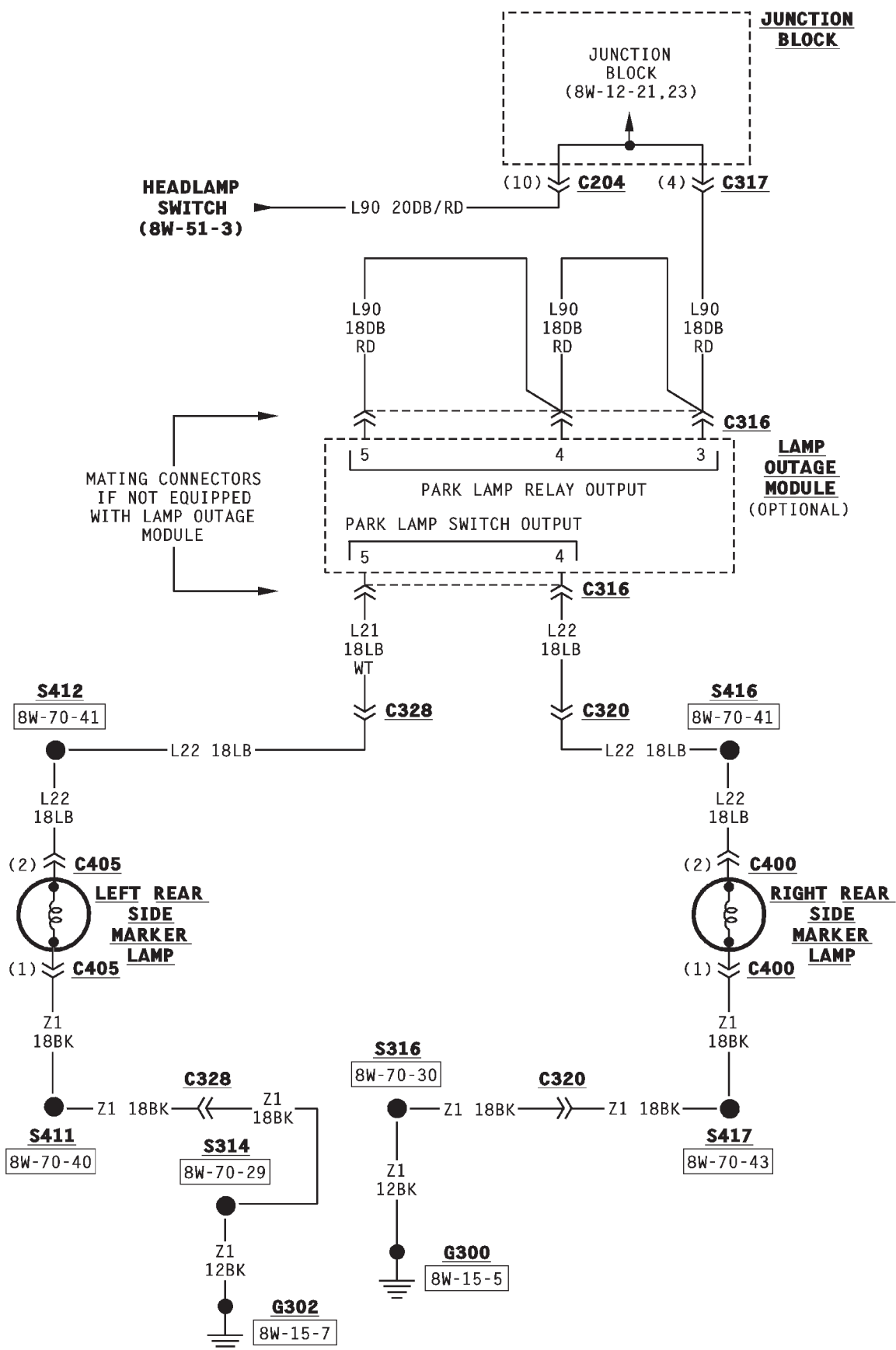
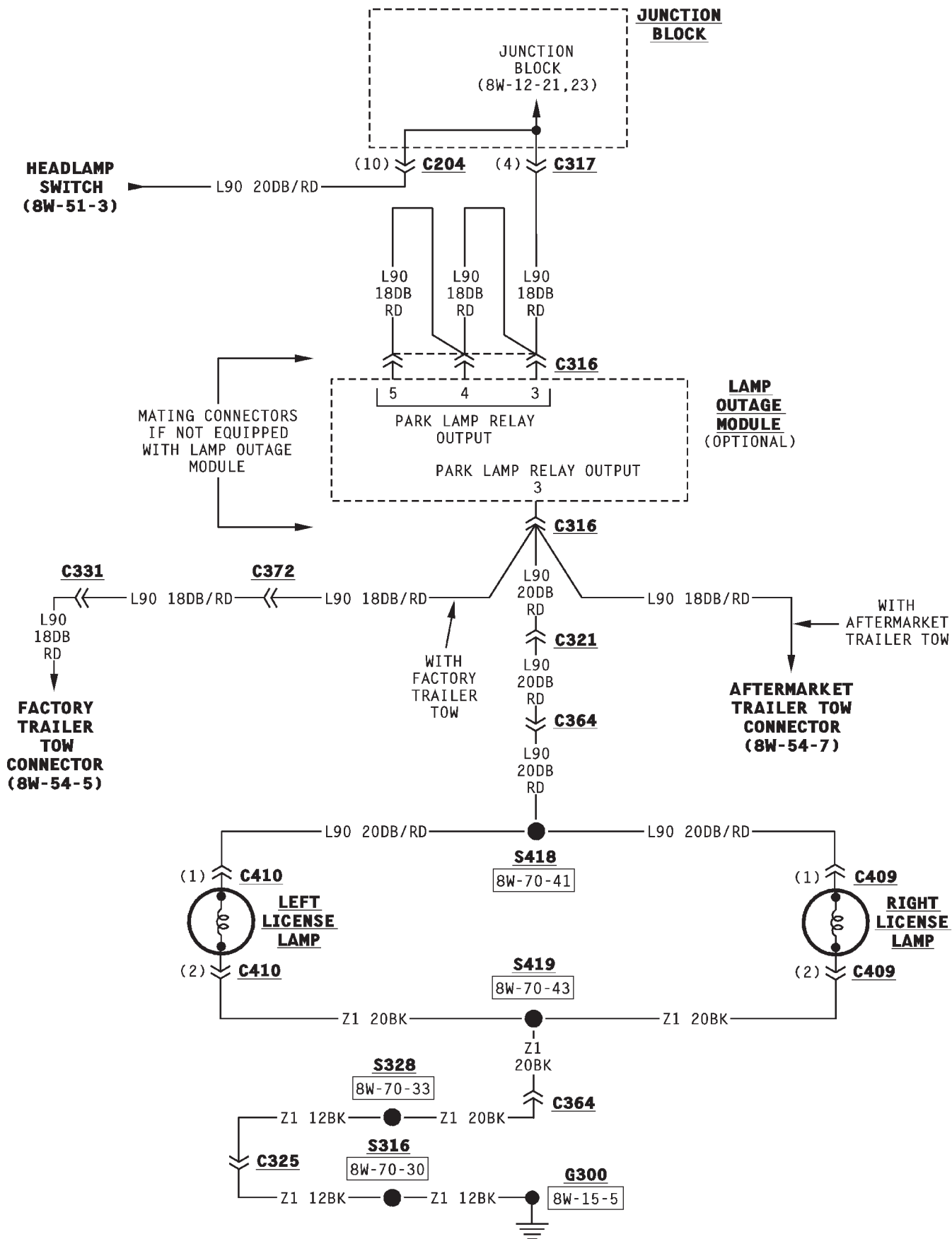






**BATTERY
POSITIVE
TERMINAL
(8W-20-3)**

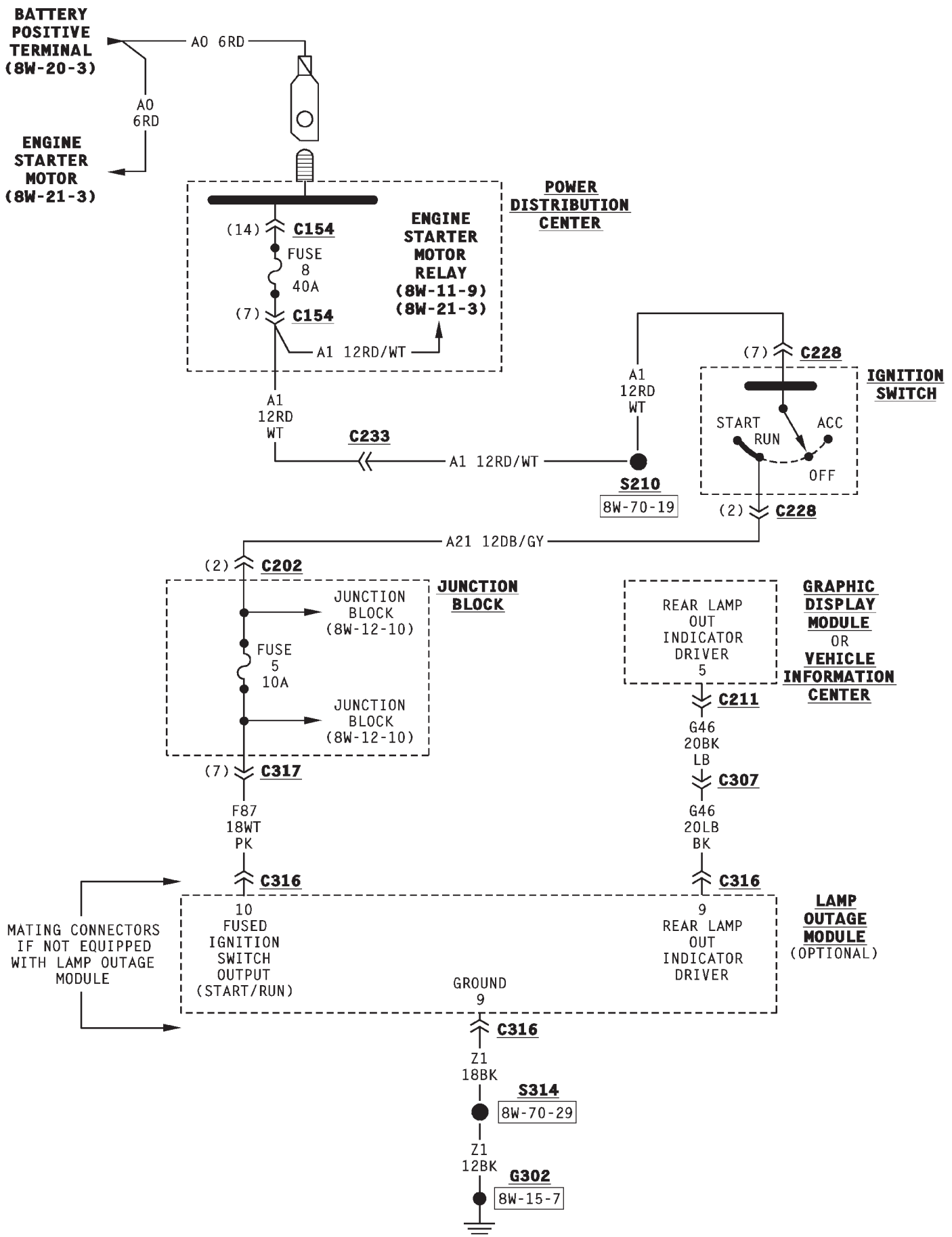
**ENGINE
STARTER
MOTOR
(8W-21-3)**

**POWER
DISTRIBUTION
CENTER**

**IGNITION
SWITCH**

**GRAPHIC
DISPLAY
MODULE
OR
VEHICLE
INFORMATION
CENTER**

**LAMP
OUTAGE
MODULE
(OPTIONAL)**



8W-52 TURN SIGNALS

DESCRIPTION AND OPERATION

ELECTRONIC FLASHER RELAY

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

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

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

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

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

TURN SIGNALS

When the operator selects the right turn signal, the multi-function switch connects circuit L5 from the flasher relay to circuits L60 and L64. Circuit L64 feeds the right front turn signal lamp and side marker lamp. Circuit L60 feeds the right rear turn

signal lamp. Circuit L64 also splices to power the right turn signal indicator lamp in the instrument cluster.

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

Circuit Z1 provides ground for the turn signal lamps.

HAZARD FLASHERS

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

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

Circuit Z1 provides ground for the hazard flasher lamps.

