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## SUSPENSION

### WHEEL ALIGNMENT

**NOTE:** All wheel alignments are to be set with the vehicle at curb height. Refer to CURB HEIGHT MEASUREMENT in SERVICE PROCEDURES.

### SPECIFICATIONS

#### WHEEL ALIGNMENT

**NOTE:** All specifications are given in degrees.

| FRONT WHEEL ALIGNMENT                                                                                                                                                                                                                                           | PREFERRED SETTING | ACCEPTABLE RANGE |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------|
| CAMBER                                                                                                                                                                                                                                                          | 0.00°             | -0.40° to +0.40° |
| Cross Camber (Maximum Side-To-Side Difference)                                                                                                                                                                                                                  | 0.00°             | 0.50             |
| CASTER                                                                                                                                                                                                                                                          | +2.45°            | +1.45° to +3.45° |
| Cross Caster (Maximum Side-To-Side Difference)                                                                                                                                                                                                                  | 0.00°             | 1.00°            |
| TOTAL TOE*                                                                                                                                                                                                                                                      | +0.10°            | 0.00° to +0.20°  |
| REAR WHEEL ALIGNMENT                                                                                                                                                                                                                                            | PREFERRED SETTING | ACCEPTABLE RANGE |
| CAMBER                                                                                                                                                                                                                                                          | 0.00°             | -0.25° to +0.25° |
| TOTAL TOE*                                                                                                                                                                                                                                                      | +0.20°            | +0.00° to +0.40° |
| THRUST ANGLE                                                                                                                                                                                                                                                    | 0.00°             | -0.30° to +0.30° |
| Note:<br>* TOTAL TOE is the sum of both the left and right wheel toe settings. TOTAL TOE must be equally split between each front wheel to ensure the steering wheel is centered after setting toe. Positive toe (+) is toe-in and negative toe (–) is Toe-out. |                   |                  |



# BRAKES

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## PARKING BRAKE

### STANDARD PROCEDURE - PARKING BRAKE AUTOMATIC ADJUSTER LOCKOUT

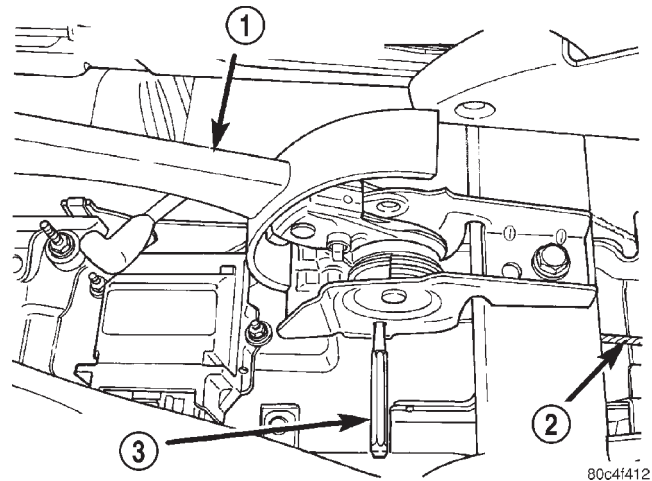
**WARNING: THE AUTOMATIC ADJUSTING FEATURE OF THIS PARKING BRAKE LEVER CONTAINS A CLOCKSPrING LOADED TO APPROXIMATELY 19 POUNDS. DO NOT RELEASE THE AUTOMATIC ADJUSTER LOCKOUT DEVICE UNLESS THE REAR PARKING BRAKE CABLES AND EQUALIZER ARE CONNECTED TO THE LEVER OUTPUT CABLE. KEEP HANDS OUT OF AUTOMATIC ADJUSTER SECTOR AND PAWL AREA. FAILURE TO OBSERVE CAUTION IN HANDLING THIS MECHANISM COULD LEAD TO SERIOUS INJURY.**

**WARNING: WHEN REPAIRS TO THE PARKING BRAKE LEVER OR CABLES ARE REQUIRED, THE AUTOMATIC ADJUSTER MUST BE LOADED AND LOCKED OUT TO AVOID POSSIBLE INJURY.**

### LOCKING AUTOMATIC ADJUSTER OUT

- (1) Block the tire and wheels so the vehicle does not move once the vehicle parking brake lever is released.
- (2) Remove the transmission shift knob as necessary.
- (3) Place parking brake lever in released (full OFF) position.
- (4) Remove the screws attaching the center console.
- (5) Remove rear window switch panel from the console.
- (6) Working through switch opening, grasp a parking brake cable or equalizer and pull back approximately 25.4 mm (1 in.)
- (7) While holding the cable or equalizer, pull the parking brake handle to it's full upright position.

- (8) Remove center console.
- (9) Grasp the parking brake lever outout cable by hand and pull upward. Continue pulling cable until an appropriate pin punch (drill bit or locking pin) can be inserted sufficiently through hole in left side of the lever mounting bracket (Fig. 1). This will lock the barking brake automatic adjustment mechanism in place and take tension off the parking brake cables. Slowly release the output cable. There should now be slack in the cables.



**Fig. 1 Pin Punch Installed**

- 1 - PARKING BRAKE LEVER
- 2 - OUTPUT CABLE
- 3 - PIN PUNCH

### UNLOCKING AUTOMATIC ADJUSTER (UNLOADING)

- (1) Be sure the rear parking brake cables are both properly installed in the equalizer.
- (2) Raise parking brake handle to the full upright position.
- (3) Keeping your hands clear of the automatic adjuster sector and pawl area, firmly grasp the parking brake lever pin punch (drill bit or locking pin if a new mechanism has been installed) (Fig. 1), then quickly remove it from the parking brake lever mech-



## PARKING BRAKE (Continued)

anism. This will allow the park brake lever mechanism to automatically adjust the parking brake cables.

(4) Install the center console and its mounting screws.

(5) Cycle the parking brake lever once to position the parking brake cables, then return the parking brake lever to its released (full OFF) position.

(6) Check the rear wheels of the vehicle. They should rotate freely without dragging with the lever in its released (full OFF) position.

(7) Install rear window switch panel.

(8) Remove the blocks from the tire and wheels.

## CABLES - PARKING BRAKE

## REMOVAL

**WARNING: THE AUTOMATIC ADJUSTING FEATURE OF THIS PARKING BRAKE LEVER CONTAINS A CLOCK SPRING LOADED TO APPROXIMATELY 19 POUNDS. DO NOT RELEASE THE AUTOMATIC ADJUSTER LOCKOUT DEVICE UNLESS THE REAR PARKING BRAKE CABLES AND EQUALIZER ARE CONNECTED TO THE LEVER OUTPUT CABLE. KEEP HANDS OUT OF AUTOMATIC ADJUSTER SECTOR AND PAWL AREA. FAILURE TO OBSERVE CAUTION IN HANDLING THIS MECHANISM COULD LEAD TO SERIOUS INJURY.**

**WARNING: WHEN REPAIRS TO THE PARKING BRAKE LEVER OR CABLES ARE REQUIRED, THE AUTOMATIC ADJUSTER MUST BE LOADED AND LOCKED OUT TO AVOID POSSIBLE INJURY. THE LEVER ADJUSTMENT MECHANISM CAN BE LOADED AND LOCKED OUT AS OUTLINED IN THIS PROCEDURE.**

**WARNING: THE AIRBAG SYSTEM IS A COMPLEX ELECTROMECHANICAL UNIT. BEFORE ATTEMPTING TO SERVICE ANY COMPONENT NEAR THE OCCUPANT RESTRAINT CONTROLLER (ORC), FIRST DISCONNECT AND ISOLATE THE BATTERY NEGATIVE CABLE. ALLOW THE SYSTEM CAPACITOR TO DISCHARGE FOR TWO (2) MINUTES. FAILURE TO DO THIS COULD RESULT IN ACCIDENTAL AIRBAG DEPLOYMENT AND POSSIBLE PERSONAL INJURY.**

**NOTE: Before proceeding with this procedure, review SERVICE WARNINGS AND CAUTIONS at the beginning of REMOVAL AND INSTALLATION in this section.**

**NOTE: The procedure below applies to either of the two rear parking brake cables.**

(1) Unclip the air cleaner cover (two clips) and move the cover aside.

(2) Disconnect and isolate the battery negative cable from its post on the battery.

(3) Block the tire and wheels so the vehicle does not move once the vehicle parking brake lever is released.

(4) Remove the transmission shift knob as necessary.

(5) Place parking brake lever in released (full OFF) position.

(6) Remove screws attaching center console.

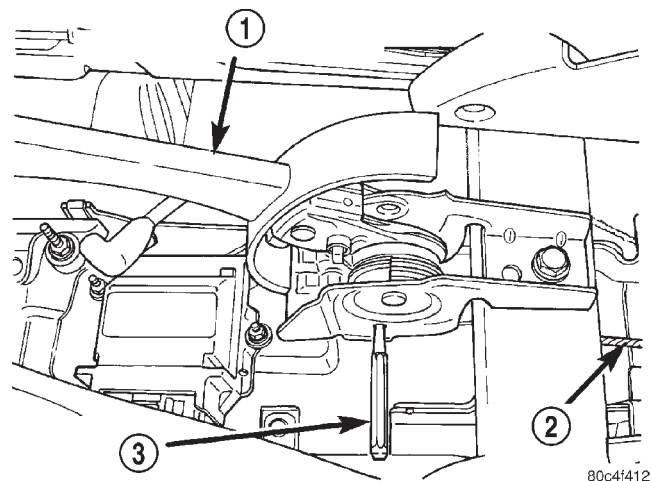
(7) Remove rear window switch panel from console.

(8) Working through switch opening, grasp a parking brake cable or equalizer and pull back approximately 25.4 mm (1 in.)

(9) While holding the cable or equalizer, pull the parking brake handle to it's full upright position.

(10) Remove center console.

(11) Grasp the parking brake lever output cable by hand and pull upward. Continue pulling on the cable until an appropriate sized pin punch (drill bit or locking pin) can be inserted sufficiently through the hole in the left side of the lever mounting bracket (Fig. 2). This will lock the parking brake automatic adjustment mechanism in place and take tension off the parking brake cables. Slowly release the output cable. There should now be slack in the cables.

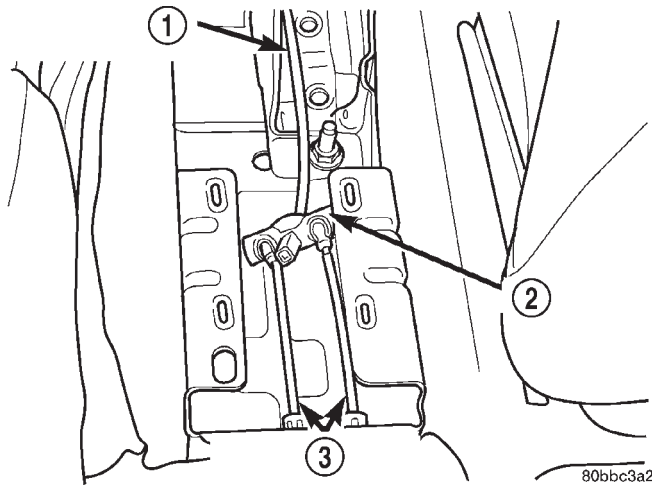


**Fig. 2 Pin Punch Installed**

- 1 - PARKING BRAKE LEVER
- 2 - OUTPUT CABLE
- 3 - PIN PUNCH

## CABLES - PARKING BRAKE (Continued)

(12) Remove the rear parking brake cables from the parking brake cable equalizer (Fig. 3).



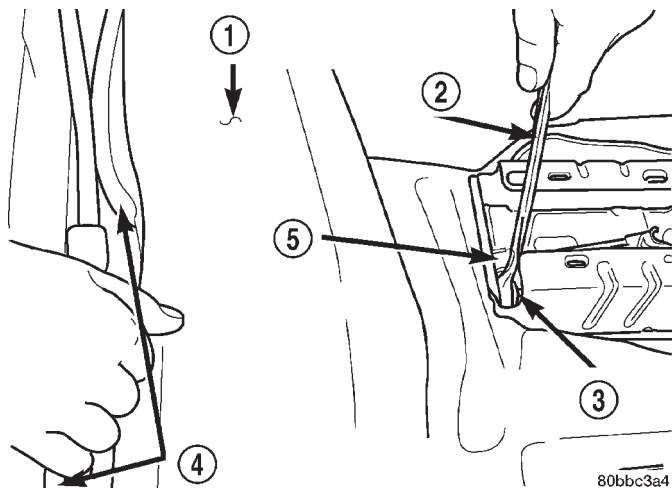
**Fig. 3 Parking Brake Cables At Equalizer**

- 1 - LEVER OUTPUT CABLE
- 2 - EQUALIZER
- 3 - REAR PARKING BRAKE CABLES

(13) Remove the rear seat cushion from the vehicle.

(14) Fold the rear carpeting forward to expose the parking brake cables at the end of the rear floor.

(15) Install the box end of a ½ inch wrench over the parking brake cable retainer (Fig. 4). Push the wrench onto the retainer until the retainer fingers are collapsed. From under the carpeting, grasp the parking brake cable housing and pull cable straight out of the bracket attached to the floor.



**Fig. 4 Compressing Cable Retainer**

- 1 - CARPET ROLLED FORWARD
- 2 - WRENCH
- 3 - RIGHT REAR CABLE
- 4 - REAR PARKING BRAKE CABLES
- 5 - LEFT REAR CABLE

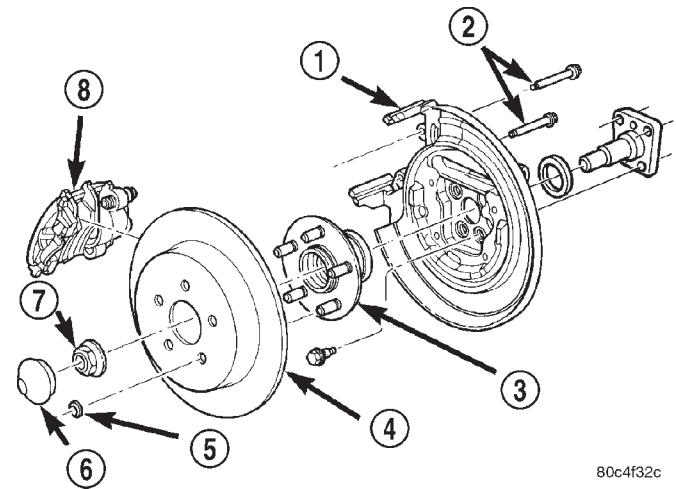
(16) Raise the vehicle. Refer to HOISTING in the LUBRICATION AND MAINTENANCE group for the proper lifting procedure.

(17) Remove the rear tire and wheel assembly from the vehicle.

(18) On vehicles equipped with rear drum brakes, remove the brake drum. Refer to BRAKE DRUM in this section.

(19) On vehicles equipped with rear disc brakes:

- Remove the disc brake caliper guide pin bolts, then the caliper from the disc brake adapter (Fig. 5).
- Hang the caliper out of the way using a wire hanger or cord.
- Remove the brake rotor from the rear hub and bearing.



**Fig. 5 Rear Disc Brakes**

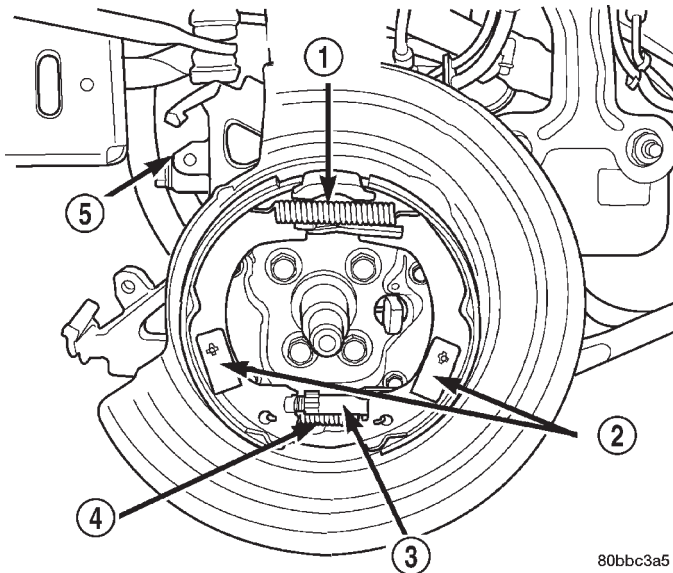
- 1 - DISC BRAKE ADAPTER
- 2 - GUIDE PIN BOLTS
- 3 - HUB AND BEARING
- 4 - BRAKE ROTOR
- 5 - RETAINER CLIP
- 6 - DUST CAP
- 7 - NUT
- 8 - DISC BRAKE CALIPER

(20) Remove the dust cap from the rear hub and bearing.

(21) Remove the hub and bearing retaining nut from the knuckle spindle, then remove the hub and bearing (Fig. 5).

## CABLES - PARKING BRAKE (Continued)

(22) On vehicles equipped with rear disc brakes, remove the upper return spring, both shoe hold-down clips, then spread the rear parking brake shoes apart at the top enough to clear the shoe anchor and remove the parking brake shoes as an assembly from the disc brake adapter (Fig. 6).



**Fig. 6 Parking Brake Shoes**

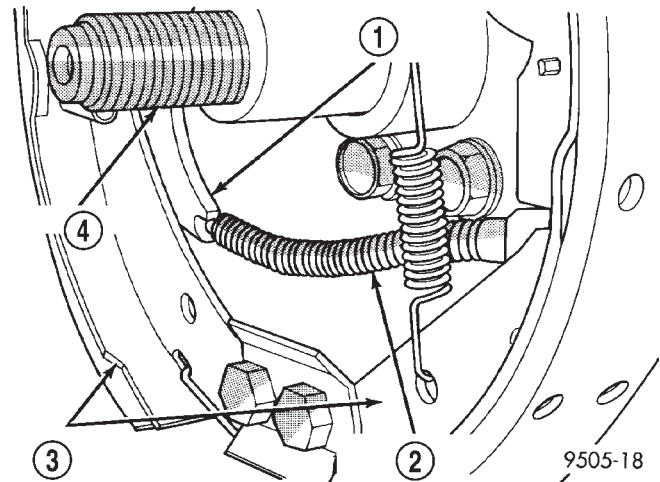
- 1 - UPPER RETURN SPRING
- 2 - SHOE HOLD DOWN CLIPS
- 3 - ADJUSTER
- 4 - LOWER REAR SPRING
- 5 - DISC BRAKE ADAPTER

(23) To remove the rear parking brake cable from the brake support plate on vehicles equipped with rear drum brakes:

- Remove the parking brake cable from the parking brake actuating lever (Fig. 7).
- Remove the actuating spring between the brake shoe adjustment lever and the brake shoe (Fig. 8).
- Remove the parking brake cable from the rear brake support plate. The parking brake cable can be removed from brake support plate using a ½ inch box wrench to compress the locking fingers on the parking brake cable retainer (Fig. 9).

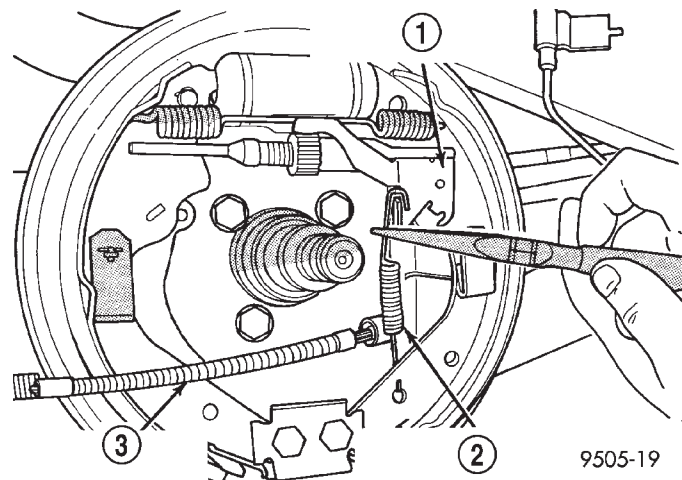
(24) To remove the rear parking brake cable from the disc brake adapter on vehicles equipped with rear disc brakes:

- Remove the parking brake actuating lever from the parking brake cable (Fig. 10).
- Remove the parking brake cable from the rear disc brake adapter. The parking brake cable can be removed from the disc brake adapter using a ½ inch offset box wrench to compress the locking fingers on the parking brake cable retainer (Fig. 11).



**Fig. 7 Actuator Lever**

- 1 - PARK BRAKE ACTUATING LEVER
- 2 - PARK BRAKE CABLE
- 3 - BRAKE SHOE ASSEMBLIES
- 4 - REAR SPINDLE



**Fig. 8 Actuating Spring**

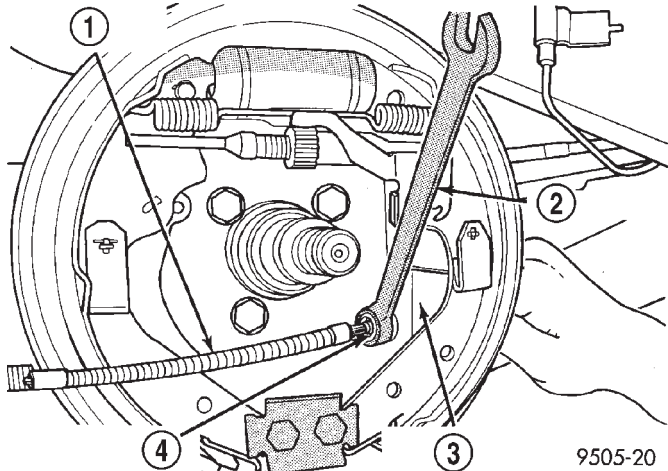
- 1 - BRAKE SHOE ADJUSTMENT LEVER
- 2 - ADJUSTMENT LEVER ACTUATING SPRING
- 3 - PARK BRAKE CABLE

(25) Remove the two fasteners securing the cable and routing brackets to the axle trailing arm (Fig. 12).

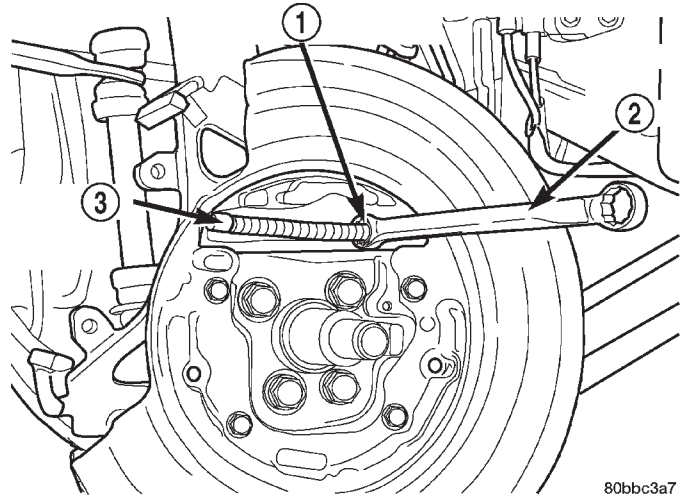
(26) Pull cable through hole in trailing arm.

(27) Remove the parking brake cable and sealing grommet from floor pan of the vehicle.

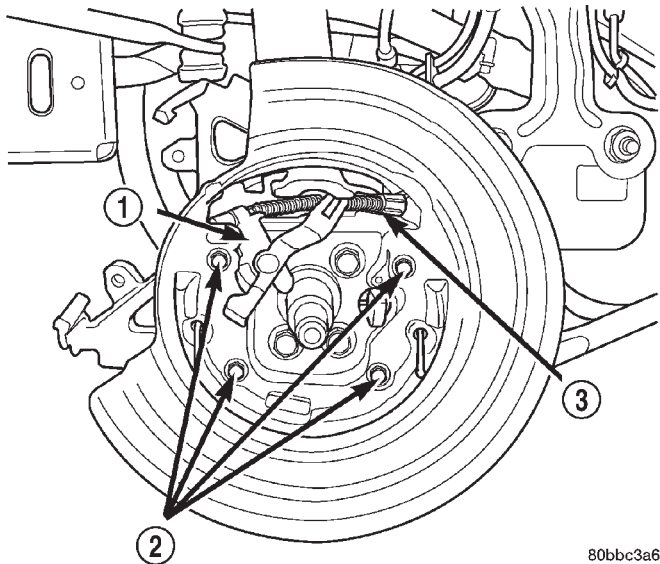
## CABLES - PARKING BRAKE (Continued)

**Fig. 9 Parking Brake Cable Removal**

- 1 - PARK BRAKE CABLE
- 2 - 1/2" WRENCH
- 3 - REAR BRAKE SUPPORT PLATE
- 4 - PARK BRAKE CABLE RETAINER

**Fig. 11 Parking Brake Cable Removal**

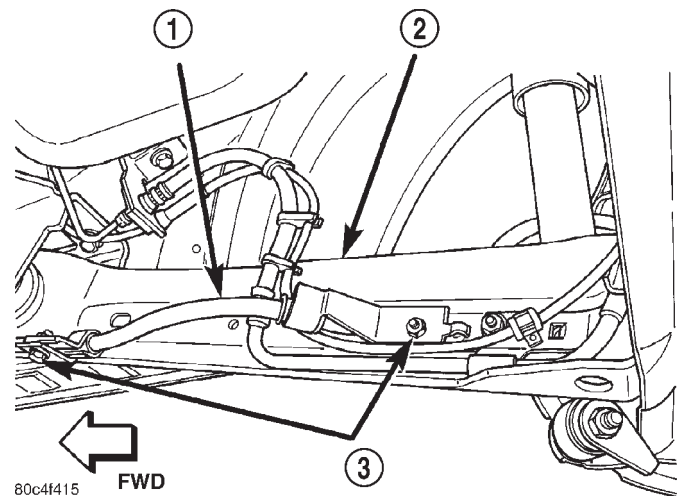
- 1 - CABLE RETAINER
- 2 - OFFSET BOX WRENCH
- 3 - PARKING BRAKE CABLE

**Fig. 10 Parking Brake Actuator Lever**

- 1 - SHOE ACTUATOR LEVER
- 2 - SHIELD MOUNTING SCREWS
- 3 - REAR PARKING BRAKE CABLE

**INSTALLATION**

**WARNING:** THE AUTOMATIC ADJUSTING FEATURE OF THIS PARKING BRAKE LEVER CONTAINS A CLOCK SPRING LOADED TO APPROXIMATELY 19 POUNDS. DO NOT RELEASE THE AUTOMATIC ADJUSTER LOCKOUT DEVICE UNLESS THE REAR PARKING BRAKE CABLES AND EQUALIZER ARE CONNECTED TO THE LEVER OUTPUT CABLE. KEEP HANDS OUT OF AUTOMATIC ADJUSTER

**Fig. 12 Cable Routing Bracket Fasteners**

- 1 - CABLE
- 2 - ARM
- 3 - FASTENERS
- 4 - FWD

**SECTOR AND PAWL AREA. FAILURE TO OBSERVE CAUTION IN HANDLING THIS MECHANISM COULD LEAD TO SERIOUS INJURY.**

**WARNING:** WHEN REPAIRS TO THE PARKING BRAKE LEVER OR CABLES ARE REQUIRED, THE AUTOMATIC ADJUSTER MUST BE LOADED AND LOCKED OUT TO AVOID POSSIBLE INJURY. THE LEVER ADJUSTMENT MECHANISM CAN BE LOADED AND LOCKED OUT AS OUTLINED IN THIS PROCEDURE.



## CABLES - PARKING BRAKE (Continued)

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**NOTE: Before proceeding with this procedure, review SERVICE WARNINGS AND CAUTIONS at the beginning of REMOVAL AND INSTALLATION in this section.**

**NOTE: The procedure below applies to either of the two rear parking brake cables.**

(1) From underneath, push the parking brake cable through the hole in the floor pan of the vehicle making sure the cable sealing grommet is installed in the floor pan as far as possible to ensure a good seal.

(2) Guide the other end of the cable through the hole in the axle trailing arm.

(3) Align the cable routing brackets with their mounts on the trailing arm. Install the two fasteners securing the cable and routing brackets to the trailing arm (Fig. 12). Install and tighten the mounting bolts to a torque of 11 N·m (100 in. lbs.).

(4) Install the parking brake cable into the brake support plate or the rear disc brake adapter. Be sure the locking fingers on the cable retainer are expanded once the cable is pushed all the way into the support plate or brake adapter hole to ensure the cable is securely held in place.

(5) On vehicles equipped with rear drum brakes:

- Install the parking brake cable on the parking brake cable actuating lever (Fig. 7).
- Install the actuating spring to the brake shoe and the brake adjustment lever (Fig. 8).

(6) On vehicles equipped with rear disc brakes:

- Install the parking brake shoes actuator lever on the parking brake cable (Fig. 10).
- Install the parking brake shoe assemblies on the disc brake adapter (Fig. 6).

(7) Install the hub and bearing on the rear spindle. Install a new hub and bearing retaining nut. Tighten the retaining nut to a torque of 217 N·m (160 ft. lbs.).

(8) Install the hub and bearing dust cap.

(9) On drum brake equipped vehicles, install the rear brake drum.

(10) On vehicles equipped with rear disc brakes, install the brake rotor, then the disc brake caliper (Fig. 5). Install the two caliper guide pin bolts, then tighten them to a torque of 22 N·m (192 in. lbs.).

(11) Install the rear tire and wheel assembly. Tighten all wheel nuts to a torque of 135 N·m (100 ft. lbs.).

(12) Lower the vehicle.

(13) Ensure that the seal grommet on the cable that was installed from underneath is fully seated into the floor pan.

(14) Route the parking brake cable under the carpeting, up to parking brake cable retaining bracket on floor pan. Install the parking brake cable through the retaining bracket. Push the cable in until the locking fingers on the cable retainer lock the cable into place.

(15) Install the rear parking brake cables into the equalizer on the parking brake lever output cable (Fig. 3).

(16) Ensure that the parking brake cables are correctly installed on the equalizer and aligned with the cable track on the parking brake lever.

(17) Raise parking brake handle to full upright position.

(18) Keeping your hands clear of the automatic adjuster sector and pawl area, firmly grasp the parking brake lever pin punch (drill bit or locking pin if a new mechanism has been installed) (Fig. 2), then quickly remove it from the parking brake lever mechanism. This will allow the park brake lever mechanism to automatically adjust the parking brake cables.

(19) Install center console and mounting screws.

(20) Install rear window switch panel.

(21) Cycle the parking brake lever once to position the parking brake cables, then return the parking brake lever its released position.

(22) Check the rear wheels of the vehicle. They should rotate freely without dragging with the lever in its released position.

(23) Apply the parking brake.

(24) Remove the blocks from the tires and wheels.

(25) Reconnect the battery negative terminal.

(26) Reinstall the air cleaner cover (two clips).

## LEVER - PARKING BRAKE

### REMOVAL

**WARNING: THE AUTOMATIC ADJUSTING FEATURE OF THIS PARKING BRAKE LEVER CONTAINS A CLOCK SPRING LOADED TO APPROXIMATELY 19 POUNDS. DO NOT RELEASE THE AUTOMATIC ADJUSTER LOCKOUT DEVICE UNLESS THE REAR PARKING BRAKE CABLES AND EQUALIZER ARE CONNECTED TO THE LEVER OUTPUT CABLE. KEEP HANDS OUT OF AUTOMATIC ADJUSTER SECTOR AND PAWL AREA. FAILURE TO OBSERVE CAUTION IN HANDLING THIS MECHANISM COULD LEAD TO SERIOUS INJURY.**

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(1) Unclip the air cleaner cover (two clips) and move the cover aside.

(2) Disconnect and isolate the battery negative cable from its post on the battery.

(3) Block the tire and wheels so the vehicle does not move once the vehicle parking brake lever is released.

(4) Remove the transmission shift knob as necessary.

(5) Place parking brake lever in released (full OFF) position.

(6) Remove screws attaching center console.

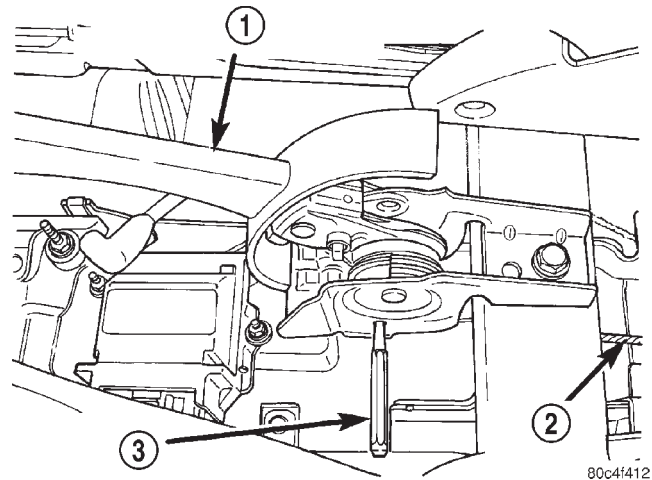
(7) Remove rear switch panel from center console.

(8) Working through switch panel opening, grasp a parking brake cable or equalizer and pull back approximately 25.4 mm (1 in.).

(9) While holding the cable or equalizer, pull the parking brake handle to its full upright position.

(10) Remove center console.

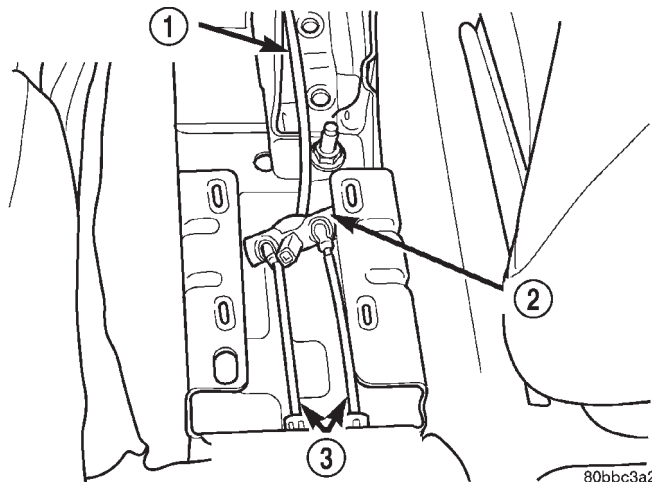
(11) Grasp the parking brake lever output cable by hand and pull upward. Continue pulling cable until an appropriate pin punch (drill bit or locking pin) can be inserted sufficiently through hole in left side of the lever mounting bracket (Fig. 13). This will lock the parking brake automatic adjustment mechanism in place and take tension off the parking brake cables. Slowly release the output cable. There should now be slack in the cables.



**Fig. 13 Pin Punch Installed**

- 1 - PARKING BRAKE LEVER
- 2 - OUTPUT CABLE
- 3 - PIN PUNCH

(12) Remove both rear parking brake cables from the parking brake cable equalizer (Fig. 14).



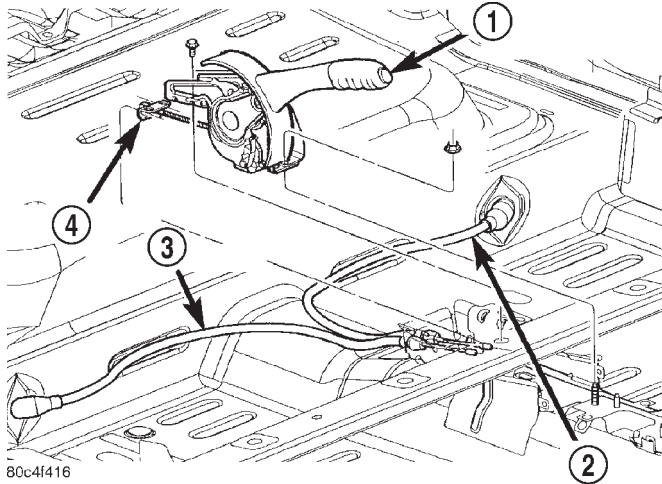
**Fig. 14 Parking Brake Cables At Equalizer**

- 1 - LEVER OUTPUT CABLE
- 2 - EQUALIZER
- 3 - REAR PARKING BRAKE CABLES

## LEVER - PARKING BRAKE (Continued)

(13) Remove the wiring harness electrical connector from the parking brake warning switch on the right side of the parking brake lever.

(14) Remove the screw and the nut attaching the parking brake lever to the vehicle (Fig. 15).



**Fig. 15 Parking Brake Lever**

- 1 - PARKING BRAKE LEVER
- 2 - LEFT CABLE
- 3 - RIGHT CABLE
- 4 - EQUALIZER

(15) Remove the parking brake lever from the vehicle.

## INSTALLATION

**WARNING: THE AUTOMATIC ADJUSTING FEATURE OF THIS PARKING BRAKE LEVER CONTAINS A CLOCK SPRING LOADED TO APPROXIMATELY 19 POUNDS. DO NOT RELEASE THE AUTOMATIC ADJUSTER LOCKOUT DEVICE UNLESS THE REAR PARKING BRAKE CABLES AND EQUALIZER ARE CONNECTED TO THE LEVER OUTPUT CABLE. KEEP HANDS OUT OF AUTOMATIC ADJUSTER SECTOR AND PAWL AREA. FAILURE TO OBSERVE CAUTION IN HANDLING THIS MECHANISM COULD LEAD TO SERIOUS INJURY.**

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**LEVER ADJUSTMENT MECHANISM CAN BE LOADED AND LOCKED OUT AS OUTLINED IN THIS PROCEDURE.**

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(1) Place the parking brake lever on the mounting studs on the vehicle floor. Install and tighten the screw and the nut to a torque of 28 N·m (250 in. lbs.) (Fig. 15).

(2) Connect the wiring harness electrical connector on the parking brake warning switch.

(3) Install both rear park brake cables into the equalizer on the parking brake lever output cable (Fig. 14).

(4) Ensure that the parking brake cables are correctly installed on the equalizer and aligned with the cable track on the parking brake lever.

(5) Raise parking brake handle to full upright position.

(6) Keeping your hands clear of the automatic adjuster sector and pawl area, firmly grasp the parking brake lever pin punch (drill bit or locking pin if a new mechanism has been installed) (Fig. 13), then quickly remove it from the parking brake lever mechanism. This will allow the park brake lever mechanism to automatically adjust the parking brake cables.

(7) Install center console and mounting screws.

(8) Install rear window switch panel.

(9) Cycle the parking brake lever once to position the parking brake cables, then return the parking brake lever its released (full OFF) position.

(10) Check the rear wheels of the vehicle. They should rotate freely without dragging with the lever in its released (full OFF) position.

(11) Apply the parking brake.

(12) Remove the blocks from the tires and wheels.

(13) Reconnect the battery negative terminal.

(14) Reinstall the air cleaner cover (two clips).

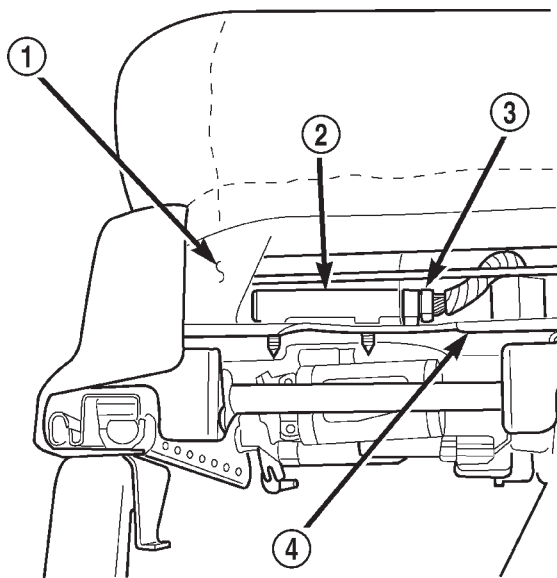
# ELECTRONIC CONTROL MODULES

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## HEATED SEAT MODULE

### DESCRIPTION



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**Fig. 1 HEATED SEAT MODULE - TYPICAL**

- 1 - SEAT CUSHION FRAME
- 2 - HEATED SEAT MODULE
- 3 - WIRE HARNESS CONNECTOR
- 4 - POWER SEAT TRACK FRONT BRACKET

Two heated seat modules are used on each vehicle equipped with the heated seat option. One heated seat module (Fig. 1) is located on each power seat track, where they are secured with two push-in type plastic fasteners. The modules are contained within a small, rectangular, molded plastic housing with a single connector receptacle that allows them to be connected to all of the required inputs and outputs through the power seat wire harness.

The heated seat modules are electronic microprocessor controlled devices that are designed to monitor the inputs and control the outputs of the heated seat system. The heated seat modules are programmed to provide two levels of heating for each front seat: a Lo temperature set point of about 36° C (97° F), or a Hi temperature set point of about 41° C (105° F). The heated seat modules are also programmed to perform self-diagnosis of certain heated seat system functions. Refer to heated seat module diagnosis and testing for additional information.

The heated seat modules cannot be adjusted or repaired. If a module is damaged or faulty, the entire module must be replaced.

### OPERATION

The heated seat module operates on battery current received through a fuse in the Junction Block (JB) on a fused ignition switch output (run-acc) circuit so that the heated seat system will only operate when the ignition switch is in the On or Accessory positions. The heated seat module is grounded at all times through a ground feed from a two wire take out and eyelet terminal connector of the power seat wire harness that is secured by a ground screw to the top of the seat crossmember under each front seat. Inputs to the heated seat module include a seat heater switch MUX circuit for each of the two heated seat switches, heated seat sensor inputs from the seat cushions of each front seat, and battery current from the power seat circuit breaker in the JB received through the energized heated seat relay on two heated seat relay output circuits. Outputs from the heated seat module include a battery voltage reference to the heated seat sensors on a sensor feed circuit, a battery current feed to the two heated seat element circuits on separate heated seat driver circuits, and separate Lo and Hi driver circuits for each of the heated seat switch Light-Emitting Diode (LED) indicator lamps.



## HEATED SEAT MODULE (Continued)

When a driver or passenger heated seat switch request signal is received by the heated seat module, the module energizes the proper switch LED indicator lamp (Lo or Hi) by pulling the LED driver circuit to ground. This provides an indication to the vehicle operator that the heated seat system is operating and whether the Hi or Lo heat mode is selected. At the same time, the heated seat module energizes the heated seat sensor feed circuit and the sensor provides the module with a heat sense input indicating the surface temperature of the selected seat cushion. If the seat cushion surface temperature input is below the temperature set point for the selected heat mode, the heated seat module energizes an N-channel Field Effect Transistor (N-FET) within the module. The N-FET switches battery current to the heated seat elements in the selected seat cushion and back. When the heated seat sensor input indicates the correct temperature set point has been achieved, the heated seat module de-energizes the N-FET which switches off the battery current to the heated seat elements. The heated seat module will continue to cycle the N-FET as needed to maintain the selected temperature set point.

If the heated seat module detects a heated seat sensor value input that is out of range or a shorted or open heated seat element circuit, it will automatically de-energize the N-FET and switch off the battery current to the affected heated seat elements. The heated seat module will also notify the vehicle operator or the repair technician of this condition by flashing the Hi and/or Lo LED indicator lamps in the affected heated seat switch in a prescribed sequence as a self-diagnostic feedback. Refer to Diagnosis and Testing for the proper heated seat system diagnosis and testing procedures.

## DIAGNOSIS AND TESTING - HEATED SEAT MODULE

Two heated seat modules are used on each vehicle, one for each front seat. Refer to the appropriate wiring information in **Wiring Diagrams**. The wiring information includes wiring diagrams, proper wire and connector repair procedures, further details on wire harness routing and retention, as well as pin-out and location views for the various wire harness connectors, splices and grounds.

(1) If a heated seat fails to heat and one or both of the LED indicator lamps on a heated seat switch flash, refer to the heated seat system diagnosis and testing procedures. If a heated seat heats, but one or both LED indicator lamps on the heated seat switch fail to operate, refer to the appropriate heated seat switch diagnosis and testing procedure. If the heated seat switch checks OK, go to Step 4. If both seats (driver and passenger) fail to heat and the LED indi-

cator lamps on the heated seat switches for both seats fail to operate, refer to the heated seat relay diagnosis and testing procedure. If the heated seat relay checks OK, go to Step 2. If only one seat (driver or passenger) fails to heat and the LED indicator lamps on the heated seat switch for that seat fail to operate, refer to the heated seat switch diagnosis and testing procedure. If the heated seat switch checks OK, go to Step 3. If a heated seat switch LED indicator lamp remains illuminated after the heated seat has been turned Off, go to Step 5.

(2) Disconnect and isolate the battery negative cable. Disconnect the power seat wire harness connector from the heated seat module connector receptacle. Check for continuity between the **ground circuit** cavity of the wire harness connector for the heated seat module and a good ground. If OK, go to Step 3. If not OK, repair the open ground circuit to ground as required.

(3) Disconnect and isolate the battery negative cable. Disconnect the power seat wire harness connector from the heated seat module connector receptacle. Disconnect the power seat wire harness connector(s) from the connector receptacle(s) of the inoperative heated seat switch(es). Check for continuity between the inoperative driver and/or passenger seat heater switch **MUX circuit** cavities of the power seat wire harness connector(s) for the inoperative heated seat switch and the power seat wire harness connector for the heated seat module. There should be continuity. If OK, replace the faulty heated seat module. If not OK, repair the open driver and/or passenger seat heater switch MUX circuit as required.

(4) Disconnect and isolate the battery negative cable. Disconnect the power seat wire harness connector from the heated seat module connector receptacle. Disconnect the power seat wire harness connector(s) from the connector receptacle(s) of the heated seat switch(es) with the inoperative LED indicator lamp(s). Check for continuity between the inoperative driver and/or passenger seat high and/or low heat **LED driver circuit** cavities of the power seat wire harness connector(s) for the heated seat switch(es) and the power seat wire harness connector for the heated seat module. There should be continuity. If OK, replace the faulty heated seat module. If not OK, repair the open driver or passenger seat high or low heat LED driver circuit as required.

(5) Disconnect and isolate the battery negative cable. Disconnect the power seat wire harness connector from the heated seat module connector receptacle. Disconnect the power seat wire harness connector(s) from the connector receptacle(s) of the heated seat switch(es) with the inaccurate LED indicator lamp(s). Check for continuity between the inop-

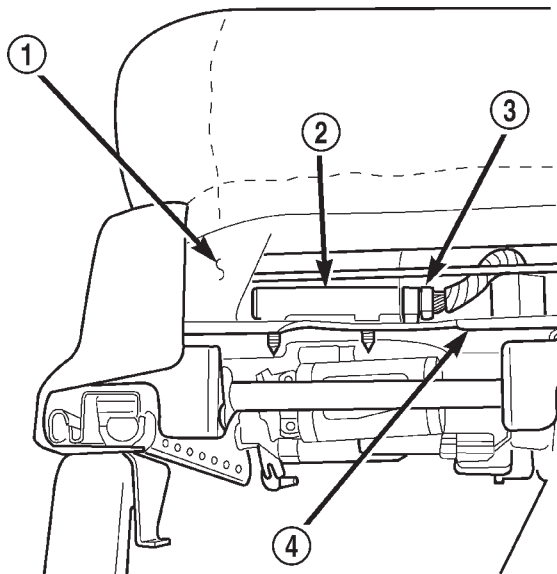
## HEATED SEAT MODULE (Continued)

erative driver and/or passenger seat high and/or low heat LED driver circuit cavity of the power seat wire harness connector(s) for the heated seat switch(es) and a good ground. There should be no continuity. If OK, replace the faulty heated seat module. If not OK, repair the shorted driver or passenger seat high or low heat LED driver circuit as required.

## REMOVAL

**WARNING: THERE ARE MANY SHARP METAL EDGES ON THE SEAT CUSHION FRAME AND SEAT ADJUSTER RAILS UNDER THE SEAT. WHEN PERFORMING THIS SERVICE, A LONG-SLEEVED SHIRT AND GLOVES SHOULD BE WORN IN ORDER TO AVOID UNNECESSARY CUTS AND ABRASIONS TO EXPOSED SKIN.**

- (1) Move the appropriate power seat to its full up and full rear stop positions.
- (2) Disconnect and isolate the battery negative cable.
- (3) Working under the seat, release the two plastic push-in fasteners from either the module or the mounting holes in the power seat cushion pan (Fig. 2).



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**Fig. 2 Heated Seat Module - Typical**

- 1 - SEAT CUSHION FRAME
- 2 - HEATED SEAT MODULE
- 3 - WIRE HARNESS CONNECTOR
- 4 - POWER SEAT TRACK FRONT BRACKET

- (4) Disconnect the power seat wire harness connector from the heated seat module connector receptacle.
- (5) Remove the heated seat module from the power seat track.

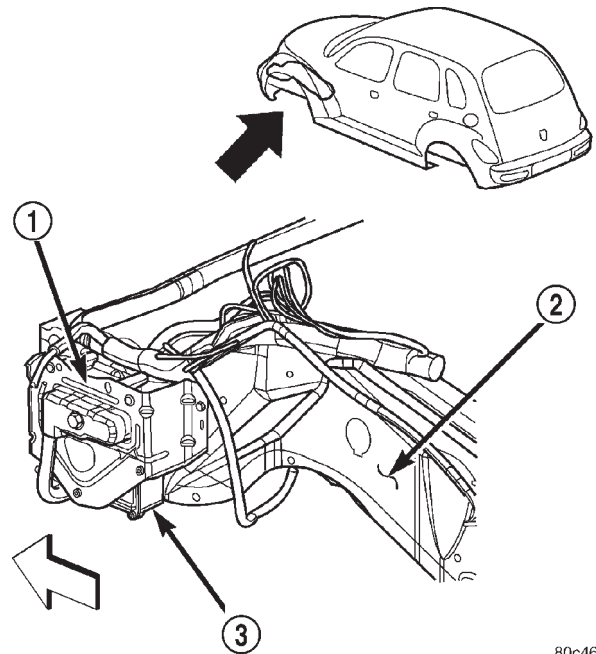
## INSTALLATION

- (1) If the two plastic push-in fasteners for the heated seat module were damaged during removal, install new fasteners onto the heated seat module.
- (2) Reconnect the power seat wire harness connector to the heated seat module connector receptacle. Be certain that the cavities in the power seat wire harness connector are aligned with the terminals in the heated seat module connector receptacle before pushing the connector firmly into place.
- (3) Install the heated seat module on the power seat cushion pan.
- (4) Reconnect the battery negative cable.

## TRANSMISSION CONTROL MODULE

## DESCRIPTION

The Transmission Control Module (TCM) is located behind the left fender and is fastened to the left frame rail forward of the suspension (Fig. 3). It mounts on a bracket that is fastened to the rail.



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**Fig. 3 Transmission Control Module (TCM) Location**

- 1 - BRACKET
- 2 - LEFT RAIL
- 3 - TRANSMISSION CONTROL MODULE (TCM)

## TRANSMISSION CONTROL MODULE (Continued)

## OPERATION

The TCM is the controlling unit for all electronic operations of the transaxle. The TCM receives information regarding vehicle operation from both direct and indirect inputs, and selects the operational mode of the transaxle. Direct inputs are hardwired to, and used specifically by the TCM. Indirect inputs originate from other components/modules, and are shared with the TCM via the communication bus.

Some examples of **direct inputs** to the TCM are:

- Battery (B+) voltage
- Ignition "ON" voltage
- Transmission Control Relay (Switched B+)
- Throttle Position Sensor
- Crankshaft Position Sensor (CKP)
- Transmission Range Sensor (TRS)
- Pressure Switches (L/R, 2/4, OD)
- Transmission Temperature Sensor (Integral to TRS)

- Input Shaft Speed Sensor
- Output Shaft Speed Sensor

Some examples of **indirect inputs** to the TCM are:

- Engine/Body Identification
- Manifold Pressure
- Target Idle
- Torque Reduction Confirmation
- Speed Control ON/OFF Switch
- Engine Coolant Temperature
- Ambient/Battery Temperature
- Brake Switch Status
- DRB Communication

Based on the information received from these various inputs, the TCM determines the appropriate shift schedule and shift points, depending on the present operating conditions and driver demand. This is possible through the control of various direct and indirect outputs.

Some examples of TCM **direct outputs** are:

- Transmission Control Relay
- Solenoids (LR/CC, 2/4, OD and UD)
- Vehicle Speed (to PCM)
- Torque Reduction Request (to PCM)

An example of a TCM **indirect output** is:

- Transmission Temperature (to PCM)

In addition to monitoring inputs and controlling outputs, the TCM has other important responsibilities and functions:

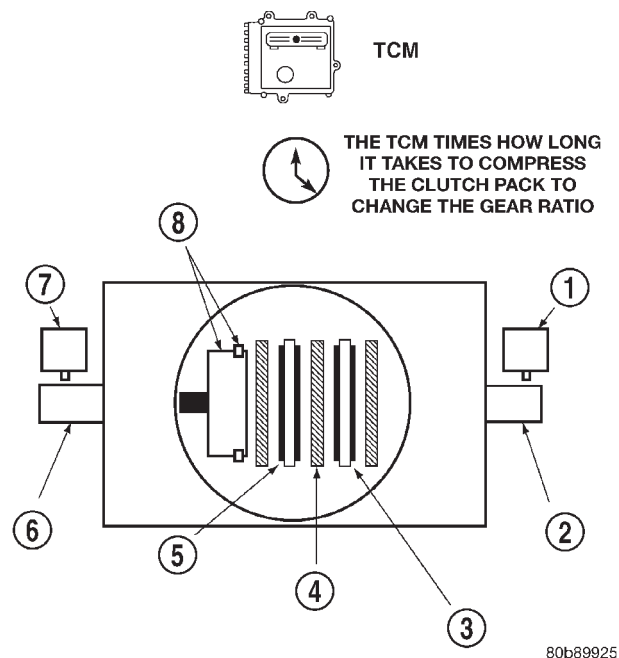
- Storing and maintaining Clutch Volume Indices (CVI)
- Storing and selecting appropriate Shift Schedules
- System self-diagnostics
- Diagnostic capabilities (with DRB scan tool)

## CLUTCH VOLUME INDEX (CVI)

An important function of the TCM is to monitor Clutch Volume Index (CVI). CVIs represent the volume of fluid needed to compress a clutch pack.

The TCM monitors gear ratio changes by monitoring the Input and Output Speed Sensors. The Input, or Turbine Speed Sensor sends an electrical signal to the TCM that represents input shaft rpm. The Output Speed Sensor provides the TCM with output shaft speed information.

By comparing the two inputs, the TCM can determine transaxle gear ratio. This is important to the CVI calculation because the TCM determines CVIs by monitoring how long it takes for a gear change to occur (Fig. 4).



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**Fig. 4 Example of CVI Calculation**

- 1 - OUTPUT SPEED SENSOR
- 2 - OUTPUT SHAFT
- 3 - CLUTCH PACK
- 4 - SEPARATOR PLATE
- 5 - FRICTION DISCS
- 6 - INPUT SHAFT
- 7 - INPUT SPEED SENSOR
- 8 - PISTON AND SEAL

## TRANSMISSION CONTROL MODULE (Continued)

Gear ratios can be determined by using the DRB Scan Tool and reading the Input/Output Speed Sensor values in the "Monitors" display. Gear ratio can be obtained by dividing the Input Speed Sensor value by the Output Speed Sensor value.

For example, if the input shaft is rotating at 1000 rpm and the output shaft is rotating at 500 rpm, then the TCM can determine that the gear ratio is 2:1. In direct drive (3rd gear), the gear ratio changes to 1:1. The gear ratio changes as clutches are applied and released. By monitoring the length of time it takes for the gear ratio to change following a shift request, the TCM can determine the volume of fluid used to apply or release a friction element.

The volume of transmission fluid needed to apply the friction elements are continuously updated for adaptive controls. As friction material wears, the volume of fluid need to apply the element increases.

Certain mechanical problems within the clutch assemblies (broken return springs, out of position snap rings, excessive clutch pack clearance, improper assembly, etc.) can cause inadequate or out-of-range clutch volumes. Also, defective Input/Output Speed Sensors and wiring can cause these conditions. The following chart identifies the appropriate clutch volumes and when they are monitored/updated:

| CLUTCH VOLUMES |                            |                 |                |                      |
|----------------|----------------------------|-----------------|----------------|----------------------|
| Clutch         | When Updated               |                 |                | Proper Clutch Volume |
|                | Shift Sequence             | Oil Temperature | Throttle Angle |                      |
| L/R            | 2-1 or 3-1 coast downshift | > 70°           | < 5°           | 35 to 83             |
| 2/4            | 1-2 shift                  | > 110°          | 5 - 54°        | 20 to 77             |
| OD             | 2-3 shift                  |                 |                | 48 to 150            |
| UD             | 4-3 or 4-2 shift           |                 | > 5°           | 24 to 70             |

**SHIFT SCHEDULES**

As mentioned earlier, the TCM has programming that allows it to select a variety of shift schedules. Shift schedule selection is dependent on the following:

- Shift lever position
- Throttle position

- Engine load
- Fluid temperature
- Software level

As driving conditions change, the TCM appropriately adjusts the shift schedule. Refer to the following chart to determine the appropriate operation expected, depending on driving conditions.

## TRANSMISSION CONTROL MODULE (Continued)

| Schedule              | Condition                                                               | Expected Operation                                                                                                                                                                                                                                                                                                                                        |
|-----------------------|-------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Extreme Cold</b>   | Oil temperature at start-up below -16° F                                | Park, Reverse, Neutral and 2nd gear only (prevents shifting which may fail a clutch with frequent shifts)                                                                                                                                                                                                                                                 |
| <b>Cold</b>           | Oil temperature at start-up above -12° F and below 36° F                | <ul style="list-style-type: none"> <li>– Delayed 2-3 upshift (approximately 22-31 mph)</li> <li>– Delayed 3-4 upshift (45-53 mph)</li> <li>– Early 4-3 coastdown shift (approximately 30 mph)</li> <li>– Early 3-2 coastdown shift (approximately 17 mph)</li> <li>– High speed 4-2, 3-2, 2-1 kickdown shifts are prevented</li> <li>– No EMCC</li> </ul> |
| <b>Warm</b>           | Oil temperature at start-up above 36° F and below 80 degree F           | <ul style="list-style-type: none"> <li>– Normal operation (upshift, kickdowns, and coastdowns)</li> <li>– No EMCC</li> </ul>                                                                                                                                                                                                                              |
| <b>Hot</b>            | Oil temperature at start-up above 80° F                                 | <ul style="list-style-type: none"> <li>– Normal operation (upshift, kickdowns, and coastdowns)</li> <li>– Full EMCC, no PEMCC except to engage FEMCC (except at closed throttle at speeds above 70-83 mph)</li> </ul>                                                                                                                                     |
| <b>Overheat</b>       | Oil temperature above 240° F or engine coolant temperature above 244° F | <ul style="list-style-type: none"> <li>– Delayed 2-3 upshift (25-32 mph)</li> <li>– Delayed 3-4 upshift (41-48 mph)</li> <li>– 3rd gear FEMCC from 30-48 mph</li> <li>– 3rd gear PEMCC from 27-31 mph</li> </ul>                                                                                                                                          |
| <b>Super Overheat</b> | Oil temperature above 260° F                                            | <ul style="list-style-type: none"> <li>– All "Overheat" shift schedule features apply</li> <li>– 2nd gear PEMCC above 22 mph</li> <li>– Above 22 mph the torque converter will not unlock unless the throttle is closed or if a wide open throttle 2nd PEMCC to 1 kickdown is made</li> </ul>                                                             |

**STANDARD PROCEDURE - PINION FACTOR SETTING**

**NOTE:** This procedure must be performed if the Transmission Control Module (TCM) has been replaced with a NEW or replacement unit. Failure to perform this procedure will result in an inoperative or improperly calibrated speedometer.

The vehicle speed readings for the speedometer are taken from the output speed sensor. The TCM must be calibrated to the different combinations of equipment (final drive and tires) available. Pinion Factor

allows the technician to set the Transmission Control Module initial setting so that the speedometer readings will be correct. To properly read and/or reset the Pinion Factor, it is necessary to use a DRB scan tool.

(1) Plug the DRBIII® scan tool into the diagnostic connector located under the instrument panel.

(2) Select the Transmission menu.

(3) Select the Miscellaneous menu.

(4) Select Pinion Factor. Then follow the instructions on the DRB scan tool screen.

## TRANSMISSION CONTROL MODULE (Continued)

**STANDARD PROCEDURE - QUICK LEARN PROCEDURE**

The quick learn procedure requires the use of the DRBIII® scan tool. This program allows the electronic transaxle system to recalibrate itself. This will provide the best possible transaxle operation.

**NOTE: The quick learn procedure should be performed if any of the following procedures are performed:**

- Transaxle Assembly Replacement
- Transmission Control Module Replacement
- Solenoid/Pressure Switch Assembly Replacement
- Clutch Plate and/or Seal Replacement
- Valve Body Replacement or Recondition

To perform the Quick Learn Procedure, the following conditions must be met:

- The brakes must be applied
- The engine speed must be above 500 rpm
- The throttle angle (TPS) must be less than 3 degrees
- The shift lever position must stay until prompted to shift to overdrive
- The shift lever position must stay in overdrive after the Shift to Overdrive prompt until the DRB indicates the procedure is complete
- The calculated oil temperature must be above 60° and below 200°

(1) Plug the DRB scan tool into the diagnostic connector. The connector is located under the instrument panel.

(2) Go to the Transmission screen.

(3) Go to the Miscellaneous screen.

(4) Select Quick Learn Procedure. Follow the instructions of the DRB to perform the Quick Learn Procedure.

**STANDARD PROCEDURE - TCC BREAK-IN VIEW/RESTART PROCEDURE**

The Transmission Control Module (TCM) employs a strategy which modifies torque converter clutch (TCC) operation. This strategy conditions the torque converter clutch disc for optimum converter clutch engagement and feel throughout the life of the transaxle. The cycle inhibits FEMCC until six hours of PEMCC operation have taken place, or the vehicle has been driven 6,035 km (3750 miles). The cycle automatically terminates when either the time or

mileage has been achieved, however, the mileage may vary slightly from vehicle to vehicle.

