

WIRING DIAGRAMS—GENERAL INFORMATION

INDEX

	page		page
Circuit Identification	1	Symbols	2
Connector and Terminal Replacement	7	Take Outs	2
Connector Replacement	6	Terminal Replacement	8
Connectors	2	Terminal/Connector Repair—Molex Connectors	6
Diode Replacement	8	Troubleshooting Tests	4
Electrostatic Discharge (ESC) Sensitive Devices	2	Troubleshooting Tools	4
General Information	1	Troubleshooting Wiring Problems	5
Intermittent and Poor Connections	4	Wire Code Identification	1
Notes, Cautions, and Warnings	1	Wiring Repair	6

GENERAL INFORMATION

This Group is divided into three stand alone sections; XJ, YJ, and XJ Right Hand Drive (XJ-RHD). Separate circuit descriptions and wiring diagrams are provided for each vehicle. Each section contains a Contents list for the wiring diagrams and circuit descriptions for that vehicle.

The complete XJ circuit descriptions and diagrams are printed first, followed by those for the YJ and then the XJ-RHD. The heading at the top of each page identifies the vehicle covered in the section.

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 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.

ALWAYS WEAR SAFETY GLASSES FOR EYE PROTECTION.

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

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

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

OPERATE THE ENGINE ONLY IN A WELL-VENTILATED AREA.

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

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

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

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).

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.

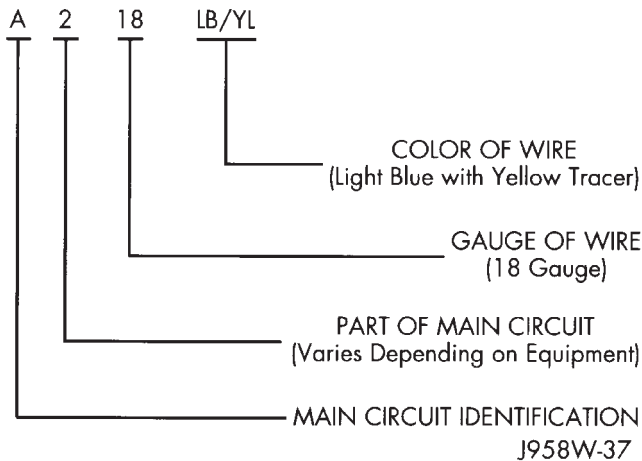


Fig. 1 Wire Color Code Identification

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

CONNECTORS

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

For viewing connector pin outs, with two terminals or greater, refer to section 8W-80. This section identifies the connector by number and 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.

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

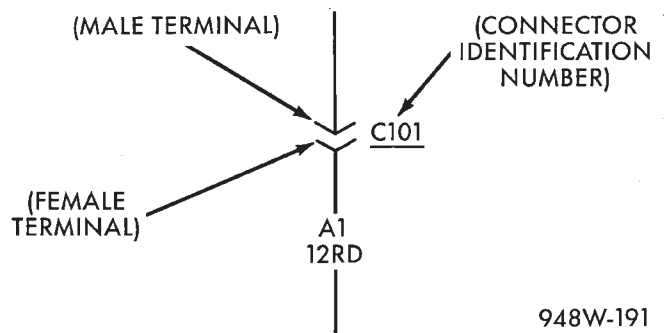


Fig. 4 Connector Identification

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).

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

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
Ω	OHMS		DENOTES WIRE GOES TO ONE OF TWO CIRCUITS
	RESISTOR		SPLICE
	VARIABLE RESISTOR	S100	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

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.

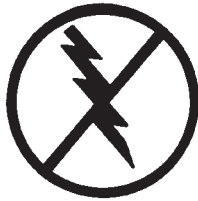
(1) Always touch a known good ground before handling the part. This should be repeated while handling the part and more frequently after sliding across a seat, sitting down from a standing position, or walking a distance.

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

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.

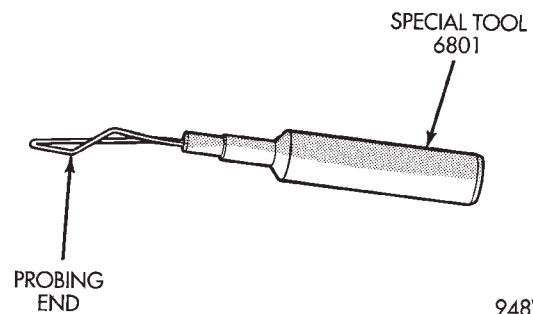
• **Voltmeter** - Used to check for voltage on a circuit. Always connect the black lead to a known good ground and the red lead to the positive side of the circuit.

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

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.

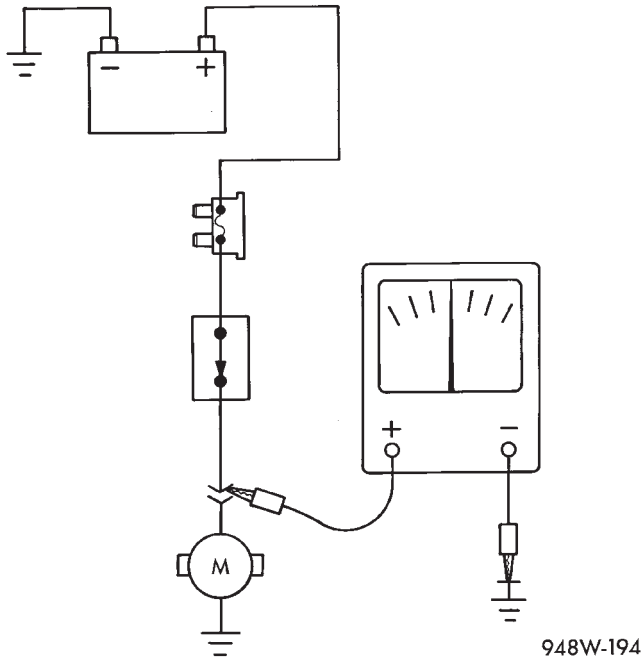


Fig. 8 Testing for Voltage

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.

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.

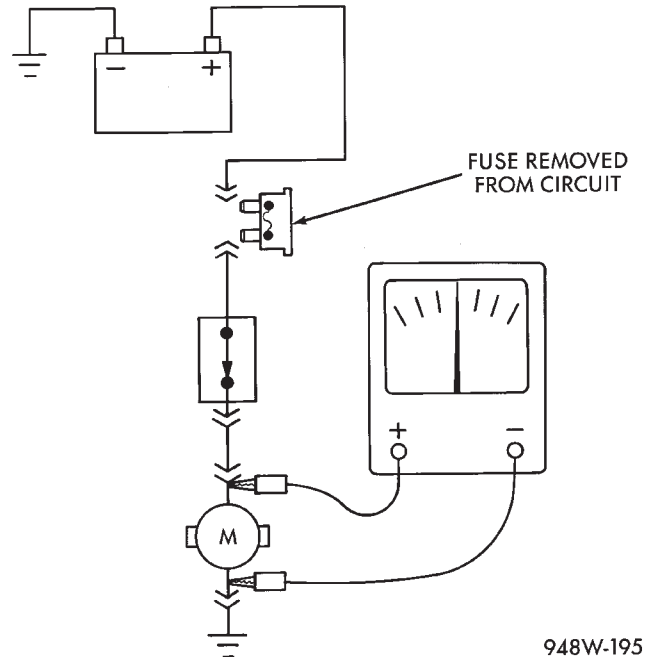


Fig. 9 Testing for Continuity

- (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.
- (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.

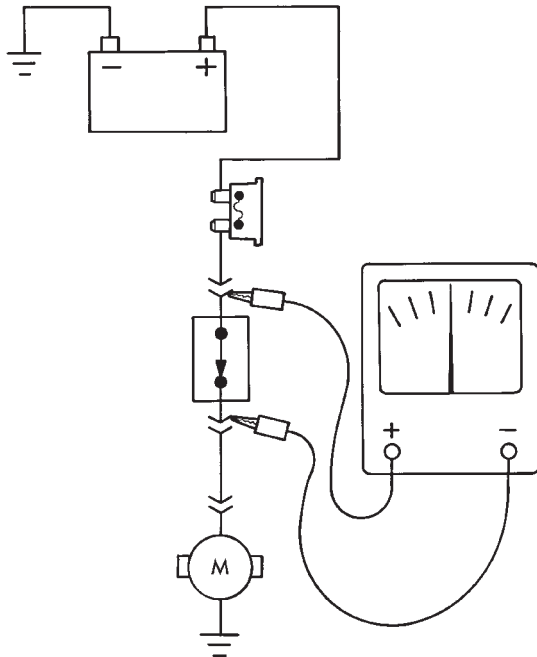


Fig. 10 Testing for Voltage Drop

948W-196

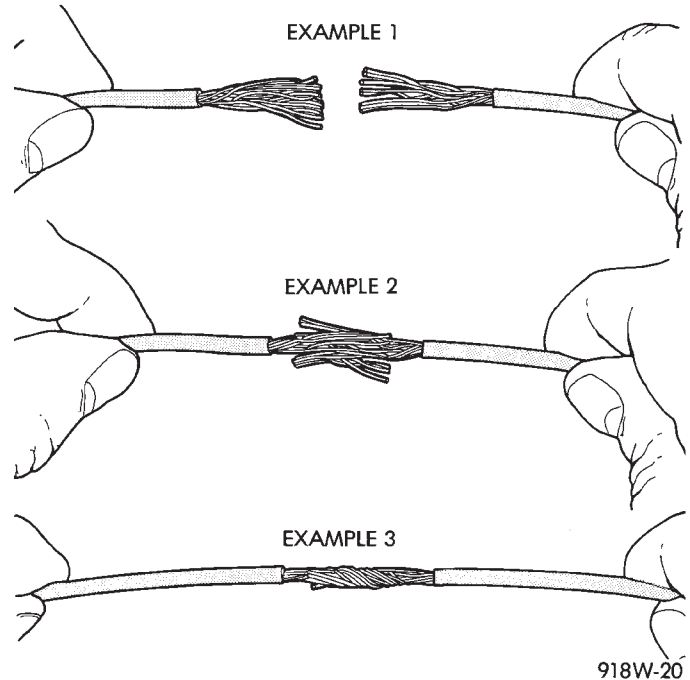


Fig. 11 Wire Repair

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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 wires (Fig. 11 example 1).
- (5) Push the two ends of wire together until the strands of wire are close to the insulation (Fig. 11 example 2).
- (6) Twist the wires together (Fig. 11 example 3).
- (7) Solder the connection together using rosin core type solder only. **Do not use acid core solder.**
- (8) Center the heat shrink tubing over the joint, and heat using a heat gun. Heat the joint until the tubing is tightly sealed and sealant comes out of both ends of the tubing.
- (9) Secure the wire to the existing ones to prevent chafing or damage to the insulation.
- (10) Connect battery and test all affected systems.

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).

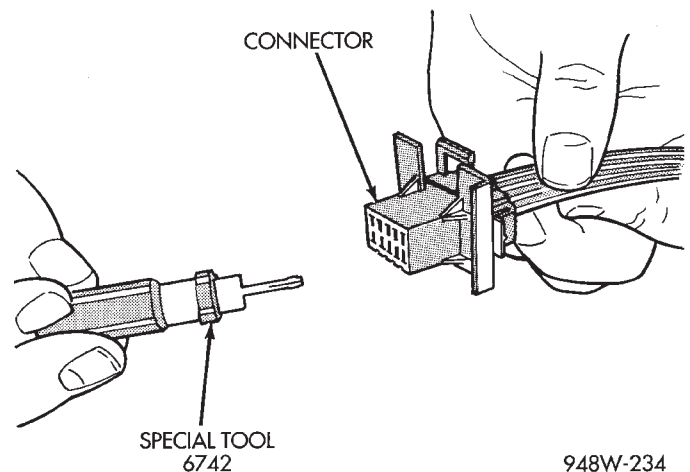


Fig. 12 Molex Connector Repair

948W-234

- (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.

CONNECTOR REPLACEMENT

- (1) Disconnect battery.
- (2) Disconnect the connector that is to be repaired from its mating half/component.
- (3) Remove connector locking wedge, if required (Fig. 14).
- (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. 15, and Fig. 16).

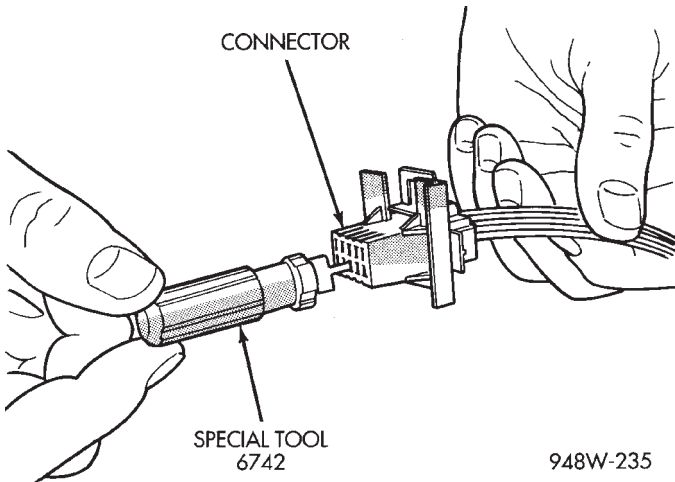


Fig. 13 Using Special Tool 6742

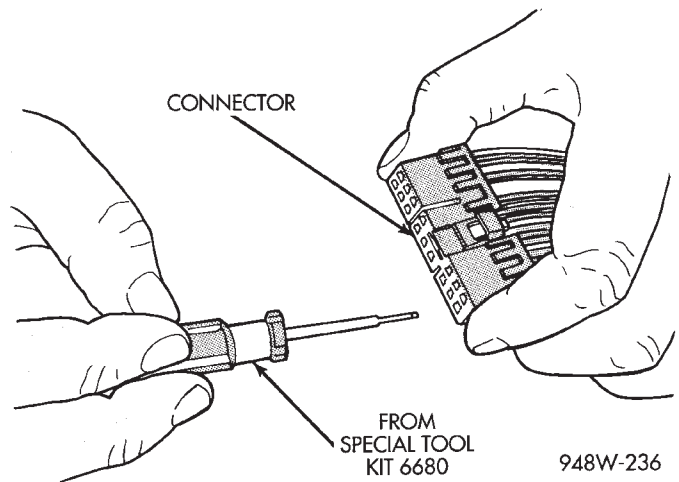


Fig. 15 Terminal Removal

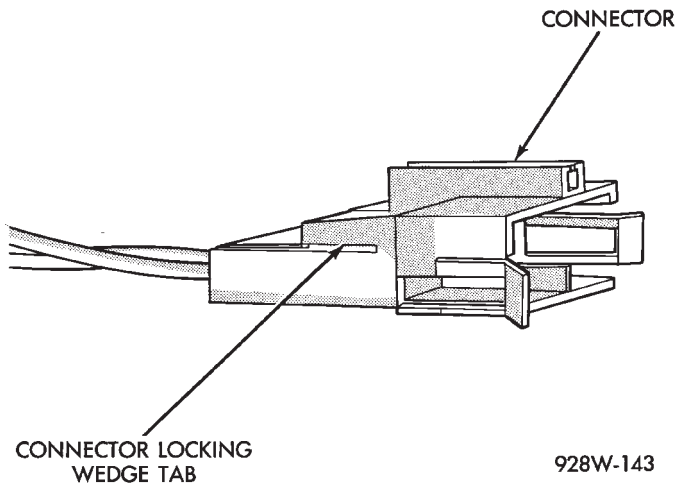


Fig. 14 Connector Locking Wedge Tab (Typical)

- (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.

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. 17).

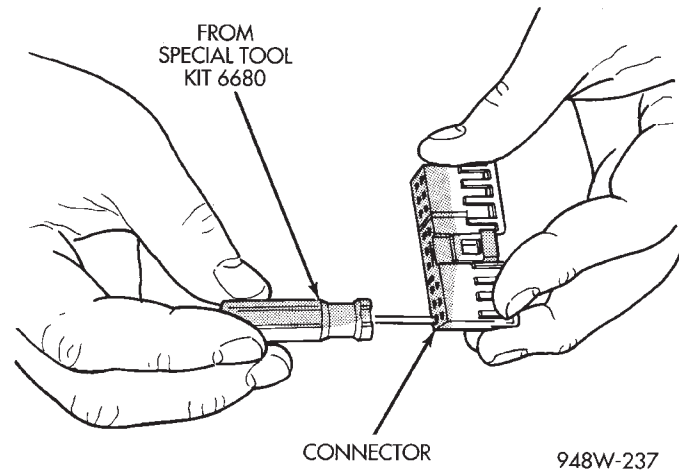


Fig. 16 Terminal Removal Using Special Tool

- (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. 17).
- (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 (Fig. 11 example 1).
- (10) Push the two ends of wire together until the strands of wire are close to the insulation (Fig. 11 example 2).
- (11) Twist the wires together (Fig. 11 example 3).
- (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.

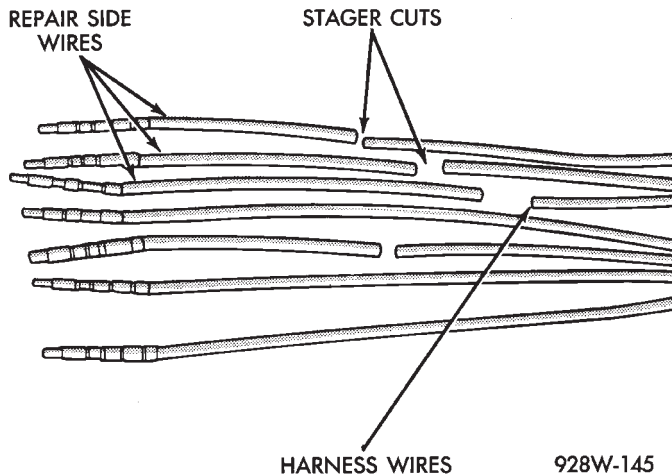


Fig. 17 Stagger Cutting Wires (Typical)

- (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.

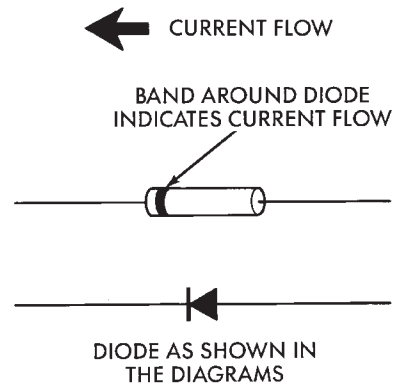
TERMINAL REPLACEMENT

- (1) Disconnect battery.
- (2) Disconnect the connector being repaired from its mating half.
- (3) Remove connector locking wedge, if required (Fig. 14).
- (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 (Figs. 15 and 16).
- (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 (Fig. 11 example 1).
- (11) Push the two ends of wire together until the strands of wire are close to the insulation (Fig. 11 example 2).
- (12) Twist the wires together (Fig. 11 example 3).

- (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 the 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. 18).



948W-197

Fig. 18 Diode Identification

- (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. Make sure the diode is completely sealed from the elements.
- (8) Re-connect the battery, and test affected systems.

WIRING DIAGRAMS

CONTENTS

	page		page
8W-01 GENERAL INFORMATION—WIRING DIAGRAMS	8W-01-1	8W-48 HEATED REAR WINDOW	8W-48-1
8W-10 FUSE/FUSE BLOCK	8W-10-1	8W-49 OVERHEAD CONSOLE	8W-49-1
8W-11 POWER DISTRIBUTION	8W-11-1	8W-50 FRONT LIGHTING	8W-50-1
8W-15 GROUND DISTRIBUTION	8W-15-1	8W-51 REAR LIGHTING	8W-51-1
8W-20 CHARGING SYSTEM	8W-20-1	8W-52 TURN SIGNALS	8W-52-1
8W-21 STARTING SYSTEM	8W-21-1	8W-53 WIPERS	8W-53-1
8W-30 FUEL/IGNITION	8W-30-1	8W-54 TRAILER TOW	8W-54-1
8W-31 TRANSMISSION CONTROLS	8W-31-1	8W-60 POWER WINDOWS	8W-60-1
8W-32 ANTI-LOCK BRAKES	8W-32-1	8W-61 POWER DOOR LOCKS	8W-61-1
8W-33 VEHICLE SPEED CONTROL	8W-33-1	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-70 SPLICE INFORMATION	8W-70-1
8W-42 AIR CONDITIONING/HEATER	8W-42-1	8W-80 CONNECTOR PIN OUTS	8W-80-1
8W-44 INTERIOR LIGHTING	8W-44-1	8W-90 CONNECTOR LOCATIONS	8W-90-1
8W-47 AUDIO SYSTEM	8W-47-1	8W-95 SPLICE LOCATIONS	8W-95-1

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.

The wiring diagram show circuits for all wheel-bases. If there is a difference in systems or components between wheel-bases, an identifier is placed next to the component.

SECTION IDENTIFICATION

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

CONNECTOR LOCATIONS

Section 8W-90 contains Connector Location illustrations. The illustrations contain the connector number and component identification. Connector 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 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.

FUSE/FUSE BLOCK

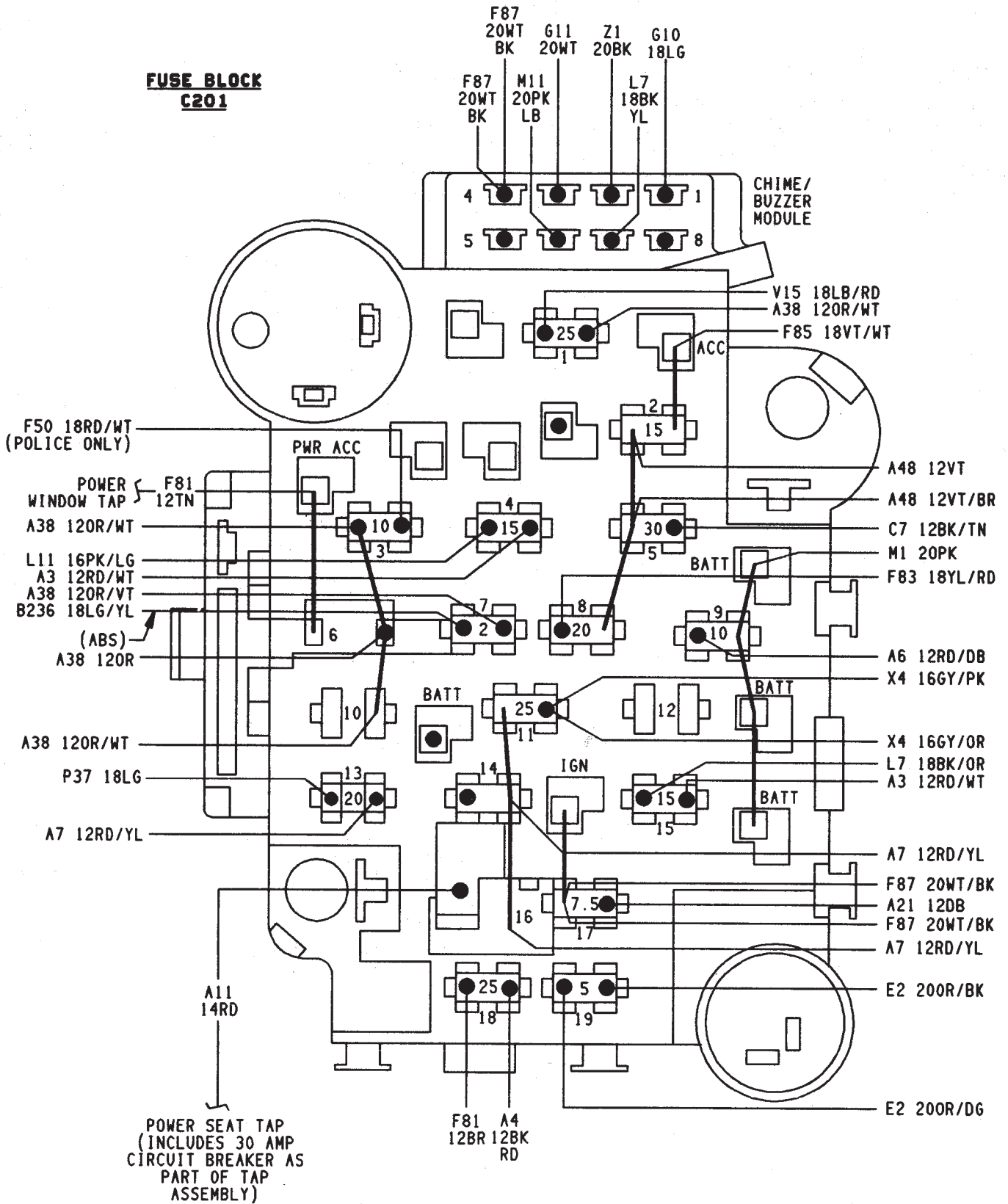
GENERAL INFORMATION

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

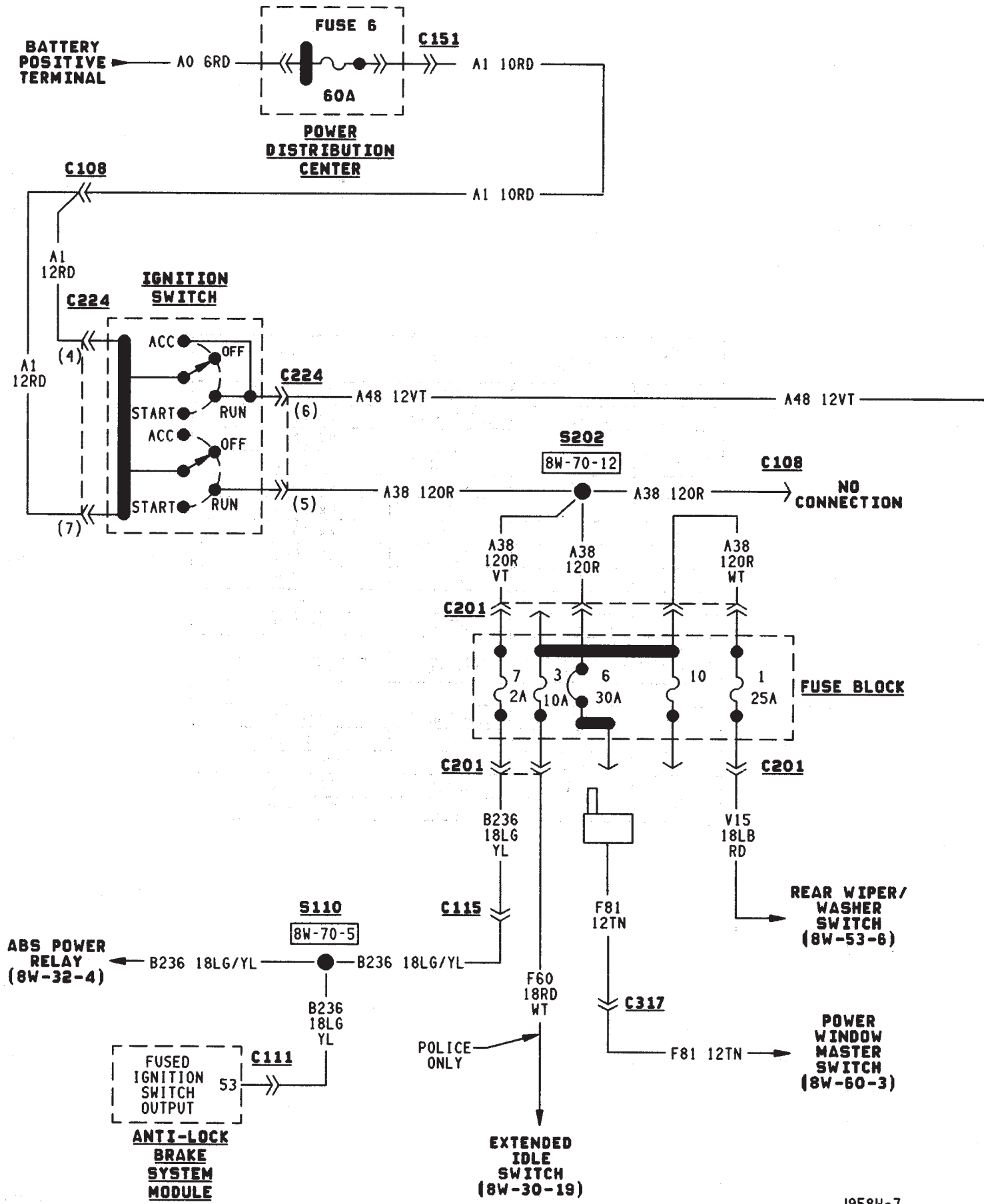
DIAGRAM INDEX

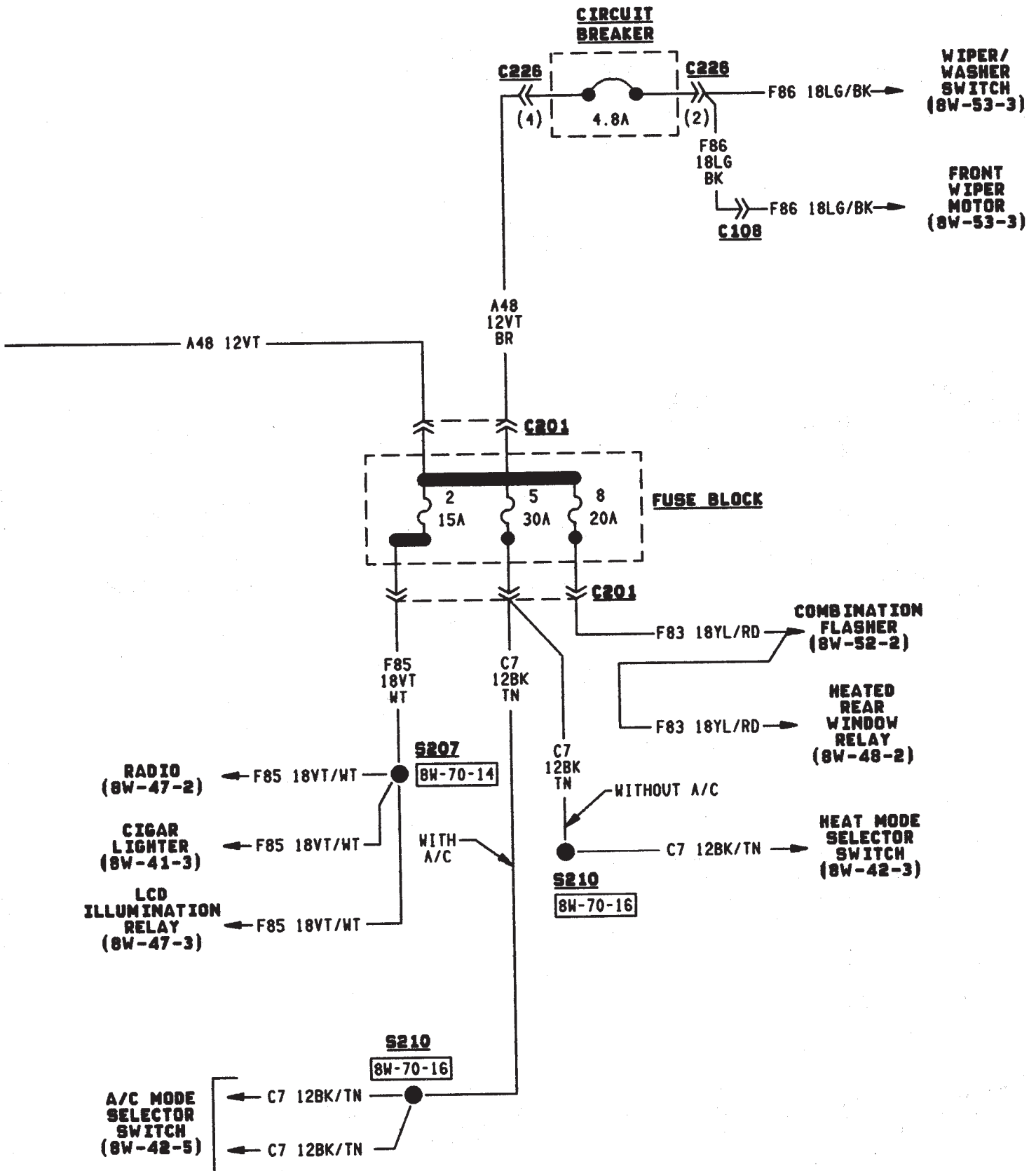
<u>Component</u>	<u>Page</u>
ABS Control Module	8W-10-4
ABS Warning Lamp Relay	8W-10-2
Chime/Buzzer Module	8W-10-2, 9, 10
Circuit Breaker Cavity 16	8W-10-12
In-Line Circuit Breaker (Wipers)	8W-10-5
In-Line Circuit Breaker (Stop Lamp Relay)	8W-10-12
Daytime Running Lamps Module	8W-10-8
Fuse 1 (Fuse Block)	8W-10-4
Fuse 2 (Fuse Block)	8W-10-5
Fuse 3 (Fuse Block)	8W-10-4, 8
Fuse 3 (PDC)	8W-10-6, 12
Fuse 4 (Fuse Block)	8W-10-7
Fuse 5 (Fuse Block)	8W-10-5
Fuse 5 (PDC)	8W-10-7, 10
Fuse 6 (Fuse Block)	8W-10-4
Fuse 6 (PDC)	8W-10-4, 8
Fuse 7 (Fuse Block)	8W-10-4, 10
Fuse 8 (Fuse Block)	8W-10-5
Fuse 9 (Fuse Block)	8W-10-6
Fuse 10 (Fuse Block)	8W-10-4
Fuse 11 (Fuse Block)	8W-10-9
Fuse 11 (PDC)	8W-10-8
Fuse 12 (PDC)	8W-10-8
Fuse 13 (Fuse Block)	8W-10-9
Fuse 14 (Fuse Block)	8W-10-9
Fuse 15 (Fuse Block)	8W-10-7
Fuse 15 (PDC)	8W-10-6
Fuse 17 (Fuse Block)	8W-10-9
Fuse Block	8W-10-2
Headlamp Delay Module	8W-10-9
Headlamp Switch	8W-10-7, 10
Heated Rear Window Relay	8W-10-10
Ignition Switch	8W-10-4, 8
Instrument Cluster	8W-10-11
Overhead Console	8W-10-9, 11
Powertrain Control Module	8W-10-8
Remote Keyless Entry Module	8W-10-9

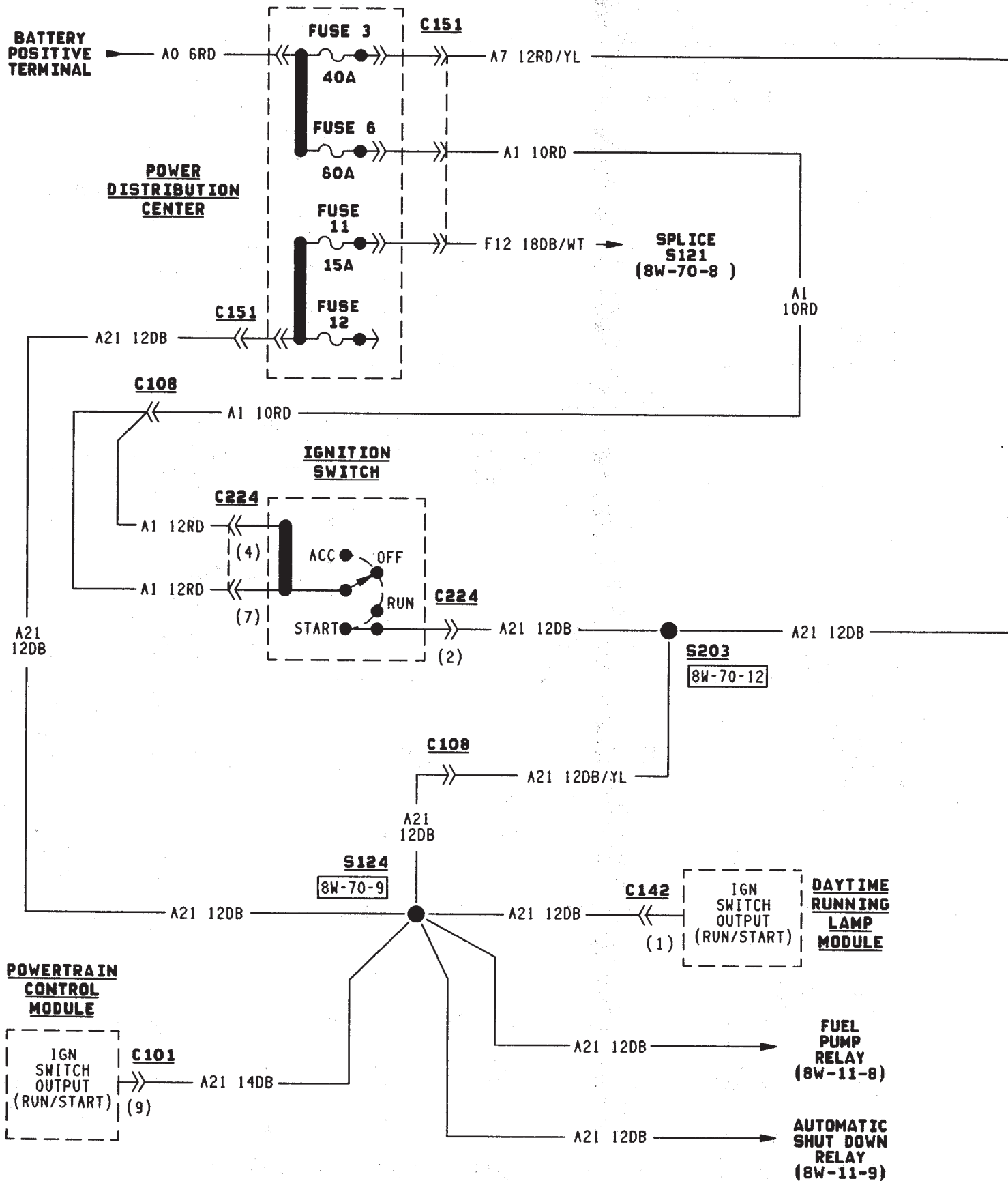
**FUSE BLOCK
C201**

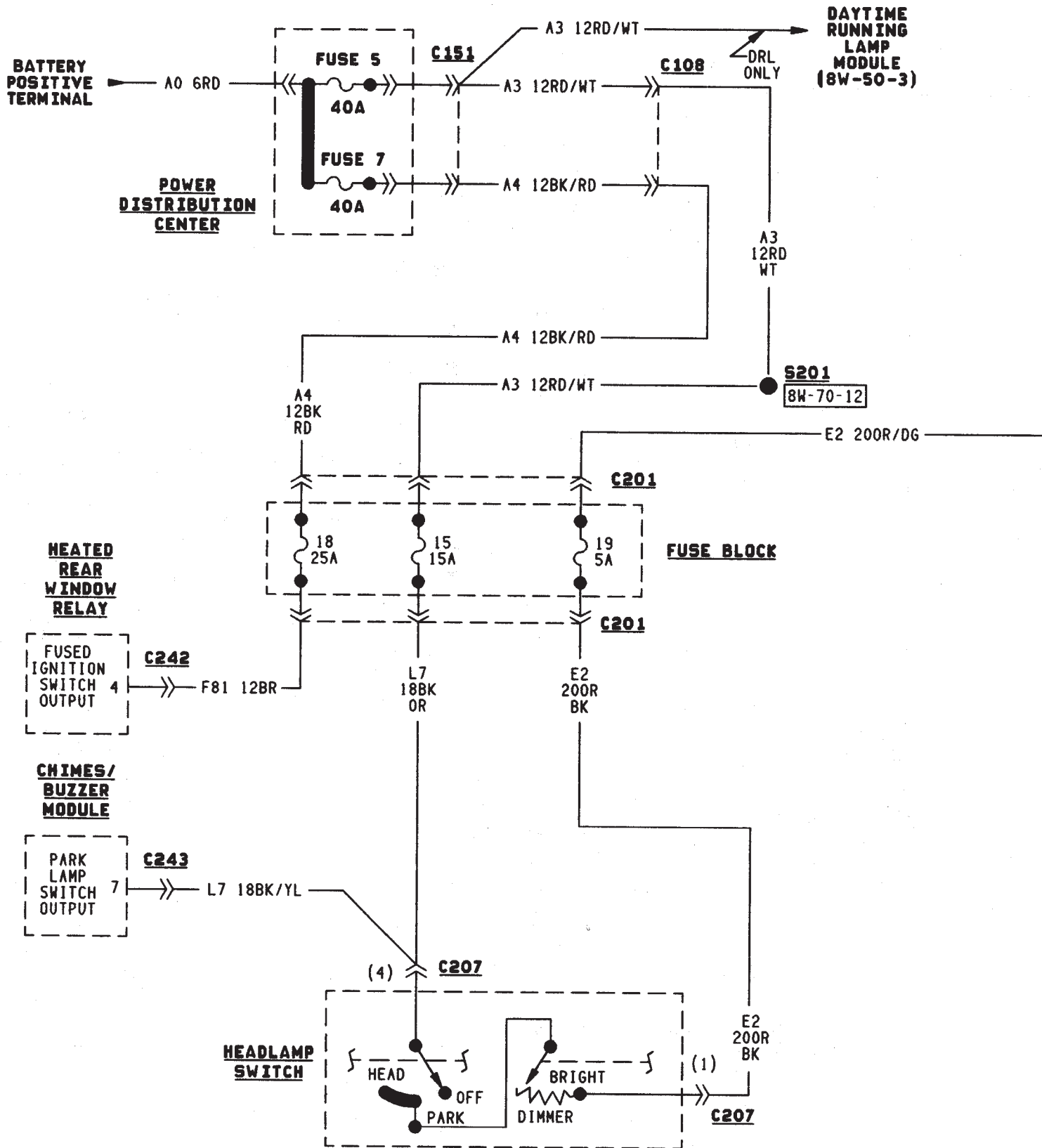


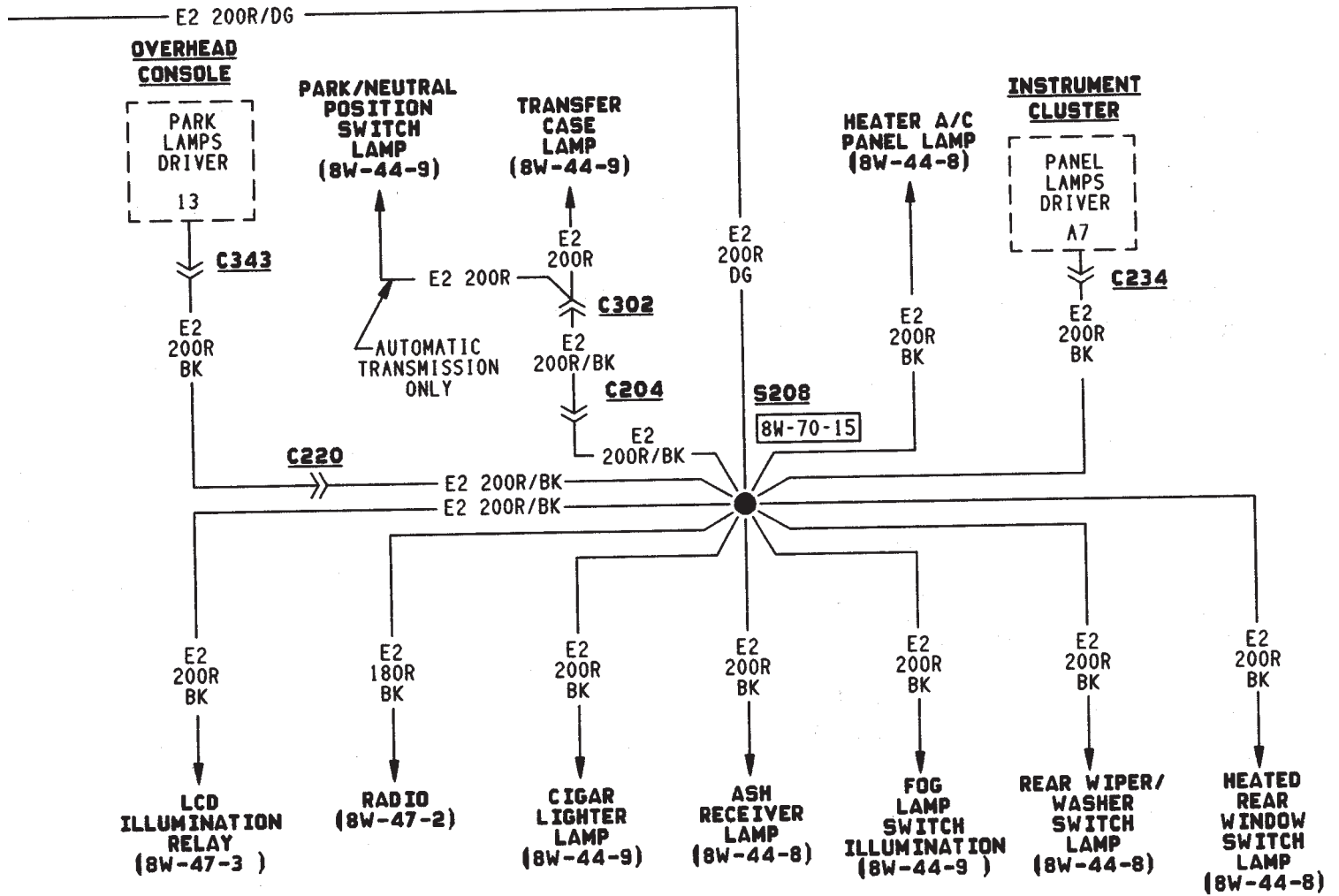
FUSE NUMBER	AMPS	COLOR	SHEET
1	25	WHITE	8W-10-4
2	15	LIGHT BLUE	8W-10-5
3	10	RED	8W-10-4
4	15	LIGHT BLUE	8W-10-7
5	30	GREEN	8W-10-5
6	30	C.B.	8W-10-4
7	2	PINK	8W-10-4
8	20	YELLOW	8W-10-5
9	10	RED	8W-10-6
10	—	—	—
11	25	WHITE	8W-10-9
12	—	—	—
13	20	YELLOW	8W-10-9
14	—	—	—
15	15	LIGHT BLUE	8W-10-7
16	30	C.B.	8W-10-12
17	7.5	BROWN	8W-10-9
18	25	WHITE	8W-10-10
19	5	TAN	8W-10-10

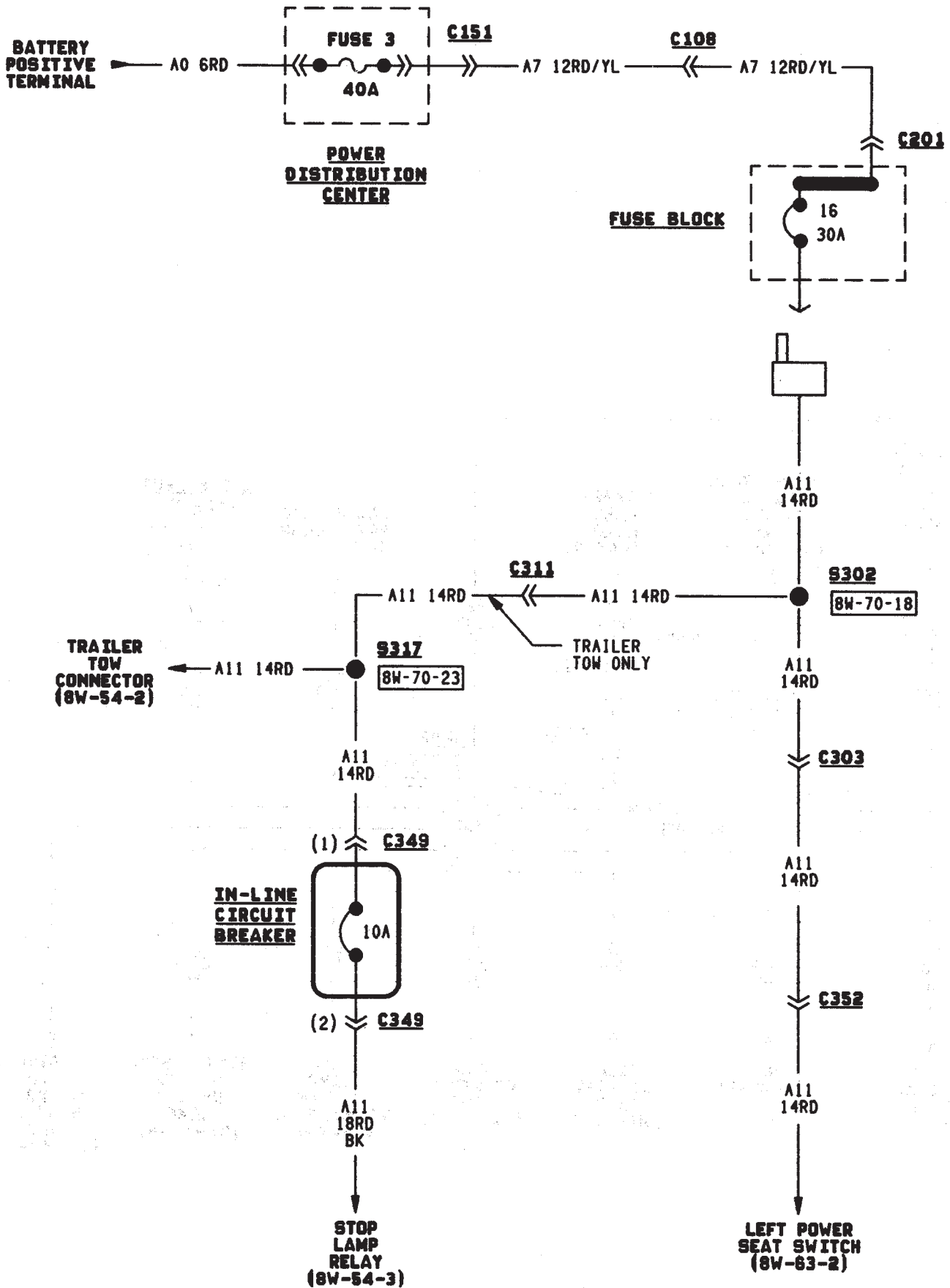












POWER DISTRIBUTION

GENERAL INFORMATION

This section covers the Power Distribution Center (PDC) and all circuits involved with it. For additional information on system operation, refer to the appropriate section of the wiring diagrams.

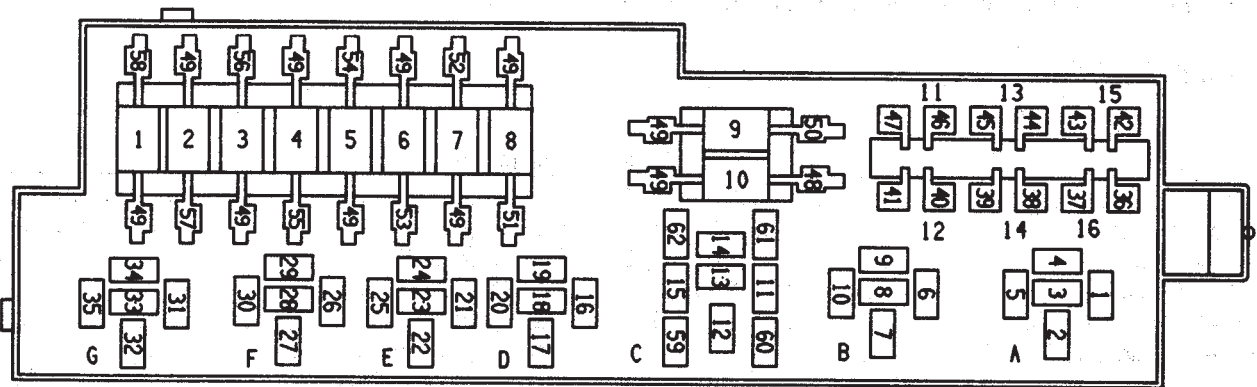
DIAGRAM INDEX

Component	Page
A/C Compressor Clutch Relay	.8W-11-3, 11
ABS Control Module	.8W-11-6, 7
ABS Power Relay	.8W-11-3, 6
ABS Pump Motor Relay	.8W-11-3, 7
Automatic Shut Down Relay	.8W-11-3, 9
Chime/Buzzer Module	.8W-11-10, 14
Circuit Breaker Cavity 16 (Fuse Block)	.8W-11-13
Combination Flasher	.8W-11-17
Daytime Running Lamp Module	.8W-11-5, 10
Diode D101	.8W-11-6
Engine Starter Motor Relay	.8W-11-3, 4
Fuel Pump Relay	.8W-11-3, 8
Fuse 1 (PDC)	.8W-11-13
Fuse 3 (PDC)	.8W-11-12
Fuse 4 (Fuse Block)	.8W-11-14
Fuse 4 (PDC)	.8W-11-15
Fuse 5 (PDC)	.8W-11-14
Fuse 6 (PDC)	.8W-11-4, 7, 10, 15
Fuse 7 (Fuse Block)	.8W-11-7
Fuse 7 (PDC)	.8W-11-4
Fuse 8 (PDC)	.8W-11-7
Fuse 9 (Fuse Block)	.8W-11-12
Fuse 9 (PDC)	.8W-11-13
Fuse 10 (PDC)	.8W-11-6, 8
Fuse 11 (Fuse Block)	.8W-11-13
Fuse 11 (PDC)	.8W-11-10
Fuse 12 (PDC)	.8W-11-15

Component	Page
Fuse 13 (PDC)	.8W-11-4
Fuse 14 (PDC)	.8W-11-8
Fuse 15 (Fuse Block)	.8W-11-14
Fuse 15 (PDC)	.8W-11-8
Fuse 16 (PDC)	.8W-11-12
Fuse 17 (Fuse Block)	.8W-11-10
Headlamp Delay Module	.8W-11-10, 14
Headlamp Switch	.8W-11-14
Headlamp Dimmer Switch	.8W-11-14
Horn Rear Window Relay	.8W-11-17
Horn Relay	.8W-11-17
Ignition Switch	.8W-11-4, 7, 10, 15
In-Line Circuit Breaker (Stop Lamp Relay)	.8W-11-13
LCD Illumination Relay	.8W-11-17
Overhead Console	.8W-11-10, 14
Powertrain Control Module	.8W-11-4, 5, 8, 9, 11
Power Distribution Center	.8W-11-2
Power Door Lock Relay	.8W-11-16
Power Door Unlock Relay	.8W-11-16
Radiator Fan Control Relay	.8W-11-3, 11
Remote Keyless Entry Module	.8W-11-10, 12
Relay Center	.8W-11-16
Telltale Connector (I.P. Cluster)	.8W-11-6, 10, 12
Torque Converter Clutch (TCC) Relay	.8W-11-15
Transmission Control Module	.8W-11-5, 8

POWER DISTRIBUTION CENTER

C151



FUSE	FUSED CIRCUIT	FEED CIRCUIT	AMPS	SHEET
1	A11 10BK/WT	A0 6RD	60	8W-11-13
2	A14 14RD (2)		30	8W-11-8
3	A7 12RD/YL (2)		40	8W-11-12
4	L9 18BK/WT		20	8W-11-15
5	A3 12RD/WT (2)		40	8W-11-14
6	A1 10RD		60	8W-11-4 8W-11-7 8W-11-10 8W-11-15
7	A4 12BK/RD (2)		40	8W-11-4
8	A10 12RD/DG		40	8W-11-7
9	A11 10BK/WT		60	8W-11-13
10	A20 14RD/DG		30	8W-11-6
11	F12 18DB/WT	A21 12DB	15	8W-11-10
12	T17 18YL (2)		10	8W-11-15
13	F39 18PK/LG (2)	A4 14BK/RD	15	8W-11-4
14	A18 18RD/BK	A14 14RD	20	8W-11-8
15	F141 16LG/RD	A14 14RD	20	8W-11-8
16	A6 18RD/BK (2)	A7 12RD/YL	20	8W-11-12

(2) - TWO WIRES

A
RADIATOR FAN
CONTROL RELAY

CAV	CIRCUIT	FUNCTION	SHEET
1	F12 18DB/WT	FUSED IGNITION SWITCH OUTPUT	8W-11-11
2	F141 16LG/RD	FUSED B(+)	8W-11-11
4	C25 16LG	RADIATOR FAN RELAY OUTPUT	8W-11-11
5	C27 20DB/PK	RADIATOR FAN RELAY CONTROL	8W-11-11

B
FUEL PUMP
RELAY

CAV	CIRCUIT	FUNCTION	SHEET
6	A21 12DB	IGNITION SWITCH OUTPUT (RUN/START)	8W-11-8
7	A14 14RD	FUSED B(+)	8W-11-8
9	A141 14DG/WT	FUEL PUMP RELAY OUTPUT	8W-11-8
9	A141 14DG/WT	FUEL PUMP RELAY OUTPUT	8W-11-8
10	K51 20DB/YL	ASD RELAY CONYROL	8W-11-8

C
ABS PUMP
MOTOR RELAY
(4.0L ONLY)

CAV	CIRCUIT	FUNCTION	SHEET
11	B116 18GY	ABS PUMP MOTOR RELAY CONTROL	8W-11-7
12	A10 14RD/DG	FUSED B(+)	8W-11-7
14	B233 12TN/BK	ABS PUMP/MOTOR RELAY OUTPUT	8W-11-7
15	B235 14GY/YL	ABS POWER RELAY OUTPUT	8W-11-7
60	Z12 14BK/TN	GROUND	8W-11-7

D
A/C COMPRESSOR
CLUTCH RELAY

CAV	CIRCUIT	FUNCTION	SHEET
16	F12 18DB/WT	FUSED IGNITION SWITCH OUTPUT	8W-11-11
17	C90 16LG	A/C PRESSURE SWITCH OUTPUT	8W-11-11
19	C3 14DB/BK	A/C CMP CLUTCH RELAY OUTPUT	8W-11-11
20	C13 20DB/OR	A/C CMP CLUTCH RELAY CONTROL	8W-11-11

E
AUTOMATIC SHUT
DOWN RELAY

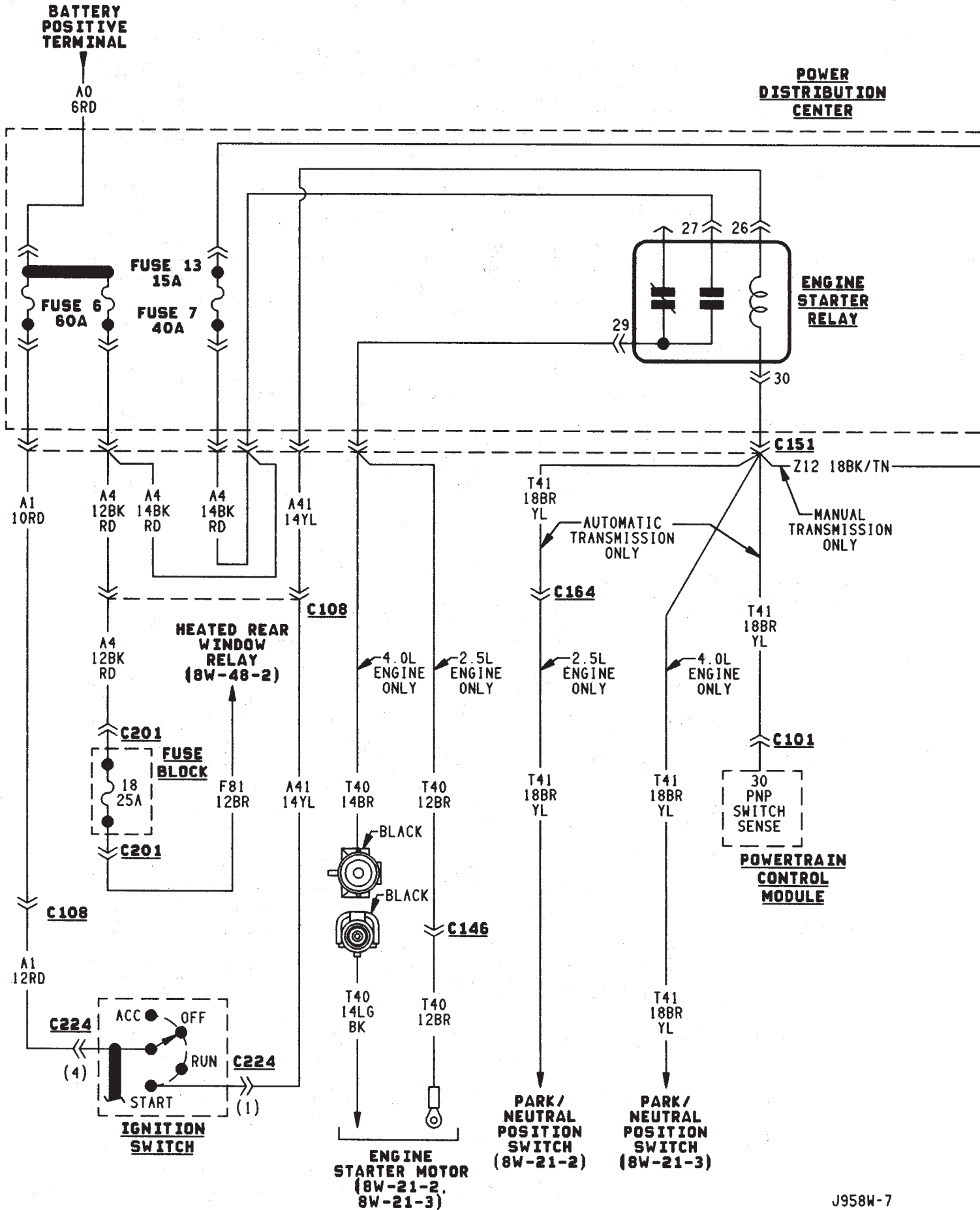
CAV	CIRCUIT	FUNCTION	SHEET
21	A21 12DB	IGNITION SWITCH OUTPUT (RUN/START)	8W-11-9
22	A18 18RD/BK	FUSED B(+)	8W-11-9
24	A142 18DG/OR	ASD RELAY OUTPUT	8W-11-9
25	K51 20DB/YL	ASD RELAY CONTROL	8W-11-9
25	K51 20DB/YL	ASD RELAY CONTROL	8W-11-9

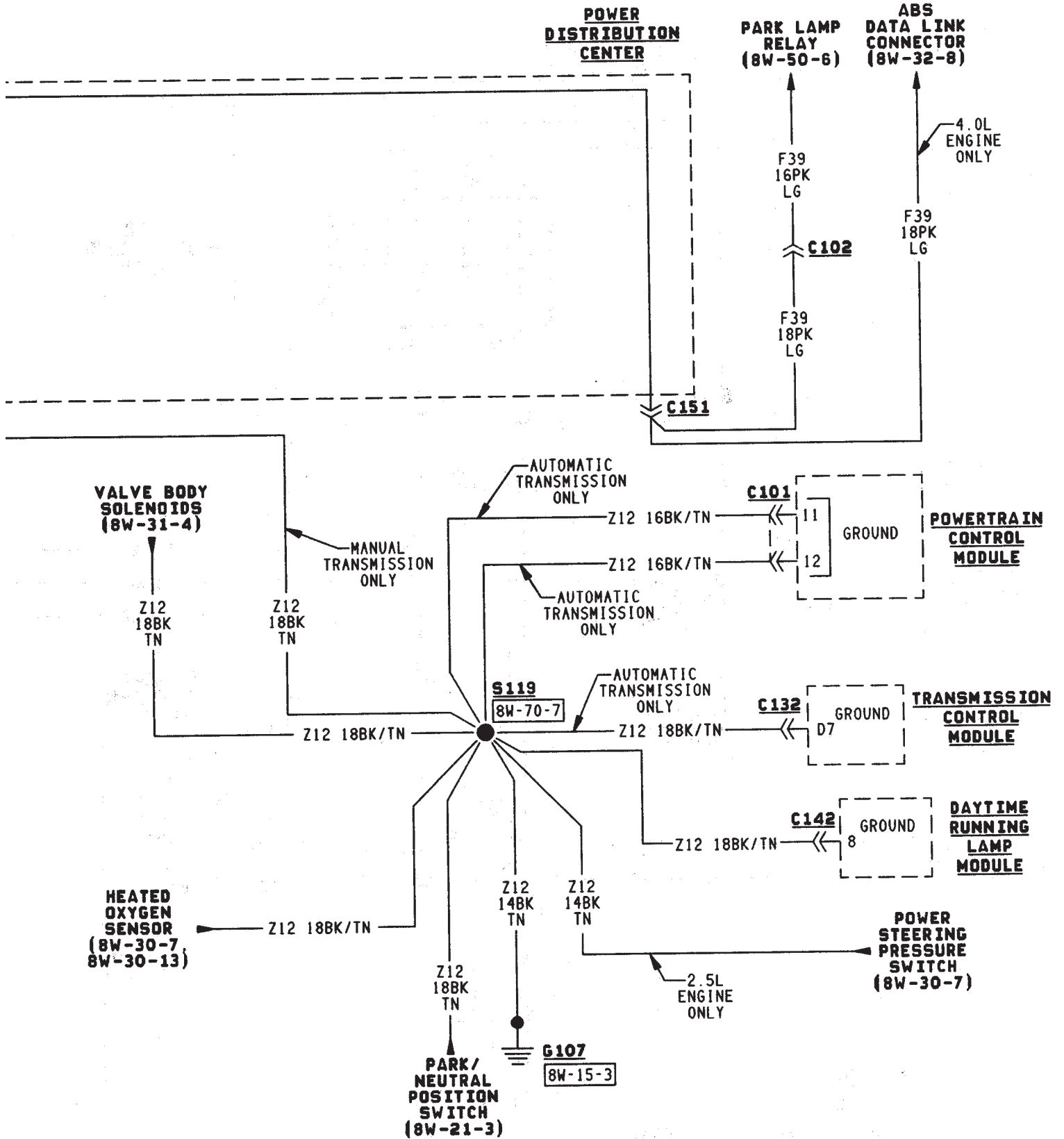
F
ENGINE STARTER
RELAY

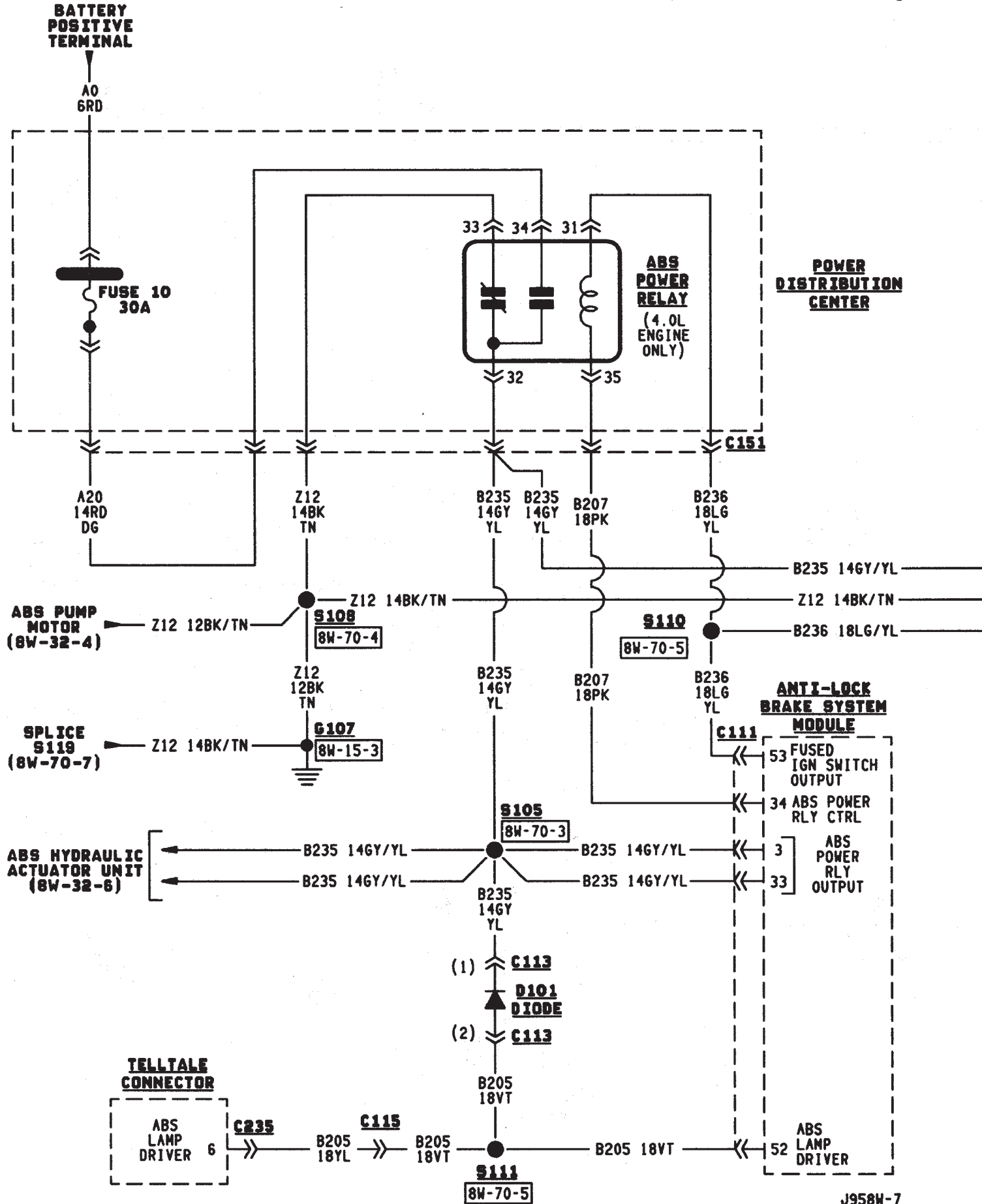
CAV	CIRCUIT	FUNCTION	SHEET
26	A41 14YL	IGNITION SWITCH OUTPUT (START)	8W-11-4
27	A4 14BK/RD	FUSED B(+)	8W-11-4
27	A4 14BK/RD	FUSED B(+)	8W-11-4
29	T40 14BR	ENGINE STARTER RELAY OUTPUT	8W-11-4
30	T41 18BR/YL	PARK/NEUTRAL POSITION SWITCH SENSE	8W-11-4
30	T41 18BR/YL	PARK/NEUTRAL POSITION SWITCH SENSE	8W-11-4

G
ABS POWER
RELAY
(4.0L ONLY)

CAV	CIRCUIT	FUNCTION	SHEET
31	B236 18LG/YL	FUSED IGNITION SWITCH OUTPUT	8W-11-6
32	B235 14GY/YL	ABS POWER RELAY OUTPUT	8W-11-6
32	B235 14GY/YL	ABS POWER RELAY OUTPUT	8W-11-6
33	Z12 12BK/TN	GROUND	8W-11-6
34	A20 14RD/DG	FUSED B(+)	8W-11-6
35	B207 18PK	ABS POWER RELAY CONTROL	8W-11-6







BATTERY
POSITIVE
TERMINAL

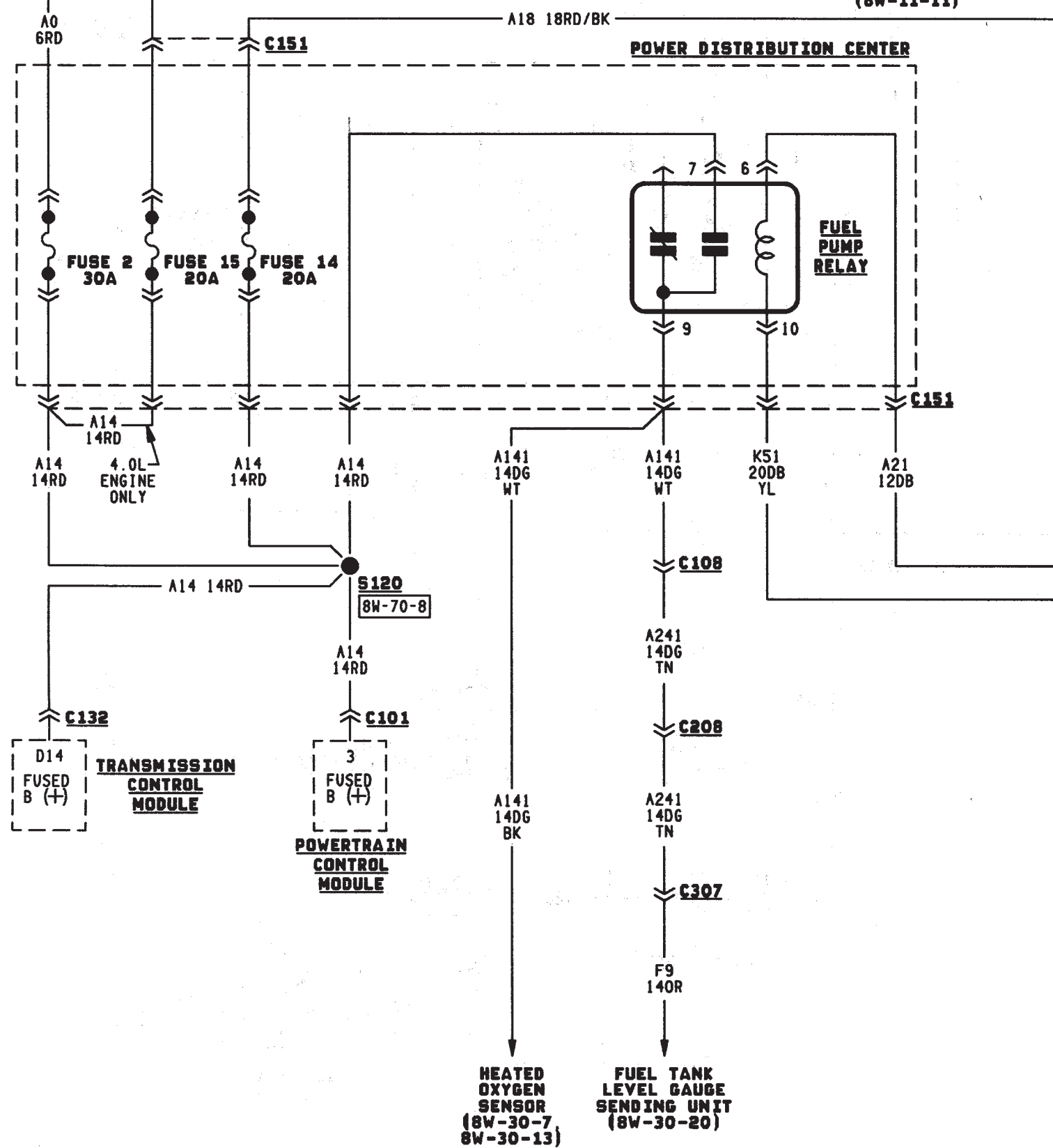
RADIATOR
FAN
CONTROL
RELAY
(8W-11-11)

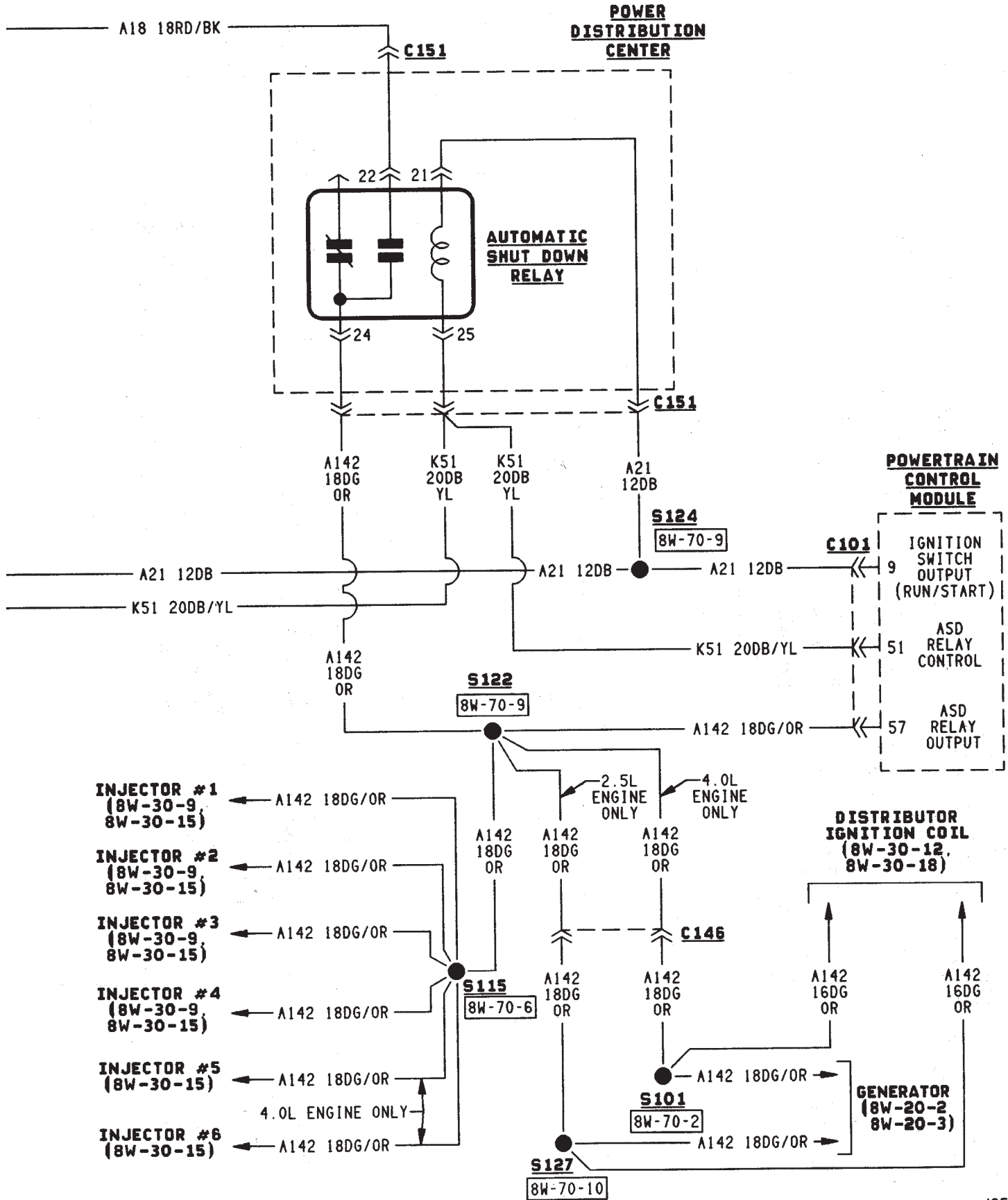
F141 16LG/RD

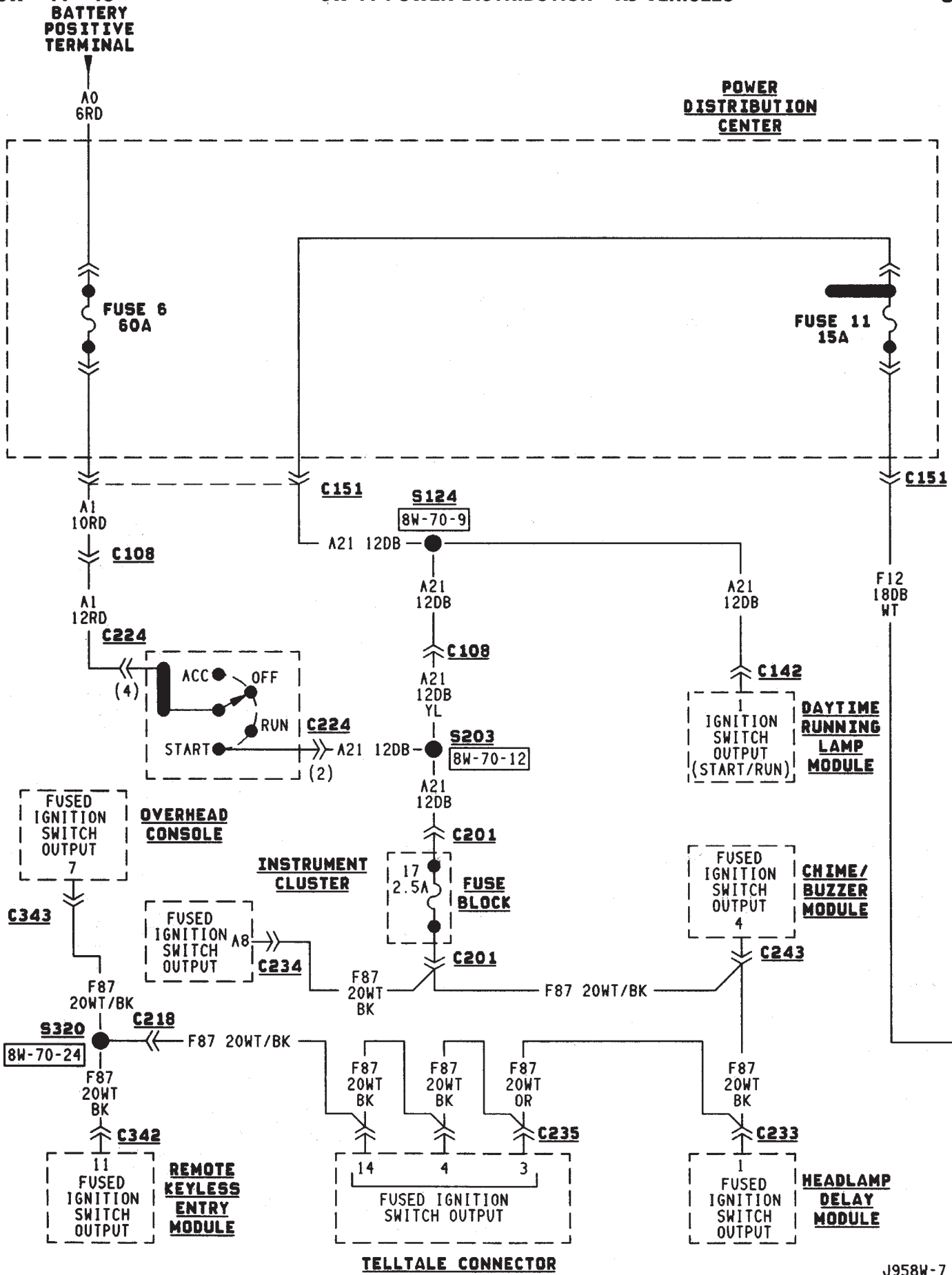
A18 18RD/BK

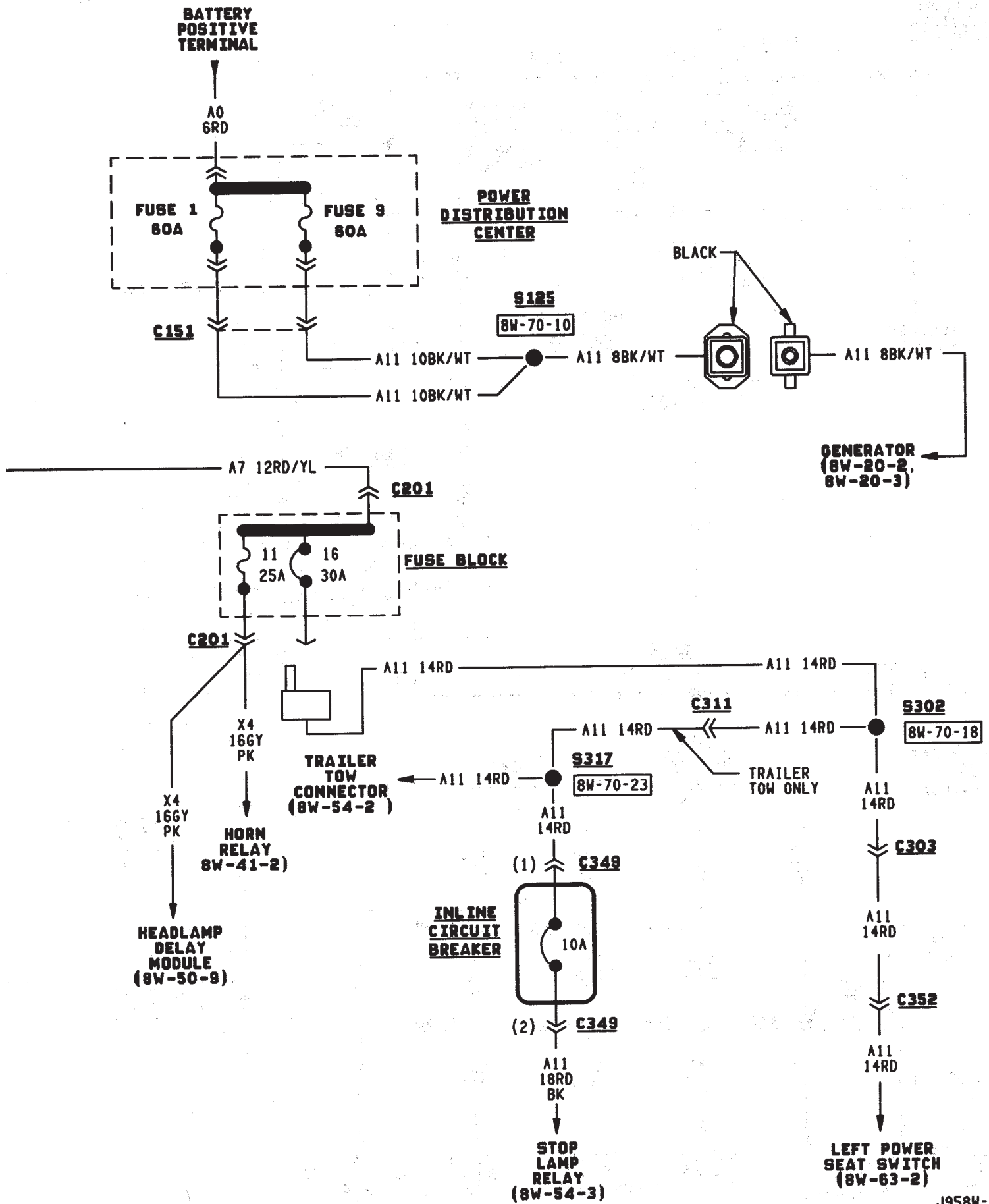
POWER DISTRIBUTION CENTER

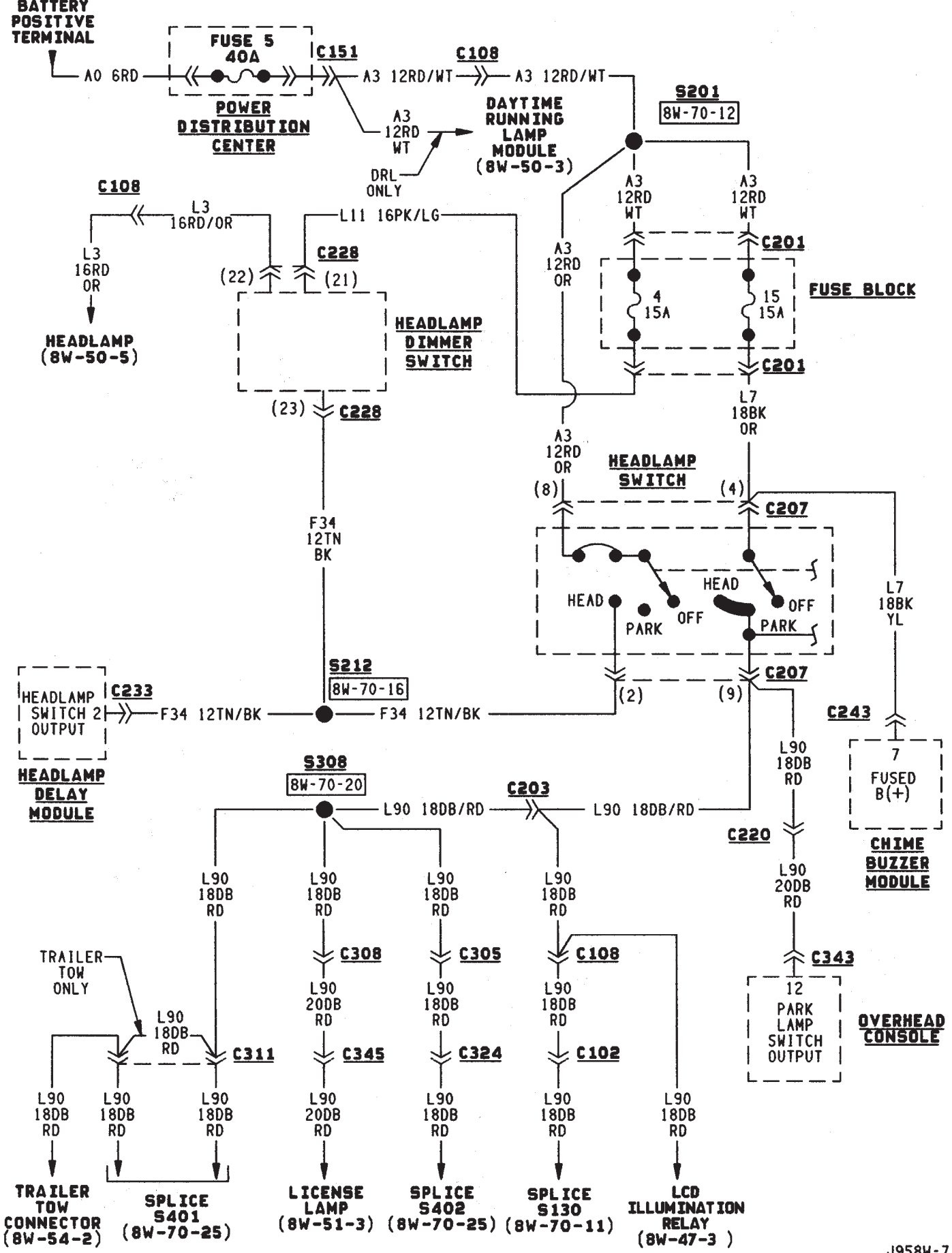
FUEL
PUMP
RELAY



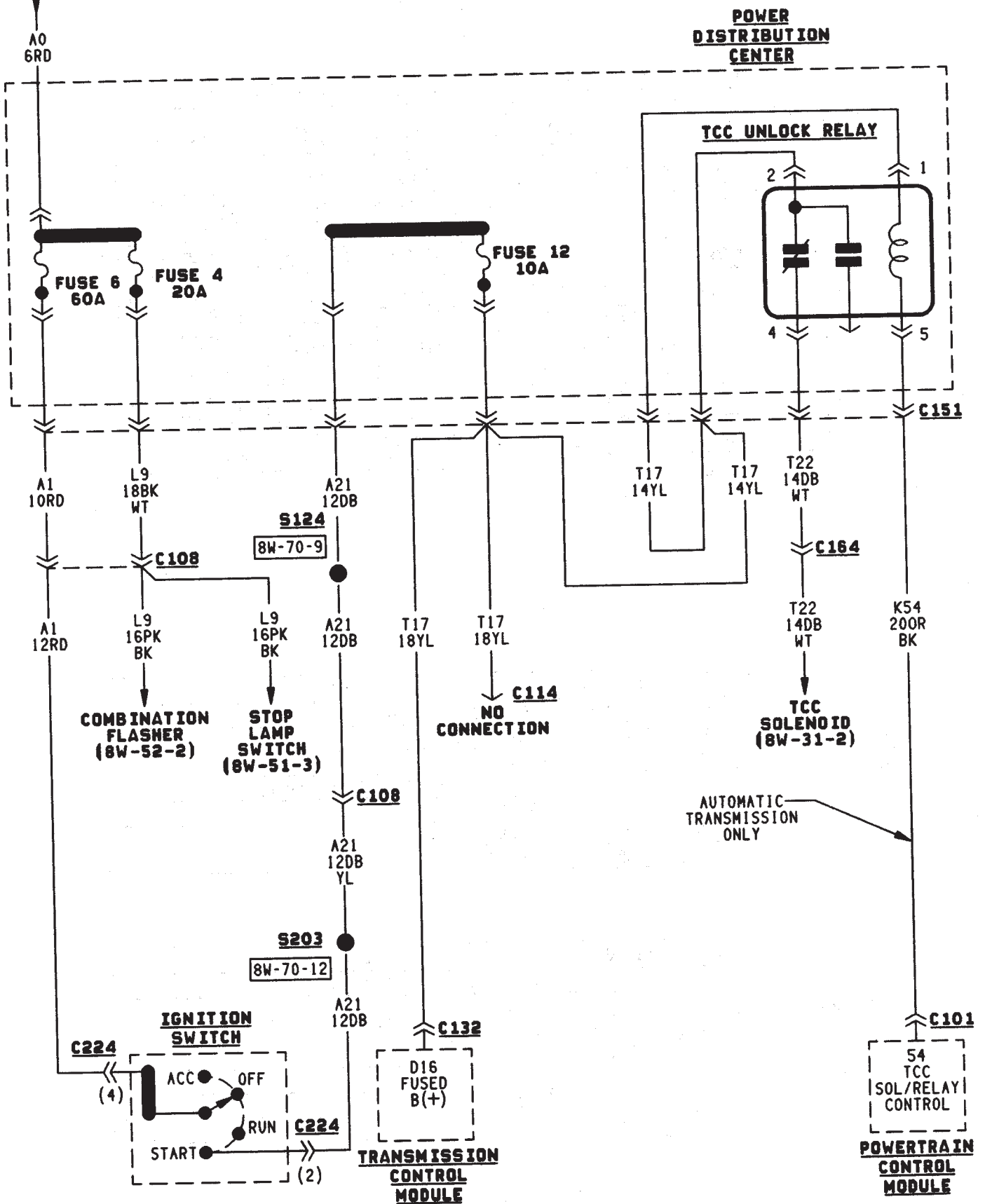






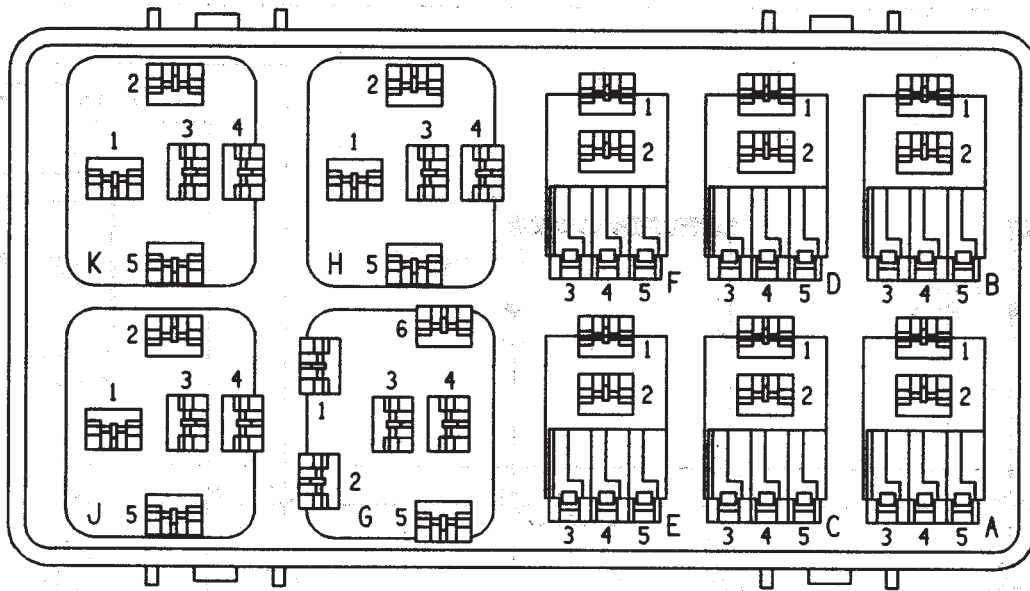


**BATTERY
POSITIVE
TERMINAL**



RELAY CENTER

C242



POWER DOOR
LOCK RELAY
(8W-61-3)

CAV	CIRCUIT	FUNCTION
A1	P2 18BK/WT	DOORLOCK RELAY OUTPUT
A2	P37 18LG	FUSED B(+)
A2	P37 18LG	FUSED B(+)
A3	P35 200R/VT	DOOR LOCK SWITCH OUTPUT (LOCK)
A4	Z1 18BK	GROUND
A5	Z1 18BK	GROUND
A5	Z1 18BK	GROUND

POWER DOOR
UNLOCK RELAY
(8W-61-3)

CAV	CIRCUIT	FUNCTION
B1	P34 18PK/BK	DOOR UNLOCK RELAY OUTPUT
B2	P37 18LG	FUSED B(+)
B3	P36 20PK/WT	DOOR LOCK SWITCH OUTPUT (UNLOCK)
B4	Z1 18BK	GROUND
B4	Z1 18BK	GROUND
B5	Z1 18BK	GROUND
B5	Z1 18BK	GROUND

LCD ILLUMINATION
RELAY
(8W-47-3)

CAV	CIRCUIT	FUNCTION
C1	X5 18LB/RD	RADIO DISPLAY OUTPUT
C2	E2 200R/BK	PANEL LAMPS DRIVER
C3	L90 18DB/RD	PARK LAMP SWITCH OUTPUT
C4	F85 18VT/WT	FUSED IGNITION SWITCH OUTPUT
C5	Z1 20BK	GROUND

HORN
RELAY
(8W-41-2)

CAV	CIRCUIT	FUNCTION
F1	X2 16DG/RD	HORN RELAY OUTPUT
F2	X4 16GY/PK	FUSED B(+)
F3	X3 20BK/RD	HORN RELAY CONTROL
F5	X4 16GY/PK	FUSED B(+)
F5	X4 16GY/PK	FUSED B(+)

HEATED REAR
WINDOW RELAY
(8W-48-2)

CAV	CIRCUIT	FUNCTION
H1	C15 12BK/RD	HEATED REAR WINDOW RELAY OUTPUT
H2	Z1 18BK	GROUND
H2	Z1 20BK	GROUND
H3	C80 18DB/WT	HEATED REAR WINDOW SWITCH
H4	F81 12BR	FUSED B(+)
H5	F83 18YL/RD	FUSED IGNITION SWITCH OUTPUT (ACC/RUN)

COMBINATION
FLASHER
(8W-52-2)

CAV	CIRCUIT	FUNCTION
J1	F83 18YL/RD	FUSED IGNITION SWITCH OUTPUT (ACC/RUN)
J1	F83 18YL/RD	FUSED IGNITION SWITCH OUTPUT (ACC/RUN)
J2	L9 16PK/BK	FUSED B(+)
J3	L12 18VT/TN	COMBINATION FLASHER OUTPUT (HAZARD)
J4	L5 18GY	COMBINATION FLASHER OUTPUT (TURN SIGNALS)
J5	Z1 18BK	GROUND
J5	Z1 18BK	GROUND

GROUND DISTRIBUTION

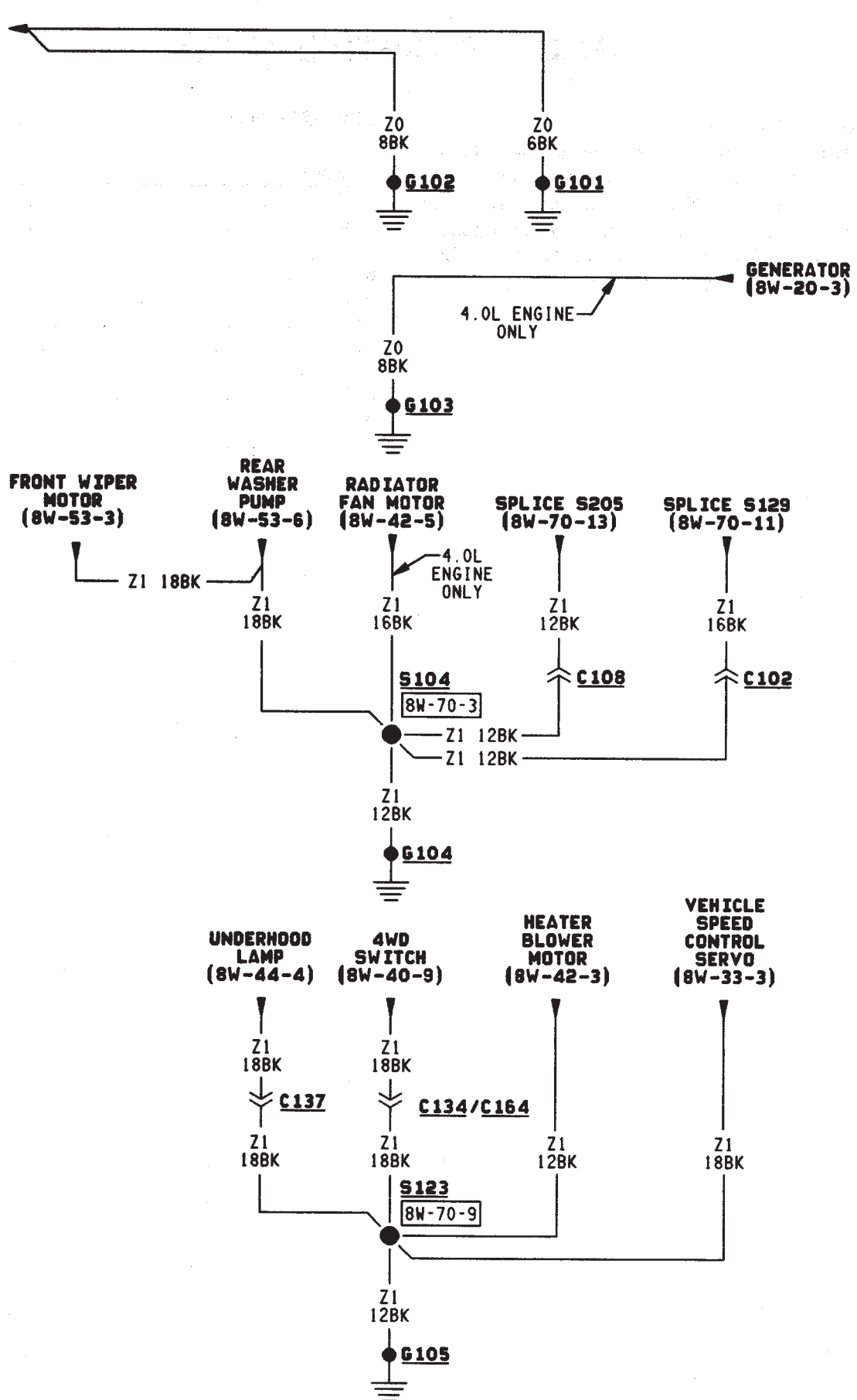
GENERAL INFORMATION

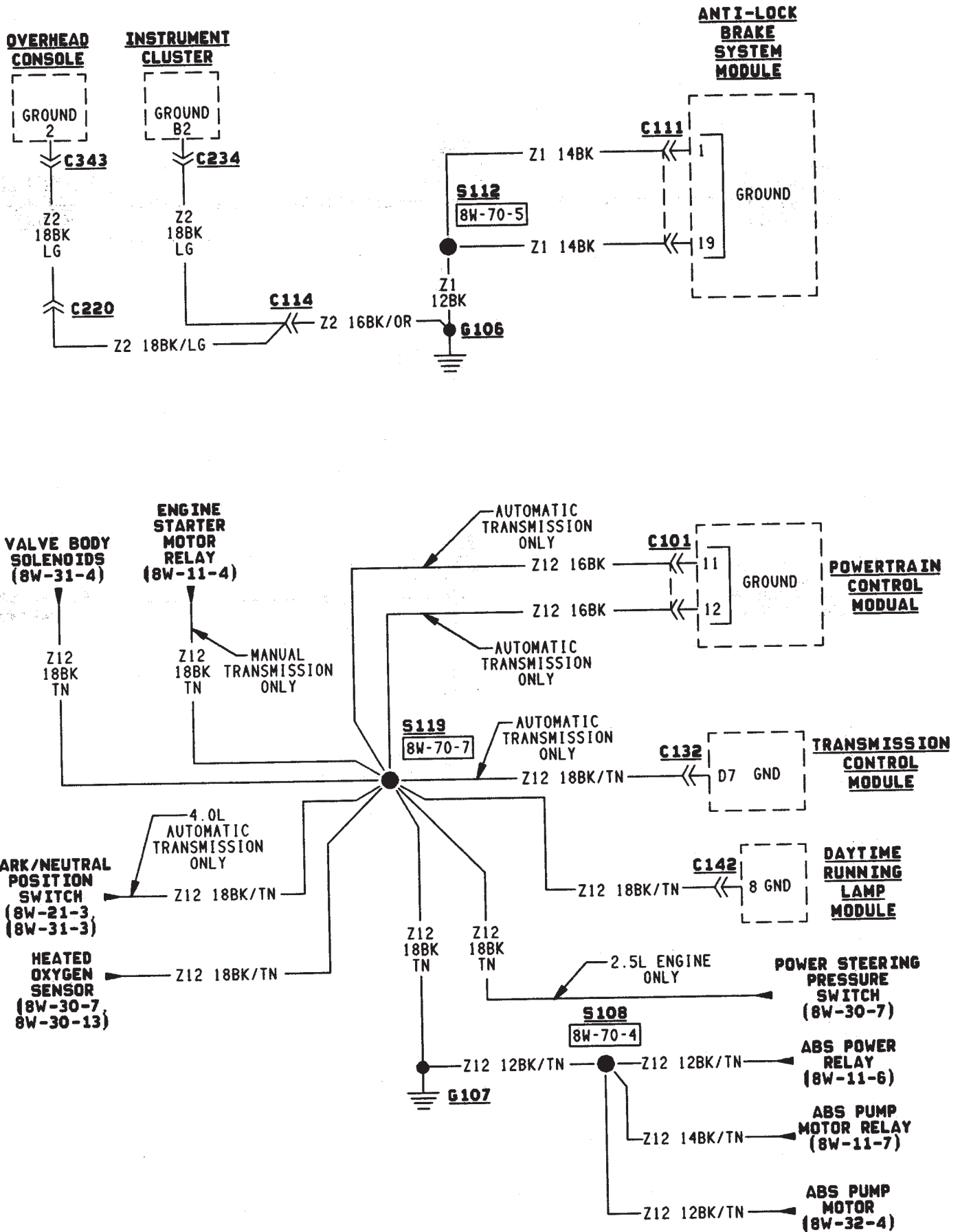
This section identifies the vehicle grounds, splices connected to each ground, and the components connected to each ground. Refer to the appropriate section of the wiring diagrams for circuit descriptions of specific systems. Refer to sub-section 8W-90 for illustrations of the physical location of each ground on the vehicle.

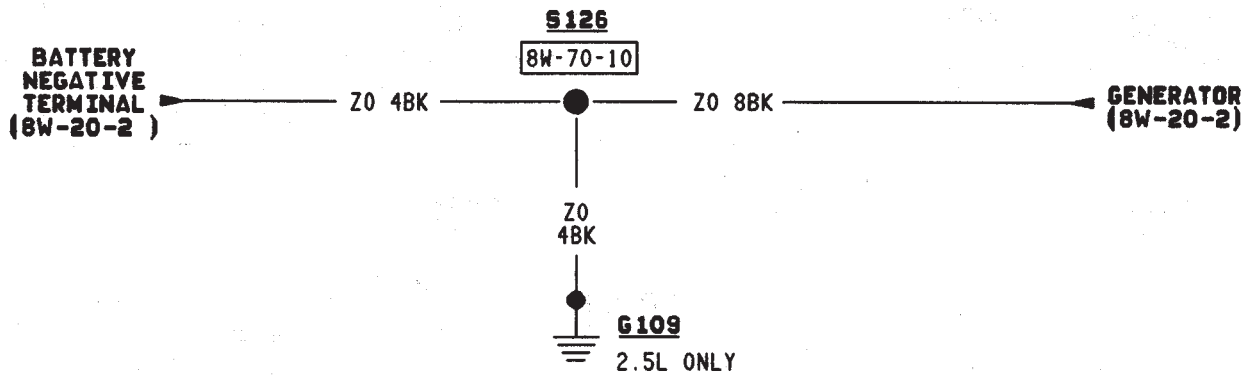
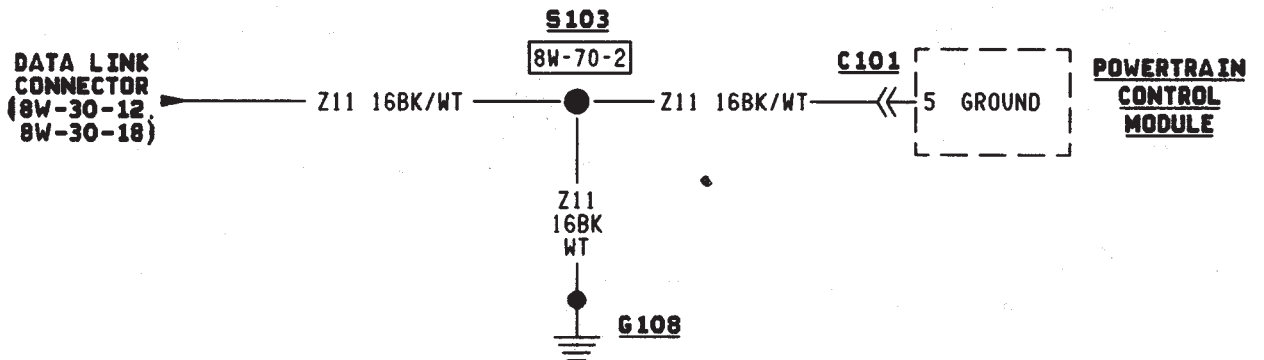
DIAGRAM INDEX

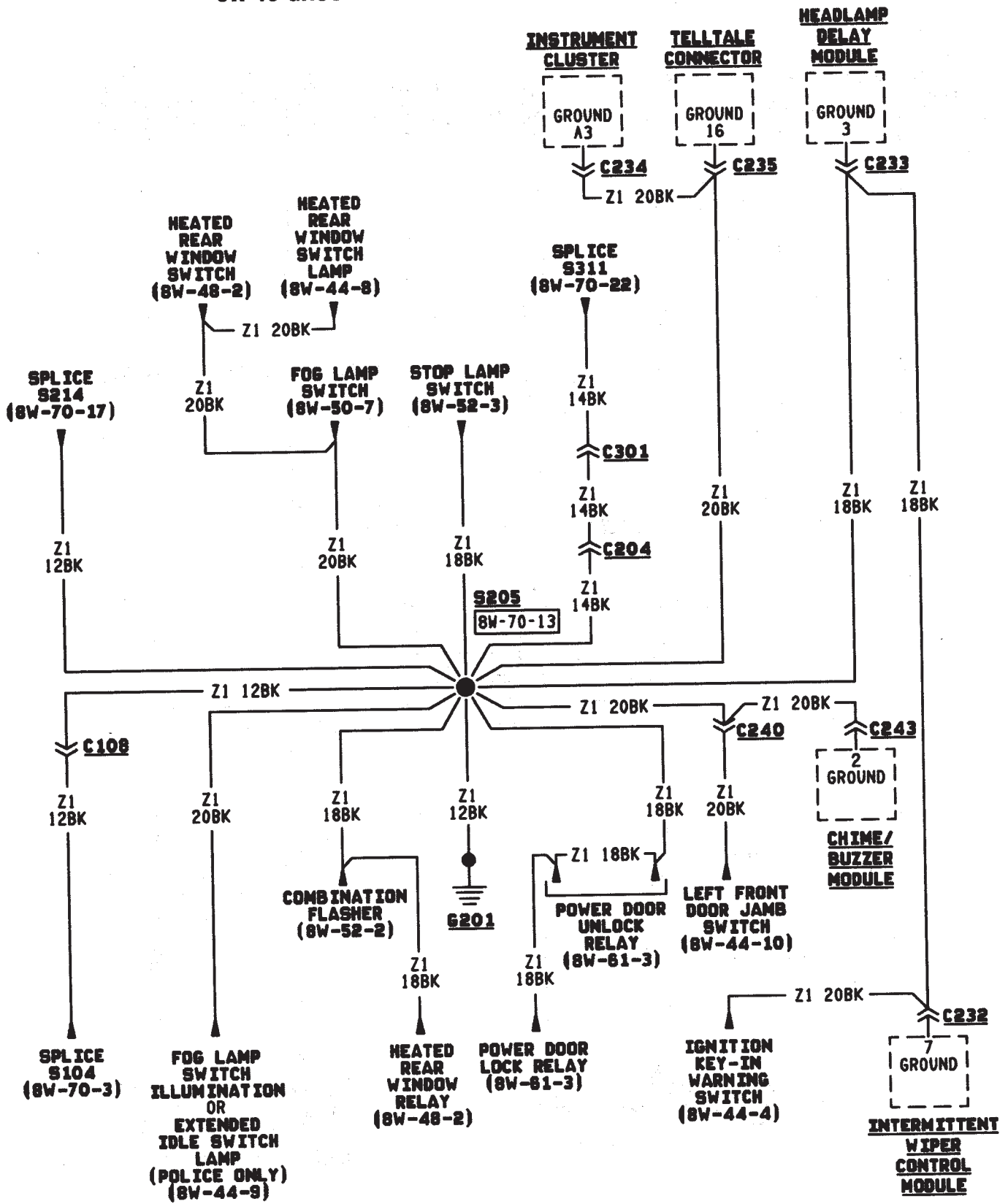
Component	Page
G101	8W-15-2
G102	8W-15-2
G103	8W-15-2
G104	8W-15-2
G105	8W-15-2
G106	8W-15-3
G107	8W-15-3
G108	8W-15-4
G109	8W-15-4
G201	8W-15-5
G301	8W-15-6

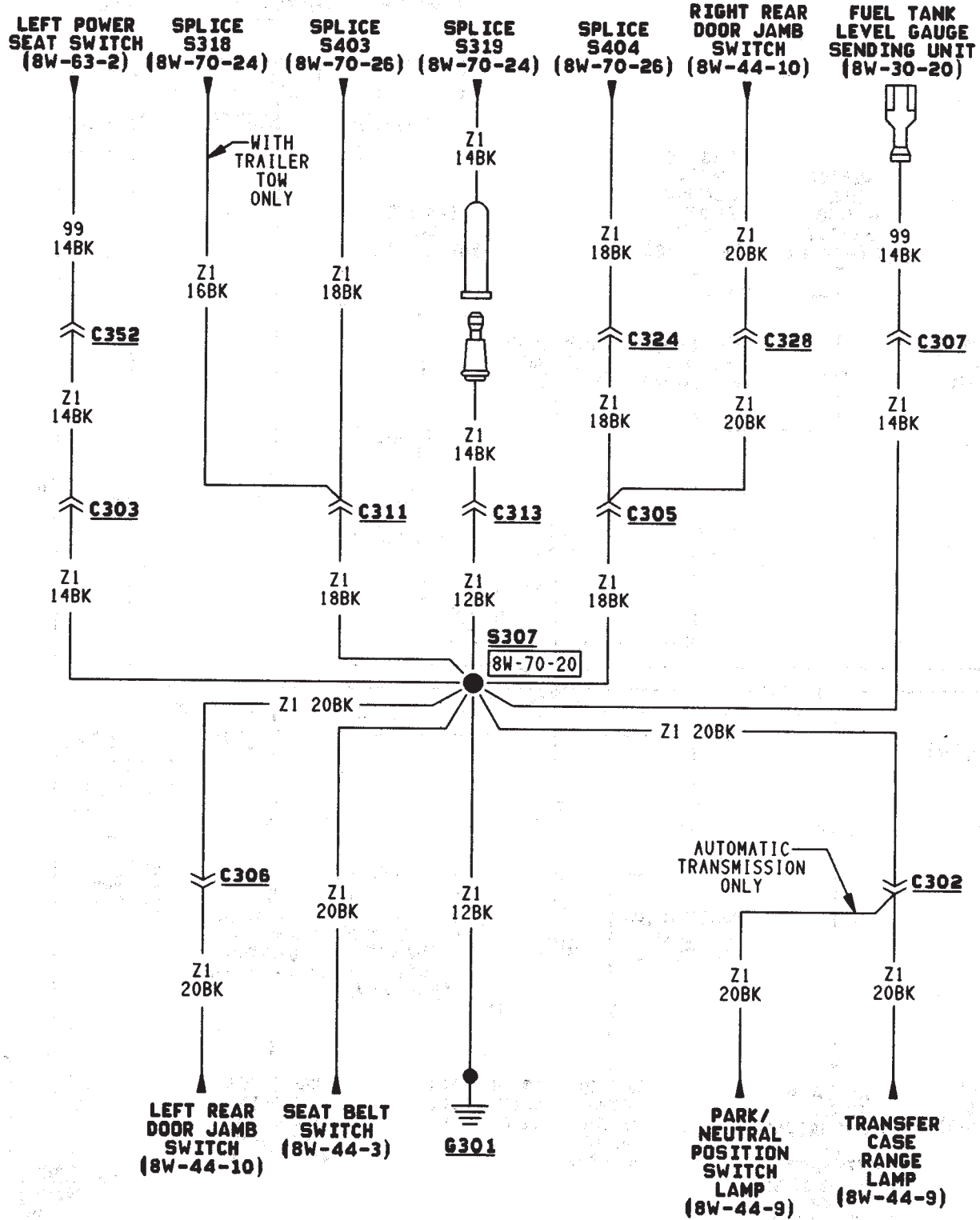
BATTERY
NEGATIVE
TERMINAL











CHARGING SYSTEM

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 splices to fuse 1 and fuse 8 in the Power Distribution Center (PDC). Circuit A0 connects the battery to the PDC.