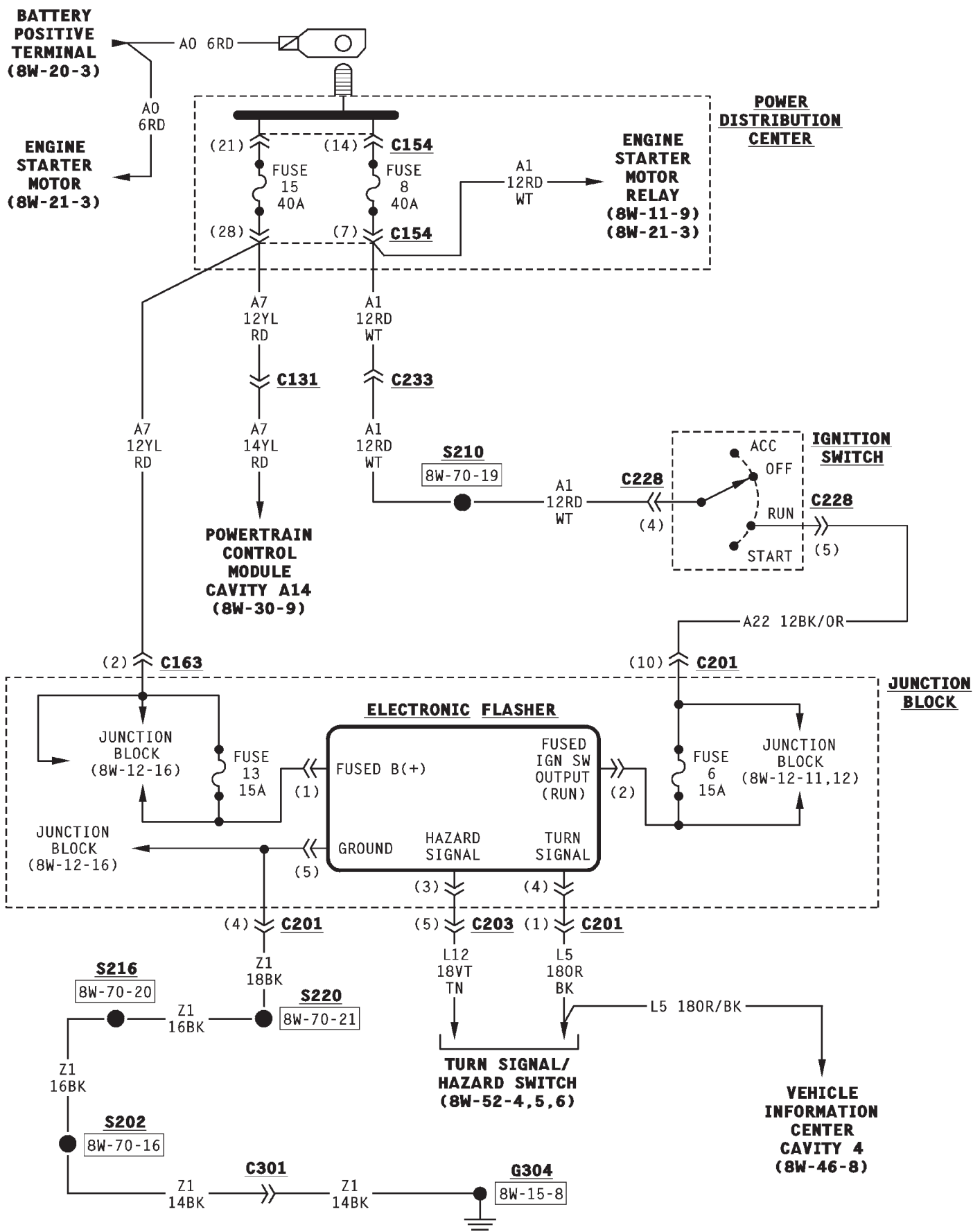
SCHEMATICS AND DIAGRAMS

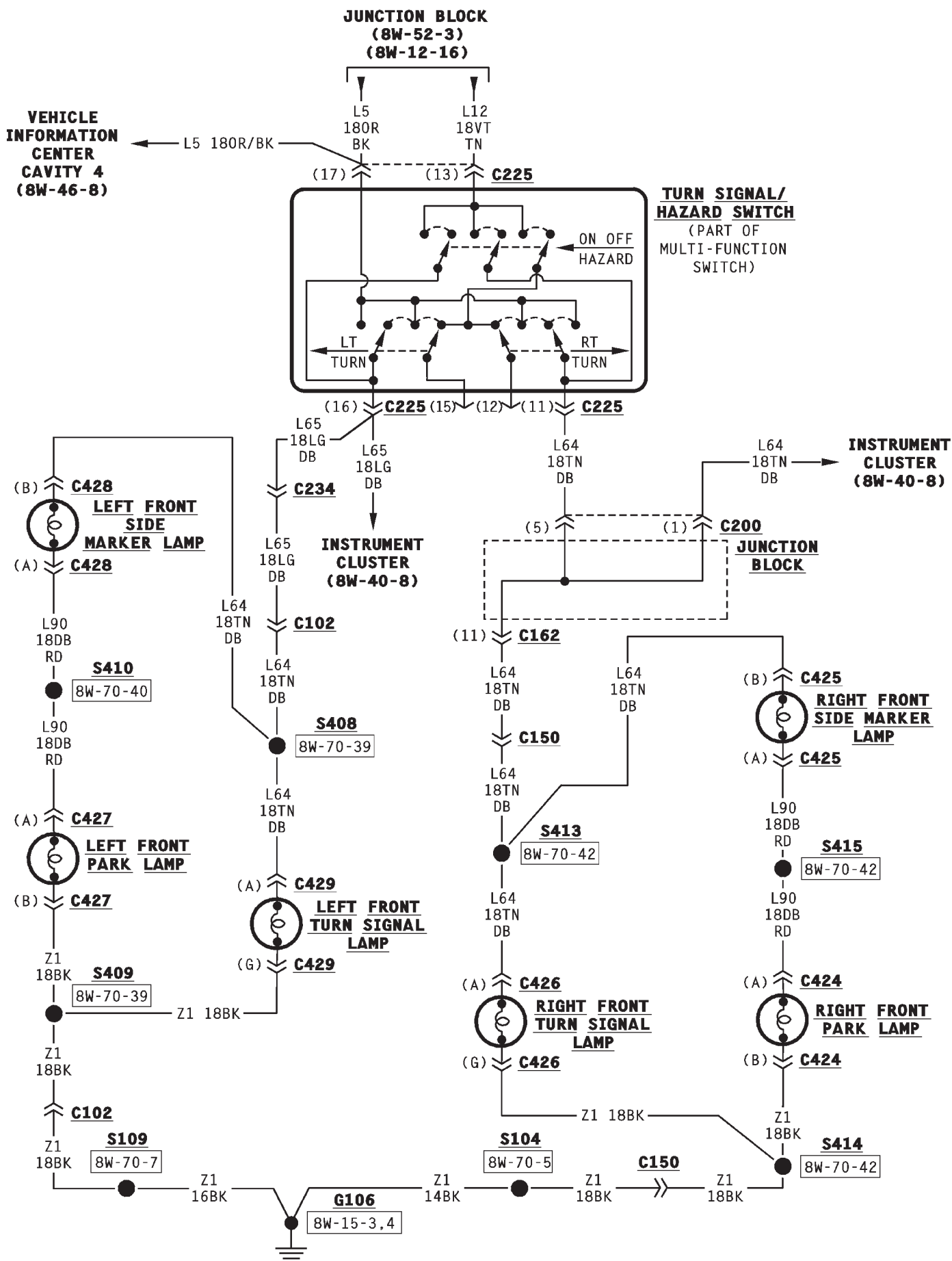
WIRING DIAGRAM INDEX

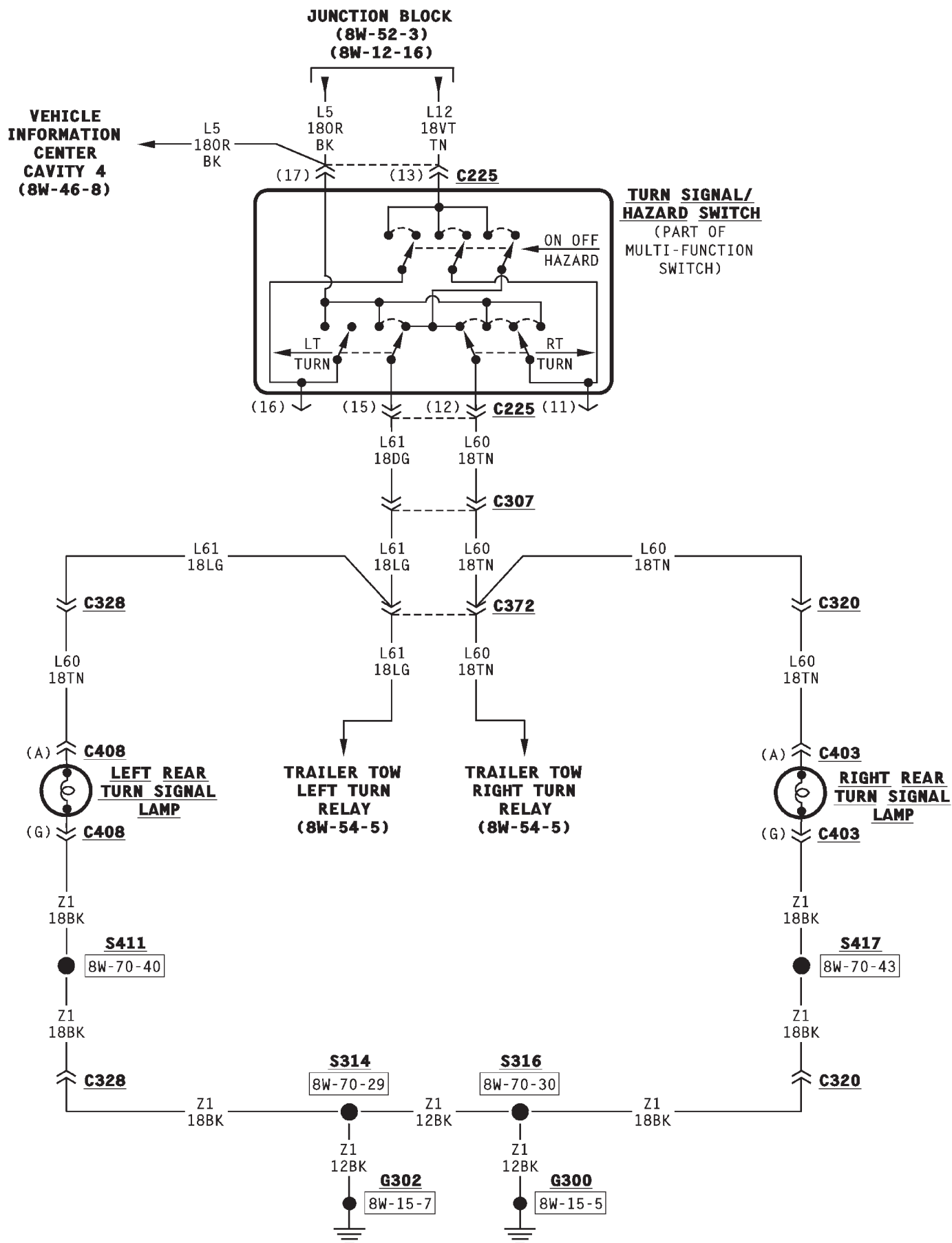
The following index covers all components found in this section of the wiring diagrams. If the component you are looking for is not found here, refer to section 8W-02 for a complete list of all components shown in the wiring diagrams.

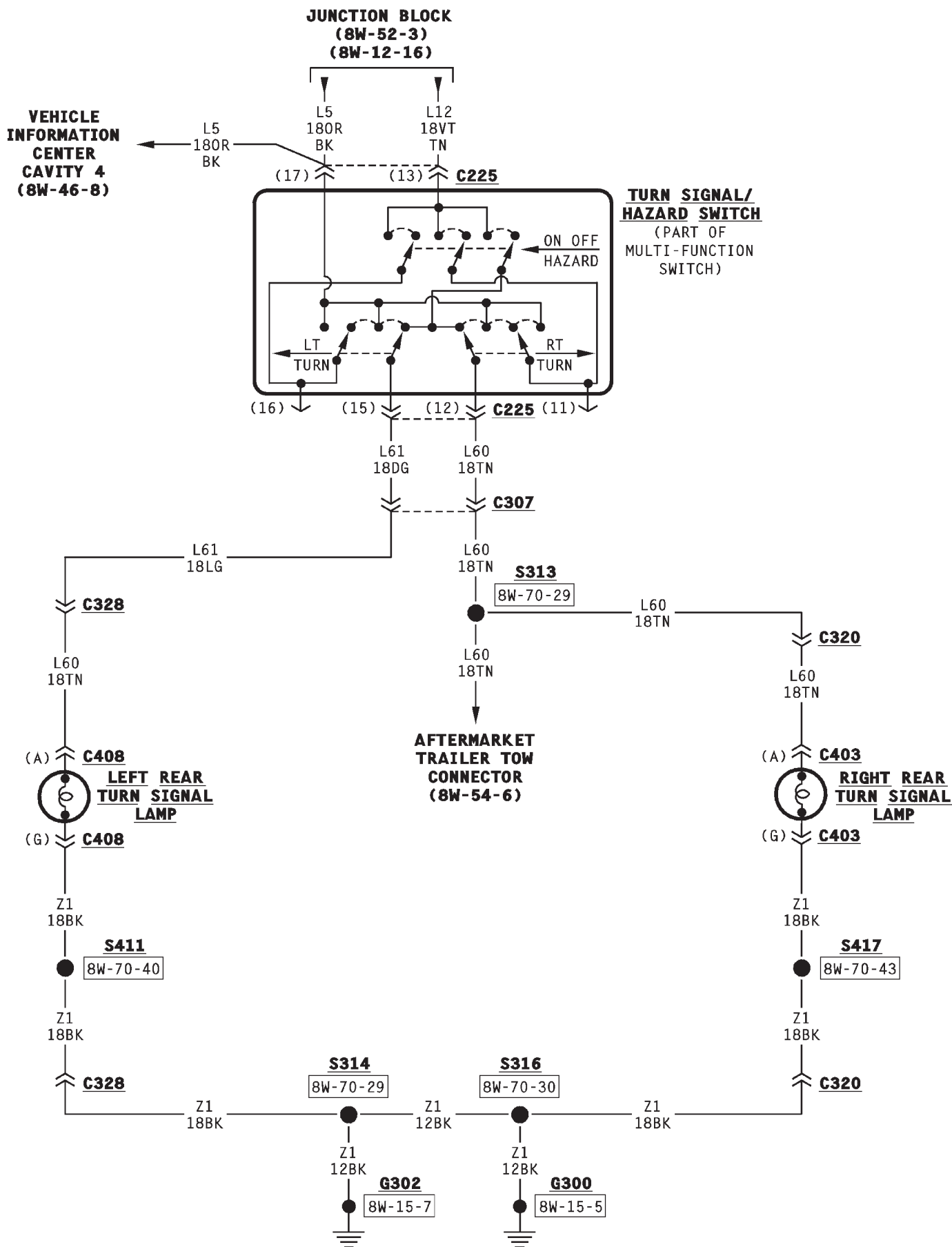
DIAGRAM INDEX

Component	Page	Component	Page
Electronic Flasher	8W-52-3	Left Front Turn Signal Lamp	8W-52-4
Fuse 6	8W-52-3	Left Rear Turn Signal Lamp	8W-52-5, 6
Fuse 8 (PDC)	8W-52-3	Right Front Park Lamp	8W-52-4
Fuse 13	8W-52-3	Right Front Side Marker Lamp	8W-52-4
Fuse 15 (PDC)	8W-52-3	Right Front Turn Signal Lamp	8W-52-4
Ignition Switch	8W-52-3	Right Rear Turn Signal Lamp	8W-52-5, 6
Left Front Park Lamp	8W-52-4	Turn Signal/Hazard Switch	8W-52-4, 5, 6
Left Front Side Marker Lamp	8W-52-4		









