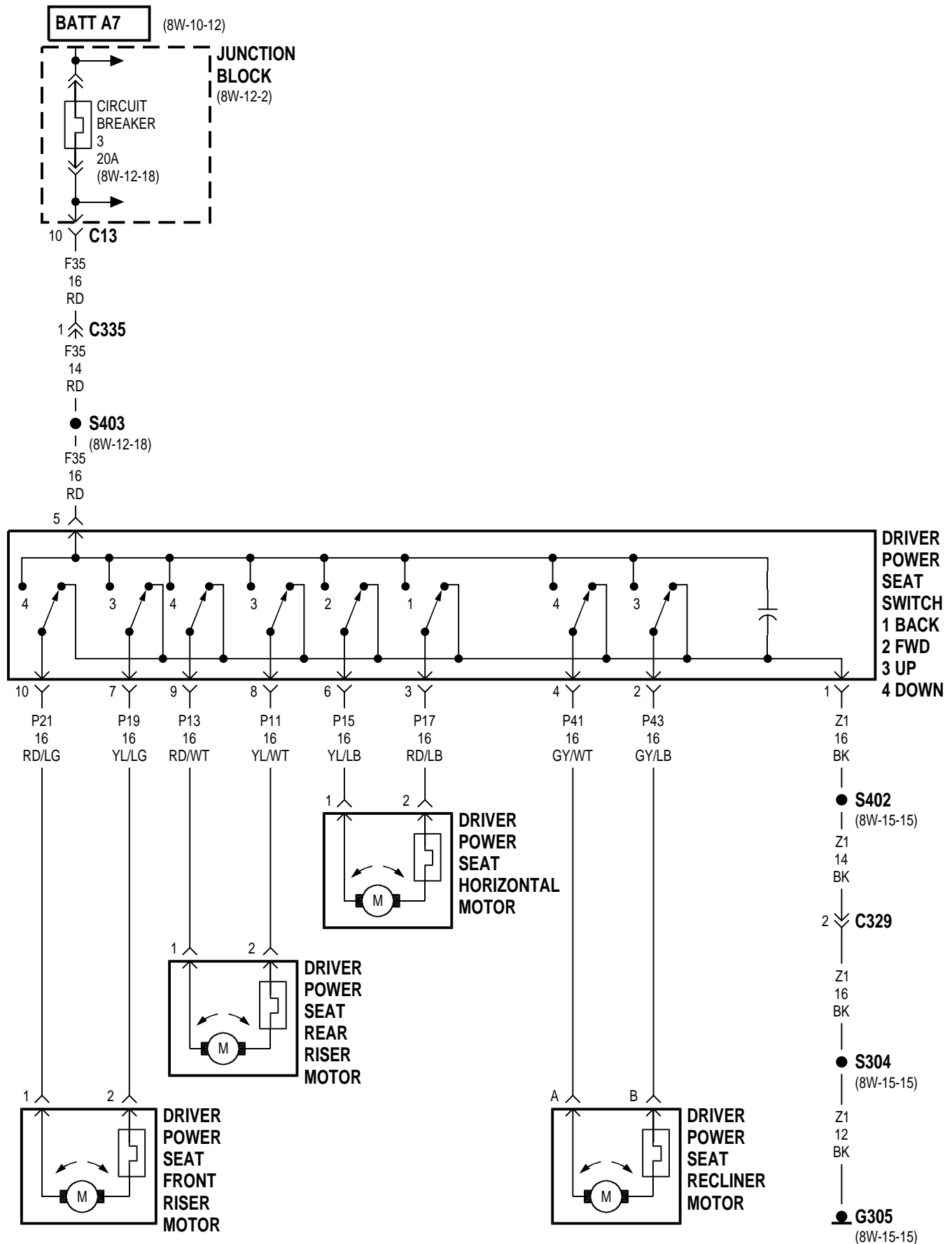


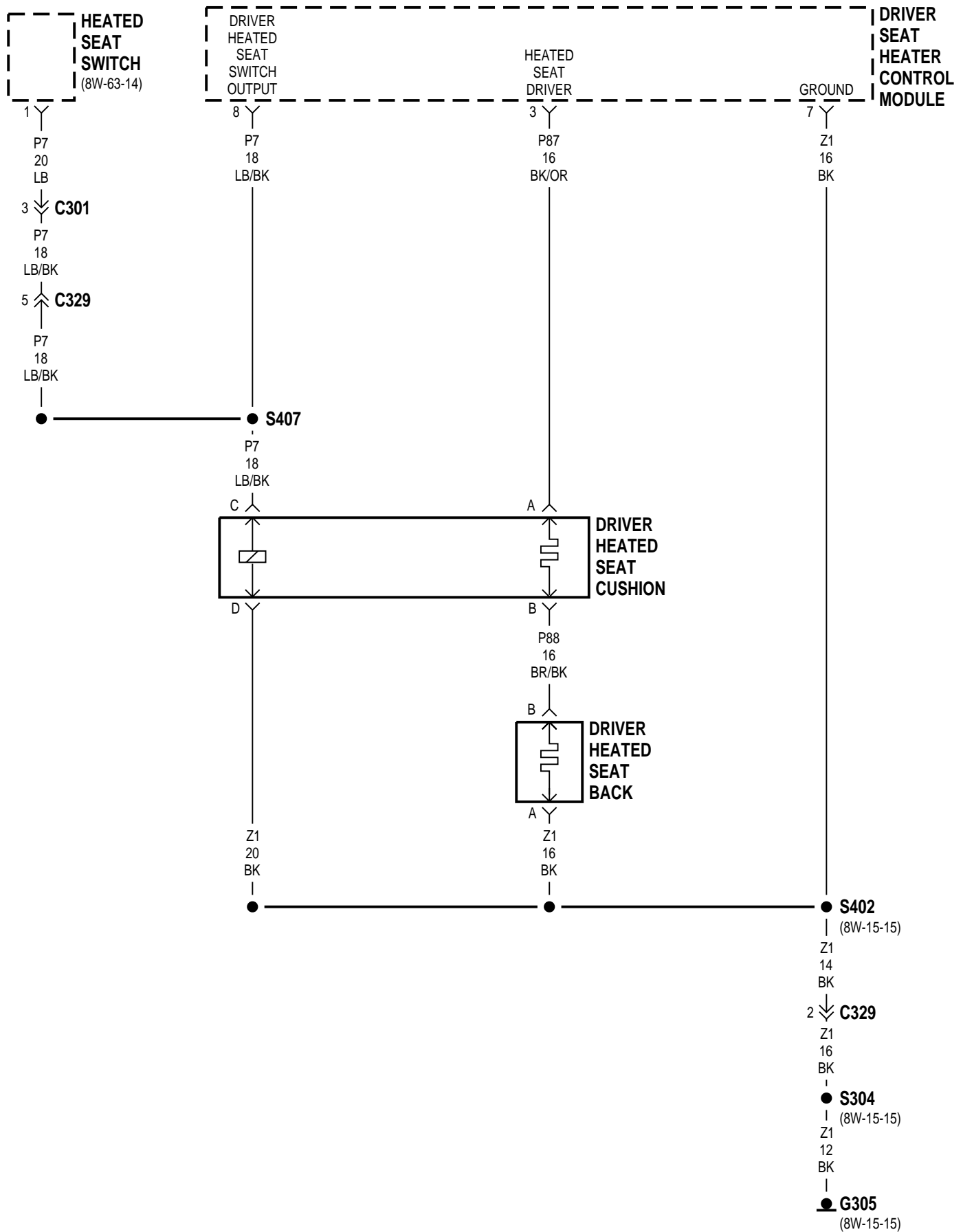


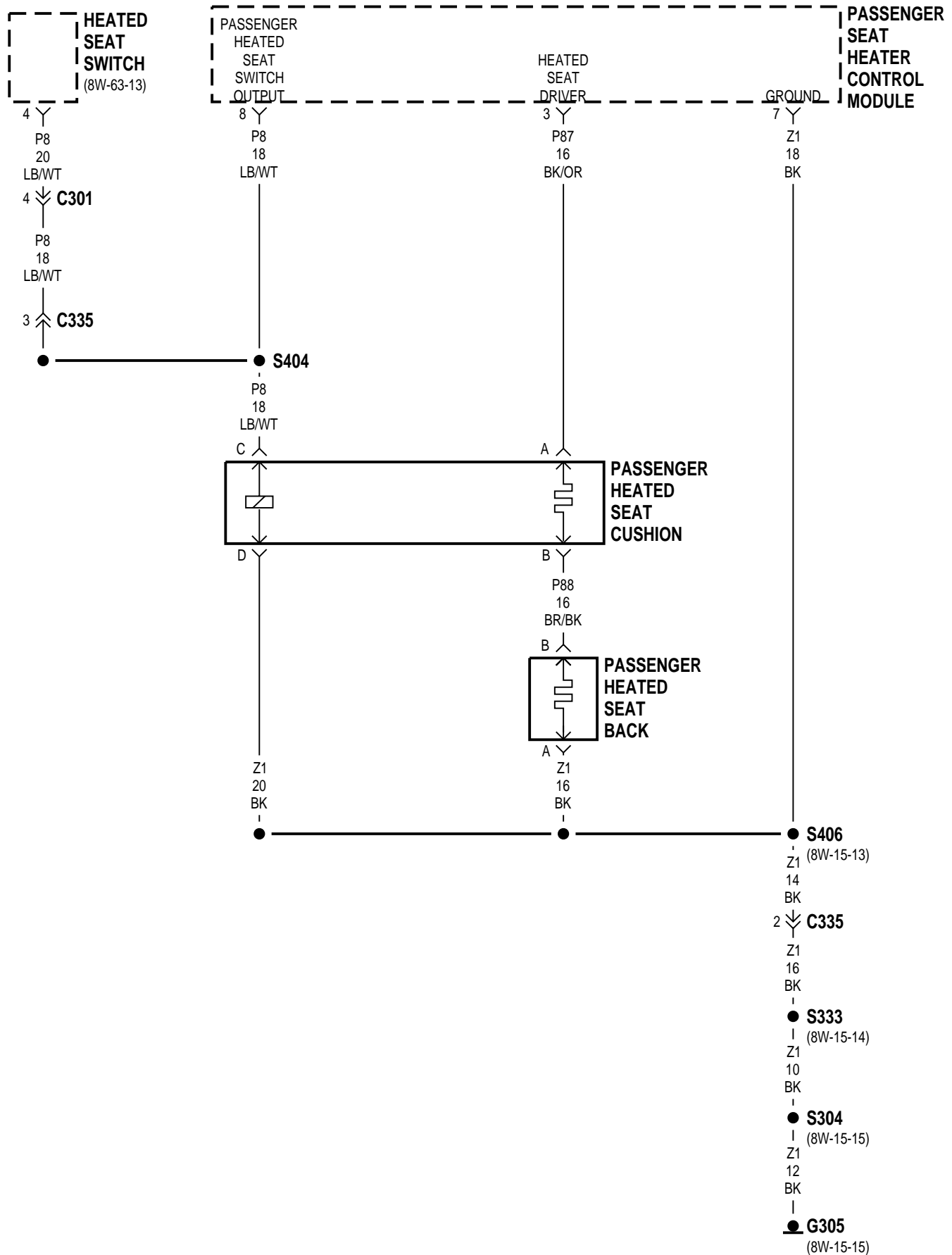


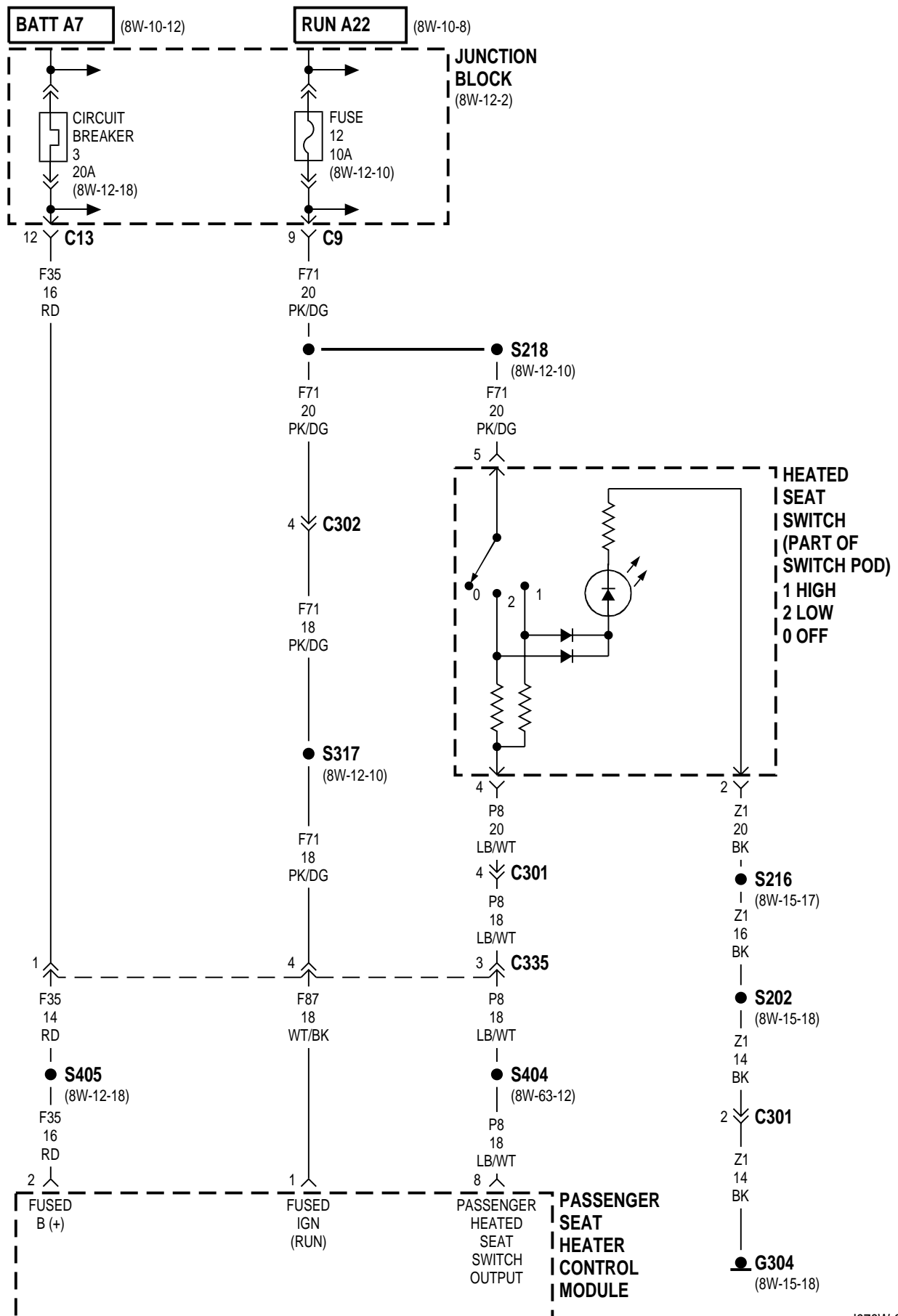


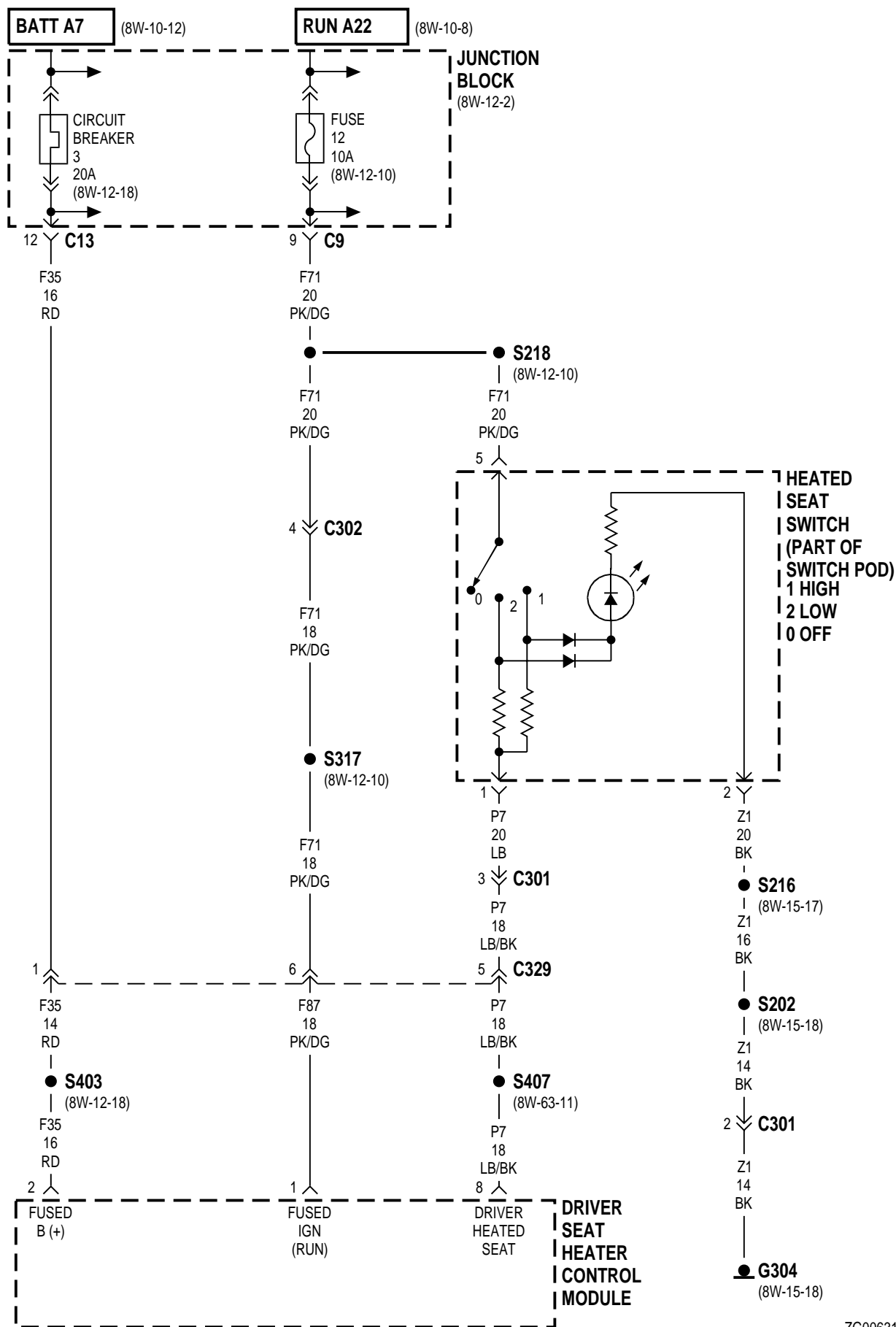


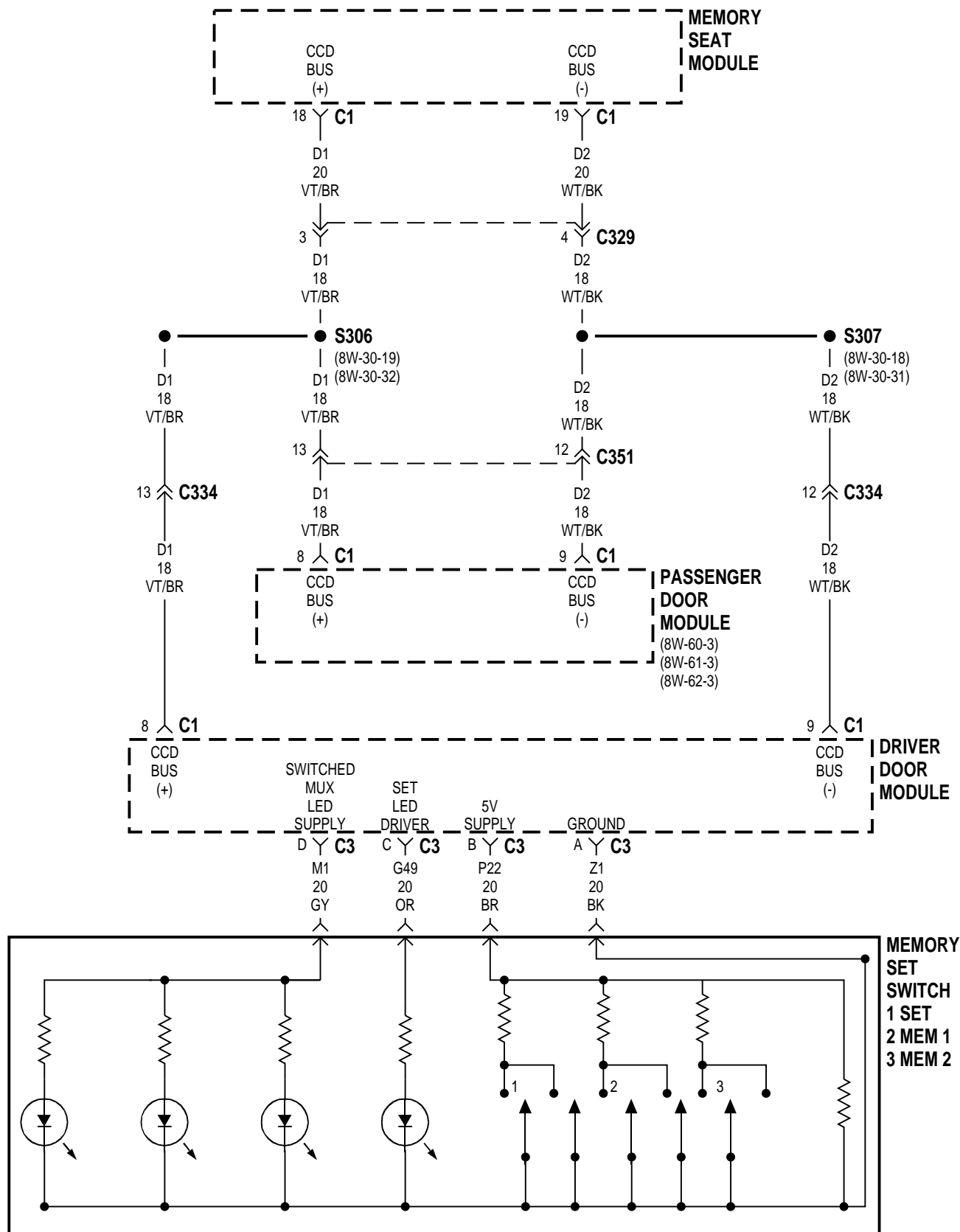












8W-63 POWER SEAT

INDEX

	page		page
DESCRIPTION AND OPERATION		MEMORY SEATS	17
HEATED SEATS	17	POWER SEATS	16
INTRODUCTION	16		

DESCRIPTION AND OPERATION

INTRODUCTION

Both front power seats on this vehicle have separate motors for adjusting lumbar, front, rear, horizontal and vertical position. Also, the vehicle may have optional heated seats.

Some models with Remote Keyless Entry (RKE) have a memory feature that allows the RKE transmitter to move the drivers seat and outside mirrors to saved positions. The memory feature also can set the radio push buttons to preset stations.

POWER SEATS

Both power seat system are protected by a 20 amp circuit breaker located in cavity 3 of the junction block. Circuit A7 from fuse 15 in Power Distribution Center (PDC) powers circuit F35 through the circuit breaker.

In both power seats, circuit F35 feeds the seat position switch and lumbar adjustment switch. A BUS bar internal to the switches feeds all the contacts. Circuit Z1 provides ground for each power seat.

LUMBAR ADJUSTMENT

Lumbar position is adjustable on both power seats. Circuit F35 feeds the left and right lumbar adjustment switch. Identical circuits from each switch power or ground the lumbar motor to adjust lumbar position.

On either power seat, during LUMBAR FORWARD adjustments, the lumbar switch connects circuit F35 to circuit P106. Circuit P106 feeds the lumbar motor. The ground path is supplied on circuit P107 from the motor through the closed contacts in switch to circuit Z1.

For LUMBAR AFT adjustments, the circuits are reversed. P107 powers the motor and circuit P106 provides ground.

DRIVER'S SEAT

When the operator selects the HORIZONTAL FORWARD function, the switch passes power from circuit F35 to circuit P15. Circuit P15 connects to the motor. Ground is provided on circuit P17 circuit back to the

switch. A bus bar internal to the switch connects circuit P17 to ground on circuit Z1.

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, the switch passes power from circuit F35 to circuit P11. Circuit P11 connects to the motor. Ground is provided on circuit P13 back to the switch. A bus bar internal to the switch connects circuit P13 to ground on circuit Z1.

For REAR VERTICAL DOWN function the circuits are reversed. P13 is the feed, and P11 is the ground.

When the operator selects the FRONT VERTICAL UP function, the switch passes power from circuit F35 to circuit P19. Circuit P19 connects to the motor. Ground is provided on circuit P21 back to the switch. A bus bar internal to the switch connects circuit P21 to ground on circuit Z1.

For FRONT VERTICAL DOWN function the circuits are reversed. P21 is the feed, and P19 is the ground.

When the operator selects the RECLINE UP function, the switch passes power from circuit F35 to the P43 circuit. Circuit P43 connects to the motor. Ground is provided on circuit P41 back to the switch. A bus bar internal to the switch connects circuit P41 to ground on circuit Z1.

For RECLINE DOWN function the circuits are reversed. P41 is the feed, and P43 is the ground.

PASSENGER'S SEAT

When the operator selects the HORIZONTAL FORWARD function, the switch passes power from circuit F35 to circuit P14. Circuit P14 connects to the motor. Ground is provided on circuit P16 circuit back to the switch. A bus bar internal to the switch connects circuit P16 to ground on circuit Z1.

For HORIZONTAL REARWARD function the circuits are reversed. P16 is the feed, and P14 is the ground.

When the operator selects the REAR VERTICAL UP function, the switch passes power from circuit F35 to circuit P10. Circuit P10 connects to the motor. Ground is provided on circuit P12 back to the switch.

DESCRIPTION AND OPERATION (Continued)

A bus bar internal to the switch connects circuit P12 to ground on circuit Z1.

For REAR VERTICAL DOWN function the circuits are reversed. P12 is the feed, and P10 is the ground.

When the operator selects the FRONT VERTICAL UP function, the switch passes power from circuit F35 to circuit P18. Circuit P18 connects to the motor. Ground is provided on circuit P20 back to the switch. A bus bar internal to the switch connects circuit P20 to ground on circuit Z1.

For FRONT VERTICAL DOWN function the circuits are reversed. P20 is the feed, and P18 is the ground.

When the operator selects the RECLINE UP function, the switch passes power from circuit F35 to the P44 circuit. Circuit P44 connects to the motor. Ground is provided on circuit P42 back to the switch. A bus bar internal to the switch connects circuit P42 to ground on circuit Z1.

For RECLINE DOWN function the circuits are reversed. P42 is the feed, and P44 is the ground.

MEMORY SEATS

Circuit A7 from fuse 15 in the Power Distribution Center (PDC) powers circuit F35 through the circuit breaker in cavity 3 of the junction block. Circuit F35 powers the Memory Seat Module (MSM). Circuit Z1 provides ground for the MSM.

When the operator moves the power seat switch or the lumbar adjustment switch, contacts in the switch CLOSE connecting the switch to the MSM. The MSM receives this input and operates the proper seat motor.

The drivers memory seat system can be activated by either one of the memory switches on the left door panel or through the Remote Keyless Entry (RKE) transmitter. If one of the memory switches on the door panel is pushed, the Drivers Door Module (DDM) signals the MSM on the CCD bus. If the memory function is activated by the RKE transmitter, the Passenger Door Module (PDM) signals the MSM on the CCD bus.

The following is a list of the circuits that connect from the power seat switch to the MSM and their functions:

- P40 - Recliner up
- P48 - Recliner down
- P19 - Front up
- P21 - Front down
- P11 - Rear up
- P13 - Rear down
- P15 - Seat forward
- P17 - Seat rearward
- P104 - lumbar rearward
- P105 - lumbar forward

To operate the seat motor(s), the control module supplies the power and ground. The following is a list of the circuits that connect from the control module to the seat motors:

- P119, P121 - Seat front up and down
- P111, P113 - Rear up and down
- P115, P117 - Seat forward and rearward
- P41, P43 - Recliner forward and rearward
- P106, P107 - Lumbar forward and rearward

SEAT POSITION SENSORS

The Memory Seat Module (MSM) receives seat position inputs from five sensors in the driver's seat. On circuit P29, the MSM supplies power to the seat position sensors on circuit P29. The MSM provides ground for the sensors on circuit P28.

Circuit P25 provides the input from the horizontal forward/rearward motor sensor to the MSM. Circuit P47 provides the input from the recline motor sensor. Circuit P103 sends the lumbar motor sensor input.

Circuit P27 provides the input from the rear riser motor sensor to the MSM. Circuit P26 provides the input from the front riser motor sensor. Circuit P29 from the MSM powers the riser motor sensors. The MSM provides ground for the riser motor sensors on circuit P28.

MEMORY SWITCH

The memory switch is used for programming the desired seat positions into the MSM memory. The memory switch also programs power mirror position into the Drivers Door Module (DDM) and the Passengers Door Module (PDM), and presets radio station selections.

Circuit P22 from DDM supplies power to the three sets of switches in the memory switch; set, memory 1, and memory 2. The three switch sets are wired in parallel and each contains a separate resistor. The voltage level present on circuit P22 depends on which memory switch is activated. Circuit Z1 from the DDM provides ground for the switches.

After a memory switch activates, the DDM broadcasts the appropriate signal on CCD bus. The MSM adjusts seat position in response to the signal.

Circuit M1 from the DDM powers the green Light Emitting Diodes (LED) in the set switch. Circuit G49 powers the red LED in the set switch. Circuit Z1 provides ground for the LEDs.

HEATED SEATS

Separate control modules operate the driver and passenger heated seats. Circuit F35 from the circuit breaker in cavity 3 of the junction block supplies power to both heated seat control modules. Circuit A7 from fuse 15 in the Power Distribution Center (PDC) powers circuit F35 through the circuit breaker.

DESCRIPTION AND OPERATION (Continued)

When the ignition switch is in the RUN position, it connects circuit A1 from fuse 8 in the PDC to circuit A22. Circuit A22 powers circuit F71 through fuse 12 in the junction block. Circuit F71 splices to supply power to the driver and passenger heated seat switches and provides an input to the heated seat control modules. Circuit Z1 provides ground for the control modules and both heated seat switches.

Both heated seat switches have three positions; OFF, LOW or HIGH. Circuit P7 sends the driver's heated seat switch signal to the driver's heated seat control module. Circuit P8 sends the passenger heated seat switch signal to the passenger heated seat control module. In the LOW and HIGH positions, the driver's heated seat switch connects battery voltage on circuit F71 to circuit P7 (driver's) or P8 (passenger). The LOW and HIGH position detentes have a resistor in series between the detente and circuit P7 or P8. Internal to the switch, voltage from

circuit F71 passes through the resistor to circuit P7 or P8. The voltage level on circuit P7 or P8 from the switch depends on switch position (LOW or HIGH).

After receiving a signal from its heated seat switch, the heated seat control module powers the heater grids in the seat. From either control module, circuit P87 powers the grid in the driver's seat cushion. Current flows out of the seat cushion on circuit P88 to the grid on the seat back. Circuit Z1 from the grid in the seat back supplies ground.

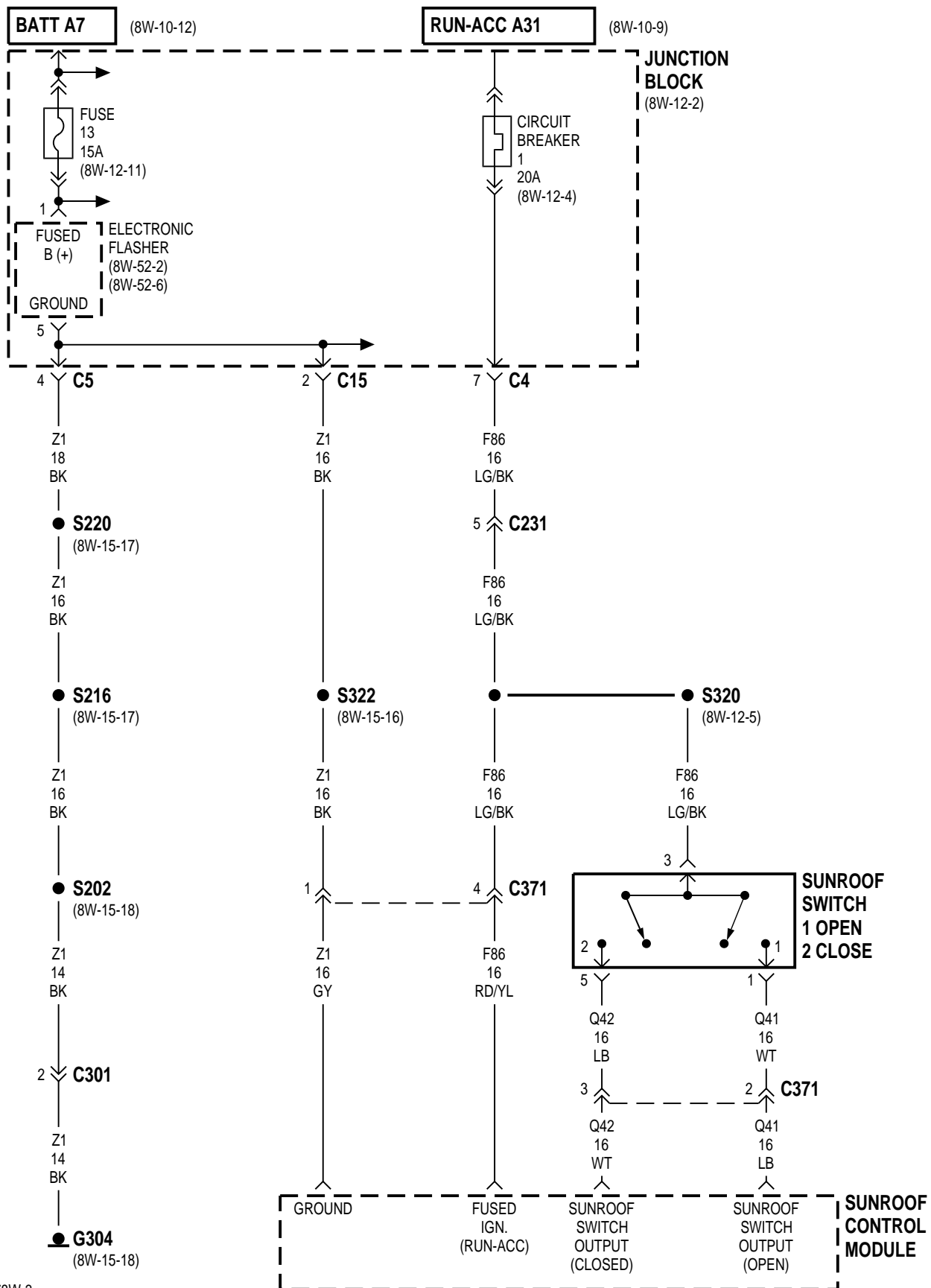
Each heated seat control module monitors seat temperature through a thermistor in each seat. When seat temperature reaches the temperature selected by the operator through the heated seat switch, the control module stops supplying voltage to the heated seat grids. To maintain selected seat temperature, the control module cycles the grid ON and OFF.

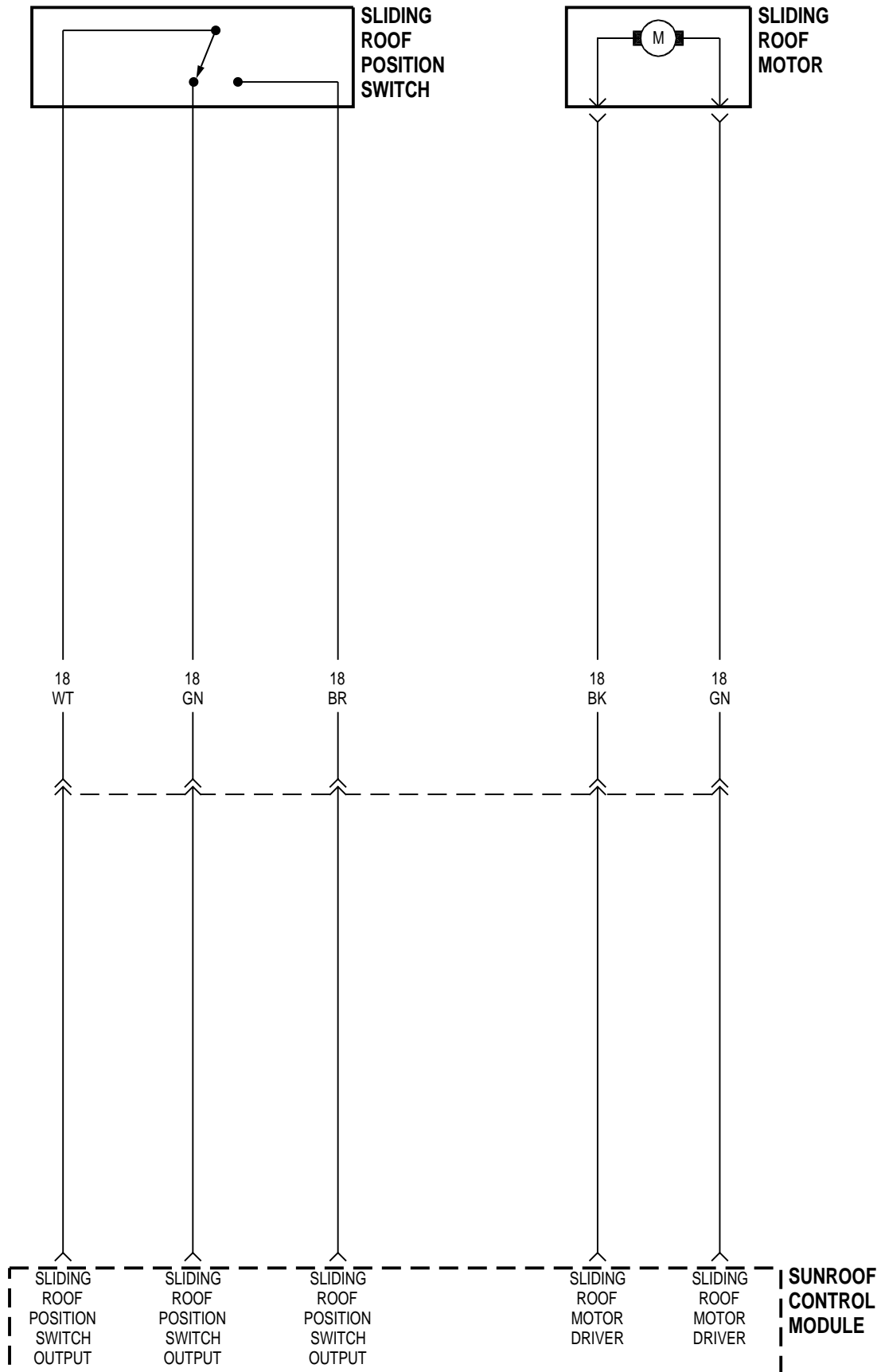
8W-64 POWER SUNROOF

INDEX

	page
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	4

Component	Page	Component	Page
Circuit Breaker 1	8W-64-2	S320	8W-64-2
Electronic Flasher	8W-64-2	S322	8W-64-2
Fuse 13	8W-64-2	Sliding Roof Motor	8W-64-3
G304	8W-64-2	Sliding Roof Position Switch	8W-64-3
Junction Block	8W-64-2	Sunroof Control Module	8W-64-2, 3
S202	8W-64-2	Sunroof Switch	8W-64-2
S216	8W-64-2		
S220	8W-64-2		





8W-64 POWER SUNROOF

INDEX

page

DESCRIPTION AND OPERATION	
POWER SUNROOF	4

DESCRIPTION AND OPERATION

POWER SUNROOF

When the ignition switch is in the ACCESSORY or RUN position it connects circuit A1 from fuse 8 in the Power Distribution Center (PDC) to circuit A31. Circuit A31 powers circuit F86 through the circuit breaker in cavity 1 of the junction block. Circuit F86 feeds the power sunroof control module and switch. Circuit Z1 provides ground for the sunroof system.

When the operator selects the OPEN function, voltage is provided on circuit F86 through the closed contacts in the switch to circuit Q41. Circuit Q41 connects between the switch and the control module.

The control module then activates the motor and moves the sunroof to the desired position. A position

sensor is used to prevent the sunroof from being moved to far in any one direction. When the sensor detects the roof is at the end of its travel it sends a signal to the control module and voltage is shut off to the motor.

When the operator selects the CLOSE function, voltage is provided on circuit F86 through the closed contacts in the switch to circuit Q42. Circuit Q42 connects between the switch and the control module.

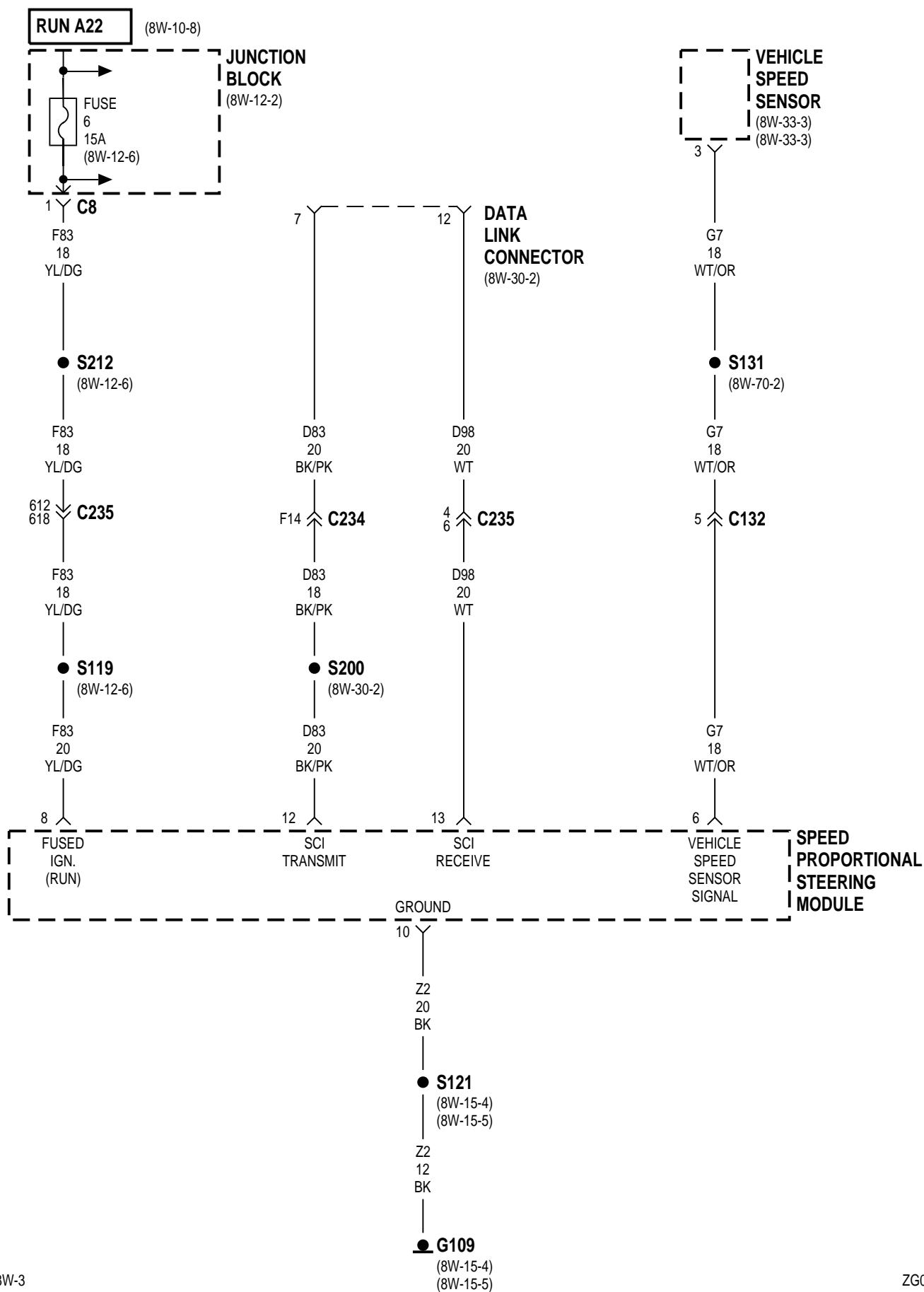
The control module then activates the motor and moves the sunroof to the desired position. The position sensor detects when the roof is at the end of its travel it sends a signal to the control module and voltage is shut off to the motor.

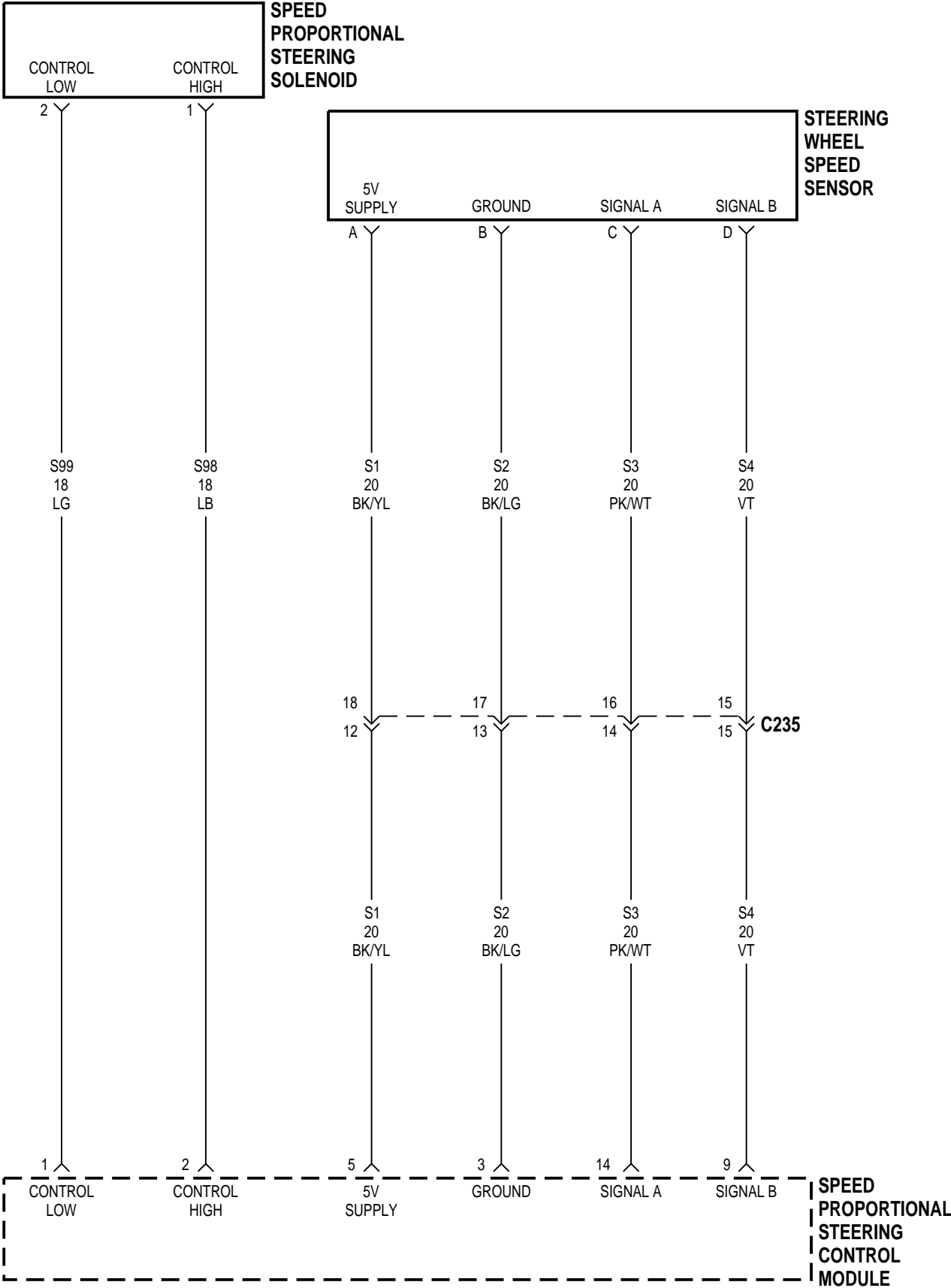
8W-65 SPEED PROPORTIONAL STEERING

INDEX

	page
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	4

Component	Page	Component	Page
Data Link Connector	8W-65-2	S121	8W-65-2
Fuse 6	8W-65-2	S131	8W-65-2
G109	8W-65-2	S200	8W-65-2
Junction Block	8W-65-2	S212	8W-65-2
S1	8W-65-3	Speed Proportional Steering Control	
S2	8W-65-3	Module	8W-65-3
S3	8W-65-3	Speed Proportional Steering Module	8W-65-2
S4	8W-65-3	Speed Proportional Steering Solenoid	8W-65-3
S98	8W-65-3	Steering Wheel Speed Sensor	8W-65-3
S99	8W-65-3	Vehicle Speed Sensor	8W-65-2
S119	8W-65-2		





8W-65 SPEED PROPORTIONAL STEERING

INDEX

	page		page
DESCRIPTION AND OPERATION		SPEED PROPORTIONAL STEERING CONTROL	
DATA LINK CONNECTOR	4	MODULE	4
INTRODUCTION	4	SPEED PROPORTIONAL STEERING	
		SOLENOID	4

DESCRIPTION AND OPERATION

INTRODUCTION

The speed proportioning steering system automatically adjusts steering effort based on vehicle speed. The system provides additional steering assist while the vehicle is stationary or at low driving speeds. At slower speeds, the system provides greater assist. At higher speeds, it provides less assist resulting in increased steering effort.

In the RUN position, the ignition switch connects circuit A1 from fuse 8 in the Power Distribution Center (PDC) to circuit A22. Circuit A22 powers circuit F83 through fuse 6 in the junction block. Circuit F83 supplies power to the Speed Proportional Steering Control Module (SPSCM). Circuit Z2 provides ground for the SPSCM.

SPEED PROPORTIONAL STEERING CONTROL
MODULE

Circuit F83 powers the Speed Proportional Steering Control Module (SPSCM). Circuit Z2 provides ground for the SPSCM.

On circuit S1, the SPSCM supplies 5 volts to the steering wheel speed sensor. The sensor provides two signals to the SPSCM on circuits S3, and S4. The SPSCM provides ground for the steering wheel speed sensor on circuit S2.

Circuit G7 supplies the vehicle speed sensor to the SPSCM.

SPEED PROPORTIONAL STEERING SOLENOID

The speed proportional steering control module (SPSCM) operates the speed proportional steering solenoid. The SPSCM supplies a pulse width modulated voltage to the solenoid. Circuits S99 and S98 connect the SPSCM to the solenoid.

DATA LINK CONNECTOR

Circuits D98 and D99 connect the Speed Proportional Steering Control Module (SPSCM) to the data link connector. Circuit D99 connects to circuit D83 which continues to the data link connector. The SPSCM transmits data to the scan tool through the data link connector on circuit D99. The SPSCM receives data from the scan tool on circuit D98.

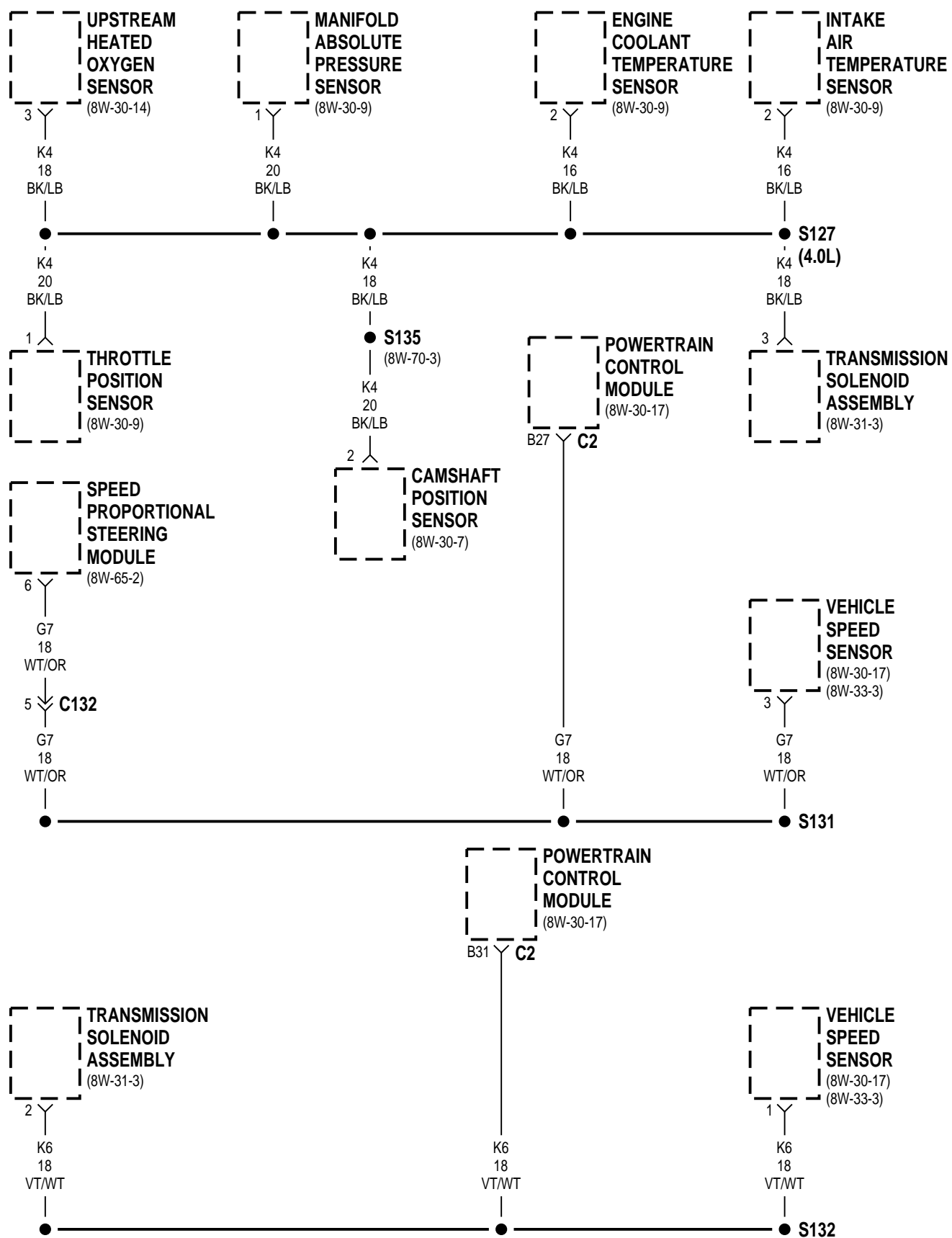
8W-70 SPLICE INFORMATION

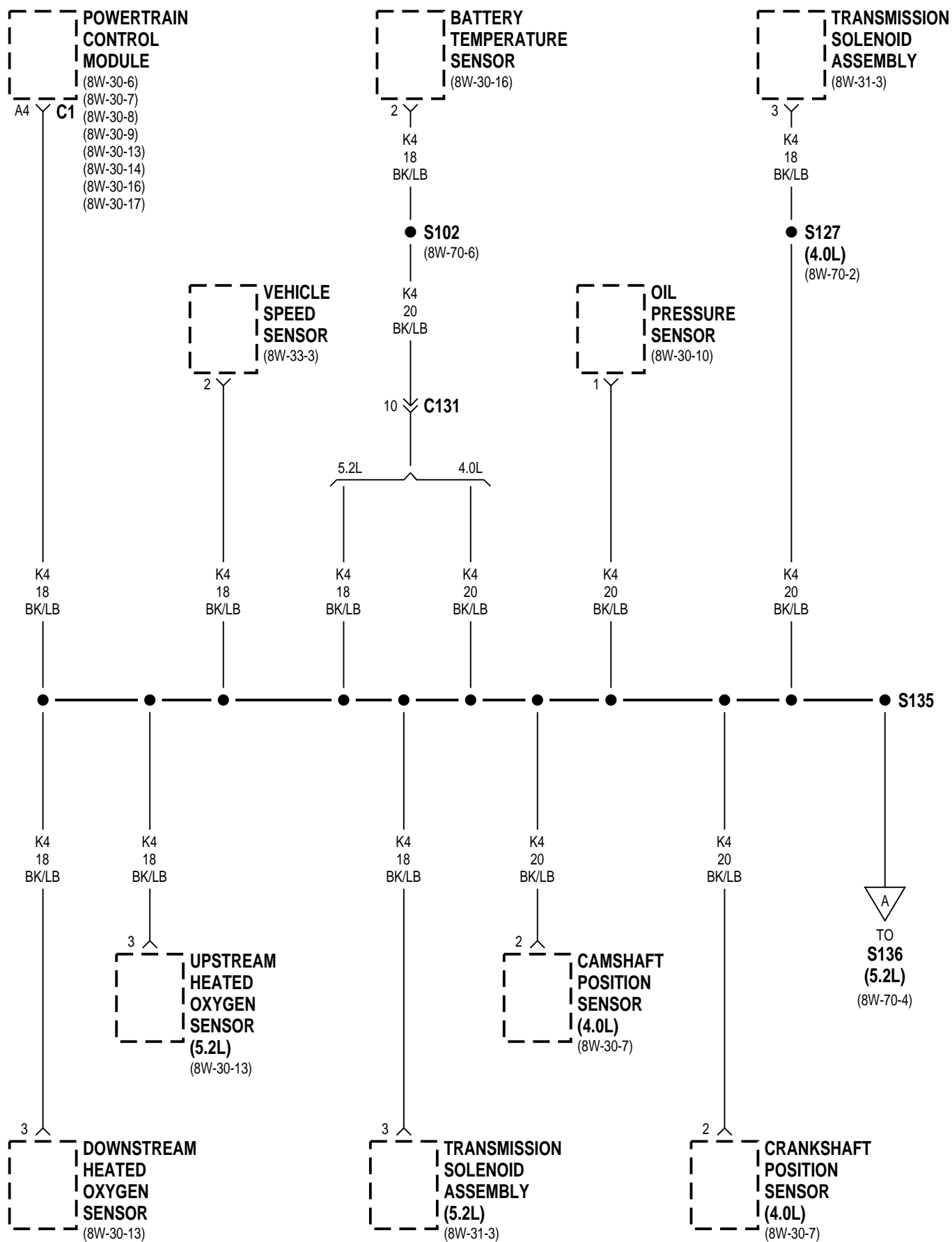
INDEX

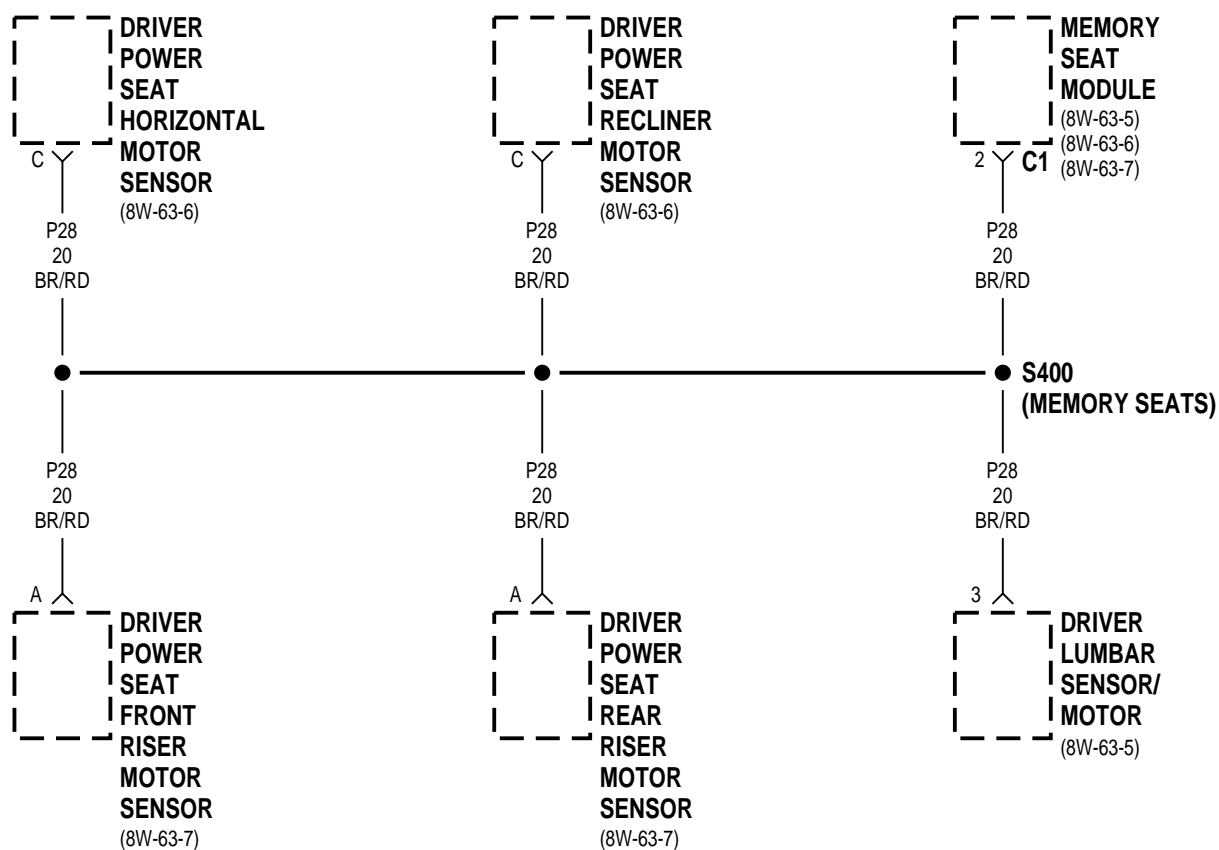
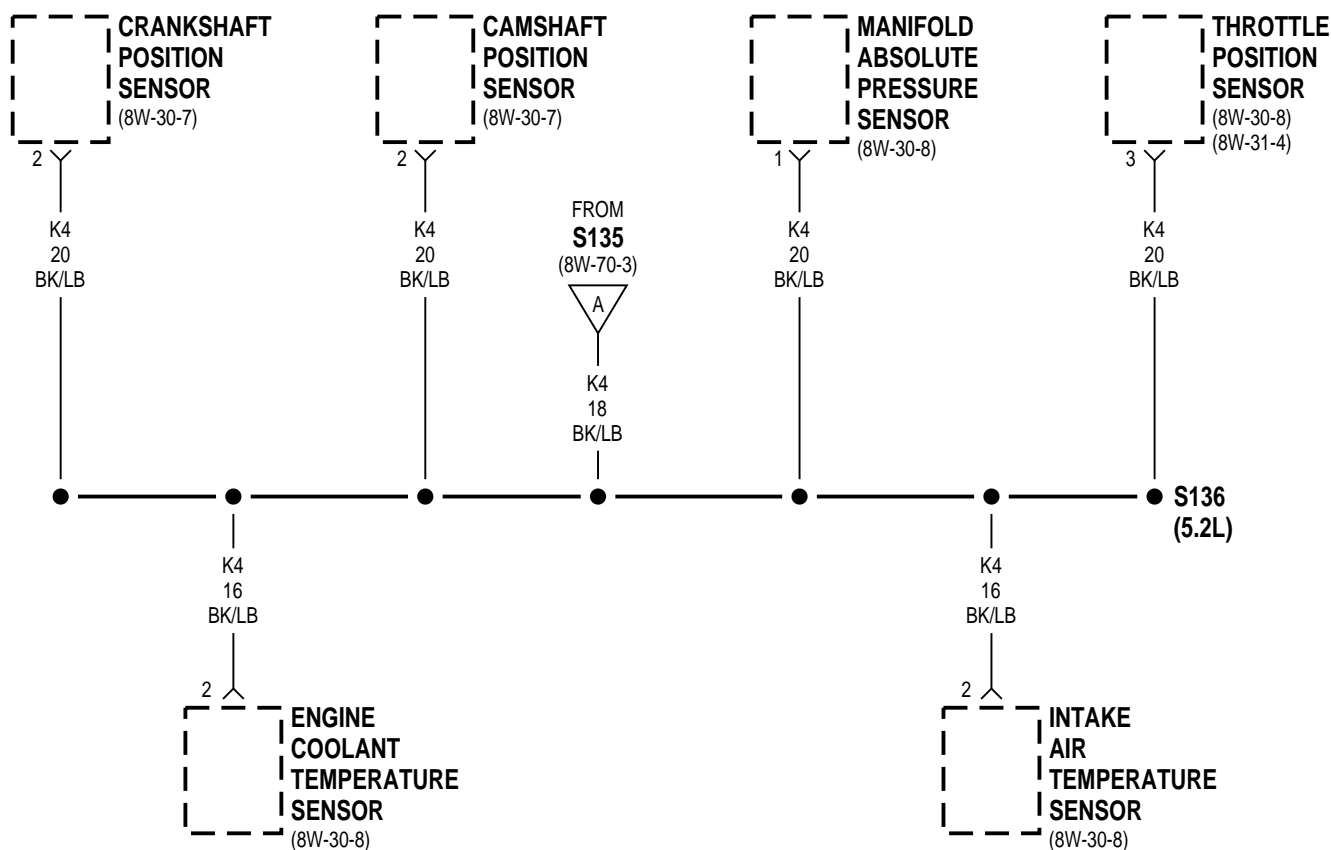
page

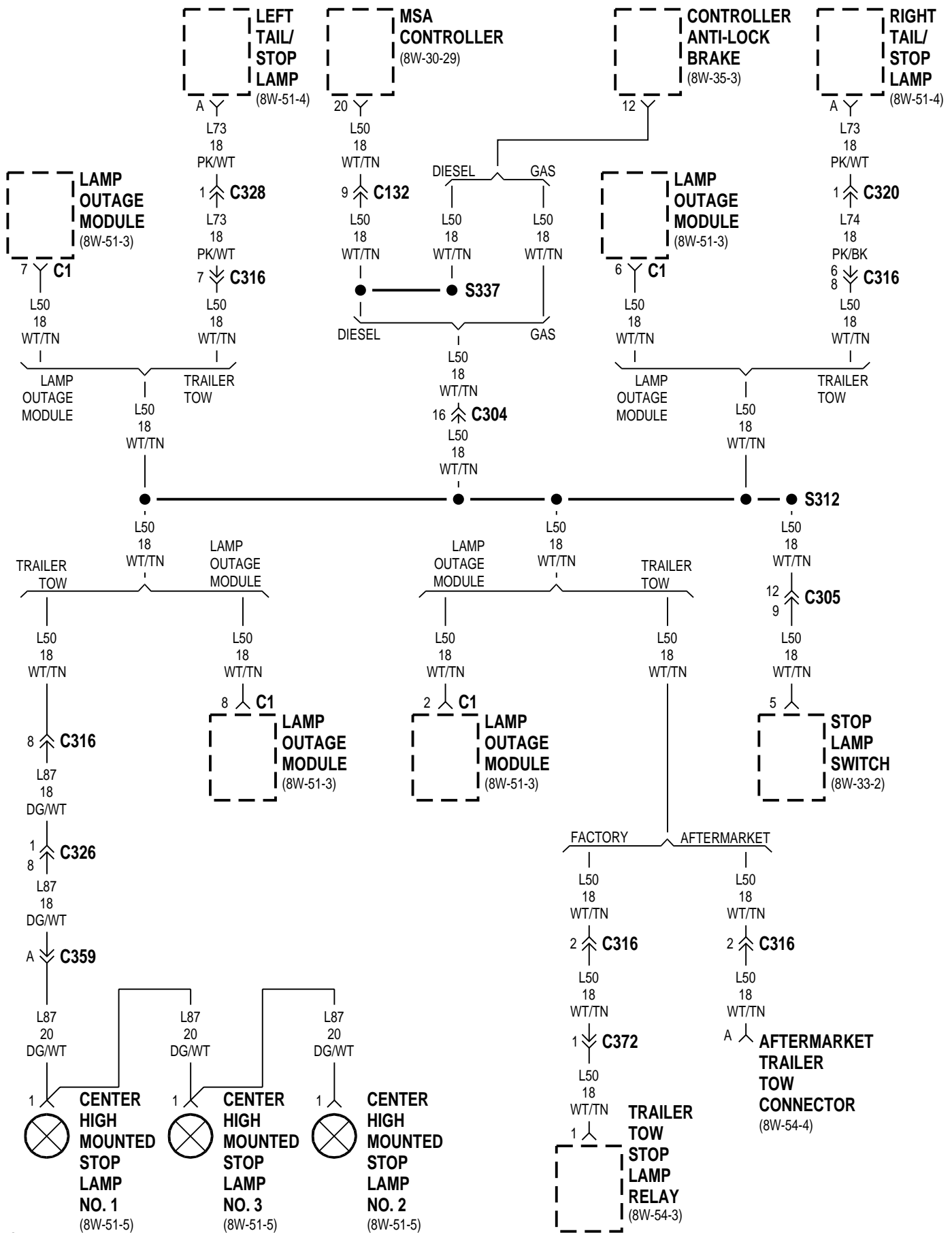
SCHEMATICS AND DIAGRAMS	1
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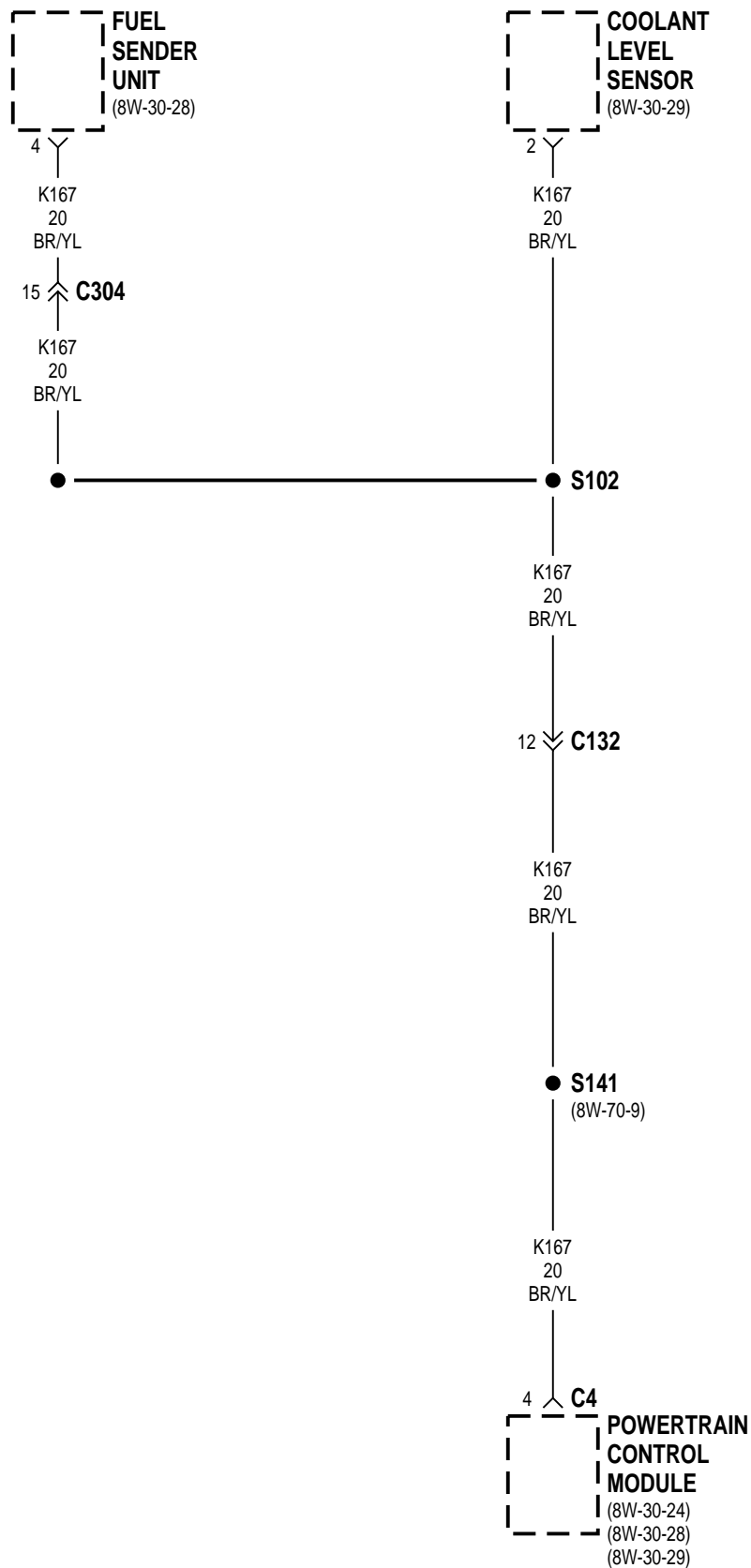
Component	Page	Component	Page
S100	8W-10-16	S222	8W-42-6, 8
S101	8W-10-15	S223	8W-42-8
S102	8W-30-16; 8W-70-6, 9	S224	8W-10-6; 8W-42-3
S103	8W-12-15; 8W-50-8; 8W-52-8	S225	8W-10-6; 8W-42-3
S104	8W-15-6, 7; 8W-52-8	S226	8W-15-8; 8W-42-4
S105	8W-12-24	S300	8W-47-5, 6
S106	8W-10-5; 8W-39-6; 8W-41-2	S301	8W-47-5, 6
S107	8W-50-3	S302	8W-15-18; 8W-45-2
S108	8W-50-3	S303	8W-45-9; 8W-50-4
S109	8W-15-4, 5; 8W-52-8	S304	8W-15-15
S110	8W-50-11	S305	8W-39-5
S111	8W-50-11	S306	8W-30-19, 32
S112	8W-50-11	S307	8W-30-18, 31
S113	8W-50-11	S308	8W-61-4
S114	8W-50-11	S309	8W-15-13; 8W-47-9, 10
S115	8W-50-11	S310	8W-61-4
S117	8W-50-4	S311	8W-12-17
S119	8W-12-6; 8W-70-8	S312	8W-70-5
S120	8W-53-3	S313	8W-52-7
S121	8W-15-4, 5	S314	8W-15-12
S122	8W-12-4; 8W-53-3	S315	8W-12-8
S124	8W-15-8	S316	8W-15-11
S125	8W-15-8; 8W-35-2	S317	8W-12-10
S126	8W-15-2	S318	8W-12-8; 8W-47-9, 10
S127	8W-70-2	S319	8W-47-5, 6
S128	8W-10-17, 19; 8W-70-7	S320	8W-12-5
S129	8W-10-17, 19; 8W-70-7	S321	8W-12-13
S130	8W-15-7; 8W-30-22	S322	8W-12-21; 8W-15-16
S131	8W-70-2	S323	8W-12-7
S132	8W-70-2	S324	8W-15-12
S133	8W-30-7	S325	8W-15-14
S134	8W-15-6; 8W-21-4; 8W-50-4	S326	8W-61-4
S135	8W-70-3	S327	8W-61-4
S136	8W-70-4, 8	S328	8W-15-10; 8W-45-11
S137	8W-10-4; 8W-20-3	S329	8W-44-14; 8W-45-11
S138	8W-10-15	S330	8W-15-9; 8W-54-3
S140	8W-30-24	S331	8W-54-2
S141	8W-70-9	S332	8W-10-4; 8W-12-9; 8W-48-2
S142	8W-30-30	S333	8W-15-14
S144	8W-30-25	S334	8W-12-21
S147	8W-52-8	S335	8W-47-5, 6
S149	8W-15-4; 8W-52-8	S336	8W-12-8
S150	8W-52-8	S400	8W-70-4
S152	8W-15-6, 7; 8W-52-8	S401	8W-63-6
S200	8W-30-2	S402	8W-15-15
S201	8W-12-8	S403	8W-12-18
S202	8W-15-18	S404	8W-63-12
S203	8W-30-18, 31	S405	8W-12-18
S204	8W-30-19, 32	S406	8W-15-13
S205	8W-15-18	S407	8W-63-11
S206	8W-31-5	S408	8W-12-17; 8W-52-3, 8
S207	8W-12-4; 8W-45-7	S409	8W-15-5; 8W-52-3, 8
S209	8W-44-11	S410	8W-12-15
S210	8W-10-7; 8W-39-2	S411	8W-15-9
S211	8W-70-8	S413	8W-52-3
S212	8W-12-6; 8W-50-11	S414	8W-52-3
S214	8W-44-12	S415	8W-12-15
S215	8W-12-5	S417	8W-15-11
S216	8W-15-17	S418	8W-51-6
S218	8W-12-10	S419	8W-15-10; 8W-51-6
S219	8W-42-6	S420	8W-30-28
S220	8W-15-17	S421	8W-30-26
S221	8W-42-2, 5		

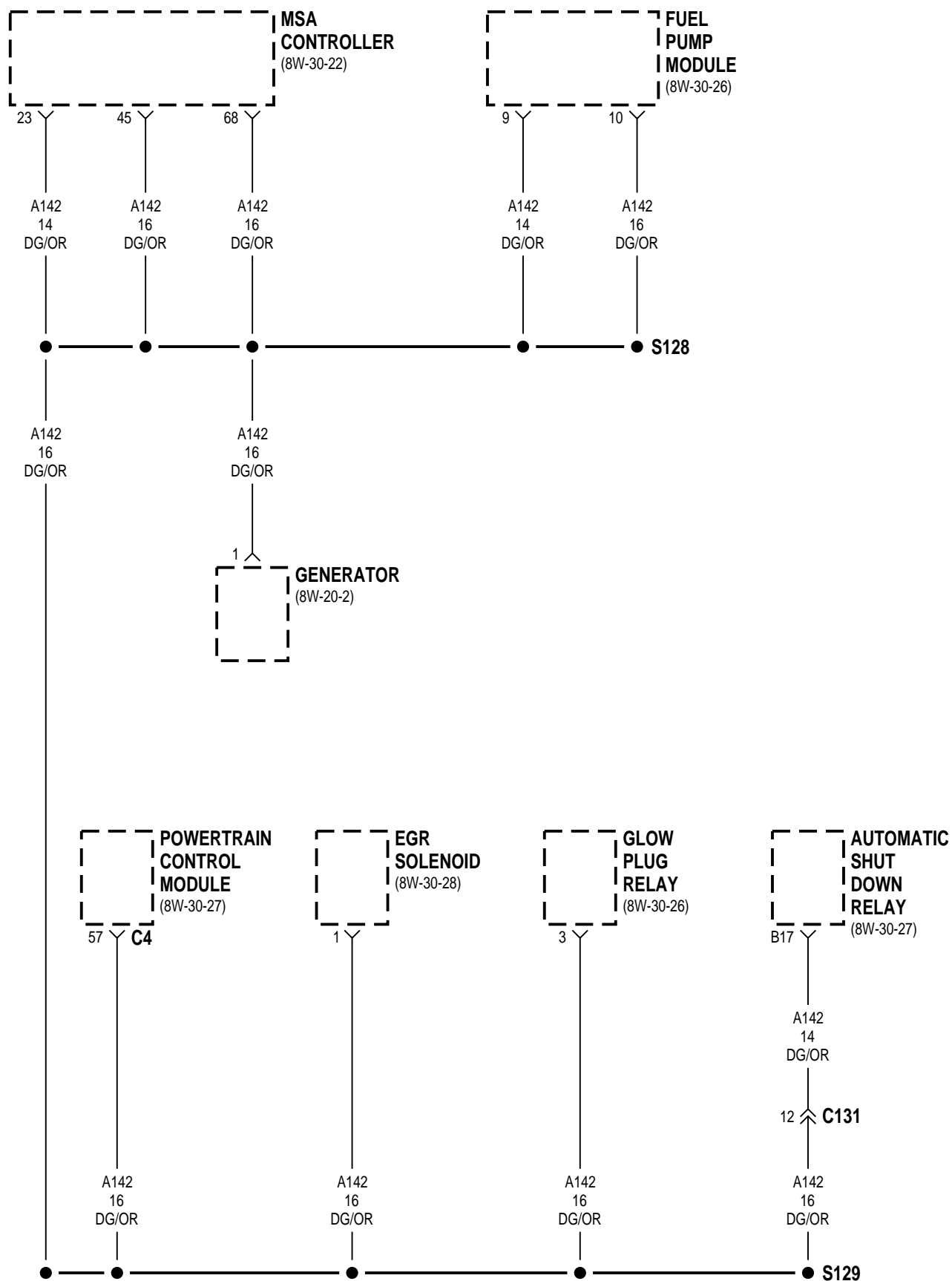


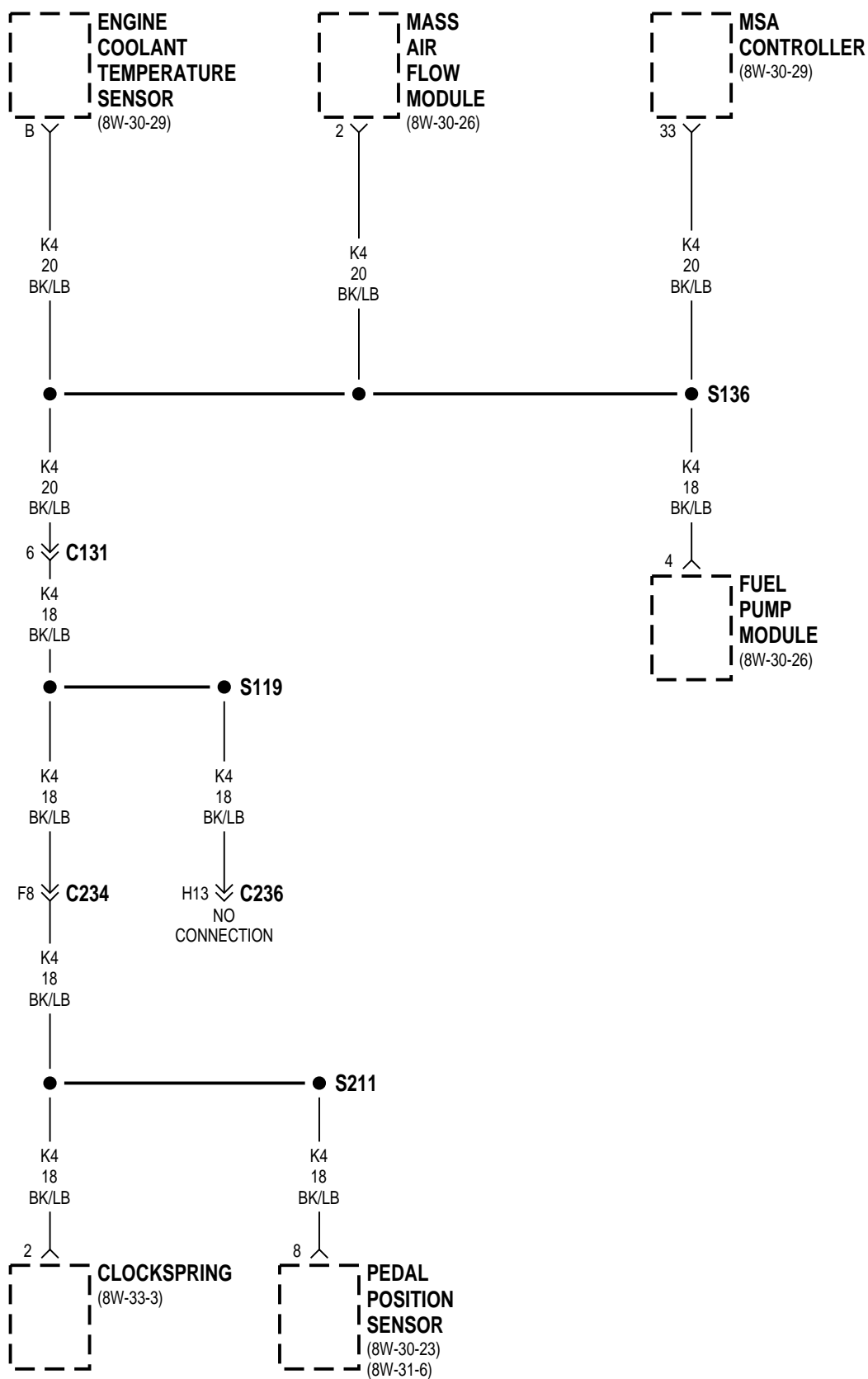


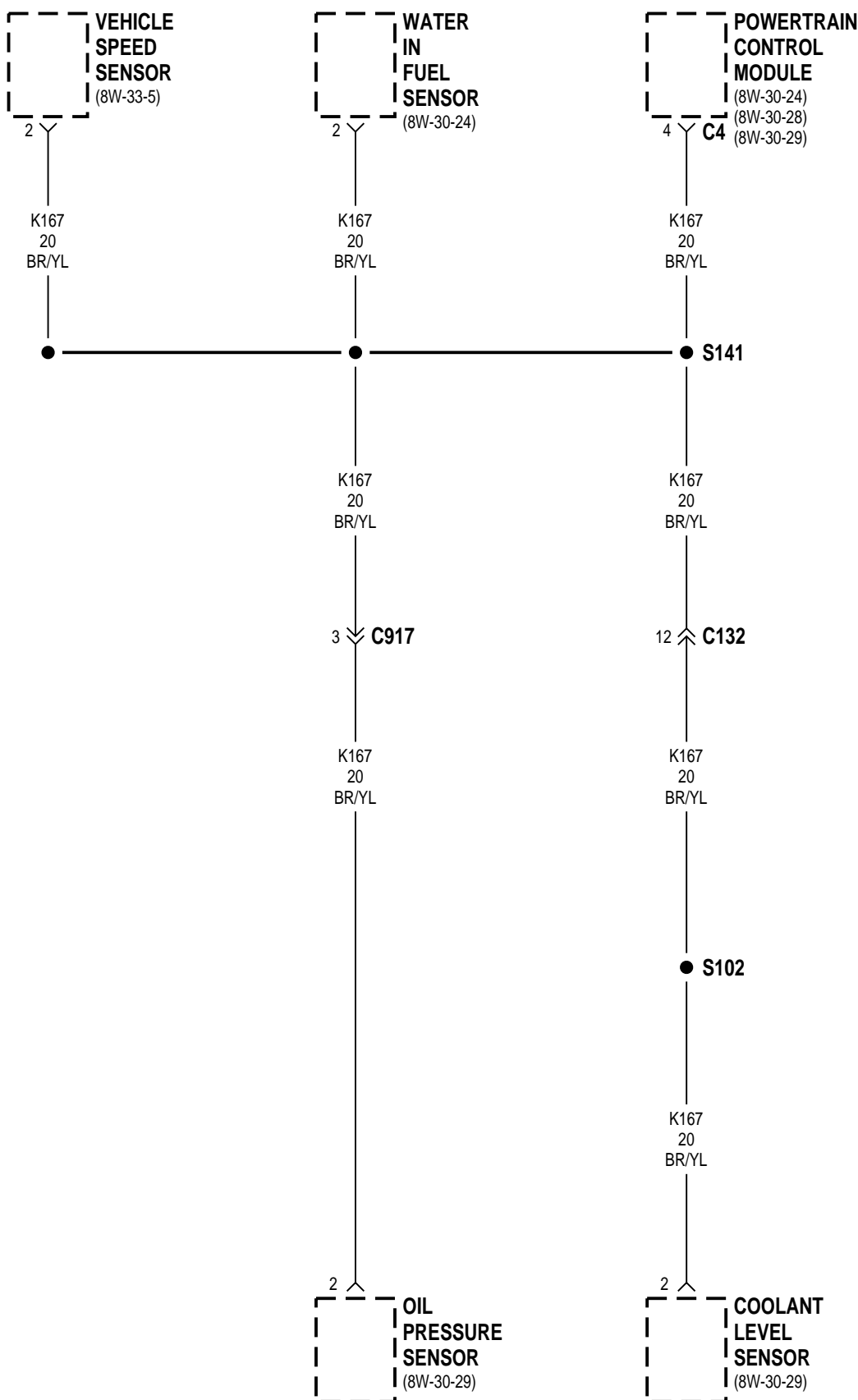












8W-80 CONNECTOR PIN-OUTS

INDEX

page

SCHEMATICS AND DIAGRAMS 1

Component	Page	Component	Page
A/C Heater Control - C1	8W-80-5	C235	8W-80-16
A/C Heater Control - C2	8W-80-5	C236	8W-80-17
A/C High Pressure Switch	8W-80-5	C300	8W-80-17
A/C Low Pressure Switch	8W-80-5	C301	8W-80-17
Aftermarket Trailer Tow Connector	8W-80-5	C302	8W-80-17
Airbag Control Module	8W-80-6	C304	8W-80-18
Ambient Temperature Sensor	8W-80-6	C305 (Gas)	8W-80-18
Ash Receiver Lamp	8W-80-6	C305 (Diesel)	8W 80-19
Auto Headlamp Light Sensor/VTSS LED ..	8W-80-6	C307	8W-80-19
Automatic Day/Night Rearview Mirror ...	8W-80-6	C316	8W-80-20
Automatic Temperature Control Module ...	8W-80-7	C320	8W-80-20
Back-Up Lamp Switch	8W-80-7	C321	8W-80-20
Battery Temperature Sensor	8W-80-7	C322	8W-80-21
Blend Actuator Door Motor (with Automatic Temperature Control)	8W-80-8	C323	8W-80-21
Blend Actuator Motor Actuator (with Manual A/C- heater)	8W-80-8	C324	8W-80-21
Blower Motor (with Manual A/C-heater) ...	8W-80-8	C325	8W-80-21
Blower Motor (with Automatic Temperature Control)	8W-80-8	C326	8W-80-21
Blower Motor Resistor Block (with Manual A/C- heater)	8W-80-8	C328	8W-80-22
Blower Power Module	8W-80-9	C329	8W-80-22
Body Control Module - C1	8W-80-9	C330	8W-80-22
Body Control Module - C2	8W-80-10	C331	8W-80-22
Body Control Module - C3	8W-80-11	C334	8W-80-23
Brake Warning Switch	8W-80-11	C335	8W-80-23
C102	8W-80-11	C343	8W-80-23
C131 (Gas)	8W-80-12	C345	8W-80-24
C131 (Diesel)	8W-80-12	C351	8W-80-24
C132 (Gas)	8W-80-12	C353	8W-80-24
C132 (Diesel)	8W-80-12	C359	8W-80-25
C141 (Diesel)	8W-80-13	C364	8W-80-25
C150	8W-80-13	C371	8W-80-25
C159	8W-80-13	C372 (with Factory Trailer Tow)	8W-80-25
C160	8W-80-13	C917 (Diesel)	8W-80-26
C182 (Diesel)	8W-80-13	Camshaft Position Sensor (Gas)	8W-80-26
C206 (with Manual A/C-heater)	8W-80-14	Cargo Lamp	8W-80-26
C206 (with Automatic Temperature Control)	8W-80-14	Center High Mounted Stop Lamp No. 1 ..	8W-80-26
C212	8W-80-15	Center High Mounted Stop Lamp No. 2 ..	8W-80-26
C229	8W-80-15	Center High Mounted Stop Lamp No. 3 ..	8W-80-27
C231	8W-80-15	Cigar Lighter	8W-80-27
C233	8W-80-15	Clutch Interlock Switch (Diesel)	8W-80-27
C234	8W-80-16	Controller Anti-Lock Brake	8W-80-27
		Coolant Level Sensor (Diesel)	8W-80-27
		Crankshaft Position Sensor (Diesel)	8W-80-28
		Crankshaft Position Sensor (Gas)	8W-80-28
		Data Link Connector	8W-80-28
		Daytime Running Lamp Module	8W-80-29

DESCRIPTION AND OPERATION (Continued)

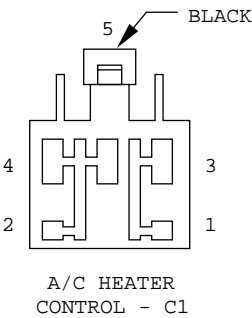
Component	Page	Component	Page
Dome/Reading Lamp	8W-80-29	Idle Air Control Motor (with 4.0L Engine) . .	8W-80-40
Downstream Heated Oxygen Sensor	8W-80-29	Idle Air Control Motor (with 5.2L Engine) . .	8W-80-40
Driver Door Module - C1	8W-80-29	Ignition Coil	8W-80-40
Driver Door Module - C2	8W-80-29	Ignition Switch	8W-80-40
Driver Door Module - C3	8W-80-30	In-Car Temperature Sensor	8W-80-40
Driver Heated Seat Back	8W-80-30	Injector No. 1	8W-80-41
Driver Heated Seat Cushion	8W-80-30	Injector No. 2	8W-80-41
Driver Lumbar Motor	8W-80-30	Injector No. 3	8W-80-41
Driver Power Seat Front Riser Motor	8W-80-31	Injector No. 4	8W-80-41
Driver Power Seat Front Riser Motor Sensor	8W-80-31	Injector No. 5	8W-80-41
Driver Power Seat Horizontal Motor	8W-80-31	Injector No. 6	8W-80-42
Driver Power Seat Horizontal Motor Sensor	8W-80-31	Injector No. 7 (with 5.2 L Engine)	8W-80-42
Driver Power Seat Lumbar Sensor/Motor . .	8W-80-31	Injector No. 8 (with 5.2 L Engine)	8W-80-42
Driver Power Seat Lumbar Switch	8W-80-32	Instrument Cluster	8W-80-42
Driver Power Seat Rear Riser Motor	8W-80-32	Intake Air Temperature Sensor	8W-80-42
Driver Power Seat Rear Riser Motor Sensor	8W-80-32	Junction Block - C1	8W-80-42
Driver Power Seat Recliner Motor	8W-80-32	Junction Block - C2	8W-80-43
Driver Power Seat Recliner Motor Sensor . .	8W-80-33	Junction Block - C3	8W-80-43
Driver Power Seat Switch	8W-80-33	Junction Block - C4	8W-80-43
Driver Seat Heater Control Module	8W-80-33	Junction Block - C5	8W-80-43
Driver Side Airbag	8W-80-34	Junction Block - C6	8W-80-44
Duty Cycle EVAP/Purge Solenoid	8W-80-34	Junction Block - C7	8W-80-44
EGR Solenoid (Diesel)	8W-80-34	Junction Block - C8	8W-80-44
Engine Coolant Temperature Sensor Signal (Diesel)	8W-80-34	Junction Block - C9	8W-80-45
Engine Coolant Temperature Sensor (with 4.0L Engine)	8W-80-34	Junction Block - C10	8W-80-45
Engine Coolant Temperature Sensor (with 5.2L Engine)	8W-80-34	Junction Block - C11	8W-80-45
Engine Starter Motor	8W-80-35	Junction Block Body Connector - C13	8W-80-45
Evaporative System Leak Detection Pump .	8W-80-35	Junction Block Body Connector - C14	8W-80-46
Factory Trailer Tow Connector	8W-80-35	Junction Block (Overhead Console) - C15 . .	8W-80-46
Floor Console Lamps	8W-80-35	Key-In Switch/ Halo Lamp	8W-80-46
Four Wheel Drive Switch	8W-80-36	Lamp Outage Module - C1	8W-80-47
Fuel Heater (Diesel)	8W-80-36	Lamp Outage Module - C2	8W-80-47
Fuel Pump Module (Diesel)	8W-80-36	Left Airbag Sensor	8W-80-47
Fuel Pump Module(Gas)	8W-80-36	Left Back-Up Lamp	8W-80-48
Fuel Sender Unit (Diesel)	8W-80-36	Left Courtesy Lamp	8W-80-48
Fuel Timing Solenoid (Diesel)	8W-80-36	Left Door Courtesy Lamp	8W-80-48
G-Switch	8W-80-37	Left Fog Lamp	8W-80-48
Generator (Gas)	8W-80-37	Left Front Cylinder Lock Switch	8W-80-48
Generator (Diesel)	8W-80-37	Left Front Door Lock Motor	8W-80-49
Glove Box Lamp	8W-80-37	Left Front Door Speaker	8W-80-49
Glow Plug Relay (Diesel)	8W-80-37	Left Front Park Lamp	8W-80-49
Graphic Display Module Or Vehicle Information Center	8W-80-38	Left Front Power Window Motor	8W-80-49
Headlamp Leveling Switch	8W-80-38	Left Front Side Marker Lamp	8W-80-49
Headlamp Switch	8W-80-39	Left Front Turn Signal Lamp	8W-80-50
High Speed Blower Motor Relay	8W-80-39	Left Front Wheel Speed Sensor	8W-80-50
Horn No. 1	8W-80-39	Left Headlamp	8W-80-50
Horn No. 2	8W-80-39	Left Headlamp Leveling Motor	8W-80-50
		Left Instrument Panel Speaker	8W-80-50
		Left License Lamp	8W-80-51
		Left Park Lamp	8W-80-51
		Left Park turn Signal Marker	8W-80-51
		Left Rear Door Lock Motor	8W-80-51
		Left Rear Door Speaker	8W-80-51

DESCRIPTION AND OPERATION (Continued)

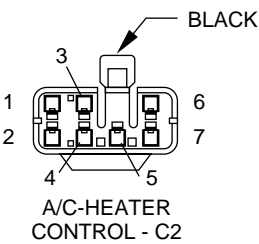
Component	Page	Component	Page
Left Rear Fog Lamp	8W-80-51	Radio - C2	8W-80-68
Left Rear Power Window Motor.	8W-80-52	Radio - C3	8W-80-68
Left Rear Power Window Switch.	8W-80-52	Rear Speaker.	8W-80-68
Left Rear Side Marker Lamp.	8W-80-52	Rear Washer Pump Motor	8W-80-69
Left Rear Turn Signal Lamp	8W-80-52	Rear Wiper Module	8W-80-69
Left Rear Wheel Speed Sensor	8W-80-52	Rear Wiper/Washer Switch	8W-80-69
Left Side Repeater.	8W-80-52	Recirculation Door Actuator (with ATC) . .	8W-80-69
Left Tail/Stop Lamp.	8W-80-53	Right Airbag Sensor	8W-80-70
Left Visor/Vanity Mirror	8W-80-53	Right Back-Up Lamp.	8W-80-70
Liftgate Ajar Switch	8W-80-53	Right Courtesy Lamp	8W-80-70
Liftgate Cylinder Lock Switch.	8W-80-53	Right Door Courtesy Lamp	8W-80-70
Liftgate Lock Motor.	8W-80-53	Right Fog Lamp.	8W-80-70
Liftglass Ajar Switch.	8W-80-54	Right Front Cylinder Lock Switch.	8W-80-71
Liftglass Limit Switch.	8W-80-54	Right Front Door Lock Motor	8W-80-71
Liftglass Push Button	8W-80-54	Right Front Door Speaker	8W-80-71
Liftglass Release Solenoid	8W-80-54	Right Front Park Lamp.	8W-80-71
Manifold Absolute Pressure Sensor	8W-80-54	Right Front Power Window Motor.	8W-80-71
Mass Air Flow Module.	8W-80-55	Right Front Side Marker Lamp.	8W-80-72
MSA Controller (Diesel)	8W-80-55	Right Front Turn Signal Lamp	8W-80-72
Memory Seat Module - C1.	8W-80-56	Right Front Wheel Speed Sensor.	8W-80-72
Memory Seat Module - C2.	8W-80-56	Right Headlamp	8W-80-72
Mini Overhead Console	8W-80-57	Right Headlamp Leveling Motor	8W-80-72
Mode Door Actuator.	8W-80-57	Right Instrument Panel Speaker.	8W-80-72
Multi-Function Switch.	8W-80-57	Right License Lamp.	8W-80-73
Needle Sensor (Diesel).	8W-80-58	Right Park Lamp.	8W-80-73
Oil Pressure Sensor.	8W-80-58	Right Park Turn Signal Marker	8W-80-73
Output Shaft Speed Sensor	8W-80-58	Right Rear Door Lock Motor	8W-80-73
Overhead Console	8W-80-58	Right Rear Door Speaker.	8W-80-73
Park/Neutral Position Switch	8W-80-59	Right Rear Fog Lamp	8W-80-73
Passenger Airbag.	8W-80-59	Right Rear Power Window Motor	8W-80-74
Passenger Door Module - C1	8W-80-59	Right Rear Power Window Switch.	8W-80-74
Passenger Door Module - C2	8W-80-59	Right Rear Side Marker Lamp	8W-80-74
Passenger Heated Seat Back.	8W-80-60	Right Rear Turn Signal Lamp.	8W-80-74
Passenger Heated Seat Cushion	8W-80-60	Right Rear Wheel Speed Sensor	8W-80-74
Passenger Lumbar Motor	8W-80-60	Right Side Repeater	8W-80-75
Passenger Lumbar Switch.	8W-80-60	Right Tail/Stop Lamp	8W-80-75
Passenger Power Seat Front Riser Motor .	8W-80-61	Right Visor/Vanity Mirror	8W-80-75
Passenger Power Seat Horizontal Motor .	8W-80-61	Seat Belt Switch	8W-80-75
Passenger Power Seat Rear Riser Motor .	8W-80-61	Shift Interlock.	8W-80-75
Passenger Power Seat Recliner Motor. . .	8W-80-61	Solar Sensor	8W-80-75
Passenger Power Seat Switch	8W-80-61	Speed Proportional Steering Module	8W-80-76
Passenger Seat Heater Control Module. . .	8W-80-62	Speed Proportional Steering Solenoid . . .	8W-80-76
Pedal Position sensor (Diesel)	8W-80-62	Steering Wheel Speed Sensor	8W-80-77
Power Amplifier - C1	8W-80-62	Steering Wheel Speed Sensor	8W-80-77
Power Amplifier - C2	8W-80-62	Stop Lamp Switch.	8W-80-77
Power Amplifier (LTD+) - C1.	8W-80-63	Switch Pod	8W-80-77
Power Amplifier (LTD+) - C2.	8W-80-63	Sunroof Control Module.	8W-80-77
Power Outlet	8W-80-64	Throttle Position Sensor	8W-80-78
Powertrain Control Module - C1	8W-80-64	Trailer Tow Circuit Breaker.	8W-80-78
Powertrain Control Module - C2	8W-80-65	Trailer Tow Left Turn Relay	8W-80-78
Powertrain Control Module - C3	8W-80-66	Trailer Tow Right Turn Relay	8W-80-78
Powertrain Control Module - C4 (Diesel). .	8W-80-67	Trailer Tow Stop Lamp Relay	8W-80-79
Radio - C1	8W-80-68	Transmission Solenoid Assembly.	8W-80-79

DESCRIPTION AND OPERATION (Continued)

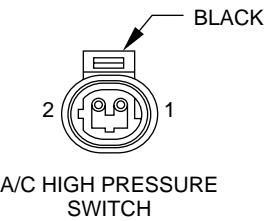
Component	Page	Component	Page
Underhood Lamp	8W-80-79	Water In-Fuel Sensor (Diesel)	8W-80-81
Upstream Heated Oxygen Sensor	8W-80-79	Windshield Washer Pump Motor	8W-80-81
Vehicle Information Center	8W-80-80	Windshield Wiper Motor	8W-80-81
Vehicle Speed Control Servo	8W-80-80	Wiper Fluid Level Sensor	8W-80-81
Vehicle Speed Control/Horn Switch	8W-80-80		
Vehicle Speed Sensor (Diesel)	8W-80-81		
Vehicle Speed Sensor (Gas)	8W-80-80		



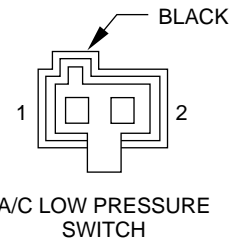
CAV	CIRCUIT	FUNCTION
1	C4 14TN	LOW BLOWER MOTOR DRIVER
2	C5 14LG	M1 BLOWER MOTOR DRIVER
3	C7 12BK/TN	HIGH BLOWER MOTOR DRIVER
4	C1 14DG	GROUND
5	C6 14LB	M2 BLOWER MOTOR DRIVER



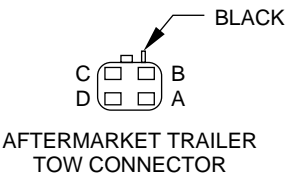
CAV	CIRCUIT	FUNCTION
1	-	-
2	C36 20DB/RD	BLEND AIR DOOR POSITION SWITCH SIGNAL
3	C34 20VT/WT	GROUND
4	E2 20OR	PANEL LAMP DRIVER
5	-	-
6	F71 20DG/PK	FUSED IGNITION SWITCH OUTPUT (RUN)
7	C90 20LG	A/C SELECT INPUT



CAV	CIRCUIT	FUNCTION
1	C21 18DB/OR	A/C PRESSURE SWITCH SENSE
2	C3 18DB/BK	A/C COMPRESSOR CLUTCH
2	Z1 18BK*	GROUND

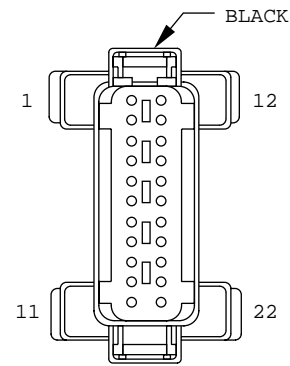


CAV	CIRCUIT	FUNCTION
1	C3 18DB/BK*	A/C PRESSURE SWITCH SENSE
1	C13 16DB**	A/C COMPRESSOR CLUTCH RELAY CONTROL
2	C21 18DB/OR	A/C PRESSURE SWITCH SENSE



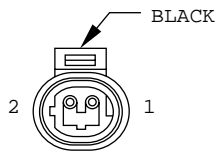
CAV	CIRCUIT	FUNCTION
A	L50 18WT/TN	STOP LAMP SWITCH OUTPUT
B	L90 18DB/RD	PARK LAMP RELAY OUTPUT
C	L60 18TN	RIGHT TURN SIGNAL
D	F70 18PK/BK	FUSED B(+)

* GAS
** DIESEL



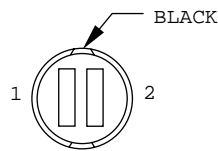
AIRBAG CONTROL MODULE

CAV	CIRCUIT	FUNCTION
1	R45 18DG/LB	DRIVER AIRBAG LINE 2
2	R43 18BK/LB	DRIVER AIRBAG LINE 1
3	-	-
4	-	-
5	R42 18BK/YL	PASSENGER AIRBAG LINE 1
6	R44 18DG/YL	PASSENGER AIRBAG LINE 2
7	-	-
8	-	-
9	-	-
10	Z6 16BK/PK	GROUND
11	-	-
12	-	-
13	-	-
14	-	-
15	-	-
16	-	-
17	G5 18DB/WT	FUSED IGNITION SWITCH OUTPUT (RUN/START)
18	D2 18WT/BK	CCD BUS (-)
19	D1 18VT/BR	CCD BUS (+)
20	F20 18WT	FUSED IGNITION SWITCH OUTPUT (RUN)
21	-	-
22	-	-



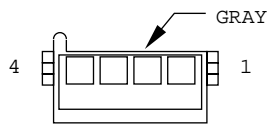
AMBIENT
TEMPERATURE SENSOR

CAV	CIRCUIT	FUNCTION
1	D41 20LG/WT	SENSOR RETURN
2	C8 20DG/RD	AMBIENT TEMPERATURE SENSOR SIGNAL



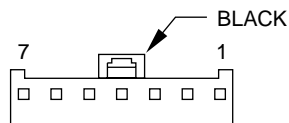
ASH RECIEVER LAMP

CAV	CIRCUIT	FUNCTION
1	E2 20OR	PANEL LAMP DRIVER
2	Z1 20BK	GROUND



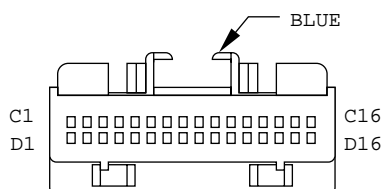
AUTO HEADLAMP
LIGHT SENSOR/VTSS LED

CAV	CIRCUIT	FUNCTION
1	F75 18VT	FUSED B(+)
2	G69 20BK/LG	VTSS INDICATOR LAMP DRIVER
3	L109 20WT	ULTRALIGHT LIGHT SENSOR DRIVER
4	L110 20OR/BK	ULTRALIGHT LIGHT SENSOR SIGNAL



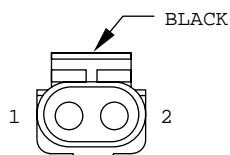
AUTOMATIC DAY/
NIGHT MIRROR

CAV	CIRCUIT	FUNCTION
1	F83 20BK/VT	FUSED IGNITION FUSED OUTPUT (RUN)
2	Z1 20BK	GROUND
3	L10 20BK/RD	BACK-UP LAMP SWITCH OUTPUT
4	P112 20BK/WT	ELECTRIC CHROMATIC MIRROR (+)
5	P114 20BK/YL	ELECTRIC CHROMATIC MIRROR (-)
6	-	-
7	-	-



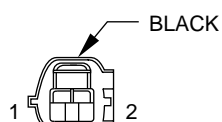
AUTOMATIC TEMPERATURE
CONTROL MODULE

CAV	CIRCUIT	FUNCTION
C1	C37 20YL	MODE DOOR MOTOR DRIVER
C2	C35 20DG/YL	BLEND AIR DOOR MOTOR DRIVER
C3	C39 20WT	MODE DOOR MOTOR POSITION SENSE
C4	-	-
C5	-	-
C6	C90 20LG	A/C SELECT INPUT
C7	-	-
C8	C40 20BR/WT	5 VOLT SUPPLY
C9	C43 18YL/BR	BLOWER POWER MODULE OUTPUT
C10	D1 18VT/BR	CCD BUS(+)
C11	D2 18WT/BK	CCD BUS(-)
C12	F71 20DG/PK	FUSED IGNITION SWITCH OUTPUT (RUN)
C13	F60 20WT/RD	FUSED B(+)
C14	C36 20RD/WT	BLEND AIR DOOR FEEDBACK SIGNAL
C15	-	-
C16	-	-
D1	C38 20DB	MODE DOOR MOTOR DRIVER
D2	C42 18PK/DB	HIGH SPEED BLOWER MOTOR RELAY SIGNAL
D3	C32 20DB/GY	RECIRCULATION DOOR MOTOR DRIVER
D4	C33 20DB/RD	RECIRCULATION DOOR MOTOR DRIVER
D5	C41 20GY/DB	HIGH SPEED BLOWER MOTOR RELAY CONTROL
D6	C34 20DB/WT	BLEND AIR DOOR MOTOR DRIVER
D7	Z4 20PK	GROUND
D8	-	-
D9	D41 20LG/WT	SENSOR RETURN
D10	-	-
D11	-	-
D12	C10 20RD/TN	IN-CAR TEMPERATURE SENSOR SIGNAL
D13	E2 20OR	PANEL LAMP DRIVER
D14	-	-
D15	C47 20BK/WT	SOLAR SENSOR SIGNAL
D16	-	-



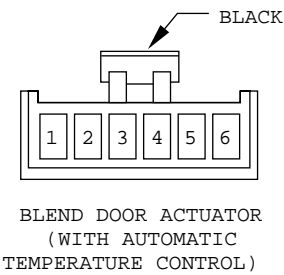
BACK-UP LAMP SWITCH
(DIESEL)

CAV	CIRCUIT	FUNCTION
1	F83 18YL/DG	FUSED IGNITION SWITCH OUTPUT
2	L10 18BR/LG	BACK-UP SWITCH OUTPUT

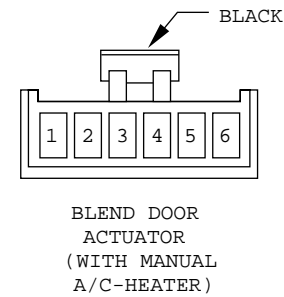


BATTERY
TEMPERATURE SENSOR

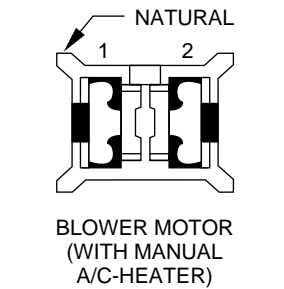
CAV	CIRCUIT	FUNCTION
1	T222 18RD/YL	BATTERY TEMPERATURE SENSE SIGNAL
2	K4 18BK/LB	SENSOR GROUND



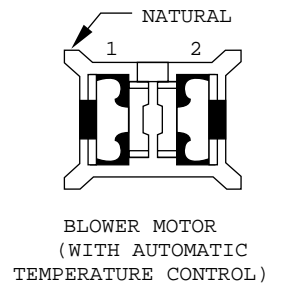
CAV	CIRCUIT	FUNCTION
1	C40 20DG/YL	5 VOLT SUPPLY
2	C36 20DB/RD	BLEND AIR DOOR FEEDBACK SIGNAL
3	D41 20LG/WT	SENSOR RETURN
4	-	-
5	C35 20DB/WT	BLEND AIR DOOR MOTOR DRIVER
6	C34 20VT/WT	BLEND AIR DOOR MOTOR DRIVER



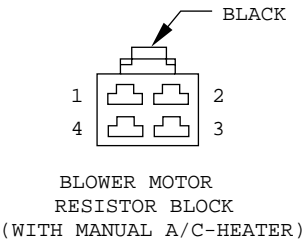
CAV	CIRCUIT	FUNCTION
1	C40 20WT/YL	5 VOLT SUPPLY
2	F71 20PK/DG	FUSED IGNITION SWITCH OUTPUT (RUN)
3	C36 20DB/RD	BLEND AIR DOOR POSITION SWITCH SIGNAL
4	C34 20VT/WT	COMMON DOOR DRIVER
5	-	-
6	-	-



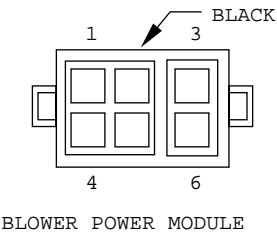
CAV	CIRCUIT	FUNCTION
1	A19 12RD	BLOWER MOTOR DRIVER
2	C7 12BK	GROUND



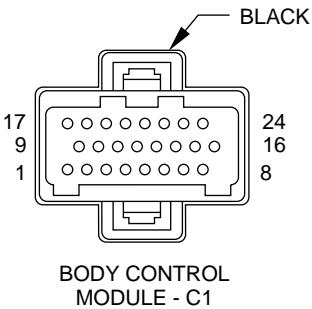
CAV	CIRCUIT	FUNCTION
1	C42 12RD	HIGH SPEED BLOWER MOTOR RELAY SIGNAL
2	Z4 12BK	GROUND



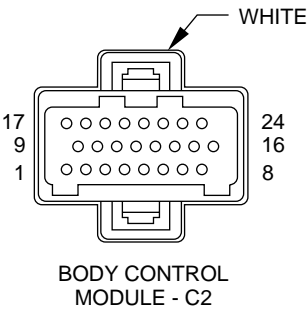
CAV	CIRCUIT	FUNCTION
1	C4 14TN	LOW BLOWER MOTOR DRIVER
2	C6 14LB	M2 BLOWER MOTOR DRIVER
3	C7 12BK	HIGH BLOWER MOTOR DRIVER
4	C5 14LG	M1 BLOWER MOTOR DRIVER



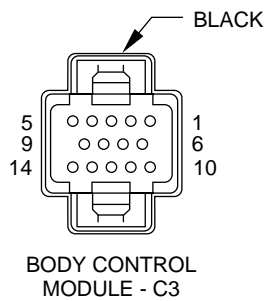
CAV	CIRCUIT	FUNCTION
1	C42 12BR/RD	BLOWER MOTOR DRIVER
2	-	-
3	A19 10RD	FUSED B(+)
4	C43 18BR/YL	BLOWER POWER MODULE OUTPUT
5	Z4 18BK	GROUND
6	-	-



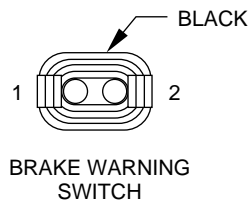
CAV	CIRCUIT	FUNCTION
1	V51 18WT	WINDSHIELD WIPER SWITCH SIGNAL
2	D41 20LG/WT	SENSOR RETURN
3	-	-
4	-	-
5	C8 20DG/RD	AMBIENT TEMPERATURE SENSOR SIGNAL
6	M11 20PK/LB	SWITCHED COURTESY LAMP FEED
7	L24 20LB/RD	AUTO HEADLAMP SWITCH SENSE
8	C80 20DB/YL	REAR WINDOW DEFOGGER SWITCH SENSE
9	L4 16VT/OR	DIMMER SWITCH LOW BEAM OUTPUT
10	-	-
11	-	-
12	G70 20BR/TN	HOOD AJAR SWITCH SENSE
13	-	-
14	G26 20LB	KEY-IN IGNITION SWITCH SENSE
15	L35 20BR/WT	FOG LAMP SWITCH OUTPUT
16	Z2 20BK/OR	GROUND
17	L90 20DB/RD	PARK LAMP RELAY OUTPUT
18	F99 20OR	FUSED IGNITION SWITCH OUTPUT (START/RUN)
19	D1 18VT/BR	CCD BUS (+)
20	D2 18WT/BK	CCD BUS (-)
21	-	-
22	-	-
23	G69 20BK/LG	VTSS INDICATOR LAMP DRIVER
24	L3 16RD/OR	DIMMER SWITCH HIGH BEAM OUTPUT



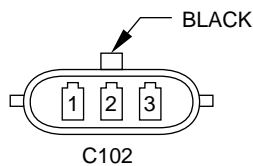
CAV	CIRCUIT	FUNCTION
1	-	-
2	L109 20WT	ULTRALIGHT SENSOR DRIVER
3	709 20RD/BK	RADIO CONTROL MUX
4	V66 16VT/WT	WIPER PARK SWITCH SENSE
5	-	-
6	M112 20BR/LG	COURTESY LAMP RELAY CONTROL
7	C90 20LG	A/C SELECT INPUT
8	F75 18VT	FUSED B(+)
9	L110 20OR/BK	ULTRALIGHT SENSOR SIGNAL
10	-	-
11	-	-
12	714 20BK/OR	AUTO HEADLAMP RELAY CONTROL
13	X4 20GY/OR	HORN RELAY CONTROL
14	C14 20WT/RD	REAR WINDOW DEFOGGER RELAY CONTROL
15	V23 20BR/PK	FUSED IGNITION SWITCH OUTPUT (ACC/RUN)
16	E2 20OR	PANEL LAMP DRIVER
17	V11 18TN/BK	WASHER SWITCH OUTPUT
18	V50 18LG/WT	WIPER SWITCH MODE SENSE
19	-	-
20	707 20BK/WT	PANEL LAMP DIMMER SWITCH SIGNAL
21	L79 20TN	PARK LAMP RELAY CONTROL
22	L95 20DG/YL	FOG LAMP RELAY CONTROL
23	V18 20YL/LG	INTERMITTENT WIPER RELAY CONTROL
24	Z1 16BK	GROUND



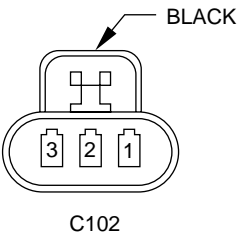
CAV	CIRCUIT	FUNCTION
1	G78 20TN/BK	LEFTGATE AJAR SWITCH SENSE
2	G9 20GY/BK	PARK BRAKE SENSE
3	G76 18TN/YL	RIGHT REAR DOOR AJAR SWITCH SENSE
4	G75 18TN	LEFT FRONT DOOR AJAR SWITCH SENSE
5	-	-
6	M4 20WT/LG	LIFTGATE COURTESY LAMP DISABLE
7	-	-
8	Z2 18BK/OR	GROUND
9	G74 18TN/RD	RIGHT FRONT DOOR AJAR SWITCH SENSE
10	G71 20VT/YL	VTSS DISARM SENSE
11	-	-
12	-	-
13	G77 18TN/OR	LEFT REAR DOOR AJAR SWITCH SENSE
14	G10 20LG/RD	SEAT BELT SWITCH SENSE



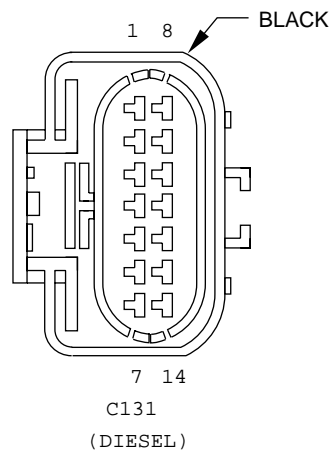
CAV	CIRCUIT	FUNCTION
1	G9 16GY/BK	RED BRAKE WARNING LAMP DRIVER
2	G9 16GY/BK	RED BRAKE WARNING LAMP DRIVER



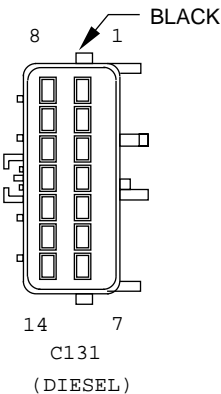
CAV	CIRCUIT
1	L65 18LG/DB
2	L90 18DB/RD
3	Z1 18BK



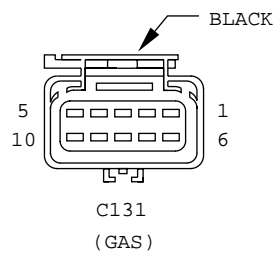
CAV	CIRCUIT
1	L65 18LG/DB
2	L90 18DB/RD
3	Z1 18BK



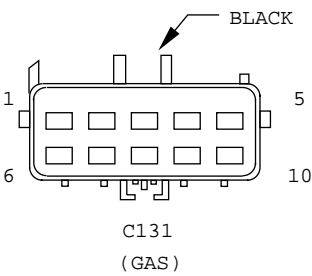
CAV	CIRCUIT
1	-
2	-
3	G40 18LB/BK
4	F99 20OR
5	G18 20PK/BK
6	K4 18BK/LB
7	L10 18BR/LG
8	G118 20PK/DB
9	A64 14OR/DB
10	Z1 12BK
11	F6 18WT/RD
12	A142 16DG/OR
13	F83 18YL/DG
14	C3 18DB/BK



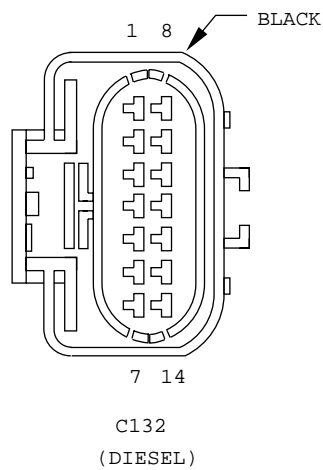
CAV	CIRCUIT
1	-
2	-
3	G40 18LB/BK
4	F99 20OR
5	G18 20PK/BK
6	K4 20BK/LB
7	L10 18BR/LG
8	G118 20PK/DB
9	A64 14DG/WT
10	Z1 12BK
11	F6 18WT/RD
12	A142 16DG/OR
13	F83 18YL/DG
14	C3 18DB/BK



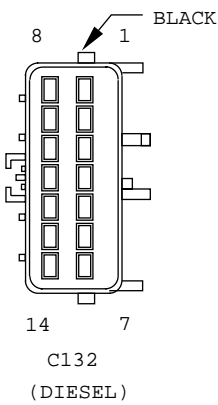
CAV	CIRCUIT
1	T20 18LB
2	F99 20OR
3	-
4	A142 18DG/OR
5	F5 14RD/YL
6	L10 18BR/LG
7	C2 18DB/YL
8	G28 20LG/OR
9	-
10	K4 20BK/LB
10	-



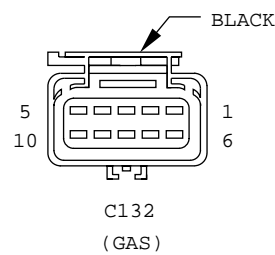
CAV	CIRCUIT
1	T20 18LB
2	F99 18OR
3	-
4	A142 18DG/OR
5	F5 14RD/YL
6	L10 18BR/LG
7	C2 18DB/YL
8	G28 20LG/OR●
9	-
10	K4 18BK/LB*
10	K4 20BK/LB**



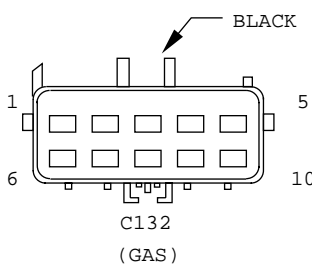
CAV	CIRCUIT
1	L53 20BR
2	Z1 18BK
3	Z2 18BK/OR
4	D2 18WT/BK
5	D1 18VT/BR
6	T106 20GY/OR
7	T107 20BK/RD
8	V32 20YL/RD
9	L50 18WT/TN
10	C13 16DB/RD
11	G28 20LG/OR
12	K167 20BR/YL
13	-
14	K900 20PK/BK



CAV	CIRCUIT
1	L53 20BR
2	Z1 18BK
3	Z2 18BK/OR
4	D2 18WT/BK
5	D1 18BT/BR
6	T106 20GY/OR
7	T107 20BK/RD
8	V32 20YL/RD
9	L50 18WT/TN
10	C13 16DB/RD
11	G28 20LG/OR
12	K167 20BR/YL
13	-
14	K900 20PK/BK

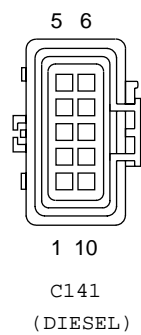


CAV	CIRCUIT
1	Z1 18BK
2	Z2 18BK/OR
3	-
4	T41 20BK/WT
5	G7 18WT/OR
6	K20 18DG
7	T66 20BR/OR
8	F83 18YL/DG
9	T106 20GY/OR
10	T107 20BK/RD

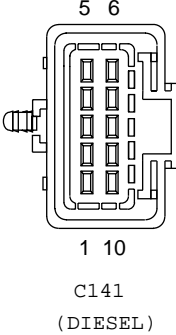


CAV	CIRCUIT
1	Z1 18BK
2	Z2 18BK/OR
3	-
4	T41 20BK/WT
5	G7 18WT/OR
6	K20 18DG
7	T66 20BR/OR
8	F83 18YL/DG
9	T106 20GY/OR●
10	T107 20BK/RD●

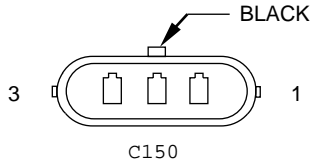
● 4WD
* 5.2L
** 4.0L



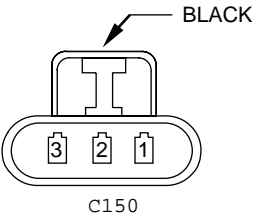
CAV	CIRCUIT
1	C2 18DB/YL
2	-
3	D83 20BK/PK
4	K95 20PK
5	C21 18DB/OR
6	T40 12LB/BK
7	K95 20PK
8	V32 20YL/RD
9	C21 18DB/OR
10	T40 12LG/BK



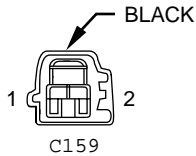
CAV	CIRCUIT
1	C2 18DB/YL
2	D83 20BK/WT
3	D84 20BK/WT
4	K95 20PK
5	C21 18DB/OR
6	T40 12LB/BK
7	-
8	-
9	-
10	-



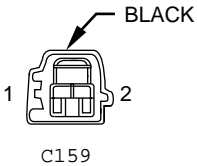
CAV	CIRCUIT
1	L64 18LG/DB
2	L90 18DB/RD
3	Z1 18BK



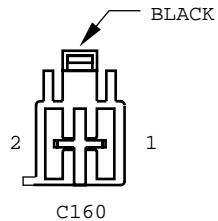
CAV	CIRCUIT
1	L64 18LG/DB
2	L90 18DB/RD
3	Z1 18BK



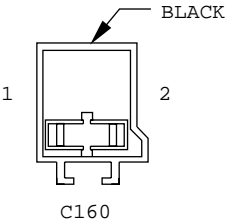
CAV	CIRCUIT
1	M1 18PK
2	Z1 18BK
2	-



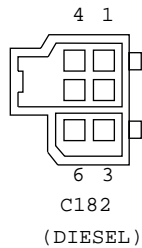
CAV	CIRCUIT
1	M1 18PK
2	Z1 18PK
2	Z4 18BK**



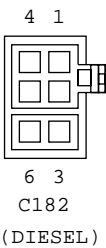
CAV	CIRCUIT
1	A19 12RD/VT
2	Z4 12BK



CAV	CIRCUIT
1	A1910RD*
1	A19 12RD**
2	Z4 12BK

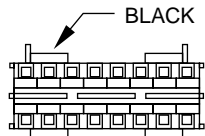


CAV	CIRCUIT
1	K255 20WT/DG
2	K151 20WT
3	K6 20VT/WT
4	K22 20OR/DB



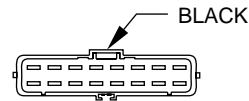
CAV	CIRCUIT
1	K255 20WT/DG
2	K151 20WT
3	K6 20VT/WT
4	K22 20OR/DB

* GAS
** DIESEL



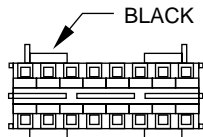
C206
(WITH MANUAL
A/C HEATER)

CAV	CIRCUIT
A	-
B	C7 12BK/TN
C	C6 14LB
D	C5 14LG
E	C4 14TN
F	C36 20DB/RD
G	F71 20PK/DG
H	C34 20VT/WT
J	C1 14DG
K	-
L	-
M	-
N	-
P	-
R	-
S	-



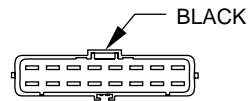
C206
(WITH MANUAL
A/C HEATER)

CAV	CIRCUIT
A	-
B	C7 12BK/TN
C	C6 14LB
D	C5 14LG
E	C4 14TN
F	C36 20DB/RD
G	F71 20PK/DG
H	C34 20VT/WT
J	Z4 12BK
K	-
L	-
M	-
N	-
P	-
R	-
S	-



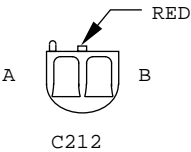
C206
(WITH AUTOMATIC
TEMPERATURE CONTROL)

CAV	CIRCUIT
A	C39 20WT
B	C37 20YL
C	C35 20DG/YL
D	C36 20RD/WT
E	C34 20DB/WT
F	F71 20PK/DG
G	C33 20DB/RD
H	C32 20DB/GY
J	C38 20DB
K	C40 20BR/WT
L	C41 20GY/DB
M	C42 18PK/DB
N	C43 18YL/BR
P	Z4 20PK
R	-
S	D41 20LG/WT

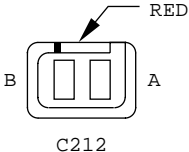


C206
(WITH AUTOMATIC
TEMPERATURE CONTROL)

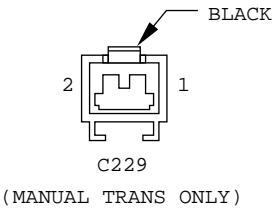
CAV	CIRCUIT
A	C39 20YL
B	C37 20TN/BK
C	C35 20DB/WT
D	C36 20DB/RD
E	C34 20VT/WT
F	F71 20PK/DG
G	C33 20VT/OR
H	C32 20LB/DG
J	C38 20DG
K	C40 20DG/YL
L	C41 20BR
M	C42 12BR/RD
N	C43 18BR/YL
P	Z4 20BK
R	-
S	D41 20LG/WT



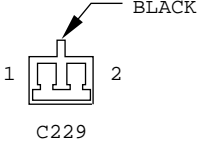
CAV	CIRCUIT
A	G28 20LG/OR
B	107 20BK/RD



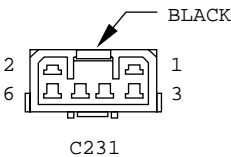
CAV	CIRCUIT
A	G42 20LG/RD
B	T10 20YL/BK



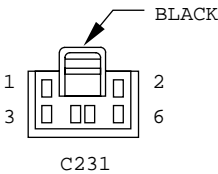
CAV	CIRCUIT
1	A41 14YL
2	T141 14YL/RD



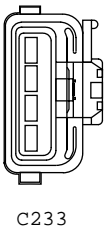
CAV	CIRCUIT
1	T141 14YL/RD
2	T141 14YL/RD



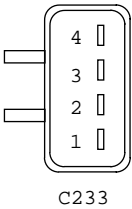
CAV	CIRCUIT
1	D1 18VT/BR
2	D2 18WT/BK
3	P112 20YL/WT
4	P114 20YL/BK
5	F86 16LG/BK
6	-



CAV	CIRCUIT
1	D1 18VT/BR
2	D2 18WT/BK
3	P112 20YL/WT
4	P114 20YL/BK
5	F86 16LG/BK
6	-

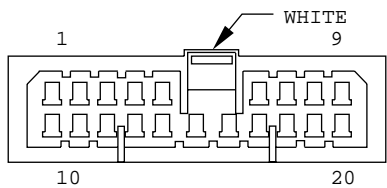


CAV	CIRCUIT
E1	A1 12RD/WT
E2	F61 16WT/OR
E4	T141 14YL/RD
E4	-



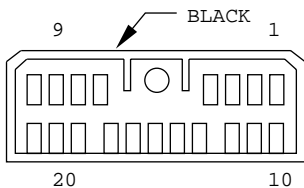
CAV	CIRCUIT
E1	A1 12RD/WT
E2	F61 16WT/OR
E4	A41 14YL*
E4	T141 14YL/RD**

* GAS
** DIESEL



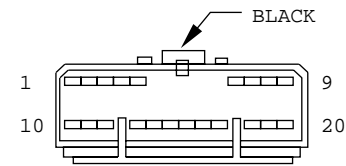
C234

CAV	CIRCUIT
F1	V11 18TN/BK
F2	L3 16RD/OR
F3	L4 16VT/OR
F4	V4 18RD/YL
F5	G9 16GY/BK*
F5	G9 18GY/BK**
F6	G18 16PK/BK*
F6	G118 16PK/DB**
F7	G29 16BK/TN
F8	K4 20BK/LB*
F8	K4 18BK/LB**
F9	V32 18YL/RD*
F9	V32 20YL/RD**
F10	L65 18LG/DB
F11	C8 20DG/RD
F12	G34 20RD/GY ●●
F12	L3 16RD/OR ●
F12	L3 16RD/OR**
F13	L53 18BR*
F13	L53 20BR**
F14	D83 20BK/PK
F15	D84 18BK/WT*
F15	D84 20BK/WT**
F17	V20 18WT/BK
F18	V6 16DB
F19	K95 18PK*
F19	K95 20PK**
F20	T9 20OR*



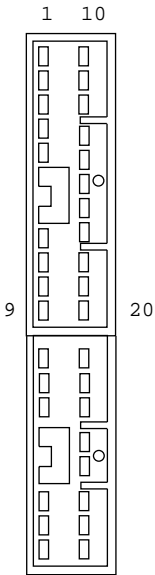
C234

CAV	CIRCUIT
F1	V11 18TN/BK
F2	L3 16RD/OR
F3	L4 16VT/OR
F4	V4 18RD/YL
F5	G9 16GY/BK
F6	G18 16PK/BK*
F7	G29 20BK/TN
F8	K4 18BK/LB
F9	V32 20YL/RD
F10	L65 18LG/DB
F11	C8 20DG/RD
F12	L3 16RD/OR
F13	L53 20BR
F14	D83 20BK/PK
F15	D84 20BK/WT
F16	-
F17	V20 18WT/BK
F18	V6 16DB
F19	K95 20PK
F20	T9 20OR



C235

CAV	CIRCUIT
G1	G68 18BR/YL*
G2	V30 20DB/LG
G3	T106 20GY/OR
G4	-
G5	205 20WT/VT
G6	D98 20WT*
G7	-
G8	-
G9	G68 18BR/YL
G10	V18 20YL/LG
G11	D41 20LG/WT
G12	S1 20BK/YL*
G13	S2 20BK/LG*
G14	S3 20PK/WT*
G15	S4 20VT*
G16	V3 18BR/WT
G17	V66 18VT/WT
G18	F83 18YL/DG
G19	D1 18VT/BR
G20	D2 18WT/BK



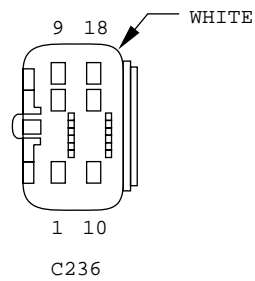
C235

CAV	CIRCUIT
G1	-
G2	-
G3	-
G4	D98 20WT
G5	205 20WT/VT
G6	G70 20BR/TN
G7	T106 20GY/OR
G8	V30 20DB/LG
G9	G68 20BR/YL
G10	D2 18WT/BK
G11	D1 18VT/BR
G12	F83 18YL/DG
G13	V66 16VT/WT
G14	V3 18BR/WT
G15	S4 20VT*
G16	S3 20PK/WT*
G17	S2 20BK/LG*
G18	S1 20BK/YL*
G19	D41 20LG/WT***
G20	V18 20YL/LG

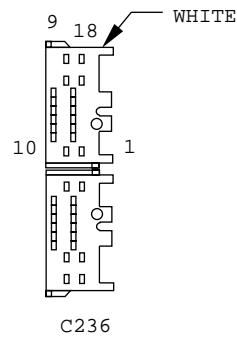
* GAS
** DIESEL

● = UNITED STATES
●● = DAYTIME RUNNING LAMPS

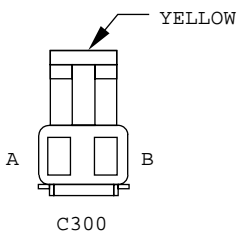
J978W-3



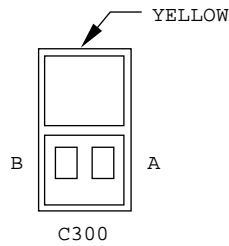
CAV	CIRCUIT
H1	-
H2	L101 20RD
H3	L102 20WT
H4	L103 20LB
H5	L104 20LG
H6	L105 20PK
H7	L106 20YL
H8	F99 20OR**
H9	-
H10	-
H11	Z1 18BK
H12	Z2 18BK/OR
H13	K4 20BK/LB**
H14	-
H15	-
H16	-
H17	-
H18	-



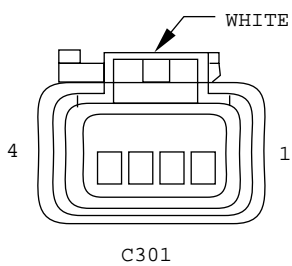
CAV	CIRCUIT
H1	-
H2	L101 20RD
H3	L102 20WT
H4	L103 20LB
H5	L104 20LG
H6	L105 20PK
H7	L106 20YL
H8	F99 20OR
H9	-
H10	-
H11	Z1 18BK
H12	Z2 18BK/OR
H13	-
H14	-
H15	-
H16	-
H17	-
H18	-



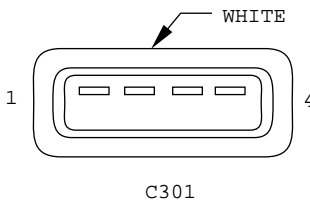
CAV	CIRCUIT
A	R44 18DG/YL
B	R42 18BK/YL



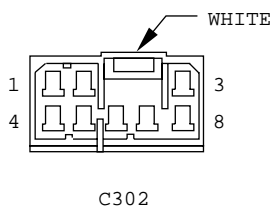
CAV	CIRCUIT
A	R44 18DB
B	R42 18VT



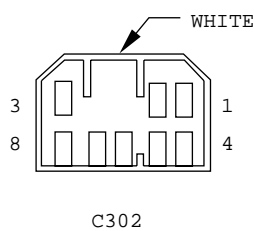
CAV	CIRCUIT
1	C15 12BK/WT
2	Z1 14BK
3	P7 18LB/BK
4	P8 18LB/WT



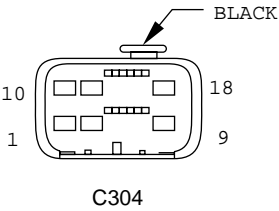
CAV	CIRCUIT
1	C15 12BK/WT
2	Z1 14BK
3	P7 20LB
4	P8 20LB/WT



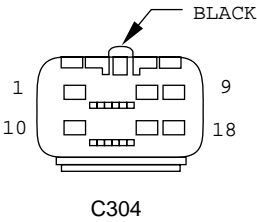
CAV	CIRCUIT
1	D1 18VT/BR
2	D2 18WT/BK
3	-
4	F71 18PK/DG
5	-
6	E2 18OR
7	P112 18YL/WT
8	P114 18YL/BK



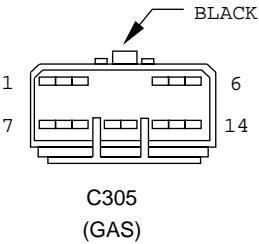
CAV	CIRCUIT
1	D1 18VT/BR
2	D2 18WT/BK
3	-
4	F71 20PK/DG
5	-
6	E2 20OR
7	P112 20YL/WT
8	P114 20YL/BK



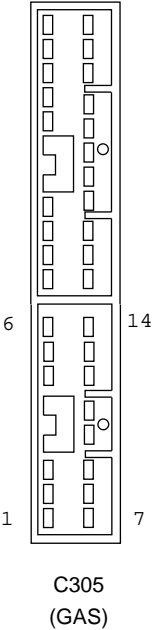
CAV	CIRCUIT
1	-
2	G9 20GY/BK
3	B1 20YL/DB
4	B2 20YL
5	-
6	B41 20YL/VT
7	B42 20TN/WT
8	B43 20PK/OR
9	-
10	G40 18LB/BK
11	-
12	B3 20LG/DB
13	B4 20LG
14	-
15	K167 20BR/YL
16	L50 18WT/TN
17	-
18	A64 16DG/WT



CAV	CIRCUIT
2	G9 20GY/BK*
2	G9 20GY/BK*
2	G9 18GY/BK**
3	B1 20YL/DB
4	B2 20YL
5	-
6	B41 20YL/VT
7	B42 20TN/WT
8	B43 20PK/OR
9	-
10	G40 18LB/BK
11	-
12	B3 20LG/DB
13	B4 20LG
15	K4 20BK/LB*
15	K167 20BR/YL**
16	L50 18WT/TN
17	-
18	A64 14DG/WT**
18	A64 16DG/WT*

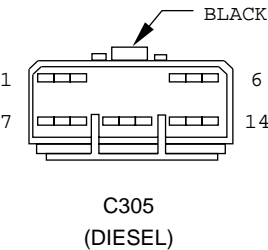


CAV	CIRCUIT
1	-
2	-
3	V24 18BR/OR
4	V20 18BK/WT
5	X55 16BR/RD
5	X55 16BR/RD
6	X53 16DG
6	X53 16DG
7	X54 16VT
7	X54 16VT
8	X56 16DB
8	X56 16DB
9	Z5 14BK/LB
9	Z5 14BK/LB
10	X51 16BR/YL
10	X51 16BR/YL
11	X57 16BR/LB
11	X57 16BR/LB
12	L50 18WT/TN
13	X52 16DB/WT
13	X52 16DB/WT
14	X58 16DB/OR
14	X58 16DB/OR

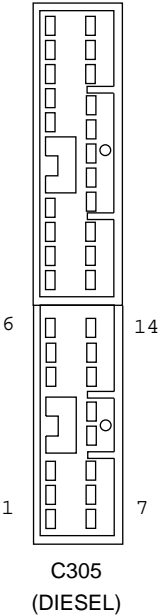


CAV	CIRCUIT
1	X53 20DG
2	X55 20BR/RD
3	V20 18WT/BK
4	V24 18BR/OR
5	-
6	-
7	X58 20DB/OR
8	X52 20DB/WT
9	L50 18WT/TN
10	X57 20BR/LB
11	X51 20BR/YL
12	Z5 16BK
13	X56 20DB
14	X54 20VT/YL

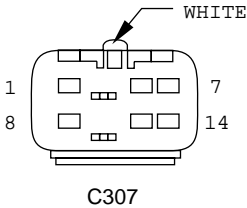
* GAS
** DIESEL



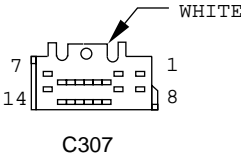
CAV	CIRCUIT
1	-
2	-
3	V24 18BR/OR
4	V20 18BK/WT
5	X55 16BR/RD
	X55 16BR/RD
6	X53 16DG
	X53 16DG
7	X54 16VT
	X54 16VT
8	X56 16DB
	X56 16DB
9	Z5 14BK/LB
	Z5 14BK/LB
10	X51 16BR/YL
	X51 16BR/YL
11	X57 16BR/LB
	X57 16BR/LB
12	L50 18WT/TN
13	X52 16DB/WT
	X52 16DB/WT
14	X58 16DB/OR
	X58 16DB/OR



CAV	CIRCUIT
1	-
2	-
3	V24 18BR/OR
4	V20 18WT/BK
5	X55 20BR/RD
6	X53 20DG
7	X54 20VT/YL
8	X56 20DB
9	Z5 16BK
10	X51 20BR/YL
11	X57 20BR/LB
12	L50 18WT/TN
13	X52 20DB/WT
14	X58 20DB/OR

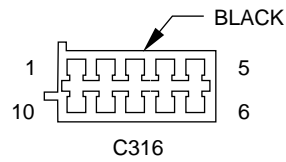


CAV	CIRCUIT
1	X82 16LB/RD
2	X80 16LB/DG
3	A 61 18LG
3	L61 18LG
4	L60 18TN
4	L60 18TN
4	L60 18TN
5	G46 20LB/BK
6	V13 18BR/LG
7	L36 18LG/OR
8	Z2 18BK/OR
9	K255 20WT/DG**
10	K151 20WT**
11	K6 20VT/WT**
12	K22 20OR/DB**
13	X85 16LG/BK
14	X87 16LG/RD

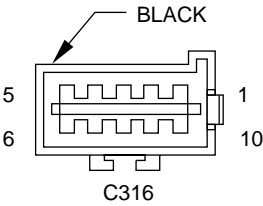


CAV	CIRCUIT
1	X82 20LB/BK
2	X80 20LB/RD
3	L61 18DG
4	L60 18TN
5	G46 20BK/LB
6	V13 18BR/LG
7	L36 18LG
8	Z2 18BK/OR
9	K255 20WT/DG**
10	K151 20WT**
11	K6 20VT/WT**
12	K22 20OR/DB**
13	X85 20LG/BK
14	X87 20LG/RD

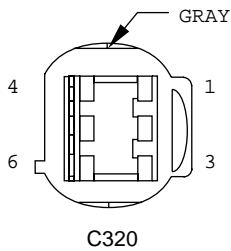
** DIESEL



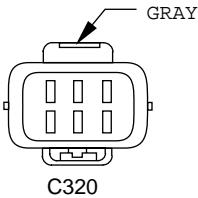
CAV	CIRCUIT
1	L36 18LG/OR
2	L50 18WT/TN
3	L90 18DB/RD
4	L90 18DB/RD
5	L90 18DB/RD
6	L50 18WT/TN
7	L50 18WT/TN
8	L50 18WT/TN
9	G46 20LB/BK
10	F87 18WT/PK



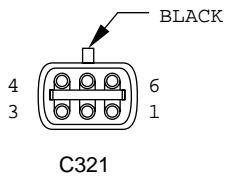
CAV	CIRCUIT
1	L36 18LG/OR
2	L50 18WT/TN
3	L90 18DB/RD*
4	L22 18LB
5	L21 18LB/WT
6	L74 18PK/BK
7	L73 18PK/WT
8	L87 18DG/WT
9	Z1 18BK
10	-



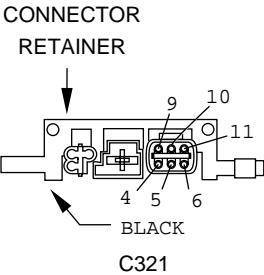
CAV	CIRCUIT
1	L74 18PK/BK
2	L22 18LB
3	L10 18BR/LG
4	Z1 18BK
5	L60 18TN
6	L36 18LG/OR



CAV	CIRCUIT
1	L74 18PK/BK
2	L21 18LB/WT
3	L10 18BR/LG
4	Z1 18BK
5	L61 18LG
6	L36 18LG/BK

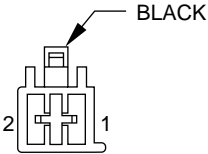


CAV	CIRCUIT
1	-
2	-
3	G71 20VT/YL
4	L90 18DB/RD
5	-
6	G78 20TN/BK



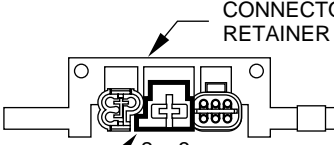
CAV	CIRCUIT
4	-
5	-
6	G71 20VT/YL
9	L78 20DB/RD
10	-
11	G90 20DB/RD

* OPTIONAL
** DIESEL



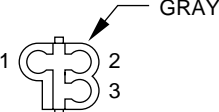
C322

CAV	CIRCUIT
1	-
2	C15 12BK/WT



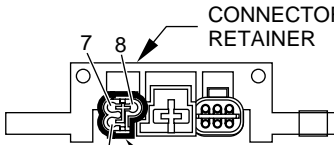
C322

CAV	CIRCUIT
2	-
3	C15 12BK/LB



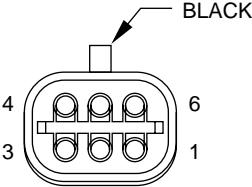
C323

CAV	CIRCUIT
1	-
2	F70 14PK/BK
3	P2 14BKWT



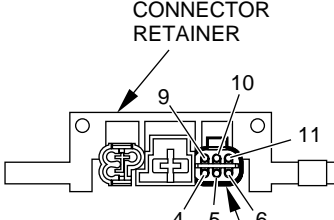
C323

CAV	CIRCUIT
1	P2 16BK/WT
7	F70 16PK/BK
8	-



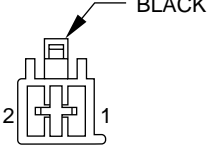
C324

CAV	CIRCUIT
1	V13 18BR/LG
2	-
3	-
4	V20 18BK/WT
5	-
6	V24 18BR/OR



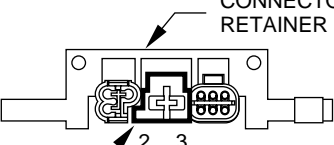
C324

CAV	CIRCUIT
4	V13 18BR/LG
5	-
6	-
9	V24 18BR/OR
10	-
11	V20 18BK/WT



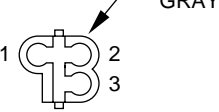
C325

CAV	CIRCUIT
1	-
2	Z1 12BK



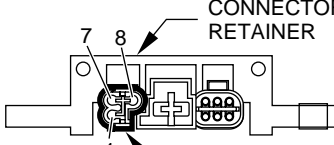
C325

CAV	CIRCUIT
2	-
3	Z1 12BK



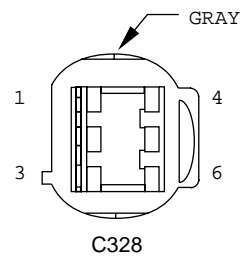
C326

CAV	CIRCUIT
1	L87 18DG/WT
2	Z1 18BK
3	P34 14PK/BK

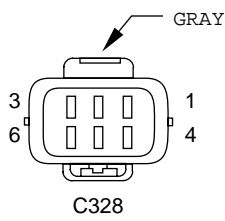


C326

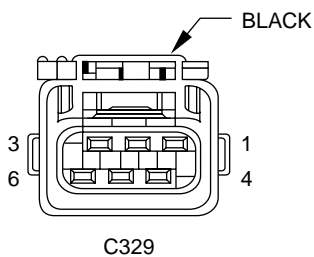
CAV	CIRCUIT
1	P34 16PK/BK
7	Z1 18BK
8	L87 18DG/WT



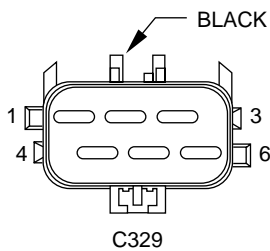
CAV	CIRCUIT
1	L73 18PK/WT
2	L21 18LB/WT
3	L10 18BR/LG
4	Z1 18BK
5	L61 18LG
5	L61 18LG
6	L36 18LG/OR



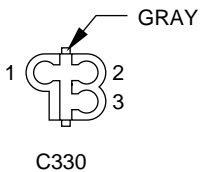
CAV	CIRCUIT
1	L74 18PK/BK
2	L21 18LB/WT
3	L10 18BR/LG
4	Z1 18BK
5	L61 18LG
6	L36 18LG/BK



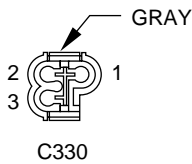
CAV	CIRCUIT
1	F35 16RD
2	Z1 16BK
3	D1 18VT/BR
4	D2 18WT/BK
5	P7 18LB/BK*
6	F71 18PK/DG*



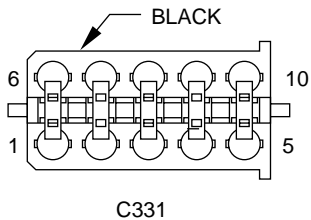
CAV	CIRCUIT
1	F35 14RD
2	Z1 14BK
3	D1 20VT/BR
4	D2 20WT/BK
5	P7 18LB/BK*
6	F87 18PK/DG*



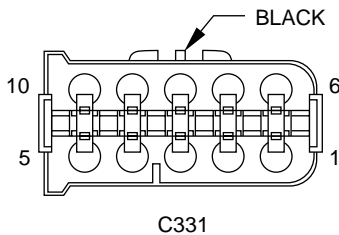
CAV	CIRCUIT
1	Q18 14GY/BK
2	Q28 14DG/WT
3	P34 14PK/BK



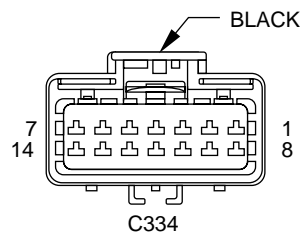
CAV	CIRCUIT
1	Q18 16GY/BK
2	Q28 16DG/WT
3	P34 18PK/BK



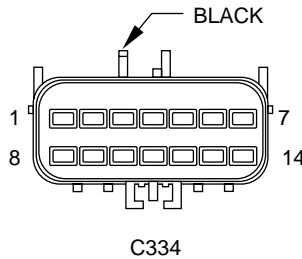
CAV	CIRCUIT
1	-
2	L90 18DB/RD
3	L10 18BR/LG
4	L61 18LG
5	L60 18TN
6	F70 18PK/BK
7	-
8	B40 12LB
9	Z1 12BK
10	-



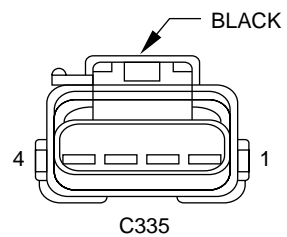
CAV	CIRCUIT
1	-
2	L90 18DB/RD
3	L10 18BR/LG
4	L61 18LG/OR
5	L60 18TN/OR
6	F70 16PK/BK
7	-
8	B40 12LB
9	Z1 12BK
10	-



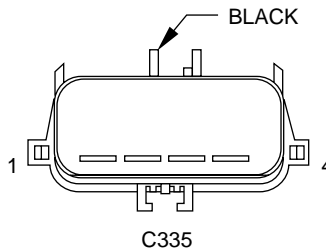
CAV	CIRCUIT
1	Z1 12BK
2	-
3	F81 10TN
4	E21 18OR/RD
5	Q17 14DB/WT
6	X53 16DG**
6	X87 16LG/RD*
7	Q27 14RD/BK
8	X55 16BR/RD**
8	X85 16LG/BK*
9	P114 18YL/BK
10	-
11	P112 18YL/WT
12	D2 18WT/BK
13	D1 18VT/BR
14	G71 20VT/YL



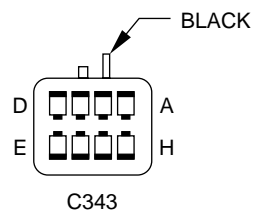
CAV	CIRCUIT
1	Z1 12BK
2	-
3	F81 12TN
4	E21 18OR
5	Q17 16DB/WT
6	X53 20DG
7	Q27 16RD/BK
8	X55 20BR/RD
9	P114 20YL/BK
10	-
11	P112 20YL/WT
12	D2 18WT/BK
13	D1 18VT/BR
14	G71 20VT/YL



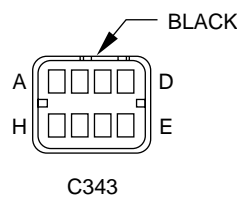
CAV	CIRCUIT
1	F35 16RD
2	Z1 16BK
3	P8 18LB/WT
4	F71 18PK/DG



CAV	CIRCUIT
1	F35 14RD
2	Z1 14BK
3	P8 18LB/WT
4	F87 18WT/BK

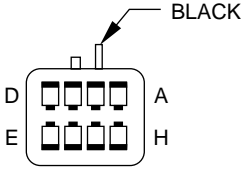


CAV	CIRCUIT
A	X93 16WT/RD*
A	X51 16BR/YL**
B	X91 16WT/BK*
B	X57 16BR/LB**
C	P2 16BK/WT
D	Z1 16BK
E	E21 18OR/RD



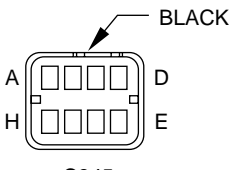
CAV	CIRCUIT
A	X52 20DB/WT
B	X58 20DB/OR
C	P2 18BK/WT
D	Z1 16BK
E	E20 20OR/DG

* WITH PREMIUM RADIO
** WITH STANDARD RADIO



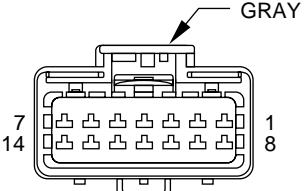
C345

CAV	CIRCUIT
A	X94 16TN/RD*
A	X52 16DB/WT**
B	X92 16TN/BK*
B	X58 16DB/OR**
C	P2 16BK/WT
D	Z1 16BK
E	E20 18OR/DB
F	-
G	-
H	-



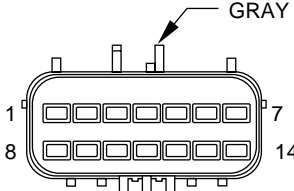
C345

CAV	CIRCUIT
A	X52 20DB/WT
B	X58 20DB/OR
C	P2 18BK/WT
D	Z1 16BK
E	E20 20OR/DG
F	-
G	-
H	-



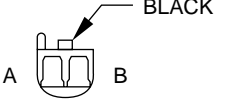
C351

CAV	CIRCUIT
1	Z1 12BK
2	-
3	F81 12TN
4	E20 18OR/DB
5	Q18 14GY/BK
6	X54 16VT**
6	X82 16LB/RD*
7	Q28 14DG/WT
8	X56 16DB**
8	X80 16LB/DG*
9	P2 14BK/WT
10	P34 14PK/BK
11	-
12	D2 18WT/BK
13	D1 18VT/BR
14	G71 20VT/YL



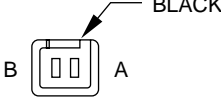
C351

CAV	CIRCUIT
1	Z1 12BK
2	-
3	F81 12TN
4	E20 18OR/DB
5	Q18 16GY/BK
6	X54 20VT
6	X82 18LB/RD
7	Q28 16DG/WT
8	X56 20DB/RD
8	X80 16LB/DG
9	P2 14BK/WT
10	P34 14PK/BK
11	-
12	D2 18WT/BK
13	D1 18VT/BR
14	G71 20VT/YL



C353

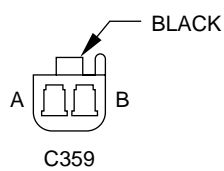
CAV	CIRCUIT
A	P114 20YL/BK
B	P112 20YL/WT



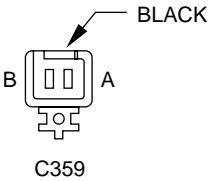
C353

CAV	CIRCUIT
A	P114 20YL/BK
B	P112 20YL/WT

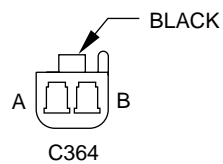
* WITH PREMIUM RADIO
** WITH STANDARD RADIO



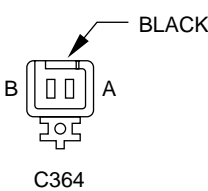
CAV	CIRCUIT
A	L87 20DG/WT
B	Z1 20BK



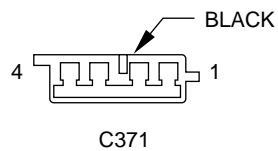
CAV	CIRCUIT
A	L87 18DG/WT
B	Z1 18BK



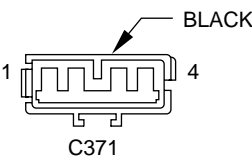
CAV	CIRCUIT
A	Z1 20BK
B	L90 20DB/RD



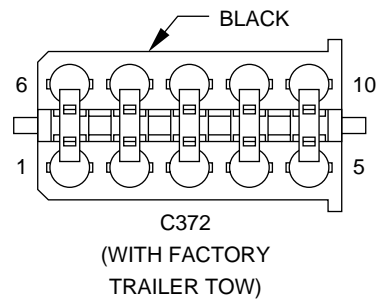
CAV	CIRCUIT
A	Z1 20BK
B	L90 20DB/RD



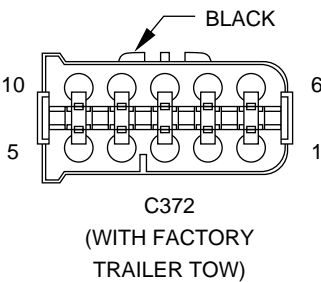
CAV	CIRCUIT
1	Z1 16BK
2	Q41 16WT
3	Q42 16LB
4	F86 16LG/BK



CAV	CIRCUIT
1	Z1 16BK
2	Q41 16LB
3	Q42 16WT
4	F86 16RD/YL

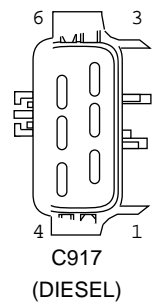


CAV	CIRCUIT
1	L50 18WT/TN
2	L90 18DB/RD
3	L10 18BR/LG
4	L61 18LG
5	L60 18TN
6	F70 16PK/BK
7	B40 12LB
8	Z1 12BK
9	-
10	-

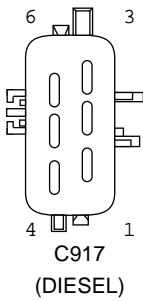


CAV	CIRCUIT
1	L50 18WT/TN
2	L90 18DB/RD
3	L10 18BR/LG
4	L61 18LG
4	L61 18LG*
5	L60 18TN
5	L60 18TN*
6	F70 16PK/BK
7	B40 12LB
8	Z1 12BK
9	-
10	-

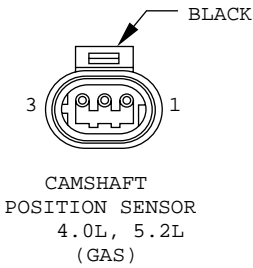
* WITH FACTORY TRAILER TOW ONLY



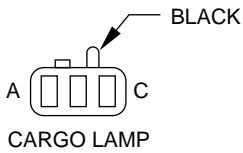
CAV	CIRCUIT
1	T40 14LG/BK
2	G60 20GY/YL
3	K167 20BR/YL



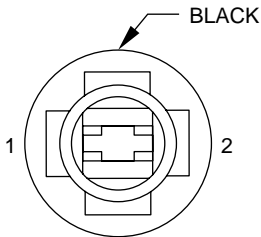
CAV	CIRCUIT
1	T40 12LG/BK
2	G60 20GY/YL
3	K167 20BR/YL



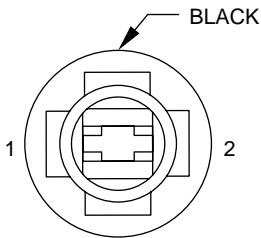
CAV	CIRCUIT	FUNCTION
1	K25 20WT/BK	5 VOLT SUPPLY
2	K4 20BK/LB	SENSOR GROUND
3	K24 18GY/BK	CAMSHAFT POSITION SENSOR SIGNAL



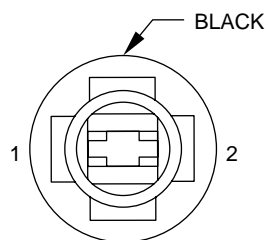
CAV	CIRCUIT	FUNCTION
A	M2 20YL	COURTESY LAMP RELAY OUTPUT
B	M1 20PK	FUSED B(+)
C	M4 20WT/LG	LIFTGATE COURTESY LAMP DISABLE



CAV	CIRCUIT	FUNCTION
1	L87 20DG/WT	STOP LAMP SWITCH OUTPUT
	L87 20DG/WT	STOP LAMP SWITCH OUTPUT
2	Z1 20BK	GROUND
	Z1 20BK	GROUND

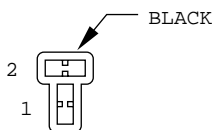


CAV	CIRCUIT	FUNCTION
1	L87 20DG/WT	STOP LAMP SWITCH OUTPUT
2	Z1 20BK	GROUND



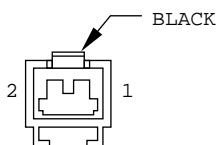
CENTER HIGH MOUNTED STOP LAMP
NO. 3

CAV	CIRCUIT	FUNCTION
1	L87 20DG/WT	STOP LAMP SWITCH OUTPUT
	L87 20DG/WT	STOP LAMP SWITCH OUTPUT
2	Z1 20BK	GROUND
	Z1 20BK	GROUND



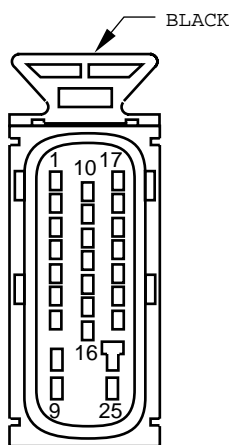
CIGAR LIGHTER

CAV	CIRCUIT	FUNCTION
1	F30 18RD/DB	FUSED IGNITION SWITCH OUTPUT (ACC/RUN)
2	Z1 18BK	GROUND



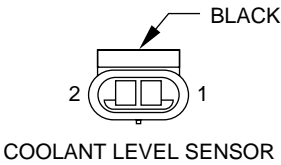
CLUTCH INTERLOCK
SWITCH (DIESEL)
(MANUAL TRANS)

CAV	CIRCUIT	FUNCTION
1	A41 14YL	IGNITION SWITCH OUTPUT START
2	T141 14YL	CLUTCH INTERLOCK SWITCH SENSE

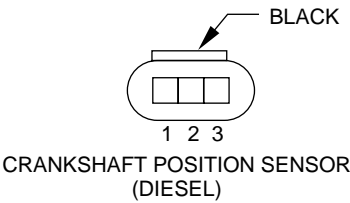


CONTROLLER
ANTI-LOCK
BRAKE

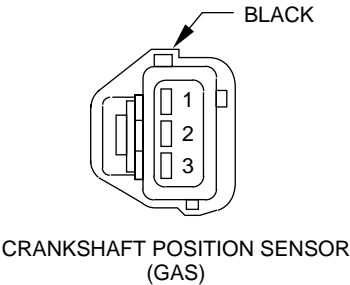
CAV	CIRCUIT	FUNCTION
1	B1 20YL/DB	RIGHT REAR WHEEL SPEED SENSOR (-)
2	B3 20LG/DB	LEFT REAR WHEEL SPEED SENSOR (-)
3	B7 20WT	RIGHT FRONT WHEEL SPEED SENSOR (+)
4	B9 20RD	LEFTT FRONT WHEEL SPEED SENSOR (+)
5	-	-
6	B41 20YL/VT	G SWITCH NO. 1 SENSE
7	B42 20TN/WT	G SWITCH NO. 2 SENSE
8	Z2 12BK	GROUND
9	A20 16RD/LG	SYSTEM RELAY
10	B4 20LG	LEFT REAR WHEEL SPEED SENSOR (+)
11	B8 20RD/DB	LEFT FRONT WHEEL SPEED SENSOR (+)
12	L50 18WT/TN	STOP LAMP SWITCH OUTPUT
13	B43 20PK/OR	G SWITCH SENSOR GROUND
14	-	-
15	-	-
16	205 20WT/VT	ABS WARNING LAMP DRIVER
17	B2 20YL	RIGHT REAR WHEEL SPEED SENSOR (+)
18	B6 20WT/DB	RIGHT FRONT WHEEL SPEED SENSOR (-)
19	-	-
20	D83 20BK/PK	SCI RECEIVE
21	-	-
22	-	-
23	F12 20DB/WT	FUSED IGNITION SWITCH OUTPUT (RUN)
24	Z2 12BK	GROUND
25	A10 10RD/DB	FUSE LINK TO ABS MOTOR RELAY



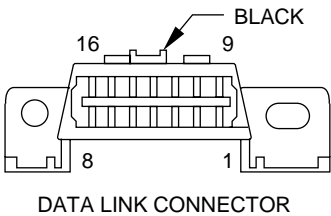
CAV	CIRCUIT	FUNCTION
1	G18 16PK/BK	ENGINE COOLANT LEVEL SENSE
2	Z1 16BK	GROUND



CAV	CIRCUIT	FUNCTION
1	K4 20BK/LB	SENSOR GROUND
2	-	-
3	K24 20GY/BK	CRANKSHAFT POSITION SENSOR SIGNAL

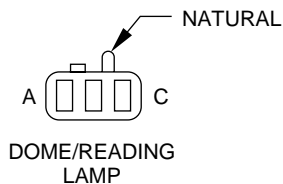


CAV	CIRCUIT	FUNCTION
1	K25 20WT/BK	5 VOLT SUPPLY
2	K4 20BK/LB	SENSOR GROUND -
3	K27 18RD/LG	CRANKSHAFT POSITION SENSOR SIGNAL

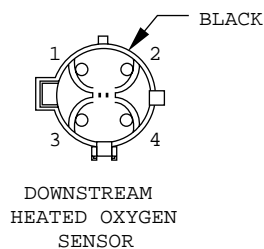


CAV	CIRCUIT	FUNCTION
1	-	-
2	-	-
3	D1 18VT/BR	CCD BUS(+)
4	Z1 18BK	GROUND
5	Z2 18BK/OR	GROUND
6	D84 20BK/WT	SCI TRANSMIT
7	D83 20BK/PK	SCI RECIEVE
8	-	-
9	-	-
10	-	-
11	D2 18WT/BK	CCD BUS (-)
12	D98 20WT	SCI TRANSMIT
13	-	-
14	-	-
15	-	-
16	F75 18VT	FUSED B(+)

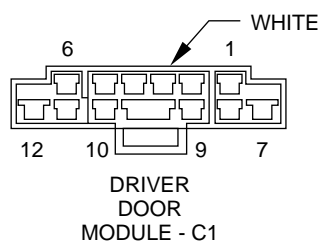
** DIESEL



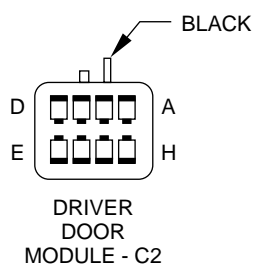
CAV	CIRCUIT	FUNCTION
A	Z1 20BK	GROUND
B	M2 20YL	COURTESY LAMP RELAY OUTPUT
C	M1 20PK	FUSED B(+)



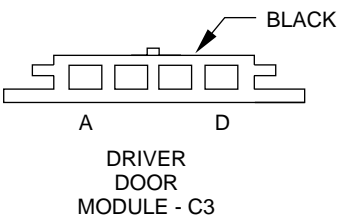
CAV	CIRCUIT	FUNCTION
1	A142 18DG/OR	AUTOMATIC SHUT DOWN RELAY OUTPUT
2	Z12 18BK/TN	GROUND
3	K4 18BK/LB	SENSOR GROUND
4	K141 18BK/PK	DOWNSTREAM HEATED OXYGEN SENSOR SIGNAL



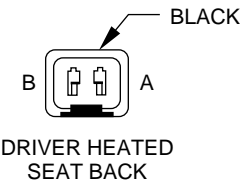
CAV	CIRCUIT	FUNCTION
1	Q11 16LB	LEFT FRONT WINDOW DRIVER (UP)
2	Q21 16WT	LEFT FRONT WINDOW DRIVER (DOWN)
3	Q17 16DB/WT	LEFT REAR WINDOW DRIVER (UP)
4	Q27 16RD/BK	LEFT REAR WINDOW DRIVER (DOWN)
5	P34 18PK/BK	LEFT FRONT DOOR UNLOCK DRIVER
6	P35 18OR/VT	LEFT FRONT DOOR LOCK DRIVER
7	Z1 12BK	GROUND
8	D1 18VT/BR	CCD BUS (+)
9	D2 18WT/BK	CCD BUS (-)
10	E21 18OR	LEFT REAR DOOR SWITCH ILLUMINATION
11	M1 20PK	MUX COURTESY LAMP DRIVER
12	F81 12TN	FUSED B(+)



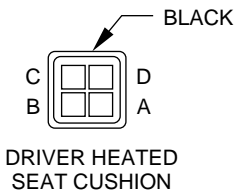
CAV	CIRCUIT	FUNCTION
A	F75 20YL	HORIZONTAL DRIVER
B	Z1 20BK	HEATER SWITCHED GROUND
C	F84 20VT	VERTICAL POSITION SENSOR SIGNAL
D	F86 20GY	SENSOR GROUND
E	F85 20GN	HORIZONTAL POSITION SENSOR SIGNAL
F	C16 20BK	HEATER 12 VOLT SUPPLY
G	F73 20DB	COMMON DRIVER
H	F71 20WT	VERTICAL DRIVER



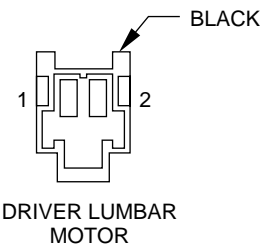
CAV	CIRCUIT	FUNCTION
A	Z1 20BK	GROUND
B	P22 20BR	5 VOLT SUPPLY
C	G49 20OR	SET LED DRIVER
D	M1 20GY	SWITCHED MUX LED SUPPLY



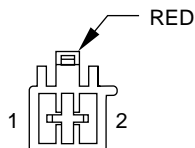
CAV	CIRCUIT	FUNCTION
A	Z1 16BK	GROUND
B	P88 16BR/BK	HEATED SEAT DRIVER



CAV	CIRCUIT	FUNCTION
A	P87 16BK/OR	HEATED SEAT DRIVER
B	P88 16BR/BK	HEATED SEAT DRIVER
C	P7 18LB/BK	DRIVER HEATED SEAT SWITCH OUTPUT
D	Z1 20BK	GROUND

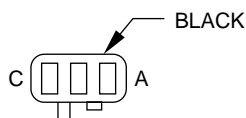


CAV	CIRCUIT	FUNCTION
1	P106 18DG/WT	LUMBAR FORWARD DRIVER
2	P107 18OR/BK	LUMBAR REARWARD DRIVER



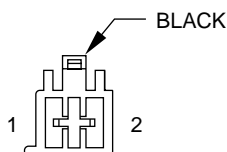
DRIVER POWER SEAT
FRONT RISER MOTOR

CAV	CIRCUIT	FUNCTION
1	P121 16RD/GY*	FRONT RISER DOWN DRIVER
	P21 16RD/LG	FRONT RISER DOWN SWITCH SENSE
2	P119 16YL/RD*	FRONT RISER UP DRIVER
	P19 16YL/LG	FRONT RISER UP SWITCH SENSE



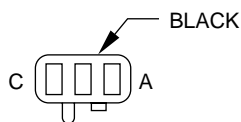
DRIVER POWER SEAT
FRONT RISER MOTOR SENSOR

CAV	CIRCUIT	FUNCTION
A	P28 20BR/RD	SENSOR GROUND
B	P26 20BR	FRONT RISER POSITION SENSE
C	P29 20BR/WT	6 VOLT SENSOR SUPPLY



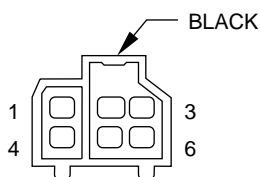
DRIVER POWER SEAT
HORIZONTAL MOTOR

CAV	CIRCUIT	FUNCTION
1	P115 16GY/LG*	HORIZONTAL FORWARD DRIVER
1	P15 16YL/LB	HORIZONTAL FORWARD SWITCH SENSE
2	P117 16RD/BR*	HORIZONTAL REARWARD DRIVER
2	P17 16RD/LB	HORIZONTAL REARWARD SWITCH SENSE



DRIVER POWER SEAT
HORIZONTAL MOTOR
SENSOR

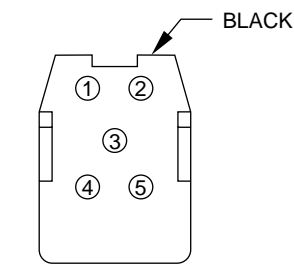
CAV	CIRCUIT	FUNCTION
A	P29 20BR/WT	6 VOLT SENSOR SUPPLY
B	P25 20VT/RD	HORIZONTAL POSITION SENSE
C	P28 20BR/RD	SENSOR GROUND



DRIVER POWER SEAT
LUMBAR SENSOR/MOTOR

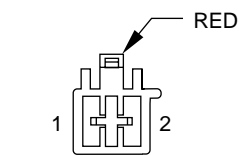
CAV	CIRCUIT	FUNCTION
1	P106 16DG/WT	LUMBAR REARWARD DRIVER
2	P107 16OR/BK	LUMBAR FORWARD DRIVER
3	P28 20BR/RD	SENSOR GROUND
4	P103 20DB/WT	LUMBAR POSITION SENSE
5	P29 20BR/WT	6 VOLT SENSOR SUPPLY

* WITH MEMORY SEATS



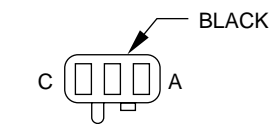
DRIVER POWER SEAT
LUMBAR SWITCH

CAV	CIRCUIT	FUNCTION
1	P104 20YL/RD*	LUMBAR REARWARD SWITCH SENSE
1	P107 18OR/BK	LUMBAR FORWARD DRIVER
2	Z1 18BK	GROUND
3	F35 18RD	FUSED B(+)
4	Z1 18BK	GROUND LUMBAR FORWARD SWITCH SENSE
5	P105 20LG/DB*	LUMBAR FORWARD SWITCH SENSE
5	P106 18DG/WT	LUMBAR REWARD DRIVER



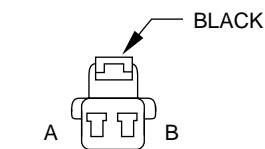
DRIVER POWER SEAT
REAR RISER MOTOR

CAV	CIRCUIT	FUNCTION
1	P113 16RD/BK*	REAR RISER DOWN DRIVER
	P13 16RD/WT	REAR RISER DOWN SWITCH SENSE
2	P111 16YL/DB*	REAR RISER UP DRIVER
	P11 16YL/WT	REAR RISER UP SWITCH SENSE



DRIVER POWER SEAT
REAR RISER MOTOR SENSOR

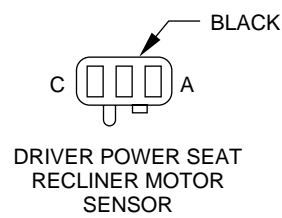
CAV	CIRCUIT	FUNCTION
A	P28 20BR/RD	SENSOR GROUND
B	P27 20LB/RD	REAR RISER POSITION SENSE
C	P29 20BR/WT	6 VOLT SENSOR SUPPLY



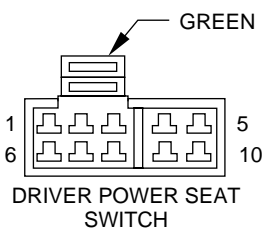
DRIVER POWER SEAT
RECLINER MOTOR

CAV	CIRCUIT	FUNCTION
A	P41 16GY/WT*	RECLINER FORWARD DRIVER
A	P41 16GY/WT	RECLINER DOWN DRIVER
B	P43 16GY/LB*	RECLINER REARWARD DRIVER
B	P43 16GY/LB	RECLINER DOWN DRIVER

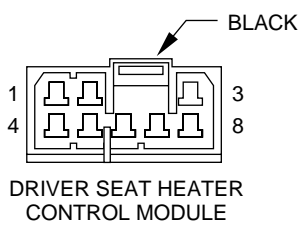
* WITH MEMORY SEATS



CAV	CIRCUIT	FUNCTION
A	P29 20BR/WT	6 VOLT SENSOR SUPPLY
B	P47 20LB	HORIZONTAL POSITION SENSE
C	P28 20BR/RD	SENSOR GROUND

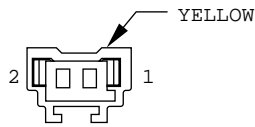


CAV	CIRCUIT	FUNCTION
1	Z1 16BK	GROUND
2	P40 18GY/LB*	RECLINER UP SWITCH SENSE
2	P43 16GY/LB	RECLINER UP DRIVER
3	P17 18RD/LB*	HORIZONTAL REARWARD SWITCH SENSE
3	P17 16RD/LB	HORIZONTAL REARWARD SWITCH SENSE
4	P48 18GY/WT*	RECLINER DOWN SWITCH SENSE
4	P41 16GY/WT	RECLINER DOWN DRIVER
5	F35 16RD	FUSED B(+)
6	P15 18YL/LB*	HORIZONTAL FORWARD SWITCH SENSE
6	P15 16YL/LB	HORIZONTAL FORWARD SWITCH SENSE
7	P19 18YL/LG*	FRONT RISER UP SWITCH SENSE
7	P19 16YL/LG	FRONT RISER UP SWITCH SENSE
8	P11 18YL/WT*	REAR RISER UP SWITCH SENSE
8	P11 16YL/WT	REAR RISER UP SWITCH SENSE
9	P13 18RD/WT*	REAR RISER DOWN SWITCH SENSE
9	P13 16RD/WT	REAR RISER DOWN SWITCH SENSE
10	P21 18RD/LG*	FRONT RISER DOWN SWITCH SENSE
10	P21 16RD/LG	FRONT RISER DOWN SWITCH SENSE



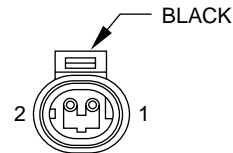
CAV	CIRCUIT	FUNCTION
1	F87 18PK/DG	FUSED IGNITION SWITCH OUTPUT
2	F35 16RD	FUSED B(+)
3	P87 16BK/OR	HEATED SEAT DRIVER
4	-	-
5	-	-
6	-	-
7	Z1 16BK	GROUND
8	P7 18LB/BK	DRIVER HEATED SEAT SWITCH OUTPUT

* WITH MEMORY SEATS



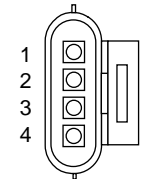
DRIVER SIDE
AIRBAG

CAV	CIRCUIT	FUNCTION
1	R45 18DG/LB	DRIVER AIR BAG LINE 2
2	R43 18BK/LB	DRIVER AIR BAG LINE 1



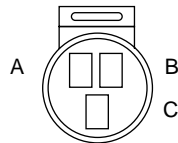
DUTY CYCLE
EVAP/PURGE SOLENOID

CAV	CIRCUIT	FUNCTION
1	F99 20OR	IGNITION SWITCH OUTPUT (START/RUN)
2	K52 18PK/BK	EVAPORATIVE EMISSION SOLENOID CONTROL



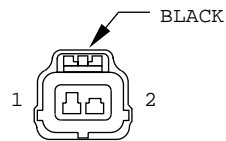
EGR SOLENOID
(DIESEL)

CAV	CIRCUIT	FUNCTION
1	A142 16DG/OR	FUSED IGNITION SWITCH OUTPUT
2	K35 16GY/YL	EXHAUST GAS RCIRCULATION SOLENOID
4	Z1 18BK	GROUND



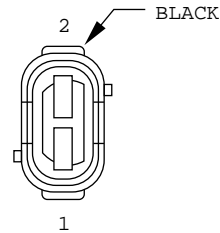
ENGINE COOLANT
TEMPERATURE SENSOR
(DIESEL)

CAV	CIRCUIT	FUNCTION
A	K2 20TN/BK	ENGINE COOLANT TEMPERATURE SENSOR SIGNAL
B	K4 20BK/LB	SENSOR GROUND
C	K222 20TN/RD	SECONDARY ENGINE COOLANT TEMP SENSOR



ENGINE COOLANT
TEMPERATURE SENSOR
(WITH 4.0L ENG)

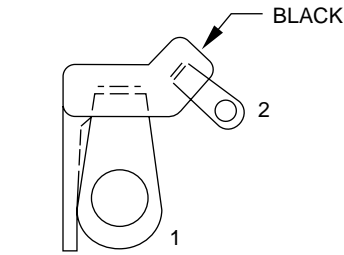
CAV	CIRCUIT	FUNCTION
1	K2 16TN/BK	ENGINE COOLANT TEMPERATURE SENSOR SIGNAL
2	K4 16BK/LB	SENSOR GROUND



ENGINE COOLANT
TEMPERATURE SENSOR
(WITH 5.2L ENG)

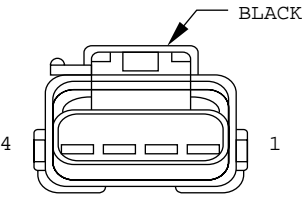
CAV	CIRCUIT	FUNCTION
1	K2 16TN/BK	ENGINE COOLANT TEMPERATURE SENSOR SIGNAL
2	K4 16BK/LB	SENSOR GROUND

** DIESEL



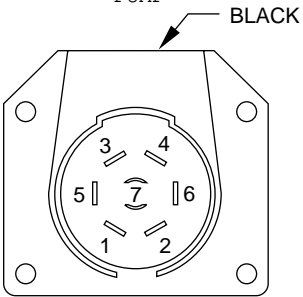
ENGINE STARTER MOTOR

CAV	CIRCUIT	FUNCTION
1	A0 6RD	B(+)
1	A0 2RD**	B(+)
2	T40 12LG/BK	ENGINE STARTER MOTOR RELAY OUTPUT
2	T40 14LG/BK**	ENGINE STARTER MOTOR RELAY OUTPUT



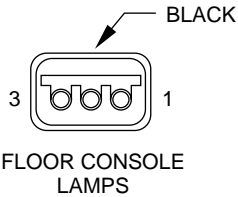
EVAPORATIVE
SYSTEM
LEAK DETECTION
PUMP

CAV	CIRCUIT	FUNCTION
1	-	-
2	F99 20OR	FUSED IGNITION SWITCH OUTPUT (START/RUN)
3	J95 18DG/RD	VAPOR CANISTER SOLENOID DRIVER
4	J96 18VT/RD	VAPOR CANISTER PUMP SWITCH DRIVER



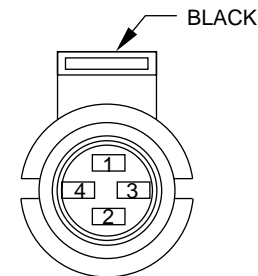
FACTORY TRAILER
TOW CONNECTOR

CAV	CIRCUIT	FUNCTION
1	Z1 12BK	GROUND
2	B40 12LB	TRAILER TOW OUTPUT
3	L90 18DB/RD	PARK LAMP RELAY OUTPUT
4	F70 18PK/BK	FUSED B(+)
5	L61 18LG	LEFT TURN SIGNAL
6	L60 18TN	RIGHT TURN SIGNAL
7	L10 18BR/LG	BACK-UP LAMP SWITCH OUTPUT



FLOOR CONSOLE
LAMPS

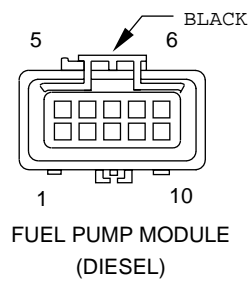
CAV	CIRCUIT	FUNCTION
1	Z1 20BK	GROUND
2	-	-
3	E2 18OR	PANEL LAMP DRIVER



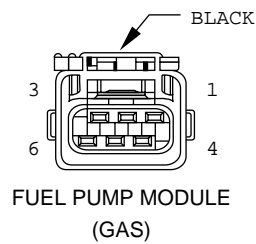
FOUR WHEEL DRIVE
SWITCH

CAV	CIRCUIT	FUNCTION
1	Z12 20BK/TN*	POWER GROUND
1	Z1 20BK**	GROUND
2	T106 20GY/OR	-
3	G28 20LG/OR	TRANS TEMP LAMP DRIVER
4	T107 20BK/RD	-

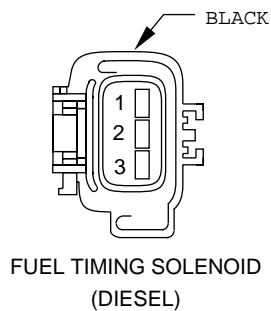
* GAS
** DIESEL



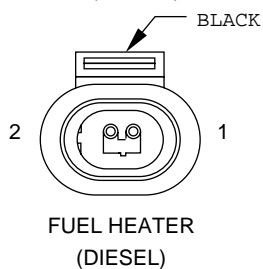
CAV	CIRCUIT	FUNCTION
1	K134 20LB/BK	SLEEVE POSITION SENSOR (-)
2	K57 20LG/OR	CONT SLEEVE POSITION SENSOR
3	K135 20WT/BK	SLEEVE POSITION SENSOR (+)
4	K4 20BK/LB	SENSOR GROUND
5	K238 16VT	FUEL TIMING SHUTOFF SOLENOID
6	K153 20OR	SHUTOFF FEED
7	K156 20GY	FUEL TEMP SENSOR SIGNAL
8	K140 14TN/WT	FUEL QUANTITY ACTUATOR GROUND
9	A142 14DG/OR	AUTO SHUTDOWN RELAY OUTPUT
10	A142 16DG/OR	AUTO SHUTDOWN RELAY OUTPUT



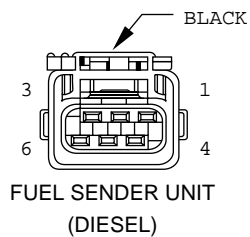
CAV	CIRCUIT	FUNCTION
1	A64 16DG/WT	FUEL PUMP RELAY OUTPUT
3	G40 20LB/BK	LOW
4	K167 20BR/YL	SENSOR RETURN
6	Z1 16BK	GROUND



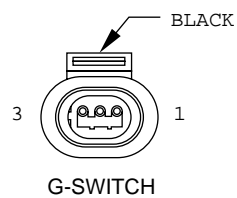
CAV	CIRCUIT	FUNCTION
1	A142 16DG/BK	AUTOMATIC SHUT DOWN RELAY OUTPUT
2	D238 16VT	FUEL TIMING SHUTOFF SOLENOID
3	K153 20OR	SHUTOFF (+)



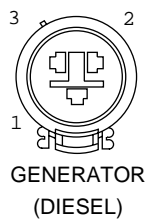
CAV	CIRCUIT	FUNCTION
1	A64 14OR/DB	ELECTRIC PUMP FEED
2	Z1 14BK	GROUND



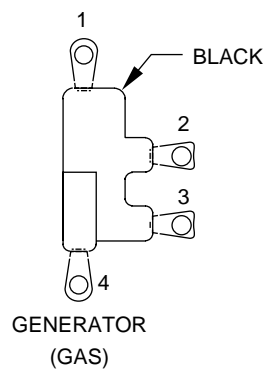
CAV	CIRCUIT	FUNCTION
1	A64 16DG/WT	FUEL PUMP RELAY OUTPUT
3	G40 20LB/BK	LOW
4	K167 20BR/YL	SENSOR RETURN
6	Z1 16BK	GROUND



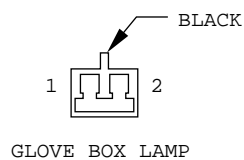
CAV	CIRCUIT	FUNCTION
1	B43 20PK/OR	G SWITCH GROUND
2	B41 20YL/VT	G SWITCH NO. 1 SENSE
3	B42 20TN/WT	G SWITCH NO. 2 SENSE



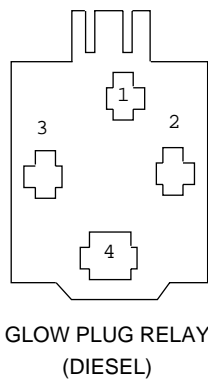
CAV	CIRCUIT	FUNCTION
1	A142 16DG/OR	AUTOMATIC SHUT DOWN RELAY OUTPUT
2	-	-
3	K20 18DG/YL	GENERATOR FIELD DRIVER



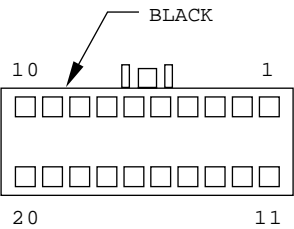
CAV	CIRCUIT	FUNCTION
1	Z0 8BK	GROUND
2	K72 18DG/VT	AUTOMATIC SHUT DOWN RELAY OUTPUT
3	K20 18DG	GENERATOR FIELD DRIVER
4	-	-



CAV	CIRCUIT	FUNCTION
1	M1 20PK	FUSED B(+)
2	Z1 20BK	GROUND

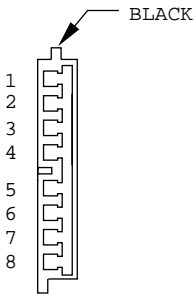


CAV	CIRCUIT	FUNCTION
1	A0 10RD	BATTERY POSITIVE
2	K152 16WT	GLOW PLUG RELAY CONTROL SENSE
3	A142 16DG/OR	FUSED IGNITION SWITCH OUTPUT
4	K154 10GY	GLOW PLUG RELAY CONTROL



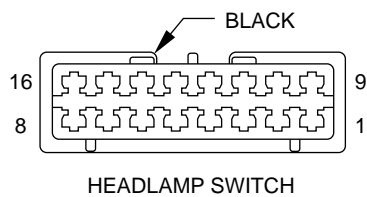
GRAPHIC DISPLAY
MODULE OR VEHICLE
INFORMATION CENTER

CAV	CIRCUIT	FUNCTION
1	G18 20PK/BK	ENGINE COOLANT LEVEL SWITCH SENSE
2	F60 20RD/WT	FUSED B(+)
3	Z2 20BK/OR	GROUND
4	L5 18OR/BK	TURN SIGNAL
5	G46 20BK/LB	REAR LAMP OUT INDICATOR DRIVER
6	-	-
7	D1 18VT/BR	CCD BUS (+)
8	D2 18WT/BK	CCD BUS (-)
9	-	-
10	E2 20OR	PANEL LAMP DRIVER
11	L90 20DB/RD	PARK LAMP RELAY OUTPUT
12	-	-
13	G29 20BK/TN	WASHER FLUID LEVEL SENSE
14	107 20BK/RD	4-WHEEL DRIVE PART TIME LAMP
15	T106 20GY/OR	4-WHEEL DRIVE FULL TIME LAMP
16	F83 18YL/DG	FUSED IGNITION SWITCH OUTPUT (RUN)
17	T19 20YL/BK	4-WHEEL DRIVE PART TIME LAMP
18	G42 20LB/RD	ALL TIME FRONT WHEELS
19	G28 20LG/OR	2-WHEEL DRIVE OR REAR WHEELS IN ALL TIME
20	Z1 20BK	GROUND

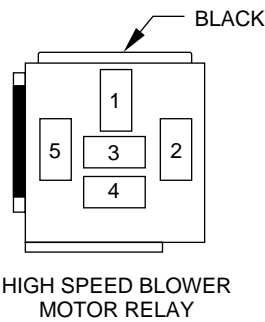


HEADLAMP LEVELING
SWITCH ●

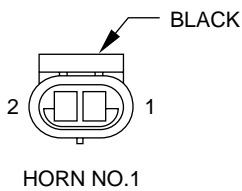
CAV	CIRCUIT	FUNCTION
1	Z1 20BK	GROUND HD/LP LEVELING
2	L106 20YL	POSITION F
3	L103 20LB	POSITION C
4	L104 20LG	POSITION D
5	F83 18YL/DG	FUSED IGN. SWITCH OUTPUT
6	L101 20RD	POSITION A
7	L102 20WT	POSITION B
8	L105 20PK	POSITION E



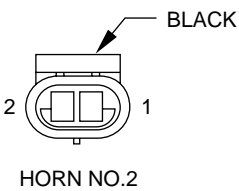
CAV	CIRCUIT	FUNCTION
1	E2 20OR	PANEL LAMP DRIVER
2	Z1 16BK	GROUND
3	M11 20PK/LB	SWITCHED COURTESY LAMP FEED
4	L39 20LB	FOG LAMP RELAY OUTPUT
5	Z1 16BK	GROUND
6	L35 20BR/WT	FOG LAMP SWITCH OUTPUT
7	L96 20LG/RD	COIL DRIVER #6
8	707 20BK/WT	PANEL LAMP DIMMER SWITCH SIGNAL
9	A6 14RD/LB	FUSED B(+)
10	-	-
11	F34 16TN/BK	LOW HEADLAMP SWITCH SENSE
12	-	-
13	L24 20LB/RD	AUTO HEADLAMP SWITCH SENSE
14	-	-
15	366 16PK/OR	PARK LAMP FEED
16	L90 20DB/RD	PARK LAMP RELAY OUTPUT



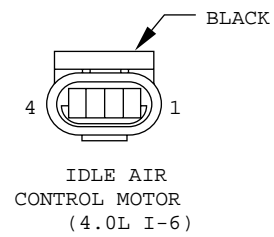
CAV	CIRCUIT	FUNCTION
1	A19 14RD/VT	FUSED B(+)
2	C42 12BR/RD	BLOWER MOTOR DRIVER
3	-	-
4	C41 20BR	HIGH BLOWER MOTOR RELAY CONTROL
5	A19 12DG/RD	FUSED B(+)
6	-	-



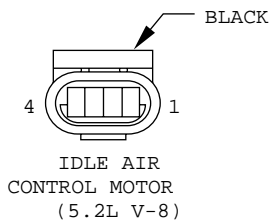
CAV	CIRCUIT	FUNCTION
1	X2 16DG/YL	HORN RELAY OUTPUT
2	Z1 16BK	GROUND



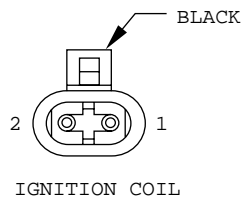
CAV	CIRCUIT	FUNCTION
1	X2 16DG/YL	HORN RELAY OUTPUT
2	Z1 16BK	GROUND



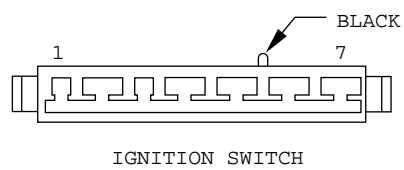
CAV	CIRCUIT	FUNCTION
1	K60 16YL/BK	IDLE AIR CONTROL NO. 2 DRIVER
2	K59 16VT/BK	IDLE AIR CONTROL NO. 4 DRIVER
3	K40 16BR/WT	IDLE AIR CONTROL NO. 3 DRIVER
4	K39 16GY/RD	IDLE AIR CONTROL NO. 1 DRIVER



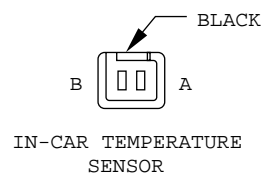
CAV	CIRCUIT	FUNCTION
1	K39 16GY/RD	IDLE AIR CONTROL NO. 1 DRIVER
2	K40 16BR/WT	IDLE AIR CONTROL NO. 3 DRIVER
3	K59 16VT/BK	IDLE AIR CONTROL NO. 4 DRIVER
4	K60 16YL/BK	IDLE AIR CONTROL NO. 2 DRIVER



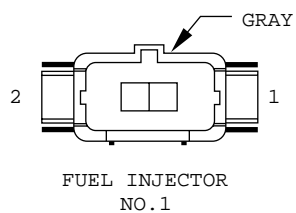
CAV	CIRCUIT	FUNCTION
1	K19 18GY/WT	IGNITION COIL NO. 1 DRIVER
2	A142 18DG/OR	AUTOMATIC SHUT DOWN RELAY OUTPUT



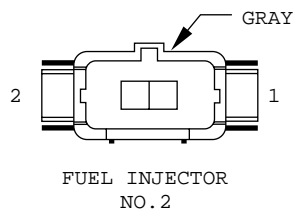
CAV	CIRCUIT	FUNCTION
1	A41 14YL	IGNITION SWITCH OUTPUT (START)
2	A21 12DB/GY	IGNITION SWITCH OUTPUT (START/RUN)
3	G9 18GY/BK	RED BRAKE WARNING LAMP DRIVER
4	A1 12RD/WT	FUSED B(+)
5	A22 12BK/OR	IGNITION SWITCH OUTPUT (RUN)
6	A31 12RD/BK	IGNITION SWITCH OUTPUT (ACC/RUN)
7	A1 12RD/WT	FUSED B(+)



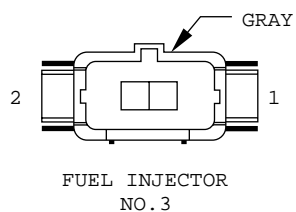
CAV	CIRCUIT	FUNCTION
A	C10 20RD/TN	IN-CAR TEMPERATURE SENSOR SIGNAL
B	D41 20LG/WT	SENSOR GROUND



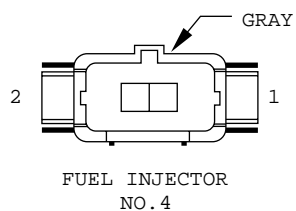
CAV	CIRCUIT	FUNCTION
1	A142 18DG/OR	AUTOMATIC SHUT DOWN RELAY OUTPUT
2	K11 18WT/DB	INJECTOR NO.1 DRIVER



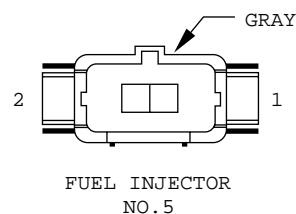
CAV	CIRCUIT	FUNCTION
1	A142 18DG/OR	AUTOMATIC SHUT DOWN RELAY OUTPUT
2	K12 18TN	INJECTOR NO. 2 DRIVER



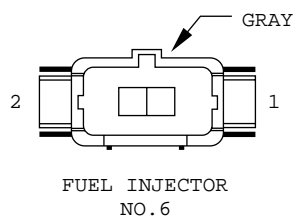
CAV	CIRCUIT	FUNCTION
1	A142 18DG/OR	AUTOMATIC SHUT DOWN RELAY OUTPUT
2	K13 18YL/WT	INJECTOR NO. 3 DRIVER



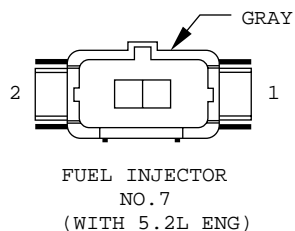
CAV	CIRCUIT	FUNCTION
1	A142 18DG/OR	AUTOMATIC SHUT DOWN RELAY OUTPUT
2	K14 18LB/BR	INJECTOR NO. 4 DRIVER



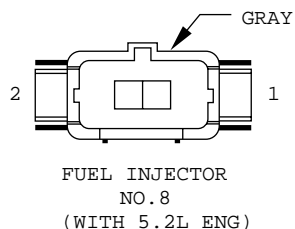
CAV	CIRCUIT	FUNCTION
1	A142 18DG/OR	AUTOMATIC SHUT DOWN RELAY OUTPUT
2	K38 18GY	INJECTOR NO. 5 DRIVER



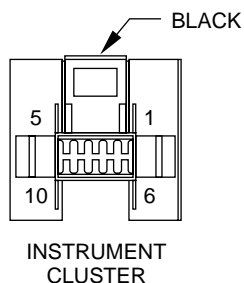
CAV	CIRCUIT	FUNCTION
1	A142 18DG/OR	AUTOMATIC SHUT DOWN RELAY OUTPUT
2	K58 18BR/YL	INJECTOR NO. 6 DRIVER



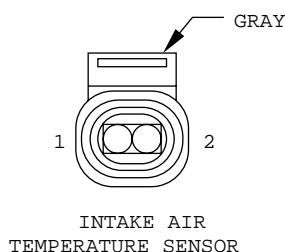
CAV	CIRCUIT	FUNCTION
1	A142 18DG/OR	AUTOMATIC SHUT DOWN RELAY OUTPUT
2	K17 18DB/WT	INJECTOR NO. 7 DRIVER



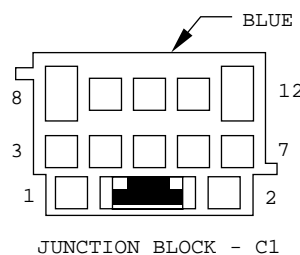
CAV	CIRCUIT	FUNCTION
1	A142 18DG/OR	AUTOMATIC SHUT DOWN RELAY OUTPUT
2	K18 18DB/YL	INJECTOR NO. 8 DRIVER



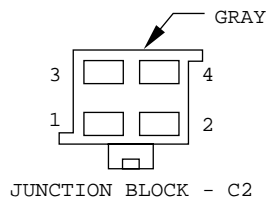
CAV	CIRCUIT	FUNCTION
1	Z1 20BK	GROUND
2	Z2 20BK/OR	GROUND
3	F75 18VT	FUSED B(+)
4	205 20WT/VT	ABS WARNING LAMP DRIVER
5	F87 20BK/WT	FUSED IGNITION SWITCH OUTPUT (START/RUN)
6	L65 18LG/DB	LEFT TURN SIGNAL INDICATOR LAMP
7	L64 18TN/DB	RIGHT TURN SIGNAL INDICATOR LAMP
8	D1 18VT/BR	CCD BUS (+)
9	D2 18WT/BK	CCD BUS (-)
10	E2 20OR	PANEL LAMP DRIVER



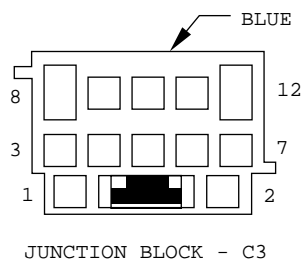
CAV	CIRCUIT	FUNCTION
1	K21 16BK/RD	INTAKE AIR TEMPERATURE SENSOR SIGNAL
2	K4 16BK/LB	SENSOR GROUND



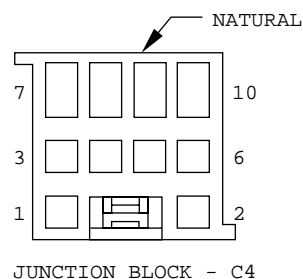
CAV	CIRCUIT	FUNCTION
1	M1 18PK	FUSED B(+)
2	L10 18BR/LG	BACK-UP LAMP SWITCH OUTPUT
3	-	-
4	L39 18LB	FOG LAMP SWITCH OUTPUT
5	F62 18RD	FUSED B(+)
6	-	-
7	T107 20BK/RD	4-WHEEL DRIVE PART TIME LAMP
8	A6 14RD/LB	FUSED B(+)
9	L90 18DB/RD	PARK LAMP SWITCH OUTPUT
10	-	-
11	F12 20DB/WT	FUSED IGNITION SWITCH OUTPUT (RUN)
12	F86 18LG/RD	FUSED B(+)



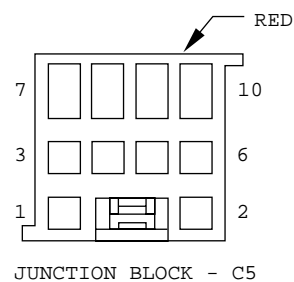
CAV	CIRCUIT	FUNCTION
1	A21 12DB/GY	IGNITION SWITCH OUTPUT (START/RUN)
2	A7 12YL/RD	FUSED B(+)
3	A900 12OR/YL	FUSED B(+)
4	A250 10RD	FUSED B(+)



CAV	CIRCUIT	FUNCTION
1	X4 20GY/OR	HORN RELAY CONTROL
2	-	-
3	G28 20LG/OR	2-WHEEL DRIVE LAMP/LOW RANGE
4	L39 18LB	FOG LAMP RELAY OUTPUT
5	F62 18RD	FUSED B(+)
6	-	-
7	-	-
8	A6 14RD/LB	FUSED B(+)
9	L90 18DB/RD	PARK LAMP SWITCH OUTPUT
10	-	-
11	L64 18TN/DB	TURN SIGNAL SWITCH OUTPUT
12	F12 20DB/WT	FUSED IGNITION SWITCH OUTPUT (ACC/RUN)

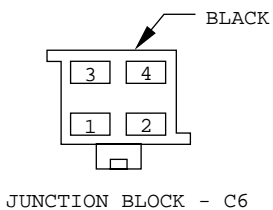


CAV	CIRCUIT	FUNCTION
1	L64 18TN/DB	RIGHT TURN SIGNAL INDICATOR LAMP
2	107 20BK/RD	4-WHEEL DRIVE PART TIME LAMP
3	F30 18RD/DB	FUSED IGNITION SWITCH OUTPUT (ACC/RUN)
4	A31 18RD/BK	FUSED IGNITION SWITCH OUTPUT (ACC/RUN)
5	L64 18TN/DB	RIGHT TURN SIGNAL INDICATOR LAMP
6	107 20BK/RD	4-WHEEL DRIVE PART TIME LAMP
7	F86 16LG/BK*	FUSED IGNITION SWITCH OUTPUT (ACC/RUN)
	F86 16LG/BK	FUSED IGNITION SWITCH OUTPUT (ACC/RUN)
8	F75 18VT	FUSED B(+)
9	F75 18VT	FUSED B(+)
10	-	-

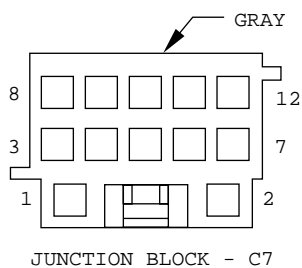


CAV	CIRCUIT	FUNCTION
1	L5 18OR/BK	TURN SIGNAL
2	G28 20LG/OR	2-WHEEL DRIVE OR REAR WHEEL IN ALL TIME
3	-	-
4	Z1 18BK	GROUND
5	X60 20DG/RD	RADIO 12 VOLT OUTPUT
6	G28 20LG/OR	ALL TIME FRONT WHEELS
7	-	-
8	F34 16TN/BK	AUTO HEADLAMP RELAY OUTPUT
9	A6 14RD/LB	FUSED B(+)
10	A22 12BK/OR	FUSED IGNITION SWITCH OUTPUT (RUN)

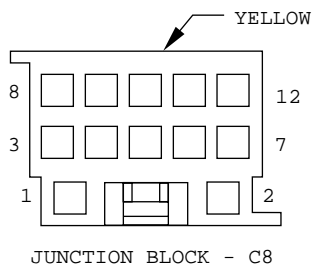
* WITH POWER SUNROOF



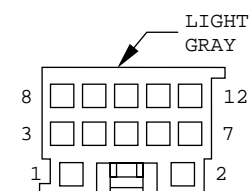
CAV	CIRCUIT	FUNCTION
1	A31 12RD/BK	FUSED IGNITION SWITCH OUTPUT (ACC/RUN)
2	A21 12DB/GY	FUSED IGNITION SWITCH OUTPUT (START/RUN)
3	C15 12BK/WT	REAR WINDOW DEFOGGER RELAY OUTPUT
4	F61 16WT/OR	FUSED B(+)



CAV	CIRCUIT	FUNCTION
1	X12 18RD/GY	FUSED IGNITION SWITCH OUTPUT (ACC/RUN)
2	L11 16LG/BK	FLASH TO PASS
3	L95 18DG/YL	FOG LAMP RELAY CONTROL
4	A31 18RD/BK	FUSED IGNITION SWITCH OUTPUT (ACC/RUN)
5	L12 18VT/TN	HAZARD SIGNAL
6	L36 18LG	REAR FOG LAMP
7	L96 20LG/RD	-
8	L39 20LB	FOG LAMP RELAY OUTPUT
9	Z1 18BK	GROUND
10	L95 18DG/YL	FOG LAMP RELAY CONTROL
11	-	-
12	X4 20GY/OR	HORN RELAY CONTROL

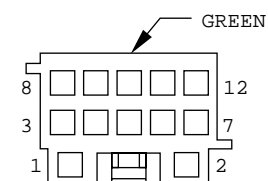


CAV	CIRCUIT	FUNCTION
1	F83 18YL/DG	FUSED IGNITION SWITCH OUTPUT (RUN)
2	M2 20YL	COURTESY LAMP RELAY OUTPUT
3	M1 20PK	FUSED B(+)
4	L90 18DB/RD	PARK LAMP SWITCH OUTPUT
5	L90 20DB/RD	PARK LAMP SWITCH OUTPUT
6	M1 20PK	FUSED B(+)
7	M2 20YL	COURTESY LAMP RELAY OUTPUT
8	M1 20PK	MUX COURTESY LAMP DRIVER
9	-	-
10	L90 20DB/RD	PARK LAMP SWITCH OUTPUT
11	M1 20PK	FUSED B(+)
12	M2 20YL	COURTESY LAMP RELAY OUTPUT



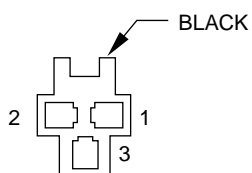
JUNCTION BLOCK - C9

CAV	CIRCUIT	FUNCTION
1	C16 20LB/YL	REAR WINDOW DEFOGGER LAMP DRIVER
2	F38 18OR	FUSED B(+)
3	-	-
4	F71 20DG/PK*	FUSED IGNITION SWITCH OUTPUT (RUN)
5	F60 20RD/WT	FUSED B(+)
6	-	-
7	-	-
8	F87 20BK/WT	FUSED IGNITION SWITCH OUTPUT (START/RUN)
9	F71 20PK/DG*	FUSED IGNITION SWITCH OUTPUT (RUN)
10	F60 20RD/WT	FUSED B(+)
11	366 16PK/OR	PARK LAMP FEED
12	F60 20WT/RD*	FUSED B(+)



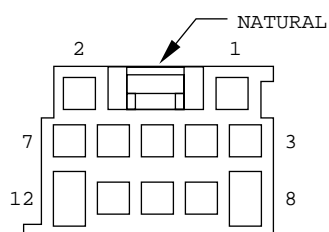
JUNCTION BLOCK - C10

CAV	CIRCUIT	FUNCTION
1	L95 20DG/YL	FOG LAMP RELAY CONTROL
2	V23 18BR/PK	FUSED IGNITION SWITCH OUTPUT (ACC/RUN)
3	L16 18RD/LG	FUSED B(+)
4	-	-
5	V23 20BR/PK	FUSED IGNITION SWITCH OUTPUT (ACC/RUN)
6	M112 20BR/LG	COURTESY LAMP RELAY CONTROL
7	X4 20GY/OR	HORN RELAY CONTROL
8	C14 20WT/RD	REAR WINDOW DEFOGGER RELAY CONTROL
9	-	-
10	L79 20TN	PARK LAMP RELAY CONTROL
11	L90 20DB/RD	PARK LAMP SWITCH OUTPUT
12	714 20BK/OR	AUTO HEADLAMP RELAY CONTROL



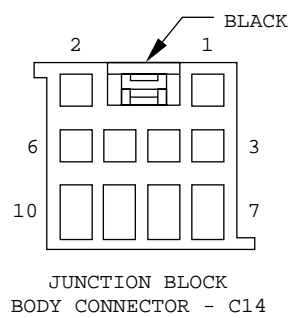
JUNCTION BLOCK - C11

CAV	CIRCUIT	FUNCTION
1	X17 20DG	POWER ANTENNA UP CONTROL
2	X14 20WT	POWER ANTENNA DOWN CONTROL
3	X16 20GY	POWER ANTENNA DRIVER

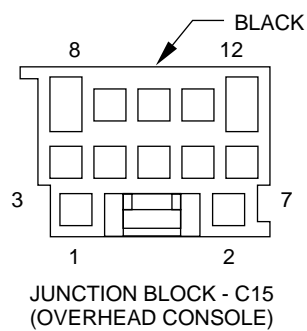
JUNCTION BLOCK
BODY CONNECTOR - C13

CAV	CIRCUIT	FUNCTION
1	F20 18WT	FUSED IGNITION SWITCH OUTPUT (RUN)
2	-	-
3	-	-
4	L90 18DB/RD	PARK LAMP RELAY OUTPUT
5	M1 20PK	FUSED B(+)
6	F12 20DB/WT	FUSED IGNITION SWITCH OUTPUT (RUN)
7	F87 20WT/PK	FUSED IGNITION SWITCH OUTPUT (START/RUN)
8	F75 14VT	FUSED B(+)
9	-	-
10	-	-
11	-	-
12	F35 16RD	FUSED B(+)

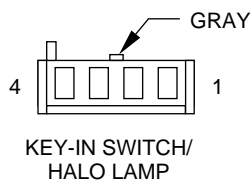
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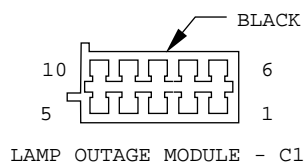
CAV	CIRCUIT	FUNCTION
1	L10 18BR/LG	BACK-UP LAMP SWITCH OUTPUT
2	G5 18DB/WT	FUSED IGNITION SWITCH OUTPUT (START/RUN)
3	M2 20YL	COURTESY LAMP RELAY OUTPUT
4	X60 18DG/RD	RADIO 12 VOLT OUTPUT
5	-	-
6	-	-
7	F81 10TN	FUSED B(+)
8	F70 14PK/BK	FUSED B(+)
9	F81 12TN	FUSED B(+)
10	F35 16RD	FUSED B(+)



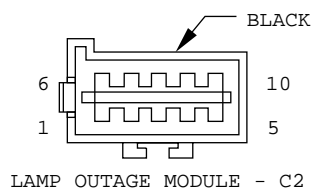
CAV	CIRCUIT	FUNCTION
1	-	-
2	Z1 16BK	GROUND
3	F83 20YL/DG*	FUSED IGNITION SWITCH OUTPUT (RUN)
3	F83 20BK/VT	FUSED IGNITION SWITCH OUTPUT (RUN)
4	-	-
5	-	-
6	-	-
7	L10 20BK/RD	BACK-UP LAMP SWITCH OUTPUT
8	-	-
9	M1 20PK	FUSED B(+)
10	-	-
11	M2 20YL	COURTESY LAMP RELAY OUTPUT
12	-	-



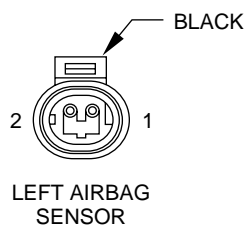
CAV	CIRCUIT	FUNCTION
1	Z1 20BK	GROUND
2	G26 20LB	KEY-IN IGNITION SWITCH SENSE
3	M2 20YL	COURTESY LAMP RELAY OUTPUT
4	M1 20PK	FUSED B(+)



CAV	CIRCUIT	FUNCTION
1	L36 18LG/OR	NOT USED
2	L50 18WT/TN	STOP LAMP SWITCH OUTPUT
3	L90 18DB/RD	PARK LAMP RELAY OUTPUT
	L90 18DB/RD	PARK LAMP RELAY OUTPUT
4	L90 18DB/RD	PARK LAMP RELAY OUTPUT
	L90 18DB/RD	PARK LAMP RELAY OUTPUT
5	L90 18DB/RD	PARK LAMP RELAY OUTPUT
6	L50 18WT/TN	STOP LAMP SWITCH OUTPUT
7	L50 18WT/TN	STOP LAMP SWITCH OUTPUT
8	L50 18WT/TN	STOP LAMP SWITCH OUTPUT
9	G46 20LB/BK	REAR LAMP OUT INDICATOR DRIVER
10	F87 18WT/PK	FUSED IGNITION SWITCH OUTPUT (START/RUN)

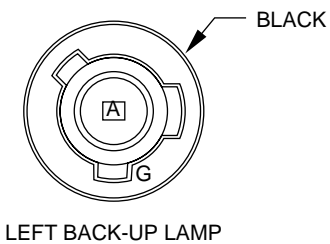


CAV	CIRCUIT	FUNCTION
1	L36 18LG/OR	NOT USED
	L36 18LG/OR	NOT USED
2	L50 18WT/TN	STOP LAMP SWITCH OUTPUT
3	L90 18DB/RD*	PARK LAMP RELAY OUTPUT
	L90 18DB/RD	PARK LAMP RELAY OUTPUT
4	L22 18LB	PARK LAMP SWITCH OUTPUT
5	L21 18LB/WT	PARK LAMP SWITCH OUTPUT
6	L74 18PK/BK	STOP LAMP SWITCH OUTPUT
7	L73 18PK/WT	STOP LAMP SWITCH OUTPUT
8	L87 18DG/WT	STOP LAMP SWITCH OUTPUT
9	Z1 18BK	GROUND
10	-	-

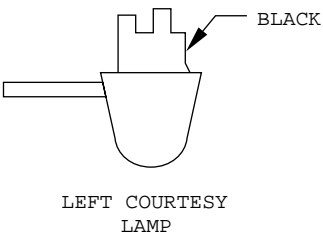


CAV	CIRCUIT	FUNCTION
1	R47 18DB/LB	LEFT IMPACT SENSOR LINE 1
2	R49 18LB	LEFT IMPACT SENSOR LINE 2

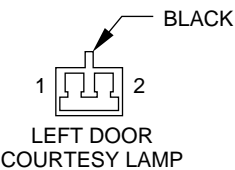
* WITH AFTERMARKET TRAILER
TOW OR FACTORY TRAILER TOW



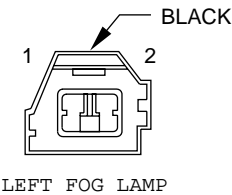
CAV	CIRCUIT	FUNCTION
A	L10 18BR/LG	BACK-UP LAMP SWITCH OUTPUT
G	Z1 18BK	GROUND



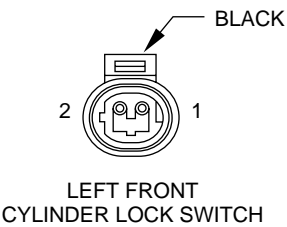
CAV	CIRCUIT	FUNCTION
A	M1 20PK	FUSED B(+)
B	M2 20YL	COURTESY LAMP RELAY OUTPUT



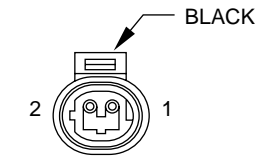
CAV	CIRCUIT	FUNCTION
1	M1 20PK	FUSED B(+)
2	Z1 20BK	GROUND



CAV	CIRCUIT	FUNCTION
1	Z1 18BK	GROUND
2	L39 18LB	FOG LAMP RELAY SWITCH OUTPUT

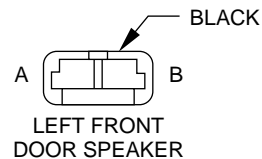


CAV	CIRCUIT	FUNCTION
1	G71 20VT/YL	VTSS DISARM SENSE
2	Z1 20BK	GROUND



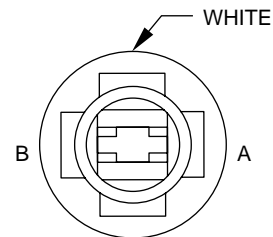
LEFT FRONT DOOR
LOCK MOTOR

CAV	CIRCUIT	FUNCTION
1	P34 18PK/BK	LEFT FRONT DOOR UNLOCK DRIVER
2	P35 18OR/VT	LEFT FRONT DOOR LOCK DRIVER



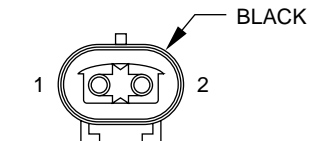
LEFT FRONT
DOOR SPEAKER

CAV	CIRCUIT	FUNCTION
A	X53 20DG	LEFT FRONT (+)
B	X55 20BR/RD	LEFT FRONT (-)



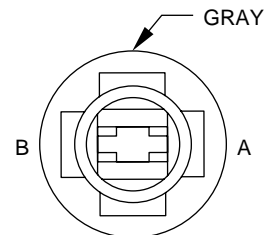
LEFT FRONT PARK LAMP

CAV	CIRCUIT	FUNCTION
A	L90 18DB/RD	PARK LAMP RELAY OUTPUT
B	Z1 18BK	GROUND



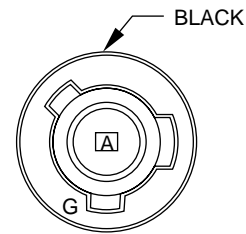
LEFT FRONT POWER
WINDOW MOTOR

CAV	CIRCUIT	FUNCTION
1	Q11 16LB	LEFT FRONT WINDOW DRIVER (UP)
2	Q21 16WT	LEFT FRONT WINDOW DRIVER (DOWN)



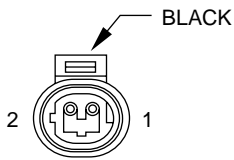
LEFT FRONT SIDE MARKER LAMP

CAV	CIRCUIT	FUNCTION
A	L90 18DB/RD	PARK LAMP RELAY OUTPUT
B	L64 18TN/DB	TURN SIGNAL SWITCH OUTPUT



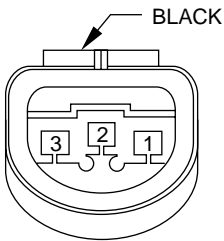
LEFT FRONT TURN
SIGNAL LAMP

CAV	CIRCUIT	FUNCTION
A	L64 18TN/DB	TURN SIGNAL SWITCH OUTPUT
G	Z1 18BK	GROUND



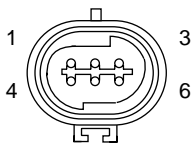
LEFT FRONT
WHEEL SPEED SENSOR

CAV	CIRCUIT	FUNCTION
1	B8 20RD/DB	LEFT FRONT WHEEL SPEED SENSOR (-)
2	B9 20RD	LEFT FRONT WHEEL SPEED SENSOR (+)



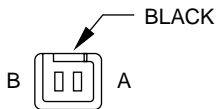
LEFT HEADLAMP

CAV	CIRCUIT	FUNCTION
1	Z1 16BK	GROUND
2	L4 16VT/OR	DIMMER SWITCH LOW BEAM OUTPUT
3	L3 16RD/OR	DIMMER SWITCH HIGH BEAM OUTPUT



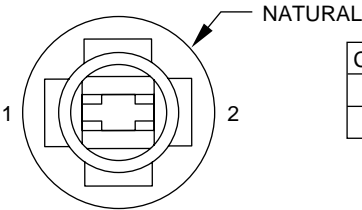
LEFT HEADLAMP LEVELING
MOTOR ●

CAV	CIRCUIT	FUNCTION
1	L104 20LG	POSITION 4
2	L103 20LB	POSITION 3
3	L102 20WT	POSITION 2
4	L105 20PK	POSITION 5
5	L106 20YL	POSITION 6
6	L101 20RD	POSITION 1



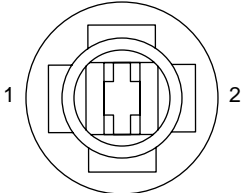
LEFT INSTRUMENT
PANEL SPEAKER

CAV	CIRCUIT	FUNCTION
A	X87 20LG/RD	AMPLIFIED LEFT FRONT (+)
B	X85 20LG/BK	AMPLIFIED LEFT FRONT (-)



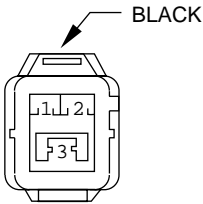
LEFT LICENSE LAMP

CAV	CIRCUIT	FUNCTION
1	L90 20DB/RD	PARK LAMP RELAY OUTPUT
2	Z1 20BK	GROUND



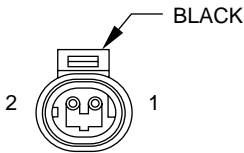
LEFT PARK LAMP

CAV	CIRCUIT	FUNCTION
1	L90 18DB/RD	PARK LAMP RELAY
2	Z1 18BK	GROUND



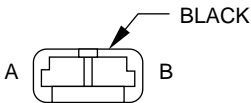
LEFT PARK TURN
SIGNAL MARKER

CAV	CIRCUIT	FUNCTION
1	L65 18LG/DB	LEFT FRONT T.S. FEED
2	L90 18DB/RD	PARK LAMP SWITCH OUTPUT
3	Z1 18BK	GROUND



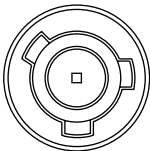
LEFT REAR DOOR
LOCK MOTOR

CAV	CIRCUIT	FUNCTION
1	P34 18PK/BK	DOOR UNLOCK DRIVER
2	P2 18BK/WT	DOOR LOCK DRIVER



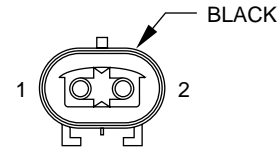
LEFT REAR
DOOR SPEAKER

CAV	CIRCUIT	FUNCTION
A	X52 20DB/WT	LEFT REAR (+)
B	X58 20DB/OR	LEFT REAR (-)



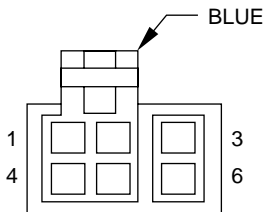
LEFT REAR
FOG LAMP

CAV	CIRCUIT	FUNCTION
A	L36 18LG/BK	REAR FOG LAMP
B	Z1 18BK	GROUND



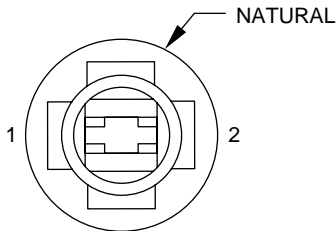
LEFT REAR POWER WINDOW MOTOR

CAV	CIRCUIT	FUNCTION
1	Q12 16BR	LEFT REAR WINDOW DRIVER (UP)
2	Q22 16VT	LEFT REAR WINDOW DRIVER (DOWN)



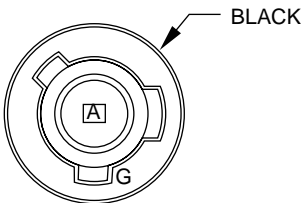
LEFT REAR POWER WINDOW SWITCH

CAV	CIRCUIT	FUNCTION
1	Q18 16GY/BK	LEFT REAR WINDOW DRIVER (UP)
2	Q12 16BR	LEFT REAR WINDOW DRIVER (UP)
3	E20 20OR/DG	LEFT REAR DOOR SWITCH ILLUMINATION
4	Q28 16DG/WT	LEFT REAR WINDOW DRIVER (DOWN)
5	Q22 16VT	LEFT REAR WINDOW DRIVER (DOWN)
6	Z1 16BK	GROUND



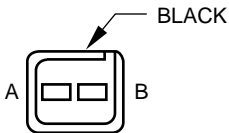
LEFT REAR SIDE MARKER LAMP

CAV	CIRCUIT	FUNCTION
1	Z1 18BK	GROUND
2	L22 18LB	PARK LAMP SWITCH OUTPUT



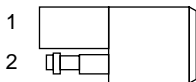
LEFT REAR TURN SIGNAL LAMP

CAV	CIRCUIT	FUNCTION
A	L60 18TN	TURN SIGNAL SWITCH OUTPUT
G	Z1 18BK	GROUND



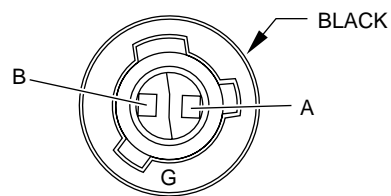
LEFT REAR WHEEL SPEED SENSOR

CAV	CIRCUIT	FUNCTION
A	B3 20LG/DB	LEFT REAR WHEEL SPEED SENSOR (-)
B	B4 20LG	LEFT REAR WHEEL SPEED SENSOR (+)



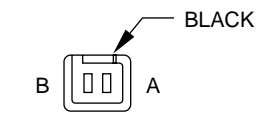
LEFT SIDE REPEATER

CAV	CIRCUIT	FUNCTION
1	Z1 18BK	GROUND
2	L65 18LG/DB	LEFT FRONT TURN SIGNAL FEED



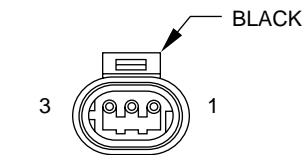
LEFT TAIL/STOP LAMP

CAV	CIRCUIT	FUNCTION
A	L74 18PK/BK	STOP LAMP SWITCH OUTPUT
B	L21 18LB/WT	PARK LAMP SWITCH OUTPUT
G	Z1 18BK	GROUND



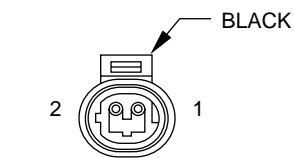
LEFT VISOR/
VANITY MIRROR

CAV	CIRCUIT	FUNCTION
A	M1 20PK	FUSED B(+)
B	Z1 20BK	GROUND



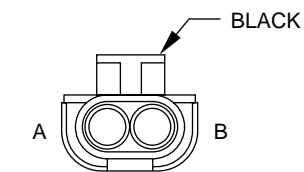
LIFTGATE AJAR SWITCH

CAV	CIRCUIT	FUNCTION
1	Z1 20BK	GROUND
2	G78 20TN/BK	LIFTGATE AJAR SWITCH SENSE
3	-	-



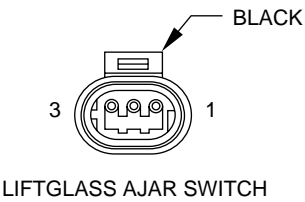
LIFTGATE
CYLINDER LOCK SWITCH

CAV	CIRCUIT	FUNCTION
1	G71 20VT/YL	VTSS DISARM SENSE
2	Z1 20BK	GROUND

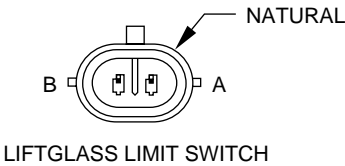


LIFTGATE LOCK MOTOR

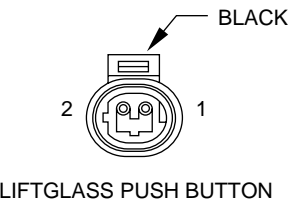
CAV	CIRCUIT	FUNCTION
A	P2 16BK/WT	DOOR LOCK DRIVER
B	P34 16PK/BK	DOOR UNLOCK DRIVER



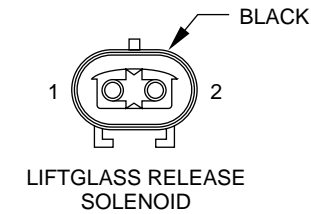
CAV	CIRCUIT	FUNCTION
1	Z1 20BK	GROUND
2	G78 20TN/BK	LIFTGLASS AJAR SWITCH SENSE
3	-	-



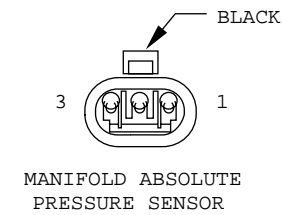
CAV	CIRCUIT	FUNCTION
A	F70 16PK/BK	FUSED B(+)
B	P101 16OR/PK	LIFTGLASS LIMIT SWITCH OUTPUT



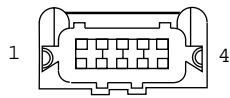
CAV	CIRCUIT	FUNCTION
1	P100 14OR/BR	LIFTGLASS PUSH BUTTON OUTPUT
2	P101 16OR/PK	LIFTGLASS LIMIT SWITCH OUTPUT



CAV	CIRCUIT	FUNCTION
1	P100 14OR/BR	LIFTGLASS PUSH BUTTON OUTPUT
2	Z1 14BK	GROUND

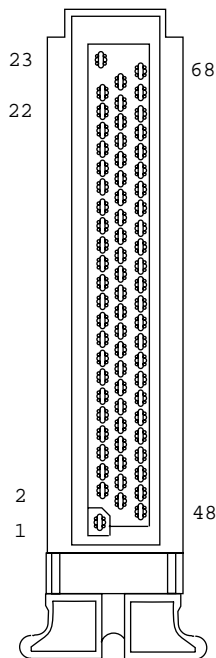


CAV	CIRCUIT	FUNCTION
1	K4 20BK/LB	SENSOR GROUND
2	K70 18RD/WT	MAP SENSOR SIGNAL
3	K25 20WT/BK	5 VOLT SUPPLY



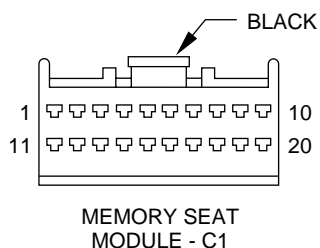
MASS AIR FLOW MODULE

CAV	CIRCUIT	FUNCTION
1	Z1 20BK	GROUND
2	K4 20BK/LB	SENSOR GROUND
3	A142 18DG/OR	FUSED (B+)
4	K155 20DB	AIR FLOW METER SIGNAL

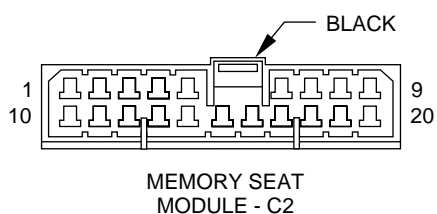
MSA CONTROLLER
(DIESEL)

CAV	CIRCUIT	FUNCTION
1	Z12 14BK/TN	POWER GROUND
2	G21 20GY/LB	TACHOMETER SIGNAL
3	K185 18OR/LB	WAIT TO START LAMP
4	K140 16TN/WT	FUEL QUANTITY ACTUATOR GROUND
5	K140 16TN/WT	FUEL QUANTITY ACTUATOR GROUND
7	K57 20LG/OR	CONT SLEEVE POS SENSE
8	K24 20LG/YL	CRANKSHAFT POSITION SENSOR
11	K68 20LG/YL	NEEDLE MOVE SENSOR (-)
12	K67 20BR/BK	NEEDLE MOVE SENSOR (+)
13	K155 20DB	AIR FLOW METER SIGNAL
14	K2 20TN/BK	ENGINE COOLANT TEMPERATUR SENSOR SIGNAL
15	K22 20OR/DB	THROTTLE POSITION SENSOR SIGNAL
20	L50 18WT/TN	STOP LAMP SWITCH OUTPUT
23	A142 14DG/OR	AUTO SHUTDOWN RELAY OUTPUT
24	Z12 16BK/TN	POWER GROUND
25	K35 16GY/YL	EGR SOLENOID CONTROL
26	K48 18OR/RD	FLT SIGNAL
27	K92 20PK	COIL DRIVER #2
28	C13 16DB/RD	A/C COMPRESSOR CLUTCH RELAY CONTROL
29	K134 20LB/BK	SLEEVE POSITION SENSE
33	K4 20BK/LB	SENSOR GROUND
36	K95 20PK	VEHICLE SPEED CONTROL SWITCH SIGNAL
37	C103 20DG	A/C SWITCH SIGNAL
38	F99 20RD/OR	FUEL HEATER RELAY OUTPUT
42	K900 20PK/BK	AUTOMATIC SHUTDOWN RELAY CONTROL
43	G7 20WT/OR	VEHICLE SPEED SENSOR SIGNAL
44	V32 20YL/RD	SPEED CONTROL ON/OFF SWITCH SENSE
45	A142 16DG/OR	AUTO SHUT DOWN RELAY (+)
46	Z12 16BK/TN	POWER GROUND
49	K140 16TN/WT	FUEL QUANTITY ACTUATOR GROUND
50	K152 16WT	GLOW PLUG RELAY CONTROL SENSE
51	K238 16VT	FUEL TIMING SHUTOFF SENSOR
52	K135 20WT/BK	SLEEVE POSITION SENSOR (+)
53	K153 20OR	SHUTOFF FEED
55	K255 20WT/DG	PEDAL POSITION SENSOR
57	K6 20VT/WT	5 VOLT SUPPLY
61	D83 20BK/PK	SCI RECEIVE
63	K156 20GY	FUEL TEMPERATURE SENSOR SIGNAL
65	K151 20WT	LOW IDLE POSITION SWITCH
68	A142 16DG/OR	LEFT FRONT DECAY SOLENOID CONTROL