Circuit Z0 provides ground for the generator. Circuit Z0 attaches to the right rear of the engine.

When the ignition switch is in either the START or RUN positions, it connects circuit A1 from fuse 6 in the PDC to circuit A21. Circuit A21 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 K51. Circuit K51 connects to cavity 51 of the PCM.

When the PCM grounds the ASD relay, contacts inside the relay close and connect circuit A18 from fuse 14 in the PDC to circuit A142. Circuit A142 splices 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 20.

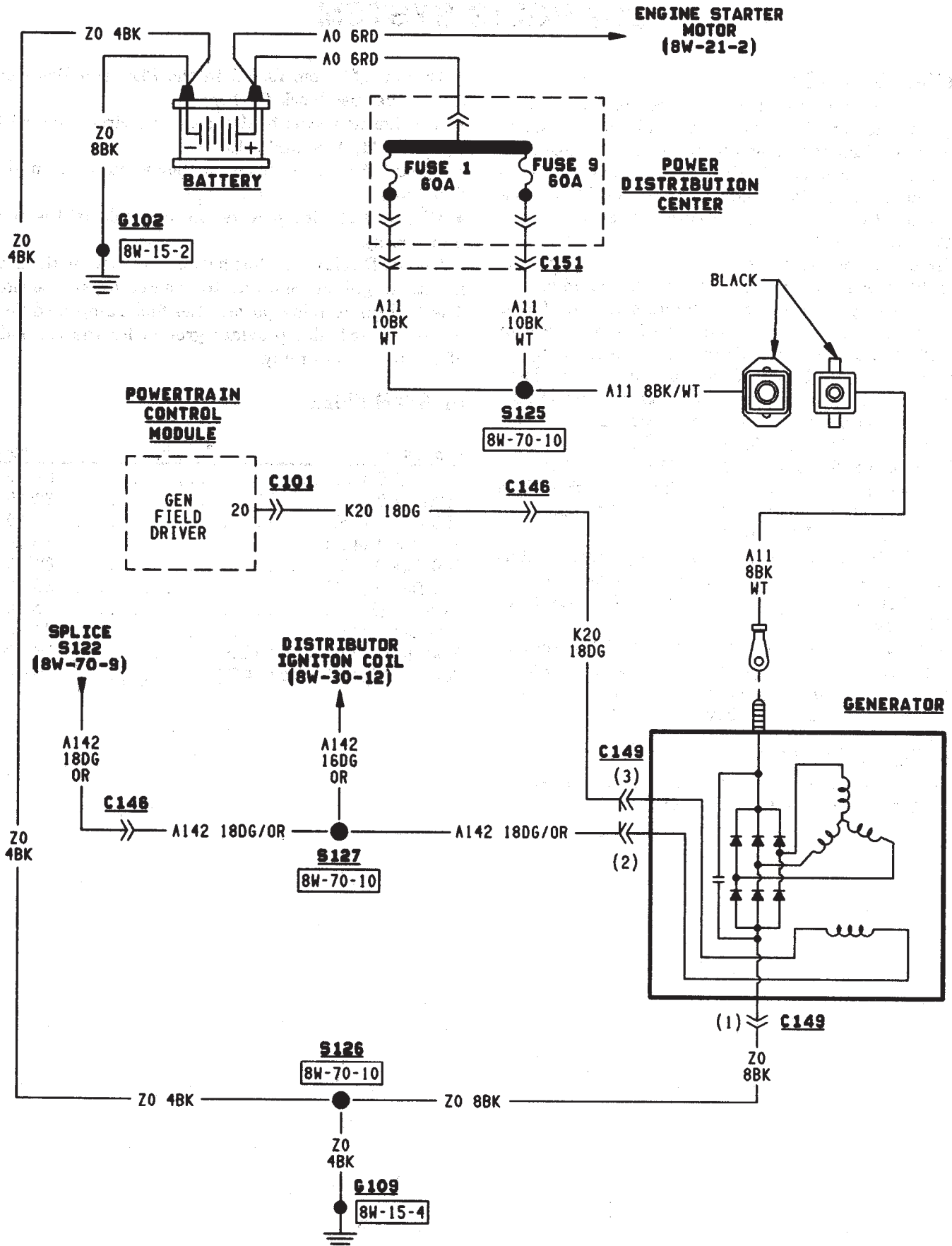
When the engine operates and there is current in the generator field, the generator produces a B+ voltage. The generator supplies B+ voltage to the battery through the A11 and A0 circuits.

HELPFUL INFORMATION

- If the vehicle is equipped with a 2.5L engine, circuit Z0 also connects to the battery.
- Circuit A14 from fuse 2 in the PDC supplies voltage to the fuse block for fuse 14.
- The ignition switch also connects circuit A1 with circuits A41, A38, and A48.
- Circuit A21 also splices to power fuse 17 in the fuse block.
- Circuit A21 also powers the coil side of the fuel pump relay.
- The ASD relay supplies battery voltage for the fuel injectors, ignition coil, and the heated oxygen sensor. The fuel pump relay powers the fuel pump module.
- Circuit K51 also provides ground for the coil side of the fuel pump relay.

DIAGRAM INDEX

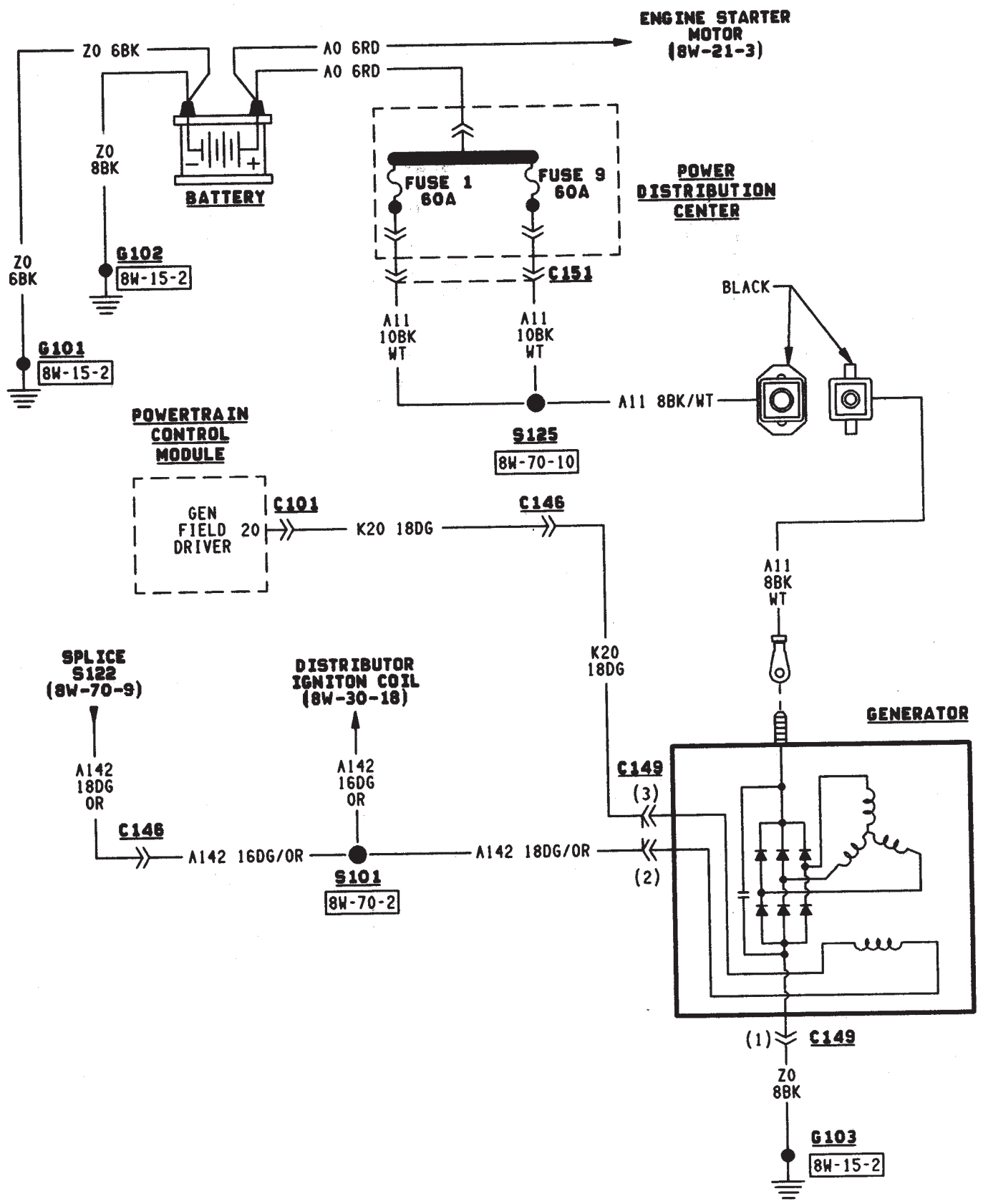
Component	Page
Battery (2.5L)	8W-20-2
Battery (4.0L)	8W-20-3
PDC Fuse 1 (2.5L)	8W-20-2
PDC Fuse 1 (4.0L)	8W-20-3
PDC Fuse 9 (2.5L)	8W-20-2
PDC Fuse 9 (4.0L)	8W-20-3
Generator (2.5L)	8W-20-2
Generator (4.0L)	8W-20-3
Powertrain Control Module (2.5L)	8W-20-2
Powertrain Control Module (4.0L)	8W-20-3



J

8W-20 CHARGING SYSTEM—XJ VEHICLES 4.0L ENGINE

8W - 20 - 3



STARTING SYSTEM

INDEX

	page		page
Diagram Index	1	Starting System	1

STARTING SYSTEM

AUTOMATIC TRANSMISSIONS

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 bus bar in the power distribution center (PDC).

Fuse 7 in the PDC supplies battery voltage to the contact side of the engine starter motor relay on circuit A4. When the coil side of the engine starter motor relay energizes, the contacts close and connect circuit A4 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.

MANUAL TRANSMISSIONS

Circuit A0 from the battery is double crimped at the positive battery post. One branch of circuit A0 (battery positive cable) connects to the battery starter motor. The other A0 branch supplies voltage to the buss bar in the power distribution center (PDC).

Fuse 7 in the PDC supplies battery voltage to the contact side of the engine starter motor relay on circuit A4. When the coil side of the engine starter motor relay energizes, the contacts close and connect circuit A4 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. Circuit Z12 provides ground for the coil side of the relay.

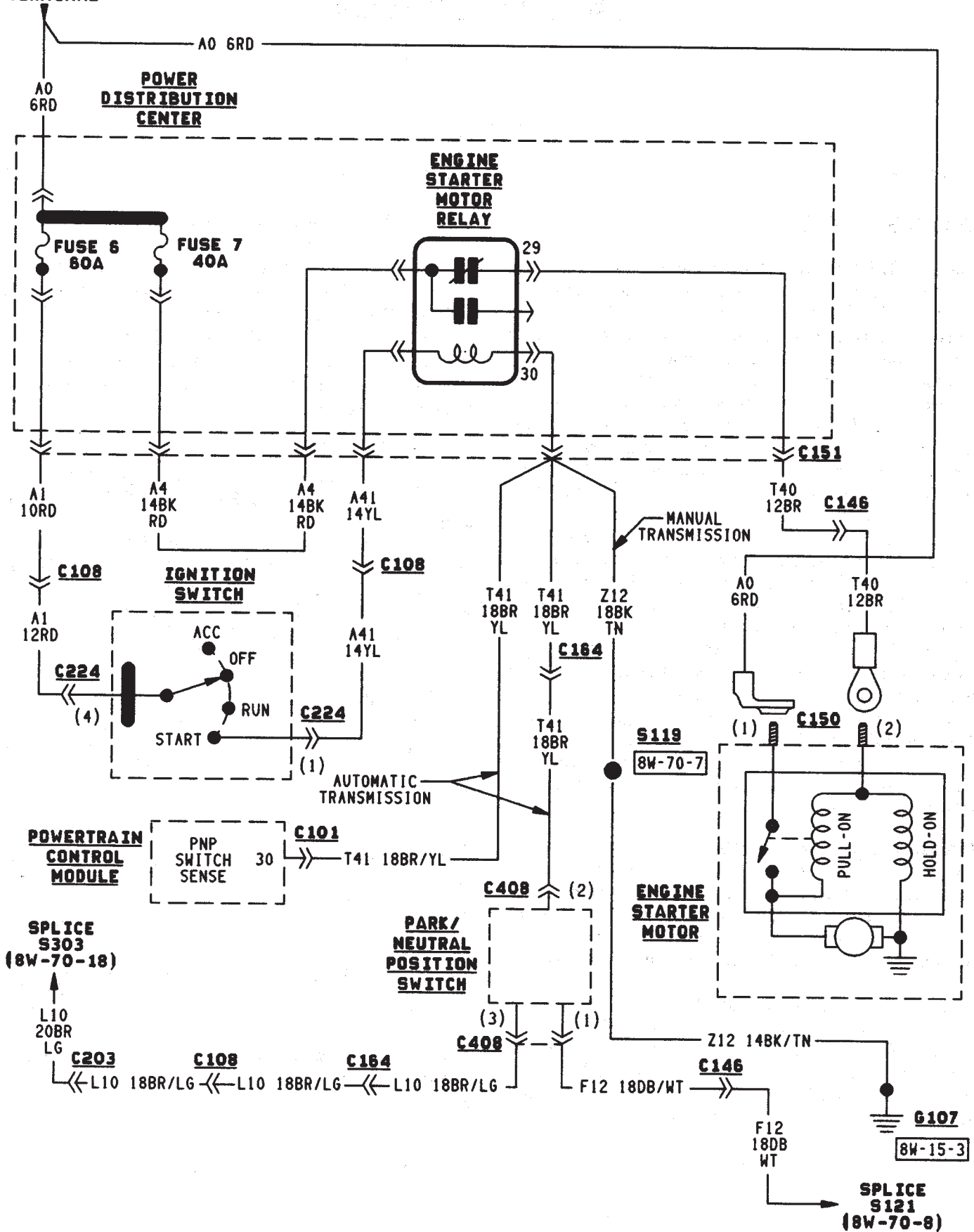
When the starter motor relay energizes and the contacts close, circuit T40 supplies battery voltage to the starter motor solenoid. Circuit A0 from the battery supplies voltage to the starter motor when the solenoid energizes.

HELPFUL INFORMATION

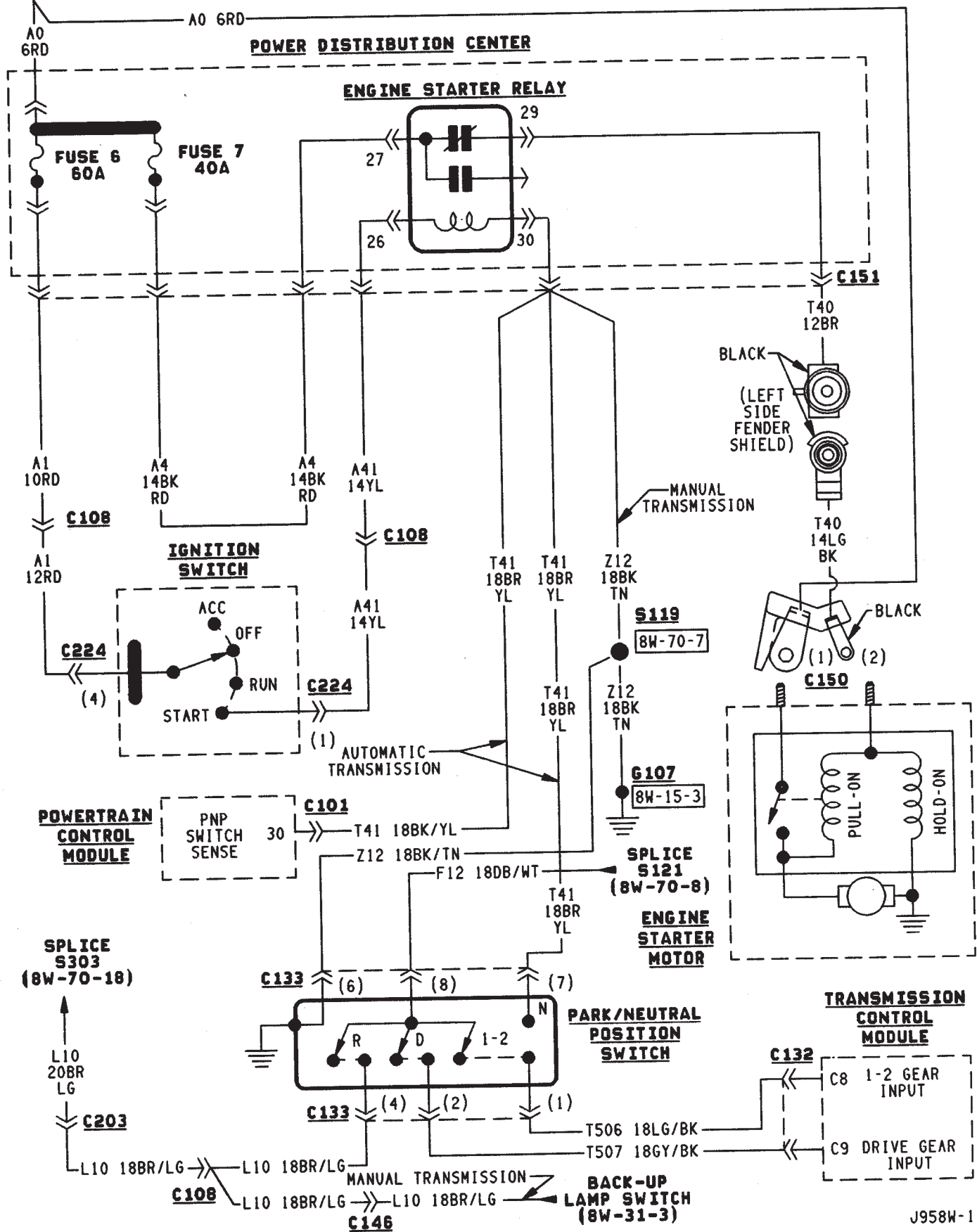
- The Park/Neutral switch closes when the transmission is in either the PARK or NEUTRAL positions.
- Circuit T41 also connects to cavity 30 of the powertrain control module (PCM). This input tells the PCM the operator is starting the vehicle.
- Circuit A4 is double crimped at the contact side of the starter motor relay. The A4 branch leaving the relay powers fuse 13 in the PDC.

DIAGRAM INDEX

Component	Page
Battery (2.5L)	8W-21-2
Battery (4.0L)	8W-21-3
Engine Starter Motor (2.5L)	8W-21-2
Engine Starter Motor (4.0L)	8W-21-3
Engine Starter Motor Relay (2.5L)	8W-21-2
Engine Starter Motor Relay (4.0L)	8W-21-3
Ignition Switch (2.5L)	8W-21-2
Ignition Switch (4.0L)	8W-21-3
PDC Fuse 6 (2.5L)	8W-21-2
PDC Fuse 6 (4.0L)	8W-21-3
PDC Fuse 7 (2.5L)	8W-21-2
PDC Fuse 7 (4.0L)	8W-21-3
Powertrain Control Module (2.5L)	8W-21-2
Powertrain Control Module (4.0L)	8W-21-3
Park/Neutral Position Switch (2.5L)	8W-21-2
Park/Neutral Position Switch (4.0L)	8W-21-3



**BATTERY
 POSITIVE
 TERMINAL**



FUEL/IGNITION

INDEX

	page		page
Automatic Shut Down (ASD) Relay	1	Idle Air Control (IAC) Motor	2
Battery Feed	1	Ignition Coil	2
Brake Switch Input	5	Ignition Switch	1
Camshaft Position Sensor	3	Intake Air Temperature Sensor	4
CCD Bus	5	Malfunction Indicator Lamp (MIL)	5
Crankshaft Position Sensor	3	Manifold Absolute Pressure Sensor	4
Data Link Connector	5	Park/Neutral Position Switch	4
Diagram Index —2.5L Engine	6	Power (Device) Ground	5
Diagram Index —4.0L Engine	6	Power Steering Pressure Switch	5
Engine Coolant Temperature Sensor	3	Tachometer Signal	5
Extended Idle Switch	5	Throttle Position Sensor	4
Fuel Injectors	1	Torque Converter Clutch (TCC) Solenoid and Relay	4
Fuel Pump Module	2	Upshift Lamp	5
Fuel Pump Relay	2	Vehicle Speed Sensor	2
Heated Oxygen Sensor	3		

IGNITION SWITCH

Circuit A1 from fuse 11 in the power distribution center (PDC), supplies battery voltage to the ignition switch. Depending upon position, the ignition switch powers circuits A21, A38, A41, or A48.

START POSITION

In the START position, the ignition switch connects circuit A1 to circuit A41. Circuit A41 connects to the coil side of the starter motor relay.

Additionally in the START position, the case grounded ignition switch provides ground for the brake lamp switch and the warning lamps in the instrument cluster.

START OR RUN POSITION

In the START or RUN position, the ignition switch connects circuit A1 to circuit A21. Circuit A21 splices to power fuse 17 in the fuse block and the coil side of the Automatic Shut Down (ASD) relay and the fuel pump relay.

RUN (ONLY) POSITION

When the ignition switch is in the RUN position, it connects circuit A1 to circuit A38. Circuit A22 splices to power fuses 1 and 7 in the fuse block.

- Fuse 1 powers the rear wiper system on circuit V15.
- Fuse 7 feeds the Anti-Lock Brake System (ABS) on circuit 236.

ACCESSORY OR RUN POSITIONS

In the ACCESSORY or RUN positions, the ignition switch connects circuit A1 to circuit A48. Circuit A48 connects to a bus bar in the fuse block that feeds fuses 2, 5, and 8.

AUTOMATIC SHUT DOWN (ASD) RELAY

When the ignition switch is in either the START or RUN positions, it connects circuit A1 from fuse 6 in the Power Distribution Center (PDC) to circuit A21. Circuit A21 supplies battery voltage to the coil side of the Automatic Shut Down (ASD) relay. The Powertrain Control Module (PCM) provides ground for the relay on circuit K51. Circuit K51 connects to cavity 51 of the PCM.

When the PCM grounds the ASD relay, contacts inside the relay close and connect circuit A18 from fuse 14 in the PDC to circuit A142. Circuit A142 splices to the generator field terminal, fuel injectors, and ignition coil. Circuit A142 also connects to cavity 57 of the PCM.

HELPFUL INFORMATION

- Along with supplying voltage to the coil side of the ASD relay, circuit A21 also supplies voltage to the coil side of the fuel pump relay.

BATTERY FEED

Circuit A14 from fuse 2 in the Power Distribution Center (PDC) supplies battery voltage to cavity 3 of the powertrain control module.

HELPFUL INFORMATION

Circuit A14 also supplies power to the contact sides of the fuel pump relay and fuse F2 in the PDC. Fuse F2 powers circuit A18 which supplies voltage to the contact side of the automatic shut down relay.

FUEL INJECTORS

When the Automatic Shut Down (ASD) relay contacts close, they connect circuits A14 and A142. Cir-

circuit A142 supplies voltage to the fuel injectors. Each injector has a separate ground circuit controlled by the PCM.

Circuit K11 provides ground for injector number one. The K11 circuit connects to cavity 16 of the PCM.

Circuit K12 provides ground for injector number two. The K12 circuit connects to cavity 15 of the PCM.

Circuit K13 provides ground for injector number three. The K13 circuit connects to cavity 14 of the PCM.

Circuit K14 provides ground for injector number four. The K14 circuit connects to cavity 13 of the PCM.

On the 4.0L engine, circuit K15 provides ground for injector number five. The K15 circuit connects to cavity 38 of the PCM.

Also on the 4.0L engine, circuit K16 provides ground for injector number six. The K16 circuit connects to cavity 58 of the PCM.

HELPFUL INFORMATION

- Circuit A142 splices to supply voltage to the fuel injectors, ignition coil, PCM, generator.
- For information about fuel injector operation, refer to Group 14.

IGNITION COIL

When the Automatic Shut Down (ASD) relay contacts close, they connect circuits A14 and A142. Circuit A142 supplies voltage to the fuel injectors. Circuit A142 splices to supply voltage to the ignition coil. The PCM controls the ground path for the ignition coil on circuit K19. Circuit K19 connects to cavity 19 of the PCM.

HELPFUL INFORMATION

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

FUEL PUMP RELAY

When the ignition switch is in either the START or RUN positions, it connects circuit A1 from fuse 6 in the Power Distribution Center (PDC) to circuit A21. Circuit A21 supplies battery voltage to the coil side of the fuel pump relay. The Powertrain Control Module (PCM) provides ground for the relay on circuit K51. Circuit K51 connects to cavity 51 of the PCM.

When the PCM grounds the fuel pump relay, contacts inside the relay close and connect circuit A14 from fuse 2 in the PDC to circuit A141. Circuit A141 supplies voltage to the fuel pump motor (part of the in-tank fuel pump module).

HELPFUL INFORMATION

- Circuit A14 also splices to supply battery voltage to cavity 3 of the PCM.

- Circuit A141 also supplies battery voltage to the heated oxygen sensor.

FUEL PUMP MODULE

FUEL PUMP MOTOR

When the fuel pump relay contacts close, the relay supplies voltage to the fuel pump motor. Circuit A141 from the relay supplies voltage to circuit A241. Circuit A241 connects to circuit F9 in the fuel pump module harness. Circuit F9 connects to the fuel pump motor.

Circuit 99 in the fuel pump module harness connects to circuit Z1. Circuit Z1 provides ground for the fuel pump motor.

FUEL LEVEL SENSOR

The fuel level sensor is a variable resistor. Circuit G4 connects the fuel level sensor to the fuel gauge in the instrument cluster. Circuit F87 from fuse 17 in the fuse block supplies voltage to the fuel gauge. The fuel level sensor draws voltage from circuit F87 through the fuel gauge on circuit G4. Circuit G4 connects to circuit 57 in the fuel pump module harness. Circuit 57 connects to the fuel level sensor.

Circuit 99 in the fuel pump module harness connects to circuit Z1. Circuit Z1 provides the ground path for the fuel level sensor. The grounding point for circuit Z1 is the left side of the cowl panel.

HELPFUL INFORMATION

As current flows through the coils in the fuel gauge, it creates a magnetic field. One of the coils in the gauge receives fixed current. The other coil is connected to the level sensor. The magnetic field controls the position of the fuel gauge pointer.

The fuel level sensor contains a variable resistor. As the position of the float arm on the fuel level sensor changes, the resistor changes the current flow through second coil in the fuel gauge. A change in current flow alters the magnetic field in the fuel gauge, which changes the pointer position.

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 39 of the PCM
- Circuit K40 connects to cavity 40 of the PCM
- Circuit K59 connects to cavity 59 of the PCM
- Circuit K60 connects to cavity 60 of the PCM

VEHICLE SPEED SENSOR

Circuit K7 supplies 8 volts from the Powertrain Control Module (PCM) to the vehicle speed sensor. The K7 circuit connects to cavity 7 of the PCM.

Circuit G7 from the vehicle speed sensor provides an input signal to the PCM. The G7 circuit connects to cavity 47 of the PCM.

The PCM provides a ground for the vehicle speed sensor signal (circuit G7) through circuit K4. Circuit K4 connects to cavity 4 of the PCM.

HELPFUL INFORMATION

- Circuit G7 splices to the speedometer, and daytime running lights module (DRL).
- Circuit K7 splices to supply 8 volts to the camshaft position sensor and crankshaft position sensor.

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

- Heated oxygen sensor
- Camshaft position sensor
- Crankshaft position sensor
- Throttle position sensor
- Manifold absolute pressure sensor
- Engine coolant temperature sensor
- Intake air temperature sensor

HEATED OXYGEN SENSOR

When the fuel pump relay contacts close, they connect circuits A14 and A141. Circuit A141 splices to supply voltage to the heated oxygen sensor.

Circuit K41 delivers the signal from the heated oxygen sensor to the PCM. Circuit K41 connects to cavity 41 of the PCM.

The PCM provides a ground for the heated oxygen sensor signal (circuit K41) through circuit K4. Circuit K4 connects to cavity 4 of the PCM connector.

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

Circuit Z12 terminates at the right side of the engine.

HELPFUL INFORMATION

- Circuit A141 also supplies battery voltage to the fuel pump.

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

- Heated oxygen sensor
- Camshaft position sensor
- Crankshaft position sensor
- Intake air temperature sensor
- Throttle position sensor
- Manifold absolute pressure sensor
- Engine coolant temperature sensor
- Vehicle speed sensor

CAMSHAFT POSITION SENSOR

The Powertrain Control Module (PCM) supplies 8 volts to the camshaft position sensor (in distributor) on circuit K7. Circuit K7 connects to cavity 7 of the PCM.

The PCM receives the camshaft position sensor signal on circuit K44. Circuit K44 connects to cavity 44 of the PCM.

The PCM provides a ground for the camshaft position sensor signal (circuit K44) through circuit K4. Circuit K4 connects to cavity 4 of the PCM.

HELPFUL INFORMATION

- Circuit K7 splices to supply 8 volts to the crankshaft position sensor and the vehicle speed sensor.

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

- Heated oxygen sensor
- Camshaft position sensor
- Crankshaft position sensor
- Intake air temperature sensor
- Throttle position sensor
- Manifold absolute pressure sensor
- Engine coolant temperature sensor
- Vehicle speed sensor

CRANKSHAFT POSITION SENSOR

The Powertrain Control Module (PCM) supplies 8 volts to the crankshaft position sensor on circuit K7. Circuit K7 connects to cavity 7 of the PCM.

The PCM receives the crankshaft position sensor signal on circuit K24. Circuit K24 connects to cavity 24 of the PCM.

The PCM provides a ground for the crankshaft position sensor (circuit K24) through circuit K4. Circuit K4 connects to cavity 4 of the PCM.

HELPFUL INFORMATION

- Circuit K7 splices to supply 8 volts to the camshaft position sensor and the vehicle speed sensor.

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

- Heated oxygen sensor
- Camshaft position sensor
- Crankshaft position sensor
- Intake air temperature sensor
- Throttle position sensor
- Manifold absolute pressure sensor
- Engine coolant temperature sensor
- 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 2 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 4 of the PCM connector.

HELPFUL INFORMATION

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

- Heated oxygen sensor
- Camshaft position sensor
- Crankshaft position sensor
- Intake air temperature sensor
- Throttle position sensor
- Manifold absolute pressure sensor
- Engine coolant temperature sensor
- Vehicle speed sensor

THROTTLE POSITION SENSOR

From the Powertrain Control Module (PCM), circuit K6 supplies 5 volts to the throttle position sensor (TPS). Circuit K6 connects to cavity 6 of the PCM.

Circuit K22 delivers the TPS signal to the PCM. Circuit K22 connects to cavity 22 of the PCM.

The PCM provides a ground for the throttle position sensor signal (circuit K22) through circuit K4. Circuit K4 connects to cavity 4 of the PCM.

HELPFUL INFORMATION

Refer to Group 14 for throttle position sensor operation.

Circuit K6 splices to supply 5 volts to the manifold absolute pressure sensor.

On vehicles equipped with the 4.0L engine and automatic transmission, circuit K22 splices to the transmission control module.

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

- Heated oxygen sensor
- Camshaft position sensor
- Crankshaft position sensor
- Intake air temperature sensor
- Throttle position sensor
- Manifold absolute pressure sensor
- Engine coolant temperature sensor
- Vehicle speed sensor

MANIFOLD ABSOLUTE PRESSURE SENSOR

From the Powertrain Control Module (PCM), circuit K6 supplies 5 volts to the manifold absolute pressure (MAP) sensor. Circuit K6 connects to cavity 6 of the PCM.

Circuit K1 delivers the MAP signal to the PCM. Circuit K1 connects to cavity 1 of the PCM.

The PCM provides a ground for the MAP sensor signal (circuit K1) through circuit K4. Circuit K4 connects to cavity 4 of the PCM.

HELPFUL INFORMATION

Refer to Group 14 for MAP sensor operation.

Circuit K6 splices to supply 5 volts to the throttle position sensor.

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

- Heated oxygen sensor
- Camshaft position sensor
- Crankshaft position sensor
- Intake air temperature sensor
- Throttle position sensor
- Manifold absolute pressure sensor
- Engine coolant temperature sensor
- Vehicle speed sensor

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 21 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 4 of the PCM.

HELPFUL INFORMATION

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

- Heated oxygen sensor
- Camshaft position sensor
- Crankshaft position sensor
- Intake air temperature sensor
- Throttle position sensor
- Manifold absolute pressure sensor
- Engine coolant temperature sensor
- Vehicle speed sensor

PARK/NEUTRAL POSITION SWITCH

When closed, the case-grounded park/neutral position switch provides a ground path on circuit T41 for the coil side of the starter motor relay. Circuit A41 from the ignition switch provides battery voltage to the coil side of the relay.

Circuit T41 splices to cavity 30 of the PCM. The park/neutral position switch provides an input to the Powertrain Control Module (PCM).

TORQUE CONVERTER CLUTCH (TCC) SOLENOID AND RELAY

The TCC solenoid is only used on 2.5L engines with the three-speed automatic transmissions. The Powertrain Control Module (PCM) operates the TCC solenoid by energizing the TCC relay.

Circuit T17 from fuse 3 in the power distribution center supplies voltage to the coil and contact sides of the TCC relay. When the PCM provides a ground path on circuit K54 for the coil side of the relay, the relay contacts close.

When the relay contacts close, they connect circuit T17 with circuit T22. Circuit T22 supplies battery voltage to the case grounded TCC solenoid. Circuit K54 connects to PCM cavity 54.

HELPFUL INFORMATION

- In the RUN or START position, the ignition switch connects circuit A1 from fuse 4 in the PDC to circuit A21.

UPSHIFT LAMP

On vehicles equipped with a manual transmission, the PCM grounds the up-shift lamp on circuit K54. Circuit K54 connects to cavity 54 of the PCM.

POWER STEERING PRESSURE SWITCH

The PCM supplies voltage to the power steering pressure switch on circuit K10. Circuit Z12 provides ground for the switch. When the switch closes, voltage flows through the switch to ground on circuit Z12. The switch closes during periods of high power steering pump load and low engine speed; such as parking maneuvers.

Circuit K10 connects to cavity 10 of the PCM. Circuit Z12 terminates at the right rear of the engine.

TACHOMETER SIGNAL

The PCM supplies the signal for the tachometer on circuit G21. Circuit G21 connects to cavity 43 of the PCM.

MALFUNCTION INDICATOR LAMP (MIL)

The PCM provides ground for the instrument cluster malfunction indicator lamp on circuit G3. The MIL displays the message CHECK ENGINE when illuminated. Circuit F87 provides voltage for the lamp.

DATA LINK CONNECTOR

Circuit F12 supplies battery voltage to the data link connector. Circuit F12 originates at fuse 11 in the Power Distribution Center.

Circuit D20 connects to cavity 45 of the PCM. Circuit D20 is the SCI receive circuit for the PCM.

Circuit D21 connects to cavity 25 of the PCM. Circuit D21 is the SCI transmit circuit for the PCM.

Circuit Z11 provides ground for the data link connector. Circuit Z11 terminates at the right rear of the engine. Circuit Z11 also connects to cavity 5 of the PCM.

HELPFUL INFORMATION

- Circuit Z1 also supplies a ground for the PCM high current drivers.
- If the system loses ground for the Z11 circuits at the right rear of the engine, the vehicle will not operate. Check the connection at the ganged-ground circuit eyelet.
- Circuit F12 splices to supply battery voltage to the vehicle speed control switch, back-up lamp switch, A/C compressor clutch relay, windshield washer fluid level sensor and radiator fan relay (4.0L engines).

BRAKE SWITCH INPUT

Circuit K29 provides the brake switch input to the PCM. Circuit V40 connects to cavity 29 of the PCM.

POWER (DEVICE) GROUND

Circuit Z12 connects to cavities 11 and 12 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 power (device) ground circuit connects to the PCM sensor return circuit (from circuit K4).

HELPFUL INFORMATION

- The grounding point for circuit Z12 is the right rear of the engine.
- If the system loses ground for the Z12 circuits at the rear of the engine, the vehicle will not operate. Check the connection at the ganged-ground circuit eyelet.
- On vehicles equipped with the 4.0L engine and automatic transmission, circuit Z12 splices to provide ground for the transmission control module.

EXTENDED IDLE SWITCH

On Police Package vehicles, an optional extended idle switch provides an input to the Powertrain Control Module (PCM) on circuit K10. Circuit K10 connects to cavity 10 of the PCM. Circuit F60 supplies battery voltage to the extended idle switch. Circuit Z1 grounds the switch.

CCD BUS

On vehicles equipped with the 4.0L engine, circuits D1 and D2 connect the Powertrain Control Module (PCM) to the CCD Bus. Circuit D1 connects to cavity 26 of the PCM. Circuit D2 connects to cavity 46 of the PCM. Circuits D1 and D2 are a twisted pair of wires.

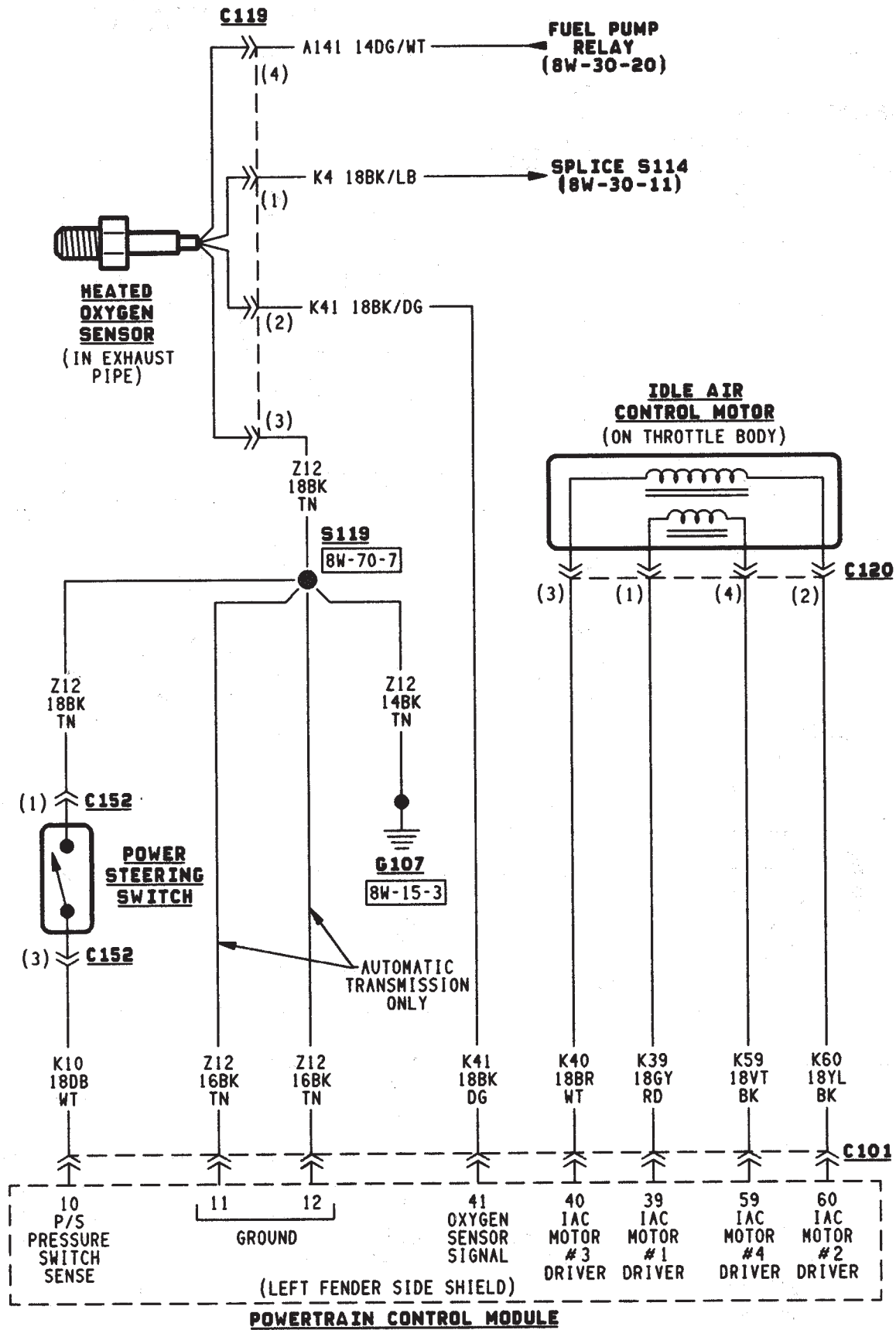
DIAGRAM INDEX—2.5L ENGINE

<u>Component</u>	<u>Page</u>
Automatic Shut Down Relay . . . . .	.8W-30-8
Camshaft Position Sensor . . . . .	.8W-30-10
Crankshaft Position Sensor . . . . .	.8W-30-11
Data Link Connector . . . . .	.8W-30-12
Distributor Ignition Coil . . . . .	.8W-30-12
Engine Coolant Temperature Sensor . . . . .	.8W-30-11
Fuel Injector #1 . . . . .	.8W-30-9
Fuel Injector #2 . . . . .	.8W-30-9
Fuel Injector #3 . . . . .	.8W-30-9
Fuel Injector #4 . . . . .	.8W-30-9
Fuel Pump Relay . . . . .	.8W-30-20
Fuel Tank Gauge Level Sending Unit . . . . .	.8W-30-20
Fuse 2 (PDC) . . . . .	.8W-30-8, 20
Fuse 6 (PDC) . . . . .	.8W-30-8, 20
Fuse 11 (PDC) . . . . .	.8W-30-12
Fuse 14 (PDC) . . . . .	.8W-30-8
Heated Oxygen Sensor . . . . .	.8W-30-7
Idle Air Control Motor . . . . .	.8W-30-7
Ignition Switch . . . . .	.8W-30-8, 20
Instrument Cluster . . . . .	.8W-30-12, 20
Intake Air Temperature Sensor . . . . .	.8W-30-11
MAP Sensor . . . . .	.8W-30-10
Powertrain Control Module . . . . .	.8W-30-7 thru 12, 19, 20
Power Steering Pressure Switch . . . . .	.8W-30-7
Throttle Position Sensor . . . . .	.8W-30-10
Vehicle Speed Sensor . . . . .	.8W-30-12

DIAGRAM INDEX—4.0L ENGINE

<u>Component</u>	<u>Page</u>
Automatic Shut Down Relay . . . . .	.8W-30-14
Camshaft Position Sensor . . . . .	.8W-30-16
Crankshaft Position Sensor . . . . .	.8W-30-16
Data Link Connector . . . . .	.8W-30-18
Distributor Ignition Coil . . . . .	.8W-30-18
Engine Coolant Temperature Sensor . . . . .	.8W-30-17
Extended Idle Switch . . . . .	.8W-30-19
Extended Idle Switch Lamp . . . . .	.8W-30-19
Fuel Injector #1 . . . . .	.8W-30-15
Fuel Injector #2 . . . . .	.8W-30-15
Fuel Injector #3 . . . . .	.8W-30-15
Fuel Injector #4 . . . . .	.8W-30-15
Fuel Injector #5 . . . . .	.8W-30-15
Fuel Injector #6 . . . . .	.8W-30-15
Fuel Pump Relay . . . . .	.8W-30-20
Fuel Tank Gauge Level Sending Unit . . . . .	.8W-30-20
Fuse 2 (PDC) . . . . .	.8W-30-14, 20
Fuse 3 (Fuse Block) . . . . .	.8W-30-19
Fuse 5 (PDC) . . . . .	.8W-30-19
Fuse 6 (PDC) . . . . .	.8W-30-14, 19, 20
Fuse 14 (PDC) . . . . .	.8W-30-14
Fuse 15 (Fuse Block) . . . . .	.8W-30-19
Fuse 19 (Fuse Block) . . . . .	.8W-30-19
Headlamp Switch . . . . .	.8W-30-19
Heated Oxygen Sensor . . . . .	.8W-30-13
Idle Air Control Motor . . . . .	.8W-30-13
Ignition Switch . . . . .	.8W-30-14, 19, 20
Instrument Cluster . . . . .	.8W-30-18
Intake Air Temperature Sensor . . . . .	.8W-30-17
MAP Sensor . . . . .	.8W-30-16
Powertrain Control Module . . . . .	.8W-30-13 thru 20
Throttle Position Sensor . . . . .	.8W-30-16
Vehicle Speed Sensor . . . . .	.8W-30-18

2.5L ENGINE



BATTERY
POSITIVE
TERMINAL

2.5L ENGINE

POWER
DISTRIBUTION
CENTER

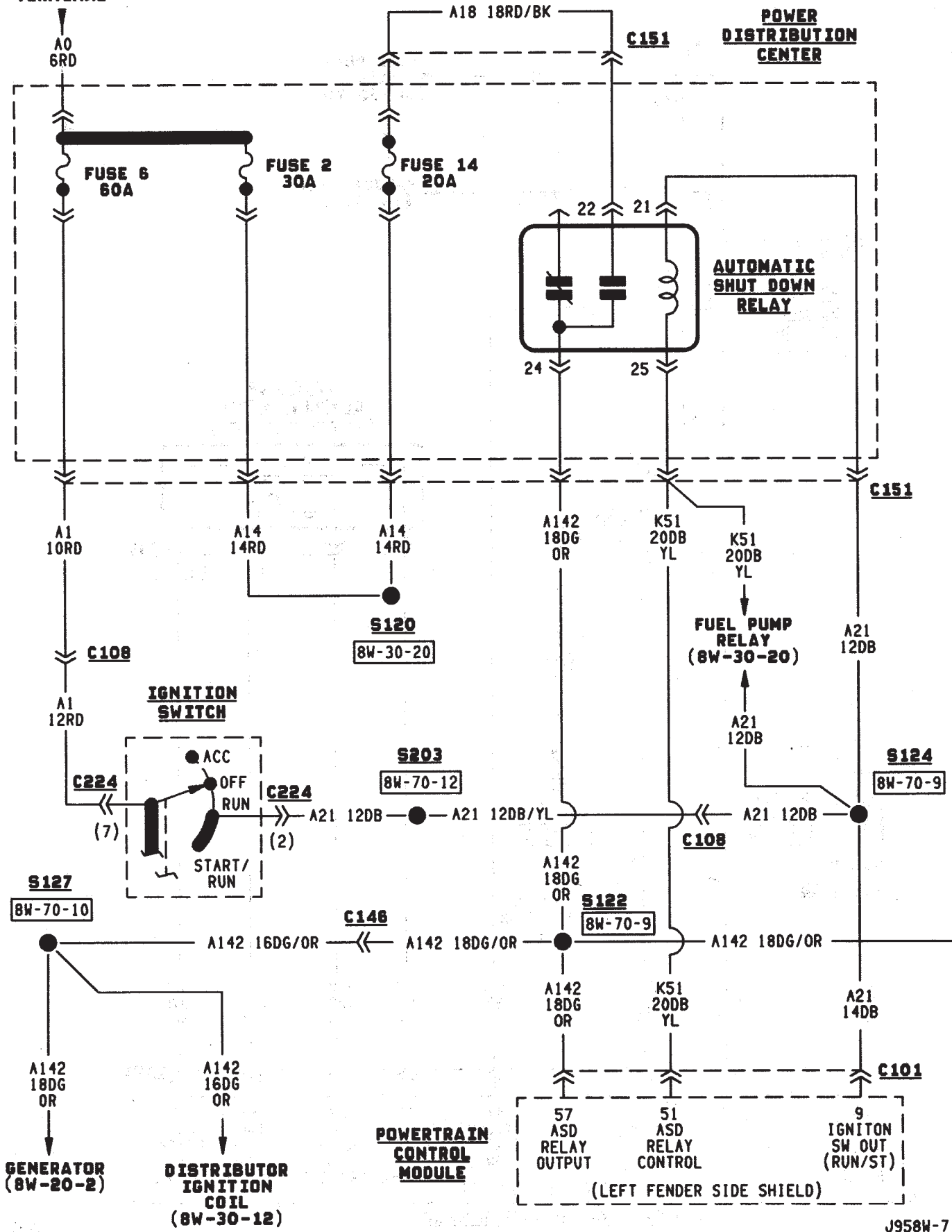
AUTOMATIC
SHUT DOWN
RELAY

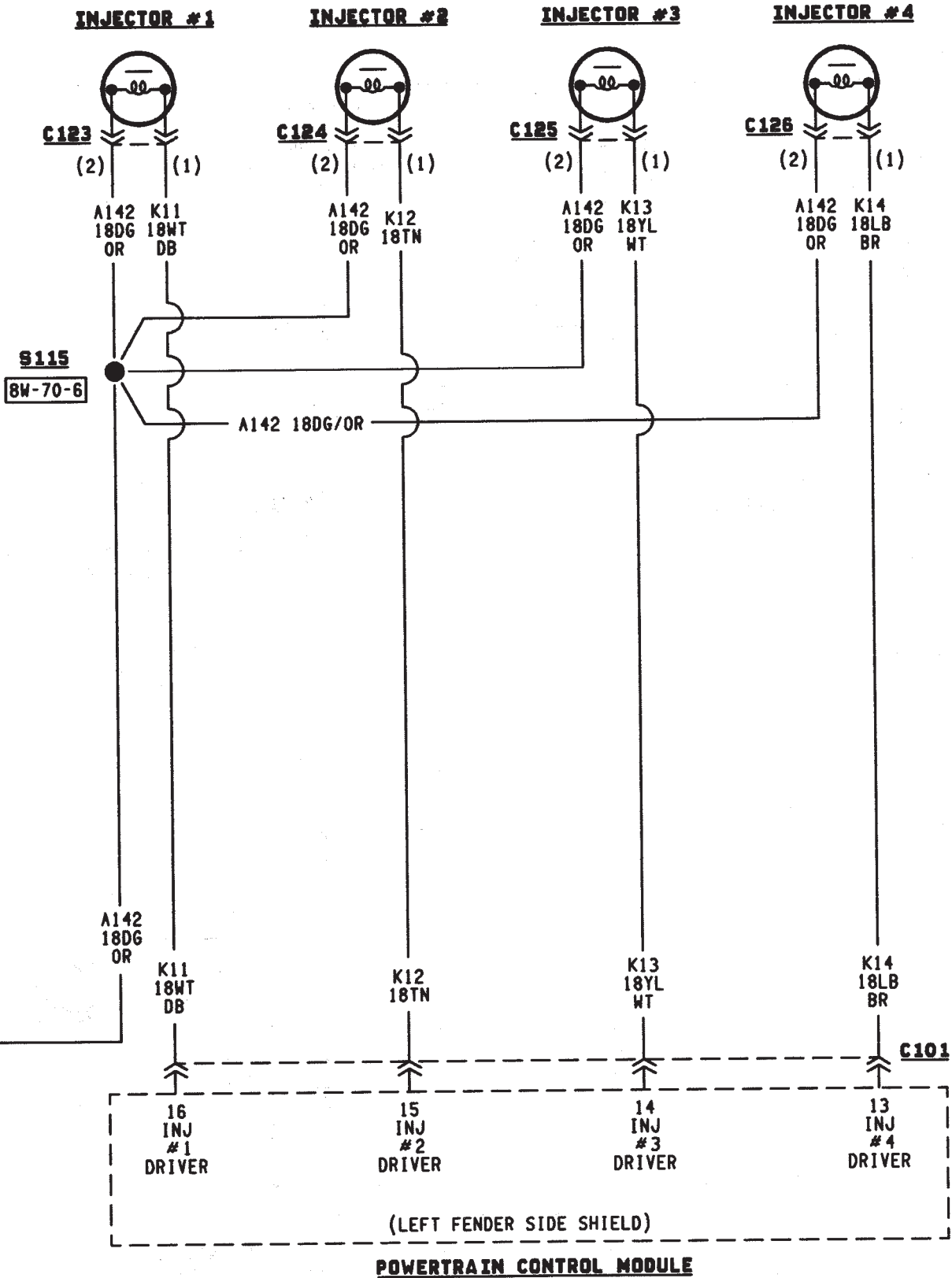
FUEL PUMP
RELAY
(8W-30-20)

IGNITION
SWITCH

POWERTRAIN
CONTROL
MODULE

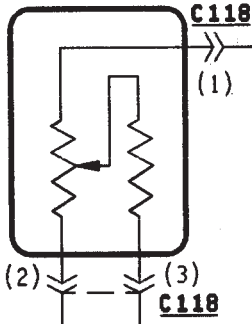
57 ASD RELAY OUTPUT
51 ASD RELAY CONTROL
9 IGNITION SW OUT (RUN/ST)
(LEFT FENDER SIDE SHIELD)



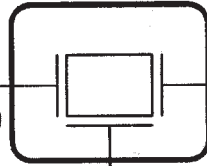


**THROTTLE
POSITION
SENSOR**

(ON THROTTLE
BODY)



**MAP SENSOR
(CENTER OF
DASH PANEL)**



**VEHICLE
SPEED
SENSOR
(8W-30-12)**

K4 18BK
LB

C164

K4 18BK
LB

S118
8W-70-7

K4 18BK/LB
K7 180R

K4 18BK
LB

(1) (2) (3)
C131

**CAMSHAFT
POSITION
SENSOR**

(IN DISTRIBUTOR)

K22 180R
DB

K6 20VT
WT

K1 20DG
RD

K4 18BK
LB

K44 18TN
YL

C101

22
TPS
SIGNAL

6
5V
SUPPLY

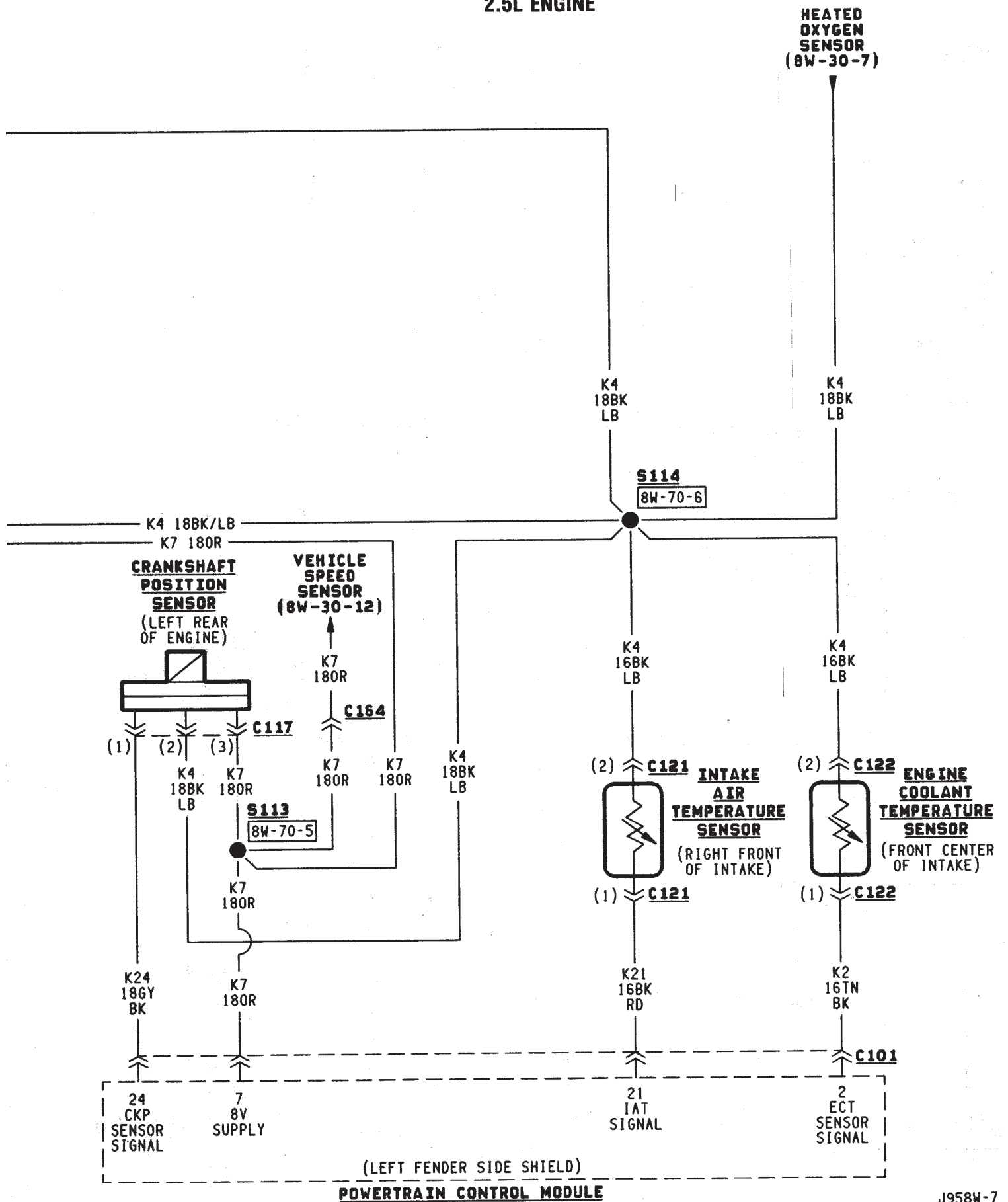
1
MAP
SENSOR
SIGNAL

4
SENSOR
GROUND

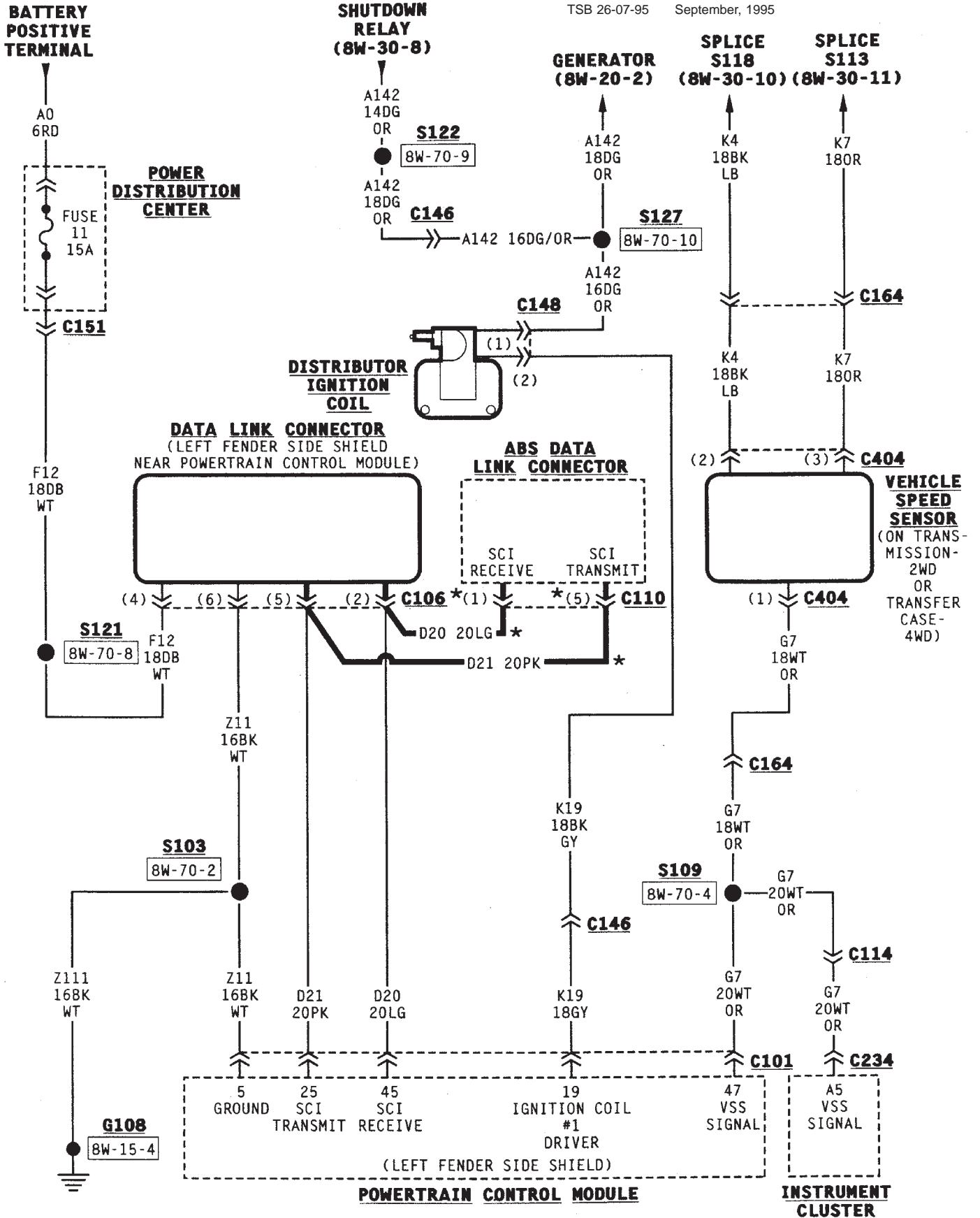
44
CMP
SENSOR
SIGNAL

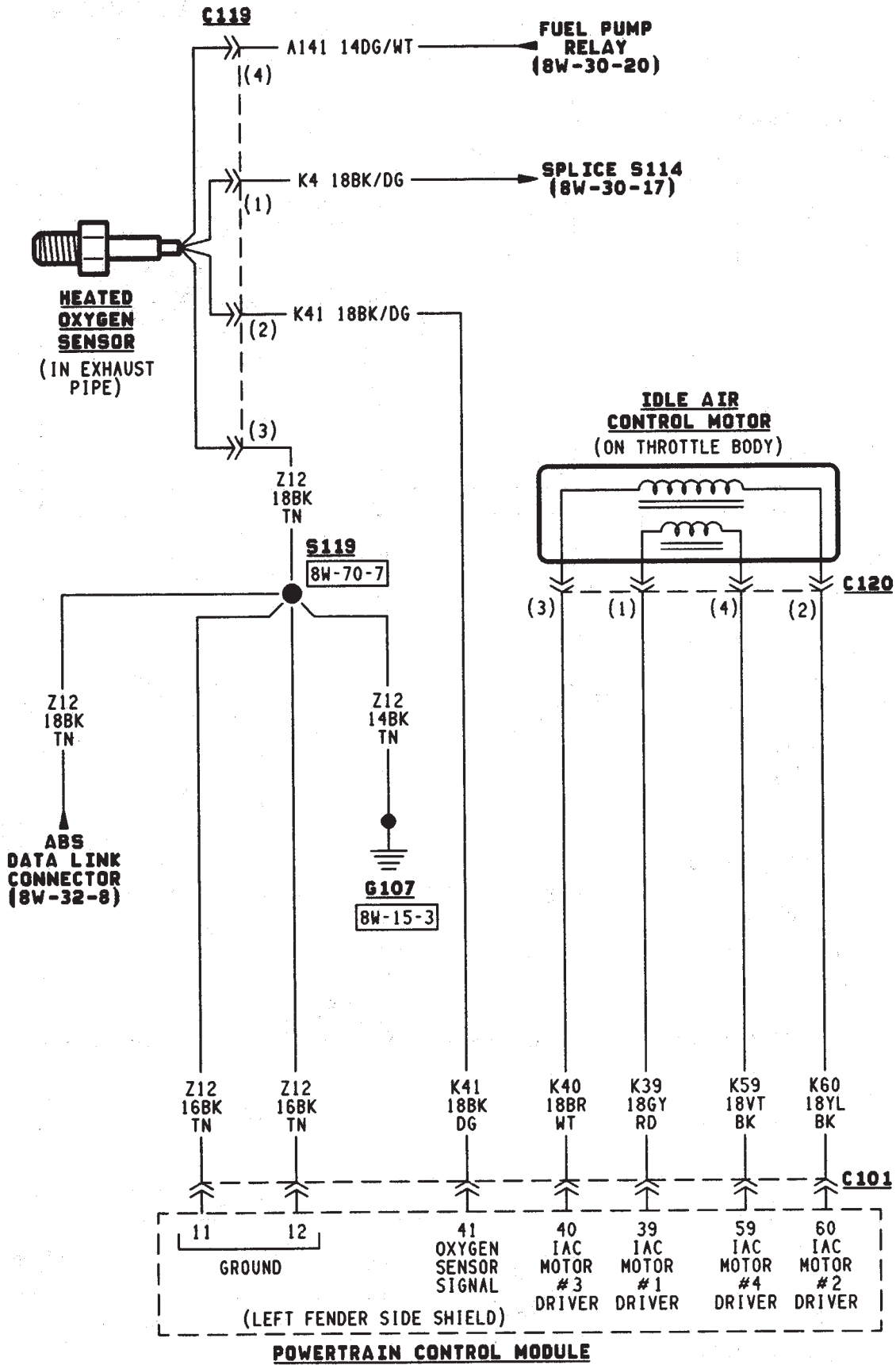
**POWERTRAIN
CONTROL
MODULE**

(LEFT FENDER SIDE SHIELD)



1995 Jeep Cherokee/Wrangler
Publication No. 81-370-5146
TSB 26-07-95 September, 1995

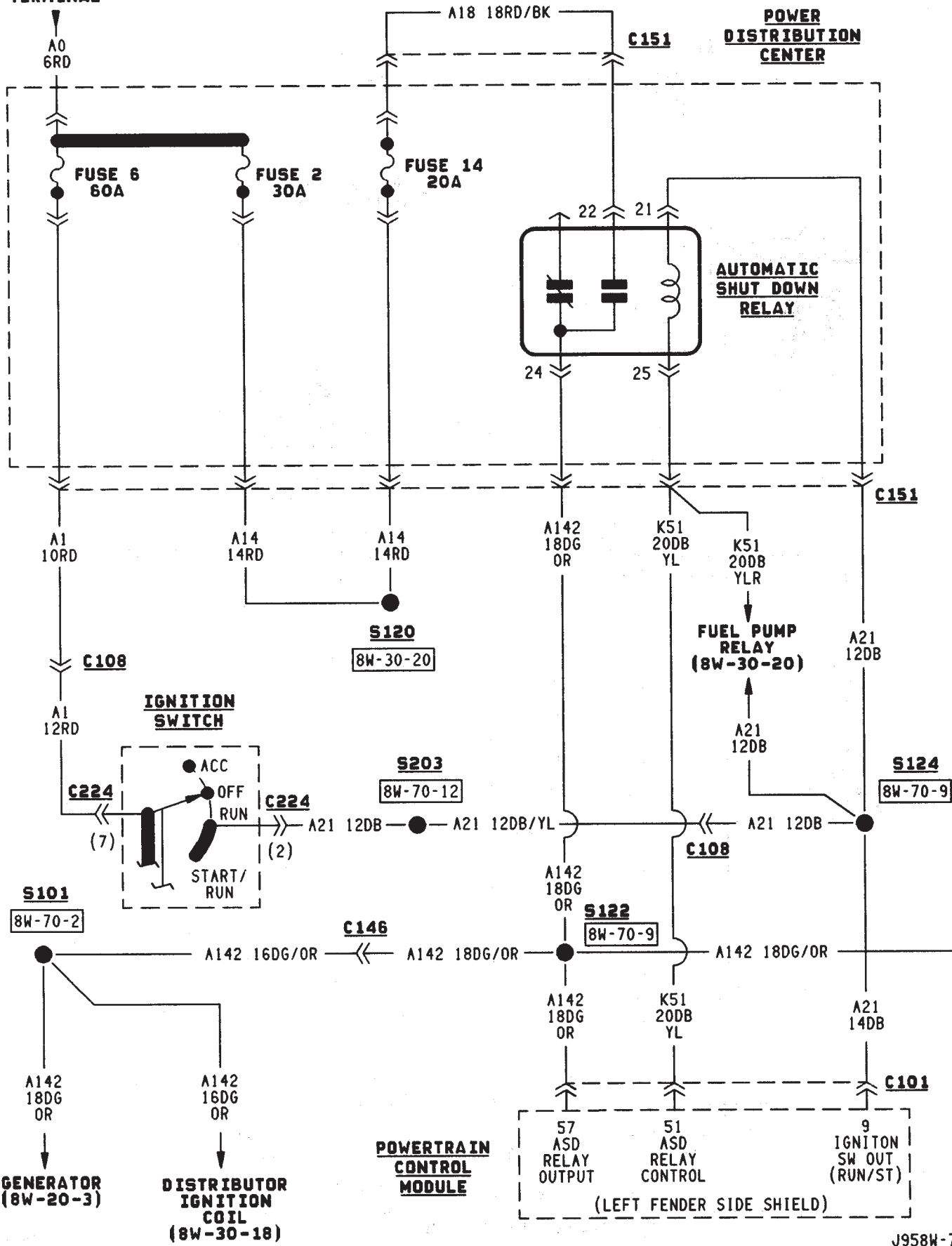


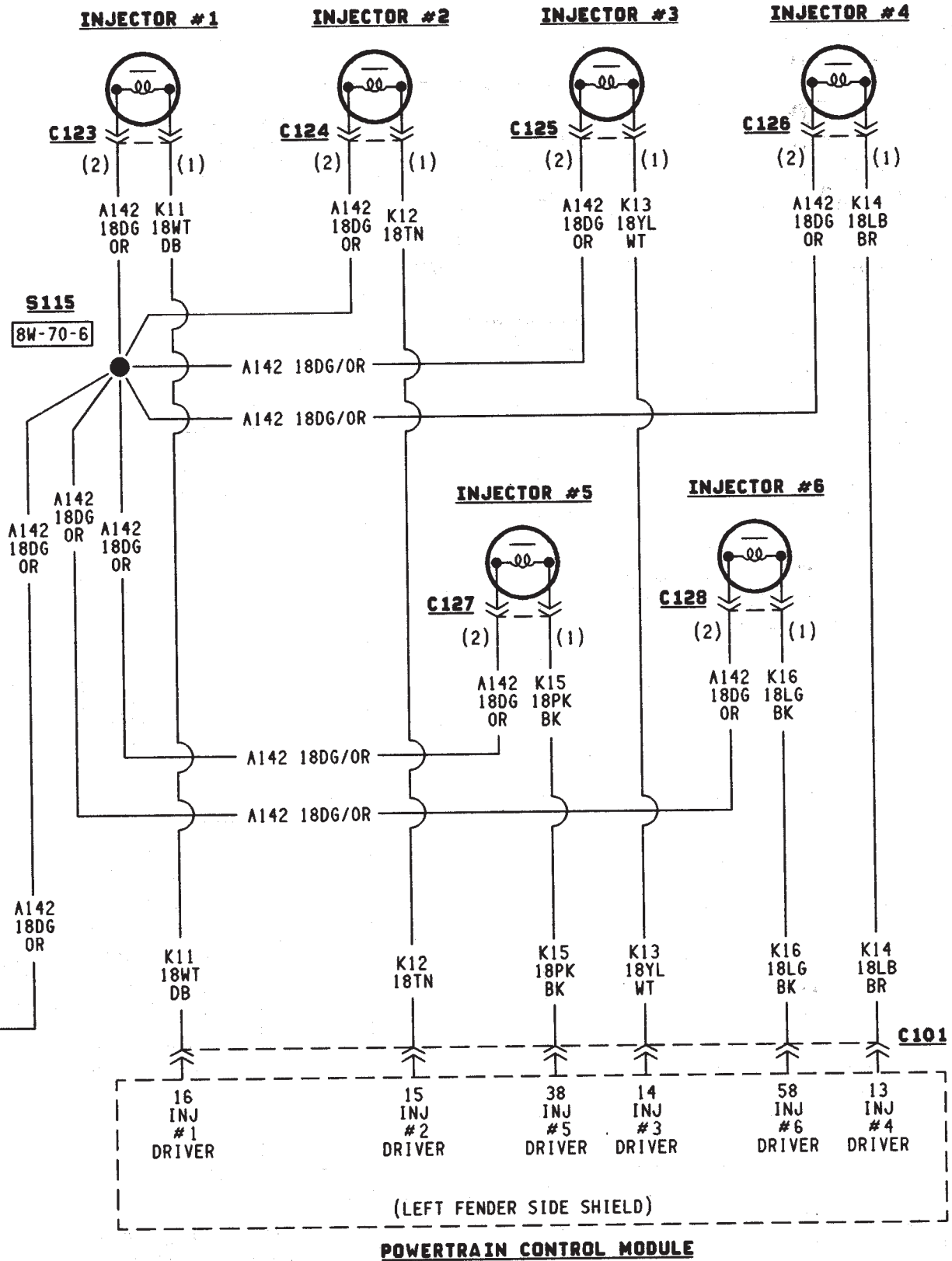


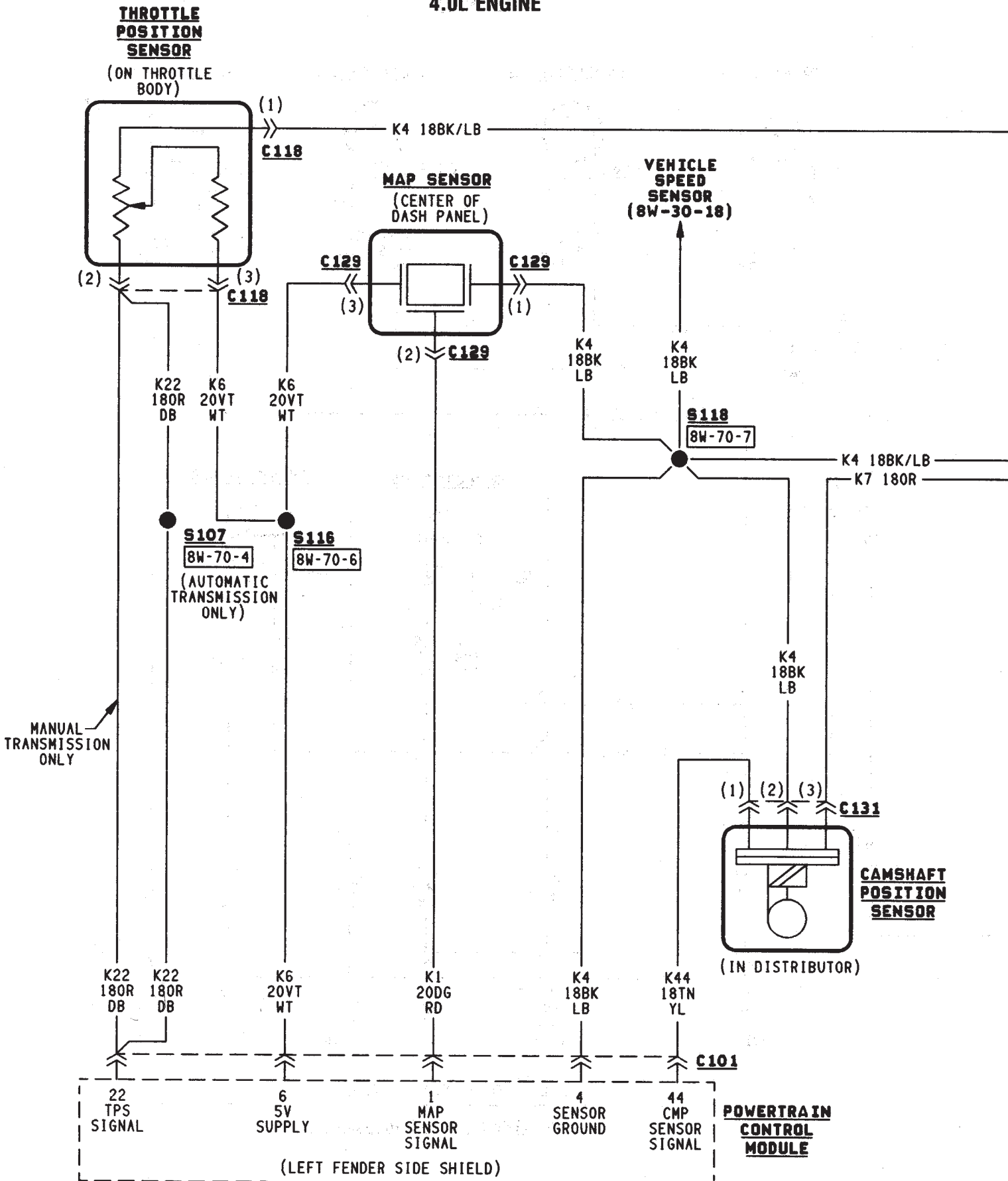
BATTERY
POSITIVE
TERMINAL

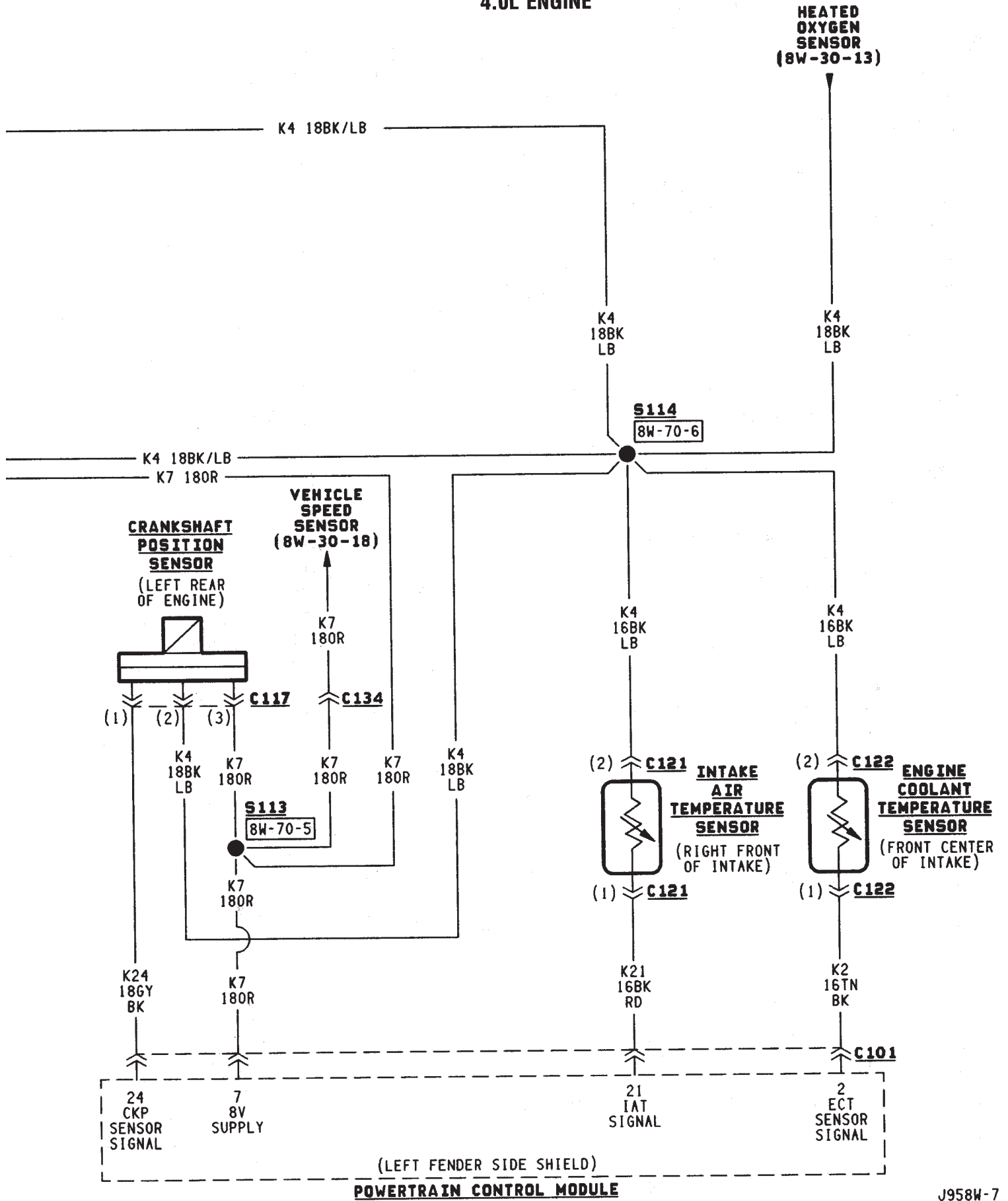
4.0L ENGINE

POWER
DISTRIBUTION
CENTER

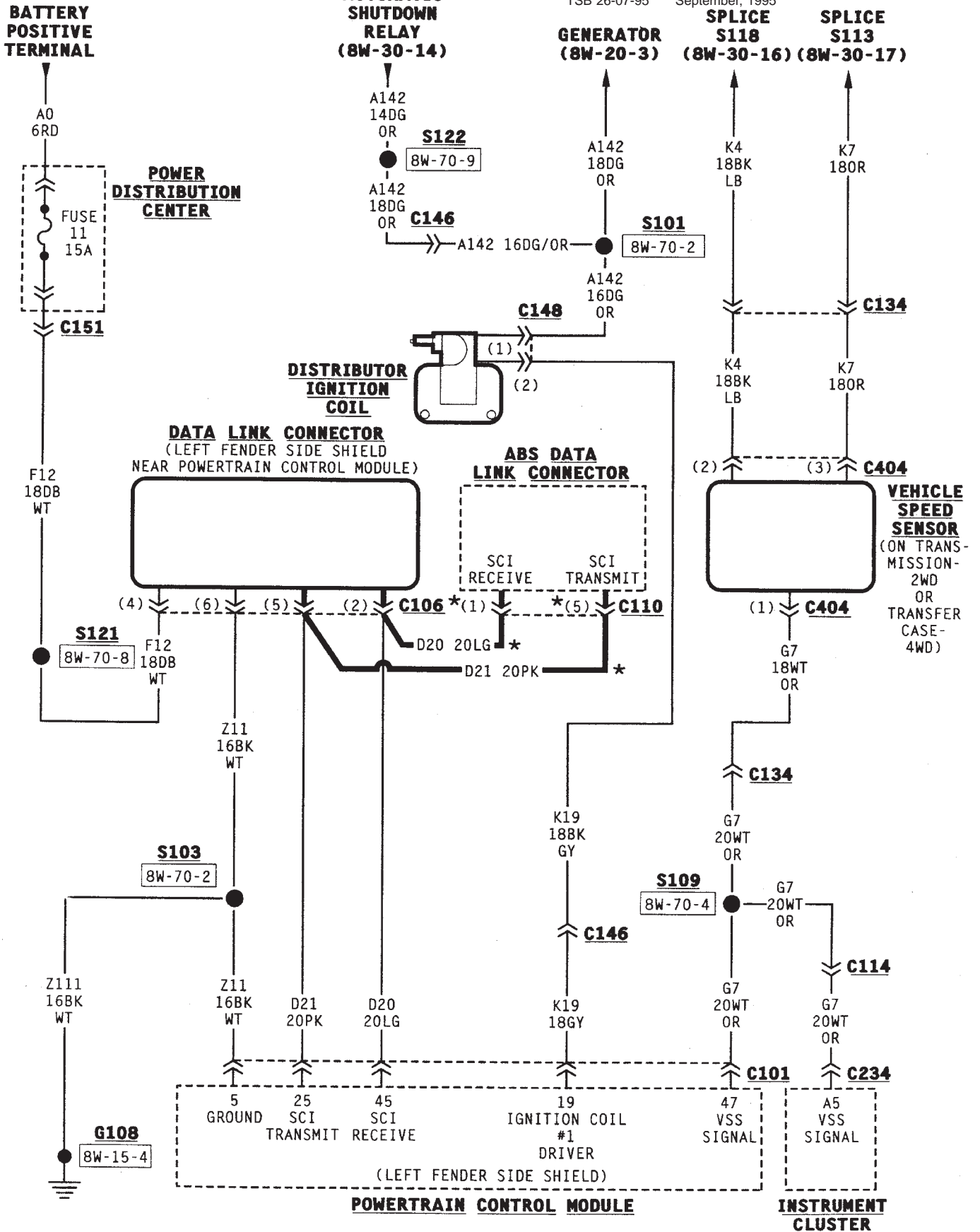


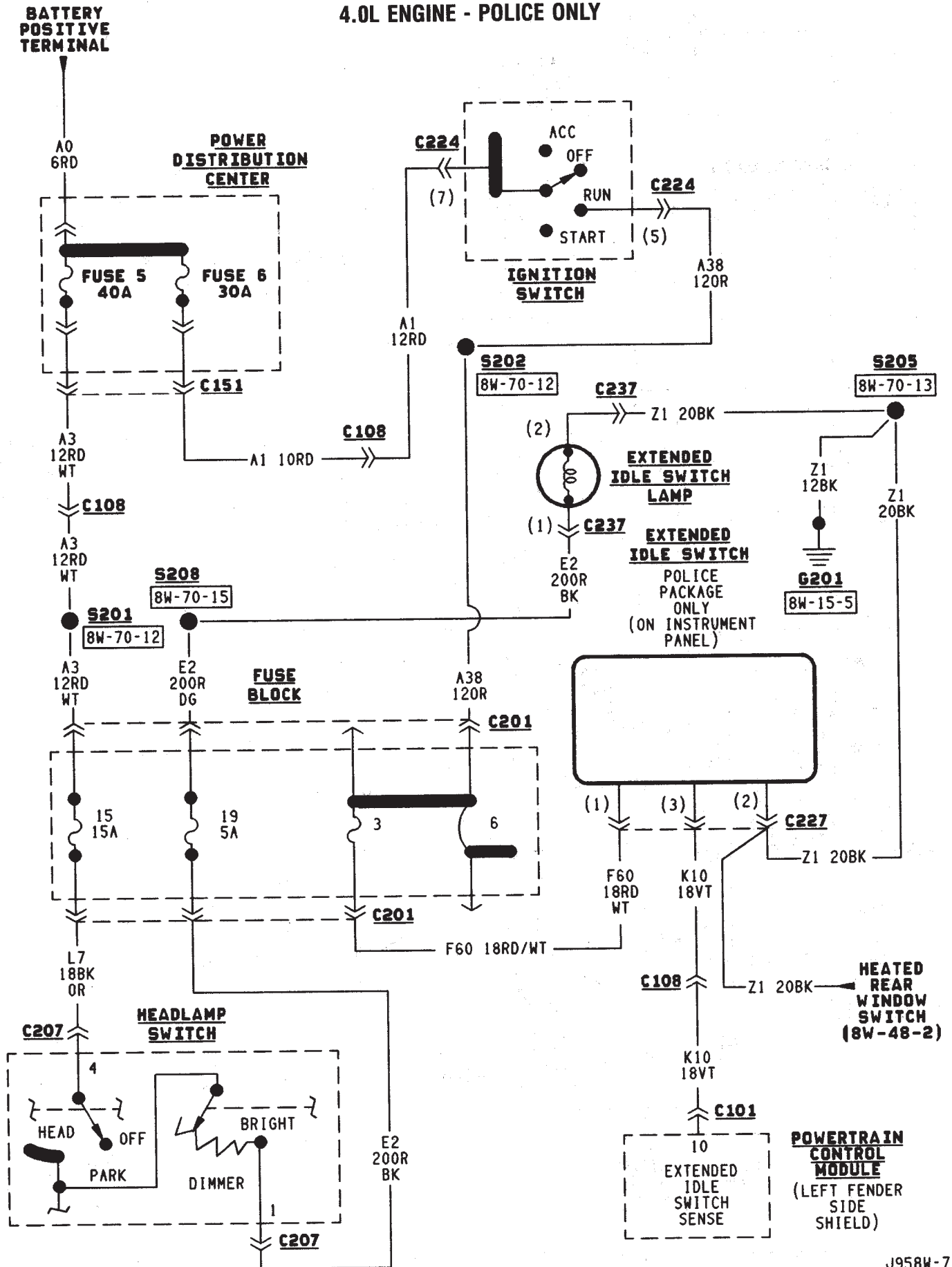




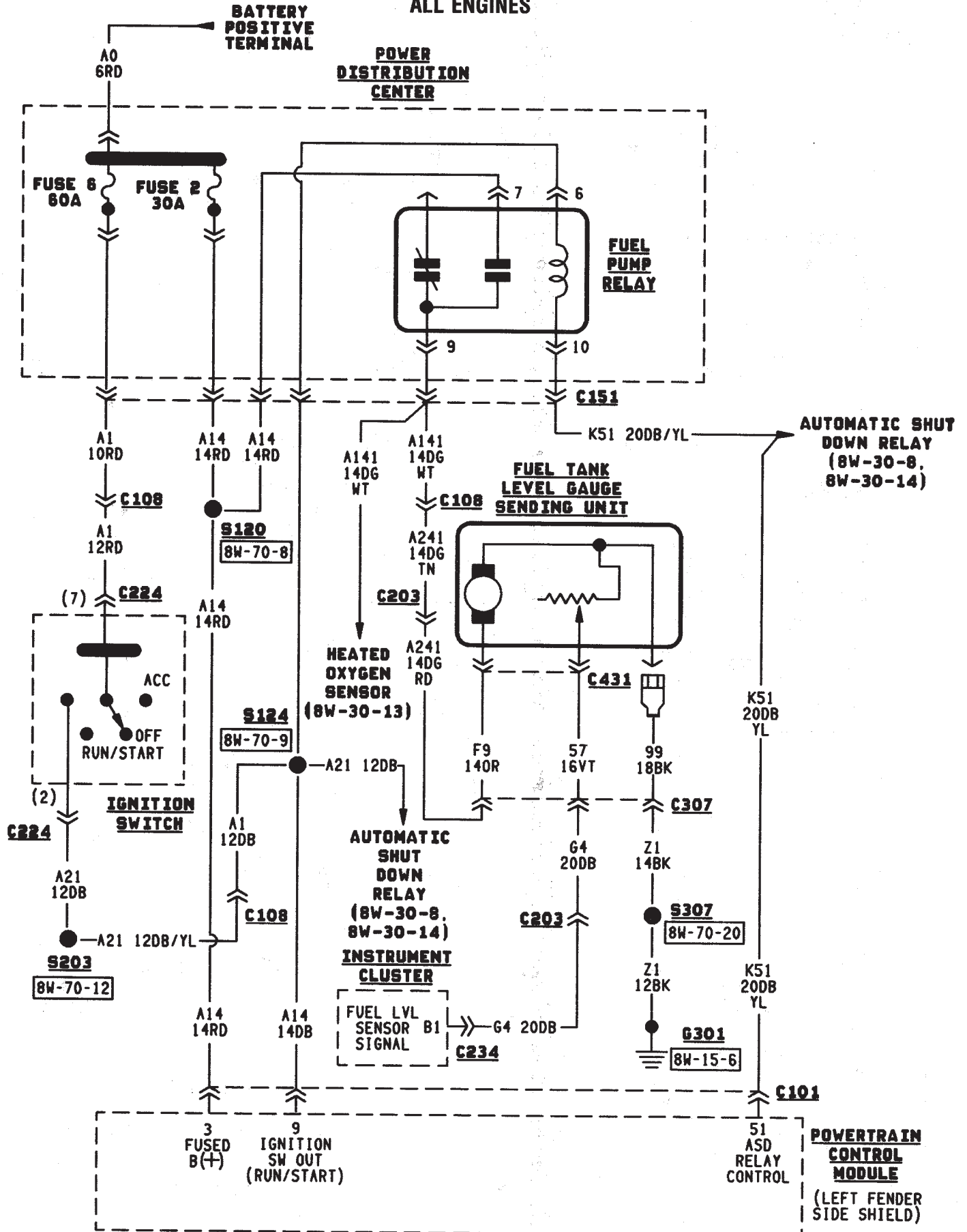


1995 Jeep Cherokee/Wrangler
Publication No. 81-370-5146
TSB 26-07-95 September, 1995





ALL ENGINES



TRANSMISSION CONTROLS

UPSHIFT LAMP

On vehicles equipped with a manual transmission, the PCM grounds the up-shift lamp on circuit K54. Circuit K54 connects to cavity 54 of the PCM.

FOUR-WHEEL DRIVE (4WD) SWITCH

When the 4WD switch closes, circuit Z1 provides ground for the 4WD indicator lamp in the instrument cluster. Circuit F87 connects to the instrument cluster and supplies battery voltage to the 4WD indicator lamp. Circuit 107 connects the indicator lamp to the 4WD switch. Circuit 106 connects the lamp to the instrument cluster and circuit F87.

TRANSMISSION CONTROL MODULE—4.0L ENGINE ONLY

Vehicles equipped with the 4.0L engine have electronically controlled solenoids in the automatic transmission valve body.

The Transmission Control Module (TCM) receives inputs from the Throttle Position Sensor (TPS) on circuit K22 and the stop lamp switch on circuit K29. Circuit K4 connects to the TCM to provide ground for the TPS signal. The TCM receives the transmission output speed sensor signal on circuit T505. Circuit A14 from fuse 2 in the Power Distribution Center supplies battery voltage to the TCM. Circuit Z12 provides ground for the TCM.

The TCM powers the S1 solenoid on circuit T510, the S2 solenoid on circuit T509, and the S3 solenoid on circuit T508. Circuit Z12 provides ground for the S1, S2, and S3 solenoids.

TORQUE CONVERTER CLUTCH (TCC) SOLENOID AND RELAY—2.5L ENGINE ONLY

The TCC solenoid is only used on 2.5L engines with the three-speed automatic transmissions. The Powertrain Control Module (PCM) operates the TCC solenoid by energizing the TCC relay.

Circuit T17 from fuse 12 in the Power Distribution Center (PDC) supplies voltage to the coil and contact sides of the TCC relay. When the PCM provides a ground path on circuit K54 for the coil side of the relay, the relay contacts close.

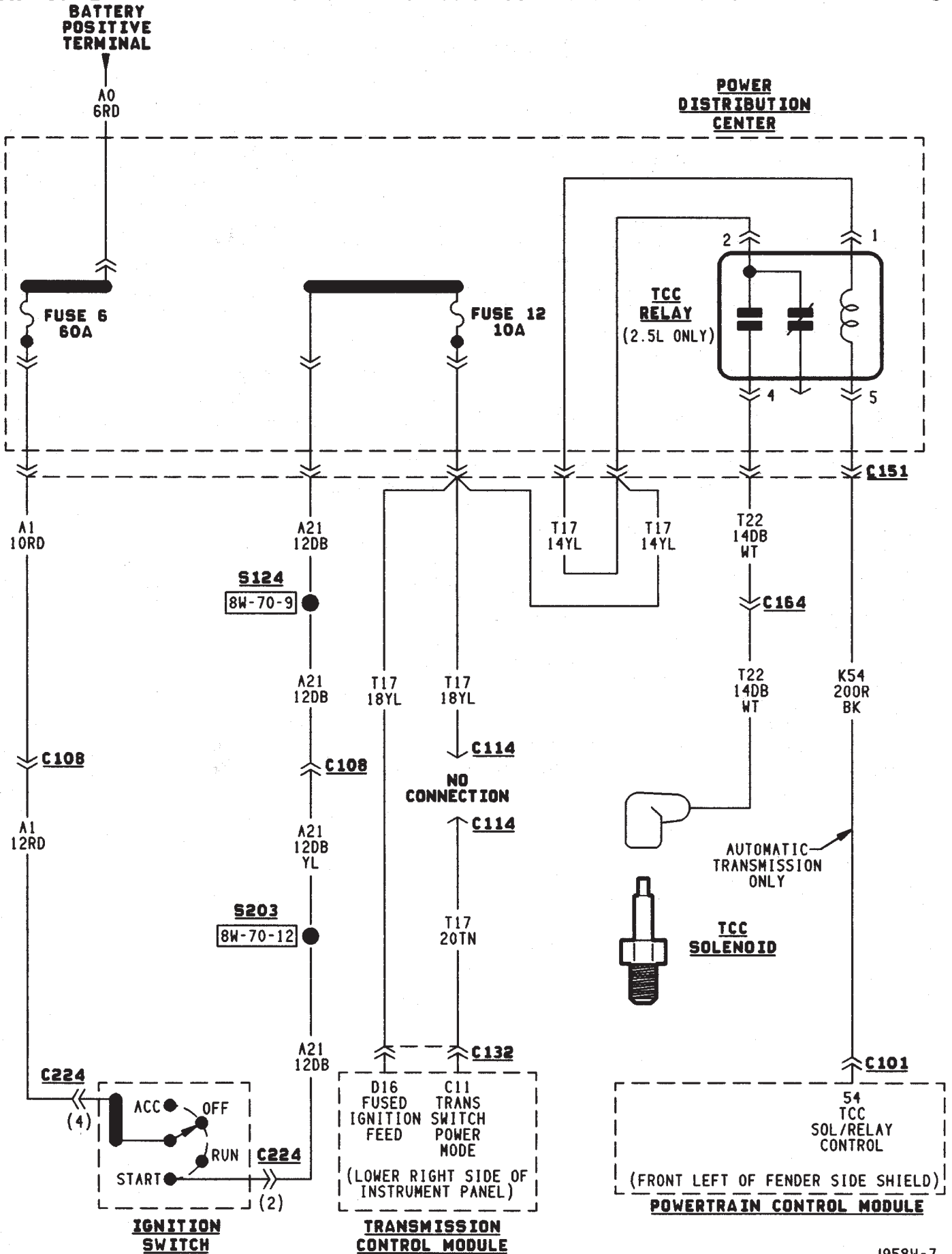
When the relay contacts close, they connect circuit T17 with circuit T22. Circuit T22 supplies battery voltage to the case grounded TCC solenoid. Circuit K54 connects to PCM cavity 54.

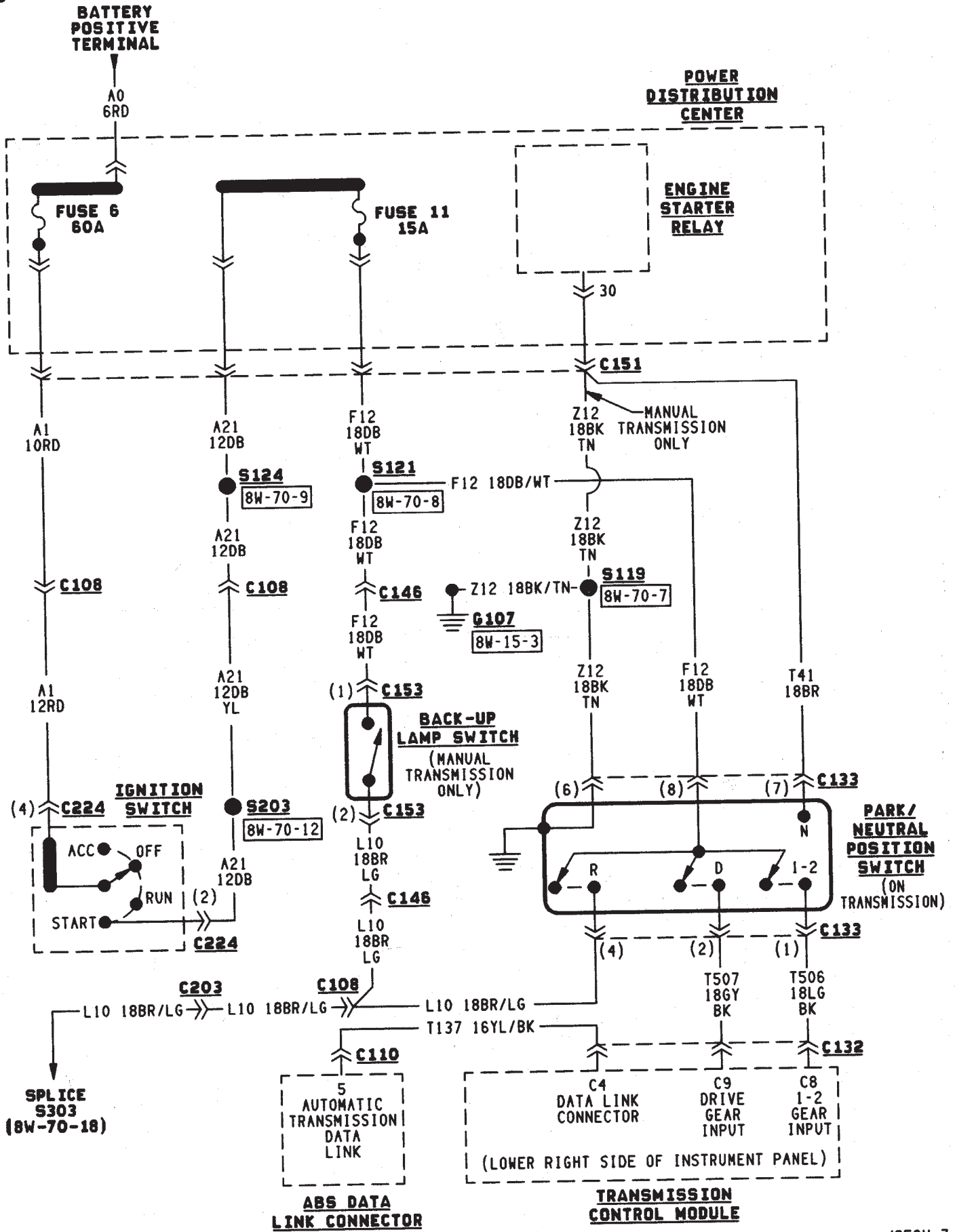
HELPFUL INFORMATION

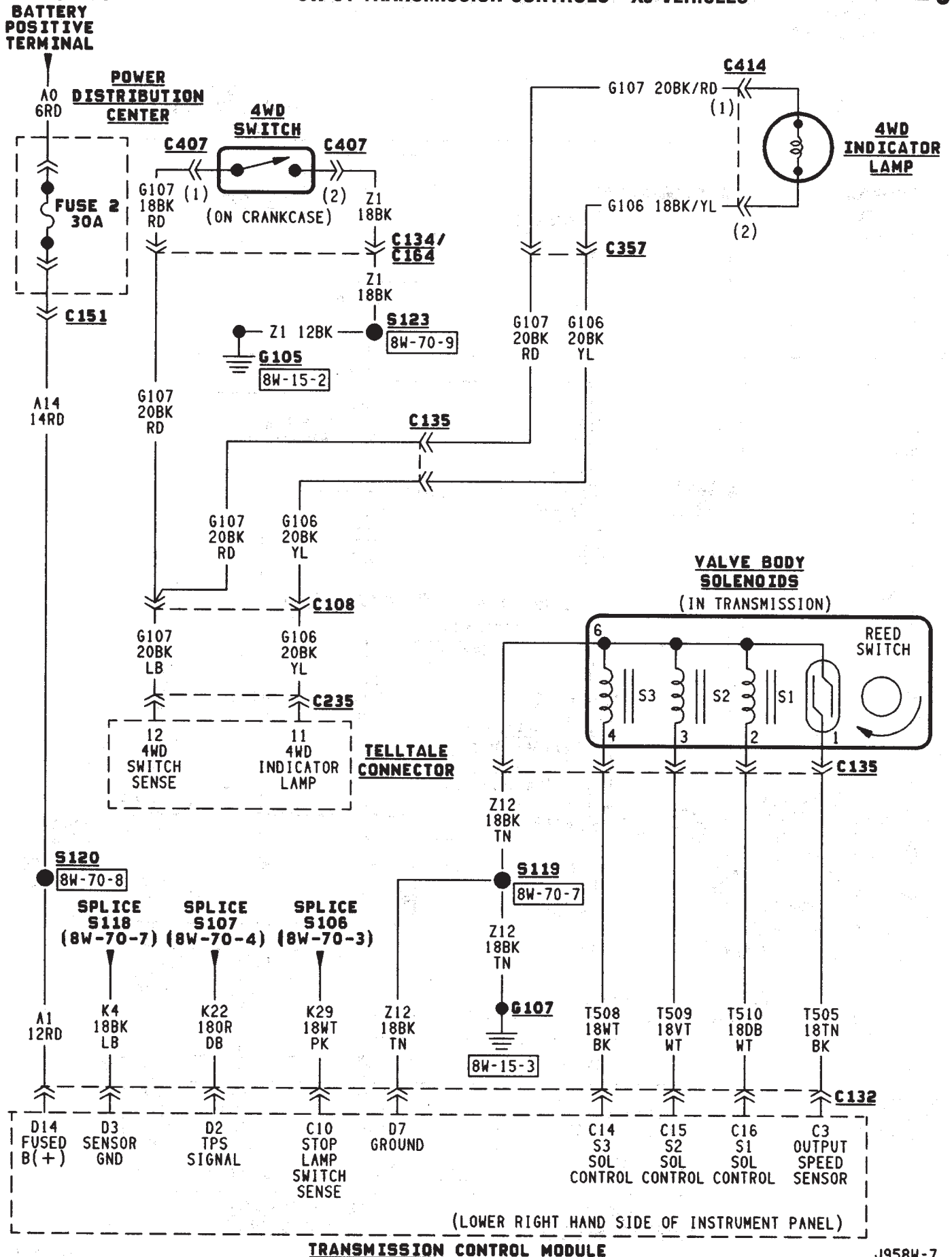
- In the RUN or START position, the ignition switch connects circuit A1 from fuse 6 in the PDC to circuit A21.

DIAGRAM INDEX

<u>Component</u>	<u>Page</u>
4-WD Indicator Lamp	8W-31-4
4-WD Indicator Switch	8W-31-4
Back-Up Lamp Switch	8W-31-3
Fuse 2 (PDC)	8W-31-4
Fuse 6 (PDC)	8W-31-2, 3
Fuse 11 (PDC)	8W-31-3
Fuse 12 (PDC)	8W-31-2
Ignition Switch	8W-31-2, 3
Powertrain Control Module	8W-31-2
Park/Neutral Position Switch	8W-31-3
TCC Relay	8W-31-2
TCC Solenoid	8W-31-2
Transmission Control Module	8W-31-2







ANTI-LOCK BRAKES

INDEX

	page		page
ABS Power Relay	1	Diagram Index	3
ABS Pump Motor Relay	1	General Information	1
ABS Warning Lamp	2	Hydraulic Control Unit	2
Acceleration Switch	1	Pump Motor Speed Sensor	2
Brake Switch Input	2	Wheel Speed Sensors	1
Data Link Connector	2		

GENERAL INFORMATION

Three fuses supply power for the Anti-Lock Brake System (ABS); fuses 8 and 10 in the Power Distribution Center (PDC) and fuse 7 in the fuse block. Fuses 8 and 10 in the PDC are connected directly to battery voltage and are HOT all times. Fuse 7 in the fuse block is HOT when the ignition switch is the RUN Position.

In the RUN position, the ignition switch connects circuit A1 from fuse 6 in the PDC with circuit A38. Circuit A38 connects to a bus bar in the fuse block. The bus bar feeds circuit B236 through fuse 7. Fuse 7 is a 2 amp fuse.

Circuit B236 connects to the coil side of the ABS power relay and cavity 53 of the ABS control module.

Circuit Z1 provides ground for the ABS control module. Circuit Z1 connects to cavities 1 and 19 of the ABS control module.

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 ABS control module. A pair of twisted wires connect to each sensor to provide signals to the ABS control module.

Circuits B6 and B7 provide signals to ABS control module from right front wheel speed sensor. Circuit B6 which provides the LOW signal connects to cavity 29 of the ABS control module. Circuit B7 connects to cavity 47 of the module and provides the HIGH signal.

Circuits B8 and B9 provide signals to ABS control module from left front wheel speed sensor. Circuit B8, which provides the LOW signal, connects to cavity 30 of the ABS control module. Circuit B9 connects to cavity 48 of the module and provides the HIGH signal.

Circuits B1 and B2 provide signals to ABS control module from right rear wheel speed sensor. Circuit B1 which provides the LOW signal connects to cavity

45 of the ABS control module. Circuit B2 connects to cavity 27 of the module and provides the HIGH signal.

Circuits B4 and B3 provide signals to ABS control module from left rear wheel speed sensor. Circuit B3, which provides the LOW signal, connects to cavity 28 of the ABS control module. Circuit B4 connects to cavity 46 of the module and provides the HIGH signal.

ACCELERATION SWITCH

During four-wheel drive operation, the acceleration (G) switch provides deceleration data to the ABS control module. Refer to Group 5, Brakes for additional information.

Circuits B515, B516, and B517 connect the acceleration sensor to the ABS control module. Circuits B515 and B516 provide switch states while circuit B517 provides ground. At the ABS control module circuit B515 connects to cavity 25, circuit B516 connects to cavity 43 and circuit B517 connects to cavity 26.

ABS POWER RELAY

The ABS power relay is located in the power distribution center (PDC). When the ABS module grounds the ABS power relay on circuit B207, the relay switches to connect circuit A20 from PDC fuse 10 to circuit B235. Circuit B236 from fuse 7 in the fuse block splices to feed the coil side of the ABS power relay. Circuit B207 connects to cavity 34 of the ABS control module.

Circuit B235 is double crimped at the ABS power relay. One branch of circuit B235 supplies power to the coil side of the ABS pump motor relay. The other branch of circuit B235 splices to cavities 3 and 33 of the ABS control module and to the hydraulic control unit.

ABS PUMP MOTOR RELAY

The ABS pump motor relay in the power distribution center (PDC) supplies voltage to the ABS pump motor. When the ABS power relay energizes, circuit B235 supplies battery voltage to the coil side of the

ABS pump motor relay. The ABS control module provides ground for the relay on circuit B116. Circuit B116 connects to cavity 15 of the ABS control module.

When the ABS pump motor energizes, it connects circuit A10 from PDC fuse 8 to circuit B233. Circuit B233 supplies battery voltage to the pump motor. Circuit Z12 provides ground for the pump motor.

PUMP MOTOR SPEED SENSOR

The input from the pump motor speed sensor tells the ABS control module that the pump is operating. Circuits B219 and B220 from the control module connect to the speed sensor.