8W-53 WIPERS

DESCRIPTION AND OPERATION

INTERMITTENT WIPER OPERATION

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

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

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

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

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

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

REAR WIPER/WASHER

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

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

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

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

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

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

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

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

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

HELPFUL INFORMATION

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

LOW WASHER FLUID LEVEL SENSOR

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

SCHEMATICS AND DIAGRAMS

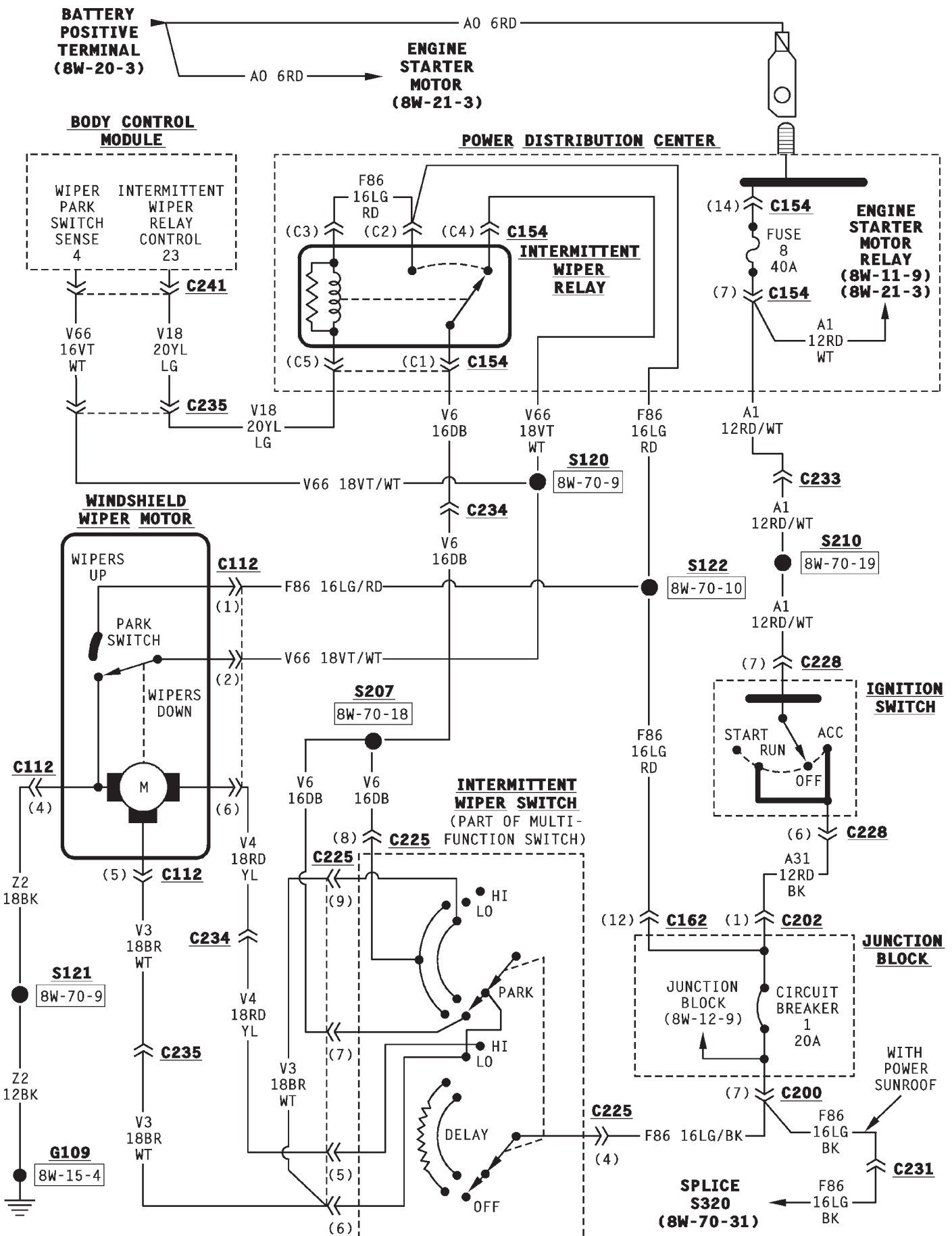
WIRING DIAGRAM INDEX

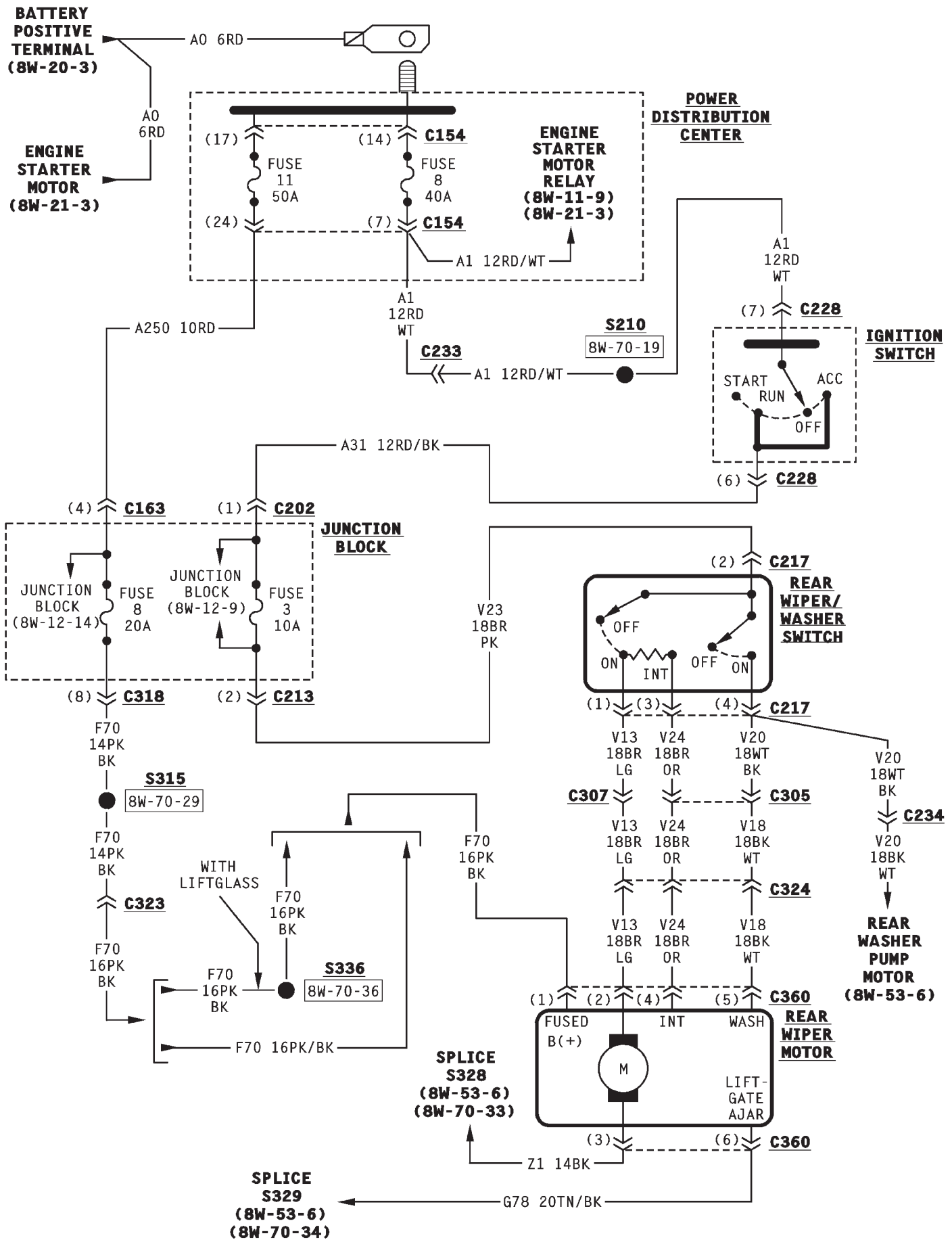
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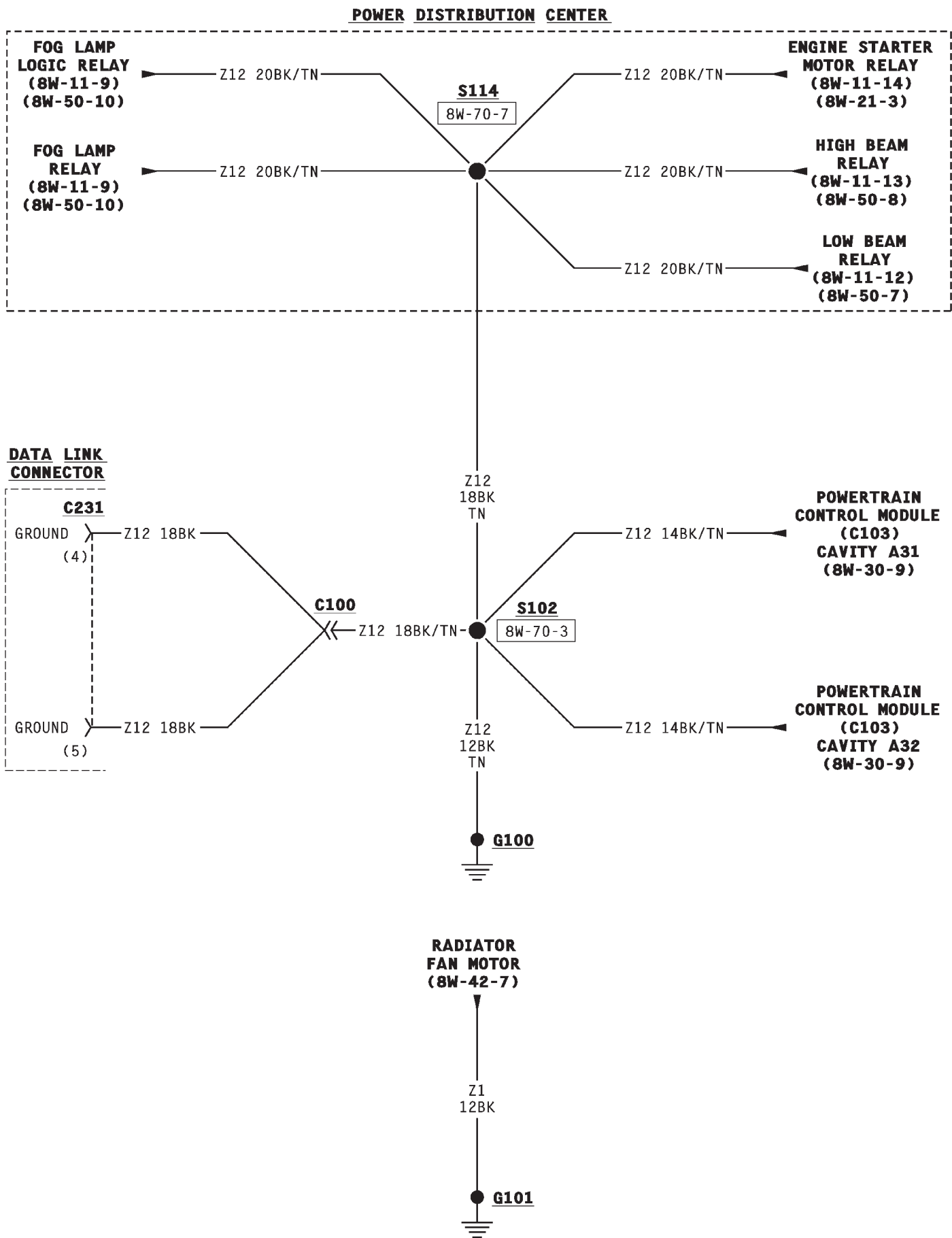
DIAGRAM INDEX

Component	Page	Component	Page
Body Control Module	8W-53-3, 4	Liftgate Ajar Switch	8W-53-6
Circuit Breaker 1	8W-53-3, 4	Liftglass Ajar Switch	8W-53-6
Fuse 3	8W-53-5	Low Washer Fluid Level Sensor	8W-53-6
Fuse 8	8W-53-5	Rear Washer Pump Motor	8W-53-6
Fuse 8 (PDC)	8W-53-3, 4, 5	Rear Wiper Motor	8W-53-5
Fuse 11 (PDC)	8W-53-5	Rear Wiper/Washer Switch	8W-53-5
Ignition Switch	8W-53-3, 4, 5	Vehicle Information Center	8W-53-6
Intermittent Wiper Relay	8W-53-4	Windshield Washer Pump Motor	8W-53-3
Intermittent Wiper Switch	8W-53-3, 4	Windshield Wiper Motor	8W-53-4









8W-54 TRAILER TOW

GENERAL INFORMATION

INTRODUCTION

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

DESCRIPTION AND OPERATION

TRAILER TOW—FACTORY INSTALLED

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

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

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

STOP LAMP RELAY

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

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

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

RIGHT TURN RELAY

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

When the operator turns the right turn signal ON, power flows through the coil in the relay to ground causing the contacts in the relay to switch from the normally CLOSED position to connect circuits 94 and L60.

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

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

LEFT TURN RELAY

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

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

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

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

HELPFUL INFORMATION

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

TRAILER TOW—AFTER-MARKET

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

SCHEMATICS AND DIAGRAMS

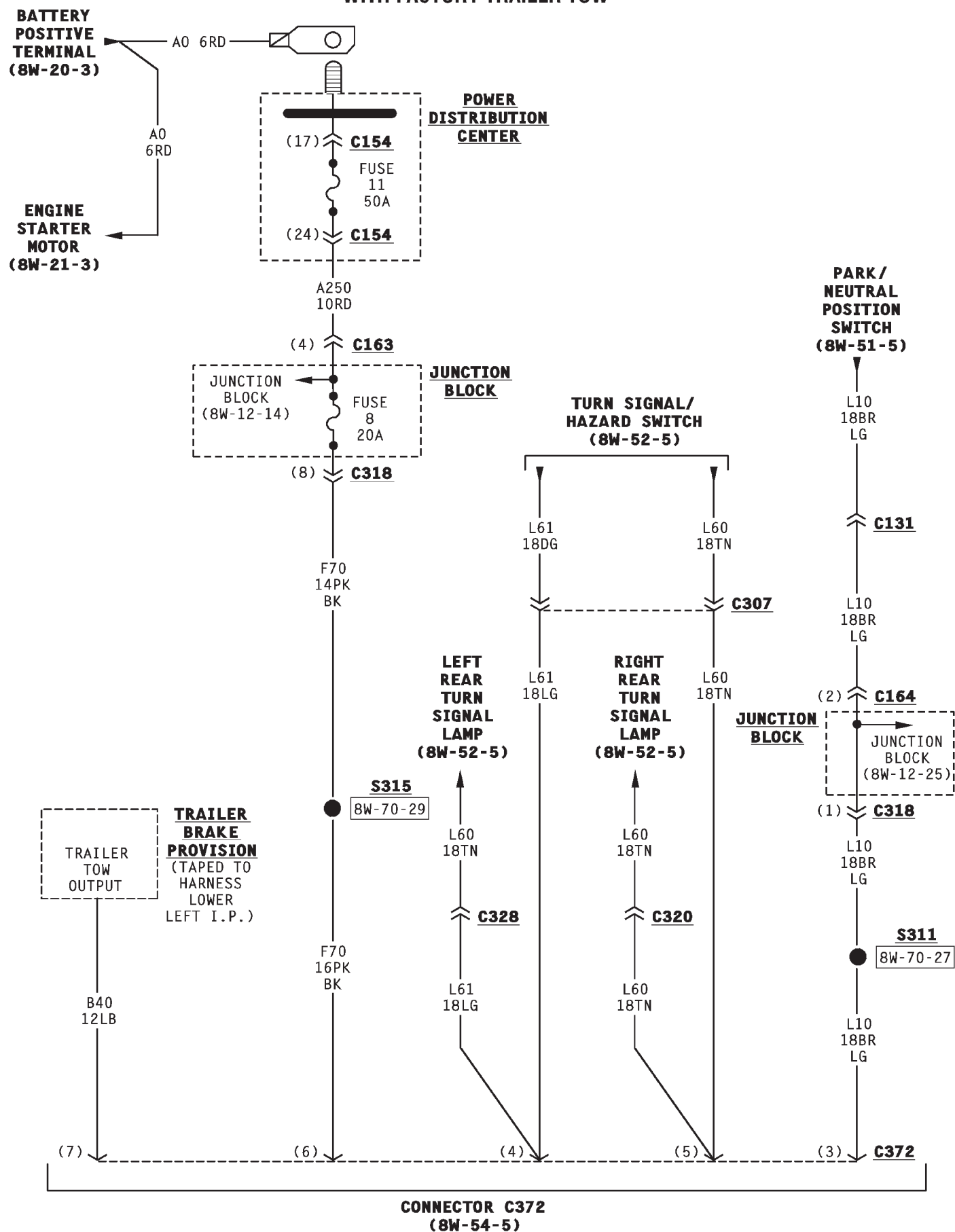
WIRING DIAGRAM INDEX

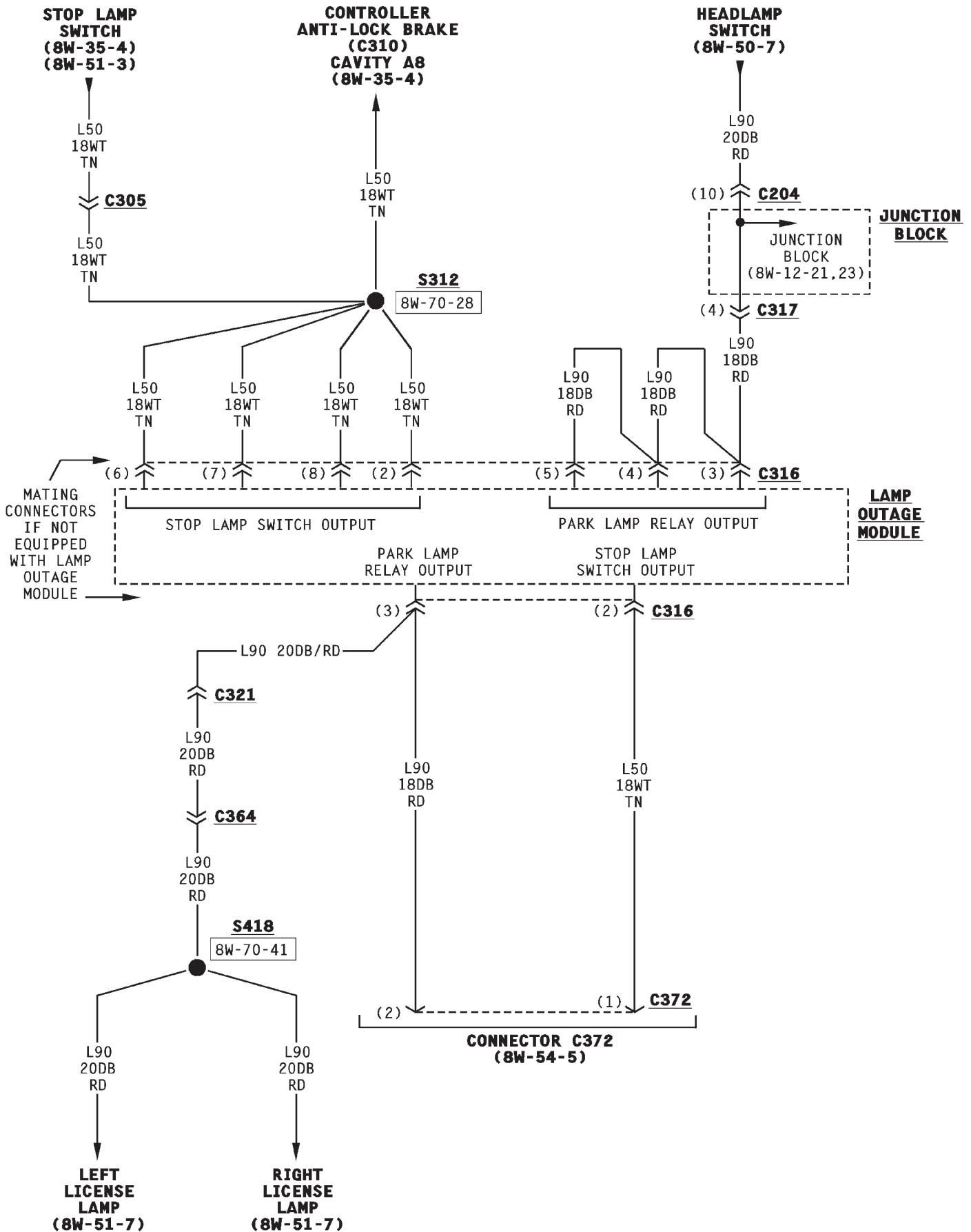
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DIAGRAM INDEX

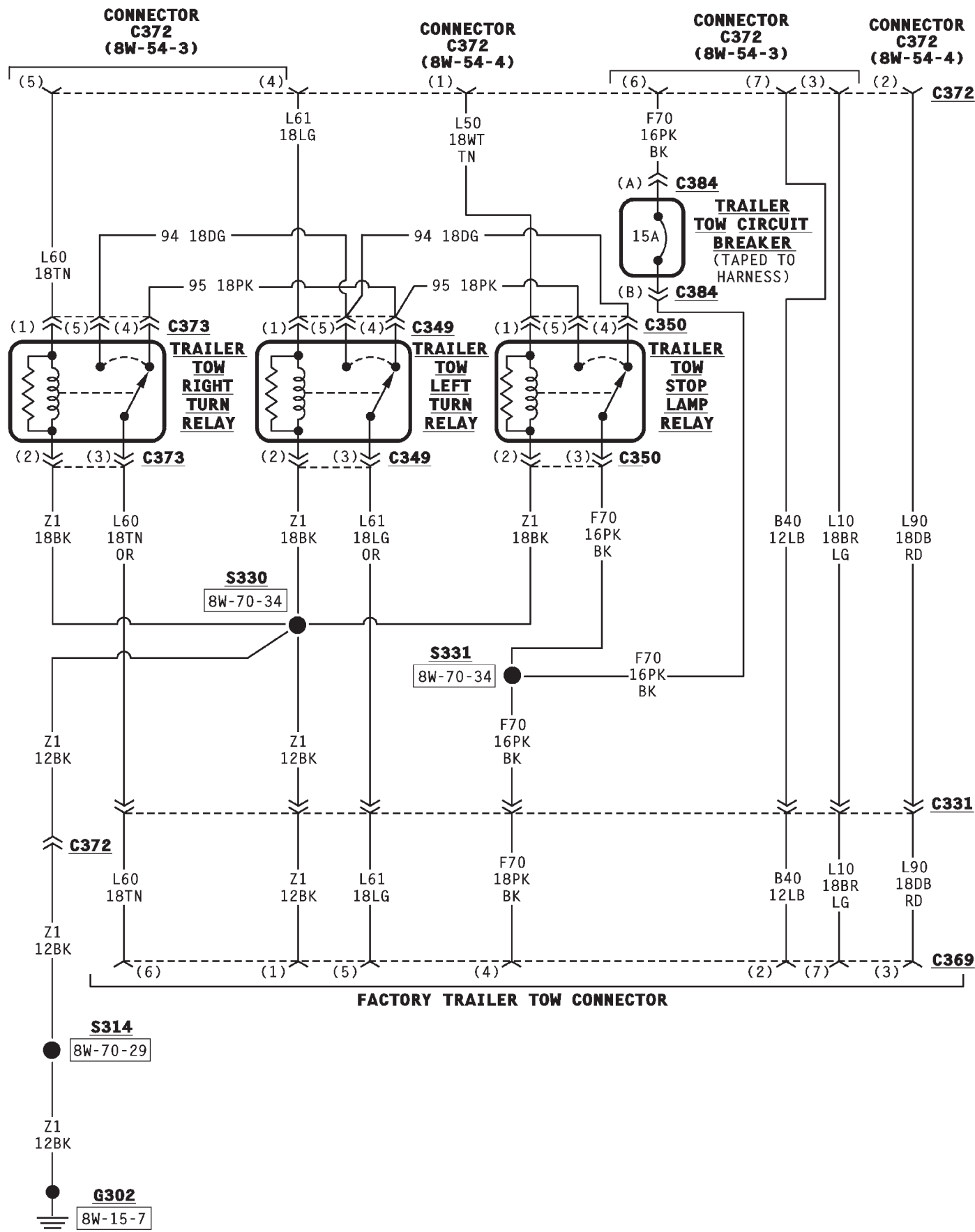
Component	Page	Component	Page
Aftermarket Trailer Tow Connector	8W-54-6, 7	Trailer Brake Provision	8W-54-5
Factory Trailer Tow Connector	8W-54-5	Trailer Tow Circuit Breaker	8W-54-3
Fuse 8	8W-54-3, 6	Trailer Tow Left Turn Relay	8W-54-5
Fuse 11 (PDC)	8W-54-3, 6	Trailer Tow Right Turn Relay	8W-54-5
Lamp Outage Module	8W-54-4, 7	Trailer Tow Stop Lamp Relay	8W-54-5