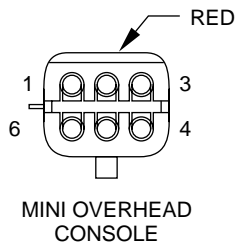
(CAVITIES NOT SHOWN ARE NOT USED)



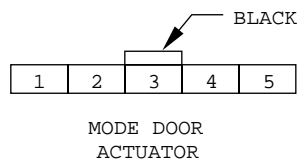
CAV	CIRCUIT	FUNCTION
1	P29 20BR/WT	6 VOLT SENSOR SUPPLY
2	P28 20BR/RD	SENSOR GROUND
3	P25 20VT/RD	HORIZONTAL POSITION SENSE
4	P26 20BR	FRONT RISER POSITION SENSE
5	P27 20LB/RD	REAR RISER POSITION SENSE
6	P47 20LB	RECLINER POSITION SENSE
7	P103 20DB/WT	LUMBAR POSITION SENSE
8	P21 18RD/LG	FRONT RISER DOWN SWITCH SENSE
9	P19 18YL/LG	FRONT RISER UP SWITCH SENSE
10	P13 18RD/WT	REAR RISER DOWN SWITCH SENSE
11	P11 18YL/WT	REAR RISER UP SWITCH SENSE
12	P15 18YL/LB	HORIZONTAL FORWARD SWITCH SENSE
13	P17 18RD/LB	HORIZONTAL REARWARD SWITCH SENSE
14	P40 18GY/LB	RECLINER UP SWITCH SENSE
15	P48 18GY/WT	RECLINER DOWN SWITCH SENSE
16	P105 20LG/DB	LUMBAR FORWARD SWITCH SENSE
17	P104 20YL/RD	LUMBAR REARWARD SWITCH SENSE
18	D1 20VT/BR	CCD BUS (+)
19	D2 20WT/BK	CCD BUS (-)
20	-	-



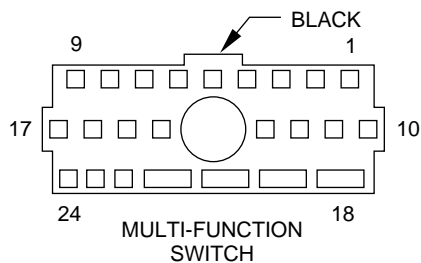
CAV	CIRCUIT	FUNCTION
1	Z1 16BK	GROUND
2	P115 16GY/LG	HORIZONTAL FORWARD DRIVER
3	P117 16RD/BR	HORIZONTAL REARWARD DRIVER
4	-	-
5	-	-
6	P43 16GY/LB	RECLINER REARWARD DRIVER
7	P41 16GY/WT	RECLINER FORWARD DRIVER
8	Z1 16BK	GROUND
9	P106 16DG/WT	LUMBAR REARWARD DRIVER
10	F35 16RD	FUSED B(+)
11	P113 16RD/BK	REAR RISER DOWN DRIVER
12	P111 16YL/DB	REAR RISER UP DRIVER
13	-	-
14	-	-
15	-	-
16	-	-
17	P121 16RD/GY	FRONT RISER DOWN DRIVER
18	P119 16YL/RD	FRONT RISER UP DRIVER
19	F35 16RD	FUSED B(+)
20	P107 16OR/BK	LUMBAR FORWARD DRIVER



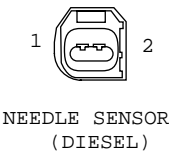
CAV	CIRCUIT	FUNCTION
1	F83 20YL/DG	FUSED IGNITION SWITCH OUTPUT (RUN)
2	Z1 20BK	GROUND
3	D1 18VT/BR	CCD BUS(+)
4	M2 20YL	COURTESY LAMP RELAY OUTPUT
5	D2 18WT/BK	CCD BUS(-)
6	M1 20PK	FUSED B(+)



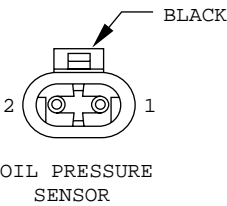
CAV	CIRCUIT	FUNCTION
1	C39 20YL	MODE DOOR MOTOR POSITION SENSE
2	C40 20DG/YL	5 VOLT SUPPLY
3	D41 20LG/WT	SENSOR RETURN
4	C38 20DG	MODE DOOR MOTOR DRIVER
5	C37 20TN/BK	MODE DOOR MOTOR DRIVER



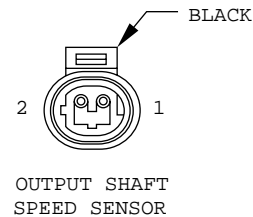
CAV	CIRCUIT	FUNCTION
1	V50 18LG/WT	WIPER SWITCH MODE SENSE
2	V51 18WT	WINDSHIELD WIPER SWITCH SIGNAL
3	V11 18TN/BK	WASHER SWITCH OUTPUT
	V11 18TN/BK	WASHER SWITCH OUTPUT
4	F86 16LG/BK	FUSED IGNITION SWITCH OUTPUT (ACC/RUN)
5	V4 18RD/YL	WIPER SWITCH HIGH SPEED OUTPUT
6	V3 18BR/WT	WIPER SWITCH LOW SPEED OUTPUT
	V3 18BR/WT	WIPER SWITCH LOW SPEED OUTPUT
7	V6 16DB	FUSED IGNITION SWITCH OUTPUT (ACC/RUN)
8	V6 16DB	FUSED IGNITION SWITCH OUTPUT (ACC/RUN)
9	V3 18BR/WT	WIPER SWITCH LOW SPEED OUTPUT
10	-	-
11	L64 18TN/DB	RIGHT TURN SIGNAL INDICATOR LAMP
12	L60 18TN	LEFT TURN SIGNAL INDICATOR LAMP
13	L12 18VT/TN	HAZARD SIGNAL
14	-	-
15	L61 18DG	TURN SIGNAL SWITCH OUTPUT
16	L65 18LG/DB	TURN SIGNAL SWITCH OUTPUT
	L65 18LG/DB	TURN SIGNAL SWITCH OUTPUT
17	L5 18OR/BK	TURN SIGNAL
	L5 18OR/BK	TURN SIGNAL
18	L4 16VT/OR	DIMMER SWITCH LOW BEAM OUTPUT
	L4 16VT/OR	DIMMER SWITCH LOW BEAM OUTPUT
19	F34 16TN/BK	LOW HEADLAMP SWITCH SENSE
	F34 16TN/BK	LOW HEADLAMP SWITCH SENSE
20	L3 16RD/OR	DIMMER SWITCH HIGH BEAM OUTPUT
21	L11 16LG/BK	FLASH TO PASS
22	-	-
23	-	-
24	-	-



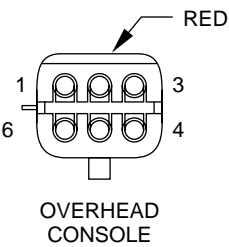
CAV	CIRCUIT	FUNCTION
1	K67 20BR/BK	NEEDLE MOVEMENT SENSOR (+)
2	K68 20LG/YL	NEEDLE MOVEMENT SENSOR (-)



CAV	CIRCUIT	FUNCTION
1	K4 20BK/LB	SENSOR GROUND
1	G60 20GY/YL*	OIL PRESSURE SENSOR SIGNAL
2	G6 18GY/WT	OIL PRESSURE SENSOR SIGNAL
2	K167 20BR/YL*	SENSOR RETURN

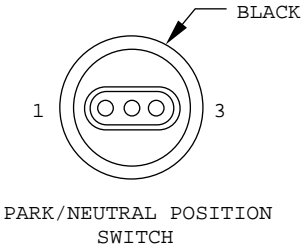


CAV	CIRCUIT	FUNCTION
1	T14 18LG/WT	OUTPUT SHAFT SPEED SENSOR SIGNAL (+)
2	T13 18DB/BK	OUTPUT SHAFT SPEED SENSOR SIGNAL (-)

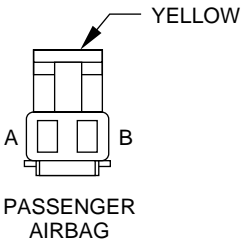


CAV	CIRCUIT	FUNCTION
1	F83 20YL/DG	FUSED IGNITION SWITCH OUTPUT (RUN)
2	Z1 20BK	GROUND
3	D1 18VT/BR	CCD BUS(+)
4	M2 20YL	COURTESY LAMP RELAY OUTPUT
5	D2 18WT/BK	CCD BUS(-)
6	M1 20PK	FUSED B(+)

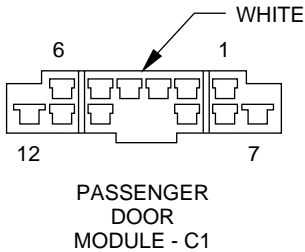
* DIESEL



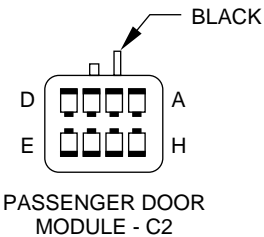
CAV	CIRCUIT	FUNCTION
1	L10 18BR/LG	BACK-UP LAMP SWITCH OUTPUT
2	T41 20BK/WT	PARK/NEUTRAL POSITION SWITCH SENSE
3	F83 18YL/DG	FUSED IGNITION SWITCH OUTPUT (RUN)



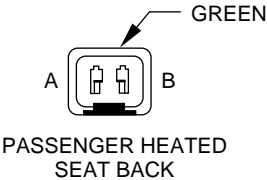
CAV	CIRCUIT	FUNCTION
A	R44 18DB	PASSENGER AIRBAG LINE 2
B	R42 18VT	PASSENGER AIRBAG LINE 1



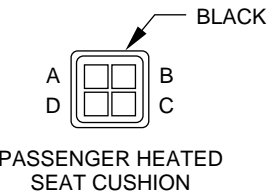
CAV	CIRCUIT	FUNCTION
1	Q12 16BR	RIGHT FRONT WINDOW DRIVER (UP)
2	Q22 16VT	RIGHT FRONT WINDOW DRIVER (DOWN)
3	Q18 16GY/BK	RIGHT REAR WINDOW DRIVER (UP)
4	Q28 16DG/WT	RIGHT REAR WINDOW DRIVER (DOWN)
5	P34 18PK/BK	RIGHT FRONT DOOR UNLOCK DRIVER
6	P2 18BK/WT	RIGHT FRONT DOOR LOCK DRIVER
7	Z1 12BK	GROUND
8	D1 18VT/BR	CCD BUS(+)
9	D2 18WT/BK	CCD BUS(-)
10	E20 18OR/DB	RIGHT REAR DOOR SWITCH ILLUMINATION
11	M1 20PK	MUX COURTESY LAMP DRIVER
12	F81 12TN	FUSED B(+)



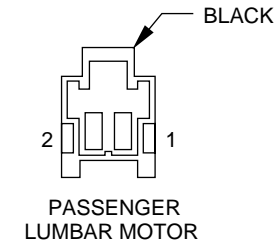
CAV	CIRCUIT	FUNCTION
A	F75 20WT	HORIZONTAL DRIVER
B	Z1 20BK	HEATER SWITCHED GROUND
C	F84 20GN	VERTICAL POSITION SENSOR SIGNAL
D	F86 20GY	SENSOR GROUND
E	F85 20VT	HORIZONTAL POSITION SENSOR SIGNAL
F	C16 20BK	HEATER 12 VOLT SUPPLY
G	F73 20DB	COMMON DRIVER
H	F71 20YL	VERTICAL DRIVER



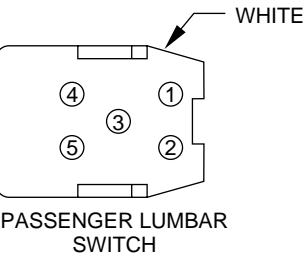
CAV	CIRCUIT	FUNCTION
A	Z1 16BK	GROUND
B	P88 16BR/BK	HEATED SEAT DRIVER



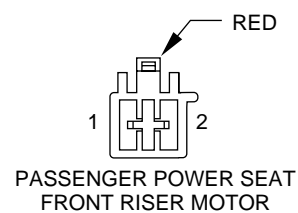
CAV	CIRCUIT	FUNCTION
A	P87 16BK/OR	HEATED SEAT DRIVER
B	P88 16BR/BK	HEATED SEAT DRIVER
C	P8 18LB/WT	PASSENGER HEATED SEAT SWITCH OUTPUT
D	Z1 20BK	GROUND



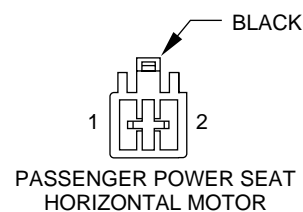
CAV	CIRCUIT	FUNCTION
1	P106 18DG/WT	LUMBAR FORWARD DRIVER
2	P107 18OR/BK	LUMBAR REARWARD DRIVER



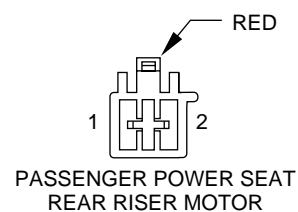
CAV	CIRCUIT	FUNCTION
1	P107 18OR/BK	LUMBAR REARWARD DRIVER
2	Z1 18BK	GROUND
3	F35 18RD	FUSE B(+)
4	Z1 18BK	GROUND
5	P106 18DG/WT	LUMBAR FORWARD DRIVER



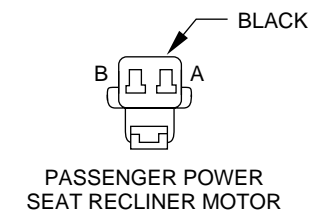
CAV	CIRCUIT	FUNCTION
1	P20 16RD/LG	FRONT RISER DOWN SWITCH SENSE
2	P18 16YL/LG	FRONT RISER UP SWITCH SENSE



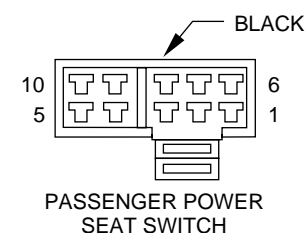
CAV	CIRCUIT	FUNCTION
1	P14 16YL/LB	HORIZONTAL FORWARD SWITCH SENSE
2	P16 16RD/LB	HORIZONTAL REARWARD SWITCH SENSE



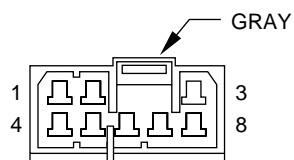
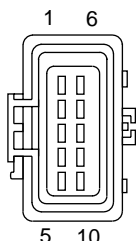
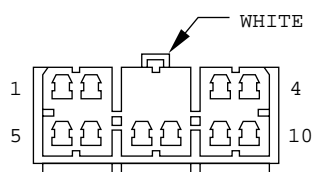
CAV	CIRCUIT	FUNCTION
1	P12 16RD/WT	REAR RISER DOWN SWITCH SENSE
2	P10 16YL/WT	REAR RISER UP SWITCH SENSE



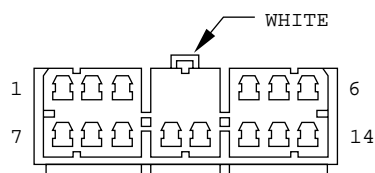
CAV	CIRCUIT	FUNCTION
A	P42 16GY/WT	RECLINER DOWN DRIVER
B	P44 16GY/LB	RECLINER UP DRIVER



CAV	CIRCUIT	FUNCTION
1	Z1 18BK	GROUND
2	P44 16GY/LB	RECLINER UP DRIVER
3	P16 16RD/LB	HORIZONTAL REARWARD SWITCH SENSE
4	P42 16GY/WT	RECLINER DOWN DRIVER
5	F35 16RD	FUSED B(+)
6	P14 16YL/LB	HORIZONTAL FORWARD SWITCH SENSE
7	P20 16RD/LG	FRONT RISER DOWN SWITCH SENSE
8	P12 16RD/WT	REAR RISER DOWN SWITCH SENSE
9	P10 16YL/WT	REAR RISER UP SWITCH SENSE
10	P18 16YL/LG	FRONT RISER UP SWITCH SENSE

PASSENGER SEAT HEATER
CONTROL MODULEPEDAL POSITION SENSOR
(DIESEL)

POWER AMPLIFIER - C1



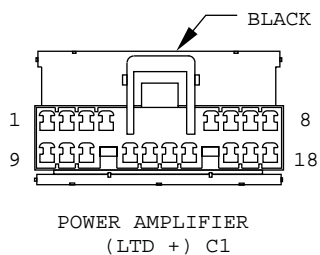
POWER AMPLIFIER - C2

CAV	CIRCUIT	FUNCTION
1	F87 18WT/BK	FUSED IGNITION SWITCH OUTPUT
2	F35 16RD	FUSED B(+)
3	P87 16BK/OR	HEATED SEAT DRIVER
4	-	-
5	-	-
6	-	-
7	Z1 18BK	GROUND
8	P8 18LB/WT	PASSENGER HEATED SEAT SWITCH OUTPUT

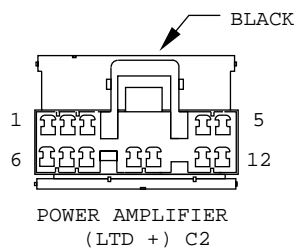
CAV	CIRCUIT	FUNCTION
3	K255 20WT/DG	PEDAL POSITION SENSOR
5	K151 20WT	LOW IDLE POSITION SWITCH
7	K6 20VT/WT	5 VOLT SUPPLY
8	K4A 18BK/LB	SENSOR GROUND
10	K22 20OR/DB	THROTTLE POSITION SENSOR SIGNAL

CAV	CIRCUIT	FUNCTION
1	X82 16LB/RD	AMPLIFIED RIGHT FRONT (+)
2	X80 16LB/DG	AMPLIFIED RIGHT FRONT (-)
3	X94 16TN/RD	AMPLIFIED RIGHT REAR (+)
4	X54 16VT	RIGHT FRONT (+)
5	X58 16DB/OR	RIGHT REAR (-)
6	X52 16DB/WT	RIGHT REAR (+)
7	-	-
8	X60 18DG/RD	RADIO 12 VOLT OUTPUT
9	X92 16TN/BK	AMPLIFIED RIGHT REAR (-)
10	X56 16DB	RIGHT FRONT (-)

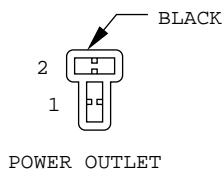
CAV	CIRCUIT	FUNCTION
1	X93 16WT/RD	AMPLIFIED LEFT REAR (+)
2	F75 16VT	FUSED B(+)
3	X87 16LG/RD	AMPLIFIED LEFT FRONT (+)
4	-	-
5	X51 16BR/YL	LEFT REAR (+)
6	X53 16DG	LEFT FRONT (+)
7	X91 16WT/BK	AMPLIFIED LEFT REAR (-)
8	F75 16VT	FUSED B(+)
9	X85 16LG/BK	AMPLIFIED LEFT FRONT (-)
10	Z5 16BK/LB	GROUND
11	Z5 16BK/LB	GROUND
12	-	-
13	X57 16BR/LB	LEFT REAR (-)
14	X55 16BR/RD	LEFT FRONT (-)



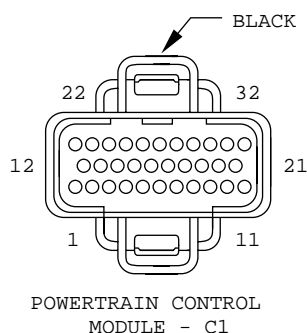
CAV	CIRCUIT	FUNCTION
1	-	
2	F75 16VT	FUSED B(+) POWER AMPLIFIER
3	Z5 16BK/LB	RADIO GROUND
4	-	-
5	X56 16DB	RIGHT FRONT SPEAKER(-)
6	X55 16BR/RD	LEFT FRONT SPEAKER (-)
7	X58 16DB/OR	RIGHT REAR SPEAKER(-)
8	X57 16BR/LB	LEFT REAR SPEAKER(-)
9	X51 16BR/YL	LEFT REAR SPEAKER (+)
10	X52 16DB/WT	RIGHT REAR SPEAKER (+)
11	X53 16DG	LEFT FRONT SPEAKER (+)
12	X54 16VT	RIGHT FRONT SPEAKER(+)
13	-	-
14	X60 18DG/RD	RADIO 12 VOLT OUTPUT
15	-	-
16	Z5 16BK/LB	RADIO GROUND
17	F75 16VT	FUSED B(+) POWER AMPLIFIER
18	-	-



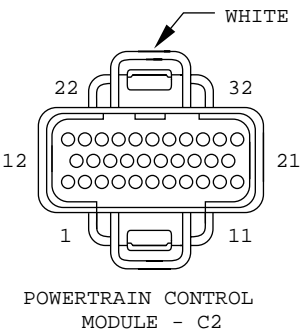
CAV	CIRCUIT	FUNCTION
1	X82 16LB/RD	AMPLIFIED RIGHT DOOR SPEAKER(+)
2	X80 16LB/DG	AMPLIFIED RIGHT SPEAKER DOOR (-)
3	X91 16WT/BK	AMPLIFIED LO LEFT REAR SPEAKER(-)
4	X95 16BR/YL	AMPLIFIED HI LEFT REAR SPEAKER(+)
5	X96 16DB/OR	AMPLIFIED RIGHT REAR SPEAKER(-)
6	X98 16DB/WT	AMPLIFIED RIGHT REAR SPEAKER(+)
7	X97 16BR/LB	AMPLIFIED HI RELT REAR SPEAKER(-)
8	X94 16TN/RD	RIGHT REAR SPEAKER(-)
9	X92 16TN/BK	RIGHT REAR SPEAKER(+)
10	X93 16WT/RD	AMPLIFIED LO LEFT REAR SPEAKER(+)
11	X85 16LG/BK	AMPLIFIED LEFT DOOR SPEAKER(-)
12	X87 16LG/RD	AMPLIFIED LEFT DOOR SPEAKER(+)



CAV	CIRCUIT	FUNCTION
1	F38 18OR	FUSED B(+)
2	Z1 18BK	GROUND



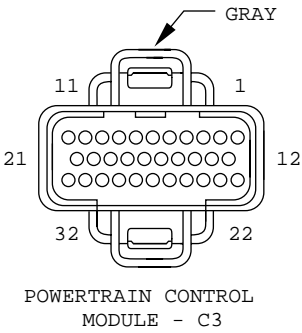
CAV	CIRCUIT	FUNCTION
A1	-	-
A2	F99 18OR	FUSED IGNITION SWITCH OUTPUT (START/RUN)
A3	-	-
A4	K4 18BK/LB	SENSOR GROUND
A5	-	-
A6	T41 18BK/WT	PARK NEUTRAL POSITION SWITCH SENSE
A7	K19 18GY/WT	IGNITION COIL NO. 1 DRIVER
A8	K27 18RD/LG	CRANKSHAFT POSITION SENSOR SIGNAL
A9	-	-
A10	K59 16VT/BK	IDLE AIR CONTROL NO. 4 DRIVER
A11	K40 16BR/WT	IDLE AIR CONTROL NO. 3 DRIVER
A12	-	-
A13	-	-
A14	-	-
A15	K21 16BK/RD	INTAKE AIR TEMPERATURE SENSOR SIGNAL
A16	K2 16TN/BK	ENGINE COOLANT TEMPERATURE SENSOR SIGNAL
A17	K25 18WT/BK	5 VOLT SUPPLY
A18	K24 18GY/BK	CAMSHAFT POSITION SENSOR SIGNAL
A19	K60 16YL/BK	IDLE AIR CONTROL NO. 2 DRIVER
A20	K39 16GY/RD	IDLE AIR CONTROL NO. 1 DRIVER
A21	-	-
A22	F5 14RD/YL	FUSED B(+)
A23	K22 18OR/DB	THROTTLE POSITION SENSOR SIGNAL
A24	K41 18BK/OR	UPSTREAM HEATED OXYGEN SENSOR SIGNAL
A25	K141 18BK/PK	DOWNSTREAM HEATED OXYGEN SENSOR SIGNAL
A26	-	-
A27	K70 18RD/WT	MAP SENSOR SIGNAL
A28	-	-
A29	-	-
A30	-	-
A31	Z12 14BK/TN	GROUND
A32	Z12 14BK/TN	GROUND



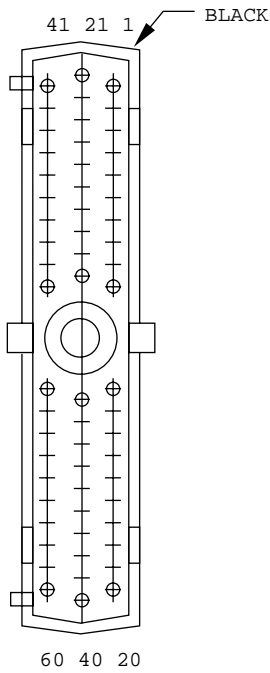
CAV	CIRCUIT	FUNCTION
B1	T54 18VT	TRANSMISSION TEMPERATURE SENSOR SIGNAL
B2	K17 18DB/WT*	INJECTOR NO. 7 DRIVER
B3	-	-
B4	K11 18WT/DB	INJECTOR NO. 1 DRIVER
B5	K13 18YL/WT	INJECTOR NO. 3 DRIVER
B6	K38 18GY	INJECTOR NO. 5 DRIVER
B7	-	-
B8	T59 18PK	VARIABLE FORCE SOLENOID CONTROL
B9	-	-
B10	K20 18DG	GENERATOR FIELD DRIVER
B11	T22 18DG/LB	TORQUE CONVERTER CLUTCH SOLENOID CONTROL
B12	K58 18BR/YL	INJECTOR NO. 6 DRIVER
B13	K18 18DB/YL*	INJECTOR NO. 8 DRIVER
B14	-	-
B15	K12 18TN	INJECTOR NO. 2 DRIVER
B16	K14 18LB/BR	INJECTOR NO. 4 DRIVER
B17	-	-
B18	-	-
B19	-	-
B20	-	-
B21	T60 18BR	OVERDRIVE SOLENOID CONTROL
B22	-	-
B23	G6 18GY/WT	OIL PRESSURE SENSOR SIGNAL
B24	-	-
B25	T13 18DB/BK	OUTPUT SHAFT SPEED SENSOR SIGNAL (-)
B26	-	-
B27	G7 18WT/OR	VEHICLE SPEED SENSOR SIGNAL
B28	T14 18LG/WT	OUTPUT SHAFT SPEED SENSOR SIGNAL (+)
B29	T25 18LG	GOVERNOR PRESSURE SIGNAL
B30	T66 18BR/OR	TRANSMISSION RELAY CONTROL
B31	K6 18VT/WT	5 VOLT SUPPLY
B32	-	-

* WITH 5.2L ENG

C142



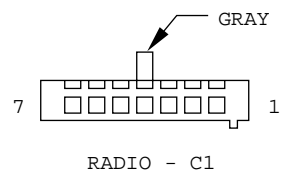
CAV	CIRCUIT	FUNCTION
C1	C13 18DB/RD	A/C COMPRESSOR CLUTCH RELAY CONTROL
C2	-	-
C3	K900 18PK/WT	AUTOMATIC SHUT DOWN RELAY CONTROL
C4	V36 18TN/RD	SPEED CONTROL VACUUM SOLENOID CONTROL
C5	V35 18LG/RD	SPEED CONTROL VENT SOLENOID CONTROL
C6	G68 18BR/YL	OVERDRIVE OFF LAMP DRIVER
C7	-	-
C8	-	-
C9	-	-
C10	J95 18DG/RD	VAPOR CANISTER SOLENOID DRIVER
C11	V32 18YL/RD	SPEED CONTROL ON/OFF SWITCH SENSE
C12	A142 18DG/OR	AUTOMATIC SHUT DOWN RELAY OUTPUT
C13	T9 18OR	OVERDRIVE OFF SWITCH SENSE
C14	J96 18VT/RD	VAPOR CANISTER PUMP SWITCH DRIVER
C15	T222 18RD/YL	BATTERY TEMPERATURE SENSE SIGNAL
C16	-	-
C17	-	-
C18	-	-
C19	K81 18DB	FUEL PUMP RELAY CONTROL
C20	K52 18PK/BK	EVAPORATIVE EMISSION SOLENOID CONTROL
C21	-	-
C22	C3 18DB/BK	A/C PRESSURE SWITCH SENSE
C23	-	-
C24	L53 18BR	STOP LAMP SWITCH SENSE
C25	K72 18DG/VT	VOLTAGE REGULATOR SIGNAL
C26	G40 18LB/BK	LOW FUEL SENSE
C27	D83 18BK/PK	SCI RECEIVE
C28	D2 18WT/BK	CCD BUS (-)
C29	D84 18BK/WT	SCI TRANSMIT
C30	D1 18VT/BR	CCD BUS (+)
C31	-	-
C32	K95 18PK	SPEED CONTROL SWITCH SIGNAL



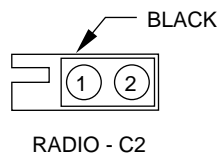
POWERTRAIN CONTROL MODULE - C4
(DIESEL)

CAV	CIRCUIT	FUNCTION
1	G40 18LB/BK	LOW FUEL WARNING
3	F6 18WT/RD	FUSED B(+)
4	K167 20BR/YL	SENSOR GROUND
6	K7 20OR/WT	5 VOLT SUPPLY
8	G18 20PK/BK	COOLANT LEVEL SENSOR
9	F99 18OR	FUSED IGNITION SWITCH OUTPUT
11	Z12 16BK/TN	GROUND
12	Z12 16BK/TN	GROUND
20	K20 18DG/YL	GENERATOR FIELD DRIVER
21	K222 20TN/RD	ENGINE COOLANT TEMPERATURE SENSOR SIGNAL
22	K48 18OR/RD	THROTTLE POSITION SENSOR SIGNAL
23	G123 20DG/WT	WATER-IN-FUEL SENSE
24	G21 20GY/LB	DISTRIBUTOR PICK-UP SIGNAL
25	D83 20BK/PK	SCI RECEIVE
26	D1 18VT/BR	CCD BUS(+)
29	L53 20BR	STOP LAMP SWITCH SENSE
41	K92 20PK	SPEED CONTROL SWITCH SIGNAL
42	G60 20GY/YL	OIL PRESSURE SENSOR SIGNAL
44	K185 18OR/LB	WAIT TO START LAMP
45	D84 20BK/WT	SCI TRANSMIT
46	D2 18WT/BK	CCD BUS(-)
47	G7 20WT/OR	VEHICLE SPEED SENSOR SIGNAL
54	G118 20PK/DB	ENGINE COOLANT LEVEL SIGNAL
57	A142 16DG/OR	AUTOMATIC SHUT DOWN RELAY OUTPUT
59	C103 20DG	A/C SWITCH SIGNAL

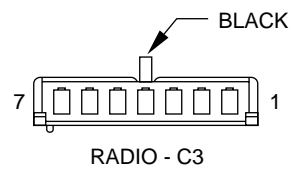
(CAVITIES NOT SHOWN ARE NOT USED)



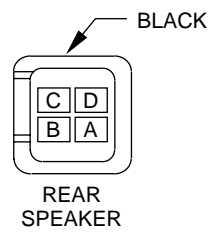
CAV	CIRCUIT	FUNCTION
1	-	-
2	X55 20BR/RD	LEFT FRONT (-)
3	X56 20DB	RIGHT FRONT (-)
4	L90 20DB/RD	PARK LAMP RELAY OUTPUT
5	E2 20OR	PANEL LAMP DRIVER
6	X12 18RD/GY	FUSED IGNITION SWITCH OUTPUT (ACC/RUN)
7	F60 20RD/WT	FUSED B(+)



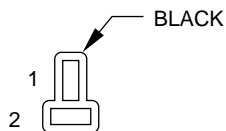
CAV	CIRCUIT	FUNCTION
1	D1 18VT/BR	CCD BUS (+)
2	D2 18WT/BK	CCD BUS (-)



CAV	CIRCUIT	FUNCTION
1	X60 20DG/RD	RADIO 12 VOLT OUTPUT
2	X51 20BR/YL	LEFT REAR (+)
3	X52 20DB/WT	RIGHT REAR (+)
4	X53 20DG	LEFT FRONT (+)
5	X54 20VT/YL	RIGHT FRONT (+)
6	X57 20BR/LB	LEFT REAR (-)
7	X58 20DB/OR	RIGHT REAR (-)

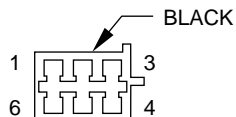


CAV	CIRCUIT	FUNCTION
A	X96 16DB/OR	
B	X98 16DB/WT	
C	X97 16BR/LB	
D	X95 16BR/YL	



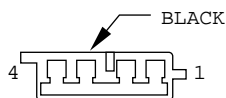
REAR WASHER
PUMP MOTOR

CAV	CIRCUIT	FUNCTION
1	V20 18WT/BK	REAR WASHER MOTOR CONTROL
2	Z2 18BK	GROUND



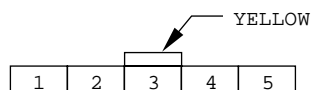
REAR WIPER
MODULE

CAV	CIRCUIT	FUNCTION
1	F70 16PK/BK	FUSED (B+)
2	V13 18BR/LG	REAR WIPER MOTOR CONTROL
3	Z1 14BK	GROUND
4	V24 18BR/OR	REAR WIPER MOTOR CONTROL (INT)
5	V20 18BK/WT	REAR WASHER MOTOR CONTROL
6	G78 20TN/BK	LIFTGATE AJAR SWITCH SENSE



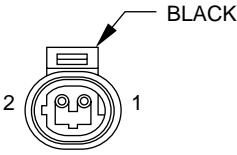
REAR WIPER/WASHER SWITCH

CAV	CIRCUIT	FUNCTION
1	V13 18BR/LG	REAR WIPER MOTOR CONTROL
2	V23 18BR/PK	FUSED IGNITION SWITCH OUTPUT (ACC/RUN)
3	V24 18BR/OR	REAR WIPER MOTOR CONTROL (INT)
4	V20 18WT/BK	REAR WASHER MOTOR CONTROL
	V20 18WT/BK	REAR WASHER MOTOR CONTROL



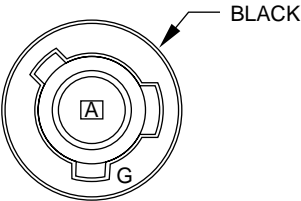
RECIRCULATION DOOR
ACTUATOR
(WITH AUTOMATIC
TEMPERATURE CONTROL)

CAV	CIRCUIT	FUNCTION
1	C33 20VT/OR	RECIRCULATION DOOR MOTOR DRIVER
2	-	-
3	-	-
4	C32 20LB/DG	RECIRCULATION DOOR MOTOR DRIVER
5	F71 20PK/DG	FUSED IGNITION SWITCH OUTPUT (RUN)



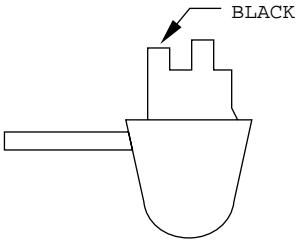
RIGHT AIRBAG
SENSOR

CAV	CIRCUIT	FUNCTION
1	R46 18BR/LB	RIGHT IMPACT SENSOR LINE 1
2	R48 18TN	RIGHT IMPACT SENSOR LINE 2



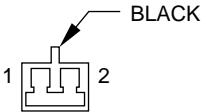
RIGHT BACK-UP LAMP

CAV	CIRCUIT	FUNCTION
A	L10 18BR/LG	BACK-UP LAMP SWITCH OUTPUT
G	Z1 18BK	GROUND



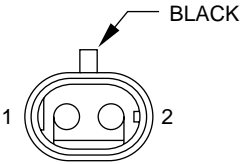
RIGHT
COURTESY LAMP

CAV	CIRCUIT	FUNCTION
A	M1 20PK	FUSED B(+)
B	M2 20YL	COURTESY LAMP RELAY OUTPUT



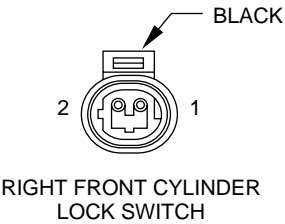
RIGHT DOOR
COURTESY LAMP

CAV	CIRCUIT	FUNCTION
1	M1 20PK	FUSED B(+)
2	Z1 20BK	GROUND

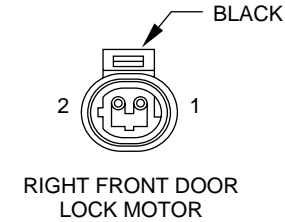


RIGHT FOG LAMP

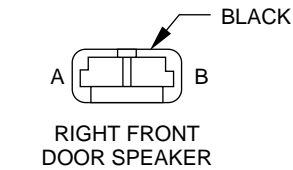
CAV	CIRCUIT	FUNCTION
1	Z1 18BK	GROUND
2	L39 18LB	FOG LAMP RELAY OUTPUT



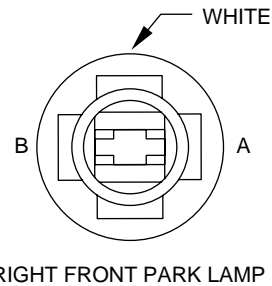
CAV	CIRCUIT	FUNCTION
1	G71 20VT/YL	VTSS DISARM SENSE
2	Z1 20BK	GROUND



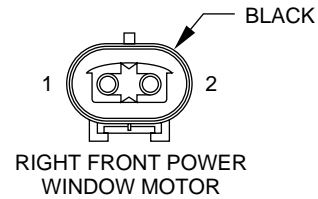
CAV	CIRCUIT	FUNCTION
1	P34 14PK/BK	DOOR UNLOCK DRIVER
2	P2 14BK/WT	DOOR LOCK DRIVER



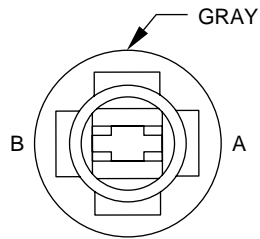
CAV	CIRCUIT	FUNCTION
A	X54 20VT	RIGHT FRONT (+)
B	X56 20DB/RD	RIGHT FRONT (-)



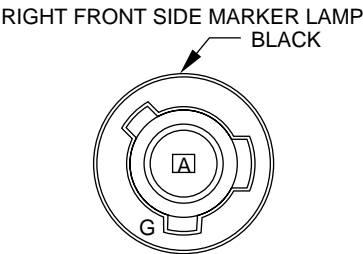
CAV	CIRCUIT	FUNCTION
A	L90 18DB/RD	PARK LAMP RELAY OUTPUT
B	Z1 18BK	GROUND



CAV	CIRCUIT	FUNCTION
1	Q12 16BR	RIGHT FRONT WINDOW DRIVER (UP)
2	Q22 16VT	RIGHT FRONT WINDOW DRIVER (DOWN)

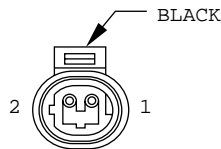


CAV	CIRCUIT	FUNCTION
A	L90 18DB/RD	PARK LAMP RELAY OUTPUT
B	L64 18TN/DB	TURN SIGNAL SWITCH OUTPUT



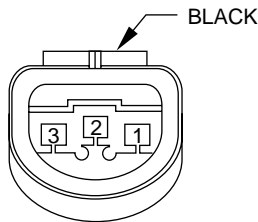
CAV	CIRCUIT	FUNCTION
A	L64 18TN/DB	TURN SIGNAL SWITCH OUTPUT
G	Z1 18BK	GROUND

RIGHT FRONT TURN
SIGNAL LAMP



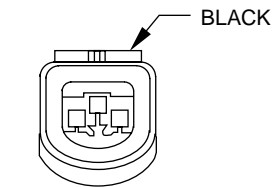
CAV	CIRCUIT	FUNCTION
1	B6 20WT/DB	RIGHT FRONT WHEEL SPEED SENSOR (-)
2	B7 20WT	RIGHT FRONT WHEEL SPEED SENSOR (+)

RIGHT FRONT
WHEEL SPEED
SENSOR



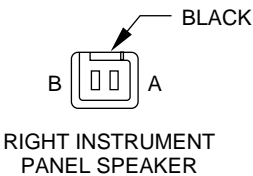
CAV	CIRCUIT	FUNCTION
1	Z1 16BK	GROUND
2	L4 16VT/OR	DIMMER SWITCH LOW BEAM OUTPUT
3	L3 16RD/OR	DIMMER SWITCH HIGH BEAM OUTPUT

RIGHT HEADLAMP



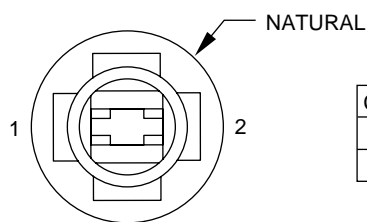
RIGHT HEADLAMP
LEVELING MOTOR •

CAV	CIRCUIT	FUNCTION
1	L104 20LG	POSITION 4
2	L103 20LB	POSITION 3
3	L102 20WT	POSITION 2
4	L105 20PK	POSITION 5
5	L106 20YL	POSITION 6
6	L101 20RD	POSITION 1



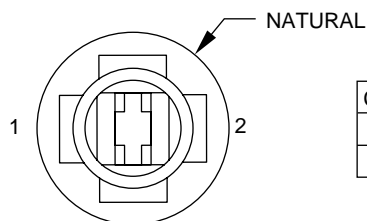
RIGHT INSTRUMENT
PANEL SPEAKER

CAV	CIRCUIT	FUNCTION
A	X82 20LB/RD	AMPLIFIED RIGHT FRONT (+)
B	X80 20LB/BK	AMPLIFIED RIGHT FRONT (-)



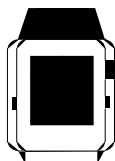
RIGHT LICENSE LAMP

CAV	CIRCUIT	FUNCTION
1	L90 20DB/RD	PARK LAMP RELAY OUTPUT
2	Z1 20BK	GROUND



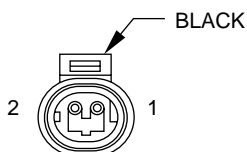
RIGHT PARK LAMP

CAV	CIRCUIT	FUNCTION
1	L90 18DB/RD	PARK LAMP RELAY OUTPUT
2	Z1 18BK	GROUND



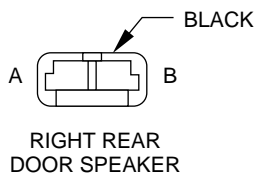
RIGHT PARK TURN
SIGNAL MARKER

CAV	CIRCUIT	FUNCTION
1	L64 18TN/DB	RIGHT TURN SIGNAL
2	L90 18DB/RD	PARK LAMP SWITCH OUTPUT
3	Z1 18BK	GROUND



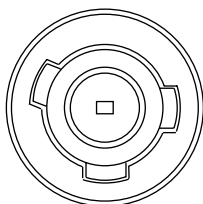
RIGHT REAR DOOR
LOCK MOTOR

CAV	CIRCUIT	FUNCTION
1	P34 18PK/BK	DOOR UNLOCK DRIVER
2	P2 18BK/WT	DOOR LOCK DRIVER



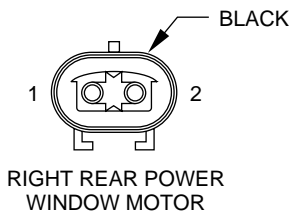
RIGHT REAR
DOOR SPEAKER

CAV	CIRCUIT	FUNCTION
A	X52 20DB/WT	RIGHT REAR (+)
B	X58 20DB/OR	RIGHT REAR (-)

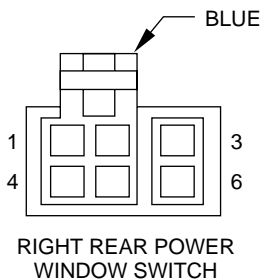


RIGHT REAR
FOG LAMP

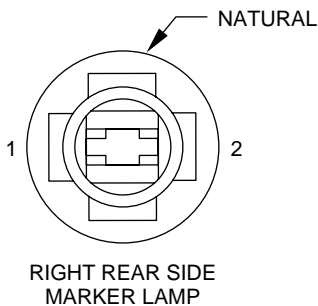
CAV	CIRCUIT	FUNCTION
A	L36 18LG/BK	REAR FOG LAMP
G	Z1 18BK	GROUND



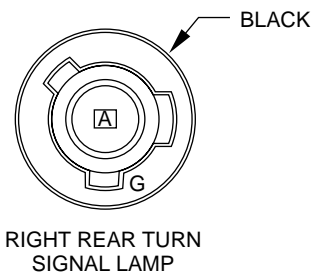
CAV	CIRCUIT	FUNCTION
1	Q12 16BR	RIGHT REAR WINDOW DRIVER (UP)
2	Q22 16VT	RIGHT REAR WINDOW DRIVER (DOWN)



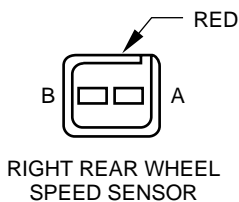
CAV	CIRCUIT	FUNCTION
1	Q18 16GY/BK	RIGHT REAR WINDOW DRIVER (UP)
2	Q12 16BR	RIGHT REAR WINDOW DRIVER (UP)
3	E20 20OR/DG	RIGHT REAR DOOR SWITCH ILLUMINATION
4	Q28 16DG/WT	RIGHT REAR WINDOW DRIVER (DOWN)
5	Q22 16VT	RIGHT REAR WINDOW DRIVER (DOWN)
6	Z1 16BK	GROUND



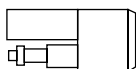
CAV	CIRCUIT	FUNCTION
1	Z1 18BK	GROUND
2	L22 18LB	PARK LAMP SWITCH OUTPUT



CAV	CIRCUIT	FUNCTION
A	L61 18LG	TURN SIGNAL SWITCH OUTPUT
G	Z1 18BK	GROUND

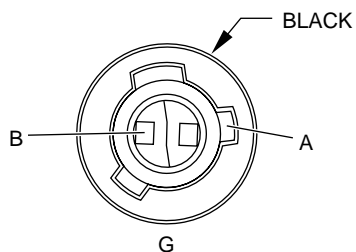


CAV	CIRCUIT	FUNCTION
A	B1 20YL/DB	RIGHT REAR WHEEL SPEED SENSOR (-)
B	B2 20YL	RIGHT REAR WHEEL SPEED SENSOR (+)



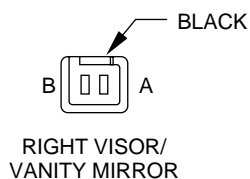
RIGHT SIDE REPEATER

CAV	CIRCUIT	FUNCTION
1	Z1 18BK	GROUND
2	L64 18LG/DB	RIGHT TURN SIGNAL

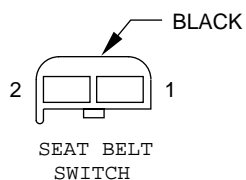


RIGHT TAIL/STOP LAMP

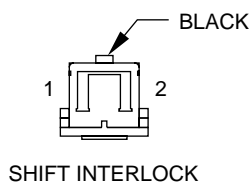
CAV	CIRCUIT	FUNCTION
A	L74 18PK/BK	STOP LAMP SWITCH OUTPUT
B	L21 18LB/WT	PARK LAMP SWITCH OUTPUT
G	Z1 18BK	GROUND

RIGHT VISOR/
VANITY MIRROR

CAV	CIRCUIT	FUNCTION
A	M1 20PK	FUSED B(+)
B	Z1 20BK	GROUND

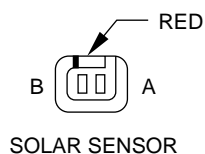
SEAT BELT
SWITCH

CAV	CIRCUIT	FUNCTION
1	G10 20LG/RD	SEAT BELT SWITCH SENSE
2	Z1 20BK	GROUND



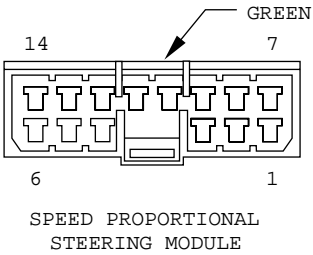
SHIFT INTERLOCK

CAV	CIRCUIT	FUNCTION
1	L53 20BR	SHIFT INTERLOCK SOLENOID SENSE
2	F87 20BK/WT	FUSED IGNITION SWITCH OUTPUT

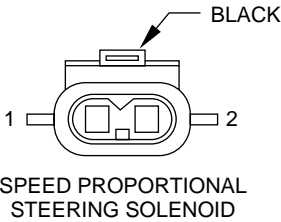


SOLAR SENSOR

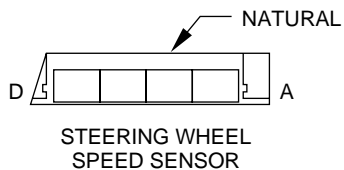
CAV	CIRCUIT	FUNCTION
A	C47 20BK/WT	SOLAR SENSOR SIGNAL
B	D41 20LG/WT	SENSOR GROUND



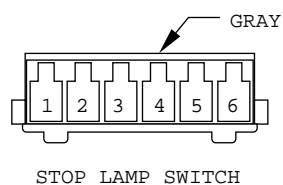
CAV	CIRCUIT	FUNCTION
1	S99 18LG	SPEED PROPORTIONAL STEERING SOLENOID CONTROL LOW
2	S98 18LB	SPEED PROPORTIONAL STEERING SOLENOID CONTROL HIGH
3	S2 20BK/LG	STEERING WHEEL SPEED SENSOR GROUND
4	-	-
5	S1 20BK/YL	5 VOLT SUPPLY
6	G7 18WT/OR	VEHICLE SPEED SENSOR SIGNAL
7	-	-
8	F83 20YL/DG	FUSED IGNITION SWITCH OUTPUT (RUN)
9	S4 20VT	STEERING WHEEL SPEED SENSOR SIGNAL B
10	Z2 20BK	GROUND
11	-	-
12	D83 20BK/PK	SCI TRANSMIT
13	D98 20WT	SCI RECEIVE
14	S3 20PK/WT	STEERING WHEEL SPEED SENSOR SIGNAL A



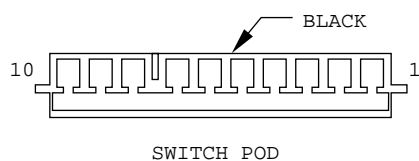
CAV	CIRCUIT	FUNCTION
1	S98 18LB	SPS SOLENOID CTL HIGH
2	S99 18LG	SPS SOLENOID CTL LOW



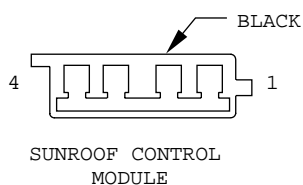
CAV	CIRCUIT	FUNCTION
A	S1 20BK/YL	5 VOLT SUPPLY
B	S2 20BK/LG	STEERING WHEEL SPEED SENSOR GROUND
C	S3 20PK/WT	STEERING WHEEL SPEED SENSOR SIGNAL A
D	S4 20VT	STEERING WHEEL SPEED SENSOR SIGNAL B



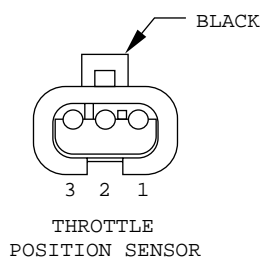
CAV	CIRCUIT	FUNCTION
1	L53 20BR	STOP LAMP SWITCH SENSE
2	Z1 20BK	GROUND
3	V32 20YL/RD	SPEED CONTROL ON/OFF SWITCH SENSE
4	V30 20DB/LG	SPEED CONTROL STOP LAMP SWITCH OUTPUT
5	L50 18WT/TN	STOP LAMP SWITCH OUTPUT
6	L16 18RD/LG	FUSED B(+)



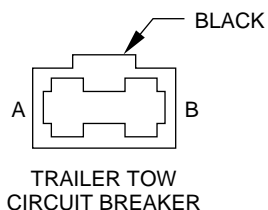
CAV	CIRCUIT	FUNCTION
1	P7 20LB	DRIVER HEATED SEAT SWITCH OUTPUT
2	Z1 20BK	GROUND
3	E2 20OR	PANEL LAMP DRIVER
4	P8 20LB/WT	PASSENGER HEATED SEAT SWITCH OUTPUT
5	F71 20PK/DG	FUSED IGNITION SWITCH OUTPUT (RUN)
6	T9 20OR	OVERDRIVE OFF SWITCH SENSE
7	G68 20BR/YL	OVERDRIVE OFF LAMP DRIVER
8	-	-
9	C80 20DB/YL	REAR WINDOW DEFOGGER SWITCH SENSE
10	C16 20LB/YL	FUSED REAR WINDOW DEFOGGER RELAY OUTPUT



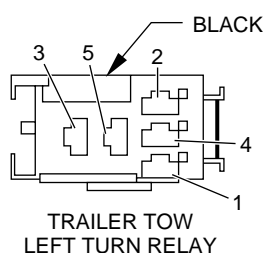
CAV	CIRCUIT	FUNCTION
1	Z1 16BK	GROUND
2	Q41 18WT	POWER SUNROOF OPEN
3	Q42 18LB	POWER SUNROOF CLOSE
4	F86 18LG/BK	FUSED IGNITION SWITCH OUTPUT



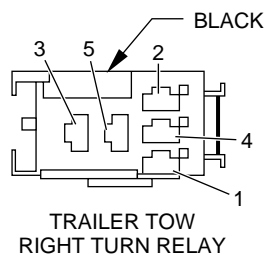
CAV	CAV	CIRCUIT	FUNCTION
●3	*1	K25 20WT/BK	5 VOLT SUPPLY
●2	*2	K22 18OR/DB	THROTTLE POSITION SENSOR SIGNAL
●1	*3	K4 20BK/LB	SENSOR GROUND



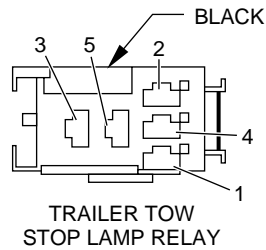
CAV	CIRCUIT	FUNCTION
A	F70 16PK/BK	FUSED B(+)
B	F70 16PK/BK	FUSED B(+)



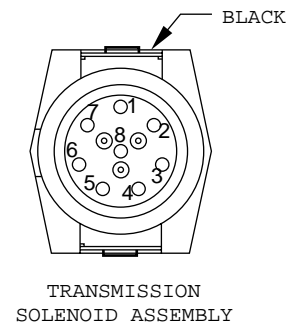
CAV	CIRCUIT	FUNCTION
1	L61 18LG	LEFT TURN SIGNAL
2	Z1 18BK	GROUND
3	L61 18LG/OR	LEFT TURN SIGNAL
4	95 18PK	FACTORY TRAILER TOW RELAY OUTPUTS
	95 18PK	FACTORY TRAILER TOW RELAY OUTPUTS
5	94 18DG	FACTORY TRAILER TOW RELAY OUTPUTS
	94 18DG	FACTORY TRAILER TOW RELAY OUTPUTS



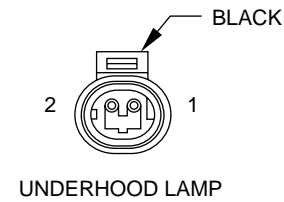
CAV	CIRCUIT	FUNCTION
1	L60 18TN	RIGHT TURN SIGNAL
2	Z1 18BK	GROUND
3	L60 18TN/OR	RIGHT TURN SIGNAL
4	95 18PK	FACTORY TRAILER TOW RELAY OUTPUTS
5	94 18DG	FACTORY TRAILER TOW RELAY OUTPUTS
6	-	-
7	-	-
8	-	-



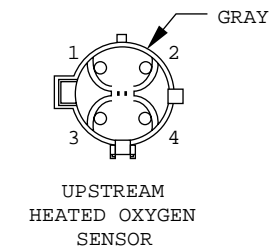
CAV	CIRCUIT	FUNCTION
1	L50 18WT/TN	STOP LAMP SWITCH OUTPUT
2	Z1 18BK	GROUND
3	F70 16PK/BK	FUSED B(+)
4	94 18DG	FACTORY TRAILER TOW RELAY OUTPUTS
5	95 18PK	FACTORY TRAILER TOW RELAY OUTPUTS



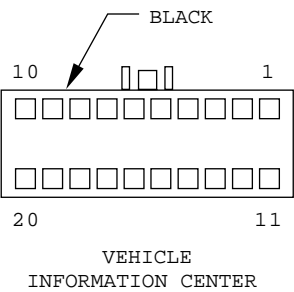
CAV	CIRCUIT	FUNCTION
1	T20 18LB	LOW/REVERSE SOLENOID CONTROL
2	K6 18VT/WT	5 VOLT SUPPLY
3	K4 18BK/LB	SENSOR GROUND
4	T25 18LG	GOVERNOR PRESSURE SIGNAL
5	T59 18PK	VARIABLE FORCE SOLENOID CONTROL
6	T60 18BR	OVERDRIVE SOLENOID CONTROL
7	T22 18DG/LB	TORQUE CONVERTER CLUTCH SOLENOID OUTPUT
8	T54 18VT	TRANSMISSION TEMPERATURE SENSOR SIGNAL



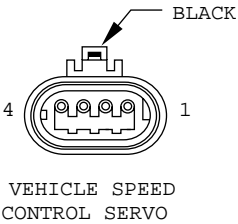
CAV	CIRCUIT	FUNCTION
1	M1 18PK	FUSED B(+)
2	Z1 18BK	GROUND



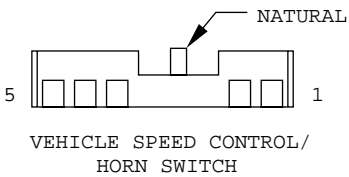
CAV	CIRCUIT	FUNCTION
1	A142 18DG/OR	AUTOMATIC SHUTDOWN RELAY OUTPUT
2	Z12 18BK/TN	GROUND
3	K4 18BK/LB	SENSOR GROUND
4	K41 18BK/OR	UPSTREAM HEATED OXYGEN SENSOR SIGNAL



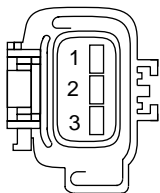
CAV	CIRCUIT	FUNCTION
1	G18 20PK/BK	ENGINE COOLANT LEVEL SWITCH SENSE
2	F60 20RD/WT	FUSED B(+)
3	Z2 20BK/OR	GROUND
4	L5 18OR/BK	TURN SIGNAL
5	G46 20BK/LB	REAR LAMP OUT INDICATOR DRIVER
6	-	-
7	D1 18VT/BR	CCD BUS (+)
8	D2 18WT/BK	CCD BUS (-)
9	-	-
10	E2 20OR	PANEL LAMP DRIVER
11	L90 20DB/RD	PARK LAMP RELAY OUTPUT
12	-	-
13	G29 20BK/TN	WASHER FLUID LEVEL SENSE
14	107 20BK/RD	4-WHEEL DRIVE PART TIME LAMP
15	T106 20GY/OR	4-WHEEL DRIVE FULL TIME LAMP
16	F83 18YL/DG	FUSED IGNITION SWITCH OUTPUT (RUN)
17	T19 20YL/BK	4-WHEEL DRIVE PART TIME LAMP
18	G42 20LB/RD	ALL TIME FRONT WHEELS
19	G28 20LG/OR	2-WHEEL DRIVE OR REAR WHEELS IN ALL TIME
20	Z1 20BK	GROUND



CAV	CIRCUIT	FUNCTION
1	V36 18TN/RD	SPEED CONTROL VACUUM SOLENOID CONTROL
2	V35 18LG/RD	SPEED CONTROL VENT SOLENOID CONTROL
3	V30 20DB/LG	SPEED CONTROL STOP LAMP SWITCH OUTPUT
4	Z4 20BK	GROUND



CAV	CIRCUIT	FUNCTION
1	K95 20PK	SPEED CONTROL SWITCH SIGNAL
2	K4 18BK/LB	SENSOR GROUND
3	709 20RD/BK	RADIO CONTROL MUX
4	Z2 20BK/OR	GROUND
5	X4 20GY/OR	HORN SWITCH



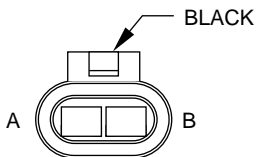
VEHICLE SPEED
SENSOR

CAV	CIRCUIT	FUNCTION
1	K7 20OR	8 VOLT SUPPLY
2	K167 20BR/YL	SENSOR GROUND
3	G7 20WT/OR	VEHICLE SPEED SENSOR SIGNAL



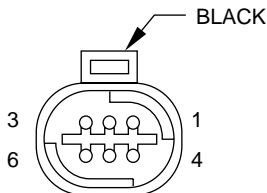
WATER IN FUEL SENSOR
(DIESEL)

CAV	CIRCUIT	FUNCTION
1	G123 20DG/WT	WATER IN FUEL SENSE
2	K167 20BR/YL	SENSOR RETURN



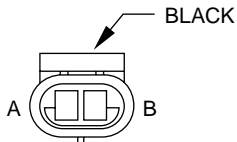
WINDSHIELD WASHER
PUMP MOTOR

CAV	CIRCUIT	FUNCTION
A	V11 18TN/BK	WASHER SWITCH OUTPUT
B	Z2 18BK	GROUND



WINDSHIELD
WIPER MOTOR

CAV	CIRCUIT	FUNCTION
1	F86 16LG/RD	FUSED IGNITION SWITCH OUTPUT (ACC/RUN)
2	V66 18VT/WT	WIPER PARK SWITCH SENSE
3	-	-
4	Z2 18BK	GROUND
5	V3 18BR/WT	WIPER SWITCH LOW SPEED OUTPUT
6	V4 18RD/YL	WIPER SWITCH HIGH SPEED OUTPUT



WIPER
FLUID LEVEL
SENSOR

CAV	CIRCUIT	FUNCTION
A	G29 16BK/TN	WASHER FLUID LEVEL SENSE
B	Z2 16BK	GROUND

8W-90 CONNECTOR LOCATIONS

DESCRIPTION AND OPERATION

INTRODUCTION

This section provides illustrations identifying component and connector locations in the vehicle. A connector index is provided. Use the wiring diagrams in

each section for connector number identification. Refer to the index for the proper figure number.

CONNECTOR/GROUND LOCATIONS

For items that are not shown in this section N/S is placed in the Fig. column

Connector Name/Number	Color	Location	Fig.
A/C Heater Control	BK	Rear of Switch	N/S
A/C High Pressure Switch	BK	Near A/C Compressor	6, 8, 11
A/C Low Pressure Switch	BK	Right Rear Corner of Engine Compartment	2
After Market Trailer Tow Connector	BK	Left Rear Quarter Panel	N/S
Airbag Control Module C1	BK	Below Center Floor Console, Near Park Brake	19
Airbag Control Module C2	YL	Below Center Floor Console, Near Park Brake	19
Ambient Temperature Sensor	BK	On Radiator Center Support	1
Auto Headlamp Light Sensor VTSS LED	BK	Top of Instrument Panel, Between Steering Column and Center Floor Console	14
Automatic Day/Night Rearview Mirror	BK	Behind Rear View Mirror	18
Automatic Temperature Control Module	BK	Left Side of HVAC Housing	N/S
Battery Temperature Sensor	BK	Below Battery Tray	4
Blend Air Door Motor	BK	On Bottom of HVAC Unit	N/S
Blend Air Actuator	BK	On Bottom of HVAC Unit	N/S

Connector Name/Number	Color	Location	Fig.
Blower Motor	NAT	Right Side of HVAC	N/S
Blower Motor Resistor Block	BK	Right Side of HVAC	N/S
Blower Motor Switch	BK	On HVAC Unit	N/S
Blower Power Module	BK	On HVAC Unit	N/S
Body Control Module C1	BK	Lower Left of Instrument Panel	16
Body Control Module C2	WT	Lower Left of Instrument Panel	16
Body Control Module C3	BK	Lower Left of Instrument Panel	16
Brake Warning Switch	BK	Right Fender Side Shield, Near Brake Master Cylinder	3
C102	BK	Rear of Fog Lamp	1
C131	BK	Right Rear Corner of Engine Compartment, Near PCM	2
C132	BK	Right Rear Corner of Engine Compartment, Near PCM	2
C137	BK	Rear of Engine (Diesel Engine)	13
C142	BK	Right Rear Corner of Engine Compartment At PCM	N/S
C144	BK	Below PDC	6, 12
C150	BK	Rear of Fog Lamp	1
C160	BK	Right Corner of Instrument Panel	15

DESCRIPTION AND OPERATION (Continued)

Connector Name/Number	Color	Location	Fig.
C206	BK	On Front of HVAC Unit	15
C212	RD	Center of Instrument Panel	14
C213	GN	Behind Right Kick Panel, At Junction Block	15
C231	BK	Right End of Instrument Panel	N/S
C233	BK	Lower Left of Instrument Panel, In Connector Bracket	16
C234	WT	Lower Left of Instrument Panel, In Connector Bracket	16
C235	BK	Lower Left of Instrument Panel, In Connector Bracket	16
C236	WT	Lower Left of Instrument Panel, In Connector Bracket	16
C300	YL	Lower Left of Instrument Panel	16
C301	NAT	Lower Left of Instrument Panel, In Connector Bracket	16
C302	WT	Lower Left of Instrument Panel, In Connector Bracket	16
C304	GY	Lower Left of Instrument Panel	N/S
C305	BK	Lower Left of Instrument Panel, In Connector Bracket	16
C307	BK	Lower Left of Instrument Panel	16

Connector Name/Number	Color	Location	Fig.
C309	GY	In Left Rear Door	22
C320	GY	Right Rear Quarter Panel, Near Bottom of Liftgate Opening	19
C321	BK	In Liftgate	24
C322	GN	In Liftgate	24
C323	GY	In Liftgate	24
C324	BK	In Liftgate	24
C325	BK	In Liftgate	24
C326	GY	In Liftgate	24
C328	GY	Left Rear Quarter Panel, Near Bottom of Liftgate Opening	20
C329	BK	Below Left Rear Passenger Seat	20
C330	GY	In Right Rear Door	22
C334	BK	In Left Front Door	21
C335	BK	Below Left Rear Passenger Seat	19
C343	BK	In Left Rear Door	22
C345	BK	In Right Rear Door	22
C351	GY	In Right Front Door	21
C353	BK	In Left Front Door	21
C359	BK	In Liftgate	24
C364	BK	In Liftgate	24
C372	BK	Right Rear Quarter Panel	23
C906	BK	Rear of Engine (Diesel)	11
C907	BK	At Fuel Filter	11
C908	BK	At Fuel Filter	11
C914	BK	Below PDC	12
C917	BK	Near Generator	N/S
Camshaft Position Sensor	BK	Near Distributor	5, 9
Cargo Lamp	BK	Rear of Cargo Lamp	20

DESCRIPTION AND OPERATION (Continued)

Connector Name/Number	Color	Location	Fig.
Center High Mounted Stop Lamp Bulb No. 1	BK	At Lamp	N/S
Center High Mounted Stop Lamp Bulb No. 2	BK	At Lamp	N/S
Center High Mounted Stop Lamp Bulb No. 3	BK	At Lamp	N/S
Cigar Lighter	BK	Rear of Cigar Lighter	14
Controller Anti-Lock Brake	BK	At Anti-Lock Brake Controller	N/S
Crankshaft Position Sensor	BK	Right Rear of Engine 4.0L Engine Rear of Engine 5.2L Engine	5, 9
Data Link Connector	BK	Lower Left of Instrument Panel	14
Daytime Running Lamp Module	BK	Right Fender Side Shield, Below PDC	2
Dome/Reading Lamp	NAT	Behind Dome Lamp	18
Downstream Heated Oxygen Sensor	BK	Above Rear of Catalytic Converter	7, 10
Driver Door Module C1	WT	In Left Front Door	21
Driver Door Module C2	BK	In Driver's Door	N/S
Driver Door Module C3	BK	In Driver's Door	N/S
Driver Heated Seat Back	BK	Under Driver's Seat	N/S
Driver Heated Seat Cushion	BK	Under Driver's Seat	N/S
Driver Lumbar Motor	BK	Under Driver's Seat	N/S
Driver Power Seat Front Riser Motor	RD	Under Driver's Seat	N/S
Driver Power Seat Front Riser Motor Sensor	BK	Under Driver's Seat	N/S

Connector Name/Number	Color	Location	Fig.
Driver Power Seat Horizontal Motor	BK	Under Driver's Seat	N/S
Driver Power Seat Horizontal Motor Sensor	BK	Under Driver's Seat	N/S
Driver Power Seat Lumbar Motor Sensor	BK	Under Driver's Seat	N/S
Driver Power Seat Lumbar Switch	BK	Under Driver's Seat	N/S
Driver Power Seat Rear Riser Motor	RD	Under Driver's Seat	N/S
Driver Power Seat Rear Riser Motor Sensor	BK	Under Driver's Seat	N/S
Driver Power Seat Recliner Motor	BK	Under Driver's Seat	N/S
Driver Power Seat Recliner Motor Sensor	BK	Under Driver's Seat	N/S
Driver Power Seat Switch	GN	Under Driver's Seat	N/S
Driver Seat Heater Control Module	BK	Under Driver's Seat	N/S
Driver Side Airbag	YL	Lower Left of Instrument Panel	16, 17
Duty Cycle EVAP/Purge Solenoid	BK	Front of Left Fender Side Shield	3
Engine Coolant Level Sensor	BK	Right Rear Corner of Engine Compartment	2
Engine Coolant Temperature Sensor	BK	On Thermostat Housing Rear of Generator	5, 8
Engine Starter Motor	BK	At Starter Motor	6, 8
Evaporative System Leak Detection Pump	BK	Front of Left Fender Side Shield	3
Factory Trailer Tow Connector	BK	On Trailer Hitch	23

DESCRIPTION AND OPERATION (Continued)

Connector Name/Number	Color	Location	Fig.
Floor Console Lamps	BK	Left Side of Center Floor Console	19
Four-Wheel Drive Switch	BK	Left Front of Transfer Case	7, 10
Fuel Heater	BK	At Fuel Heater/Filter	11
Fuel Pump Module	BK	Near Fuel Tank	19
G100		Right Fender Side Shield	2
G101		Right Side of Engine Block 4.0L Engine Below Generator 5.2L Engine	6, 8
G103		Right Side of Engine Block 4.0L Engine Below Generator 5.2L Engine	6, 8
G104		Right Side of Engine Block 4.0L Engine	8
G104		Below Generator 5.2L Engine	8
G104		Below A/C Compressor Diesel Engine	13
G105		Right Rear of Engine 4.0L Engine Below A/C Compressor 5.2L Engine	5, 9
G106		Right Fender Side Shield	2
G107		Right Fender Side Shield	2
G108		Front of Left Fender Side Shield	3
G109		Front of Left Fender Side Shield	3
G300		Right Rear Quarter Panel	19

Connector Name/Number	Color	Location	Fig.
G301		Rear of Passenger's Seat	19
G302		On Floor Pan Rear of Driver's Seat	20
G303		On Floor Pan Rear of Driver's Seat	20
G304		On Floor Pan Rear of Driver's Seat	20
G305		On Floor Pan Rear of Driver's Seat	20
G-Switch	BK	Below Right Rear Passenger Seat	19
Generator	BK	At Generator	6
Glove Box Lamp	BK	At Glove Box Lamp	14
Glow Plug Relay	BK	At PDC (Diesel Engine)	N/S
Graphic Display Module/Vehicle Information Center	BK	Rear of Vehicle Information Center (VIC)	11
Headlamp Leveling Switch	BK	At Switch	N/S
Headlamp Switch	BK	Rear of Headlamp Switch	14
High Speed Blower Motor Relay	BK	Right Side of HVAC	N/S
Horn No. 1	BK	At Horn, Lower Right Front of Vehicle	1
Horn No. 2	BK	At Horn, Lower Right Front of Vehicle	1
Idle Air Control Motor	BK	On Throttle Body	5, 9
Ignition Coil	BK	Right Front of Engine	5, 8
Ignition Switch	BK	On Steering Column	17

DESCRIPTION AND OPERATION (Continued)

Connector Name/Number	Color	Location	Fig.
In-Car Temperature Sensor	BK	Center, Top of Instrument Panel	14
Injector No. 1	GY	At Injector	5, 9
Injector No. 2	GY	At Injector	5, 8
Injector No. 3	GY	At Injector	5, 9
Injector No. 4	GY	At Injector	5, 8
Injector No. 5	GY	At Injector	5, 9
Injector No. 6	GY	At Injector	5, 8
Injector No. 7	GY	At Injector	9
Injector No. 8	GY	At Injector	8
Instrument Cluster	BK	Rear of Instrument Cluster	14
Intake Air Temperature Sensor	GY	On Intake Manifold	5, 8
Junction Block - C1	BK	Behind Right Kick Panel	15
Junction Block - C2	BK	Behind Right Kick Panel	15
Junction Block - C3	BK	Behind Right Kick Panel	15
Junction Block - C4	BL*	Behind Right Kick Panel	15
Junction Block - C5	YL	Behind Right Kick Panel	15
Junction Block - C6	GY	Behind Right Kick Panel	15
Junction Block - C7	GN	Behind Right Kick Panel	15
Junction Block - C8	BK	Behind Right Kick Panel	N/S
Junction Block - C9	BK	Behind Right Kick Panel	N/S
Junction Block - C10	BK	Behind Right Kick Panel	N/S
Junction Block Body Connector - C13	BK	Behind Right Kick Panel	N/S
Junction Block Body Connector - C14	BK	Behind Right Kick Panel	N/S
Key-In Switch/ Halo Lamp	GY	On Steering Column, Near Ignition Switch	17

Connector Name/Number	Color	Location	Fig.
Lamp Outage Module C1	BK	Left Rear Quarter Panel, Near Bottom of Liftgate Opening	20
Lamp Outage Module C2	BK	Left Rear Quarter Panel, Near Bottom of Liftgate Opening	20
Left Back-Up Lamp	BK	At Lamp	N/S
Left Courtesy Lamp	BK	At Lamp	14
Left Door Courtesy Lamp	BK	In Left Front Door	21
Left Fog Lamp	BK	Left Fog Lamp	1
Left Front Cylinder Lock Switch	BK	In Left Front Door	21
Left Front Door Lock Motor	BK	In Left Front Door	21
Left Front Door Speaker	BK	In Left Front Door	21
Left Front Park Lamp	WT	At Lamp	N/S
Left Front Power Window Motor	BK	In Left Front Door	21
Left Front Side Marker Lamp	GY	At Lamp	N/S
Left Front Turn Signal Lamp	BK	At Lamp	N/S
Left Front Wheel Speed Sensor	BK	Left Rear Corner of Engine Compartment	3
Left Headlamp	BK	Rear of Headlamp	1
Left Headlamp Leveling Motor	BK	At Headlamp	1
Left Instrument Panel Speaker	BK	Rear of Left Instrument Panel Speaker	14
Left License Lamp	NAT	In Liftgate Behind License Plate Lamps	26
Left Rear Door Lock Motor	BK	In Left Rear Door	22
Left Rear Door Speaker	BK	In Left Rear Door	22

DESCRIPTION AND OPERATION (Continued)

Connector Name/Number	Color	Location	Fig.
Left Rear Power Window Motor	BK	In Left Rear Door	22
Left Rear Power Window switch	BL	In Left Rear Door	22
Left Rear Side Marker Lamp	NAT	At Lamp	N/S
Left Rear Turn Signal Lamp	BK	At Lamp	N/S
Left Rear Wheel Speed Sensor	BK	Below Right Rear Passenger Seat	19
Left Side Repeater Lamp	BK	At Lamp	N/S
Left Tail/Stop Lamp	BK	At Lamp	N/S
Left Visor/Vanity Mirror	BK	Top of Left A-Pillar	18
Liftgate Ajar Switch	BK	In Liftgate	24
Liftgate Cylinder Lock Switch	BK	In Liftgate	24
Liftgate Lock Motor	BK	In Liftgate	24
Liftglass Ajar Switch	BK	In Liftgate	24
Liftglass Limit Switch	NAT	In Liftgate	24
Liftglass Push Button	BK	In Liftgate	24
Liftglass Release Solenoid	BK	In Liftgate	24
Low Washer Fluid Level Sensor	BK	Below Battery Tray	4
Manifold Absolute Pressure Sensor	BK	On Throttle Body	5, 9
Memory Seat Module Connector C1	BK	At Driver's Seat	N/S
Memory Seat Module Connector C2	BK	At Driver's Seat	N/S
Mini Overhead Console	GY	Under Passenger's Seat	N/S
Mode Door Motor	BK	Left Side of HVAC	N/S

Connector Name/Number	Color	Location	Fig.
Multi-Function Switch	BK	On Steering Column	17
Oil Pressure Sensor	BK	Near Distributor	5, 9
Output Shaft Speed Sensor	BK	Left Side of Transmission	7, 10
Overhead Console	RD	Center of Headliner, Above Rear View Mirror	18
Overhead Console Junction Block	BK	Behind Right Kick Panel, At Junction Block	15
Park/Neutral Position Switch	BK	Left Side of Transmission	7, 10
Passenger Airbag	YL	Behind Passenger Airbag	14
Passenger Door Module	WT	In Right Front Door	21
Passenger Heated Seat Back	GN	Under Passenger's Seat	N/S
Passenger Heated Seat Cushion	BK	Under Passenger's Seat	N/S
Passenger Lumbar Motor	BK	Under Passenger's Seat	N/S
Passenger Lumbar Switch	WT	Under Passenger's Seat	N/S
Passenger Power Seat Front Riser Motor	RD	Under Passenger's Seat	N/S
Passenger Power Seat Horizontal Motor	BK	Under Passenger's Seat	N/S
Passenger Power Seat Rear Riser Motor	RD	Under Passenger's Seat	N/S
Passenger Power Seat Recliner Motor	BK	Under Passenger's Front Seat	N/S
Passenger Power Seat Switch	BK	Under Passenger's Front Seat	N/S

DESCRIPTION AND OPERATION (Continued)

Connector Name/Number	Color	Location	Fig.
Passenger Seat Heater Control Module	GY	Under Passenger's Seat	N/S
Power Amplifier C1	WT	Below Right Rear Passenger Seat	13
Power Amplifier C2	WT	Below Right Rear Passenger Seat	13
Power Antenna Motor	BK	At Junction Block	N/S
Power Outlet	BK	Rear of Power Outlet	14
Powertrain Control Module C1	BK	Right Rear Corner of Engine Compartment At PCM	2
Powertrain Control Module C2	WT	Right Rear Corner of Engine Compartment At PCM	2
Powertrain Control Module C3	GY	Right Rear Corner of Engine Compartment At PCM	2
Radio C1	GY	Rear of Radio	14
Radio C2	BK	Rear of Radio	14
Radio C3	BK	Rear of Radio	14
Rear Speaker	BK	Rear Door	22
Rear Washer Pump Motor	BK	Bottom of Windshield Washer Fluid Reservoir	4
Rear Wiper Motor	BK	In Liftgate	24
Rear Wiper/Washer Switch	BK	Behind Rear Wiper Switch	14
Recirculation Door Motor	YL	Top of HVAC	N/S
Right Back-Up Lamp	BK	At Lamp	N/S
Right Courtesy Lamp	BK	Right Courtesy Lamp	14
Right Door Courtesy Lamp	BK	In Right Front Door	21
Right Fog Lamp	BK	Rear of Fog Lamp	1

Connector Name/Number	Color	Location	Fig.
Right Front Cylinder Lock Switch	BK	In Right Front Door	21
Right Front Door Lock Motor	BK	In Right Front Door	21
Right Front Door Speaker	BK	In Right Front Door	21
Right Front Park Lamp	WT	At Lamp	N/S
Right Front Power Window Motor	BK	In Right Front Door	21
Right Front Side Marker Lamp	GY	At Lamp	N/S
Right Front Turn Signal Lamp	BK	At Lamp	N/S
Right Front Wheel Speed Sensor	BK	Right Rear Corner of Engine Compartment	2
Right Headlamp	BK	Right Fog Lamp	1
Right Headlamp Leveling Motor	BK	At Headlamp	1
Right Instrument Panel Speaker	BK	Top Right of Instrument Panel	14
Right License Lamp	NAT	In Liftgate, Behind License Plate Lamps	26
Right Rear Door Lock Motor	BK	In Right Rear Door	22
Right Rear Door Speaker	BK	In Right Rear Door	22
Right Rear Power Window Motor	BK	In Right Rear Door	22
Right Rear Power Window Switch	BL	In Right Rear Door	22
Right Rear Side Marker Lamp	NAT	At Lamp	N/S
Right Rear Turn Signal Lamp	BK	At Lamp	N/S
Right Rear Wheel Speed Sensor	RD	Below Right Rear Passenger Seat	19
Right Side Repeater Lamp	BK	At Lamp	N/S

DESCRIPTION AND OPERATION (Continued)

Connector Name/Number	Color	Location	Fig.
Right Tail/Stop Lamp	BK	At Lamp	N/S
Right Visor/Vanity Mirror	BK	Top of Right A-Pillar	18
Seat Belt Switch	BK	Near Bottom of Driver's Seat Belt Clasp	19
Shift Interlock	BK	Steering Column, On Shift Cable	N/S
Solar Sensor	RD	Above Glove Box	14
Speed Proportional Steering Control Module	GN	Top Left Corner of Dash Panel, Behind Instrument Panel	16
Speed Proportional Steering Solenoid	BK	On Power Steering Pump	3, 5
Steering Wheel Speed Sensor	RD	Above Glove Box	14
Stop Lamp Switch	GY	Top of Brake Pedal Arm	16
Sunroof Control Module	BK	Rear of Sunroof	N/S
Sunroof Motor	BK	Rear of Sun Roof	N/S
Sunroof Switch	NAT	Center of Headliner, Above Rear View Mirror	18
Switch Pod	BK	Rear of Overdrive Switch	14

Connector Name/Number	Color	Location	Fig.
Throttle Position Sensor	BK	On Throttle Body	5, 9
Trailer Tow Circuit Breaker	BK	Right Rear Quarter Panel	23
Trailer Tow Left Turn Relay	BK	Right Rear Quarter Panel	23
Trailer Tow Right Turn Relay	BK	Right Rear Quarter Panel	23
Trailer Tow Stop Lamp Relay	BK	Right Rear Quarter Panel	23
Transmission Solenoid Assembly	BK	Left Side of Transmission	7, 10
Underhood Lamp	BK	On Underside of Hood	25
Upstream Heated Oxygen Sensor	GY	Right Front of Transmission	10
Vehicle Speed Control Servo	BK	Right Fender Side Shield	2
Vehicle Speed Control/Horn Switch	NAT	On Steering Column	17
Vehicle Speed Sensor	BK	Rear of Transfer Case	7, 10
Windshield Washer Pump Motor	BK	Bottom of Windshield Washer Fluid Reservoir	4
Windshield Wiper Motor	BK	Center of Cowl	4

DESCRIPTION AND OPERATION (Continued)

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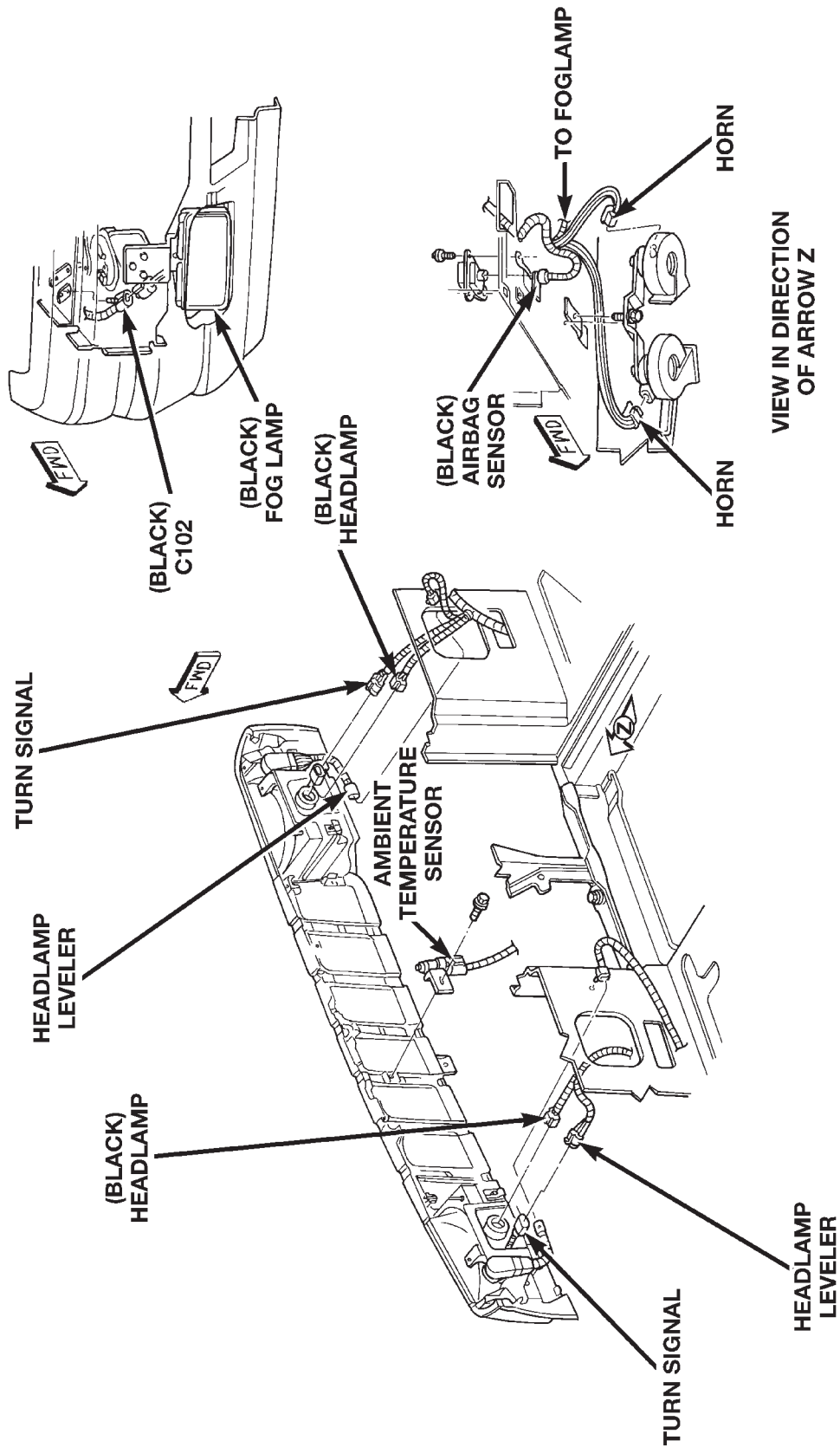


Fig. 1 Front End Lighting

DESCRIPTION AND OPERATION (Continued)

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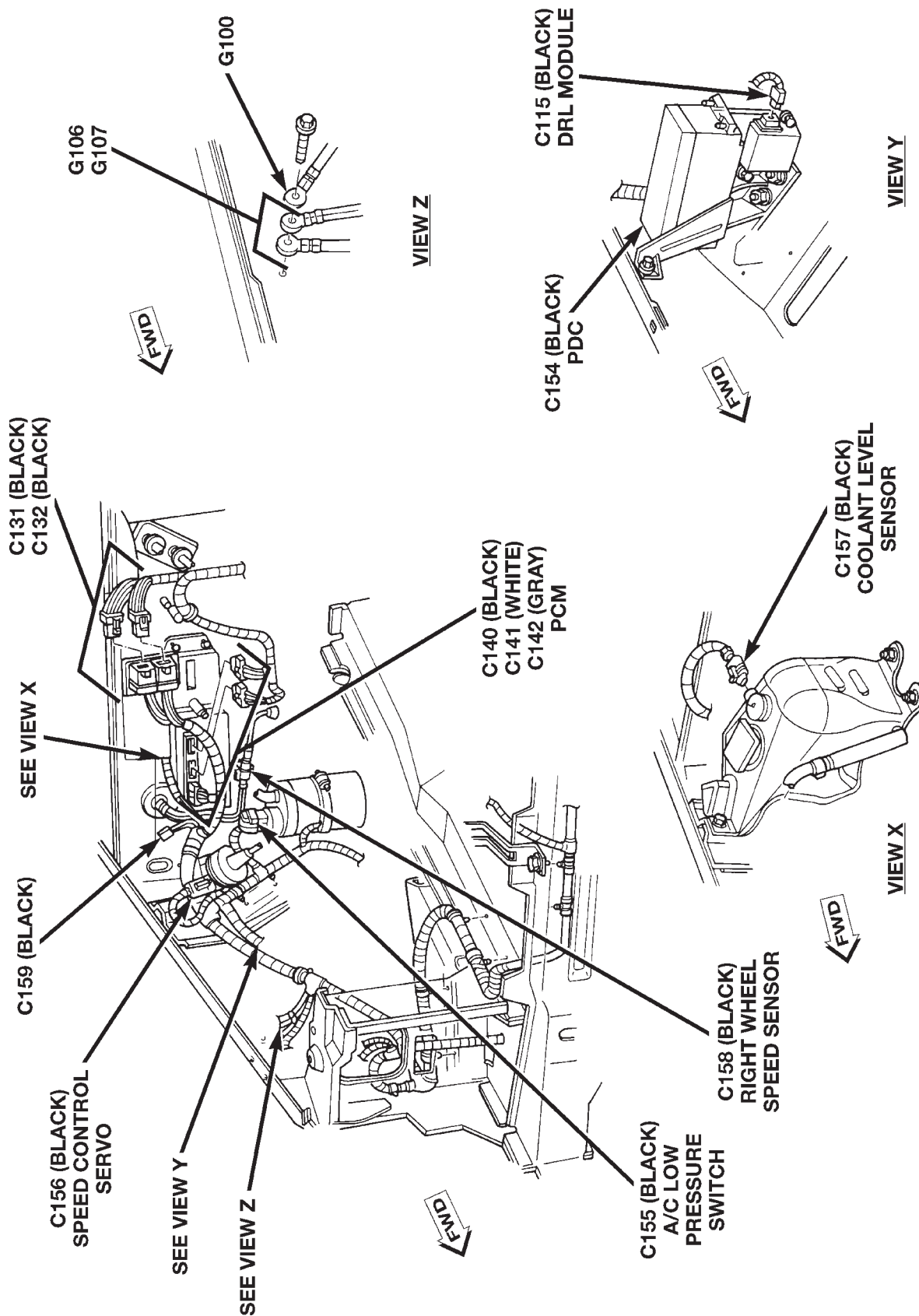
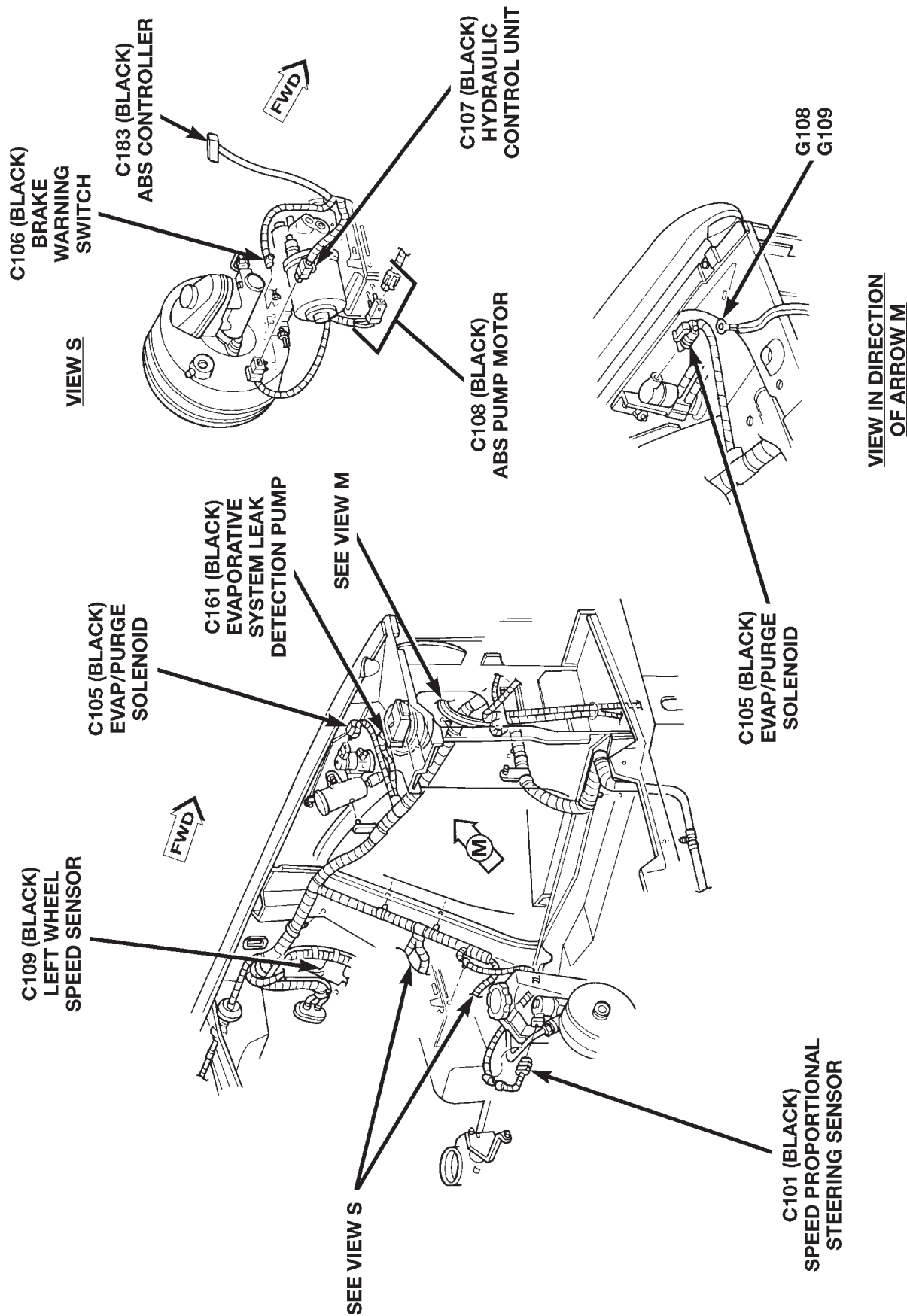


Fig. 2 Engine Compartment—Left Side

DESCRIPTION AND OPERATION (Continued)



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Fig. 3 Engine Compartment—Right Side

DESCRIPTION AND OPERATION (Continued)

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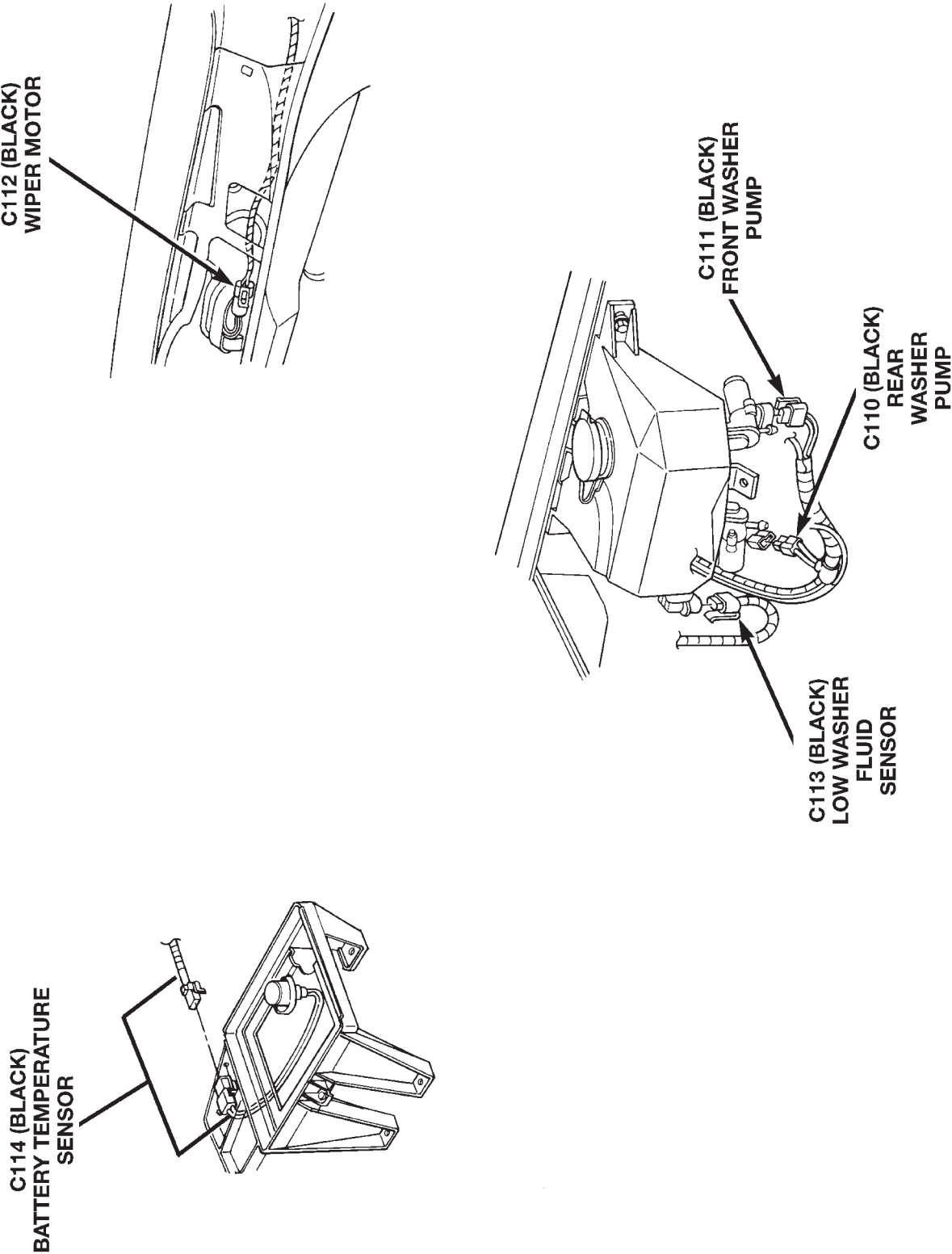


Fig. 4 Engine Compartment Connectors

DESCRIPTION AND OPERATION (Continued)

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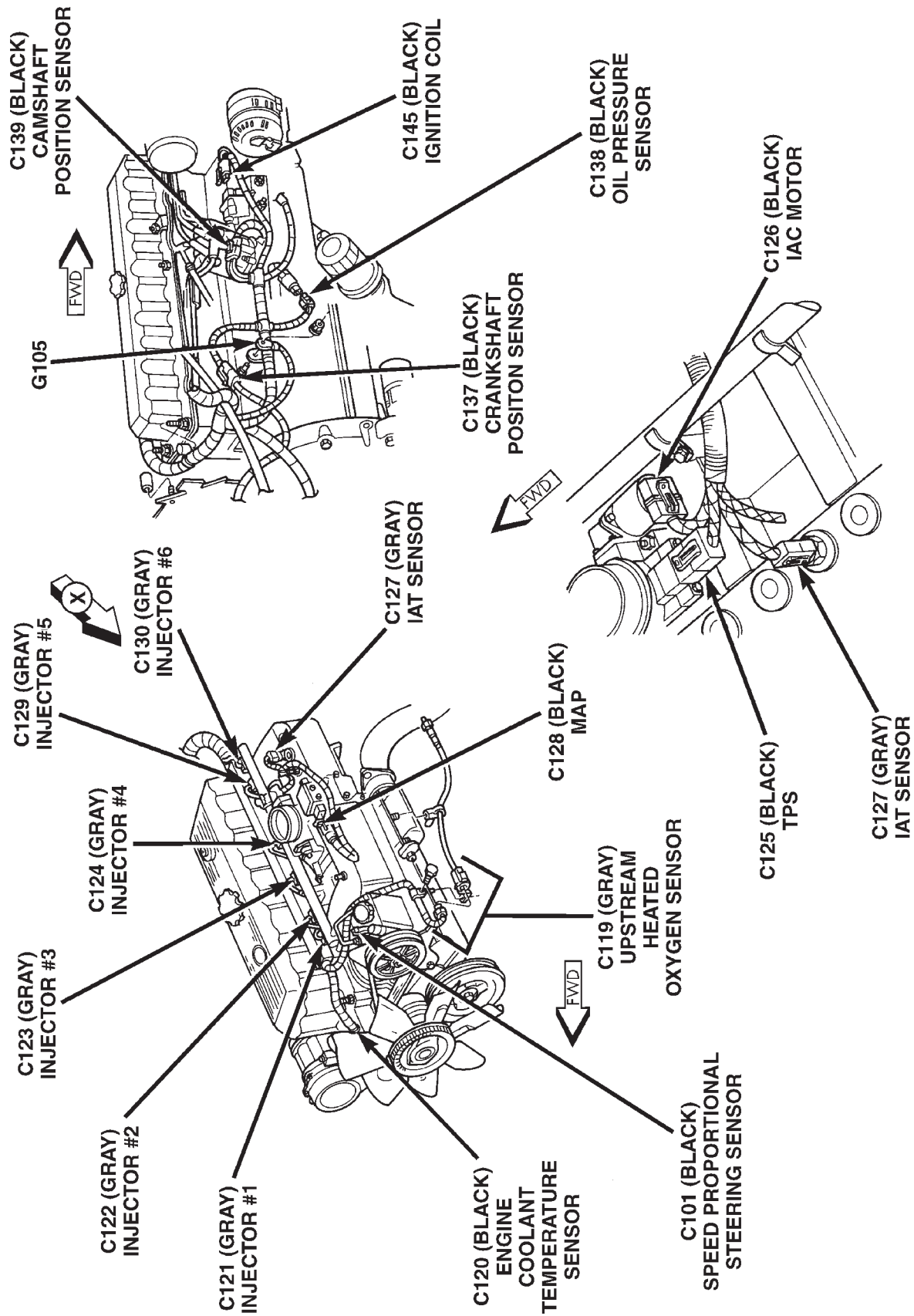


Fig. 5 Engine Connectors—4.0L Engine

DESCRIPTION AND OPERATION (Continued)

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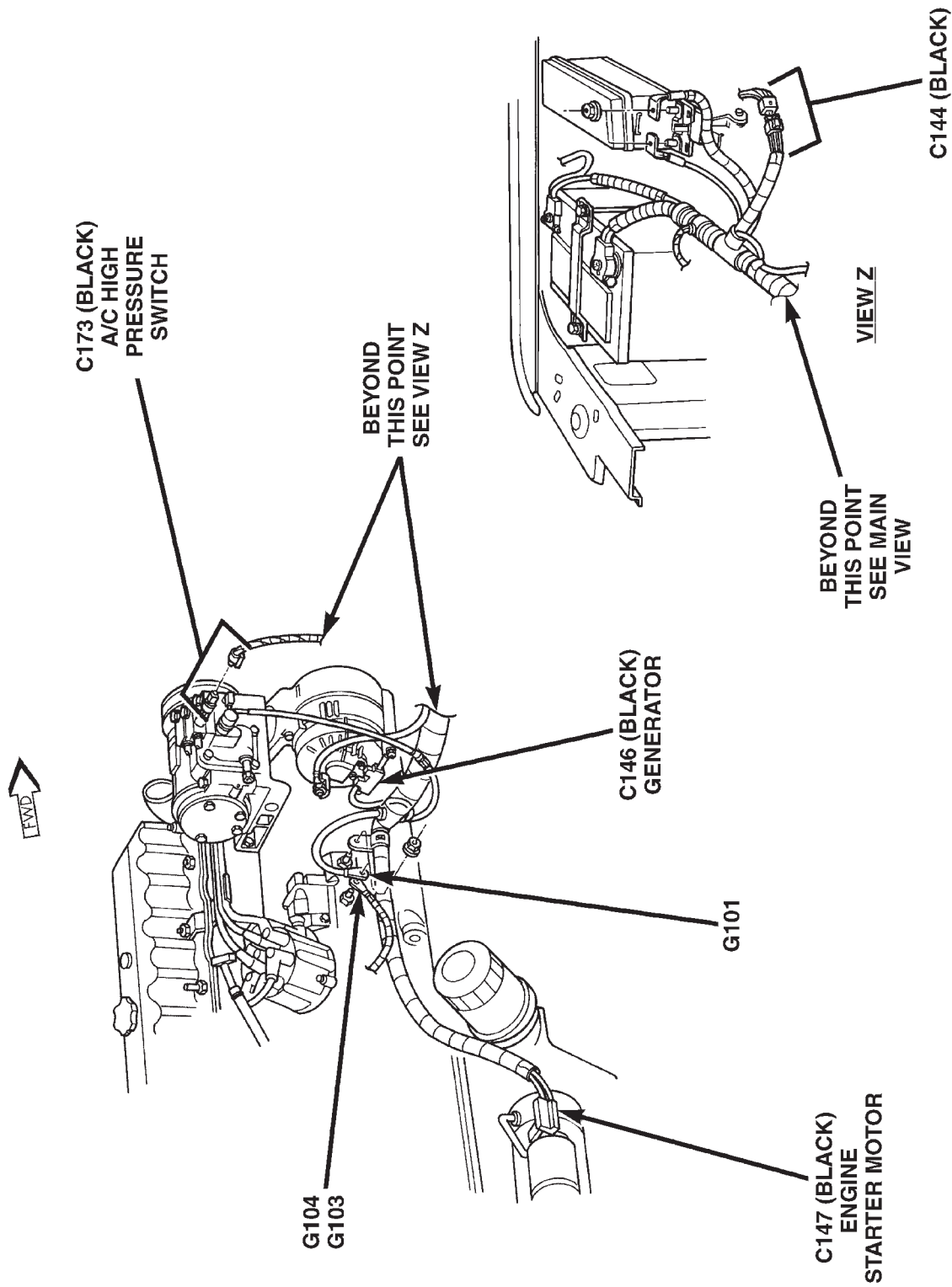


Fig. 6 Charging System Connectors—4.0L Engine

DESCRIPTION AND OPERATION (Continued)

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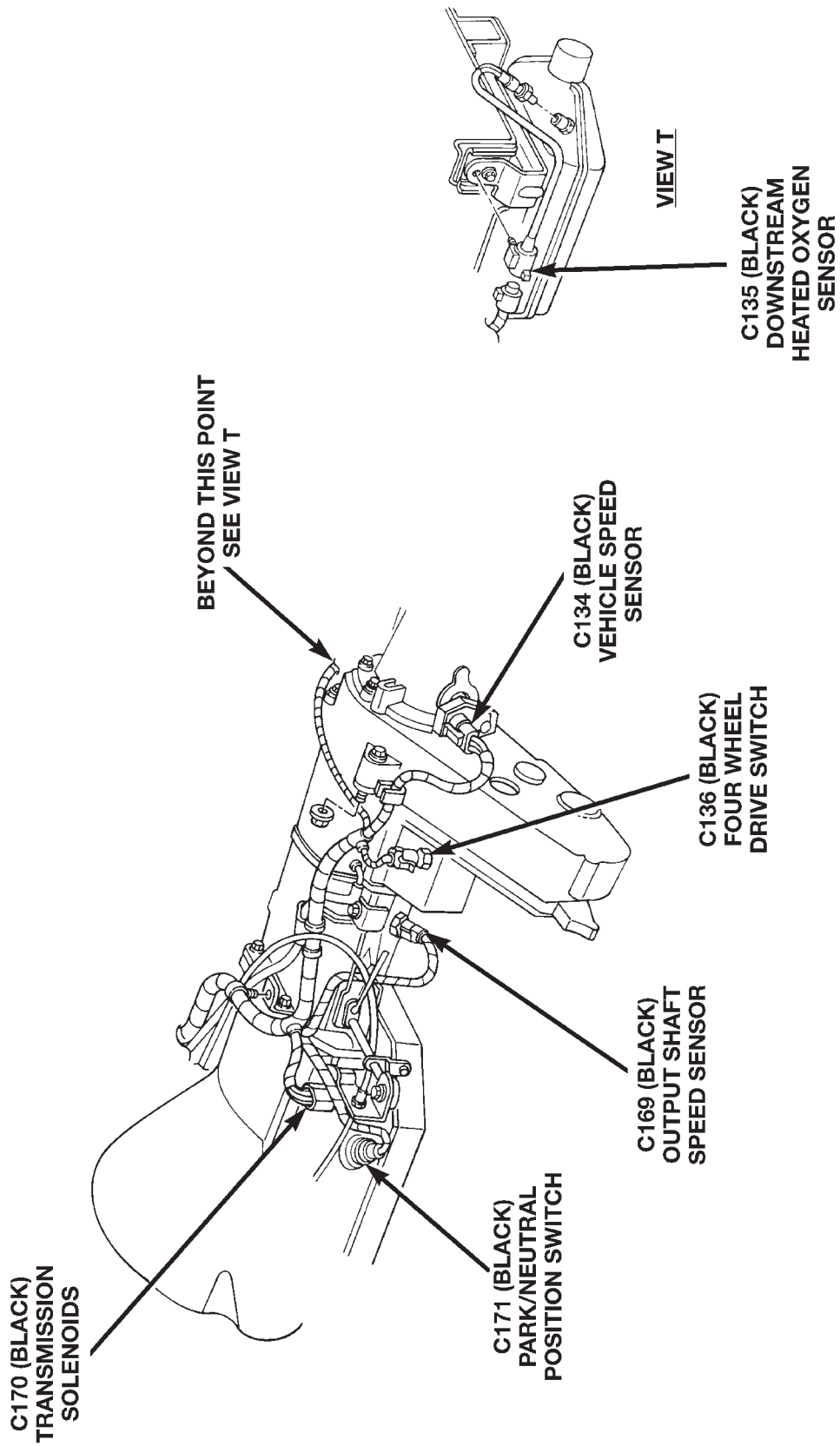


Fig. 7 Transmission Connectors—4.0L Engine

DESCRIPTION AND OPERATION (Continued)

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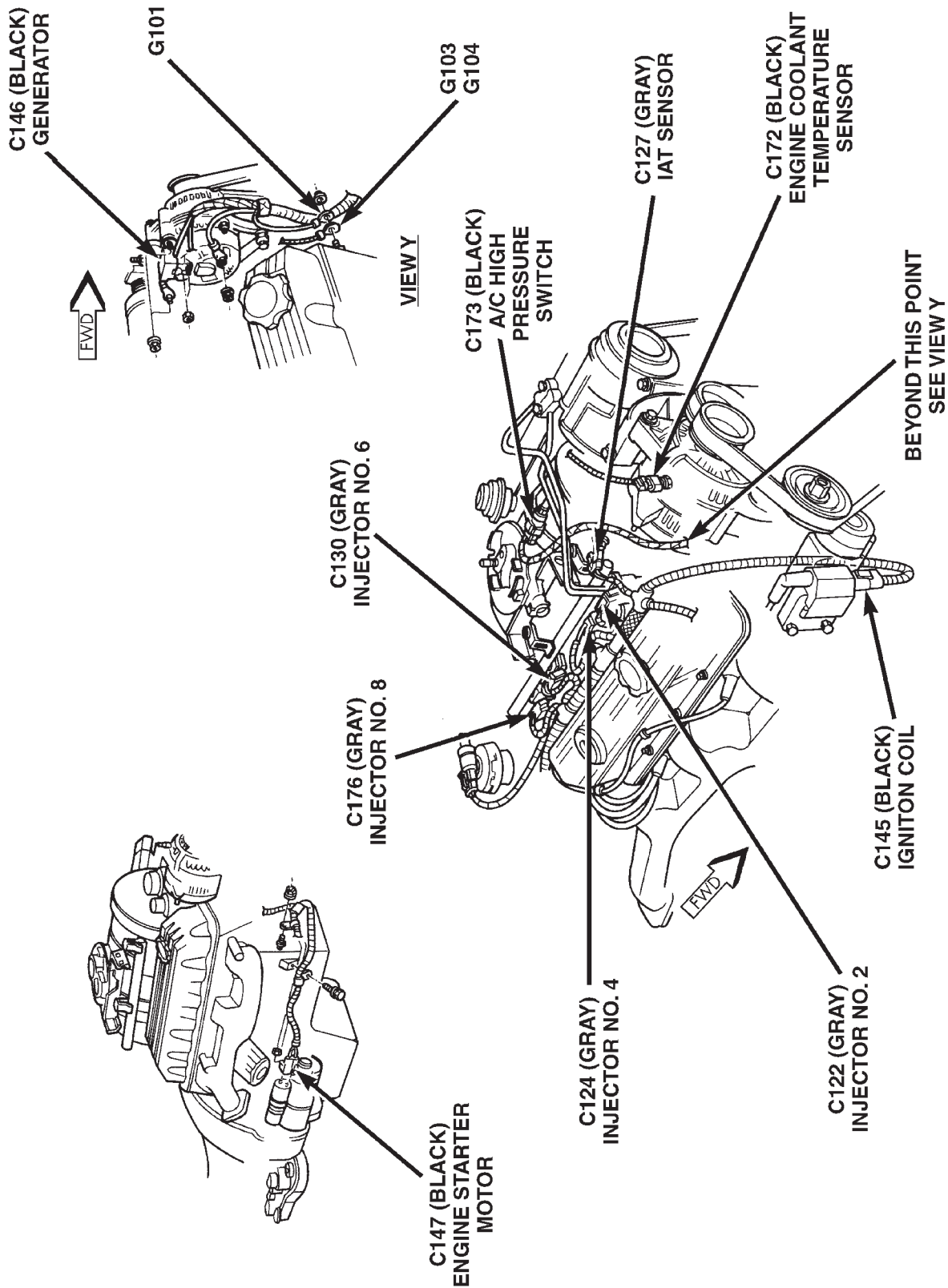
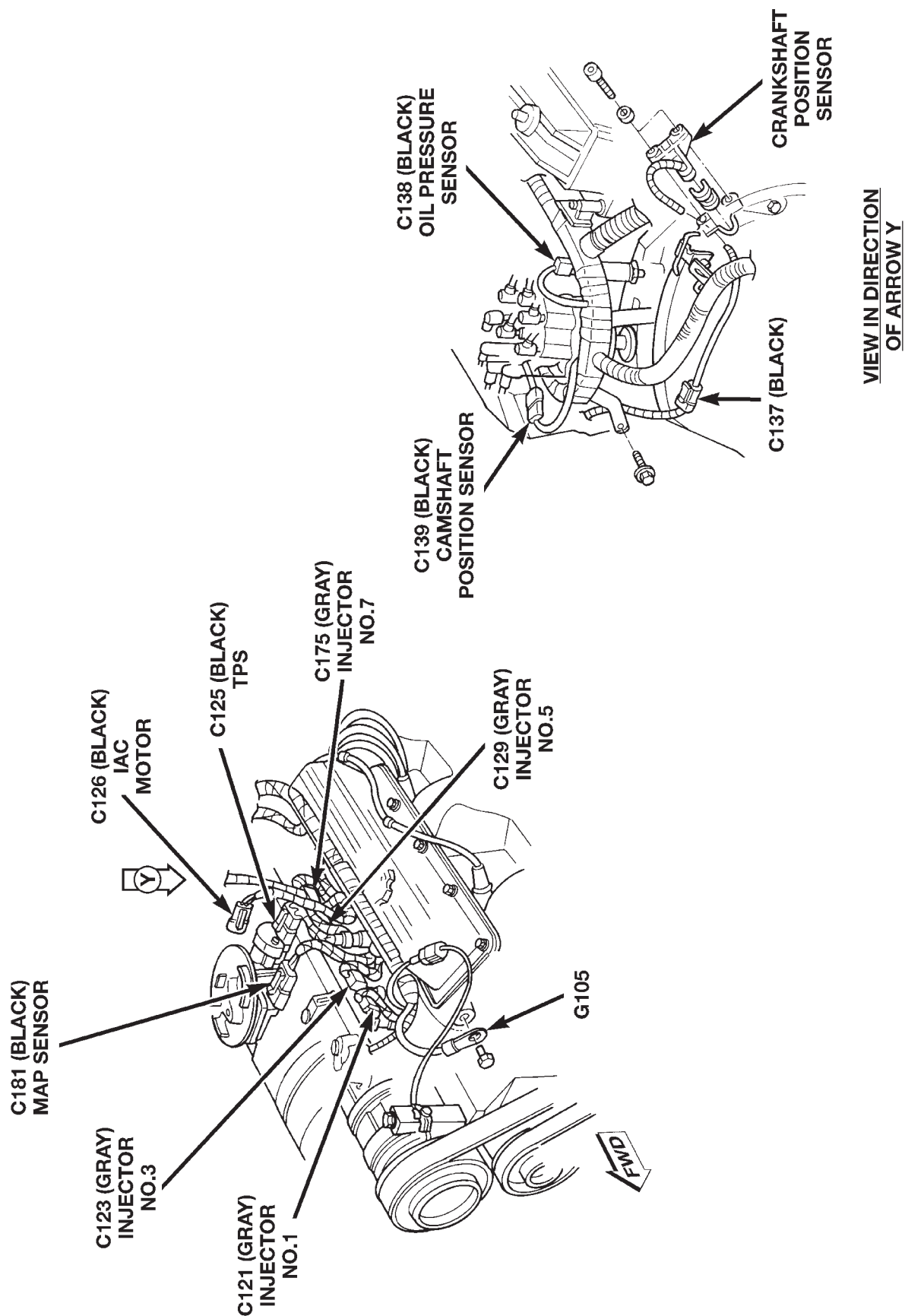


Fig. 8 Engine Connectors—5.2L Engine

DESCRIPTION AND OPERATION (Continued)



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Fig. 9 Engine Connectors—5.2L Engine

DESCRIPTION AND OPERATION (Continued)

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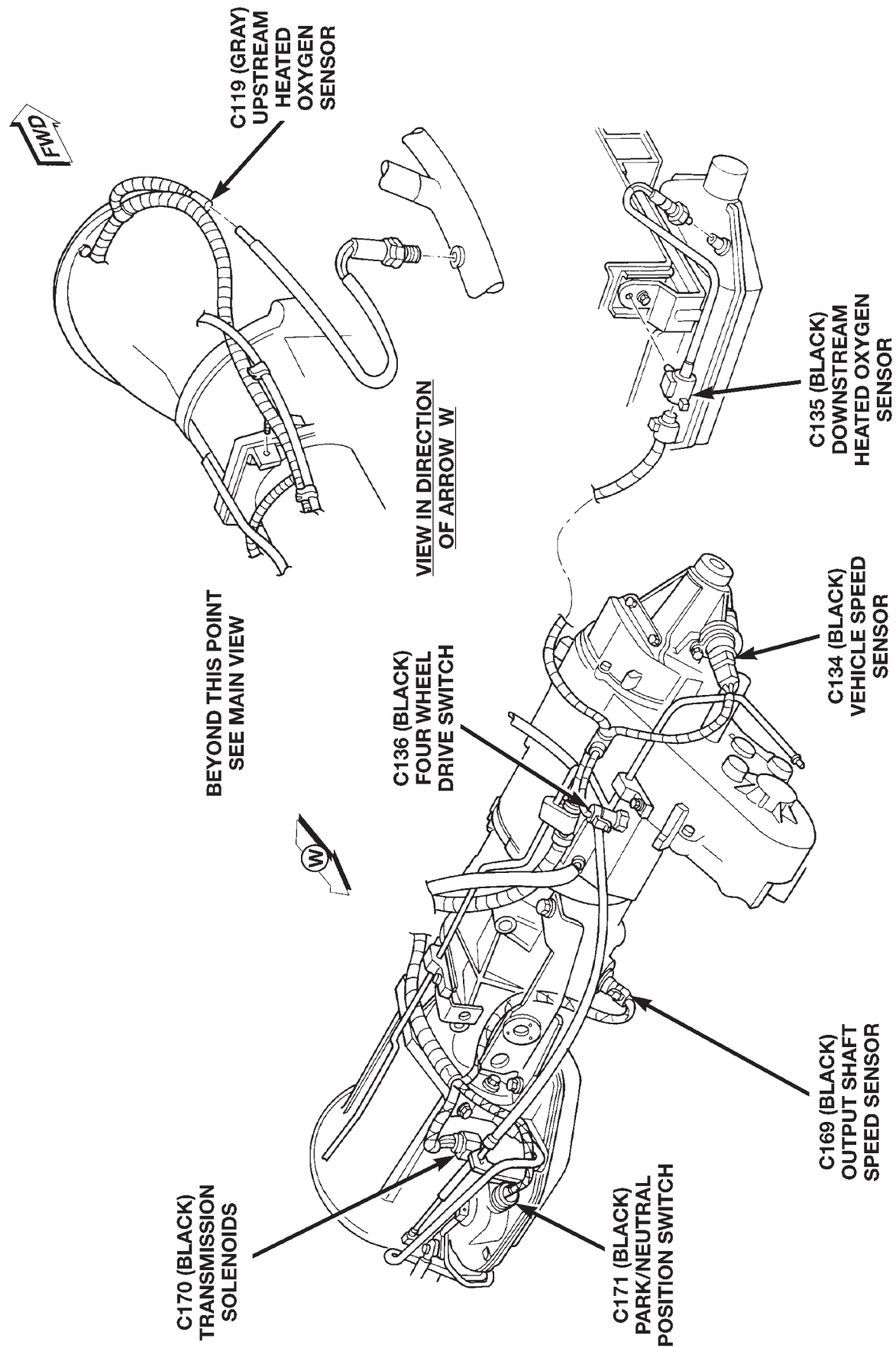


Fig. 10 Transmission Connectors—5.2L

DESCRIPTION AND OPERATION (Continued)

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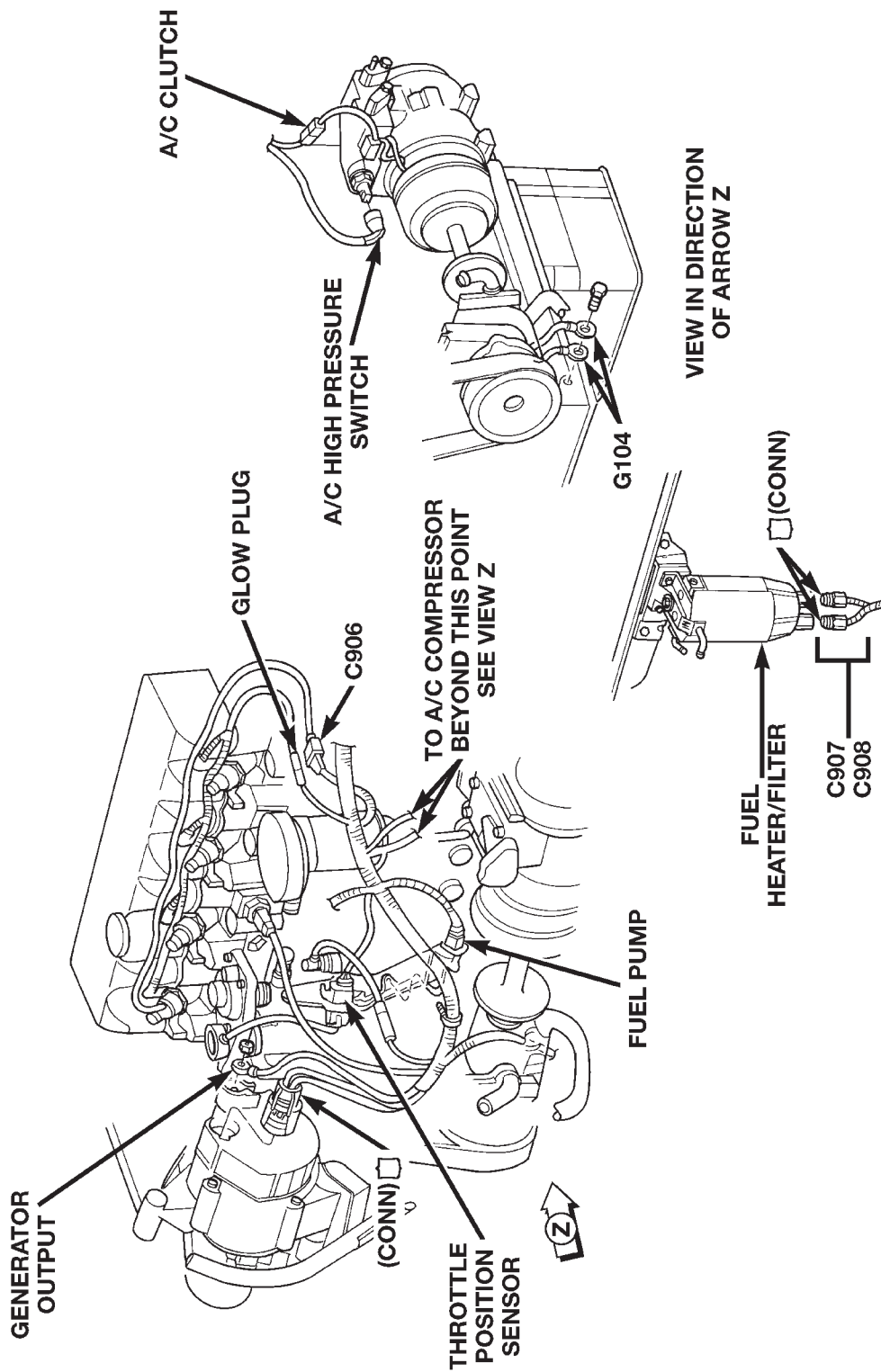


Fig. 11 Engine Connectors—Diesel Engine

DESCRIPTION AND OPERATION (Continued)

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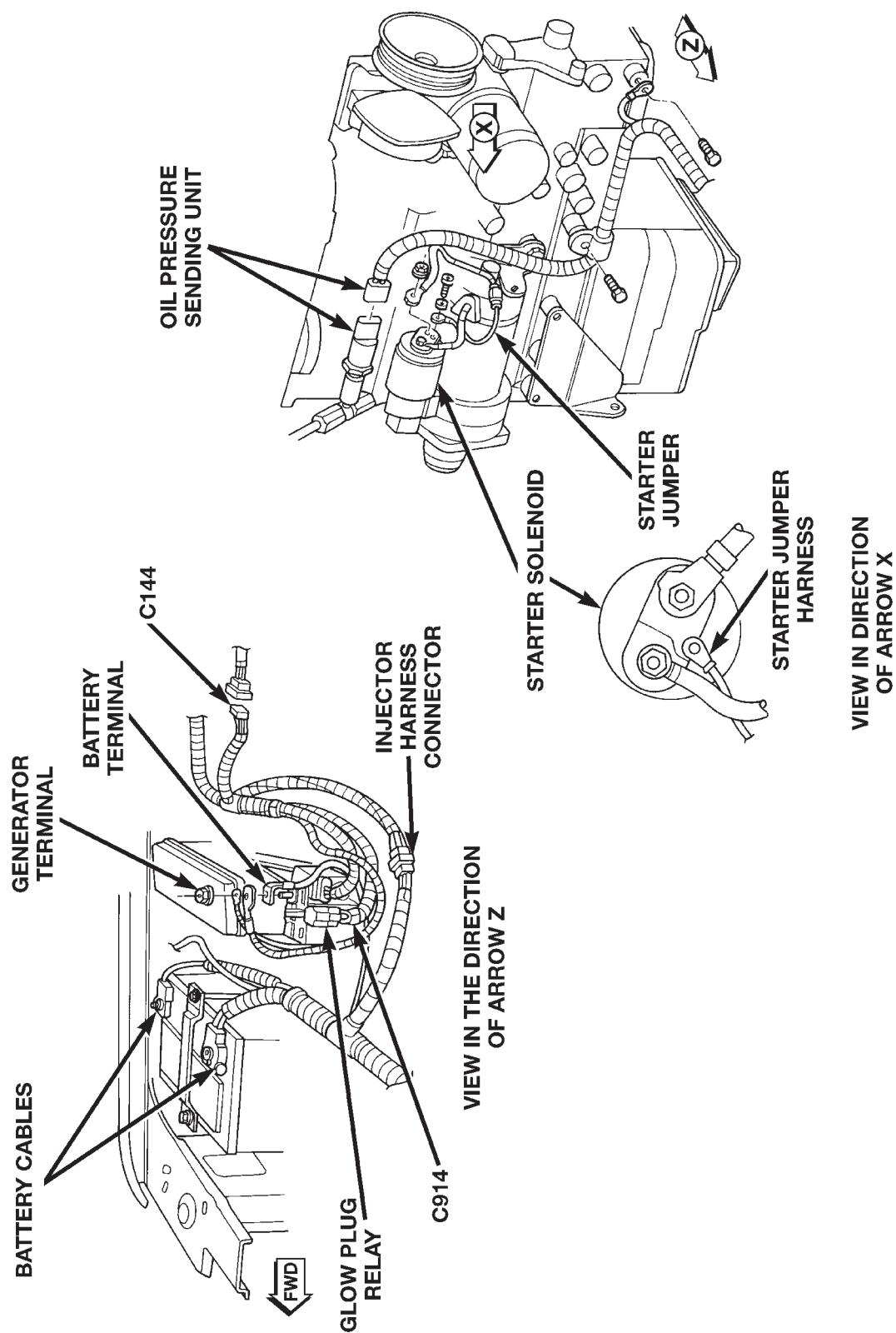


Fig. 12 Battery and Starter Motor Connectors—Diesel Engine

DESCRIPTION AND OPERATION (Continued)

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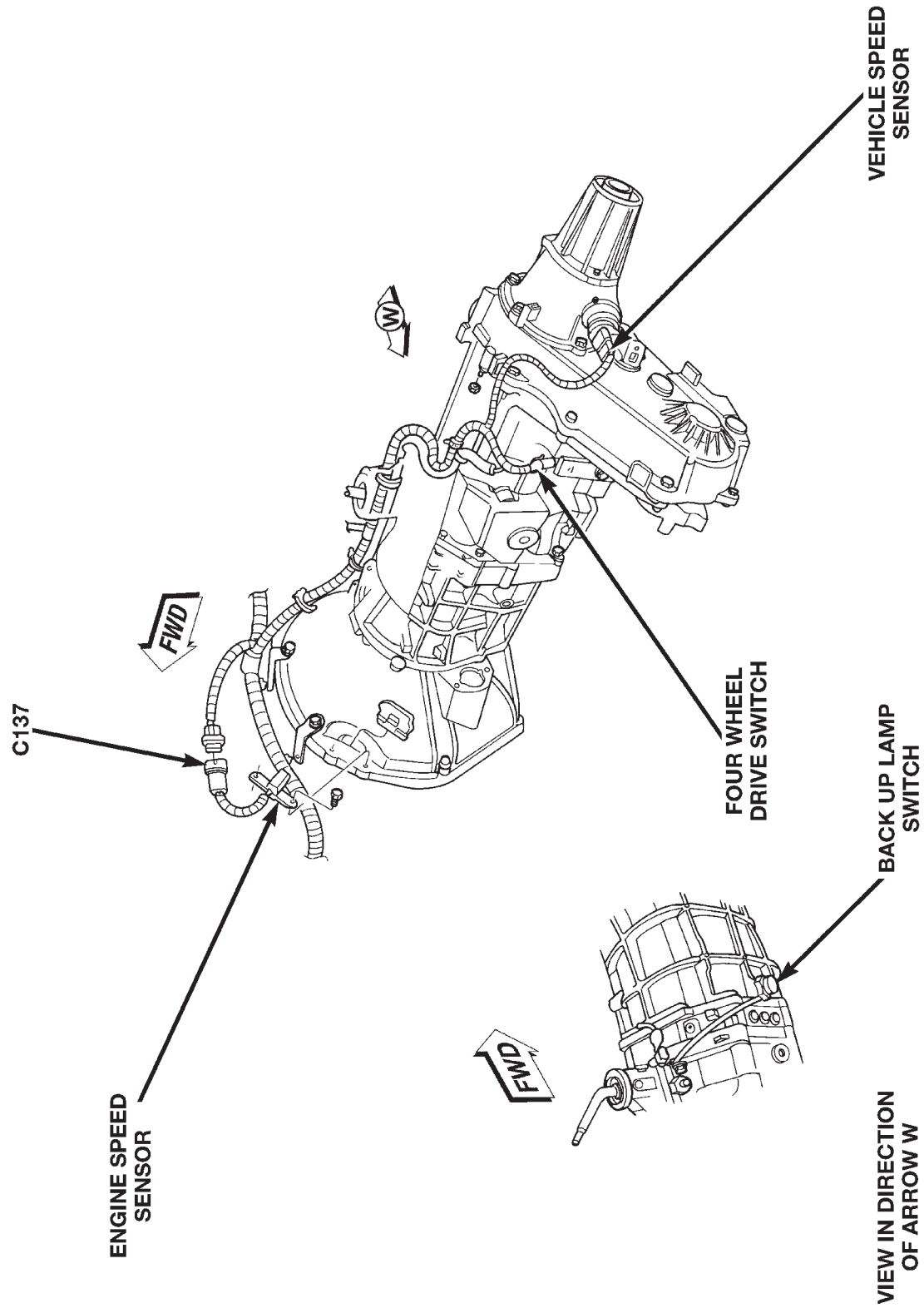
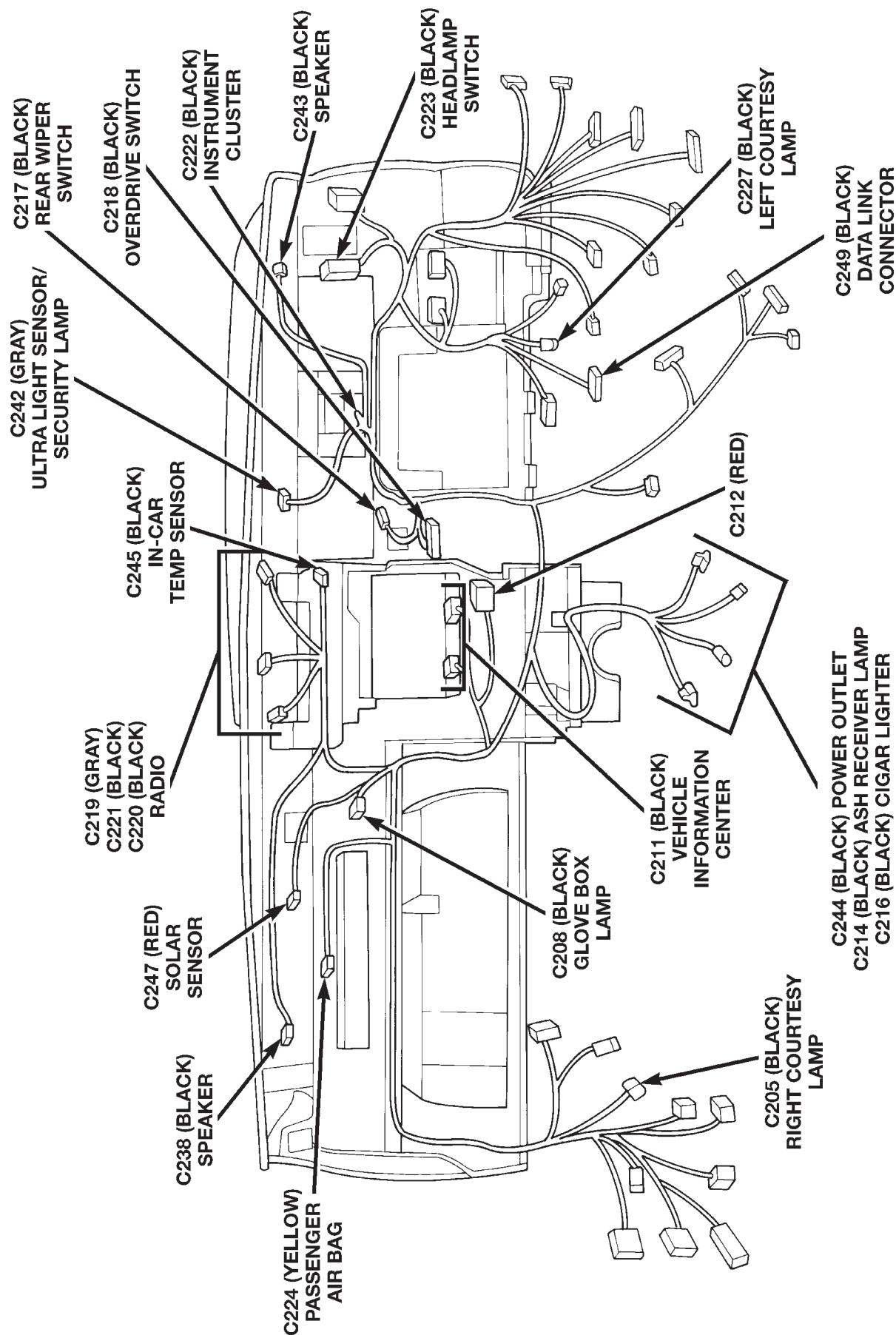


Fig. 13 Transmission Connectors—Diesel Engine

DESCRIPTION AND OPERATION (Continued)



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Fig. 14 Instrument Panel Connectors

DESCRIPTION AND OPERATION (Continued)

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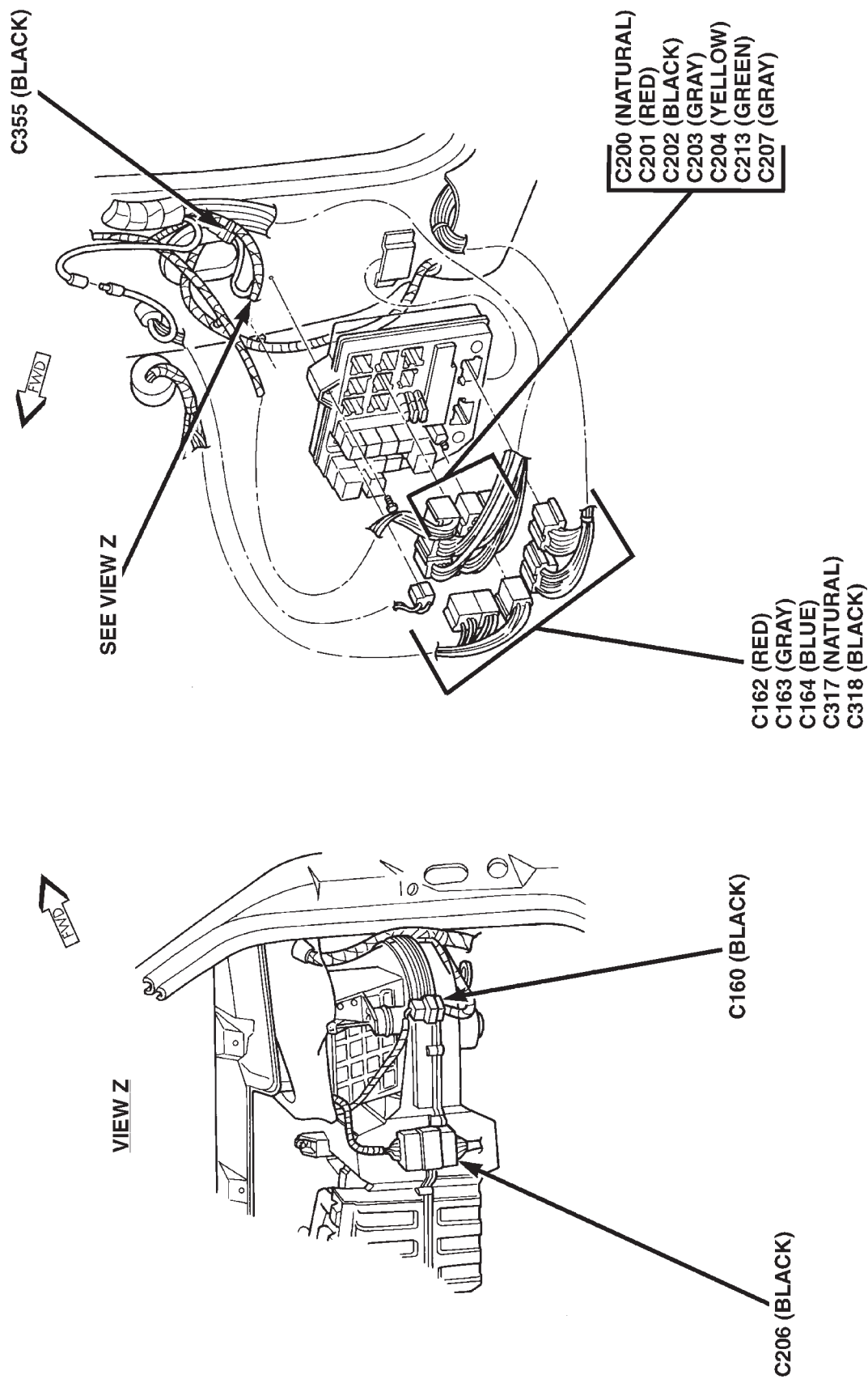


Fig. 15 Junction Block and HVAC Unit Connectors

DESCRIPTION AND OPERATION (Continued)

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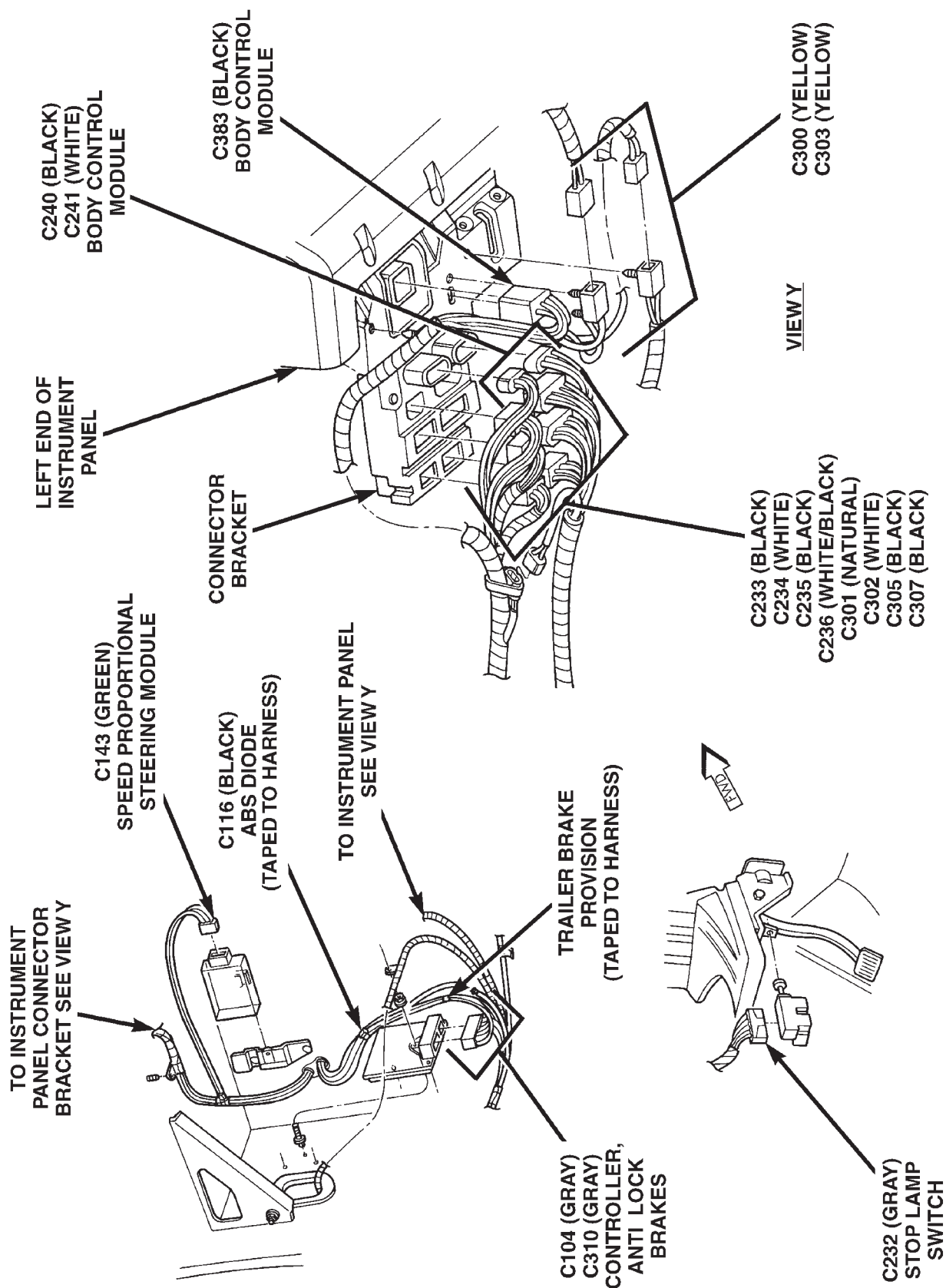


Fig. 16 Instrument Panel Connectors—Left Side

DESCRIPTION AND OPERATION (Continued)

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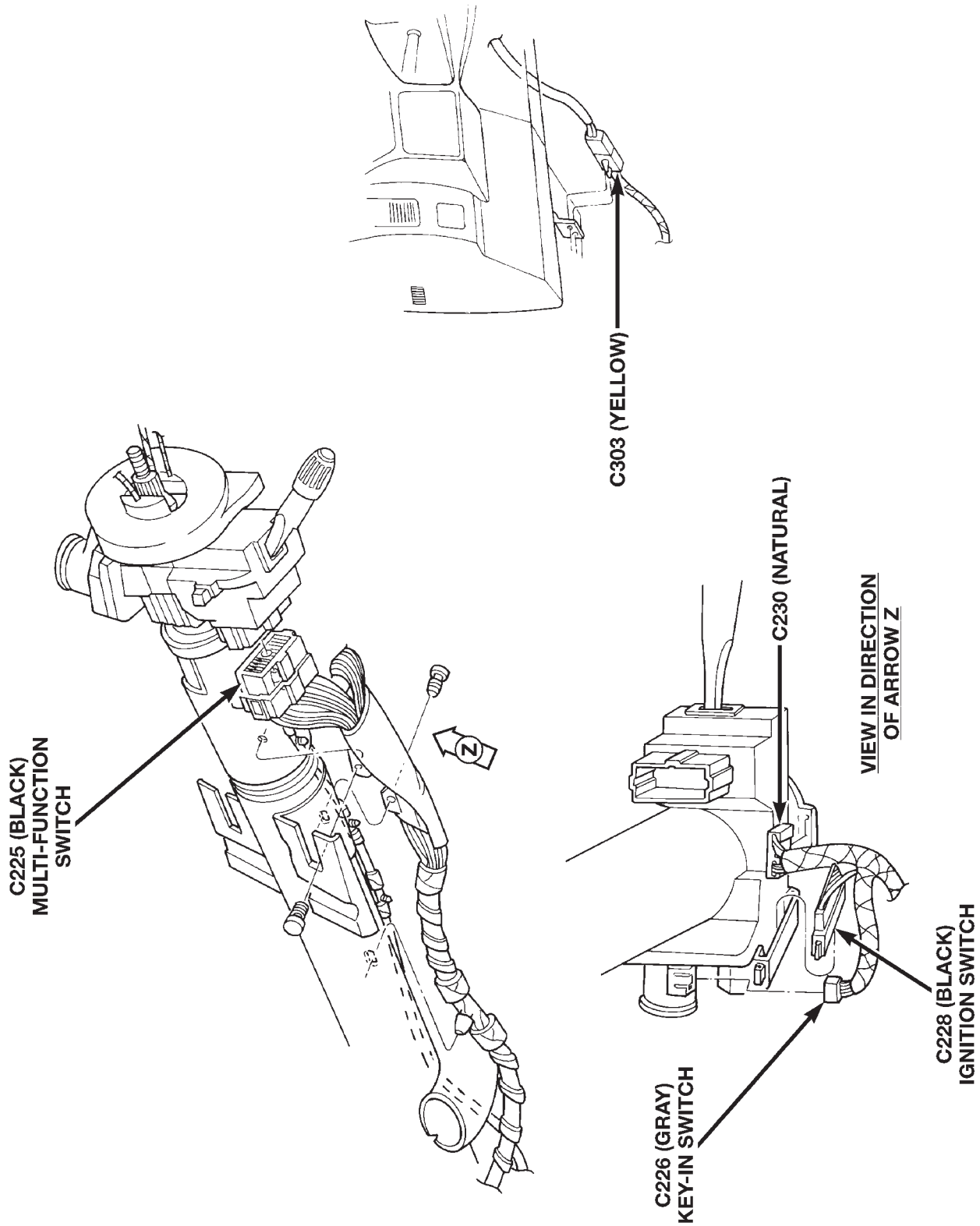


Fig. 17 Steering Column Connectors

DESCRIPTION AND OPERATION (Continued)

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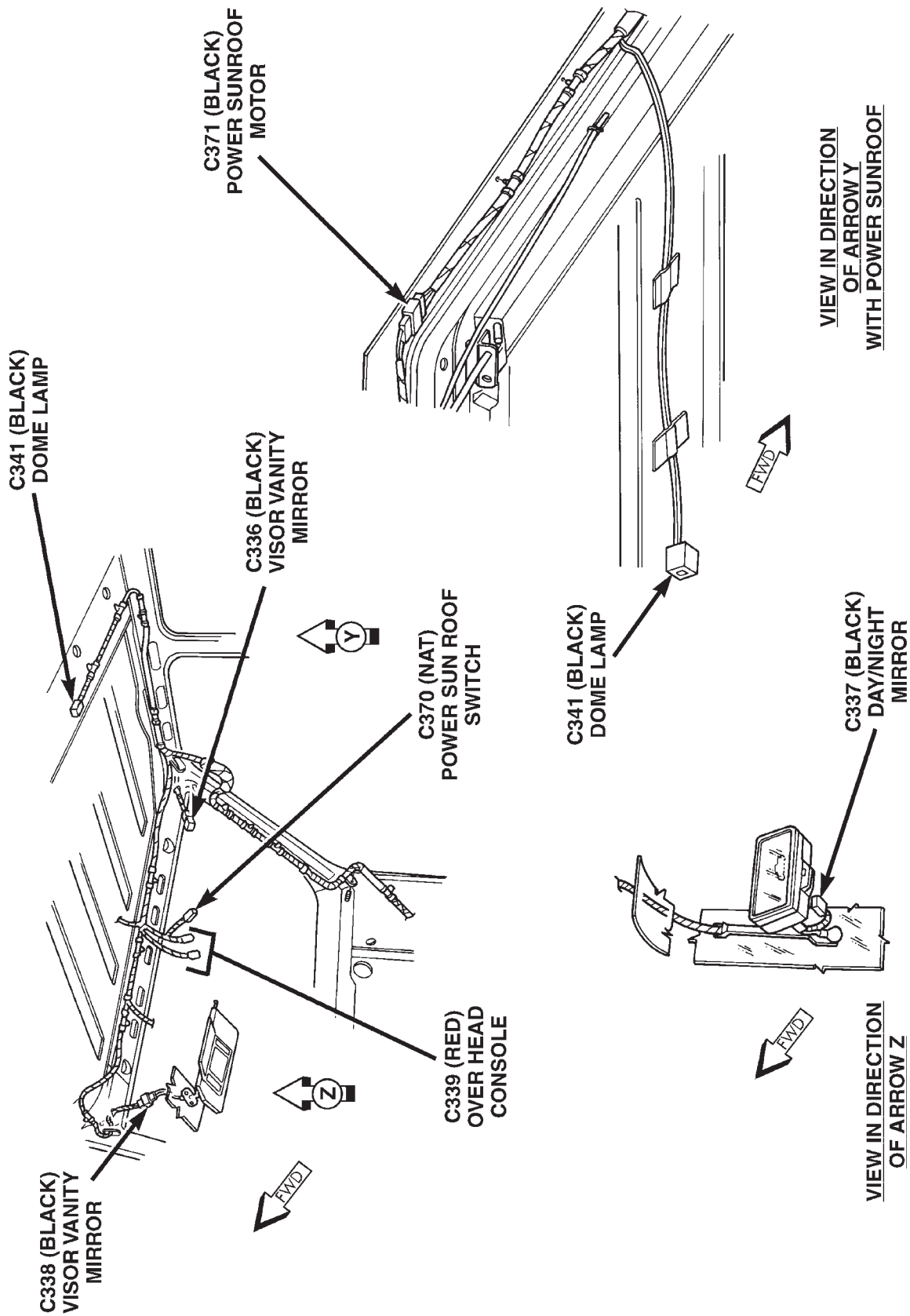


Fig. 18 Roof Connectors

DESCRIPTION AND OPERATION (Continued)

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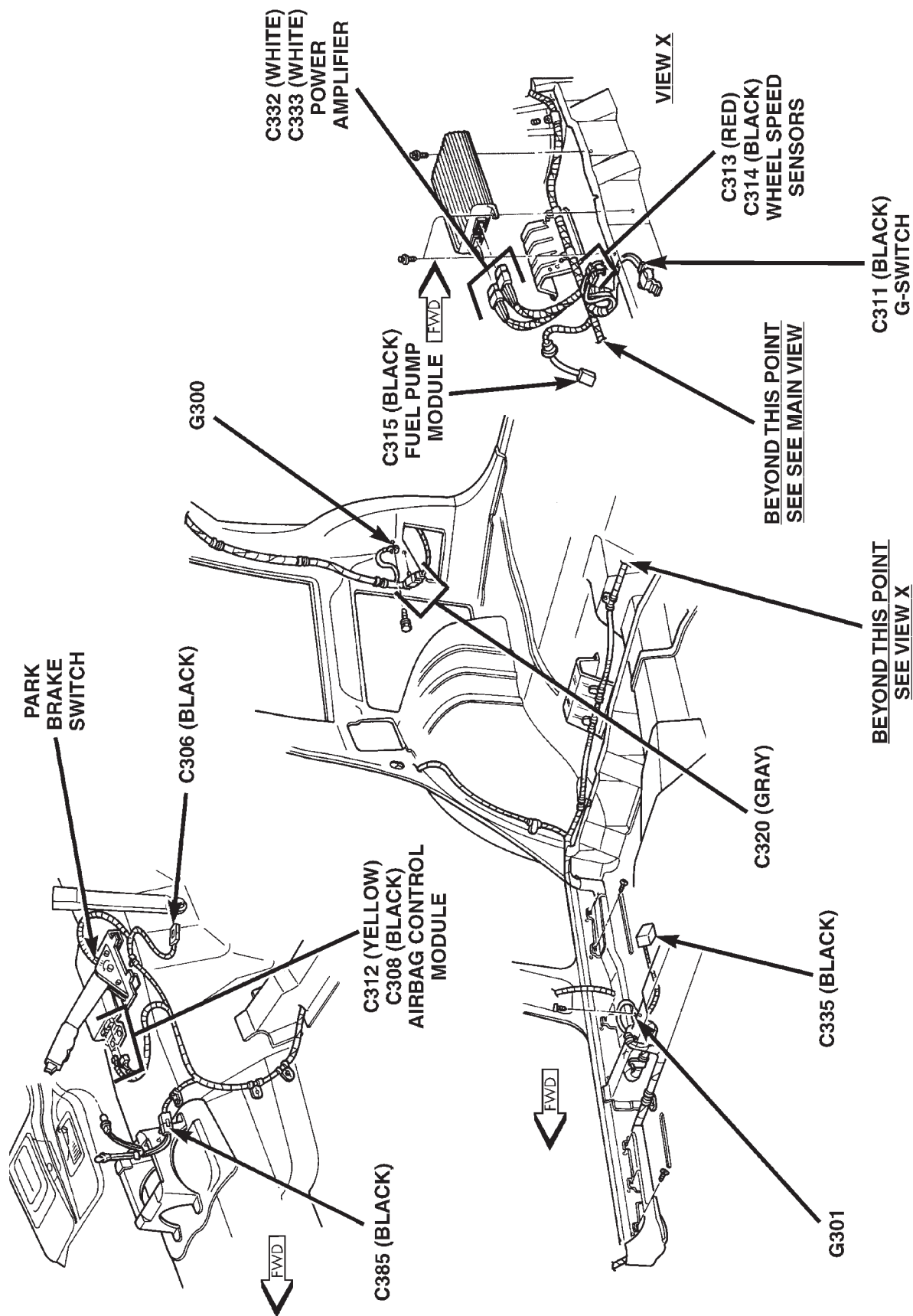
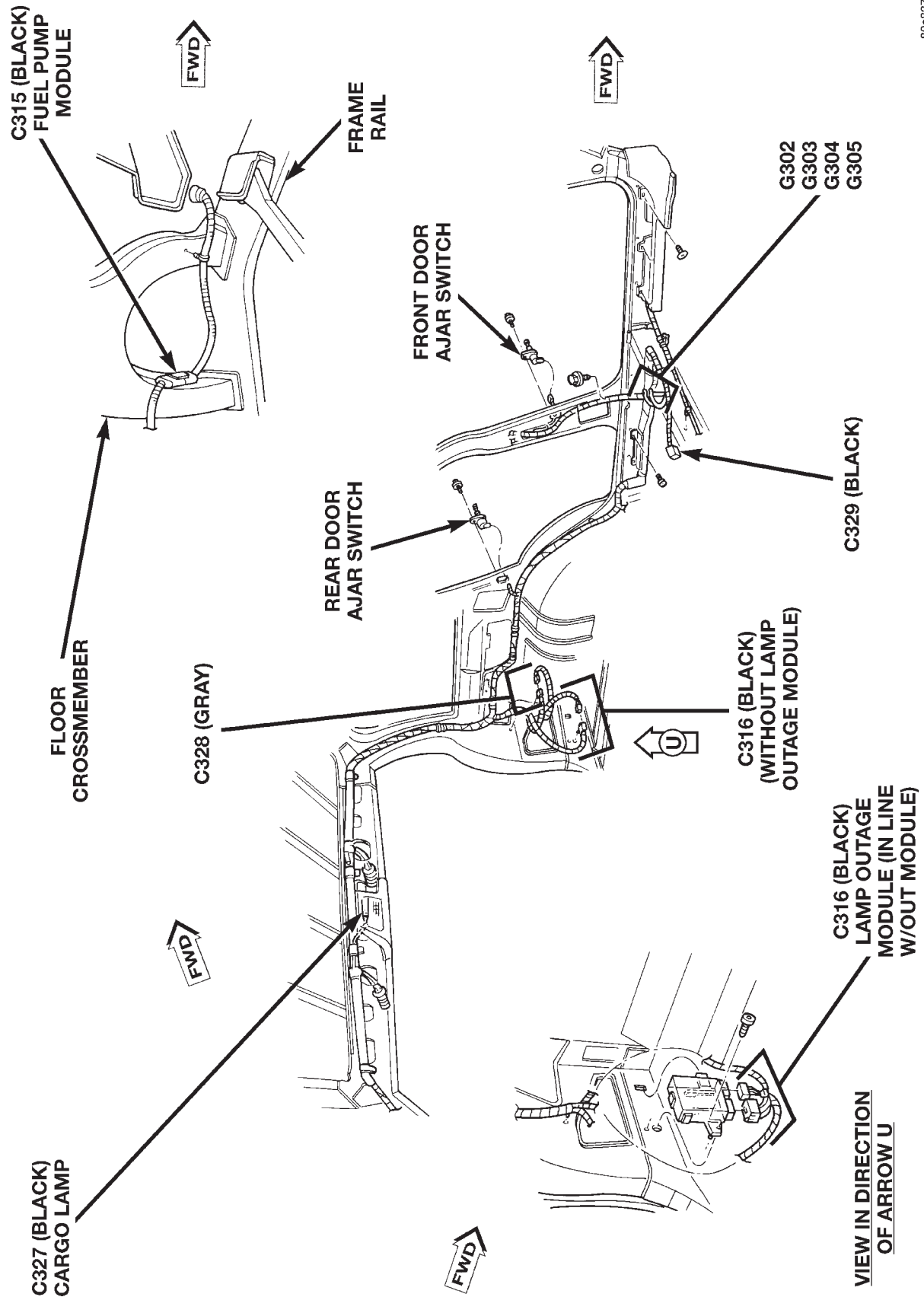


Fig. 19 Body Connectors—Right Side

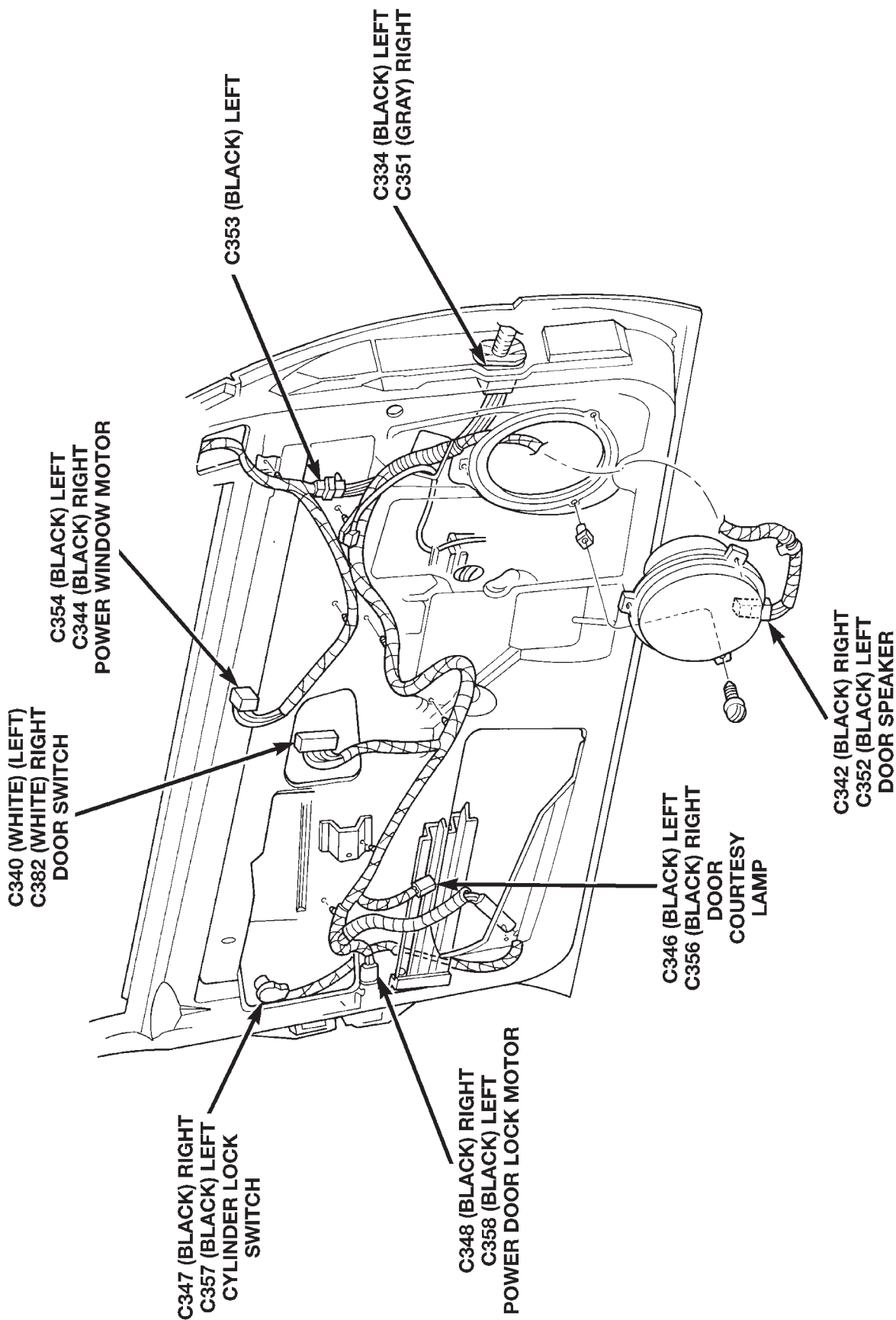
DESCRIPTION AND OPERATION (Continued)



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Fig. 20 Body Connectors—Left Side

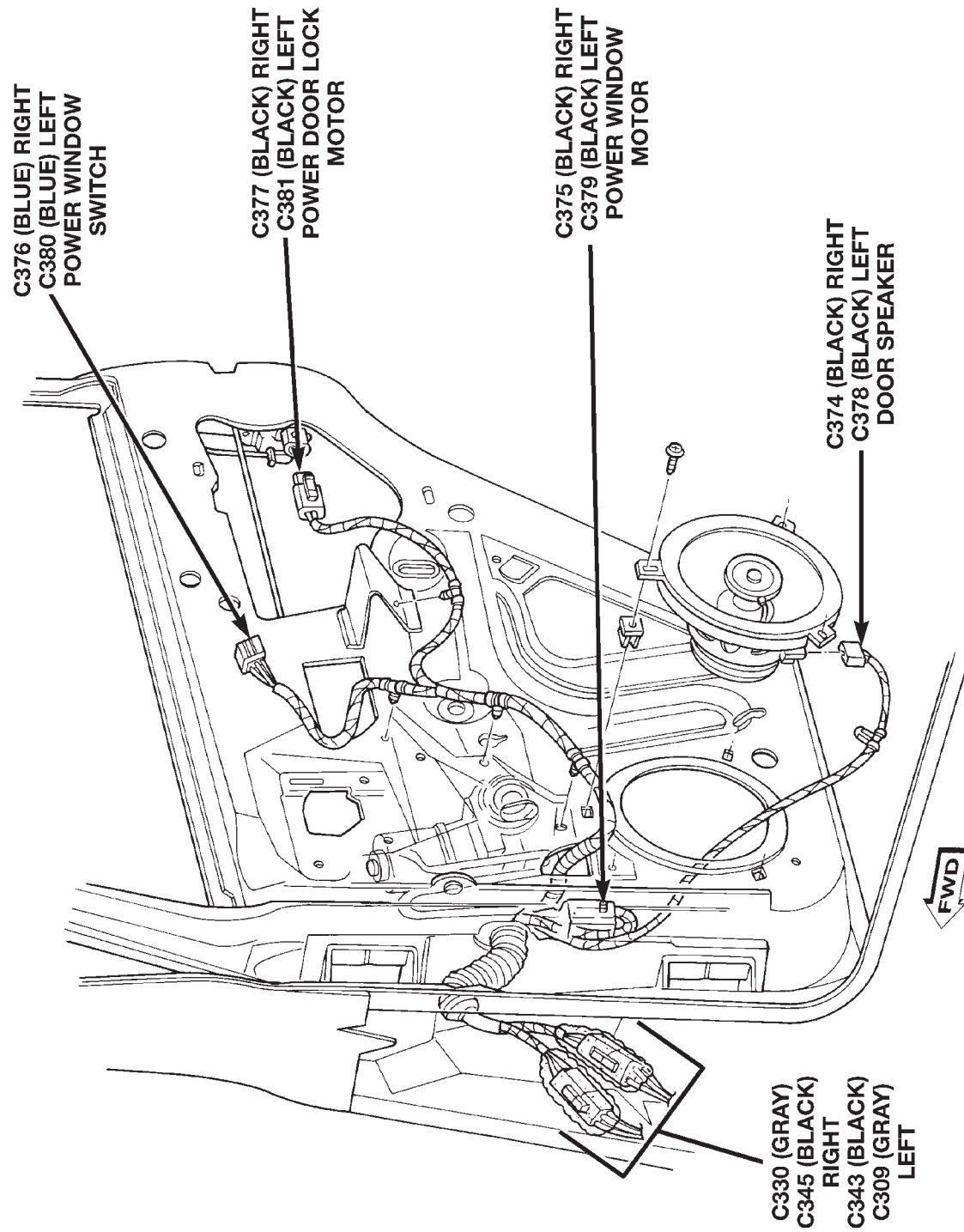
DESCRIPTION AND OPERATION (Continued)



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Fig. 21 Front Door Connectors

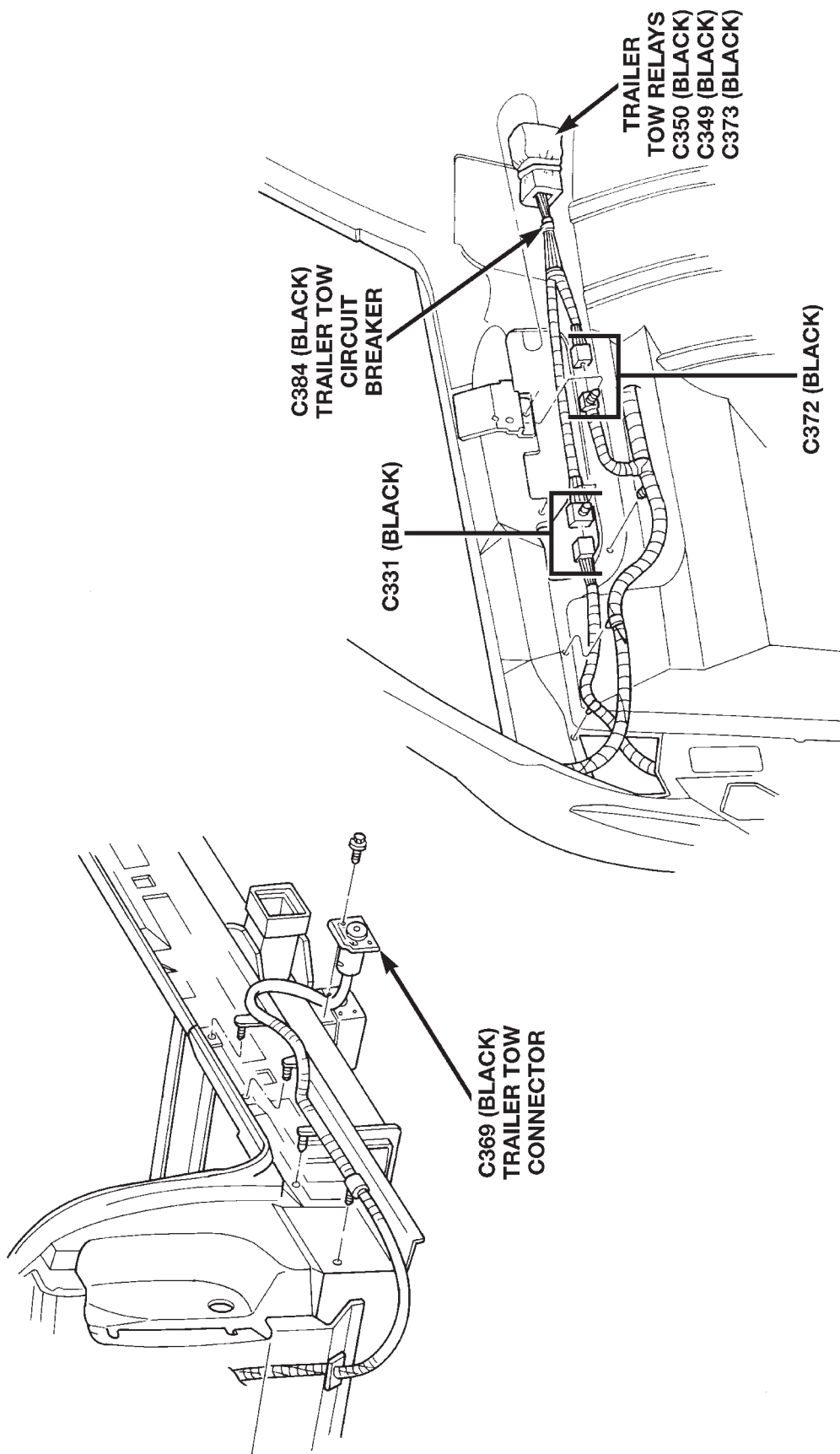
DESCRIPTION AND OPERATION (Continued)



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Fig. 22 Rear Door Connectors

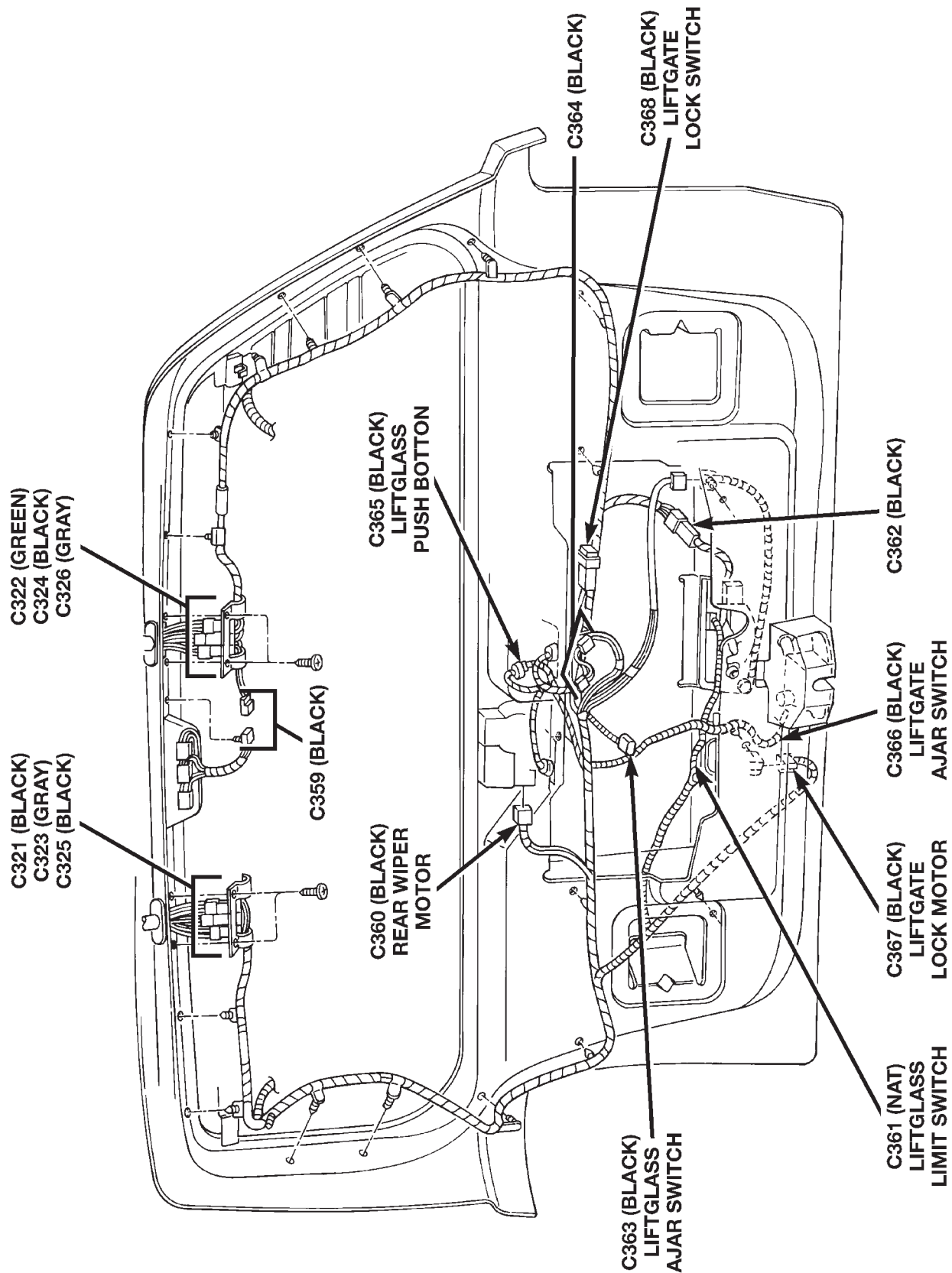
DESCRIPTION AND OPERATION (Continued)



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Fig. 23 Factory Trailer Tow

DESCRIPTION AND OPERATION (Continued)



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Fig. 24 Liftgate Connectors

DESCRIPTION AND OPERATION (Continued)

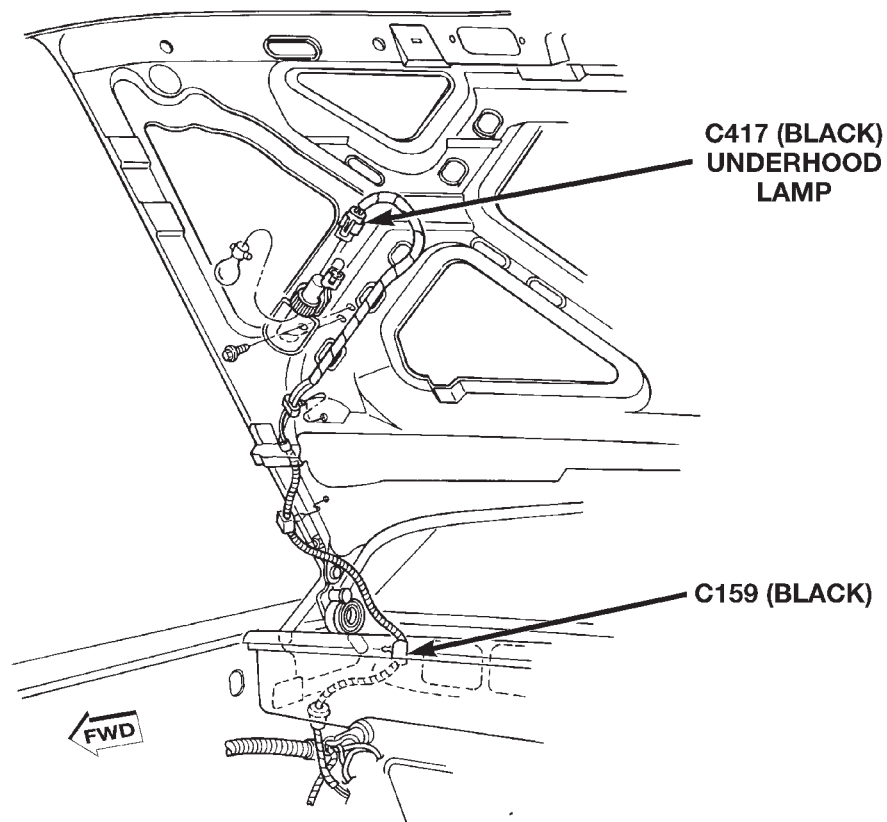


Fig. 25 Underhood Lamp

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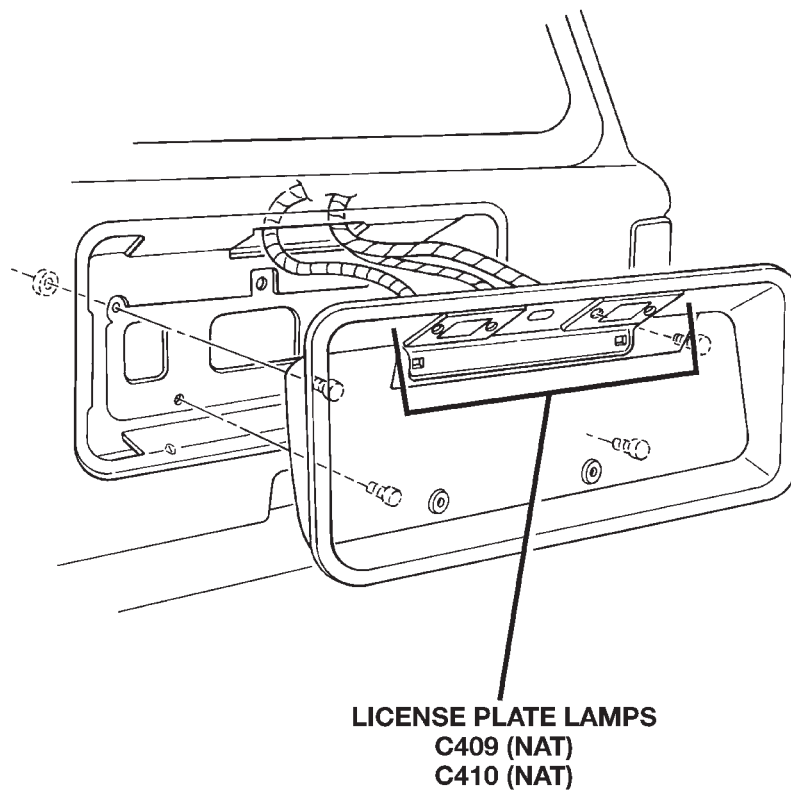


Fig. 26 License Plate Lamps

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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 proper splice number.

SPLICE LOCATIONS

For splices that are not shown in the figures in this section a N/S is placed in the Fig. column.

Splice Number	Location	Fig.
S100	Near Power Distribution Center	1
S101	Near Battery Temperature Sensor T/O	1
S102	Near Battery Temperature Sensor T/O	1
S103	Near Battery Temperature Sensor T/O	1
S104	Right Front Corner of Engine Compartment	1
S105	Right Front Corner of Engine Compartment	1
S106	Right Front Corner of Engine Compartment	1
S107	Left Front Corner of Engine Compartment	1
S108	Left Front Corner of Engine Compartment	1
S109	Near EVAP/Purge Solenoid T/O	1
S116	Near Branch to Brake Warning Switch	1
S117	In Branch to Brake Warning Switch	1
S118	In Branch to Brake Warning Switch	1
S119	Left Rear of Engine Compartment	1
S120	Near T/O to Low Washer Fluid Level Sensor	1
S121	Near T/O to Low Washer Fluid Level Sensor	1
S122	Near Vehicle Speed Control Servo T/O	1
S123	Near Vehicle Speed Control Servo T/O	1
S124	Near Vehicle Speed Control Servo T/O	1
S125	Near Controller, Antilock Brakes	6
S126	Near A/C High Pressure Switch T/O (4.0L Engine)	1
S126	In Branch to Starter Motor (5.2L Engine)	3
S127	Near Injector No. 3 T/O (4.0L Engine)	2
S128	Near Injector No. 5 T/O (4.0L Engine)	2

Splice Number	Location	Fig.
S128	Near T/Os for Injectors 6 and 8 (5.2L Engine)	3
S128	Near T/Os for A/C Compressor	4
S129	Rear of Engine (4.0L Engine)	2
S129	Near Injector No. 3 T/O (5.2L Engine)	3
S129	Rear of Engine (Diesel Engine)	N/S
S130	Rear of Engine (4.0L Engine)	2
S130	Near Crankshaft Position Sensor T/O (5.2L Engine)	3
S130	Near Crankshaft Position Sensor T/O (Diesel Engine)	4
S131	In Branch to Transmission (4.0L Engine)	2
S131	Right Rear of Engine (5.2L Engine)	3
S132	Near Branch to Transmission (4.0L Engine)	2
S132	Rear of Engine (5.2L Engine)	3
S133	In Branch to Oil Pressure Sensor and Crankshaft Position Sensor (4.0L Engine)	2
S133	Near Injector No. 5 T/O (5.2L Engine)	3
S134	Near Branch to Powertrain Control Module (4.0L Engine)	2
S134	Rear of Engine (5.2L Engine)	3
S134	Near Crankshaft Position Sensor T/O (Diesel Engine)	4
S135	Near Branch to PCM (4.0L Engine)	2
S135	Right Rear of Engine (5.2L Engine)	3
S136	Near Injector No. 7 T/O (5.2L Engine)	3
S136	Near Crankshaft Position Sensor T/O (Diesel Engine)	4
S138	Near Crankshaft Position Sensor T/O (Diesel Engine)	4
S140	Rear of Engine (Diesel Engine)	4
S141	Rear of Engine (Diesel Engine)	4
S142	Near T/Os for A/C Compressor	4

DESCRIPTION AND OPERATION (Continued)

Splice Number	Location	Fig.	Splice Number	Location	Fig.
S200	Near Headlamp Switch T/O	5	S313	Left Rear Quarter Panel	8
S201	Near Headlamp Switch T/O	5	S314	Top of Left Rear Quarter Panel	8
S202	Near Stop Lamp Switch T/O	5	S315	Top of Left Rear Quarter Panel	8
S203	Near Stop Lamp Switch T/O	5	S316	Near Right Side T/O for Liftgate	9
S204	Near Branch to Instrument Cluster	5	S317	In Branch to Power Amplifier	8
S205	Near Branch to Instrument Cluster	5	S318	In Branch to Power Amplifier	8
S206	Near Branch to Rear Window Defogger Switch	5	S319	Near Branch to Right Rear Door Ajar Switch	9
S207	Near Shift Interlock T/O	5	S320	In Branch to Dome/Reading Lamp	9
S208	Near Branch to Shift Interlock T/O	5	S321	Between Day/Night Mirror T/O and Right Vanity Mirror T/O	10
S209	Near Branch to Shift Interlock T/O	5	S322	Between Day/Night Mirror T/O and Right Vanity Mirror T/O	10
S210	Near Transfer Case Illumination Lamp T/O	5	S323	Near Day/Night Mirror T/O	10
S211	Near Branch to Graphic Display Module/Vehicle Information Center	5	S324	In Left Front Door, Between Power Window Motor T/O and Power Mirror T/O	11
S212	Near Passenger Airbag T/O	5	S325	In Right Front Door, Near Power Window Motor T/O	11
S214	Near Passenger Airbag T/O	5	S326	In Right Front Door, Near Power Window Motor T/O	11
S215	Near Passenger Airbag T/O	5	S327	In Right Front Door, Near Power Window Motor T/O	11
S216	Near Passenger Airbag T/O	5	S328	In Liftgate, Near Rear Window Defogger T/O	12
S218	Near Passenger Airbag T/O	5	S329	In Liftgate, Near Rear Wiper Motor T/O	12
S219	Near Branch to Graphic Display Module/Vehicle Information Center	5	S330	In Factory Trailer Tow Harness, Near Body Harness Connector	8
S220	Near Passenger Airbag T/O	5	S331	In Factory Trailer Tow Harness, Near Trailer Receptacle Harness Connector	8
S221	On HVAC Harness	7	S332	In Liftgate, Near Left Body Connectors	12
S222	On HVAC Harness	7	S333	Near T/O to Right Power Seat	9
S223	On HVAC Harness	7	S334	In Branch to Dome Reading Lamp	10
S224	On HVAC Harness	7	S335	In Branch to Power Amplifier	8
S225	On HVAC Harness	7	S336	In Liftgate, Between Rear Wiper Motor T/O and Liftgate Lock Motor T/O	12
S226	On HVAC Harness	7	S400	In Left Power Seat Harness, Near Lumbar Motor T/O	N/S
S300	Near Left Kick Panel	6	S401	In Left Power Seat Harness, Near Riser Motor Sensor T/O	N/S
S301	Near Left Kick Panel	6	S402	In Left Power Seat Harness, Between Riser Motor Sensor T/O and Heated Seat Module T/O	N/S
S302	Near Left Kick Panel	6	S403	In Left Power Seat Harness, Near Seat Switch T/O	N/S
S303	Near Branch to Floor Console	8			
S304	Near Branch to Floor Console	8			
S305	Near Branch to Left Rear Door	8			
S306	Near Branch to Left Rear Door	8			
S307	Near Branch to Left Rear Door	8			
S308	Near Branch to Power Amplifier	8			
S309	In Branch to Power Amplifier	8			
S310	Near Branch to Power Amplifier	8			
S311	Left Rear Quarter Panel	8			
S312	Left Rear Quarter Panel	8			

DESCRIPTION AND OPERATION (Continued)

Splice Number	Location	Fig.	Splice Number	Location	Fig.
S404	In Right Power Seat Harness, Near Seat Motor T/Os	N/S	S412	In Left Tail Lamp Harness, Between Body Connector and Grommet	N/S
S405	In Right Power Seat Harness, Near Seat Motor T/Os	N/S	S413	Near Right Front Turn Signal Bulb Socket	N/S
S406	In Right Power Seat Harness, In Branch to Seat Switch	N/S	S414	Near Right Front Turn Signal Bulb Socket	N/S
S407	In Left Power Seat Harness, Near Lumbar Motor T/O	N/S	S415	Near Right Front Park Lamp Bulb Socket	N/S
S408	Near Left Front Turn Signal Bulb Socket	N/S	S416	In Right Tail Lamp Harness, Between Body Connector and Grommet	N/S
S409	Near Left Front Turn Signal Bulb Socket	N/S	S417	In Right Tail Lamp Harness, Between Body Connector and Grommet	N/S
S410	Near Left Front Park Lamp Bulb Socket	N/S	S418	In License Plate Lamp Harness	12
S411	In Left Tail Lamp Harness, Between Body Connector and Grommet	N/S	S419	In License Lamp Harness	12
			S421	Fuse Link at PDC	N/S

DESCRIPTION AND OPERATION (Continued)

805fe51c

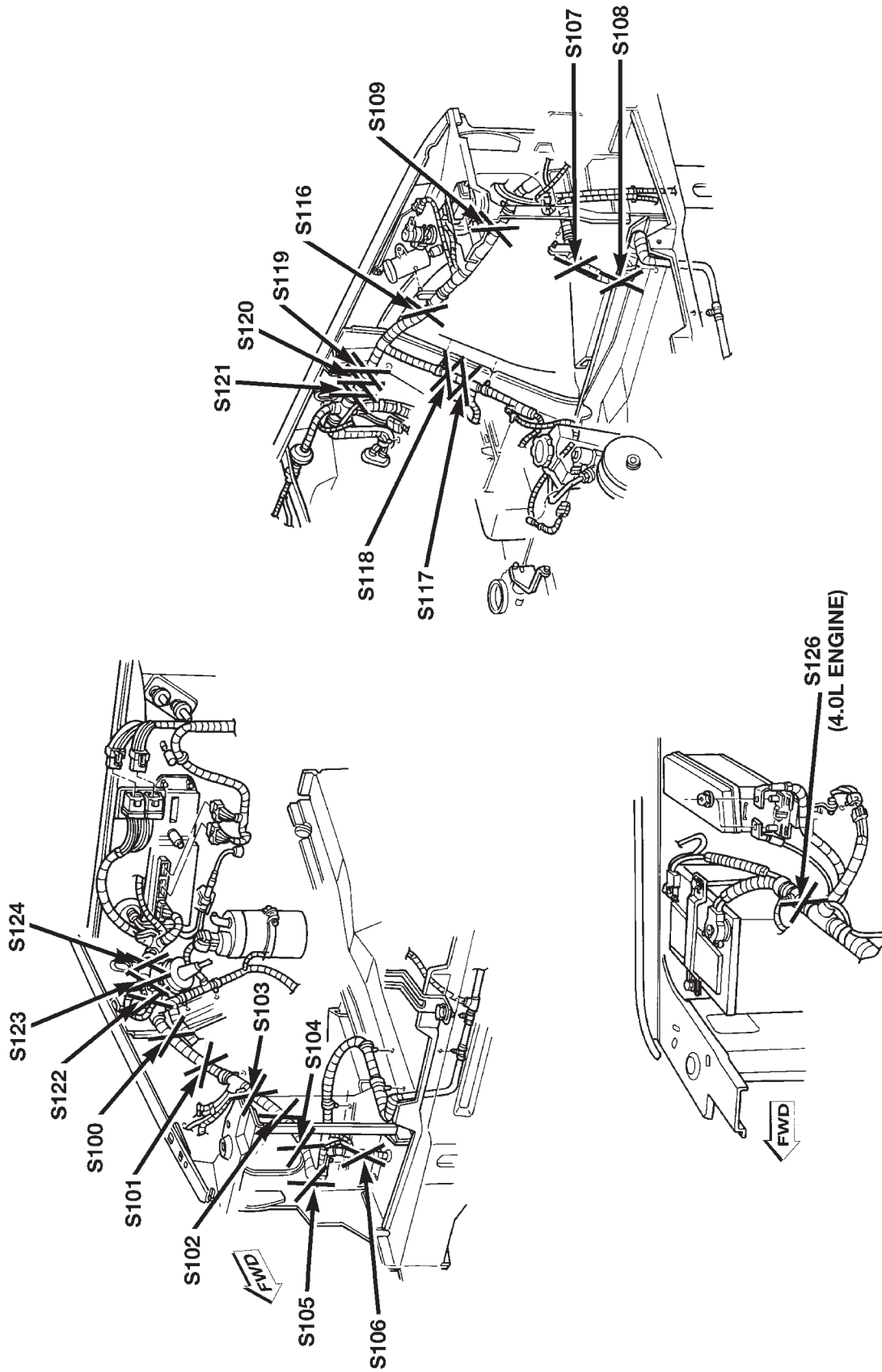


Fig. 1 Engine Compartment Splices

DESCRIPTION AND OPERATION (Continued)

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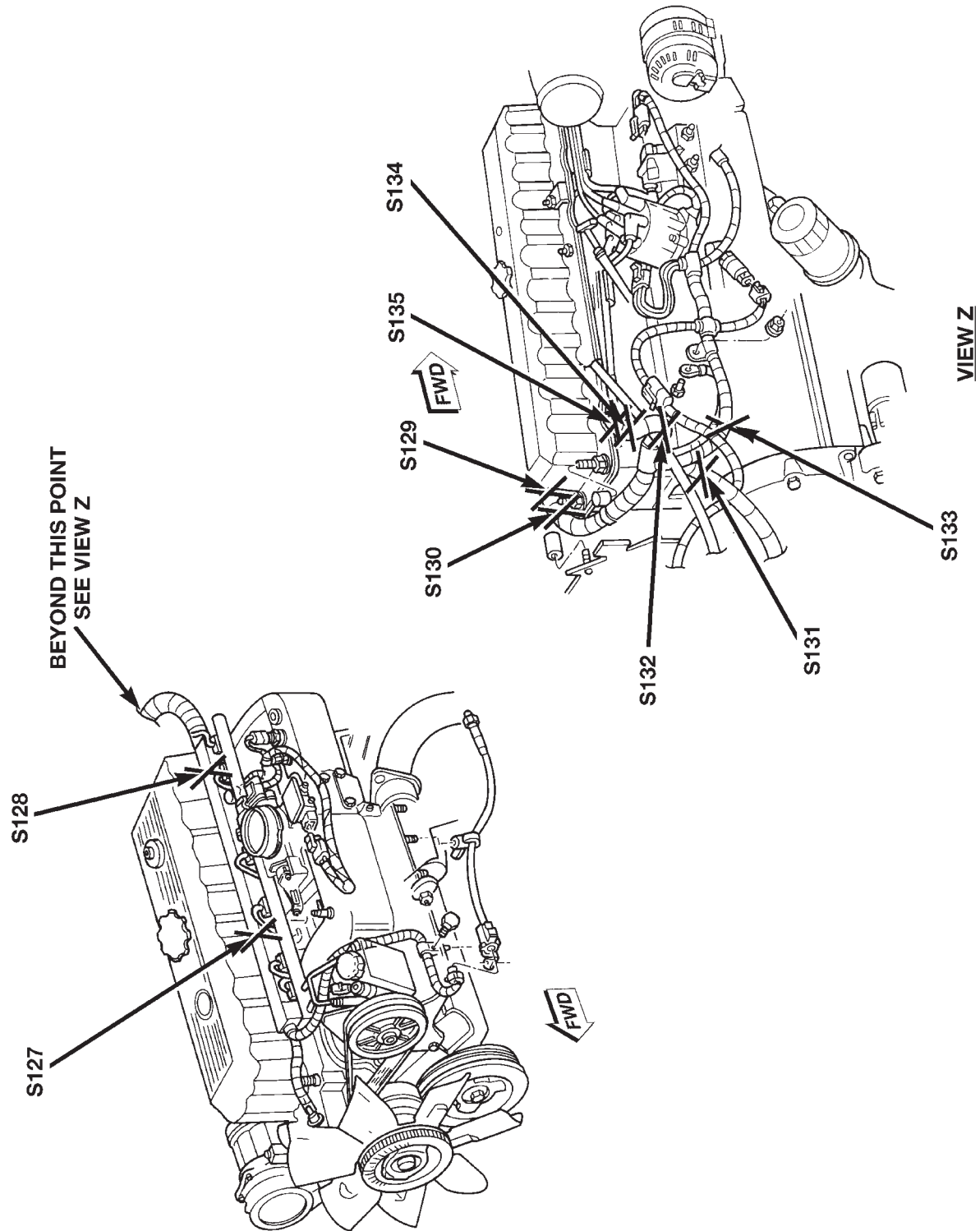


Fig. 2 Engine Wiring Splices—4.0L Engine

DESCRIPTION AND OPERATION (Continued)

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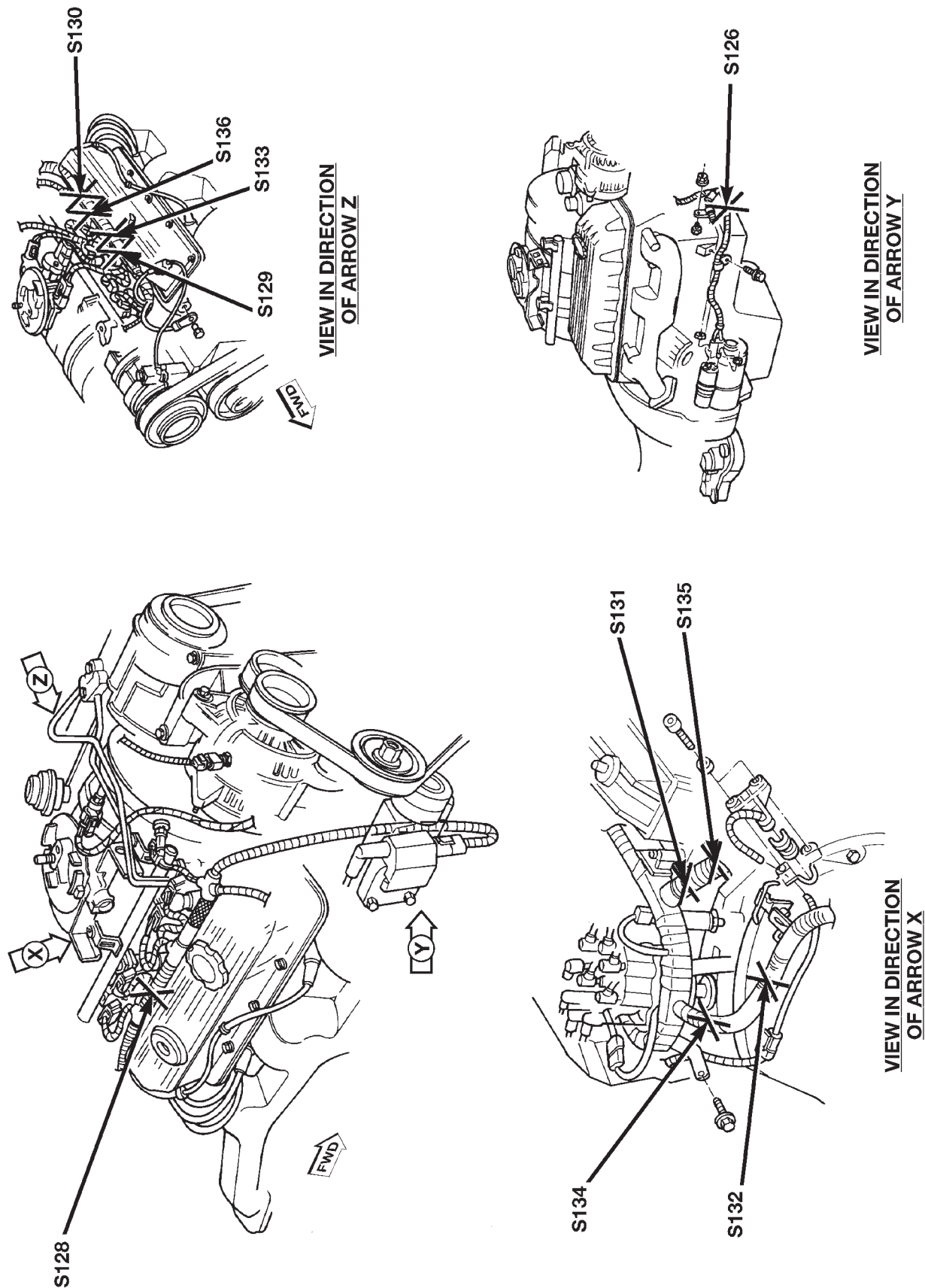


Fig. 3 Engine Wiring Splices—5.2L Engine

DESCRIPTION AND OPERATION (Continued)

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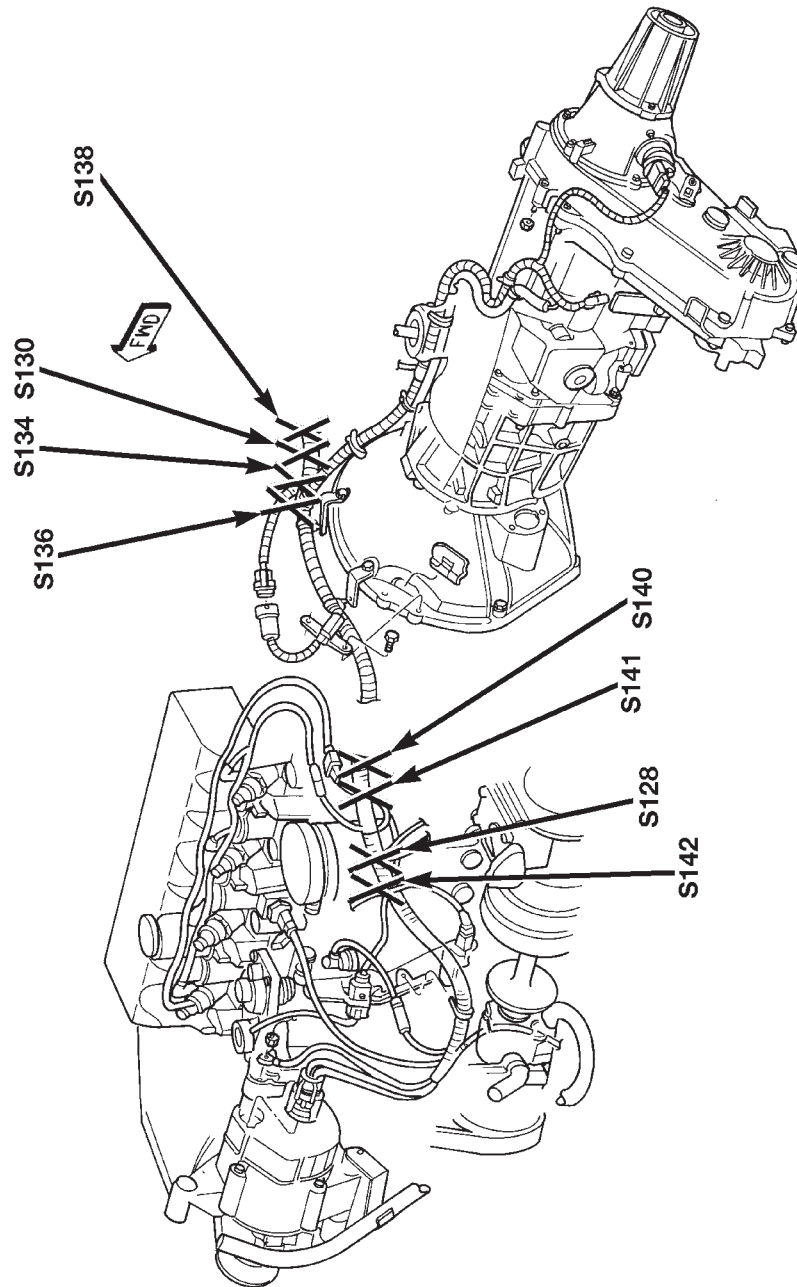
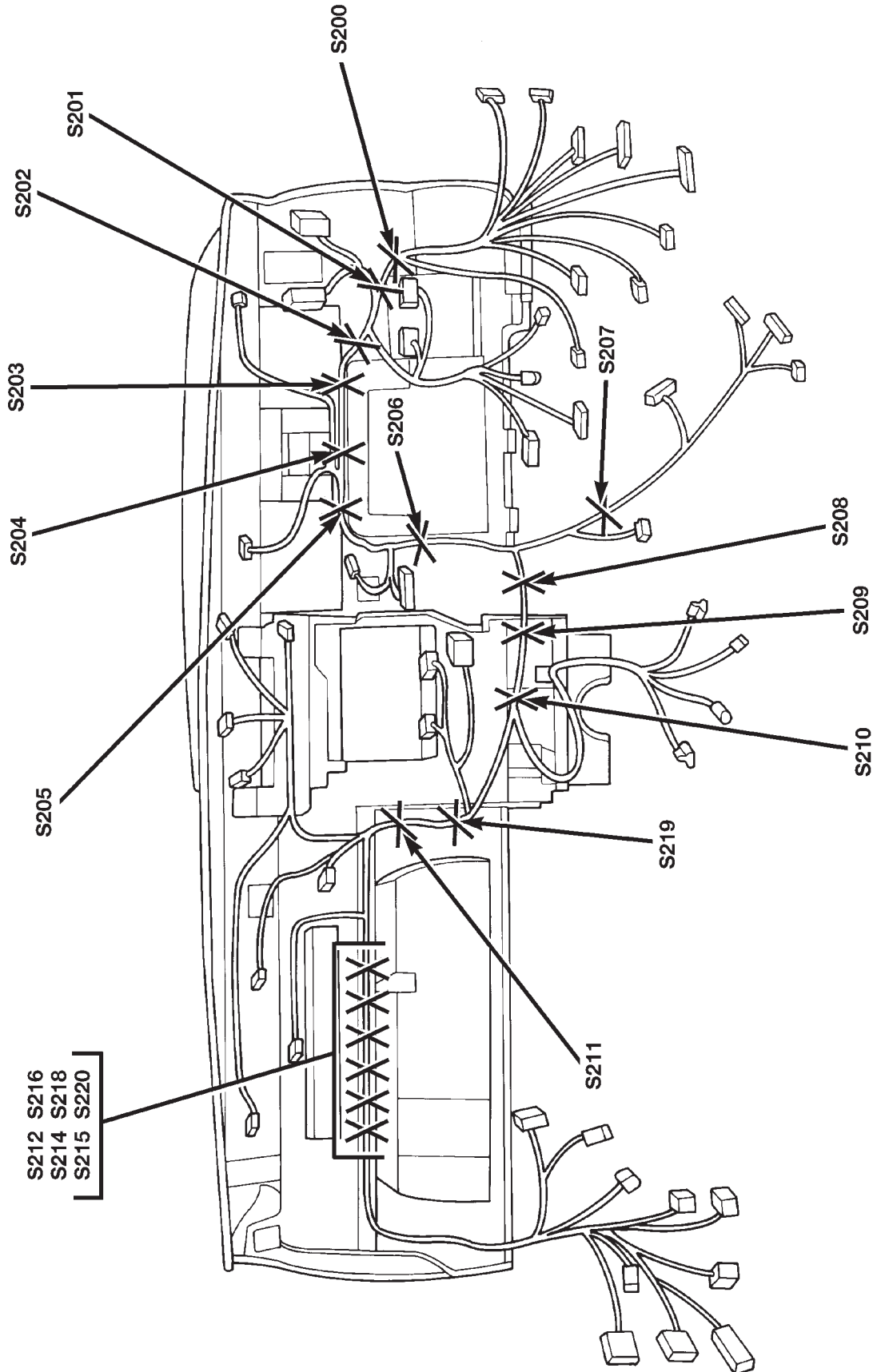


Fig. 4 Engine and Transmission Wiring Splices—Diesel Engine

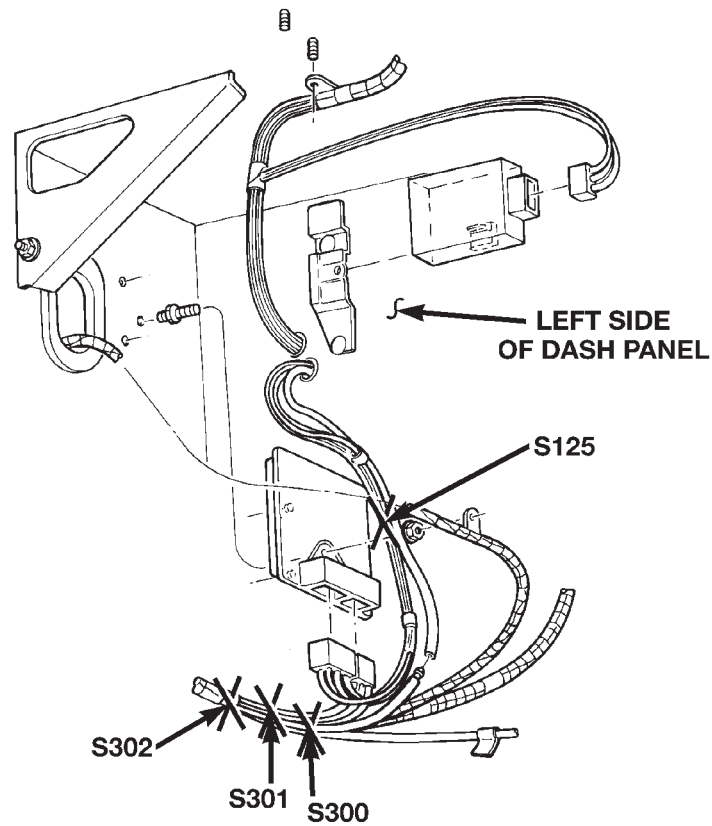
DESCRIPTION AND OPERATION (Continued)



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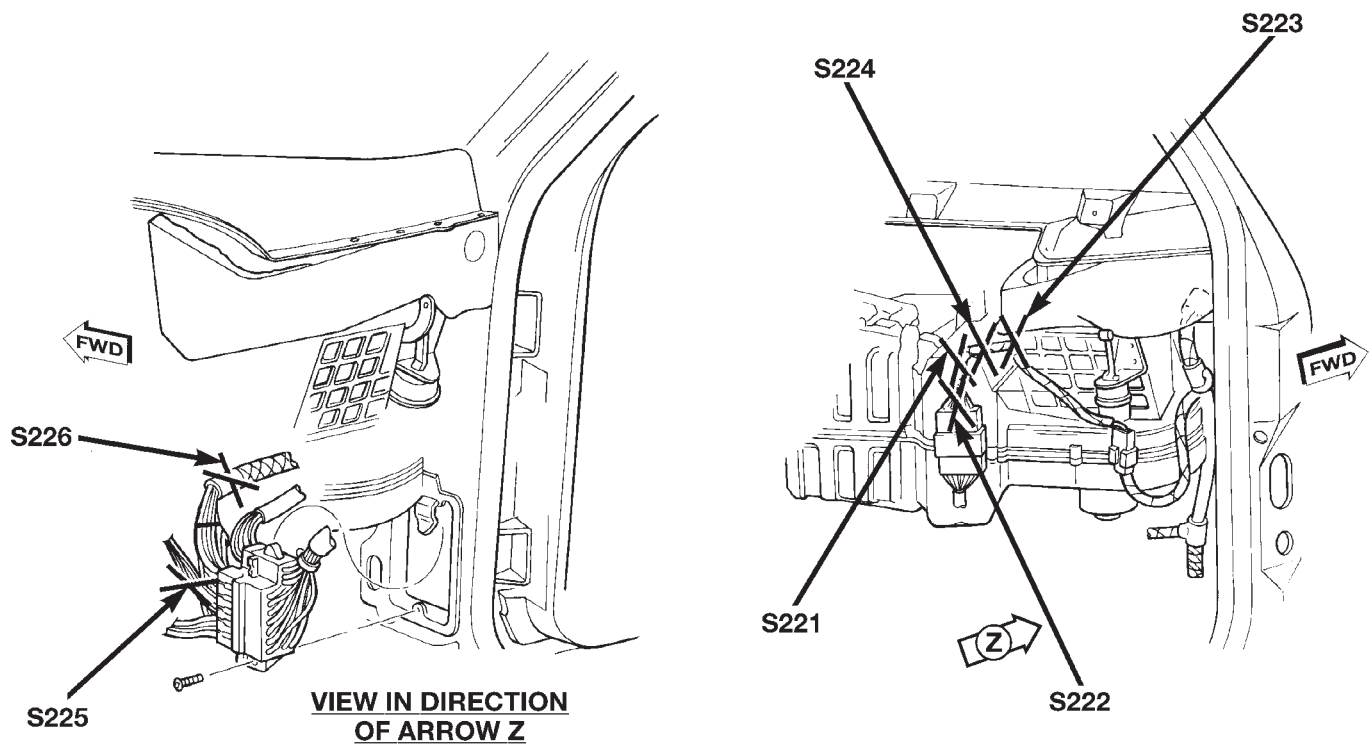
Fig. 5 Instrument Panel Splices

DESCRIPTION AND OPERATION (Continued)



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Fig. 6 Body Splices



80500592

Fig. 7 HVAC Harness Splices

DESCRIPTION AND OPERATION (Continued)

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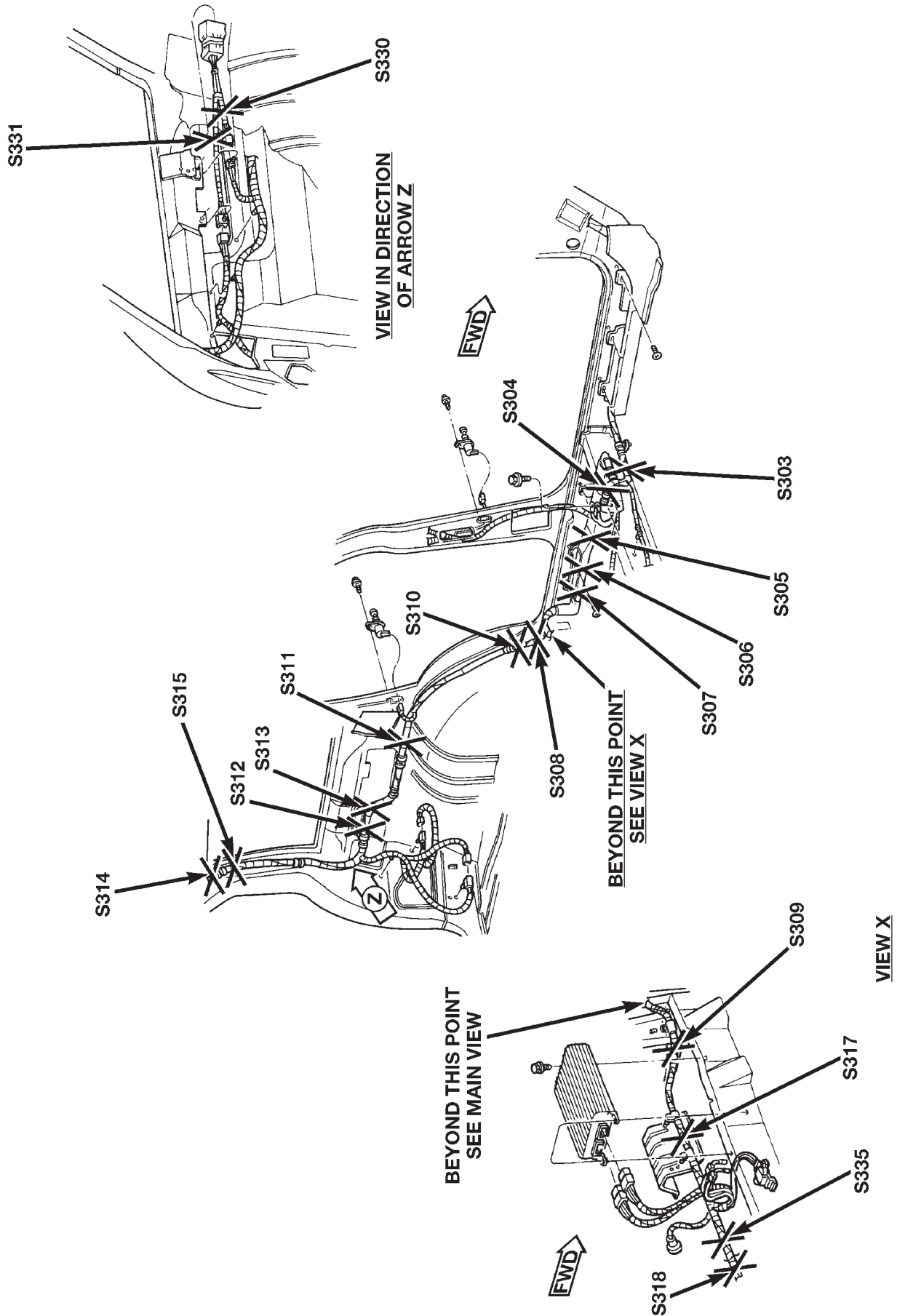


Fig. 8 Left Body Side Wiring Splices

DESCRIPTION AND OPERATION (Continued)

805fe520

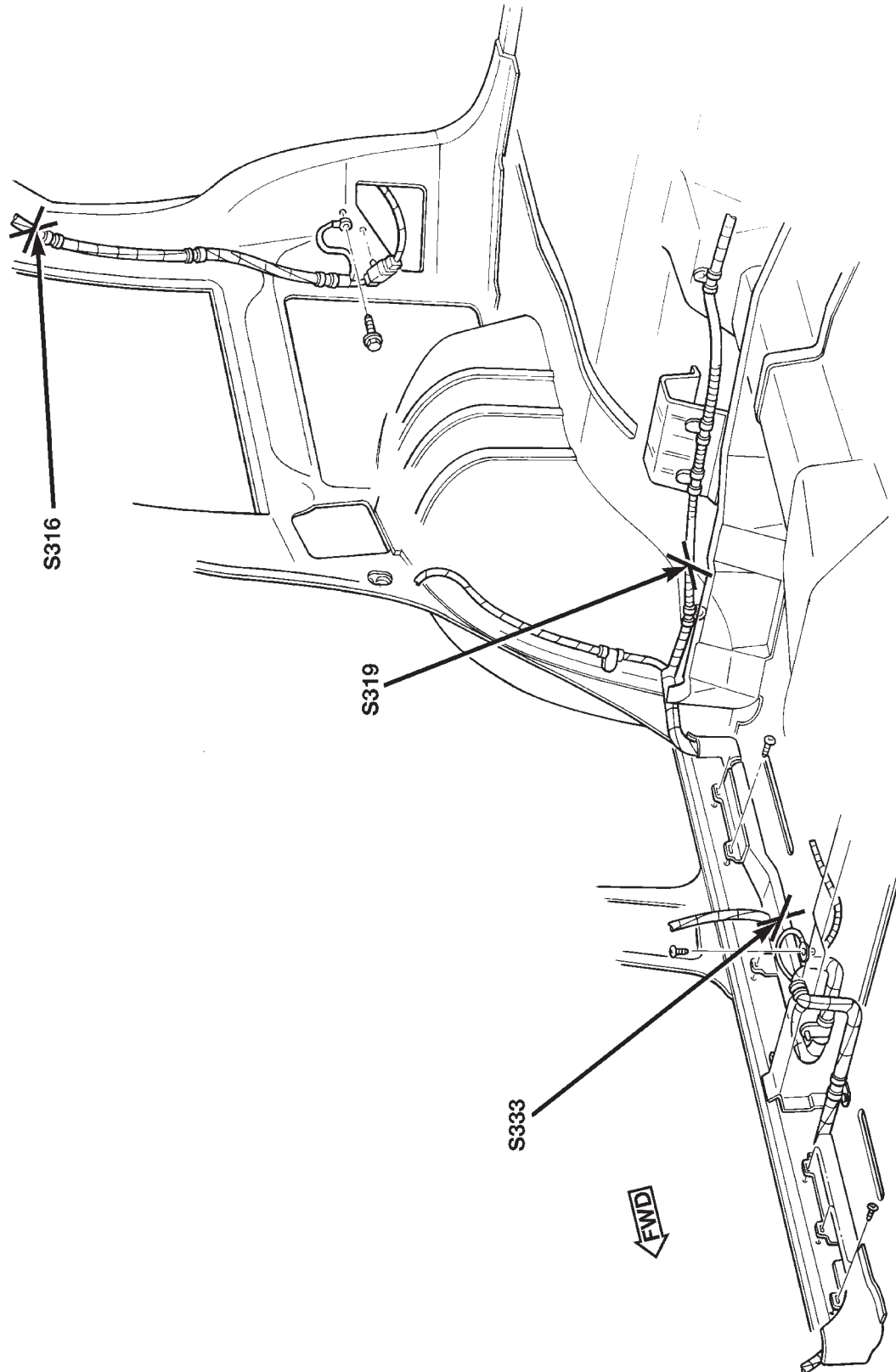


Fig. 9 Right Side Body Wiring Splices

DESCRIPTION AND OPERATION (Continued)

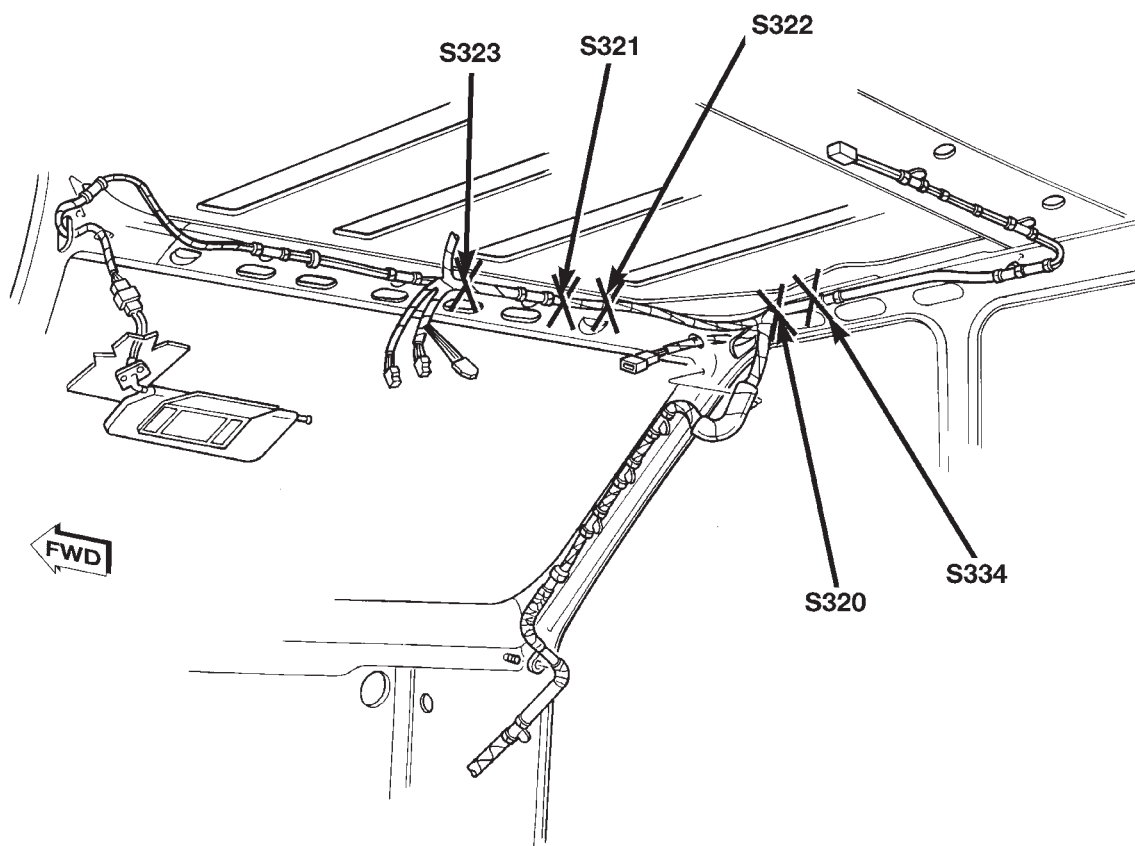


Fig. 10 Roof Wiring Splices

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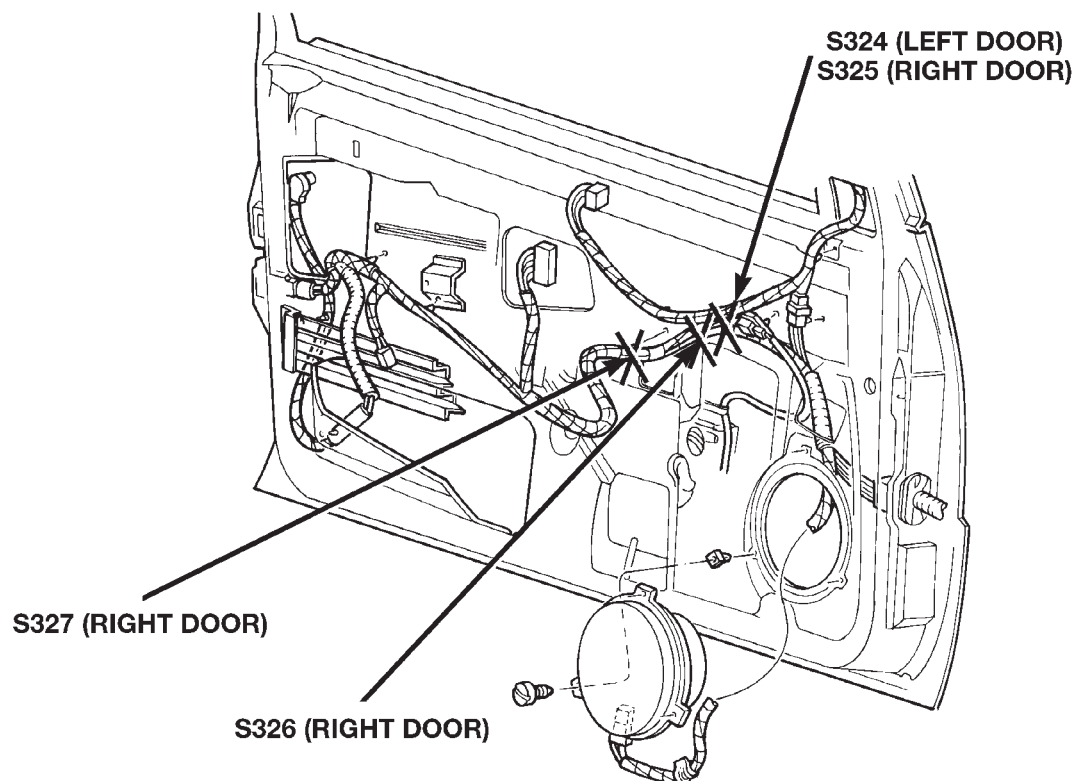


Fig. 11 Front Door Harness Splices

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DESCRIPTION AND OPERATION (Continued)

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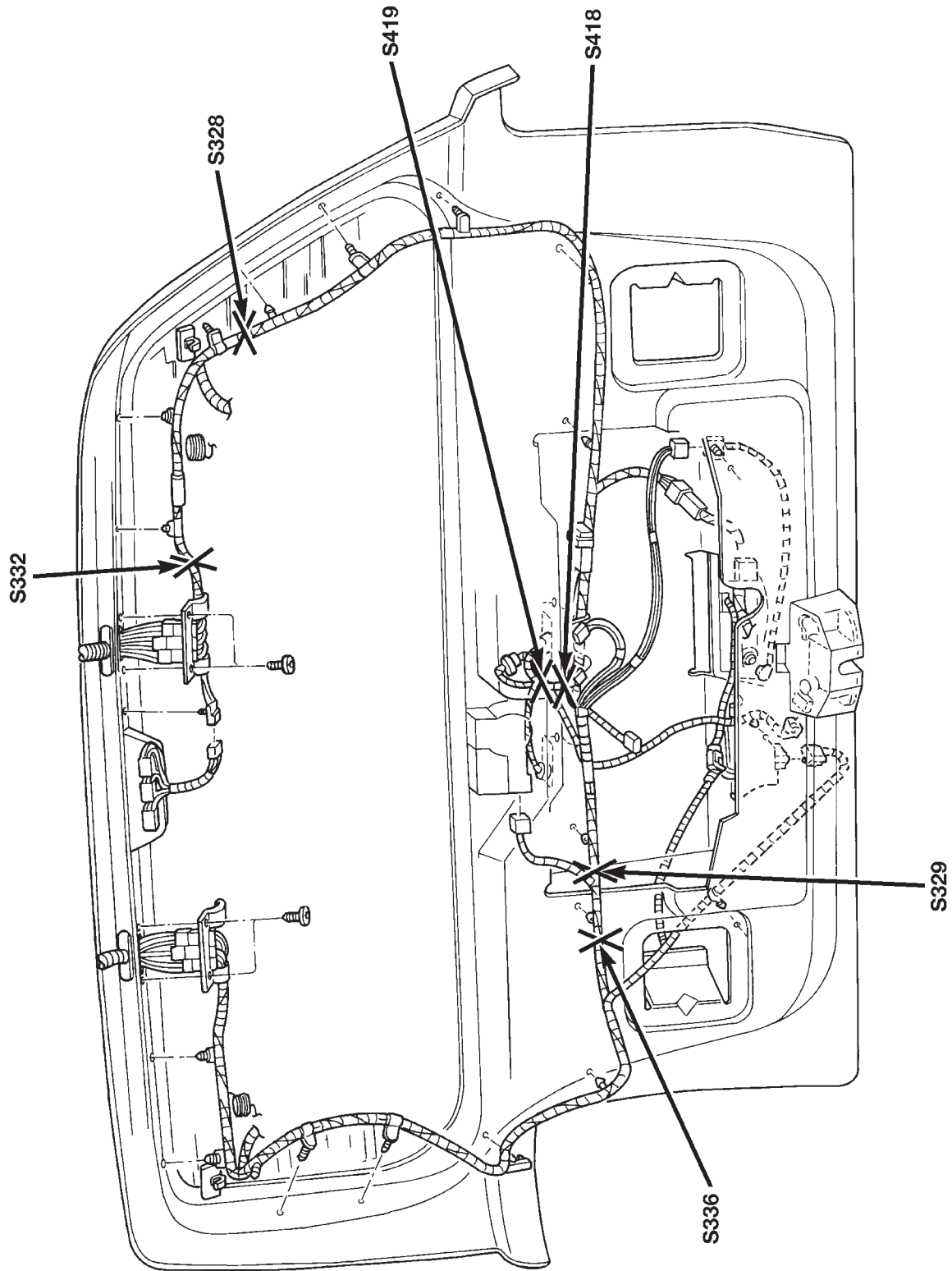


Fig. 12 Liftgate Splices

WIRING DIAGRAMS

CONTENTS

	page		page
8W-01 GENERAL INFORMATION	8W-01-1	8W-46 MESSAGE CENTER	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-49 OVERHEAD CONSOLE	8W-49-1
8W-15 GROUND DISTRIBUTION	8W-15-1	8W-50 FRONT LIGHTING	8W-50-1
8W-20 CHARGING SYSTEM	8W-20-1	8W-51 REAR LIGHTING	8W-51-1
8W-21 STARTING SYSTEM	8W-21-1	8W-52 TURN SIGNALS	8W-52-1
8W-30 FUEL/IGNITION SYSTEMS	8W-30-1	8W-53 WIPERS	8W-53-1
8W-31 TRANSMISSION CONTROL SYSTEM	8W-31-1	8W-54 TRAILER TOW	8W-54-1
8W-33 VEHICLE SPEED CONTROL	8W-33-1	8W-60 POWER WINDOWS	8W-60-1
8W-35 ALL-WHEEL ANTI-LOCK BRAKES	8W-35-1	8W-61 POWER DOOR LOCKS	8W-61-1
8W-39 VEHICLE THEFT SECURITY SYSTEM	8W-39-1	8W-62 POWER MIRRORS	8W-62-1
8W-40 INSTRUMENT CLUSTER	8W-40-1	8W-63 POWER SEAT	8W-63-1
8W-41 HORN/CIGAR LIGHTER	8W-41-1	8W-64 POWER SUNROOF	8W-64-1
8W-42 AIR CONDITIONING/HEATER	8W-42-1	8W-65 SPEED PROPORTIONAL STEERING	8W-65-1
8W-43 AIRBAG SYSTEM	8W-43-1	8W-70 SPLICE INFORMATION	8W-70-1
8W-44 INTERIOR LIGHTING	8W-44-1	8W-80 CONNECTOR PIN-OUTS	8W-80-1
8W-45 BODY CONTROL MODULE	8W-45-1	8W-90 CONNECTOR LOCATIONS	8W-90-1
		8W-95 SPLICE LOCATIONS	8W-95-1

8W-01 GENERAL INFORMATION

INDEX

	page		page
DESCRIPTION AND OPERATION		TROUBLESHOOTING TESTS	6
CIRCUIT IDENTIFICATION	3	TROUBLESHOOTING TOOLS	5
CONNECTOR/GROUND LOCATIONS	1	TROUBLESHOOTING WIRING PROBLEMS	6
CONNECTORS	3	SERVICE PROCEDURES	
ELECTROSTATIC DISCHARGE (ESD)		CONNECTOR AND TERMINAL REPLACEMENT .	9
SENSITIVE DEVICES	5	CONNECTOR REPLACEMENT	8
HOW TO USE THIS GROUP	1	DIODE REPLACEMENT	10
NOTES, CAUTIONS, and WARNINGS	1	TERMINAL REPLACEMENT	9
SECTION IDENTIFICATION	1	TERMINAL/CONNECTOR REPAIR-MOLEX	
SPLICE LOCATIONS	1	CONNECTORS	7
SYMBOLS	3	TERMINAL/CONNECTOR REPAIR—THOMAS	
TAKE OUTS	3	AND BETTS CONNECTORS	8
WIRE CODE IDENTIFICATION	2	WIRING REPAIR	7
DIAGNOSIS AND TESTING		SPECIAL TOOLS	
INTERMITTENT AND POOR CONNECTIONS ...	5	WIRING/TERMINAL	11

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 descrip-

tions, 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.

NOTES are used to help describe how switches or components operate to complete a particular circuit. They are also used to indicate different conditions

DESCRIPTION AND OPERATION (Continued)

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)

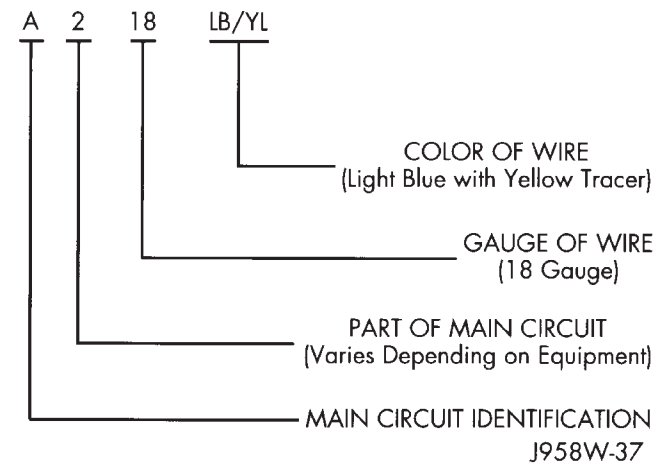


Fig. 1 Wire Code Identification

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

DESCRIPTION AND OPERATION (Continued)

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.

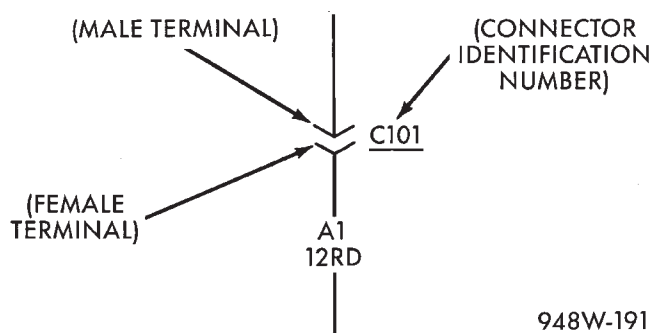
<u>CIRCUIT</u>	<u>FUNCTION</u>
A	Battery Feed
B	Brake Controls
C	Climate Controls
D	Diagnostic Circuits
E	Dimming Illumination Circuits
F	Fused Circuits (Secondary Feed)
G	Monitoring Circuits (Gauges)
H	Open
I	Not Used
J	Open
K	Powertrain Control Module
L	Exterior Lighting
M	Interior Lighting
N	ESA Module
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).

**Fig. 4 Connector Identification**

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 section also provides terminal numbering, circuit identification, wire colors, and functions.

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.






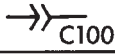



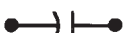































TAKE OUTS

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		CONNECTOR IDENTIFICATION
	GANG FUSES WITH BUSS BAR		MALE CONNECTOR
	CIRCUIT BREAKER		FEMALE CONNECTOR
	CAPACITOR		DENOTES WIRE CONTINUES ELSEWHERE
	OHMS		DENOTES WIRE GOES TO ONE OF TWO CIRCUITS
	RESISTOR		SPLICE
	VARIABLE RESISTOR		SPLICE IDENTIFICATION
	SERIES RESISTOR		THERMAL ELEMENT
	COIL		TIMER
	STEP UP COIL		MULTIPLE CONNECTOR
	OPEN CONTACT		OPTIONAL WIRING WITH WIRING WITHOUT
	CLOSED CONTACT		"Y" WINDINGS
	CLOSED SWITCH		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.

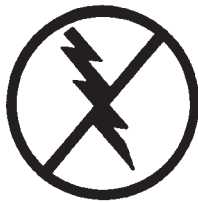
(1) Always touch a known good ground before handling the part. This should be repeated while handling the part and more frequently after sliding across a seat, sitting down from a standing position, or walking a distance.

(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.



948W-193

Fig. 6 Electrostatic Discharge Symbol**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.

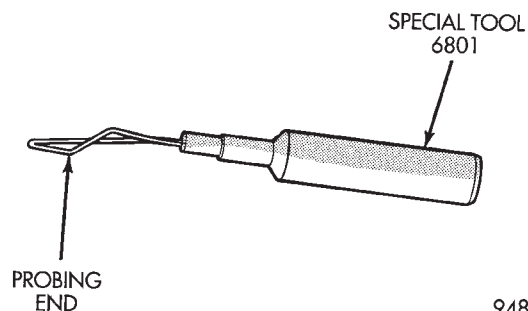
- **Voltmeter** - Used to check for voltage on a circuit. Always connect the black lead to a known good ground and the red lead to the positive side of the circuit.

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. 7). Select the proper 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.



948W-233

Fig. 7 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

DIAGNOSIS AND TESTING (Continued)

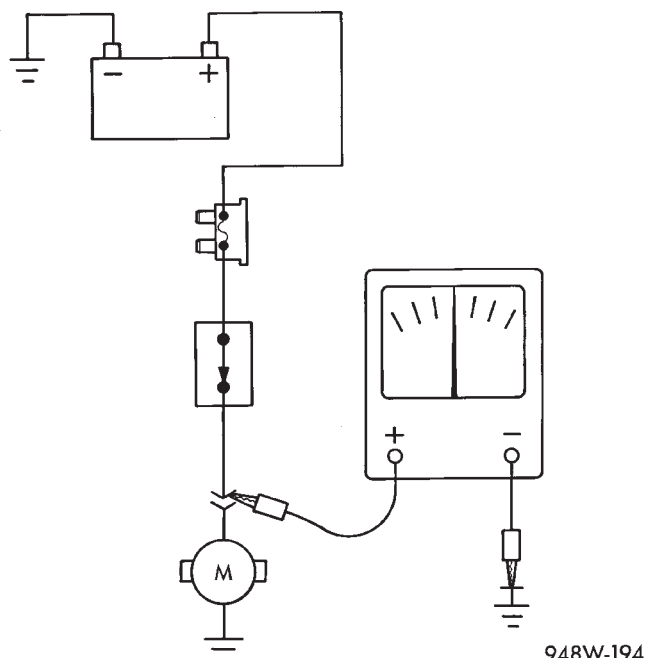
TROUBLESHOOTING TESTS

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. 8).

(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.



948W-194

Fig. 8 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. 9).