BRAKE SWITCH INPUT

Circuit L50 from the stop lamp provides the brake switch input to the ABS control module. When the brake pedal is depressed, the stop lamp switch closes to supply battery voltage from circuit L9 to circuit L50. Circuit L50 connects to cavity 32 of the ABS control module. Circuit L9 originates at fuse 4 in the Power Distribution Center (PDC).

HYDRAULIC CONTROL UNIT

When the ABS power relay energizes, two branches of circuit B235 splice to supply voltage to the isolation and dump solenoids in the hydraulic control unit. The hydraulic control unit contains three separate isolation solenoids and three separate dump solenoids. The ABS control module activates the decay and isolation solenoids by providing separate ground paths for each.

The ABS module provides a ground path for the rear isolation solenoid on circuit B251. Circuit B251 connects to cavity 54 of the ABS control module.

For the right front isolation solenoid, the ABS module provides a ground path on circuit B249. Circuit B249 connects to cavity 38 of the ABS control module.

On circuit B245, the ABS module provides ground for the left front isolation solenoid. Circuit B245 connects to cavity 20 of the ABS control module.

The ABS module provides a ground path for the rear decay solenoid on circuit B254. Circuit B254 connects to cavity 36 of the ABS control module.

For the right front decay solenoid, the ABS module provides a ground path on circuit B248. Circuit B248 connects to cavity 21 of the ABS control module.

On circuit B243, the ABS module provides ground for the left decay solenoid. Circuit B243 connects to cavity 2 of the ABS control module.

ABS WARNING LAMP

Circuit F87 provides power for the ABS warning lamp at the instrument cluster. Ground for the ABS warning lamp is provided by either the ABS control module or by the ABS power relay when the relay is not energized. The ABS control module illuminates the lamp by providing ground on circuit B205.

Circuit B205 splices to connect to circuit B235 through a diode. When the ABS power relay is not energized, it connects circuit B235 to circuit Z12. The ground path for the warning lamp is through the diode to circuit B235, through the ABS power relay to ground on circuit Z12.

The diode between circuit B205 and B235 prevents voltage from flowing to the ABS control module when the ABS power relay switches to supply power on circuit B235.

DATA LINK CONNECTOR

Circuit D1 from cavity 23 of the ABS control module receives data from the DRB scan tool through the data link connector. The ABS control module transmits data to the scan tool through the connector on circuit D2. Circuit D2 originates at cavity 42 of the ABS control module.

Through the data link connector, circuit Z12 provides ground for the DRB scan tool.

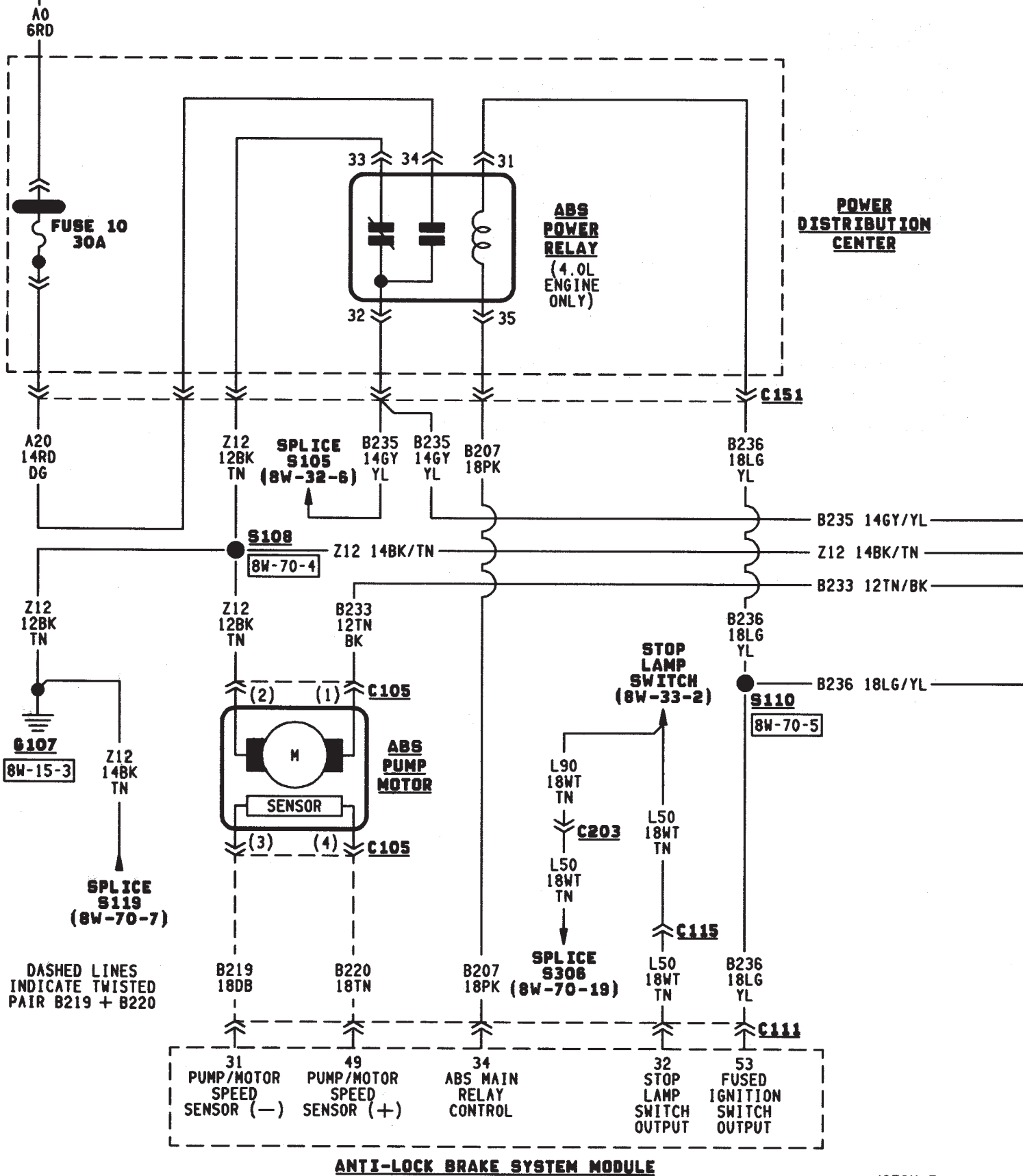
Circuit A4 from fuse 10 in the Power Distribution Center (PDC) supplies power to fuse 5 in the PDC. Fuse 5 powers circuit F39 which supplies battery voltage to the scan tool through the diagnostic connector.

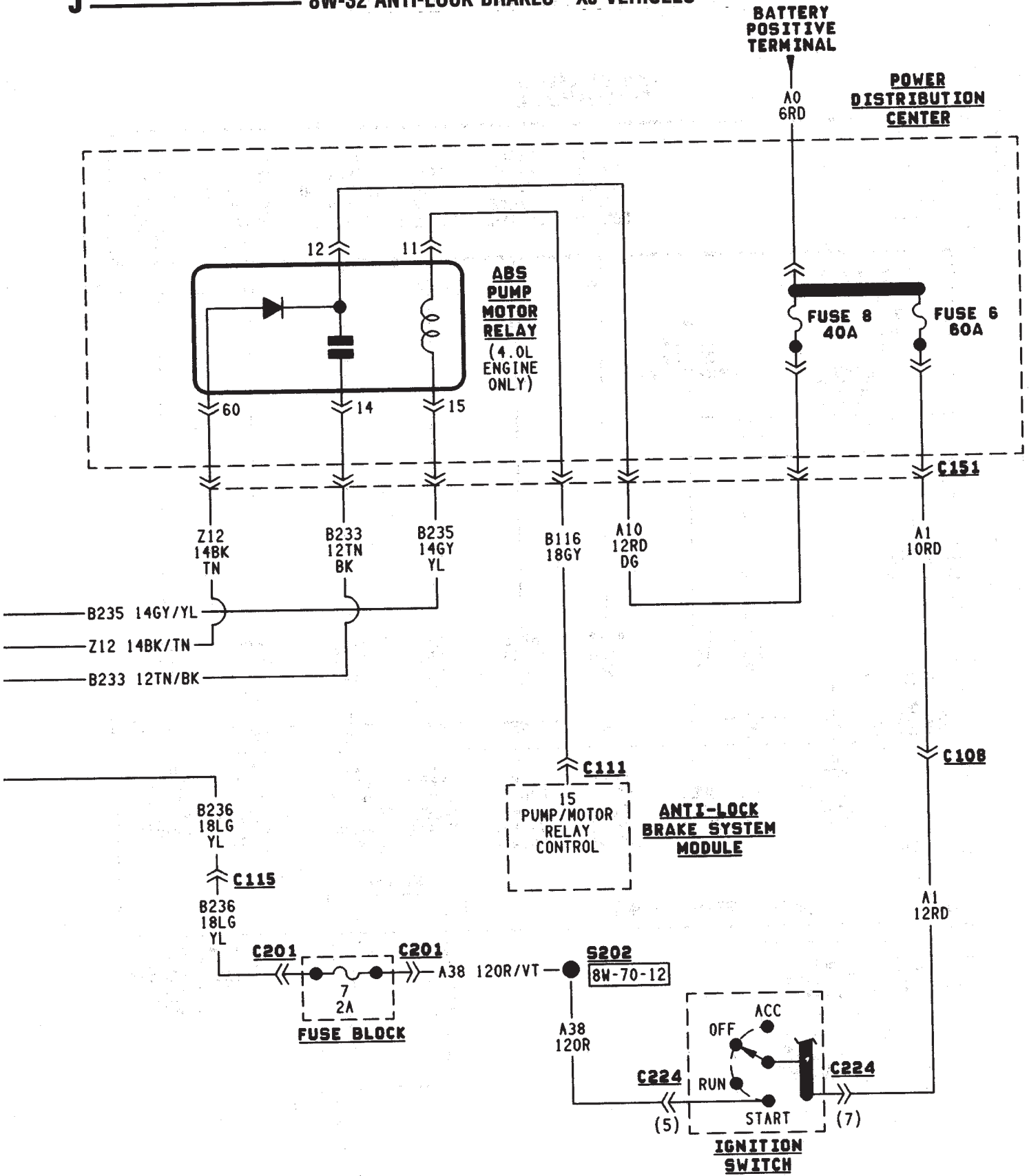
HELPFUL INFORMATION

- Check fuses 10 and 5 in the PDC.
- If the vehicle is equipped with an automatic transmission, circuits D1 and D2 are double crimped at the data link connector and connect to the Powertrain Control Module (PCM).

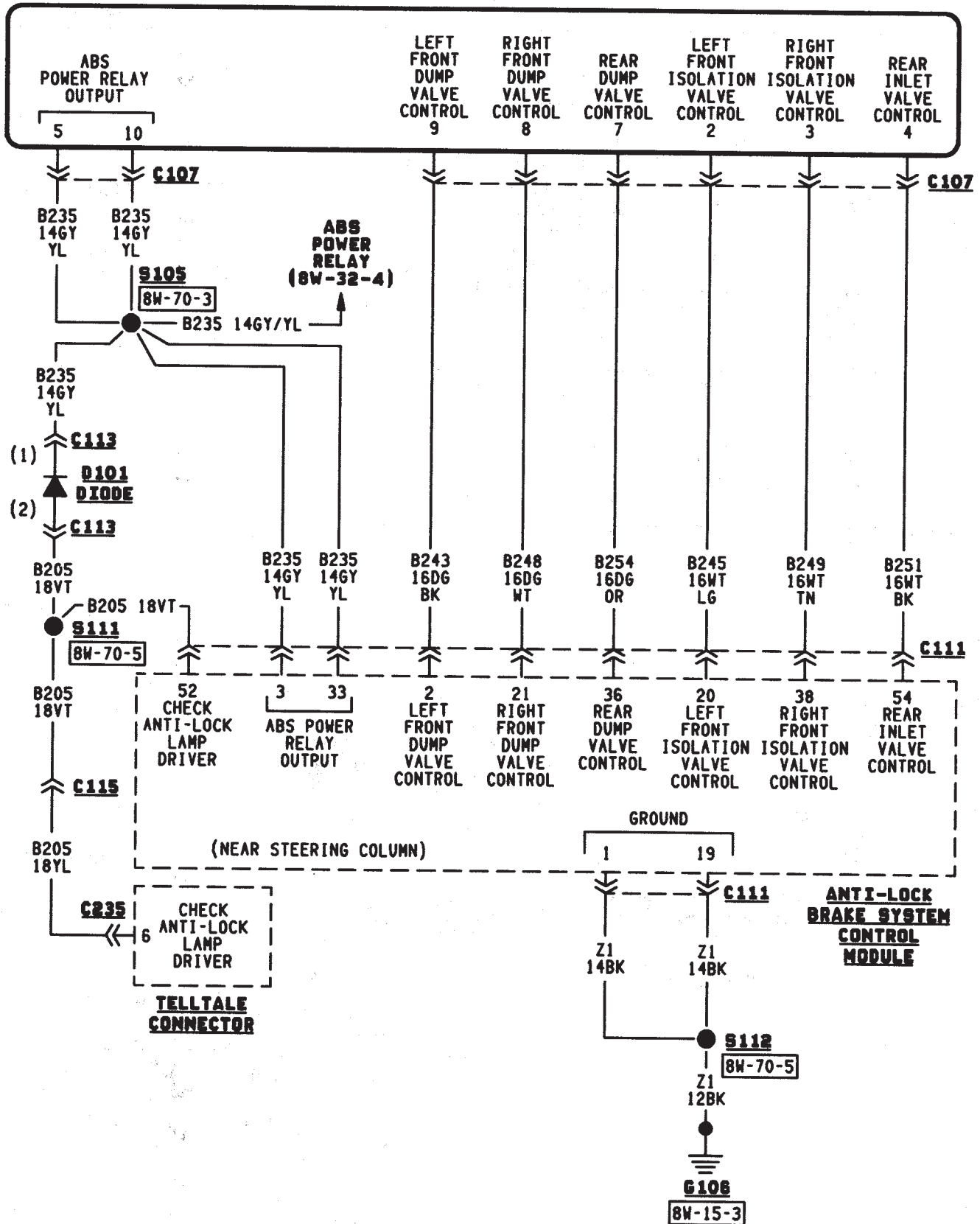
DIAGRAM INDEX

<u>Component</u>	<u>Page</u>
ABS Control Module . . . . .	.8W-32-4 thru 8
ABS Hydraulic Unit . . . . .	.8W-32-6
ABS Power Relay . . . . .	.8W-32-4
ABS Pump Motor . . . . .	.8W-32-5
ABS Pump Motor Relay . . . . .	.8W-32-4
Data Link Connector . . . . .	.8W-32-8
Diode . . . . .	.8W-32-6
Fuse 6 (PDC) . . . . .	.8W-32-5
Fuse 7 (Fuse Block) . . . . .	.8W-32-5
Fuse 7 (PDC) . . . . .	.8W-32-8
Fuse 8 (PDC) . . . . .	.8W-32-5
Fuse 10 (PDC) . . . . .	.8W-32-4
Fuse 13 (PDC) . . . . .	.8W-32-8
G-Sensor . . . . .	.8W-32-8
Ignition Switch . . . . .	.8W-32-5
Powertrain Control Module . . . . .	.8W-32-8
Telltale Connector (Instrument Cluster) . . . . .	.8W-32-6
Transmission Control Module . . . . .	.8W-32-8
Wheel Speed Sensors . . . . .	.8W-32-7

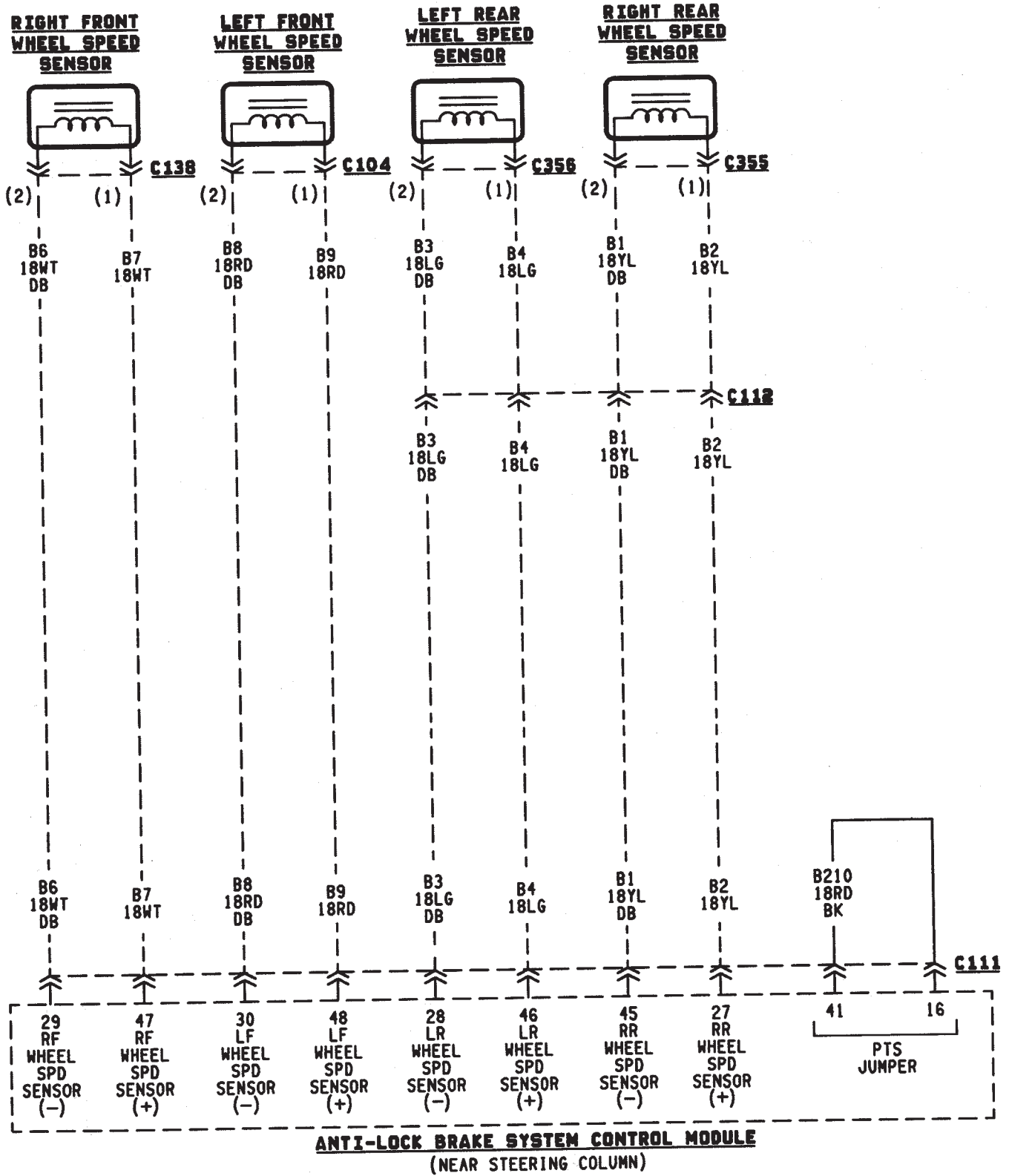




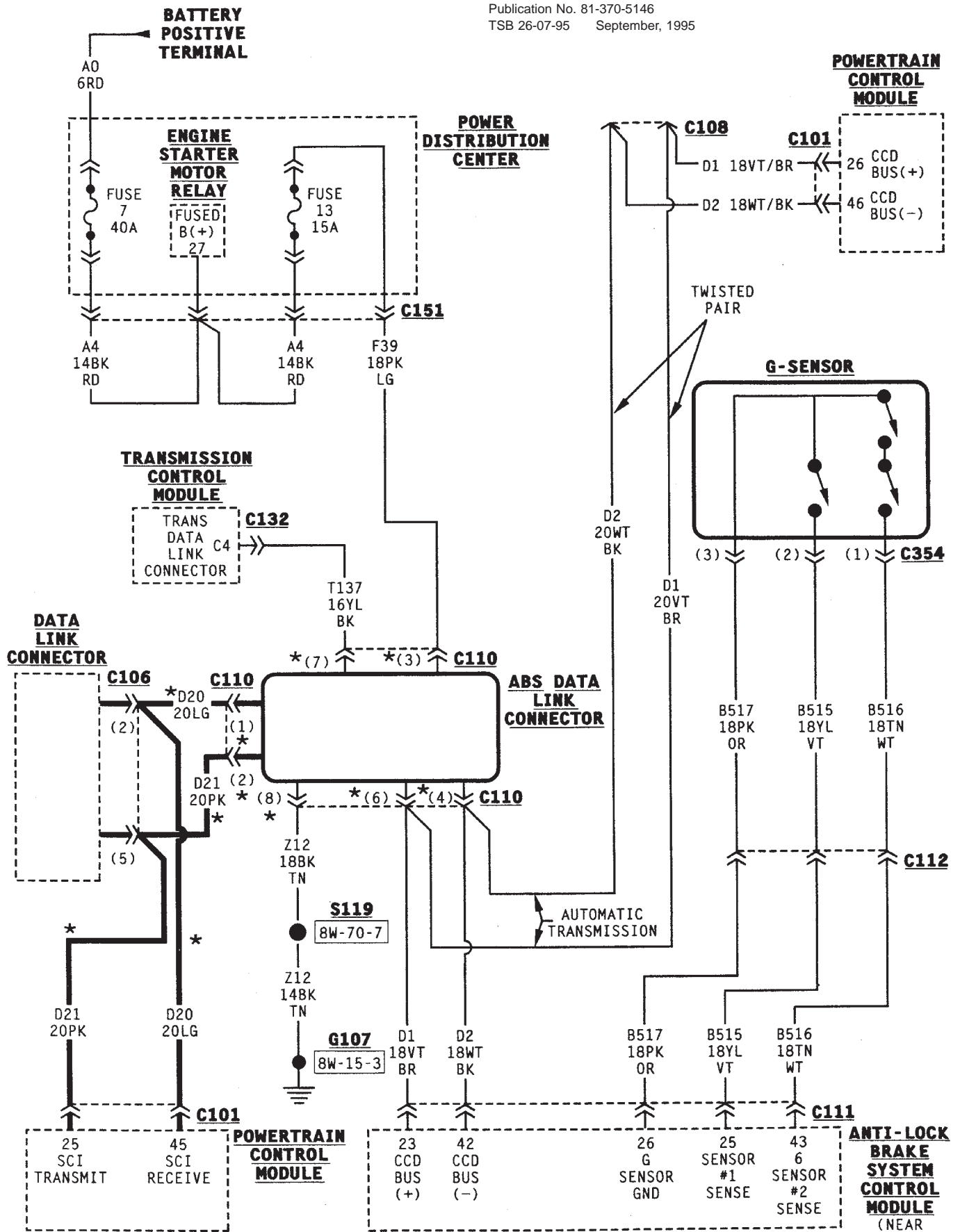
ABS HYDRAULIC ACTUATION UNIT



DASHED LINES INDICATE TWISTED PAIRS
B1+B2, B3+B4, B6+B7, B8+B9



1995 Jeep Cherokee/Wrangler
Publication No. 81-370-5146
TSB 26-07-95 September, 1995



VEHICLE SPEED CONTROL

VEHICLE SPEED CONTROL

The vehicle speed control system is operated by the Powertrain Control Module (PCM). Circuit F12 from fuse 11 in the Power Distribution Center (PDC) supplies battery voltage to the vehicle speed control ON/OFF switch. Circuit A21 supplies voltage to fuse 11 when the ignition switch is in the START or RUN positions. In the START or RUN position the ignition switch connects circuit A21 with circuit A1. Fuse 6 in the PDC protects circuit A1.

The vehicle speed control ON/OFF switch supplies voltage to the SET/COAST and RESUME/ACCEL switches. Both switches send signals to the PCM (which supplies the ground path for the switches).

The PCM controls the vent and vacuum functions of the speed control servo on circuits V35 and V36. Depending on the signal it receives from the vehicle speed control switches, the PCM either applies vacuum to, or vents vacuum from, the servo. Circuit V36 from cavity 33 of the PCM sends the vacuum signal to the servo. Circuit V35 from cavity 53 sends the vent signal.

Circuit V32 signals to the PCM that the speed control switch is in the ON position. The V32 circuit connects to cavity 49 of the PCM. Circuit V32 also connects to the stop lamp switch.

In the CLOSED position, the stop lamp switch connects circuit V32 with circuit V30 to power the speed control servo. Circuit Z1 provides ground for the speed control servo.

Circuit V31 provides the SET/COAST signal to cavity 48 of the PCM. Circuit V33 sends the RESUME/ACCEL signal to cavity 50 of the PCM.

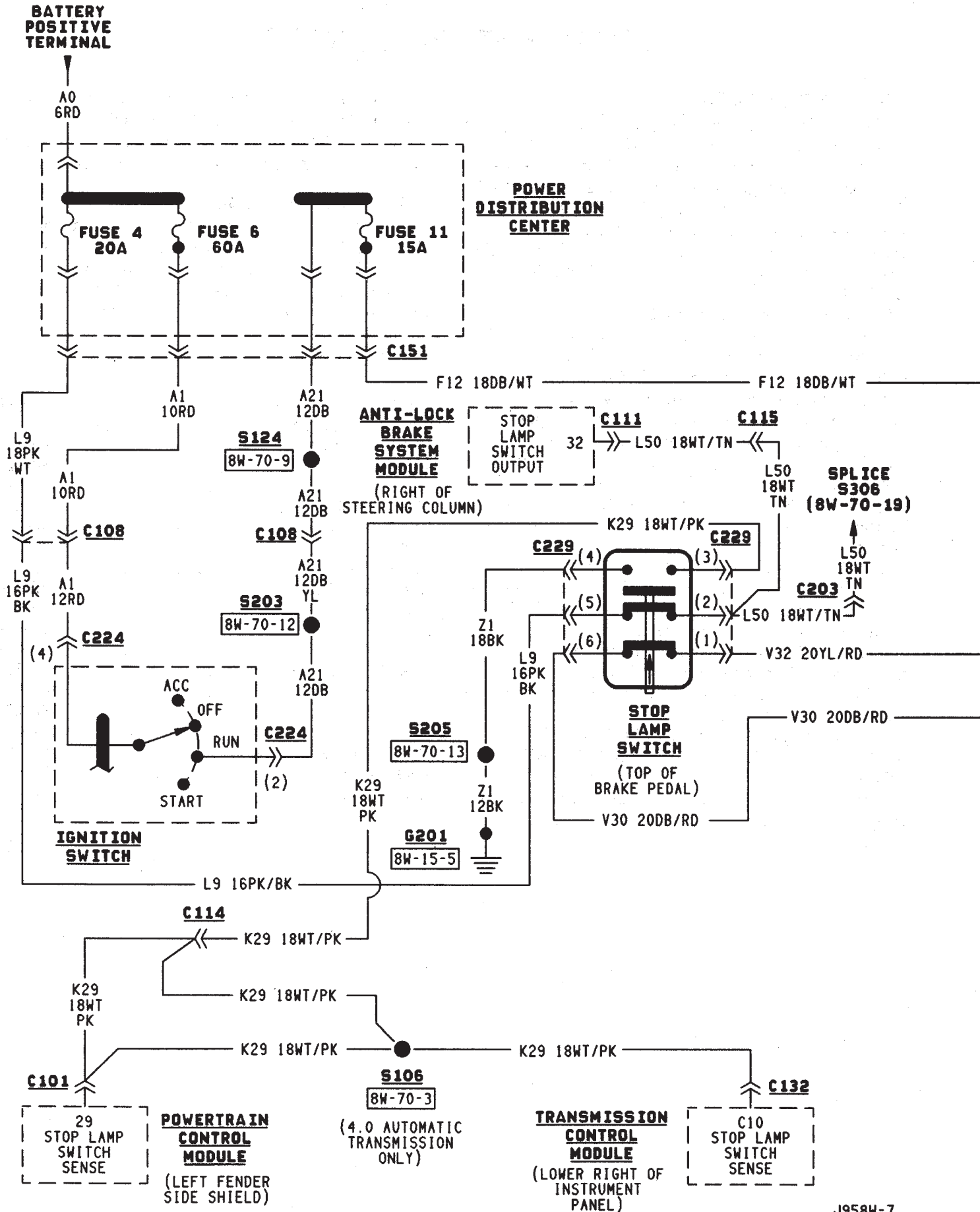
Circuit K29 connects to cavity 29 of the PCM and to ground through the stop lamp switch. The stop lamp switch OPENS when the operator depresses the brake pedal. The PCM disables speed control when the stop lamp switch opens. From the stop lamp switch, circuit Z1 provides ground for circuit K29.

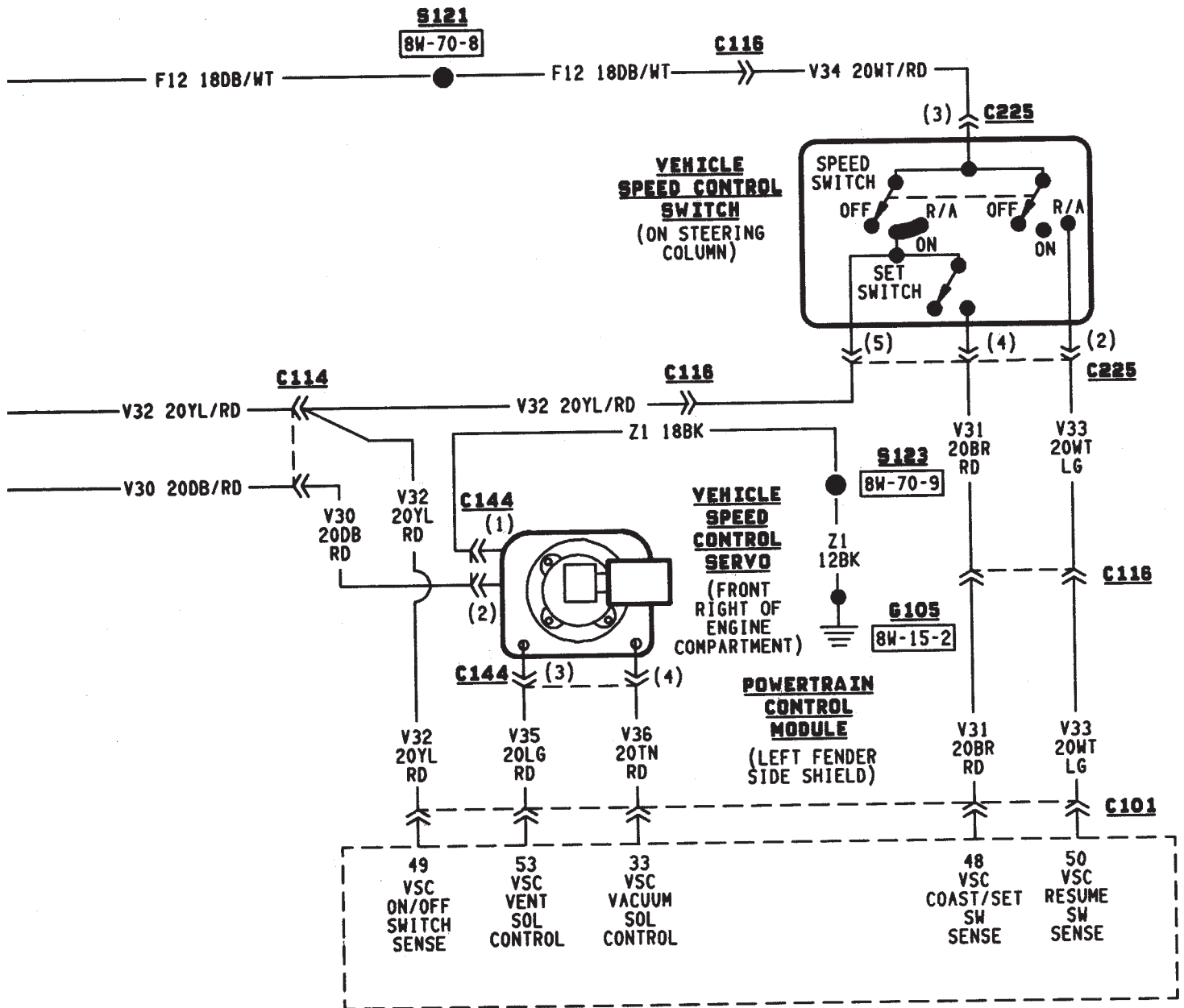
HELPFUL INFORMATION

- Circuit K29 also connects to the ABS control module on vehicles with all wheel anti-lock brakes.
- On vehicles with the 4.0L Engine and Automatic Transmission, Circuit K29 connects to the Transmission Control Module (TCM).

DIAGRAM INDEX

<u>Component</u>	<u>Page</u>
ABS Control Module	8W-32-4 thru 8
ABS Hydraulic Unit	8W-32-6
ABS Power Relay	8W-32-4
ABS Pump Motor	8W-32-5
ABS Pump Motor Relay	8W-32-4
Data Link Connector	8W-32-8
Diode	8W-32-6
Fuse 6 (PDC)	8W-32-5
Fuse 7 (Fuse Block)	8W-32-5
Fuse 7 (PDC)	8W-32-8
Fuse 8 (PDC)	8W-32-5
Fuse 10 (PDC)	8W-32-4
Fuse 13 (PDC)	8W-32-8
G-Sensor	8W-32-8
Ignition Switch	8W-32-5
Powertrain Control Module	8W-32-8
Telltale Connector (Instrument Cluster)	8W-32-6
Transmission Control Module	8W-32-8
Wheel Speed Sensors	8W-32-7





INSTRUMENT CLUSTER

INDEX

	page		page
ABS Warning Lamp	2	Low Fuel Warning Lamp	1
Brake Warning Lamp	2	Low Washer Fluid Warning Lamp	2
Charging System Indicator Lamp	3	Malfunction Indicator Lamp (MIL)	2
Cluster Ground	3	Manual Transmission Up-Shift Lamp	2
Diagram Index	3	Oil Pressure Gauge	2
Engine Coolant Temperature Gauge	1	Oil Pressure Warning Lamp	2
Engine Coolant Temperature Warning Lamp	1	Seat Belt Indicator Warning Lamp	2
Fuel Gauge	1	Speedometer	2
High-Beam Indicator Lamp	2	Tachometer	2
Instrument Cluster	1	Turn Signal Indicator Lamps	2

INSTRUMENT CLUSTER

The instrument cluster contains the gauges and warning lamps. All gauges have magnetic movements.

When the ignition switch is in the START or RUN position, circuit A21 feeds circuit F87 through fuse 17 in the fuse block. Circuit A1 from fuse 6 in the Power Distribution Center (PDC) supplies voltage to circuit A21. Circuit A1 is HOT at all times.

Circuit F87 connects to the cluster connector to power the gauges and to the telltale connector to power the warning lamps.

Circuit E2 from fuse 19 in the fuse block feeds the illumination lamps. Circuit E2 originates at the headlamp switch and continues through fuse 19. The headlamp switch powers circuit E2 when the parking lamps or headlamp are ON.

Circuit Z2 provides ground for the indicator lamps and illumination lamps.

ENGINE COOLANT TEMPERATURE GAUGE

Circuit G20 connects the engine coolant temperature gauge to the engine coolant temperature sensor. The sensor is a variable resistor and case grounded to the engine. Circuit F87 connects to the instrument cluster left connector and supplies voltage for the gauge.

The gauge uses two coils. Current passing through the coils creates a magnetic field. Position of the gauge needle is controlled by the amount of current passing through the coils to ground at the sensor.

ENGINE COOLANT TEMPERATURE WARNING LAMP

Circuit G20 connects the engine coolant temperature warning lamp to the engine coolant temperature switch. When the switch closes, battery voltage from circuit F87 flows through the lamp to ground through the switch on circuit G20. The engine coolant temperature switch is case grounded to the engine. Cir-

cuit F87 connects to the instrument cluster connector and supplies voltage for the lamp.

Circuit G20 also connects to the warning lamp to ground when the ignition switch is in the START position. When the ignition switch is in the START position, the lamp illuminates for a bulb test.

FUEL GAUGE

The fuel level sensor is a variable resistor. Circuit G4 connects the fuel level sensor to the fuel gauge in the instrument cluster. Circuit F87 from fuse 17 in the fuse block supplies voltage to the fuel gauge. The fuel level sensor draws voltage from circuit F87 through the fuel gauge on circuit G4. Circuit G4 connects to circuit 57 in the fuel pump module harness. Circuit 57 connects to the fuel level sensor.

Circuit 99 in the fuel pump module harness connects to circuit Z1. Circuit Z1 provides the ground path for the fuel level sensor. The grounding point for circuit Z1 is the left side of the cowl panel.

As current flows through the coils in the fuel gauge, it creates a magnetic field. One of the coils in the gauge receives fixed current. The other coil is connected to the level sensor. The magnetic field controls the position of the fuel gauge pointer.

The fuel level sensor contains a variable resistor. As the position of the float arm on the fuel level sensor changes, the resistor changes the current flow through second coil in the fuel gauge. A change in current flow alters the magnetic field in the fuel gauge, which changes the pointer position.

LOW FUEL WARNING LAMP

Circuit G4 connects the fuel level sensor to the fuel gauge. The low fuel level module at the rear of the gauge monitors resistance in circuit G4. The low fuel level module powers an light emitting diode (LED) when the resistance in circuit G4 reaches a calibrated level. The LED illuminates the Low Fuel indicator. Refer to Group 8E for additional information.

OIL PRESSURE GAUGE

The case grounded oil pressure sensor is a variable resistor that connects to circuit G6. Circuit G6 connects to the oil pressure gauge.

Circuit F87 connects to the instrument cluster connector and supplies battery voltage to oil pressure gauge. The gauge uses two coils. Current passing through the coils creates a magnetic field. Position of the gauge needle is controlled by the amount of current passing through the coils to ground at the sensor.

OIL PRESSURE WARNING LAMP

The case grounded oil pressure switch connects to circuit G6. Circuit G6 connects to the oil pressure warning lamp. Circuit F87 connects to the instrument cluster connector and supplies battery voltage to oil pressure lamp.

When the oil pressure switch close, battery voltage flows through the warning lamp to ground through the switch, illuminating the lamp.

TACHOMETER

The tachometer module in the instrument cluster operates the tachometer. The Powertrain Control Module (PCM) supplies the signal for the tachometer on circuit G21. Circuit G21 connects to cavity 43 of the PCM.

SPEEDOMETER

The speedometer and odometer receive a signal from the vehicle speed sensor on circuit G7. Circuit G7 also connects to the Powertrain Control Module (PCM) at cavity 47.

ABS WARNING LAMP

Circuit F87 provides power for the ABS warning lamp at the instrument cluster. Ground for the ABS warning lamp is provided by either the ABS control module or by the ABS power relay when the relay is not energized. The ABS control module illuminates the lamp by providing ground on circuit B205.

Circuit B205 splices to connect to circuit B235 through a diode. When the ABS power relay is not energized, it connects circuit B235 to circuit Z12. The ground path for the warning lamp is through the diode to circuit B235, through the ABS power relay to ground on circuit Z12.

The diode between circuit B205 and B235 prevents voltage from flowing to the ABS control module when the ABS power relay switches to supply power on circuit B235.

MALFUNCTION INDICATOR LAMP (MIL)

The PCM provides ground for the instrument cluster malfunction indicator lamp on circuit G3. Circuit G3 connects to cavity 32 of the PCM. Circuit F87

provides voltage for the lamp. The MIL displays the message CHECK ENGINE when illuminated.

For information regarding diagnostic trouble code access using the MIL lamp, refer to Group 14, Fuel Systems.

LOW WASHER FLUID WARNING LAMP

Circuit G29 connects the low washer fluid switch to the warning lamp in the instrument cluster. Circuit F12 supplies battery voltage to the switch.

When the low washer fluid switch closes, it connects circuits G29 and F12. Battery voltage from circuit F12 powers the low washer fluid lamp. Circuit Z1 at the instrument cluster provides ground to illuminate the warning lamp.

SEAT BELT INDICATOR WARNING LAMP

The seat belt indicator warning lamp is activated by the chime/buzzer on circuit G11. Circuit G11 supplies power to instrument cluster for the lamp. Circuit Z1 provides ground for the lamp at the cluster.

The chime/buzzer module powers circuit G11 after it receives an input on circuit G10 indicating the seat belt switch is open.

HIGH-BEAM INDICATOR LAMP

Circuit L3 supplies power for the high-beam indicator lamp. The ground path for the lamp is through circuit Z1. If the vehicle has Daytime Running Lamps (DRL), the DRL module powers circuit L3 through circuit G465. On vehicles not equipped with DRL, the headlamp switch powers circuit L3.

Circuit Z1 provides ground for the indicator lamp at the cluster.

TURN SIGNAL INDICATOR LAMPS

Circuits L61 and L60 power for the turn signal indicator lamps. Circuit L61 powers the left indicator lamp. Circuit L60 powers the right indicator lamp. Circuit Z1 provides ground for the lamps.

BRAKE WARNING LAMP

Circuit F87 supplies power to the park brake lamp. Ground for the park brake lamp is supplied through the case grounded park brake switch or brake warning switch on circuit G9. Circuit G9 Connects to circuit B203. Circuit B203 connects to the brake warning lamp at the instrument cluster.

MANUAL TRANSMISSION UP-SHIFT LAMP

Circuit F87 supplies power for the manual transmission up-shift lamp. The lamp illuminates when the Powertrain Control Module (PCM) provides ground for the lamp on circuit K54. Circuit K54 connects to cavity 54 of the PCM.

CHARGING SYSTEM INDICATOR LAMP

The Powertrain Control Module (PCM) illuminates the charging system indicator lamp by providing ground for the lamp on circuit G12. Circuit G12 connects to cavity 36 of the PCM. Circuit F87 supplies battery voltage to the lamp.

FOUR-WHEEL DRIVE (4WD) SWITCH

When the 4WD switch closes, circuit Z1 provides ground for the 4WD indicator lamp in the instrument cluster. Circuit F87 connects to the instrument cluster and supplies battery voltage to the 4WD indicator lamp. Circuit 107 connects the indicator lamp to the 4WD switch. Circuit 106 connects the lamp to the instrument cluster and circuit F87.

CLUSTER GROUND

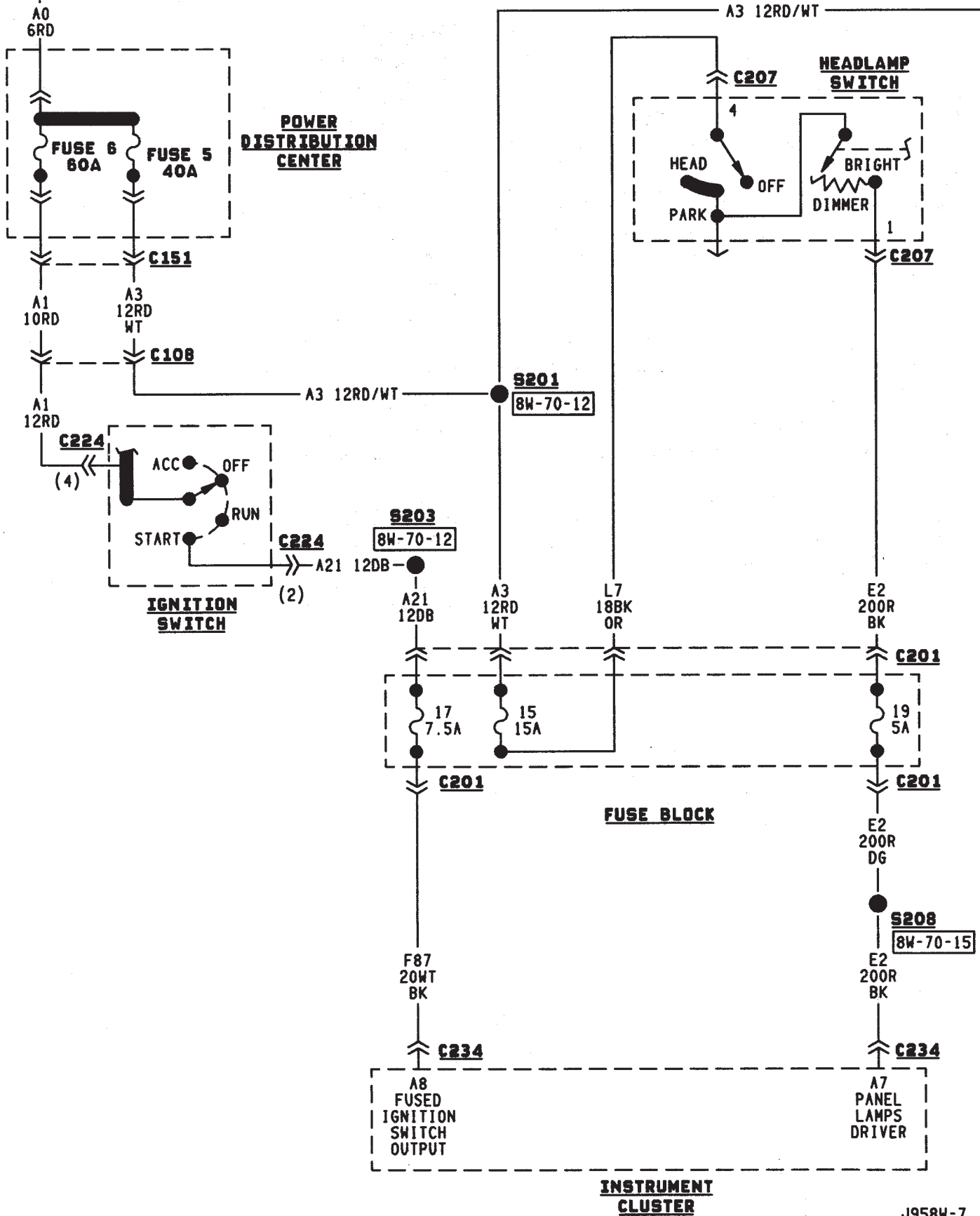
Circuit Z1 from the instrument cluster left connector provides ground for the illumination lamps and indicator lamps.

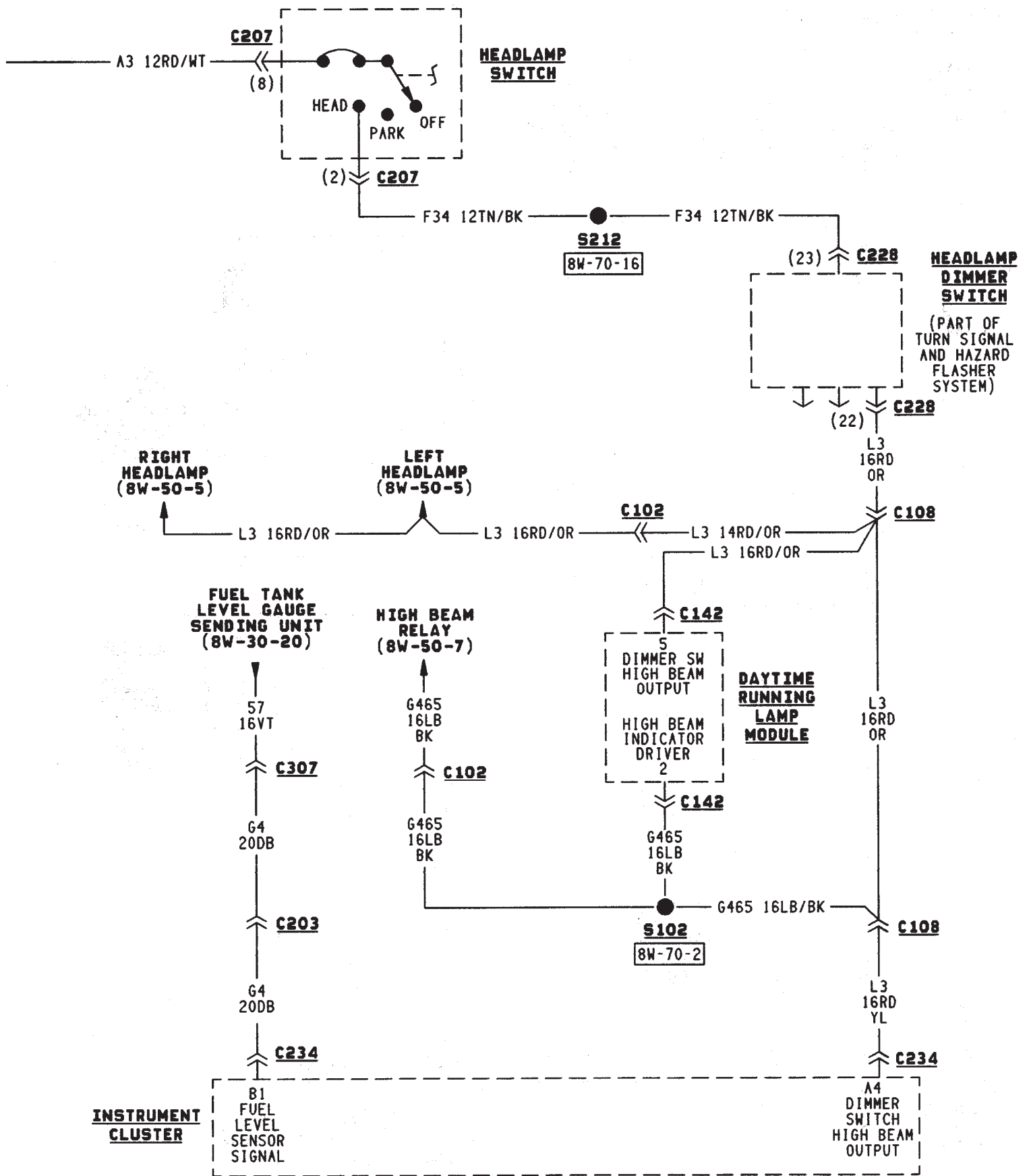
HELPFUL INFORMATION

- If the warning lamps don't operate, check fuse 14 in the fuse block.
- If the indicator lamps and illumination lamps don't operate, check fuse 13 in the fuse block.
- Inspect the ground at the instrument panel lower right reinforcement support.

DIAGRAM INDEX

<u>Component</u>	<u>Page</u>
4WD Switch	8W-40-9
4WD Indicator Lamp	8W-40-9
ABS Control Module	8W-40-9
Brake Warning Switch	8W-40-10
Chime/Buzzer Module	8W-40-8
Daytime Running Lamps Module	8W-40-5, 6
Engine Coolant Temperature Sending Unit	8W-40-6
Engine Oil Pressure Sending Unit	8W-40-6
Fuse 3 (PDC)	8W-40-8
Fuse 5 (PDC)	8W-40-4
Fuse 6 (PDC)	8W-40-4, 8
Fuse 11 (PDC)	8W-40-8
Fuse 16 (PDC)	8W-40-8
Fuse 9 (Fuse Block)	8W-40-8
Fuse 15 (Fuse Block)	8W-40-4
Fuse 17 (Fuse Block)	8W-40-4, 8
Fuse 19 (Fuse Block)	8W-40-4
Headlamp Switch	8W-40-4, 5
Headlamp Delay Module	8W-40-8
Headlamp Dimmer Switch	8W-40-5
Ignition Switch	8W-40-4, 8, 10
Instrument Cluster	8W-40-4, 5
Low Washer Fluid Lamp Switch	8W-40-8
Park Brake Switch	8W-40-10
Powertrain Control Module	8W-40-6
Remote Keyless Entry Module	8W-40-8
Telltale Connector (Instrument Cluster)	8W-40-7 thru 10

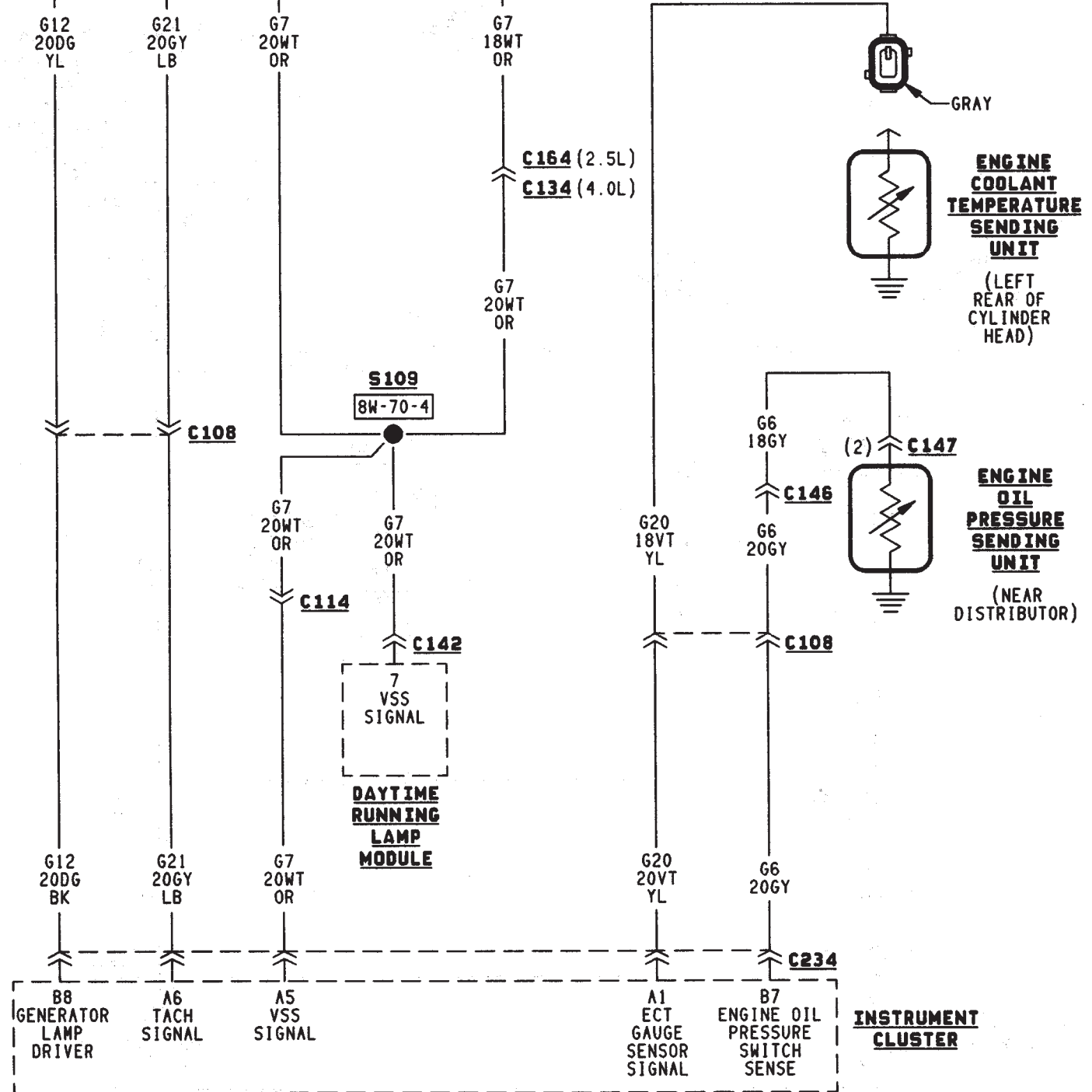


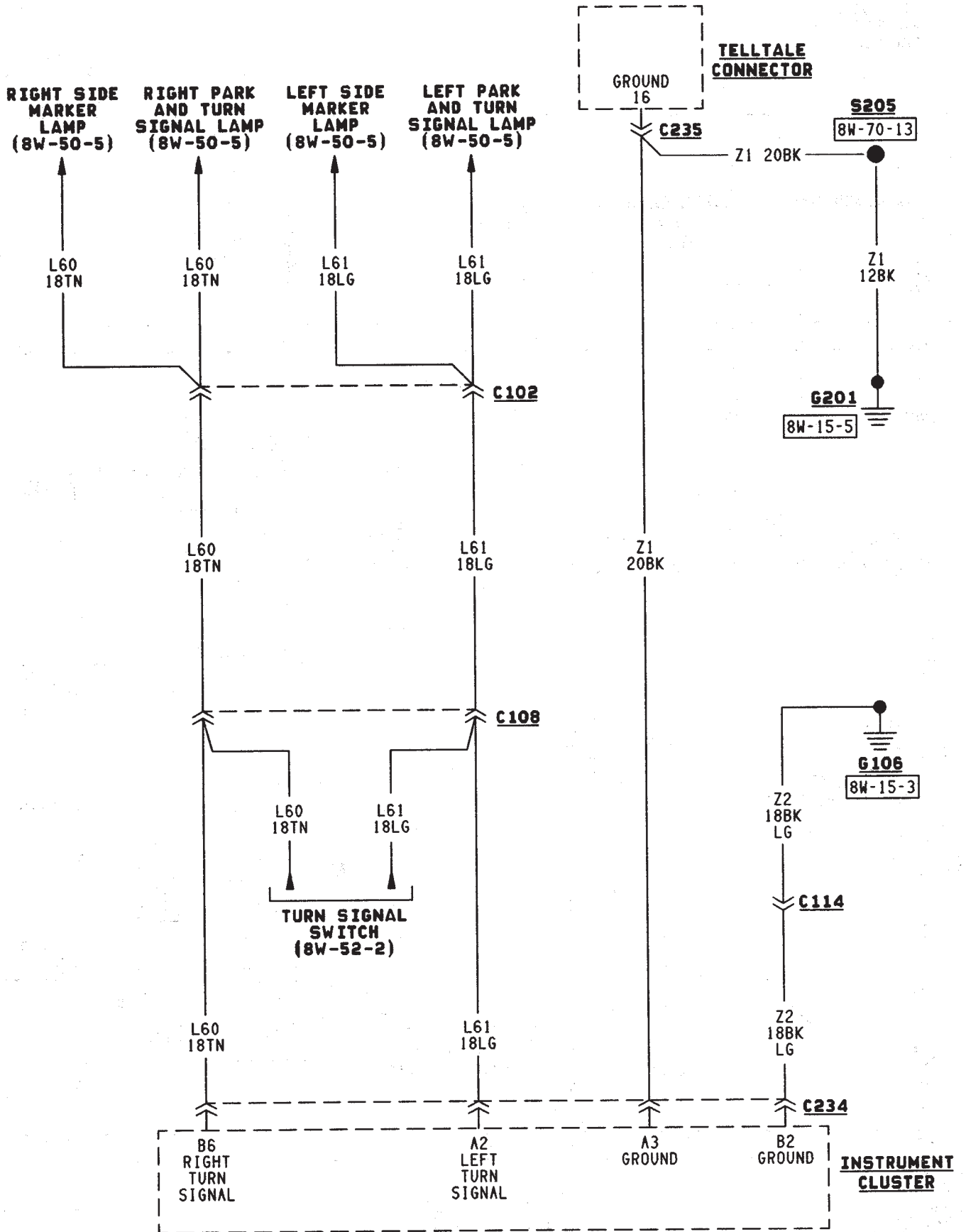


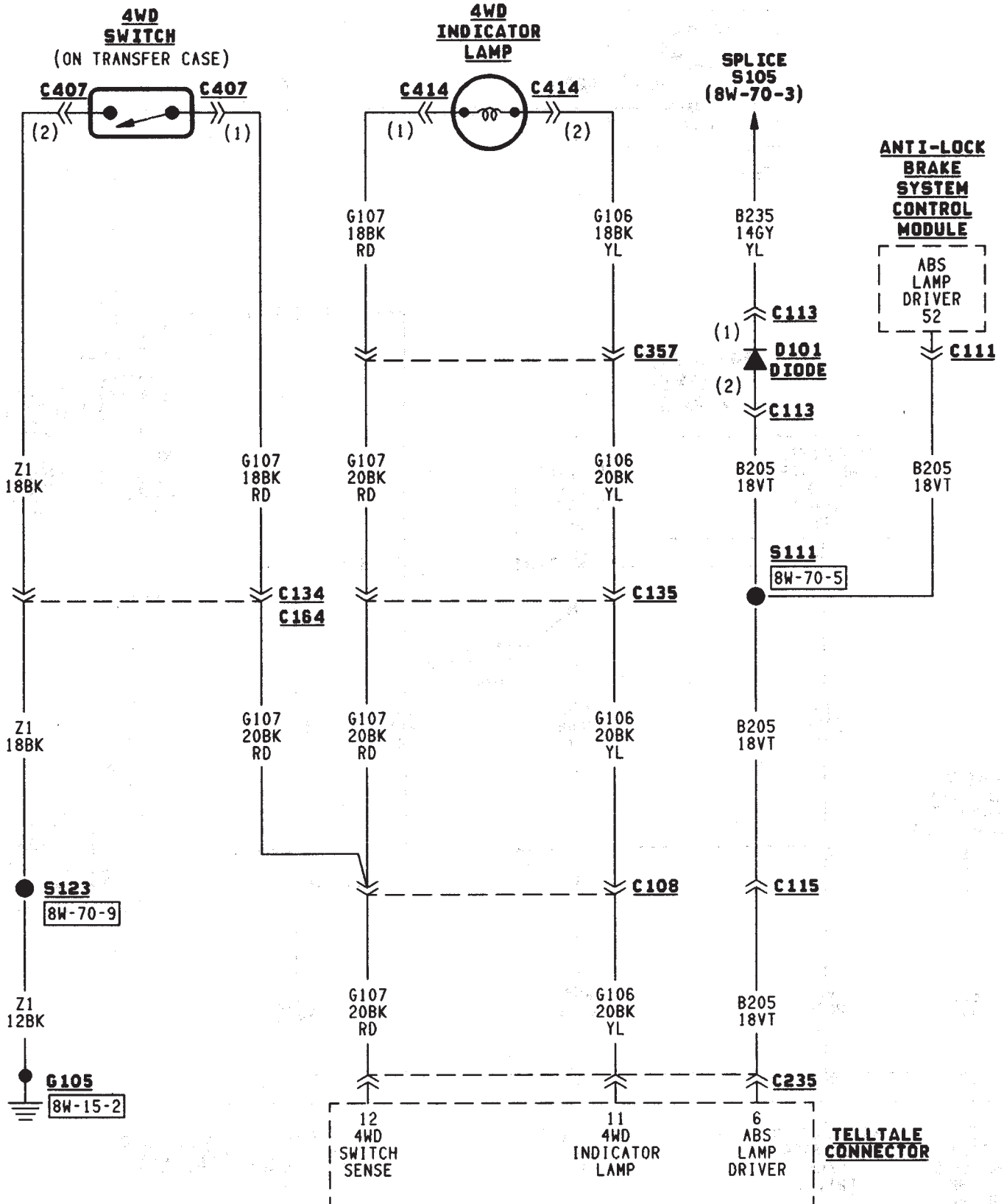
POWERTRAIN CONTROL MODULE



VEHICLE SPEED SENSOR
(8W-30-12,
8W-30-18)







HORN/CIGAR LIGHTER

HORN

The horn system uses two switches and horn relay. The horn switches are on the steering wheel.

Circuit A7 from fuse 3 in the Power Distribution Center (PDC) feeds a fuse block bus bar that powers circuit X4 through fuse 11. Circuit X4 is HOT at all times and powers the coil and contact sides of the horn relay.

When the case grounded horn switch is depressed, circuit X3 provides ground for the coil side of the relay and the contacts close. When the contacts close, circuit X2 supplies voltage to the case grounded horns.

HELPFUL INFORMATION

- The horn switches are grounded to the steering wheel.
- Circuit X4 is double crimped at the coil side of the horn relay.
- Check fuse 3 in the PDC and fuse 11 in the fuse block.

CIGAR LIGHTER

In the ACCESSORY or RUN position, the ignition switch supplies voltage to fuse 2 in the fuse block on circuit A48. Fuse 2 feeds circuit F85 which connects to the cigar lighter. When the lighter is depressed, the contacts inside of the lighter element close and voltage flows to ground on circuit Z1.

HELPFUL INFORMATION

- In the ACCESSORY or RUN position, the ignition switch connects circuit A1 from fuse 6 in the PDC with circuit A48.
- Circuit F85 also powers the radio and LCD relay.

DIAGRAM INDEX

<u>Component</u>	<u>Page</u>
Cigar Lighter	8W-41-3
Fuse 3 (PDC)	8W-41-2
Fuse 6 (PDC)	8W-41-3
Fuse 11 (Fuse Block)	8W-41-2
Fuse 2 (Fuse Block)	8W-41-3
Horns	8W-41-2
Horn Relay	8W-41-2
Horn Switch	8W-41-2
Ignition Switch	8W-41-3

BATTERY
POSITIVE
TERMINAL

A0
6RD

POWER
DISTRIBUTION
CENTER

FUSE 3
40A

C151

A7
12RD
YL

C108

A7
12RD
YL

C201

FUSE 11
25A

FUSE
BLOCK

C201

X4
16GY
PK

X4
16GY
PK

HORN
RELAY

RELAY
CENTER

C242

C242

X2 16DG/RD

X3 20BK/RD

RIGHT
SIDE
HORN

LEFT
SIDE
HORN

X2 18DG/RD

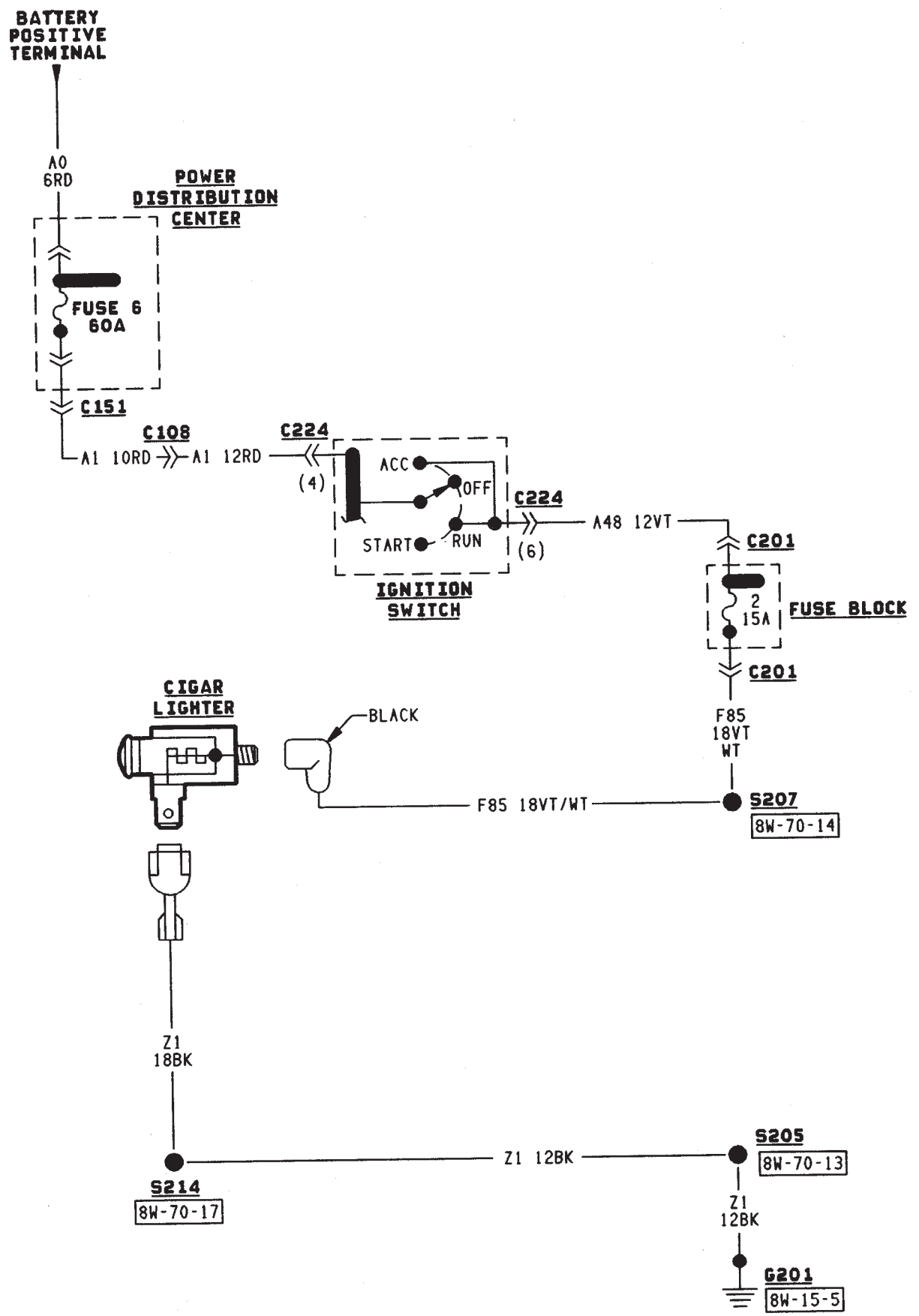
X2 18DG/RD

X2
16DG
RD

HORN
SWITCH
(CENTER OF
STEERING
WHEEL)

HORN
BRUSH/
SLIP
RING

C225



AIR CONDITIONING/HEATER

CONTENTS

	page		page
A/C-HEATER SYSTEM	1	HEATER SYSTEM	1

GENERAL INFORMATION

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

HEATER SYSTEM

BLOWER MOTOR

In the RUN or ACCESSORY position, the ignition switch connects circuit A1 from fuse 6 in the Power Distribution Center (PDC) to circuit A48. Circuit A48 supplies battery voltage to fuse 5 in the fuse block. Fuse 5 supplies power to the heat mode switch on circuit C7.

Circuit C43 from the heat mode switch splices to supply voltage to the blower motor switch and the blower motor resistor block. The blower motor switch sets blower motor speed to HIGH, M1, M2, or LOW.

When the blower motor switch is in the LOW position, circuit C43 from the heat mode supplies voltage to the resistor block. Voltage does not pass through the blower motor switch in the LOW position.

In the M1 position, the blower motor switch supplies voltage to the resistor block on circuit C4. From circuit C4, voltage passes through three resistors in the resistor block to the blower motor on circuit C1.

In the M2 position, the blower motor supplies voltage to the resistor block on circuit C6. From circuit C6 voltage flows through two resistors to the blower motor on circuit C1.

In the HIGH position, the blower motor switch connects directly to the blower motor on circuit C1. Voltage does not pass through the resistor block.

Circuit Z1 provides ground for the blower motor.

A/C-HEATER SYSTEM

GENERAL INFORMATION

Several fuses supply power for the air conditioning/heater system. In the START or RUN positions, the ignition switch connects circuit A1 from fuse 6 in the Power Distribution Center (PDC) to circuit A21. Circuit A21 powers a bus bar in the PDC that feeds circuit F12 through fuse 11. Circuit F12 feeds the contact side of the A/C compressor clutch relay and the coil side of the radiator fan relay (4.0L engine).

In the RUN or ACCESSORY position, the ignition switch connects circuit A1 from fuse 11 in the PDC to circuit A48. Circuit A48 supplies battery voltage to fuse 5 in the fuse block. Fuse 5 supplies power to the A/C-Heater control switch on circuit C7.

Fuse 13 in the PDC supplies battery voltage to the contact side of the radiator fan relay on circuit F141. Circuit A14 from fuse 15 in the PDC powers PDC fuse 4.

BLOWER MOTOR

In the RUN or ACCESSORY position, the ignition switch connects circuit A1 from fuse 6 in the PDC to circuit A48. Circuit A48 supplies battery voltage to fuse 5 in the fuse block. Fuse 5 supplies power to the A/C-Heater control switch on circuit C7.

Circuit C43 from the A/C-heater switch splices to supply voltage to the blower motor switch and the blower motor resistor block. The blower motor switch sets blower motor speed to HIGH, M1, M2, or LOW.

When the blower motor switch is in the LOW position, circuit C43 from the A/C-Heater switch supplies voltage to the resistor block. Voltage does not pass through the blower motor switch in the LOW position.

In the M1 position, the blower motor switch supplies voltage to the resistor block on circuit C4. From circuit C4, voltage passes through three resistors in the resistor block to the blower motor on circuit C1.

In the M2 position, the blower motor supplies voltage to the resistor block on circuit C6. From circuit C6 voltage flows through two resistors to the blower motor on circuit C1.

In the HIGH position, the blower motor switch connects directly to the blower motor on circuit C1. Voltage does not pass through the resistor block.

Circuit Z1 provides ground for the blower motor.

AIR CONDITIONING OPERATION

When the A/C-heater control switch is moved to an A/C position or the defrost position, the Powertrain Control Module (PCM) receives the A/C select signal on circuit C90. Circuit C90 connects to cavity 28 of the PCM.

Circuit also C90 splices to the low pressure switch and to supply battery voltage to the coil side of the A/C compressor clutch relay. If the low pressure switch is closed, circuit C90 connects to circuit C21. Circuit C21 supplies battery voltage to the A/C cycling switch. Circuit C91 from the A/C cycling switch provides the A/C request signal to the PCM. Circuit C91 connects to cavity 27 of the PCM. Circuit Z1 provides ground for the A/C cycling switch.

After receiving the A/C request signal, the PCM supplies ground for the A/C compressor clutch relay on circuit C13. Circuit F12 from fuse 11 in the PDC supplies battery voltage to the contact side of the A/C compressor clutch relay. When the PCM grounds the relay, the contacts close and connect circuit F12 to circuit C3. Circuit C3 feeds the A/C compressor clutch.

Also, after receiving the A/C request signal, the PCM supplies ground for the coil side of the radiator fan relay on circuit C27 (4.0L engine). Circuit C27 connects to cavity 31 of the PCM. Circuit F12 supplies battery voltage to the coil side of the relay.

When the PCM grounds the coil side of the radiator fan relay, the contacts close and connects circuit F141 from fuse 4 in the PDC to circuit C25. Circuit C25 feeds the radiator fan motor. Circuit Z1 provides ground for the motor.

HELPFUL INFORMATION

Circuit A14 from PDC fuse 2 powers circuit F141 through fuse 15 in the PDC.

RADIATOR FAN RELAY AND MOTOR

In the START or RUN positions, the ignition switch connects circuit A1 from fuse 6 in the Power Distribution Center (PDC) to circuit A21. Circuit A21 powers a bus bar in the PDC that feeds circuit F12 through fuse 11. Circuit F12 feeds the coil side of the radiator fan relay (4.0L engine).

The PCM supplies ground for the coil side of the radiator fan relay on circuit C27 (4.0L engine). Circuit C27 connects to cavity 31 of the PCM.

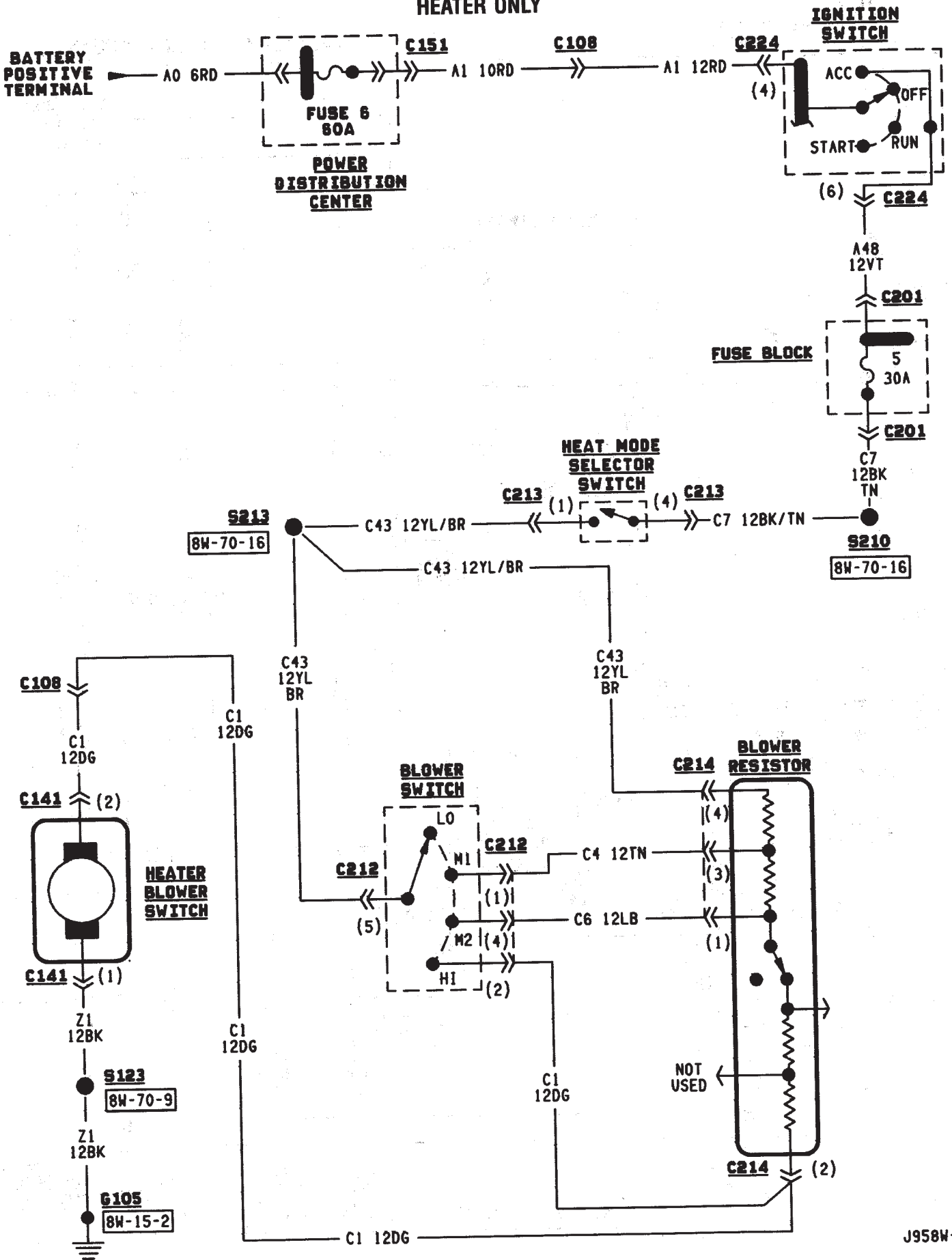
When the PCM grounds the coil side of the radiator fan relay, the contacts close and connects circuit F141 from fuse 15 in the PDC to circuit C25. Circuit C25 feeds the radiator fan motor. Circuit Z1 provides ground for the radiator fan motor.

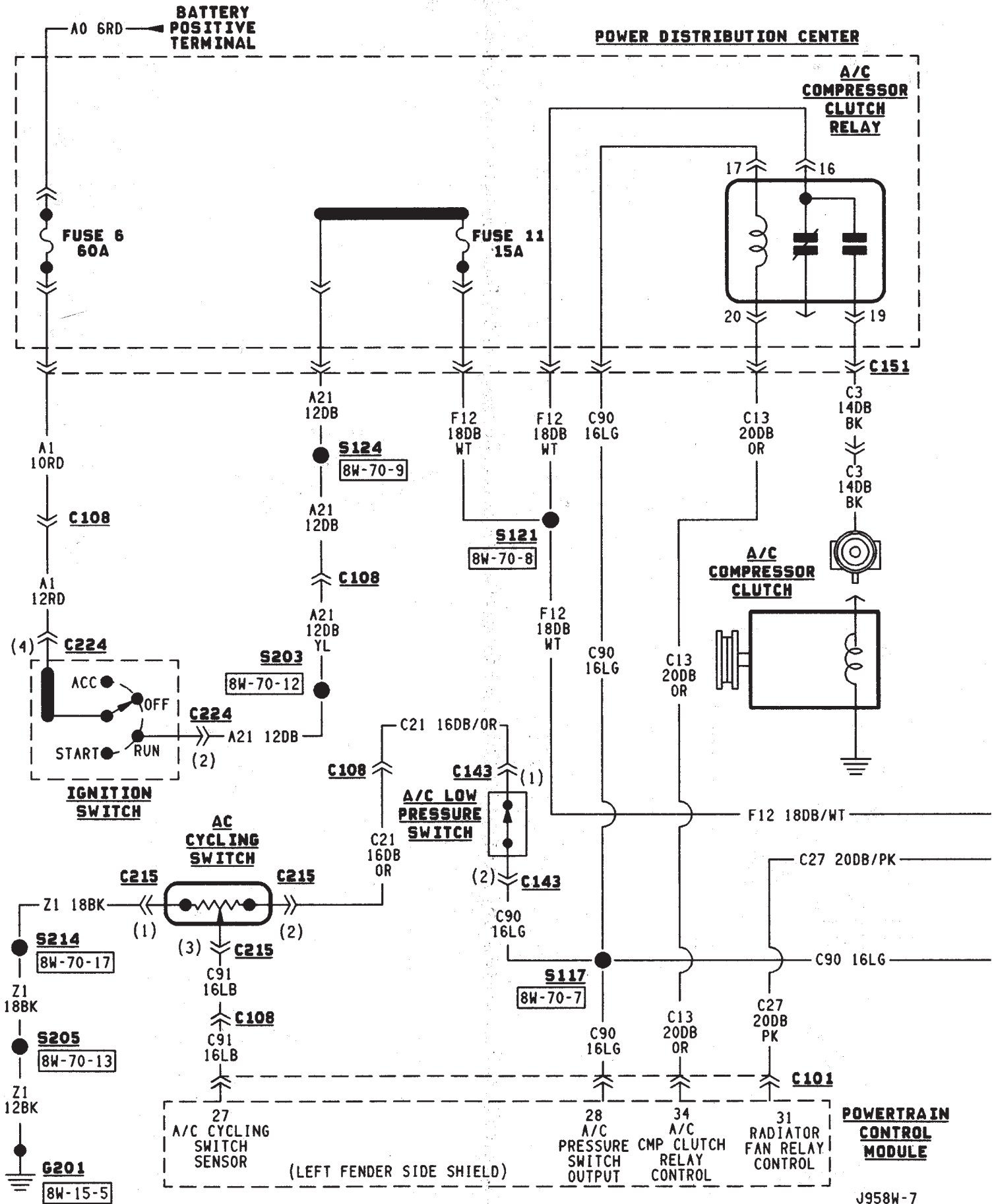
HELPFUL INFORMATION

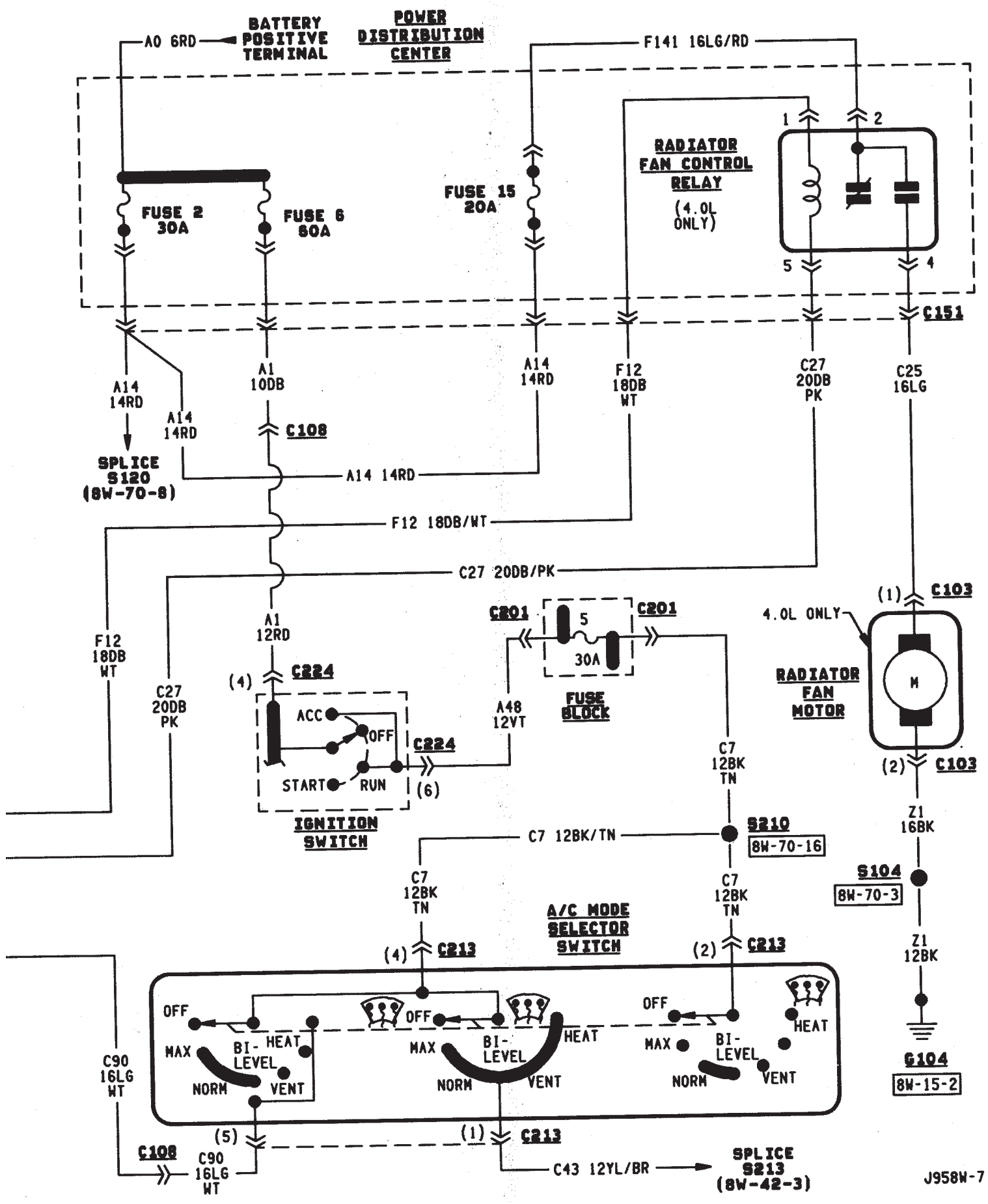
Circuit A14 from PDC fuse 2 powers circuit F141 through fuse 15 in the PDC.

DIAGRAM INDEX

<u>Component</u>	<u>Page</u>
A/C Compressor Clutch	8W-42-4
A/C Compressor Clutch Relay	8W-42-4
A/C Cycling Switch	8W-42-4
A/C Low Pressure Switch	8W-42-4
A/C Mode Select Switch	8W-42-5
Blower Motor	8W-42-3
Blower Motor Switch	8W-42-3
Blower Motor Resistor	8W-42-3
Fuse 2 (PDC)	8W-42-5
Fuse 5 (Fuse Block)	8W-42-3, 5
Fuse 6 (PDC)	8W-42-3, 5
Fuse 11 (PDC)	8W-42-4
Fuse 15 (PDC)	8W-42-5
Heater Mode Switch	8W-42-3
Ignition Switch	8W-42-3, 4, 5
Powertrain Control Module	8W-42-4
Radiator Fan Motor	8W-42-5
Radiator Fan Relay	8W-42-5







INTERIOR LIGHTING

INDEX

	page		page
Cargo Lamp, Courtesy Lamps and Dome Lamp	1	Instrument Panel Illumination Lamps	1
Chime/Buzzer Module	2	Reading Lamps	2
Diagram Index	2	Time Delay Relay	1
General Information	1	Underhood Lamp	2
Glove Box Lamp	1	Visor Vanity Mirror Lamps	2
Ignition Switch Lamp	1		

GENERAL INFORMATION

Circuit M1 supplies power to the glove box lamp, left courtesy lamp, right courtesy lamp, dome lamp, and cargo lamp. The M1 circuit also connects to the remote keyless entry module. Circuit M1 is protected by the ignition off draw (IOD) fuse (fuse 9) in the fuse block.

Circuit E2 supplies power for the instrument panel illumination lamps.

INSTRUMENT PANEL ILLUMINATION LAMPS

Circuit E2 from the headlamp switch splices to supply power to the following illumination lamps:

- Ash receiver lamp
- Cigar lighter lamp
- Transmission range indicator lamp
- Transfer case range indicator lamp
- A/C-Heater switch lamp
- Heated rear window lamp
- Rear wiper switch lamp
- Fog lamp switch lamp

Fuse 19 in the fuse block protects circuit E2. Circuit Z1 provides ground for all of the illumination lamps except for the cigar lighter lamp. The cigar lighter lamp is case grounded.

HELPFUL INFORMATION

Circuit E2 also supplies power to the radio, LCD relay and the illumination lamps in the instrument cluster.

IGNITION SWITCH LAMP

The time delay relay is used to allow a time-ON function for the ignition switch lamp and the courtesy lamp. Power for the relay is received on the M1 circuit from the IOD fuse (fuse F9) in the fuse block.

Circuit M2 provides ground for the time delay relay through the right and left door ajar switches and the headlamp switch. When a door is opened, or the headlamp switch is moved to the dome lamp position,

a ground path is provided for the relay on circuit M2. This energizes the relay, causing the contacts to close.

When the relay contacts close, power is provided through the relay to circuit M50. The M50 circuit supplies current to the ignition switch lamp. Circuit Z1 provides ground for the lamp.

GLOVE BOX LAMP

Circuit M1 from the IOD fuse (fuse F9) in the fuse block powers the glove box lamp. A case grounded switch, in series after the lamp, closes when the glove box door is opened. The switch completes a path to ground on circuit Z1.

CARGO LAMP, COURTESY LAMPS AND DOME LAMP

Circuit M1 from the IOD fuse (fuse F9) in the fuse block supplies power to the cargo, courtesy lamps and dome lamp. This circuit is HOT at all times. The ground path for the lamp is provided in three different ways.

One way is through the door jamb switches. Circuit M2 connects to the door jamb switches from the courtesy and dome lamps. The switches are connected to ground circuit Z1. When a door is opened, the plunger in the switch closes, completing a path to ground.

The second way is through the liftgate switch. Circuit M2 connects to circuit M4 at the cargo lamp. Circuit M4 connects to the liftgate switch. The liftgate switch connects to ground circuit Z1. When the lift gate opens, the plunger in the switch closes, completing a path to ground.

The third ground path is through the headlamp switch. Circuit M2 is spliced in with the headlamp switch. When the operator turns the headlamp switch to the dome lamp ON position, a ground path is provided through the switch.

READING LAMPS

Circuit M1 from the IOD fuse (fuse F9) in the fuse block supplies power to the reading lamps. Circuit M1 is HOT at all times. When the operator depresses the reading lamp, the reading lamp switch closes and supplies ground on circuit Z1.

VISOR VANITY MIRROR LAMPS

Circuit M1 from the IOD fuse (fuse F9) in the fuse block supplies power to the vanity lamps. Circuit M1 is HOT at all times. When the vanity lamps switch closes, voltage flows to vanity mirror lamps. The vanity mirror is case grounded.

UNDERHOOD LAMP

Circuit A6 from fuse 16 in the Power Distribution Center (PDC) supplies battery voltage for the underhood lamp. A mercury switch, in series after the lamp, connects the lamp to ground on circuit Z1. When the hood is raised, mercury inside the switch moves to a position where it connects circuit M1 to ground circuit Z1, illuminating the lamp.

CHIME/BUZZER MODULE

The buzzer or optional chime module sounds an audible warning tone. The tone sounds for seat belt warning and when the ignition key is in the ignition switch while the drivers door is open. The tone also sounds when the ignition key is in the ON position while the drivers side seat belt is not buckled. Lastly, the tone sounds when the headlamps are ON when the ignition is OFF. Refer to Group 8U for system operation.

When the ignition switch is in the RUN or START position, circuit F87 from fuse 17 in the fuse block supplies power to the chime/buzzer module. Circuit A21 from the ignition switch supplies power to fuse 17.

Circuit L7 from fuse 15 in the fuse block also supplies power to the chime/buzzer module. Circuit A3 from fuse 5 in the Power Distribution Center (PDC) powers fuse 15.

When the parking lamps or headlamps are ON, the headlamp switch connects circuit G26 with the drivers side door jamb switch. Circuit G26 also connects to the key-in switch. Circuit M11 connects the key-in switch to the chime/buzzer module and the headlamp switch.

If the headlamps are ON, and the drivers door opens, ground for the chime/buzzer is on circuit C26 from the headlamp switch through the door jamb switch to circuit Z1.

If the headlamps are OFF with the key in the ignition while the drivers side door is open, ground for

the chime/buzzer is supplied through the key-in switch. The ground path is over circuit M11, through the closed key-in switch to circuit C26. From circuit C26, the ground path continues through the drivers door jamb switch to circuit Z1.

Circuit G11 from the buzzer powers the seat belt warning lamp in the instrument cluster. Circuit Z1 at the instrument cluster provides ground for the lamp.

Circuit G10 from the buzzer connects to the seat belt switch. When the seat belt switch closes a path to ground is completed on circuit Z1 and the tone sounds momentarily.

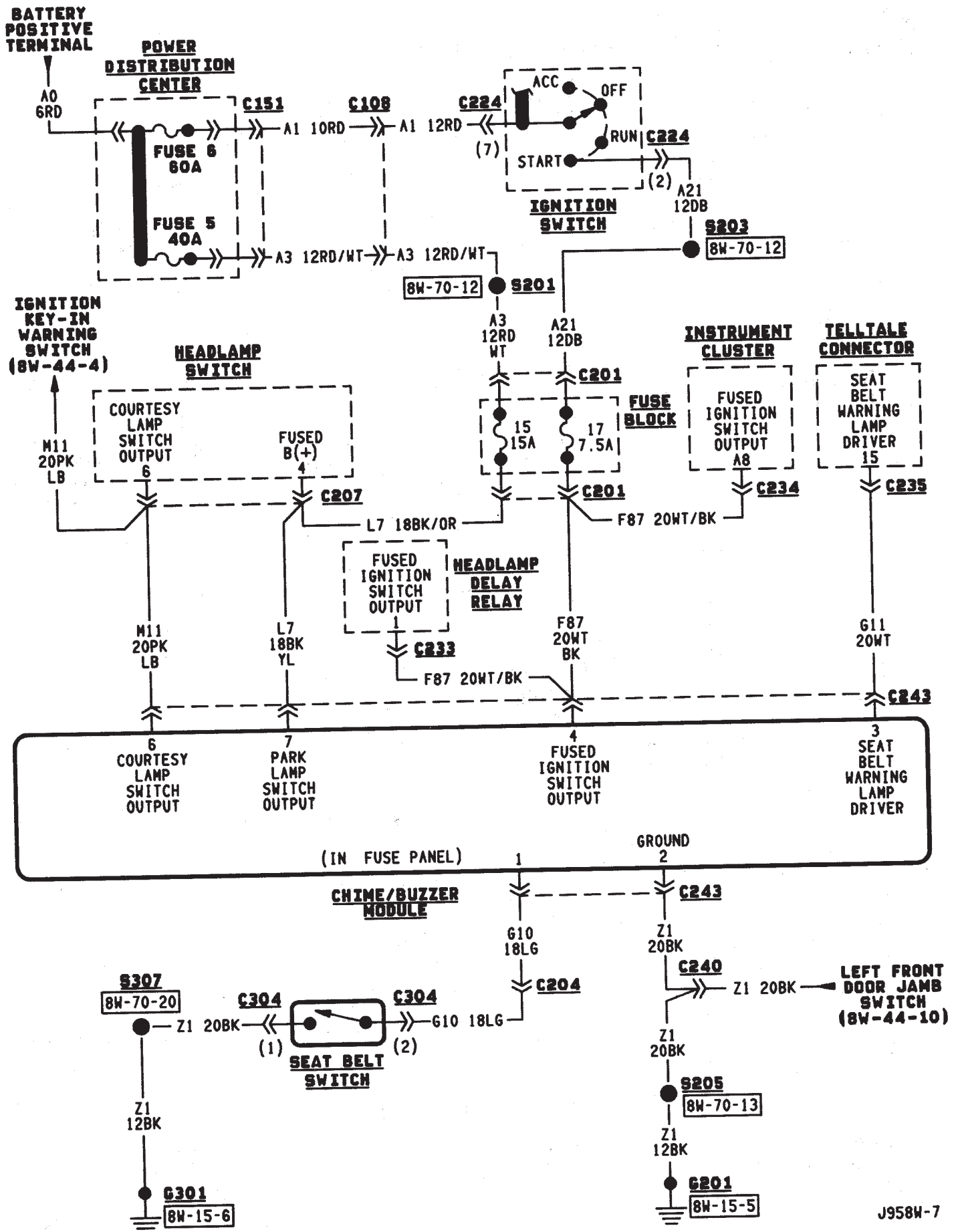
Circuit Z1 also grounds the chime\buzzer module.

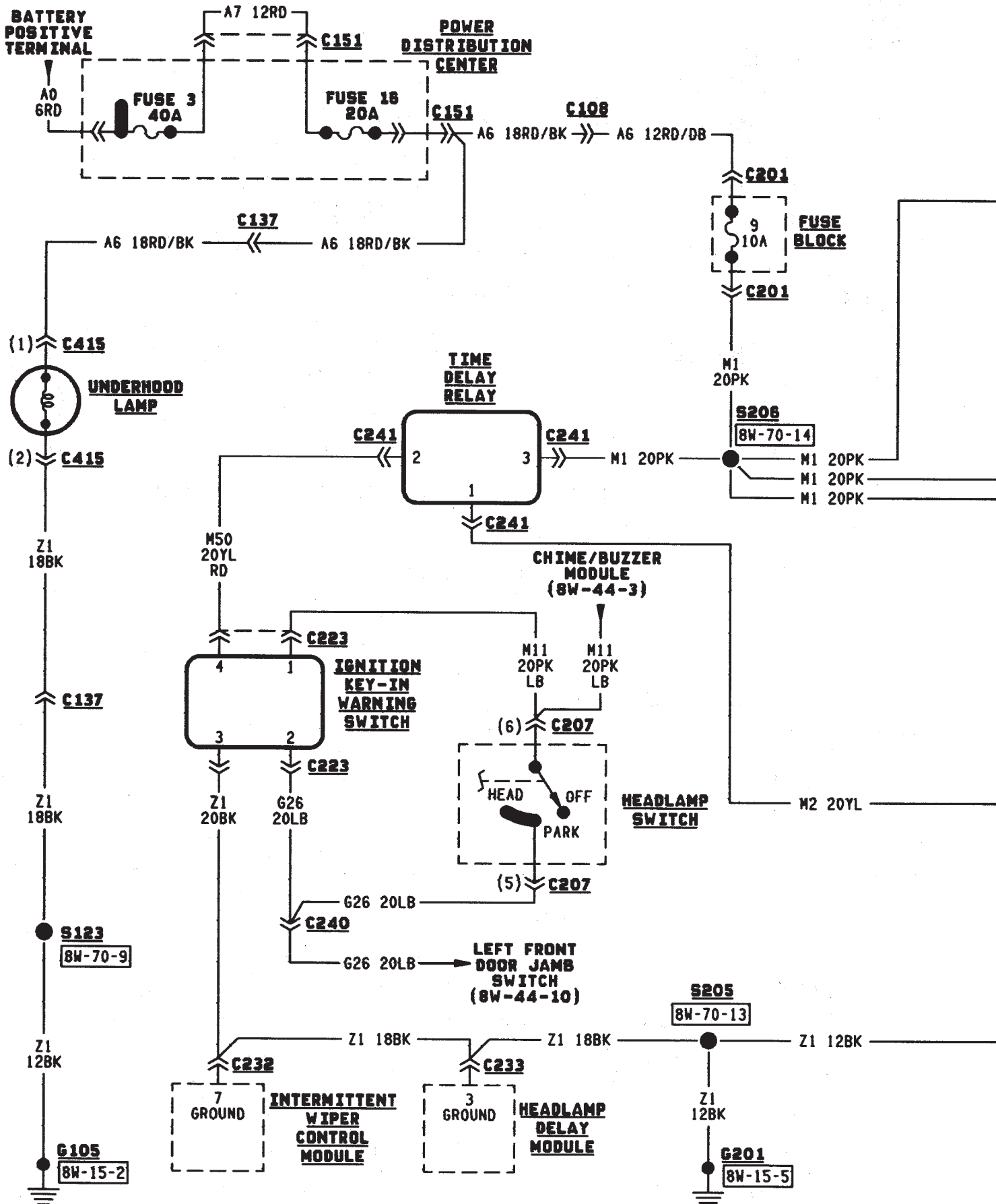
HELPFUL INFORMATION

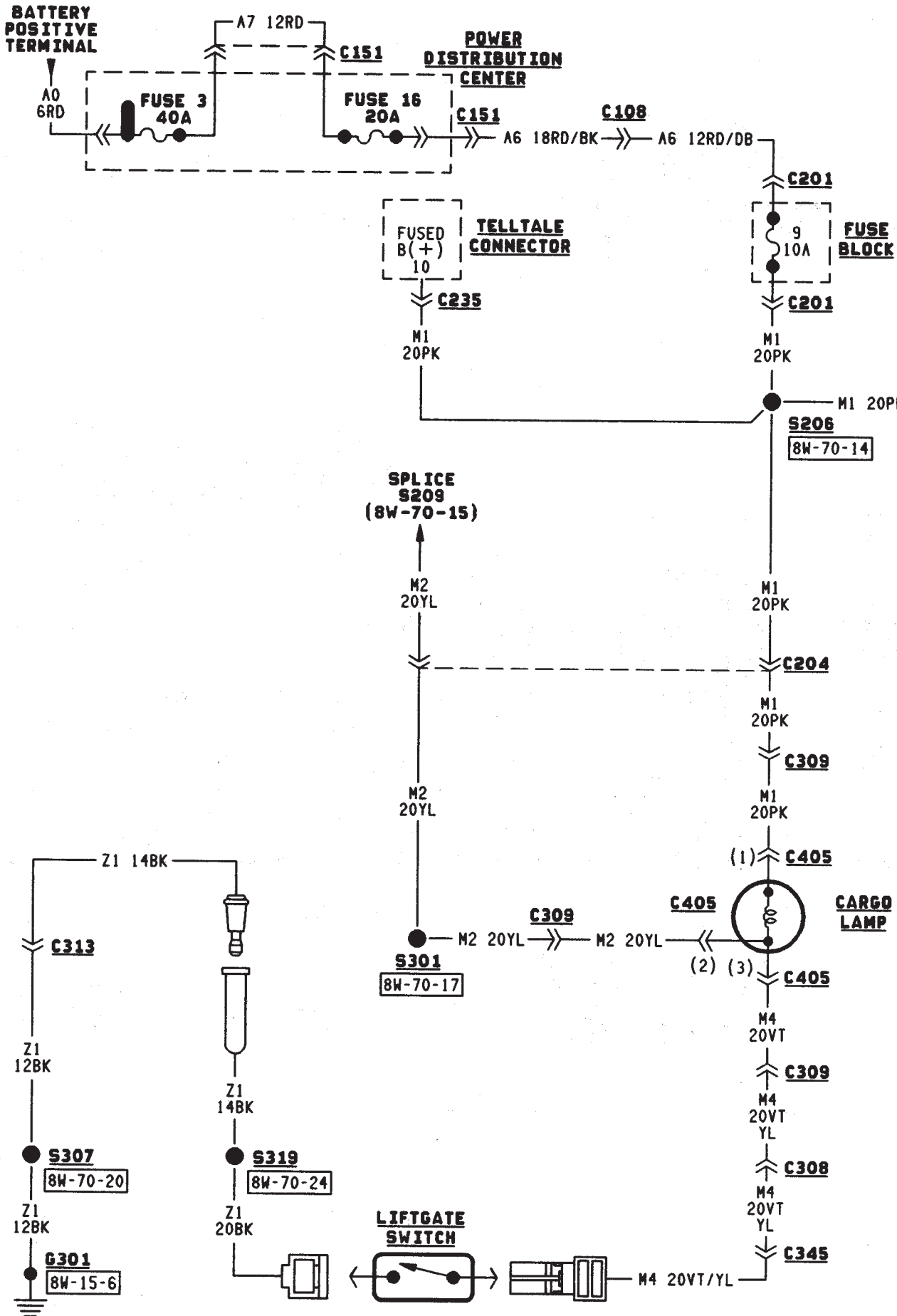
Circuit F87 also powers the instrument cluster and the headlamp delay module.