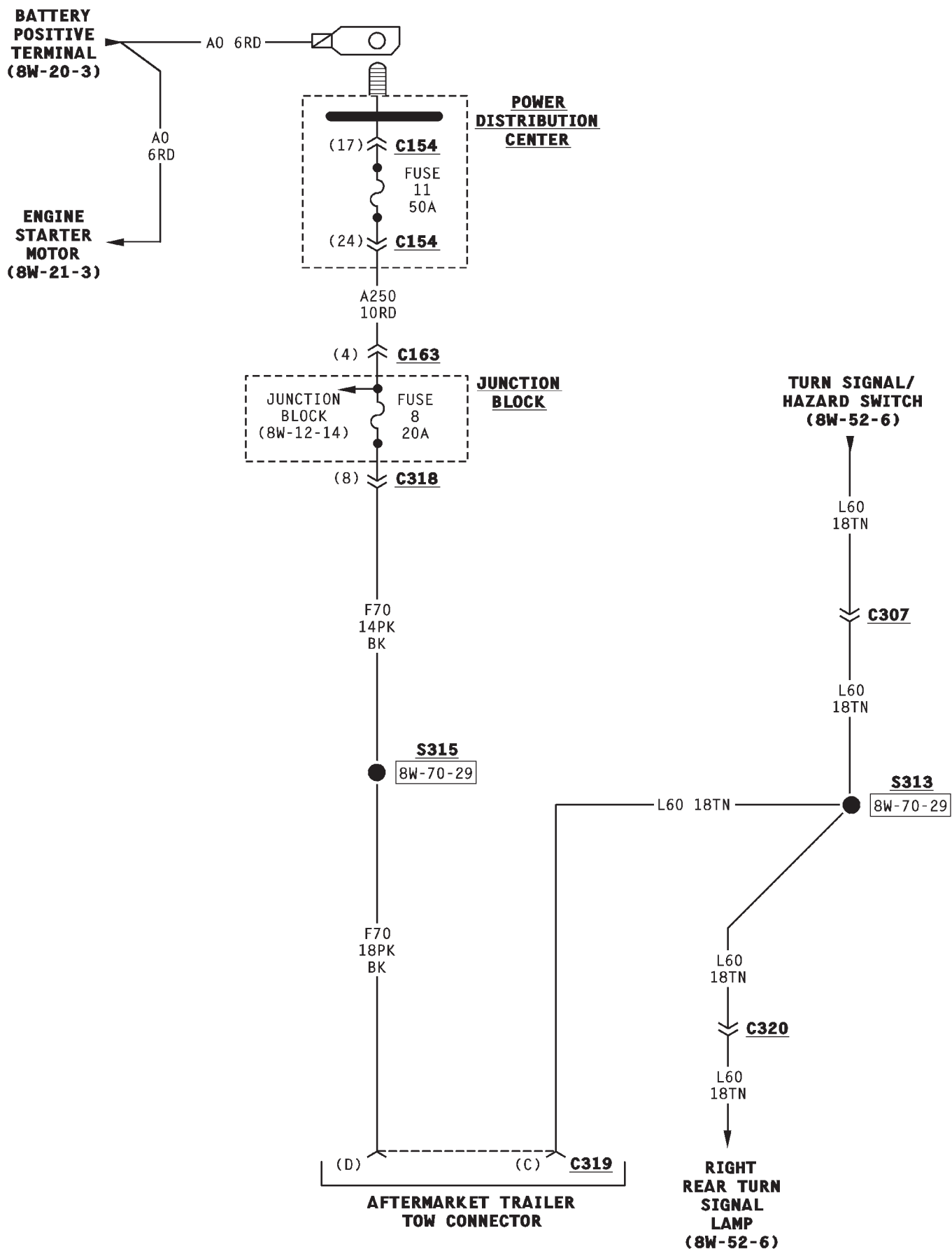
ZJ
**8W-54 TRAILER TOW
WITH FACTORY TRAILER TOW**
8W - 54 - 3

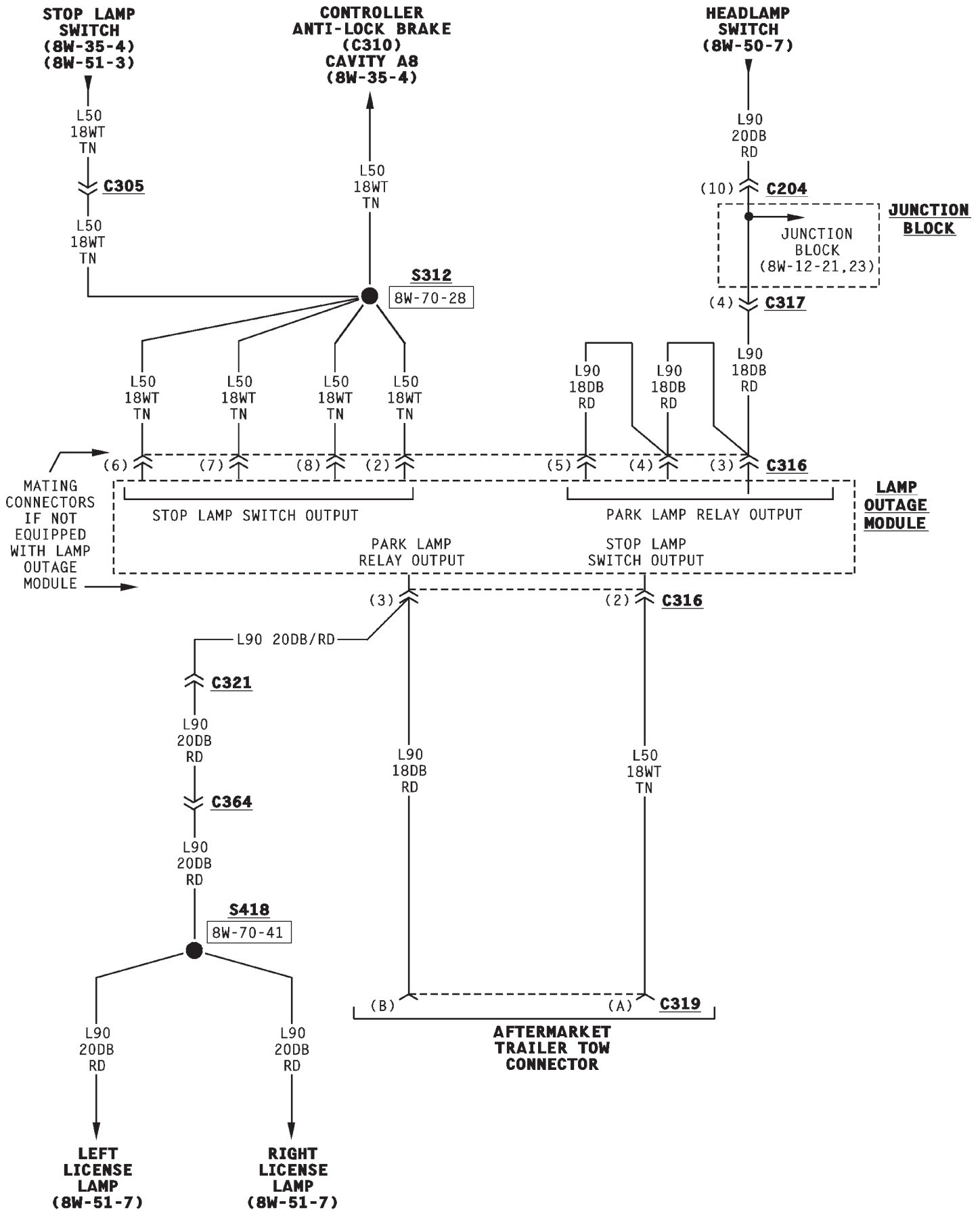




ZJ
**8W-54 TRAILER TOW
WITH FACTORY TRAILER TOW**
8W - 54 - 5







8W-60 POWER WINDOWS

INDEX

	page		page
DESCRIPTION AND OPERATION		SCHEMATICS AND DIAGRAMS	
INTRODUCTION	1	WIRING DIAGRAM INDEX	2
POWER WINDOWS	1		

DESCRIPTION AND OPERATION

INTRODUCTION

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

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

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

POWER WINDOWS

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

LEFT FRONT WINDOW OPERATION

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

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

RIGHT FRONT WINDOW OPERATION

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

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

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

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

LEFT REAR WINDOW

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

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

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

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

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

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

DESCRIPTION AND OPERATION (Continued)

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

RIGHT REAR WINDOW

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

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

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

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

If the operator has selected the window lock-out feature, the Driver's Door Module signals the PDM on the CCD bus. In response, the PDM will not sup-

ply power to the right rear window switch on circuits Q18 and Q28. Also, the PDM does not illuminate the LED in the switch.