The TCC break-in cycle must be restarted using the DRB Scan Tool, and upon:

- Replacement of TCM on vehicle with less than 6,035 km (3750 miles) or less than 6 hours of PEMCC operation
- Replacement of torque converter assembly at any vehicle mileage

**NOTE: Failure to restart the TCC Break-In Cycle upon TCM replacement in vehicles with less than six hours of PEMCC or less than 6,035 km (3750 miles), or upon torque converter replacement at any mileage, may result in vehicle shudder during certain operating conditions.**

**Procedure**

The DRB Scan Tool is required to view and/or restart the TCC Break-In cycle.

(1) Connect the DRB Scan Tool to the vehicle diagnostic connector.

(2) Navigate to "TCC Break-In" via Transmission/Transmission Control Module/Miscellaneous.

(3) View or Start TCC Break-In as prompted by DRB menu.

**REMOVAL**

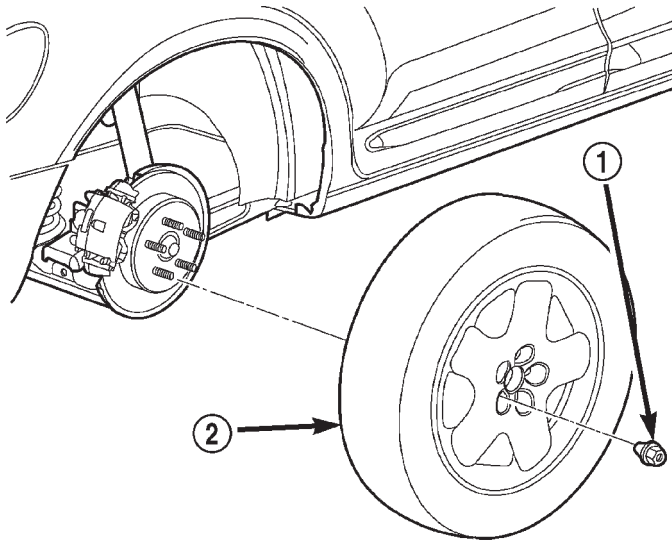
**NOTE: If the transmission control module (TCM) is being replaced with a new or replacement unit, the Pinion Factor and Quick Learn procedures must be performed. (Refer to 8 - ELECTRICAL/ELECTRONIC CONTROL MODULES/TRANSMISSION CONTROL MODULE/STANDARD PROCEDURE/PINION FACTOR PROCEDURE)(Refer to 8 - ELECTRICAL/ELECTRONIC CONTROL MODULES/STANDARD PROCEDURE/QUICK LEARN PROCEDURE)**

**NOTE: If the TCM is being replaced and has recorded less than six hours of PEMCC operation, AND the vehicle has less than 6,035 km (3750 miles), the Torque Converter Clutch (TCC) Break-In cycle must be restarted (Refer to 8 - ELECTRICAL/ELECTRONIC CONTROL MODULES/STANDARD PROCEDURE/TCC BREAK-IN VIEW/RESET PROCEDURE)**



## TRANSMISSION CONTROL MODULE (Continued)

- (1) Disconnect battery negative cable.
- (2) Raise vehicle on hoist.
- (3) Remove left front wheel/tire assembly (Fig. 5).



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**Fig. 5 Wheel/Tire Removal/Installation**

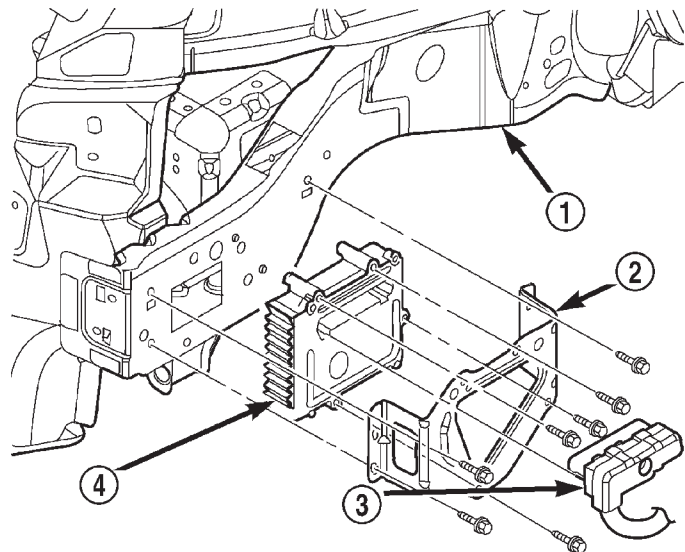
- 1 - LUG NUT
- 2 - WHEEL/TIRE

- (4) Remove wheel house splash shield.
- (5) Remove TCM 60-way connector.
- (6) Remove three TCM bracket-to-body mounting screws (Fig. 6).
- (7) Remove TCM from bracket (Fig. 6).

**INSTALLATION**

**NOTE:** If the transmission control module (TCM) is being replaced with a new or replacement unit, the Pinion Factor and Quick Learn procedures must be performed. (Refer to 8 - ELECTRICAL/ELECTRONIC CONTROL MODULES/TRANSMISSION CONTROL MODULE/STANDARD PROCEDURE/PINION FACTOR PROCEDURE)(Refer to 8 - ELECTRICAL/ELECTRONIC CONTROL MODULES/STANDARD PROCEDURE/QUICK LEARN PROCEDURE)

**NOTE:** If the TCM is being replaced and has recorded less than six hours of PEMCC operation,



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**Fig. 6 TCM Removal/Installation**

- 1 - LEFT RAIL
- 2 - BRACKET
- 3 - 60-WAY HARNESS CONNECTOR
- 4 - TRANSMISSION CONTROL MODULE (TCM)

**AND the vehicle has less than 6,035 km (3750 miles), the Torque Converter Clutch (TCC) Break-In cycle must be restarted (Refer to 8 - ELECTRICAL/ELECTRONIC CONTROL MODULES/STANDARD PROCEDURE/TCC BREAK-IN VIEW/RESET PROCEDURE)**

(1) Install TCM to mounting bracket and tighten four screws to 11 N·m (100 in. lbs.).

(2) Install TCM/bracket assembly and fasten with three mounting screws (Fig. 6). Torque screws to 11 N·m (100 in. lbs.) torque.

**CAUTION:** TCM 60-way connector must be torqued within 30-40 in. lbs. Improper torque may result in connector damage.

(3) Connect the TCM 60-way connector and torque to 4 N·m (35 in. lbs.).

(4) Install wheel house splash shield.

(5) Install left front wheel/tire assembly (Fig. 5). Torque lug nuts to 135 N·m (100 ft. lbs.) torque.

(6) Lower vehicle.

(7) Connect the battery negative cable.

## HEATED SYSTEMS

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| DESCRIPTION . . . . .               | 4    |                                        |      |

## HEATED SEAT SYSTEM

### DESCRIPTION

Individually controlled, electrically heated front seats are available factory-installed optional equipment on this model. Vehicles with this option can be visually identified by the two separate heated seat switches mounted on each of the seat cushion side shields. The heated seat system allows the front seat driver and passenger to select from two different levels of supplemental electrical seat heating, or no seat heating to suit their individual comfort requirements. The heated seat system for this vehicle includes the following major components, which are described in further detail later in this section:

- **Heated Seat Elements** - Two heated seat elements are used per vehicle, one for each front seat. The heated seat elements are integral to the front seat and seat back cushions. Refer to the description of the heated seat elements later in this section for additional information.

- **Heated Seat Modules** - Two heated seat modules are used per vehicle. One module is mounted to each of the power seat cushion pans, under the forward edge of each front seat. Refer to the description of the heated seat module in the electronic control modules section of the service manual for additional information.

- **Heated Seat Relay** - One heated seat relay is used per vehicle. The relay is located in the instru-

ment panel fuse block, on the left lower side of the instrument panel.

- **Heated Seat Sensors** - Two heated seat sensors are used per vehicle, one for each front seat. The heated seat sensors are integral to each of the heated seat cushions.

- **Heated Seat Switch** - Two heated seat switches are used per vehicle, one for the driver and one for the passenger side front seats. The switches are mounted to each of the front seat cushion side shields. Refer to the description of the heated seat switch later in this section for additional information.

Hard wired circuitry connects the heated seat system components to each other through the electrical system of the vehicle. These hard wired circuits are integral to several wire harnesses, which are routed throughout the vehicle and retained by many different methods. These circuits may be connected to each other, to the vehicle electrical system and to the heated seat system components through the use of a combination of soldered splices, splice block connectors and many different types of wire harness terminal connectors and insulators. Refer to the appropriate wiring information. The wiring information includes wiring diagrams, proper wire and connector repair procedures, further details on wire harness routing and retention, as well as pin-out and location views for the various wire harness connectors, splices and grounds.

## HEATED SEAT SYSTEM (Continued)

**OPERATION**

The heated seat system is designed to provide individually controlled, supplemental heat to the seat cushion and seat back surfaces of both front seats. Because this system converts electrical current to heat, the heated seat system can provide a measure of warm comfort almost immediately upon entering a cold vehicle, rather than having to wait for the engine coolant to reach sufficient temperature to deliver heat through the conventional heater system. This system allows each front seat occupant to individually select one of two comfort levels, Hi or Lo, or to turn the heater for their seat off.

The heated seat system components operate on battery current received through a fuse in the Junction Block (JB) on a fused ignition switch output (run-acc) circuit so that the system will only operate when the ignition switch is in the On or Accessory positions. The heated seat system will be turned Off automatically whenever the ignition switch is turned to any position except On or Accessory. Also, the heated seat system will not operate when the surface temperature of the seat cushion cover at either heated seat sensor is above the designed temperature set points of the system. The heated seat system has a self-diagnostic capability. When certain failures are

detected within the heated seat system, the system will provide a visual indication of the failure by flashing the Light Emitting Diode (LED) indicator lamps located in the heated seat switches. See the owner's manual in the vehicle glove box for more information on the features, use and operation of the heated seat system.

**DIAGNOSIS AND TESTING - HEATED SEAT SYSTEM**

Refer to **Wiring Diagrams** for the appropriate wiring information. The wiring information includes wiring diagrams, proper wire and connector repair procedures, further details on wire harness routing and retention, as well as pin-out and location views for the various wire harness connectors, splices and grounds.

**NOTE: DO NOT ATTEMPT TO SWAP HEATED SEAT MODULES FROM ONE VEHICLE TO ANOTHER. MOST OF THESE MODULES ARE VEHICLE FEATURE SPECIFIC AND THEREFORE NOT INTERCHANGEABLE. ALWAYS USE THE CORRECT PART NUMBERED MODULE WHEN DIAGNOSING OR REPLACING A MODULE.**

| HEATED SEAT SYSTEM DIAGNOSIS                        |                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CONDITION                                           | POSSIBLE CAUSES                                                                                                                                    | CORRECTION                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| NO HEATED SEAT SWITCH ILLUMINATION WITH IGNITION ON | <ol style="list-style-type: none"> <li>1. Faulty fuse.</li> <li>2. Wiring faulty.</li> <li>3. Ground faulty.</li> <li>4. Faulty switch.</li> </ol> | <ol style="list-style-type: none"> <li>1. Check heated seat fuse in Junction Block (JB). Replace fuse, if required.</li> <li>2. Check fused ignition switch output (run-acc) circuit from heated seat switch connector to ignition switch. Repair, if required.</li> <li>3. Check for ground at heated seat switch connector. Repair, if required.</li> <li>4. Refer to Heated Seat Switch for the proper switch diagnosis and testing procedures.</li> </ol> |
| SEATS HEAT, BUT NO HEATED SEAT SWITCH INDICATORS    | <ol style="list-style-type: none"> <li>1. Wiring faulty.</li> <li>2. Faulty switch LED.</li> <li>3. Faulty module.</li> </ol>                      | <ol style="list-style-type: none"> <li>1. Check LED driver circuit(s) from heated seat switch connector to heated seat module connector. Repair, if required.</li> <li>2. Replace switch with known good unit. If OK, discard faulty switch.</li> <li>3. Refer to Heated Seat Module for the proper module diagnosis and testing procedures. Replace, if required.</li> </ol>                                                                                 |

## HEATED SEAT SYSTEM (Continued)

| HEATED SEAT SYSTEM DIAGNOSIS                           |                                                                     |                                                                                                                                                                                                                                                                                                                 |
|--------------------------------------------------------|---------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CONDITION                                              | POSSIBLE CAUSES                                                     | CORRECTION                                                                                                                                                                                                                                                                                                      |
| SEATS DO NOT HEAT AND NO HEATED SEAT SWITCH INDICATORS | 1. Faulty circuit breaker.<br>2. Faulty relay.<br>3. Faulty module. | 1. Check power seat circuit breaker in Junction Block (JB). Replace, if required.<br>2. Refer to Heated Seat Relay for the proper relay diagnosis and testing procedures. Replace, if required.<br>3. Refer to Heated Seat Module for the proper module diagnosis and testing procedures. Replace, if required. |
| HEATED SEAT SWITCH INDICATORS FLASHING                 | 1. Faulty sensor.<br>2. Faulty element.                             | 1. Refer to Heated Seat Sensor for the proper heated seat system self-diagnostic routine. Repair, as required.<br>2. Refer to Heated Seat Element for the proper heated seat system self-diagnostic routine. Repair, as required.                                                                               |

**SELF-DIAGNOSTICS - HEATED SEAT SYSTEM**

The heated seat system is capable of performing some self-diagnostics. The following table depicts the various failure modes which will be reported to the occupant via flashing of the heated seat switch Light-Emitting Diode (LED) indicators. Flashing LED indicators on the driver side switch indicate that a fault exists in the driver side portion of the system and,

likewise, flashing LED indicators on the passenger side switch indicate a fault exists in the passenger side portion of the system. The LED indicators will flash at a rate of approximately one-half second on, and one-half second off for a duration of one minute. This process will repeat each time an attempt is made to turn the system on with the heated seat switches until the problem has been corrected.

| HEATED SEAT SYSTEM SELF-DIAGNOSTIC TABLE |                           |                           |
|------------------------------------------|---------------------------|---------------------------|
| FAILURE MODE                             | SWITCH "HI" LED INDICATOR | SWITCH "LO" LED INDICATOR |
| Shorted Heating Element                  | Flashing                  | Flashing                  |
| Open Heating Element                     | Flashing                  | Off                       |
| NTC Sensor Value Out of Range            | Off                       | Flashing                  |

**DRIVER SEAT HEATER SWITCH****DESCRIPTION**

The heated seat switches are located on the out-board cushion side shield of the driver and passenger seats. The two, momentary rocker type switches provide a resistor multiplexed signal to the appropriate Heated Seat Module (HSM) through separate hard wired circuits. Each switch contains two light emitting diodes (LED), one for each High and Low setting to let the occupant know that the seat heater system is on.

The heated seat switches and their LED's cannot be repaired. If either switch is faulty or damaged the entire switch must be replaced.

**OPERATION**

There are three modes that can be selected with each of the heated seat switches: Off, Low, and High. When the front of the switch rocker is depressed, the High mode is selected and the high mode LED indicator illuminates. Depressing the front of the switch rocker a second time will return the heated seat to Off. When the rear of the switch rocker is depressed, the Low mode is selected and the low mode LED indicator illuminates. Depressing the rear of the switch rocker a second time will return the heated seat to Off. In addition, the heated seats will automatically return to the Off mode anytime the vehicle ignition switch is turned Off.

## DRIVER SEAT HEATER SWITCH (Continued)

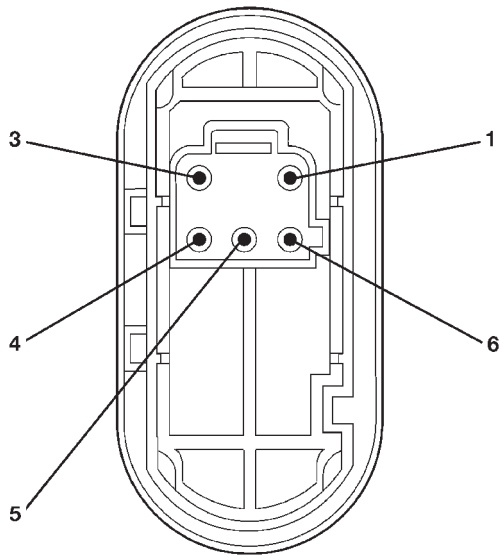
Both switches provide separate resistor multiplexed hard wire inputs to the Heated Seat Module to indicate the selected mode. The Heated Seat Module responds to the heated seat switch status messages by controlling the output to the seat heater elements of the selected seat. The Low heat position set point is about 36° C (97° F), and the High heat position set point is about 41° C (105° F).

### DIAGNOSIS & TESTING - DRIVER SEAT HEATER SWITCH

For circuit description and diagrams, refer to **Wiring Diagrams**.

Inspect the Heated Seat Switches for apparent damage or sticking/binding and replace as required. Refer to Heated Seat Switch Removal and Installation.

Inspect the continuity between pin 4 and pin 6 of the switch. Measure the resistance between the two pins. Refer to (Fig. 1) and the Heated Seat Switch Pin Call-Out table. If the readings do not correspond to those in the Heated Seat Switch Continuity table, replace the heated seat switch.



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**Fig. 1 Heated Seat Switch (Rear View)**

**HEATED SEAT SWITCH PIN CALL-OUT**

| PIN | FUNCTION      |
|-----|---------------|
| 1   | LO LED        |
| 2   | OPEN          |
| 3   | GROUND        |
| 4   | IGNITION FEED |
| 5   | HI LED        |
| 6   | REQUEST LINE  |

### HEATED SEAT SWITCH CONTINUITY

| CONTINUITY BETWEEN | SWITCH POSITION | READING   |
|--------------------|-----------------|-----------|
| PIN 4 AND 6        | OFF             | 2200 OHMS |
| PIN 4 AND 6        | LO              | 415 OHMS  |
| PIN 4 AND 6        | HI              | 33 OHMS   |

### REMOVAL

(1) Disconnect and isolate the negative battery cable remote terminal from the remote battery post.

(2) Remove the appropriate seat cushion side shield. Refer to the Body section of this manual for the procedure.

(3) Working from the underside of the switch, gently rock the switch back and forth out of its mounting location.

### INSTALLATION

(1) Gently rock the switch back and forth in to its mounting location.

(2) Install the appropriate seat cushion side shield. Refer to the Body section of this manual for the procedure.

(3) Connect the remote negative battery cable.

## HEATED SEAT ELEMENT

### DESCRIPTION

The heated seat system includes two seat heating elements in each front seat, one for the seat cushion and the other for the seat back. All models use two carbon fiber mesh heating elements for each seat that are connected in parallel with the Heated Seat Module (HSM). The temperature sensor is a Negative Temperature Coefficient (NTC) thermistor. One temperature sensor is used for each seat, and it is located on the seat cushion heating element for all models.

The seat heating elements are glued into the seat and seat back cushions. The heated seat elements and the temperature sensor cannot be adjusted or repaired and, if faulty or damaged, the seat cushion(s) must be replaced. Refer to the Body section of this manual for the seat cushion and/or cover trim service procedures.



## HEATED SEAT ELEMENT (Continued)

**OPERATION**

The heated seat elements resist the flow of electrical current. When battery current is passed through the elements, the energy lost by the resistance of the elements to the current flow is released in the form of heat. The temperature sensor is a NTC thermistor. When the temperature of the seat cushion cover rises, the resistance of the sensor decreases. The heated seat module supplies a five-volt current to one side of each sensor, and monitors the voltage drop through the sensor on a return circuit. The heated seat module uses this temperature sensor input to monitor the temperature of the seat, and regulates the current flow to the seat heating elements accordingly.

**DIAGNOSIS AND TESTING - HEATED SEAT ELEMENT**

All models use carbon fiber mesh heating elements for each seat that are connected in parallel with the Heated Seat Module. For complete circuit diagrams, refer to **Wiring Diagrams**.

**CARBON FIBER ELEMENT**

(1) If both the seat cushion and seat back elements fail to heat, go to Step 2. If only the seat back element fails to heat, go to Step 11. If only a portion of the heated seat cushion element fails to heat, replace the faulty seat cushion cover trim and element unit.

(2) Disconnect and isolate the battery negative cable. Disconnect the green 2-way heated seat jumper wire harness connector from the power seat wire harness. The power seat wire harness connector for the heated seat jumper is secured to a bracket located under the rear edge of the seat cushion frame. Check for continuity between the two cavities in the heated seat jumper half of the green wire harness connector. There should be continuity. If OK, to Step 3. If not OK, repair the open jumper circuit as required.

(3) Check for continuity between one cavity in the heated seat jumper half of the green wire harness connector and the seat back frame. There should be no continuity. If OK, go to Step 4. If not OK, repair the shorted jumper circuit as required.

(4) Disconnect the C2 connector of the power seat wire harness from the Heated Seat Module (HSM) connector receptacle. Check for continuity between the ground circuit cavities in the C2 connector and the power seat wire harness half of the 2-way green heated seat jumper wire harness connector. There should be continuity. If OK, go to Step 5. If not OK, repair the open ground circuit as required.

(5) Check for continuity between the ground circuit (Z1) cavities in the C2 connector and a good ground. There should be no continuity. If OK, go to

Step 6. If not OK, repair the shorted ground circuit (Z1) as required.

(6) Disconnect the 4-way heated seat element wire harness connector from the power seat wire harness. The 4-way heated seat element wire harness connector is secured next to the 2-way green heated seat jumper wire harness connector on a bracket located under the rear edge of the seat cushion frame. Check for continuity between the heated seat driver circuit cavities in the power seat wire harness halves of the 2-way green heated seat jumper wire harness connector and the 4-way heated seat element wire harness connector. There should be continuity. If OK, go to Step 7. If not OK, repair the open heated seat driver circuit as required.

(7) Check for continuity between the heated seat driver circuit cavity in the power seat wire harness half of the 2-way green heated seat jumper wire harness connector and a good ground. There should be no continuity. If OK, go to Step 8. If not OK, repair the shorted heated seat driver circuit as required.

(8) Check for continuity between the seat heater B(+) driver circuit cavities in the power seat wire harness half of the 4-way heated seat element wire harness connector and the C2 HSM wire harness connector. There should be continuity. If OK, go to Step 9. If not OK, repair the open seat heater B(+) driver circuit as required.

(9) Check for continuity between the seat heater B(+) driver circuit cavity in the power seat wire harness half of the 4-way heated seat element wire harness connector and a good ground. There should be no continuity. If OK, go to Step 10. If not OK, repair the shorted seat heater B(+) driver circuit as required.

(10) Check the total heated seat element resistance between the heated seat driver circuit and the seat heater B(+) driver circuit cavities in the heated seat element half of the 4-way heated seat element wire harness connector. The resistance should be about 2.20 ohms  $\pm$  10%. If OK, refer to **Heated Seat Sensor** in the Diagnosis and Testing section of this group. If not OK, go to Step 11.

(11) Disconnect the black 2-way heated seat back element wire harness connector from the heated seat cushion element wire harness. The black 2-way heated seat back element wire harness connector is tucked under the seat cushion trim cover located near the rear edge of the seat cushion frame. Check the resistance of the heated seat back element between the two cavities in the seat back half of the black 2-way heated seat back element wire harness connector. The resistance should be about 5.51 ohms  $\pm$  10%. If OK, go to Step 12. If not OK, replace the faulty seat back cover trim and element unit.



## HEATED SEAT ELEMENT (Continued)

(12) With the black 2-way heated seat back element wire harness connector still disconnected from the heated seat cushion element wire harness connector, check the resistance of the heated seat cushion elements between the heated seat driver circuit and the seat heater B(+) driver circuit cavities in the heated seat element half of the 4-way heated seat element wire harness connector. The resistance should be about 3.67 ohms  $\pm$  10%. If OK, refer to **Heated Seat Sensor** in the Diagnosis and Testing section of this group. If not OK, replace the faulty seat cushion cover trim and element unit.

## HEATED SEAT SENSOR

## DIAGNOSIS AND TESTING - HEATED SEAT SENSOR

For complete circuit diagrams, refer to **Wiring Diagrams**.

(1) Disconnect and isolate the battery negative cable. Disconnect the 4-way heated seat cushion element wire harness connector from the power seat wire harness. The power seat wire harness connectors for the seat cushion and seat back heating elements are secured to a bracket located under the rear edge of the seat cushion frame.

(2) Check for continuity between the seat sensor 5V supply circuit cavity of the 4-way heated seat cushion element wire harness connector and the seat cushion frame. There should be no continuity. If OK, go to Step 3. If not OK, replace the faulty seat cushion cover trim and element unit.

(3) Using an ohmmeter, check the resistance between the seat sensor 5V supply circuit and the seat temperature sensor input circuit cavities of the 4-way heated seat cushion element wire harness connector. The sensor resistance should be between 14 kilohms at 15° C (60° F) and 5 kilohms at 30° C (85° F). If OK, go to Step 4. If not OK, replace the faulty seat cushion cover trim and element unit.

(4) Disconnect the C1 connector of the power seat wire harness from the Heated Seat Module (HSM) connector receptacle. Check for continuity between the seat sensor 5V supply circuit cavity of the 4-way power seat wire harness connector for the heated seat cushion element and the seat cushion frame. There should be no continuity. If OK, go to Step 5. If not OK, repair the shorted seat sensor 5V supply circuit as required.

(5) Check for continuity between the seat sensor 5V supply circuit cavities of the 4-way power seat wire harness connector for the heated seat cushion element and the C1 power seat wire harness connec-

tor for the HSM. There should be continuity. If OK, go to Step 6. If not OK, repair the open seat sensor 5V supply circuit as required.

(6) Check for continuity between the seat temperature sensor input circuit cavity of the 4-way power seat wire harness connector for the heated seat cushion element and the seat cushion frame. There should be no continuity. If OK, go to Step 7. If not OK, repair the shorted seat temperature sensor input circuit as required.

(7) Check for continuity between the seat temperature sensor input circuit cavities of the 4-way power seat wire harness connector for the heated seat cushion element and the C1 power seat wire harness connector for the HSM. There should be continuity. If OK, refer to Diagnosis and Testing of the **Heated Seat Module** in the Electronic Control Modules section of the service manual. If not OK, repair the open seat temperature sensor input circuit as required.

## PASSENGER SEAT HEATER SWITCH

## DESCRIPTION

The heated seat switches are located on the outboard cushion side shield of the driver and passenger seats. The two, momentary rocker type switches provide a resistor multiplexed signal to the appropriate Heated Seat Module (HSM) through separate hard wired circuits. Each switch contains two light emitting diodes (LED), one for each High and Low setting to let the occupant know that the seat heater system is on.

The heated seat switches and their LED's cannot be repaired. If either switch is faulty or damaged the entire switch must be replaced.

## OPERATION

There are three modes that can be selected with each of the heated seat switches: Off, Low, and High. When the front of the switch rocker is depressed, the High mode is selected and the high mode LED indicator illuminates. Depressing the front of the switch rocker a second time will return the heated seat to Off. When the rear of the switch rocker is depressed, the Low mode is selected and the low mode LED indicator illuminates. Depressing the rear of the switch rocker a second time will return the heated seat to Off. In addition, the heated seats will automatically return to the Off mode anytime the vehicle ignition switch is turned Off.

## PASSENGER SEAT HEATER SWITCH (Continued)

Both switches provide separate resistor multiplexed hard wire inputs to the Heated Seat Module to indicate the selected mode. The Heated Seat Module responds to the heated seat switch status messages by controlling the output to the seat heater elements of the selected seat. The Low heat position set point is about 36° C (97° F), and the High heat position set point is about 41° C (105° F).

**DIAGNOSIS & TESTING - PASSENGER SEAT HEATER SWITCH**

For circuit description and diagrams, refer to **Wiring Diagrams**.

Inspect the Heated Seat Switches for apparent damage or sticking/binding and replace as required. Refer to Heated Seat Switch Removal and Installation.

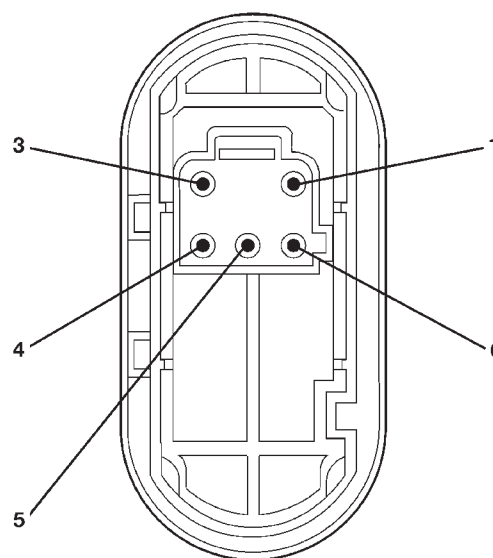
Inspect the continuity between pin 4 and pin 6 of the switch. Measure the resistance between the two pins. Refer to (Fig. 2) and the Heated Seat Switch Pin Call-Out table. If the readings do not correspond to those in the Heated Seat Switch Continuity table, replace the heated seat switch.

**HEATED SEAT SWITCH PIN CALL-OUT**

| PIN | FUNCTION      |
|-----|---------------|
| 1   | LO LED        |
| 2   | OPEN          |
| 3   | GROUND        |
| 4   | IGNITION FEED |
| 5   | HI LED        |
| 6   | REQUEST LINE  |

**HEATED SEAT SWITCH CONTINUITY**

| CONTINUITY BETWEEN | SWITCH POSITION | READING   |
|--------------------|-----------------|-----------|
| PIN 4 AND 6        | OFF             | 2200 OHMS |
| PIN 4 AND 6        | LO              | 415 OHMS  |
| PIN 4 AND 6        | HI              | 33 OHMS   |



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**Fig. 2 Heated Seat Switch (Rear View)****REMOVAL**

(1) Disconnect and isolate the negative battery cable remote terminal from the remote battery post.

(2) Remove the appropriate seat cushion side shield. Refer to the Body section of this manual for the procedure.

(3) Working from the underside of the switch, gently rock the switch back and forth out of its mounting location.

**INSTALLATION**

(1) Gently rock the switch back and forth in to its mounting location.

(2) Install the appropriate seat cushion side shield. Refer to the Body section of this manual for the procedure.

(3) Connect the remote negative battery cable.



POWER SYSTEMS

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POWER WINDOW SWITCH

DIAGNOSIS AND TESTING - POWER WINDOW SWITCH

The following wiring test determines whether or not voltage is continuous through the body harness to the power window switches.

Remove the suspected switch for testing. Connect a voltmeter positive lead to pin 12 and the negative lead to pin 4 of the switch harness connector. Turn ignition switch to the ON position. Voltmeter should read battery voltage. If OK, go to Window Switch Diagnosis and Testing. If not OK, check the 20 amp circuit breaker in the fuse block or for a broken wire. Refer to the appropriate wiring information. The wiring information includes wiring diagrams, proper wire and connector repair procedures, details of wire harness routing and retention, connector pin-out information and location views for the various wire harness connectors, splices and grounds.

Remove the switch from its mounting. Using an ohmmeter, test the window switch for continuity in all positions listed in the Continuity Table. Refer to the Power Window Switch Continuity table to determine if continuity is correct.

To test the left front down and express down switch position, connect pin 4 to ground and pin 12 to a 12 volt source. Using a voltmeter, measure for voltage from pin 13 to ground.

To test the right front down and express down switch position, connect pin 4 to ground and pin 12 to a 12 volt source. Using a voltmeter, measure for voltage from pin 3 to ground. If the correct results are not obtained, replace the switch.

POWER WINDOW SWITCH CONTINUITY

| SWITCH POSITION                          | CONTINUITY BETWEEN         |
|------------------------------------------|----------------------------|
|                                          | <b>MASTER SWITCH</b>       |
| LOCKOUT SWITCH (TOP OF SWITCH DEPRESSED) | PIN 12 AND 5               |
| LEFT FRONT UP                            | PIN 12 AND 14              |
| RIGHT FRONT UP                           | PIN 12 AND 7               |
| LEFT REAR UP                             | PIN 12 AND 8               |
| LEFT REAR DOWN                           | PIN 12 AND 9               |
| RIGHT REAR UP                            | PIN 12 AND 1               |
| RIGHT REAR DOWN                          | PIN 12 AND 2               |
|                                          | <b>LEFT REAR SWITCH</b>    |
| OFF                                      | PIN 2 AND 5<br>PIN 3 AND 8 |
| UP                                       | PIN 4 AND 5                |
| DOWN                                     | PIN 4 AND 8                |
|                                          | <b>RIGHT REAR SWITCH</b>   |
| OFF                                      | PIN 2 AND 5<br>PIN 3 AND 8 |
| UP                                       | PIN 4 AND 5                |
| DOWN                                     | PIN 4 AND 8                |



## RESTRAINTS

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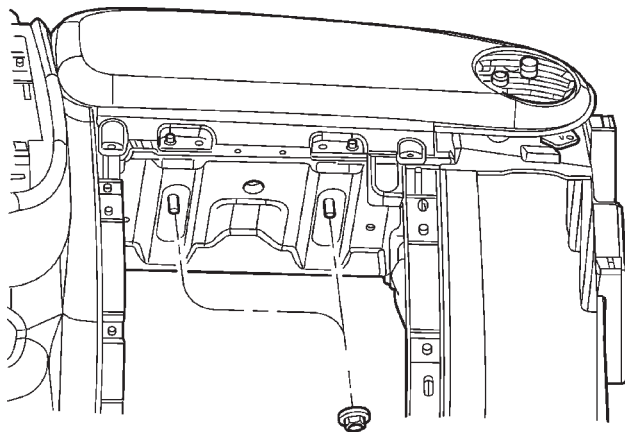
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## PASSENGER AIRBAG

### REMOVAL

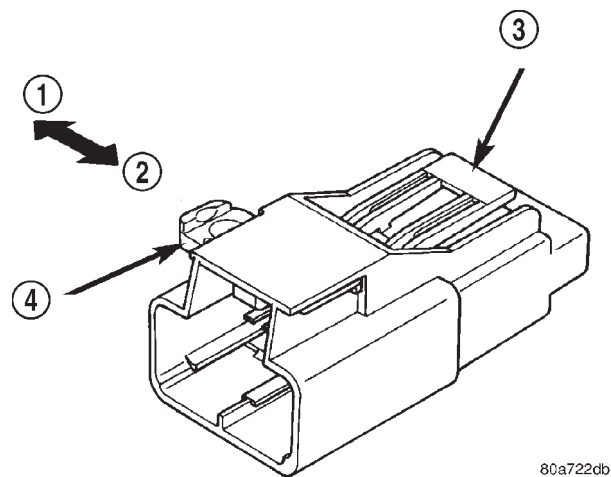
#### NON-DEPLOYED AIRBAG

- (1) Open hood.
- (2) Disconnect and isolate the battery negative cable.
- (3) Wait two minutes for the reserve capacitor to discharge before removing non-deployed module.
- (4) Remove instrument panel top cover. Refer to Instrument Panel Systems, Instrument Panel Top Cover Removal and Installation.
- (5) Open glove box, push in on the box/bin sides and lower to floor.
- (6) Remove the right instrument panel end cap. Refer to Instrument Panel Systems, Removal and Installation, Instrument Panel End Cap.
- (7) Remove four passenger airbag cover screws along the bottom end of the airbag cover.
- (8) Remove two passenger airbag cover screws along the top edge of the airbag cover.
- (9) Remove two nuts retaining passenger airbag to instrument panel assembly inside glove box opening (Fig. 1).



**Fig. 1 PASSENGER AIRBAG RETAINING NUTS**

- (10) Lift airbag up until the wire connector is visible and disconnect the 4-way wire connector from airbag. Unlock the red locking tab and compress lock to release the connector (Fig. 2).



**Fig. 2 PASSENGER AIRBAG ELECTRICAL CONNECTOR**

- 1 - UNLOCK
- 2 - LOCK
- 3 - PRESS LOCK
- 4 - RED LOCKING TAB

- (11) Remove passenger airbag from vehicle.

### PASSENGER AIRBAG COVER

- (1) Open hood.
- (2) Disconnect and isolate the battery negative cable.
- (3) Remove the Passenger Airbag from the vehicle. Refer to Passenger Airbag Module/Cover Removal and Installation.
- (4) Unsnap cover from passenger airbag and remove by lifting the airbag cover up towards the hinge.
- (5) Reach in under the cover and push down on the metal flap running the length of the top of the airbag housing.
- (6) Maneuver airbag cover out of the airbag housing.



## PASSENGER AIRBAG (Continued)

**DEPLOYED AIRBAG**

When removing a deployed airbag, rubber gloves, eye protection, and a long-sleeved shirt should be worn, as there may be deposits on the surface which could irritate the skin and eyes.

- (1) Open hood.
- (2) Disconnect and isolate the battery negative cable.
- (3) Roll/fold airbag towards instrument panel.
- (4) Close door over folded airbag and tape door closed.
- (5) Remove instrument panel top cover. Refer to Instrument Panel Systems, Instrument Panel Top Cover Removal and Installation.
- (6) Open glove box, push in on the box/bin sides and lower to floor.
- (7) Remove the right instrument panel end cap. Refer to Instrument Panel Systems, Removal and Installation, Instrument Panel End Cap.
- (8) Remove four passenger airbag cover screws along the bottom end of the airbag cover.
- (9) Remove two passenger airbag cover screws along the top edge of the airbag cover.
- (10) Remove two nuts retaining passenger airbag to instrument panel assembly inside glove box opening (Fig. 1).
- (11) Lift airbag up until the wire connector is visible and disconnect the 4-way wire connector from module. Unlock the red locking tab and compress lock to release the connector (Fig. 2).
- (12) Remove passenger airbag from vehicle.

**INSTALLATION****NON-DEPLOYED AIRBAG**

- (1) Place airbag into instrument panel opening, connect the 4-way wire connector, and lock the red locking tab (Fig. 2).
- (2) Install the two nuts retaining passenger airbag to instrument panel assembly inside glove box opening (Fig. 1). Torque the two airbag retaining nuts to 22 to 34 N·m (200 to 300 in. lbs.) torque.
- (3) Install two passenger airbag cover screws along the top edge of the airbag cover. Torque trim screws to 2 N·m (20 in. lbs.).
- (4) Install four passenger airbag cover screws along the bottom end of the airbag cover. Torque trim screws to 2 N·m (20 in. lbs.).
- (5) Install the right instrument panel end cap. Refer to Instrument Panel Systems, Removal and Installation, Instrument Panel End Cap.
- (6) Push in on the box/bin sides and close glove box door.
- (7) Connect the battery negative cable.

- (8) Install instrument panel top cover. Refer to Instrument Panel Systems, Instrument Panel Top Cover Removal and Installation.

**WARNING: DO NOT CONNECT BATTERY NEGATIVE CABLE YET. REFER FIRST TO DIAGNOSIS AND TESTING, AIRBAG SYSTEM TEST.**

- (9) Close hood.
- (10) Verify vehicle and system operation.

**PASSENGER AIRBAG COVER**

If reinstalling the airbag cover onto the same passenger airbag, perform the following adjustment:

- Using a 90° needle nose pliers or equivalent, place the pliers on the rear edge of the airbag cover metal flap retainer.
  - Bend roughly 10° so that the metal flap is closed slightly to eliminate rattles of the airbag cover.
  - Bend until the measurement of the metal flap to airbag housing is 7 - 8.3 mm (use a drill bit ranging from 9/32 - 21/64 inch).
- (1) Snap cover onto the passenger airbag frame.
  - (2) Install the Passenger Airbag. Refer to Passenger Airbag Module/Cover Removal and Installation.

**WARNING: DO NOT CONNECT BATTERY NEGATIVE CABLE YET. REFER FIRST TO DIAGNOSIS AND TESTING, AIRBAG SYSTEM TEST.**

- (3) Close hood.
- (4) Verify vehicle and system operation.

**DEPLOYED AIRBAG**

- (1) Place airbag into instrument panel opening, connect the 4-way wire connector, and lock the red locking tab (Fig. 2).
- (2) Install the two nuts retaining passenger airbag to instrument panel assembly inside glove box opening (Fig. 1). Torque the two module retaining nuts to 22 to 34 N·m (200 to 300 in. lbs.) torque.
- (3) Install two passenger airbag cover screws along the top edge of the airbag cover. Torque trim screws to 2 N·m (20 in. lbs.).
- (4) Install four passenger airbag cover screws along the bottom end of the airbag cover. Torque trim screws to 2 N·m (20 in. lbs.).
- (5) Install the right instrument panel end cap. Refer to Instrument Panel Systems, Removal and Installation, Instrument Panel End Cap.
- (6) Push in on the box/bin sides and close glove box door.
- (7) Connect the battery negative cable.
- (8) Install instrument panel top cover. Refer to Instrument Panel Systems, Instrument Panel Top Cover Removal and Installation.

## PASSENGER AIRBAG (Continued)

**WARNING: DO NOT CONNECT BATTERY NEGATIVE CABLE YET. REFER FIRST TO DIAGNOSIS AND TESTING, AIRBAG SYSTEM TEST.**

(9) Close hood.

(10) Verify vehicle and system operation.



## WIRING

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WIRING DIAGRAM  
INFORMATIONDESCRIPTION - HOW TO USE WIRING  
DIAGRAMS

DaimlerChrysler Corporation wiring diagrams are designed to provide information regarding the vehicles wiring content. In order to effectively use the wiring diagrams to diagnose and repair DaimlerChrysler Corporation vehicles, it is important to understand all of their features and characteristics.

Diagrams are arranged such that the power (B+) side of the circuit is placed near the top of the page, and the ground (B-) side of the circuit is placed near the bottom of the page (Fig. 1).

All switches, components, and modules are shown in the at rest position with the doors closed and the key removed from the ignition (Fig. 2).

Components are shown two ways. A solid line around a component indicates that the component is complete. A dashed line around the component indicates that the component is being shown is not complete. Incomplete components have a reference number to indicate the page where the component is shown complete.

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.

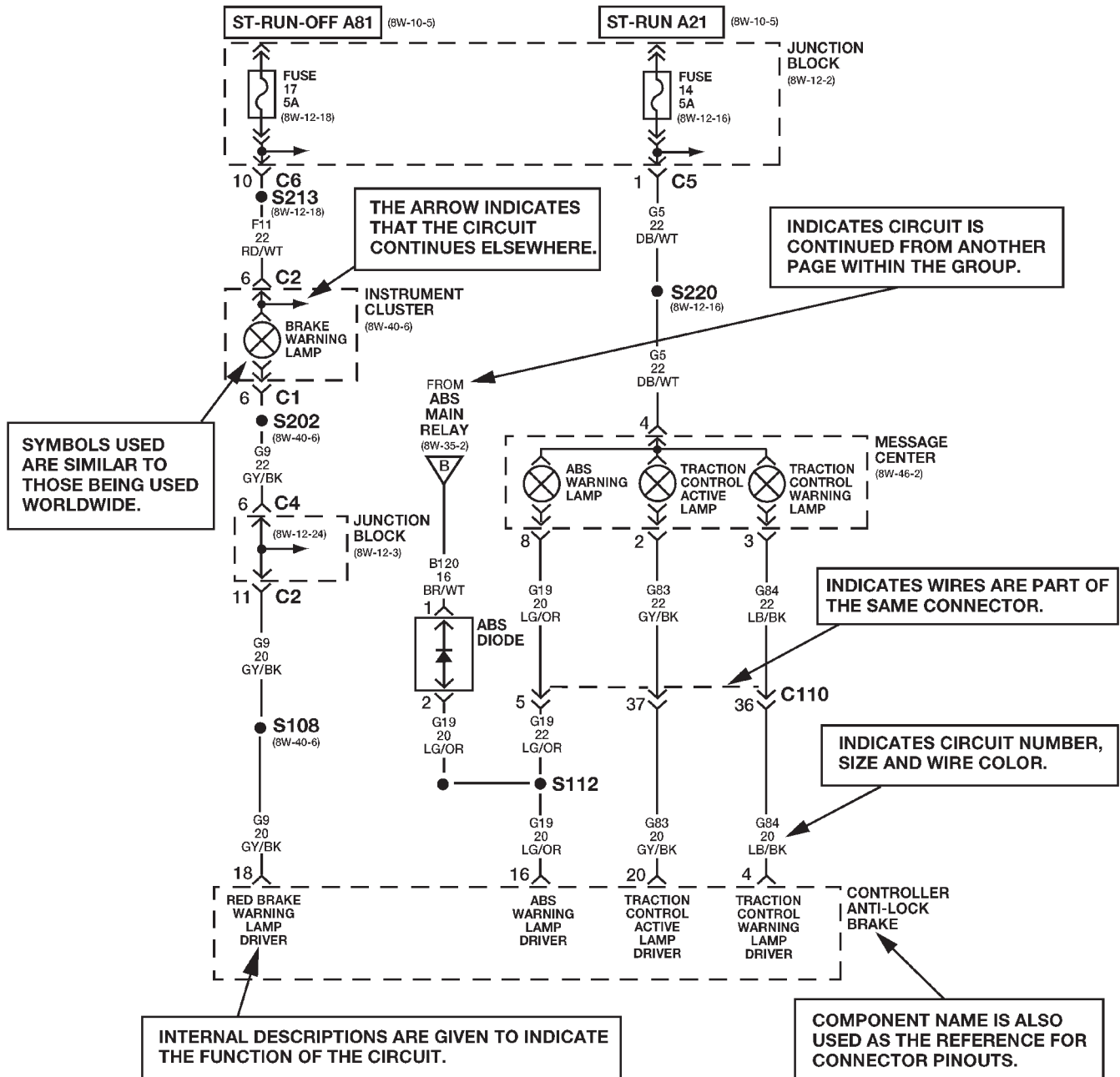
## SYMBOLS

International symbols are used throughout the wiring diagrams. These symbols are consistent with those being used around the world (Fig. 3).



## WIRING DIAGRAM INFORMATION (Continued)

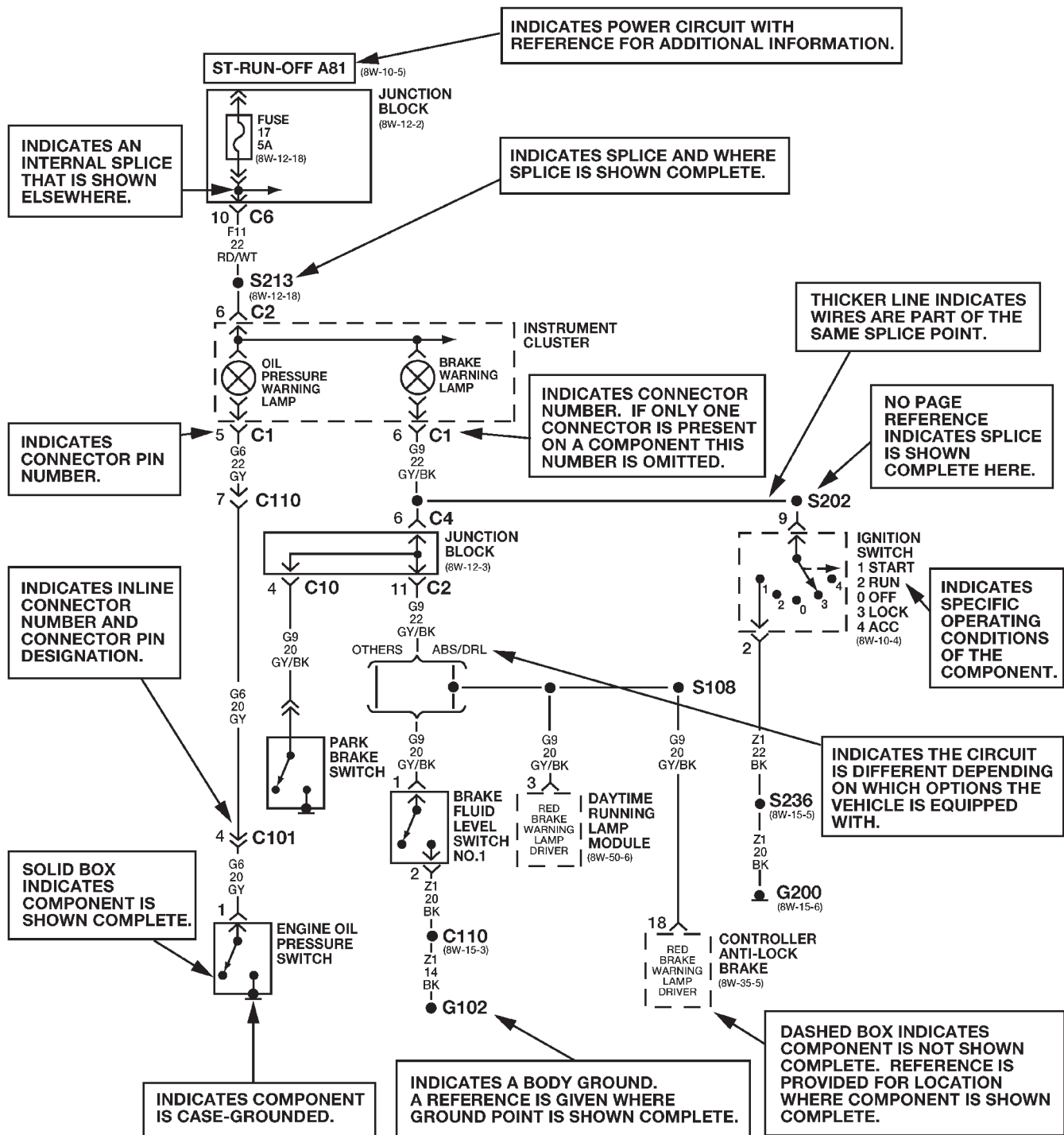
DIAGRAMS ARE ARRANGED WITH THE POWER B+ SIDE OF THE CIRCUIT NEAR THE TOP OF THE PAGE, AND THE GROUND SIDE OF THE CIRCUIT NEAR THE BOTTOM OF THE PAGE.



The System shown here is an **EXAMPLE ONLY**. It does not represent the actual circuit shown in the **WIRING DIAGRAM SECTION**.

Fig. 1 WIRING DIAGRAM EXAMPLE 1

## WIRING DIAGRAM INFORMATION (Continued)



The System shown here is an **EXAMPLE ONLY**. It does not represent the actual circuit shown in the **WIRING DIAGRAM SECTION**.

Fig. 2 WIRING DIAGRAM EXAMPLE 2

## WIRING DIAGRAM INFORMATION (Continued)

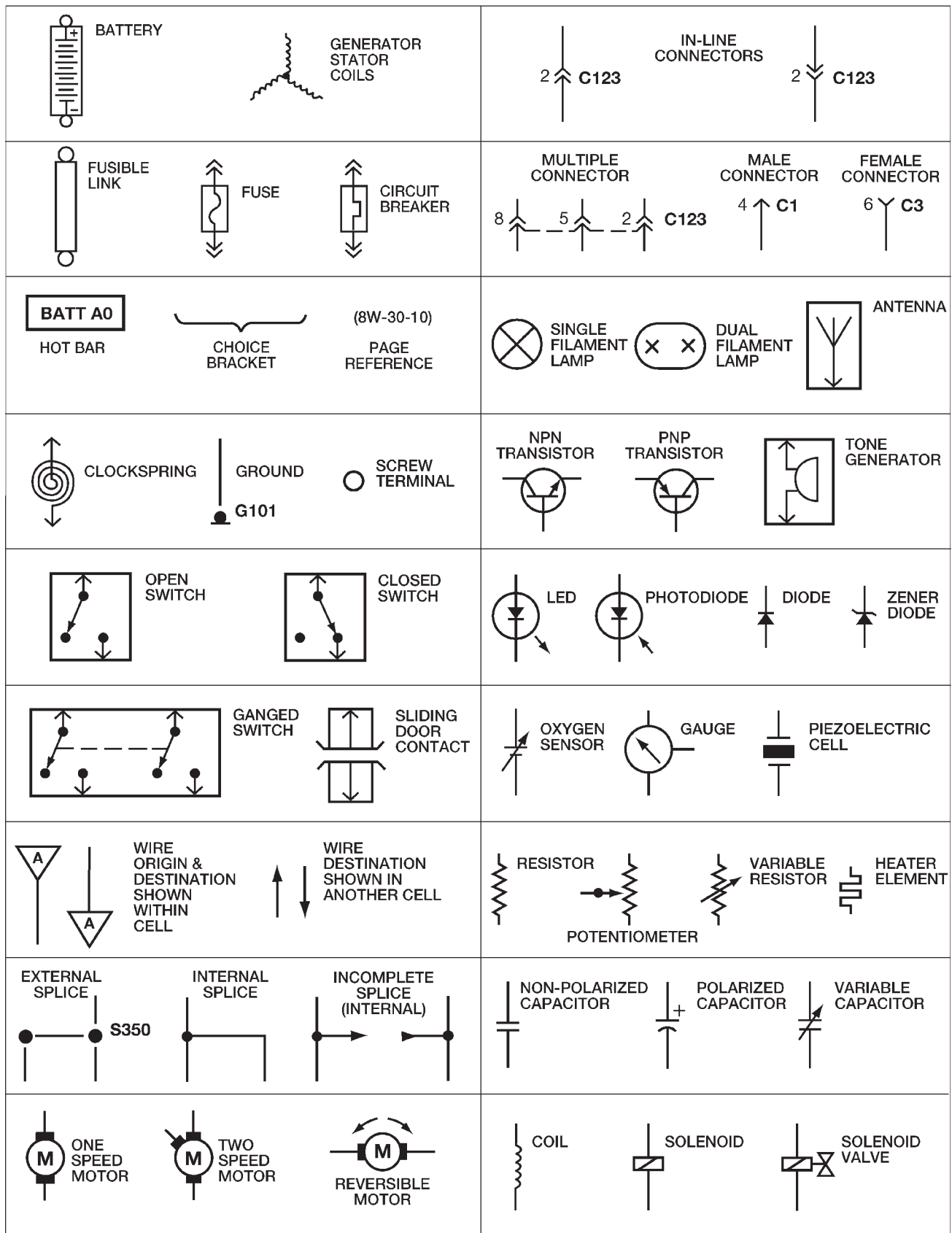


Fig. 3 WIRING DIAGRAM SYMBOLS

## WIRING DIAGRAM INFORMATION (Continued)

## TERMINOLOGY

This is a list of terms and definitions used in the wiring diagrams.

|                           |                                                                |
|---------------------------|----------------------------------------------------------------|
| LHD .....                 | Left Hand Drive Vehicles                                       |
| RHD .....                 | Right Hand Drive Vehicles                                      |
| ATX ..                    | Automatic Transmissions-Front Wheel Drive                      |
| MTX ....                  | Manual Transmissions-Front Wheel Drive                         |
| AT ....                   | Automatic Transmissions-Rear Wheel Drive                       |
| MT .....                  | Manual Transmissions-Rear Wheel Drive                          |
| SOHC .....                | Single Over Head Cam Engine                                    |
| DOHC .....                | Double Over Head Cam Engine                                    |
| Built-Up-Export .....     | Vehicles Built For Sale In<br>Markets Other Than North America |
| Except-Built-Up-Export .. | Vehicles Built For Sale In<br>North America                    |

## WARNINGS - GENERAL

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

**WARNING:: ALWAYS WEAR SAFETY GLASSES FOR EYE PROTECTION.**

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

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

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

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

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

**WARNING: TO PREVENT SERIOUS BURNS, AVOID CONTACT WITH HOT PARTS SUCH AS THE RADIA-**

**TOR, EXHAUST MANIFOLD(S), TAIL PIPE, CATALYTIC CONVERTER AND MUFFLER.**

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

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

## DIAGNOSIS AND TESTING - WIRING HARNESS

## 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.

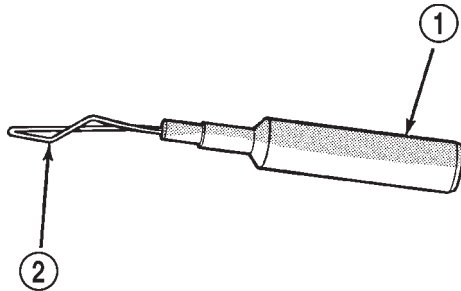
**CAUTION:** Most of the electrical components used in today's vehicles are Solid State. When checking voltages in these circuits, use a meter with a 10 - megohm or greater impedance rating.

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

## WIRING DIAGRAM INFORMATION (Continued)

• **Probing Tools** - These tools are used for probing terminals in connectors (Fig. 4) 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. 4 PROBING TOOL**

- 1 - SPECIAL TOOL 6801  
2 - PROBING END

**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 into 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 or moisture
- Wire insulation that has rubbed through causing a short to ground
- Some or all of the wiring strands broken inside of the insulation
- Wiring broken inside of the insulation

**TROUBLESHOOTING WIRING PROBLEMS**

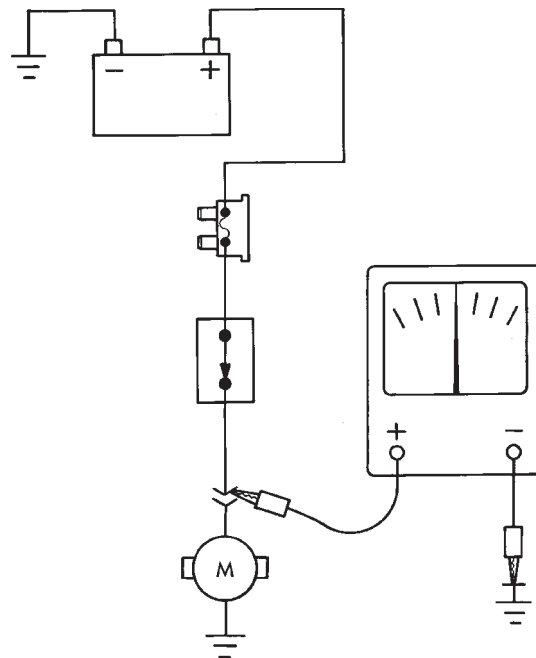
When troubleshooting wiring problems there are six steps which can aid in the procedure. The steps are listed and explained below. Always check for non-factory items added to the vehicle before doing any

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

**STANDARD PROCEDURE - TESTING FOR VOLTAGE POTENTIAL**

- (1) Connect the ground lead of a voltmeter to a known good ground (Fig. 5).
- (2) Connect the other lead of the voltmeter to the selected test point. The vehicle ignition may need to be turned ON to check voltage. Refer to the appropriate test procedure.



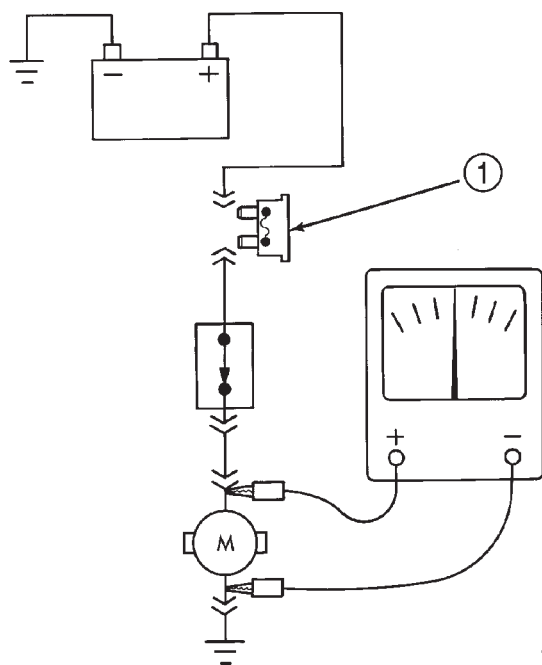
948W-194

**Fig. 5 TESTING FOR VOLTAGE POTENTIAL**

## WIRING DIAGRAM INFORMATION (Continued)

**STANDARD PROCEDURE - 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. 6)
- (3) Connect the other lead to the other end of the circuit being tested. Low or no resistance means good continuity.



948W-195

**Fig. 6 TESTING FOR CONTINUITY**

1 - FUSE REMOVED FROM CIRCUIT

**STANDARD PROCEDURE - TESTING FOR A SHORT TO GROUND**

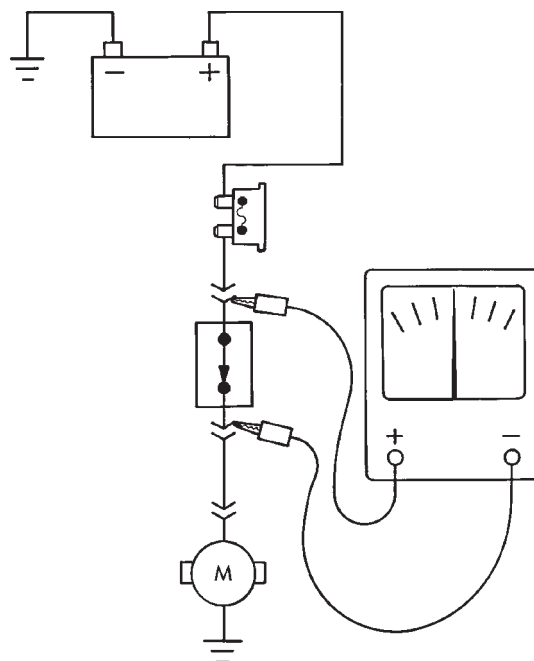
- (1) Remove the fuse and disconnect all items involved with the fuse.
- (2) Connect a test light or a voltmeter across the terminals of the fuse.
- (3) Starting at the fuse block, wiggle the wiring harness about six to eight inches apart and watch the voltmeter/test lamp.
- (4) If the voltmeter registers voltage or the test lamp glows, there is a short to ground in that general area of the wiring harness.

**STANDARD PROCEDURE - TESTING FOR SHORT TO GROUND ON FUSES POWERING SEVERAL LOADS**

- (1) Refer to the wiring diagrams and disconnect or isolate all items on the suspected fused circuits.
- (2) Replace the blown fuse.
- (3) Supply power to the fuse by turning ON the ignition switch or re-connecting the battery.
- (4) Start connecting the items in the fuse circuit one at a time. When the fuse blows the circuit with the short to ground has been isolated.

**STANDARD PROCEDURE - TESTING FOR A VOLTAGE DROP**

- (1) Connect the positive lead of the voltmeter to the side of the circuit closest to the battery (Fig. 7).
- (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.