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

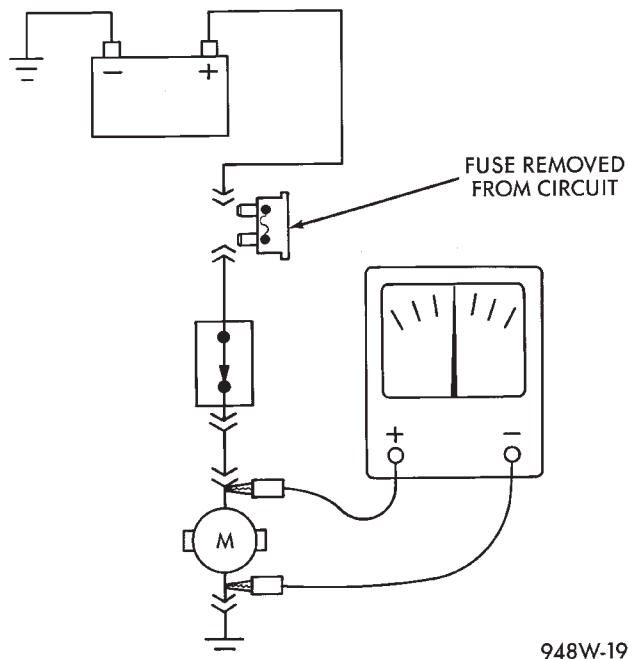
TESTING FOR A SHORT TO GROUND

(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.



948W-195

Fig. 9 Testing for Continuity

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.

(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. 10).

(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.

DIAGNOSIS AND TESTING (Continued)

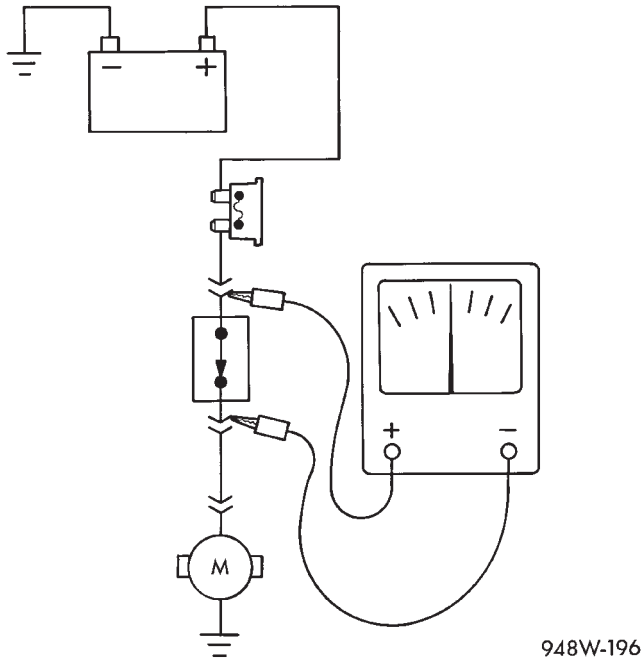


Fig. 10 Testing for Voltage Drop

(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. 11)

(5) Push the two ends of wire together until the strands of wire are close to the insulation (example 2) (Fig. 11)

(6) Twist the wires together (example 3) (Fig. 11)

(7) Solder the connection together using rosin core type solder. **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

(10) Connect battery and test all affected systems.

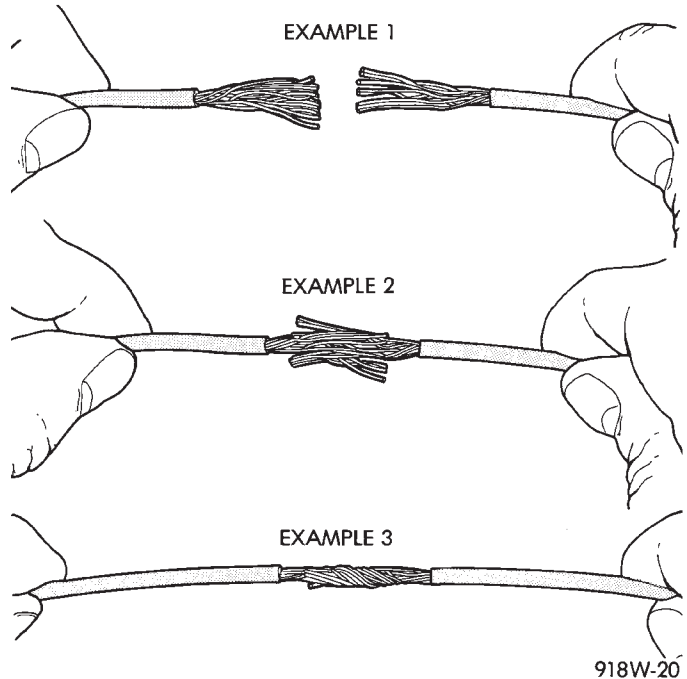


Fig. 11 Wire Repair

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. 12).

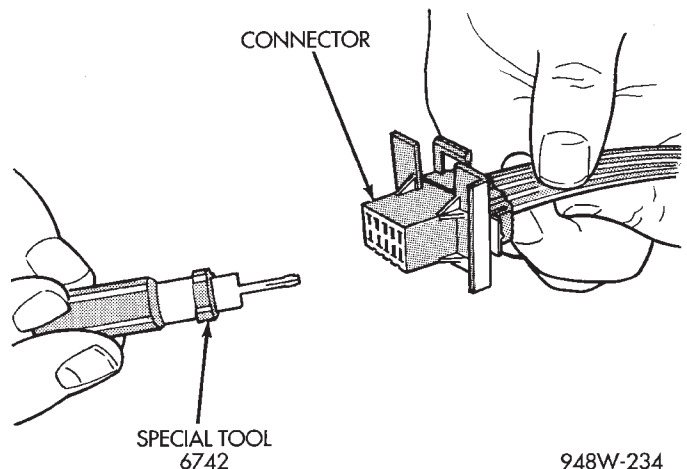


Fig. 12 Molex Connector Repair

SERVICE PROCEDURES (Continued)

(4) Using special tool 6742 release the locking fingers on the terminal (Fig. 13).

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

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

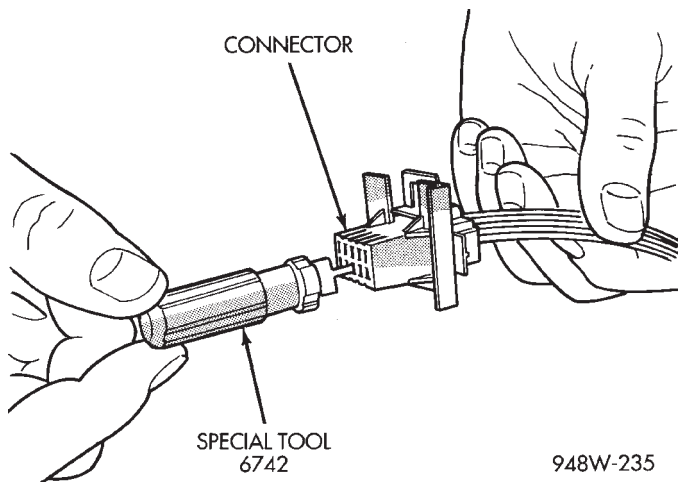


Fig. 13 Using Special Tool 6742

TERMINAL/CONNECTOR REPAIR—THOMAS AND BETTS CONNECTORS

- (1) Disconnect battery.
- (2) Disconnect the connector from its mating half/component.
- (3) Push in the two lock tabs on the side of the connector (Fig. 14).

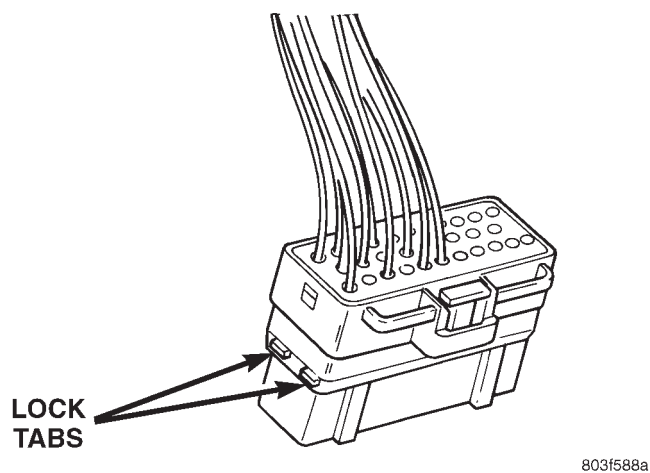


Fig. 14 Thomas and Betts Connector Lock Release Tabs

(4) Insert the probe end of special tool 6934 into the back of the connector cavity (Fig. 15).

(5) Grasp the wire and tool 6934 and slowly remove the wire and terminal from the connector.

(6) Repair or replace the terminal.

(7) Install the wire and terminal in the connector. Fully seat the terminal in the connector.

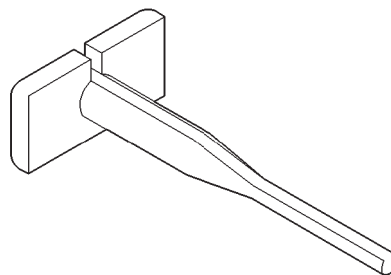


Fig. 15 Removing Wire Terminal

(8) Push in the single lock tab on the side of the connector (Fig. 16).

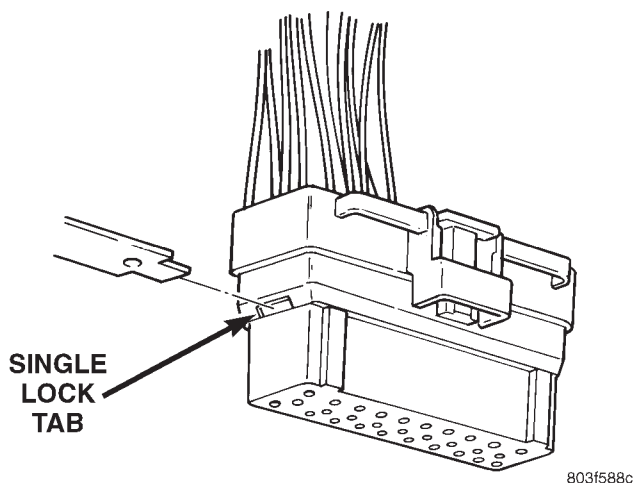


Fig. 16 Single Lock Tab

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. 17)

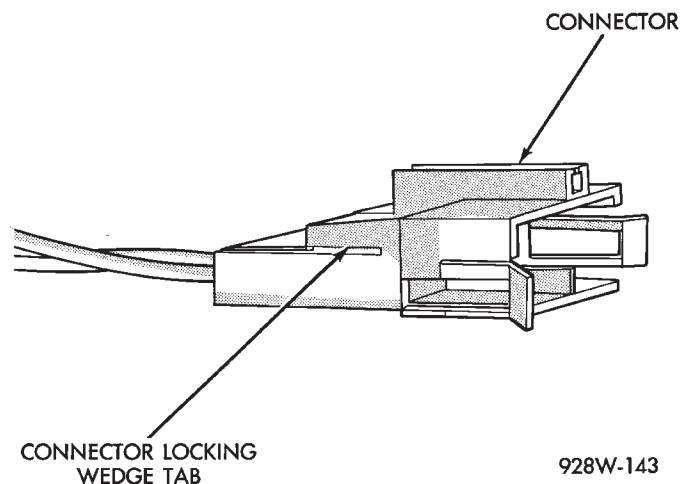


Fig. 17 Connector Locking Wedge

SERVICE PROCEDURES (Continued)

(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. 18) (Fig. 19).

(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 pin-out 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.

(10) Connect battery and test all affected systems.

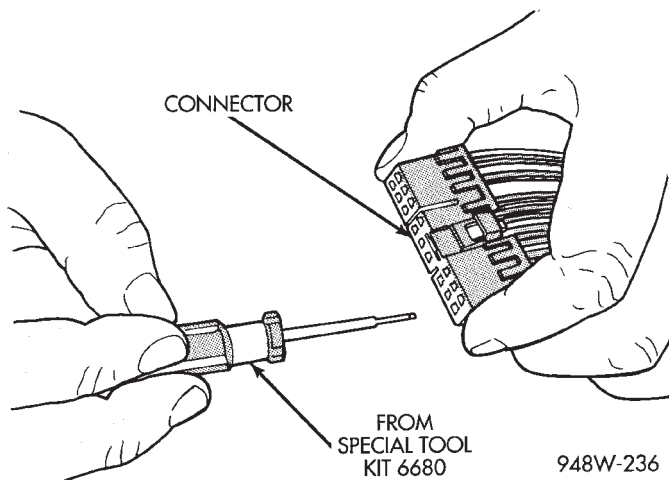


Fig. 18 Terminal Removal

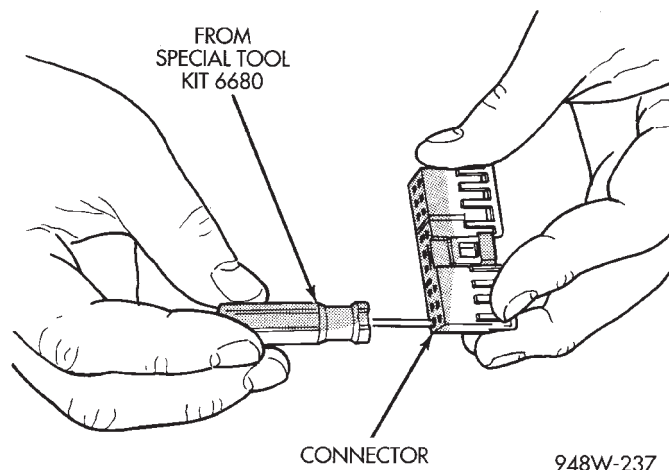


Fig. 19 Terminal Removal Using Special Tool

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. 20).

(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. 20).

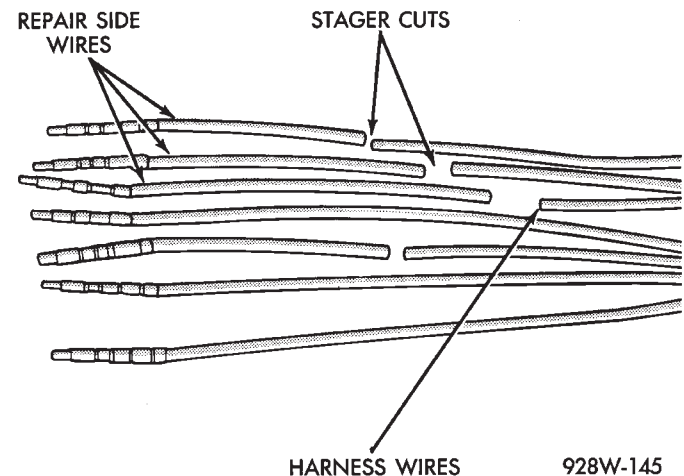


Fig. 20 Stagger Cutting Wires

(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.

(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 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)

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

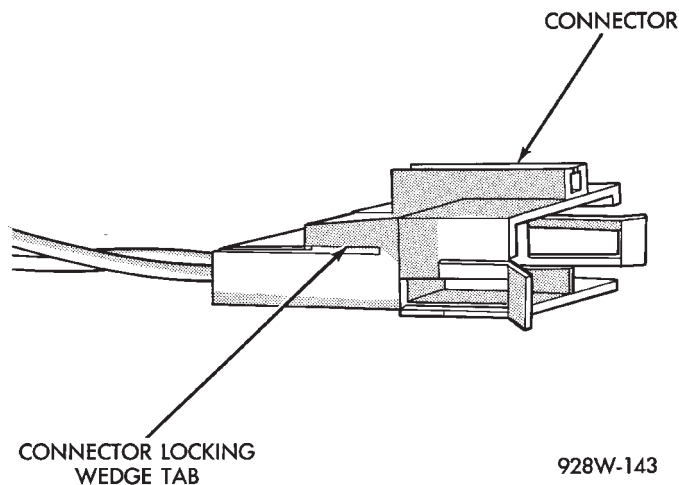


Fig. 21 Connector Locking Wedge Tab (Typical)

(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).

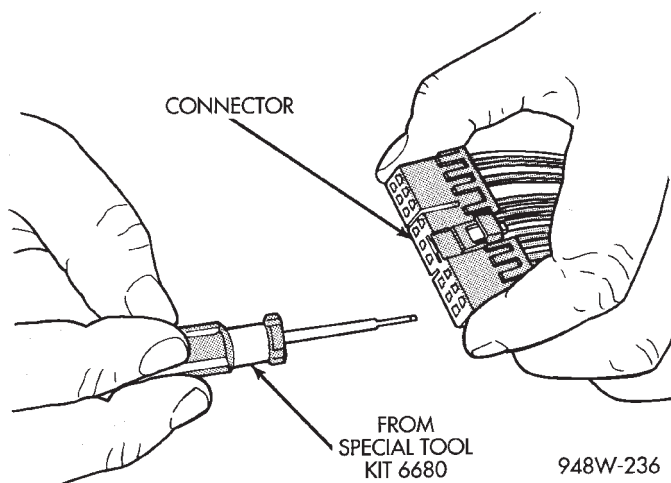


Fig. 22 Terminal Removal

(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.

(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.

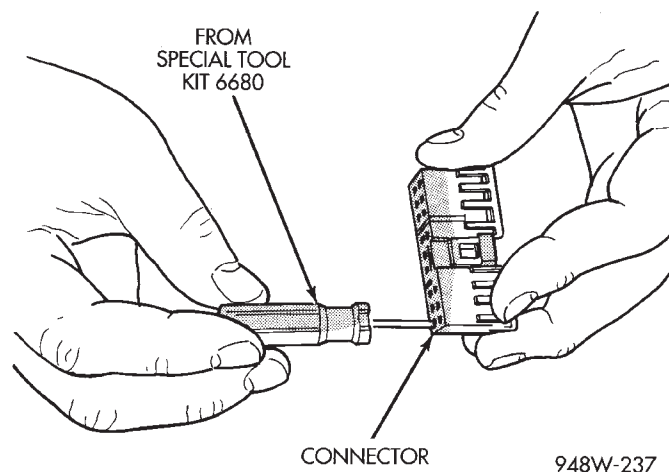


Fig. 23 Terminal Removal Using Special Tool

(12) Twist the wires together.

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

(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.

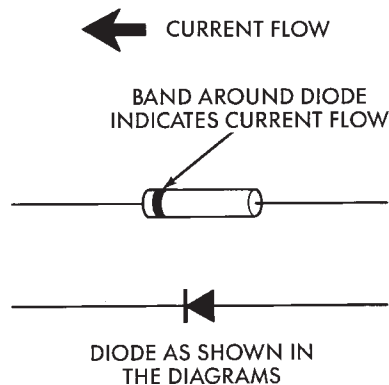
(18) Connect battery, and test all affected systems.

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).



948W-197

Fig. 24 Diode Identification

SERVICE PROCEDURES (Continued)

(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.

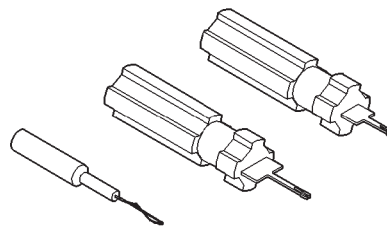
(6) Solder the connection together using rosin core type solder only. **Do not use acid core solder.**

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

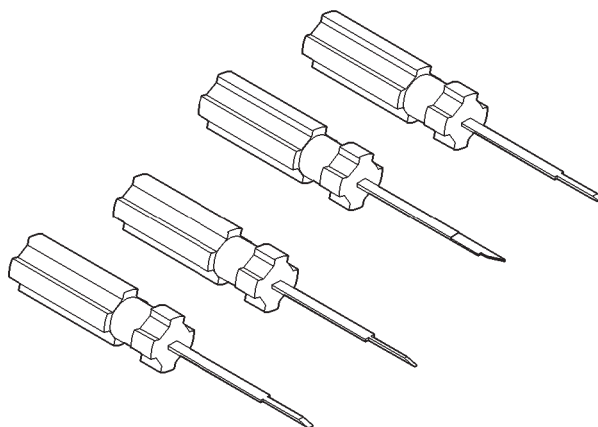
(8) Re-connect the battery, and test affected systems.

SPECIAL TOOLS

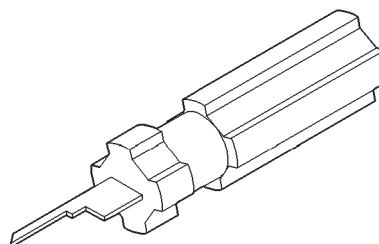
WIRING/TERMINAL



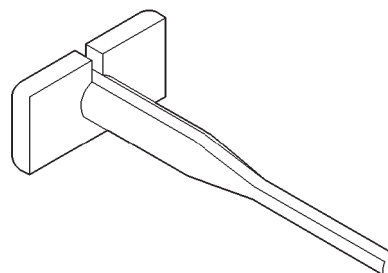
Probing Tool Package 6807



Terminal Pick 6680



Terminal Removing Tool 6932



Terminal Removing Tool 6934

8W-02 COMPONENT INDEX

INDEX

page

SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	4

Component	Page	Component	Page
A/C Compressor Clutch	8W-42	Crankshaft Position (CKP) Sensor	8W-30
A/C Compressor Clutch Relay	8W-42	Cruise Lamp	8W-40
A/C Heater Control	8W-42	Cylinder Lock Switches	8W-39
A/C High Pressure Switch	8W-42	Data Link Connector	8W-30
A/C Low Pressure Switch	8W-42	Daytime Running Lamp (DRL) Module	8W-50
ABS Warning Lamp	8W-40	Dome/Reading Lamp	8W-44
Aftermarket Trailer Tow Connector	8W-54	Door Ajar Switches	8W-39, 44, 45
Airbag Control Module	8W-43	Door Courtesy Lamps	8W-44
Airbag Warning Lamp	8W-40, 43	Door Lock Motors	8W-61
Ambient Temperature Sensor	8W-42, 45	Door Speakers	8W-47
Antenna	8W-47	Driver Door Module	8W-60, 61, 62, 63
Ash Receiver Lamp	8W-44	Driver Heated Seat Back	8W-63
Automatic Day/Night Mirror	8W-44	Driver Heated Seat Cushion	8W-63
Automatic Headlamp Light		Driver Lumbar Motor	8W-63
Sensor/Vtss Led	8W-45, 50	Driver Lumbar Sensor/Motor	8W-63
Automatic Headlamp Relay	8W-12, 50	Driver Lumbar Switch	8W-63
Automatic Shut Down Relay	8W-10, 20, 30, 42	Driver Power Mirror	8W-62
Automatic Temperature Control Module	8W-42	Driver Power Seat Front Riser Motor	8W-63
Back-Up Lamp Switch	8W-51	Driver Power Seat Front Riser Motor Sensor	8W-63
Back-Up Lamps	8W-51	Driver Power Seat Horizontal Motor	8W-63
Battery	8W-15, 20	Driver Power Seat Horizontal Motor Sensor	8W-63
Battery Temperature Sensor	8W-30	Driver Power Seat Rear Riser Motor	8W-63
Blend Door Actuator	8W-42	Driver Power Seat Rear Riser Motor Sensor	8W-63
Blower Motor	8W-42	Driver Power Seat Recliner Motor	8W-63
Blower Motor Resistor Block	8W-42	Driver Power Seat Recliner Motor Sensor	8W-63
Blower Power Module	8W-42	Driver Power Seat Switch	8W-63
Body Control Module	8W-39, 40, 45	Driver Seat Heater Control Module	8W-63
Brake Warning Lamp	8W-40	Driver Side Airbag	8W-43
Brake Warning Switch	8W-40	Duty Cycle Evap/Purge Solenoid	8W-30
Camshaft Position (CMP) Sensor	8W-30	EGR Solenoid	8W-30
Cargo Lamp	8W-44	Electronic Flasher	8W-52
Center High Mounted Stop Lamps (CHMSL)	8W-51	Engine Coolant Level Sensor	8W-46
Check Engine Lamp	8W-40	Engine Coolant Temperature (ECT) Sensor	8W-30
Check Gages Lamp	8W-40	Engine Starter Motor	8W-21
Cigar Lighter	8W-41	Engine Starter Motor Relay	8W-21
Cigar Lighter Lamp	8W-44	Evaporative System Leak Detection Pump	8W-30
Cigar Lighter Relay	8W-41	Factory Trailer Tow Connector	8W-54
Circuit Breakers	8W-10, 12, 50, 54	Floor Console Lamps	8W-44
Clockspring	8W-30, 33, 39, 47	Fog Lamp Relay	8W-12, 50
Clutch Interlock Switch	8W-21	Fog Lamp Switch	8W-50
Controller Anti-Lock Brake	8W-35	Fog Lamps	8W-50, 51
Coolant Level Sensor	8W-30	Four Wheel Drive Switch	8W-46
Courtesy Lamp Relay	8W-44	Fuel Gauge	8W-40
Courtesy Lamps	8W-44	Fuel Heater	8W-30

SPECIAL TOOLS (Continued)

Component	Page	Component	Page
Fuel Heater Relay	8W-30	Memory Set Switch 1 Set	8W-63
Fuel Injectors	8W-30	Mercury Switch	8W-44
Fuel Pump Module	8W-30	Mode Door Actuator	8W-42
Fuel Pump Relay	8W-30	MSA Controller	8W-10, 30, 33
Fuel Sender Unit	8W-30	Needle Sensor	8W-30
Fuses (JB)	8W-12	Oil Pressure Gauge	8W-40
Fuses (PDC)	8W-10	Oil Pressure Sensor	8W-30
G Switch	8W-35	Output Shaft Speed Sensor	8W-30, 31
Gauge	8W-40	Overhead Console	8W-49
Generator	8W-20	Park Brake Switch	8W-45, 50
Glove Box Lamp	8W-44	Park Lamp Relay	8W-12, 45, 50, 51
Glow Plug	8W-30	Park Lamps	8W-50, 52
Glow Plug Relay	8W-30	Park/Neutral Position Switch	8W-30, 44
Graphic Display Module	8W-46	Passenger Door Module	8W-60, 61, 62
Ground Distribution	8W-15	Passenger Heated Seat Back	8W-63
Headlamp Dimmer Switch	8W-50	Passenger Heated Seat Cushion	8W-63
Headlamp Leveling Motors	8W-50	Passenger Lumbar Motor	8W-63
Headlamp Leveling Switch	8W-50	Passenger Lumbar Switch	8W-63
Headlamp Switch	8W-50	Passenger Power Mirror	8W-62
Headlamps	8W-50	Passenger Power Seat Front Riser Motor	8W-63
Heated Oxygen Sensors	8W-30	Passenger Power Seat Horizontal Motor	8W-63
Heated Seat Switch	8W-63	Passenger Power Seat Rear Riser Motor	8W-63
High Beam Indicator Lamp	8W-40	Passenger Power Seat Recliner Motor	8W-63
High Speed Blower Motor Relay	8W-42	Passenger Power Seat Switch	8W-63
Hood Switch	8W-39	Passenger Seat Heater Control Module	8W-63
Horn Relay	8W-39, 41	Passenger Side Airbag	8W-43
Horn Switch	8W-39, 41	Pedal Position Sensor	8W-30, 31
Horns	8W-39, 41	Power Amplifier	8W-47
Idle Air Control (IAC) Motor	8W-30	Power Antenna	8W-47
Ignition Coil	8W-30	Power Antenna Relay	8W-12, 47
Ignition Switch	8W-10	Power Distribution Center	8W-10
Illumination Lamps	8W-40, 44	Power Outlet	8W-41
In-Car Temperature Sensor	8W-42	Power Window Motors	8W-60
Instrument Cluster	8W-40	Power Window Switches	8W-60
Instrument Panel Speakers	8W-47	Powertrain Control Module	8W-20, 30, 33
Intake Air Temperature (IAT) Sensor	8W-30	Radio	8W-47
Intermittent Wiper Relay	8W-53	Radio Remote Switches	8W-47
Intermittent Wiper Switch	8W-53	Rear Fog Lamp Relay A	8W-51
Junction Block	8W-12	Rear Speakers	8W-47
Key-In Switch/Halo Lamp	8W-44, 45	Rear Washer Pump Motor	8W-53
Lamp Outage Module	8W-51	Rear Window Defogger	8W-48
License Lamps	8W-51	Rear Window Defogger Relay	8W-12, 48
Liftgate Ajar Switch	8W-39, 44, 45, 53	Rear Window Defogger Switch	8W-48
Liftgate Cylinder Lock Switch	8W-39	Rear Wiper Module	8W-53
Liftgate Lock Motor	8W-61	Rear Wiper Motor	8W-53
Liftglass Ajar Switch	8W-39, 44, 45	Rear Wiper/Washer Switch	8W-53
Liftglass Limit Switch	8W-61	Recirculation Door Actuator	8W-42
Liftglass Push Button	8W-61	Seat Belt Switch	8W-45
Liftglass Release Solenoid	8W-61	Seat Belt Warning Lamp	8W-40
Low Fuel Warning Lamp	8W-40	Shift Interlock	8W-31
Manifold Absolute Pressure (MAP) Sensor	8W-30	Side Marker Lamps	8W-52
Mass Air Flow Module	8W-30	Side Repeaters	8W-52
Memory Seat Module	8W-63	Sliding Roof Motor	8W-64

SPECIAL TOOLS (Continued)

Component	Page	Component	Page
Sliding Roof Position Switch	8W-64	Transmission Control Relay	8W-30, 31
Solar Sensor	8W-42	Transmission Solenoid Assembly	8W-30, 31
Speed Proportional Steering Control Module .	8W-65	Turn Signal Indicator Lamps	8W-40
Speed Proportional Steering Module	8W-65	Turn Signal Lamps	8W-40, 50, 52
Speed Proportional Steering Solenoid	8W-65	Turn Signal/Hazard Warning Switch	8W-52
Speedometer	8W-40	Underhood Lamp	8W-44
Splice Information	8W-70	Universal Garage Door Opener	8W-44
Steering Wheel Speed Sensor	8W-65	Variable Force Solenoid	8W-31
Stop Lamp Switch	8W-33	Vehicle Information Center	8W-46
Sunroof Control Module	8W-64	Vehicle Speed Control Servo	8W-33
Sunroof Switch	8W-64	Vehicle Speed Control/Horn	
Switch Pod	8W-44	Switch	8W-30, 33, 39, 41, 47
Tachometer	8W-40	Vehicle Speed Sensor	8W-30, 31, 33
Tail/Stop Lamps	8W-51	Visor/Vanity Lamps	8W-44
Throttle Position (TP) Sensor	8W-30, 31	Volt Meter	8W-40
Torque Converter Clutch Solenoid	8W-31	Water In Fuel Sensor	8W-30
Trailer Brake Provision	8W-54	Wheel Speed Sensors	8W-35
Trailer Tow Circuit Breaker	8W-54	Windshield Washer Pump Motor	8W-53
Trailer Tow Stop Lamp Relay	8W-54	Windshield Wiper Motor	8W-53
Trailer Tow Turn Relays	8W-54	Wiper Fluid Level Sensor	8W-46, 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.

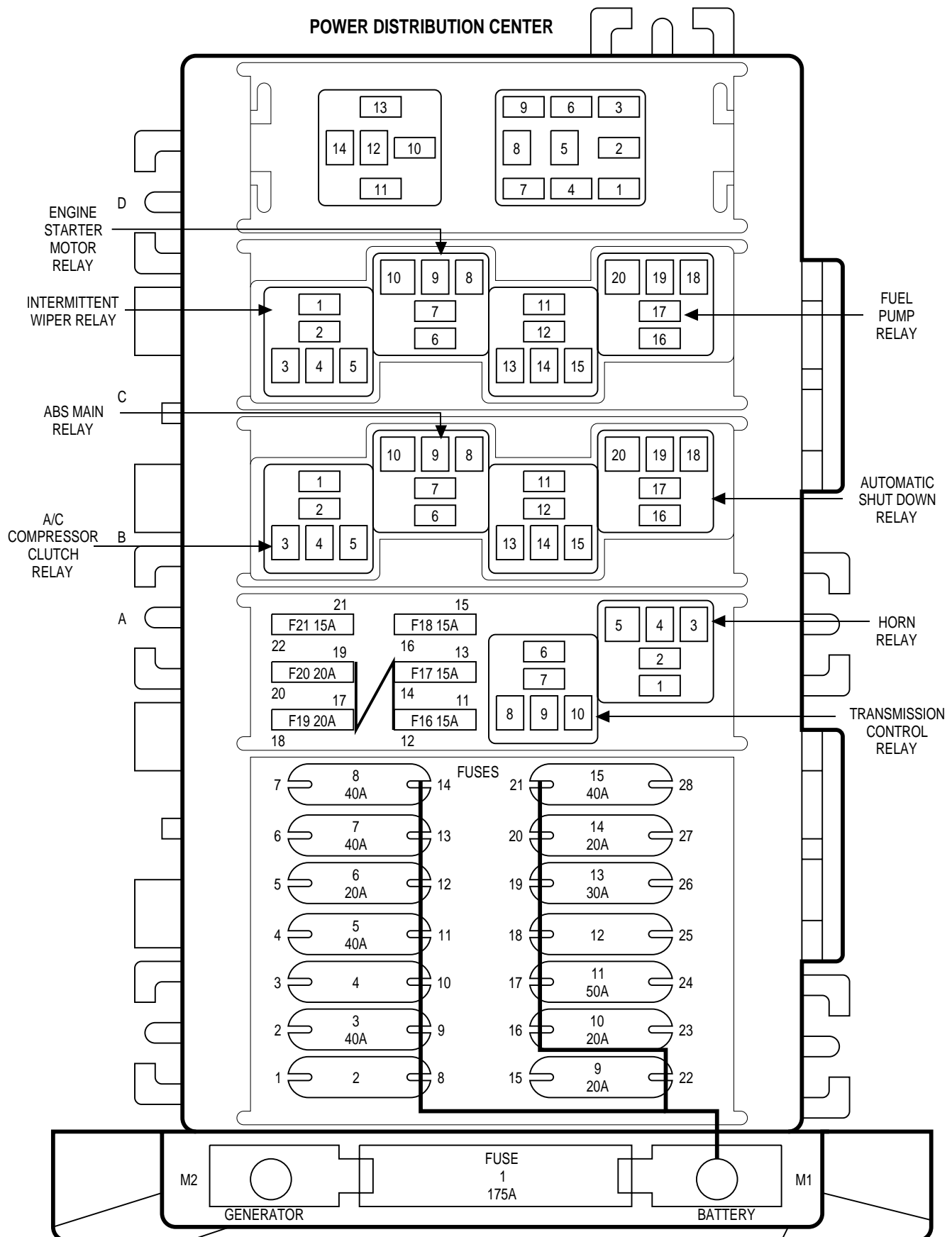
8W-10 POWER DISTRIBUTION

INDEX

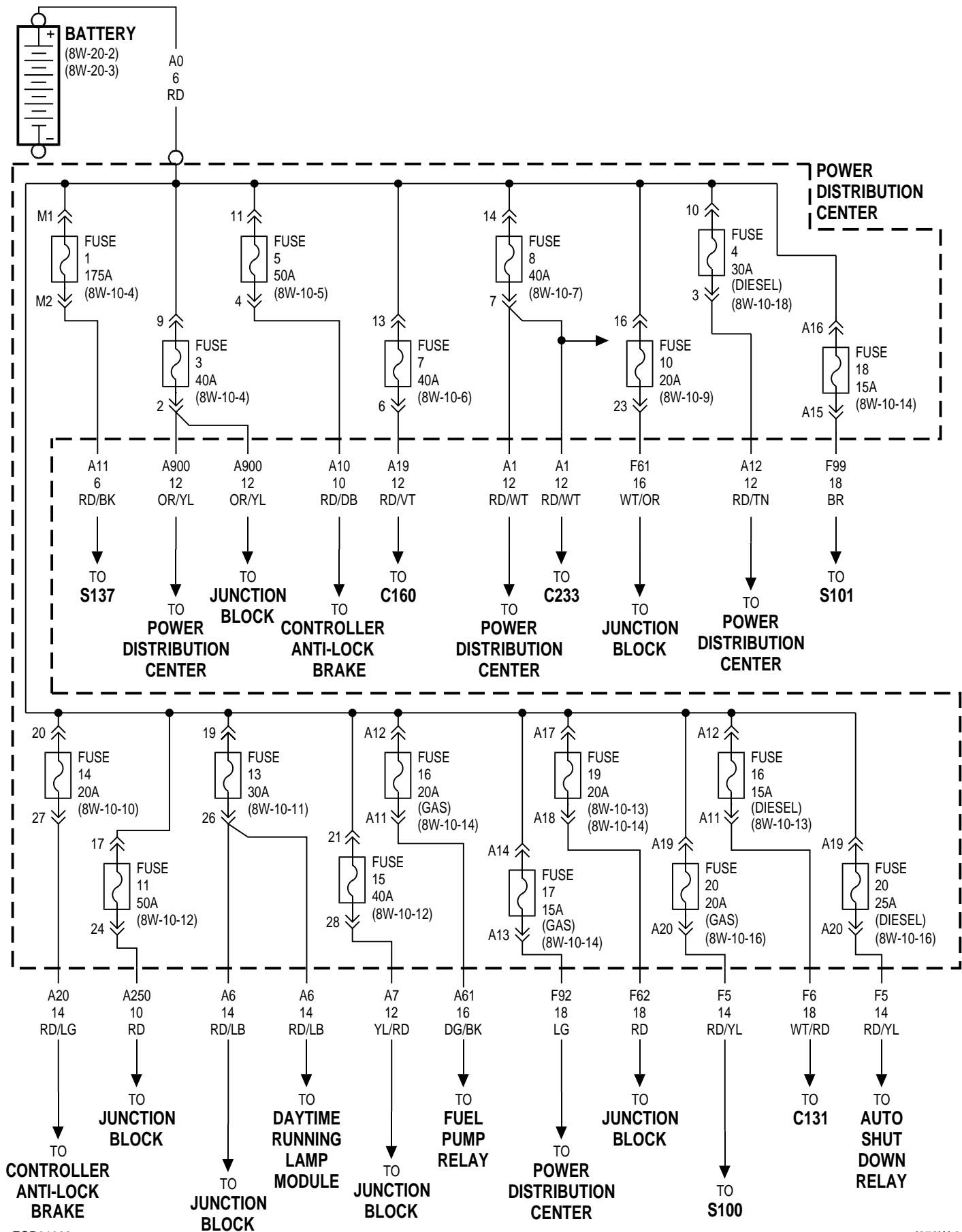
page

SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	24

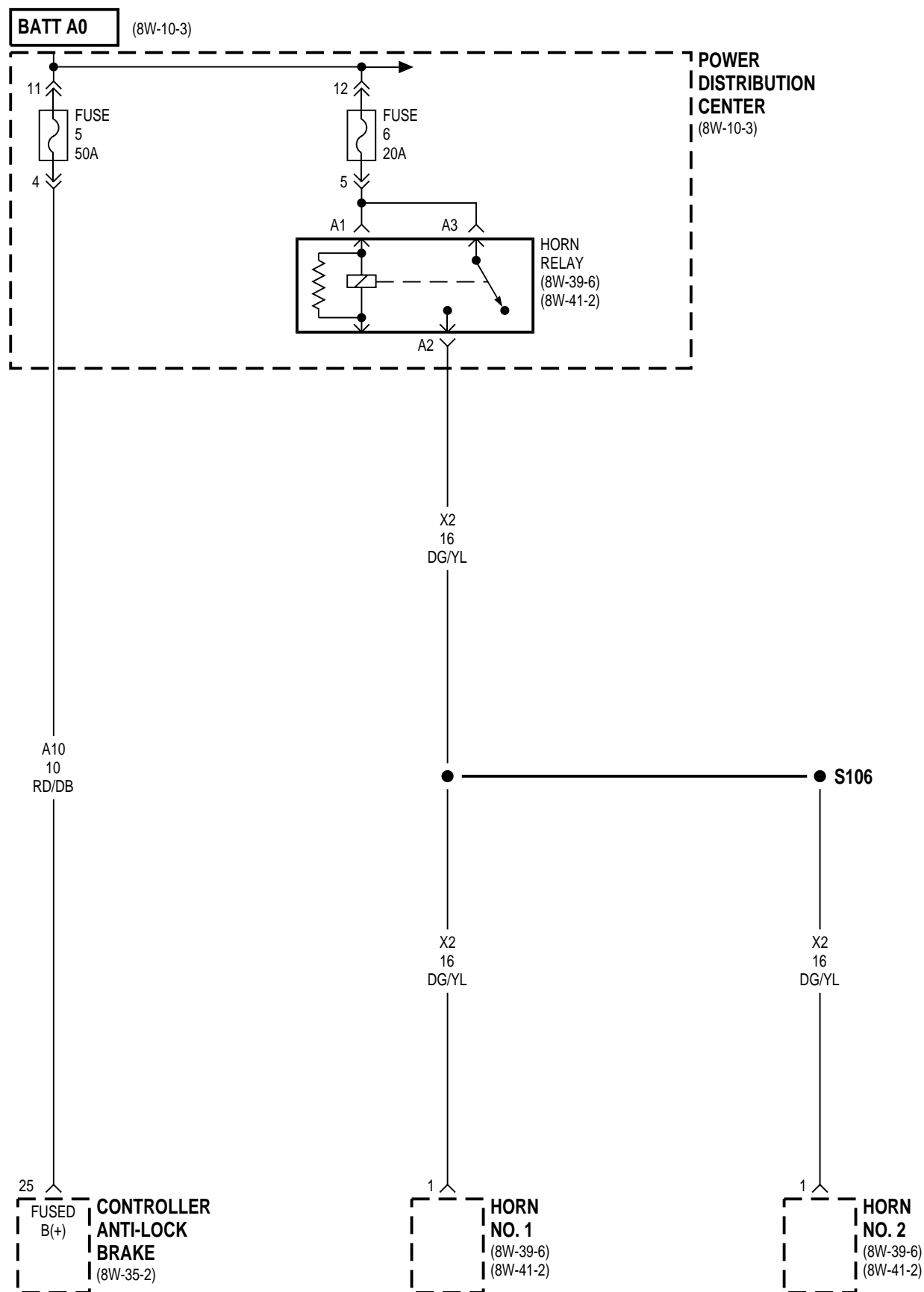
Component	Page	Component	Page
A/C Compressor Clutch	8W-10-4	Fuse 13	8W-10-3, 11, 12
A/C Compressor Clutch Relay	8W-10-4, 15	Fuse 14	8W-10-3, 9, 10
Automatic Headlamp Relay	8W-10-11	Fuse 15	8W-10-3, 12
Automatic Shut Down Relay	8W-10-15, 16, 18	Fuse 16	8W-10-3, 12, 13, 14
Automatic Temperature Control Module	8W-10-6	Fuse 17	8W-10-3, 11, 14
Battery	8W-10-3	Fuse 18	8W-10-8, 13, 14
Blower Motor	8W-10-6	Fuse 19	8W-10-3, 12, 13, 14
Blower Power Module	8W-10-6	Fuse 20	8W-10-3, 12, 16, 18
Body Control Module	8W-10-15	Fuse 21	8W-10-4, 12
Brake Warning Switch	8W-10-7	Fuse 22	8W-10-8
Circuit Breaker	8W-10-11	Generator	8W-10-4, 19
Circuit Breaker 1	8W-10-9	Glow Plug Relay	8W-10-19
Circuit Breaker 2	8W-10-10	Headlamp Dimmer Switch	8W-10-11
Circuit Breaker 3	8W-10-12	Headlamp Switch	8W-10-11, 13, 14
Clutch Interlock Switch	8W-10-7	High Speed Blower Motor Relay	8W-10-6
Controller Anti-Lock Brake	8W-10-5, 10	Horn No. 1	8W-10-5
Daytime Running Lamp Module	8W-10-11	Horn No. 2	8W-10-5
Downstream Heated Oxygen Sensor	8W-10-17	Horn Relay	8W-10-5
Duty Cycle Evap/Purge Solenoid	8W-10-15	Ignition Coil	8W-10-17
EGR Solenoid	8W-10-19	Ignition Switch	8W-10-7, 8, 9
Engine Starter Motor	8W-10-7	Junction Block	8W-10-4, 8, 9, 10, 11, 12, 13, 14
Engine Starter Motor Relay	8W-10-7	Left Fog Lamp	8W-10-13, 14
Evaporative System Leak Detection Pump	8W-10-15	Mass Air Flow Module	8W-10-19
Fog Lamp Relay	8W-10-13, 14	MSA Controller	8W-10-15, 18, 19
Fuel Heater Relay	8W-10-15, 18	Power Distribution Center .	8W-10-3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 16, 18
Fuel Injector No. 1	8W-10-17	Powertrain Control Module	8W-10-13, 15, 16, 19
Fuel Injector No. 2	8W-10-17	Rear Window Defogger	8W-10-4
Fuel Injector No. 3	8W-10-17	Rear Window Defogger Relay	8W-10-4
Fuel Injector No. 4	8W-10-17	Right Fog Lamp	8W-10-13, 14
Fuel Injector No. 5	8W-10-17	S100	8W-10-16
Fuel Injector No. 6	8W-10-17	S101	8W-10-15
Fuel Injector No. 7	8W-10-17	S105	8W-10-13, 14
Fuel Injector No. 8	8W-10-17	S106	8W-10-5
Fuel Pump Module	8W-10-14, 19	S128	8W-10-17, 19
Fuel Pump Relay	8W-10-14, 15	S129	8W-10-17, 19
Fuse 1	8W-10-3, 4, 9	S137	8W-10-4
Fuse 2	8W-10-9	S138	8W-10-15
Fuse 3	8W-10-3, 4, 9	S210	8W-10-7
Fuse 4	8W-10-3, 8, 18	S224	8W-10-6
Fuse 5	8W-10-3, 5, 8	S225	8W-10-6
Fuse 6	8W-10-5, 8	S332	8W-10-4
Fuse 7	8W-10-3, 6, 10	Transmission Control Relay	8W-10-14
Fuse 8	8W-10-3, 7, 10	Transmission Solenoid Assembly	8W-10-14
Fuse 9	8W-10-10	Upstream Heated Oxygen Sensor	8W-10-17
Fuse 10	8W-10-3, 4, 9		
Fuse 11	8W-10-3, 8, 10		
Fuse 12	8W-10-8		

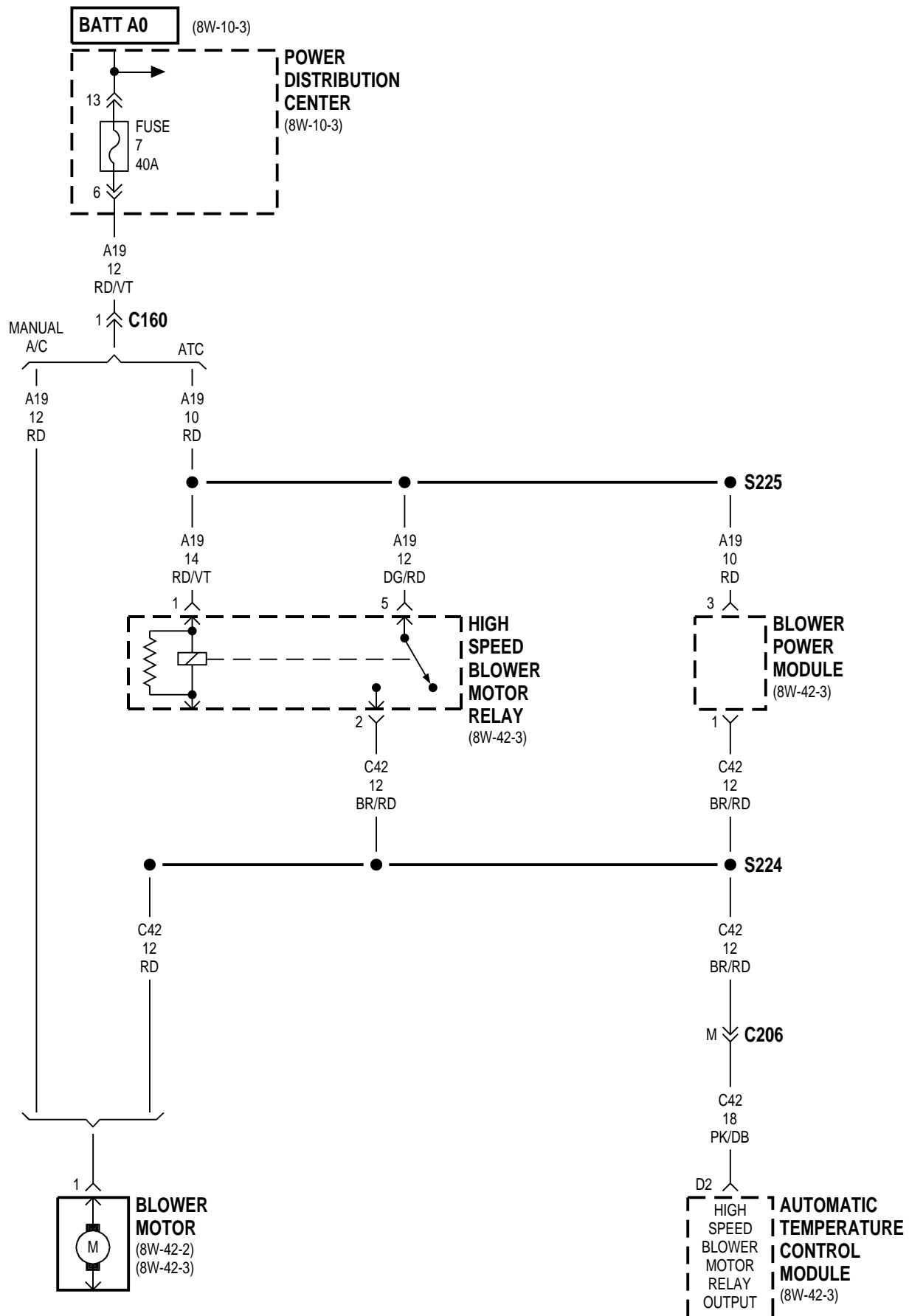


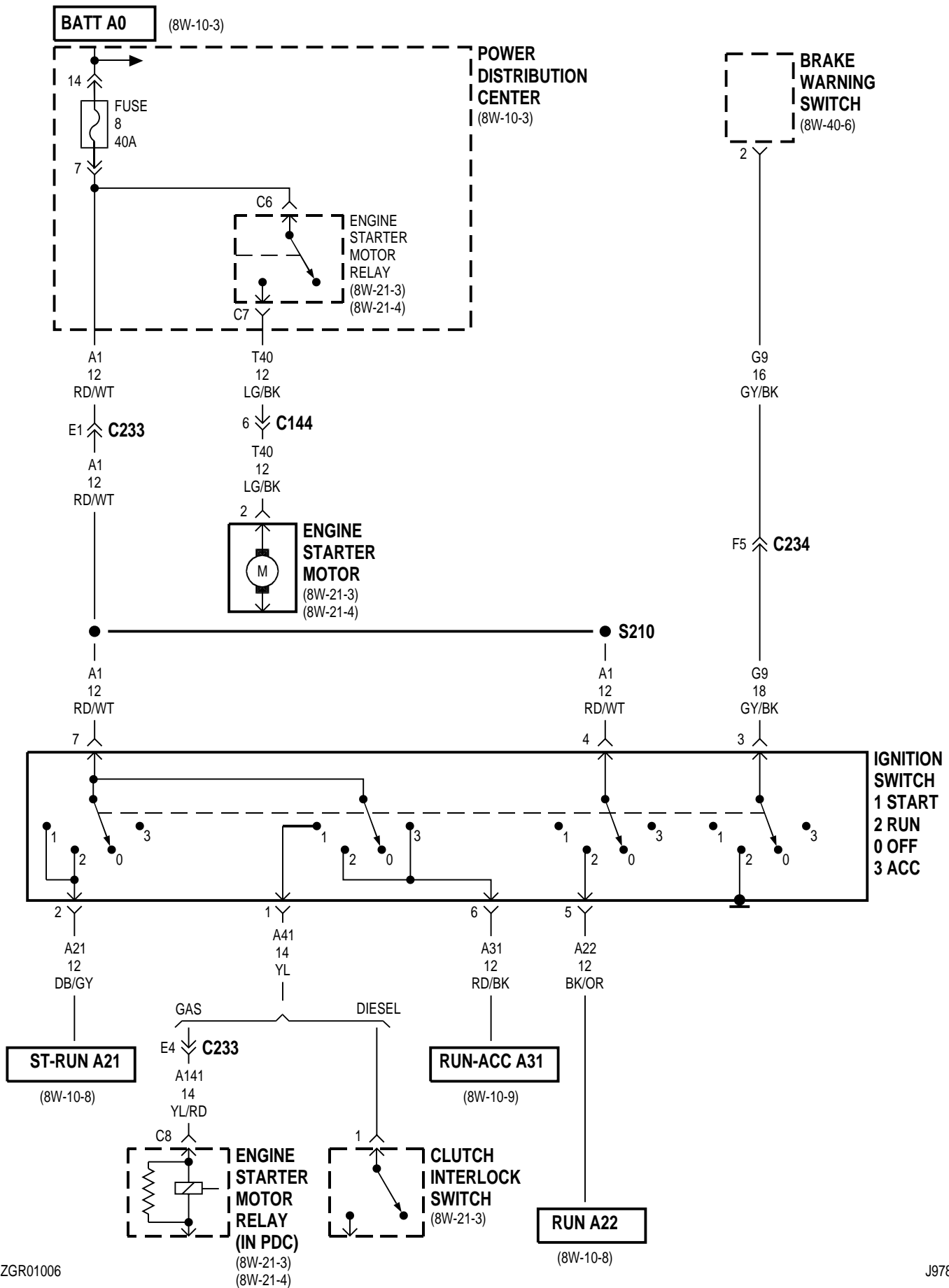
SEE PAGE 8W-10-20 FOR PDC PIN-OUT INFORMATION



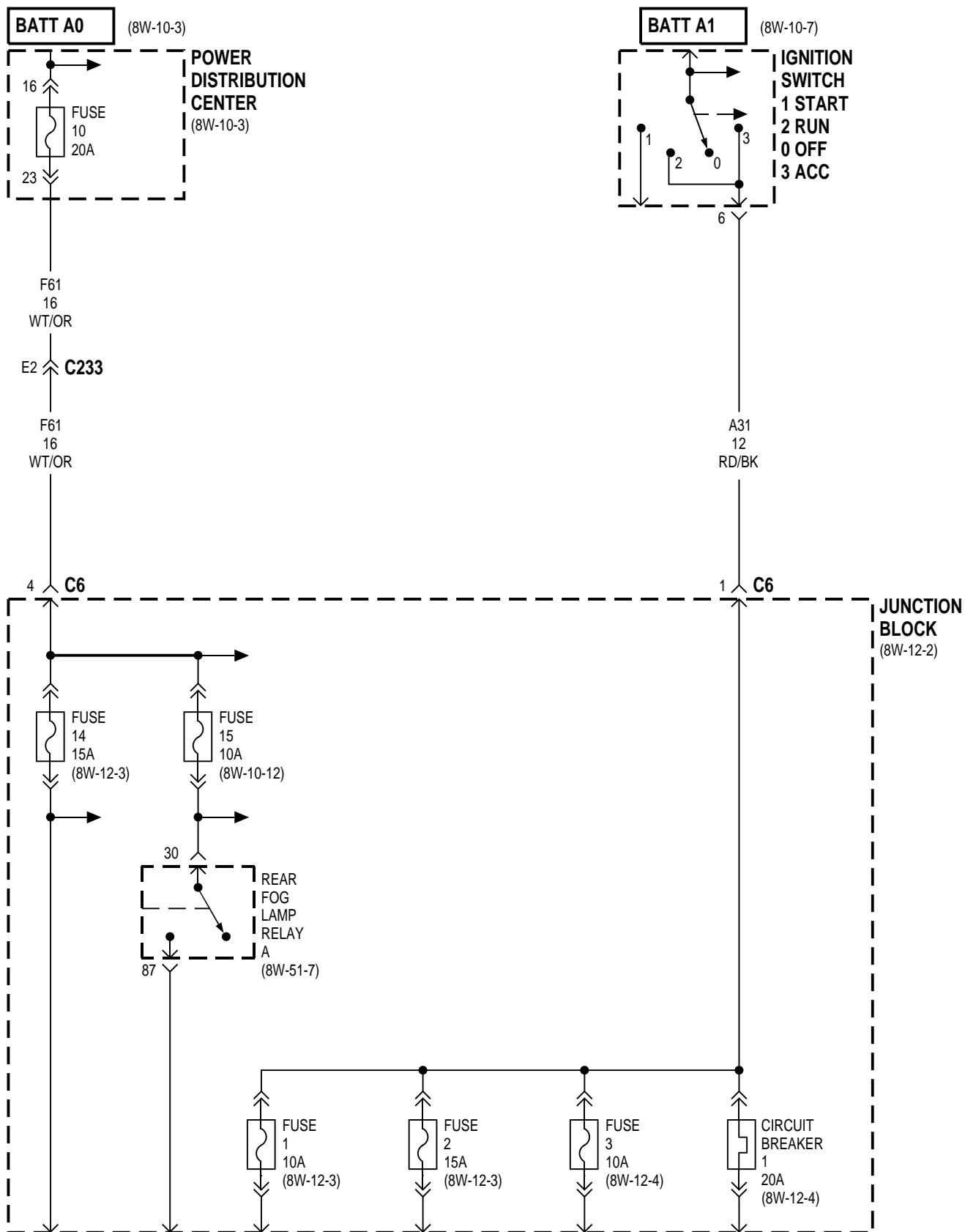


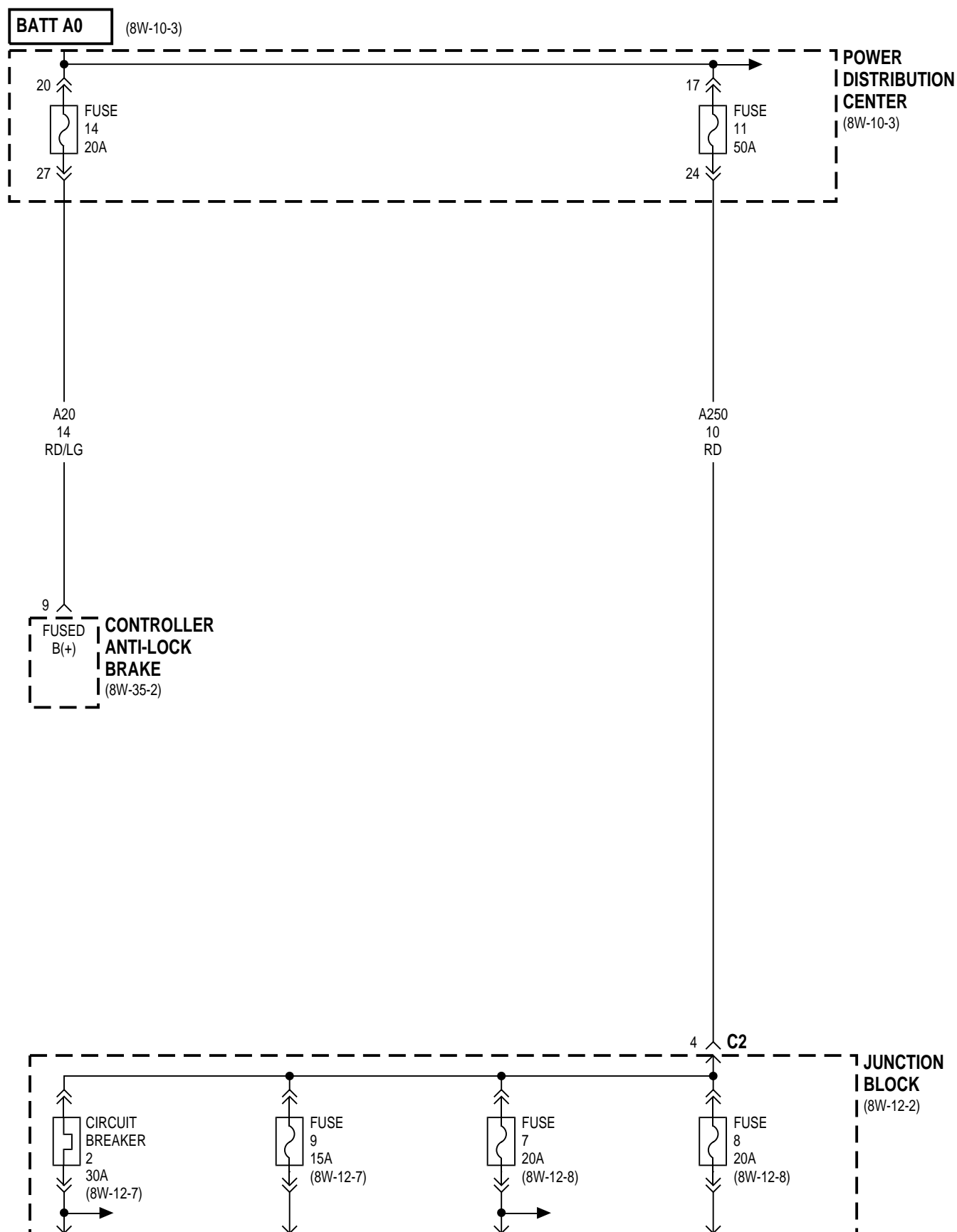


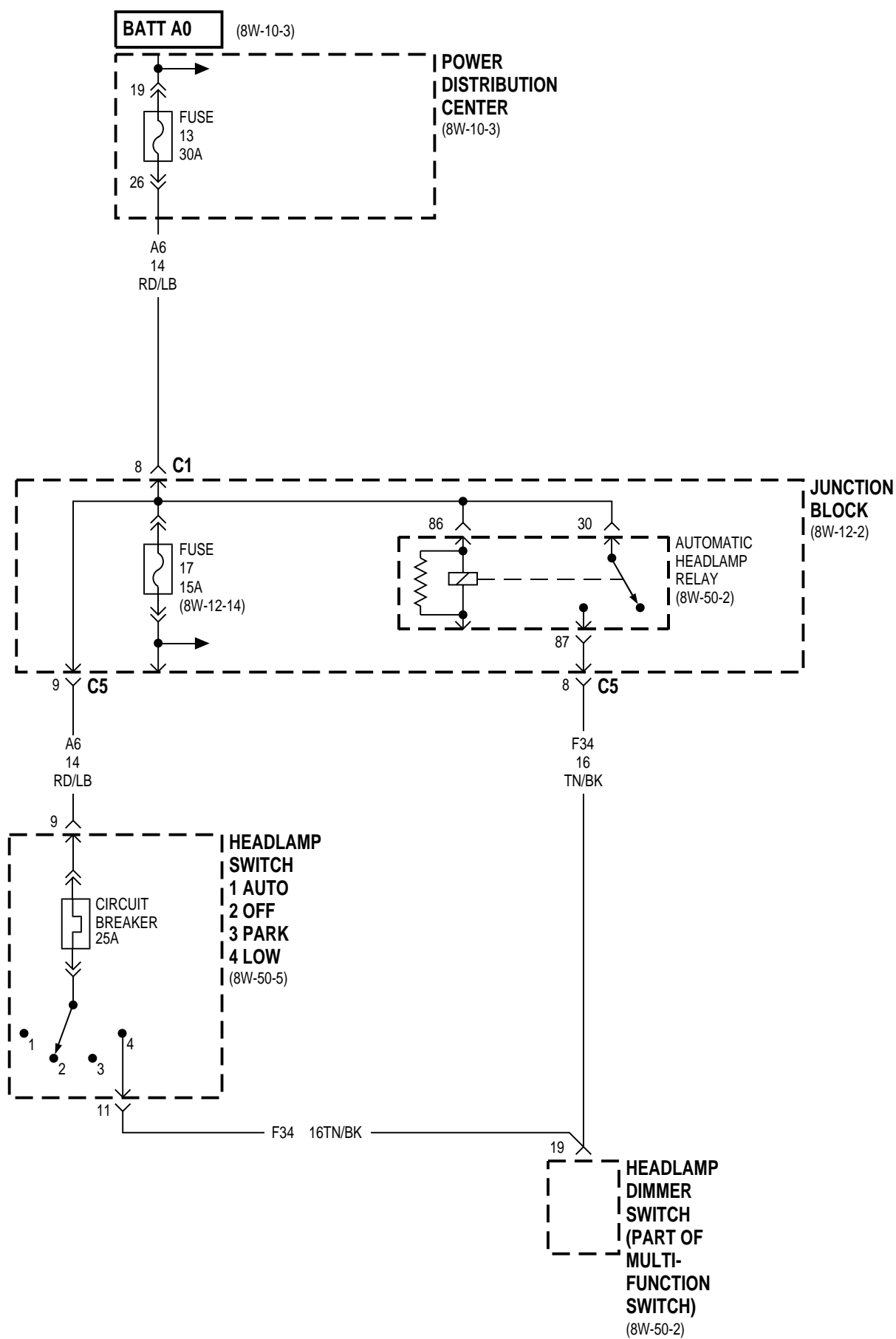


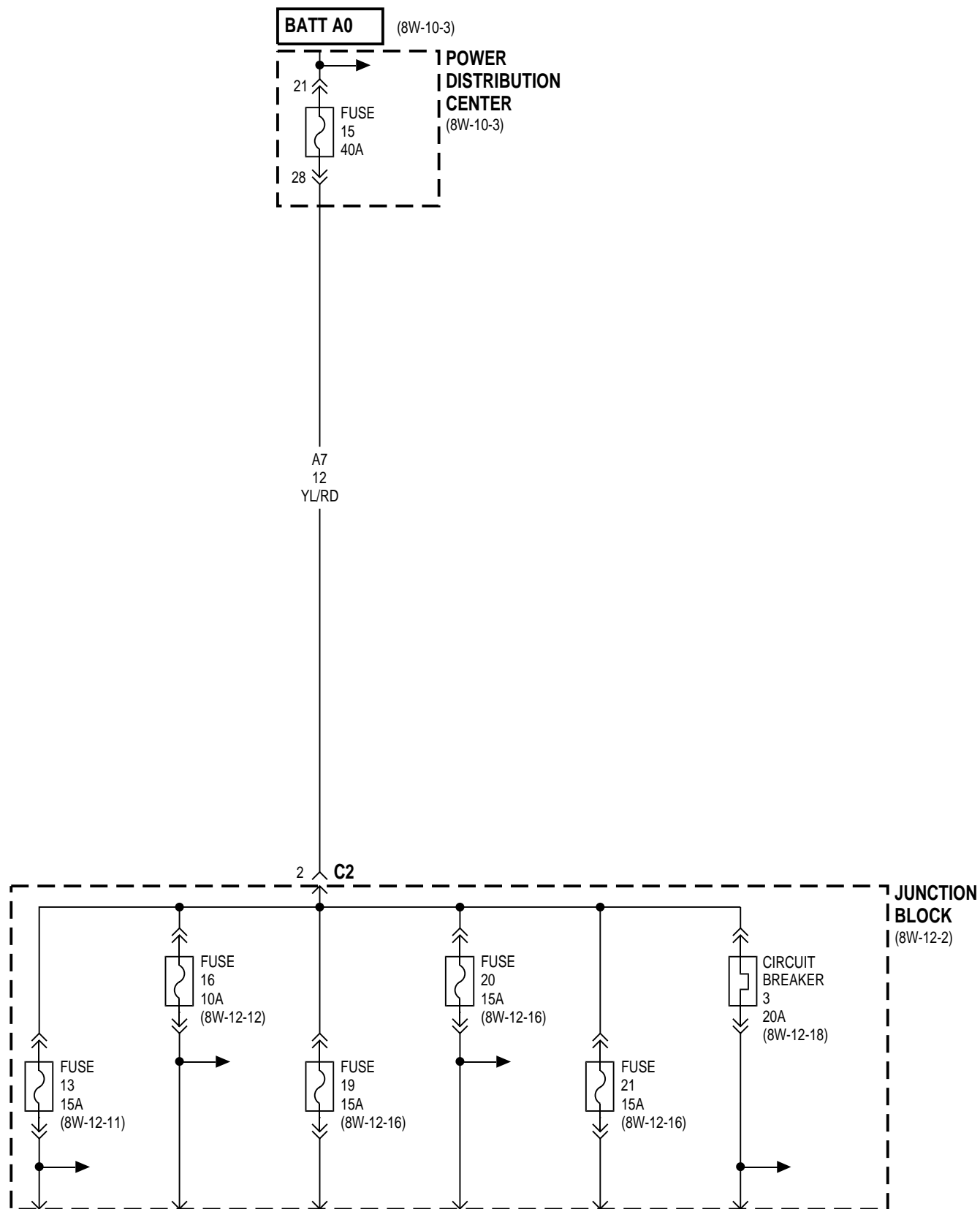


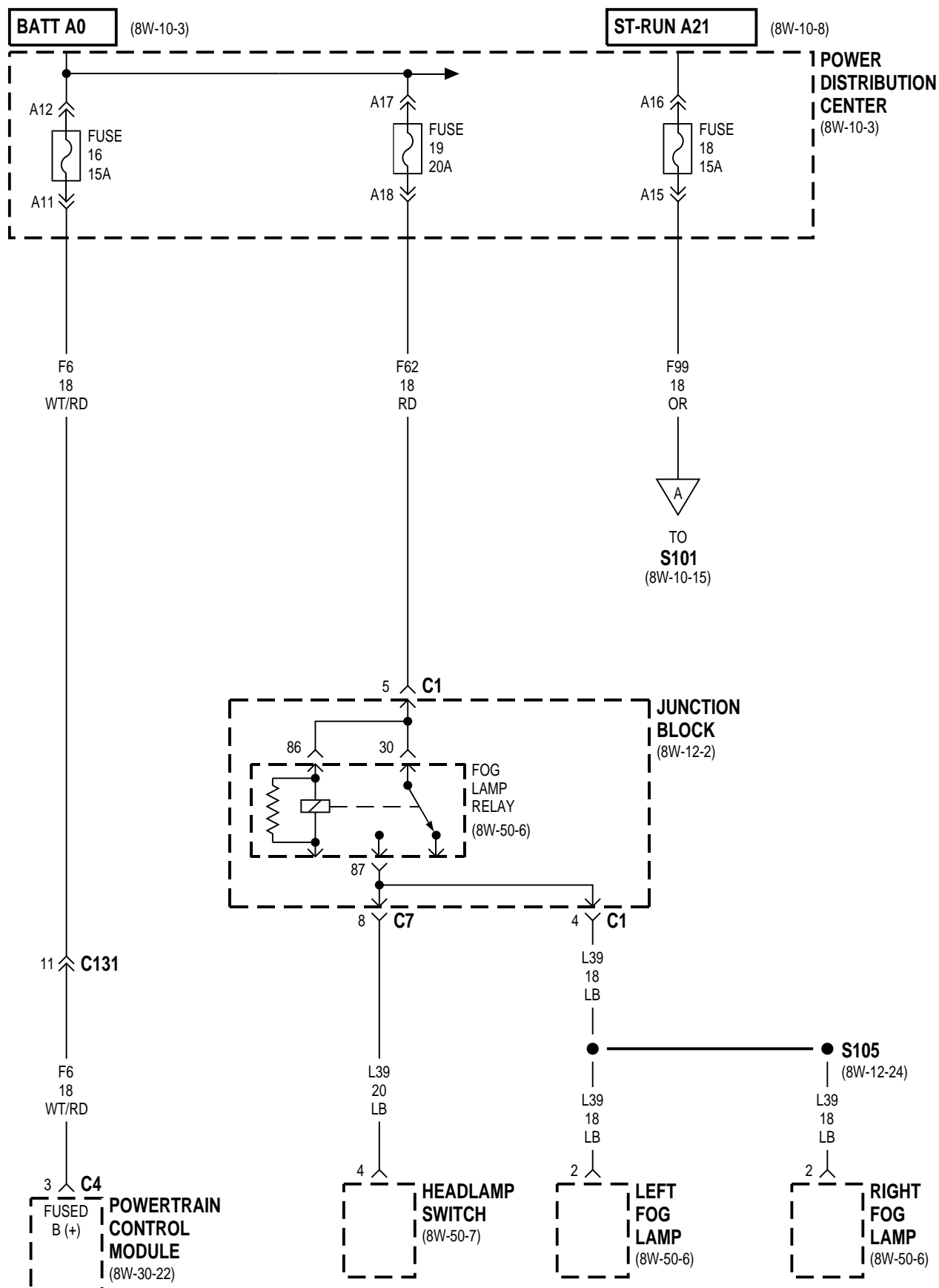


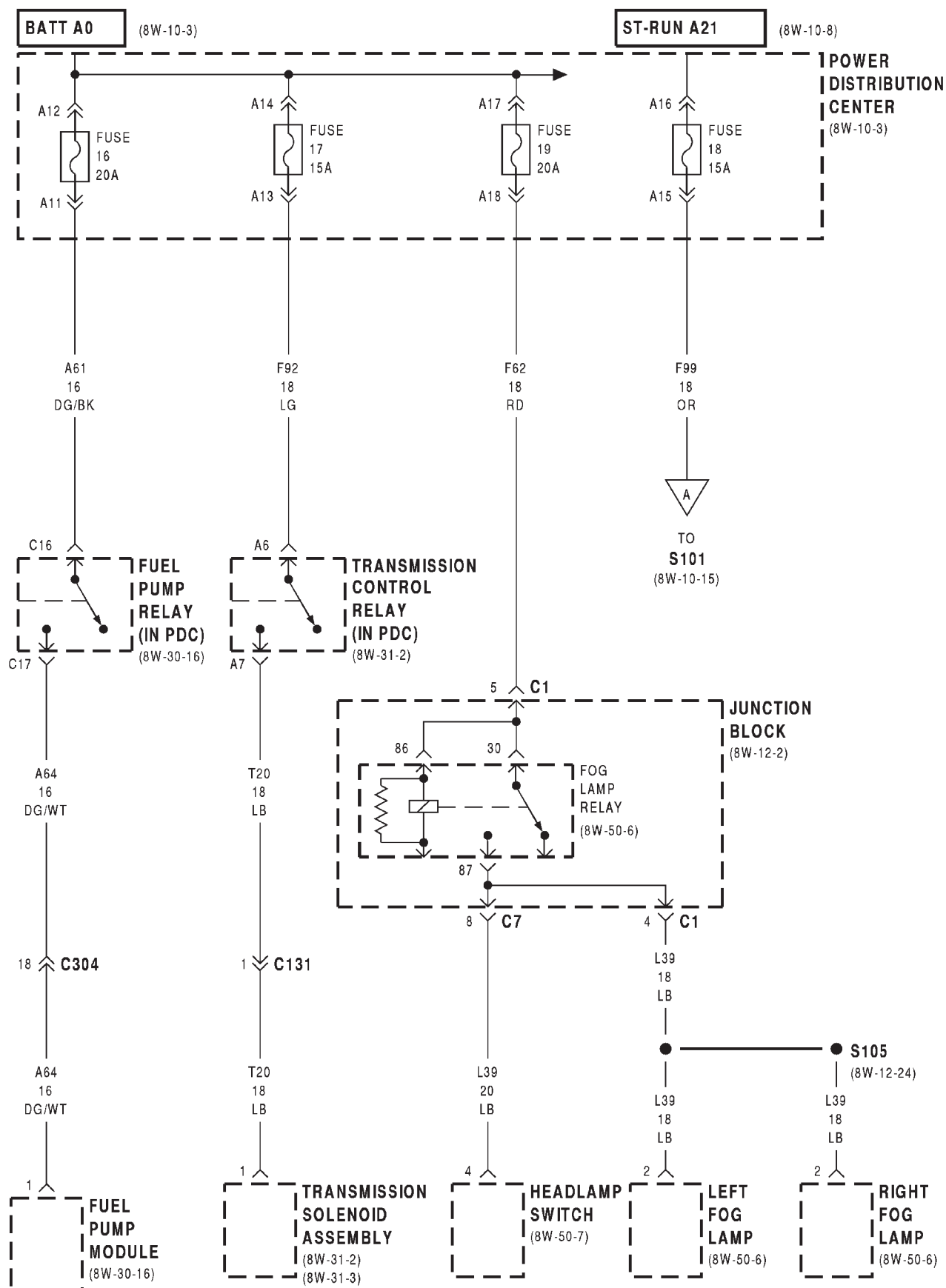


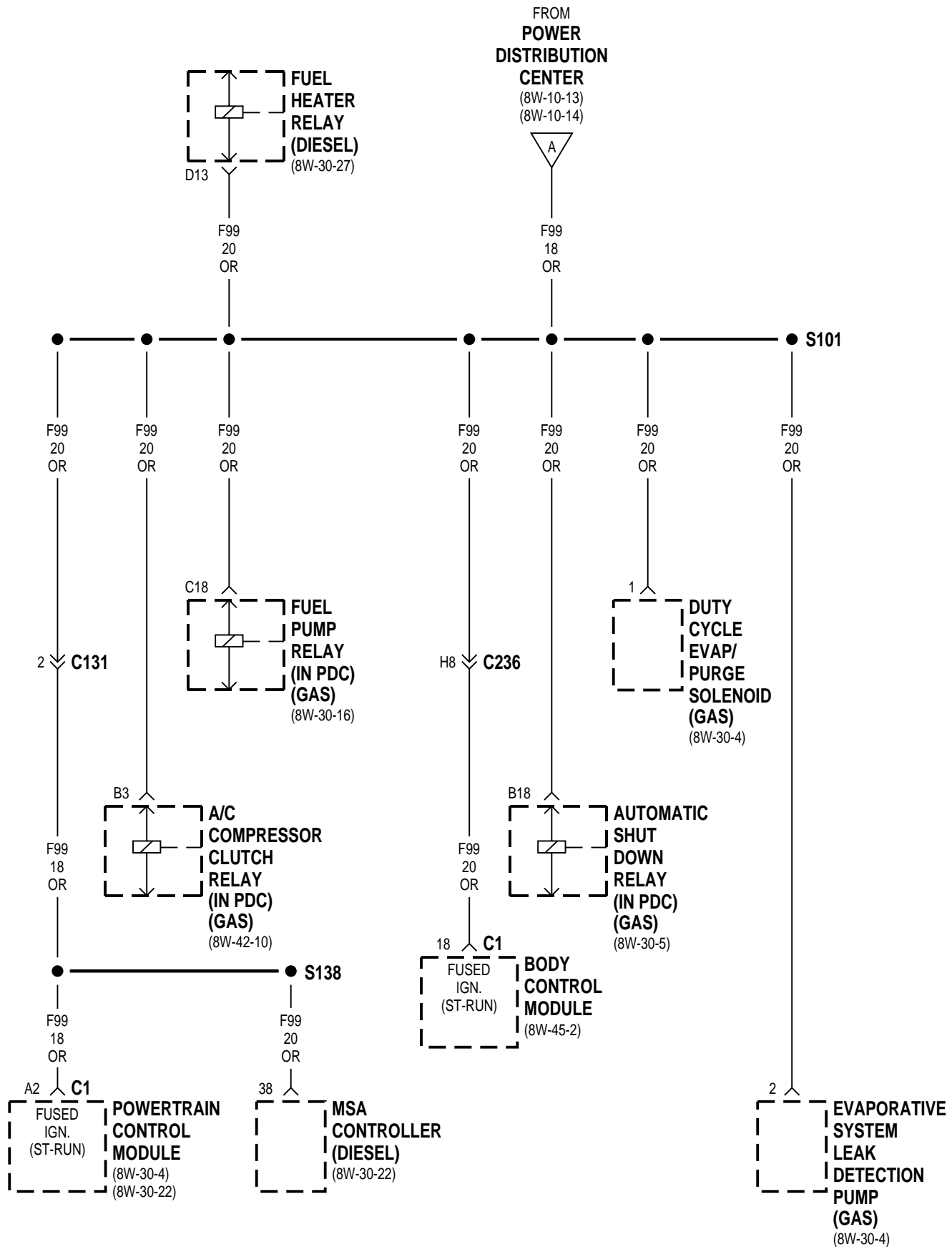


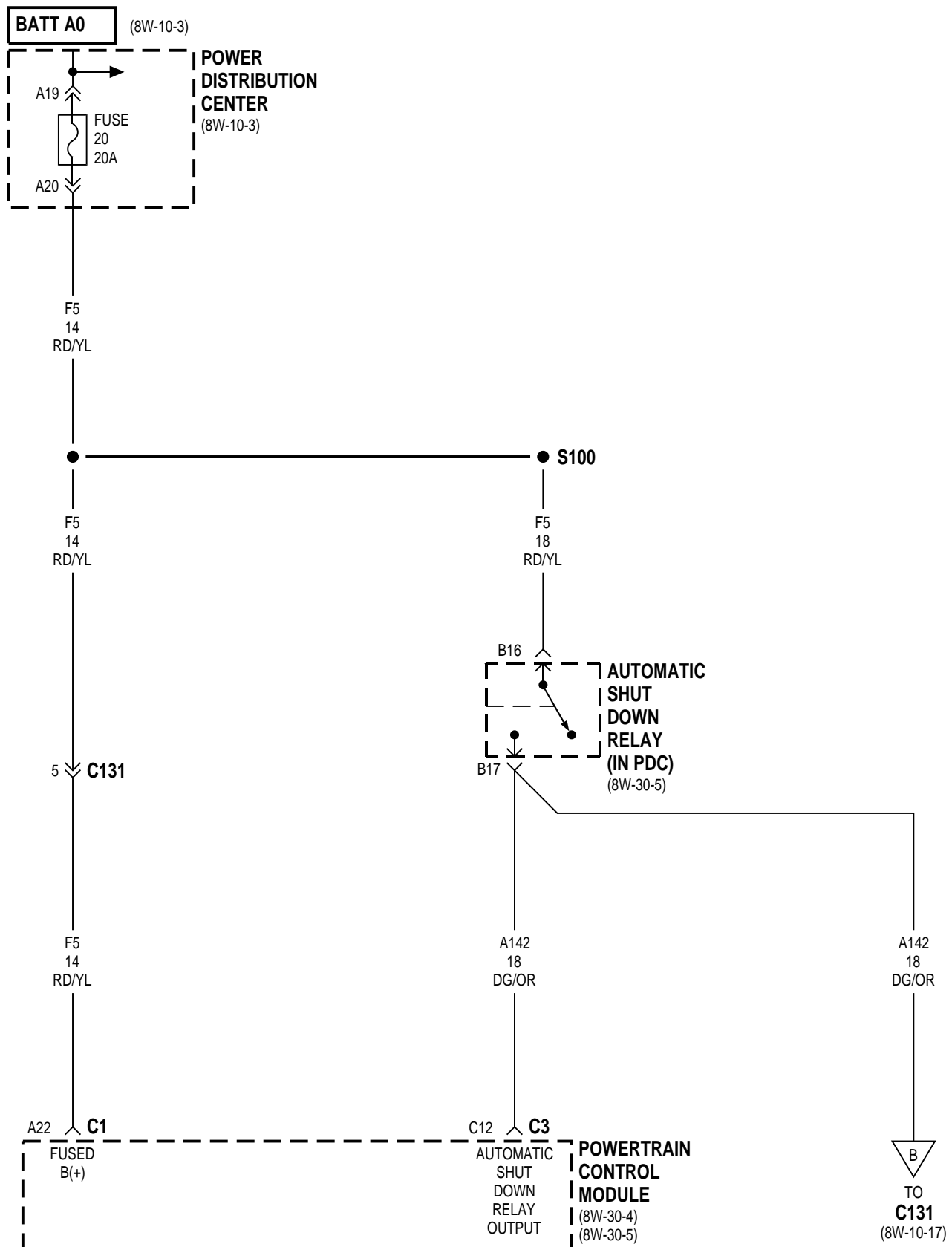




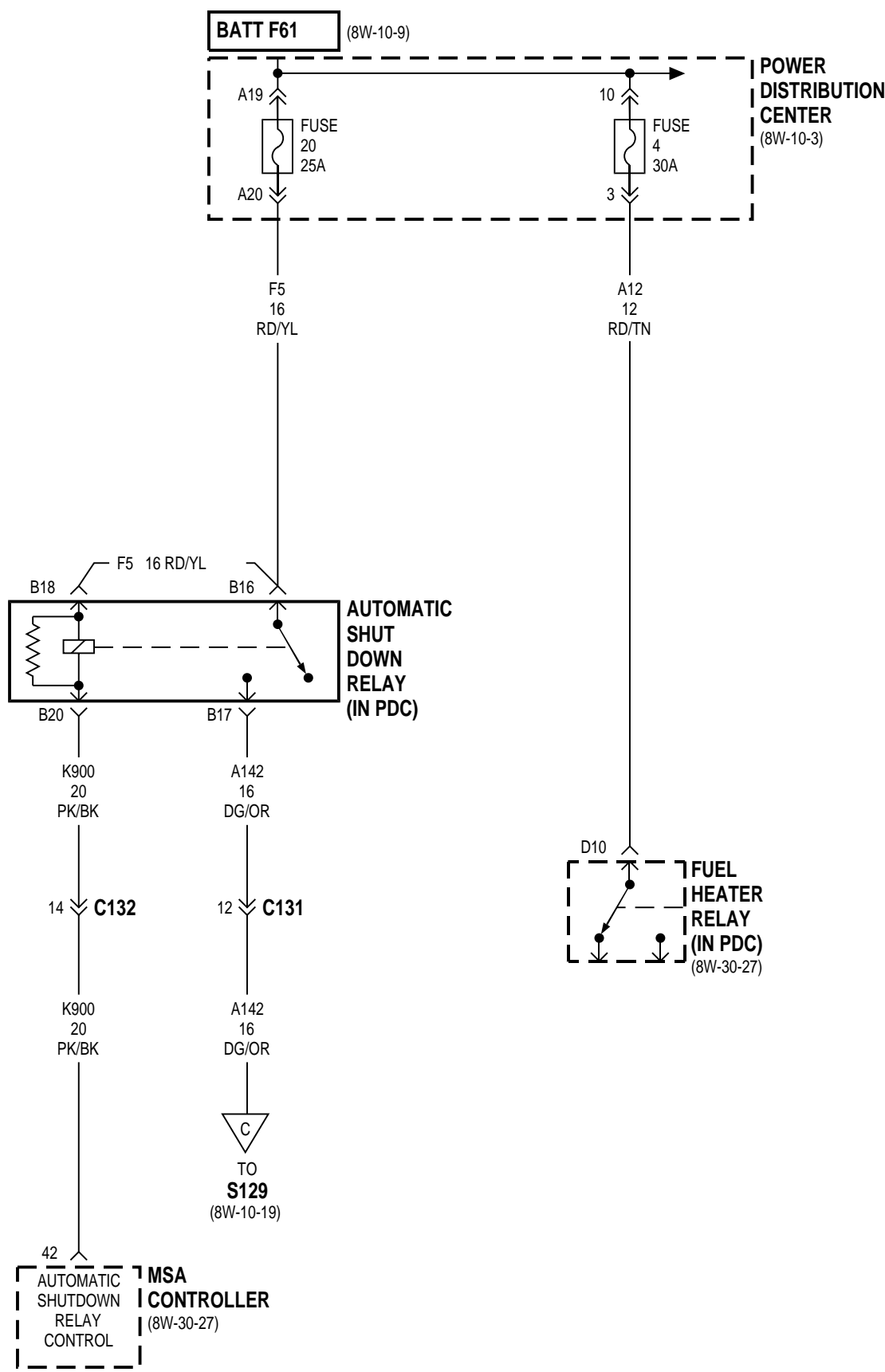


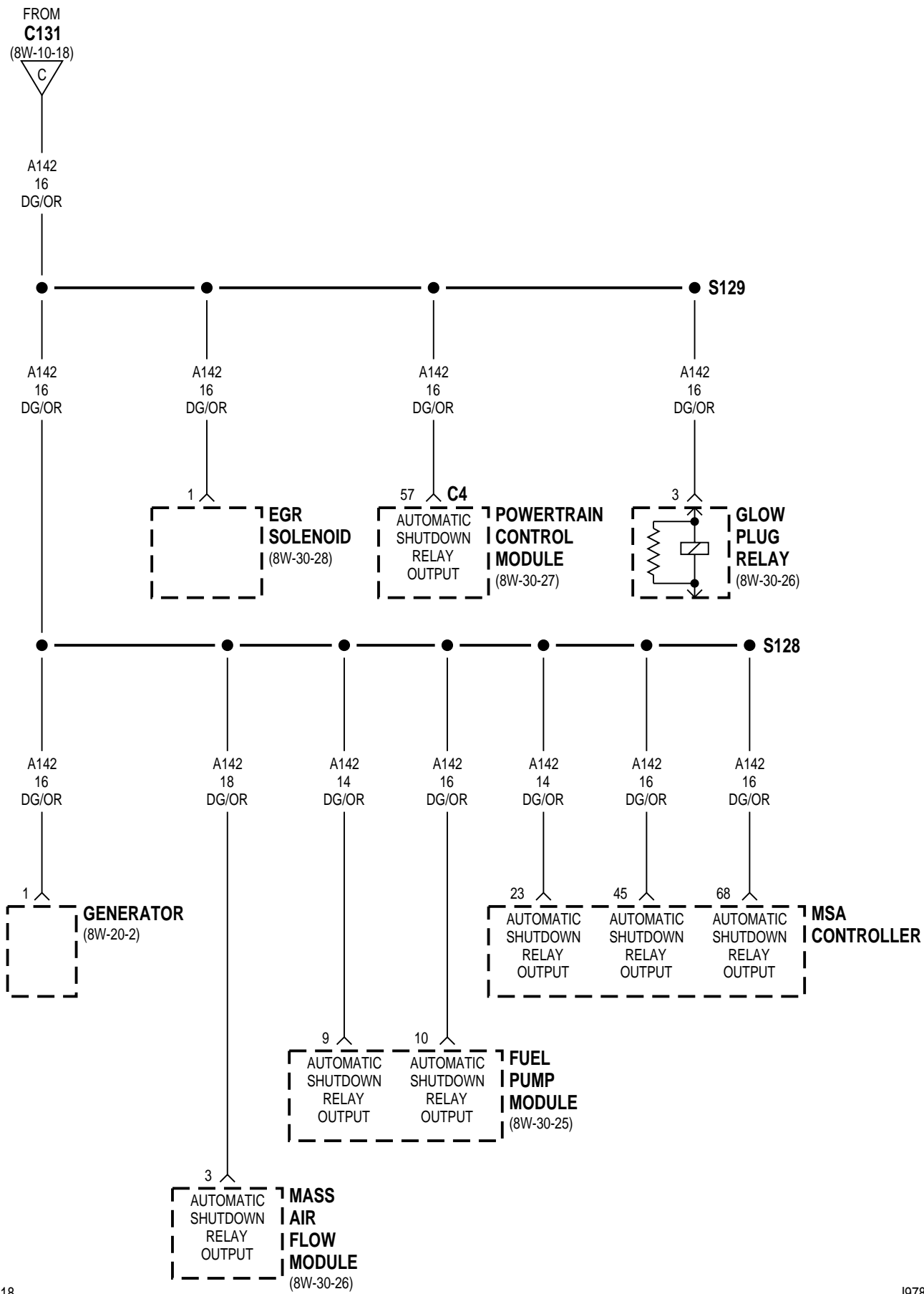












FUSE NO.	AMPS	FEED CIRCUIT	FUSED CIRCUIT	
1	175	A11 6RD/BK	B(+)	
2	-	-	SPARE	
3	40	A900 12OR/YL	FUSED B(+)	
		A900 12OR/YL	FUSED B(+)	
4	30	A12 12RD/TN	FUSED B(+)	*
5	50	A10 10RD/DB	FUSED B(+)	
6	20	F31 16VT	FUSED B(+)	
7	40	A19 12RD/VT	FUSED B(+)	
8	40	A1 12RD/WT	FUSED B(+)	
		A1 12RD/WT	FUSED B(+)	
9	-	-	SPARE	
10	20	F61 16WT/OR	8W-10-7	
11	50	A250 10RD	FUSED B(+)	
12	-	-	SPARE	
13	30	A6 14RD/LB	FUSED B(+)	
		A6 14RD/LB	FUSED B(+)	
14	20	A20 14RD/LG	FUSED B(+)	
15	40	A7 12YL/RD	FUSED B(+)	
		A7 12YL/RD	FUSED B(+)	
16	20	A61 16DG/BK	FUSED B(+)	**
16	15	A61 18WT/RD	FUSED B(+)	*
17	15	F92 18LG	FUSED B(+)	**
17	-	-	-	*
18	15	F99 18OR	FUSED IGNITION SWITCH OUTPUT (ST/RUN)	
19	20	F62 18RD	FUSED B(+)	
20	20	F5 14RD/YL	FUSED B(+)	**
20	25	F5 14RD/YL	FUSED B(+)	*
21	15	F250 18RD/GY	FUSED B(+)	

** GAS

* DIESEL

HORN
RELAY

CAV	CIRCUIT	FUNCTION
A1	F31 16VT	FUSED B(+)
A2	X2 16DG/YL	HORN RELAY OUTPUT
A3	F31 16VT	FUSED B(+)
	F31 16VT	FUSED B(+)
A4	-	-
A5	X4 20GY/OR	HORN RELAYCONTROL

TRANSMISSION
CONTROL
RELAY

CAV	CIRCUIT	FUNCTION
A6	F92 18LG	FUSED B(+)
A7	T20 18LB	TRANSMISSION RELAY OUTPUT
A8	K72 18DG/VT	VOLTAGE REGULATION
A9	-	-
A10	B120 12BR/WT	ABS PUMP MOTOR RELAY OUTPUT

A/C
COMPRESSOR
CLUTCH
RELAY

CAV	CIRCUIT	FUNCTION
B1	F250 18RD/GY	ABS WARNING LAMP RELAY OUTPUT
B2	C2 18DB/YL	AUTOMATIC SHUT DOWN RELAY OUTPUT
B3	F99 20OR	FUSED IGNITION SWITCH OUPUT (RUN)
B4	-	-
B5	C13 18DB/RD	A/C COMPRESSOR CLUTCH RELAY CONTROL

AUTOMATIC
SHUT DOWN
RELAY

CAV	CIRCUIT	FUNCTION
B16	F5 18RD/YL	FUSED B(+)
B16	F5 16RD/YL *	FUSED B(+)
B16	F5 16RD/YL *	FUSED IGNITION SWITCH OUTPUT (ST/RUN)
B17	A142 18DG/OR	FUSED B(+)
B17	A142 18DG/OR	FUSED B(+)
B17	A142 16DG/OR	FUSED B(+)
B18	F5 16RD/YL	FUSED B(+)
B18	F99 20OR	FUSED IGNITION SWITCH OUTPUT (ST/RUN)
B20	K900 20PK/WT	AUTOMATIC SHUT DOWN RELAY CONTROL
B20	K900 20PK/WT	AUTOMATIC SHUT DOWN RELAY CONTROL

INTERMITTENT
WIPER
RELAY

CAV	CIRCUIT	FUNCTION
C1	V6 16DB	WIPER PARK SWITCH SENSE
C2	F86 16LG/RD *	FUSED B(+)
	F86 18LG/RD **	FUSED B(+)
C3	F86 16LG/RD	FUSED B(+)
C4	V66 18VT/WT	WIPER PARK SWITCH SENSE
C5	V18 20YL/LG	INTERMITTENT WIPER RELAY CONTROL

* DIESEL

** GAS

ENGINE
STARTER
MOTOR
RELAY

CAV	CIRCUIT	FUNCTION
C6	A1 12RD/WT	FUSED B(+)
C7	T40 12LG/BK	ENGINE STARTER MOTOR RELAY OUTPUT
C8	T141 14YL/RD	FUSED IGNITION SWITCH OUTPUT (ST)
C9	-	-
C10	Z4 20BK	PARK NEUTRAL POSITION SWITCH SENSE
C10	T41 20BK/WT	PARK NEUTRAL POSITION SWITCH SENSE

**

*

FUEL
PUMP
RELAY

CAV	CIRCUIT	FUNCTION
C16	A61 16DG/BK	FUSED B(+)
C17	A64 16DG/WT	FUEL PUMP RELAY OUTPUT
C18	F99 200R	FUSED IGNITION SWITCH OUTPUT (ST/RUN)
C19	-	-
C20	K81 18DB	FUEL PUMP RELAY CONTROL

FUEL
HEATER
RELAY
(DIESEL)

CAV	CIRCUIT	FUNCTION
D10	A12 12RD/TN	FUSED B(+)
D11	Z4 20BK	GROUND
D12	-	-
D13	F99 200R	FUSED IGNITION SWITCH OUTPUT (ST/RUN)
D14	A64 14OR/DB	FUEL HEATER FEED

* GAS

** DIESEL

8W-10 POWER DISTRIBUTION

DESCRIPTION AND OPERATION

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

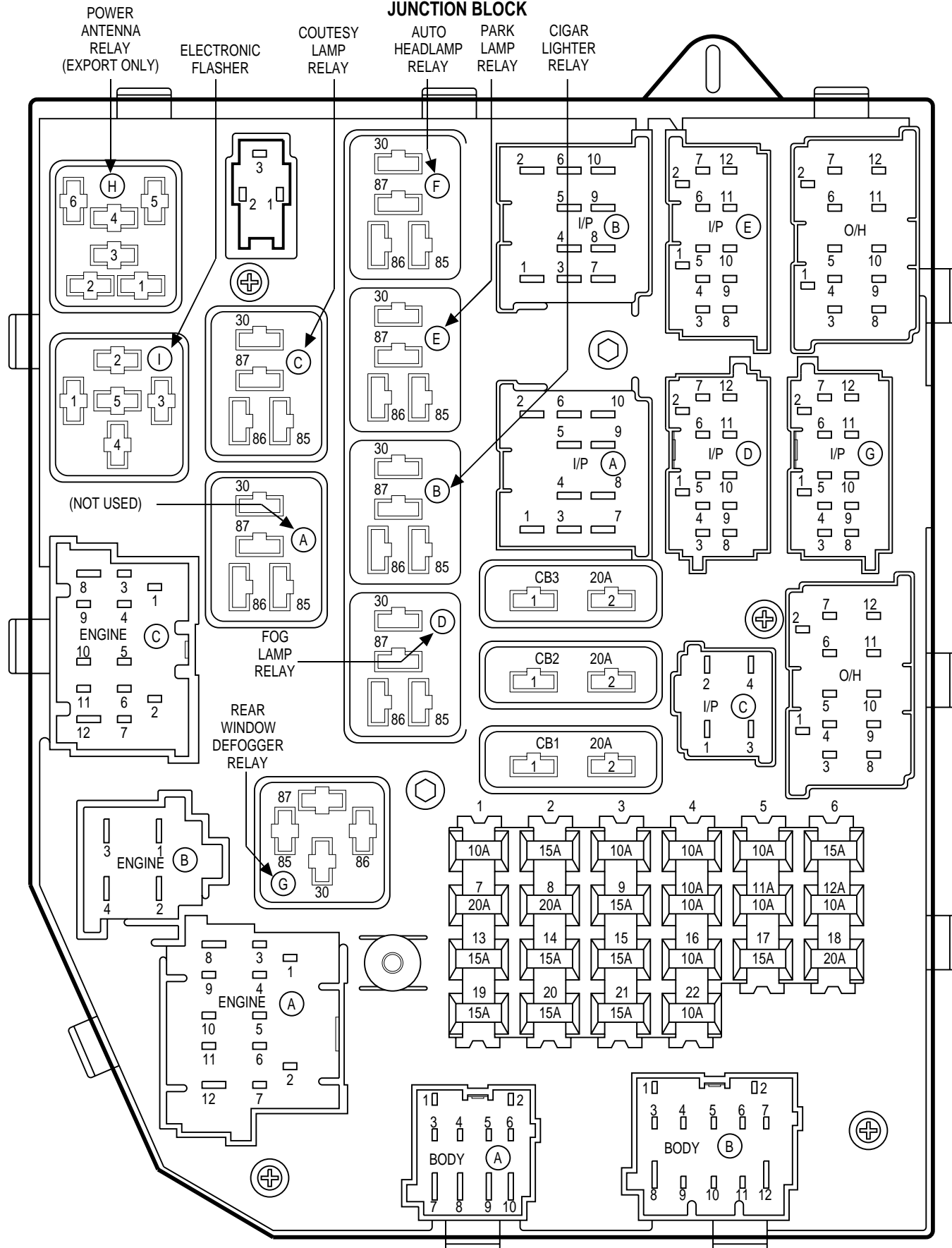
8W-12 JUNCTION BLOCK

INDEX

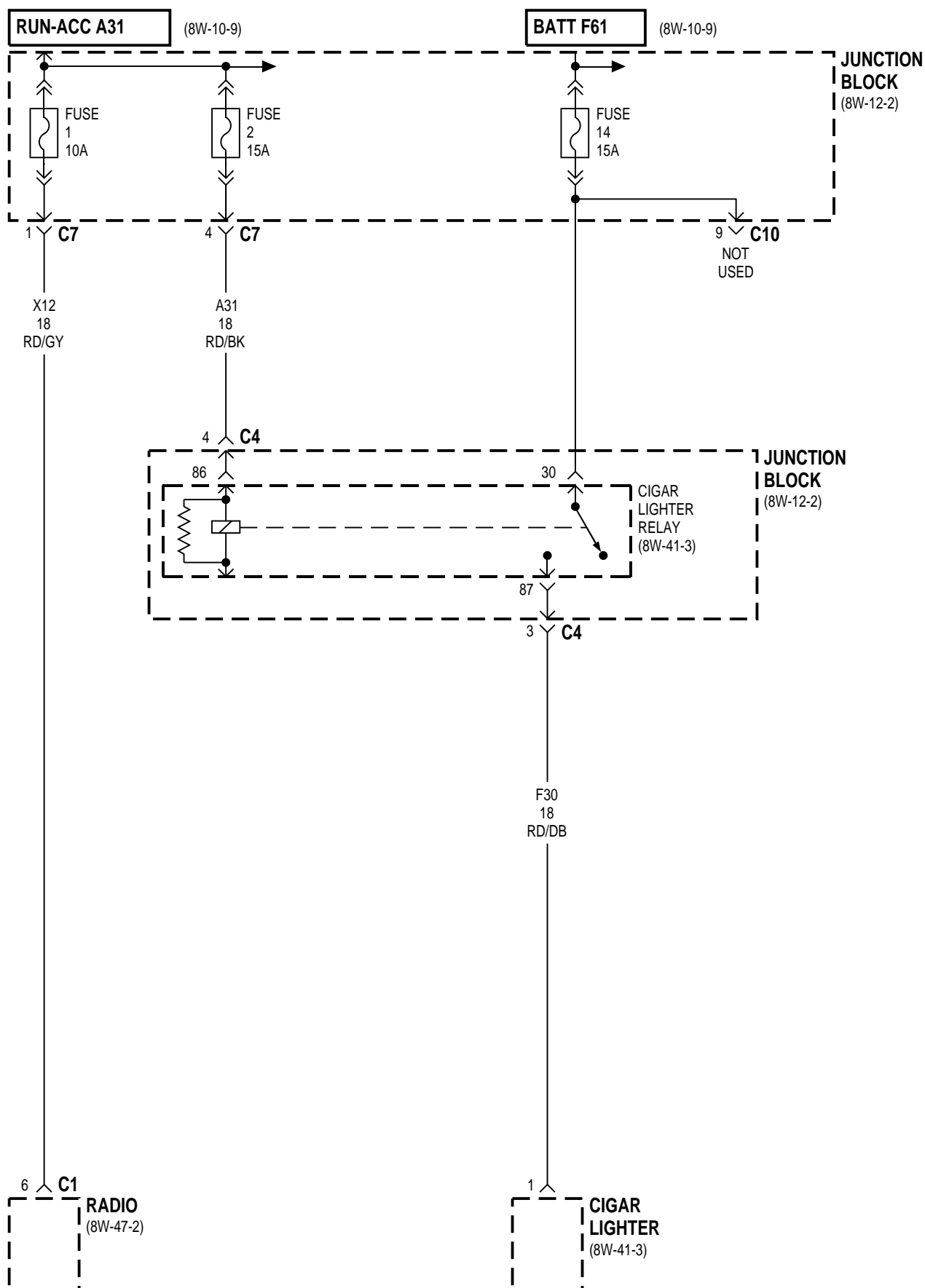
	page
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	29

Component	Page	Component	Page
A/C Heater Control	8W-12-10	Headlamp Switch	8W-12-14, 20, 24
Aftermarket Trailer Tow Connector	8W-12-8	Horn Relay	8W-12-23
Airbag Control Module	8W-12-5, 23	Instrument Cluster	8W-12-5, 8, 17
Automatic Day/Night Mirror	8W-12-7, 17, 21	Intermittent Wiper Relay	8W-12-4
Automatic Headlamp Light Sensor/Vtss Led ..	8W-12-8	Intermittent Wiper Switch	8W-12-4
Automatic Headlamp Relay	8W-12-24	Key-In Switch/Halo Lamp	8W-12-12, 22
Automatic Temperature Control Module ..	8W-12-10, 16	Lamp	8W-12-20
Back-Up Lamp Switch	8W-12-6	Lamp Outage Module	8W-12-5, 15, 20
Blend Door Actuator	8W-12-10	Left Back-Up Lamp	8W-12-17
Body Control Module	8W-12-4, 8, 9, 14, 23, 24	Left Courtesy Lamp	8W-12-12, 22
Cargo Lamp	8W-12-12, 22	Left Fog Lamp	8W-12-24
Cigar Lighter	8W-12-3	Left Front Park Lamp	8W-12-15
Cigar Lighter Relay	8W-12-3	Left Visor/Vanity Lamp	8W-12-13, 21
Circuit Breaker 1	8W-12-4	Liftglass Limit Switch	8W-12-8
Circuit Breaker 2	8W-12-7	Memory Seat Module	8W-12-18
Circuit Breaker 3	8W-12-18	Overhead Console	8W-12-7, 13, 21
Controller Anti-Lock Brake	8W-12-9	Park Lamp Relay	8W-12-14
Courtesy Lamp Relay	8W-12-12, 22	Park/Neutral Position Switch	8W-12-6, 17
Data Link Connector	8W-12-8	Passenger Door Module	8W-12-7
Dome/Reading Lamp	8W-12-13, 21	Passenger Lumbar Switch	8W-12-18
Driver Door Module	8W-12-7	Passenger Power Seat Switch	8W-12-18
Driver Lumbar Switch	8W-12-18	Passenger Seat Heater Control Module ..	8W-12-10, 18
Driver Power Seat Switch	8W-12-18	Power Amplifier	8W-12-8, 11
Driver Seat Heater Control Module	8W-12-10, 18	Power Antenna	8W-12-11
Electronic Flasher	8W-12-6, 11	Power Antenna Relay	8W-12-11
Factory Trailer Tow Connector	8W-12-17	Power Distribution Center	8W-12-5, 20
Fog	8W-12-20	Power Outlet	8W-12-16
Fog Lamp Relay	8W-12-24	Radio	8W-12-3, 11, 15, 16
Four Wheel Drive Switch	8W-12-19	Rear	8W-12-20
Fuse 1	8W-12-3	Rear Window Defogger	8W-12-9
Fuse 2	8W-12-3	Rear Wiper Motor	8W-12-8
Fuse 3	8W-12-4	Rear Wiper/Washer Switch	8W-12-4
Fuse 4	8W-12-5	Recirculation Door Actuator	8W-12-10
Fuse 5	8W-12-5	Relay	8W-12-20
Fuse 6	8W-12-6	Right Back-Up Lamp	8W-12-17
Fuse 7	8W-12-8	Right Courtesy Lamp	8W-12-12, 22
Fuse 8	8W-12-8	Right Fog Lamp	8W-12-24
Fuse 9	8W-12-7	Right Front Park Lamp	8W-12-15
Fuse 10	8W-12-9	Right Front Side Marker Lamp	8W-12-17
Fuse 11	8W-12-9	Right Side Repeater	8W-12-17
Fuse 12	8W-12-10	Right Visor/Vanity Lamp	8W-12-13, 21
Fuse 13	8W-12-11	Shift Interlock	8W-12-5
Fuse 14	8W-12-3	Speed Proportional Steering Module	8W-12-6
Fuse 16	8W-12-12	Stop Lamp Switch	8W-12-7
Fuse 17	8W-12-14	Sunroof Control Module	8W-12-5, 21
Fuse 18	8W-12-5	Sunroof Switch	8W-12-5
Fuse 18 (PDC)	8W-12-20	Switch Pod	8W-12-10
Fuse 19	8W-12-16	Trailer Tow Circuit Breaker	8W-12-8
Fuse 20	8W-12-16	Turn Signal/Hazard Warning Switch	8W-12-11, 17
Fuse 21	8W-12-16	Underhood Lamp	8W-12-12
Fuse 22	8W-12-23	Vehicle Information Center	8W-12-6, 11, 15, 16, 19
Glove Box Lamp	8W-12-12	Vehicle Speed Control/Horn Switch	8W-12-23
Graphic Display Module	8W-12-6, 16, 19, 21	Windshield Wiper Motor	8W-12-4
Headlamp Dimmer Switch	8W-12-16, 24		
Headlamp Leveling Switch	8W-12-6		

TOP OF JUNCTION BLOCK

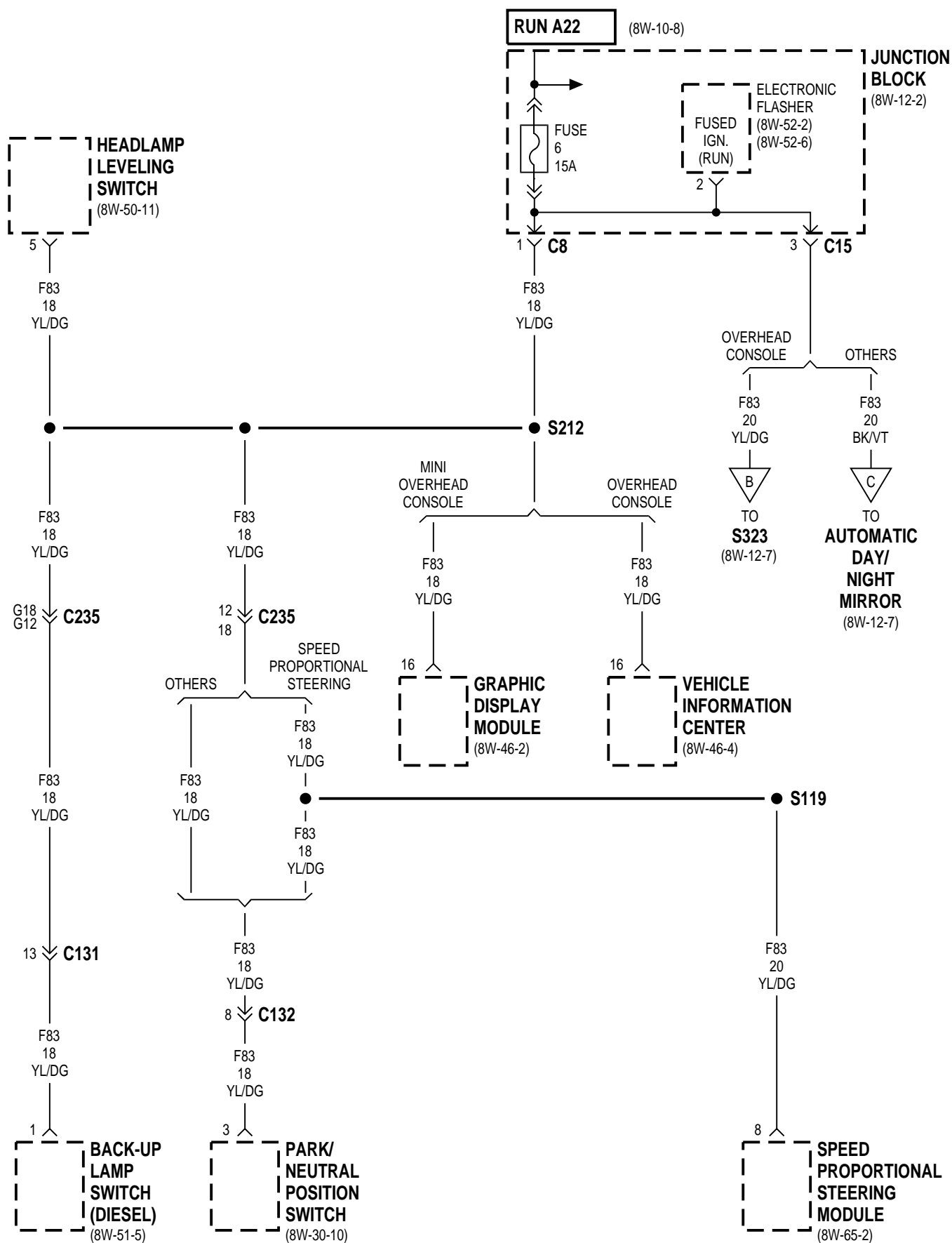


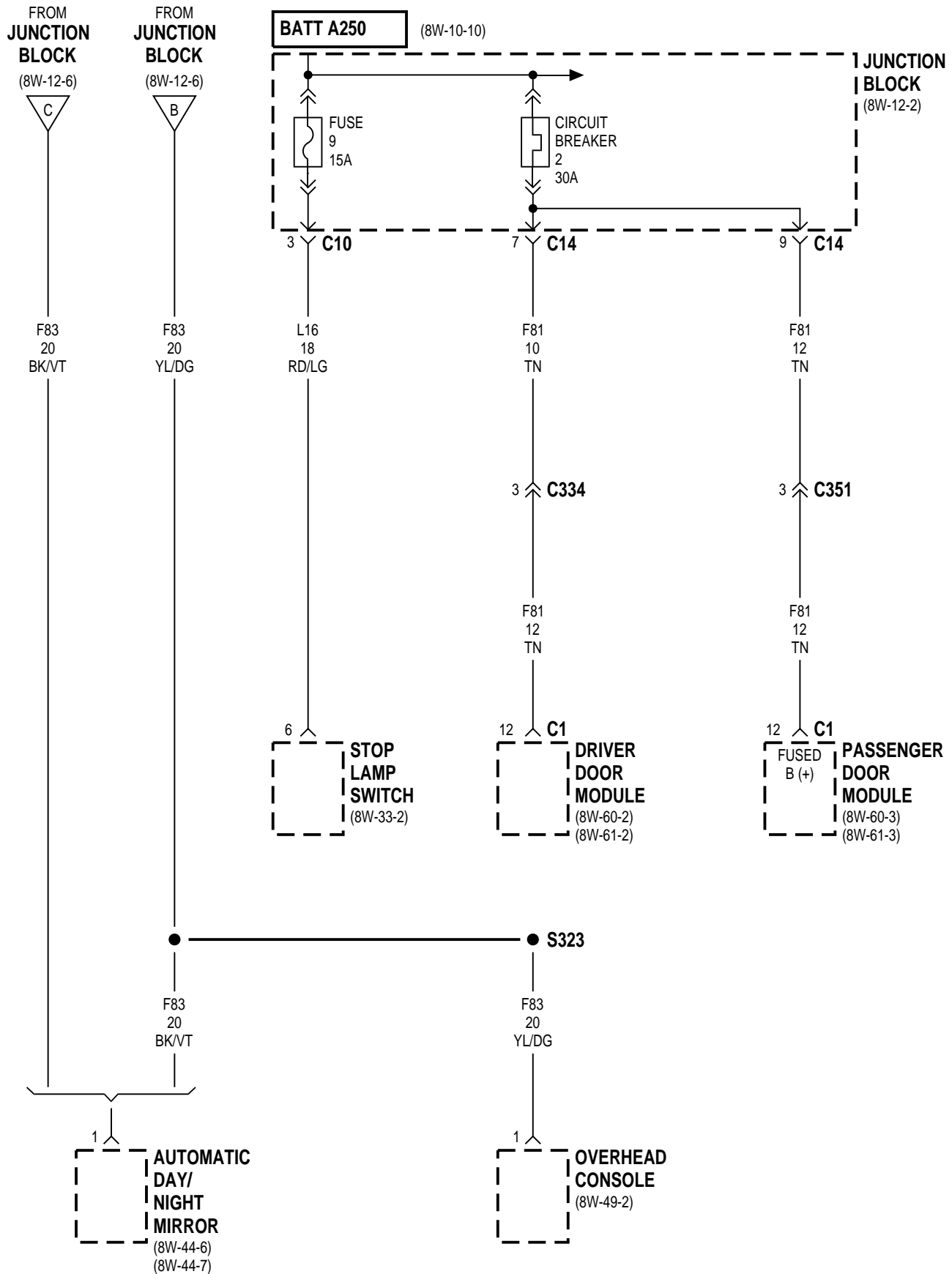
SEE PAGE 8W-12-25 FOR JUNCTION BLOCK PIN-OUT INFORMATION

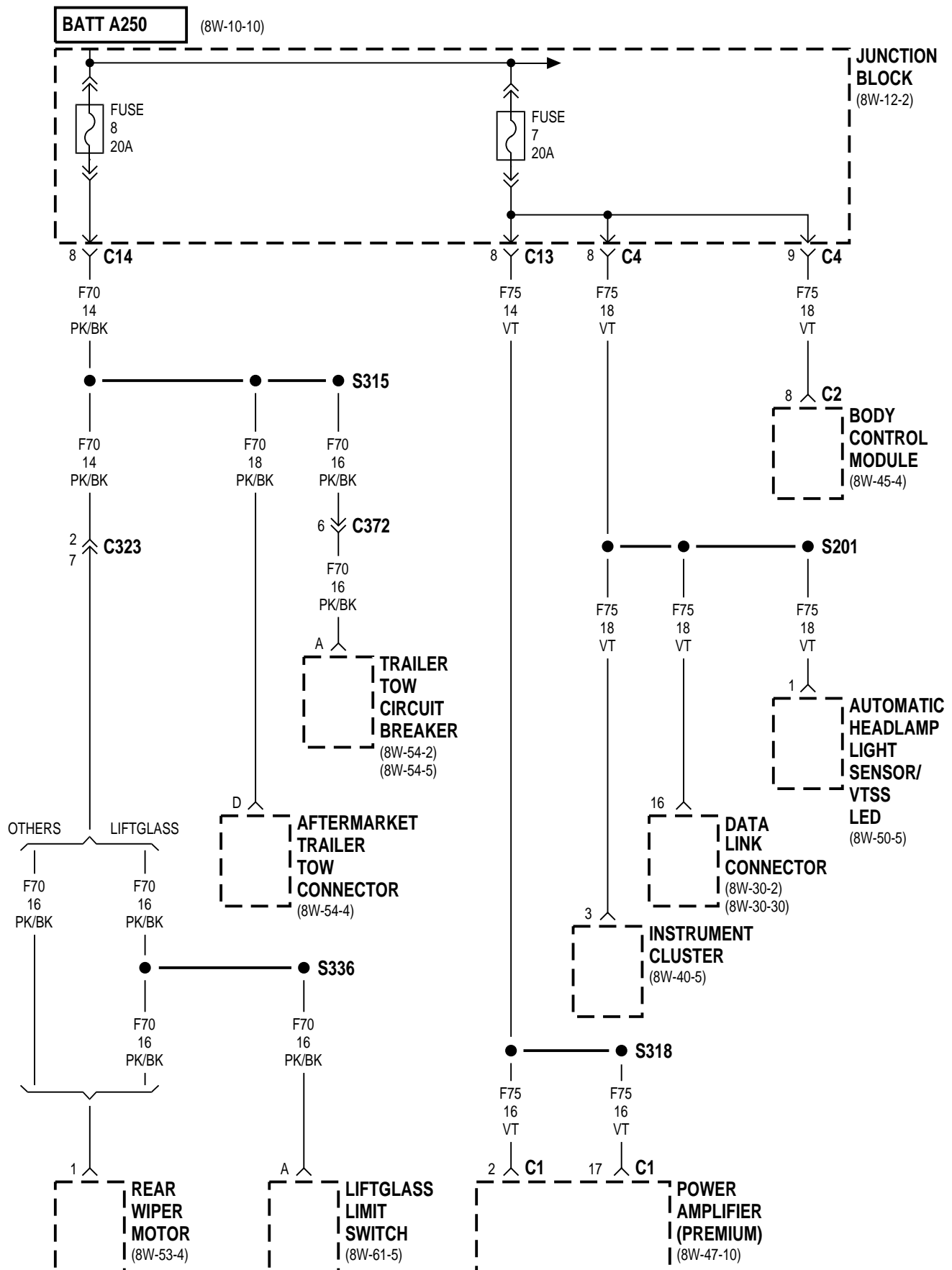




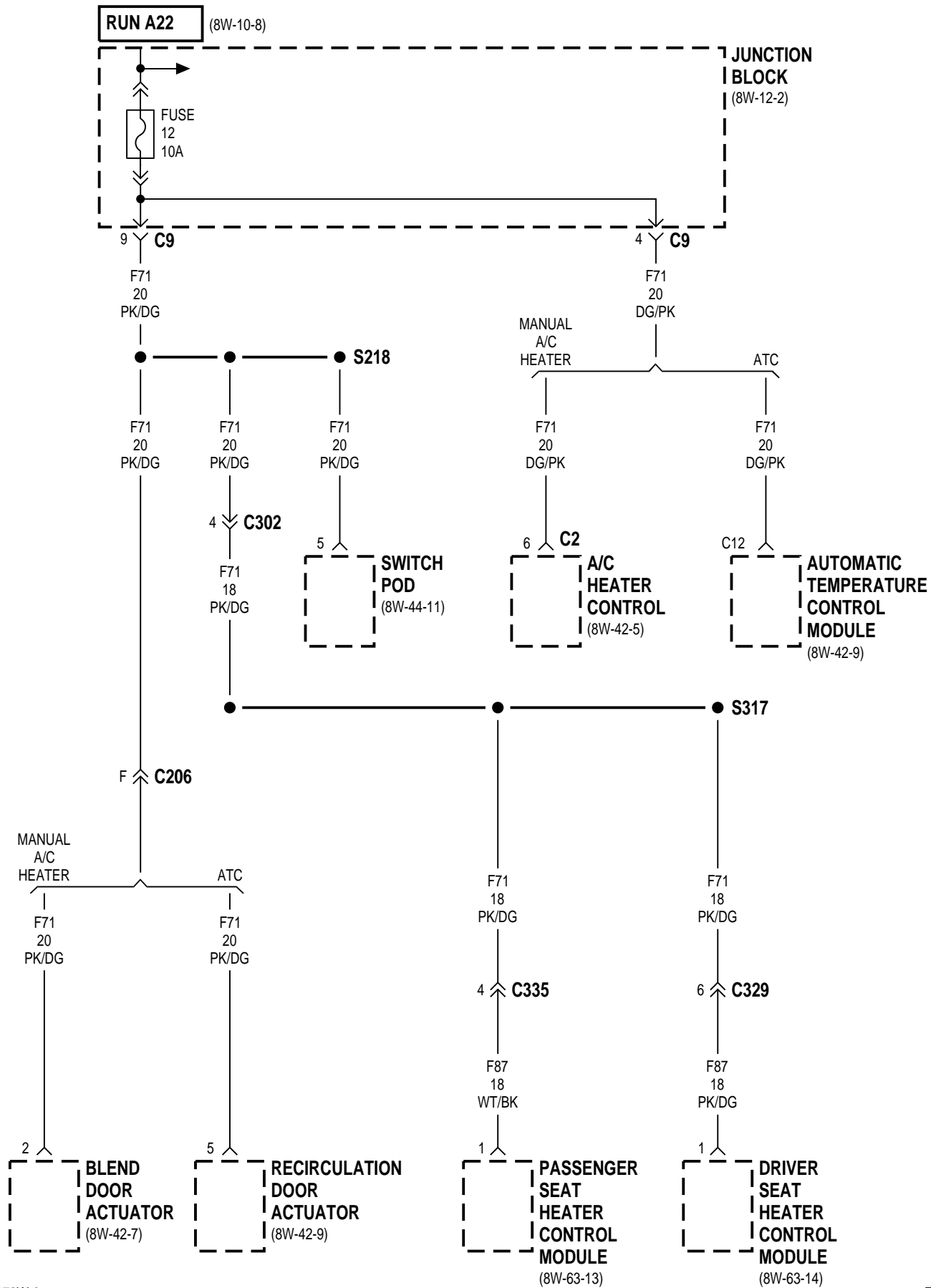


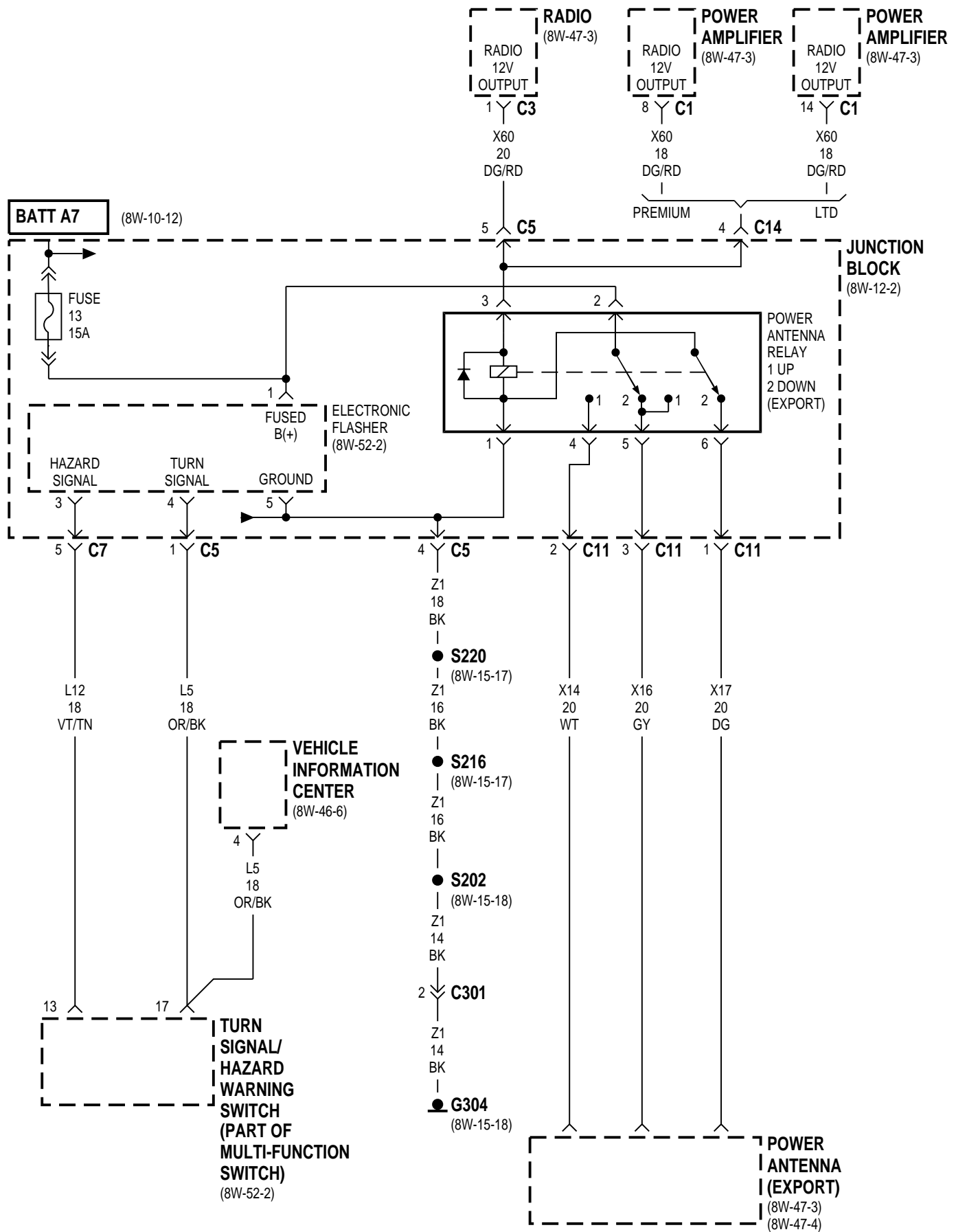


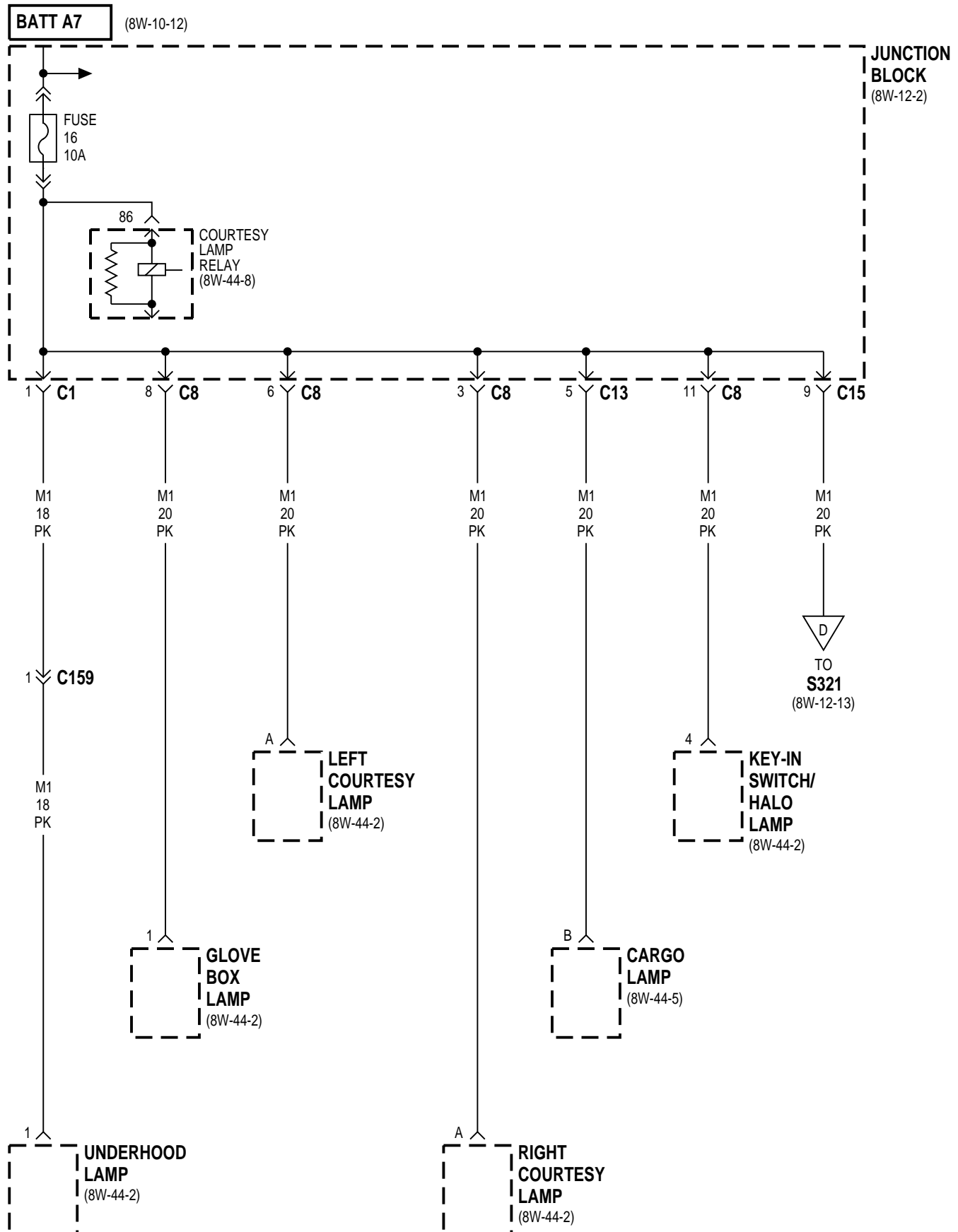


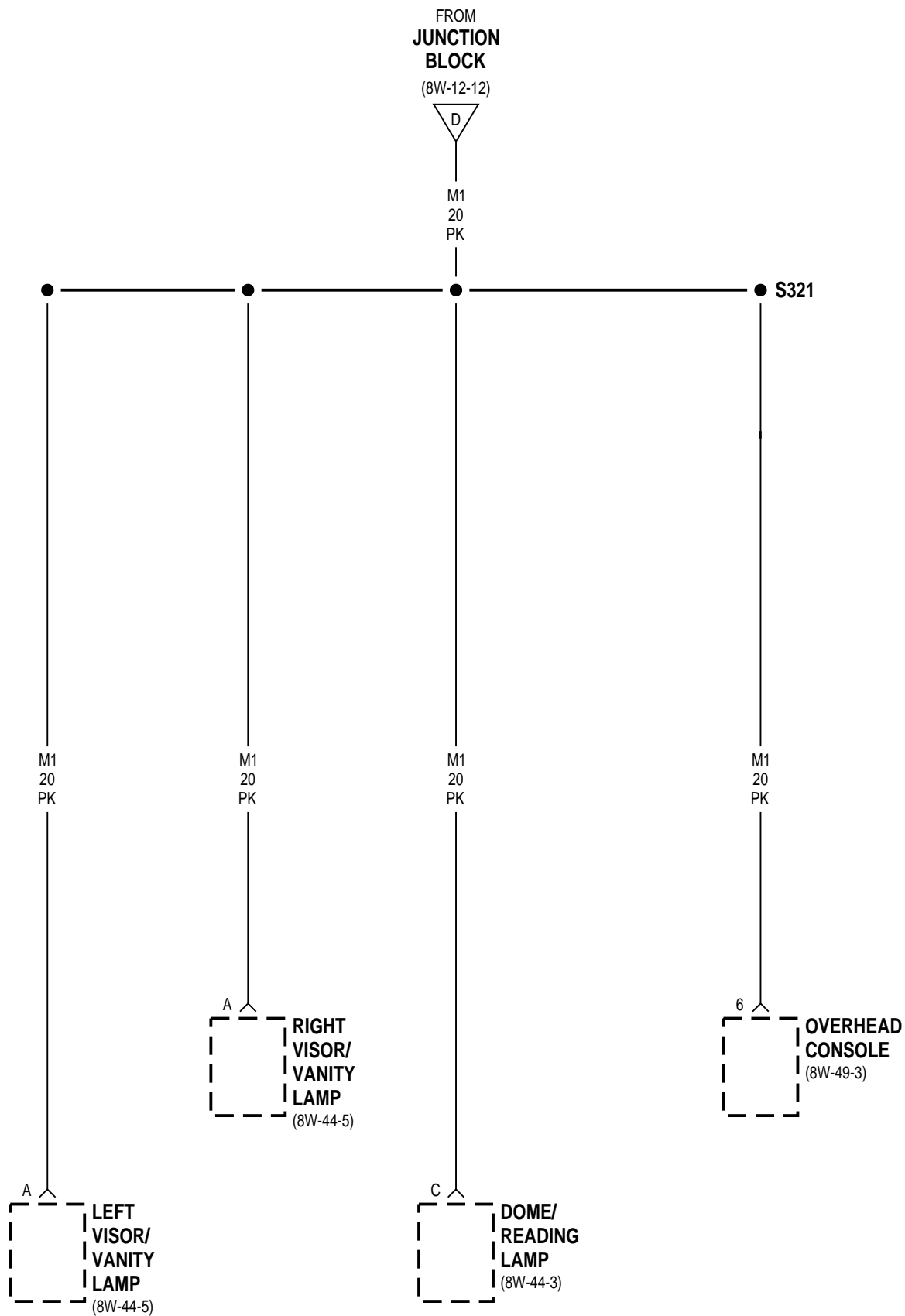


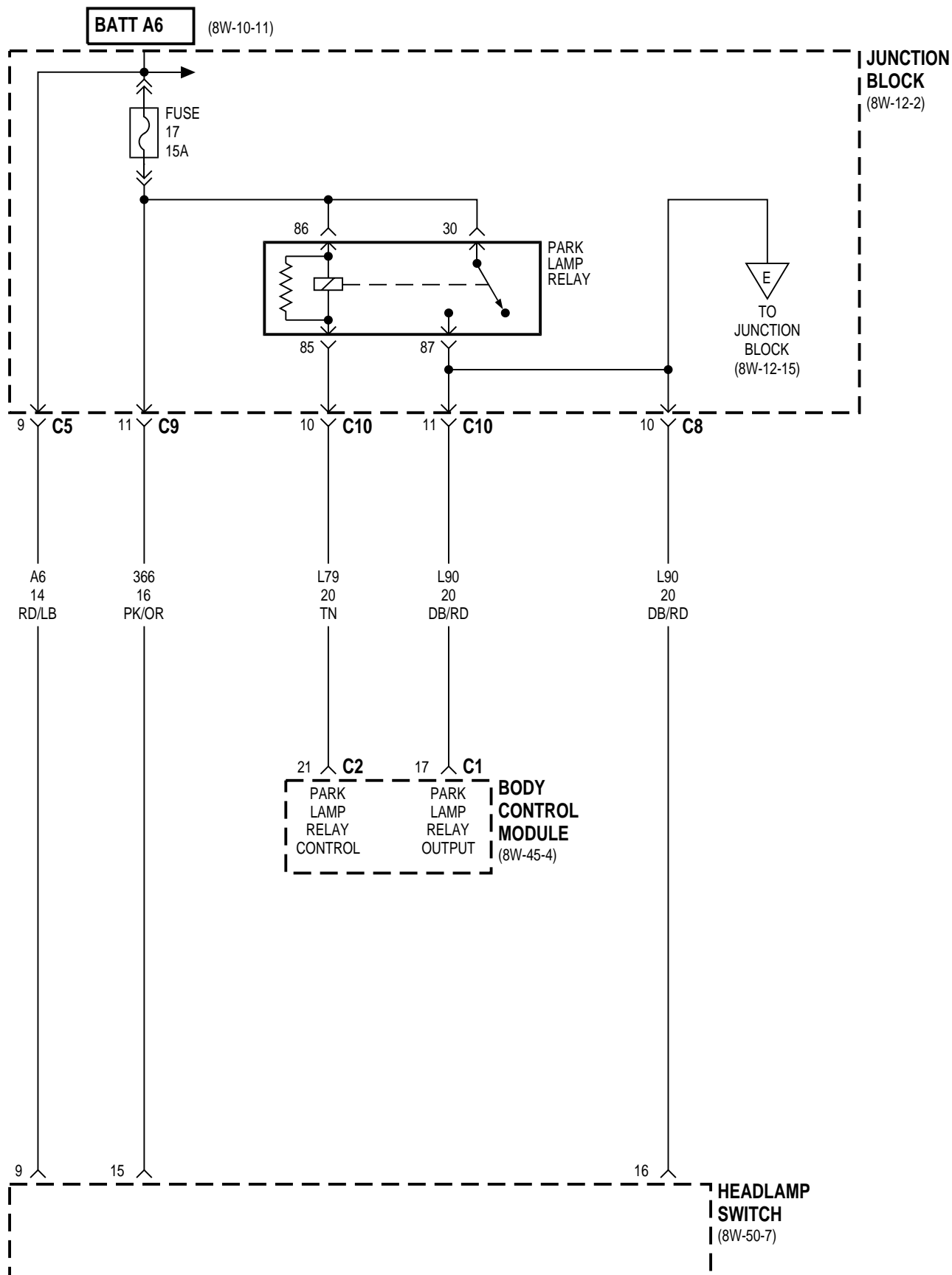




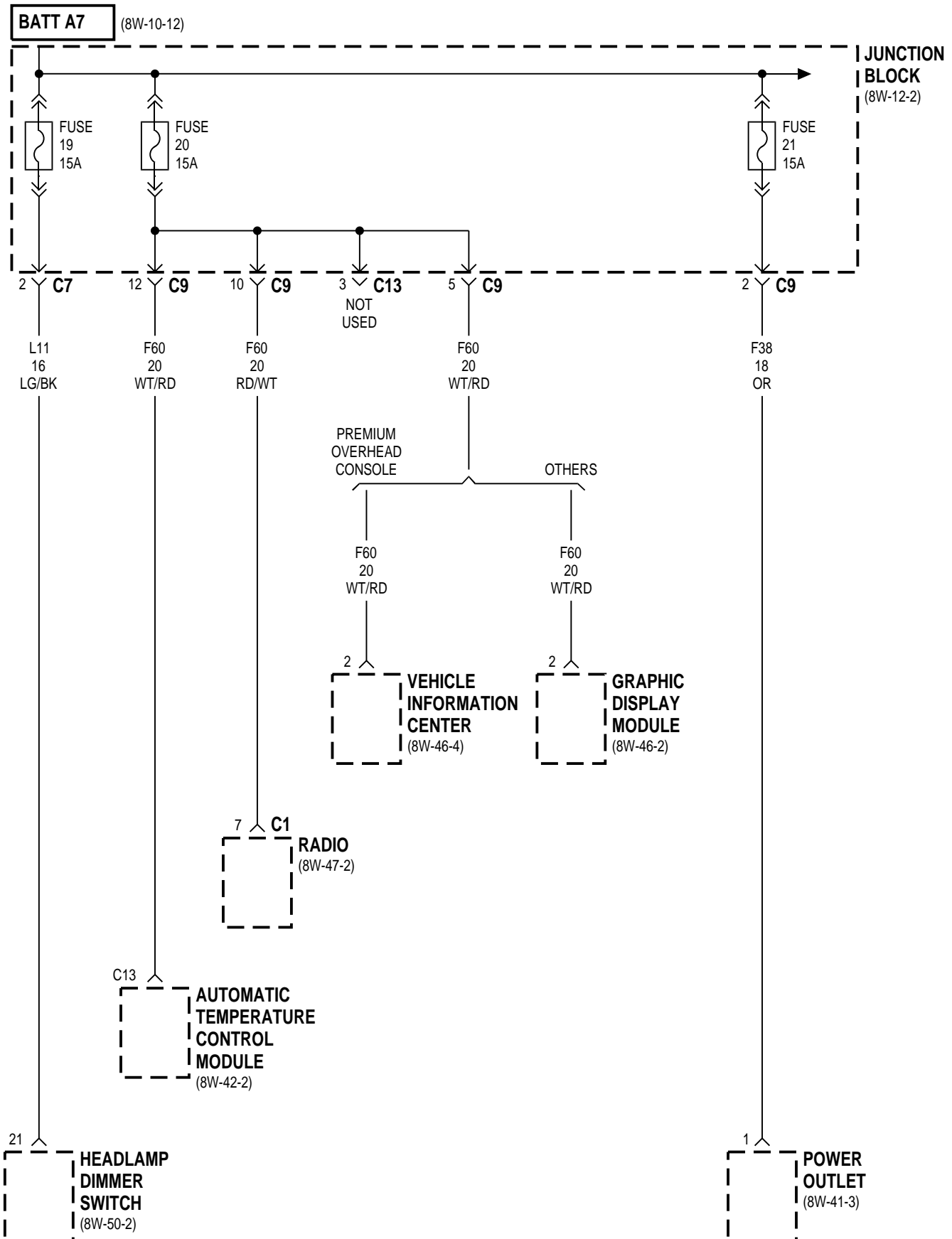




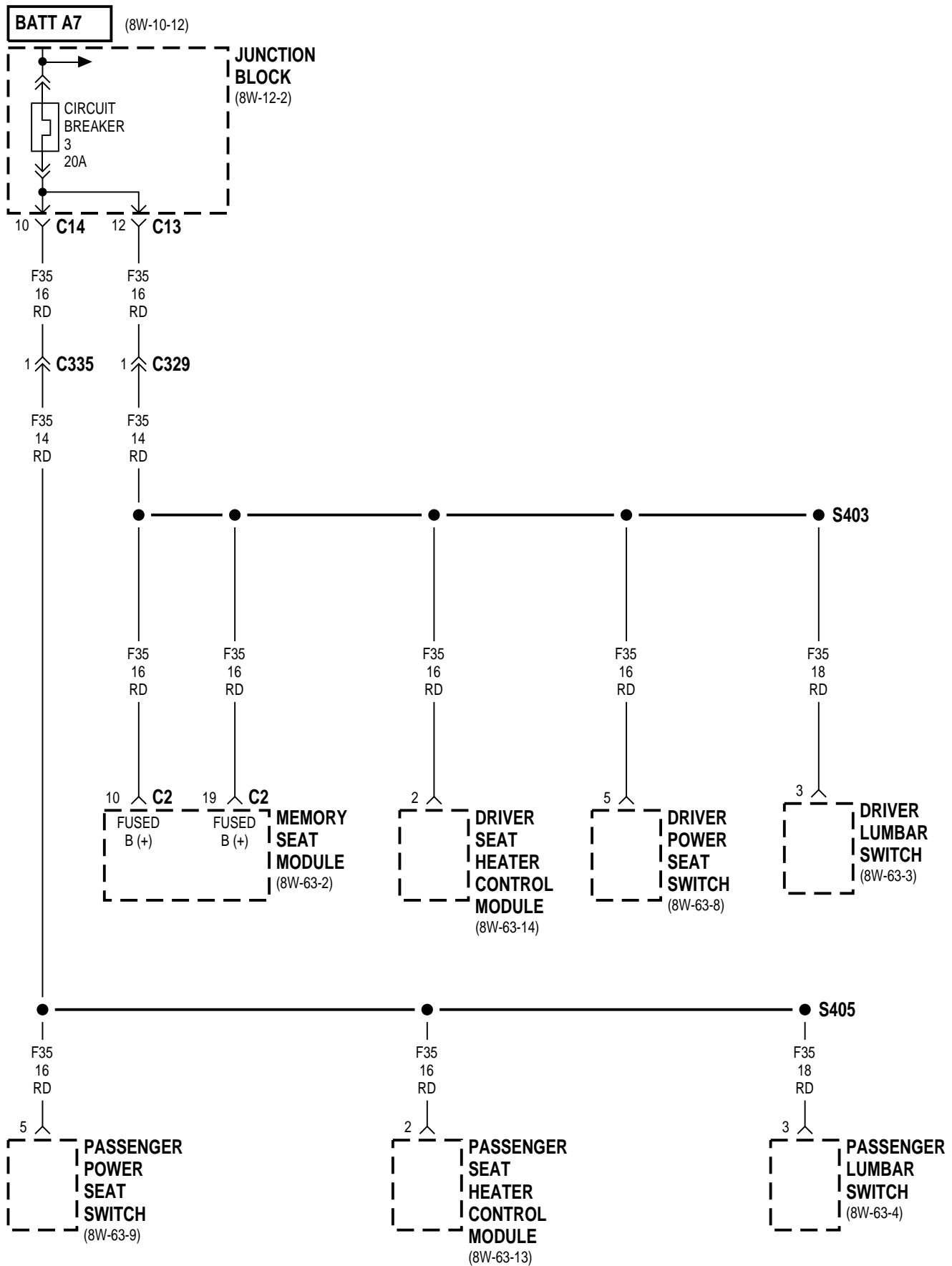


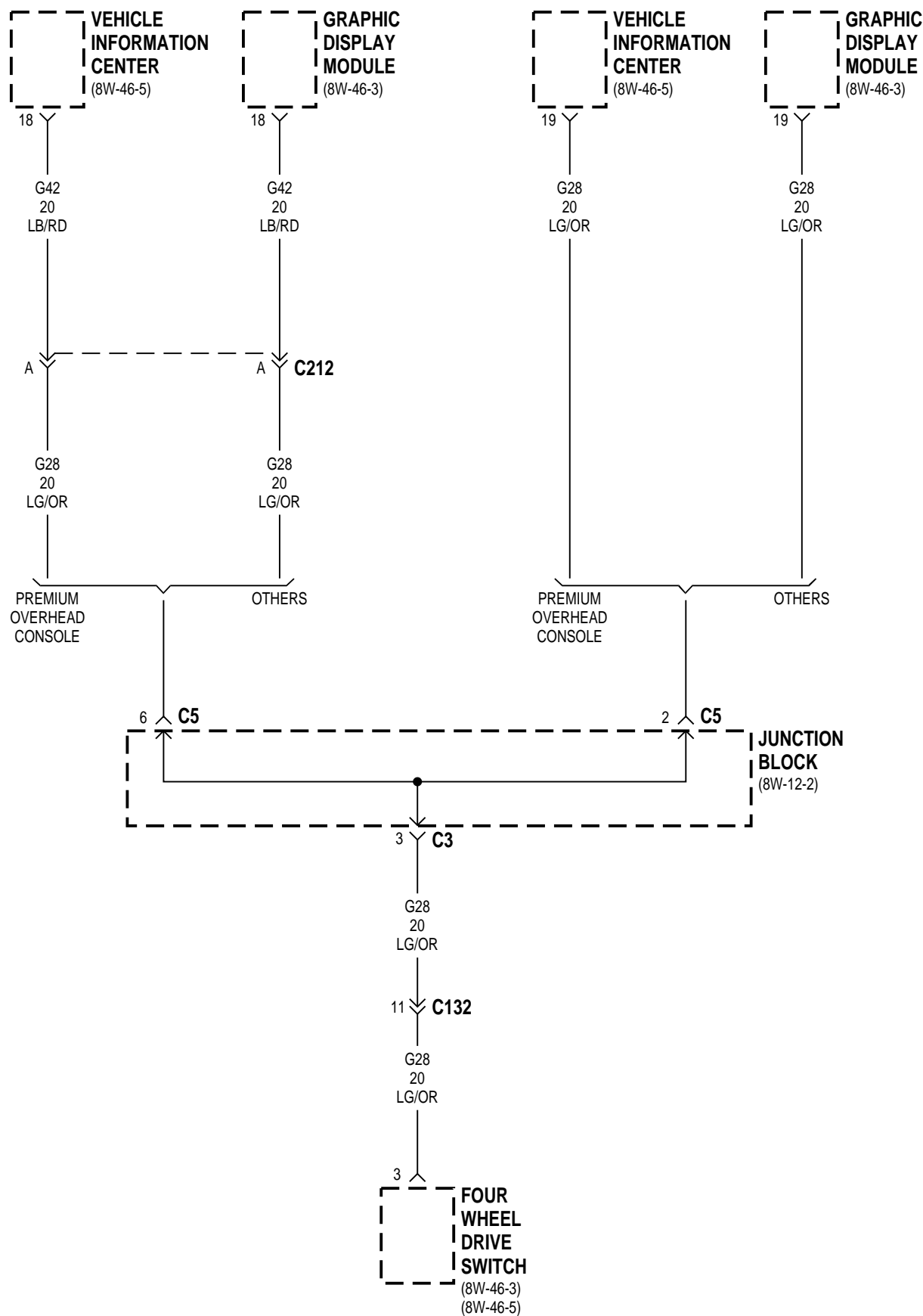




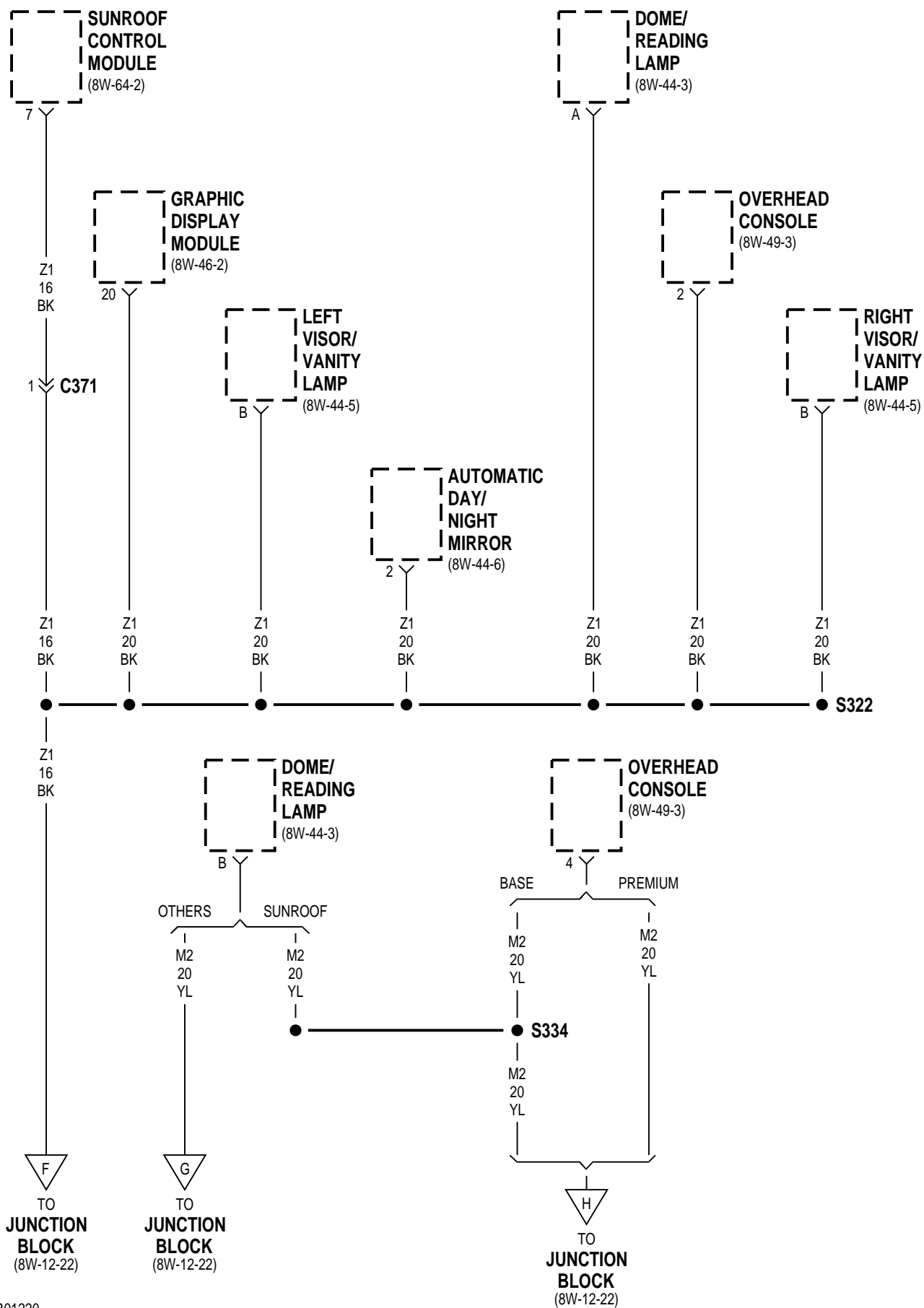


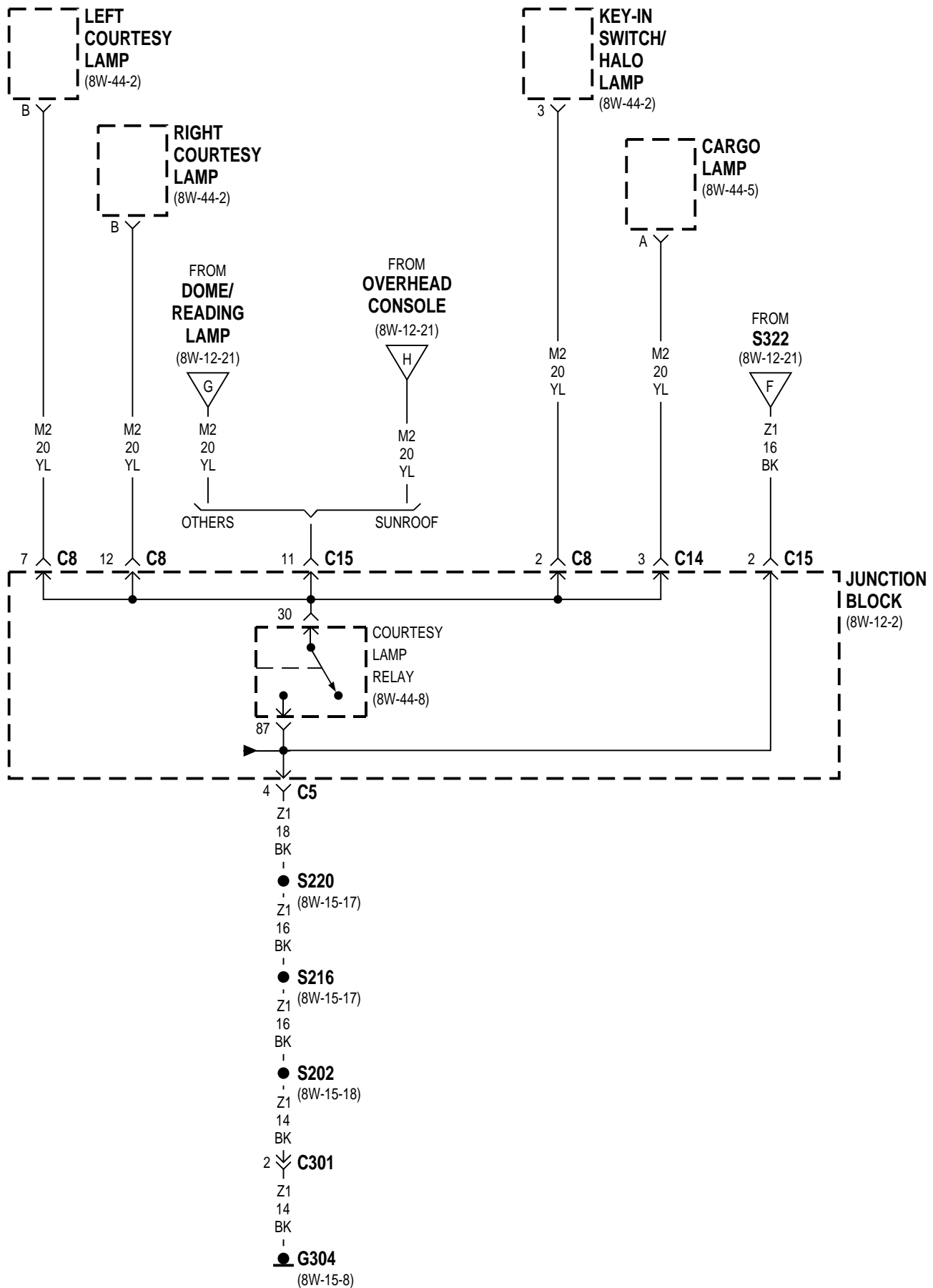


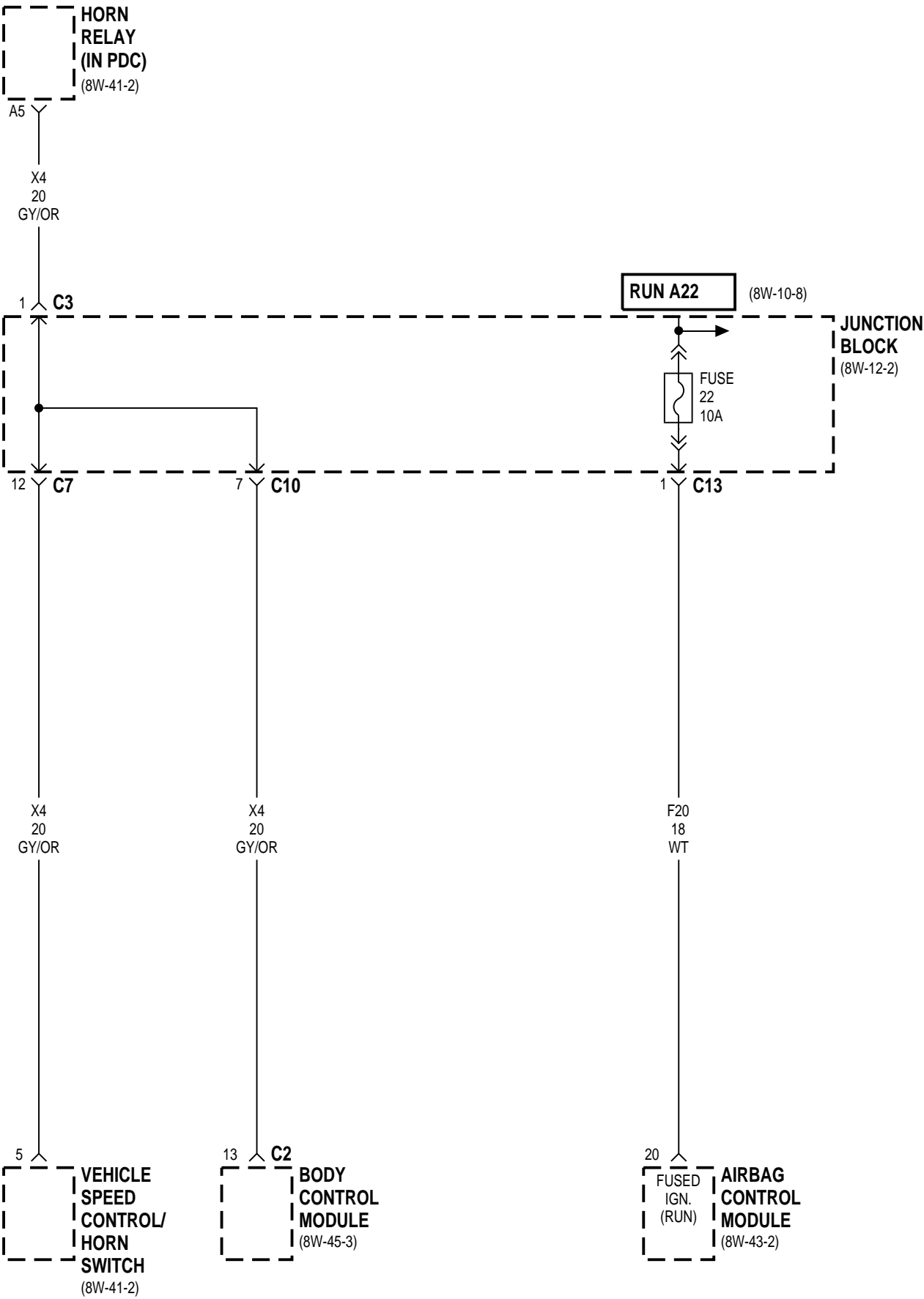


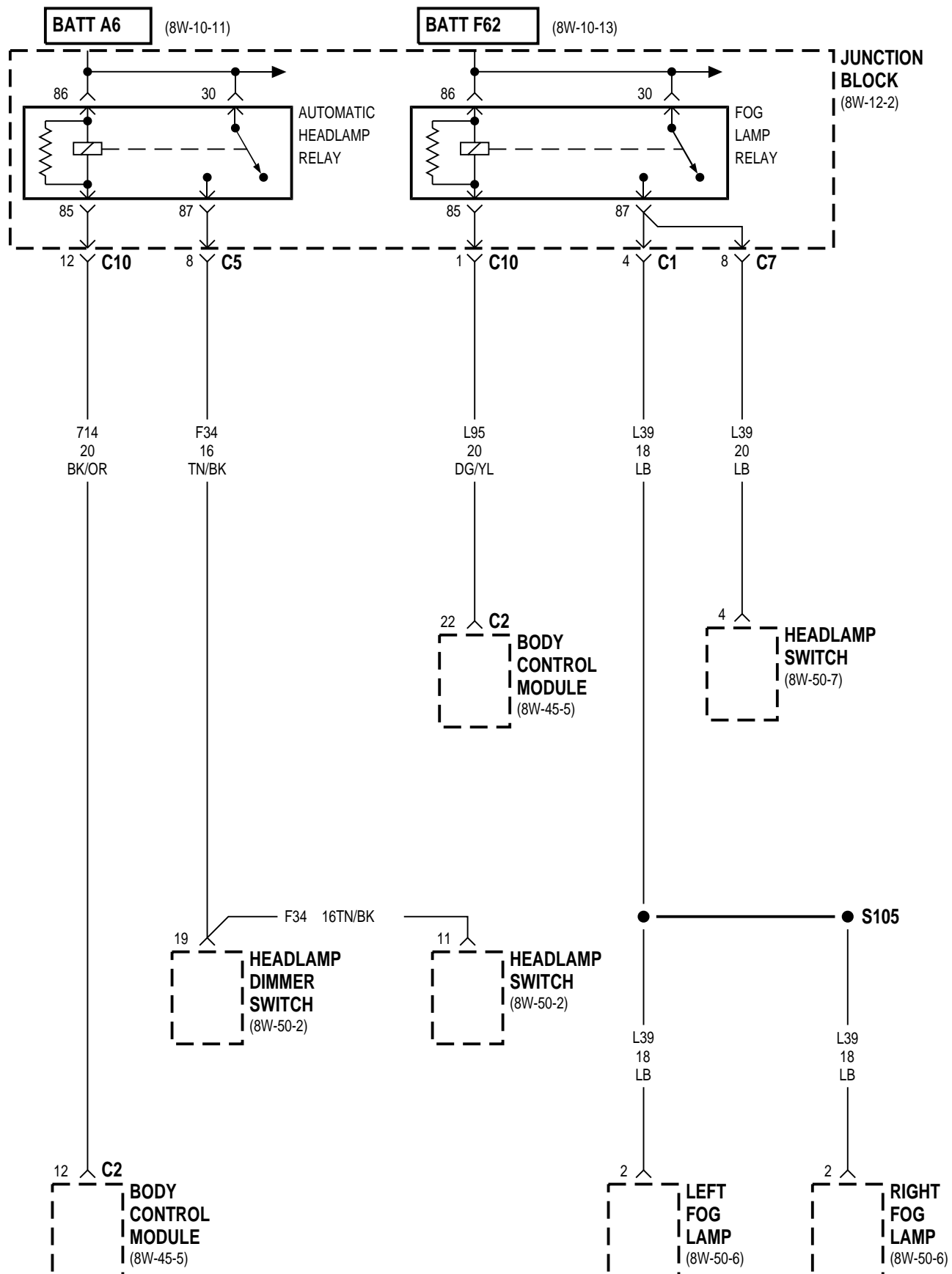












FUSES

FUSE NO.	SIZE	FEED CIRCUIT	FUSED CIRCUIT
1	10A	A31 12RD/BK	X12 18RD/GY
2	15A	A31 12RD/BK	A31 18RD/BK
3	10A	A31 12RD/BK	V23 18BR/PK
			V23 20BR/PK
4	10A	A21 12DB/GY	G5 18DB/WT
5	10A	A21 12DB/GY	F87 20BK/WT
			F87 18WT/PK
6	15A	A22 12BK/OR	F83 18YL/DG
			F83 20YL/DG
			F83 20BK/VT
7	20A	A250 10RD	F75 18VT
			F75 18VT
			F75 14VT
8	20A	A250 10RD	F70 14PK/BK
9	15A	A250 10RD	L16 18RD/LG
10	10A	C15 12BK/WT	C16 20LB/YL
11	10A	A22 12BK/OR	F12 20DB/WT
			F12 20DB/WT
12	10A	A22 12BK/OR	F71 20PK/DG
			F71 20PK/DG
13	15A	A7 12YL/RD	INTERNAL
14	15A	F61 12WT/OR	INTERNAL
15	NOT USED	-	-
16	10A	A7 12YL/RD	MI 18PK
			M1 20PK (7 WIRES)
17	15A	A6 14RD/LB	366 16PK/OR
18	NOT USED	-	-
19	15A	A7 12YL/RD	L11 16LG/BK
20	15A	A7 12YL/RD	F60 20RD/WT (3 WIRES)
21	15A	A7 12YL/RD	F38 18OR
22	10A	A22 12BK/OR	F20 18WT

CIRCUIT BREAKERS

CIRCUIT BREAKER NO.	SIZE	FEED CIRCUIT	FUSED CIRCUIT
1 *	20A	A31 12RD/BK	F86 16LG/BK
			F86 16LG/BK
			F86 16LG/RD
2	30A	A250 10RD	F81 10TN
			F81 12TN
3	20A	A7 12YL/RD	35 16RD
			F35 16RD
1 **	20A	A31 12 RD/BK	F86 18 LG/BK

RELAYS

REAR
FOG LAMP
RELAY
(A)

CAVITY	CIRCUIT	FUNCTION
30	F61 16WT/OR	FUSED B(+)
85	L96 20LG/RD	GROUND
86	L95 18DG/YL	RELAY OUTPUT
87	L36 18LG	REAR FOG LAMP
87A	-	-

CIGAR
LIGHTER
RELAY
(B)

CAV	CIRCUIT	FUNCTION
30	INTERNAL	FUSED B(+)
85	Z1 20BK	GROUND
86	A31 RD/BK	FUSED IGNITION SWITCH OUPUT (RUN)
87	F30 18RD/DB	FUSED IGNITION SWITCH OUTPUT (ACC/RUN)
87A	-	-

REAR
WINDOW
DEFOGGER
RELAY
(G)

CAVITY	CIRCUIT	FUNCTION
30	A900 OR/YL	FUSED B(+)
85	C14 WT/RD	REAR WINDOW DEFOGGER RELAY CONTROL
86	A900 OR/YL	FUSED B(+)
87	C15 BK/WT	REAR WINDOW DEFOGGER RELAY OUTPUT
87A	-	-

POWER
ANTENNA
RELAY
(H)
(EXPORT ONLY)

CAVITY	CIRCUIT	FUNCTION
1	Z1 BK	GROUND
2	INTERNAL	FUSED B(+)
3	X60 DG/RD	RADIO 12 VOLT OUTPUT
4	X14 WT	POWER ANTENNA DOWN CONTROL
5	X16 GY	POWER ANTENNA DRIVER
6	X17 GN	POWER ANTENNA UP CONTROL

ELECTRONIC
FLASHER
(I)

CAVITY	CIRCUIT	FUNCTION
1	INTERNAL	FUSED B(+)
2	INTERNAL	FUSED IGNITION SWITCH OUTPUT (RUN)
3	L12 VT/TN	HAZARD SIGNAL
4	L5 OR/BK	TURN SIGNAL
5	Z1 BK	GROUND

COURTESY
LAMP
RELAY
(C)

CAVITY	CIRCUIT	FUNCTION
30	M2 YL	COURTESY LAMP RELAY OUTPUT
85	M112 BR/LG	COURTESY LAMP RELAY CONTROL
86	M1 PK	FUSED B(+)
87	Z1 BK	GROUND
87A	-	-

FOG
LAMP
RELAY
(D)

CAVITY	CIRCUIT	FUNCTION
30	F62 RD	FUSED B(+)
85	L95 DG/YL	FOG LAMP RELAY CONTROL
86	F62 RD	FUSED B(+)
87	L39 LB	FOG LAMP RELAY OUTPUT
87A	-	-

PARK
LAMP
RELAY
(E)

CAVITY	CIRCUIT	FUNCTION
30	366 PK/OR	PARK LAMP FEED
85	L79 TN	PARK LAMP RELAY CONTROL
86	366 PK/OR	PARK LAMP FEED
87	L90 DB/RD	PARK LAMP RELAY OUTPUT
87A	-	-

AUTO
HEADLAMP
RELAY
(F)

CAVITY	CIRCUIT	FUNCTION
30	A6 RD/LB	FUSED B(+)
85	714 BK/OR	AUTO HEADLAMP RELAY CONTROL
86	A6 RD/LB	FUSED B(+)
87	F34 TN/BK	AUTO HEADLAMP RELAY OUTPUT
87A	-	-

8W-12 JUNCTION BLOCK

DESCRIPTION AND OPERATION

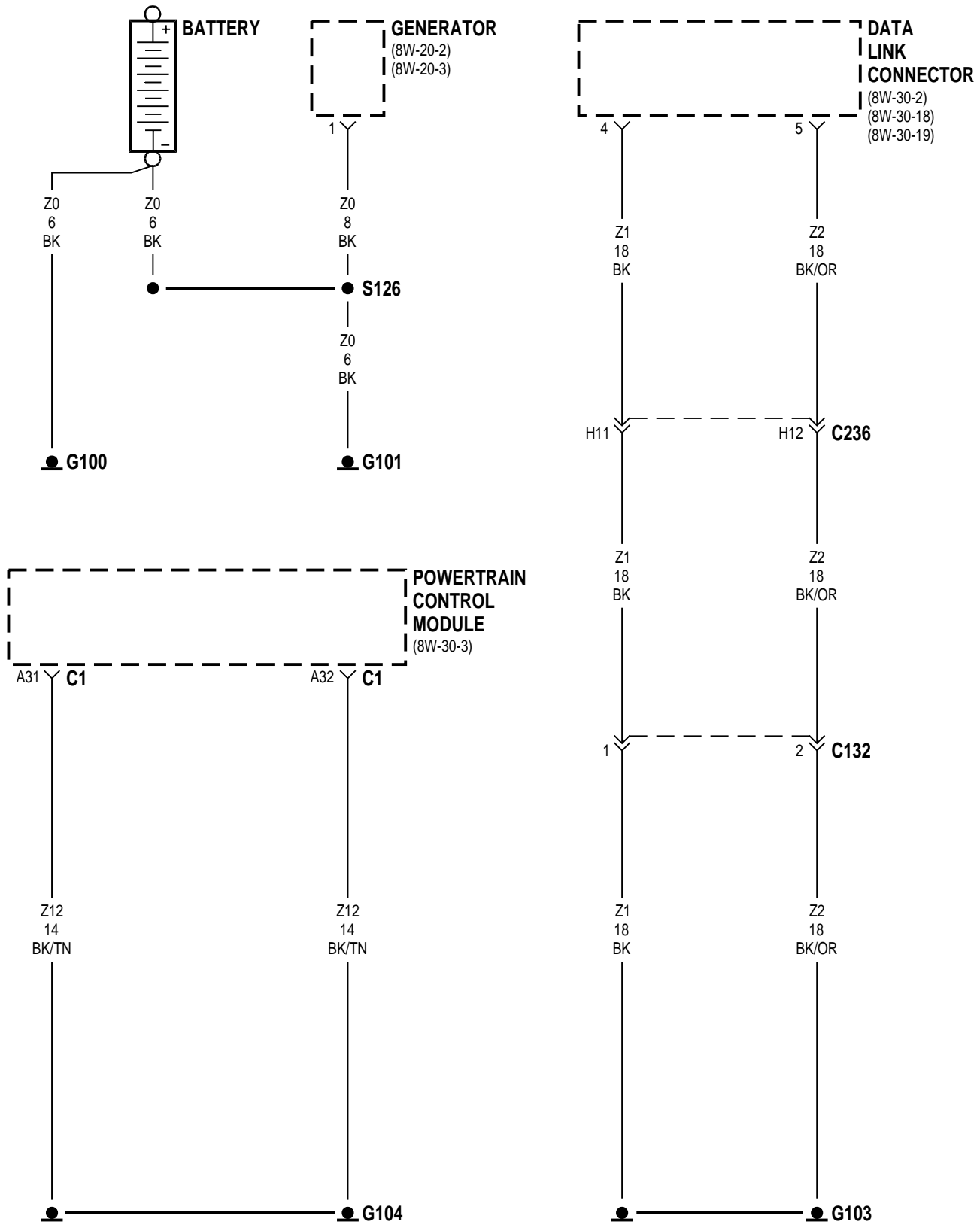
This section covers the junction block and all circuits involved with it. For additional information on system operation, please refer to the appropriate section of the wiring diagrams.

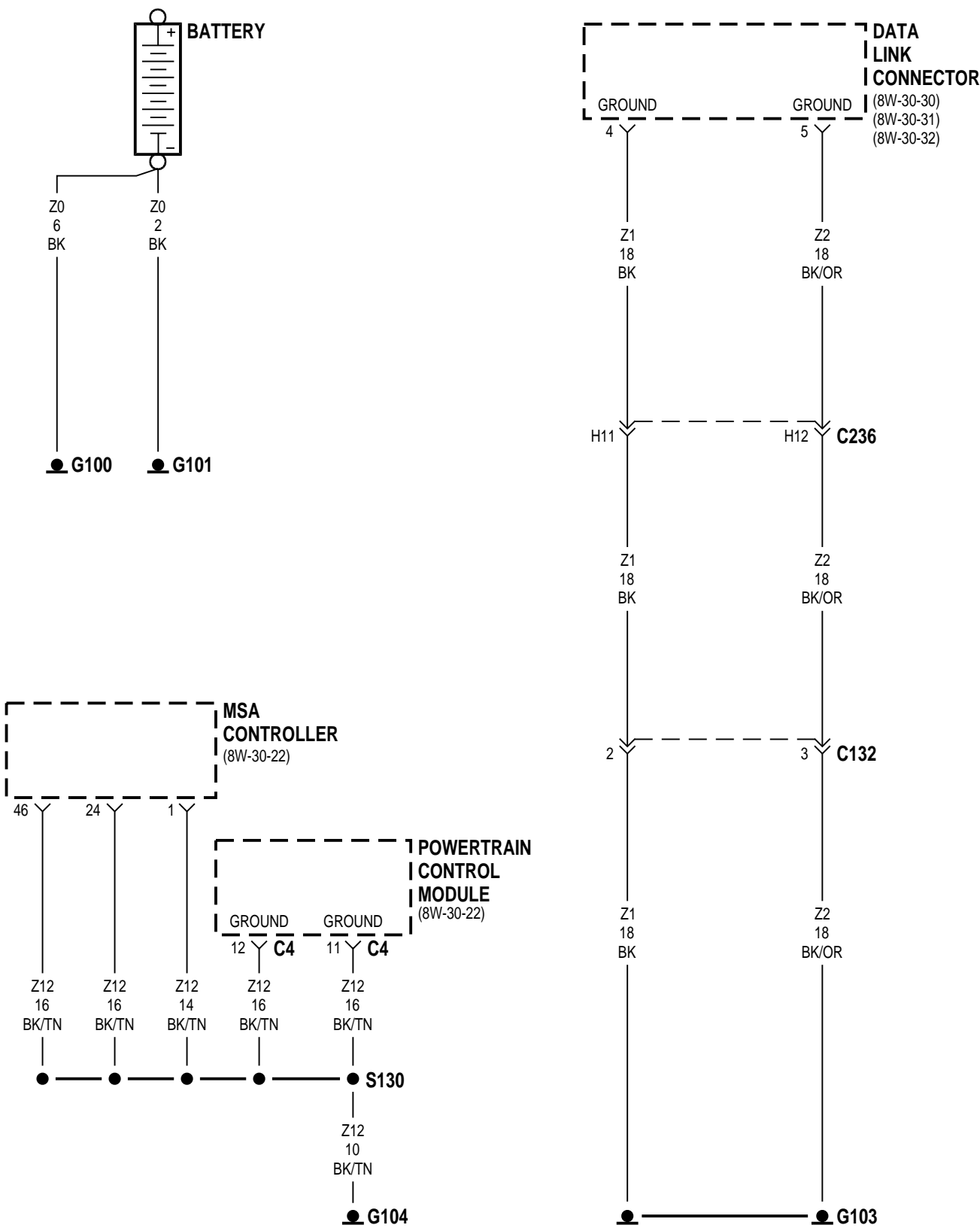
8W-15 GROUND DISTRIBUTION

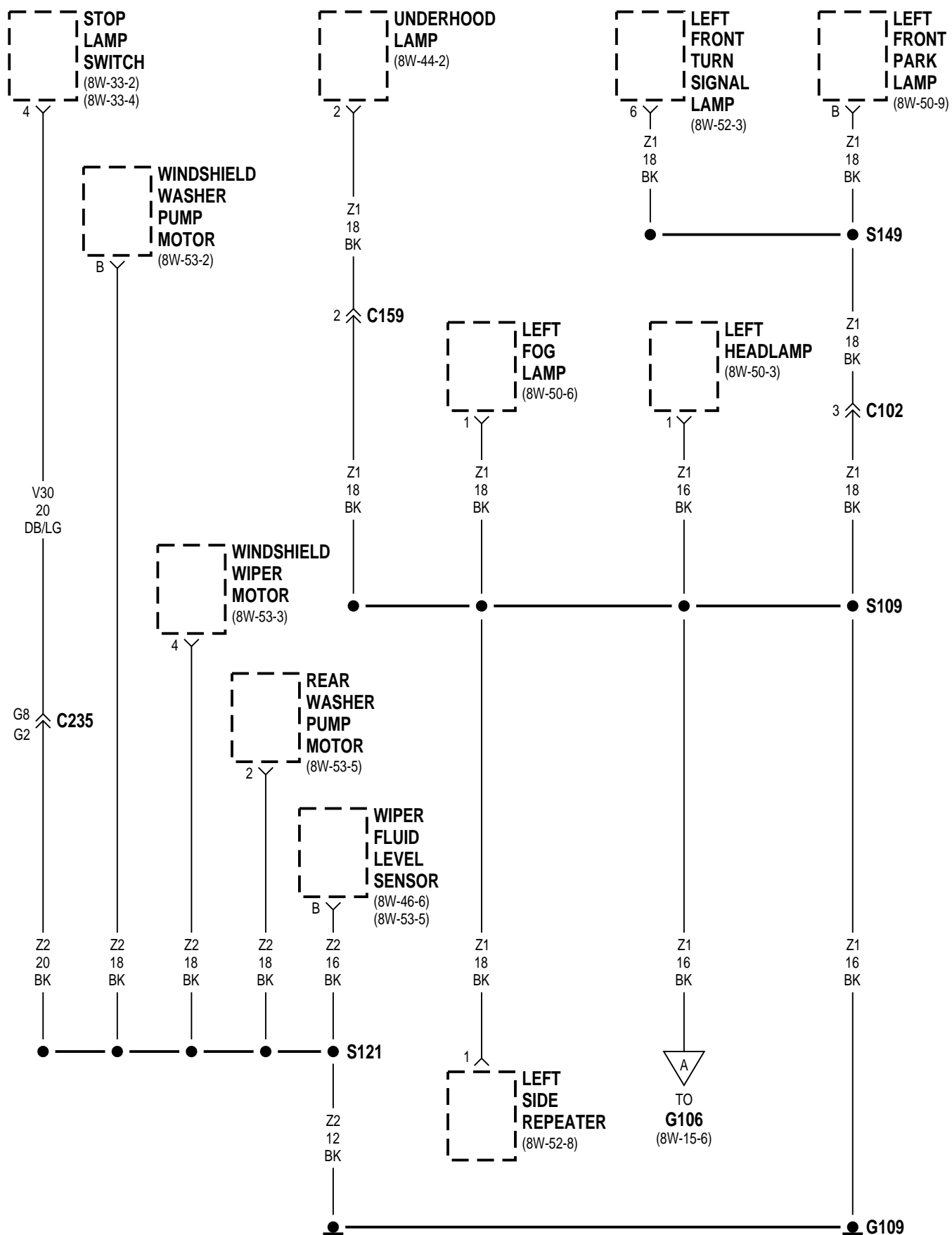
INDEX

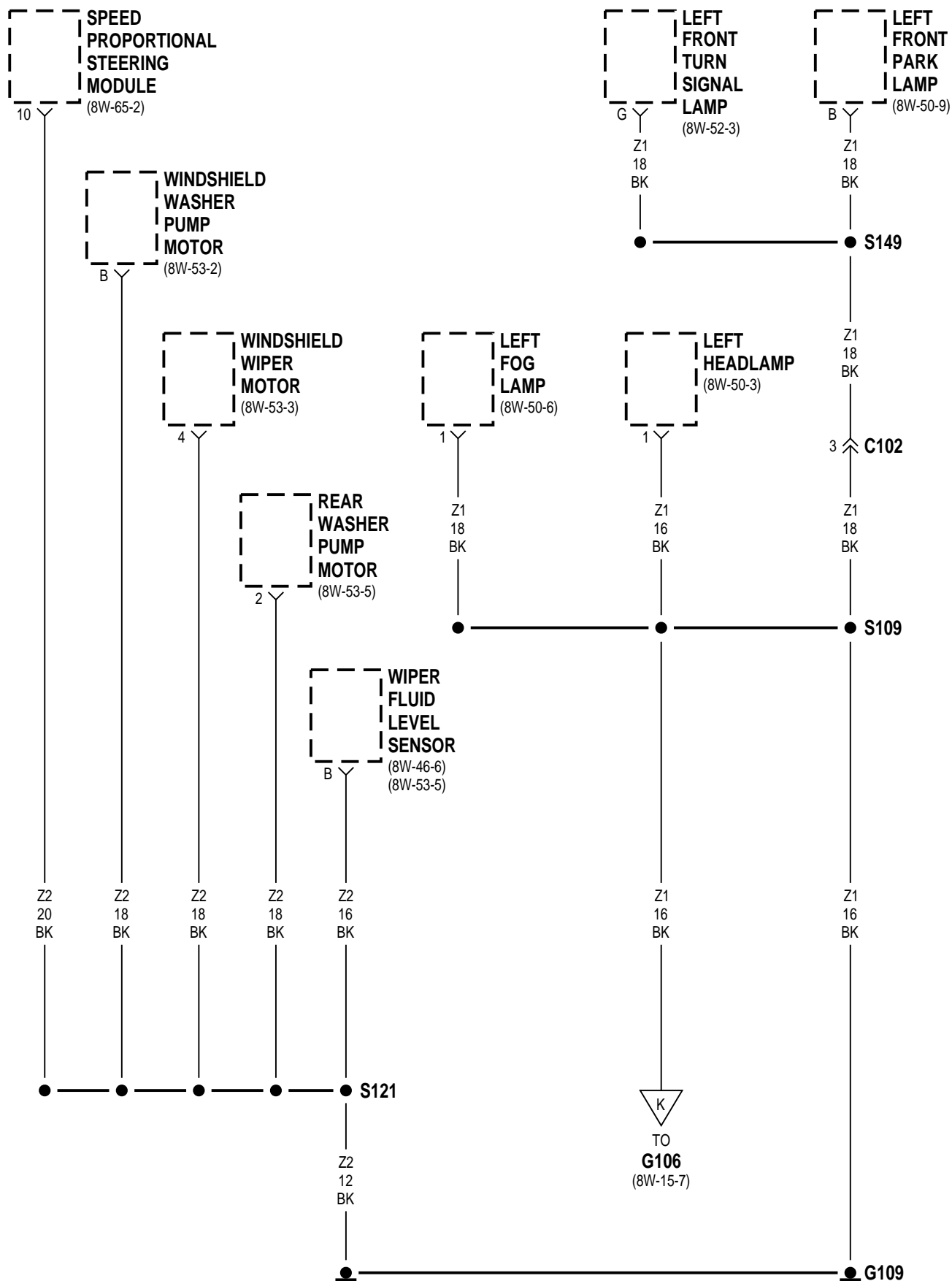
	page
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	19

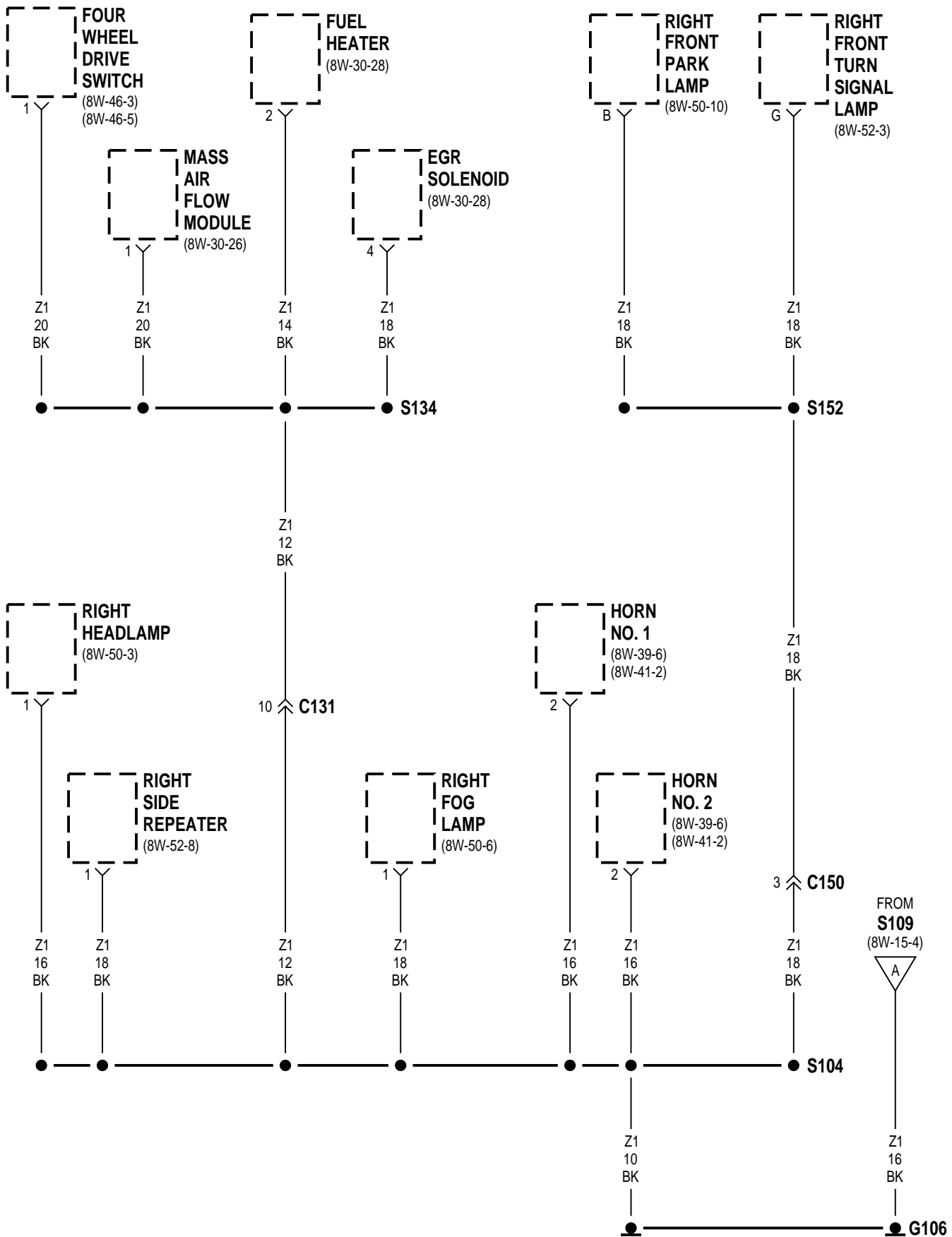
Component	Page	Component	Page
A/C Heater Control	8W-15-8, 17	Left Door Courtesy Lamp	8W-15-12
A/C High Pressure Switch	8W-15-7	Left Fog Lamp	8W-15-4, 5
Airbag Control Module	8W-15-13	Left Front Park Lamp	8W-15-4, 5
Ash Receiver Lamp	8W-15-17	Left Front Turn Signal Lamp	8W-15-4, 5
Automatic Day/Night Mirror	8W-15-16	Left Headlamp	8W-15-4, 5
Automatic Temperature Control Module	8W-15-8	Left License Lamp	8W-15-10
Battery	8W-15-2, 3	Left Rear Fog Lamp	8W-15-9
Blend Door Actuator	8W-15-17	Left Rear Power Window Switch	8W-15-15
Blower Motor	8W-15-8	Left Rear Turn Signal Lamp	8W-15-9
Blower Power Module	8W-15-8	Left Side Repeater	8W-15-4
Body Control Module	8W-15-18	Left Tail/Stop Lamp	8W-15-9
Center High Mounted Stop Lamp No. 1	8W-15-9	Left Visor/Vanity Lamp	8W-15-16
Center High Mounted Stop Lamp No. 2	8W-15-9	Liftgate Ajar Switch	8W-15-10
Center High Mounted Stop Lamp No. 3	8W-15-9	Liftgate Cylinder Lock Switch	8W-15-10
Cigar Lighter	8W-15-17	Liftglass Ajar Switch	8W-15-10
Controller Anti-Lock Brake	8W-15-8	Liftglass Release Solenoid	8W-15-10
Courtesy Lamp Relay	8W-15-16	Mass Air Flow Module	8W-15-6
Data Link Connector	8W-15-2, 3	Memory Seat Module	8W-15-15
Dome/Reading Lamp	8W-15-16	Msa Controller	8W-15-3
Downstream Heated Oxygen Sensor	8W-15-7	Overhead Console	8W-15-16
Driver Door Module	8W-15-12	Passenger Door Module	8W-15-14
Driver Heated Seat Back	8W-15-15	Passenger Heated Seat Back	8W-15-13
Driver Heated Seat Cushion	8W-15-15	Passenger Heated Seat Cushion	8W-15-13
Driver Lumbar Switch	8W-15-15	Passenger Lumbar Switch	8W-15-13
Driver Power Seat Switch	8W-15-15	Passenger Power Seat Switch	8W-15-13
Driver Seat Heater Control Module	8W-15-15	Passenger Seat Heater Control Module	8W-15-13
EGR Solenoid	8W-15-6	Power Amplifier	8W-15-13
Electronic Flasher	8W-15-16	Power Outlet	8W-15-17
Engine Coolant Level Sensor	8W-15-7	Powertrain Control Module	8W-15-2, 3
Engine Starter Motor Relay	8W-15-8	Radio	8W-15-13
Factory Trailer Tow Connector	8W-15-9	Rear Washer Pump Motor	8W-15-4, 5
Floor Console Lamps	8W-15-15	Rear Window Defogger	8W-15-10
Four Wheel Drive Switch	8W-15-6, 7	Rear Wiper Motor	8W-15-10
Fuel Heater	8W-15-6	Right Back-Up Lamp	8W-15-11
Fuel Heater Relay	8W-15-8	Right Door Courtesy Lamp	8W-15-14
Fuel Pump Module	8W-15-15	Right Fog Lamp	8W-15-6, 7
G100	8W-15-2, 3	Right Front Park Lamp	8W-15-6, 7
G101	8W-15-2, 3	Right Front Turn Signal Lamp	8W-15-6, 7
G103	8W-15-2, 3	Right Headlamp	8W-15-6, 7
G104	8W-15-2, 3	Right License Lamp	8W-15-10
G105	8W-15-7	Right Rear Fog Lamp	8W-15-11
G106	8W-15-6, 7	Right Rear Power Window Switch	8W-15-14
G107	8W-15-8	Right Rear Turn Signal Lamp	8W-15-11
G108	8W-15-8	Right Side Repeater	8W-15-6, 7
G109	8W-15-4, 5	Right Tail/Stop Lamp	8W-15-11
G300	8W-15-11	Right Visor/Vanity Lamp	8W-15-16
G301	8W-15-14	Seat Belt Switch	8W-15-15
G302	8W-15-12	Speed Proportional Steering Module	8W-15-5
G303	8W-15-13	Stop Lamp Switch	8W-15-4, 18
G304	8W-15-18	Sunroof Control Module	8W-15-16
G305	8W-15-15	Switch Pod	8W-15-17
Generator	8W-15-2	Trailer Tow	8W-15-9
Glove Box Lamp	8W-15-17	Underhood Lamp	8W-15-4, 8
Graphic Display Module	8W-15-17, 18	Upstream Heated Oxygen Sensor	8W-15-7
Headlamp Leveling Switch	8W-15-18	Vehicle Information Center	8W-15-12, 17, 18
Headlamp Switch	8W-15-18	Vehicle Speed Control Servo	8W-15-8
Horn	8W-15-6, 7	Vehicle Speed Control/Horn Switch	8W-15-18
Instrument Cluster	8W-15-17, 18	Windshield Washer Pump Motor	8W-15-4, 5
Junction Block	8W-15-16, 17	Windshield Wiper Motor	8W-15-4, 5
Key-In Switch/Halo Lamp	8W-15-17	Wiper Fluid Level Sensor	8W-15-4, 5
Lamp Outage Module	8W-15-12		
Left Back-Up Lamp	8W-15-9		

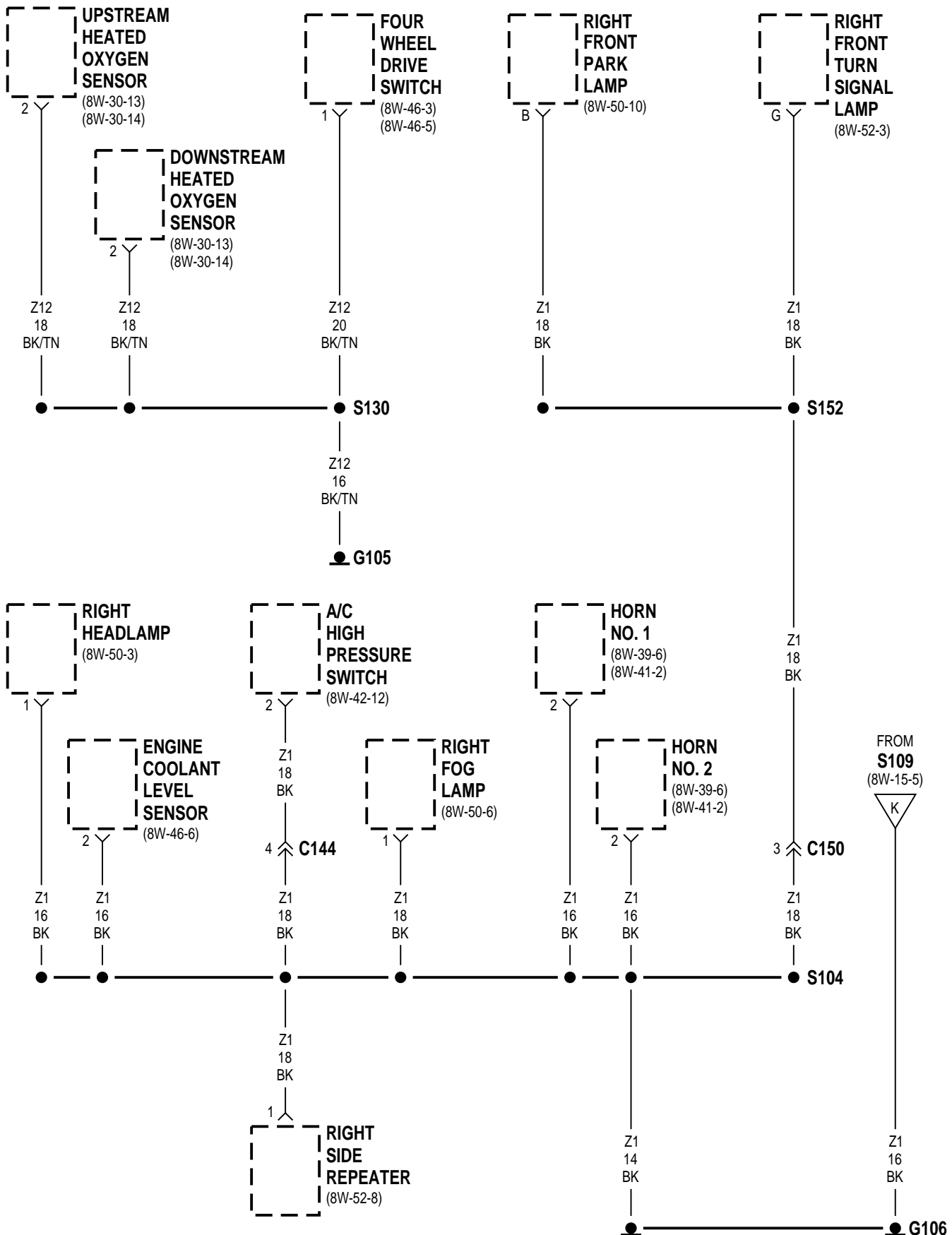


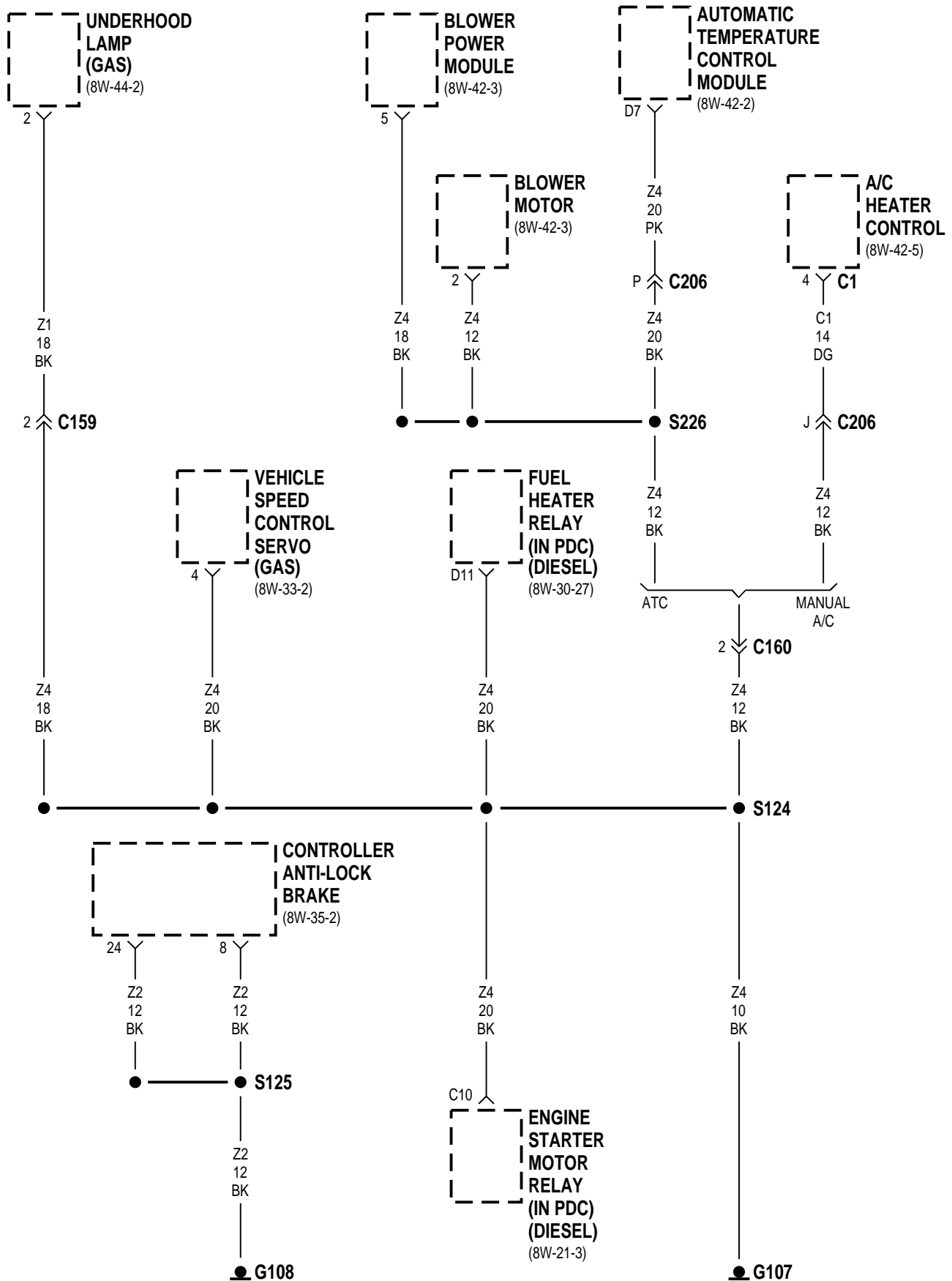


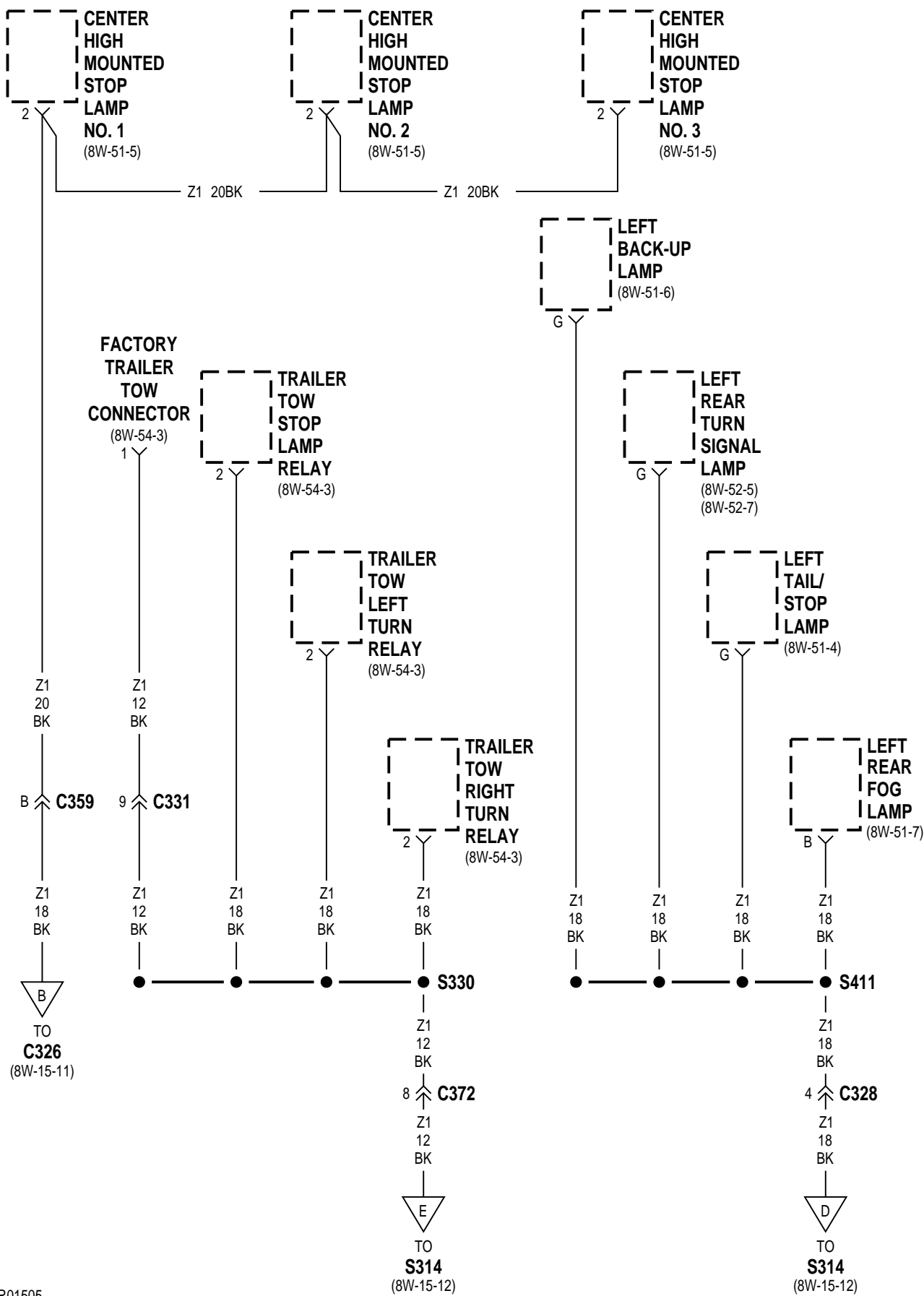


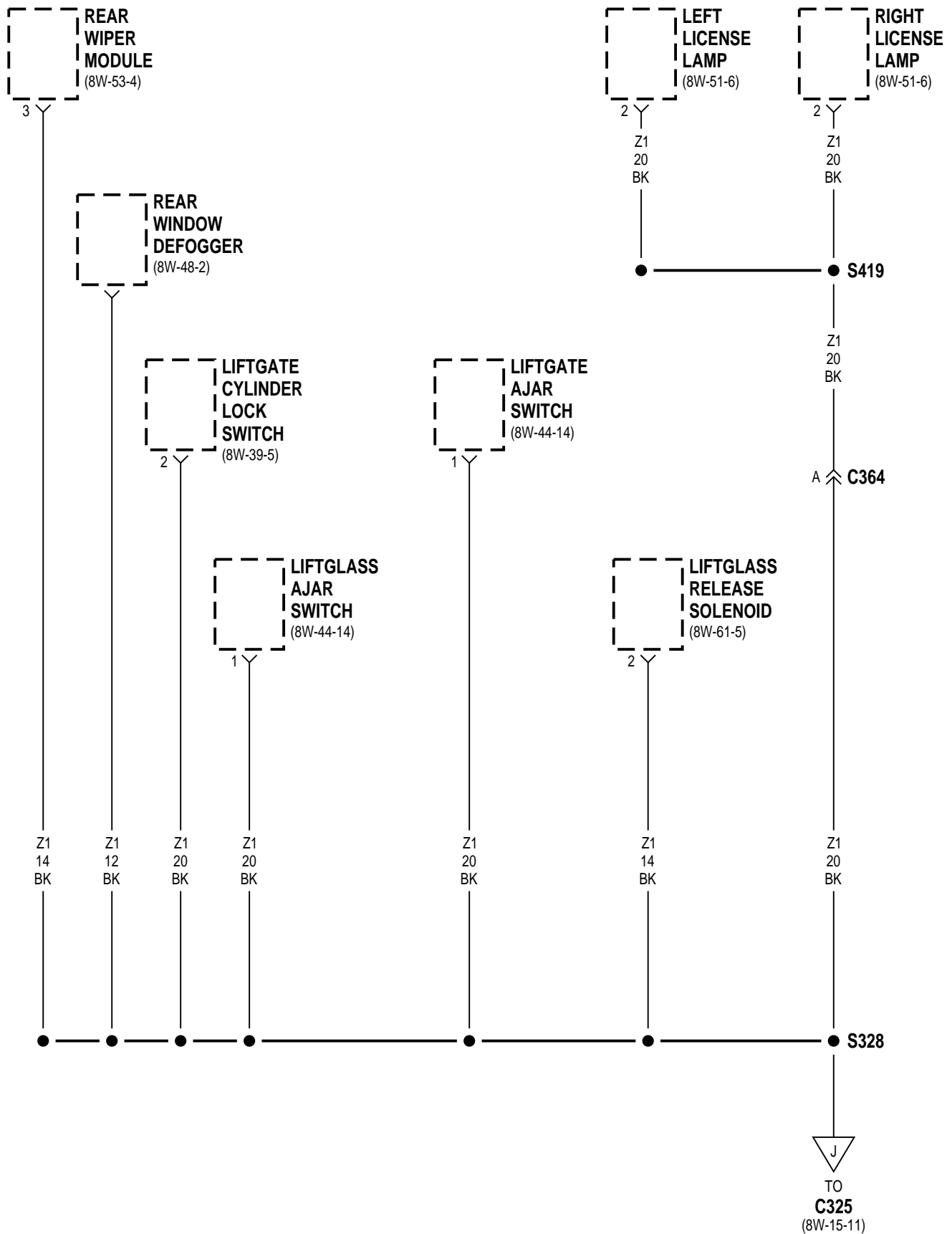


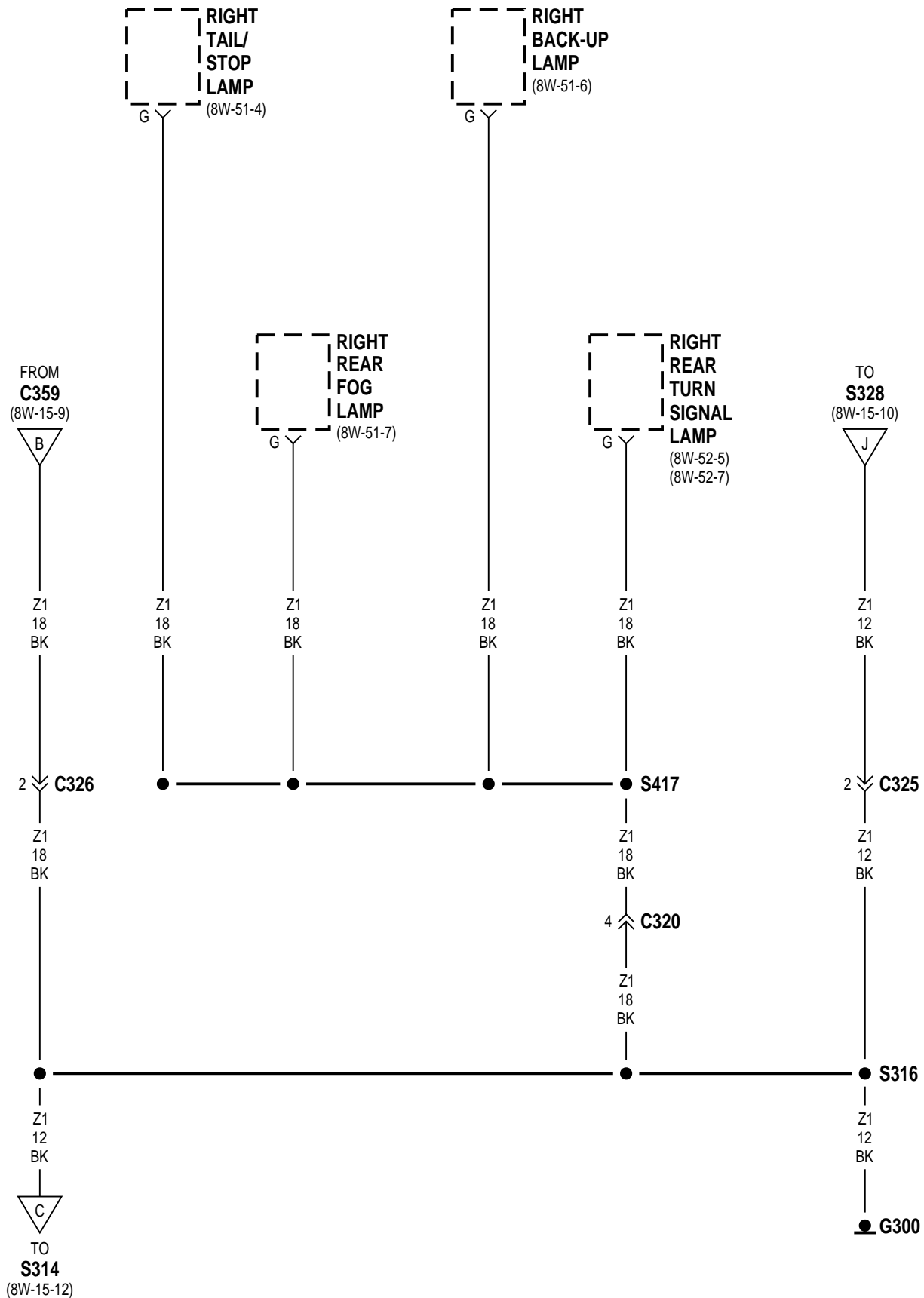


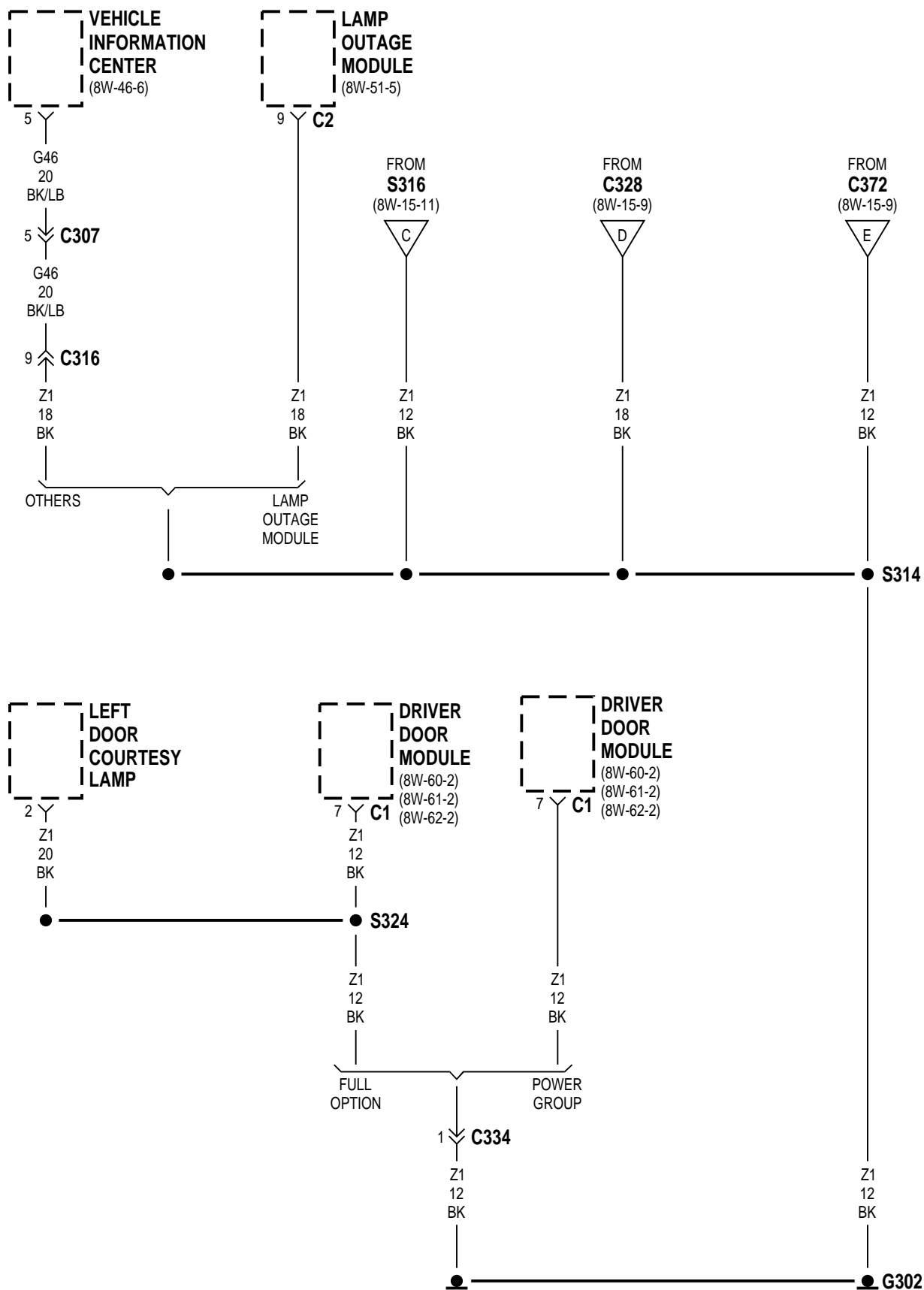


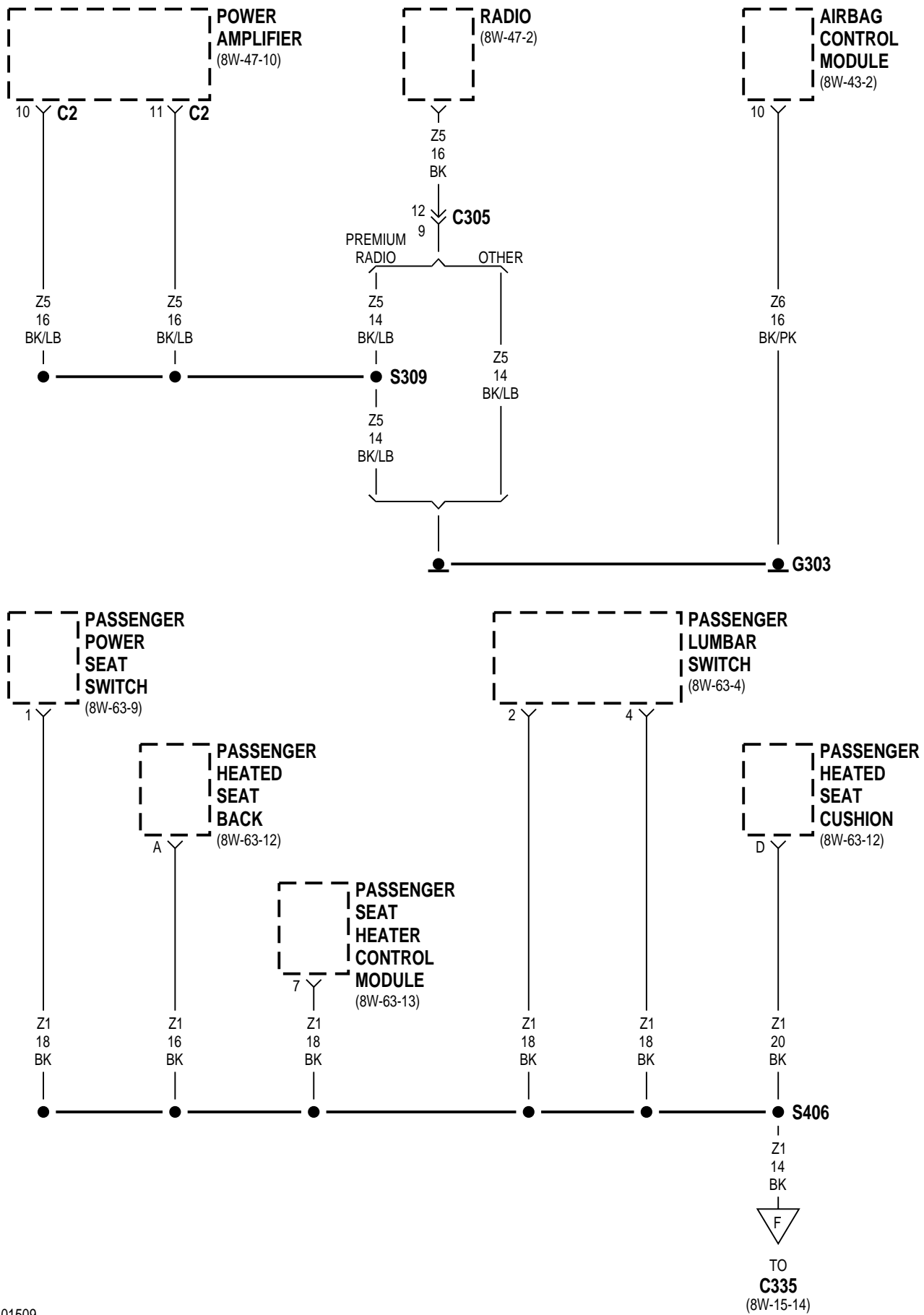


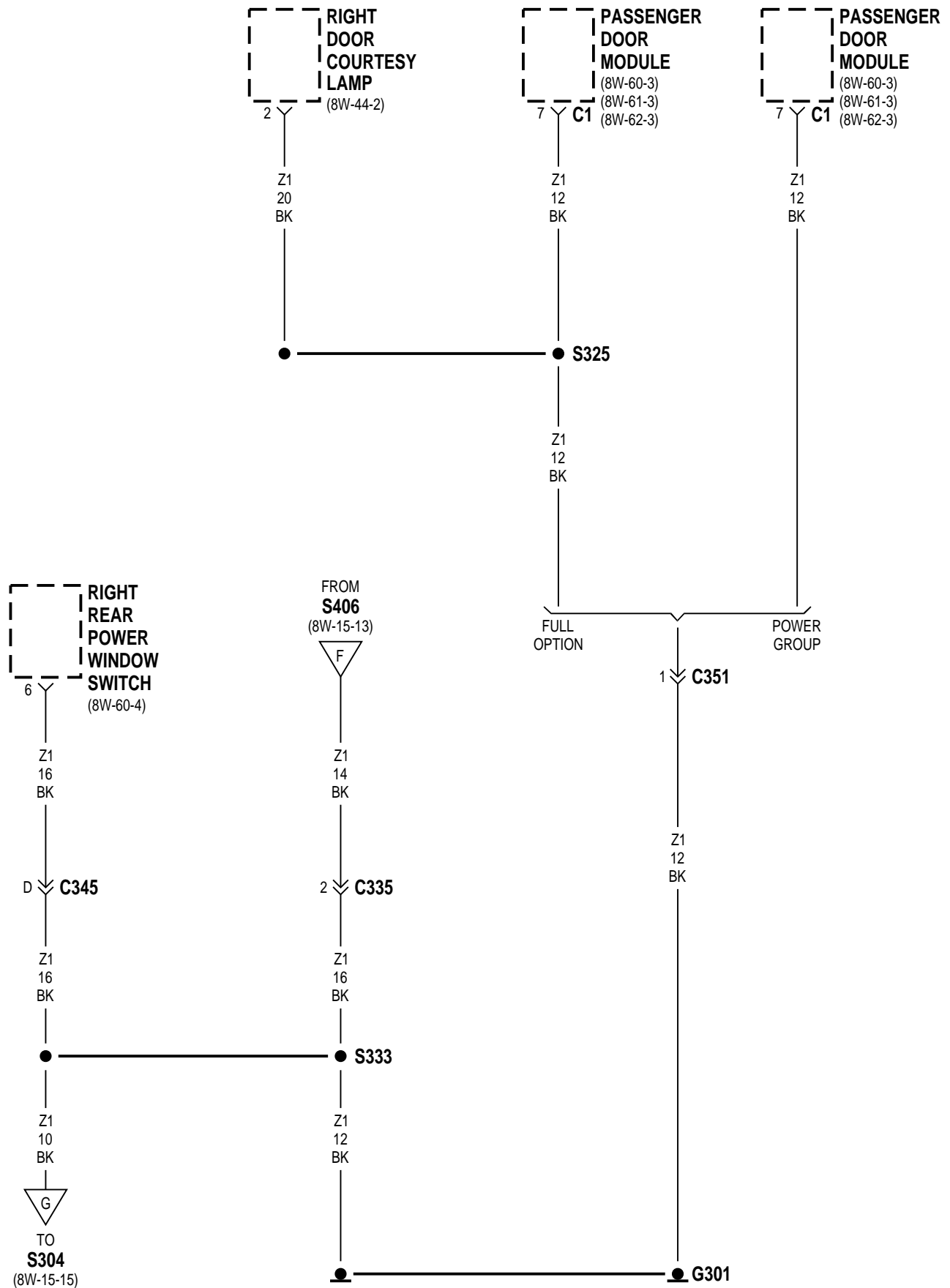


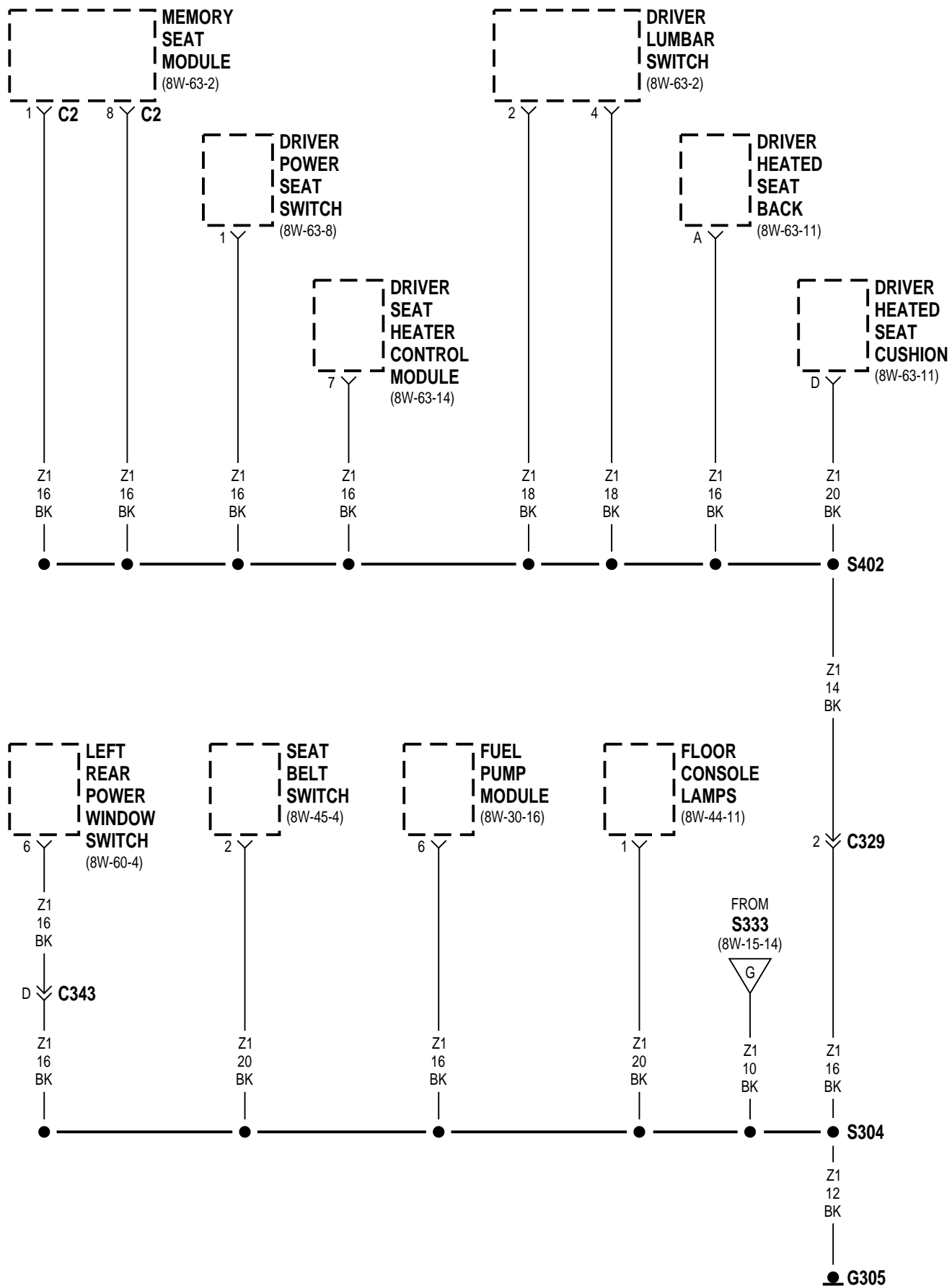


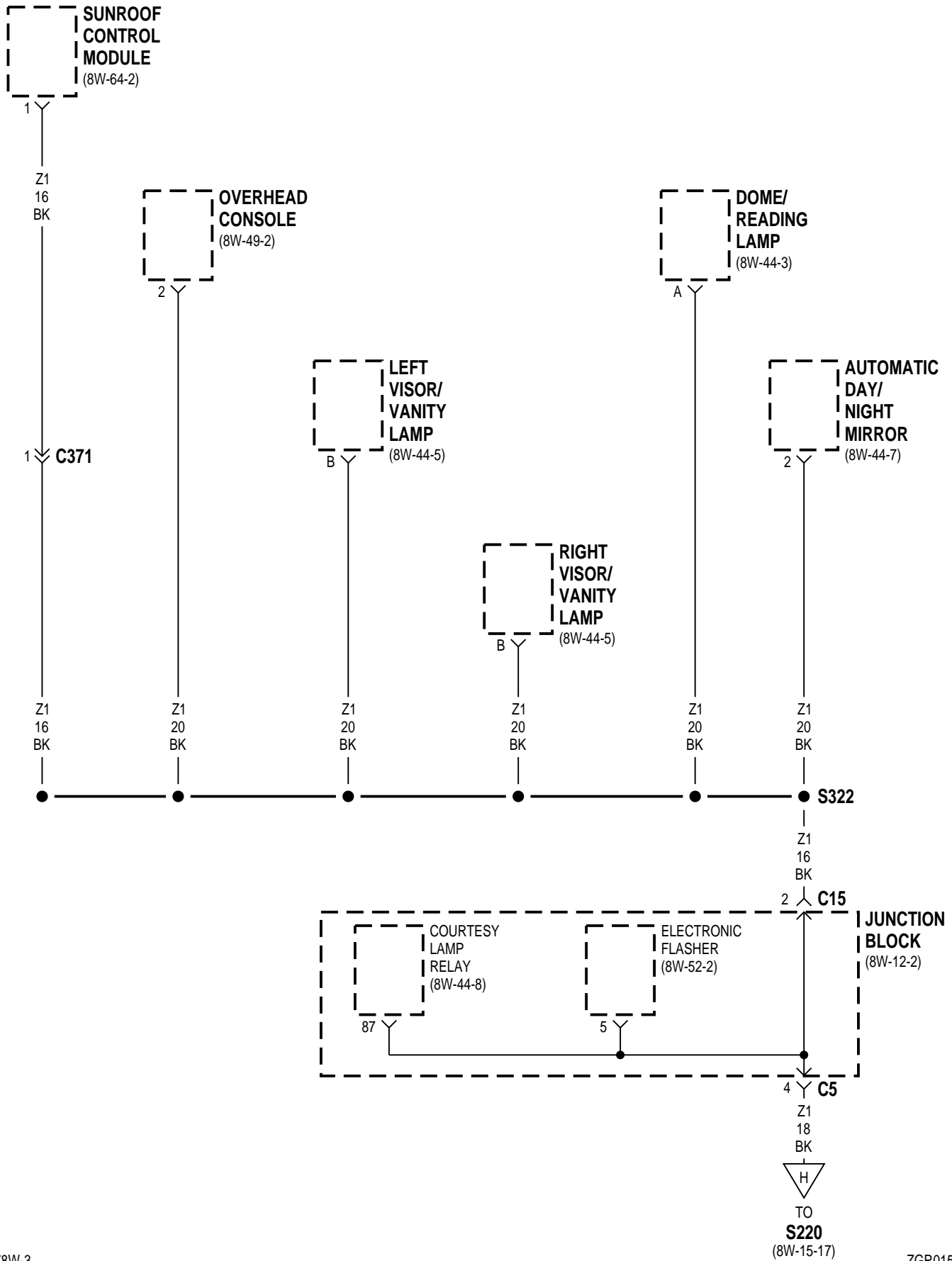


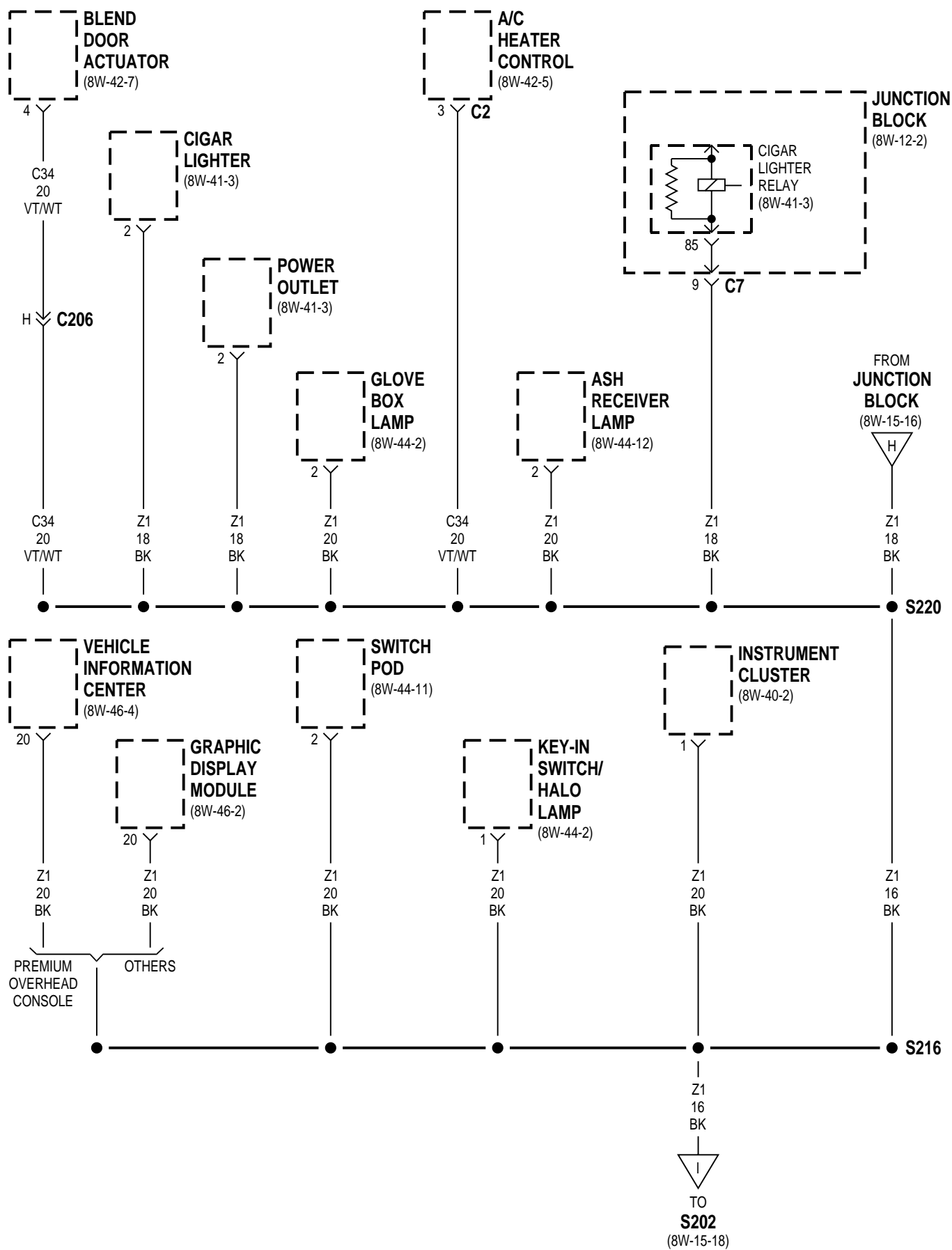


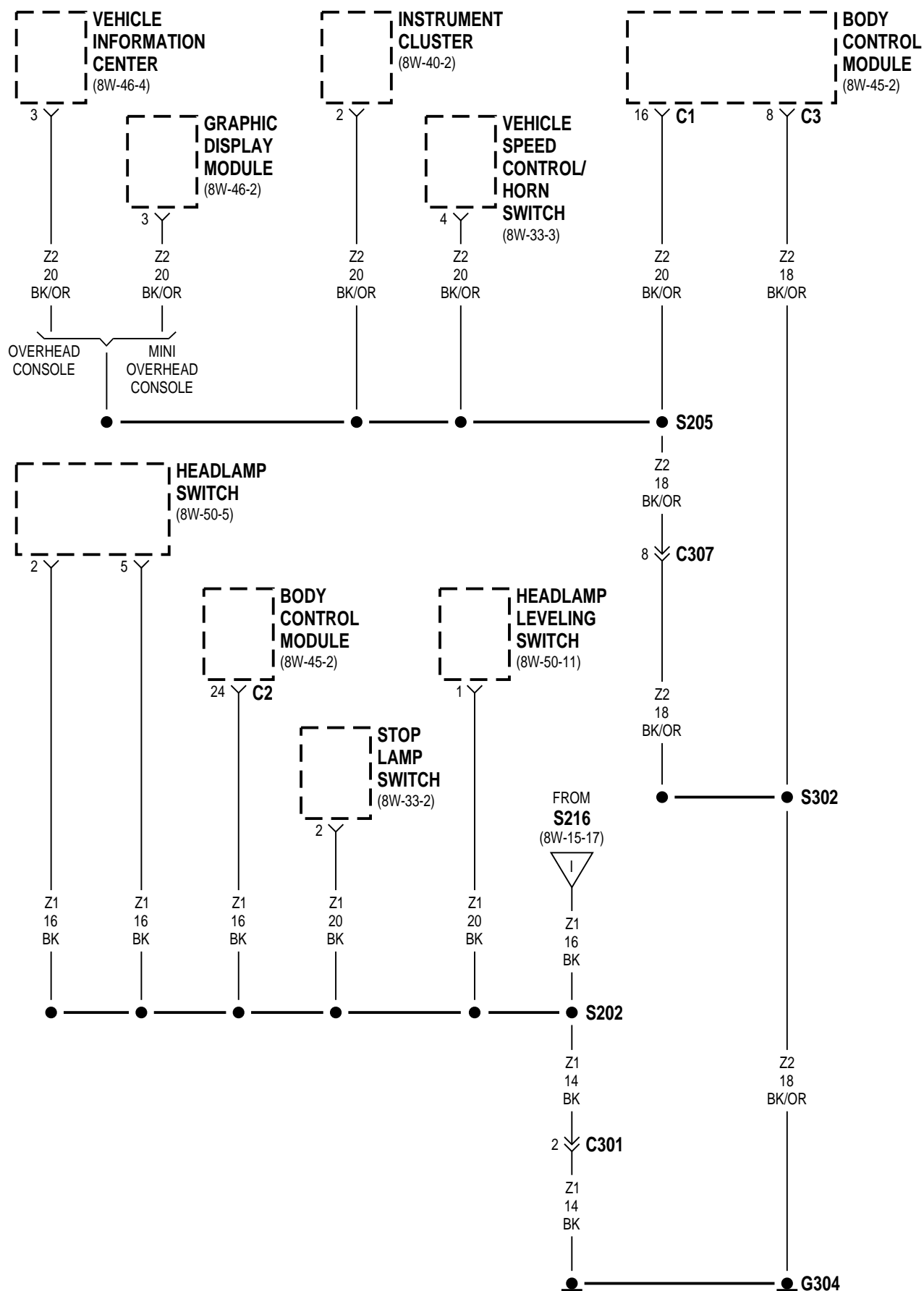












8W-15 GROUND DISTRIBUTION

DESCRIPTION AND OPERATION

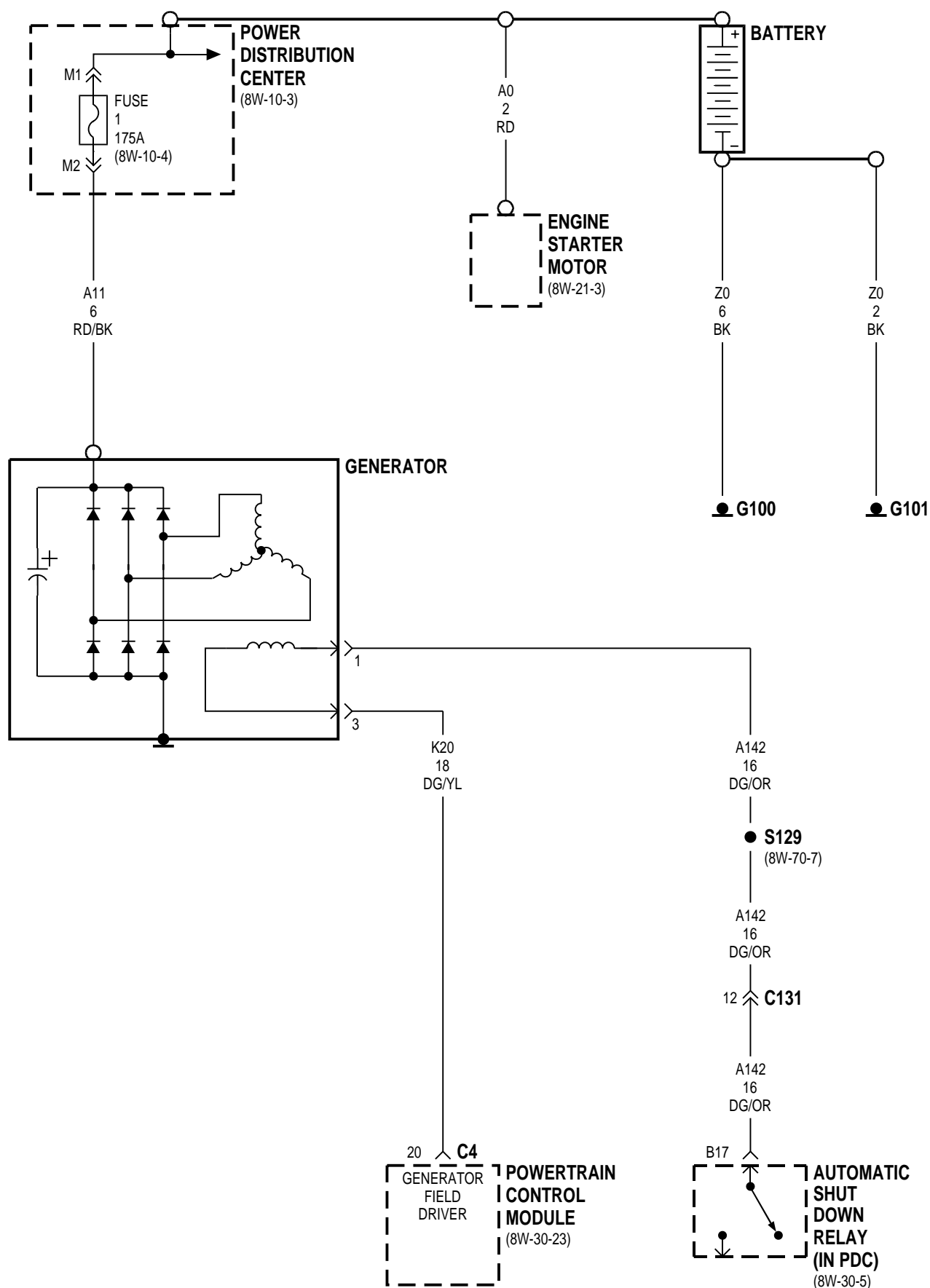
This section identifies the grounds, splices that connect to those grounds, and the components that connect those grounds. For additional information on system operation, refer to the appropriate section of the wiring diagrams. For an illustration of the physical location of each ground, refer to group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

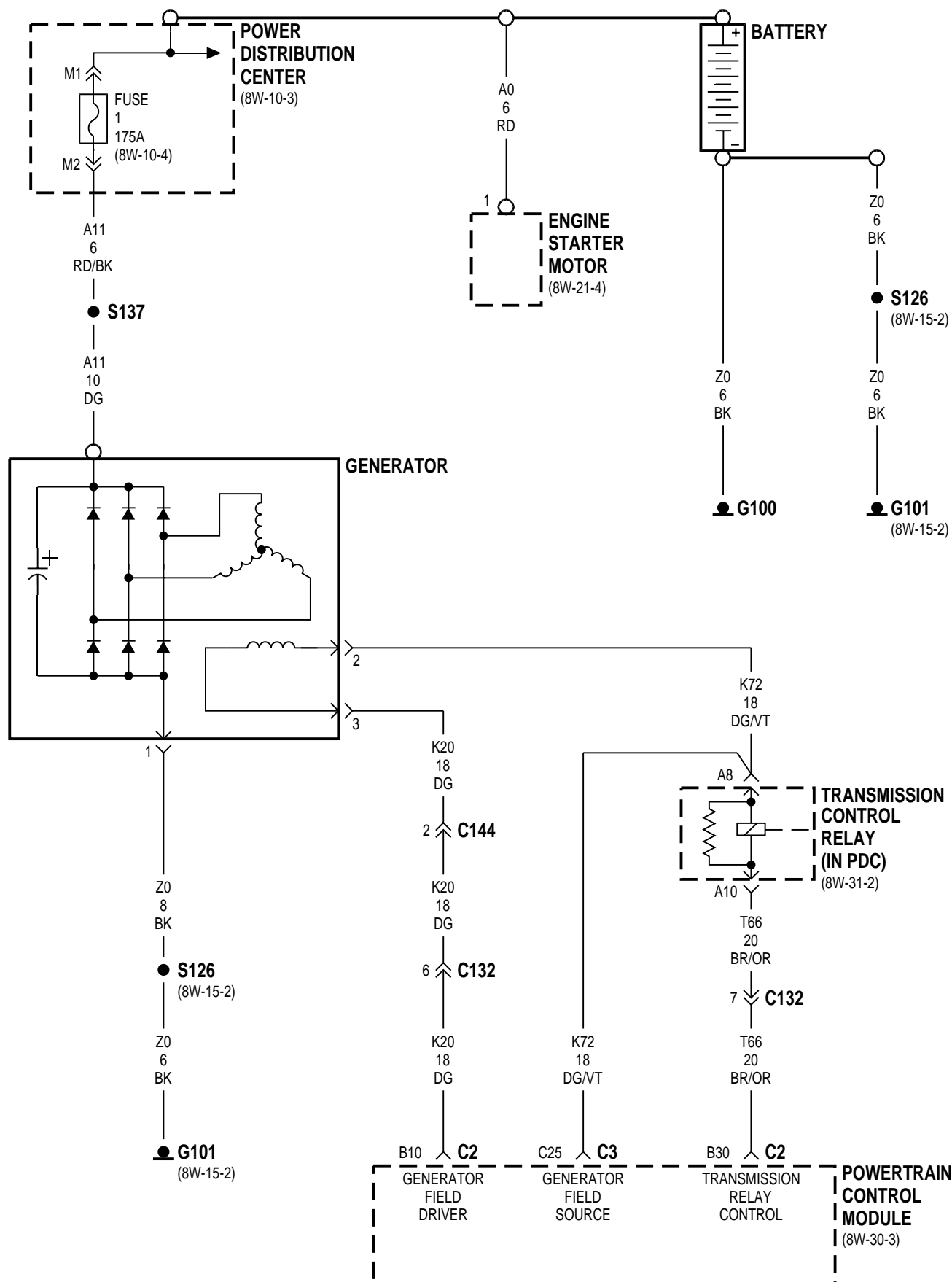
8W-20 CHARGING SYSTEM

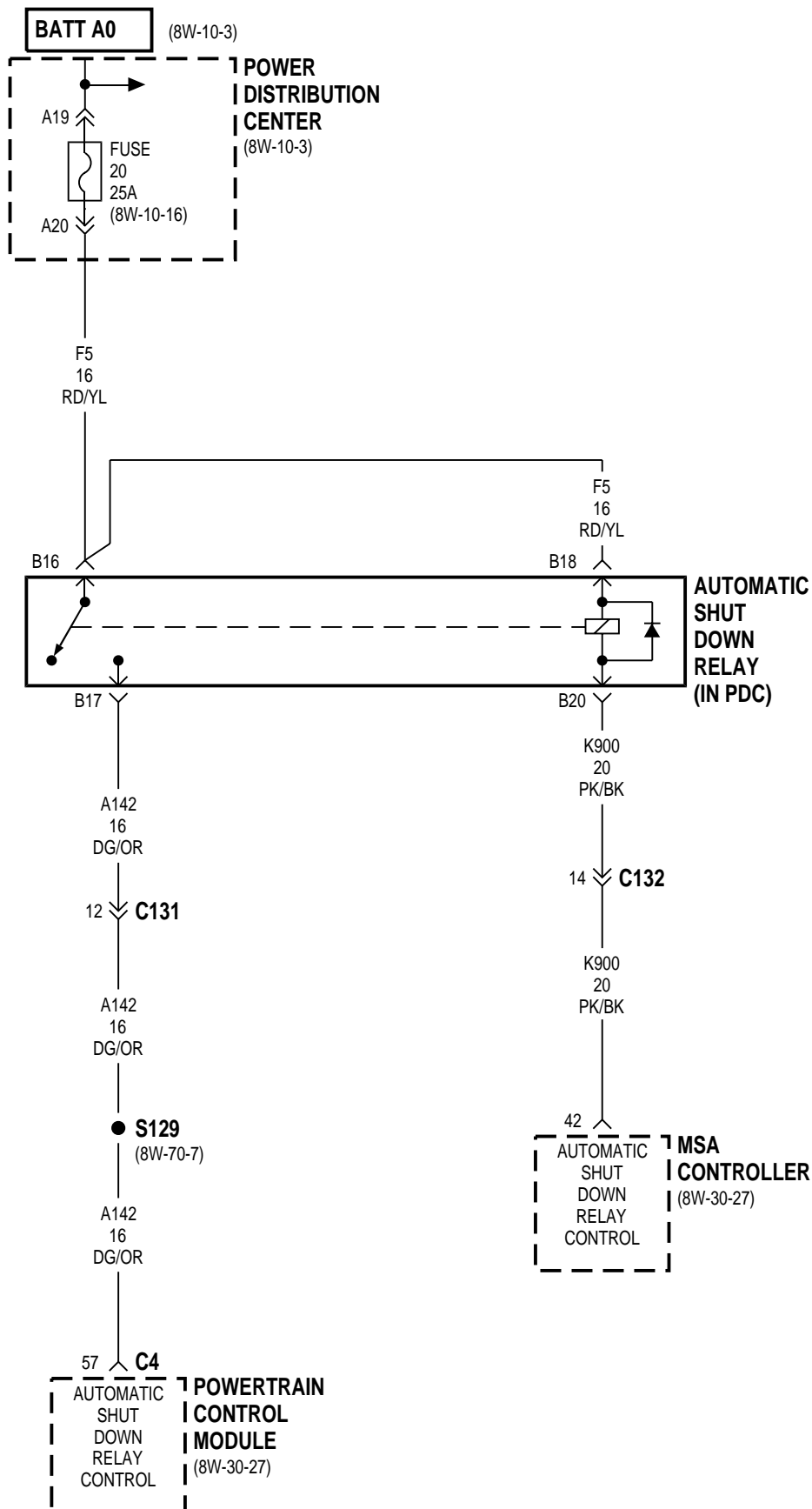
INDEX

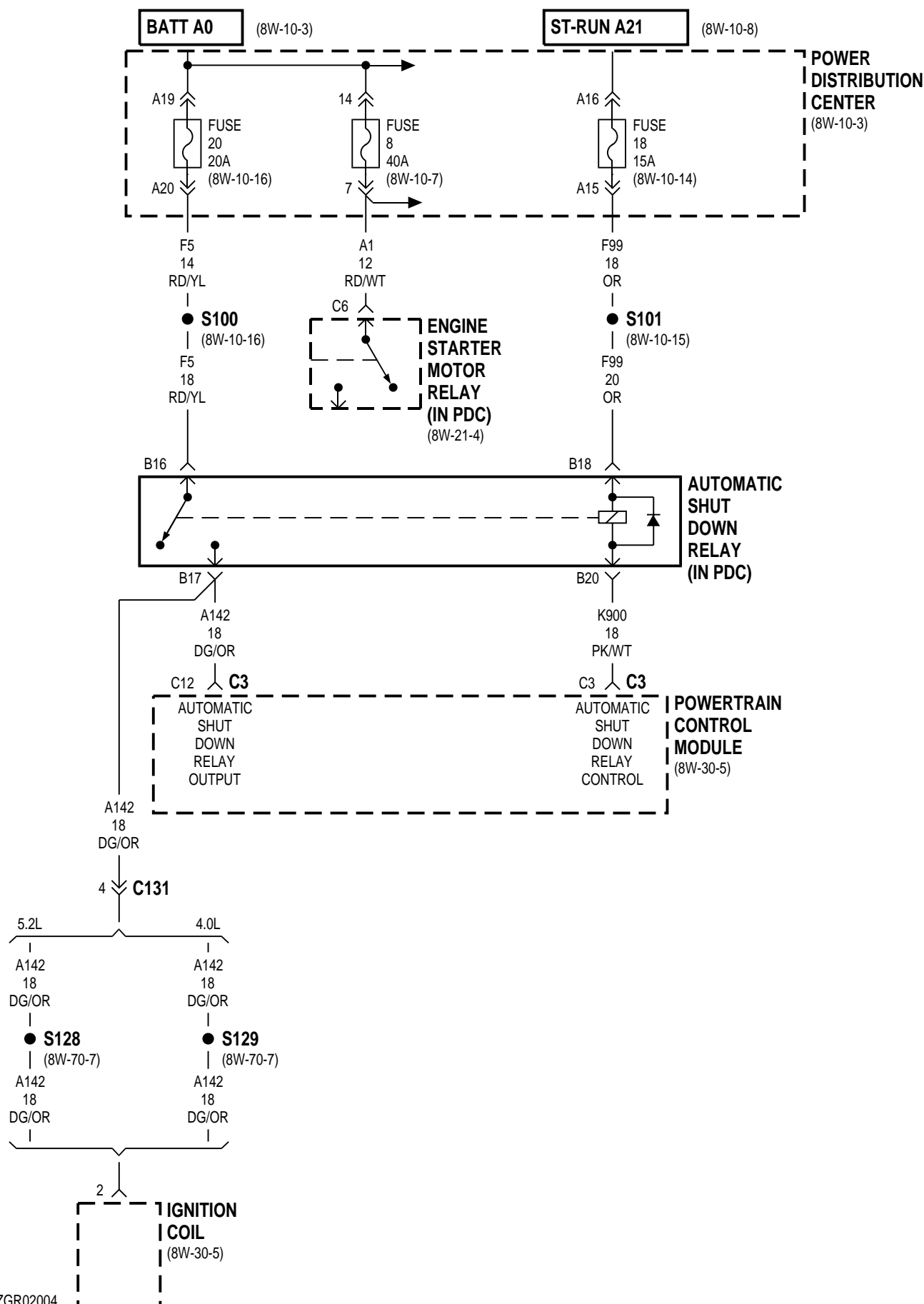
	page
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	6

Component	Page	Component	Page
Automatic Shut Down Relay	8W-20-2, 4, 5	MSA Controller	8W-20-4
Battery	8W-20-2, 3	Power Distribution Center	8W-20-2, 3, 4, 5
Engine Starter Motor	8W-20-2, 3	Powertrain Control Module	8W-20-2, 3, 4, 5
Engine Starter Motor Relay	8W-20-5	S100	8W-20-5
Fuse 1	8W-20-2, 3	S101	8W-20-5
Fuse 8	8W-20-5	S126	8W-20-3
Fuse 18	8W-20-5	S128	8W-20-5
Fuse 20	8W-20-4, 5	S129	8W-20-2, 4, 5
G100	8W-20-2, 3	S137	8W-20-3
G101	8W-20-2, 3	Transmission Control Relay	8W-20-3
Generator	8W-20-2, 3		
Ignition Coil	8W-20-5		









8W-20 CHARGING SYSTEM

DESCRIPTION AND OPERATION

CHARGING SYSTEM

The charging system is an integral part of the battery and starting systems. Because all these systems work in conjunction, diagnose and test them together.