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

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

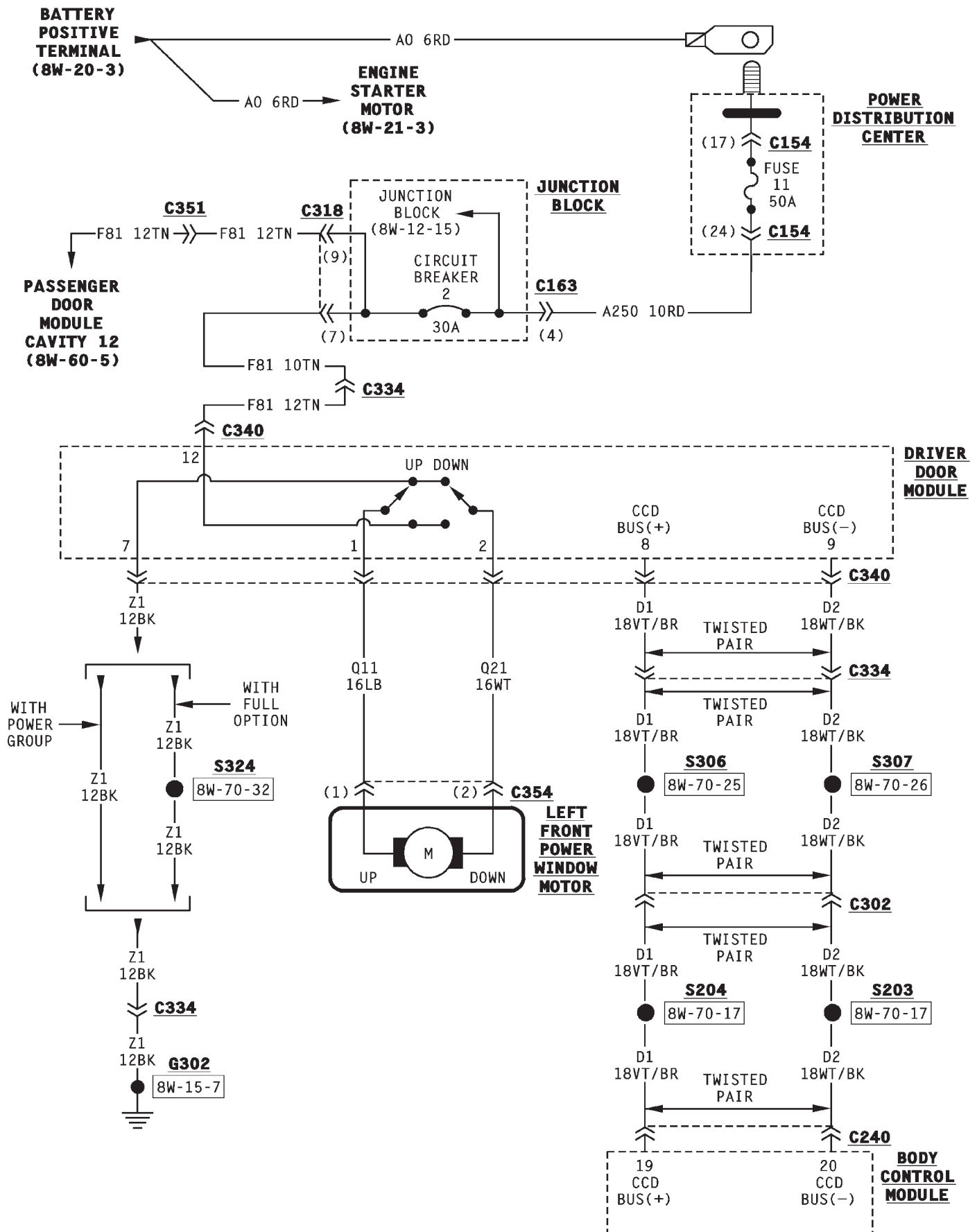
SCHEMATICS AND DIAGRAMS

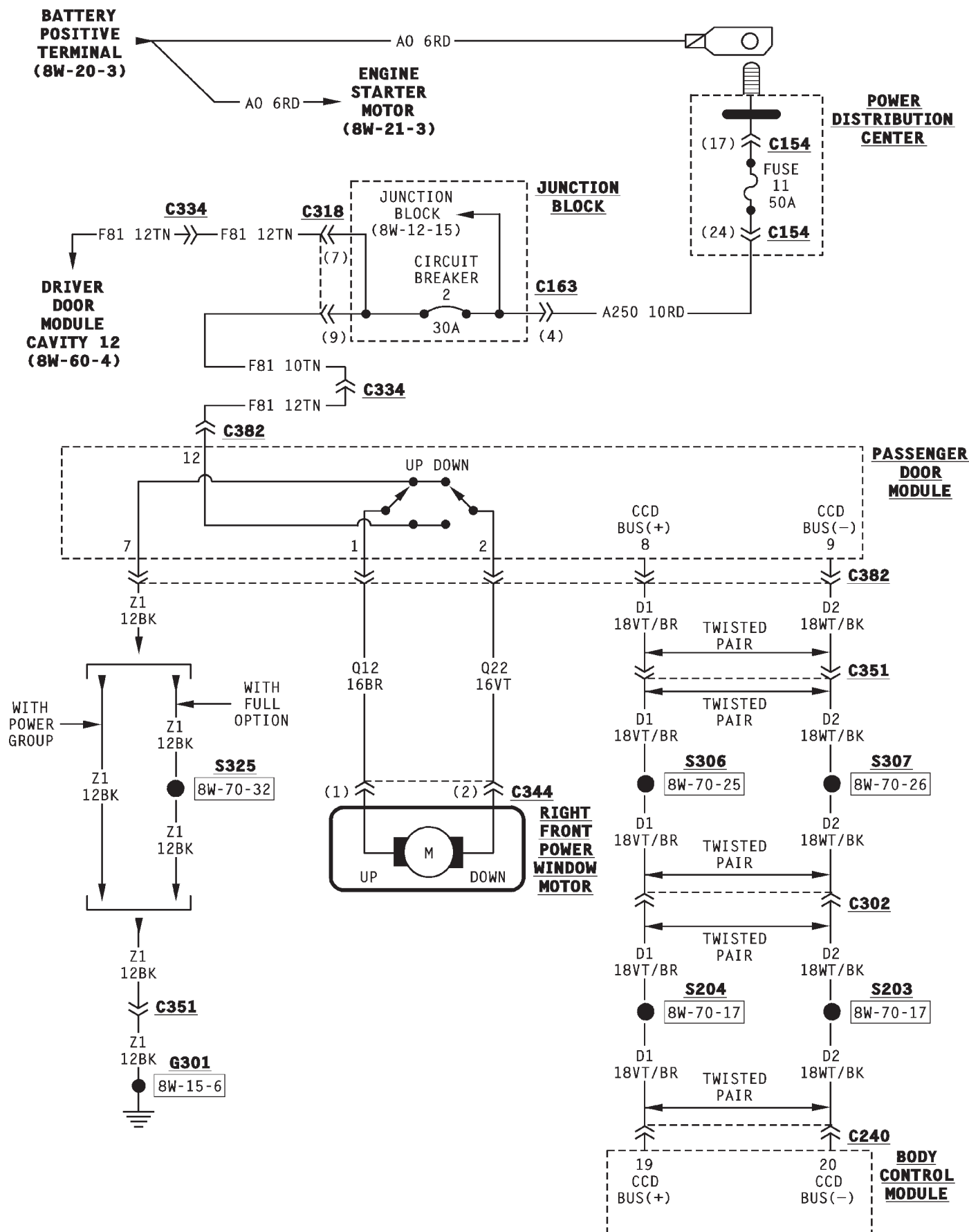
WIRING DIAGRAM INDEX

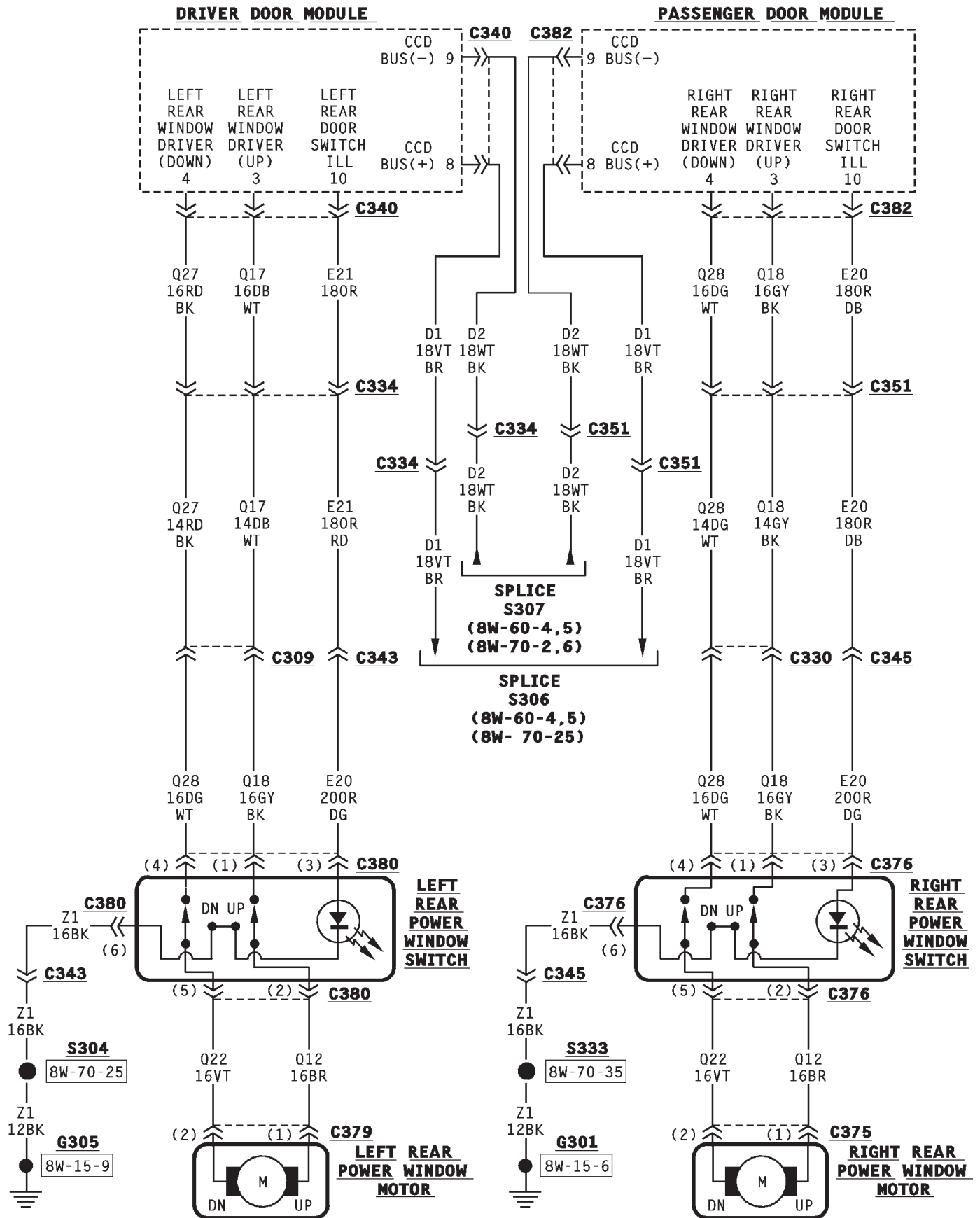
The following index covers all components found in this section of the wiring diagrams. If the component you are looking for is not found here, refer to section 8W-02 for a complete list of all components shown in the wiring diagrams.

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Component	Page	Component	Page
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Circuit Breaker 2	8W-60-4, 5	Passenger Door Module	8W-60-5, 6
Driver Door Module	8W-60-4, 6	Right Front Power Window Motor	8W-60-5
Fuse 11 (PDC)	8W-60-4, 5	Right Rear Power Window Motor	8W-60-6
Left Front Power Window Motor	8W-60-4	Right Rear Power Window Switch	8W-60-6
Left Rear Power Window Motor	8W-60-6		







8W-61 POWER DOOR LOCKS

DESCRIPTION AND OPERATION

INTRODUCTION

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

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

POWER DOOR LOCKS

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

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

After receiving a LOCK signal, the DDM supplies battery voltage to the left front door lock motor on

circuit P36. The DDM also connects circuit P34 from the motor to ground.

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

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

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

REMOTE KEYLESS ENTRY

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

LIFTGLASS

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

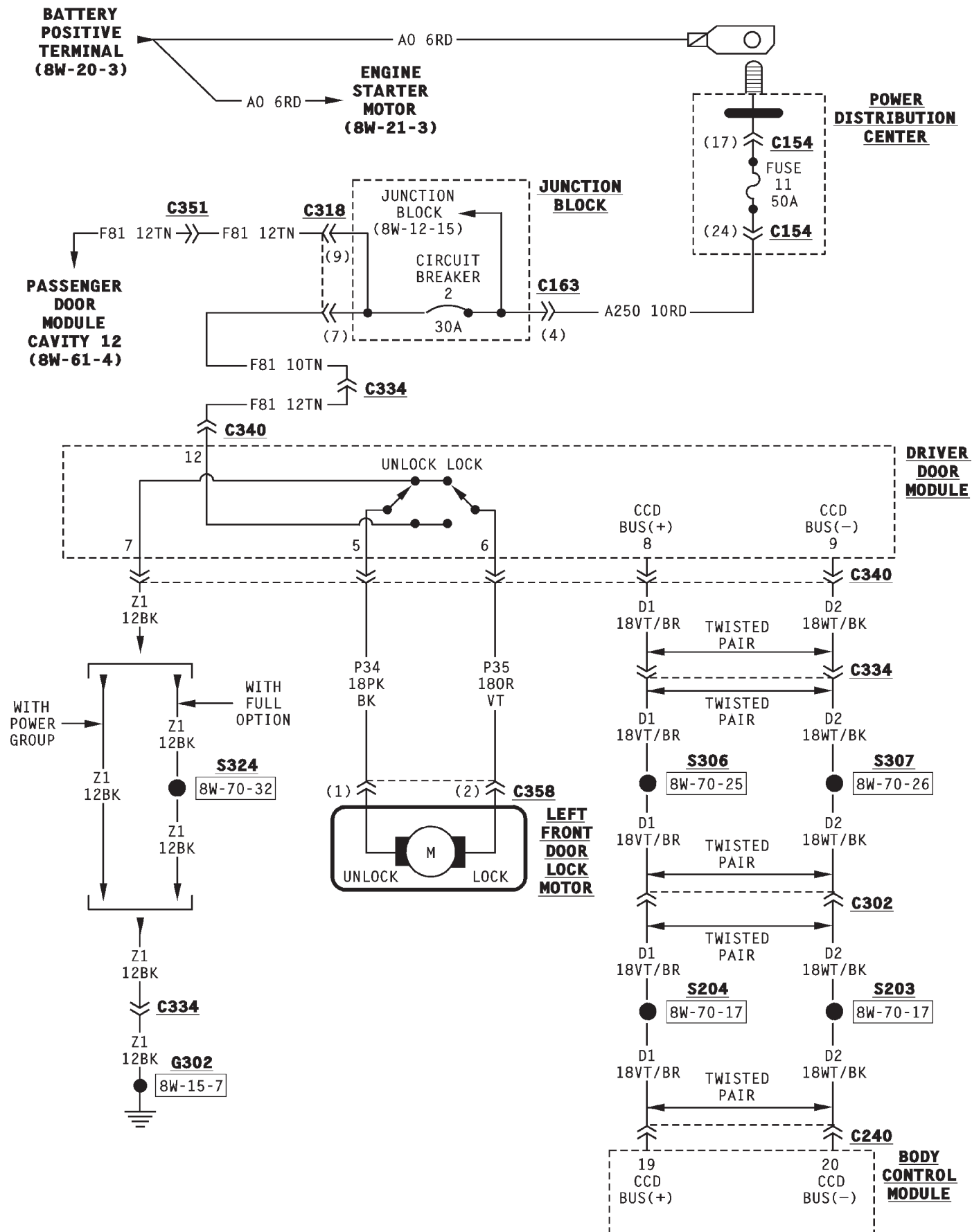
SCHEMATICS AND DIAGRAMS

WIRING DIAGRAM INDEX

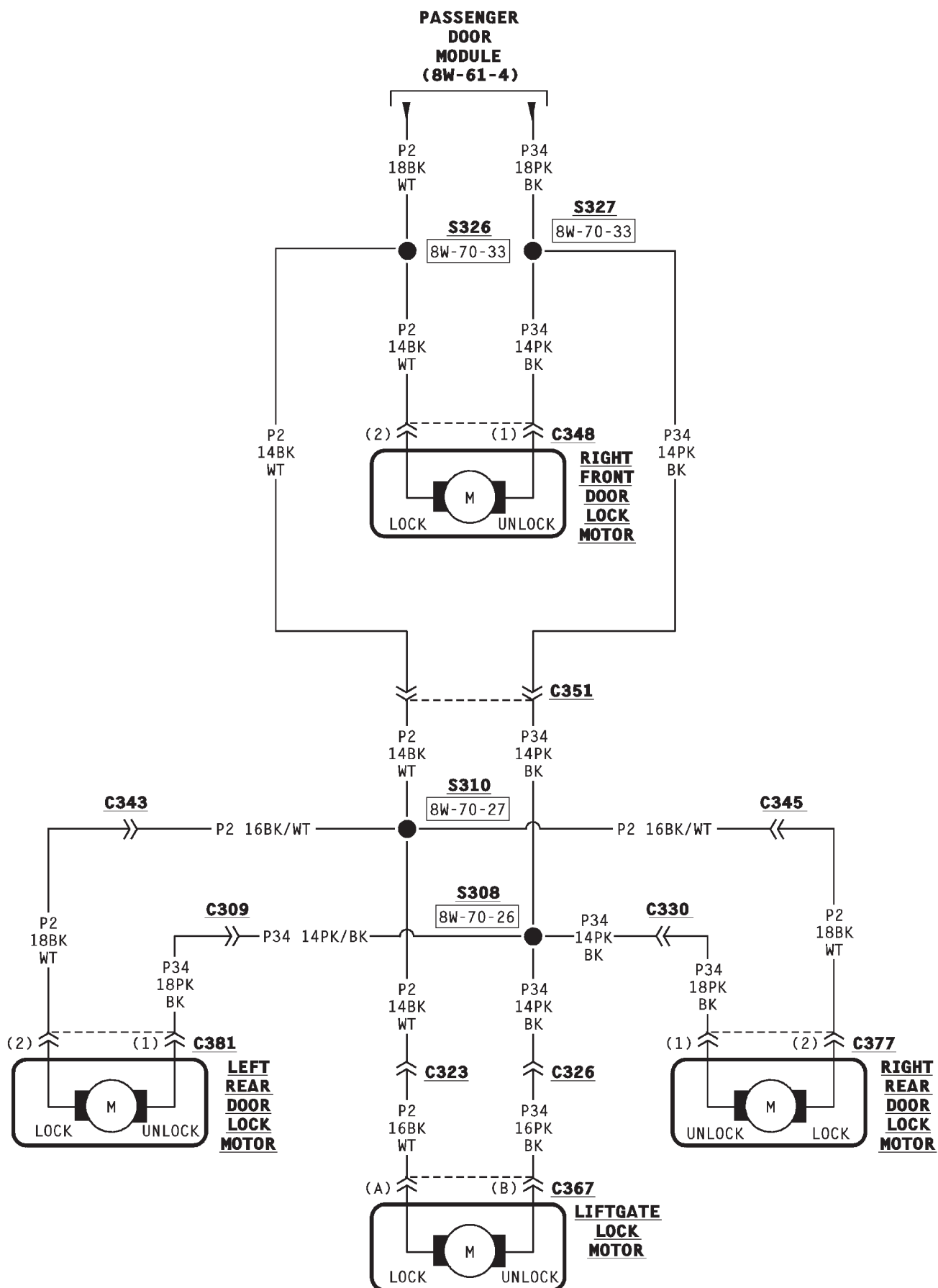
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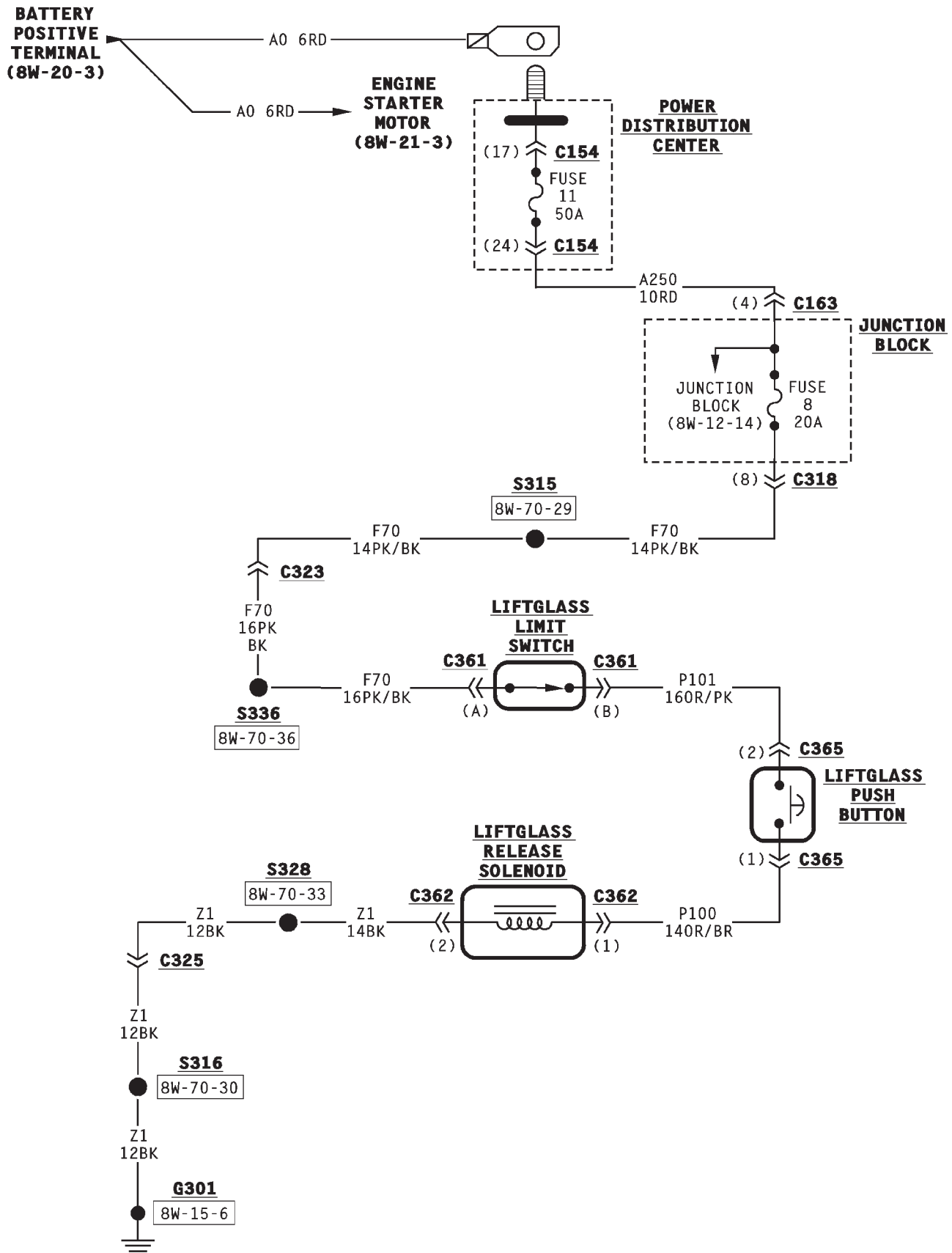
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Component	Page	Component	Page
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Circuit Breaker 2	8W-61-3, 4	Liftglass Limit Switch	8W-61-6
Driver Door Module	8W-61-3	Liftglass Push Button	8W-61-6
Fuse 8	8W-61-6	Liftglass Release Solenoid	8W-61-6
Fuse 11 (PDC)	8W-61-3, 4, 6	Passenger Door Module	8W-61-4
Left Front Door Lock Motor	8W-61-3	Right Front Door Lock Motor	8W-61-5
Left Rear Door Lock Motor	8W-61-5	Right Rear Door Lock Motor	8W-61-5









8W-62 POWER MIRRORS

DESCRIPTION AND OPERATION

INTRODUCTION

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

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

POWER MIRROR

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

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

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

LEFT MIRROR ADJUSTMENT

The DDM adjusts the position of the left mirror. When an UP adjustment is made, the DDM supplies power to the left mirror UP/DOWN motor on circuit F71 and grounds circuit F73.