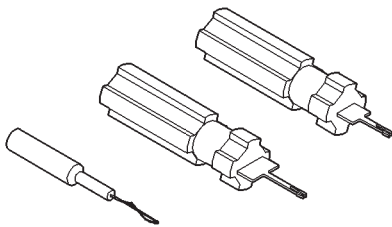
948W-196

**Fig. 7 TESTING FOR VOLTAGE DROP**

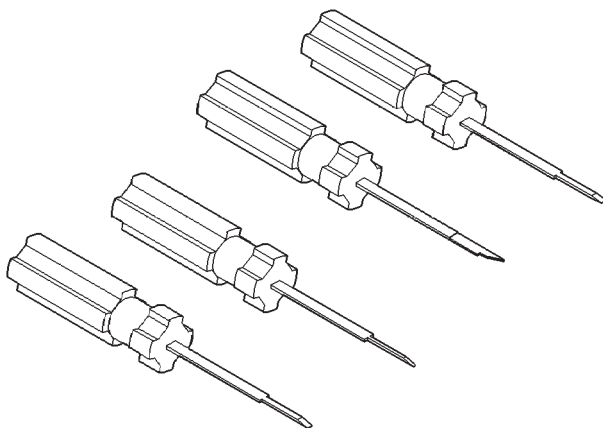
## WIRING DIAGRAM INFORMATION (Continued)

### SPECIAL TOOLS

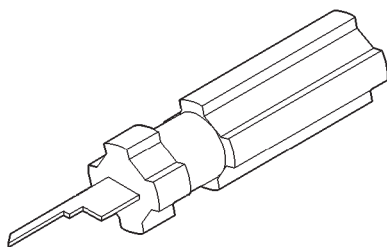
#### SPECIAL TOOLS - WIRING/TERMINAL



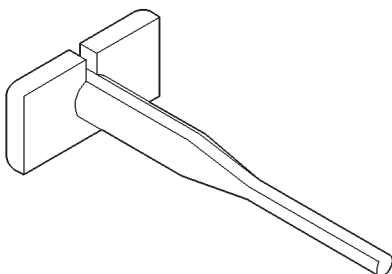
**PROBING TOOL PACKAGE 6807**



**TERMINAL PICK 6680**



**TERMINAL REMOVING TOOL 6932**

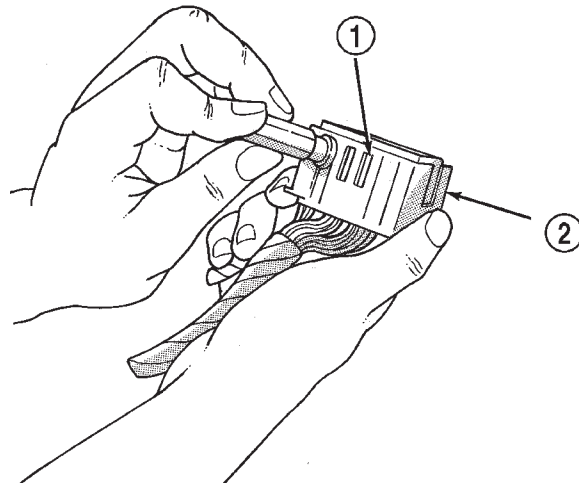


**TERMINAL REMOVING TOOL 6934**

### CONNECTOR - AUGAT

#### REMOVAL

- (1) Disconnect battery.
- (2) Disconnect the connector from its mating half/component.
- (3) Push down on the yellow connector locking tab to release the terminals (Fig. 8).

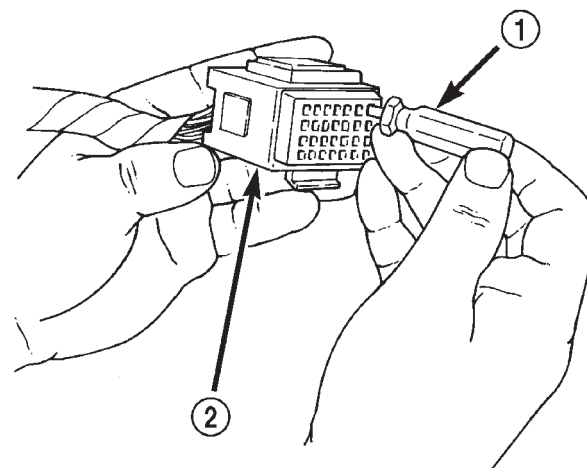


958W-54

**Fig. 8 AUGAT CONNECTOR REPAIR**

- 1 - LOCKING TAB  
2 - CONNECTOR

- (4) Using special tool 6932, push the terminal to remove it from the connector (Fig. 9).
- (5) Repair or replace the terminal as necessary.



803f5845

**Fig. 9 USING**

- 1 - SPECIAL TOOL 6932  
2 - CONNECTOR



## CONNECTOR - AUGAT (Continued)

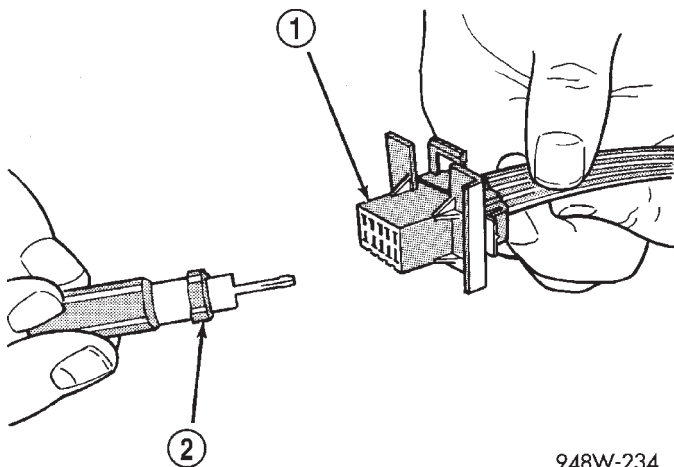
### INSTALLATION

- (1) Reset the terminal locking tang.
- (2) Insert the removed wire in the same cavity on the repair connector.
- (3) Repeat steps 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.
- (4) When the connector is re-assembled, the locking tab must be placed in the locked position to prevent terminal push out.
- (5) Connect connector to its mating half/component.
- (6) Connect battery and test all affected systems.

## CONNECTOR - MOLEX

### REMOVAL

- (1) Disconnect battery.
- (2) Disconnect the connector from its mating half/component.
- (3) Insert special tool 6742 into the terminal end of the connector (Fig. 10).



948W-234

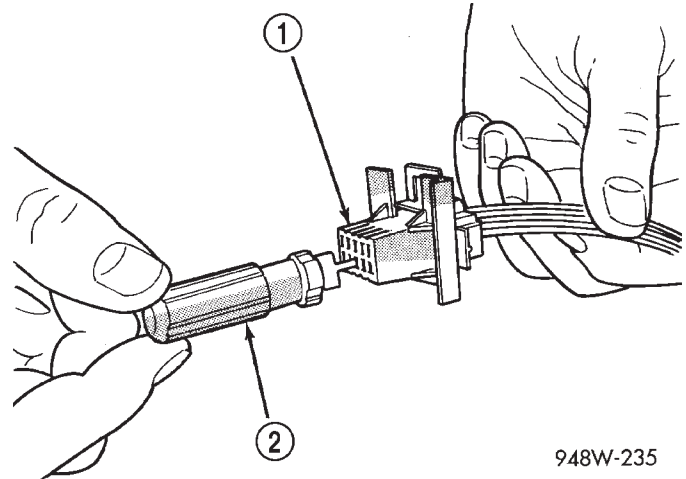
**Fig. 10 MOLEX CONNECTOR REPAIR**

- 1 - CONNECTOR
- 2 - SPECIAL TOOL 6742

- (4) Using special tool 6742, release the locking fingers on the terminal (Fig. 11).
- (5) Pull on the wire to remove it from the connector.
- (6) Repair or replace the terminal as necessary.

### INSTALLATION

- (1) Reset the terminal locking tang.
- (2) Insert the removed wire in the same cavity on the repair connector.
- (3) Repeat steps 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.



948W-235

**Fig. 11 USING SPECIAL TOOL 6742**

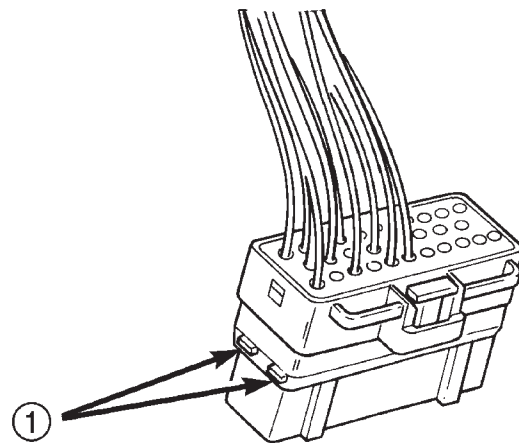
- 1 - CONNECTOR
- 2 - SPECIAL TOOL 6742

- (4) Connect connector to its mating half/component.
- (5) Connect battery and test all affected systems.

## CONNECTOR - THOMAS AND BETTS

### REMOVAL

- (1) Disconnect battery.
- (2) Disconnect the connector from its mating half/component.
- (3) Push in the two lock tabs on the side of the connector (Fig. 12).



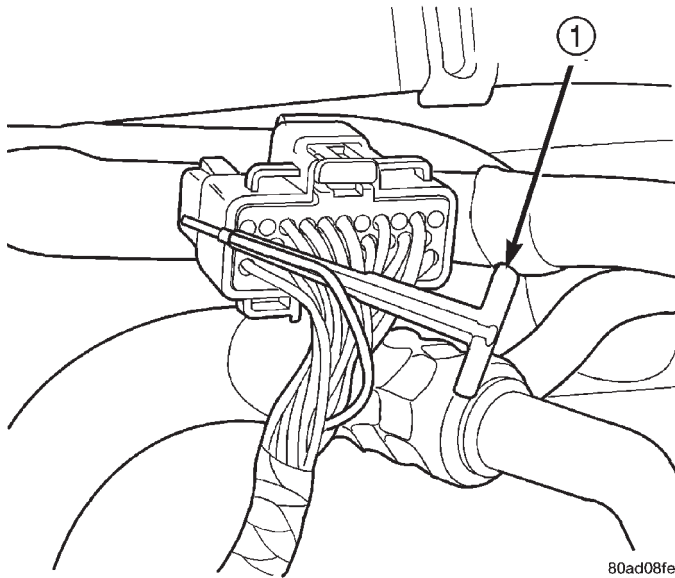
803f588a

**Fig. 12 THOMAS AND BETTS CONNECTOR LOCK RELEASE TABS**

- 1 - LOCK TABS

## CONNECTOR - THOMAS AND BETTS (Continued)

(4) Insert the probe end of special tool 6934 into the back of the connector cavity (Fig. 13).



**Fig. 13 REMOVING WIRE TERMINAL**

1 - SPECIAL TOOL 6934

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

(6) Repair or replace the terminal as necessary.

## INSTALLATION

(1) Reset the terminal locking tang.

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

(3) Repeat steps for each wire in the connector, being sure that all wires are fully seated into the proper cavities. For additional connector pin-out identification, refer to the wiring diagrams.

(4) Push in the single lock tab on the side of the connector (Fig. 14).

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

(6) Connect battery and test all affected systems.

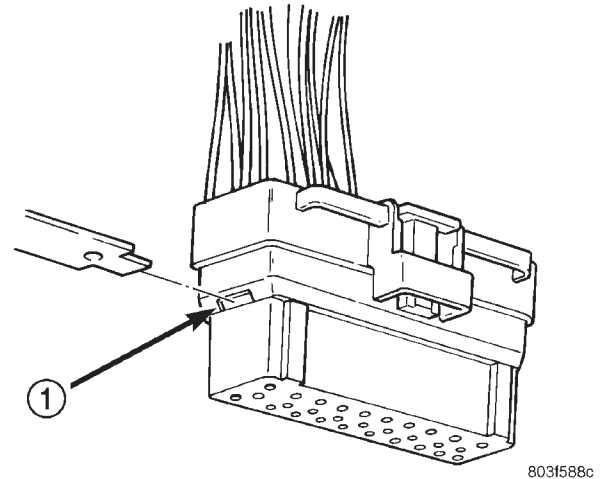
## DIODE

### REMOVAL

(1) Disconnect the battery.

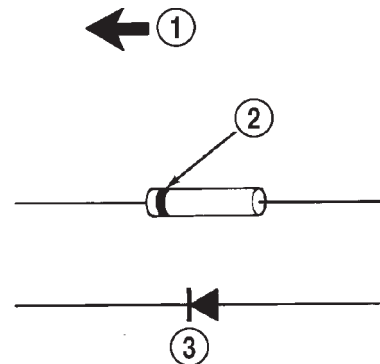
(2) Locate the diode in the harness, and remove the protective covering.

(3) Remove the diode from the harness, pay attention to the current flow direction (Fig. 15).



**Fig. 14 SINGLE LOCK TAB**

1 - SINGLE LOCK TAB



948W-197

**Fig. 15 DIODE IDENTIFICATION**

1 - CURRENT FLOW

2 - BAND AROUND DIODE INDICATES CURRENT FLOW

3 - DIODE AS SHOWN IN THE DIAGRAMS

### INSTALLATION

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

(2) Install the new diode in the harness, making sure current flow is correct. If necessary, refer to the appropriate wiring diagram for current flow (Fig. 15).

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

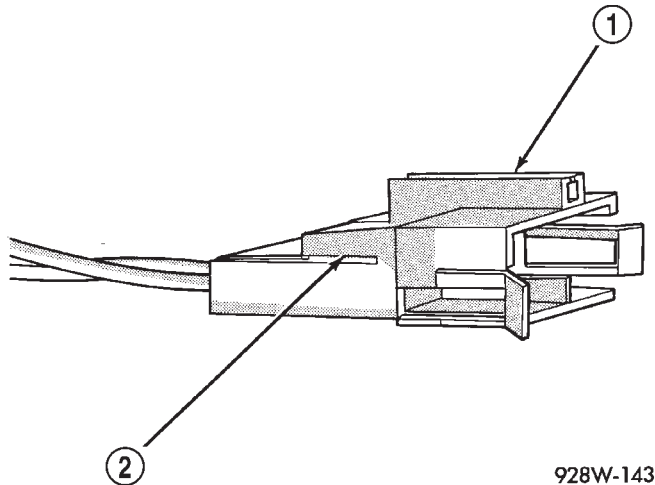
(4) Tape the diode to the harness using electrical tape. Make sure the diode is completely sealed from the elements.

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

## TERMINAL

### REMOVAL

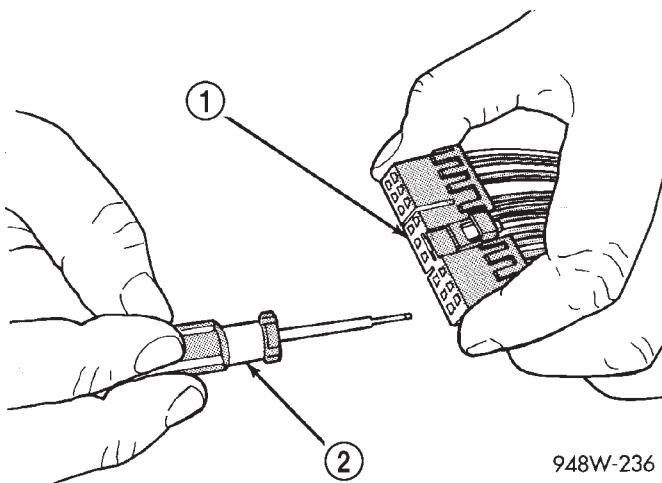
- (1) Disconnect battery.
- (2) Disconnect the connector being repaired from its mating half/component.
- (3) Remove the connector locking wedge, if required (Fig. 16).



**Fig. 16 CONNECTOR LOCKING WEDGE TAB (TYPICAL)**

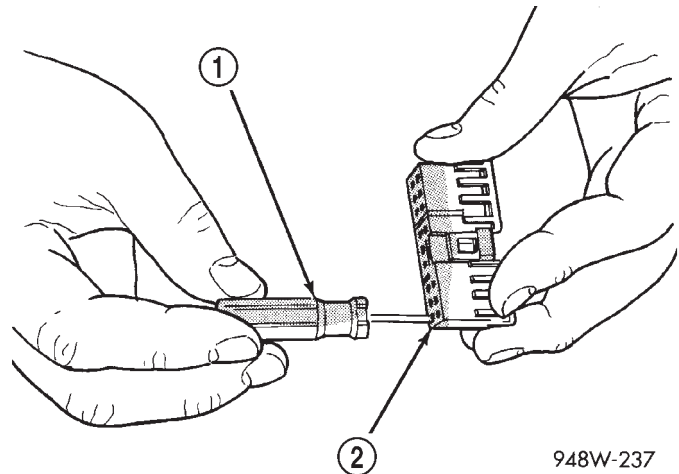
- 1 - CONNECTOR  
2 - CONNECTOR LOCKING WEDGE TAB

(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. 17) (Fig. 18).



**Fig. 17 TERMINAL REMOVAL**

- 1 - CONNECTOR  
2 - FROM SPECIAL TOOL KIT 6680



**Fig. 18 TERMINAL REMOVAL USING SPECIAL TOOL**

- 1 - FROM SPECIAL TOOL KIT 6680  
2 - CONNECTOR

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

### INSTALLATION

- (1) Select a wire from the terminal repair assembly that best matches the color wire being repaired.
- (2) Cut the repair wire to the proper length and remove one-half (1/2) inch of insulation.
- (3) Splice the repair wire to the wire harness .
- (4) Insert the repaired wire into the connector.
- (5) Install the connector locking wedge, if required, and reconnect the connector to its mating half/component.
- (6) Re-tape the wire harness starting at 1-1/2 inches behind the connector and 2 inches past the repair.
- (7) Connect battery and test all affected systems.

## WIRE

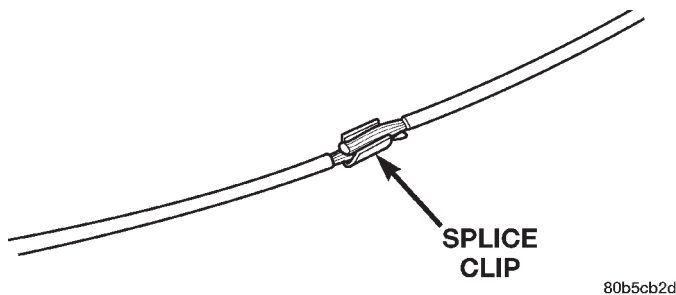
### STANDARD PROCEDURE - WIRE SPLICING

When splicing a wire, it is important that the correct gage be used as shown in the wiring diagrams.

(1) Remove one-half (1/2) inch of insulation from each wire that needs to be spliced.

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

(3) Place the strands of wire overlapping each other inside of the splice clip (Fig. 19).



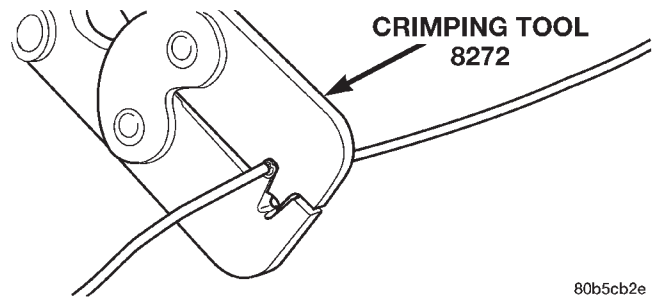
**Fig. 19 SPLICE CLIP**

(4) Using crimping tool, Miller p/n 8272, crimp the splice clip and wires together (Fig. 20)

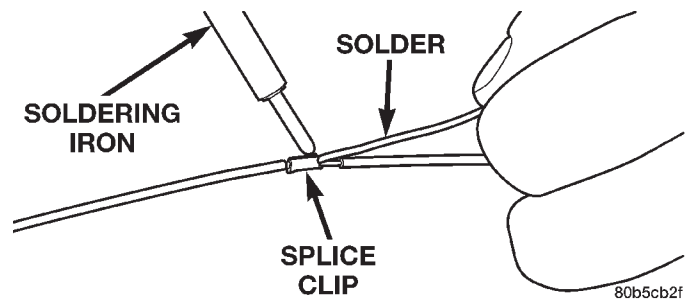
(5) Solder the connection together using rosin core type solder only (Fig. 21).

**CAUTION: DO NOT USE ACID CORE SOLDER.**

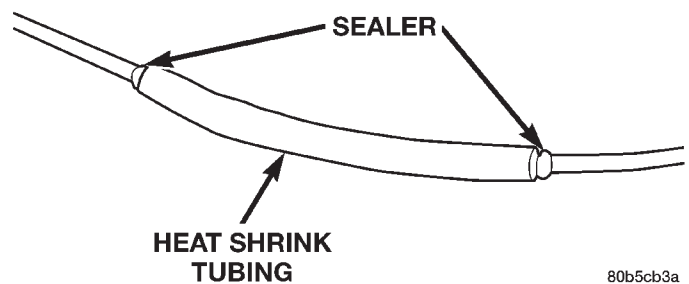
(6) Center the heat shrink tubing over the joint and heat using a heat gun. Heat the joint until the tubing is tightly sealed and sealant comes out of both ends of the tubing (Fig. 22).



**Fig. 20 CRIMPING TOOL**



**Fig. 21 SOLDER**



**Fig. 22 HEAT SHRINK TUBING**

## 8W-02 COMPONENT INDEX

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| Brake Warning Indicator Switch . . . . .              | 8W-30         | Horn Relay . . . . .                        | 8W-41       |
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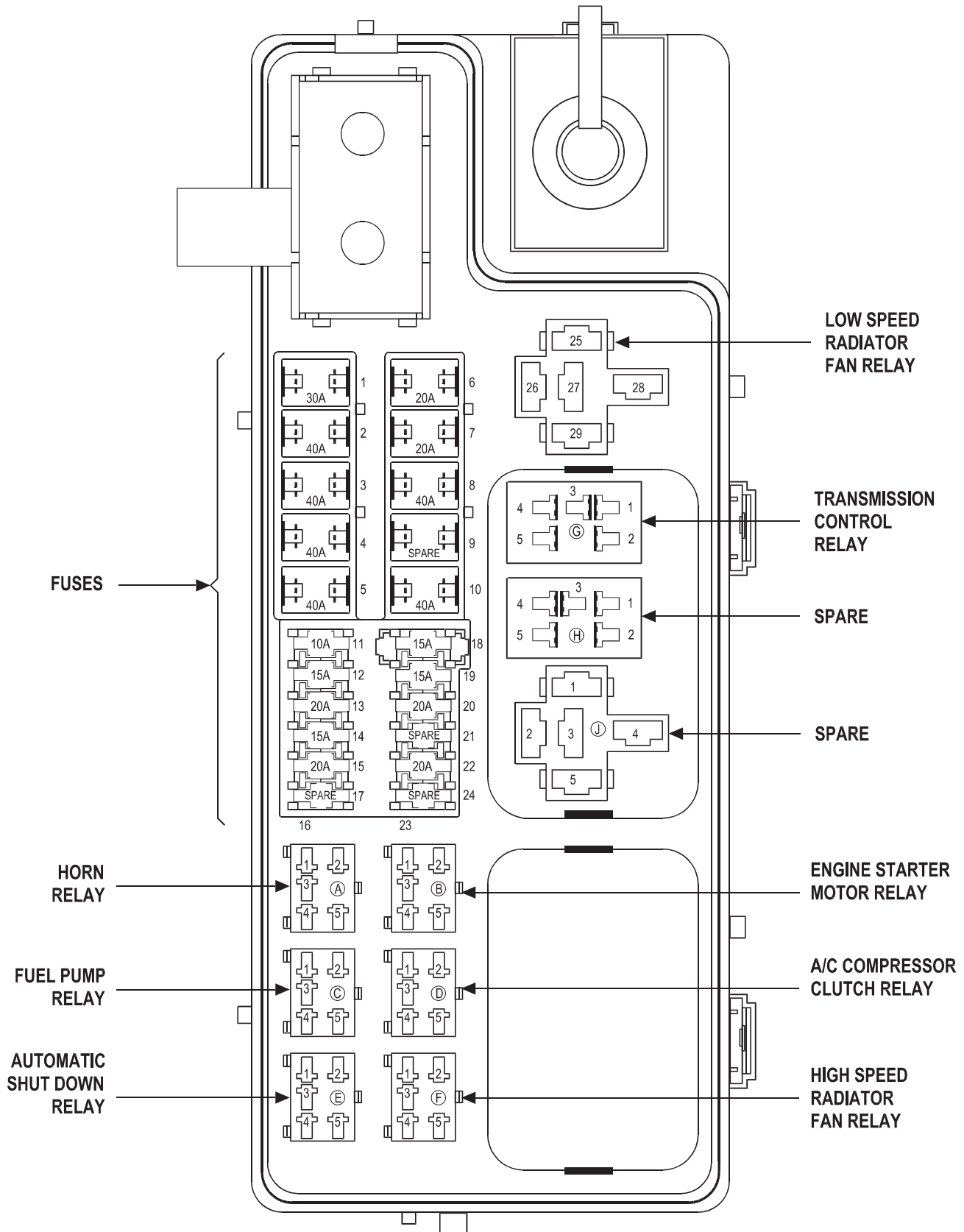


## 8W-10 POWER DISTRIBUTION

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| Brake Lamp Switch . . . . .             | 8W-10-6, 11       | Fuse 18 (PDC) . . . . .                                     | 8W-10-7, 15                                        |
| Cargo Lamp . . . . .                    | 8W-10-15          | Fuse 19 (PDC) . . . . .                                     | 8W-10-7, 16                                        |
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| Cigar Lighter . . . . .                 | 8W-10-17          | Fuse Block . . . . .                                        | 8W-10-6, 8, 10, 18, 19                             |
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| Diode . . . . .                         | 8W-10-11          | High Speed Radiator Fan Relay . . . . .                     | 8W-10-9                                            |
| Dome Lamp . . . . .                     | 8W-10-15          | Horn Relay . . . . .                                        | 8W-10-14                                           |
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| Engine Starter Motor . . . . .          | 8W-10-6, 8, 17    | Ignition Switch . . . . .                                   | 8W-10-6, 7, 8, 16, 17, 18, 19                      |
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| Fuel Injector No. 4 . . . . .           | 8W-10-13          | Low Note Horn . . . . .                                     | 8W-10-14                                           |
| Fuel Pump Module . . . . .              | 8W-10-12          | Low Speed Radiator Fan Relay . . . . .                      | 8W-9, 10                                           |
| Fuel Pump Relay . . . . .               | 8W-10-12          | Map/Reading Lamps . . . . .                                 | 8W-10-15                                           |
| Fuse 1 (FB) . . . . .                   | 8W-10-10          | Multi- Function Switch . . . . .                            | 8W-10-7, 16                                        |
| Fuse 1 (PDC) . . . . .                  | 8W-10-6, 8, 17    | Noise Suppressor . . . . .                                  | 8W-10-13                                           |
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| Fuse 4 (FB) . . . . .                   | 8W-10-8           | Power Mirror Switch . . . . .                               | 8W-10-15                                           |
| Fuse 4 (PDC) . . . . .                  | 8W-10-6, 8        | Power Outlet . . . . .                                      | 8W-10-16, 17                                       |
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| Fuse 5 (PDC) . . . . .                  | 8W-10-6, 9        | Power Seat Switch . . . . .                                 | 8W-10-6, 9                                         |
| Fuse 6 (FB) . . . . .                   | 8W-10-18          | Powertrain Control Module . . . . .                         | 8W-10-12, 13                                       |
| Fuse 6 (PDC) . . . . .                  | 8W-10-6, 9        | Radiator Fan Motor . . . . .                                | 8W-10-9                                            |
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| Fuse 8 (PDC) . . . . .                  | 8W-10-6, 10       | Rear Window Defogger Switch . . . . .                       | 8W-10-6, 10                                        |
| Fuse 9 (FB) . . . . .                   | 8W-10-19          | Right Power Mirror . . . . .                                | 8W-10-10                                           |
| Fuse 10 (FB) . . . . .                  | 8W-10-19          | Right Tail/Stop Lamp . . . . .                              | 8W-10-11                                           |
| Fuse 10 (PDC) . . . . .                 | 8W-10-6, 10       | Right Visor/Vanity Lamp . . . . .                           | 8W-10-15                                           |
| Fuse 11 (FB) . . . . .                  | 8W-10-19          | Sentry Key Immobilizer Module . . . . .                     | 8W-10-15                                           |
| Fuse 11 (PDC) . . . . .                 | 8W-10-6, 11       | Siren . . . . .                                             | 8W-10-15                                           |
| Fuse 12 (FB) . . . . .                  | 8W-10-19          | Transmission Control Module . . . . .                       | 8W-10-14, 18                                       |
| Fuse 12 (PDC) . . . . .                 | 8W-10-6, 7, 11    | Transmission Control Relay . . . . .                        | 8W-10-14                                           |
| Fuse 13 (FB) . . . . .                  | 8W-10-19          | Transmission Solenoid/Pressure<br>Switch Assembly . . . . . | 8W-10-14                                           |
| Fuse 13 (PDC) . . . . .                 | 8W-10-6, 7, 12    |                                                             |                                                    |
| Fuse 14 (FB) . . . . .                  | 8W-10-19          |                                                             |                                                    |
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## POWER DISTRIBUTION CENTER



# 2001 PT CRUISER SUPPLEMENT

PT 8W-10 POWER DISTRIBUTION 8W - 10 - 3

## FUSES

| FUSE | AMPS | FUSED CIRCUIT    | FUNCTION   |
|------|------|------------------|------------|
| 1    | 30A  | A1 14RD          | FUSED B(+) |
| 2    | 40A  | A10 12RD/DG □    | FUSED B(+) |
| 3    | 40A  | A2 12PK/BK       | FUSED B(+) |
| 4    | 40A  | A35 12DB △ ###   | FUSED B(+) |
| 5    | 40A  | A16 12GY         | FUSED B(+) |
| 6    | 20A  | A120 16RD/LB ##  | FUSED B(+) |
| 6    | 20A  | A120 16RD/LG ### | FUSED B(+) |
| 7    | 20A  | A20 12RD/DB □    | FUSED B(+) |
| 8    | 40A  | A4 12BK/PK       | FUSED B(+) |
| 9    | -    | -                | -          |
| 10   | 40A  | A3 12RD/WT       | FUSED B(+) |
| 11   | 10A  | A17 20RD/BK      | FUSED B(+) |
| 12   | 15A  | F32 18PK/DB      | FUSED B(+) |
| 13   | 20A  | A14 18RD/WT      | FUSED B(+) |
| 14   | 15A  | F62 20RD         | FUSED B(+) |
| 15   | 20A  | A30 16RD/WT ■■   | FUSED B(+) |
| 16   | -    | -                | -          |
| 17   | -    | -                | -          |
| 18   | 15A  | M1 20PK          | FUSED B(+) |
| 19   | 15A  | A15 18PK/DG      | FUSED B(+) |
| 20   | 20A  | F1 16DB/BK       | FUSED B(+) |
| 21   | -    | -                | -          |
| 22   | -    | -                | -          |
| 23   | -    | -                | -          |
| 24   | -    | -                | -          |

△ HEATED SEATS  
□ ABS  
■■ A/T  
## EARLY BUILD  
### NORMAL BUILD

## RELAYS

### A/C COMPRESSOR CLUTCH RELAY

| CAVITY | CIRCUIT     | FUNCTION                                 |
|--------|-------------|------------------------------------------|
| D1     | C3 20DB/BK  | A/C COMPRESSOR CLUTCH RELAY OUTPUT       |
| D2     | C28 20DB/OR | A/C COMPRESSOR CLUTCH RELAY CONTROL      |
| D3     | -           | -                                        |
| D4     | F18 20LG/BK | FUSED IGNITION SWITCH OUTPUT (RUN-START) |
| D5     | A17 20RD/BK | FUSED B(+)                               |

### AUTOMATIC SHUT DOWN RELAY

| CAVITY | CIRCUIT      | FUNCTION                          |
|--------|--------------|-----------------------------------|
| E1     | A142 18DG/OR | AUTOMATIC SHUT DOWN RELAY OUTPUT  |
| E2     | K51 20DB/YL  | AUTOMATIC SHUT DOWN RELAY CONTROL |
| E3     | -            | -                                 |
| E4     | A14 18RD/WT  | FUSED B(+)                        |
| E5     | A14 18RD/WT  | FUSED B(+)                        |

### ENGINE STARTER MOTOR RELAY

| CAVITY | CIRCUIT  | FUNCTION                             |
|--------|----------|--------------------------------------|
| B1     | T40 14BR | ENGINE STARTER MOTOR RELAY OUTPUT    |
| B2     | K90 20TN | ENGINE STARTER MOTOR RELAY CONTROL   |
| B3     | -        | -                                    |
| B4     | A41 14YL | FUSED IGNITION SWITCH OUTPUT (START) |
| B5     | A1 14RD  | FUSED B(+)                           |

### FUEL PUMP RELAY

| CAVITY | CIRCUIT      | FUNCTION                                 |
|--------|--------------|------------------------------------------|
| C1     | A141 16DG/WT | FUEL PUMP RELAY OUTPUT                   |
| C2     | K31 20BR     | FUEL PUMP RELAY CONTROL                  |
| C3     | -            | -                                        |
| C4     | F12 20DB/WT  | FUSED IGNITION SWITCH OUTPUT (RUN-START) |
| C5     | A14 18RD/WT  | FUSED B(+)                               |

## RELAYS

### HIGH SPEED RADIATOR FAN RELAY

| CAVITY | CIRCUIT     | FUNCTION                                 |
|--------|-------------|------------------------------------------|
| F1     | C25 12YL    | HIGH SPEED RADIATOR FAN RELAY OUTPUT     |
| F2     | C27 20DB/PK | HIGH SPEED RADIATOR FAN RELAY CONTROL    |
| F3     | -           | -                                        |
| F4     | F18 20LG/BK | FUSED IGNITION SWITCH OUTPUT (RUN-START) |
| F5     | A16 12GY    | FUSED B(+)                               |

### HORN RELAY

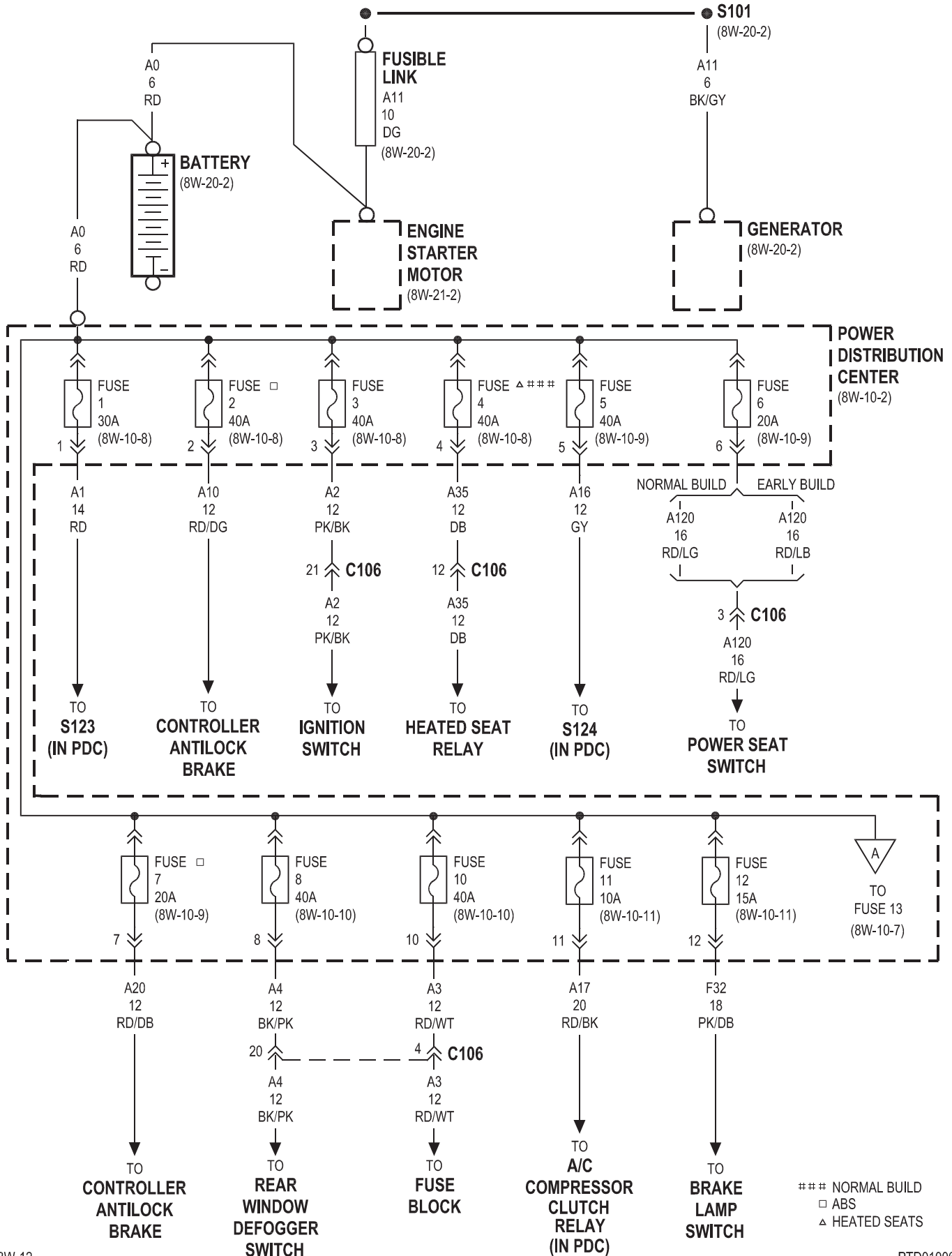
| CAVITY | CIRCUIT    | FUNCTION           |
|--------|------------|--------------------|
| A1     | X2 20DG/RD | HORN RELAY OUTPUT  |
| A2     | X3 20BK/RD | HORN RELAY CONTROL |
| A3     | -          | -                  |
| A4     | F62 20RD   | FUSED B(+)         |
| A5     | F62 20RD   | FUSED B(+)         |

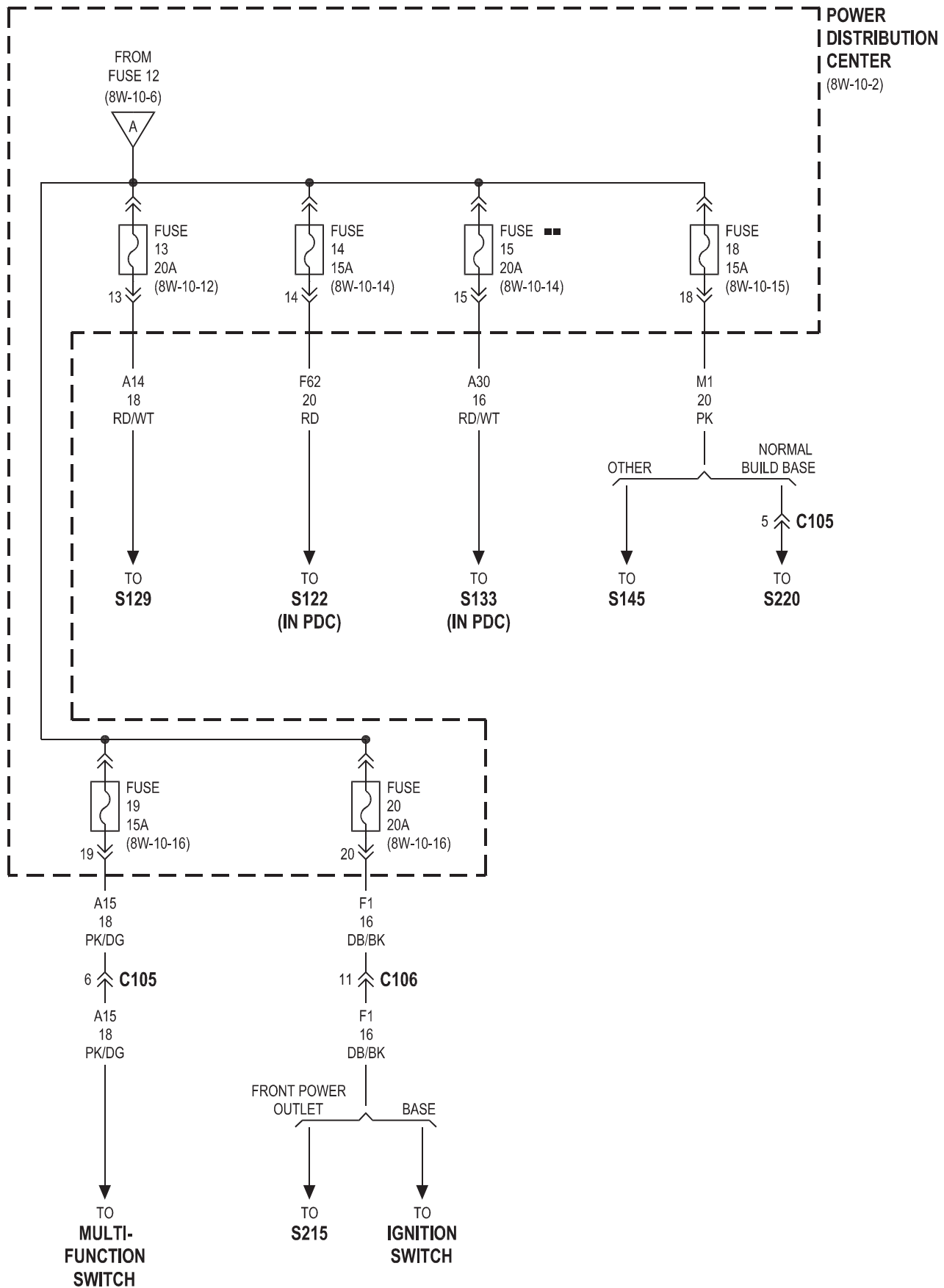
### LOW SPEED RADIATOR FAN RELAY

| CAVITY | CIRCUIT     | FUNCTION                                 |
|--------|-------------|------------------------------------------|
| 25     | F18 20LG/BK | FUSED IGNITION SWITCH OUTPUT (RUN-START) |
| 26     | C23 12DG    | LOW SPEED RADIATOR FAN RELAY OUTPUT      |
| 27     | -           | -                                        |
| 28     | A16 12GY    | FUSED B(+)                               |
| 29     | C24 20YL/RD | LOW SPEED RADIATOR FAN RELAY CONTROL     |

### TRANSMISSION CONTROL RELAY

| CAVITY | CIRCUIT     | FUNCTION                           |
|--------|-------------|------------------------------------|
| G1     | T16 16RD    | TRANSMISSION CONTROL RELAY OUTPUT  |
| G2     | Z1 20BK     | GROUND                             |
| G3     | -           | -                                  |
| G4     | T15 20LG    | TRANSMISSION CONTROL RELAY CONTROL |
| G5     | A30 16RD/WT | FUSED B(+)                         |



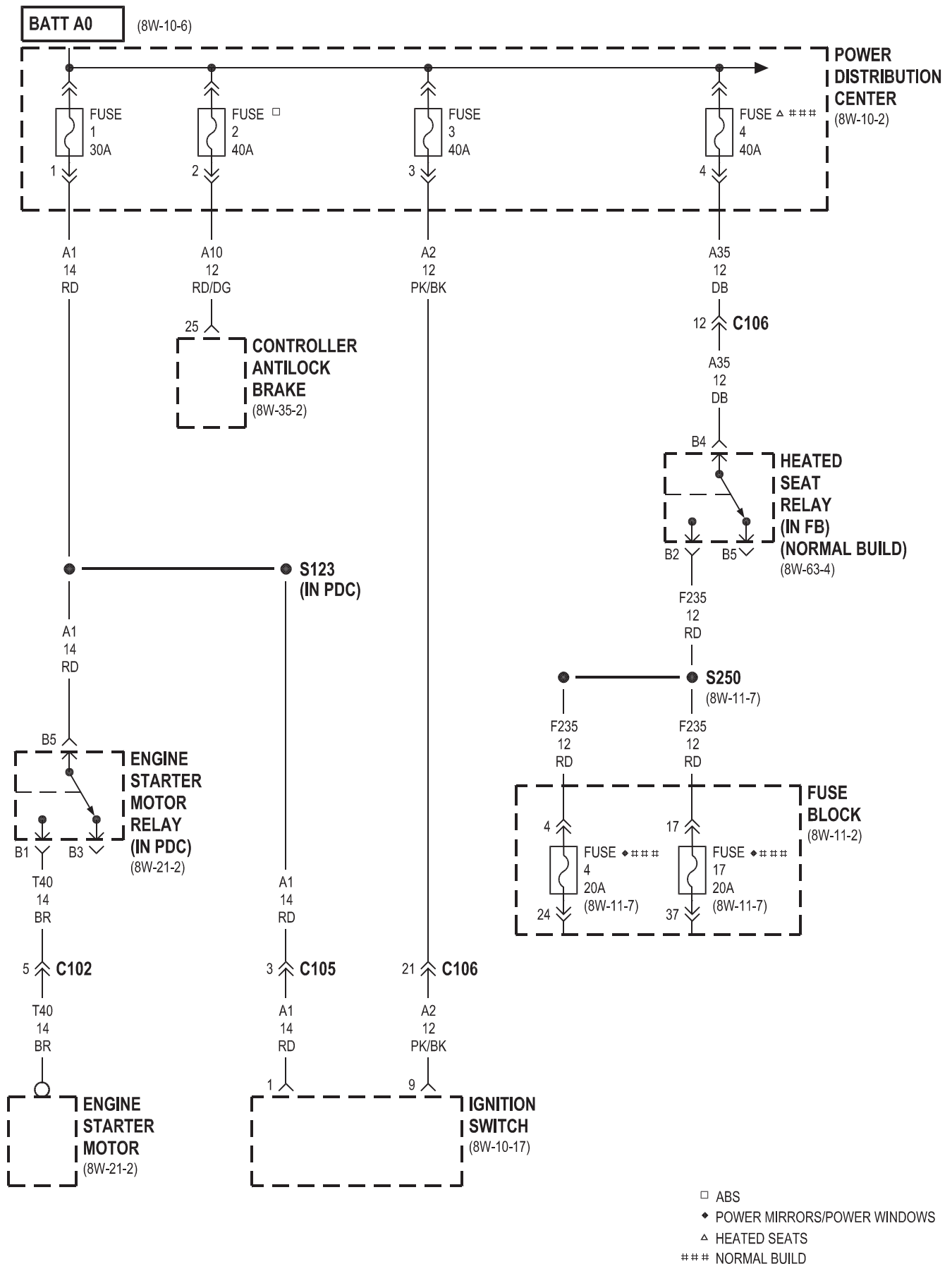


## 2001 PT CRUISER SUPPLEMENT

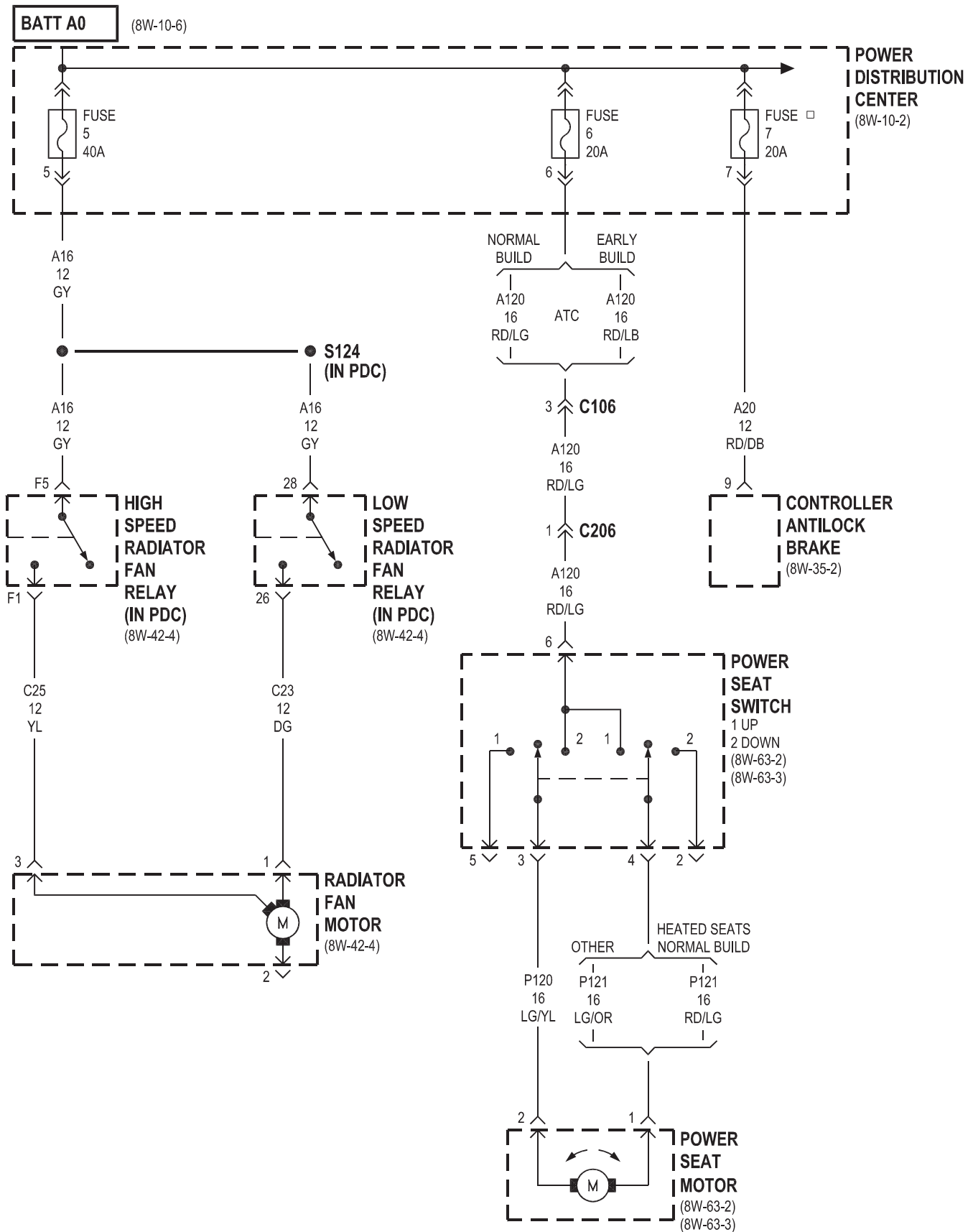
**8W - 10 - 8**

## 8W-10 POWER DISTRIBUTION

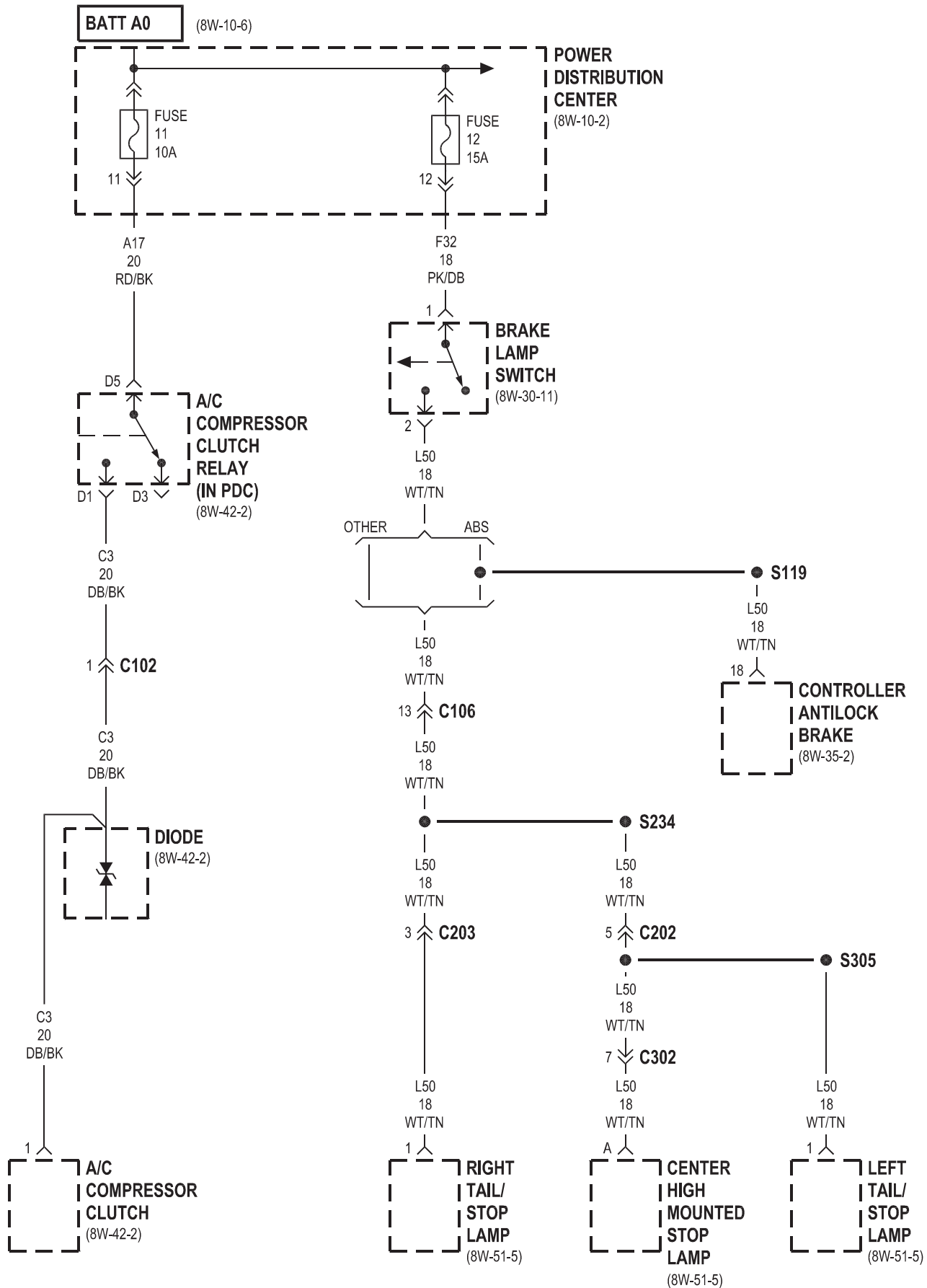
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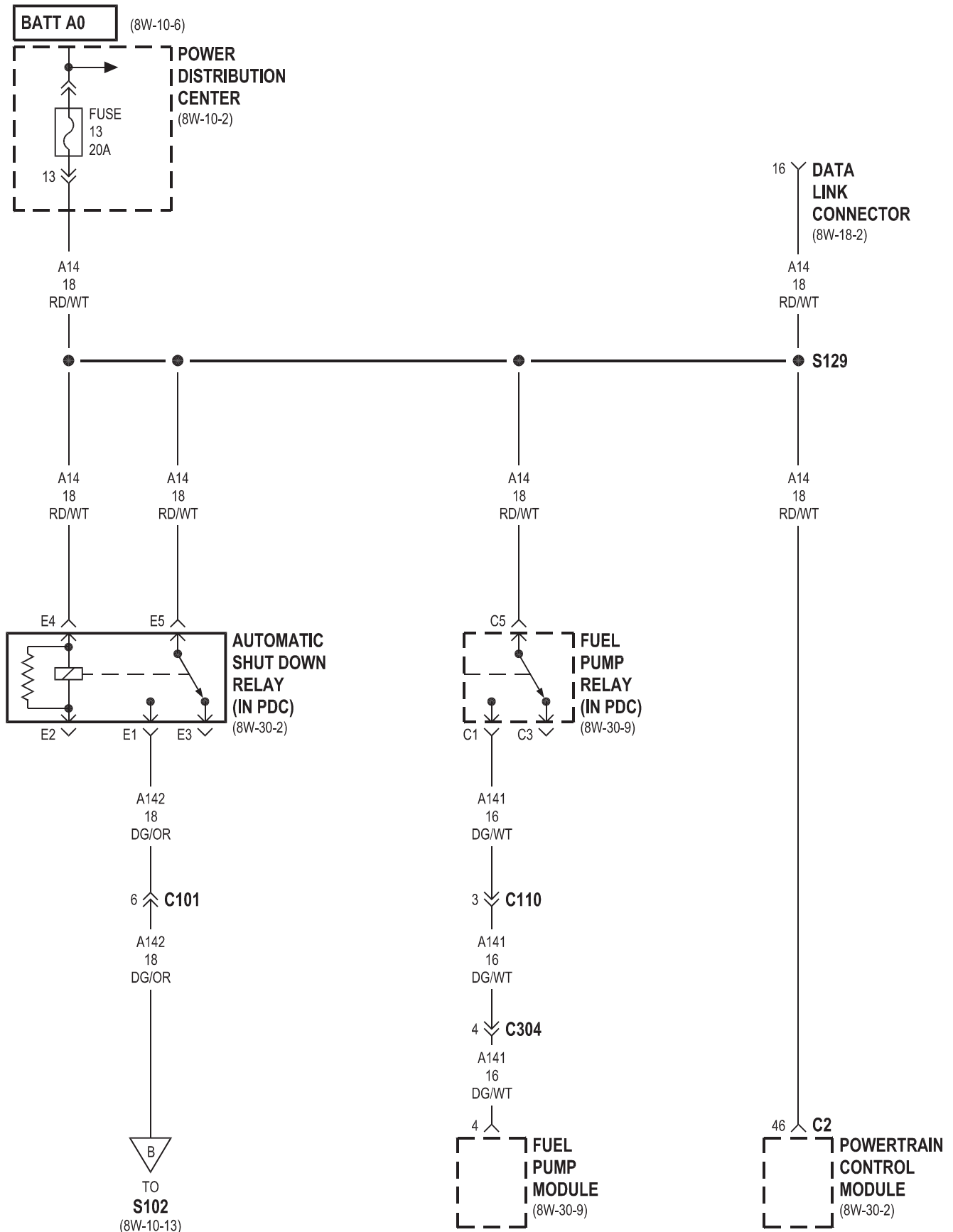