Circuit A11 connects to the generator output terminal and the Power Distribution Center (PDC). Circuit A0 connects the battery to the PDC. Circuit Z0 provides ground for the generator.

When the ignition switch is in either the START or RUN positions, it connects circuit A1 from fuse 8 in the PDC to circuit A21. Circuit A21 powers circuit F99 through fuse 18 in the PDC. Circuit F99 splices to supply current to the coil side of the Automatic Shut Down (ASD) relay. The Powertrain Control Module (PCM) provides ground for the relay on circuit K900. Circuit K900 connects to cavity C3 of the PCM.

When the PCM grounds the ASD relay, contacts inside the relay close and connect circuit F5 from the fuse 20 in the PDC to circuit A142. Circuit A142 splices to supply system voltage to cavity C12 of the PCM. Circuit K72 from Cavity C25 of the PCM supplies current to the generator field terminal..

The PCM has an internal voltage regulator that controls generator output. The PCM controls the generator field on circuit K20. Circuit K20 connects to PCM cavity B10.

When the engine operates and there is current in the generator field, the generator produces a B+ voltage. The generator supplies B+ voltage to the battery through the A11 and A0 circuits.

HELPFUL INFORMATION

- Circuit A21 passes through the junction block before reaching fuse 18 in the PDC.
- The ASD relay supplies battery voltage for the fuel injectors, ignition coil, and the heated oxygen sensors.

CHARGING SYSTEM (DIESEL)

The charging system is an integral part of the battery and starting systems. Because all these systems work in conjunction, diagnose and test them together.

Circuit A11 connects to the generator output terminal and the Power Distribution Center (PDC). Circuit A0 connects the battery to the PDC. The generator is case grounded.

Power for the field terminal in the generator is supplied on circuit A142. This circuit is HOT when the contacts in the Automatic Shut Down (ASD) relay are CLOSED.

The PCM has an internal voltage regulator that controls generator output. The PCM controls the generator field on circuit K20.

When the engine operates and there is current in the generator field, the generator produces a B+ voltage. The generator supplies B+ voltage to the battery through the A11 and A0 circuits.

HELPFUL INFORMATION

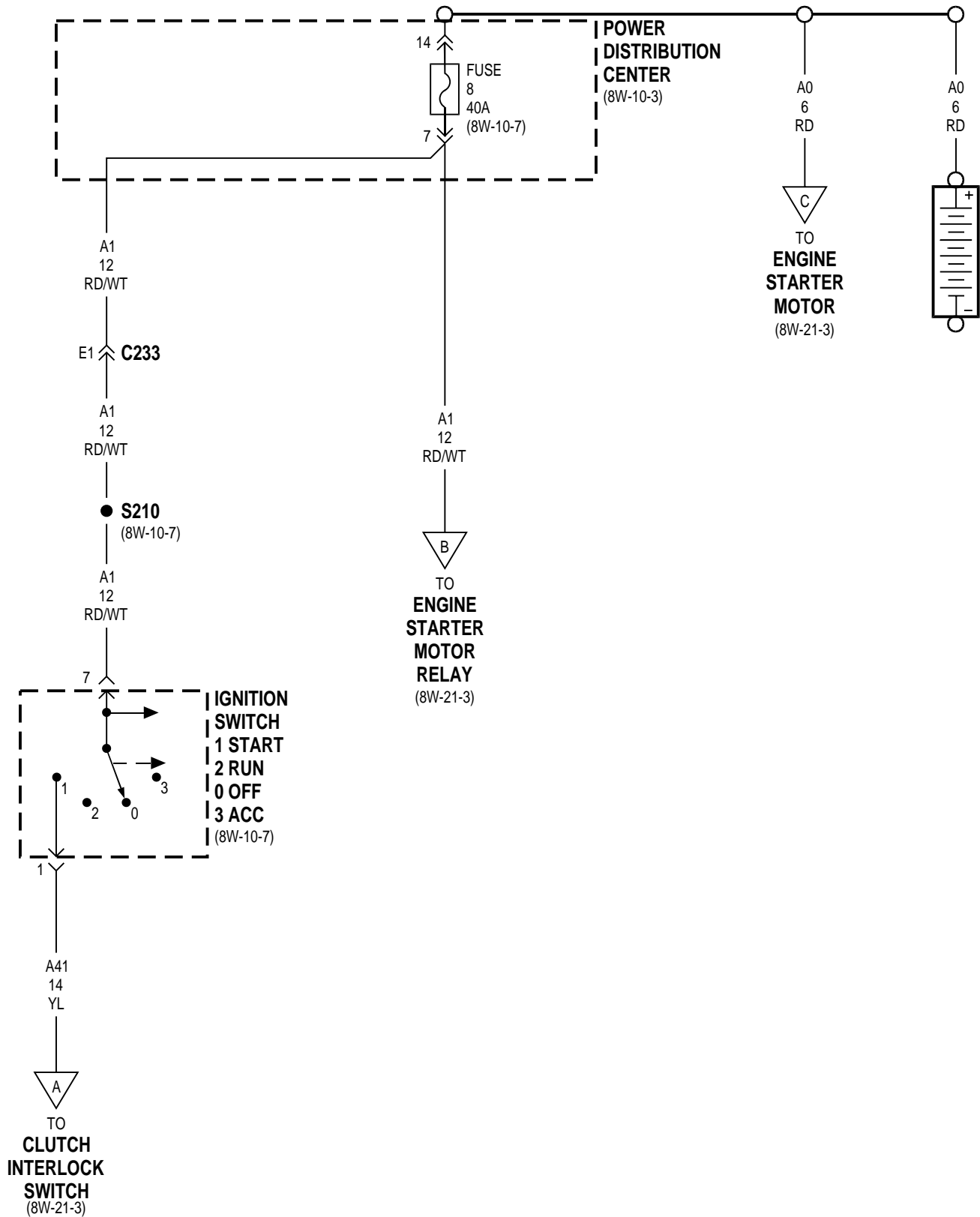
- Check the 175 amp fuse in the PDC
- Check the 25 amp fuse located in cavity F20 of the PDC

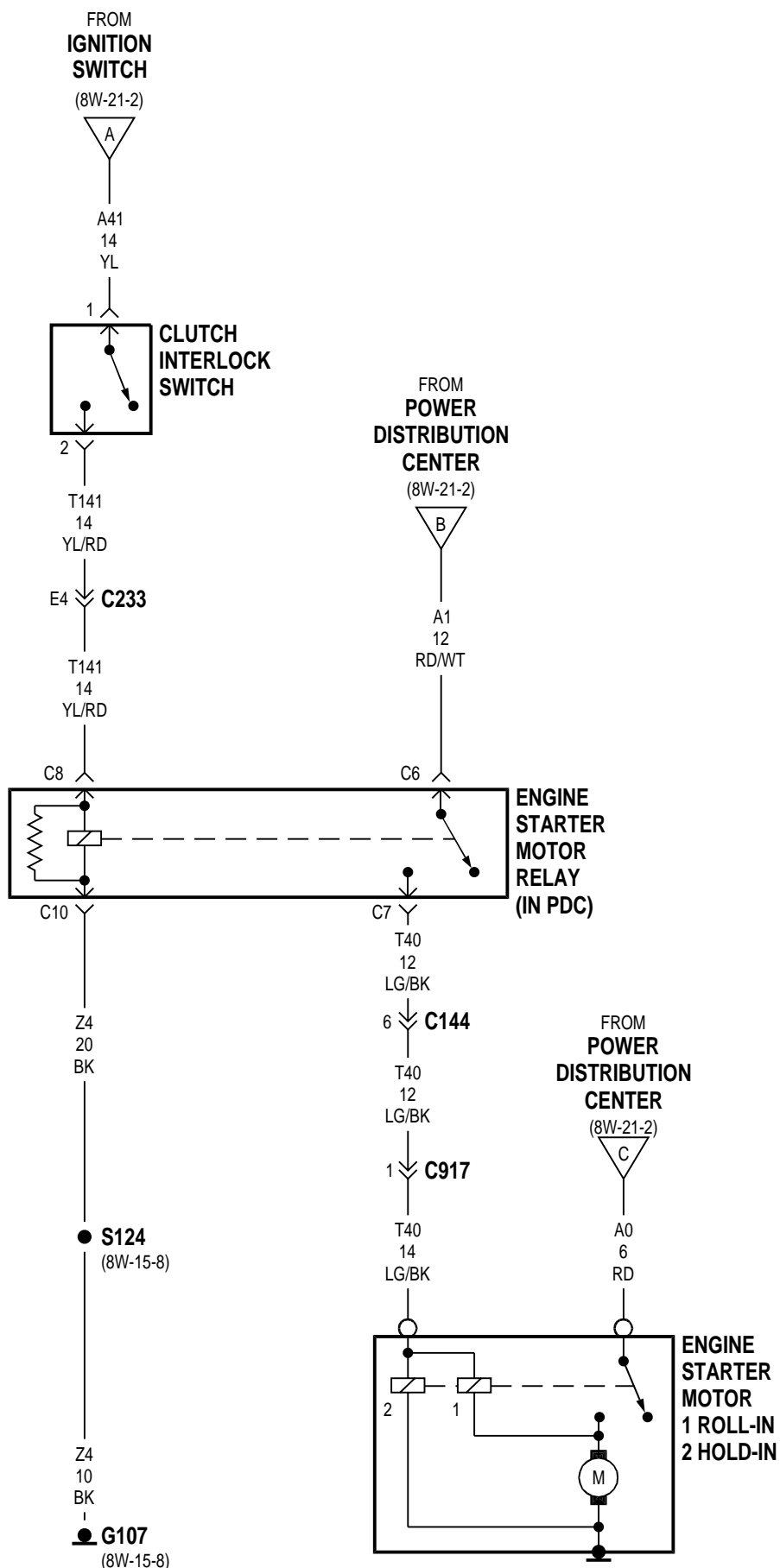
8W-21 STARTING SYSTEM

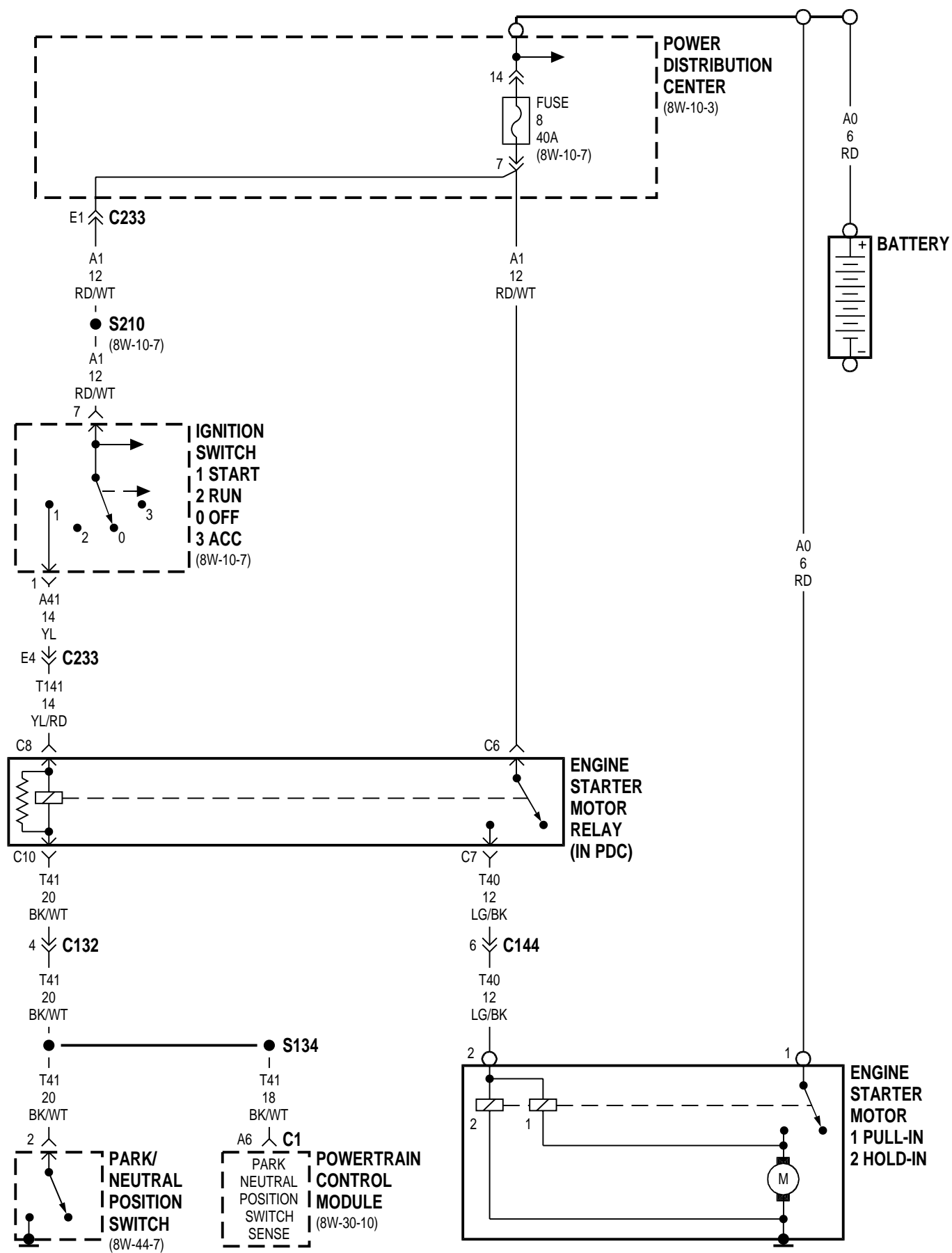
INDEX

	page
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	5

Component	Page	Component	Page
Battery	8W-21-4	Park/Neutral Position Switch	8W-21-4
Clutch Interlock Switch	8W-21-3	Power Distribution Center	8W-21-2, 3, 4
Engine Starter Motor	8W-21-3, 4	Powertrain Control Module	8W-21-4
Engine Starter Motor Relay	8W-21-3, 4	S124	8W-21-3
Fuse 8	8W-21-2, 4	S134	8W-21-4
G107	8W-21-3	S210	8W-21-2, 4
Ignition Switch	8W-21-2, 4		







8W-21 STARTING SYSTEM

DESCRIPTION AND OPERATION

STARTING SYSTEM

Circuit A0 from the battery is double crimped at the positive battery post. One branch of circuit A0 (battery positive cable) connects to the engine starter motor. The other A0 branch supplies voltage to the Power Distribution Center (PDC).

Circuit A1 from fuse 8 in the PDC supplies battery voltage to the contact side of the engine starter motor relay. When the coil side of the engine starter motor relay energizes, the contacts close and connect circuit A1 to circuit T40. Circuit T40 supplies battery voltage to the starter motor solenoid.

The ignition switch supplies battery voltage to the coil side of the starter motor relay on circuit A41 when the key is moved to the START position and the PARK/NEUTRAL position switch is closed. Ground for the coil side of the starter motor relay is supplied by the case grounded PARK/NEUTRAL position switch. Circuit T41 connects the coil side of the relay to the PARK/NEUTRAL position switch.

When the starter motor relay energizes and the contacts close, circuit T40 supplies battery voltage to the starter motor solenoid. Circuit A0 from the battery supplies voltage to the starter motor when the solenoid energizes.

STARTING SYSTEM (DIESEL)

Power for the coil side of the engine starter motor relay is supplied on circuit T141. This circuit is HOT when the operator has moved the ignition key to the START position and the clutch pedal position switch is CLOSED.

Ground for the coil side of the relay is supplied on circuit Z4.

When the coil side of the relay energizes the contacts in the relay CLOSE connecting circuits A1 and T40. The A1 circuit is protected by a 40 amp fuse located in the Power Distribution Center (PDC). Circuit T40 connects from the relay to the solenoid in the engine starter motor.

Power for the motor in the starter is supplied on circuit A0. This is a direct feed from the battery. Ground for the engine starter motor is supplied through a case ground.

HELPFUL INFORMATION (DIESEL)

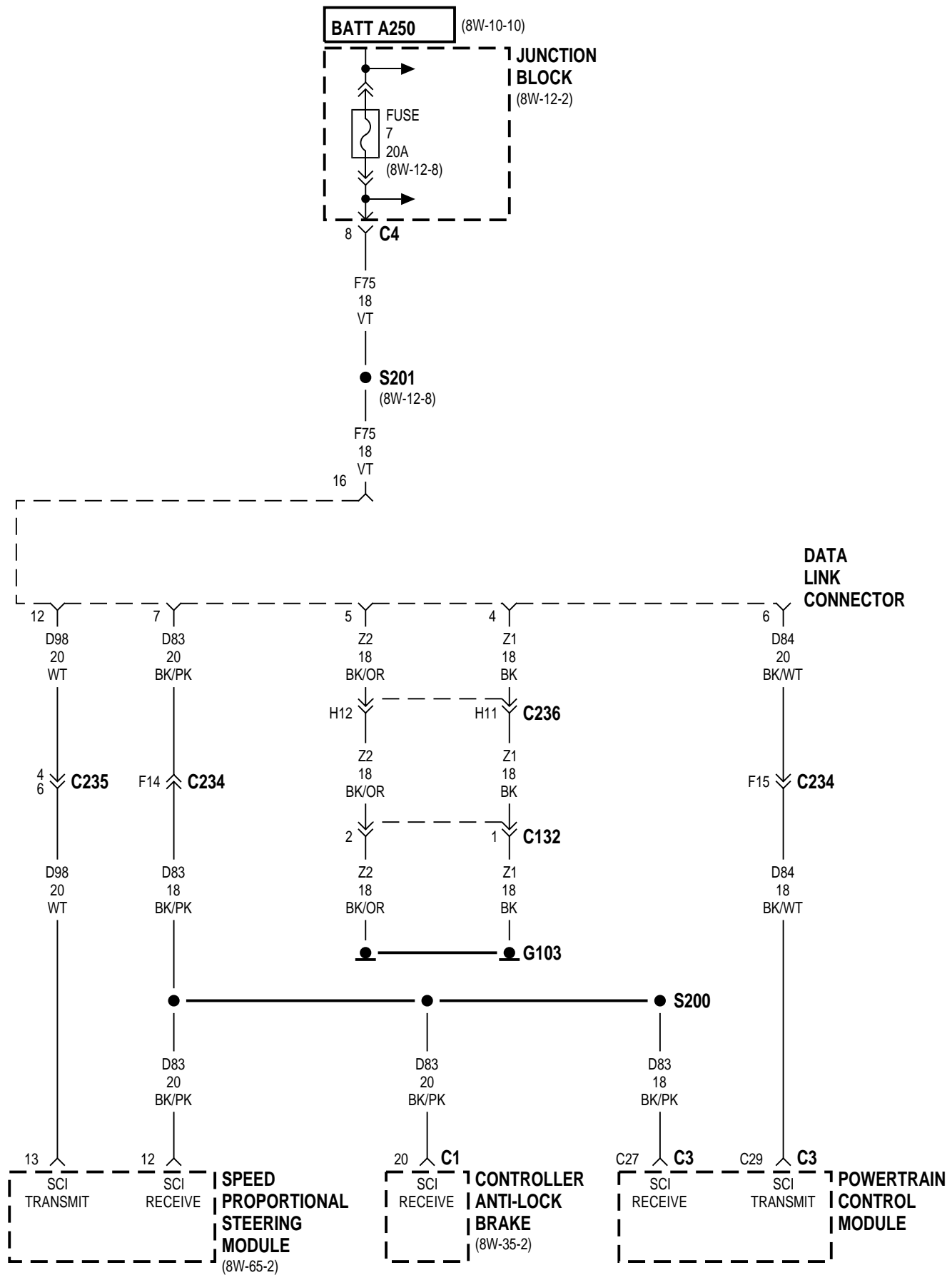
- Check the 40 amp fuse located in the PDC
- Check the clutch pedal position switch for proper operation
- Check the case ground of the engine starter motor

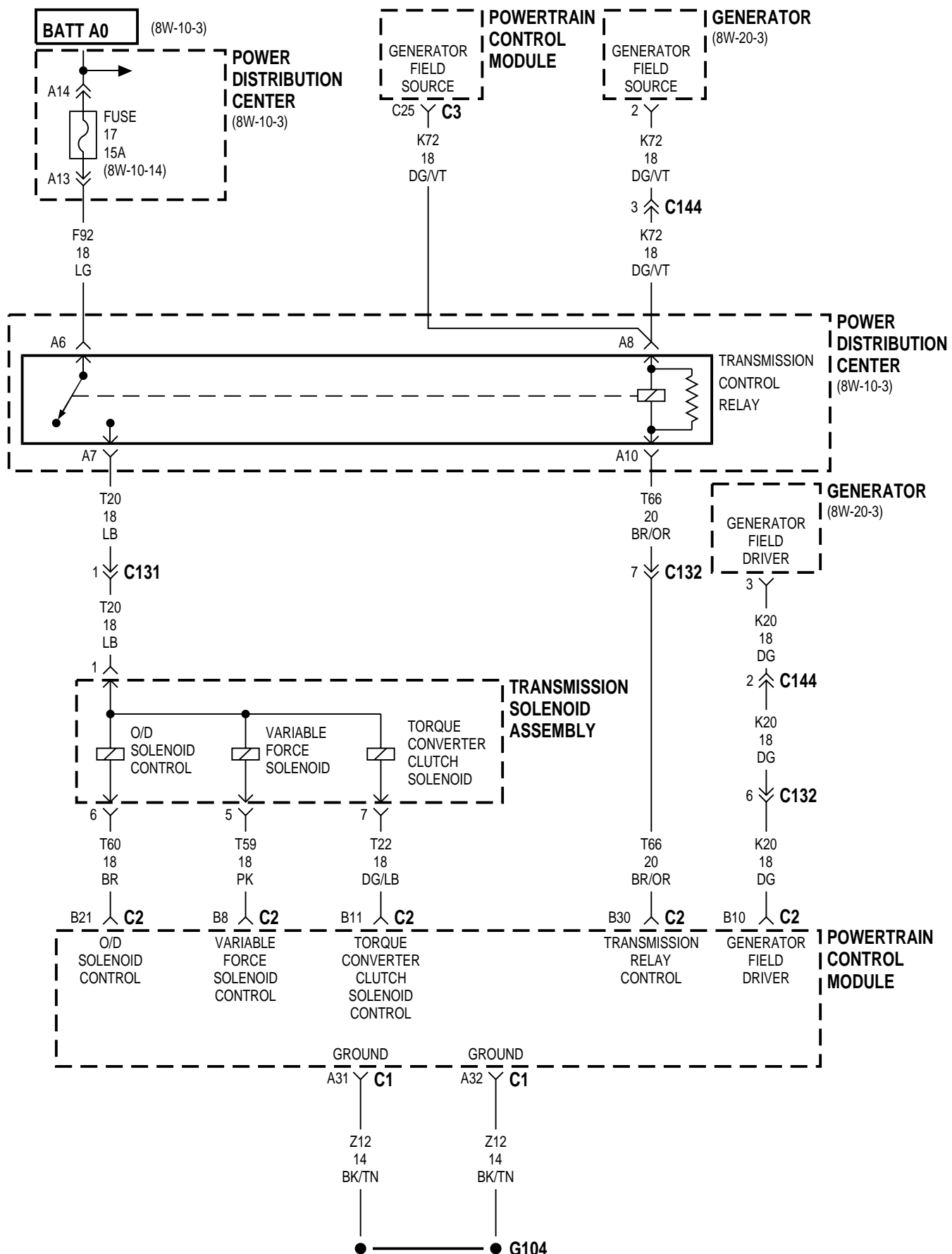
8W-30 FUEL/IGNITION SYSTEMS

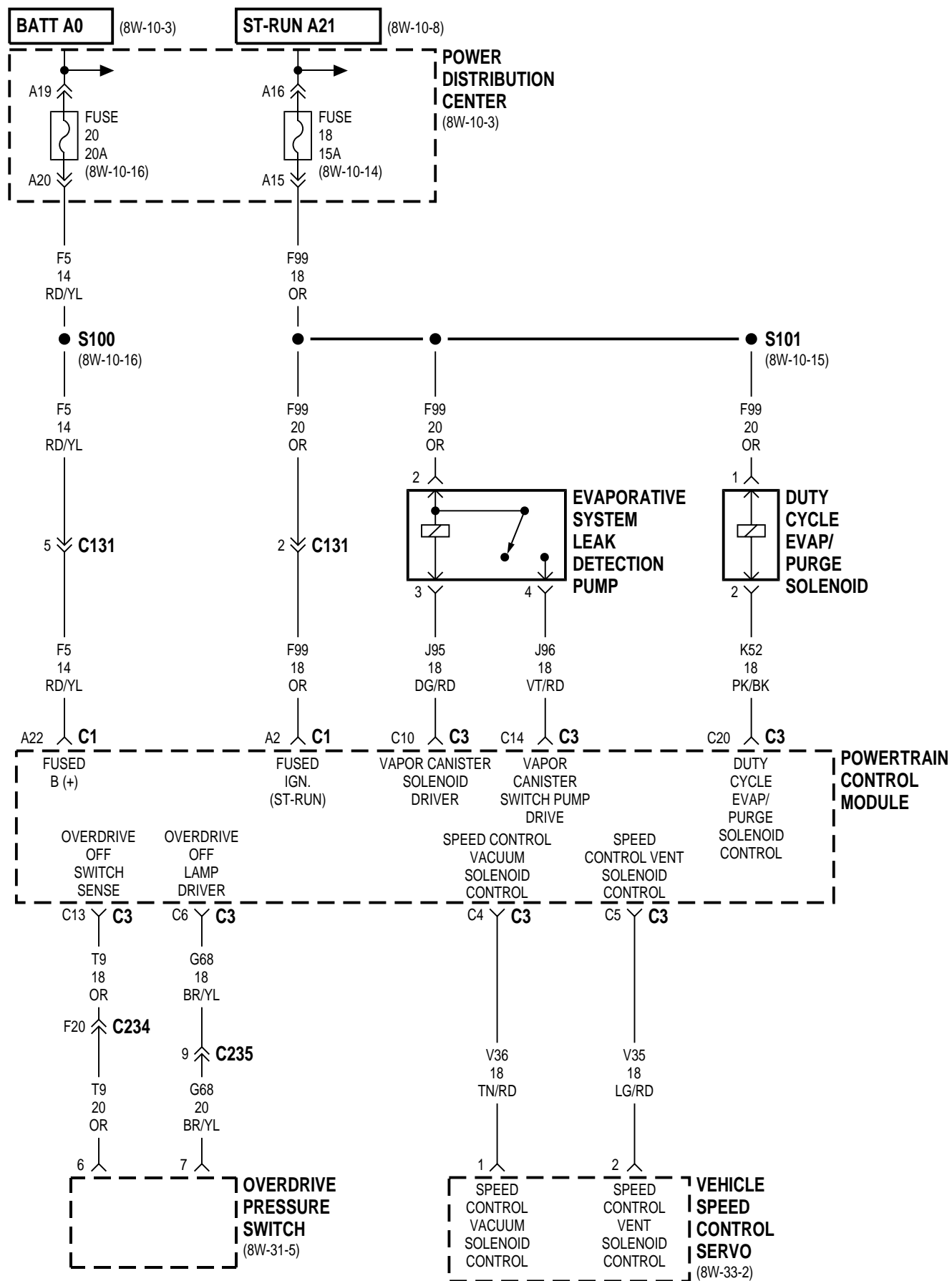
INDEX

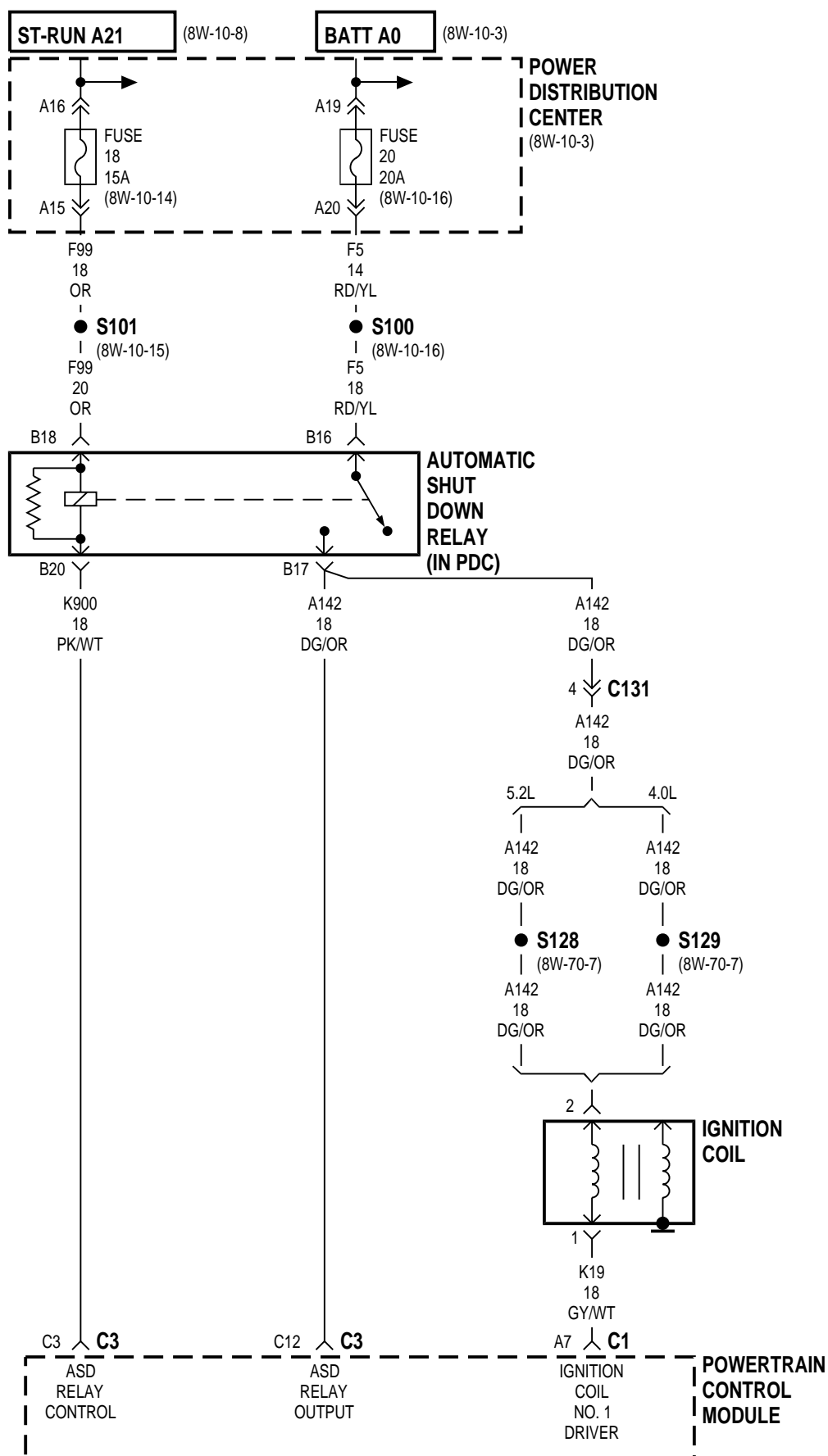
	page
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	33

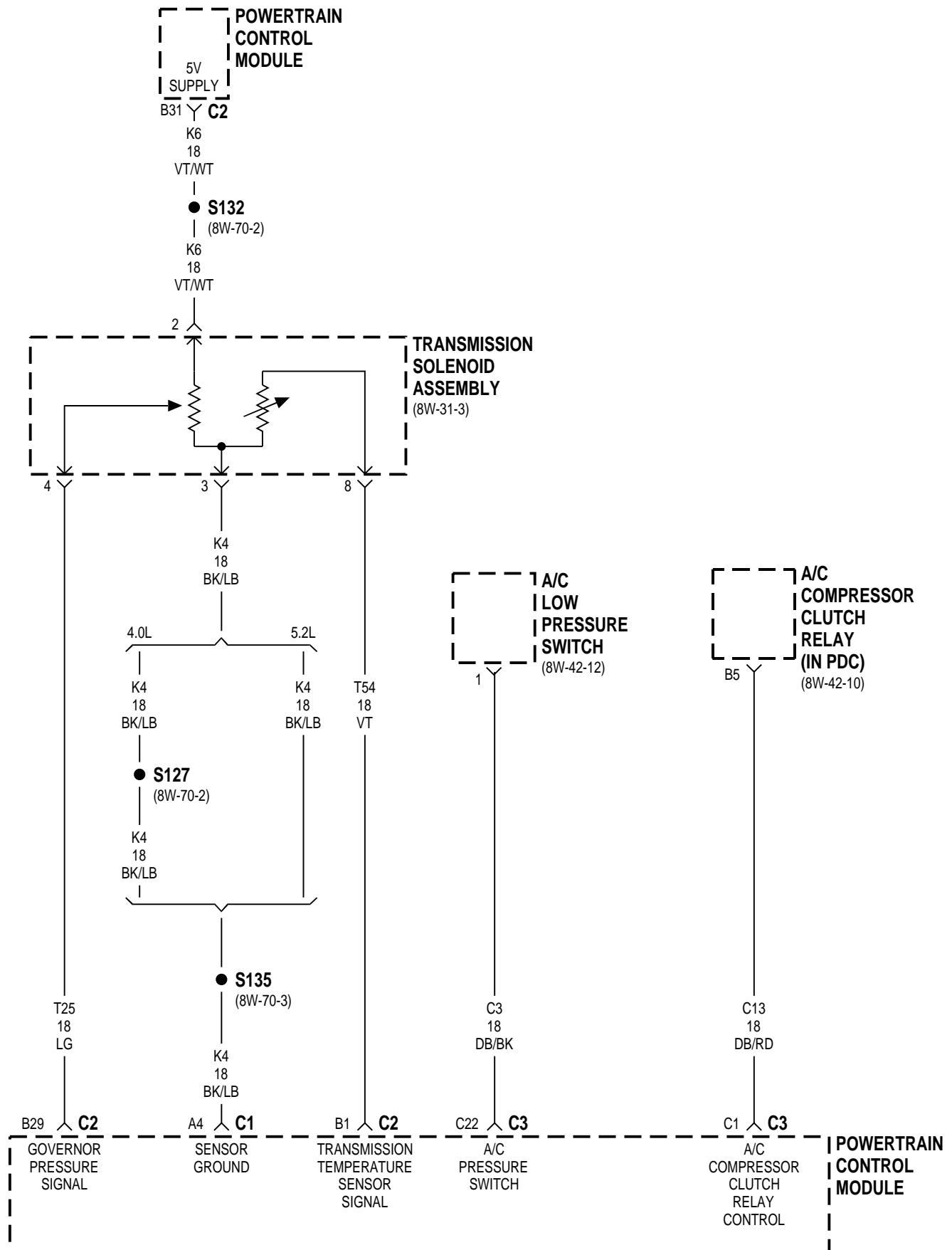
Component	Page	Component	Page
A/C Compressor Clutch Relay Gas Engines	8W-30-6	Generator Gas Engines	8W-30-3
A/C Low Pressure Switch Gas Engines	8W-30-6	Generator Diesel Engine	8W-30-23
A/C Low Pressure Switch Diesel Engine	8W-30-22	Glow Plug Diesel Engine	8W-30-26
Airbag Control Module Diesel Engine	8W-30-31, 32	Glow Plug Relay Diesel Engine	8W-30-26
Airbag Control Module Gas Engines	8W-30-18, 19	Idle Air Control Motor 4.0L Engine	8W-30-21
Automatic Shut Down Relay 4.0L Engine	8W-30-14, 15	Idle Air Control Motor 5.2L Engine	8W-30-20
Automatic Shut Down Relay 5.2L Engine	8W-30-11, 12, 13	Ignition Coil Gas Engines	8W-30-5
Automatic Shut Down Relay Diesel Engine	8W-30-27	Instrument Cluster Diesel Engine	8W-30-31, 32
Automatic Shut Down Relay Gas Engines	8W-30-5	Instrument Cluster Gas Engines	8W-30-18, 19
Automatic Temperature Control Module Diesel Engine	8W-30-31, 32	Intake Air Temperature Sensor 4.0L Engine	8W-30-9
Automatic Temperature Control Module Gas Engines	8W-30-18, 19	Intake Air Temperature Sensor 5.2L Engine	8W-30-8
Battery Temperature Sensor Gas Engines	8W-30-16	Junction Block Diesel Engine	8W-30-30
Body Control Module Diesel Engine	8W-30-31, 32	Junction Block Gas Engines	8W-30-2
Body Control Module Gas Engines	8W-30-18, 19	Left Switch Gas Engines	8W-30-17
Camshaft Position Sensor Gas Engines	8W-30-7	Manifold Absolute Pressure Sensor 4.0L Engine	8W-30-9
Clockspring Gas Engines	8W-30-17	Manifold Absolute Pressure Sensor 5.2L Engine	8W-30-8
Controller Anti-Lock Brake Diesel Engine	8W-30-30	Manifold Absolute Pressure Sensor Gas Engines	8W-30-7
Controller Anti-Lock Brake Gas Engines	8W-30-2	Mass Air Flow Module Diesel Engine	8W-30-26
Coolant Level Sensor Diesel Engine	8W-30-29	Memory Seat Module Diesel Engine	8W-30-31, 32
Crankshaft Position Sensor Diesel Engine	8W-30-24	Memory Seat Module Gas Engines	8W-30-18, 19
Crankshaft Position Sensor Gas Engines	8W-30-7	MSA Controller Diesel Engine	8W-30-22, 23, 24, 25, 26, 27, 29, 30
Data Link Connector Diesel Engine	8W-30-30, 31, 32	Needle Sensor Diesel Engine	8W-30-24
Data Link Connector Gas Engines	8W-30-2, 18, 19	Oil Pressure Sensor Diesel Engine	8W-30-29
Downstream Heated Oxygen Sensor 4.0L Engine	8W-30-14	Oil Pressure Sensor Gas Engines	8W-30-10
Downstream Heated Oxygen Sensor 5.2L Engine	8W-30-13	Output Shaft Speed Sensor Gas Engines	8W-30-10
Driver Door Module Diesel Engine	8W-30-31, 32	Overdrive Pressure Switch Gas Engines	8W-30-4
Driver Door Module Gas Engines	8W-30-18, 19	Overhead Console Diesel Engine	8W-30-31, 32
Duty Cycle Evap/Purge Solenoid Gas Engines	8W-30-4	Overhead Console Gas Engines	8W-30-18, 19
EGR Solenoid Diesel Engine	8W-30-28	Park/Neutral Position Switch Gas Engines	8W-30-10
Engine Coolant Temperature Sensor 4.0L Engine	8W-30-9	Passenger Door Module Diesel Engine	8W-30-31, 32
Engine Coolant Temperature Sensor 5.2L Engine	8W-30-8	Passenger Door Module Gas Engines	8W-30-18, 19
Engine Coolant Temperature Sensor Diesel Engine	8W-30-29	Pedal Position Sensor Diesel Engine	8W-30-23
Evaporative System Leak Detection Pump Gas Engines	8W-30-4	Power Distribution Center 4.0L Engine	8W-30-14, 15
Fuel Heater Diesel Engine	8W-30-28	Power Distribution Center 5.2L Engine	8W-30-11, 12, 13
Fuel Heater Relay Diesel Engine	8W-30-27	Power Distribution Center Diesel Engine	8W-30-22, 27
Fuel Injector No. 1 4.0L Engine	8W-30-15	Power Distribution Center Gas Engines	8W-30-3, 4, 5, 16
Fuel Injector No. 1 5.2L Engine	8W-30-11	Powertrain Control Module 4.0L Engine	8W-30-9, 14, 15, 21
Fuel Injector No. 2 4.0L Engine	8W-30-15	Powertrain Control Module 5.2L Engine	8W-30-8, 11, 12, 13, 20
Fuel Injector No. 2 5.2L Engine	8W-30-12	Powertrain Control Module Diesel Engine	8W-30-22, 23, 24, 27, 28, 29, 30, 31, 32
Fuel Injector No. 3 4.0L Engine	8W-30-15	Powertrain Control Module Gas Engines	8W-30-2, 3, 4, 5, 6, 7, 10, 16, 17, 18, 19
Fuel Injector No. 3 5.2L Engine	8W-30-11	Radio Diesel Engine	8W-30-31, 32
Fuel Injector No. 4 4.0L Engine	8W-30-15	Radio Gas Engines	8W-30-18, 19
Fuel Injector No. 4 5.2L Engine	8W-30-12	Right Switch Gas Engines	8W-30-17
Fuel Injector No. 5 4.0L Engine	8W-30-15	Speed Proportional Steering Module Gas Engines	8W-30-2
Fuel Injector No. 5 5.2L Engine	8W-30-11	Stop Lamp Switch Gas Engines	8W-30-10
Fuel Injector No. 6 4.0L Engine	8W-30-15	Stop Lamp Switch Diesel Engine	8W-30-29
Fuel Injector No. 6 5.2L Engine	8W-30-12	Throttle Position Sensor 4.0L Engine	8W-30-9
Fuel Injector No. 7 5.2L Engine	8W-30-11	Throttle Position Sensor 5.2L Engine	8W-30-8
Fuel Injector No. 8 5.2L Engine	8W-30-12	Throttle Position Sensor Gas Engines	8W-30-7
Fuel Pump Module Diesel Engine	8W-30-25, 26	Transmission Control Relay Gas Engines	8W-30-3
Fuel Pump Module Gas Engines	8W-30-16	Transmission Solenoid Assembly Gas Engines	8W-30-3, 6
Fuel Pump Relay Gas Engines	8W-30-16	Upstream Heated Oxygen Sensor 4.0L Engine	8W-30-14
Fuel Sender Unit Diesel Engine	8W-30-28	Upstream Heated Oxygen Sensor 5.2L Engine	8W-30-13
Fuse 4 Diesel Engine	8W-30-27	Vehicle Information Center Diesel Engine	8W-30-31, 32
Fuse 7 Diesel Engine	8W-30-30	Vehicle Information Center Gas Engines	8W-30-18, 19
Fuse 7 Gas Engines	8W-30-2	Vehicle Speed Control Servo Gas Engines	8W-30-4, 10
Fuse 16 Diesel Engine	8W-30-22	Vehicle Speed Control/Horn Switch Gas Engines	8W-30-17
Fuse 16 Gas Engines	8W-30-16	Vehicle Speed Sensor Diesel Engine	8W-30-24
Fuse 17 Gas Engines	8W-30-3	Vehicle Speed Sensor Gas Engines	8W-30-17
Fuse 18 Diesel Engine	8W-30-22, 27	Water In Fuel Sensor Diesel Engine	8W-30-24
Fuse 18 Gas Engines	8W-30-4, 5, 16		
Fuse 20 Diesel Engine	8W-30-27		
Fuse 20 Gas Engines	8W-30-4, 5		

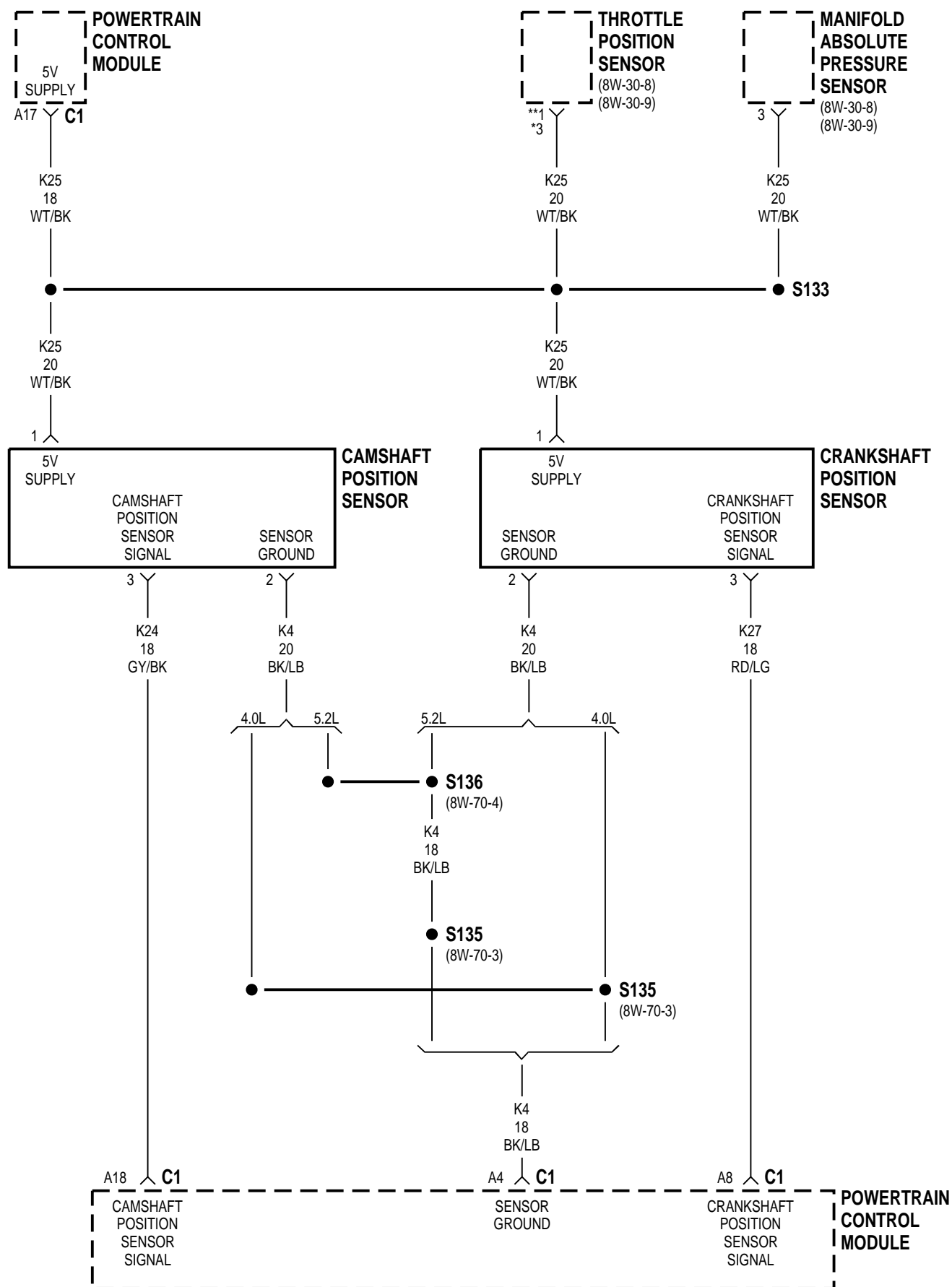


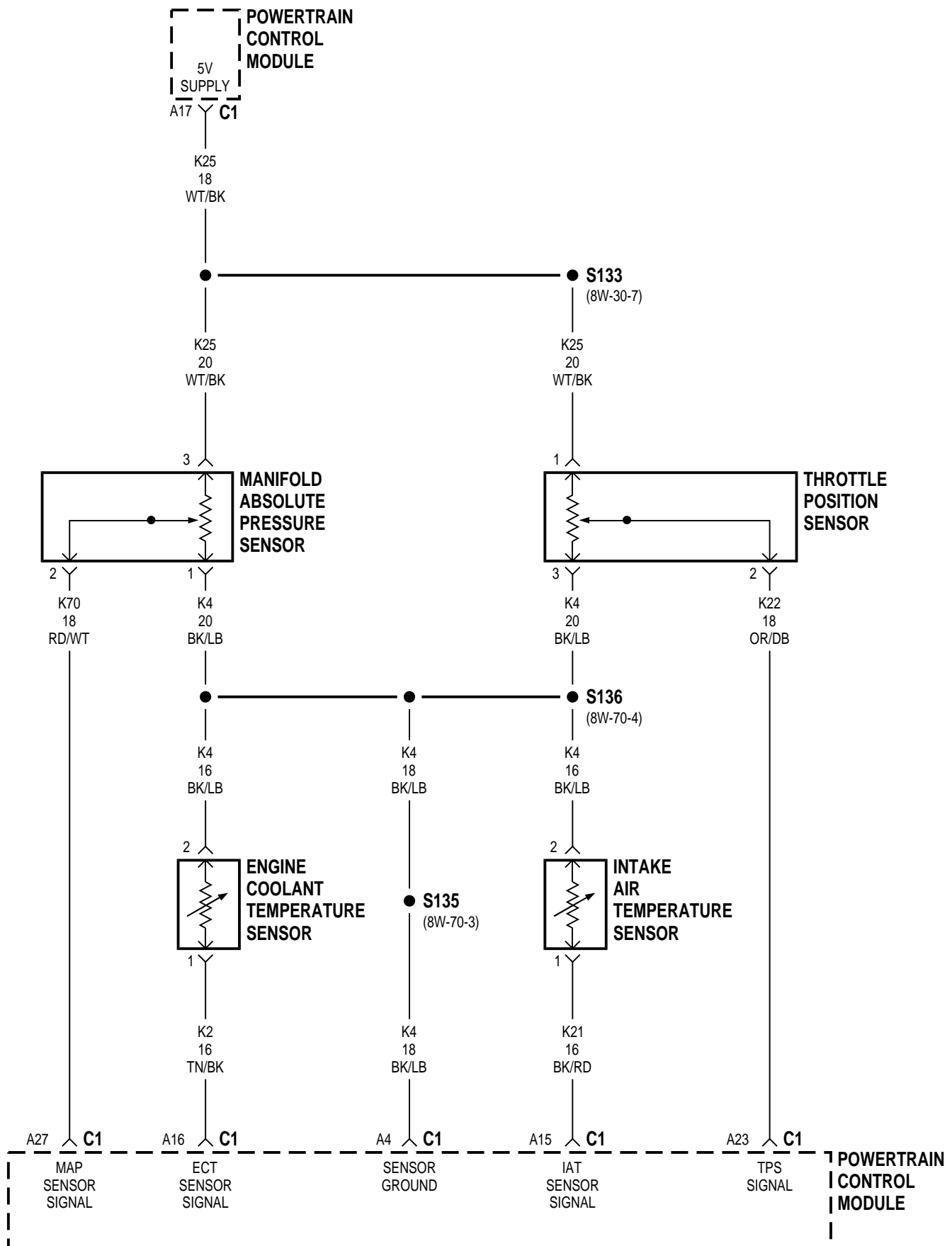


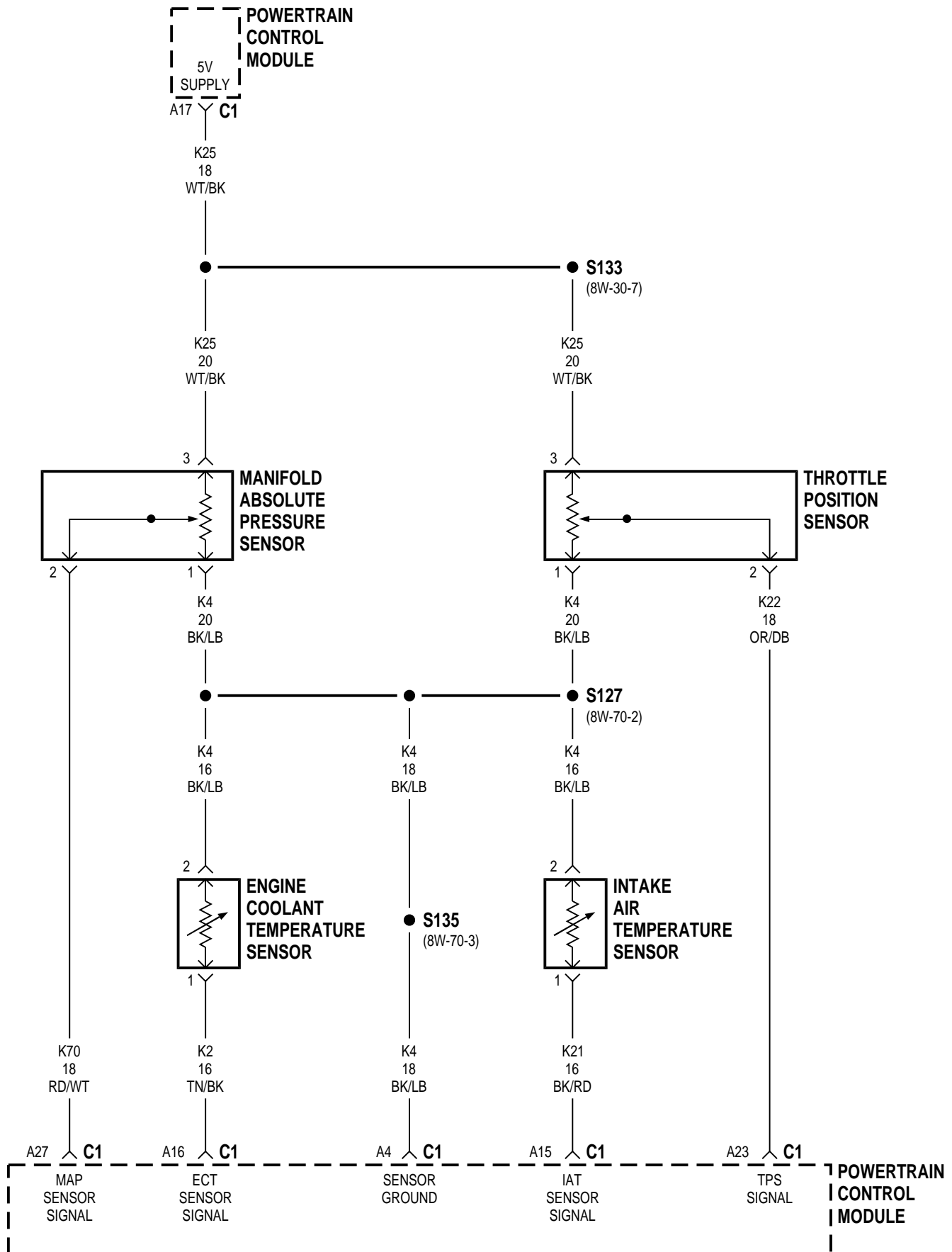


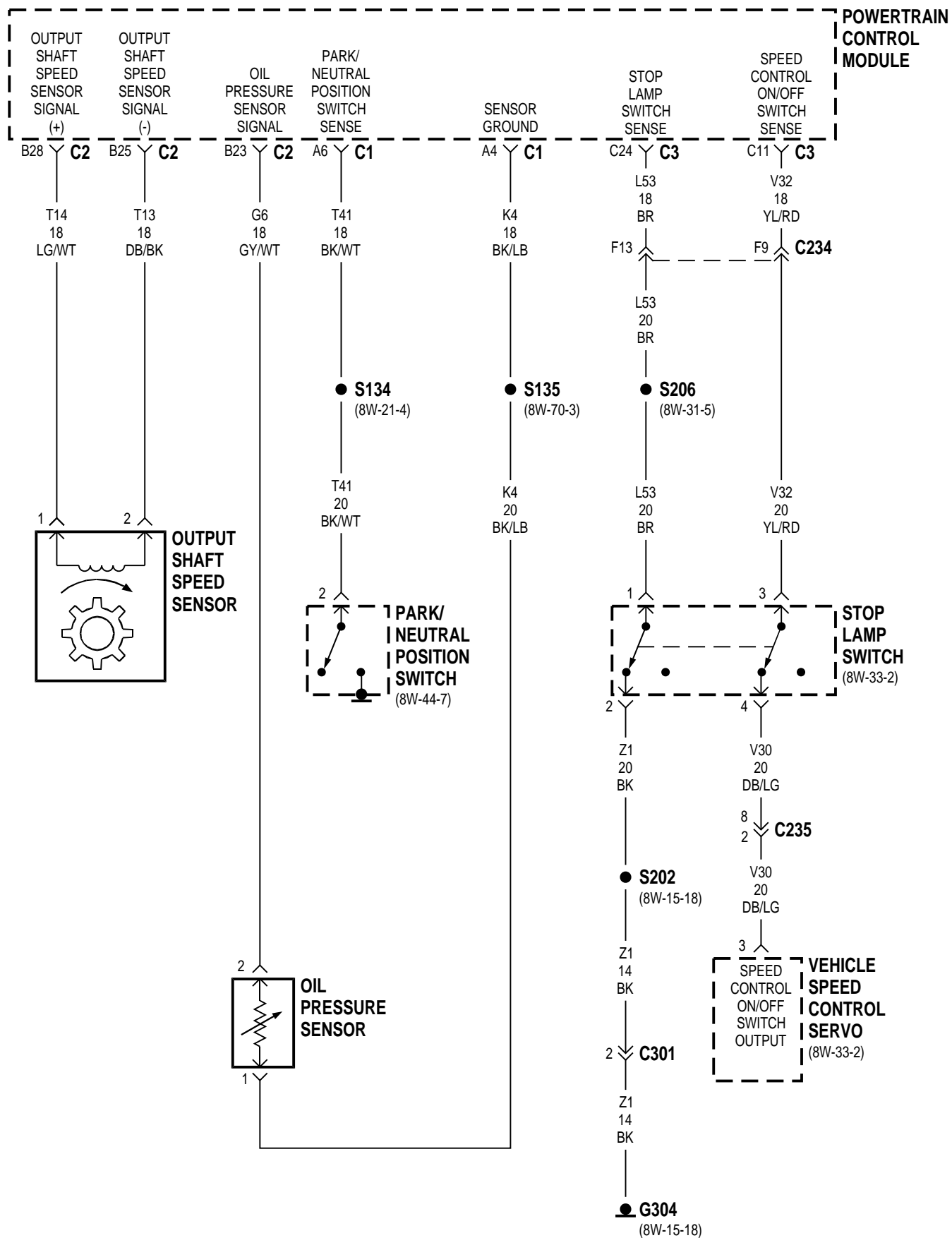


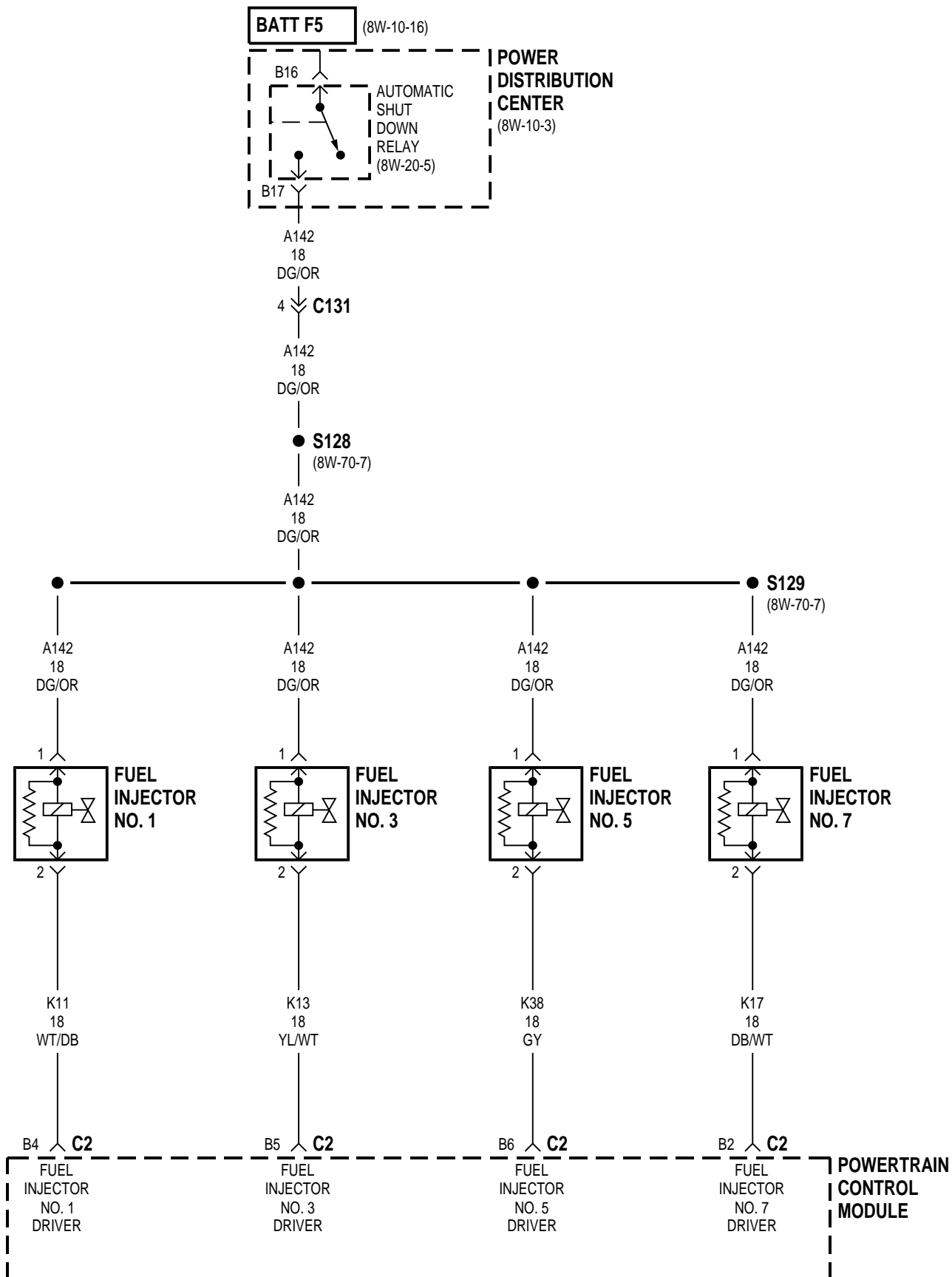


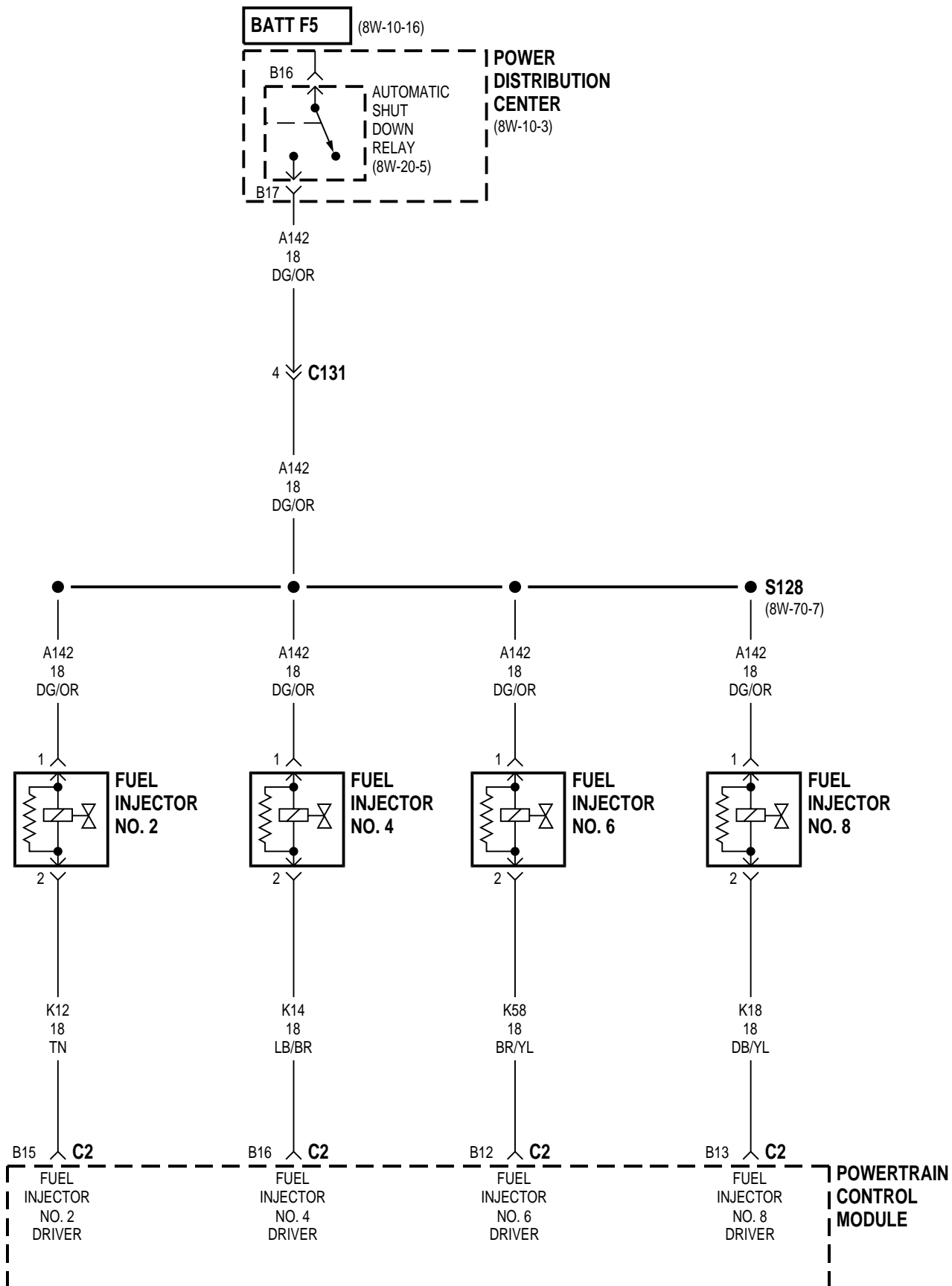


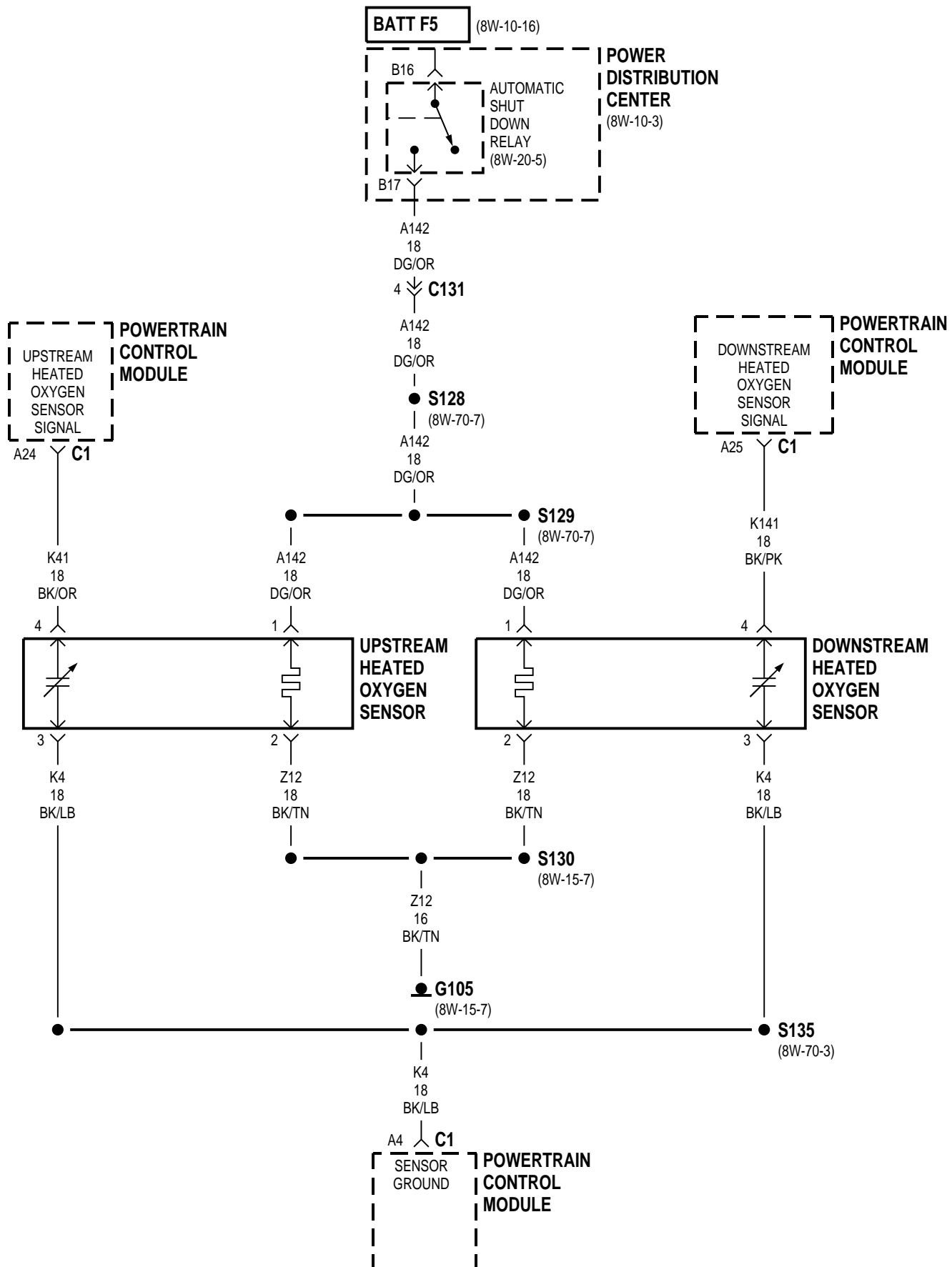


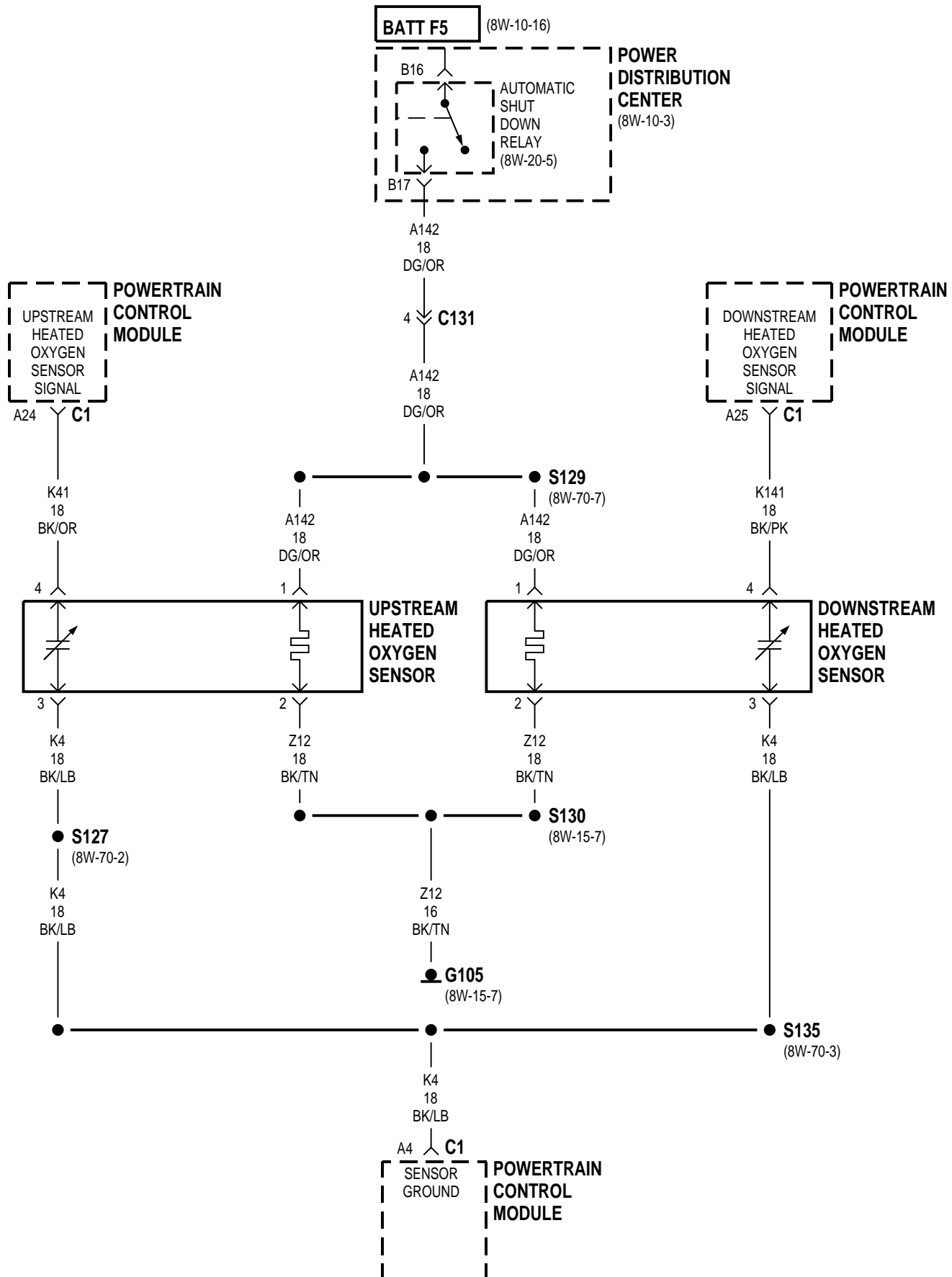


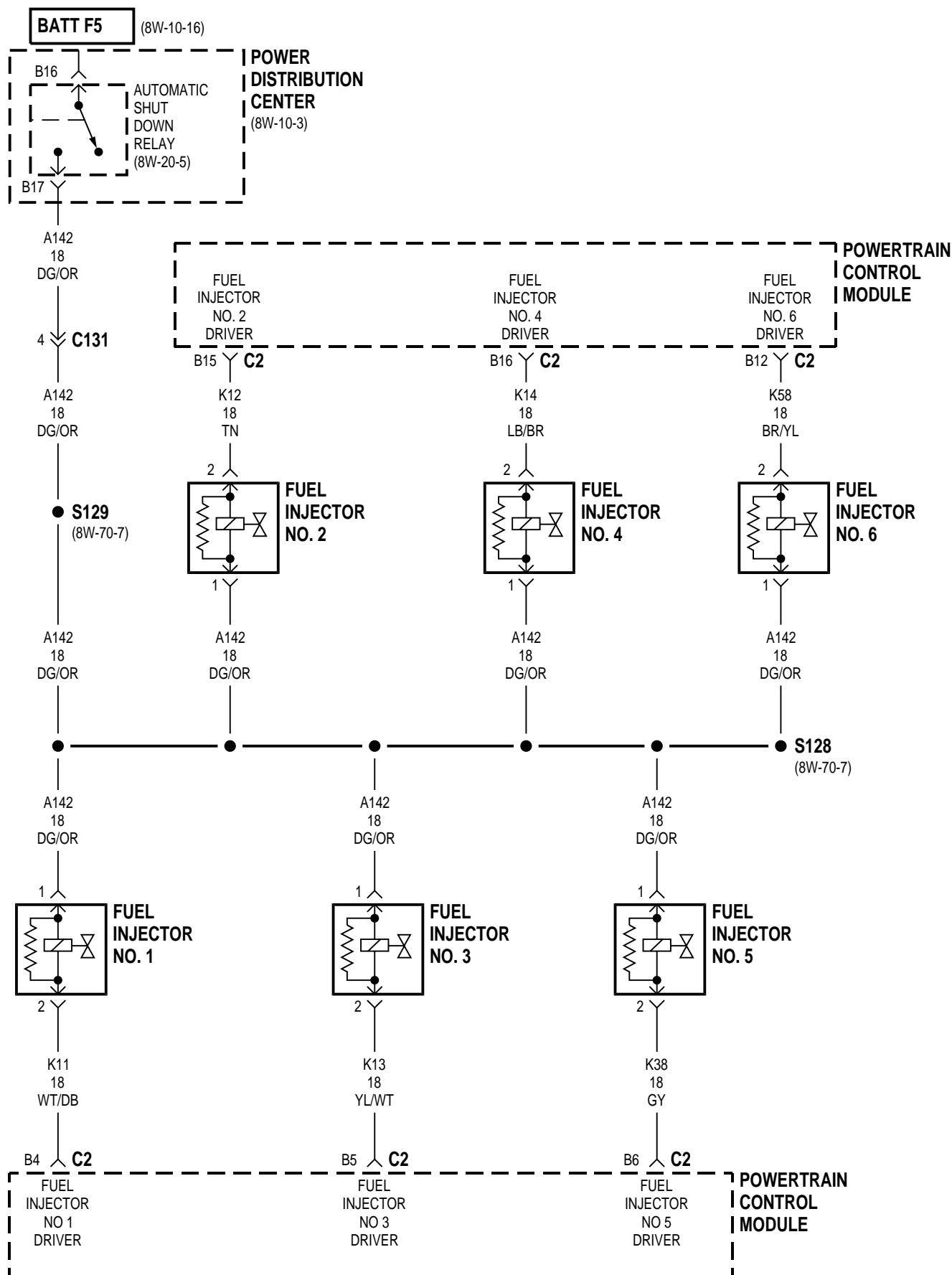


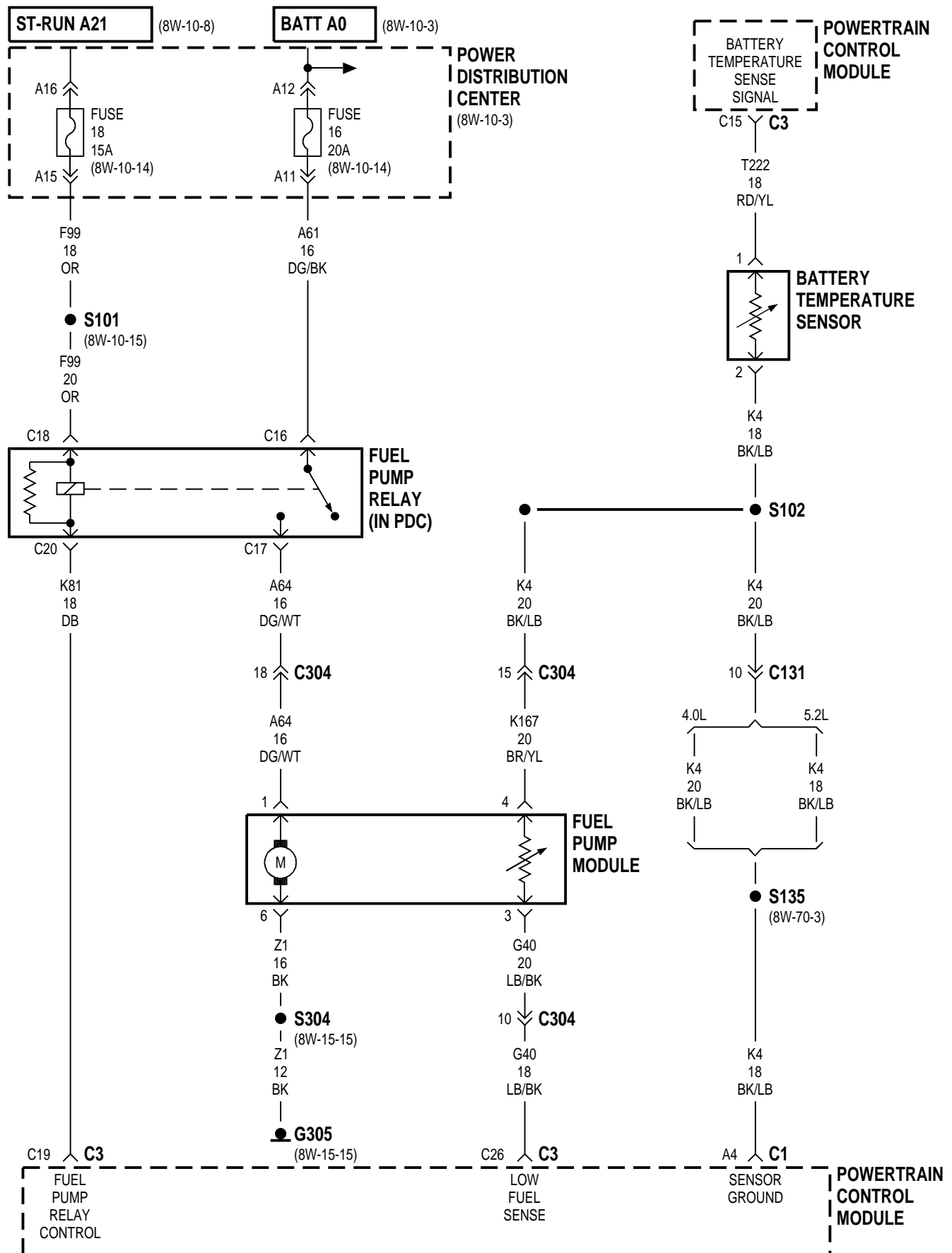


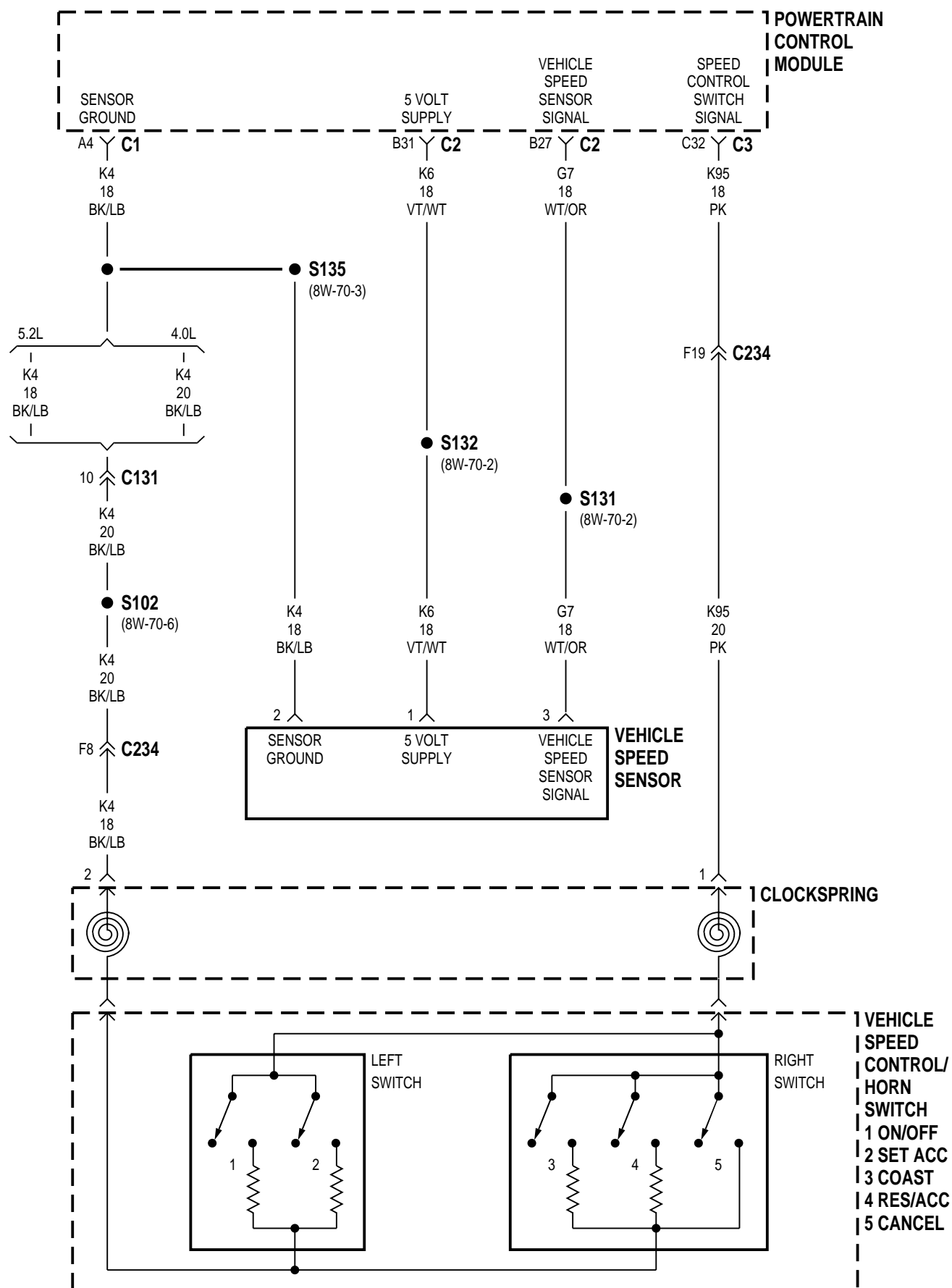


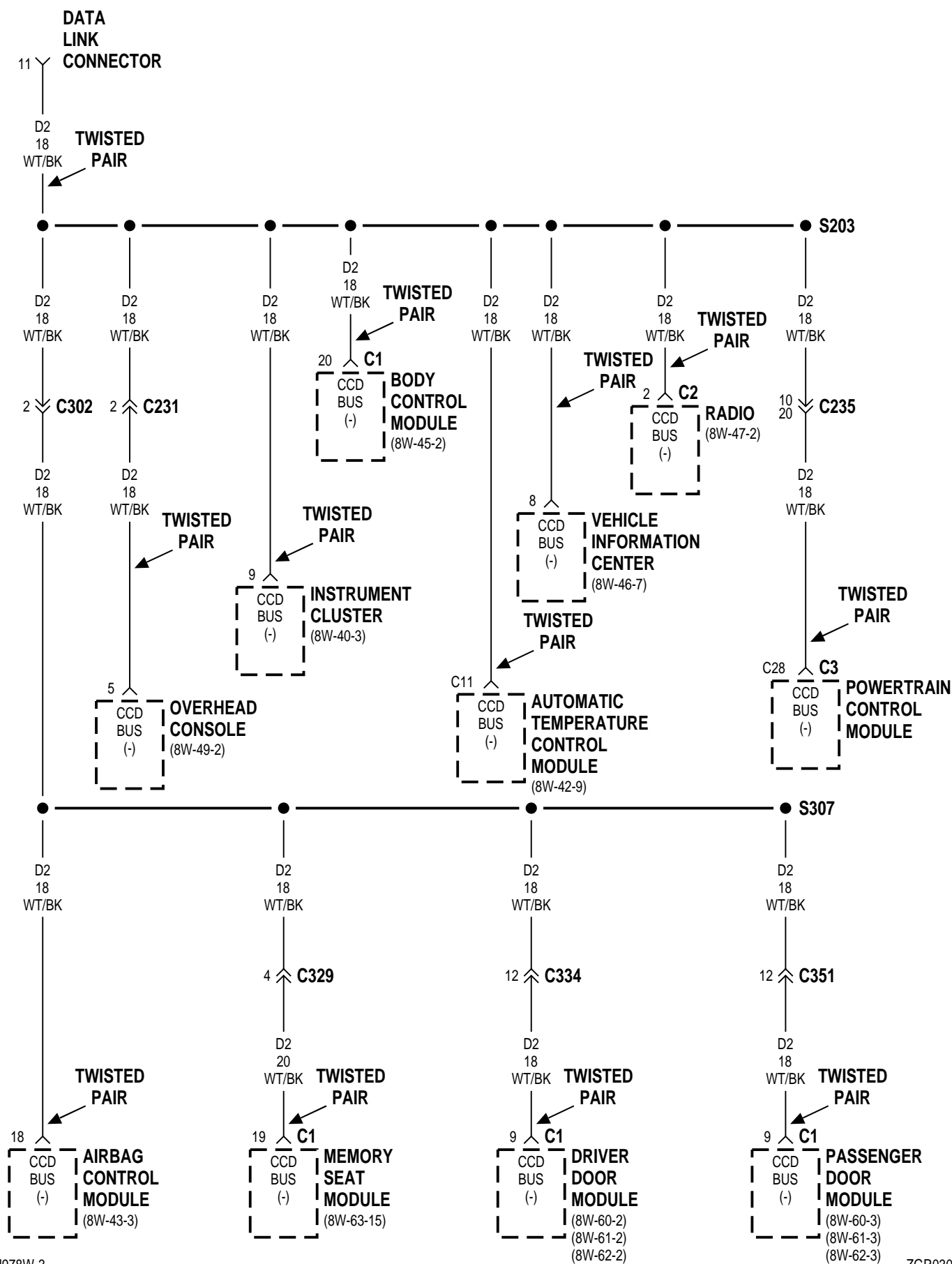


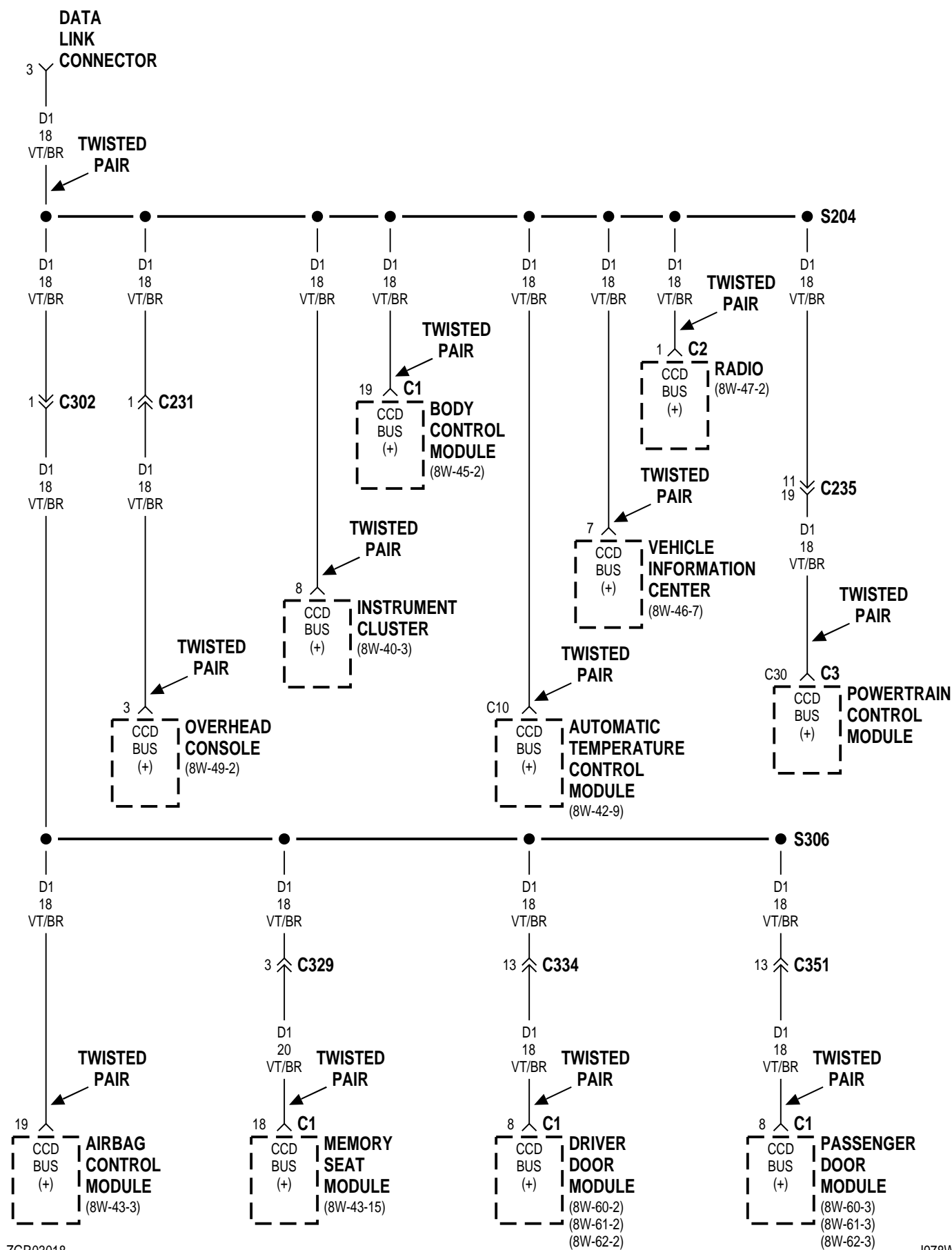


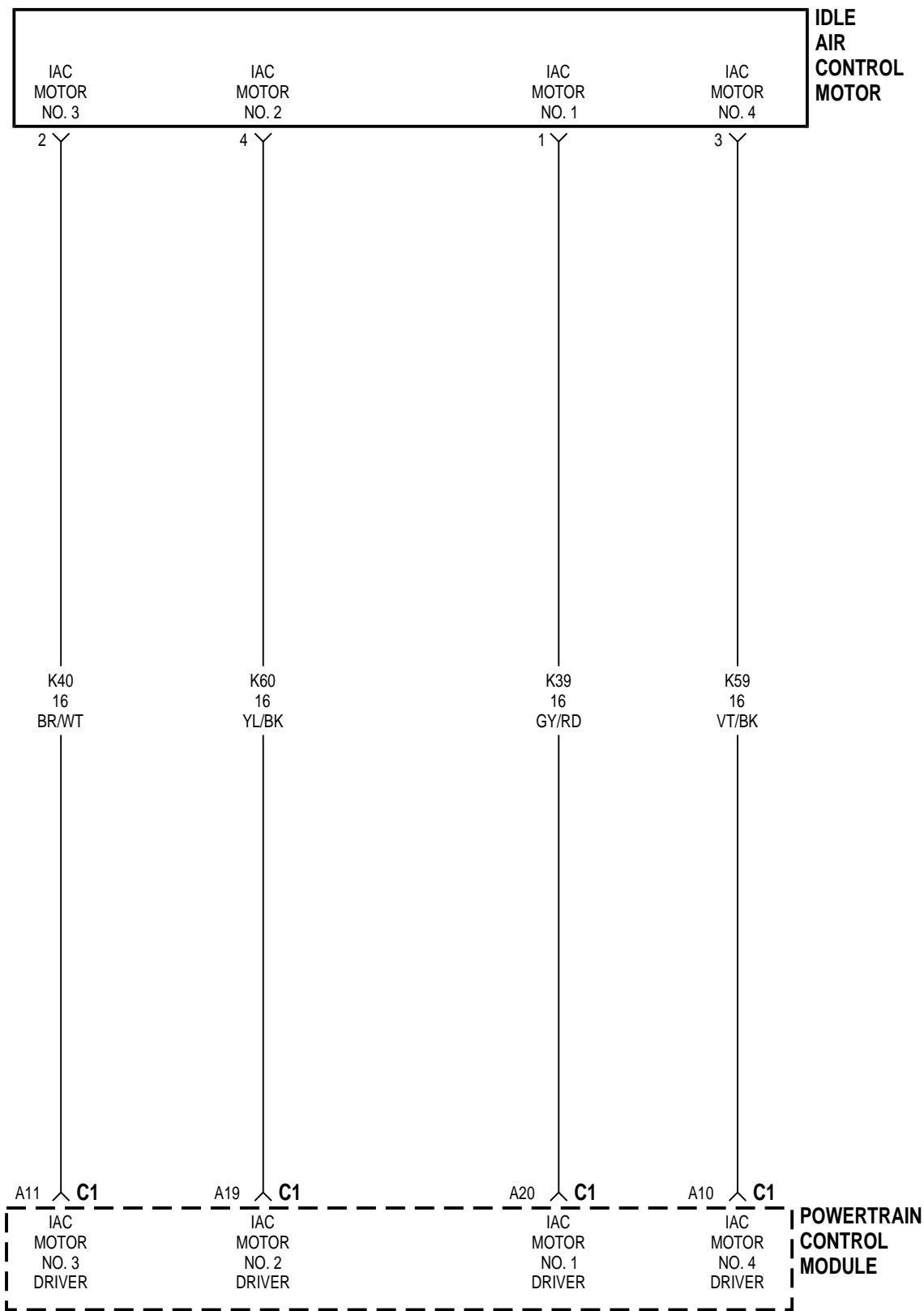


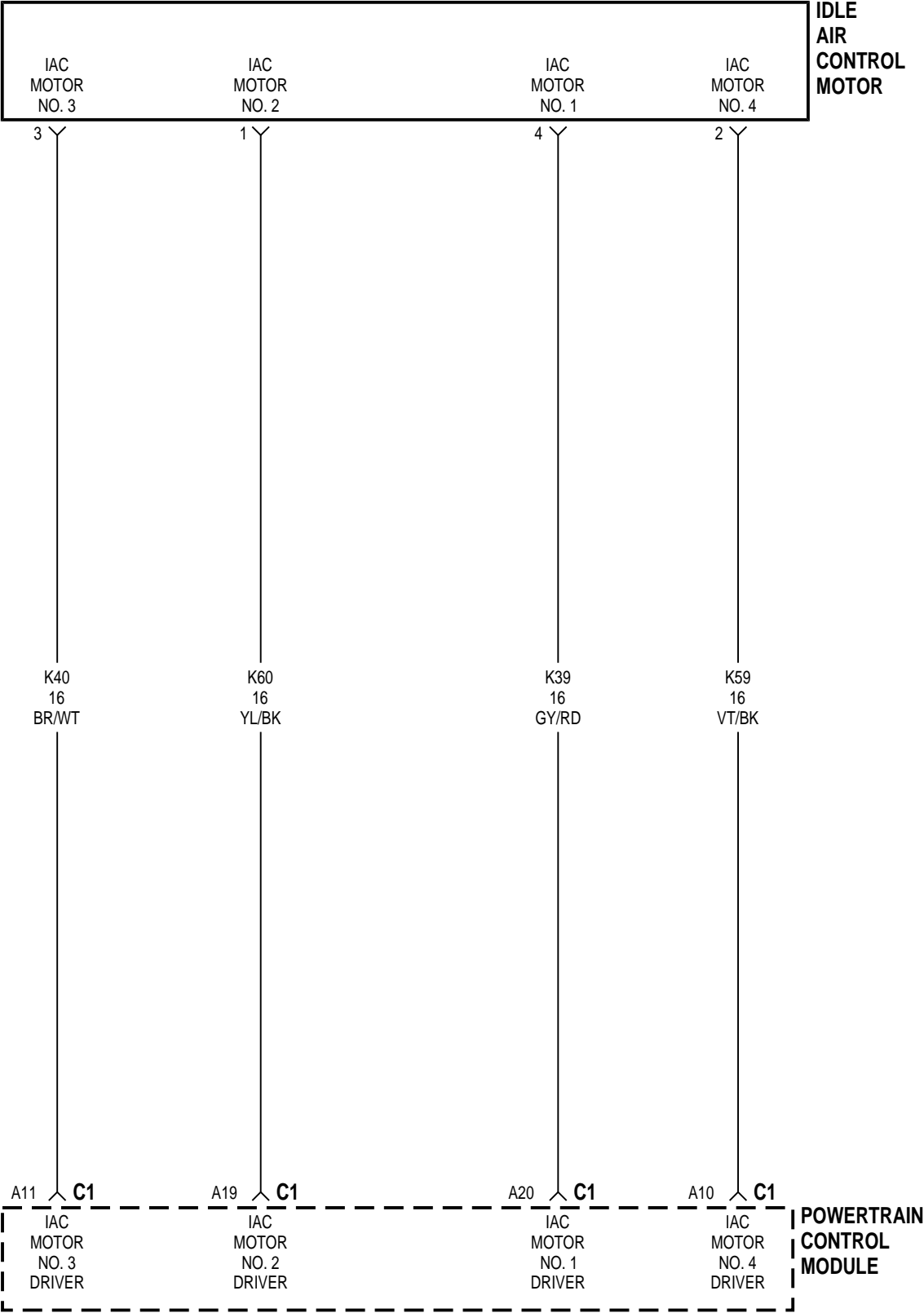


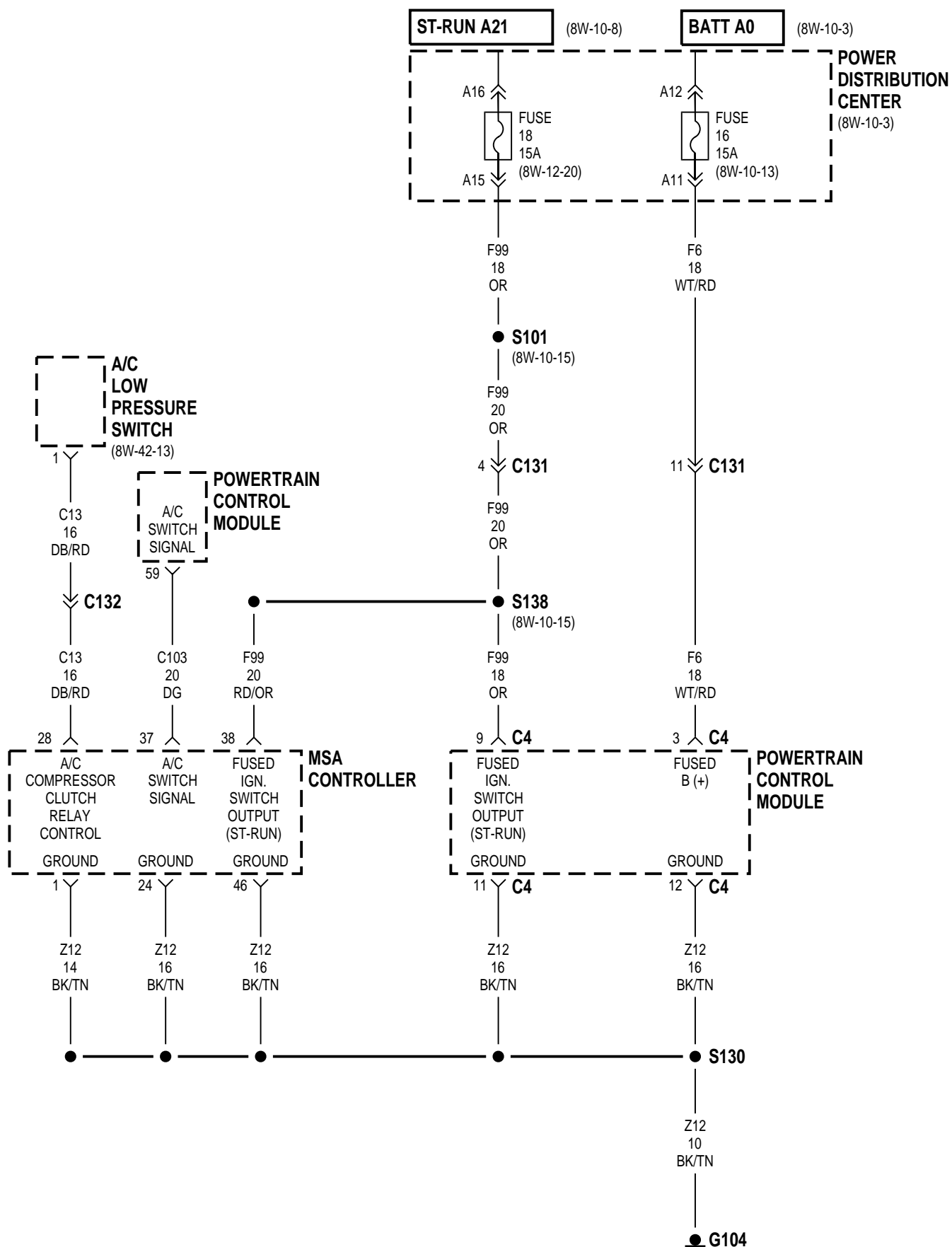




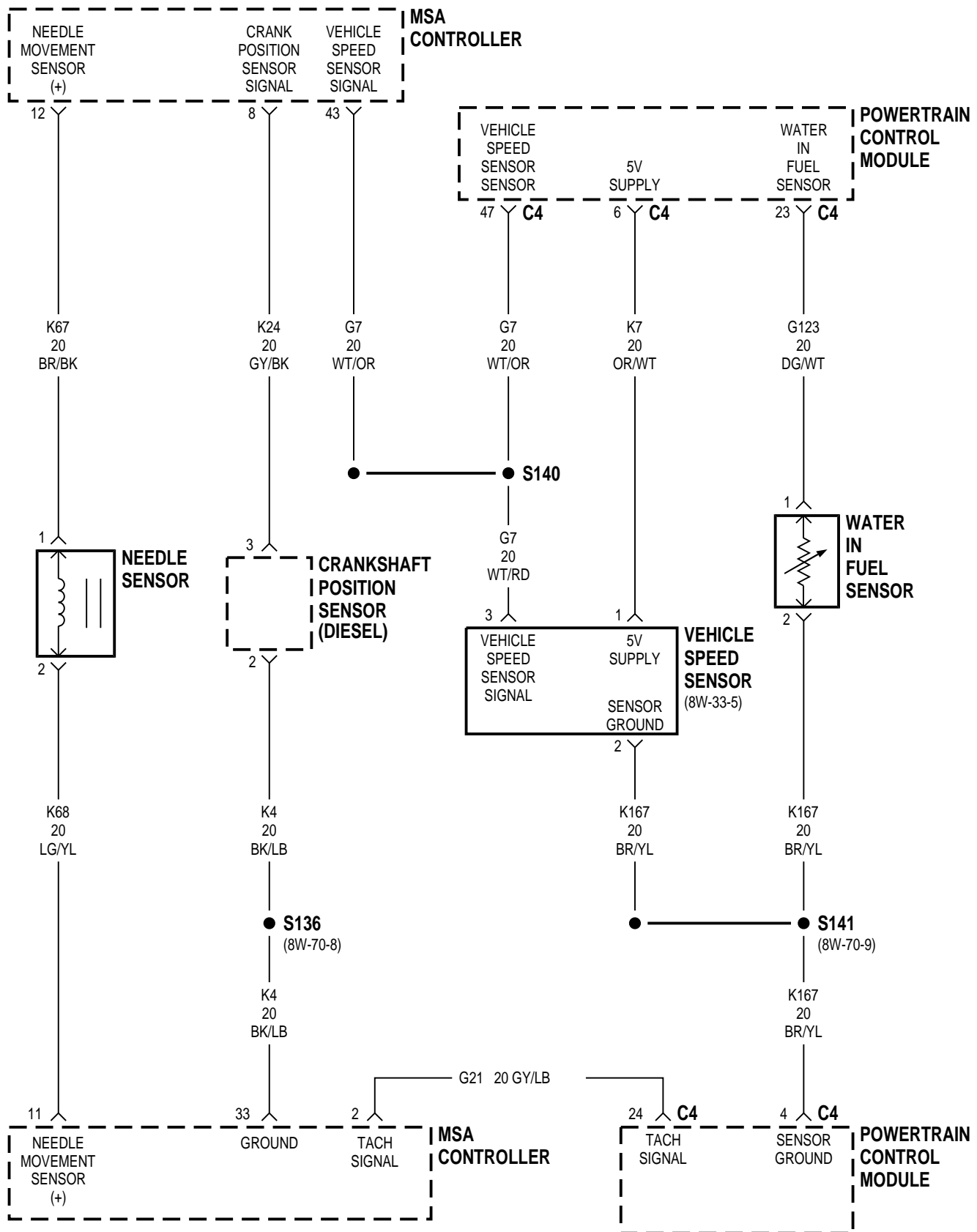


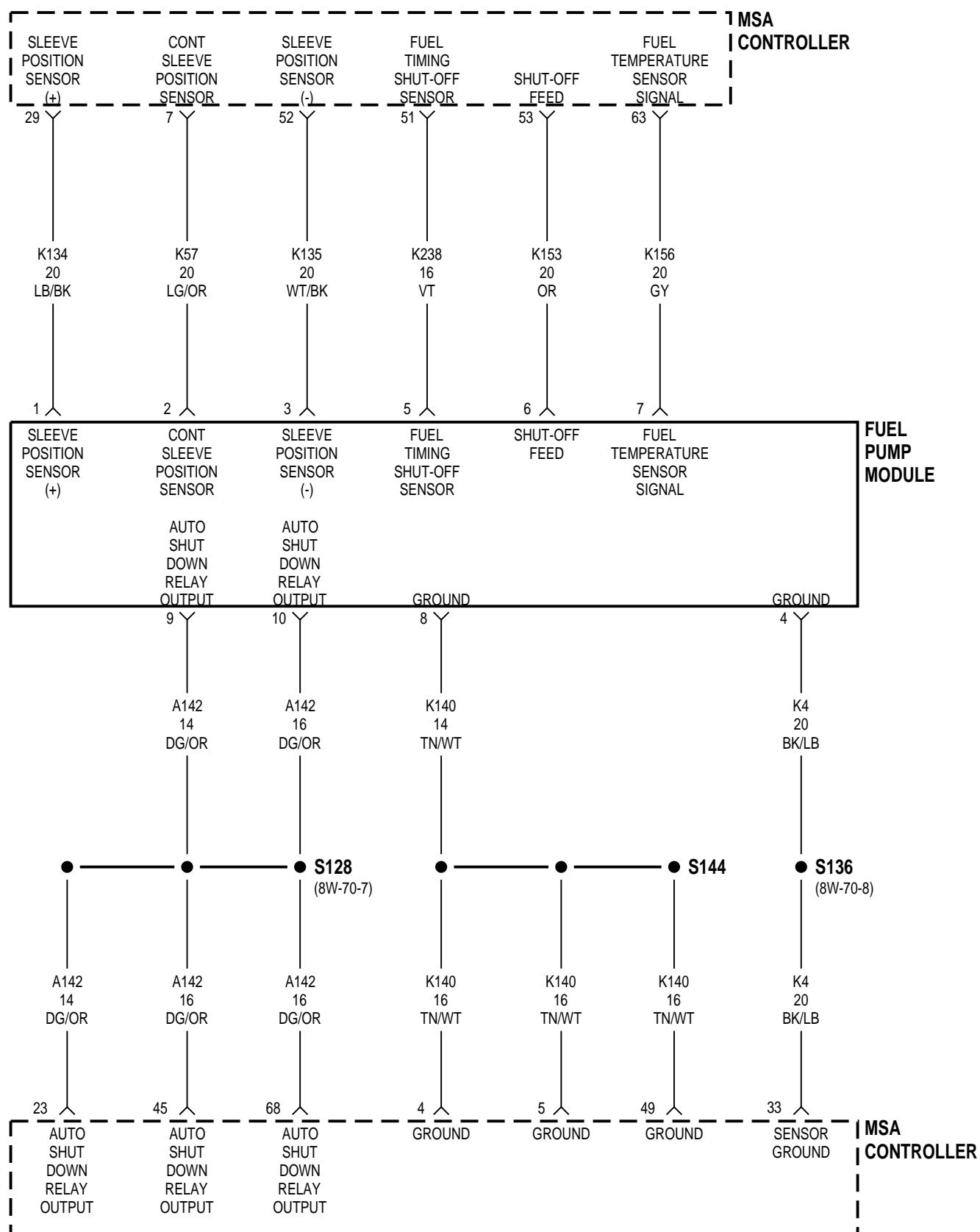


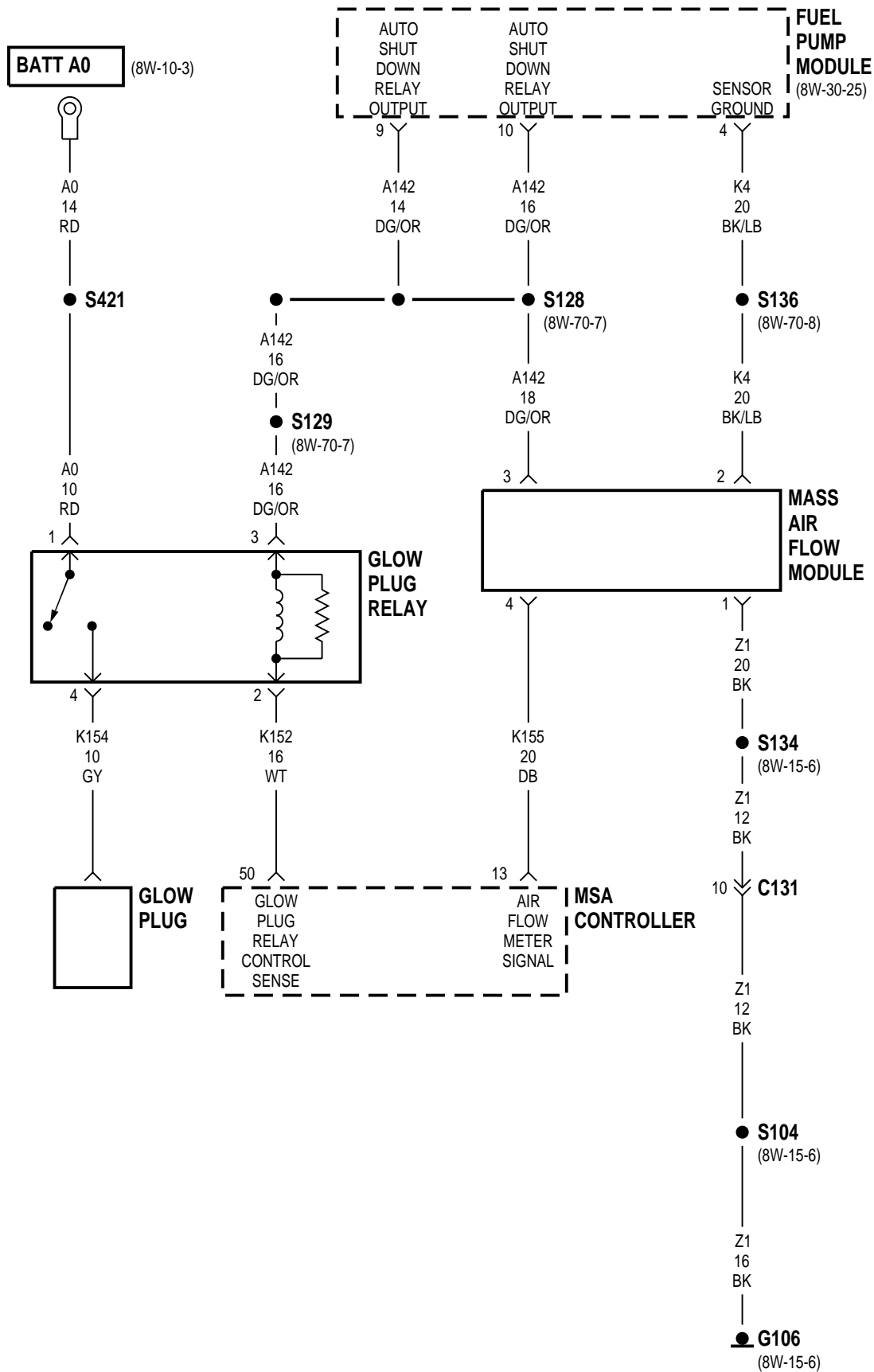


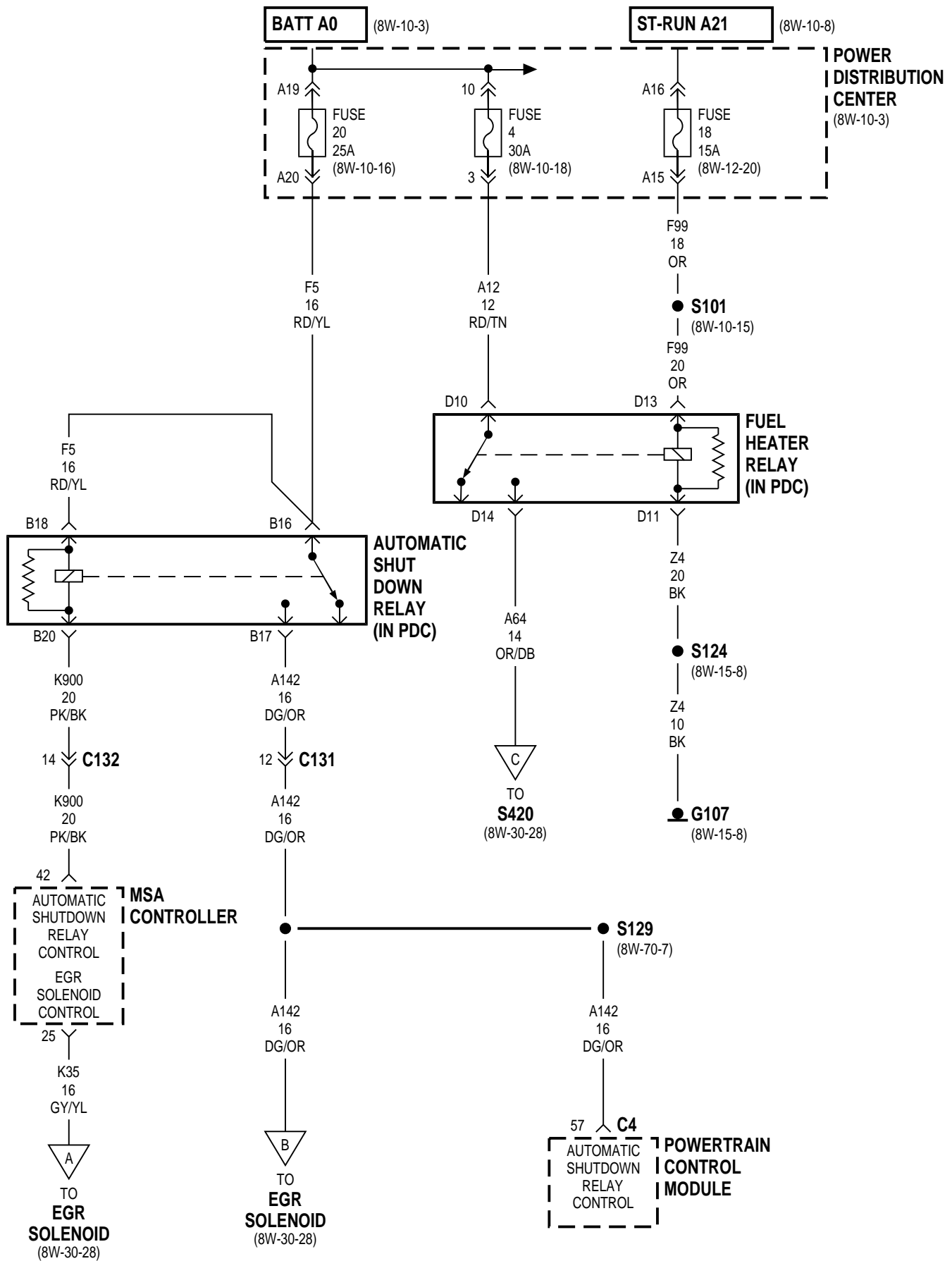


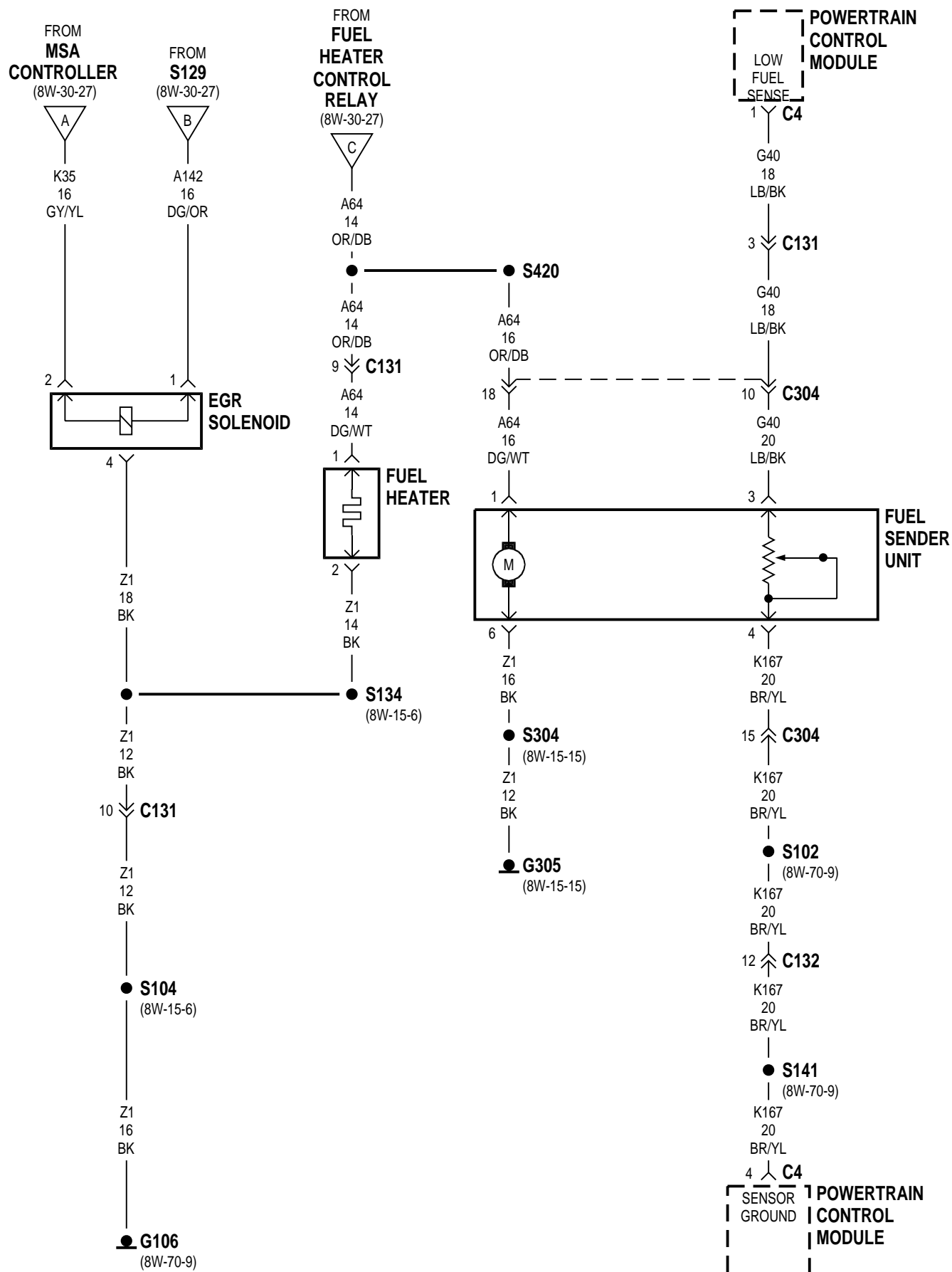


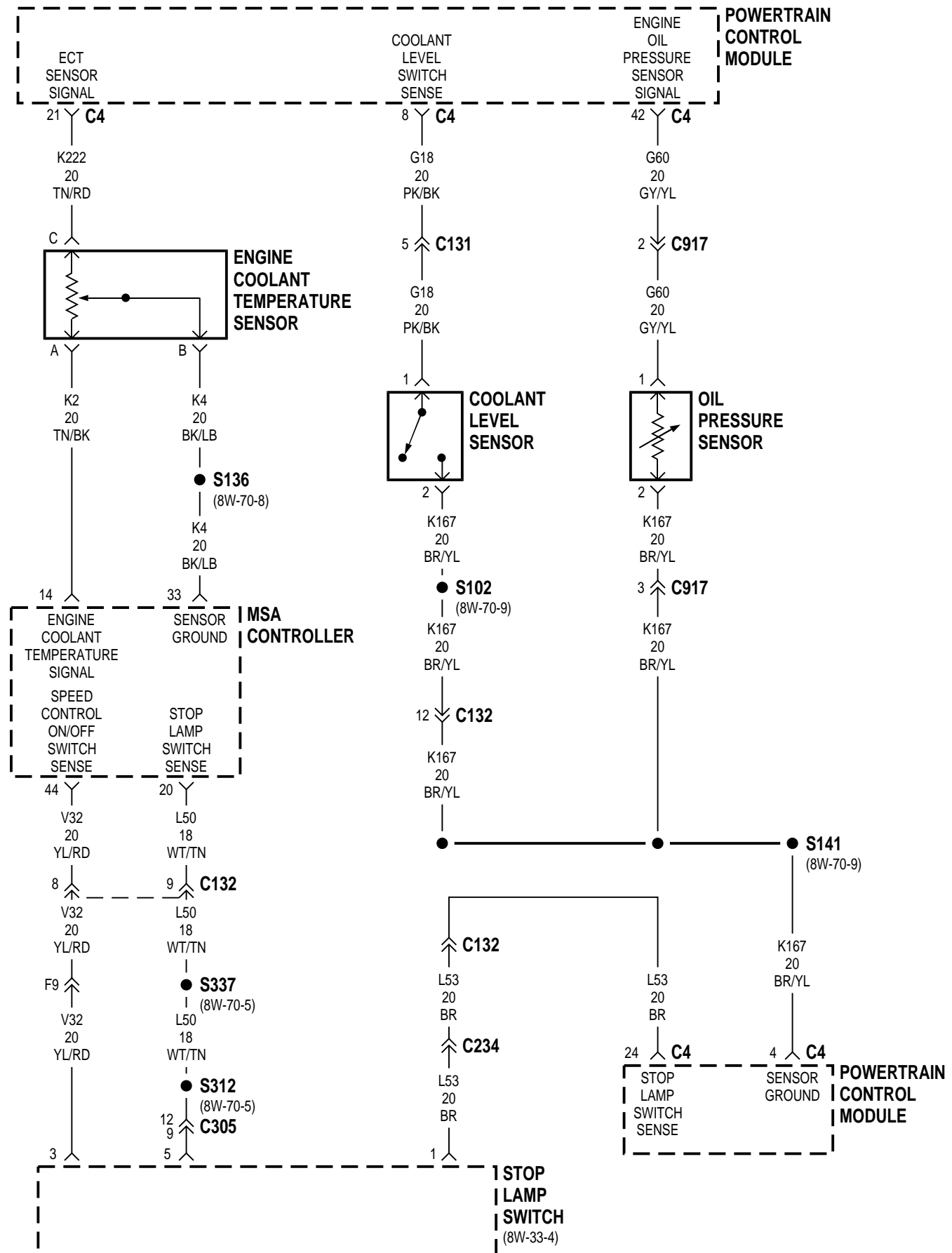


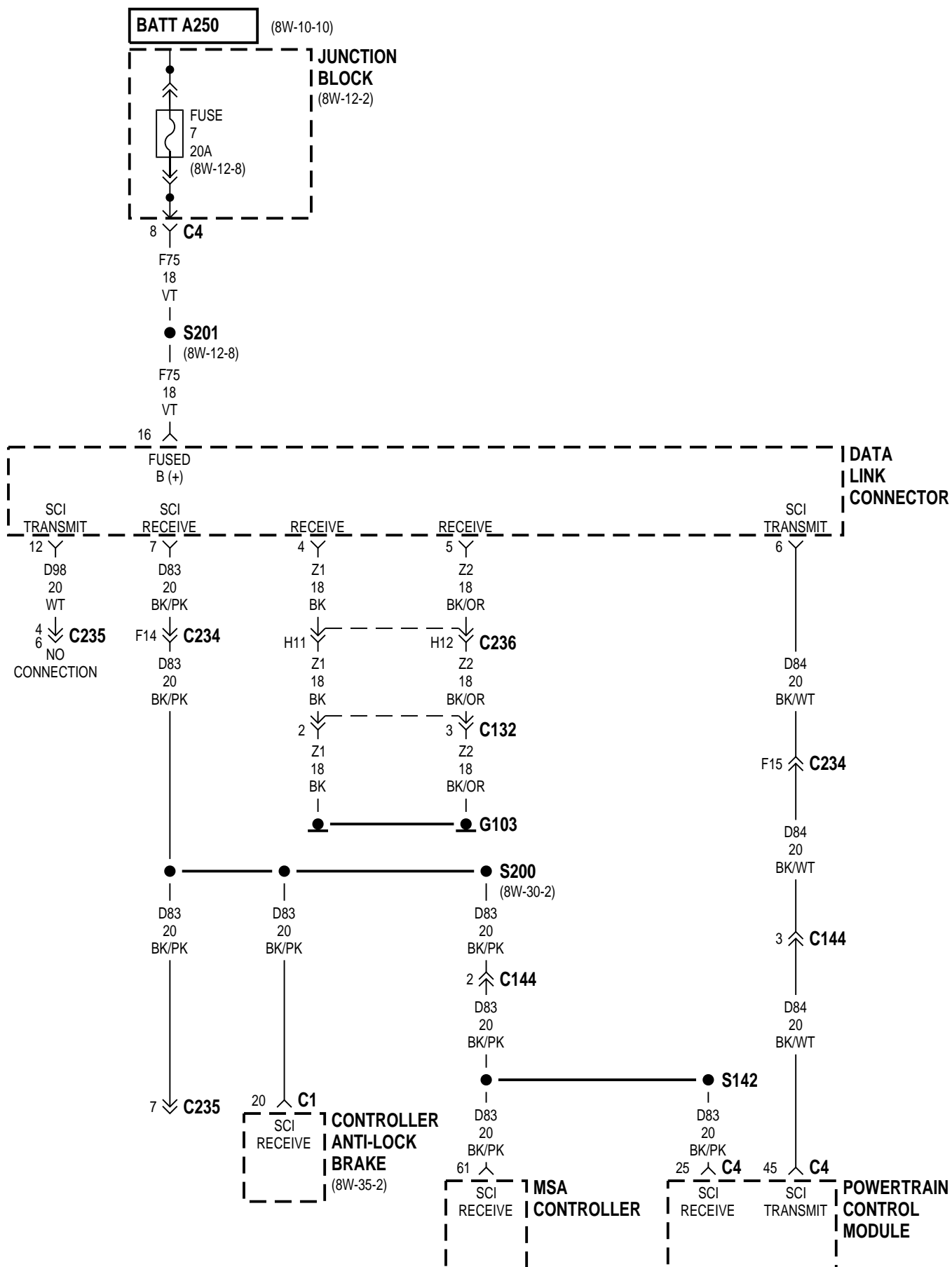


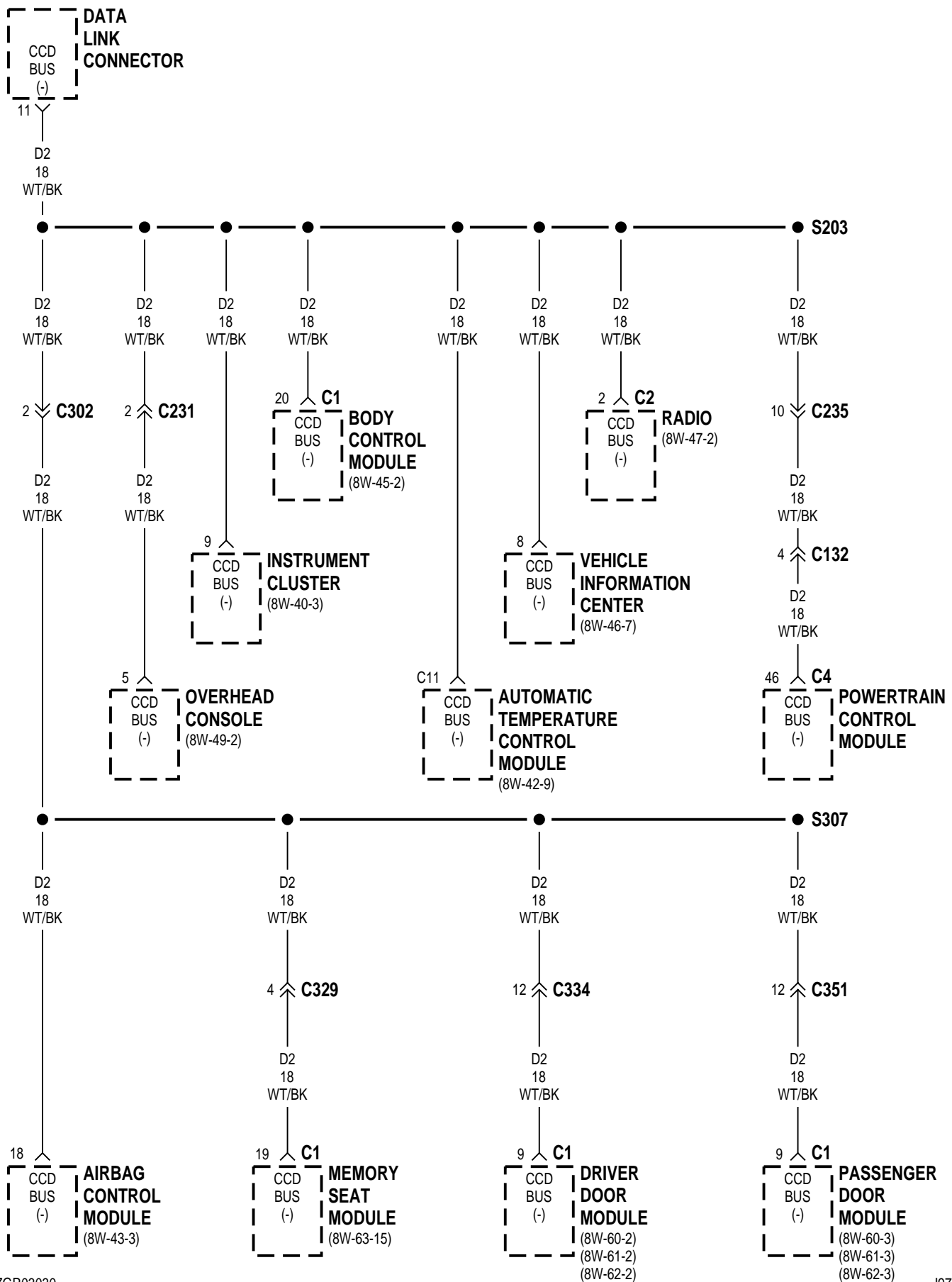


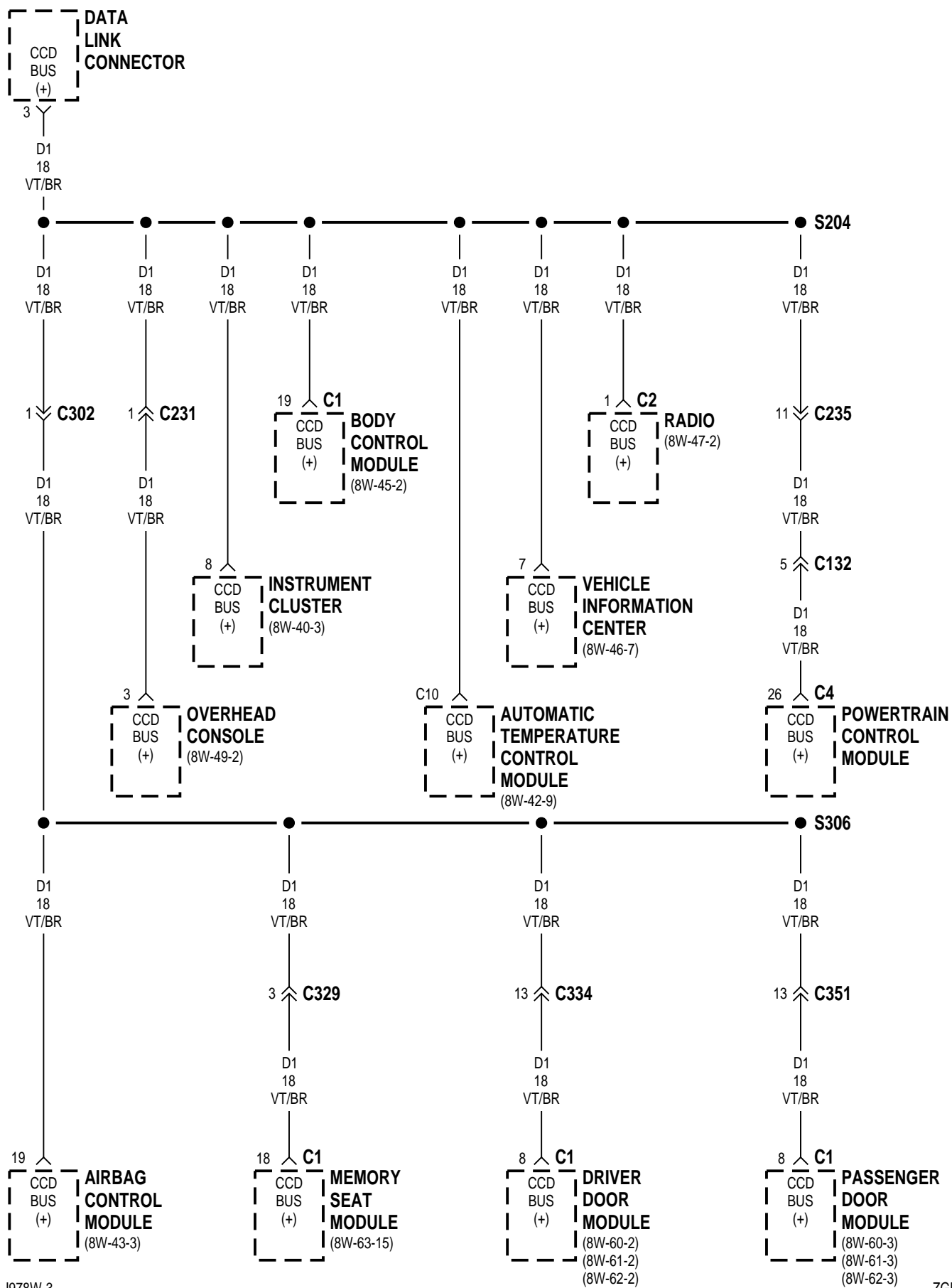












8W-30 FUEL/IGNITION SYSTEMS

INDEX

	page		page
DESCRIPTION AND OPERATION		FUEL PUMP MODULE (DIESEL)	34
ACCELERATOR PEDAL POSITION SENSOR		FUEL PUMP MODULE	34
(DIESEL)	37	FUEL PUMP RELAY	34
AUTOMATIC SHUT DOWN (ASD) RELAY	34	GLOW PLUGS (DIESEL)	39
AUTOMATIC SHUT DOWN RELAY (DIESEL)	34	GROUND	33
BATTERY FEED (DIESEL)	33	HEATED OXYGEN SENSORS	35
BATTERY FEED	33	IDLE AIR CONTROL (IAC) MOTOR	39
BATTERY TEMPERATURE SENSOR	35	IGNITION COIL	39
CAMSHAFT POSITION SENSOR	36	IGNITION SWITCH	33
CCD BUS	39	INSTRUMENTED FIRST INJECTOR (DIESEL)	39
CRANKSHAFT POSITION SENSOR (DIESEL)	36	INTAKE AIR TEMPERATURE SENSOR	37
CRANKSHAFT POSITION SENSOR	35	LOW COOLANT LEVEL SWITCH (DIESEL)	39
DATA LINK CONNECTOR	34	LOW IDLE POSITION SWITCH (DIESEL)	37
DUTY CYCLE EVAP/PURGE SOLENOID	39	MANIFOLD ABSOLUTE PRESSURE SENSOR	37
EGR SOLENOID (DIESEL)	39	MASS AIR FLOW SENSOR (DIESEL)	37
ENGINE COOLANT TEMPERATURE SENSOR		OIL PRESSURE SENSOR (DIESEL)	38
(DIESEL)	36	OIL PRESSURE SENSOR	38
ENGINE COOLANT TEMPERATURE SENSOR	36	PCM GROUND (DIESEL)	34
EVAPORATIVE SYSTEM LEAK DETECTION		THROTTLE POSITION SENSOR	36
PUMP	36	VEHICLE SPEED SENSOR (DIESEL)	35
FUEL HEATER (DIESEL)	39	VEHICLE SPEED SENSOR	35
FUEL INJECTION PUMP (DIESEL)	38	WATER IN FUEL SENSOR (DIESEL)	38
FUEL INJECTORS	38		

DESCRIPTION AND OPERATION

IGNITION SWITCH

Circuit A1 from fuse 8 in the Power Distribution Center (PDC) powers four different circuits through the ignition switch. When the ignition switch is in the START or RUN position, it connects circuit A1 to circuit A21.

In the ACCESSORY or RUN position, the ignition switch connects to circuit A31. In the START position, the ignition switch connects circuit A1 to circuit A41. When the ignition switch is in the RUN position it connects circuit A1 to circuit A22.

Also in the START position, the case grounded ignition switch grounds circuit G9 from the brake warning switch.

BATTERY FEED

Circuit F5 from fuse 20 in the Power Distribution Center (PDC) supplies battery voltage to cavity A22 of the Powertrain Control Module (PCM).

HELPFUL INFORMATION

Circuit F5 also supplies power to the contact sides of the Automatic Shut Down (ASD) relay.

BATTERY FEED (DIESEL)

Battery feed for the Powertrain Control Module (PCM) is supplied from several sources. One is a constant battery feed on circuit F6. This circuit is protected by a 15 amp fuse located in the Power Distribution Center (PDC)

Battery voltage is also provided on circuit F99. This circuit is HOT in the START and RUN position and protected by a 15 amp fuse located in the PDC. Power for the fuse is supplied on circuit A21 from the ignition switch.

GROUND

Circuit Z12 connects to cavities A31 and A32 of the PCM. The Z12 circuit provides ground for PCM internal drivers that operate high current devices like the injectors and ignition coil.

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

HELPFUL INFORMATION

- If the system loses ground for the Z12 circuits, the vehicle will not operate. Check the connection at the ganged-ground circuit eyelet.

DESCRIPTION AND OPERATION (Continued)

PCM GROUND (DIESEL)

Ground for the Powertrain Control Module (PCM) is supplied on the Z12 circuit. This circuit connects to four cavities in the PCM and terminates at the PCM ground location.

DATA LINK CONNECTOR

Circuit A250 from fuse 11 in the Power Distribution Center (PDC) powers circuit F75 through fuse 7 in the junction block. Circuit F75 supplies battery voltage to the data link connector.

Circuit D84 connects to cavity C29 of the PCM. Circuit D84 is the SCI transmit circuit for the Powertrain Control Module (PCM). Circuit D83 connects to cavity C27 of the PCM and cavity A3 of the Controller- Anti Lock Brakes. Circuit D83 is the SCI receive circuit for the PCM.

Circuits D83 and D98 from the speed proportional steering module connect to the data link connector.

Circuits Z1 and Z2 provide ground for the data link connector.

AUTOMATIC SHUT DOWN (ASD) RELAY

When the ignition switch is in either the START or RUN position, it connects circuit A1 from fuse 8 in the Power Distribution Center (PDC) to circuit A21. Circuit A21 powers circuit F99 through PDC fuse 18. Circuit F99 feeds the coil side of the Automatic Shut Down (ASD) relay. The Powertrain Control Module (PCM) provides ground for the relay on circuit K900. Circuit K900 connects to cavity C3 of the PCM.

When the PCM grounds the ASD relay, contacts inside the relay close and connect circuit F5 from fuse 20 in the PDC to circuit A142. Circuit A142 splices to, fuel injectors, ignition coil and the upstream and downstream heated oxygen sensors. Circuit A142 also connects to cavity C12 of the PCM.

HELPFUL INFORMATION

Along with supplying voltage to the coil side of the ASD relay, circuit F99 also supplies voltage to the coil side of the fuel pump relay.

AUTOMATIC SHUT DOWN RELAY (DIESEL)

Power for the coil and contact side of the Automatic Shut Down (ASD) relay is supplied on circuit F5. This circuit is HOT at all times and protected by a 25 amp fuse located in the Power Distribution Center (PDC).

Ground for the coil side of the relay is controlled by the Powertrain Control Module (PCM) on circuit K900.

When the PCM provides a ground for the coil side of the relay the contacts in the relay CLOSE and connect circuits F5 and A142. The A142 circuit sup-

plies power to various components and modules in the fuel system.

HELPFUL INFORMATION

- Check the 25 amp fuse located in the PDC
- Refer to the appropriate section of the service manual or Diagnostic Test Procedures manual

FUEL PUMP RELAY

When the ignition switch is in either the START or RUN positions, it connects circuit A1 from fuse 8 in the Power Distribution Center (PDC) to circuit A21. Circuit A21 powers circuit F99 through PDC fuse 18. Circuit F99 supplies battery voltage to the coil side of the fuel pump relay. The Powertrain Control Module (PCM) provides ground for the relay on circuit K81. Circuit K81 connects to cavity C19 of the PCM.

When the PCM grounds the fuel pump relay, contacts inside the relay close and connect circuit A61 from fuse 16 in the PDC to circuit A64. Circuit A64 feeds the fuel pump motor (part of the in-tank fuel pump module).

HELPFUL INFORMATION

Circuit F99 also powers the coil side of the Automatic Shut Down (ASD) relay.

FUEL PUMP MODULE

The in-tank fuel pump module contains the fuel pump motor and fuel level sensor.

FUEL PUMP MOTOR

When the fuel pump relay contacts close, the relay feeds the fuel pump motor. Circuit A64 from the relay powers the fuel pump module. Circuit Z1 provides ground for the fuel pump motor.

FUEL LEVEL SENSOR

The fuel level sensor is a variable resistor. Circuit G40 provides the fuel level input to cavity C26 of the Powertrain Control Module (PCM). The PCM broadcasts fuel level data on the CCD bus. The micro-processor in the instrument cluster receives the message on the CCD bus, calculates fuel gauge needle position and adjusts the gauge.

FUEL PUMP MODULE (DIESEL)

The in-tank fuel pump module contains the fuel pump motor and fuel level sensor.

FUEL PUMP MOTOR

When the fuel pump relay contacts close, the relay feeds the fuel pump motor. Circuit A64 from the relay powers the fuel pump motor. Circuit Z1 provides ground for the fuel pump motor.

DESCRIPTION AND OPERATION (Continued)

FUEL LEVEL SENSOR

The fuel level sensor is a variable resistor. Circuit G40 provides the fuel level input to the Powertrain Control Module (PCM). The PCM broadcasts fuel level data on the CCD bus. The micro-processor in the instrument cluster receives the message on the CCD bus, calculates fuel gauge needle position and adjusts the gauge.

VEHICLE SPEED SENSOR

Circuit K6 supplies 5 volts from the Powertrain Control Module (PCM) to the vehicle speed sensor. The K6 circuit connects to cavity B31 of the PCM.

Circuit G7 from the vehicle speed sensor provides an input signal to the PCM. The G7 circuit connects to cavity B27 of the PCM.

The PCM provides a ground for the vehicle speed sensor signal (circuit G7) through circuit K4. Circuit K4 connects to cavity A4 of the PCM.

HELPFUL INFORMATION

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

- Battery temperature sensor
- Camshaft position sensor
- Crankshaft position sensor
- Downstream heated oxygen sensor
- Engine coolant temperature sensor
- Fuel pump module
- Intake air temperature sensor
- Manifold absolute pressure sensor
- Oil pressure sensor
- Powertrain control module
- Throttle position sensor
- Transmission solenoid assembly
- Upstream heated oxygen sensor
- Vehicle speed control switch

VEHICLE SPEED SENSOR (DIESEL)

Circuit K7 supplies voltage from the Powertrain Control Module (PCM) to the vehicle speed sensor.

Circuit G7 from the vehicle speed sensor provides an input signal to the PCM.

The PCM provides a ground for the vehicle speed sensor signal (circuit G7) through circuit K4.

HEATED OXYGEN SENSORS

When the Automatic Shut Down (ASD) relay contacts close, circuit A142 supplies voltage to the upstream and downstream heated oxygen sensors.

Circuit K41 delivers the signal from the upstream heated oxygen sensor to the Powertrain Control Module (PCM). Circuit K41 connects to cavity A24 of the PCM. Circuit K141 supplies the signal from the downstream heated oxygen sensor to the PCM. Circuit K141 connects to PCM cavity A25.

The PCM provides a ground for the heated oxygen sensor signals (circuits K41 and K141) through circuit K4. Circuit K4 connects to cavity A4 of the PCM connector.

Circuit Z12 provides ground for the heater circuit in each sensor.

HELPFUL INFORMATION

Circuit A142 also supplies battery voltage to the fuel injectors, ignition coil, and generator.

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

- Battery temperature sensor
- Camshaft position sensor
- Crankshaft position sensor
- Engine coolant temperature sensor
- Fuel pump module
- Intake air temperature sensor
- Manifold absolute pressure sensor
- Oil pressure sensor
- Powertrain control module
- Throttle position sensor
- Transmission solenoid assembly
- Vehicle speed control switch
- Vehicle speed sensor

BATTERY TEMPERATURE SENSOR

The Powertrain Control Module (PCM) determines battery temperature on circuit T222. Circuit T222 connects the PCM to the battery temperature sensor. Circuit T222 connects to cavity C15 of the PCM. Circuit K4 provides ground for the sensor and connects to PCM cavity A4.

CRANKSHAFT POSITION SENSOR

The Powertrain Control Module (PCM) supplies 5 volts to the crankshaft position sensor on circuit K25. Circuit K25 connects to cavity A17 of the PCM.

The PCM receives the crankshaft position sensor signal on circuit K27. Circuit K27 connects to cavity A8 of the PCM.

The PCM provides a ground for the crankshaft position sensor (circuit K27) through circuit K4. Circuit K4 connects to cavity A4 of the PCM.

HELPFUL INFORMATION

• Circuit K25 splices to supply 5 volts to the camshaft position sensor, manifold absolute pressure sensor and throttle position sensor.

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

- Battery temperature sensor
- Camshaft position sensor
- Downstream heated oxygen sensor
- Engine coolant temperature sensor
- Fuel pump module
- Intake air temperature sensor

DESCRIPTION AND OPERATION (Continued)

- Manifold absolute pressure sensor
- Oil pressure sensor
- Powertrain control module
- Throttle position sensor
- Transmission solenoid assembly
- Upstream heated oxygen sensor
- Vehicle speed control switch
- Vehicle speed sensor

CRANKSHAFT POSITION SENSOR (DIESEL)

The Powertrain Control Module (PCM) supplies voltage to the crankshaft position sensor on circuit K24.

The PCM provides a ground for the crankshaft position sensor (circuit K24) through circuit K4.

CAMSHAFT POSITION SENSOR

The Powertrain Control Module (PCM) supplies 5 volts to the camshaft position sensor (in distributor) on circuit K25. Circuit K25 connects to cavity A17 of the PCM.

The PCM receives the camshaft position sensor signal on circuit K24. Circuit K24 connects to cavity A18 of the PCM.

The PCM provides a ground for the camshaft position sensor signal (circuit K24) through circuit K4. Circuit K4 connects to cavity A4 of the PCM.

HELPFUL INFORMATION

• Circuit K25 splices to supply 5 volts to the crankshaft position sensor, manifold absolute pressure sensor, and throttle position sensor.

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

- Battery temperature sensor
- Crankshaft position sensor
- Downstream heated oxygen sensor
- Engine coolant temperature sensor
- Fuel pump module
- Intake air temperature sensor
- Manifold absolute pressure sensor
- Oil pressure sensor
- Powertrain control module
- Throttle position sensor
- Transmission solenoid assembly
- Upstream heated oxygen sensor
- Vehicle speed control switch
- Vehicle speed sensor

ENGINE COOLANT TEMPERATURE SENSOR

The engine coolant temperature sensor provides an input to the Powertrain Control Module (PCM) on circuit K2. 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 A16 of the PCM.

The PCM provides a ground for the engine coolant temperature sensor signal (circuit K2) through circuit K4. Circuit K4 connects to cavity A4 of the PCM connector.

HELPFUL INFORMATION

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

- Battery temperature sensor
- Camshaft position sensor
- Crankshaft position sensor
- Downstream heated oxygen sensor
- Fuel pump module
- Intake air temperature sensor
- Manifold absolute pressure sensor
- Oil pressure sensor
- Powertrain control module
- Throttle position sensor
- Transmission solenoid assembly
- Upstream heated oxygen sensor
- Vehicle speed control switch
- Vehicle speed sensor

ENGINE COOLANT TEMPERATURE SENSOR (DIESEL)

The Engine Coolant Temperature (ECT) sensor on this engine application is a dual function sensor. It provides a engine coolant temperature input to the Powertrain Control Module (PCM) on Circuits K2 and Circuit K222.

Ground for the sensor is supplied on circuit K4.

The sensor is a variable resistor. As engine coolant temperature changes the resistance on the K4 circuit changes.

EVAPORATIVE SYSTEM LEAK DETECTION PUMP

Vehicle built for sale in the State of California are equipped with an evaporative system leak detection pump.

When the ignition switch is in the START or RUN position, it connects circuit A1 from fuse 8 in the Power Distribution Center (PDC) to circuit A21. Circuit A21 powers circuit F99 through PDC fuse 18. Circuit F99 feeds the leak detection pump.

On circuits J96 and J95, the PCM operates the leak detection pump. Circuit J96 connects to cavity C14 of the PCM. Circuit J95 connects to PCM cavity C10.

THROTTLE POSITION SENSOR

From the Powertrain Control Module (PCM), circuit K25 supplies 5 volts to the throttle position sensor (TPS). Circuit K25 connects to cavity A17 of the PCM.

DESCRIPTION AND OPERATION (Continued)

Circuit K22 delivers the TPS signal to the PCM. Circuit K22 connects to cavity A23 of the PCM.

The PCM provides a ground for the throttle position sensor signal (circuit K22) through circuit K4. Circuit K4 connects to cavity A4 of the PCM.

HELPFUL INFORMATION

Refer to Group 14 for throttle position sensor operation.

Circuit K25 splices to supply 5 volts to the manifold absolute pressure sensor, camshaft position sensor, and crankshaft position sensor.

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

- Battery temperature sensor
- Camshaft position sensor
- Crankshaft position sensor
- Downstream heated oxygen sensor
- Engine coolant temperature sensor
- Fuel pump module
- Intake air temperature sensor
- Manifold absolute pressure sensor
- Oil pressure sensor
- Powertrain control module
- Transmission solenoid assembly
- Upstream heated oxygen sensor
- Vehicle speed control switch
- Vehicle speed sensor

ACCELERATOR PEDAL POSITION SENSOR (DIESEL)

Power for the accelerator pedal position sensor is supplied by the Powertrain Control Module (PCM) on circuit K6. This is a 5 volt feed from the PCM.

Circuit K22 provides the pedal position input to the PCM. Ground for the sensor is supplied from the PCM on circuit K4.

LOW IDLE POSITION SWITCH (DIESEL)

Circuit K151 connects from the Powertrain Control Module (PCM) to the low idle position switch. This circuit provides the low idle switch input.

Ground for the switch is provided on circuit K4.

MANIFOLD ABSOLUTE PRESSURE SENSOR

From the Powertrain Control Module (PCM), circuit K25 supplies 5 volts to the manifold absolute pressure (MAP) sensor. Circuit K25 connects to cavity A17 of the PCM.

Circuit K70 delivers the MAP signal to the PCM. Circuit K70 connects to cavity A27 of the PCM.

The PCM provides a ground for the MAP sensor signal (circuit K70) through circuit K4. Circuit K4 connects to cavity A4 of the PCM.

HELPFUL INFORMATION

Refer to Group 14 for MAP sensor operation.

Circuit K25 splices to supply 5 volts to the camshaft position sensor, crankshaft position sensor and throttle position sensor.

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

- Battery temperature sensor
- Camshaft position sensor
- Crankshaft position sensor
- Downstream heated oxygen sensor
- Engine coolant temperature sensor
- Fuel pump module
- Intake air temperature sensor
- Oil pressure sensor
- Powertrain control module
- Throttle position sensor
- Transmission solenoid assembly
- Upstream heated oxygen sensor
- Vehicle speed control switch
- Vehicle speed sensor

MASS AIR FLOW SENSOR (DIESEL)

When the ignition switch is in the START or RUN position, it connects Circuit A1 from fuse 8 in the Power Distribution Center (PDC) to circuit A21. Circuit A21 powers circuit F99 through PDC fuse 18. Circuit F99 feeds the mass air flow sensor.

Circuit K155 provides the input to the PCM. A sensor ground is provided by the PCM on circuit K4.

Ground is also provided on circuit Z1.

INTAKE AIR TEMPERATURE SENSOR

The intake air temperature sensor provides an input to the Powertrain Control Module (PCM) on circuit K21. Circuit K21 connects to cavity A15 of the PCM.

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 for the intake air temperature sensor signal (circuit K21) through circuit K4. Circuit K4 connects to cavity A4 of the PCM.

HELPFUL INFORMATION

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

- Battery temperature sensor
- Camshaft position sensor
- Crankshaft position sensor
- Downstream heated oxygen sensor
- Engine coolant temperature sensor
- Fuel pump module
- Manifold absolute pressure sensor
- Oil pressure sensor
- Powertrain control module
- Throttle position sensor

DESCRIPTION AND OPERATION (Continued)

- Transmission solenoid assembly
- Upstream heated oxygen sensor
- Vehicle speed control switch
- Vehicle speed sensor

OIL PRESSURE SENSOR

The oil pressure sensor is a variable resistor. A change in engine oil pressure changes the resistance in the sending unit which alters the signal sensed by the Powertrain Control Module on circuit G6. Circuit G6 connects to cavity B23 of the PCM.

The PCM provides ground for the oil pressure sensor on circuit K4. Circuit K4 connects to cavity A4 of the PCM.

The PCM broadcasts the oil pressure data on the CCD bus. The micro-processor in the instrument cluster receives the signal from the CCD bus, calculates oil pressure and adjusts the gauge needle position.

The Body Control Module (BCM) also receives the oil pressure data broadcast by the PCM on the CCD bus. If oil pressure drops below a calibrated pressure, the BCM sounds an audible chime and illuminates the oil pressure warning lamp.

OIL PRESSURE SENSOR (DIESEL)

The oil pressure sensor is a variable resistor. A change in engine oil pressure changes the resistance in the sending unit which alters the signal sensed by the Powertrain Control Module on circuit G60.

The PCM provides ground for the oil pressure sensor on circuit K4.

The PCM broadcasts the oil pressure data on the CCD bus. The micro-processor in the instrument cluster receives the signal from the CCD bus, calculates oil pressure and adjusts the gauge needle position.

The Body Control Module (BCM) also receives the oil pressure data broadcast by the PCM on the CCD bus. If oil pressure drops below a calibrated pressure, the BCM sounds an audible chime and illuminates the oil pressure warning lamp.

WATER IN FUEL SENSOR (DIESEL)

The water in fuel sensor provides an input to the Powertrain Control Module (PCM) on circuit G123.

The PCM provides ground for the water in fuel sensor signal (circuit G123) through circuit K4.

FUEL INJECTORS

When the Automatic Shut Down (ASD) relay contacts close, they connect circuits F5 and A142. Circuit A142 supplies voltage to the fuel injectors. Each injector has a separate ground circuit controlled by the Powertrain Control Module (PCM).

Circuit K11 provides ground for injector number one. The K11 circuit connects to cavity B4 of the PCM.

Circuit K12 provides ground for injector number two. The K12 circuit connects to cavity B15 of the PCM.

Circuit K13 provides ground for injector number three. The K13 circuit connects to cavity B5 of the PCM.

Circuit K14 provides ground for injector number four. The K14 circuit connects to cavity B16 of the PCM.

Circuit K38 provides ground for injector number five. The K38 circuit connects to cavity B6 of the PCM.

Circuit K58 provides ground for injector number six. The K58 circuit connects to cavity B12 of the PCM.

On the 5.2L engine, circuit K17 provides ground for injector number seven. The K17 circuit connects to cavity B2 of the PCM.

Also on the 5.2L engine, circuit K18 provides ground for injector number eight. The K18 circuit connects to cavity B13 of the PCM.

HELPFUL INFORMATION

- Circuit A142 splices to supply voltage to the fuel injectors, ignition coil, PCM, generator, and heated oxygen sensors.

- For information about fuel injector operation, refer to Group 14.

FUEL INJECTION PUMP (DIESEL)

The fuel injection pump used on this engine application performs several functions. Each of these is described as follows.

FUEL SHUT-OFF SOLENOID

Power for the fuel shut-off solenoid is supplied on circuit A142. This circuit is HOT when the contacts in the diesel Powertrain Control Module (PCM) relay are CLOSED. Ground for the solenoid is controlled by the PCM on circuit K153.

SOLENOID VALVE

Power for the solenoid is supplied on circuit A142. This circuit is HOT when the contacts in the diesel Powertrain Control Module (PCM) relay are CLOSED. Ground for the solenoid is controlled by the PCM on circuit K238.

FUEL TEMP SENSOR

Circuit K156 connects between the Powertrain Control Module (PCM) and the fuel temperature sensor. The sensor is a variable resistor. As fuel temperature changes the resistance on circuit K156 changes. Ground for the sensor is supplied on circuit K4.

CONTROL SLEEVE POSITION SENSOR

Circuit K134 connects between the Powertrain Control Module (PCM) and the control sleeve position sensor. This circuit is the position input to the PCM.

Circuit K57 is used for the middle tap, and circuit K135 is used for the measure coil.

DESCRIPTION AND OPERATION (Continued)

FUEL QUANTITY ACTUATOR

Power for the fuel quantity Actuator is supplied on circuit A142. This circuit is HOT when the contacts in the diesel Powertrain Control Module (PCM) relay are CLOSED. Ground for the Actuator is controlled by the PCM on circuit K140.

FUEL HEATER (DIESEL)

When the ignition switch is in the START or RUN position, it connects circuit A1 from fuse 8 in the Power Distribution Center (PDC) to circuit A21. Circuit A21 powers circuit F99 through PDC fuse 18. Circuit F99 feeds the coil side of the fuel heater relay. Ground for the relay is supplied by circuit Z4.

When the contacts of the fuel heater relay are closed they connect circuit A12 from fuse 4 of the PDC and circuit A64. Circuit A64 supplies voltage to the fuel heater. Ground for the fuel heater is supplied on circuit Z1.

INSTRUMENTED FIRST INJECTOR (DIESEL)

The instrumented first injector is used to provide a input to the Powertrain Control Module (PCM). Circuit K67 connects from the PCM connector, cavity 12, to the injector and is used as the signal wire.

Circuit K68, from cavity 11 of the PCM connector, is used for a return from the injector.

GLOW PLUGS (DIESEL)

The glow plugs used on this vehicle are controlled by the Powertrain Control Module (PCM) and the glow plug relay. Power for the coil side of the relay is supplied on circuit A142. This circuit is HOT when the contacts in the diesel Powertrain Control Module (PCM) relay are CLOSED.

The ground side of the relay is controlled by the PCM on circuit K152. This circuit connects to cavity 50 of the PCM connector.

When the PCM determines a need for glow plug operation it supplies a ground path on circuit K152. This causes the contacts in the relay to CLOSE connecting circuit A0 and K154. The A0 circuit is HOT at all times. Circuit K154 connects from the relay to the glow plugs.

The glow plugs are case grounded.

IGNITION COIL

When the Automatic Shut Down (ASD) relay contacts close, circuit A142 supplies voltage to the ignition coil. The Powertrain Control Module (PCM) controls the ground path for the ignition coil on circuit K19. Circuit K19 connects to cavity A7 of the PCM.

HELPFUL INFORMATION

Circuit A142 splices to supply voltage to the fuel injectors, PCM, heated oxygen sensors, and generator.

IDLE AIR CONTROL (IAC) 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 A20 of the PCM
- Circuit K40 connects to cavity A11 of the PCM
- Circuit K59 connects to cavity A10 of the PCM
- Circuit K60 connects to cavity A19 of the PCM

DUTY CYCLE EVAP/PURGE SOLENOID

When the ignition switch is in the START or RUN position, it connects circuit A1 from fuse 8 in the Power Distribution Center (PDC) to circuit A21. Circuit A21 powers circuit F99 through PDC fuse 18. Circuit F99 powers to the Duty Cycle EVAP/Purge solenoid.

The Powertrain Control Module (PCM) provides the ground path for the solenoid on circuit K52. Circuit K52 connects to cavity C20 of the PCM.

EGR SOLENOID (DIESEL)

Power for the EGR solenoid is supplied on circuit A142. This circuit is HOT when the contacts in the diesel Powertrain Control Module (PCM) relay are CLOSED. Ground for the solenoid is supplied on circuit Z1.

The PCM controls the operation of the solenoid by supplying a ground path for circuit K35. This circuit connects to cavity 25 of the PCM connector

LOW COOLANT LEVEL SWITCH (DIESEL)

When the low coolant level switch closes, it connects circuit G18 from the Powertrain Control Module (PCM) and circuit K167. Circuit K167 connects to circuit K4 sensor ground circuit.

When the low coolant level switch is closed the PCM receives a signal from circuit G18.

CCD BUS

Circuits D1 and D2 connect the Powertrain Control Module (PCM) to the CCD Bus. Circuit D1 connects to cavity C30 of the PCM. Circuit D2 connects to cavity C28 of the PCM. Circuits D1 and D2 are a twisted pair of wires.

Several modules and controllers broadcast and receive data on the CCD Bus. Each module or controller is enabled to receive only certain messages. The PCM broadcasts the following messages on the CCD bus.

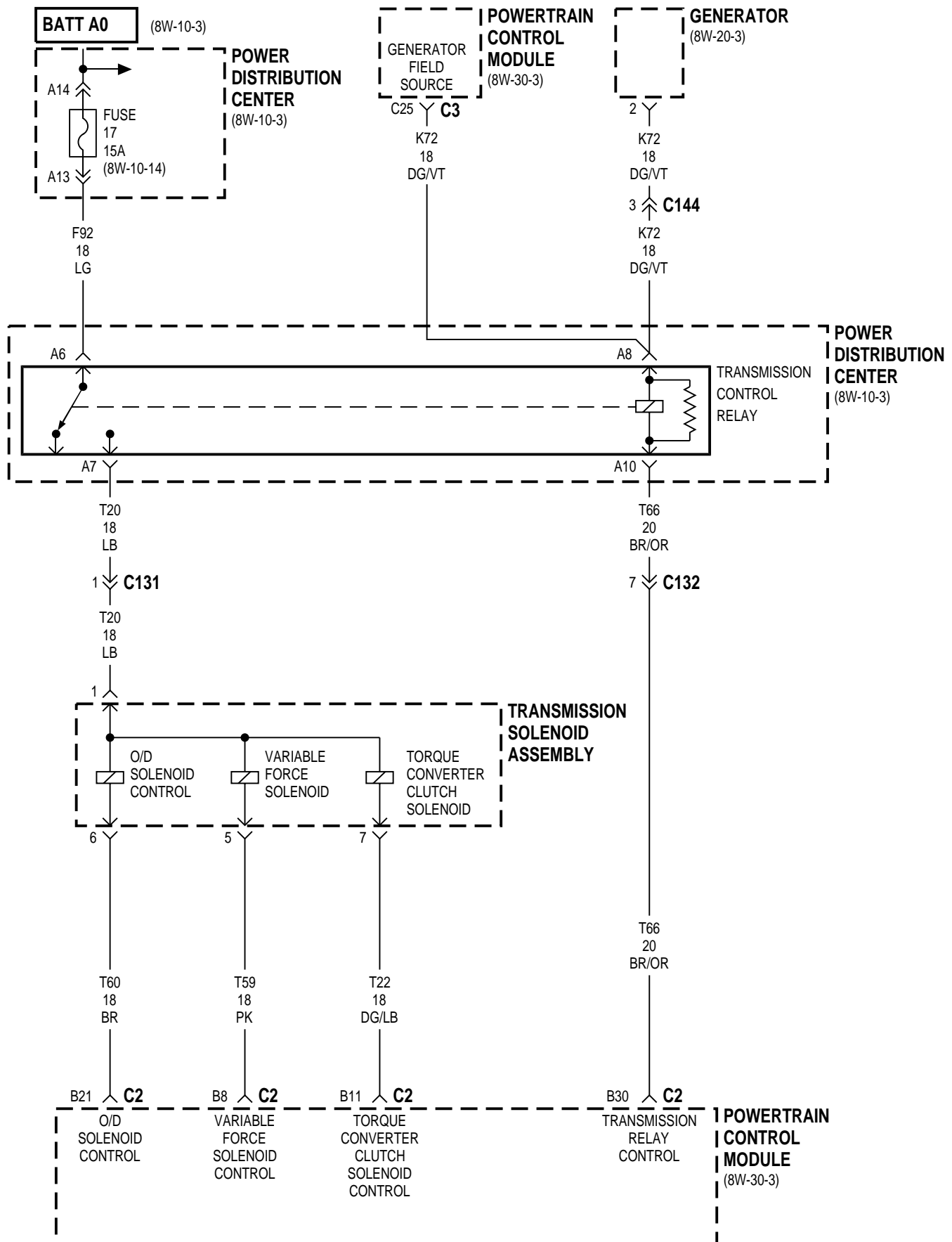
- Engine RPM
- Injector on-time and distance pulses
- Vehicle speed
- Engine temperature
- Battery temperature
- Oil pressure

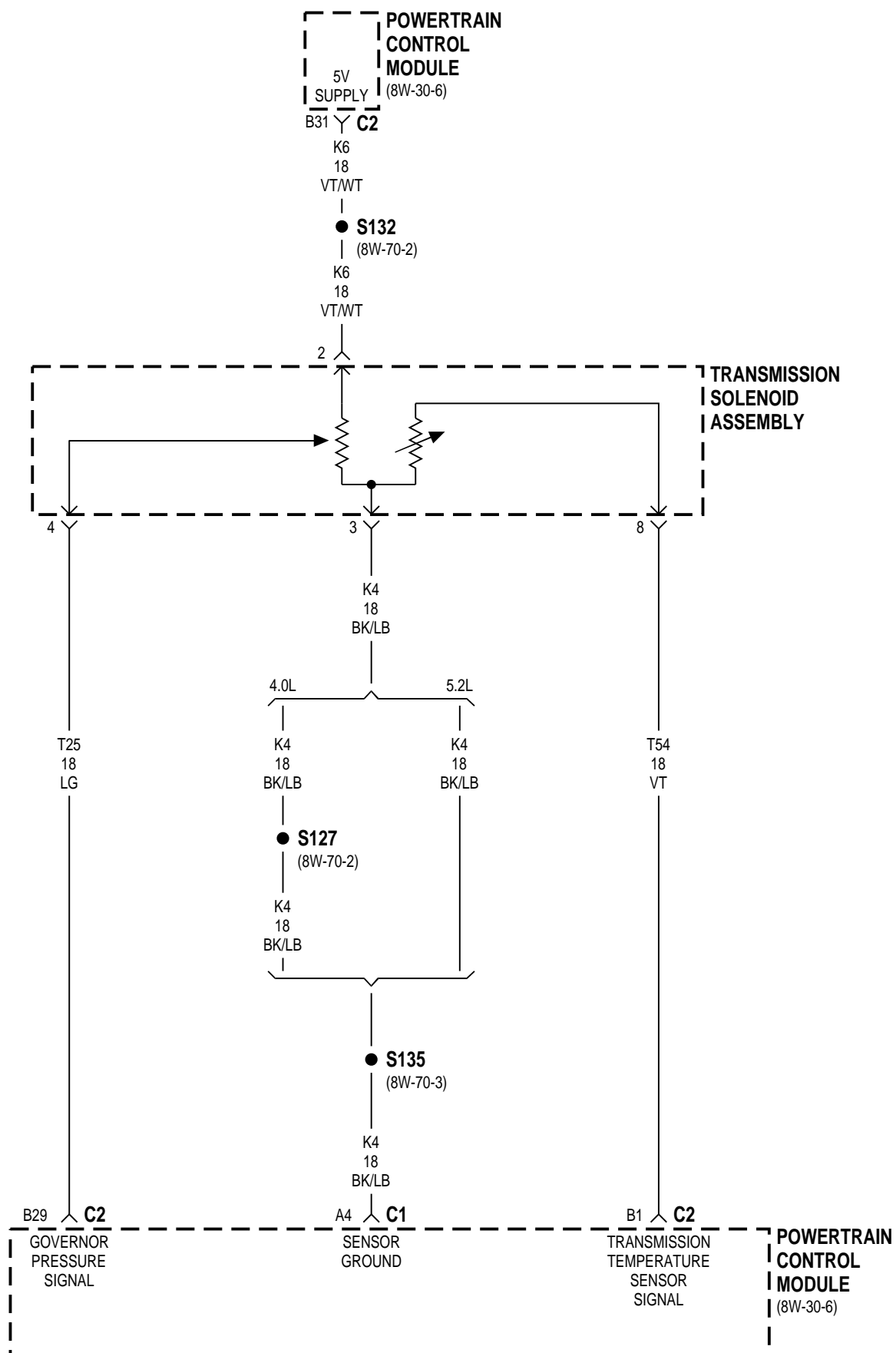
8W-31 TRANSMISSION CONTROL SYSTEM

INDEX

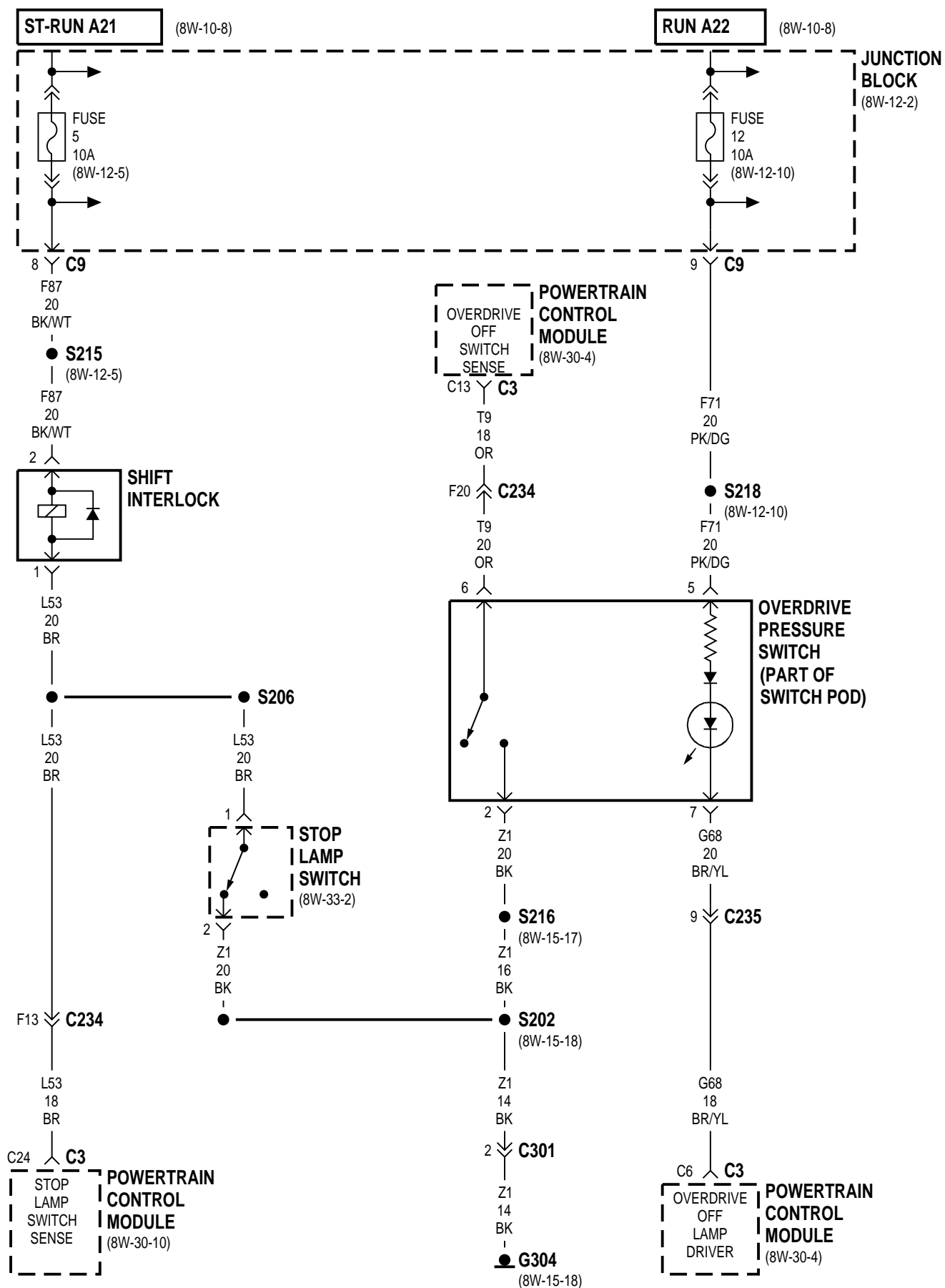
	page
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	7

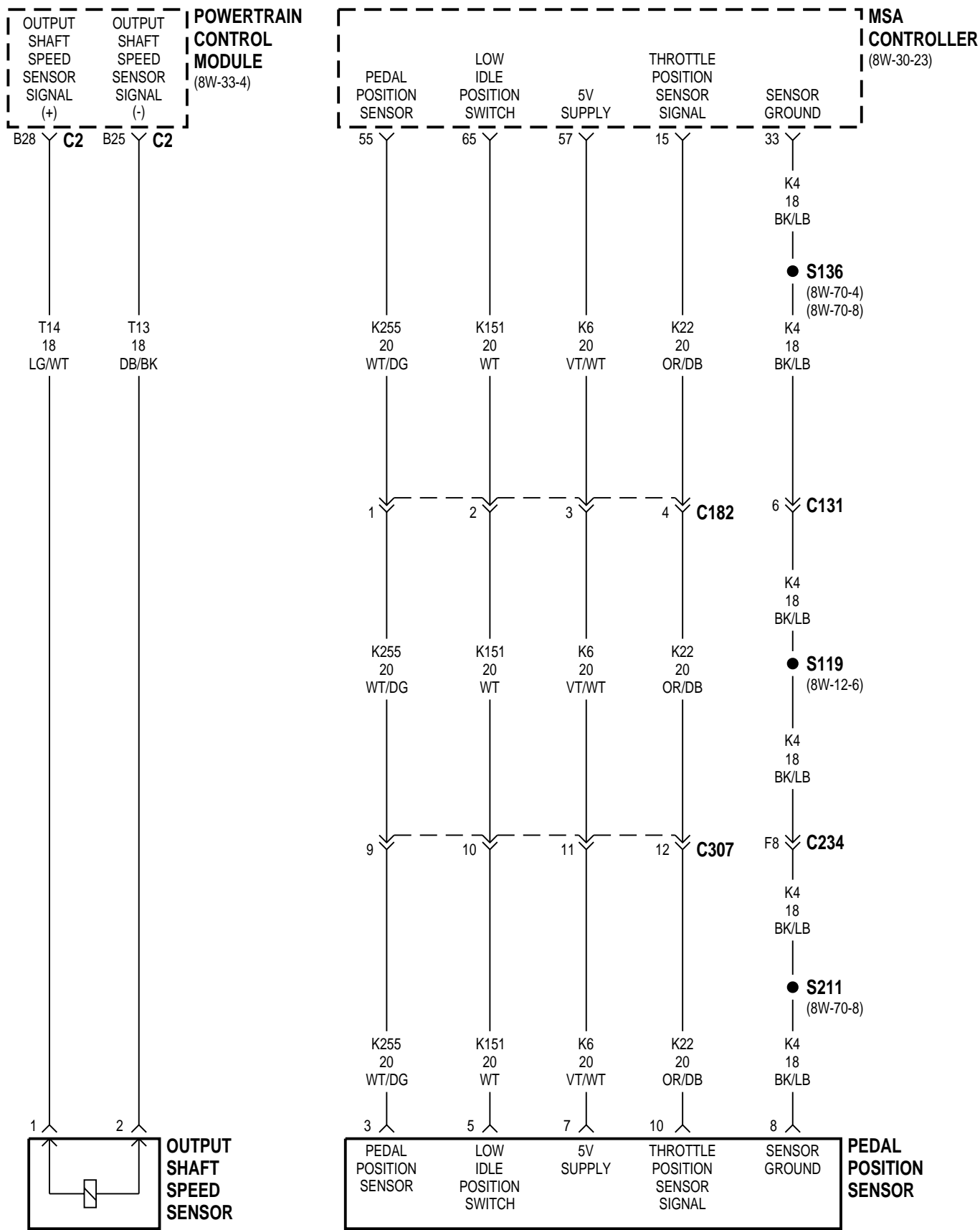
Component	Page	Component	Page
Fuse 5	8W-31-5	S135	8W-31-3, 4
Fuse 12	8W-31-5	S136	8W-31-4
Fuse 17	8W-31-2	S202	8W-31-5
G304	8W-31-5	S206	8W-31-5
Generator	8W-31-2	S215	8W-31-5
Junction Block	8W-31-5	S216	8W-31-5
MSA Controller	8W-31-6	S218	8W-31-5
O/D Solenoid Control	8W-31-2	Shift Interlock	8W-31-5
Output Shaft Speed Sensor	8W-31-4, 6	Stop Lamp Switch	8W-31-5
Overdrive Pressure Switch	8W-31-5	Throttle Position Sensor	8W-31-4
Pedal Position Sensor	8W-31-6	Torque Converter Clutch Solenoid	8W-31-2
Power Distribution Center	8W-31-2	Transmission Control Relay	8W-31-2
Powertrain Control Module	8W-31-2, 3, 4, 5, 6	Transmission Solenoid Assembly	8W-31-2
S127	8W-31-3, 4	Transmission Solenoid Assembly	8W-31-3
S131	8W-31-4	Variable Force Solenoid	8W-31-2
S132	8W-31-3, 4	Vehicle Speed Sensor	8W-31-4
S133	8W-31-4		











8W-31 TRANSMISSION CONTROL SYSTEM

INDEX

	page		page
DESCRIPTION AND OPERATION		SHIFT INTERLOCK	7
GOVERNOR PRESSURE SENSOR	7	TRANSMISSION CONTROL RELAY	7
OUTPUT SHAFT SPEED SENSOR	7	TRANSMISSION SOLENOID ASSEMBLY	7
OVERDRIVE SWITCH	7	TRANSMISSION TEMPERATURE SENSOR	8

DESCRIPTION AND OPERATION

OVERDRIVE SWITCH

Automatic transmission equipped vehicles have an overdrive switch. The operator disables or enables overdrive when the switch is depressed.

The overdrive system consists of a switch connected to the Powertrain Control Module (PCM) and a Light Emitting Diode (LED) which illuminates for the overdrive ON/OFF indicator.

If overdrive is currently enabled, it is disabled when the operator depresses the overdrive switch. Also, if the operator already disabled overdrive, it is enabled when the switch is depressed.

Circuit T9 from the overdrive switch connects to cavity C13 of the PCM and provides the overdrive signal. Circuit Z1 provides ground for the switch.

In the RUN position, the ignition switch connects circuit A1 from fuse 8 in the Power Distribution Center (PDC) with circuit A22. Circuit A22 powers circuit F71 through fuse 12 in the junction block. Circuit F71 supplies power for the overdrive ON/OFF indicator LED. The PCM turns the overdrive ON/OFF indicator ON or OFF by providing ground on circuit G68. Circuit G68 connects to cavity C6 of the PCM.

TRANSMISSION CONTROL RELAY

The transmission control relay powers the overdrive solenoid, torque convertor clutch solenoid, and variable force solenoid. All three solenoids are molded together.

When the ignition switch is in the START or RUN positions, it connects circuit A1 from fuse 8 in the Power Distribution Center (PDC) to circuit A21. Circuit A21 powers circuit F99 through fuse 18 in the PDC. Circuit F99 powers the coil side of the electronic transmission relay. The Powertrain Control Module (PCM) provides ground for the relay on circuit T66. Circuit T66 connects to cavity B30 of the PCM.

When the PCM grounds the relay, the relay contacts connect circuit F92 from fuse 17 in the PDC to circuit T20. Circuit T20 powers the solenoids.

TRANSMISSION SOLENOID ASSEMBLY

The Torque Convertor Clutch (TCC) solenoid, overdrive solenoid and variable force solenoid are molded together. Circuit T20 from the electronic transmission relay supplies power for the solenoids. The Powertrain Control Module (PCM) operates each solenoid individually by providing ground for each solenoid on separate circuits.

- The PCM provides ground for the TCC solenoid on circuit T22. Circuit T22 connects to cavity B11 of the PCM.

- The PCM supplies ground for the overdrive solenoid on circuit T60. Circuit T60 connects to cavity B21 of the PCM.

- On circuit T59, the PCM provides ground for the variable force solenoid. Circuit T59 connects to cavity B8 of the PCM.

SHIFT INTERLOCK

The shift interlock prevents the operator from shifting the vehicle out of PARK unless the brake pedal is pressed. When the ignition switch is in the START or RUN position, circuit A21 feeds circuit F87 through fuse 5 in the junction block. Circuit F87 splices to power the shift interlock.

When the brake pedal is not depressed, the stop lamp switch provides ground for interlock by connecting circuit L53 to ground. When grounded, the interlock prevents shifting the transmission out of PARK. When the brake pedal is pressed, the stop lamp switch disconnects circuit L53 from ground.

OUTPUT SHAFT SPEED SENSOR

The output shaft speed sensor generates a signal indicating the speed of the transmission output shaft. Circuits T13 and T14 connect the sensor to the Powertrain Control Module (PCM). Circuit T13 connects to cavity B25 of the PCM. Circuit T14 connects to cavity B28.

GOVERNOR PRESSURE SENSOR

The governor pressure sensor supplies the transmission pressure input to the Powertrain Control Module on circuit T25. Circuit T25 connects to cavity

DESCRIPTION AND OPERATION (Continued)

B29 of the PCM. Circuit K6 from cavity B31 of the PCM supplies 5 volts to the sensor. The PCM provides ground for the governor pressure sensor on circuit K4. Circuit K4 connects to cavity A4 of the PCM.

The governor pressure sensor is part of the transmission solenoid assembly.

TRANSMISSION TEMPERATURE SENSOR

The transmission temperature sensor is located in the transmission solenoid assembly. The Powertrain Control Module (PCM) supplies 5 volts to the sensor on circuit K6. Circuit T54 from the sensor connects to cavity B1 of the PCM and provides the transmission temperature input. The PCM provides ground for the sensor on cavity K4.

If transmission temperature exceeds a calibrated temperature, the PCM sends a signal to the Vehicle Information Center (VIC) over the CCD bus. In response, the VIC displays a message to the driver.

HELPFUL INFORMATION

Circuit K6 also supplies 5 volts to the vehicle speed sensor.

Circuit K4 also provides ground for the signals from the following:

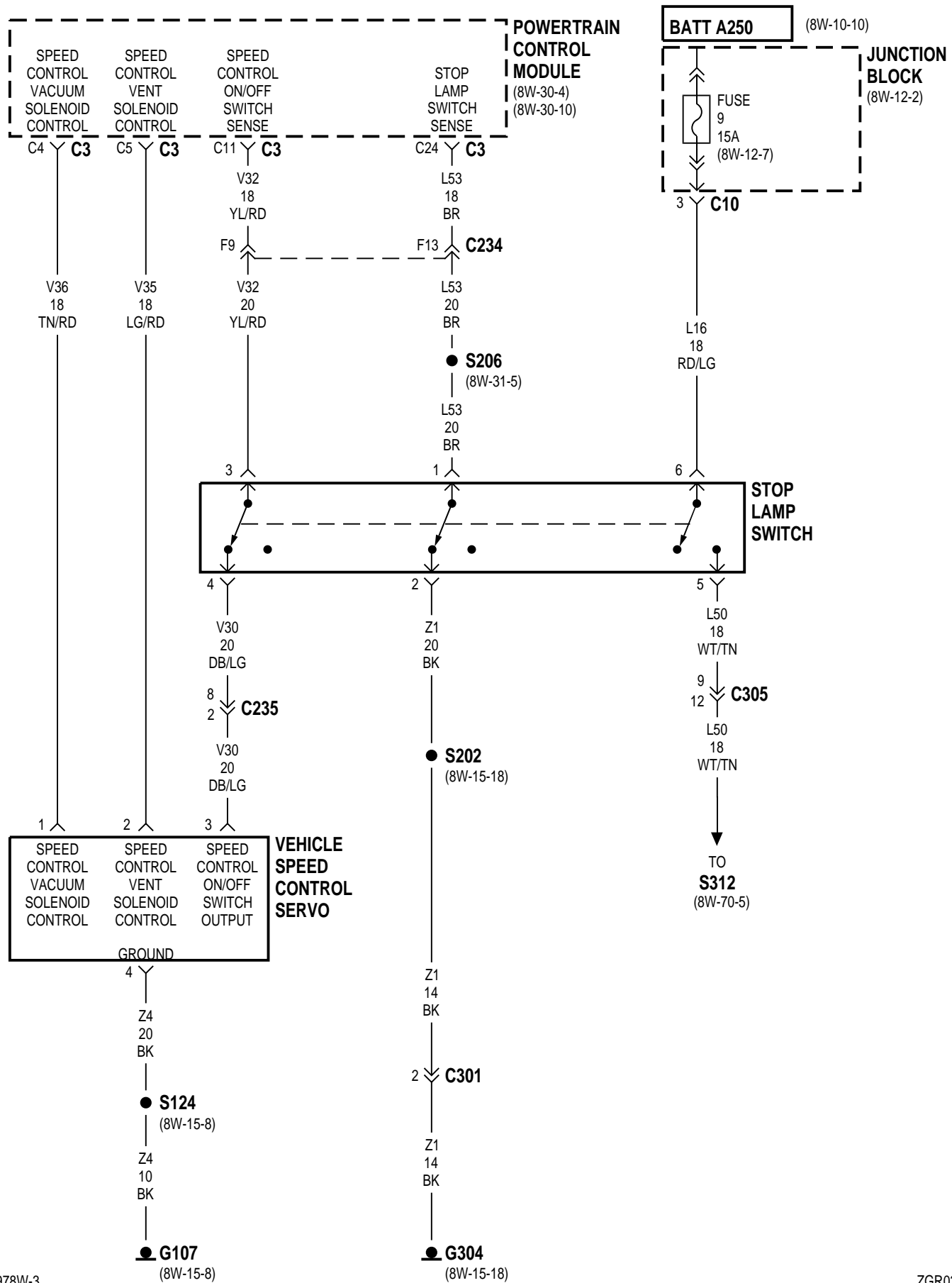
- Battery temperature sensor
- Camshaft position sensor
- Crankshaft position sensor
- Downstream heated oxygen sensor
- Engine coolant temperature sensor
- Fuel pump module
- Intake air temperature sensor
- Manifold absolute pressure sensor
- Oil pressure sensor
- Powertrain control module
- Throttle position sensor
- Transmission solenoid assembly
- Upstream heated oxygen sensor
- Vehicle speed control switch
- Vehicle speed sensor

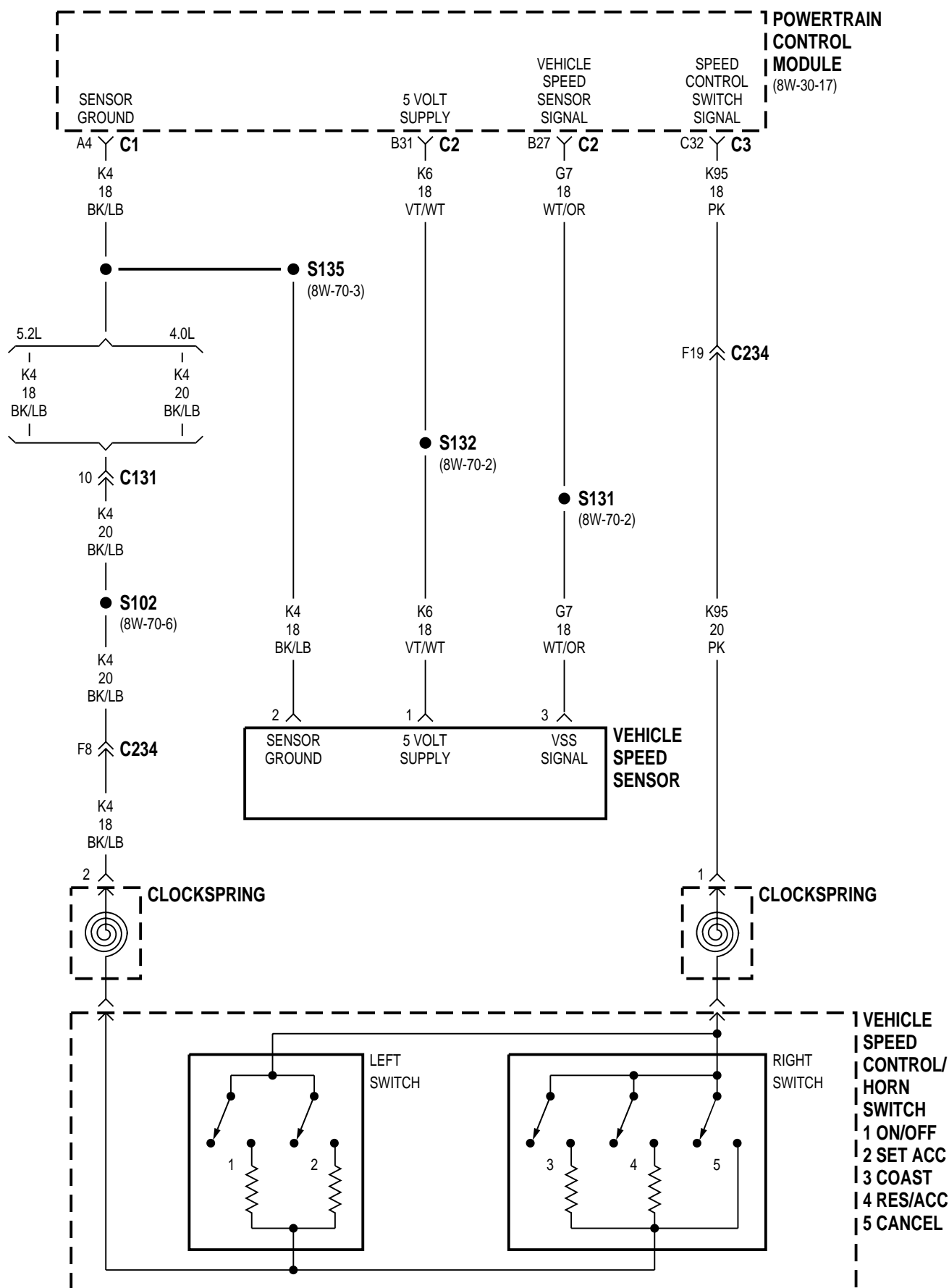
8W-33 VEHICLE SPEED CONTROL

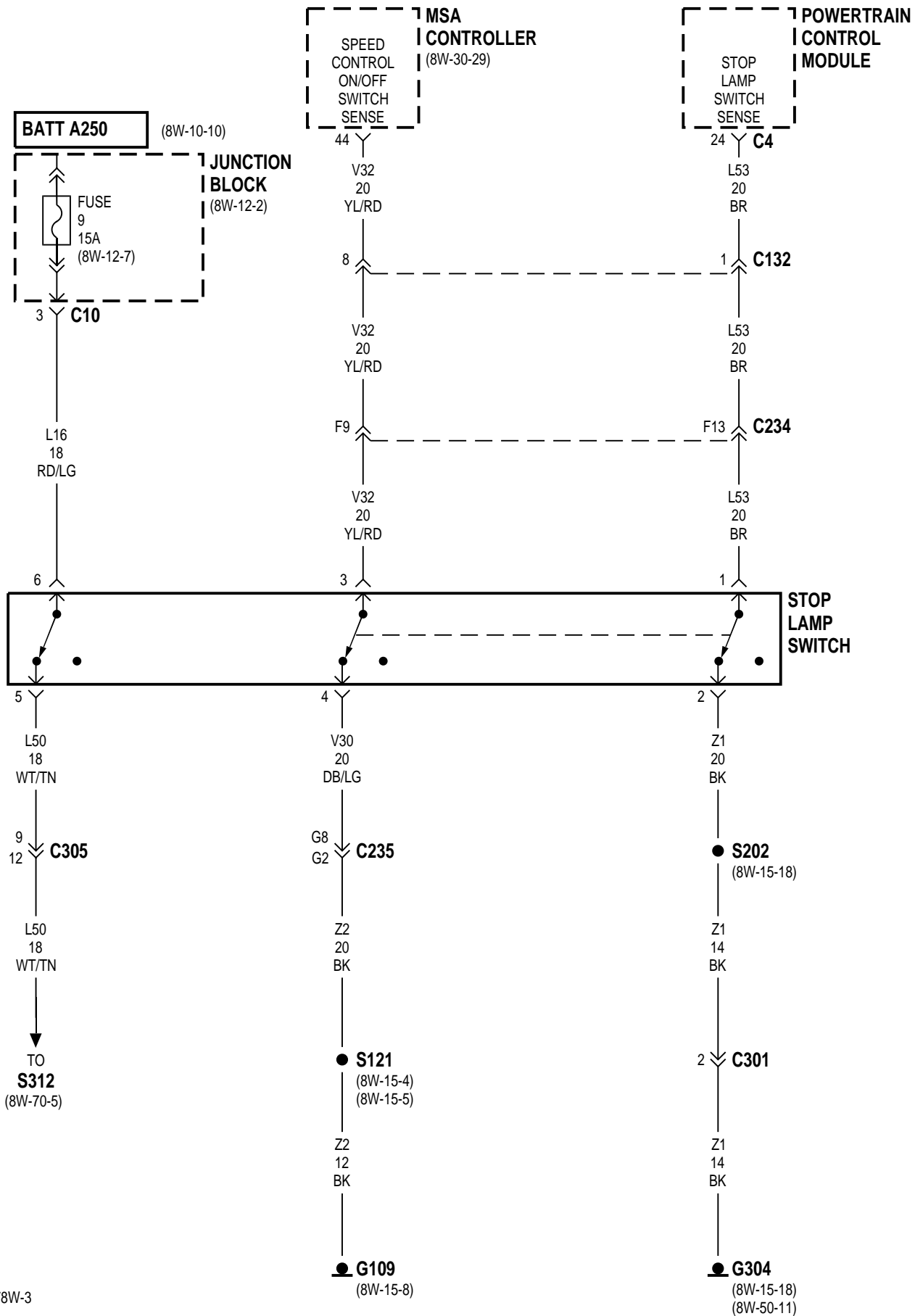
INDEX

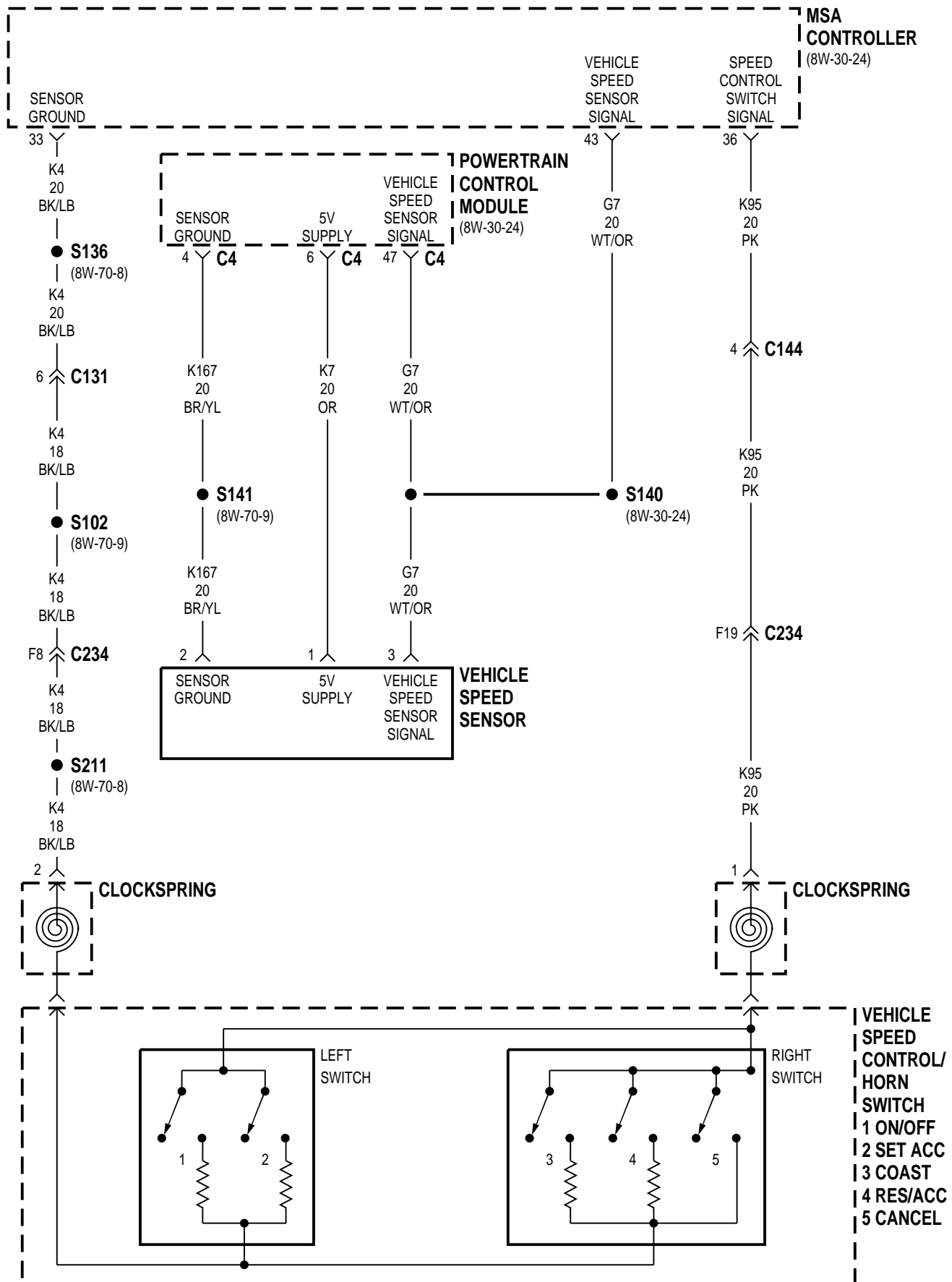
	page
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	6

Component	Page	Component	Page
Clockspring	8W-33-3, 5	S132	8W-33-3
Fuse 9	8W-33-2, 4	S135	8W-33-3
G107	8W-33-2	S136	8W-33-5
G109	8W-33-4	S140	8W-33-5
G304	8W-33-2, 4	S141	8W-33-5
Junction Block	8W-33-2, 4	S202	8W-33-2, 4
Left Switch	8W-33-3, 5	S206	8W-33-2
MSA Controller	8W-33-4, 5	S211	8W-33-5
Powertrain Control Module	8W-33-2, 3, 4, 5	S312	8W-33-2, 4
Right Switch	8W-33-3, 5	Stop Lamp Switch	8W-33-2, 4
S102	8W-33-3, 5	Vehicle Speed Control Servo	8W-33-2
S121	8W-33-4	Vehicle Speed Control/Horn Switch	8W-33-3, 5
S124	8W-33-2	Vehicle Speed Sensor	8W-33-3, 5
S131	8W-33-3		









8W-33 VEHICLE SPEED CONTROL

DESCRIPTION AND OPERATION

VEHICLE SPEED CONTROL

The Powertrain Control Module (PCM) operates the vehicle speed control system. The vehicle speed control switches are located in the steering wheel.

Circuit V32 from cavity C11 of the PCM connects to circuit V30 through the stop lamp switch. Circuit V30 powers the vehicle speed control servo.

Circuit K95 from PCM cavity C32 connects to the vehicle speed control switches. The switches are wired in parallel and each contains a separate resistor. The voltage level present on circuit K95 (at PCM cavity C32) depends on which speed control switch is selected. Circuit K4 from PCM cavity A4 supplies ground for the speed control switches.

- When the ON/OFF switch is open, the voltage level on circuit K95 at PCM cavity C32 has a nominal value of 5.0 volts with a range from 4.8 to 5.0 volts.

- When the ON/OFF switch closes, the voltage level on circuit K95 at PCM cavity C32 has nominal value of 1.51 volts with a range from 1.31 to 1.61 volts.

- When the SET switch closes, the voltage level on circuit K95 at PCM cavity C32 has nominal value of 3.8 volts with a range from 3.6 to 3.9 volts.

- When the RESUME/ACCEL switch closes, the voltage level on circuit K95 at PCM cavity C32 has nominal value of 4.4 volts with a range from 4.2 to 4.5 volts.

- When the COAST switch closes, the voltage level on circuit K95 at PCM cavity C32 has nominal value of 2.92 volts with a range from 2.72 to 3.02 volts.

- When the CANCEL switch closes, the voltage level on circuit K95 at PCM cavity C32 has is 0.1 volts or less.

The PCM controls the vent and vacuum functions of the vehicle speed control servo on circuits V35 and V36. Depending on the signal it receives from vehicle speed control switches, the PCM either applies vacuum to or vents vacuum from the servo. Circuit V36 from cavity C4 of the PCM sends the vacuum signal to the servo. Circuit V35 from cavity C5 sends the vent signal.

Circuit L53 provides the stop lamp switch sense input to the PCM at cavity C24. The stop lamp switch connects circuit L53 to ground on circuit Z1. When the brake pedal is depressed, the stop lamp switch opens and disconnects circuits L53 and Z1, and circuits V32 and V30. When the stop lamp

switch disconnects circuits V32 and V30, power is removed from the speed control servo.

HELPFUL INFORMATION

Circuit K4 also provides ground for some of the engine control sensors that provide inputs to the PCM.

VEHICLE SPEED CONTROL (DIESEL)

The Powertrain Control Module (PCM) operates the vehicle speed control system. The vehicle speed control switches are located in the steering wheel.

Circuit V32 from the PCM connects to circuit V30 through the stop lamp switch. Circuit V30 connects to circuit Z2 ground. Circuit L53 from the PCM connects to Circuit Z1 ground, through the stop lamp switch.

Circuit K95 from the PCM connects to the vehicle speed control switches. The switches are wired in parallel and each contains a separate resistor. The voltage level present on circuit K95 at the PCM depends on which speed control switch is selected. Circuit K4 from PCM supplies ground for the speed control switches.

- When the ON/OFF switch is open, the voltage level on circuit K95 at the PCM has a nominal value of 5.0 volts with a range from 4.8 to 5.0 volts.

- When the ON/OFF switch closes, the voltage level on circuit K95 at the PCM has nominal value of 1.51 volts with a range from 1.31 to 1.61 volts.

- When the SET switch closes, the voltage level on circuit K95 at the PCM has nominal value of 3.8 volts with a range from 3.6 to 3.9 volts.

- When the RESUME/ACCEL switch closes, the voltage level on circuit K95 at the PCM has nominal value of 4.4 volts with a range from 4.2 to 4.5 volts.

- When the COAST switch closes, the voltage level on circuit K95 at the PCM has nominal value of 2.92 volts with a range from 2.72 to 3.02 volts.

- When the CANCEL switch closes, the voltage level on circuit K95 at the PCM is 0.1 volts or less.

Circuit L53 and V32 provide stop lamp switch sense input to the PCM. When the brake pedal is depressed, the stop lamp switch opens and disconnects circuits L53 and Z1, and circuits V32 and V30 indicating brakes are applied.

HELPFUL INFORMATION

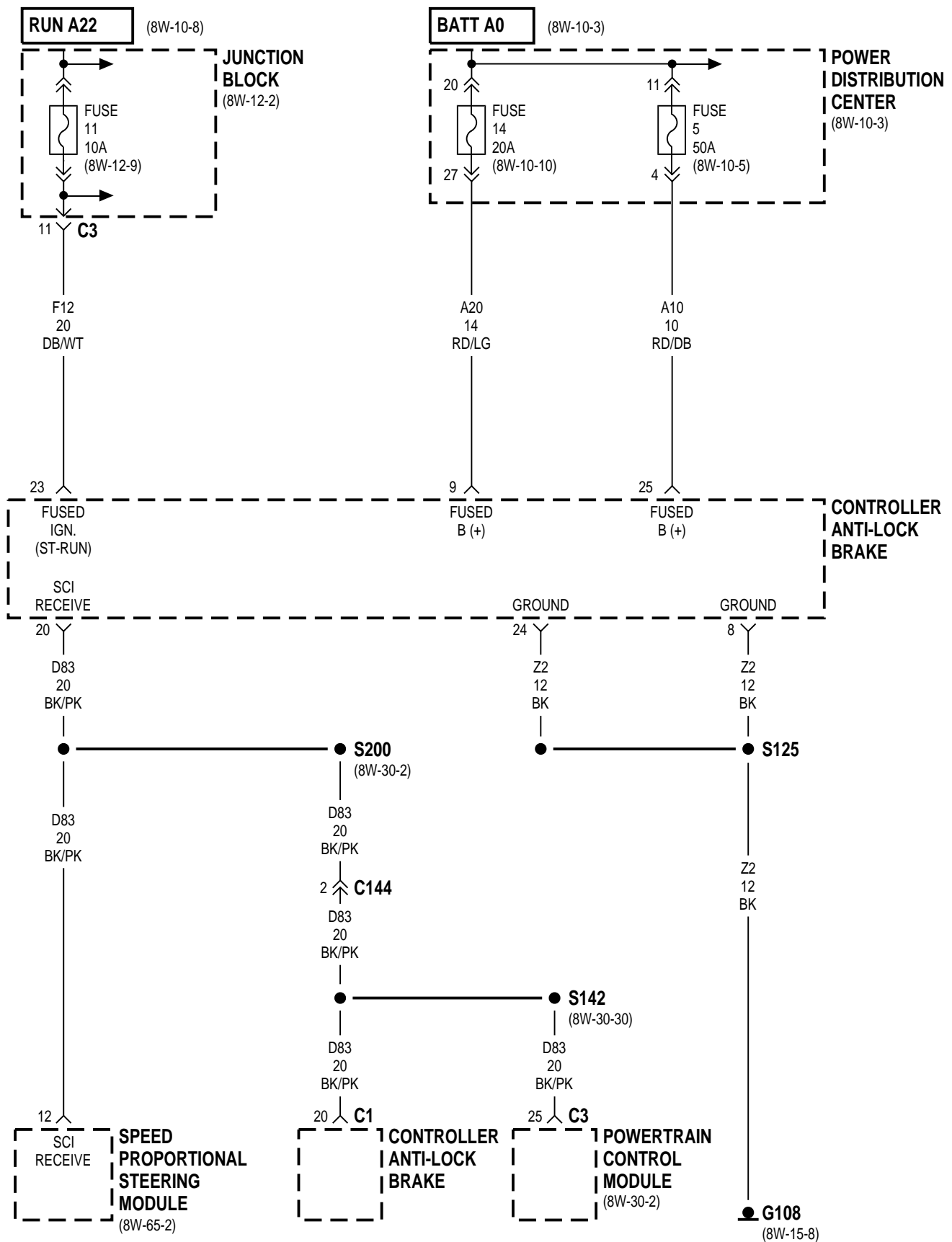
Circuit K4 also provides ground for some of the engine control sensors that provide inputs to the PCM.

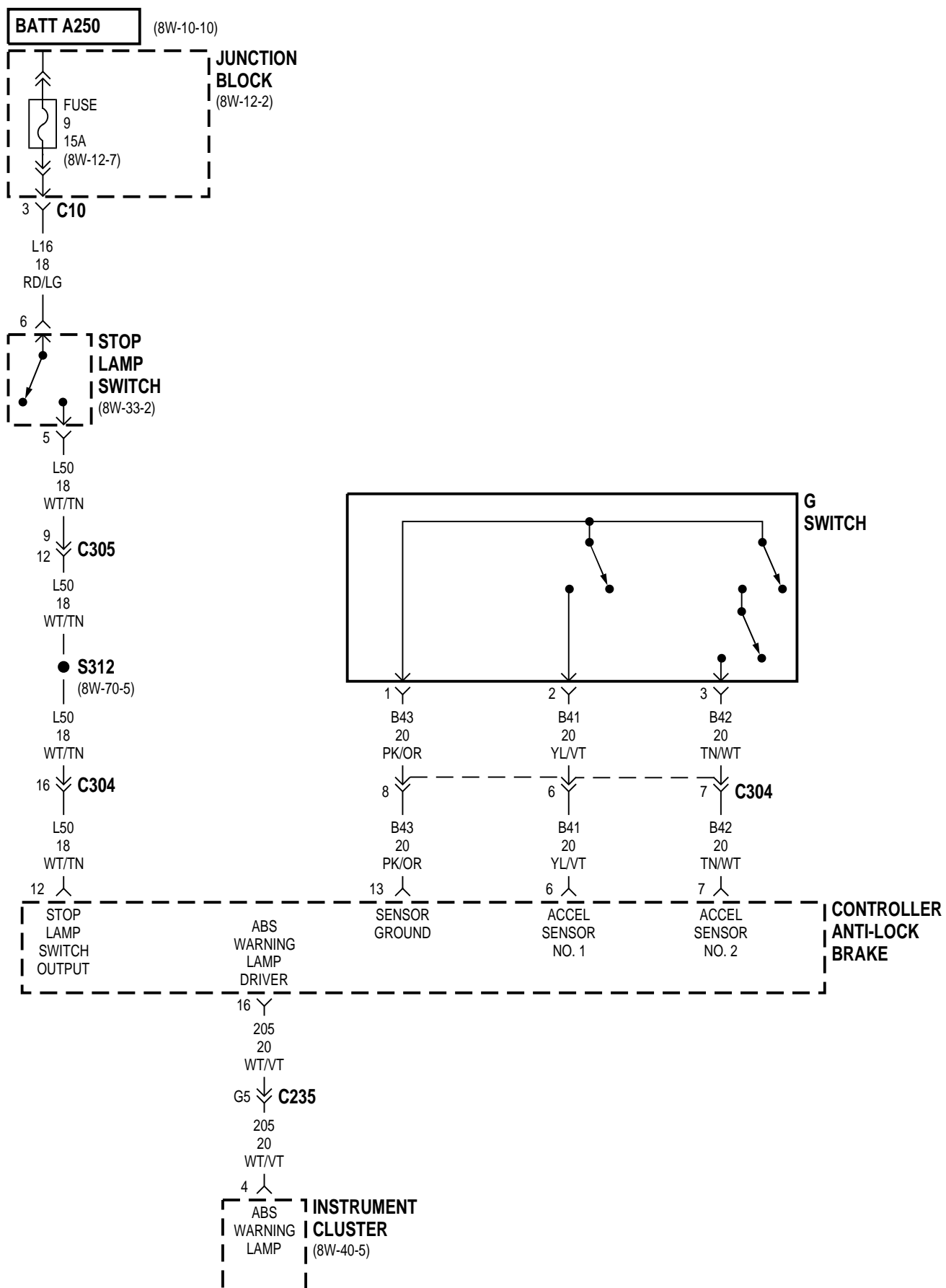
8W-35 ALL-WHEEL ANTI-LOCK BRAKES

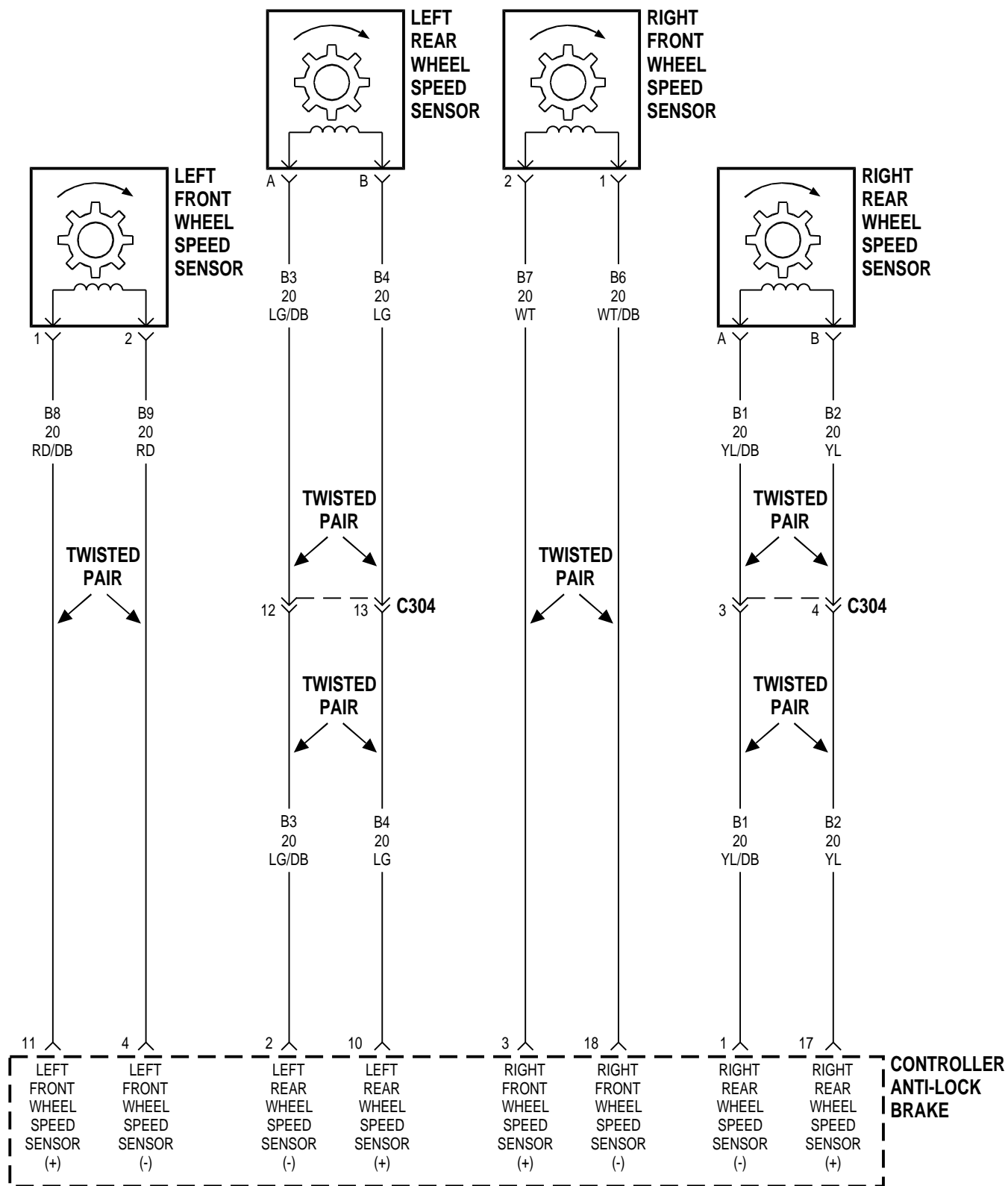
INDEX

	page
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	5

Component	Page	Component	Page
Controller Anti-Lock Brake	8W-35-2, 3, 4	Power Distribution Center	8W-35-2
Fuse 5	8W-35-2	Powertrain Control Module	8W-35-2
Fuse 9	8W-35-3	Right Front Wheel Speed Sensor	8W-35-4
Fuse 11	8W-35-2	Right Rear Wheel Speed Sensor	8W-35-4
Fuse 14	8W-35-2	S125	8W-35-2
G Switch	8W-35-3	S142	8W-35-2
G108	8W-35-2	S200	8W-35-2
Instrument Cluster	8W-35-3	S312	8W-35-3
Junction Block	8W-35-2, 3	Speed Proportional Steering Module	8W-35-2
Left Front Wheel Speed Sensor	8W-35-4	Stop Lamp Switch	8W-35-3
Left Rear Wheel Speed Sensor	8W-35-4		







8W-35 ALL-WHEEL ANTI-LOCK BRAKES

INDEX

	page		page
DESCRIPTION AND OPERATION		INTRODUCTION	5
ABS WARNING LAMP	5	STOP LAMP SWITCH INPUT	5
DATA LINK CONNECTOR	5	WHEEL SPEED SENSORS	5
G-SWITCH	5		

DESCRIPTION AND OPERATION

INTRODUCTION

Several fuses supply power for the Anti-Lock Brake System (ABS); fuses 5, 8, 11, and 14 in the Power Distribution Center (PDC) and fuse 9 and 11 in the junction block. Fuses 5, 8, 11, and 14 in the PDC are connected directly to battery voltage and are HOT all times. Fuse 11 in the junction block is HOT when the ignition switch is in the RUN position. Fuse 9 in the junction block is Hot at all times.

In the RUN position, the ignition switch connects circuit A1 from fuse 8 in the PDC with circuit A22. Circuit A22 feeds circuit F12 through fuse 11 in the junction block. Circuit F12 connects to the Controller, Anti-Lock Brakes (CAB).

Circuit Z2 provides ground for the CAB.

Refer to group 5, Brakes for operational descriptions of ABS system components.

WHEEL SPEED SENSORS

The all wheel anti-lock system uses four wheel speed sensors; one for each wheel. Each sensor converts wheel speed into an electrical signal that it transmits to the Controller, Anti-Lock Brakes (CAB). A pair of twisted wires connect to each sensor to provide signals to the CAB.

Circuits B6 and B7 provide signals to the CAB from the right front wheel speed sensor.

Circuits B8 and B9 provide signals to the CAB from the left front wheel speed sensor.

Circuits B1 and B2 provide signals to the CAB from right rear wheel speed sensor.

Circuits B4 and B3 provide signals to the CAB from the left rear wheel speed sensor.

G-SWITCH

During four-wheel drive operation, the G-switch provides deceleration data to the Controller, Anti-Lock Brakes (CAB). Refer to Group 5, Brakes for additional information.

Circuits B41, B42, and B43 connect the G-switch to the CAB. Circuits B41 and B42 provide switch states while circuit B43 provides ground.

ABS WARNING LAMP

Circuit F87 from fuse 5 in the junction block provides power for the ABS warning lamp in the instrument cluster. Ground for the ABS warning lamp is provided by the Controller, Anti-Lock Brakes (CAB). The CAB illuminates the lamp by providing ground on circuit 205.

HELPFUL INFORMATION

When the ignition switch is in the START or RUN position, it connects circuit A1 from fuse 8 in the Power Distribution Center (PDC) to circuit A21. Circuit A21 powers circuit F87 through fuse 5 in the junction block.

STOP LAMP SWITCH INPUT

Circuit L50 from the stop lamp switch provides the brake switch input to the Controller, Anti-Lock Brakes (CAB). When the brake pedal is depressed, the stop lamp switch closes to supply battery voltage from circuit L16 to circuit L50. Circuit L50 connects to the CAB. Circuit L16 originates at fuse 9 in the junction block. Circuit A250 from fuse 11 in the Power Distribution Center (PDC) supplies power to junction block fuse 9.

DATA LINK CONNECTOR

Circuit D83 from cavity A3 of the Controller, Anti-Lock Brakes (CAB) transmits data to the DRB scan tool through the data link connector. Through the data link connector, circuits Z1 and Z2 provide ground for the DRB scan tool.

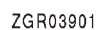
Circuit F75 supplies battery voltage to the scan tool through the diagnostic connector.