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

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

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

RIGHT MIRROR ADJUSTMENT

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

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

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

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

HEATER ELEMENTS

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

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

SCHEMATICS AND DIAGRAMS

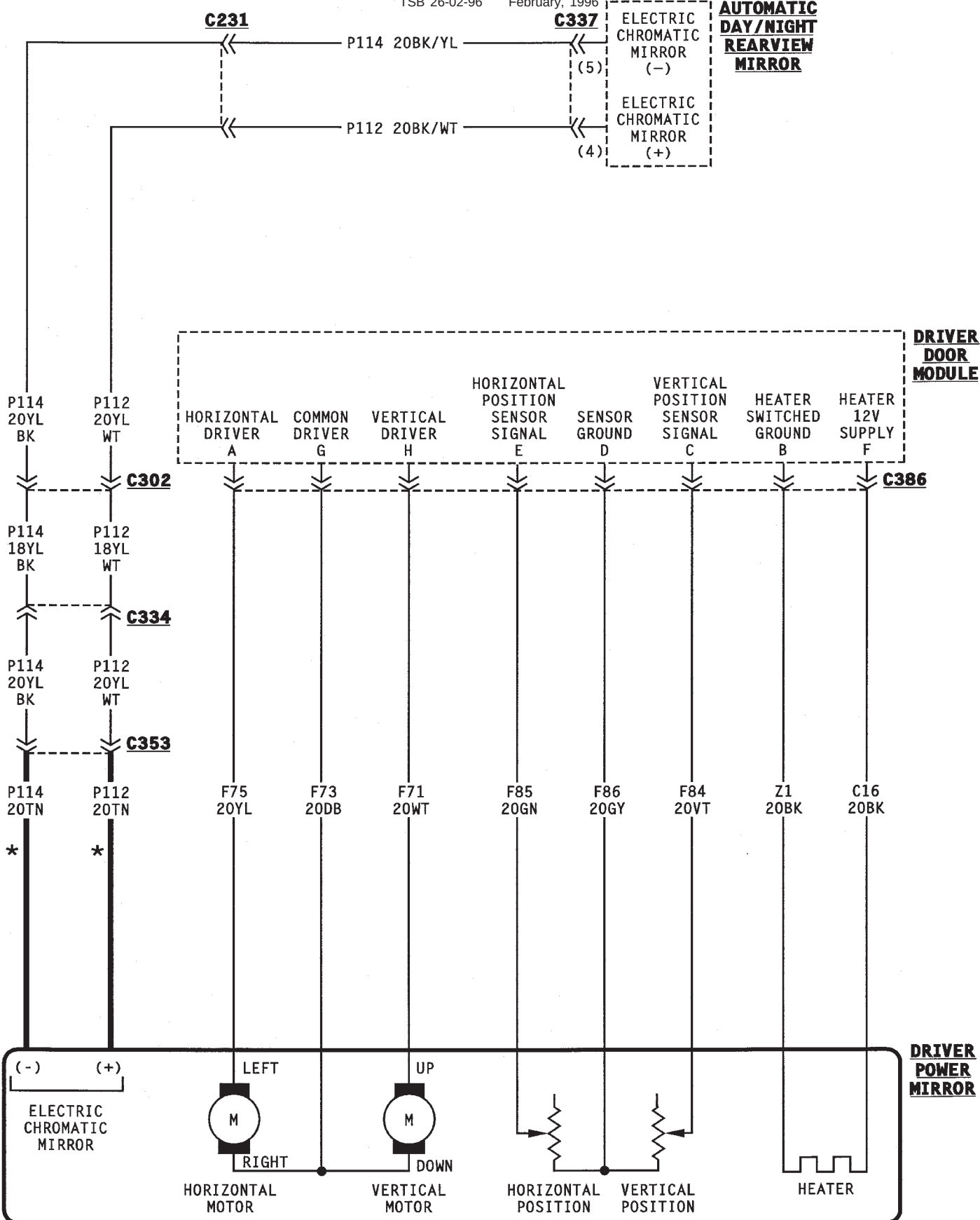
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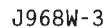
The following index covers all components found in this section of the wiring diagrams. If the component you are looking for is not found here, refer to section 8W-02 for a complete list of all components shown in the wiring diagrams.

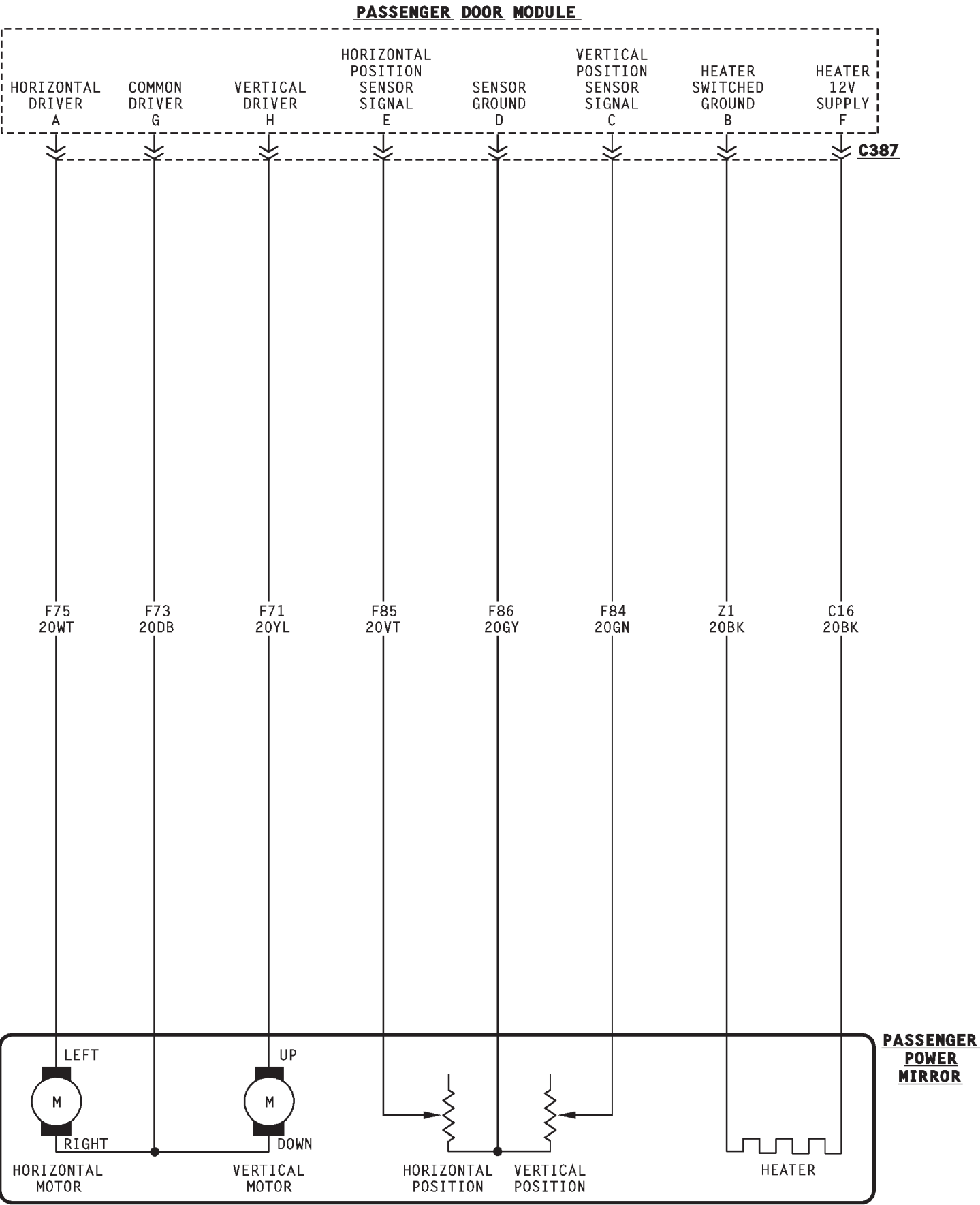
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8W-63 POWER SEAT

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DESCRIPTION AND OPERATION

INTRODUCTION

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

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

POWER SEATS

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

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

LUMBAR ADJUSTMENT

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

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

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

DRIVER'S SEAT

When the operator selects the HORIZONTAL FORWARD function, the switch passes power from circuit F35 to circuit P15. Circuit P15 connects to the motor.

Ground is provided on circuit P17 circuit back to the switch. A bus bar internal to the switch connects circuit P17 to ground on circuit Z1.

For HORIZONTAL REARWARD function the circuits are reversed. P17 is the feed, and P15 is the ground.

When the operator selects the REAR VERTICAL UP function, the switch passes power from circuit F35 to circuit P11. Circuit P11 connects to the motor. Ground is provided on circuit P13 back to the switch. A bus bar internal to the switch connects circuit P13 to ground on circuit Z1.

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

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

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

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

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

PASSENGER'S SEAT

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

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

When the operator selects the REAR VERTICAL UP function, the switch passes power from circuit

DESCRIPTION AND OPERATION (Continued)

F35 to circuit P10. Circuit P10 connects to the motor. Ground is provided on circuit P12 back to the switch. A bus bar internal to the switch connects circuit P12 to ground on circuit Z1.

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

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

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

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

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

MEMORY SEATS

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

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

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

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

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

- P105 - lumbar forward

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

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

SEAT POSITION SENSORS

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

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

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

MEMORY SWITCH

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

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

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

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

HEATED SEATS

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

DESCRIPTION AND OPERATION (Continued)

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

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

After receiving a signal from its heated seat switch, the heated seat control module powers the