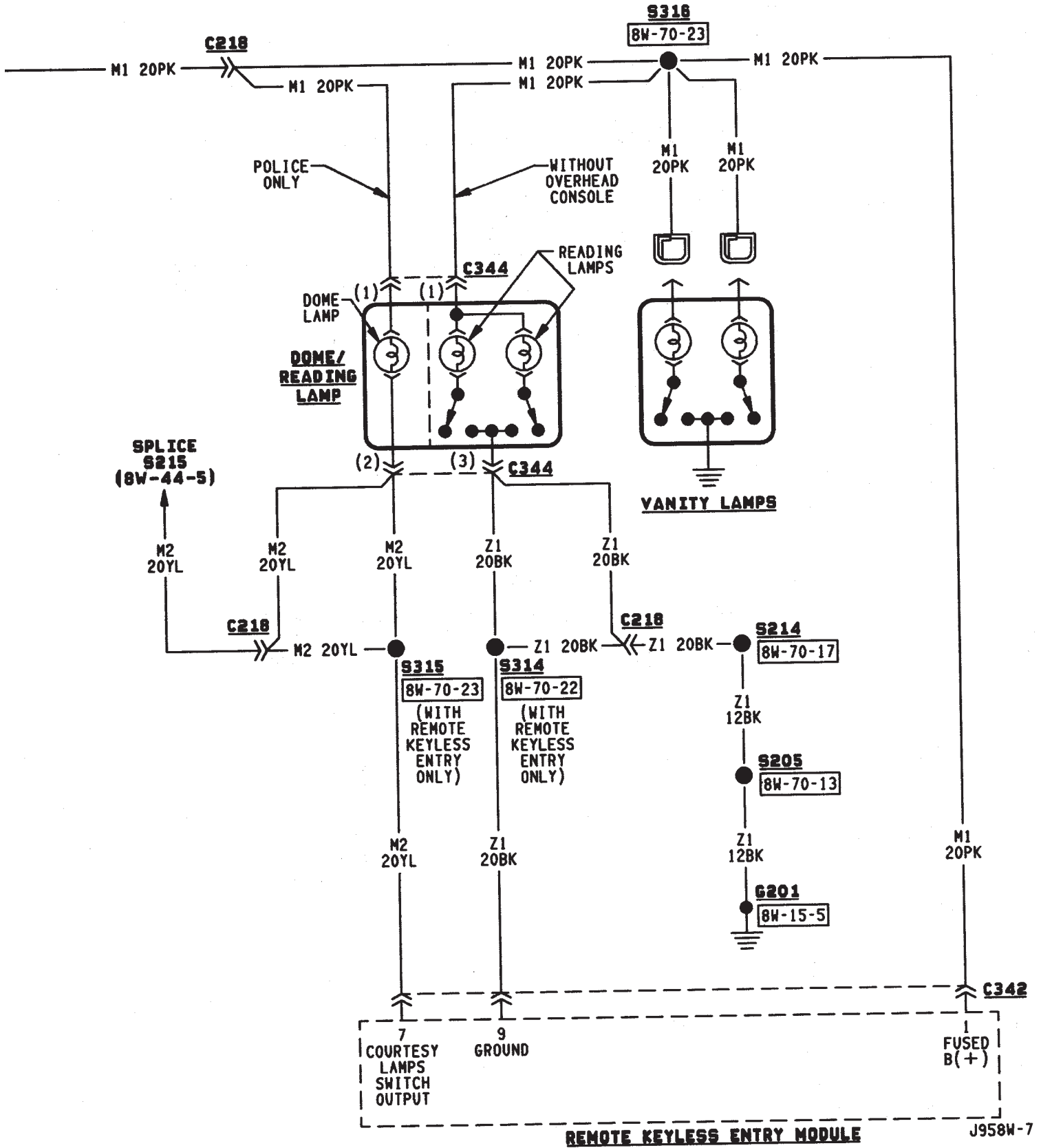
DIAGRAM INDEX

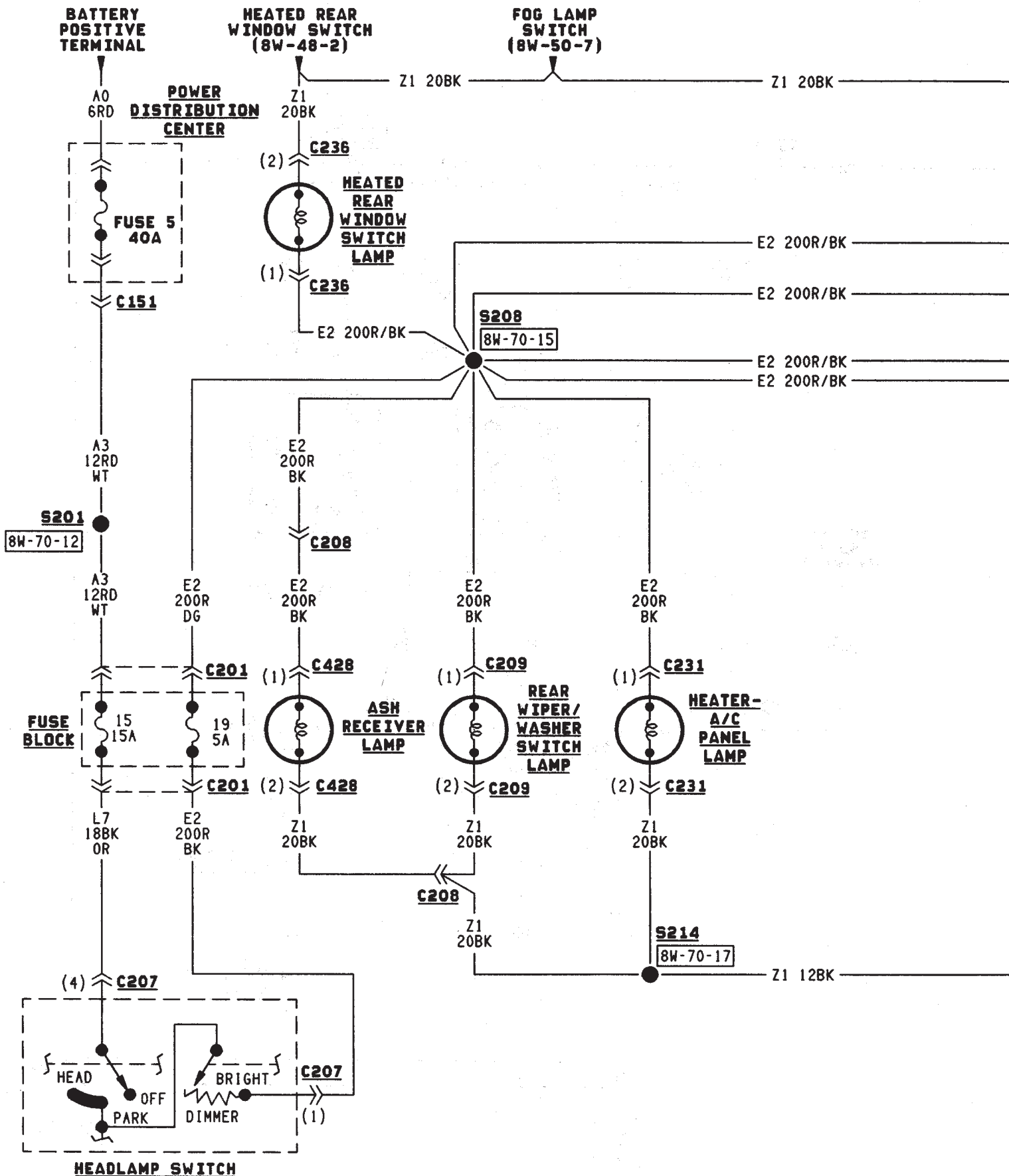
<u>Component</u>	<u>Page</u>
Cargo Lamp	8W-44-6
Chime/Buzzer Module	8W-44-3
Courtesy Lamps	8W-44-5
Dome Lamp	8W-44-7
Door Jamb Switches	8W-44-10
Fuse 3 (PDC)	8W-44-4, 6
Fuse 5 (PDC)	8W-44-3, 8
Fuse 6 (PDC)	8W-44-3
Fuse 9 (Fuse Block)	8W-44-4, 6
Fuse 15 (Fuse Block)	8W-44-3, 8
Fuse 16 (PDC)	8W-44-4, 6
Fuse 17 (Fuse Block)	8W-44-3
Fuse 19 (Fuse Block)	8W-44-8
Glove Box Lamp and Switch	8W-44-5
Headlamp Switch	8W-44-3, 4, 5, 8
Headlamp Delay Module	8W-44-4
Headlamp Delay Relay	8W-44-3
Ignition Switch	8W-44-3
Instrument Cluster	8W-44-3
Instrument Panel Illumination Lamps	8W-44-8, 9
Intermittent Wiper Control Module	8W-44-4
Key-In Switch	8W-44-4
Liftgate Switch	8W-44-6
Reading Lamps	8W-44-7
Remote Keyless Entry Module	8W-44-7
Seat Belt Switch	8W-44-3
Telltale Connector (Instrument Cluster)	8W-44-3
Time Delay Relay	8W-44-4
Underhood Lamp	8W-44-4
Vanity Lamps	8W-44-7

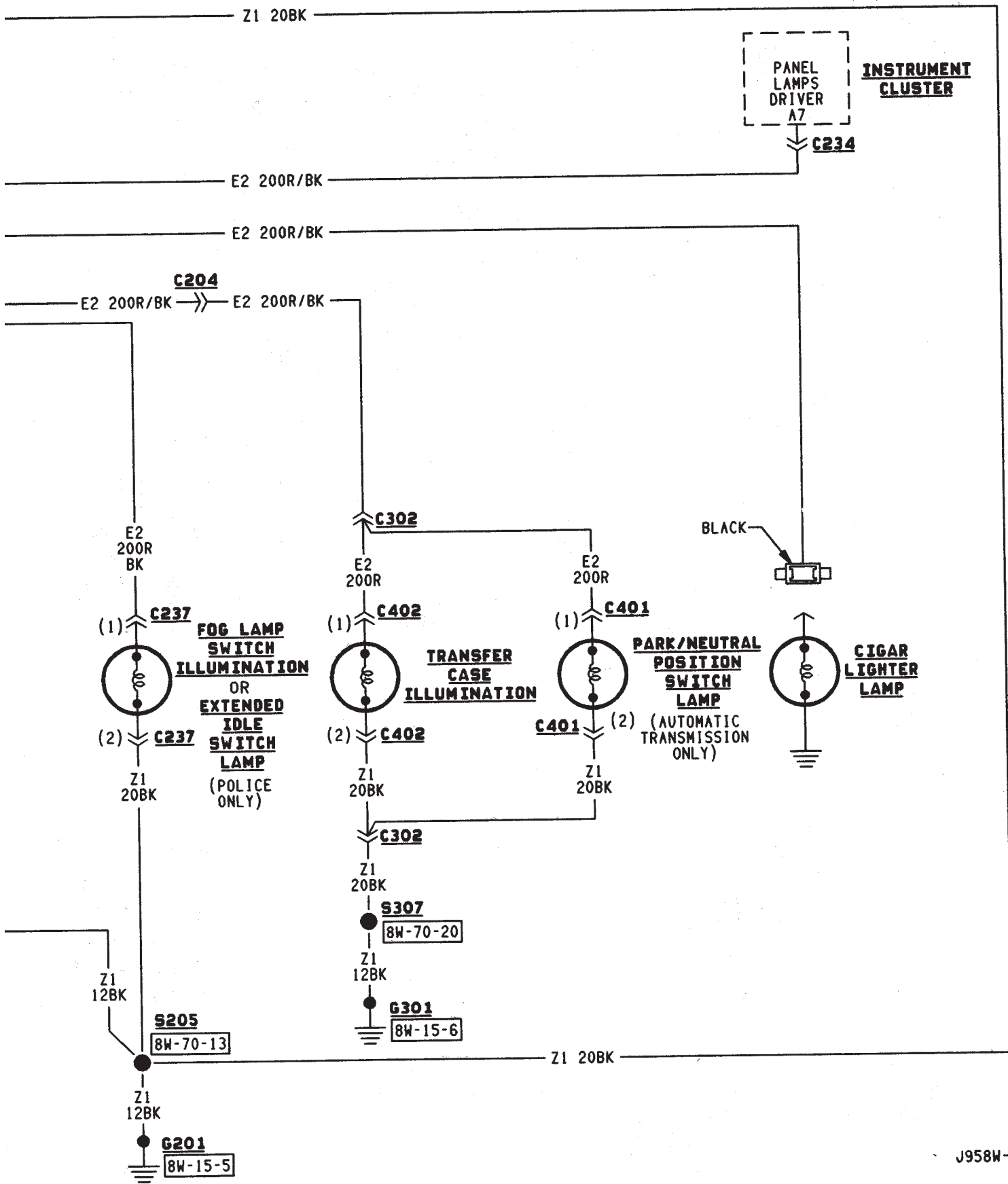


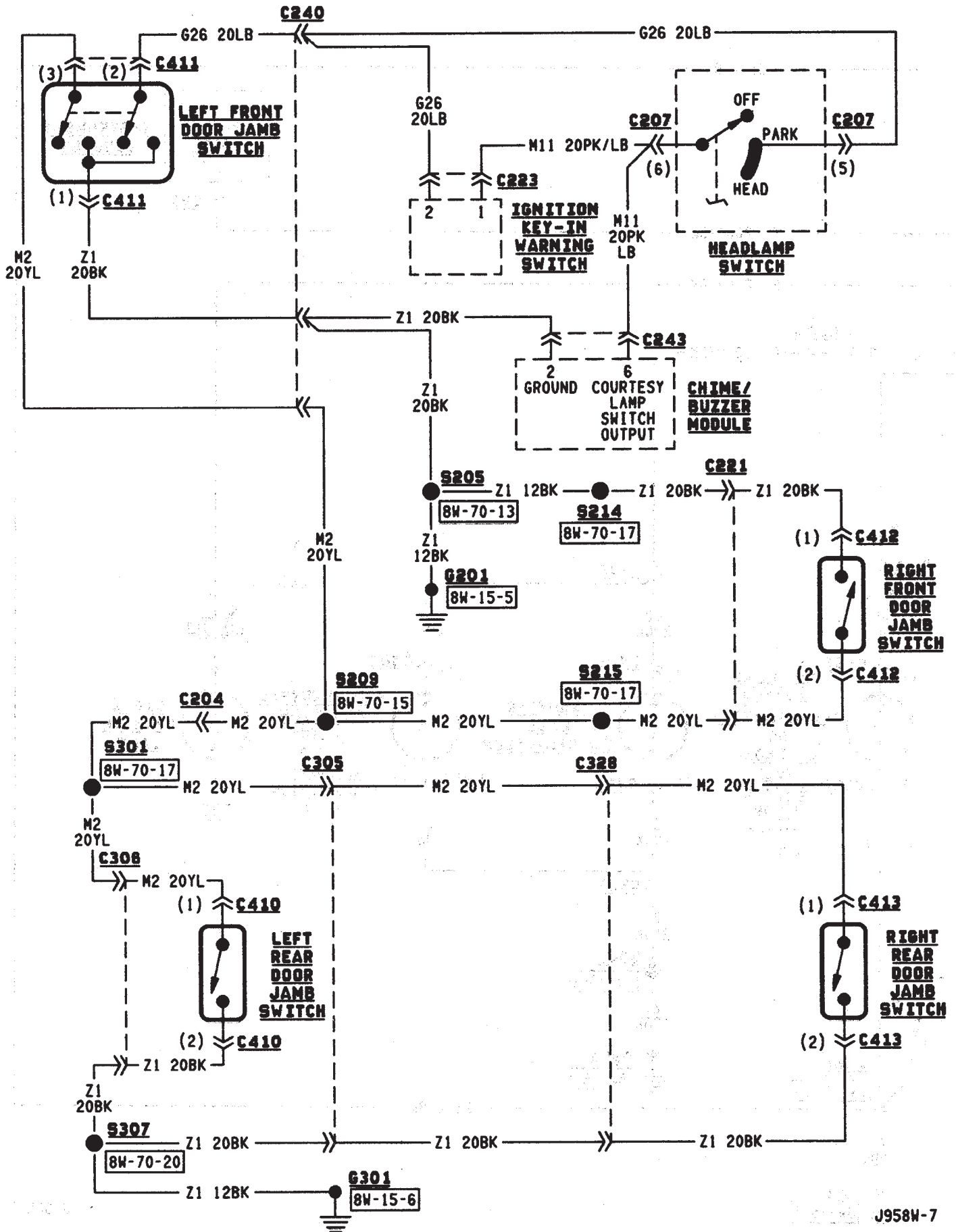


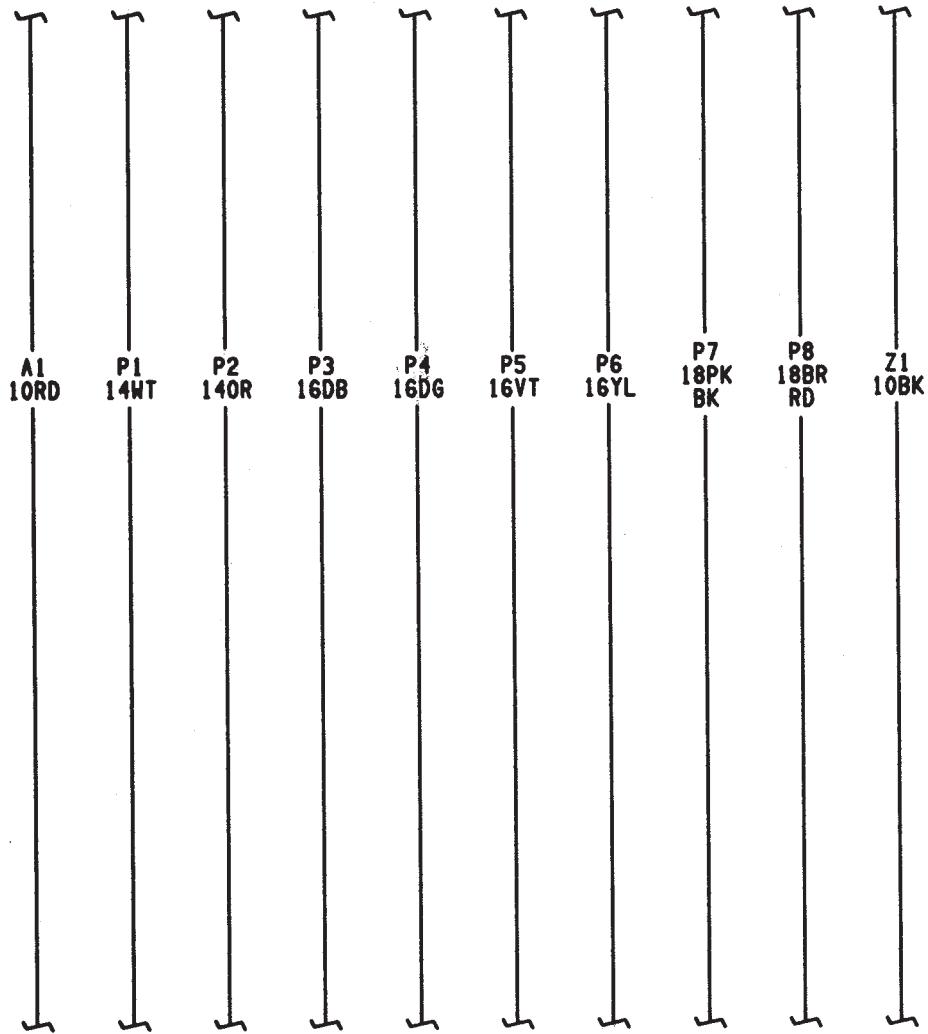












POLICE WIRING PROVISIONS
NO CONNECTIONS
NO TERMINALS
WIRES TAPED TO DOME LAMP HARNESS

AUDIO SYSTEM

RADIO

When the ignition switch is in the ACCESSORY or RUN position, it connects circuit A1 from fuse 6 in the Power Distribution Center (PDC) to circuit A48. Circuit A48 powers circuit F85 through fuse 2 in the fuse block. Circuit F85 powers the radio.

Circuit Z1 provides ground for the radio. The antenna connects to the rear of the radio.

RADIO MEMORY

Circuit M1 from the Ignition Off Draw (IOD) fuse (fuse 9) in the fuse block supplies power for the radio memory. The IOD fuse is removed during vehicle shipping to prevent excessive battery draw.

Circuit A6 from fuse 16 in the Power Distribution Center (PDC) supplies voltage to fuse 9. Circuit A7 from fuse 3 in the PDC powers circuit A6 through fuse 16. Circuits A6, A7 and M1 are HOT at all times.

RADIO ILLUMINATION

Circuit E2 supplies battery voltage to the radio illumination lamps when the headlamps or parking lamps are on and the dimmer switch is in the LOW or ON positions.

Circuit X5 supplies battery voltage for the radio clock and station frequency display. Circuit X5 originates at the radio illumination relay and is fed by either circuit F85 or circuit E2 depending on the switch position inside the relay.

When the headlamps and parking lamps are off, the radio illumination relay is in its normal At Rest position. In the At Rest position, the relay connects circuit F85 from fuse 2 in the fuse block to circuit X5.

When the headlamps or parking lamps are on, circuit L90 from the headlamp switch supplies battery voltage to the coil side of the radio illumination relay. Circuit Z1 provides ground for the coil side of the relay.

When voltage is present on circuit L90, the radio illumination relay switches from its At Rest position to connect circuit E2 to circuit X5.

SPEAKERS

There are 3 different radio packages. The standard radio package includes 2 speakers; one in each front door. The four speaker system uses speakers in each front door plus speakers in the rear sound bar. The six speaker system has the front door speakers, sound bar speakers and two speakers in the instrument panel.

BASE RADIO

Vehicles with the base radio have a jumper between the radio and the instrument panel connectors. The jumper simulates rear speaker load.

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.

FOUR SPEAKER SYSTEM

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.

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

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

SIX SPEAKER SYSTEM

Circuit X53 feeds the left speaker in the instrument panel. The X53 circuit is double crimped at the instrument panel left speaker and branches to the left front door speaker. Circuit X55 is the return to the radio from the instrument panel left speaker and left front door speaker. Circuit X55 is double crimped at the instrument panel left speaker.

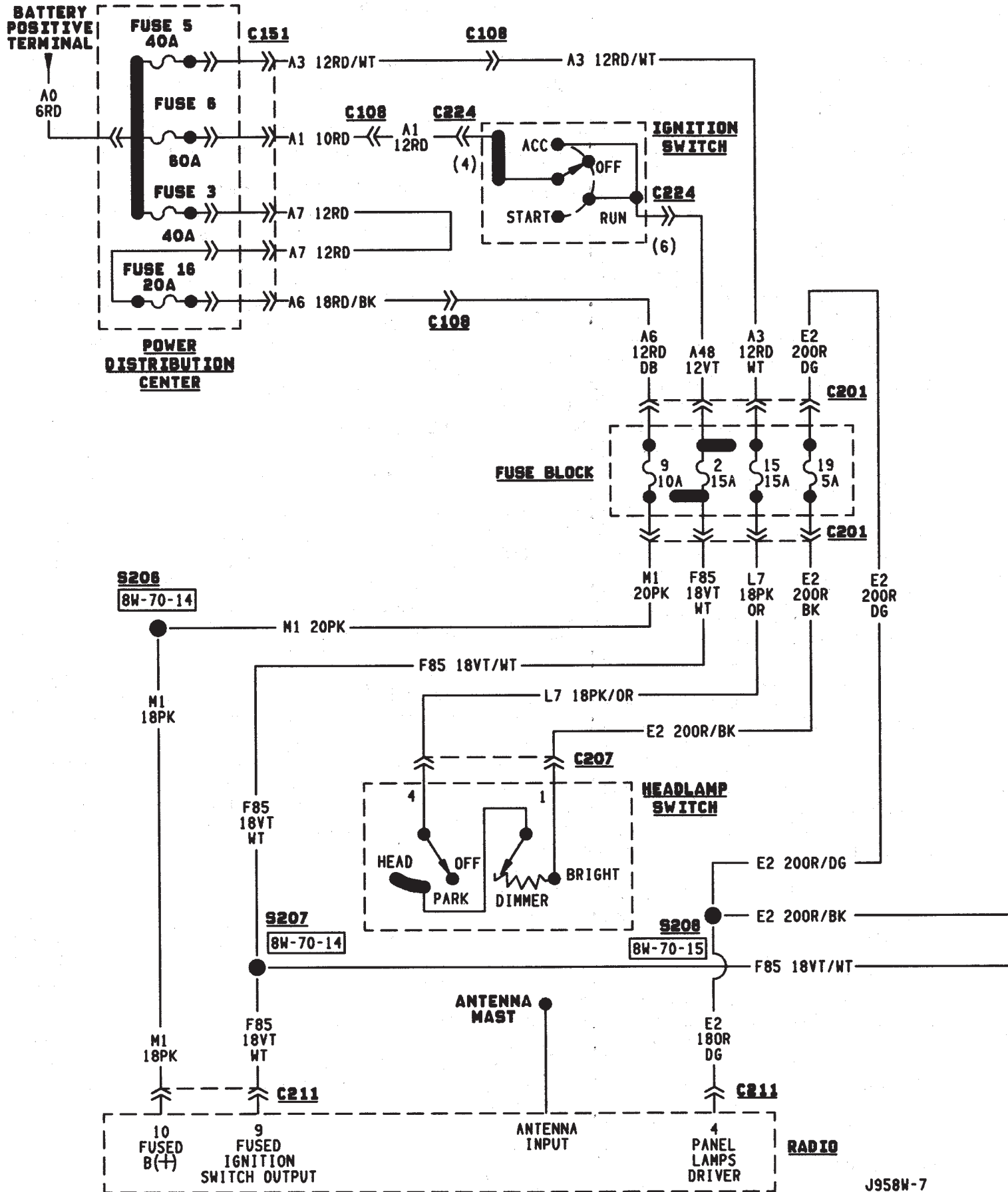
Circuit X54 feeds the right speaker in the instrument panel. The X54 circuit is double crimped at the instrument panel right speaker and branches to the right front door speaker. Circuit X56 is the return to the radio from the instrument panel left speaker and left front door speaker. Circuit X56 is double crimped at the instrument panel left speaker.

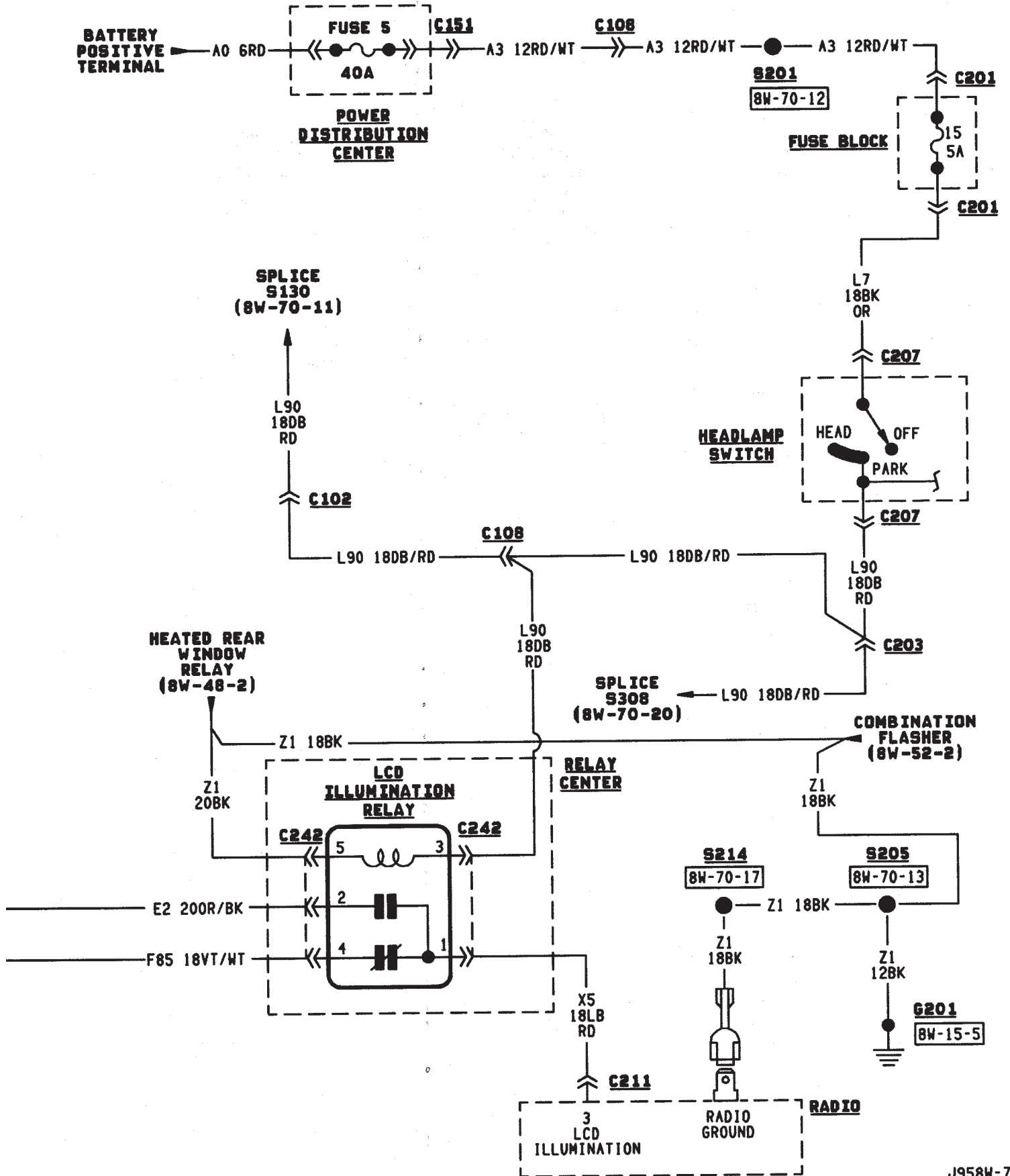
Circuit X51 feeds the left rear speaker. Circuit X57 is the return from the speaker to the radio.

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

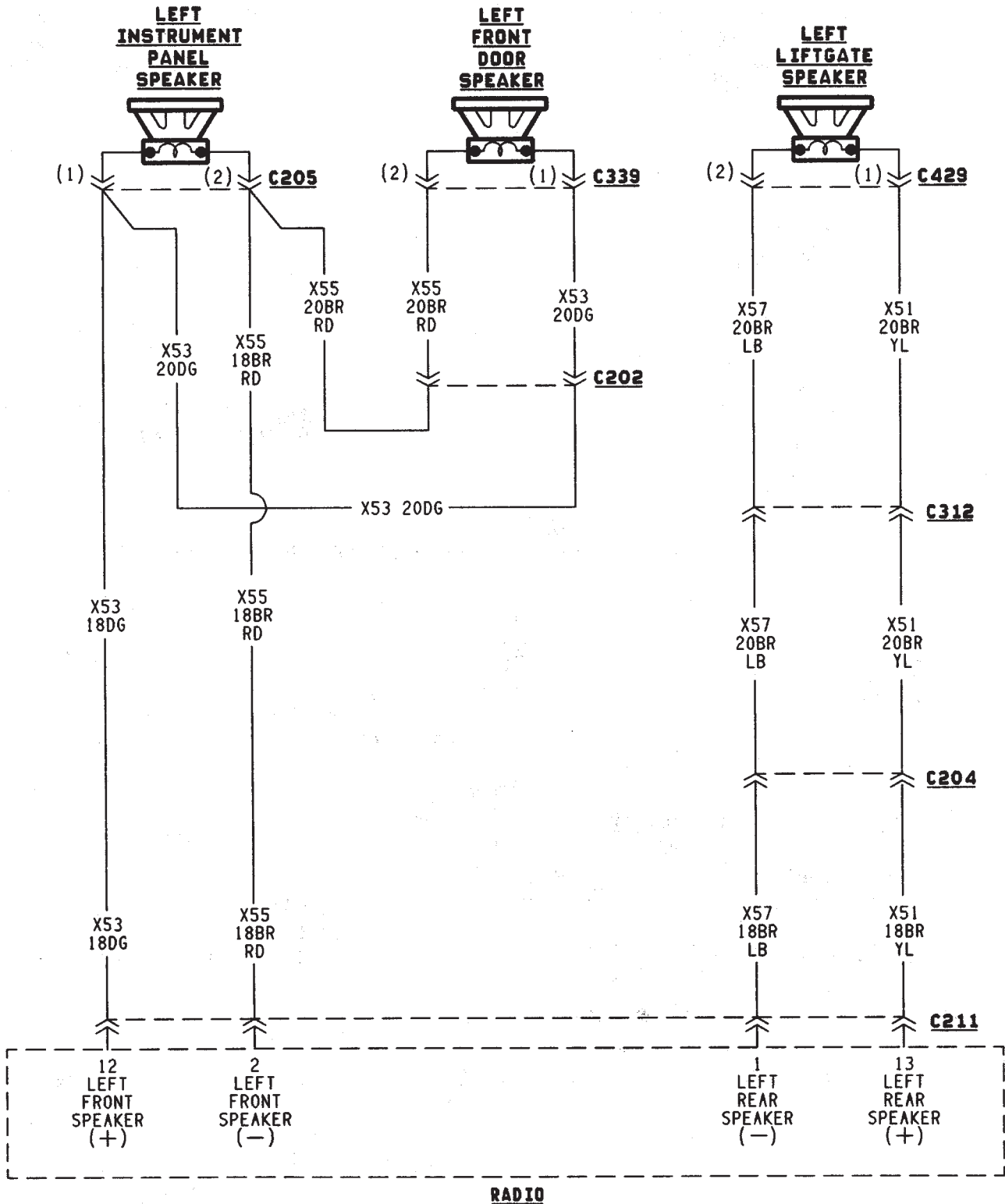
DIAGRAM INDEX

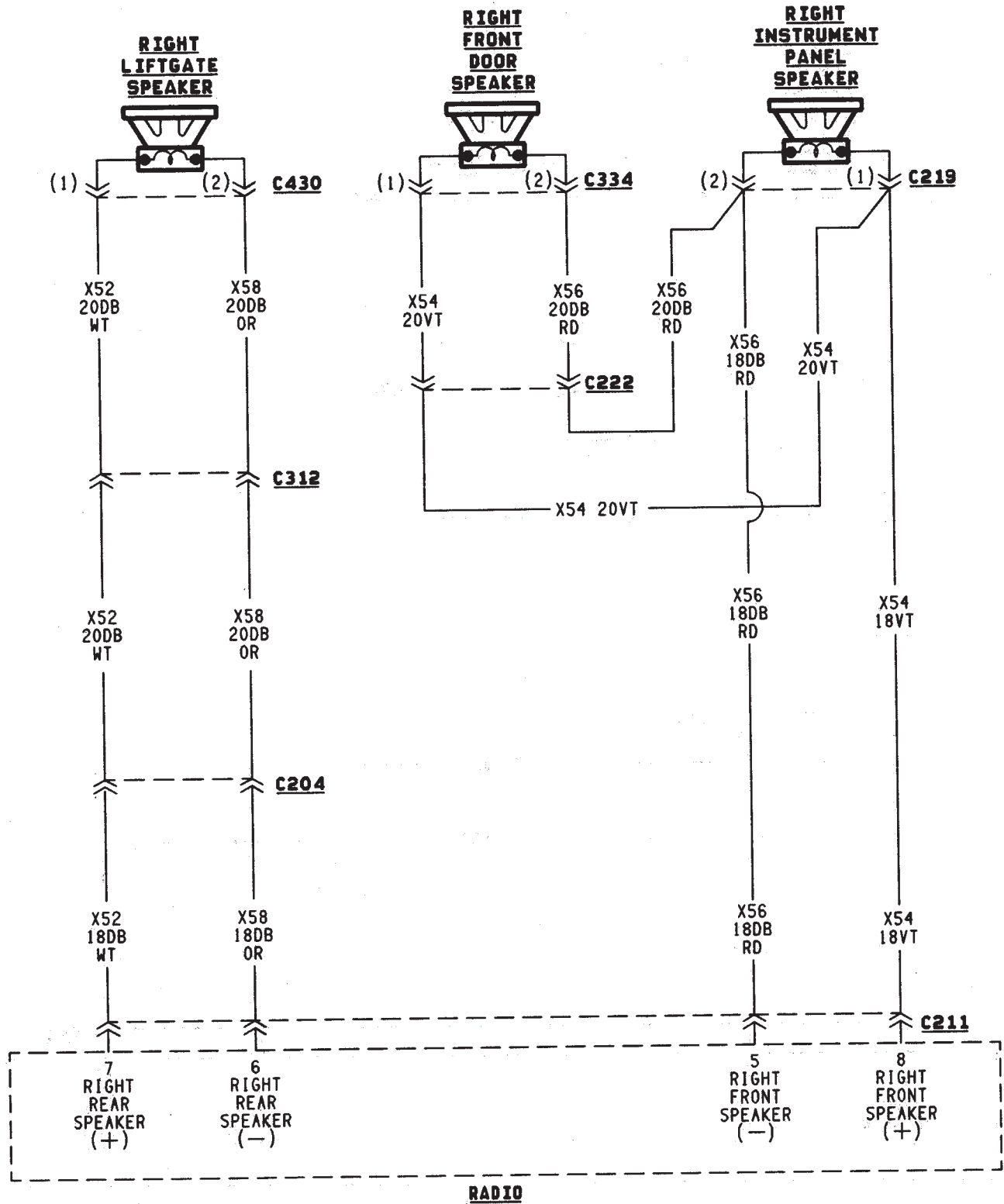
Component	Page
Fuse Block . . . . .	.8W-47-2, 3
Headlamp Switch . . . . .	.8W-47-2
Ignition Switch . . . . .	.8W-47-2
LCD Relay . . . . .	.8W-47-3
Power Distribution Center . . . . .	.8W-47-2, 3
Radio . . . . .	.8W-47-2 thru 7
Speakers (Six Speaker System) . . . . .	.8W-47-4, 5
Speakers (Four Speaker System) . . . . .	.8W-47-6, 7

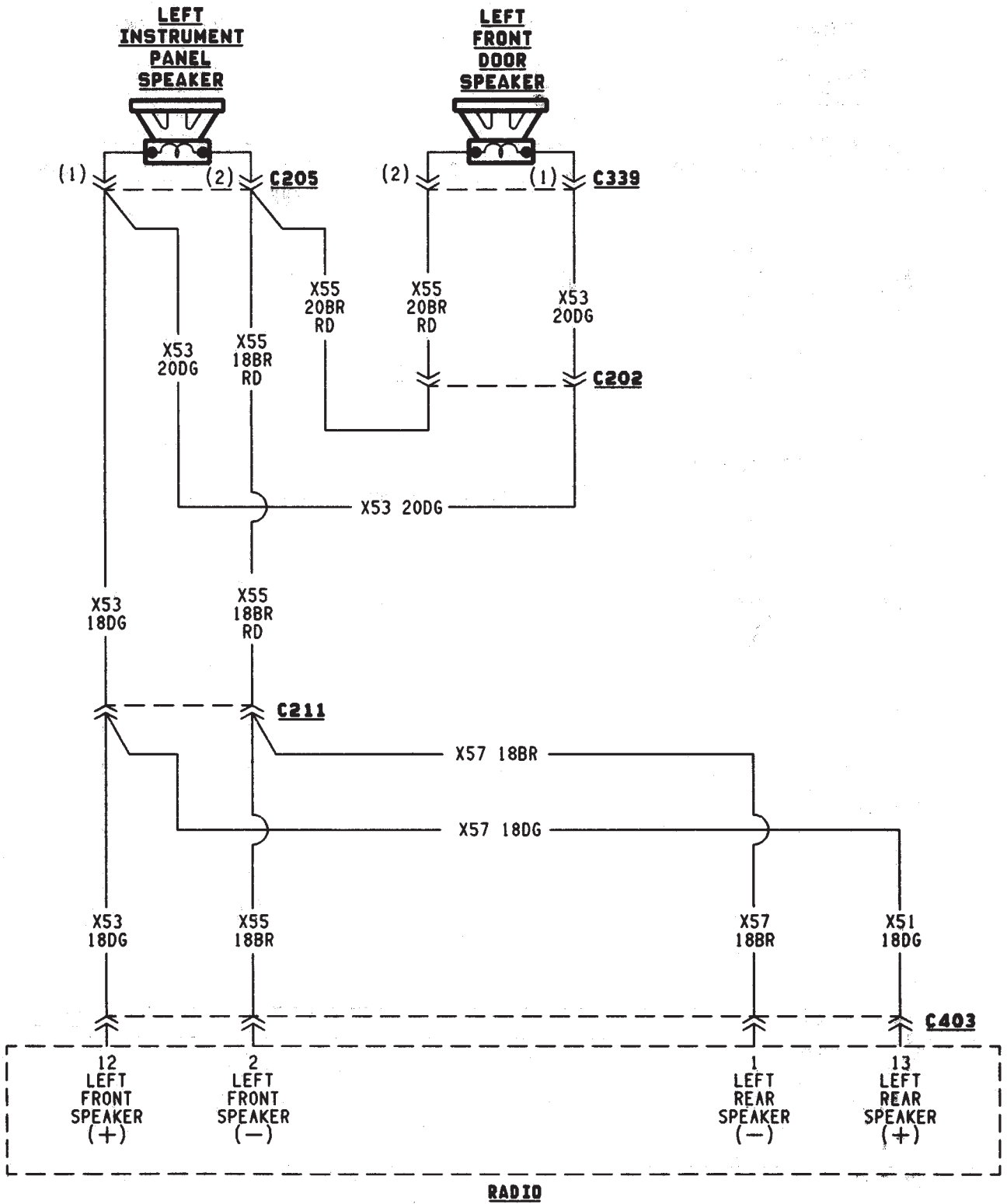


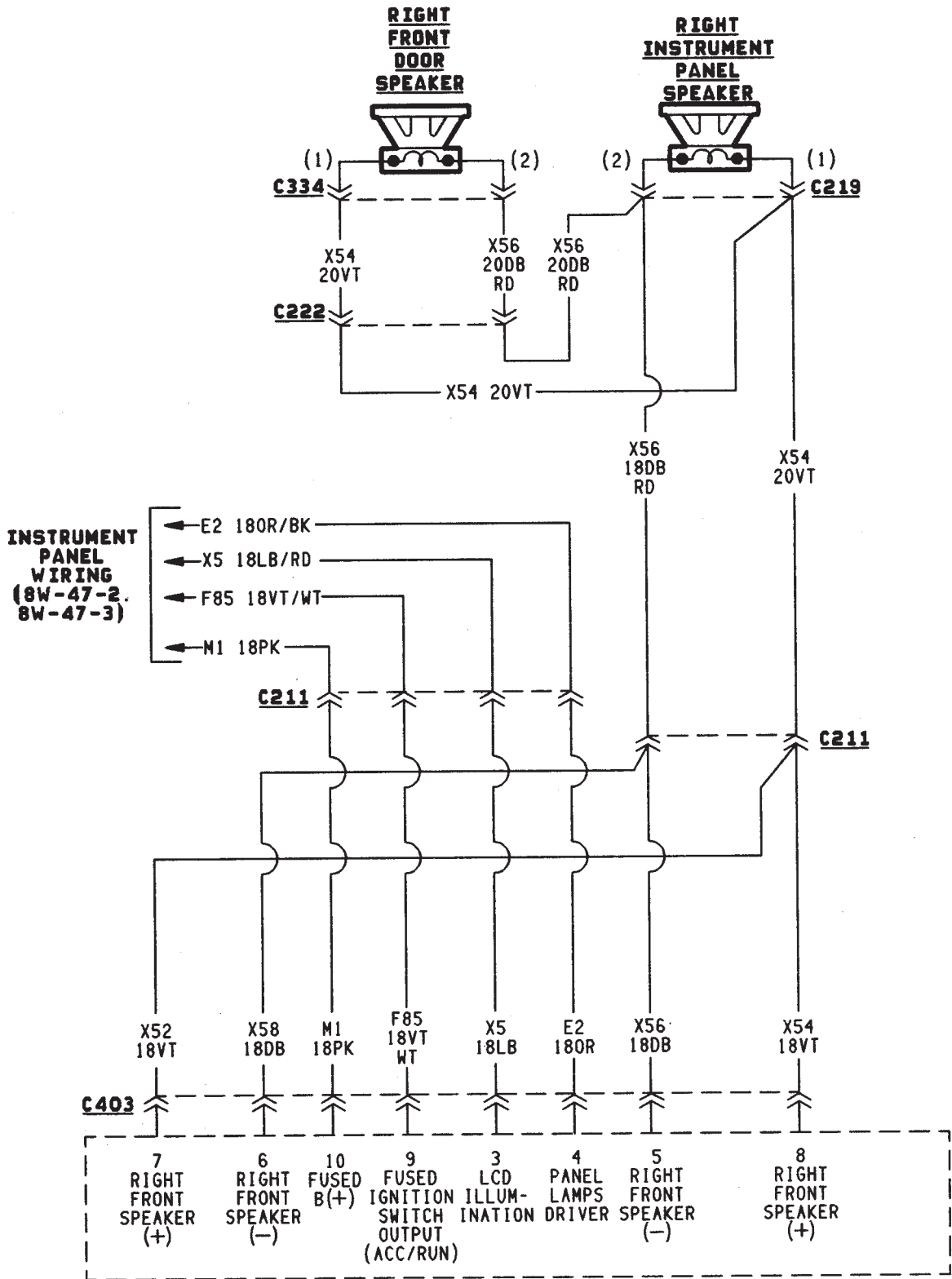


6 SPEAKER SYSTEM









HEATED REAR WINDOW

HEATED REAR WINDOW

The heated rear window relay supplies power to heated rear window grid. Circuit F83 from fuse 8 in the fuse 8 in the fuse block supplies power to the heated rear window relay when the ignition switch is in the ACCESSORY or RUN positions.

When the operator depresses the heated rear window switch, the contacts inside the switch momentarily close and circuit C80 connects the switch to the relay. This causes the relay to change state and complete a circuit to energize the coil side of the relay and start the relay timer.

Circuit F81 from fuse 18 in the fuse block supplies voltage to the coil and contact sides of the relay. Circuit Z1 provides ground for the relay.

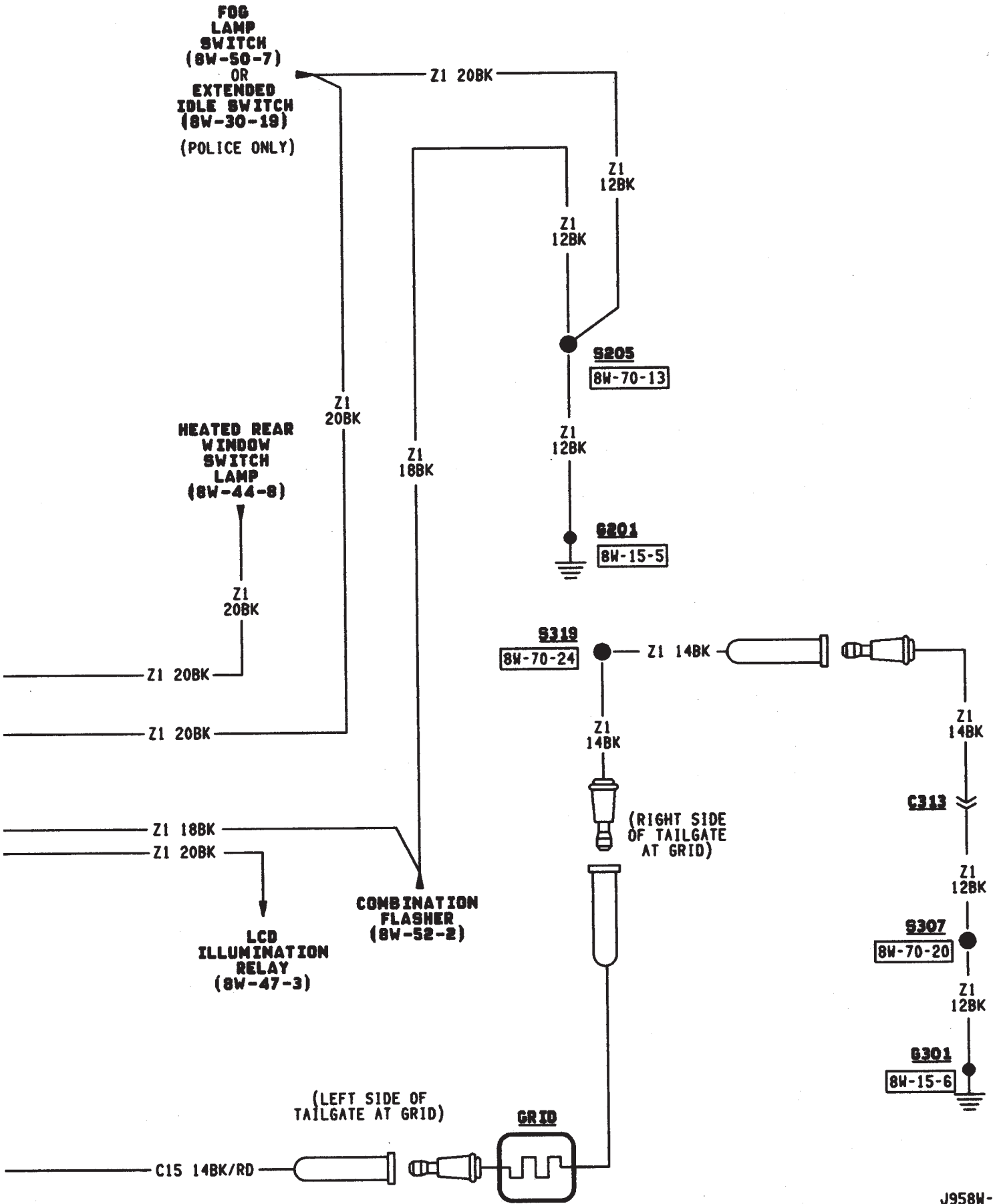
When the heated rear window relay energizes, the contacts inside the relay close and connect circuit F81 to circuit C15. Circuit C15 splices to the power the heated rear window grid and the indicator lamp in the heated rear window switch. Circuit Z1 provides ground for the heated rear window grid.

HELPFUL INFORMATION

- When the ignition switch is in the ACCESSORY or RUN positions, it connects circuit A1 from fuse 6 in the power distribution center (PDC) to circuit A48.
- Check for broken grid lines on the window.
- Check for a broken bus bar or disconnected leads at the rear window.
- Check for a good ground.

DIAGRAM INDEX

Component	Page
Fuse 6 (PDC)	8W-48-2
Fuse 7 (PDC)	8W-48-2
Fuse 8 (Fuse Block)	8W-48-2
Fuse 18 (Fuse Block)	8W-48-2
Ignition Switch	8W-48-2
Heated Rear Window Grid	8W-48-3
Heated Rear Window Relay	8W-48-2
Heated Rear Window Switch	8W-48-2



OVERHEAD CONSOLE

OVERHEAD CONSOLE

When the ignition switch is in the START or RUN position, it connects circuit A1 from fuse 6 in the Power Distribution Center (PDC) to circuit A21. Circuit A21 supplies power to circuit F87 through fuse 17 in the fuse block. Circuit F87 supplies power to the overhead console.

When the headlamps or parking lamps are ON, circuits L90 and E2 provide voltage to the overhead console for illumination. Voltage on circuit L90 informs the overhead console that the headlamps or parking lamps are ON. Circuit E2 from fuse 19 in the fuse block powers the illumination lamps in the overhead console. Circuit E2 originates at the headlamp switch.

Circuits Z1 and Z2 provides ground for the overhead console. From circuit M2, the overhead console senses when one of the door jamb switches opens.

AMBIENT TEMPERATURE SENSOR

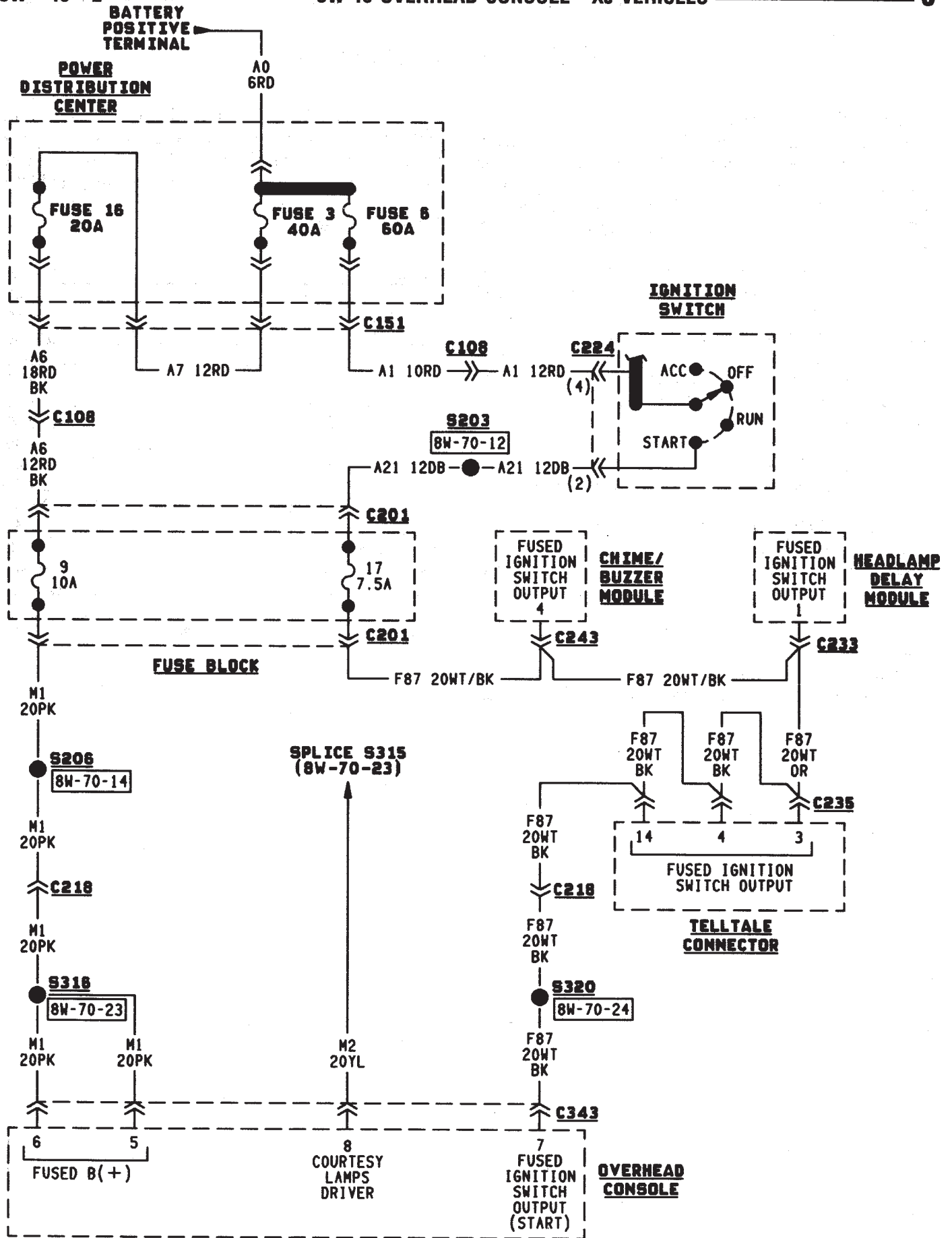
The ambient temperature sensor is a variable resistor. Circuit G31 supplies voltage from the overhead console to the sensor. Circuit G32 is the signal return from the sensor to the overhead console.

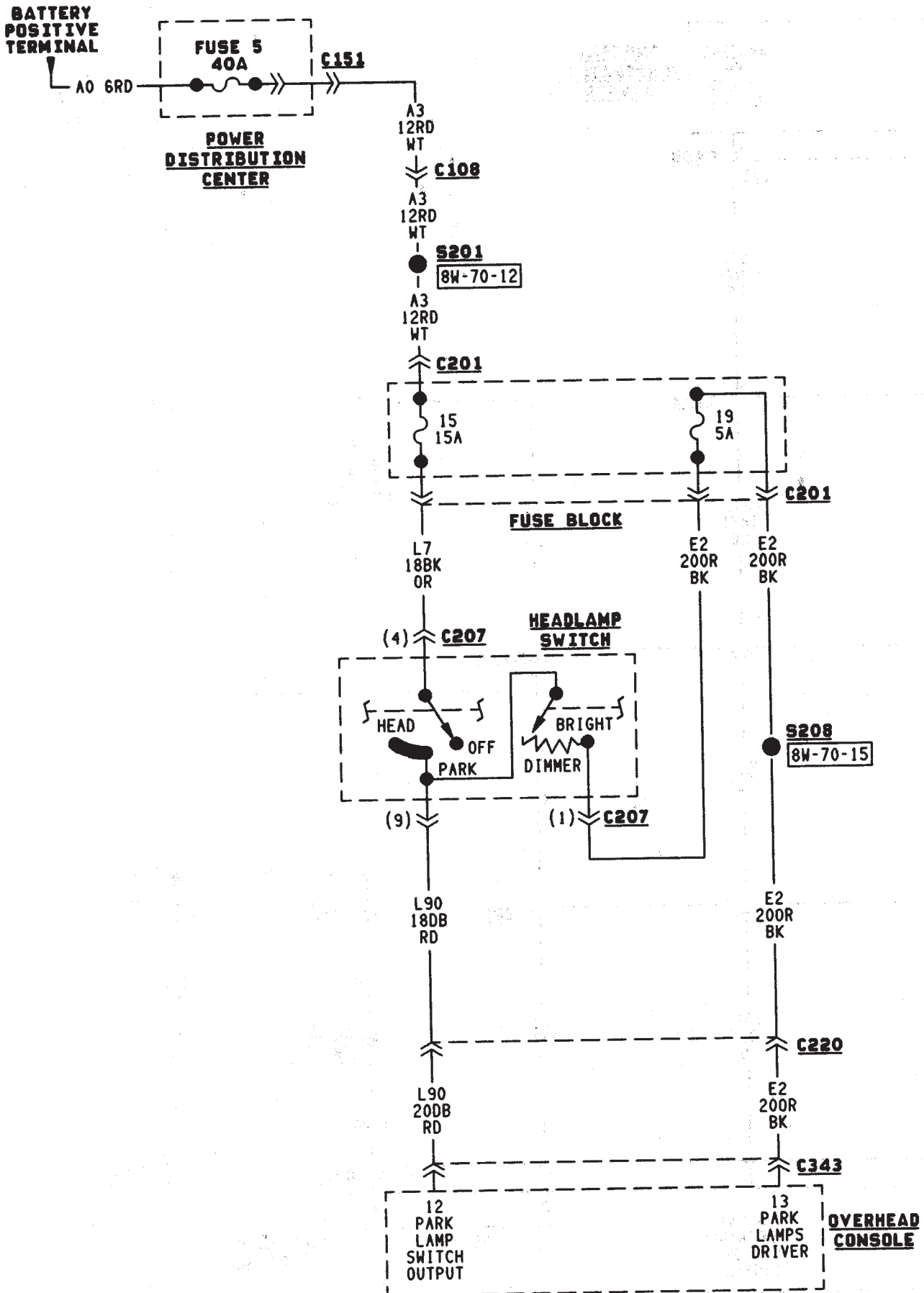
LAMPS

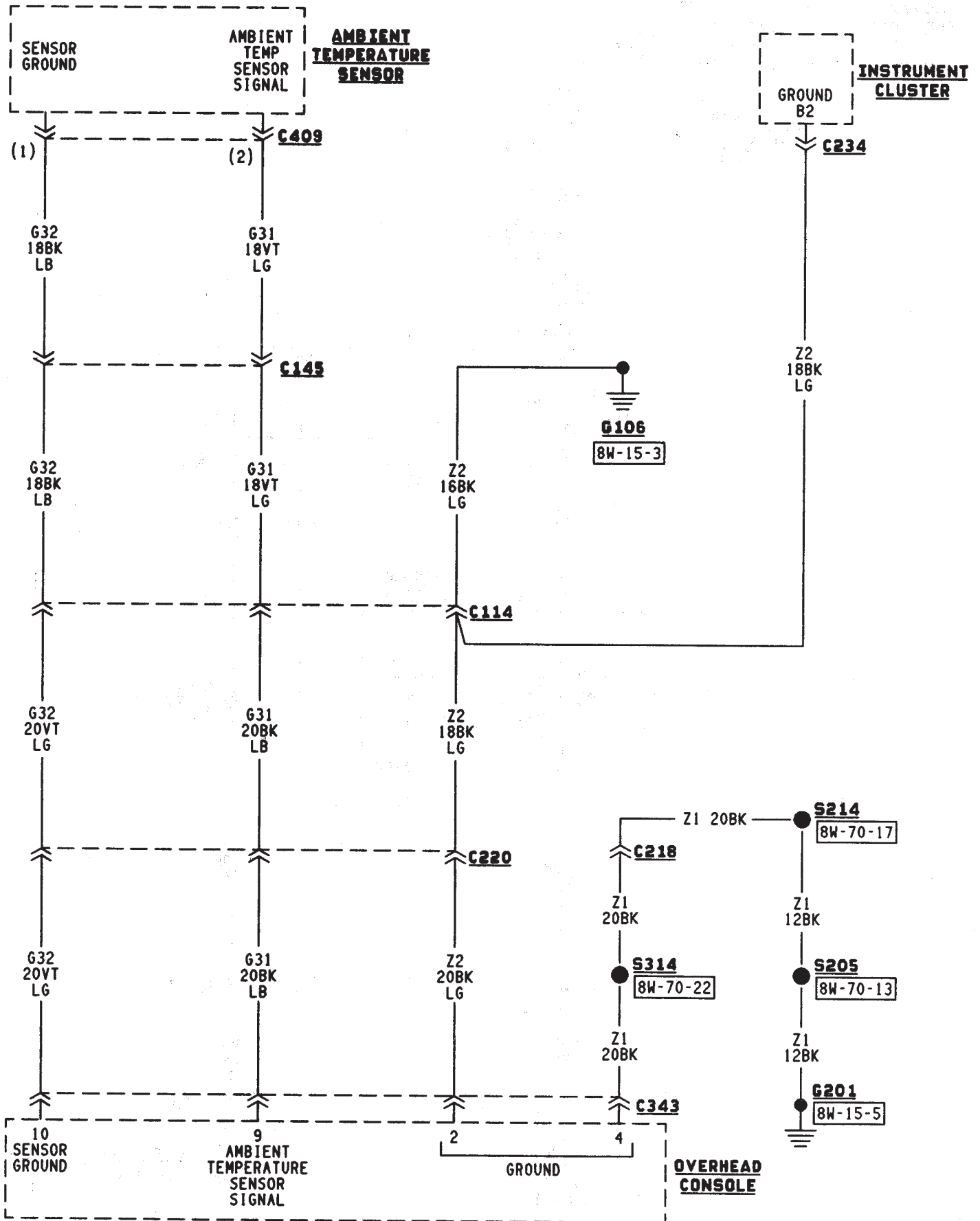
Circuit M1 supplies voltage for the case grounded reading lamps in the overhead console. The ignition off draw (IOD) fuse (fuse 9) in the fuse block supplies voltage to circuit M1. Circuit A6 from fuse 16 in PDC feeds the IOD fuse. Circuit A7 from fuse 3 in the PDC supplies voltage to fuse 1 in the PDC.

DIAGRAM INDEX

<u>Component</u>	<u>Page</u>
Ambient Temperature Sensor	8W-49-4
Chime/Buzzer Module	8W-49-2
Fuse 1 (PDC)	8W-49-2
Fuse 3 (PDC)	8W-49-2
Fuse 5 (PDC)	8W-49-2
Fuse 9 (Fuse Block)	8W-49-2
Fuse 15 (Fuse Block)	8W-49-3
Fuse 16 (PDC)	8W-49-2
Fuse 17 (Fuse Block)	8W-49-2
Fuse 19 (Fuse Block)	8W-49-3
Headlamp Delay Module	8W-49-2
Headlamp Switch	8W-49-3
Ignition Switch	8W-49-2
Instrument Cluster	8W-49-4
Overhead Console	8W-49-3, 4
Overhead Console	8W-49-2
Telltale Connector (Instrument Cluster)	8W-49-2







FRONT LIGHTING

INDEX

	page		page
Daytime Running Lamp (DRL) Module	2	Headlamp Delay Module	2
Diagram Index	2	Headlamps	1
Fog Lamps	1	Parking Lamps	1

HEADLAMPS

The headlamp switch has three positions: ON, PARK (parking lamps) and OFF. Circuit A3 from fuse 5 in the PDC connects to the headlamp switch and feeds the circuit L7 through fuse 15 in the fuse block. Circuit L7 connects to the headlamp switch.

Circuit A3 also splices to feed circuit L11 through fuse 4 in the fuse block. Circuit L11 connects to the dimmer switch circuitry in the multi-function switch.

Circuit A3 from fuse 5 in the PDC supplies battery voltage to the headlamp switch. The headlamp switch has an internal circuit breaker that connects circuit A3 to circuit F34. Circuit F34 connects to the dimmer switch circuitry in the multi-function switch.

HEADLAMP SWITCH IN OFF OR PARKING LAMP POSITION

Circuit L11 connects to the dimmer switch portion of the multi-function switch. Circuit L11 supplies power for the high beams on circuit L3 when the operator flashes the headlamps with the turn signal stalk of the multi-function switch.

HEADLAMP SWITCH IN ON POSITION

When the headlamp switch is in the ON position, circuit A3 from fuse 5 in the Power Distribution Center (PDC) connects 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 with the turn signal stalk of the multi-function switch, circuit L11 connects to the L3 circuit. Circuit L3 powers high beam operation.

HEADLAMP GROUND

Circuit Z1 provides ground for both the right and left headlamps. Circuit Z1 also supplies ground for the fog lamps, if equipped.

HELPFUL INFORMATION

- Check fuse 5 in the PDC.
- The headlamp switch has an internal circuit breaker.

PARKING LAMPS

Circuit A3 from fuse 5 in the Power Distribution

Center (PDC) connects to a bus bar in the fuse block which feeds circuit L7. Fuse 15 in the fuse block protects circuit L7.

The headlamp switch has three positions: ON, PARK (parking lamps) and OFF, plus a dimmer switch. When the headlamp switch is in the PARK or ON position, the switch connects circuit L7 to circuit L90. From the headlamp switch, circuit L90 branches to power the front parking lamps and rear tail lamps, side marker lamps, and rear license plate lamps.

GROUND CIRCUIT

Circuit Z1 provides a ground for the parking lamps and turn signal lamps. The Z1 circuit also provide ground for the headlamps.

HELPFUL INFORMATION

- Check fuse 5 in the PDC.
- Check fuse 15 in the fuse block.
- When the headlamp switch is in the PARK or ON position, the dimmer circuit, L7, also connects to circuit E2. Circuit E2 continues through fuse 19 in the fuse block. Circuit E2 powers the illumination lamps.

FOG LAMPS

The fog lamps are controlled by the fog lamp switch, park lamp relay and high beam relay. The fog lamps operate only when the headlamp switch is in the ON position, and the operator has selected low-beam operation. When the headlamps are in high-beam operation, the fog lamps will not operate.

Circuit F39 from fuse 5 in the Power Distribution Center (PDC) supplies voltage to the contact side of the park lamp relay.

Circuit L90 supplies power to the coil side of the park lamp relay. Circuit L35 connects to the coil side of the relay and to circuit Z1 through the fog lamp switch. Ground for the coil side of the relay is provided on circuit Z1 through the fog lamp switch.

When the fog lamp switch closes, the park lamp relay contacts close and circuit F39 passes through the relay to power the contact side of the high beam relay. When the headlamp high beams are OFF, the high beam relay is not energized and voltage flows through the normally closed contacts to circuit L39.

Circuit L39 supplies voltage to the fog lamps. Circuit Z1 provides ground for the fog lamps.

If the high beam lamps are ON, circuit G465 energizes the high beam relay. When the high beam relay energizes, the contacts open and power is not supplied to the fog lamps. Circuit Z1 provides ground for the coil side of the high beam relay.

Circuit E2 provides voltage for the illumination lamp in the fog lamp switch.

HELPFUL INFORMATION

- Circuit L3 splices to power circuit G465. Circuit L3 powers the high beam circuit of the headlamps.

HEADLAMP DELAY MODULE

When the operator turns off the ignition switch and the headlamp switch, the headlamp delay module powers the headlamps for approximately 45 seconds.

When the ignition switch is in the RUN position, circuit A21 powers circuit F87 through fuse 17 in the fuse block. Circuit F87 supplies the IGNITION ON/OFF signal to the headlamp delay module. Circuit Z1 provides ground for the module.

When the headlamp delay module activates, it connects circuit X4 from fuse 11 in the fuse block to circuit F34. Circuit F34 powers the headlamps through the headlamp dimmer switch circuit L3.

HELPFUL INFORMATION

Circuit A7 from fuse 3 in the PDC supplies voltage to the fuse block bus bar that powers circuit X4 through the fuse in cavity 11.

DAYTIME RUNNING LAMP (DRL) MODULE

On vehicles built for sale in Canada, the low-beam headlamps operate when the ignition switch is in the RUN position.

When the ignition switch is in the RUN position, circuit A1 from fuse 6 in the Power Distribution Center (PDC), connects to circuit A21. Circuit A21 splices to supply power to the DRL module.

Circuit A3 from fuse 5 in the PDC connects to DRL module. Circuit A3 is HOT at all times.

The DRL module receives the vehicle speed sensor input from circuit G7. Circuit G465 from the DRL module splices to circuit L3 to provide power for the high beam indicator lamp in the instrument cluster.

Circuit L4 powers the low beams of the left and right headlamps. When the headlamp switch is OFF, the DRL module powers the low beams on circuit L4. When the headlamps are ON, the dimmer switch in the multi-function switch powers the low beams on circuit L4.

Circuit L3 feeds the high beams of the headlamps. When the operator flashes the headlamps with the stalk of the multi-function switch, the DRL senses voltage on circuit L3. When it senses voltage on circuit L3, the DRL module stops supplying power to the low beams on circuit L4.

Circuit Z12 provides ground for the DRL module.

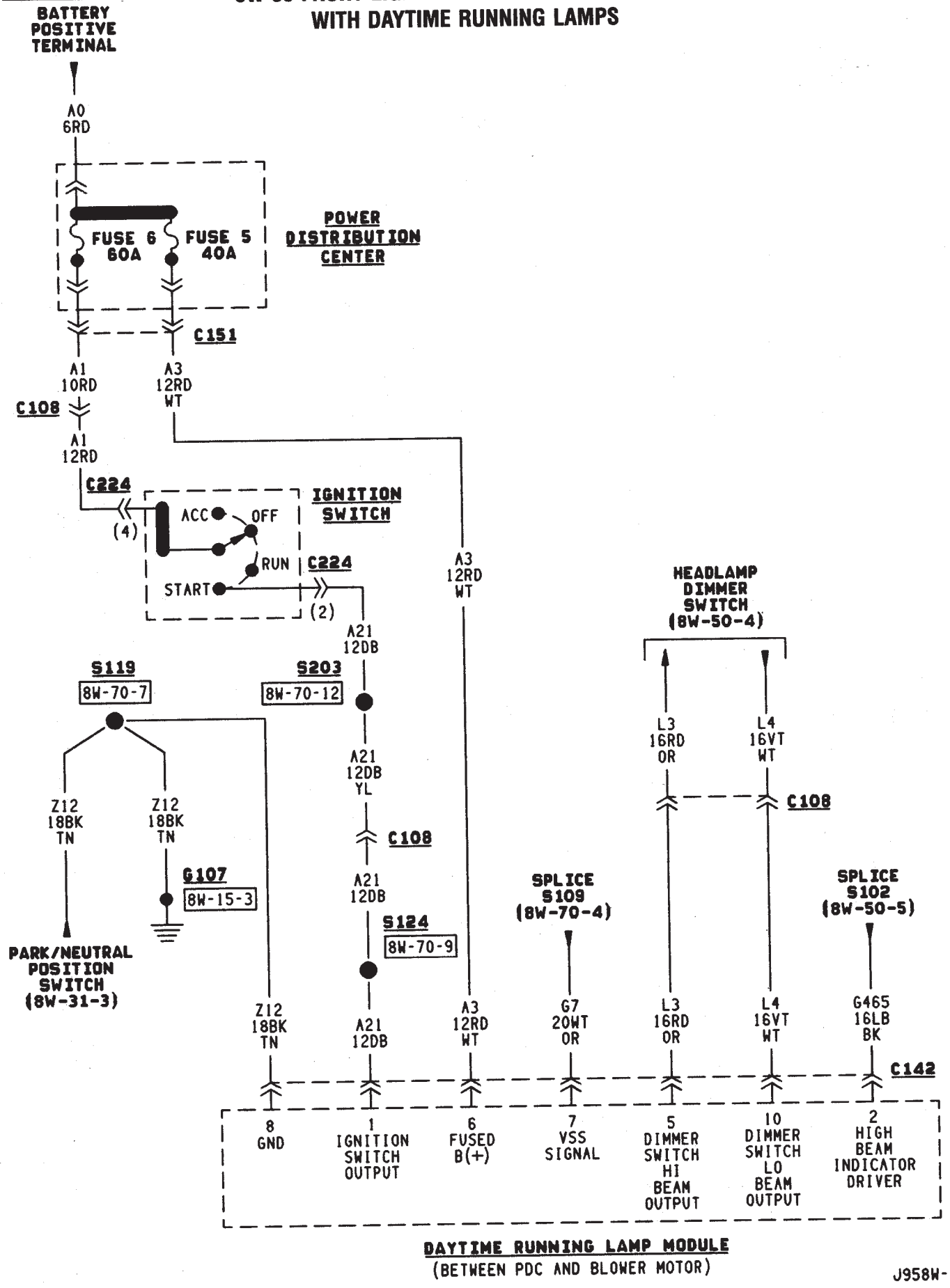
DIAGRAM INDEX

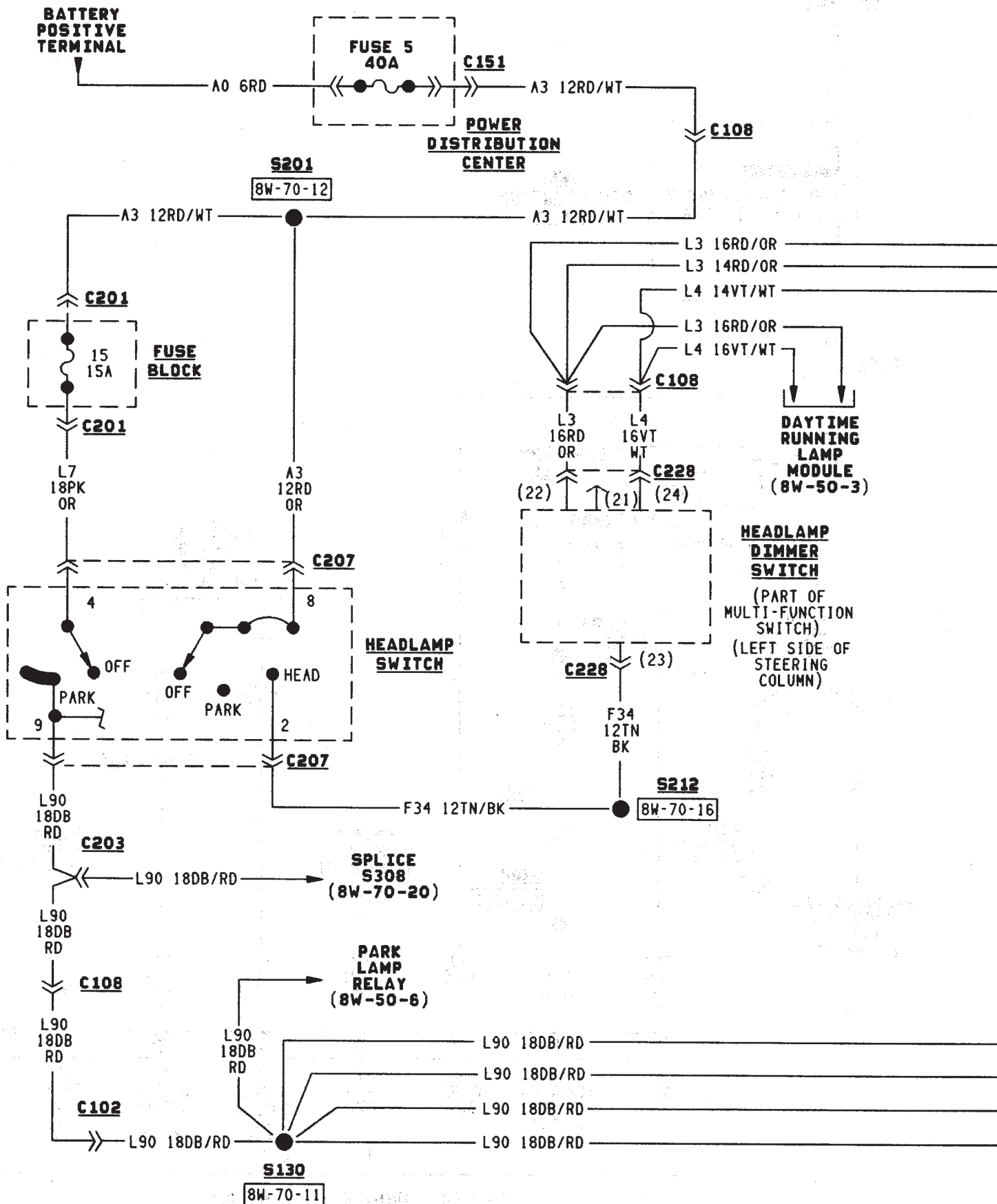
<u>Component</u>	<u>Page</u>
Chime/Buzzer Module . . . . .	.8W-50-8
Daytime Running Lamps (DRL) Module . . . . .	.8W-50-3
Fog Lamps . . . . .	.8W-50-7
Fog Lamp Switch . . . . .	.8W-50-7
Fuse 3 (PDC) . . . . .	.8W-50-9
Fuse 4 (Fuse Block) . . . . .	.8W-50-9
Fuse 5 (PDC) . . . . .	.8W-50-2, 3, 6, 9
Fuse 6 (PDC) . . . . .	.8W-50-2, 8
Fuse 7 (PDC) . . . . .	.8W-50-6
Fuse 11 (Fuse Block) . . . . .	.8W-50-9
Fuse 13 (PDC) . . . . .	.8W-50-6
Fuse 15 (Fuse Block) . . . . .	.8W-50-3, 6
Fuse 17 (Fuse Block) . . . . .	.8W-50-8
Fuse 19 (Fuse Block) . . . . .	.8W-50-6
Headlamps . . . . .	.8W-50-5
Headlamp Dimmer Switch . . . . .	.8W-50-4, 9
Headlamp Switch . . . . .	.8W-50-4, 6, 9
High Beam Relay . . . . .	.8W-50-7
Ignition Switch . . . . .	.8W-50-3, 8
Park Lamp Relay . . . . .	.8W-50-6
Side Marker Lamps . . . . .	.8W-50-5
Tail, Stop and Turn Signal Lamps8W-50-5
Telltale Connector (Instrument Cluster)8W-50-9

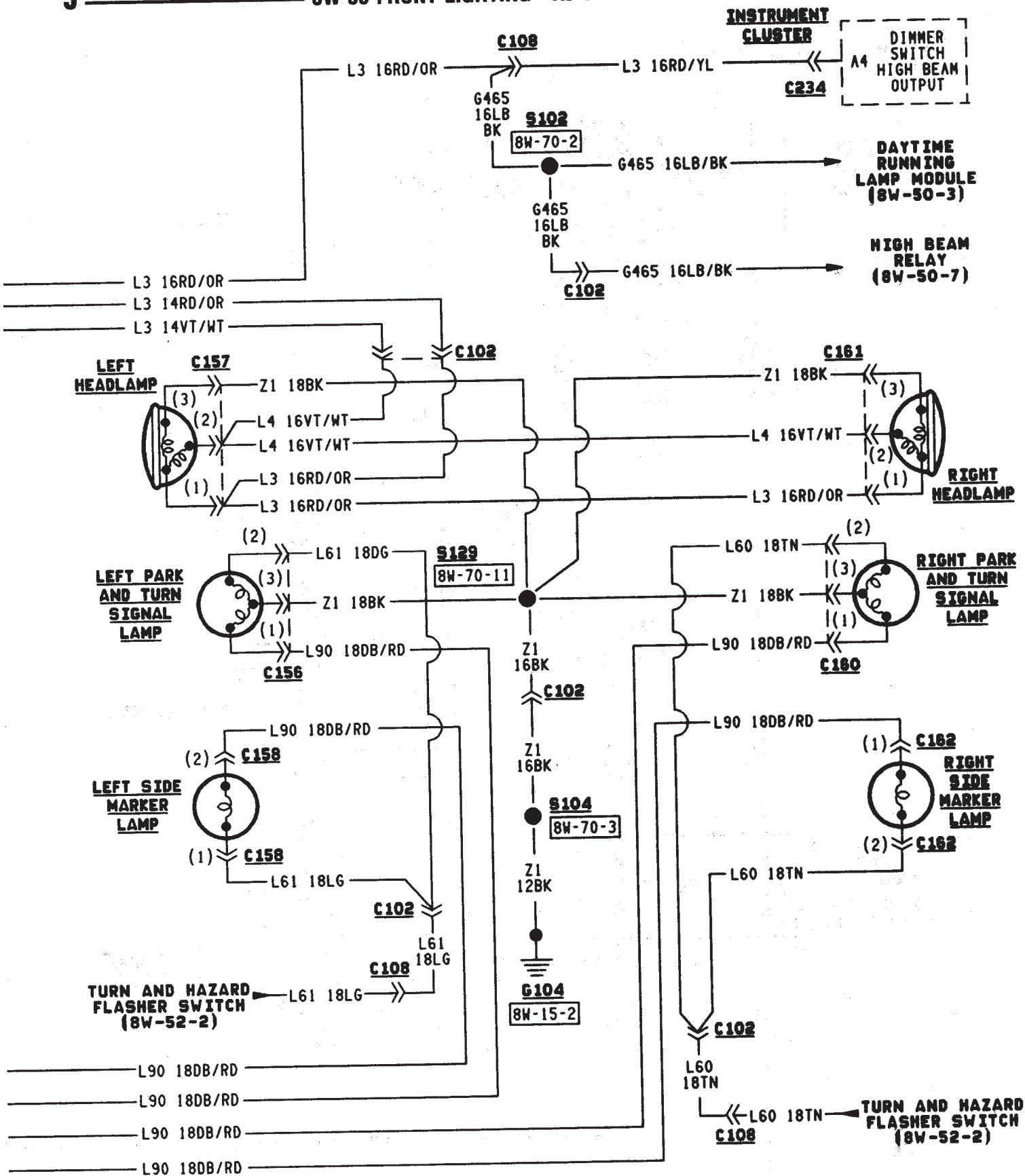
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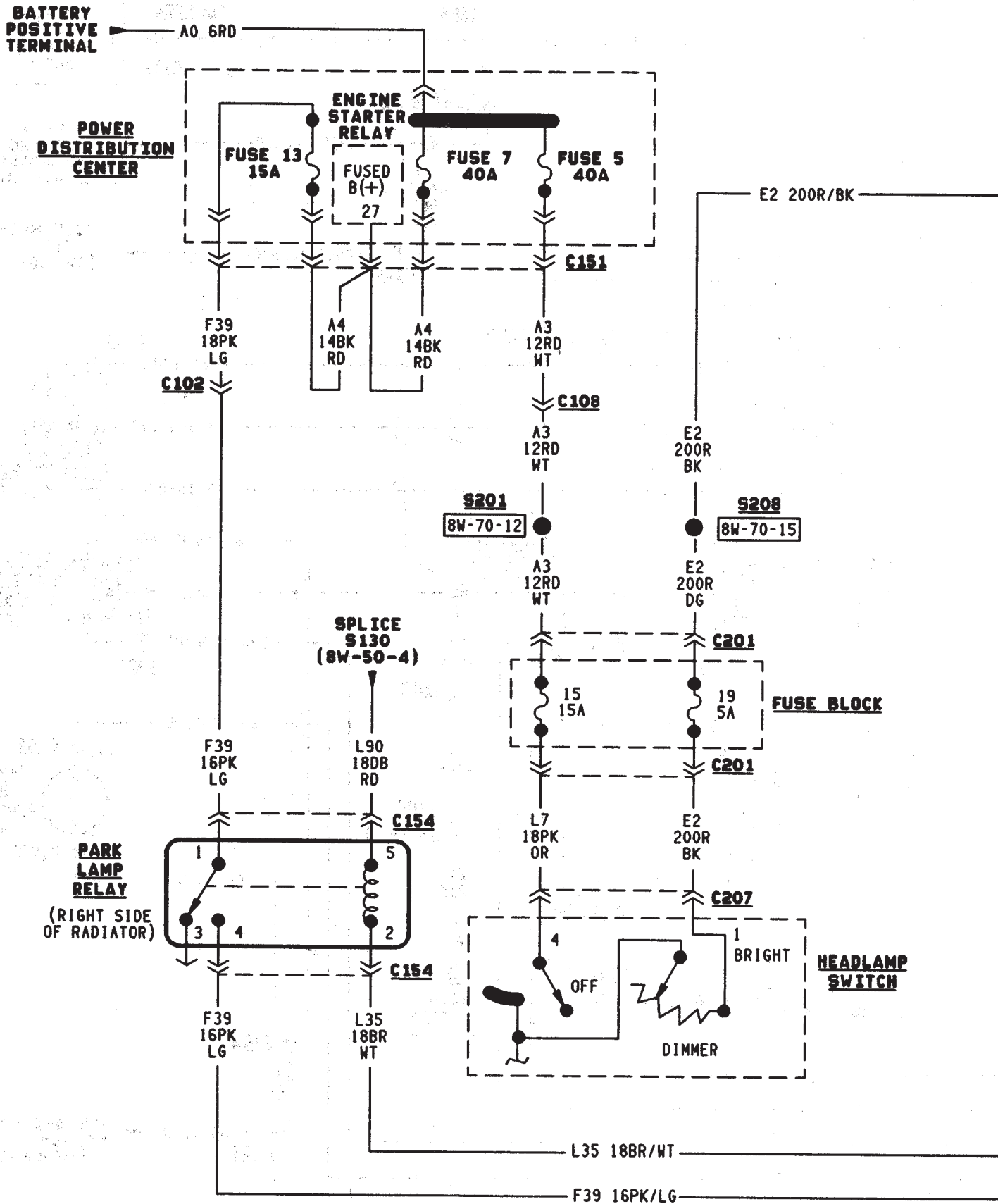
8W-50 FRONT LIGHTING—XJ VEHICLES WITH DAYTIME RUNNING LAMPS

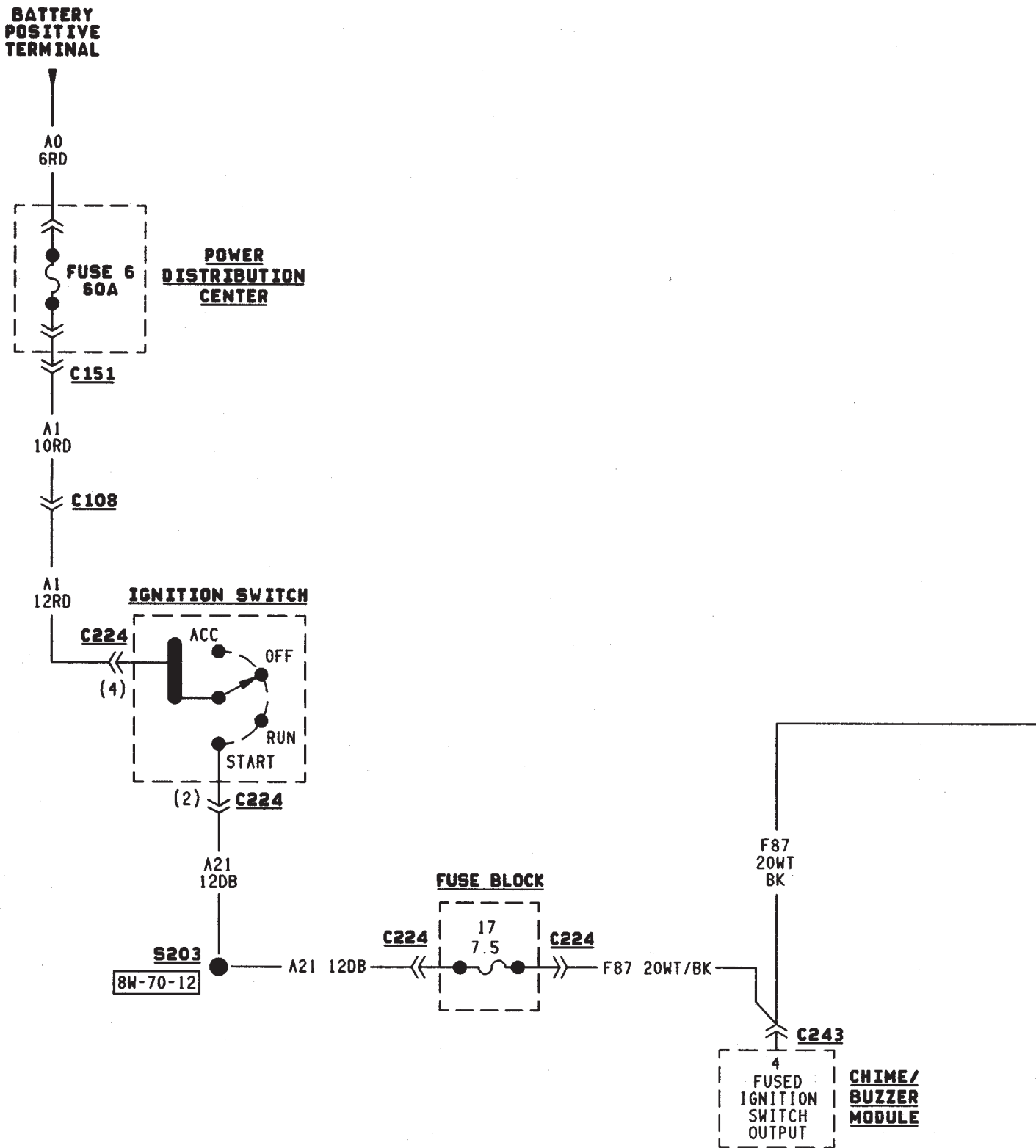
8W - 50 - 3

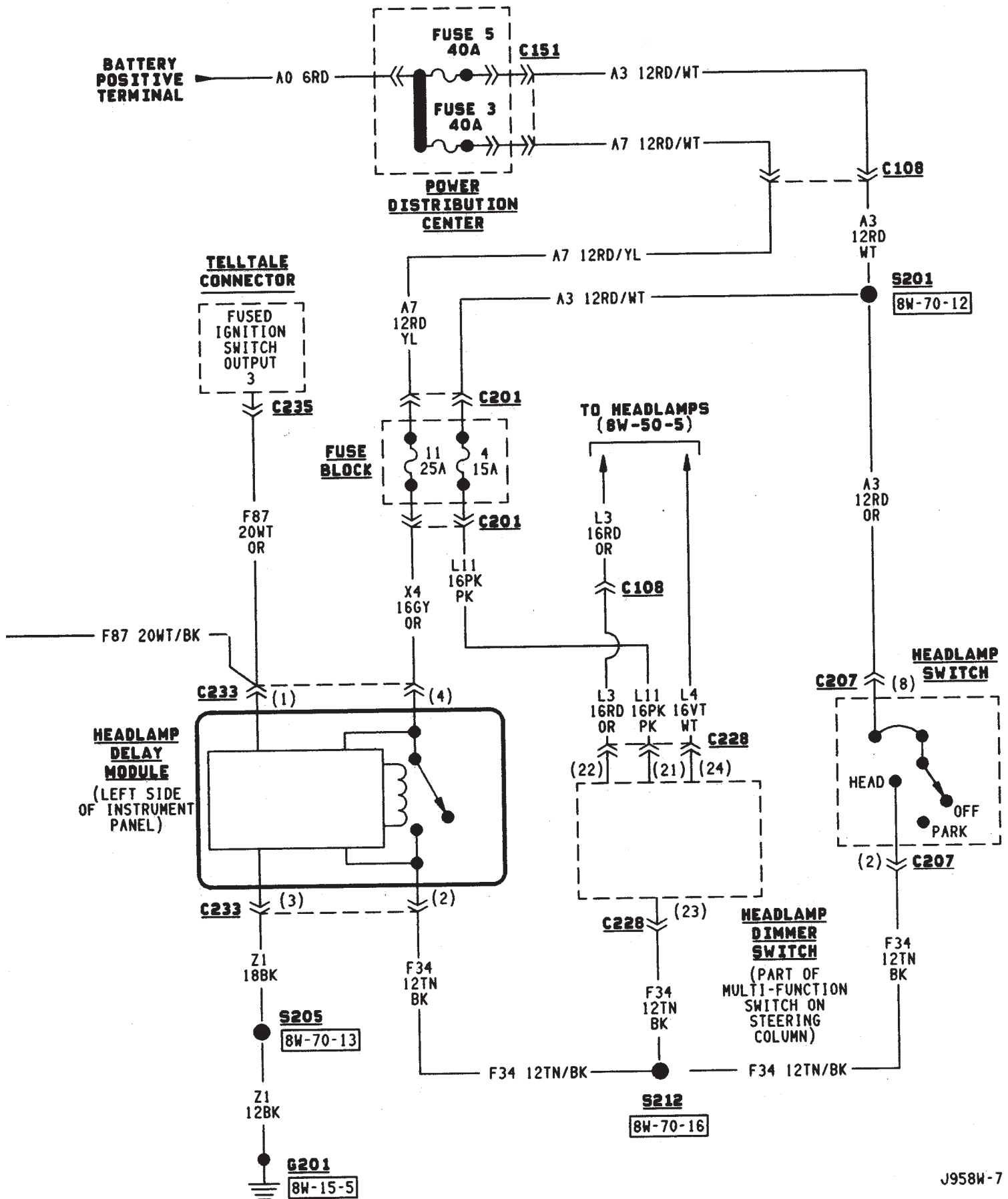












REAR LIGHTING

TAIL LAMPS AND REAR LICENSE PLATE LAMPS

Circuit A3 from fuse 5 in the Power Distribution Center (PDC) connects to a bus bar in the fuse block which feeds circuit L7. Fuse 15 in the fuse block protects circuit L7.

The headlamp switch has three positions: ON, PARK (parking lamps) and OFF, plus a dimmer switch. When the headlamp switch is in the PARK or ON position, the switch connects circuit L7 to circuit L90. From the headlamp switch, circuit L90 branches to power the front parking lamps and rear tail lamps, side marker lamps, and rear license plate lamps.

GROUND CIRCUIT

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 splices to the trailer tow harness.
- Check fuse 5 in PDC.
- Check fuse 15 in the fuse block.
- When the headlamp switch is in the PARK or ON position, circuit L7 also connects to circuit E2. Circuit E2 continues through fuse 19 in the fuse block. Circuit E2 powers the illumination lamps.

STOP LAMPS AND CHMSL LAMPS

Circuit L9 from fuse 4 in the Power Distribution Center (PDC) connects to the stop lamp switch.

When the operator depresses the brake pedal, the stop lamp switch closes and connects circuit L9 to circuit L50. Circuit L50 connects to the stop lamps and Center High Mounted Stop Lamps (CHMSL). Circuit Z1 provides a ground for the stop lamps and CHMSL lamps.

HELPFUL INFORMATION

- Check fuse 4 in the PDC.
- Check for continuity across the stop lamp switch when it is closed.

BACK-UP LAMPS

In the START or RUN position, the ignition switch connects circuit A1 from fuse 6 in the Power Distribution Center (PDC) to circuit A21. Circuit A21 feeds a bus bar in the PDC that powers circuit F12 through fuse 11.

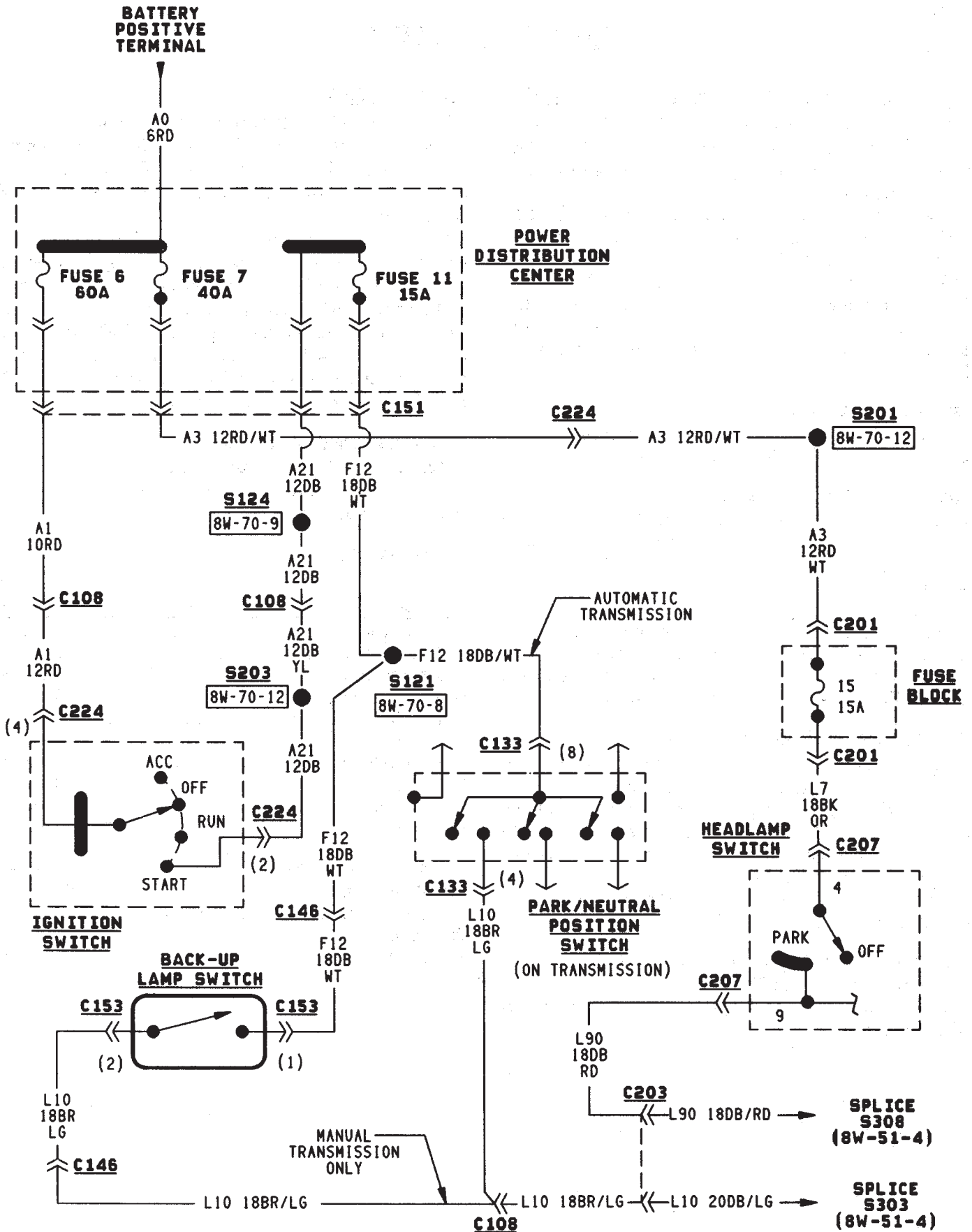
Circuit F20 supplies power to the back-up lamp switch. On automatic transmission equipped vehicles, the back-up lamp switch is part of an assembly that includes the PARK/NEUTRAL position switch. When the operator puts the transmission in REVERSE, the back-up lamp switch connects circuit F20 to circuit L10. Circuit L10 feeds the back-up lamps. Circuit Z1 provides ground for the back-up lamps.

HELPFUL INFORMATION

- Check fuses 6 and 11 in the PDC.
- Check for continuity across the back-up lamp switch when it is closed.

DIAGRAM INDEX

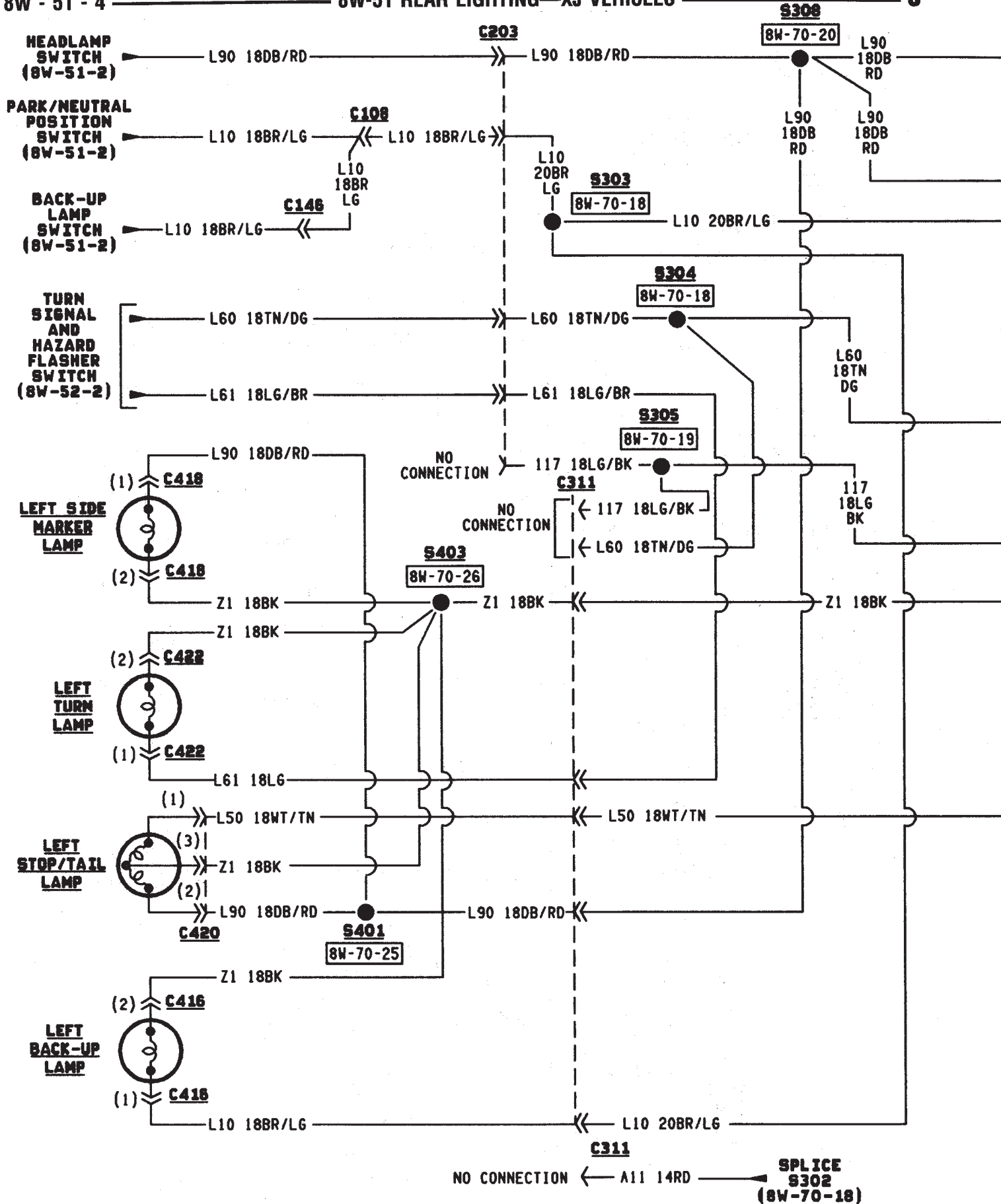
Component	Page
Back-Up Lamps	8W-51-4, 5
Back-Up Lamp Switch	8W-51-2
Center High Mounted Stop Lamps (CHMSL)	8W-51-3
Fuse 15 (Fuse Block)	8W-51-2
Fuse 4 (PDC)	8W-51-3
Fuse 6 (PDC)	8W-51-2
Fuse 7 (PDC)	8W-51-2
Fuse 11 (PDC)	8W-51-2
Headlamp Switch	8W-51-2
Ignition Switch	8W-51-2
License Plate Lamp	8W-51-3
Park/Neutral Position Switch	8W-51-2
Side Marker Lamps	8W-51-4, 5
Stop Lamp Switch	8W-51-3
Tail/Stop Lamps	8W-51-4, 5
Turn Signal Lamps	8W-51-4, 5

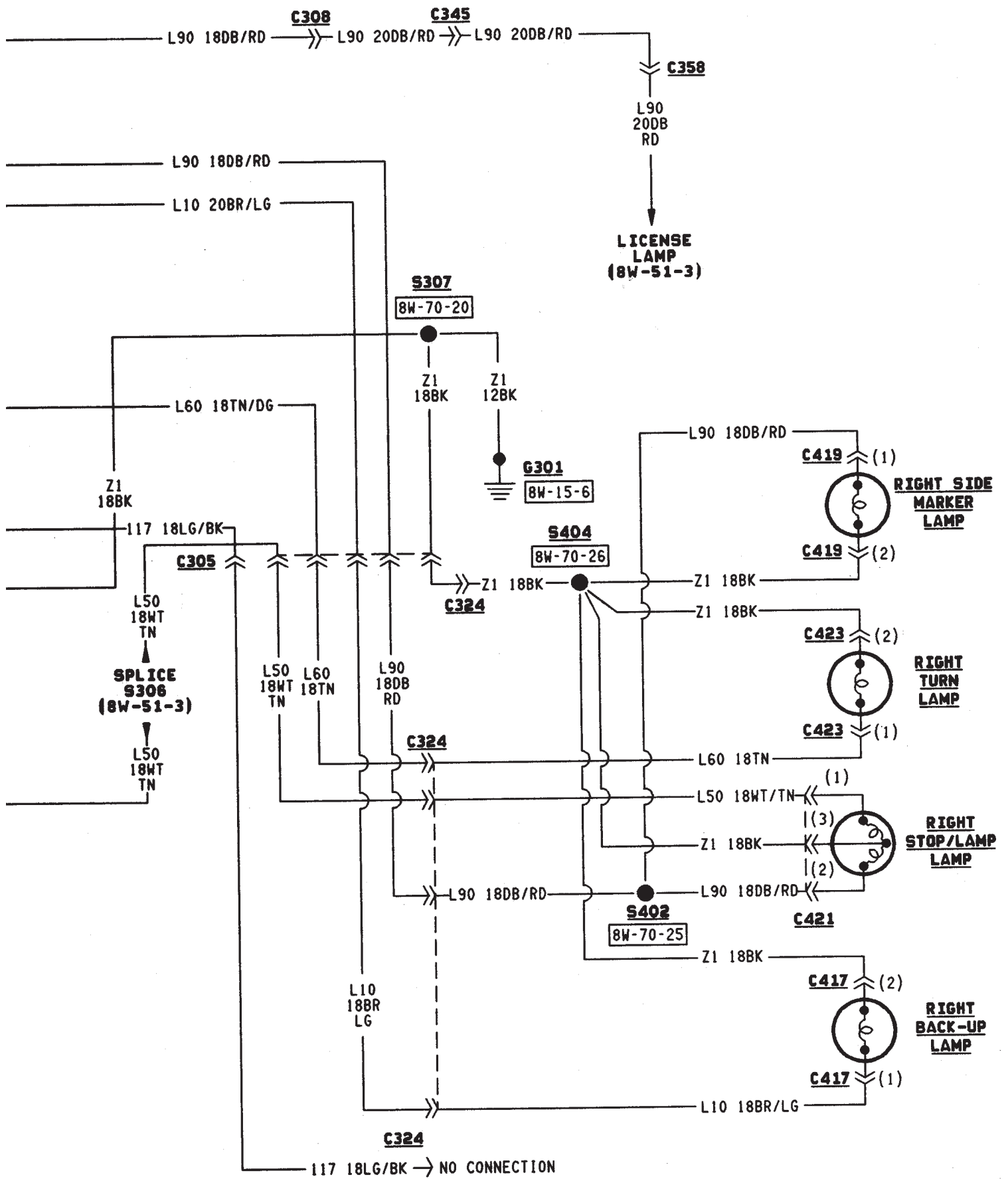


8W - 51 - 4

8W-51 REAR LIGHTING—XJ VEHICLES

J





TURN SIGNALS

COMBINATION FLASHER

In the ACCESSORY or RUN position, the ignition switch connects circuit A1 from fuse 6 in the Power Distribution Center (PDC) to circuit A48. Circuit A48 feeds circuit F83 through fuse 8 in the fuse block.

Circuit F83 powers the combination flasher for the turn signals. Circuit L9 from fuse 4 in the PDC supplies battery voltage to the combination flasher for the hazard lamps. Circuit Z1 provides ground for the combination flasher.

Circuit L5 from the flasher connects to the multi-function switch to supply power to the turn signals. The multi-function switch supplies voltage to the turn signals and side marker lamps on circuits L60 and L61.

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

TURN SIGNALS

When the operator selects the right turn signal, the multi-function switch connects power from circuit L5 to circuit L60. Circuit L60 feeds the right front and right rear turn signal lamps. Circuit L60 also splices to power the right turn signal indicator lamp on the instrument cluster.

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

Circuit Z1 provides ground for the turn signal lamps.

HELPFUL INFORMATION

- The turn signal lamps are the same lamps used for the hazard flasher.
- Check fuse 6 in the PDC and fuse 8 in the fuse block if the turn signals do not operate.
- Circuit F83 also connects to the heated rear window relay.

HAZARD FLASHERS

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

Circuit L60 feeds the right front and right rear turn signal lamp. Circuit L60 also splices to power the right turn signal indicator lamp on the instrument cluster.

Circuit L61 feeds the left front and left rear turn signal lamp. Circuit L61 also splices to power the left turn signal indicator lamp on the instrument cluster.

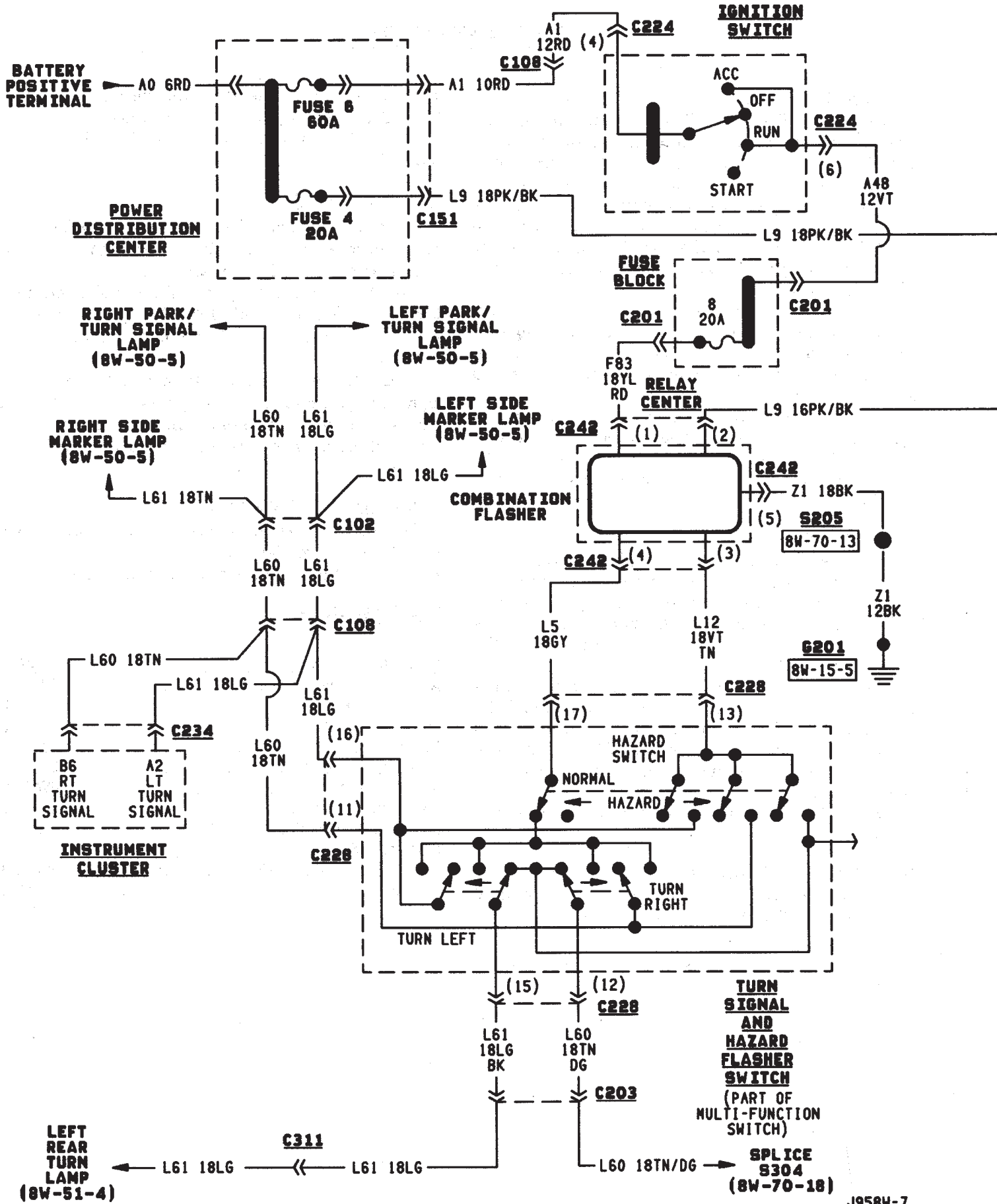
Circuit Z1 provides ground for the hazard flasher lamps.

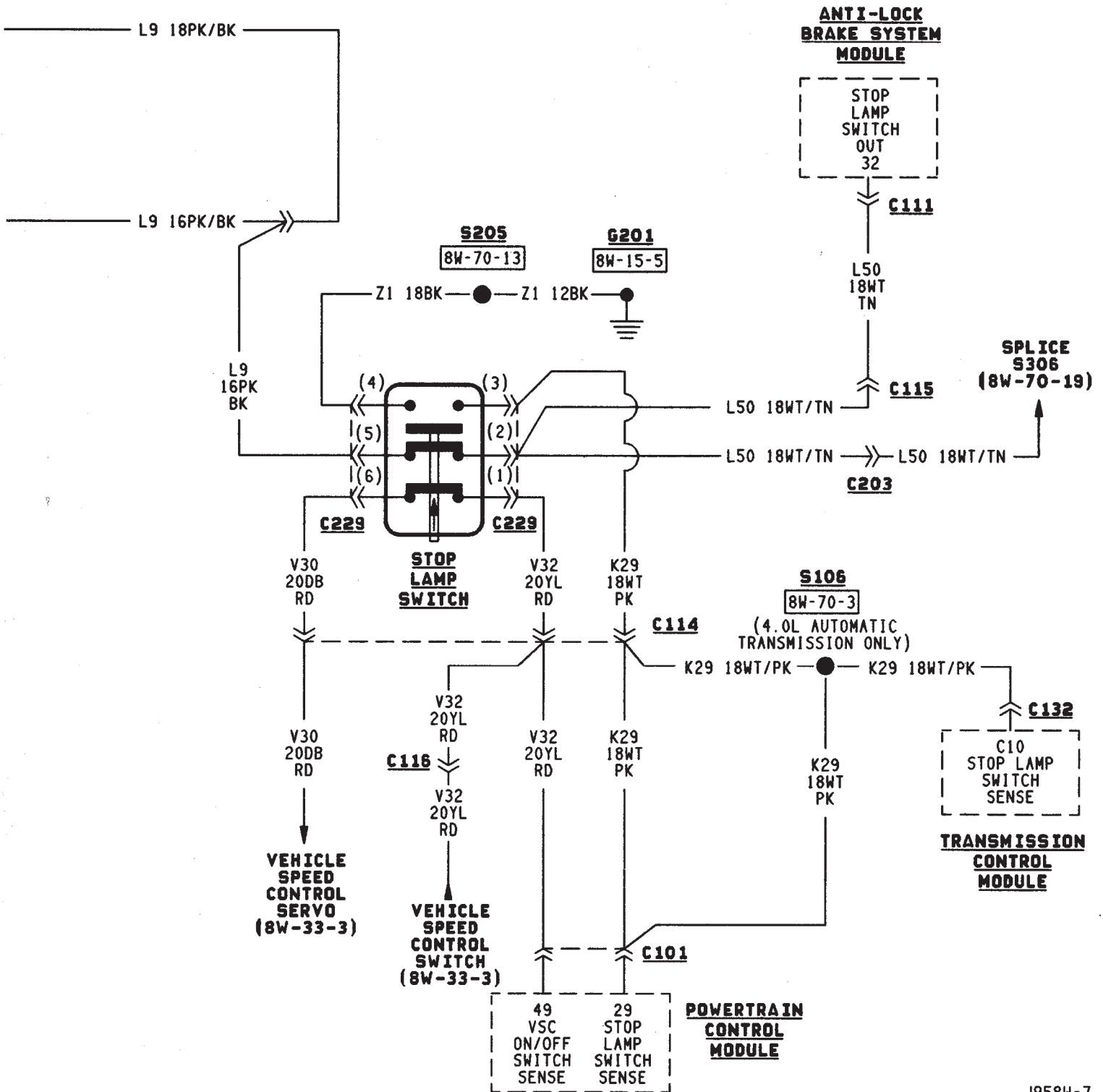
HELPFUL INFORMATION

- The hazard flasher lamps are the same lamps used for the turn signals.
- Circuit L9 also connects to the stop lamp switch.

DIAGRAM INDEX

<u>Component</u>	<u>Page</u>
ABS Control Module	8W-52-3
Combination Flasher	8W-52-2
Fuse 4 (PDC)	8W-52-2
Fuse 6 (PDC)	8W-52-2
Fuse 8 (Fuse Block)	8W-52-2
Ignition Switch	8W-52-2
Instrument Cluster	8W-52-2
Powertrain Control Module	8W-52-3
Stop Lamp Switch	8W-52-3
Transmission Control Module	8W-52-3
Turn Signal Switch	8W-52-2





WIPERS

INDEX

	page		page
Diagram Index	2	Wipers—Intermittent	1
Rear Wiper System	1	Wipers—Standard	1

WIPERS—STANDARD

A circuit breaker powers the standard wiper system. The standard wiper system operates at either LOW or HIGH speeds.

In the ACCESSORY or RUN position, the ignition switch connects circuit A1 from fuse 6 in the Power Distribution Center (PDC) with circuit A48. Circuit A48 supplies voltage to circuit F86 through the circuit breaker near the left kick panel.

Circuit F86 is double crimped at the circuit breaker and supplies power to the wiper switch and the park switch in the wiper motor. Circuit Z1 from the wiper motor provides ground for the wiper motor and switch.

When the operator moves the wiper switch to the LOW position, battery voltage passes through the switch to circuit V3. Circuit V3 feeds the wiper motor low speed brushes. If the operator selects wiper HIGH speed operation, the wiper switch passes current to circuit V4. Circuit V4 feeds the wiper motor high speed brushes.

As the windshield wiper motor turns, the park switch, internal to the motor, moves from its DOWN position to the UP position. When the wiper switch is turned OFF, the V55 circuit prevents the wipers from stopping in any position but park.

The windshield washer uses a pump motor located inside the windshield washer fluid reservoir. When the washer switch is pressed, power is supplied through the wiper switch to the pump motor on circuit V10. Circuit Z1 provide ground for the pump motor.

HELPFUL INFORMATION

Circuit Z1 also provides ground for the rear wiper washer pump, radiator fan motor and front end lighting.

WIPERS—INTERMITTENT

A circuit breaker powers the standard wiper system. The intermittent wiper system operates at either LOW or HIGH or DELAY speeds.

In the ACCESSORY or RUN position, the ignition switch connects circuit A1 from fuse 6 in the PDC with circuit A48. Circuit A48 supplies voltage to circuit F86 through the circuit breaker near the left kick panel.

Circuit F86 is double crimped at the circuit breaker and supplies power to the wiper switch and the park switch in the wiper motor. Circuit Z1 from the wiper motor provides ground for the wiper motor and switch.

When the operator moves the wiper switch to the LOW position, battery voltage passes through the switch to circuit V3. Circuit V3 feeds the wiper motor low speed brushes. If the operator selects wiper HIGH speed operation, the wiper switch passes current to circuit V4. Circuit V4 feeds the wiper motor high speed brushes.

The DELAY portion of the wiper switch contains a variable resistor. The variable resistor connects to the intermittent wiper module through the wiper switch harness. The amount of delay selected by the operator determines the voltage drop through the resistor and the voltage level received by the intermittent wiper module.

After the intermittent wiper control module determines the amount of delay selected, it cycles the wipers by periodically energizing circuit V3. Circuit V3 powers the wiper motor low speed brushes.

As the windshield wiper motor turns, the park switch, internal to the motor, moves from its DOWN position to the UP position. When the wiper switch is turned OFF, the V55 circuit prevents the wipers from stopping in any position but park.

The windshield washer uses a pump motor located inside the windshield washer fluid reservoir. When the washer switch is pressed, power is supplied through the wiper switch to the pump motor on circuit V10. Circuit Z1 provides ground for the pump motor.

HELPFUL INFORMATION

Circuit Z1 also provides ground for the rear wiper washer pump, radiator fan motor and front end lighting.

REAR WIPER SYSTEM

In the RUN position, the ignition switch connects circuit A1 from fuse 6 in the PDC with circuit A38. Circuit A38 connects to a fuse block bus bar that powers circuit V15 through the fuse in cavity 1. Circuit V15 supplies power to the rear wiper switch.