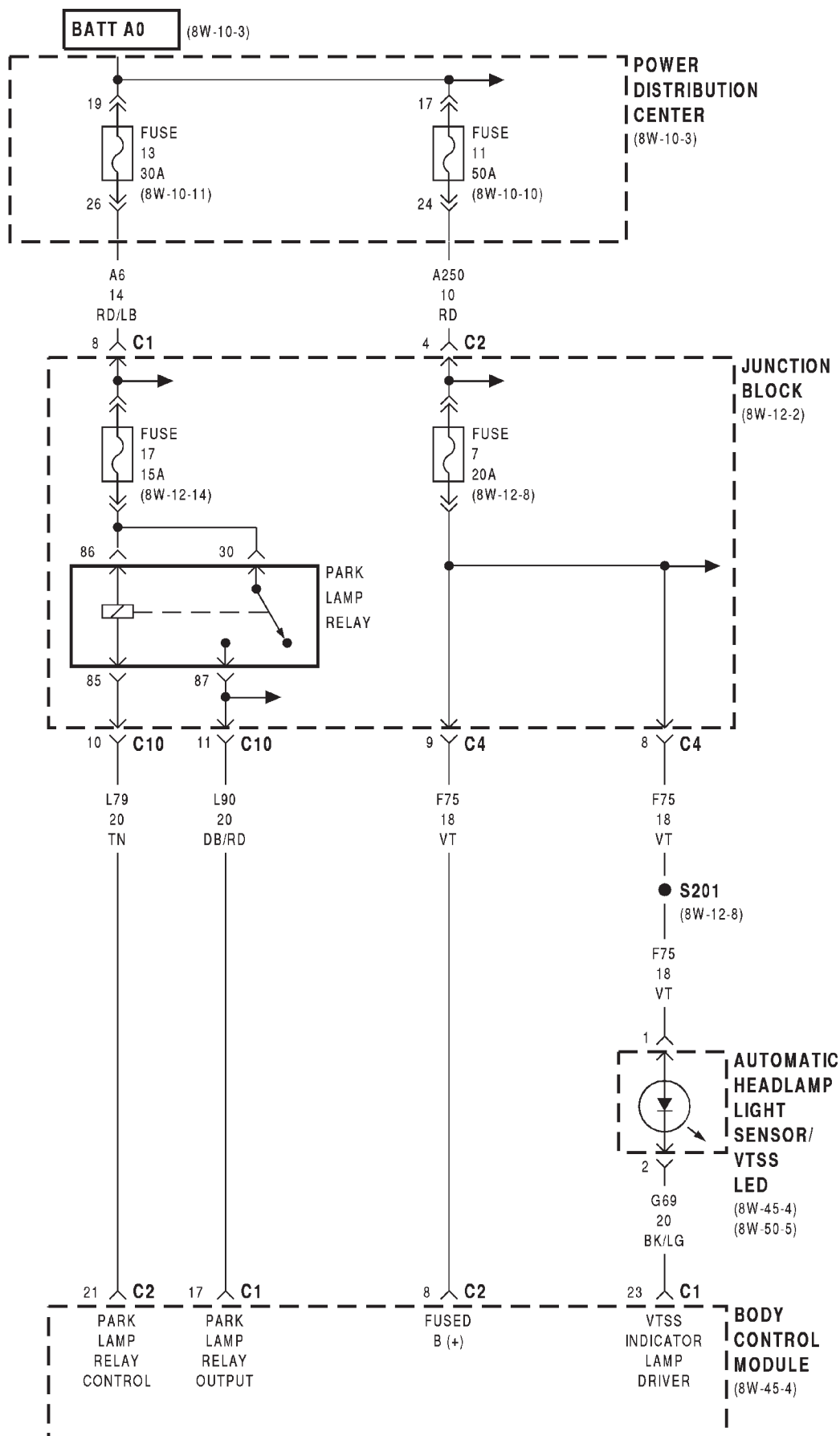
8W-39 VEHICLE THEFT SECURITY SYSTEM

INDEX

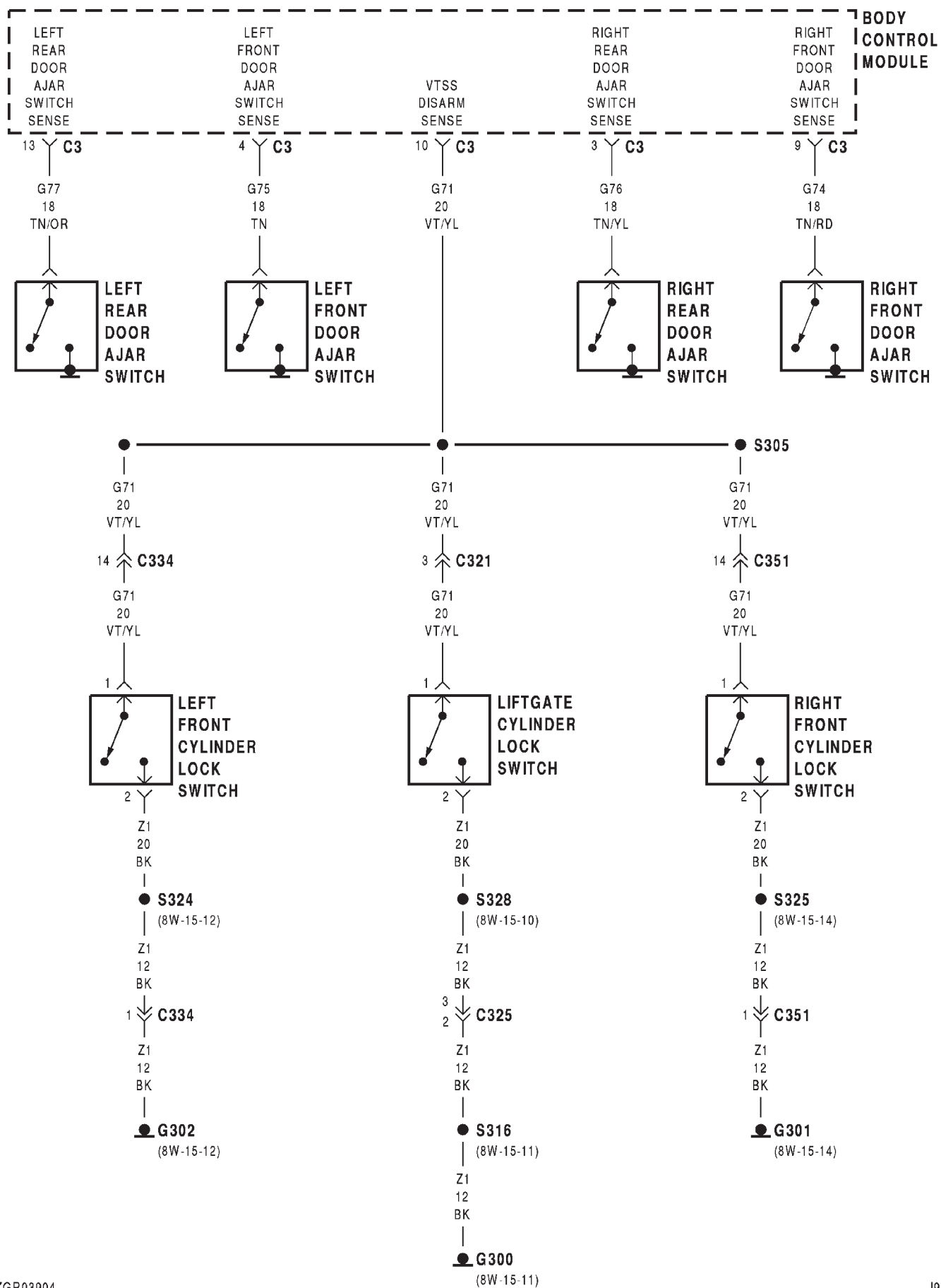
	page
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	7

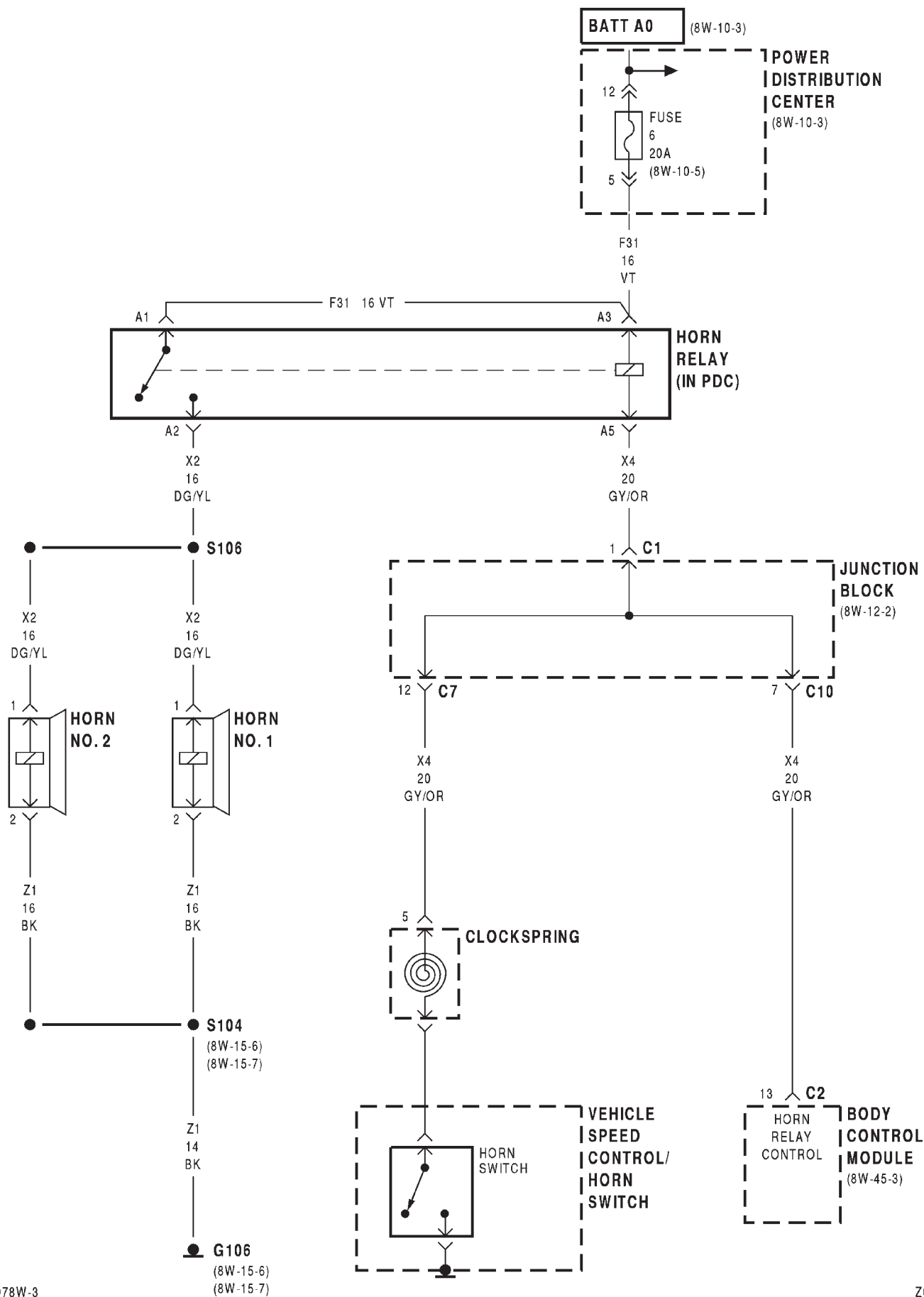
Component	Page	Component	Page
Automatic Headlamp Light		Left Rear Door Ajar Switch	8W-39-5
Sensor/Vtss Led	8W-39-3	Liftgate Ajar Switch	8W-39-4
Body Control Module	8W-39-2, 3, 4, 5, 6	Liftgate Cylinder Lock Switch	8W-39-5
Clockspring	8W-39-6	Liftglass Ajar Switch	8W-39-4
Engine Starter Motor Relay	8W-39-2	Park	8W-39-3
Fuse 3	8W-39-2	Power Distribution Center	8W-39-2, 3, 6
Fuse 6	8W-39-6	Relay	8W-39-3
Fuse 7	8W-39-3	Right Front Cylinder Lock Switch	8W-39-5
Fuse 8	8W-39-2	Right Front Door Ajar Switch	8W-39-5
Fuse 11	8W-39-3	Right Rear Door Ajar Switch	8W-39-5
Fuse 13	8W-39-3	S101	8W-39-2
Fuse 17	8W-39-3	S104	8W-39-6
Fuse 18	8W-39-2	S106	8W-39-6
G106	8W-39-6	S201	8W-39-3
G300	8W-39-4, 5	S202	8W-39-4
G301	8W-39-5	S205	8W-39-4
G302	8W-39-5	S210	8W-39-2
G304	8W-39-4	S302	8W-39-4
Hood Switch	8W-39-4	S305	8W-39-5
Horn No. 1	8W-39-6	S316	8W-39-4, 5
Horn No. 2	8W-39-6	S324	8W-39-5
Horn Relay	8W-39-6	S325	8W-39-5
Horn Switch	8W-39-6	S328	8W-39-4, 5
Ignition Switch	8W-39-2	S329	8W-39-4
Junction Block	8W-39-2, 3, 6	Vehicle Speed Control/Horn Switch	8W-39-6
Left Front Cylinder Lock Switch	8W-39-5		
Left Front Door Ajar Switch	8W-39-5		











8W-39 VEHICLE THEFT SECURITY SYSTEM

INDEX

	page		page
DESCRIPTION AND OPERATION		VEHICLE THEFT SECURITY SYSTEM	
INTRODUCTION	7	OPERATION	7

DESCRIPTION AND OPERATION

INTRODUCTION

The Body Control Module (BCM) operates the Vehicle Theft Security System (VTSS). The BCM monitors the vehicle doors, hood, liftglass in the liftgate, liftgate, and ignition for unauthorized operation.

When the BCM detects unauthorized operation, it operates the horn repeatedly for three minutes and flashes the headlamps and tail lamps for 15 minutes. Also, the engine will not operate until the VTSS is disarmed.

The vehicle operator can activate the alarm by pushing the panic button on the Remote Keyless Entry (RKE) transmitter. When the operator pushes the panic button, the radio frequency receiver in the Passenger Door Module (PDM) receives the PANIC signal and broadcasts a message on the CCD bus. When the BCM sees the PANIC message on the CCD bus, it operates the horn repeatedly, turns on the interior lights, and flashes the headlamps and tail lamps. The BCM activates the panic alarm for three minutes unless the operator starts the vehicle and drives at a speed above 15 MPH or pushes the panic button on the RKE transmitter a second time.

When the ignition switch is in the START or RUN position, it connects circuit A1 from fuse 8 in the PDC to circuit A21. Circuit A21 powers circuit F99 through PDC fuse 18. Circuit F99 feeds the BCM.

In the ACCESSORY or RUN position, the ignition switch connects circuit A1 to circuit A31. Circuit A31 powers circuit V23 through fuse 3 in the junction block. Circuit V23 feeds the BCM.

VEHICLE THEFT SECURITY SYSTEM OPERATION

Each door, the liftgate, hood, and the liftglass in the liftgate have an ajar switch that connects to the Body Control Module (BCM). The ajar switches are normally open when the doors, liftgate, liftglass and hood are closed. When one of them open, its ajar switch closes and connects the BCM to ground. In response, if the Vehicle Theft Security System is armed, the BCM starts the alarm. Refer to the Introduction in this section for alarm information.

The BCM receives the ajar switch signals on the following circuits.

- Circuit G75 provides the left front door ajar switch signal

- Circuit G74 provides the right front door ajar switch signal
- Circuit G77 provides the left rear door ajar switch signal
- Circuit G76 provides the right rear door ajar switch signal
- Circuit G78 provides the liftgate ajar and liftglass ajar signals

SYSTEM ARMING

The system alarm sets after the operator uses the power door locks or Remote Keyless Entry (RKE) transmitter to lock the doors and liftgate. After all doors and the liftgate are locked and closed, the BCM illuminates a red Light Emitting Diode (LED) (VTSS indicator light) on circuit G69. The red LED is located on the top of the instrument panel. The LED flashes rapidly signalling the system is arming. It flashes at slower rate after approximately 15 seconds, indicating the BCM has set the VTSS.

SYSTEM DISARMING

The operator can disarm the system by unlocking a front door or the liftgate with the key or the RKE transmitter. The BCM monitors the lock cylinder switch in each front door and the liftgate lock cylinder switches on circuit G71.

HORNS

When the BCM activates the horns, it energizes the horn relay by providing a ground path for the relay coil on circuit X4. Circuit F31 from fuse 6 in the Power Distribution Center (PDC) powers the coil and contact sides of the relay.

When the horn relay energize, its contact close and connect circuit F31 to circuit X2. Circuit X2 feeds the horns. Circuit Z1 provides ground for the horns.

PARKING LAMPS

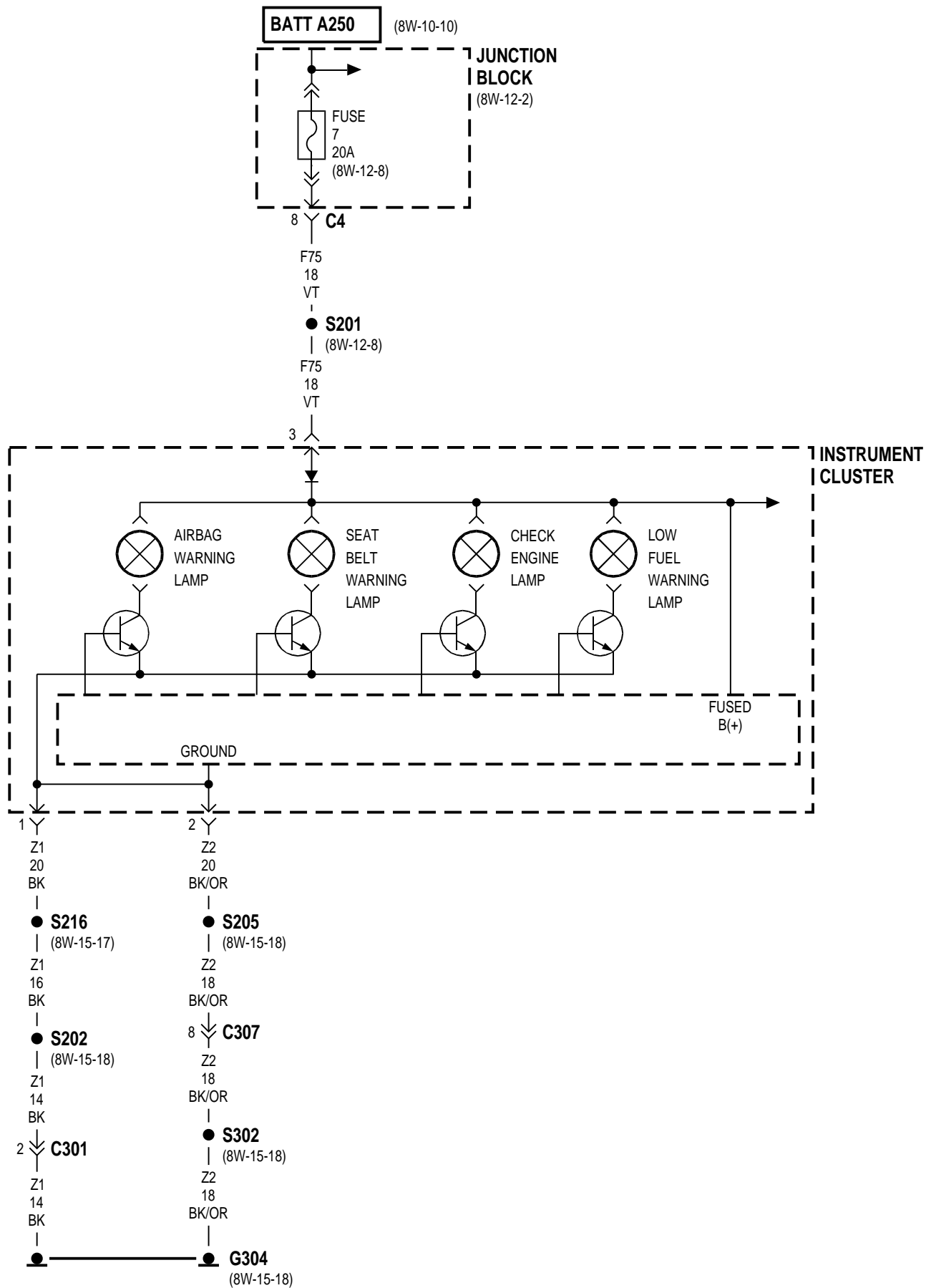
The BCM operates the park lamps when it senses unauthorized entry to the vehicle while the Vehicle Theft Security System is armed. When it senses unauthorized entry, the BCM energizes the park lamp relay by providing ground for the relay coil on circuit L79. Circuit 366 powers the relay coil and contacts. When the relay energizes, it connects circuit 366 to circuit L90. Circuit L90 powers the park lamps, side marker lamps and tail lamps.

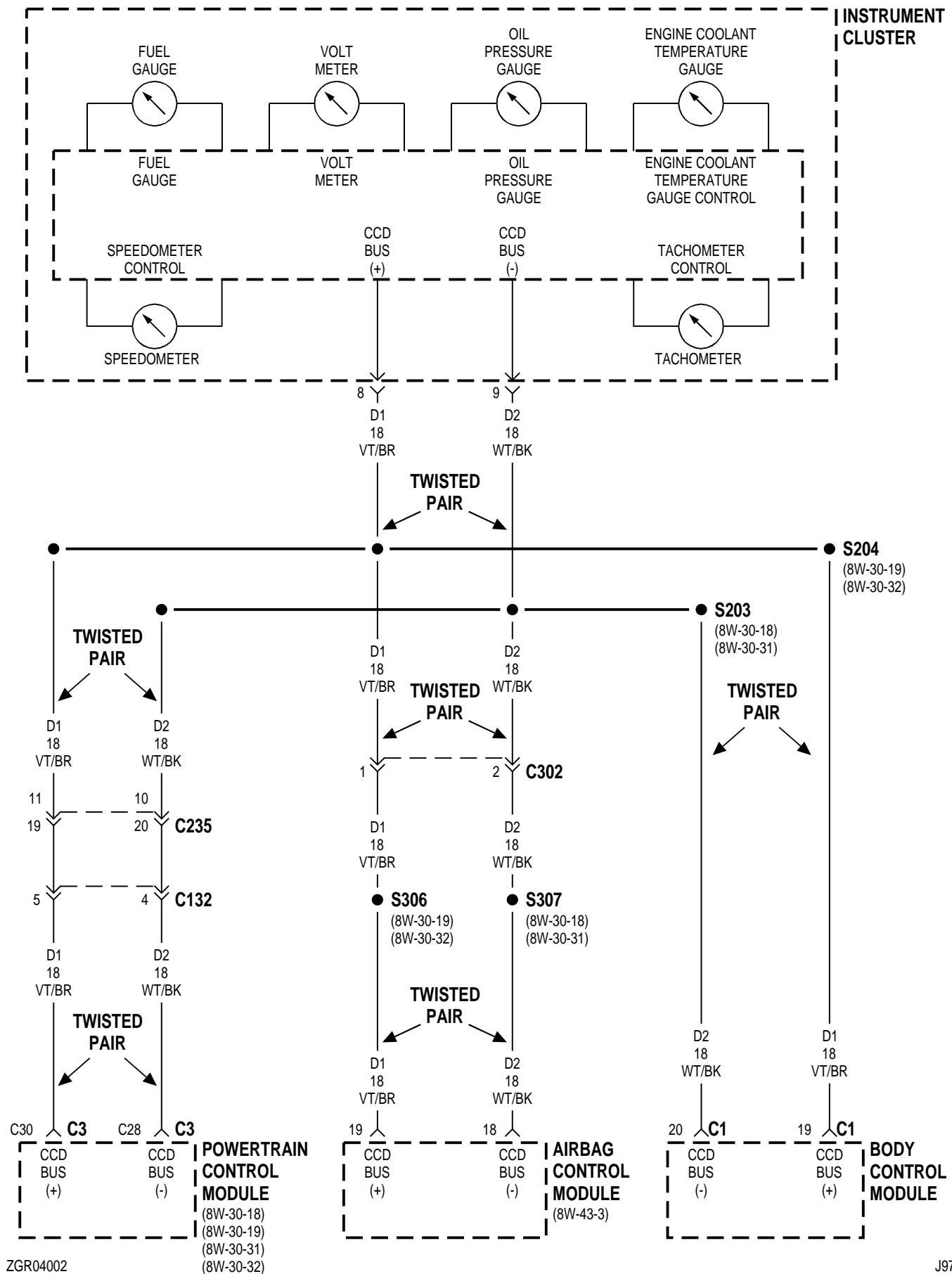
8W-40 INSTRUMENT CLUSTER

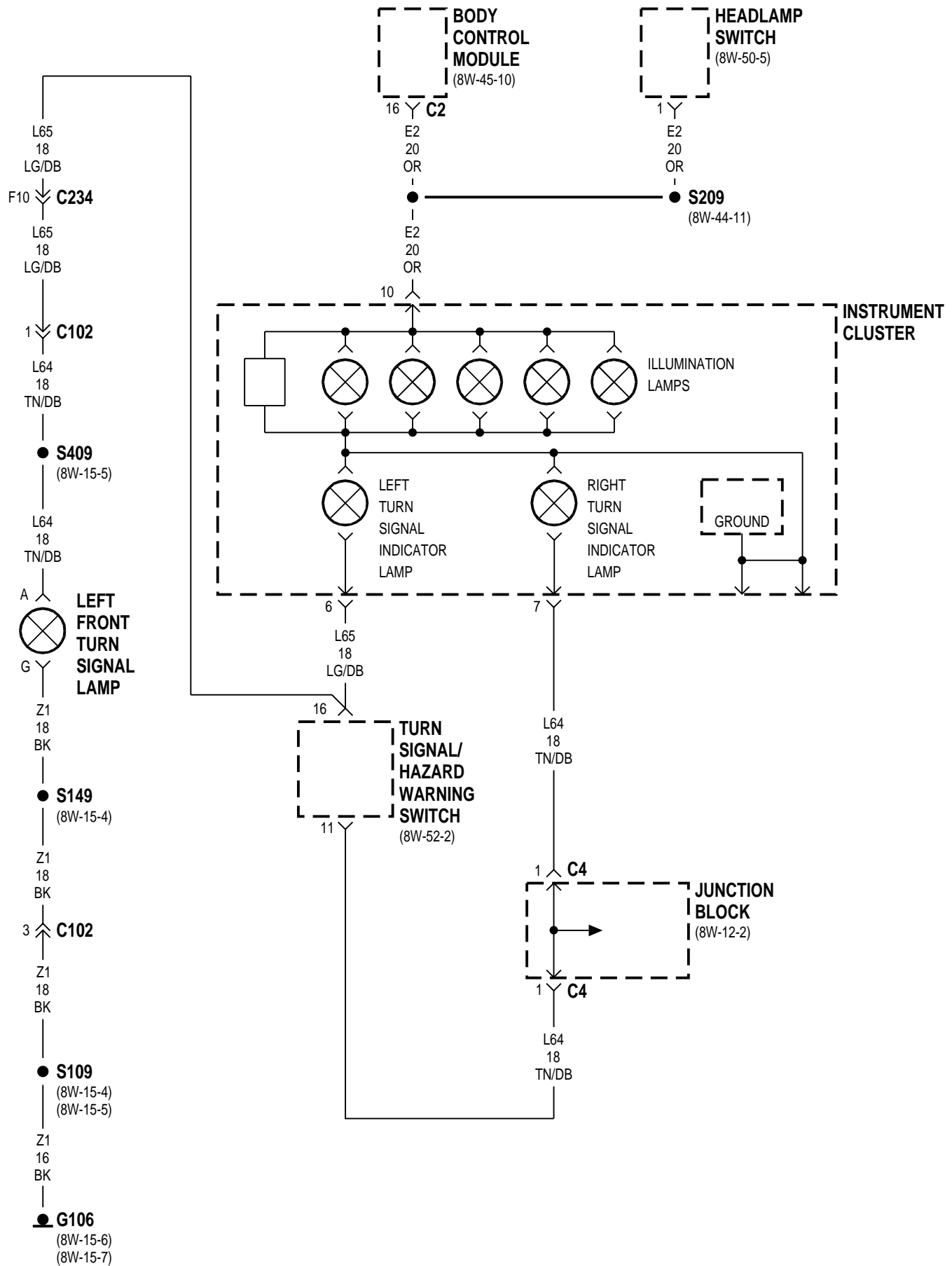
INDEX

	page
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	7

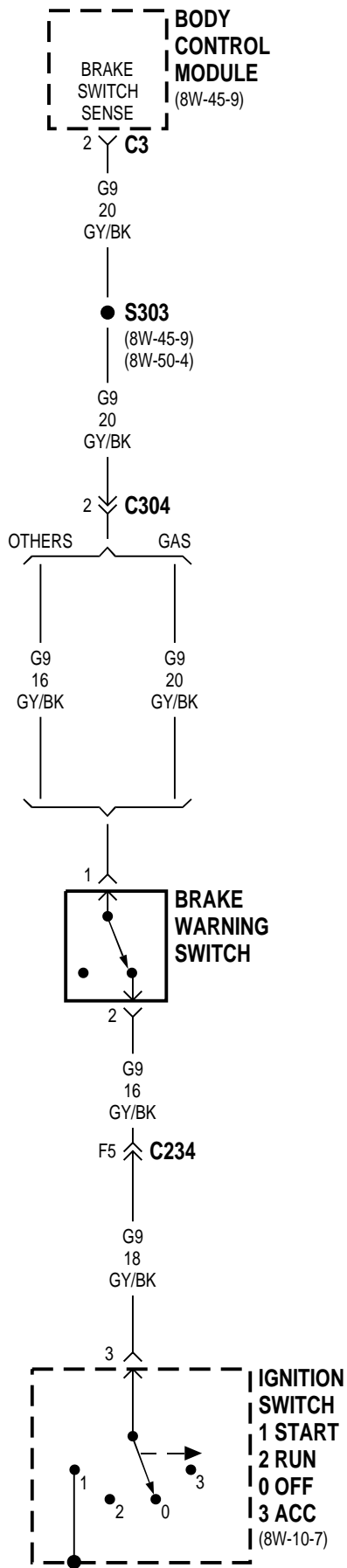
Component	Page	Component	Page
ABS Warning Lamp	8W-40-5	Low Fuel Warning Lamp	8W-40-2
Airbag Control Module	8W-40-3	Oil Pressure Gauge	8W-40-3
Airbag Warning Lamp	8W-40-2	Powertrain Control Module	8W-40-3
Body Control Module	8W-40-3, 4, 6	Right Turn Signal Indicator Lamp	8W-40-4
Brake Warning Lamp	8W-40-5	S109	8W-40-4
Brake Warning Switch	8W-40-6	S149	8W-40-4
Check Engine Lamp	8W-40-2	S201	8W-40-2, 5
Check Gages Lamp	8W-40-5	S202	8W-40-2, 5
Controller Anti-Lock Brake	8W-40-5	S203	8W-40-3
Cruise Lamp	8W-40-5	S204	8W-40-3
Engine Coolant Temperature	8W-40-3	S205	8W-40-2, 5
Fuel Gauge	8W-40-3	S209	8W-40-4
Fuse 5	8W-40-5	S215	8W-40-5
Fuse 7	8W-40-2, 5	S216	8W-40-2, 5
G106	8W-40-4	S302	8W-40-2, 5
G304	8W-40-2, 5	S303	8W-40-6
Gauge	8W-40-3	S306	8W-40-3
Headlamp Switch	8W-40-4	S307	8W-40-3
High Beam Indicator Lamp	8W-40-5	S409	8W-40-4
Ignition Switch	8W-40-6	Seat Belt Warning Lamp	8W-40-2
Illumination Lamps	8W-40-4	Speedometer	8W-40-3
Instrument Cluster	8W-40-2, 3, 4, 5	Tachometer	8W-40-3
Junction Block	8W-40-2, 4, 5	Turn Signal/Hazard Warning Switch	8W-40-4
Left Front Turn Signal Lamp	8W-40-4	Volt Meter	8W-40-3
Left Turn Signal Indicator Lamp	8W-40-4		











8W-40 INSTRUMENT CLUSTER

INDEX

	page		page
DESCRIPTION AND OPERATION		OIL PRESSURE GAUGE	7
ABS WARNING LAMP	7	SPEEDOMETER	7
ENGINE COOLANT TEMPERATURE GAUGE ...	7	TACHOMETER	7
FUEL GAUGE	7	TURN SIGNAL INDICATOR LAMPS	8
HIGH BEAM INDICATOR LAMP	8	VOLTMETER	7
ILLUMINATION LAMPS	8	WARNING LAMPS—EXCEPT ABS	7
INTRODUCTION	7		

DESCRIPTION AND OPERATION

INTRODUCTION

The electronic instrument cluster contains a micro-processor which controls cluster functions based on data it receives from the CCD bus. Circuit A250 from fuse 11 in the Power Distribution Center (PDC) powers circuit F75 through fuse 7 in the junction block. Circuit F75 powers the cluster micro-processor plus the warning lamps (except the ABS warning lamp) and the high beam indicator lamp. The cluster micro-processor switches the warning lamps and high beam indicator lamps on and off by controlling a transistor in the ground path for each lamp.

WARNING LAMPS—EXCEPT ABS

Circuit F75 feeds all the warning lamps in the instrument cluster except the ABS warning lamp. The micro-processor in the cluster controls each lamp (except the ABS lamp) through a transistor in the ground path of each lamp. The cluster micro-processor turns the warning lamps ON and OFF based on inputs received on the CCD bus. Circuits Z1 and Z2 provide ground for the lamps and micro-processor.

SPEEDOMETER

The micro-processor in the instrument cluster calculates the position of the speedometer needle based on the vehicle speed signal broadcast on the CCD bus by the Powertrain Control Module. The PCM determines vehicle speed from the input provided by the vehicle speed sensor.

TACHOMETER

The Powertrain Control Module (PCM) transmits the engine RPM data on the CCD bus. From the bus, the instrument cluster calculates tachometer needle position based on the engine RPM signal.

VOLTMETER

The Powertrain Control Module (PCM) broadcasts system voltage data on the CCD bus. The micro-processor in the instrument cluster calculate voltmeter needle position base on the signal received from the CCD bus.

FUEL GAUGE

The Powertrain Control Module (PCM) transmits the fuel percentage data over the CCD bus. The micro-processor in the instrument cluster calculates position of the fuel gauge needle based on the signal from the PCM.

ENGINE COOLANT TEMPERATURE GAUGE

The Powertrain Control Module (PCM) broadcasts the engine coolant temperature data over the CCD bus. From the data signal on the CCD bus, the instrument cluster micro-processor calculates coolant temperature gauge needle position.

ABS WARNING LAMP

Circuit F87 from fuse 5 in the junction block provides power for the ABS warning lamp in the instrument cluster. Ground for the ABS warning lamp is provided by the Controller, Anti-Lock Brakes (CAB). The CAB illuminates the lamp by providing ground on circuit 205.

HELPFUL INFORMATION

When the ignition switch is in the START or RUN position, it connects circuit A1 from fuse 8 in the Power Distribution Center (PDC) to circuit A21. Circuit A21 powers circuit F87 through fuse 5 in the junction block.

OIL PRESSURE GAUGE

The instrument cluster micro-processor calculates engine oil pressure gauge needle position based on the oil pressure data received over the CCD bus. The

DESCRIPTION AND OPERATION (Continued)

Powertrain Control Module (PCM) transmits the data over the CCD bus.

HIGH BEAM INDICATOR LAMP

The micro-processor in the instrument cluster switches the high beam indicator lamp ON and OFF through a transistor in lamps ground circuit. The Body Control Module (BCM) signals the instrument cluster micro-processor over the CCD bus to turn the high beam indicator ON or OFF. Circuit F75 powers the lamp.

TURN SIGNAL INDICATOR LAMPS

Circuits L65 and L64 from the turn signal/hazard flasher circuitry in the multi-function switch power

the turn signal indicator lamps. Circuit L64 powers the right turn signal indicator lamp. Circuit L65 powers the left indicator lamp. Circuits Z1 and Z2 provide ground for the lamps.

ILLUMINATION LAMPS

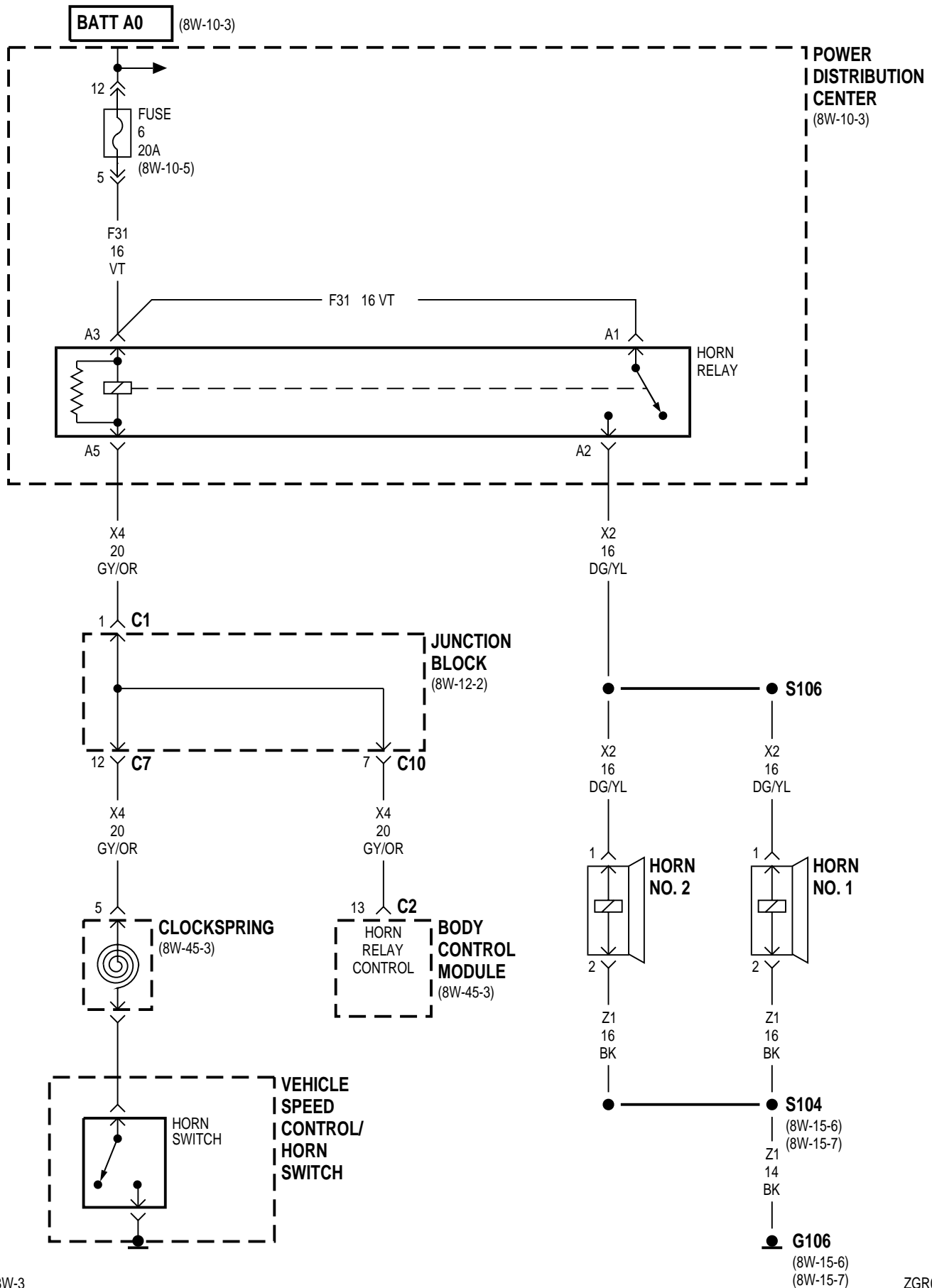
Circuit E2 from the headlamp switch powers the illumination lamps in the instrument cluster. Circuits Z1 and Z2 provide ground for the lamps.

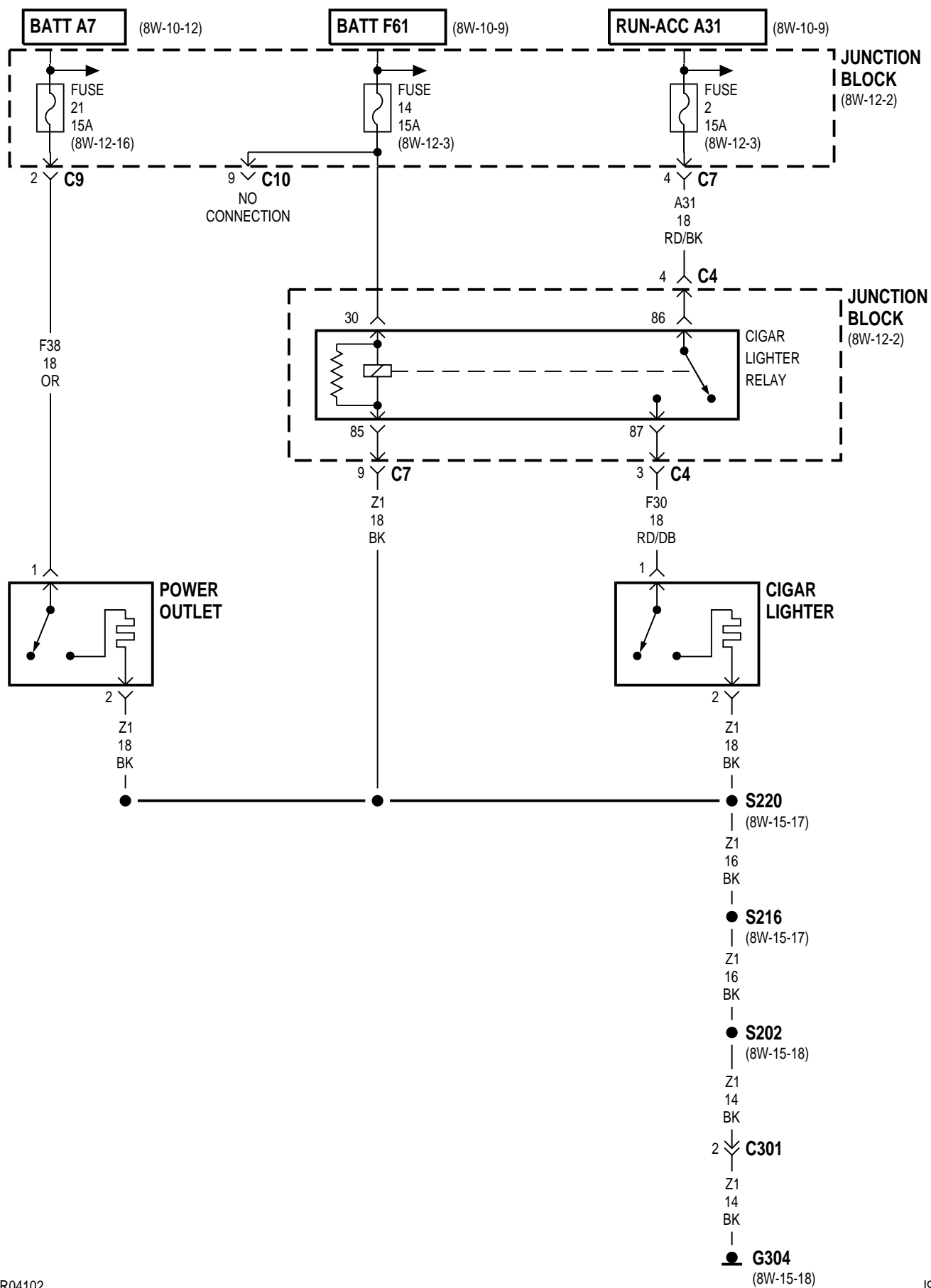
8W-41 HORN/CIGAR LIGHTER

INDEX

	page
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	4

Component	Page	Component	Page
Body Control Module	8W-41-2	Horn Relay	8W-41-2
Cigar Lighter	8W-41-3	Horn Switch	8W-41-2
Cigar Lighter Relay	8W-41-3	Junction Block	8W-41-2, 3
Clockspring	8W-41-2	Power Distribution Center	8W-41-2
Fuse 2	8W-41-3	Power Outlet	8W-41-3
Fuse 6	8W-41-2	S104	8W-41-2
Fuse 14	8W-41-3	S106	8W-41-2
Fuse 21	8W-41-3	S202	8W-41-3
G106	8W-41-2	S216	8W-41-3
G304	8W-41-3	S220	8W-41-3
Horn No. 1	8W-41-2	Vehicle Speed Control/Horn Switch	8W-41-2
Horn No. 2	8W-41-2		





8W-41 HORN/CIGAR LIGHTER

DESCRIPTION AND OPERATION

HORN

The horn system is powered by circuit F31 from fuse 6 in the Power Distribution Center (PDC). Circuit F31 supplies voltage to the coil and contact sides of the horn relay in the PDC.

When the operator presses the horn switch, a ground path is completed on the coil side of the horn relay through the case grounded switch, on circuit X4. The horn relay contacts then closes to connect circuit F31 to circuit X2. Circuit X2 powers the horns. Circuit Z1 provides ground for the horns.

On vehicles equipped with Vehicle Theft Security System (VTSS), the X4 circuit is spliced to the Body Control Module (BCM). For operation of the VTSS, refer to section 8W-39.

CIGAR LIGHTER

The cigar lighter relay powers the cigar lighter. The relay energizes when the ignition switch is in the ACCESSORY or RUN position. In the ACCES-

SORY or RUN position, the switch connects circuit A1 from fuse 8 in the Power Distribution Center (PDC) to circuit A31. Circuit A31 powers relay coil. Circuit Z1 provides ground for the relay coil.

When the relay energizes, it connects circuit F61 from fuse 10 in the PDC to circuit F30. Circuit F30 powers the cigar lighter.

When the operator depresses the lighter, contacts inside the lighter element close, and voltage from circuit F30 flows through the heating element to ground. Circuit Z1 provides ground for the lighter.

HELPFUL INFORMATION

Circuit Z1 also grounds the power outlet.

POWER OUTLET

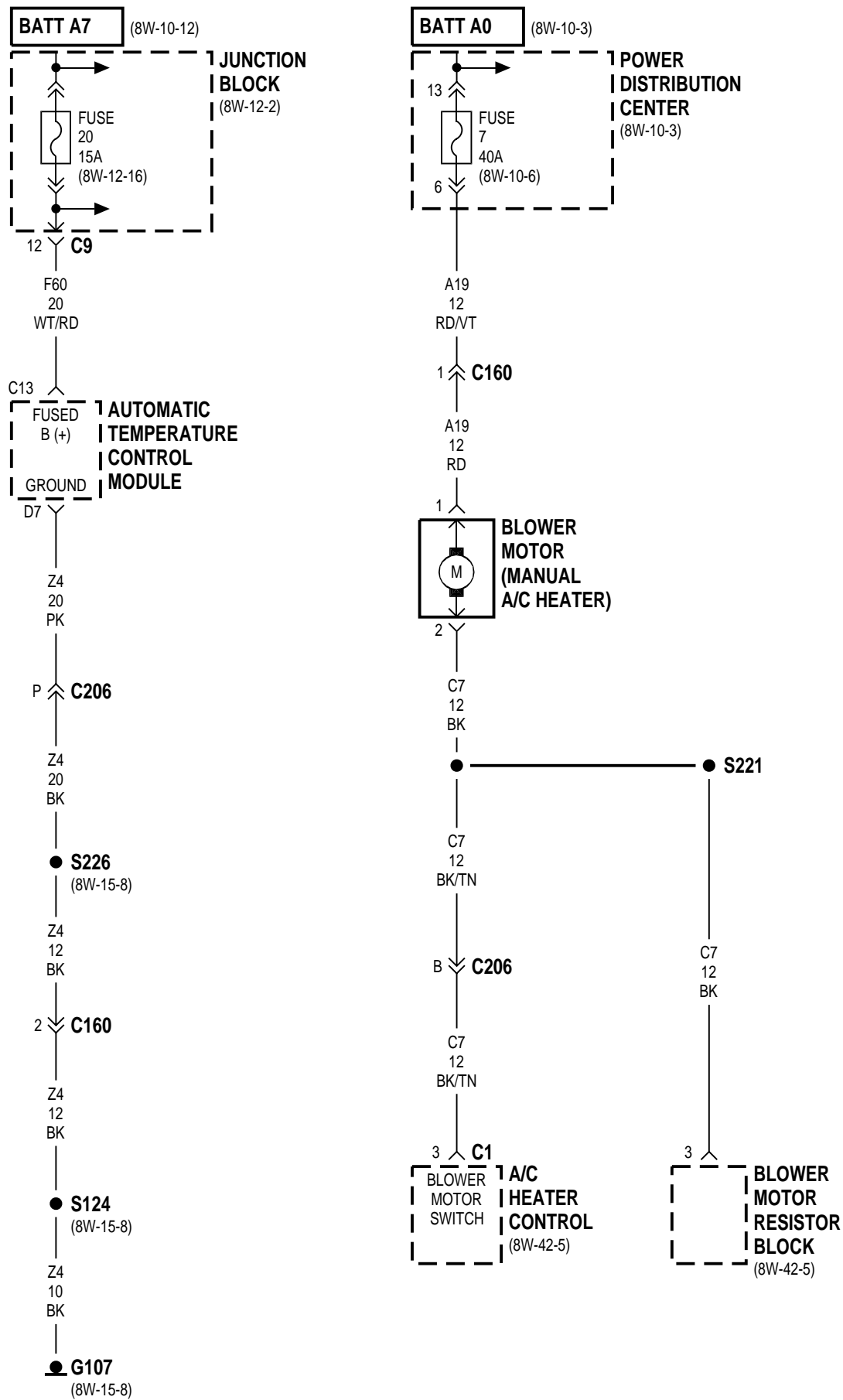
Circuit A7 from 15 in the Power Distribution Center (PDC) powers circuit F38 through fuse 21 in the junction block. Circuit F38 feeds the power outlet. Circuits A7 and F38 are HOT at all times. Circuit Z1 provides ground for the power outlet.

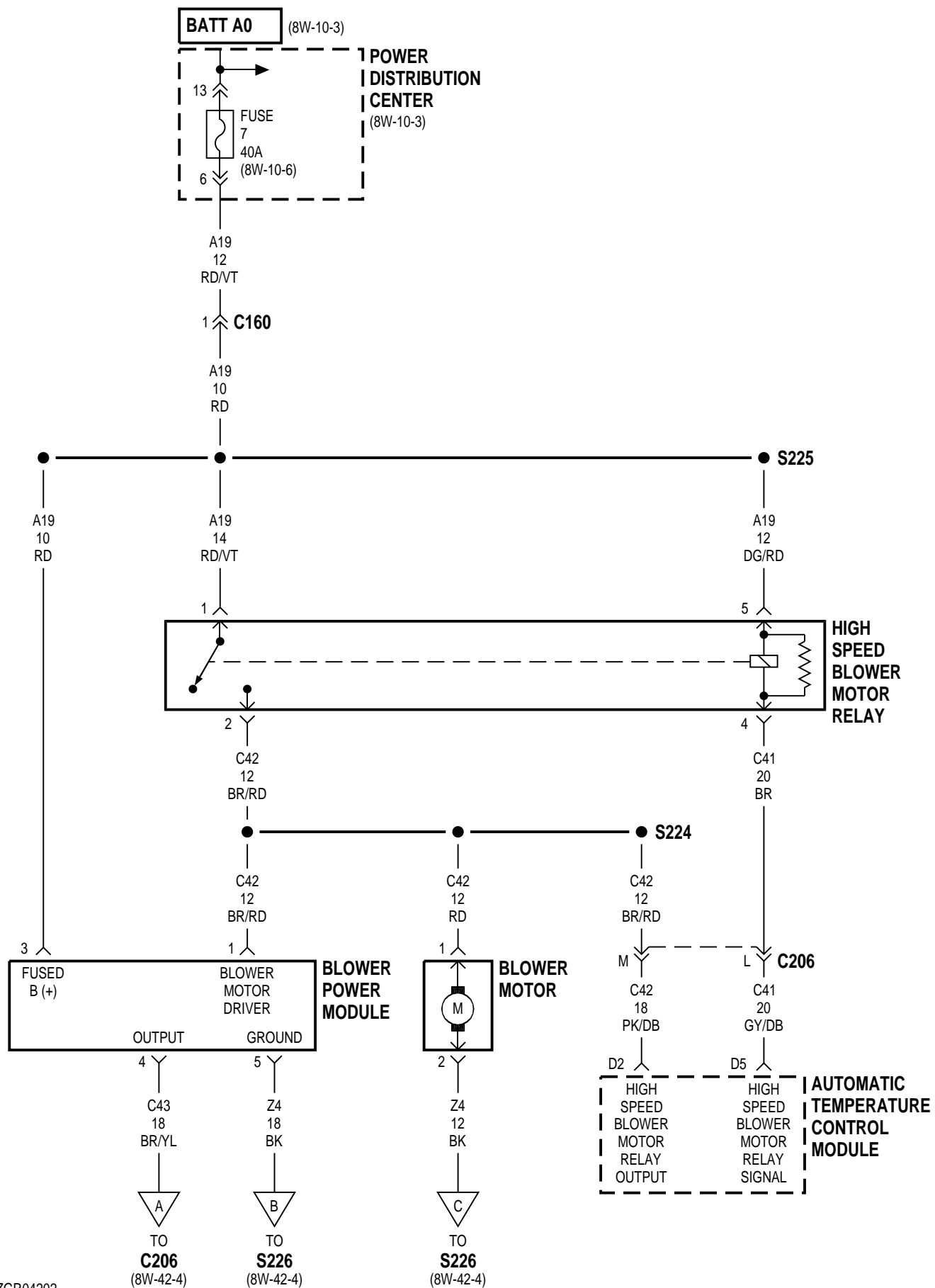
8W-42 AIR CONDITIONING/HEATER

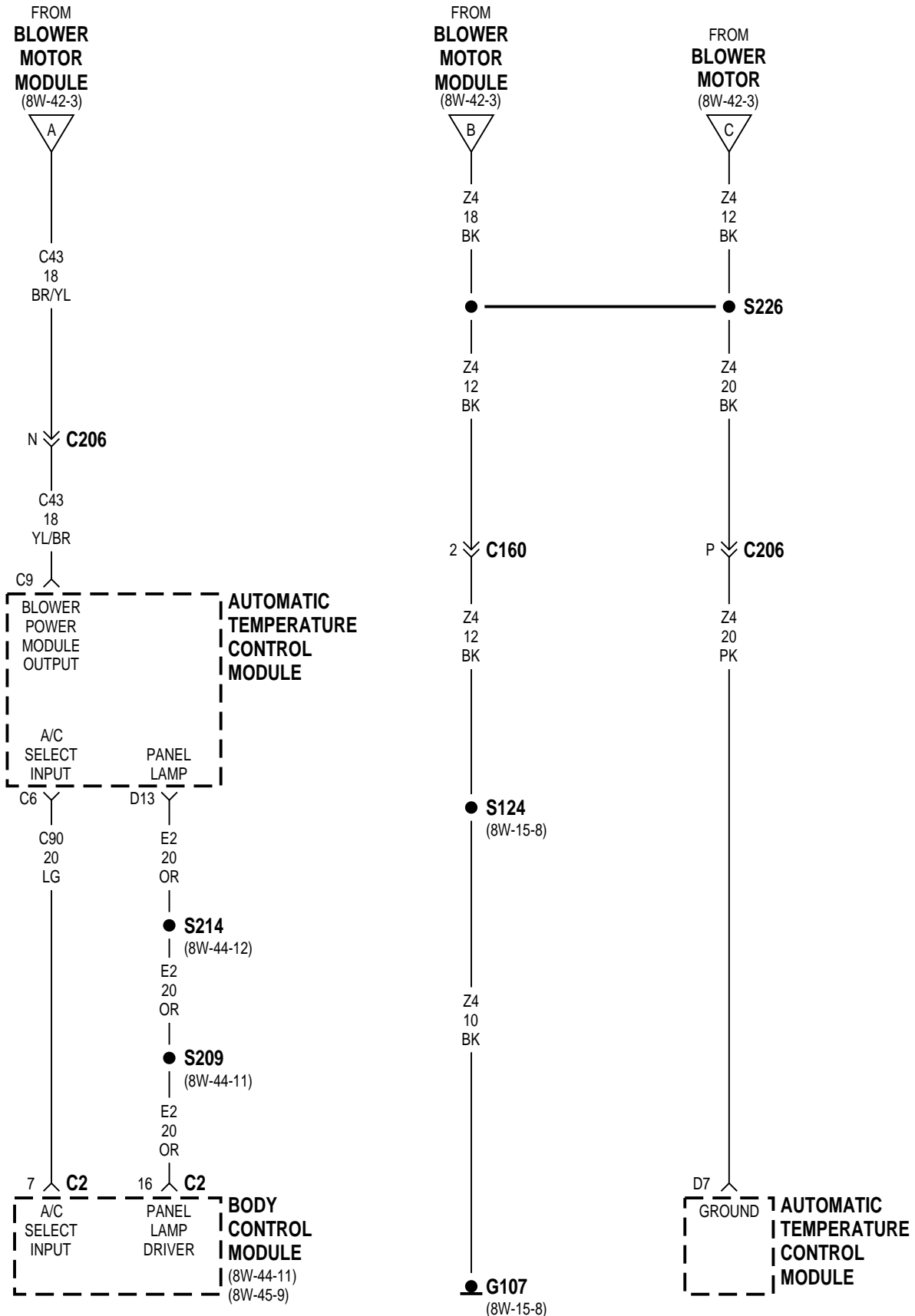
INDEX

	page
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	14

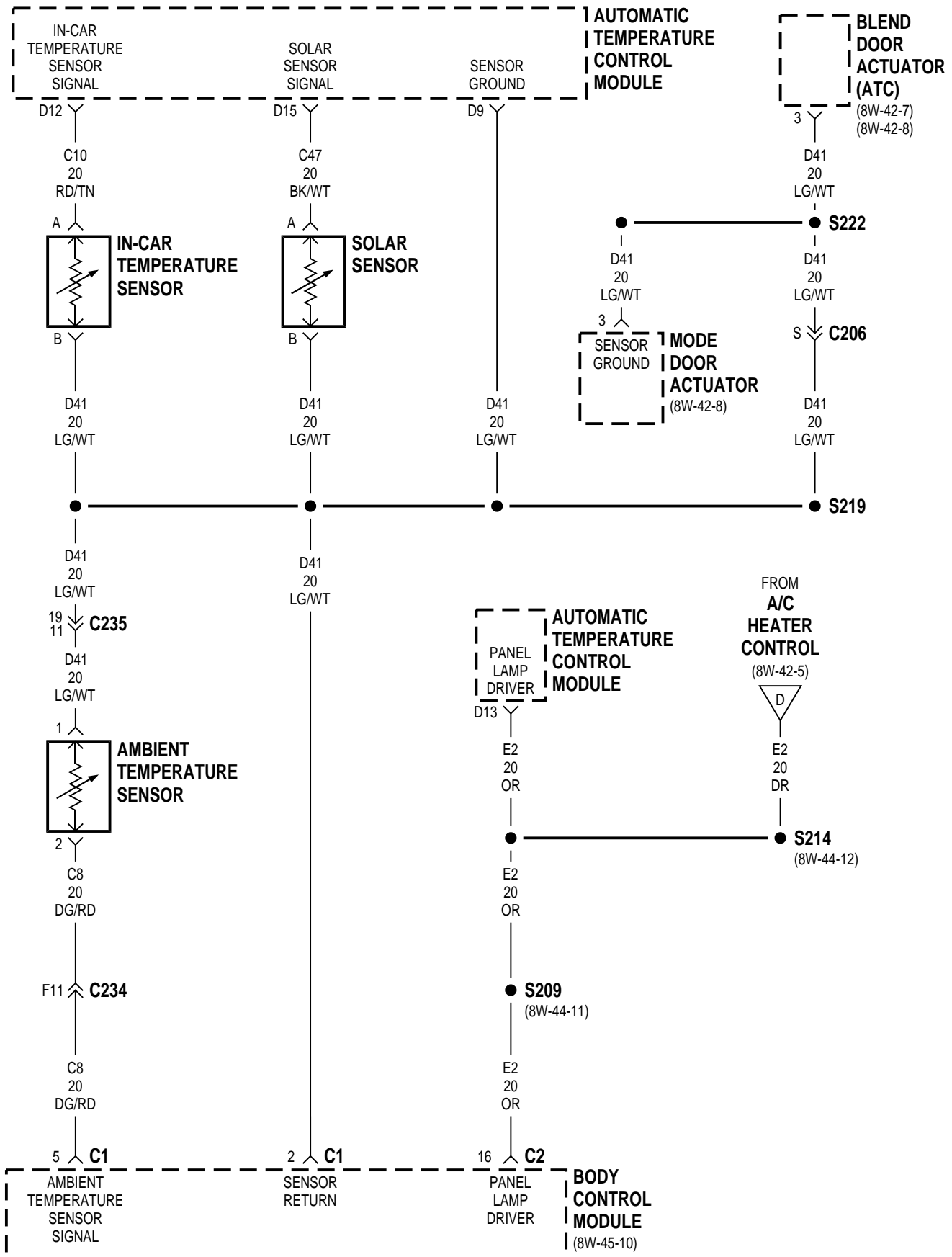
Component	Page	Component	Page
A/C Compressor Clutch	8W-42-10, 11	Junction Block	8W-42-2, 5, 7, 9
A/C Compressor Clutch Relay	8W-42-10, 11	Mode Door Actuator	8W-42-6, 8
A/C Heater Control	8W-42-2, 5	MSA Controller	8W-42-13
A/C High Pressure Switch	8W-42-12, 13	Power Distribution Center	8W-42-2, 3, 10, 11
A/C Low Pressure Switch	8W-42-12, 13	Powertrain Control Module	8W-42-12, 13
Ambient Temperature Sensor	8W-42-6	Recirculation Door Actuator	8W-42-9
Automatic Shut Down Relay	8W-42-11	S101	8W-42-10
Automatic Temperature Control		S104	8W-42-12
Module	8W-42-2, 3, 4, 6, 8, 9	S124	8W-42-2, 4, 7
Blend Door Actuator	8W-42-6, 7, 8	S202	8W-42-7
Blower Motor	8W-42-2, 3, 5	S203	8W-42-9
Blower Motor Resister Block	8W-42-2, 5	S204	8W-42-9
Blower Power Module	8W-42-3	S209	8W-42-4, 6
Body Control Module	8W-42-4, 5, 6	S214	8W-42-4, 6
Data Link Connector	8W-42-9	S216	8W-42-7
Fuse 3	8W-42-11	S218	8W-42-7, 9
Fuse 7	8W-42-2, 3	S219	8W-42-6, 8
Fuse 12	8W-42-5, 7, 9	S220	8W-42-7
Fuse 18	8W-42-10	S221	8W-42-2, 5
Fuse 20	8W-42-2, 11	S222	8W-42-6, 8
Fuse 21	8W-42-10, 11	S223	8W-42-8
G106	8W-42-12	S224	8W-42-3
G107	8W-42-2, 4, 7	S225	8W-42-3
G304	8W-42-7	S226	8W-42-2, 4
High Speed Blower Motor Relay	8W-42-3	Solar Sensor	8W-42-6
In-Car Temperature Sensor	8W-42-6		

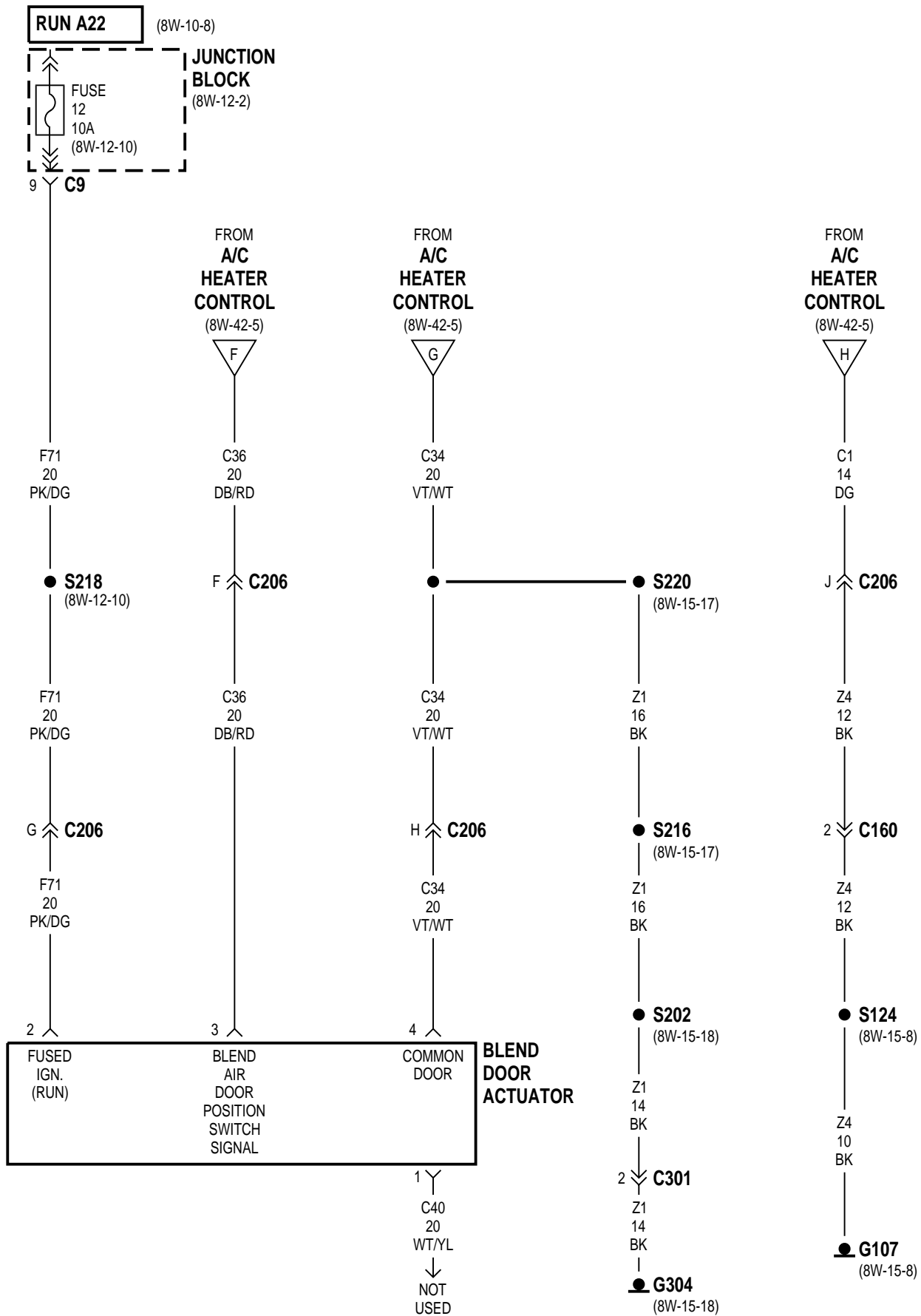


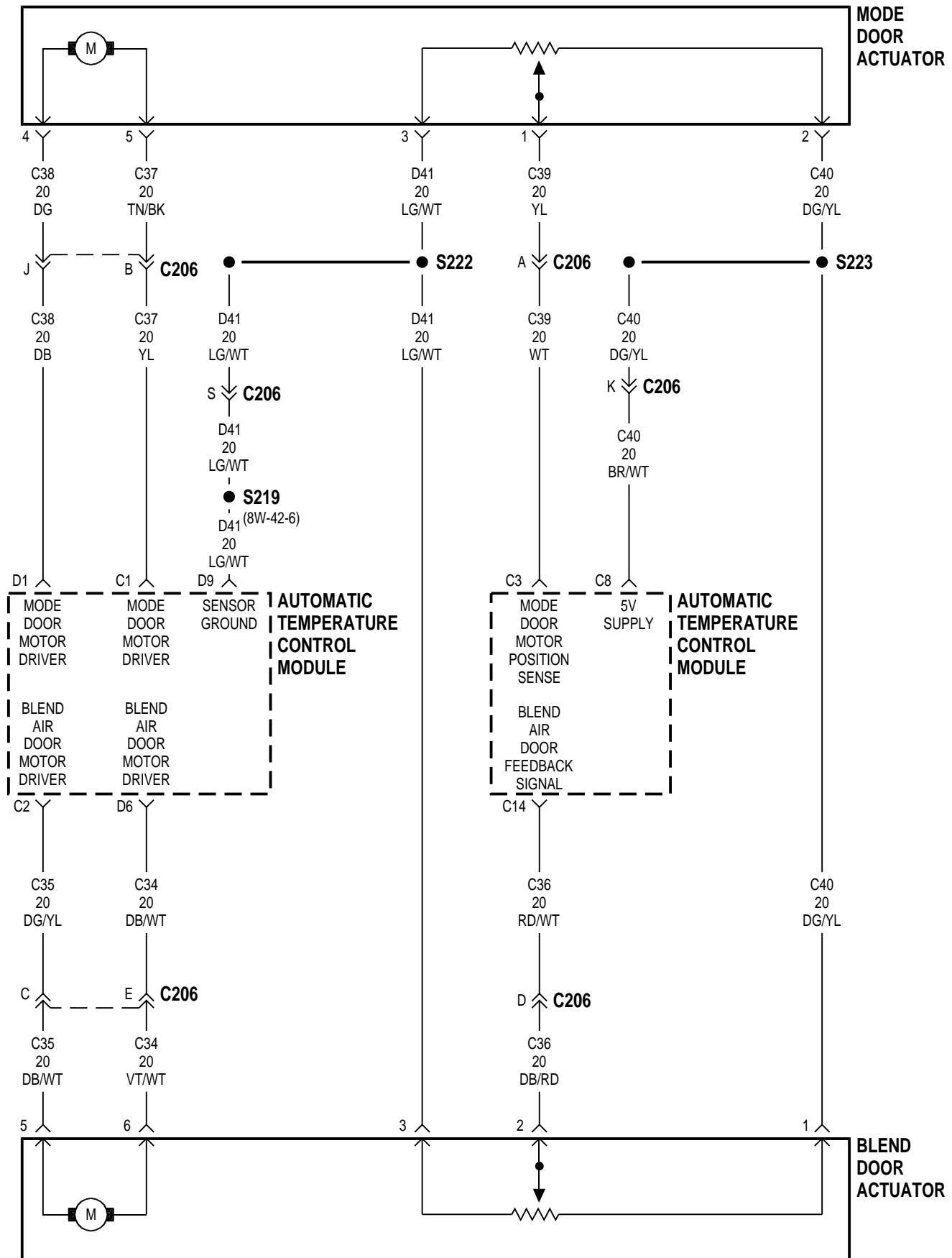


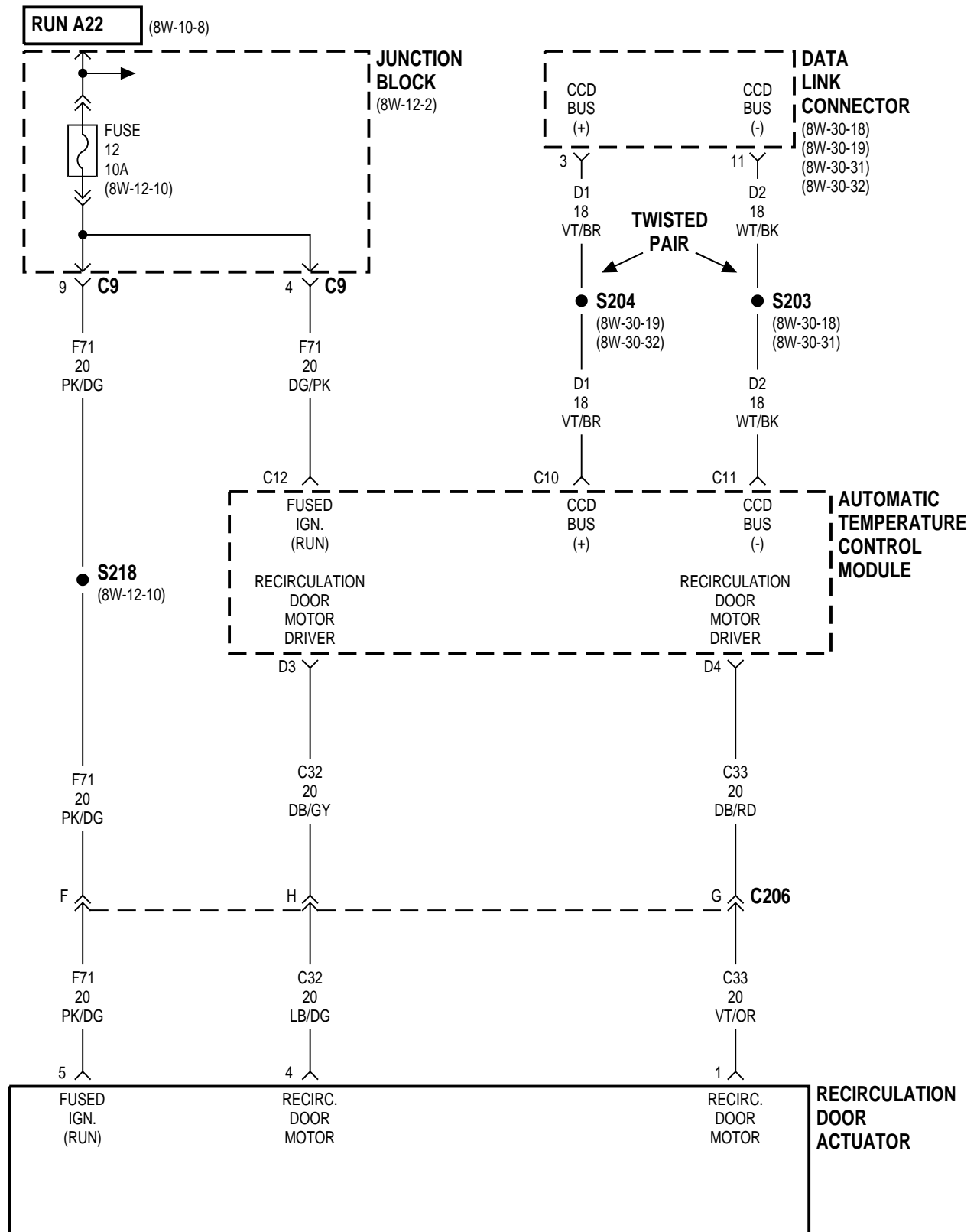


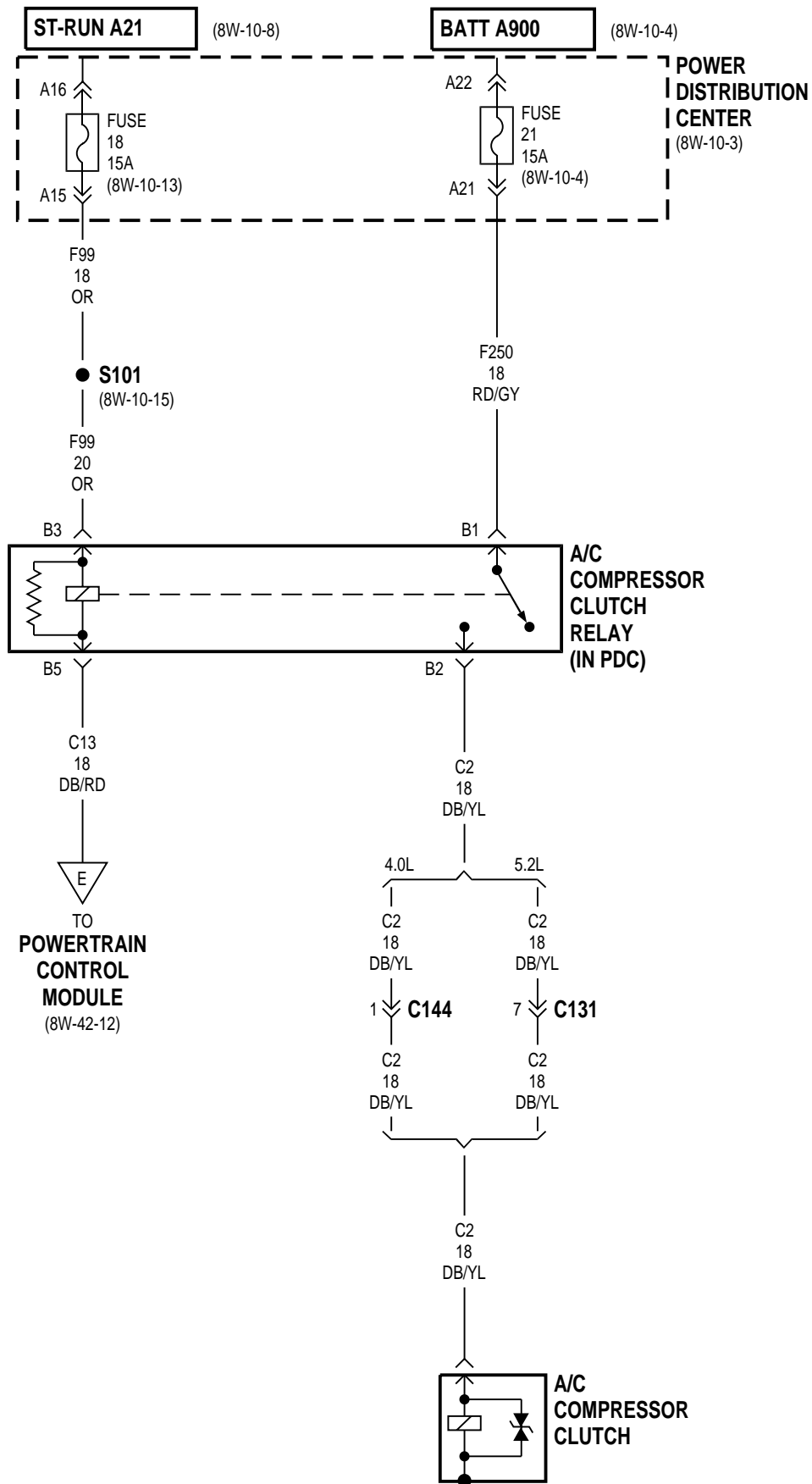


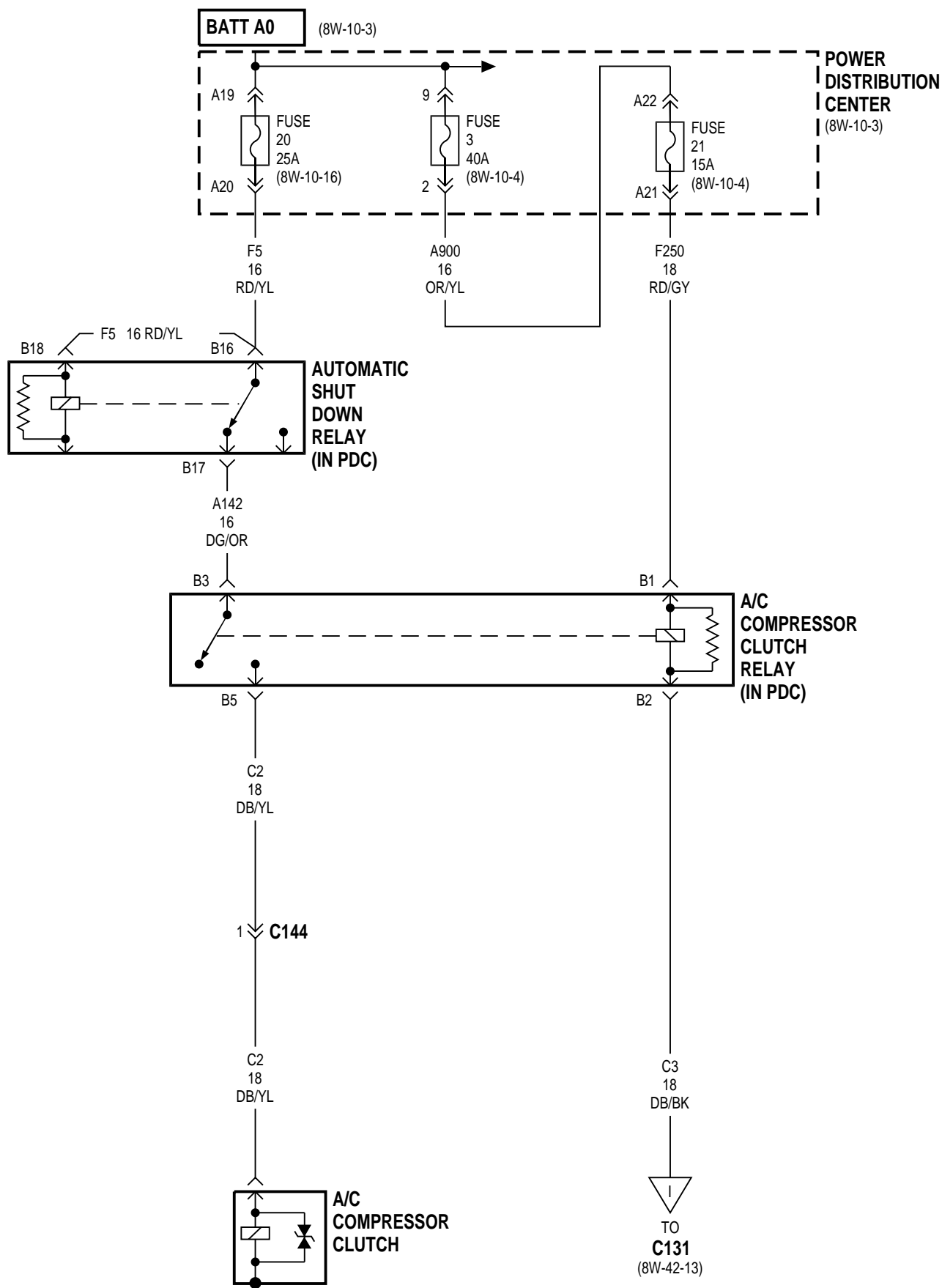


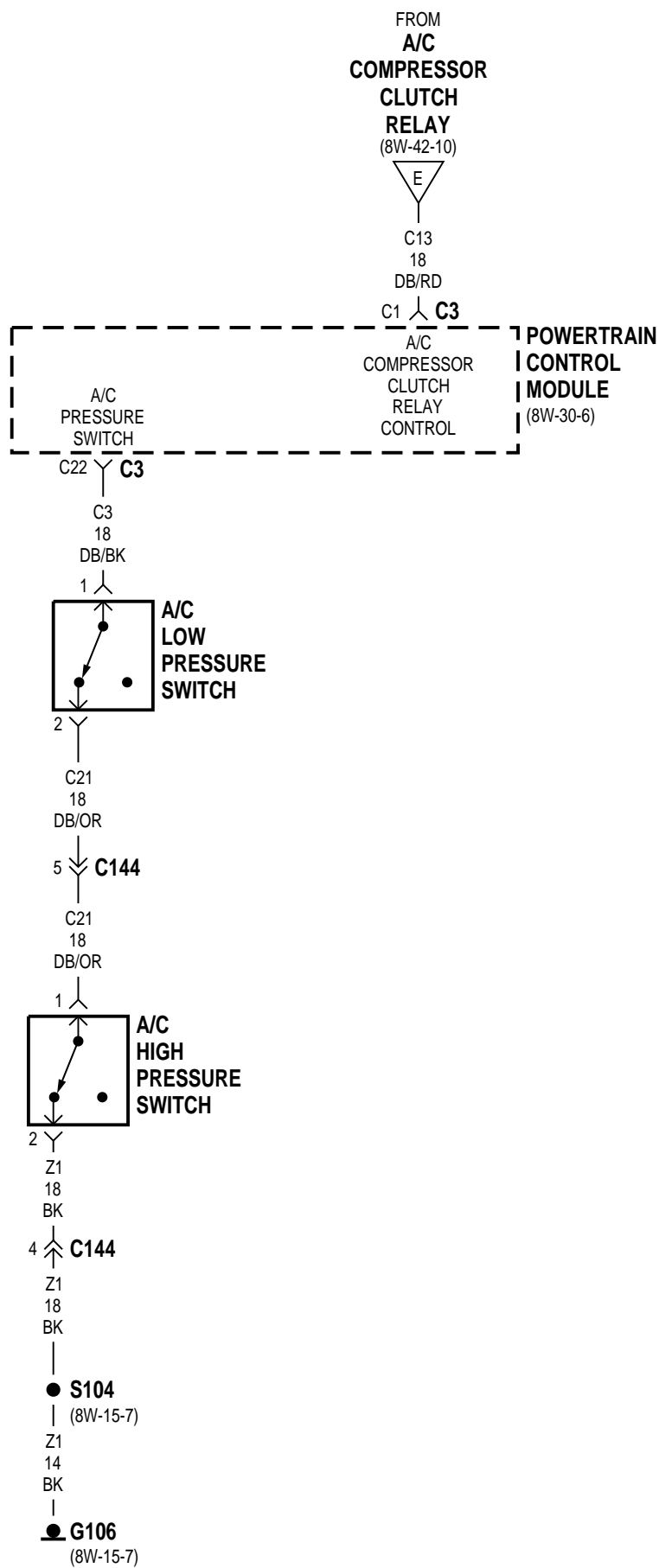


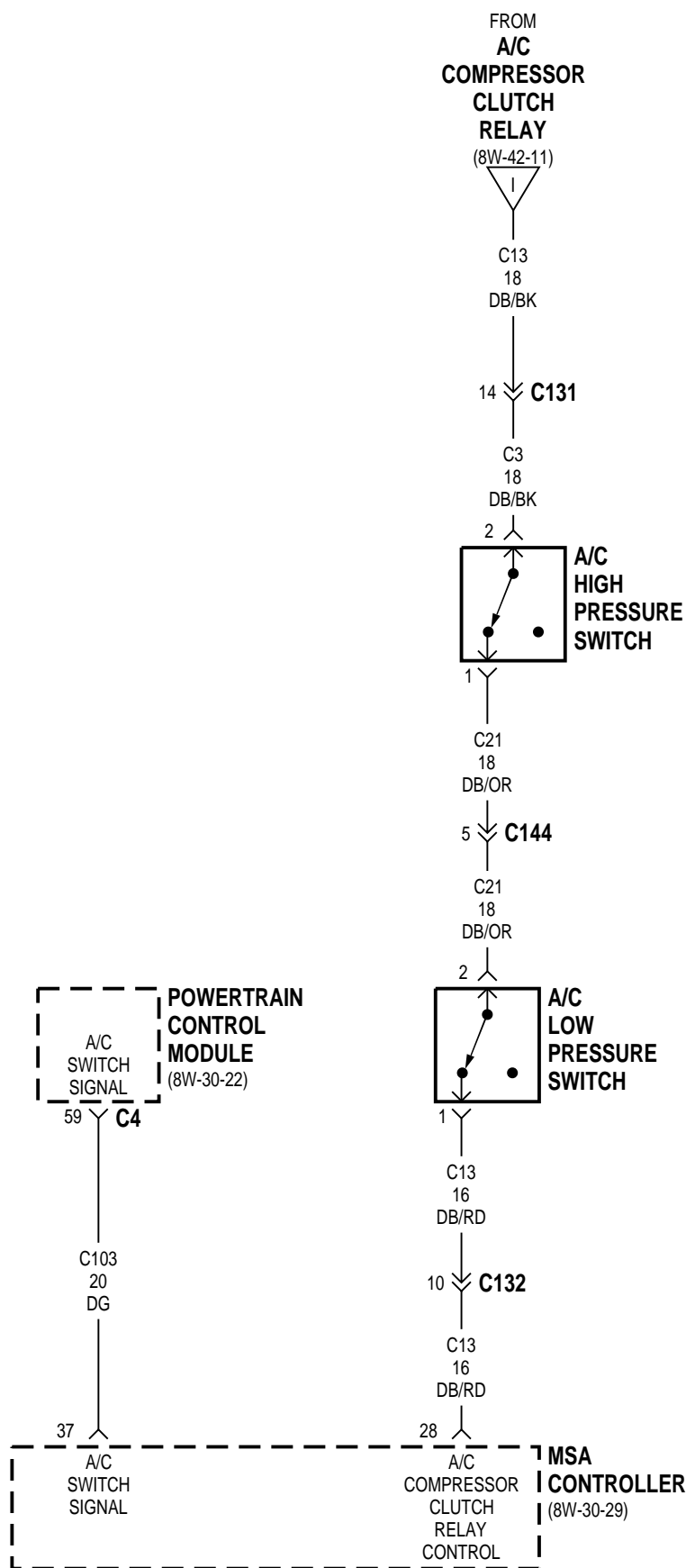












8W-42 AIR CONDITIONING/HEATER

INDEX

	page		page
GENERAL INFORMATION			
INTRODUCTION	14	BLEND DOOR MOTOR—AUTOMATIC	
DESCRIPTION AND OPERATION			
A/C OPERATION—AUTOMATIC TEMPERATURE		TEMPERATURE CONTROL	16
CONTROL	15	BLOWER MOTOR—AUTOMATIC	
A/C OPERATION—MANUAL A/C	14	TEMPERATURE CONTROL	16
AMBIENT TEMPERATURE SENSOR	15	BLOWER MOTOR—MANUAL A/C-HEATER	14
AUTOMATIC TEMPERATURE CONTROL (ATC)		IN-CAR TEMPERATURE SENSOR	15
MODULE	15	MANUAL A/C-HEATER	14
AUTOMATIC TEMPERATURE CONTROL (ATC) .	15	MODE DOOR MOTOR—AUTOMATIC	
BLEND AIR DOOR MOTOR ACTUATOR—		TEMPERATURE CONTROL	16
MANUAL A/C-HEATER	15	RECIRCULATION DOOR MOTOR—AUTOMATIC	
		TEMPERATURE CONTROL	16
		SOLAR SENSOR	15

GENERAL INFORMATION

INTRODUCTION

This section of the wiring diagrams is divided into two sub-sections; Manual A/C-Heater, and Automatic Temperature Control (ATC). When referring to the circuit descriptions or wiring diagrams, ensure that you use the correct one.

DESCRIPTION AND OPERATION

MANUAL A/C-HEATER

Several fuses supply power for the manual air conditioning/heater system. When the ignition switch is in the RUN position, it connects circuit A1 from fuse 8 in the Power Distribution Center (PDC) to circuit A22. Circuit A22 powers circuit F71 through fuse 12 in the junction block. Circuit F71 connects to the A/C control switches and the blend air door motor.

When the ignition switch is in the START or RUN position, it connects circuit A1 to circuit A21. Circuit A21 powers circuit F99 through fuse 18 in the PDC. Circuit F99 powers the coil side of the A/C compressor clutch relay.

Circuit A900 from fuse 3 in the PDC powers circuit F250 through fuse 21 in the PDC. Circuit F250 powers the contact side of the A/C compressor clutch relay.

Circuit E2 from the headlamp dimmer switch powers the case grounded illumination lamp in the A/C-heater control switch.

BLOWER MOTOR—MANUAL A/C-HEATER

The blower motor switch has four positions; LOW, MEDIUM 1, MEDIUM 2, AND HIGH. Circuit A19

from fuse 7 in the PDC supplies power to the blower motor. Ground for the blower motor is supplied on circuit C7 through the blower motor resistor block to the blower motor switch, through an internal relay in the A/C-Heater Control head. When the internal relay energizes, it connects the blower motor switch to circuit C1. Circuit C1 connects to ground circuit Z4.

In the HIGH position, the blower motor switch connects circuit C7 from the blower motor directly to ground on circuits C1 and Z4. In the LOW or MEDIUM positions, the ground path passes through the blower motor resistor block to the switch. The switch connects the circuit C1.

The blower motor resistor block consists of three resistors connected in series. Depending on blower motor switch position, the ground path on circuit C7 from the blower motor passes through one or more resistors to circuit C1.

When the blower motor switch is in the LOW position, the ground path passes through all three resistors in the blower motor resistor block to circuit C4. The blower motor switch connects circuit C4 to circuits C1 and Z4.

In the MEDIUM 1 position, the ground path passes through two resistors in the resistor block to circuit C5. The blower motor switch connects circuit C5 to circuits C1 and Z4.

In the MEDIUM 2 position, the ground path passes through one resistor in the resistor block to circuit C6. The blower motor switch connects circuit C6 to circuits C1 and Z4.

A/C OPERATION—MANUAL A/C

When the A/C-heater control switch is moved to an A/C position or the defrost position, the Body Control

DESCRIPTION AND OPERATION (Continued)

Module (BCM) receives the A/C select signal on circuit C90. After receiving the input, the BCM signals the Powertrain Control Module (PCM) on the CCD bus.

The A/C low pressure and high pressure switches are wired in series and connect to ground on circuit Z1. Circuit C3 from the PCM connects to the low pressure switch. Circuit C21 connects the low pressure switch to the high pressure switch. The high pressure switch connects circuit C21 to ground circuit Z1. If the A/C low pressure and high pressure switches are closed, the PCM senses the A/C request signal on circuit C3.

After sensing the A/C request signal, the PCM supplies ground for the coil side of A/C compressor clutch relay on circuit C13. Circuit F99 from fuse 18 in the PDC powers the coil side of the relay.

When the PCM grounds the A/C compressor clutch relay, the contacts close and connect circuit F250 from fuse 21 in the PDC to circuit C2. Circuit C2 supplies power to the case grounded A/C compressor clutch.

The A/C compressor clutch has a built-in diode. The diode controls the induced voltage that results from the magnetic field collapsing when the clutch disengages. The diode provides a current path to protect other components and systems.

HELPFUL INFORMATION

Circuit A900 from fuse 3 in the PDC powers circuit F250 through PDC fuse 21.

BLEND AIR DOOR MOTOR ACTUATOR—MANUAL A/C-HEATER

The A/C-Heater control head contains a blend door position sensor. The sensor is a variable resistor that provides the blend door position input to the blend door motor actuator on circuit C36.

Circuit F71 from fuse 12 in the junction block powers the actuator when the ignition switch is in the RUN position. Circuit C34 splices to connect the blend door actuator to ground circuit Z1.

AUTOMATIC TEMPERATURE CONTROL (ATC)

Several fuses supply power for the Automatic Temperature Control (ATC) system. When the ignition switch is in the RUN position, it connects circuit A1 from fuse 8 in the Power Distribution Center (PDC) to circuit A22. Circuit A22 powers circuit F71 through fuse 12 in the junction block. Circuit F71 connects to the ATC module and the recirculation door motor.

Circuit A7 from fuse 15 in the PDC powers circuit F60 through fuse 20 in the junction block. Circuit F60 supplies power to the ATC module.

When the ignition switch is in the START or RUN position, it connects circuit A1 from PDC fuse 8 to circuit A21. Circuit A21 powers circuit F99 through fuse 18 in the PDC. Circuit F99 powers the coil side of the A/C compressor clutch relay.

Circuit A19 from fuse 7 in the PDC connects to the blower power module and to the coil and contact sides of the high speed blower motor relay.

AUTOMATIC TEMPERATURE CONTROL (ATC) MODULE

Circuit F71 supplies battery voltage to the Automatic Temperature Control (ATC) module when the ignition switch is in the RUN position. Circuit F60 from fuse 20 in the junction block connects to the ATC module. Circuit F60 is HOT at all times. Circuit Z4 provides ground for the ATC module.

Circuit E2 from the headlamp dimmer switch connects to the ATC module.

The ATC module communicates with other vehicle modules and controllers on the CCD bus. Circuits D1 and D2 for the CCD Bus connect to the ATC module.

AMBIENT TEMPERATURE SENSOR

The ambient temperature sensor is a variable resistor. Circuit C8 provides the ambient temperature sensor signal to the ATC module. Circuit D41 provides ground for the sensor. Circuit D41 connects to the ATC module.

IN-CAR TEMPERATURE SENSOR

The in-car temperature sensor is a variable resistor. Circuit C10 provides the in-car temperature sensor signal to the ATC module. Circuit D41 provides ground for the sensor. Circuit D41 connects to the ATC module.

SOLAR SENSOR

The solar sensor is a variable resistor. Circuit C47 from the ATC module connects to the solar sensor. Circuit D41 provides ground for the sensor. Circuit D41 connects to the ATC module.

A/C OPERATION—AUTOMATIC TEMPERATURE CONTROL

When the A/C select switch in the Automatic Temperature Control (ATC) control head closes circuit C90 provides the A/C select signal to the Body Control Module (BCM). After receiving the input, the BCM signals the Powertrain Control Module (PCM) on the CCD bus.

The A/C low pressure and high pressure switches are wired in series and connect to ground on circuit Z1. Circuit C3 from the PCM connects to the low pressure switch. Circuit C21 connects the low pressure switch to the high pressure switch. The high

DESCRIPTION AND OPERATION (Continued)

pressure switch connects circuit C21 to ground circuit Z1. If the A/C low pressure and high pressure switches are closed, the PCM senses the A/C request signal on circuit C3.

After sensing the A/C request signal, the PCM supplies ground for the coil side of A/C compressor clutch relay on circuit C13. Circuit F99 from fuse 18 in the PDC powers the coil side of the relay.

When the PCM grounds the A/C compressor clutch relay, the contacts close and connects circuit F250 from fuse 21 in the PDC to circuit C2. Circuit C2 supplies power to the case grounded A/C compressor clutch.

The A/C compressor clutch has a built-in diode. The diode controls the induced voltage that results from the magnetic field collapsing when the clutch disengages. The diode provides a current path to protect other components and systems.

HELPFUL INFORMATION

Circuit A900 from fuse 3 in the PDC powers circuit F250 through PDC fuse 21.

RECIRCULATION DOOR MOTOR—AUTOMATIC TEMPERATURE CONTROL

When the ignition switch is in the RUN position, it connects circuit A1 from fuse 8 in the Power Distribution Center (PDC) to circuit A22. Circuit A22 powers circuit F71 through fuse 12 in the junction block. Circuit F71 feeds the recirculation door motor. Circuit F71 also connects to the Automatic Temperature Control (ATC) module.

Circuits C32 and C33 from the ATC module connect to the recirculation door motor. Circuits C32 and C33 provide ground for the motor.

MODE DOOR MOTOR—AUTOMATIC TEMPERATURE CONTROL

Circuit C40 from the Automatic Temperature Control (ATC) module supplies 5 volts to the position switch in the mode door motor. The ATC module receives the sensor signal from the mode door motor on circuit C39. Circuit D41 provides ground for the mode door position sensor. Circuit D41 connects to the ATC module.

The ATC module operates the mode door motor on circuits C37 and C38.

BLEND DOOR MOTOR—AUTOMATIC TEMPERATURE CONTROL

Circuit C40 from the Automatic Temperature Control (ATC) module supplies 5 volts to the position

switch in the blend door motor. The ATC module receives the sensor signal from the blend door motor on circuit C36. Circuit D41 provides ground for the mode door position sensor. Circuit D41 connects to the ATC module.

The ATC module operates the mode door motor on circuits C35 and C34.

BLOWER MOTOR—AUTOMATIC TEMPERATURE CONTROL

When the operator selects blower motor HIGH speed operation, the Automatic Temperature Control (ATC) module grounds high speed blower motor relay. For any speed other than HIGH, the blower power module supplies battery voltage for the blower motor.

BLOWER MOTOR POWER MODULE

When the operator selects any blower motor speed other than HIGH, the blower motor power module supplies voltage for the blower motor. Circuit A19 from fuse 7 in the Power Distribution Center (PDC) supplies battery voltage to the blower motor power module.

The voltage level fed to the blower motor depends on the blower speed selected by the operator. Slower speed selections provide lower voltage to the motor. The blower motor power module feeds the blower motor on circuit C42. Circuit Z4 provides ground for the blower motor and the blower motor power module.

Circuit C43 from the power module connects to the ATC module. The ATC module controls feedback on circuit C43.

HIGH SPEED BLOWER MOTOR RELAY

Circuit A19 from fuse 7 in the Power Distribution Center supplies battery voltage to the coil and contacts sides of the high speed blower motor relay. The ATC module provides ground for the coil side of the relay on circuit C41.

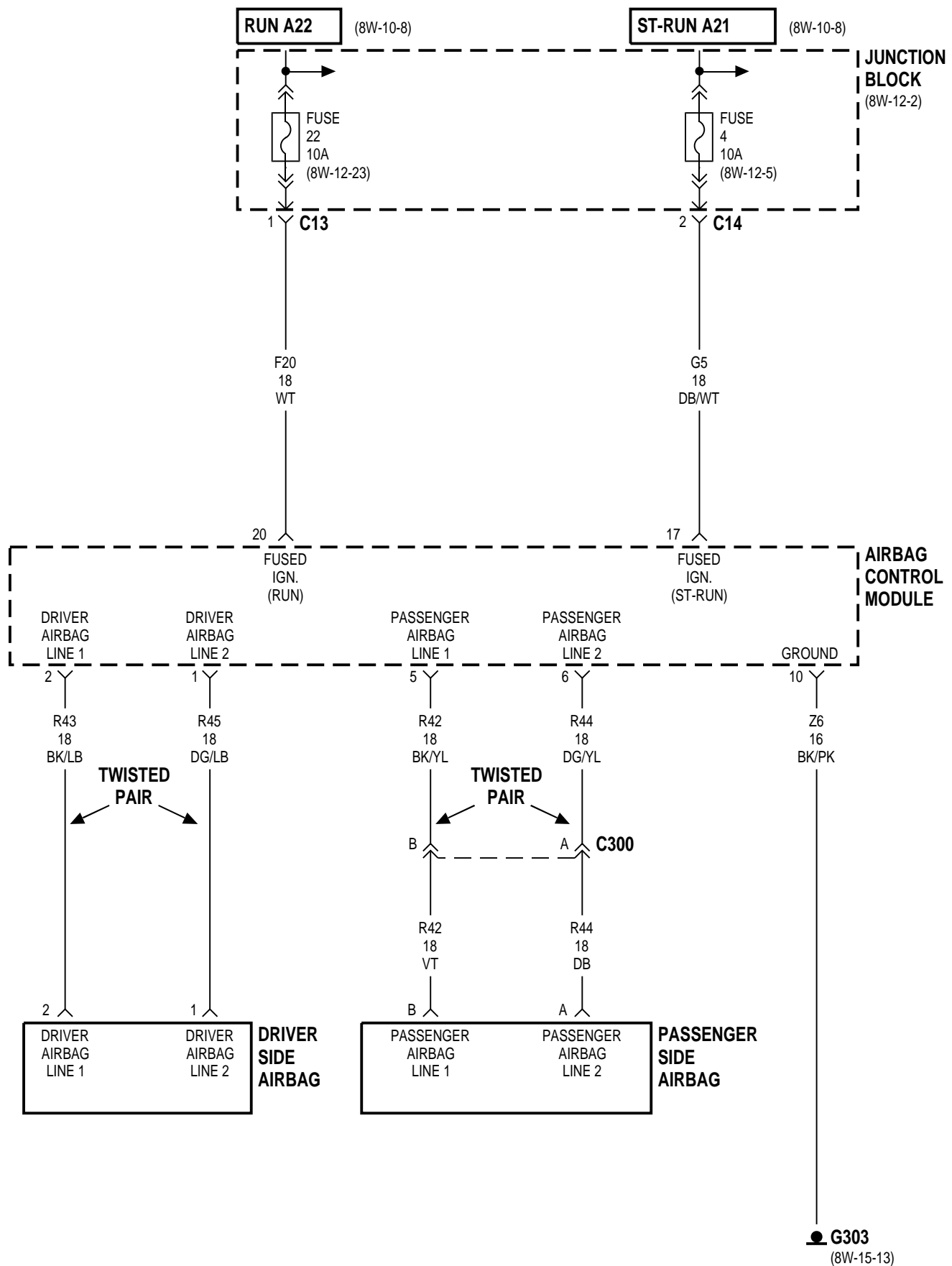
When the ATC module grounds the high speed blower motor relay, the relay contacts close and connect circuit A19 to circuit C42. Circuit C42 connects to the blower motor and the ATC module. Circuit Z4 provides ground for the blower motor.

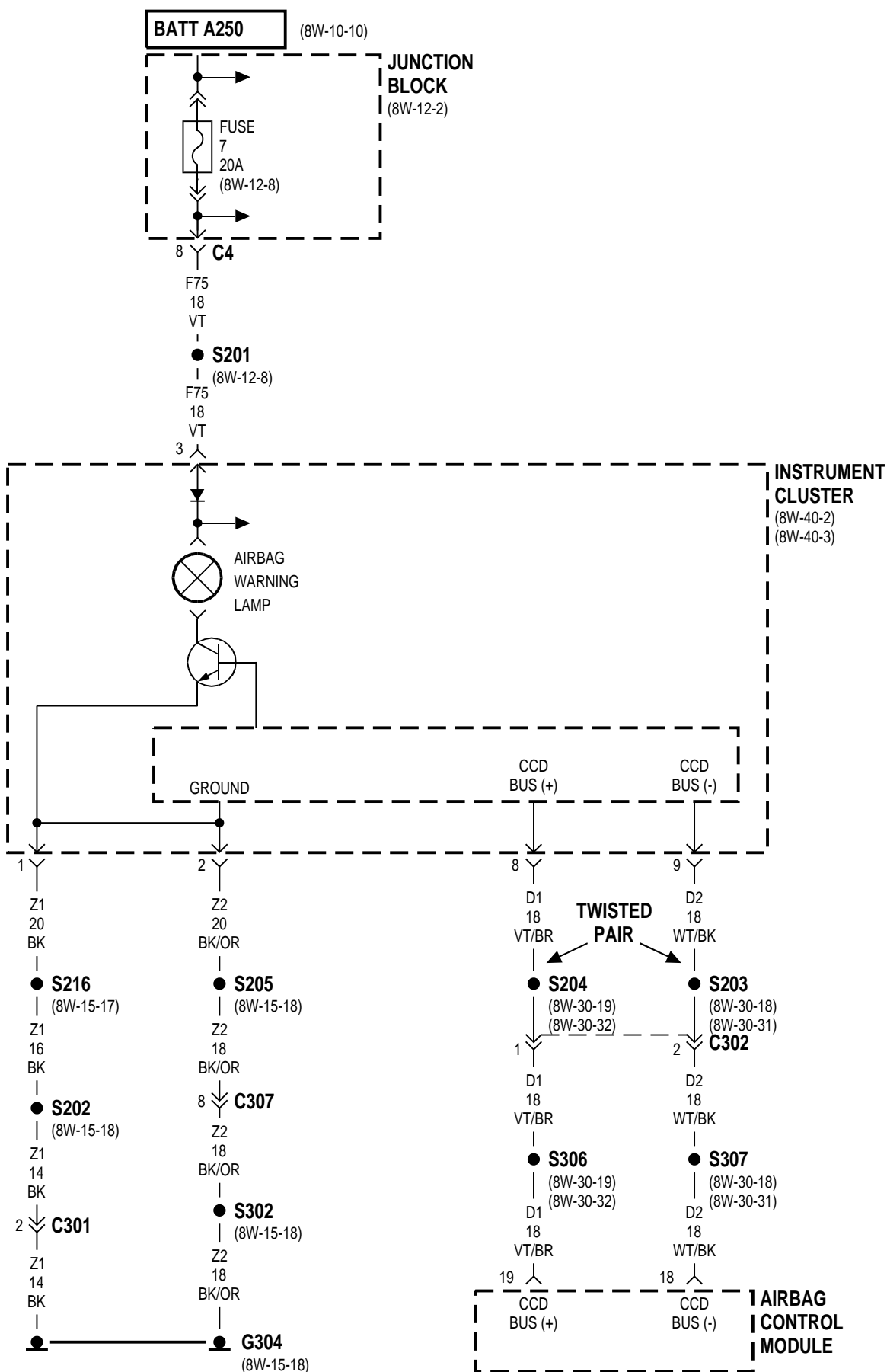
8W-43 AIRBAG SYSTEM

INDEX

	page
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	4

Component	Page	Component	Page
Airbag Control Module	8W-43-2, 3	S201	8W-43-3
Airbag Warning Lamp	8W-43-3	S202	8W-43-3
Driver Side Airbag	8W-43-2	S203	8W-43-3
Fuse 4	8W-43-2	S204	8W-43-3
Fuse 7	8W-43-3	S205	8W-43-3
Fuse 22	8W-43-2	S216	8W-43-3
G303	8W-43-2	S302	8W-43-3
G304	8W-43-3	S306	8W-43-3
Instrument Cluster	8W-43-3	S307	8W-43-3
Junction Block	8W-43-2, 3		
Passenger Side Airbag	8W-43-2		





8W-43 AIRBAG SYSTEM

INDEX

	page		page
DESCRIPTION AND OPERATION		AIRBAG WARNING LAMP	4
AIRBAG IMPACT SENSOR	4	INTRODUCTION	4
AIRBAG SQUIB (AIRBAG IGNITER)	4		

DESCRIPTION AND OPERATION

INTRODUCTION

This vehicle has a drivers airbag and a passengers airbag. The Airbag Control Module (ACM) operates both. The airbag system has two sensors, located at the left front and right front of the engine compartment.

In the START or RUN position, the ignition switch connects circuit A1 from fuse 8 in the Power Distribution Center (PDC) to circuit A22. Circuit A22 powers circuit F20 through fuse 22 in the junction block. Circuit F20 connects to the ACM.

When the ignition switch is in the RUN position, it connects circuit A1 to circuit A21. Circuit A21 powers circuit G5 through fuse 4 in the junction block. Circuit G5 connects to the ACM. Circuit Z6 provides ground for the ACM.

Circuit A250 from fuse 11 in the PDC powers circuit F75 through fuse 7 in the junction block. Circuit F75 powers the airbag warning lamp in the instrument cluster.

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)

Circuits, R43 and R45, connect the ACM to the drivers airbag squib (igniter) after passing through the clock spring connector. Circuit R43 from cavity 2 of the ACM 4-way connector connects to the squib. Circuit R45 from cavity 1 of the ACM 4-way connector connects to the squib.

Circuits, R42 and R44, connect the ACM to the passenger airbag squib (igniter). Circuit R42 from cavity 5 of the ACM 4-way connector connects to the squib. Circuit R44 from cavity 6 of the ACM 4-way connector connects to the squib.

AIRBAG WARNING LAMP

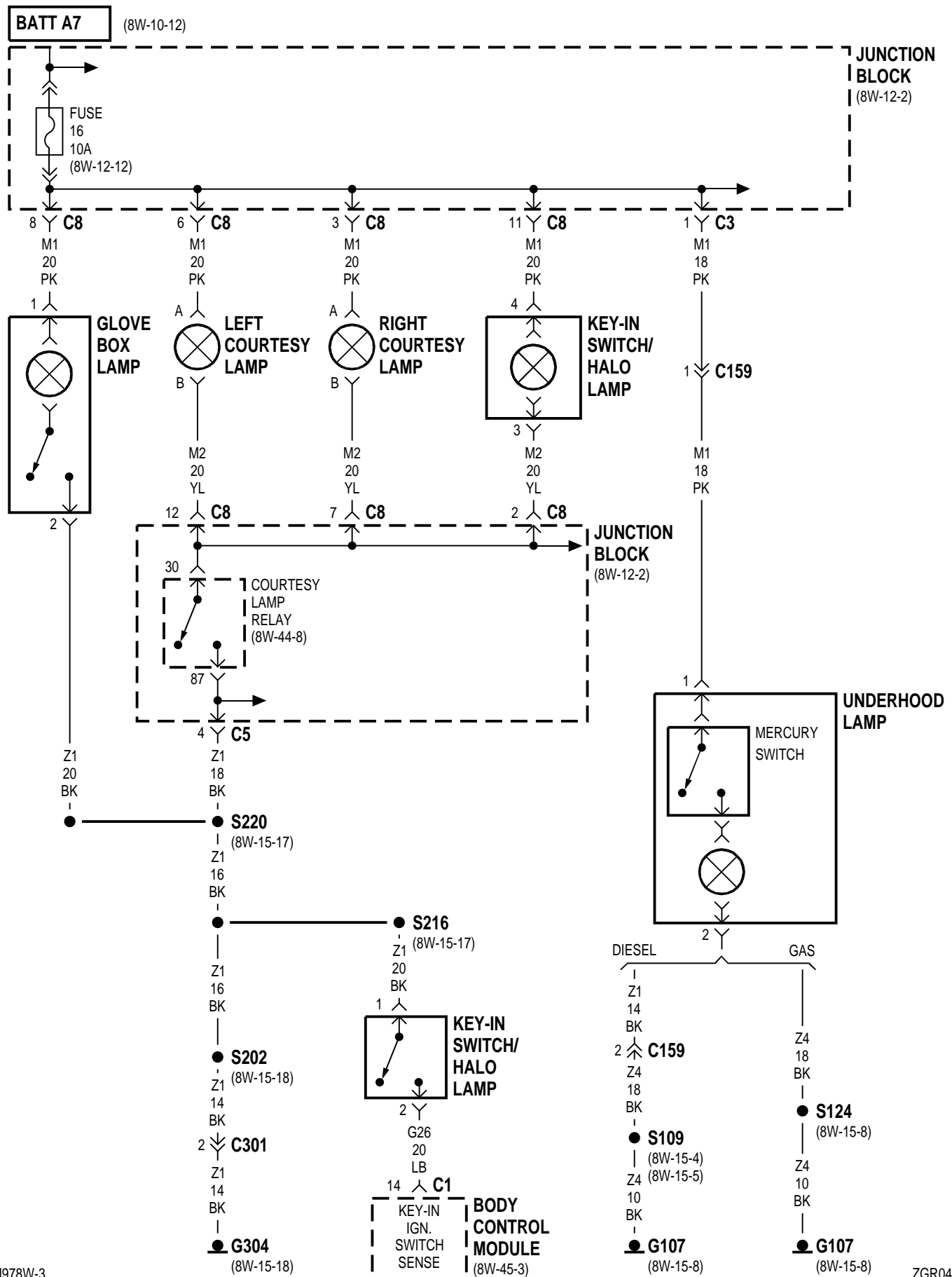
Circuit F75 from fuse 7 in the junction block feeds the airbag warning lamp. Ground circuit Z1 connects to the warning lamp through a transistor controlled by the microprocessor in the instrument cluster. When the microprocessor receives a signal from Airbag Control Module (ACM) on the CCD bus, it switches the transistor to connect the lamp to ground.

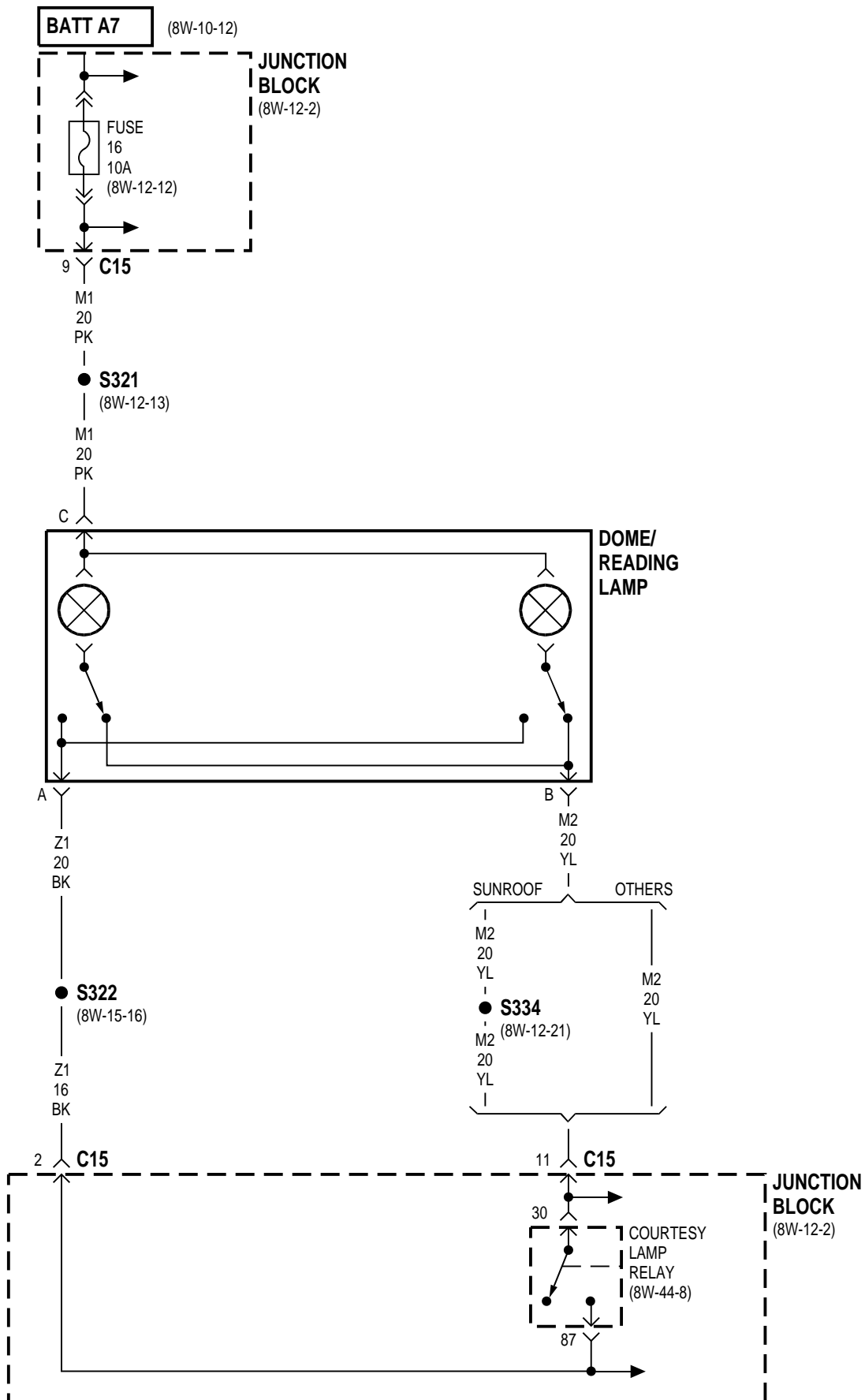
8W-44 INTERIOR LIGHTING

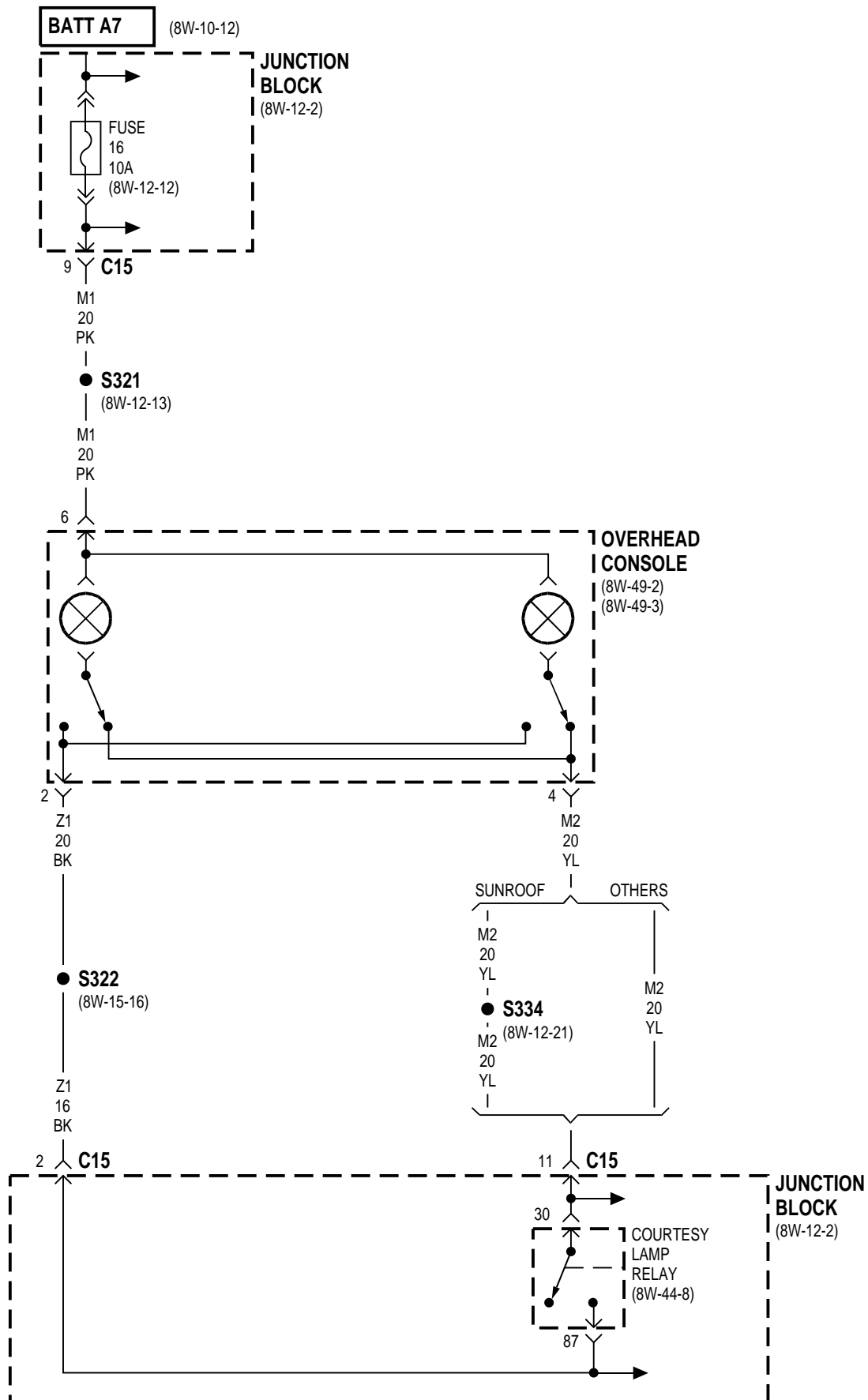
INDEX

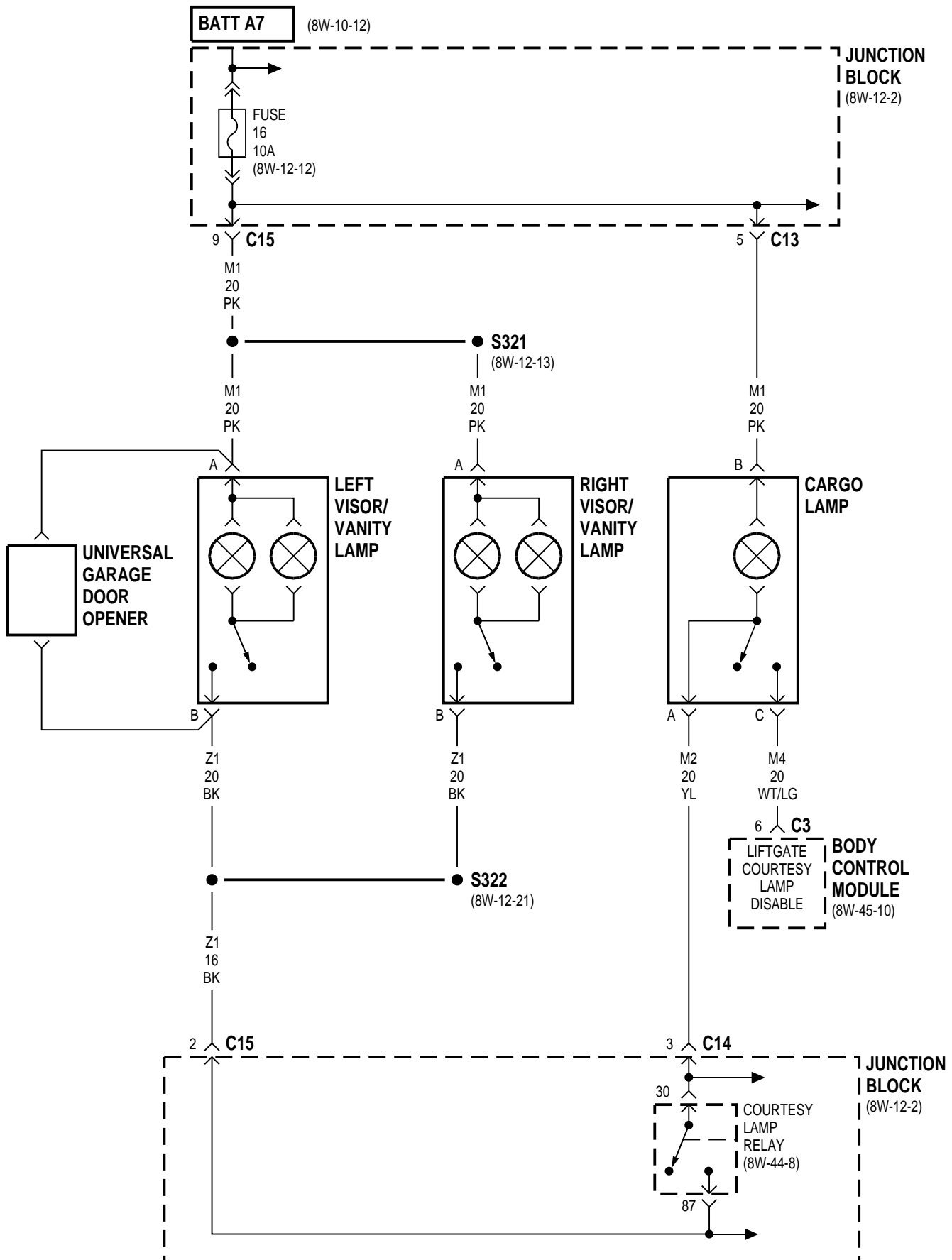
	page
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	15

Component	Page	Component	Page
A/C Heater Control	8W-44-12	Park/Neutral Position Switch	8W-44-6
Ash Receiver Lamp	8W-44-11, 12	Passenger Door Module	8W-44-10
Automatic Day/Night Mirror	8W-44-6, 7	Radio	8W-44-8
Automatic Temperature Control Module ..	8W-44-12	Rear Wiper Module	8W-44-14
Body Control		Right Courtesy Lamp	8W-44-2, 8
Module	8W-44-2, 5, 8, 9, 10, 11, 12, 13, 14	Right Door Courtesy Lamp	8W-44-10
Cargo Lamp	8W-44-5	Right Front Door Ajar Switch	8W-44-14
Cigar Lighter Lamp	8W-44-12	Right Rear Door Ajar Switch	8W-44-14
Circuit Breaker 2	8W-44-9, 10	Right Visor/Vanity Lamp	8W-44-5
Courtesy Lamp Relay	8W-44-2, 3, 4, 5, 8	S109	8W-44-2
Dome/Reading Lamp	8W-44-3	S119	8W-44-6
Driver Door Module	8W-44-9	S124	8W-44-2
Driver Power Mirror	8W-44-7	S202	8W-44-2, 7, 8, 11, 12, 13
Floor Console Lamps	8W-44-11	S203	8W-44-9, 10
Fuse 6	8W-44-6	S204	8W-44-9, 10
Fuse 16	8W-44-2, 3, 4, 5, 8	S205	8W-44-11
Fuse 17	8W-44-13	S209	8W-44-11, 12, 13
G107	8W-44-2	S212	8W-44-6
G300	8W-44-14	S214	8W-44-11, 12
G301	8W-44-10	S216	8W-44-2, 7, 8, 11, 12
G302	8W-44-9	S220	8W-44-2, 7, 8, 12
G303	8W-44-8	S302	8W-44-11
G304	8W-44-2, 7, 8, 11, 12, 13	S304	8W-44-11
G305	8W-44-11	S306	8W-44-9, 10
Glove Box Lamp	8W-44-2	S307	8W-44-9, 10
Graphic Display Module	8W-44-12	S309	8W-44-8
Headlamp Switch	8W-44-11, 13	S316	8W-44-14
Illumination	8W-44-13	S321	8W-44-3, 4, 5
Instrument Cluster	8W-44-11	S322	8W-44-3, 4, 5, 7
Junction Block ...	8W-44-2, 3, 4, 5, 6, 7, 8, 9, 10, 13	S323	8W-44-6
Key-In Switch/Halo Lamp	8W-44-2	S324	8W-44-9
Lamps	8W-44-13	S325	8W-44-10
Left Courtesy Lamp	8W-44-2, 8	S328	8W-44-14
Left Door Courtesy Lamp	8W-44-9	S329	8W-44-14
Left Front Door Ajar Switch	8W-44-14	S334	8W-44-3, 4
Left Rear Door Ajar Switch	8W-44-14	Switch Pod	8W-44-11
Left Visor/Vanity Lamp	8W-44-5	Underhood Lamp	8W-44-2
Liftgate Ajar Switch	8W-44-14	Universal Garage Door Opener	8W-44-5
Liftglass Ajar Switch	8W-44-14	Vehicle Information Center	8W-44-12
Mercury Switch	8W-44-2		
Overhead Console	8W-44-4		

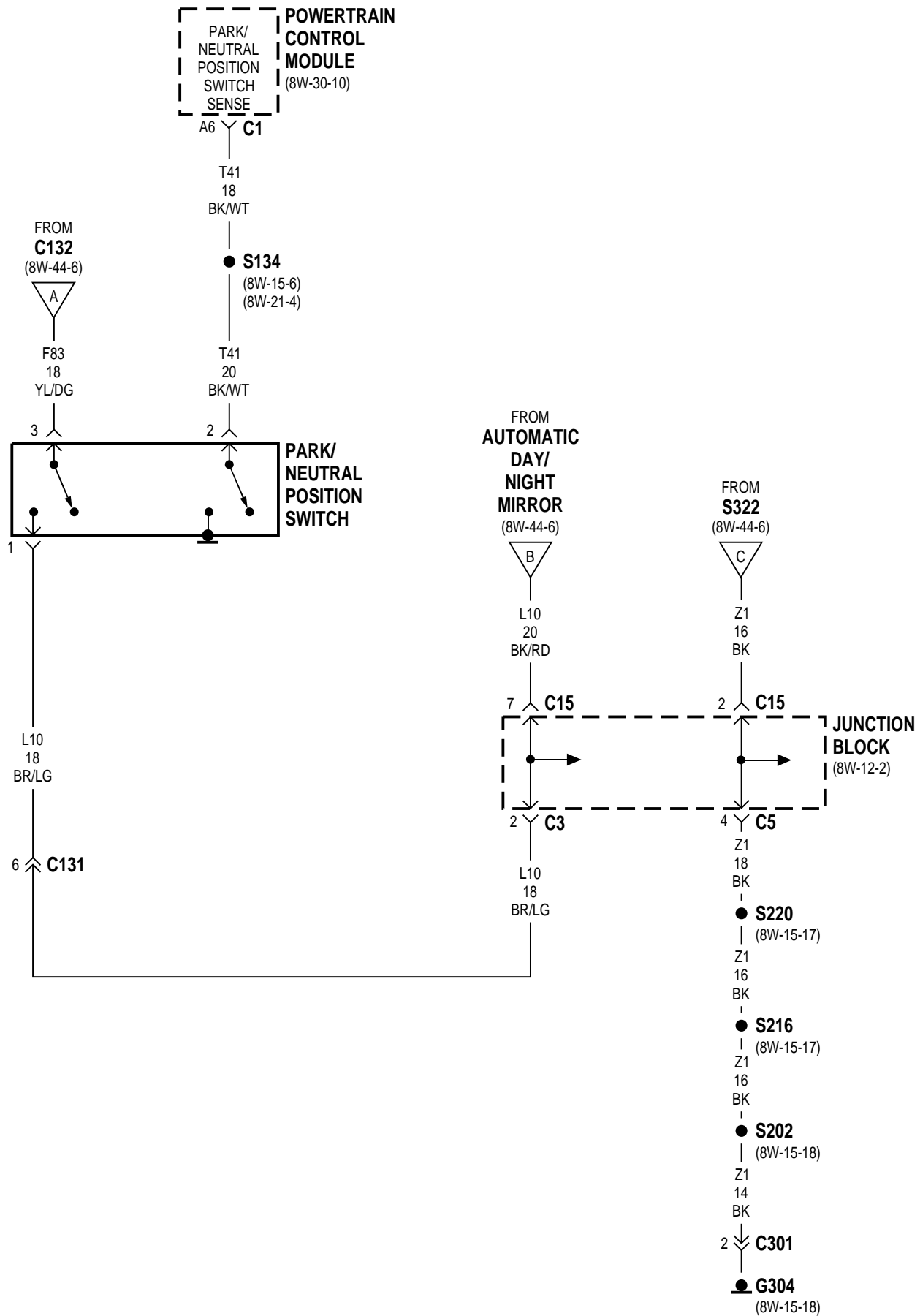






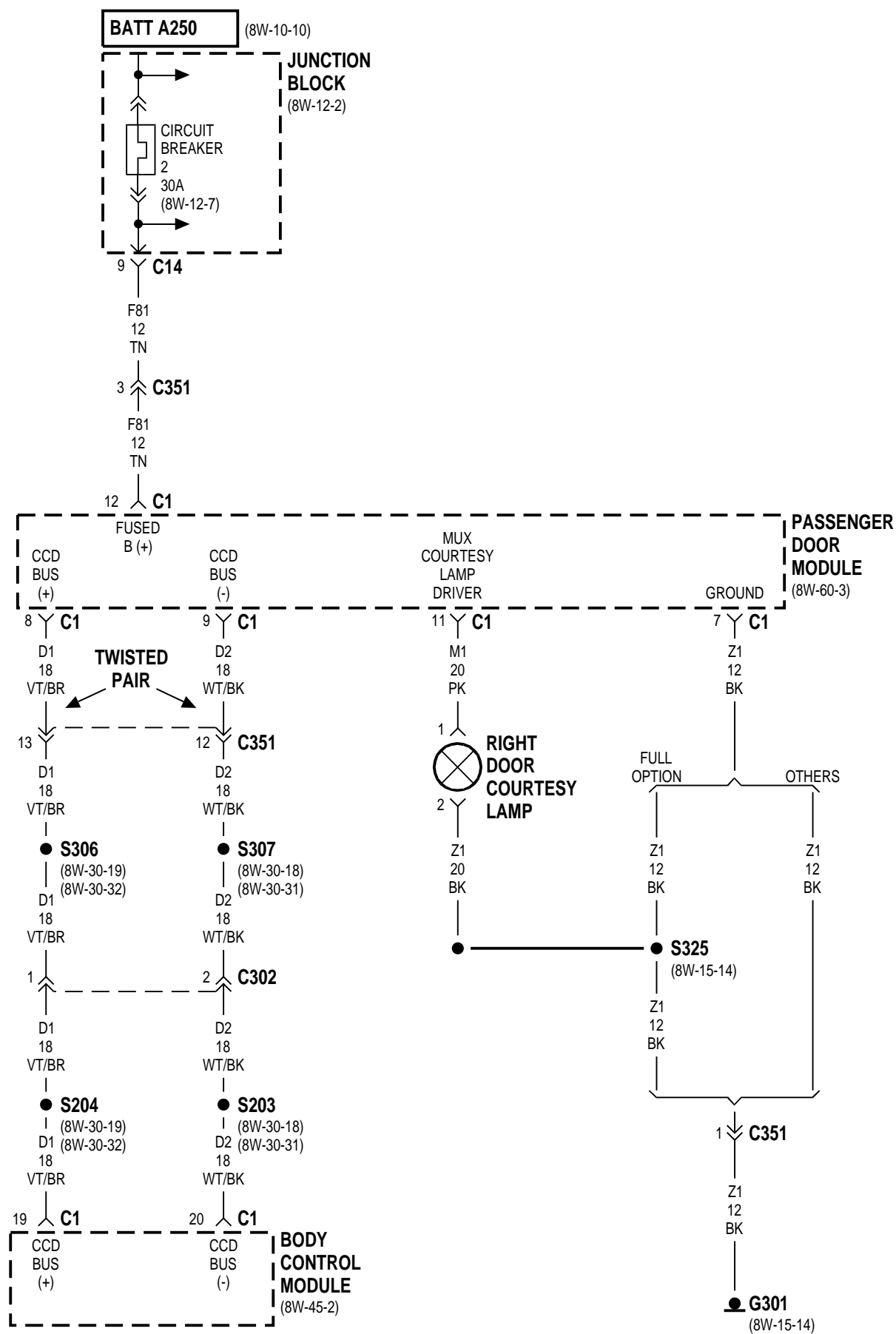


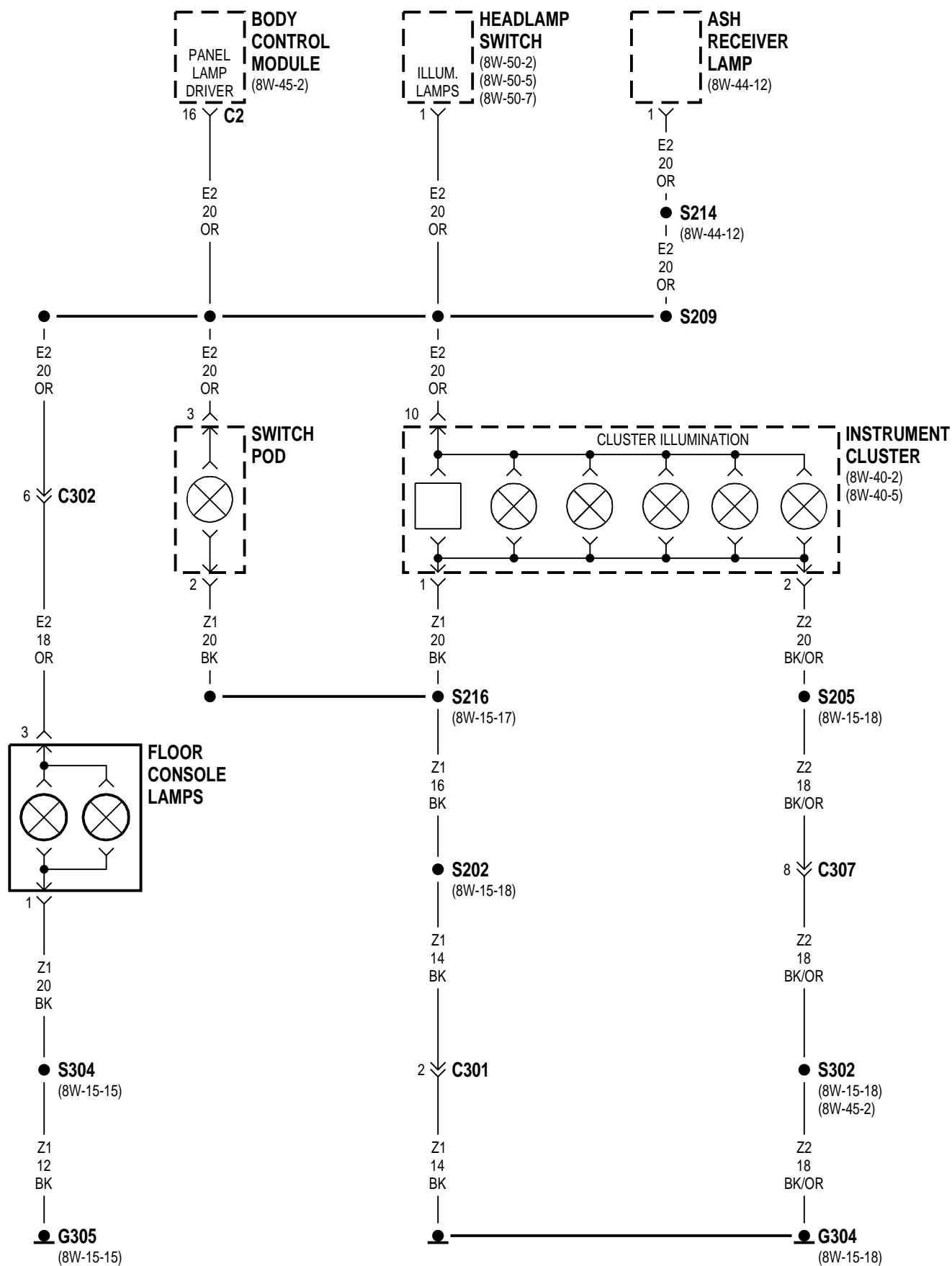


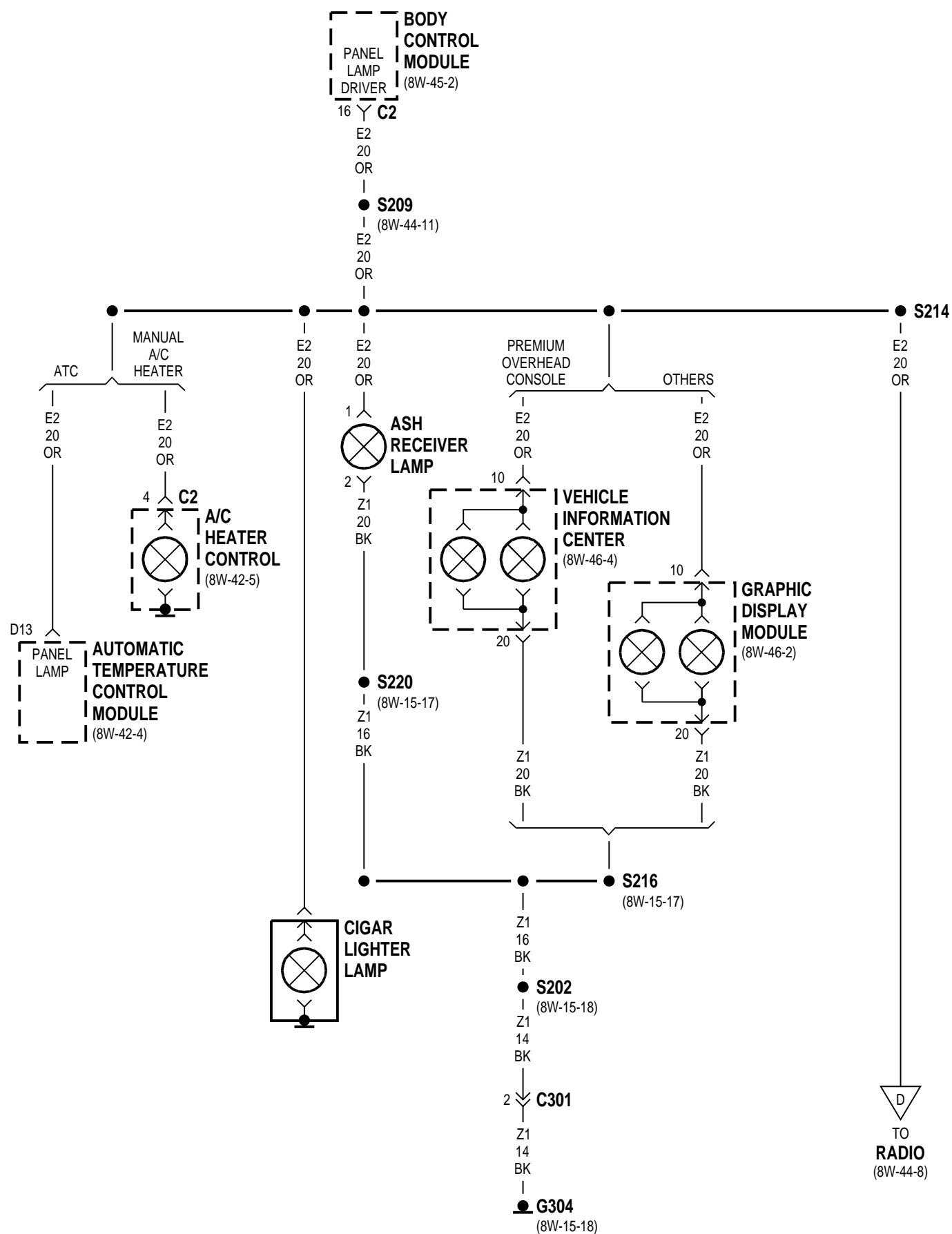


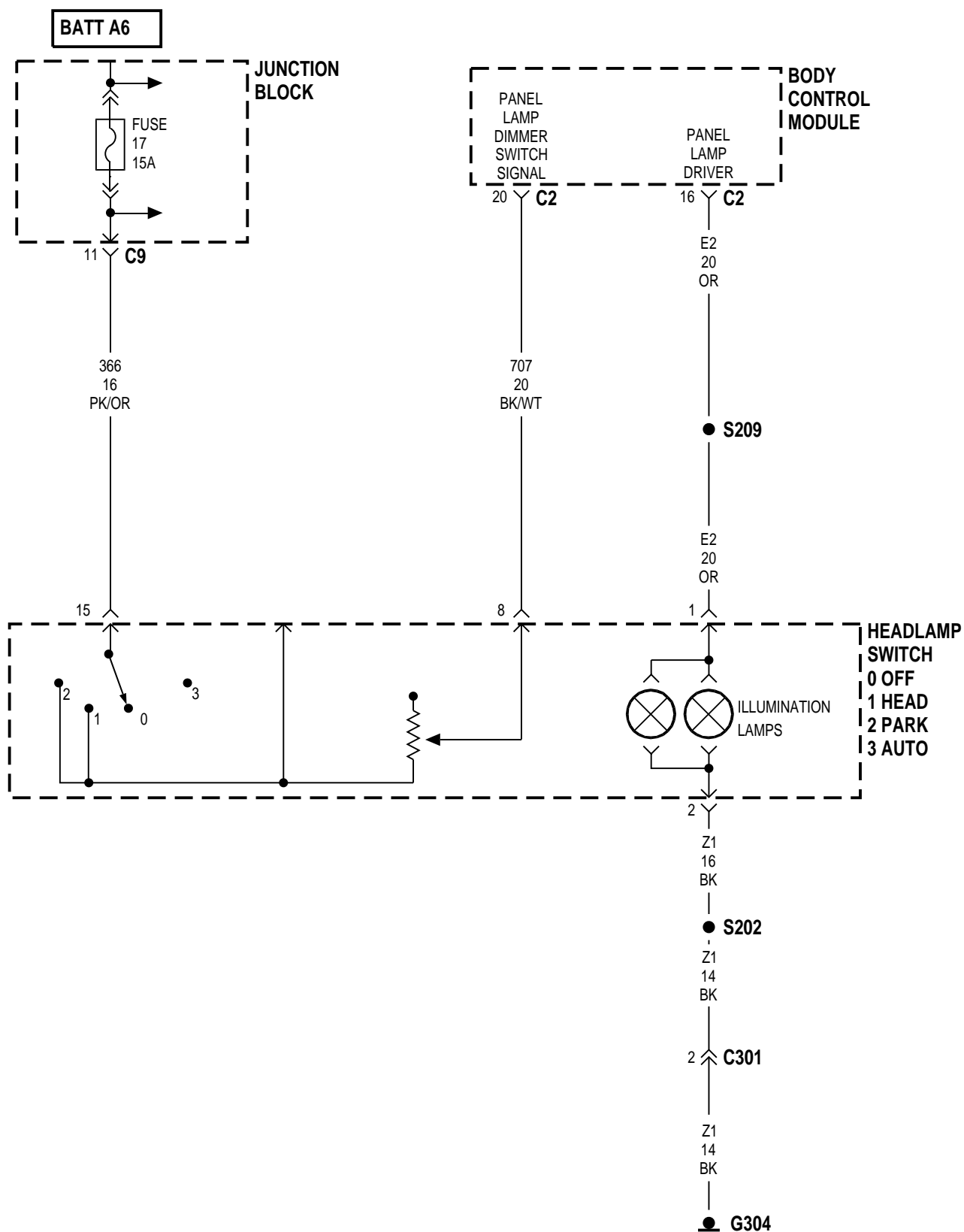


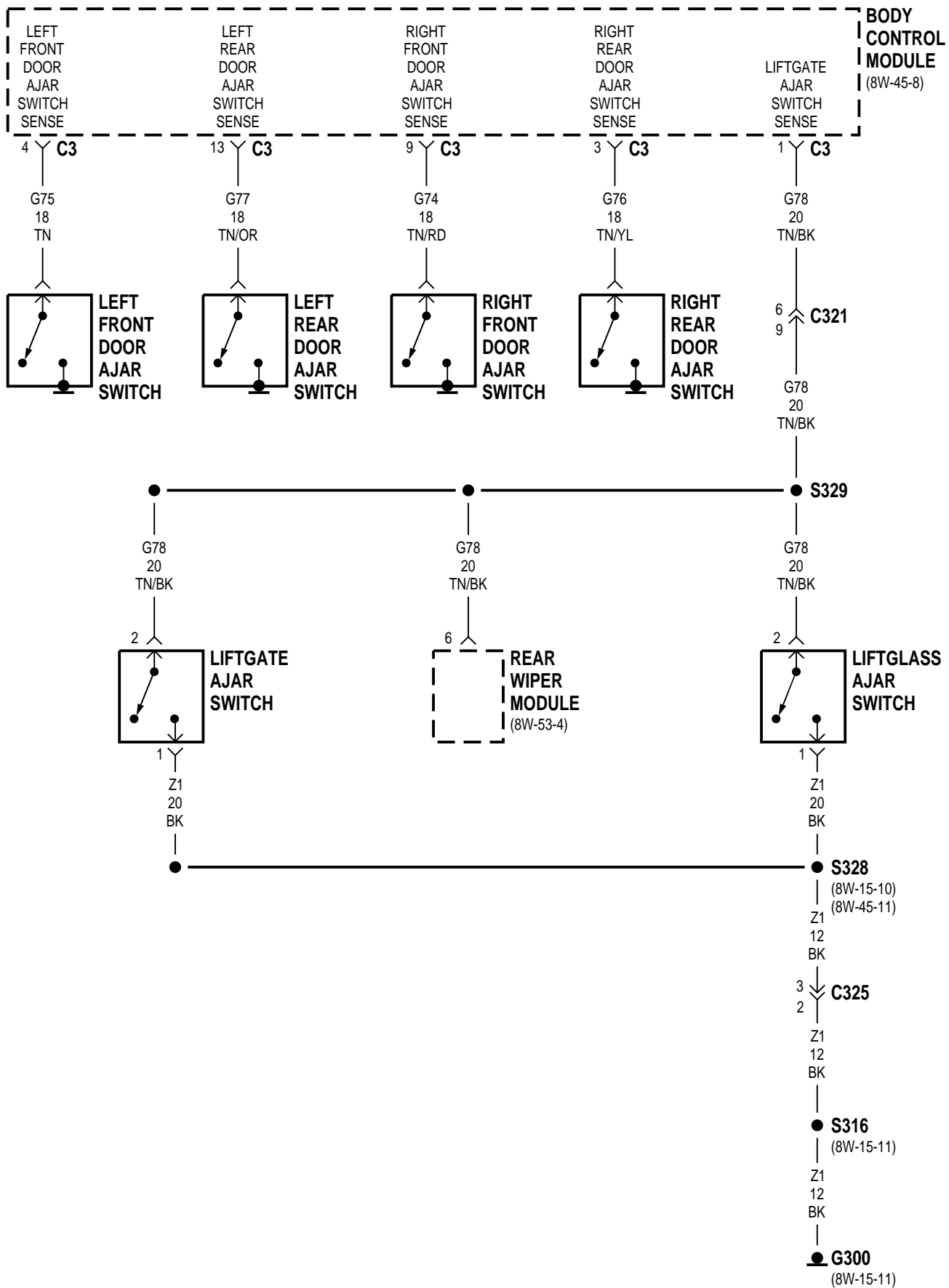












8W-44 INTERIOR LIGHTING

INDEX

	page		page
DESCRIPTION AND OPERATION		INTRODUCTION	15
COURTESY LAMPS, CARGO LAMP, IGNITION		OVERHEAD CONSOLE LAMPS	16
SWITCH KEY-IN HALO LAMP	15	UNDERHOOD LAMP	16
DAY/NIGHT MIRROR	16	UNIVERSAL GARAGE DOOR OPENER	16
GLOVE BOX LAMP	16	VISOR VANITY MIRRORS	16
ILLUMINATION LAMPS	15		

DESCRIPTION AND OPERATION

INTRODUCTION

The Body Control Module (BCM) controls the courtesy lamps and rear cargo lamps. The reading dome/reading lamps in the overhead console act as courtesy lamps as well as containing a switch for independent operation.

Circuit 707 from the dimmer switch circuitry in the head lamp switch provides the illumination lamp intensity signal to the BCM. The BCM powers the illumination lamps on circuit E2.

When the ignition switch is in the START or RUN position, it connects circuit A1 from fuse 8 in the PDC to circuit A21. Circuit A21 powers circuit F99 through PDC fuse 18. Circuit F99 feeds the BCM.

In the ACCESSORY or RUN position, the ignition switch connects circuit A1 to circuit A31. Circuit A31 powers circuit V23 through fuse 3 in the junction block. Circuit V23 feeds the BCM.

ILLUMINATION LAMPS

When the headlamps or parking lamps are ON, the The Body Control Module (BCM) receives the park lamp input on circuit L90 and the illumination lamp intensity signal on circuit 707. Circuit 707 from the dimmer switch circuitry in the head lamp switch provides the illumination lamp intensity signal to the BCM.

After calculating the requested illumination lamp intensity, the BCM powers the following illumination lamps on circuit E2:

- Headlamp switch
- Floor console
- Instrument panel
- Ash receiver
- Graphic Display or Vehicle Information Center (VIC)
- Cigar lighter
- Radio

- A/C-Heater control switch

Circuit Z1 provides ground for the floor console lamps, instrument panel lamps, ash receiver lamp, graphic display or VIC. Circuit Z4 grounds the automatic temperature control switch lamp. Circuit Z5 grounds the radio lamp. The cigar lighter lamp and A/C-Heater control switch lamp (manual A/C-Heater) are case grounded.

COURTESY LAMPS, CARGO LAMP, IGNITION SWITCH KEY-IN HALO LAMP

When the courtesy lamp switch closes, it connects circuit M11 from the Body Control Module to ground on circuit Z1. In response to the courtesy lamp signal, the BCM energizes the courtesy lamp relay by grounding the relay coil on circuit M112. When the relay energizes, it connects circuit M2 to ground on circuit Z1. Circuit M2 provides ground for the right and left courtesy lamps, dome/reading lamps, key-in halo lamp and cargo lamp.

Circuit A7 from fuse 15 in the Power Distribution Center (PDC) powers circuit M1 through fuse 16 in the junction block. Circuit M1 powers the right and left courtesy lamps, ignition switch key-in halo lamp, and cargo lamp. Circuit M1 also powers the glove box lamp and underhood lamp.

DOOR COURTESY LAMPS

When the BCM receives the courtesy lamp signal, it broadcasts a message on the CCD bus. The message signals the Drivers Door Module (DDM) and Passenger Door Module (PDM). In response, the DDM and PDM power the courtesy lamps in the front doors on circuit M1. Circuit Z1 grounds the courtesy lamps in the front doors.

Circuit F81 from the circuit breaker in cavity 2 of the junction block powers the DDM and PDM. Circuit A250 from fuse 11 in the PDC feeds circuit F81 through the circuit breaker.

DESCRIPTION AND OPERATION (Continued)

LIFTGATE COURTESY LAMP DISABLE SWITCH

When closed, the liftgate disable switch provides signal to the BCM on circuit M4 indicating a request to disable the courtesy lamps. To operate, all the doors must be closed with only the liftgate open. Pushing on the liftgate lens activates the switch. Pushing on the lense a second time deactivates the switch.

After receiving the courtesy lamp disable signal, the BCM turns off the courtesy lamps by de-energizing the courtesy lamp relay.

GLOVE BOX LAMP

Circuit A7 from 15 in the Power Distribution Center (PDC) powers circuit M1 through fuse 16 in the junction block. Circuit M1 powers the glove box lamp. The lamp has a switch in series which when closed, connects the lamp to ground on circuit Z1.

UNDERHOOD LAMP

Circuit M1 from fuse 16 in the Power Distribution Center (PDC) feeds the underhood lamp. The lamp contains a mercury switch which connects the lamp to ground on circuit Z1 when the hood is raised.

VISOR VANITY MIRRORS

Circuit A7 from fuse 15 in the Power Distribution Center (PDC) powers circuit M1 through fuse 16 in the junction block. Circuit M1 feeds the visor vanity mirror lamps. Each mirror has a switch grounds the lamps in the mirrors to circuit Z1.

OVERHEAD CONSOLE LAMPS

Circuit A7 from fuse 15 in the Power Distribution Center (PDC) powers circuit M1 through fuse 16 in the junction block. Circuit M1 feeds the overhead console lamps.

Each overhead console lamp has a switch that connects the lamps to ground on circuit Z1. The lamps are also grounded when the Body Control Module (BCM) energizes the courtesy lamp relay to connect circuit M2 to ground on circuit Z1.

DAY/NIGHT MIRROR

When the ignition switch is in the RUN position, it connects circuit A1 from fuse 8 in the Power Distribution Center (PDC) circuit A22. Circuit A22 powers circuit F83 through fuse 6 in the junction block. Circuit F83 feeds the day/night rear view mirror. Circuit Z1 grounds mirror.

Circuits P112 and P114 connect from the day/night mirror to the drivers outside mirror.

Circuit L10 from the park/neutral switch signals the day/night mirror when the vehicle is in reverse. The mirror turns off when the vehicle is in reverse.

UNIVERSAL GARAGE DOOR OPENER

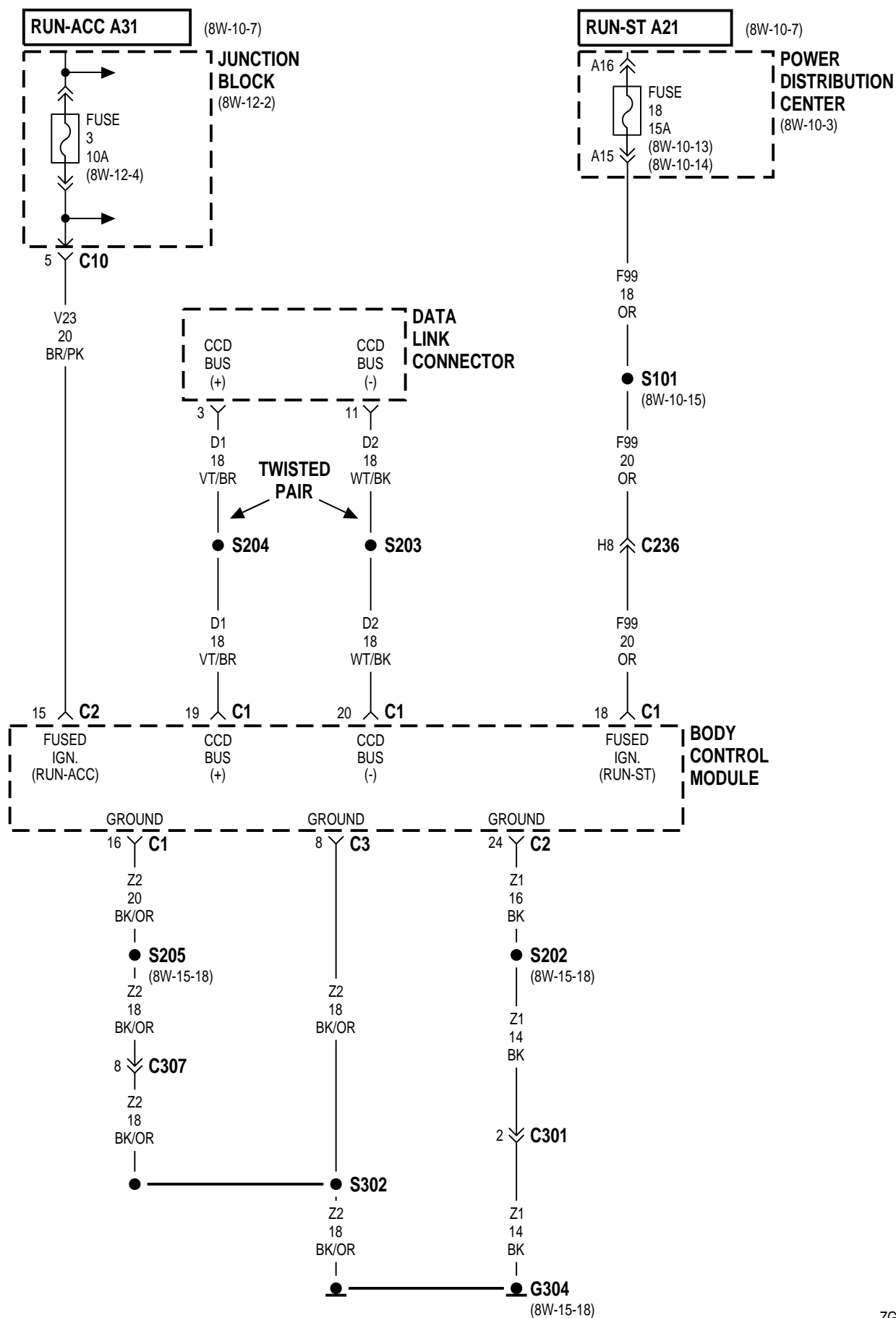
Circuit A7 from fuse 15 in the Power Distribution Center (PDC) powers circuit M1 through fuse 16 in the junction block. Circuit M1 feeds the visor vanity mirrors and the universal garage door opener. The opener is located on the left visor. Circuit Z1 provides ground for the opener.

8W-45 BODY CONTROL MODULE

INDEX

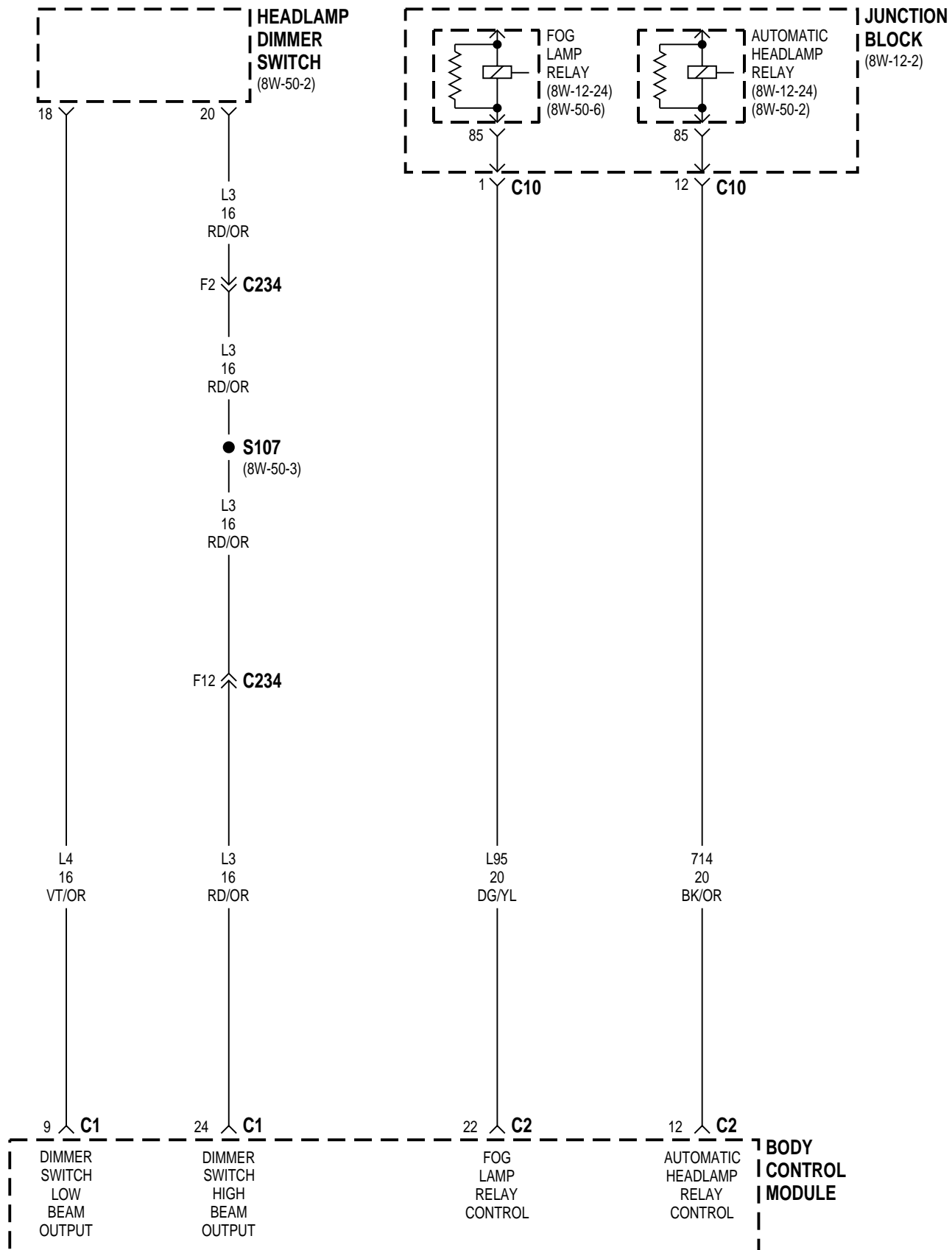
	page
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	12

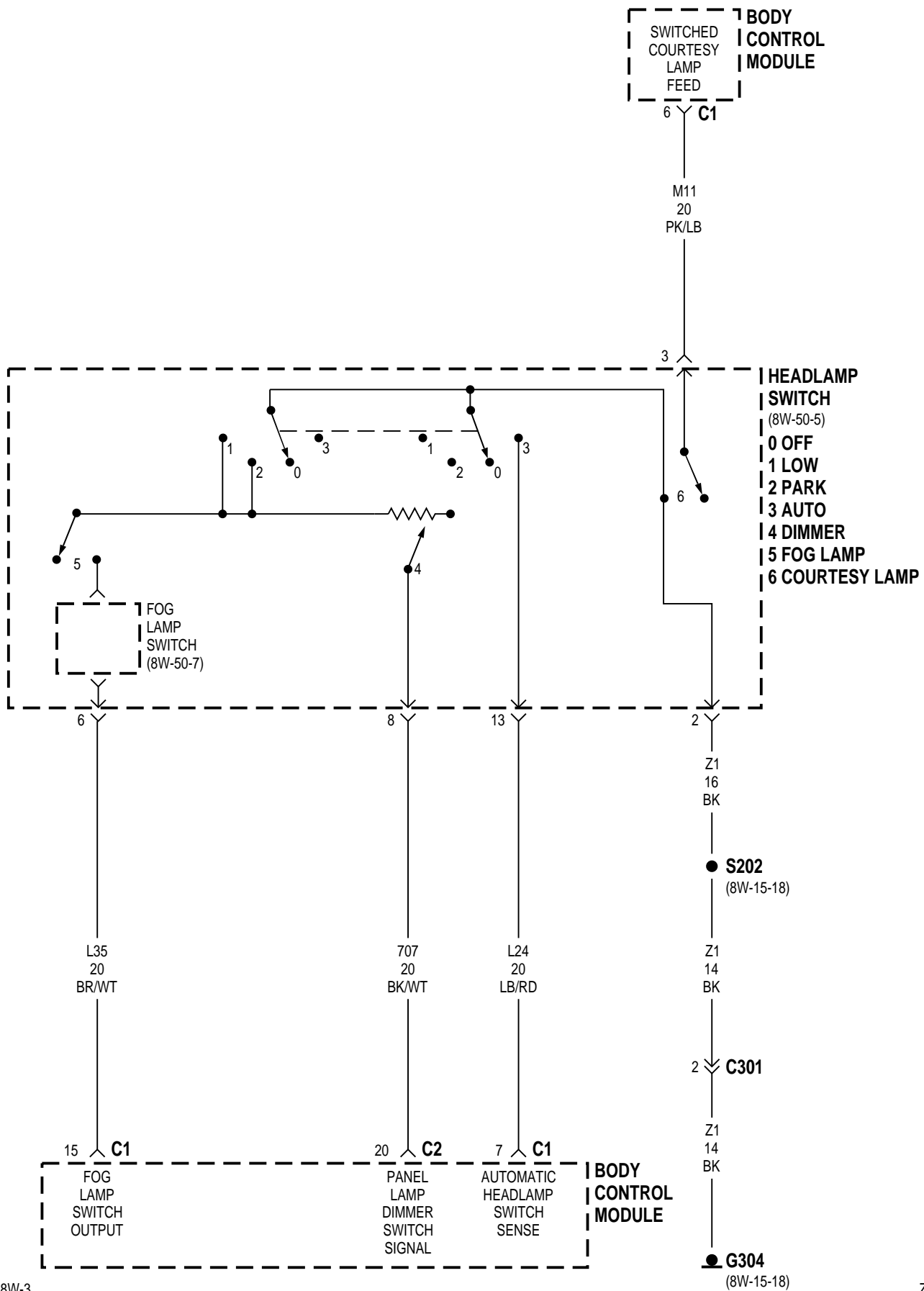
Component	Page	Component	Page
A/C Heater Control	8W-45-9	Liftgate Ajar Switch	8W-45-11
Ambient Temperature Sensor	8W-45-9	Liftgate Cylinder Lock Switch	8W-45-8
Ash Lamp Receiver	8W-45-10	Liftglass Ajar Switch	8W-45-11
Automatic Headlamp Light		Park Brake Switch	8W-45-9
Sensor/Vtss Led	8W-45-4	Park Lamp Relay	8W-45-4
Automatic Headlamp Relay	8W-45-5	Power Distribution Center	8W-45-2, 3
Automatic Temperature Control Module ...	8W-45-9	Rear Window Defogger Relay	8W-45-3
Body Control Module .	8W-45-2, 3, 4, 5, 6, 7, 8, 9, 10	Rear Window Defogger Switch	8W-45-9
Brake Warning Switch	8W-45-9	Rear Wiper Module	8W-45-11
Cargo Lamp	8W-45-10	Right Front Cylinder Lock Switch	8W-45-8
Circuit Breaker 1	8W-45-7	Right Front Door Ajar Switch	8W-45-8
Clockspring	8W-45-7	Right Rear Door Ajar Switch	8W-45-8
Courtesy Lamp Relay	8W-45-3	S101	8W-45-2
Data Link Connector	8W-45-2	S107	8W-45-5
Daytime Running Lamp Module	8W-45-5	S117	8W-45-9
Floor Console Lamps	8W-45-10	S120	8W-45-7
Fog Lamp Relay	8W-45-5	S122	8W-45-7
Fog Lamp Switch	8W-45-6	S201	8W-45-4
Fuse 3	8W-45-2, 3	S202	8W-45-2
Fuse 6	8W-45-3	S202	8W-45-6
Fuse 7	8W-45-4	S203	8W-45-2
Fuse 17	8W-45-4	S204	8W-45-2
Fuse 18	8W-45-2	S205	8W-45-2
G300	8W-45-11	S207	8W-45-7
G304	8W-45-2, 6	S209	8W-45-10
G305	8W-45-4	S214	8W-45-10
Headlamp Dimmer Switch	8W-45-5	S216	8W-45-3
Headlamp Switch	8W-45-6	S219	8W-45-9
Hood Switch	8W-45-10	S220	8W-45-3
Horn Relay	8W-45-3	S302	8W-45-2
Instrument Cluster	8W-45-10	S303	8W-45-9
Intermittent Wiper Relay	8W-45-7	S304	8W-45-4
Intermittent Wiper Switch	8W-45-7	S305	8W-45-8
Junction Block	8W-45-2, 3, 4, 5, 7	S328	8W-45-11
Key-In Switch/Halo Lamp	8W-45-3	S329	8W-45-11
Left Front Cylinder Lock Switch	8W-45-8	Seat Belt Switch	8W-45-4
Left Front Door Ajar Switch	8W-45-8	Switch Pod	8W-45-10
Left Rear Door Ajar Switch	8W-45-8		

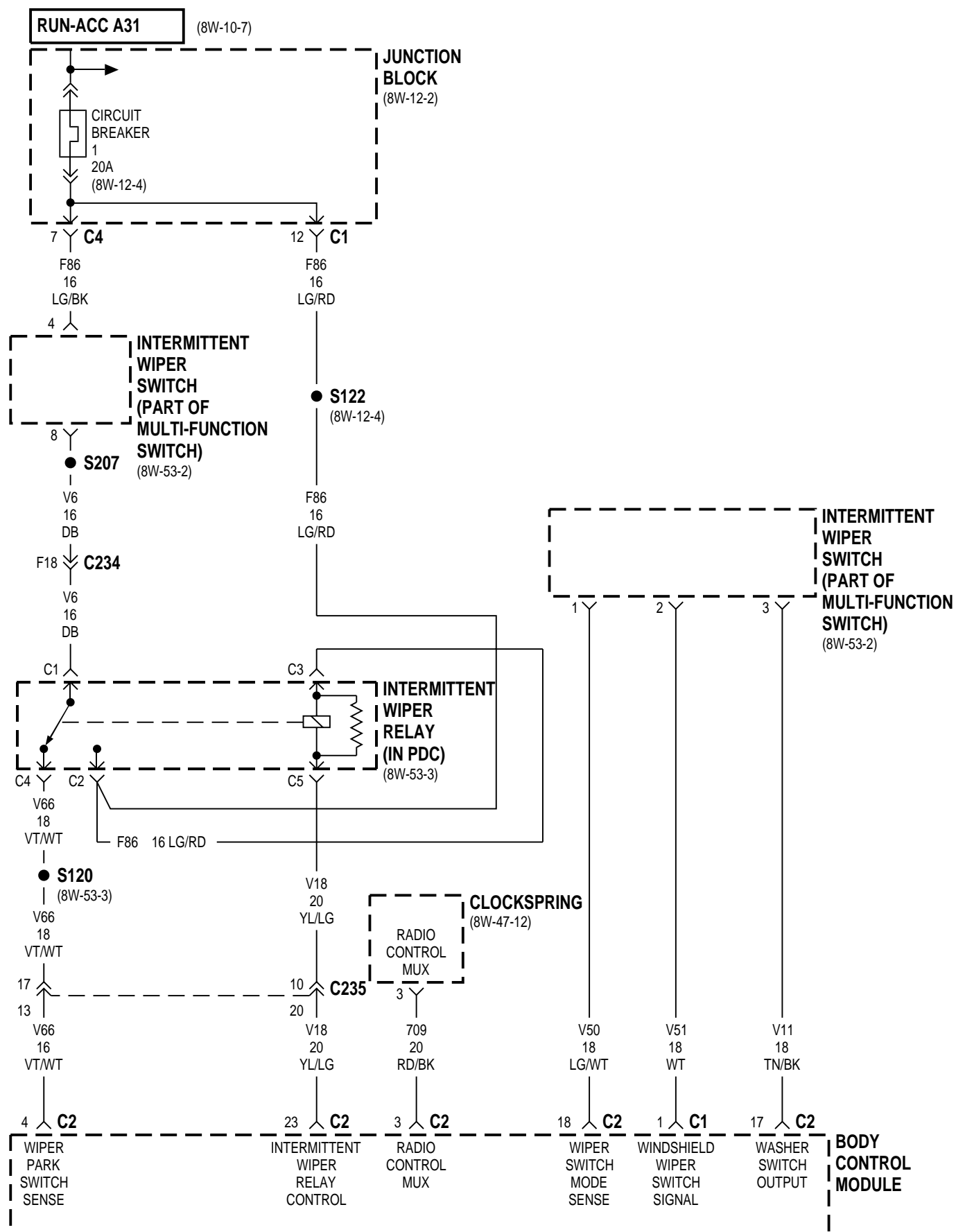


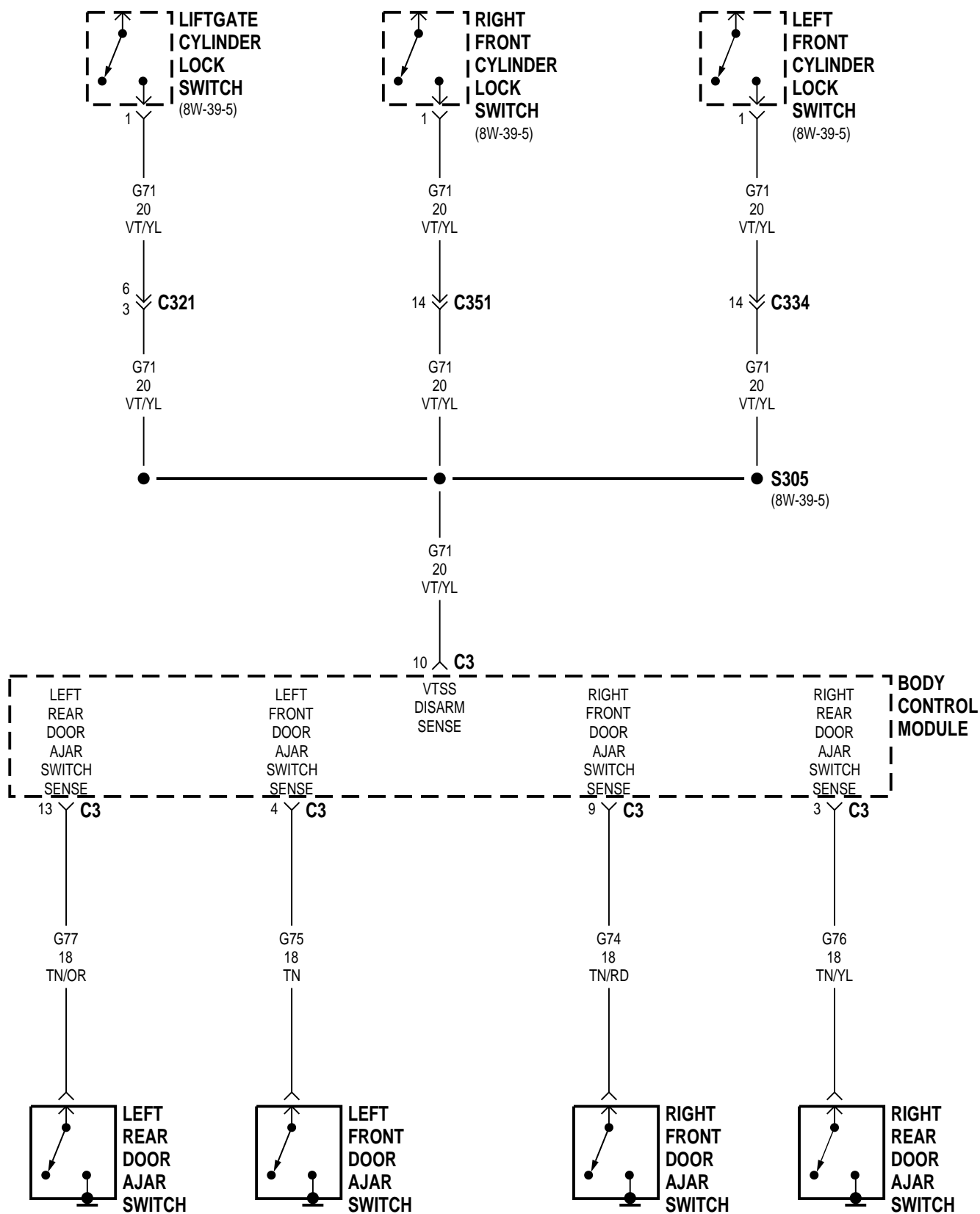


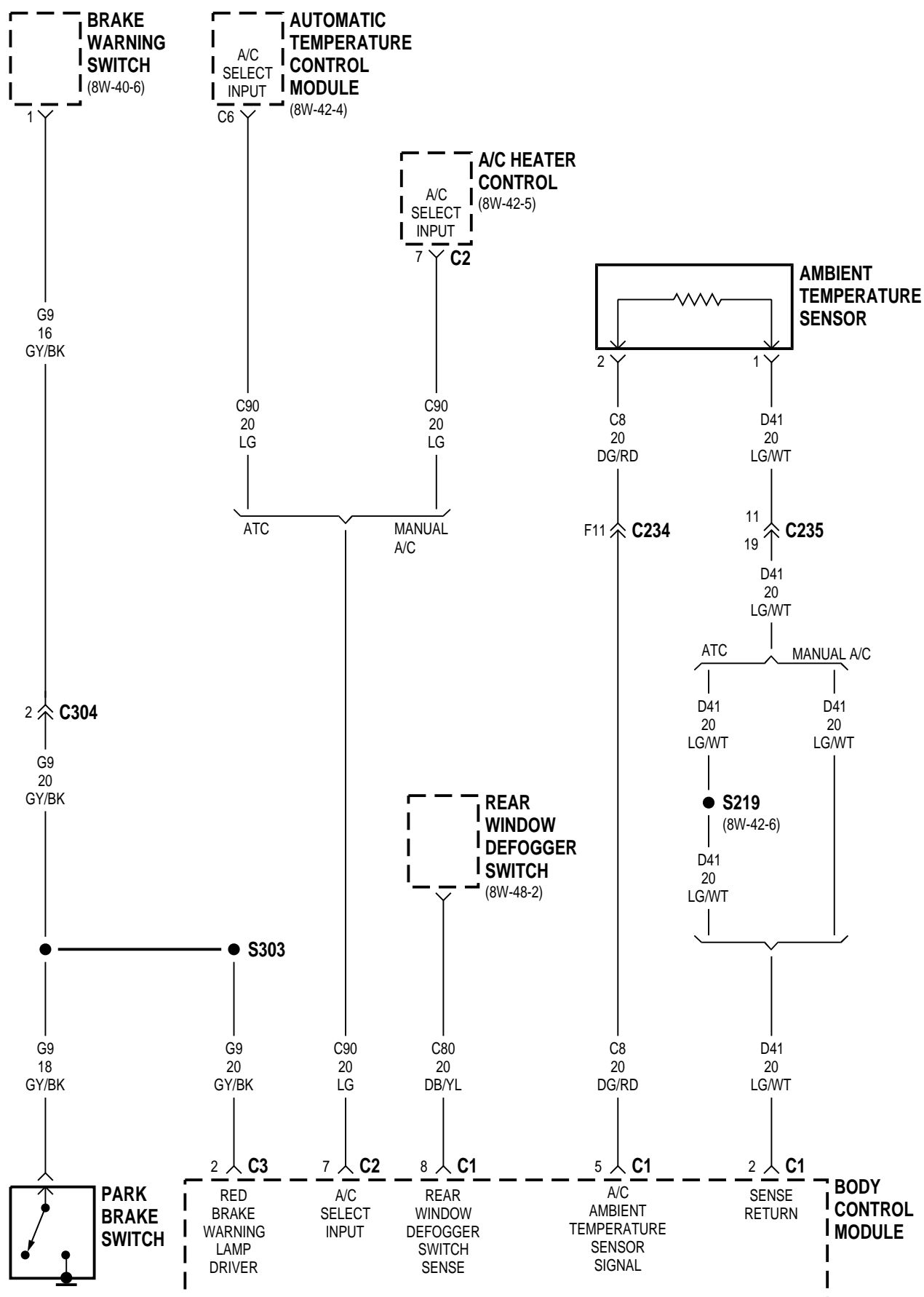


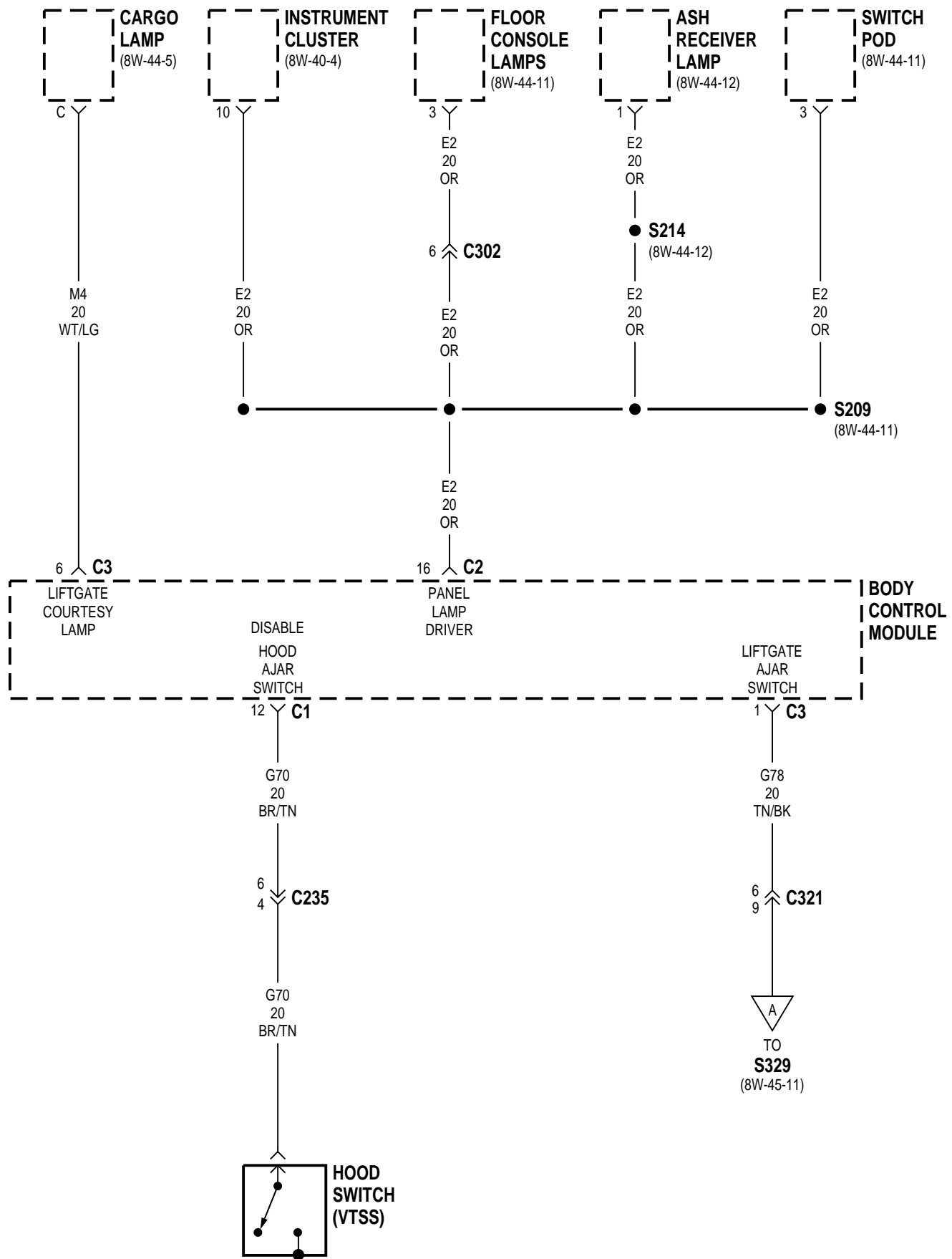


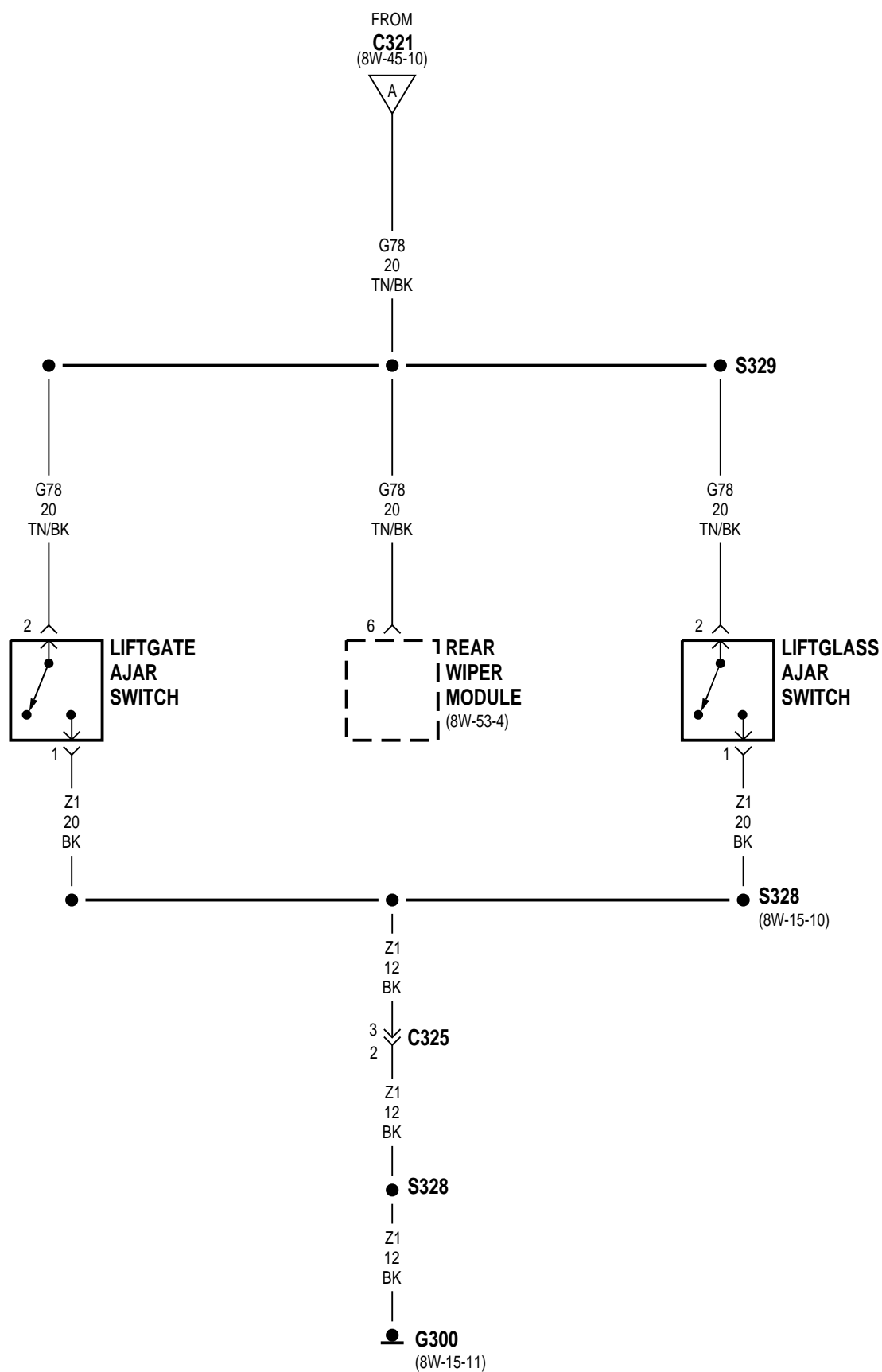












8W-45 BODY CONTROL MODULE

INDEX

	page		page
DESCRIPTION AND OPERATION		INTRODUCTION	12
A/C SELECT SWITCH	12	KEY-IN IGNITION CHIME	13
AJAR CHIME	13	LIFTGATE COURTESY LAMP DISABLE SWITCH	13
AMBIENT TEMPERATURE SENSOR	12	LOW FUEL WARNING LAMP ANNOUNCEMENT CHIME	13
AUTO HEADLAMPS	13	LOW OIL PRESSURE WARNING CHIME	13
COURTESY LAMP SWITCH	12	PARK LAMP SWITCH SENSE	13
ENGINE TEMPERATURE CRITICAL CHIME	13	SEAT BELT SWITCH	13
IGNITION SWITCH SENSE	13		
INSTRUMENT PANEL DIMMING	13		

DESCRIPTION AND OPERATION

INTRODUCTION

The Body Control Module (BCM) used in this vehicle provides a communication interface with other controllers and modules. The BCM also controls various vehicle functions. Circuit operation of specific systems or components controlled by the BCM are found in wiring diagram section covering the component or system.

This section of the wiring diagrams provides an overview of the functions controlled or supported by the BCM. The BCM provides or supports the following features:

- A/C Select Switch Status
- Ambient Temperature
- Automatic Funeral Mode
- Automatic Headlamp Control
- Chime
- Courtesy Lamps with Time Out
- Door, Hood or Liftgate Ajar Status
- Door Lock Inhibit
- Electronic Odometer
- Electronic Vehicle Information Center
- Fog Lamp Control
- Headlamp Delay
- High Beam Indicator
- Illuminated Entry
- Instrument Panel Dimming
- Intermittent Wiper Control
- Liftgate Courtesy Lamp Disable
- Mechanical Instrument Cluster
- Rear Window Defogger Control
- Remote Radio Control
- Seat Belt Reminder
- Speed Sensitive Intermittent Wipe Control
- Vehicle Theft Security System

The BCM communicates with the following controllers and modules over the CCD bus:

- Automatic Temperature Control (ATC) Module
- Compass (Overhead Console)
- Driver Door Module (DDM)
- Mechanical Instrument Cluster
- Memory Seat Module
- Passenger Door Module (PDM)
- Powertrain Control Module
- Vehicle Information Center
- Radio

Circuit A250 from fuse 11 in the Power Distribution Center (PDC) powers circuit F75 through fuse 7 in the junction block. Circuit F75 supplies battery voltage to the BCM. Circuits Z1 and Z2 provide ground for the BCM.

A/C SELECT SWITCH

If the vehicle is equipped with Automatic Temperature Control (ATC), the Automatic Temperature Control Module sends the A/C select switch to the Body Control Module (BCM) on circuit C90. If the vehicle has manual A/C, the A/C-heater control switch sends the A/C select signal to the BCM on circuit C90.

AMBIENT TEMPERATURE SENSOR

The ambient air temperature sensor is a variable resistor. As ambient (outside) temperature varies, the resistance in the sensor changes. Circuit C8 from the Body Control Module (BCM) supplies power to the sensor. Circuit D41 provides the sensor signal to the BCM.

COURTESY LAMP SWITCH

When the courtesy lamp switch inside the headlamp switch closes, it completes a path to ground for circuit M11 from the Body Control Module (BCM). The BCM energizes the courtesy lamp relay in the junction block to power the courtesy lamps. Refer to section 8W-44.

DESCRIPTION AND OPERATION (Continued)

LIFTGATE COURTESY LAMP DISABLE SWITCH

When the courtesy lamp disable switch closes, it provides battery voltage to the Body Control Module (BCM) on circuit M4.

AUTO HEADLAMPS

When the operator puts the headlamp switch in the AUTO position, the auto headlamp switch closes and connects circuit L24 from the Body Control Module to ground. This signals the BCM to operate the headlamps based on the ultralight sensor input. The BCM powers the ultralight sensor on circuit L110. Circuit L109 provides the signal from the sensor to the BCM.

PARK LAMP SWITCH SENSE

When the operator puts the headlamp switch in the park lamp position, the park lamp switch closes and circuit L90 powers the parking lamps. Circuit L90 also provides an input to the Body Control Module (BCM). The BCM monitors the L90 circuit and circuit 707 from the dimmer switch to determine instrument panel lamp intensity

INSTRUMENT PANEL DIMMING

On circuit 707 from the dimmer switch in the headlamp switch, the Body Control Module (BCM) determines selected intensity for the instrument panel lamps. The BCM also transmits a signal representing required lamp intensity over the CCD bus. After receiving the signal from the CCD bus, all other display modules update their brightness level.

IGNITION SWITCH SENSE

On circuit V23, the Body Control Module (BCM) senses when the ignition switch is in the ACCESSORY or RUN position. The BCM senses when the ignition switch is in the START or RUN position on circuit F99.

AJAR CHIME

On models equipped with a Vehicle Information Center (VIC), the Body Control Module (BCM)

sounds an audible chime when the vehicle is moving if one of the doors, the hood, or liftgate opens. The BCM also signals the VIC over the CCD bus. The VIC then displays which component is ajar.

KEY-IN IGNITION CHIME

When the key is inserted into the ignition switch, the key-in switch closes and connects circuit G26 from the Body Control Module to ground on circuit Z1. When the key-in switch closes, the BCM sounds an audible fast rate chime.

SEAT BELT SWITCH

The seat belt switch closes when the seat belt is not buckled. When closed, the switch connects circuit G10 from the Body Control Module (BCM) to ground on circuit Z1. If the switch is closed while the ignition switch is ON, the BCM sounds an audible warning chime.

LOW OIL PRESSURE WARNING CHIME

When oil pressure drops below a calibrated level, the Body Control Module (BCM) sounds an audible chime to alert the operator. The BCM receives the low oil pressure signal on the CCD bus.

ENGINE TEMPERATURE CRITICAL CHIME

When engine temperature exceeds a pre-determined temperature, the Body Control Module (BCM) sounds an audible chime. The Powertrain Control Module (PCM) broadcasts engine coolant temperature to the BCM on the CCD bus.

LOW FUEL WARNING LAMP ANNOUNCEMENT CHIME

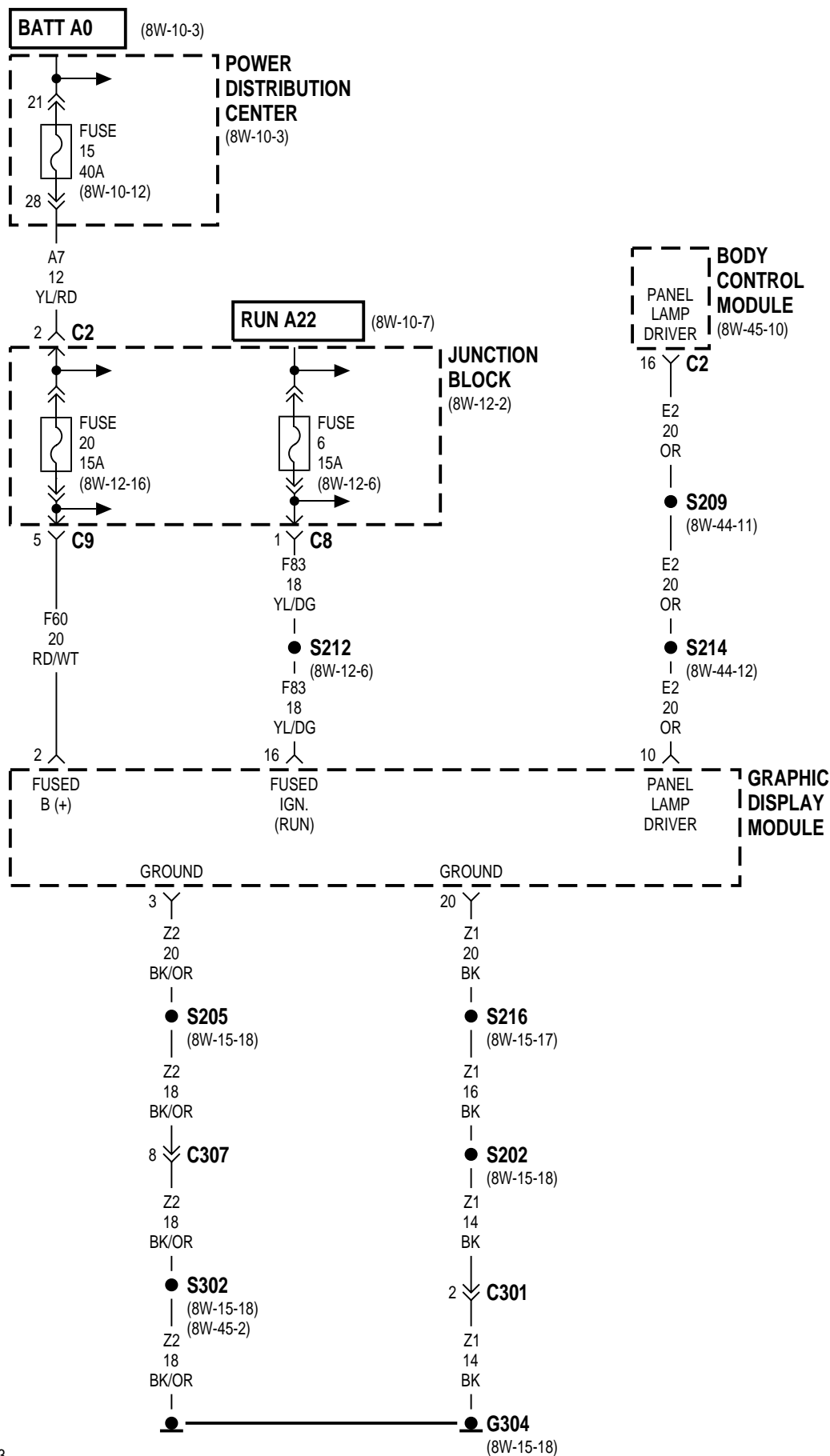
The Body Control Module (BCM) sounds an audible chime when the low fuel warning lamp illuminates.

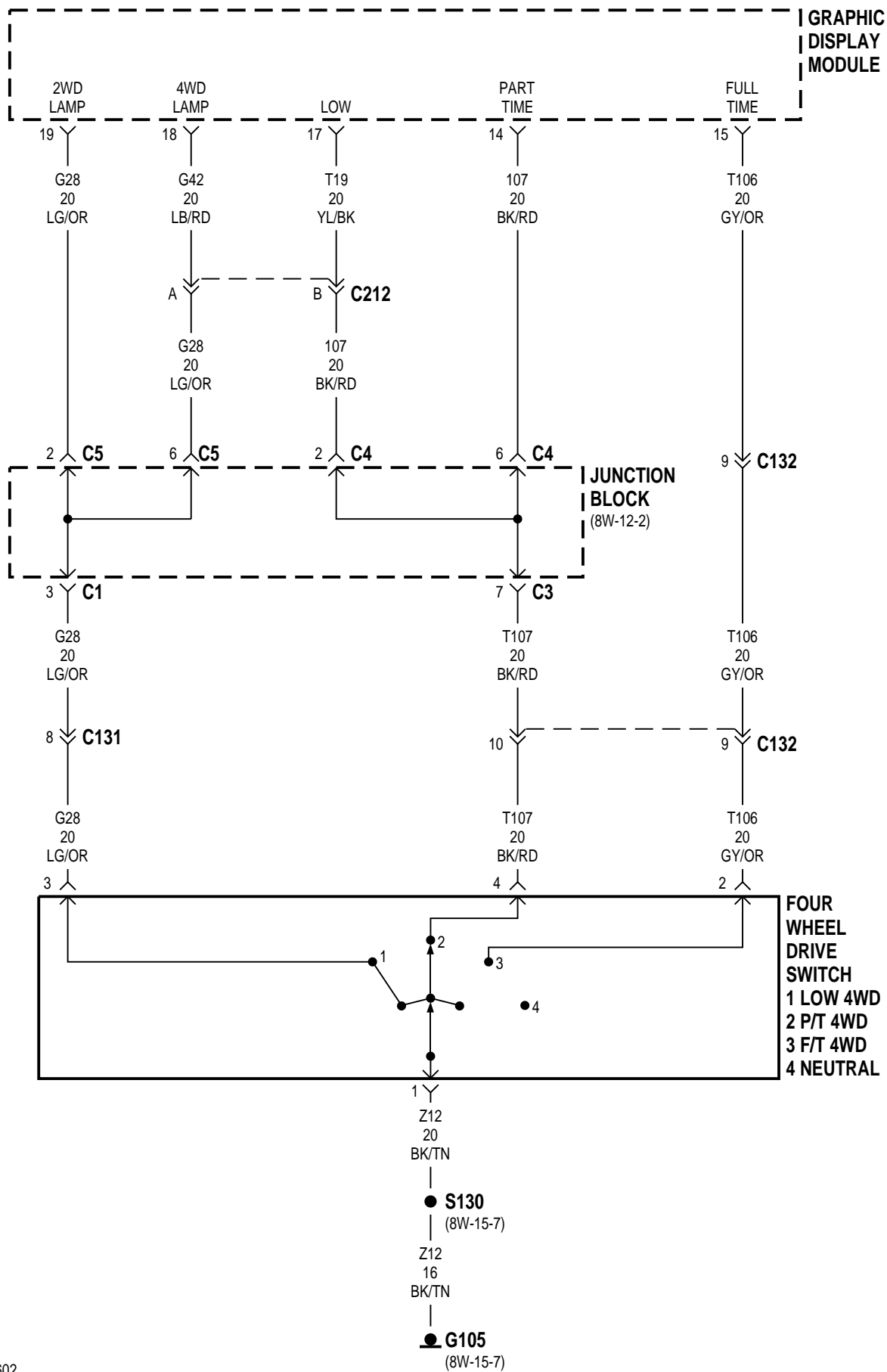
8W-46 MESSAGE CENTER

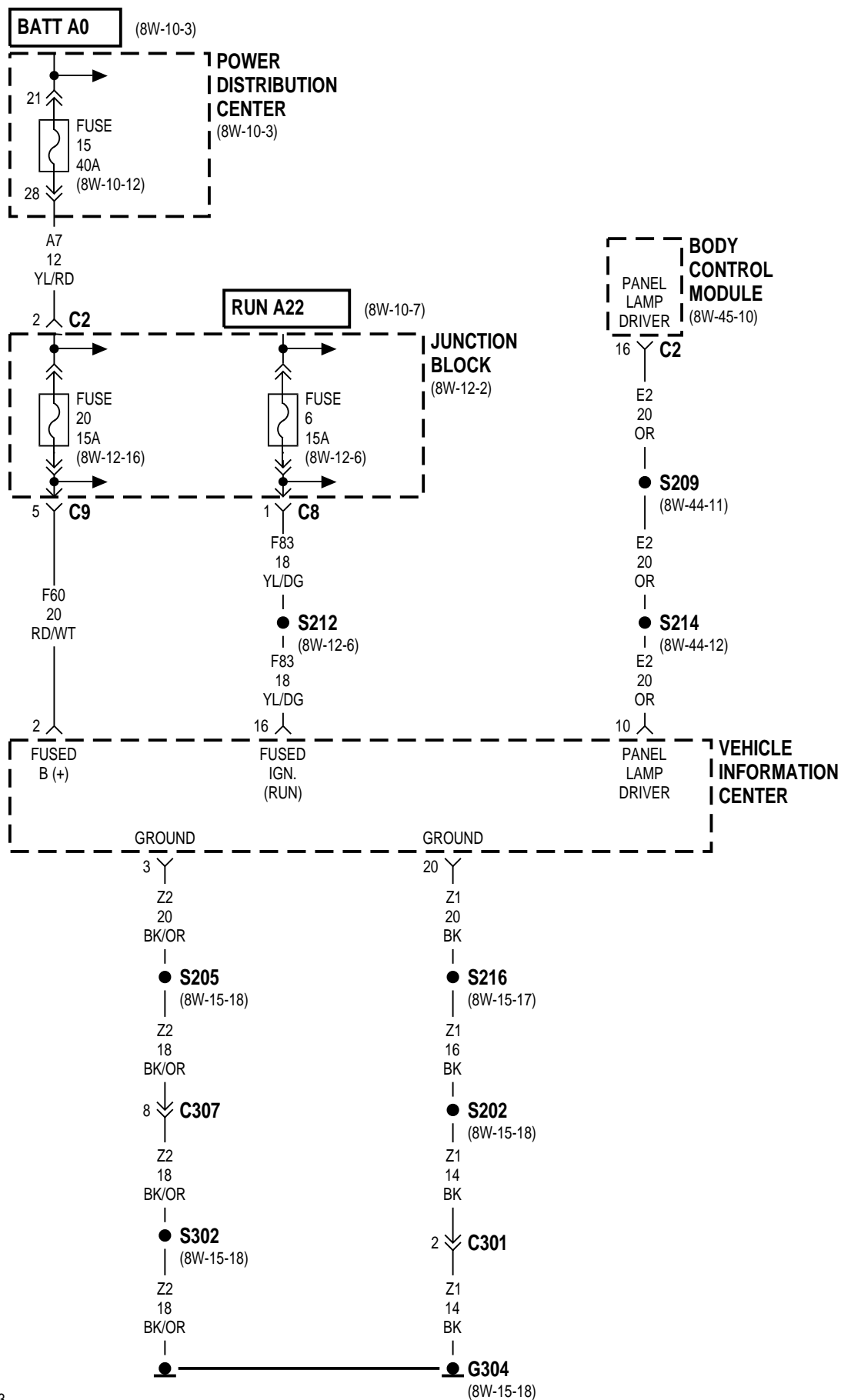
INDEX

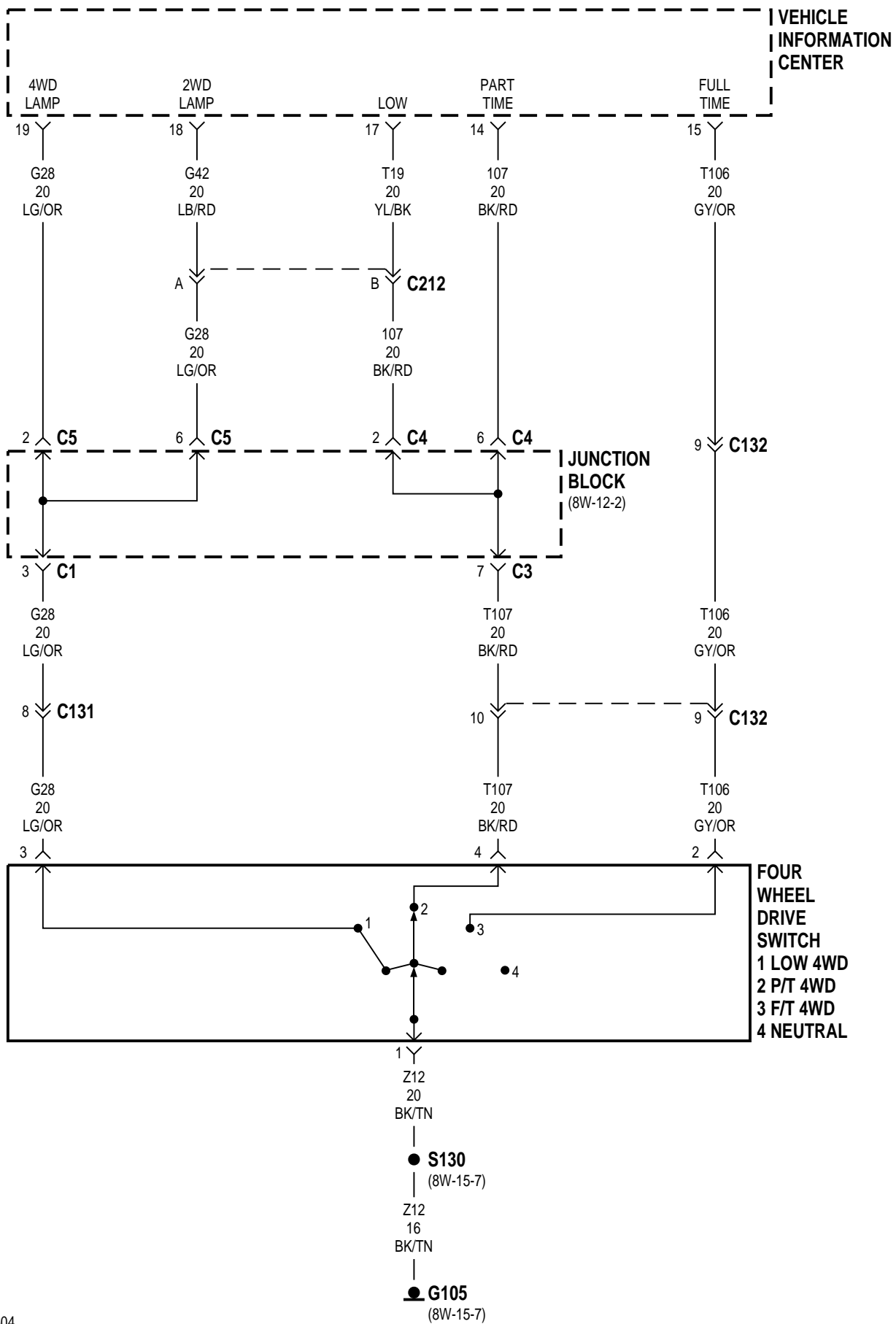
	page
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	8

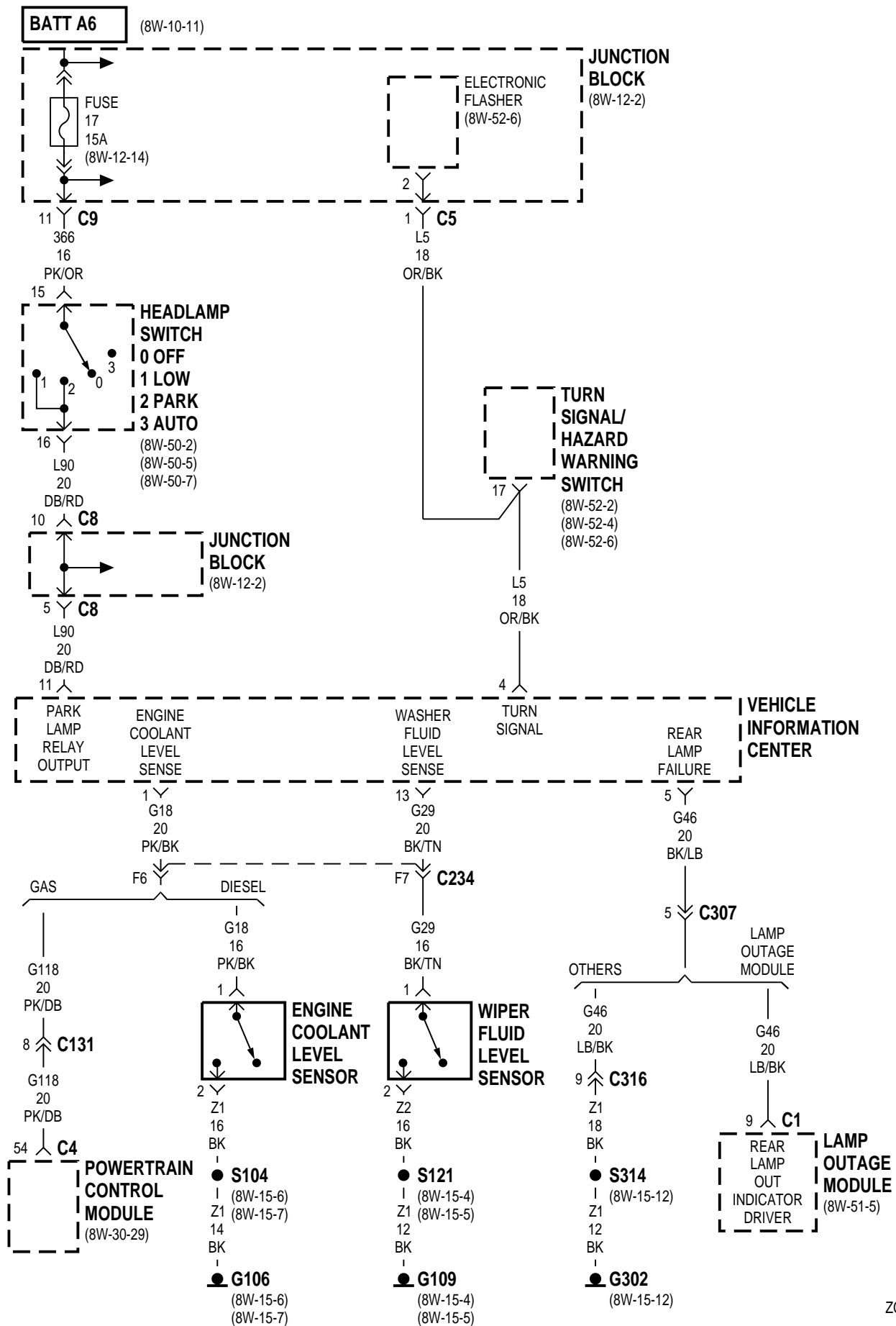
Component	Page	Component	Page
Body Control Module	8W-46-2, 4, 7	Powertrain Control Module	8W-46-6, 7
Electronic Flasher	8W-46-6	S104	8W-46-6
Engine Coolant Level Sensor	8W-46-6	S121	8W-46-6
Four Wheel Drive Switch	8W-46-3, 5	S130	8W-46-3, 5
Fuse 6	8W-46-2, 4	S202	8W-46-2, 4
Fuse 15	8W-46-2, 4	S203	8W-46-7
Fuse 17	8W-46-6	S204	8W-46-7
Fuse 20	8W-46-2, 4	S205	8W-46-2, 4
G105	8W-46-3, 5	S209	8W-46-2, 4
G106	8W-46-6	S212	8W-46-2, 4
G109	8W-46-6	S214	8W-46-2, 4
G118	8W-46-6	S216	8W-46-2, 4
G302	8W-46-6	S302	8W-46-2, 4
G304	8W-46-2, 4	S314	8W-46-6
Graphic Display Module	8W-46-2, 3	Turn Signal/Hazard Warning Switch	8W-46-6
Headlamp Switch	8W-46-6	Vehicle Information Center	8W-46-4, 5, 6, 7
Junction Block	8W-46-2, 3, 4, 5, 6	Wiper Fluid Level Sensor	8W-46-6
Lamp Outage Module	8W-46-6		
Power Distribution Center	8W-46-2, 4		

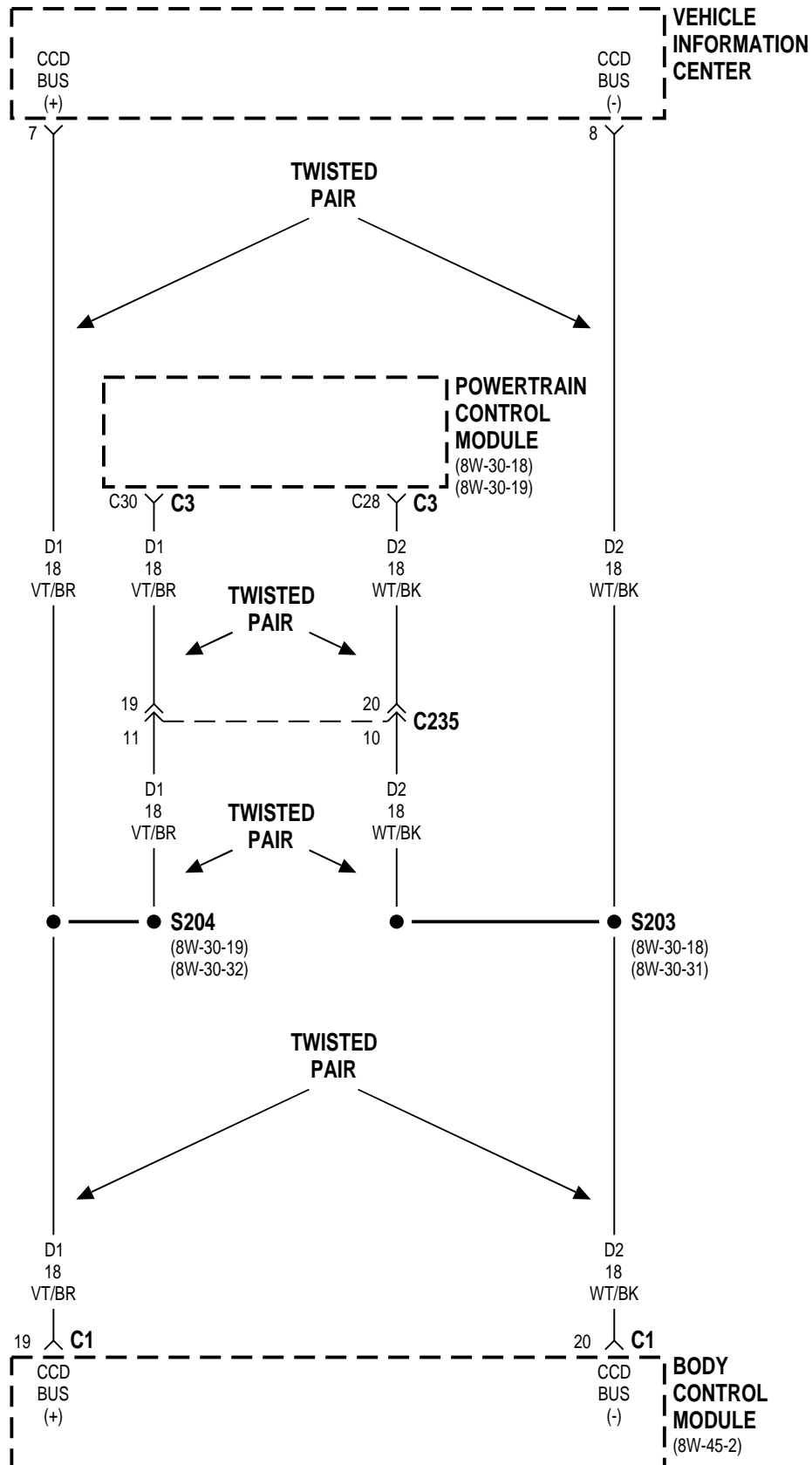












8W-46 MESSAGE CENTER

INDEX

	page		page
GENERAL INFORMATION		VEHICLE INFORMATION CENTER	8
INTRODUCTION	8		
DESCRIPTION AND OPERATION			
GRAPHIC DISPLAY MODULE	8		

GENERAL INFORMATION

INTRODUCTION

Each four-wheel drive equipped Grand Cherokee is equipped with a four-wheel drive Graphic Display Module (GDM). The GDM is located at the bottom of the instrument panel center stack. The GDM displays transfer case mode selection.

Some vehicle are equipped with an optional Vehicle Information Center (VIC). The VIC has several functions:

- Display current time and date.
- Monitor specific vehicle operating systems and alert the driver if a malfunction occurs.
- Display service reminder or indicate distance to service.
- Display 2WD/4WD transfer case modes of operation.

DESCRIPTION AND OPERATION

GRAPHIC DISPLAY MODULE

Several fuses supply power to the Graphic Display Module (GDM). When the ignition switch is in the RUN position it connects circuit A1 from fuse 8 in the PDC to circuit A22. Circuit A22 feeds circuit F83 through fuse 6 in the junction block. Circuit F83 supplies voltage to the GDM.

Circuit A7 from fuse 15 in the PDC powers circuit F60 through fuse 20 in the junction block. Circuits A7 and F60 are HOT at all times. Circuit F60 feeds the GDM. Circuits Z1 and Z2 provide ground for the GDM.

TRANSFER CASE RANGE DISPLAY

When the transfer case is in either 4WD Low, Part Time 4WD, or Full Time it connects circuit G28 from the Graphic Display Module (GDM) to ground on circuit Z12. In response, the GDM illuminates the 4WD display.

When the transfer case switch is in 4WD Low, it connects circuit G28 from the GDM to ground on circuit Z12. In addition to illuminating the 4WD display, the GDM also illuminates the LOW display.

When the transfer case switch is in Part Time 4WD position, it connects circuit T107 from the GDM to ground on circuit Z12. In addition to illuminating the 4WD display, the GDM also illuminates the PART TIME display.

When the transfer case switch is in Full Time 4WD position, it connects circuit T106 from the GDM to ground on circuit Z12. In addition to illuminating the 4WD display, the GDM also illuminates the FULL TIME display.

VEHICLE INFORMATION CENTER

Several fuses supply power to the Vehicle Information Center (VIC). When the ignition switch is in the RUN position it connects circuit A1 from fuse 8 in the PDC to circuit A22. Circuit A22 feeds circuit F83 through fuse 6 in the junction block. Circuit F83 supplies voltage to the VIC.

Circuit A7 from fuse 15 in the PDC powers circuit F60 through fuse 20 in the junction block. Circuits A7 and F60 are HOT at all times. Circuit F60 feeds the VIC.

Circuit A6 from fuse 13 in the PDC powers circuit 366 through fuse 17 in the junction block. Circuit 366 connects to the headlamp switch. When the headlamp switch is in the PARK or LOW position, it connects circuit 366 to circuit L90. Circuit L90 connects to the VIC. Circuit E2 from the Body Control Module (BCM) powers the illumination lamps in the VIC.

Circuits Z1 and Z2 provide ground for the VIC.

TRANSFER CASE RANGE DISPLAY

When the transfer case is in either 4WD Low, Part Time 4WD, or Full Time it connects circuit G28 from the Vehicle Information Center (VIC) to ground on circuit Z12. In response, the VIC illuminates the 4WD display.

When the transfer case switch is in 4WD Low, it connects circuit G28 from the VIC to ground on circuit Z12. In addition to illuminating the 4WD display, the VIC also illuminates the LOW display.

DESCRIPTION AND OPERATION (Continued)

When the transfer case switch is in Part Time 4WD position, it connects circuit T107 from the VIC to ground on circuit Z12. In addition to illuminating the 4WD display, the VIC also illuminates the PART TIME display.

When the transfer case switch is in Full Time 4WD position, it connects circuit T106 from the VIC to ground on circuit Z12. In addition to illuminating the 4WD display, the VIC also illuminates the FULL TIME display.

LAMP OUTAGE

Circuit G46 connects from the Lamp Outage Module (LOM) to the Vehicle Information Center (VIC). Circuit G46 supplies the rear lamp out signal to the VIC.

LOW WASHER FLUID WARNING

When the low washer fluid switch closes, it connects circuit G29 from the VIC to ground on circuit

Z1. The VIC displays the Low Washer Fluid warning when the switch closes.

LOW ENGINE COOLANT WARNING

When the engine coolant level switch closes, it connects circuit G18 from the VIC to ground on circuit Z1. The VIC displays the Low Coolant Level warning when the switch closes.

DOOR AJAR AND LIFTGATE AJAR DISPLAYS

Each door and the liftgate have an ajar switch that connects to the Body Control Module (BCM). The BCM senses when the liftgate or a door opens, and sends the a signal to the VIC on the CCD bus. In response, the VIC displays which door is open. The VIC communicates with the BCM over the CCD bus on circuits D1 and D2.