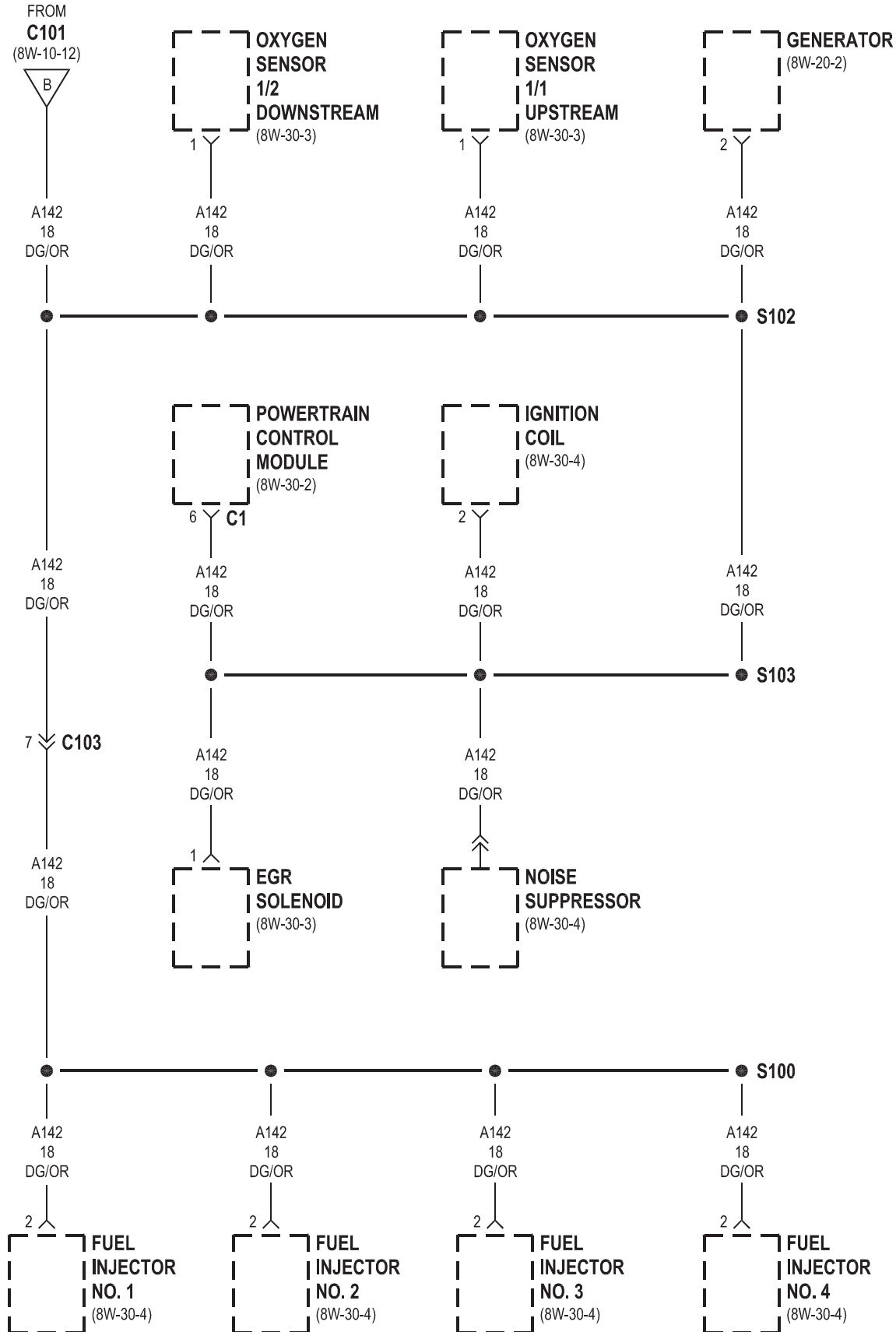


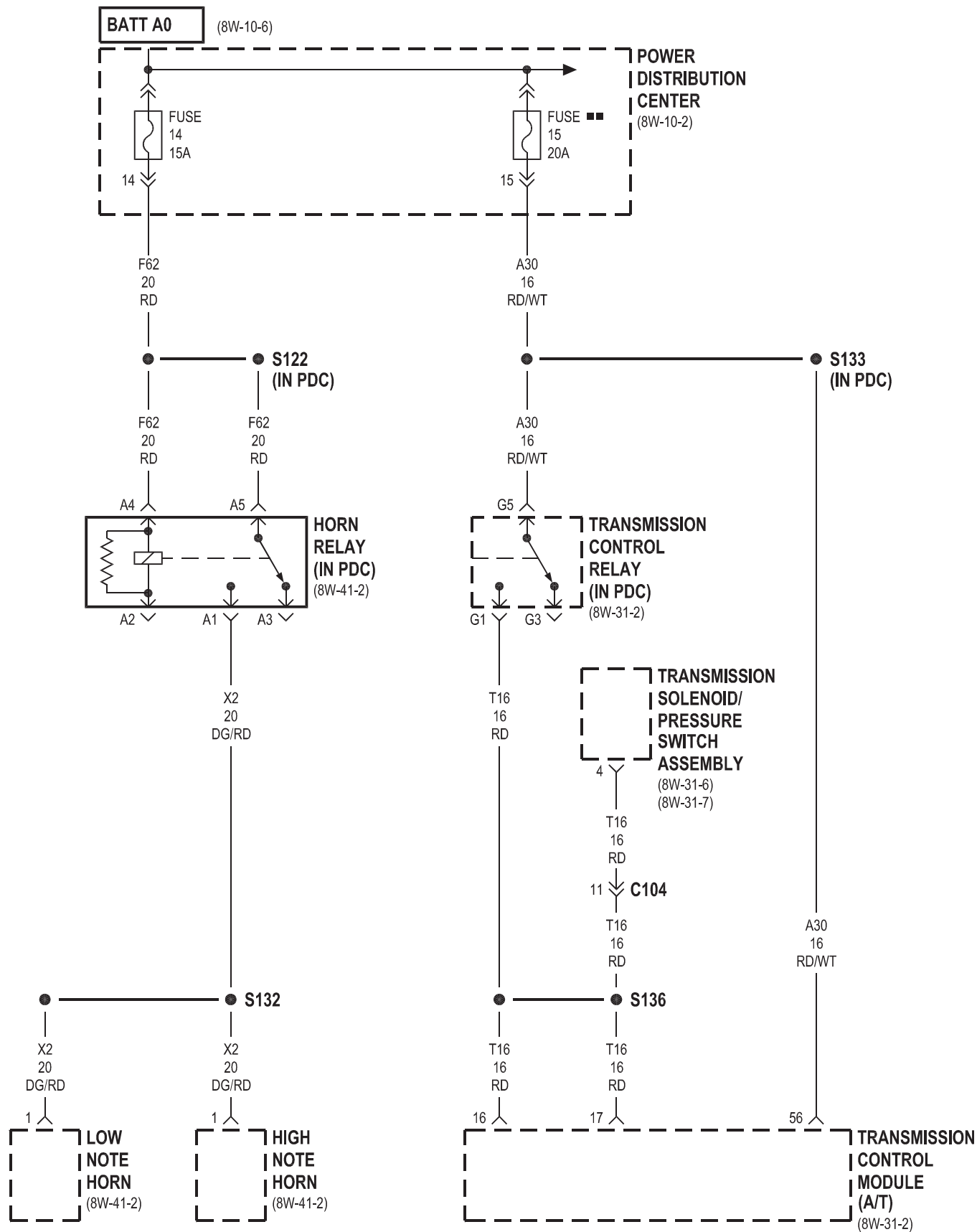


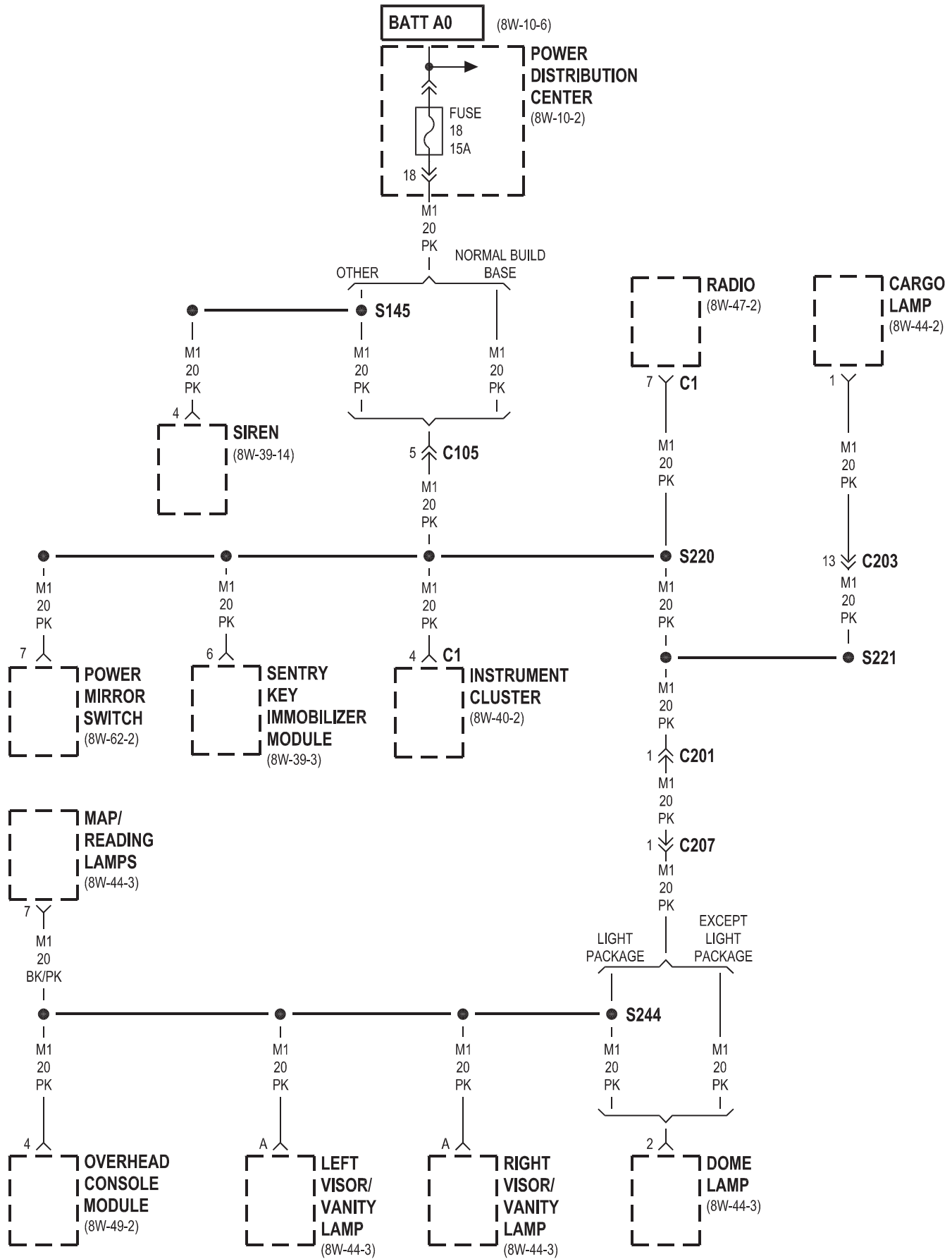




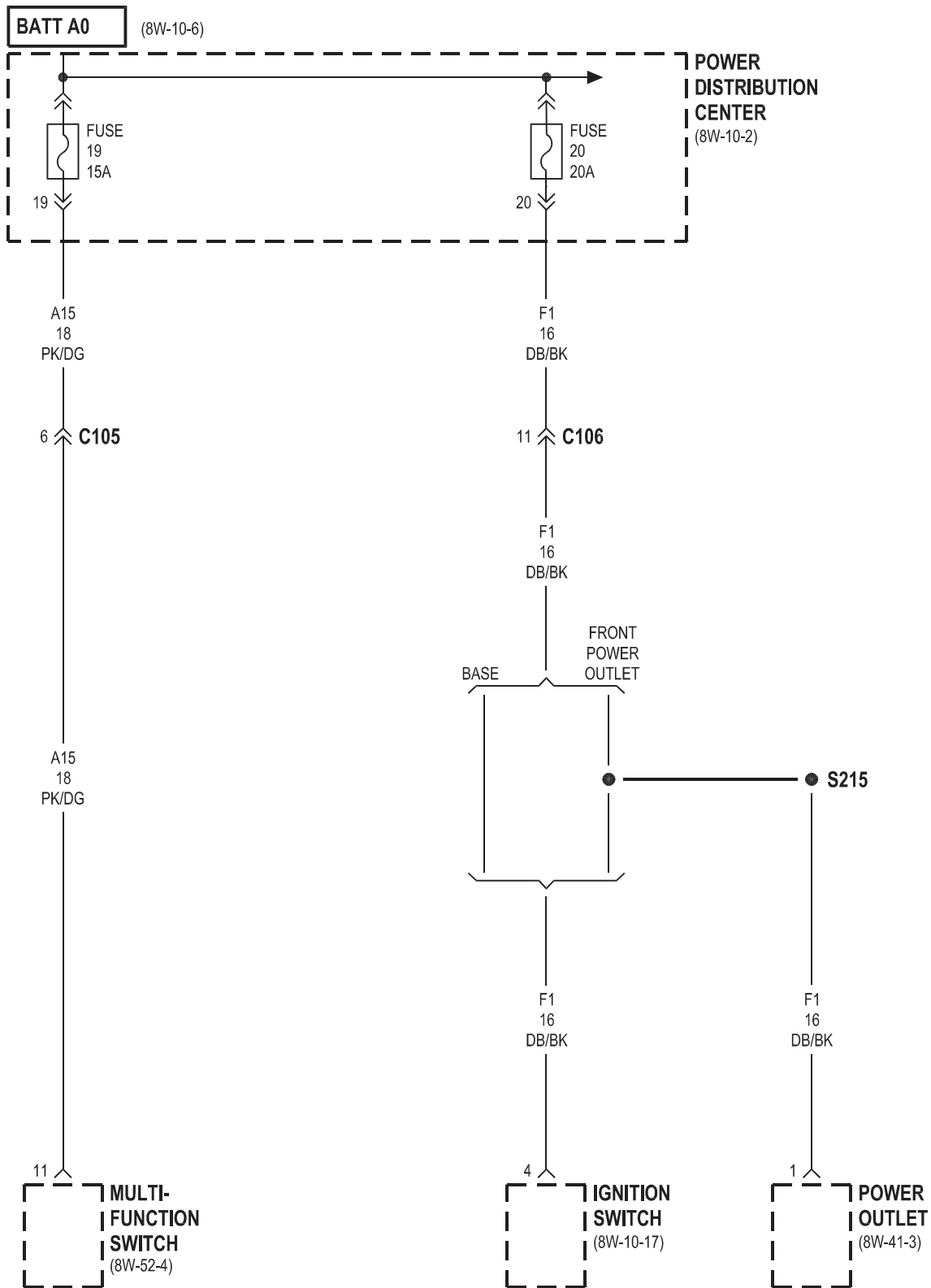


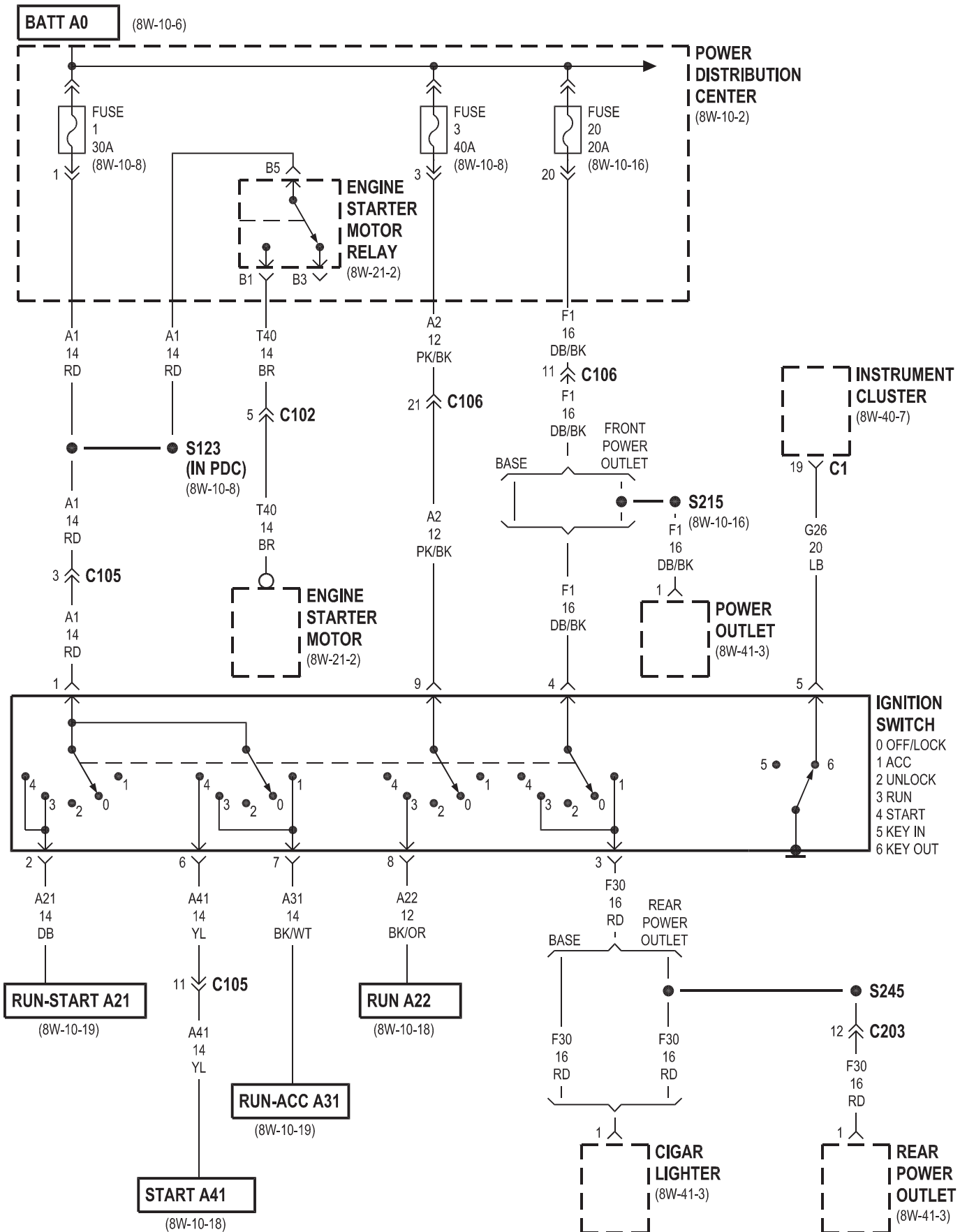


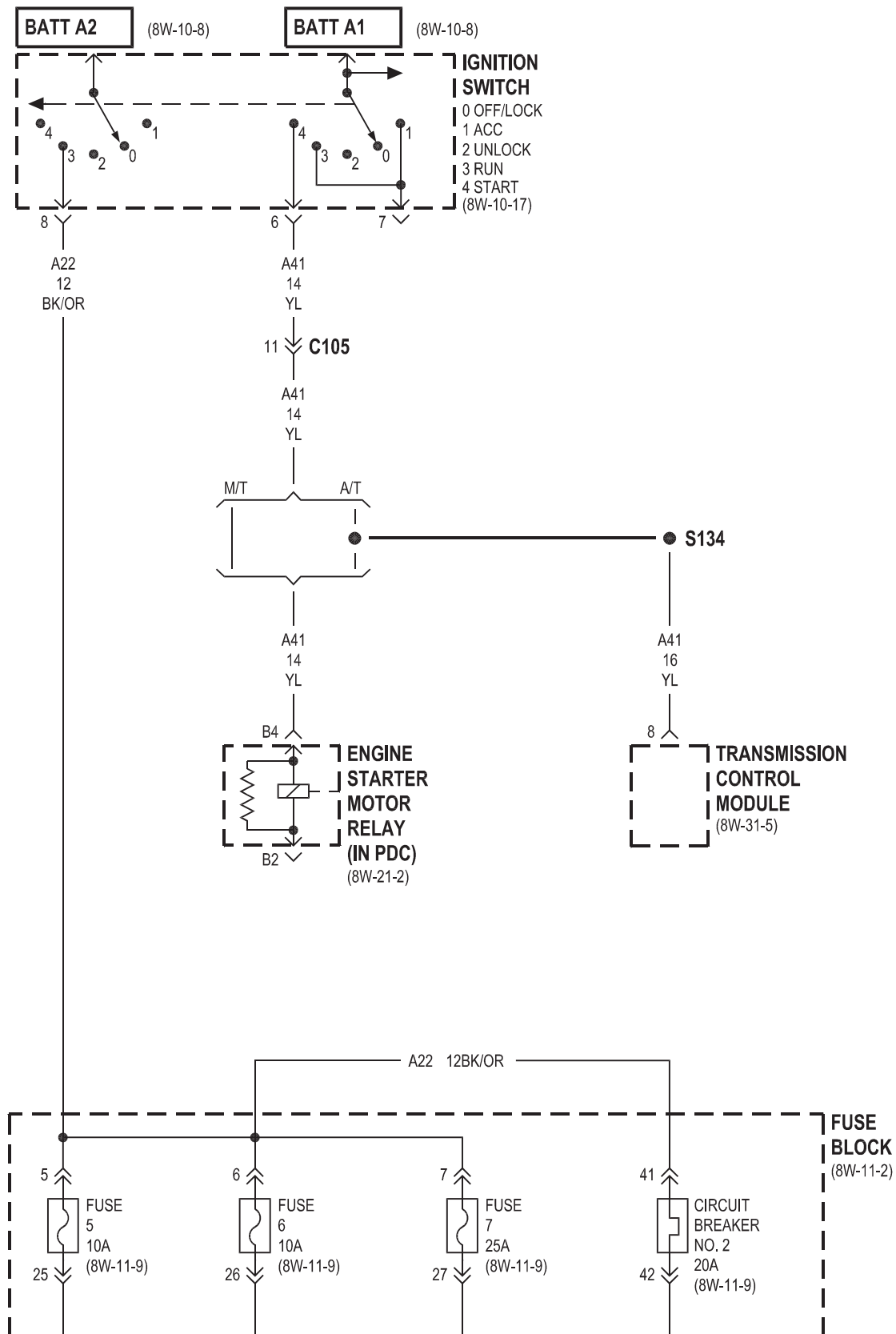


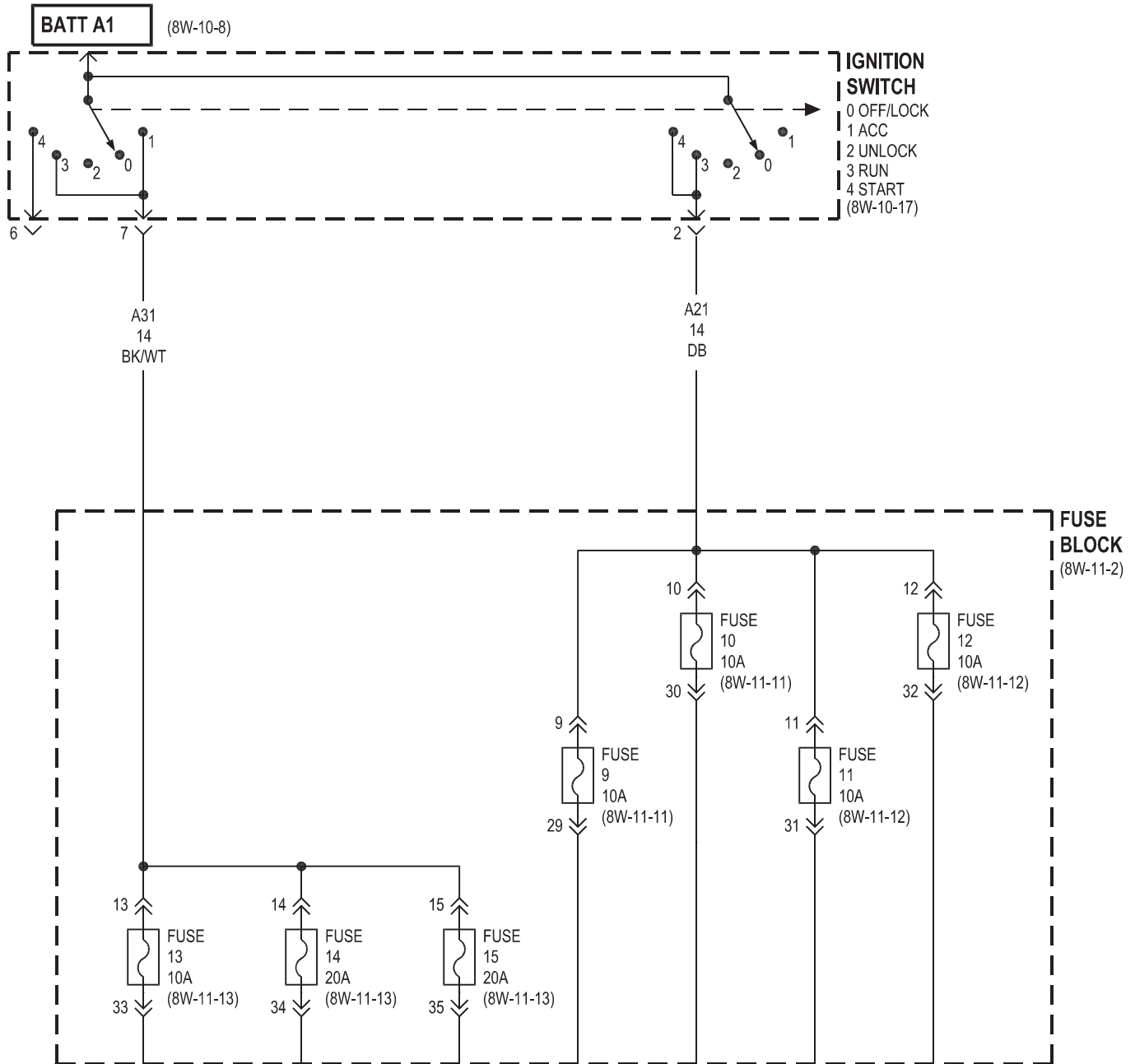








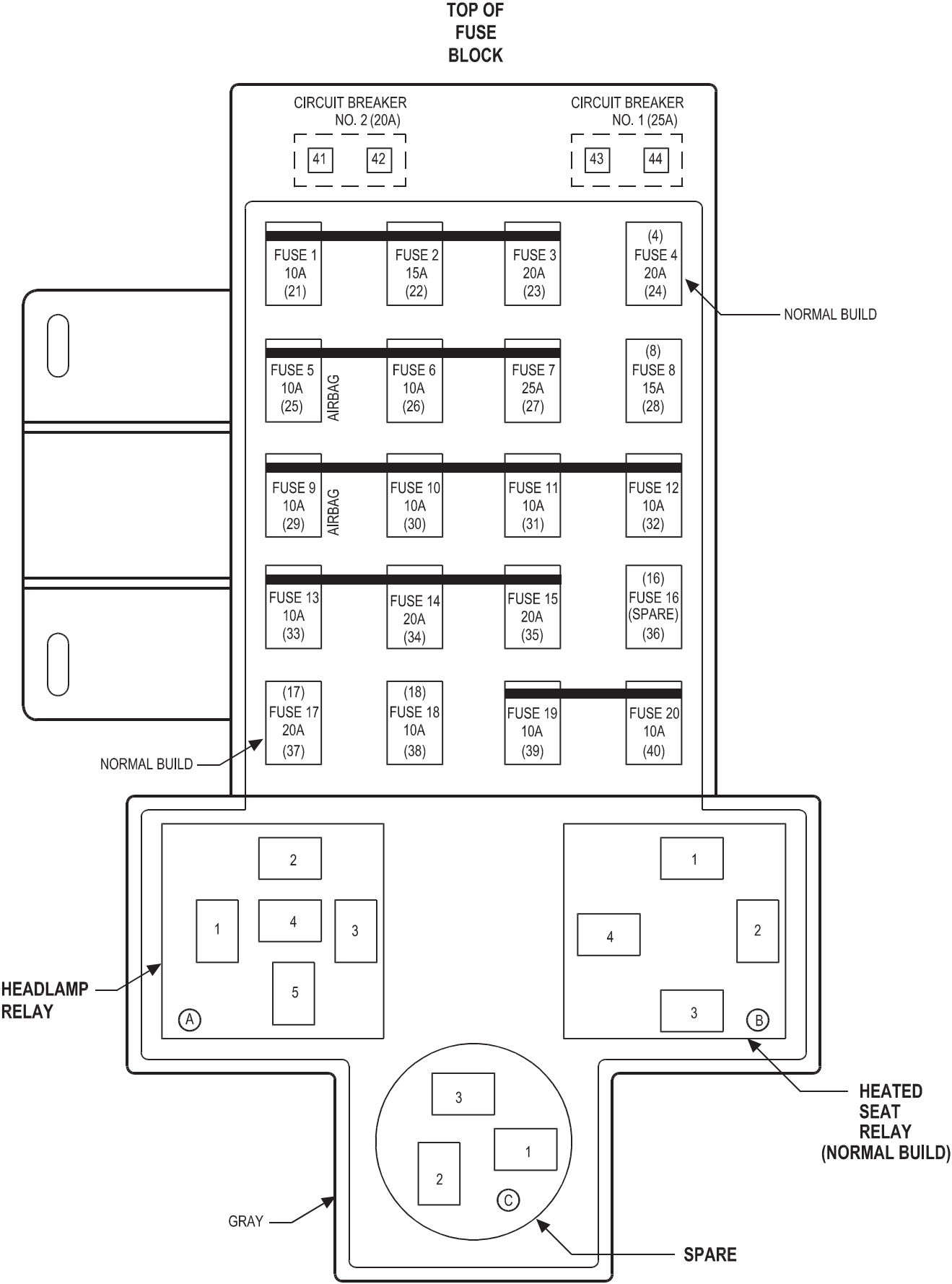






## 8W-11 FUSE BLOCK

| <b>Component</b>                                         | <b>Page</b>                                     | <b>Component</b>                                     | <b>Page</b>             |
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| A/C Compressor Clutch Relay . . . . .                    | 8W-11-12                                        | Headlamp Switch . . . . .                            | 8W-11-5, 10, 15, 16     |
| Back-Up Lamp Switch . . . . .                            | 8W-11-9                                         | Heated Seat Relay . . . . .                          | 8W-11-7, 9              |
| Blower Motor . . . . .                                   | 8W-11-9                                         | High Speed Radiator Fan Relay . . . . .              | 8W-11-12                |
| Brake Transmission Shift<br>Interlock Solenoid . . . . . | 8W-11-12                                        | Instrument Cluster . . . . .                         | 8W-11-5, 10, 11, 15, 16 |
| Circuit Breaker No. 1 (FB) . . . . .                     | 8W-11-5, 10, 15                                 | Leak Detection Pump . . . . .                        | 8W-11-12                |
| Circuit Breaker No. 2 (FB) . . . . .                     | 8W-11-9                                         | Left Front Park/Turn Signal Lamp . . . . .           | 8W-11-6                 |
| Controller Antilock Brake . . . . .                      | 8W-11-12                                        | Left High Beam Headlamp . . . . .                    | 8W-11-16                |
| Driver Door Lock Switch . . . . .                        | 8W-11-5                                         | Left Low Beam Headlamp . . . . .                     | 8W-11-16                |
| Driver Heated Seat Module . . . . .                      | 8W-11-8                                         | Left Power Mirror . . . . .                          | 8W-11-14                |
| Driver Heated Seat Switch . . . . .                      | 8W-11-8                                         | Left Side Impact Airbag Control Module . .           | 8W-11-11                |
| Front Power Window Switch . . . . .                      | 8W-11-9                                         | Left Tail/Stop Lamp . . . . .                        | 8W-11-6                 |
| Front Wiper Motor . . . . .                              | 8W-11-13                                        | License Lamp . . . . .                               | 8W-11-6                 |
| Front Wiper/Washer Switch . . . . .                      | 8W-11-13                                        | Low Speed Radiator Fan Relay . . . . .               | 8W-11-12                |
| Fuel Pump Relay . . . . .                                | 8W-11-12                                        | Multi- Function Switch . . . . .                     | 8W-11-13                |
| Fuse 1 (FB) . . . . .                                    | 8W-11-5                                         | Occupant Restraint Controller . . . . .              | 8W-11-9, 11             |
| Fuse 2 (FB) . . . . .                                    | 8W-11-5                                         | Overhead Console Module . . . . .                    | 8W-11-13                |
| Fuse 3 (FB) . . . . .                                    | 8W-11-5                                         | Passenger Door Lock Switch . . . . .                 | 8W-11-5                 |
| Fuse 4 (FB) . . . . .                                    | 8W-11-7                                         | Passenger Heated Seat Module . . . . .               | 8W-11-8                 |
| Fuse 4 (PDC) . . . . .                                   | 8W-11-7                                         | Passenger Heated Seat Switch . . . . .               | 8W-11-8                 |
| Fuse 5 (FB) . . . . .                                    | 8W-11-9                                         | Power Distribution Center . . . . .                  | 8W-11-7, 14             |
| Fuse 6 (FB) . . . . .                                    | 8W-11-7, 9                                      | Power Mirror Switch . . . . .                        | 8W-11-5                 |
| Fuse 7 (FB) . . . . .                                    | 8W-11-9                                         | Power Sunroof Module . . . . .                       | 8W-11-13                |
| Fuse 8 (FB) . . . . .                                    | 8W-11-10                                        | Powertrain Control Module . . . . .                  | 8W-11-12                |
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| Fuse 10 (FB) . . . . .                                   | 8W-11-11                                        | Rear Window Defogger Switch . . . . .                | 8W-11-9, 14             |
| Fuse 11 (FB) . . . . .                                   | 8W-11-12                                        | Rear Wiper Motor . . . . .                           | 8W-11-13                |
| Fuse 12 (FB) . . . . .                                   | 8W-11-12                                        | Rear Wiper Switch . . . . .                          | 8W-11-13                |
| Fuse 13 (FB) . . . . .                                   | 8W-11-13                                        | Remote Keyless Entry Module . . . . .                | 8W-11-5, 11, 15         |
| Fuse 14 (FB) . . . . .                                   | 8W-11-13                                        | Right Front Park/Turn Signal Lamp . . . . .          | 8W-11-6                 |
| Fuse 15 (FB) . . . . .                                   | 8W-11-13                                        | Right High Beam Headlamp . . . . .                   | 8W-11-16                |
| Fuse 17 (FB) . . . . .                                   | 8W-11-7                                         | Right Low Beam Headlamp . . . . .                    | 8W-11-16                |
| Fuse 18 (FB) . . . . .                                   | 8W-11-14                                        | Right Power Mirror . . . . .                         | 8W-11-14                |
| Fuse 19 (FB) . . . . .                                   | 8W-11-16                                        | Right Side Impact Airbag<br>Control Module . . . . . | 8W-11-11                |
| Fuse 20 (FB) . . . . .                                   | 8W-11-16                                        | Right Tail/Stop Lamp . . . . .                       | 8W-11-5                 |
| Fuse Block . . . . .                                     | 8W-11-2, 5, 7, 9, 10, 11,<br>12, 13, 14, 15, 16 | Sentry Key Immobilizer Module . . . . .              | 8W-11-11                |
| G201 . . . . .                                           | 8W-11-7                                         | Transmission Control Module . . . . .                | 8W-11-12                |
| Headlamp Relay . . . . .                                 | 8W-11-10, 15, 16                                | Transmission Range Sensor . . . . .                  | 8W-11-9                 |



## FUSES

| FUSE | AMPS | FUSED CIRCUIT     | FUNCTION NAME                            |
|------|------|-------------------|------------------------------------------|
| 1    | 10A  | F9 20RD/BK        | FUSED B(+)                               |
| 2    | 15A  | F33 18PK/RD       | FUSED B(+)                               |
| 3    | 20A  | F35 18RD          | FUSED B(+)                               |
| 4    | 20A  | F99 18RD/WT Δ ### | FUSED HEATED SEAT RELAY OUTPUT           |
| 5    | 10A  | F25 18TN/LG       | FUSED IGNITION SWITCH OUTPUT (RUN)       |
| 6    | 10A  | F20 18WT          | FUSED IGNITION SWITCH OUTPUT (RUN)       |
| 7    | 25A  | C1 14DG           | FUSED IGNITION SWITCH OUTPUT (RUN)       |
| 8    | 15A  | F39 18PK/LG       | FUSED HEADLAMP RELAY OUTPUT              |
| 9    | 10A  | F15 18DG/WT       | FUSED IGNITION SWITCH OUTPUT (RUN-START) |
| 10   | 10A  | G5 20DB/BK        | FUSED IGNITION SWITCH OUTPUT (RUN-START) |
| 11   | 10A  | F12 20DB/WT       | FUSED IGNITION SWITCH OUTPUT (RUN-START) |
| 12   | 10A  | F18 20LG/BK       | FUSED IGNITION SWITCH OUTPUT (RUN-START) |
|      |      | F18 20LG/BK       | FUSED IGNITION SWITCH OUTPUT (RUN-START) |
| 13   | 10A  | X12 18RD/WT       | FUSED IGNITION SWITCH OUTPUT (RUN-ACC)   |
| 14   | 20A  | F10 18YL/RD       | FUSED IGNITION SWITCH OUTPUT (RUN-ACC)   |
| 15   | 20A  | F13 16DB          | FUSED IGNITION SWITCH OUTPUT (RUN-ACC)   |
| 16   | -    | -                 | -                                        |
| 17   | 20A  | F98 18RD/WT Δ ### | FUSED HEATED SEAT RELAY OUTPUT           |
| 18   | 10A  | C16 20LB/YL ♦     | FUSED REAR WINDOW DEFOGGER SWITCH OUTPUT |
| 19   | 10A  | L44 16VT/RD       | FUSED RIGHT LOW BEAM OUTPUT              |
| 20   | 10A  | L43 16VT          | FUSED LEFT LOW BEAM OUTPUT               |

## CIRCUIT BREAKERS

|            |     |                |                                    |
|------------|-----|----------------|------------------------------------|
| C.B. NO. 1 | 25A | F3 16LB/OR ##  | FUSED B(+)                         |
| C.B. NO. 1 | 25A | F3 12LB/OR ### | FUSED B(+)                         |
| C.B. NO. 2 | 20A | F21 14TN       | FUSED IGNITION SWITCH OUTPUT (RUN) |

Δ HEATED SEAT  
 ## EARLY BUILD  
 ### NORMAL BUILD  
 ♦ POWER MIRRORS/POWER WINDOWS



## RELAYS

HEADLAMP  
RELAY

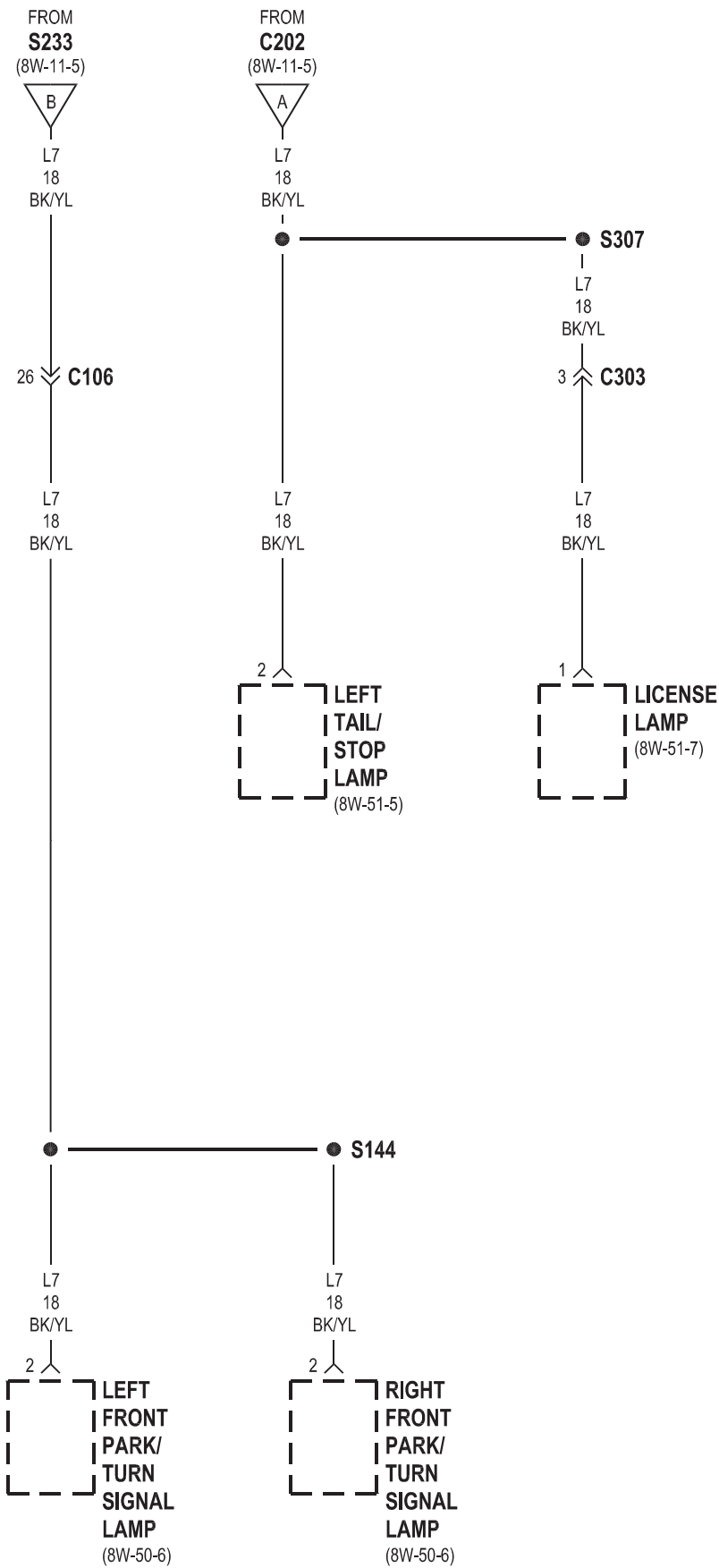
| CAVITY | CIRCUIT           | FUNCTION               |
|--------|-------------------|------------------------|
| A1     | Z1 20BK           | GROUND                 |
| A2     | L4 16VT/WT        | HEADLAMP RELAY OUTPUT  |
| A3     | L3 16RD/OR        | HEADLAMP RELAY CONTROL |
| A4     | F34 18TN/BK       | HEADLAMP RELAY OUTPUT  |
| A5     | F3 16LB/OR    ##  | FUSED B(+)             |
| A5     | F3 12LB/OR    ### | FUSED B(+)             |

HEATED  
SEAT  
RELAY  
(NORMAL BUILD)

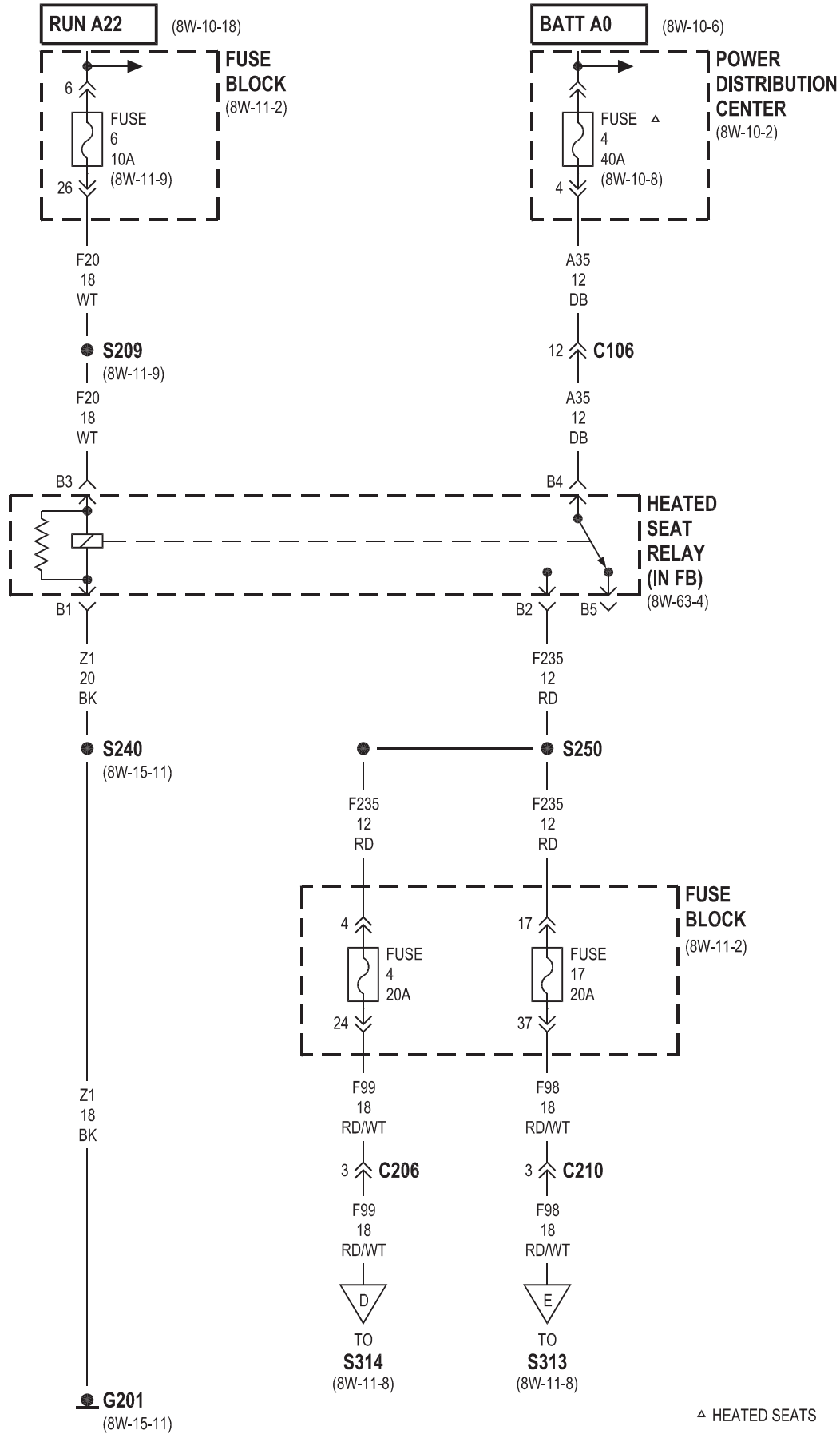
| CAVITY | CIRCUIT   | FUNCTION                     |
|--------|-----------|------------------------------|
| B1     | Z1 20BK   | GROUND                       |
| B2     | F235 12RD | HEATED SEAT RELAY OUTPUT     |
| B3     | F20 18WT  | IGNITION SWITCH OUTPUT (RUN) |
| B4     | A35 12DB  | FUSED B(+)                   |
| B5     | -         | -                            |