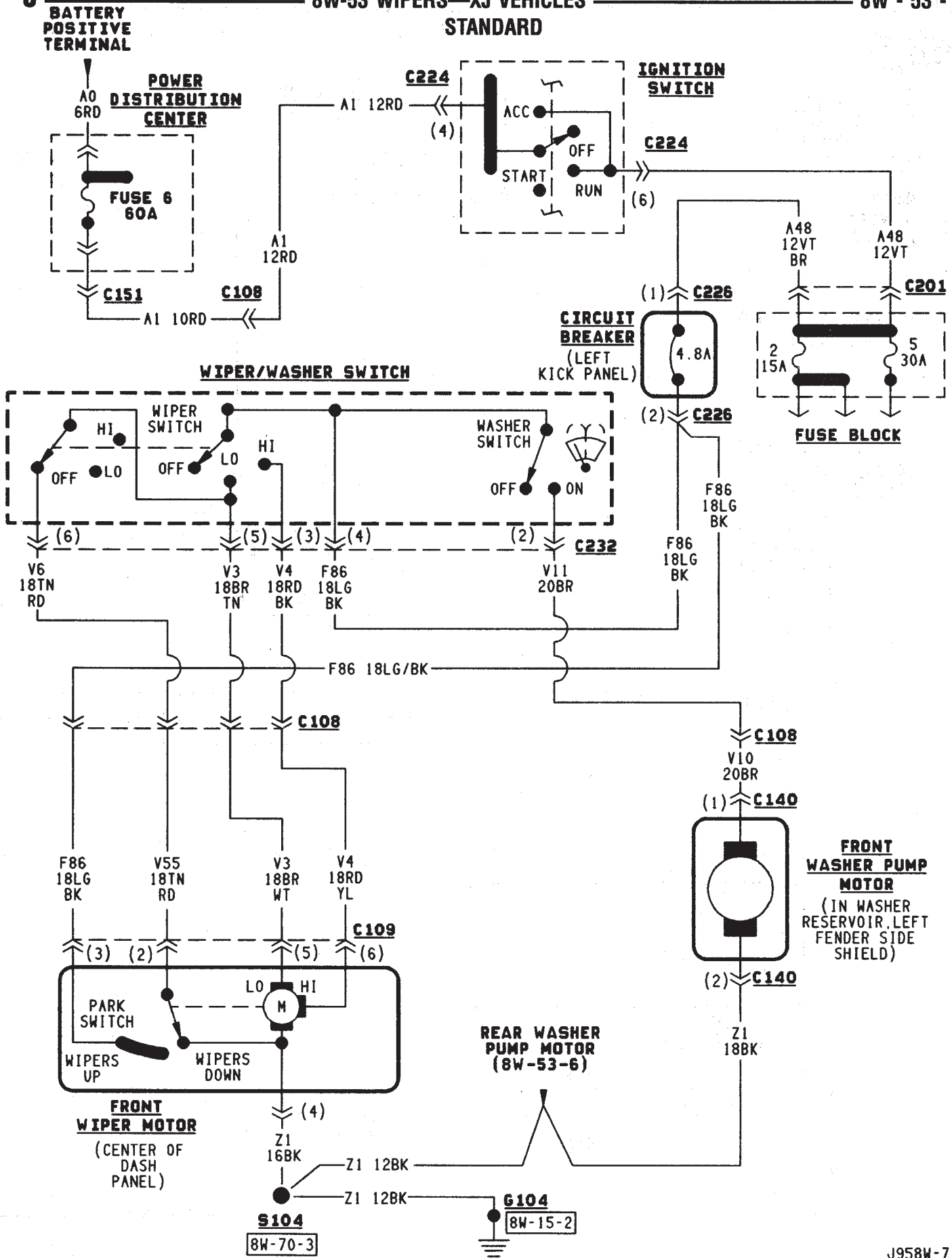
In the WIPE or WASH positions, the rear wiper switch supplies voltage to the wiper motor on circuit V13. Circuit Z1 provides ground for the wiper motor.

The rear windshield washer uses a pump motor located inside the windshield washer fluid reservoir. When the rear wiper switch is pressed, power is supplied through the wiper switch to both the rear wiper and the pump motor on circuit V20. Circuit Z1 provides ground for the pump motor.

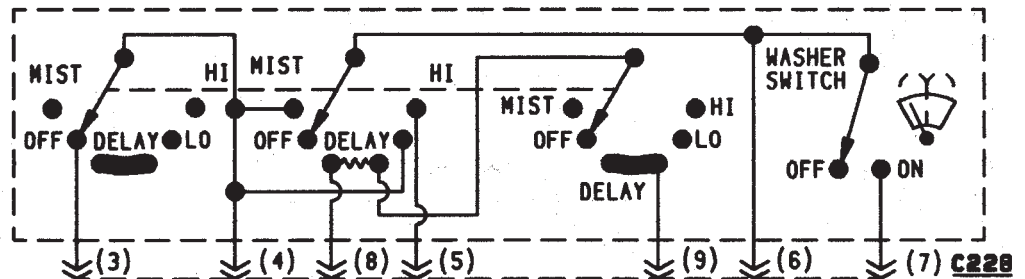
As the rear wiper motor turns, the park switch, internal to the motor, moves from the RUN position to the PARK position. When the wiper switch is turned OFF, the F20 circuit prevents the wipers from stopping in any position but park.

DIAGRAM INDEX

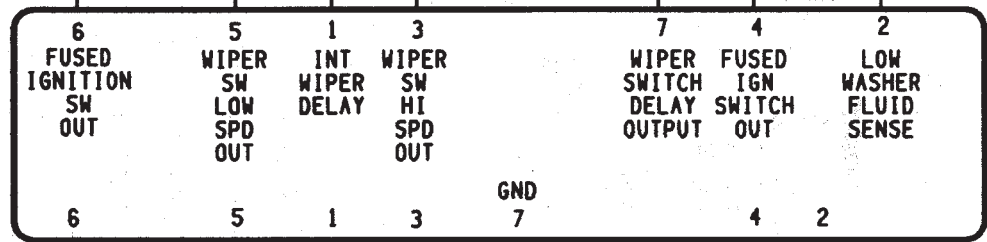
<u>Component</u>	<u>Page</u>
Circuit Breaker . . . . .	.8W-53-3, 4
Front Wiper Motor . . . . .	.8W-53-3, 4
Front Washer Pump Motor . . . . .	.8W-53-3, 5
Fuse 1 (Fuse Block) . . . . .	.8W-53-6
Fuse 6 (PDC) . . . . .	.8W-53-3, 4, 6
Fuse Block . . . . .	.8W-53-3, 4
Ignition Switch . . . . .	.8W-53-3, 4, 6
Intermittent Wiper Module . . . . .	.8W-53-5
Rear Washer Pump Motor . . . . .	.8W-53-6
Rear Wiper Motor . . . . .	.8W-53-6
Rear Wiper Switch . . . . .	.8W-53-6
Wiper Switch (Intermittent Wipers) . . . . .	.8W-53-5
Wiper Switch (Standard Wipers) . . . . .	.8W-53-3



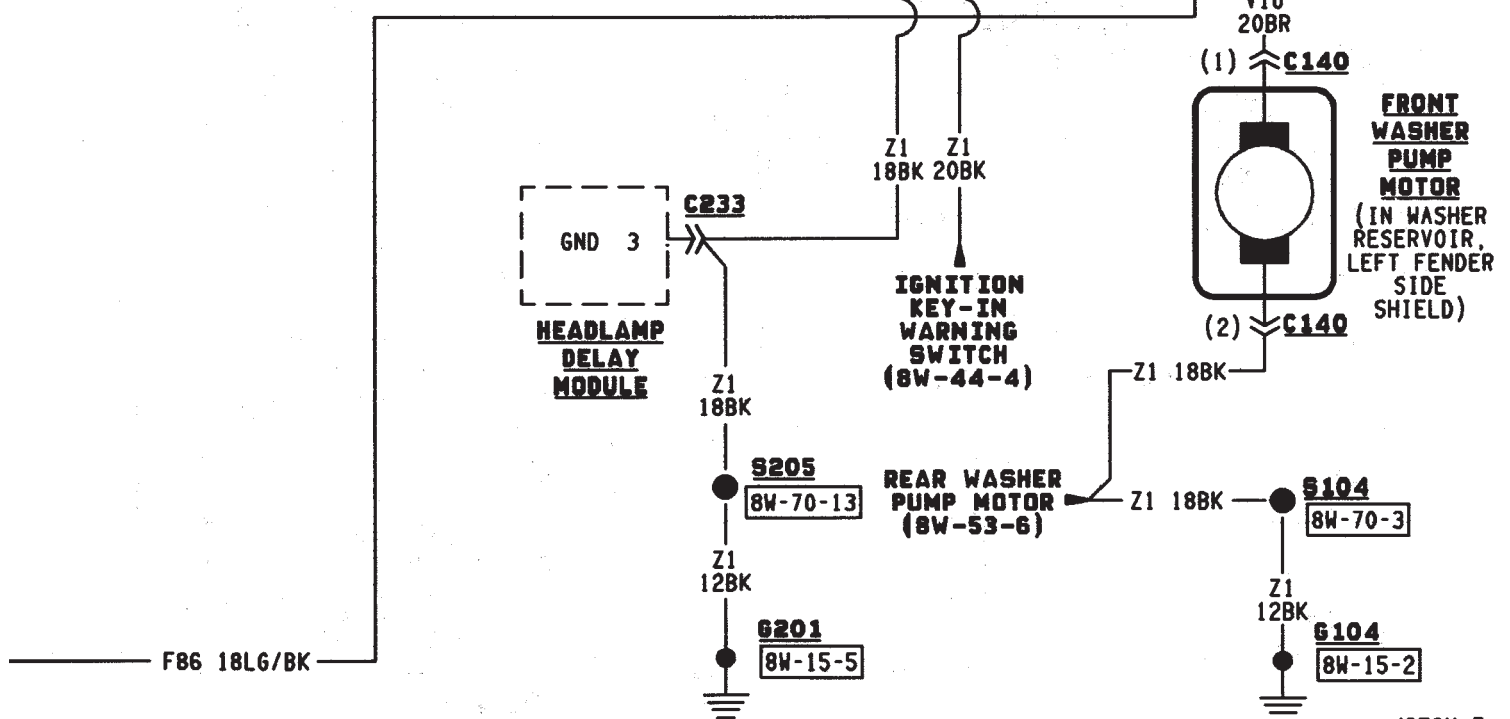
WIPER/WASHER SWITCH



INTERMITTENT WIPER CONTROL MODULE
 (LEFT SIDE OF INSTRUMENT PANEL)

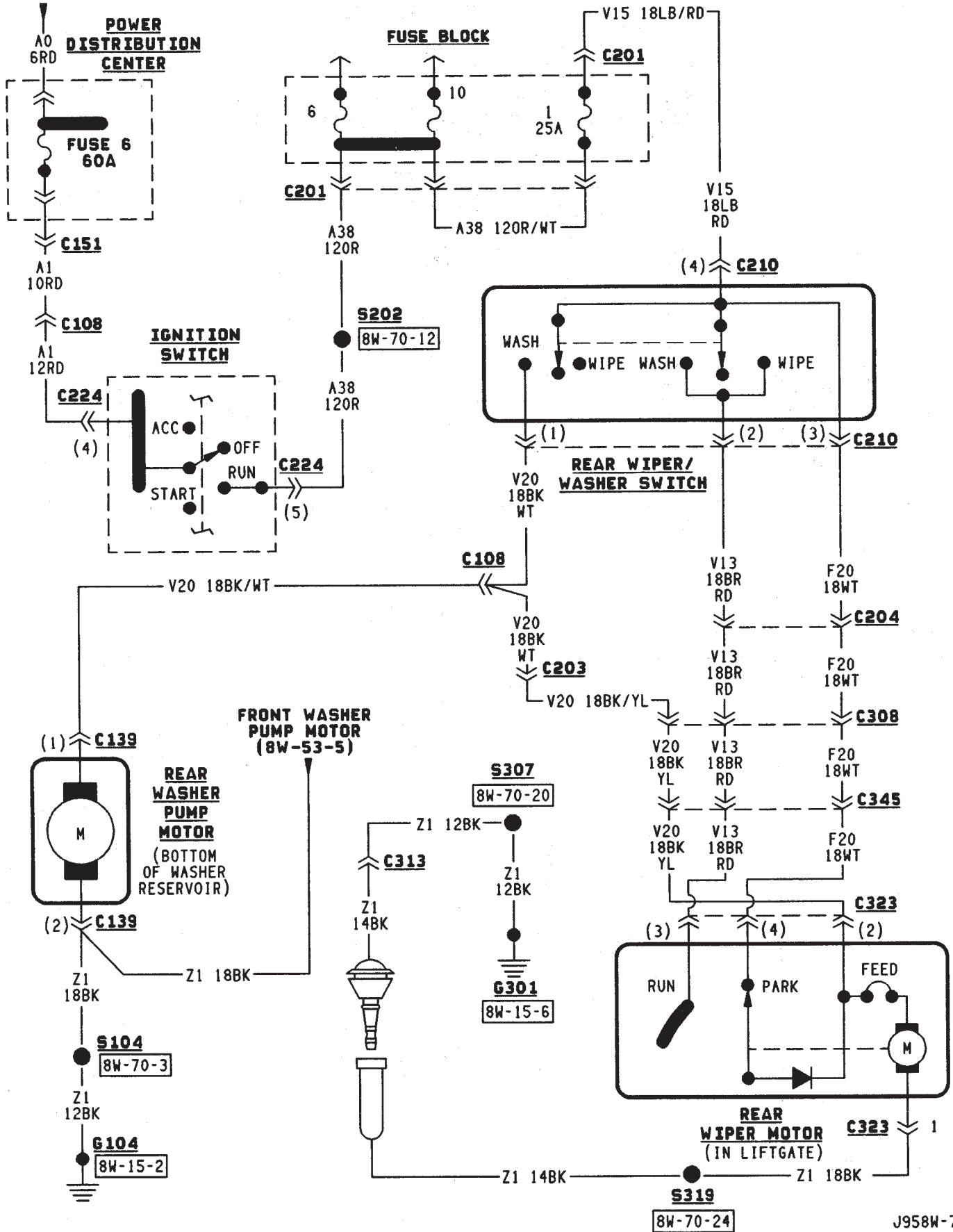


V6 18DB
 V3 18BR/TN
 V4 18RD/BK



BATTERY
POSITIVE
TERMINAL

REAR



TRAILER TOW

TRAILER TOW

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

Battery voltage for the trailer tow circuit breaker and relays is supplied on circuit A11. This circuit is HOT at all times and connects to the power accessory tap in the fuse block. An in line 10 amp circuit protected breaker protects circuit A11 and the trailer tow circuits. The trailer tow circuit breaker is 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 depresses the brake pedal, voltage flows through the coil of the relay to ground causing the contacts in the relay to connect circuits A11 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 there 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 and circuit A11. The A11 circuit is HOT at all times and protected by a 10 amp circuit breaker located in the left 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 there 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.

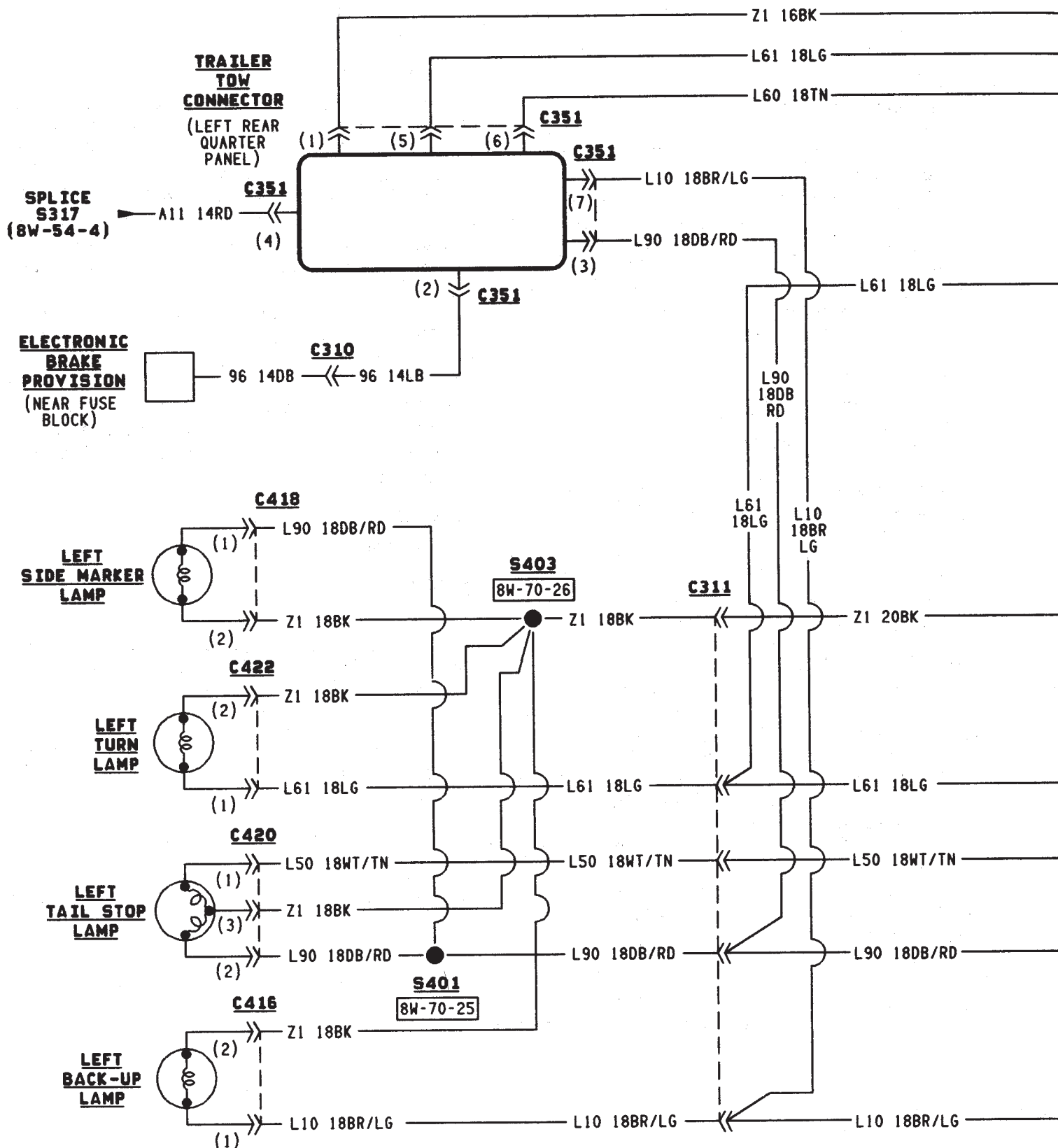
Circuit 94 is fed power through the normally CLOSED side of the stop lamp relay and circuit A11. The A11 circuit is HOT at all times and protected by a 10 amp circuit breaker located in the right rear quarter panel.

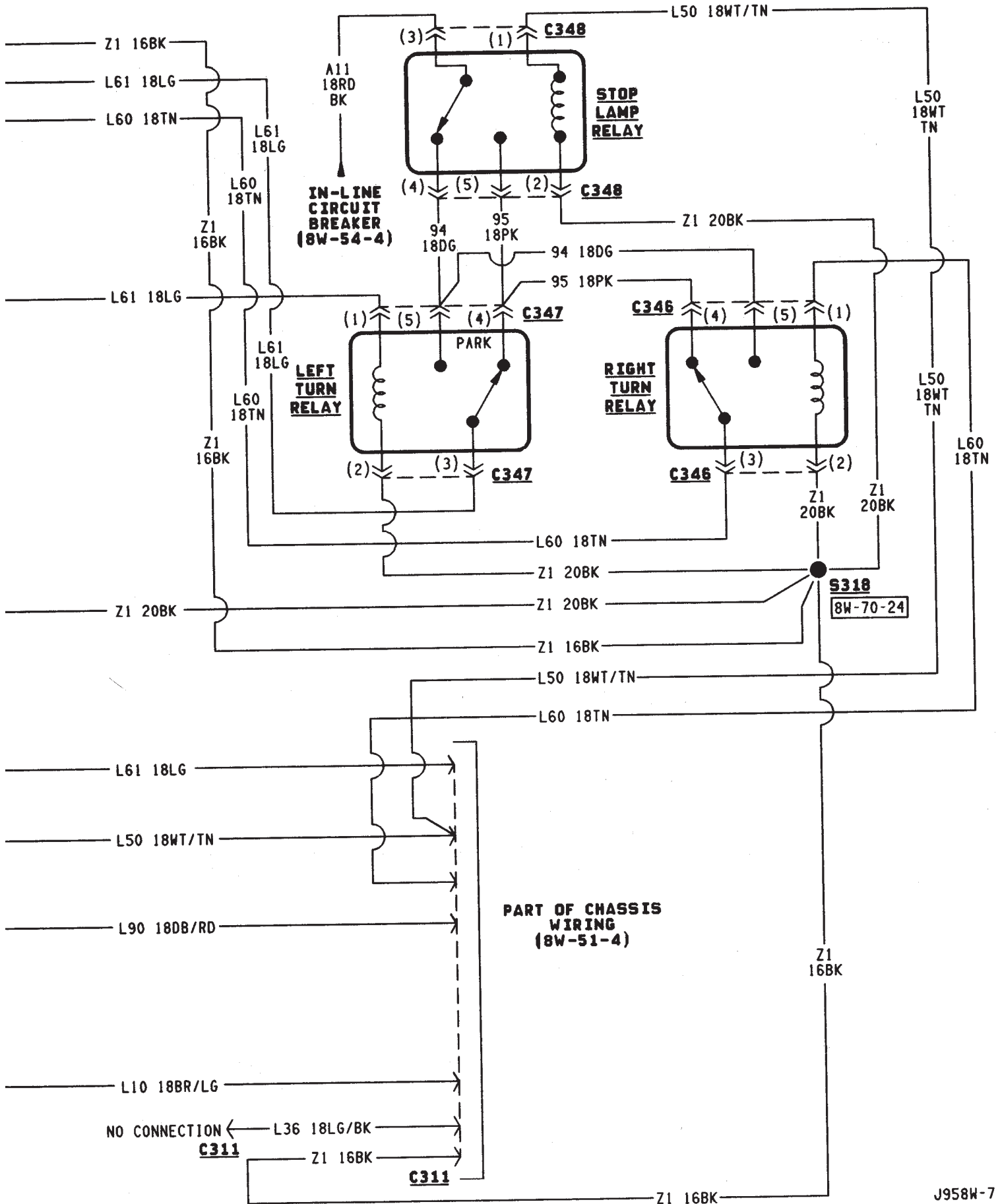
HELPFUL INFORMATION

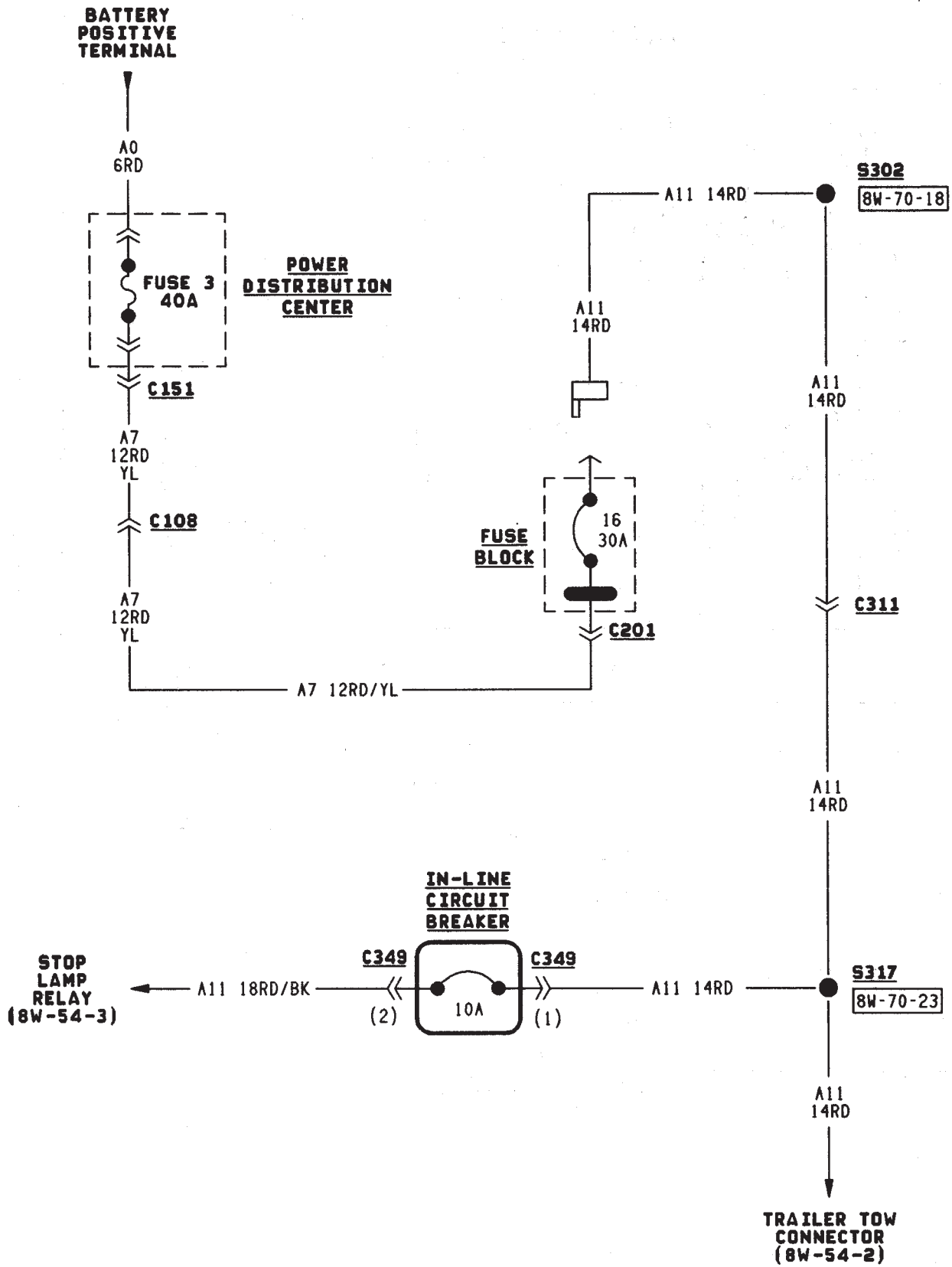
- Check the In-Line circuit breaker

DIAGRAM INDEX

<u>Component</u>	<u>Page</u>
Circuit Breaker (Fuse Block Cavity 16)	8W-54-4
Circuit Breaker (In-Line)	8W-54-4
Electric Brake Provision	8W-54-2
Fuse 3 (PDC)	8W-54-4
Left Turn Signal Relay	8W-54-3
Left Back-Up Lamp	8W-54-2
Left Side Marker Lamp	8W-54-2
Left Tail/Stop Lamp	8W-54-2
Left Turn Signal Lamp	8W-54-2
Right Turn Signal Relay	8W-54-3
Stop Lamp Relay	8W-54-3
Trailer Tow Connector	8W-54-2







POWER WINDOWS

INDEX

	page	page	
Diagram Index	2	Power Windows	1
Helpful Information	2		

POWER WINDOWS

The power window system is powered by circuit F81 which connects to the accessory tap in the fuse block. The accessory tap receives its feed from the ignition switch on the A38 circuit. Circuit A38 is HOT when the ignition switch is in the RUN position only.

Circuit F81 connects to the master window switch. Circuit Z1 provides ground for the power windows.

A LOCK-OUT feature is provided on the driver's door window switch. When this feature is engaged the other windows in the system will not operate.

LEFT FRONT WINDOW OPERATION

When the operator selects window DOWN operation power is supplied on the F81 circuit through the switch to circuit Q11. Circuit Q11 goes from the switch to the power window motor. Ground for the motor is supplied on the Q21 circuit back to the switch. A bus bar, internal to the switch, connects the Q21 circuit to the Z1 circuit.

For window UP operation the circuits are reversed. Circuit Q11 is the feed, and circuit Q21 is the ground.

RIGHT FRONT WINDOW OPERATION

When the DRIVER selects window DOWN operation, power is supplied on the F81 circuit through the switch to circuit Q26.

Circuit Q26 goes from the drivers door switch to the right front door switch. Power is passed through this switch to circuit Q22. The Q22 circuit then goes to the right front window motor.

Ground for the window motor is supplied on the Q12 circuit back to the right door switch. Circuitry internal to the switch then passes the ground to circuit Q16. Circuit Q16 goes from the right front door switch to the master switch. A bus bar, internal to the switch, connects the Q16 circuit to the Z1 circuit.

For window UP operation the circuits are reversed. Circuits Q16 and Q12 are the feeds, and circuits Q22 and Q26 are the grounds.

If the switch is being operated from the PASSENGER'S front door, and the operator is requesting window DOWN operation, power is supplied on the Q1 circuit from the driver's master switch circuit through the switch to the Q22 circuit.

Ground for the motor is supplied on the Q12 circuit through the switch and back to the master switch on circuit Q16. A bus bar, internal to the switch, connects the Q16 circuit to the Z1 circuit.

For window UP operation, the circuits are reversed. Circuit Q12 is the power and circuit Q22 is the ground.

LEFT REAR WINDOW

When the DRIVER selects window DOWN operation power is supplied on the F81 circuit through the switch to circuit Q17.

Circuit Q17 goes from the drivers door switch to the left rear door power window switch. Power is passed through the switch to circuit Q12. The Q12 circuit then goes to the left rear window motor.

Ground for the window motor is supplied on the Q22 circuit back to the left rear door switch. Circuitry internal to the switch then passes the ground to circuit Q27. Circuit Q27 goes from the left rear door switch to the master switch. A bus bar, internal to the switch, connects the Q27 circuit to the Z1 circuit.

For window UP operation the circuits are reversed. Circuits Q27, and Q22 are the feeds, and circuits Q12, and Q12 are the grounds.

If the switch is being operated from the LEFT REAR door, and the operator is requesting window DOWN operation, power is supplied on the Q1 circuit from the driver's master switch circuit through the switch to the Q22 circuit.

Ground for the motor is supplied on the Q12 circuit through the switch and to circuit Q17. Circuit Q17 connects to the master window switch. A bus bar, internal to the switch, connects the Q17 circuit to the Z1 circuit.

For window UP operation, the circuits are reversed. Circuit Q12 is the power and circuits Q22, and Q27 are the grounds.

RIGHT REAR WINDOW

When the DRIVER selects window DOWN operation, power is supplied on the F81 circuit through the switch to circuit Q18.

Circuit Q18 goes from the drivers door switch to the right rear door window switch connector where it changes to circuit Q33. Circuit Q33 connects to the right rear door window switch. Power is passed

through this switch to circuit Q22. The Q22 circuit then goes to the right rear window motor.

Ground for the window motor is supplied on the Q12 circuit back to the right rear door switch. Circuitry internal to the switch then passes the ground to circuit Q28. Circuit Q28 goes from the right rear door switch to the master switch. A bus bar, internal to the switch, connects the Q28 circuit to the Z1 circuit.

For window UP operation the circuits are reversed. Circuits Q28 and Q12 are the feeds, and circuits Q22, Q33 and Q18 are the grounds.

If the switch is being operated from the RIGHT REAR door, and the operator is requesting window DOWN operation, power is supplied on the Q1 circuit from the driver's master switch circuit through the switch to the Q22 circuit.

Ground for the motor is supplied on the Q12 circuit through the switch and back to the master switch on circuit Q28. A bus bar, internal to the switch, connects the Q28 circuit to the Z1 circuit.

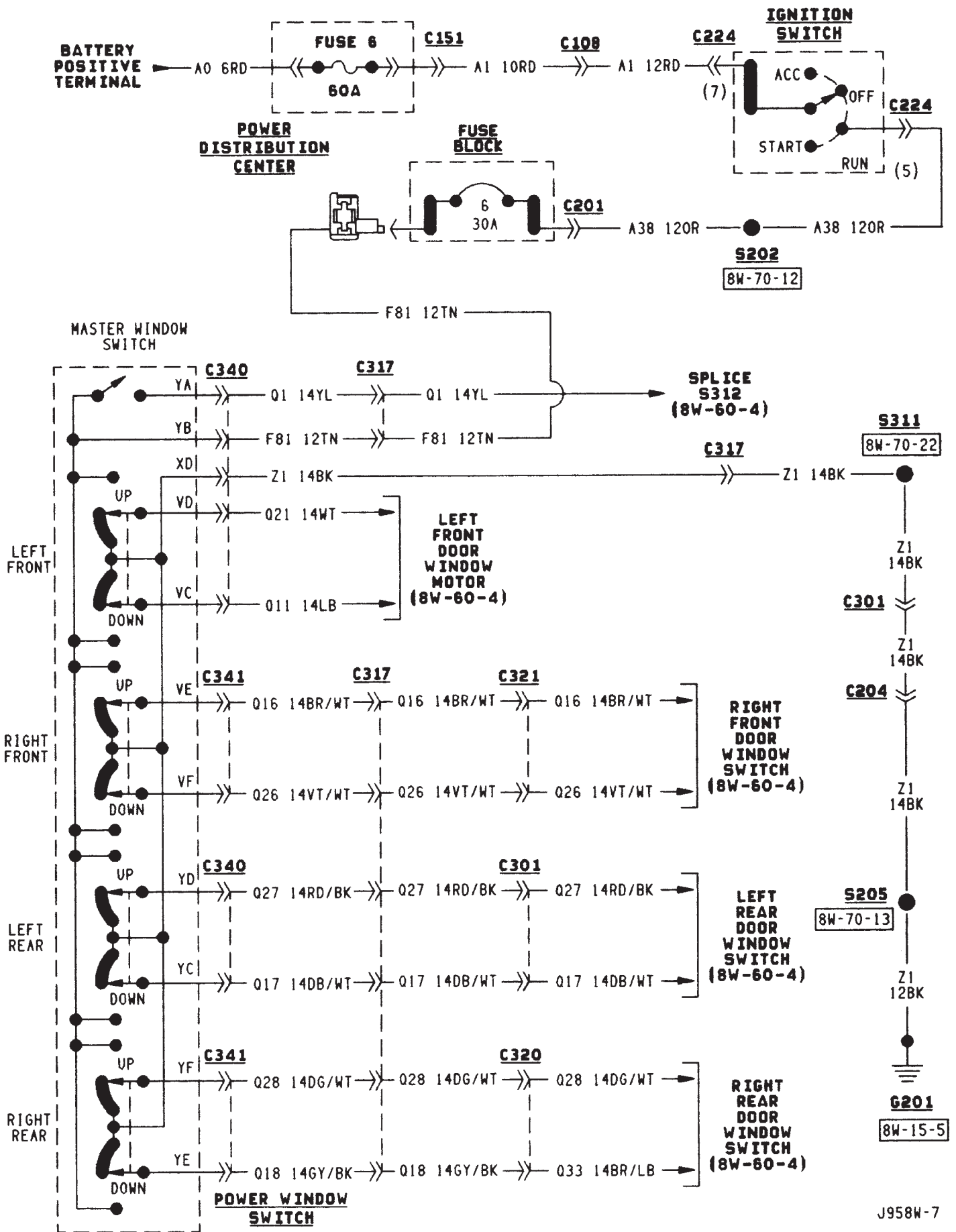
For window UP operation, the circuits are reversed. Circuit Q12 is the power and circuit Q22 is the ground.

HELPFUL INFORMATION

- When the ignition switch is in the RUN position, it connects circuit A1 from fuse 11 in the Power Distribution Center (PDC) to circuit A38.
- Refer to the appropriate group of the Service Manual for test procedures.

DIAGRAM INDEX

<u>Component</u>	<u>Page</u>
Circuit Breaker (Fuse Block Cavity 6)	8W-60-3
Fuse 6 (PDC)	8W-60-3
Ignition Switch	8W-60-3
Power Window Door Switches	8W-60-4
Power Window Master Switch	8W-60-3
Power Window Motors	8W-60-4



POWER DOOR LOCKS

POWER DOOR LOCKS

Two relays provide power for the power door lock motors. The Unlock relay provides power for the unlock circuits while the Lock relay powers the lock circuits. Either the power door lock switches or the remote keyless entry module operate the Unlock and Lock relays.

LOCK RELAY

Circuit M1 from fuse 9 in the fuse block powers circuit P38. When either power door lock switch is put in the LOCK position, the switch connects circuit P38 to circuit P35. If the operator uses Remote Keyless Entry (RKE), the RKE module powers circuit P35. In either case, circuit P35 supplies power to the coil side of the lock relay, causing the relay contacts to close. Circuit Z1 provides ground for the coil side of the lock relay.

When the lock relay contacts close, they connect battery voltage from circuit P37 to circuit P2. Circuit P2 then supplies battery voltage to the power door lock motors to LOCK the doors.

When the power doors LOCK, ground for the motors is on circuit P34 through the normally closed contacts in the door unlock relay to ground on circuit Z1.

UNLOCK RELAY

Circuit M1 from fuse 9 in the fuse block powers circuit P38. When either power door lock switch is put in the UNLOCK position, the switch connects circuit P38 to circuit P36. If the operator uses Remote Keyless Entry (RKE), the RKE module powers circuit P36. In either case, circuit P36 supplies power to the coil side of the unlock relay, causing the relay contacts to close. Circuit Z1 provides ground for the coil side of the unlock relay.

When the unlock relay contacts close, they connect battery voltage from circuit P37 to circuit P34. Circuit P34 then supplies battery voltage to the power door lock motors to UNLOCK the doors.

When the power doors UNLOCK, ground for the motors is on circuit P2 through the normally closed contacts in the door lock relay to ground on circuit Z1.

REMOTE KEYLESS ENTRY MODULE

Circuit M1 from the ignition off draw (IOD) fuse in cavity 9 of the fuse block supplies power to the Remote Keyless Entry (RKE) module. Circuit F87 from fuse 17 in the fuse block supplies power to the RKE module when the ignition switch is in the START or RUN position. Circuit Z1 provides ground for the RKE module.

The RKE module UNLOCKS the doors by energizing the unlock relay on circuit P36. Refer to Unlock Relay.

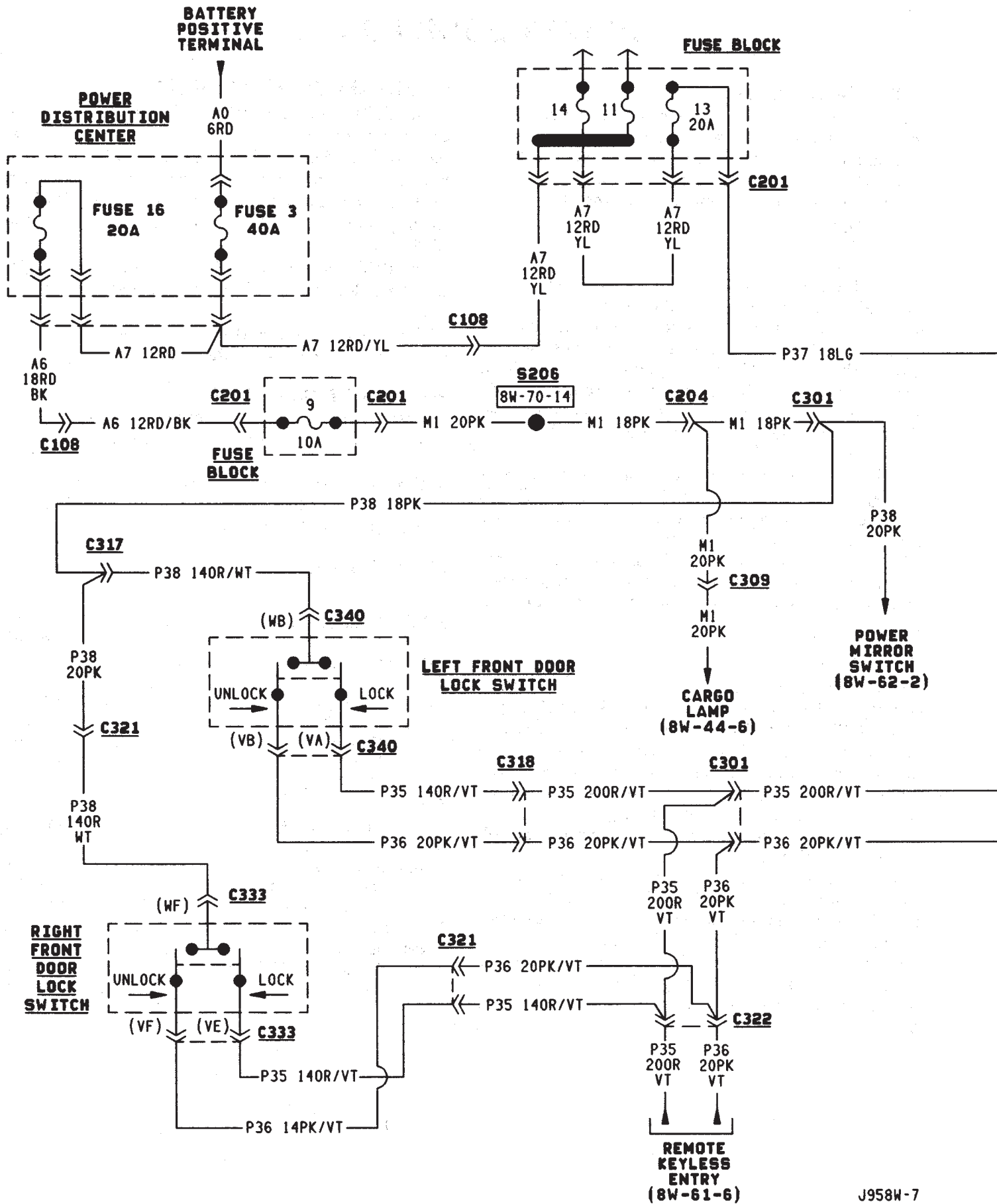
The module LOCKS the doors by energizing the lock relay on circuit P35. Refer to Lock Relay.

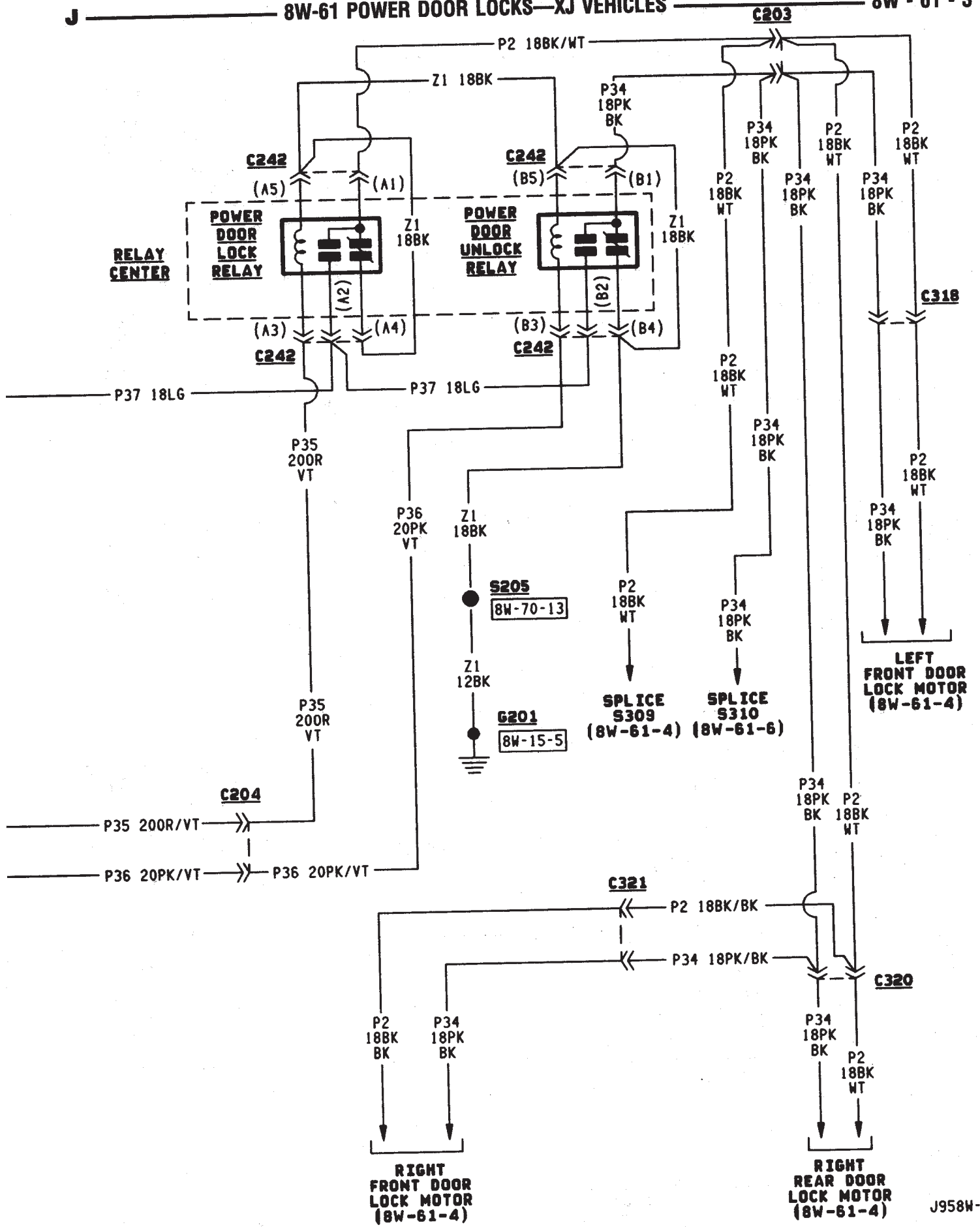
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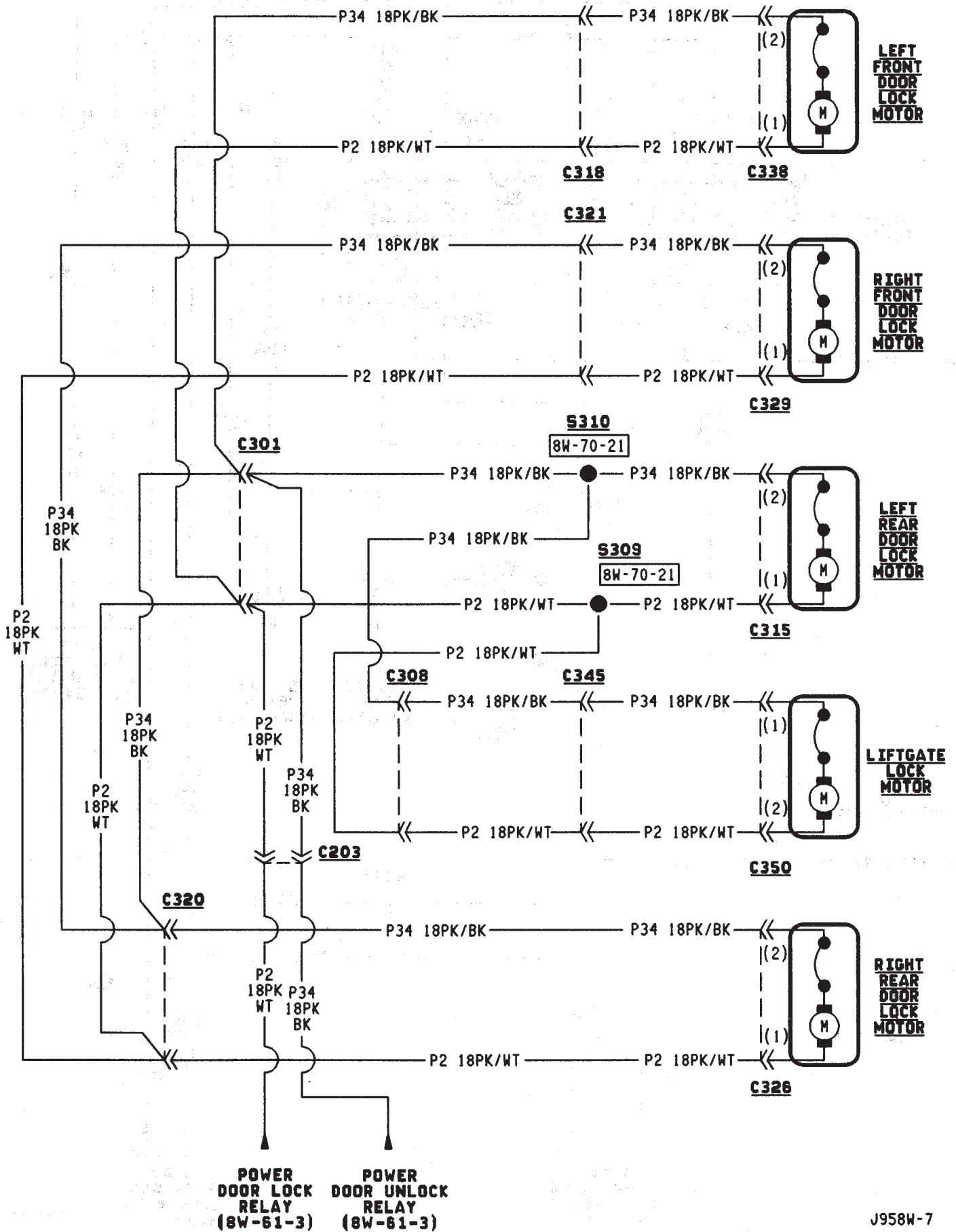
- Fuse 13 in the fuse block powers circuit P37. Circuit A7 from fuse 3 in the PDC feeds fuse 13 in the fuse block.
- Circuit A7 from fuse 3 in the PDC also feeds fuse 16 in the PDC. PDC fuse 16 powers fuse 9 in the fuse block. Fuse 9 protects the M1 circuit.

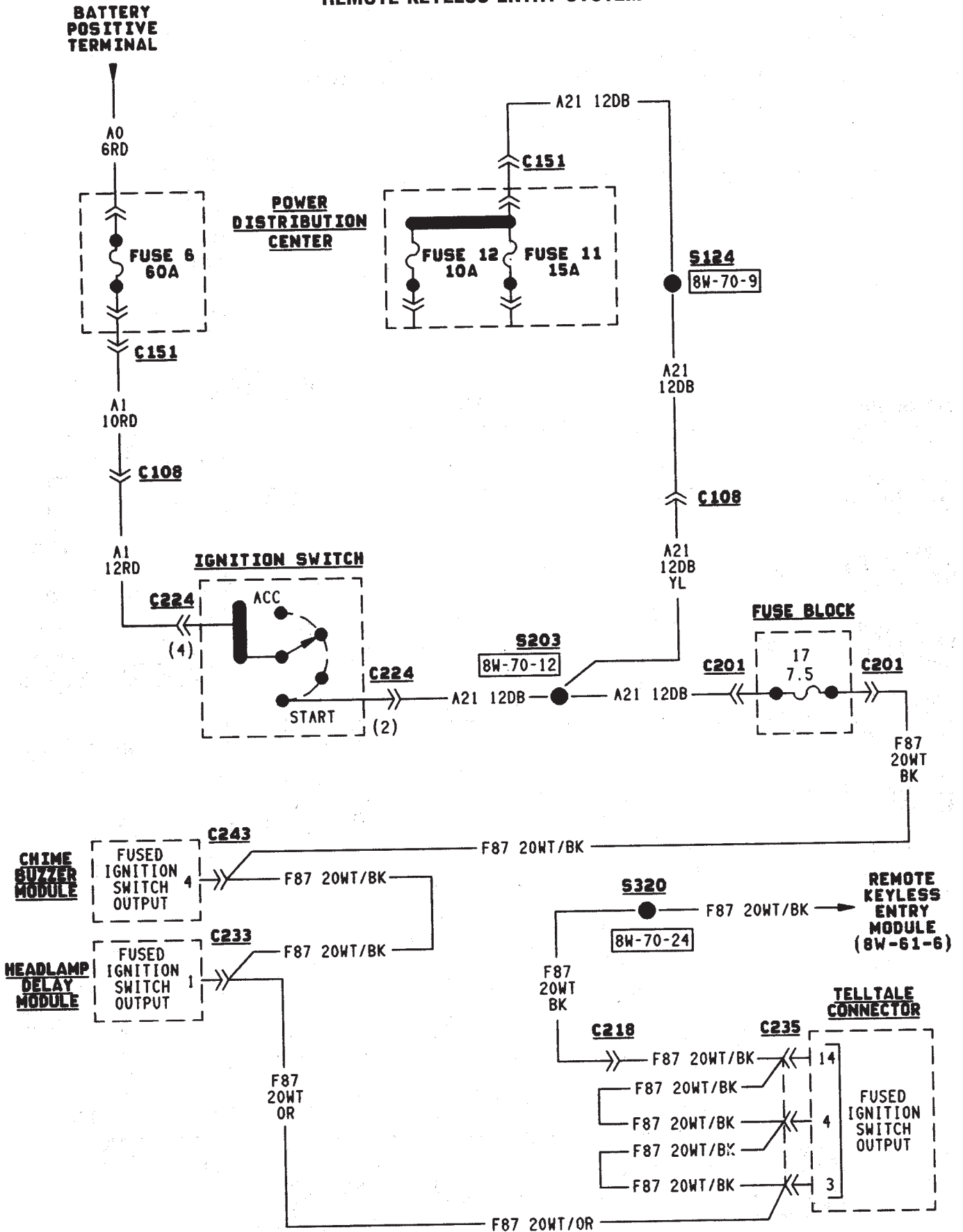
DIAGRAM INDEX

Component	Page
Chime/Buzzer Module	8W-61-5
Fuse 3 (PDC)	8W-61-2, 6
Fuse 6 (PDC)	8W-61-5
Fuse 9 (Fuse Block)	8W-61-2
Fuse 11 (Fuse Block)	8W-61-2
Fuse 13 (Fuse Block)	8W-61-2
Fuse 14 (Fuse Block)	8W-61-2
Fuse 16 (PDC)	8W-61-2, 6
Fuse 17 (Fuse Block)	8W-61-5
Headlamp Delay Module	8W-61-5
Ignition Switch	8W-61-5
Liftgate Lock Motor	8W-61-4
Power Door Lock Motors	8W-61-4
Power Door Lock Relay	8W-61-3
Power Door Lock Switches	8W-61-2
Power Door Unlock Relay	8W-61-3
Remote Keyless Entry (RKE) Module	8W-61-6
Telltale Connector	8W-61-5

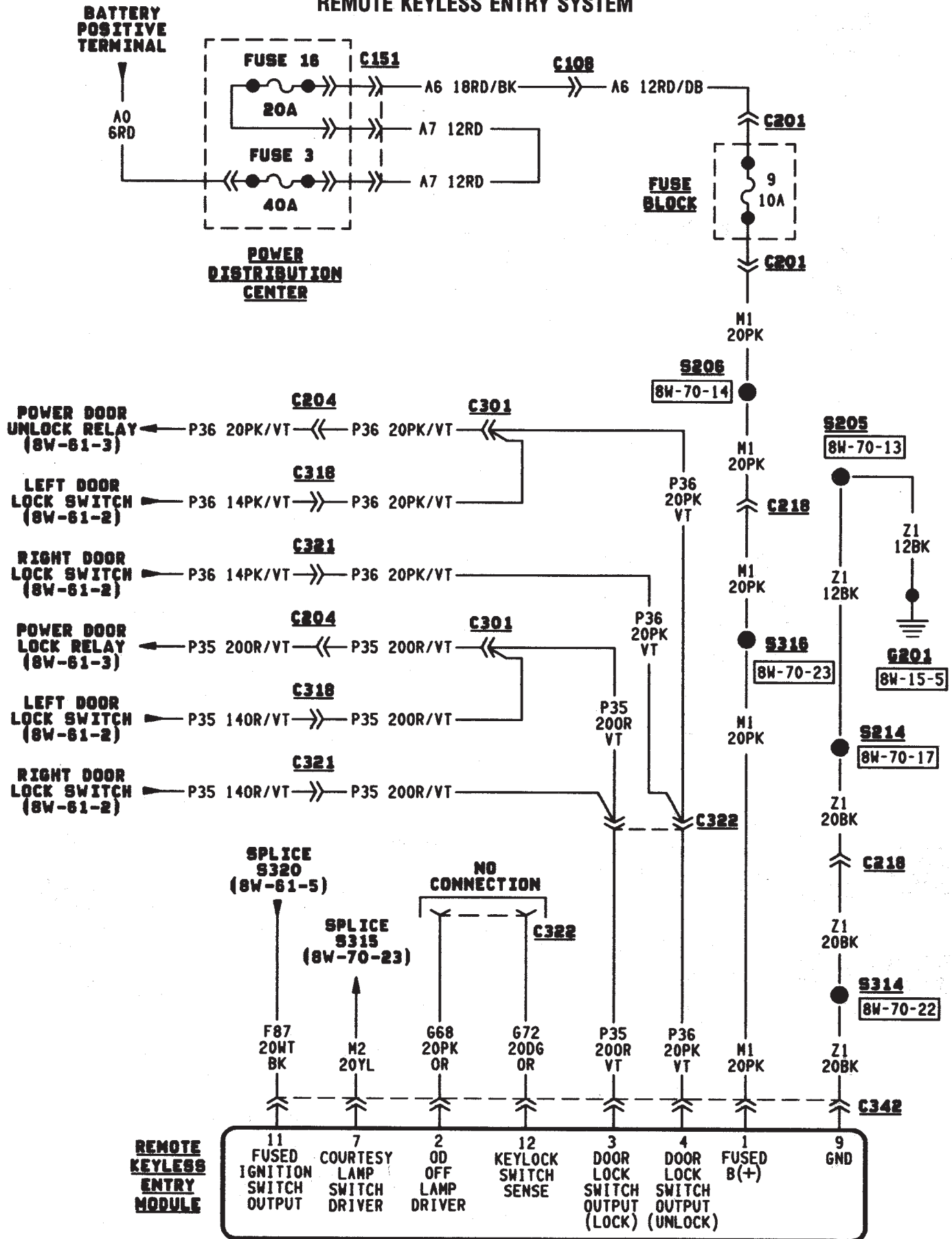








REMOTE KEYLESS ENTRY SYSTEM



POWER MIRRORS

POWER MIRRORS

Four switches operates the left and right power mirrors. One switch selects right or left mirror. Each mirror has two motors; a LEFT/RIGHT motor and a UP/DOWN motor. The motors switch polarity to allow mirror adjustment.

Circuit A7 from fuse 3 in the Power Distribution Center (PDC) supplies battery voltage to fuse 16 in the PDC. Fuse 16 in the PDC supplies voltage to the Ignition Off Draw (IOD) fuse (fuse 9) in the fuse block. Fuse 9 supplies power to circuit M1. Circuit M1 connects to circuit P38. Circuit P38 powers the power mirror switch. Circuit Z1 connects to the power mirror switch and supplies ground for the power mirror system.

RIGHT POWER MIRROR OPERATION

In the right position, the power mirror switch supplies power to the right mirror LEFT/RIGHT motor on circuit P79 when a rightward adjustment is made. Circuit P77 provides the ground path the for rightward adjustments.

When the operator makes leftward adjustment, polarity reverses. For leftward adjustments, the switch supplies battery voltage to the right mirror LEFT/RIGHT motor on circuit P77. Circuit P79 supplies ground for leftward adjustments.

During upward adjustments, the switch supplies voltage to the right mirror UP/DOWN motor on circuit P79. Circuit P78 supplies ground during upward adjustments.

For downward adjustments, the polarity is reversed, the switch powers the right mirror UP/DOWN motor on circuit P78. Circuit P79 supplies the ground path.

LEFT POWER MIRROR OPERATION

In the left position, the power mirror switch supplies power to the left mirror LEFT/RIGHT motor on circuit P79 when a rightward adjustment is made. Circuit P81 provides the ground path the for rightward adjustments.

When the operator makes leftward adjustment, polarity reverses. For leftward adjustments, the switch supplies battery voltage the left mirror LEFT/RIGHT motor on circuit P81. Circuit P79 supplies ground for leftward adjustments.

During upward adjustments, the switch supplies voltage to the left mirror UP/DOWN motor on circuit P79. Circuit P80 supplies ground during upward adjustments.

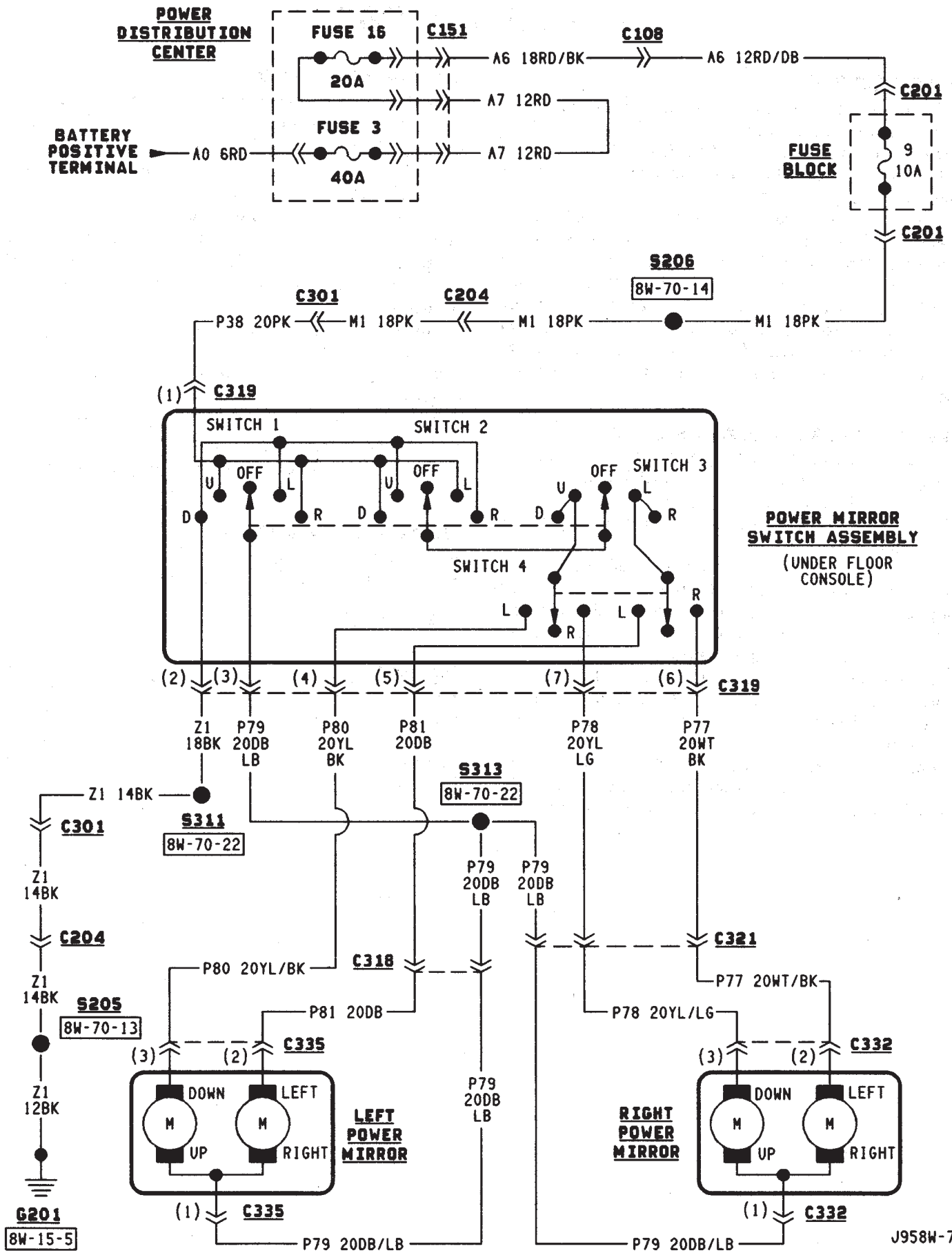
For downward adjustments, the polarity is reversed, the switch powers the left mirror UP/DOWN motor on circuit P80. Circuit P79 supplies the ground path.

HELPFUL INFORMATION

- Check fuse 9 in the fuse block
- Check fuses 3 and 16 in the PDC

DIAGRAM INDEX

<u>Component</u>	<u>Page</u>
Fuse 3 (PDC)	8W-62-2
Fuse 9 (Fuse Block)	8W-62-2
Fuse 16 (PDC)	8W-62-2
Power Mirrors	8W-62-2
Power Mirror Switch	8W-62-2



POWER SEAT

POWER SEAT

Battery voltage for the power seat system is supplied by circuit A11, which is HOT at all times. This circuit connects to the power accessory tap in the fuse block and the power seat switch. The circuit breaker in cavity 16 protects circuit A11.

A BUS bar internal to the power seat switch connects the power from circuit A11 to the switches. Grounding for the seat system is supplied on circuit Z1.

The motors located under the seat are protected by circuit breakers wired in with the motors. Each motor has its own circuit breaker.

When the operator selects the FRONT VERTICAL UP function, power is passed on the A11 circuit through the closed contacts in the switch to the S5 circuit. The S5 circuit connects to the motor. Ground is provided on the S6 circuit back to the switch. A ground BUS bar internal to the switch then connects to the Z1 circuit.

For FRONT VERTICAL DOWN function the circuits are reversed. S6 is the feed and S5 is the ground.

When the operator selects the SEAT FORWARD function, power is passed on the A11 circuit through the closed contacts in the switch to the S3 circuit. The S3 circuit connects to the motor. Ground is provided on the S4 circuit back to the switch. A ground BUS bar internal to the switch then connects to the Z1 circuit.

For SEAT REARWARD function the circuits are reversed. S4 is the feed and S3 is the ground.

When the operator selects the REAR VERTICAL UP function, power is passed on the A11 circuit

through the closed contacts in the switch to the S1 circuit. The S1 circuit connects to the motor. Ground is provided on the S2 circuit back to the switch. A ground BUS bar internal to the switch then connects to the Z1 circuit.

For REAR VERTICAL DOWN function the circuits are reversed. S2 is the feed and S1 is the ground.

When the operator selects the SEAT UP function power is passed on the A11 circuit through the closed contacts in the switch to the S1 and S5 circuits. The S1 circuit connects to the rear UP/DOWN motor, and S5 connects to the front UP/DOWN motor. Ground is provided on the S2 and S6 circuits back to the switch. A ground BUS bar internal to the switch then connects to the Z1 circuit.

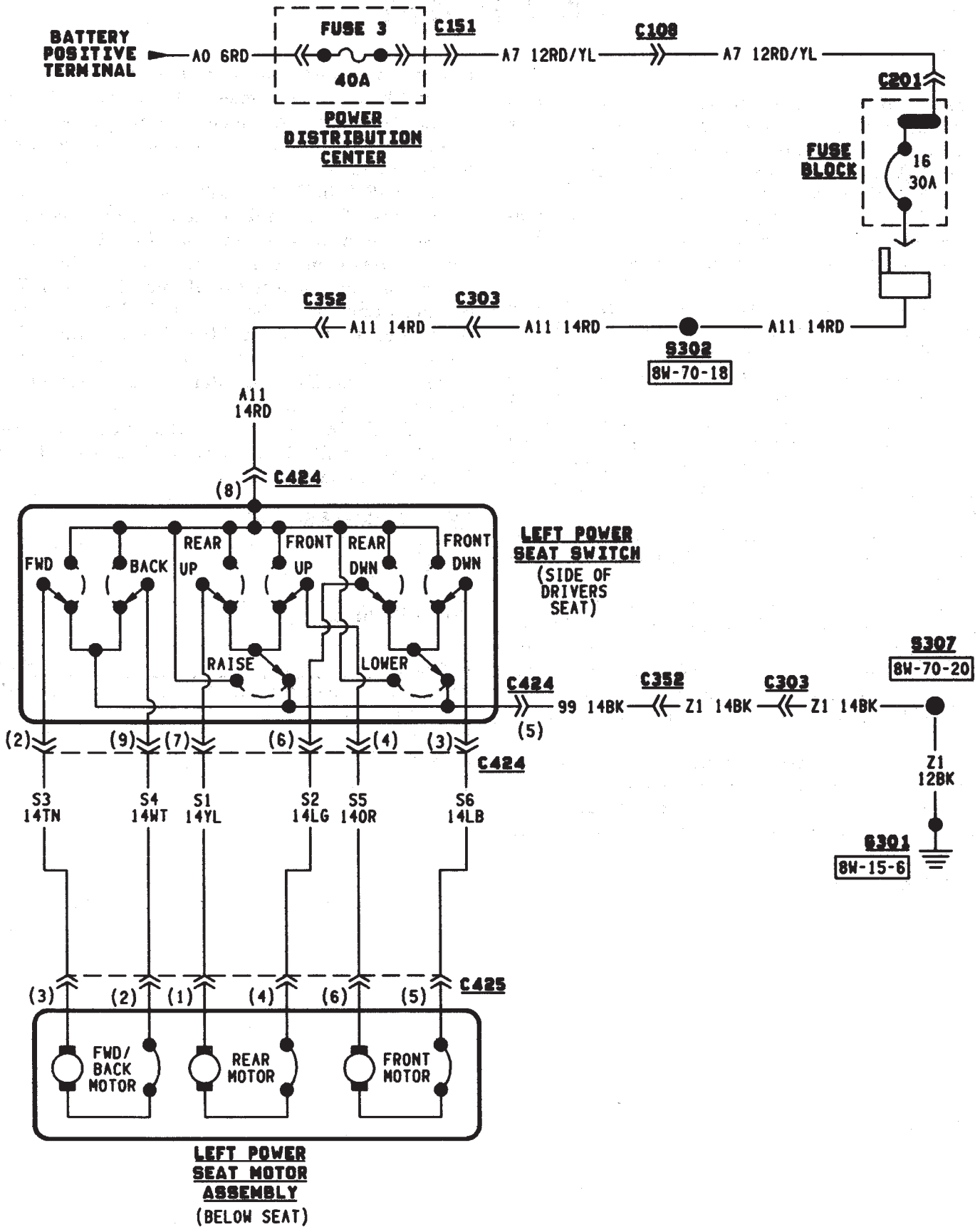
For SEAT DOWN function the circuits are reversed. S2 and S6 circuits are the feeds and S1 and S5 are the grounds.

HELPFUL INFORMATION

- Check the 30 amp circuit breaker in cavity 16 of the fuse block.

DIAGRAM INDEX

<u>Component</u>	<u>Page</u>
Circuit Breaker (Fuse Block Cavity 16)	8W-63-2
Fuse 3 (Fuse Block)	8W-63-2
Power Seat	8W-63-2
Power Seat Switch	8W-63-2



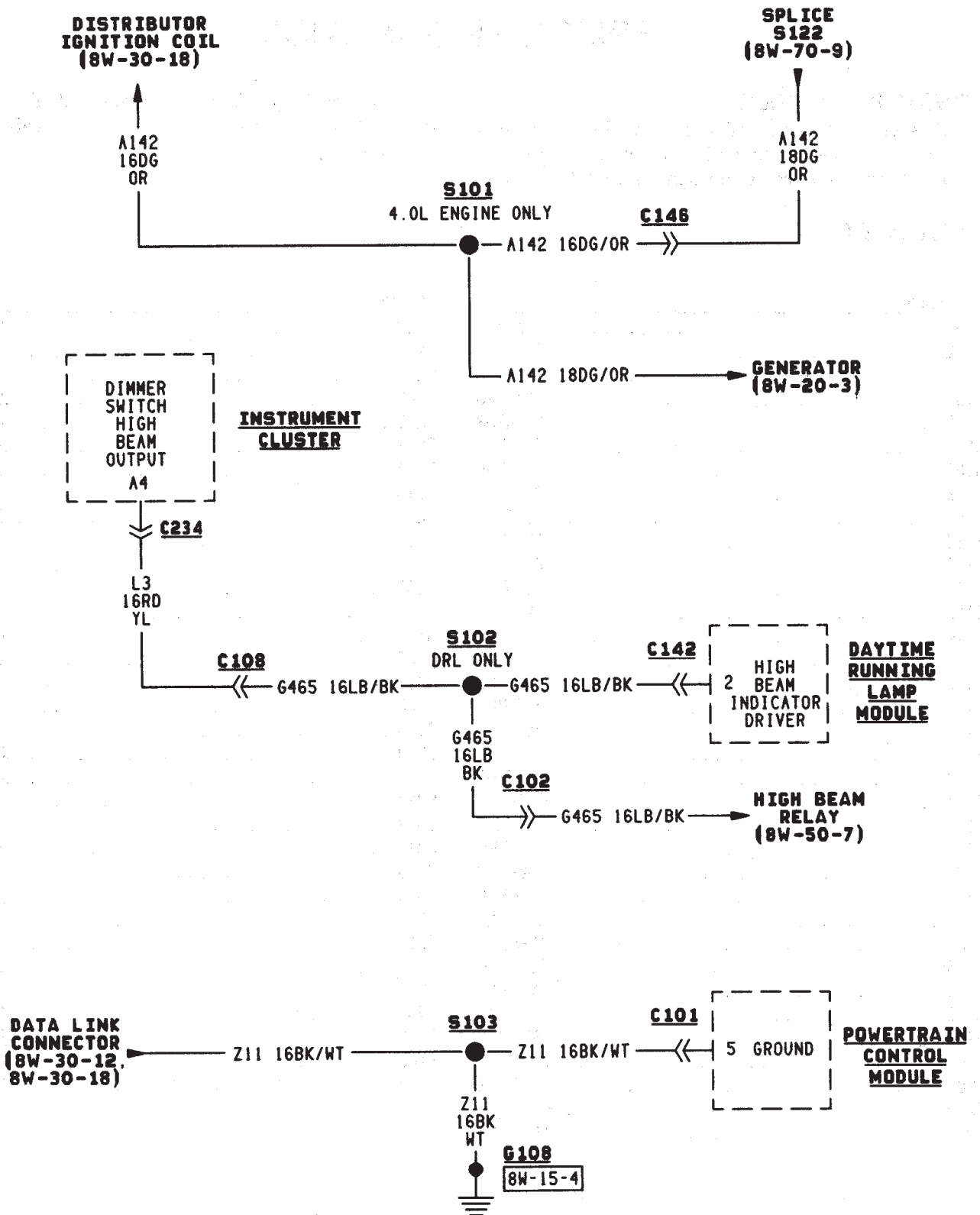
SPLICE INFORMATION

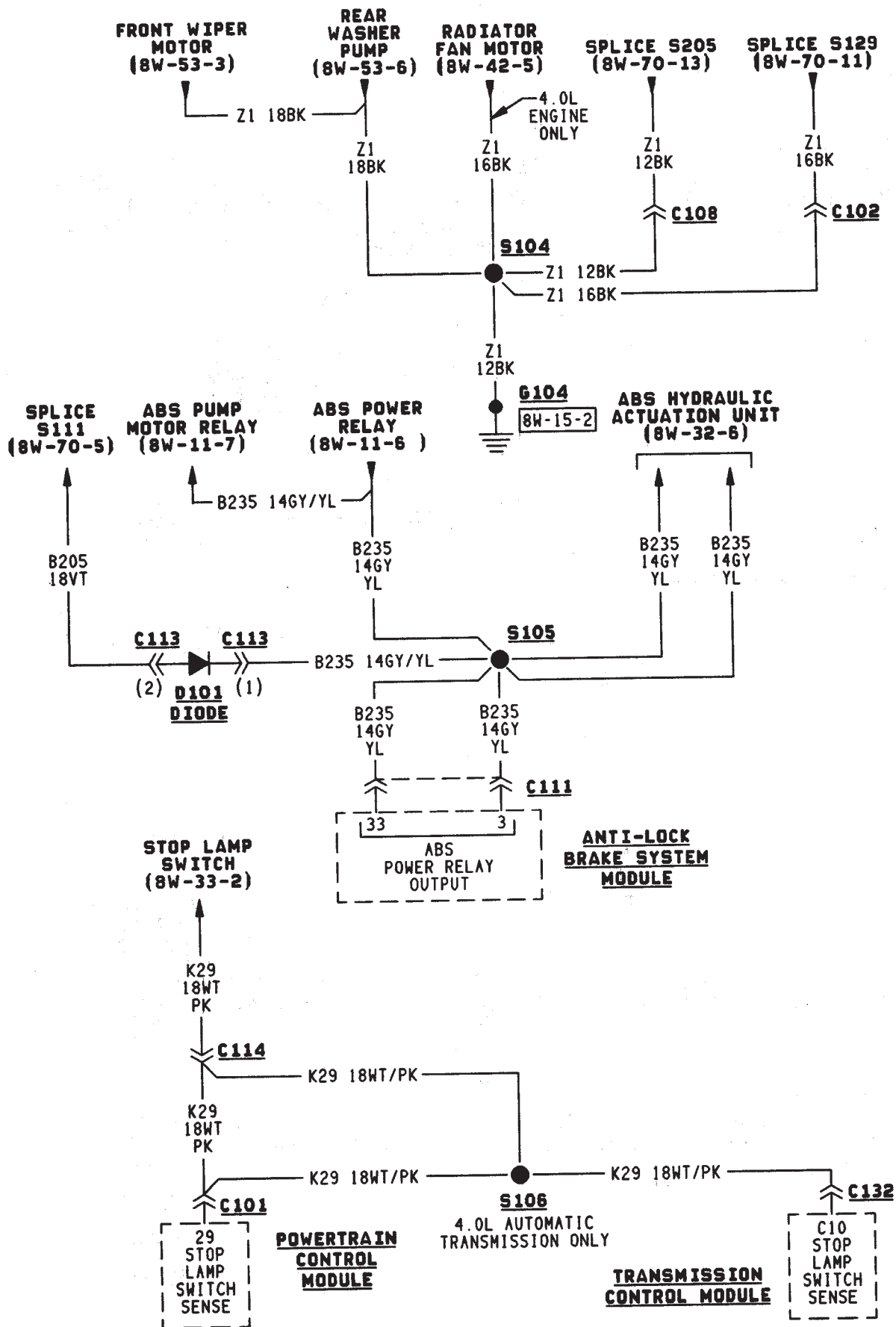
GENERAL INFORMATION

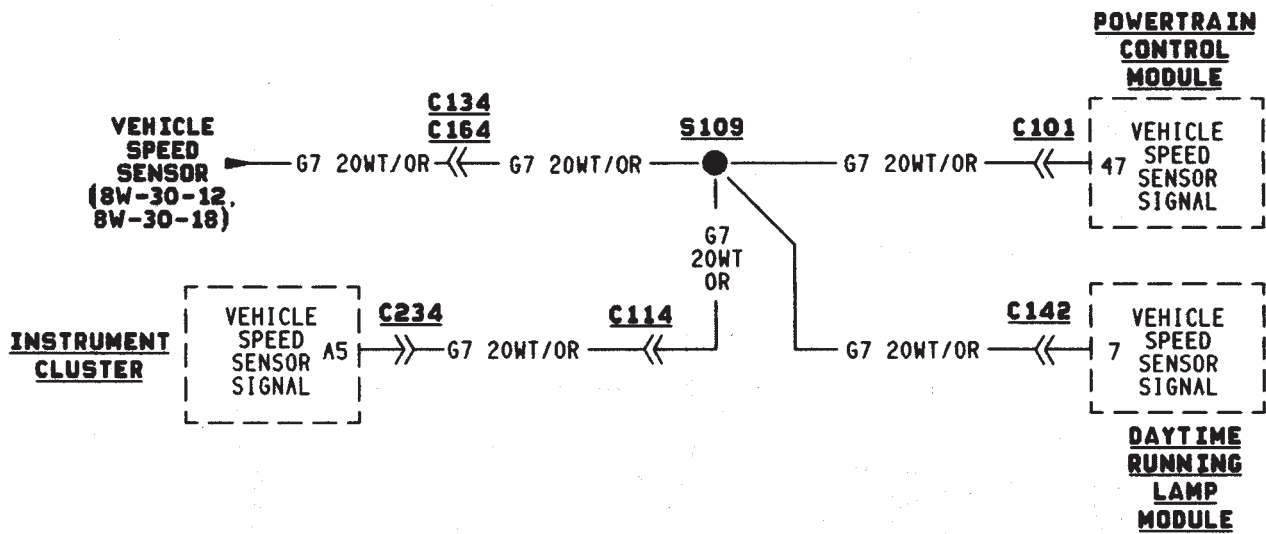
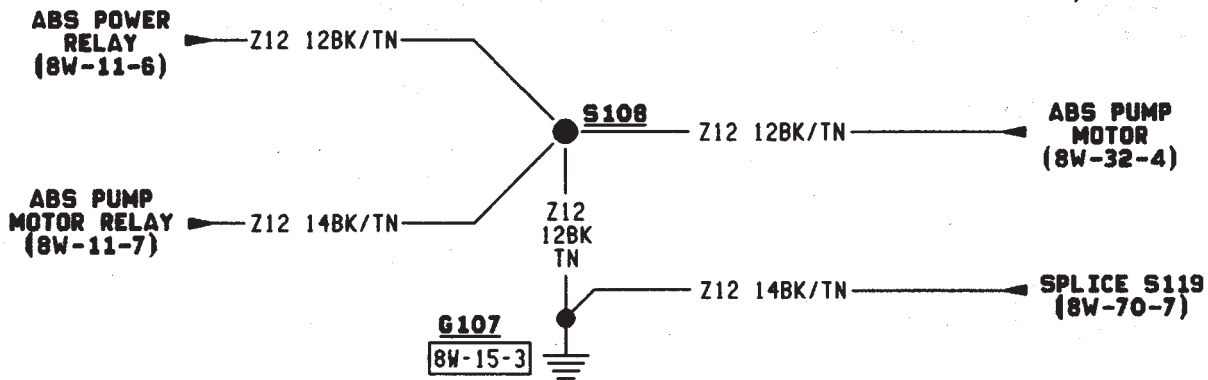
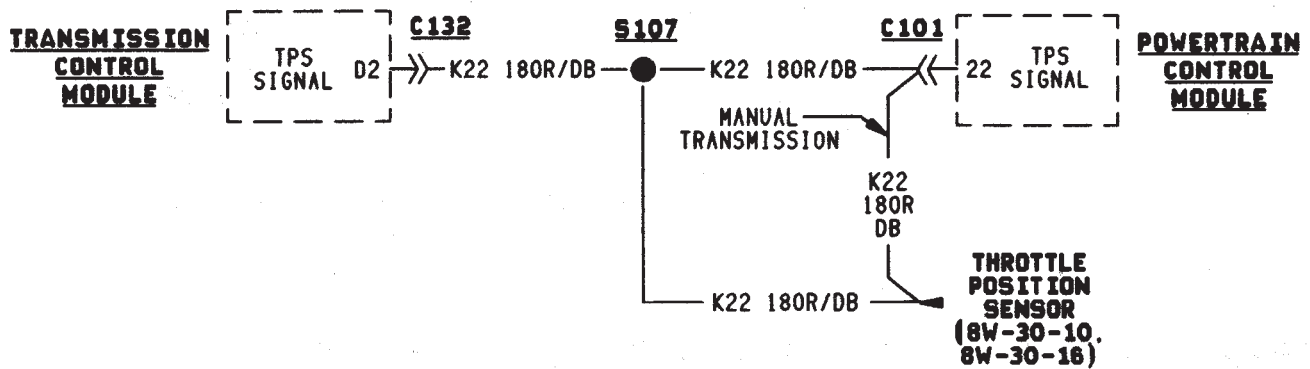
This section identifies all splices in the wiring diagrams. It also shows the splices in their entirety. All circuits that are part of the splices are shown, and the systems they affect are referenced. For viewing the location of each splice in the vehicle, refer to Section 8W-95.

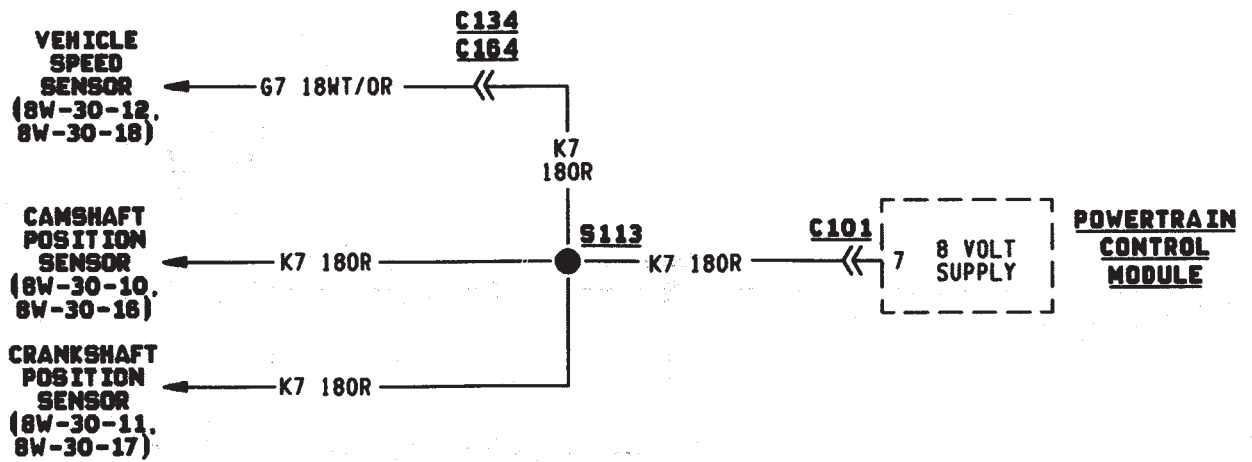
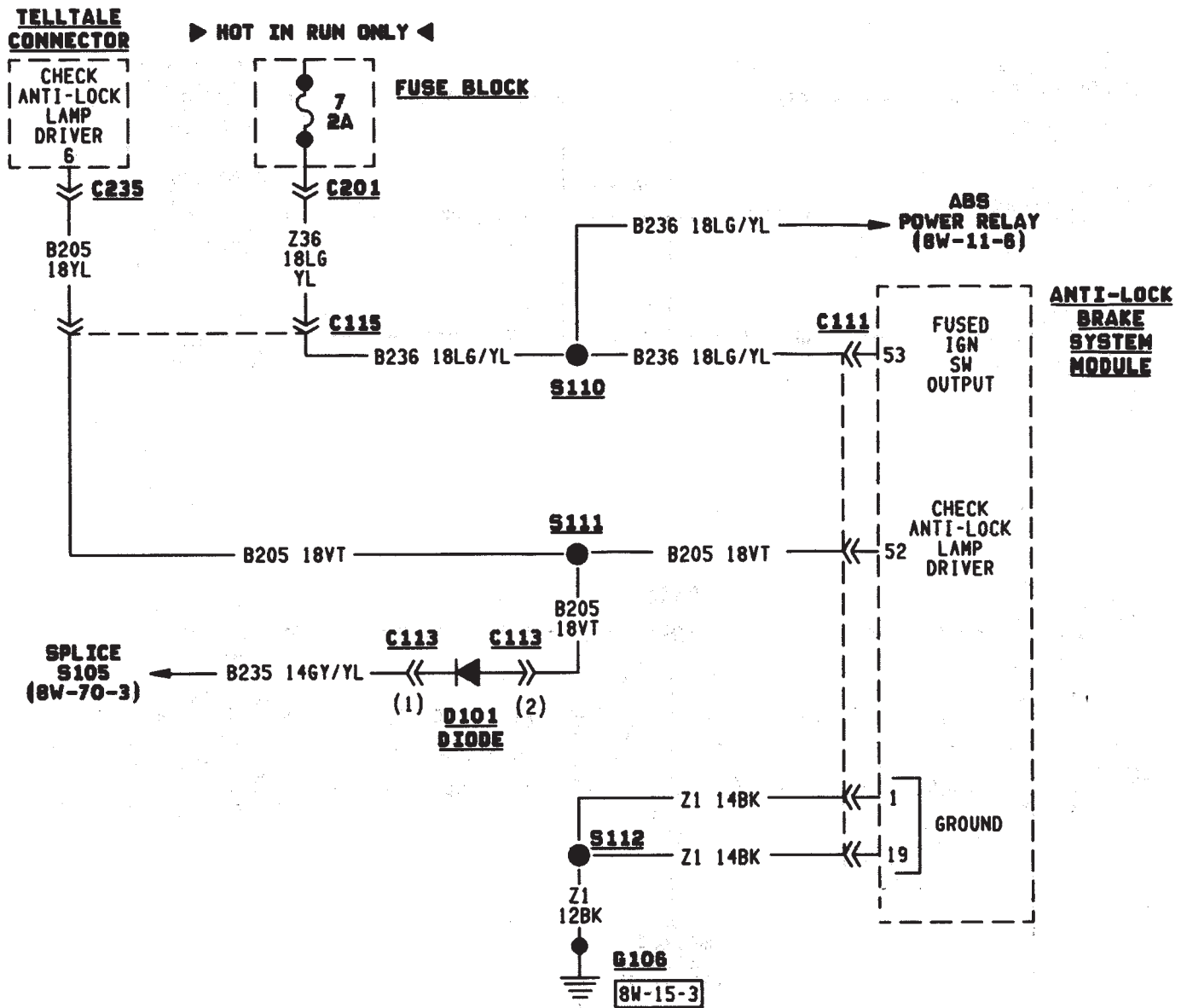
SPLICE INDEX

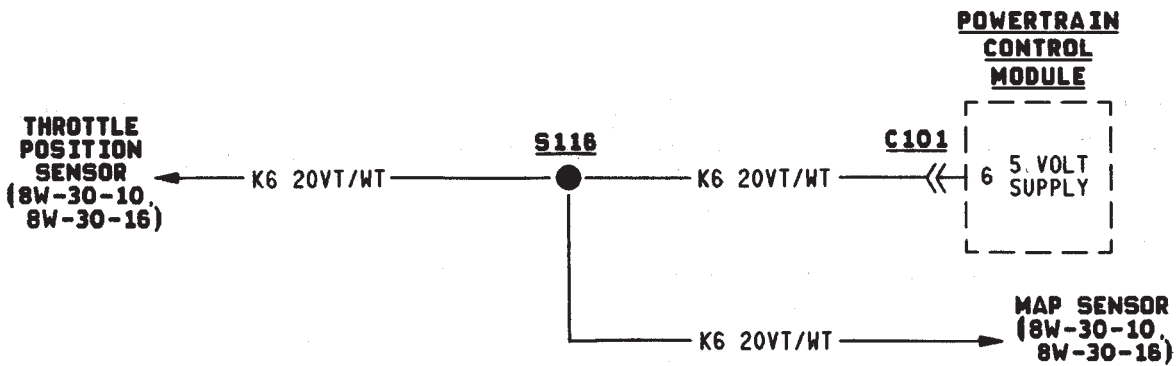
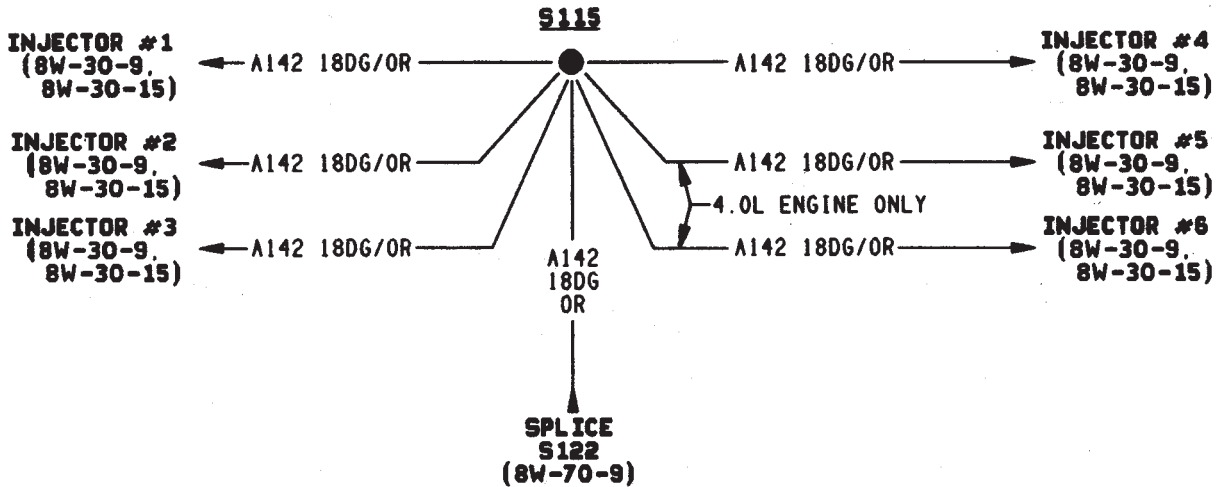
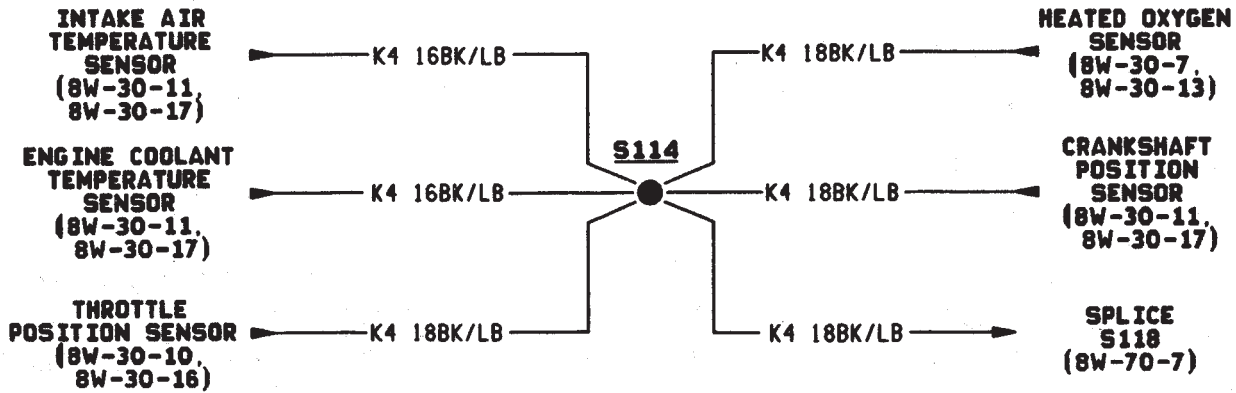
Component	Page	Component	Page
S101	8W-70-2	S206	8W-70-14
S102	8W-70-2	S207	8W-70-14
S103	8W-70-2	S208	8W-70-15
S104	8W-70-3	S209	8W-70-15
S105	8W-70-3	S210	8W-70-16
S106	8W-70-3	S212	8W-70-16
S107	8W-70-4	S213	8W-70-16
S108	8W-70-4	S214	8W-70-17
S109	8W-70-4	S215	8W-70-17
S110	8W-70-5	S301	8W-70-17
S111	8W-70-5	S302	8W-70-18
S112	8W-70-5	S303	8W-70-18
S113	8W-70-5	S304	8W-70-18
S114	8W-70-6	S305	8W-70-19
S115	8W-70-6	S306	8W-70-19
S116	8W-70-6	S307	8W-70-20
S117	8W-70-7	S308	8W-70-20
S118	8W-70-7	S309	8W-70-21
S119	8W-70-7	S310	8W-70-21
S120	8W-70-8	S311	8W-70-22
S121	8W-70-8	S312	8W-70-22
S122	8W-70-9	S313	8W-70-22
S123	8W-70-9	S314	8W-70-22
S124	8W-70-9	S315	8W-70-23
S125	8W-70-10	S316	8W-70-23
S126	8W-70-10	S317	8W-70-23
S127	8W-70-10	S318	8W-70-24
S128	8W-70-10	S319	8W-70-24
S129	8W-70-11	S320	8W-70-24
S130	8W-70-11	S401	8W-70-25
S201	8W-70-12	S402	8W-70-25
S202	8W-70-12	S403	8W-70-26
S203	8W-70-12	S404	8W-70-26
S204	8W-70-13		
S205	8W-70-13		

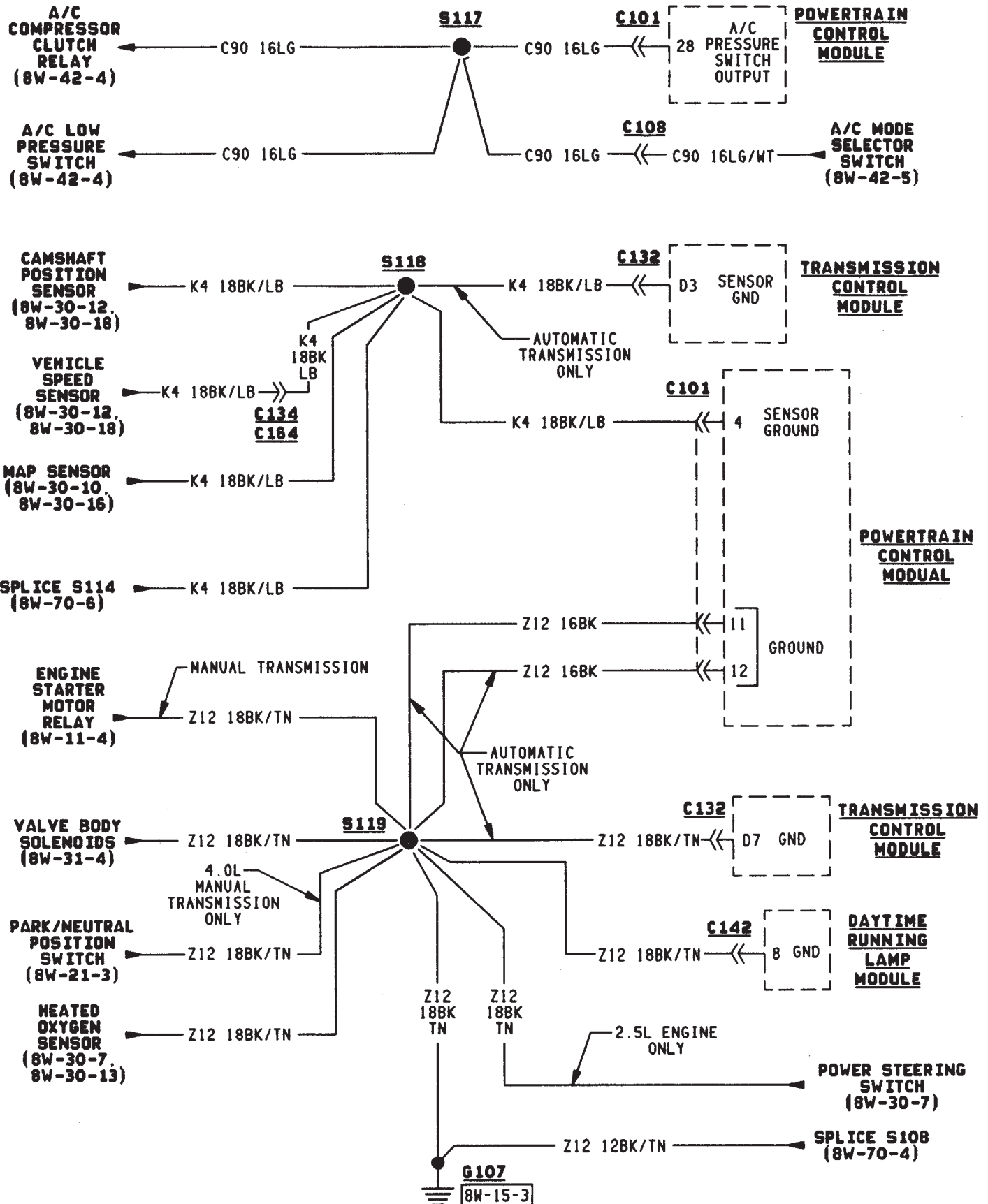


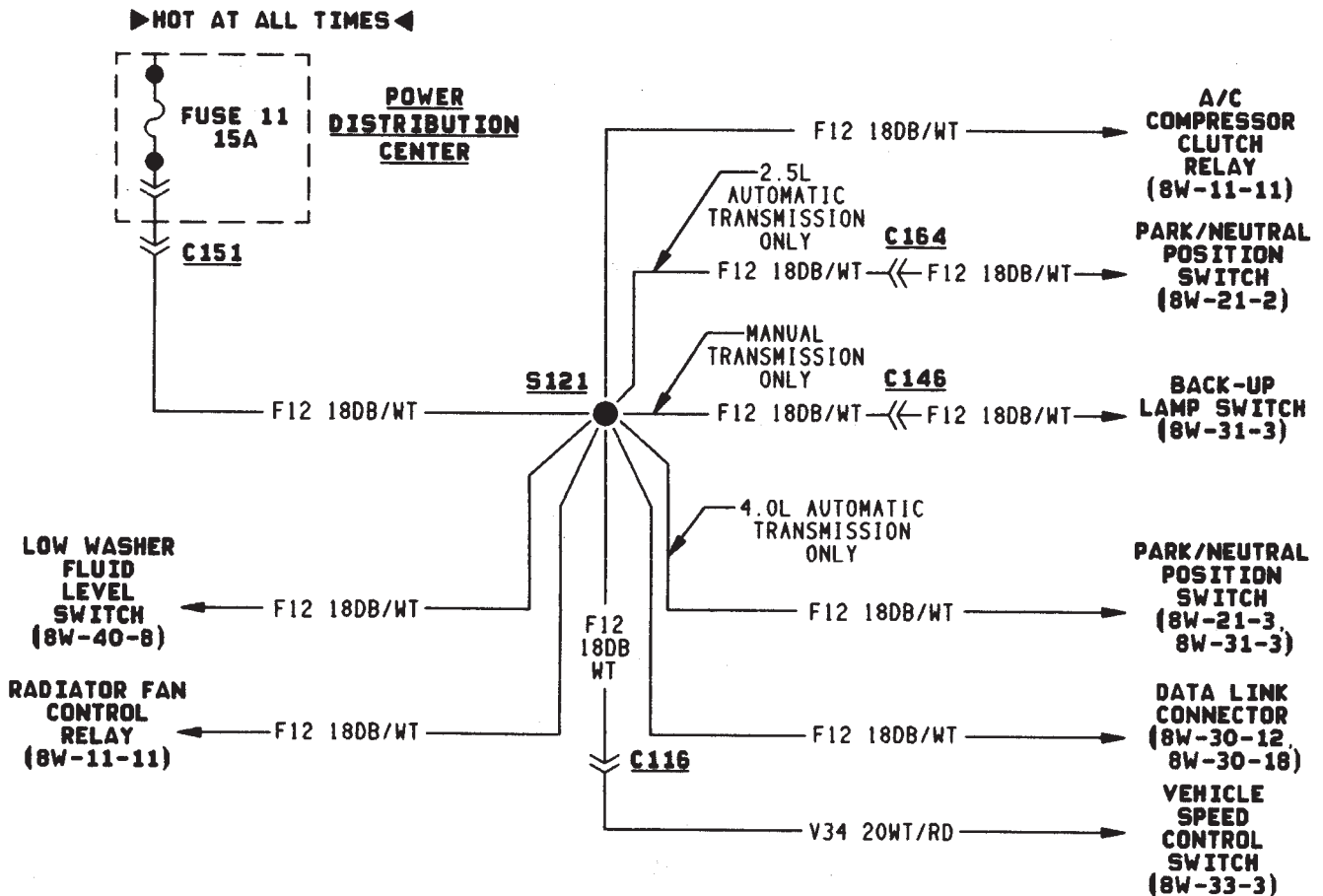
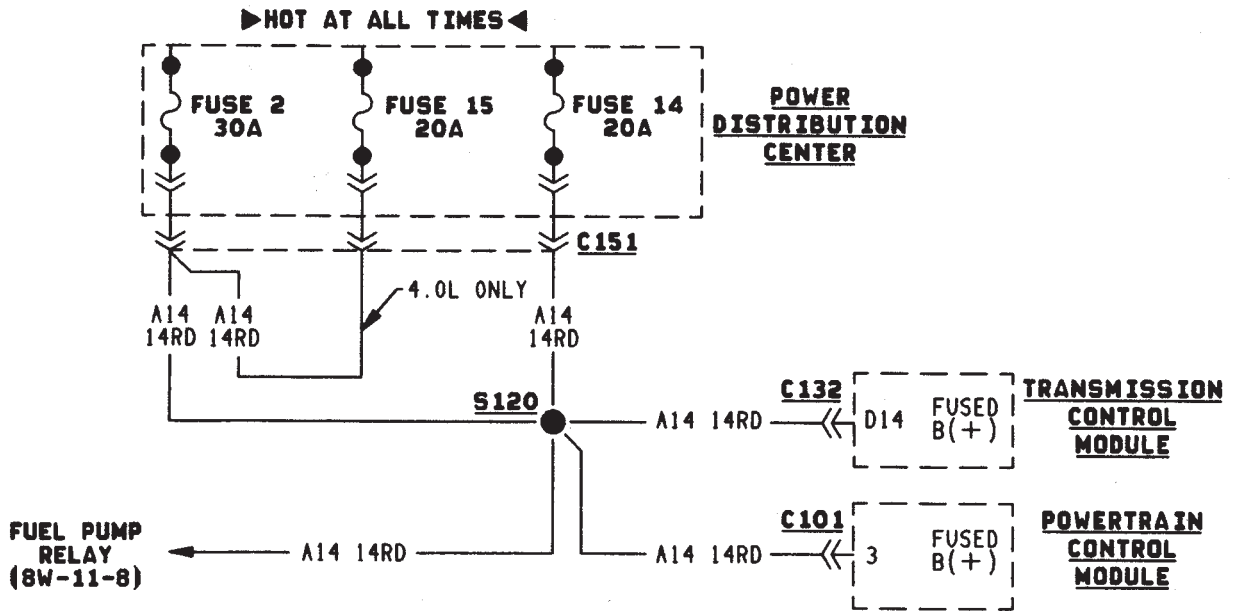


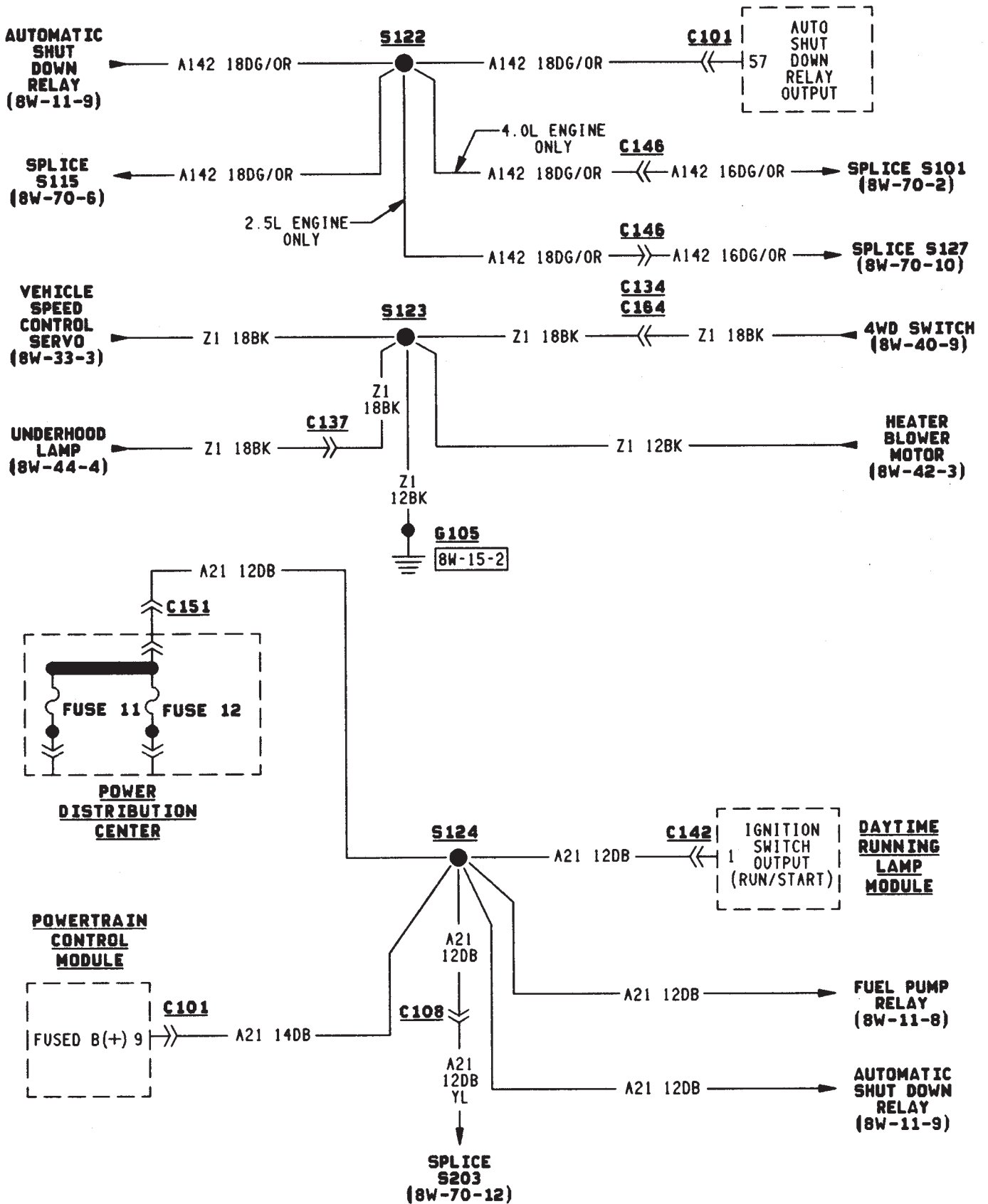


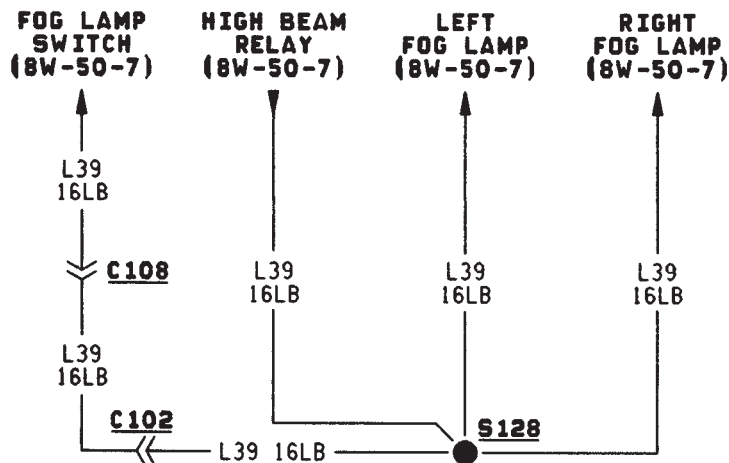
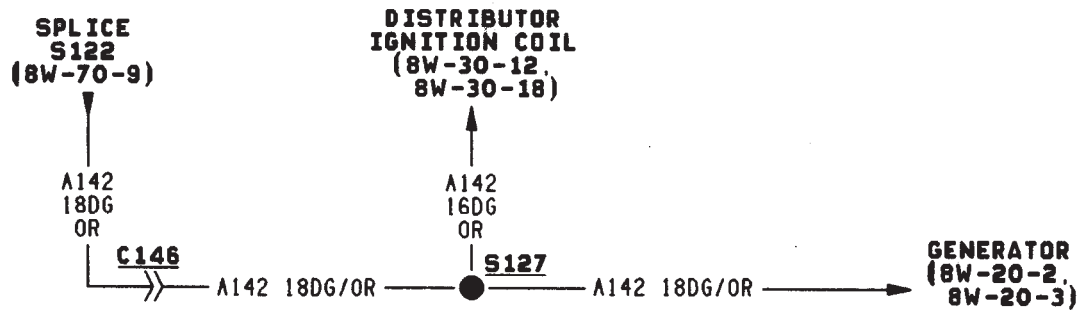
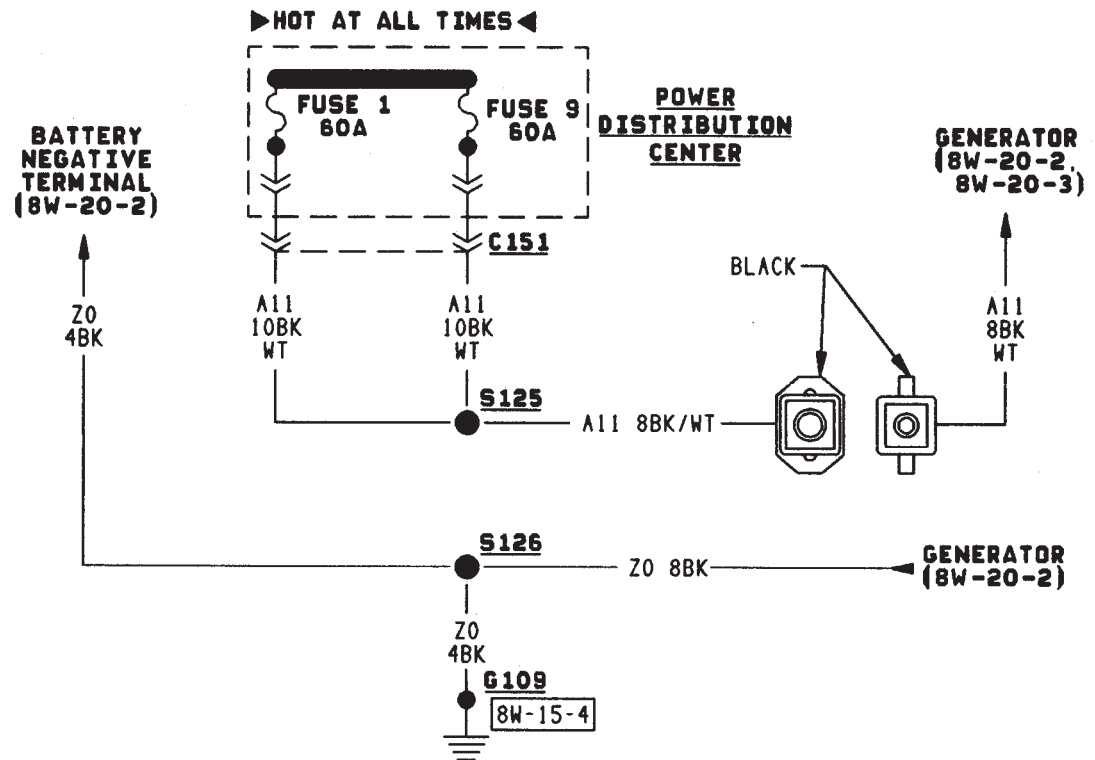