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

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

SCHEMATICS AND DIAGRAMS

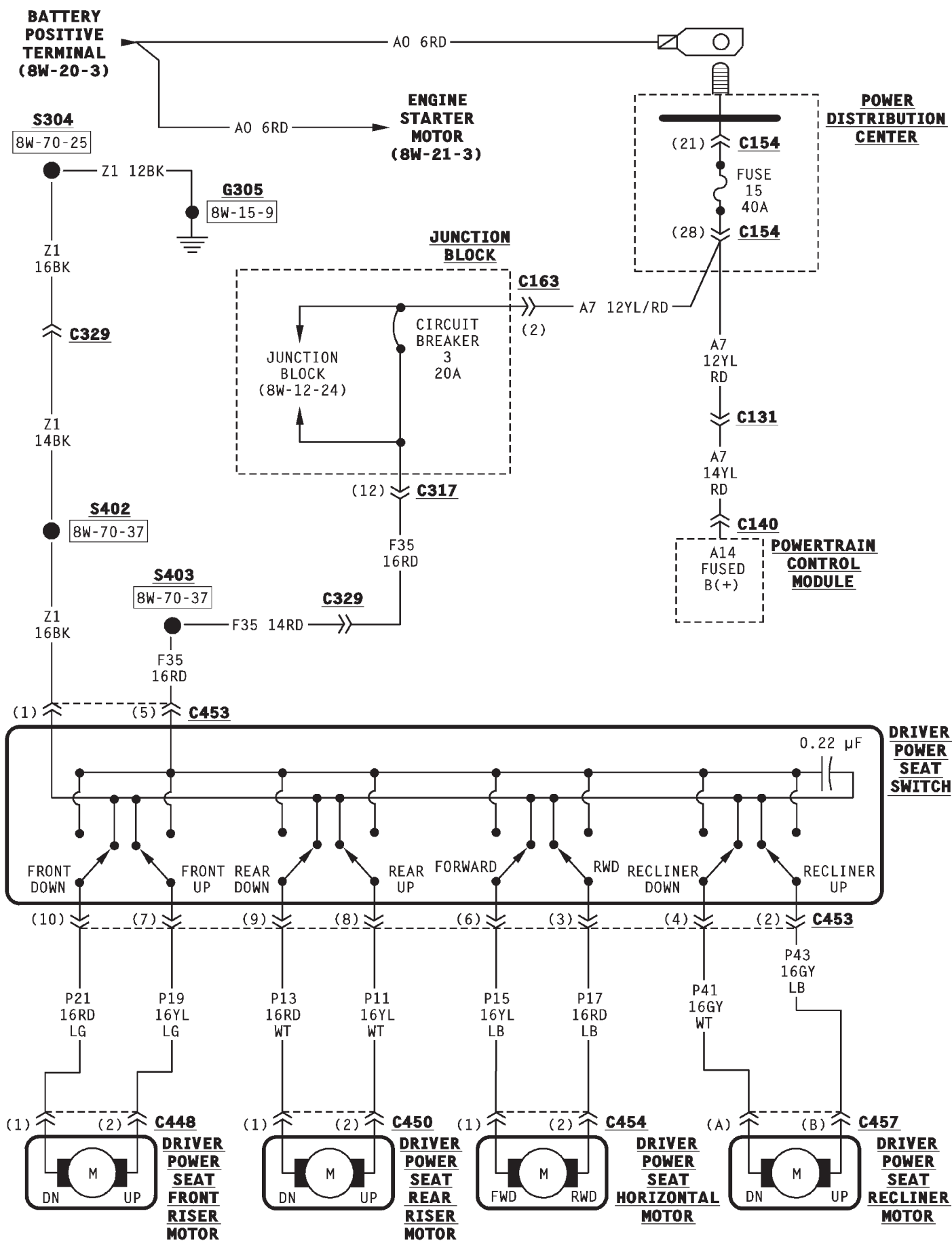
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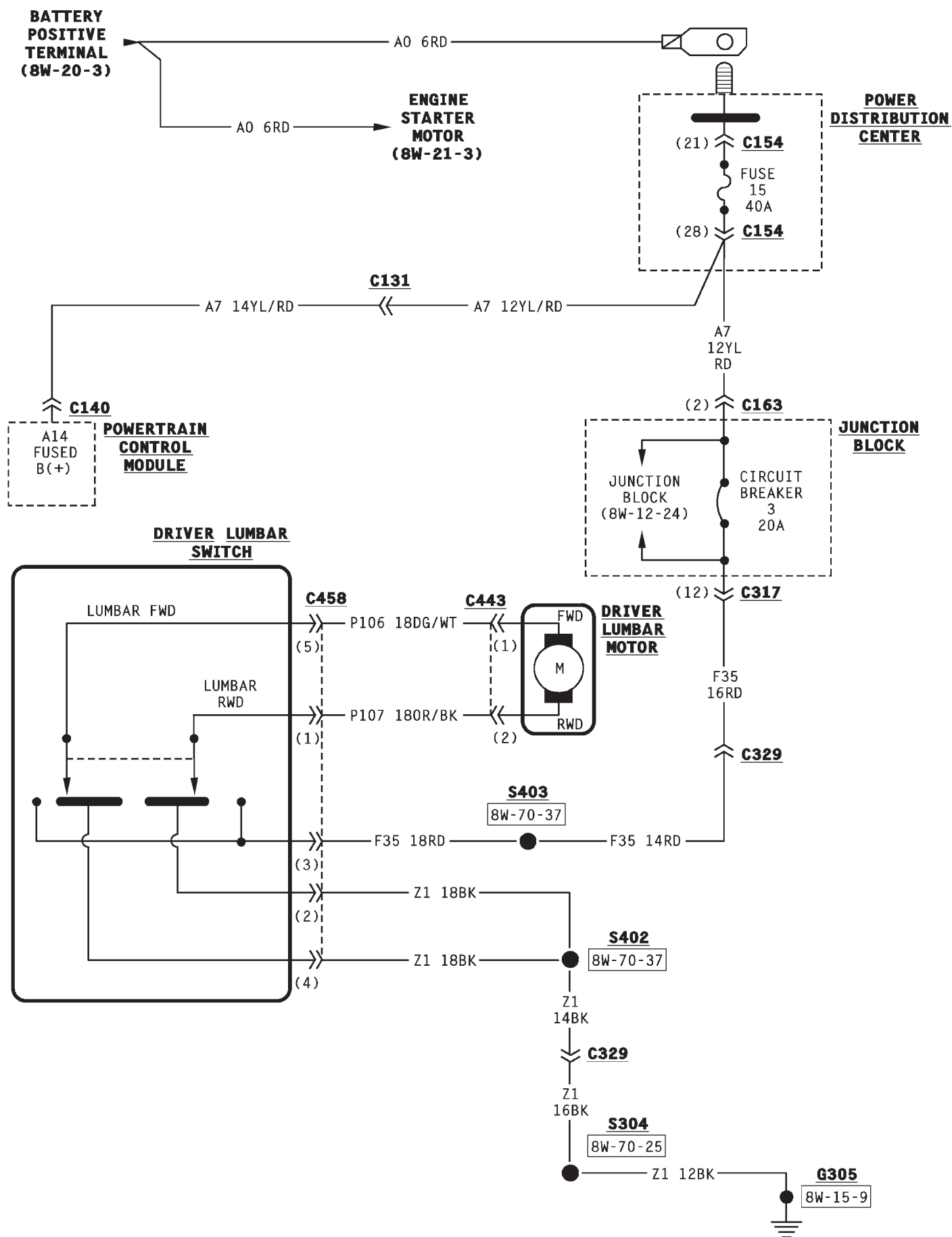
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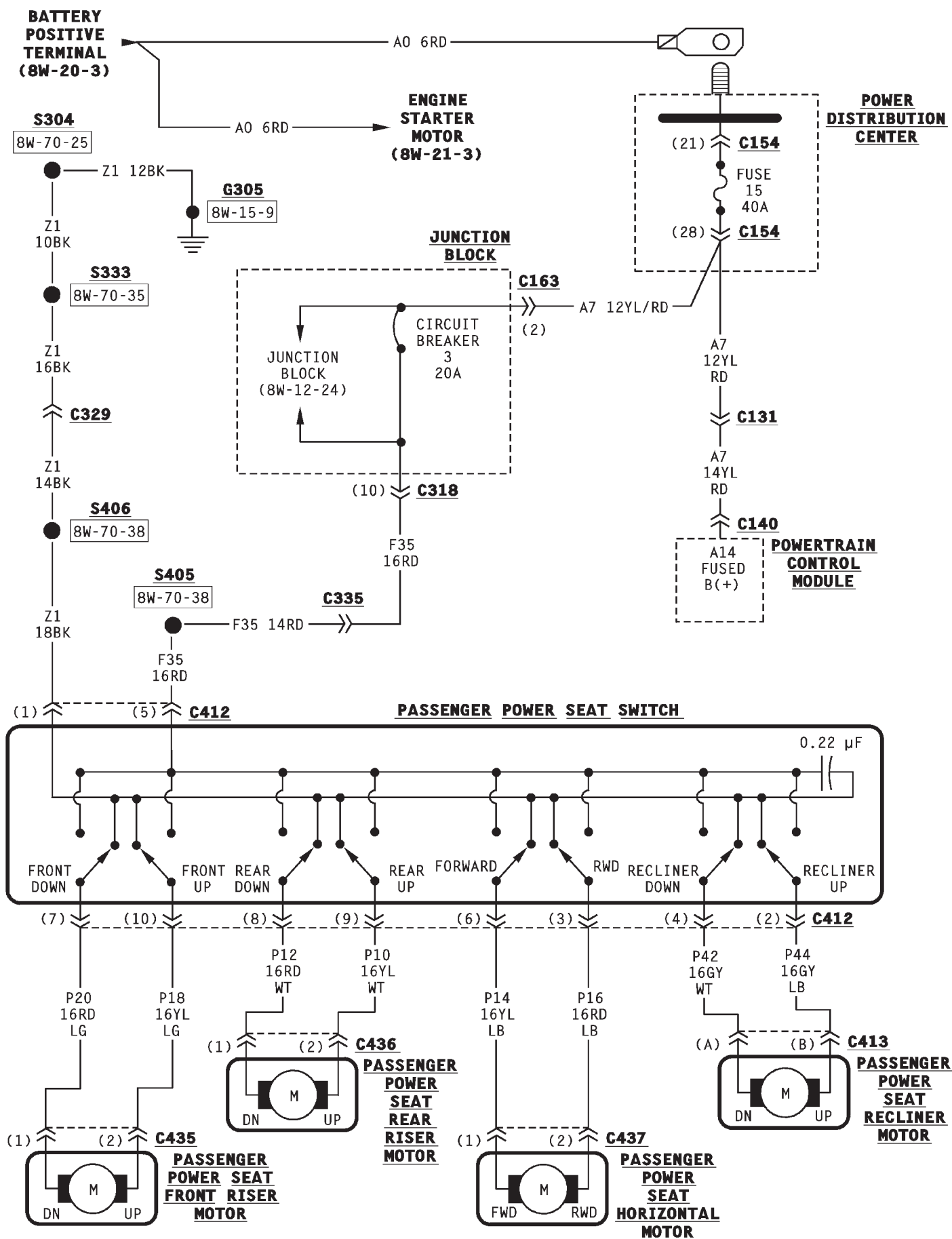
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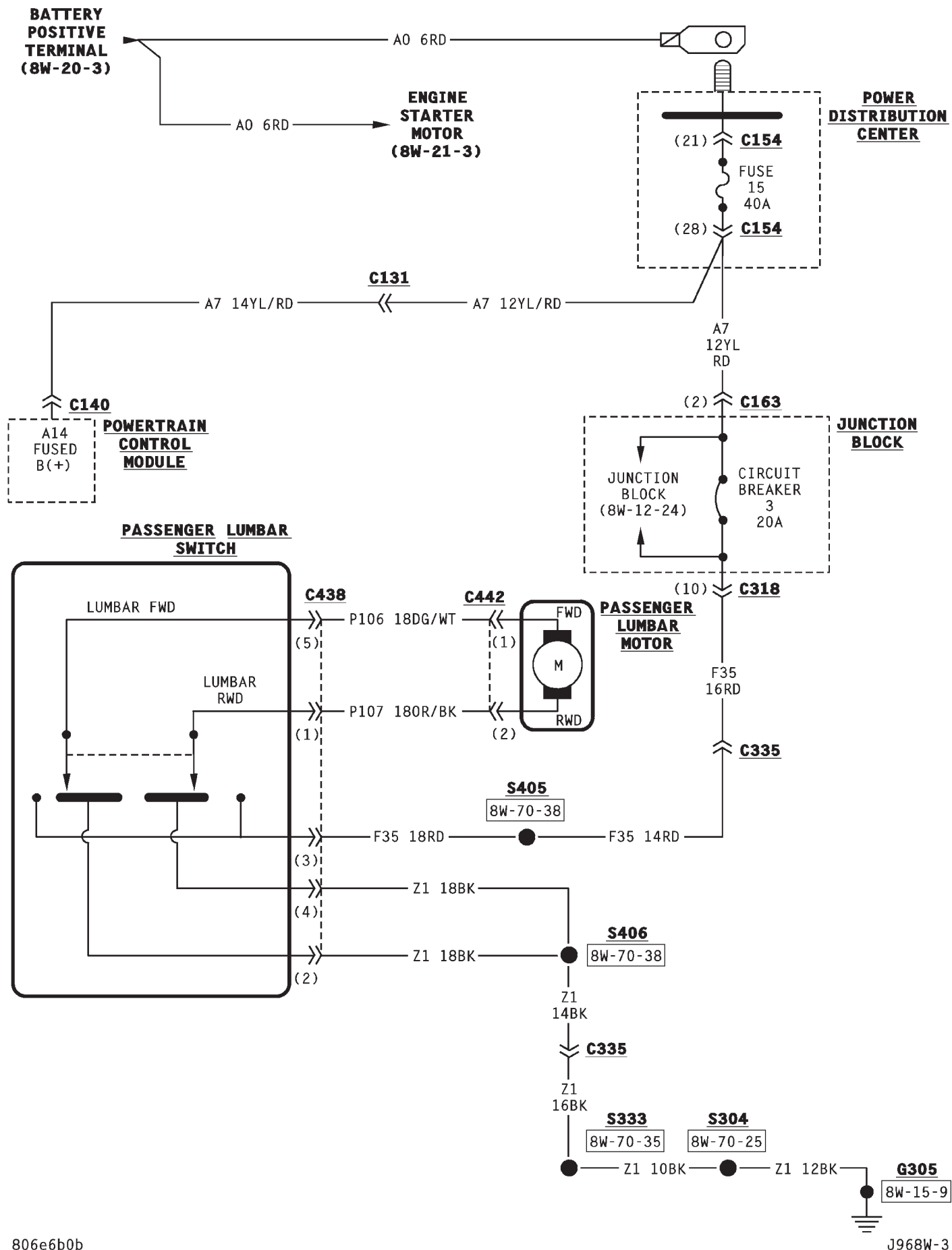
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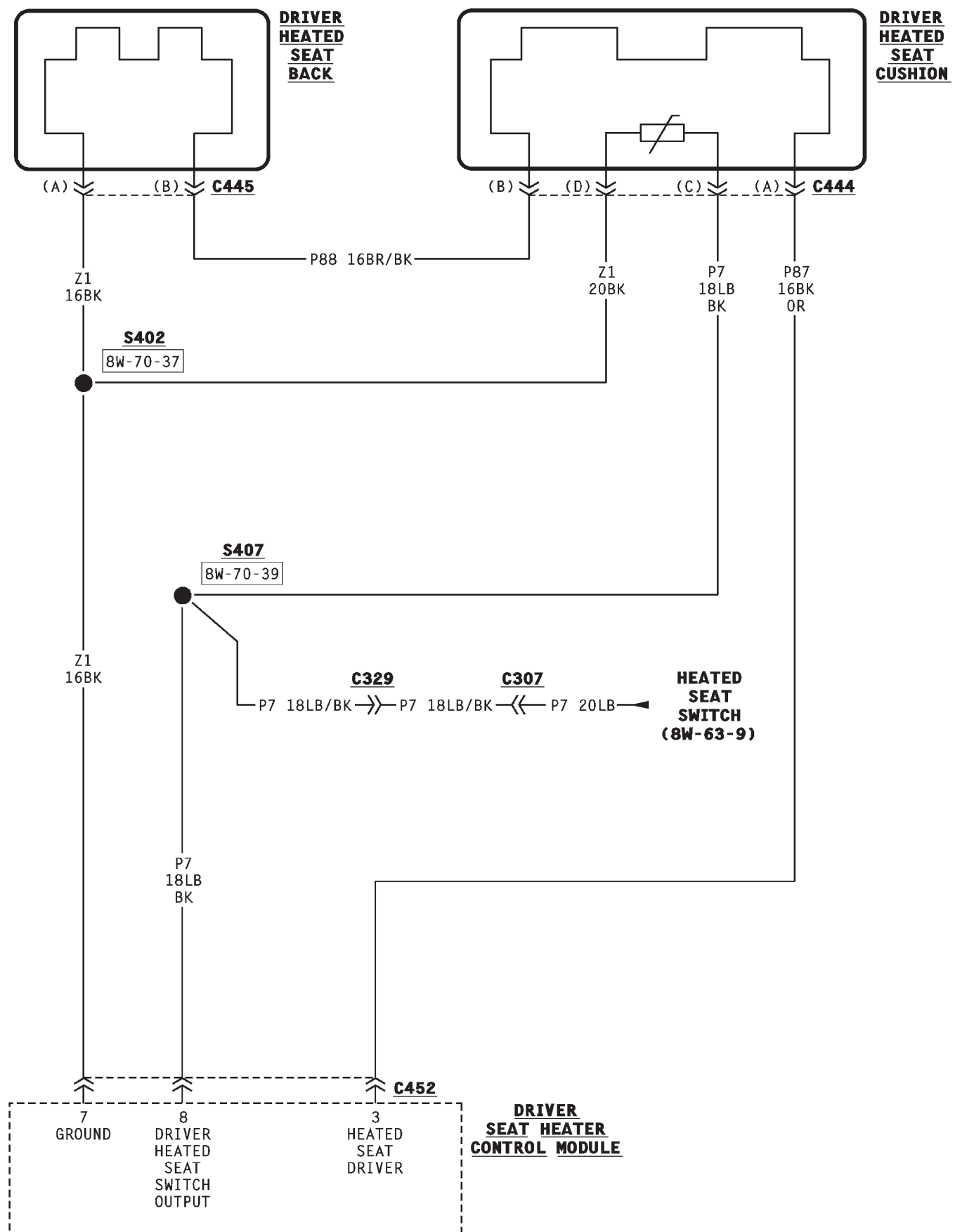