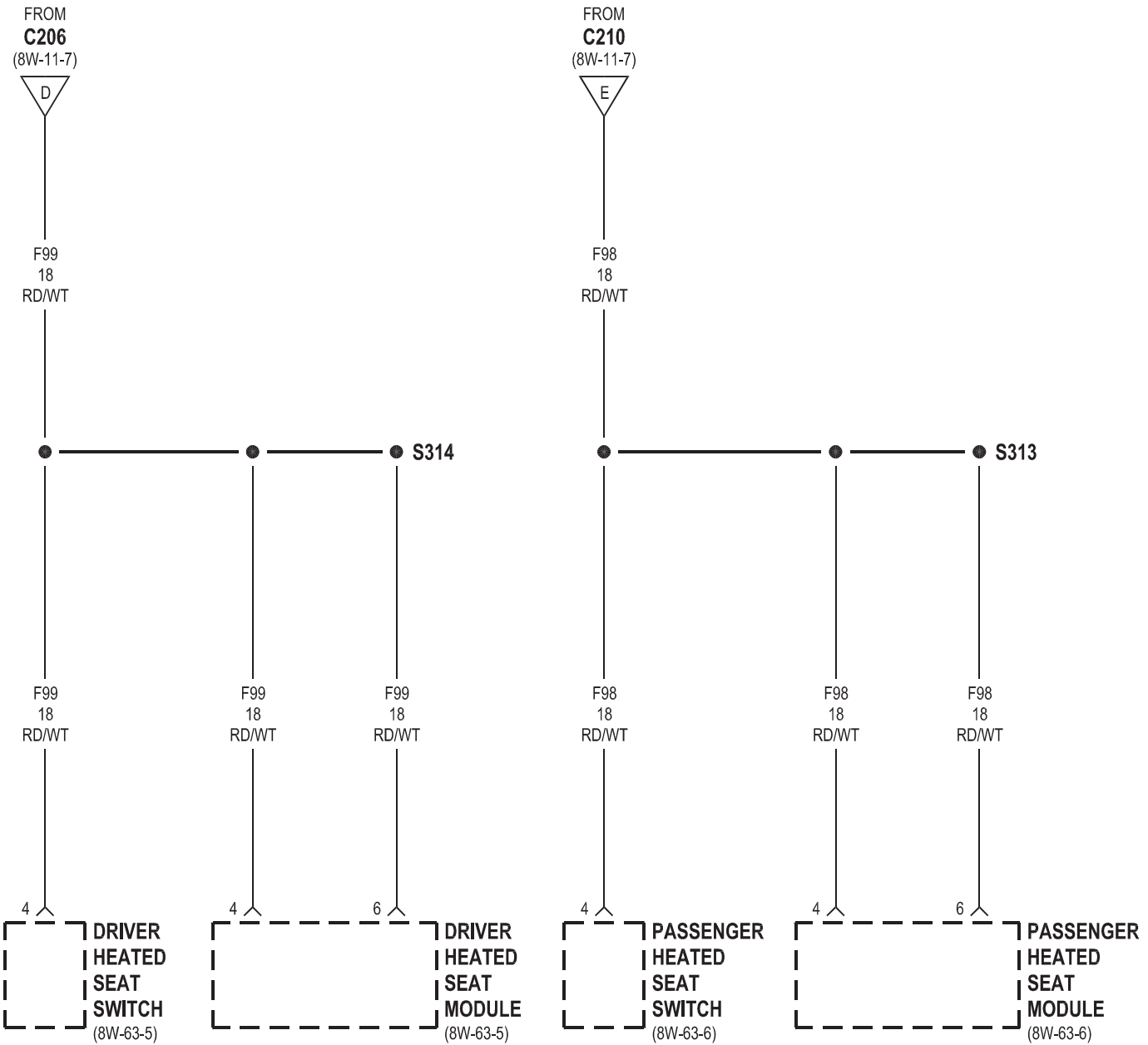
## EARLY BUILD  
### NORMAL BUILD

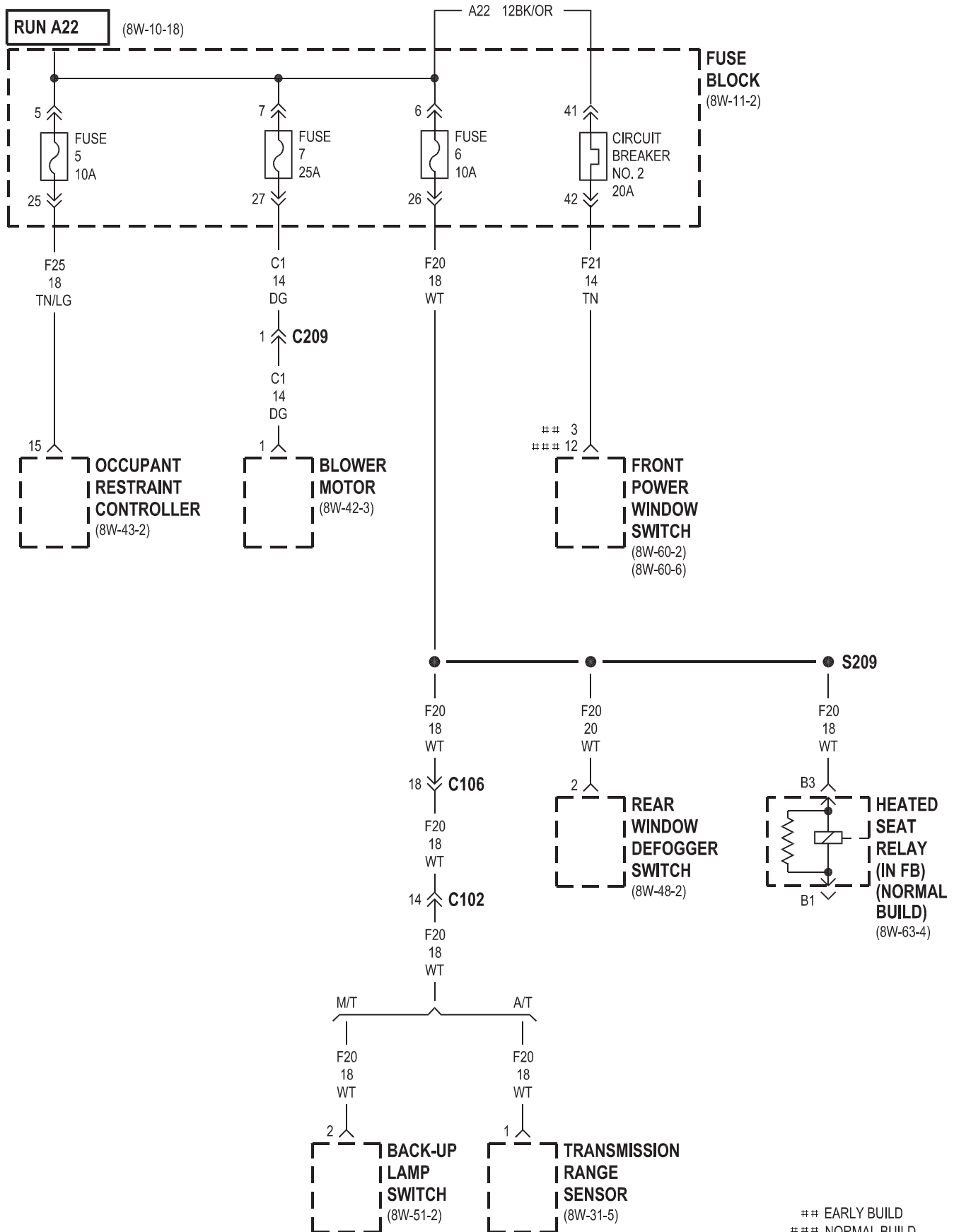


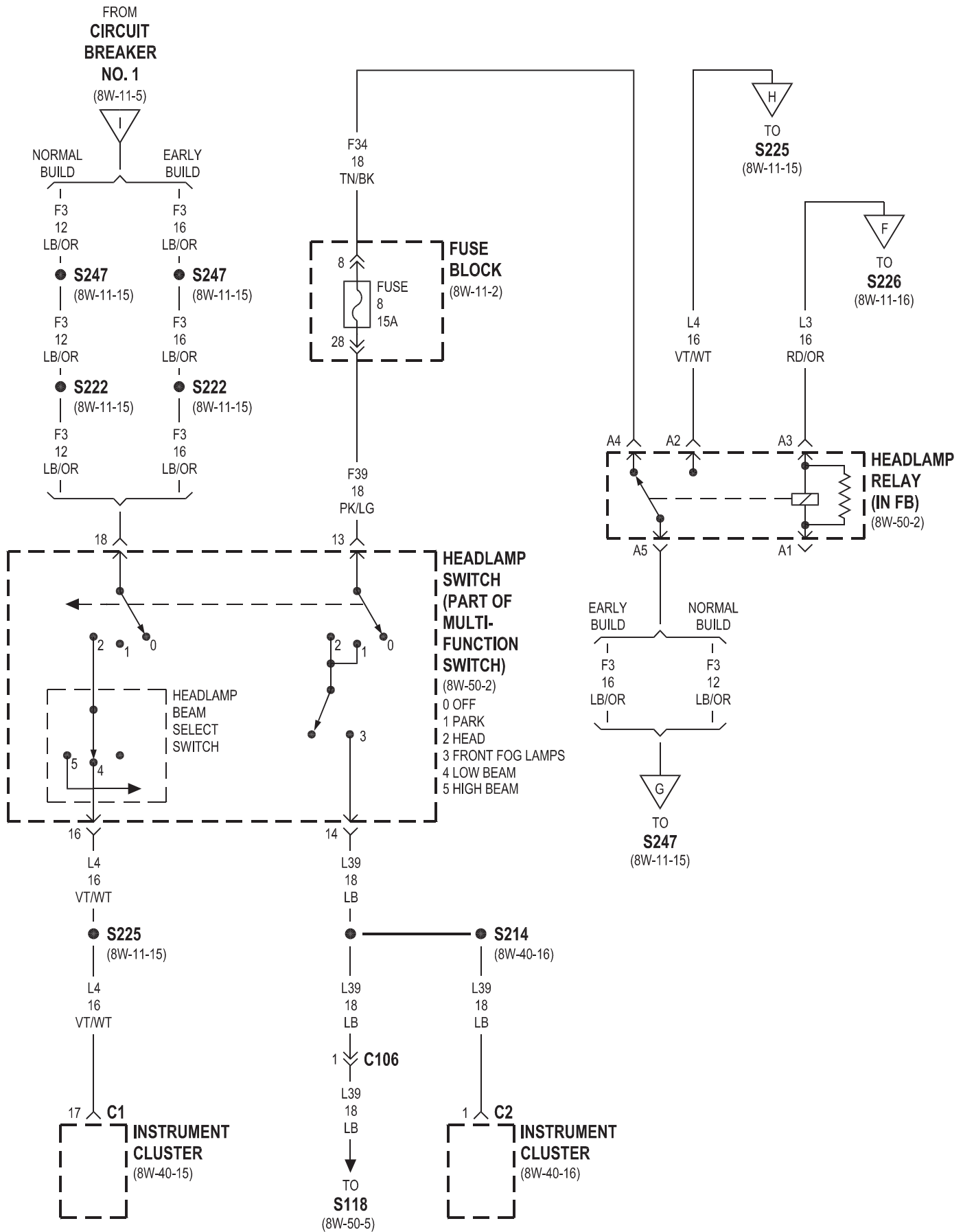


## NORMAL BUILD



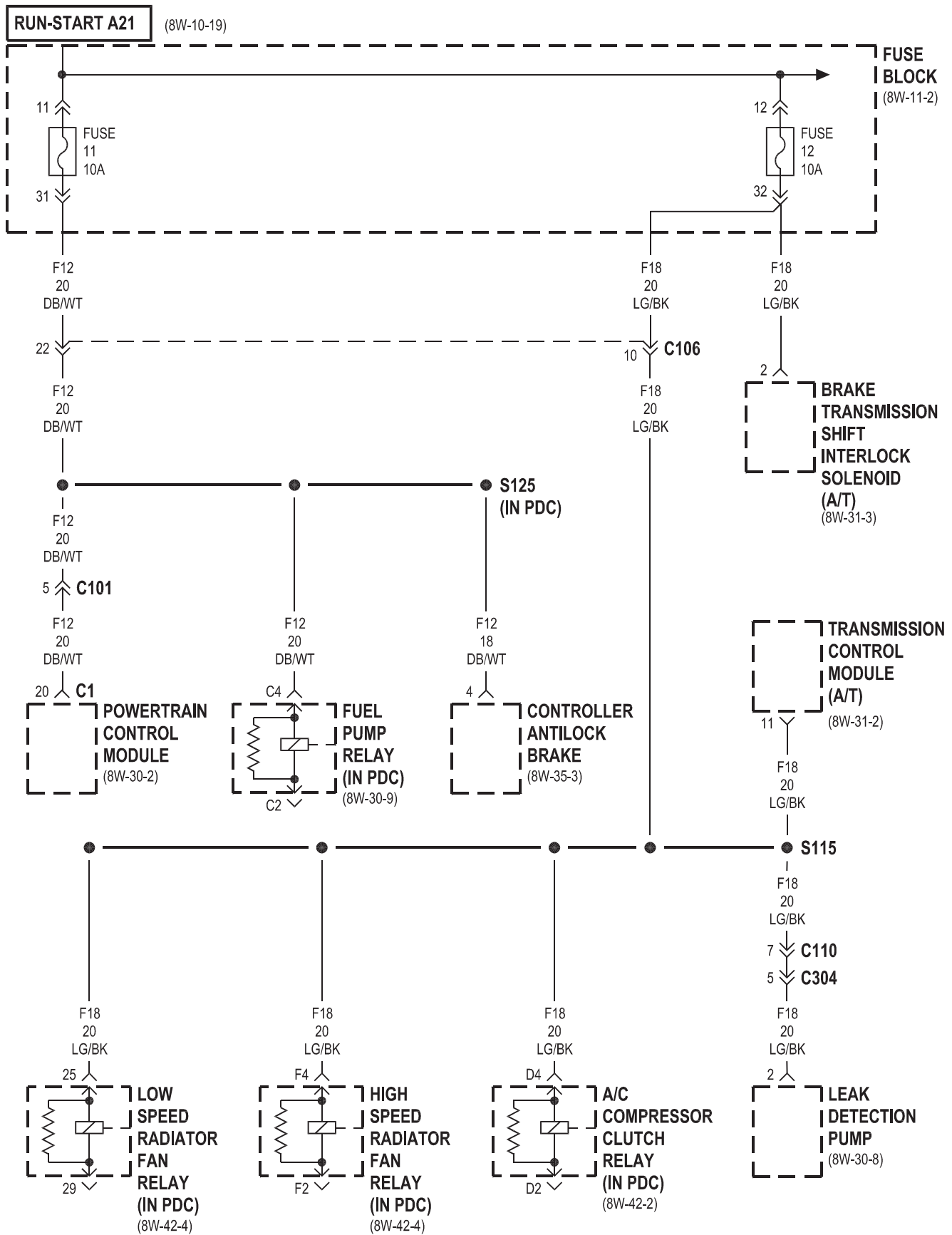


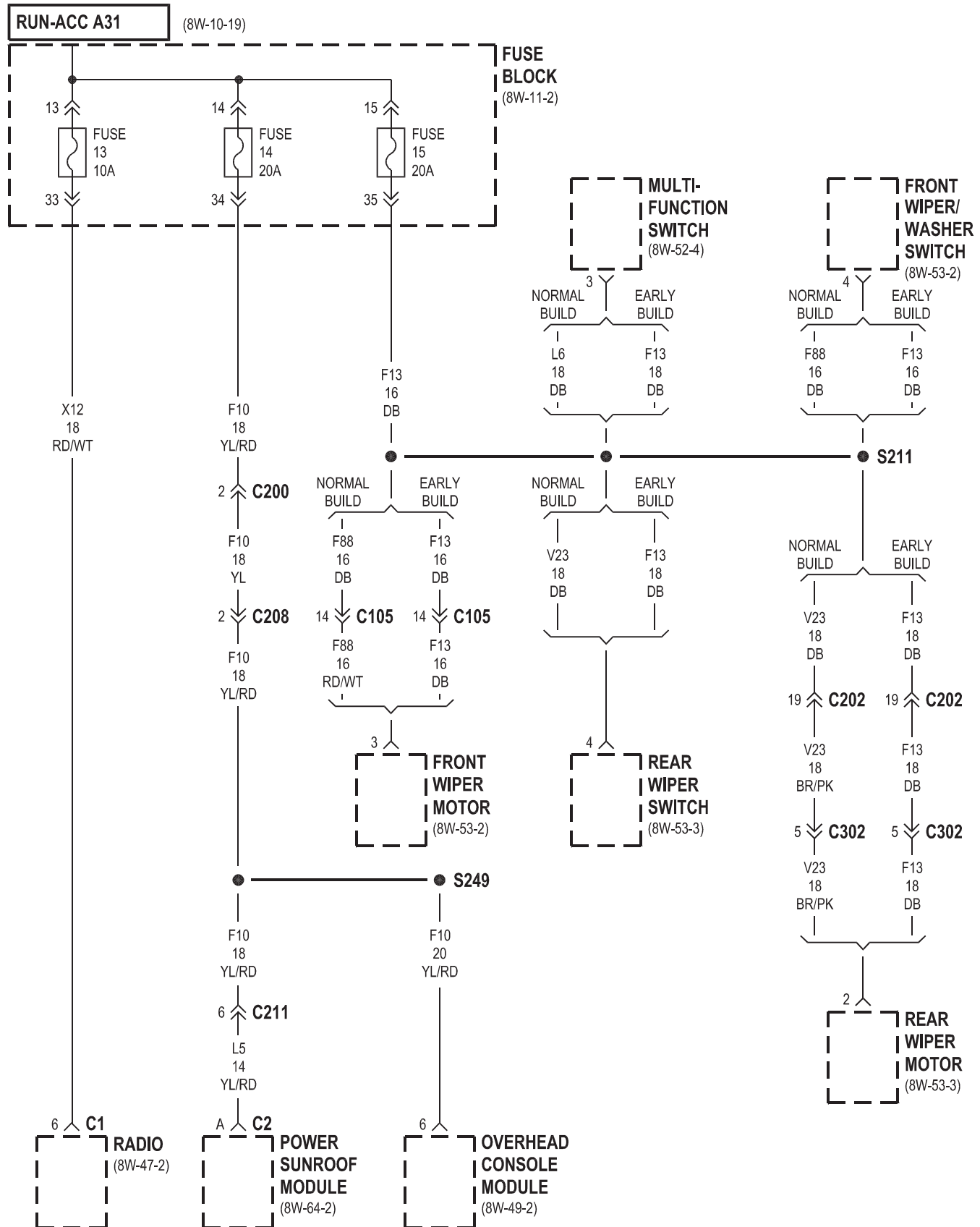


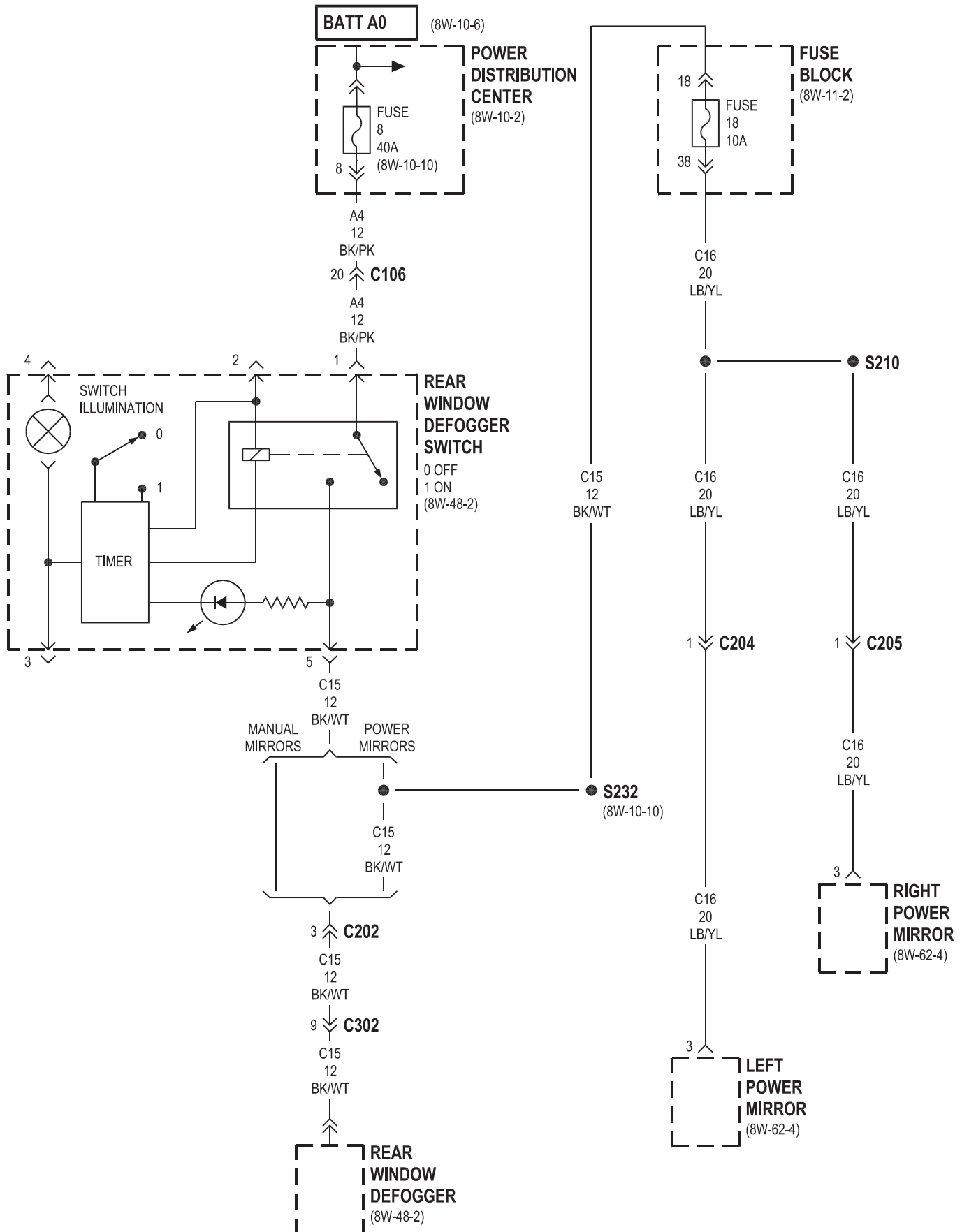


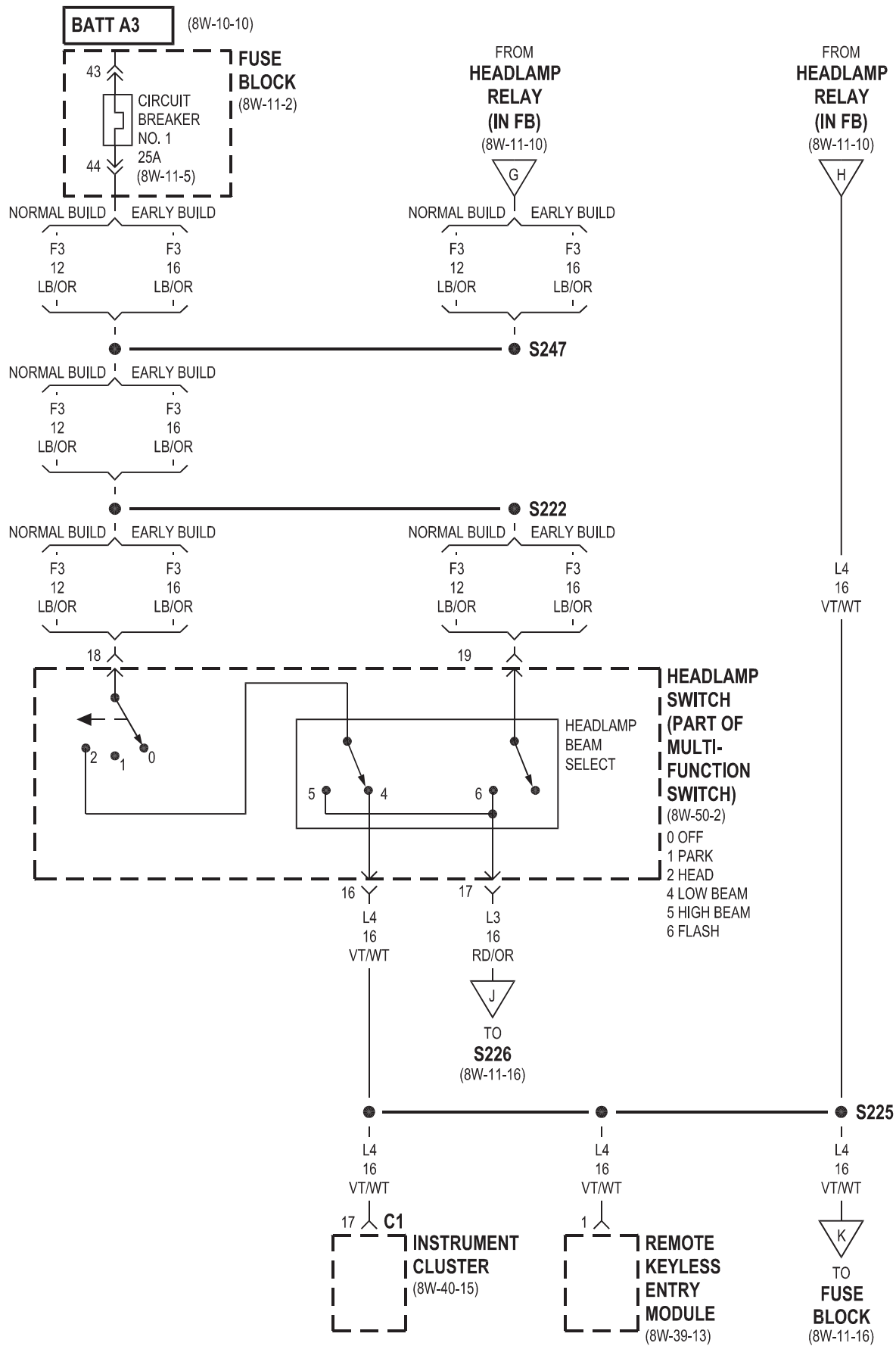


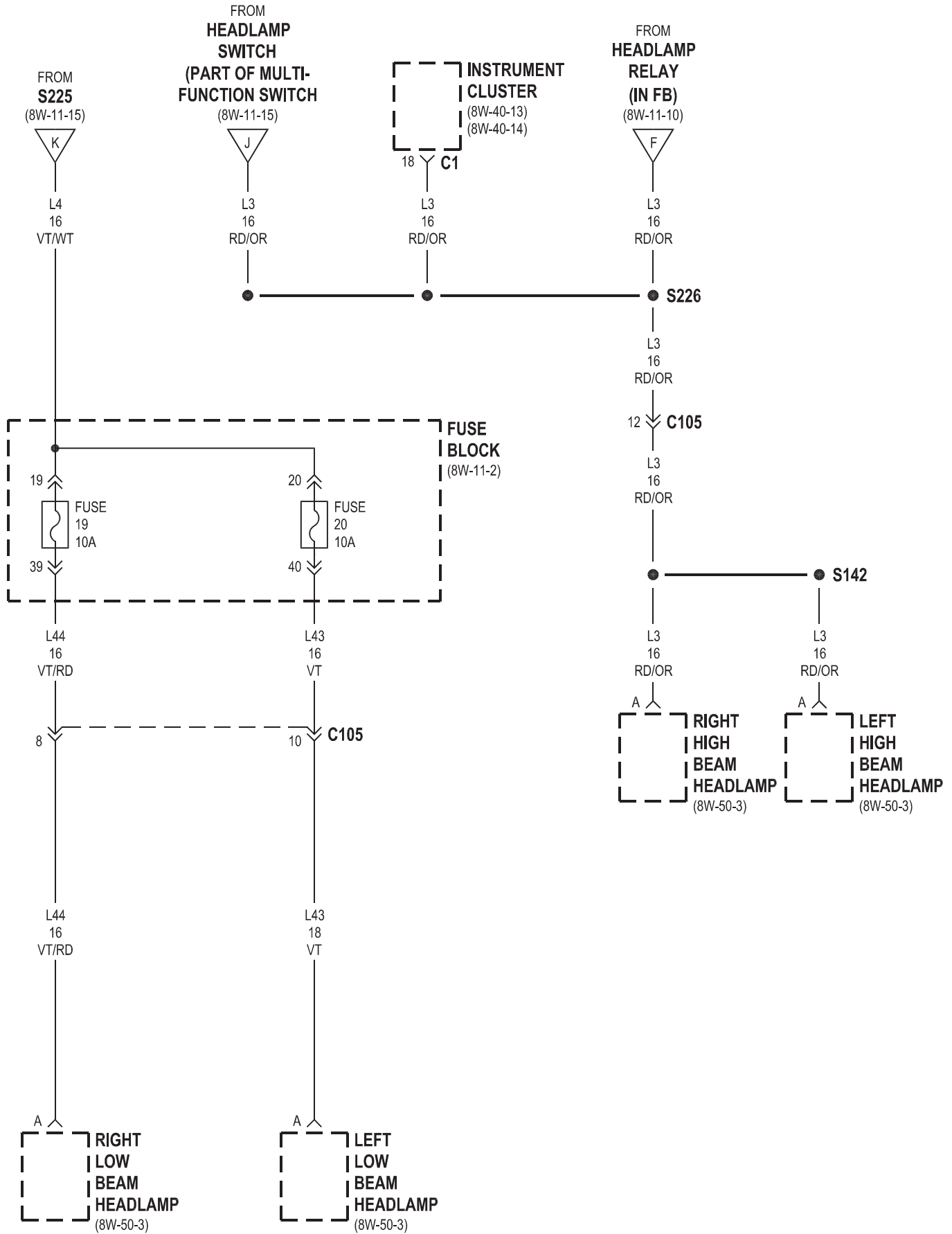






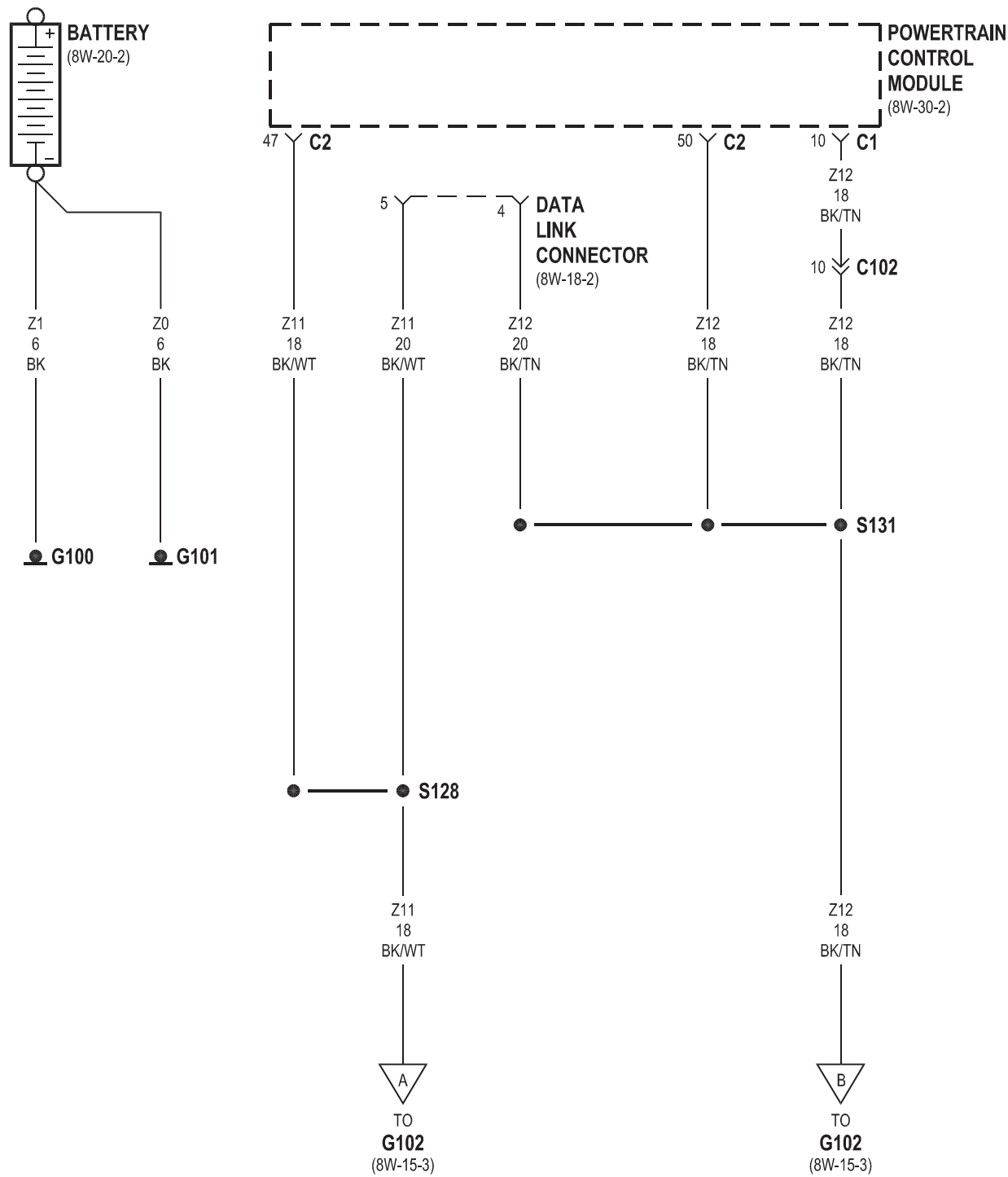


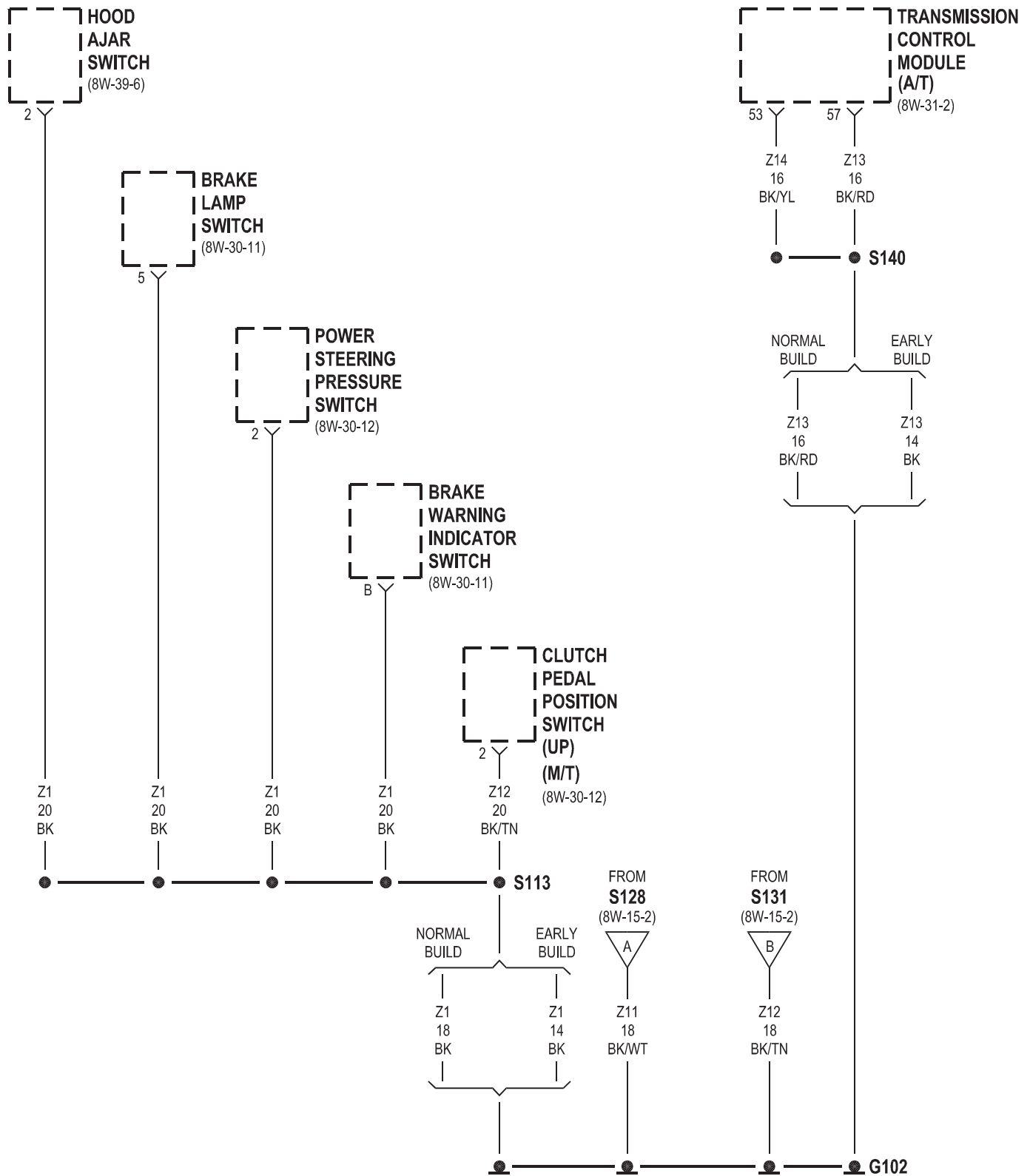




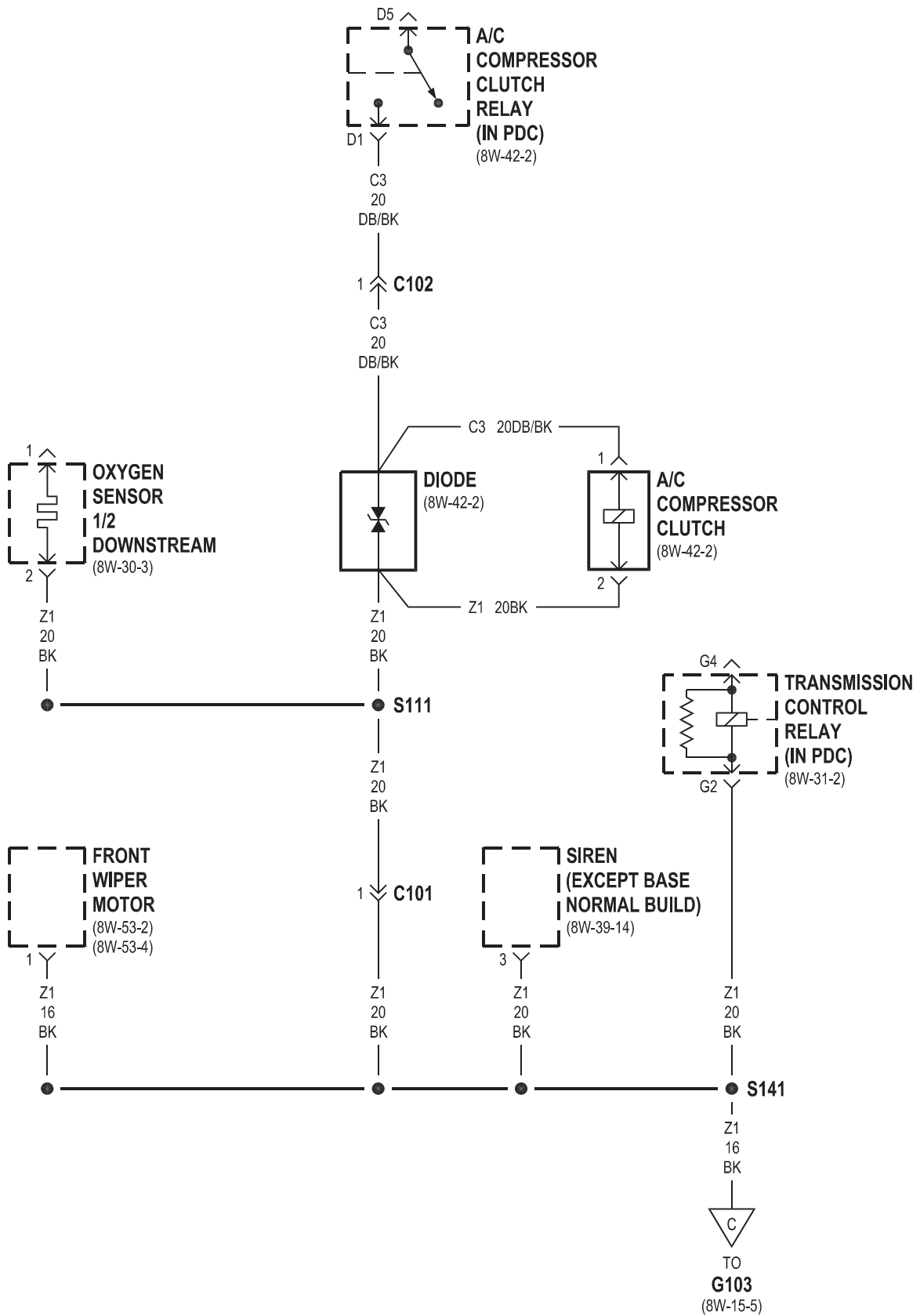
## 8W-15 GROUND DISTRIBUTION

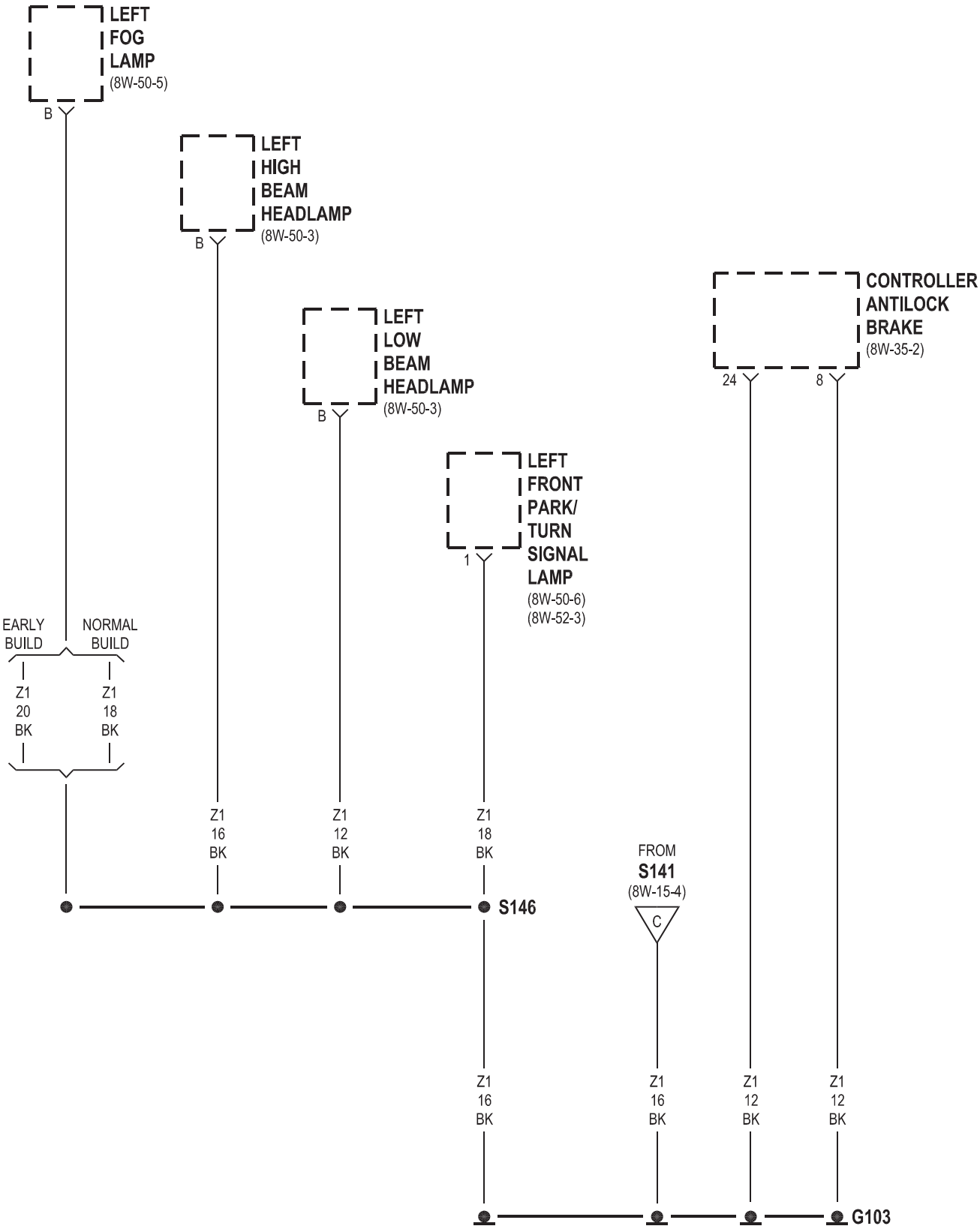
| <b>Component</b>                                      | <b>Page</b> | <b>Component</b>                                         | <b>Page</b>  |
|-------------------------------------------------------|-------------|----------------------------------------------------------|--------------|
| A/C Compressor Clutch . . . . .                       | 8W-15-4     | Left Rear Turn Signal Lamp . . . . .                     | 8W-15-15     |
| A/C Compressor Clutch Relay . . . . .                 | 8W-15-4     | Left Side Impact Airbag Control Module . .               | 8W-15-15     |
| A/C- Heater Control Switch . . . . .                  | 8W-15-12    | Left Tail/Stop Lamp . . . . .                            | 8W-15-15     |
| Battery . . . . .                                     | 8W-15-2     | Left Turn Signal Indicator . . . . .                     | 8W-15-11     |
| Brake Lamp Switch . . . . .                           | 8W-15-3     | Left Visor/Vanity Lamp . . . . .                         | 8W-15-13     |
| Brake Warning Indicator Switch . . . . .              | 8W-15-3     | License Lamp . . . . .                                   | 8W-15-15     |
| Center High Mounted Stop Lamp . . . . .               | 8W-15-14    | Liftgate Ajar Switch . . . . .                           | 8W-15-14     |
| Center Stack Lamp . . . . .                           | 8W-15-9     | Liftgate Cylinder Lock Switch . . . . .                  | 8W-15-14     |
| Cigar Lighter . . . . .                               | 8W-15-12    | Low Note Horn . . . . .                                  | 8W-15-7      |
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| Driver Door Lock Switch . . . . .                     | 8W-15-9     | Passenger Door Lock Switch . . . . .                     | 8W-15-13     |
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| Driver Heated Seat Cushion . . . . .                  | 8W-15-10    | Passenger Heated Seat Cushion . . . . .                  | 8W-15-10     |
| Driver Heated Seat Module . . . . .                   | 8W-15-10    | Passenger Heated Seat Module . . . . .                   | 8W-15-10     |
| Driver Heated Seat Switch . . . . .                   | 8W-15-10    | Passenger Heated Seat Switch . . . . .                   | 8W-15-10     |
| Driver Seat Belt Switch . . . . .                     | 8W-15-15    | Power Mirror Switch . . . . .                            | 8W-15-11     |
| Front Power Window Switch . . . . .                   | 8W-15-12    | Power Outlet . . . . .                                   | 8W-15-12     |
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| Front Wiper/Washer Switch . . . . .                   | 8W-15-11    | Power Steering Pressure Switch . . . . .                 | 8W-15-3      |
| Fuel Pump Module . . . . .                            | 8W-15-7     | Power Sunroof Module . . . . .                           | 8W-15-13     |
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| G105 . . . . .                                        | 8W-15-7     | Rear Window Defogger Switch . . . . .                    | 8W-15-9      |
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| G201 . . . . .                                        | 8W-15-11    | Rear Wiper Switch . . . . .                              | 8W-15-9      |
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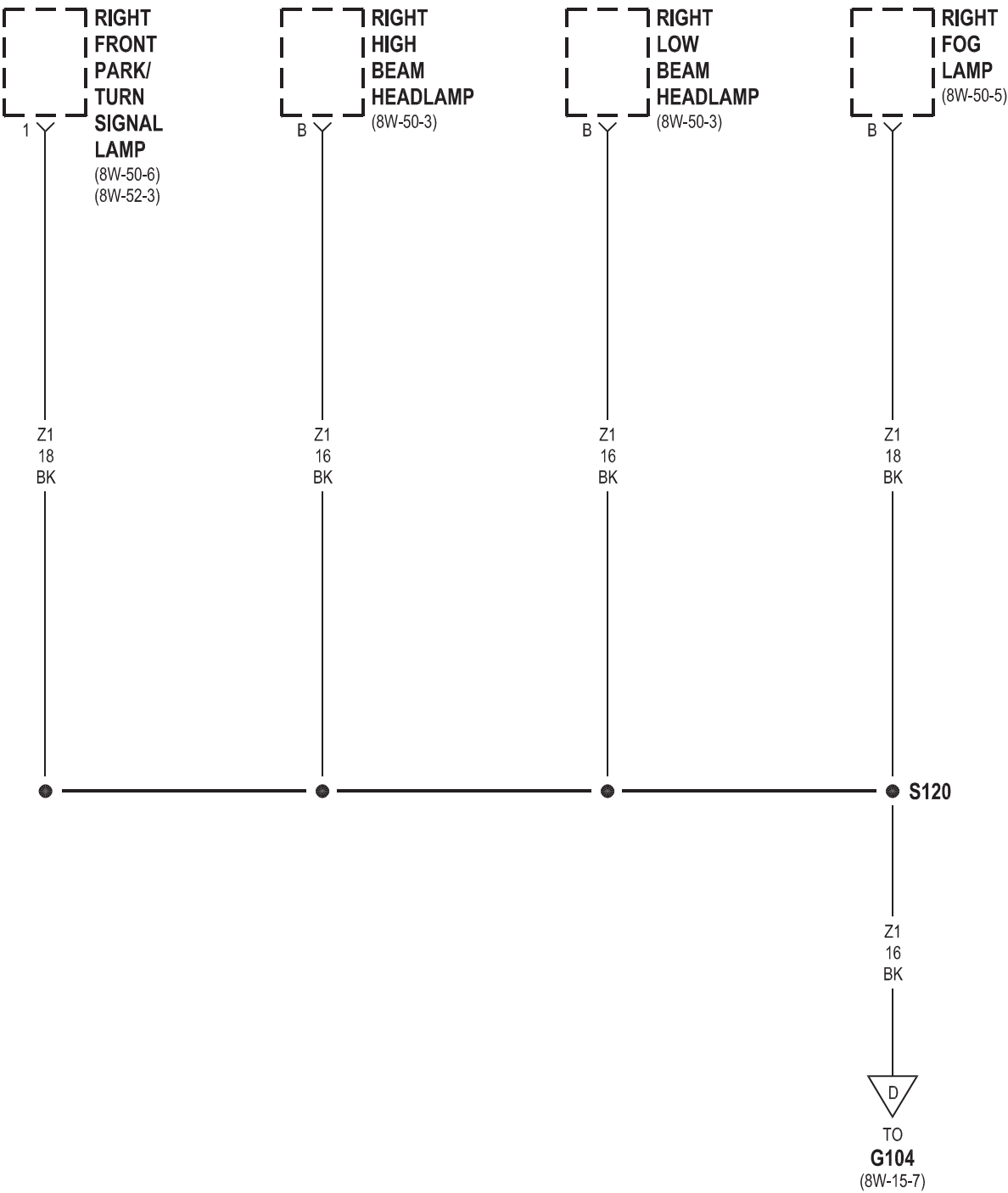


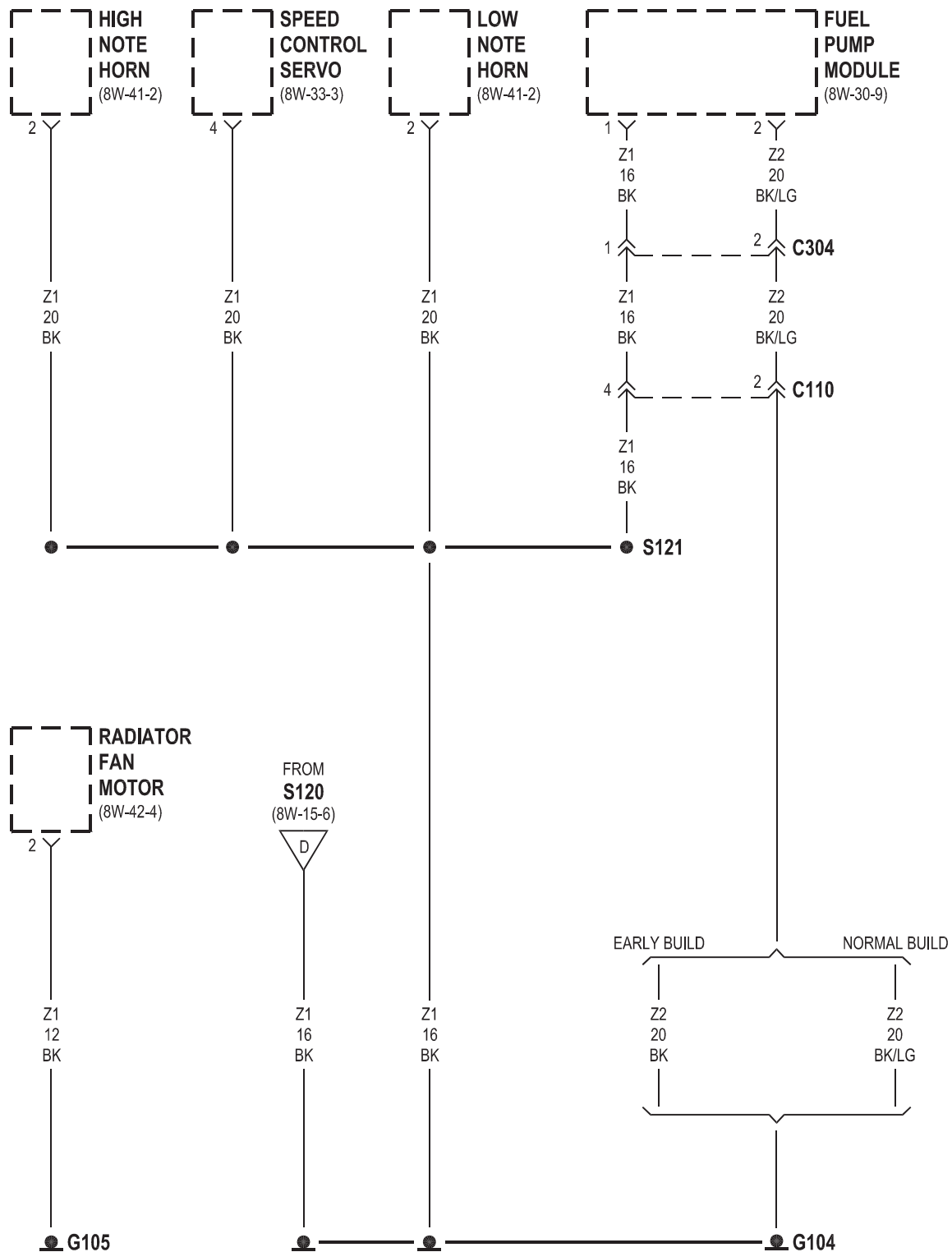










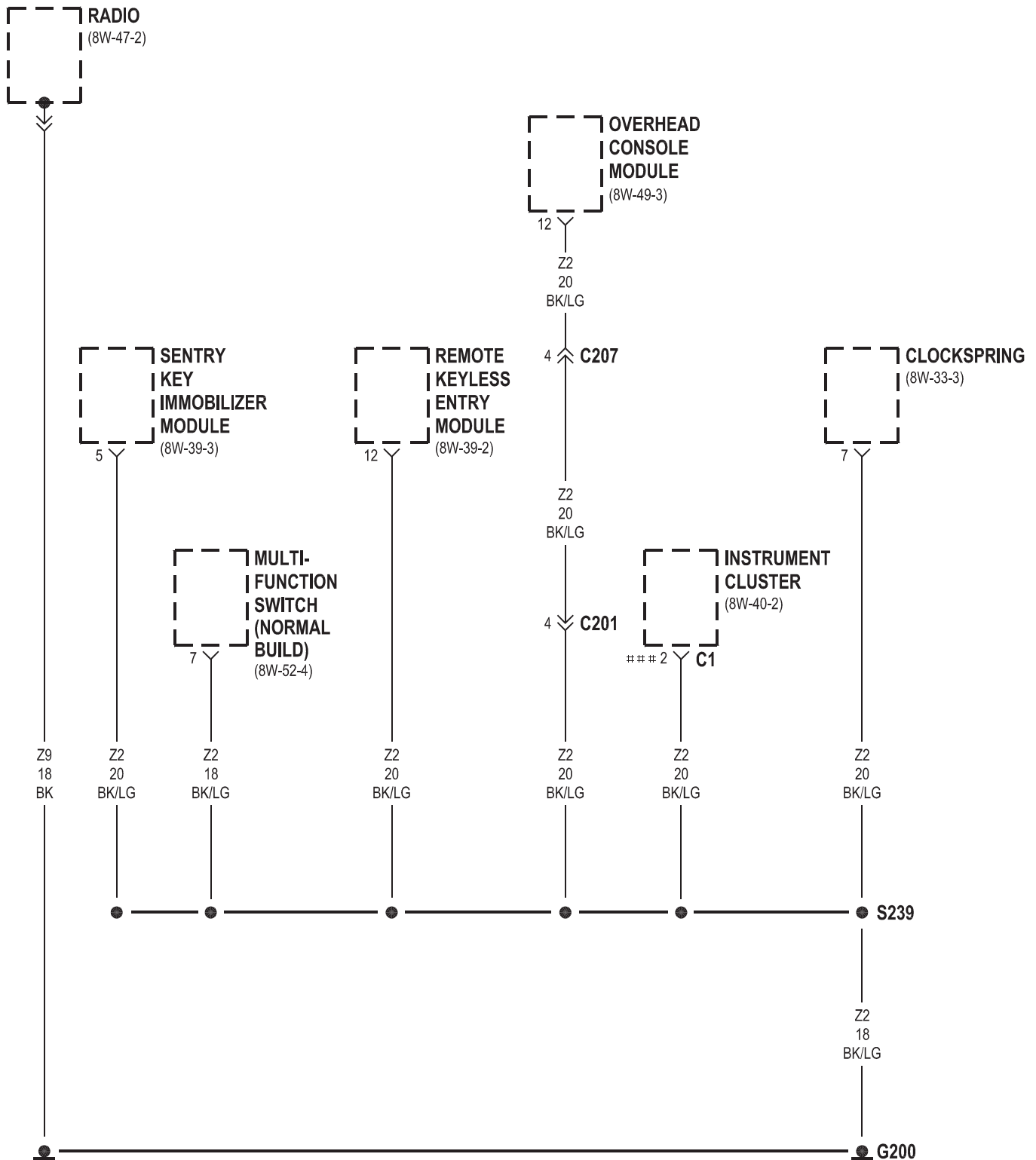


# 2001 PT CRUISER SUPPLEMENT

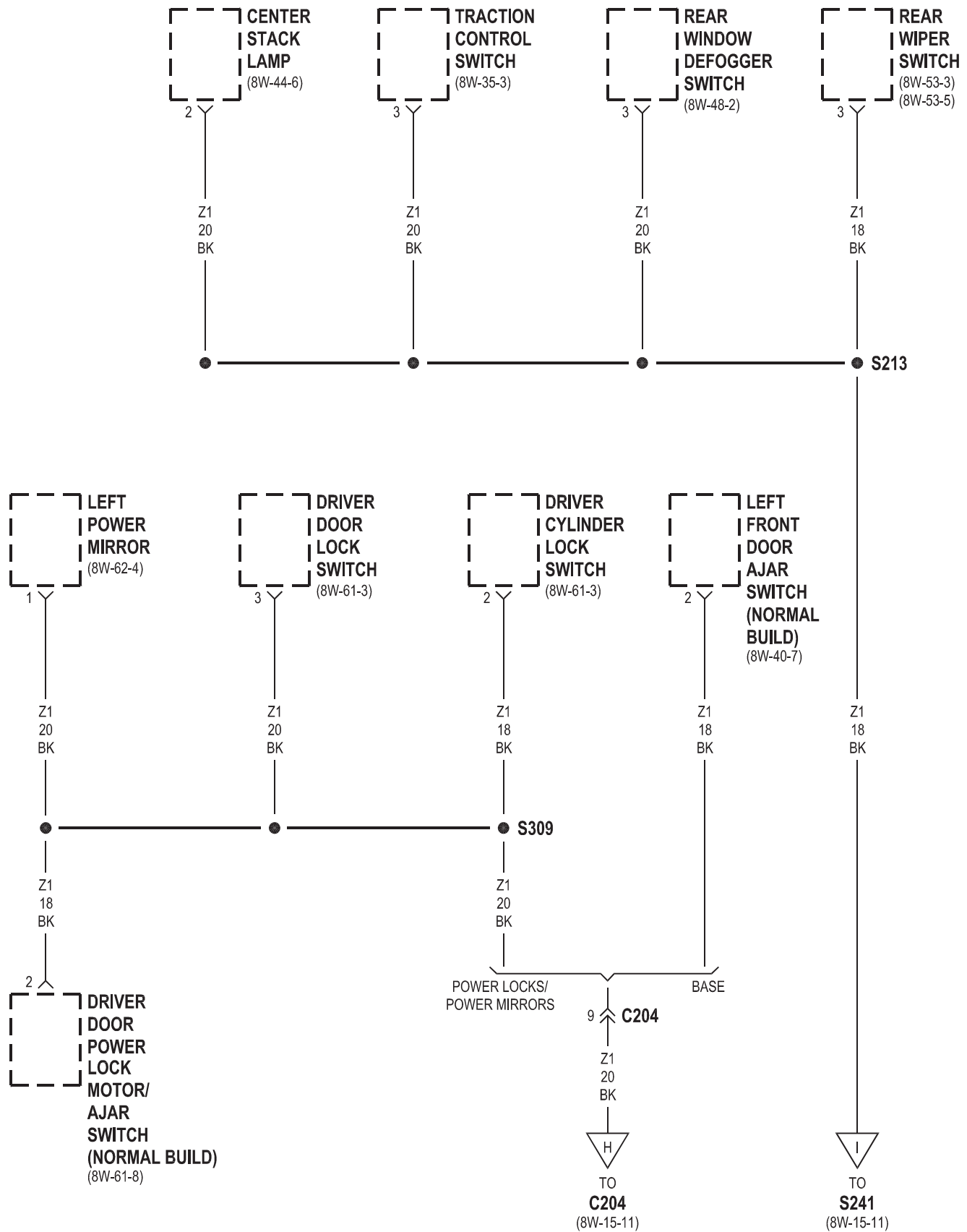
8W - 15 - 8

8W-15 GROUND DISTRIBUTION

PT



### NORMAL BUILD

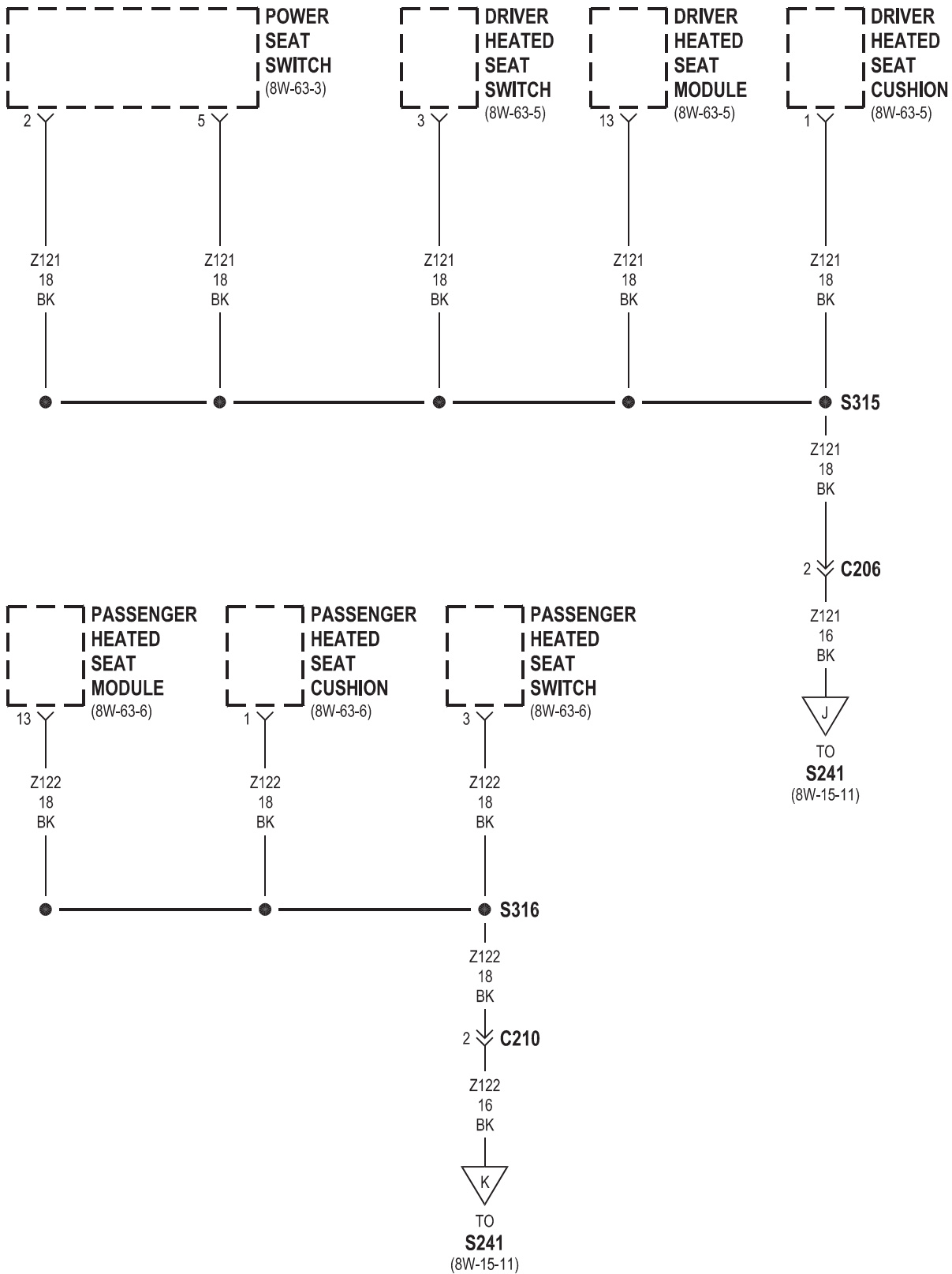


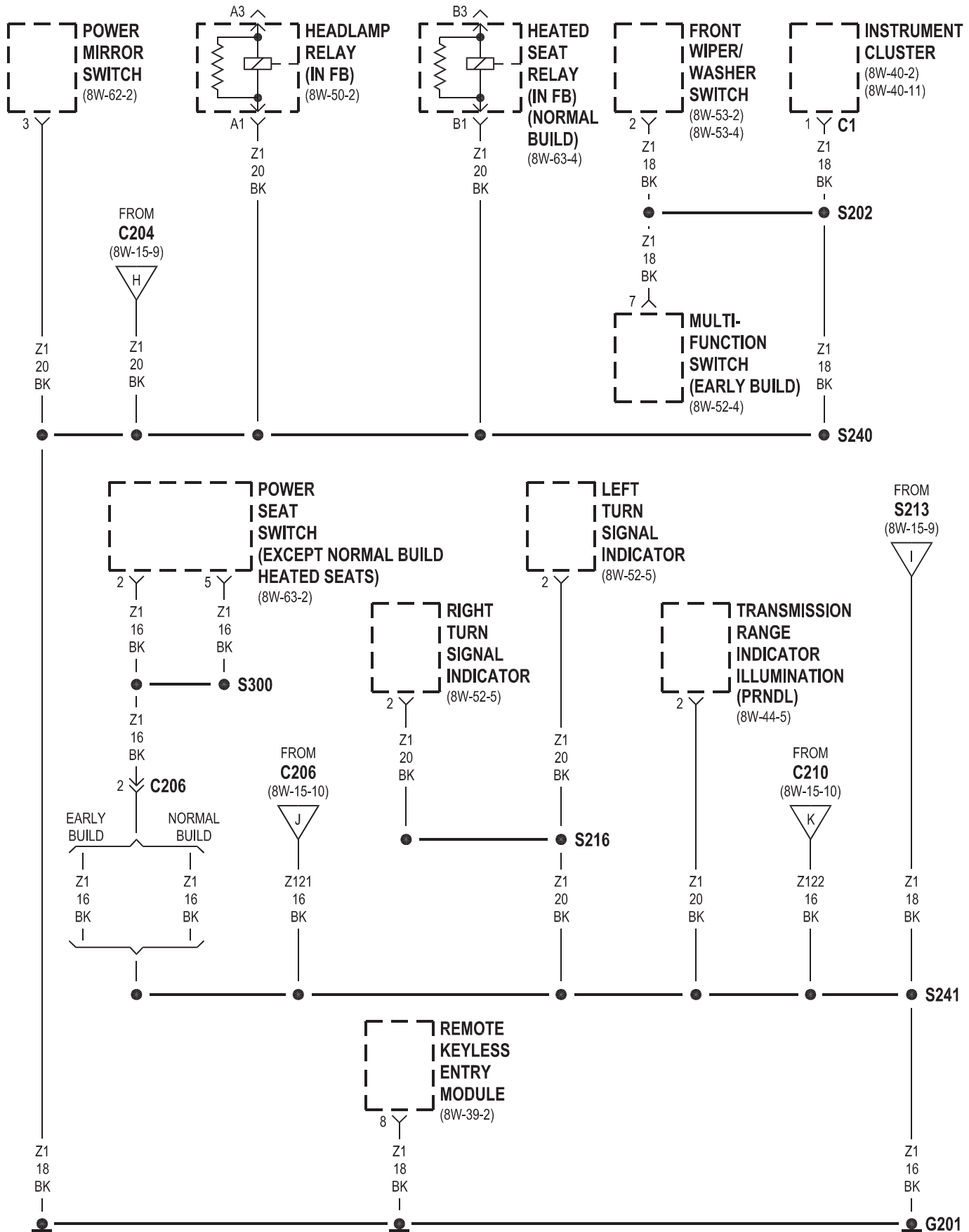
# 2001 PT CRUISER SUPPLEMENT

8W - 15 - 10

## 8W-15 GROUND DISTRIBUTION NORMAL BUILD HEATED SEATS

PT





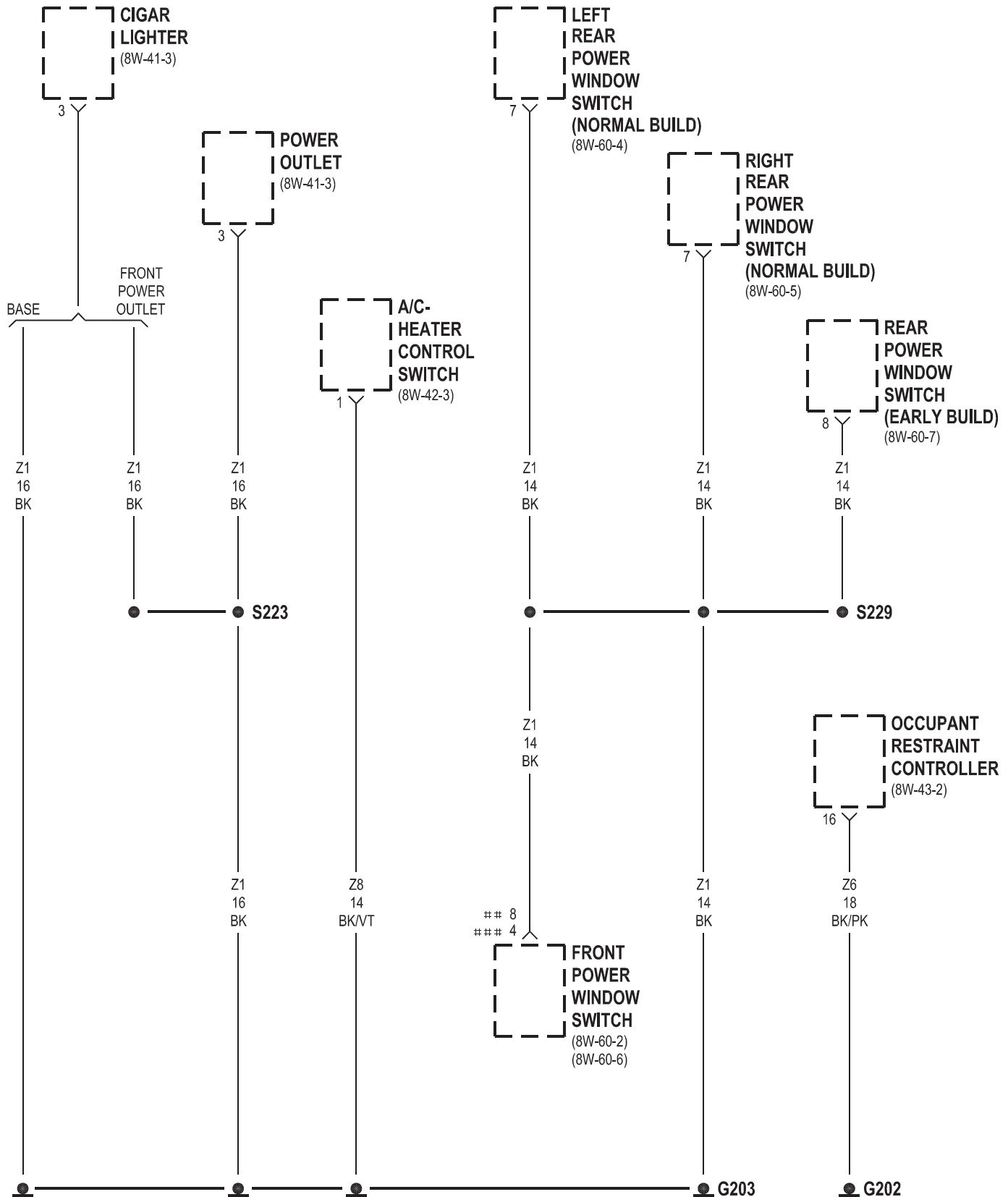


# 2001 PT CRUISER SUPPLEMENT

8W - 15 - 12

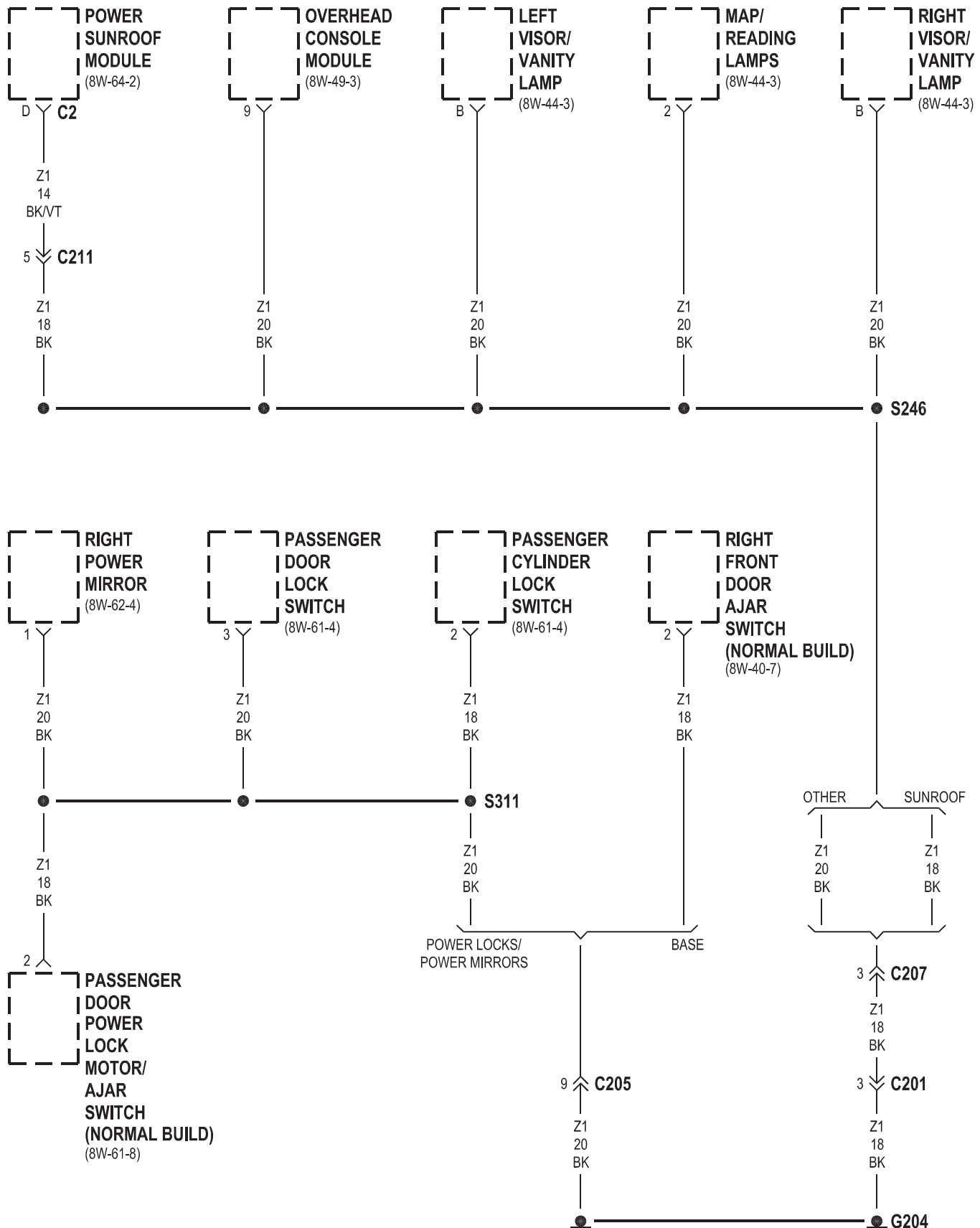
8W-15 GROUND DISTRIBUTION

PT



## EARLY BUILD  
### NORMAL BUILD

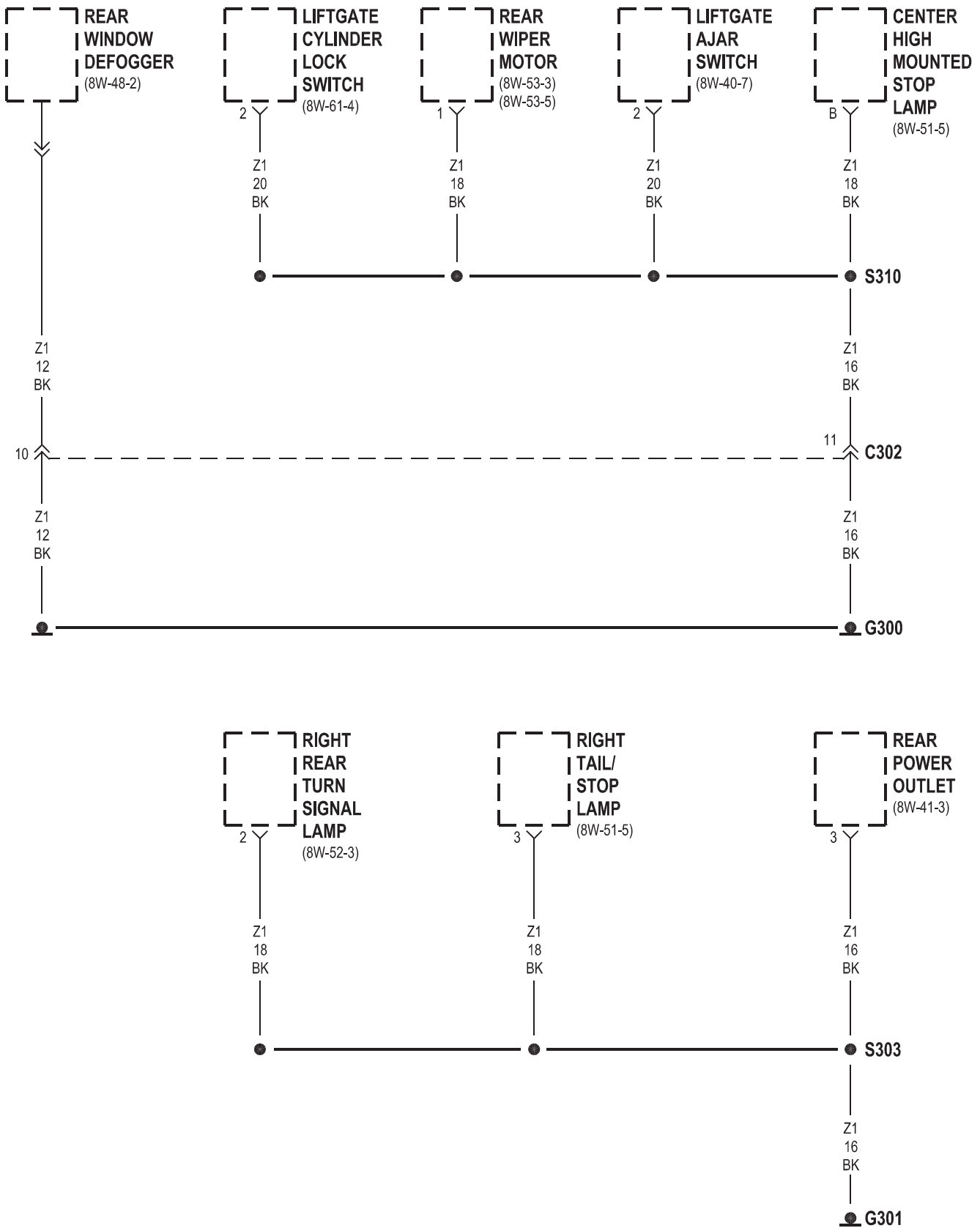
## PT 8W-15 GROUND DISTRIBUTION 8W - 15 - 13