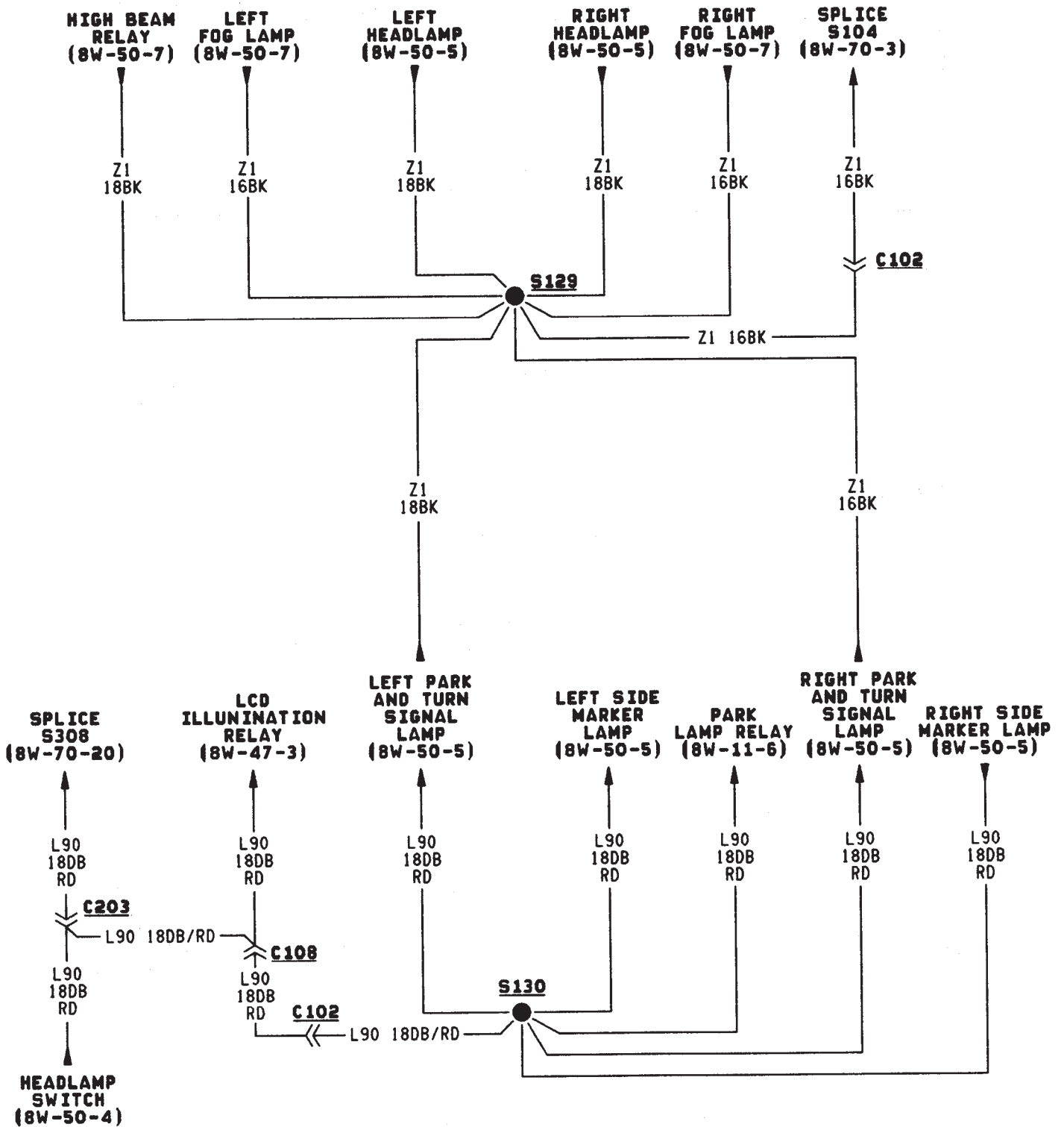




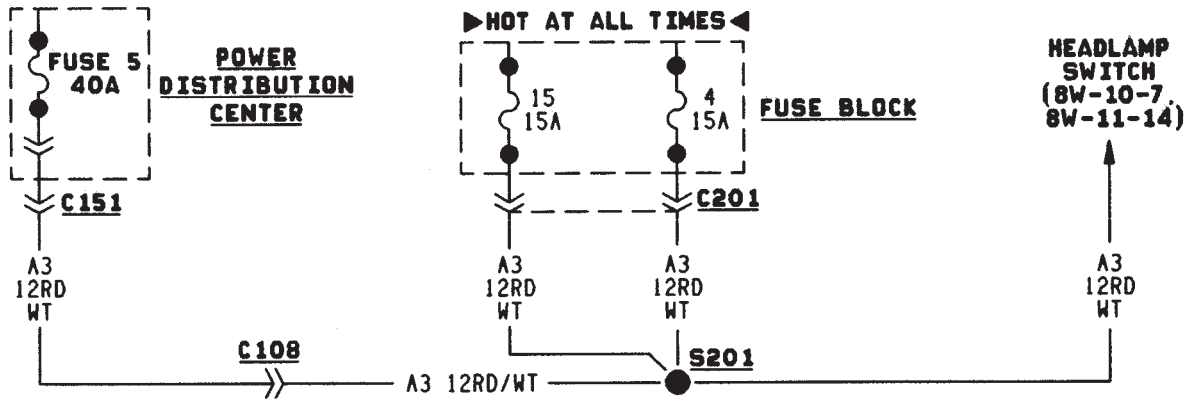




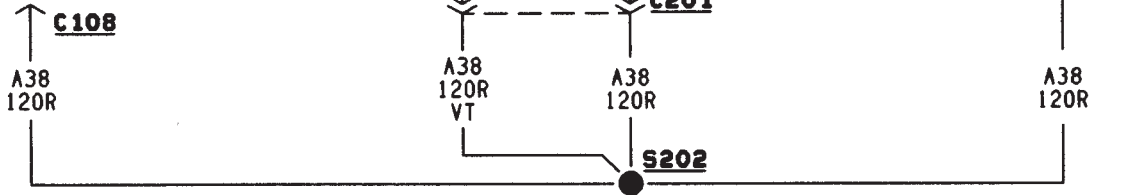




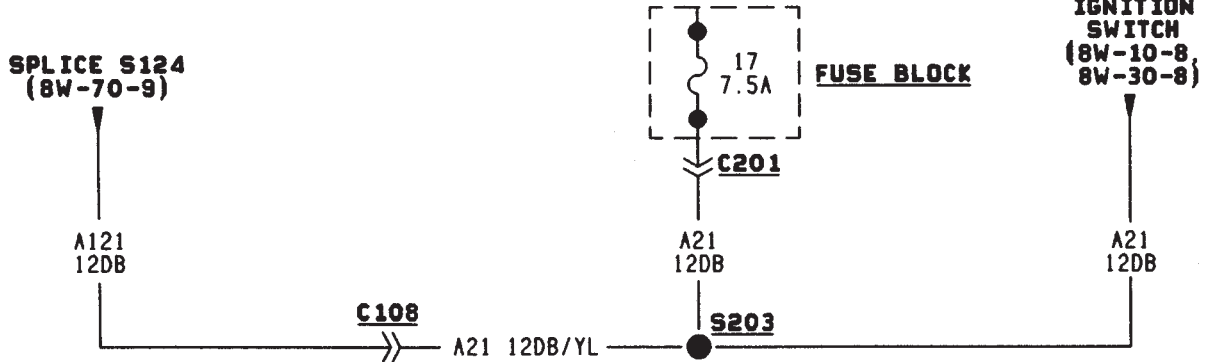
▶HOT AT ALL TIMES◀

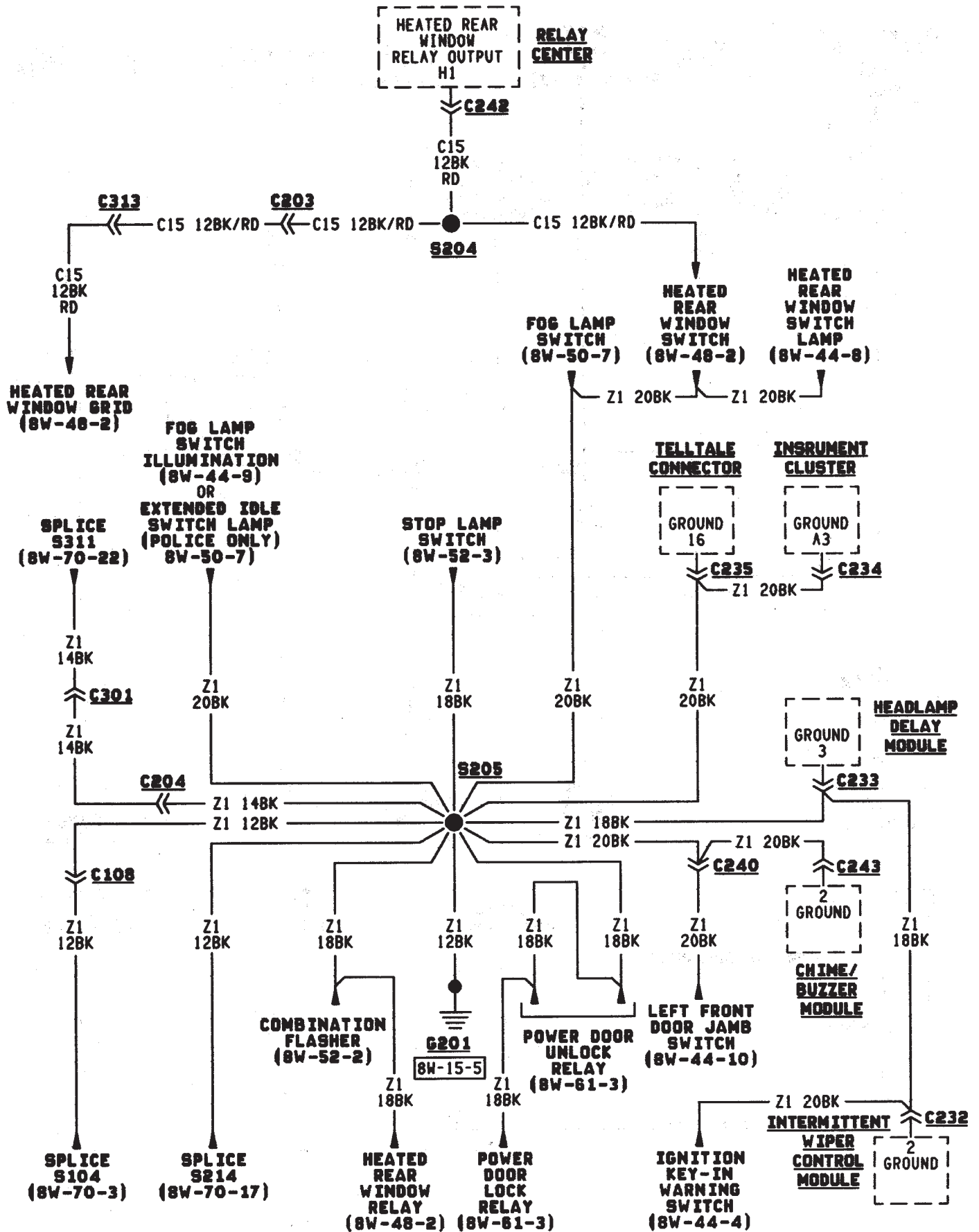


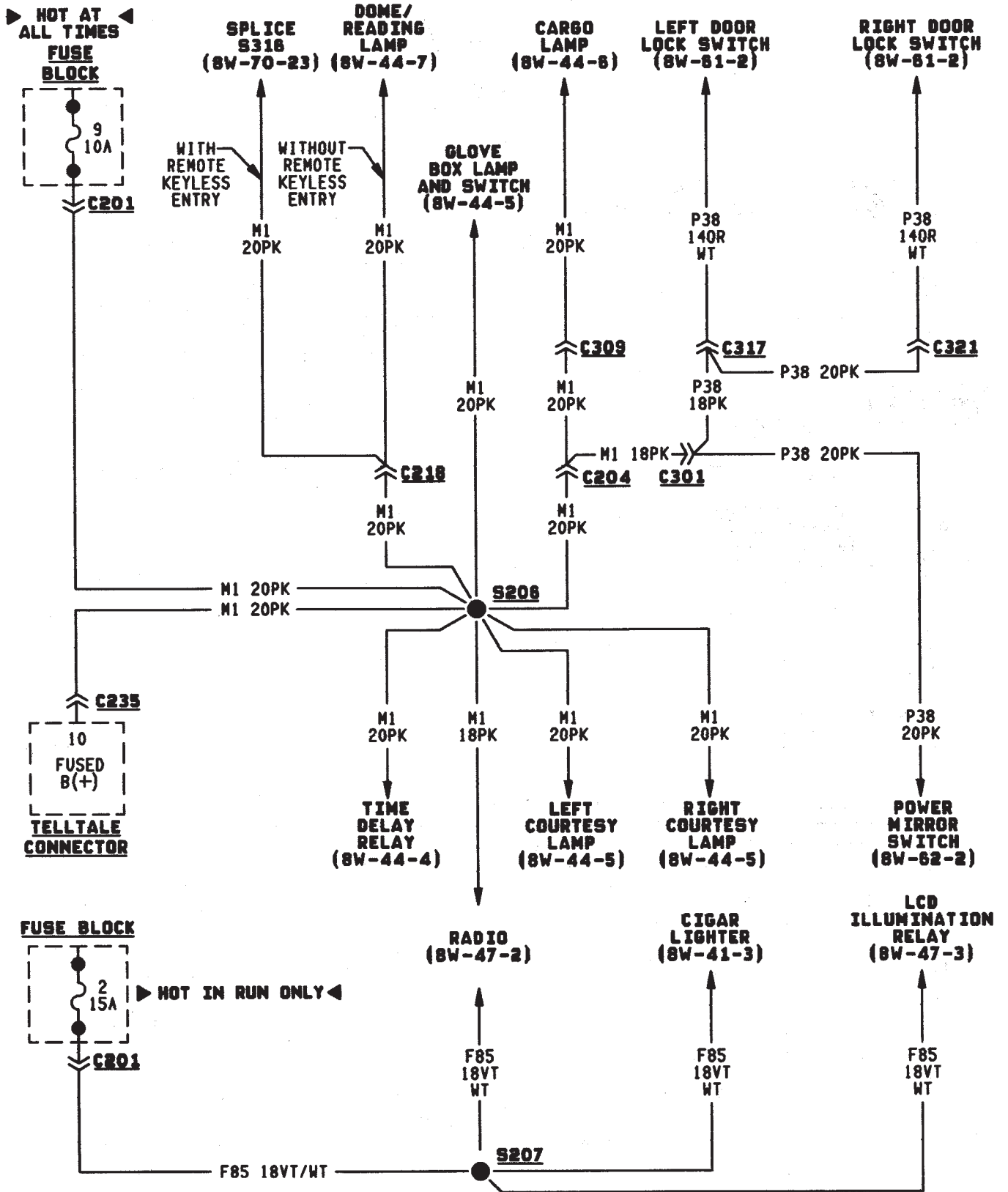
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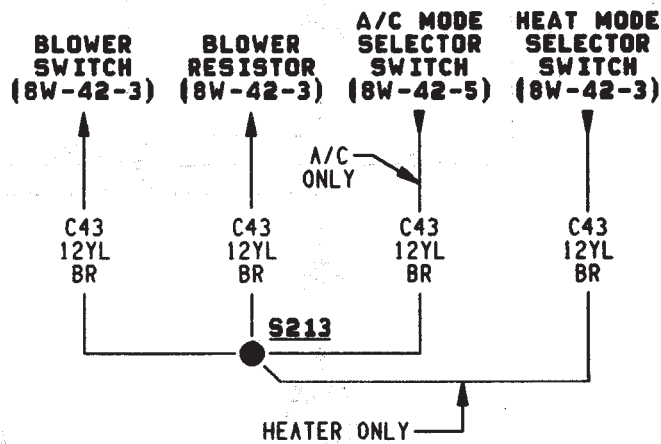
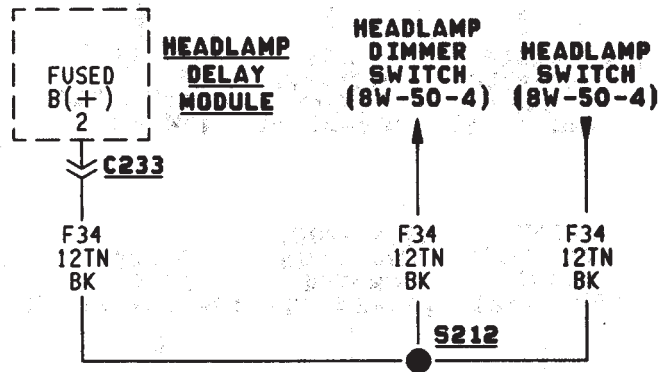
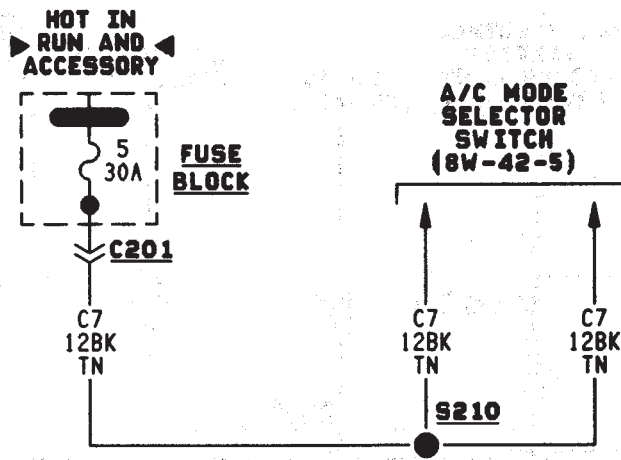


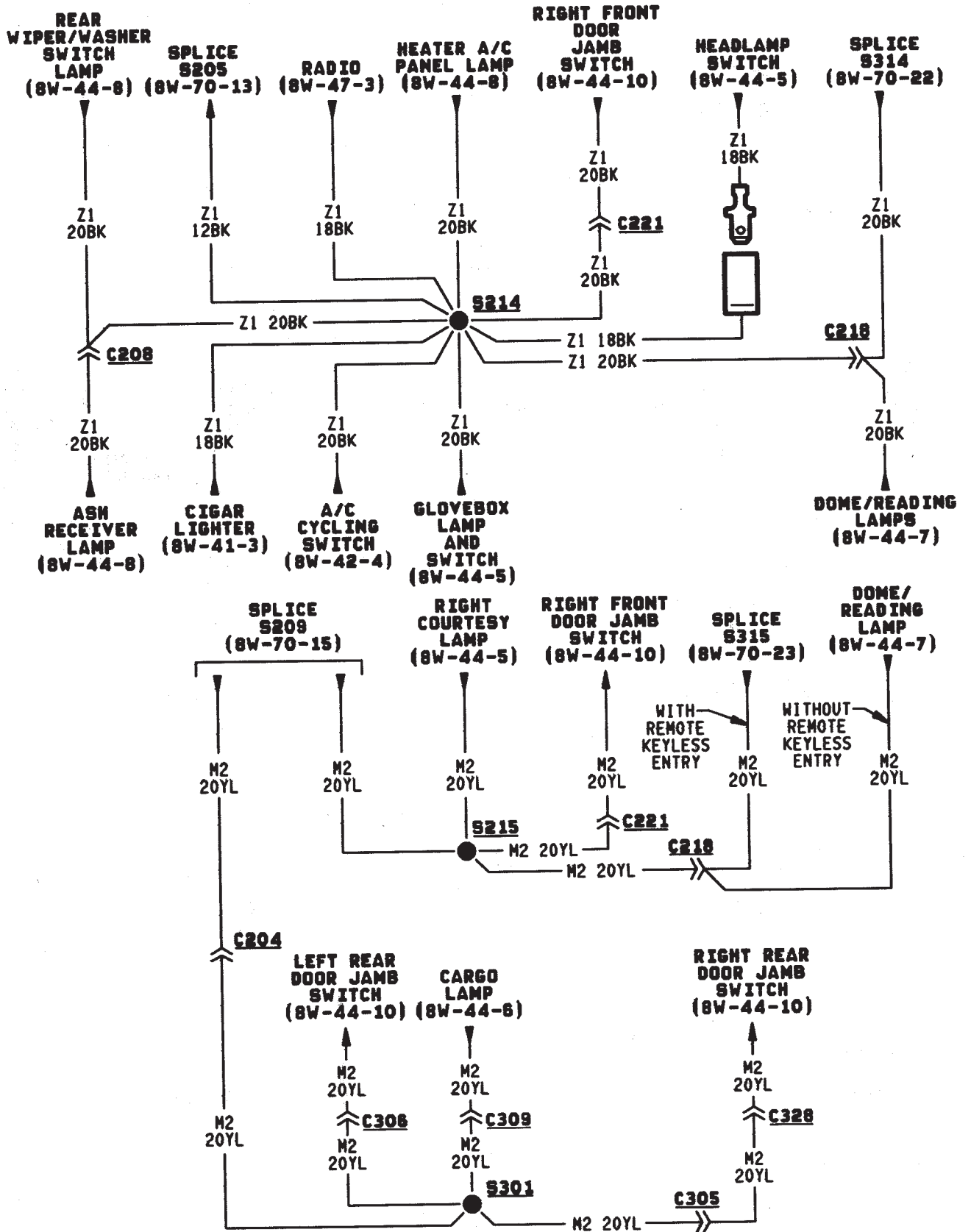
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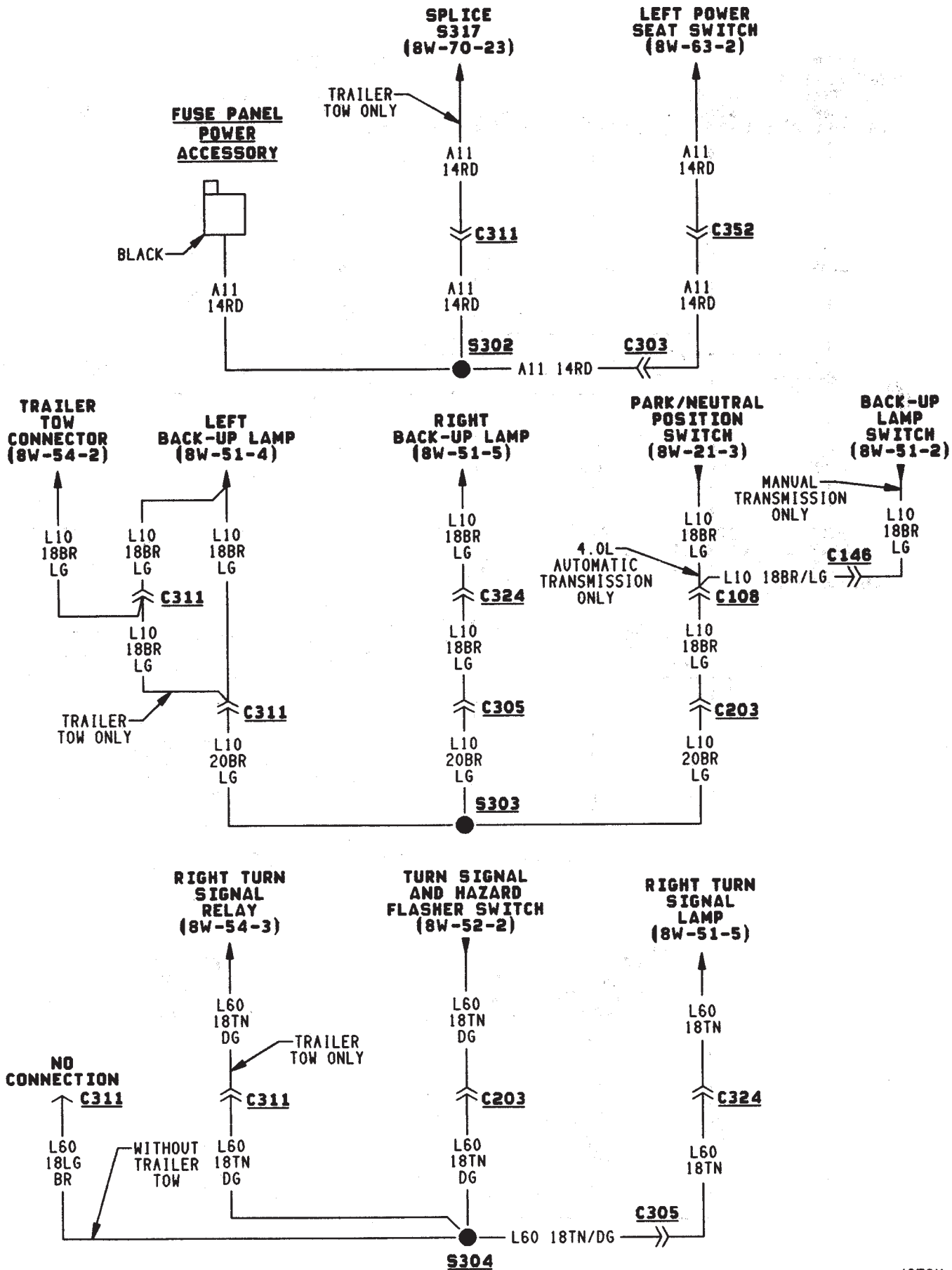


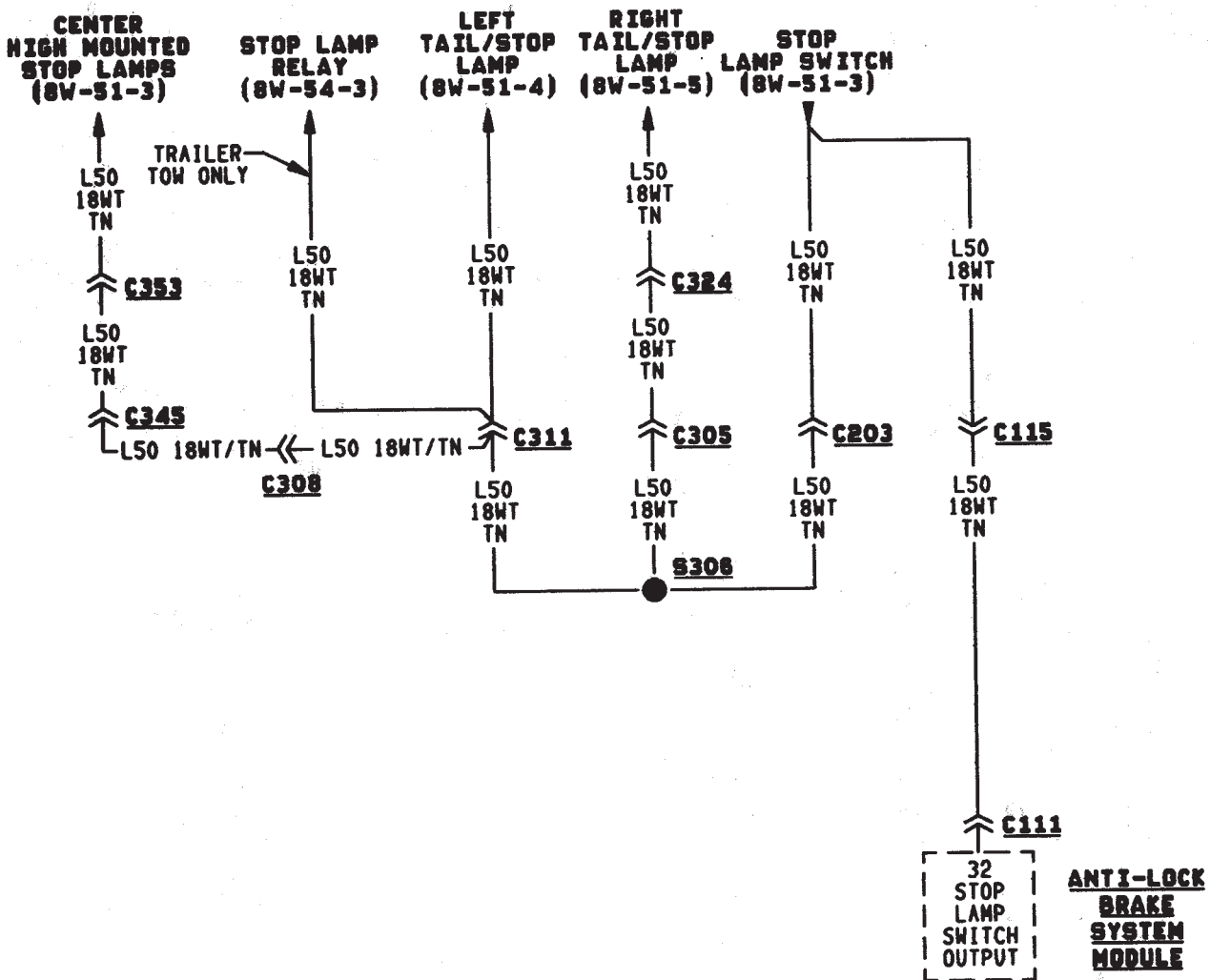
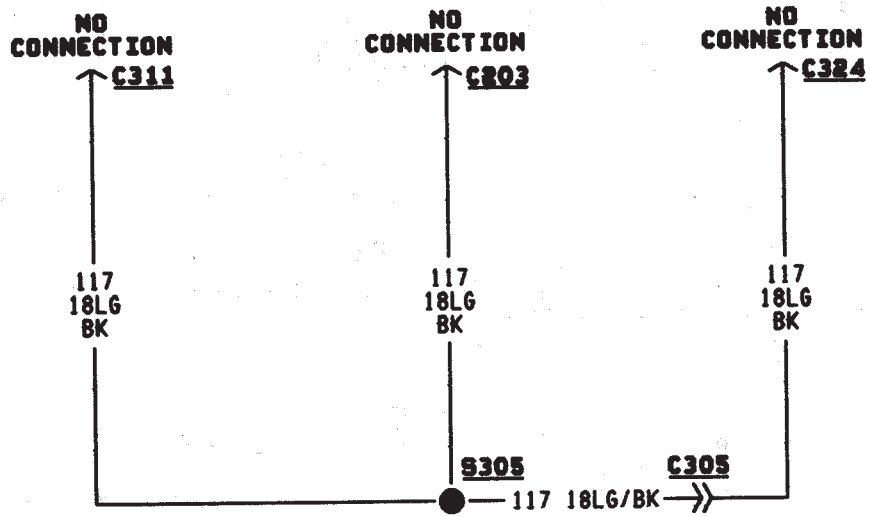


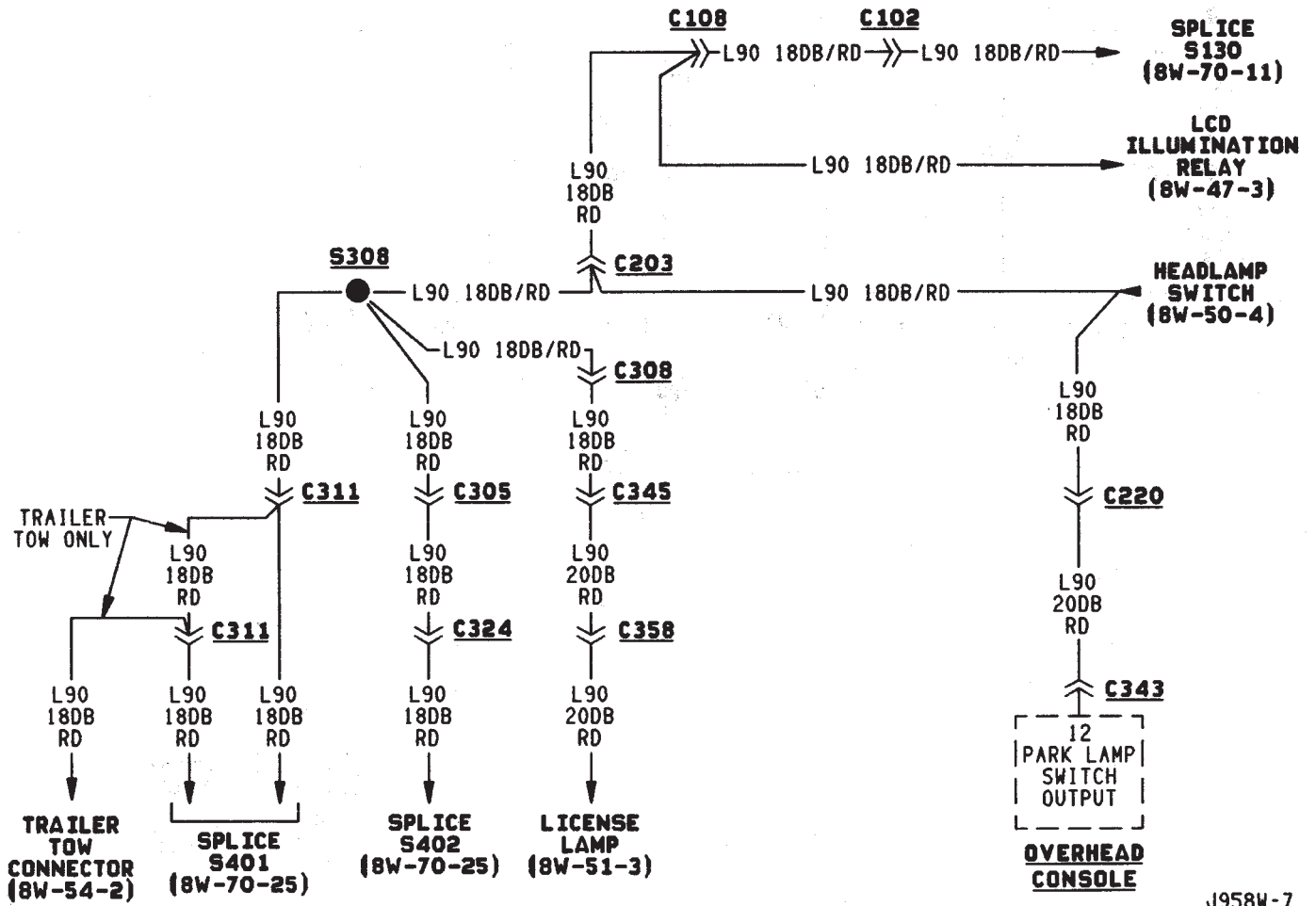
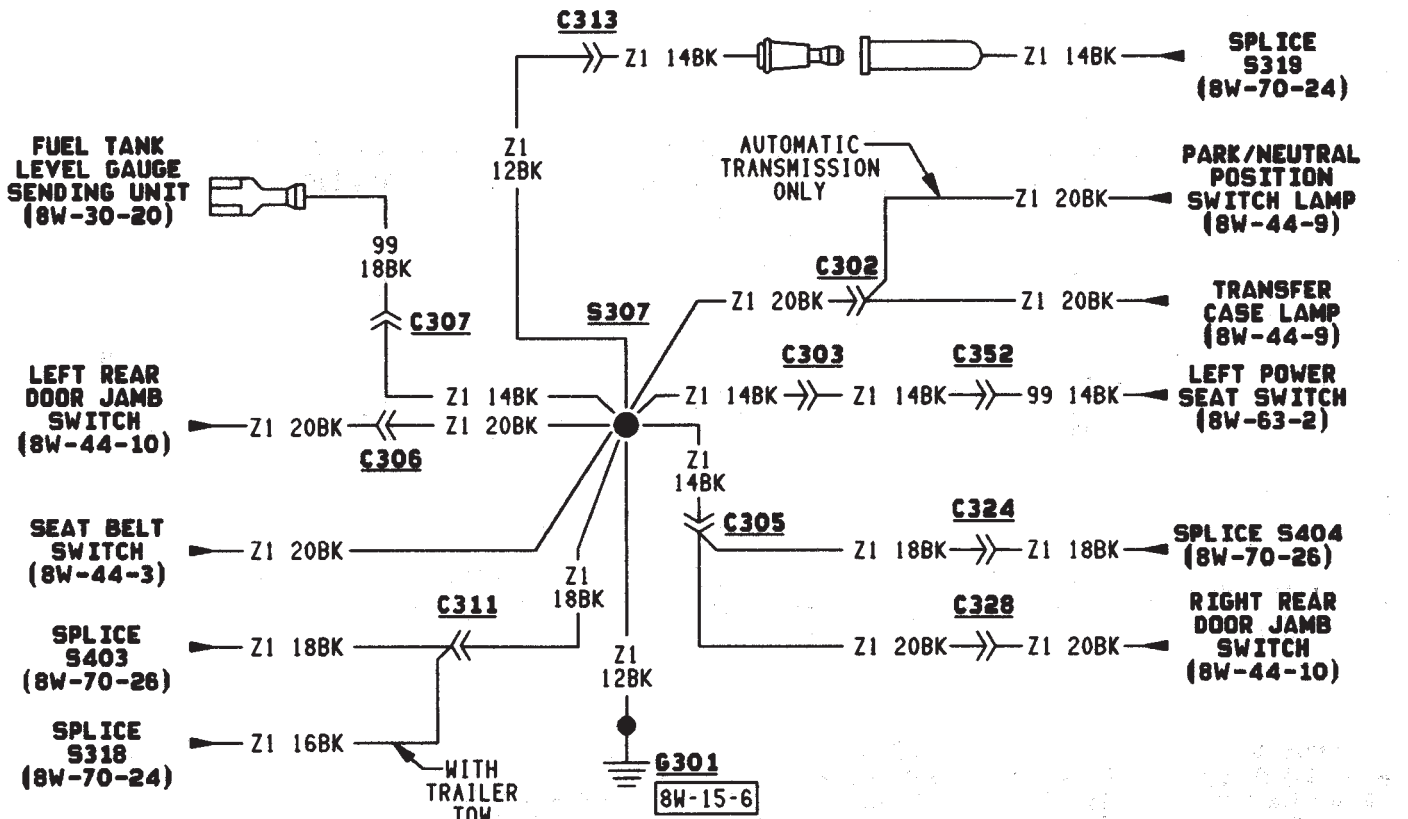


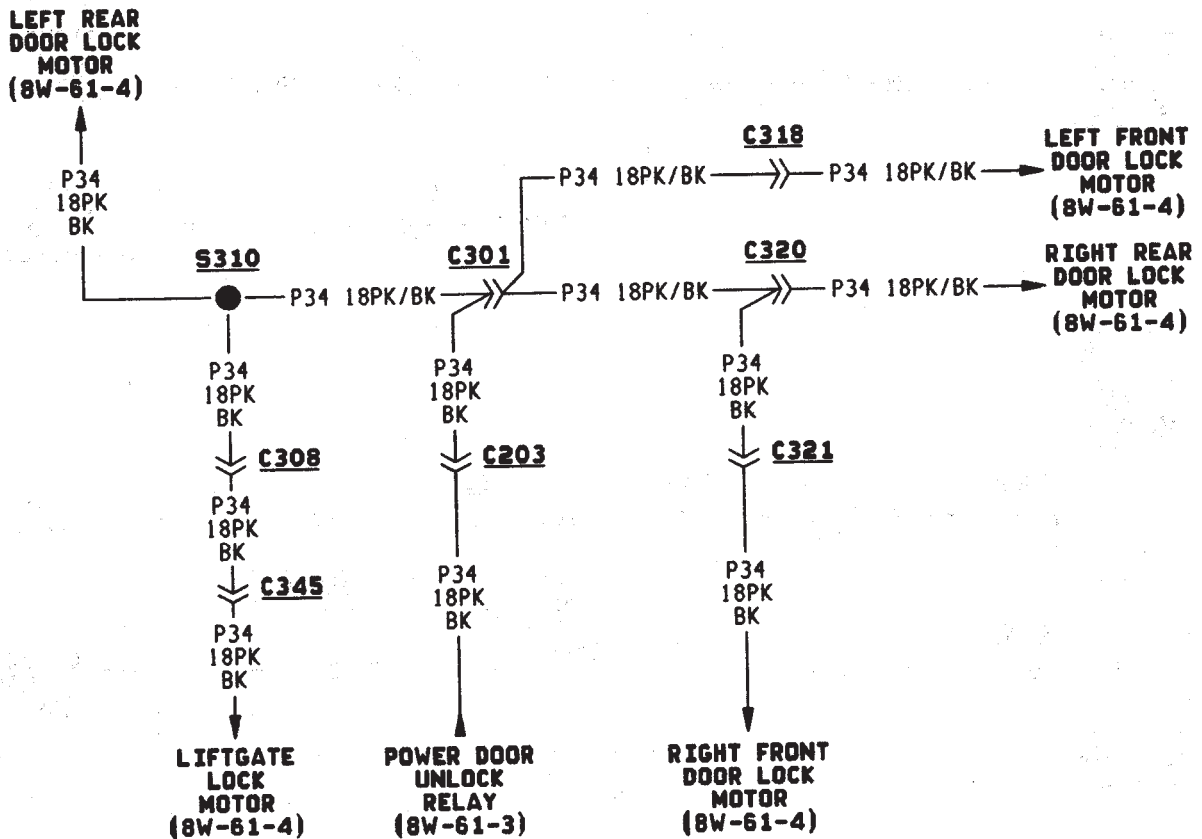
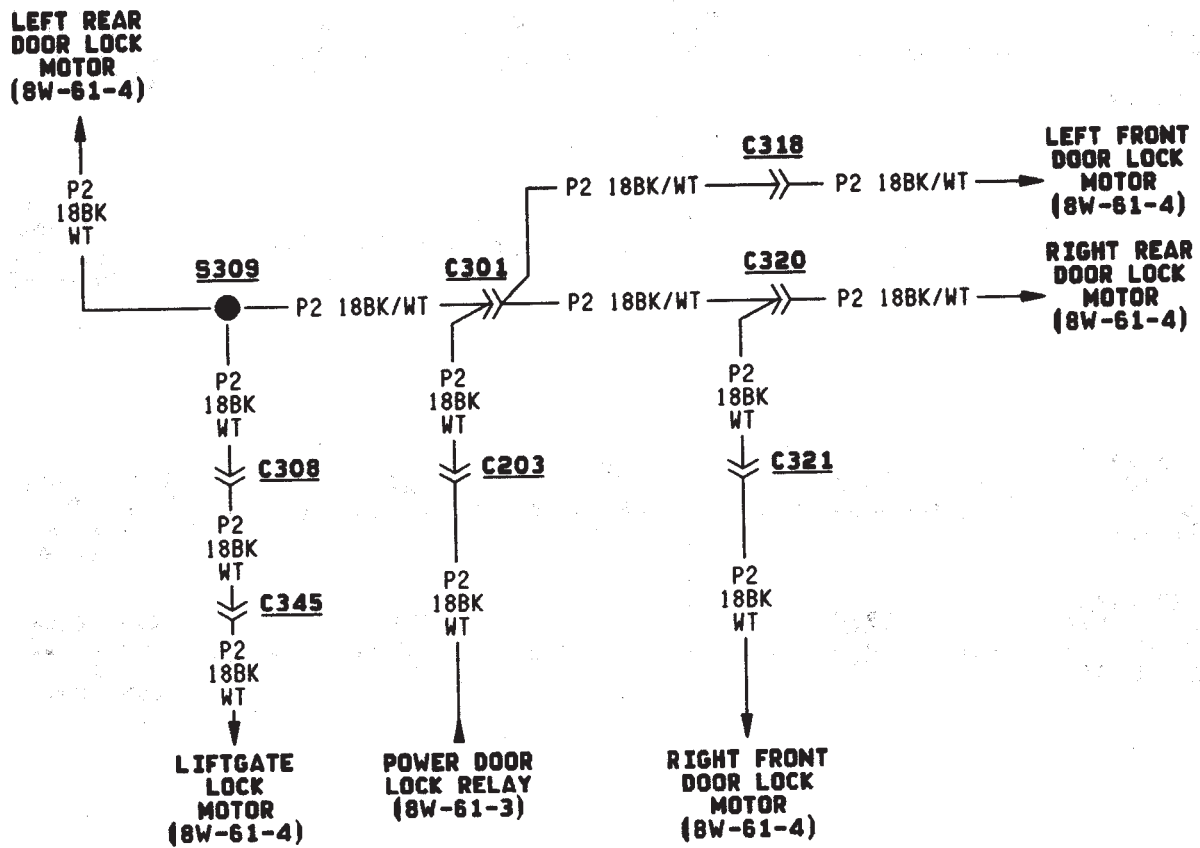


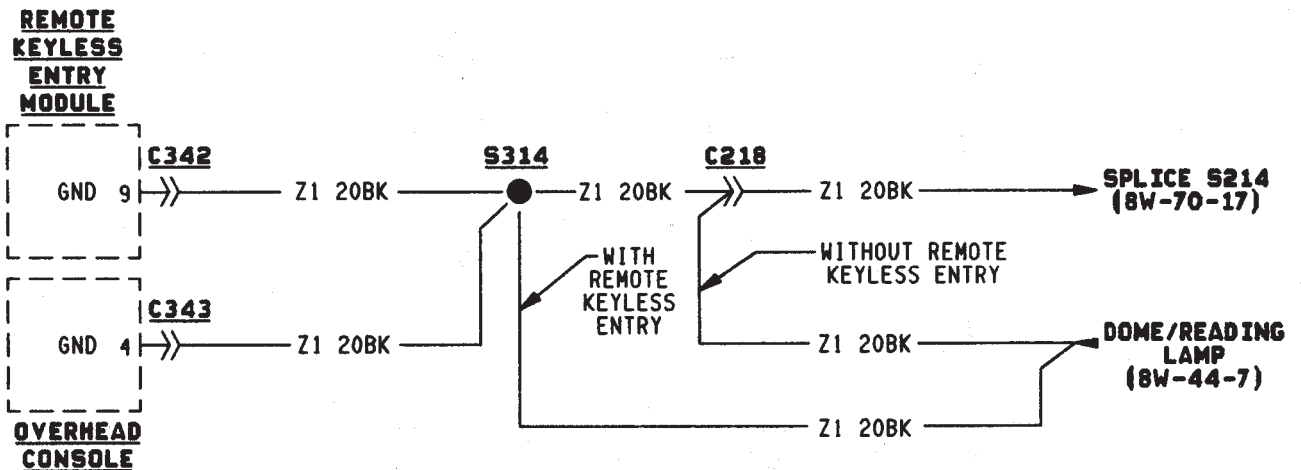
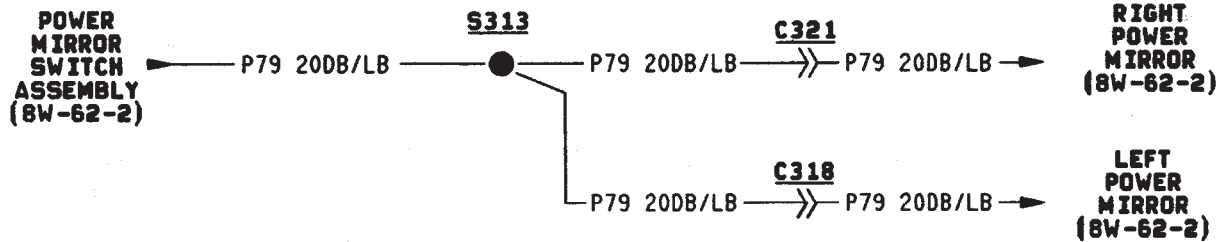
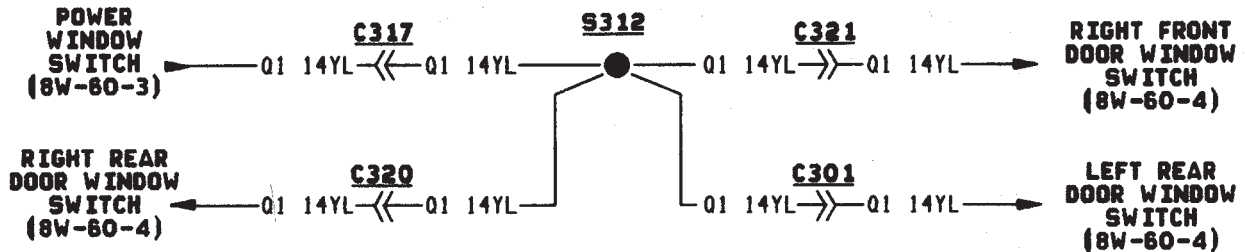
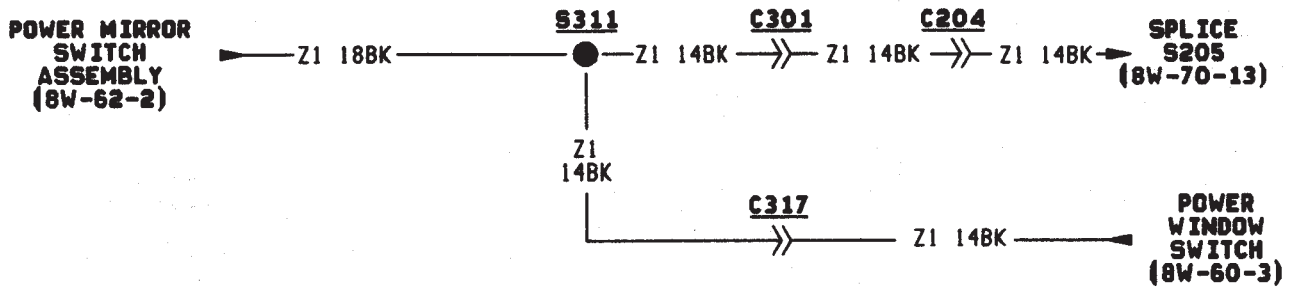


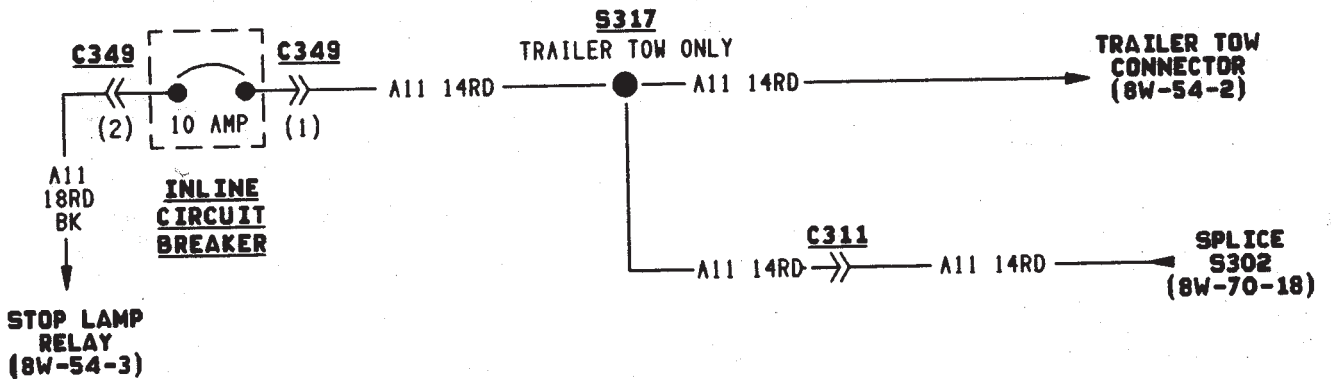
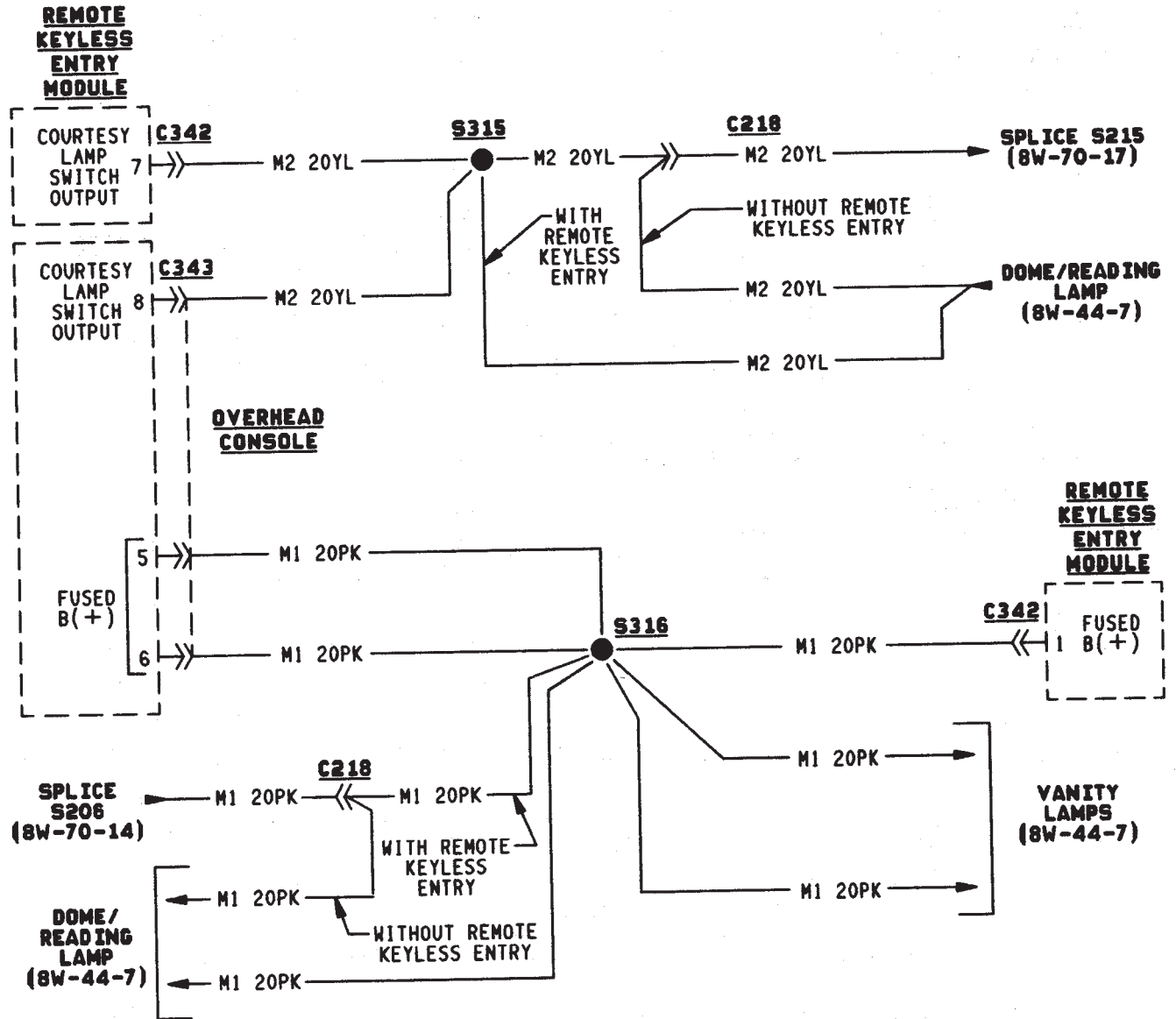


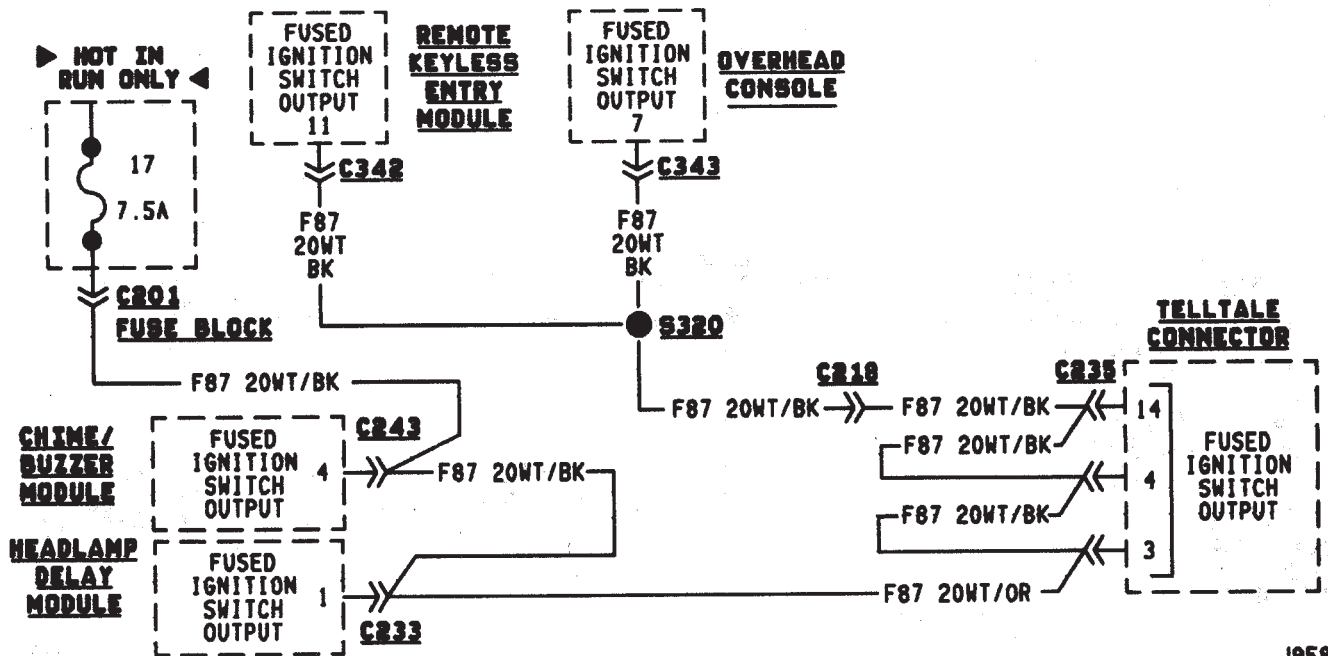
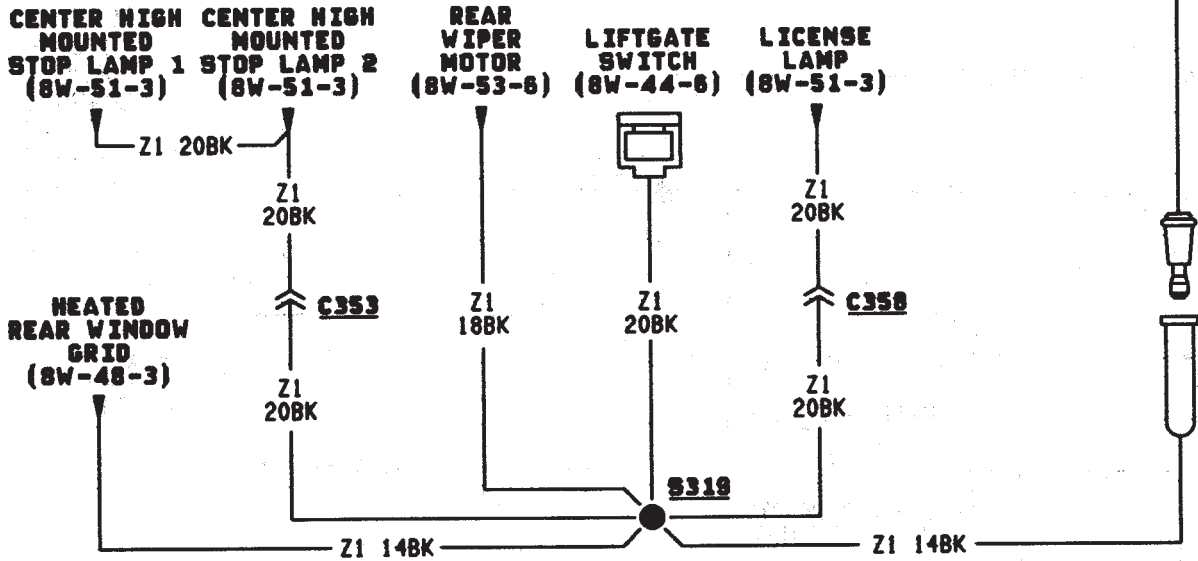
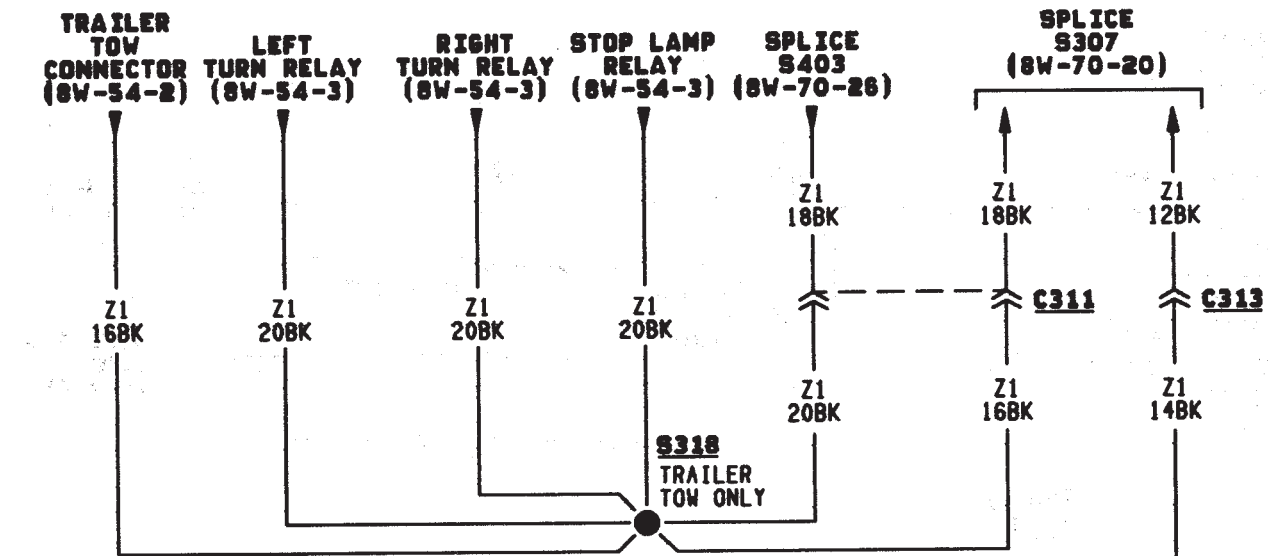


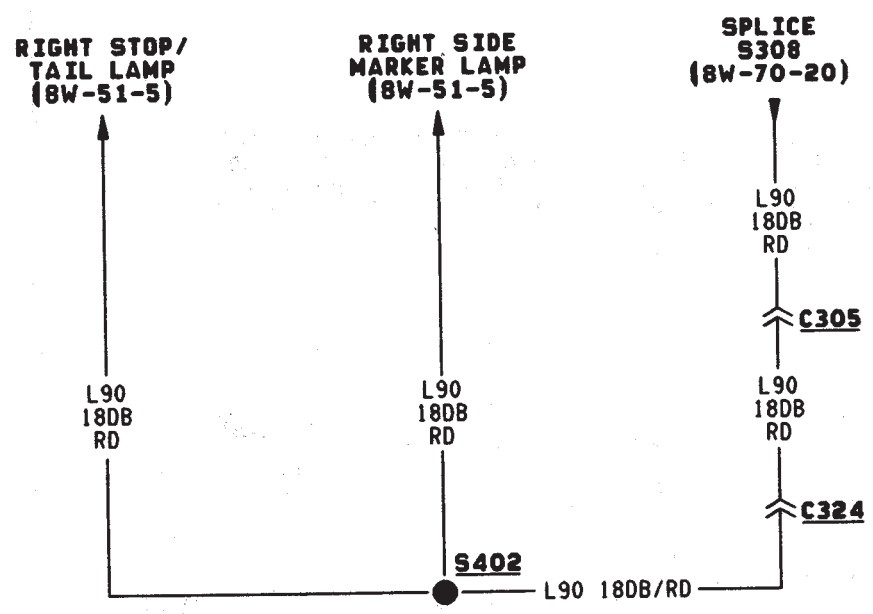
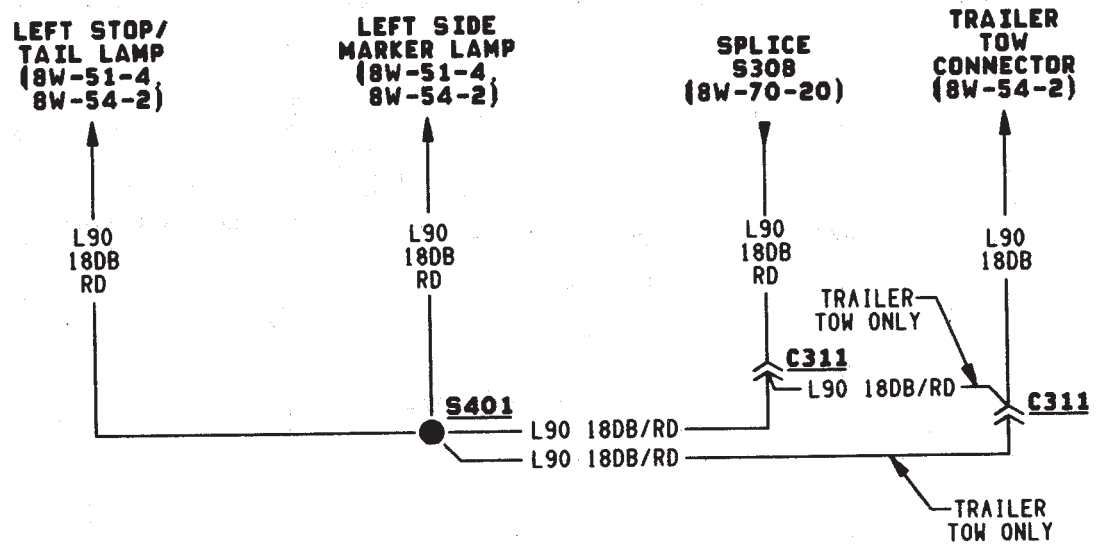


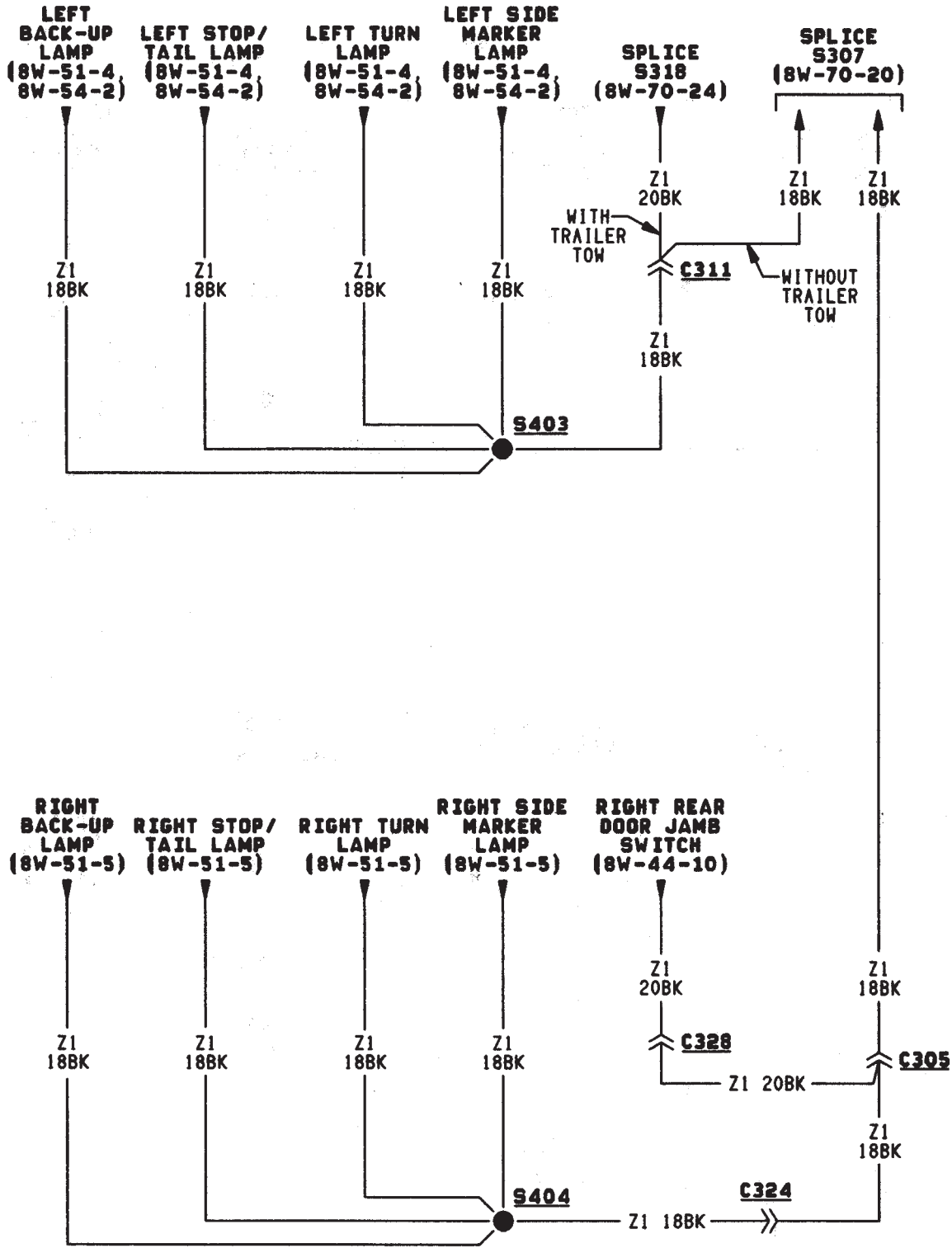












CONNECTOR PIN OUTS

GENERAL INFORMATION

The pages referenced in this section show the connector, the circuits in the connector, and the pin that

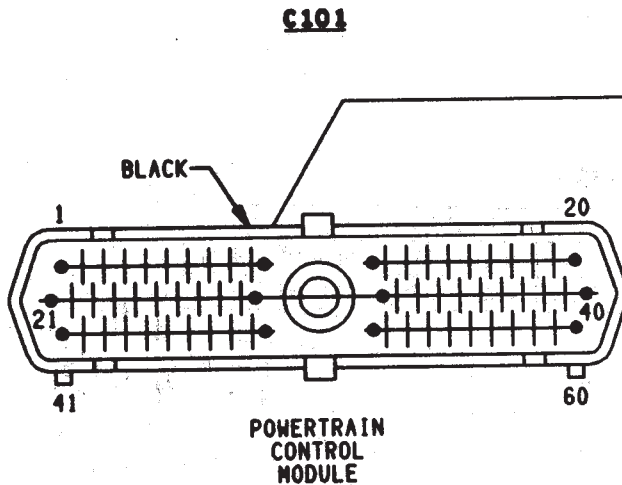
circuit occupies. Individual connector numbers are referenced on diagram pages throughout Group 8W.

CONNECTOR LOCATIONS

Component	Page	Component	Page
C101	.8W-80-3	C148	.8W-80-17
C102	.8W-80-4	C149	.8W-80-18
C103	.8W-80-4	C150	.8W-80-18
C104	.8W-80-4	C151	.8W-80-18
C105	.8W-80-4	C152	.8W-80-18
C106	.8W-80-5	C153	.8W-80-18
C107	.8W-80-5	C154	.8W-80-19
C108	.8W-80-6, 7	C155	.8W-80-19
C109	.8W-80-8	C156	.8W-80-19
C110	.8W-80-8	C157	.8W-80-19
C111	.8W-80-9	C158	.8W-80-20
C112	.8W-80-10	C159	.8W-80-20
C113	.8W-80-10	C160	.8W-80-20
C114	.8W-80-10	C161	.8W-80-20
C115	.8W-80-10	C162	.8W-80-22
C116	.8W-80-11	C163	.8W-80-21
C117	.8W-80-11	C164	.8W-80-21
C118	.8W-80-11	C202	.8W-80-21
C119	.8W-80-11	C203	.8W-80-21
C120	.8W-80-11	C204	.8W-80-22
C121	.8W-80-12	C205	.8W-80-22
C122	.8W-80-12	C206	.8W-80-22
C123	.8W-80-12	C207	.8W-80-22
C124	.8W-80-12	C208	.8W-80-23
C125	.8W-80-12	C209	.8W-80-23
C126	.8W-80-12	C210	.8W-80-23
C127	.8W-80-13	C211	.8W-80-23
C128	.8W-80-13	C212	.8W-80-23
C129	.8W-80-13	C213	.8W-80-24
C130	.8W-80-13	C214	.8W-80-24
C131	.8W-80-13	C215	.8W-80-24
C132	.8W-80-14	C216	.8W-80-24
C133	.8W-80-14	C217	.8W-80-24
C134	.8W-80-15	C218	.8W-80-25
C135	.8W-80-15	C219	.8W-80-25
C136	.8W-80-15	C220	.8W-80-25
C137	.8W-80-15	C221	.8W-80-25
C138	.8W-80-15	C222	.8W-80-25
C139	.8W-80-16	C223	.8W-80-26
C140	.8W-80-16	C224	.8W-80-26
C141	.8W-80-16	C225	.8W-80-26
C142	.8W-80-16	C226	.8W-80-26
C143	.8W-80-16	C227	.8W-80-26
C144	.8W-80-17	C228	.8W-80-27
C145	.8W-80-17	C229	.8W-80-27
C146	.8W-80-17	C230	.8W-80-27
C147	.8W-80-17	C231	.8W-80-28

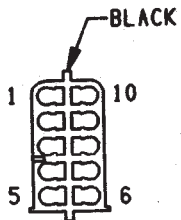
<u>Component</u>	<u>Page</u>	<u>Component</u>	<u>Page</u>
C232	8W-80-28	C342	8W-80-40
C233	8W-80-28	C343	8W-80-40
C234	8W-80-28	C344	8W-80-40
C235	8W-80-29	C345	8W-80-41
C236	8W-80-29	C346	8W-80-41
C237	8W-80-29	C347	8W-80-41
C238	8W-80-29	C348	8W-80-41
C239	8W-80-30	C349	8W-80-42
C240	8W-80-30	C350	8W-80-42
C241	8W-80-30	C351	8W-80-42
C242	8W-80-30	C352	8W-80-42
C243	8W-80-30	C353	8W-80-42
C301	8W-80-31	C354	8W-80-43
C302	8W-80-31	C355	8W-80-43
C303	8W-80-31	C356	8W-80-43
C304	8W-80-31	C357	8W-80-43
C305	8W-80-31	C358	8W-80-43
C306	8W-80-32	C401	8W-80-44
C307	8W-80-32	C402	8W-80-44
C308	8W-80-32	C403	8W-80-41
C309	8W-80-32	C404	8W-80-44
C310	8W-80-32	C405	8W-80-44
C311	8W-80-33	C406	8W-80-45
C312	8W-80-33	C407	8W-80-45
C313	8W-80-33	C408	8W-80-45
C314	8W-80-33	C409	8W-80-45
C315	8W-80-33	C410	8W-80-45
C316	8W-80-34	C411	8W-80-46
C317	8W-80-34	C412	8W-80-46
C318	8W-80-34	C413	8W-80-46
C319	8W-80-34	C414	8W-80-46
C320	8W-80-35	C415	8W-80-46
C321	8W-80-35	C416	8W-80-47
C322	8W-80-35	C417	8W-80-47
C323	8W-80-35	C418	8W-80-47
C324	8W-80-36	C419	8W-80-47
C325	8W-80-36	C420	8W-80-47
C326	8W-80-36	C421	8W-80-48
C327	8W-80-36	C422	8W-80-48
C328	8W-80-36	C423	8W-80-48
C329	8W-80-37	C424	8W-80-48
C331	8W-80-37	C425	8W-80-49
C332	8W-80-37	C426	8W-80-49
C333	8W-80-37	C427	8W-80-49
C334	8W-80-38	C428	8W-80-49
C335	8W-80-38	C429	8W-80-50
C336	8W-80-38	C430	8W-80-50
C338	8W-80-38	C431	8W-80-50
C339	8W-80-38		
C340	8W-80-39		
C341	8W-80-39		

CAV	CIRCUIT	FUNCTION
1	K1 20DG/RD	MAP SENSOR SIGNAL
2	K2 16TN/BK	ENGINE COOLANT TEMP SENSOR SIGNAL
3	A14 14RD	FUSED B(+)
4	K4 18BK/LB	SENSOR GROUND
5	Z11 16BK/WT	GROUND
6	K6 20VT/WT	5-VOLT SUPPLY
7	K7 18OR	8-VOLT SUPPLY
8	—	—
9	A21 14DB	IGN SWITCH OUTPUT (RUN/START)
10	K10 18VT	POWER STEERING SWITCH SENSE
11	Z12 16BK/TN	GROUND
12	Z12 16BK/TN	GROUND
13	K14 18LB/BR	INJECTOR #4 DRIVER
14	K13 18YL/WT	INJECTOR #3 DRIVER
15	K12 18TN	INJECTOR #2 DRIVER
16	K11 18WT/DB	INJECTOR #1 DRIVER
17	—	—
18	—	—
19	K19 18GY	IGNITION COIL #1 DRIVER
20	K20 18DG	GENERATOR FIELD DRIVER
21	K21 16BK/RD	INTAKE AIR TEMP SENSOR SIGNAL
22	K22 18OR/DB	THROTTLE POSITION SENSOR SIGNAL
23	—	—
24	K24 18GY/BK	CRANKSHAFT POSITION SENSOR SIGNAL
25	D21 20PK	SCI TRANSMIT
* 26	D1 18VT/BR	CCD BUS (+) (4.0L AUTO ONLY)
27	C91 16LB	A/C CYCLING SWITCH SENSE
28	C90 16LG	A/C PRESSURE SWITCH OUTPUT
29	K29 18WT/PK	STOP LAMP SWITCH SENSE
30	T41 18BR/YL	PARK/NEUTRAL POSITION SWITCH SENSE
31	C27 20DB/PK	RADIATOR FAN RLY CONTROL (4.0L ONLY)
32	G3 20BK/PK	MALFUNCTION INDICATOR LAMP DRIVER
33	V36 20TN/RD	VEH SPEED CONTROL VACUUM SOL CONTROL
34	C13 20DB/OR	A/C COMPRESSOR CLUTCH RELAY CONTROL
35	—	—
36	G12 20DG/YL	GENERATOR LAMP DRIVER
37	—	—
38	K15 18PK/BK	INJECTOR #5 DRIVER (4.0L ONLY)
39	K39 18GY/RD	IDLE AIR CONTROL MOTOR #1 DRIVER
40	K40 18BR/WT	IDLE AIR CONTROL MOTOR #3 DRIVER
41	K41 18BK/DG	HEATED OXYGEN SENSOR SIGNAL
42	—	—
43	G21 20GY/LB	TACHOMETER SIGNAL
44	K44 18TN/YL	CAMSHAFT POSITION SENSOR SIGNAL
45	D20 20LG	SCI RECEIVE
* 46	D2 18WT/BK	CCD BUS (-) (4.0L AUTO ONLY)
47	G7 20WT/OR	VEH SPEED SENSOR SIGNAL
48	V31 20BR/RD	VEH SPEED CNTRL COAST/SET SW SENSE
49	V32 20YL/RD	VEH SPEED CNTRL ON/OFF SW SENSE
50	V33 20WT/LG	VEH SPEED CNTRL RESUME SW SENSE
51	K51 20DB/YL	AUTOMATIC SHUT DOWN RELAY CONTROL
52	—	—
53	V35 20LG/RD	VEH SPEED CNTRL VENT SOLENOID CNTRL
54	K54 20OR/BK	UP-SHIFT LAMP DRIVER (MAN TRANS)
54	K54 20OR/BK	TCC SOL RLY CTRL (2.5L AUTO TRANS ONLY)
55	—	—
56	—	—
57	A142 18DG/OR	AUTOMATIC SHUT DOWN RELAY OUTPUT
58	K16 18LG/BK	INJECTOR #6 DRIVER (4.0L ONLY)
59	K59 18VT/BK	IDLE AIR CONTROL MOTOR #4 DRIVER
60	K60 18YL/BK	IDLE AIR CONTROL MOTOR #2 DRIVER

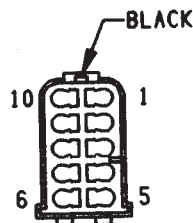


* — INDICATES TWISTED PAIR D1 & D2

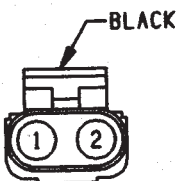
C102



CAV	CIRCUIT
1	G465 16LB/BK
2	L3 14RD/OR
3	L61 18LG
4	L90 18DB/RD
5	Z1 16BK
6	L35 16BR/WT
7	L39 16LB
8	L60 18TN
9	L4 14VT/WT
10	F39 18PK/LG



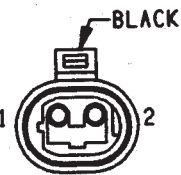
CAV	CIRCUIT
1	G465 16LB/BK
2	L3 16RD/OR
3	L61 18LG
4	L90 18DB/RD
5	Z1 16BK
6	L35 18BR/WT
7	L39 16LB
8	L60 18TN
8	L60 18TN
9	L4 16VT/WT
10	F39 16PK/LG



RADIATOR FAN MOTOR

C103

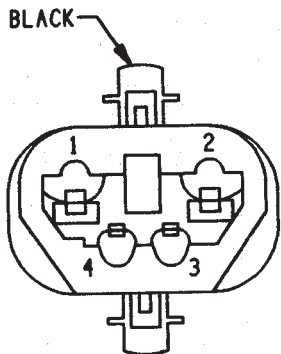
CAV	CIRCUIT	FUNCTION
1	C25 16LG	RADIATOR FAN RELAY OUTPUT
2	Z1 16BK	GROUND



LEFT FRONT WHEEL SPEED SENSOR

C104

CAV	CIRCUIT	FUNCTION
* 1	B9 18RD	LEFT FRONT WHEEL SPEED SENSOR (+)
* 2	B8 18RD/DB	LEFT FRONT WHEEL SPEED SENSOR (-)



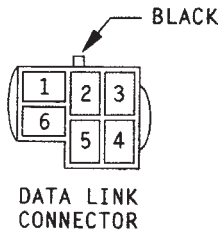
ABS PUMP MOTOR

C105

CAV	CIRCUIT	FUNCTION
1	B233 12TN/BK	PUMP/MOTOR RELAY OUTPUT
2	Z12 12BK/TN	GROUND
* 3	B219 18DB	PUMP/MOTOR SPEED SENSOR (-)
* 4	B220 18TN	PUMP/MOTOR SPEED SENSOR (+)

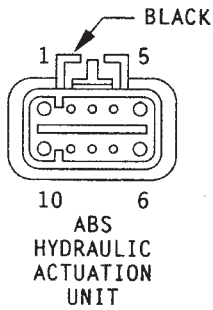
* - INDICATES TWISTED PAIRS (B8 & B9, B219 & B220)

1995 Jeep Cherokee/Wrangler
 Publication No. 81-370-5146
 TSB 26-07-95 September, 1995



C106

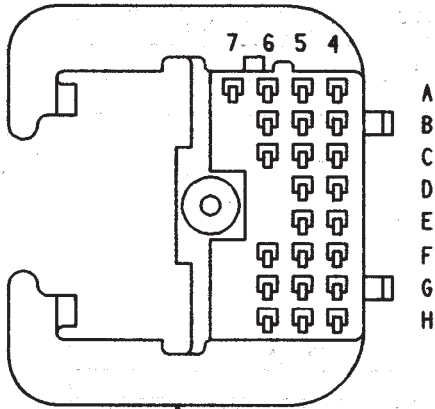
CAV	CIRCUIT	FUNCTION
1	—	—
2	D20 20LG	SCI RECEIVE
	* D20 20LG	SCI RECEIVE
3	—	—
4	F12 18DB/WT	FUSED IGNITION SWITCH OUTPUT
5	D21 20PK	SCI TRANSMIT
	* D21 20PK	SCI TRANSMIT
6	Z11 16BK/WT	GROUND



C107

CAV	CIRCUIT	FUNCTION
1	—	—
2	B245 16WT/LG	LEFT FRONT ISOLATION VALVE CONTROL
3	B249 16WT/TN	RIGHT FRONT ISOLATION VALVE CONTROL
4	B251 16WT/BK	REAR INLET VALVE CONTROL
5	B235 14GY/YL	ABS POWER RELAY OUTPUT
6	—	—
7	B254 16DG/OR	REAR DUMP VALVE CONTROL
8	B248 16DG/WT	RIGHT FRONT DUMP VALVE CONTROL
9	B243 16DG/BK	LEFT FRONT DUMP VALVE CONTROL
10	B235 14GY/YL	ABS POWER RELAY OUTPUT

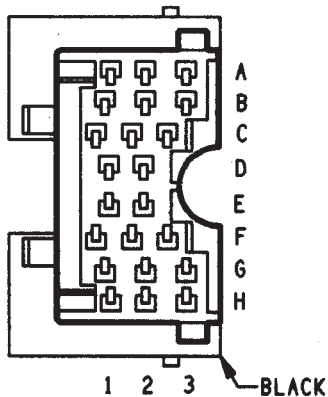
C108



BLACK
BULKHEAD—HIGH
(HEADLAMP/DASH
HARNESS)

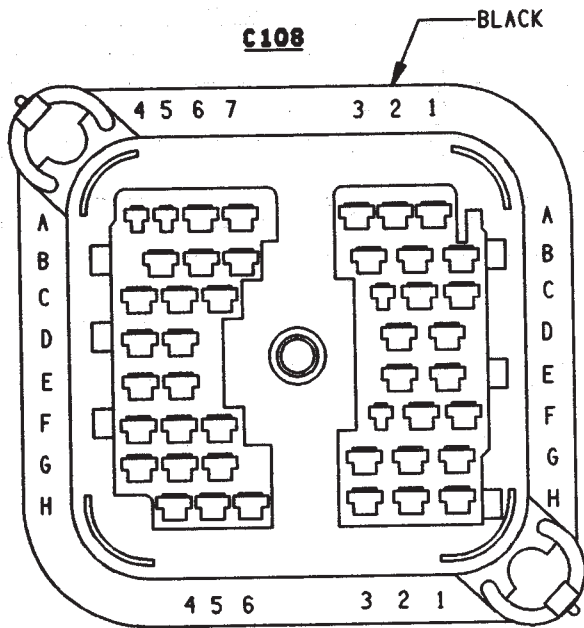
CAV	CIRCUIT
A4	L9 18BK/WT
A5	C90 16LG
A6	A6 18RD/BK
A7	G3 20BK/PK
B4	G21 20GY/LB
B5	G106 20BK/YL
B6	A21 12DB
C4	A141 14DG/WT
C5	L10 18BR/LG
C6	G6 20GY
D4	L39 16LB
D5	L4 14VT/WT
D5	L4 16VT/WT
E4	A1 10RD
E5	C1 12DG
F4	G9 20GY/WT
F5	G9 20GY/BK
F6	K10 18VT
G4	Z1 12BK
G5	C91 16LB
G6	—
H4	L3 14RD/OR
H4	L3 16RD/OR
H5	V20 18BK/WT
H6	G29 20BK/TN

C108



BLACK
BULKHEAD—LOW
(HEADLAMP/DASH
HARNESS)

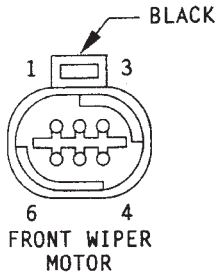
CAV	CIRCUIT
A1	L61 18LG
A2	K54 200R/BK
A3	F86 18LG/BK
B1	L90 18DB/RD
B2	V10 20BR
B3	V4 18RD/YL
C1	G107 20BK/RD
C1	G107 20BK/RD
C2	D2 18WT/BK
C2	D2 20WT/BK
C3	D1 18VT/BR
C3	D1 20VT/BR
D1	A3 12RD/WT
D2	A4 12BK/RD
E1	A7 12RD/YL
E2	X2 18DG/RD
E2	X2 18DG/RD
F1	G465 16LB/BK
F2	L60 18TN
F3	G20 18VT/YL
G1	L35 16BR/WT
G2	G12 20DG/YL
G3	V3 18BR/WT
H1	C21 16DB/OR
H2	A41 14YL
H3	V55 18TN/RD



CAV	CIRCUIT
A1	L61 18LG
A1	L61 18LG
A2	K54 20LG/OR
A3	F86 18LG/BK
A4	L9 16PK/BK
A4	L9 16PK/BK
A5	C90 16LG/WT
A6	A6 12RD/DB
A7	G3 20BK/PK
B1	L90 18DB/RD
B1	L90 18DB/RD
B2	B11 20BR
B3	V4 18RD/BK
B4	G21 20GY/LB
B5	G106 20BK/YL
B6	A21 12DB/YL
C1	G107 20BK/LB
C4	A241 14DG/TN
C5	L10 18BR/LG
C6	G6 20GY
D1	A3 12RD/WT
D2	A4 12BK/RD
D4	L39 16LB
D5	L4 16VT/WT
E1	A7 12RD/YL
E2	X2 16DG/RD
E4	A1 12RD
E4	A1 12RD
E5	C1 12DG
F1	L3 16RD/YL
F2	L60 18TN
F2	L60 18TN
F3	G20 20VT/YL
F4	G9 18GY/OR
F5	G9 20GY/WT
F6	K10 18VT
G1	L35 16BR/WT
G2	G12 20DG/BK
G3	V3 18BR/TN
G4	Z1 12BK
G5	C91 16LB
G6	A38 12OR
H1	C21 16DB/OR
H2	A41 18YL
H3	V6 18TN/RD
H4	L3 16RD/OR
H5	V20 18BK/WT
H5	V20 18BK/WT
H6	G29 20BK/TN

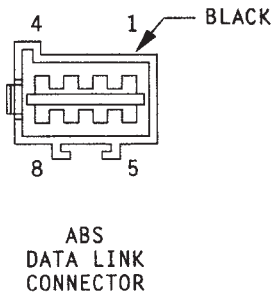
1995 Jeep Cherokee/Wrangler
 Publication No. 81-370-5146
 TSB 26-07-95 September, 1995

C109

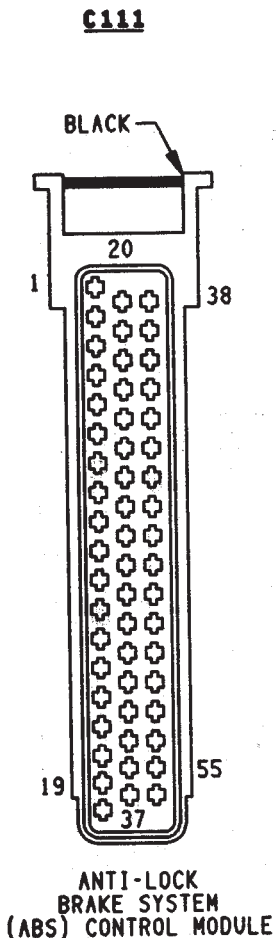


CAV	CIRCUIT	FUNCTION
1	-	-
2	V55 18TN/RD	WIPER PARK SWITCH SENSE
3	F86 18LG/BK	FUSED IGNITION SWITCH OUTPUT
4	Z1 16BK	GROUND
5	V3 18BK/WT	WIPER SWITCH LOW SPEED OUTPUT
6	V4 18RD/YL	WIPER SWITCH HIGH SPEED OUTPUT

C110



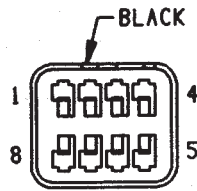
CAV	CIRCUIT	FUNCTION
1	*D20 20LG	SCI RECEIVE
2	-	-
3	*F39 18PK/LG	FUSED IGN SW OUTPUT (RUN/START)
4	*D2 18WT/BK	CCD BUS(-)
5	*D21 20PK	SCI TRANSMIT
6	*D1 18VT/BR	CCD BUS (+)
7	*T137 16YL/BK	TRANS DIAG
8	*Z12 18BK/TN	GROUND



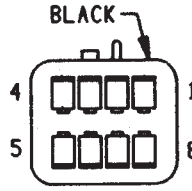
CAV	CIRCUIT	FUNCTION
1	Z1 14BK	GROUND
2	B243 16DG/BK	LEFT FRONT DUMP VALVE CONTROL
3	B235 14GY/YL	ABS POWER RELAY OUTPUT
4	---	---
5	---	---
6	---	---
7	---	---
8	---	---
9	---	---
10	---	---
11	---	---
12	---	---
13	---	---
14	---	---
15	B116 18GY	PUMP/MOTOR RELAY CONTROL
16	B210 18RD/BK	PEDAL TRAVEL SENSOR JUMPER
17	---	---
18	---	---
19	Z1 14BK	GROUND
20	B245 16WT/LG	LEFT FRONT ISOLATION VALVE CONTROL
21	B248 16DG/WT	RIGHT FRONT DUMP VALVE CONTROL
22	---	---
* 23	D1 18VT/BR	CCD BUSS (+)
24	---	---
25	B515 18YL/VT	G-SENSOR #1 SENSE
26	B517 18PK/OR	G-SENSOR GROUND
* 27	B2 18YL	RIGHT REAR WHEEL SPEED SENSOR (+)
* 28	B3 18LG/DB	LEFT REAR WHEEL SPEED SENSOR (-)
* 29	B6 18WT/DB	RIGHT FRONT WHEEL SPEED SENSOR (-)
* 30	B8 18RD/DB	LEFT FRONT WHEEL SPEED SENSOR (-)
* 31	B219 18DB	PUMP/MOTOR SPEED SENSOR (-)
32	L50 18WT/TN	STOP LAMP SWITCH OUTPUT
33	B235 14GY/YL	ABS POWER RELAY OUTPUT
34	B207 18PK	ABS POWER RELAY CONTROL
35	---	---
36	B254 16DG/OR	REAR DUMP VALVE CONTROL
37	---	---
38	B249 16WT/TN	RIGHT FRONT ISOLATION VALVE CONTROL
39	---	---
40	---	---
41	B210 18RD/BK	PEDAL TRAVEL SENSOR JUMPER
* 42	D2 18WT/BK	CCD BUS (-)
43	B516 18TN/WT	G-SENSOR #2 SENSE
44	---	---
* 45	B1 18YL/DB	RIGHT REAR WHEEL SPEED SENSOR (-)
* 46	B4 18LG	LEFT REAR WHEEL SPEED SENSOR (+)
* 47	B7 18WT	RIGHT FRONT WHEEL SPEED SENSOR (+)
* 48	B9 18RD	LEFT FRONT WHEEL SPEED SENSOR (+)
* 49	B220 18TN	PUMP/MOTOR SPEED SENSOR (+)
50	---	---
51	---	---
52	B205 18VT	ABS LAMP DRIVER
53	B236 18LG/YL	FUSED IGNITION SWITCH OUTPUT
54	B251 16WT/BK	REAR INLET VALVE CONTROL
55	---	---

*—INDICATES TWISTED PAIRS (B1 & B2, B3 & B4, B6 & B7, B8 & B9, D1 & D2)

C112

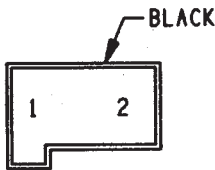


CAV	CIRCUIT
1	B1 18YL/DB
2	B517 18PK/OR
3	B516 18TN/WT
4	B515 18YL/WT
5	—
6	B4 18LG
7	B3 18LG/DB
8	B2 18YL



CAV	CIRCUIT
1	B1 18YL/DB
2	B517 18PK/OR
3	B516 18TN/WT
4	B515 18YL/VT
5	—
6	B4 18LG
7	B3 18LG/DB
8	B2 18YL

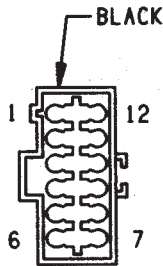
C113



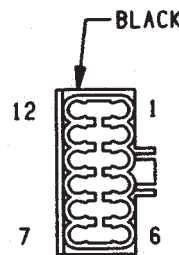
CAV	CIRCUIT	FUNCTION
1	B235 14GY/YL	ABS POWER RELAY OUTPUT
2	B205 18VT	ABS LAMP DRIVER

DIODE

C114

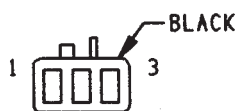


CAV	CIRCUIT
1	—
2	—
3	—
4	G32 20VT/LG
5	G31 20BK/LB
6	Z2 18BK/LG
6	Z2 18BK/LG
7	G7 20WT/OR
8	—
9	—
10	V30 20DB/RD
11	V32 20YL/RD
12	K29 18WT/PK

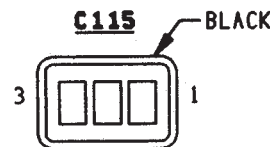


CAV	CIRCUIT
1	T17 18YL
2	T177 20TN
3	—
4	G32 18BK/LB
5	G31 18VT/LG
6	Z2 16BK/OR
7	G7 20WT/OR
8	—
9	—
10	V30 20DB/RD
11	V32 20YL/RD
11	V32 20YL/RD
12	K29 18WT/PK

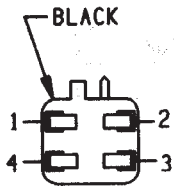
C115



CAV	CIRCUIT
1	B205 18VT
2	B236 18LG/YL
3	L50 18WT/TN

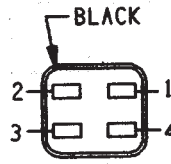


CAV	CIRCUIT
1	B205 18YL
2	B236 18LG/YL
3	L50 18WT/TN

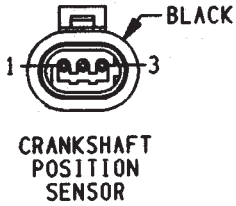


CAV	CIRCUIT
1	V33 20WT/LG
2	V32 20YL/RD
3	V31 20BR/RD
4	F12 18DB/WT

C116

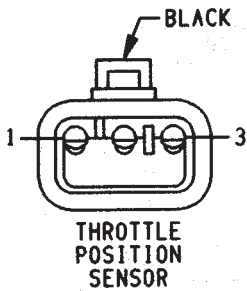


CAV	CIRCUIT
1	V33 20WT/LG
2	V32 20YL/RD
3	V31 20BR/RD
4	V34 20WT/RD



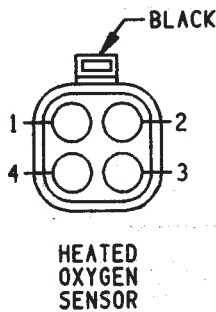
CAV	CIRCUIT	FUNCTION
1	K24 18GY/BK	CRANKSHAFT POSITION SENSOR SIGNAL
2	K4 18BK/LB	SENSOR GROUND
3	K7 18OR	8-VOLT SUPPLY

C117



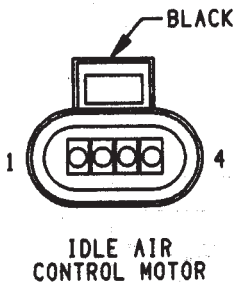
CAV	CIRCUIT	FUNCTION
1	K4 18BK/LB	SENSOR GROUND
2	K22 18OR/DB	THROTTLE POSITION SENSOR SIGNAL
3	K6 20VT/WT	5-VOLT SUPPLY

C118



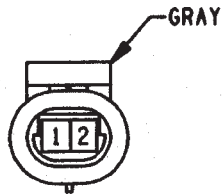
CAV	CIRCUIT	FUNCTION
1	K4 18BK/LB	SENSOR GROUND
2	K41 18BK/DG	HEATED OXYGEN SENSOR SIGNAL
3	Z12 18BK/TN	GROUND
4	A141 14DG/WT	FUEL PUMP RELAY OUTPUT

C119



CAV	CIRCUIT	FUNCTION
1	K39 18GY/RD	IDLE AIR CONTROL MOTOR DRIVER #1
2	K60 18YL/BK	IDLE AIR CONTROL MOTOR DRIVER #2
3	K40 18BR/WT	IDLE AIR CONTROL MOTOR DRIVER #3
4	K59 18VT/BK	IDLE AIR CONTROL MOTOR DRIVER #4

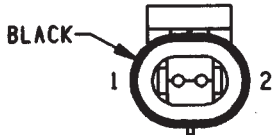
C120



INTAKE AIR TEMPERATURE SENSOR

C121

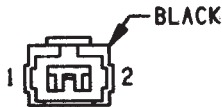
CAV	CIRCUIT	FUNCTION
1	K21 16BK/RD	INTAKE AIR TEMPERATURE SENSOR SIGNAL
2	K4 16BK/LB	SENSOR GROUND



ENGINE COOLANT TEMPERATURE SENSOR

C122

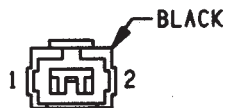
CAV	CIRCUIT	FUNCTION
1	K2 16TN/BK	ENGINE COOLANT TEMP SENSOR SIGNAL
2	K4 16BK/LB	SENSOR GROUND



INJECTOR # 1

C123

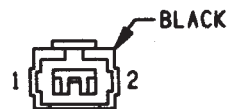
CAV	CIRCUIT	FUNCTION
1	K11 18WT/DB	INJECTOR # 1 DRIVER
2	A142 18DG/OR	AUTOMATIC SHUT DOWN RELAY OUTPUT



INJECTOR # 2

C124

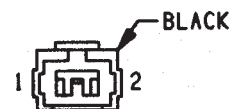
CAV	CIRCUIT	FUNCTION
1	K12 18TN	INJECTOR # 2 DRIVER
2	A142 18DG/OR	AUTOMATIC SHUT DOWN RELAY OUTPUT



INJECTOR # 3

C125

CAV	CIRCUIT	FUNCTION
1	K13 18YL/WT	INJECTOR # 3 DRIVER
2	A142 18DG/OR	AUTOMATIC SHUT DOWN RELAY OUTPUT

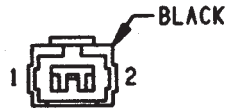


INJECTOR # 4

C126

CAV	CIRCUIT	FUNCTION
1	K14 18LB/BR	INJECTOR # 4 DRIVER
2	A142 18DG/OR	AUTOMATIC SHUT DOWN RELAY OUTPUT

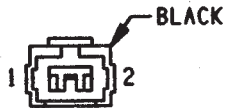
C127



INJECTOR #5

CAV	CIRCUIT	FUNCTION
1	K15 18PK/BK	INJECTOR #5 DRIVER
2	A142 18DG/OR	AUTOMATIC SHUT DOWN RELAY OUTPUT

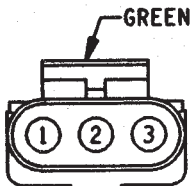
C128



INJECTOR #6

CAV	CIRCUIT	FUNCTION
1	K16 18LG/BK	INJECTOR #6 DRIVER
2	A142 18DG/OR	AUTOMATIC SHUT DOWN RELAY OUTPUT

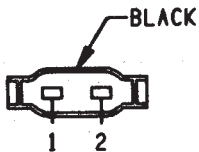
C129



MAP SENSOR

CAV	CIRCUIT	FUNCTION
1	K4 18BK/LB	SENSOR GROUND
2	K1 20DG/RD	MAP SENSOR SIGNAL
3	K6 20VT/WT	5-VOLT SUPPLY

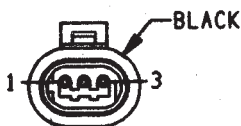
C130



BRAKE WARNING SWITCH

CAV	CIRCUIT	FUNCTION
1	G9 20GY/BK	BRAKE WARNING LAMP DRIVER
2	G9 20GY/WT	BRAKE WARNING LAMP DRIVER

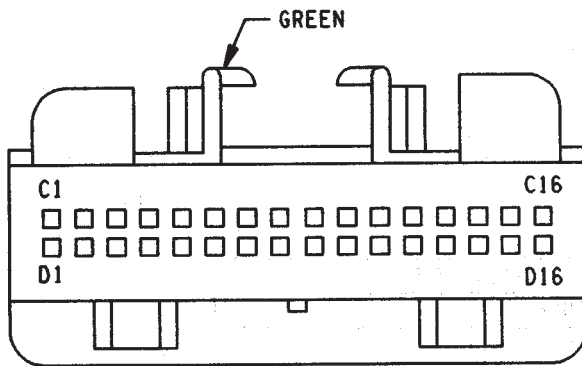
C131



CAMSHAFT POSITION SENSOR

CAV	CIRCUIT	FUNCTION
1	K44 18TN/YL	CAMSHAFT POSITION SENSOR SIGNAL
2	K4 18BK/LB	SENSOR GROUND
3	K7 18OR	8-VOLT SUPPLY

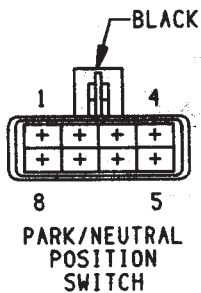
C132



TRANSMISSION CONTROL MODULE

CAV	CIRCUIT	FUNCTION
C1	—	—
C2	—	—
C3	T505 18TN/BK	TRANS OUTPUT SPEED SENSOR
C4	T137 16YL/BK	TRANS DATA LINK CONNECTOR
C5	—	—
C6	—	—
C7	—	—
C8	T506 18LG/BK	1-2 GEAR INPUT
C9	T507 18GY/BK	DRIVE GEAR INPUT
C10	K29 18WT/PK	STOP LAMP SWITCH SENSE
C11	T177 20TN	TRANS SWITCH POWER MODE
C12	—	—
C13	—	—
C14	T508 18WT/BK	SOLENOID S3 CONTROL
C15	T509 18VT/WT	SOLENOID S2 CONTROL
C16	T510 18DB/WT	SOLENOID S1 CONTROL
D1	—	—
D2	K22 180R/DB	THROTTLE POS SENSOR SIGNAL
D3	K4 18BK/LB	SENSOR GROUND
D4	—	—
D5	—	—
D6	—	—
D7	Z12 18BK/TN	GROUND
D8	—	—
D9	—	—
D10	—	—
D11	—	—
D12	—	—
D13	—	—
D14	A14 14RD	FUSED B(+)
D15	—	—
D16	T17 18YL	FUSED B(+)

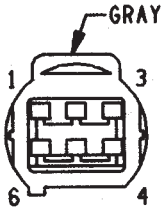
C133



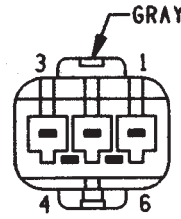
PARK/NEUTRAL POSITION SWITCH

CAV	CIRCUIT	FUNCTION
1	T506 18LG/BK	1-2 GEAR INPUT
2	T507 18GY/BK	DRIVE GEAR INPUT
3	—	—
4	L10 18BR/LG	BACK-UP LAMP SWITCH OUTPUT
5	—	—
6	Z12 18BK/TN	GROUND
7	T41 18BR/YL	PARK/NEUTRAL POSITION SWITCH SENSE
8	F12 18DB/WT	FUSED IGNITION SWITCH OUTPUT

C134

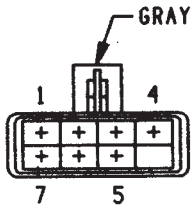


CAV	CIRCUIT
1	G7 18WT/OR
2	K4 18BK/LB
3	G107 18BK/RD
4	K7 18OR
5	—
6	Z1 18BK



CAV	CIRCUIT
1	G7 20WT/OR
2	K4 18BK/LB
3	G107 20BK/RD
4	K7 18OR
5	—
6	Z1 18BK

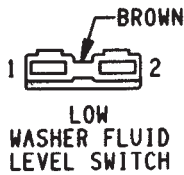
C135



VALVE BODY SOLENOIDS

CAV	CIRCUIT	FUNCTION
1	G107 20BK/RD	4WD SENSE
2	T510 18DB/WT	SOLENOID S1 CONTROL
3	T509 18VT/WT	SOLENOID S2 CONTROL
4	T508 18WT/BK	SOLENOID S3 CONTROL
5	T505 18TN/BK	TRANSMISSION OUTPUT SPEED SENSOR
6	Z12 18BK/TN	GROUND
7	G106 20BK/YL	4WD INDICATOR LAMP

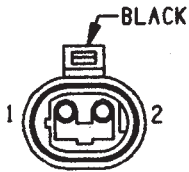
C136



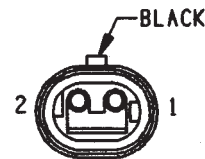
LOW WASHER FLUID LEVEL SWITCH

CAV	CIRCUIT	FUNCTION
1	F12 18DB/WT	FUSED IGNITION SWITCH OUTPUT
2	G29 20BK/TN	WASHER FLUID SWITCH SENSE

C137

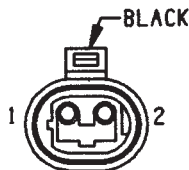


CAV	CIRCUIT
1	A6 18RD/BK
2	Z1 18BK



CAV	CIRCUIT
1	A6 18RD/BK
2	Z1 18BK

C138

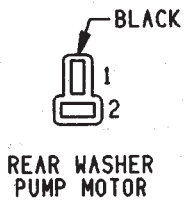


RIGHT FRONT WHEEL SPEED SENSOR

CAV	CIRCUIT	FUNCTION
* 1	B7 18WT	RIGHT FRONT WHEEL SPEED SENSOR (+)
* 2	B6 18WT/DB	RIGHT FRONT WHEEL SPEED SENSOR (-)

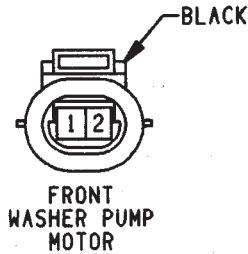
* — INDICATES TWISTED PAIR

C139



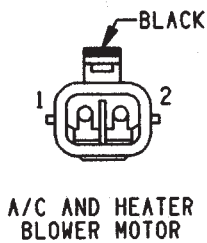
CAV	CIRCUIT	FUNCTION
1	V20 18BK/WT	REAR WASHER PUMP MOTOR CONTROL
2	Z1 18BK	GROUND
2	Z1 18BK	GROUND

C140



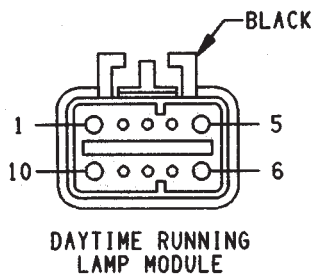
CAV	CIRCUIT	FUNCTION
1	V10 20BR	WINDSHIELD WASHER SWITCH OUTPUT
2	Z1 18BK	GROUND

C141



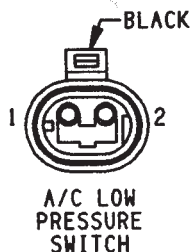
CAV	CIRCUIT	FUNCTION
1	Z1 12BK	GROUND
2	C1 12DG	FUSED IGNITION SWITCH OUTPUT

C142



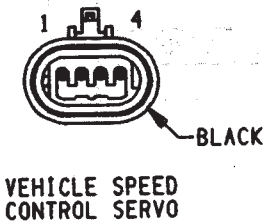
CAV	CIRCUIT	FUNCTION
1	A21 12DB	IGNITION SWITCH OUTPUT (RUN/START)
2	G465 16LB/BK	HIGH BEAM INDICATOR DRIVER
3	—	—
4	—	—
5	L3 16RD/OR	DIMMER SWITCH HIGH BEAM OUTPUT
6	A3 12RD/WT	FUSED B(+)
7	G7 20WT/OR	VEHICLE SPEED SENSOR SIGNAL
8	Z12 18BK/TN	GROUND
9	—	—
10	L4 16VT/WT	DIMMER SWITCH LOW BEAM OUTPUT

C143



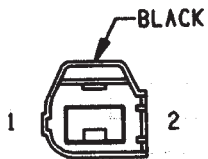
CAV	CIRCUIT	FUNCTION
1	C21 16DB/OR	A/C SWITCH SENSE
2	C90 16LG	A/C PRESSURE SWITCH OUTPUT

C144

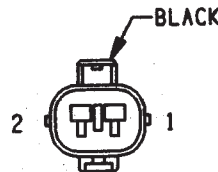


CAV	CIRCUIT	FUNCTION
1	Z1 18BK	GROUND
2	V30 20DB/RD	VEH SPEED CONTROL BRAKE SW OUTPUT
3	V35 20LG/RD	VEHICLE SPEED CTRL VENT SOL CONTROL
4	V36 20TN/RD	VEHICLE SPEED CTRL VACUUM SOL CONTROL

C145

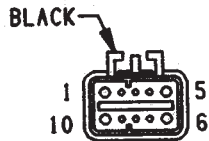


CAV	CIRCUIT
1	G31 18VT/LG
2	G32 18BK/LB

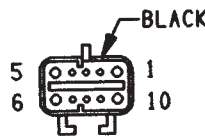


CAV	CIRCUIT
1	G31 18VT/LG
2	G32 18BK/LB

C146

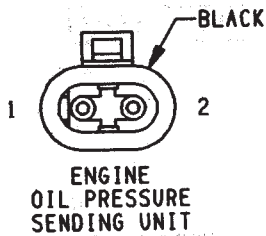


CAV	CIRCUIT
1	C3 14DB/BK
2	F12 18DB/WT
3	L10 18BR/LG
4	K19 18GY
5	T40 12BR
6	—
7	G6 20GY
8	—
9	K20 18DG
10	A142 18DG/OR

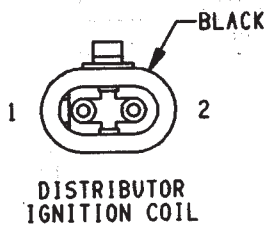


CAV	CIRCUIT
1	C3 14DB/BK
2	F12 18DB/WT
3	L10 18BR/LG
4	K19 18BK/GY
5	T40 12BR
6	—
7	G6 18GY
8	—
9	K20 18DG
10	A142 16DG/OR