8W-47 AUDIO SYSTEM

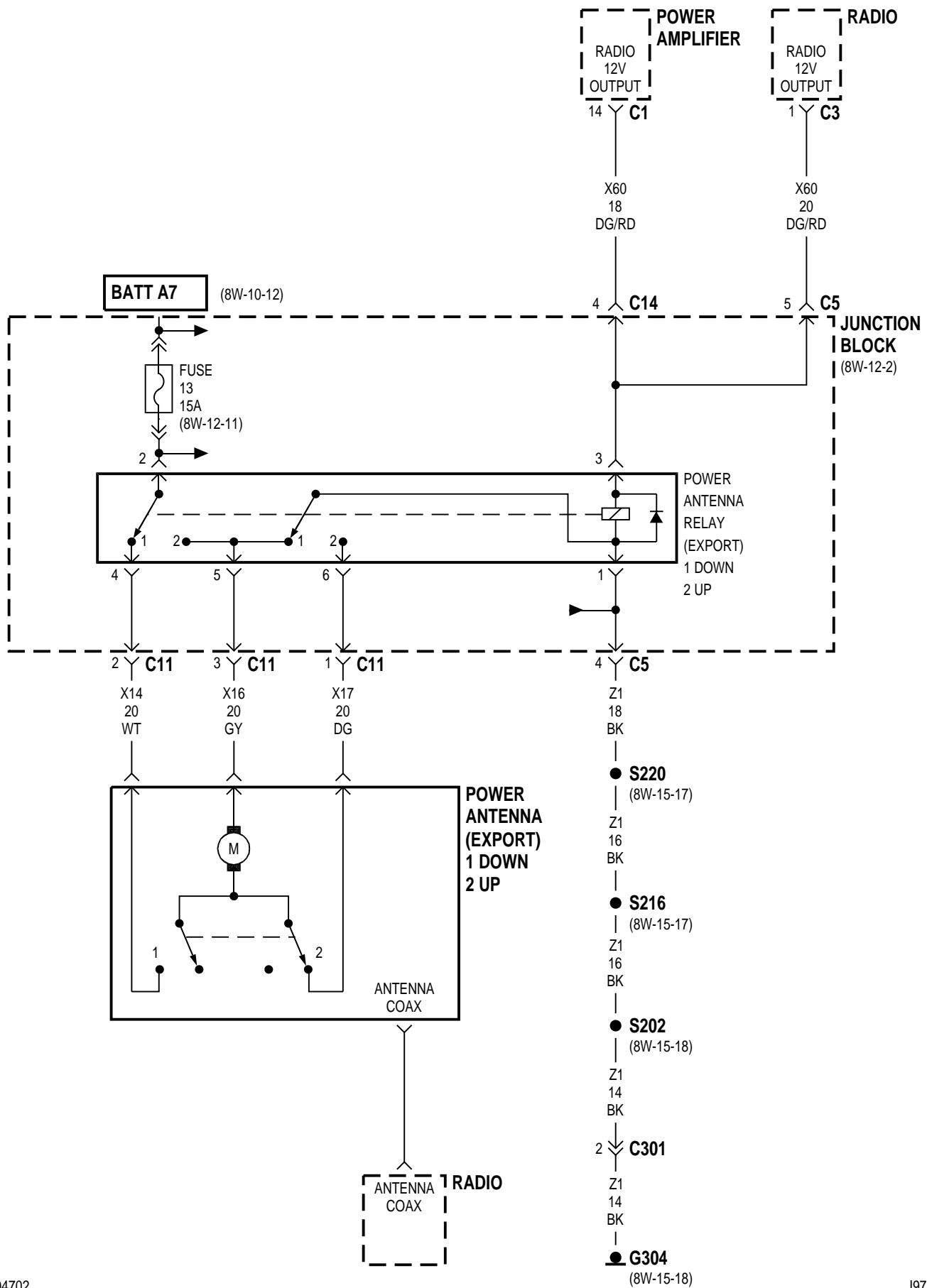
INDEX

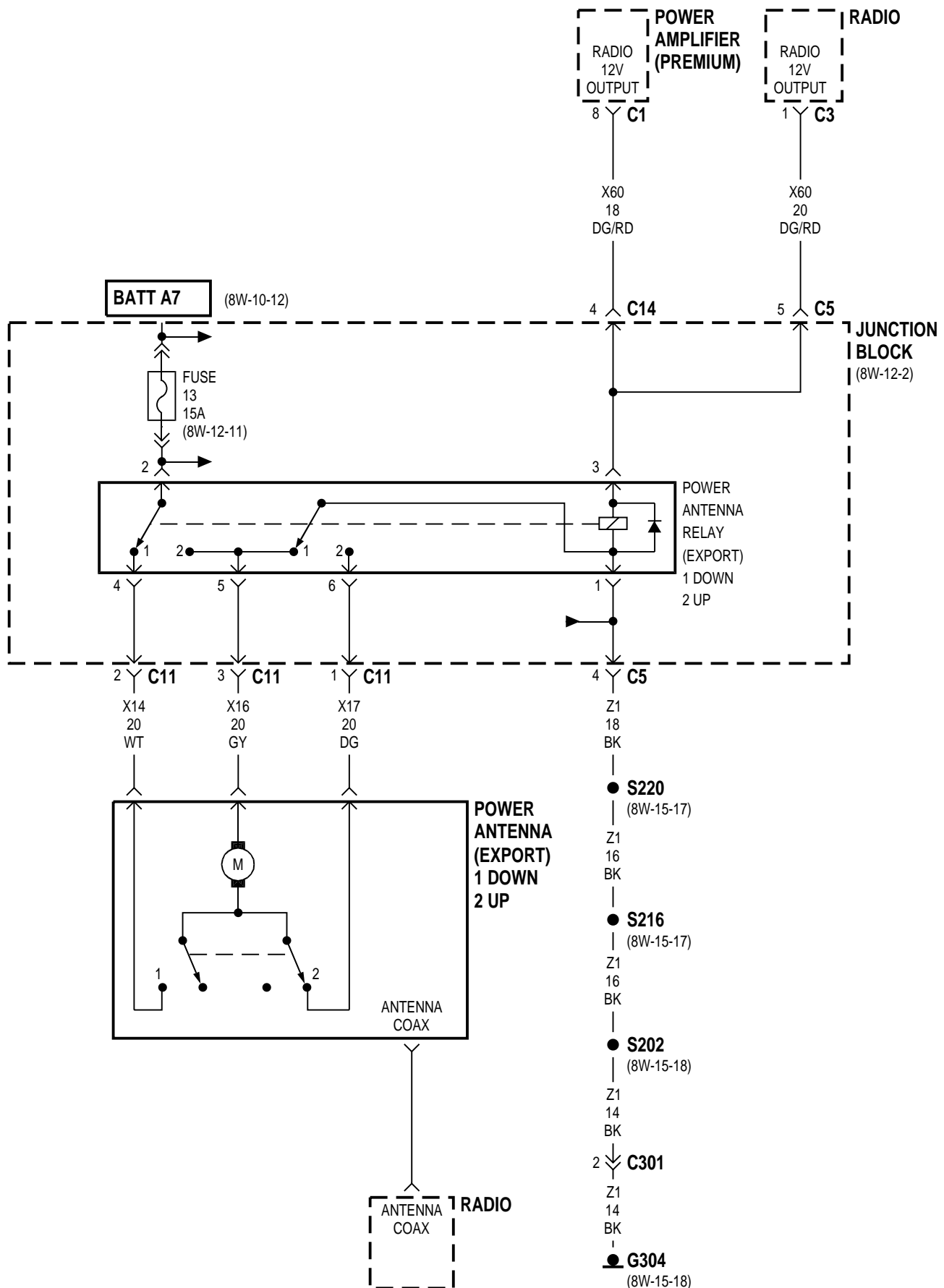
page

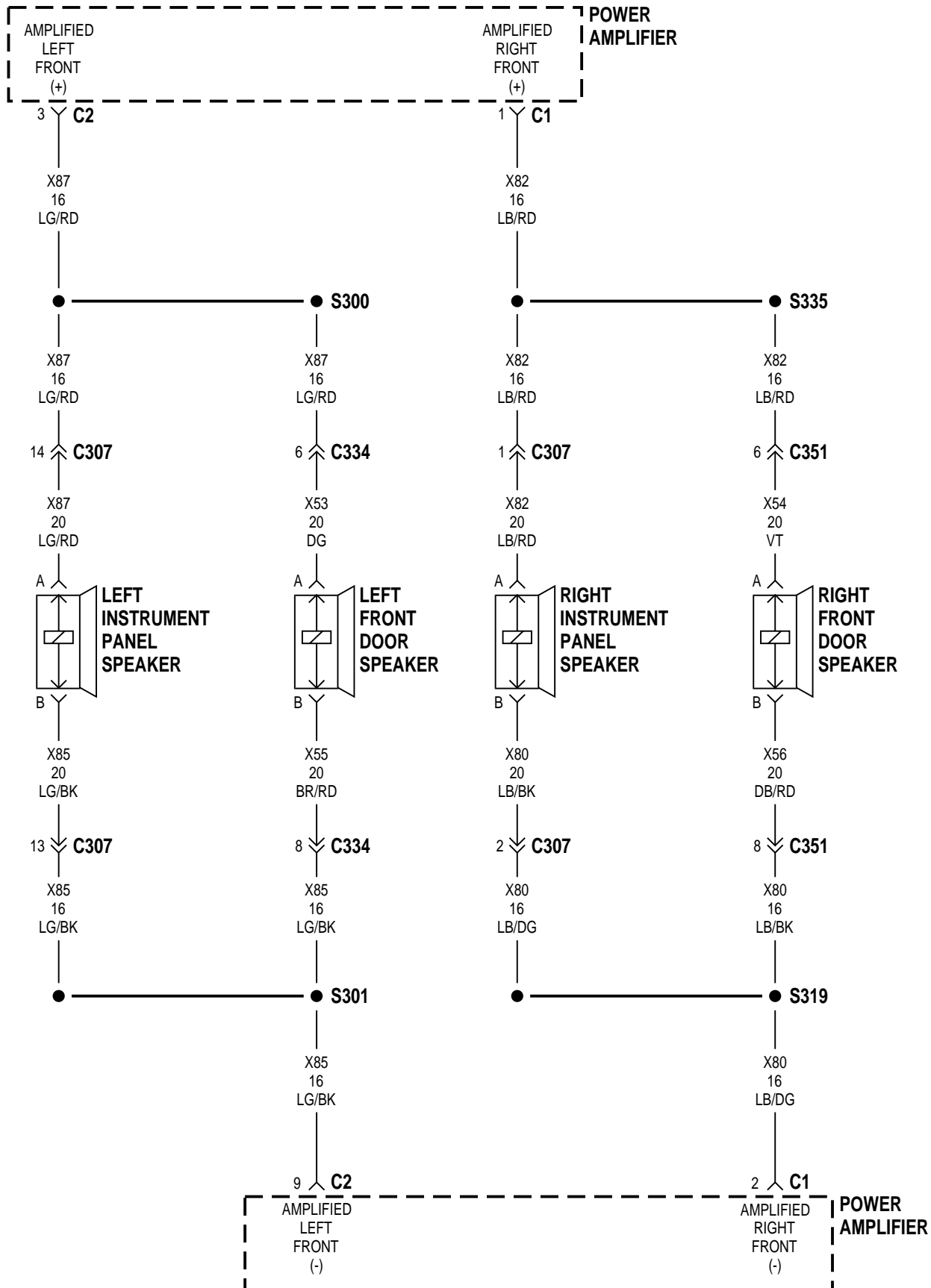
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	14

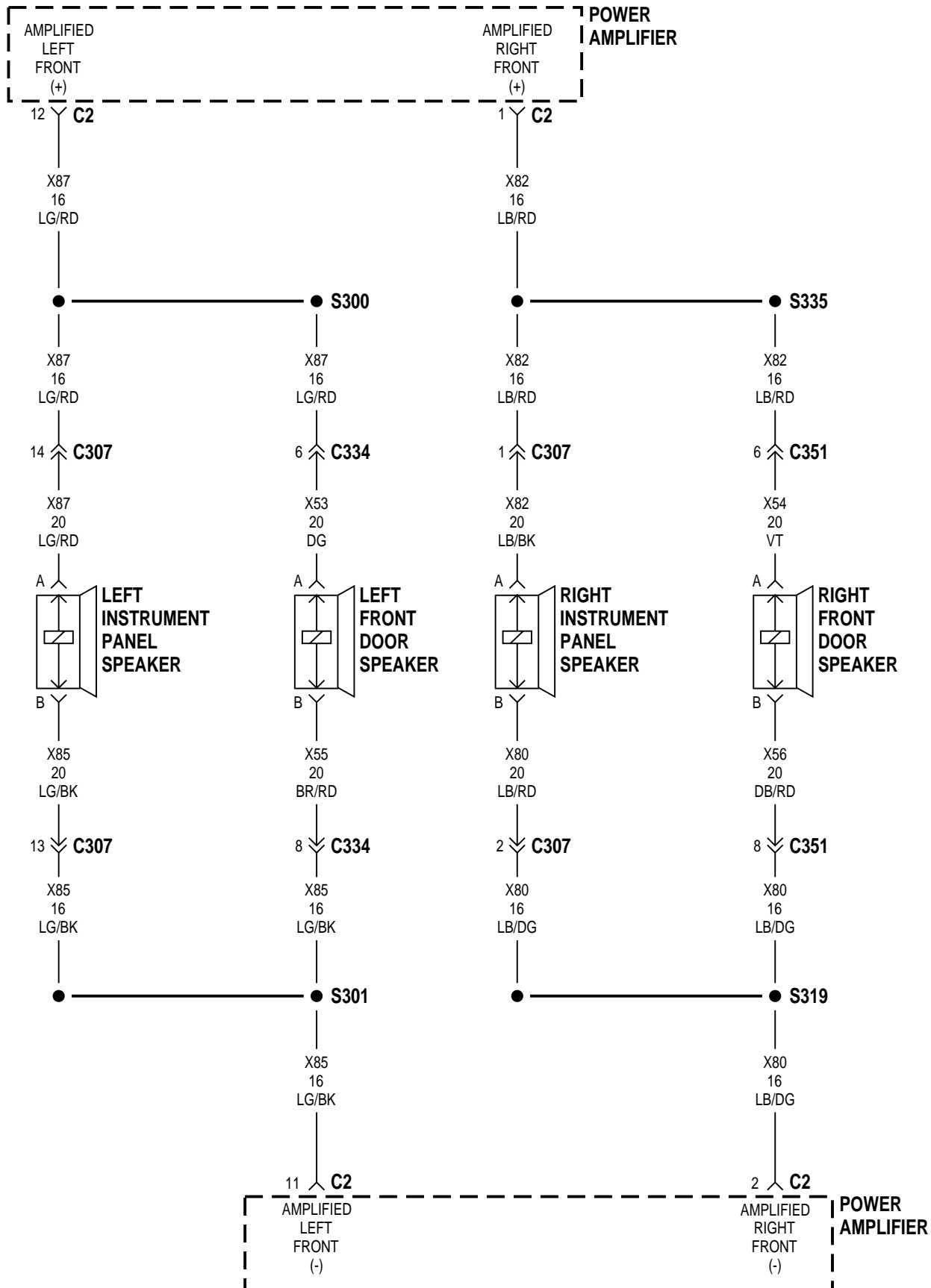
Component	Page	Component	Page
Antenna	8W-47-2, 9, 10	Right Front Door Speaker	8W-47-5, 6, 8
Body Control Module	8W-47-2, 12	Right Instrument Panel Speaker	8W-47-5, 6
Clockspring	8W-47-12	Right Radio Remote Switch	8W-47-12
Fuse 1	8W-47-2	Right Rear Door Speaker	8W-47-7, 8, 11
Fuse 7	8W-47-9, 10	S202	8W-47-3, 4
Fuse 13	8W-47-3, 4	S203	8W-47-2, 12
Fuse 17	8W-47-2	S204	8W-47-2, 12
Fuse 20	8W-47-2	S205	8W-47-12
G303	8W-47-2, 9, 10	S209	8W-47-2
G304	8W-47-3, 4, 12	S214	8W-47-2
Junction Block	8W-47-2, 3, 4, 9, 10	S216	8W-47-3, 4
Left Front Door Speaker	8W-47-5, 6, 8	S220	8W-47-3, 4
Left Instrument Panel Speaker	8W-47-5, 6	S300	8W-47-5, 6
Left Radio Remote Switch	8W-47-12	S301	8W-47-5, 6
Left Rear Door Speaker	8W-47-7, 8, 11	S302	8W-47-12
Park Lamp Relay	8W-47-2	S309	8W-47-9, 10
Power Amplifier ...	8W-47-3, 4, 5, 6, 7, 9, 10, 11, 13	S318	8W-47-9, 10
Power Antenna	8W-47-3, 4	S319	8W-47-5, 6
Power Antenna Relay	8W-47-3, 4	S335	8W-47-5, 6
Powertrain Control Module	8W-47-12	Vehicle Speed Control/Horn Switch	8W-47-12
Radio	8W-47-2, 3, 4, 8, 9, 10, 12		
Rear Speaker	8W-47-11, 13		

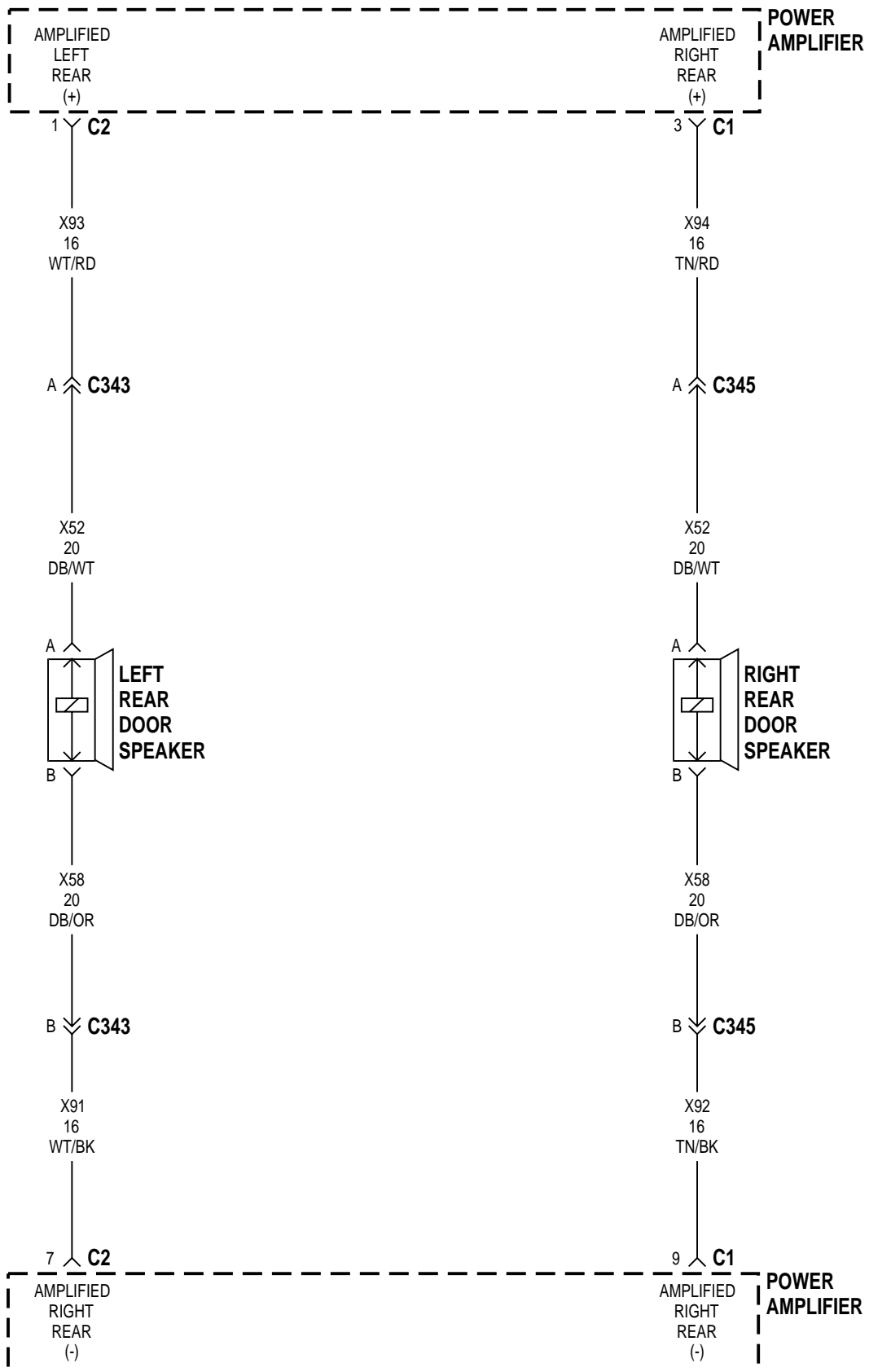


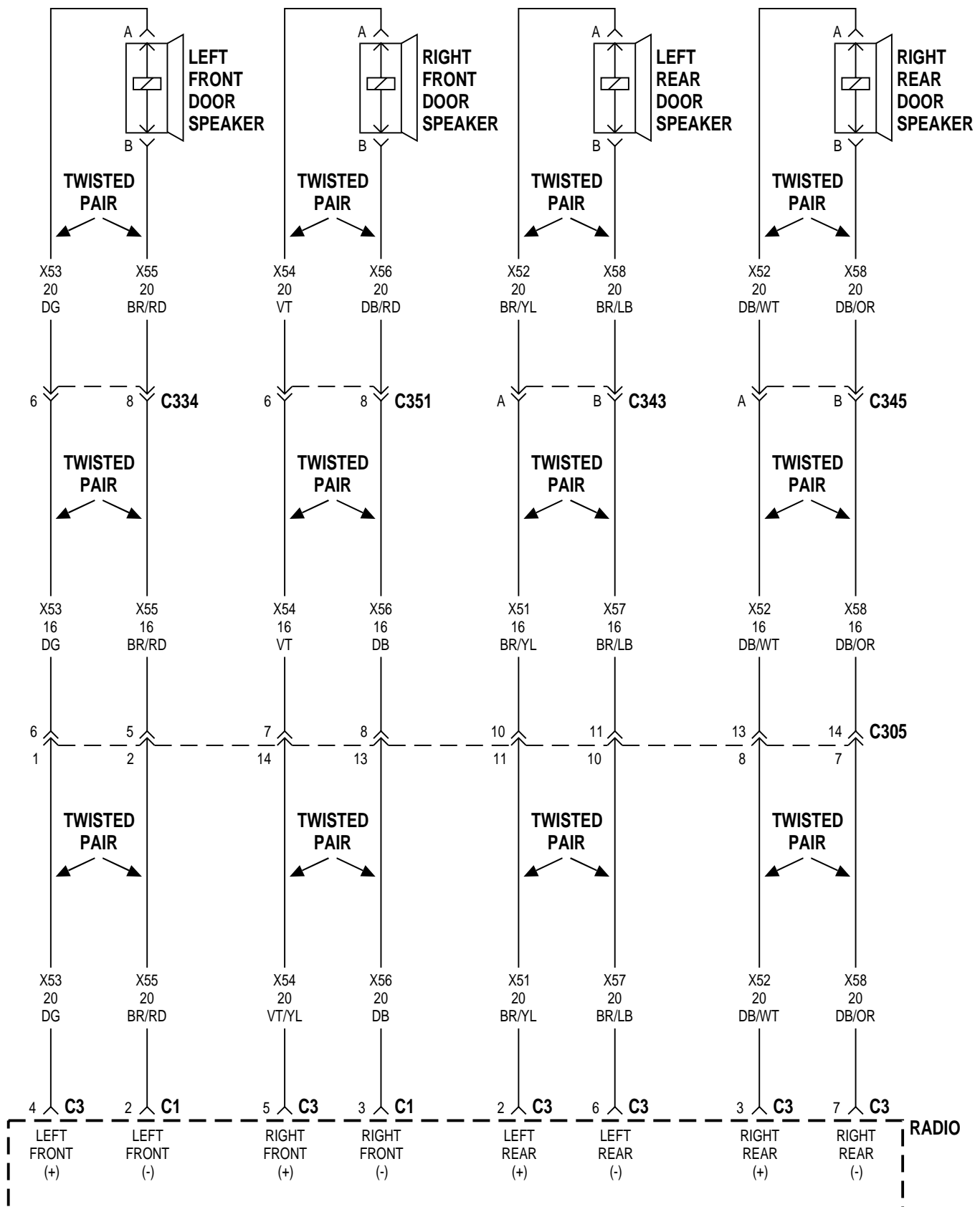


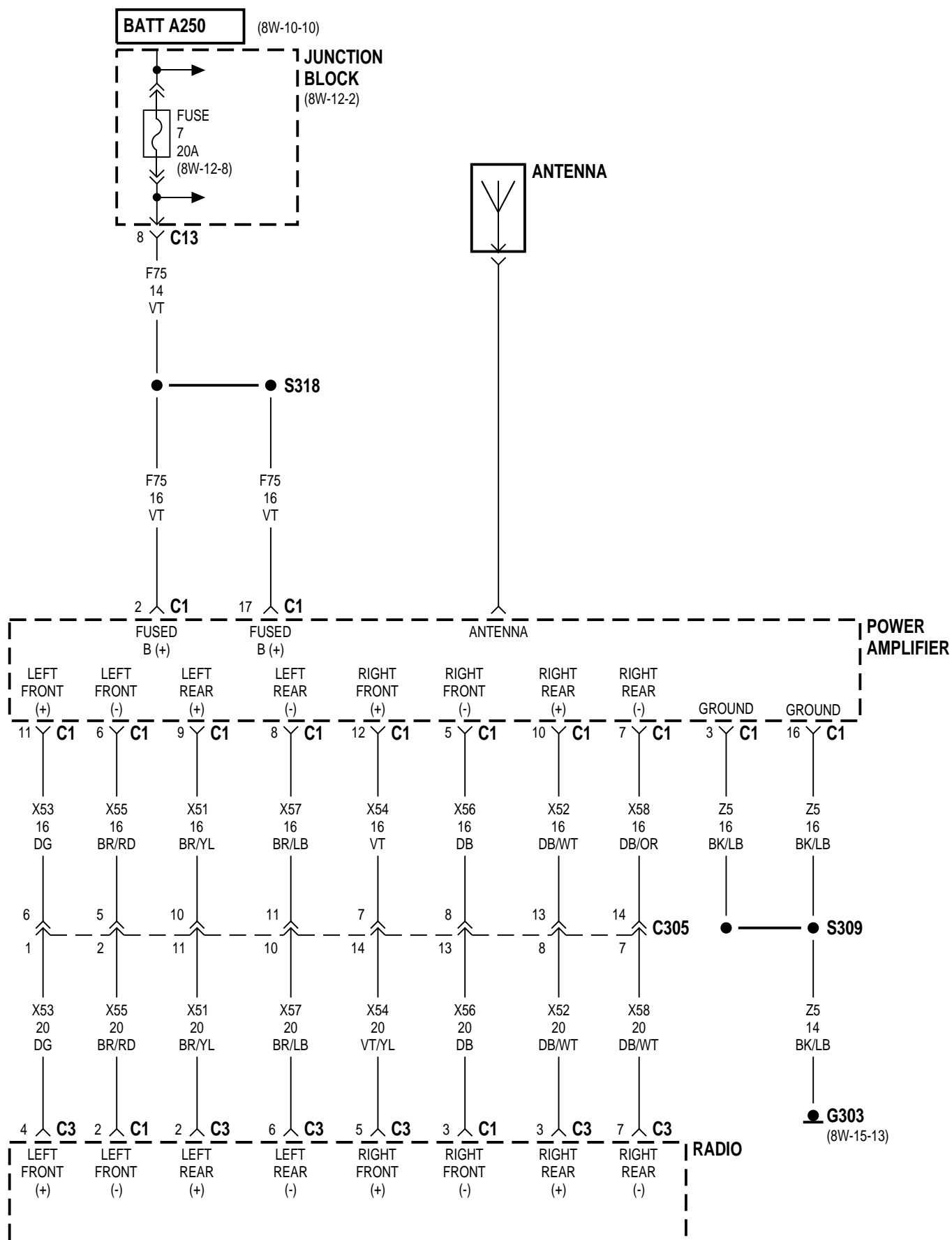


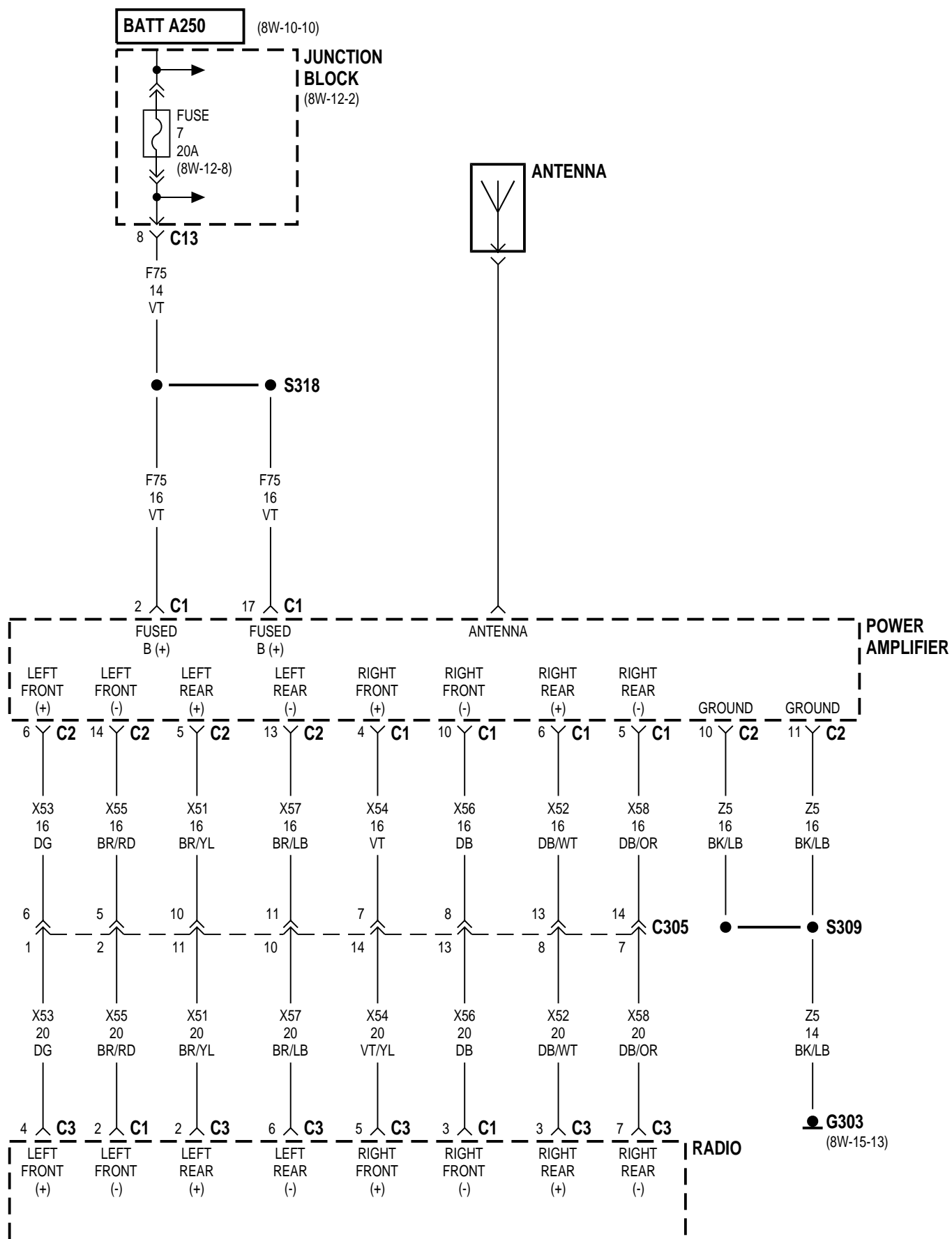


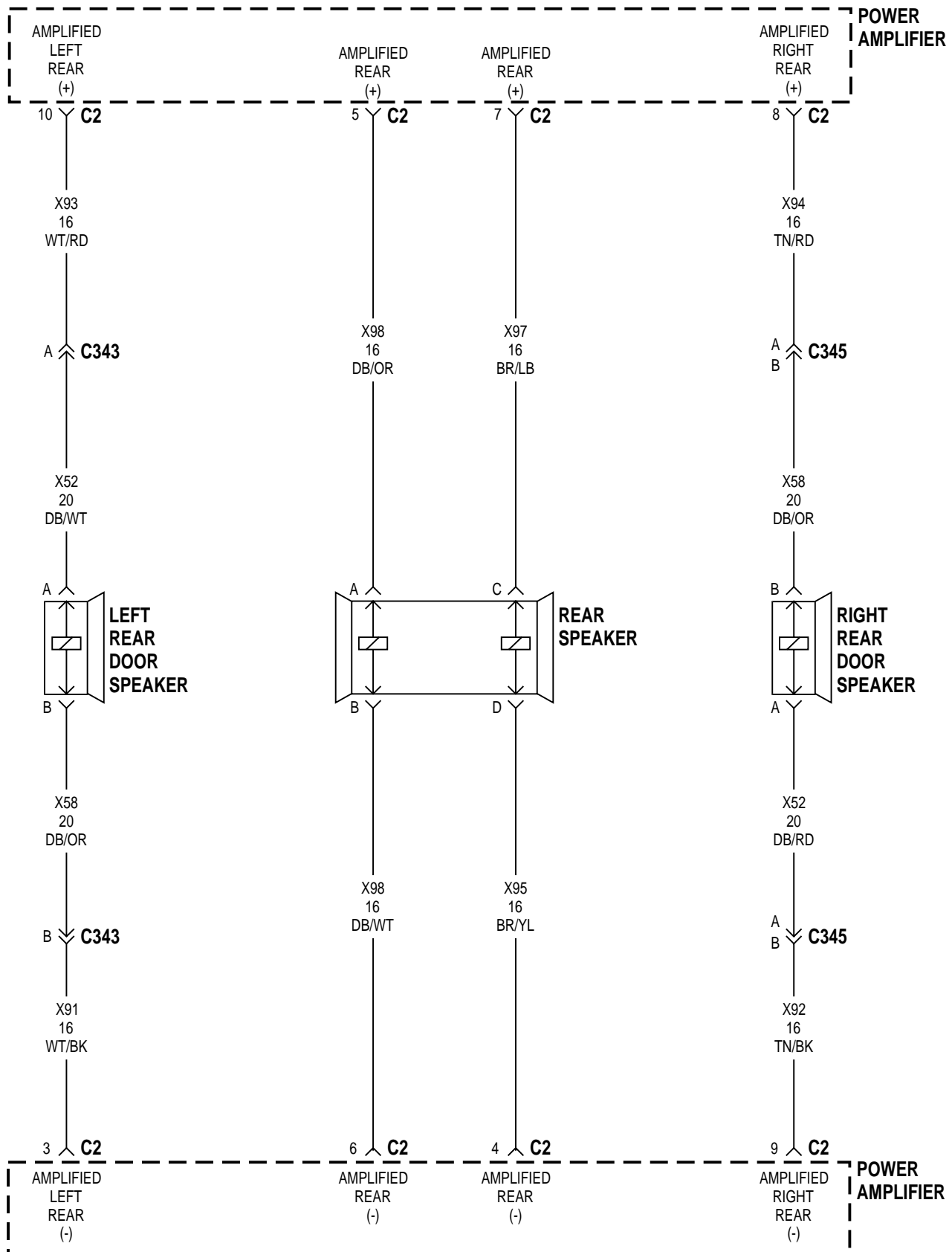


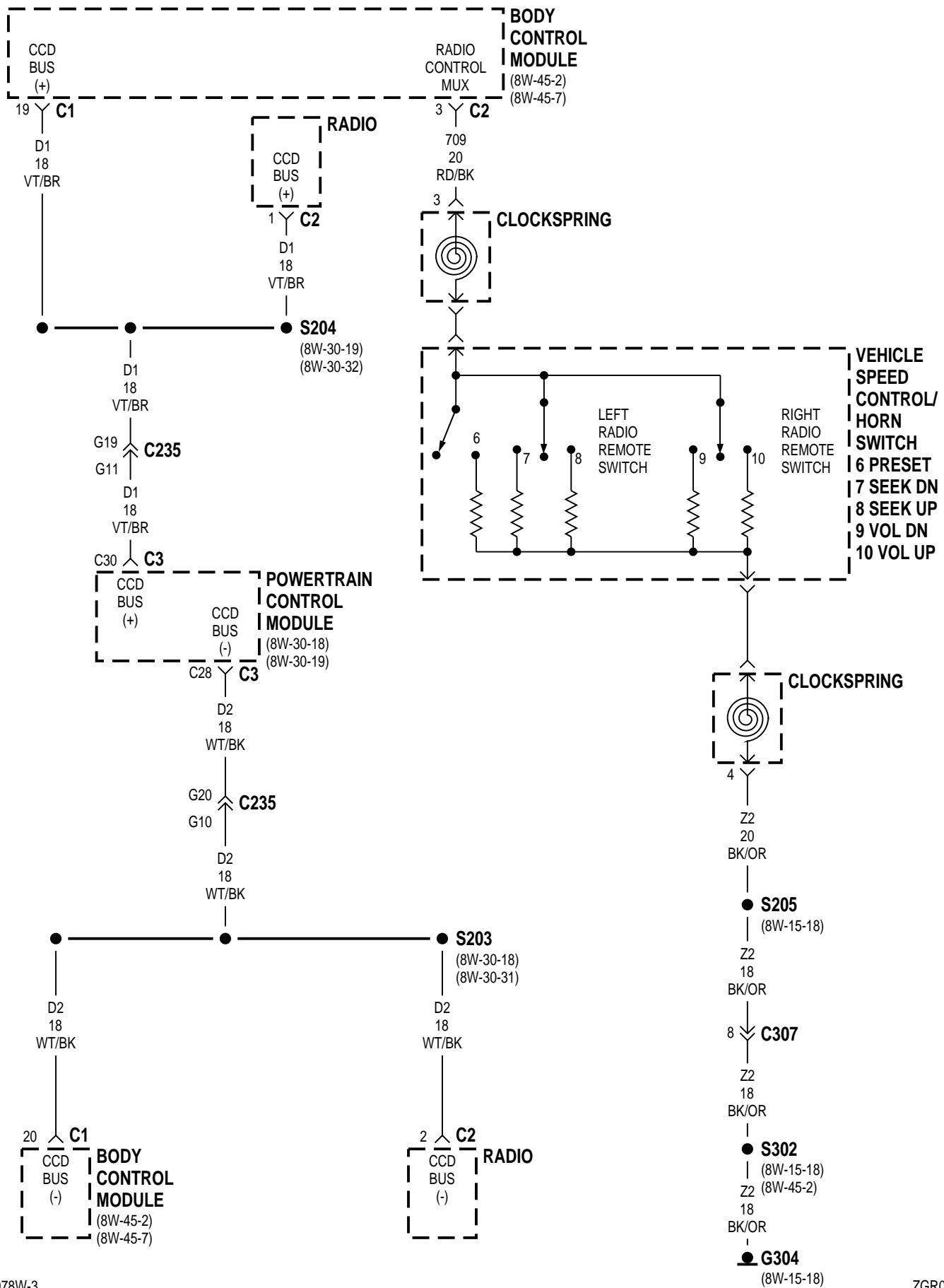


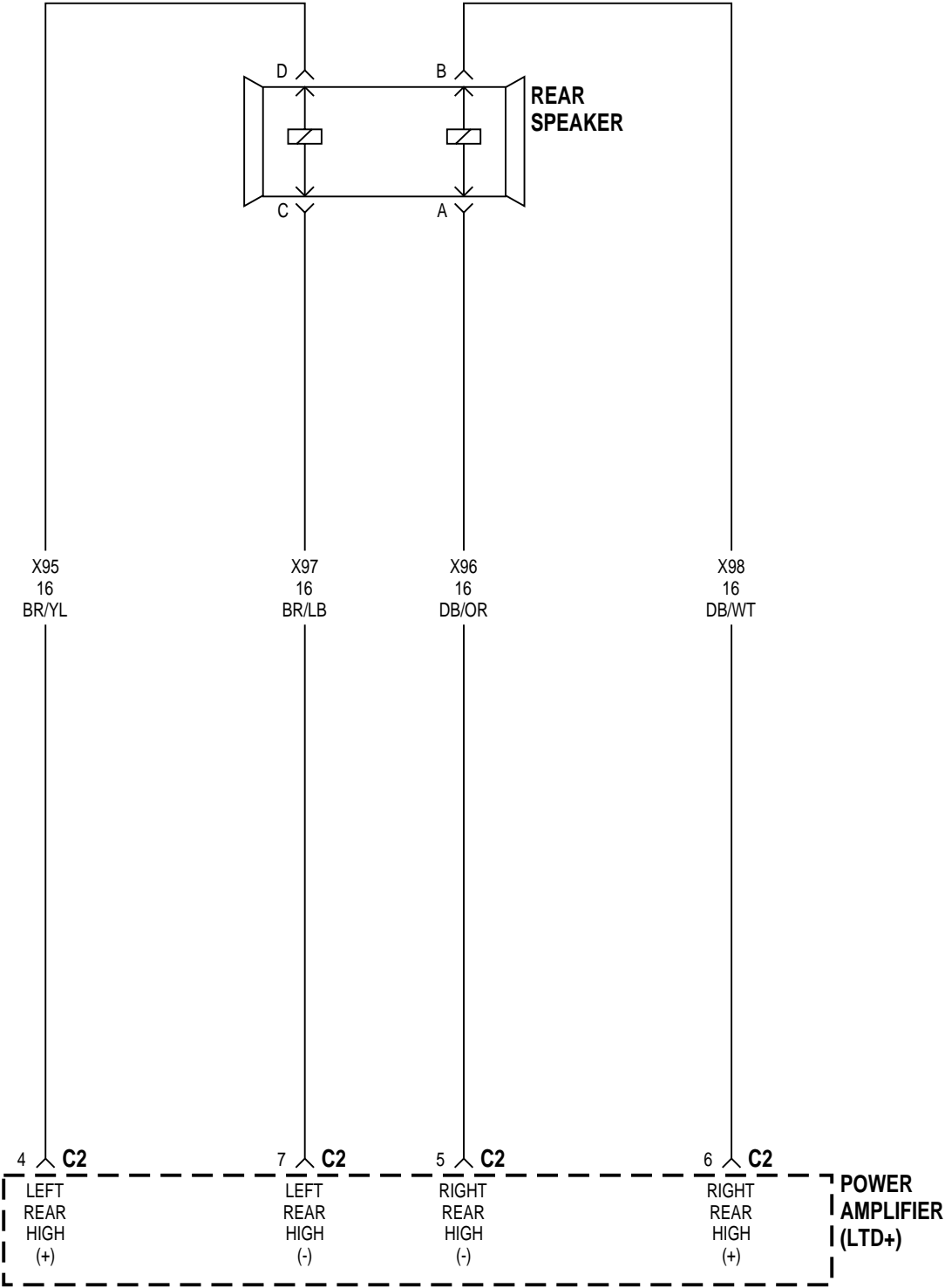












8W-47 AUDIO SYSTEM

INDEX

	page		page
GENERAL INFORMATION		POWER ANTENNA—EXPORT ONLY 15	
INTRODUCTION	14	RADIO ILLUMINATION	14
DESCRIPTION AND OPERATION		RADIO MEMORY	14
AMPLIFIER AND SPEAKERS—PREMIUM	14	RADIO REMOTE SWITCHES	15
LIMITED PLUS SYSTEM	15	SPEAKERS—STANDARD SYSTEM	14

GENERAL INFORMATION

INTRODUCTION

There are three audio systems offered on this vehicle. The standard system uses four speakers. The premium system includes 120 watt amplifier, Infinity coaxial full-range speakers mounted in each rear door, Infinity mid-range speakers mounted in each front door, and Infinity tweeters mounted at each outboard end of the instrument panel cover. The Limited Plus system includes 180 watt amplifier, Infinity woofers mounted in each rear door, Infinity mid-range speakers mounted in each front door, Infinity tweeters mounted at each outboard end of the instrument panel cover, and a sound bar including two Infinity woofers and two Infinity tweeters.

All systems are powered by circuit X12 from fuse 1 in the junction block. When the ignition switch is in the ACCESSORY or RUN position, it connects circuit A1 from fuse 8 in the Power Distribution Center (PDC) to circuit A31. Circuit A31 powers circuit X12 through junction block fuse 1.

Circuit Z5 provides ground for all radios.

All radios connect to the CCD bus on circuits D1 and D2.

DESCRIPTION AND OPERATION

RADIO MEMORY

On the standard and optional radios, circuit F60 from fuse 20 in the junction block powers the radio memory. Circuit A7 from fuse 15 in the Power Distribution Center (PDC) powers junction block fuse 20 and circuit F60.

RADIO ILLUMINATION

When the parking lamps or the headlamps are ON, circuits E2 and L90 are used to power the radio illumination lamps. Circuit E2 is used for the dimmable lamps. Circuit L90 is the parking lamps feed.

SPEAKERS—STANDARD SYSTEM

The standard system uses four speakers. Circuit X53 feeds the speaker in the left front door. Circuit X55 is the return from the speaker to the radio.

Circuit X54 feeds the right front door speaker. Circuit X56 is the return from the speaker to the radio.

From the radio, circuit X51 connects to circuit X52 at the jumper harness for the left rear door speaker. Circuit X51 and X52 feed the speaker. Circuit X58 from the speaker jumper harness connects to circuit X57. Circuit X57 is the return from the speaker to the radio.

Circuit X52 feeds the right rear door speaker. Circuit X58 is the return from the speaker to the radio. Circuits X52 and X58 continue through the jumper harness to the right rear door speaker.

AMPLIFIER AND SPEAKERS—PREMIUM

A power amplifier is used on premium systems only. The amplifier is connected between the radio and the speakers.

Circuit A250 from fuse 11 in the Power Distribution Center (PDC) powers circuit F75 through fuse 7 in the junction block. Circuit F75 feeds the radio amplifier. Circuit Z5 provides ground for the amplifier. Circuit X60 from the radio supplies power to the amplifier.

From the radio, circuits X54 and X56 for the right front speaker and the speaker in the right side of the instrument panel, connect to the power amplifier. Circuit X54 is the feed from the radio to the amplifier. Circuit X82 is the feed from the amplifier to the right instrument panel speaker and right front door speaker. Circuit X80 is the return from the speakers to the amplifier and circuit X56 is the return from the amplifier to the radio. Circuits X80 and X82 from the amplifier connect to circuits X56 and X54 at the jumper harness for the right front door speaker.

For the left front door speaker and the speaker in the left side of the instrument panel, circuits X53 and X55 from the radio connect to the power amplifier. Circuit X53 is the feed from the radio to the amplifier. Circuit X87 is the feed from the amplifier

DESCRIPTION AND OPERATION (Continued)

to the left instrument panel speaker and left front door speaker. Circuit X85 is the return from speakers to the amplifier and circuit X55 is the return from the amplifier to the radio. Circuits X87 and X85 from the amplifier connect to circuits X55 and X53 at the jumper harness for the left front door speaker.

Circuit X51, the feed for the left rear door speaker and circuit X57, the return for the speaker, connect from the radio to the power amplifier. At the jumper harness for the left rear door speaker, circuit X93 from the amplifier connects to circuit X52 and circuit X91 connects to circuit X58. Circuits X93 and X52 feed the speaker. The speaker return is on circuit X58 and circuit X91.

Circuit X52, the feed for the right rear door speaker and circuit X58, the return for the speaker, connect from the radio to the power amplifier. At the jumper harness for the right rear door speaker, circuit X94 from the amplifier connects to circuit X52 and circuit X92 connects to circuit X58. Circuits X94 and X52 feed the speaker. The speaker return is on circuits X58 and X92.

RADIO REMOTE SWITCHES

Premium radios have remote volume, seek, and preset switches on the steering wheel. The remote switches connect to the Body Control Module (BCM) on circuit 709 and ground on circuit Z2. Each switch is wired in parallel. A resistor in series between each switch and ground circuit Z2 determines the signal sensed by the BCM on circuit 709.

After sensing a request from the radio remote switches, the BCM signals the radio over the CCD bus to make the requested selection.

LIMITED PLUS SYSTEM

The circuits for the Limited Plus system are the same as the Premium System except for the sound

bar, mounted on the inside roof headliner just forward of the liftgate.

For the speakers housed in the sound bar, circuit X95 from the amplifier is the feed for the left speakers. Circuit X97 is the return to the amplifier for the left speakers. Circuit X98 from the amplifier is the feed for the right speakers. Circuit X96 is the return to the amplifier for the right speakers.

POWER ANTENNA—EXPORT ONLY

The power antenna is only used on vehicles built for export markets.

The power antenna relay supplies voltage to the power antenna motor. The relay supplies voltage to the antenna motor to either raise or lower the antenna.

Circuit A7 from fuse 15 in the Power Distribution Center (PDC) feeds the relay switch through fuse 13 in the junction block.

When the radio is OFF, the switch in the power antenna relay is in the DOWN position. In DOWN position, the relay switch powers circuit X14. Circuit X14 supplies voltage to power antenna motor to lower the antenna. The ground path is from the motor to the relay on circuit X16, through the switch in the relay to ground on circuit Z1.

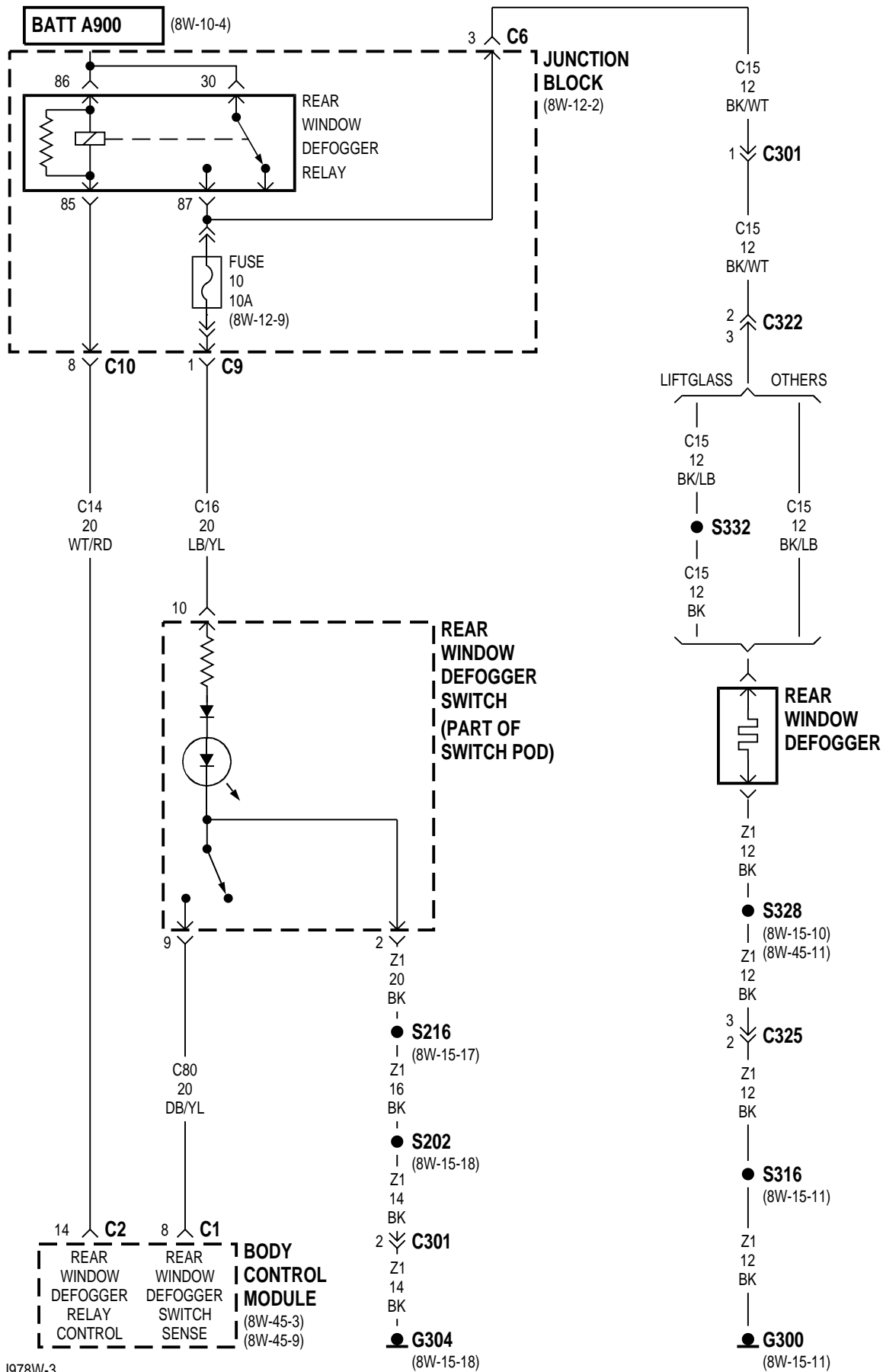
Circuit Z1 also provides ground for the coil side of the power antenna relay. When the radio is turned ON, circuit X60 from the radio supplies power to the coil side of antenna relay and the relay switches to the UP position. In the UP position, the switch powers circuit X16. Circuit X16 supplies voltage to power the antenna motor to raise the antenna. The ground path is from the motor to the relay on circuit X17, through the switch in the relay to ground on circuit Z1.

8W-48 REAR WINDOW DEFOGGER

INDEX

	page
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	3

Component	Page	Component	Page
Body Control Module	8W-48-2	Rear Window Defogger Switch	8W-48-2
Fuse 10	8W-48-2	S202	8W-48-2
G300	8W-48-2	S216	8W-48-2
G304	8W-48-2	S316	8W-48-2
Junction Block	8W-48-2	S328	8W-48-2
Rear Window Defogger	8W-48-2	S332	8W-48-2
Rear Window Defogger Relay	8W-48-2		



8W-48 REAR WINDOW DEFOGGER

DESCRIPTION AND OPERATION

REAR WINDOW DEFOGGER

The Body Control Module (BCM) operates the rear window defogger system through a relay located in the junction block. When the operator presses the rear window defogger switch, the switch connects circuit C80 from the BCM to ground circuit Z1. In response, the BCM grounds the coil side of the rear window defogger relay on circuit C14.

When the BCM grounds the rear window defogger relay coil, the contacts close and connect circuit A900

from fuse 3 in the Power Distribution Center (PDC) to circuit C15. Circuit C15 supplies power to the rear window defogger grid. Circuit A900 also powers the coil side of the relay. Circuit Z1 grounds the rear window defogger grid.

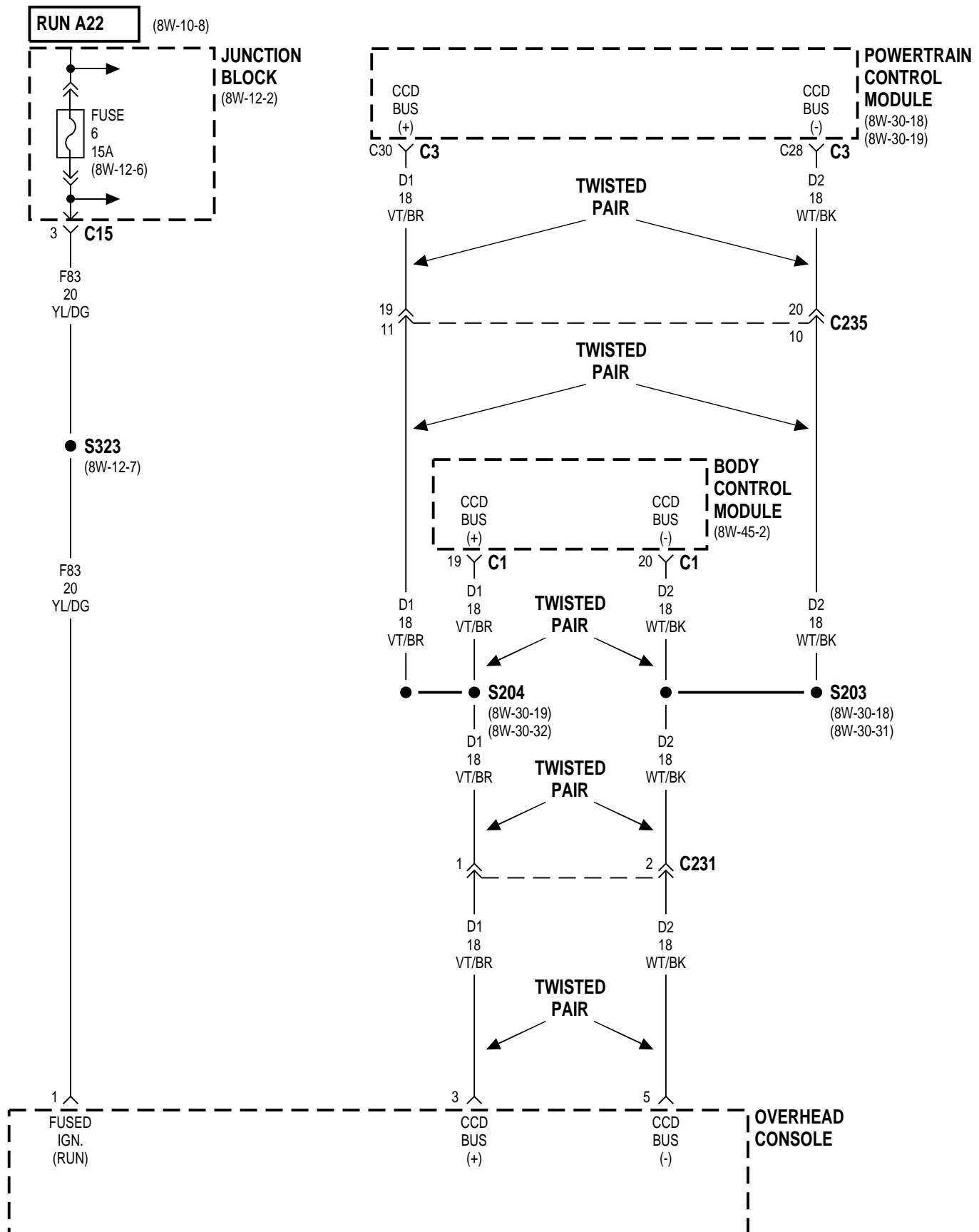
Internal to the junction block, circuit C15 splices to feed circuit C16 through fuse 10. Circuit C16 feeds the Light Emitting Diode (LED) in the rear window defogger switch.

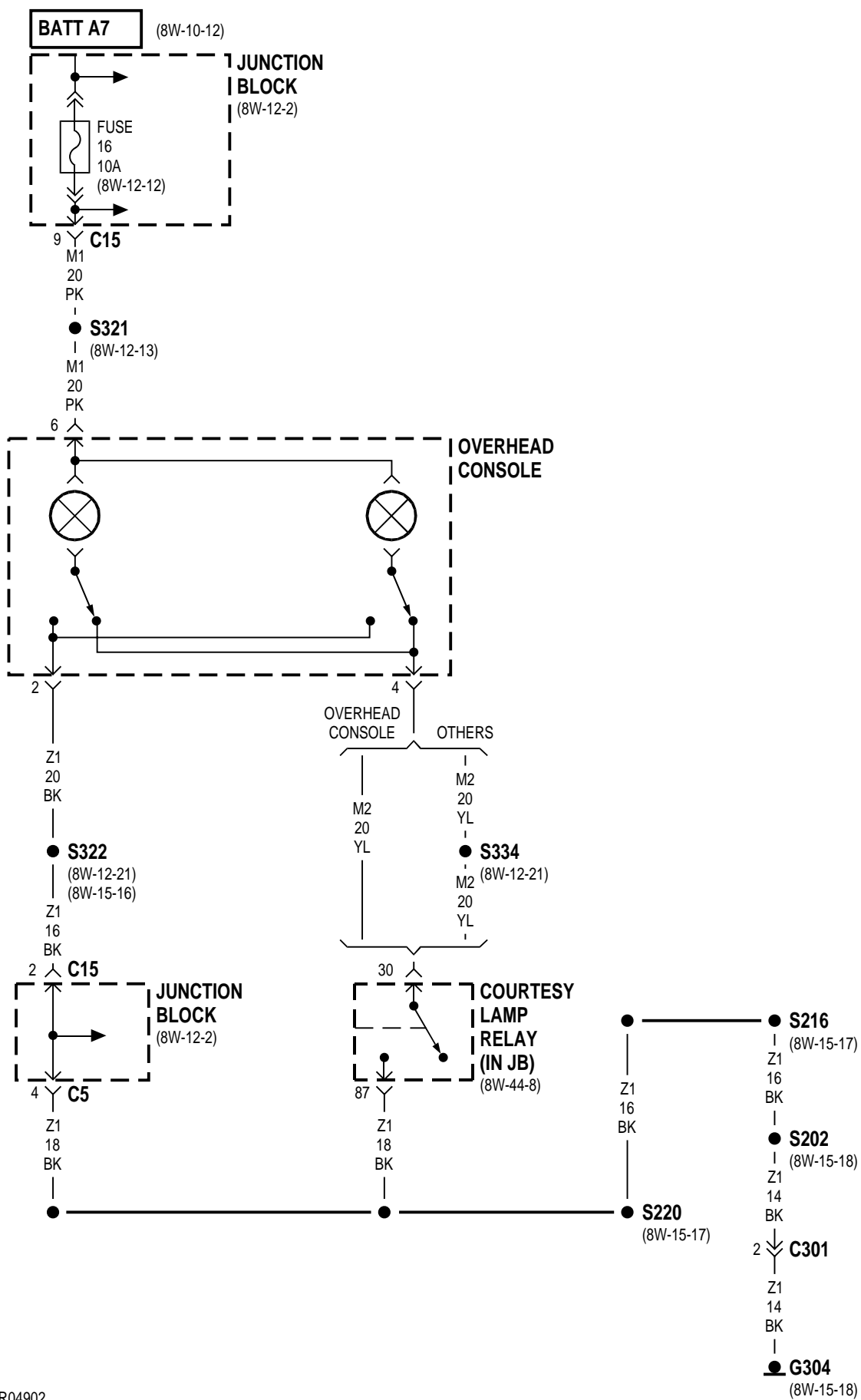
8W-49 OVERHEAD CONSOLE

INDEX

	page
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	4

Component	Page	Component	Page
Body Control Module	8W-49-2	S203	8W-49-2
Courtesy Lamp Relay	8W-49-3	S204	8W-49-2
Fuse 6	8W-49-2	S216	8W-49-3
Fuse 16	8W-49-3	S220	8W-49-3
G304	8W-49-3	S321	8W-49-3
Junction Block	8W-49-2, 3	S322	8W-49-3
Overhead Console	8W-49-2, 3	S323	8W-49-2
Powertrain Control Module	8W-49-2	S334	8W-49-3
S202	8W-49-3		





8W-49 OVERHEAD CONSOLE

DESCRIPTION AND OPERATION

OVERHEAD CONSOLE

When the ignition switch is in the RUN position, it connects circuit A1 from fuse 8 in the Power Distribution Center (PDC) to circuit A22. Circuit A22 powers circuit F83 through fuse 6 in the junction block. Circuit F83 supplies power to the overhead console.

The Body Control Module (BCM) broadcasts the park lamp signal and instrument panel illumination lamp intensity signal on the CCD bus. The overhead console receives the signals over the CCD bus and calculates display illumination intensity.

The overhead console receives the fuel percentage and distance information on the CCD bus from the Powertrain Control Module (PCM).

The overhead console contains a US/Metric switch. The switch selects which units to show on the display. The overhead console broadcasts the US/Metric selection on the CCD bus.

OVERHEAD CONSOLE LAMPS

Circuit A7 from fuse 15 in the Power Distribution Center (PDC) powers circuit M1 through fuse 16 in the junction block. Circuit M1 feeds the overhead console lamps.

Each overhead console lamp has a switch that connects the lamps to ground on circuit Z1. The lamps are also grounded when the Body Control Module (BCM) energizes the courtesy lamp relay to connect circuit M2 to ground on circuit Z1.

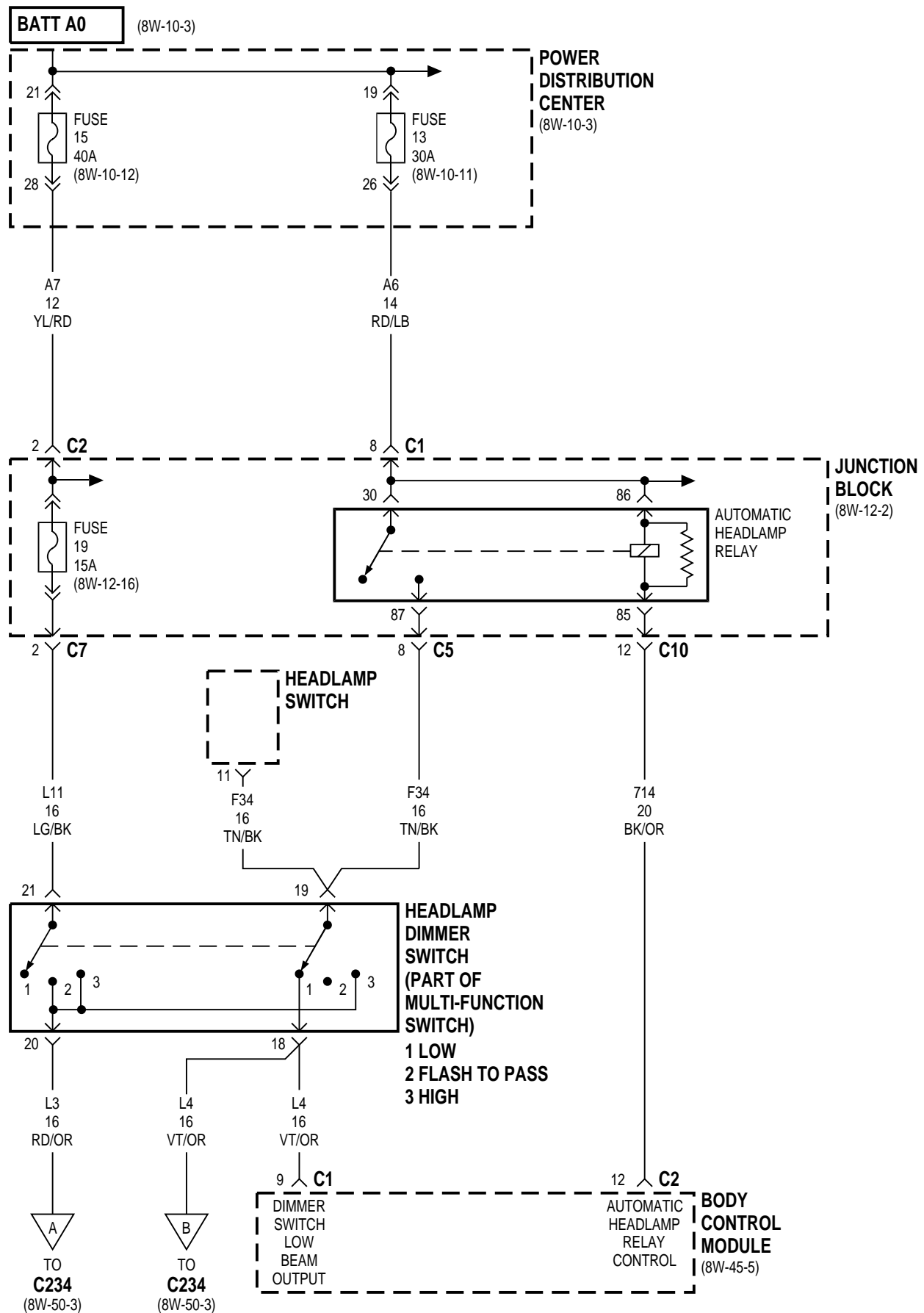
8W-50 FRONT LIGHTING

INDEX

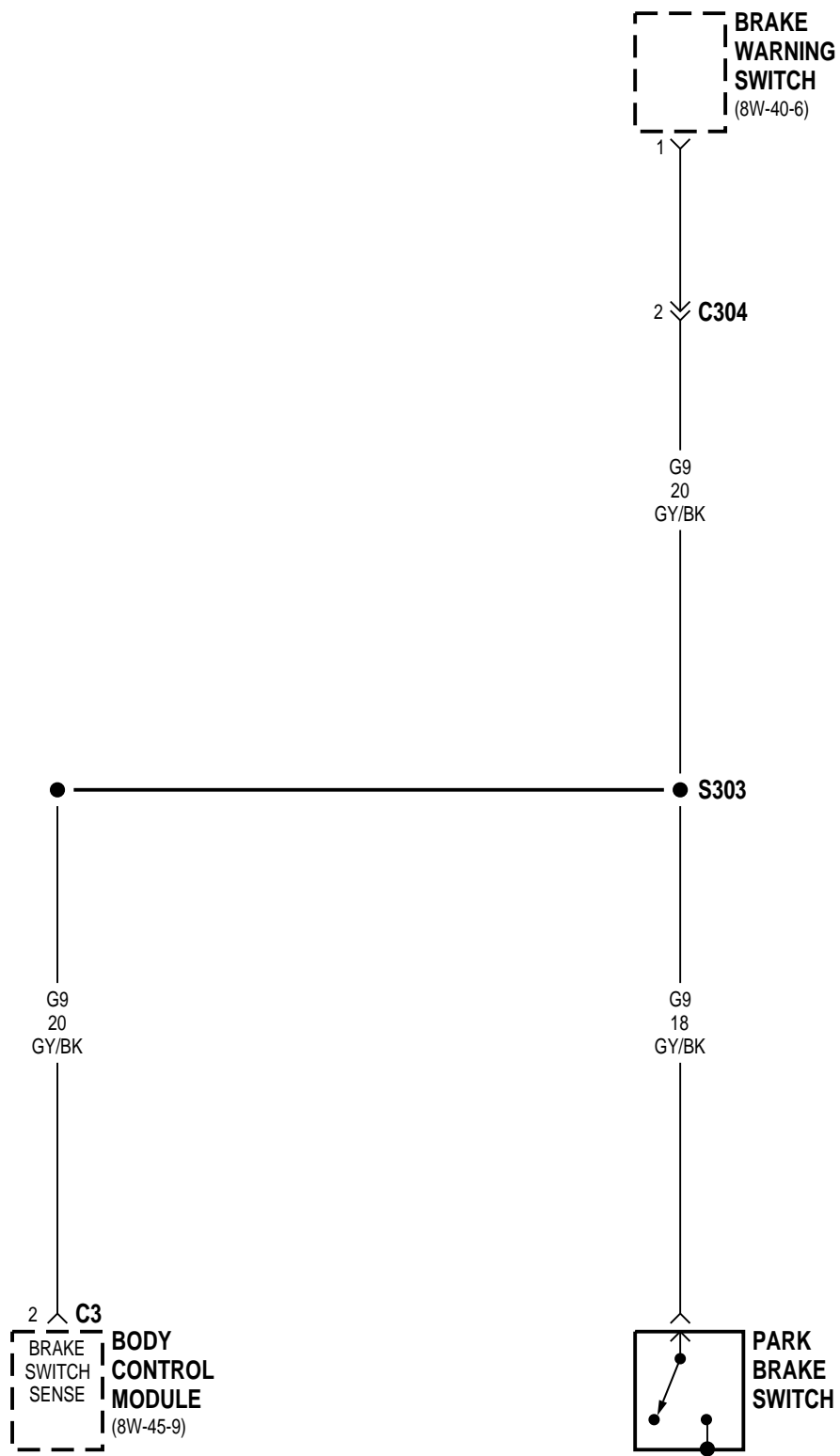
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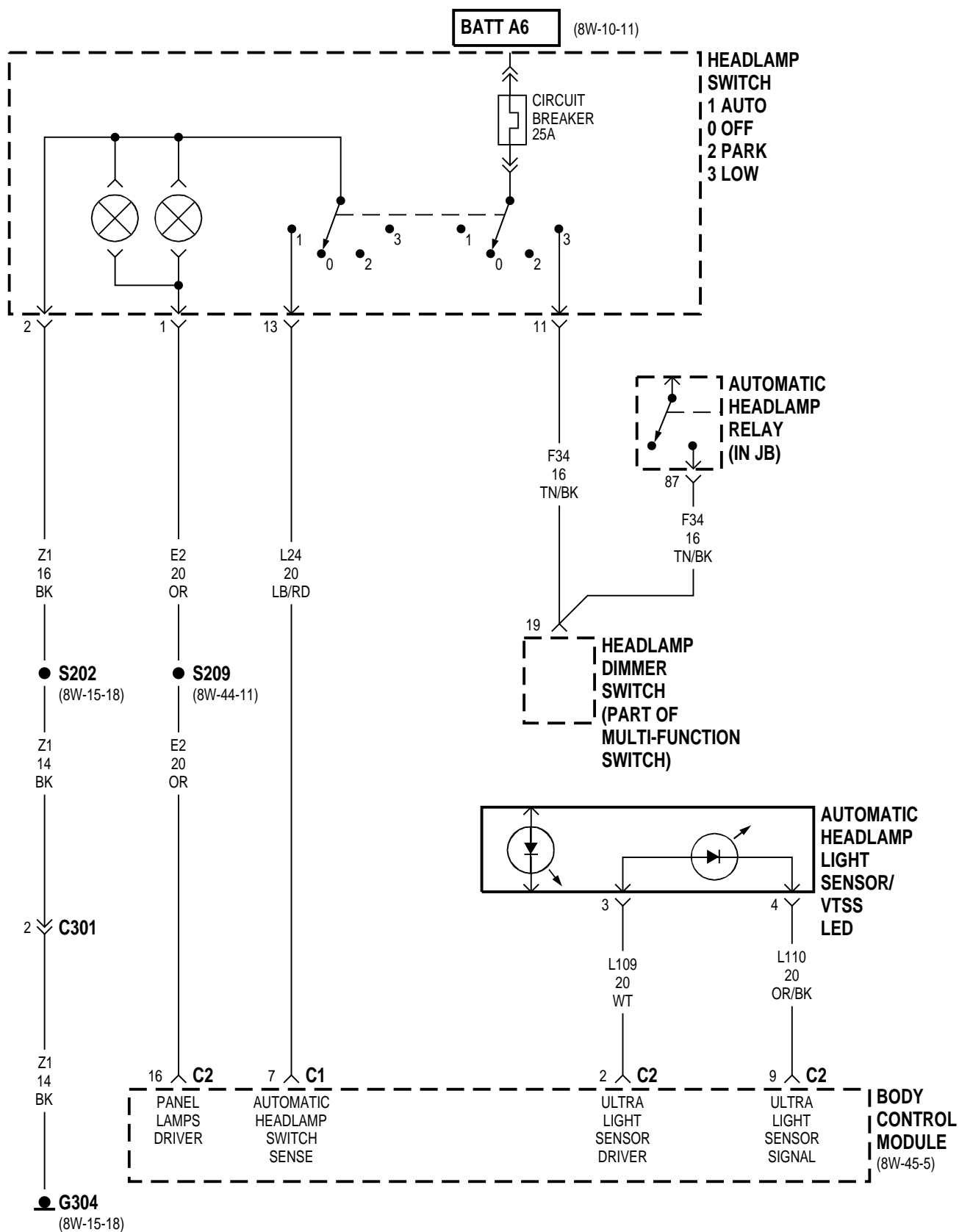
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	12

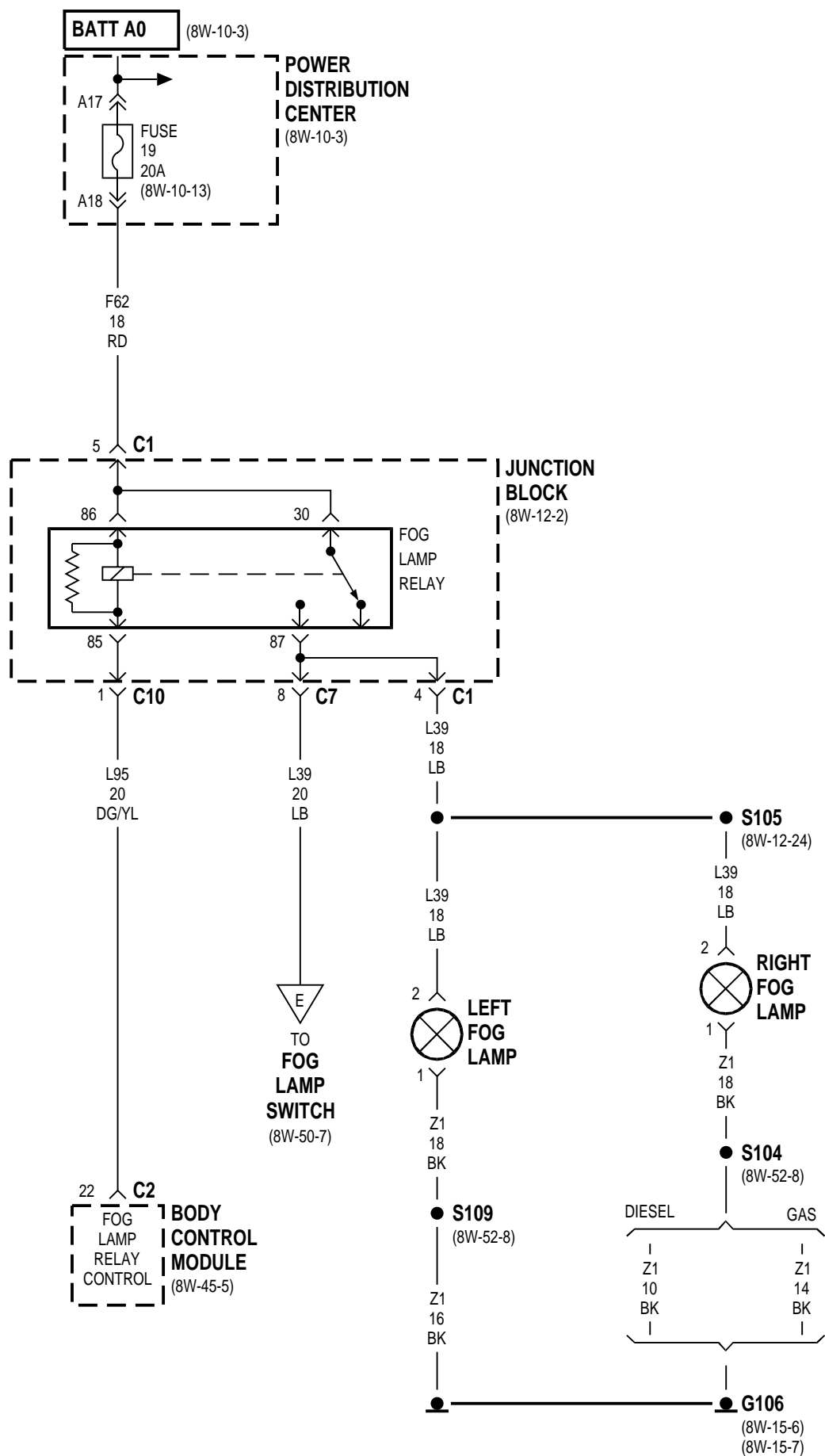
Component	Page	Component	Page
Automatic Headlamp Light Sensor/Vtss Led .	8W-50-5	Right Front Park Lamp	8W-50-10
Automatic Headlamp Relay	8W-50-2, 5	Right Front Turn Signal Lamp	8W-50-10
Body Control Module	8W-50-2, 3, 4, 5, 6, 7, 8	Right Headlamp	8W-50-3
Brake Warning Switch	8W-50-4	Right Headlamp Leveling Motor	8W-50-11
Circuit Breaker	8W-50-5	S103	8W-50-8
Daytime Running Lamp Module	8W-50-3, 4	S104	8W-50-3, 6, 10
Fog Lamp Relay	8W-50-6	S105	8W-50-6
Fog Lamp Switch	8W-50-7	S107	8W-50-3
Fuse 6	8W-50-4	S108	8W-50-3
Fuse 13	8W-50-2, 4	S109	8W-50-3, 6, 9
Fuse 15	8W-50-2	S110	8W-50-11
Fuse 17	8W-50-7, 8	S111	8W-50-11
Fuse 19	8W-50-2, 6	S112	8W-50-11
G106	8W-50-3, 6, 9, 10	S113	8W-50-11
G107	8W-50-4	S114	8W-50-11
G109	8W-50-3	S115	8W-50-11
G304	8W-50-5, 7, 11	S117	8W-50-4
Headlamp Dimmer Switch	8W-50-2, 5	S119	8W-50-4
Headlamp Leveling Switch	8W-50-11	S134	8W-50-4
Headlamp Switch	8W-50-2, 5, 7	S147	8W-50-9
Instrument Cluster	8W-50-9, 10	S149	8W-50-9
Junction Block	8W-50-2, 4, 6, 7, 8, 10	S150	8W-50-10
Lamp Outage Module	8W-50-8	S152	8W-50-10
Left Fog Lamp	8W-50-6	S202	8W-50-5, 7, 11
Left Front Park Lamp	8W-50-9	S209	8W-50-5
Left Front Turn Signal Lamp	8W-50-9	S212	8W-50-4, 11
Left Headlamp	8W-50-3	S303	8W-50-4
Left Headlamp Leveling Motor	8W-50-11	S408	8W-50-10
Park Brake Switch	8W-50-4	S409	8W-50-9
Park Lamp Relay	8W-50-7, 8	Turn Signal/Hazard Warning Switch ...	8W-50-9, 10
Power Distribution Center	8W-50-2, 4, 6	Vehicle Information Center	8W-50-8
Radio	8W-50-8		
Right Fog Lamp	8W-50-6		



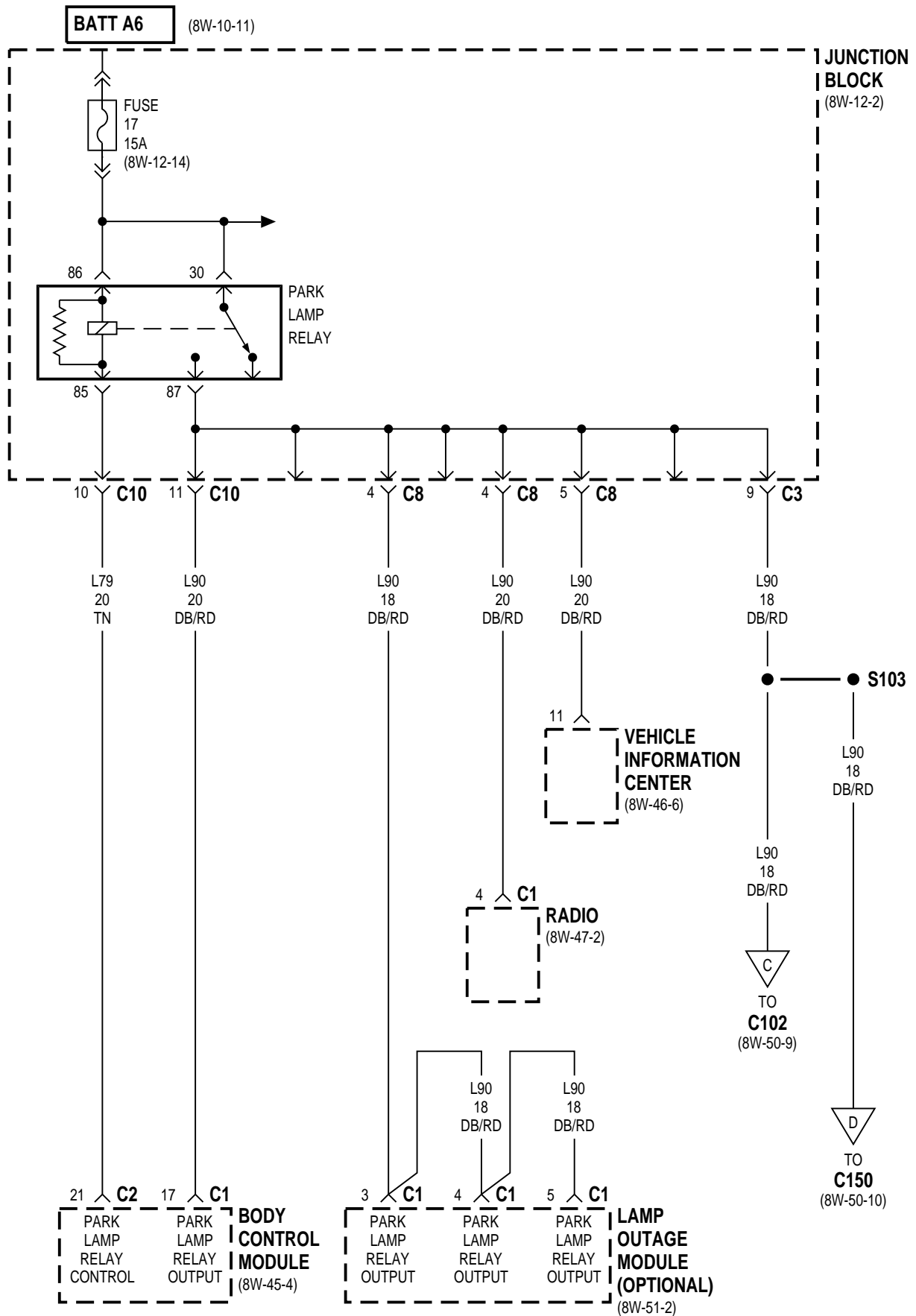


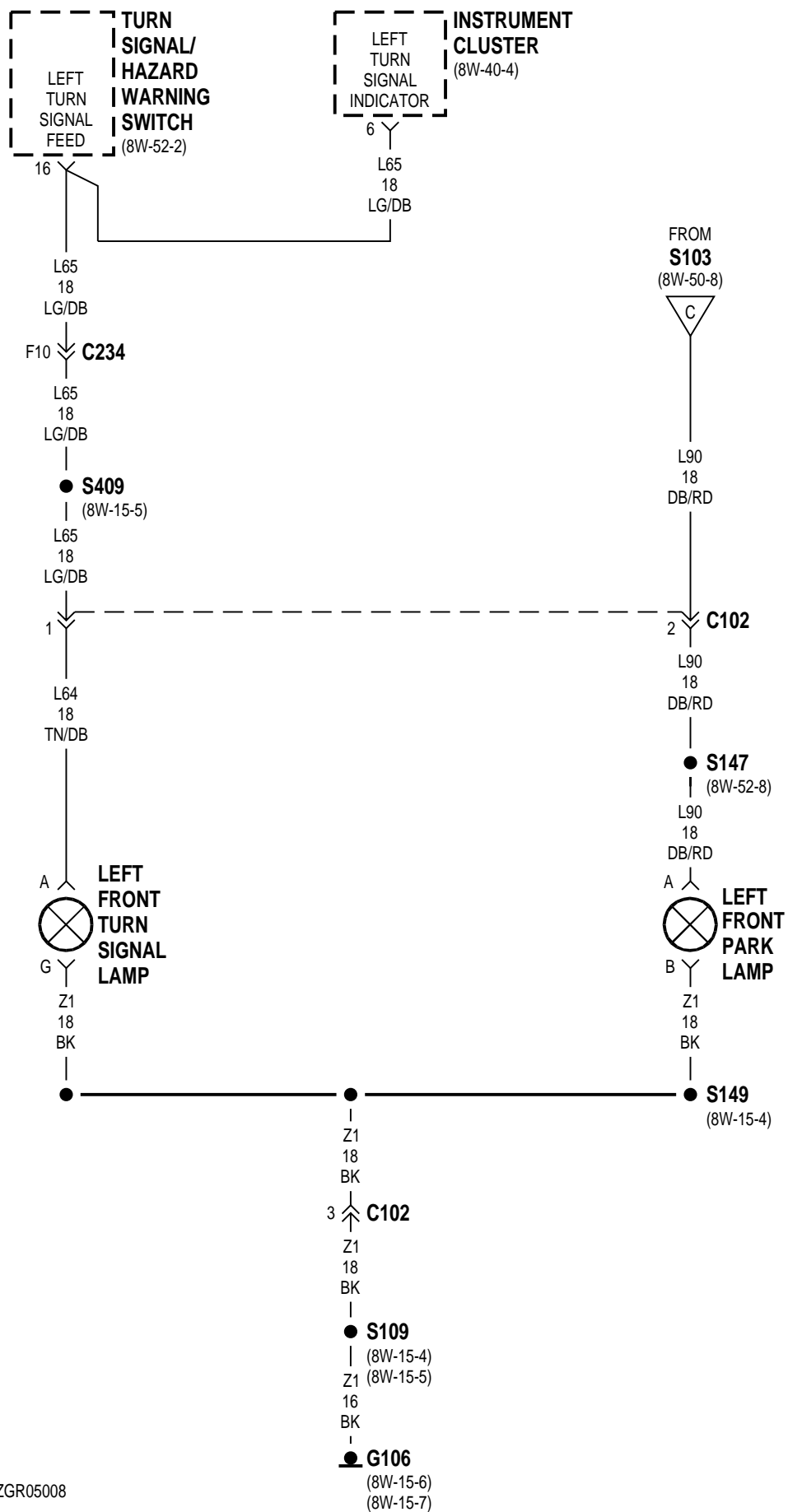


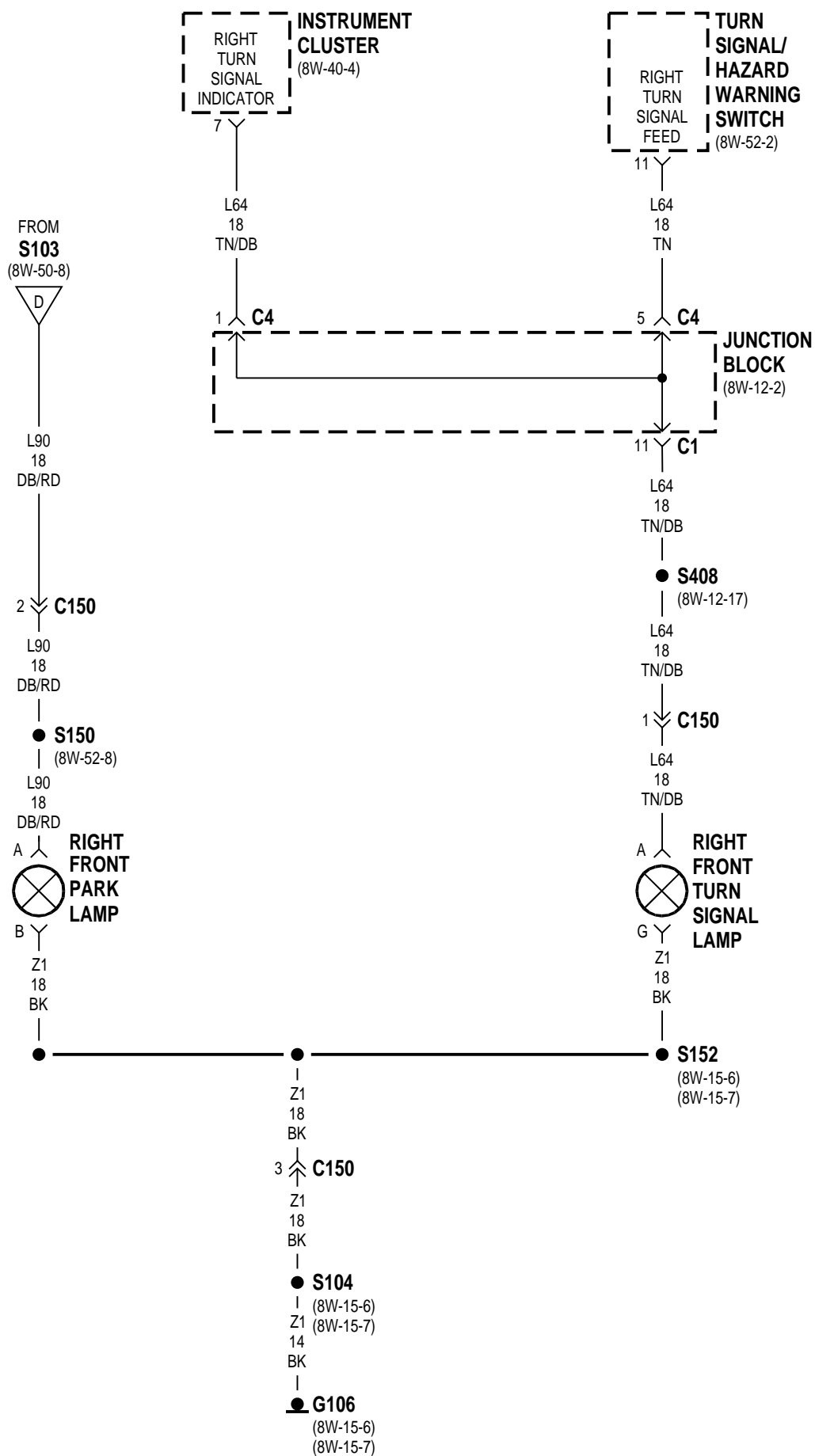


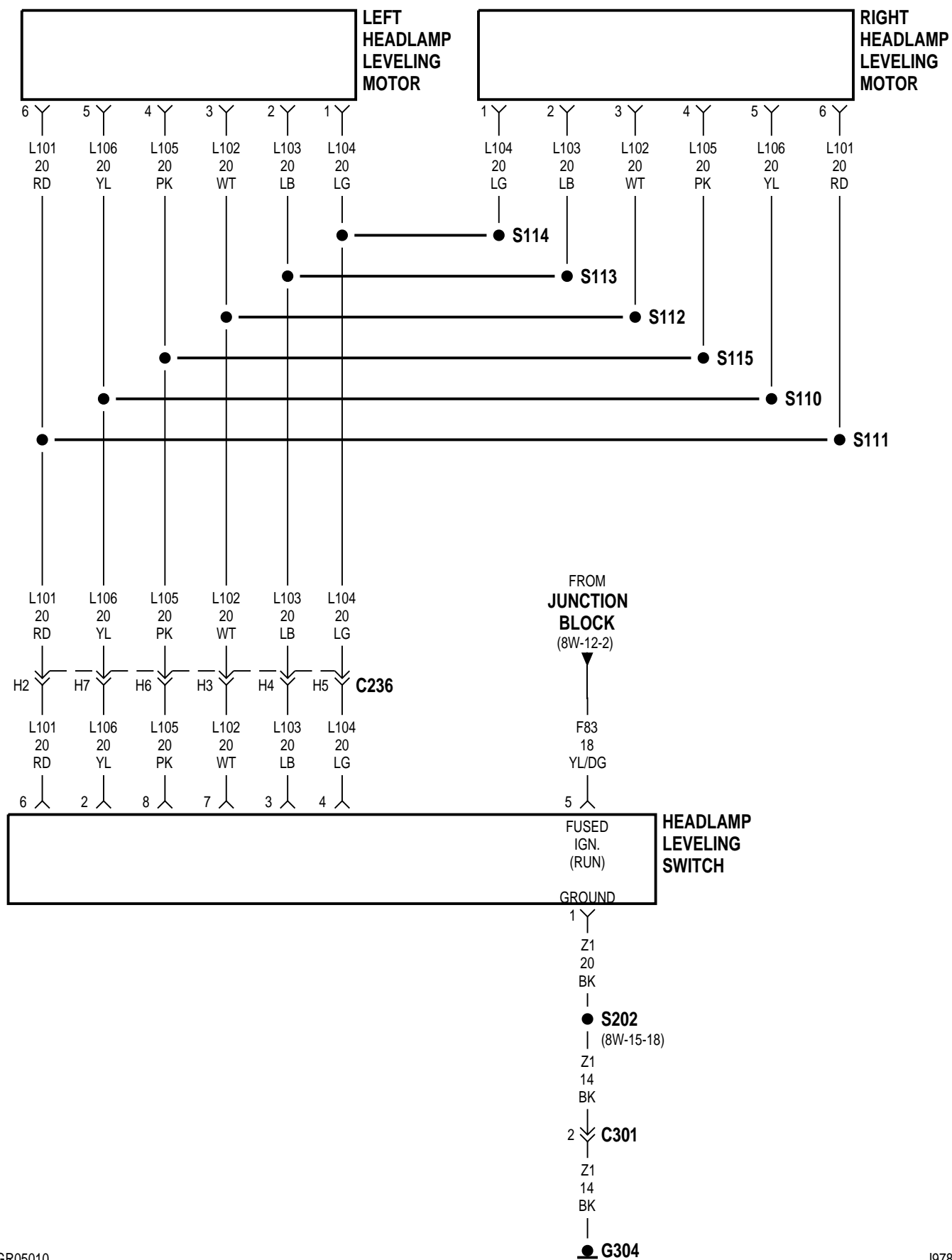












8W-50 FRONT LIGHTING

INDEX

	page		page
DESCRIPTION AND OPERATION		HEADLAMPS	12
AUTO HEADLAMPS	12	INTRODUCTION	12
FOG LAMPS	12	PARKING LAMPS	12
HEADLAMP LEVELING	12		

DESCRIPTION AND OPERATION

INTRODUCTION

The vehicle is equipped with a Body Control Module (BCM). The BCM controls the auto headlamp feature through the auto headlamp relay.

The park lamps operate when the headlamp switch is in the ON or PARK position. Also, if the vehicle is equipped with the Vehicle Theft Security System (VTSS), the BCM powers the park lamps through the park lamp relay if it senses unauthorized vehicle operation.

Circuit A6 from fuse 13 in Power Distribution Center (PDC), powers the headlamp switch through the circuit breaker in the switch.

PARKING LAMPS

Circuit A6 from fuse 13 in the Power Distribution Center (PDC) powers circuit 366 through fuse 17 in the junction block. When the headlamp switch is in the PARK lamp position, it connects circuit 366 to circuit L90. Circuit L90 powers the parking lamps, side marker lamps. Circuit L90 also connects to the Body Control Module (BCM).

The BCM operates the park lamps when it senses unauthorized entry to the vehicle while the Vehicle Theft Security System is armed. When it sense unauthorized entry, the BCM energizes the park lamp relay by providing ground for the relay coil on circuit L79. Circuit 366 powers the relay coil and contacts. When the relay energizes, it connects circuit 366 to circuit L90.

HEADLAMPS

When the headlamp switch is in the LOW position, it connects circuit A6 from fuse 13 in the Power Distribution Center (PDC) to circuit F34. Circuit F34 connects to the dimmer switch portion of the multi-function switch and feeds circuit L4. Circuit L4 powers the low beam of the headlamps.

When the operator selects high beam operation or flash-to-pass with the turn signal stalk of the multi-function switch, circuit L11 from fuse 19 in the junction block connects to circuit L3. Circuit L3 powers

headlamp high beams. Circuit L3 also connects to the Body Control Module (BCM).

If the vehicle was built for sale in the Country of Canada, the Daytime Running Lamps (DRL) module powers the headlamp high beams on circuit L3 when the headlamp switch is off and the ignition switch is in the RUN position.

HEADLAMP LEVELING

When the ignition switch is in the RUN position, it connects circuit A1 from fuse 8 in the Power Distribution Center (PDC) to circuit A22. Circuit A22 powers circuit F83 through fuse 6 in the junction block. Circuit F83 feeds the headlamp leveling switch. Circuit Z1 grounds the switch.

AUTO HEADLAMPS

The Body Control Module (BCM) operates the Auto Headlamp feature. The BCM monitors outside light intensity through the auto headlamp light sensor. Circuit L109 from the BCM provides 5 volts to the sensor. Circuit L110 from the sensor sends the light intensity signal to the BCM.

In the AUTO position, the headlamp switch provides a signal to the BCM by connecting circuit L24 to ground on circuit Z1. If outside light intensity is low enough when the BCM senses the AUTO headlamp request, it energizes the auto headlamp relay by grounding the relay coil on circuit 714. Circuit A6 from fuse 13 in the Power Distribution Center (PDC) powers the relay coil and contacts.

When the relay energizes, it connects circuit A6 to circuit F34. Circuit F34 powers circuit L4 through the headlamp dimmer switch circuitry in the multi-function switch. Circuit L4 powers the headlamps.

FOG LAMPS

The fog lamps only operate when the headlamp high beams are off and the park lamps are on. The fog lamp switch contains a light emitting diode (LED) that illuminates during fog lamp operation.

When the fog lamp switch closes, it signals the Body Control Module (BCM) on circuit L35. If the park lamps are on and the BCM does not sense head-

DESCRIPTION AND OPERATION (Continued)

lamp high beam operation on circuit L3, it energizes the fog lamp relay. The BCM energizes the relay by grounding the relay coil on circuit L95. Circuit F62 from fuse 19 in the Power Distribution Center (PDC) powers the relay coil and contacts.

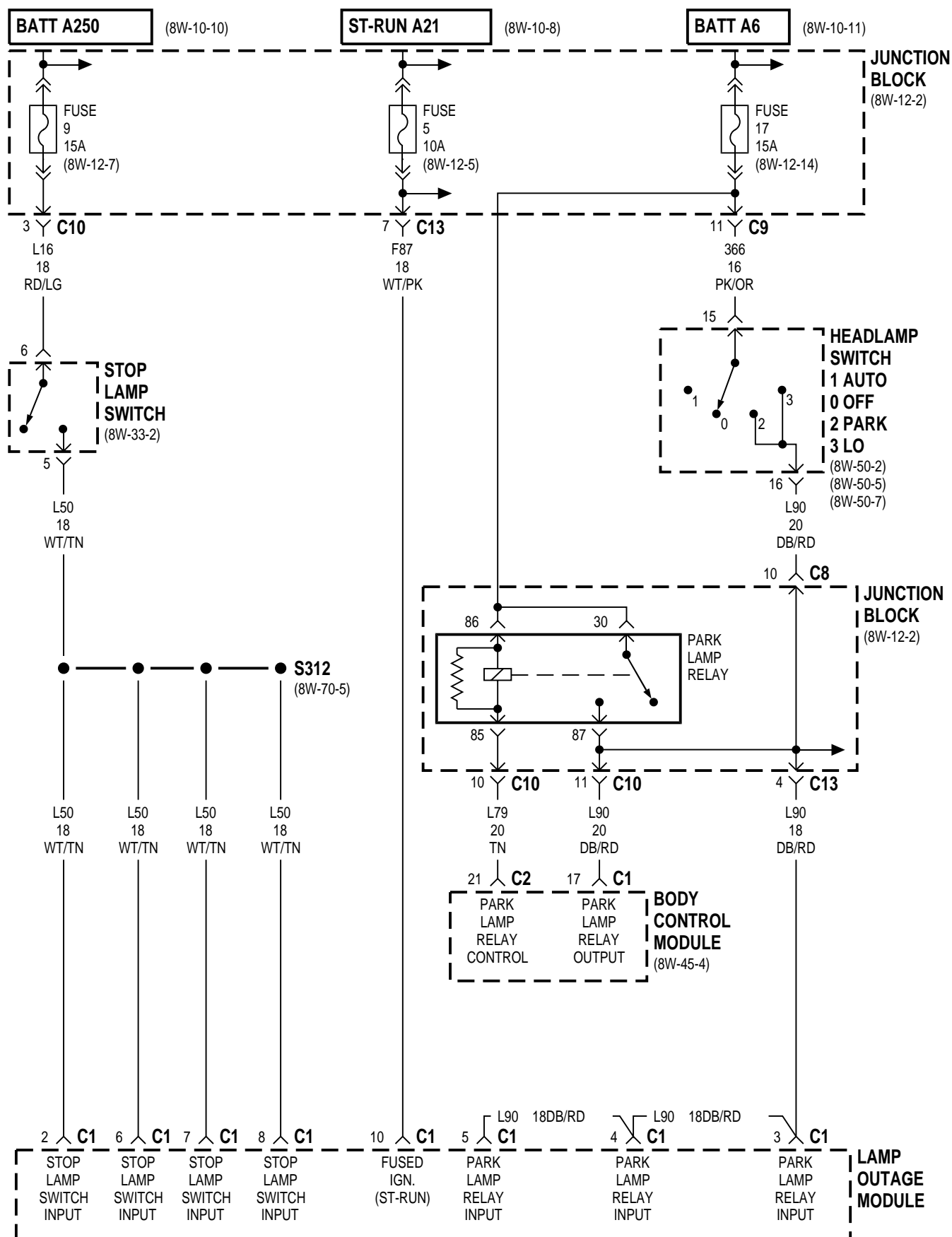
When the fog lamp relay energizes, it connects circuit F62 from fuse 19 in the Power Distribution Center (PDC) to circuit L39. Circuit L39 powers the fog lamps and the fog lamp switch LED. Circuit Z1 provides ground for the lamps and the LED.

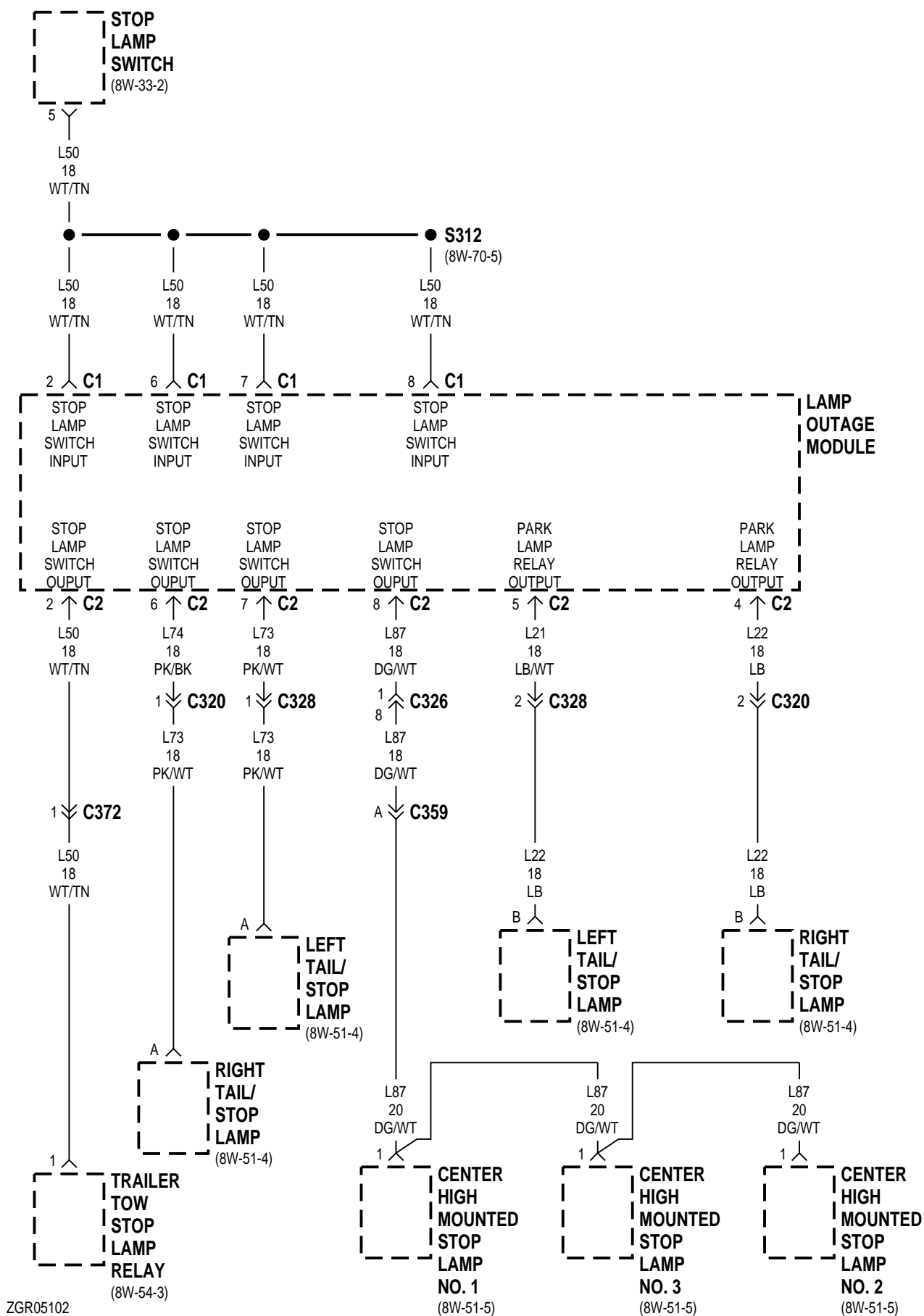
8W-51 REAR LIGHTING

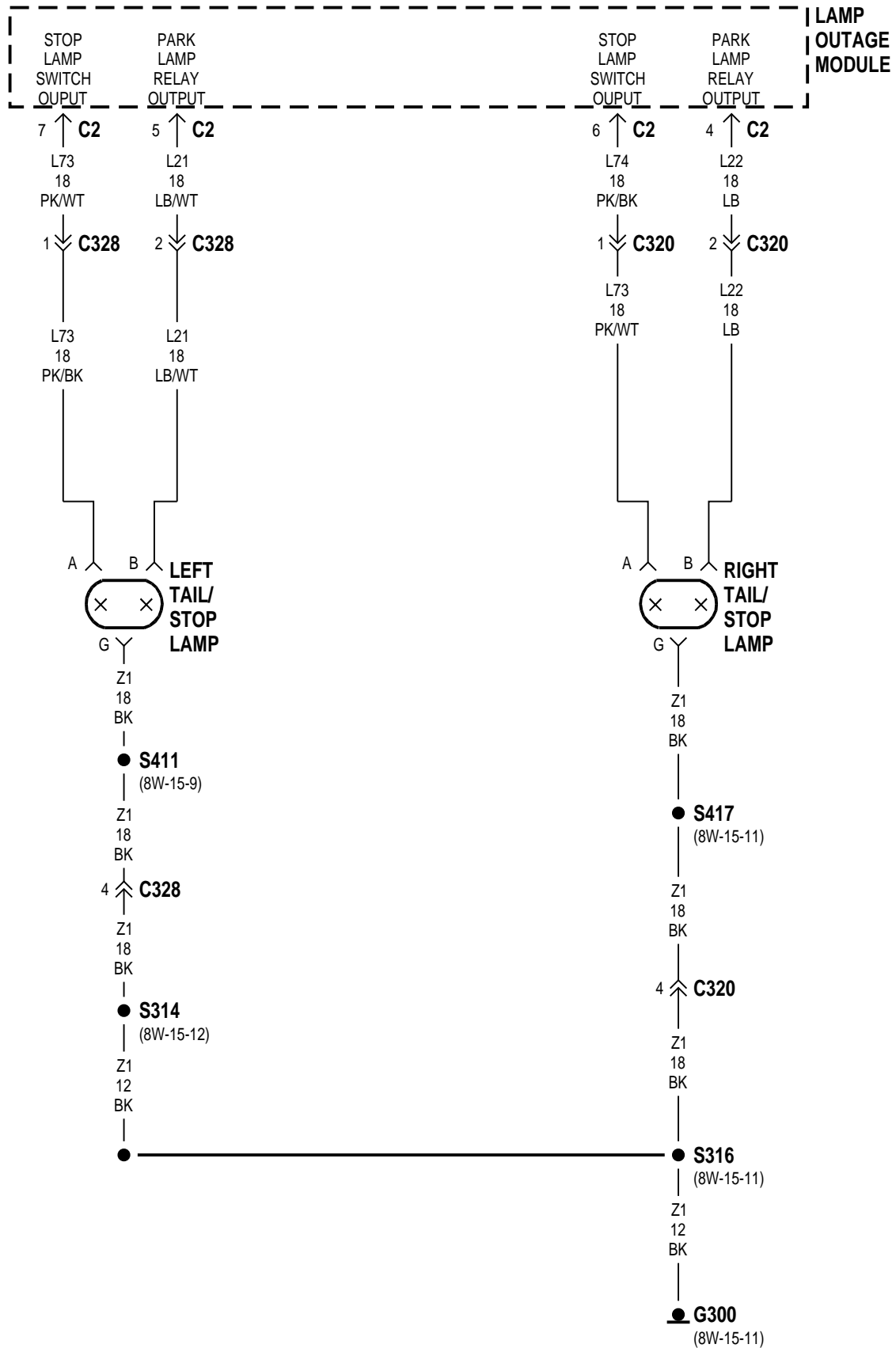
INDEX

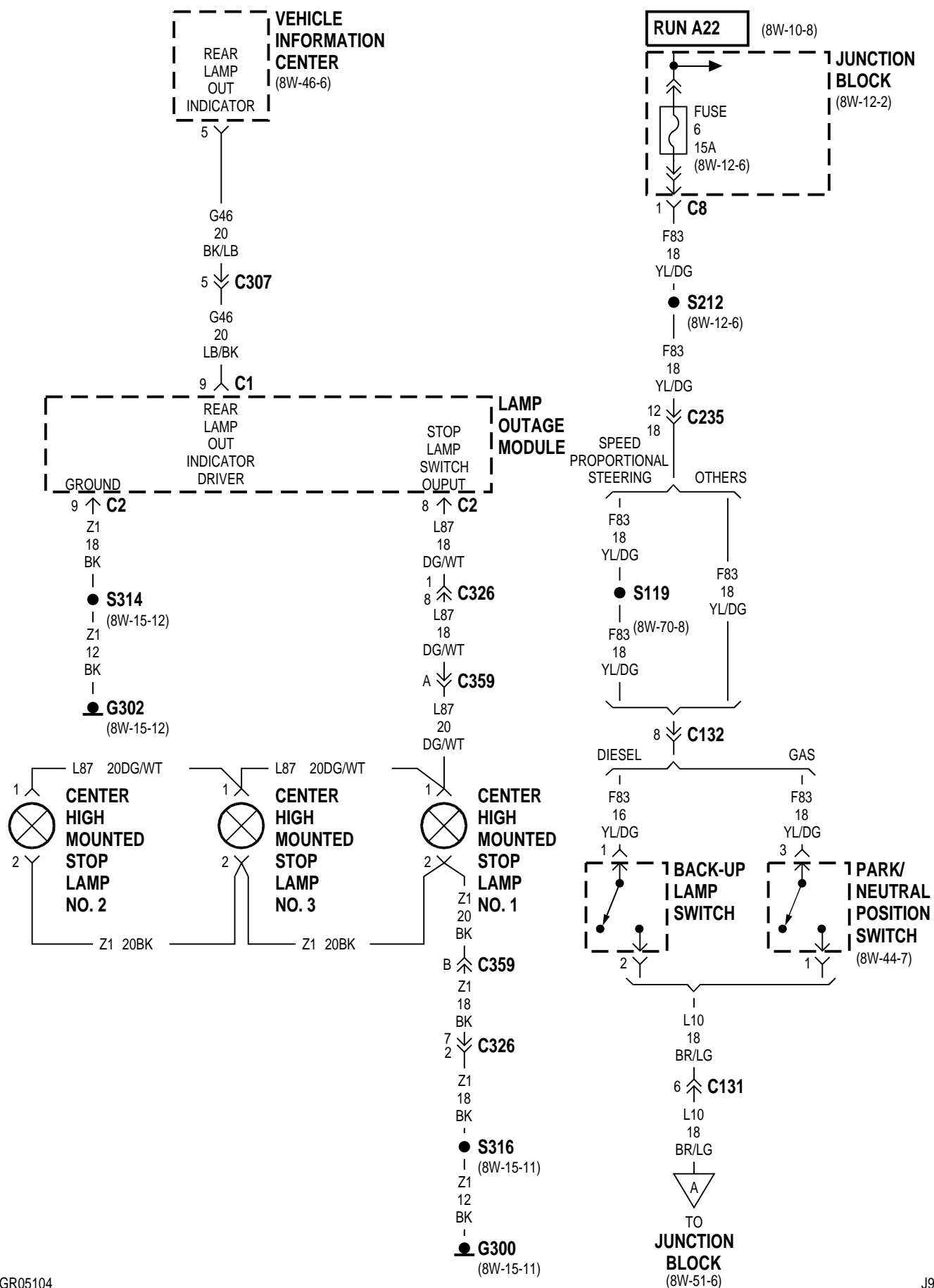
	page
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	8

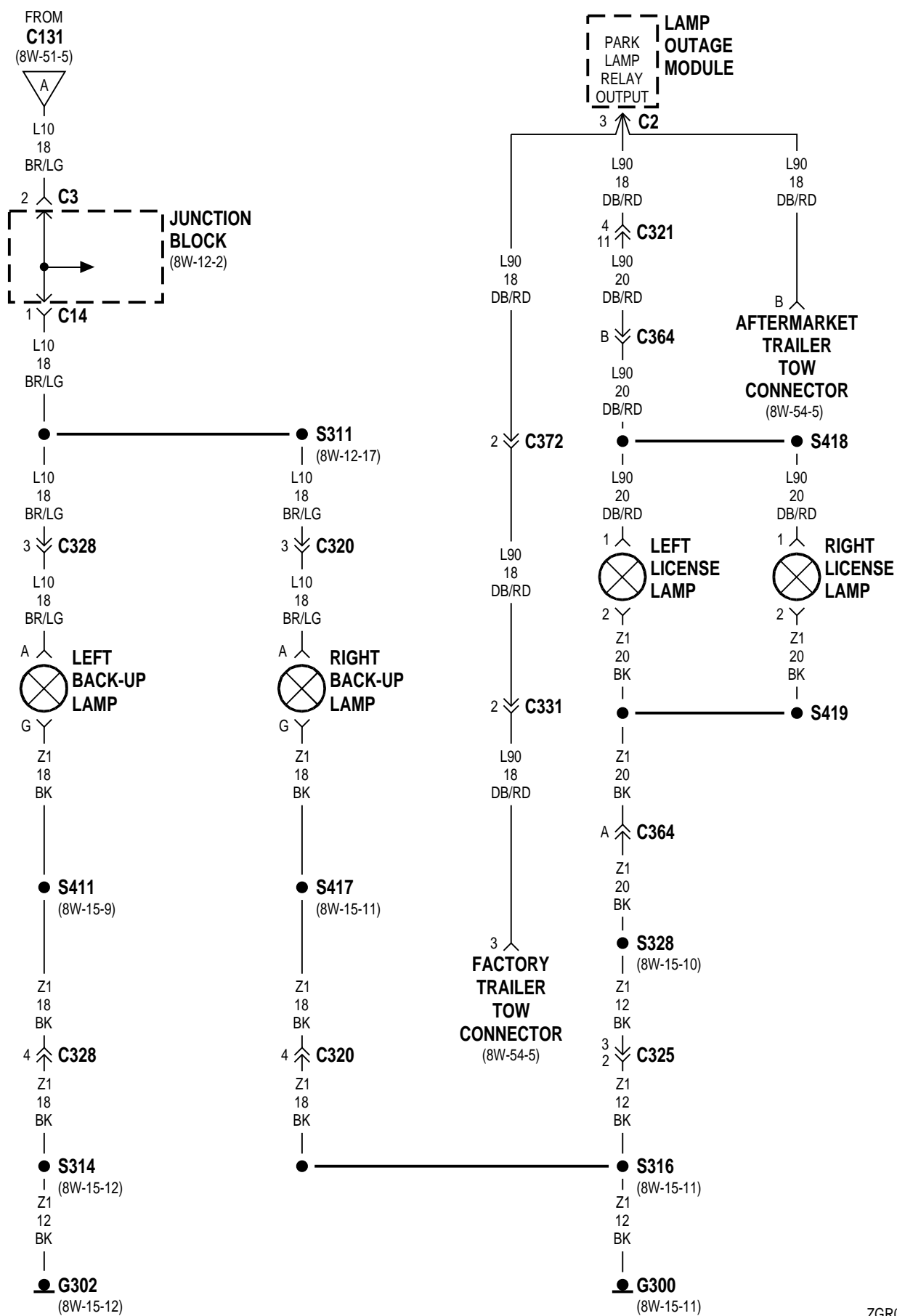
Component	Page	Component	Page
Aftermarket Trailer Tow Connector	8W-51-6	Rear Fog Lamp Relay A	8W-51-7
Back-Up Lamp Switch	8W-51-5	Right Back-Up Lamp	8W-51-6
Body Control Module	8W-51-2	Right License Lamp	8W-51-6
Center High Mounted Stop Lamp No. 1 ..	8W-51-3, 5	Right Rear Fog Lamp	8W-51-7
Center High Mounted Stop Lamp No. 2 ..	8W-51-3, 5	Right Tail/Stop Lamp	8W-51-3, 4
Center High Mounted Stop Lamp No. 3 ..	8W-51-3, 5	S119	8W-51-5
Factory Trailer Tow Connector	8W-51-6	S202	8W-51-7
Fuse 5	8W-51-2	S212	8W-51-5
Fuse 6	8W-51-5	S311	8W-51-6
Fuse 9	8W-51-2	S312	8W-51-2, 3
Fuse 15	8W-51-7	S314	8W-51-4, 5, 6
Fuse 17	8W-51-2, 7	S316	8W-51-4, 5, 6, 7
G300	8W-51-4, 5, 6, 7	S328	8W-51-6
G302	8W-51-5, 6	S411	8W-51-4, 6, 7
G304	8W-51-7	S412	8W-51-3
Headlamp Switch	8W-51-2, 7	S416	8W-51-3
Junction Block	8W-51-2, 5, 6, 7	S417	8W-51-4, 6, 7
Lamp Outage Module	8W-51-2, 3, 4, 5, 6, 7	S418	8W-51-6
Left Back-Up Lamp	8W-51-6	S419	8W-51-6
Left License Lamp	8W-51-6	Stop Lamp Switch	8W-51-2, 3
Left Rear Fog Lamp	8W-51-7	Trailer Tow Stop Lamp Relay	8W-51-3
Left Tail/Stop Lamp	8W-51-3, 4	Vehicle Information Center	8W-51-5
Park Lamp Relay	8W-51-2		
Park/Neutral Position Switch	8W-51-5		













8W-51 REAR LIGHTING

DESCRIPTION AND OPERATION

TAIL LAMPS, REAR LICENSE PLATE LAMPS AND SIDE MARKER LAMPS

Circuit A6 from fuse 13 in the Power Distribution Center (PDC) feeds circuit 366 through fuse 17 in the junction block. Circuit 366 connects to the headlamp switch.

When the headlamp switch is in the PARK or LOW position, the switch connects circuit 366 to circuit L90. From the headlamp switch, circuit L90 branches to power the front parking lamps and rear license plate lamps. Circuit L90 connects to circuits L21 and L22. Circuits L21 and L22 feed the tail lamps and side marker lamps. If the vehicle is equipped with a lamp outage module, circuit L90 feeds the module and the module powers the rear tail, license plate and side marker lamps.

The Body Control Module (BCM) operates the park lamps when it senses unauthorized entry to the vehicle while the Vehicle Theft Security System is armed. When it sense unauthorized entry, the BCM energizes the park lamp relay by providing ground for the relay coil on circuit L79. Circuit 366 powers the relay coil and contacts. When the relay energizes, it connects circuit 366 to circuit L90.

Circuit Z1 provides a ground for the parking lamps, tail lamps, and rear license plate lamps.

HELPFUL INFORMATION

- If the vehicle is equipped with factory installed trailer tow, circuit L90 connects to the trailer tow harness.
- Check fuse 13 in PDC.
- Check fuse 17 in the junction block.

STOP LAMPS AND CHMSL LAMPS

Circuit A250 from fuse 11 in the Power Distribution Center (PDC) supplies voltage to circuit L16 through fuse 9 in the junction block. Circuit L16 connects to the stop lamp switch.

When the operator presses the brake pedal, the stop lamp switch closes and connects circuit L16 to circuit L50. Circuit L50 connects to circuits L73, L74 and L87. Circuit L73 and L74 feed the stop lamps. Circuit L87 powers the Center High Mounted Stop Lamps (CHMSL). Circuit Z1 provides a ground for the stop lamps and CHMSL lamps.

If the vehicle is equipped with a lamp outage module, circuit L50 connects to the module. The lamp outage module powers circuit L73, L74 and L87.

REAR FOG LAMPS

The rear fog lamps are powered by the rear fog lamp relay on circuit L36. The relay coil and contacts are powered by circuit L95 from fuse 15 in the fuse block. The relay coil ground is controlled by the headlamp and rear fog lamp switches on circuit L96.

BACK-UP LAMPS

In the RUN position, the ignition switch connects circuit A1 from fuse 8 in the Power Distribution Center (PDC) to circuit A22. Circuit A22 powers circuit F83 through fuse 6 in the junction block.

Circuit F83 supplies power to the PARK/NEUTRAL position switch. When the operator puts the transmission in REVERSE, the switch connects circuit F83 to circuit L10. Circuit L10 feeds the back-up lamps. Circuit Z1 provides ground for the back-up lamps.

HELPFUL INFORMATION

- Check fuse 8 in the PDC and fuse 6 in the junction block.
- Check for continuity across the back-up lamp switch when it is closed.

LAMP OUTAGE MODULE (LOM)

The Lamp Outage Module (LOM) determines if a rear lighting lamp is not operating. When the ignition switch is in the START or RUN position, circuit A1 from fuse 8 in the Power Distribution Center (PDC) connects to circuit A21. Circuit A21 feeds circuit F87 through fuse 5 in the junction block. Circuits F87 feeds the LOM.

Circuit G46 from the LOM connects to the Vehicle Information Center (VIC). When the LOM senses an inoperative lamp, the VIC displays the data to the vehicle operator.

Circuit L90 which feeds the tail lamps and side marker lamps, connects to the LOM. From the LOM, circuit L90 continues to the license plate lamps. Circuits L21 and L22 from the LOM power the tail lamps and side marker lamps.

Circuit L50 from the stop lamp switch connects to the LOM. From the LOM, circuits L73 and L74 power the stop lamps and circuit L87 powers the Center High Mounted Stop Lamps (CHMSL).

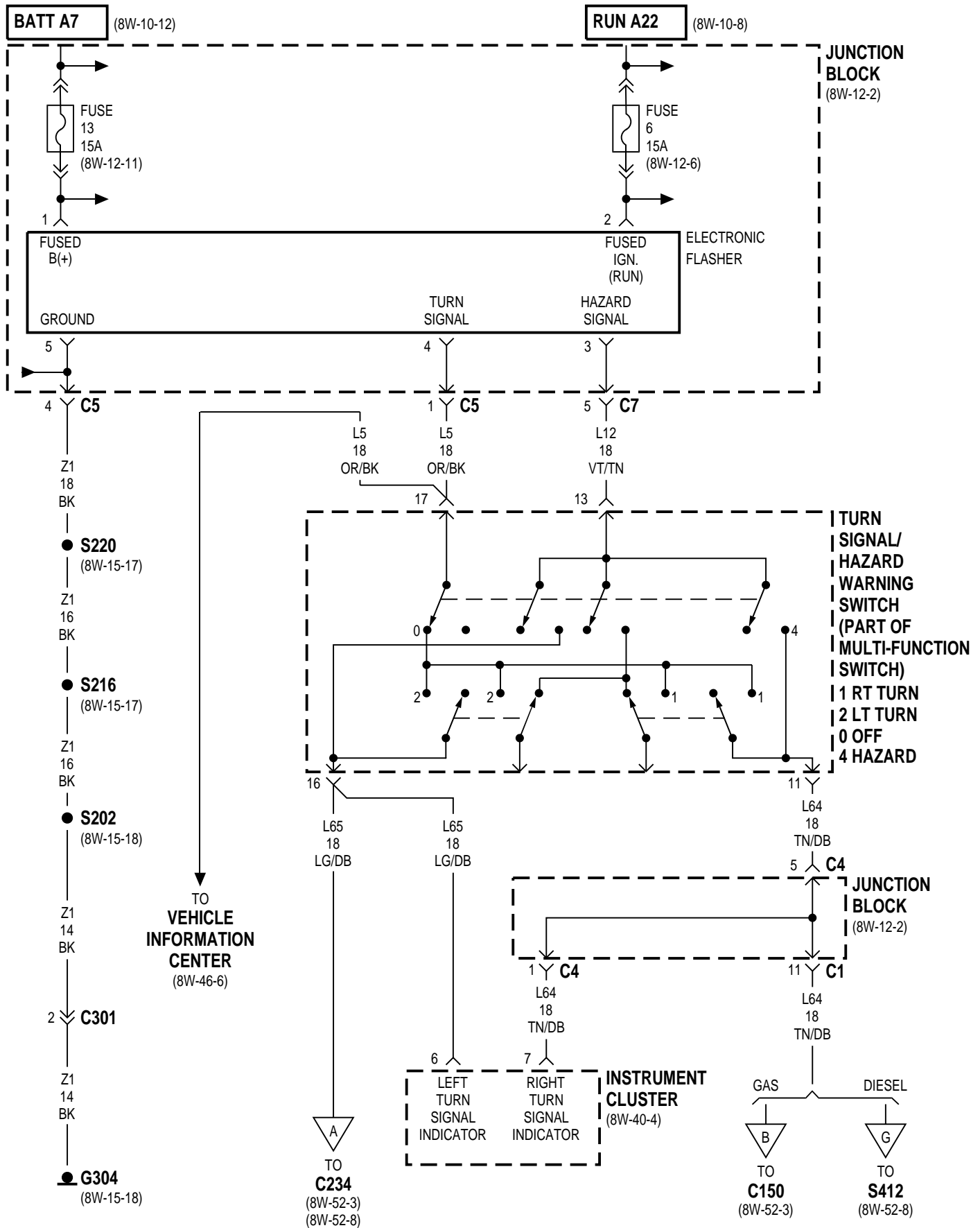
Circuit Z1 grounds the LOM.

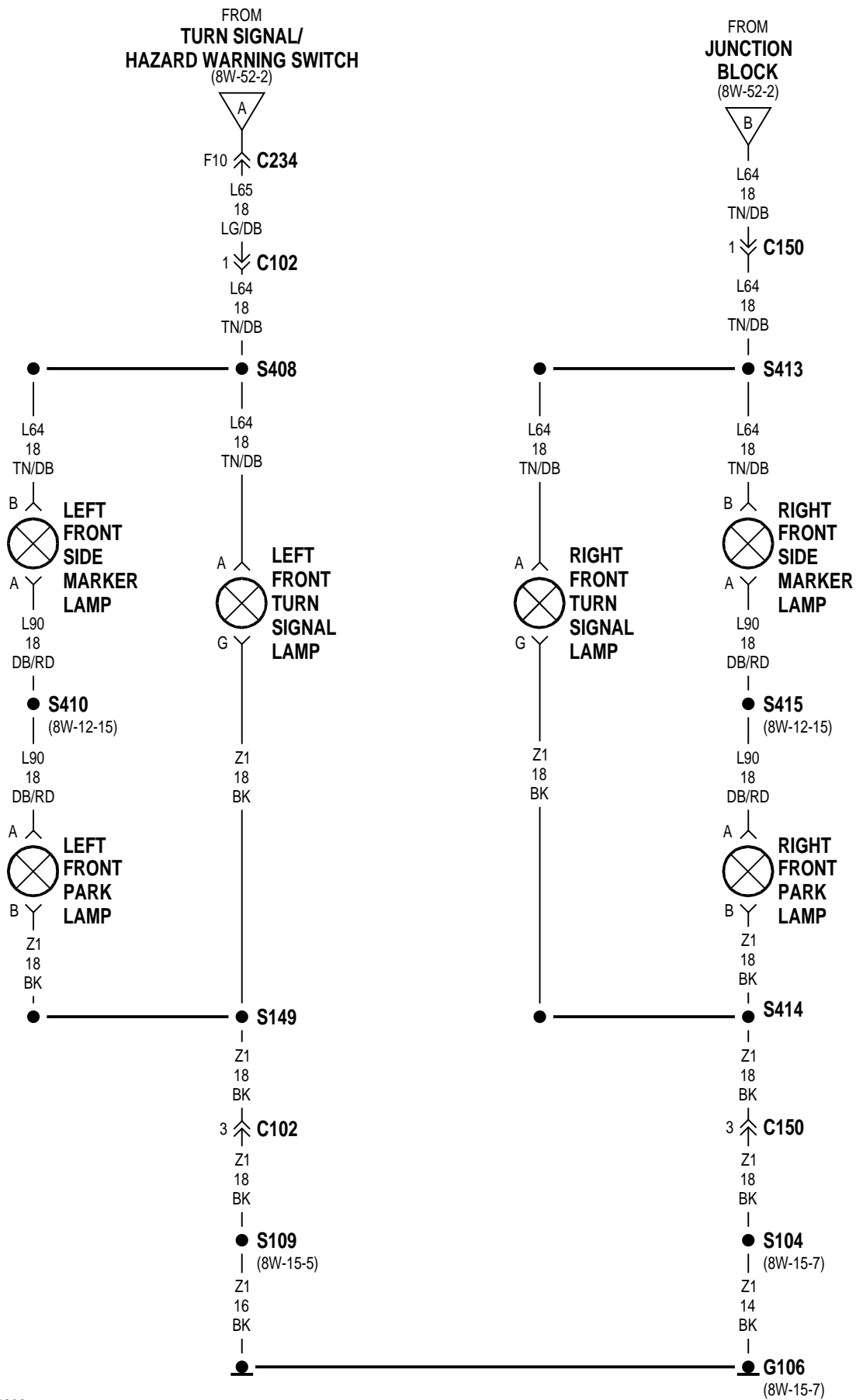
8W-52 TURN SIGNALS

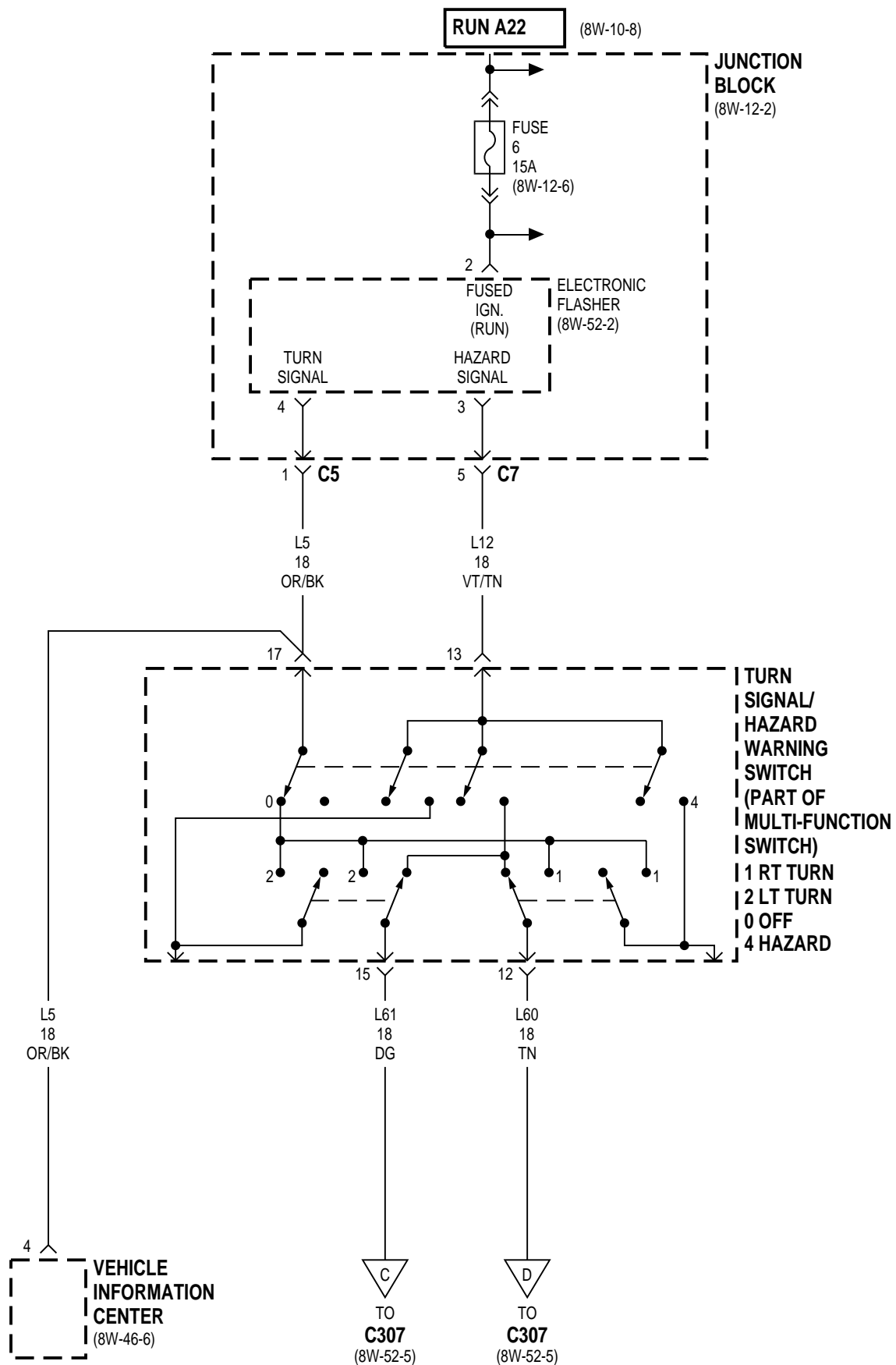
INDEX

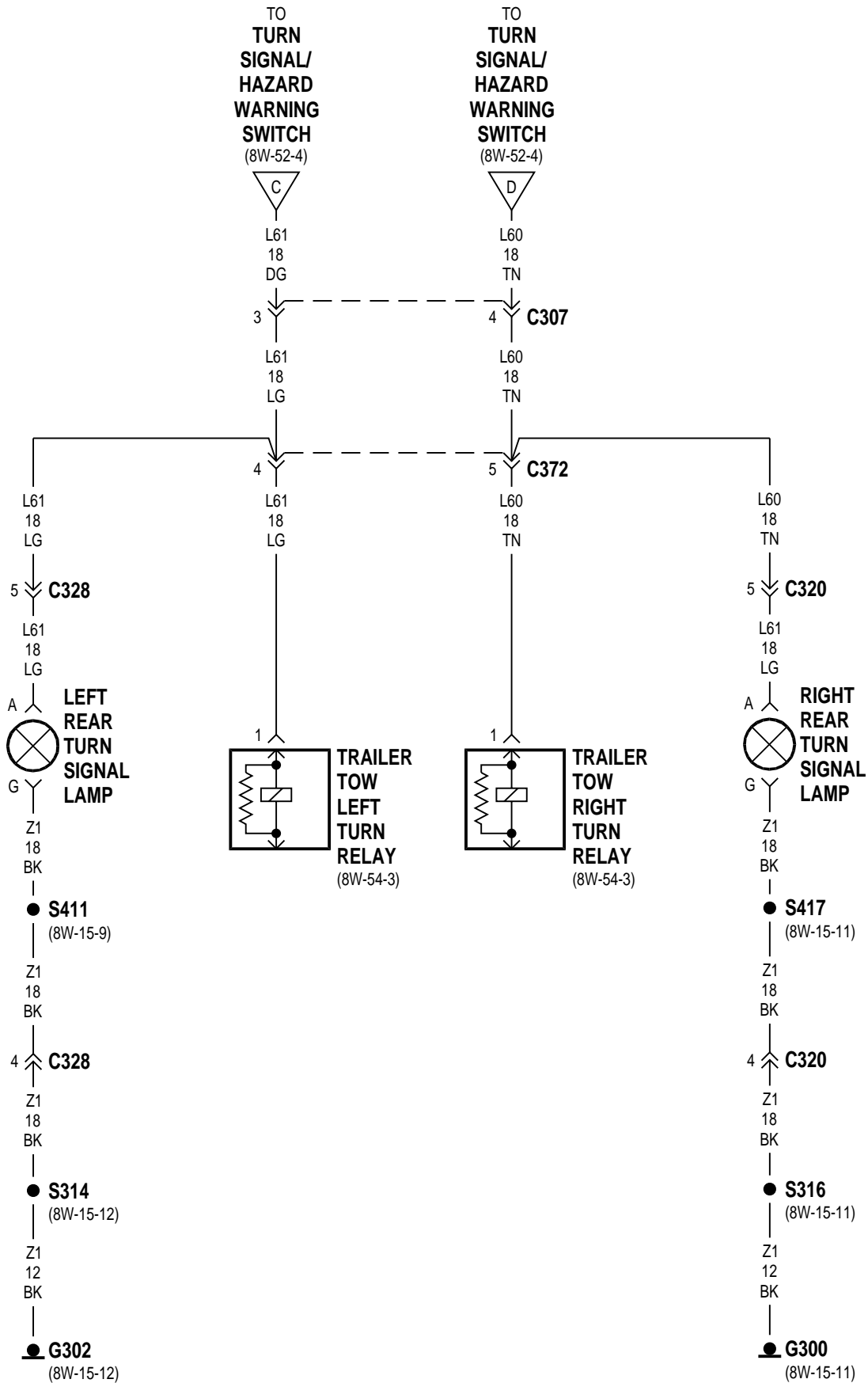
	page
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	9

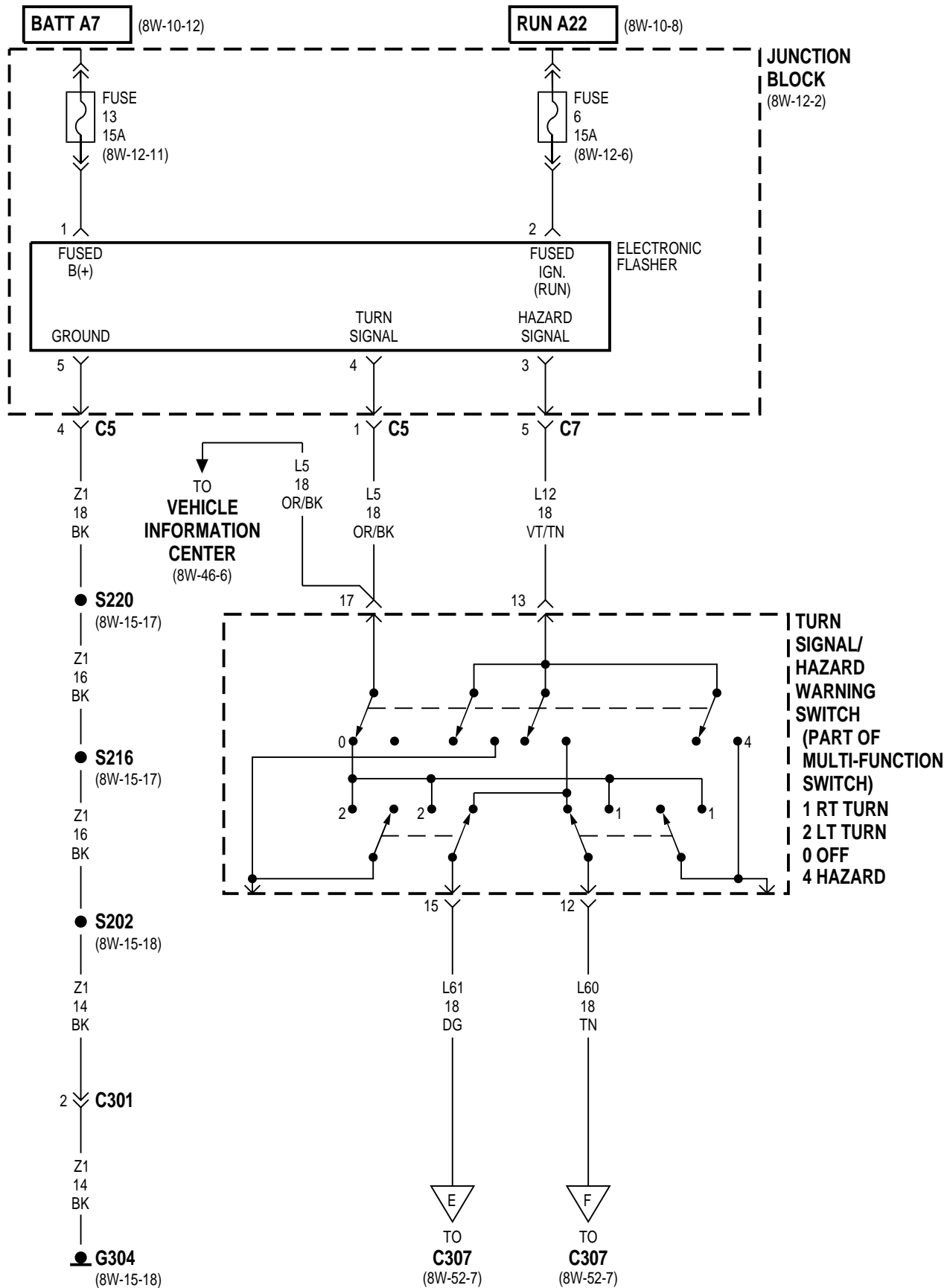
Component	Page	Component	Page
Aftermarket Trailer Tow Connector	8W-52-7	S103	8W-52-8
Electronic Flasher	8W-52-2, 4, 6	S104	8W-52-3, 8
Fuse 6	8W-52-2, 4, 6	S109	8W-52-3, 8
Fuse 8	8W-52-7	S147	8W-52-8
Fuse 13	8W-52-2, 6	S149	8W-52-8
G106	8W-52-3, 8	S150	8W-52-8
G109	8W-52-8	S152	8W-52-8
G300	8W-52-5, 7	S202	8W-52-2, 6
G302	8W-52-5, 7	S216	8W-52-2, 6
G304	8W-52-2, 6	S220	8W-52-2, 6
Instrument Cluster	8W-52-2	S313	8W-52-7
Junction Block	8W-52-2, 4, 6, 7	S314	8W-52-5, 7
Left Front Park Lamp	8W-52-3	S315	8W-52-7
Left Front Side Marker Lamp	8W-52-3	S316	8W-52-5, 7
Left Front Turn Signal	8W-52-8	S408	8W-52-3, 8
Left Front Turn Signal Lamp	8W-52-3	S409	8W-52-3, 8
Left Park Lamp	8W-52-8	S410	8W-52-3
Left Rear Turn Signal Lamp	8W-52-5, 7	S411	8W-52-5, 7
Left Side Repeater	8W-52-8	S413	8W-52-3
Park Lamp Relay	8W-52-8	S414	8W-52-3
Right Front Park Lamp	8W-52-3	S415	8W-52-3
Right Front Side Marker Lamp	8W-52-3	S417	8W-52-5, 7
Right Front Turn Signal	8W-52-8	Trailer Tow Left Turn Relay	8W-52-5
Right Front Turn Signal Lamp	8W-52-3	Trailer Tow Right Turn Relay	8W-52-5
Right Park Lamp	8W-52-8	Turn Signal/Hazard Warning Switch ..	8W-52-2, 4, 6
Right Rear Turn Signal Lamp	8W-52-5, 7	Vehicle Information Center	8W-52-2, 4, 6
Right Side Repeater	8W-52-8		

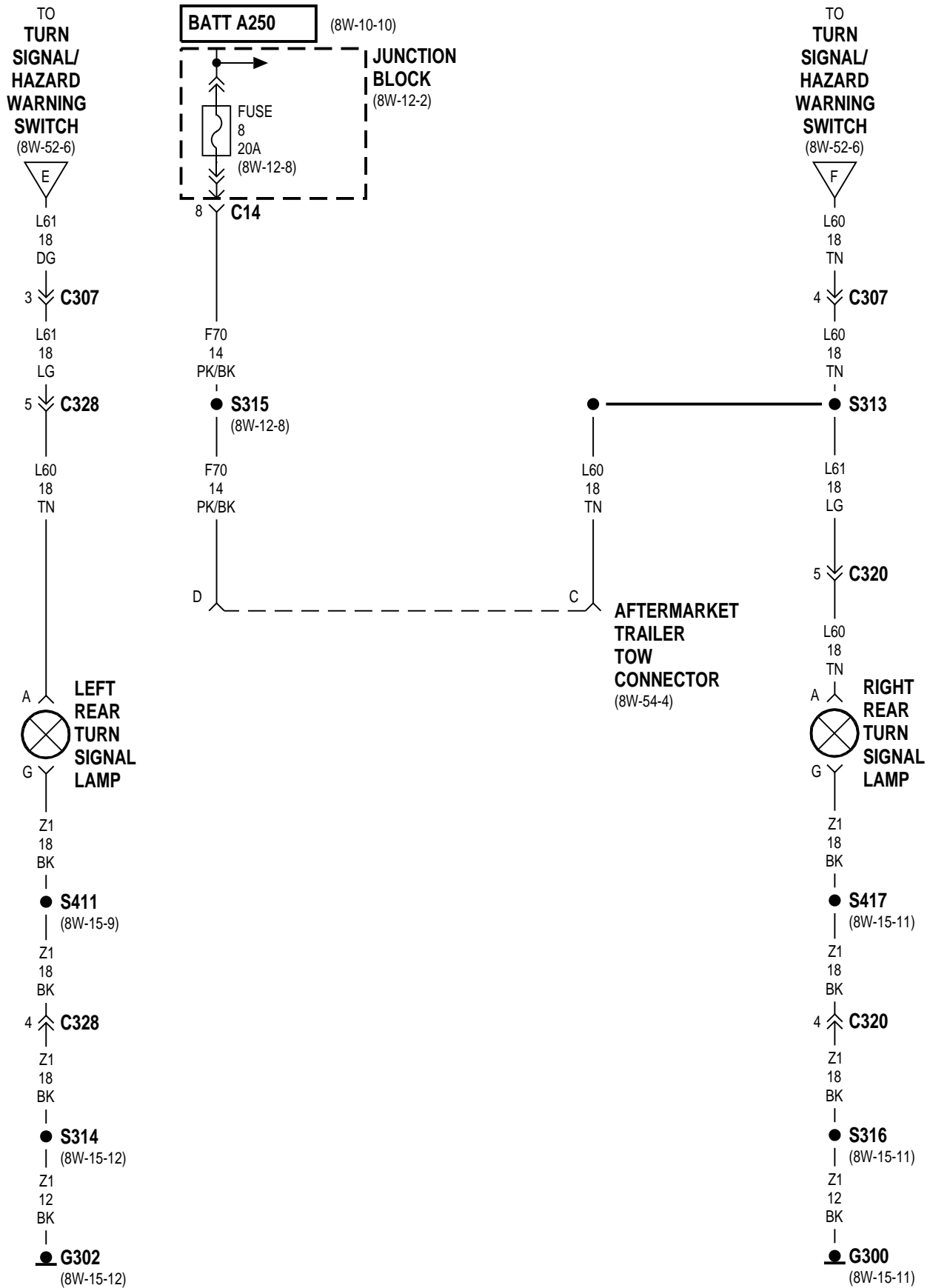


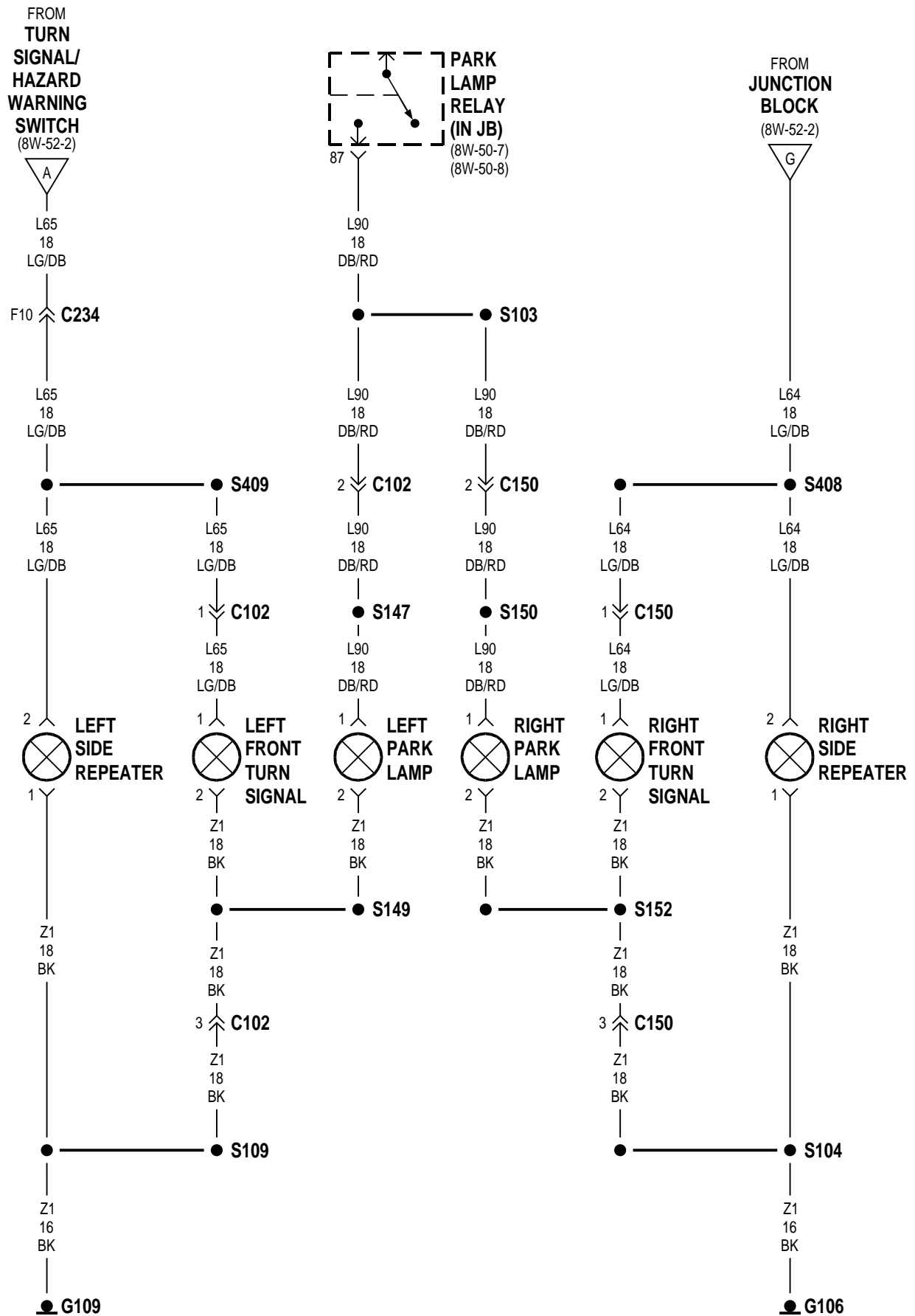












8W-52 TURN SIGNALS

DESCRIPTION AND OPERATION

ELECTRONIC FLASHER RELAY

The electronic flasher relay in the junction block supplies battery voltage to the turn signal/hazard switch circuitry in the multi-function switch. When the ignition switch is OFF, the hazard flashers will operate but the turn signals will not.

Circuit A7 from fuse 15 in the Power Distribution Center (PDC) powers the electronic flasher through fuse 13 in the junction block.

In the RUN position, the ignition switch connects circuit A1 from fuse 8 in the Power Distribution Center (PDC) to circuit A22. Circuit A22 feeds the flasher relay through fuse 6 in the junction block. Circuit Z1 provides ground for the relay.

Circuit L5 from the flasher relay connects to the multi-function switch to supply power to the turn signal circuits. The multi-function switch connects to the right rear turn signal lamps on circuit L60 and the left rear turn signal lamp on circuit L61. Circuit L64 from the switch feeds the right front turn signal lamp and side marker lamp. Circuit L65 feeds the left front turn signal lamp and side marker lamp.

Circuit L12 from the flasher relay connects to the multi-function switch to supply power to the hazard flasher circuits. The multi-function switch connects to the rear turn signal lamps on circuits L60 and L61 and the front turn signal and side marker lamps on circuits L64 and L65.

TURN SIGNALS

When the operator selects the right turn signal, the multi-function switch connects circuit L5 from

the flasher relay to circuits L60 and L64. Circuit L64 feeds the right front turn signal lamp and side marker lamp. Circuit L60 feeds the right rear turn signal lamp. Circuit L64 also splices to power the right turn signal indicator lamp in the instrument cluster.

When the operator selects the left turn signal, the multi-function switch connects circuit L5 from the flasher relay to circuits L61 and L65. Circuit L61 feeds the left rear turn signal lamp and side marker lamp. Circuit L65 feeds the left front turn signal lamp. Circuit L65 also splices to power the left turn signal indicator lamp on the instrument cluster.

Circuit Z1 provides ground for the turn signal lamps.

HAZARD FLASHERS

When the operator selects the hazard flashers, the multi-function switch circuit L12 from the flasher relay circuits L60, L61, L64 and L65.

Circuit L61 feeds the left rear turn signal lamp. Circuit L60 feeds the right rear turn signal lamp. Circuit L65 feeds the left front turn signal lamp, side marker lamp and the instrument cluster indicator lamp. Circuit L64 feeds the right front turn signal lamp, side marker lamp and the instrument cluster indicator lamp.

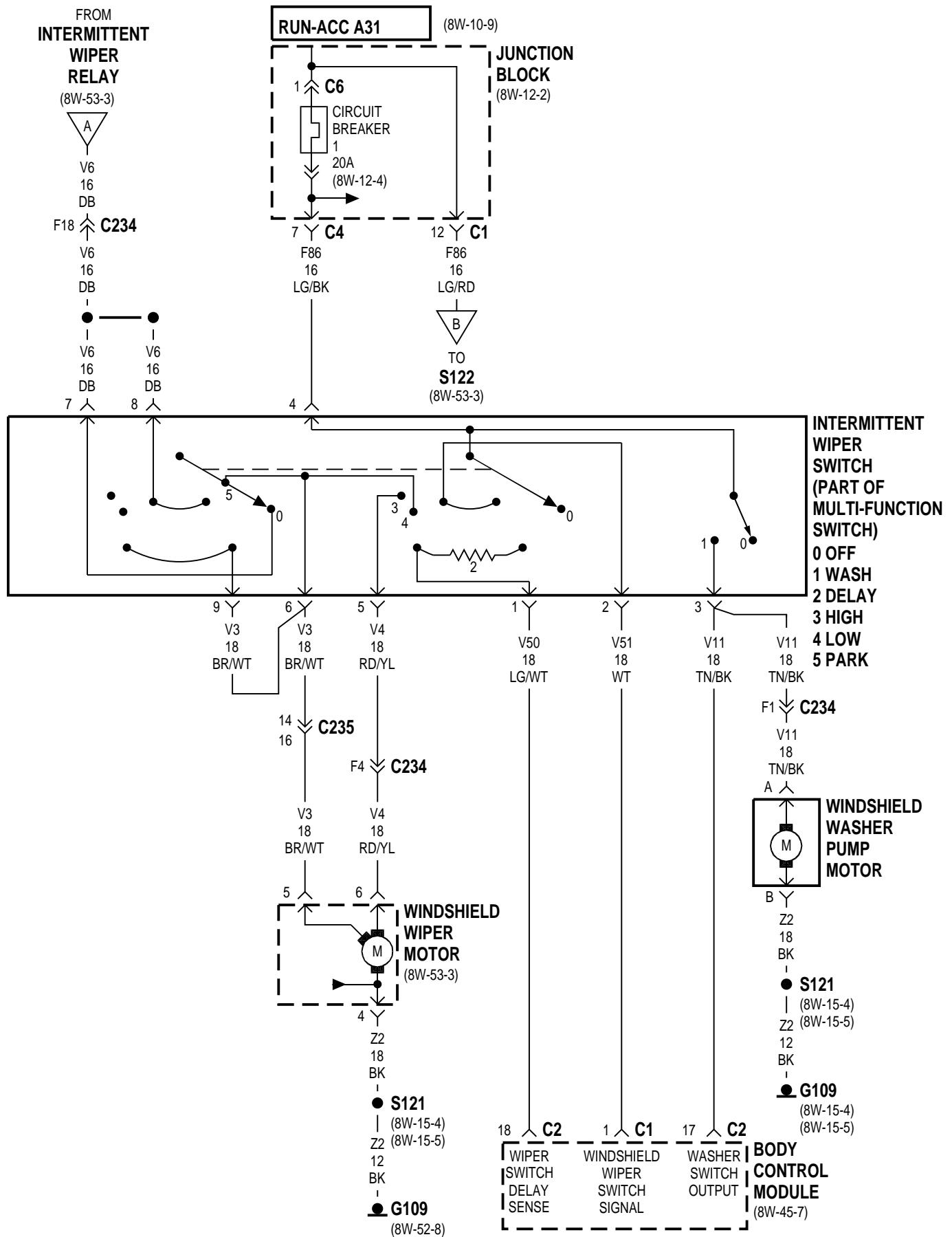
Circuit Z1 provides ground for the hazard flasher lamps.

8W-53 WIPERS

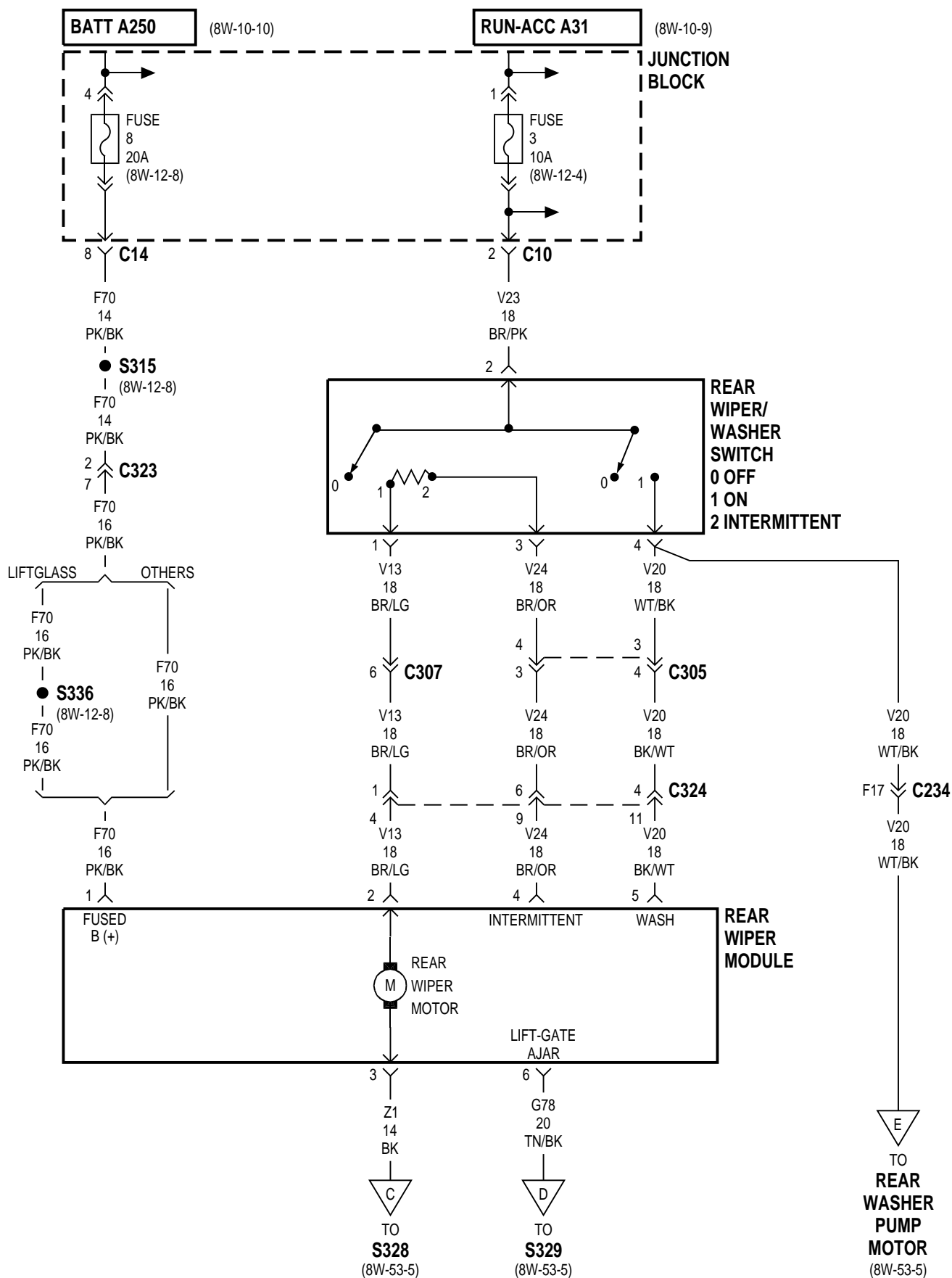
INDEX

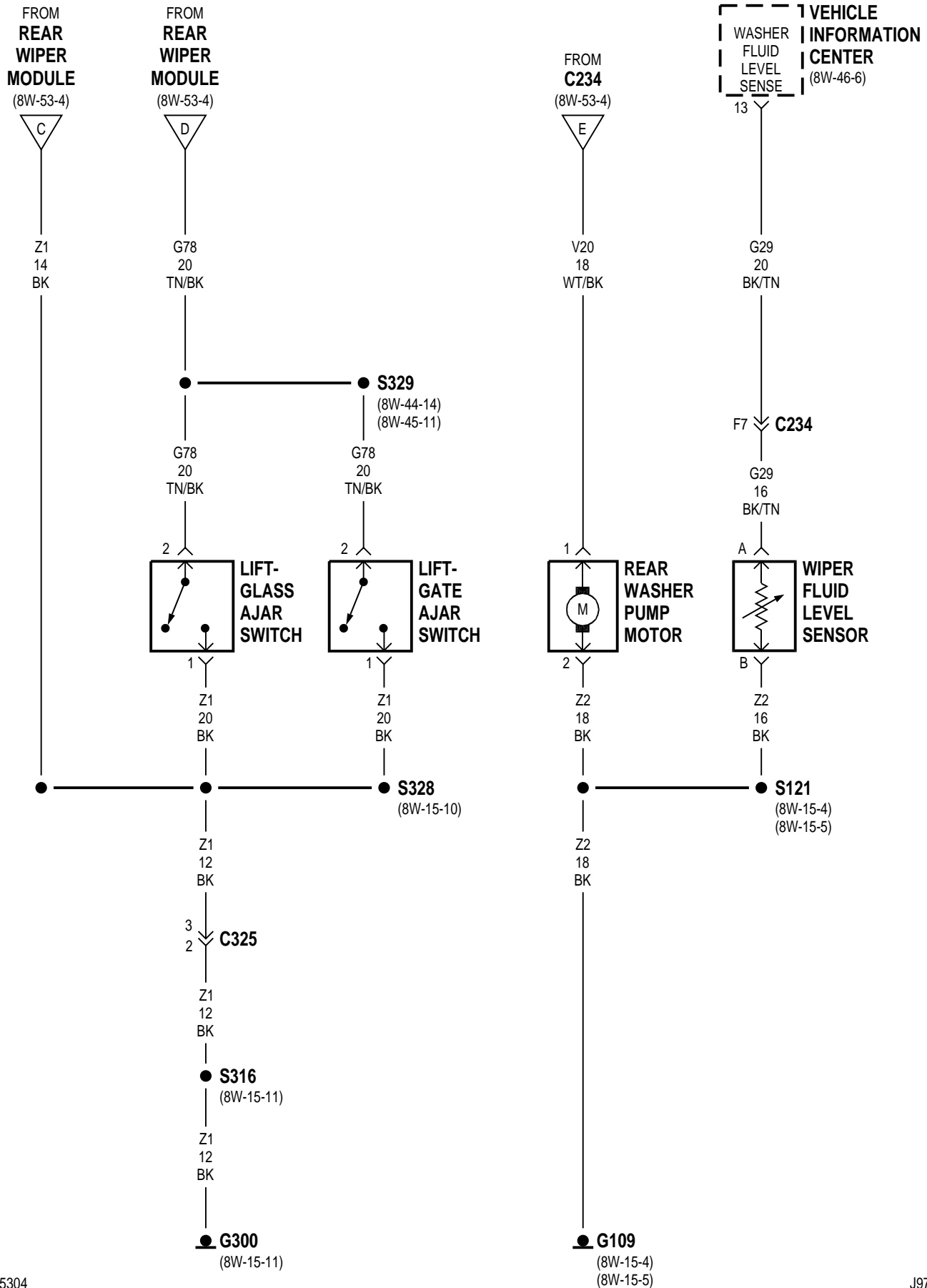
	page
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	6

Component	Page	Component	Page
Body Control Module	8W-53-2, 3	Rear Wiper/Washer Switch	8W-53-4
Circuit Breaker 1	8W-53-2	S120	8W-53-3
Fuse 3	8W-53-4	S121	8W-53-2, 3, 5
Fuse 8	8W-53-4	S122	8W-53-3
G109	8W-53-2, 3, 5	S315	8W-53-4
G300	8W-53-5	S316	8W-53-5
Intermittent Wiper Relay	8W-53-3	S328	8W-53-5
Intermittent Wiper Switch	8W-53-2, 3	S329	8W-53-5
Junction Block	8W-53-2, 4	S336	8W-53-4
Lift- Gate Ajar Switch	8W-53-5	Vehicle Information Center	8W-53-5
Lift- Glass Ajar Switch	8W-53-5	Windshield Washer Pump Motor	8W-53-2
Rear Washer Pump Motor	8W-53-5	Windshield Wiper Motor	8W-53-2, 3
Rear Wiper Module	8W-53-4	Wiper Fluid Level Sensor	8W-53-5
Rear Wiper Motor	8W-53-4		









8W-53 WIPERS

DESCRIPTION AND OPERATION

INTERMITTENT WIPER OPERATION

In the ACCESSORY or RUN position, the ignition switch connects circuit A1 from fuse 8 in the PDC to circuit A31. Circuit A31 powers circuit F86 through the circuit breaker in cavity 1 of the junction block. Circuit F86 supplies power to the intermittent wiper switch.

When the operator selects LOW speed wiper operation, the switch connects circuit F86 to circuit V3. Circuit V3 powers the wiper motor low speed brush.

When the operator selects HIGH speed wiper operation, the switch connects circuit F86 to circuit V4. Circuit V4 powers the wiper motor high speed brush.

When the operator selects intermittent wiper operation the wiper switch sends a signals to the Body Control Module (BCM) on circuit V51. The BCM determines the amount of delay selected on circuit V50 from the switch.

After determining the amount of delay selected, the BCM periodically energizes the intermittent wiper relay on circuit V18. Circuit F86 from the circuit breaker in the junction block powers the relay coil and contacts. Circuit F86 is HOT when the ignition switch is in the ACCESSORY or RUN position.

When the intermittent wiper relay energizes it powers circuit V6. Circuit V6 connects to circuit V3 through the intermittent wiper switch. Circuit V3 powers the wiper motor low speed brush. Circuit Z2 provides ground for the brush. When not energized, the relay connects circuit F86 to circuit V66. Circuit V66 connects to the park switch in the intermittent wiper motor and the BCM.

REAR WIPER/WASHER

The rear wiper and washer system uses a switch assembly located in the right switch pod.

When the ignition switch is in the ACCESSORY or RUN position, it connects circuit A1 from fuse 8 in the Power Distribution Center (PDC) to circuit A31. Circuit A31 powers circuit V23 through fuse 3 in the junction block. Circuit V23 supplies power for the rear wiper/wash switch.

Circuit A250 from fuse 11 in the PDC powers circuit F70 through fuse 8 in the junction block. Circuit F70 powers the rear wiper motor and the control module located internal to the motor assembly.

When the operator selects the ON position, power is supplied through the switch to circuit V13. The V13 circuit connects from the switch to the rear wiper control module.

The module processes this signal and supplies power to the wiper motor. Ground for the wiper motor is supplied on circuit Z1.

When the switch is placed in the DELAY position, power is supplied from the switch to the motor control on circuit V24. The module processes this signal and connects the motor to voltage. The amount of DELAY is controlled by the position of the rear wiper switch.

When the WASH switch is activated, power is passed through the switch to circuit V20. This circuit is double crimped at the switch. One branch of the circuit connects to the rear wiper control module. The other branch connects to the rear washer pump motor.

An additional input to the rear wiper control module is supplied on circuit G78. This circuit is connected to the liftgate and liftglass ajar switches. Circuit G78 signals the control when the liftgate or liftglass opens.

When the liftgate is ajar the wiper control module will not allow the rear wiper or washer to operate.

HELPFUL INFORMATION

- Check fuses 8 and 11 in the PDC
- Check fuses 3 and 8 in the junction block
- Check the operation of the liftgate ajar switch

LOW WASHER FLUID LEVEL SENSOR

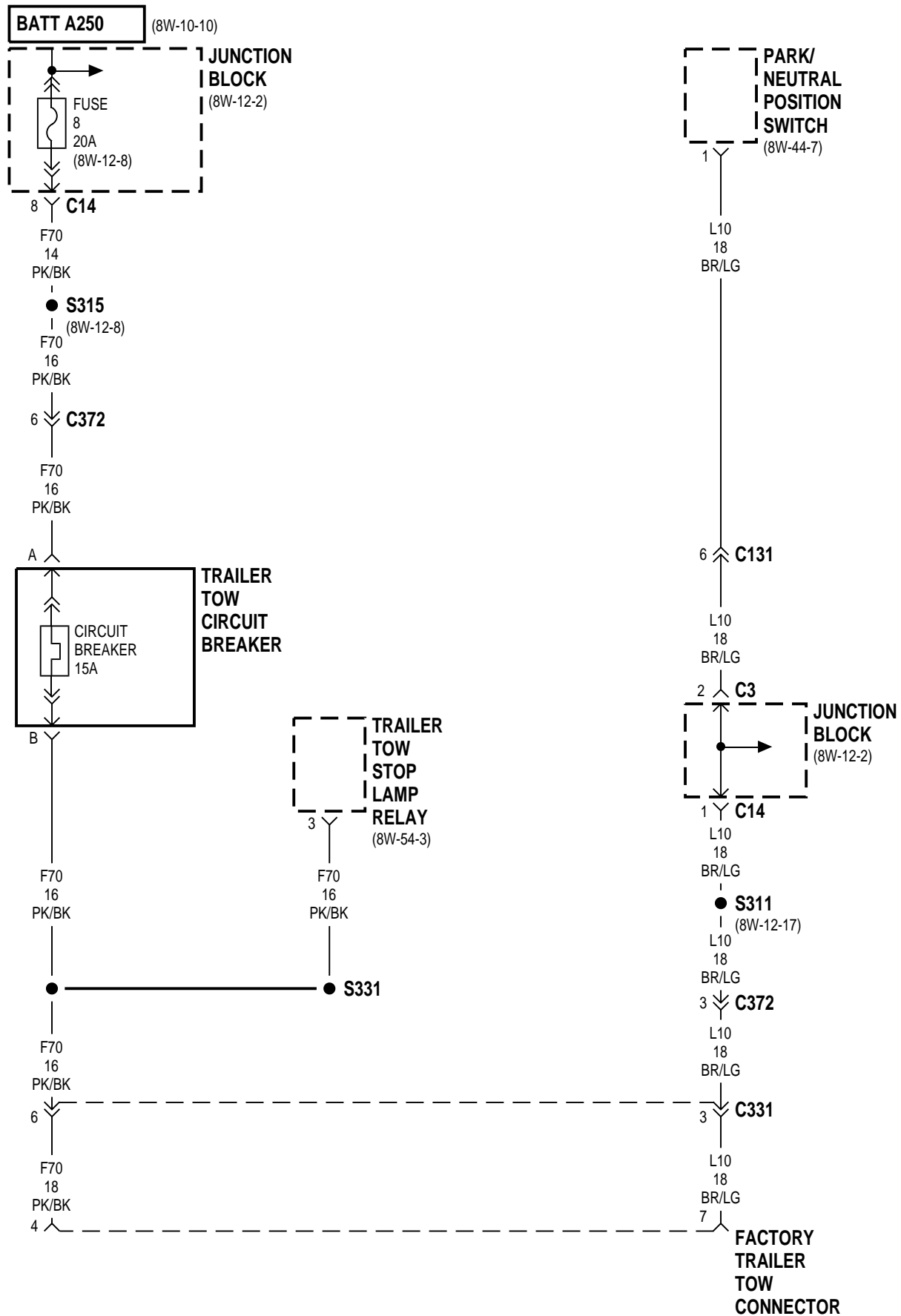
When the switch in the low washer fluid sensor closes, it connects circuit G29 from the Vehicle Information Center (VIC) to ground on circuit Z2. The VIC displays the low washer fluid message.

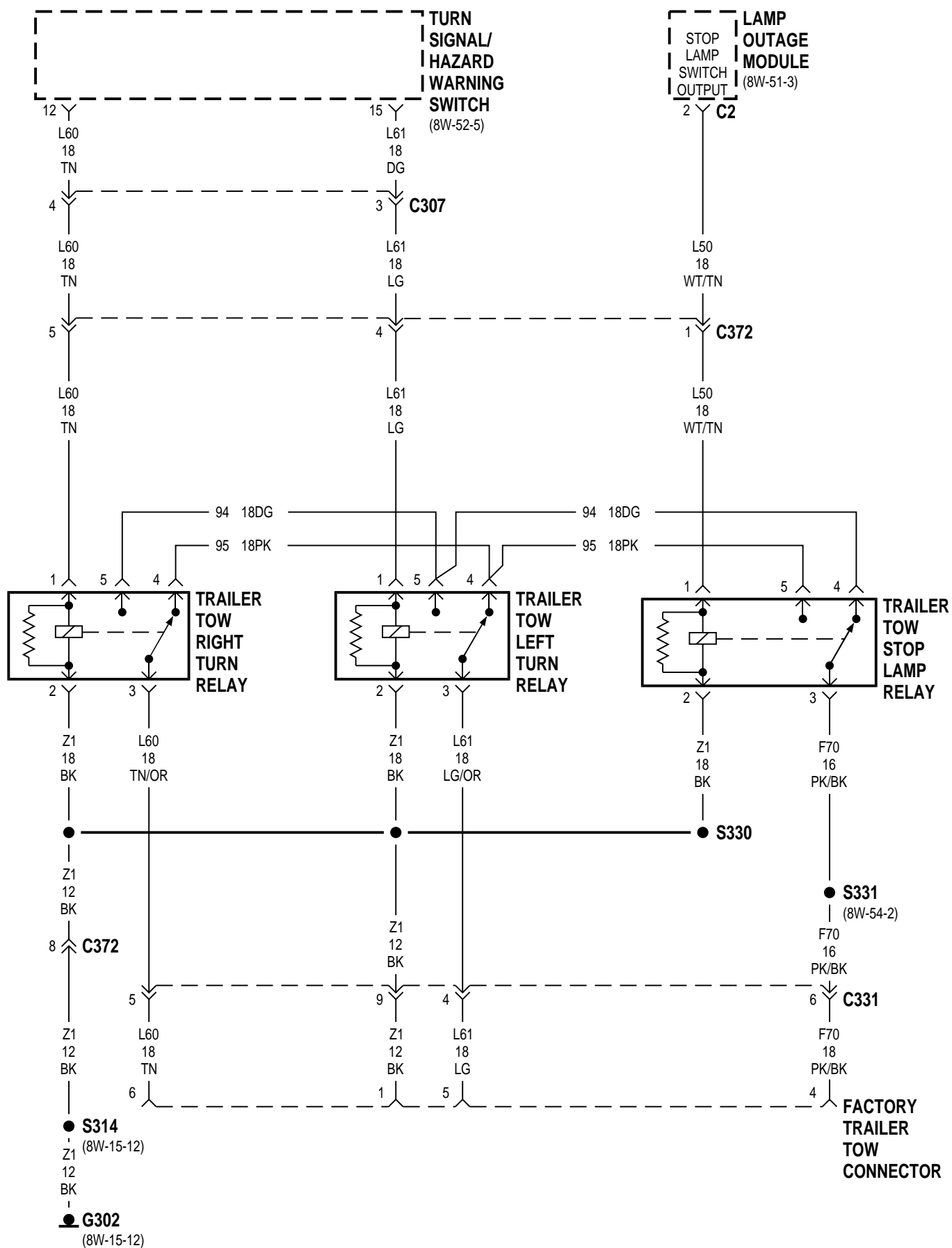
8W-54 TRAILER TOW

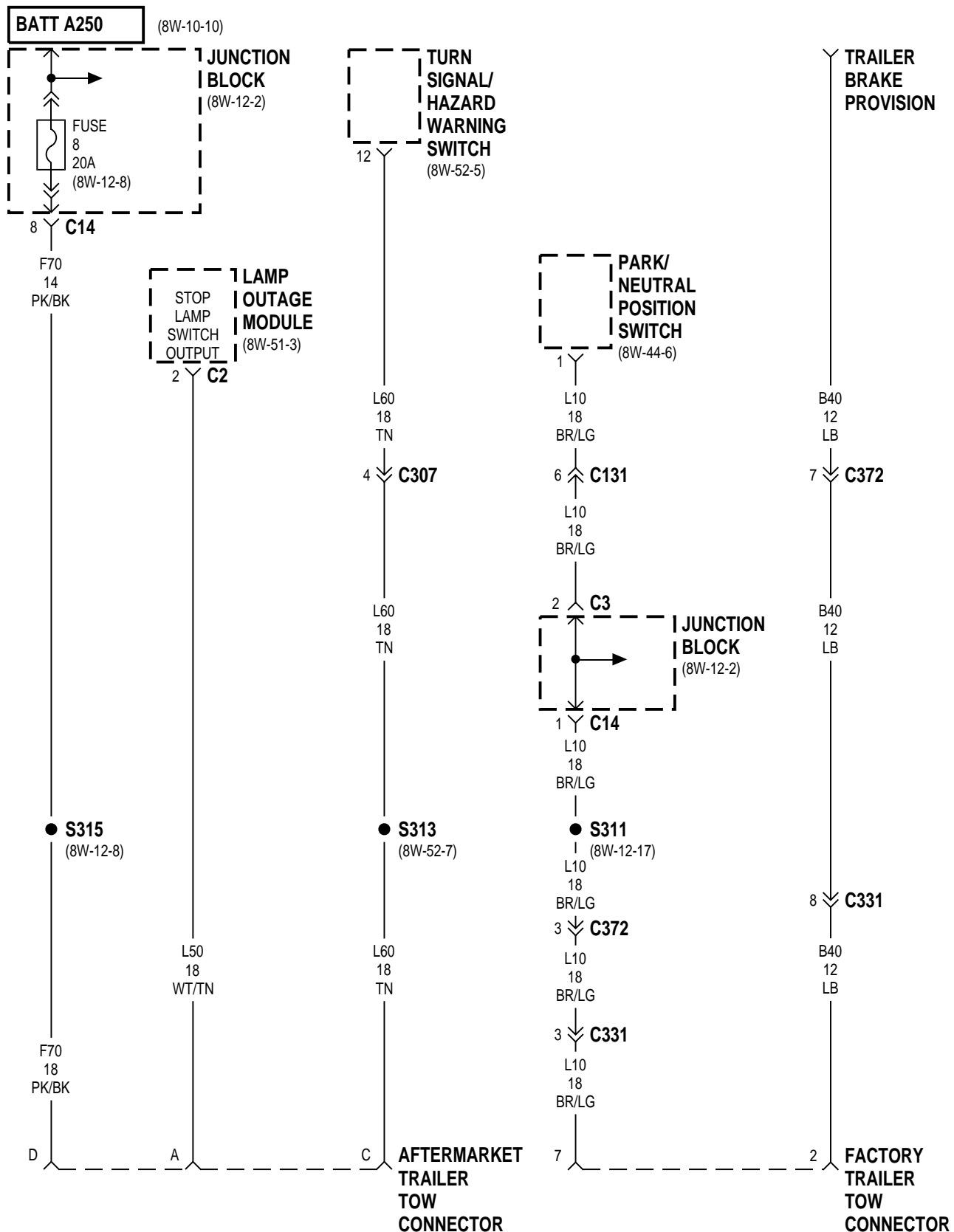
INDEX

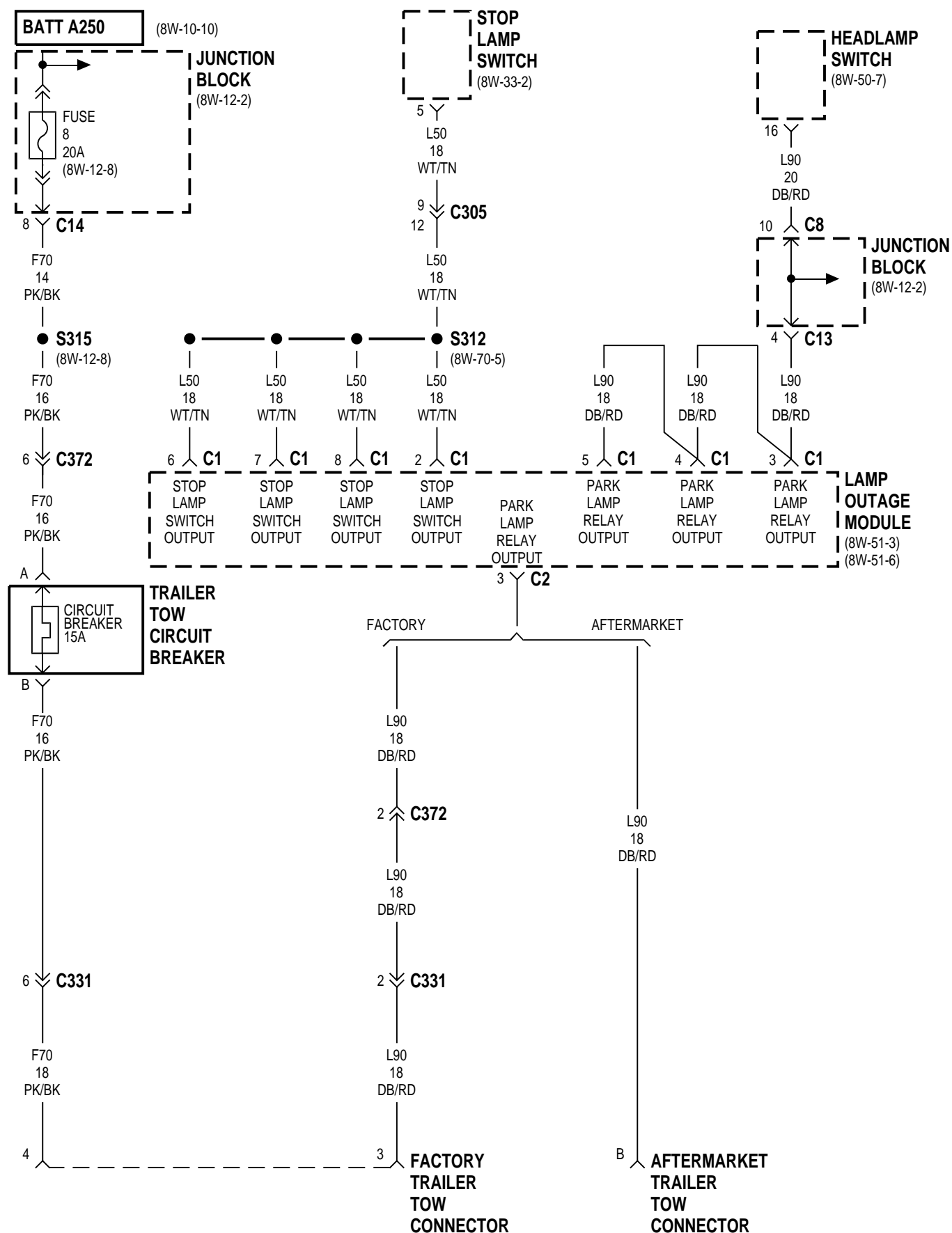
	page
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	6

Component	Page	Component	Page
Aftermarket Trailer Tow Connector	8W-54-4, 5	S314	8W-54-3
Circuit Breaker	8W-54-5	S315	8W-54-2, 4, 5
Circuit Breaker 15a	8W-54-2	S330	8W-54-3
Factory Trailer Tow Connector	8W-54-2, 3, 4, 5	S331	8W-54-2, 3
Fuse 8	8W-54-2, 4, 5	Stop Lamp Switch	8W-54-5
G302	8W-54-3	Trailer Brake Provision	8W-54-2, 4
Headlamp Switch	8W-54-5	Trailer Tow Circuit Breaker	8W-54-2, 5
Junction Block	8W-54-2, 4, 5	Trailer Tow Left Turn Relay	8W-54-3
Lamp Outage Module	8W-54-3, 4, 5	Trailer Tow Right Turn Relay	8W-54-3
Park/Neutral Position Switch	8W-54-2, 4	Trailer Tow Stop Lamp Relay	8W-54-2, 3
S311	8W-54-2, 4	Turn Signal/Hazard Warning Switch	8W-54-3, 4
S312	8W-54-5		
S313	8W-54-4		









8W-54 TRAILER TOW

GENERAL INFORMATION

INTRODUCTION

Two trailer tow packages are available; a factory installed package and a package with after-market provisions. This section provides separate wiring diagrams for each.

DESCRIPTION AND OPERATION

TRAILER TOW—FACTORY INSTALLED

The factory installed trailer tow system in this vehicle uses three relays and a circuit breaker along with the trailer tow wiring connector.

Circuit A250 from fuse 11 in the Power Distribution Center (PDC) powers circuit F70 through fuse 8 in the junction block. Circuit F70 supplies battery voltage for the trailer tow circuit breaker and the contact side of the stop lamp relay.

The trailer tow circuit breaker is taped to the trailer tow harness located in the left rear quarter panel.

STOP LAMP RELAY

Power for the coil side of the stop lamp relay is supplied by circuit L50. This circuit connects to the stop lamps. Ground for the coil side is supplied on circuit Z1.

When the operator presses the brake pedal, voltage flows through the coil of the relay to ground causing the contacts in the relay to connect circuits F70 and 95.

Circuit 95 connects to the left and right turn signal relays. Voltage flows through the closed contacts in the relays to the trailer tow connector.

RIGHT TURN RELAY

Power for the coil side of the right turn relay is supplied by circuit L60. This circuit connects to the right side turn signal lamps. Ground for the coil side of the relay is supplied on circuit Z1.

When the operator turns the right turn signal ON, power flows through the coil in the relay to ground causing the contacts in the relay to switch from the

normally CLOSED position to connect circuits 94 and L60.

Circuit 94 is the feed for the contact side of the relay. Circuit L60 connects from the relay to the trailer tow connector.

Circuit 94 is fed power through the normally CLOSED side of the stop lamp relay by circuit F70. Circuit F70 is HOT at all times and protected by a circuit breaker located in the right rear quarter panel.

LEFT TURN RELAY

Power for the coil side of the left turn relay is supplied by circuit L61. This circuit connects to the left side turn signal lamps. Ground for the coil side of the relay is supplied on circuit Z1.

When the operator turns the left turn signal ON, power flows through the coil in the relay to ground causing the contacts in the relay to switch from the normally CLOSED position to connect circuits 94 and L61.

Circuit 94 is the feed for the contact side of the relay. Circuit L61 connects from the relay to the trailer tow connector.

Circuit 94 is fed power through the normally CLOSED side of the stop lamp relay by circuit F70. Circuit F70 is HOT at all times and protected by a circuit breaker located in the right rear quarter panel.

HELPFUL INFORMATION

- Check fuse 11 in the PDC
- Check fuse 8 in the junction block
- Check the In-Line circuit breaker
- A trailer brake provision is taped to the harness at the lower left of the instrument panel

TRAILER TOW—AFTER-MARKET

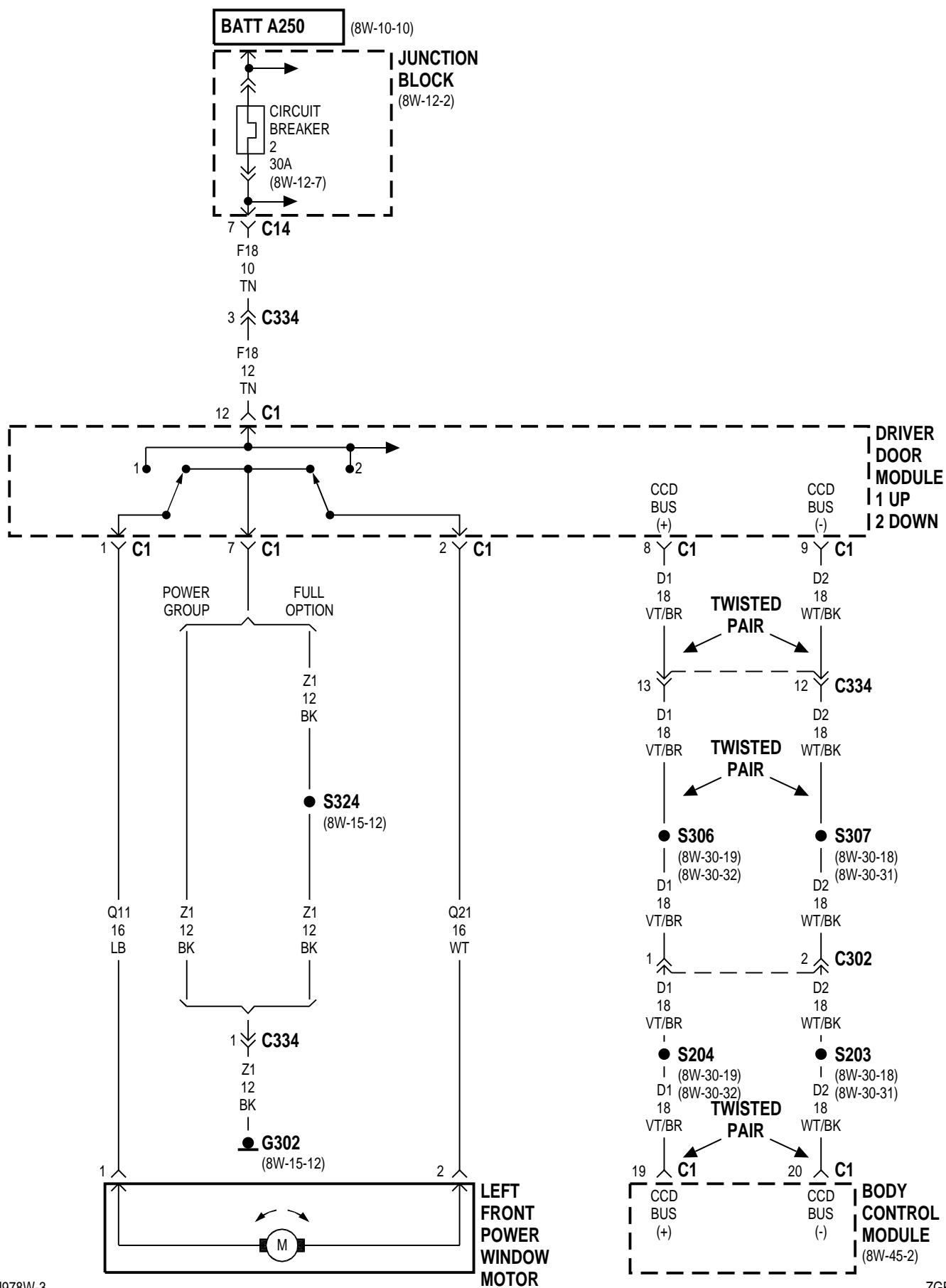
The after-market trailer tow connector is located in the left rear quarter panel. The connector contains feed circuit F70 from fuse 8 in the junction block. Circuit L60 from the right turn signals, circuit L90 for parking lamps, and circuit L50 from the stop lamp switch.

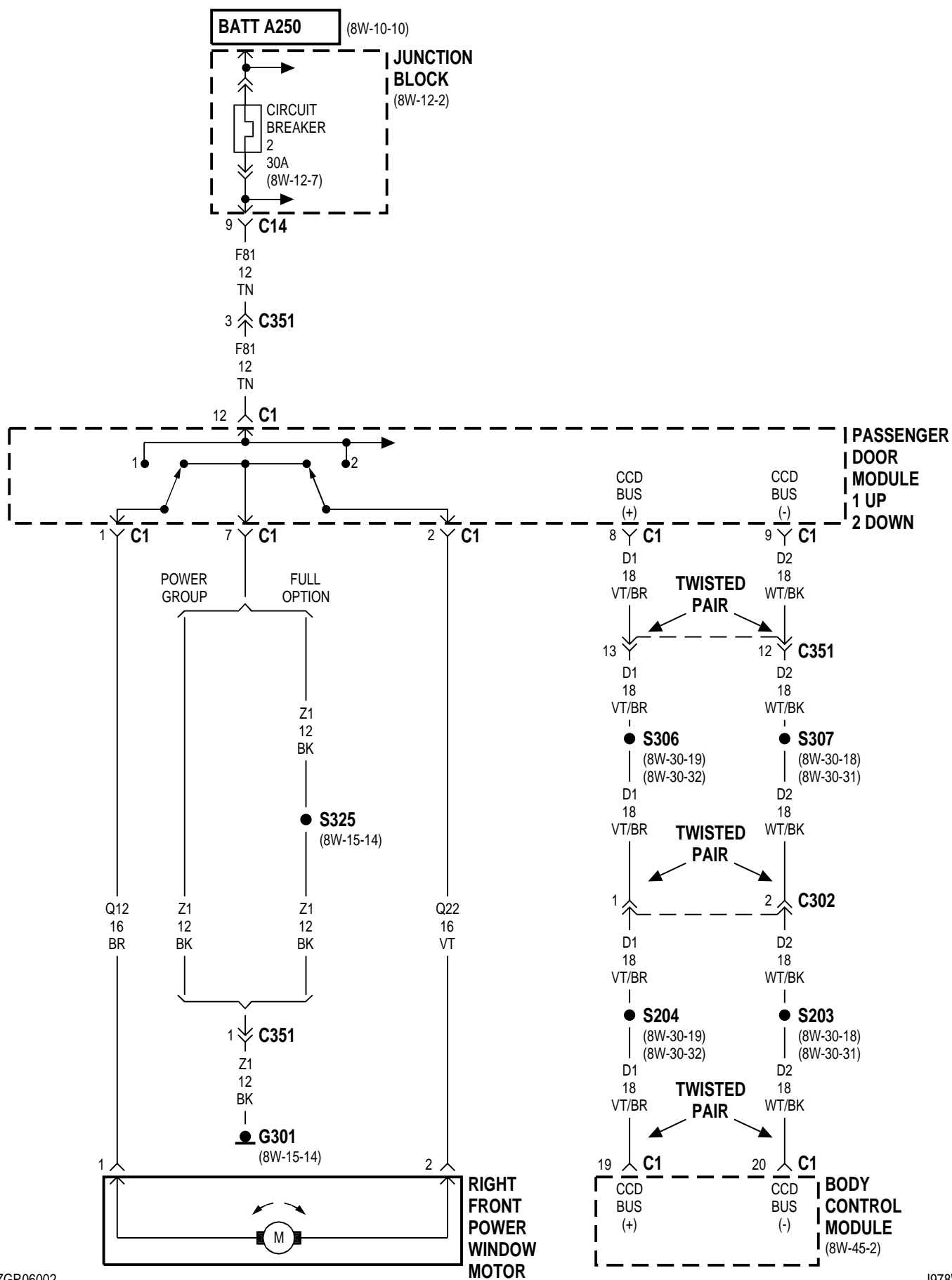
8W-60 POWER WINDOWS

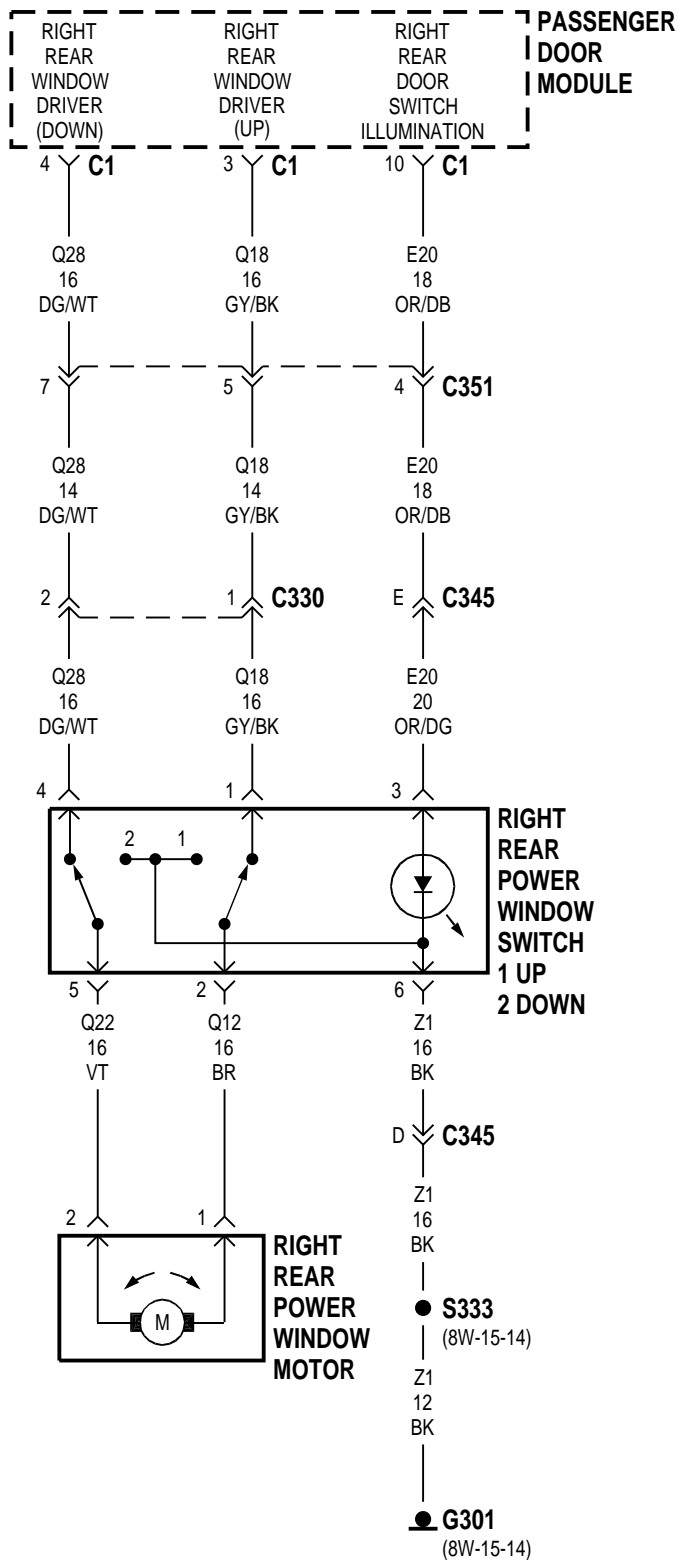
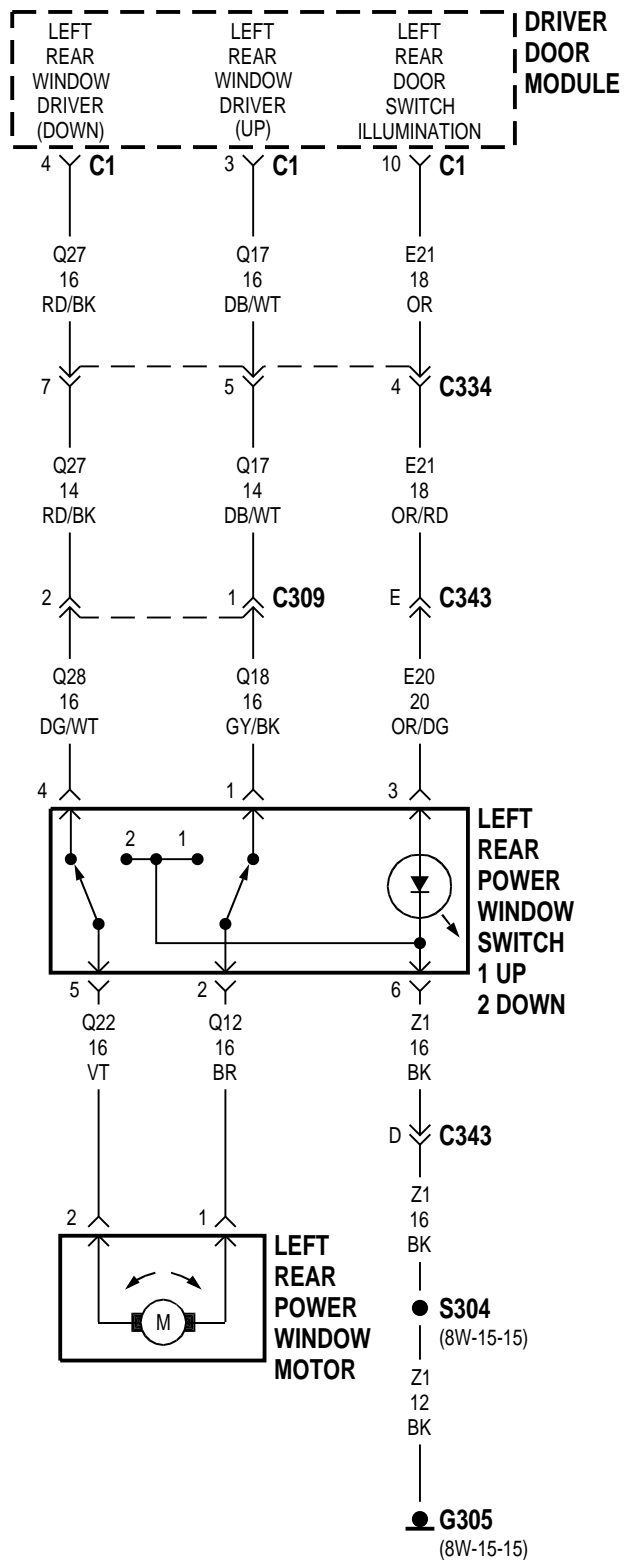
INDEX

	page
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	5

Component	Page	Component	Page
Body Control Module	8W-60-2, 3	Right Rear Power Window Motor	8W-60-4
Circuit Breaker 2	8W-60-2, 3	Right Rear Power Window Switch	8W-60-4
Driver Door Module	8W-60-2, 4	S203	8W-60-2, 3
G301	8W-60-3, 4	S204	8W-60-2, 3
G302	8W-60-2	S304	8W-60-4
G305	8W-60-4	S306	8W-60-2, 3
Junction Block	8W-60-2, 3	S307	8W-60-2, 3
Left Front Power Window Motor	8W-60-2	S324	8W-60-2
Left Rear Power Window Motor	8W-60-4	S325	8W-60-3
Left Rear Power Window Switch	8W-60-4	S333	8W-60-4
Passenger Door Module	8W-60-3, 4		
Right Front Power Window Motor	8W-60-3		







8W-60 POWER WINDOWS

INDEX

	page		page
DESCRIPTION AND OPERATION		POWER WINDOWS 5	
INTRODUCTION	5		

DESCRIPTION AND OPERATION

INTRODUCTION

All four power windows can be controlled by the switches on the Drivers Door Module (DDM). Additionally, the left rear window as well as the right front and right rear windows have separate switches. The switch pod on the DDM a contains lock out switch. The lock-out feature prevents the windows from being operated by any switch other than the drivers door switch. Each rear window switch contains an LED. The DDM prevents illumination of the LEDs when the operator selects the window lock-out feature.

POWER WINDOWS

Circuit A250 from fuse 11 in the Power Distribution Center (PDC) powers circuit F81 through the circuit breaker in cavity 2 of the junction block. Circuit F81 supplies power to the Drivers Door Module (DDM) and the Passengers Door Module (PDM). The DDM and PDM operate the power windows. Circuit Z1 provides ground for the power window system.

LEFT FRONT WINDOW OPERATION

The Drivers Door Module operates the left front window. When the operator selects window DOWN operation, the DDM connects circuit F81 to circuit Q21. Circuit Q21 goes from the switch to the power window motor. Ground for the motor is supplied on the Q11 circuit back to the switch. The DDM connects circuit Q11 to ground circuit Z1. For window UP operation the circuits are reversed. The DDM connects circuit Q11 to circuit F81 and connects circuit Q21 to ground circuit Z1.

RIGHT FRONT WINDOW OPERATION

The Passengers Door Module (PDM) operates the right front window. If the DRIVER operates the passenger window, the Drivers Door Module signals the Passengers Door Module over the CCD Bus. For window DOWN operation, the PDM connects circuit F81 to circuit Q22. Circuit Q22 goes from the power window switch circuitry in the PDM to the power window motor. Ground for the motor is sup-

plied on circuit Q12 back to the switch. The DDM connects circuit Q12 to ground circuit Z1. For window UP operation the circuits are reversed. The PDM connects circuit Q12 to circuit F81 and connects circuit Q22 to ground circuit Z1.

LEFT REAR WINDOW

Circuits Q17 and Q27 connect the Driver's Door Module (DDM) to the left rear window switch. When the operator has not selected the window lock-out feature, the DDM connects circuits Q17 and Q27 to battery voltage. At the left door harness, circuit Q17 connects to circuit Q18 and circuit Q27 connects to circuit Q28. Circuits Q18 and Q28 connect to the left rear power window switch. If the window is operated from left rear switch for window DOWN operation, the switch connects circuit Q12 from the power window motor to ground on circuit Z1. The left rear window switch connects circuit Q28 to circuit Q22. Circuit Q22 powers the window motor. Circuits Q12 and Z1 provide ground. For window UP operation the circuits are reversed. The left rear window switch connects Q22 to ground on circuit Z1. Circuit Q18 powers the rear window motor. Circuits Q22 and Z1 provide ground.

The left rear window switch contains a Light Emitting Diode (LED). The DDM illuminates the LED on circuit E21. Circuit E21 connects to circuit E20 at the left door harness. Circuit E20 connects to the left rear window switch and powers the LED. If the operator has selected the window lock-out feature, the DDM will not supply power to the left rear window switch on circuits Q27 and Q17. Also, the DDM does not illuminate the LED in the switch. If the window is operated from DRIVER'S switch for window DOWN operation, the DDM powers circuit Q27 and grounds circuit Q17. Circuit Q27 connects to circuit Q28 at the left rear door harness. From circuit Q28, current passes through the closed contacts in the left rear window switch to circuit Q22. Circuit Q22 powers the window motor. The ground path for the motor is on circuit Q12 from the motor, through the closed contacts in the left rear window switch to circuit Q18, to Q17 back to the DDM.

DESCRIPTION AND OPERATION (Continued)

For window UP operation the circuits are reversed. The DDM powers circuit Q17 and grounds circuit Q27.

RIGHT REAR WINDOW

Circuits Q18 and Q28 connect the Passenger's Door Module (PDM) to the right rear window switch. When the operator has not selected the window lock-out feature, the PDM connects circuits Q18 and Q28 to battery voltage.

If the window is operated from right rear switch for window DOWN operation, the switch connects circuit Q12 from the power window motor to ground on circuit Z1. The right rear window switch connects circuit Q28 to circuit Q22. Circuit Q22 powers the window motor. Circuits Q12 and Z1 provide ground.

For window UP operation the circuits are reversed. The right rear window switch connects Q22 to ground on circuit Z1. Circuit Q18 from the PDM powers circuit Q12 through the closed contacts in the right rear window switch. Circuit Q12 powers the window motor. Circuits Q22 and Z1 provide ground.

The right rear window switch contains a Light Emitting Diode (LED). The PDM illuminates the LED on circuit E20.

If the operator has selected the window lock-out feature, the Driver's Door Module signals the PDM on the CCD bus. In response, the PDM will not supply power to the right rear window switch on circuits Q18 and Q28. Also, the PDM does not illuminate the LED in the switch.

If the window is operated from DRIVER'S switch for window DOWN operation, the DDM signals the PDM over the CCD Bus. In response, the PDM powers circuit Q28 and grounds circuit Q18. From circuit Q28, current passes through the closed contacts in the right rear window switch to circuit Q22. Circuit Q22 powers the window motor. The ground path for the motor is on circuit Q12 from the motor, through the closed contacts in the right rear window switch to the PDM on circuit Q18.

For window UP operation the circuits are reversed. After the DDM signals the PDM on the CCD Bus, the PDM powers circuit Q18 and grounds circuit Q28.

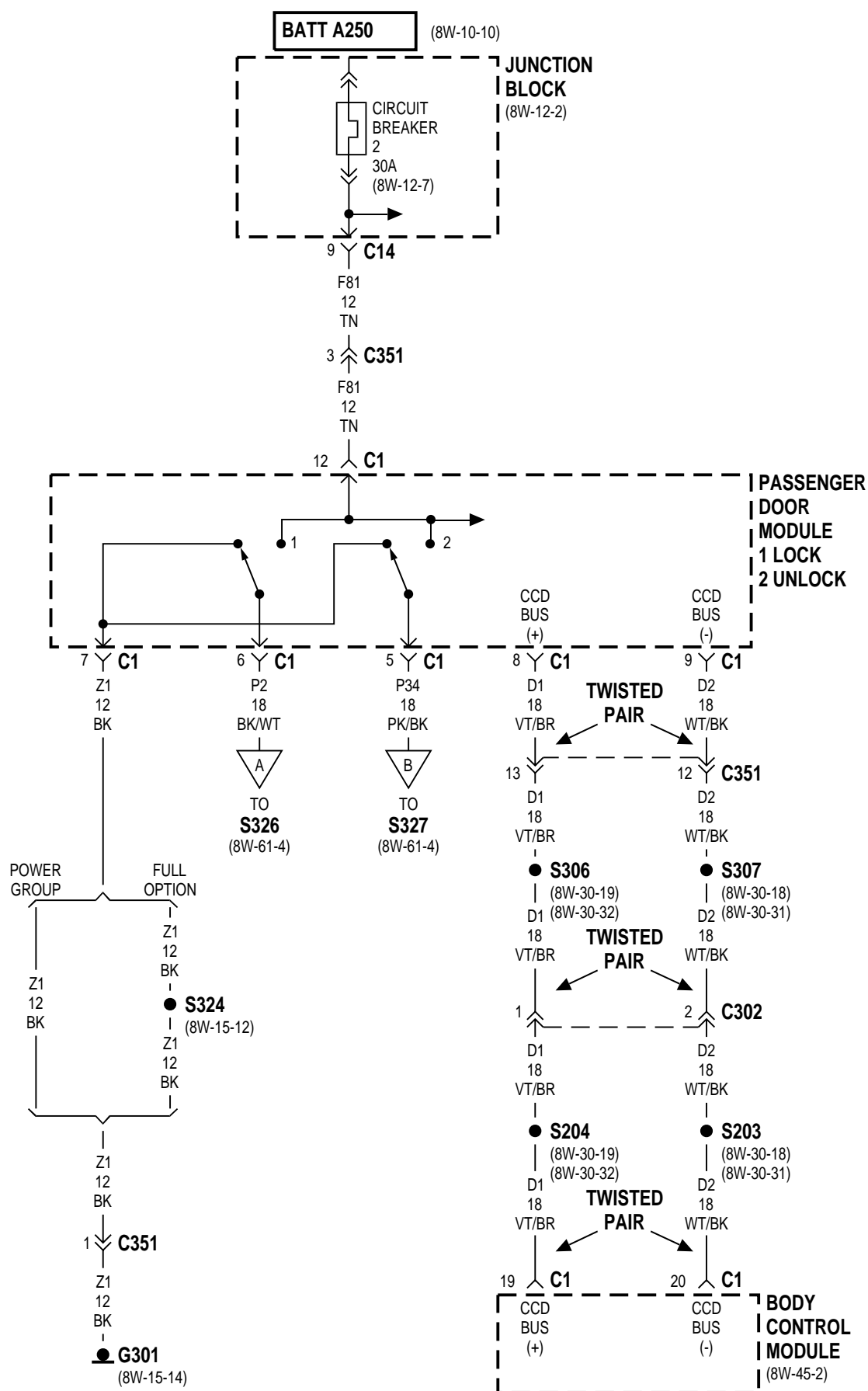
8W-61 POWER DOOR LOCKS

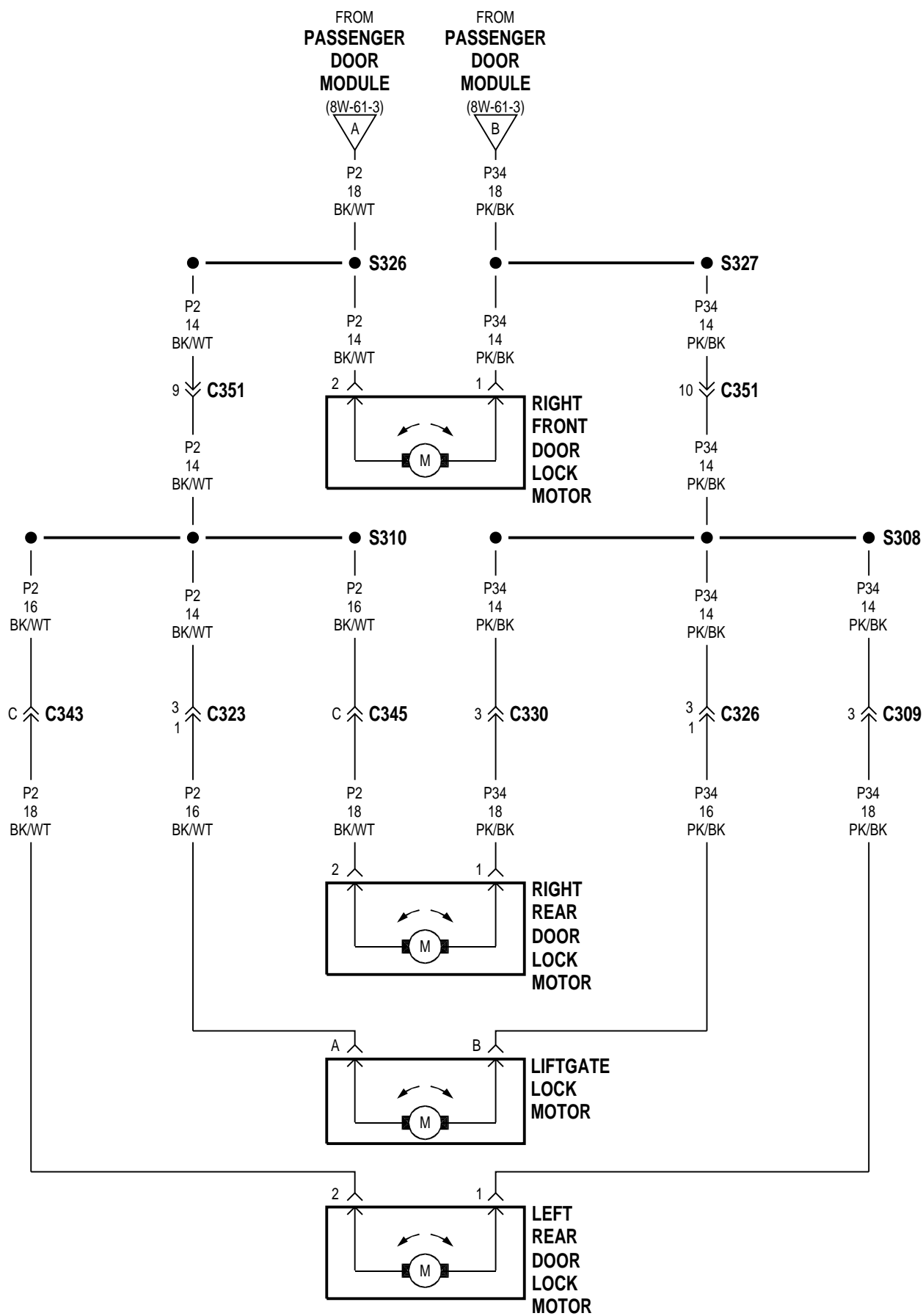
INDEX

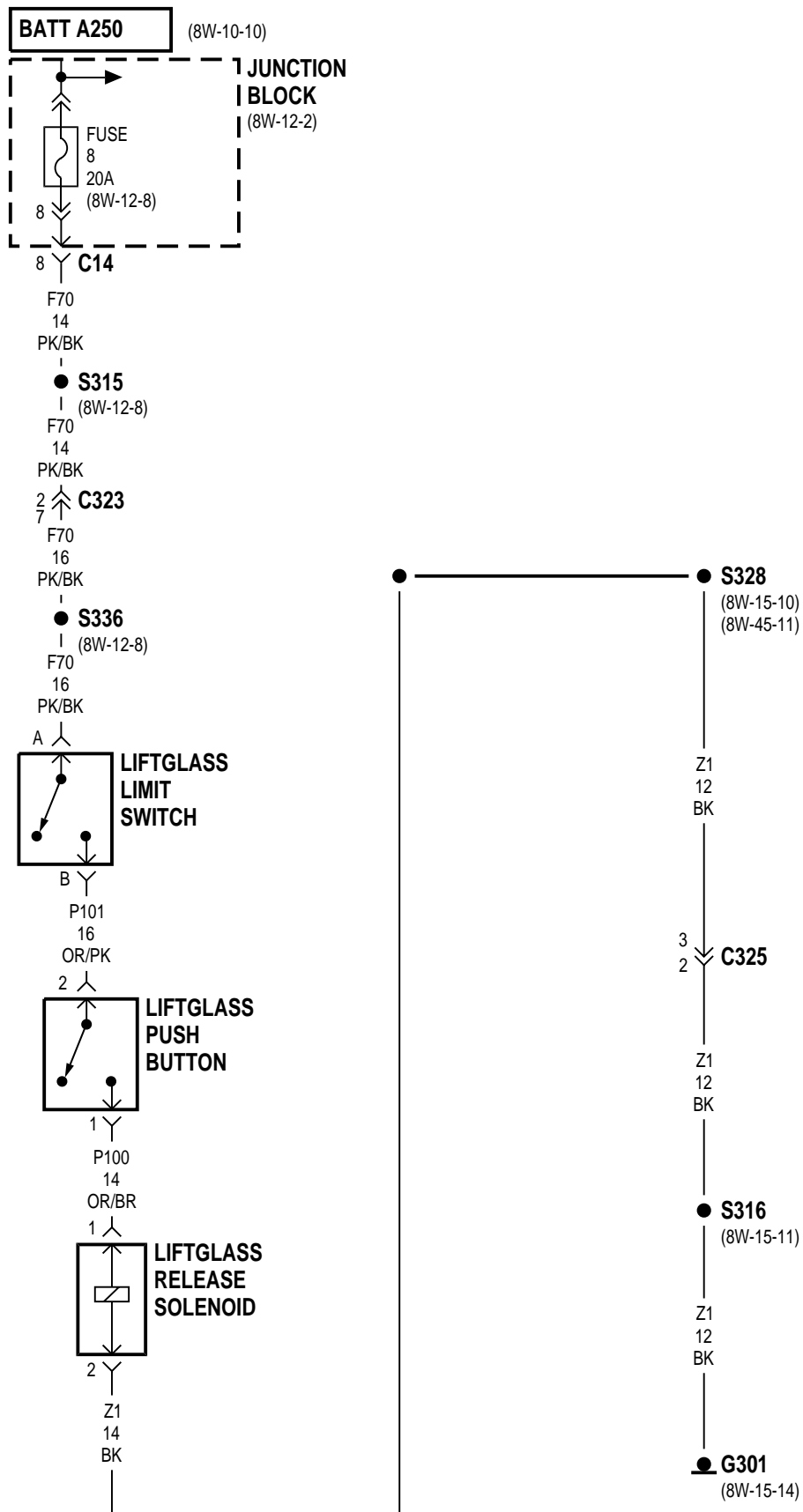
	page
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	6

Component	Page	Component	Page
Body Control Module	8W-61-2, 3	Right Rear Door Lock Motor	8W-61-4
Circuit Breaker 2	8W-61-2, 3	S203	8W-61-2, 3
Driver Door Module	8W-61-2	S204	8W-61-2, 3
Fuse 8	8W-61-5	S306	8W-61-2, 3
G301	8W-61-3, 5	S307	8W-61-2, 3
G302	8W-61-2	S308	8W-61-4
Junction Block	8W-61-2, 3, 5	S310	8W-61-4
Left Front Door Lock Motor	8W-61-2	S315	8W-61-5
Left Rear Door Lock Motor	8W-61-4	S316	8W-61-5
Liftgate Lock Motor	8W-61-4	S324	8W-61-2, 3
Liftglass Limit Switch	8W-61-5	S326	8W-61-4
Liftglass Push Button	8W-61-5	S327	8W-61-4
Liftglass Release Solenoid	8W-61-5	S328	8W-61-5
Passenger Door Module	8W-61-3	S336	8W-61-5
Right Front Door Lock Motor	8W-61-4		









8W-61 POWER DOOR LOCKS

DESCRIPTION AND OPERATION

INTRODUCTION

The Drivers Door Module (DDM) powers the drivers door lock motor. The Passengers Door Module (PDM) powers the passenger, both rear doorlock and the liftgate lock motors. The DDM and PDM each contain a door lock switch. When one of the switches is activated, a signal is sent on the CCD Bus to the other door module (PDM or DDM depending on which switch activated) to either LOCK or UNLOCK the lock motors. The Remote Keyless Entry transmitter can also LOCK or UNLOCK the door lock and liftgate lock motors. The PDM contains the radio frequency receiver that receives the RKE transmitter signals.

The vehicle is equipped with a Rolling Door Lock feature. When this feature is enabled, the PDM will lock the doors and liftgate after the vehicles reaches approximately 15 MPH.

POWER DOOR LOCKS

Circuit A250 from fuse 11 in the Power Distribution Center (PDC) powers circuit F81 through the circuit breaker in cavity 2 of the junction block. Circuit F81 supplies power to the Drivers Door Module (DDM) and the Passengers Door Module (PDM). The DDM and PDM operate the power door locks. Circuit Z1 provides ground for the power door locks.

The PDM contains the radio frequency receiver that receives the radio frequency signals from the Remote Keyless Entry (RKE) transmitter. After either the passenger door lock switch activates or it receives input from the RKE transmitter, the PDM sends the appropriate signal to the DDM over the

CCD Bus. When the DRIVERS door lock switch activates, the DDM sends the appropriate signal to the PDM.

After receiving a LOCK signal, the DDM supplies battery voltage to the left front door lock motor on circuit P36. The DDM also connects circuit P34 from the motor to ground.

When the DDM receives the UNLOCK signal, it powers circuit P34 and grounds circuit P36.

After receiving a LOCK signal, the PDM supplies battery voltage to the right front door lock motor, rear door lock motors and liftgate lock motors on circuit P2. The PDM also connects circuit P34 from the motor to ground.

When the DDM receives the UNLOCK signal, it powers circuit P34 and grounds circuit P2.

REMOTE KEYLESS ENTRY

The Remote Keyless Entry (RKE) transmitter sends three unique signals to the radio frequency receiver in Passengers Door Module (PDM): LOCK, UNLOCK and PANIC. After it receives any one of the three signals, the PDM broadcasts the appropriate signal over the CCD bus.

LIFTGLASS

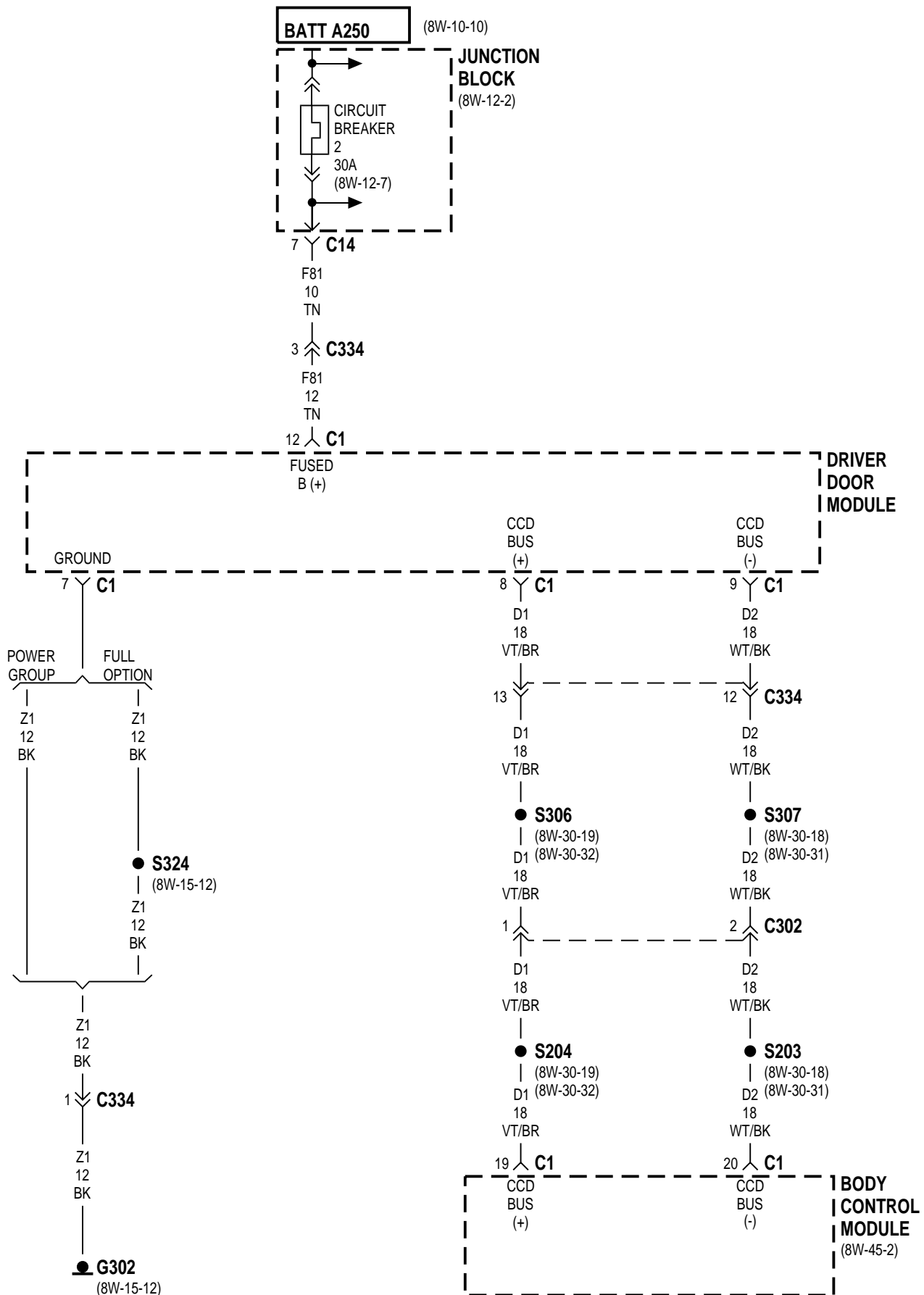
Circuit A250 from fuse 11 in the Power Distribution Center (PDC) powers circuit F70 through fuse 8 in the junction block. If the liftglass limit switch is closed, it connects circuit F70 to the liftglass switch (push button) on circuit P101. When closed, the liftglass switch connects circuit P101 to circuit P100. Circuit P100 feeds the liftglass solenoid. Circuit Z1 grounds the solenoid.

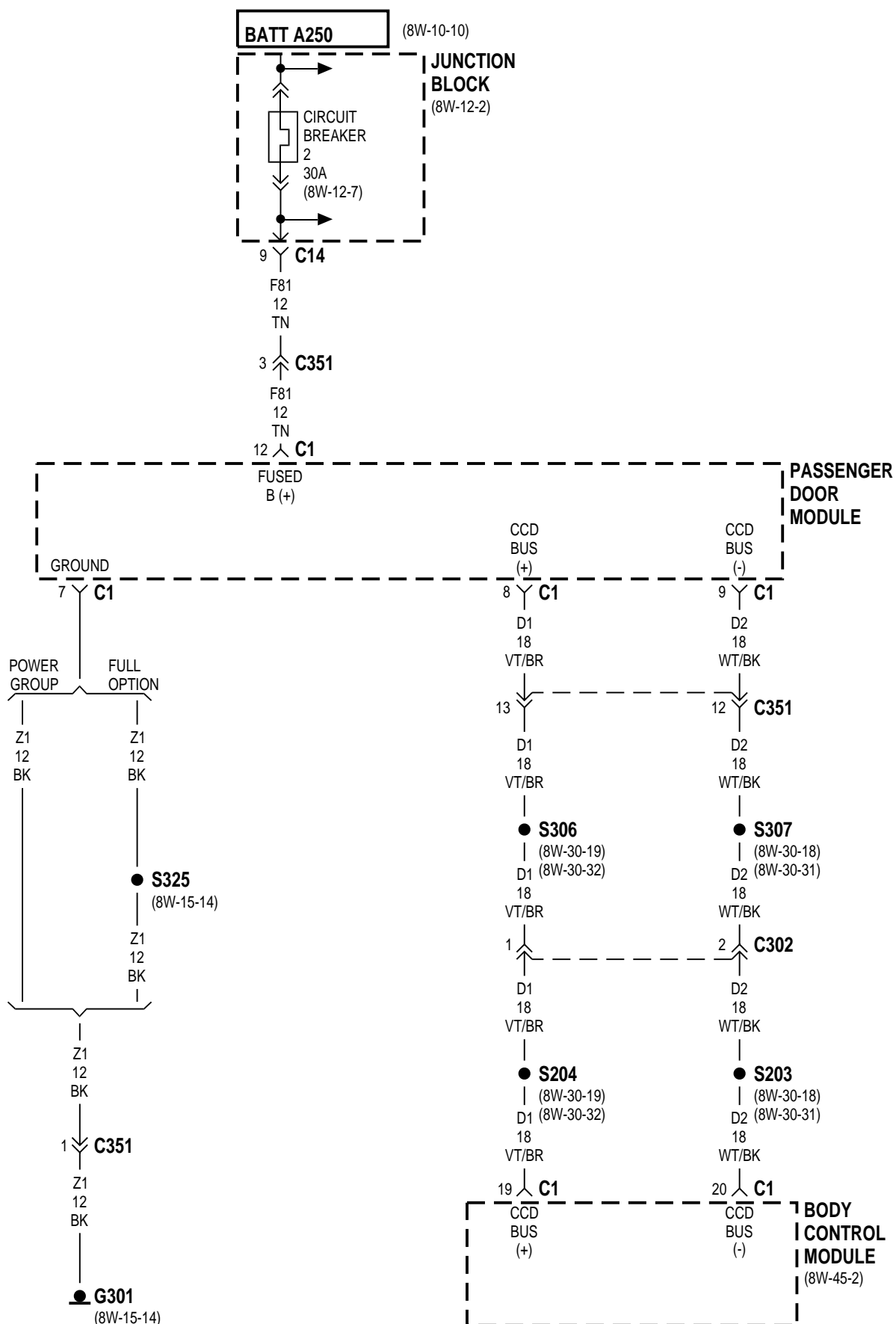
8W-62 POWER MIRRORS

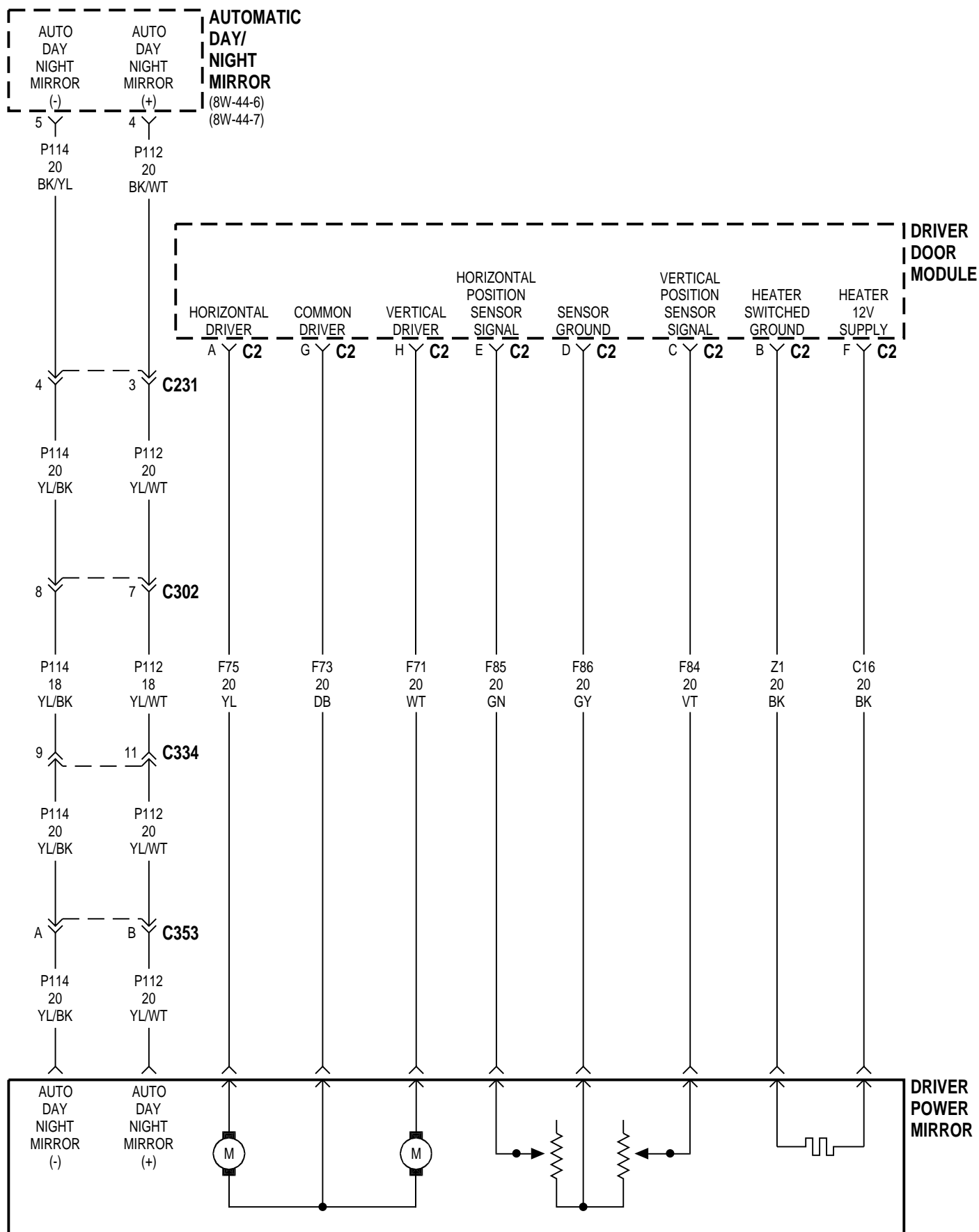
INDEX

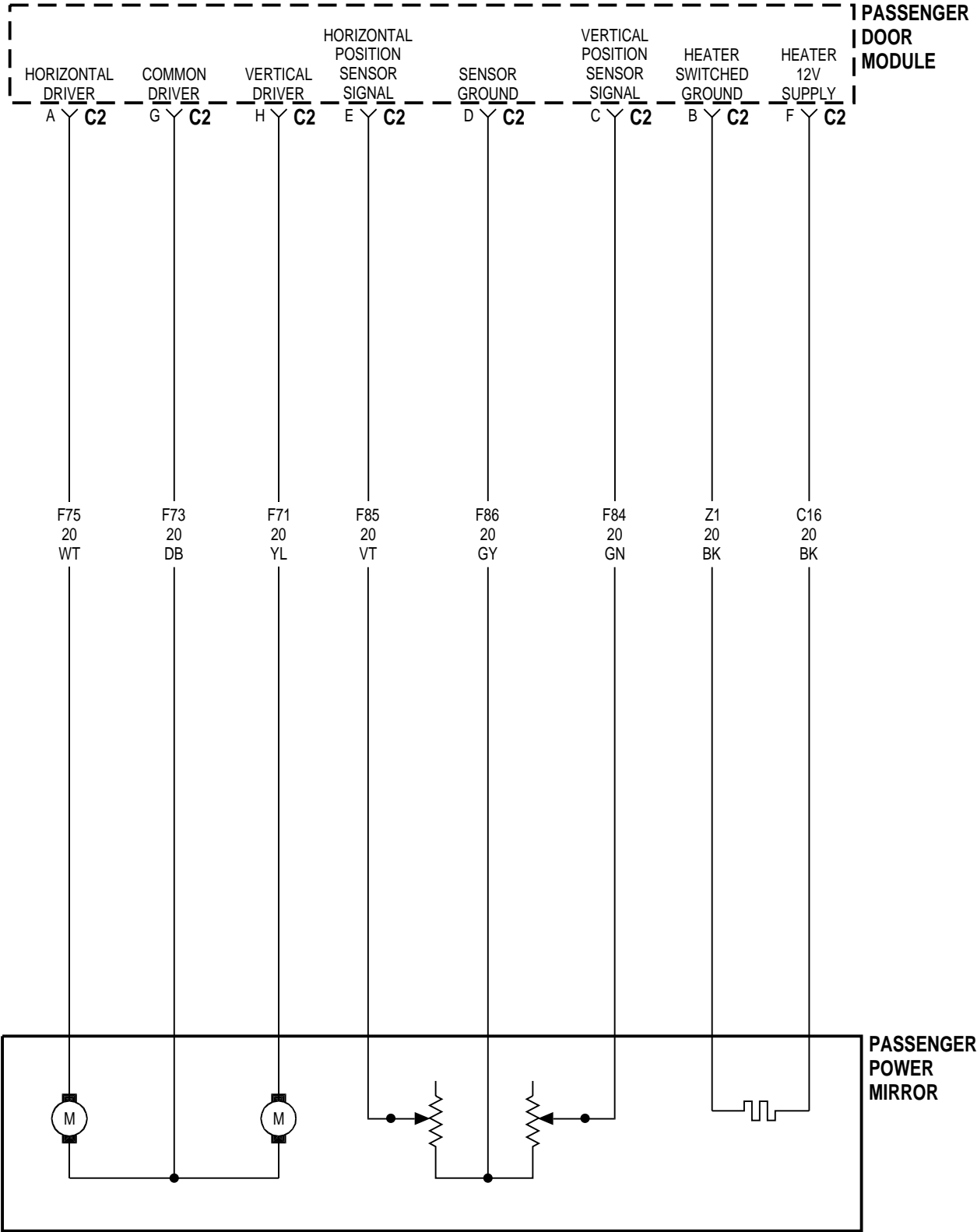
	page
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	6

Component	Page	Component	Page
Automatic Day/Night Mirror	8W-62-4	Passenger Power Mirror	8W-62-5
Body Control Module	8W-62-2, 3	S203	8W-62-2, 3
Circuit Breaker 2	8W-62-2, 3	S204	8W-62-2, 3
Driver Door Module	8W-62-2, 4	S306	8W-62-2, 3
Driver Power Mirror	8W-62-4	S307	8W-62-2, 3
G301	8W-62-3	S324	8W-62-2
G302	8W-62-2	S325	8W-62-3
Junction Block	8W-62-2, 3		
Passenger Door Module	8W-62-3, 5		









8W-62 POWER MIRRORS

DESCRIPTION AND OPERATION

INTRODUCTION

The Drivers Door Module (DDM) controls both power mirrors. The DDM adjusts the left mirror and signals the Passenger Door Module (PDM) over the CCD bus to adjust the right mirror. A push button switch on the outside of the DDM controls the horizontal and vertical position of both mirrors. The DDM also has a selector switch with right, left and center (off) positions for mirror selection.

Some models with Remote Keyless Entry (RKE) have a memory feature that allows the RKE transmitter to move the drivers seat and outside mirrors to a saved positions. The memory feature also can set the radio push buttons to preset stations.

POWER MIRROR

The circuits from the left outside mirror to the Driver Door Module (DDM) and right mirror to Passenger Door Module have identical circuit numbers. Each mirror has two motors; an UP/DOWN motor and a LEFT/RIGHT motor. The motors switch polarity to allow mirror adjustment. The DDM and PDM adjust mirror position by supplying power or ground to the mirror motors.

Each mirror has a vertical position sensor and a horizontal position sensor. The sensors in the left mirror connect to the DDM. Sensors in the right mirror connect to the PDM. The DDM and PDM determine horizontal position on circuit F85 and vertical position on circuit F84. Circuit F86 provides ground for each sensor.

If the vehicle is equipped with an automatic day/night rear view mirror, the left power mirror also automatically adjusts to varying ambient light intensity. Circuits P114 and P112 connect the left power mirror to the automatic day/night rear view mirror.

LEFT MIRROR ADJUSTMENT

The DDM adjusts the position of the left mirror. When an UP adjustment is made, the DDM supplies

power to the left mirror UP/DOWN motor on circuit F71 and grounds circuit F73.

When a DOWN adjustment is made, the polarity reverses. The DDM supplies power to circuit F73 and grounds circuit F71.

During LEFT adjustments, the DDM supplies power to the LEFT/RIGHT motor on circuit F75 and grounds circuit F73.

For RIGHT adjustments, the polarity reverses. The DDM supplies power to circuit F73 and grounds circuit F75.

RIGHT MIRROR ADJUSTMENT

The PDM adjusts the right mirror in response to signals it receives over the CCD bus from the DDM. When an UP adjustment is made, the PDM supplies power to the right mirror UP/DOWN motor on circuit F71 and grounds circuit F73.

When a DOWN adjustment is made, the polarity reverses. The PDM supplies power to circuit F73 and grounds circuit F71.

During LEFT adjustments, the PDM supplies power to the LEFT/RIGHT motor on circuit F75 and grounds circuit F73.

For RIGHT adjustments, the polarity reverses. The PDM supplies power to circuit F73 and grounds circuit F75.

HEATER ELEMENTS

The Driver Door Module (DDM) powers the heater circuit in the left power mirror. The Passenger Door Module powers the heater element in the right mirror. When the Body Control Module (BCM) detects the operator pressed the rear window defogger switch, it broadcasts the appropriate message to the DDM and PDM over the CCD bus. The DDM and PDM activate the heater elements in the mirrors until the BCM no longer broadcasts the message on the CCD bus.

The DDM and PDM power the heater element on circuit C16. On circuit Z1, the DDM and PDM provide ground for the heater elements.