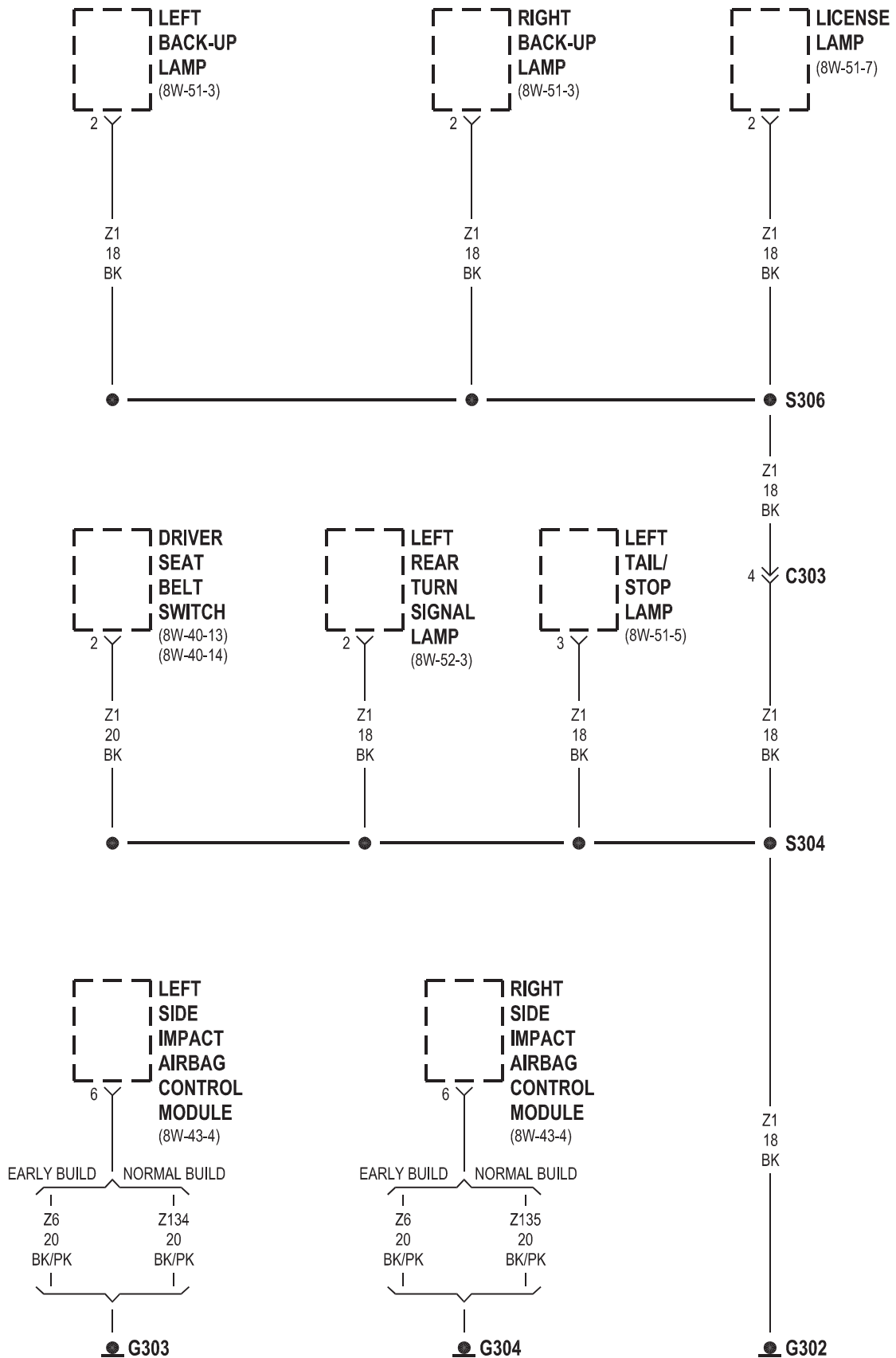


8W - 15 - 14

8W-15 GROUND DISTRIBUTION

PT

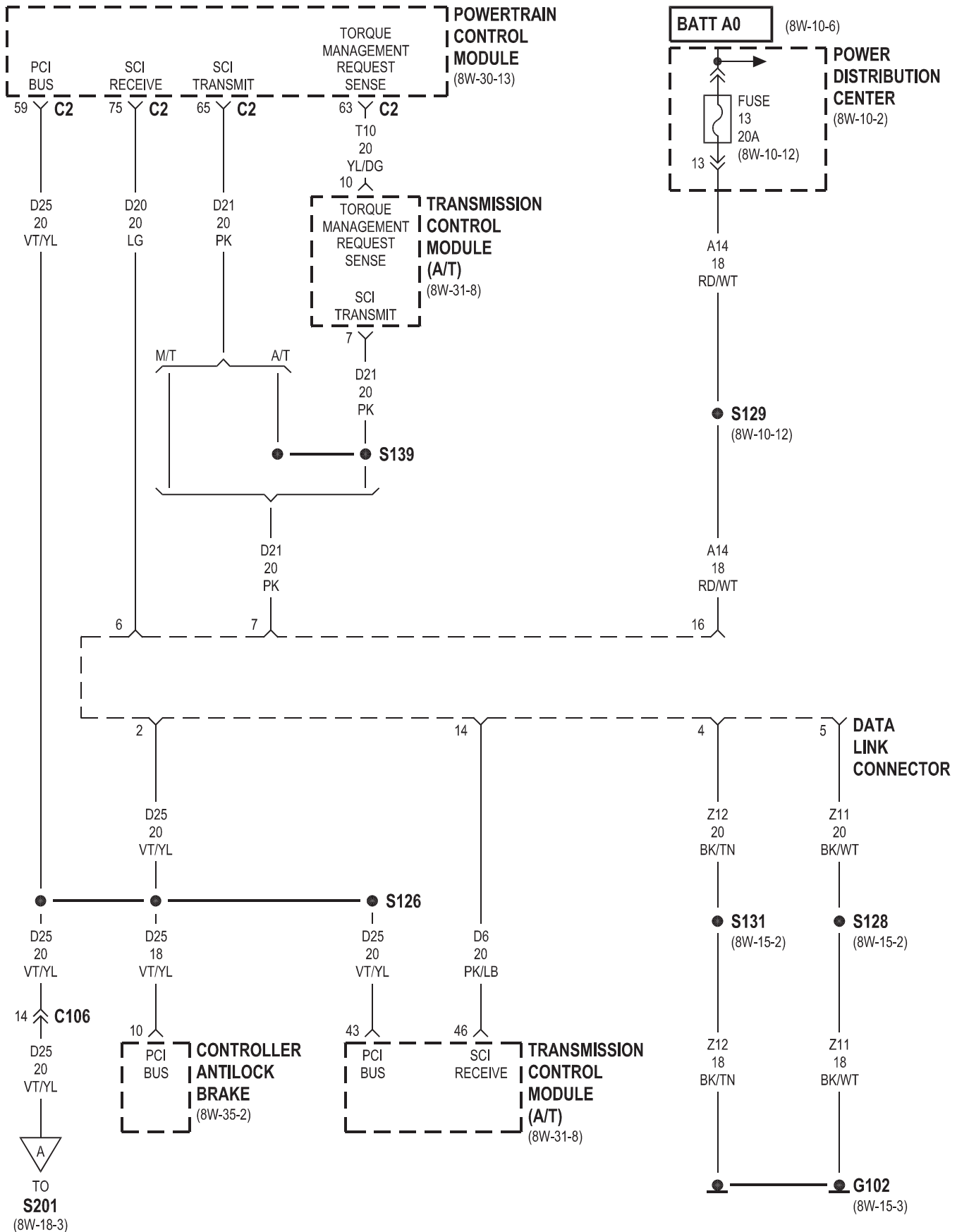


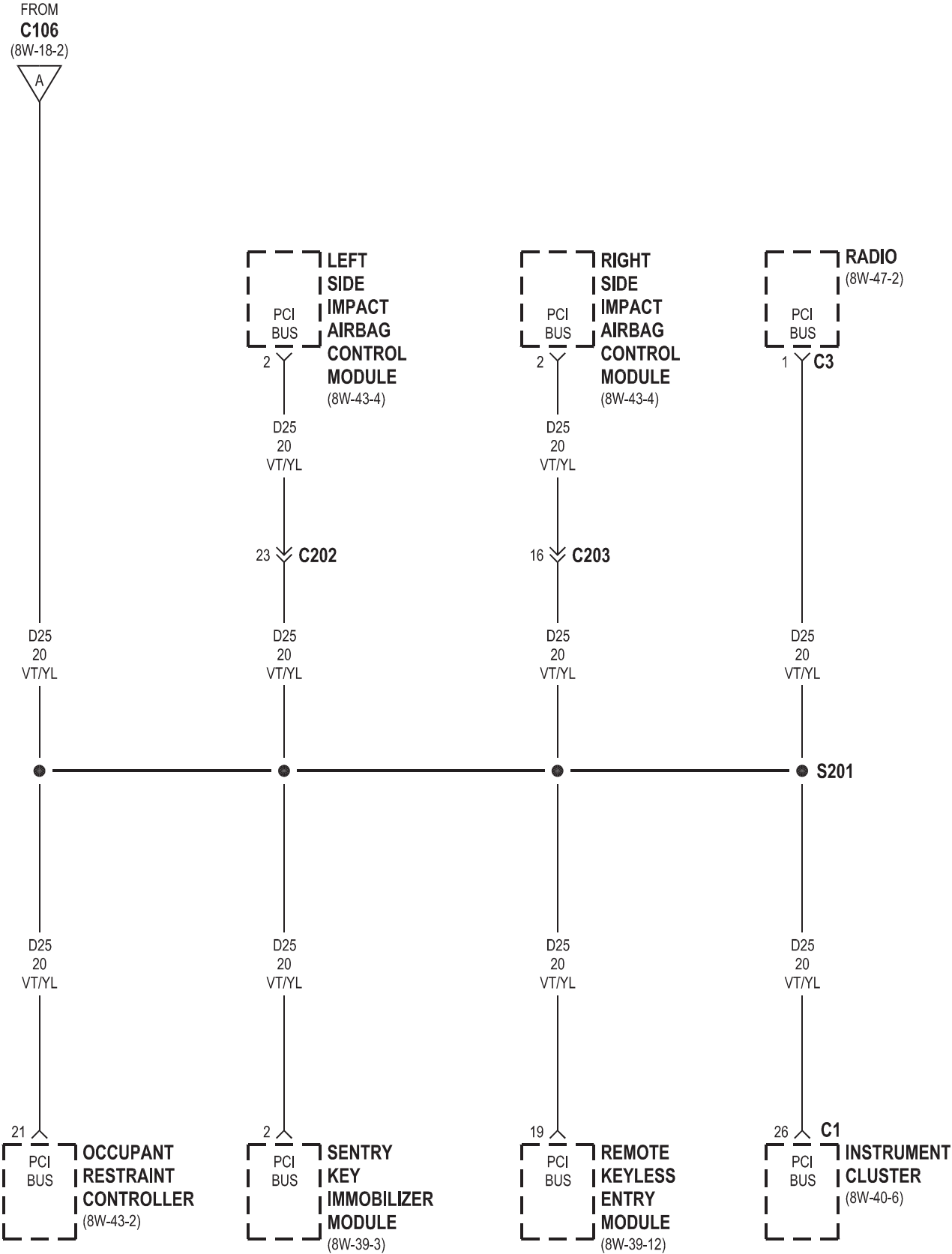




## 8W-18 BUS COMMUNICATIONS

| <b>Component</b>                           | <b>Page</b> | <b>Component</b>                          | <b>Page</b> |
|--------------------------------------------|-------------|-------------------------------------------|-------------|
| Controller Antilock Brake . . . . .        | 8W-18-2     | Power Distribution Center . . . . .       | 8W-18-2     |
| Data Link Connector . . . . .              | 8W-18-2     | Powertrain Control Module . . . . .       | 8W-18-2     |
| Fuse 13 (PDC) . . . . .                    | 8W-18-2     | Radio . . . . .                           | 8W-18-3     |
| G102 . . . . .                             | 8W-18-2     | Remote Keyless Entry Module . . . . .     | 8W-18-3     |
| Instrument Cluster . . . . .               | 8W-18-3     | Right Side Impact Airbag Control Module . | 8W-18-3     |
| Left Side Impact Airbag Control Module . . | 8W-18-3     | Sentry Key Immobilizer Module . . . . .   | 8W-18-3     |
| Occupant Restraint Controller . . . . .    | 8W-18-3     | Transmission Control Module . . . . .     | 8W-18-2     |



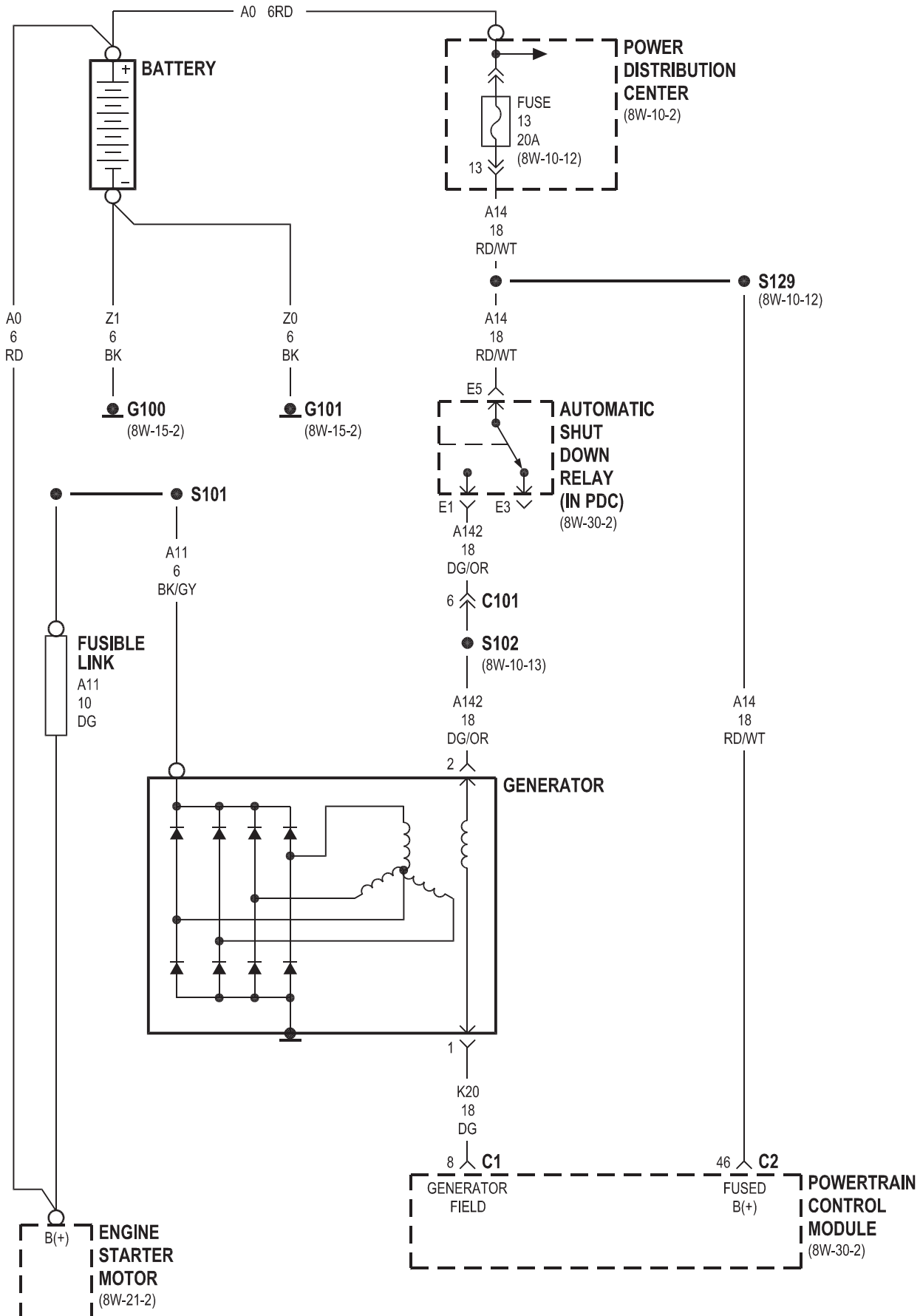






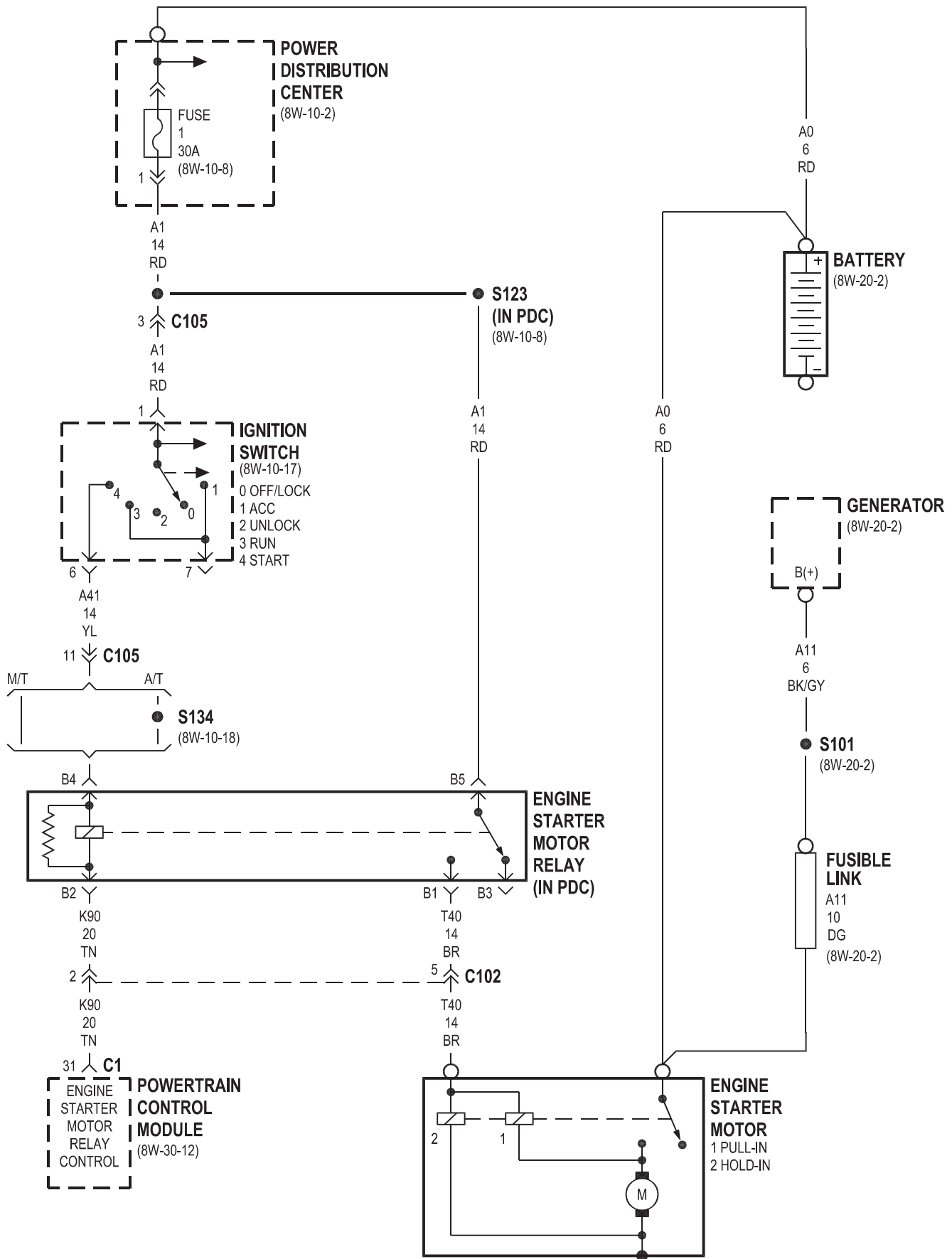
## 8W-20 CHARGING SYSTEM

| <b>Component</b>                    | <b>Page</b> | <b>Component</b>                    | <b>Page</b> |
|-------------------------------------|-------------|-------------------------------------|-------------|
| Automatic Shut Down Relay . . . . . | 8W-20-2     | G100 . . . . .                      | 8W-20-2     |
| Battery . . . . .                   | 8W-20-2     | G101 . . . . .                      | 8W-20-2     |
| Engine Starter Motor . . . . .      | 8W-20-2     | Generator . . . . .                 | 8W-20-2     |
| Fuse 13 (PDC) . . . . .             | 8W-20-2     | Power Distribution Center . . . . . | 8W-20-2     |
| Fusible Link . . . . .              | 8W-20-2     | Powertrain Control Module . . . . . | 8W-20-2     |



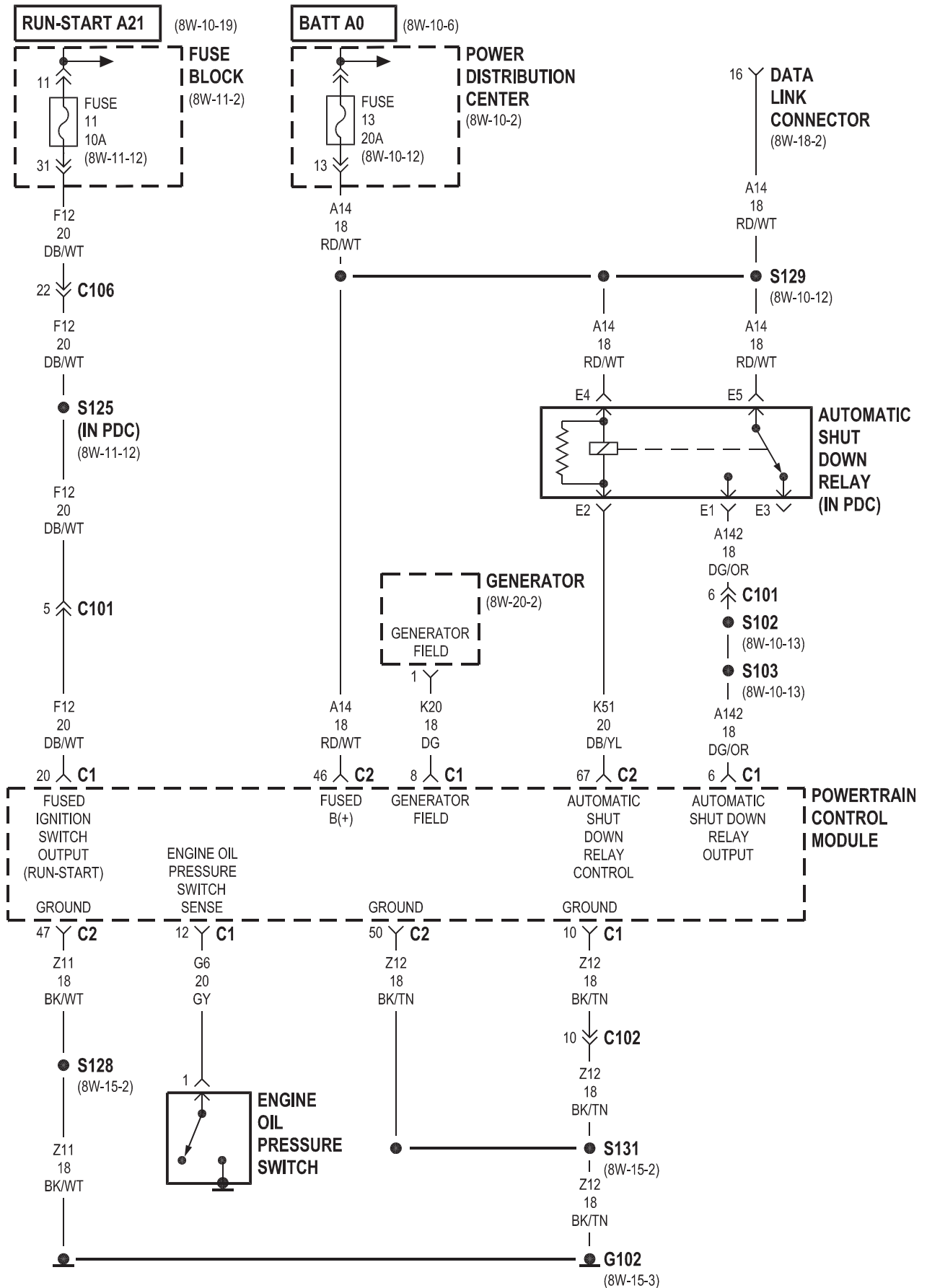
## 8W-21 STARTING SYSTEM

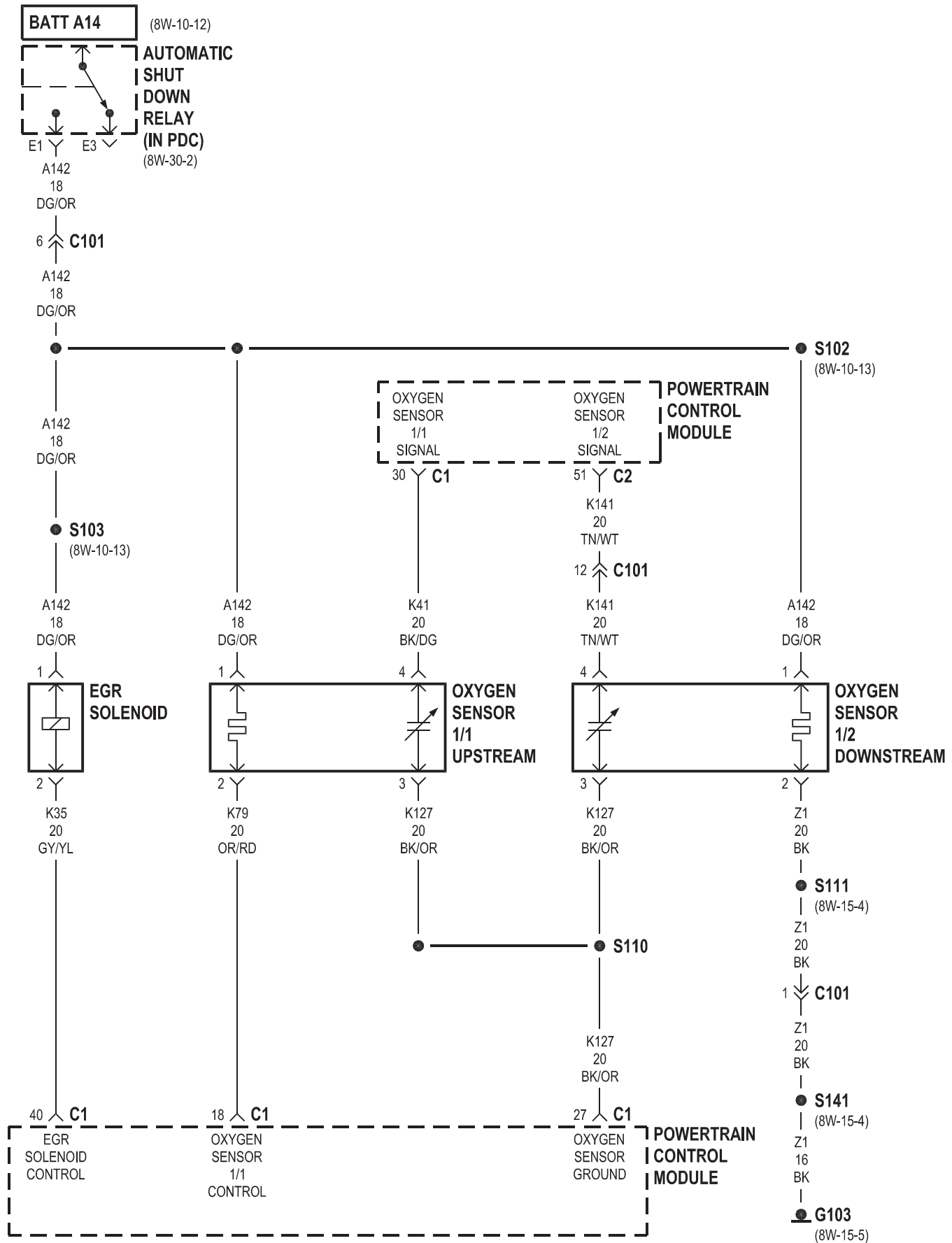
| <b>Component</b>                     | <b>Page</b> | <b>Component</b>                    | <b>Page</b> |
|--------------------------------------|-------------|-------------------------------------|-------------|
| Battery . . . . .                    | 8W-21-2     | Generator . . . . .                 | 8W-21-2     |
| Engine Starter Motor . . . . .       | 8W-21-2     | Ignition Switch . . . . .           | 8W-21-2     |
| Engine Starter Motor Relay . . . . . | 8W-21-2     | Power Distribution Center . . . . . | 8W-21-2     |
| Fuse 1 (PDC) . . . . .               | 8W-21-2     | Powertrain Control Module . . . . . | 8W-21-2     |
| Fusible Link . . . . .               | 8W-21-2     |                                     |             |



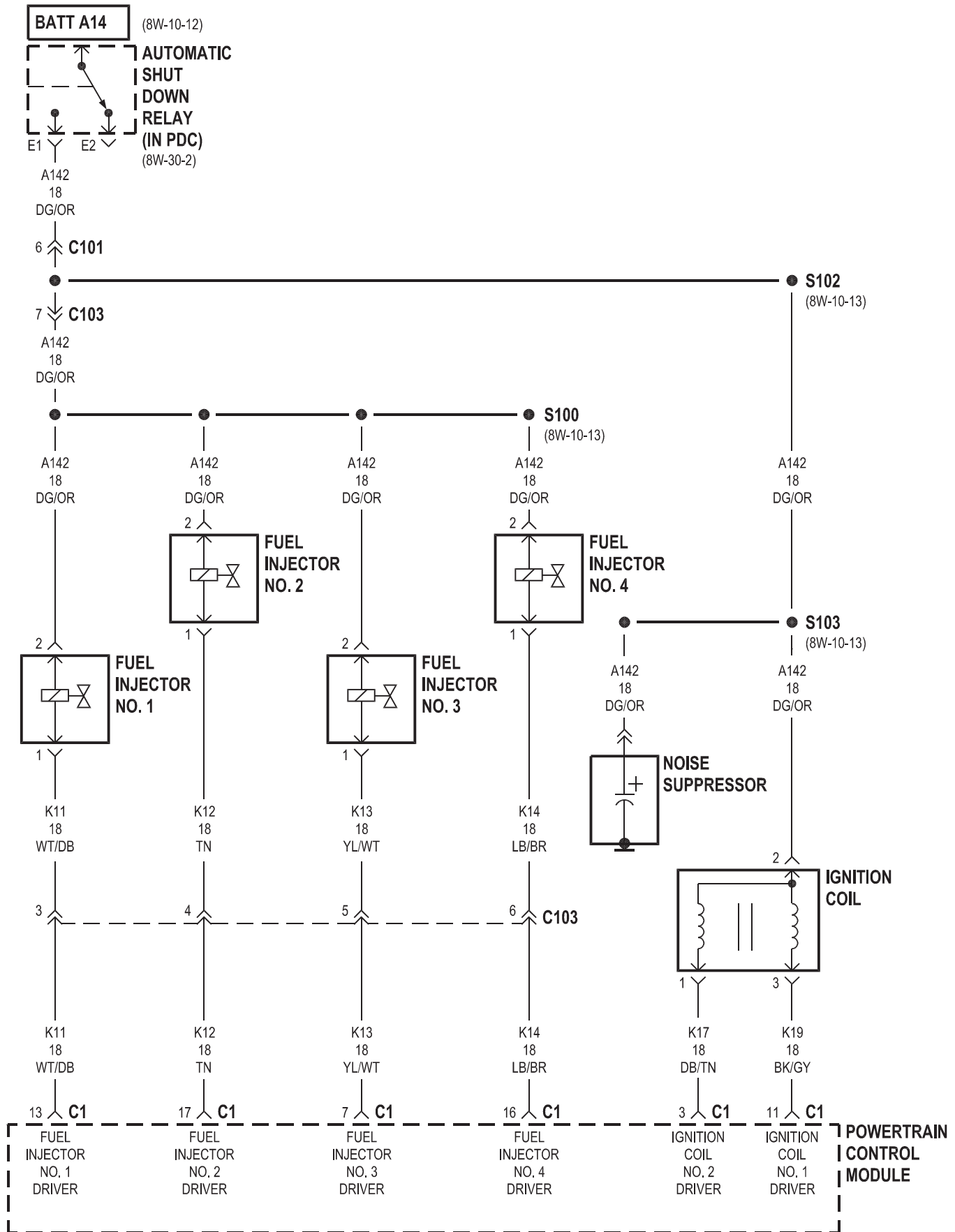
## 8W-30 FUEL/IGNITION SYSTEM

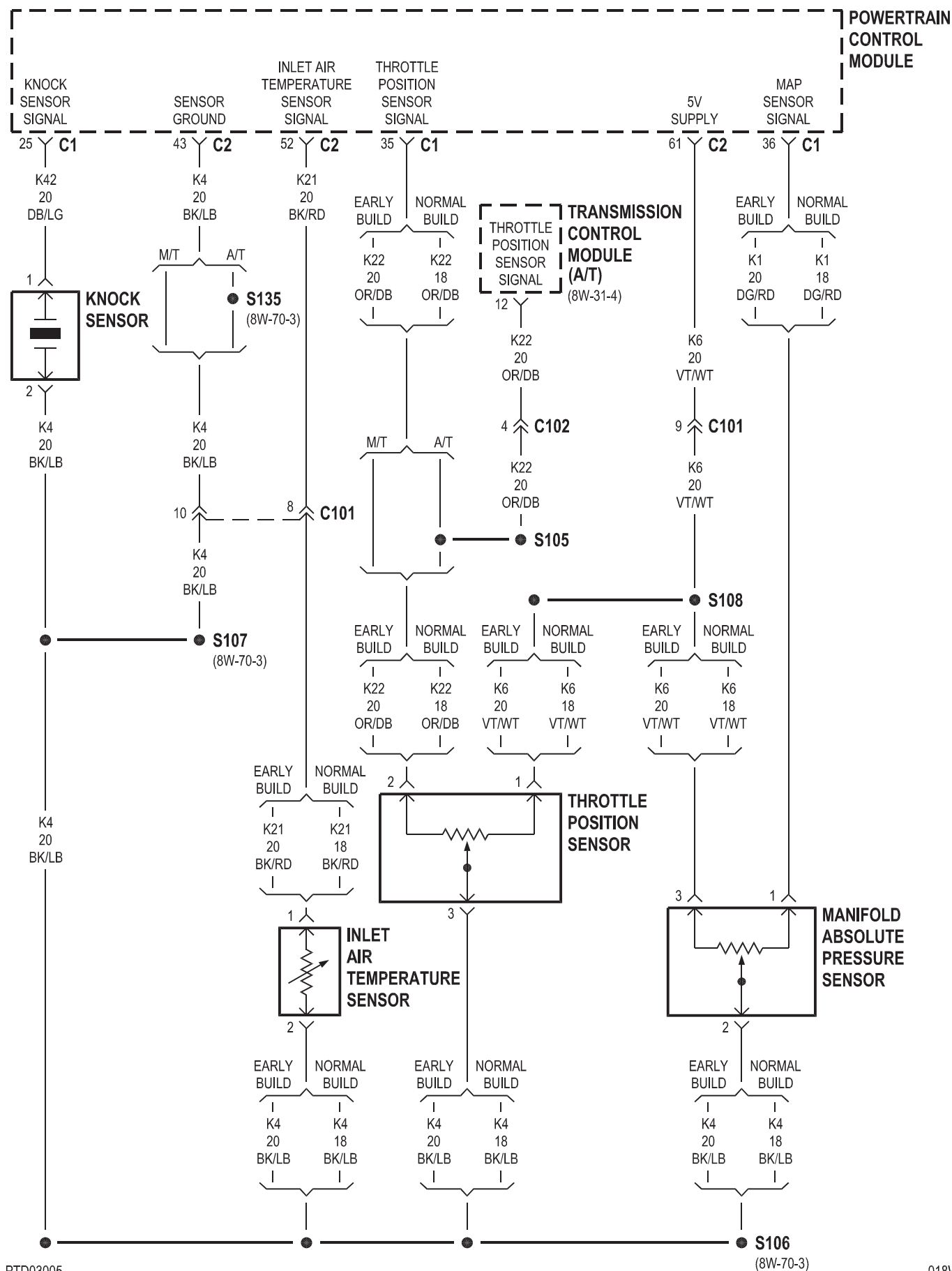
| <b>Component</b>                                         | <b>Page</b>       | <b>Component</b>                            | <b>Page</b>                                     |
|----------------------------------------------------------|-------------------|---------------------------------------------|-------------------------------------------------|
| A/C Compressor Clutch Relay . . . . .                    | 8W-30-8           | G102 . . . . .                              | 8W-30-2, 11, 12                                 |
| A/C Pressure Transducer . . . . .                        | 8W-30-8           | G103 . . . . .                              | 8W-30-3                                         |
| Automatic Shut Down Relay . . . . .                      | 8W-30-2, 3, 4     | G104 . . . . .                              | 8W-30-9, 10                                     |
| Brake Lamp Switch . . . . .                              | 8W-30-10, 11      | G200 . . . . .                              | 8W-30-10                                        |
| Brake Transmission Shift<br>Interlock Solenoid . . . . . | 8W-30-11          | Generator . . . . .                         | 8W-30-2                                         |
| Brake Warning Indicator Switch . . . . .                 | 8W-30-11          | High Speed Radiator Fan Relay . . . . .     | 8W-30-8                                         |
| Camshaft Position Sensor . . . . .                       | 8W-30-6           | Idle Air Control Motor . . . . .            | 8W-30-7                                         |
| Clockspring . . . . .                                    | 8W-30-10          | Ignition Coil . . . . .                     | 8W-30-4                                         |
| Clutch Pedal Position Switch . . . . .                   | 8W-30-12          | Inlet Air Temperature Sensor . . . . .      | 8W-30-5                                         |
| Controller Antilock Brake . . . . .                      | 8W-30-11, 13      | Instrument Cluster . . . . .                | 8W-30-9                                         |
| Crankshaft Position Sensor . . . . .                     | 8W-30-6           | Knock Sensor . . . . .                      | 8W-30-5                                         |
| Data Link Connector . . . . .                            | 8W-30-2, 13       | Leak Detection Pump . . . . .               | 8W-30-8                                         |
| EGR Solenoid . . . . .                                   | 8W-30-3           | Low Speed Radiator Fan Relay . . . . .      | 8W-30-8                                         |
| Engine Coolant Temperature Sensor . . . . .              | 8W-30-6           | Manifold Absolute Pressure Sensor . . . . . | 8W-30-5                                         |
| Engine Oil Pressure Switch . . . . .                     | 8W-30-2           | Noise Suppressor . . . . .                  | 8W-30-4                                         |
| Engine Starter Motor Relay . . . . .                     | 8W-30-12          | Oxygen Sensor 1/1 Upstream . . . . .        | 8W-30-3                                         |
| Evap Purge Solenoid . . . . .                            | 8W-30-12          | Oxygen Sensor 1/2 Downstream . . . . .      | 8W-30-3                                         |
| Fuel Injector No. 1 . . . . .                            | 8W-30-4           | Power Distribution Center . . . . .         | 8W-30-2, 9, 11                                  |
| Fuel Injector No. 2 . . . . .                            | 8W-30-4           | Power Steering Pressure Switch . . . . .    | 8W-30-12                                        |
| Fuel Injector No. 3 . . . . .                            | 8W-30-4           | Powertrain Control Module . . . . .         | 8W-30-2, 3, 4, 5, 6, 7,<br>8, 9, 10, 11, 12, 13 |
| Fuel Injector No. 4 . . . . .                            | 8W-30-4           | Speed Control Servo . . . . .               | 8W-30-10, 11                                    |
| Fuel Pump Module . . . . .                               | 8W-30-9           | Throttle Position Sensor . . . . .          | 8W-30-5                                         |
| Fuel Pump Relay . . . . .                                | 8W-30-9           | Transmission Control<br>Module . . . . .    | 8W-30-5, 6, 7, 12, 13                           |
| Fuse 11 (FB) . . . . .                                   | 8W-30-2, 9        | Transmission Range Sensor . . . . .         | 8W-30-12                                        |
| Fuse 12 (FB) . . . . .                                   | 8W-30-8, 11       | Vehicle Speed Control Switch . . . . .      | 8W-30-10                                        |
| Fuse 12 (PDC) . . . . .                                  | 8W-30-11          | Vehicle Speed Sensor . . . . .              | 8W-30-7                                         |
| Fuse 13 (PDC) . . . . .                                  | 8W-30-2, 9        |                                             |                                                 |
| Fuse Block . . . . .                                     | 8W-30-11, 2, 8, 9 |                                             |                                                 |