C147

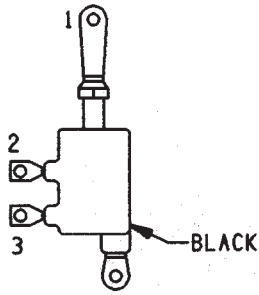


CAV	CIRCUIT	FUNCTION
1	—	—
2	G6 18GY	ENGINE OIL PRESSURE SWITCH SENSE



C148

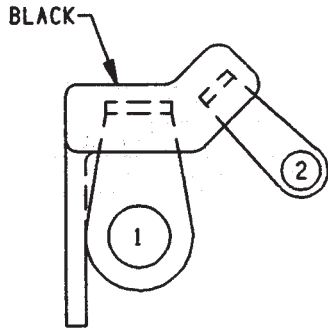
CAV	CIRCUIT	FUNCTION
1	A142 16DG/OR	AUTOMATIC SHUT DOWN RELAY OUTPUT
2	K19 18BK/GY	IGNITION COIL #1 DRIVER



GENERATOR

C149

CAV	CIRCUIT	FUNCTION
1	Z0 8BK	GROUND
2	A142 18DG/OR	AUTOMATIC SHUT DOWN RELAY OUTPUT
3	K20 18DG	GENERATOR FIELD DRIVER

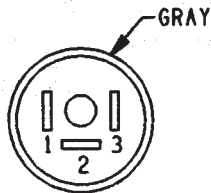


ENGINE STARTER MOTOR

C150

CAV	CIRCUIT	FUNCTION
1	A0 6D	B (+)
2	T40 14LG/BK	ENGINE STARTER MOTOR RELAY OUTPUT

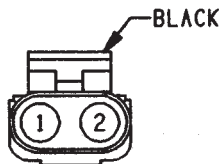
C151
POWER DISTRIBUTION CENTER
(8W-11-2)



POWER STEERING PRESSURE SWITCH

C152

CAV	CIRCUIT	FUNCTION
1	Z12 18BK/TN	GROUND
2	—	—
3	K10 18DB/WT	POWER STEERING PRESSURE SWITCH SENSE

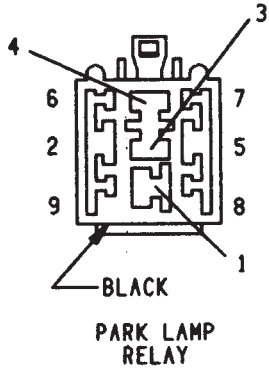


BACK-UP LAMP SWITCH

C153

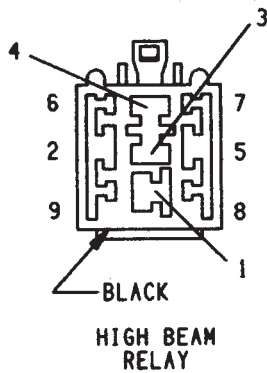
CAV	CIRCUIT	FUNCTION
1	F12 18DB/WT	FUSED IGNITION SWITCH OUTPUT
2	L10 18BR/LG	BACK-UP LAMP SWITCH OUTPUT

C154

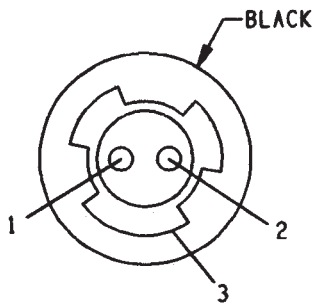


CAV	CIRCUIT	FUNCTION
1	F39 16PK/LG	FUSED B (+)
2	L35 18BR/WT	PARK LAMP RELAY CONTROL
3	—	—
4	F39 16PK/LG	FUSED B (+)
5	L90 18DB/RD	PARK LAMP SWITCH OUPUT
6	—	—
7	—	—
8	—	—
9	—	—

C155



CAV	CIRCUIT	FUNCTION
1	F39 16PK/LG	FUSED B (+)
2	Z1 18BK	GROUND
3	L39 16LB	HIGH BEAM RELAY OUTPUT
4	—	—
5	G465 16LB/BK	HIGH BEAM INDICATOR DRIVER
6	—	—
7	—	—
8	—	—
9	—	—

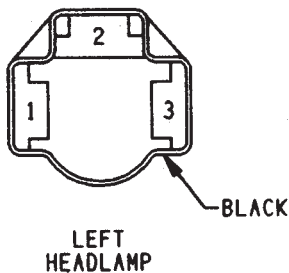


LEFT PARK AND TURN SIGNAL LAMP

C156

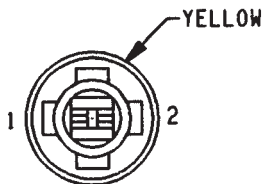
CAV	CIRCUIT	FUNCTION
1	L90 18DB/RD	PARK LAMP SWITCH OUTPUT
2	L61 18LG	LEFT TURN SIGNAL
3	Z1 18BK	GROUND

C157



LEFT HEADLAMP

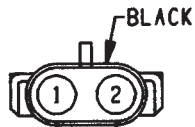
CAV	CIRCUIT	FUNCTION
1	L3 16RD/OR	DIMMER SWITCH HIGH BEAM OUTPUT
1	L3 16RD/OR	DIMMER SWITCH HIGH BEAM OUTPUT
2	L4 16VT/WT	DIMMER SWITCH LOW BEAM OUTPUT
2	L4 16VT/WT	DIMMER SWITCH LOW BEAM OUTPUT
3	Z1 18BK	GROUND



LEFT SIDE MARKER LAMP

C158

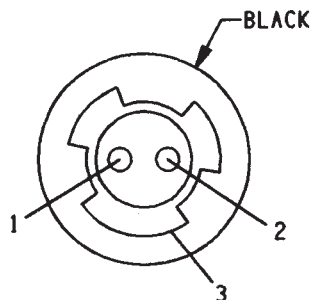
CAV	CIRCUIT	FUNCTION
1	L61 18LG	LEFT TURN SIGNAL
2	L90 18DB/RD	PARK LAMP SWITCH OUTPUT



LEFT FOG LAMP

C159

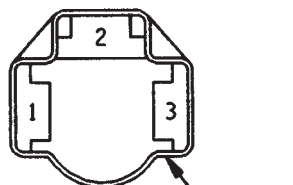
CAV	CIRCUIT	FUNCTION
1	L39 16LB	FOG LAMP SWITCH OUTPUT
2	Z1 16BK	GROUND



RIGHT PARK AND TURN SIGNAL LAMP

C160

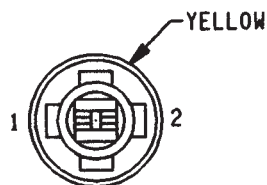
CAV	CIRCUIT	FUNCTION
1	L90 18DB/RD	PARK LAMP SWITCH OUTPUT
2	L60 18TN	RIGHT TURN SIGNAL
3	Z1 18BK	GROUND



RIGHT HEADLAMP

C161

CAV	CIRCUIT	FUNCTION
1	L3 16RD/OR	DIMMER SWITCH HIGH BEAM OUTPUT
2	L4 16VT/WT	DIMMER SWITCH LOW BEAM OUTPUT
3	Z1 18BK	GROUND

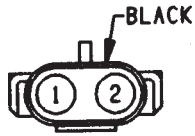


RIGHT SIDE MARKER LAMP

C162

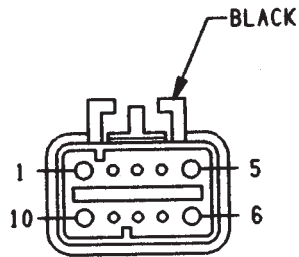
CAV	CIRCUIT	FUNCTION
1	L90 18DB/RD	PARK LAMP SWITCH OUTPUT
2	L60 18TN	RIGHT TURN SIGNAL

C163



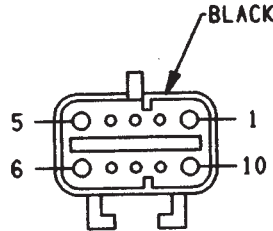
RIGHT
FOG LAMP

CAV	CIRCUIT	FUNCTION
1	L39 16LB	FOG LAMP SWITCH OUPUT
2	Z1 16BK	GROUND



CAV	CIRCUIT
1	F12 18DB/WT
2	Z1 18BK
3	G107 20BK/RD
4	K4 18BK/LB
5	G7 20WT/OR
6	K7 18OR
7	T41 18BR/YL
8	L10 18BR/LG
9	—
10	T22 14DB/WT

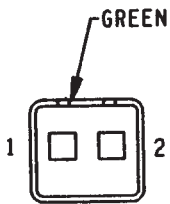
C164



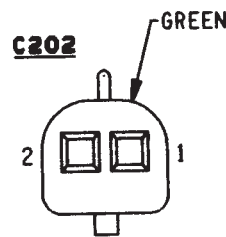
CAV	CIRCUIT
1	F12 18DB/WT
2	Z1 18GY
3	G107 18BK/RD
4	K4 18BK/LB
5	G7 18WT/OR
6	K7 18OR
7	T41 18BR/YL
8	L10 18BR/LG
9	—
10	T22 14DB/WT

C201

**FUSE BLOCK
(8W-10-2)**

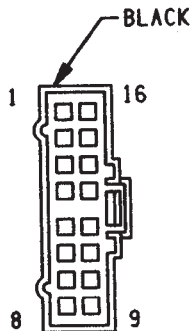


CAV	CIRCUIT
1	X53 20DG
2	X55 20BR/RD

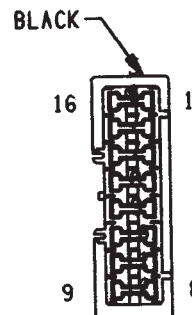


CAV	CIRCUIT
1	X53 20DG
2	X55 20BR/RD

C203

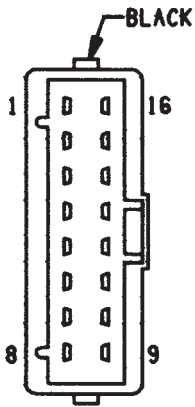


CAV	CIRCUIT
1	A241 14DG/RD
2	L60 18TN/DG
3	L90 18DB/RD
4	G4 20DB
5	L10 20BR/LG
6	L61 18LG
7	G9 20GY/BK
8	C15 12BK/RD
9	—
10	—
11	—
12	P34 18PK/BK
13	P2 18BK/WT
14	L50 18WT/TN
15	V20 18BK/YL
16	117 18LG/BK

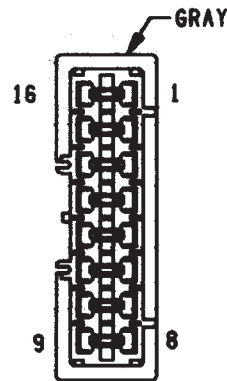


CAV	CIRCUIT
1	A241 14DG/TN
2	L60 18TN/DG
3	L90 18DB/RD
3	L90 18DB/RD
4	G4 20DB
5	L10 18BR/LG
6	L61 18LG/BK
7	G9 18GY/OR
7	203 18DG
8	C15 12BK/RD
9	—
10	—
11	—
12	P34 18PK/BK
13	P2 18BK/WT
14	L50 18WT/TN
15	V20 18BK/WT
16	—

C204

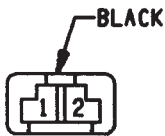


CAV	CIRCUIT
1	X58 20DB/OR
2	X52 20DB/WT
3	E2 200R/BK
4	Z1 14BK
5	M1 20PK
5	M1 18PK
6	X57 20BR/LB
7	X51 20BR/YL
8	—
9	—
10	—
11	P36 20PK/VT
12	P35 200R/VT
13	F20 18WT
14	V13 18BR/RD
15	G10 18LG
16	M2 20YL



CAV	CIRCUIT
1	X58 18DB/OR
2	X52 18DB/WT
3	E2 200R/BK
4	Z1 14BK
5	M1 20PK
6	X57 18BR/LB
7	X51 18BR/YL
8	—
9	—
10	—
11	P36 20PK/VT
12	P35 200R/VT
13	F20 18WT
14	V13 18BR/RD
15	G10 18LG
16	M2 20YL

C205



LEFT INSTRUMENT PANEL SPEAKER

CAV	CIRCUIT	FUNCTION
1	X53 20DG	LEFT FRONT SPEAKER (+)
1	X53 18DG	LEFT FRONT SPEAKER (+)
2	X55 20BR/RD	LEFT FRONT SPEAKER (-)
2	X55 18BR/RD	LEFT FRONT SPEAKER (-)

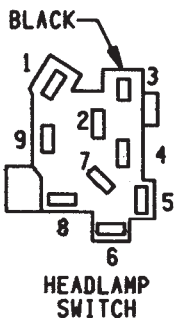
C206



LEFT COURTESY LAMP

CAV	CIRCUIT	FUNCTION
1	M1 20PK	FUSED B(+)
2	M2 20YL	COURTESY LAMP DRIVER

C207



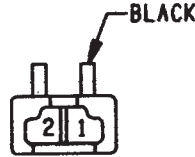
HEADLAMP SWITCH

CAV	CIRCUIT	FUNCTION
1	E2 200R/BK	FUSED PANEL LAMPS DIMMER SW SIGNAL
2	F34 12TN/BK	FUSED B(+)
3	M2 20YL	COURTESY LAMP DRIVER
4	L7 18BK/YL	FUSED B(+)
4	L7 18BK/OR	FUSED B(+)
5	G26 20LB	KEY-IN IGNITION SWITCH SENSE
6	M11 20PK/LB	COURTESY LAMP SWITCH OUTPUT
6	M11 20PK/LB	COURTESY LAMP SWITCH OUTPUT
7	—	—
8	A3 12RD/WT	FUSED B(+)
9	L90 18DB/RD	PARK LAMP SWITCH OUTPUT
9	L90 18DB/RD	PARK LAMP SWITCH OUTPUT



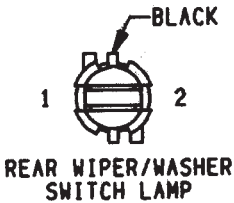
CAV	CIRCUIT
1	Z1 20BK
1	Z1 20BK
2	E2 200R/BK

C208



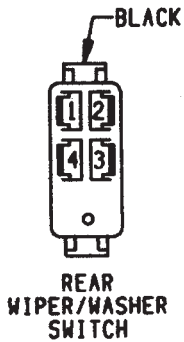
CAV	CIRCUIT
1	Z1 20BK
2	E2 200R/BK

C209



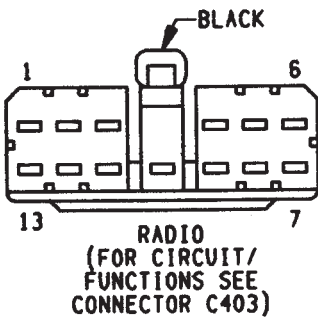
CAV	CIRCUIT	FUNCTION
1	E2 200R/BK	PANEL LAMPS DRIVER
2	Z1 20BK	GROUND

C210

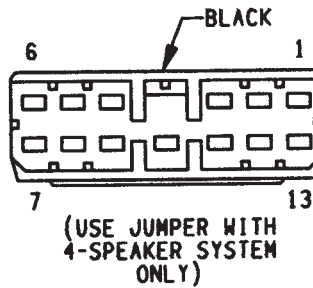


CAV	CIRCUIT	FUNCTION
1	V20 18BK/WT	REAR WASHER PUMP MOTOR CONTROL
2	V13 18BR/RD	REAR WASHER RUN
3	F20 18WT	FUSED IGNITION SWITCH OUTPUT
4	V15 18LB/RD	WINDSHIELD WASHER RELAY CONTROL

C211

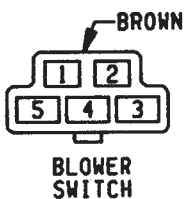


CAV	CIRCUIT
1	X57 18BR/LB
2	X55 18BR/RD
3	X5 18LB/RD
4	E2 180R/BK
5	X56 18DB/RD
6	X58 18DB/OR
7	X52 18DB/WT
8	X54 18VT
9	F85 18VT/WT
10	M1 18PK
11	—
12	X53 18DG
13	X51 18BR/YL

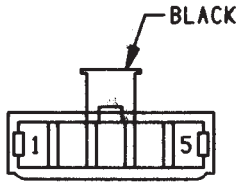


CAV	CIRCUIT
1	—
2	X55 18BR
2	X57 18BR
3	X5 18LB
4	E2 180R
5	X56 18DB
5	X58 18DB
6	—
7	—
8	X52 18VT
8	X54 18VT
9	F85 18WT
10	M1 18PK
11	—
12	X51 18DG
12	X53 18DG
13	—

C212



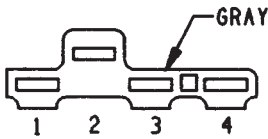
CAV	CIRCUIT	FUNCTION
1	C4 12TN	LOW MOTOR BLOWER DRIVER
2	C1 12DG	FUSED IGNITION SWITCH OUTPUT
3	—	—
4	C6 12LB	M2 BLOWER MOTOR DRIVER
5	C43 12YL/BR	FUSED/IGNITION SWITCH OUTPUT(ACC/RUN)



MODE
SELECTOR
SWITCH

C213

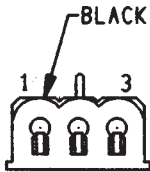
CAV	CIRCUIT	FUNCTION
1	C43 12YL/BR	FUSED IGNITION SWITCH OUTPUT (ACC/RUN)
2	C7 12BK/TN	HIGH BLOWER MOTOR DRIVER
3	—	—
4	C7 12BK/TN	HIGH BLOWER MOTOR DRIVER
5	C90 16LG/WT	A/C PRESSURE SWITCH OUTPUT



BLOWER
RESISTOR

C214

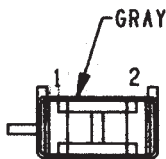
CAV	CIRCUIT	FUNCTION
1	C6 12LB	M2 BLOWER MOTOR DRIVER
2	C1 12DG	FUSED IGNITION SWITCH OUTPUT
2	C1 12DG	FUSED IGNITION SWITCH OUTPUT
3	C4 12TN	LOW BLOWER MOTOR OUTPUT
4	C43 12YL/BR	FUSED IGNITION SWITCH OUTPUT (ACC/RUN)



A/C
CYCLING SWITCH

C215

CAV	CIRCUIT	FUNCTION
1	Z1 16BK	GROUND
2	C21 16DB/OR	A/C SWITCH SENSE
3	C91 16LB	A/C SWITCH SENSE



GLOVE BOX
LAMP AND
SWITCH

C216

CAV	CIRCUIT	FUNCTION
1	M1 20PK	FUSED B (+)
2	Z1 20BK	GROUND

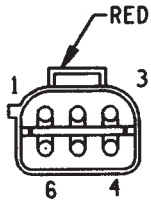


RIGHT
COURTESY
LAMP

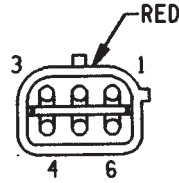
C217

CAV	CIRCUIT	FUNCTION
1	M1 20PK	FUSED B (+)
2	M2 20YL	COURTESY LAMP DRIVER

C218

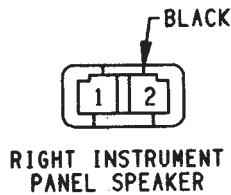


CAV	CIRCUIT
1	—
2	F87 20WT/BK
3	—
4	Z1 20BK
5	M1 20PK
6	M2 20YL



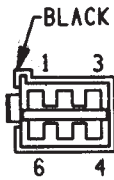
CAV	CIRCUIT
1	—
2	F87 20WT/BK
3	—
4	Z1 20BK
5	M1 20PK
6	M2 20YL

C219

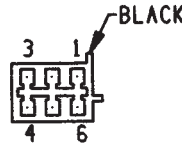


CAV	CIRCUIT	FUNCTION
1	X54 20VT	RIGHT FRONT SPEAKER (+)
1	X54 18VT	RIGHT FRONT SPEAKER (+)
2	X56 20DB/RD	RIGHT FRONT SPEAKER (-)
2	X56 18DB/RD	RIGHT FRONT SPEAKER (-)

C220

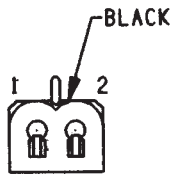


CAV	CIRCUIT
1	G32 20VT/LG
2	L90 18DB/RD
3	E2 200R/BK
4	G31 20BK/LB
5	Z2 18BK/LG
6	—

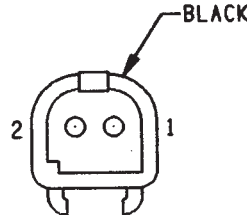


CAV	CIRCUIT
1	G32 20VT/LG
2	L90 20DB/RD
3	E2 200R/BK
4	G31 20BK/LB
5	Z2 20BK/LG
6	—

C221

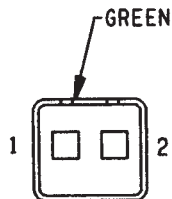


CAV	CIRCUIT
1	Z1 20BK
2	M2 20YL

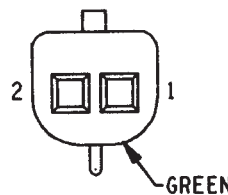


CAV	CIRCUIT
1	Z1 20BK
2	M2 20YL

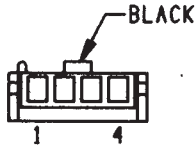
C222



CAV	CIRCUIT
1	X54 20VT
2	X56 20DB/RD



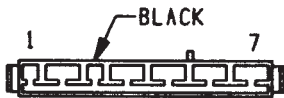
CAV	CIRCUIT
1	X54 20VT
2	X56 20DB/RD



IGNITION
KEY-IN
WARNING
SWITCH

C223

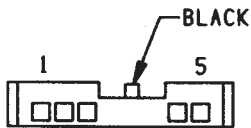
CAV	CIRCUIT	FUNCTION
1	M50 20YL/RD	KEY—IN LAMP DRIVER
2	Z1 20BK	GROUND
3	G26 20LB	KEY—IN IGNITION SWITCH SENSE
4	M11 20PK/LB	COURTESY LAMP SWITCH OUTPUT



IGNITION SWITCH

C224

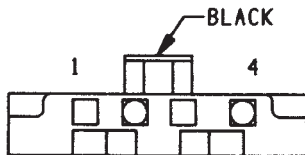
CAV	CIRCUIT	FUNCTION
1	A41 14YL	IGNITION SWITCH OUTPUT (START)
2	A21 12DB	IGNITION SWITCH OUTPUT (RUN/START)
3	G9 20GY/WT	BRAKE WARNING LAMP DRIVER
4	A1 12RD	FUSED B(+)
5	A38 12OR	IGNITION SWITCH OUTPUT (RUN)
6	A48 12VT	IGNITION SWITCH OUTPUT (RUN/ACC)
7	A1 12RD	FUSED B(+)



VEHICLE SPEED
CONTROL SWITCH

C225

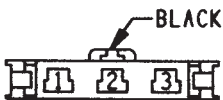
CAV	CIRCUIT	FUNCTION
1	X3 20BK/RD	HORN RELAY CONTROL
2	V33 20WT/LG	VEH SPEED CNTRL RESUME SW SENSE
3	V34 20WT/RD	VEH SPEED CONTROL SWITCH FEED
4	V31 20BR/RD	VEH SPEED CONTROL COAST/SET SW SENSE
5	V32 20YL/RD	VEH SPEED CONTROL ON/OFF SW SENSE



CIRCUIT
BREAKER
(WIPER)

C226

CAV	CIRCUIT	FUNCTION
1	—	—
2	F86 18LG/BK	FUSED IGNITION SWITCH OUTPUT
2	F86 18LG/BK	FUSED IGNITION SWITCH OUTPUT
3	—	—
4	A48 12VT/BR	IGNITION SWITCH OUTPUT (RUN/ACC)

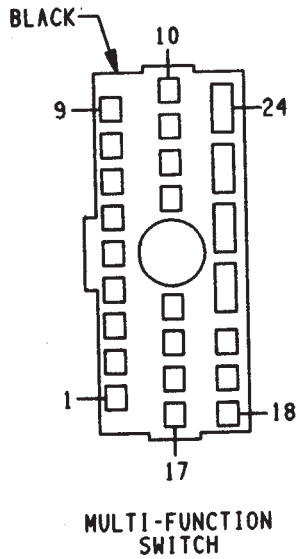


EXTENDED
IDLE SWITCH
(POLICE OPTION
ONLY)

C227

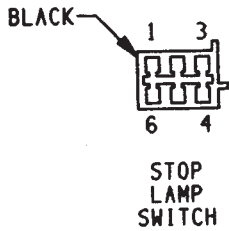
CAV	CIRCUIT	FUNCTION
1	F60 18RD/WT	FUSED B(+)
2	Z1 20BK	GROUND
2	Z1 20BK	GROUND
3	K10 18VT	EXTENDED IDLE SWITCH SENSE

C228



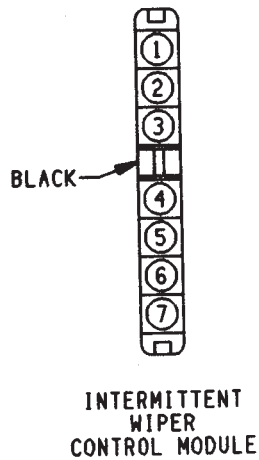
CAV	CIRCUIT	FUNCTION
1	—	—
2	—	—
3	V6 18DB	FUSED IGNITION SWITCH OUTPUT
4	V3 18BR/WT	WIPER SWITCH LOW SPEED OUTPUT
5	V4 18RD/YL	WIPER SWITCH HIGH SPEED OUTPUT
6	F86 18LG/BK	FUSED IGNITION SWITCH OUTPUT
7	V11 18BK/TN	LOW WASHER FLUID SENSE
8	V51 18WT	INTERMITTENT WIPER DELAY
9	V50 18LG	WIPER SWITCH DELAY OUTPUT
10	—	—
11	L60 18TN	RIGHT TURN SIGNAL
12	L60 18TN/DG	RIGHT TURN SIGNAL
13	L12 18VT/TN	HAZARD FLASHER OUTPUT
14	—	—
15	L61 18LG/BK	LEFT TURN SIGNAL
16	L61 18LG	LEFT TURN SIGNAL
17	L5 18GY	COMBINATION FLASHER OUTPUT (TURN SIGNALS)
18	—	—
19	—	—
20	—	—
21	L11 16PK/LG	COMBINATION FLASHER OUTPUT (HAZARD)
22	L3 16RD/OR	DIMMER SWITCH HIGH BEAM OUTPUT
23	F34 12TN/BK	FUSED B(+)
24	L4 16VT/WT	DIMMER SWITCH LOW BEAM OUTPUT

C229

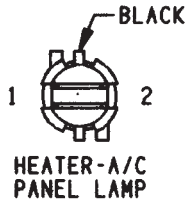


CAV	CIRCUIT	FUNCTION
1	V32 20YL/RD	VEH SPEED CONTROL ON/OFF SW SENSE
2	L50 18WT/TN	BRAKE LAMP SWITCH OUTPUT
2	L50 18WT/TN	BRAKE LAMP SWITCH OUTPUT
3	K29 18WT/PK	BRAKE SWITCH SENSE
4	Z1 18BK	GROUND
5	L9 16PK/BK	FUSED B(+)
6	V30 20DB/RD	VEH SPEED CONTROL BRAKE SW OUTPUT

C230

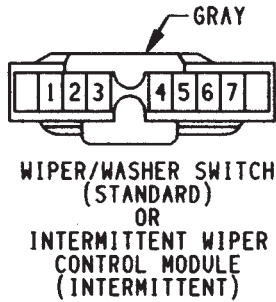


CAV	CIRCUIT	FUNCTION
1	V51 18WT	INTERMITTENT WIPER DELAY
2	V11 18BK/TN	LOW WASHER FLUID SENSE
3	V4 18RD/YL	WIPER SWITCH HIGH SPEED OUTPUT
4	F86 20LG/BK	FUSED IGNITION SWITCH OUTPUT
5	V3 18BR/WT	WIPER SWITCH LOW SPEED OUTPUT
6	V6 18DB	FUSED IGNITION SWITCH OUTPUT
7	V50 18LG	WIPER SWITCH DELAY OUTPUT



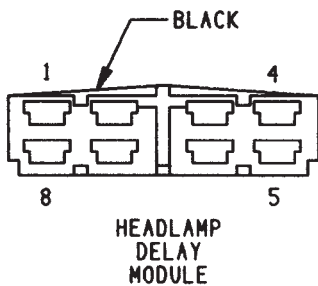
C231

CAV	CIRCUIT	FUNCTION
1	E2 200R/BK	PANEL LAMPS DRIVER
2	Z1 20BK	GROUND



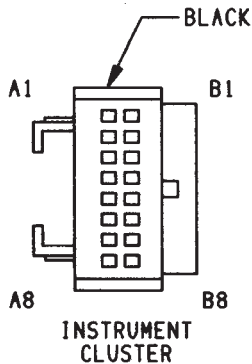
C232

CAV	CIRCUIT	FUNCTION
1	—	—
2	V11 20BR	LOW WASHER FLUID SENSE
3	V4 18RD/BK	WIPER SWITCH HIGH SPEED OUTPUT
4	F86 18LG/BK	FUSED IGNITION SWITCH OUTPUT
5	V3 18BR/TN	WIPER SWITCH LOW SPEED OUTPUT
6	V6 18TN/DB	FUSED IGNITION SWITCH OUTPUT
7	Z1 18BK	GROUND
7	Z1 20BK	GROUND



C233

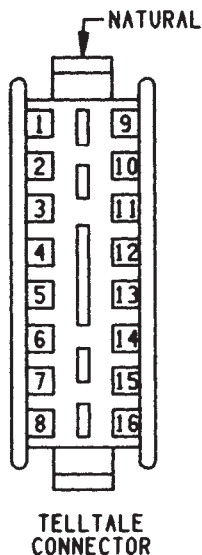
CAV	CIRCUIT	FUNCTION
1	F87 20WT/OR	FUSED IGNITION SWITCH OUTPUT
1	F87 20WT/BK	FUSED IGNITION SWITCH OUTPUT
2	F34 12TN/BK	HEADLAMP SWITCH OUTPUT
3	Z1 18BK	GROUND
3	Z1 18BK	GROUND
4	X4 16GY/OR	FUSED B(+)
5	—	—
6	—	—
7	—	—
8	—	—



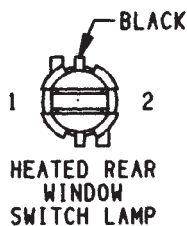
C234

CAV	CIRCUIT	FUNCTION
A1	G20 20VT/YL	ECT GAUGE SENSOR SIGNAL
A2	L61 18LG	LEFT TURN SIGNAL
A3	Z1 20BK	GROUND
A4	L3 16RD/YL	DIMMER SWITCH HIGH BEAM OUTPUT
A5	G7 20WT/OR	VEHICLE SPEED SENSOR SIGNAL
A6	G21 20GY/LB	TACHOMETER SIGNAL
A7	E2 200R/BK	PANEL LAMPS DRIVER
A8	F87 20WT/BK	FUSED IGNITION SWITCH OUTPUT
B1	G4 20DB	FUEL LEVEL SENSOR SIGNAL
B2	Z2 18BK/LG	GROUND
B3	—	—
B4	—	—
B5	—	—
B6	L60 18TN	RIGHT TURN SIGNAL
B7	G6 20GY	ENGINE OIL PRESSURE SWITCH SENSE
B8	G12 20DG/BK	GENERATOR LAMP DRIVER

C235

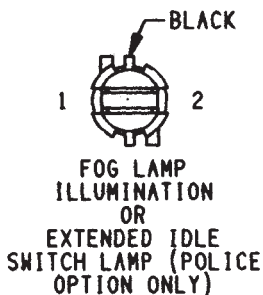


CAV	CIRCUIT	FUNCTION
1	G29 20BK/TN	WASHER FLUID SWITCH SENSE
2	G3 20BK/PK	MALFUNCTION INDICATOR LAMP DRIVER
3	F87 20WT/OR	FUSED IGNITION SWITCH OUTPUT
3	F87 20WT/BK	FUSED IGNITION SWITCH OUTPUT
4	F87 20WT/BK	FUSED IGNITION SWITCH OUTPUT
4	F87 20WT/BK	FUSED IGNITION SWITCH OUTPUT
5	—	—
6	B205 18YL	ABS LAMP DRIVER
7	K54 20LG/OR	UP-SHIFT LAMP DRIVER
8	B203 18DG	BRAKE WARNING/PARK BRAKE LAMP DRIVER
9	—	—
10	M1 20PK	FUSED B(+)
11	G106 20BK/YL	4WD INDICATOR LAMP
12	G107 20BK/LB	4WD SWITCH OUTPUT
13	—	—
14	F87 20WT/BK	FUSED IGNITION SWITCH OUTPUT
14	F87 20WT/BK	FUSED IGNITION SWITCH OUTPUT
15	G11 20WT	SEAT BELT WARNING LAMP DRIVER
16	Z1 20BK	GROUND
16	Z1 20BK	GROUND



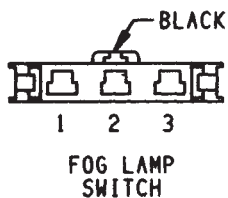
C236

CAV	CIRCUIT	FUNCTION
1	E2 200R/BK	PANEL LAMPS DRIVER
2	Z1 20BK	GROUND



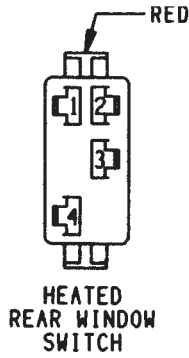
C237

CAV	CIRCUIT	FUNCTION
1	E2 200R/BK	PANEL LAMPS DRIVER
2	Z1 20BK	GROUND



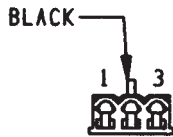
C238

CAV	CIRCUIT	FUNCTION
1	L39 16LB	FRONT FOG LAMPS SWITCH OUTPUT
2	L35 16BR/WT	FOG LAMP SWITCH CONTROL
3	Z1 20BK	GROUND
3	Z1 20BK	GROUND



C239

CAV	CIRCUIT	FUNCTION
1	—	—
2	Z1 20BK	GROUND
2	Z1 20BK	GROUND
3	C80 18DB/WT	HEATED REAR WINDOW RELAY CONTROL
4	C15 12BK/RD	HEATED REAR WINDOW RELAY OUTPUT

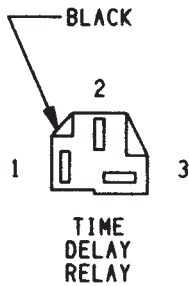


C240



CAV	CIRCUIT
1	Z1 20BK
1	Z1 20BK
2	G26 20LB
2	G26 20LB
3	M2 20YL

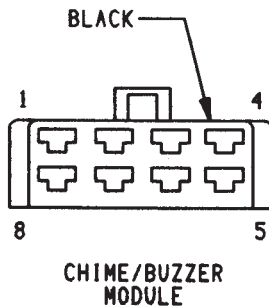
CAV	CIRCUIT
1	Z1 20BK
2	G26 20LB
3	M2 20YL



C241

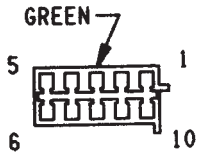
CAV	CIRCUIT	FUNCTION
1	M2 20YL	PANEL LAMPS DRIVER
2	M50 20YL/RD	KEY-IN LAMP DRIVER
3	M1 20PK	FUSED B(+)

**C242
RELAY CENTER
(8W-11-16)**



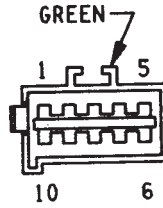
C243

CAV	CIRCUIT	FUNCTION
1	G10 18LG	SEAT BELT SWITCH SENSE
2	Z1 20BK	GROUND
3	G11 20WT	PARK BRAKE SWITCH SENSE
4	F87 20WT/BK	FUSED IGNITION SWITCH OUTPUT
4	F87 20WT/BK	FUSED IGNITION SWITCH OUTPUT
5	—	—
6	M11 20PK/LB	COURTESY LAMP SWITCH OUTPUT
7	L7 18BK/YL	FUSED B(+)
8	—	—

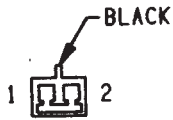


CAV	CIRCUIT
1	M1 18PK
2	—
3	P2 18BK/WT
3	P2 18BK/WT
4	Q27 14RD/BK
5	Q17 14DB/WT
6	P34 18PK/BK
6	P34 18PK/BK
7	Z1 14BK
8	Q1 14YL
9	P35 200R/VT
10	P36 20PK/VT

C301

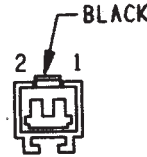


CAV	CIRCUIT
1	P38 18PK
1	P38 20PK
2	—
3	P2 18BK/WT
3	P2 18BK/WT
4	Q27 14RD/BK
5	Q17 14DB/WT
6	P34 18PK/BK
6	P34 18PK/BK
7	Z1 14BK
8	Q1 14YL
9	P35 200R/VT
9	P35 200R/VT
10	P36 20PK/VT
10	P36 20PK/VT

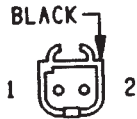


CAV	CIRCUIT
1	E2 200R/BK
2	Z1 20BK

C302

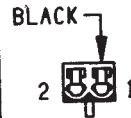


CAV	CIRCUIT
1	E2 200R
1	E2 200R
2	Z1 20BK
2	Z1 20BK

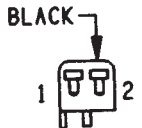


CAV	CIRCUIT
1	Z1 14BK
2	A11 14RD

C303



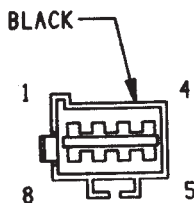
CAV	CIRCUIT
1	Z1 14BK
2	A11 14RD



SEAT BELT SWITCH

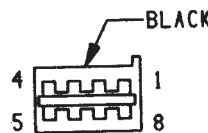
CAV	CIRCUIT	FUNCTION
1	Z1 20BK	GROUND
2	G10 18LG	SEAT BELT SWITCH SENSE

C304

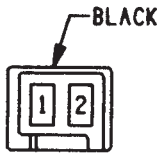


CAV	CIRCUIT
1	L10 20BR/LG
2	L60 18TN/DG
3	Z1 18BK
4	117 18LG/BK
5	L90 18DB/RD
6	L50 18WT/TN
7	M2 20YL
8	—

C305

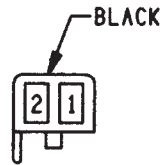


CAV	CIRCUIT
1	L10 20BR/LG
2	L60 18TN
3	Z1 20BK
3	Z1 18BK
4	117 18LG/BK
5	L90 18DB/RD
6	L50 18WT/TN
7	M2 20YL
8	—

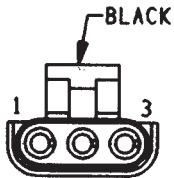


CAV	CIRCUIT
1	M2 20YL
2	Z1 20BK

C306

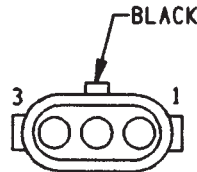


CAV	CIRCUIT
1	M2 20YL
2	Z1 20BK

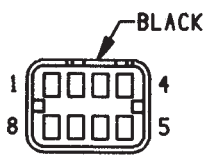


CAV	CIRCUIT
1	Z1 14BK
2	G4 20DB
3	A241 14DG/RD

C307

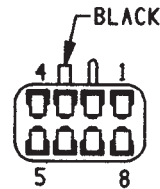


CAV	CIRCUIT
1	99 18BK
2	57 16VT
2	F9 140R

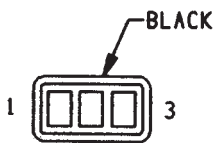


CAV	CIRCUIT
1	P2 18BK/WT
2	P34 18PK/BK
3	M4 20VT/YL
4	L50 18WT/TN
5	V13 18BR/RD
6	F20 18WT
7	V20 18BK/YL
8	L90 18DB/RD

C308

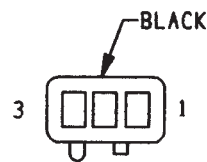


CAV	CIRCUIT
1	P2 18BK/WT
2	P34 18PK/BK
3	M4 20VT/YL
4	L50 18WT/TN
5	V13 18BR/RD
6	F20 18WT
7	V20 18BK/YL
8	L90 18DB/RD

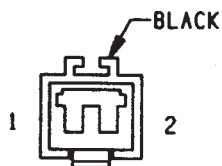


CAV	CIRCUIT
1	M1 20PK
2	M2 20YL
3	M4 20VT/YL

C309

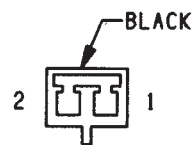


CAV	CIRCUIT
1	M1 20PK
2	M2 20YL
3	G71 20VT/YL
3	M4 20VT/YL



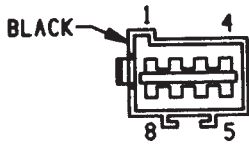
CAV	CIRCUIT
1	96 14LB
2	—

C310

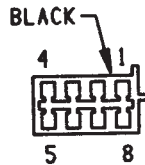


CAV	CIRCUIT
1	96 14LB
2	—

(TRAILER TOW HARNESS ONLY)



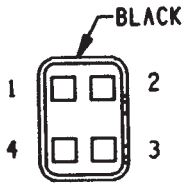
CAV	CIRCUIT
1	L10 18BR/LG
2	L61 18LG
3	Z1 18BK
4	L36 18LG/BK
5	L90 18DB/RD
6	L50 18WT/TN
6	L50 18WT/TN
7	A11 14RD
8	L60 18TN



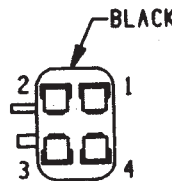
CAV	CIRCUIT
1	L10 20BR/LG
2	L61 18LG
3	Z1 18BK
4	117 18LG/BK
5	L90 18DB/RD
6	L50 18WT/TN
6	L50 18WT/TN
7	A11 14RD
8	L60 18TN/DG

CAV	CIRCUIT
1	L10 18BR/LG
1	L10 18BR/LG
2	L61 18LG
2	L61 18LG
3	Z1 20BK
4	L36 18LG/BK
5	L90 18DB/RD
5	L90 18DB/RD
6	L50 18WT/TN
6	
6	

C312

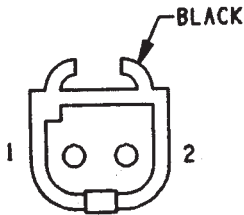


CAV	CIRCUIT
1	X58 20DB/OR
2	X52 20DB/WT
3	X57 20BR/LB
4	X51 20BR/YL

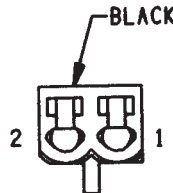


CAV	CIRCUIT
1	X58 20DB/OR
2	X52 20DB/WT
3	X57 20BR/LB
4	X51 20BR/YL

C313

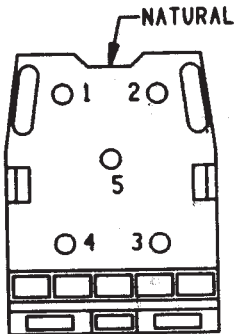


CAV	CIRCUIT
1	Z1 12BK
2	C15 12BK/RD



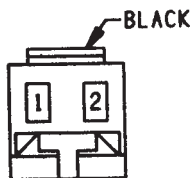
CAV	CIRCUIT
1	Z1 14BK
2	C15 14BK/RD

C314



CAV	CIRCUIT	FUNCTION
1	Q12 14BR	LT RR P/W UP/DOWN CONTROL
2	Q27 14RD/BK	LT RR P/W UP/DOWN CONTROL
3	Q22 14VT	LT RR P/W UP/DOWN CONTROL
4	Q17 14DB/WT	LT RR P/W UP/DOWN CONTROL
5	Q1 14YL	POWER WINDOW MASTER SWITCH OUTPUT

LEFT REAR
DOOR WINDOW
SWITCH



LEFT REAR
DOOR LOCK
MOTOR

C315

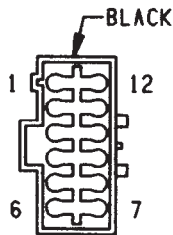
CAV	CIRCUIT	FUNCTION
1	P2 18BK/WT	DOOR LOCK RELAY OUTPUT
2	P34 18PK/BK	DOOR UNLOCK DRIVER



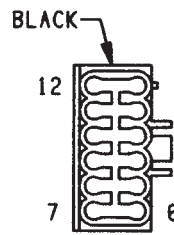
C316

CAV	CIRCUIT	FUNCTION
1	Q12 14BR	LT RR P/W UP/DOWN CONTROL
2	Q22 14VT	LT RR P/W UP/DOWN CONTROL

C317

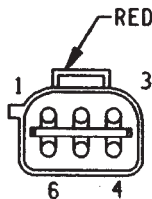


CAV	CIRCUIT
1	Q16 14BR/WT
2	Q26 14VT/WT
3	F81 12TN
4	Q1 14YL
5	Q18 14GY/BK
6	Q17 14DB/WT
7	—
8	P80 20YL/BK
9	Z1 14BK
10	P38 18PK
10	P38 20PK
11	Q27 14RD/BK
12	Q28 14DG/WT

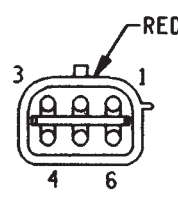


CAV	CIRCUIT
1	Q16 14BR/WT
2	Q26 14VT/WT
3	F81 12TN
4	Q1 14YL
5	Q18 14GY/BK
6	Q17 14DB/WT
7	—
8	P80 20YL/BK
9	Z1 14BK
10	P38 14OR/WT
11	Q27 14RD/BK
12	Q28 14DG/WT

C318

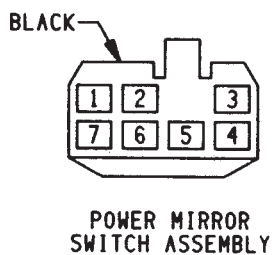


CAV	CIRCUIT
1	P36 20PK/VT
2	P34 18PK/BK
3	P2 18BK/WT
4	P35 20OR/VT
5	P81 20DB
6	P79 20DB/LB



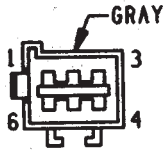
CAV	CIRCUIT
1	P36 14PK/VT
2	P34 18PK/BK
3	P2 18BK/WT
4	P35 14OR/VT
5	P81 20DB
6	P79 20DB/LB

C319

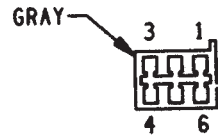


CAV	CIRCUIT	FUNCTION
1	P38 20PK	FUSED B(+)
2	Z1 18BK	GROUND
3	P79 20DB/LB	GROUND
4	P80 20YL/BK	UP/DOWN MOTOR—LEFT
5	P81 20DB	RIGHT/LEFT MOTOR—LEFT
6	P77 20WT/BK	RIGHT/LEFT MOTOR—RIGHT
7	P78 20YL/LG	UP/DOWN MOTOR—RIGHT

C320

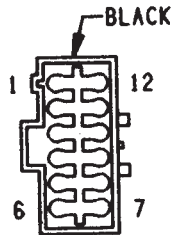


CAV	CIRCUIT
1	—
2	P34 18PK/BK
2	P34 18PK/BK
3	P2 18BK/WT
3	P2 18BK/WT
4	Q18 14GY/BK
5	Q28 14DG/WT
6	Q1 14YL

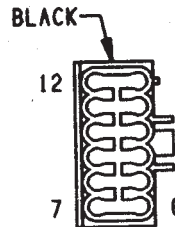


CAV	CIRCUIT
1	—
2	P34 18PK/BK
3	P2 18BK/WT
4	Q33 14BR/LB
5	Q28 14DG/WT
6	Q1 14YL

C321

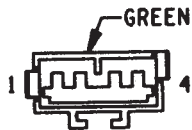


CAV	CIRCUIT
1	P38 20PK
2	P35 20OR/VT
3	P36 20PK/VT
4	P2 18BK/WT
5	P34 18PK/BK
6	Q1 14YL
7	—
8	P79 20DB/LB
9	P77 20WT/BK
10	P78 20YL/LG
11	Q16 14BR/WT
12	Q26 14VT/WT



CAV	CIRCUIT
1	P38 14OR/WT
2	P35 14OR/VT
3	P36 14PK/VT
4	P2 18BK/WT
5	P34 18PK/BK
6	Q1 14YL
7	—
8	P79 20DB/LB
9	P77 20WT/BK
10	P78 20YL/LG
11	Q16 14BR/WT
12	Q26 14VT/WT

C322

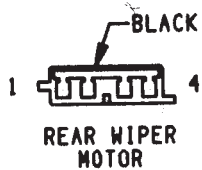


CAV	CIRCUIT
1	—
2	P35 20OR/VT
2	P35 20OR/VT
3	P36 20PK/VT
3	P36 20PK/VT
4	—



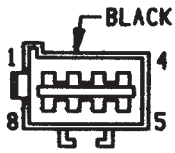
CAV	CIRCUIT
1	G68 20PK/OR
2	P35 20OR/VT
3	P36 20PK/VT
4	G72 20DG/OR

C323

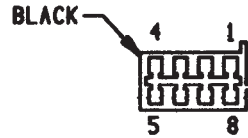


CAV	CIRCUIT	FUNCTION
1	Z1 18BK	GROUND
2	V20 18BK/YL	REAR WASHER PUMP MOTOR CONTROL
3	V13 18BR/RD	REAR WASHER RUN
4	F20 18WT	FUSED IGNITION SWITCH OUTPUT

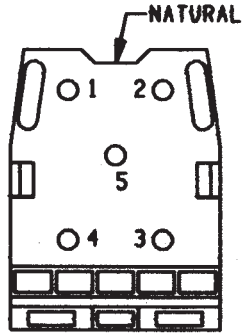
C324



CAV	CIRCUIT
1	L10 18BR/LG
2	L60 18TN
3	Z1 18BK
4	—
5	L90 18DB/RD
6	L50 18WT/TN
7	—
8	—



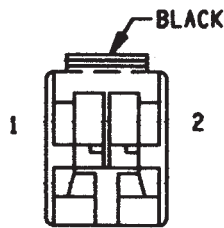
CAV	CIRCUIT
1	L10 20BR/LG
2	L60 18TN
3	Z1 18BK
4	117 18LG/BK
5	L90 18DB/RD
6	L50 18WT/TN
7	—
8	—



C325

CAV	CIRCUIT	FUNCTION
1	Q12 14BR	RT RR P/W UP/DOWN CONTROL
2	Q28 14D6/WT	RT RR P/W UP/DOWN CONTROL
3	Q22 14VT	RT RR P/W UP/DOWN CONTROL
4	Q33 14BR/LB	RT RR P/W UP/DOWN CONTROL
5	Q1 14YL	POWER WINDOW MASTER SWITCH OUTPUT

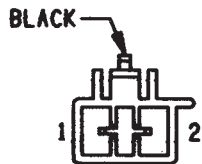
RIGHT REAR
DOOR WINDOW
SWITCH



C326

CAV	CIRCUIT	FUNCTION
1	P2 18BK/WT	DOOR LOCK RELAY OUTPUT
2	P34 18PK/BK	DOOR UNLOCK DRIVER

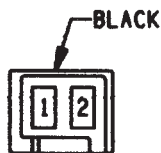
RIGHT REAR
DOOR LOCK
MOTOR



C327

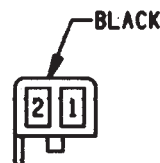
CAV	CIRCUIT	FUNCTION
1	Q12 14BR	RT RR P/W UP/DOWN CONTROL
2	Q22 14VT	RT RR P/W UP/DOWN CONTROL

RIGHT REAR
DOOR WINDOW
MOTOR

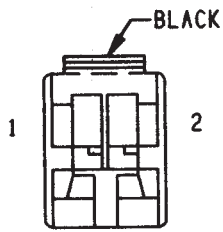


C328

CAV	CIRCUIT
1	M2 20YL
2	Z1 20BK



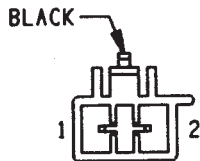
CAV	CIRCUIT
1	M2 20YL
2	Z1 20BK



RIGHT FRONT
DOOR LOCK
MOTOR

C329

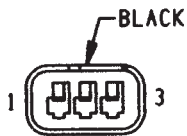
CAV	CIRCUIT	FUNCTION
1	P2 18BK/WT	DOOR LOCK RELAY OUTPUT
2	P34 18PK/BK	DOOR UNLOCK DRIVER



RIGHT FRONT
DOOR WINDOW
MOTOR

C331

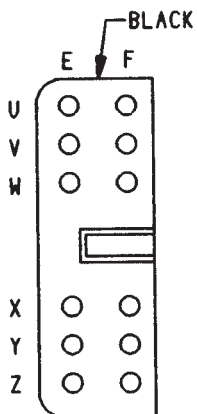
CAV	CIRCUIT	FUNCTION
1	Q12 14BR	RT FT P/W UP/DOWN CONTROL
2	Q22 14VT	RT FT P/W UP/DOWN CONTROL



RIGHT POWER
MIRROR

C332

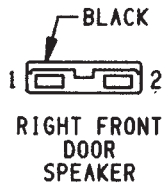
CAV	CIRCUIT	FUNCTION
1	P79 20DB/LB	MIRROR GROUND
2	P77 20WT/BK	RIGHT/LEFT MOTOR—RIGHT
3	P78 20YL/LG	UP/DOWN MOTOR—RIGHT



RIGHT FRONT
DOOR
LOCK SWITCH

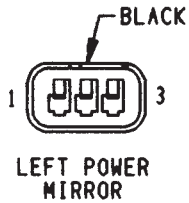
C333

CAV	CIRCUIT	FUNCTION
UE	—	—
UF	—	—
VE	P35 140R/VT	DOOR LOCK SWITCH OUTPUT (LOCK)
VF	P36 14PK/VT	DOOR LOCK SWITCH OUTPUT (UNLOCK)
WE	—	—
WF	P38 140R/WT	DOOR LOCK RELAY CONTROL
XE	Q1 14YL	MASTER SWITCH OUTPUT
XF	Q26 14VT/WT	MASTER SWITCH—MOTOR DOWN
YE	Q12 14BR	RT FT P/W UP/DOWN CONTROL
YF	Q22 14VT	RT FT P/W UP/DOWN CONTROL
ZE	Q16 14BR/WT	MASTER SWITCH—MOTOR UP
ZF	—	—



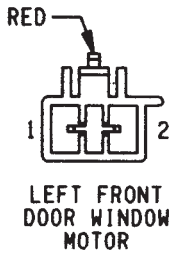
C334

CAV	CIRCUIT	FUNCTION
1	X54 20VT	RIGHT FRONT SPEAKER (+)
2	X56 20DB/RD	RIGHT FRONT SPEAKER (-)



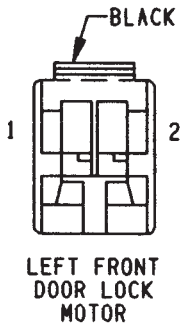
C335

CAV	CIRCUIT	FUNCTION
1	P79 20DB/LB	GROUND
2	P81 20DB	RIGHT/LEFT MOTOR-LEFT
3	P80 20YL/BK	UP/DOWN MOTOR-LEFT



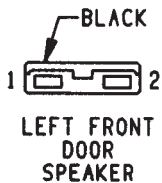
C336

CAV	CIRCUIT	FUNCTION
1	Q11 14LB	LT FRONT P/W UP/DOWN CONTROL
2	Q21 14WT	LT FRONT P/W UP/DOWN CONTROL



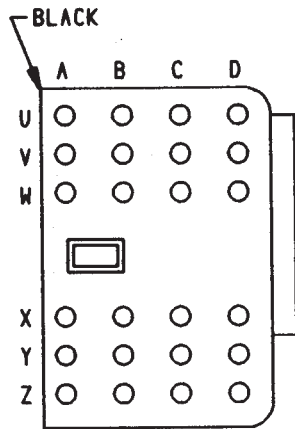
C338

CAV	CIRCUIT	FUNCTION
1	P2 18BK/WT	DOOR LOCK RELAY OUTPUT
2	P34 18PK/BK	DOOR UNLOCK DRIVER



C339

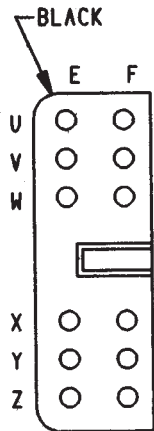
CAV	CIRCUIT	FUNCTION
1	X53 20DG	LEFT FRONT SPEAKER (+)
2	X55 20BR/RD	LEFT FRONT SPEAKER (-)



LEFT DOOR
LOCK/
WINDOW SWITCH

C340

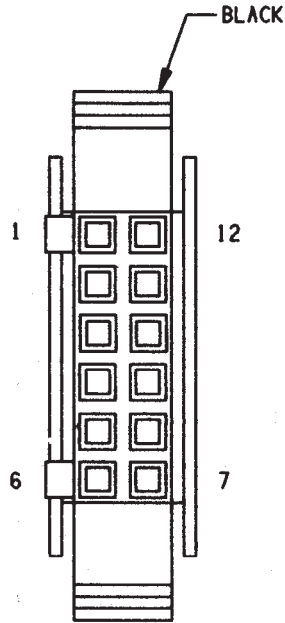
CAV	CIRCUIT	FUNCTION
UA	—	—
UB	—	—
UC	—	—
UD	—	—
VA	P35 14OR/VT	DOOR LOCK SWITCH OUTPUT (LOCK)
VB	P36 14PK/VT	DOOR LOCK SWITCH OUTPUT (UNLOCK)
VC	Q11 14LB	LT FRONT P/W UP/DOWN CONTROL
VD	Q21 14WT	LT FRONT P/W UP/DOWN CONTROL
WA	—	—
WB	P38 14OR/WT	DOOR LOCK RELAY CONTROL
WC	—	—
WD	—	—
XA	—	—
XB	—	—
XC	—	—
XD	Z1 14PK	GROUND
YA	Q1 14YL	MASTER SWITCH FEED
YB	F81 12TN	FUSED IGNITION SWITCH OUTPUT
YC	Q17 14DB/WT	LEFT REAR P/W UP/DOWN CONTROL
YD	Q27 14RD/BK	LEFT REAR P/W UP/DOWN CONTROL
ZA	—	—
ZB	—	—
ZC	—	—
ZD	—	—



RIGHT
WINDOW SWITCH

C341

CAV	CIRCUIT	FUNCTION
UE	—	—
UF	—	—
VE	Q16 14BR/WT	POWER WINDOW MASTER SWITCH-MOTOR UP
VF	Q26 14VT/WT	POWER WINDOW MASTER SWITCH-MOTOR DOWN
WE	—	—
WF	—	—
XE	—	—
XF	—	—
YE	Q18 14GY/BK	RIGHT REAR P/W UP/DOWN CONTROL
YF	Q28 14DG/WT	RIGHT REAR P/W UP/DOWN CONTROL
ZE	—	—
ZF	—	—

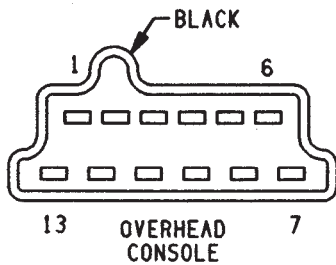


REMOTE
KEYLESS
ENTRY
MODULE

C342

CAV	CIRCUIT	FUNCTION
1	M1 20PK	FUSED B(+)
2	G68 20PK/OR	OVERDRIVE OFF LAMP DRIVER
3	P35 200R/VT	DOOR LOCK SWITCH OUTPUT (LOCK)
4	P36 20PK/VT	DOOR LOCK SWITCH OUTPUT (UNLOCK)
5	—	—
6	—	—
7	M2 20YL	COURTESY LAMP SWITCH OUTPUT
8	—	—
9	Z1 20BK	GROUND
10	—	—
11	F87 20WT/BK	FUSED IGNITION SWITCH OUTPUT
12	G72 20DG/OR	KEYLOCK SWITCH SENSE

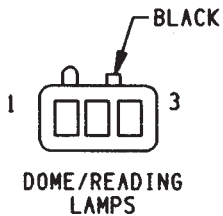
C343



OVERHEAD
CONSOLE

CAV	CIRCUIT	FUNCTION
1	—	—
2	Z2 20BK/LG	GROUND
3	—	—
4	Z1 20BK	GROUND
5	M1 20PK	FUSED B(+)
6	M1 20PK	FUSED B(+)
7	F87 20WT/BK	FUSED IGNITION SWITCH OUTPUT
8	M2 20YL	COURTESY LAMP SWITCH OUTPUT
9	G31 20BK/LB	AMBIENT AIR TEMP SENSOR SIGNAL
10	G32 20VT/LG	SENSOR GROUND
11	—	—
12	L90 20DB/RD	PARK LAMP SWITCH OUTPUT
13	E2 200R/BK	PANEL LAMPS DRIVER

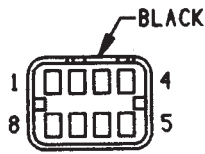
C344



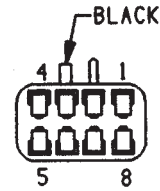
DOME/READING
LAMPS

CAV	CIRCUIT	FUNCTION
1	M1 20PK	FUSED B(+)
2	M2 20YL	COURTESY LAMP SWITCH OUTPUT
3	Z1 20BK	GROUND

C345

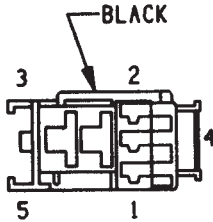


CAV	CIRCUIT
1	M4 20VT/YL
2	L50 18WT/TN
3	P2 18BK/WT
4	P34 18PK/BK
5	V13 18BR/RD
6	F20 18WT
7	V20 18BK/YL
8	L90 18DB/RD



CAV	CIRCUIT
1	M4 20VT/YL
2	L50 18WT/TN
3	P2 18BK/WT
4	P34 18PK/BK
5	V13 18BR/RD
6	F20 18WT
7	V20 18BK/YL
8	L90 20DB/RD

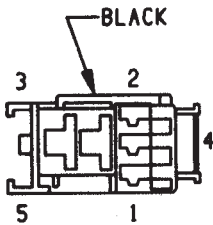
C346



RIGHT TURN RELAY

CAV	CIRCUIT	FUNCTION
1	L60 18TN	RIGHT TURN SIGNAL
2	Z1 20BK	GROUND
3	L60 18TN	RIGHT TURN SIGNAL
4	95 18PK	STOP LAMP RELAY OUTPUT
5	94 18DG	STOP LAMP RELAY OUTPUT

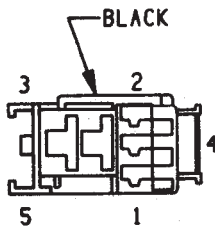
C347



LEFT TURN RELAY

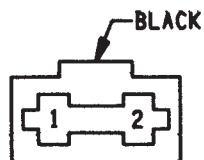
CAV	CIRCUIT	FUNCTION
1	L61 18LG	LEFT TURN SIGNAL
2	Z1 20BK	GROUND
3	L61 18LG	LEFT TURN SIGNAL
4	95 18PK	STOP LAMP RELAY OUTPUT
4	95 18PK	STOP LAMP RELAY OUTPUT
5	94 18DG	STOP LAMP RELAY OUTPUT
5	94 18DG	STOP LAMP RELAY OUTPUT

C348



STOP LAMP RELAY

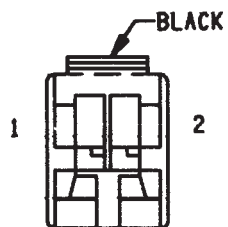
CAV	CIRCUIT	FUNCTION
1	L50 18WT/TN	STOP LAMP SWITCH OUTPUT
2	Z1 20BK	GROUND
3	A11 18RD/BK	GENERATOR OUTPUT
4	94 18DG	STOP LAMP RELAY OUTPUT
5	95 18PK	STOP LAMP RELAY OUTPUT



IN-LINE
CIRCUIT
BREAKER

C349

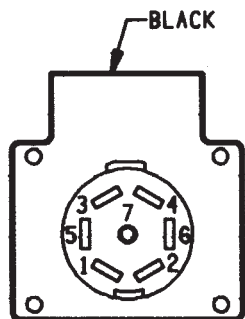
CAV	CIRCUIT	FUNCTION
1	A11 14RD	GENERATOR OUTPUT
2	A11 18RD/BK	GENERATOR OUTPUT



LIFTGATE
LOCK
MOTOR

C350

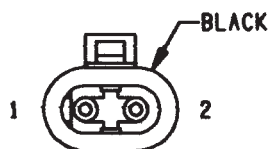
CAV	CIRCUIT	FUNCTION
1	P34 18PK/BK	DOOR UNLOCK DRIVER
2	P2 18BK/WT	DOOR LOCK RELAY OUTPUT



TRAILER TOW
CONNECTOR

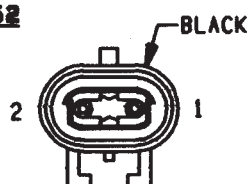
C351

CAV	CIRCUIT	FUNCTION
1	Z1 16BK	GROUND
2	96 14LB	ELECTRIC BRAKE FEED
3	L90 18DB/RD	PARK LAMP SWITCH OUTPUT
4	A11 14RD	GENERATOR OUTPUT
5	L61 18LG	LEFT TURN SIGNAL
6	L60 18TN	RIGHT TURN SIGNAL
7	L10 18BR/LG	BACK-UP LAMP SWITCH OUTPUT

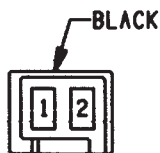


CAV	CIRCUIT
1	Z1 14BK
2	A11 14RD

C352

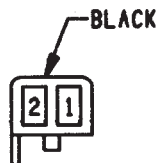


CAV	CIRCUIT
1	Z1 14BK
2	A11 14RD

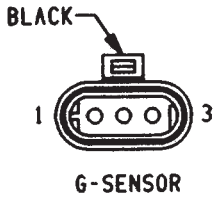


CAV	CIRCUIT
1	L50 18WT/TN
2	Z1 20BK

C353



CAV	CIRCUIT
1	L50 18WT/TN
2	Z1 20BK



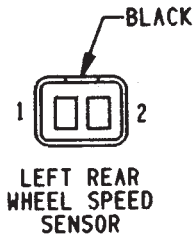
C354

CAV	CIRCUIT	FUNCTION
1	B516 18TN/WT	G-SENSOR #2 SENSE
2	B515 18YL/VT	G-SENSOR #1 SENSE
3	B517 18PK/OR	G-SENSOR GROUND



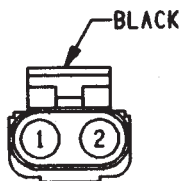
C355

CAV	CIRCUIT	FUNCTION
1	B2 18YL	RIGHT REAR WHEEL SPEED SENSOR (+)
2	B1 18YL/DB	RIGHT REAR WHEEL SPEED SENSOR (-)



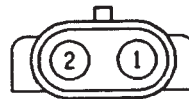
C356

CAV	CIRCUIT	FUNCTION
1	B3 18LG/DB	LEFT REAR WHEEL SPEED SENSOR (-)
2	B4 18LG	LEFT REAR WHEEL SPEED SENSOR (+)



C357

CAV	CIRCUIT
1	G107 18BK/RD
2	G106 18GY/YL

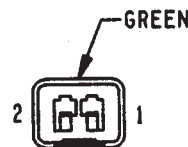


CAV	CIRCUIT
1	G107 20BK/RD
2	G106 20GY/YL

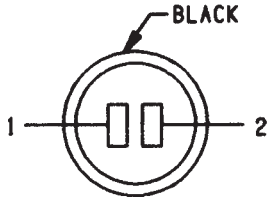


C358

CAV	CIRCUIT
1	L90 20DB/RD
2	Z1 20BK



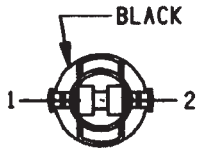
CAV	CIRCUIT
1	L90 20DB/RD
2	Z1 20BK



PARK/NEUTRAL
POSITION SWITCH
LAMP

C401

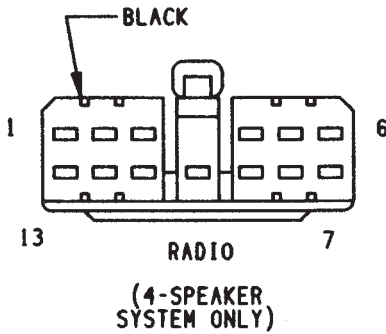
CAV	CIRCUIT	FUNCTION
1	E2 200R	PANEL LAMPS DRIVER
2	Z1 20BK	GROUND



TRANSFER
CASE LAMP

C402

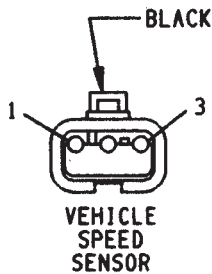
CAV	CIRCUIT	FUNCTION
1	E2 200R	PANEL LAMPS DRIVER
2	Z1 20BK	GROUND



RADIO
(4-SPEAKER
SYSTEM ONLY)

C403

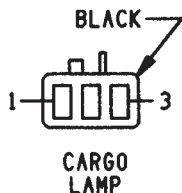
CAV	CIRCUIT	FUNCTION
1	X57 18BR	LEFT REAR SPEAKER (-)
2	X55 18BR	LEFT FRONT SPEAKER (-)
3	X5 18LB	RADIO DISPLAY OUTPUT
4	E2 180R	PANEL LAMPS DRIVER
5	X56 18DB	RIGHT FRONT SPEAKER (-)
6	X58 18DB	RIGHT REAR SPEAKER (-)
7	X52 18VT	RIGHT REAR SPEAKER (+)
8	X54 18VT	RIGHT FRONT SPEAKER (+)
9	F85 18WT	FUSED IGNITION SWITCH OUTPUT
10	M1 18PK	FUSED B(+)
11	—	—
12	X53 18DG	LEFT FRONT SPEAKER (+)
13	X51 18DG	LEFT REAR SPEAKER (+)



VEHICLE
SPEED
SENSOR

C404

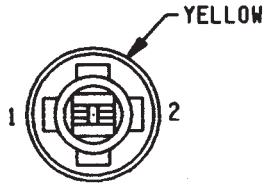
CAV	CIRCUIT	FUNCTION
1	G7 18WT/OR	VEHICLE SPEED SENSOR SIGNAL
2	K4 18BK/LB	SENSOR GROUND
3	K7 180R	8-VOLT SUPPLY



CARGO
LAMP

C405

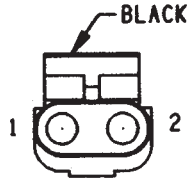
CAV	CIRCUIT	FUNCTION
1	M1 20PK	FUSED B (+)
2	M2 20YL	COURTESY LAMPS DRIVER
3	M4 20VT	CARGO LAMP OUTPUT
3	G71 20VT/YL	LIFTGATE LATCH SWITCH SENSE



LICENSE LAMP

C406

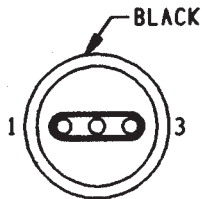
CAV	CIRCUIT	FUNCTION
1	L90 20DB/RD	PARK LAMP SWITCH OUTPUT
2	Z1 20BK	GROUND



4WD SWITCH

C407

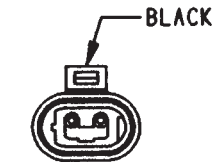
CAV	CIRCUIT	FUNCTION
1	G107 18BK/RD	4WD SWITCH OUTPUT
2	Z1 18GY	GROUND



PARK/NEUTRAL POSITION SWITCH

C408

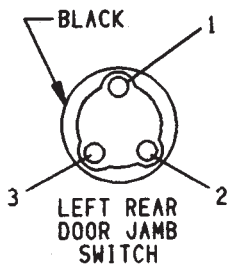
CAV	CIRCUIT	FUNCTION
1	F12 18DB/WT	FUSED IGNITION SWITCH OUTPUT
2	T41 18BR/YL	PARK/NEUTRAL POSITION SWITCH SENSOR
3	L10 18BR/LG	BACK-UP LAMP SENSE



AMBIENT AIR TEMPERATURE SENSOR

C409

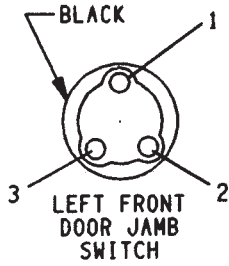
CAV	CIRCUIT	FUNCTION
1	G32 18BK/LB	SENSOR GROUND
2	G31 18VT/LG	AMBIENT AIR TEMPERATURE SENSOR SIGNAL



LEFT REAR DOOR JAMB SWITCH

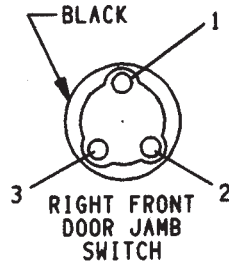
C410

CAV	CIRCUIT	FUNCTION
1	—	—
2	M2 20YL	COURTESY LAMPS DRIVER
3	Z1 20BK	GROUND



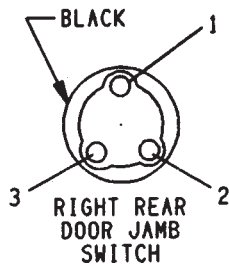
C411

CAV	CIRCUIT	FUNCTION
1	Z1 20BK	GROUND
2	G26 20LB	KEY-IN IGNITION SWITCH SENSE
3	M2 20YL	COURTESY LAMPS DRIVER



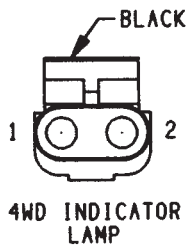
C412

CAV	CIRCUIT	FUNCTION
1	Z1 20BK	GROUND
2	M2 20YL	COURTESY LAMPS DRIVER
3	—	—



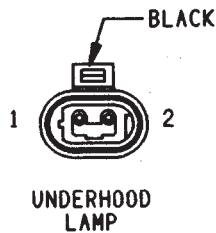
C413

CAV	CIRCUIT	FUNCTION
1	—	—
2	M2 20YL	COURTESY LAMPS DRIVER
3	Z1 20BK	GROUND



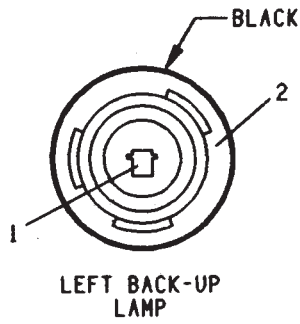
C414

CAV	CIRCUIT	FUNCTION
1	G107 18BK/RD	4WD SWITCH SENSE
2	G106 18GY/YL	4WD INDICATOR LAMP



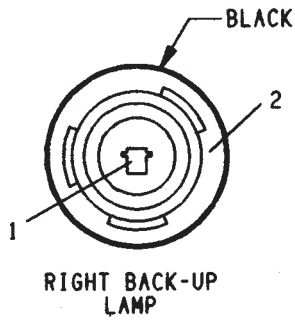
C415

CAV	CIRCUIT	FUNCTION
1	A6 18RD/BK	FUSED B(+)
2	Z1 18BK	GROUND



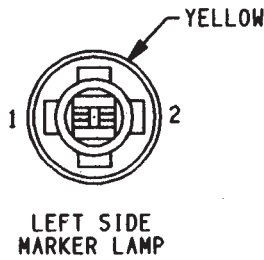
C416

CAV	CIRCUIT	FUNCTION
1	L10 18BR/LG	BACK-UP LAMP SWITCH OUTPUT
2	Z1 18BK	GROUND



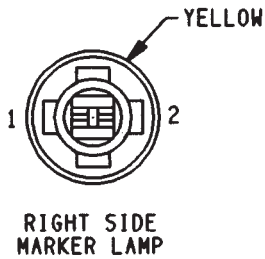
C417

CAV	CIRCUIT	FUNCTION
1	L10 18BR/LG	BACK-UP LAMP SWITCH OUTPUT
2	Z1 18BK	GROUND



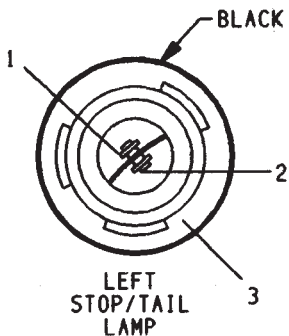
C418

CAV	CIRCUIT	FUNCTION
1	L90 18DB/RD	PARK LAMP SWITCH OUTPUT
2	Z1 18BK	GROUND



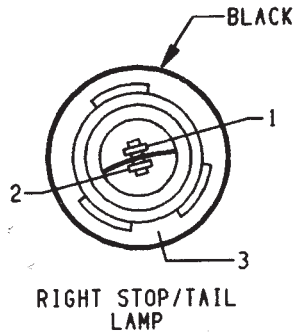
C419

CAV	CIRCUIT	FUNCTION
1	L90 18DB/RD	PARK LAMP SWITCH OUTPUT
2	Z1 18BK	GROUND



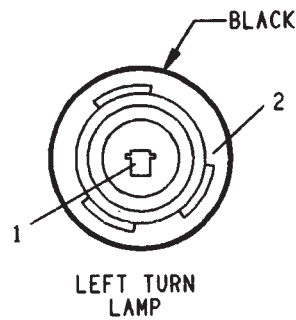
C420

CAV	CIRCUIT	FUNCTION
1	L50 18WT/TN	STOP LAMP SWITCH OUTPUT
2	L90 18DB/RD	PARK LAMP SWITCH OUTPUT
3	Z1 18BK	GROUND



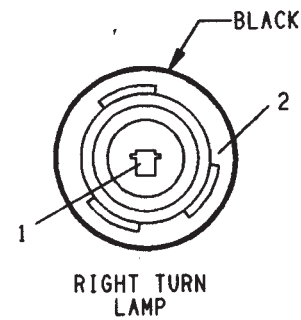
C421

CAV	CIRCUIT	FUNCTION
1	L50 18WT/TN	STOP LAMP SWITCH OUTPUT
2	L90 18DB/RD	PARK LAMP SWITCH OUTPUT
3	Z1 18BK	GROUND



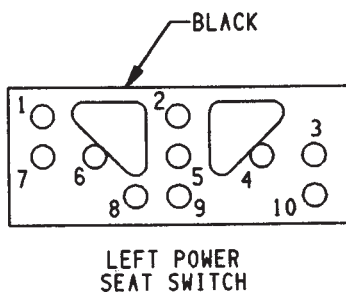
C422

CAV	CIRCUIT	FUNCTION
1	L61 18LG	LEFT TURN SIGNAL
2	Z1 18BK	GROUND



C423

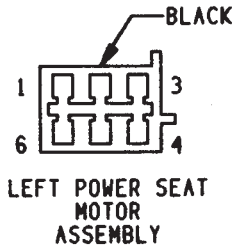
CAV	CIRCUIT	FUNCTION
1	L60 18TN	RIGHT TURN SIGNAL
2	Z1 18BK	GROUND



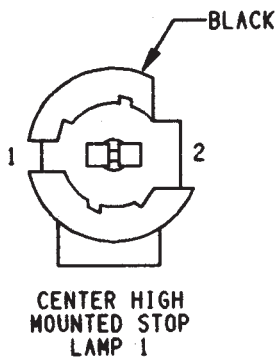
C424

CAV	CIRCUIT	FUNCTION
1	—	—
2	S3 14TN	POWER SEAT SWITCH OUTPUT-FORWARD
3	S1 14YL	POWER SEAT SWITCH OUTPUT-RAISE REAR
4	S2 14LG	POWER SEAT SWITCH OUTPUT-LOWER REAR
5	Z1 14BK	GROUND
6	S5 14OR	POWER SEAT SWITCH OUTPUT-RAISE FRONT
7	S6 14LB	POWER SEAT SWITCH OUTPUT-LOWER FRONT
8	A11 14RD	FUSED B(+)
9	S4 14WT	POWER SEAT SWITCH OUTPUT-REARWARD
10	—	—

C425

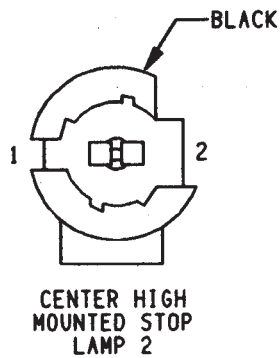


CAV	CIRCUIT	FUNCTION
1	S1 14YL	POWER SEAT SWITCH OUTPUT-RAISE REAR
2	S4 14WT	POWER SEAT SWITCH OUTPUT-REARWARD
3	S3 14TN	POWER SEAT SWITCH OUTPUT-FORWARD
4	S5 14OR	POWER SEAT SWITCH OUTPUT-RAISE FRONT
5	S6 14LB	POWER SEAT SWITCH OUTPUT-LOWER FRONT
6	S2 14LG	POWER SEAT SWITCH OUTPUT-LOWER REAR



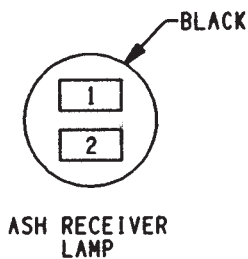
C426

CAV	CIRCUIT	FUNCTION
1	L50 18WT/TN	STOP LAMP SWITCH OUTPUT
2	Z1 20BK	GROUND



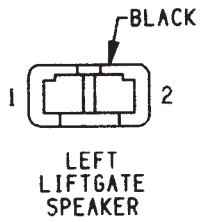
C427

CAV	CIRCUIT	FUNCTION
1	L50 18WT/TN	STOP LAMP SWITCH OUTPUT
1	L50 18WT/TN	STOP LAMP SWITCH OUTPUT
2	Z1 20BK	GROUND
2	Z1 20BK	GROUND



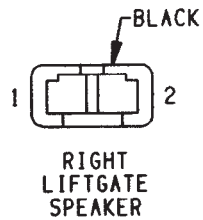
C428

CAV	CIRCUIT	FUNCTION
1	E2 200R/BK	PANEL LAMPS DRIVER
2	Z1 20BK	GROUND



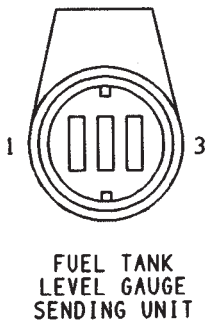
C429

CAV	CIRCUIT	FUNCTION
1	X51 20BR/YL	LEFT REAR SPEAKER (+)
2	X57 20BR/LB	LEFT REAR SPEAKER (-)



C430

CAV	CIRCUIT	FUNCTION
1	X52 20DB/WT	RIGHT REAR SPEAKER (+)
2	X58 20DB/OR	RIGHT REAR SPEAKER (-)



C431

CAV	CIRCUIT	FUNCTION
1	F9 140R	FUEL PUMP RELAY OUTPUT
2	—	—
3	57 16VT	FUEL LEVEL SENSOR SIGNAL

CONNECTOR LOCATIONS

GENERAL INFORMATION

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.

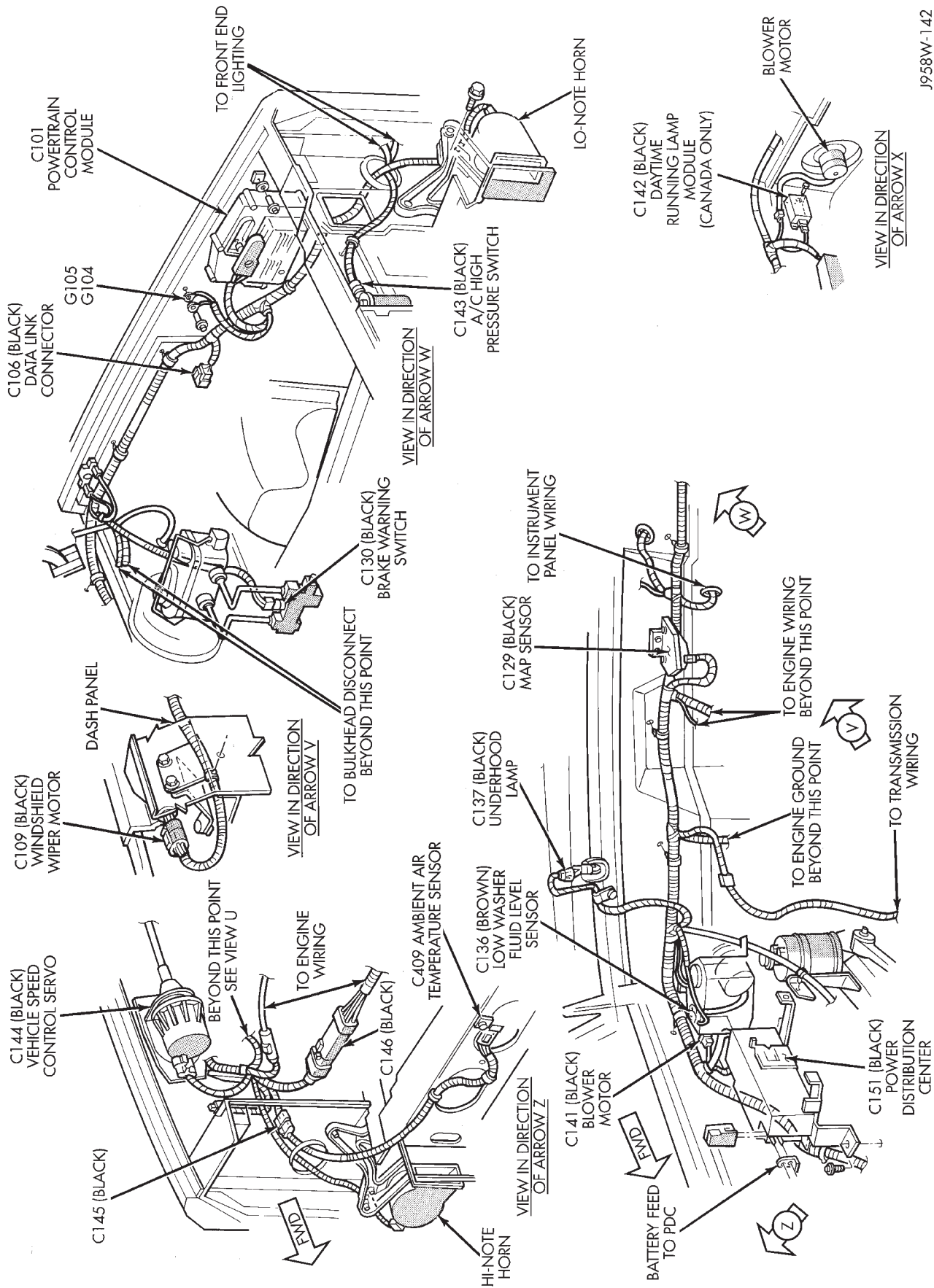
connector index is provided. Use the wiring diagrams in each section for connector number identification. Refer to the index for the proper figure number.

CONNECTOR LOCATIONS

Connector #	Color	Location	Fig.	Connector #	Color	Location	Fig.
C101	BK	Front of Left Fender Side Shield	.1, 2	C143	BK	Bottom Front of Right Fender Side Shield	.1, 3
C102	BK	Bottom Right of Radiator Closure Panel	.8	C144	BK	Front of Right Fender Side Shield	.1, 3
C103	BK	Near Left Side of Radiator	.2, 8	C145	BK	Front of Right Fender Side Shield	.1, 3
C104	BK	Left Fender Side Shield		C146	BK	Right Side of Grille Opening	.1, 3
C105	BK	Bottom of Left Fender Side Shield	.2	C147	BK	Below Distributor	.7
C106	BK	Left Fender Side Shield, Near PCM	.1, 2	C148	BK	Right Side of Engine	.6, 7
C107	BK	On ABS Pump Motor	.2	C149	BK	Rear of Generator	.5, 6
C108	BK	Right Rear Corner of Engine Compartment	.2, 3	C150	BK	Right Rear of Engine	.7
C109	BK	Center of Dash Panel	.1, 4	C151	BK	Right Fender Side Shield	.1, 4
C110	BK	Center of I.P., Below ABS Control Module	.13, 14	C152	GY	Behind Power Steering Pump	.6
C111	BK	Left of Steering Column	.14	C153	BK	Right Side of Transmission	.21
C112	BK	At ABS Control Module	.13	C154	BK	Left Side of Radiator Closure Panel	.8
C113	BK	In Harness, Near ABS Control Module	.13	C155	BK	Left Rear of Radiator Closure Panel	.8
C114	BK	Center of I.P., Below ABS Control Module	.14	C156	BK	Behind Lens	.8
C115	BK	Near ABS Control Module	.14	C157	BK	Behind Left Headlamp	.8
C116	BK	Below ABS Control Module	.14	C158	BK	Behind Lens	.8
C117	BK	Rear of Intake Manifold	.6, 7	C159	BK	Center of Grille Opening	.8
C118	BK	On Throttle Body	.6, 7	C160	BK	Behind Lens	.8
C119	BK	Bottom Left Front of Cylinder Block	.6, 7	C161	BK	Behind Right Headlamp	.8
C120	BK	On Throttle Body	.6, 7	C162	BK	Behind Lens	.8
C121	GY	Rear of Intake Manifold	.6, 7	C163	BK	Center of Grille Opening	.8
C122	BK	At Thermostat Housing	.6, 7	C164	BK	Right Center of Engine Compartment	
C123	BK	Injector No. 1	.6, 7	C201	BK	Below Left Side of I.P.	.9, 14
C124	BK	Injector No. 2	.6, 7	C202	LG	Behind Left Kick Panel	.14
C125	BK	Injector No. 3	.6, 7	C203	BK	Behind Left Kick Panel	.14
C126	BK	Injector No. 4	.6, 7	C204	GY	Behind Left Kick Panel	.14
C127	BK	Injector No. 5	.7	C205	BK	Bottom Right of I.P.	.12
C128	BK	Injector No. 6	.7	C206	BK	Bottom Right of I.P.	.12
C129	GN	Center of Dash Panel	.1, 4	C207	BK	Behind Headlamp Switch	.10
C130	BK	Below Brake Master Cylinder	.1, 2	C208	BK	Bottom Right of I.P.	.12
C131	BK	Distributor	.6, 7	C209	BK	On I.P. Right of Steering Column	.10
C132	GN	Lower Right Side of I.P.		C210	BK	On I.P. Right of Steering Column	.10
C133	BK	Right of Blower Motor	.4	C211	BK	Rear of Radio	.11
C134	GY	Right of Blower Motor	.4	C212	BR	Center of I.P.	.10
C135	GY	Right of Blower Motor	.4	C213	BK	Center of I.P.	.10
C136	BR	On Washer Fluid Reservoir	.1, 4	C214	GY	Right Side of I.P.	.13
C137	BK	Under Side of Hood	.1, 4	C215	BK	Right Side of I.P.	.13
C138	BK	Left of Blower Motor	.4	C216	GY	Glove Box	.10
C139	BK	Bottom of Washer Fluid Reservoir	.3, 4	C217	BK	Bottom Right of I.P.	.11
C140	BK	Bottom of Washer Fluid Reservoir	.3, 4	C218	RD	Right Side of I.P.	.13, 17
C141	BK	In Front of Washer Fluid Reservoir	.1, 4	C219	BK	Bottom Right of I.P.	.11
C142	BK	Between PDC and Blower Motor	.1, 4	C220	BK	Right Side of I.P.	.13
				C221	BK	Right Corner of I.P.	.13
				C222	LG	Right Corner of I.P.	.13
				C223	BK	Right Front of Steering Column	.14
				C224	BK	Right Front of Steering Column	.14
				C225	NAT	Below Steering Column	.14

Connector #	Color	Location	Fig.	Connector #	Color	Location	Fig.
C226	BK	Left Kick Panel		C342	BK	Front Center of Roof Liner	16
C227	BK	On I.P. Right of Steering Column	10	C343	BK	Behind Overhead Console	16
C228	BK	Left Side of Steering Column	14	C344	BK	Behind Doom Lamp	16
C229	BK	Top of Brake Pedal Arm	13	C345	BK	In left Rear Corner of Vehicle	20
C230	BK	Left Side of I.P.	12	C346	BK	Left Rear Quarter Panel	20
C231	BK	Center of I.P.	10	C347	BK	Left Rear Quarter Panel	20
C232	GY	Left Side of I.P.	12	C348	BK	Left Rear Quarter Panel	20
C233	BK	Left Side of I.P.	12	C349	BK	Left Rear Quarter Panel	20
C234	BK	Rear of I.P. Cluster	10	C350	BK	In Liftgate	24
C235	NAT	Rear of I.P. Cluster	10	C351	BK	Left Rear Quarter Panel	22
C236	BK	On I.P. Right of Steering Column	10	C352	BK	Floor Pan, Near Drivers Seat	
C237	BK	On I.P. Right of Steering Column	10	C353	BK	In Liftgate	25
C238	BK	On I.P. Left of Steering Column	10	C354	BK	Below Left Rear Seat	19
C239	RD	On I.P. Left of Steering Column	10	C355	RD	Below Left Rear Seat	19
C240	BK	Left Front Door	17	C356	BK	Below Left Rear Seat	19
C241	BK	Center of I.P.		C357	BK	On Transmission	21
C242	BK	Center Bottom of I.P.	9, 11	C358	GN	In Liftgate	24
C243	BK	Center Left of I.P.		C401	BK	Behind PRNDL	15
C301	DG	Behind Left Kick Panel		C402	BK	In Floor Console	
C302	BK	Near Floor Console		C403	BK	Rear of Radio	11
C303	BK	Bottom Right of Drivers Seat	15, 23	C404	BK	Rear of Transmission (2WD)	21
C304	BK	Bottom of Drivers Seat	15	C404	BK	Rear of Transfer Case (4WD)	21
C305	BK	Behind Right Kick Panel	17	C405	BK	Behind Cargo Lamp	20
C306	BK	Left B Pillar	18	C406	YL	In Liftgate	24
C307	BK	Near Fuel Tank	15	C407	BK	On Transfer Case	21
C308	BK	In Liftgate	24	C408	BK	Side of Transmission	
C309	BK	Under Rear of Roof Liner	20	C409	BK	Right of Radiator	1, 3
C310	BK	Left Rear Quarter Panel	20	C410	BK	In Left Rear Door	
C311	BK	Left Rear Quarter Panel	20	C411	BK	In Left Front Door	
C312	BK	Left Rear Quarter Panel	20	C412	BK	In Right Door	
C313	BK	In Liftgate	24	C413	BK	In Right Rear Door	
C314	NAT	In Left Rear Door	18	C414	BK	On Transfer Case	21
C315	BK	In Left Rear Door	18	C415	BK	Near Underhood Lamp	
C316	RD	In Left Rear Door	18	C416	BK	Behind Lens	
C317	BK	Behind Left Kick Panel	15, 17	C417	BK	Behind Lens	
C318	RD	Behind Left Kick Panel	15, 17	C418	YL	Behind Lens	
C319	BK	Under Floor Console	15	C419	YL	Behind Lens	
C320	GY	Under Right Rear Seat	18	C420	BK	Behind Lens	
C321	BK	Behind Right Kick Panel	17	C421	BK	Behind Lens	
C322	DG	At Dome Lamp		C422	BK	Behind Lens	
C323	BK	In Liftgate	24	C423	BK	Behind Lens	
C324	BK	Right Rear Quarter Panel	20	C424	BK	Side of Drivers Seat	23
C325	NAT	In Right Rear Door	18	C425	BK	Below Drivers Seat	23
C326	BK	In Right Rear Door	18	C426	BK	Behind Lens	25
C327	BK	In Right Rear Door	18	C427	BK	Behind Lens	25
C328	BK	In Right B Pillar	18	C428	BK	At Ash Receiver	12
C329	BK	In Right Front Door	17	C429	BK	In Liftgate	24
C331	BK	In Right Front Door	17	C430	BK	In Liftgate	24
C332	BK	In Right Front Door	17	G101		Near Battery	5
C333	BK	In Right Front Door	17	G102		Near Battery	5
C334	BK	In Right Front Door	17	G103		Right Front Side of Engine, Behind Generator	5
C335	BK	In Left Front Door	17	G104		Left Fender Side Shield, Behind PCM	1, 2
C336	BK	In Left Front Door	17	G105		Left Fender Side Shield, Behind PCM	1, 2
C338	BK	In Left Front Door	17	G106		Right Rear of Engine	6, 7
C339	BK	In Left Front Door	17	G107		Right Rear of Engine	6, 7
C340	BK	In Left Front Door	17				
C341	BK	In Left Front Door	17				

<u>Connector #</u>	<u>Color</u>	<u>Location</u>	<u>Fig.</u>	<u>Connector #</u>	<u>Color</u>	<u>Location</u>	<u>Fig.</u>
G108		Right Rear of Engine	.6, 7	G201		Below Headlamp Switch	.9
G109		Right Front Side of Engine, Behind Generator	.5	G301		Left Rear Quarter Panel	.20



J958W-142

Fig. 1 Engine Compartment Wiring Connectors—2.5L

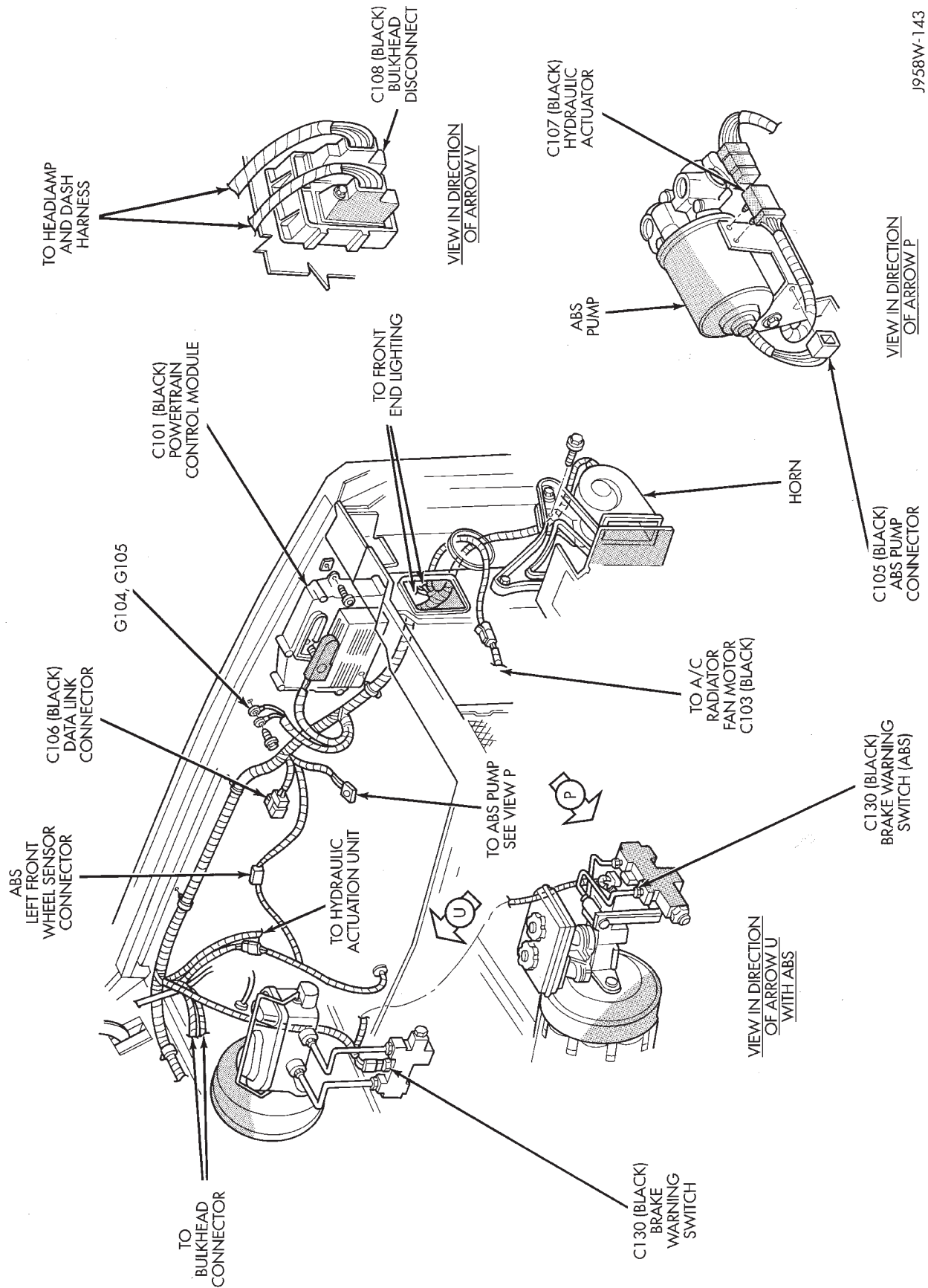


Fig. 2 Engine Compartment Wiring Connectors—4.0L

WASHER
FLUID
RESERVOIR

C139 (BLACK)
REAR WASHER PUMP

C140 (BLACK)
FRONT WASHER
PUMP

C143 (BLACK)
A/C LOW PRESSURE
SWITCH

C146 (BLACK)

C144 SPEED
CONTROL SERVO

C145 (BLACK)



HORN

C409 (BLACK)
AMBIENT AIR
TEMPERATURE
SENSOR

J958W-144

C108 (BLACK)
BULKHEAD
CONNECTOR

Fig. 3 Engine Compartment Wiring Connectors

J958W-145

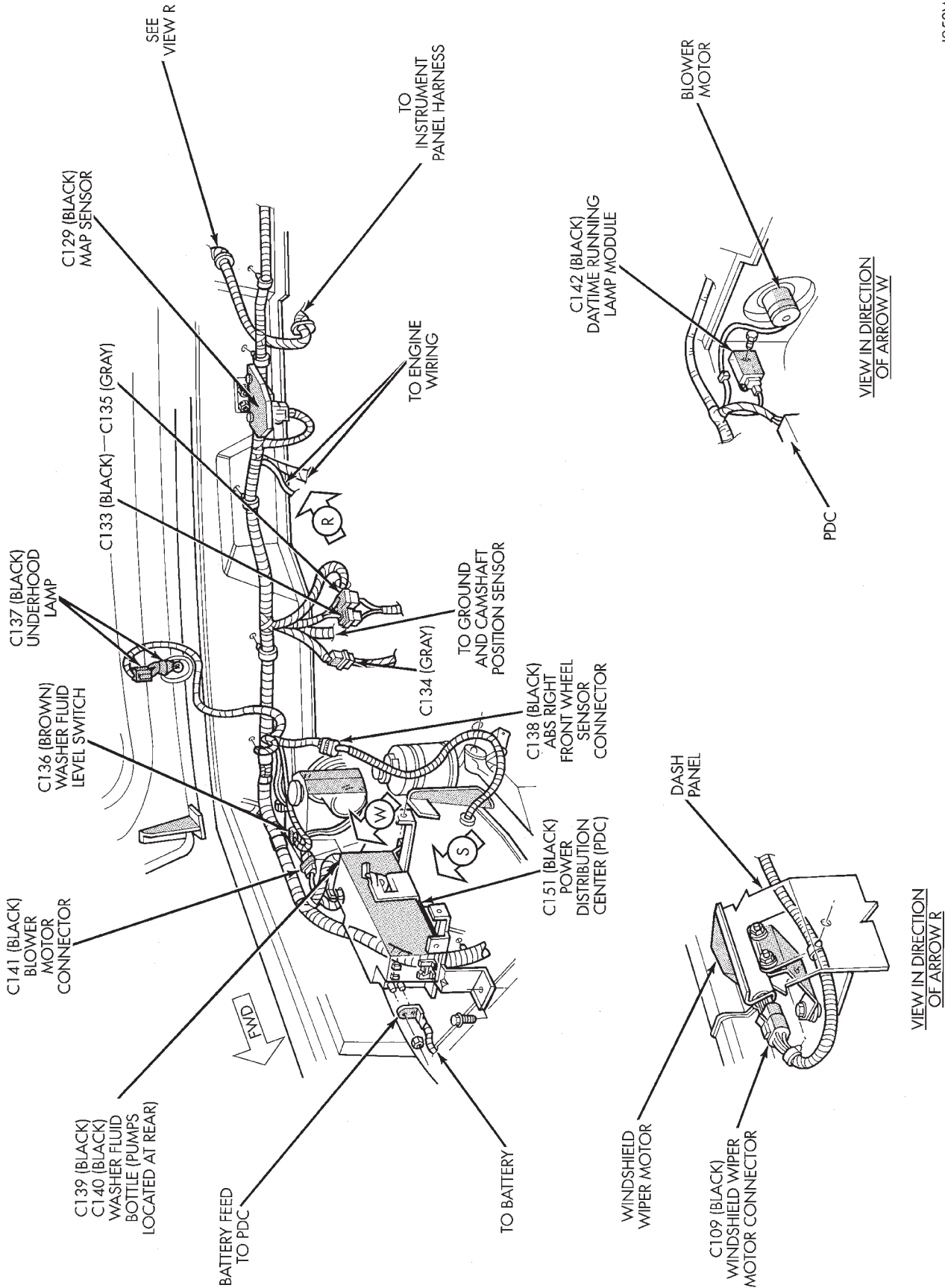
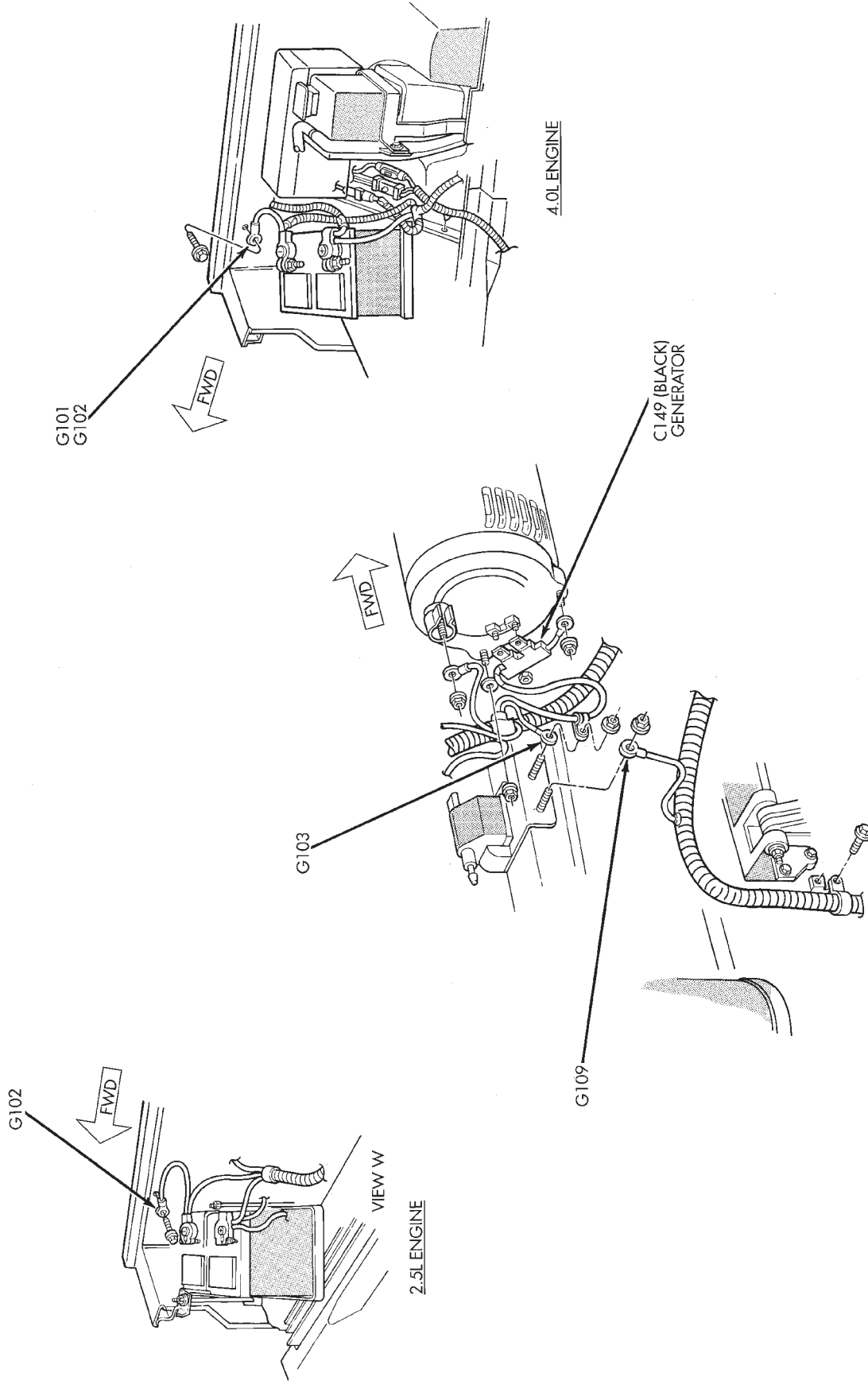