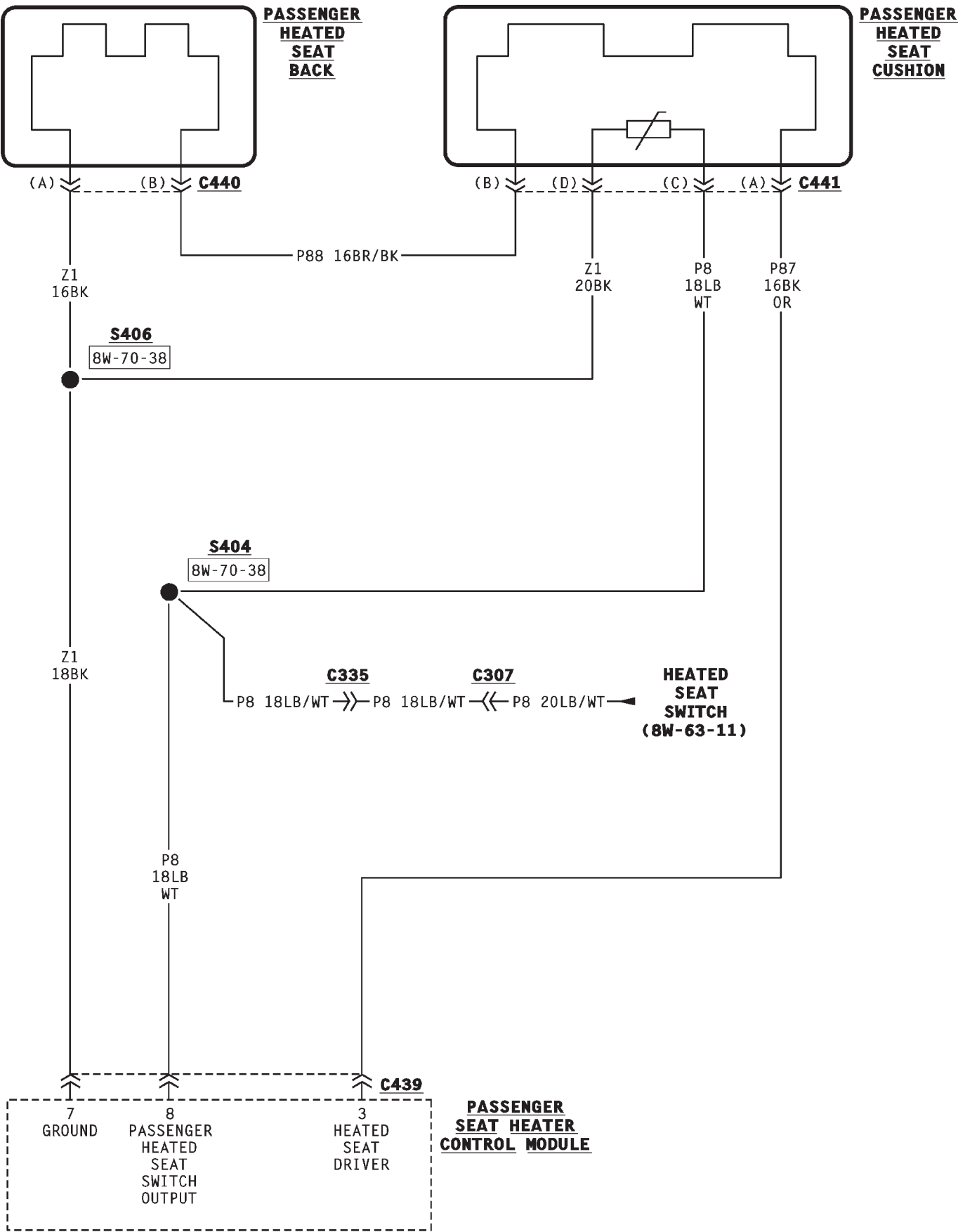




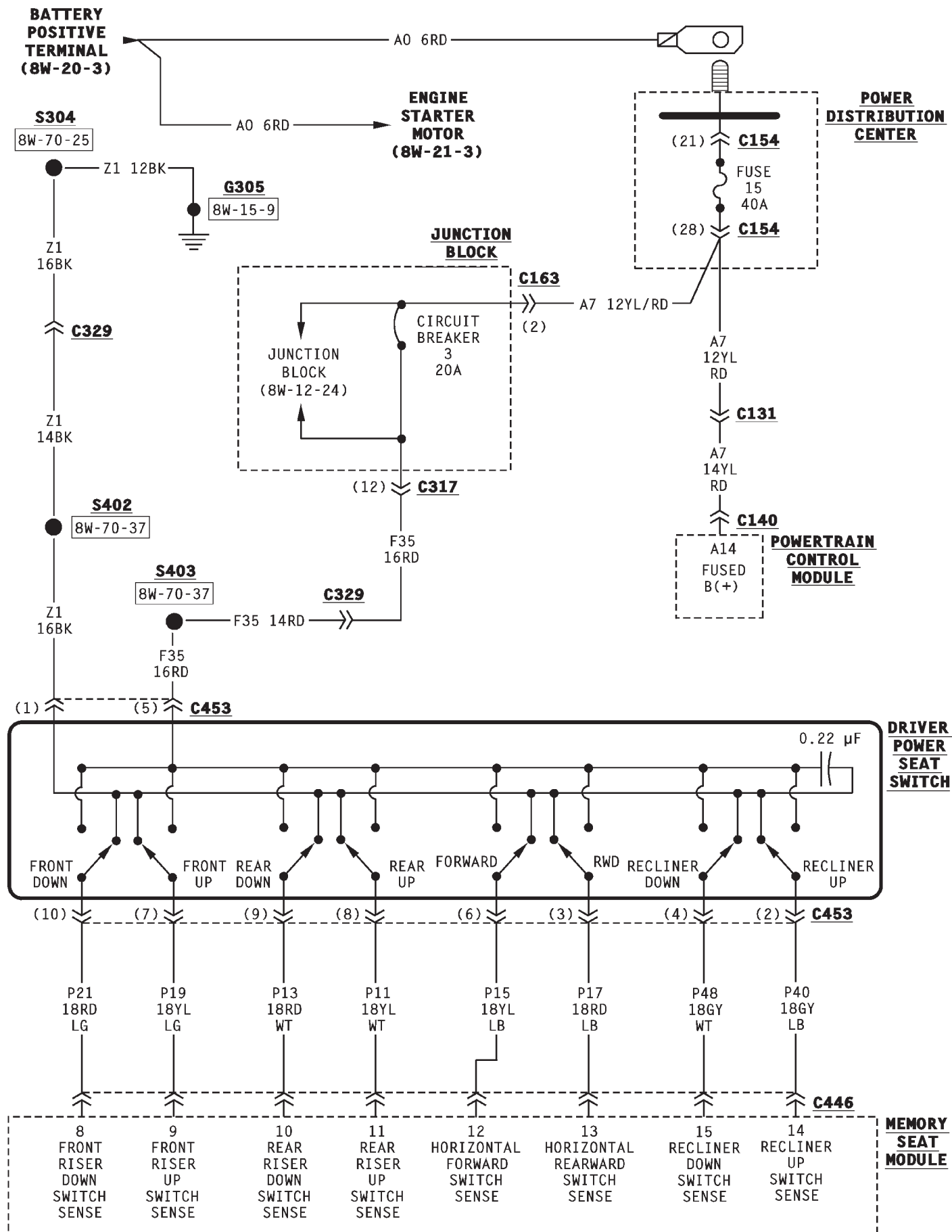


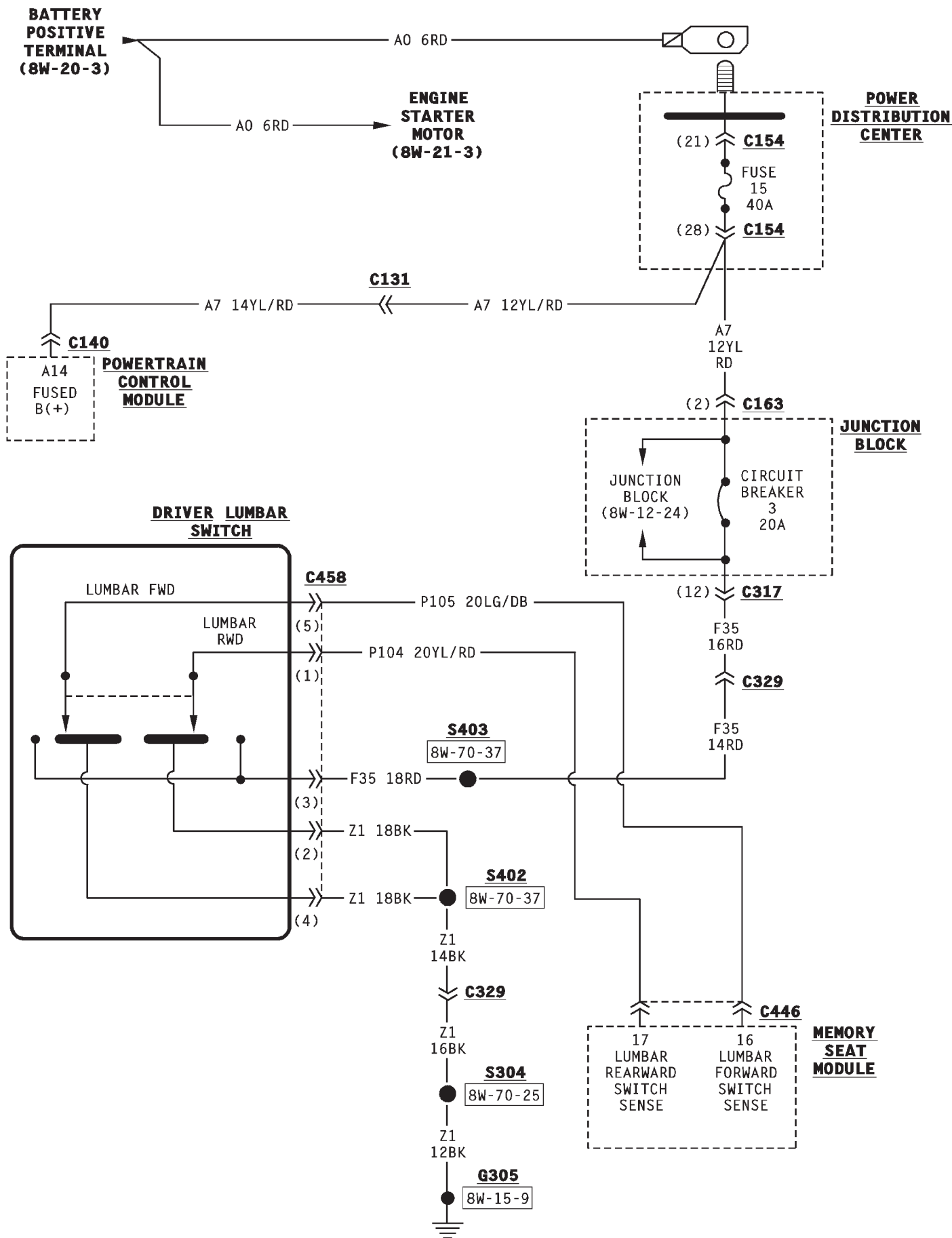


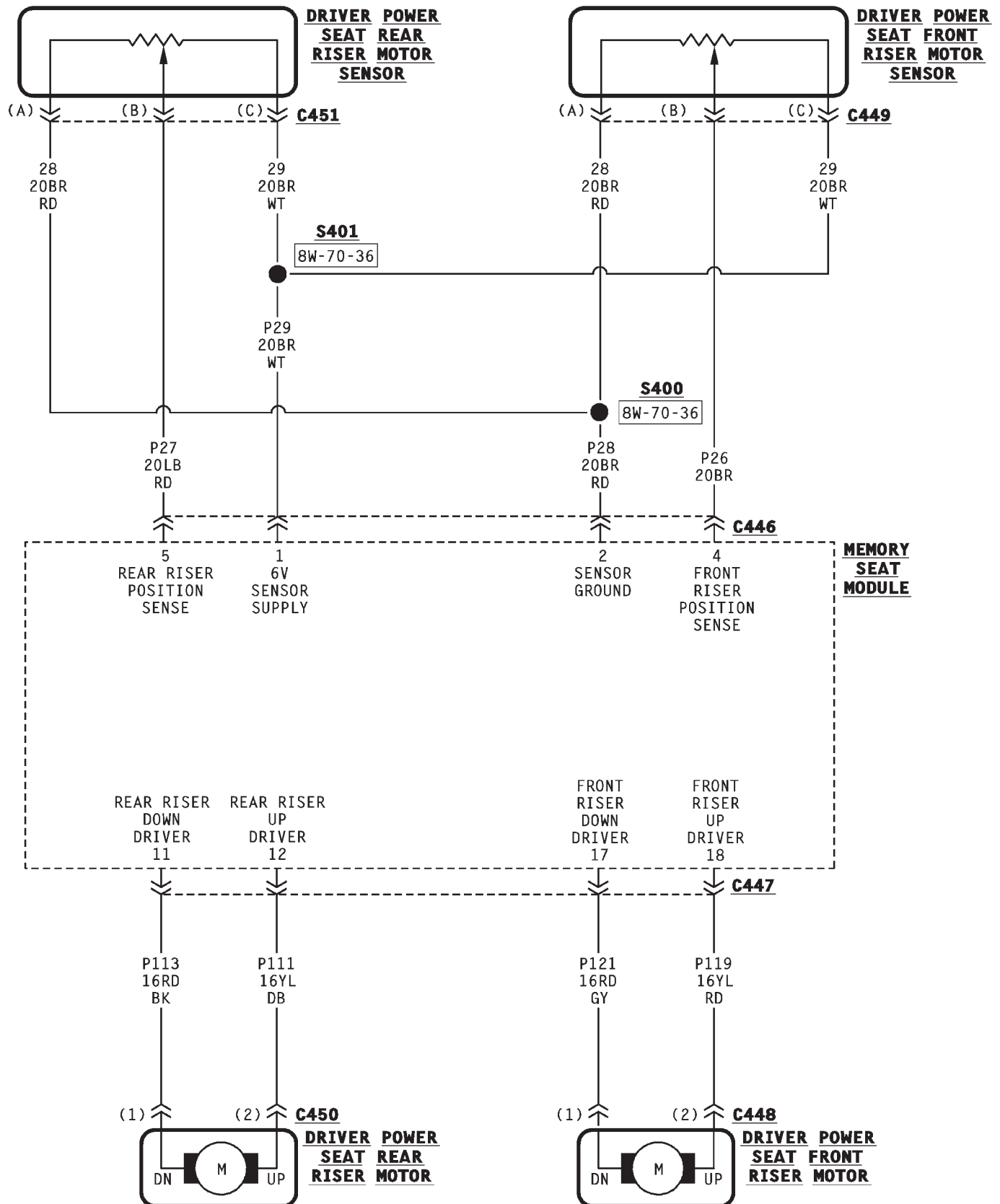


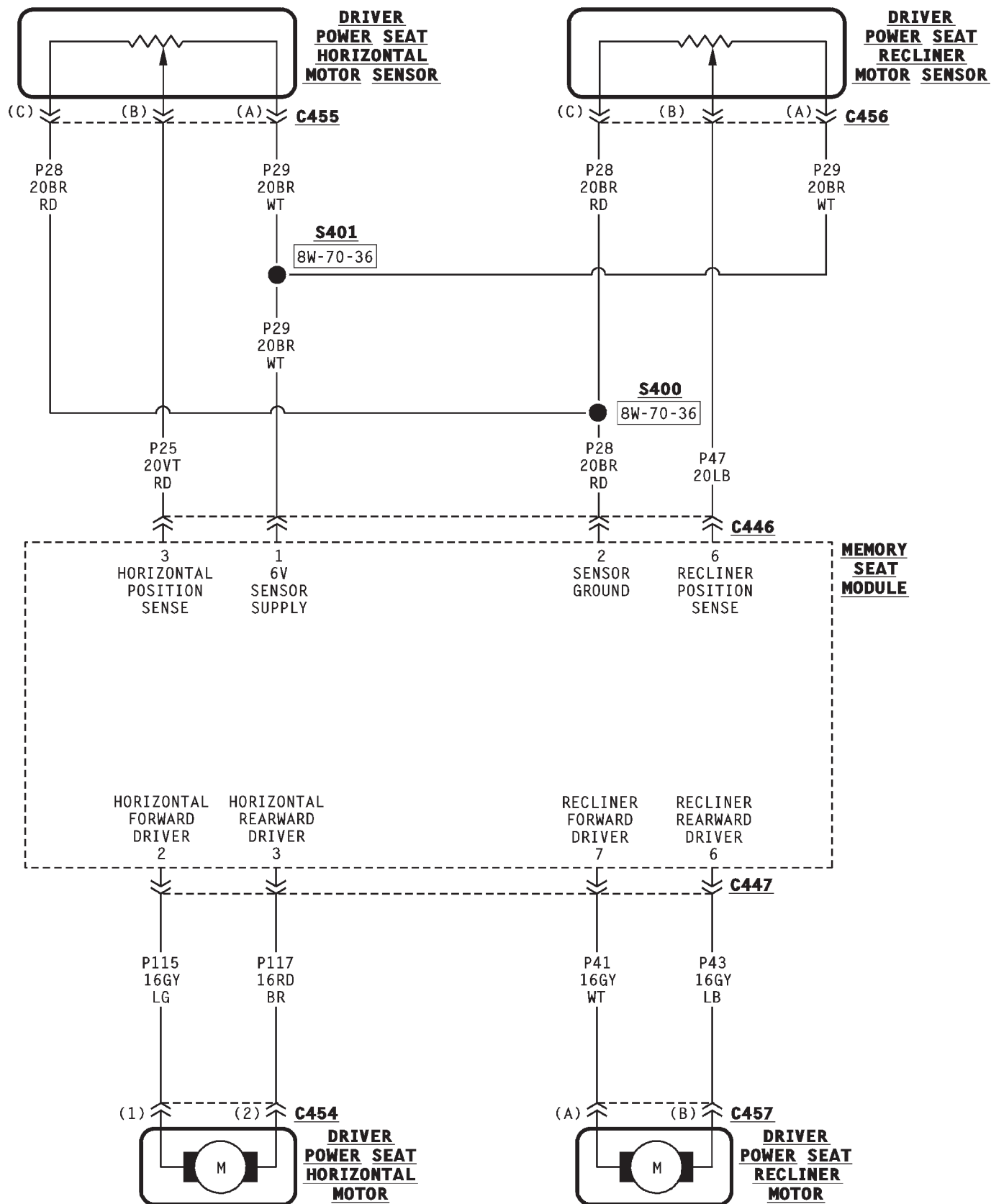


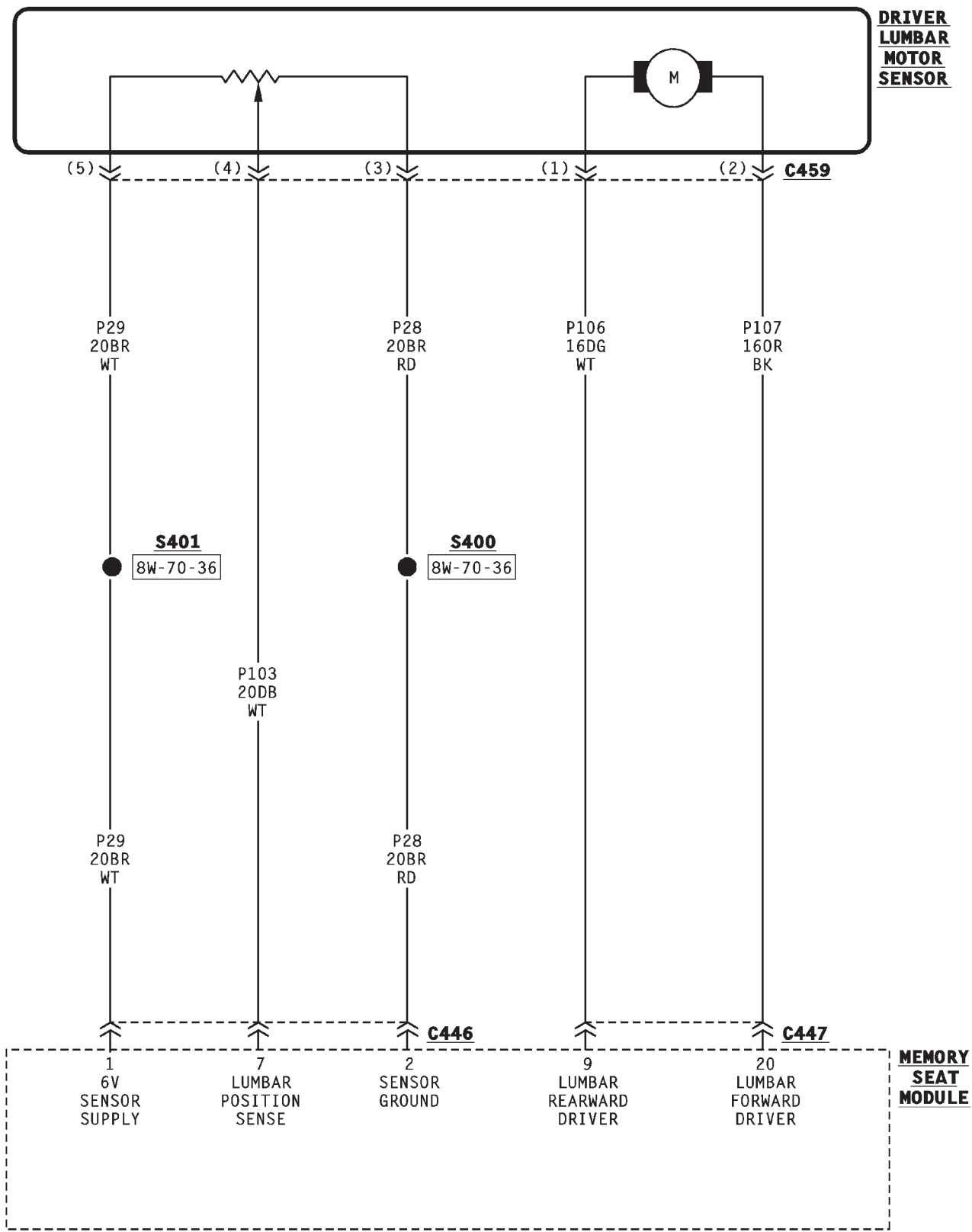












8W-64 POWER SUNROOF

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DESCRIPTION AND OPERATION

POWER SUNROOF

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

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

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

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

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

SCHEMATICS AND DIAGRAMS

WIRING DIAGRAM INDEX

The following index covers all components found in this section of the wiring diagrams. If the component you are looking for is not found here, refer to section 8W-02 for a complete list of all components shown in the wiring diagrams.