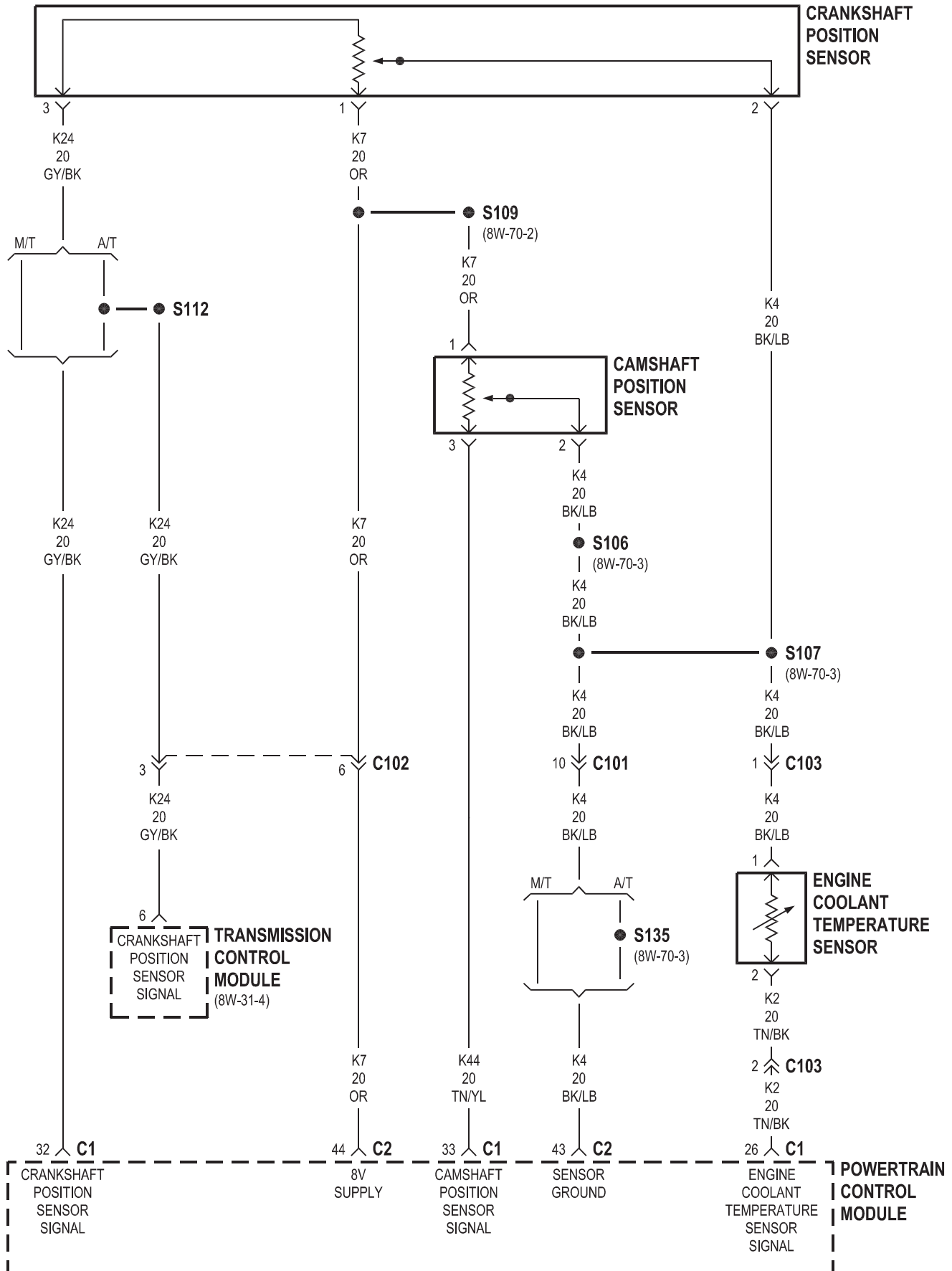


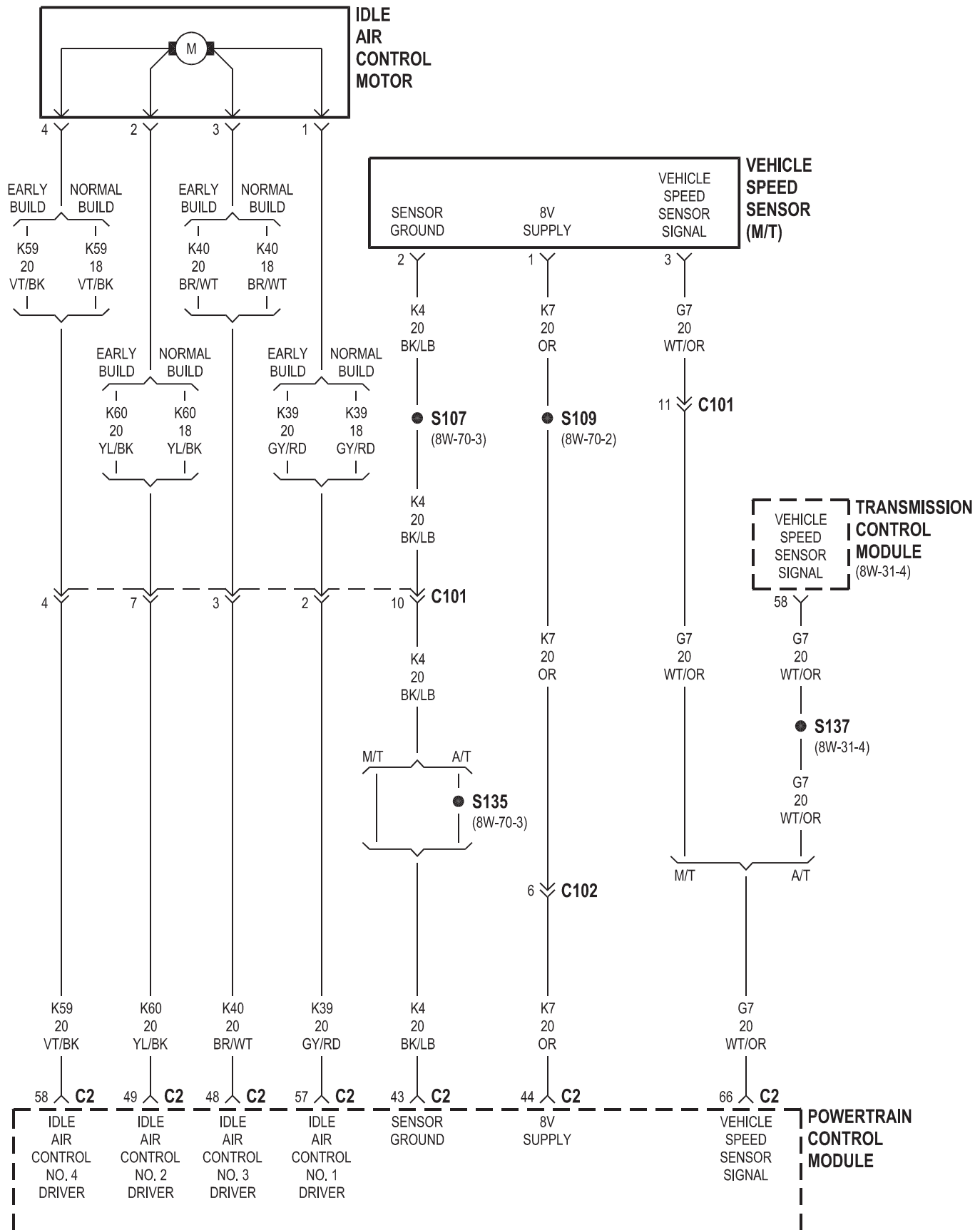


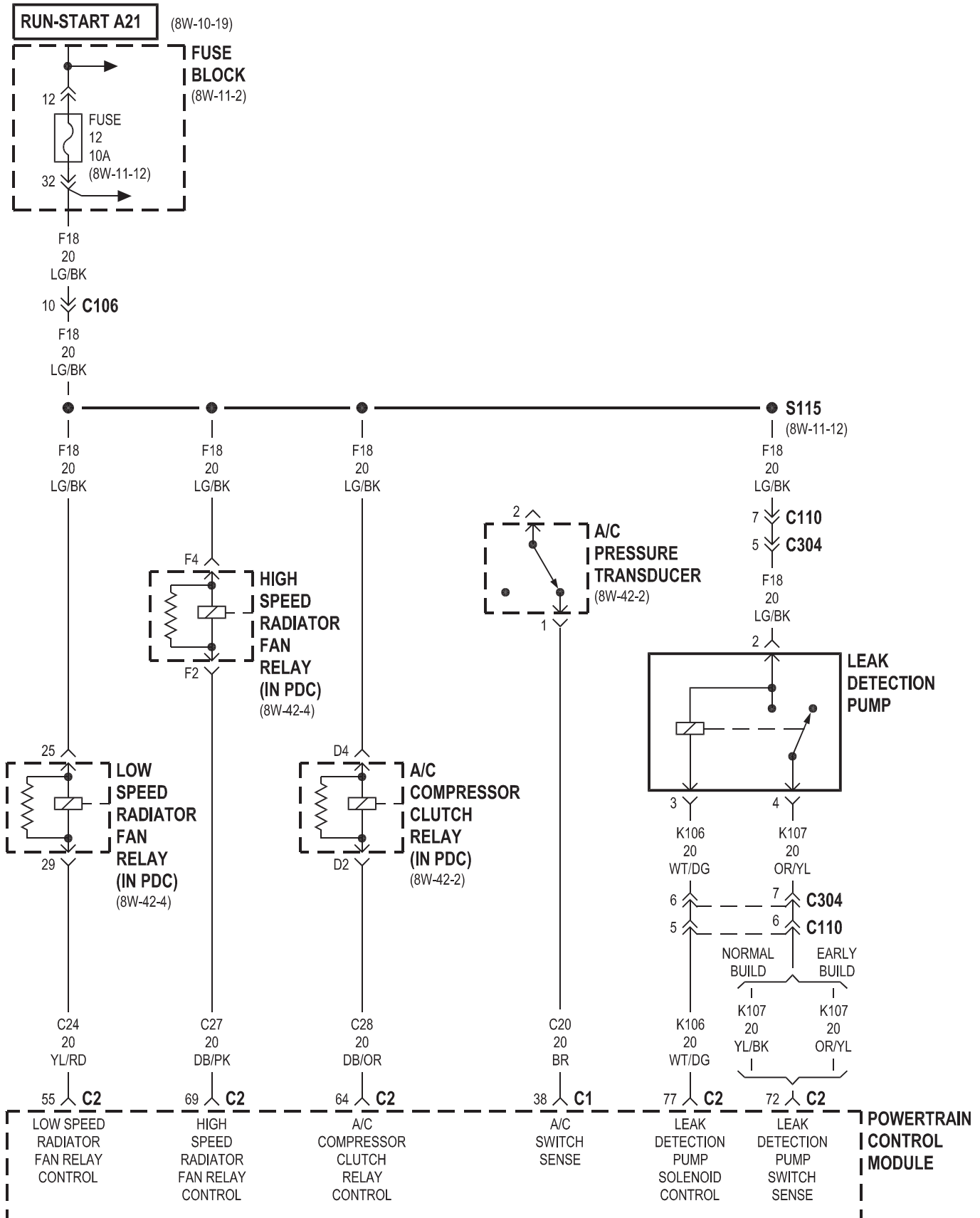


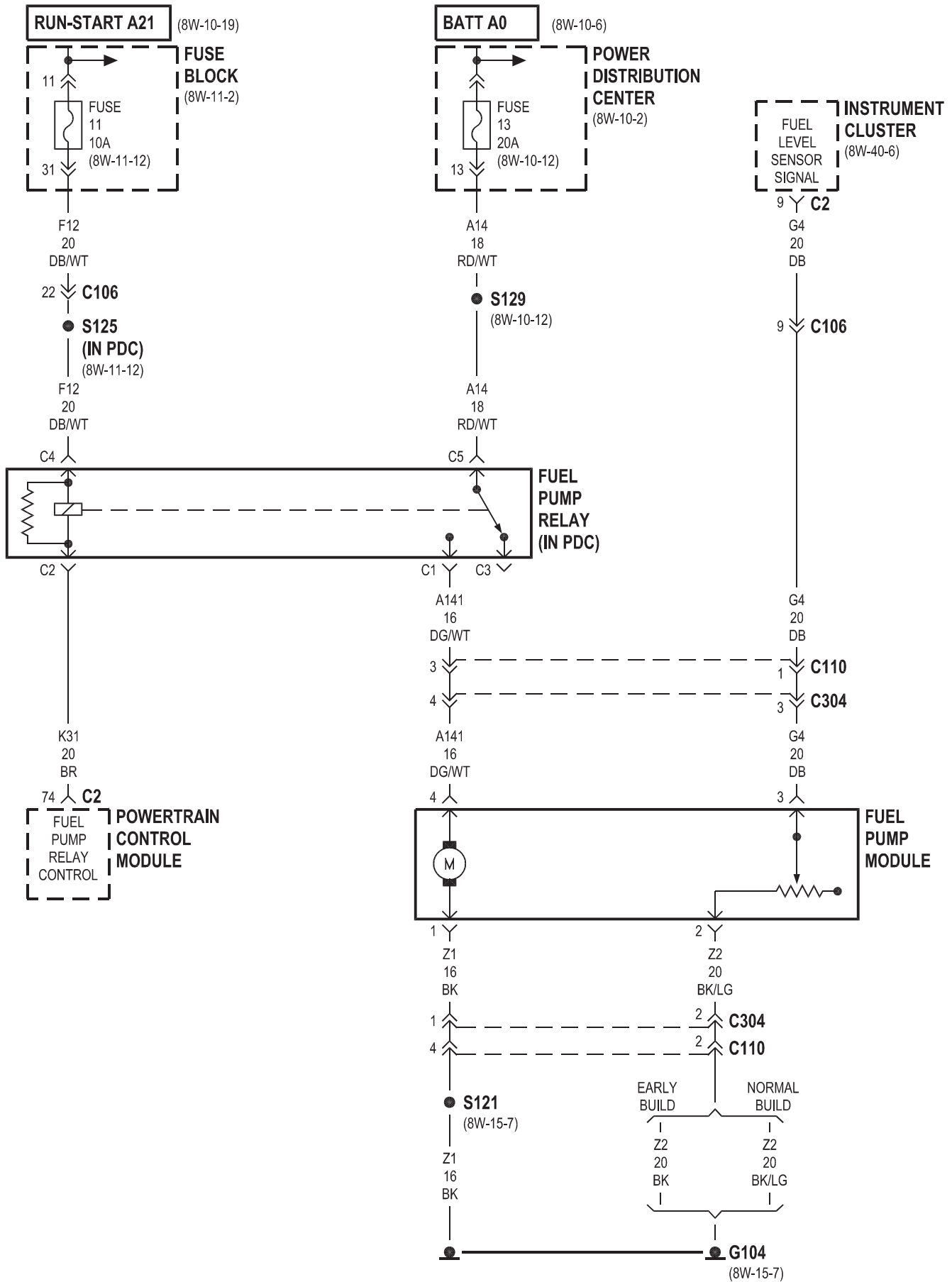


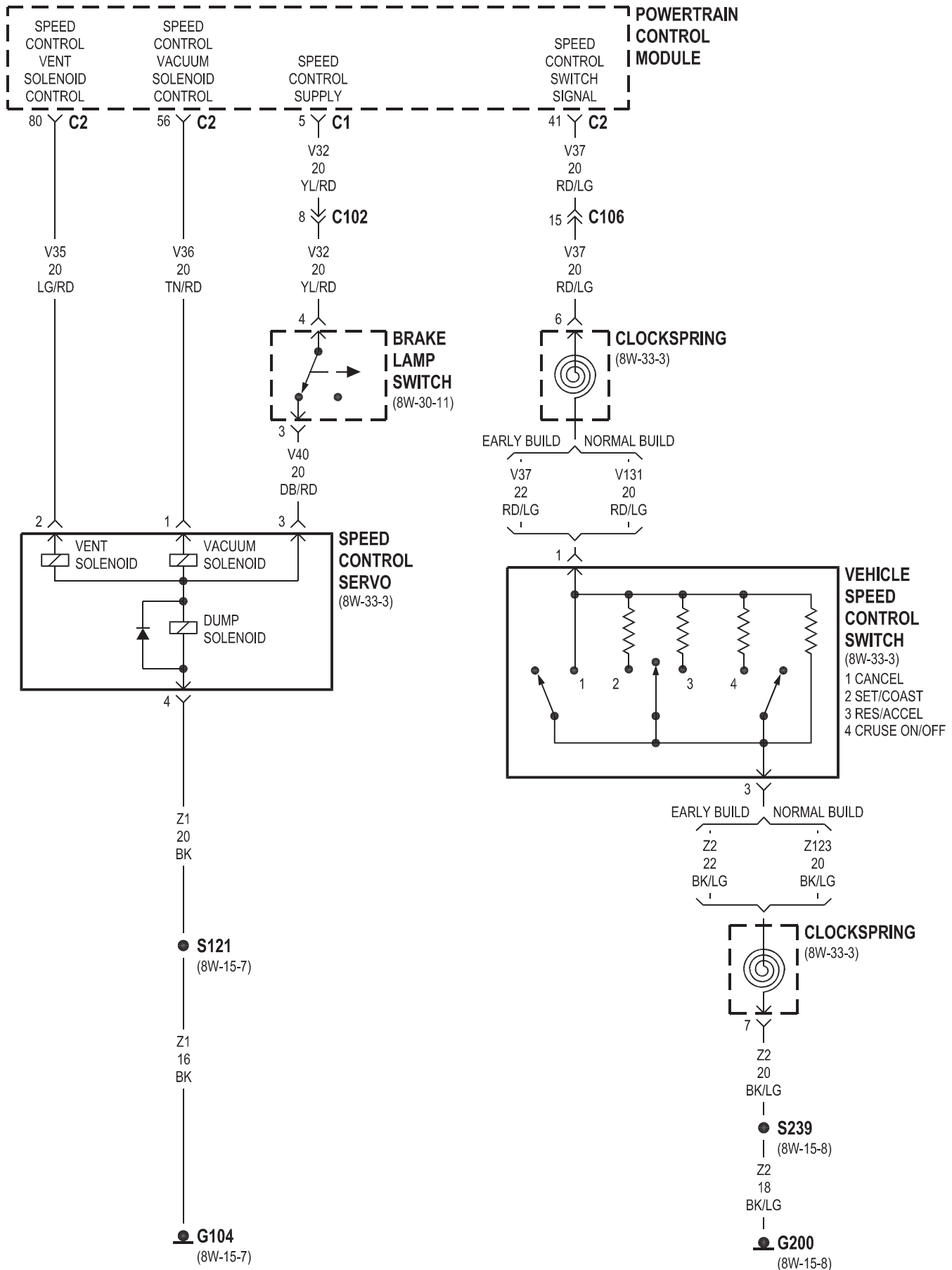


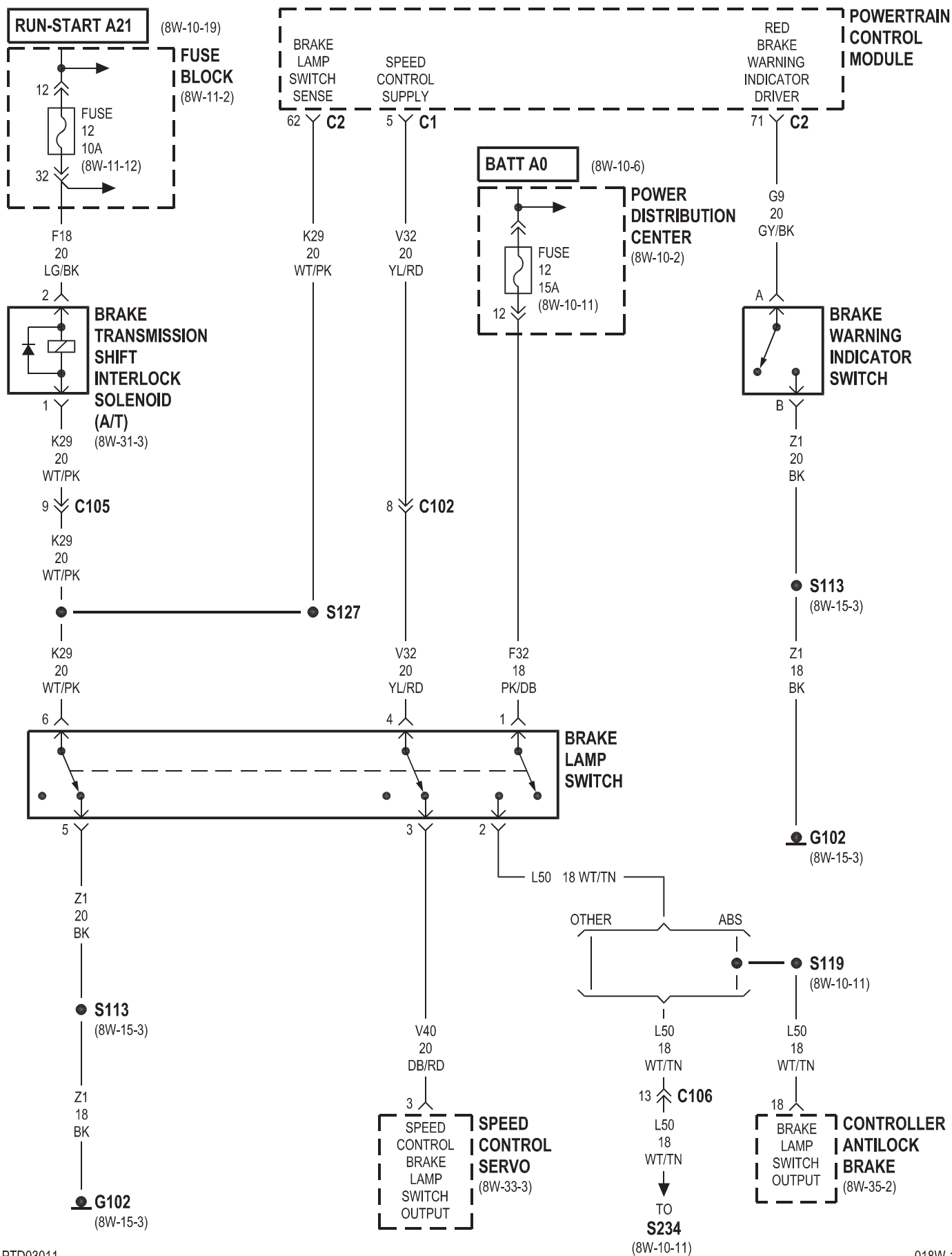




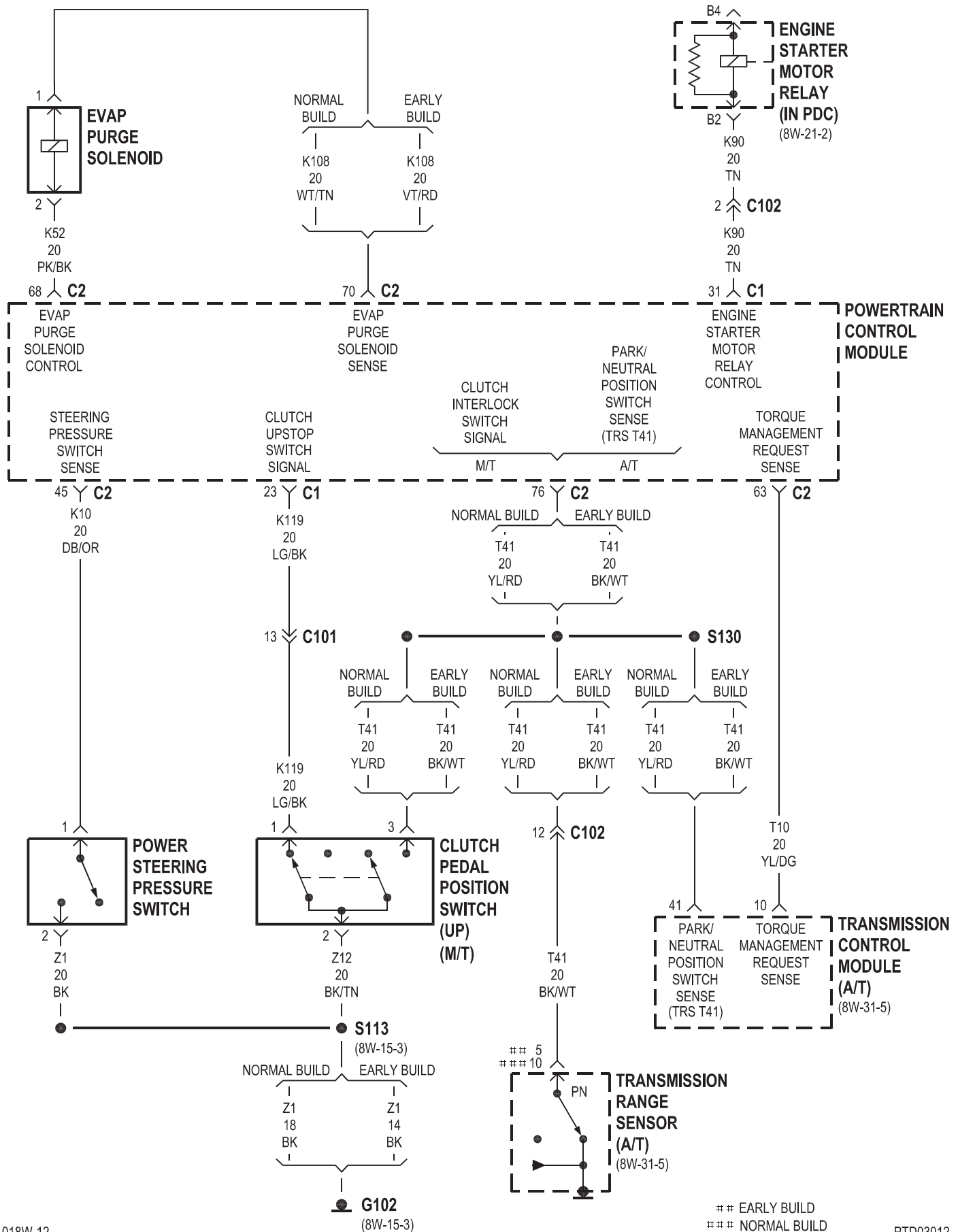










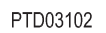


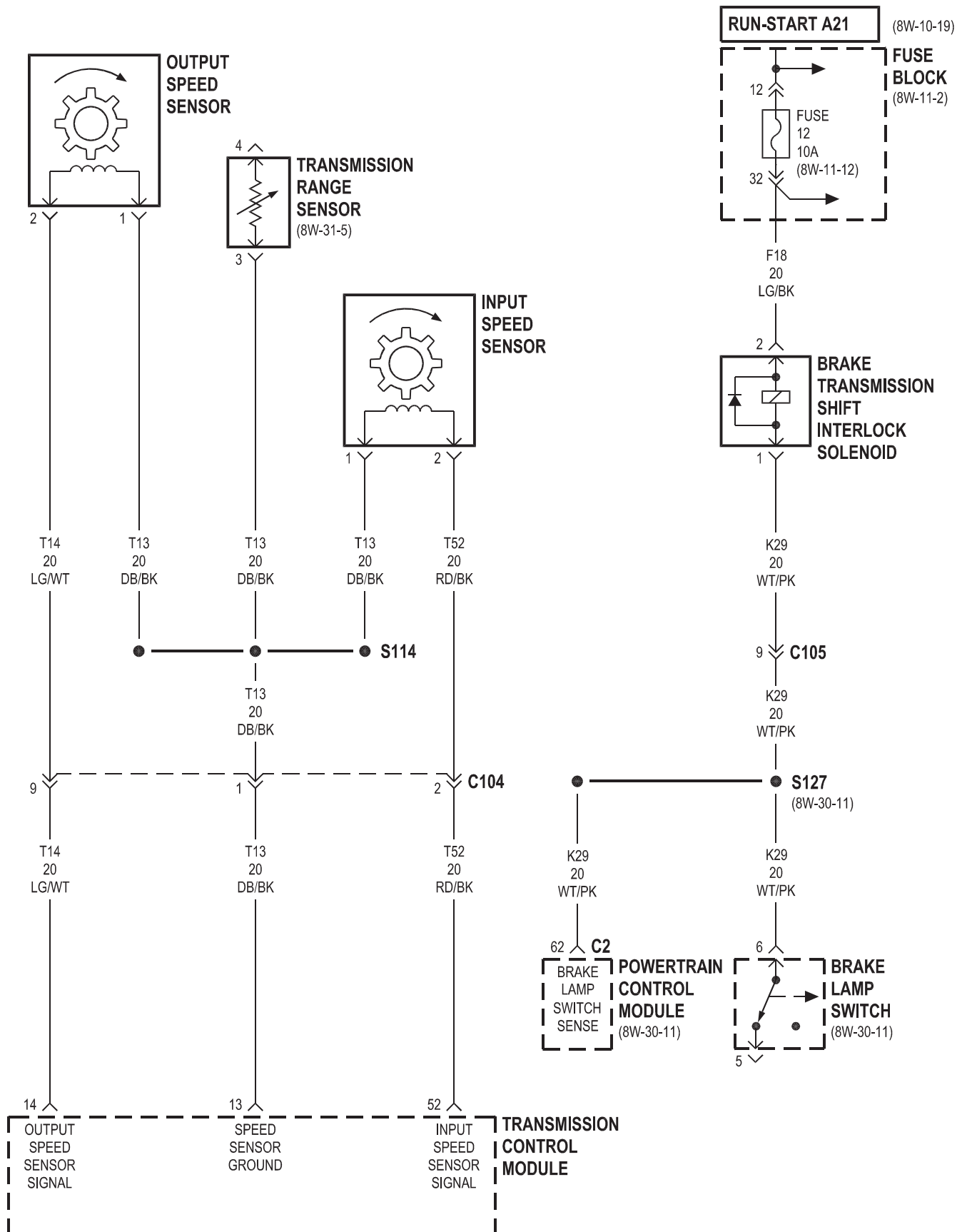


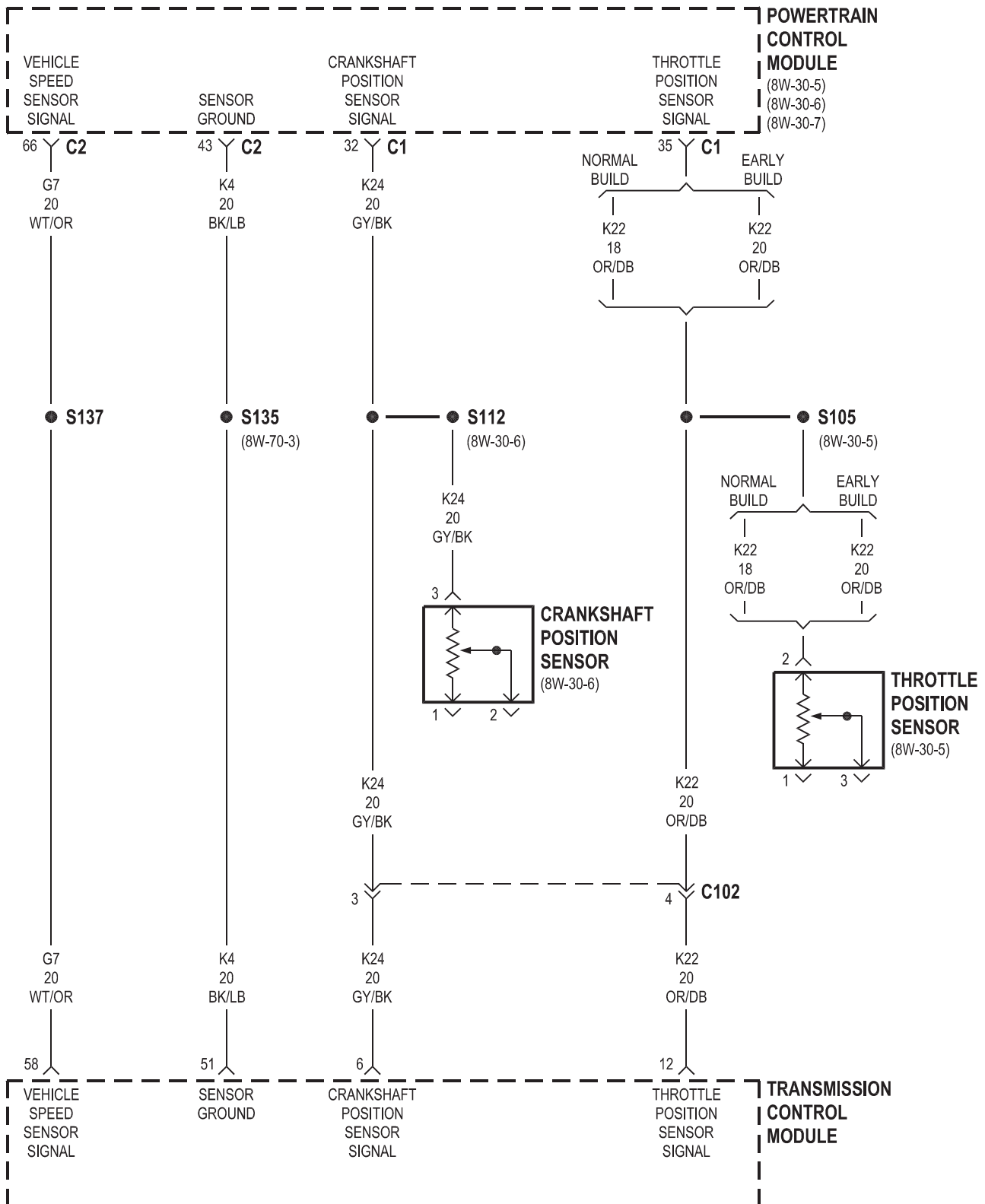


## 8W-31 TRANSMISSION CONTROL SYSTEM

| <b>Component</b>                                      | <b>Page</b>   | <b>Component</b>                                         | <b>Page</b>               |
|-------------------------------------------------------|---------------|----------------------------------------------------------|---------------------------|
| Brake Lamp Switch . . . . .                           | 8W-31-3       | Input Speed Sensor . . . . .                             | 8W-31-3                   |
| Brake Transmission Shift Interlock Solenoid . . . . . | 8W-31-3       | Output Speed Sensor . . . . .                            | 8W-31-3                   |
| Crankshaft Position Sensor . . . . .                  | 8W-31-4       | Power Distribution Center . . . . .                      | 8W-31-2, 6, 7             |
| Data Link Connector . . . . .                         | 8W-31-8       | Powertrain Control Module . . . . .                      | 8W-31-3, 4, 5, 8          |
| Fuse 6 (FB) . . . . .                                 | 8W-31-5       | Throttle Position Sensor . . . . .                       | 8W-31-4                   |
| Fuse 12 (FB) . . . . .                                | 8W-31-2, 3    | Transmission Control Module . . . . .                    | 8W-31-2, 3, 4, 5, 6, 7, 8 |
| Fuse 15 (PDC) . . . . .                               | 8W-31-2       | Transmission Control Relay . . . . .                     | 8W-31-2, 6, 7             |
| Fuse Block . . . . .                                  | 8W-31-2, 3, 5 | Transmission Range Sensor . . . . .                      | 8W-31-3, 5                |
| G102 . . . . .                                        | 8W-31-2       | Transmission Solenoid/Pressure Switch Assembly . . . . . | 8W-31-6, 7                |
| G103 . . . . .                                        | 8W-31-2       |                                                          |                           |
| Ignition Switch . . . . .                             | 8W-31-5       |                                                          |                           |

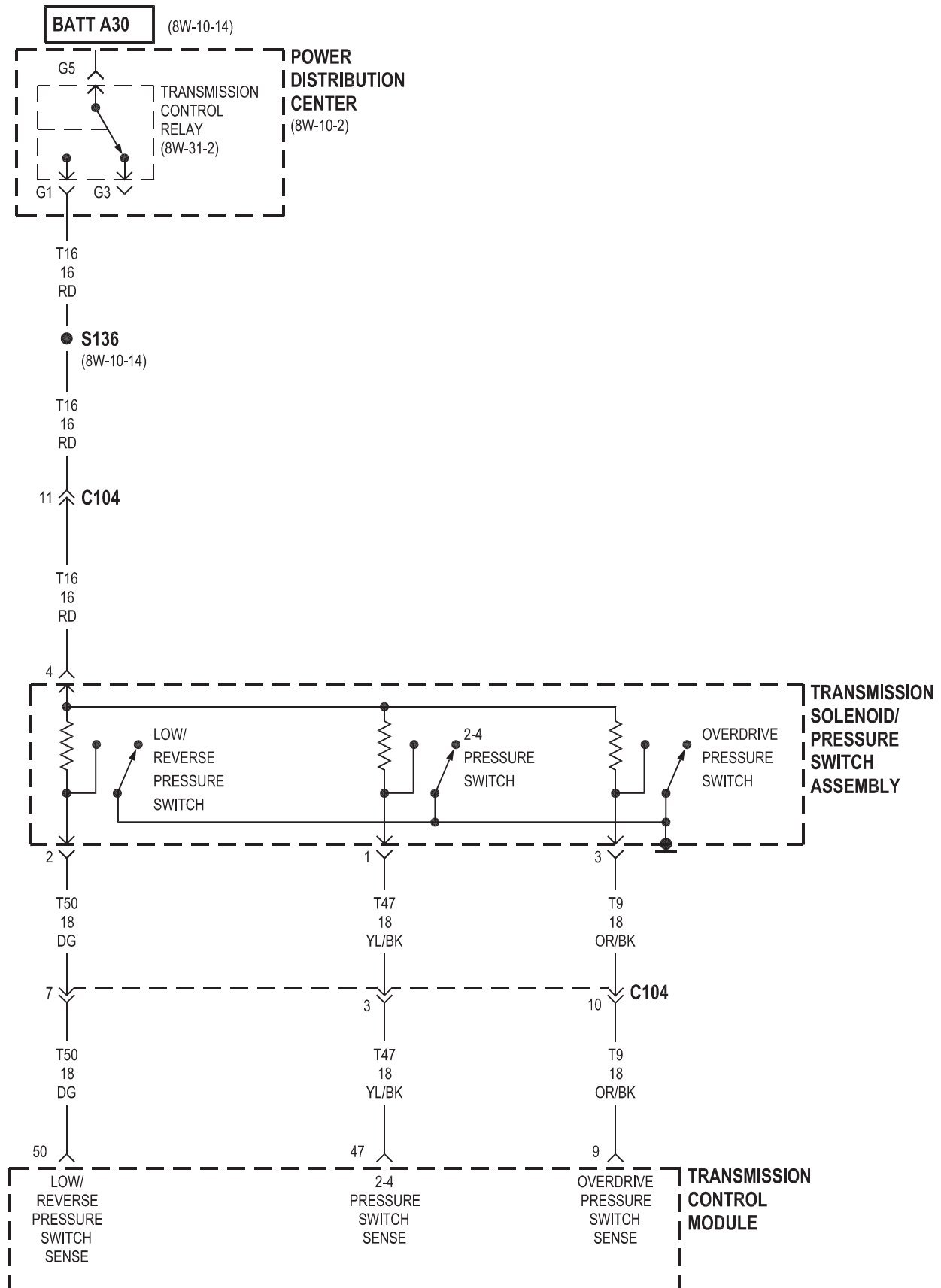


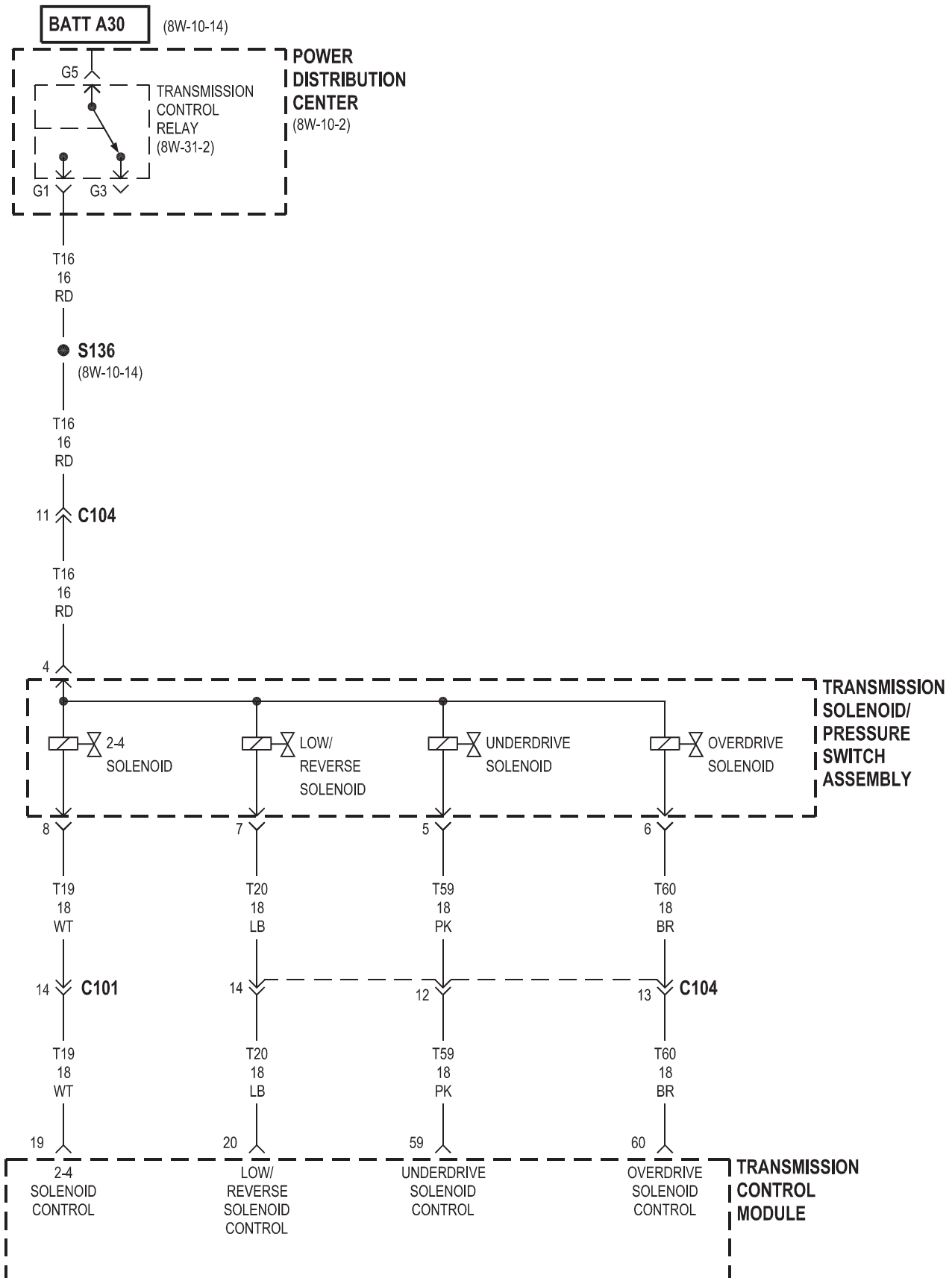


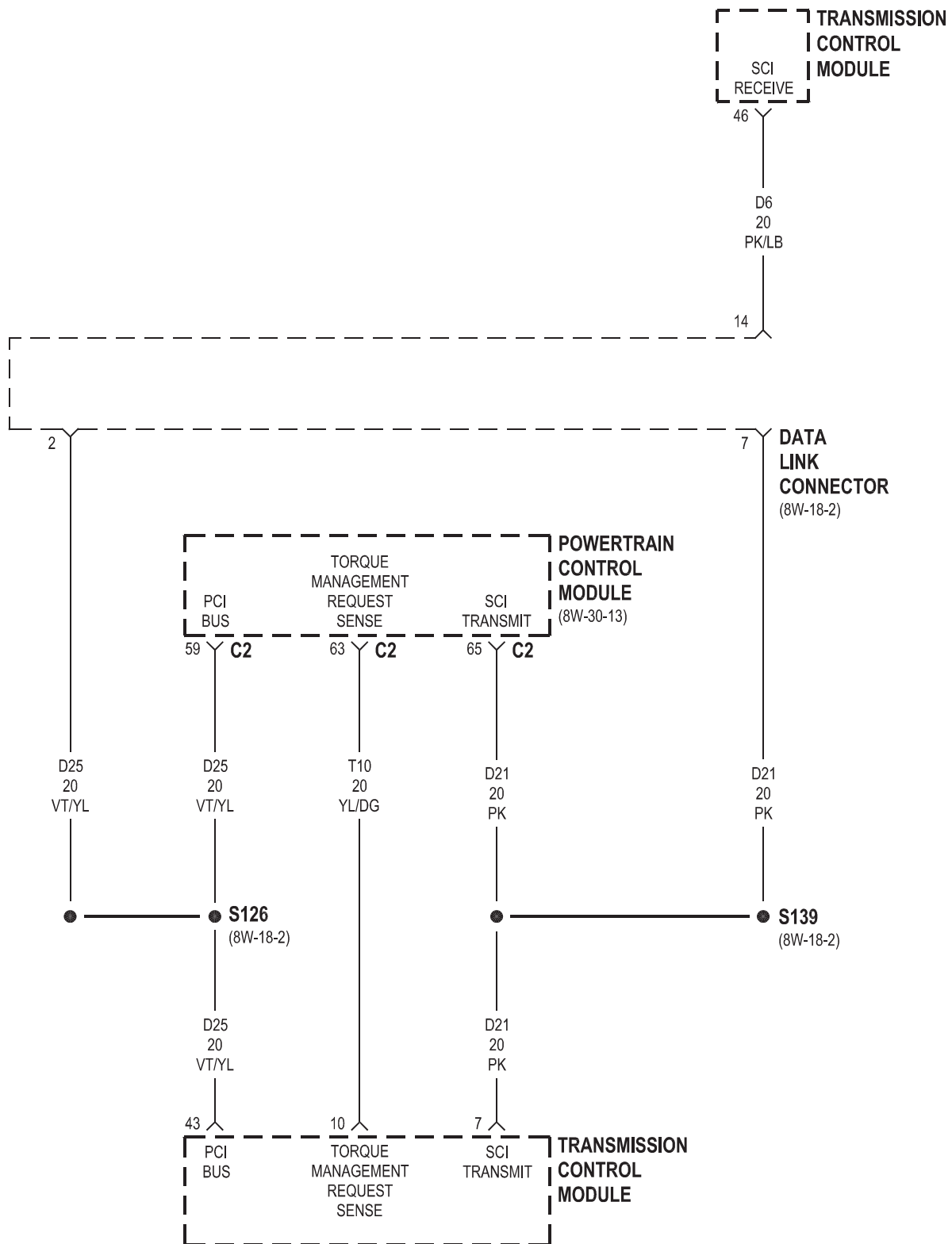






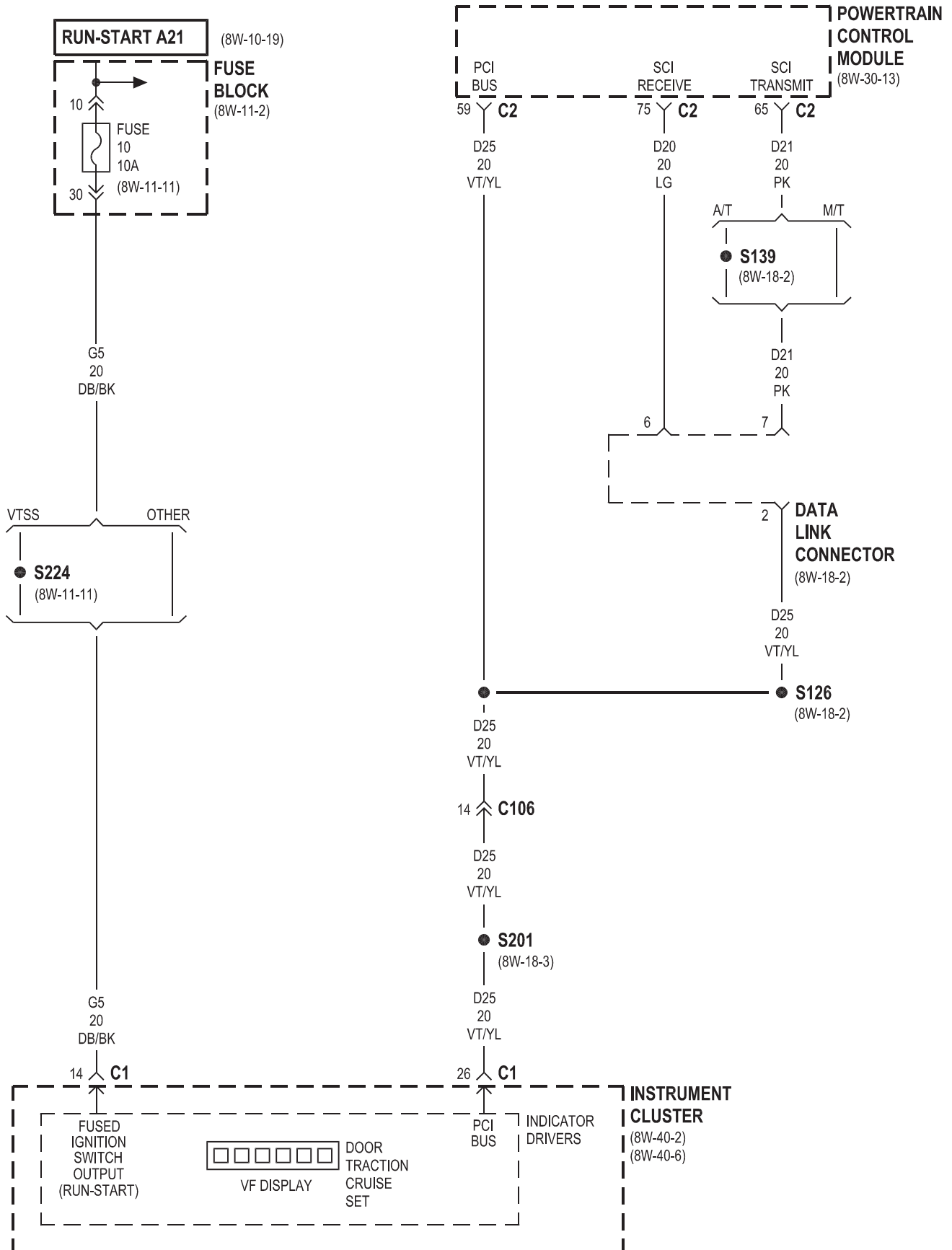


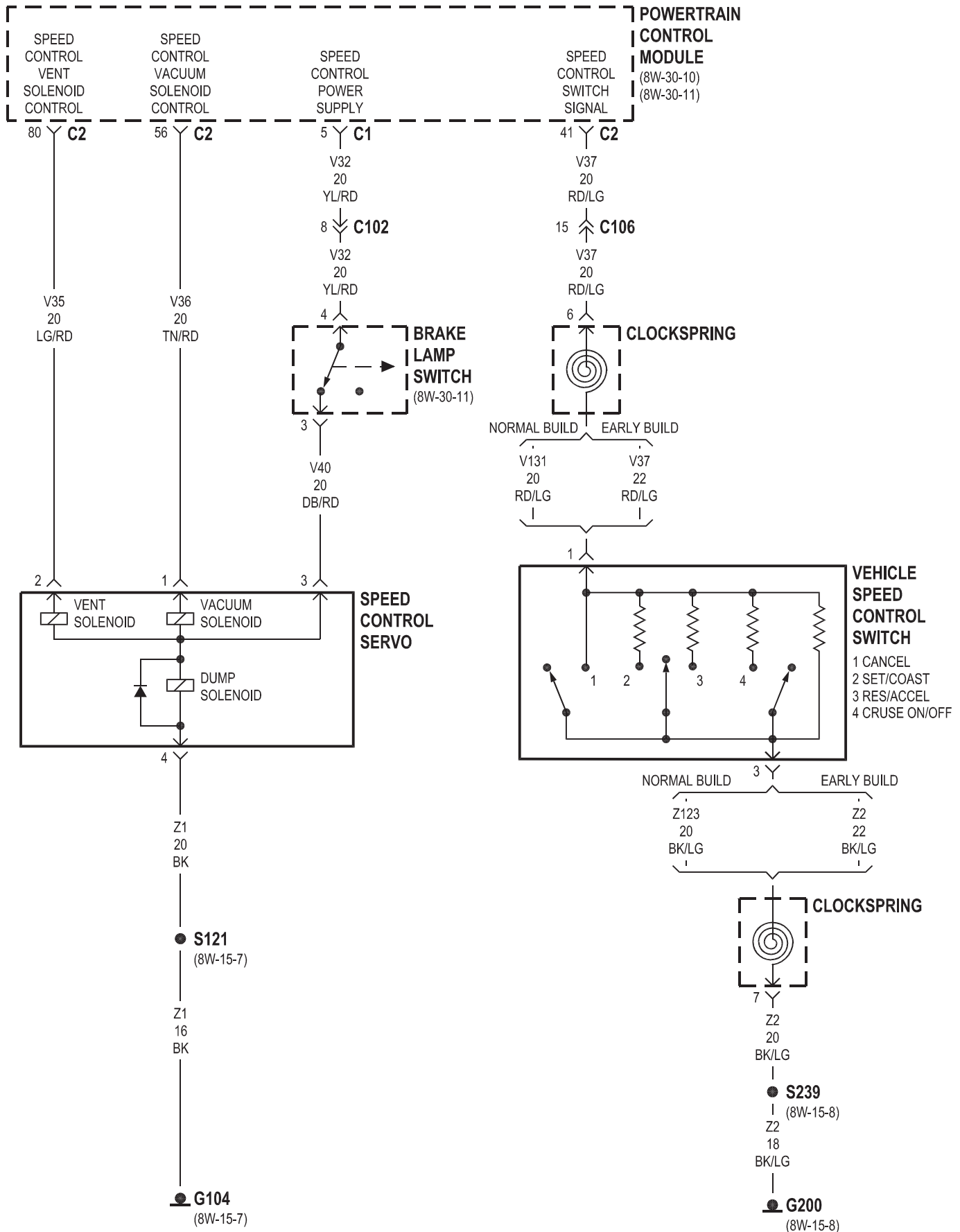


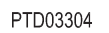


## 8W-33 VEHICLE SPEED CONTROL

| <b>Component</b>                       | <b>Page</b> | <b>Component</b>                       | <b>Page</b>   |
|----------------------------------------|-------------|----------------------------------------|---------------|
| Brake Lamp Switch . . . . .            | 8W-33-3     | Instrument Cluster . . . . .           | 8W-33-2       |
| Clockspring . . . . .                  | 8W-33-3     | Powertrain Control Module . . . . .    | 8W-33-2, 3, 4 |
| Clutch Pedal Position Switch . . . . . | 8W-33-4     | Speed Control Servo . . . . .          | 8W-33-3       |
| Data Link Connector . . . . .          | 8W-33-2     | Transmission Control Module . . . . .  | 8W-33-4       |
| Fuse 10 (FB) . . . . .                 | 8W-33-2     | Transmission Range Sensor . . . . .    | 8W-33-4       |
| Fuse Block . . . . .                   | 8W-33-2     | Vehicle Speed Control Switch . . . . . | 8W-33-3       |
| G104 . . . . .                         | 8W-33-3     | Vehicle Speed Sensor . . . . .         | 8W-33-4       |
| G200 . . . . .                         | 8W-33-3     |                                        |               |



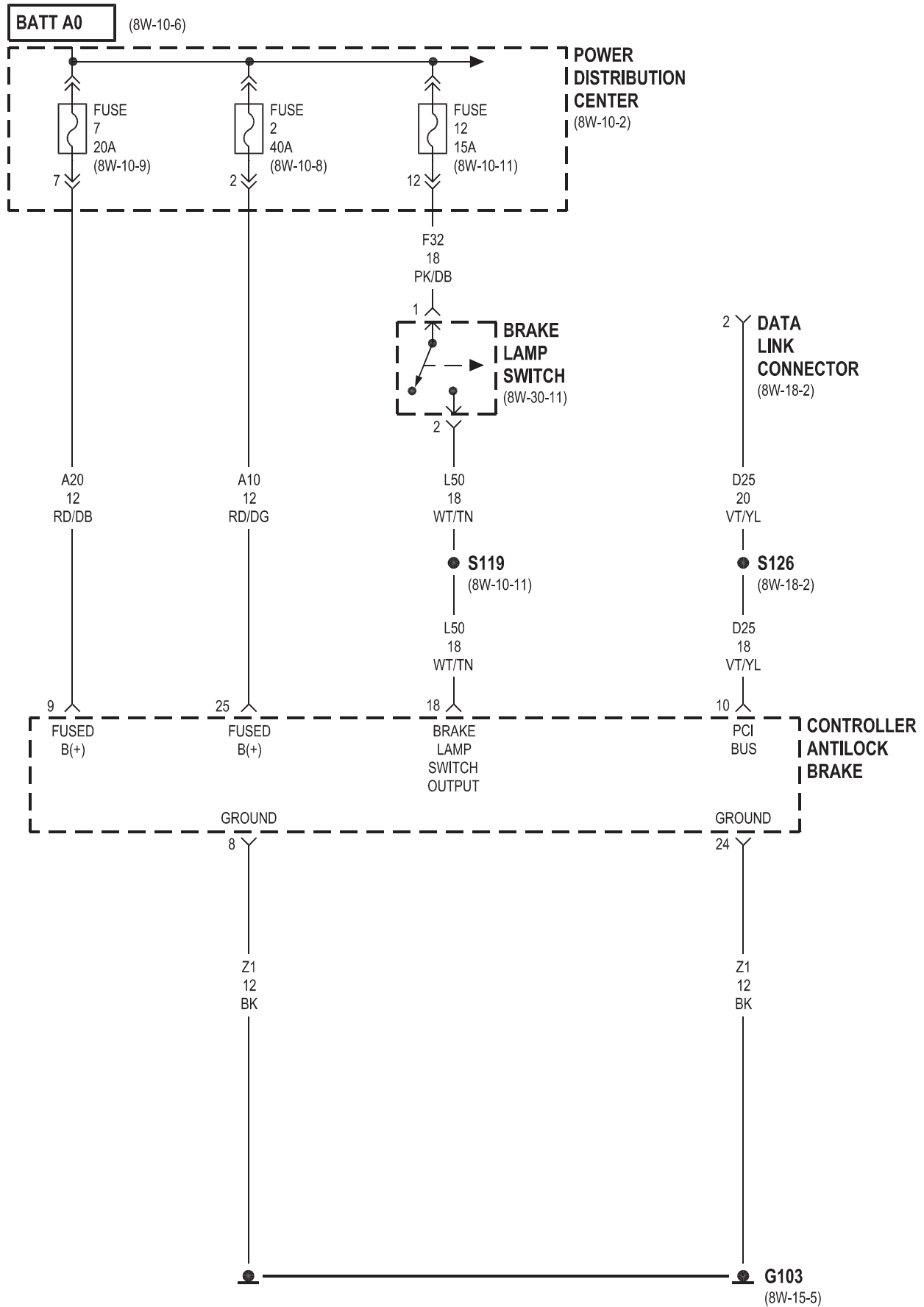


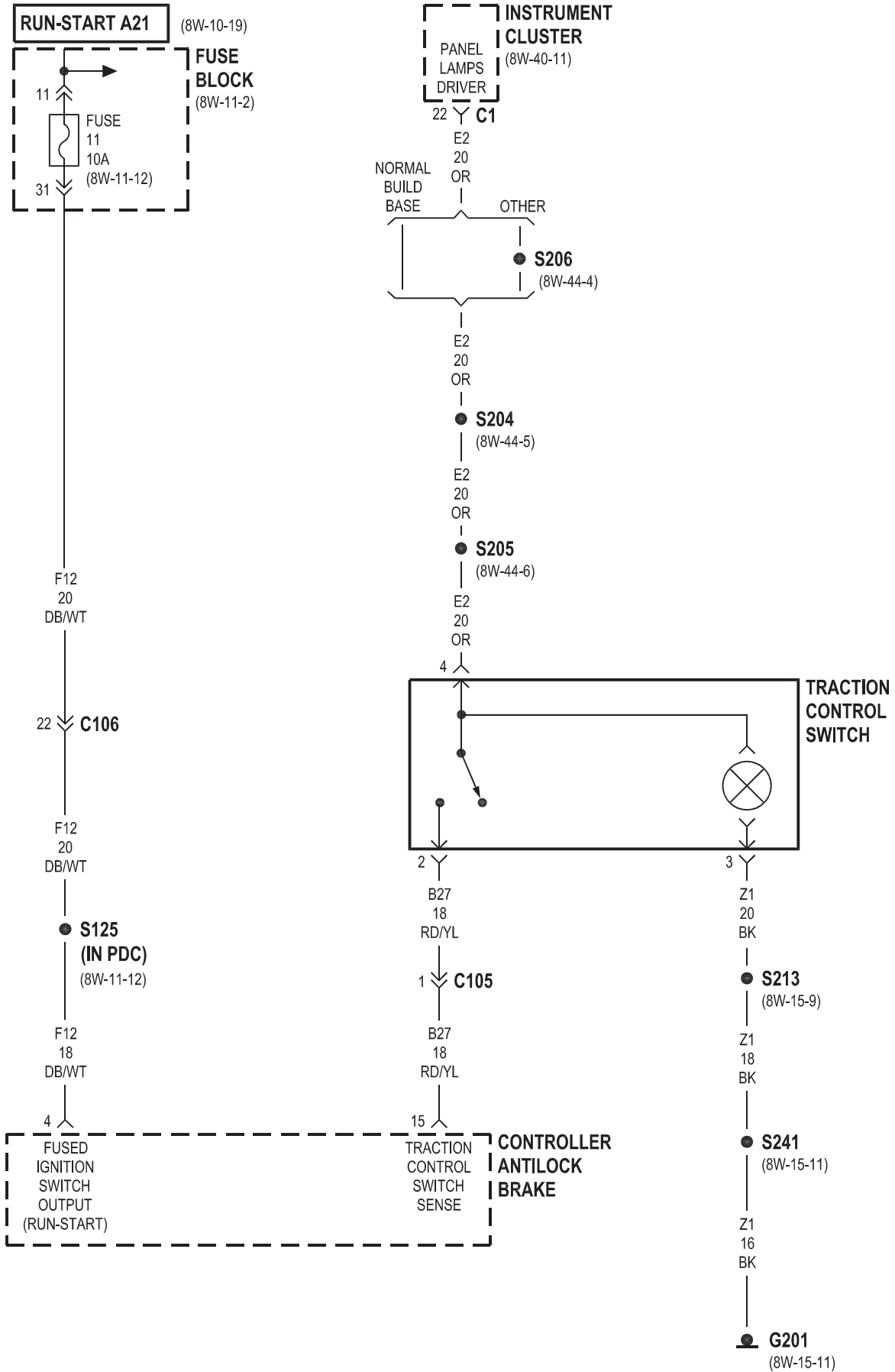


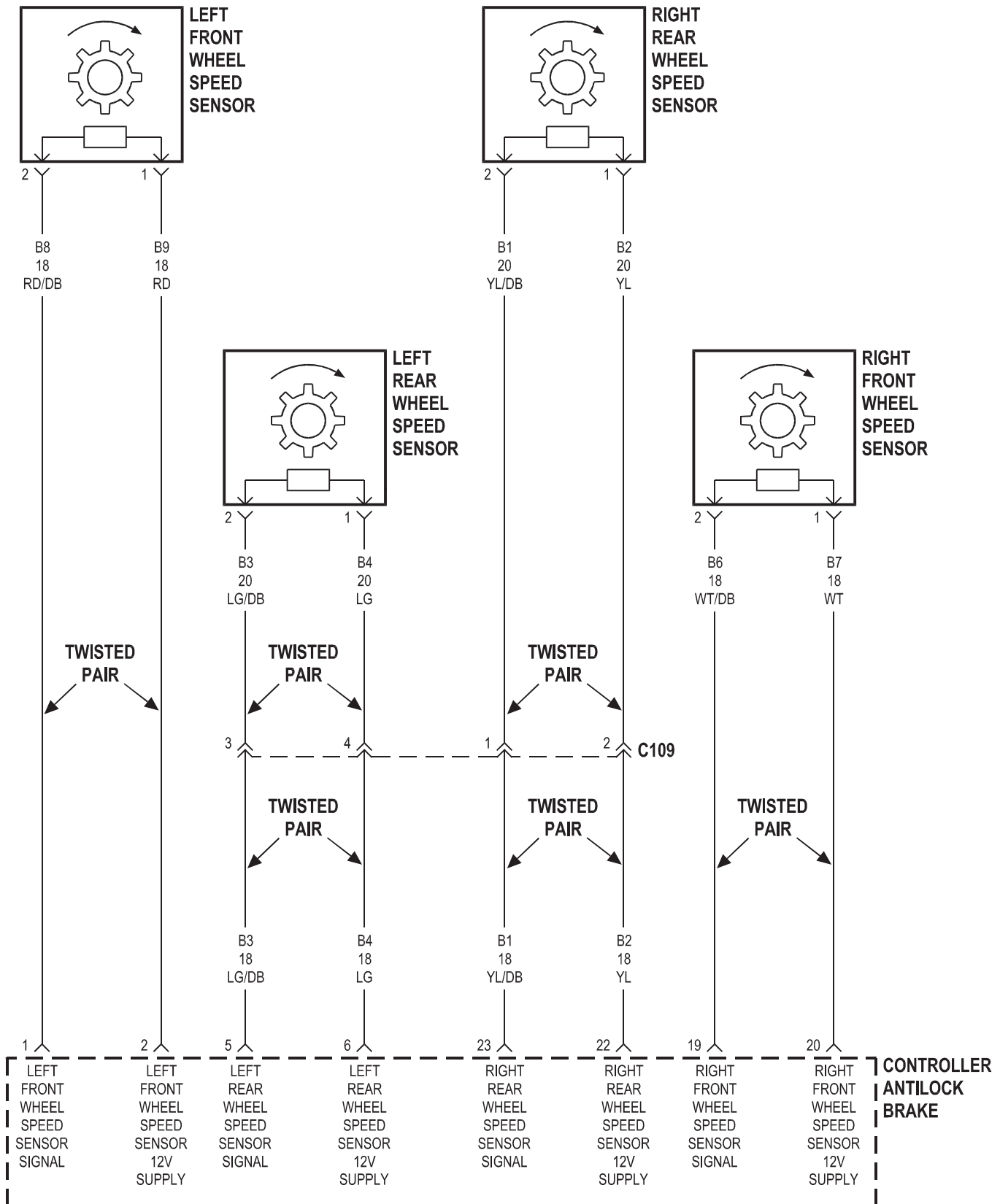
## 8W-35 ANTILOCK BRAKES

| <b>Component</b>                    | <b>Page</b>   | <b>Component</b>                         | <b>Page</b> |
|-------------------------------------|---------------|------------------------------------------|-------------|
| Brake Lamp Switch . . . . .         | 8W-35-2       | G201 . . . . .                           | 8W-35-3     |
| Controller Antilock Brake . . . . . | 8W-35-2, 3, 4 | Instrument Cluster . . . . .             | 8W-35-3     |
| Data Link Connector . . . . .       | 8W-35-2       | Left Front Wheel Speed Sensor . . . . .  | 8W-35-4     |
| Fuse 2 (PDC) . . . . .              | 8W-35-2       | Left Rear Wheel Speed Sensor . . . . .   | 8W-35-4     |
| Fuse 7 (PDC) . . . . .              | 8W-35-2       | Power Distribution Center . . . . .      | 8W-35-2     |
| Fuse 11 (FB) . . . . .              | 8W-35-3       | Right Front Wheel Speed Sensor . . . . . | 8W-35-4     |
| Fuse 12 (PDC) . . . . .             | 8W-35-2       | Right Rear Wheel Speed Sensor . . . . .  | 8W-35-4     |
| Fuse Block . . . . .                | 8W-35-3       | Traction Control Switch . . . . .        | 8W-35-3     |
| G103 . . . . .                      | 8W-35-2       |                                          |             |



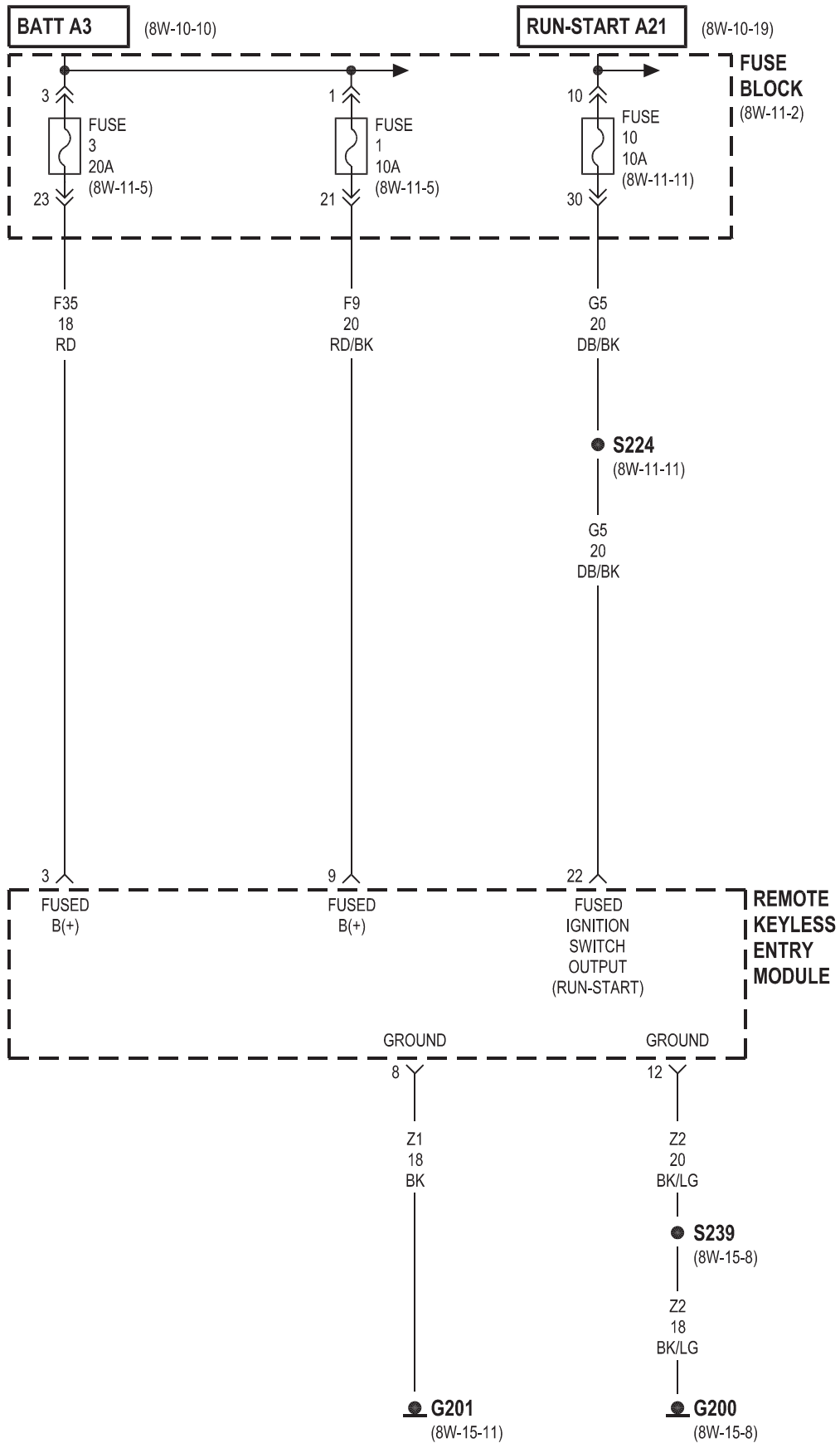


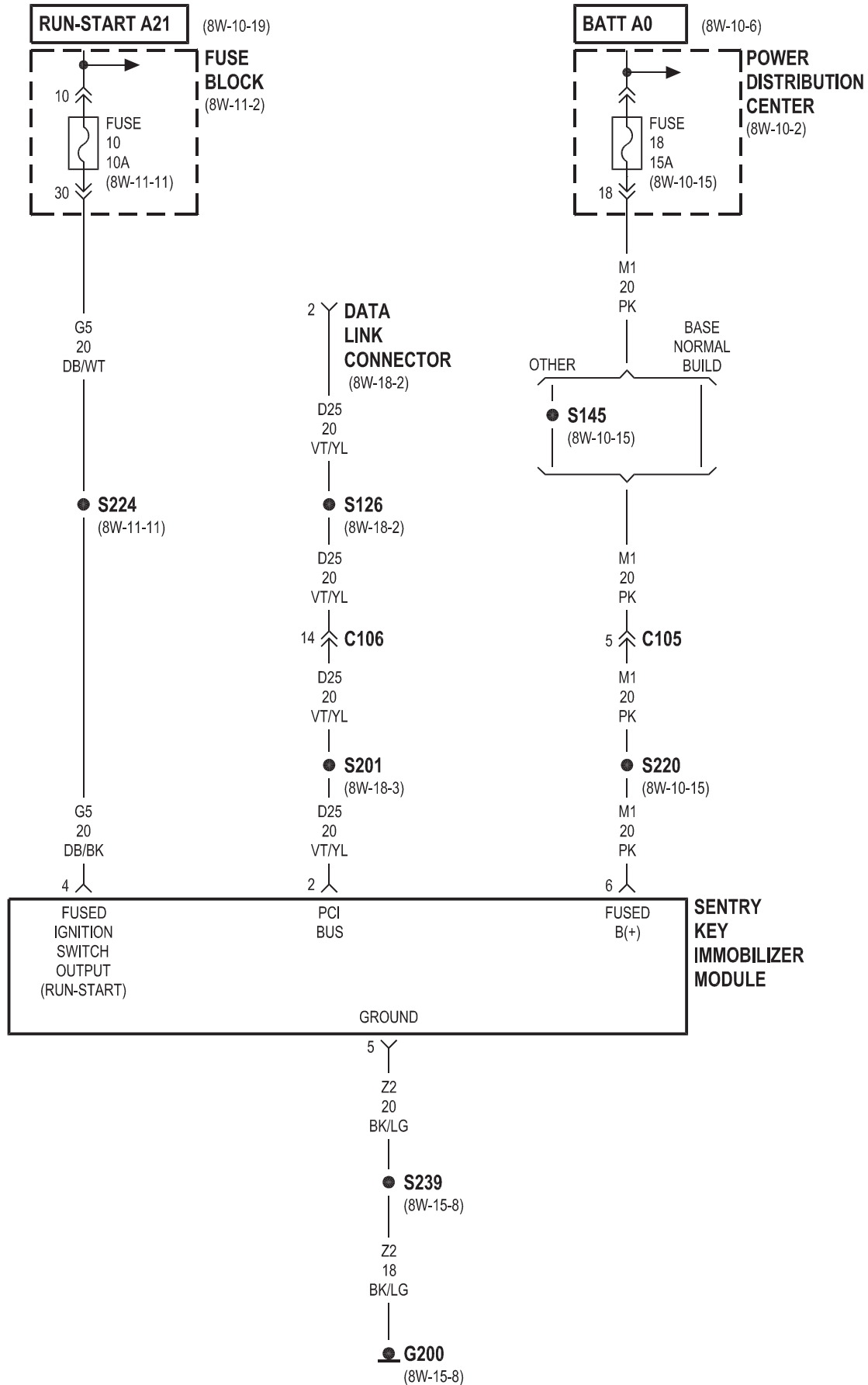


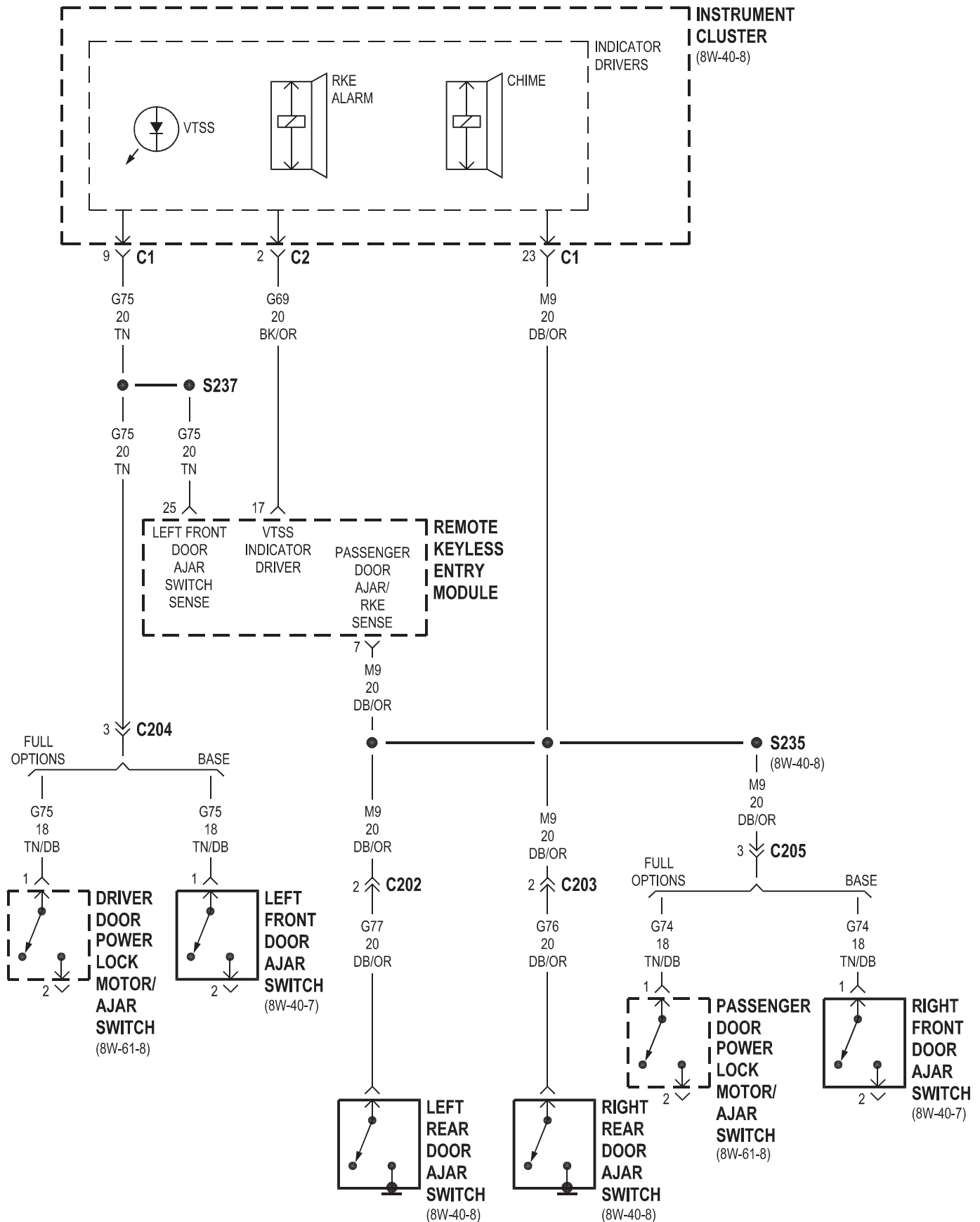


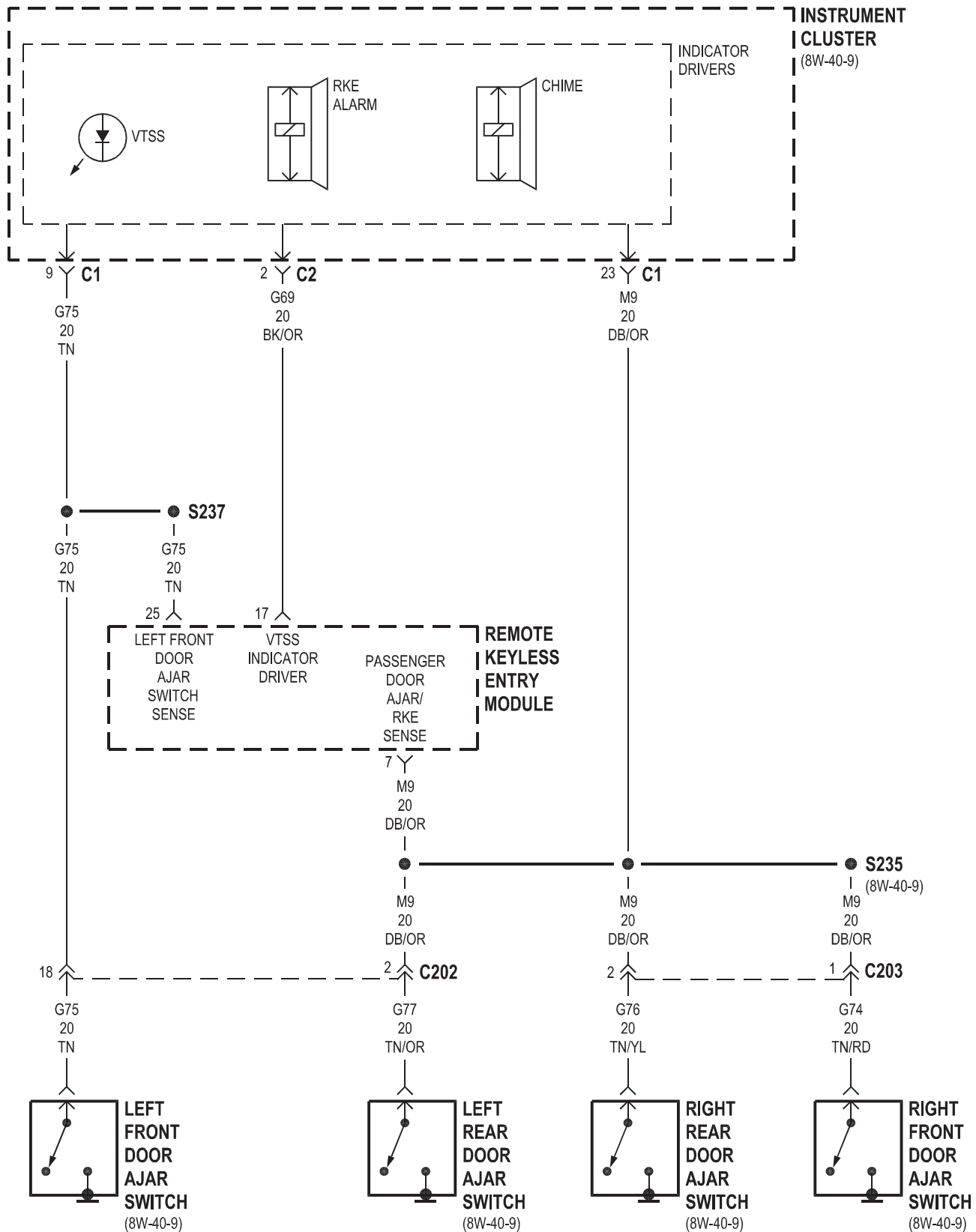
## 8W-39 VEHICLE THEFT SECURITY SYSTEM

| <b>Component</b>                                      | <b>Page</b>        | <b>Component</b>                                         | <b>Page</b>                                  |
|-------------------------------------------------------|--------------------|----------------------------------------------------------|----------------------------------------------|
| Data Link Connector . . . . .                         | 8W-39-3, 12        | Left Front Door Ajar Switch . . . . .                    | 8W-39-4, 5                                   |
| Driver Cylinder Lock Switch . . . . .                 | 8W-39-7            | Left Front Park/Turn Signal Lamp . . . . .               | 8W-39-11                                     |
| Driver Door Lock Motor . . . . .                      | 8W-39-9            | Left Low Beam Headlamp . . . . .                         | 8W-39-13                                     |
| Driver Door Lock Switch . . . . .                     | 8W-39-7, 10        | Left Rear Door Ajar Switch . . . . .                     | 8W-39-4, 5                                   |
| Driver Door Power Lock Motor/Ajar<br>Switch . . . . . | 8W-39-4, 9         | Left Rear Door Power Lock Motor . . . . .                | 8W-39-8                                      |
| Fuse 1 (FB) . . . . .                                 | 8W-39-2            | Liftgate Ajar Switch . . . . .                           | 8W-39-6                                      |
| Fuse 3 (FB) . . . . .                                 | 8W-39-2            | Liftgate Cylinder Lock Switch . . . . .                  | 8W-39-7                                      |
| Fuse 10 (FB) . . . . .                                | 8W-39-2, 3         | Liftgate Power Lock Motor . . . . .                      | 8W-39-8                                      |
| Fuse 14 (PDC) . . . . .                               | 8W-39-12           | Low Note Horn . . . . .                                  | 8W-39-12                                     |
| Fuse 18 (PDC) . . . . .                               | 8W-39-3, 14        | Passenger Cylinder Lock Switch . . . . .                 | 8W-39-7                                      |
| Fuse 19 (FB) . . . . .                                | 8W-39-13           | Passenger Door Lock Motor . . . . .                      | 8W-39-9                                      |
| Fuse 20 (FB) . . . . .                                | 8W-39-13           | Passenger Door Lock Switch . . . . .                     | 8W-39-7, 10                                  |
| Fuse Block . . . . .                                  | 8W-39-2, 3, 13     | Passenger Door Power Lock<br>Motor/Ajar Switch . . . . . | 8W-39-4, 9                                   |
| G102 . . . . .                                        | 8W-39-6            | Power Distribution Center . . . . .                      | 8W-39-3, 12, 14                              |
| G103 . . . . .                                        | 8W-39-11, 14       | Remote Keyless Entry Module . .                          | 8W-39-2, 4, 5, 6, 7,<br>8, 9, 10, 12, 13, 14 |
| G104 . . . . .                                        | 8W-39-11, 12       | Right Front Door Ajar Switch . . . . .                   | 8W-39-4, 5                                   |
| G200 . . . . .                                        | 8W-39-2, 3         | Right Front Park/Turn Signal Lamp . . . . .              | 8W-39-11                                     |
| G201 . . . . .                                        | 8W-39-2            | Right Low Beam Headlamp . . . . .                        | 8W-39-13                                     |
| G300 . . . . .                                        | 8W-39-6            | Right Rear Door Ajar Switch . . . . .                    | 8W-39-4, 5                                   |
| Headlamp Switch . . . . .                             | 8W-39-10           | Right Rear Door Power Lock Motor . . . . .               | 8W-39-8                                      |
| High Note Horn . . . . .                              | 8W-39-12           | Sentry Key Immobilizer Module . . . . .                  | 8W-39-3                                      |
| Hood Ajar Switch . . . . .                            | 8W-39-6            | Siren . . . . .                                          | 8W-39-14                                     |
| Horn Relay . . . . .                                  | 8W-39-12           |                                                          |                                              |
| Instrument Cluster . . . . .                          | 8W-39-4, 5, 10, 13 |                                                          |                                              |