Fig. 4 Engine Compartment Wiring Connectors—Right Side, 4.0L



J958W-146

Fig. 5 Battery and Generator Wiring

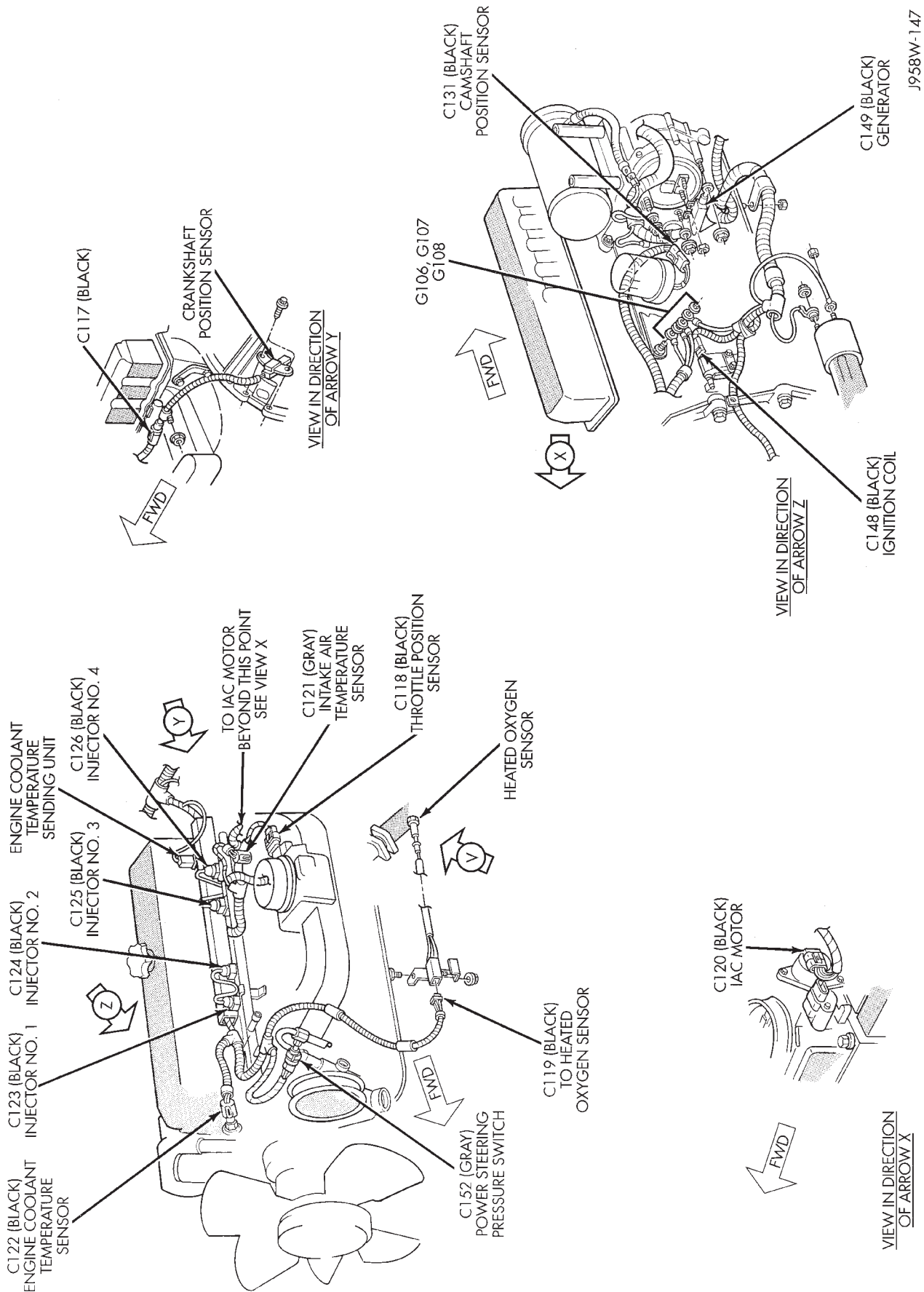


Fig. 6 Engine Wiring Connectors—2.5L Engine

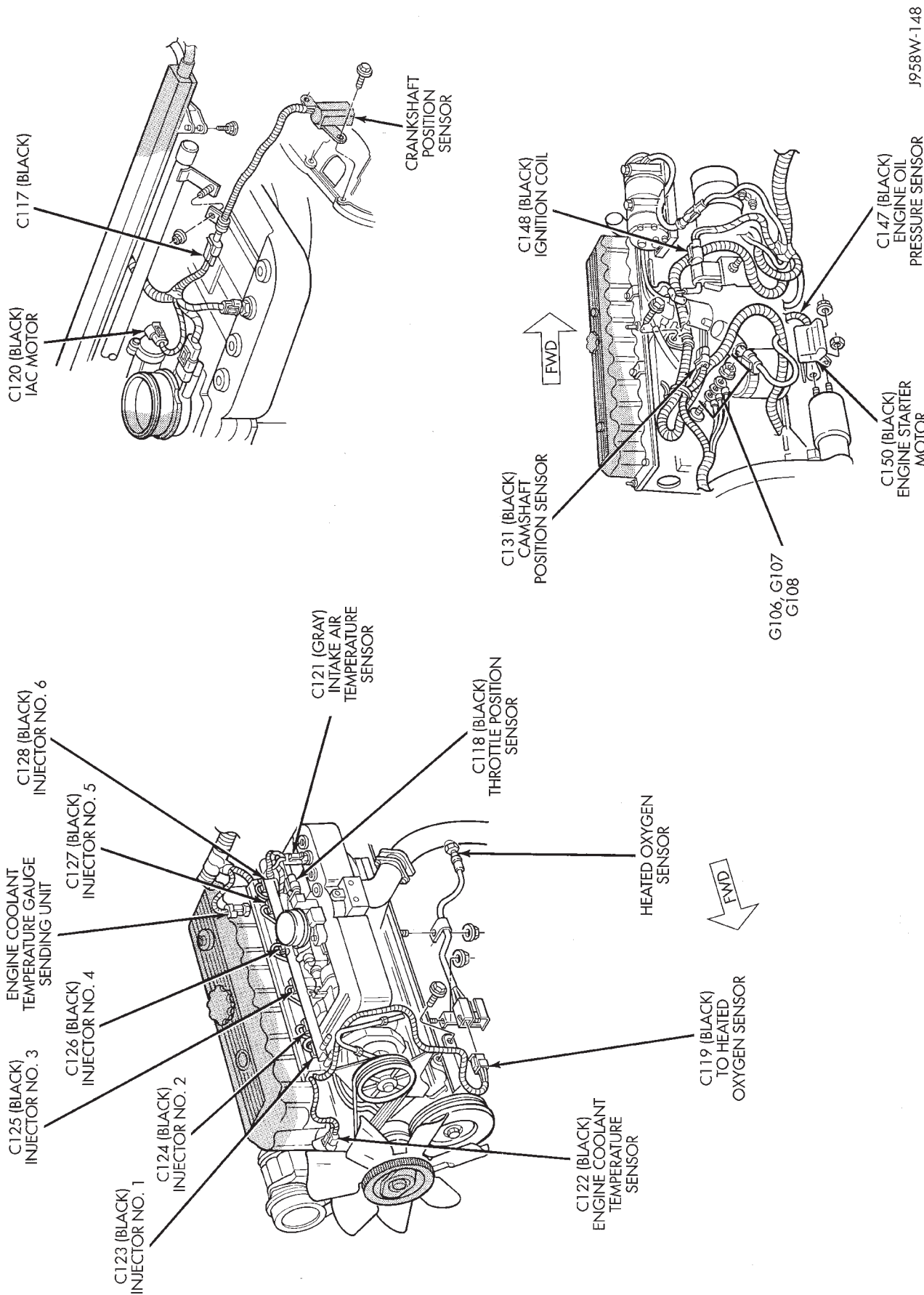
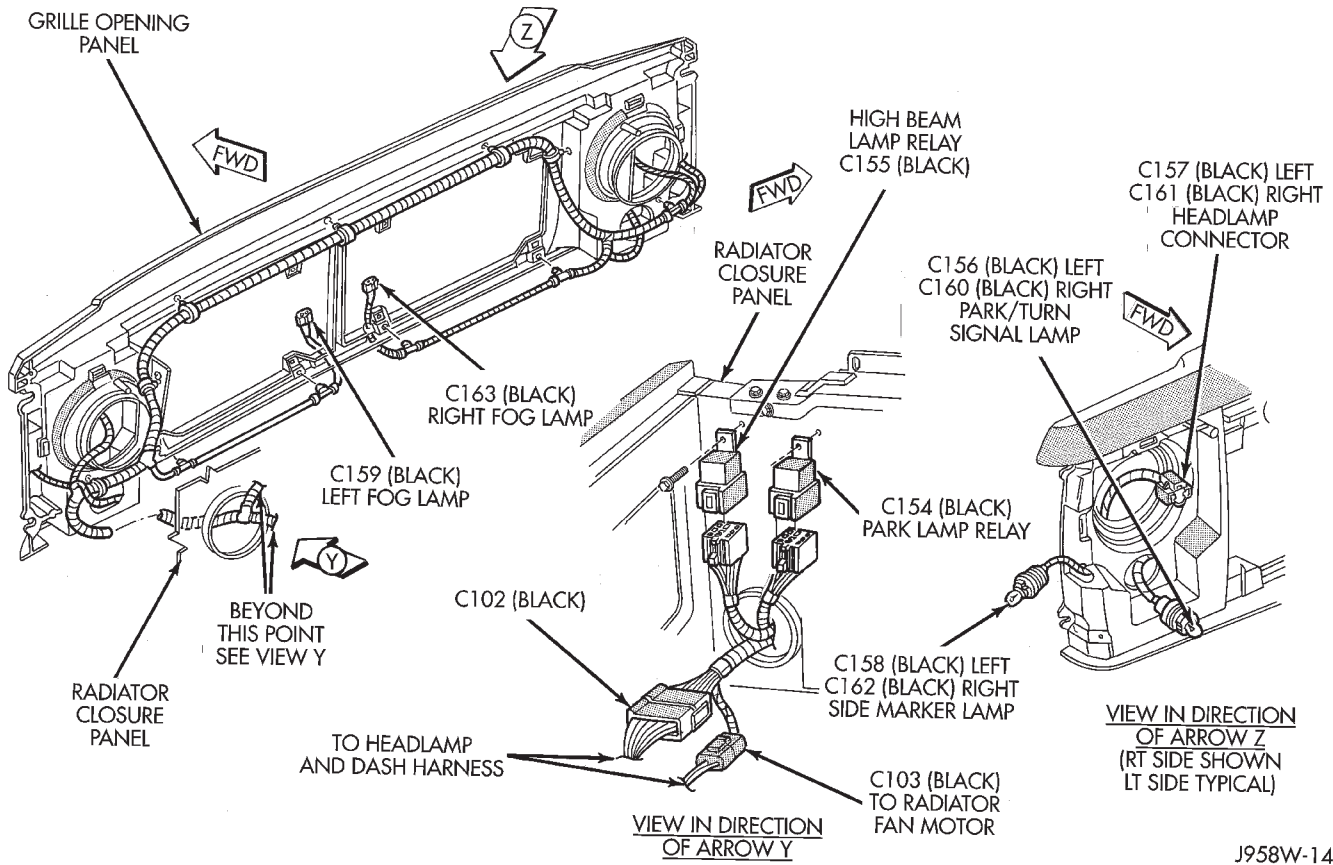
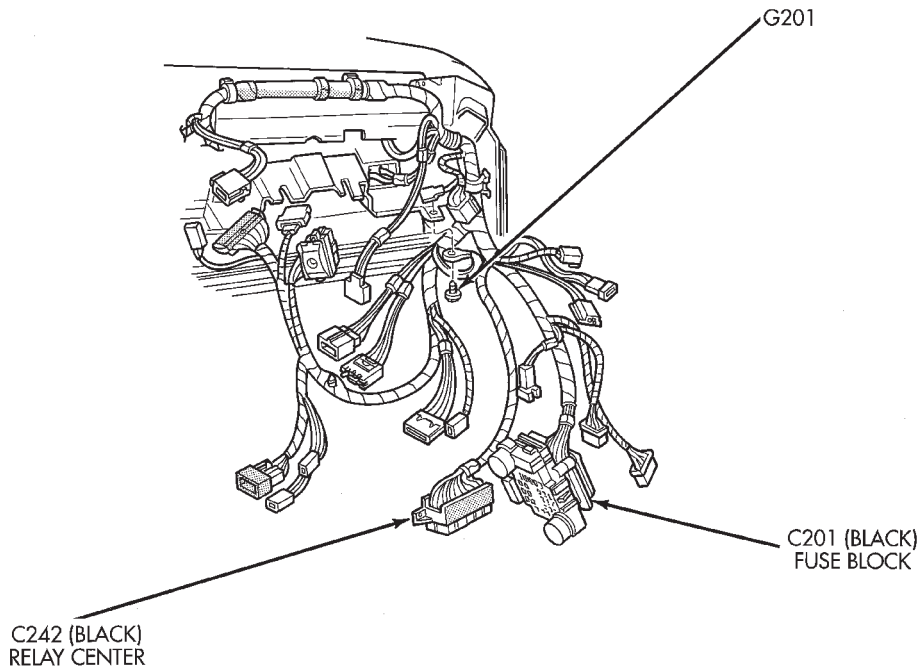


Fig. 7 Engine Wiring Connectors—4.0L Engine



J958W-149

Fig. 8 Front End Lighting Wiring Connectors



J958W-150

Fig. 9 Instrument Panel Ground

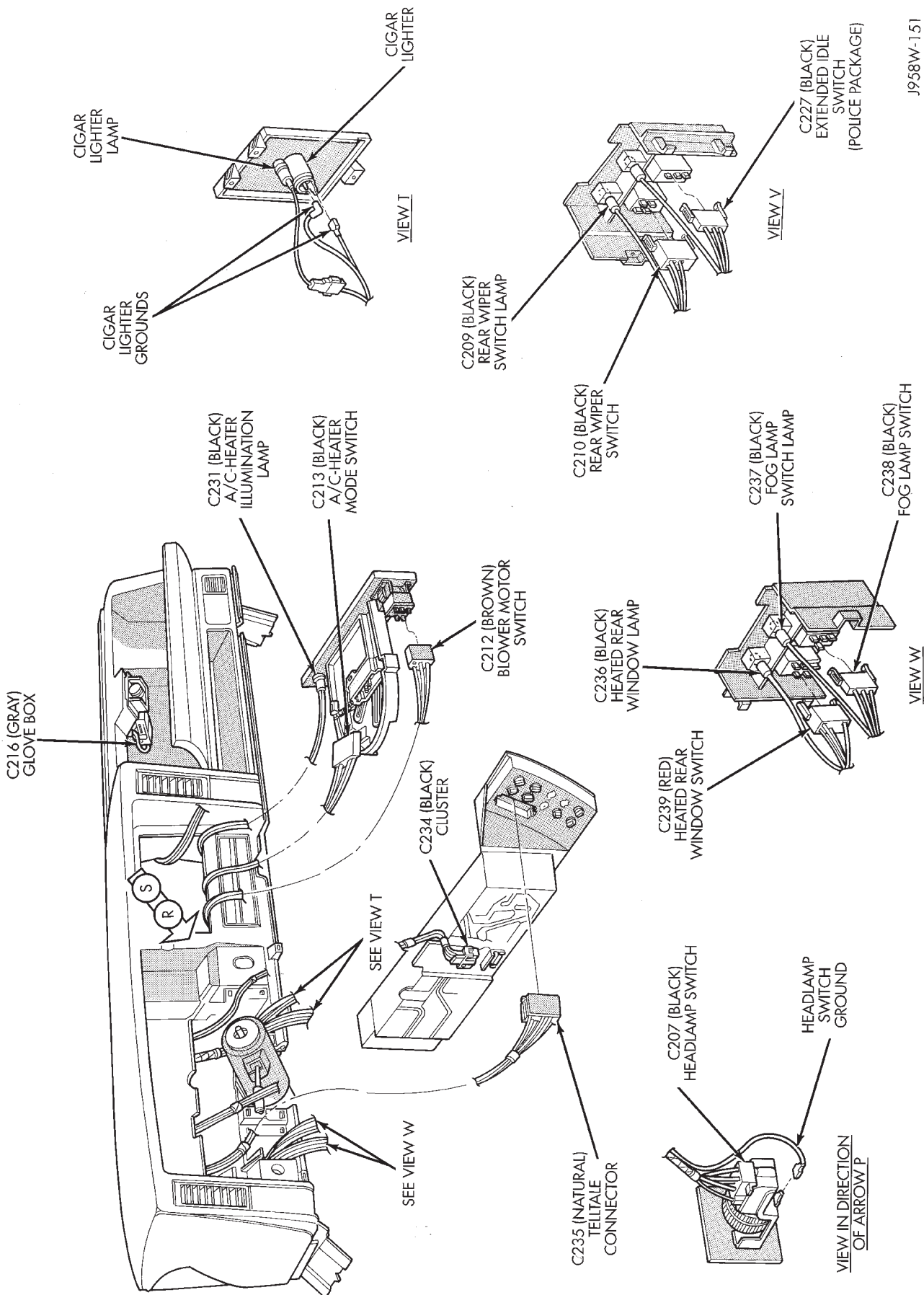
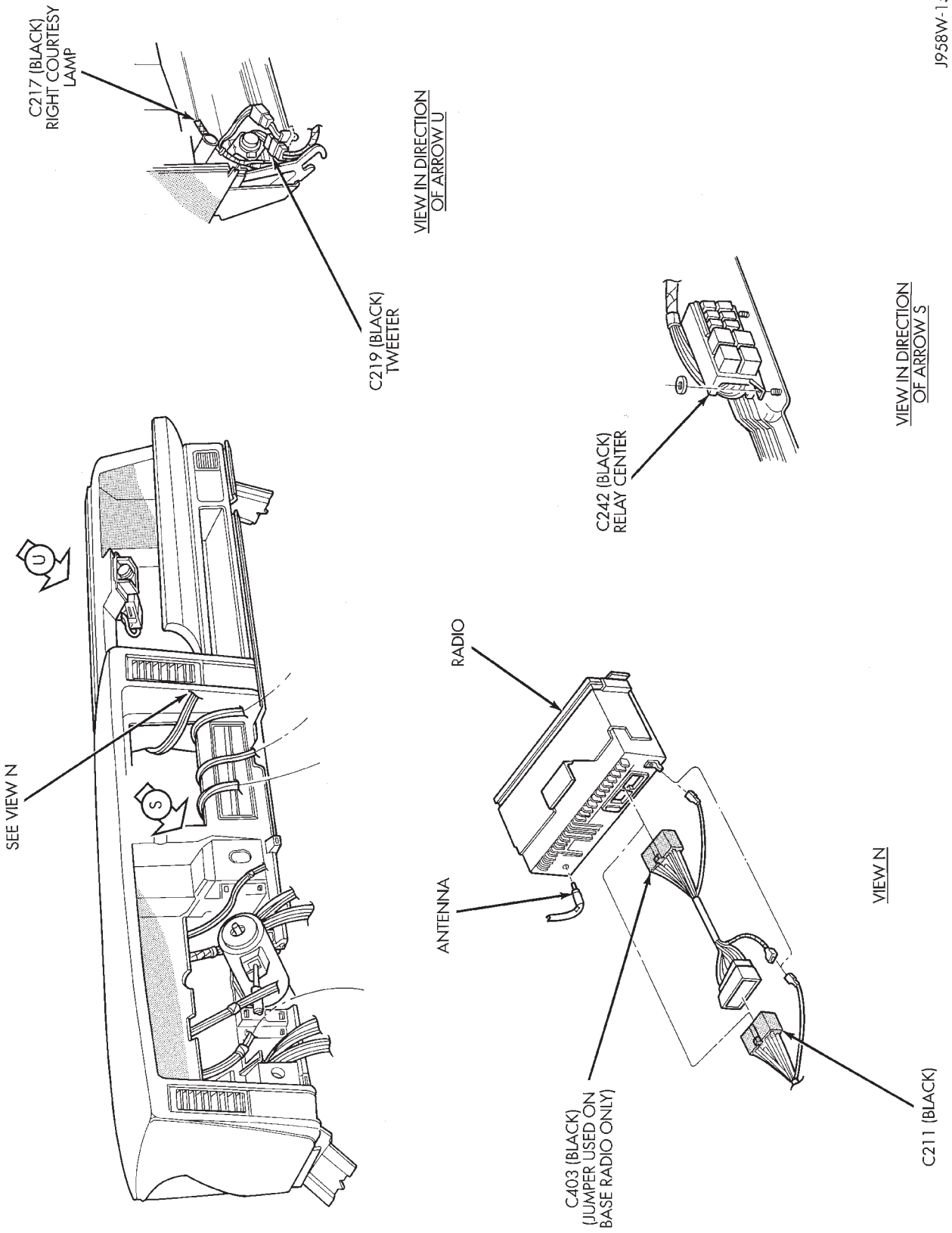
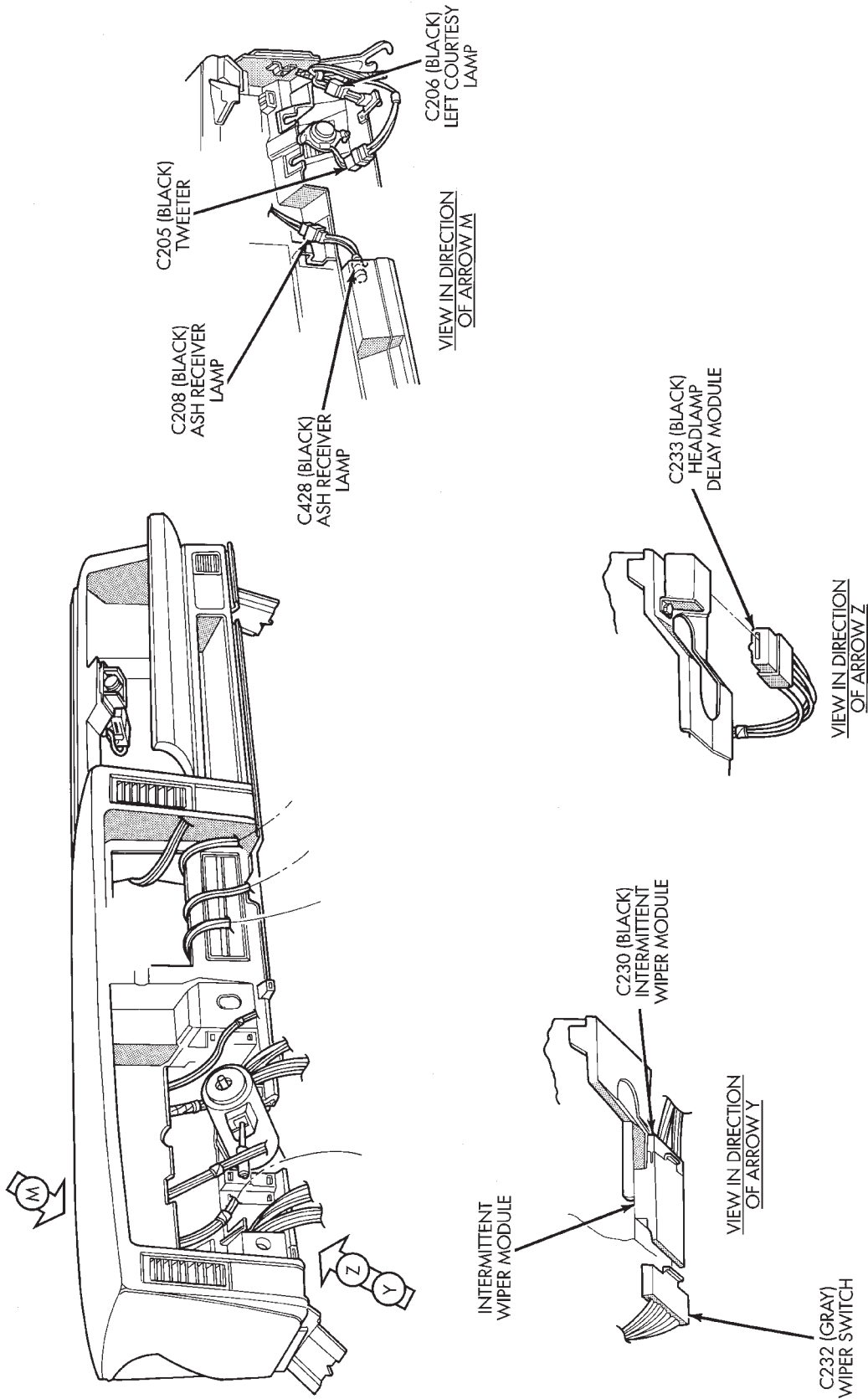


Fig. 10 Instrument Panel Wiring Connectors—Left Side



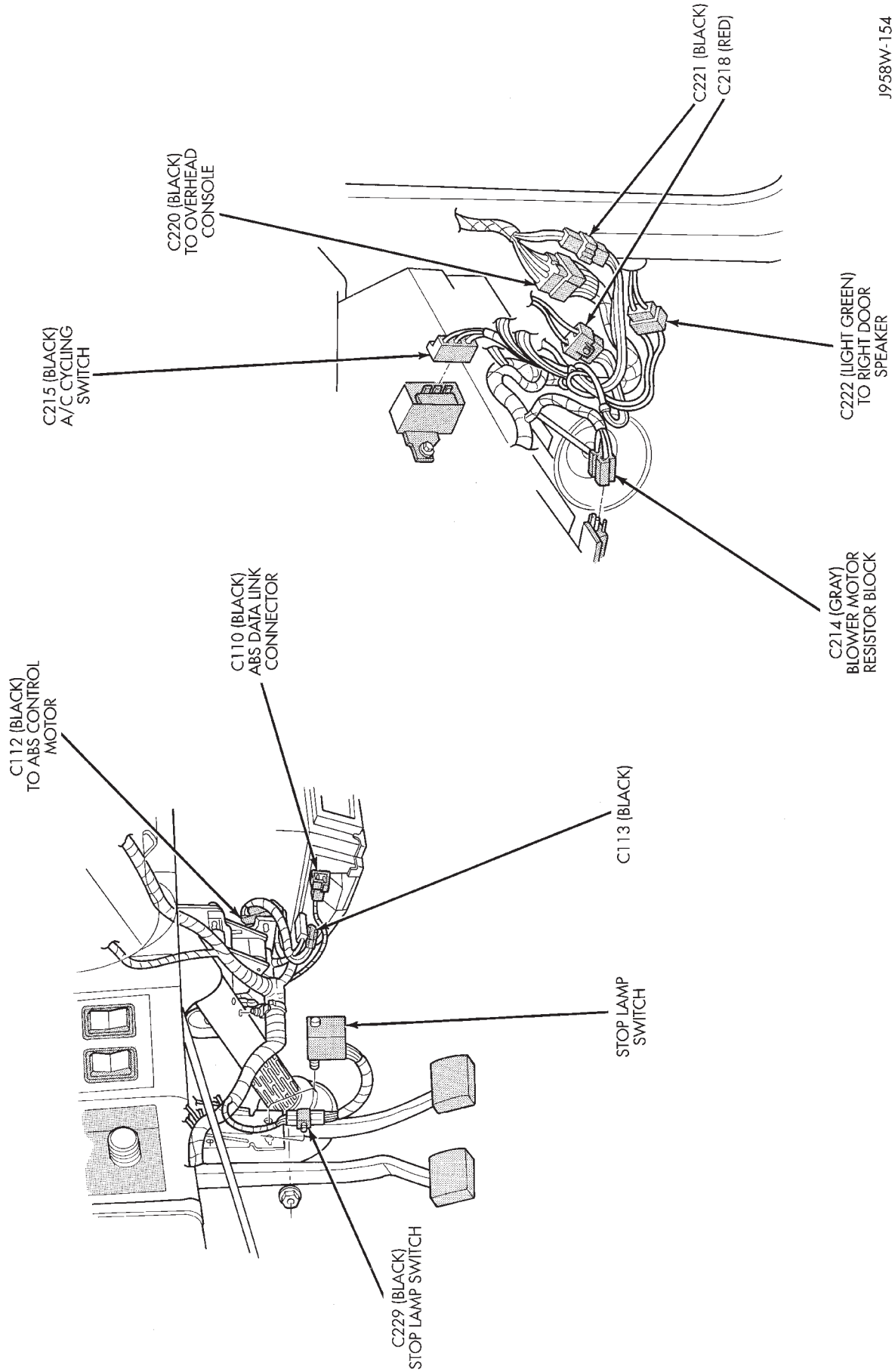
J958W-152

Fig. 11 Instrument Panel Wiring Connectors—Center



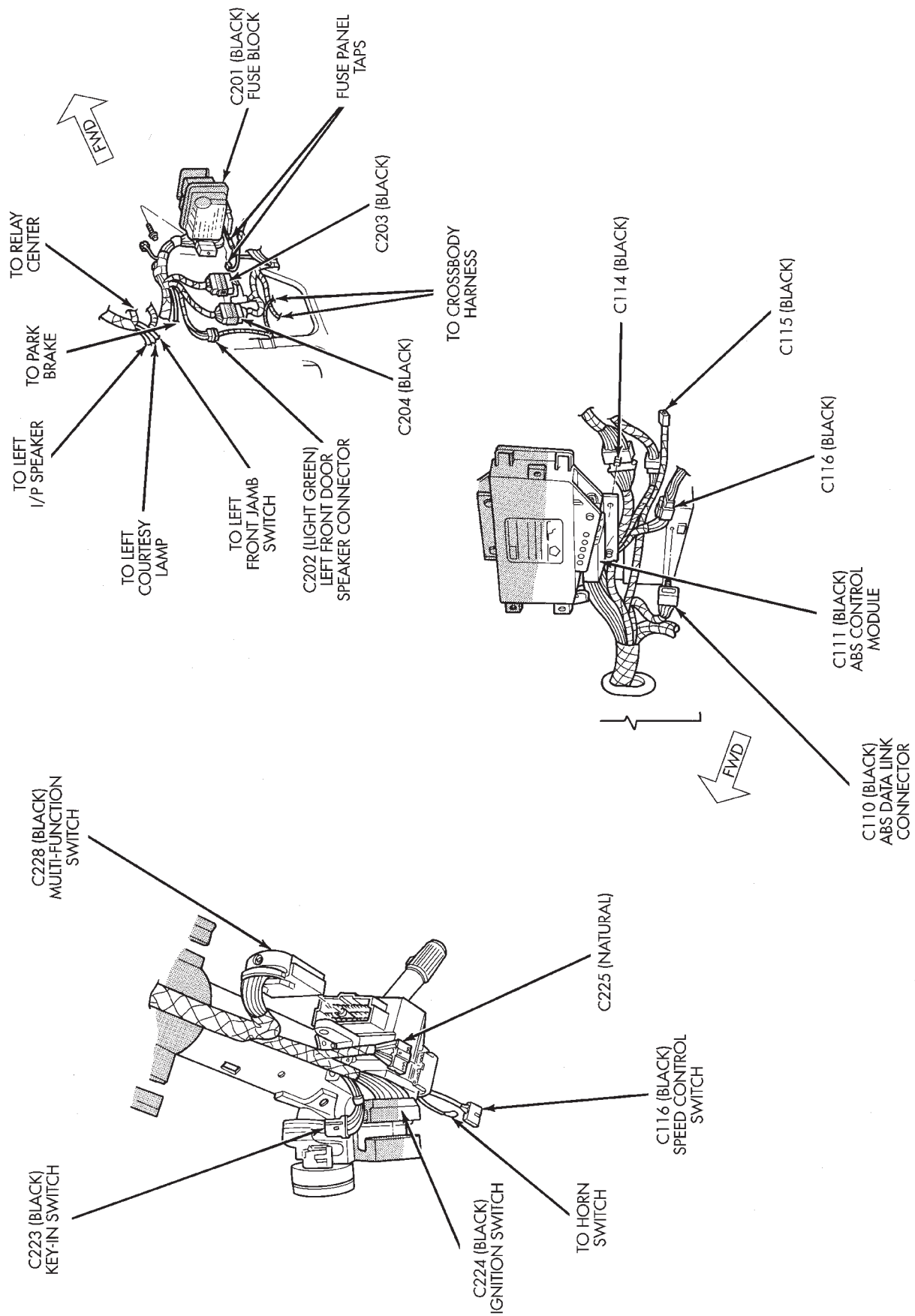
J958W-153

Fig. 12 Instrument Panel Wiring Connectors



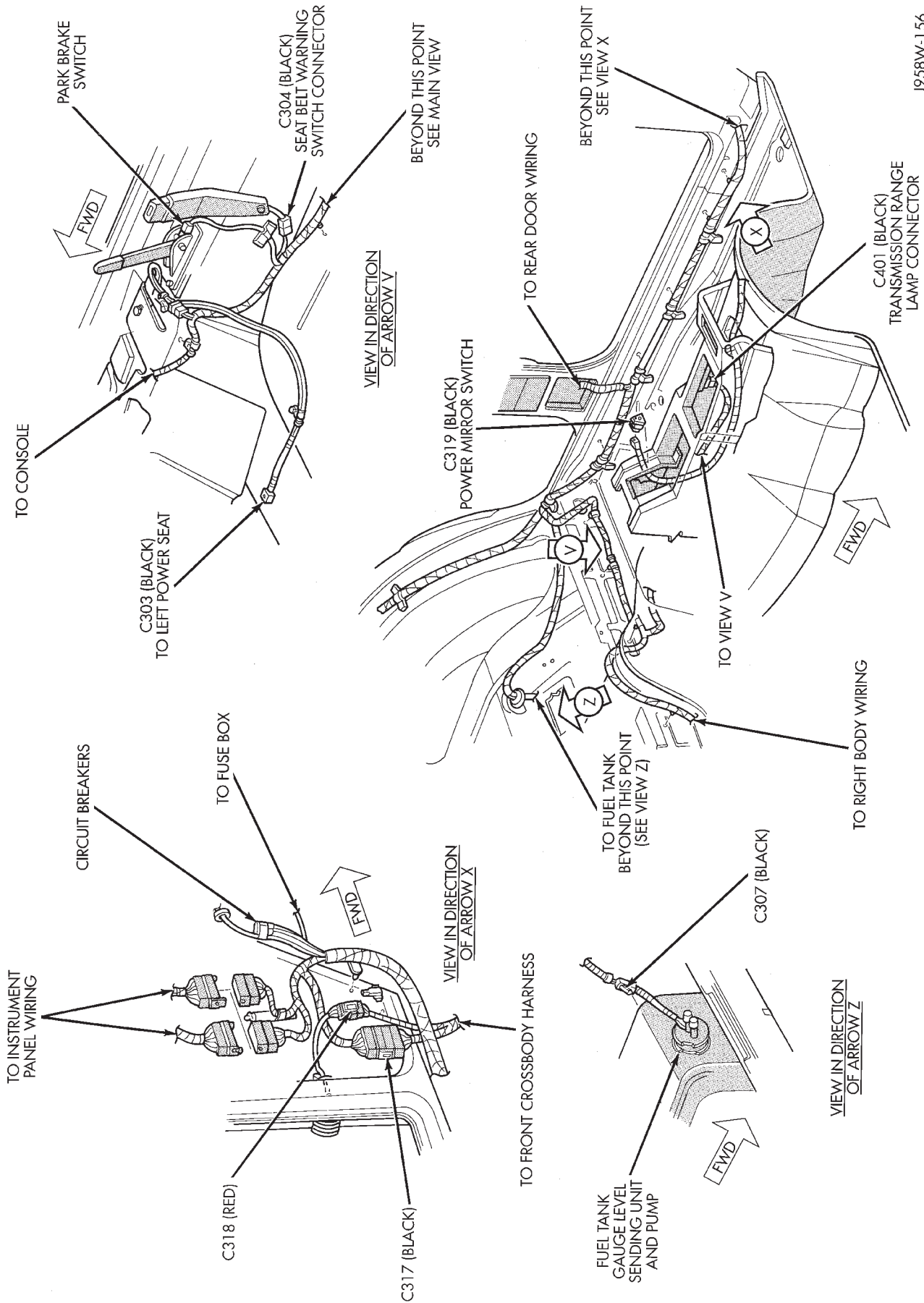
J958W-154

Fig. 13 Stop Lamp Switch, Blower Motor and ABS Control Module Wiring Connectors



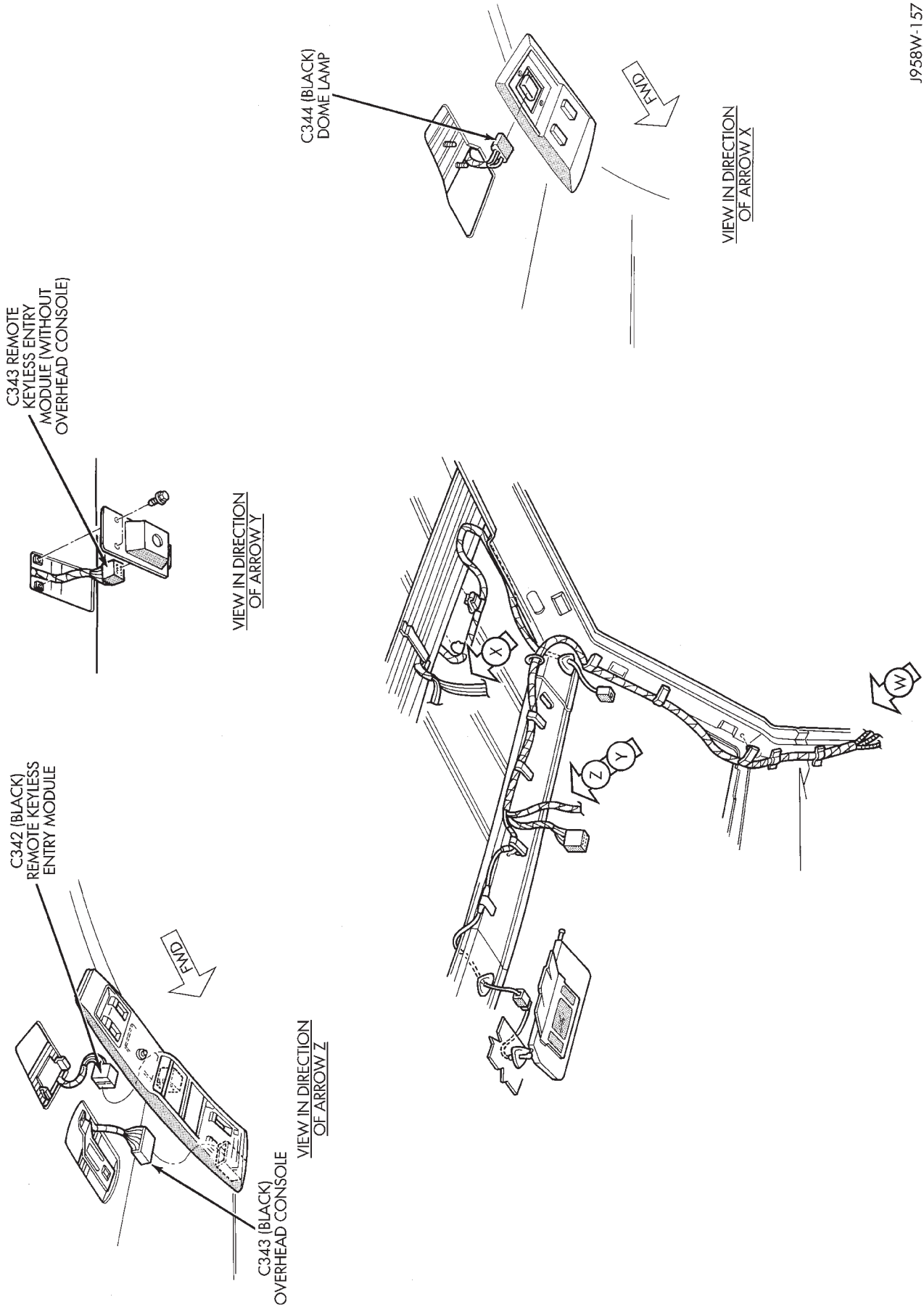
J958W-155

Fig. 14 Steering Column, Fuse Panel and ABS Control Module Wiring Connectors



J958W-156

Fig. 15 Body Wiring Connectors



J958W-157

Fig. 16 Dome Lamp and Overhead Console Wiring Connectors

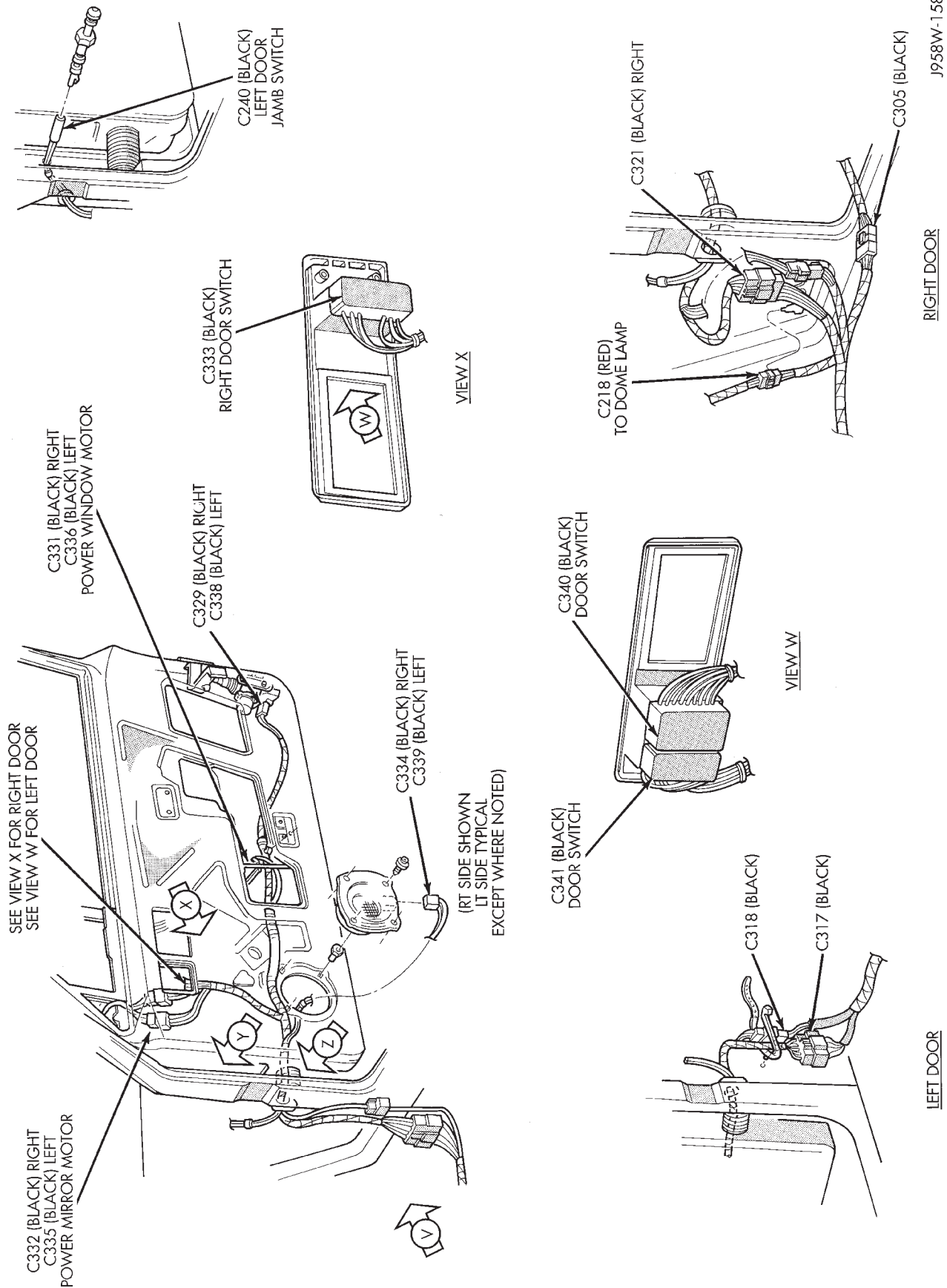
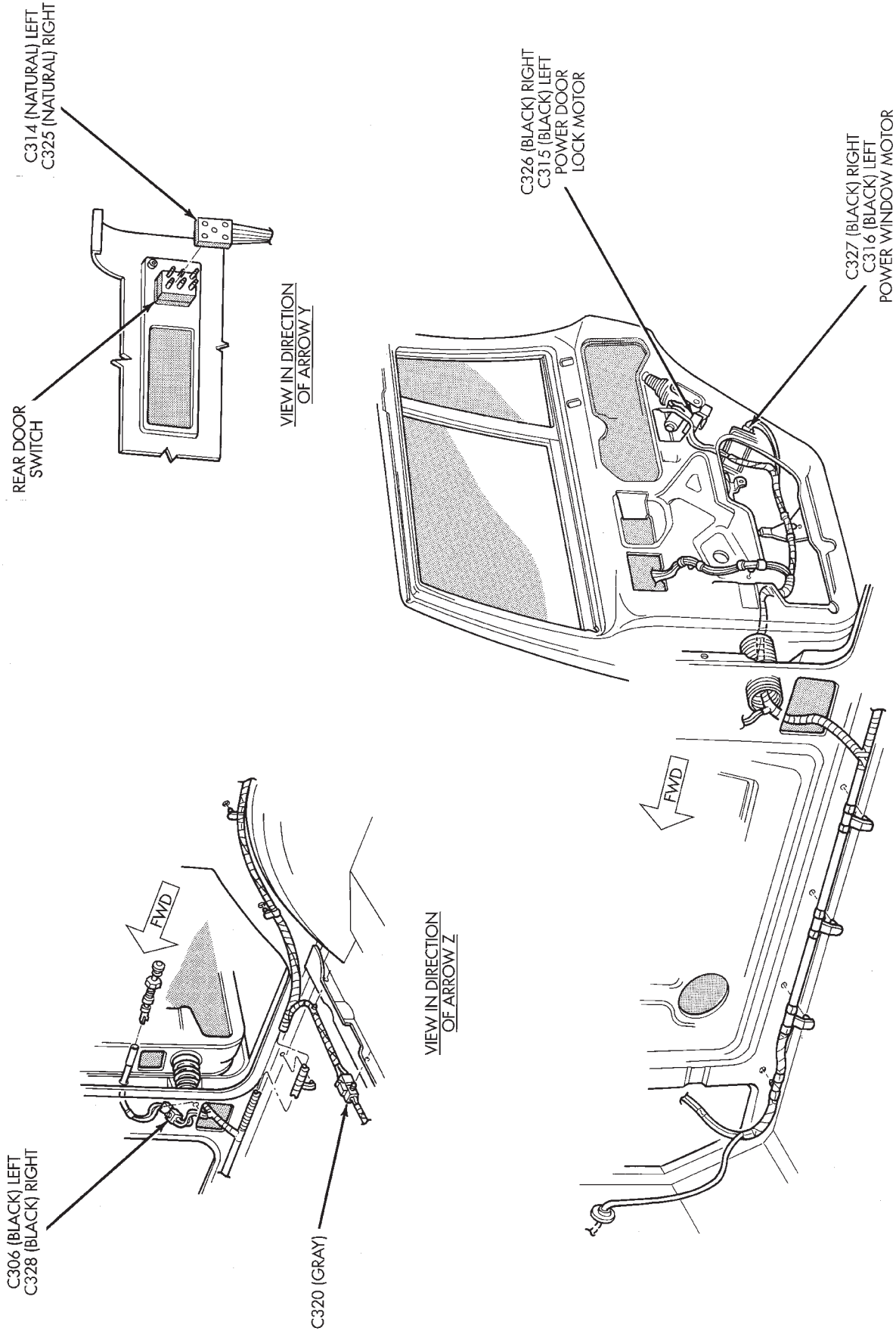


Fig. 17 Front Door Wiring Connectors



J958W-159

REAR DOOR WIRING CONNECTORS

Fig. 18 Rear Door Wiring Connectors

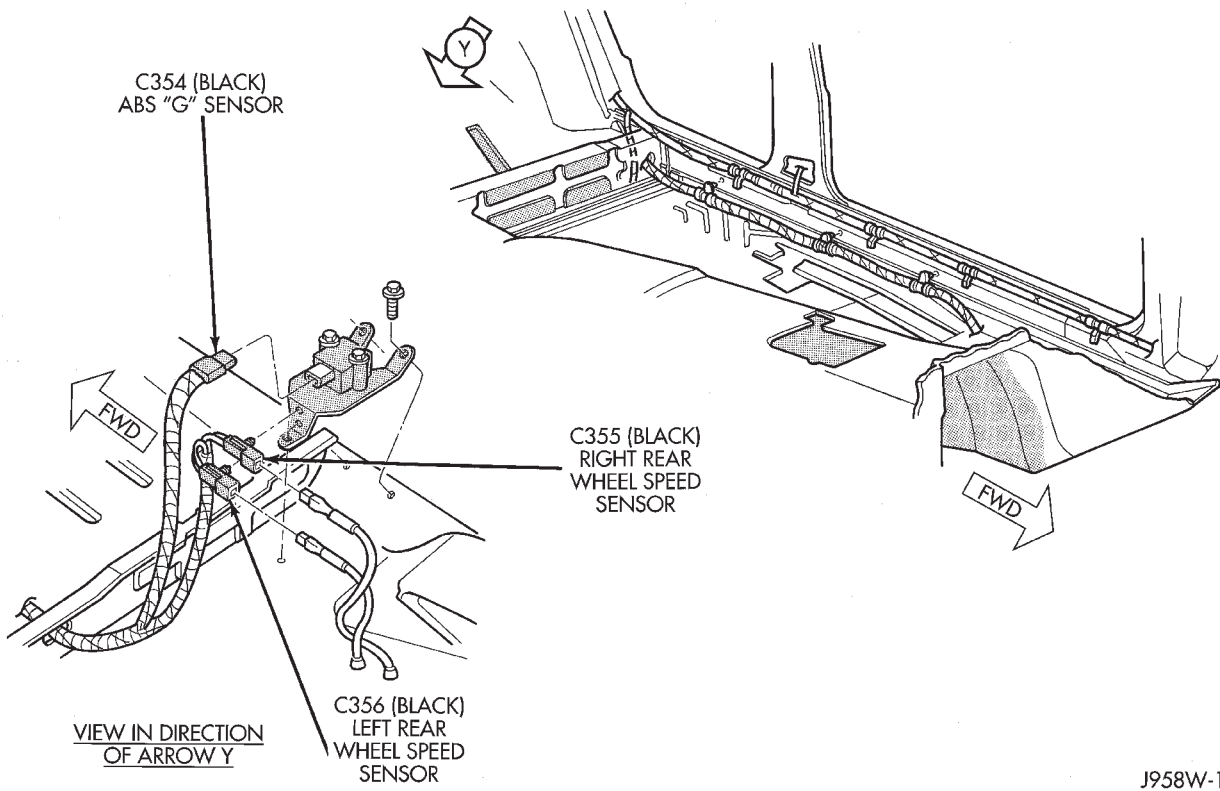


Fig. 19 ABS Sensors Wiring Connections

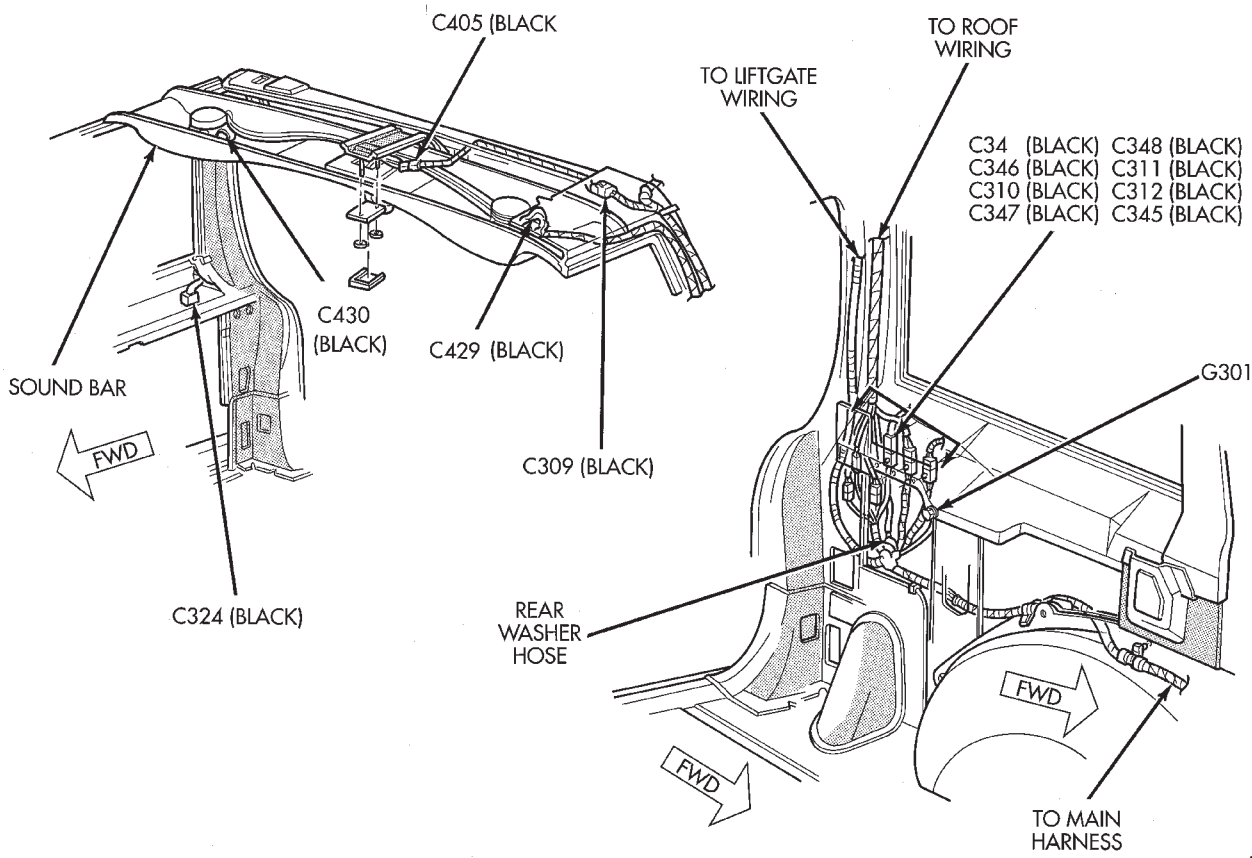


Fig. 20 Rear Compartment Wiring Connectors

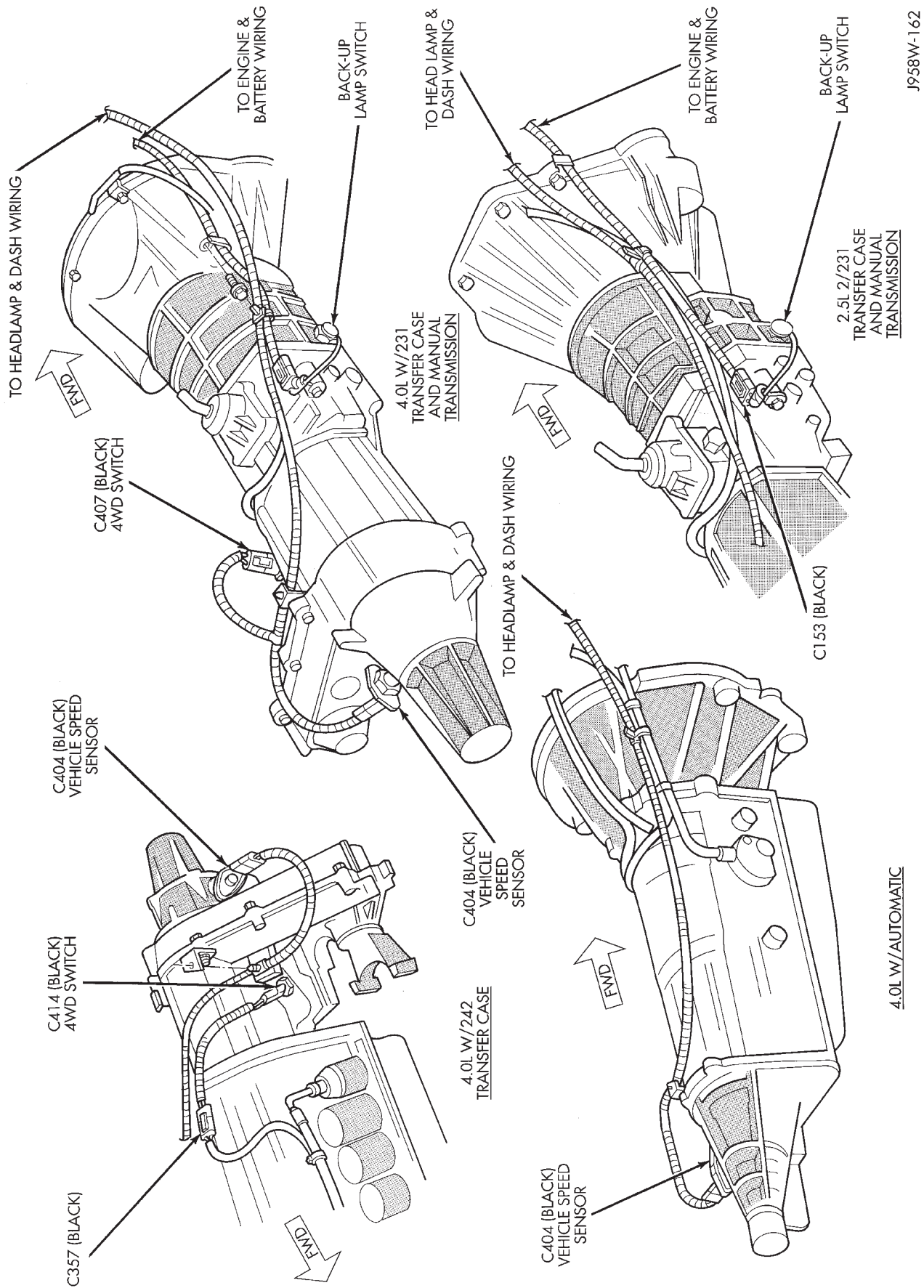
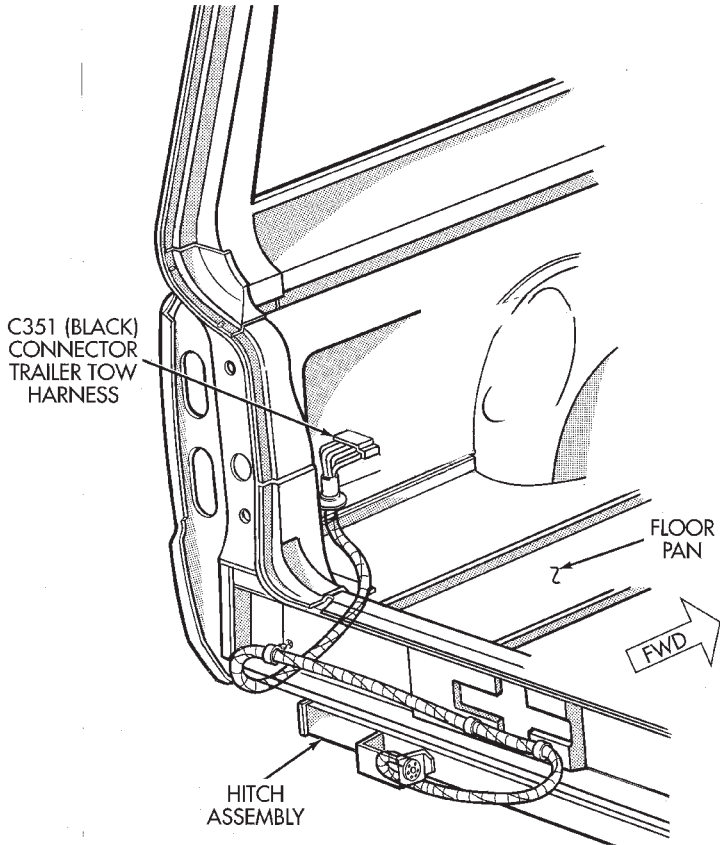


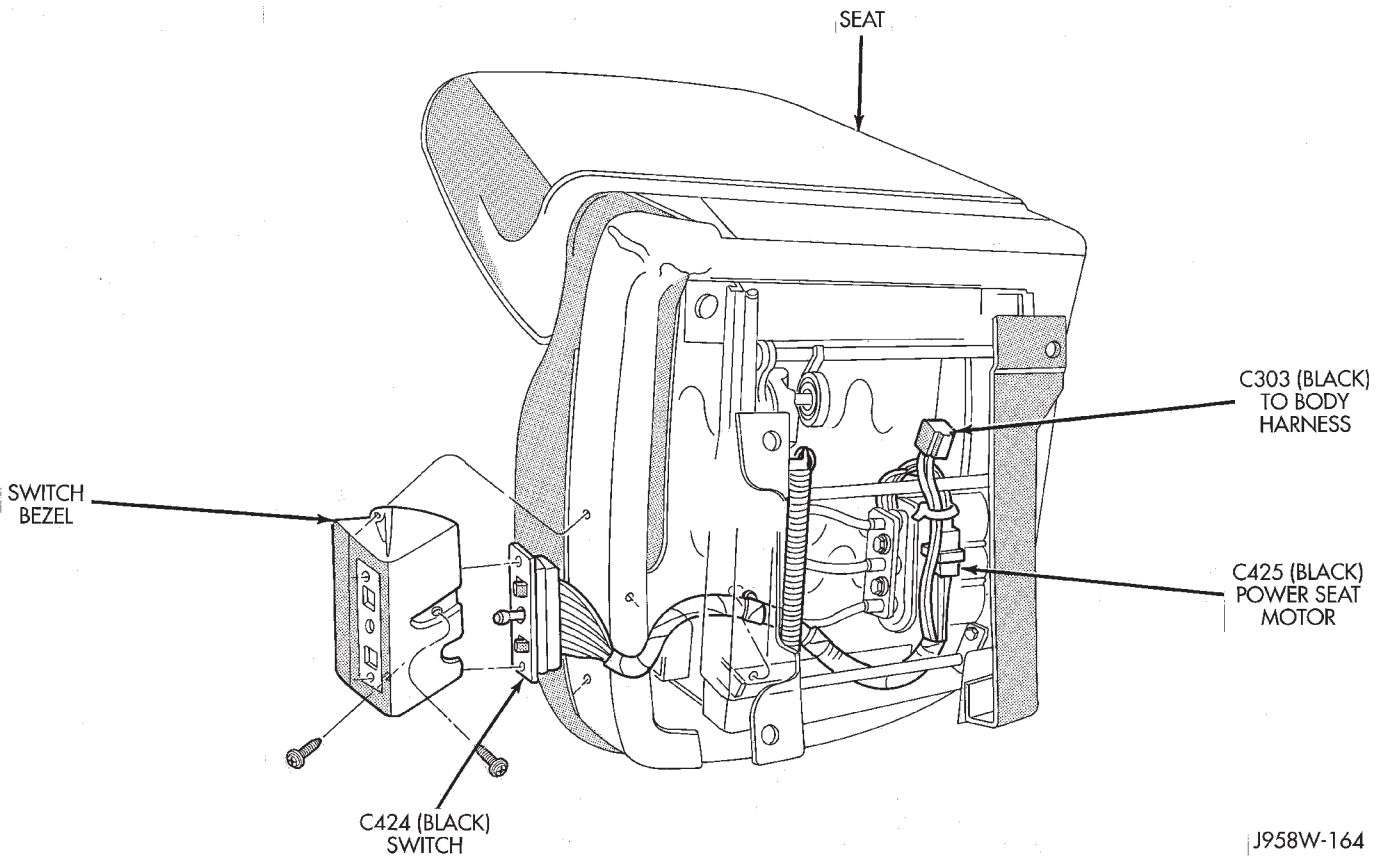
Fig. 21 Transmission Wiring Connectors

J958W-162



J958W-163

Fig. 22 Trailer Tow Connector



J958W-164

Fig. 23 Power Seat Wiring Connectors

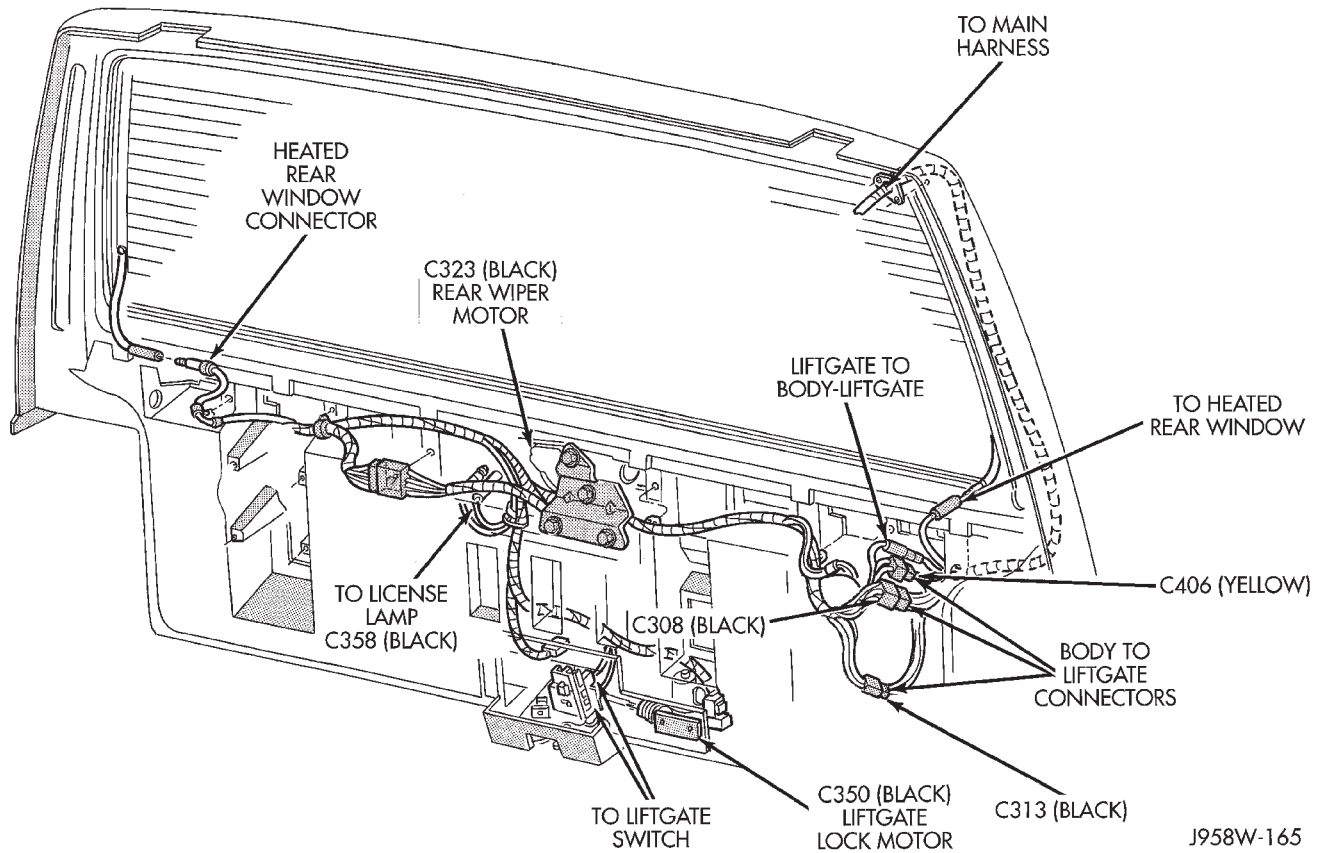
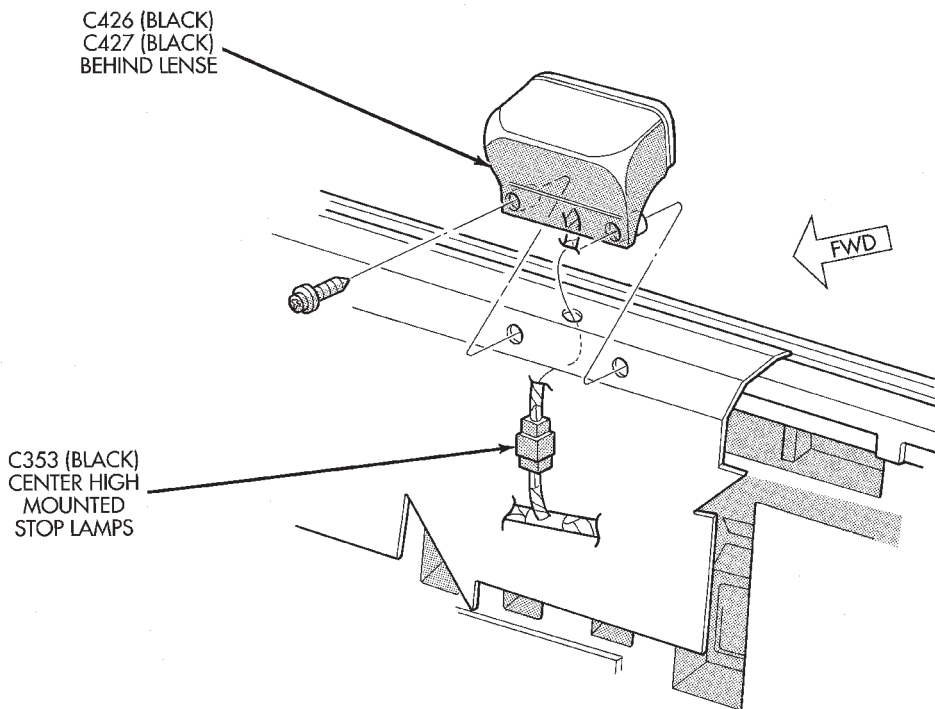


Fig. 24 Liftgate Wiring Connector



J958W-166

Fig. 25 Center High Mounted Stop Lamps (CHMSL)

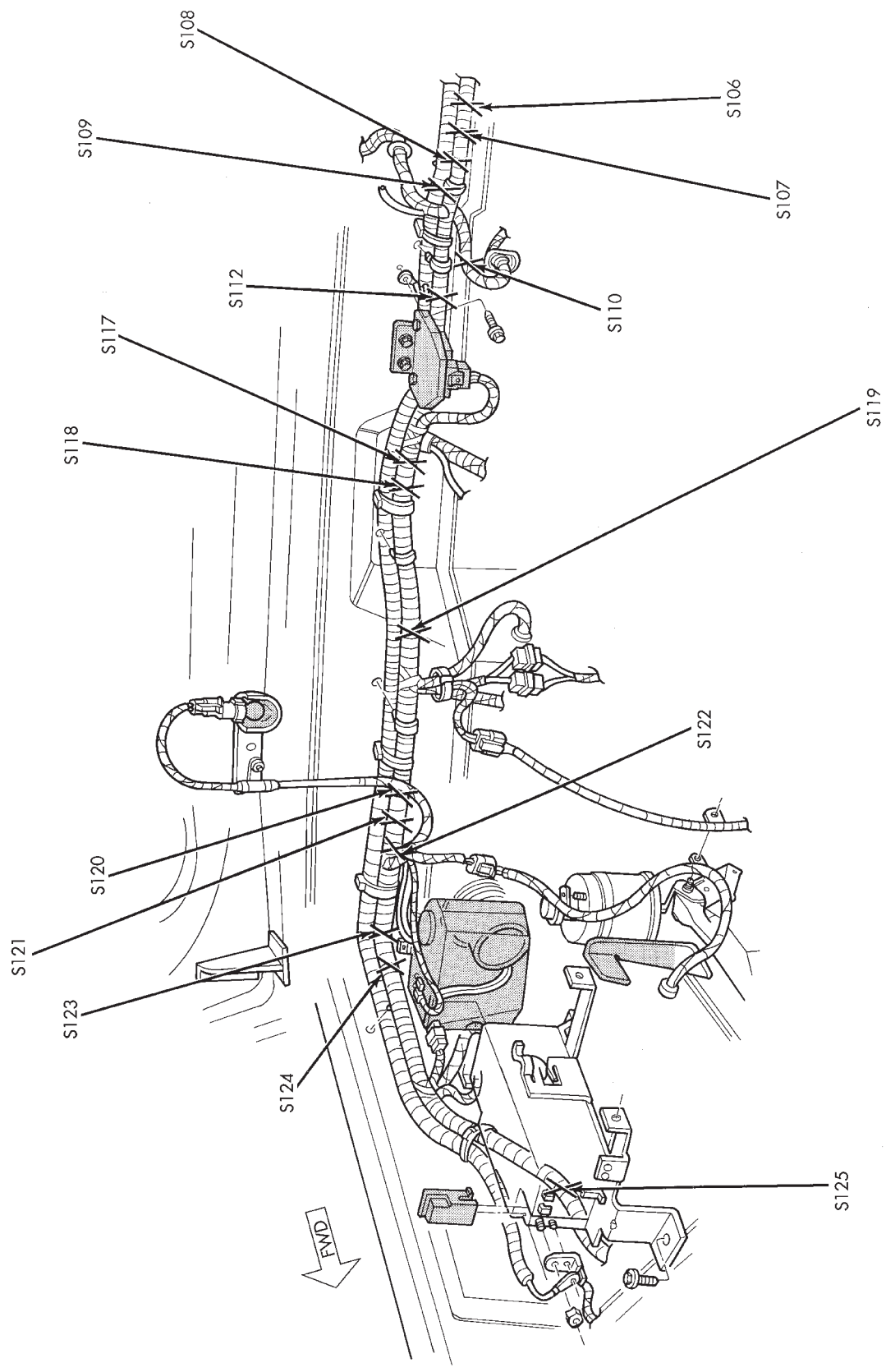
SPLICE LOCATIONS

GENERAL INFORMATION

This section provides illustrations identifying the general location of the splices in this vehicle. A splice index is provided. Use the wiring diagrams in each section for splice number identification. Refer to the index for the proper splice number.

SPLICE LOCATIONS

Splice Number	Locations	Fig.	Splice Number	Locations	Fig.
S101	Near Generator T/O	.4	S206	Near T/O for Telltale	.6
S102	Near Bulkhead T/O	.2	S207	Near T/O for Cluster	.6
S103	Near Bulkhead T/O	.2	S208	Near T/O for Cluster	.6
S104	Near Bulkhead T/O	.2	S209	Right Side of Cluster	.6
S105	Near Bulkhead T/O	.2	S210	Right Side of Cluster	.6
S106	Near Bulkhead T/O	.1	S211	Near Instrument Panel Ground T/O	.6
S107	Near Wiper Motor T/O	.1	S212	Near Wiper Switch T/O	.6
S108	Near Wiper Motor T/O	.1	S213	Near Antenna T/O	.7
S109	Near Wiper Motor T/O	.1	S214	Near Blower Resistor T/O	.7
S110	Center of Dash Panel Near Grommet	.1	S215	Right Side of Instrument Panel	.7
S111	Near T/O for ABS Diode	.7	S301	In Left Rear Door T/O	.8
S112	Near T/O for Map Sensor	.1	S302	Near Left C-Pillar	.8
S113	Near T/O for Injector #5 and #6	.4	S303	Near Left C-Pillar	.8
S114	Near T/O for Injector #5 and #6	.4	S304	Near Left C-Pillar	.8
S115	Near T/O for Injector #5 and #6	.4	S305	Near Left C-Pillar	.8
S116	Near T/O for Injector #5 and #6	.4	S306	Near Left C-Pillar	.8
S117	Near T/O for Map Sensor	.1	S307	Left Rear Wheel Well	.10
S118	Near T/O for Map Sensor	.1	S308	Left Rear Wheel Well	.10
S119	Near Distributor T/O	.1	S309	Near Left Rear Door T/O	.8
S120	Between Distributor T/O and Underhood Lamp T/O	.1	S310	Near Left Rear Door T/O	.8
S121	Between Distributor T/O and Underhood Lamp T/O	.1	S311	Left Side of Floor Tunnel	.9
S122	Between Distributor T/O and Underhood Lamp T/O	.1	S312	Top of Floor Tunnel	.9
S123	RT Side of Cowl Panel	.1	S313	In Power Mirror Switch T/O	.9
S124	RT Side of Cowl Panel	.1	S314	Right A- Pillar	.11
S125	Near T/O for PDC	.1	S315	Near RT Vanity Mirror T/O	.11
S126	Near T/O for Oil Pressure Switch	.5	S316	Near RT Vanity Mirror T/O	.11
S127	Near Generator T/O	.5	S317	In Trailer Tow Harness Near Grommet	.14
S128	LT Side of Grille Panel	.3	S318	In Trailer Tow Harness Near Grommet	.14
S129	LT Side of Grille Panel	.3	S319	In Liftgate	.13
S130	Center of Grille Panel	.3	S320	Right A-Pillar	.11
S201	Near Body Harness Connector T/O	.6	S321	In Left Front Door	.12
S202	Near Body Harness Connector T/O	.6	S401	In Left Rear Tail Lamp	.Not Shown
S203	Near Body Harness Connector T/O	.6	S402	In Right Rear Tail Lamp	.Not Shown
S204	Near Relay Center	.6	S403	In Left Rear Tail Lamp	.Not Shown
S205	Near T/O for Headlamp Switch	.6	S404	In Right Rear Tail Lamp	.Not Shown



J958W-128

Fig. 1 Engine Compartment Splices XJ

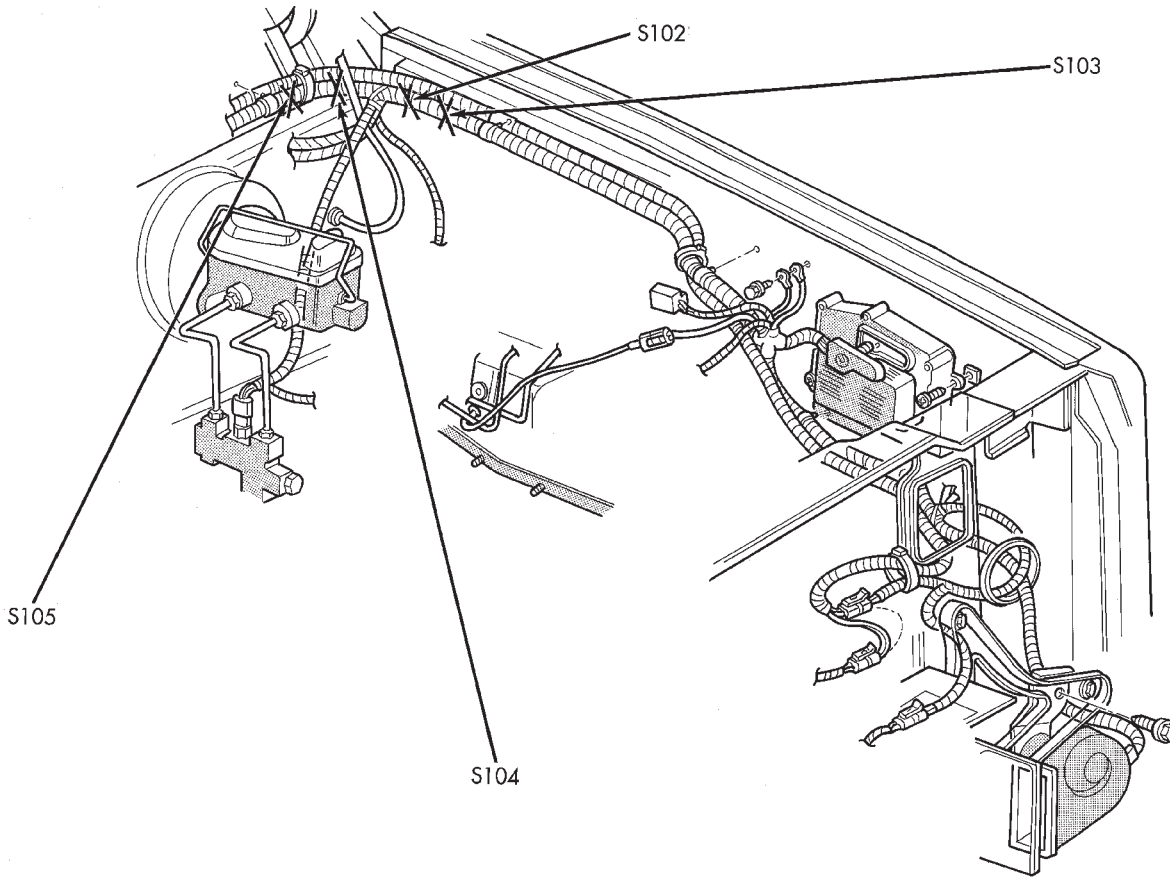


Fig. 2 Engine Compartment Splices XJ

J958W-129

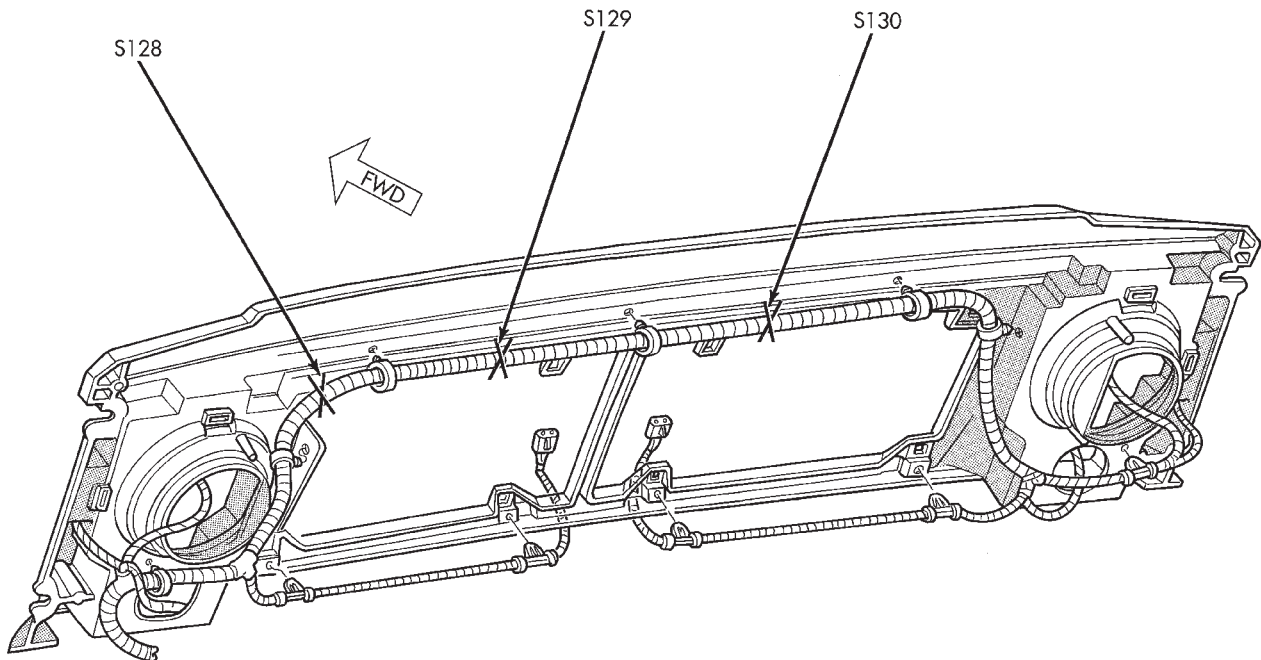
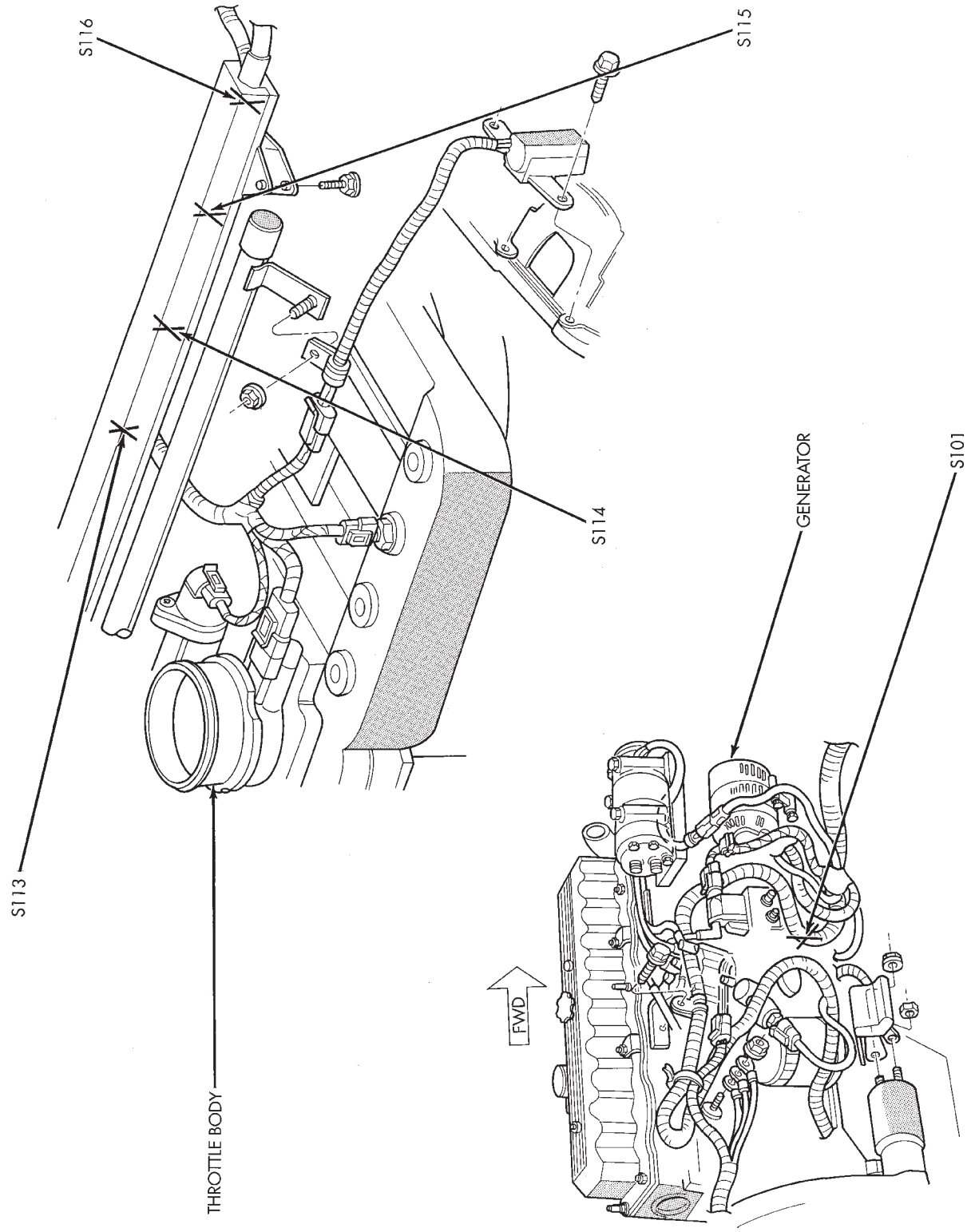


Fig. 3 Front End Splices XJ

J958W-130

J958W-131

Fig. 4 Engine Splices 4.0L XJ



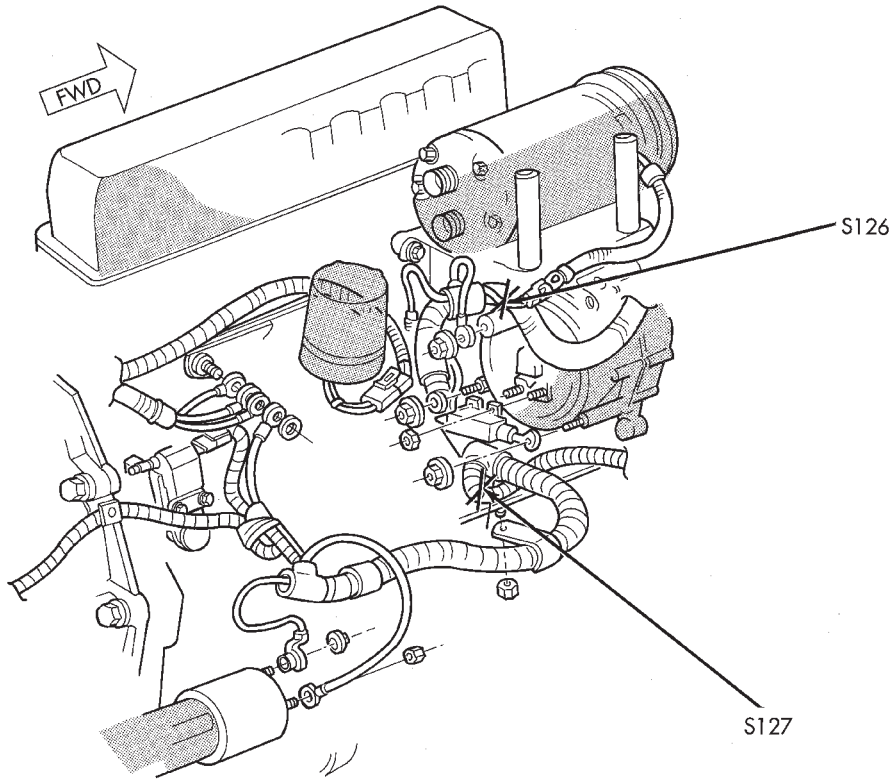


Fig. 5 Engine Splices 2.5L XJ

J958W-132

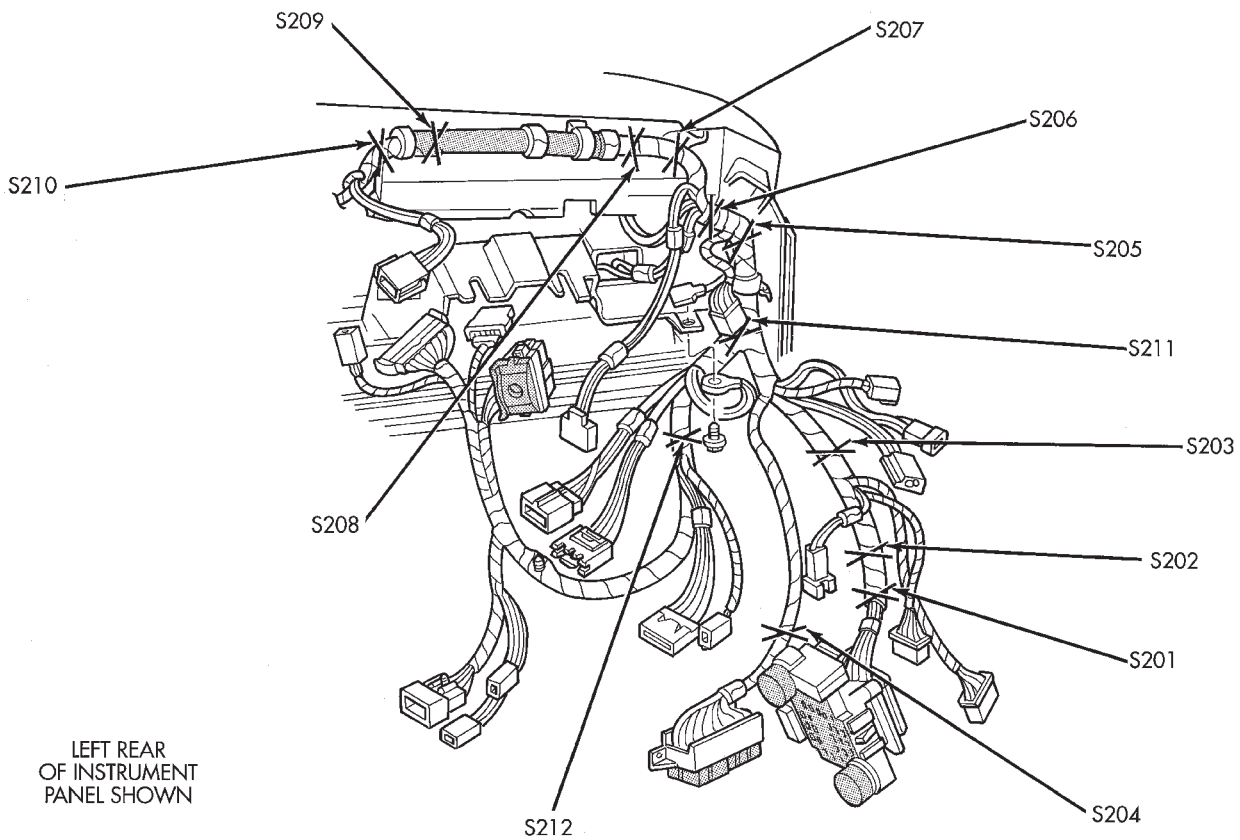


Fig. 6 Instrument Panel Splices XJ

J958W-133

J958W-134

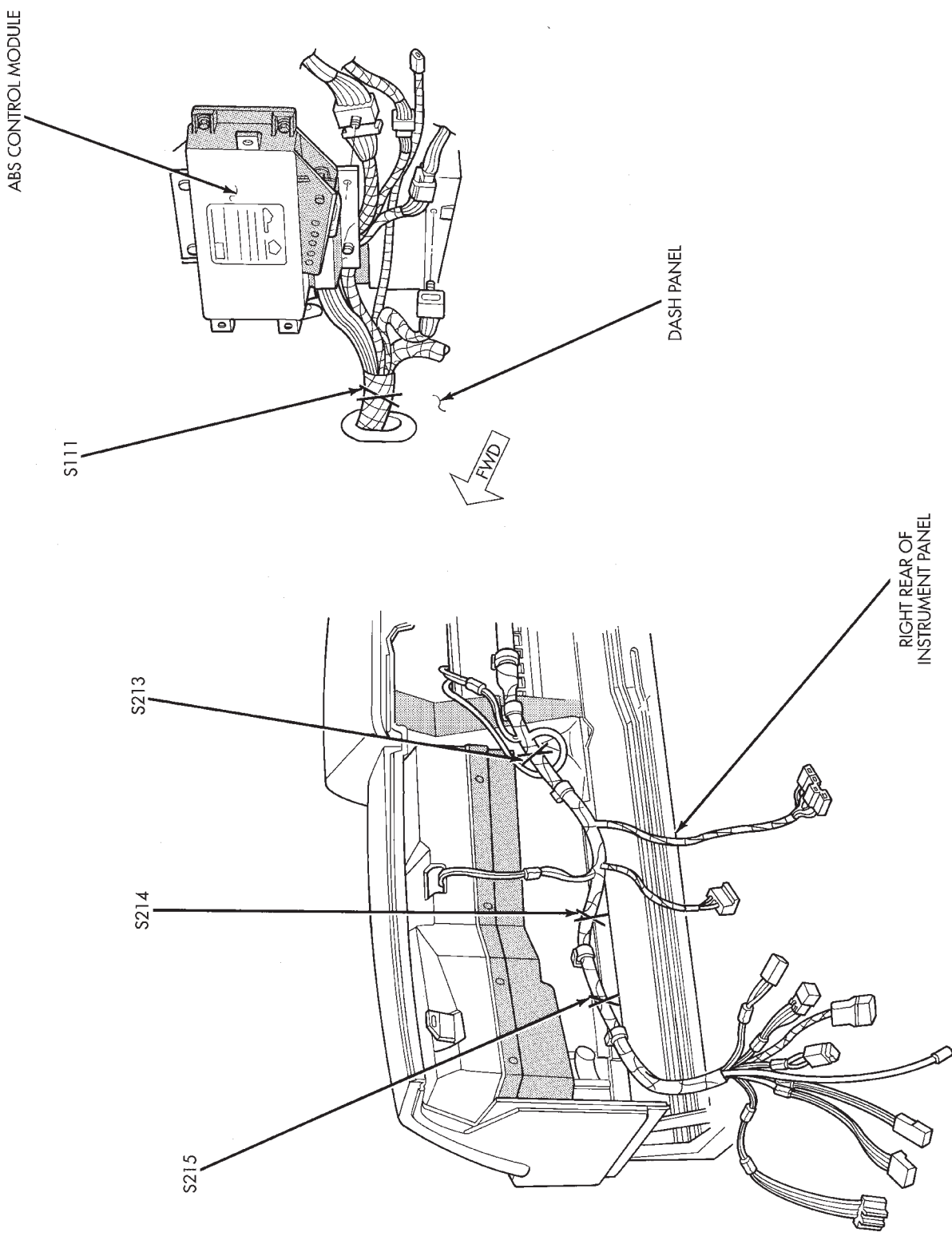


Fig. 7 Instrument Panel Splices XJ

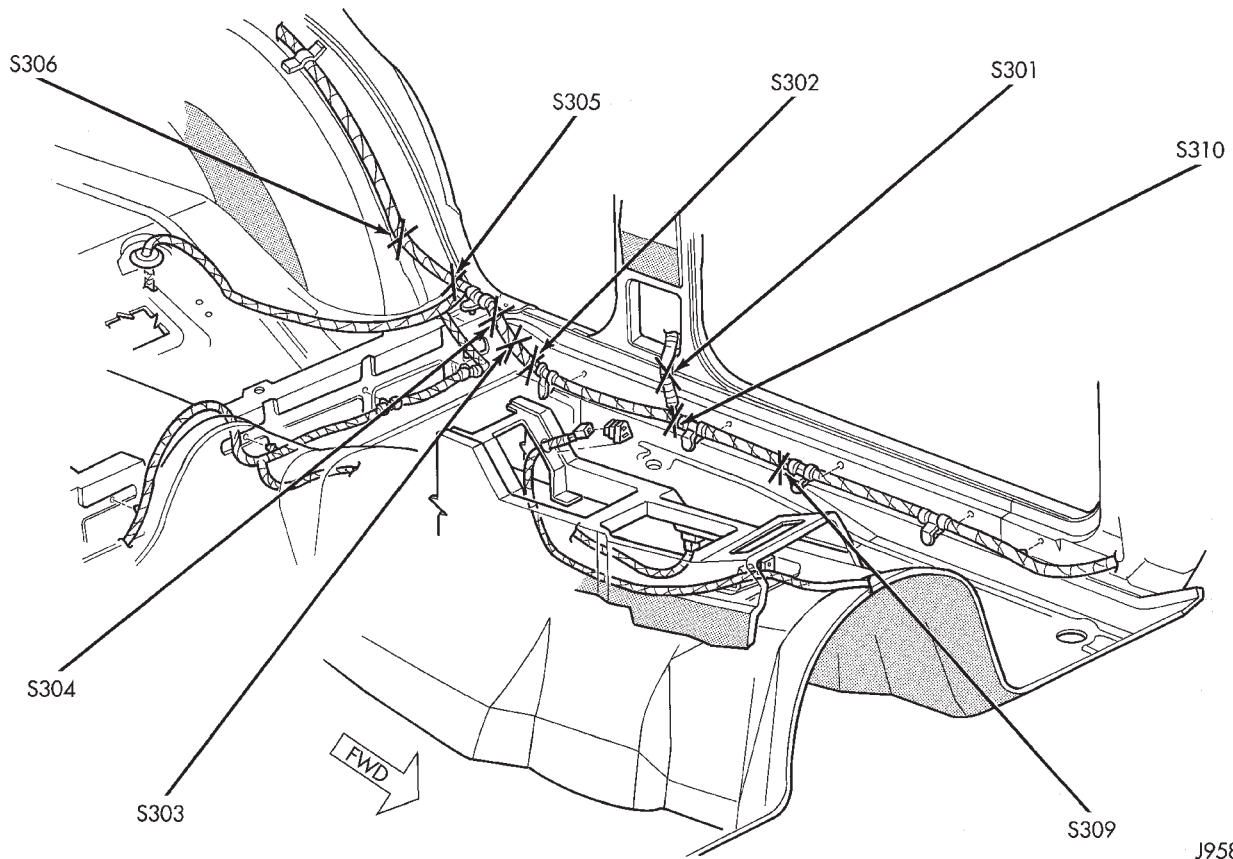


Fig. 8 Body Splices XJ

J958W-135

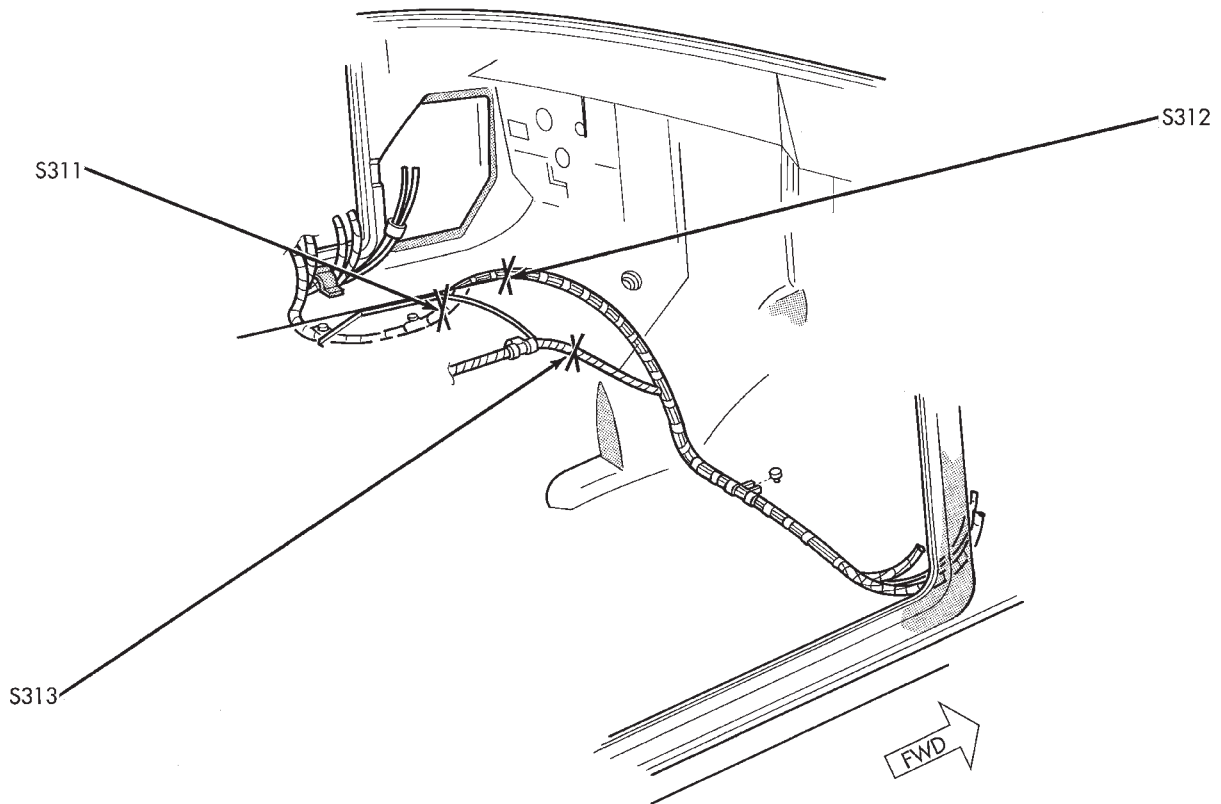
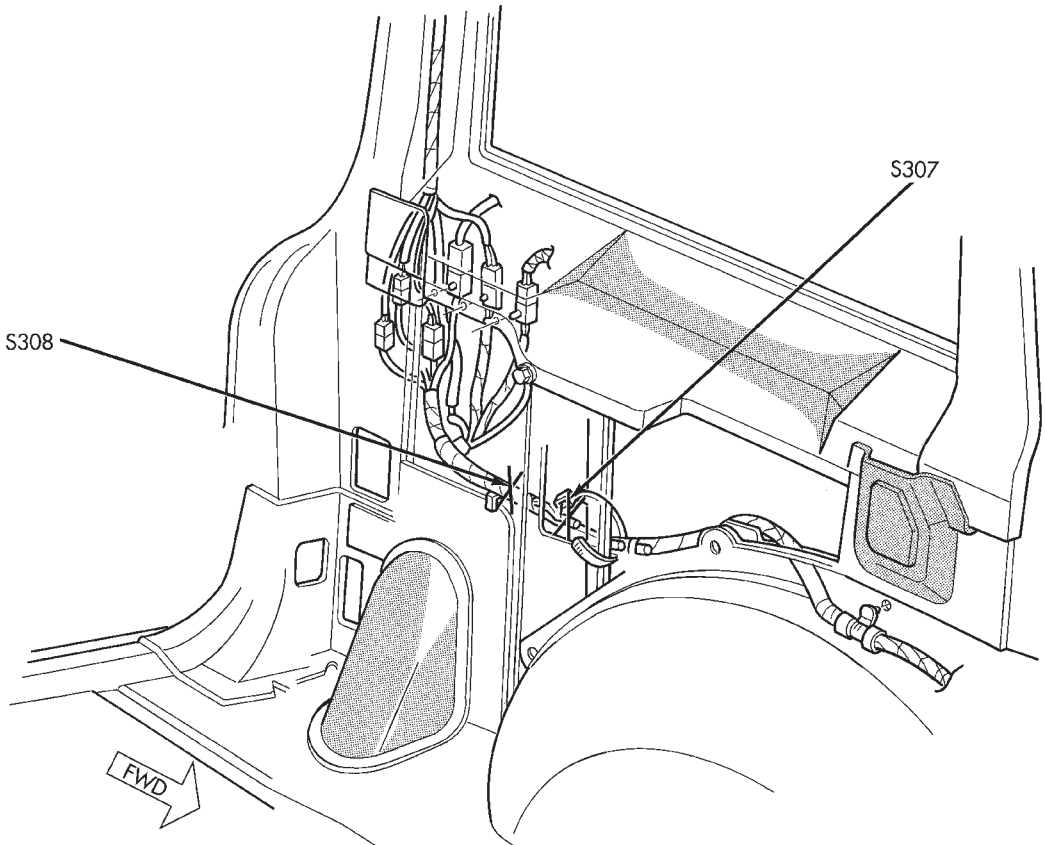


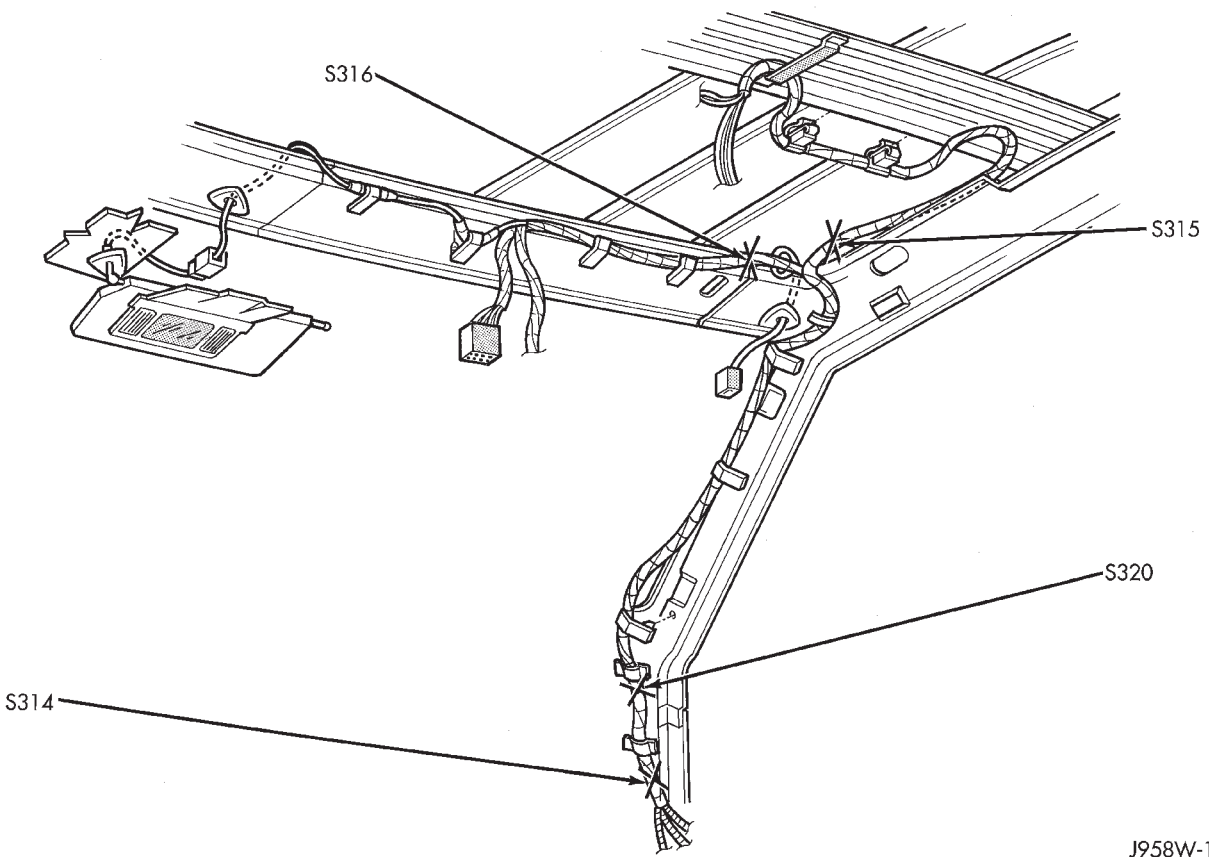
Fig. 9 Cross-body Splices XJ

J958W-136



J958W-137

Fig. 10 Body Splices XJ



J958W-138

Fig. 11 Roof Splices XJ

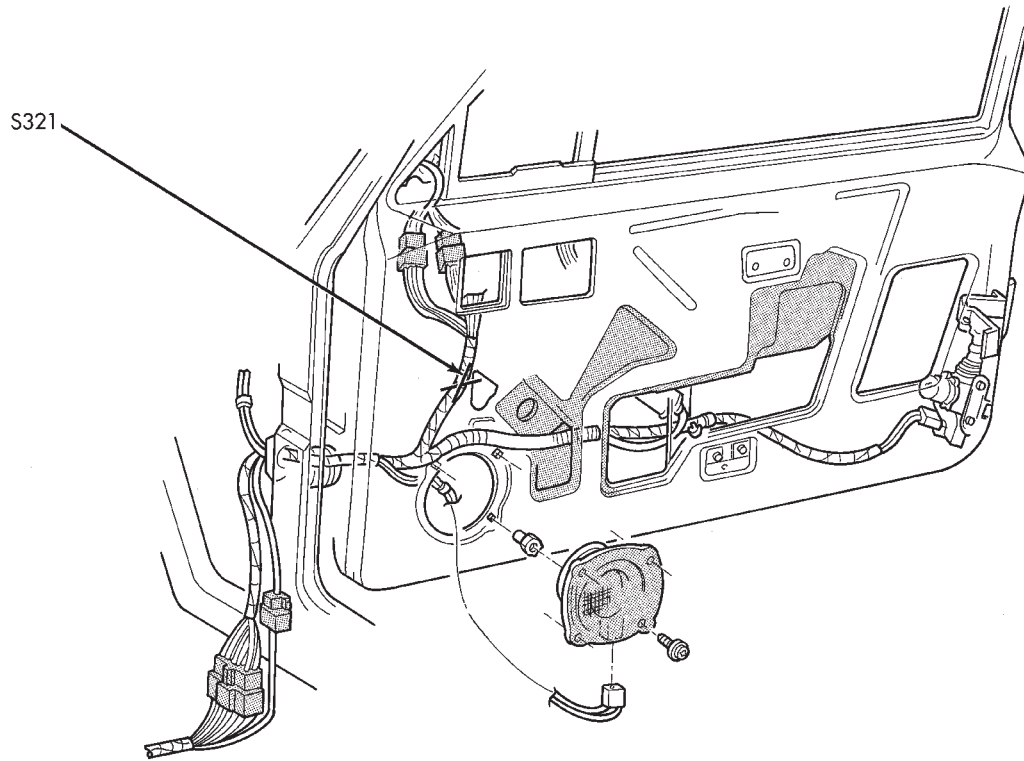


Fig. 12 Door Splices XJ

J958W-139

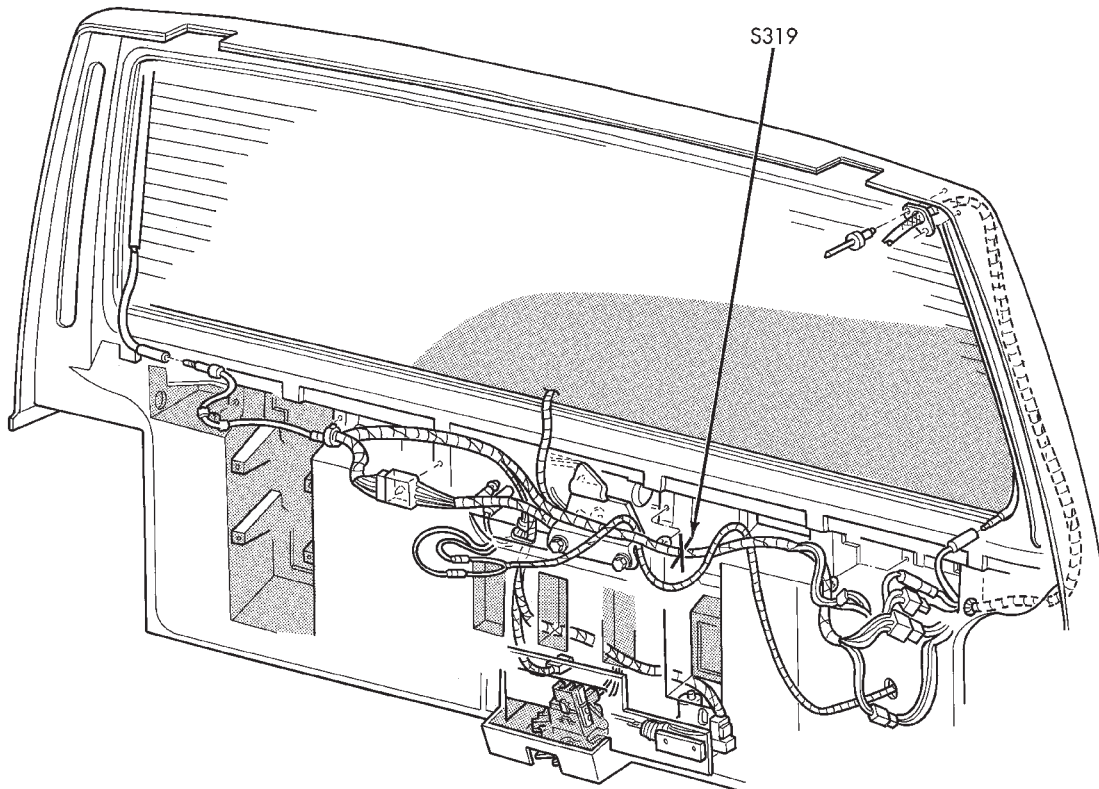
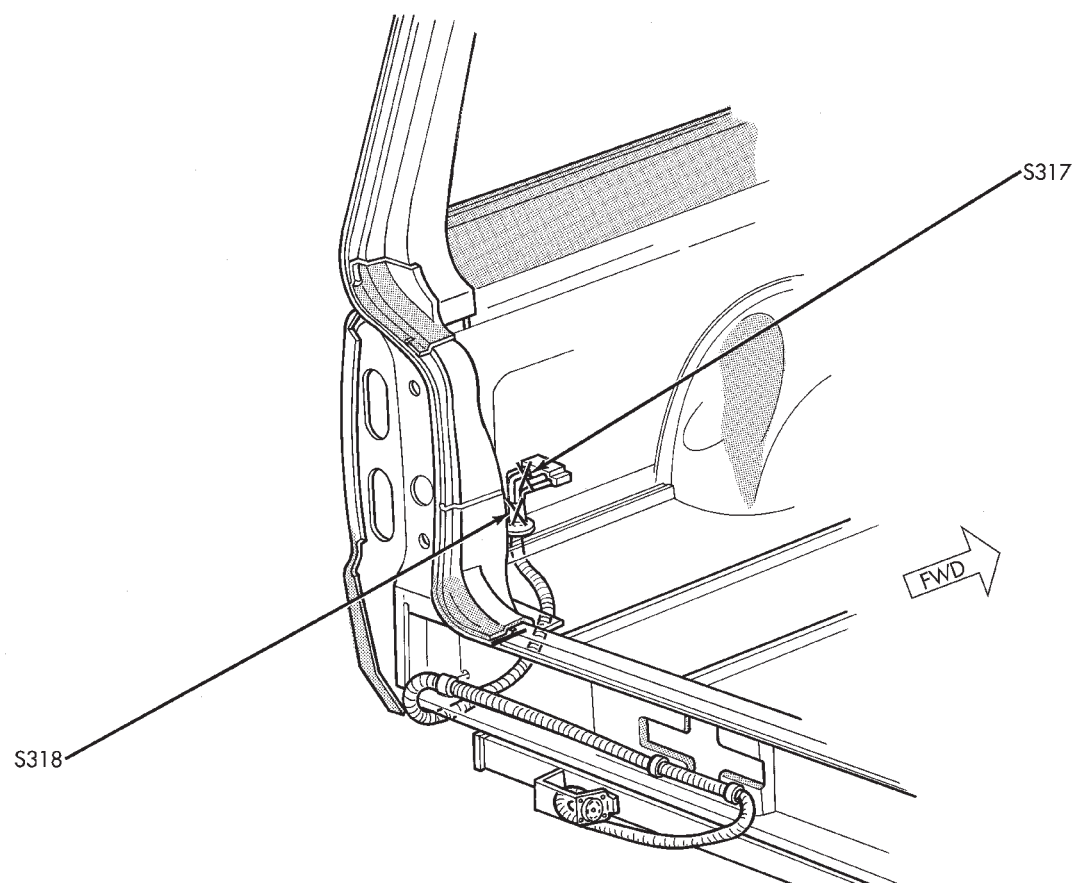


Fig. 13 Liftgate Splices XJ

J958W-140



J958W-141

Fig. 14 Trailer Tow Splices XJ