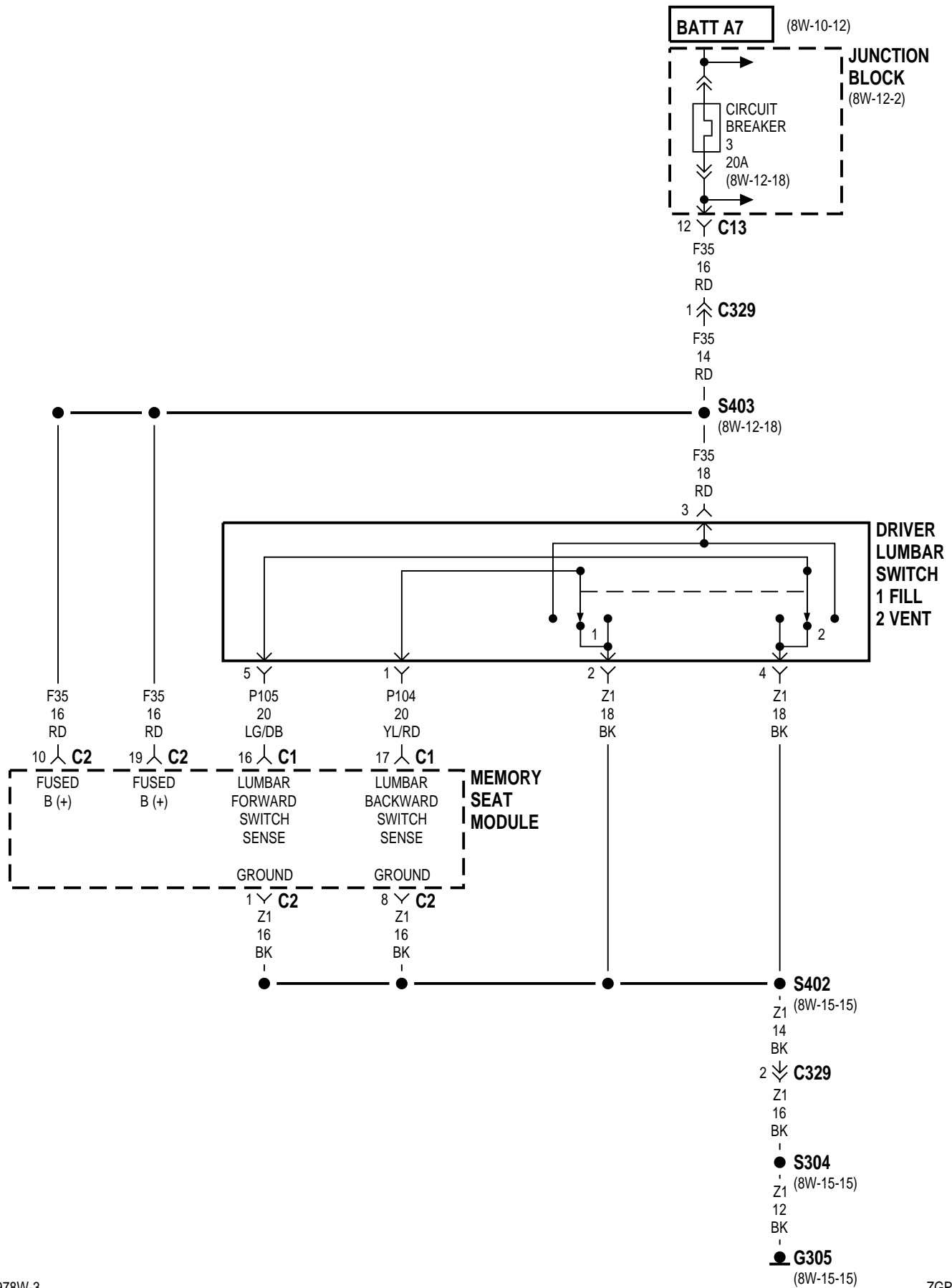
8W-63 POWER SEAT

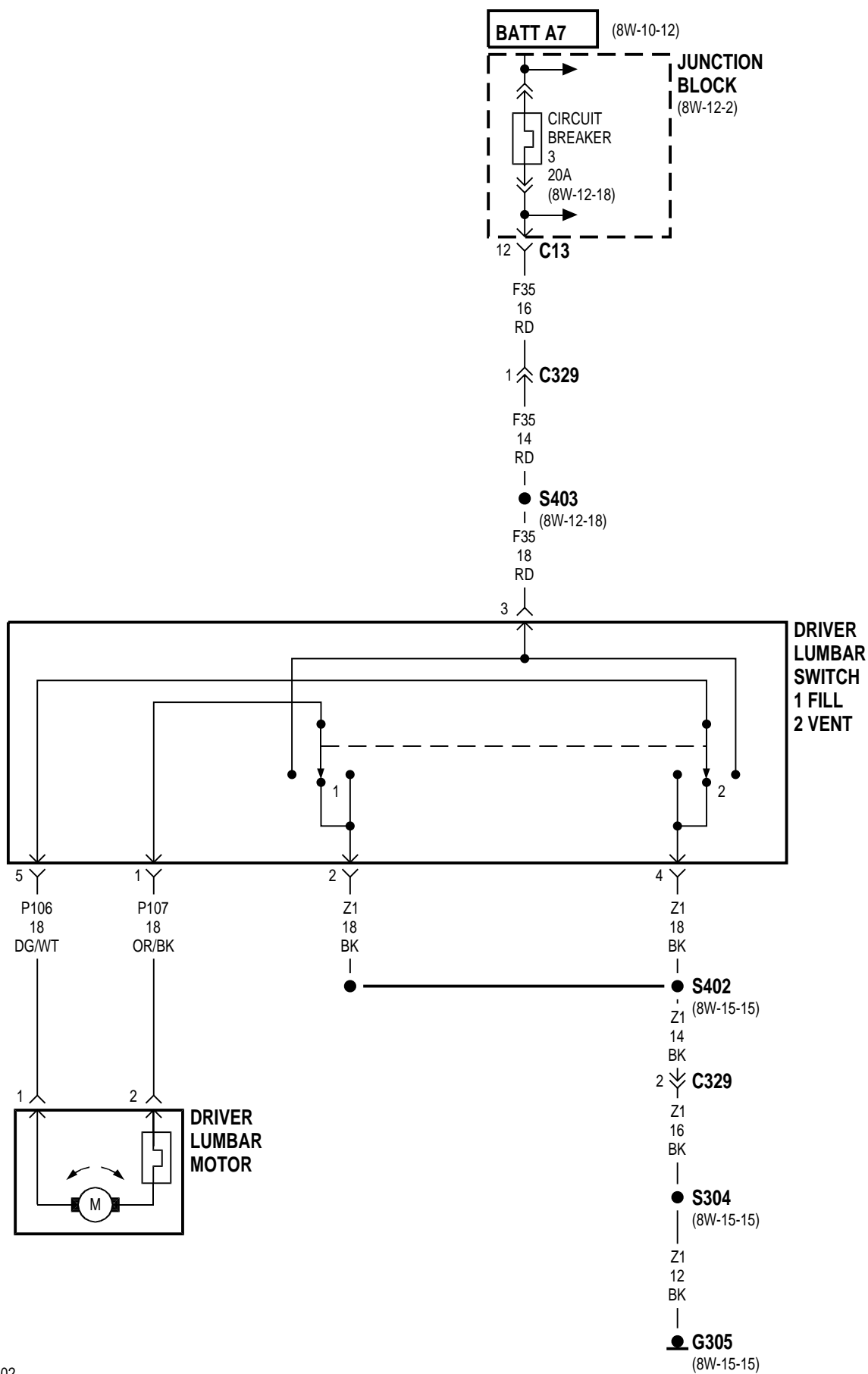
INDEX

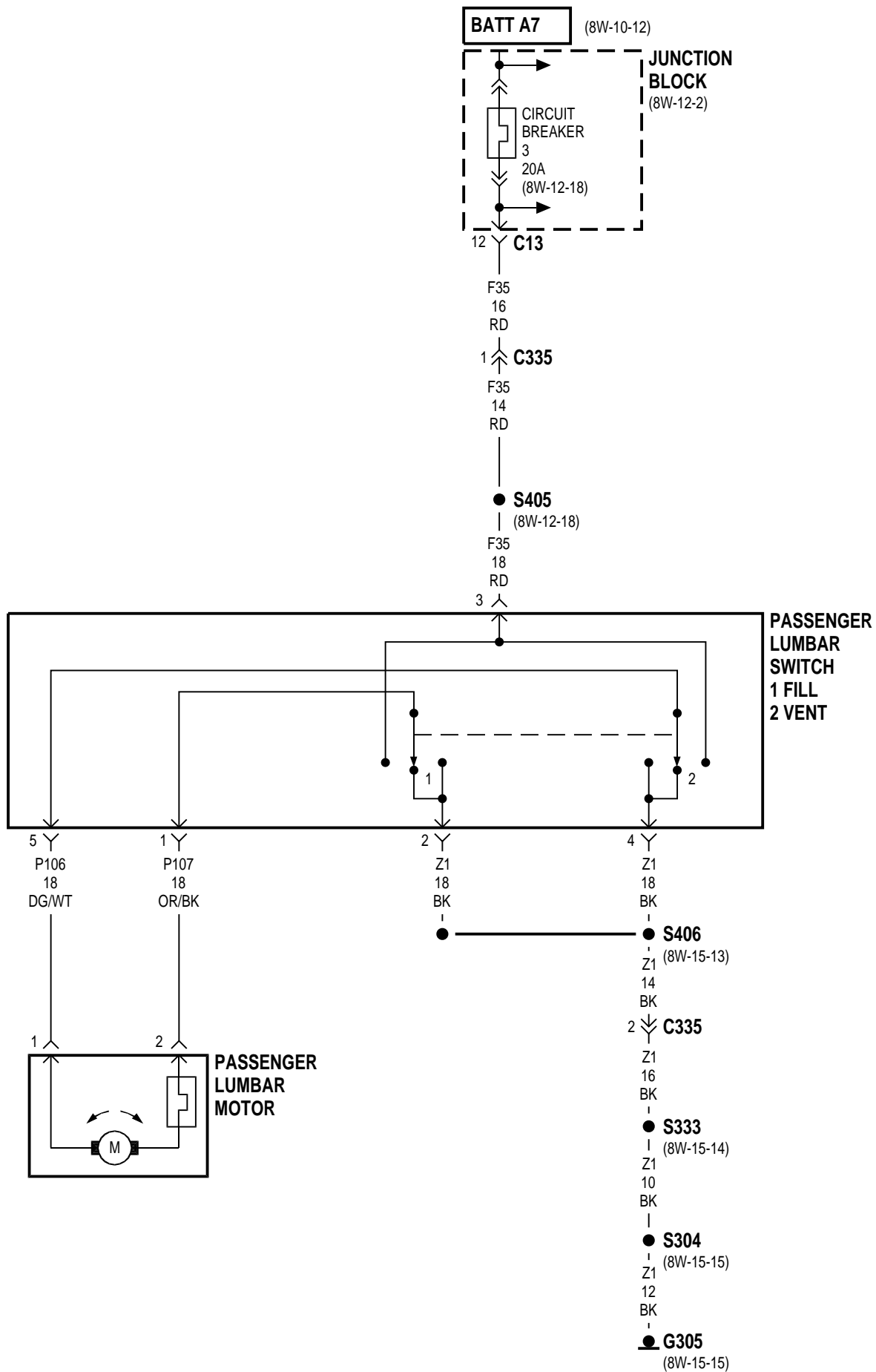
page

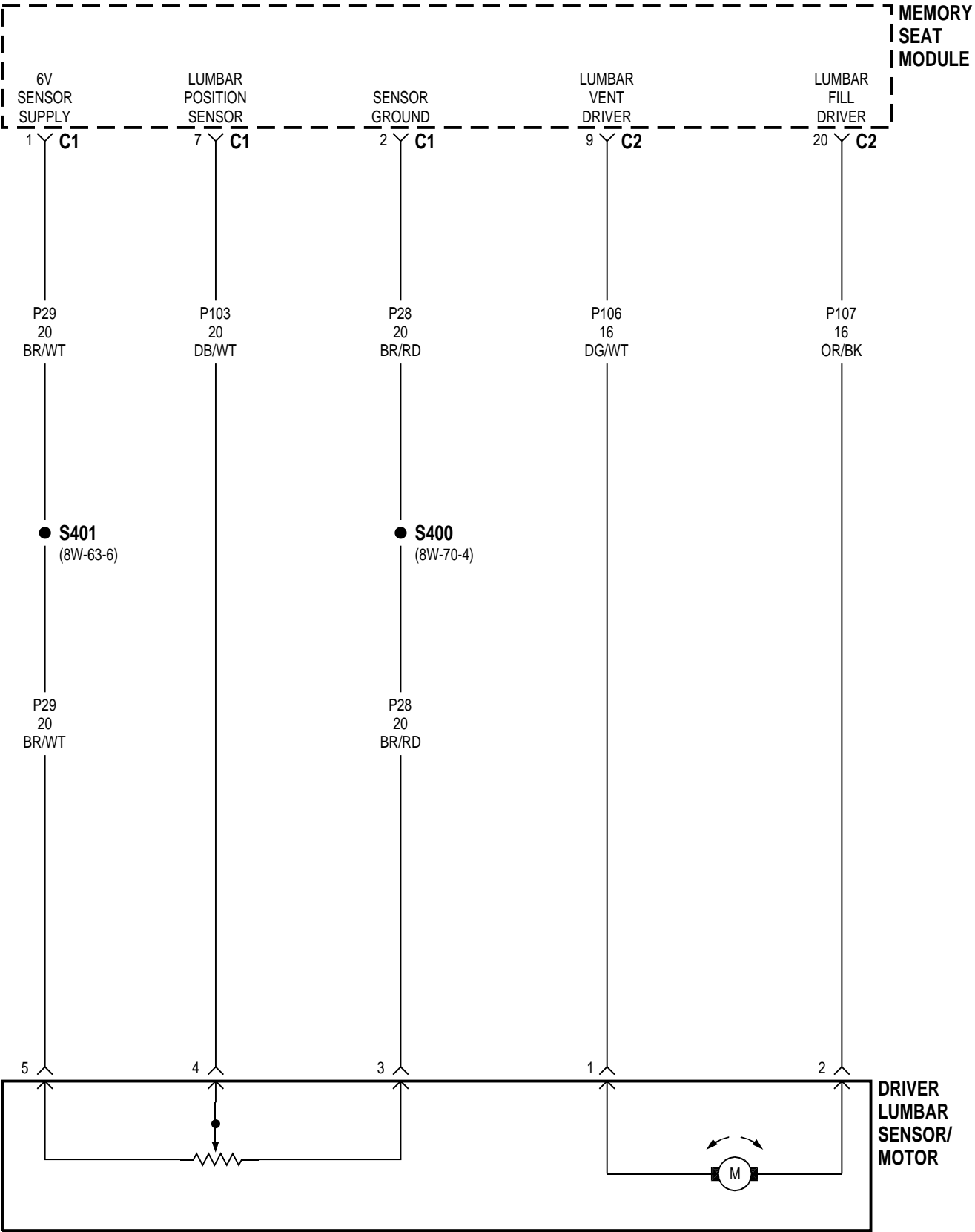
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	16

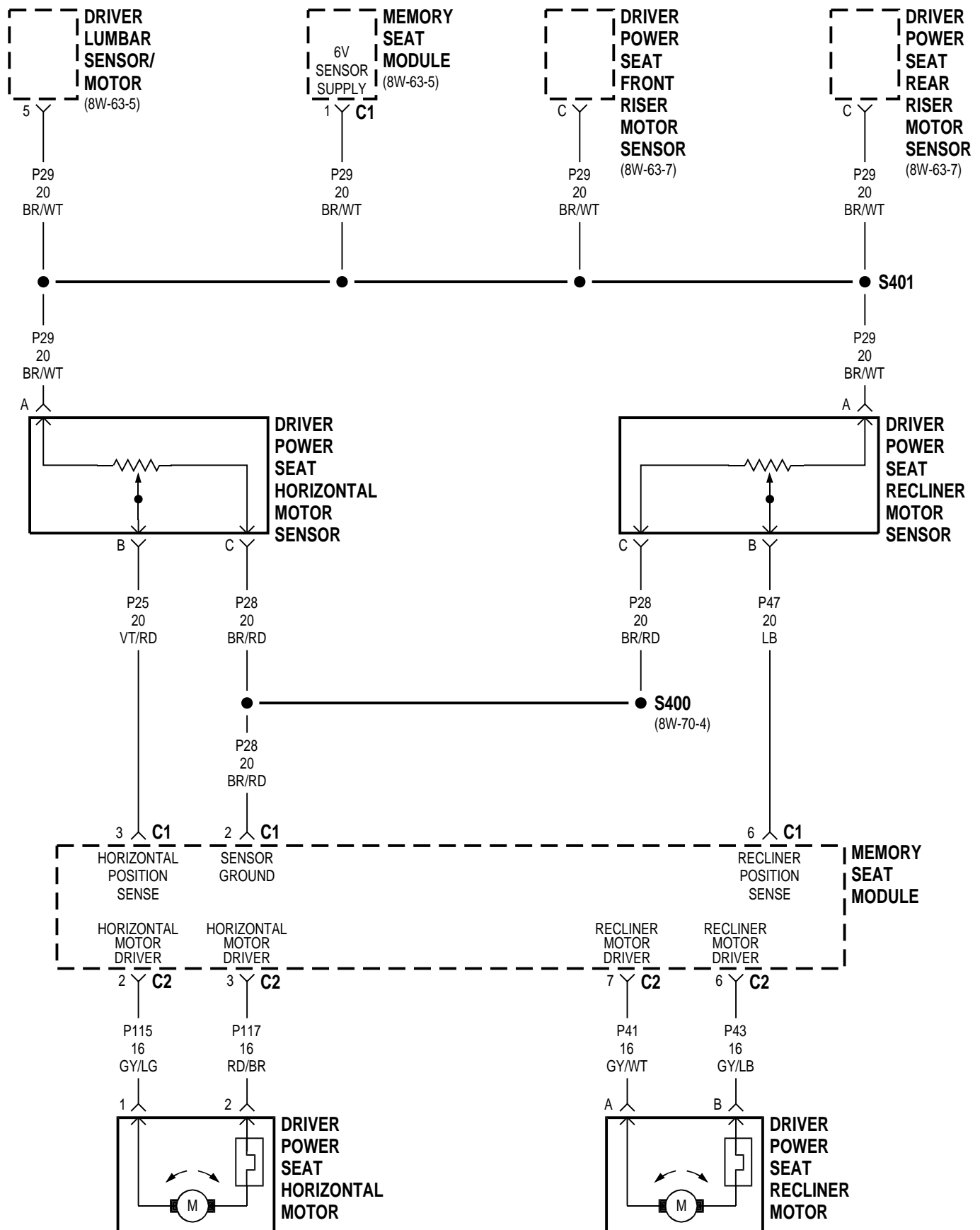
Component	Page	Component	Page
Circuit Breaker 3	8W-63-2, 3, 4, 8, 9, 10, 13, 14	Passenger Heated Seat Back	8W-63-12
Driver Door Module	8W-63-15	Passenger Heated Seat Cushion	8W-63-12
Driver Heated Seat Back	8W-63-11	Passenger Lumbar Motor	8W-63-4
Driver Heated Seat Cushion	8W-63-11	Passenger Lumbar Switch	8W-63-4
Driver Lumbar Motor	8W-63-3	Passenger Power Seat Front Riser Motor . .	8W-63-9
Driver Lumbar Sensor/Motor	8W-63-5, 6	Passenger Power Seat Horizontal Motor . . .	8W-63-9
Driver Lumbar Switch	8W-63-2, 3	Passenger Power Seat Rear Riser Motor . . .	8W-63-9
Driver Power Seat Front Riser Motor . .	8W-63-7, 10	Passenger Power Seat Recliner Motor	8W-63-9
Driver Power Seat Front Riser Motor Sensor	8W-63-6, 7	Passenger Power Seat Switch	8W-63-9
Driver Power Seat Horizontal Motor . . .	8W-63-6, 10	Passenger Seat Heater Control Module	8W-63-12, 13
Driver Power Seat Horizontal Motor Sensor	8W-63-6	S202	8W-63-13, 14
Driver Power Seat Rear Riser Motor . . .	8W-63-7, 10	S216	8W-63-13, 14
Driver Power Seat Rear Riser Motor Sensor	8W-63-6, 7	S218	8W-63-13, 14
Driver Power Seat Recliner Motor	8W-63-6, 10	S304	8W-63-2, 3, 4, 8, 9, 10, 11, 12
Driver Power Seat Recliner Motor Sensor . .	8W-63-6	S306	8W-63-15
Driver Power Seat Switch	8W-63-8, 10	S307	8W-63-15
Driver Seat Heater Control Module . . .	8W-63-11, 14	S317	8W-63-13, 14
Fuse 12	8W-63-13, 14	S333	8W-63-4, 9, 12
G304	8W-63-13, 14	S400	8W-63-5, 6, 7
G305	8W-63-2, 3, 4, 8, 9, 10, 11, 12	S401	8W-63-5, 6, 7
Heated Seat Switch	8W-63-11, 12, 13, 14	S402	8W-63-2, 3, 8, 10, 11
Junction Block	8W-63-2, 3, 4, 8, 9, 10, 13, 14	S403	8W-63-2, 3, 8, 10, 14
Memory Seat Module	8W-63-2, 5, 6, 7, 8, 15	S404	8W-63-12, 13
Memory Set Switch 1 Set	8W-63-15	S405	8W-63-4, 9, 13
Passenger Door Module	8W-63-15	S406	8W-63-4, 9, 12
		S407	8W-63-11, 14

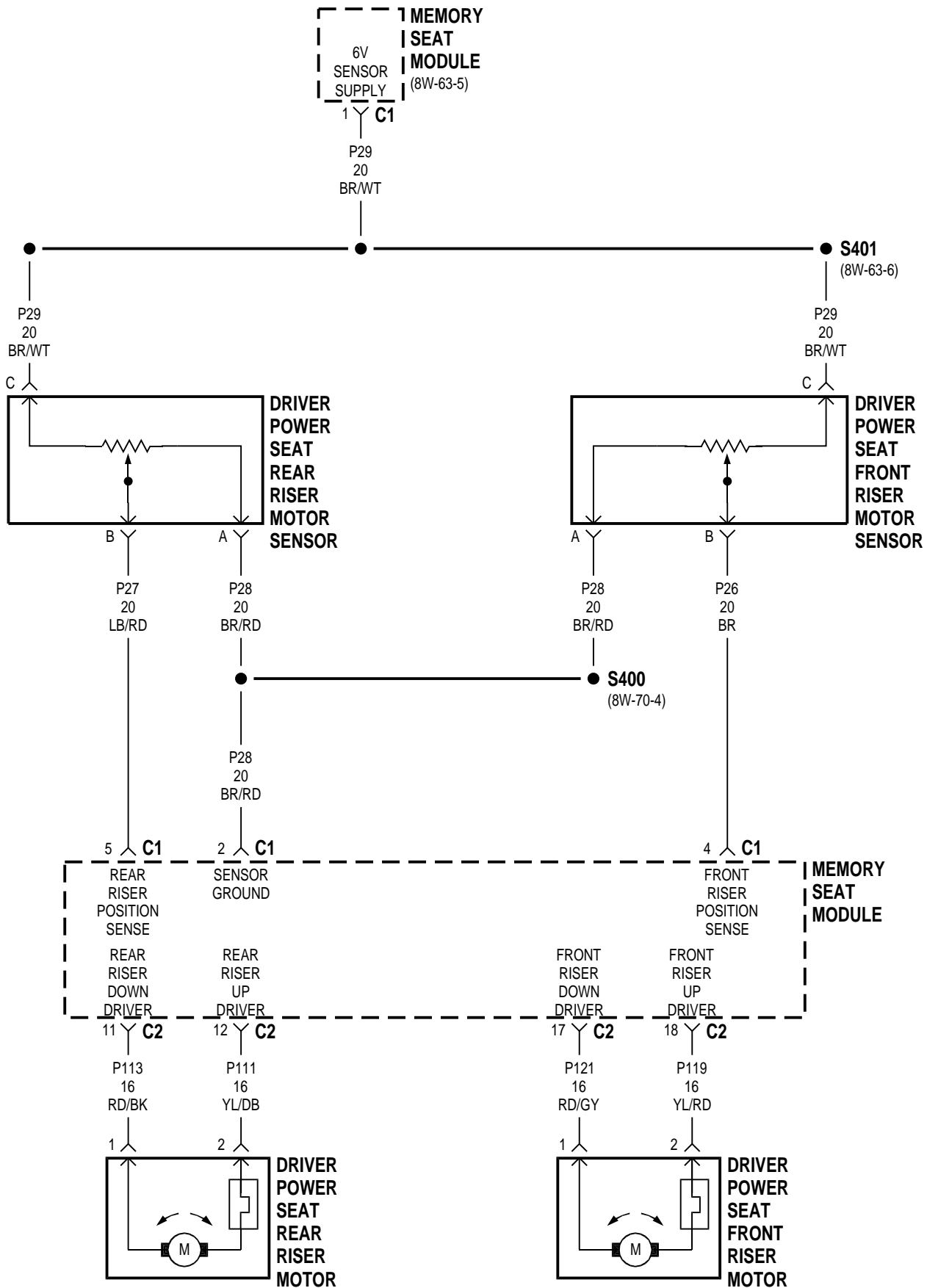


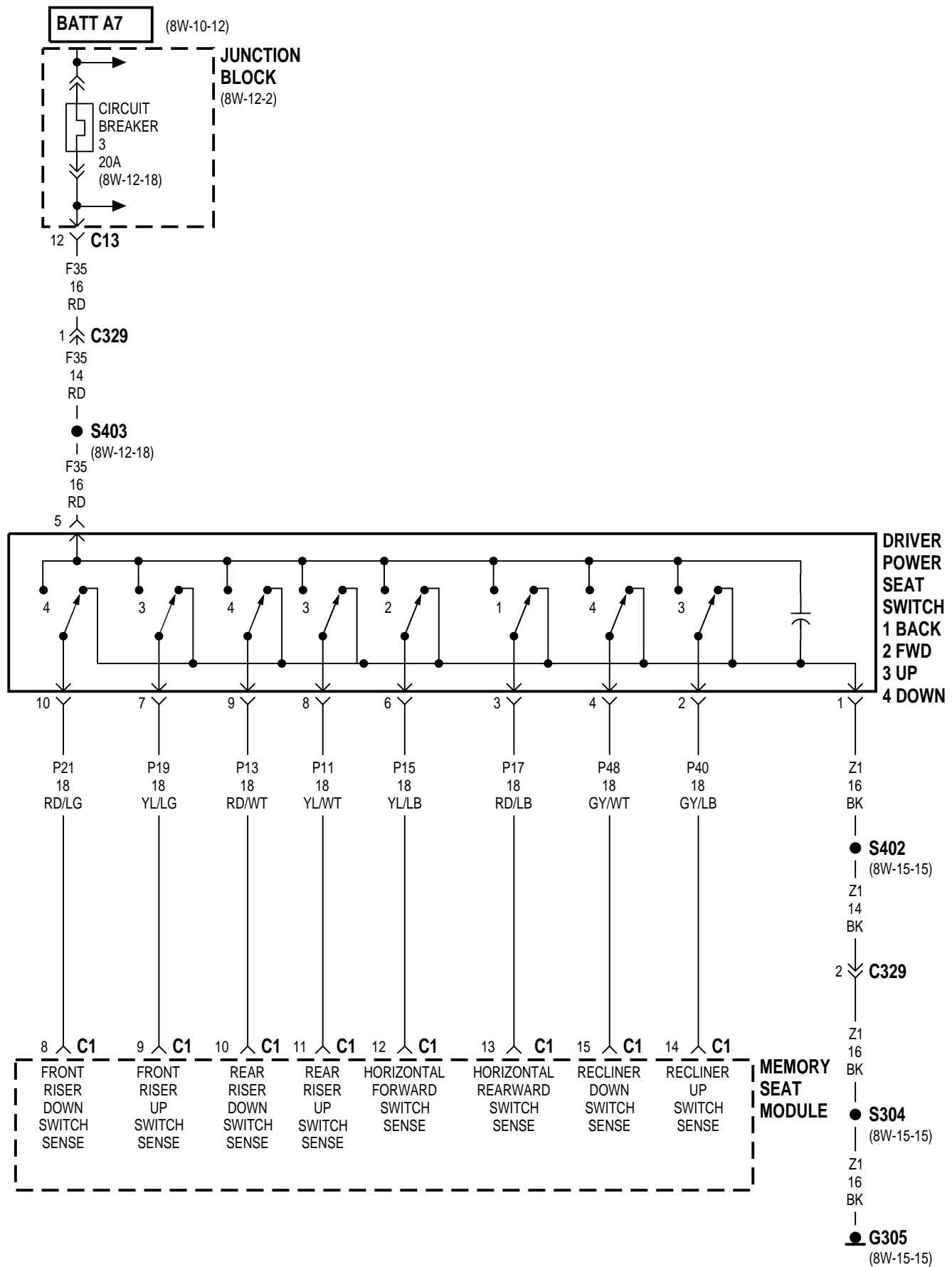


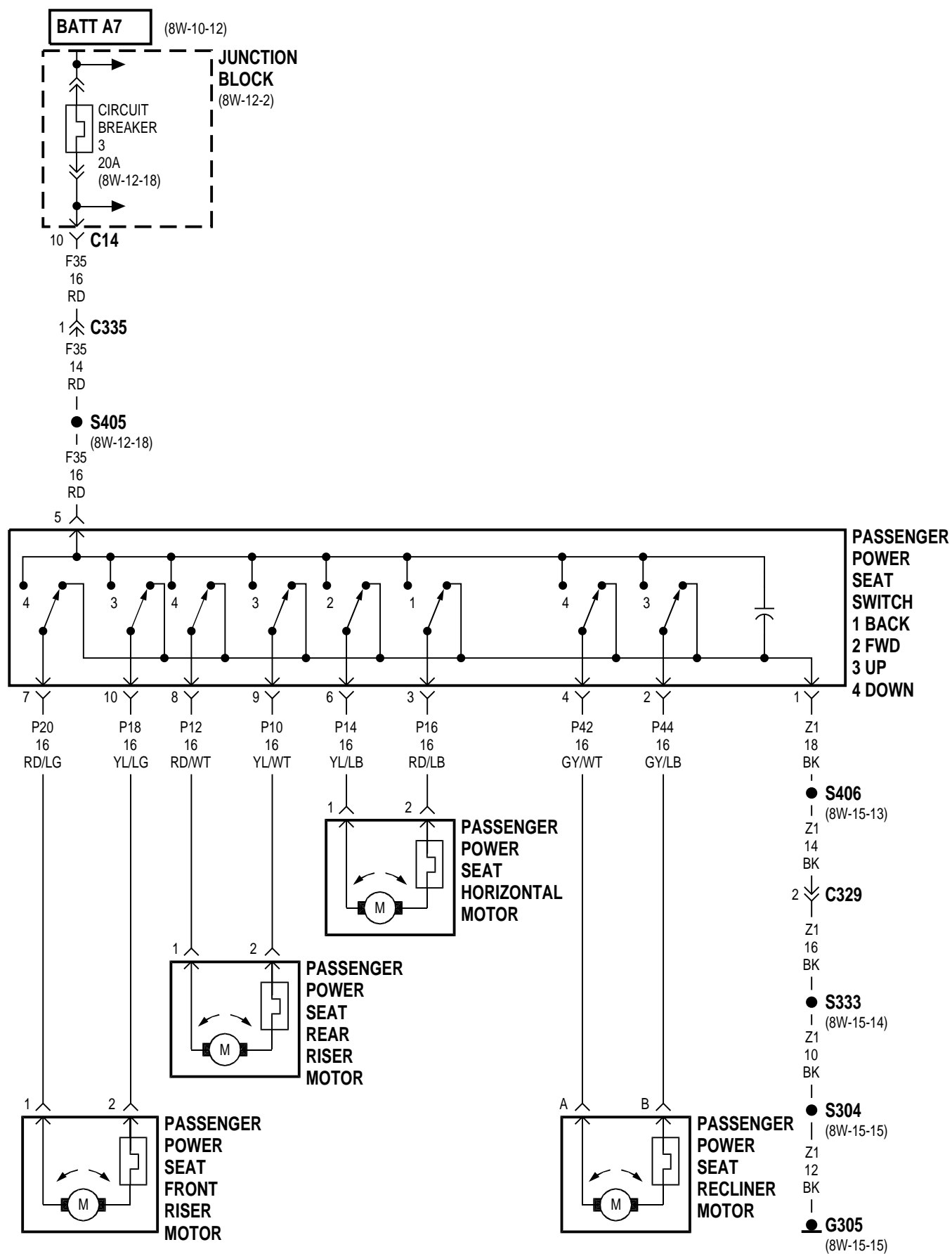


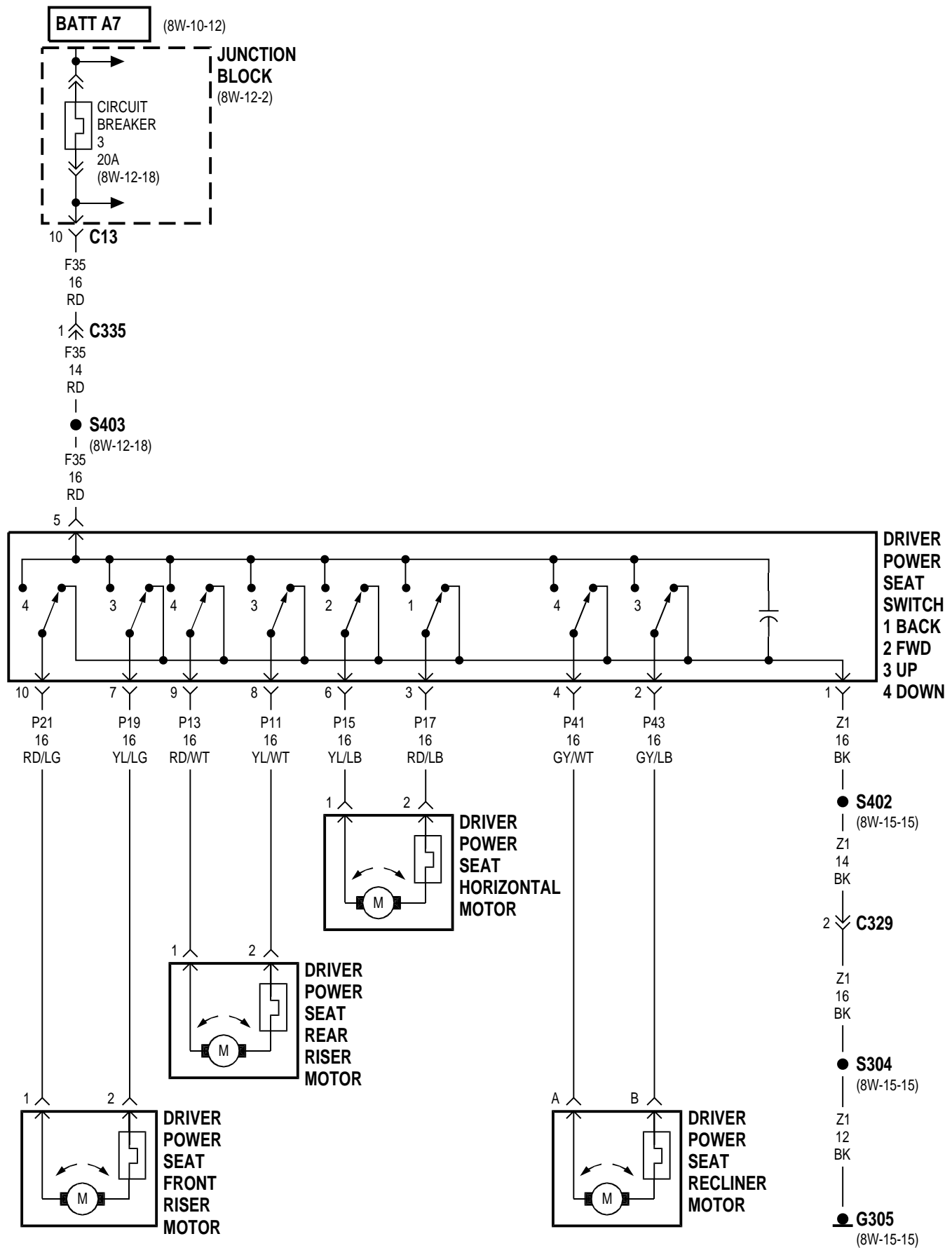


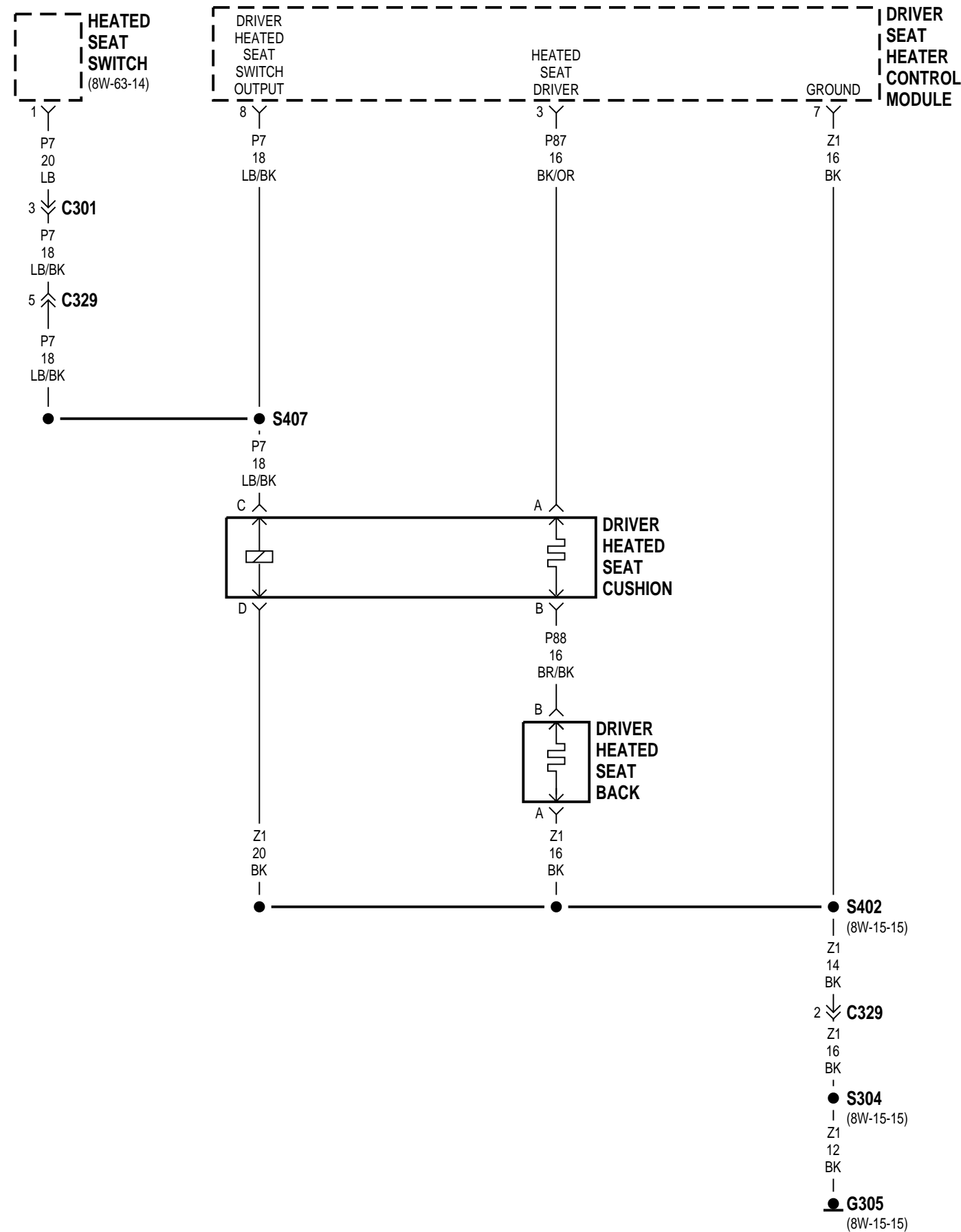


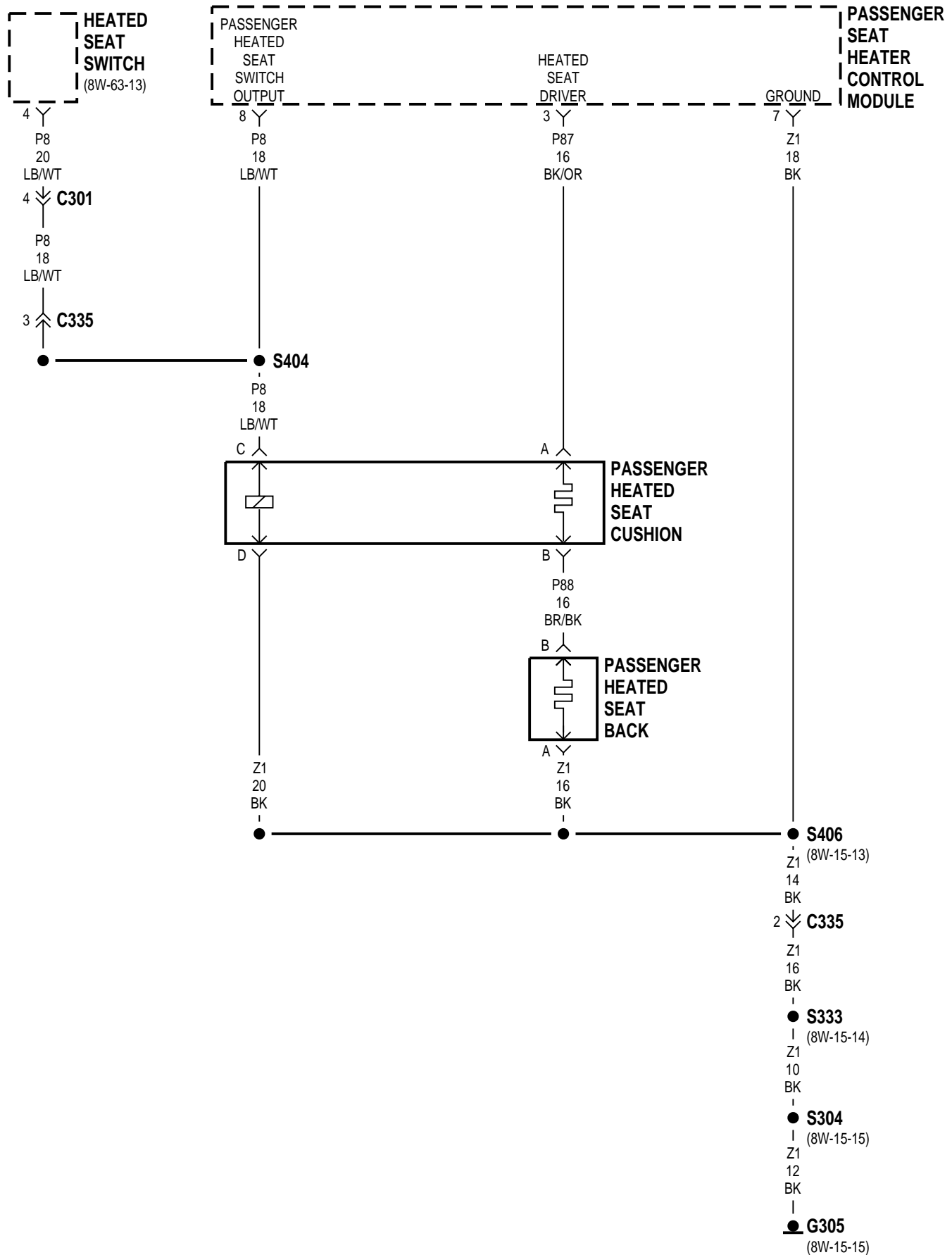


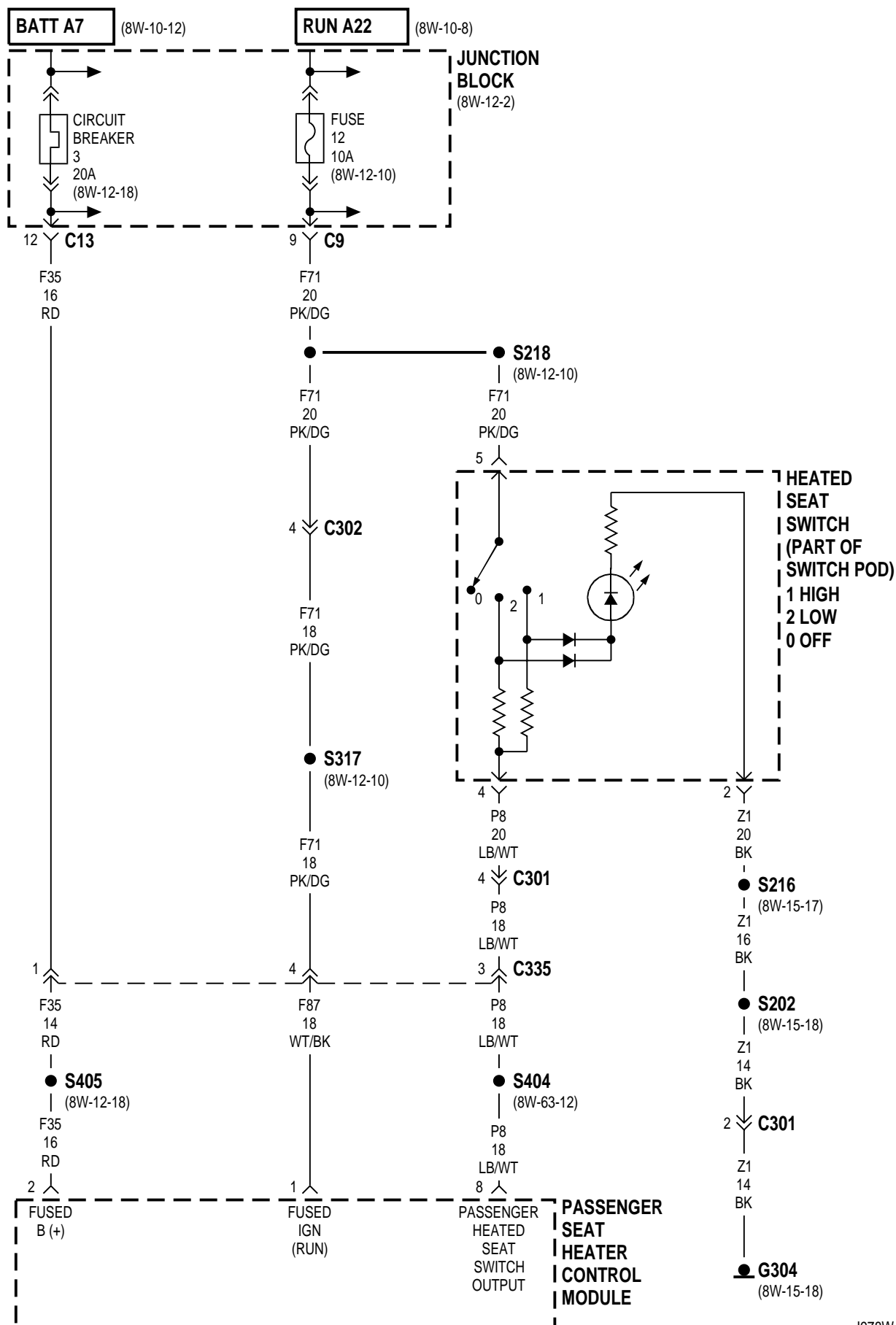


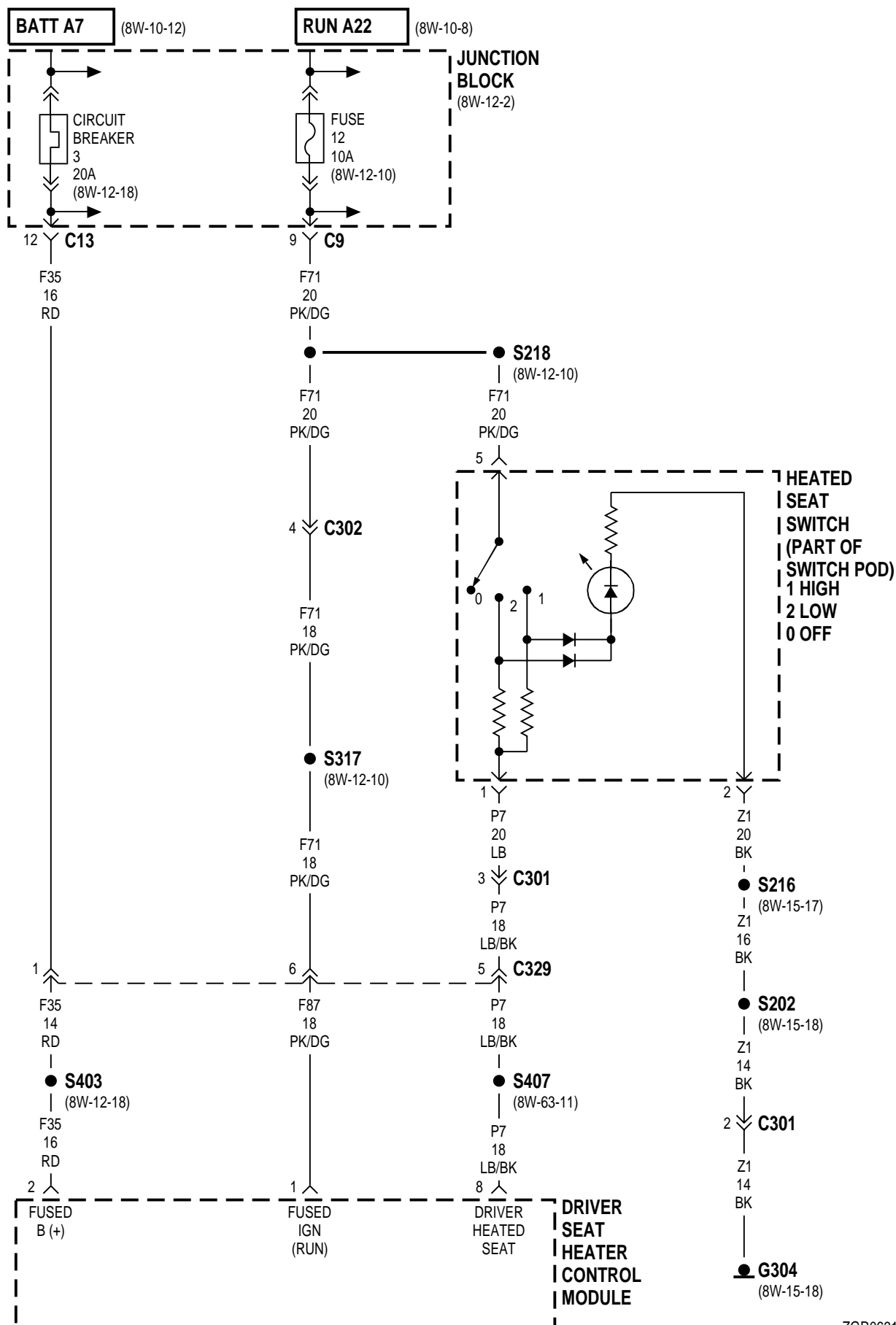


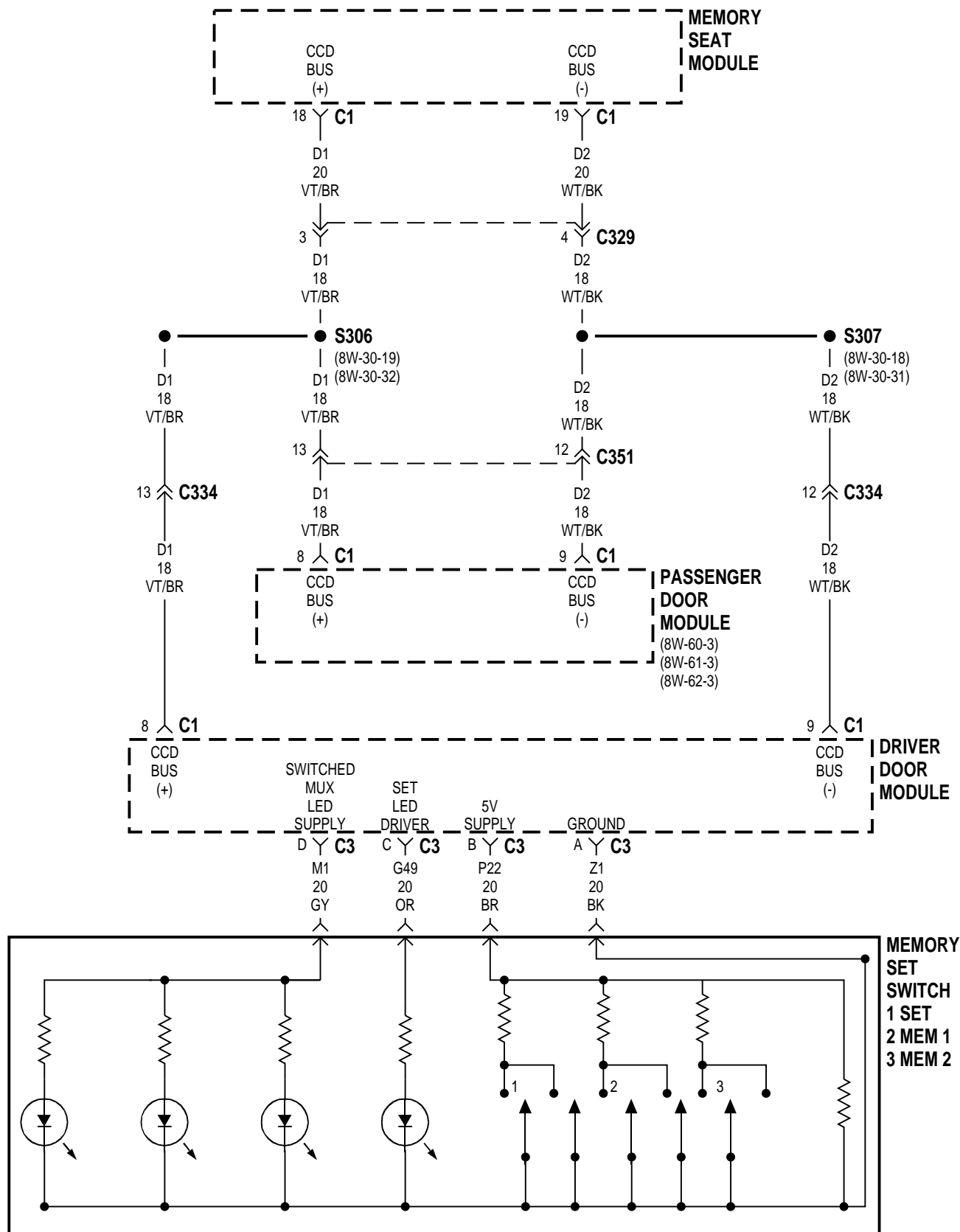












8W-63 POWER SEAT

INDEX

	page		page
DESCRIPTION AND OPERATION		MEMORY SEATS	17
HEATED SEATS	17	POWER SEATS	16
INTRODUCTION	16		

DESCRIPTION AND OPERATION

INTRODUCTION

Both front power seats on this vehicle have separate motors for adjusting lumbar, front, rear, horizontal and vertical position. Also, the vehicle may have optional heated seats.

Some models with Remote Keyless Entry (RKE) have a memory feature that allows the RKE transmitter to move the drivers seat and outside mirrors to saved positions. The memory feature also can set the radio push buttons to preset stations.

POWER SEATS

Both power seat system are protected by a 20 amp circuit breaker located in cavity 3 of the junction block. Circuit A7 from fuse 15 in Power Distribution Center (PDC) powers circuit F35 through the circuit breaker.

In both power seats, circuit F35 feeds the seat position switch and lumbar adjustment switch. A BUS bar internal to the switches feeds all the contacts. Circuit Z1 provides ground for each power seat.

LUMBAR ADJUSTMENT

Lumbar position is adjustable on both power seats. Circuit F35 feeds the left and right lumbar adjustment switch. Identical circuits from each switch power or ground the lumbar motor to adjust lumbar position.

On either power seat, during LUMBAR FORWARD adjustments, the lumbar switch connects circuit F35 to circuit P106. Circuit P106 feeds the lumbar motor. The ground path is supplied on circuit P107 from the motor through the closed contacts in switch to circuit Z1.

For LUMBAR AFT adjustments, the circuits are reversed. P107 powers the motor and circuit P106 provides ground.

DRIVER'S SEAT

When the operator selects the HORIZONTAL FORWARD function, the switch passes power from circuit F35 to circuit P15. Circuit P15 connects to the motor. Ground is provided on circuit P17 circuit back to the

switch. A bus bar internal to the switch connects circuit P17 to ground on circuit Z1.

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, the switch passes power from circuit F35 to circuit P11. Circuit P11 connects to the motor. Ground is provided on circuit P13 back to the switch. A bus bar internal to the switch connects circuit P13 to ground on circuit Z1.

For REAR VERTICAL DOWN function the circuits are reversed. P13 is the feed, and P11 is the ground.

When the operator selects the FRONT VERTICAL UP function, the switch passes power from circuit F35 to circuit P19. Circuit P19 connects to the motor. Ground is provided on circuit P21 back to the switch. A bus bar internal to the switch connects circuit P21 to ground on circuit Z1.

For FRONT VERTICAL DOWN function the circuits are reversed. P21 is the feed, and P19 is the ground.

When the operator selects the RECLINE UP function, the switch passes power from circuit F35 to the P43 circuit. Circuit P43 connects to the motor. Ground is provided on circuit P41 back to the switch. A bus bar internal to the switch connects circuit P41 to ground on circuit Z1.

For RECLINE DOWN function the circuits are reversed. P41 is the feed, and P43 is the ground.

PASSENGER'S SEAT

When the operator selects the HORIZONTAL FORWARD function, the switch passes power from circuit F35 to circuit P14. Circuit P14 connects to the motor. Ground is provided on circuit P16 circuit back to the switch. A bus bar internal to the switch connects circuit P16 to ground on circuit Z1.

For HORIZONTAL REARWARD function the circuits are reversed. P16 is the feed, and P14 is the ground.

When the operator selects the REAR VERTICAL UP function, the switch passes power from circuit F35 to circuit P10. Circuit P10 connects to the motor. Ground is provided on circuit P12 back to the switch.

DESCRIPTION AND OPERATION (Continued)

A bus bar internal to the switch connects circuit P12 to ground on circuit Z1.

For REAR VERTICAL DOWN function the circuits are reversed. P12 is the feed, and P10 is the ground.

When the operator selects the FRONT VERTICAL UP function, the switch passes power from circuit F35 to circuit P18. Circuit P18 connects to the motor. Ground is provided on circuit P20 back to the switch. A bus bar internal to the switch connects circuit P20 to ground on circuit Z1.

For FRONT VERTICAL DOWN function the circuits are reversed. P20 is the feed, and P18 is the ground.

When the operator selects the RECLINE UP function, the switch passes power from circuit F35 to the P44 circuit. Circuit P44 connects to the motor. Ground is provided on circuit P42 back to the switch. A bus bar internal to the switch connects circuit P42 to ground on circuit Z1.

For RECLINE DOWN function the circuits are reversed. P42 is the feed, and P44 is the ground.

MEMORY SEATS

Circuit A7 from fuse 15 in the Power Distribution Center (PDC) powers circuit F35 through the circuit breaker in cavity 3 of the junction block. Circuit F35 powers the Memory Seat Module (MSM). Circuit Z1 provides ground for the MSM.

When the operator moves the power seat switch or the lumbar adjustment switch, contacts in the switch CLOSE connecting the switch to the MSM. The MSM receives this input and operates the proper seat motor.

The drivers memory seat system can be activated by either one of the memory switches on the left door panel or through the Remote Keyless Entry (RKE) transmitter. If one of the memory switches on the door panel is pushed, the Drivers Door Module (DDM) signals the MSM on the CCD bus. If the memory function is activated by the RKE transmitter, the Passenger Door Module (PDM) signals the MSM on the CCD bus.

The following is a list of the circuits that connect from the power seat switch to the MSM and their functions:

- P40 - Recliner up
- P48 - Recliner down
- P19 - Front up
- P21 - Front down
- P11 - Rear up
- P13 - Rear down
- P15 - Seat forward
- P17 - Seat rearward
- P104 - lumbar rearward
- P105 - lumbar forward

To operate the seat motor(s), the control module supplies the power and ground. The following is a list of the circuits that connect from the control module to the seat motors:

- P119, P121 - Seat front up and down
- P111, P113 - Rear up and down
- P115, P117 - Seat forward and rearward
- P41, P43 - Recliner forward and rearward
- P106, P107 - Lumbar forward and rearward

SEAT POSITION SENSORS

The Memory Seat Module (MSM) receives seat position inputs from five sensors in the driver's seat. On circuit P29, the MSM supplies power to the seat position sensors on circuit P29. The MSM provides ground for the sensors on circuit P28.

Circuit P25 provides the input from the horizontal forward/rearward motor sensor to the MSM. Circuit P47 provides the input from the recline motor sensor. Circuit P103 sends the lumbar motor sensor input.

Circuit P27 provides the input from the rear riser motor sensor to the MSM. Circuit P26 provides the input from the front riser motor sensor. Circuit P29 from the MSM powers the riser motor sensors. The MSM provides ground for the riser motor sensors on circuit P28.

MEMORY SWITCH

The memory switch is used for programming the desired seat positions into the MSM memory. The memory switch also programs power mirror position into the Drivers Door Module (DDM) and the Passengers Door Module (PDM), and presets radio station selections.

Circuit P22 from DDM supplies power to the three sets of switches in the memory switch; set, memory 1, and memory 2. The three switch sets are wired in parallel and each contains a separate resistor. The voltage level present on circuit P22 depends on which memory switch is activated. Circuit Z1 from the DDM provides ground for the switches.

After a memory switch activates, the DDM broadcasts the appropriate signal on CCD bus. The MSM adjusts seat position in response to the signal.

Circuit M1 from the DDM powers the green Light Emitting Diodes (LED) in the set switch. Circuit G49 powers the red LED in the set switch. Circuit Z1 provides ground for the LEDs.

HEATED SEATS

Separate control modules operate the driver and passenger heated seats. Circuit F35 from the circuit breaker in cavity 3 of the junction block supplies power to both heated seat control modules. Circuit A7 from fuse 15 in the Power Distribution Center (PDC) powers circuit F35 through the circuit breaker.

DESCRIPTION AND OPERATION (Continued)

When the ignition switch is in the RUN position, it connects circuit A1 from fuse 8 in the PDC to circuit A22. Circuit A22 powers circuit F71 through fuse 12 in the junction block. Circuit F71 splices to supply power to the driver and passenger heated seat switches and provides an input to the heated seat control modules. Circuit Z1 provides ground for the control modules and both heated seat switches.

Both heated seat switches have three positions; OFF, LOW or HIGH. Circuit P7 sends the driver's heated seat switch signal to the driver's heated seat control module. Circuit P8 sends the passenger heated seat switch signal to the passenger heated seat control module. In the LOW and HIGH positions, the driver's heated seat switch connects battery voltage on circuit F71 to circuit P7 (driver's) or P8 (passenger). The LOW and HIGH position detentes have a resistor in series between the detente and circuit P7 or P8. Internal to the switch, voltage from

circuit F71 passes through the resistor to circuit P7 or P8. The voltage level on circuit P7 or P8 from the switch depends on switch position (LOW or HIGH).

After receiving a signal from its heated seat switch, the heated seat control module powers the heater grids in the seat. From either control module, circuit P87 powers the grid in the driver's seat cushion. Current flows out of the seat cushion on circuit P88 to the grid on the seat back. Circuit Z1 from the grid in the seat back supplies ground.

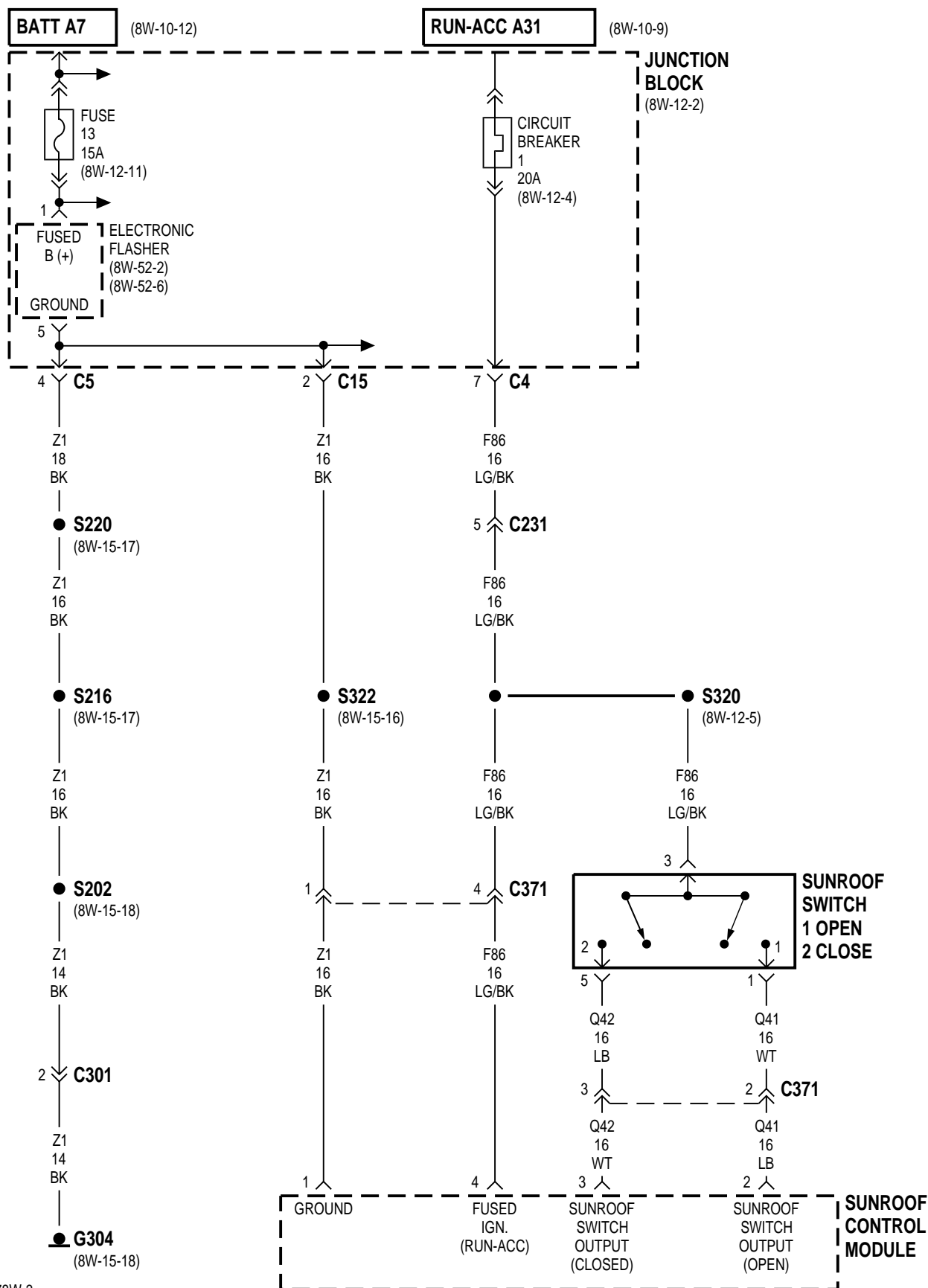
Each heated seat control module monitors seat temperature through a thermistor in each seat. When seat temperature reaches the temperature selected by the operator through the heated seat switch, the control module stops supplying voltage to the heated seat grids. To maintain selected seat temperature, the control module cycles the grid ON and OFF.

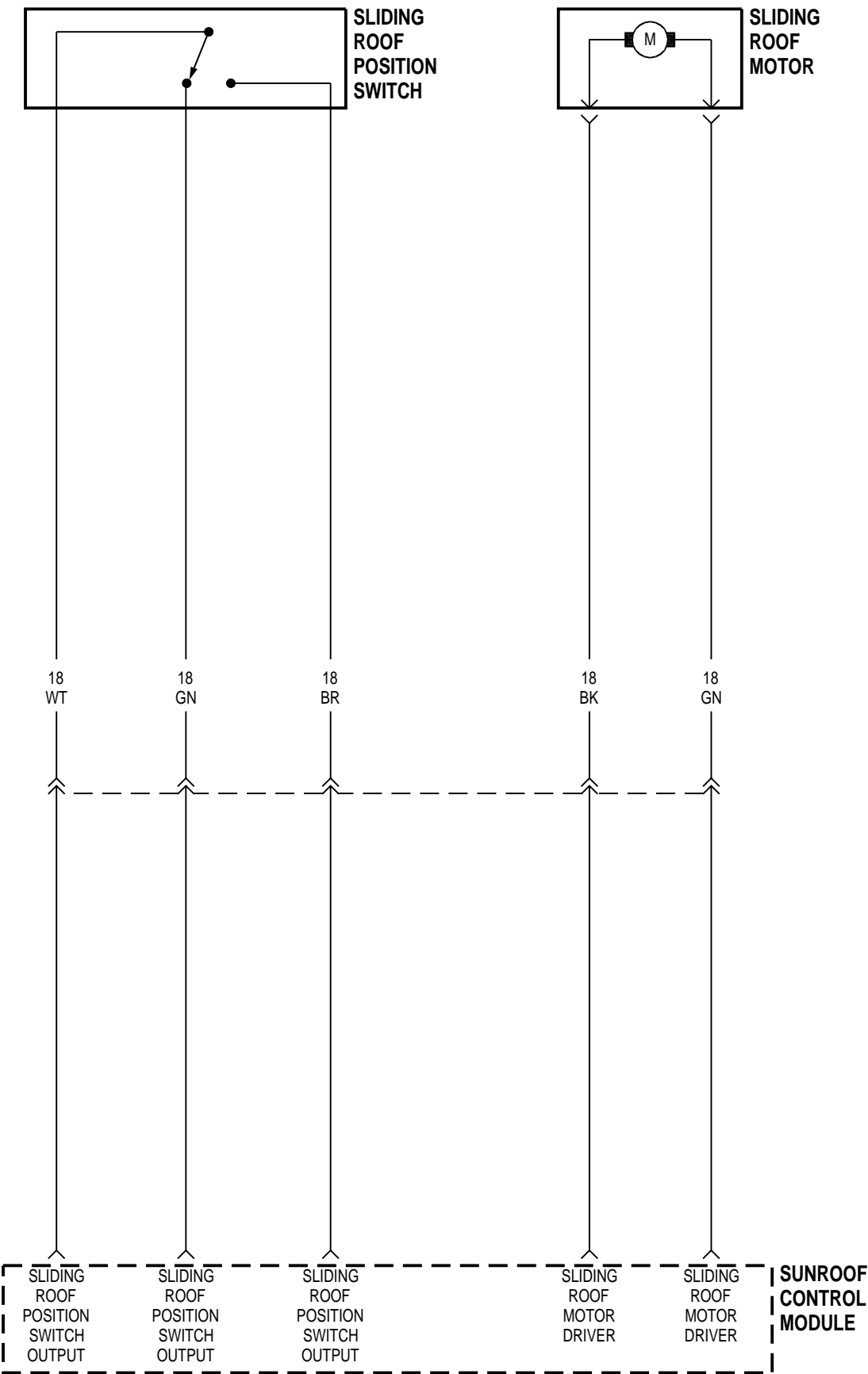
8W-64 POWER SUNROOF

INDEX

	page
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	4

Component	Page	Component	Page
Circuit Breaker 1	8W-64-2	S320	8W-64-2
Electronic Flasher	8W-64-2	S322	8W-64-2
Fuse 13	8W-64-2	Sliding Roof Motor	8W-64-3
G304	8W-64-2	Sliding Roof Position Switch	8W-64-3
Junction Block	8W-64-2	Sunroof Control Module	8W-64-2, 3
S202	8W-64-2	Sunroof Switch	8W-64-2
S216	8W-64-2		
S220	8W-64-2		





8W-64 POWER SUNROOF

INDEX

page

DESCRIPTION AND OPERATION	
POWER SUNROOF	4

DESCRIPTION AND OPERATION

POWER SUNROOF

When the ignition switch is in the ACCESSORY or RUN position it connects circuit A1 from fuse 8 in the Power Distribution Center (PDC) to circuit A31. Circuit A31 powers circuit F86 through the circuit breaker in cavity 1 of the junction block. Circuit F86 feeds the power sunroof control module and switch. Circuit Z1 provides ground for the sunroof system.

When the operator selects the OPEN function, voltage is provided on circuit F86 through the closed contacts in the switch to circuit Q41. Circuit Q41 connects between the switch and the control module.

The control module then activates the motor and moves the sunroof to the desired position. A position

sensor is used to prevent the sunroof from being moved to far in any one direction. When the sensor detects the roof is at the end of its travel it sends a signal to the control module and voltage is shut off to the motor.

When the operator selects the CLOSE function, voltage is provided on circuit F86 through the closed contacts in the switch to circuit Q42. Circuit Q42 connects between the switch and the control module.

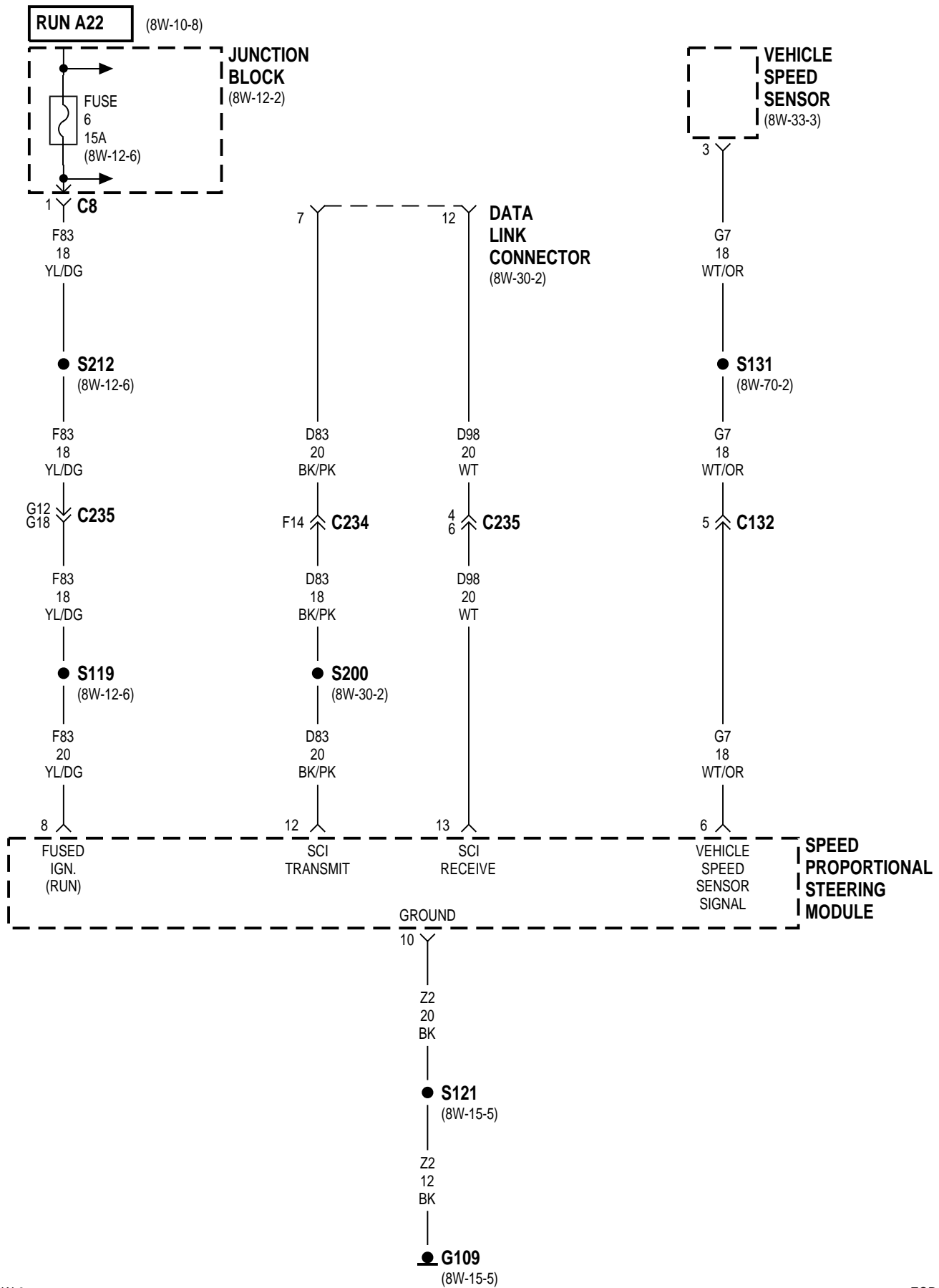
The control module then activates the motor and moves the sunroof to the desired position. The position sensor detects when the roof is at the end of its travel it sends a signal to the control module and voltage is shut off to the motor.

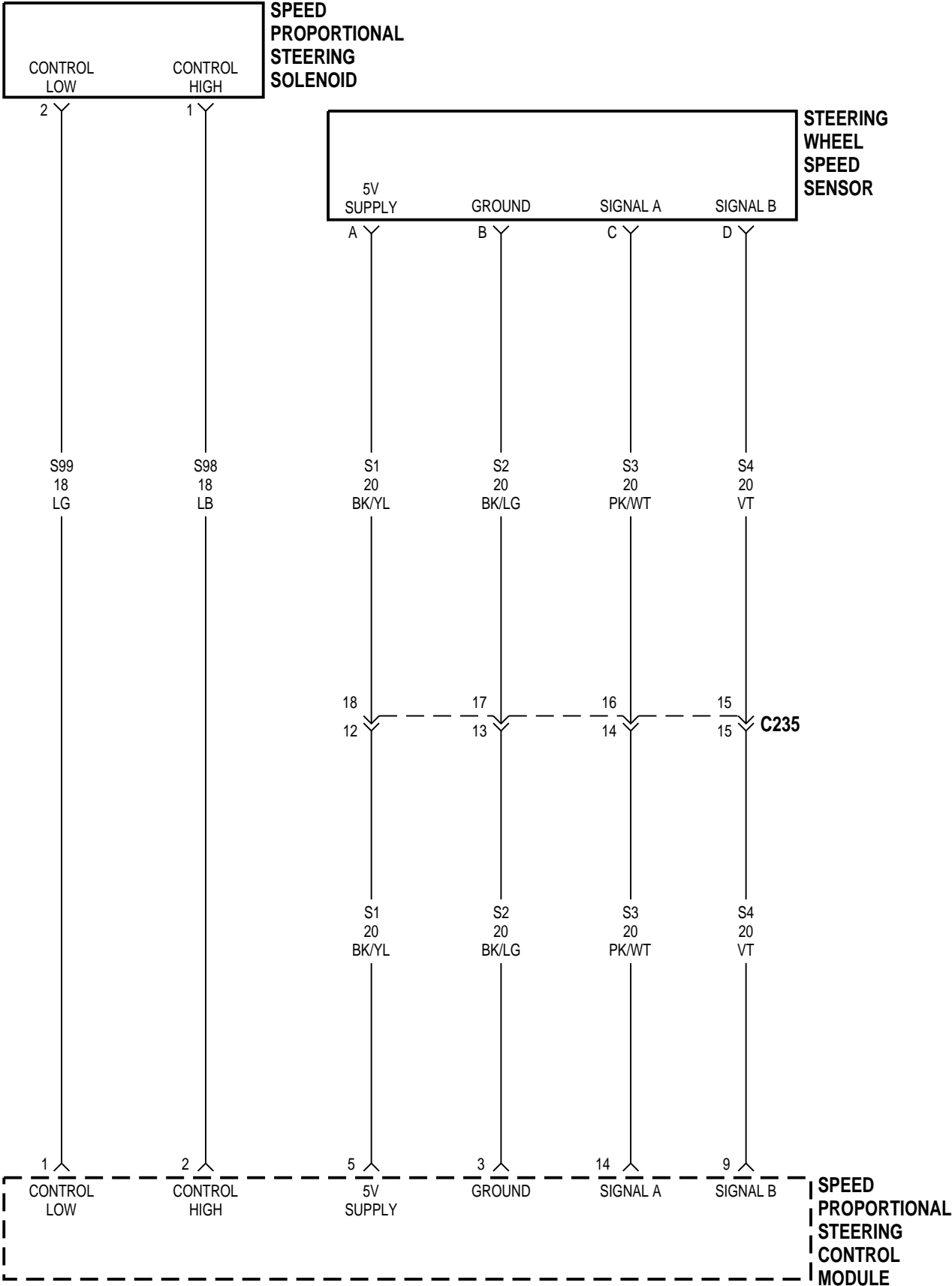
8W-65 SPEED PROPORTIONAL STEERING

INDEX

	page
SCHEMATICS AND DIAGRAMS	1
DESCRIPTION AND OPERATION	4

Component	Page	Component	Page
Data Link Connector	8W-65-2	S121	8W-65-2
Fuse 6	8W-65-2	S131	8W-65-2
G109	8W-65-2	S200	8W-65-2
Junction Block	8W-65-2	S212	8W-65-2
S1	8W-65-3	Speed Proportional Steering Control	
S2	8W-65-3	Module	8W-65-3
S3	8W-65-3	Speed Proportional Steering Module	8W-65-2
S4	8W-65-3	Speed Proportional Steering Solenoid	8W-65-3
S98	8W-65-3	Steering Wheel Speed Sensor	8W-65-3
S99	8W-65-3	Vehicle Speed Sensor	8W-65-2
S119	8W-65-2		





8W-65 SPEED PROPORTIONAL STEERING

INDEX

	page		page
DESCRIPTION AND OPERATION		SPEED PROPORTIONAL STEERING CONTROL	
DATA LINK CONNECTOR	4	MODULE	4
INTRODUCTION	4	SPEED PROPORTIONAL STEERING	
		SOLENOID	4

DESCRIPTION AND OPERATION

INTRODUCTION

The speed proportioning steering system automatically adjusts steering effort based on vehicle speed. The system provides additional steering assist while the vehicle is stationary or at low driving speeds. At slower speeds, the system provides greater assist. At higher speeds, it provides less assist resulting in increased steering effort.

In the RUN position, the ignition switch connects circuit A1 from fuse 8 in the Power Distribution Center (PDC) to circuit A22. Circuit A22 powers circuit F83 through fuse 6 in the junction block. Circuit F83 supplies power to the Speed Proportional Steering Control Module (SPSCM). Circuit Z2 provides ground for the SPSCM.

SPEED PROPORTIONAL STEERING CONTROL
MODULE

Circuit F83 powers the Speed Proportional Steering Control Module (SPSCM). Circuit Z2 provides ground for the SPSCM.

On circuit S1, the SPSCM supplies 5 volts to the steering wheel speed sensor. The sensor provides two signals to the SPSCM on circuits S3, and S4. The SPSCM provides ground for the steering wheel speed sensor on circuit S2.

Circuit G7 supplies the vehicle speed sensor to the SPSCM.

SPEED PROPORTIONAL STEERING SOLENOID

The speed proportional steering control module (SPSCM) operates the speed proportional steering solenoid. The SPSCM supplies a pulse width modulated voltage to the solenoid. Circuits S99 and S98 connect the SPSCM to the solenoid.

DATA LINK CONNECTOR

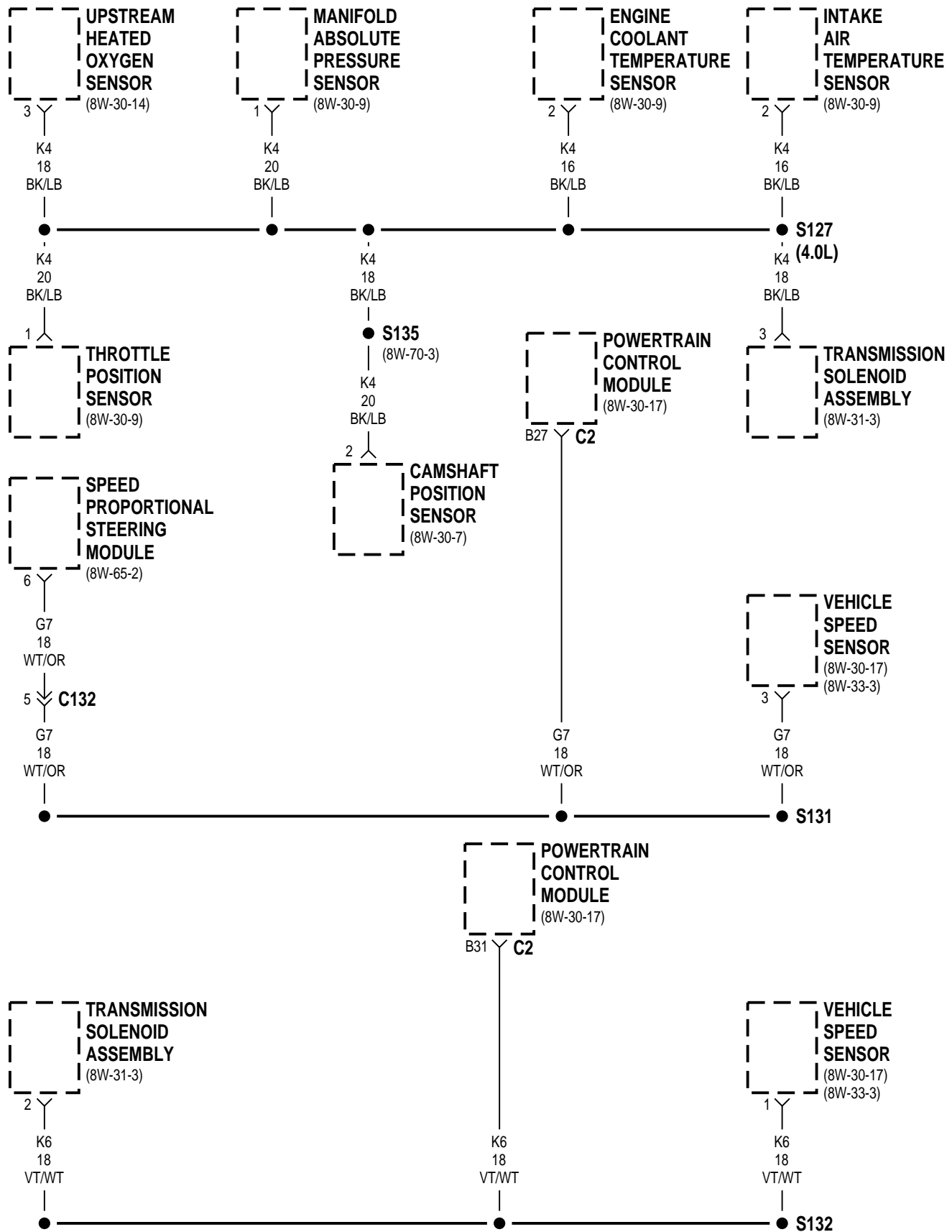
Circuits D98 and D99 connect the Speed Proportional Steering Control Module (SPSCM) to the data link connector. Circuit D99 connects to circuit D83 which continues to the data link connector. The SPSCM transmits data to the scan tool through the data link connector on circuit D99. The SPSCM receives data from the scan tool on circuit D98.

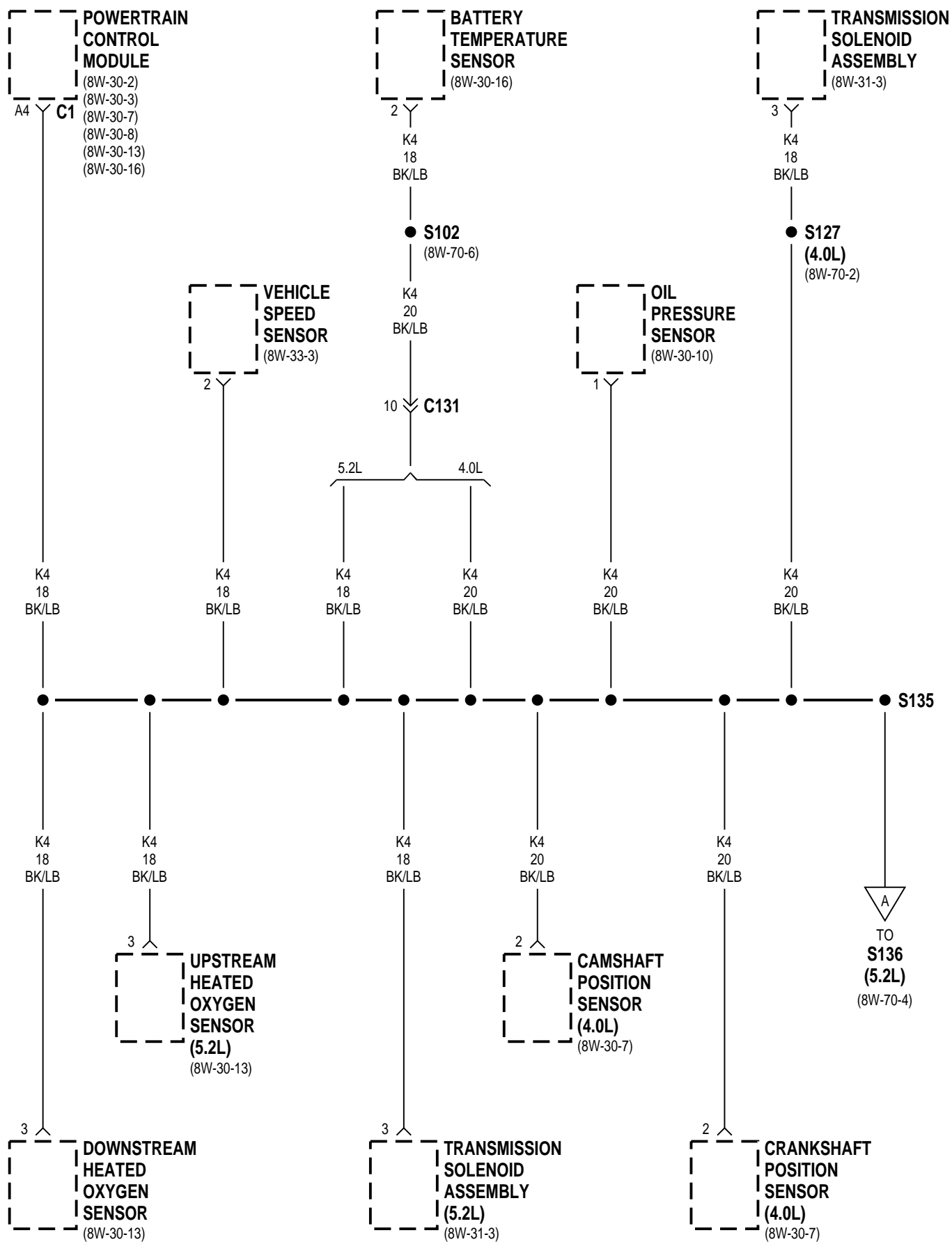
8W-70 SPLICE INFORMATION

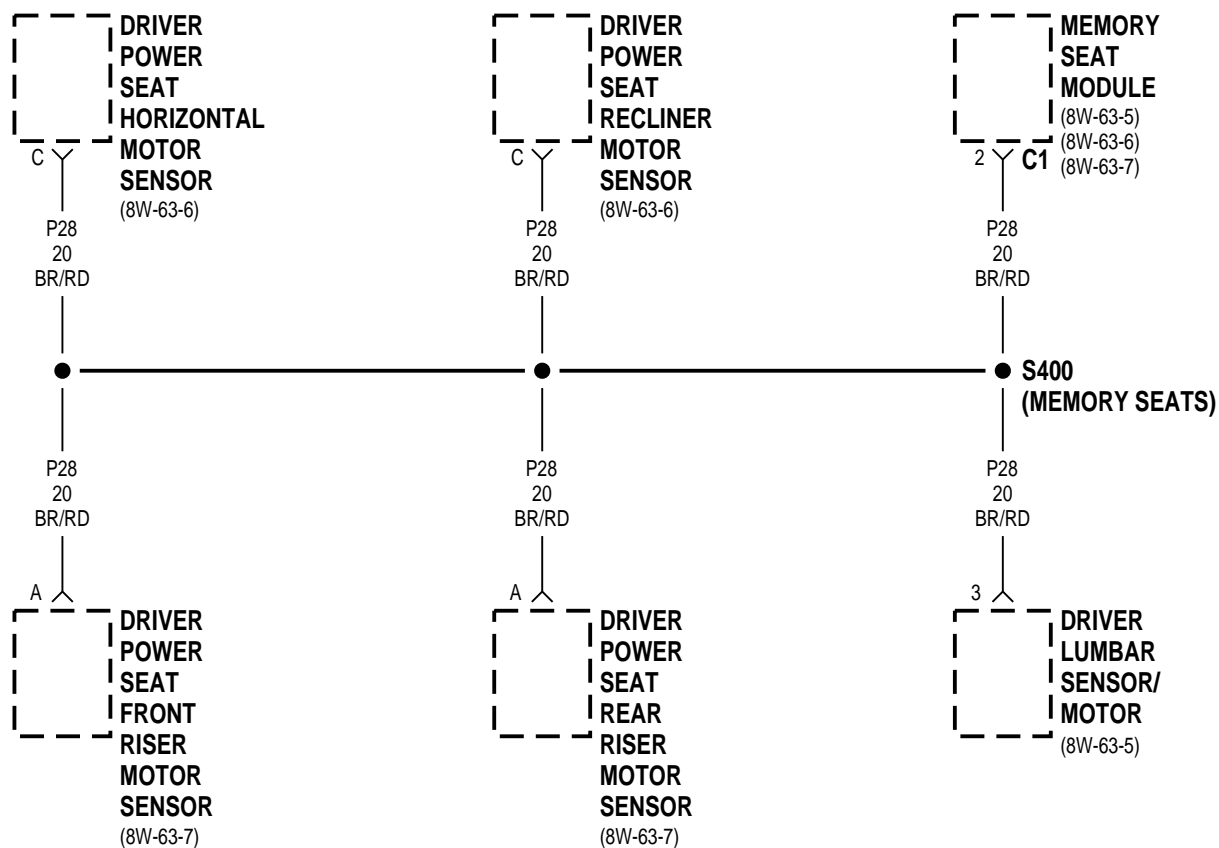
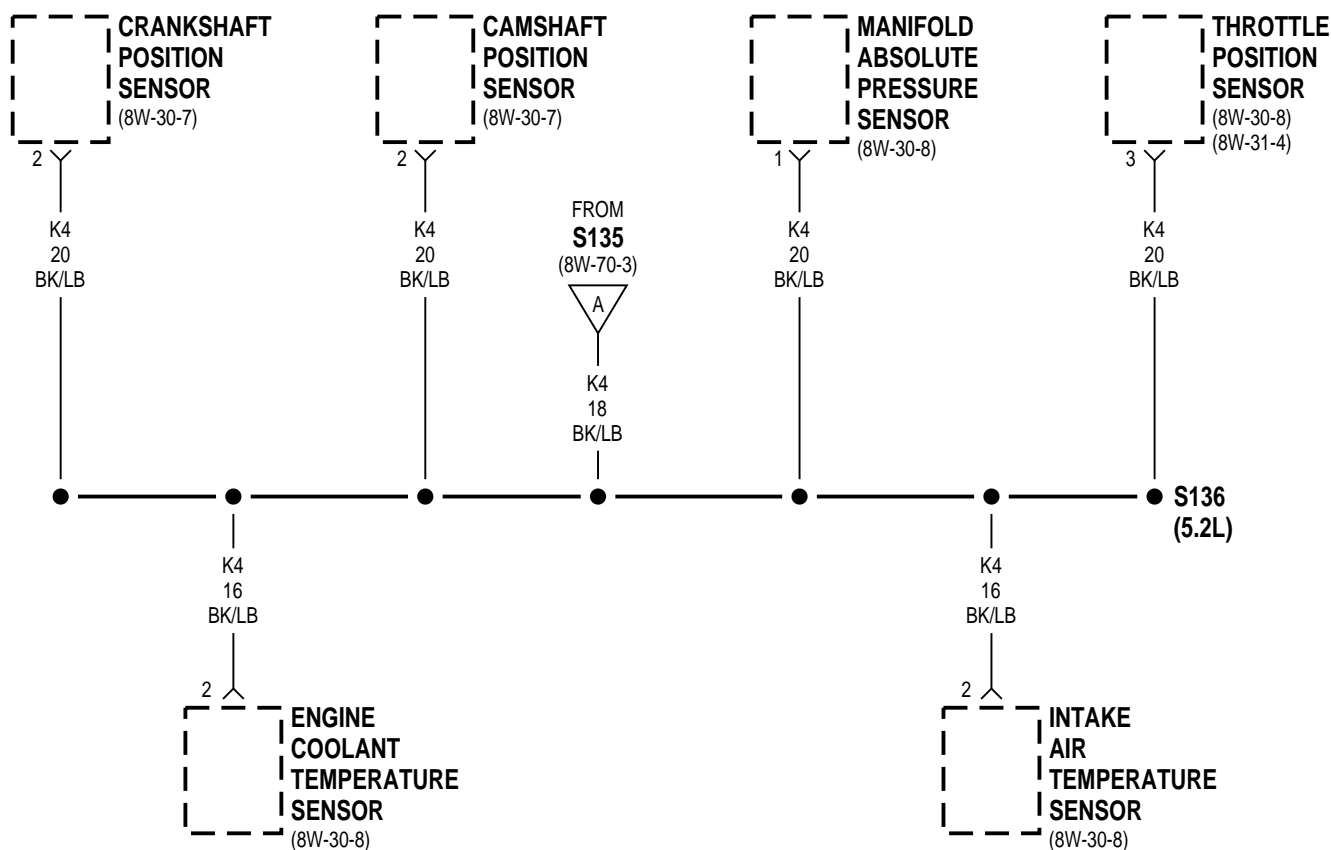
INDEX

SCHEMATICS AND DIAGRAMS	page 1
-------------------------------	--------

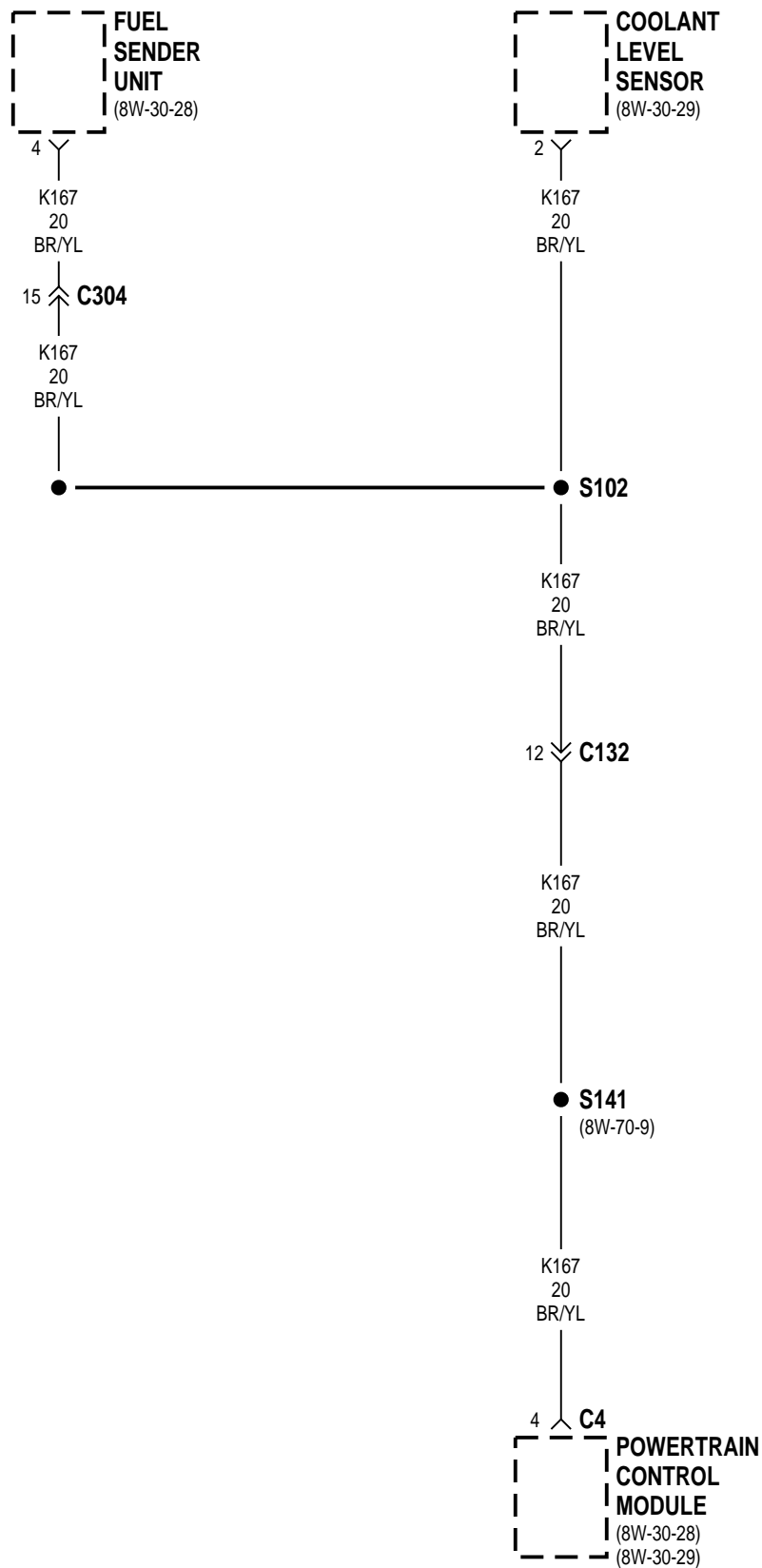
Component	Page	Component	Page
S100	8W-10-16	S222	8W-42-6, 8
S101	8W-10-15	S223	8W-42-8
S102	8W-30-16; 8W-70-6, 9	S224	8W-10-6; 8W-42-3
S103	8W-12-15; 8W-50-8; 8W-52-8	S225	8W-10-6; 8W-42-3
S104	8W-15-6, 7; 8W-52-8	S226	8W-15-8; 8W-42-4
S105	8W-12-24	S300	8W-47-5, 6
S106	8W-10-5; 8W-39-6; 8W-41-2	S301	8W-47-5, 6
S107	8W-50-3	S302	8W-15-18; 8W-45-2
S108	8W-50-3	S303	8W-45-9; 8W-50-4
S109	8W-15-4, 5; 8W-52-8	S304	8W-15-15
S110	8W-50-11	S305	8W-39-5
S111	8W-50-11	S306	8W-30-19, 32
S112	8W-50-11	S307	8W-30-18, 31
S113	8W-50-11	S308	8W-61-4
S114	8W-50-11	S309	8W-15-13; 8W-47-9, 10
S115	8W-50-11	S310	8W-61-4
S117	8W-50-4	S311	8W-12-17
S119	8W-12-6; 8W-70-8	S312	8W-70-5
S120	8W-53-3	S313	8W-52-7
S121	8W-15-4, 5	S314	8W-15-12
S122	8W-12-4; 8W-53-3	S315	8W-12-8
S124	8W-15-8	S316	8W-15-11
S125	8W-15-8; 8W-35-2	S317	8W-12-10
S126	8W-15-2	S318	8W-12-8; 8W-47-9, 10
S127	8W-70-2	S319	8W-47-5, 6
S128	8W-10-17, 19; 8W-70-7	S320	8W-12-5
S129	8W-10-17, 19; 8W-70-7	S321	8W-12-13
S130	8W-15-7; 8W-30-22	S322	8W-12-21; 8W-15-16
S131	8W-70-2	S323	8W-12-7
S132	8W-70-2	S324	8W-15-12
S133	8W-30-7	S325	8W-15-14
S134	8W-15-6; 8W-21-4; 8W-50-4	S326	8W-61-4
S135	8W-70-3	S327	8W-61-4
S136	8W-70-4, 8	S328	8W-15-10; 8W-45-11
S137	8W-10-4; 8W-20-3	S329	8W-44-14; 8W-45-11
S138	8W-10-15	S330	8W-15-9; 8W-54-3
S140	8W-30-24	S331	8W-54-2
S141	8W-70-9	S332	8W-10-4; 8W-12-9; 8W-48-2
S142	8W-30-30	S333	8W-15-14
S144	8W-30-25	S334	8W-12-21
S147	8W-52-8	S335	8W-47-5, 6
S149	8W-15-4; 8W-15-5, 8W-52-3, 8W-52-8	S336	8W-12-8
S150	8W-52-8	S400	8W-70-4
S152	8W-15-6, 7; 8W-52-8	S401	8W-63-6
S200	8W-30-2	S402	8W-15-15
S201	8W-12-8	S403	8W-12-18
S202	8W-15-18	S404	8W-63-12
S203	8W-30-18, 31	S405	8W-12-18
S204	8W-30-19, 32	S406	8W-15-13
S205	8W-15-18	S407	8W-63-11
S206	8W-31-5	S408	8W-12-17; 8W-52-3, 8
S207	8W-12-4; 8W-45-7	S409	8W-15-5; 8W-52-3, 8
S209	8W-44-11	S410	8W-12-15
S210	8W-10-7; 8W-39-2	S411	8W-15-9
S211	8W-70-8	S413	8W-52-3
S212	8W-12-6; 8W-50-11	S414	8W-52-3
S214	8W-44-12	S415	8W-12-15
S215	8W-12-5	S417	8W-15-11
S216	8W-15-17	S418	8W-51-6
S218	8W-12-10	S419	8W-15-10; 8W-51-6
S219	8W-42-6	S420	8W-30-28
S220	8W-15-17	S421	8W-30-26
S221	8W-42-2, 5		

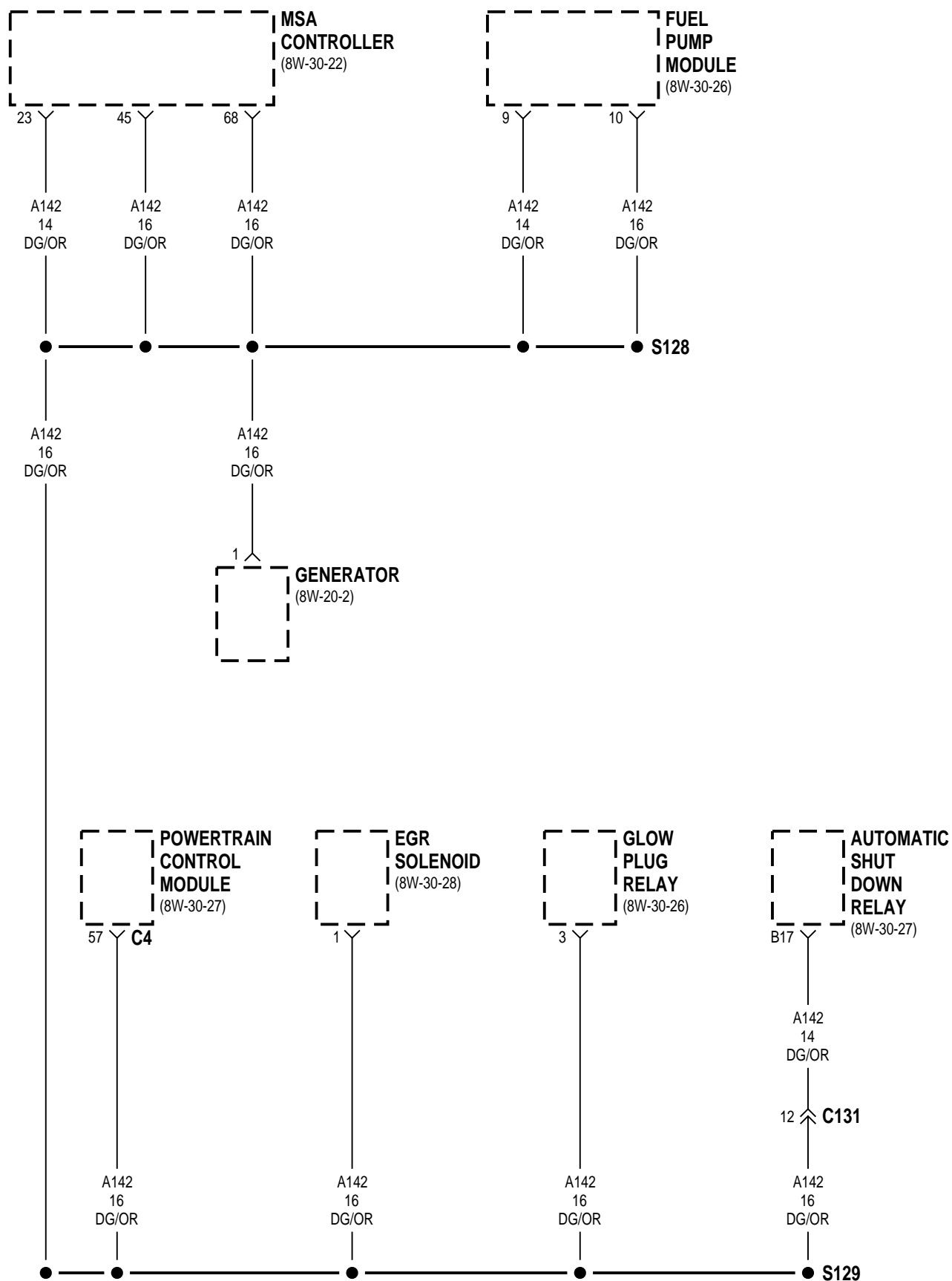


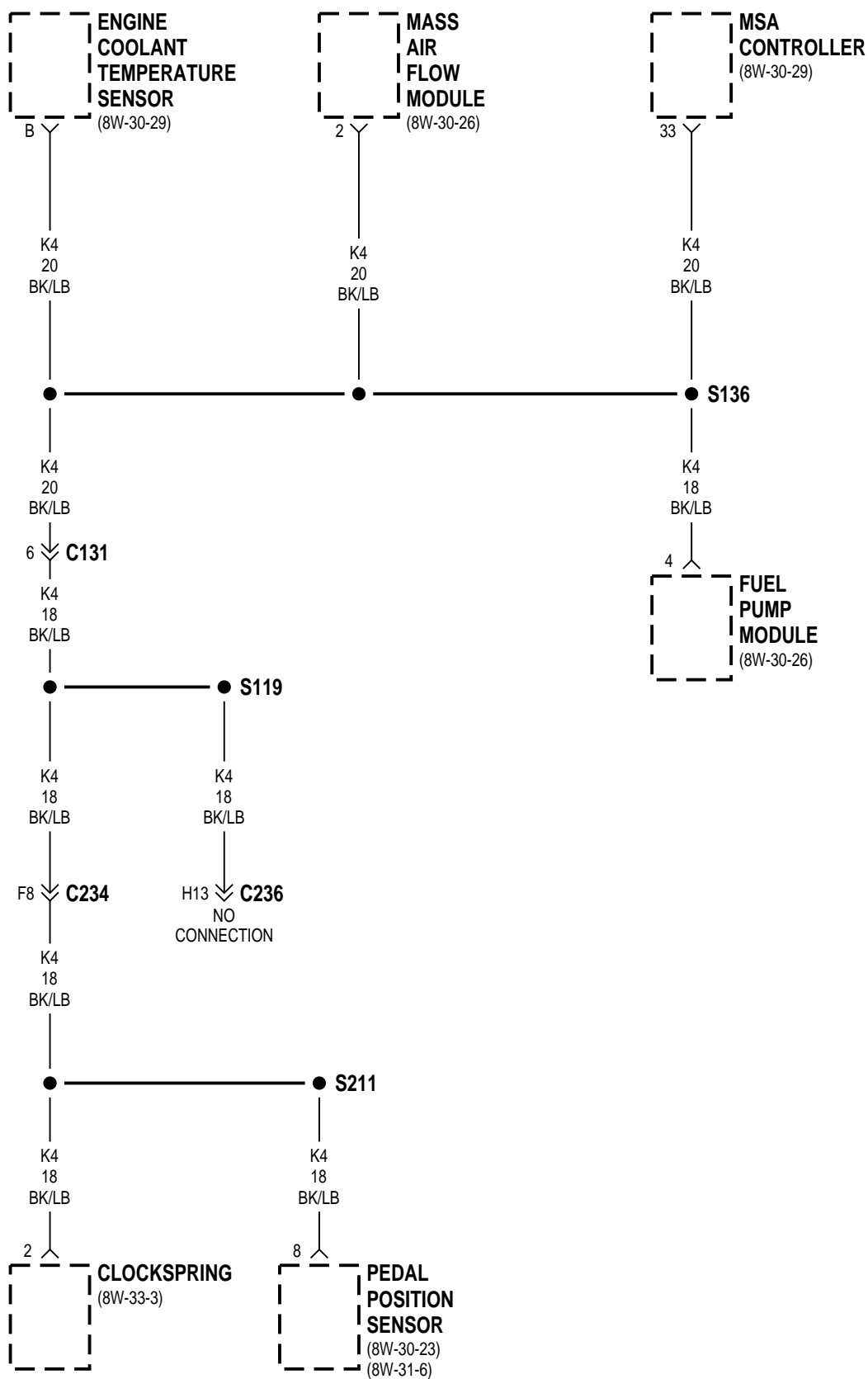


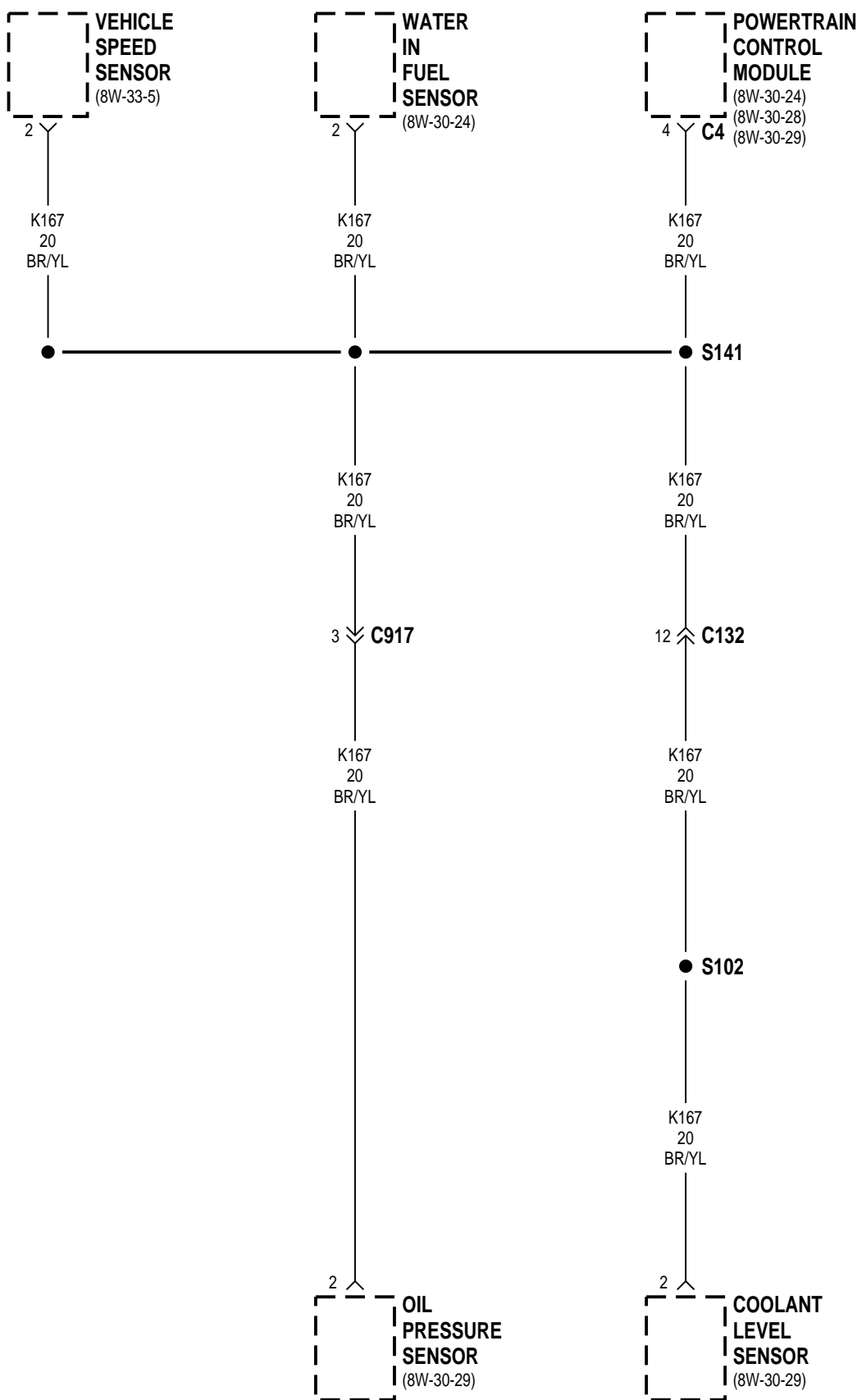












8W-80 CONNECTOR PIN-OUTS

INDEX

page

SCHEMATICS AND DIAGRAMS	1
-------------------------------	---

Component	Page	Component	Page
A/C Heater Control - C1	8W-80-5	C235	8W-80-16
A/C Heater Control - C2	8W-80-5	C236	8W-80-17
A/C High Pressure Switch	8W-80-5	C300	8W-80-17
A/C Low Pressure Switch	8W-80-5	C301	8W-80-17
Aftermarket Trailer Tow Connector	8W-80-5	C302	8W-80-17
Airbag Control Module	8W-80-6	C304	8W-80-18
Ambient Temperature Sensor	8W-80-6	C305 (Gas)	8W-80-18
Ash Receiver Lamp	8W-80-6	C305 (Diesel)	8W 80-19
Auto Headlamp Light Sensor/VTSS LED ..	8W-80-6	C307	8W-80-19
Automatic Day/Night Rearview Mirror	8W-80-6	C316	8W-80-20
Automatic Temperature Control Module ...	8W-80-7	C320	8W-80-20
Back-Up Lamp Switch	8W-80-7	C321	8W-80-20
Battery Temperature Sensor	8W-80-7	C322	8W-80-21
Blend Actuator Door Motor (with Automatic Temperature Control)	8W-80-8	C323	8W-80-21
Blend Actuator Motor Actuator (with Manual A/C- heater)	8W-80-8	C324	8W-80-21
Blower Motor (with Manual A/C-heater) ...	8W-80-8	C325	8W-80-21
Blower Motor (with Automatic Temperature Control)	8W-80-8	C326	8W-80-21
Blower Motor Resistor Block (with Manual A/C-heater)	8W-80-8	C328	8W-80-22
Blower Power Module	8W-80-9	C329	8W-80-22
Body Control Module - C1	8W-80-9	C330	8W-80-22
Body Control Module - C2	8W-80-10	C331	8W-80-22
Body Control Module - C3	8W-80-11	C334	8W-80-23
Brake Warning Switch	8W-80-11	C335	8W-80-23
C102	8W-80-11	C343	8W-80-23
C131 (Gas)	8W-80-12	C345	8W-80-24
C131 (Diesel)	8W-80-12	C351	8W-80-24
C132 (Gas)	8W-80-12	C353	8W-80-24
C132 (Diesel)	8W-80-12	C359	8W-80-25
C141 (Diesel)	8W-80-13	C364	8W-80-25
C150	8W-80-13	C371	8W-80-25
C159	8W-80-13	C372 (with Factory Trailer Tow)	8W-80-25
C160	8W-80-13	C917 (Diesel)	8W-80-26
C182 (Diesel)	8W-80-13	Camshaft Position Sensor (Gas)	8W-80-26
C206 (with Manual A/C-heater)	8W-80-14	Cargo Lamp	8W-80-26
C206 (with Automatic Temperature Control)	8W-80-14	Center High Mounted Stop Lamp No. 1 ..	8W-80-26
C212	8W-80-15	Center High Mounted Stop Lamp No. 2 ..	8W-80-26
C229	8W-80-15	Center High Mounted Stop Lamp No. 3 ..	8W-80-27
C231	8W-80-15	Cigar Lighter	8W-80-27
C233	8W-80-15	Clutch Interlock Switch (Diesel)	8W-80-27
C234	8W-80-16	Controller Anti-Lock Brake	8W-80-27
		Coolant Level Sensor (Diesel)	8W-80-27
		Crankshaft Position Sensor (Diesel)	8W-80-28
		Crankshaft Position Sensor (Gas)	8W-80-28
		Data Link Connector	8W-80-28
		Daytime Running Lamp Module	8W-80-29

DESCRIPTION AND OPERATION (Continued)

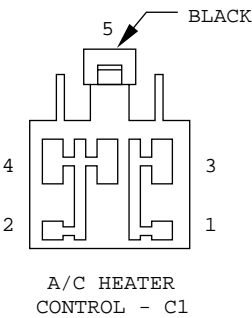
Component	Page	Component	Page
Dome/Reading Lamp	8W-80-29	Horn No. 2	8W-80-39
Downstream Heated Oxygen Sensor	8W-80-29	Idle Air Control Motor (with 4.0L Engine) .	8W-80-40
Driver Door Module - C1	8W-80-29	Idle Air Control Motor (with 5.2L Engine) .	8W-80-40
Driver Door Module - C2	8W-80-29	Ignition Coil	8W-80-40
Driver Door Module - C3	8W-80-30	Ignition Switch	8W-80-40
Driver Heated Seat Back	8W-80-30	In-Car Temperature Sensor	8W-80-40
Driver Heated Seat Cushion	8W-80-30	Injector No. 1	8W-80-41
Driver Lumbar Motor	8W-80-30	Injector No. 2	8W-80-41
Driver Power Seat Front Riser Motor	8W-80-31	Injector No. 3	8W-80-41
Driver Power Seat Front Riser Motor Sensor	8W-80-31	Injector No. 4	8W-80-41
Driver Power Seat Horizontal Motor	8W-80-31	Injector No. 5	8W-80-41
Driver Power Seat Horizontal Motor Sensor	8W-80-31	Injector No. 6	8W-80-42
Driver Power Seat Lumbar Sensor/Motor .	8W-80-31	Injector No. 7 (with 5.2 L Engine)	8W-80-42
Driver Power Seat Lumbar Switch	8W-80-32	Injector No. 8 (with 5.2 L Engine)	8W-80-42
Driver Power Seat Rear Riser Motor	8W-80-32	Instrument Cluster	8W-80-42
Driver Power Seat Rear Riser Motor Sensor	8W-80-32	Intake Air Temperature Sensor	8W-80-42
Driver Power Seat Recliner Motor	8W-80-32	Junction Block - C1	8W-80-42
Driver Power Seat Recliner Motor Sensor .	8W-80-33	Junction Block - C2	8W-80-43
Driver Power Seat Switch	8W-80-33	Junction Block - C3	8W-80-43
Driver Seat Heater Control Module	8W-80-33	Junction Block - C4	8W-80-43
Driver Side Airbag	8W-80-34	Junction Block - C5	8W-80-43
Duty Cycle EVAP/Purge Solenoid	8W-80-34	Junction Block - C6	8W-80-44
EGR Solenoid (Diesel)	8W-80-34	Junction Block - C7	8W-80-44
Engine Coolant Temperature Sensor Signal (Diesel)	8W-80-34	Junction Block - C8	8W-80-44
Engine Coolant Temperature Sensor (with 4.0L Engine)	8W-80-34	Junction Block - C9	8W-80-45
Engine Coolant Temperature Sensor (with 5.2L Engine)	8W-80-34	Junction Block - C10	8W-80-45
Engine Starter Motor	8W-80-35	Junction Block - C11	8W-80-45
Evaporative System Leak Detection Pump	8W-80-35	Junction Block Body Connector - C13	8W-80-45
Factory Trailer Tow Connector	8W-80-35	Junction Block Body Connector - C14	8W-80-46
Floor Console Lamps	8W-80-35	Junction Block (Overhead Console) - C15 .	8W-80-46
Four Wheel Drive Switch	8W-80-36	Key-In Switch/ Halo Lamp	8W-80-46
Fuel Heater (Diesel)	8W-80-36	Lamp Outage Module - C1	8W-80-47
Fuel Pump Module (Diesel)	8W-80-36	Lamp Outage Module - C2	8W-80-47
Fuel Pump Module(Gas)	8W-80-36	Left Airbag Sensor	8W-80-47
Fuel Sender Unit (Diesel)	8W-80-36	Left Back-Up Lamp	8W-80-48
Fuel Timing Solenoid (Diesel)	8W-80-36	Left Courtesy Lamp	8W-80-48
G-Switch	8W-80-37	Left Door Courtesy Lamp	8W-80-48
Generator (Gas)	8W-80-37	Left Fog Lamp	8W-80-48
Generator (Diesel)	8W-80-37	Left Front Cylinder Lock Switch	8W-80-48
Glove Box Lamp	8W-80-37	Left Front Door Lock Motor	8W-80-49
Glow Plug Relay (Diesel)	8W-80-37	Left Front Door Speaker	8W-80-49
Graphic Display Module Or Vehicle Information Center	8W-80-38	Left Front Park Lamp	8W-80-49
Headlamp Leveling Switch	8W-80-38	Left Front Power Window Motor	8W-80-49
Headlamp Switch	8W-80-39	Left Front Side Marker Lamp	8W-80-49
High Speed Blower Motor Relay	8W-80-39	Left Front Turn Signal Lamp	8W-80-50
Horn No. 1	8W-80-39	Left Front Wheel Speed Sensor	8W-80-50
		Left Headlamp	8W-80-50
		Left Headlamp Leveling Motor	8W-80-50
		Left Instrument Panel Speaker	8W-80-50
		Left License Lamp	8W-80-51
		Left Park Lamp	8W-80-51
		Left Park turn Signal Marker	8W-80-51
		Left Rear Door Lock Motor	8W-80-51

DESCRIPTION AND OPERATION (Continued)

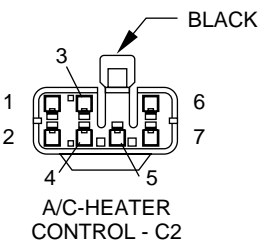
Component	Page	Component	Page
Left Rear Door Speaker	8W-80-51	Radio - C1	8W-80-68
Left Rear Fog Lamp	8W-80-51	Radio - C2	8W-80-68
Left Rear Power Window Motor	8W-80-52	Radio - C3	8W-80-68
Left Rear Power Window Switch	8W-80-52	Rear Speaker	8W-80-68
Left Rear Side Marker Lamp	8W-80-52	Rear Washer Pump Motor	8W-80-69
Left Rear Turn Signal Lamp	8W-80-52	Rear Wiper Module	8W-80-69
Left Rear Wheel Speed Sensor	8W-80-52	Rear Wiper/Washer Switch	8W-80-69
Left Side Repeater	8W-80-52	Recirculation Door Actuator (with ATC) . .	8W-80-69
Left Tail/Stop Lamp	8W-80-53	Right Airbag Sensor	8W-80-70
Left Visor/Vanity Mirror	8W-80-53	Right Back-Up Lamp	8W-80-70
Liftgate Ajar Switch	8W-80-53	Right Courtesy Lamp	8W-80-70
Liftgate Cylinder Lock Switch	8W-80-53	Right Door Courtesy Lamp	8W-80-70
Liftgate Lock Motor	8W-80-53	Right Fog Lamp	8W-80-70
Liftglass Ajar Switch	8W-80-54	Right Front Cylinder Lock Switch	8W-80-71
Liftglass Limit Switch	8W-80-54	Right Front Door Lock Motor	8W-80-71
Liftglass Push Button	8W-80-54	Right Front Door Speaker	8W-80-71
Liftglass Release Solenoid	8W-80-54	Right Front Park Lamp	8W-80-71
Manifold Absolute Pressure Sensor	8W-80-54	Right Front Power Window Motor	8W-80-71
Mass Air Flow Module	8W-80-55	Right Front Side Marker Lamp	8W-80-72
MSA Controller (Diesel)	8W-80-55	Right Front Turn Signal Lamp	8W-80-72
Memory Seat Module - C1	8W-80-56	Right Front Wheel Speed Sensor	8W-80-72
Memory Seat Module - C2	8W-80-56	Right Headlamp	8W-80-72
Mini Overhead Console	8W-80-57	Right Headlamp Leveling Motor	8W-80-72
Mode Door Actuator	8W-80-57	Right Instrument Panel Speaker	8W-80-72
Multi-Function Switch	8W-80-57	Right License Lamp	8W-80-73
Needle Sensor (Diesel)	8W-80-58	Right Park Lamp	8W-80-73
Oil Pressure Sensor	8W-80-58	Right Park Turn Signal Marker	8W-80-73
Output Shaft Speed Sensor	8W-80-58	Right Rear Door Lock Motor	8W-80-73
Overhead Console	8W-80-58	Right Rear Door Speaker	8W-80-73
Park/Neutral Position Switch	8W-80-59	Right Rear Fog Lamp	8W-80-73
Passenger Airbag	8W-80-59	Right Rear Power Window Motor	8W-80-74
Passenger Door Module - C1	8W-80-59	Right Rear Power Window Switch	8W-80-74
Passenger Door Module - C2	8W-80-59	Right Rear Side Marker Lamp	8W-80-74
Passenger Heated Seat Back	8W-80-60	Right Rear Turn Signal Lamp	8W-80-74
Passenger Heated Seat Cushion	8W-80-60	Right Rear Wheel Speed Sensor	8W-80-74
Passenger Lumbar Motor	8W-80-60	Right Side Repeater	8W-80-75
Passenger Lumbar Switch	8W-80-60	Right Tail/Stop Lamp	8W-80-75
Passenger Power Seat Front Riser Motor .	8W-80-61	Right Visor/Vanity Mirror	8W-80-75
Passenger Power Seat Horizontal Motor .	8W-80-61	Seat Belt Switch	8W-80-75
Passenger Power Seat Rear Riser Motor .	8W-80-61	Shift Interlock	8W-80-75
Passenger Power Seat Recliner Motor . .	8W-80-61	Solar Sensor	8W-80-75
Passenger Power Seat Switch	8W-80-61	Speed Proportional Steering Module	8W-80-76
Passenger Seat Heater Control Module . .	8W-80-62	Speed Proportional Steering Solenoid . . .	8W-80-76
Pedal Position sensor (Diesel)	8W-80-62	Steering Wheel Speed Sensor	8W-80-77
Power Amplifier - C1	8W-80-62	Steering Wheel Speed Sensor	8W-80-77
Power Amplifier - C2	8W-80-62	Stop Lamp Switch	8W-80-77
Power Amplifier (LTD+) - C1	8W-80-63	Switch Pod	8W-80-77
Power Amplifier (LTD+) - C2	8W-80-63	Sunroof Control Module	8W-80-77
Power Outlet	8W-80-64	Throttle Position Sensor	8W-80-78
Powertrain Control Module - C1	8W-80-64	Trailer Tow Circuit Breaker	8W-80-78
Powertrain Control Module - C2	8W-80-65	Trailer Tow Left Turn Relay	8W-80-78
Powertrain Control Module - C3	8W-80-66	Trailer Tow Right Turn Relay	8W-80-78
Powertrain Control Module - C4 (Diesel) .	8W-80-67	Trailer Tow Stop Lamp Relay	8W-80-79

DESCRIPTION AND OPERATION (Continued)

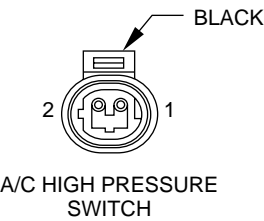
Component	Page	Component	Page
Transmission Solenoid Assembly	8W-80-79	Vehicle Speed Sensor (Gas)	8W-80-80
Underhood Lamp	8W-80-79	Water In-Fuel Sensor (Diesel)	8W-80-81
Upstream Heated Oxygen Sensor	8W-80-79	Windshield Washer Pump Motor	8W-80-81
Vehicle Information Center	8W-80-80	Windshield Wiper Motor	8W-80-81
Vehicle Speed Control Servo	8W-80-80	Wiper Fluid Level Sensor	8W-80-81
Vehicle Speed Control/Horn Switch	8W-80-80		
Vehicle Speed Sensor (Diesel)	8W-80-81		



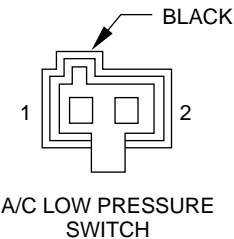
CAV	CIRCUIT	FUNCTION
1	C4 14TN	LOW BLOWER MOTOR DRIVER
2	C5 14LG	M1 BLOWER MOTOR DRIVER
3	C7 12BK/TN	HIGH BLOWER MOTOR DRIVER
4	C1 14DG	GROUND
5	C6 14LB	M2 BLOWER MOTOR DRIVER



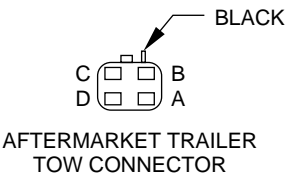
CAV	CIRCUIT	FUNCTION
1	-	-
2	C36 20DB/RD	BLEND AIR DOOR POSITION SWITCH SIGNAL
3	C34 20VT/WT	GROUND
4	E2 20OR	PANEL LAMP DRIVER
5	-	-
6	F71 20DG/PK	FUSED IGNITION SWITCH OUTPUT (RUN)
7	C90 20LG	A/C SELECT INPUT



CAV	CIRCUIT	FUNCTION
1	C21 18DB/OR	A/C PRESSURE SWITCH SENSE
2	C3 18DB/BK	A/C COMPRESSOR CLUTCH
2	Z1 18BK*	GROUND

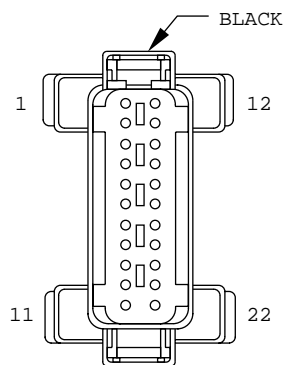


CAV	CIRCUIT	FUNCTION
1	C3 18DB/BK*	A/C PRESSURE SWITCH SENSE
1	C13 16DB**	A/C COMPRESSOR CLUTCH RELAY CONTROL
2	C21 18DB/OR	A/C PRESSURE SWITCH SENSE



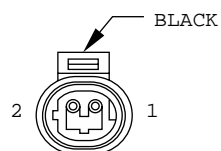
CAV	CIRCUIT	FUNCTION
A	L50 18WT/TN	STOP LAMP SWITCH OUTPUT
B	L90 18DB/RD	PARK LAMP RELAY OUTPUT
C	L60 18TN	RIGHT TURN SIGNAL
D	F70 18PK/BK	FUSED B(+)

* GAS
** DIESEL



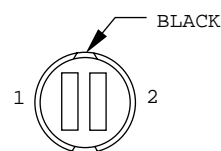
AIRBAG CONTROL MODULE

CAV	CIRCUIT	FUNCTION
1	R45 18DG/LB	DRIVER AIRBAG LINE 2
2	R43 18BK/LB	DRIVER AIRBAG LINE 1
3	-	-
4	-	-
5	R42 18BK/YL	PASSENGER AIRBAG LINE 1
6	R44 18DG/YL	PASSENGER AIRBAG LINE 2
7	-	-
8	-	-
9	-	-
10	Z6 16BK/PK	GROUND
11	-	-
12	-	-
13	-	-
14	-	-
15	-	-
16	-	-
17	G5 18DB/WT	FUSED IGNITION SWITCH OUTPUT (RUN/START)
18	D2 18WT/BK	CCD BUS (-)
19	D1 18VT/BR	CCD BUS (+)
20	F20 18WT	FUSED IGNITION SWITCH OUTPUT (RUN)
21	-	-
22	-	-



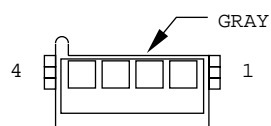
AMBIENT TEMPERATURE SENSOR

CAV	CIRCUIT	FUNCTION
1	D41 20LG/WT	SENSOR RETURN
2	C8 20DG/RD	AMBIENT TEMPERATURE SENSOR SIGNAL



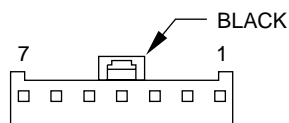
ASH RECIEVER LAMP

CAV	CIRCUIT	FUNCTION
1	E2 20OR	PANEL LAMP DRIVER
2	Z1 20BK	GROUND

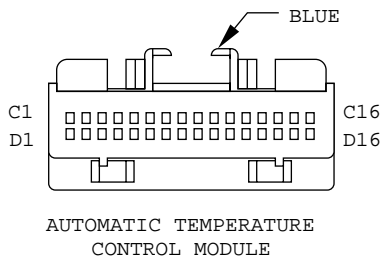


AUTO HEADLAMP LIGHT SENSOR/VTSS LED

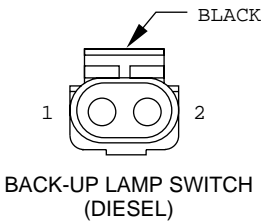
CAV	CIRCUIT	FUNCTION
1	F75 18VT	FUSED B(+)
2	G69 20BK/LG	VTSS INDICATOR LAMP DRIVER
3	L109 20WT	ULTRALIGHT LIGHT SENSOR DRIVER
4	L110 20OR/BK	ULTRALIGHT LIGHT SENSOR SIGNAL

AUTOMATIC DAY/
NIGHT MIRROR

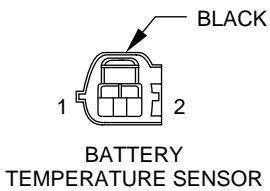
CAV	CIRCUIT	FUNCTION
1	F83 20BK/VT	FUSED IGNITION FUSED OUTPUT (RUN)
2	Z1 20BK	GROUND
3	L10 20BK/RD	BACK-UP LAMP SWITCH OUTPUT
4	P112 20BK/WT	ELECTRIC CHROMATIC MIRROR (+)
5	P114 20BK/YL	ELECTRIC CHROMATIC MIRROR (-)
6	-	-
7	-	-



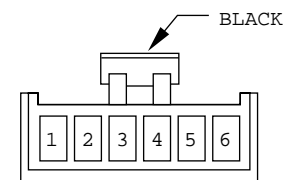
CAV	CIRCUIT	FUNCTION
C1	C37 20YL	MODE DOOR MOTOR DRIVER
C2	C35 20DG/YL	BLEND AIR DOOR MOTOR DRIVER
C3	C39 20WT	MODE DOOR MOTOR POSITION SENSE
C4	-	-
C5	-	-
C6	C90 20LG	A/C SELECT INPUT
C7	-	-
C8	C40 20BR/WT	5 VOLT SUPPLY
C9	C43 18YL/BR	BLOWER POWER MODULE OUTPUT
C10	D1 18VT/BR	CCD BUS(+)
C11	D2 18WT/BK	CCD BUS(-)
C12	F71 20DG/PK	FUSED IGNITION SWITCH OUTPUT (RUN)
C13	F60 20WT/RD	FUSED B(+)
C14	C36 20RD/WT	BLEND AIR DOOR FEEDBACK SIGNAL
C15	-	-
C16	-	-
D1	C38 20DB	MODE DOOR MOTOR DRIVER
D2	C42 18PK/DB	HIGH SPEED BLOWER MOTOR RELAY SIGNAL
D3	C32 20DB/GY	RECIRCULATION DOOR MOTOR DRIVER
D4	C33 20DB/RD	RECIRCULATION DOOR MOTOR DRIVER
D5	C41 20GY/DB	HIGH SPEED BLOWER MOTOR RELAY CONTROL
D6	C34 20DB/WT	BLEND AIR DOOR MOTOR DRIVER
D7	Z4 20PK	GROUND
D8	-	-
D9	D41 20LG/WT	SENSOR RETURN
D10	-	-
D11	-	-
D12	C10 20RD/TN	IN-CAR TEMPERATURE SENSOR SIGNAL
D13	E2 20OR	PANEL LAMP DRIVER
D14	-	-
D15	C47 20BK/WT	SOLAR SENSOR SIGNAL
D16	-	-



CAV	CIRCUIT	FUNCTION
1	F83 18YL/DG	FUSED IGNITION SWITCH OUTPUT
2	L10 18BR/LG	BACK-UP SWITCH OUTPUT

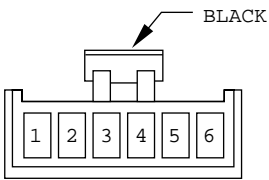


CAV	CIRCUIT	FUNCTION
1	T222 18RD/YL	BATTERY TEMPERATURE SENSE SIGNAL
2	K4 18BK/LB	SENSOR GROUND



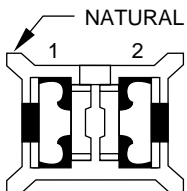
BLEND DOOR ACTUATOR
(WITH AUTOMATIC
TEMPERATURE CONTROL)

CAV	CIRCUIT	FUNCTION
1	C40 20DG/YL	5 VOLT SUPPLY
2	C36 20DB/RD	BLEND AIR DOOR FEEDBACK SIGNAL
3	D41 20LG/WT	SENSOR RETURN
4	-	-
5	C35 20DB/WT	BLEND AIR DOOR MOTOR DRIVER
6	C34 20VT/WT	BLEND AIR DOOR MOTOR DRIVER



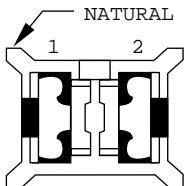
BLEND DOOR
ACTUATOR
(WITH MANUAL
A/C-HEATER)

CAV	CIRCUIT	FUNCTION
1	C40 20WT/YL	5 VOLT SUPPLY
2	F71 20PK/DG	FUSED IGNITION SWITCH OUTPUT (RUN)
3	C36 20DB/RD	BLEND AIR DOOR POSITION SWITCH SIGNAL
4	C34 20VT/WT	COMMON DOOR DRIVER
5	-	-
6	-	-



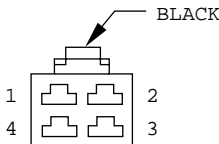
BLOWER MOTOR
(WITH MANUAL
A/C-HEATER)

CAV	CIRCUIT	FUNCTION
1	A19 12RD	BLOWER MOTOR DRIVER
2	C7 12BK	GROUND



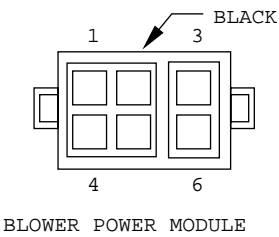
BLOWER MOTOR
(WITH AUTOMATIC
TEMPERATURE CONTROL)

CAV	CIRCUIT	FUNCTION
1	C42 12RD	HIGH SPEED BLOWER MOTOR RELAY SIGNAL
2	Z4 12BK	GROUND

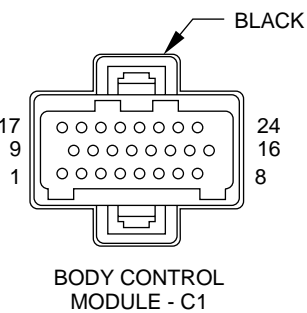


BLOWER MOTOR
RESISTOR BLOCK
(WITH MANUAL A/C-HEATER)

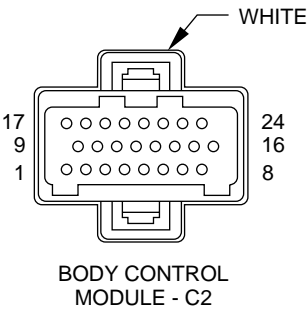
CAV	CIRCUIT	FUNCTION
1	C4 14TN	LOW BLOWER MOTOR DRIVER
2	C6 14LB	M2 BLOWER MOTOR DRIVER
3	C7 12BK	HIGH BLOWER MOTOR DRIVER
4	C5 14LG	M1 BLOWER MOTOR DRIVER



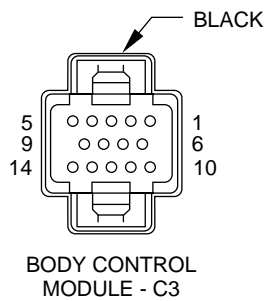
CAV	CIRCUIT	FUNCTION
1	C42 12BR/RD	BLOWER MOTOR DRIVER
2	-	-
3	A19 10RD	FUSED B(+)
4	C43 18BR/YL	BLOWER POWER MODULE OUTPUT
5	Z4 18BK	GROUND
6	-	-



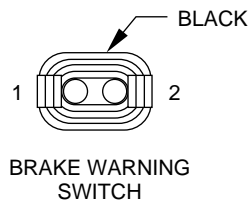
CAV	CIRCUIT	FUNCTION
1	V51 18WT	WINDSHIELD WIPER SWITCH SIGNAL
2	D41 20LG/WT	SENSOR RETURN
3	-	-
4	-	-
5	C8 20DG/RD	AMBIENT TEMPERATURE SENSOR SIGNAL
6	M11 20PK/LB	SWITCHED COURTESY LAMP FEED
7	L24 20LB/RD	AUTO HEADLAMP SWITCH SENSE
8	C80 20DB/YL	REAR WINDOW DEFOGGER SWITCH SENSE
9	L4 16VT/OR	DIMMER SWITCH LOW BEAM OUTPUT
10	-	-
11	-	-
12	G70 20BR/TN	HOOD AJAR SWITCH SENSE
13	-	-
14	G26 20LB	KEY-IN IGNITION SWITCH SENSE
15	L35 20BR/WT	FOG LAMP SWITCH OUTPUT
16	Z2 20BK/OR	GROUND
17	L90 20DB/RD	PARK LAMP RELAY OUTPUT
18	F99 20OR	FUSED IGNITION SWITCH OUTPUT (START/RUN)
19	D1 18VT/BR	CCD BUS (+)
20	D2 18WT/BK	CCD BUS (-)
21	-	-
22	-	-
23	G69 20BK/LG	VTSS INDICATOR LAMP DRIVER
24	L3 16RD/OR	DIMMER SWITCH HIGH BEAM OUTPUT



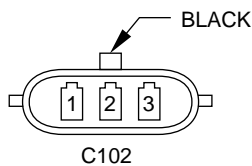
CAV	CIRCUIT	FUNCTION
1	-	-
2	L109 20WT	ULTRALIGHT SENSOR DRIVER
3	709 20RD/BK	RADIO CONTROL MUX
4	V66 16VT/WT	WIPER PARK SWITCH SENSE
5	-	-
6	M112 20BR/LG	COURTESY LAMP RELAY CONTROL
7	C90 20LG	A/C SELECT INPUT
8	F75 18VT	FUSED B(+)
9	L110 20OR/BK	ULTRALIGHT SENSOR SIGNAL
10	-	-
11	-	-
12	714 20BK/OR	AUTO HEADLAMP RELAY CONTROL
13	X4 20GY/OR	HORN RELAY CONTROL
14	C14 20WT/RD	REAR WINDOW DEFOGGER RELAY CONTROL
15	V23 20BR/PK	FUSED IGNITION SWITCH OUTPUT (ACC/RUN)
16	E2 20OR	PANEL LAMP DRIVER
17	V11 18TN/BK	WASHER SWITCH OUTPUT
18	V50 18LG/WT	WIPER SWITCH MODE SENSE
19	-	-
20	707 20BK/WT	PANEL LAMP DIMMER SWITCH SIGNAL
21	L79 20TN	PARK LAMP RELAY CONTROL
22	L95 20DG/YL	FOG LAMP RELAY CONTROL
23	V18 20YL/LG	INTERMITTENT WIPER RELAY CONTROL
24	Z1 16BK	GROUND



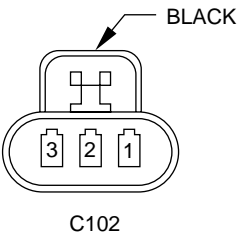
CAV	CIRCUIT	FUNCTION
1	G78 20TN/BK	LEFTGATE AJAR SWITCH SENSE
2	G9 20GY/BK	PARK BRAKE SENSE
3	G76 18TN/YL	RIGHT REAR DOOR AJAR SWITCH SENSE
4	G75 18TN	LEFT FRONT DOOR AJAR SWITCH SENSE
5	-	-
6	M4 20WT/LG	LIFTGATE COURTESY LAMP DISABLE
7	-	-
8	Z2 18BK/OR	GROUND
9	G74 18TN/RD	RIGHT FRONT DOOR AJAR SWITCH SENSE
10	G71 20VT/YL	VTSS DISARM SENSE
11	-	-
12	-	-
13	G77 18TN/OR	LEFT REAR DOOR AJAR SWITCH SENSE
14	G10 20LG/RD	SEAT BELT SWITCH SENSE



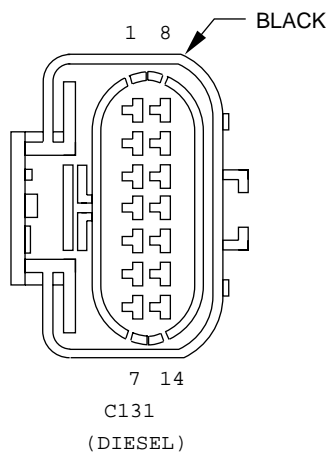
CAV	CIRCUIT	FUNCTION
1	G9 16GY/BK	RED BRAKE WARNING LAMP DRIVER
2	G9 16GY/BK	RED BRAKE WARNING LAMP DRIVER



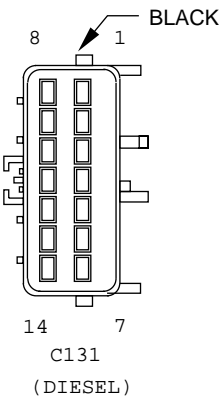
CAV	CIRCUIT
1	L65 18LG/DB
2	L90 18DB/RD
3	Z1 18BK



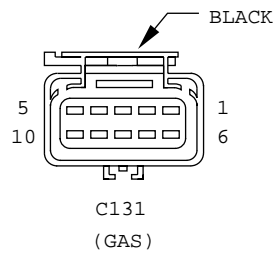
CAV	CIRCUIT
1	L65 18LG/DB
2	L90 18DB/RD
3	Z1 18BK



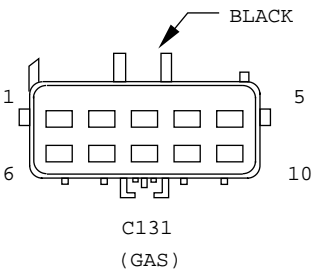
CAV	CIRCUIT
1	-
2	-
3	G40 18LB/BK
4	F99 20OR
5	G18 20PK/BK
6	K4 18BK/LB
7	L10 18BR/LG
8	G118 20PK/DB
9	A64 14OR/DB
10	Z1 12BK
11	F6 18WT/RD
12	A142 16DG/OR
13	F83 18YL/DG
14	C3 18DB/BK



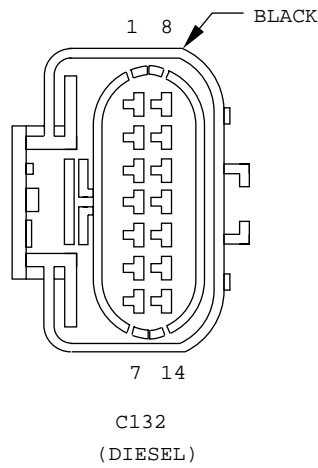
CAV	CIRCUIT
1	-
2	-
3	G40 18LB/BK
4	F99 20OR
5	G18 20PK/BK
6	K4 20BK/LB
7	L10 18BR/LG
8	G118 20PK/DB
9	A64 14DG/WT
10	Z1 12BK
11	F6 18WT/RD
12	A142 16DG/OR
13	F83 18YL/DG
14	C3 18DB/BK



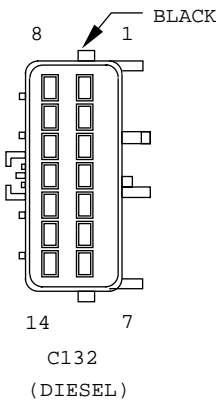
CAV	CIRCUIT
1	T20 18LB
2	F99 20OR
3	-
4	A142 18DG/OR
5	F5 14RD/YL
6	L10 18BR/LG
7	C2 18DB/YL
8	G28 20LG/OR
9	-
10	K4 20BK/LB
10	-



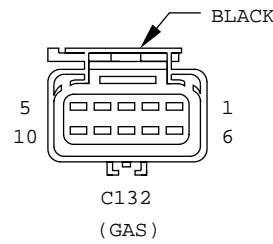
CAV	CIRCUIT
1	T20 18LB
2	F99 18OR
3	-
4	A142 18DG/OR
5	F5 14RD/YL
6	L10 18BR/LG
7	C2 18DB/YL
8	G28 20LG/OR●
9	-
10	K4 18BK/LB*
10	K4 20BK/LB**



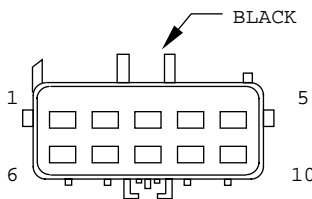
CAV	CIRCUIT
1	L53 20BR
2	Z1 18BK
3	Z2 18BK/OR
4	D2 18WT/BK
5	D1 18VT/BR
6	T106 20GY/OR
7	T107 20BK/RD
8	V32 20YL/RD
9	L50 18WT/TN
10	C13 16DB/RD
11	G28 20LG/OR
12	K167 20BR/YL
13	-
14	K900 20PK/BK



CAV	CIRCUIT
1	L53 20BR
2	Z1 18BK
3	Z2 18BK/OR
4	D2 18WT/BK
5	D1 18BT/BR
6	T106 20GY/OR
7	T107 20BK/RD
8	V32 20YL/RD
9	L50 18WT/TN
10	C13 16DB/RD
11	G28 20LG/OR
12	K167 20BR/YL
13	-
14	K900 20PK/BK

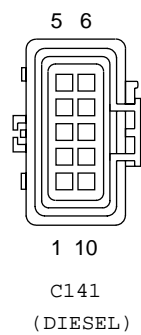


CAV	CIRCUIT
1	Z1 18BK
2	Z2 18BK/OR
3	-
4	T41 20BK/WT
5	G7 18WT/OR
6	K20 18DG
7	T66 20BR/OR
8	F83 18YL/DG
9	T106 20GY/OR
10	T107 20BK/RD

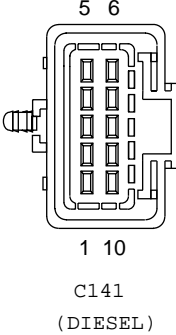


CAV	CIRCUIT
1	Z1 18BK
2	Z2 18BK/OR
3	-
4	T41 20BK/WT
5	G7 18WT/OR
6	K20 18DG
7	T66 20BR/OR
8	F83 18YL/DG
9	T106 20GY/OR●
10	T107 20BK/RD●

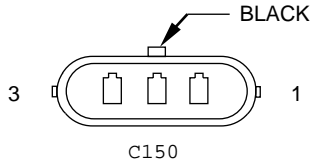
- 4WD
- * 5.2L
- ** 4.0L



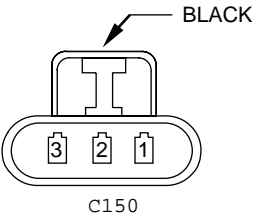
CAV	CIRCUIT
1	C2 18DB/YL
2	-
3	D83 20BK/PK
4	K95 20PK
5	C21 18DB/OR
6	T40 12LB/BK
7	K95 20PK
8	V32 20YL/RD
9	C21 18DB/OR
10	T40 12LG/BK



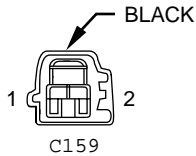
CAV	CIRCUIT
1	C2 18DB/YL
2	D83 20BK/WT
3	D84 20BK/WT
4	K95 20PK
5	C21 18DB/OR
6	T40 12LB/BK
7	-
8	-
9	-
10	-



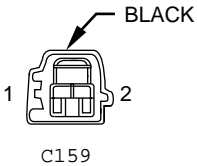
CAV	CIRCUIT
1	L64 18LG/DB
2	L90 18DB/RD
3	Z1 18BK



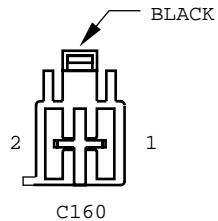
CAV	CIRCUIT
1	L64 18LG/DB
2	L90 18DB/RD
3	Z1 18BK



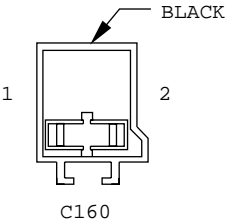
CAV	CIRCUIT
1	M1 18PK
2	Z1 18BK
2	-



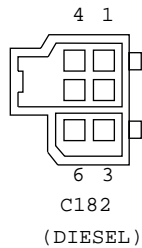
CAV	CIRCUIT
1	M1 18PK
2	Z1 18PK
2	Z4 18BK**



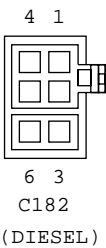
CAV	CIRCUIT
1	A19 12RD/VT
2	Z4 12BK



CAV	CIRCUIT
1	A1910RD*
1	A19 12RD**
2	Z4 12BK

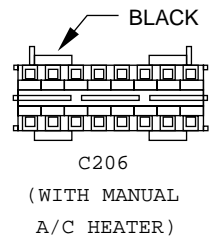


CAV	CIRCUIT
1	K255 20WT/DG
2	K151 20WT
3	K6 20VT/WT
4	K22 20OR/DB

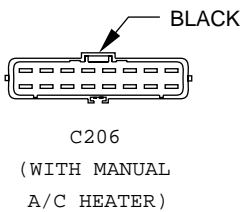


CAV	CIRCUIT
1	K255 20WT/DG
2	K151 20WT
3	K6 20VT/WT
4	K22 20OR/DB

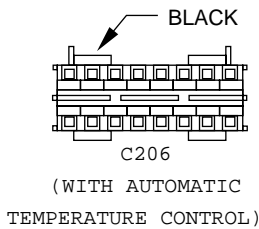
* GAS
** DIESEL



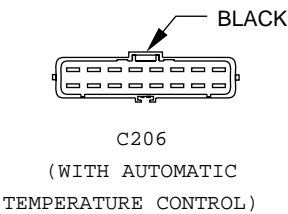
CAV	CIRCUIT
A	-
B	C7 12BK/TN
C	C6 14LB
D	C5 14LG
E	C4 14TN
F	C36 20DB/RD
G	F71 20PK/DG
H	C34 20VT/WT
J	C1 14DG
K	-
L	-
M	-
N	-
P	-
R	-
S	-



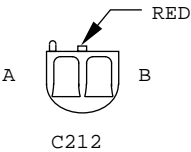
CAV	CIRCUIT
A	-
B	C7 12BK/TN
C	C6 14LB
D	C5 14LG
E	C4 14TN
F	C36 20DB/RD
G	F71 20PK/DG
H	C34 20VT/WT
J	Z4 12BK
K	-
L	-
M	-
N	-
P	-
R	-
S	-



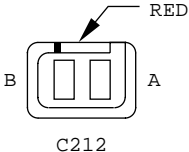
CAV	CIRCUIT
A	C39 20WT
B	C37 20YL
C	C35 20DG/YL
D	C36 20RD/WT
E	C34 20DB/WT
F	F71 20PK/DG
G	C33 20DB/RD
H	C32 20DB/GY
J	C38 20DB
K	C40 20BR/WT
L	C41 20GY/DB
M	C42 18PK/DB
N	C43 18YL/BR
P	Z4 20PK
R	-
S	D41 20LG/WT



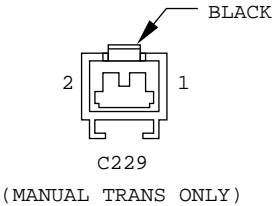
CAV	CIRCUIT
A	C39 20YL
B	C37 20TN/BK
C	C35 20DB/WT
D	C36 20DB/RD
E	C34 20VT/WT
F	F71 20PK/DG
G	C33 20VT/OR
H	C32 20LB/DG
J	C38 20DG
K	C40 20DG/YL
L	C41 20BR
M	C42 12BR/RD
N	C43 18BR/YL
P	Z4 20BK
R	-
S	D41 20LG/WT



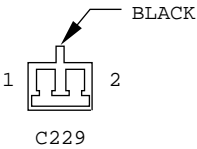
CAV	CIRCUIT
A	G28 20LG/OR
B	107 20BK/RD



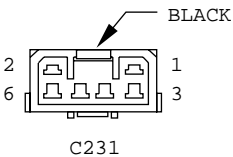
CAV	CIRCUIT
A	G42 20LG/RD
B	T10 20YL/BK



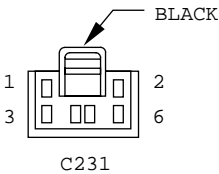
CAV	CIRCUIT
1	A41 14YL
2	T141 14YL/RD



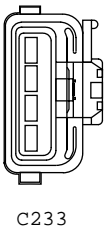
CAV	CIRCUIT
1	T141 14YL/RD
2	T141 14YL/RD



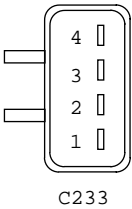
CAV	CIRCUIT
1	D1 18VT/BR
2	D2 18WT/BK
3	P112 20YL/WT
4	P114 20YL/BK
5	F86 16LG/BK
6	-



CAV	CIRCUIT
1	D1 18VT/BR
2	D2 18WT/BK
3	P112 20YL/WT
4	P114 20YL/BK
5	F86 16LG/BK
6	-

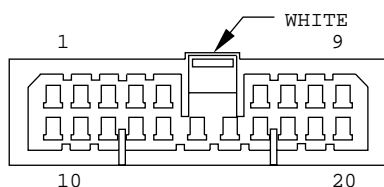


CAV	CIRCUIT
E1	A1 12RD/WT
E2	F61 16WT/OR
E4	T141 14YL/RD
E4	-



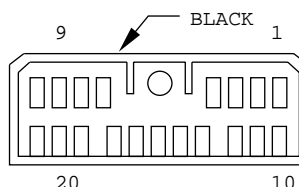
CAV	CIRCUIT
E1	A1 12RD/WT
E2	F61 16WT/OR
E4	A41 14YL*
E4	T141 14YL/RD**

* GAS
** DIESEL



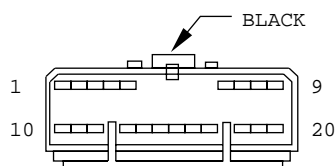
C234

CAV	CIRCUIT
F1	V11 18TN/BK
F2	L3 16RD/OR
F3	L4 16VT/OR
F4	V4 18RD/YL
F5	G9 16GY/BK*
F5	G9 18GY/BK**
F6	G18 16PK/BK*
F6	G118 16PK/DB**
F7	G29 16BK/TN
F8	K4 20BK/LB*
F8	K4 18BK/LB**
F9	V32 18YL/RD*
F9	V32 20YL/RD**
F10	L65 18LG/DB
F11	C8 20DG/RD
F12	G34 20RD/GY ●●
F12	L3 16RD/OR ●
F12	L3 16RD/OR**
F13	L53 18BR*
F13	L53 20BR**
F14	D83 20BK/PK
F15	D84 18BK/WT*
F15	D84 20BK/WT**
F17	V20 18WT/BK
F18	V6 16DB
F19	K95 18PK*
F19	K95 20PK**
F20	T9 20OR*



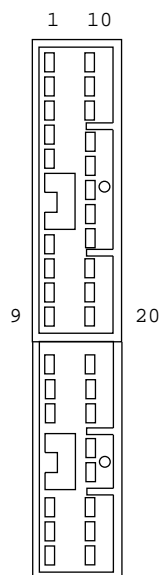
C234

CAV	CIRCUIT
F1	V11 18TN/BK
F2	L3 16RD/OR
F3	L4 16VT/OR
F4	V4 18RD/YL
F5	G9 16GY/BK
F6	G18 16PK/BK*
F7	G29 20BK/TN
F8	K4 18BK/LB
F9	V32 20YL/RD
F10	L65 18LG/DB
F11	C8 20DG/RD
F12	L3 16RD/OR
F13	L53 20BR
F14	D83 20BK/PK
F15	D84 20BK/WT
F16	-
F17	V20 18WT/BK
F18	V6 16DB
F19	K95 20PK
F20	T9 20OR



C235

CAV	CIRCUIT
G1	G68 18BR/YL*
G2	V30 20DB/LG
G3	T106 20GY/OR
G4	-
G5	205 20WT/VT
G6	D98 20WT*
G7	-
G8	-
G9	G68 18BR/YL
G10	V18 20YL/LG
G11	D41 20LG/WT
G12	S1 20BK/YL*
G13	S2 20BK/LG*
G14	S3 20PK/WT*
G15	S4 20VT*
G16	V3 18BR/WT
G17	V66 18VT/WT
G18	F83 18YL/DG
G19	D1 18VT/BR
G20	D2 18WT/BK



C235

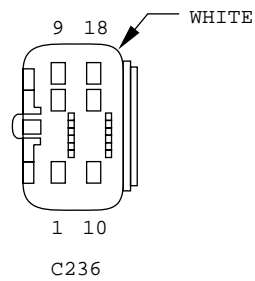
CAV	CIRCUIT
G1	-
G2	-
G3	-
G4	D98 20WT
G5	205 20WT/VT
G6	G70 20BR/TN
G7	T106 20GY/OR
G8	V30 20DB/LG
G9	G68 20BR/YL
G10	D2 18WT/BK
G11	D1 18VT/BR
G12	F83 18YL/DG
G13	V66 16VT/WT
G14	V3 18BR/WT
G15	S4 20VT*
G16	S3 20PK/WT*
G17	S2 20BK/LG*
G18	S1 20BK/YL*
G19	D41 20LG/WT***
G20	V18 20YL/LG

* GAS

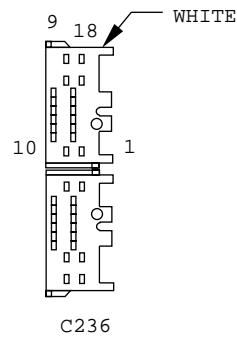
** DIESEL

● = UNITED STATES

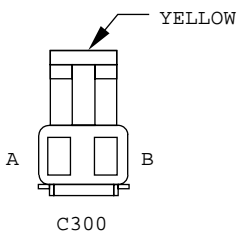
●● = DAYTIME RUNNING LAMPS J978W-3



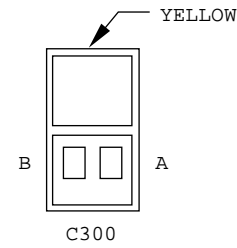
CAV	CIRCUIT
H1	-
H2	L101 20RD
H3	L102 20WT
H4	L103 20LB
H5	L104 20LG
H6	L105 20PK
H7	L106 20YL
H8	F99 20OR**
H9	-
H10	-
H11	Z1 18BK
H12	Z2 18BK/OR
H13	K4 20BK/LB**
H14	-
H15	-
H16	-
H17	-
H18	-



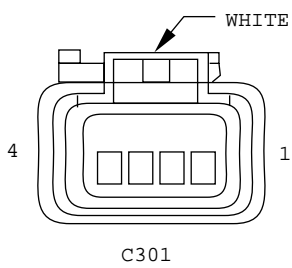
CAV	CIRCUIT
H1	-
H2	L101 20RD
H3	L102 20WT
H4	L103 20LB
H5	L104 20LG
H6	L105 20PK
H7	L106 20YL
H8	F99 20OR
H9	-
H10	-
H11	Z1 18BK
H12	Z2 18BK/OR
H13	-
H14	-
H15	-
H16	-
H17	-
H18	-



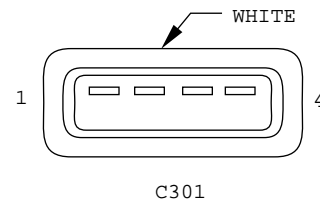
CAV	CIRCUIT
A	R44 18DG/YL
B	R42 18BK/YL



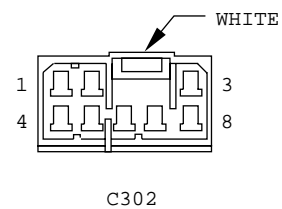
CAV	CIRCUIT
A	R44 18DB
B	R42 18VT



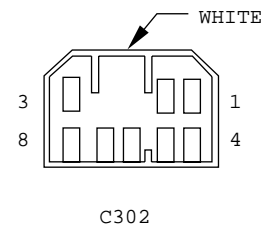
CAV	CIRCUIT
1	C15 12BK/WT
2	Z1 14BK
3	P7 18LB/BK
4	P8 18LB/WT



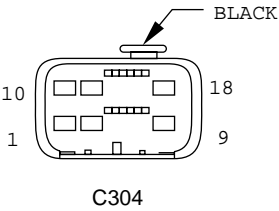
CAV	CIRCUIT
1	C15 12BK/WT
2	Z1 14BK
3	P7 20LB
4	P8 20LB/WT



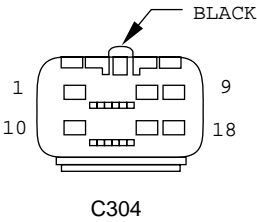
CAV	CIRCUIT
1	D1 18VT/BR
2	D2 18WT/BK
3	-
4	F71 18PK/DG
5	-
6	E2 18OR
7	P112 18YL/WT
8	P114 18YL/BK



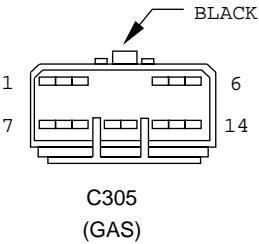
CAV	CIRCUIT
1	D1 18VT/BR
2	D2 18WT/BK
3	-
4	F71 20PK/DG
5	-
6	E2 20OR
7	P112 20YL/WT
8	P114 20YL/BK



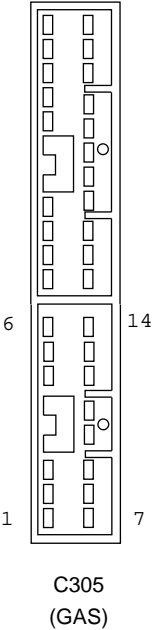
CAV	CIRCUIT
1	-
2	G9 20GY/BK
3	B1 20YL/DB
4	B2 20YL
5	-
6	B41 20YL/VT
7	B42 20TN/WT
8	B43 20PK/OR
9	-
10	G40 18LB/BK
11	-
12	B3 20LG/DB
13	B4 20LG
14	-
15	K167 20BR/YL
16	L50 18WT/TN
17	-
18	A64 16DG/WT



CAV	CIRCUIT
2	G9 20GY/BK*
2	G9 20GY/BK*
2	G9 18GY/BK**
3	B1 20YL/DB
4	B2 20YL
5	-
6	B41 20YL/VT
7	B42 20TN/WT
8	B43 20PK/OR
9	-
10	G40 18LB/BK
11	-
12	B3 20LG/DB
13	B4 20LG
15	K4 20BK/LB*
15	K167 20BR/YL**
16	L50 18WT/TN
17	-
18	A64 14DG/WT**
18	A64 16DG/WT*

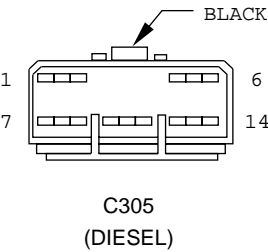


CAV	CIRCUIT
1	-
2	-
3	V24 18BR/OR
4	V20 18BK/WT
5	X55 16BR/RD
5	X55 16BR/RD
6	X53 16DG
6	X53 16DG
7	X54 16VT
7	X54 16VT
8	X56 16DB
8	X56 16DB
9	Z5 14BK/LB
9	Z5 14BK/LB
10	X51 16BR/YL
10	X51 16BR/YL
11	X57 16BR/LB
11	X57 16BR/LB
12	L50 18WT/TN
13	X52 16DB/WT
13	X52 16DB/WT
14	X58 16DB/OR
14	X58 16DB/OR

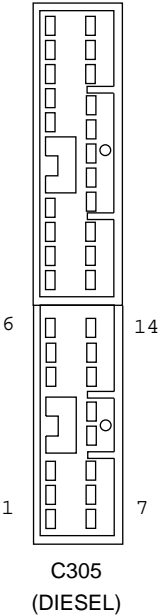


CAV	CIRCUIT
1	X53 20DG
2	X55 20BR/RD
3	V20 18WT/BK
4	V24 18BR/OR
5	-
6	-
7	X58 20DB/OR
8	X52 20DB/WT
9	L50 18WT/TN
10	X57 20BR/LB
11	X51 20BR/YL
12	Z5 16BK
13	X56 20DB
14	X54 20VT/YL

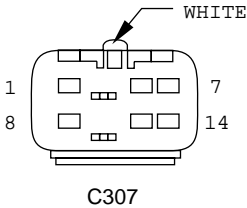
* GAS
** DIESEL



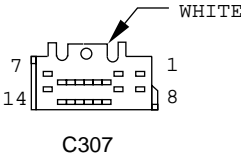
CAV	CIRCUIT
1	-
2	-
3	V24 18BR/OR
4	V20 18BK/WT
5	X55 16BR/RD
	X55 16BR/RD
6	X53 16DG
	X53 16DG
7	X54 16VT
	X54 16VT
8	X56 16DB
	X56 16DB
9	Z5 14BK/LB
	Z5 14BK/LB
10	X51 16BR/YL
	X51 16BR/YL
11	X57 16BR/LB
	X57 16BR/LB
12	L50 18WT/TN
13	X52 16DB/WT
	X52 16DB/WT
14	X58 16DB/OR
	X58 16DB/OR



CAV	CIRCUIT
1	-
2	-
3	V24 18BR/OR
4	V20 18WT/BK
5	X55 20BR/RD
6	X53 20DG
7	X54 20VT/YL
8	X56 20DB
9	Z5 16BK
10	X51 20BR/YL
11	X57 20BR/LB
12	L50 18WT/TN
13	X52 20DB/WT
14	X58 20DB/OR

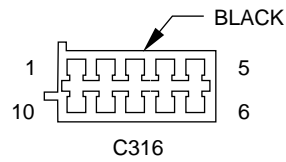


CAV	CIRCUIT
1	X82 16LB/RD
2	X80 16LB/DG
3	A 61 18LG
3	L61 18LG
4	L60 18TN
4	L60 18TN
4	L60 18TN
5	G46 20LB/BK
6	V13 18BR/LG
7	L36 18LG/OR
8	Z2 18BK/OR
9	K255 20WT/DG**
10	K151 20WT**
11	K6 20VT/WT**
12	K22 20OR/DB**
13	X85 16LG/BK
14	X87 16LG/RD

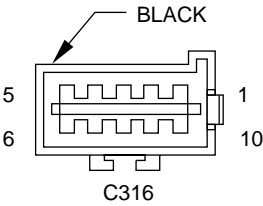


CAV	CIRCUIT
1	X82 20LB/BK
2	X80 20LB/RD
3	L61 18DG
4	L60 18TN
5	G46 20BK/LB
6	V13 18BR/LG
7	L36 18LG
8	Z2 18BK/OR
9	K255 20WT/DG**
10	K151 20WT**
11	K6 20VT/WT**
12	K22 20OR/DB**
13	X85 20LG/BK
14	X87 20LG/RD

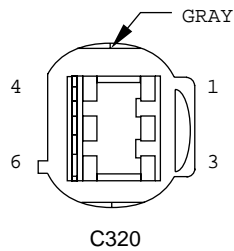
** DIESEL



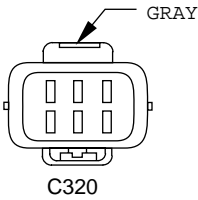
CAV	CIRCUIT
1	L36 18LG/OR
2	L50 18WT/TN
3	L90 18DB/RD L90 18DB/RD
4	L90 18DB/RD L90 18DB/RD
5	L90 18DB/RD
6	L50 18WT/TN
7	L50 18WT/TN
8	L50 18WT/TN
9	G46 20LB/BK
10	F87 18WT/PK



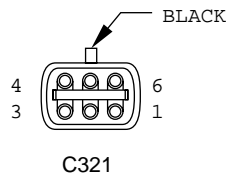
CAV	CIRCUIT
1	L36 18LG/OR L36 18LG/OR
2	L50 18WT/TN
3	L90 18DB/RD* L90 20DB/RD
4	L22 18LB
5	L21 18LB/WT
6	L74 18PK/BK
7	L73 18PK/WT
8	L87 18DG/WT
9	Z1 18BK
10	-



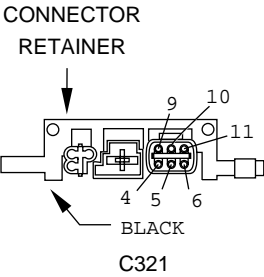
CAV	CIRCUIT
1	L74 18PK/BK
2	L22 18LB
3	L10 18BR/LG
4	Z1 18BK
5	L60 18TN
5	L60 18TN
6	L36 18LG/OR



CAV	CIRCUIT
1	L74 18PK/BK
2	L21 18LB/WT
3	L10 18BR/LG
4	Z1 18BK
5	L61 18LG
6	L36 18LG/BK

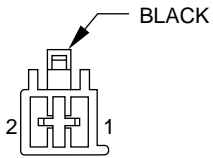


CAV	CIRCUIT
1	-
2	-
3	G71 20VT/YL
4	L90 18DB/RD
5	-
6	G78 20TN/BK



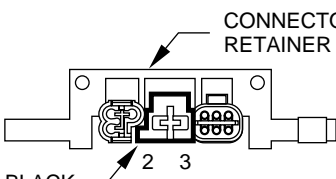
CAV	CIRCUIT
4	-
5	-
6	G71 20VT/YL
9	L78 20DB/RD
10	-
11	G90 20DB/RD

* OPTIONAL
** DIESEL



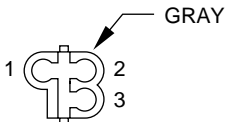
C322

CAV	CIRCUIT
1	-
2	C15 12BK/WT



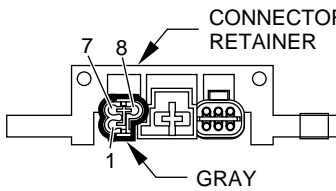
C322

CAV	CIRCUIT
2	-
3	C15 12BK/LB



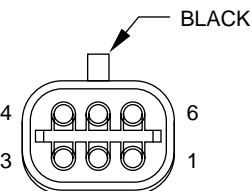
C323

CAV	CIRCUIT
1	-
2	F70 14PK/BK
3	P2 14BKWT



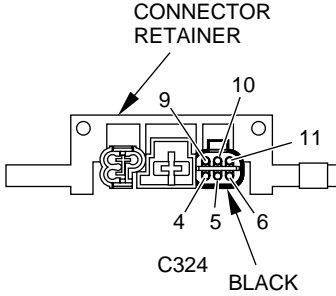
C323

CAV	CIRCUIT
1	P2 16BK/WT
7	F70 16PK/BK
8	-



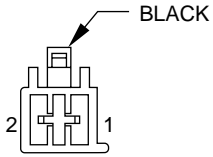
C324

CAV	CIRCUIT
1	V13 18BR/LG
2	-
3	-
4	V20 18BK/WT
5	-
6	V24 18BR/OR



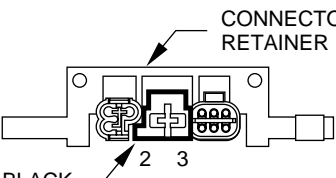
C324

CAV	CIRCUIT
4	V13 18BR/LG
5	-
6	-
9	V24 18BR/OR
10	-
11	V20 18BK/WT



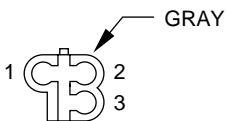
C325

CAV	CIRCUIT
1	-
2	Z1 12BK



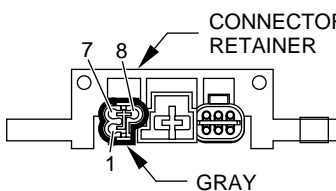
C325

CAV	CIRCUIT
2	-
3	Z1 12BK



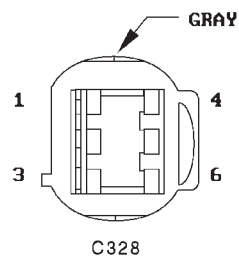
C326

CAV	CIRCUIT
1	L87 18DG/WT
2	Z1 18BK
3	P34 14PK/BK

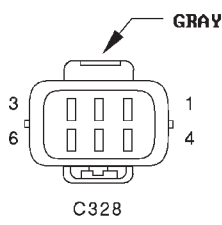


C326

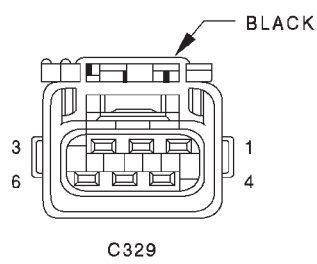
CAV	CIRCUIT
1	P34 16PK/BK
7	Z1 18BK
8	L87 18DG/WT



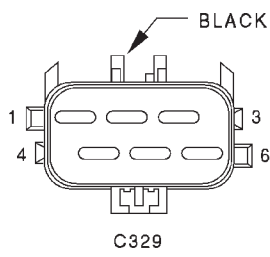
CAV	CIRCUIT
1	L73 18PK/WT
2	L21 18LB/WT
3	L10 18BR/LG
4	Z1 18BK
5	L61 18LG
5	L61 18LG
6	L36 18LG/OR



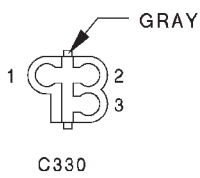
CAV	CIRCUIT
1	L74 18PK/BK
2	L21 18LB/WT
3	L10 18BR/LG
4	Z1 18BK
5	L61 18LG
6	L36 18LG/BK



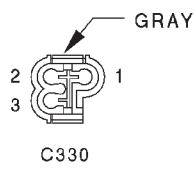
CAV	CIRCUIT
1	F35 16RD
2	Z1 16BK
3	D1 18VT/BR
4	D2 18WT/BK
5	P7 18LB/BK*
6	F71 18PK/DG*



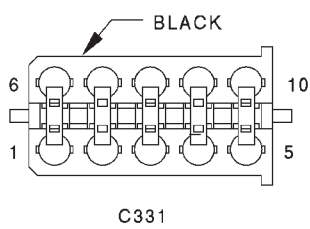
CAV	CIRCUIT
1	F35 14RD
2	Z1 14BK
3	D1 20VT/BR
4	D2 20WT/BK
5	P7 18LB/BK*
6	F87 18PK/DG*



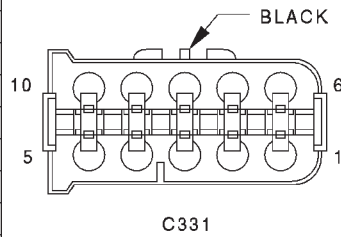
CAV	CIRCUIT
1	Q18 14GY/BK
2	Q28 14DG/WT
3	P34 14PK/BK



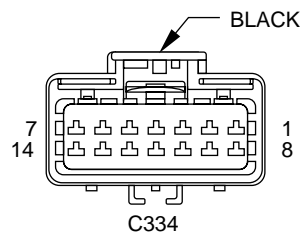
CAV	CIRCUIT
1	Q18 16GY/BK
2	Q28 16DG/WT
3	P34 18PK/BK



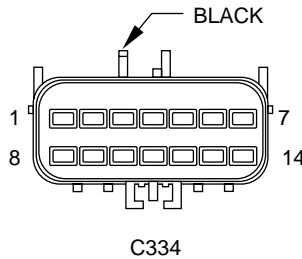
CAV	CIRCUIT
1	-
2	L90 18DB/RD
3	L10 18BR/LG
4	L61 18LG
5	L60 18TN
6	F70 18PK/BK
7	-
8	B40 12LB
9	Z1 12BK
10	-



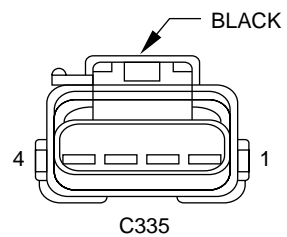
CAV	CIRCUIT
1	-
2	L90 18DB/RD
3	L10 18BR/LG
4	L61 18LG/OR
5	L60 18TN/OR
6	F70 16PK/BK
7	-
8	B40 12LB
9	Z1 12BK
10	-



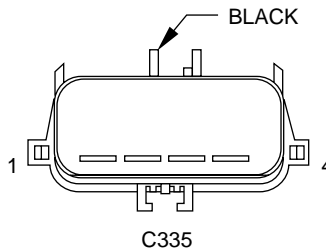
CAV	CIRCUIT
1	Z1 12BK
2	-
3	F81 10TN
4	E21 18OR/RD
5	Q17 14DB/WT
6	X53 16DG**
6	X87 16LG/RD*
7	Q27 14RD/BK
8	X55 16BR/RD**
8	X85 16LG/BK*
9	P114 18YL/BK
10	-
11	P112 18YL/WT
12	D2 18WT/BK
13	D1 18VT/BR
14	G71 20VT/YL



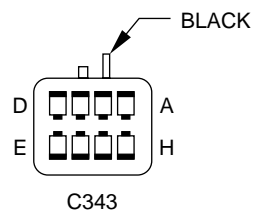
CAV	CIRCUIT
1	Z1 12BK
2	-
3	F81 12TN
4	E21 18OR
5	Q17 16DB/WT
6	X53 20DG
7	Q27 16RD/BK
8	X55 20BR/RD
9	P114 20YL/BK
10	-
11	P112 20YL/WT
12	D2 18WT/BK
13	D1 18VT/BR
14	G71 20VT/YL



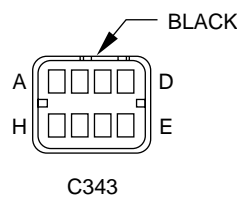
CAV	CIRCUIT
1	F35 16RD
2	Z1 16BK
3	P8 18LB/WT
4	F71 18PK/DG



CAV	CIRCUIT
1	F35 14RD
2	Z1 14BK
3	P8 18LB/WT
4	F87 18WT/BK

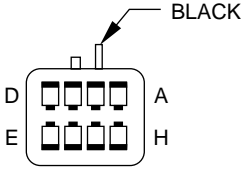


CAV	CIRCUIT
A	X93 16WT/RD*
A	X51 16BR/YL**
B	X91 16WT/BK*
B	X57 16BR/LB**
C	P2 16BK/WT
D	Z1 16BK
E	E21 18OR/RD



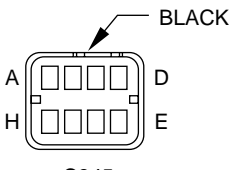
CAV	CIRCUIT
A	X52 20DB/WT
B	X58 20DB/OR
C	P2 18BK/WT
D	Z1 16BK
E	E20 20OR/DG

* WITH PREMIUM RADIO
** WITH STANDARD RADIO



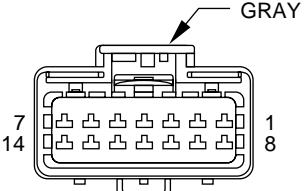
C345

CAV	CIRCUIT
A	X94 16TN/RD*
A	X52 16DB/WT**
B	X92 16TN/BK*
B	X58 16DB/OR**
C	P2 16BK/WT
D	Z1 16BK
E	E20 18OR/DB
F	-
G	-
H	-



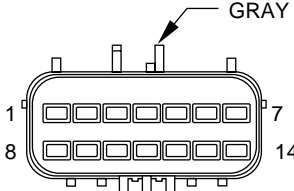
C345

CAV	CIRCUIT
A	X52 20DB/WT
B	X58 20DB/OR
C	P2 18BK/WT
D	Z1 16BK
E	E20 20OR/DG
F	-
G	-
H	-



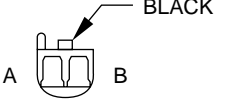
C351

CAV	CIRCUIT
1	Z1 12BK
2	-
3	F81 12TN
4	E20 18OR/DB
5	Q18 14GY/BK
6	X54 16VT**
6	X82 16LB/RD*
7	Q28 14DG/WT
8	X56 16DB**
8	X80 16LB/DG*
9	P2 14BK/WT
10	P34 14PK/BK
11	-
12	D2 18WT/BK
13	D1 18VT/BR
14	G71 20VT/YL



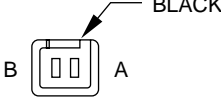
C351

CAV	CIRCUIT
1	Z1 12BK
2	-
3	F81 12TN
4	E20 18OR/DB
5	Q18 16GY/BK
6	X54 20VT
6	X82 18LB/RD
7	Q28 16DG/WT
8	X56 20DB/RD
8	X80 16LB/DG
9	P2 14BK/WT
10	P34 14PK/BK
11	-
12	D2 18WT/BK
13	D1 18VT/BR
14	G71 20VT/YL



C353

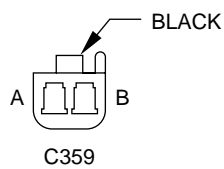
CAV	CIRCUIT
A	P114 20YL/BK
B	P112 20YL/WT



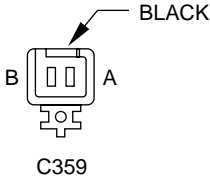
C353

CAV	CIRCUIT
A	P114 20YL/BK
B	P112 20YL/WT

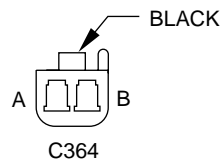
* WITH PREMIUM RADIO
** WITH STANDARD RADIO



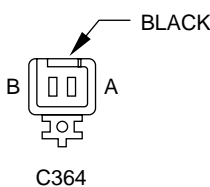
CAV	CIRCUIT
A	L87 20DG/WT
B	Z1 20BK



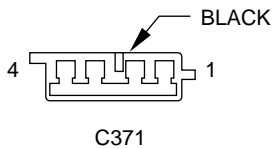
CAV	CIRCUIT
A	L87 18DG/WT
B	Z1 18BK



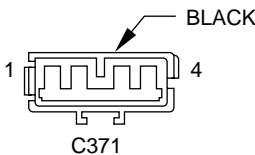
CAV	CIRCUIT
A	Z1 20BK
B	L90 20DB/RD



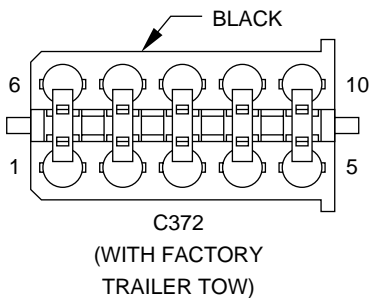
CAV	CIRCUIT
A	Z1 20BK
B	L90 20DB/RD



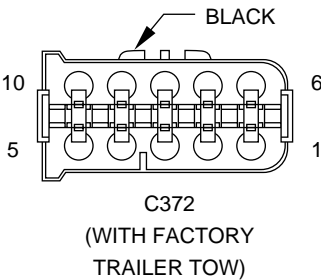
CAV	CIRCUIT
1	Z1 16BK
2	Q41 16WT
3	Q42 16LB
4	F86 16LG/BK



CAV	CIRCUIT
1	Z1 16BK
2	Q41 16LB
3	Q42 16WT
4	F86 16RD/YL

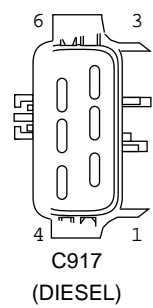


CAV	CIRCUIT
1	L50 18WT/TN
2	L90 18DB/RD
3	L10 18BR/LG
4	L61 18LG
5	L60 18TN
6	F70 16PK/BK
7	B40 12LB
8	Z1 12BK
9	-
10	-

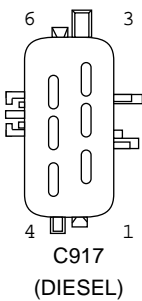


CAV	CIRCUIT
1	L50 18WT/TN
2	L90 18DB/RD
3	L10 18BR/LG
4	L61 18LG
4	L61 18LG*
5	L60 18TN
5	L60 18TN*
6	F70 16PK/BK
7	B40 12LB
8	Z1 12BK
9	-
10	-

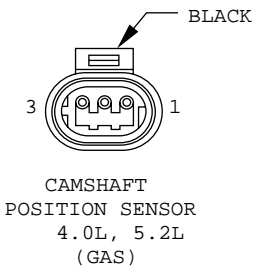
* WITH FACTORY TRAILER TOW ONLY



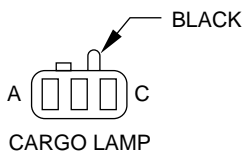
CAV	CIRCUIT
1	T40 14LG/BK
2	G60 20GY/YL
3	K167 20BR/YL



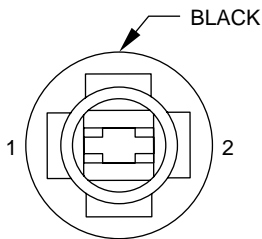
CAV	CIRCUIT
1	T40 12LG/BK
2	G60 20GY/YL
3	K167 20BR/YL



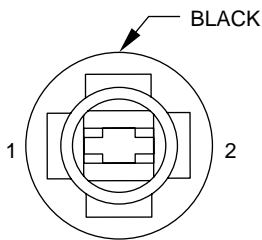
CAV	CIRCUIT	FUNCTION
1	K25 20WT/BK	5 VOLT SUPPLY
2	K4 20BK/LB	SENSOR GROUND
3	K24 18GY/BK	CAMSHAFT POSITION SENSOR SIGNAL



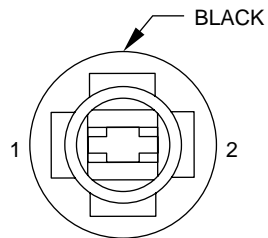
CAV	CIRCUIT	FUNCTION
A	M2 20YL	COURTESY LAMP RELAY OUTPUT
B	M1 20PK	FUSED B(+)
C	M4 20WT/LG	LIFTGATE COURTESY LAMP DISABLE



CAV	CIRCUIT	FUNCTION
1	L87 20DG/WT	STOP LAMP SWITCH OUTPUT
	L87 20DG/WT	STOP LAMP SWITCH OUTPUT
2	Z1 20BK	GROUND
	Z1 20BK	GROUND

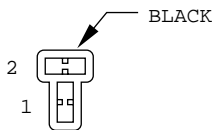


CAV	CIRCUIT	FUNCTION
1	L87 20DG/WT	STOP LAMP SWITCH OUTPUT
2	Z1 20BK	GROUND



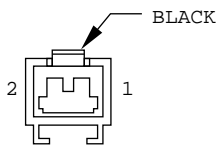
CENTER HIGH MOUNTED STOP LAMP
NO. 3

CAV	CIRCUIT	FUNCTION
1	L87 20DG/WT	STOP LAMP SWITCH OUTPUT
	L87 20DG/WT	STOP LAMP SWITCH OUTPUT
2	Z1 20BK	GROUND
	Z1 20BK	GROUND



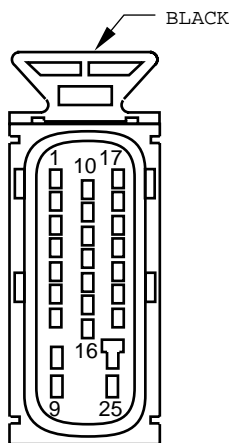
CIGAR LIGHTER

CAV	CIRCUIT	FUNCTION
1	F30 18RD/DB	FUSED IGNITION SWITCH OUTPUT (ACC/RUN)
2	Z1 18BK	GROUND



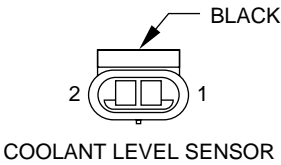
CLUTCH INTERLOCK
SWITCH (DIESEL)
(MANUAL TRANS)

CAV	CIRCUIT	FUNCTION
1	A41 14YL	IGNITION SWITCH OUTPUT START
2	T141 14YL	CLUTCH INTERLOCK SWITCH SENSE

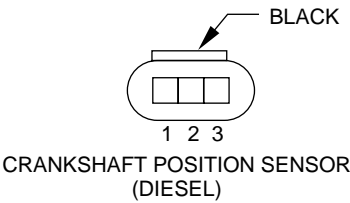


CONTROLLER
ANTI-LOCK
BRAKE

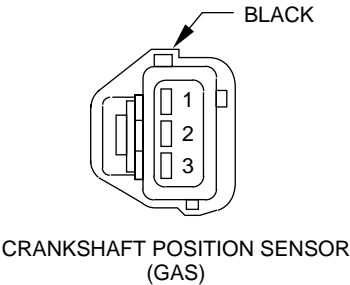
CAV	CIRCUIT	FUNCTION
1	B1 20YL/DB	RIGHT REAR WHEEL SPEED SENSOR (-)
2	B3 20LG/DB	LEFT REAR WHEEL SPEED SENSOR (-)
3	B7 20WT	RIGHT FRONT WHEEL SPEED SENSOR (+)
4	B9 20RD	LEFTT FRONT WHEEL SPEED SENSOR (+)
5	-	-
6	B41 20YL/VT	G SWITCH NO. 1 SENSE
7	B42 20TN/WT	G SWITCH NO. 2 SENSE
8	Z2 12BK	GROUND
9	A20 14RD/LG	SYSTEM RELAY
10	B4 20LG	LEFT REAR WHEEL SPEED SENSOR (+)
11	B8 20RD/DB	LEFT FRONT WHEEL SPEED SENSOR (+)
12	L50 18WT/TN	STOP LAMP SWITCH OUTPUT
13	B43 20PK/OR	G SWITCH SENSOR GROUND
14	-	-
15	-	-
16	205 20WT/VT	ABS WARNING LAMP DRIVER
17	B2 20YL	RIGHT REAR WHEEL SPEED SENSOR (+)
18	B6 20WT/DB	RIGHT FRONT WHEEL SPEED SENSOR (-)
19	-	-
20	D83 20BK/PK	SCI RECEIVE
21	-	-
22	-	-
23	F12 20DB/WT	FUSED IGNITION SWITCH OUTPUT (RUN)
24	Z2 12BK	GROUND
25	A10 10RD/DB	FUSE LINK TO ABS MOTOR RELAY



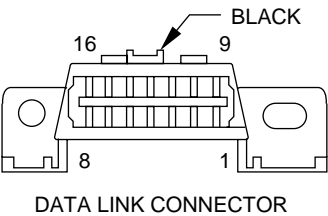
CAV	CIRCUIT	FUNCTION
1	G18 16PK/BK	ENGINE COOLANT LEVEL SENSE
2	Z1 16BK	GROUND



CAV	CIRCUIT	FUNCTION
1	K4 20BK/LB	SENSOR GROUND
2	-	-
3	K24 20GY/BK	CRANKSHAFT POSITION SENSOR SIGNAL

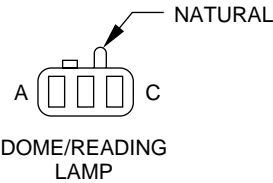


CAV	CIRCUIT	FUNCTION
1	K25 20WT/BK	5 VOLT SUPPLY
2	K4 20BK/LB	SENSOR GROUND -
3	K27 18RD/LG	CRANKSHAFT POSITION SENSOR SIGNAL

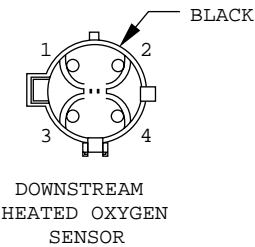


CAV	CIRCUIT	FUNCTION
1	-	-
2	-	-
3	D1 18VT/BR	CCD BUS(+)
4	Z1 18BK	GROUND
5	Z2 18BK/OR	GROUND
6	D84 20BK/WT	SCI TRANSMIT
7	D83 20BK/PK	SCI RECIEVE
8	-	-
9	-	-
10	-	-
11	D2 18WT/BK	CCD BUS (-)
12	D98 20WT	SCI TRANSMIT
13	-	-
14	-	-
15	-	-
16	F75 18VT	FUSED B(+)

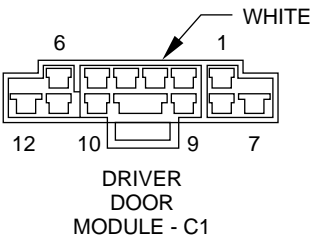
** DIESEL



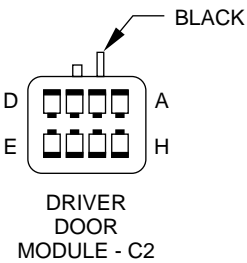
CAV	CIRCUIT	FUNCTION
A	Z1 20BK	GROUND
B	M2 2OYL	COURTESY LAMP RELAY OUTPUT
C	M1 20PK	FUSED B(+)



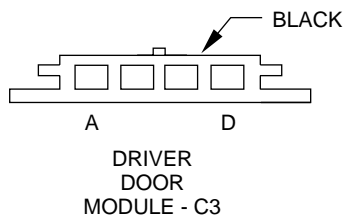
CAV	CIRCUIT	FUNCTION
1	A142 18DG/OR	AUTOMATIC SHUT DOWN RELAY OUTPUT
2	Z12 18BK/TN	GROUND
3	K4 18BK/LB	SENSOR GROUND
4	K141 18BK/PK	DOWNSTREAM HEATED OXYGEN SENSOR SIGNAL



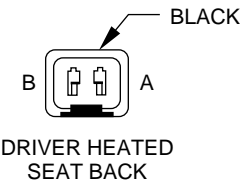
CAV	CIRCUIT	FUNCTION
1	Q11 16LB	LEFT FRONT WINDOW DRIVER (UP)
2	Q21 16WT	LEFT FRONT WINDOW DRIVER (DOWN)
3	Q17 16DB/WT	LEFT REAR WINDOW DRIVER (UP)
4	Q27 16RD/BK	LEFT REAR WINDOW DRIVER (DOWN)
5	P34 18PK/BK	LEFT FRONT DOOR UNLOCK DRIVER
6	P35 18OR/VT	LEFT FRONT DOOR LOCK DRIVER
7	Z1 12BK	GROUND
8	D1 18VT/BR	CCD BUS (+)
9	D2 18WT/BK	CCD BUS (-)
10	E21 18OR	LEFT REAR DOOR SWITCH ILLUMINATION
11	M1 20PK	MUX COURTESY LAMP DRIVER
12	F81 12TN	FUSED B(+)



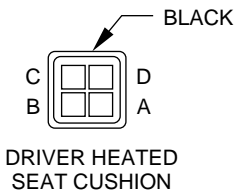
CAV	CIRCUIT	FUNCTION
A	F75 20YL	HORIZONTAL DRIVER
B	Z1 20BK	HEATER SWITCHED GROUND
C	F84 20VT	VERTICAL POSITION SENSOR SIGNAL
D	F86 20GY	SENSOR GROUND
E	F85 20GN	HORIZONTAL POSITION SENSOR SIGNAL
F	C16 20BK	HEATER 12 VOLT SUPPLY
G	F73 20DB	COMMON DRIVER
H	F71 20WT	VERTICAL DRIVER



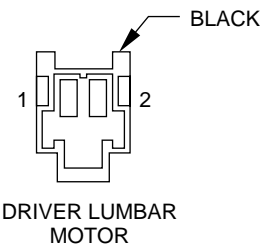
CAV	CIRCUIT	FUNCTION
A	Z1 20BK	GROUND
B	P22 20BR	5 VOLT SUPPLY
C	G49 20OR	SET LED DRIVER
D	M1 20GY	SWITCHED MUX LED SUPPLY



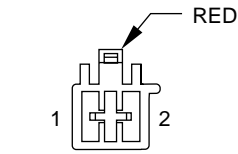
CAV	CIRCUIT	FUNCTION
A	Z1 16BK	GROUND
B	P88 16BR/BK	HEATED SEAT DRIVER



CAV	CIRCUIT	FUNCTION
A	P87 16BK/OR	HEATED SEAT DRIVER
B	P88 16BR/BK	HEATED SEAT DRIVER
C	P7 18LB/BK	DRIVER HEATED SEAT SWITCH OUTPUT
D	Z1 20BK	GROUND

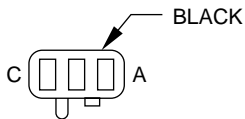


CAV	CIRCUIT	FUNCTION
1	P106 18DG/WT	LUMBAR FORWARD DRIVER
2	P107 18OR/BK	LUMBAR REARWARD DRIVER



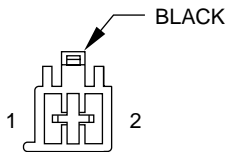
DRIVER POWER SEAT
FRONT RISER MOTOR

CAV	CIRCUIT	FUNCTION
1	P121 16RD/GY*	FRONT RISER DOWN DRIVER
	P21 16RD/LG	FRONT RISER DOWN SWITCH SENSE
2	P119 16YL/RD*	FRONT RISER UP DRIVER
	P19 16YL/LG	FRONT RISER UP SWITCH SENSE



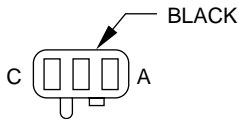
DRIVER POWER SEAT
FRONT RISER MOTOR SENSOR

CAV	CIRCUIT	FUNCTION
A	P28 20BR/RD	SENSOR GROUND
B	P26 20BR	FRONT RISER POSITION SENSE
C	P29 20BR/WT	6 VOLT SENSOR SUPPLY



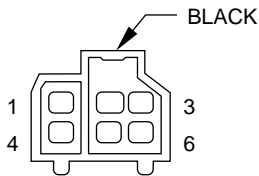
DRIVER POWER SEAT
HORIZONTAL MOTOR

CAV	CIRCUIT	FUNCTION
1	P115 16GY/LG*	HORIZONTAL FORWARD DRIVER
1	P15 16YL/LB	HORIZONTAL FORWARD SWITCH SENSE
2	P117 16RD/BR*	HORIZONTAL REARWARD DRIVER
2	P17 16RD/LB	HORIZONTAL REARWARD SWITCH SENSE



DRIVER POWER SEAT
HORIZONTAL MOTOR
SENSOR

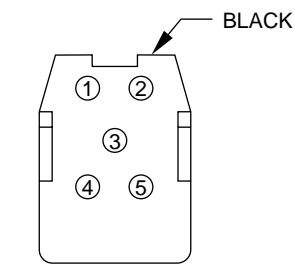
CAV	CIRCUIT	FUNCTION
A	P29 20BR/WT	6 VOLT SENSOR SUPPLY
B	P25 20VT/RD	HORIZONTAL POSITION SENSE
C	P28 20BR/RD	SENSOR GROUND



DRIVER POWER SEAT
LUMBAR SENSOR/MOTOR

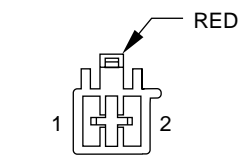
CAV	CIRCUIT	FUNCTION
1	P106 16DG/WT	LUMBAR REARWARD DRIVER
2	P107 16OR/BK	LUMBAR FORWARD DRIVER
3	P28 20BR/RD	SENSOR GROUND
4	P103 20DB/WT	LUMBAR POSITION SENSE
5	P29 20BR/WT	6 VOLT SENSOR SUPPLY

* WITH MEMORY SEATS



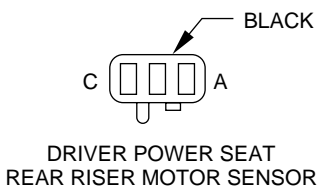
DRIVER POWER SEAT
LUMBAR SWITCH

CAV	CIRCUIT	FUNCTION
1	P104 20YL/RD*	LUMBAR REARWARD SWITCH SENSE
1	P107 18OR/BK	LUMBAR FORWARD DRIVER
2	Z1 18BK	GROUND
3	F35 18RD	FUSED B(+)
4	Z1 18BK	GROUND LUMBAR FORWARD SWITCH SENSE
5	P105 20LG/DB*	LUMBAR FORWARD SWITCH SENSE
5	P106 18DG/WT	LUMBAR REWARD DRIVER



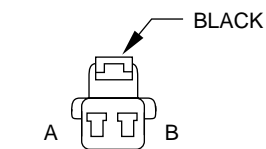
DRIVER POWER SEAT
REAR RISER MOTOR

CAV	CIRCUIT	FUNCTION
1	P113 16RD/BK*	REAR RISER DOWN DRIVER
	P13 16RD/WT	REAR RISER DOWN SWITCH SENSE
2	P111 16YL/DB*	REAR RISER UP DRIVER
	P11 16YL/WT	REAR RISER UP SWITCH SENSE



DRIVER POWER SEAT
REAR RISER MOTOR SENSOR

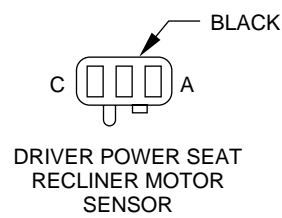
CAV	CIRCUIT	FUNCTION
A	P28 20BR/RD	SENSOR GROUND
B	P27 20LB/RD	REAR RISER POSITION SENSE
C	P29 20BR/WT	6 VOLT SENSOR SUPPLY



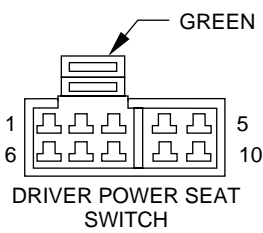
DRIVER POWER SEAT
RECLINER MOTOR

CAV	CIRCUIT	FUNCTION
A	P41 16GY/WT*	RECLINER FORWARD DRIVER
A	P41 16GY/WT	RECLINER DOWN DRIVER
B	P43 16GY/LB*	RECLINER REARWARD DRIVER
B	P43 16GY/LB	RECLINER DOWN DRIVER

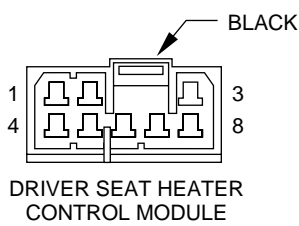
* WITH MEMORY SEATS



CAV	CIRCUIT	FUNCTION
A	P29 20BR/WT	6 VOLT SENSOR SUPPLY
B	P47 20LB	HORIZONTAL POSITION SENSE
C	P28 20BR/RD	SENSOR GROUND

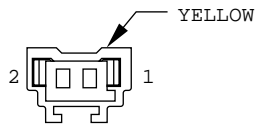


CAV	CIRCUIT	FUNCTION
1	Z1 16BK	GROUND
2	P40 18GY/LB*	RECLINER UP SWITCH SENSE
2	P43 16GY/LB	RECLINER UP DRIVER
3	P17 18RD/LB*	HORIZONTAL REARWARD SWITCH SENSE
3	P17 16RD/LB	HORIZONTAL REARWARD SWITCH SENSE
4	P48 18GY/WT*	RECLINER DOWN SWITCH SENSE
4	P41 16GY/WT	RECLINER DOWN DRIVER
5	F35 16RD	FUSED B(+)
6	P15 18YL/LB*	HORIZONTAL FORWARD SWITCH SENSE
6	P15 16YL/LB	HORIZONTAL FORWARD SWITCH SENSE
7	P19 18YL/LG*	FRONT RISER UP SWITCH SENSE
7	P19 16YL/LG	FRONT RISER UP SWITCH SENSE
8	P11 18YL/WT*	REAR RISER UP SWITCH SENSE
8	P11 16YL/WT	REAR RISER UP SWITCH SENSE
9	P13 18RD/WT*	REAR RISER DOWN SWITCH SENSE
9	P13 16RD/WT	REAR RISER DOWN SWITCH SENSE
10	P21 18RD/LG*	FRONT RISER DOWN SWITCH SENSE
10	P21 16RD/LG	FRONT RISER DOWN SWITCH SENSE



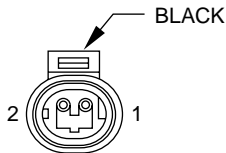
CAV	CIRCUIT	FUNCTION
1	F87 18PK/DG	FUSED IGNITION SWITCH OUTPUT
2	F35 16RD	FUSED B(+)
3	P87 16BK/OR	HEATED SEAT DRIVER
4	-	-
5	-	-
6	-	-
7	Z1 16BK	GROUND
8	P7 18LB/BK	DRIVER HEATED SEAT SWITCH OUTPUT

* WITH MEMORY SEATS



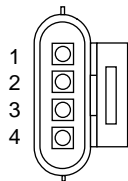
DRIVER SIDE
AIRBAG

CAV	CIRCUIT	FUNCTION
1	R45 18DG/LB	DRIVER AIR BAG LINE 2
2	R43 18BK/LB	DRIVER AIR BAG LINE 1



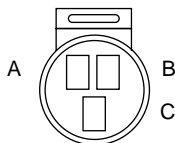
DUTY CYCLE
EVAP/PURGE SOLENOID

CAV	CIRCUIT	FUNCTION
1	F99 20OR	IGNITION SWITCH OUTPUT (START/RUN)
2	K52 18PK/BK	EVAPORATIVE EMISSION SOLENOID CONTROL



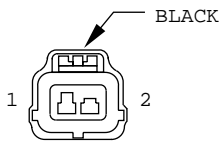
EGR SOLENOID
(DIESEL)

CAV	CIRCUIT	FUNCTION
1	A142 16DG/OR	FUSED IGNITION SWITCH OUTPUT
2	K35 16GY/YL	EXHAUST GAS RCIRCULATION SOLENOID
4	Z1 18BK	GROUND



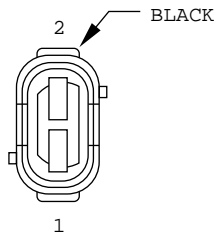
ENGINE COOLANT
TEMPERATURE SENSOR
(DIESEL)

CAV	CIRCUIT	FUNCTION
A	K2 20TN/BK	ENGINE COOLANT TEMPERATURE SENSOR SIGNAL
B	K4 20BK/LB	SENSOR GROUND
C	K222 20TN/RD	SECONDARY ENGINE COOLANT TEMP SENSOR



ENGINE COOLANT
TEMPERATURE SENSOR
(WITH 4.0L ENG)

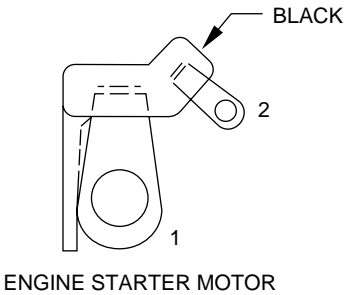
CAV	CIRCUIT	FUNCTION
1	K2 16TN/BK	ENGINE COOLANT TEMPERATURE SENSOR SIGNAL
2	K4 16BK/LB	SENSOR GROUND



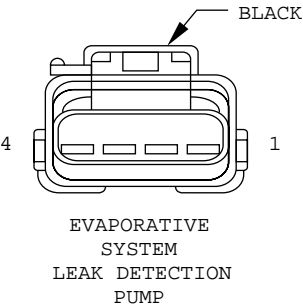
ENGINE COOLANT
TEMPERATURE SENSOR
(WITH 5.2L ENG)

CAV	CIRCUIT	FUNCTION
1	K2 16TN/BK	ENGINE COOLANT TEMPERATURE SENSOR SIGNAL
2	K4 16BK/LB	SENSOR GROUND

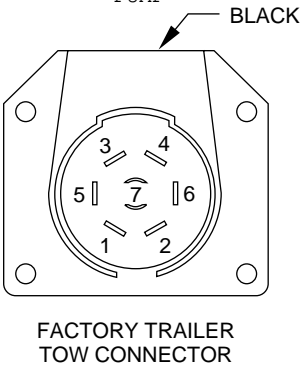
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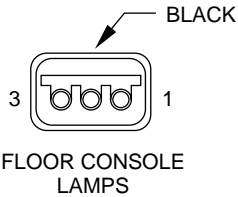
CAV	CIRCUIT	FUNCTION
1	A0 6RD	B(+)
1	A0 2RD**	B(+)
2	T40 12LG/BK	ENGINE STARTER MOTOR RELAY OUTPUT
2	T40 14LG/BK**	ENGINE STARTER MOTOR RELAY OUTPUT



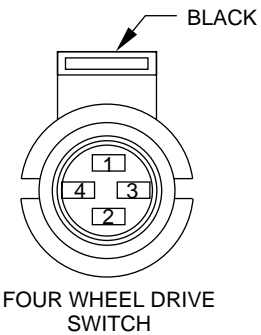
CAV	CIRCUIT	FUNCTION
1	-	-
2	F99 20OR	FUSED IGNITION SWITCH OUTPUT (START/RUN)
3	J95 18DG/RD	VAPOR CANISTER SOLENOID DRIVER
4	J96 18VT/RD	VAPOR CANISTER PUMP SWITCH DRIVER



CAV	CIRCUIT	FUNCTION
1	Z1 12BK	GROUND
2	B40 12LB	TRAILER TOW OUTPUT
3	L90 18DB/RD	PARK LAMP RELAY OUTPUT
4	F70 18PK/BK	FUSED B(+)
5	L61 18LG	LEFT TURN SIGNAL
6	L60 18TN	RIGHT TURN SIGNAL
7	L10 18BR/LG	BACK-UP LAMP SWITCH OUTPUT

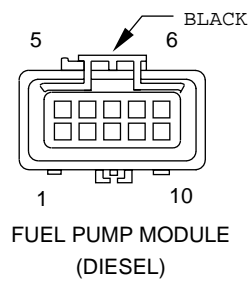


CAV	CIRCUIT	FUNCTION
1	Z1 20BK	GROUND
2	-	-
3	E2 18OR	PANEL LAMP DRIVER

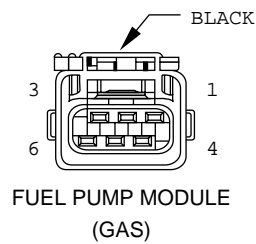


CAV	CIRCUIT	FUNCTION
1	Z12 20BK/TN*	POWER GROUND
1	Z1 20BK**	GROUND
2	T106 20GY/OR	-
3	G28 20LG/OR	TRANS TEMP LAMP DRIVER
4	T107 20BK/RD	-

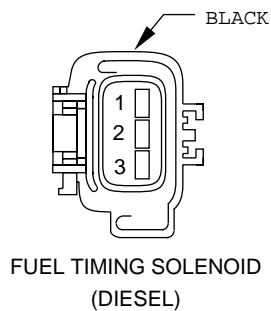
* GAS
** DIESEL



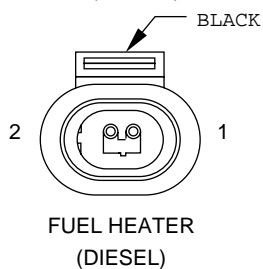
CAV	CIRCUIT	FUNCTION
1	K134 20LB/BK	SLEEVE POSITION SENSOR (-)
2	K57 20LG/OR	CONT SLEEVE POSITION SENSOR
3	K135 20WT/BK	SLEEVE POSITION SENSOR (+)
4	K4 20BK/LB	SENSOR GROUND
5	K238 16VT	FUEL TIMING SHUTOFF SOLENOID
6	K153 20OR	SHUTOFF FEED
7	K156 20GY	FUEL TEMP SENSOR SIGNAL
8	K140 14TN/WT	FUEL QUANTITY ACTUATOR GROUND
9	A142 14DG/OR	AUTO SHUTDOWN RELAY OUTPUT
10	A142 16DG/OR	AUTO SHUTDOWN RELAY OUTPUT



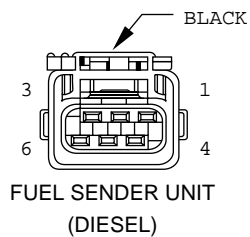
CAV	CIRCUIT	FUNCTION
1	A64 16DG/WT	FUEL PUMP RELAY OUTPUT
3	G40 20LB/BK	LOW
4	K167 20BR/YL	SENSOR RETURN
6	Z1 16BK	GROUND



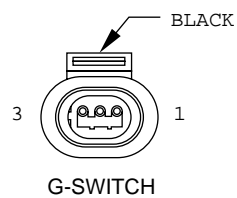
CAV	CIRCUIT	FUNCTION
1	A142 16DG/BK	AUTOMATIC SHUT DOWN RELAY OUTPUT
2	D238 16VT	FUEL TIMING SHUTOFF SOLENOID
3	K153 20OR	SHUTOFF (+)



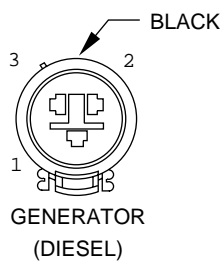
CAV	CIRCUIT	FUNCTION
1	A64 14OR/DB	ELECTRIC PUMP FEED
2	Z1 14BK	GROUND



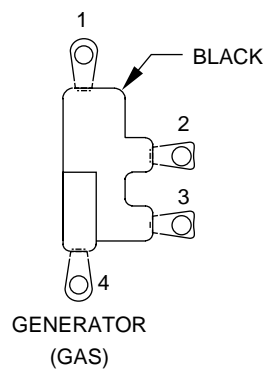
CAV	CIRCUIT	FUNCTION
1	A64 16DG/WT	FUEL PUMP RELAY OUTPUT
3	G40 20LB/BK	LOW
4	K167 20BR/YL	SENSOR RETURN
6	Z1 16BK	GROUND



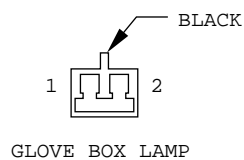
CAV	CIRCUIT	FUNCTION
1	B43 20PK/OR	G SWITCH GROUND
2	B41 20YL/VT	G SWITCH NO. 1 SENSE
3	B42 20TN/WT	G SWITCH NO. 2 SENSE



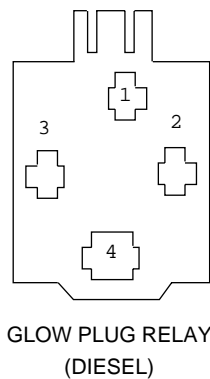
CAV	CIRCUIT	FUNCTION
1	A142 16DG/OR	AUTOMATIC SHUT DOWN RELAY OUTPUT
2	-	-
3	K20 18DG/YL	GENERATOR FIELD DRIVER



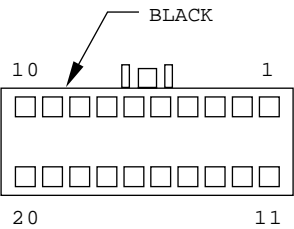
CAV	CIRCUIT	FUNCTION
1	Z0 8BK	GROUND
2	K72 18DG/VT	AUTOMATIC SHUT DOWN RELAY OUTPUT
3	K20 18DG	GENERATOR FIELD DRIVER
4	-	-



CAV	CIRCUIT	FUNCTION
1	M1 20PK	FUSED B(+)
2	Z1 20BK	GROUND

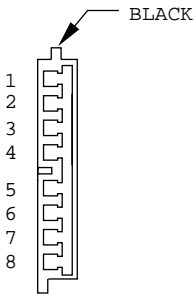


CAV	CIRCUIT	FUNCTION
1	A0 10RD	BATTERY POSITIVE
2	K152 16WT	GLOW PLUG RELAY CONTROL SENSE
3	A142 16DG/OR	FUSED IGNITION SWITCH OUTPUT
4	K154 10GY	GLOW PLUG RELAY CONTROL



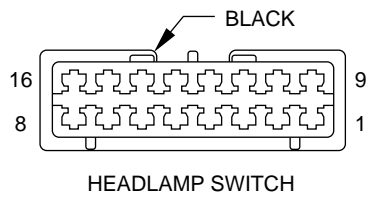
GRAPHIC DISPLAY
MODULE OR VEHICLE
INFORMATION CENTER

CAV	CIRCUIT	FUNCTION
1	G18 20PK/BK	ENGINE COOLANT LEVEL SWITCH SENSE
2	F60 20RD/WT	FUSED B(+)
3	Z2 20BK/OR	GROUND
4	L5 18OR/BK	TURN SIGNAL
5	G46 20BK/LB	REAR LAMP OUT INDICATOR DRIVER
6	-	-
7	D1 18VT/BR	CCD BUS (+)
8	D2 18WT/BK	CCD BUS (-)
9	-	-
10	E2 20OR	PANEL LAMP DRIVER
11	L90 20DB/RD	PARK LAMP RELAY OUTPUT
12	-	-
13	G29 20BK/TN	WASHER FLUID LEVEL SENSE
14	107 20BK/RD	4-WHEEL DRIVE PART TIME LAMP
15	T106 20GY/OR	4-WHEEL DRIVE FULL TIME LAMP
16	F83 18YL/DG	FUSED IGNITION SWITCH OUTPUT (RUN)
17	T19 20YL/BK	4-WHEEL DRIVE PART TIME LAMP
18	G42 20LB/RD	ALL TIME FRONT WHEELS
19	G28 20LG/OR	2-WHEEL DRIVE OR REAR WHEELS IN ALL TIME
20	Z1 20BK	GROUND

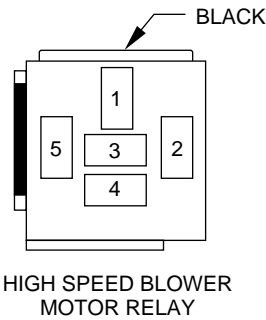


HEADLAMP LEVELING
SWITCH ●

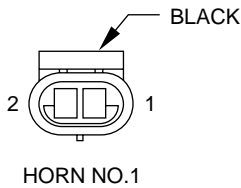
CAV	CIRCUIT	FUNCTION
1	Z1 20BK	GROUND HD/LP LEVELING
2	L106 20YL	POSITION F
3	L103 20LB	POSITION C
4	L104 20LG	POSITION D
5	F83 18YL/DG	FUSED IGN. SWITCH OUTPUT
6	L101 20RD	POSITION A
7	L102 20WT	POSITION B
8	L105 20PK	POSITION E



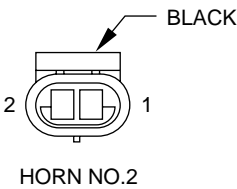
CAV	CIRCUIT	FUNCTION
1	E2 20OR	PANEL LAMP DRIVER
2	Z1 16BK	GROUND
3	M11 20PK/LB	SWITCHED COURTESY LAMP FEED
4	L39 20LB	FOG LAMP RELAY OUTPUT
5	Z1 16BK	GROUND
6	L35 20BR/WT	FOG LAMP SWITCH OUTPUT
7	L96 20LG/RD	COIL DRIVER #6
8	707 20BK/WT	PANEL LAMP DIMMER SWITCH SIGNAL
9	A6 14RD/LB	FUSED B(+)
10	-	-
11	F34 16TN/BK	LOW HEADLAMP SWITCH SENSE
12	-	-
13	L24 20LB/RD	AUTO HEADLAMP SWITCH SENSE
14	-	-
15	366 16PK/OR	PARK LAMP FEED
16	L90 20DB/RD	PARK LAMP RELAY OUTPUT



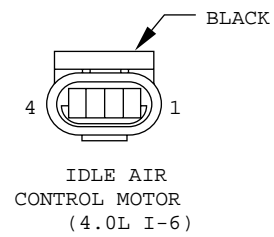
CAV	CIRCUIT	FUNCTION
1	A19 14RD/VT	FUSED B(+)
2	C42 12BR/RD	BLOWER MOTOR DRIVER
3	-	-
4	C41 20BR	HIGH BLOWER MOTOR RELAY CONTROL
5	A19 12DG/RD	FUSED B(+)
6	-	-



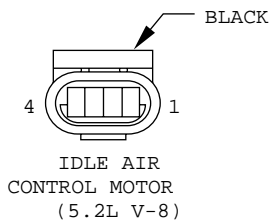
CAV	CIRCUIT	FUNCTION
1	X2 16DG/YL	HORN RELAY OUTPUT
2	Z1 16BK	GROUND



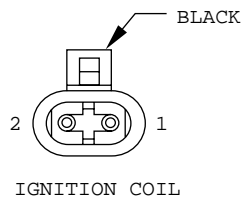
CAV	CIRCUIT	FUNCTION
1	X2 16DG/YL	HORN RELAY OUTPUT
2	Z1 16BK	GROUND



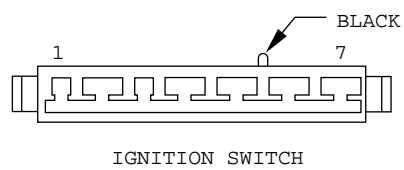
CAV	CIRCUIT	FUNCTION
1	K60 16YL/BK	IDLE AIR CONTROL NO. 2 DRIVER
2	K59 16VT/BK	IDLE AIR CONTROL NO. 4 DRIVER
3	K40 16BR/WT	IDLE AIR CONTROL NO. 3 DRIVER
4	K39 16GY/RD	IDLE AIR CONTROL NO. 1 DRIVER



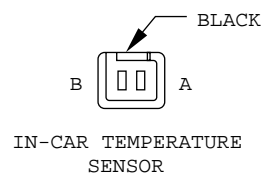
CAV	CIRCUIT	FUNCTION
1	K39 16GY/RD	IDLE AIR CONTROL NO. 1 DRIVER
2	K40 16BR/WT	IDLE AIR CONTROL NO. 3 DRIVER
3	K59 16VT/BK	IDLE AIR CONTROL NO. 4 DRIVER
4	K60 16YL/BK	IDLE AIR CONTROL NO. 2 DRIVER



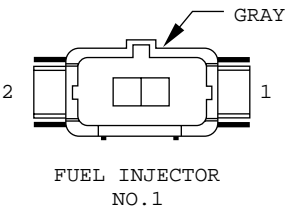
CAV	CIRCUIT	FUNCTION
1	K19 18GY/WT	IGNITION COIL NO. 1 DRIVER
2	A142 18DG/OR	AUTOMATIC SHUT DOWN RELAY OUTPUT



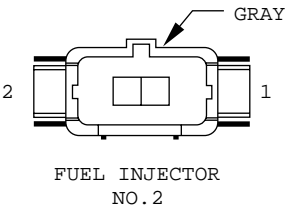
CAV	CIRCUIT	FUNCTION
1	A41 14YL	IGNITION SWITCH OUTPUT (START)
2	A21 12DB/GY	IGNITION SWITCH OUTPUT (START/RUN)
3	G9 18GY/BK	RED BRAKE WARNING LAMP DRIVER
4	A1 12RD/WT	FUSED B(+)
5	A22 12BK/OR	IGNITION SWITCH OUTPUT (RUN)
6	A31 12RD/BK	IGNITION SWITCH OUTPUT (ACC/RUN)
7	A1 12RD/WT	FUSED B(+)



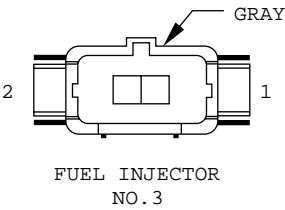
CAV	CIRCUIT	FUNCTION
A	C10 20RD/TN	IN-CAR TEMPERATURE SENSOR SIGNAL
B	D41 20LG/WT	SENSOR GROUND



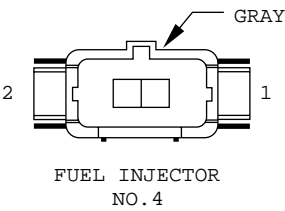
CAV	CIRCUIT	FUNCTION
1	A142 18DG/OR	AUTOMATIC SHUT DOWN RELAY OUTPUT
2	K11 18WT/DB	INJECTOR NO.1 DRIVER



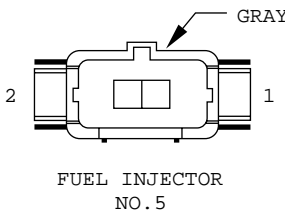
CAV	CIRCUIT	FUNCTION
1	A142 18DG/OR	AUTOMATIC SHUT DOWN RELAY OUTPUT
2	K12 18TN	INJECTOR NO. 2 DRIVER



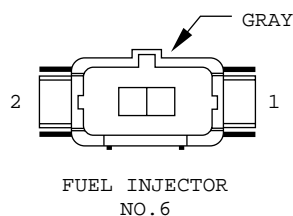
CAV	CIRCUIT	FUNCTION
1	A142 18DG/OR	AUTOMATIC SHUT DOWN RELAY OUTPUT
2	K13 18YL/WT	INJECTOR NO. 3 DRIVER



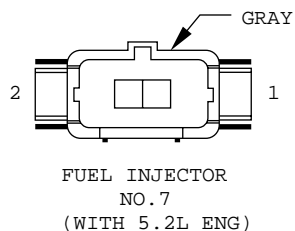
CAV	CIRCUIT	FUNCTION
1	A142 18DG/OR	AUTOMATIC SHUT DOWN RELAY OUTPUT
2	K14 18LB/BR	INJECTOR NO. 4 DRIVER



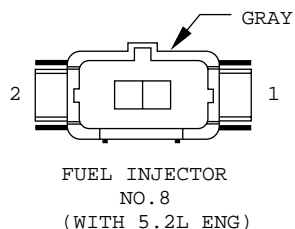
CAV	CIRCUIT	FUNCTION
1	A142 18DG/OR	AUTOMATIC SHUT DOWN RELAY OUTPUT
2	K38 18GY	INJECTOR NO. 5 DRIVER



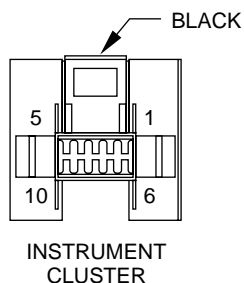
CAV	CIRCUIT	FUNCTION
1	A142 18DG/OR	AUTOMATIC SHUT DOWN RELAY OUTPUT
2	K58 18BR/YL	INJECTOR NO. 6 DRIVER



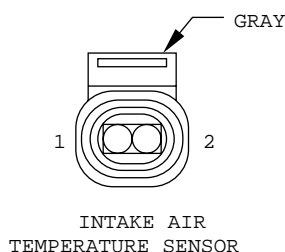
CAV	CIRCUIT	FUNCTION
1	A142 18DG/OR	AUTOMATIC SHUT DOWN RELAY OUTPUT
2	K17 18DB/WT	INJECTOR NO. 7 DRIVER



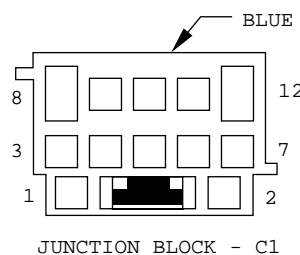
CAV	CIRCUIT	FUNCTION
1	A142 18DG/OR	AUTOMATIC SHUT DOWN RELAY OUTPUT
2	K18 18DB/YL	INJECTOR NO. 8 DRIVER



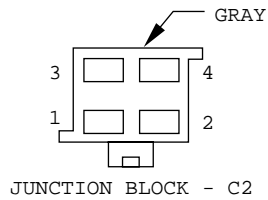
CAV	CIRCUIT	FUNCTION
1	Z1 20BK	GROUND
2	Z2 20BK/OR	GROUND
3	F75 18VT	FUSED B(+)
4	205 20WT/VT	ABS WARNING LAMP DRIVER
5	F87 20BK/WT	FUSED IGNITION SWITCH OUTPUT (START/RUN)
6	L65 18LG/DB	LEFT TURN SIGNAL INDICATOR LAMP
7	L64 18TN/DB	RIGHT TURN SIGNAL INDICATOR LAMP
8	D1 18VT/BR	CCD BUS (+)
9	D2 18WT/BK	CCD BUS (-)
10	E2 20OR	PANEL LAMP DRIVER



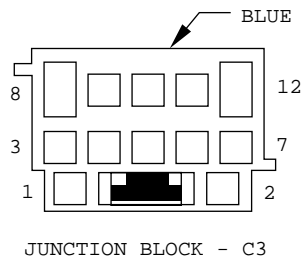
CAV	CIRCUIT	FUNCTION
1	K21 16BK/RD	INTAKE AIR TEMPERATURE SENSOR SIGNAL
2	K4 16BK/LB	SENSOR GROUND



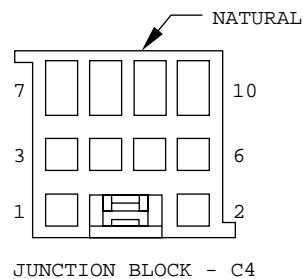
CAV	CIRCUIT	FUNCTION
1	M1 18PK	FUSED B(+)
2	L10 18BR/LG	BACK-UP LAMP SWITCH OUTPUT
3	-	-
4	L39 18LB	FOG LAMP SWITCH OUTPUT
5	F62 18RD	FUSED B(+)
6	-	-
7	T107 20BK/RD	4-WHEEL DRIVE PART TIME LAMP
8	A6 14RD/LB	FUSED B(+)
9	L90 18DB/RD	PARK LAMP SWITCH OUTPUT
10	-	-
11	F12 20DB/WT	FUSED IGNITION SWITCH OUTPUT (RUN)
12	F86 18LG/RD	FUSED B(+)



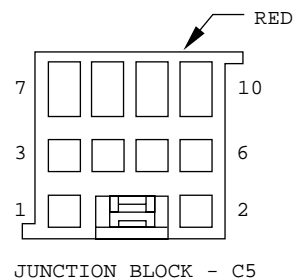
CAV	CIRCUIT	FUNCTION
1	A21 12DB/GY	IGNITION SWITCH OUTPUT (START/RUN)
2	A7 12YL/RD	FUSED B(+)
3	A900 12OR/YL	FUSED B(+)
4	A250 10RD	FUSED B(+)



CAV	CIRCUIT	FUNCTION
1	X4 20GY/OR	HORN RELAY CONTROL
2	-	-
3	G28 20LG/OR	2-WHEEL DRIVE LAMP/LOW RANGE
4	L39 18LB	FOG LAMP RELAY OUTPUT
5	F62 18RD	FUSED B(+)
6	-	-
7	-	-
8	A6 14RD/LB	FUSED B(+)
9	L90 18DB/RD	PARK LAMP SWITCH OUTPUT
10	-	-
11	L64 18TN/DB	TURN SIGNAL SWITCH OUTPUT
12	F12 20DB/WT	FUSED IGNITION SWITCH OUTPUT (ACC/RUN)

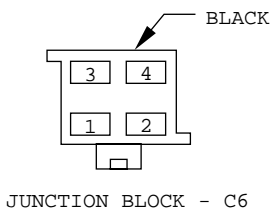


CAV	CIRCUIT	FUNCTION
1	L64 18TN/DB	RIGHT TURN SIGNAL INDICATOR LAMP
2	107 20BK/RD	4-WHEEL DRIVE PART TIME LAMP
3	F30 18RD/DB	FUSED IGNITION SWITCH OUTPUT (ACC/RUN)
4	A31 18RD/BK	FUSED IGNITION SWITCH OUTPUT (ACC/RUN)
5	L64 18TN/DB	RIGHT TURN SIGNAL INDICATOR LAMP
6	107 20BK/RD	4-WHEEL DRIVE PART TIME LAMP
7	F86 16LG/BK*	FUSED IGNITION SWITCH OUTPUT (ACC/RUN)
	F86 16LG/BK	FUSED IGNITION SWITCH OUTPUT (ACC/RUN)
8	F75 18VT	FUSED B(+)
9	F75 18VT	FUSED B(+)
10	-	-

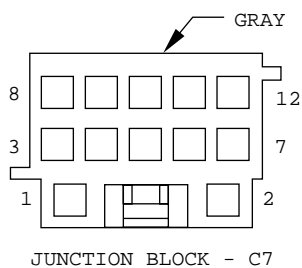


CAV	CIRCUIT	FUNCTION
1	L5 18OR/BK	TURN SIGNAL
2	G28 20LG/OR	2-WHEEL DRIVE OR REAR WHEEL IN ALL TIME
3	-	-
4	Z1 18BK	GROUND
5	X60 20DG/RD	RADIO 12 VOLT OUTPUT
6	G28 20LG/OR	ALL TIME FRONT WHEELS
7	-	-
8	F34 16TN/BK	AUTO HEADLAMP RELAY OUTPUT
9	A6 14RD/LB	FUSED B(+)
10	A22 12BK/OR	FUSED IGNITION SWITCH OUTPUT (RUN)

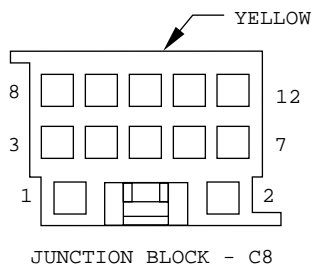
* WITH POWER SUNROOF



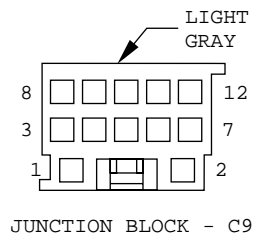
CAV	CIRCUIT	FUNCTION
1	A31 12RD/BK	FUSED IGNITION SWITCH OUTPUT (ACC/RUN)
2	A21 12DB/GY	FUSED IGNITION SWITCH OUTPUT (START/RUN)
3	C15 12BK/WT	REAR WINDOW DEFOGGER RELAY OUTPUT
4	F61 16WT/OR	FUSED B(+)



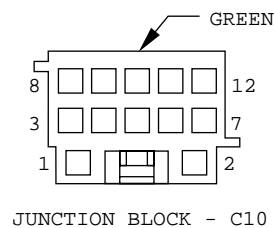
CAV	CIRCUIT	FUNCTION
1	X12 18RD/GY	FUSED IGNITION SWITCH OUTPUT (ACC/RUN)
2	L11 16LG/BK	FLASH TO PASS
3	L95 18DG/YL	FOG LAMP RELAY CONTROL
4	A31 18RD/BK	FUSED IGNITION SWITCH OUTPUT (ACC/RUN)
5	L12 18VT/TN	HAZARD SIGNAL
6	L36 18LG	REAR FOG LAMP
7	L96 20LG/RD	-
8	L39 20LB	FOG LAMP RELAY OUTPUT
9	Z1 18BK	GROUND
10	L95 18DG/YL	FOG LAMP RELAY CONTROL
11	-	-
12	X4 20GY/OR	HORN RELAY CONTROL



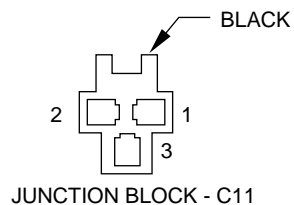
CAV	CIRCUIT	FUNCTION
1	F83 18YL/DG	FUSED IGNITION SWITCH OUTPUT (RUN)
2	M2 20YL	COURTESY LAMP RELAY OUTPUT
3	M1 20PK	FUSED B(+)
4	L90 18DB/RD	PARK LAMP SWITCH OUTPUT
5	L90 20DB/RD	PARK LAMP SWITCH OUTPUT
6	M1 20PK	FUSED B(+)
7	M2 20YL	COURTESY LAMP RELAY OUTPUT
8	M1 20PK	MUX COURTESY LAMP DRIVER
9	-	-
10	L90 20DB/RD	PARK LAMP SWITCH OUTPUT
11	M1 20PK	FUSED B(+)
12	M2 20YL	COURTESY LAMP RELAY OUTPUT



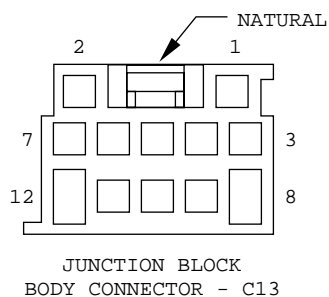
CAV	CIRCUIT	FUNCTION
1	C16 20LB/YL	REAR WINDOW DEFOGGER LAMP DRIVER
2	F38 18OR	FUSED B(+)
3	-	-
4	F71 20DG/PK*	FUSED IGNITION SWITCH OUTPUT (RUN)
5	F60 20RD/WT	FUSED B(+)
6	-	-
7	-	-
8	F87 20BK/WT	FUSED IGNITION SWITCH OUTPUT (START/RUN)
9	F71 20PK/DG*	FUSED IGNITION SWITCH OUTPUT (RUN)
10	F60 20RD/WT	FUSED B(+)
11	366 16PK/OR	PARK LAMP FEED
12	F60 20WT/RD*	FUSED B(+)



CAV	CIRCUIT	FUNCTION
1	L95 20DG/YL	FOG LAMP RELAY CONTROL
2	V23 18BR/PK	FUSED IGNITION SWITCH OUTPUT (ACC/RUN)
3	L16 18RD/LG	FUSED B(+)
4	-	-
5	V23 20BR/PK	FUSED IGNITION SWITCH OUTPUT (ACC/RUN)
6	M112 20BR/LG	COURTESY LAMP RELAY CONTROL
7	X4 20GY/OR	HORN RELAY CONTROL
8	C14 20WT/RD	REAR WINDOW DEFOGGER RELAY CONTROL
9	-	-
10	L79 20TN	PARK LAMP RELAY CONTROL
11	L90 20DB/RD	PARK LAMP SWITCH OUTPUT
12	714 20BK/OR	AUTO HEADLAMP RELAY CONTROL

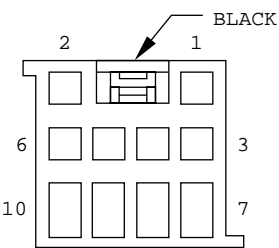


CAV	CIRCUIT	FUNCTION
1	X17 20DG	POWER ANTENNA UP CONTROL
2	X14 20WT	POWER ANTENNA DOWN CONTROL
3	X16 20GY	POWER ANTENNA DRIVER



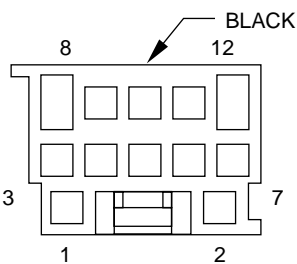
CAV	CIRCUIT	FUNCTION
1	F20 18WT	FUSED IGNITION SWITCH OUTPUT (RUN)
2	-	-
3	-	-
4	L90 18DB/RD	PARK LAMP RELAY OUTPUT
5	M1 20PK	FUSED B(+)
6	F12 20DB/WT	FUSED IGNITION SWITCH OUTPUT (RUN)
7	F87 20WT/PK	FUSED IGNITION SWITCH OUTPUT (START/RUN)
8	F75 14VT	FUSED B(+)
9	-	-
10	-	-
11	-	-
12	F35 16RD	FUSED B(+)

* AUTOMATIC TEMP CONTROL



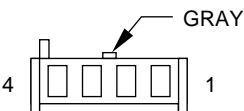
JUNCTION BLOCK
BODY CONNECTOR - C14

CAV	CIRCUIT	FUNCTION
1	L10 18BR/LG	BACK-UP LAMP SWITCH OUTPUT
2	G5 18DB/WT	FUSED IGNITION SWITCH OUTPUT (START/RUN)
3	M2 20YL	COURTESY LAMP RELAY OUTPUT
4	X60 18DG/RD	RADIO 12 VOLT OUTPUT
5	-	-
6	-	-
7	F81 10TN	FUSED B(+)
8	F70 14PK/BK	FUSED B(+)
9	F81 12TN	FUSED B(+)
10	F35 16RD	FUSED B(+)



JUNCTION BLOCK - C15
(OVERHEAD CONSOLE)

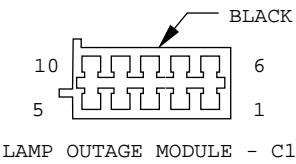
CAV	CIRCUIT	FUNCTION
1	-	-
2	Z1 16BK	GROUND
3	F83 20YL/DG*	FUSED IGNITION SWITCH OUTPUT (RUN)
3	F83 20BK/VT	FUSED IGNITION SWITCH OUTPUT (RUN)
4	-	-
5	-	-
6	-	-
7	L10 20BK/RD	BACK-UP LAMP SWITCH OUTPUT
8	-	-
9	M1 20PK	FUSED B(+)
10	-	-
11	M2 20YL	COURTESY LAMP RELAY OUTPUT
12	-	-



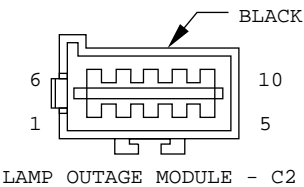
KEY-IN SWITCH/
HALO LAMP

CAV	CIRCUIT	FUNCTION
1	Z1 20BK	GROUND
2	G26 20LB	KEY-IN IGNITION SWITCH SENSE
3	M2 20YL	COURTESY LAMP RELAY OUTPUT
4	M1 20PK	FUSED B(+)

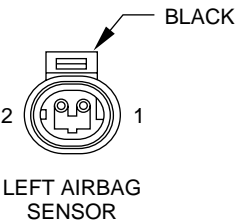
* WITH OVERHEAD CONSOLE



CAV	CIRCUIT	FUNCTION
1	L36 18LG/OR	NOT USED
2	L50 18WT/TN	STOP LAMP SWITCH OUTPUT
3	L90 18DB/RD	PARK LAMP RELAY OUTPUT
	L90 18DB/RD	PARK LAMP RELAY OUTPUT
4	L90 18DB/RD	PARK LAMP RELAY OUTPUT
	L90 18DB/RD	PARK LAMP RELAY OUTPUT
5	L90 18DB/RD	PARK LAMP RELAY OUTPUT
6	L50 18WT/TN	STOP LAMP SWITCH OUTPUT
7	L50 18WT/TN	STOP LAMP SWITCH OUTPUT
8	L50 18WT/TN	STOP LAMP SWITCH OUTPUT
9	G46 20LB/BK	REAR LAMP OUT INDICATOR DRIVER
10	F87 18WT/PK	FUSED IGNITION SWITCH OUTPUT (START/RUN)

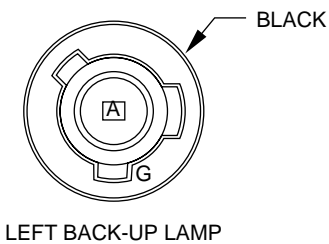


CAV	CIRCUIT	FUNCTION
1	L36 18LG/OR	NOT USED
	L36 18LG/OR	NOT USED
2	L50 18WT/TN	STOP LAMP SWITCH OUTPUT
3	L90 18DB/RD*	PARK LAMP RELAY OUTPUT
	L90 18DB/RD	PARK LAMP RELAY OUTPUT
4	L22 18LB	PARK LAMP SWITCH OUTPUT
5	L21 18LB/WT	PARK LAMP SWITCH OUTPUT
6	L74 18PK/BK	STOP LAMP SWITCH OUTPUT
7	L73 18PK/WT	STOP LAMP SWITCH OUTPUT
8	L87 18DG/WT	STOP LAMP SWITCH OUTPUT
9	Z1 18BK	GROUND
10	-	-

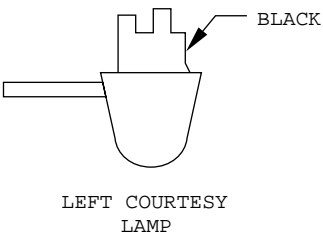


CAV	CIRCUIT	FUNCTION
1	R47 18DB/LB	LEFT IMPACT SENSOR LINE 1
2	R49 18LB	LEFT IMPACT SENSOR LINE 2

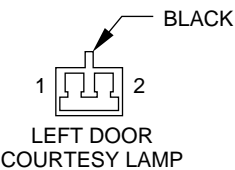
* WITH AFTERMARKET TRAILER
TOW OR FACTORY TRAILER TOW



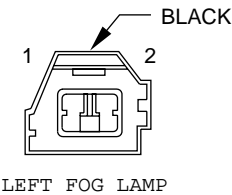
CAV	CIRCUIT	FUNCTION
A	L10 18BR/LG	BACK-UP LAMP SWITCH OUTPUT
G	Z1 18BK	GROUND



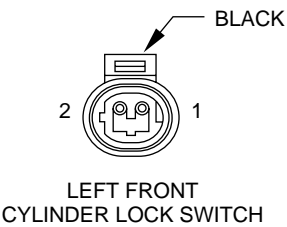
CAV	CIRCUIT	FUNCTION
A	M1 20PK	FUSED B(+)
B	M2 20YL	COURTESY LAMP RELAY OUTPUT



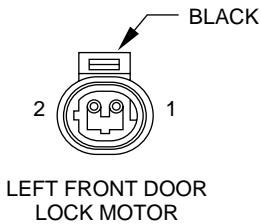
CAV	CIRCUIT	FUNCTION
1	M1 20PK	FUSED B(+)
2	Z1 20BK	GROUND



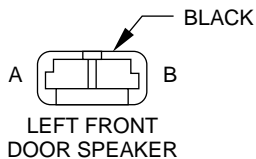
CAV	CIRCUIT	FUNCTION
1	Z1 18BK	GROUND
2	L39 18LB	FOG LAMP RELAY SWITCH OUTPUT



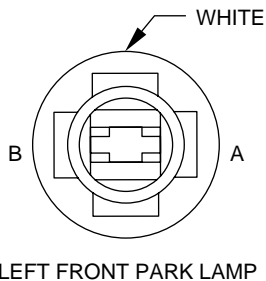
CAV	CIRCUIT	FUNCTION
1	G71 20VT/YL	VTSS DISARM SENSE
2	Z1 20BK	GROUND



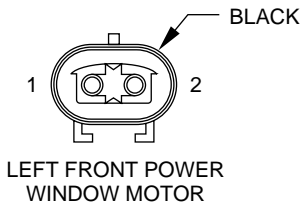
CAV	CIRCUIT	FUNCTION
1	P34 18PK/BK	LEFT FRONT DOOR UNLOCK DRIVER
2	P35 18OR/VT	LEFT FRONT DOOR LOCK DRIVER



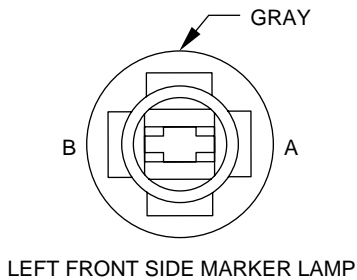
CAV	CIRCUIT	FUNCTION
A	X53 20DG	LEFT FRONT (+)
B	X55 20BR/RD	LEFT FRONT (-)



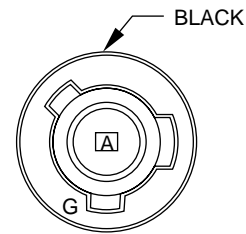
CAV	CIRCUIT	FUNCTION
A	L90 18DB/RD	PARK LAMP RELAY OUTPUT
B	Z1 18BK	GROUND



CAV	CIRCUIT	FUNCTION
1	Q11 16LB	LEFT FRONT WINDOW DRIVER (UP)
2	Q21 16WT	LEFT FRONT WINDOW DRIVER (DOWN)

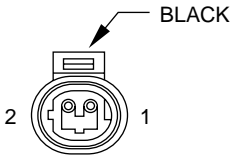


CAV	CIRCUIT	FUNCTION
A	L90 18DB/RD	PARK LAMP RELAY OUTPUT
B	L64 18TN/DB	TURN SIGNAL SWITCH OUTPUT



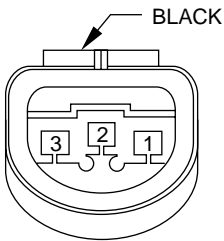
LEFT FRONT TURN
SIGNAL LAMP

CAV	CIRCUIT	FUNCTION
A	L64 18TN/DB	TURN SIGNAL SWITCH OUTPUT
G	Z1 18BK	GROUND



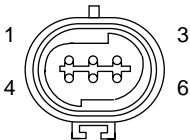
LEFT FRONT
WHEEL SPEED SENSOR

CAV	CIRCUIT	FUNCTION
1	B8 20RD/DB	LEFT FRONT WHEEL SPEED SENSOR (-)
2	B9 20RD	LEFT FRONT WHEEL SPEED SENSOR (+)



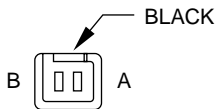
LEFT HEADLAMP

CAV	CIRCUIT	FUNCTION
1	Z1 16BK	GROUND
2	L4 16VT/OR	DIMMER SWITCH LOW BEAM OUTPUT
3	L3 16RD/OR	DIMMER SWITCH HIGH BEAM OUTPUT



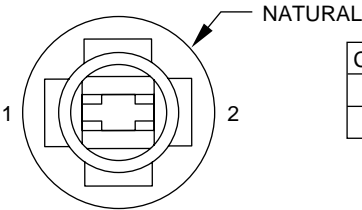
LEFT HEADLAMP LEVELING
MOTOR ●

CAV	CIRCUIT	FUNCTION
1	L104 20LG	POSITION 4
2	L103 20LB	POSITION 3
3	L102 20WT	POSITION 2
4	L105 20PK	POSITION 5
5	L106 20YL	POSITION 6
6	L101 20RD	POSITION 1



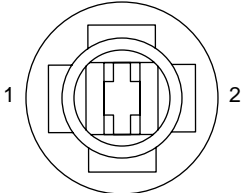
LEFT INSTRUMENT
PANEL SPEAKER

CAV	CIRCUIT	FUNCTION
A	X87 20LG/RD	AMPLIFIED LEFT FRONT (+)
B	X85 20LG/BK	AMPLIFIED LEFT FRONT (-)



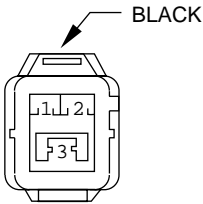
LEFT LICENSE LAMP

CAV	CIRCUIT	FUNCTION
1	L90 20DB/RD	PARK LAMP RELAY OUTPUT
2	Z1 20BK	GROUND



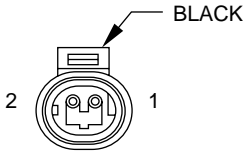
LEFT PARK LAMP

CAV	CIRCUIT	FUNCTION
1	L90 18DB/RD	PARK LAMP RELAY
2	Z1 18BK	GROUND



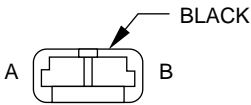
LEFT PARK TURN
SIGNAL MARKER

CAV	CIRCUIT	FUNCTION
1	L65 18LG/DB	LEFT FRONT T.S. FEED
2	L90 18DB/RD	PARK LAMP SWITCH OUTPUT
3	Z1 18BK	GROUND



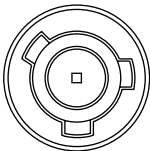
LEFT REAR DOOR
LOCK MOTOR

CAV	CIRCUIT	FUNCTION
1	P34 18PK/BK	DOOR UNLOCK DRIVER
2	P2 18BK/WT	DOOR LOCK DRIVER



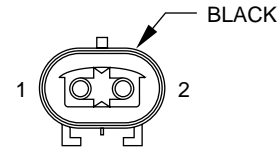
LEFT REAR
DOOR SPEAKER

CAV	CIRCUIT	FUNCTION
A	X52 20DB/WT	LEFT REAR (+)
B	X58 20DB/OR	LEFT REAR (-)



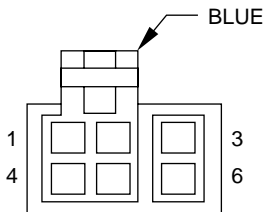
LEFT REAR
FOG LAMP

CAV	CIRCUIT	FUNCTION
A	L36 18LG/BK	REAR FOG LAMP
B	Z1 18BK	GROUND



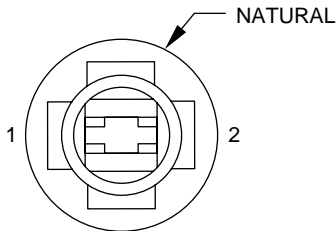
LEFT REAR POWER WINDOW MOTOR

CAV	CIRCUIT	FUNCTION
1	Q12 16BR	LEFT REAR WINDOW DRIVER (UP)
2	Q22 16VT	LEFT REAR WINDOW DRIVER (DOWN)



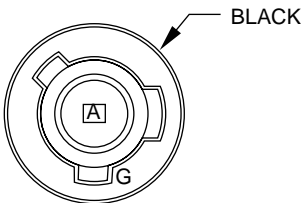
LEFT REAR POWER WINDOW SWITCH

CAV	CIRCUIT	FUNCTION
1	Q18 16GY/BK	LEFT REAR WINDOW DRIVER (UP)
2	Q12 16BR	LEFT REAR WINDOW DRIVER (UP)
3	E20 20OR/DG	LEFT REAR DOOR SWITCH ILLUMINATION
4	Q28 16DG/WT	LEFT REAR WINDOW DRIVER (DOWN)
5	Q22 16VT	LEFT REAR WINDOW DRIVER (DOWN)
6	Z1 16BK	GROUND



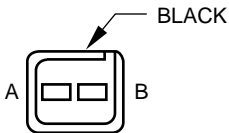
LEFT REAR SIDE MARKER LAMP

CAV	CIRCUIT	FUNCTION
1	Z1 18BK	GROUND
2	L22 18LB	PARK LAMP SWITCH OUTPUT



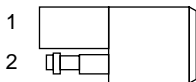
LEFT REAR TURN SIGNAL LAMP

CAV	CIRCUIT	FUNCTION
A	L60 18TN	TURN SIGNAL SWITCH OUTPUT
G	Z1 18BK	GROUND



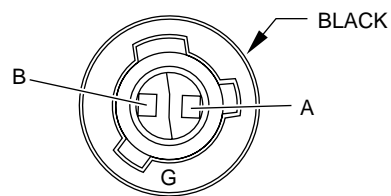
LEFT REAR WHEEL SPEED SENSOR

CAV	CIRCUIT	FUNCTION
A	B3 20LG/DB	LEFT REAR WHEEL SPEED SENSOR (-)
B	B4 20LG	LEFT REAR WHEEL SPEED SENSOR (+)



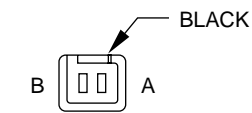
LEFT SIDE REPEATER

CAV	CIRCUIT	FUNCTION
1	Z1 18BK	GROUND
2	L65 18LG/DB	LEFT FRONT TURN SIGNAL FEED



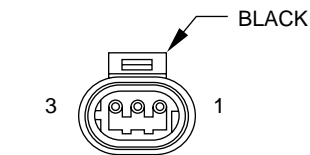
LEFT TAIL/STOP LAMP

CAV	CIRCUIT	FUNCTION
A	L74 18PK/BK	STOP LAMP SWITCH OUTPUT
B	L21 18LB/WT	PARK LAMP SWITCH OUTPUT
G	Z1 18BK	GROUND



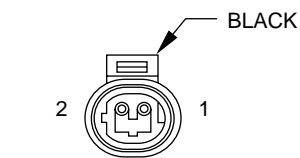
LEFT VISOR/
VANITY MIRROR

CAV	CIRCUIT	FUNCTION
A	M1 20PK	FUSED B(+)
B	Z1 20BK	GROUND



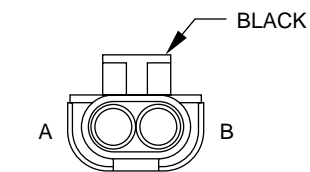
LIFTGATE AJAR SWITCH

CAV	CIRCUIT	FUNCTION
1	Z1 20BK	GROUND
2	G78 20TN/BK	LIFTGATE AJAR SWITCH SENSE
3	-	-



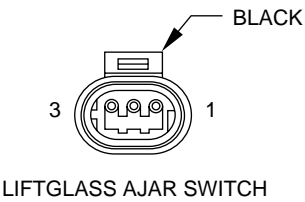
LIFTGATE
CYLINDER LOCK SWITCH

CAV	CIRCUIT	FUNCTION
1	G71 20VT/YL	VTSS DISARM SENSE
2	Z1 20BK	GROUND

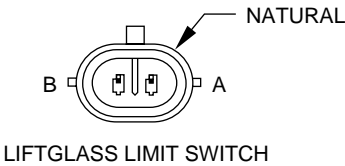


LIFTGATE LOCK MOTOR

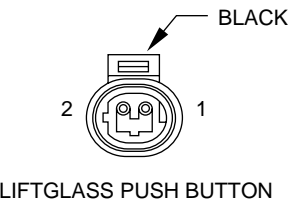
CAV	CIRCUIT	FUNCTION
A	P2 16BK/WT	DOOR LOCK DRIVER
B	P34 16PK/BK	DOOR UNLOCK DRIVER



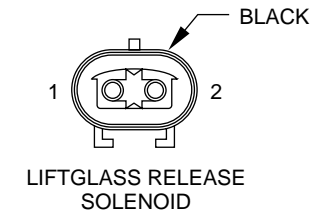
CAV	CIRCUIT	FUNCTION
1	Z1 20BK	GROUND
2	G78 20TN/BK	LIFTGLASS AJAR SWITCH SENSE
3	-	-



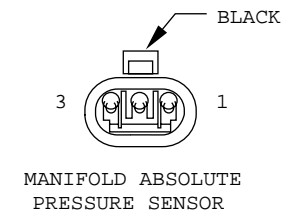
CAV	CIRCUIT	FUNCTION
A	F70 16PK/BK	FUSED B(+)
B	P101 16OR/PK	LIFTGLASS LIMIT SWITCH OUTPUT



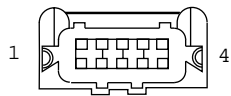
CAV	CIRCUIT	FUNCTION
1	P100 14OR/BR	LIFTGLASS PUSH BUTTON OUTPUT
2	P101 16OR/PK	LIFTGLASS LIMIT SWITCH OUTPUT



CAV	CIRCUIT	FUNCTION
1	P100 14OR/BR	LIFTGLASS PUSH BUTTON OUTPUT
2	Z1 14BK	GROUND

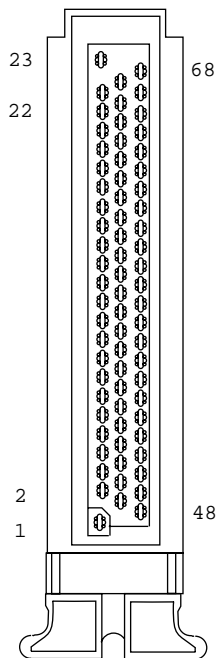


CAV	CIRCUIT	FUNCTION
1	K4 20BK/LB	SENSOR GROUND
2	K70 18RD/WT	MAP SENSOR SIGNAL
3	K25 20WT/BK	5 VOLT SUPPLY



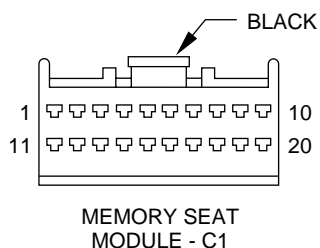
MASS AIR FLOW MODULE

CAV	CIRCUIT	FUNCTION
1	Z1 20BK	GROUND
2	K4 20BK/LB	SENSOR GROUND
3	A142 18DG/OR	FUSED (B+)
4	K155 20DB	AIR FLOW METER SIGNAL

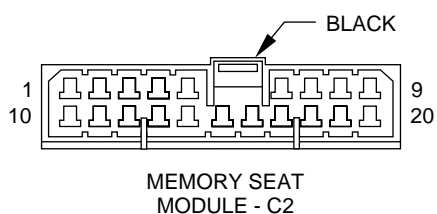
MSA CONTROLLER
(DIESEL)

CAV	CIRCUIT	FUNCTION
1	Z12 14BK/TN	POWER GROUND
2	G21 20GY/LB	TACHOMETER SIGNAL
3	K185 18OR/LB	WAIT TO START LAMP
4	K140 16TN/WT	FUEL QUANTITY ACTUATOR GROUND
5	K140 16TN/WT	FUEL QUANTITY ACTUATOR GROUND
7	K57 20LG/OR	CONT SLEEVE POS SENSE
8	K24 20LG/YL	CRANKSHAFT POSITION SENSOR
11	K68 20LG/YL	NEEDLE MOVE SENSOR (-)
12	K67 20BR/BK	NEEDLE MOVE SENSOR (+)
13	K155 20DB	AIR FLOW METER SIGNAL
14	K2 20TN/BK	ENGINE COOLANT TEMPERATUR SENSOR SIGNAL
15	K22 20OR/DB	THROTTLE POSITION SENSOR SIGNAL
20	L50 18WT/TN	STOP LAMP SWITCH OUTPUT
23	A142 14DG/OR	AUTO SHUTDOWN RELAY OUTPUT
24	Z12 16BK/TN	POWER GROUND
25	K35 16GY/YL	EGR SOLENOID CONTROL
26	K48 18OR/RD	FLT SIGNAL
27	K92 20PK	COIL DRIVER #2
28	C13 16DB/RD	A/C COMPRESSOR CLUTCH RELAY CONTROL
29	K134 20LB/BK	SLEEVE POSITION SENSE
33	K4 20BK/LB	SENSOR GROUND
36	K95 20PK	VEHICLE SPEED CONTROL SWITCH SIGNAL
37	C103 20DG	A/C SWITCH SIGNAL
38	F99 20RD/OR	FUEL HEATER RELAY OUTPUT
42	K900 20PK/BK	AUTOMATIC SHUTDOWN RELAY CONTROL
43	G7 20WT/OR	VEHICLE SPEED SENSOR SIGNAL
44	V32 20YL/RD	SPEED CONTROL ON/OFF SWITCH SENSE
45	A142 16DG/OR	AUTO SHUT DOWN RELAY (+)
46	Z12 16BK/TN	POWER GROUND
49	K140 16TN/WT	FUEL QUANTITY ACTUATOR GROUND
50	K152 16WT	GLOW PLUG RELAY CONTROL SENSE
51	K238 16VT	FUEL TIMING SHUTOFF SENSOR
52	K135 20WT/BK	SLEEVE POSITION SENSOR (+)
53	K153 20OR	SHUTOFF FEED
55	K255 20WT/DG	PEDAL POSITION SENSOR
57	K6 20VT/WT	5 VOLT SUPPLY
61	D83 20BK/PK	SCI RECEIVE
63	K156 20GY	FUEL TEMPERATURE SENSOR SIGNAL
65	K151 20WT	LOW IDLE POSITION SWITCH
68	A142 16DG/OR	LEFT FRONT DECAY SOLENOID CONTROL

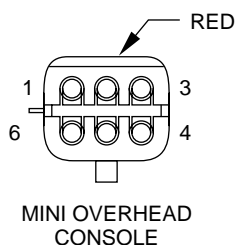
(CAVITIES NOT SHOWN ARE NOT USED)



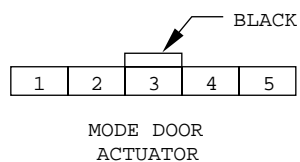
CAV	CIRCUIT	FUNCTION
1	P29 20BR/WT	6 VOLT SENSOR SUPPLY
2	P28 20BR/RD	SENSOR GROUND
3	P25 20VT/RD	HORIZONTAL POSITION SENSE
4	P26 20BR	FRONT RISER POSITION SENSE
5	P27 20LB/RD	REAR RISER POSITION SENSE
6	P47 20LB	RECLINER POSITION SENSE
7	P103 20DB/WT	LUMBAR POSITION SENSE
8	P21 18RD/LG	FRONT RISER DOWN SWITCH SENSE
9	P19 18YL/LG	FRONT RISER UP SWITCH SENSE
10	P13 18RD/WT	REAR RISER DOWN SWITCH SENSE
11	P11 18YL/WT	REAR RISER UP SWITCH SENSE
12	P15 18YL/LB	HORIZONTAL FORWARD SWITCH SENSE
13	P17 18RD/LB	HORIZONTAL REARWARD SWITCH SENSE
14	P40 18GY/LB	RECLINER UP SWITCH SENSE
15	P48 18GY/WT	RECLINER DOWN SWITCH SENSE
16	P105 20LG/DB	LUMBAR FORWARD SWITCH SENSE
17	P104 20YL/RD	LUMBAR REARWARD SWITCH SENSE
18	D1 20VT/BR	CCD BUS (+)
19	D2 20WT/BK	CCD BUS (-)
20	-	-



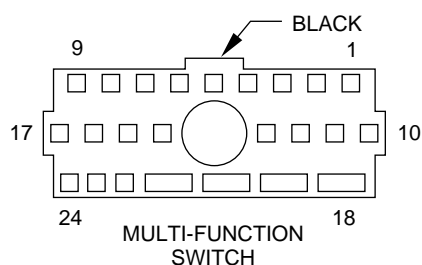
CAV	CIRCUIT	FUNCTION
1	Z1 16BK	GROUND
2	P115 16GY/LG	HORIZONTAL FORWARD DRIVER
3	P117 16RD/BR	HORIZONTAL REARWARD DRIVER
4	-	-
5	-	-
6	P43 16GY/LB	RECLINER REARWARD DRIVER
7	P41 16GY/WT	RECLINER FORWARD DRIVER
8	Z1 16BK	GROUND
9	P106 16DG/WT	LUMBAR REARWARD DRIVER
10	F35 16RD	FUSED B(+)
11	P113 16RD/BK	REAR RISER DOWN DRIVER
12	P111 16YL/DB	REAR RISER UP DRIVER
13	-	-
14	-	-
15	-	-
16	-	-
17	P121 16RD/GY	FRONT RISER DOWN DRIVER
18	P119 16YL/RD	FRONT RISER UP DRIVER
19	F35 16RD	FUSED B(+)
20	P107 16OR/BK	LUMBAR FORWARD DRIVER



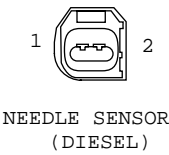
CAV	CIRCUIT	FUNCTION
1	F83 20YL/DG	FUSED IGNITION SWITCH OUTPUT (RUN)
2	Z1 20BK	GROUND
3	D1 18VT/BR	CCD BUS(+)
4	M2 20YL	COURTESY LAMP RELAY OUTPUT
5	D2 18WT/BK	CCD BUS(-)
6	M1 20PK	FUSED B(+)



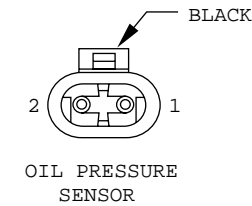
CAV	CIRCUIT	FUNCTION
1	C39 20YL	MODE DOOR MOTOR POSITION SENSE
2	C40 20DG/YL	5 VOLT SUPPLY
3	D41 20LG/WT	SENSOR RETURN
4	C38 20DG	MODE DOOR MOTOR DRIVER
5	C37 20TN/BK	MODE DOOR MOTOR DRIVER



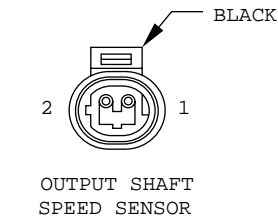
CAV	CIRCUIT	FUNCTION
1	V50 18LG/WT	WIPER SWITCH MODE SENSE
2	V51 18WT	WINDSHIELD WIPER SWITCH SIGNAL
3	V11 18TN/BK	WASHER SWITCH OUTPUT
	V11 18TN/BK	WASHER SWITCH OUTPUT
4	F86 16LG/BK	FUSED IGNITION SWITCH OUTPUT (ACC/RUN)
5	V4 18RD/YL	WIPER SWITCH HIGH SPEED OUTPUT
6	V3 18BR/WT	WIPER SWITCH LOW SPEED OUTPUT
	V3 18BR/WT	WIPER SWITCH LOW SPEED OUTPUT
7	V6 16DB	FUSED IGNITION SWITCH OUTPUT (ACC/RUN)
8	V6 16DB	FUSED IGNITION SWITCH OUTPUT (ACC/RUN)
9	V3 18BR/WT	WIPER SWITCH LOW SPEED OUTPUT
10	-	-
11	L64 18TN/DB	RIGHT TURN SIGNAL INDICATOR LAMP
12	L60 18TN	LEFT TURN SIGNAL INDICATOR LAMP
13	L12 18VT/TN	HAZARD SIGNAL
14	-	-
15	L61 18DG	TURN SIGNAL SWITCH OUTPUT
16	L65 18LG/DB	TURN SIGNAL SWITCH OUTPUT
	L65 18LG/DB	TURN SIGNAL SWITCH OUTPUT
17	L5 18OR/BK	TURN SIGNAL
	L5 18OR/BK	TURN SIGNAL
18	L4 16VT/OR	DIMMER SWITCH LOW BEAM OUTPUT
	L4 16VT/OR	DIMMER SWITCH LOW BEAM OUTPUT
19	F34 16TN/BK	LOW HEADLAMP SWITCH SENSE
	F34 16TN/BK	LOW HEADLAMP SWITCH SENSE
20	L3 16RD/OR	DIMMER SWITCH HIGH BEAM OUTPUT
21	L11 16LG/BK	FLASH TO PASS
22	-	-
23	-	-
24	-	-



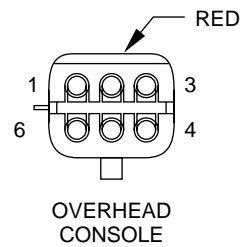
CAV	CIRCUIT	FUNCTION
1	K67 20BR/BK	NEEDLE MOVEMENT SENSOR (+)
2	K68 20LG/YL	NEEDLE MOVEMENT SENSOR (-)



CAV	CIRCUIT	FUNCTION
1	K4 20BK/LB	SENSOR GROUND
1	G60 20GY/YL*	OIL PRESSURE SENSOR SIGNAL
2	G6 18GY/WT	OIL PRESSURE SENSOR SIGNAL
2	K167 20BR/YL*	SENSOR RETURN

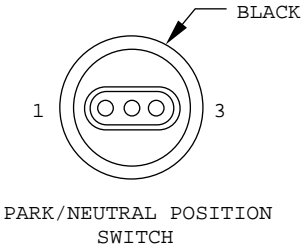


CAV	CIRCUIT	FUNCTION
1	T14 18LG/WT	OUTPUT SHAFT SPEED SENSOR SIGNAL (+)
2	T13 18DB/BK	OUTPUT SHAFT SPEED SENSOR SIGNAL (-)

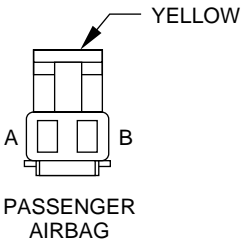


CAV	CIRCUIT	FUNCTION
1	F83 20YL/DG	FUSED IGNITION SWITCH OUTPUT (RUN)
2	Z1 20BK	GROUND
3	D1 18VT/BR	CCD BUS(+)
4	M2 20YL	COURTESY LAMP RELAY OUTPUT
5	D2 18WT/BK	CCD BUS(-)
6	M1 20PK	FUSED B(+)

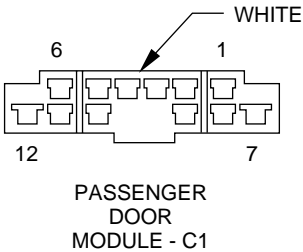
* DIESEL



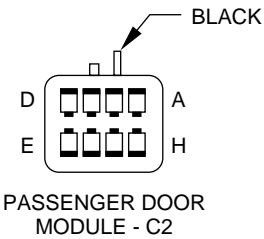
CAV	CIRCUIT	FUNCTION
1	L10 18BR/LG	BACK-UP LAMP SWITCH OUTPUT
2	T41 20BK/WT	PARK/NEUTRAL POSITION SWITCH SENSE
3	F83 18YL/DG	FUSED IGNITION SWITCH OUTPUT (RUN)



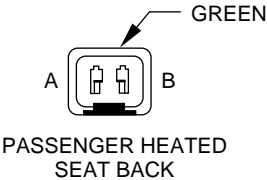
CAV	CIRCUIT	FUNCTION
A	R44 18DB	PASSENGER AIRBAG LINE 2
B	R42 18VT	PASSENGER AIRBAG LINE 1



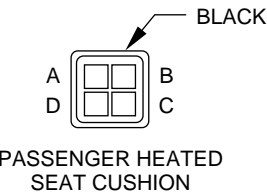
CAV	CIRCUIT	FUNCTION
1	Q12 16BR	RIGHT FRONT WINDOW DRIVER (UP)
2	Q22 16VT	RIGHT FRONT WINDOW DRIVER (DOWN)
3	Q18 16GY/BK	RIGHT REAR WINDOW DRIVER (UP)
4	Q28 16DG/WT	RIGHT REAR WINDOW DRIVER (DOWN)
5	P34 18PK/BK	RIGHT FRONT DOOR UNLOCK DRIVER
6	P2 18BK/WT	RIGHT FRONT DOOR LOCK DRIVER
7	Z1 12BK	GROUND
8	D1 18VT/BR	CCD BUS(+)
9	D2 18WT/BK	CCD BUS(-)
10	E20 18OR/DB	RIGHT REAR DOOR SWITCH ILLUMINATION
11	M1 20PK	MUX COURTESY LAMP DRIVER
12	F81 12TN	FUSED B(+)



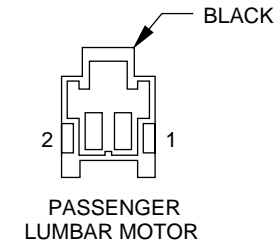
CAV	CIRCUIT	FUNCTION
A	F75 20WT	HORIZONTAL DRIVER
B	Z1 20BK	HEATER SWITCHED GROUND
C	F84 20GN	VERTICAL POSITION SENSOR SIGNAL
D	F86 20GY	SENSOR GROUND
E	F85 20VT	HORIZONTAL POSITION SENSOR SIGNAL
F	C16 20BK	HEATER 12 VOLT SUPPLY
G	F73 20DB	COMMON DRIVER
H	F71 20YL	VERTICAL DRIVER



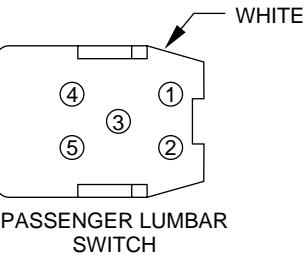
CAV	CIRCUIT	FUNCTION
A	Z1 16BK	GROUND
B	P88 16BR/BK	HEATED SEAT DRIVER



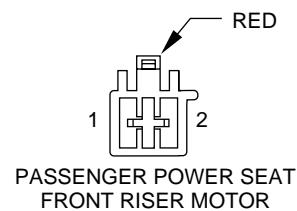
CAV	CIRCUIT	FUNCTION
A	P87 16BK/OR	HEATED SEAT DRIVER
B	P88 16BR/BK	HEATED SEAT DRIVER
C	P8 18LB/WT	PASSENGER HEATED SEAT SWITCH OUTPUT
D	Z1 20BK	GROUND



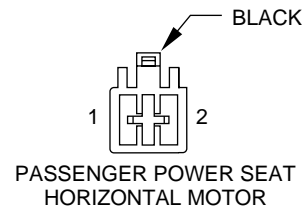
CAV	CIRCUIT	FUNCTION
1	P106 18DG/WT	LUMBAR FORWARD DRIVER
2	P107 18OR/BK	LUMBAR REARWARD DRIVER



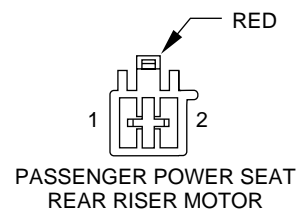
CAV	CIRCUIT	FUNCTION
1	P107 18OR/BK	LUMBAR REARWARD DRIVER
2	Z1 18BK	GROUND
3	F35 18RD	FUSE B(+)
4	Z1 18BK	GROUND
5	P106 18DG/WT	LUMBAR FORWARD DRIVER



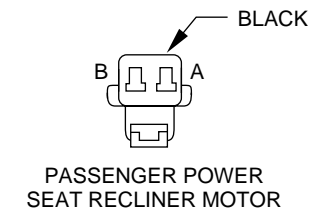
CAV	CIRCUIT	FUNCTION
1	P20 16RD/LG	FRONT RISER DOWN SWITCH SENSE
2	P18 16YL/LG	FRONT RISER UP SWITCH SENSE



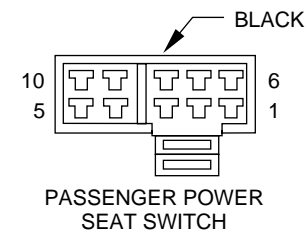
CAV	CIRCUIT	FUNCTION
1	P14 16YL/LB	HORIZONTAL FORWARD SWITCH SENSE
2	P16 16RD/LB	HORIZONTAL REARWARD SWITCH SENSE



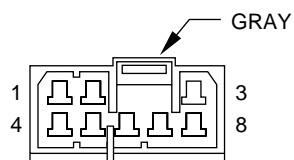
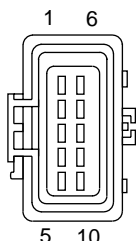
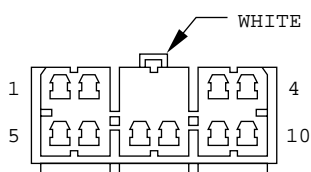
CAV	CIRCUIT	FUNCTION
1	P12 16RD/WT	REAR RISER DOWN SWITCH SENSE
2	P10 16YL/WT	REAR RISER UP SWITCH SENSE



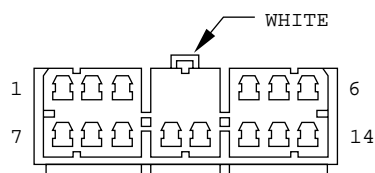
CAV	CIRCUIT	FUNCTION
A	P42 16GY/WT	RECLINER DOWN DRIVER
B	P44 16GY/LB	RECLINER UP DRIVER



CAV	CIRCUIT	FUNCTION
1	Z1 18BK	GROUND
2	P44 16GY/LB	RECLINER UP DRIVER
3	P16 16RD/LB	HORIZONTAL REARWARD SWITCH SENSE
4	P42 16GY/WT	RECLINER DOWN DRIVER
5	F35 16RD	FUSED B(+)
6	P14 16YL/LB	HORIZONTAL FORWARD SWITCH SENSE
7	P20 16RD/LG	FRONT RISER DOWN SWITCH SENSE
8	P12 16RD/WT	REAR RISER DOWN SWITCH SENSE
9	P10 16YL/WT	REAR RISER UP SWITCH SENSE
10	P18 16YL/LG	FRONT RISER UP SWITCH SENSE

PASSENGER SEAT HEATER
CONTROL MODULEPEDAL POSITION SENSOR
(DIESEL)

POWER AMPLIFIER - C1



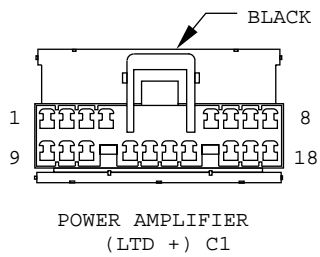
POWER AMPLIFIER - C2

CAV	CIRCUIT	FUNCTION
1	F87 18WT/BK	FUSED IGNITION SWITCH OUTPUT
2	F35 16RD	FUSED B(+)
3	P87 16BK/OR	HEATED SEAT DRIVER
4	-	-
5	-	-
6	-	-
7	Z1 18BK	GROUND
8	P8 18LB/WT	PASSENGER HEATED SEAT SWITCH OUTPUT

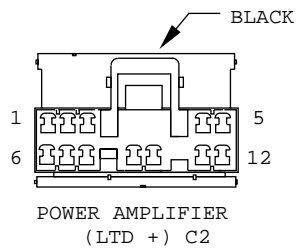
CAV	CIRCUIT	FUNCTION
3	K255 20WT/DG	PEDAL POSITION SENSOR
5	K151 20WT	LOW IDLE POSITION SWITCH
7	K6 20VT/WT	5 VOLT SUPPLY
8	K4A 18BK/LB	SENSOR GROUND
10	K22 20OR/DB	THROTTLE POSITION SENSOR SIGNAL

CAV	CIRCUIT	FUNCTION
1	X82 16LB/RD	AMPLIFIED RIGHT FRONT (+)
2	X80 16LB/DG	AMPLIFIED RIGHT FRONT (-)
3	X94 16TN/RD	AMPLIFIED RIGHT REAR (+)
4	X54 16VT	RIGHT FRONT (+)
5	X58 16DB/OR	RIGHT REAR (-)
6	X52 16DB/WT	RIGHT REAR (+)
7	-	-
8	X60 18DG/RD	RADIO 12 VOLT OUTPUT
9	X92 16TN/BK	AMPLIFIED RIGHT REAR (-)
10	X56 16DB	RIGHT FRONT (-)

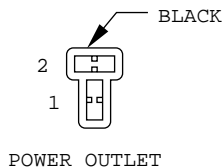
CAV	CIRCUIT	FUNCTION
1	X93 16WT/RD	AMPLIFIED LEFT REAR (+)
2	F75 16VT	FUSED B(+)
3	X87 16LG/RD	AMPLIFIED LEFT FRONT (+)
4	-	-
5	X51 16BR/YL	LEFT REAR (+)
6	X53 16DG	LEFT FRONT (+)
7	X91 16WT/BK	AMPLIFIED LEFT REAR (-)
8	F75 16VT	FUSED B(+)
9	X85 16LG/BK	AMPLIFIED LEFT FRONT (-)
10	Z5 16BK/LB	GROUND
11	Z5 16BK/LB	GROUND
12	-	-
13	X57 16BR/LB	LEFT REAR (-)
14	X55 16BR/RD	LEFT FRONT (-)



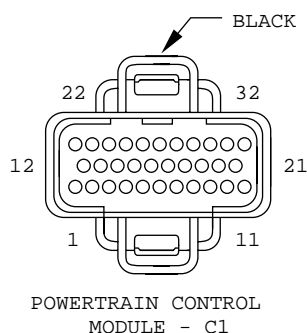
CAV	CIRCUIT	FUNCTION
1	-	
2	F75 16VT	FUSED B(+) POWER AMPLIFIER
3	Z5 16BK/LB	RADIO GROUND
4	-	-
5	X56 16DB	RIGHT FRONT SPEAKER(-)
6	X55 16BR/RD	LEFT FRONT SPEAKER (-)
7	X58 16DB/OR	RIGHT REAR SPEAKER(-)
8	X57 16BR/LB	LEFT REAR SPEAKER(-)
9	X51 16BR/YL	LEFT REAR SPEAKER (+)
10	X52 16DB/WT	RIGHT REAR SPEAKER (+)
11	X53 16DG	LEFT FRONT SPEAKER (+)
12	X54 16VT	RIGHT FRONT SPEAKER(+)
13	-	-
14	X60 18DG/RD	RADIO 12 VOLT OUTPUT
15	-	-
16	Z5 16BK/LB	RADIO GROUND
17	F75 16VT	FUSED B(+) POWER AMPLIFIER
18	-	-



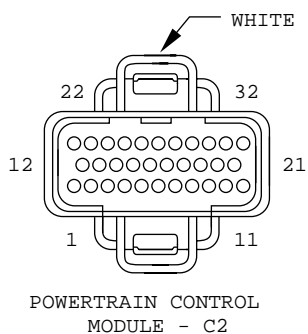
CAV	CIRCUIT	FUNCTION
1	X82 16LB/RD	AMPLIFIED RIGHT DOOR SPEAKER(+)
2	X80 16LB/DG	AMPLIFIED RIGHT SPEAKER DOOR (-)
3	X91 16WT/BK	AMPLIFIED LO LEFT REAR SPEAKER(-)
4	X95 16BR/YL	AMPLIFIED HI LEFT REAR SPEAKER(+)
5	X96 16DB/OR	AMPLIFIED RIGHT REAR SPEAKER(-)
6	X98 16DB/WT	AMPLIFIED RIGHT REAR SPEAKER(+)
7	X97 16BR/LB	AMPLIFIED HI RELT REAR SPEAKER(-)
8	X94 16TN/RD	RIGHT REAR SPEAKER(-)
9	X92 16TN/BK	RIGHT REAR SPEAKER(+)
10	X93 16WT/RD	AMPLIFIED LO LEFT REAR SPEAKER(+)
11	X85 16LG/BK	AMPLIFIED LEFT DOOR SPEAKER(-)
12	X87 16LG/RD	AMPLIFIED LEFT DOOR SPEAKER(+)



CAV	CIRCUIT	FUNCTION
1	F38 18OR	FUSED B(+)
2	Z1 18BK	GROUND



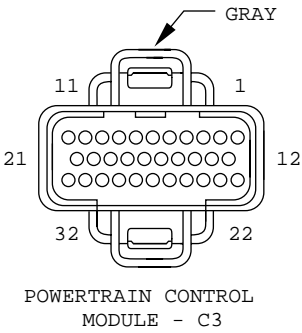
CAV	CIRCUIT	FUNCTION
A1	-	-
A2	F99 18OR	FUSED IGNITION SWITCH OUTPUT (START/RUN)
A3	-	-
A4	K4 18BK/LB	SENSOR GROUND
A5	-	-
A6	T41 18BK/WT	PARK NEUTRAL POSITION SWITCH SENSE
A7	K19 18GY/WT	IGNITION COIL NO. 1 DRIVER
A8	K27 18RD/LG	CRANKSHAFT POSITION SENSOR SIGNAL
A9	-	-
A10	K59 16VT/BK	IDLE AIR CONTROL NO. 4 DRIVER
A11	K40 16BR/WT	IDLE AIR CONTROL NO. 3 DRIVER
A12	-	-
A13	-	-
A14	-	-
A15	K21 16BK/RD	INTAKE AIR TEMPERATURE SENSOR SIGNAL
A16	K2 16TN/BK	ENGINE COOLANT TEMPERATURE SENSOR SIGNAL
A17	K25 18WT/BK	5 VOLT SUPPLY
A18	K24 18GY/BK	CAMSHAFT POSITION SENSOR SIGNAL
A19	K60 16YL/BK	IDLE AIR CONTROL NO. 2 DRIVER
A20	K39 16GY/RD	IDLE AIR CONTROL NO. 1 DRIVER
A21	-	-
A22	F5 14RD/YL	FUSED B(+)
A23	K22 18OR/DB	THROTTLE POSITION SENSOR SIGNAL
A24	K41 18BK/OR	UPSTREAM HEATED OXYGEN SENSOR SIGNAL
A25	K141 18BK/PK	DOWNSTREAM HEATED OXYGEN SENSOR SIGNAL
A26	-	-
A27	K70 18RD/WT	MAP SENSOR SIGNAL
A28	-	-
A29	-	-
A30	-	-
A31	Z12 14BK/TN	GROUND
A32	Z12 14BK/TN	GROUND



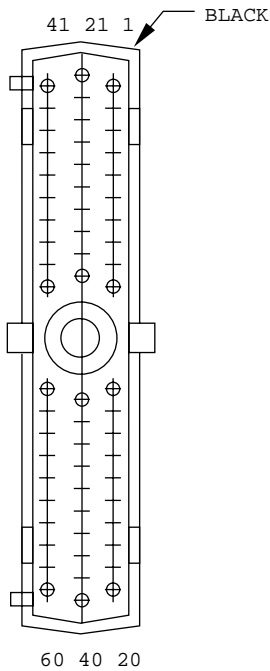
CAV	CIRCUIT	FUNCTION
B1	T54 18VT	TRANSMISSION TEMPERATURE SENSOR SIGNAL
B2	K17 18DB/WT*	INJECTOR NO. 7 DRIVER
B3	-	-
B4	K11 18WT/DB	INJECTOR NO. 1 DRIVER
B5	K13 18YL/WT	INJECTOR NO. 3 DRIVER
B6	K38 18GY	INJECTOR NO. 5 DRIVER
B7	-	-
B8	T59 18PK	VARIABLE FORCE SOLENOID CONTROL
B9	-	-
B10	K20 18DG	GENERATOR FIELD DRIVER
B11	T22 18DG/LB	TORQUE CONVERTER CLUTCH SOLENOID CONTROL
B12	K58 18BR/YL	INJECTOR NO. 6 DRIVER
B13	K18 18DB/YL*	INJECTOR NO. 8 DRIVER
B14	-	-
B15	K12 18TN	INJECTOR NO. 2 DRIVER
B16	K14 18LB/BR	INJECTOR NO. 4 DRIVER
B17	-	-
B18	-	-
B19	-	-
B20	-	-
B21	T60 18BR	OVERDRIVE SOLENOID CONTROL
B22	-	-
B23	G6 18GY/WT	OIL PRESSURE SENSOR SIGNAL
B24	-	-
B25	T13 18DB/BK	OUTPUT SHAFT SPEED SENSOR SIGNAL (-)
B26	-	-
B27	G7 18WT/OR	VEHICLE SPEED SENSOR SIGNAL
B28	T14 18LG/WT	OUTPUT SHAFT SPEED SENSOR SIGNAL (+)
B29	T25 18LG	GOVERNOR PRESSURE SIGNAL
B30	T66 20BR/OR	TRANSMISSION RELAY CONTROL
B31	K6 18VT/WT	5 VOLT SUPPLY
B32	-	-

* WITH 5.2L ENG

C142



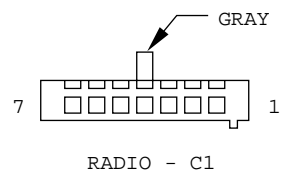
CAV	CIRCUIT	FUNCTION
C1	C13 18DB/RD	A/C COMPRESSOR CLUTCH RELAY CONTROL
C2	-	-
C3	K900 18PK/WT	AUTOMATIC SHUT DOWN RELAY CONTROL
C4	V36 18TN/RD	SPEED CONTROL VACUUM SOLENOID CONTROL
C5	V35 18LG/RD	SPEED CONTROL VENT SOLENOID CONTROL
C6	G68 18BR/YL	OVERDRIVE OFF LAMP DRIVER
C7	-	-
C8	-	-
C9	-	-
C10	J95 18DG/RD	VAPOR CANISTER SOLENOID DRIVER
C11	V32 18YL/RD	SPEED CONTROL ON/OFF SWITCH SENSE
C12	A142 18DG/OR	AUTOMATIC SHUT DOWN RELAY OUTPUT
C13	T9 18OR	OVERDRIVE OFF SWITCH SENSE
C14	J96 18VT/RD	VAPOR CANISTER PUMP SWITCH DRIVER
C15	T222 18RD/YL	BATTERY TEMPERATURE SENSE SIGNAL
C16	-	-
C17	-	-
C18	-	-
C19	K81 18DB	FUEL PUMP RELAY CONTROL
C20	K52 18PK/BK	EVAPORATIVE EMISSION SOLENOID CONTROL
C21	-	-
C22	C3 18DB/BK	A/C PRESSURE SWITCH SENSE
C23	-	-
C24	L53 18BR	STOP LAMP SWITCH SENSE
C25	K72 18DG/VT	VOLTAGE REGULATOR SIGNAL
C26	G40 18LB/BK	LOW FUEL SENSE
C27	D83 18BK/PK	SCI RECEIVE
C28	D2 18WT/BK	CCD BUS (-)
C29	D84 18BK/WT	SCI TRANSMIT
C30	D1 18VT/BR	CCD BUS (+)
C31	-	-
C32	K95 18PK	SPEED CONTROL SWITCH SIGNAL



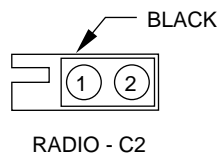
POWERTRAIN CONTROL MODULE - C4
(DIESEL)

CAV	CIRCUIT	FUNCTION
1	G40 18LB/BK	LOW FUEL WARNING
3	F6 18WT/RD	FUSED B(+)
4	K167 20BR/YL	SENSOR GROUND
6	K7 20OR/WT	5 VOLT SUPPLY
8	G18 20PK/BK	COOLANT LEVEL SENSOR
9	F99 18OR	FUSED IGNITION SWITCH OUTPUT
11	Z12 16BK/TN	GROUND
12	Z12 16BK/TN	GROUND
20	K20 18DG/YL	GENERATOR FIELD DRIVER
21	K222 20TN/RD	ENGINE COOLANT TEMPERATURE SENSOR SIGNAL
22	K48 18OR/RD	THROTTLE POSITION SENSOR SIGNAL
23	G123 20DG/WT	WATER-IN-FUEL SENSE
24	G21 20GY/LB	DISTRIBUTOR PICK-UP SIGNAL
25	D83 20BK/PK	SCI RECEIVE
26	D1 18VT/BR	CCD BUS(+)
29	L53 20BR	STOP LAMP SWITCH SENSE
41	K92 20PK	SPEED CONTROL SWITCH SIGNAL
42	G60 20GY/YL	OIL PRESSURE SENSOR SIGNAL
44	K185 18OR/LB	WAIT TO START LAMP
45	D84 20BK/WT	SCI TRANSMIT
46	D2 18WT/BK	CCD BUS(-)
47	G7 20WT/OR	VEHICLE SPEED SENSOR SIGNAL
54	G118 20PK/DB	ENGINE COOLANT LEVEL SIGNAL
57	A142 16DG/OR	AUTOMATIC SHUT DOWN RELAY OUTPUT
59	C103 20DG	A/C SWITCH SIGNAL

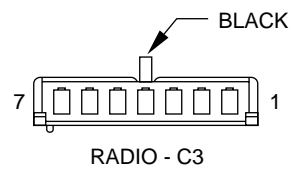
(CAVITIES NOT SHOWN ARE NOT USED)



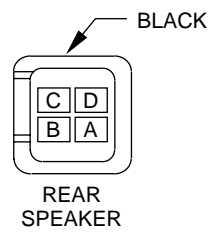
CAV	CIRCUIT	FUNCTION
1	-	-
2	X55 20BR/RD	LEFT FRONT (-)
3	X56 20DB	RIGHT FRONT (-)
4	L90 20DB/RD	PARK LAMP RELAY OUTPUT
5	E2 20OR	PANEL LAMP DRIVER
6	X12 18RD/GY	FUSED IGNITION SWITCH OUTPUT (ACC/RUN)
7	F60 20RD/WT	FUSED B(+)



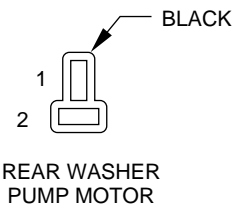
CAV	CIRCUIT	FUNCTION
1	D1 18VT/BR	CCD BUS (+)
2	D2 18WT/BK	CCD BUS (-)



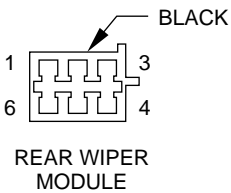
CAV	CIRCUIT	FUNCTION
1	X60 20DG/RD	RADIO 12 VOLT OUTPUT
2	X51 20BR/YL	LEFT REAR (+)
3	X52 20DB/WT	RIGHT REAR (+)
4	X53 20DG	LEFT FRONT (+)
5	X54 20VT/YL	RIGHT FRONT (+)
6	X57 20BR/LB	LEFT REAR (-)
7	X58 20DB/OR	RIGHT REAR (-)



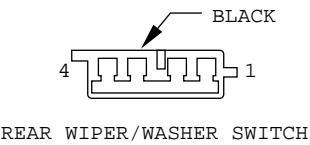
CAV	CIRCUIT	FUNCTION
A	X96 16DB/OR	
B	X98 16DB/WT	
C	X97 16BR/LB	
D	X95 16BR/YL	



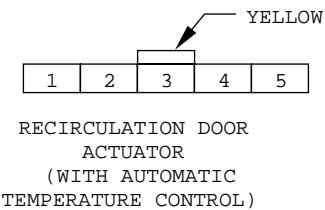
CAV	CIRCUIT	FUNCTION
1	V20 18WT/BK	REAR WASHER MOTOR CONTROL
2	Z2 18BK	GROUND



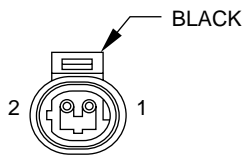
CAV	CIRCUIT	FUNCTION
1	F70 16PK/BK	FUSED (B+)
2	V13 18BR/LG	REAR WIPER MOTOR CONTROL
3	Z1 14BK	GROUND
4	V24 18BR/OR	REAR WIPER MOTOR CONTROL (INT)
5	V20 18BK/WT	REAR WASHER MOTOR CONTROL
6	G78 20TN/BK	LIFTGATE AJAR SWITCH SENSE



CAV	CIRCUIT	FUNCTION
1	V13 18BR/LG	REAR WIPER MOTOR CONTROL
2	V23 18BR/PK	FUSED IGNITION SWITCH OUTPUT (ACC/RUN)
3	V24 18BR/OR	REAR WIPER MOTOR CONTROL (INT)
4	V20 18WT/BK	REAR WASHER MOTOR CONTROL
	V20 18WT/BK	REAR WASHER MOTOR CONTROL

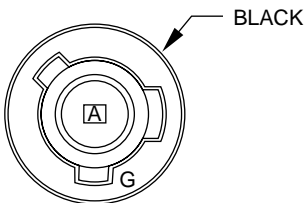


CAV	CIRCUIT	FUNCTION
1	C33 20VT/OR	RECIRCULATION DOOR MOTOR DRIVER
2	-	-
3	-	-
4	C32 20LB/DG	RECIRCULATION DOOR MOTOR DRIVER
5	F71 20PK/DG	FUSED IGNITION SWITCH OUTPUT (RUN)



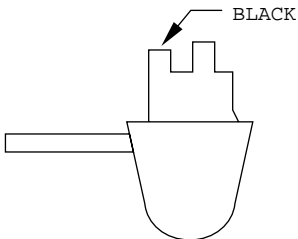
RIGHT AIRBAG
SENSOR

CAV	CIRCUIT	FUNCTION
1	R46 18BR/LB	RIGHT IMPACT SENSOR LINE 1
2	R48 18TN	RIGHT IMPACT SENSOR LINE 2



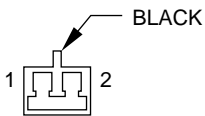
RIGHT BACK-UP LAMP

CAV	CIRCUIT	FUNCTION
A	L10 18BR/LG	BACK-UP LAMP SWITCH OUTPUT
G	Z1 18BK	GROUND



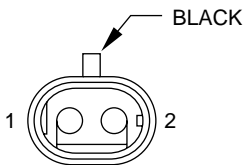
RIGHT
COURTESY LAMP

CAV	CIRCUIT	FUNCTION
A	M1 20PK	FUSED B(+)
B	M2 20YL	COURTESY LAMP RELAY OUTPUT



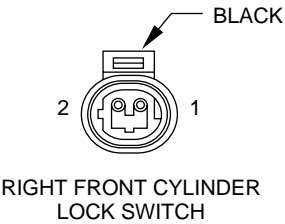
RIGHT DOOR
COURTESY LAMP

CAV	CIRCUIT	FUNCTION
1	M1 20PK	FUSED B(+)
2	Z1 20BK	GROUND

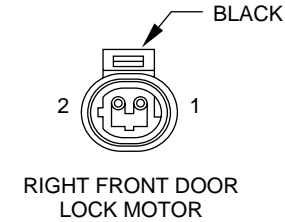


RIGHT FOG LAMP

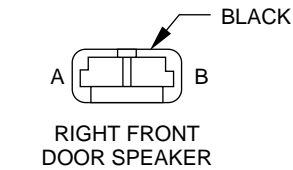
CAV	CIRCUIT	FUNCTION
1	Z1 18BK	GROUND
2	L39 18LB	FOG LAMP RELAY OUTPUT



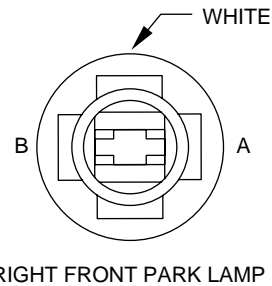
CAV	CIRCUIT	FUNCTION
1	G71 20VT/YL	VTSS DISARM SENSE
2	Z1 20BK	GROUND



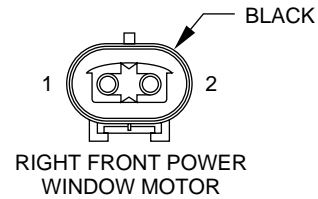
CAV	CIRCUIT	FUNCTION
1	P34 14PK/BK	DOOR UNLOCK DRIVER
2	P2 14BK/WT	DOOR LOCK DRIVER



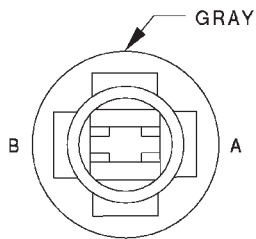
CAV	CIRCUIT	FUNCTION
A	X54 20VT	RIGHT FRONT (+)
B	X56 20DB/RD	RIGHT FRONT (-)



CAV	CIRCUIT	FUNCTION
A	L90 18DB/RD	PARK LAMP RELAY OUTPUT
B	Z1 18BK	GROUND

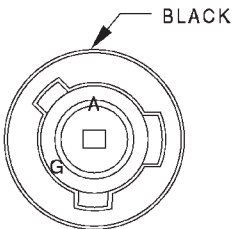


CAV	CIRCUIT	FUNCTION
1	Q12 16BR	RIGHT FRONT WINDOW DRIVER (UP)
2	Q22 16VT	RIGHT FRONT WINDOW DRIVER (DOWN)



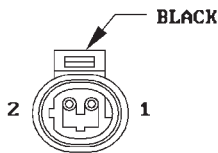
RIGHT FRONT SIDE MARKER LAMP

CAV	CIRCUIT	FUNCTION
A	L90 18DB/RD	PARK LAMP RELAY OUTPUT
B	L64 18TN/DB	TURN SIGNAL SWITCH OUTPUT



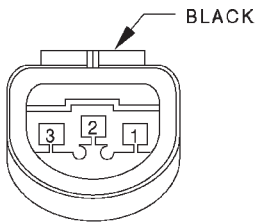
RIGHT FRONT TURN
SIGNAL LAMP

CAV	CIRCUIT	FUNCTION
A	L64 18TN/DB	TURN SIGNAL SWITCH OUTPUT
G	Z1 18BK	GROUND



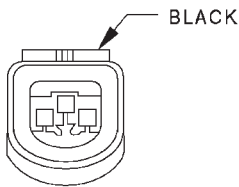
RIGHT FRONT
WHEEL SPEED
SENSOR

CAV	CIRCUIT	FUNCTION
1	B6 20WT/DB	RIGHT FRONT WHEEL SPEED SENSOR (-)
2	B7 20WT	RIGHT FRONT WHEEL SPEED SENSOR (+)



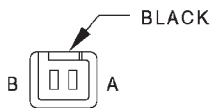
RIGHT HEADLAMP

CAV	CIRCUIT	FUNCTION
1	Z1 16BK	GROUND
2	L4 16VT/OR	DIMMER SWITCH LOW BEAM OUTPUT
3	L3 16RD/OR	DIMMER SWITCH HIGH BEAM OUTPUT



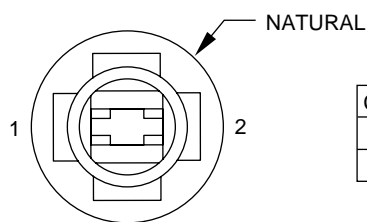
RIGHT HEADLAMP
LEVELING MOTOR •

CAV	CIRCUIT	FUNCTION
1	L104 20LG	POSITION 4
2	L103 20LB	POSITION 3
3	L102 20WT	POSITION 2
4	L105 20PK	POSITION 5
5	L106 20YL	POSITION 6
6	L101 20RD	POSITION 1



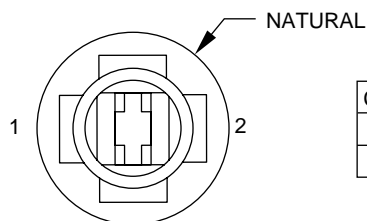
RIGHT INSTRUMENT
PANEL SPEAKER

CAV	CIRCUIT	FUNCTION
A	X82 20LB/RD	AMPLIFIED RIGHT FRONT (+)
B	X80 20LB/BK	AMPLIFIED RIGHT FRONT (-)



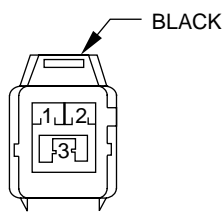
RIGHT LICENSE LAMP

CAV	CIRCUIT	FUNCTION
1	L90 20DB/RD	PARK LAMP RELAY OUTPUT
2	Z1 20BK	GROUND



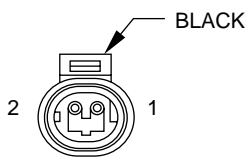
RIGHT PARK LAMP

CAV	CIRCUIT	FUNCTION
1	L90 18DB/RD	PARK LAMP RELAY OUTPUT
2	Z1 18BK	GROUND



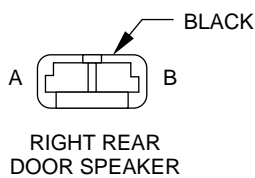
RIGHT PARK TURN
SIGNAL MARKER

CAV	CIRCUIT	FUNCTION
1	L64 18TN/DB	RIGHT TURN SIGNAL
2	L90 18DB/RD	PARK LAMP SWITCH OUTPUT
3	Z1 18BK	GROUND



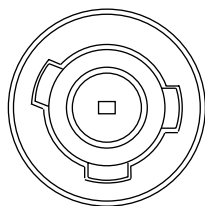
RIGHT REAR DOOR
LOCK MOTOR

CAV	CIRCUIT	FUNCTION
1	P34 18PK/BK	DOOR UNLOCK DRIVER
2	P2 18BK/WT	DOOR LOCK DRIVER



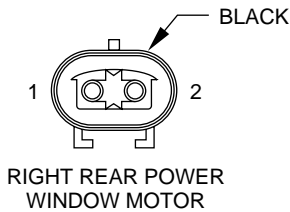
RIGHT REAR
DOOR SPEAKER

CAV	CIRCUIT	FUNCTION
A	X52 20DB/WT	RIGHT REAR (+)
B	X58 20DB/OR	RIGHT REAR (-)

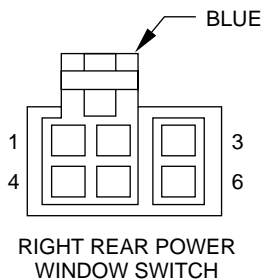


RIGHT REAR
FOG LAMP

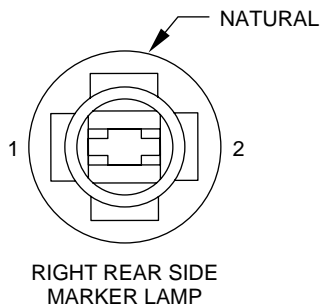
CAV	CIRCUIT	FUNCTION
A	L36 18LG/BK	REAR FOG LAMP
G	Z1 18BK	GROUND



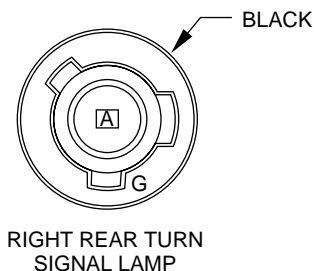
CAV	CIRCUIT	FUNCTION
1	Q12 16BR	RIGHT REAR WINDOW DRIVER (UP)
2	Q22 16VT	RIGHT REAR WINDOW DRIVER (DOWN)



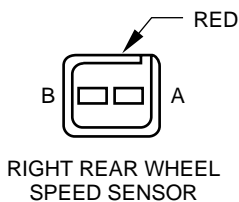
CAV	CIRCUIT	FUNCTION
1	Q18 16GY/BK	RIGHT REAR WINDOW DRIVER (UP)
2	Q12 16BR	RIGHT REAR WINDOW DRIVER (UP)
3	E20 20OR/DG	RIGHT REAR DOOR SWITCH ILLUMINATION
4	Q28 16DG/WT	RIGHT REAR WINDOW DRIVER (DOWN)
5	Q22 16VT	RIGHT REAR WINDOW DRIVER (DOWN)
6	Z1 16BK	GROUND



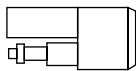
CAV	CIRCUIT	FUNCTION
1	Z1 18BK	GROUND
2	L22 18LB	PARK LAMP SWITCH OUTPUT



CAV	CIRCUIT	FUNCTION
A	L61 18LG	TURN SIGNAL SWITCH OUTPUT
G	Z1 18BK	GROUND

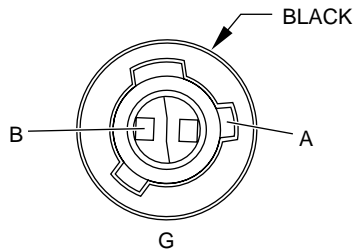


CAV	CIRCUIT	FUNCTION
A	B1 20YL/DB	RIGHT REAR WHEEL SPEED SENSOR (-)
B	B2 20YL	RIGHT REAR WHEEL SPEED SENSOR (+)



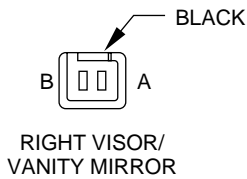
RIGHT SIDE REPEATER

CAV	CIRCUIT	FUNCTION
1	Z1 18BK	GROUND
2	L64 18LG/DB	RIGHT TURN SIGNAL



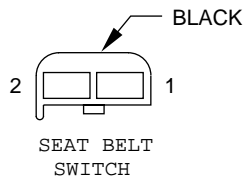
RIGHT TAIL/STOP LAMP

CAV	CIRCUIT	FUNCTION
A	L74 18PK/BK	STOP LAMP SWITCH OUTPUT
B	L21 18LB/WT	PARK LAMP SWITCH OUTPUT
G	Z1 18BK	GROUND



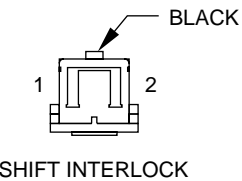
RIGHT VISOR/
VANITY MIRROR

CAV	CIRCUIT	FUNCTION
A	M1 20PK	FUSED B(+)
B	Z1 20BK	GROUND



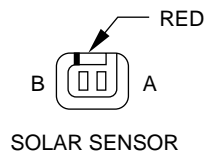
SEAT BELT
SWITCH

CAV	CIRCUIT	FUNCTION
1	G10 20LG/RD	SEAT BELT SWITCH SENSE
2	Z1 20BK	GROUND



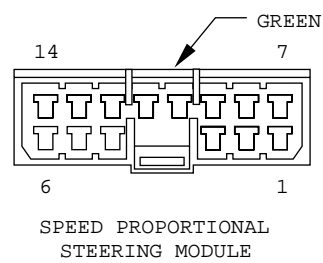
SHIFT INTERLOCK

CAV	CIRCUIT	FUNCTION
1	L53 20BR	SHIFT INTERLOCK SOLENOID SENSE
2	F87 20BK/WT	FUSED IGNITION SWITCH OUTPUT

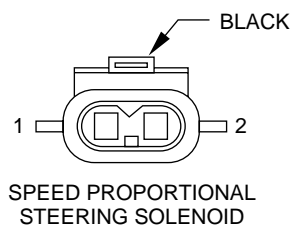


SOLAR SENSOR

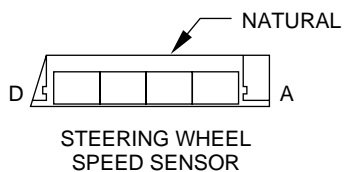
CAV	CIRCUIT	FUNCTION
A	C47 20BK/WT	SOLOR SENSOR SIGNAL
B	D41 20LG/WT	SENSOR GROUND



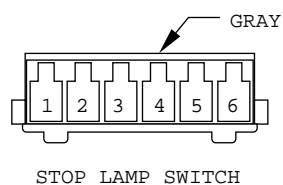
CAV	CIRCUIT	FUNCTION
1	S99 18LG	SPEED PROPORTIONAL STEERING SOLENOID CONTROL LOW
2	S98 18LB	SPEED PROPORTIONAL STEERING SOLENOID CONTROL HIGH
3	S2 20BK/LG	STEERING WHEEL SPEED SENSOR GROUND
4	-	-
5	S1 20BK/YL	5 VOLT SUPPLY
6	G7 18WT/OR	VEHICLE SPEED SENSOR SIGNAL
7	-	-
8	F83 20YL/DG	FUSED IGNITION SWITCH OUTPUT (RUN)
9	S4 20VT	STEERING WHEEL SPEED SENSOR SIGNAL B
10	Z2 20BK	GROUND
11	-	-
12	D83 20BK/PK	SCI TRANSMIT
13	D98 20WT	SCI RECEIVE
14	S3 20PK/WT	STEERING WHEEL SPEED SENSOR SIGNAL A



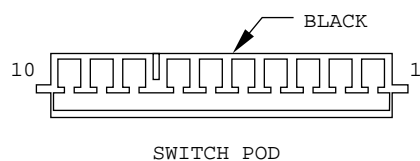
CAV	CIRCUIT	FUNCTION
1	S98 18LB	SPS SOLENOID CTL HIGH
2	S99 18LG	SPS SOLENOID CTL LOW



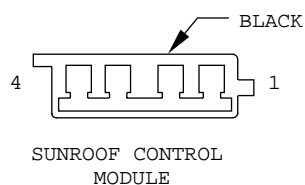
CAV	CIRCUIT	FUNCTION
A	S1 20BK/YL	5 VOLT SUPPLY
B	S2 20BK/LG	STEERING WHEEL SPEED SENSOR GROUND
C	S3 20PK/WT	STEERING WHEEL SPEED SENSOR SIGNAL A
D	S4 20VT	STEERING WHEEL SPEED SENSOR SIGNAL B



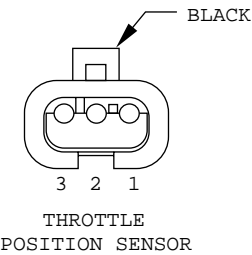
CAV	CIRCUIT	FUNCTION
1	L53 20BR	STOP LAMP SWITCH SENSE
2	Z1 20BK	GROUND
3	V32 20YL/RD	SPEED CONTROL ON/OFF SWITCH SENSE
4	V30 20DB/LG	SPEED CONTROL STOP LAMP SWITCH OUTPUT
5	L50 18WT/TN	STOP LAMP SWITCH OUTPUT
6	L16 18RD/LG	FUSED B(+)



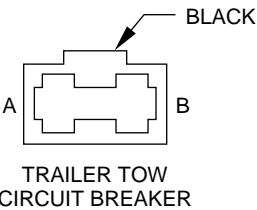
CAV	CIRCUIT	FUNCTION
1	P7 20LB	DRIVER HEATED SEAT SWITCH OUTPUT
2	Z1 20BK	GROUND
3	E2 20OR	PANEL LAMP DRIVER
4	P8 20LB/WT	PASSENGER HEATED SEAT SWITCH OUTPUT
5	F71 20PK/DG	FUSED IGNITION SWITCH OUTPUT (RUN)
6	T9 20OR	OVERDRIVE OFF SWITCH SENSE
7	G68 20BR/YL	OVERDRIVE OFF LAMP DRIVER
8	-	-
9	C80 20DB/YL	REAR WINDOW DEFOGGER SWITCH SENSE
10	C16 20LB/YL	FUSED REAR WINDOW DEFOGGER RELAY OUTPUT



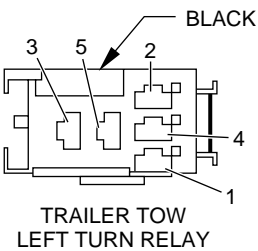
CAV	CIRCUIT	FUNCTION
1	Z1 16BK	GROUND
2	Q41 18WT	POWER SUNROOF OPEN
3	Q42 18LB	POWER SUNROOF CLOSE
4	F86 18LG/BK	FUSED IGNITION SWITCH OUTPUT



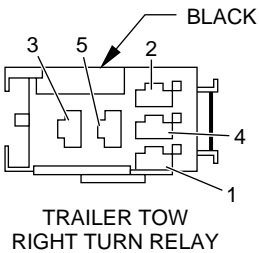
CAV	CAV	CIRCUIT	FUNCTION
●3	*1	K25 20WT/BK	5 VOLT SUPPLY
●2	*2	K22 18OR/DB	THROTTLE POSITION SENSOR SIGNAL
●1	*3	K4 20BK/LB	SENSOR GROUND



CAV	CIRCUIT	FUNCTION
A	F70 16PK/BK	FUSED B(+)
B	F70 16PK/BK	FUSED B(+)

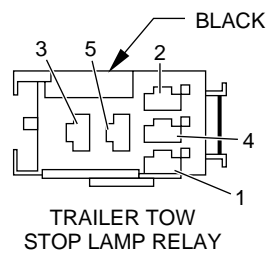


CAV	CIRCUIT	FUNCTION
1	L61 18LG	LEFT TURN SIGNAL
2	Z1 18BK	GROUND
3	L61 18LG/OR	LEFT TURN SIGNAL
4	95 18PK	FACTORY TRAILER TOW RELAY OUTPUTS
	95 18PK	FACTORY TRAILER TOW RELAY OUTPUTS
5	94 18DG	FACTORY TRAILER TOW RELAY OUTPUTS
	94 18DG	FACTORY TRAILER TOW RELAY OUTPUTS

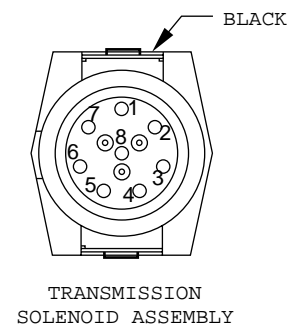


CAV	CIRCUIT	FUNCTION
1	L60 18TN	RIGHT TURN SIGNAL
2	Z1 18BK	GROUND
3	L60 18TN/OR	RIGHT TURN SIGNAL
4	95 18PK	FACTORY TRAILER TOW RELAY OUTPUTS
5	94 18DG	FACTORY TRAILER TOW RELAY OUTPUTS
6	-	-
7	-	-
8	-	-

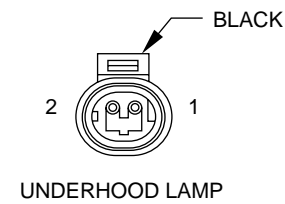
* 5.2L V-8
● 4.0L I-6



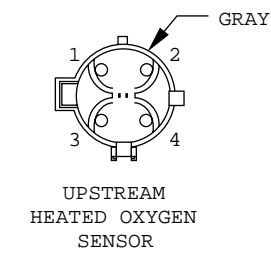
CAV	CIRCUIT	FUNCTION
1	L50 18WT/TN	STOP LAMP SWITCH OUTPUT
2	Z1 18BK	GROUND
3	F70 16PK/BK	FUSED B(+)
4	94 18DG	FACTORY TRAILER TOW RELAY OUTPUTS
5	95 18PK	FACTORY TRAILER TOW RELAY OUTPUTS



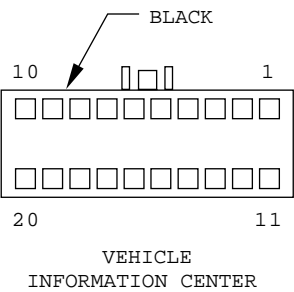
CAV	CIRCUIT	FUNCTION
1	T20 18LB	LOW/REVERSE SOLENOID CONTROL
2	K6 18VT/WT	5 VOLT SUPPLY
3	K4 18BK/LB	SENSOR GROUND
4	T25 18LG	GOVERNOR PRESSURE SIGNAL
5	T59 18PK	VARIABLE FORCE SOLENOID CONTROL
6	T60 18BR	OVERDRIVE SOLENOID CONTROL
7	T22 18DG/LB	TORQUE CONVERTER CLUTCH SOLENOID OUTPUT
8	T54 18VT	TRANSMISSION TEMPERATURE SENSOR SIGNAL



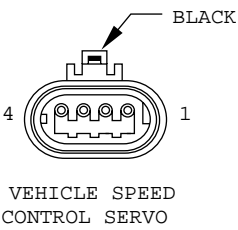
CAV	CIRCUIT	FUNCTION
1	M1 18PK	FUSED B(+)
2	Z1 18BK	GROUND



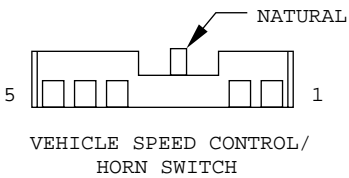
CAV	CIRCUIT	FUNCTION
1	A142 18DG/OR	AUTOMATIC SHUTDOWN RELAY OUTPUT
2	Z12 18BK/TN	GROUND
3	K4 18BK/LB	SENSOR GROUND
4	K41 18BK/OR	UPSTREAM HEATED OXYGEN SENSOR SIGNAL



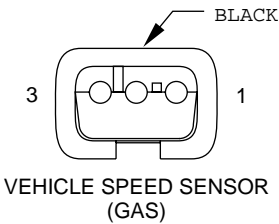
CAV	CIRCUIT	FUNCTION
1	G18 20PK/BK	ENGINE COOLANT LEVEL SWITCH SENSE
2	F60 20RD/WT	FUSED B(+)
3	Z2 20BK/OR	GROUND
4	L5 18OR/BK	TURN SIGNAL
5	G46 20BK/LB	REAR LAMP OUT INDICATOR DRIVER
6	-	-
7	D1 18VT/BR	CCD BUS (+)
8	D2 18WT/BK	CCD BUS (-)
9	-	-
10	E2 20OR	PANEL LAMP DRIVER
11	L90 20DB/RD	PARK LAMP RELAY OUTPUT
12	-	-
13	G29 20BK/TN	WASHER FLUID LEVEL SENSE
14	107 20BK/RD	4-WHEEL DRIVE PART TIME LAMP
15	T106 20GY/OR	4-WHEEL DRIVE FULL TIME LAMP
16	F83 18YL/DG	FUSED IGNITION SWITCH OUTPUT (RUN)
17	T19 20YL/BK	4-WHEEL DRIVE PART TIME LAMP
18	G42 20LB/RD	ALL TIME FRONT WHEELS
19	G28 20LG/OR	2-WHEEL DRIVE OR REAR WHEELS IN ALL TIME
20	Z1 20BK	GROUND



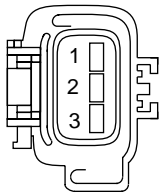
CAV	CIRCUIT	FUNCTION
1	V36 18TN/RD	SPEED CONTROL VACUUM SOLENOID CONTROL
2	V35 18LG/RD	SPEED CONTROL VENT SOLENOID CONTROL
3	V30 20DB/LG	SPEED CONTROL STOP LAMP SWITCH OUTPUT
4	Z4 20BK	GROUND



CAV	CIRCUIT	FUNCTION
1	K95 20PK	SPEED CONTROL SWITCH SIGNAL
2	K4 18BK/LB	SENSOR GROUND
3	709 20RD/BK	RADIO CONTROL MUX
4	Z2 20BK/OR	GROUND
5	X4 20GY/OR	HORN SWITCH



CAV	CIRCUIT	FUNCTION
1	K6 18VT/WT	5 VOLT SUPPLY
2	K4 18BK/LB	SENSOR GROUND
3	G7 18WT/OR	VEHICLE SPEED SENSOR SIGNAL



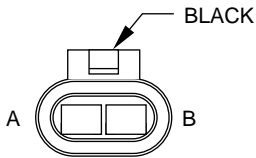
VEHICLE SPEED SENSOR
(DIESEL)

CAV	CIRCUIT	FUNCTION
1	K7 20OR	8 VOLT SUPPLY
2	K167 20BR/YL	SENSOR GROUND
3	G7 20WT/OR	VEHICLE SPEED SENSOR SIGNAL



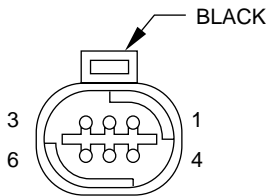
WATER IN FUEL SENSOR
(DIESEL)

CAV	CIRCUIT	FUNCTION
1	G123 20DG/WT	WATER IN FUEL SENSE
2	K167 20BR/YL	SENSOR RETURN



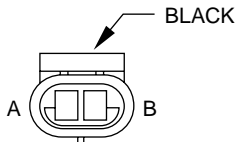
WINDSHIELD WASHER
PUMP MOTOR

CAV	CIRCUIT	FUNCTION
A	V11 18TN/BK	WASHER SWITCH OUTPUT
B	Z2 18BK	GROUND



WINDSHIELD
WIPER MOTOR

CAV	CIRCUIT	FUNCTION
1	F86 16LG/RD	FUSED IGNITION SWITCH OUTPUT (ACC/RUN)
2	V66 18VT/WT	WIPER PARK SWITCH SENSE
3	-	-
4	Z2 18BK	GROUND
5	V3 18BR/WT	WIPER SWITCH LOW SPEED OUTPUT
6	V4 18RD/YL	WIPER SWITCH HIGH SPEED OUTPUT



WIPER
FLUID LEVEL
SENSOR

CAV	CIRCUIT	FUNCTION
A	G29 16BK/TN	WASHER FLUID LEVEL SENSE
B	Z2 16BK	GROUND

8W-90 CONNECTOR LOCATIONS

DESCRIPTION AND OPERATION

INTRODUCTION

This section provides illustrations identifying component and connector locations in the vehicle. A connector index is provided. Use the wiring diagrams in

each section for connector number identification. Refer to the index for the proper figure number.

CONNECTOR/GROUND LOCATIONS

For items that are not shown in this section N/S is placed in the Fig. column.

Connector Name/Number	Color	Location	Fig.
A/C Heater Control	BK	Rear of Switch	15
A/C High Pressure Switch	BK	Near A/C Compressor	5
A/C Low Pressure Switch	BK	Right Rear Corner of Engine Compartment	2
After Market Trailer Tow Connector	BK	Left Rear Quarter Panel	N/S
Airbag Control Module C1	BK	Below Center Floor Console, Near Park Brake	18
Airbag Control Module C2	YL	Below Center Floor Console, Near Park Brake	18
Ambient Temperature Sensor	BK	On Radiator Center Support	1
Auto Headlamp Light Sensor VTSS LED	BK	Top of Instrument Panel, Between Steering Column and Center Floor Console	14
Automatic Day/Night Rearview Mirror	BK	Behind Rear View Mirror	17
Automatic Temperature Control Module	BK	Left Side of HVAC Housing	14
Battery Temperature Sensor	BK	Below Battery Tray	3
Blend Air Door Motor	BK	On Bottom of HVAC Unit	N/S
Blend Air Actuator	BK	On Bottom of HVAC Unit	N/S
Blower Motor	NAT	Right Side of HVAC	N/S

Connector Name/Number	Color	Location	Fig.
Blower Motor Resistor Block	BK	Right Side of HVAC	N/S
Blower Motor Switch	BK	On HVAC Unit	N/S
Blower Power Module	BK	On HVAC Unit	N/S
Body Control Module C1	BK	Lower Left of Instrument Panel	N/S
Body Control Module C2	WT	Lower Left of Instrument Panel	N/S
Body Control Module C3	BK	Lower Left of Instrument Panel	N/S
Brake Warning Switch	BK	Near Brake Master Cylinder	3
C102	BK	Rear of Fog Lamp	1
C131	BK	Right Rear Corner of Engine Compartment, Near PCM	2
C132	BK	Right Rear Corner of Engine Compartment, Near PCM	2
C137	BK	Rear of Engine (Diesel Engine)	13
C142	BK	Corner of Engine Compartment At PCM	N/S
C144	BK	Below PDC	12
C150	BK	Rear of Fog Lamp	1
C160	BK	Corner of Instrument Panel	N/S
C206	BK	On Front of HVAC Unit	N/S
C212	RD	Center of Instrument Panel	N/S

DESCRIPTION AND OPERATION (Continued)

Connector Name/Number	Color	Location	Fig.
C213	GN	Behind Right Kick Panel, At Junction Block	N/S
C231	BK	Right End of Instrument Panel	N/S
C233	BK	Lower Left Instrument Panel, In Connector Bracket	N/S
C234	WT	Lower Instrument Panel, In Connector Bracket	N/S
C235	BK	Lower Instrument Panel, In Connector Bracket	N/S
C236	WT	Lower Instrument Panel, In Connector Bracket	N/S
C300	YL	Lower Instrument Panel	N/S
C301	NAT	Lower Instrument Panel, In Connector Bracket	N/S
C302	WT	Lower Instrument Panel, In Connector Bracket	N/S
C304	GY	Lower Instrument Panel	N/S
C305	BK	Lower Instrument Panel, In Connector Bracket	N/S
C307	BK	Lower Instrument Panel	N/S
C309	GY	In Left Rear Door	21
C320	GY	Right Rear Quarter Panel, Near Bottom of Liftgate Opening	18
C321	BK	In Liftgate	23
C322	GN	In Liftgate	23
C323	GY	In Liftgate	23
C324	BK	In Liftgate	23
C325	BK	In Liftgate	23
C326	GY	In Liftgate	23
C328	GY	Left Rear Quarter Panel, Near Bottom of Liftgate Opening	19
C329	BK	Below Left Rear Passenger Seat	19

Connector Name/Number	Color	Location	Fig.
C330	GY	In Right Rear Door	21
C334	BK	In Left Front Door	20
C335	BK	Below Left Rear Passenger Seat	18
C343	BK	In Left Rear Door	21
C345	BK	In Right Rear Door	21
C351	GY	In Right Front Door	20
C353	BK	In Left Front Door	20
C359	BK	In Liftgate	23
C364	BK	In Liftgate	23
C372	BK	Right Rear Quarter Panel	22
C906	BK	Rear of Engine (Diesel)	11
C907	BK	At Fuel Filter	11
C908	BK	At Fuel Filter	11
C914	BK	Below PDC	12
C917	BK	Near Generator	N/S
Camshaft Position Sensor	BK	Near Distributor	5, 9
Cargo Lamp	BK	Rear of Cargo Lamp	18
Center High Mounted Stop Lamp Bulb No. 1	BK	At Lamp	N/S
Center High Mounted Stop Lamp Bulb No. 2	BK	At Lamp	N/S
Center High Mounted Stop Lamp Bulb No. 3	BK	At Lamp	N/S
Cigar Lighter	BK	Rear of Cigar Lighter	14
Controller Anti-Lock Brake	BK	At Anti-Lock Brake Controller	N/S
Crankshaft Position Sensor	BK	Right Rear of Engine 4.0L Engine Rear of Engine 5.2L Engine	5, 9
Data Link Connector	BK	Lower Instrument Panel	N/S
Daytime Running Lamp Module	BK	Right Fender Side Shield, Below PDC	N/S
Dome/Reading Lamp	NAT	Behind Dome Lamp	17

DESCRIPTION AND OPERATION (Continued)

Connector Name/Number	Color	Location	Fig.
Downstream Heated Oxygen Sensor	BK	Above Rear of Catalytic Converter	7, 10
Driver Door Module C1	WT	In Left Front Door	20
Driver Door Module C2	BK	In Driver's Door	N/S
Driver Door Module C3	BK	In Driver's Door	N/S
Driver Heated Seat Back	BK	Under Driver's Seat	N/S
Driver Heated Seat Cushion	BK	Under Driver's Seat	N/S
Driver Lumbar Motor	BK	Under Driver's Seat	N/S
Driver Power Seat Front Riser Motor	RD	Under Driver's Seat	N/S
Driver Power Seat Front Riser Motor Sensor	BK	Under Driver's Seat	N/S
Driver Power Seat Horizontal Motor	BK	Under Driver's Seat	N/S
Driver Power Seat Horizontal Motor Sensor	BK	Under Driver's Seat	N/S
Driver Power Seat Lumbar Motor Sensor	BK	Under Driver's Seat	N/S
Driver Power Seat Lumbar Switch	BK	Under Driver's Seat	N/S
Driver Power Seat Rear Riser Motor	RD	Under Driver's Seat	N/S
Driver Power Seat Rear Riser Motor Sensor	BK	Under Driver's Seat	N/S
Driver Power Seat Recliner Motor	BK	Under Driver's Seat	N/S
Driver Power Seat Recliner Motor Sensor	BK	Under Driver's Seat	N/S
Driver Power Seat Switch	GN	Under Driver's Seat	N/S
Driver Seat Heater Control Module	BK	Under Driver's Seat	N/S
Driver Side Airbag	YL	Lower Instrument Panel	16

Connector Name/Number	Color	Location	Fig.
Duty Cycle EVAP/Purge Solenoid	BK	Front of Left Fender Side Shield	4
Engine Coolant Level Sensor	BK	Top of Reserve Tank	3
Engine Coolant Temperature Sensor	BK	On Thermostat Housing Rear of Generator	5, 8
Engine Starter Motor	BK	At Starter Motor	6, 8
Evaporative System Leak Detection Pump	BK	Front of Left Fender Side Shield	N/S
Factory Trailer Tow Connector	BK	On Trailer Hitch	22
Floor Console Lamps	BK	Left Side of Center Floor Console	18
Four-Wheel Drive Switch	BK	Left Front of Transfer Case	7, 10
Fuel Heater	BK	At Fuel Heater/Filter	11
Fuel Pump Module	BK	Near Fuel Tank	18
G100		Right Fender Side Shield	2
G101		Right Side of Engine Block 4.0L Engine Below Generator 5.2L Engine	6, 8
G103		Right Side of Engine Block 4.0L Engine Below Generator 5.2L Engine	8
G104		Right Side of Engine Block 4.0L Engine	8
G104		Below Generator 5.2L Engine	8
G104		Below A/C Compressor Diesel Engine	13
G105		Right Rear of Engine 4.0L Engine Below A/C Compressor 5.2L Engine	5, 9
G106		Right Fender Side Shield	2
G107		Right Fender Side Shield	2

DESCRIPTION AND OPERATION (Continued)

Connector Name/Number	Color	Location	Fig.
G108		Front of Left Fender Side Shield	4
G109		Front of Left Fender Side Shield	4
G300		Right Rear Quarter Panel	18
G301		Rear of Driver's Seat	18
G302		On Floor Pan Rear of Seat	19
G303		On Floor Pan Rear of Seat	19
G304		On Floor Pan Rear of Seat	19
G305		On Floor Pan Rear of Seat	19
G-Switch	BK	Below Right Rear Seat	18
Generator	BK	At Generator	6
Glove Box Lamp	BK	At Glove Box Lamp	15
Glow Plug Relay	BK	At PDC (Diesel Engine)	N/S
Graphic Display Module/Vehicle Information Center	BK	Rear of Vehicle Information Center (VIC)	15
Headlamp Leveling Switch	BK	At Switch	15
Headlamp Switch	BK	Rear of Headlamp Switch	14
High Speed Blower Motor Relay	BK	Right Side of HVAC	N/S
Horn No. 1	BK	At Horn, Lower Right Front of Vehicle	1
Horn No. 2	BK	At Horn, Lower Right Front of Vehicle	1
Idle Air Control Motor	BK	On Throttle Body	5, 9
Ignition Coil	BK	Right Front of Engine	5, 8
Ignition Switch	BK	On Steering Column	16
In-Car Temperature Sensor	BK	Center, Top of Instrument Panel	15

Connector Name/Number	Color	Location	Fig.
Injector No. 1	GY	At Injector	5, 9
Injector No. 2	GY	At Injector	5, 8
Injector No. 3	GY	At Injector	5, 9
Injector No. 4	GY	At Injector	5, 8
Injector No. 5	GY	At Injector	5, 9
Injector No. 6	GY	At Injector	5, 8
Injector No. 7	GY	At Injector	9
Injector No. 8	GY	At Injector	8
Instrument Cluster	BK	Rear of Instrument Cluster	14
Intake Air Temperature Sensor	GY	On Intake Manifold	5, 8
Junction Block - C1	BK	Behind Kick Panel	N/S
Junction Block - C2	BK	Behind Kick Panel	N/S
Junction Block - C3	BK	Behind Kick Panel	N/S
Junction Block - C4	BL*	Behind Kick Panel	N/S
Junction Block - C5	YL	Behind Kick Panel	N/S
Junction Block - C6	GY	Behind Kick Panel	N/S
Junction Block - C7	GN	Behind Kick Panel	N/S
Junction Block - C8	BK	Behind Kick Panel	N/S
Junction Block - C9	BK	Behind Kick Panel	N/S
Junction Block - C10	BK	Behind Kick Panel	N/S
Junction Block Body Connector - C13	BK	Behind Kick Panel	N/S
Junction Block Body Connector - C14	BK	Behind Kick Panel	N/S
Key-In Switch/Halo Lamp	GY	On Steering Column, Near Ignition Switch	16
Lamp Outage Module C1	BK	Left Rear Quarter Panel, Near Bottom of Liftgate Opening	19

DESCRIPTION AND OPERATION (Continued)

Connector Name/Number	Color	Location	Fig.
Lamp Outage Module C2	BK	Left Rear Quarter Panel, Near Bottom of Liftgate Opening	19
Left Back-Up Lamp	BK	At Lamp	N/S
Left Courtesy Lamp	BK	At Lamp	14
Left Door Courtesy Lamp	BK	In Left Front Door	20
Left Fog Lamp	BK	Left Fog Lamp	1
Left Front Cylinder Lock Switch	BK	In Left Front Door	20
Left Front Door Lock Motor	BK	In Left Front Door	20
Left Front Door Speaker	BK	In Left Front Door	20
Left Front Park Lamp	WT	At Lamp	N/S
Left Front Power Window Motor	BK	In Left Front Door	20
Left Front Side Marker Lamp	GY	At Lamp	N/S
Left Front Turn Signal Lamp	BK	At Lamp	N/S
Left Front Wheel Speed Sensor	BK	Left Rear Corner of Engine Compartment	N/S
Left Headlamp	BK	Rear of Headlamp	1
Left Headlamp Leveling Motor	BK	At Headlamp	1
Left Instrument Panel Speaker	BK	Rear of Left Instrument Panel Speaker	14
Left License Lamp	NAT	In Liftgate Behind License Plate Lamps	25
Left Rear Door Lock Motor	BK	In Left Rear Door	21
Left Rear Door Speaker	BK	In Left Rear Door	21
Left Rear Power Window Motor	BK	In Left Rear Door	21
Left Rear Power Window switch	BL	In Left Rear Door	21
Left Rear Side Marker Lamp	NAT	At Lamp	N/S

Connector Name/Number	Color	Location	Fig.
Left Rear Turn Signal Lamp	BK	At Lamp	N/S
Left Rear Wheel Speed Sensor	BK	Below Right Rear Passenger Seat	18
Left Side Repeater Lamp	BK	At Lamp	N/S
Left Tail/Stop Lamp	BK	At Lamp	N/S
Left Visor/Vanity Mirror	BK	Top of Left A-Pillar	17
Liftgate Ajar Switch	BK	In Liftgate	23
Liftgate Cylinder Lock Switch	BK	In Liftgate	23
Liftgate Lock Motor	BK	In Liftgate	23
Liftglass Ajar Switch	BK	In Liftgate	23
Liftglass Limit Switch	NAT	In Liftgate	23
Liftglass Push Button	BK	In Liftgate	23
Liftglass Release Solenoid	BK	In Liftgate	23
Low Washer Fluid Level Sensor	BK	At Washer Reservoir	4
Manifold Absolute Pressure Sensor	BK	On Throttle Body	5, 9
Memory Seat Module Connector C1	BK	At Driver's Seat	N/S
Memory Seat Module Connector C2	BK	At Driver's Seat	N/S
Mini Overhead Console	GY	Under Front Seat	N/S
Mode Door Motor	BK	Left Side of HVAC	N/S
Multi-Function Switch	BK	On Steering Column	16
Oil Pressure Sensor	BK	Near Distributor	5, 9
Output Shaft Speed Sensor	BK	Left Side of Transmission	7, 10
Overhead Console	RD	Center of Headliner, Above Rear View Mirror	17

DESCRIPTION AND OPERATION (Continued)

Connector Name/Number	Color	Location	Fig.
Overhead Console Junction Block	BK	Behind Kick Panel, At Junction Block	N/S
Park/Neutral Position Switch	BK	Left Side of Transmission	7, 10
Passenger Airbag	YL	Behind Passenger Airbag	14
Passenger Door Module	WT	In Front Door	20
Passenger Heated Seat Back	GN	Under Passenger's Seat	N/S
Passenger Heated Seat Cushion	BK	Under Passenger's Seat	N/S
Passenger Lumbar Motor	BK	Under Passenger's Seat	N/S
Passenger Lumbar Switch	WT	Under Passenger's Seat	N/S
Passenger Power Seat Front Riser Motor	RD	Under Passenger's Seat	N/S
Passenger Power Seat Horizontal Motor	BK	Under Passenger's Seat	N/S
Passenger Power Seat Rear Riser Motor	RD	Under Passenger's Seat	N/S
Passenger Power Seat Recliner Motor	BK	Under Passenger's Front Seat	N/S
Passenger Power Seat Switch	BK	Under Passenger's Front Seat	N/S
Passenger Seat Heater Control Module	GY	Under Passenger's Seat	N/S
Power Amplifier C1	WT	Below Right Rear Passenger Seat	13
Power Amplifier C2	WT	Below Right Rear Passenger Seat	13
Power Antenna Motor	BK	At Antenna	N/S
Power Outlet	BK	Rear of Power Outlet	14
Powertrain Control Module C1	BK	Right Rear Corner of Engine Compartment At PCM	3

Connector Name/Number	Color	Location	Fig.
Powertrain Control Module C2	WT	Right Rear Corner of Engine Compartment At PCM	3
Powertrain Control Module C3	GY	Right Rear Corner of Engine Compartment At PCM	3
Radio C1	GY	Rear of Radio	14
Radio C2	BK	Rear of Radio	14
Radio C3	BK	Rear of Radio	14
Rear Speaker	BK	Rear Door	21
Rear Washer Pump Motor	BK	Bottom of Windshield Washer Fluid Reservoir	4
Rear Wiper Motor	BK	In Liftgate	23'
Rear Wiper/Washer Switch	BK	Behind Rear Wiper Switch	14
Recirculation Door Motor	YL	Top of HVAC	N/S
Right Back-Up Lamp	BK	At Lamp	N/S
Right Courtesy Lamp	BK	Right Courtesy Lamp	14
Right Door Courtesy Lamp	BK	In Right Front Door	20
Right Fog Lamp	BK	Rear of Fog Lamp	1
Right Front Cylinder Lock Switch	BK	In Right Front Door	20
Right Front Door Lock Motor	BK	In Right Front Door	20
Right Front Door Speaker	BK	In Right Front Door	20
Right Front Park Lamp	WT	At Lamp	N/S
Right Front Power Window Motor	BK	In Right Front Door	20
Right Front Side Marker Lamp	GY	At Lamp	N/S
Right Front Turn Signal Lamp	BK	At Lamp	N/S
Right Front Wheel Speed Sensor	BK	Right Rear Corner of Engine Compartment	2
Right Headlamp	BK	Right Fog Lamp	1

DESCRIPTION AND OPERATION (Continued)

Connector Name/Number	Color	Location	Fig.
Right Headlamp Leveling Motor	BK	At Headlamp	1
Right Instrument Panel Speaker	BK	Top Right of Instrument Panel	14
Right License Lamp	NAT	In Liftgate, Behind License Plate Lamps	25
Right Rear Door Lock Motor	BK	In Right Rear Door	21
Right Rear Door Speaker	BK	In Right Rear Door	21
Right Rear Power Window Motor	BK	In Right Rear Door	21
Right Rear Power Window Switch	BL	In Right Rear Door	21
Right Rear Side Marker Lamp	NAT	At Lamp	N/S
Right Rear Turn Signal Lamp	BK	At Lamp	N/S
Right Rear Wheel Speed Sensor	RD	Below Right Rear Passenger Seat	18
Right Side Repeater Lamp	BK	At Lamp	N/S
Right Tail/Stop Lamp	BK	At Lamp	N/S
Right Visor/Vanity Mirror	BK	Top of Right A-Pillar	17
Seat Belt Switch	BK	Near Bottom of Driver's Seat Belt Clasp	18
Shift Interlock	BK	Steering Column, On Shift Cable	N/S
Solar Sensor	RD	Above Glove Box	14
Speed Proportional Steering Control Module	GN	Behind Instrument Panel	15
Speed Proportional Steering Solenoid	BK	On Power Steering Pump	4

Connector Name/Number	Color	Location	Fig.
Stop Lamp Switch	GY	Top of Brake Pedal Arm	15
Sunroof Control Module	BK	Rear of Sunroof	N/S
Sunroof Motor	BK	Rear of Sun Roof	N/S
Sunroof Switch	NAT	Center of Headliner, Above Rear View Mirror	17
Switch Pod	BK	Rear of Overdrive Switch	N/S
Throttle Position Sensor	BK	On Throttle Body	5, 9
Trailer Tow Circuit Breaker	BK	Right Rear Quarter Panel	22
Trailer Tow Left Turn Relay	BK	Right Rear Quarter Panel	22
Trailer Tow Right Turn Relay	BK	Right Rear Quarter Panel	22
Trailer Tow Stop Lamp Relay	BK	Right Rear Quarter Panel	22
Transmission Solenoid Assembly	BK	Left Side of Transmission	7, 10
Underhood Lamp	BK	On Underside of Hood	24
Upstream Heated Oxygen Sensor	GY	Right Front of Transmission	10
Vehicle Speed Control Servo	BK	At Servo	N/S
Vehicle Speed Control/Horn Switch	NAT	On Steering Column	16
Vehicle Speed Sensor	BK	Rear of Transfer Case	7, 10
Windshield Washer Pump Motor	BK	Bottom of Windshield Washer Fluid Reservoir	4
Windshield Wiper Motor	BK	Center of Cowl	4

DESCRIPTION AND OPERATION (Continued)

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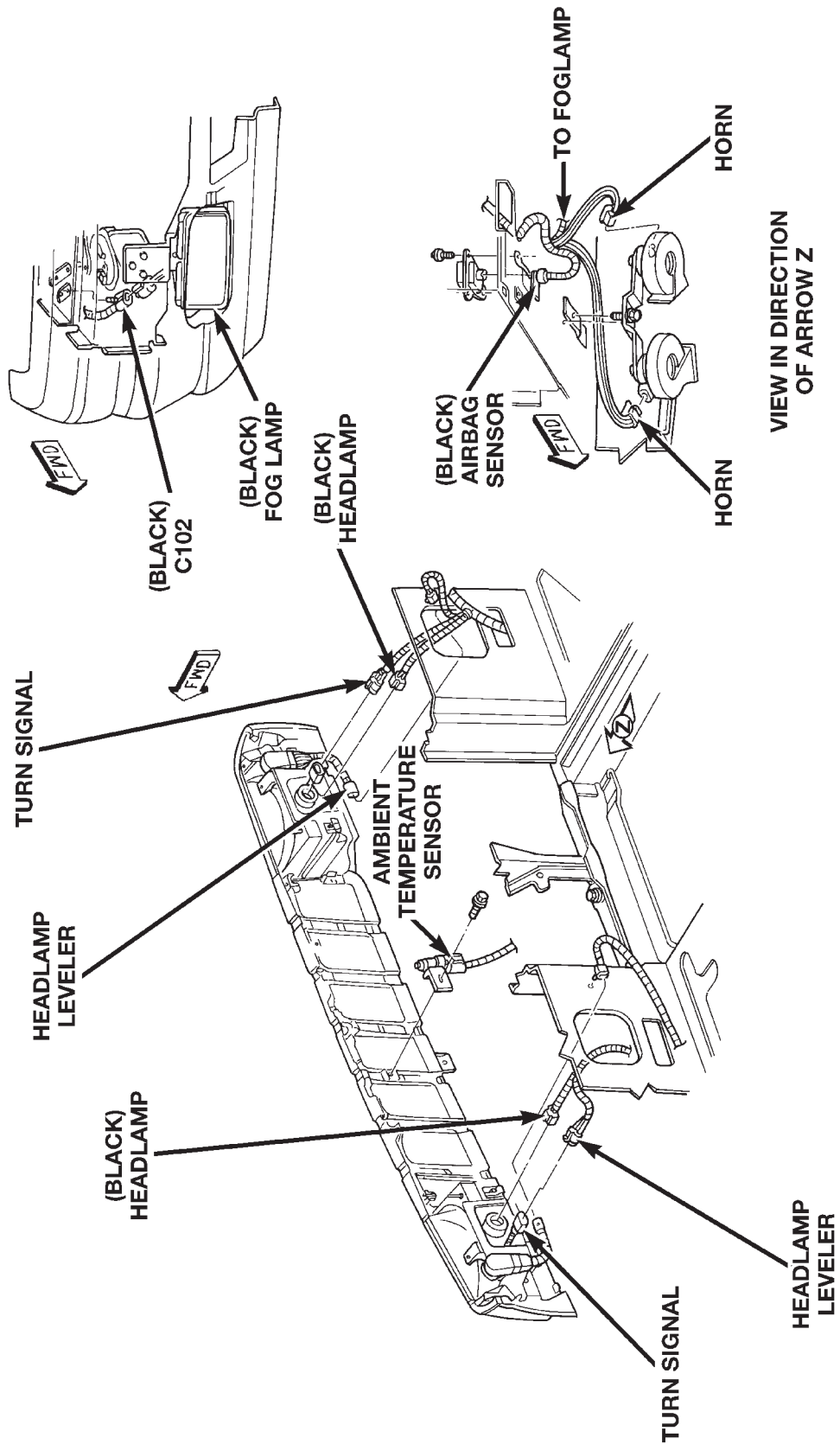


Fig. 1 Front End Lighting

DESCRIPTION AND OPERATION (Continued)

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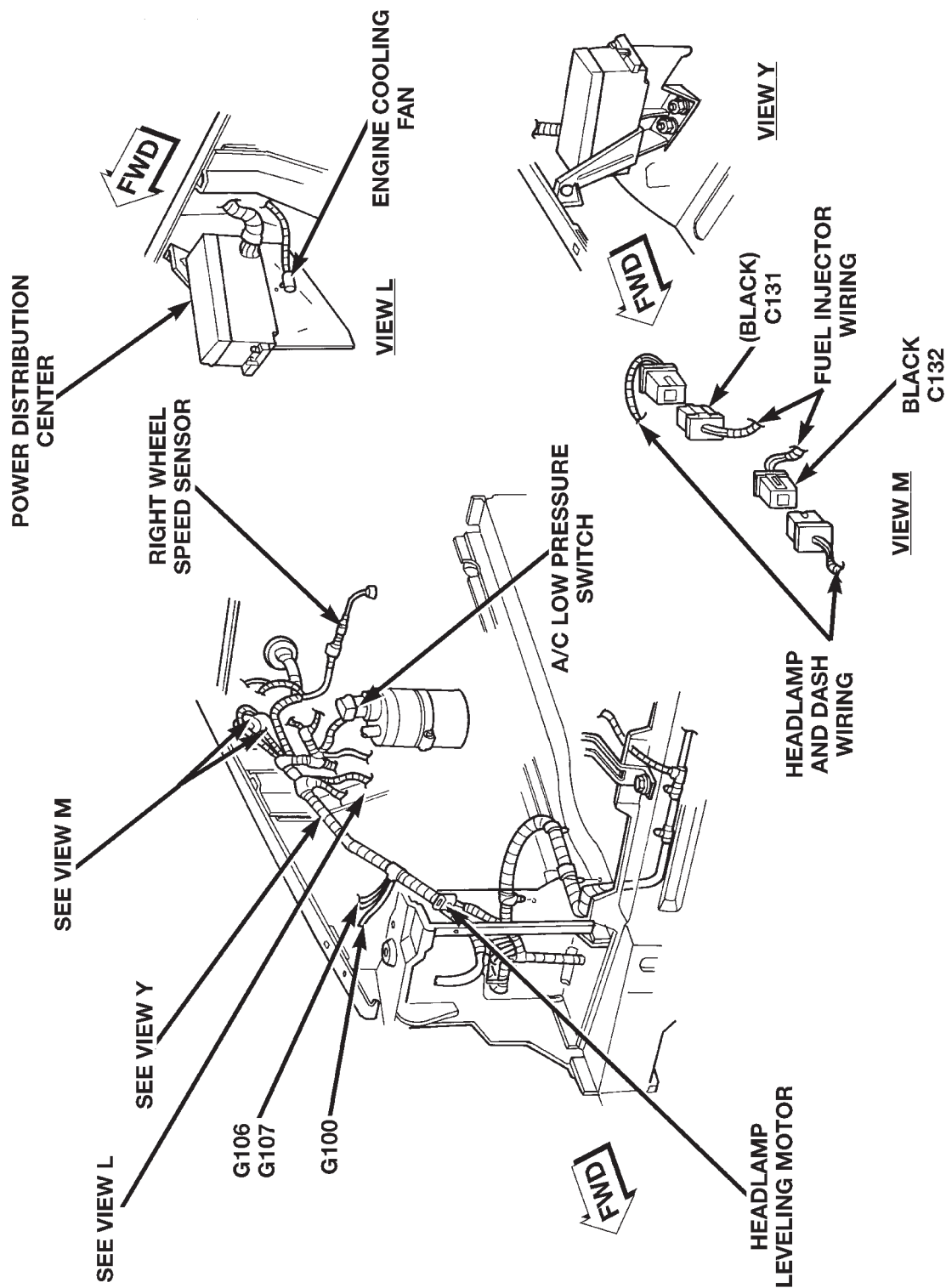


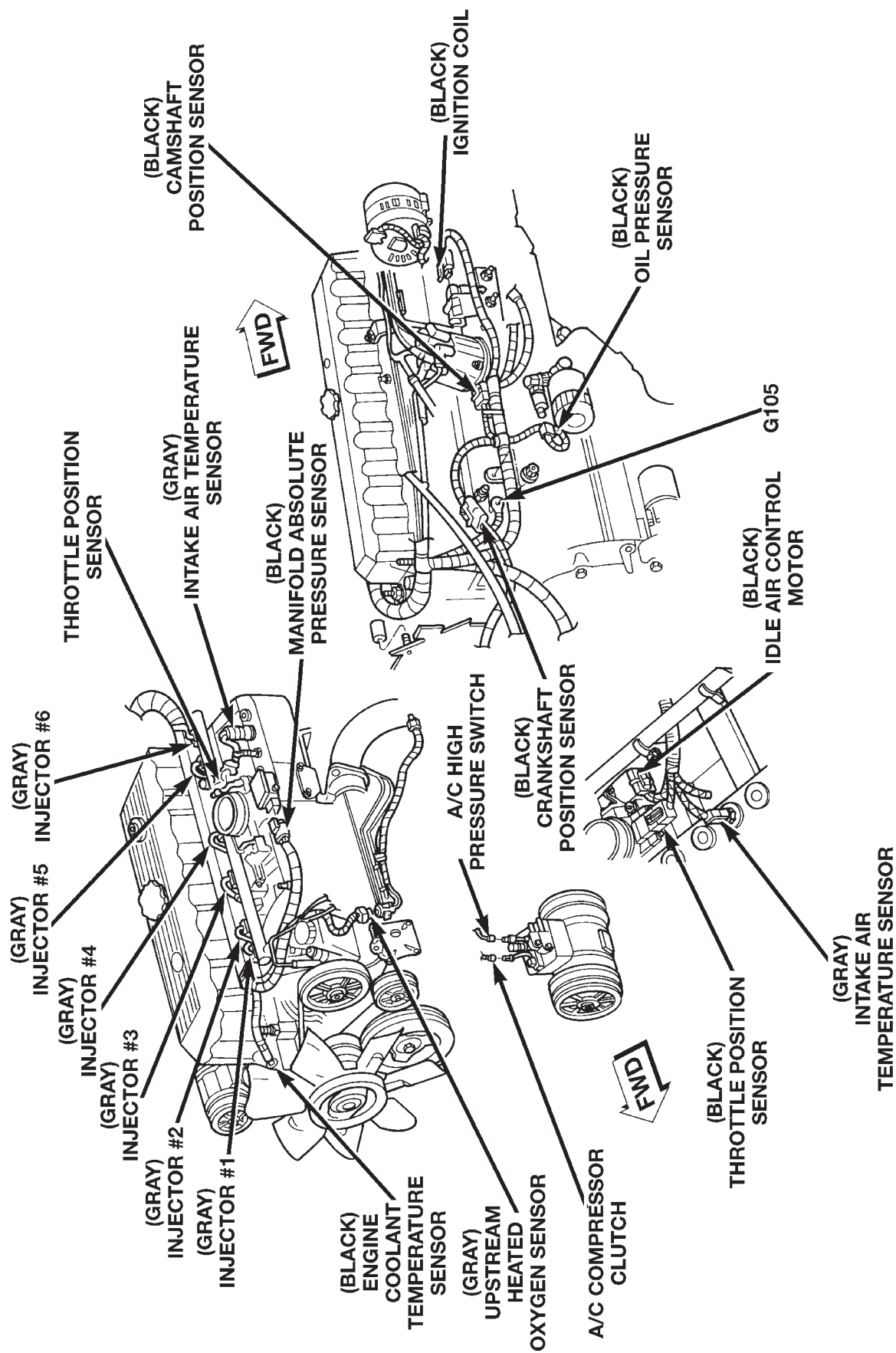
Fig. 2 Engine Compartment—Right Side

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Fig. 4 Engine Compartment Left Side

DESCRIPTION AND OPERATION (Continued)



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Fig. 5 Engine Connectors—4.0L Engine

DESCRIPTION AND OPERATION (Continued)

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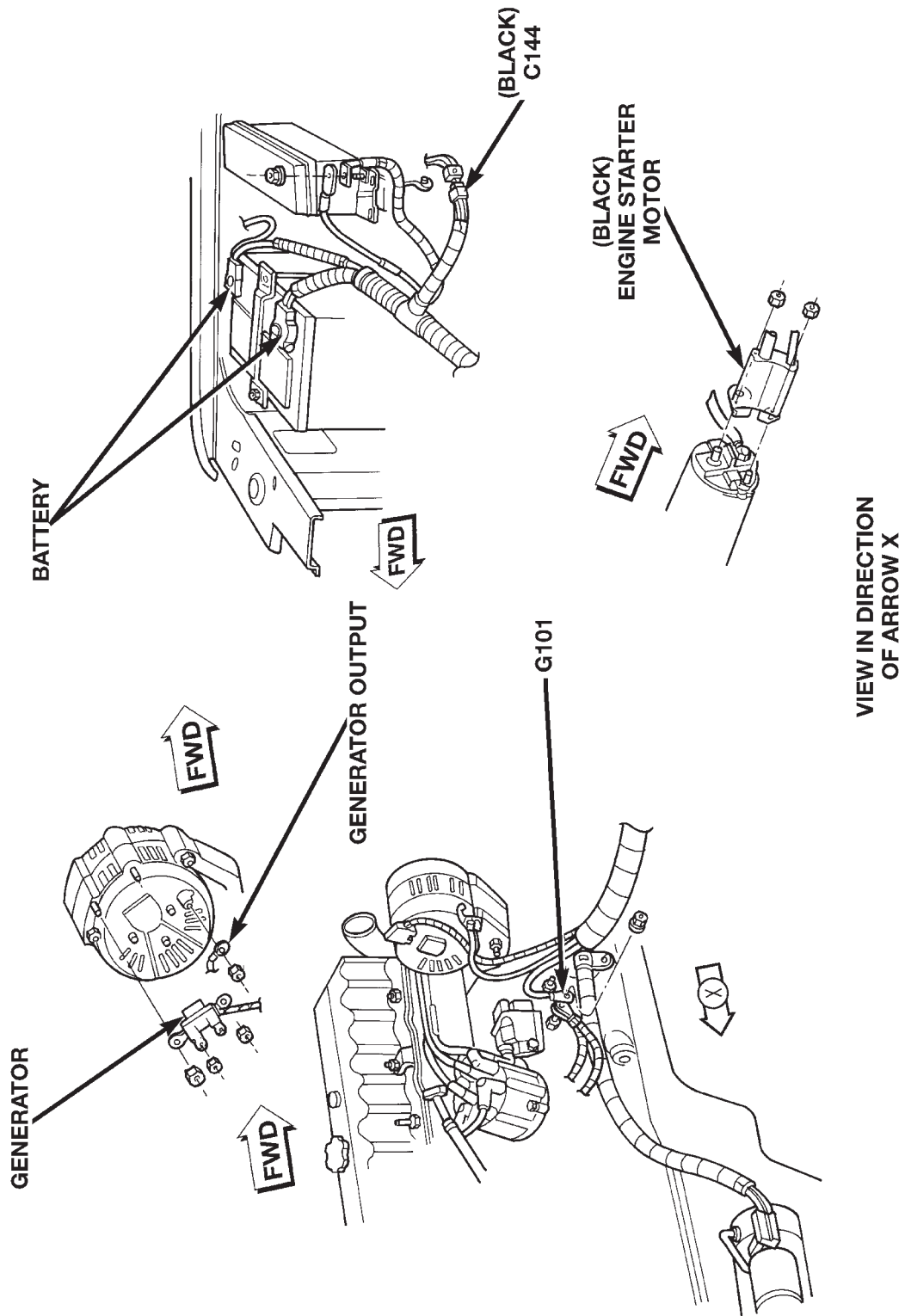


Fig. 6 Charging System Connectors—4.0L Engine

DESCRIPTION AND OPERATION (Continued)

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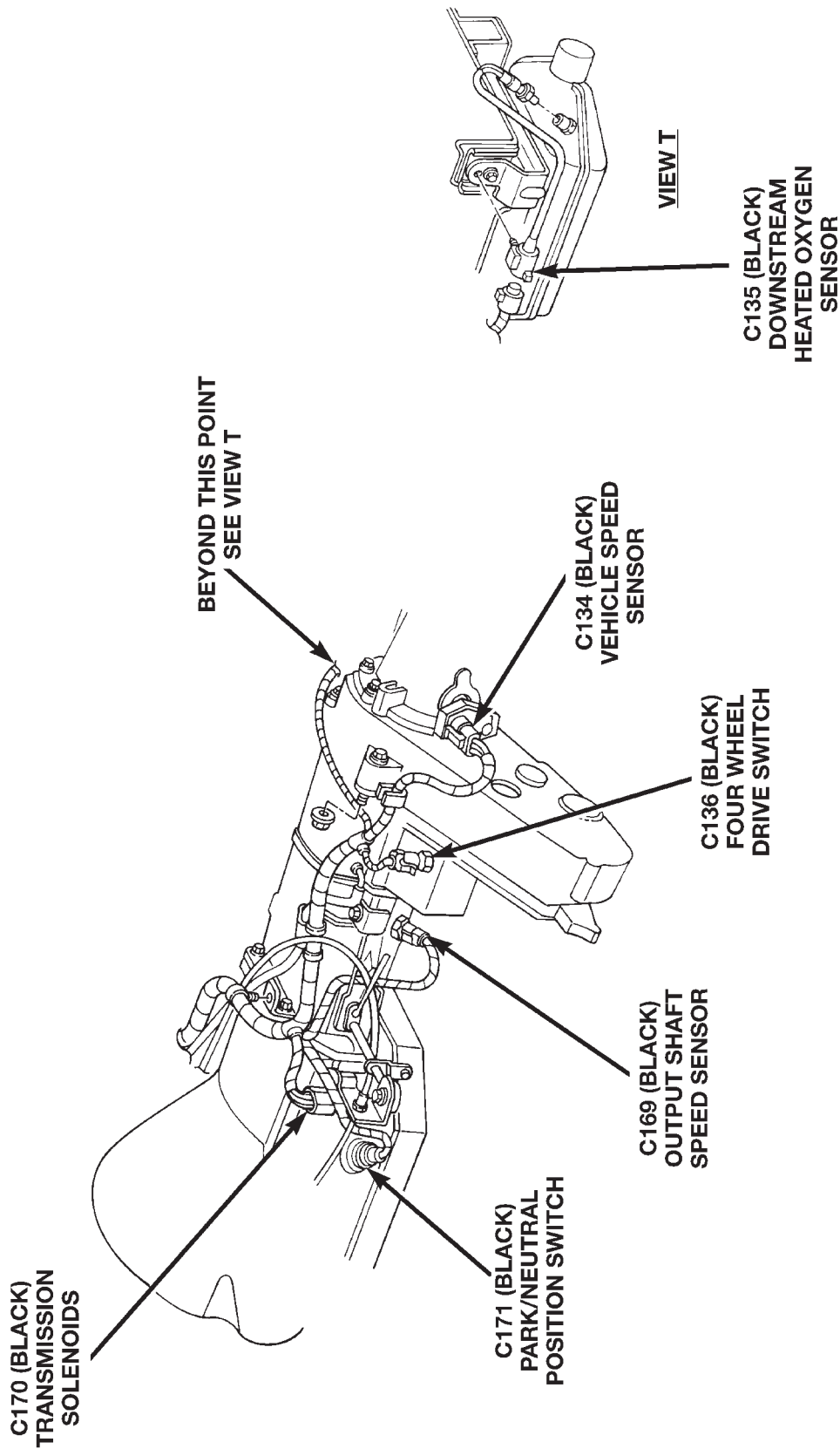


Fig. 7 Transmission Connectors—4.0L Engine

DESCRIPTION AND OPERATION (Continued)

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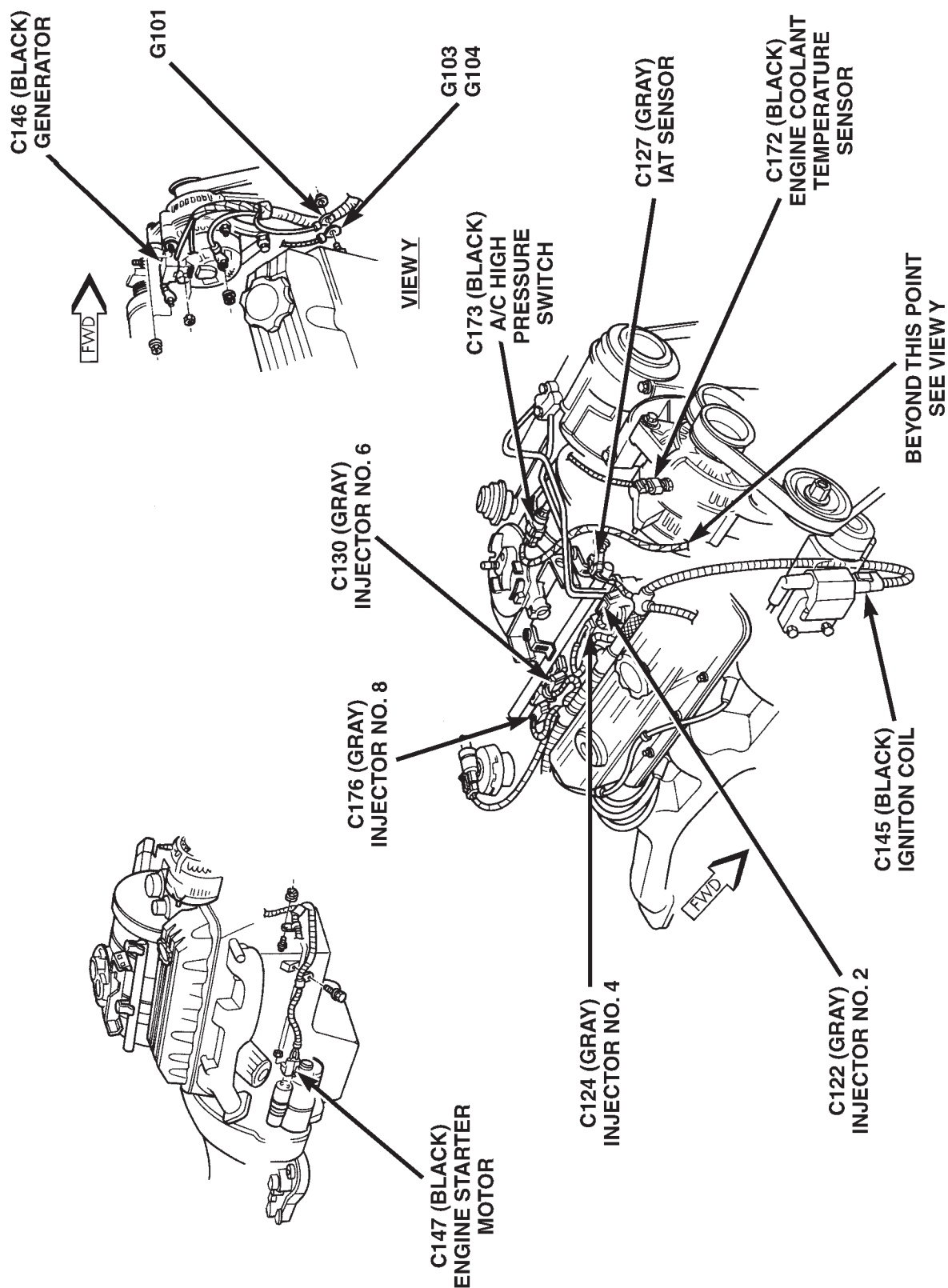
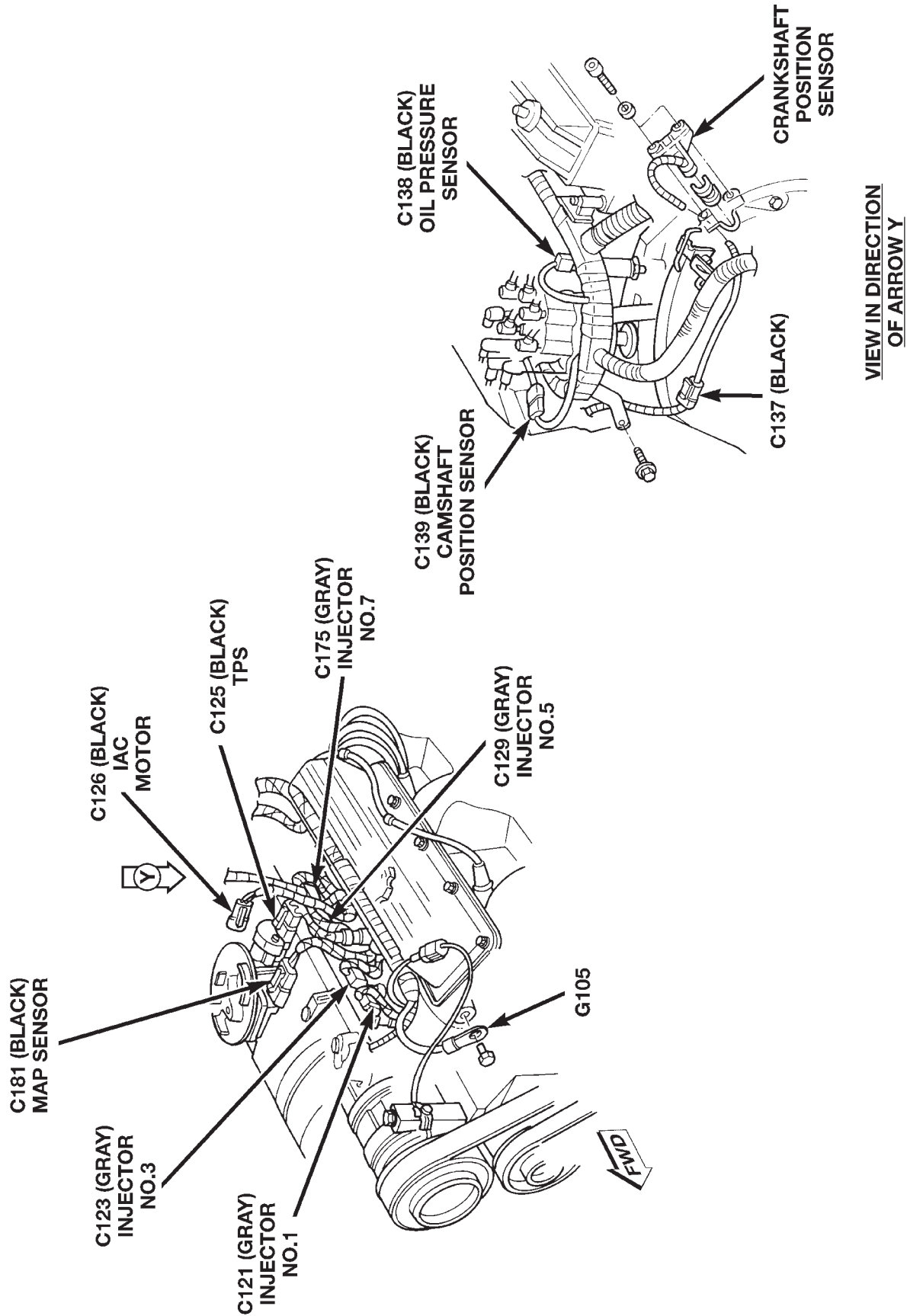


Fig. 8 Engine Connectors—5.2L Engine

DESCRIPTION AND OPERATION (Continued)



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Fig. 9 Engine Connectors—5.2L Engine

DESCRIPTION AND OPERATION (Continued)

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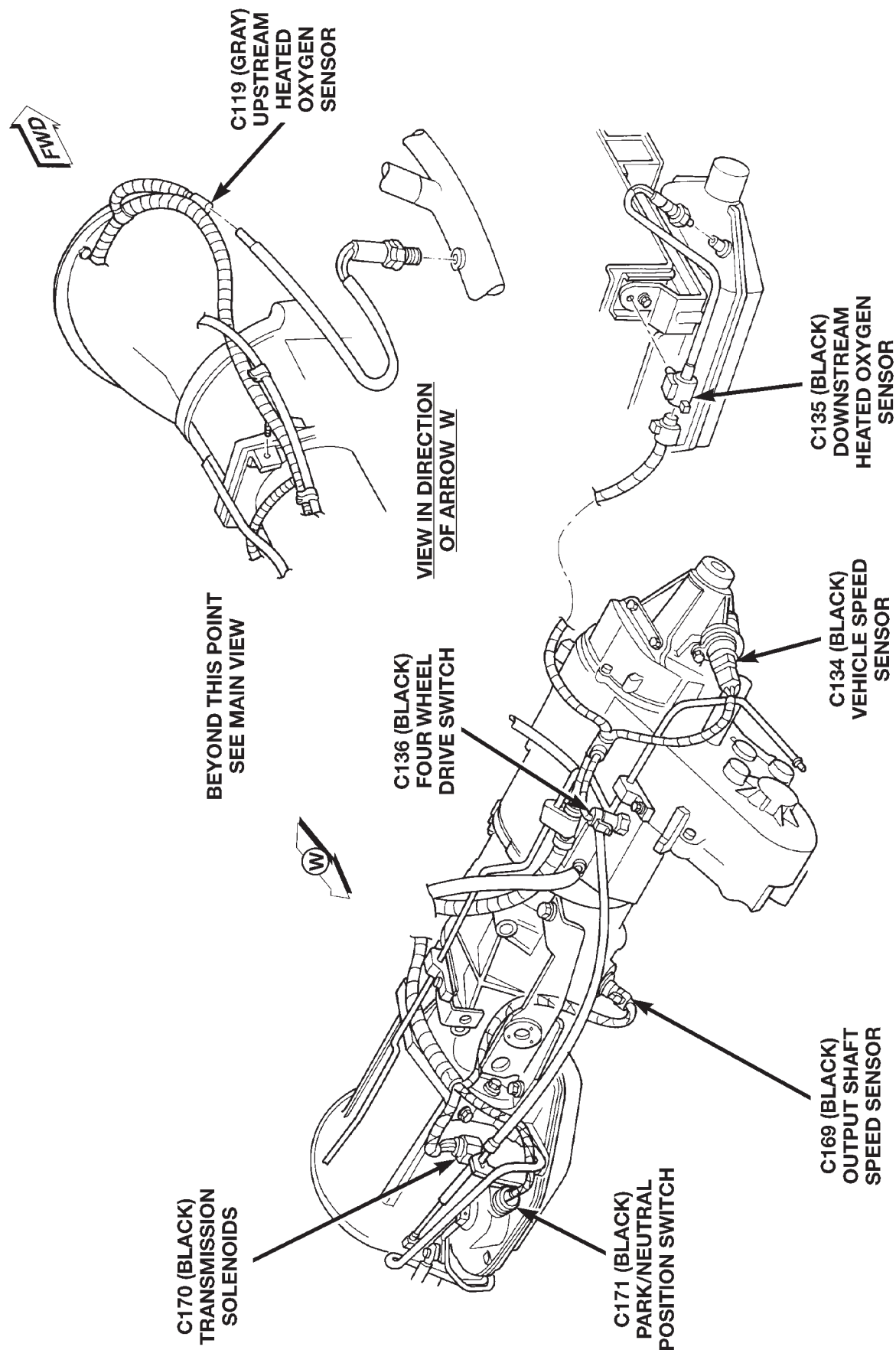


Fig. 10 Transmission Connectors—5.2L

DESCRIPTION AND OPERATION (Continued)

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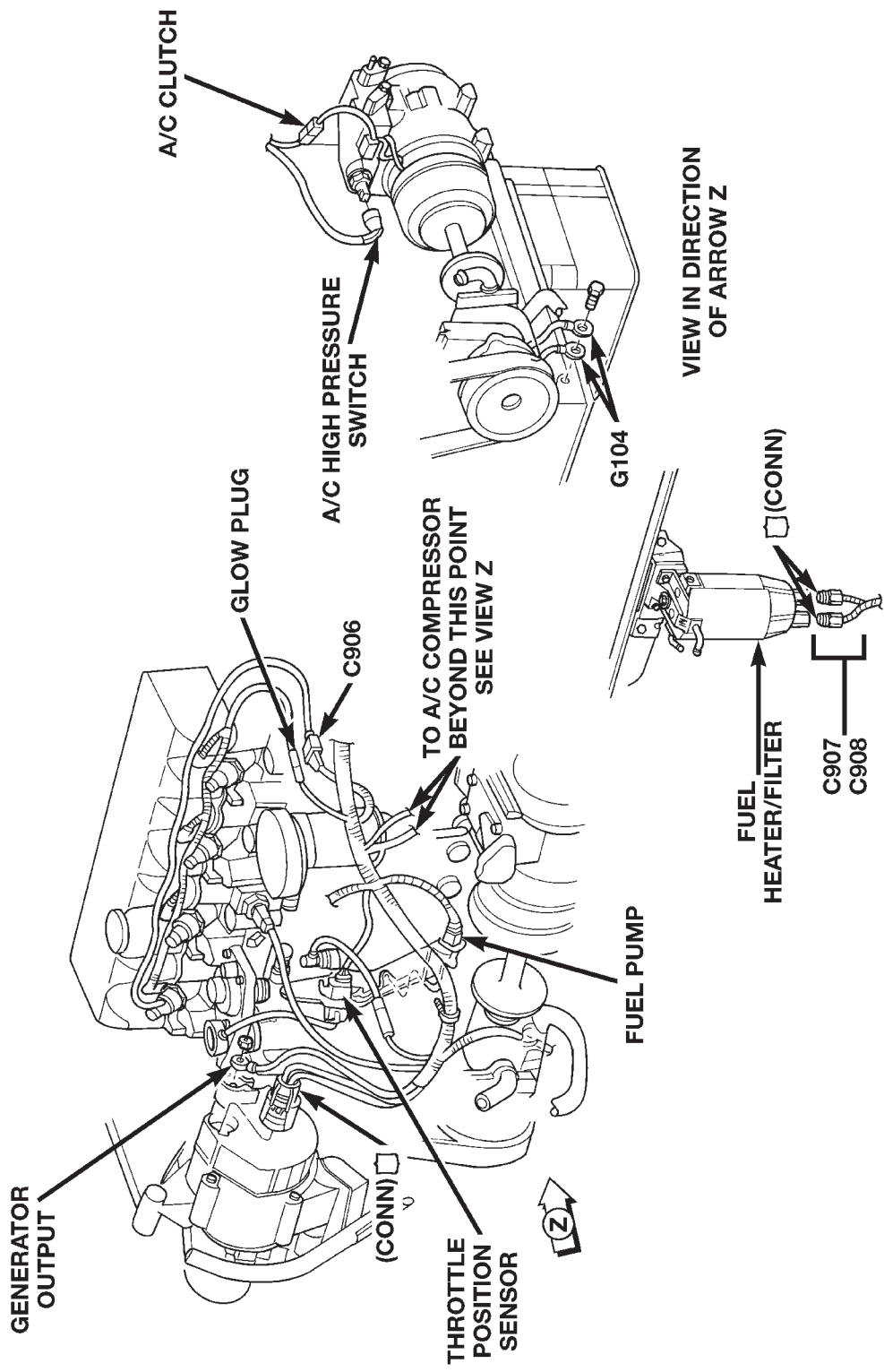


Fig. 11 Engine Connectors—Diesel Engine

DESCRIPTION AND OPERATION (Continued)

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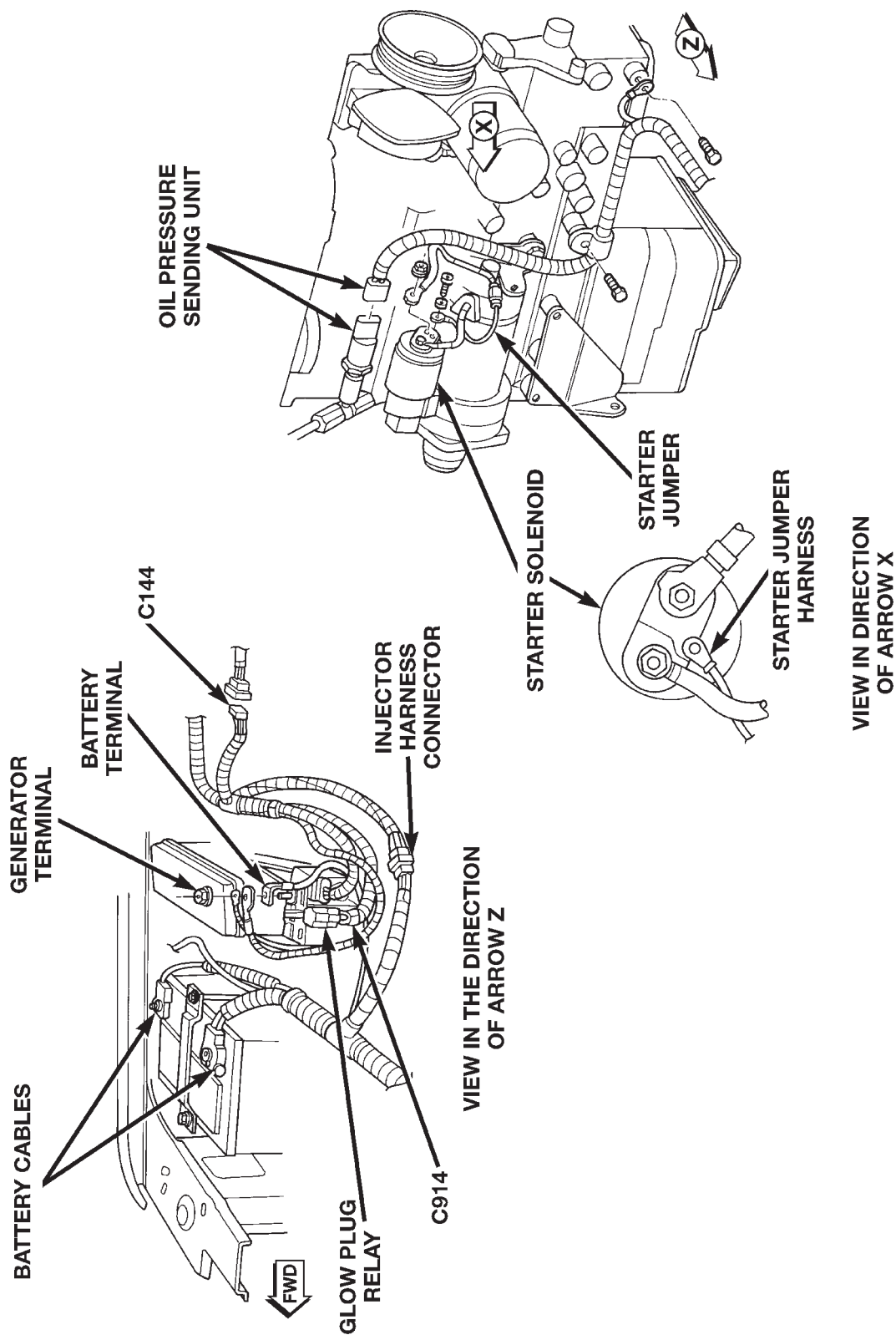


Fig. 12 Battery and Starter Motor Connectors—Diesel Engine

DESCRIPTION AND OPERATION (Continued)

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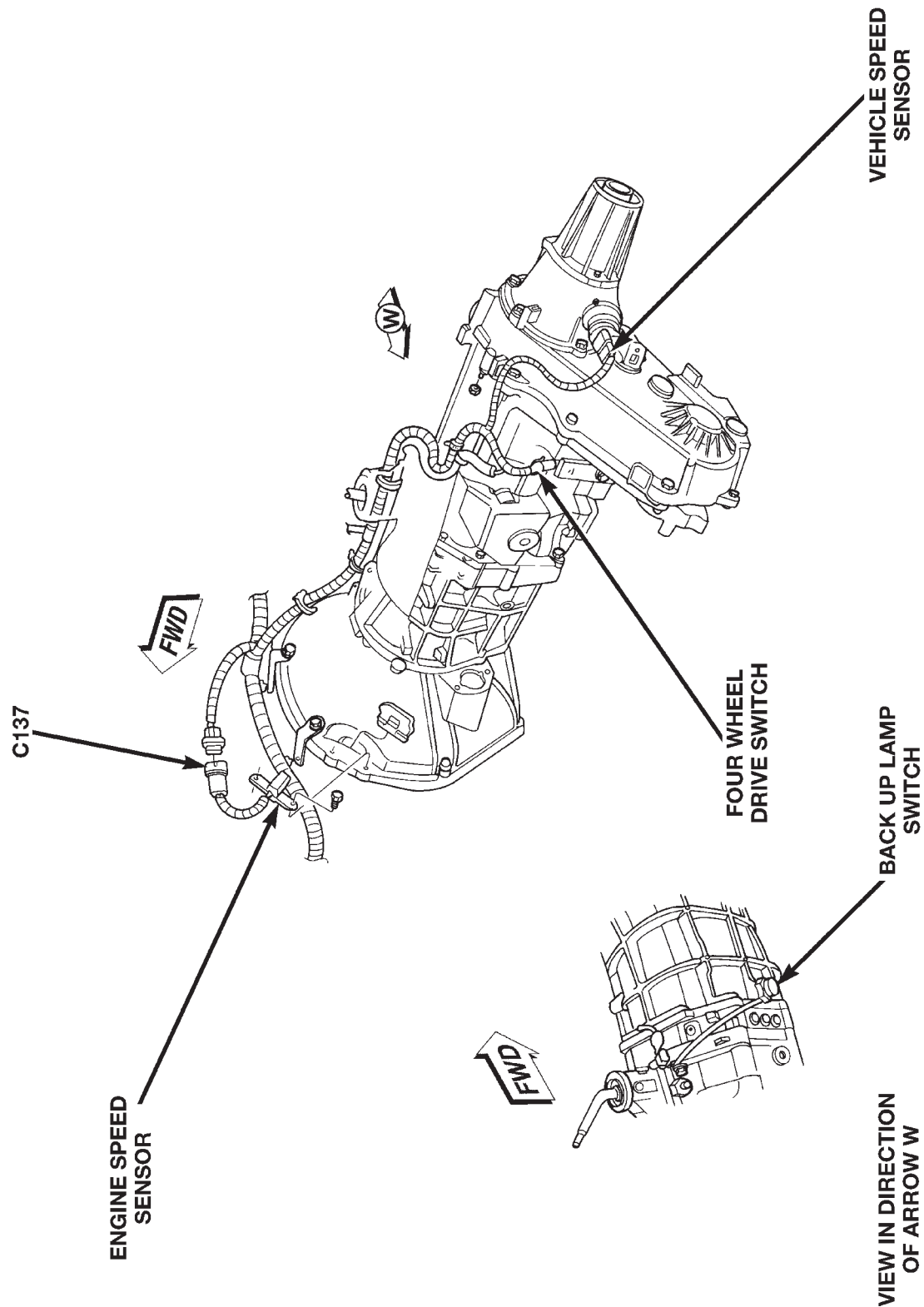


Fig. 13 Transmission Connectors—Diesel Engine

DESCRIPTION AND OPERATION (Continued)

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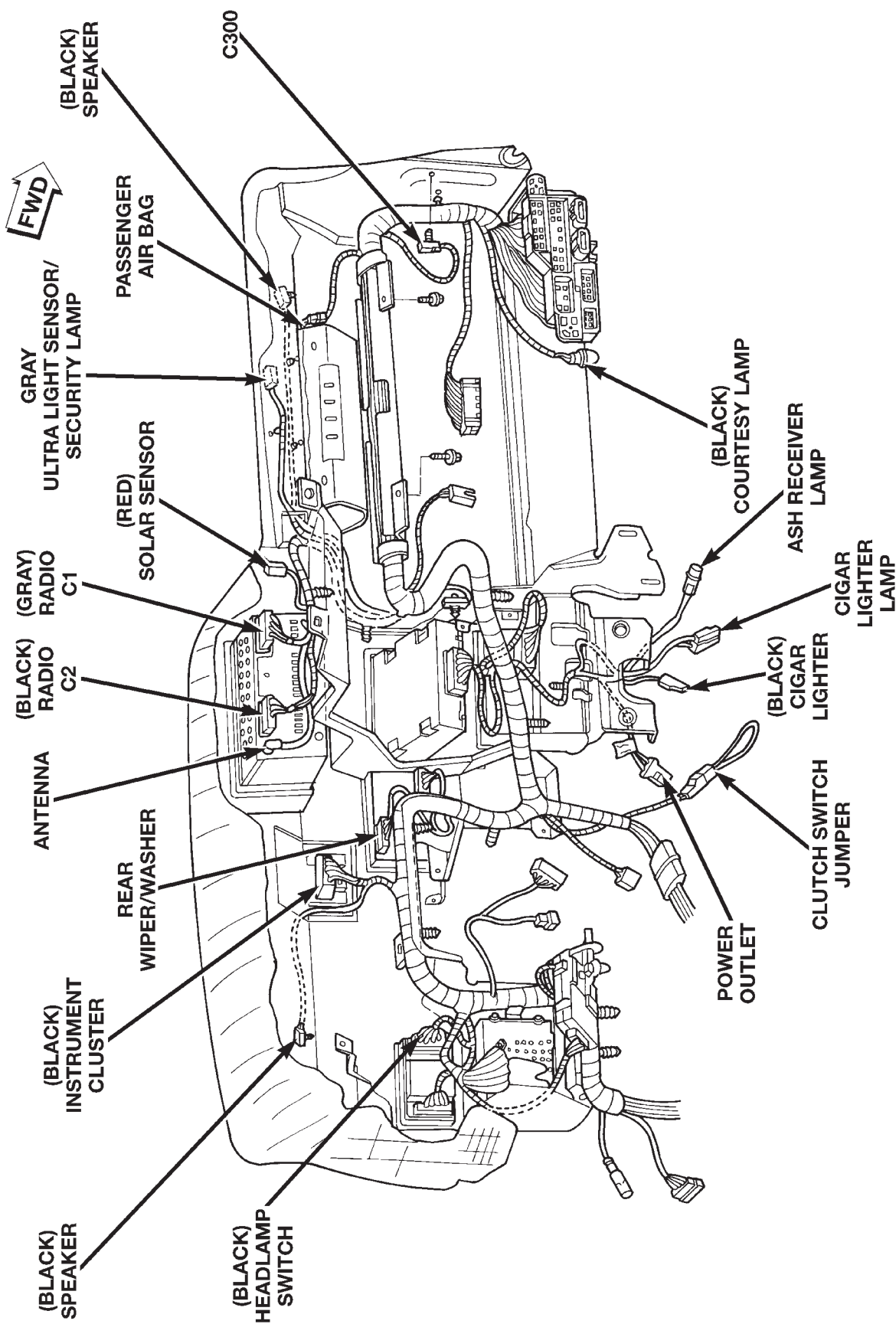


Fig. 14 Instrument Panel Connectors

DESCRIPTION AND OPERATION (Continued)

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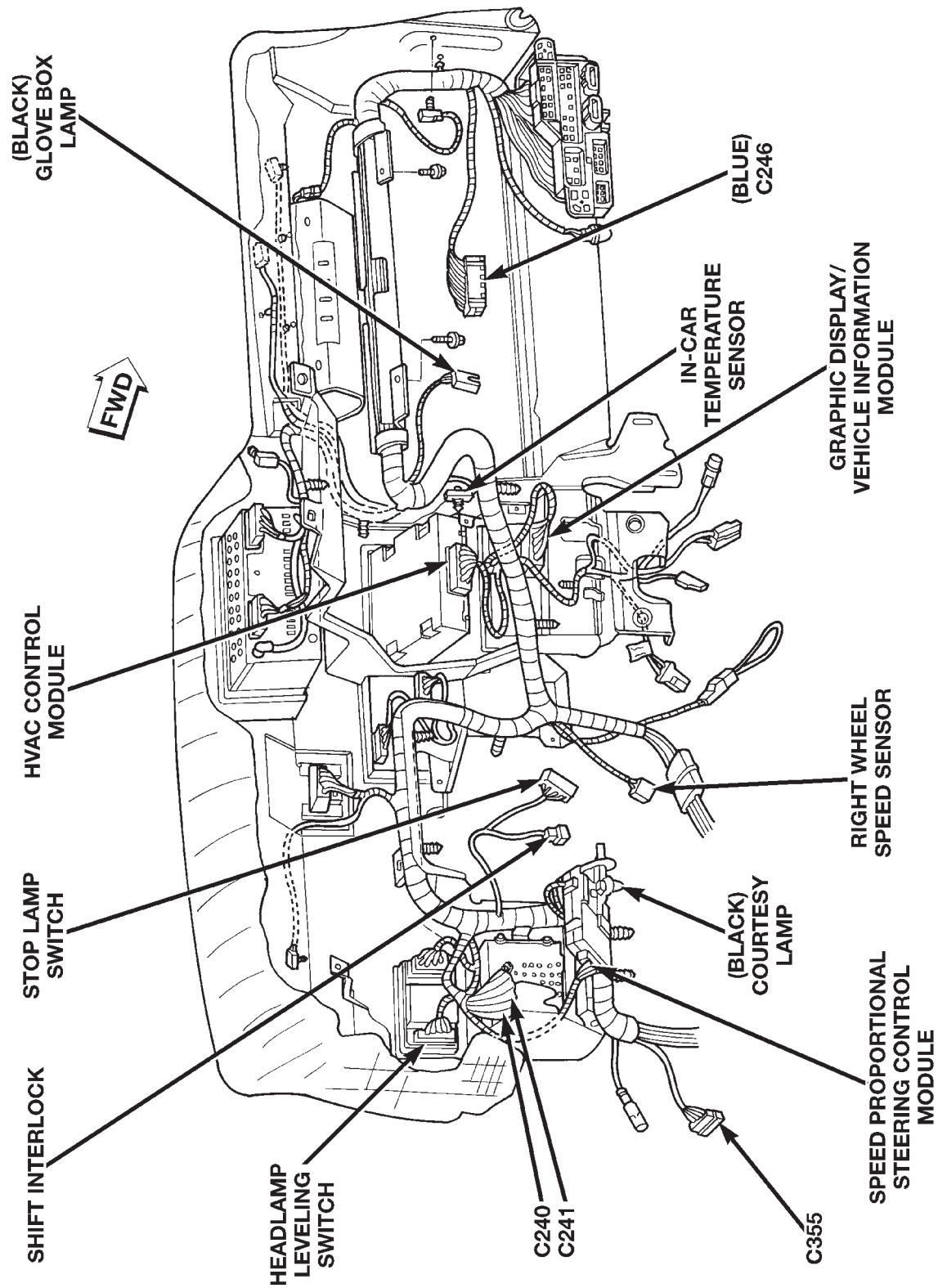


Fig. 15 Instrument Panel Connectors

DESCRIPTION AND OPERATION (Continued)

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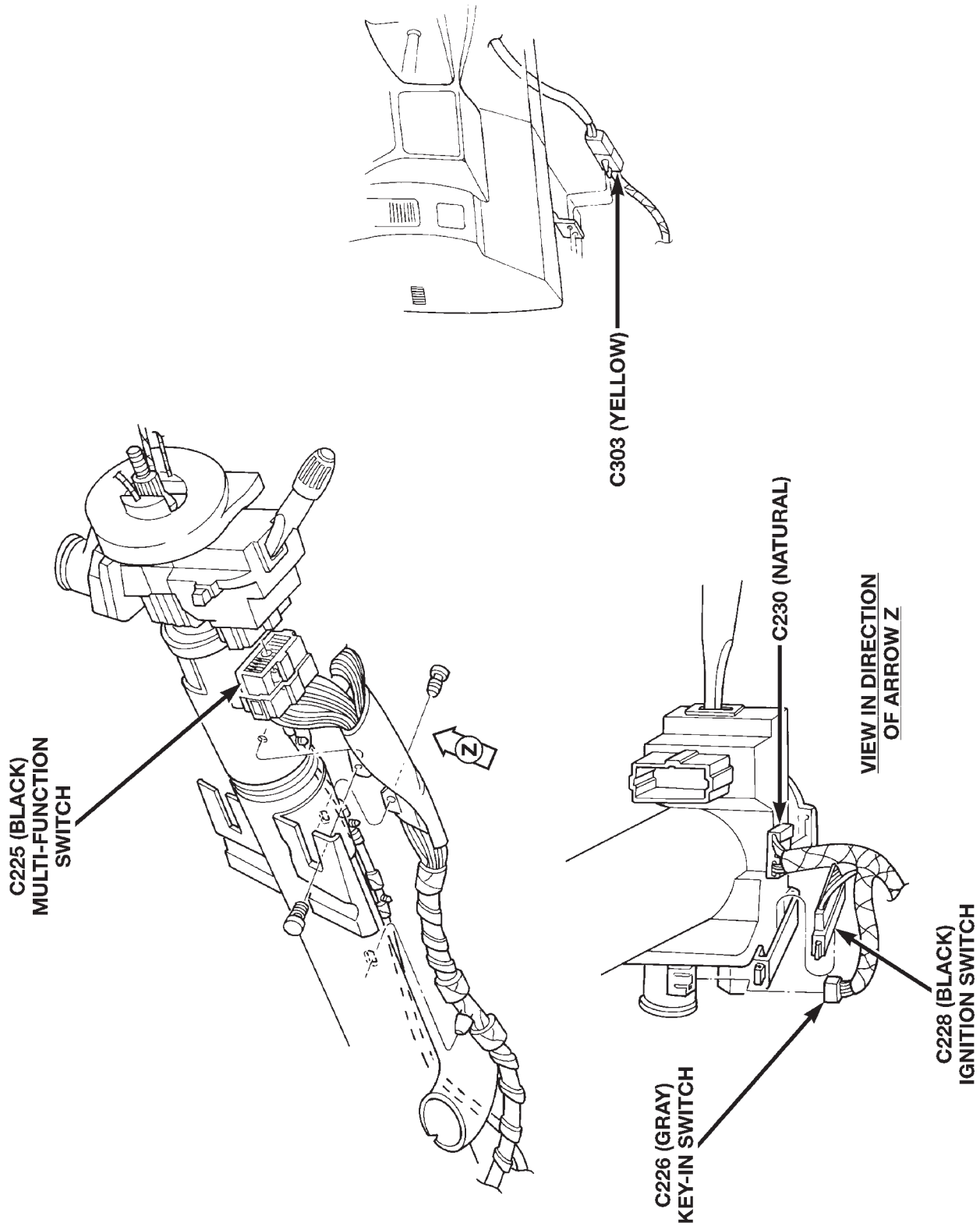


Fig. 16 Steering Column Connectors

DESCRIPTION AND OPERATION (Continued)

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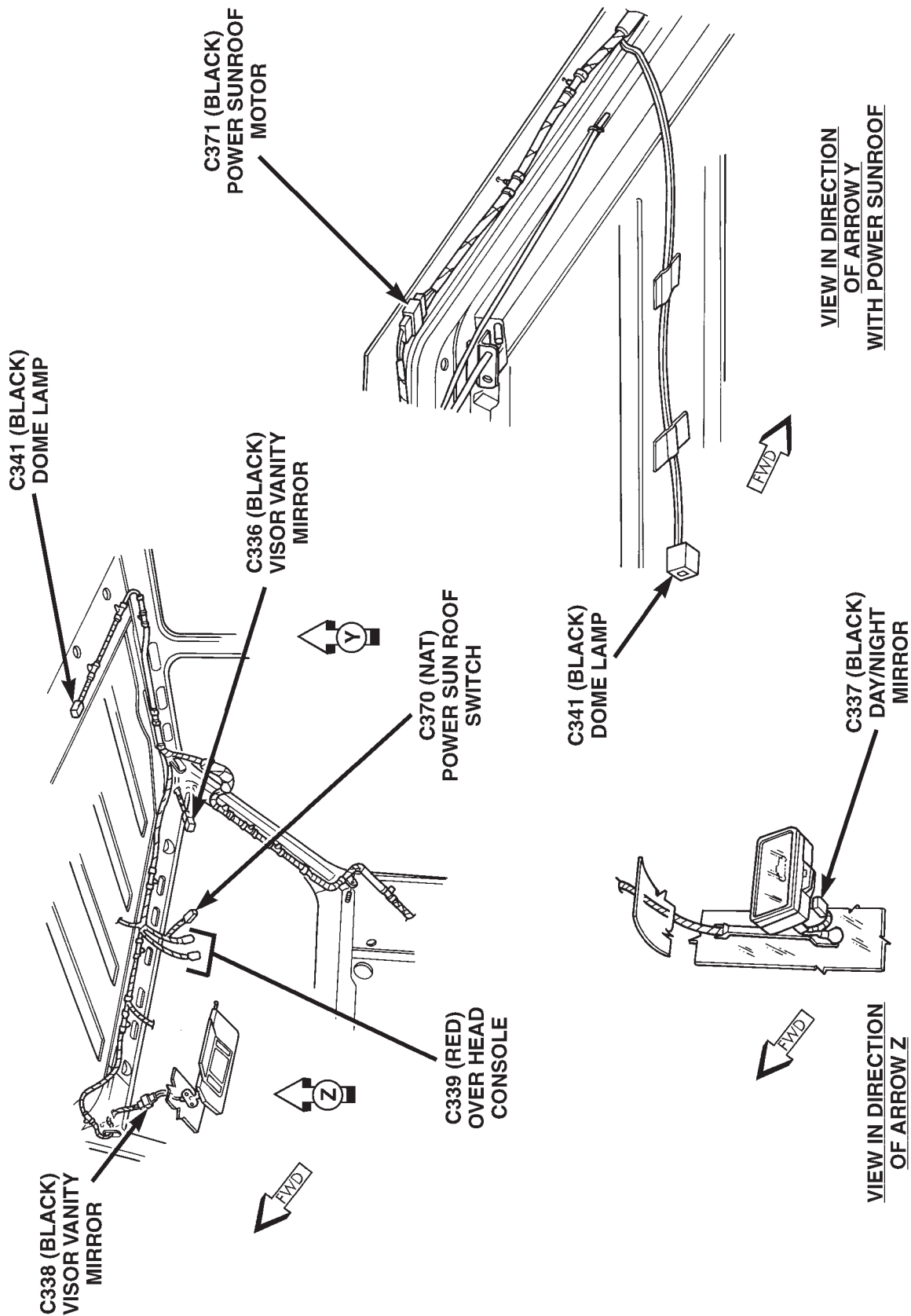


Fig. 17 Roof Connectors

DESCRIPTION AND OPERATION (Continued)

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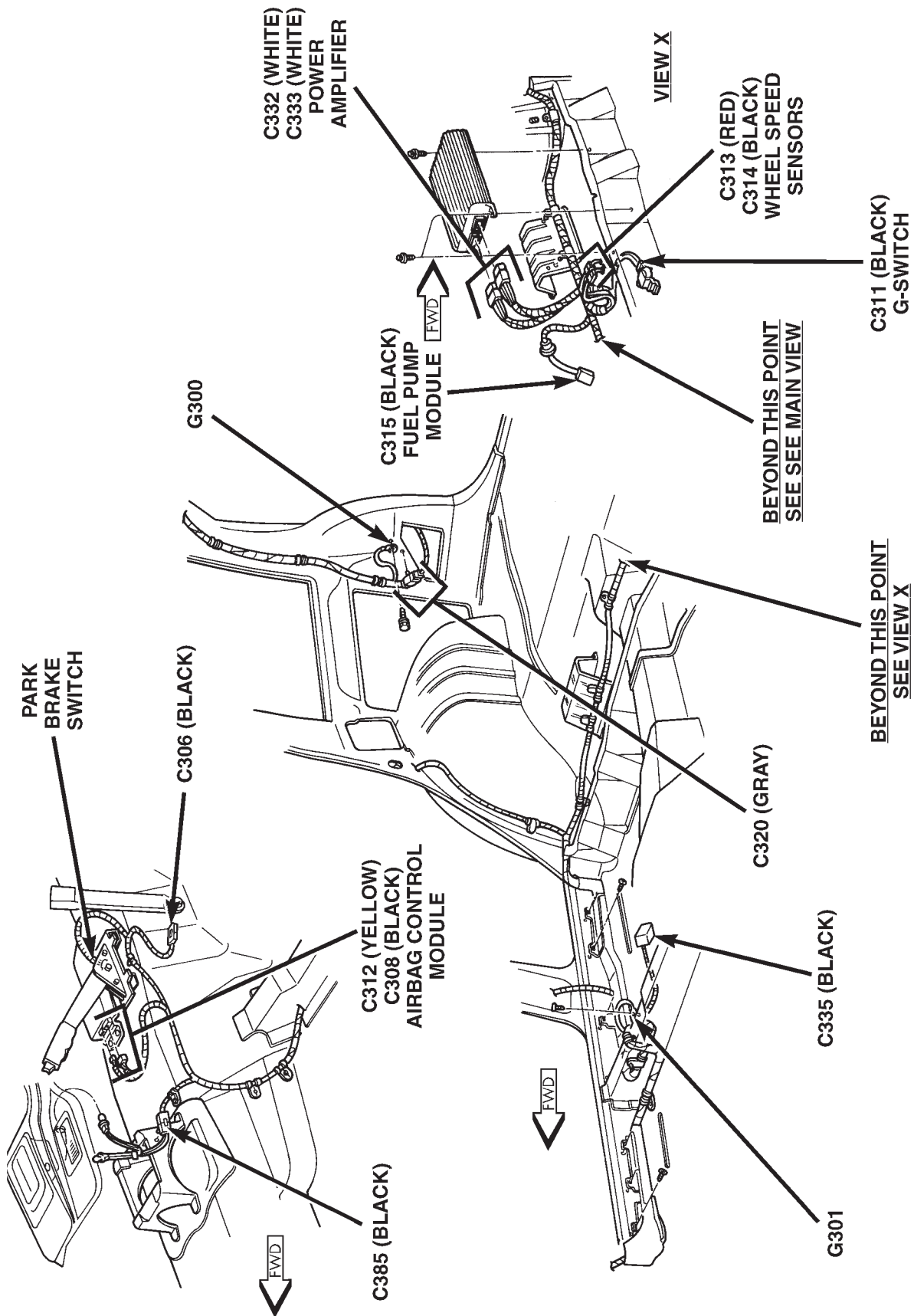
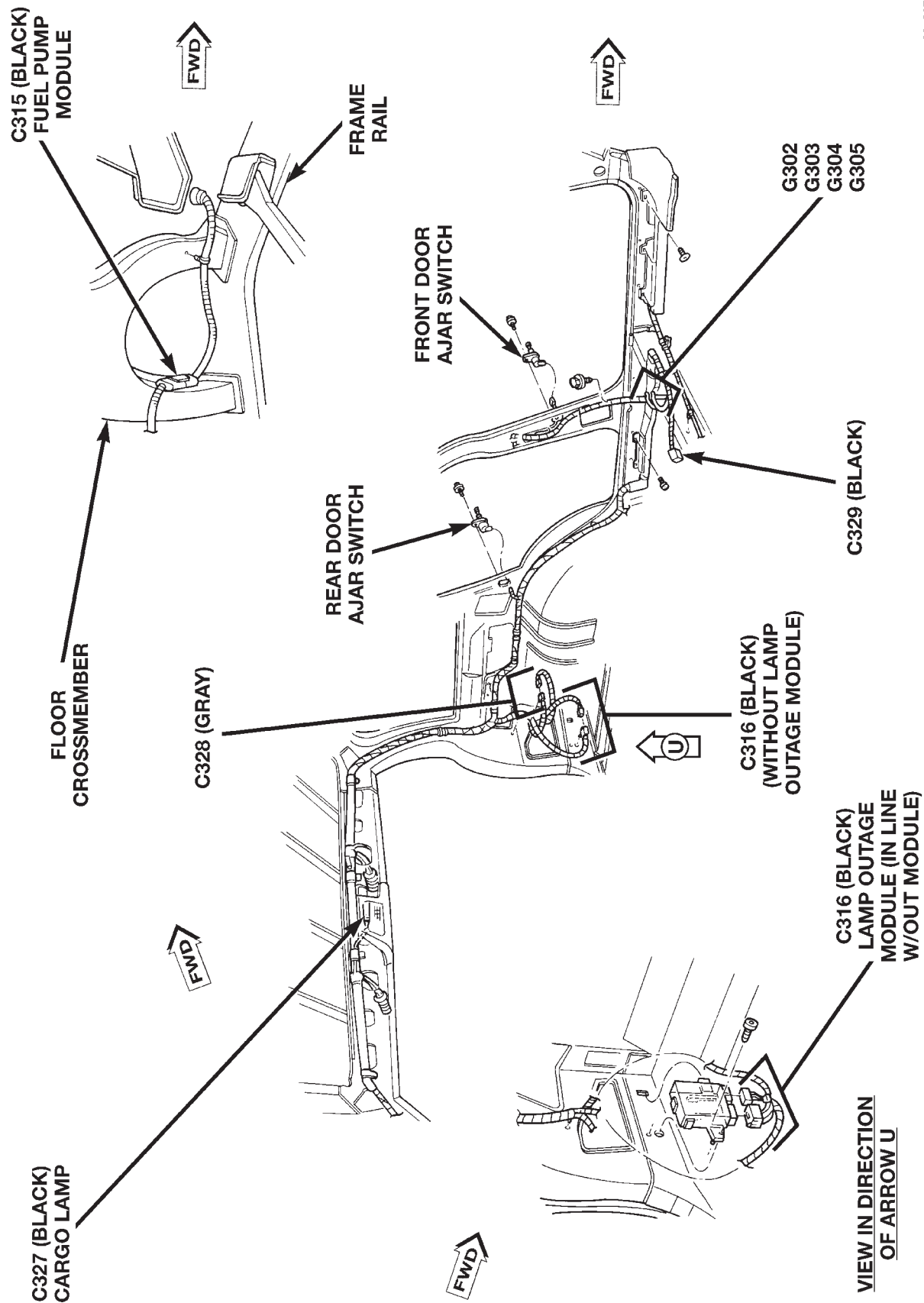


Fig. 18 Body Connectors—Right Side

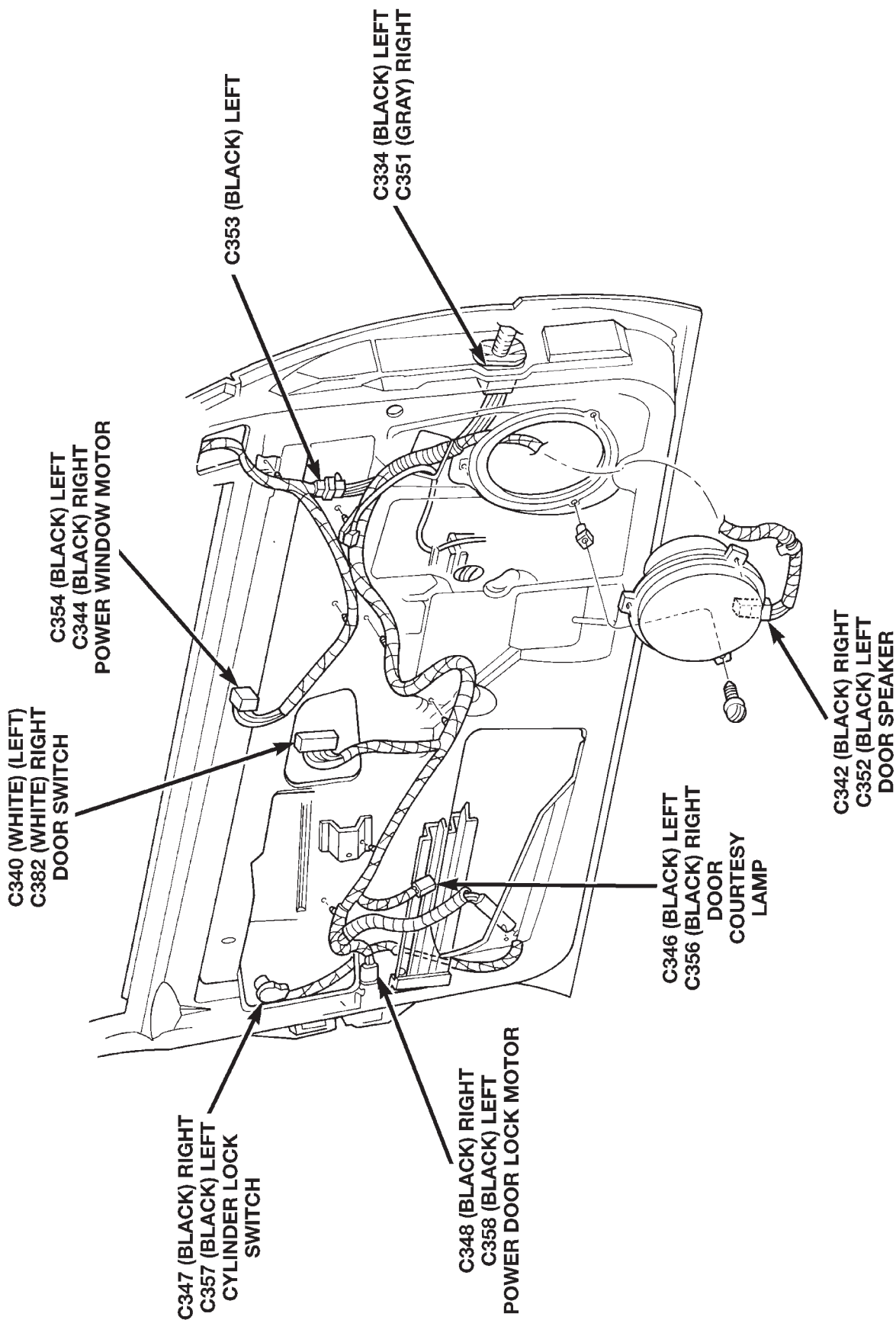
DESCRIPTION AND OPERATION (Continued)



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Fig. 19 Body Connectors—Left Side

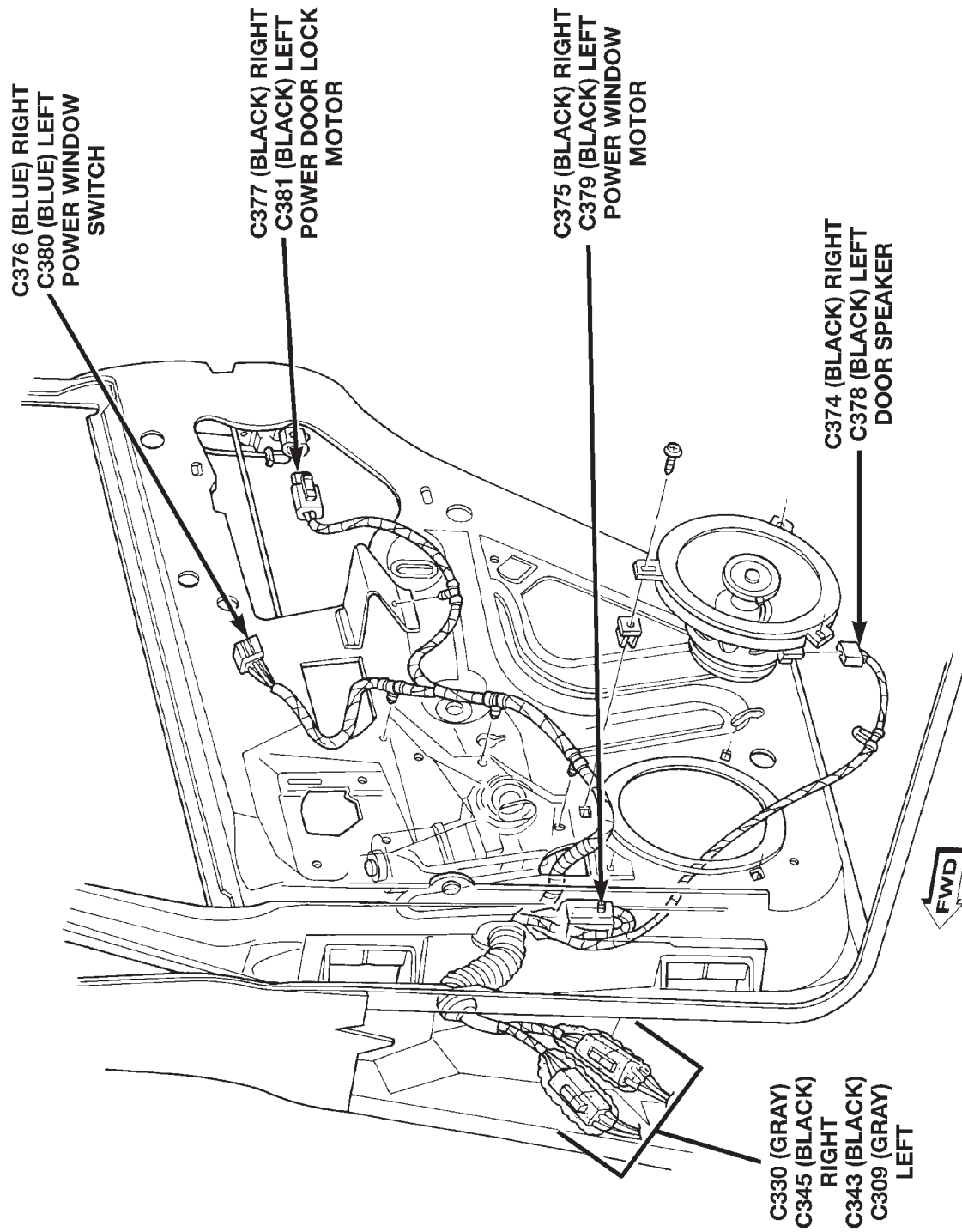
DESCRIPTION AND OPERATION (Continued)



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Fig. 20 Front Door Connectors

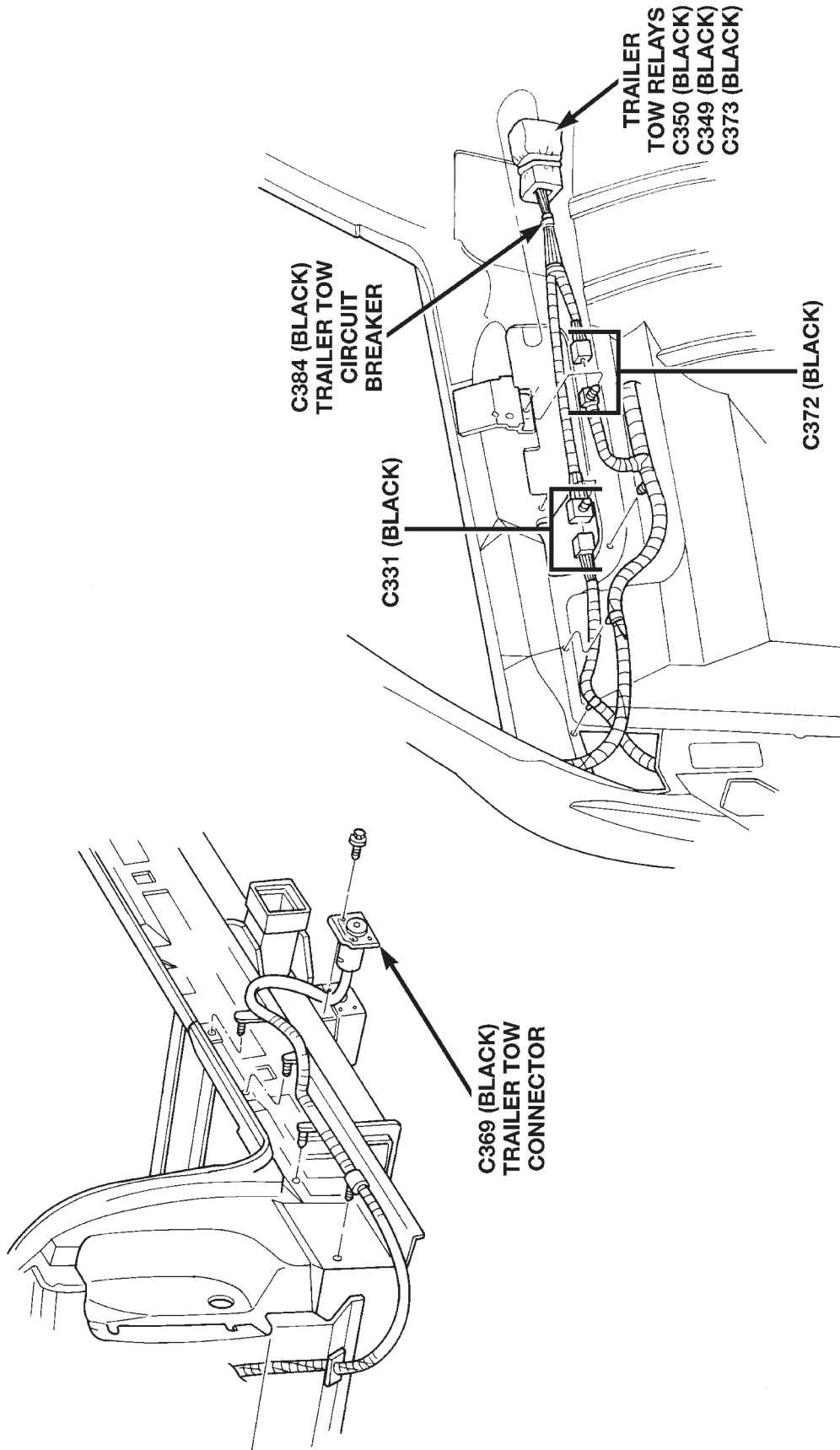
DESCRIPTION AND OPERATION (Continued)



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Fig. 21 Rear Door Connectors

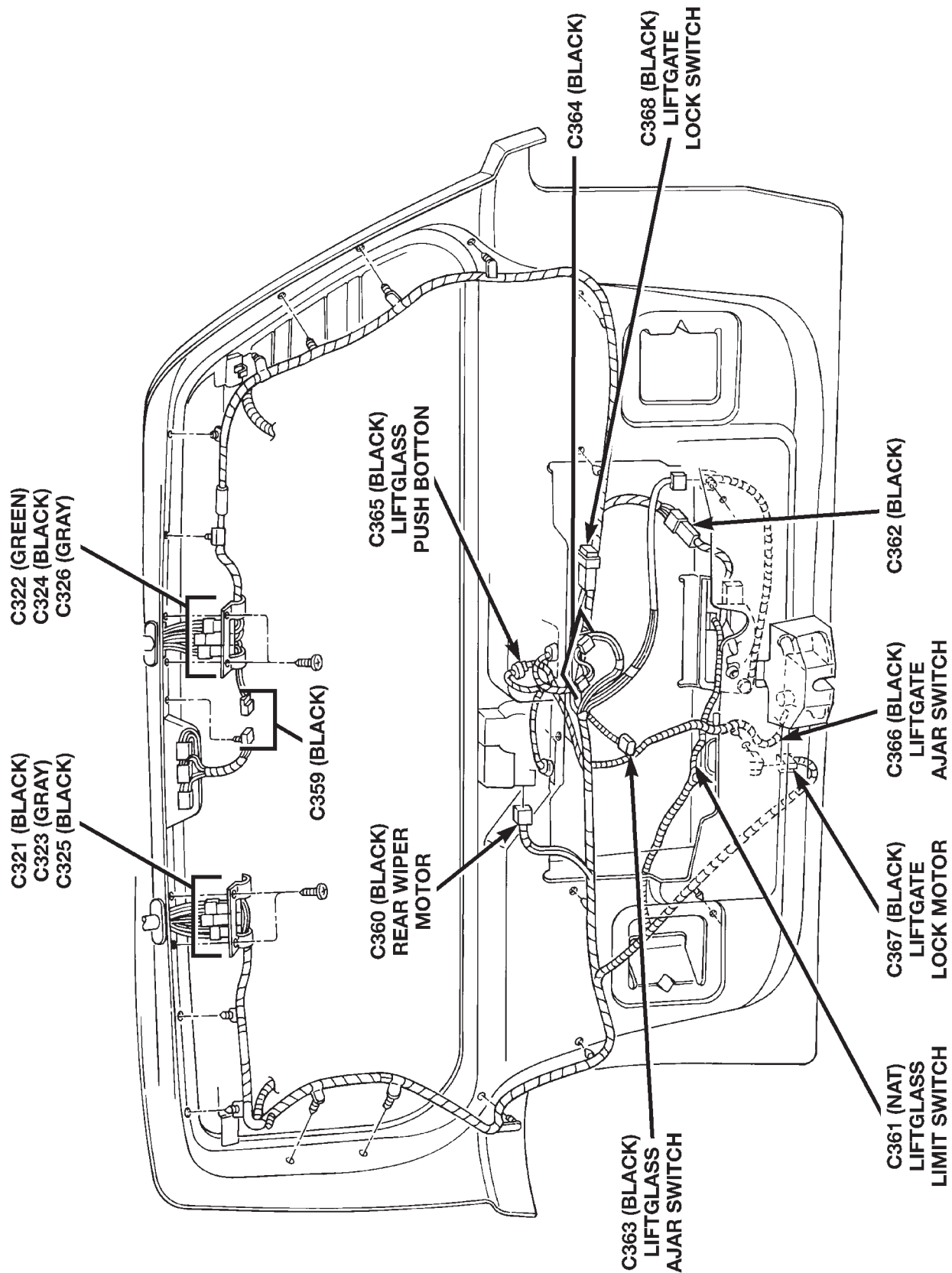
DESCRIPTION AND OPERATION (Continued)



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Fig. 22 Factory Trailer Tow

DESCRIPTION AND OPERATION (Continued)



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Fig. 23 Liftgate Connectors

DESCRIPTION AND OPERATION (Continued)

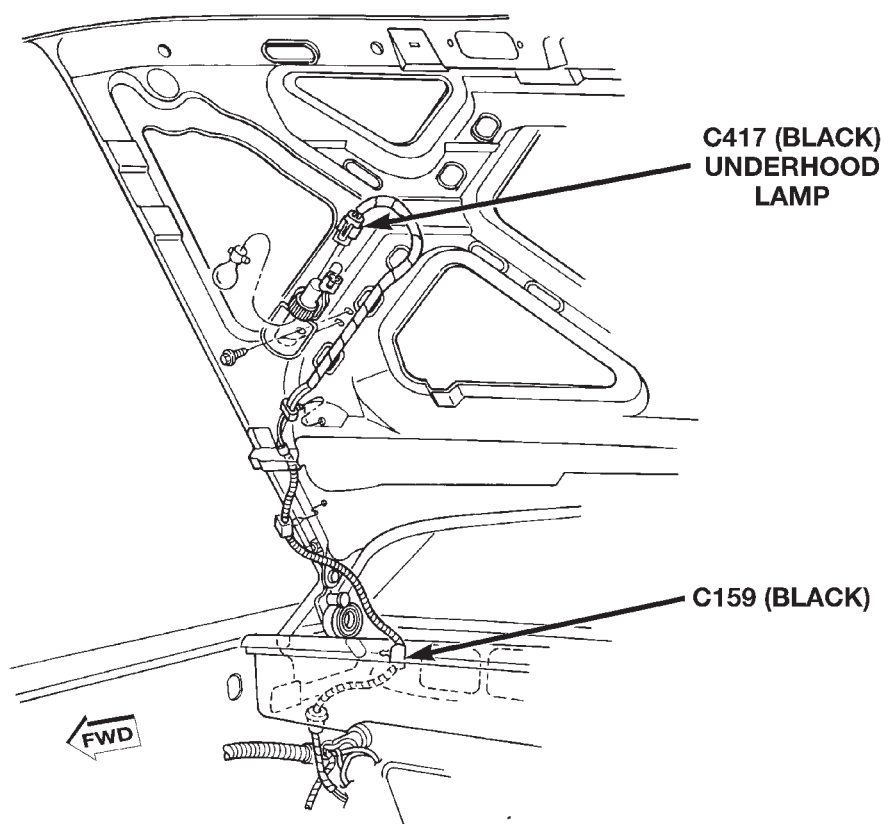


Fig. 24 Underhood Lamp

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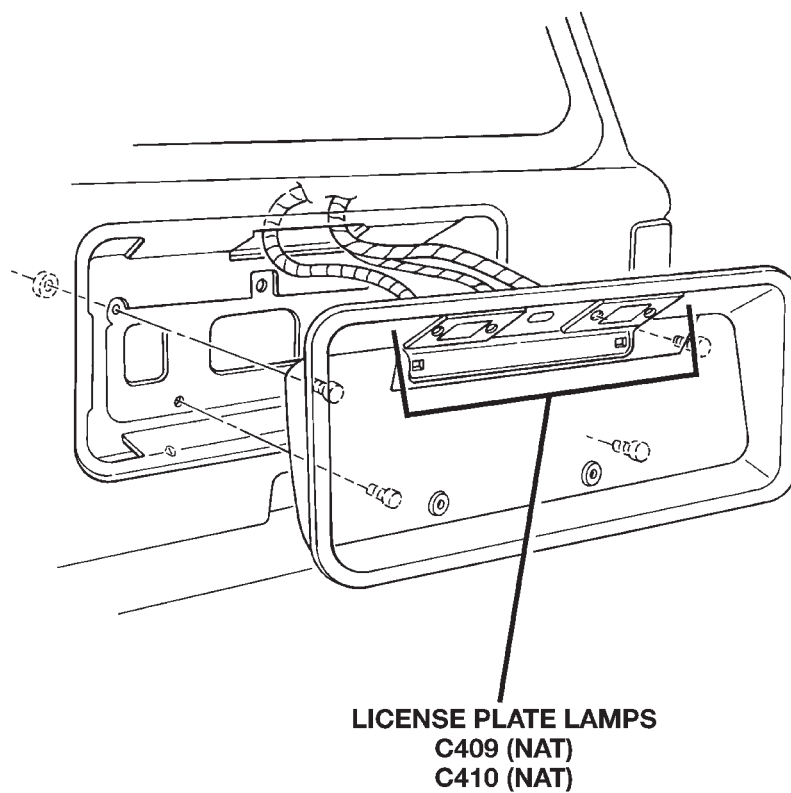


Fig. 25 License Plate Lamps

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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 proper splice number.

SPLICE LOCATIONS

For splices that are not shown in the figures in this section an N/S is placed in the Fig. column.

Splice Number	Location	Fig.
S100	Near Power Distribution Center	1
S101	Near Battery Temperature Sensor T/O	1
S102	Near Battery Temperature Sensor T/O	1
S103	Near Battery Temperature Sensor T/O	1
S104	Right Front Corner of Engine Compartment	1
S105	Right Front Corner of Engine Compartment	1
S106	Right Front Corner of Engine Compartment	1
S107	Left Front Corner of Engine Compartment	1
S108	Left Front Corner of Engine Compartment	1
S109	Near EVAP/Purge Solenoid T/O	1
S116	Near Branch to Brake Warning Switch	1
S117	In Branch to Brake Warning Switch	1
S118	In Branch to Brake Warning Switch	1
S119	Left Rear of Engine Compartment	1
S120	Near T/O to Low Washer Fluid Level Sensor	1
S121	Near T/O to Low Washer Fluid Level Sensor	1
S122	Near Vehicle Speed Control Servo T/O	1
S123	Near Vehicle Speed Control Servo T/O	1
S124	Near Vehicle Speed Control Servo T/O	1
S125	Near Controller, Antilock Brakes	6

Splice Number	Location	Fig.
S126	Near A/C High Pressure Switch T/O (4.0L Engine)	1
S126	In Branch to Starter Motor (5.2L Engine)	3
S127	Near Injector No. 3 T/O (4.0L Engine)	2
S128	Near Injector No. 5 T/O (4.0L Engine)	2
S128	Near T/Os for Injectors 6 and 8 (5.2L Engine)	3
S128	Near T/Os for A/C Compressor	4
S129	Rear of Engine (4.0L Engine)	2
S129	Near Injector No. 3 T/O (5.2L Engine)	3
S129	Rear of Engine (Diesel Engine)	N/S
S130	Rear of Engine (4.0L Engine)	2
S130	Near Crankshaft Position Sensor T/O (5.2L Engine)	3
S130	Near Crankshaft Position Sensor T/O (Diesel Engine)	4
S131	In Branch to Transmission (4.0L Engine)	2
S131	Right Rear of Engine (5.2L Engine)	3
S132	Near Branch to Transmission (4.0L Engine)	2
S132	Rear of Engine (5.2L Engine)	3
S133	In Branch to Oil Pressure Sensor and Crankshaft Position Sensor (4.0L Engine)	2
S133	Near Injector No. 5 T/O (5.2L Engine)	3
S134	Near Branch to Powertrain Control Module (4.0L Engine)	2
S134	Rear of Engine (5.2L Engine)	3

DESCRIPTION AND OPERATION (Continued)

Splice Number	Location	Fig.	Splice Number	Location	Fig.
S134	Near Crankshaft Position Sensor T/O (Diesel Engine)	4	S222	On HVAC Harness	7
S135	Near Branch to PCM (4.0L Engine)	2	S223	On HVAC Harness	7
S135	Right Rear of Engine (5.2L Engine)	3	S224	On HVAC Harness	7
S136	Near Injector No. 7 T/O (5.2L Engine)	3	S225	On HVAC Harness	7
S136	Near Crankshaft Position Sensor T/O (Diesel Engine)	4	S226	On HVAC Harness	7
S138	Near Crankshaft Position Sensor T/O (Diesel Engine)	4	S300	Near Left Kick Panel	6
S140	Rear of Engine (Diesel Engine)	4	S301	Near Left Kick Panel	6
S141	Rear of Engine (Diesel Engine)	4	S302	Near Left Kick Panel	6
S142	Near T/Os for A/C Compressor	4	S303	Near Branch to Floor Console	8
S200	Near Headlamp Switch T/O	5	S304	Near Branch to Floor Console	8
S201	Near Headlamp Switch T/O	5	S305	Near Branch to Left Rear Door	8
S202	Near Stop Lamp Switch T/O	5	S306	Near Branch to Left Rear Door	8
S203	Near Stop Lamp Switch T/O	5	S307	Near Branch to Left Rear Door	8
S204	Near Branch to Instrument Cluster	5	S308	Near Branch to Power Amplifier	8
S205	Near Branch to Instrument Cluster	5	S309	In Branch to Power Amplifier	8
S206	Near Branch to Rear Window Defogger Switch	5	S310	Near Branch to Power Amplifier	8
S207	Near Shift Interlock T/O	5	S311	Left Rear Quarter Panel	8
S208	Near Branch to Shift Interlock T/O	5	S312	Left Rear Quarter Panel	8
S209	Near Branch to Shift Interlock T/O	5	S313	Left Rear Quarter Panel	8
S210	Near Transfer Case Illumination Lamp T/O	5	S314	Top of Left Rear Quarter Panel	8
S211	Near Branch to Graphic Display Module/Vehicle Information Center	5	S315	Top of Left Rear Quarter Panel	8
S212	Near Passenger Airbag T/O	5	S316	Near Right Side T/O for Liftgate	9
S214	Near Passenger Airbag T/O	5	S317	In Branch to Power Amplifier	8
S215	Near Passenger Airbag T/O	5	S318	In Branch to Power Amplifier	8
S216	Near Passenger Airbag T/O	5	S319	Near Branch to Right Rear Door Ajar Switch	9
S218	Near Passenger Airbag T/O	5	S320	In Branch to Dome/Reading Lamp	9
S219	Near Branch to Graphic Display Module/Vehicle Information Center	5	S321	Between Day/Night Mirror T/O and Right Vanity Mirror T/O	10
S220	Near Passenger Airbag T/O	5	S322	Between Day/Night Mirror T/O and Right Vanity Mirror T/O	10
S221	On HVAC Harness	7	S323	Near Day/Night Mirror T/O	10
			S324	In Left Front Door, Between Power Window Motor T/O and Power Mirror T/O	11
			S325	In Right Front Door, Near Power Window Motor T/O	11
			S326	In Right Front Door, Near Power Window Motor T/O	11
			S327	In Right Front Door, Near Power Window Motor T/O	11
			S328	In Liftgate, Near Rear Window Defogger T/O	12

DESCRIPTION AND OPERATION (Continued)

Splice Number	Location	Fig.
S329	In Liftgate, Near Rear Wiper Motor T/O	12
S330	In Factory Trailer Tow Harness, Near Body Harness Connector	8
S331	In Factory Trailer Tow Harness, Near Trailer Receptacle Harness Connector	8
S332	In Liftgate, Near Left Body Connectors	12
S333	Near T/O to Right Power Seat	9
S334	In Branch to Dome Reading Lamp	10
S335	In Branch to Power Amplifier	8
S336	In Liftgate, Between Rear Wiper Motor T/O and Liftgate Lock Motor T/O	12
S400	In Left Power Seat Harness, Near Lumbar Motor T/O	N/S
S401	In Left Power Seat Harness, Near Riser Motor Sensor T/O	N/S
S402	In Left Power Seat Harness, Between Riser Motor Sensor T/O and Heated Seat Module T/O	N/S
S403	In Left Power Seat Harness, Near Seat Switch T/O	N/S
S404	In Right Power Seat Harness, Near Seat Motor T/Os	N/S
S405	In Right Power Seat Harness, Near Seat Motor T/Os	N/S
S406	In Right Power Seat Harness, In Branch to Seat Switch	N/S

Splice Number	Location	Fig.
S407	In Left Power Seat Harness, Near Lumbar Motor T/O	N/S
S408	Near Left Front Turn Signal Bulb Socket	N/S
S409	Near Left Front Turn Signal Bulb Socket	N/S
S410	Near Left Front Park Lamp Bulb Socket	N/S
S411	In Left Tail Lamp Harness, Between Body Connector and Grommet	N/S
S412	In Left Tail Lamp Harness, Between Body Connector and Grommet	N/S
S413	Near Right Front Turn Signal Bulb Socket	N/S
S414	Near Right Front Turn Signal Bulb Socket	N/S
S415	Near Right Front Park Lamp Bulb Socket	N/S
S416	In Right Tail Lamp Harness, Between Body Connector and Grommet	N/S
S417	In Right Tail Lamp Harness, Between Body Connector and Grommet	N/S
S418	In License Plate Lamp Harness	12
S419	In License Lamp Harness	12
S421	Fuse Link at PDC	N/S

DESCRIPTION AND OPERATION (Continued)

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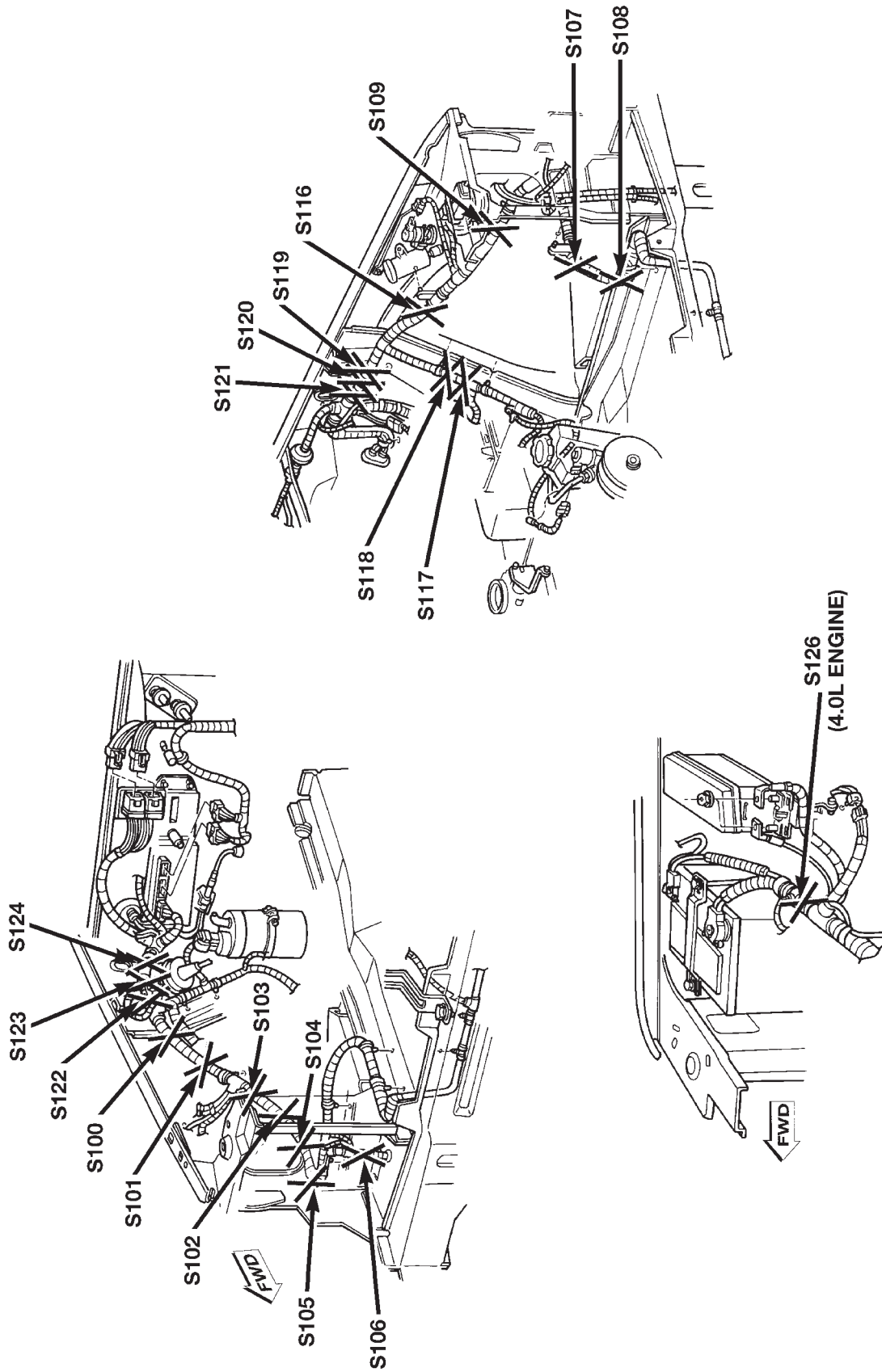


Fig. 1 Engine Compartment Splices

DESCRIPTION AND OPERATION (Continued)

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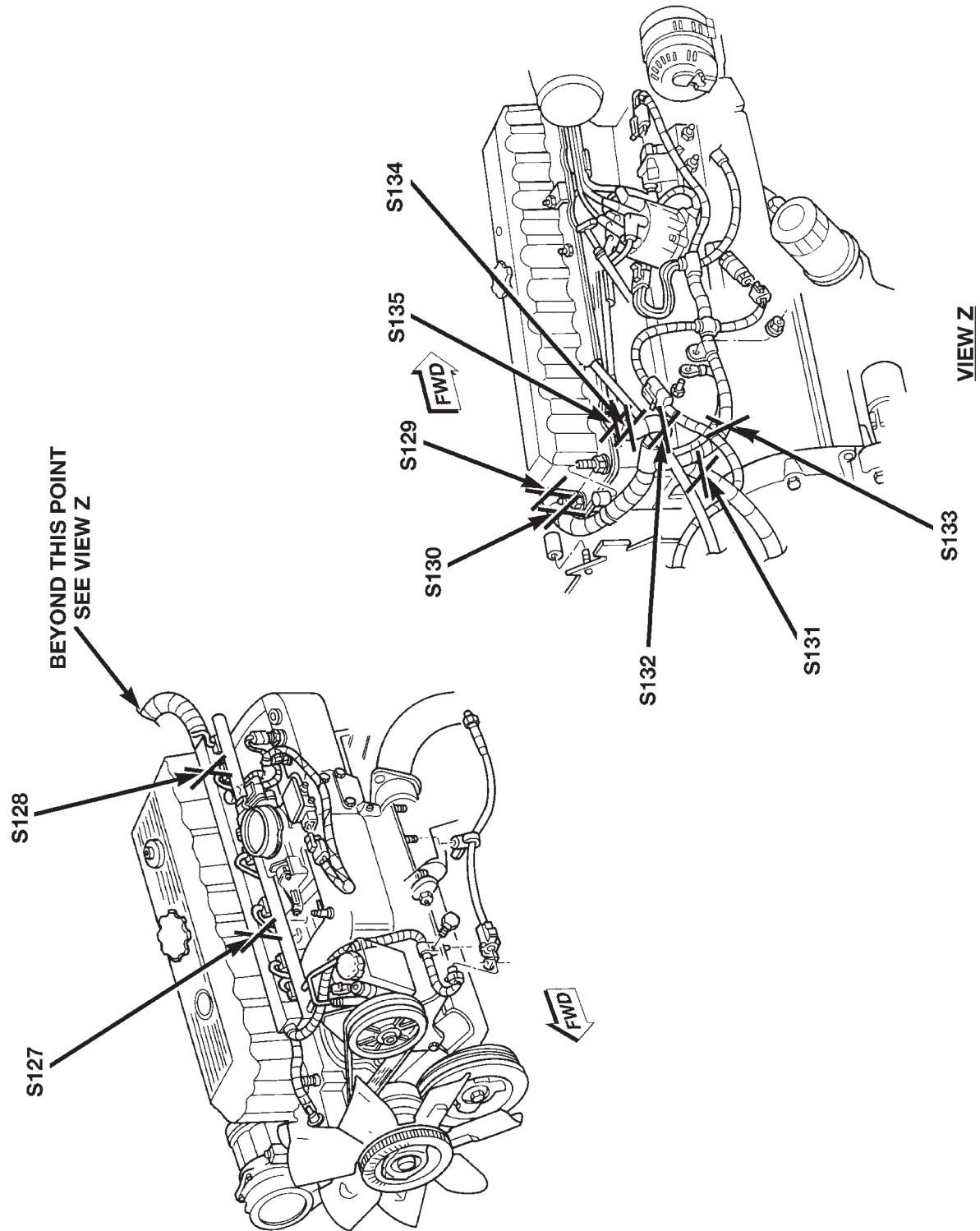


Fig. 2 Engine Wiring Splices—4.0L Engine

DESCRIPTION AND OPERATION (Continued)

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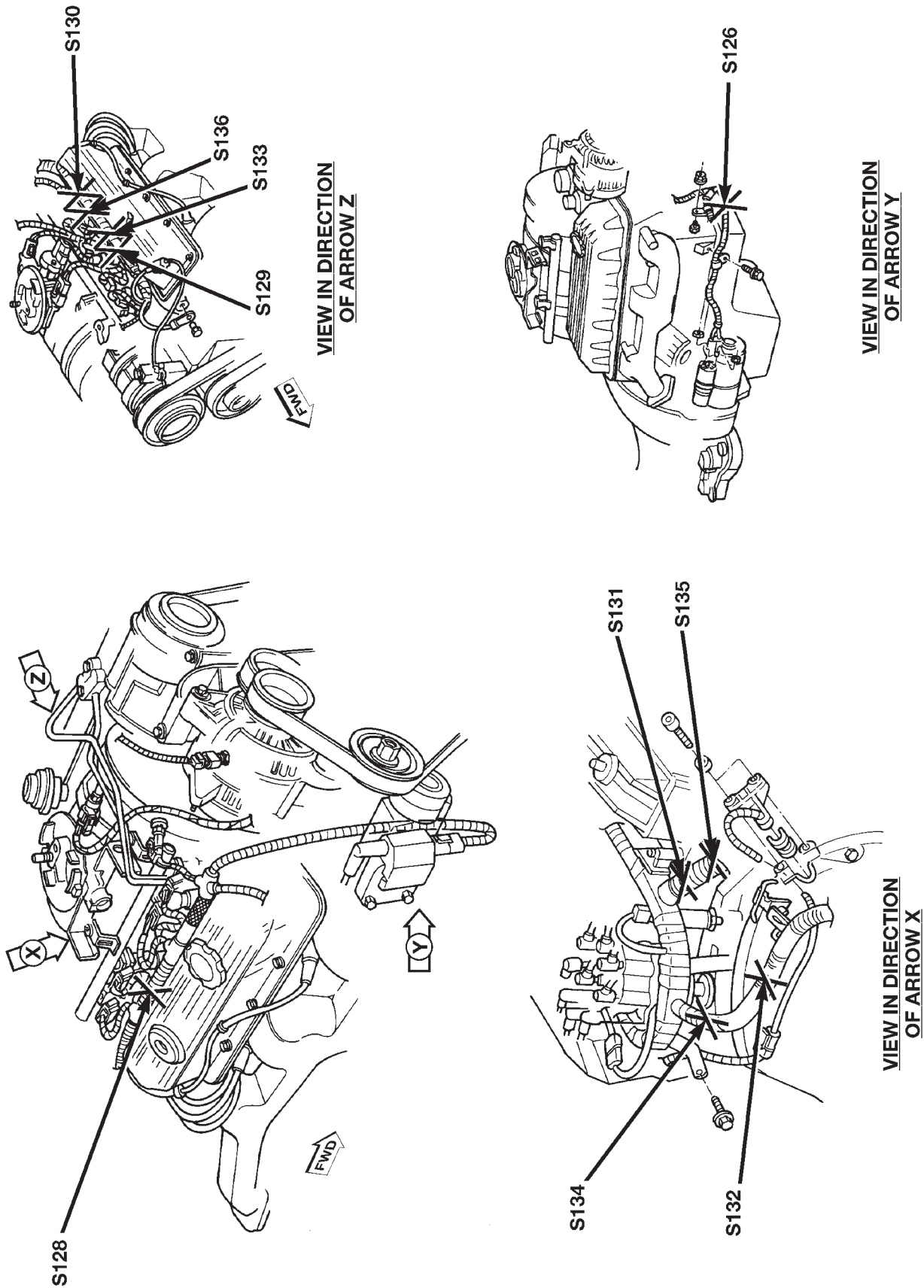


Fig. 3 Engine Wiring Splices—5.2L Engine

DESCRIPTION AND OPERATION (Continued)

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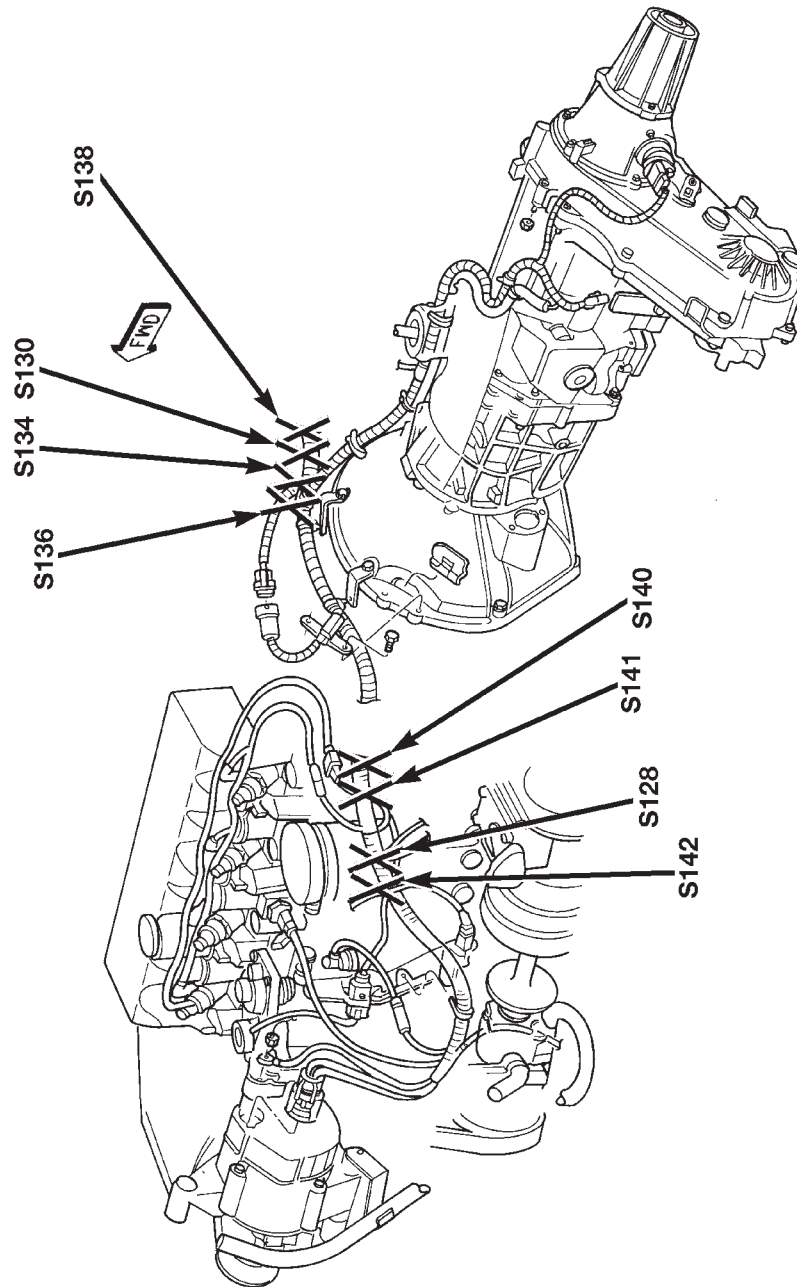


Fig. 4 Engine and Transmission Wiring Splices—Diesel Engine

DESCRIPTION AND OPERATION (Continued)

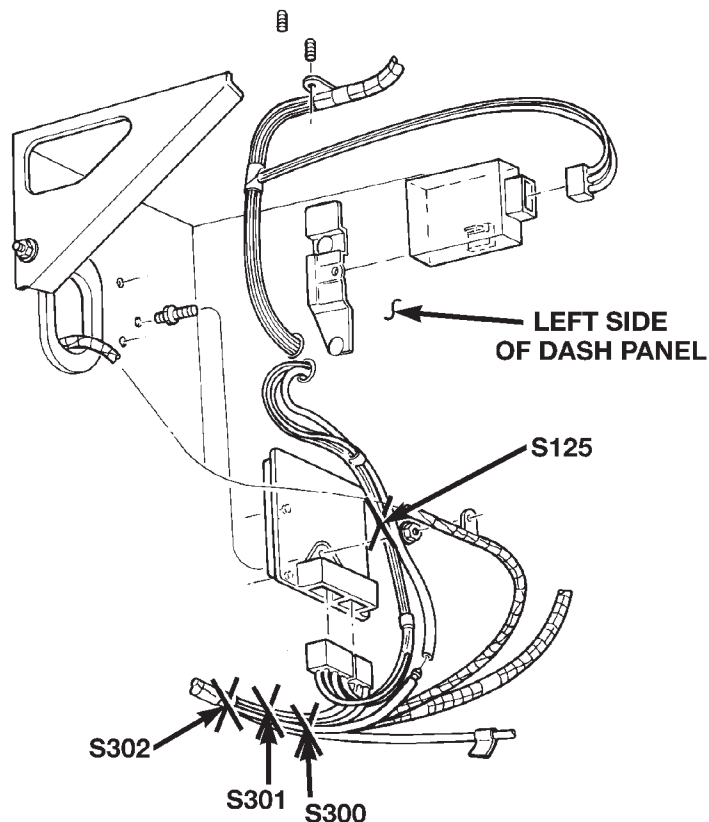


Fig. 6 Body Splices

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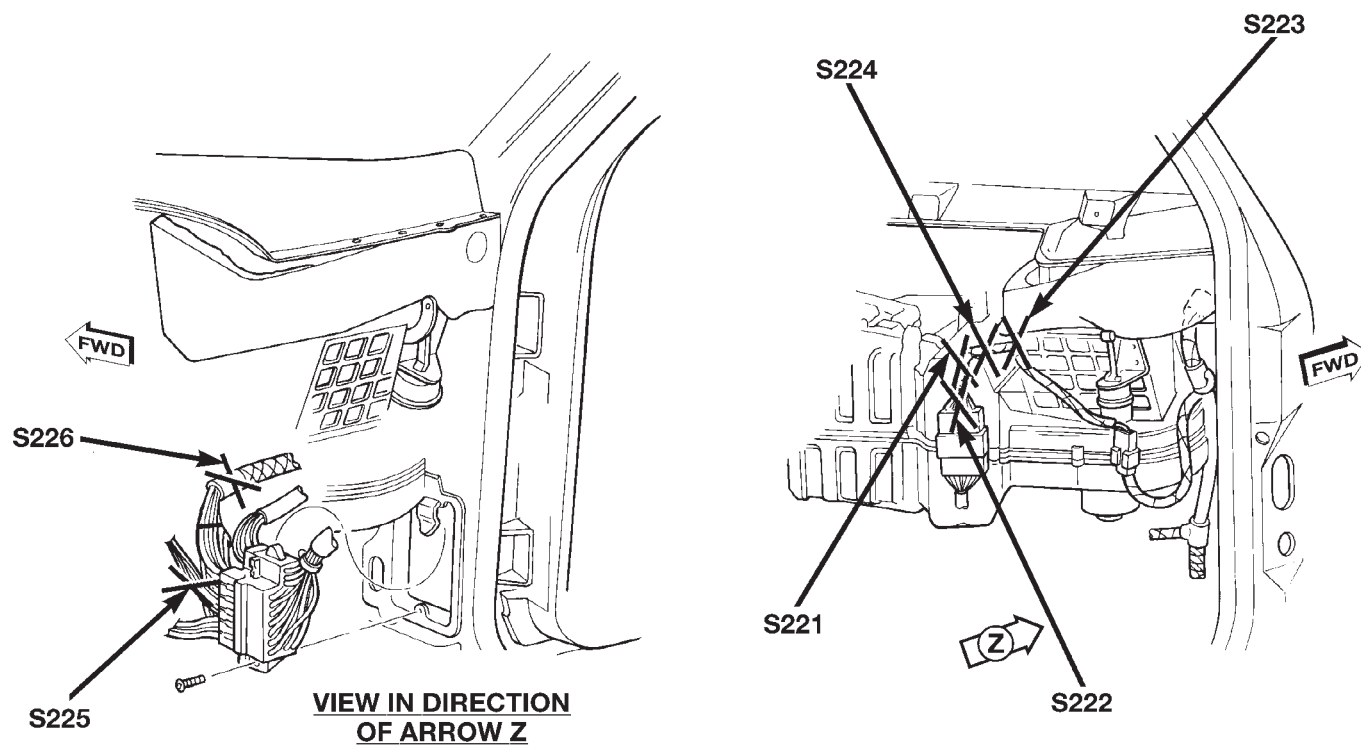
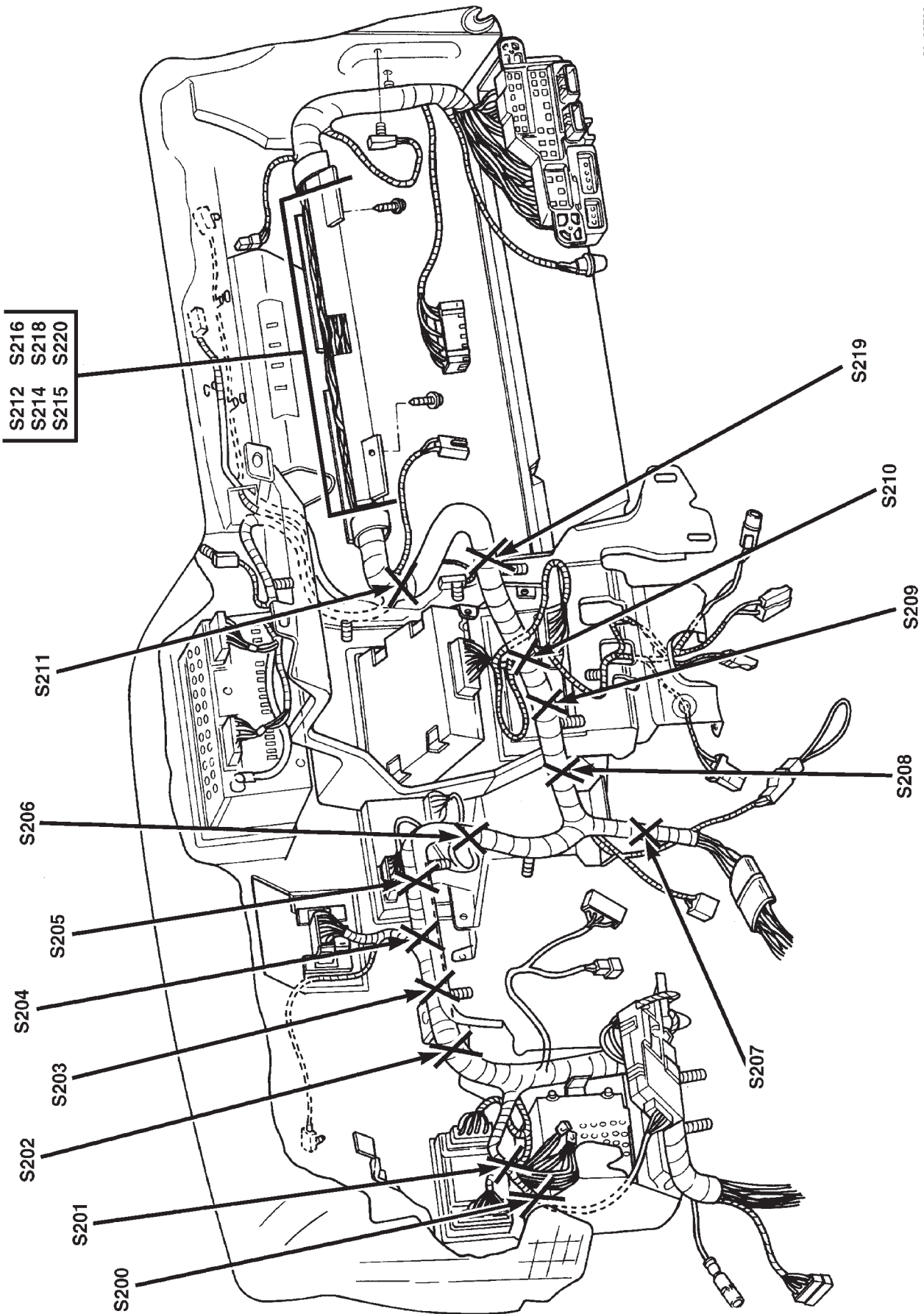


Fig. 7 HVAC Harness Splices

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DESCRIPTION AND OPERATION (Continued)



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Fig. 5 Instrument Panel Splices

DESCRIPTION AND OPERATION (Continued)

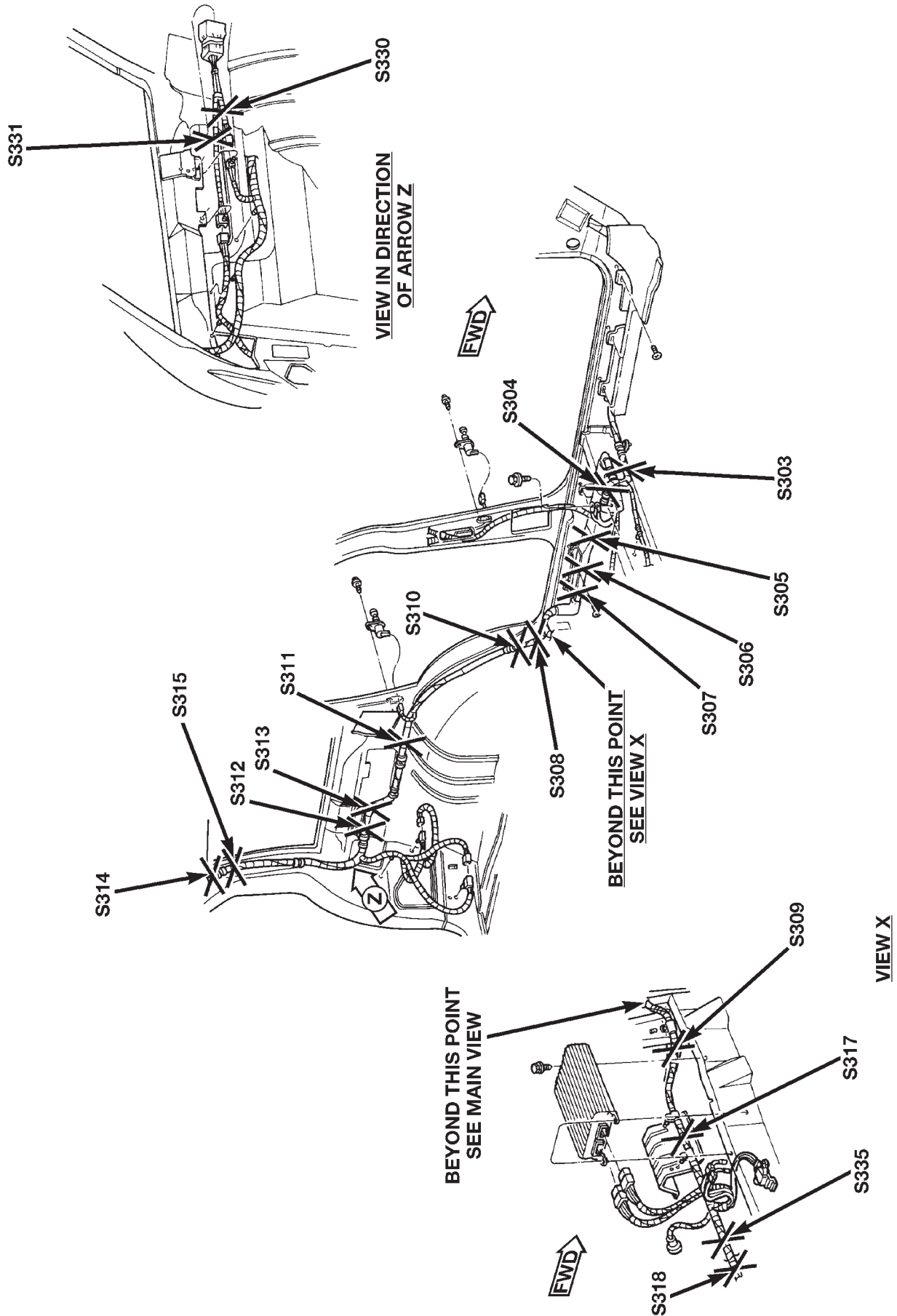


Fig. 8 Left Body Side Wiring Splices

DESCRIPTION AND OPERATION (Continued)

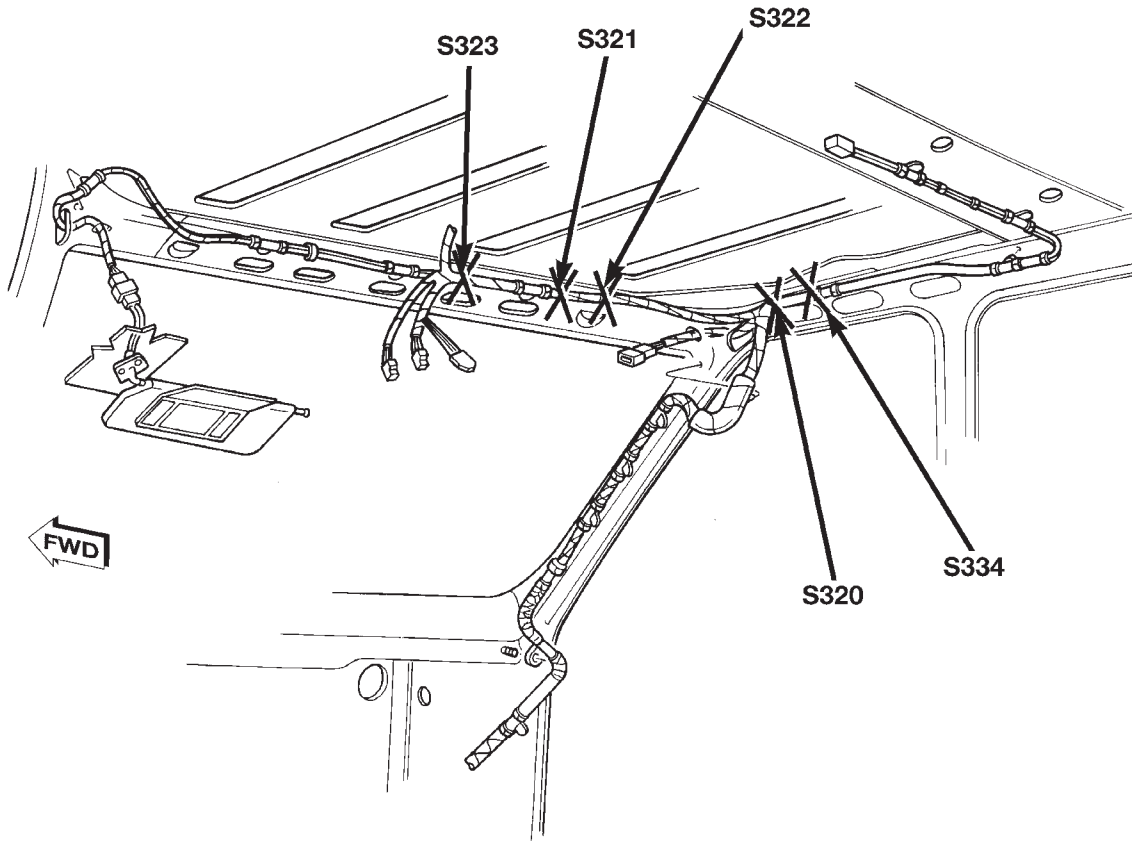


Fig. 10 Roof Wiring Splices

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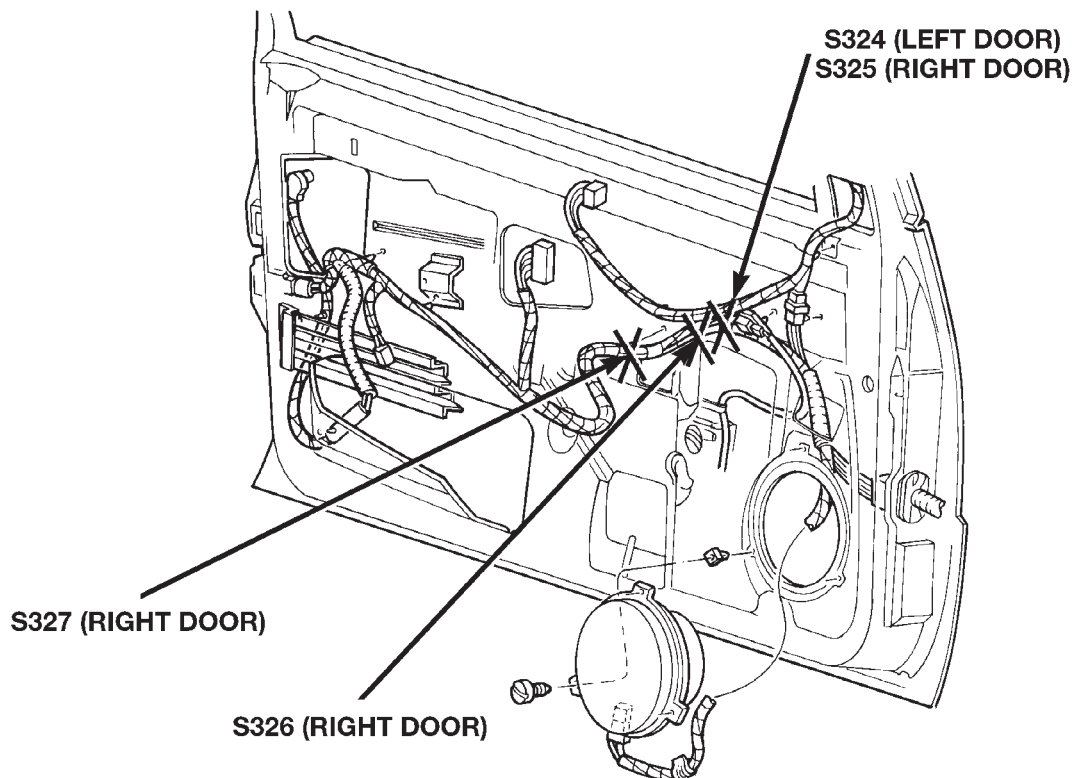


Fig. 11 Front Door Harness Splices

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DESCRIPTION AND OPERATION (Continued)

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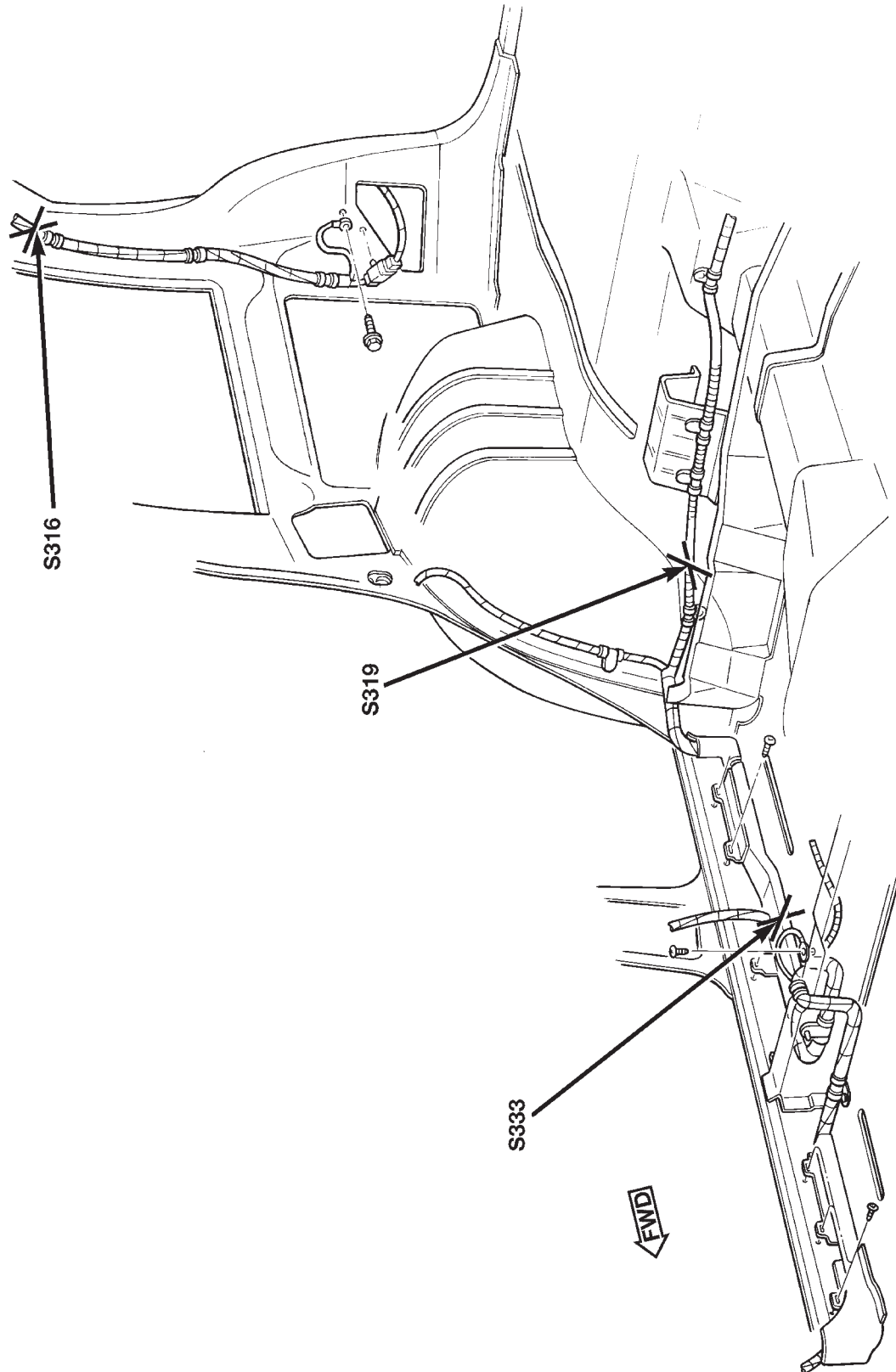


Fig. 9 Right Side Body Wiring Splices

DESCRIPTION AND OPERATION (Continued)

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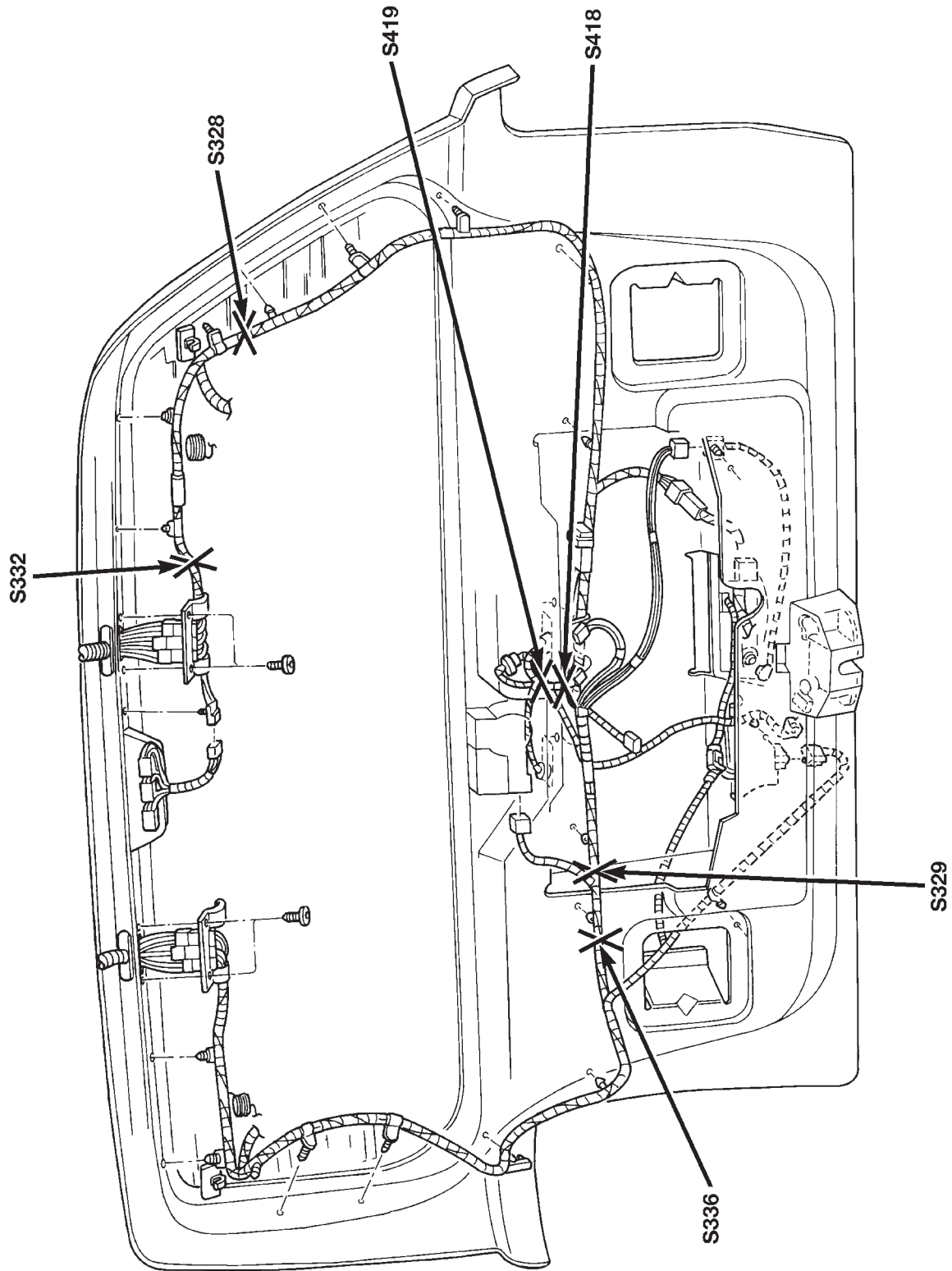


Fig. 12 Liftgate Splices