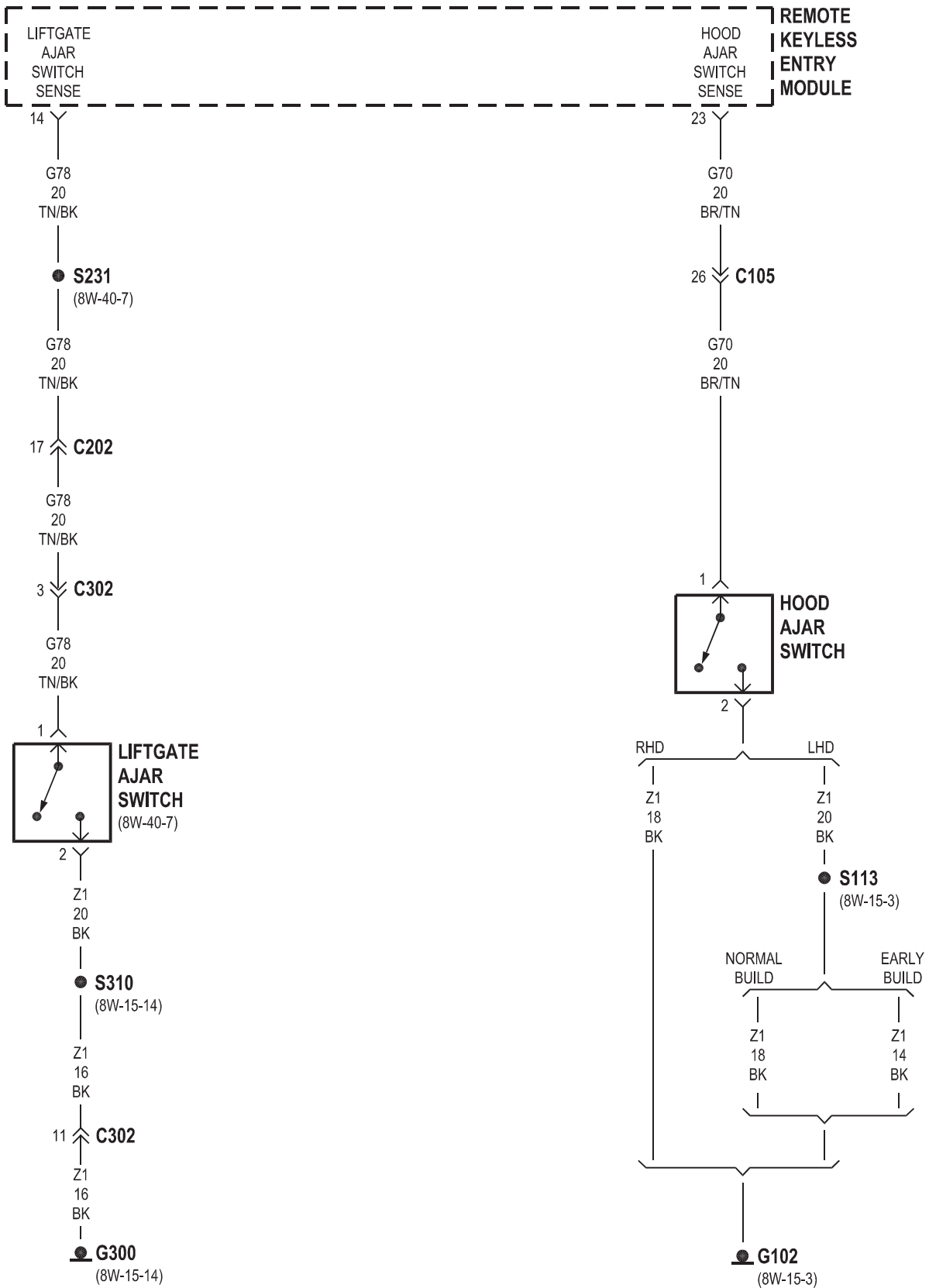


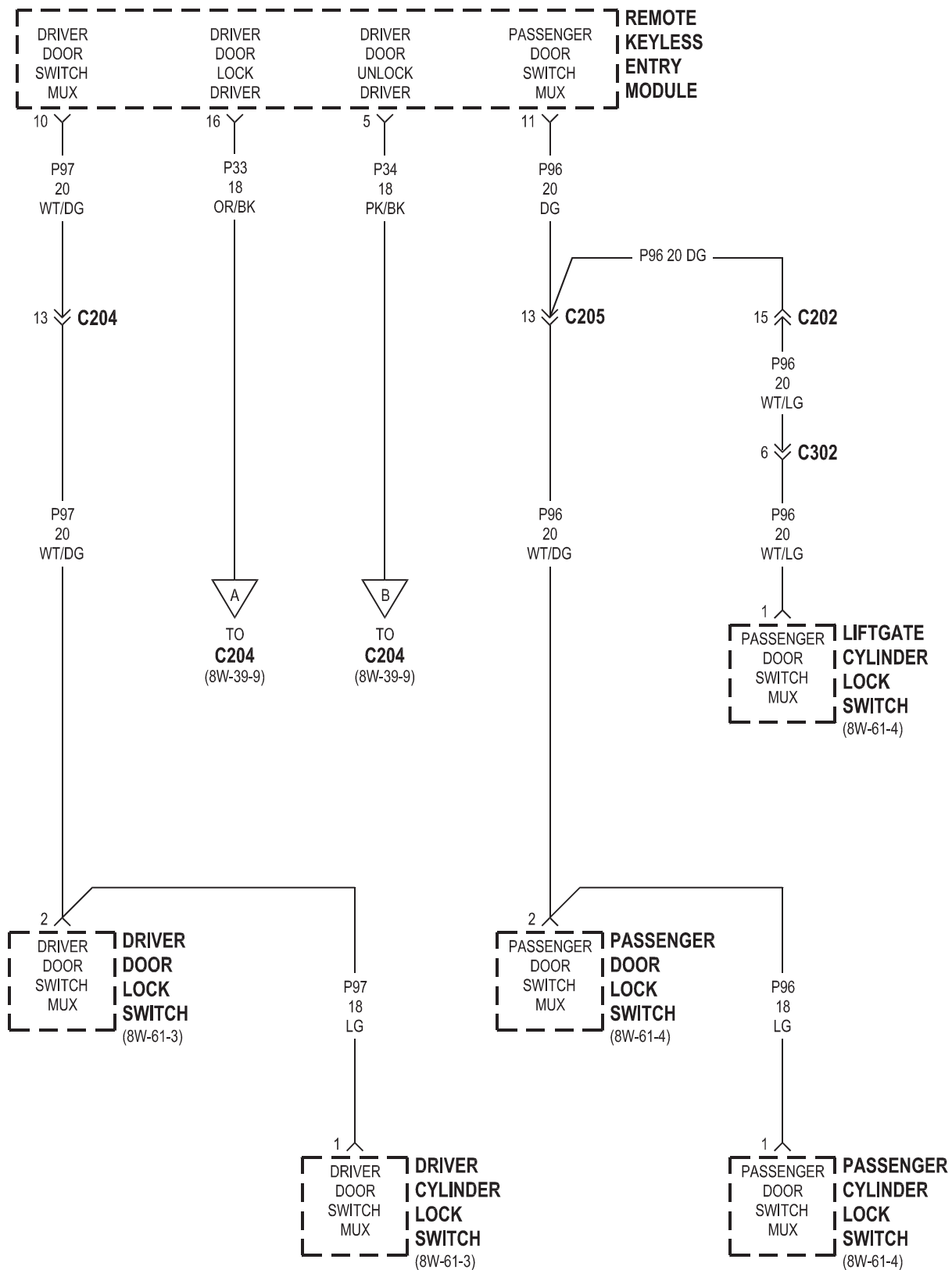


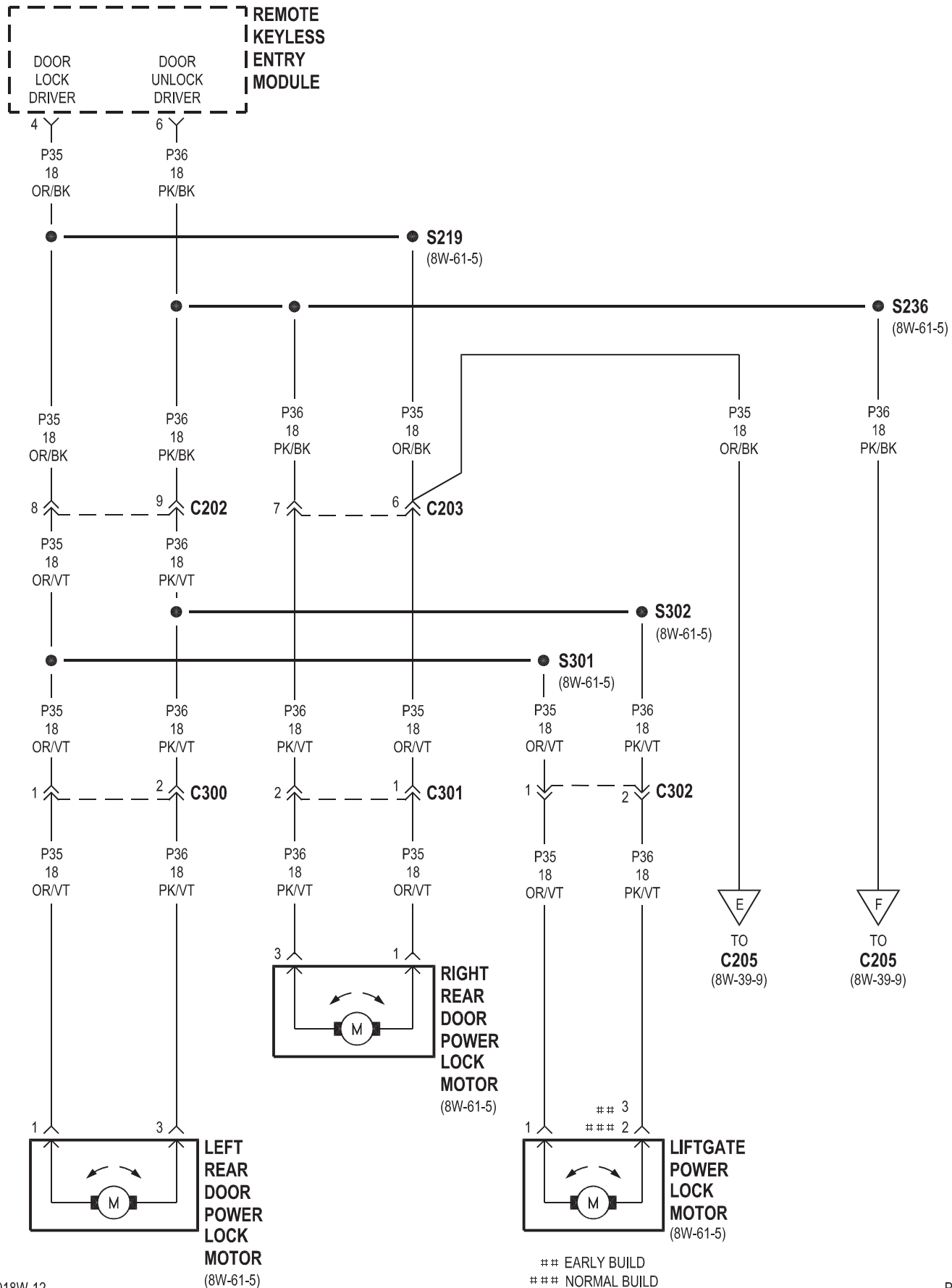


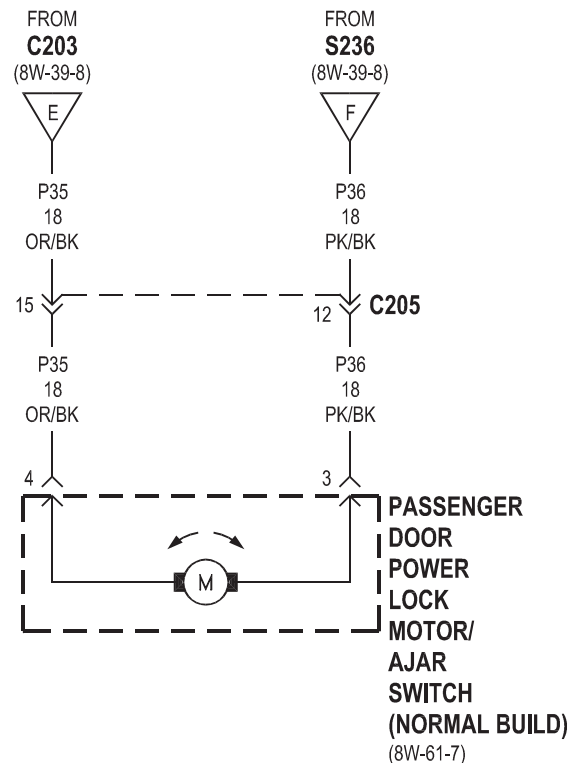
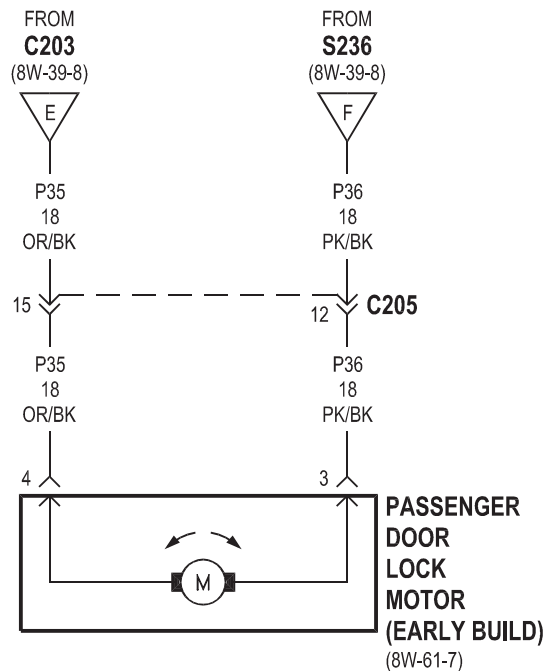
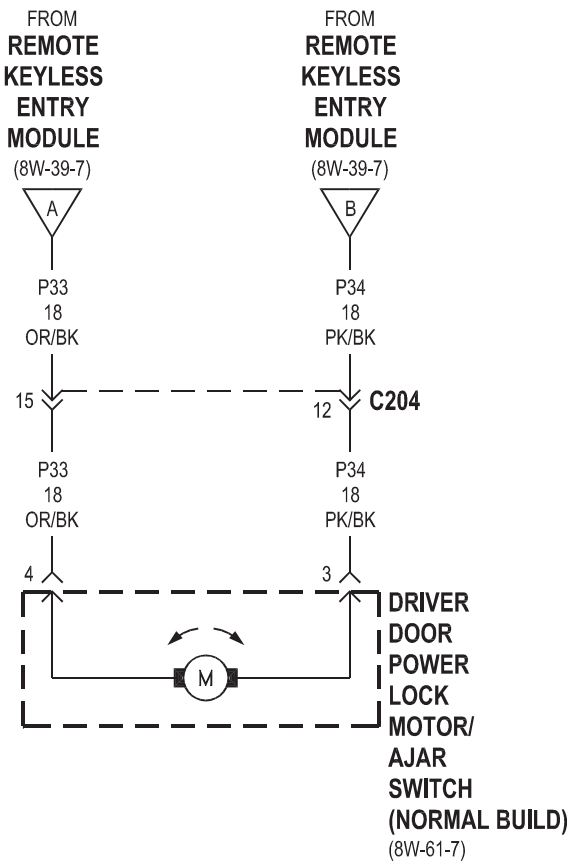
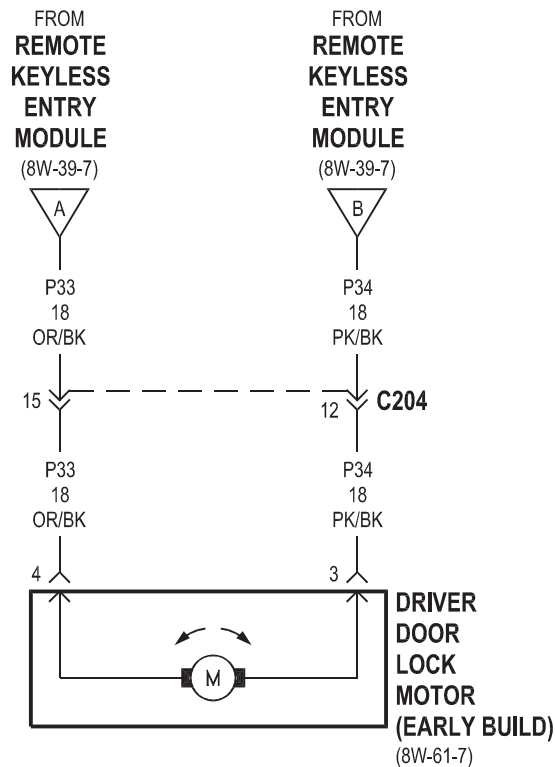


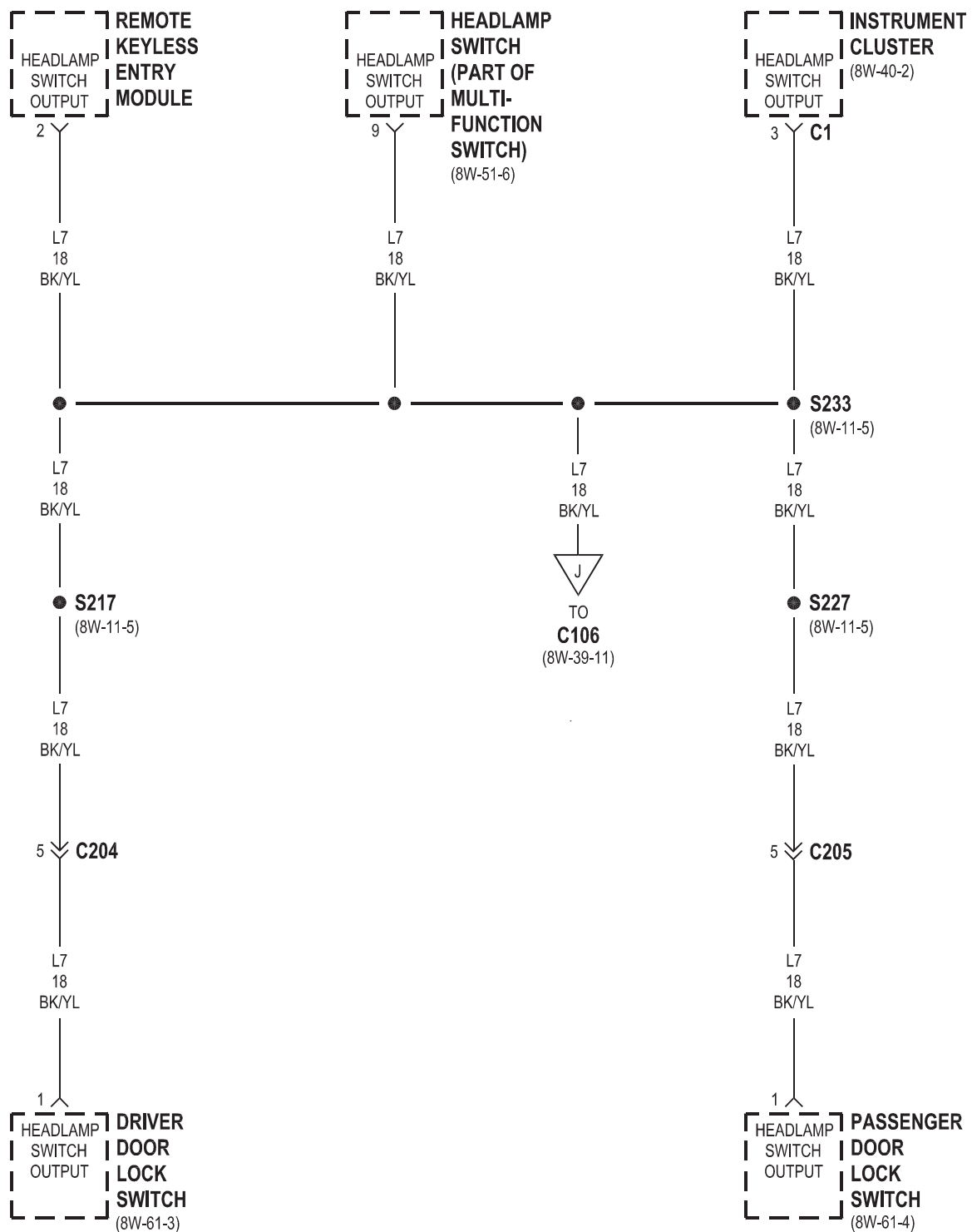


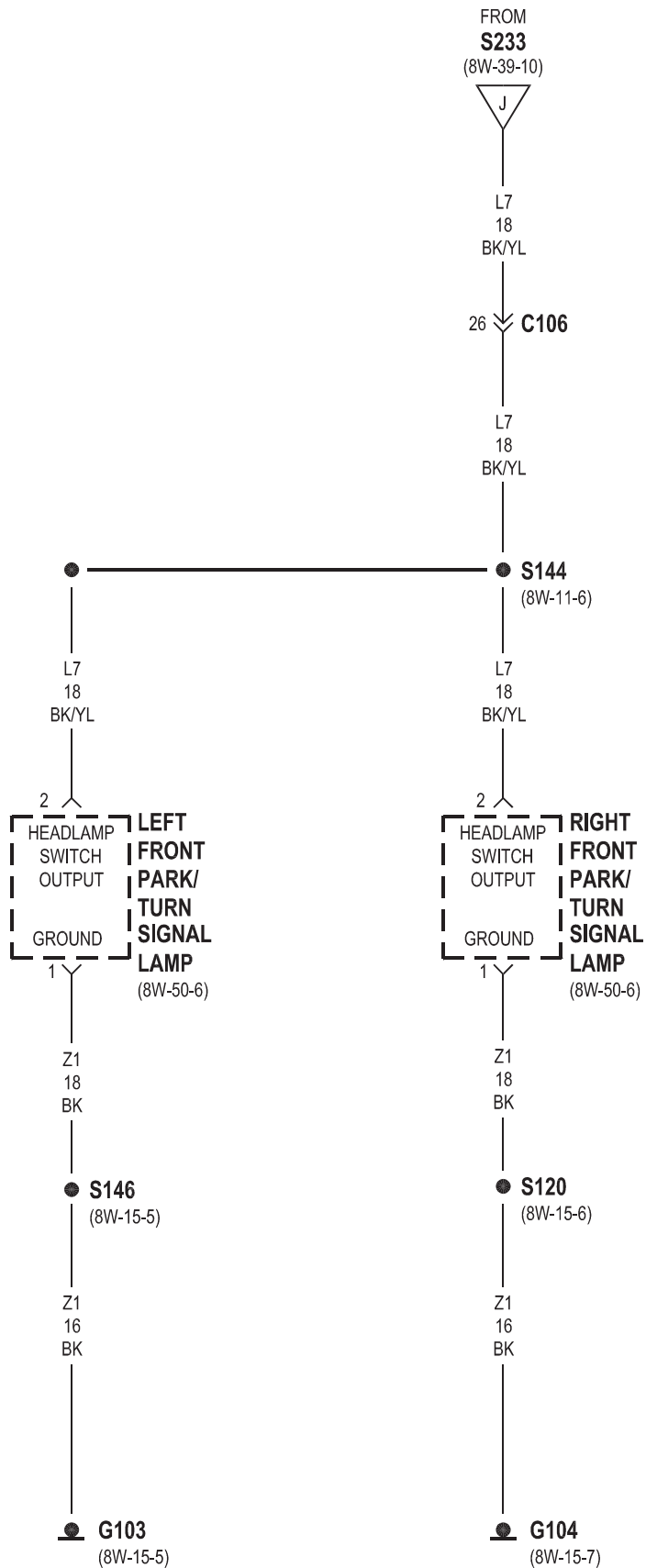




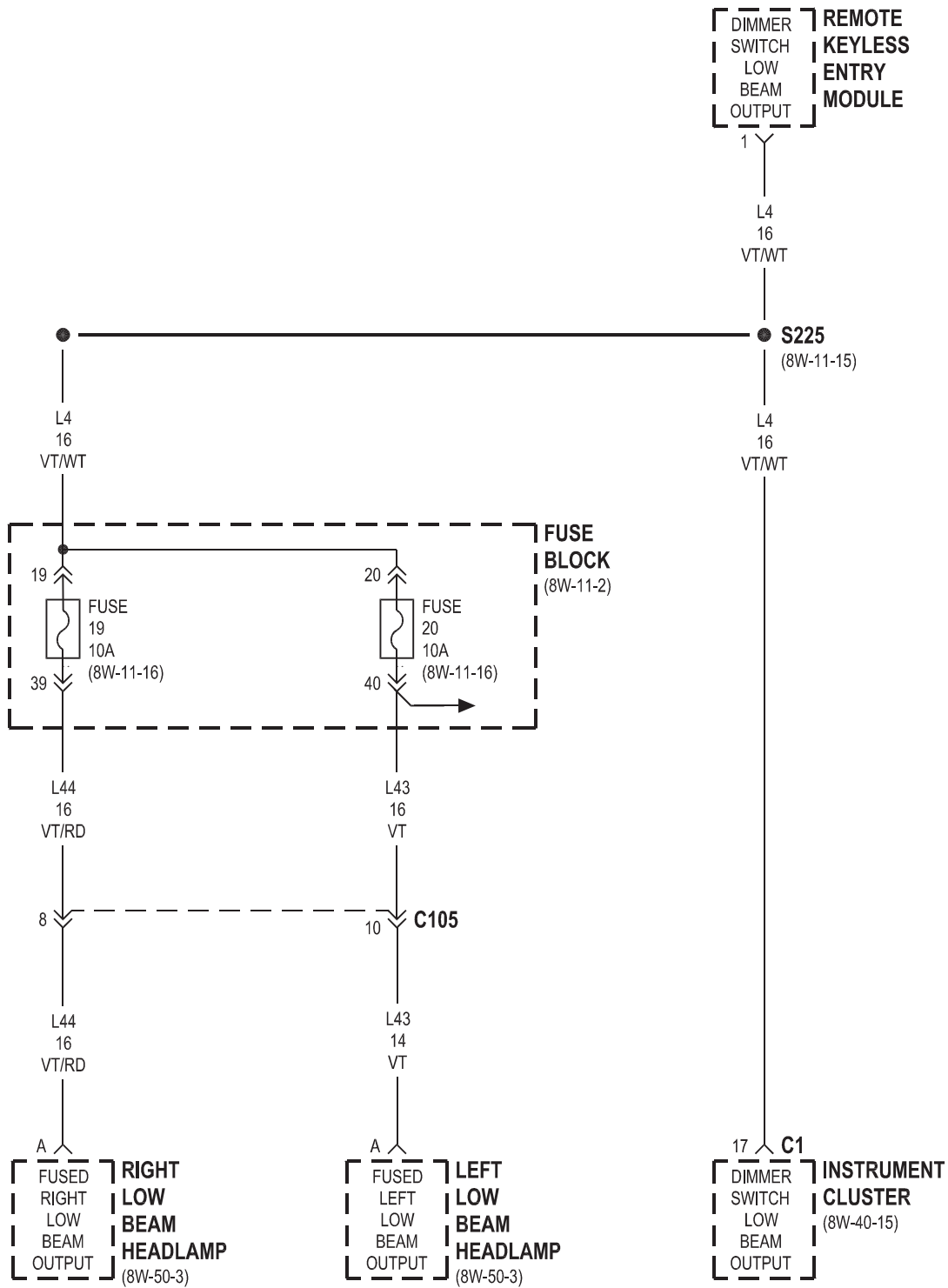




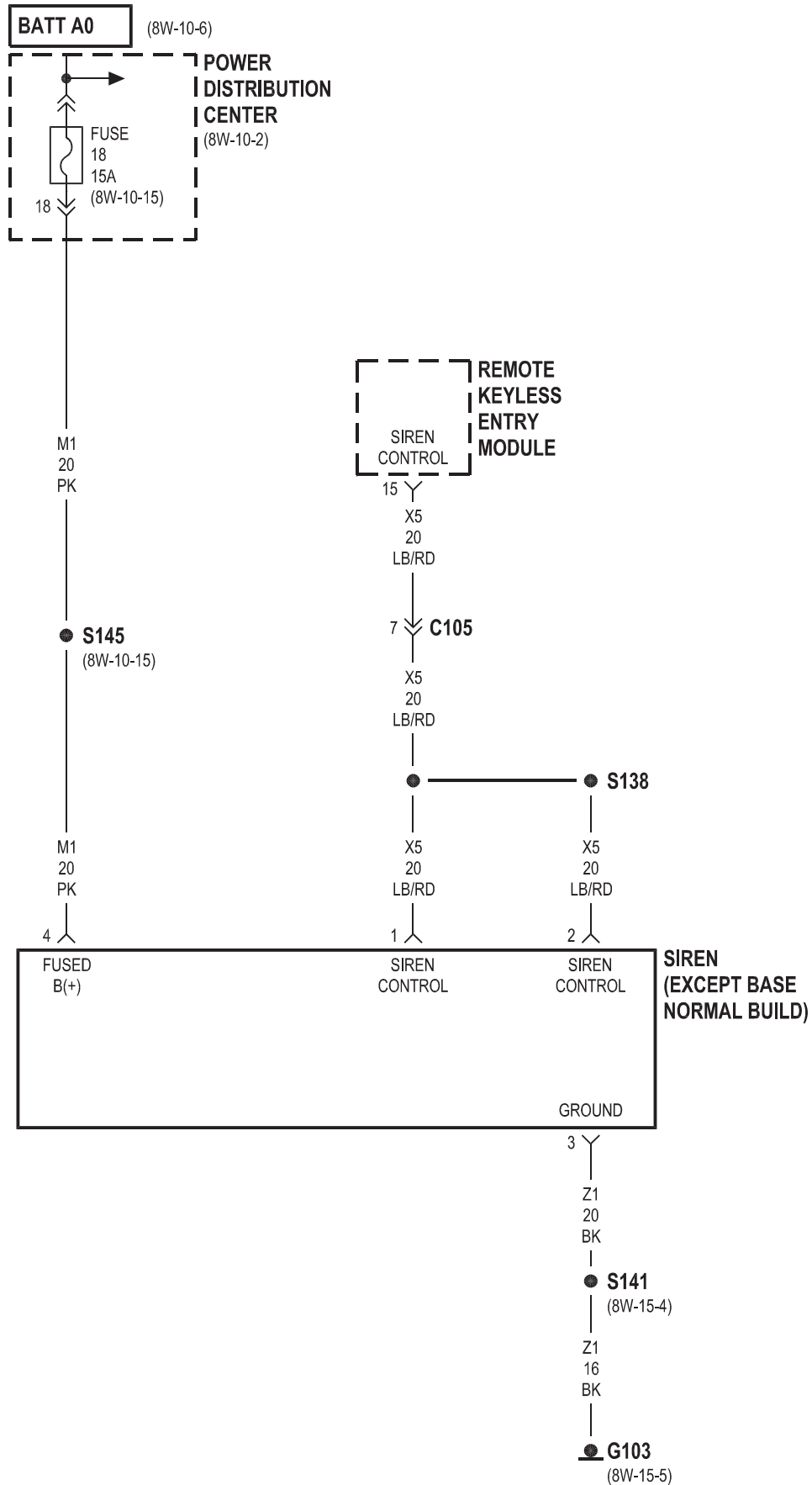








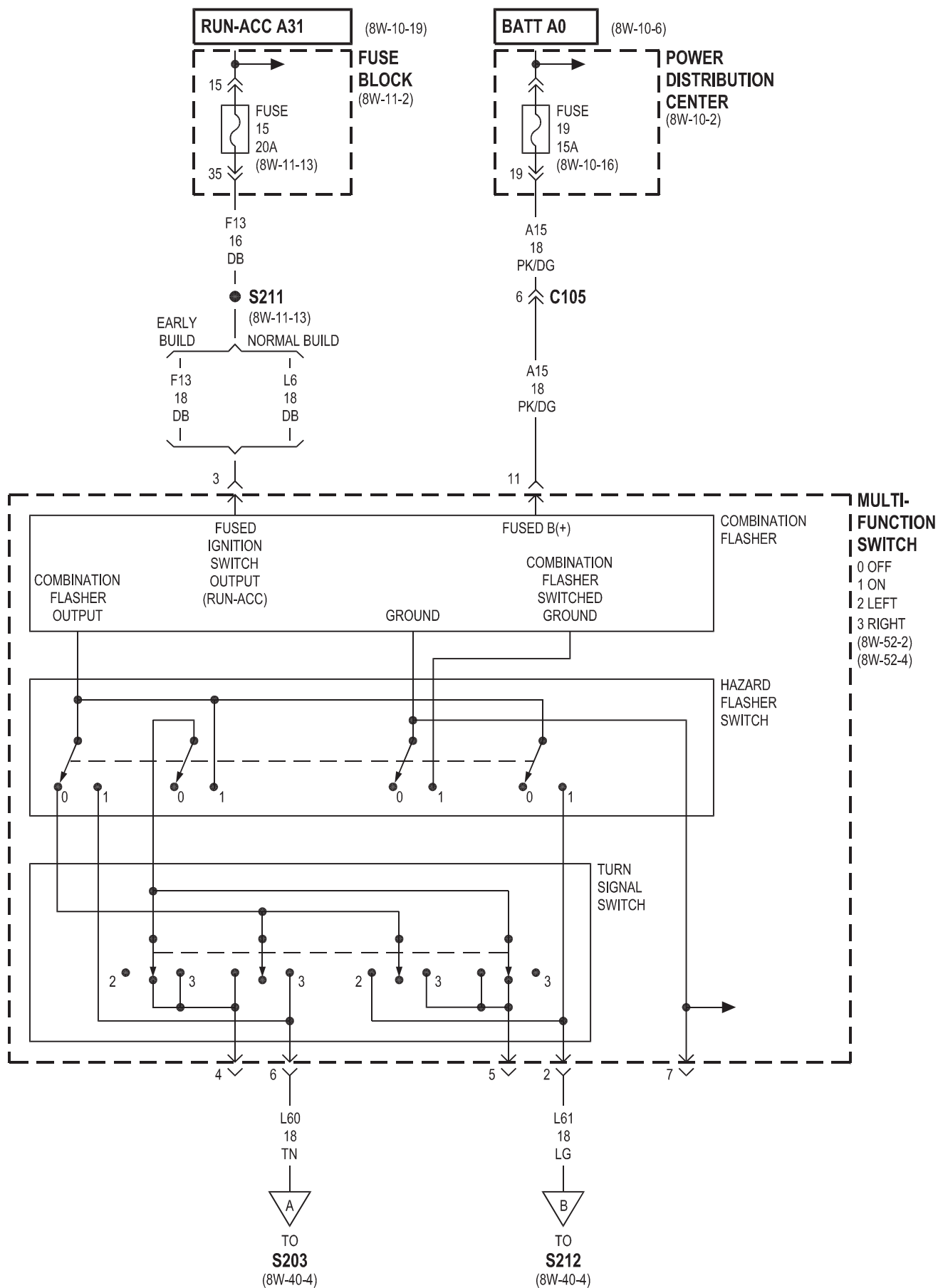


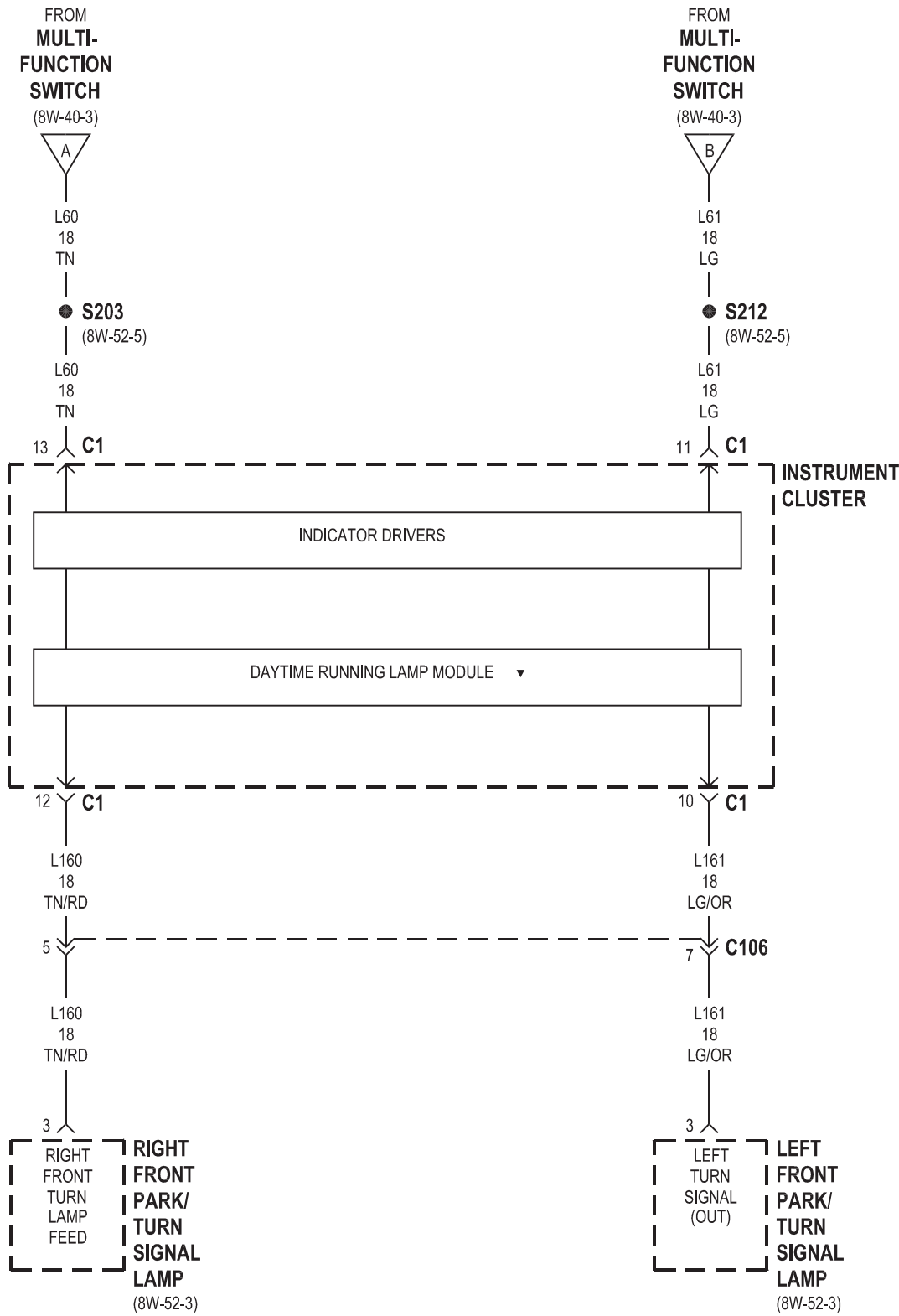


## 8W-40 INSTRUMENT CLUSTER

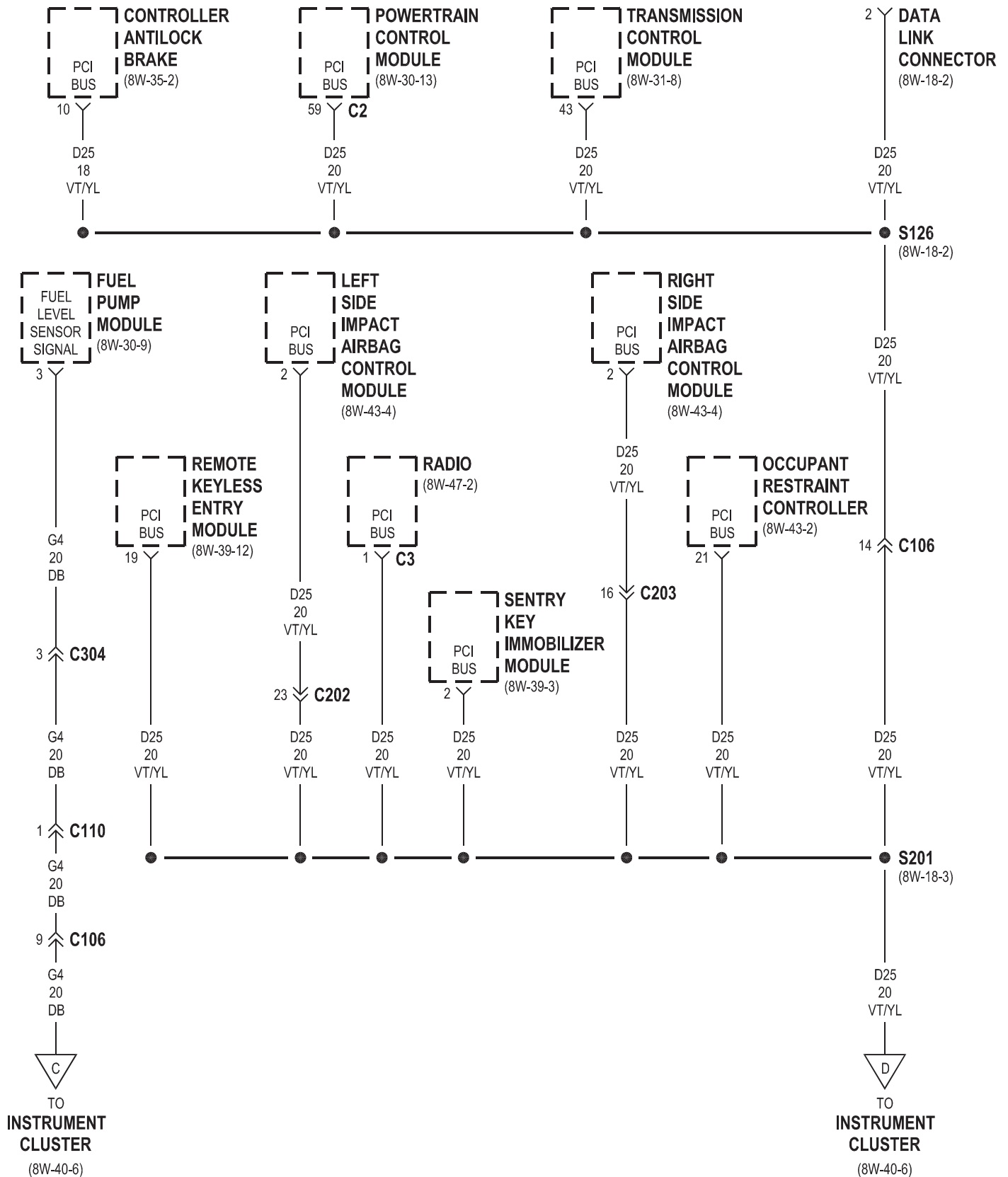
| <b>Component</b>                                      | <b>Page</b>                                           | <b>Component</b>                             | <b>Page</b>      |
|-------------------------------------------------------|-------------------------------------------------------|----------------------------------------------|------------------|
| A/C- Heater Control Switch . . . . .                  | 8W-40-12                                              | Left Front Door Ajar Switch . . . . .        | 8W-40-7, 8, 9    |
| Cargo Lamp . . . . .                                  | 8W-40-10                                              | Left Front Park/Turn Signal Lamp . . . . .   | 8W-40-4          |
| Center Stack Lamp . . . . .                           | 8W-40-12                                              | Left Rear Door Ajar Switch . . . . .         | 8W-40-8, 9       |
| Circuit Breaker No. 1 (FB) . . . . .                  | 8W-40-15                                              | Left Side Impact Airbag Control Module . . . | 8W-40-5          |
| Controller Antilock Brake . . . . .                   | 8W-40-5                                               | Liftgate Ajar Switch . . . . .               | 8W-40-7          |
| Data Link Connector . . . . .                         | 8W-40-5                                               | Map/Reading Lamps . . . . .                  | 8W-40-10         |
| Dome Lamp . . . . .                                   | 8W-40-10                                              | Multi- Function Switch . . . . .             | 8W-40-3, 4, 11   |
| Driver Door Power Lock                                |                                                       | Occupant Restraint Controller . . . . .      | 8W-40-5          |
| Motor/Ajar Switch . . . . .                           | 8W-40-8                                               | Overhead Console Module . . . . .            | 8W-40-10, 12     |
| Driver Seat Belt Switch . . . . .                     | 8W-40-13, 14                                          | Parking Brake Switch . . . . .               | 8W-40-13, 14     |
| Front Power Window Switch . . . . .                   | 8W-40-12                                              | Passenger Door Power Lock                    |                  |
| Fuel Pump Module . . . . .                            | 8W-40-5                                               | Motor/Ajar Switch . . . . .                  | 8W-40-8          |
| Fuse 2 (FB) . . . . .                                 | 8W-40-2                                               | Power Distribution Center . . . . .          | 8W-40-2, 3       |
| Fuse 8 (FB) . . . . .                                 | 8W-40-16                                              | Powertrain Control Module . . . . .          | 8W-40-5          |
| Fuse 10 (FB) . . . . .                                | 8W-40-2                                               | Radio . . . . .                              | 8W-40-5, 12      |
| Fuse 15 (FB) . . . . .                                | 8W-40-3                                               | Rear Window Defogger Switch . . . . .        | 8W-40-12         |
| Fuse 18 (PDC) . . . . .                               | 8W-40-2                                               | Rear Wiper Switch . . . . .                  | 8W-40-12         |
| Fuse 19 (PDC) . . . . .                               | 8W-40-3                                               | Remote Keyless Entry Module . . . .          | 8W-40-5, 7, 8, 9 |
| Fuse Block . . . . .                                  | 8W-40-2, 3, 15, 16                                    | Right Fog Lamp . . . . .                     | 8W-40-16         |
| G200 . . . . .                                        | 8W-40-2, 11                                           | Right Front Door Ajar Switch . . . . .       | 8W-40-7, 8, 9    |
| G201 . . . . .                                        | 8W-40-2, 7, 11                                        | Right Front Park/Turn Signal Lamp . . . . .  | 8W-40-4          |
| G204 . . . . .                                        | 8W-40-7                                               | Right Rear Door Ajar Switch . . . . .        | 8W-40-8, 9       |
| G300 . . . . .                                        | 8W-40-7                                               | Right Side Impact Airbag                     |                  |
| G302 . . . . .                                        | 8W-40-13, 14                                          | Control Module . . . . .                     | 8W-40-5          |
| Headlamp Relay . . . . .                              | 8W-40-16                                              | Sentry Key Immobilizer Module . . . . .      | 8W-40-5          |
| Headlamp Switch . . . 8W-40-2, 10, 11, 13, 14, 15, 16 |                                                       | Traction Control Switch . . . . .            | 8W-40-12         |
| Ignition Switch . . . . .                             | 8W-40-7                                               | Transmission Control Module . . . . .        | 8W-40-5          |
| Indicator Drivers . . . . .                           | 8W-40-9, 14                                           | Transmission Range Indicator                 |                  |
| Instrument Cluster . . . . .                          | 8W-40-2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16 | Illumination . . . . .                       | 8W-40-12         |
| Left Fog Lamp . . . . .                               | 8W-40-16                                              |                                              |                  |

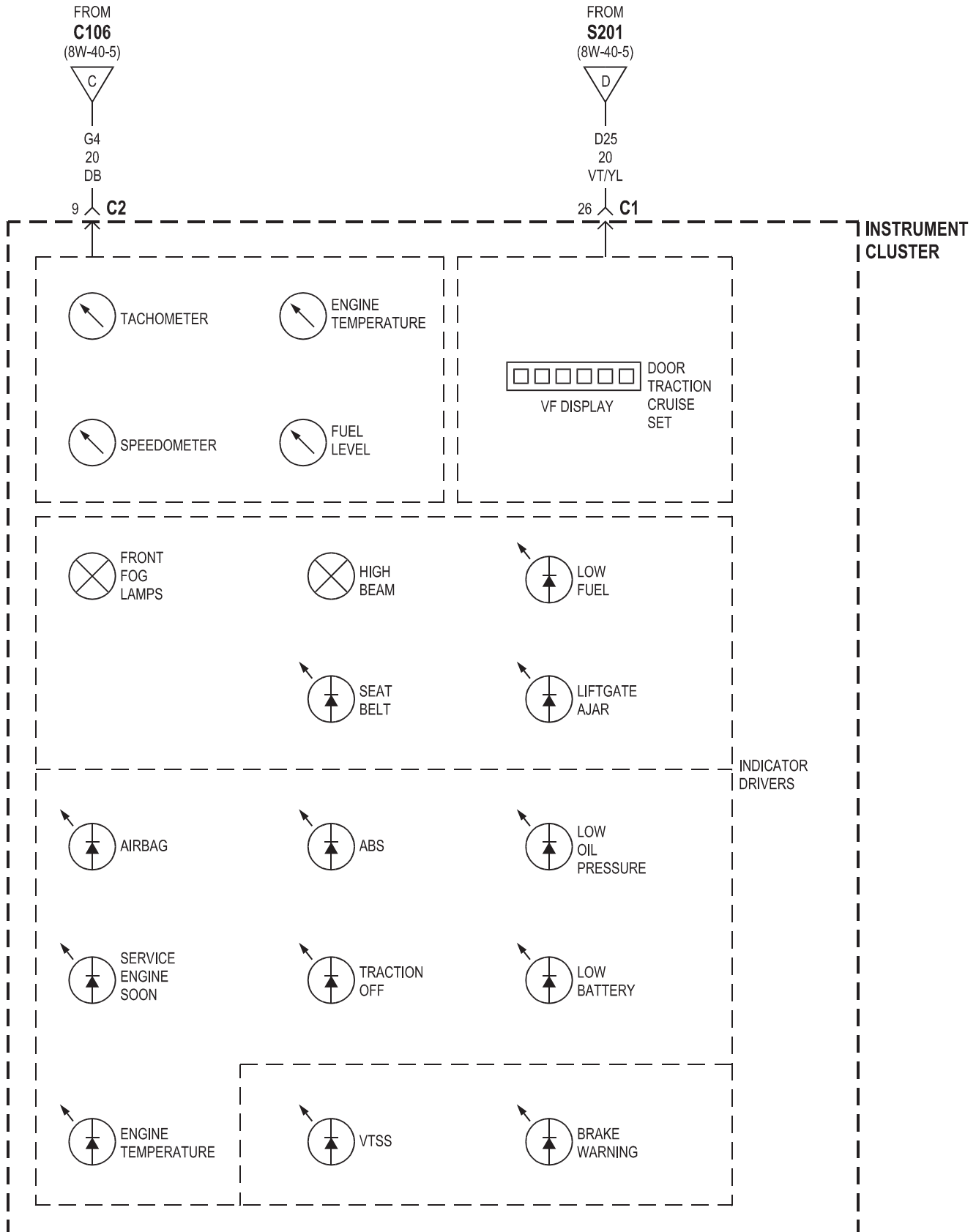


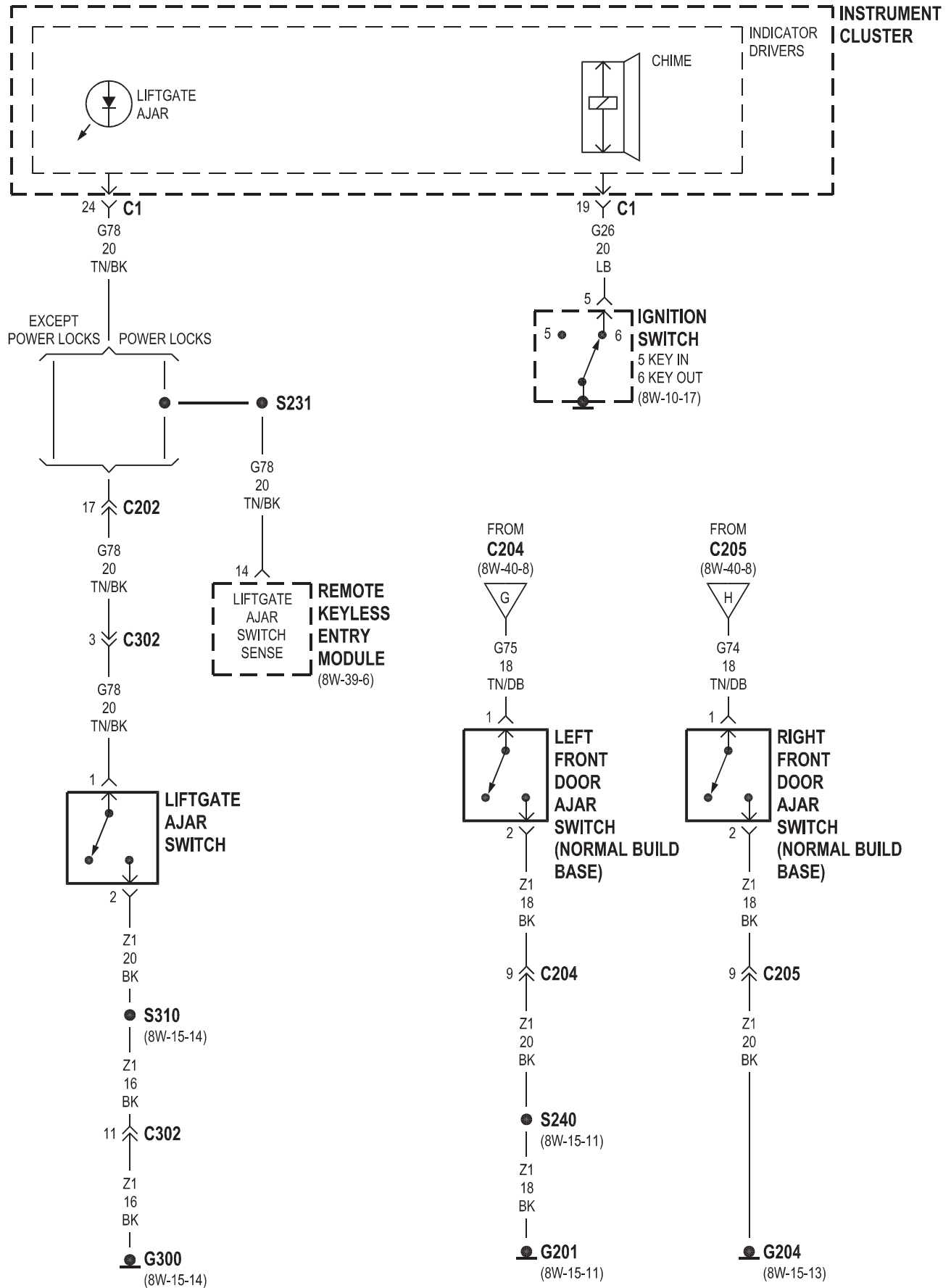




## PT 8W-40 INSTRUMENT CLUSTER 8W - 40 - 5





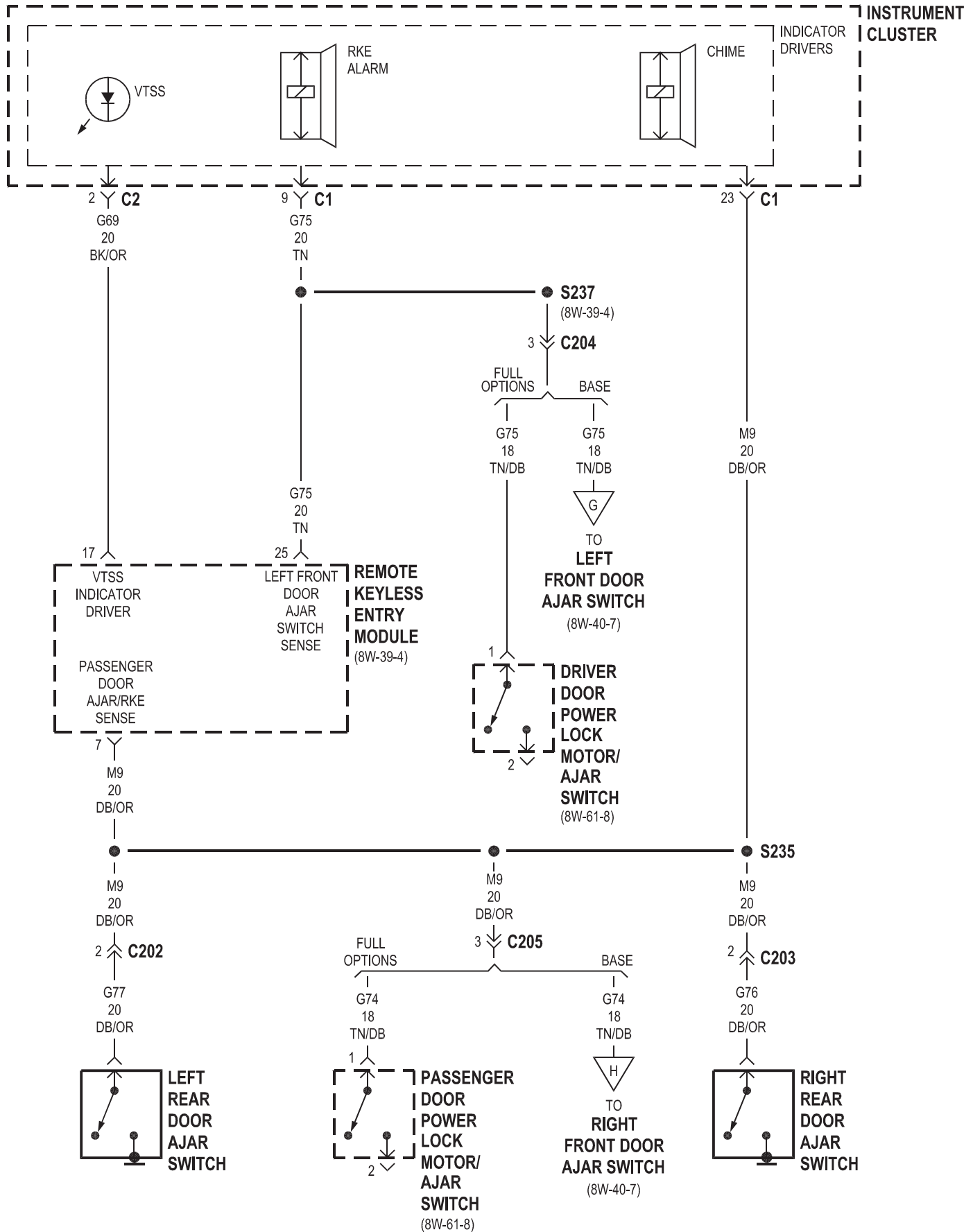


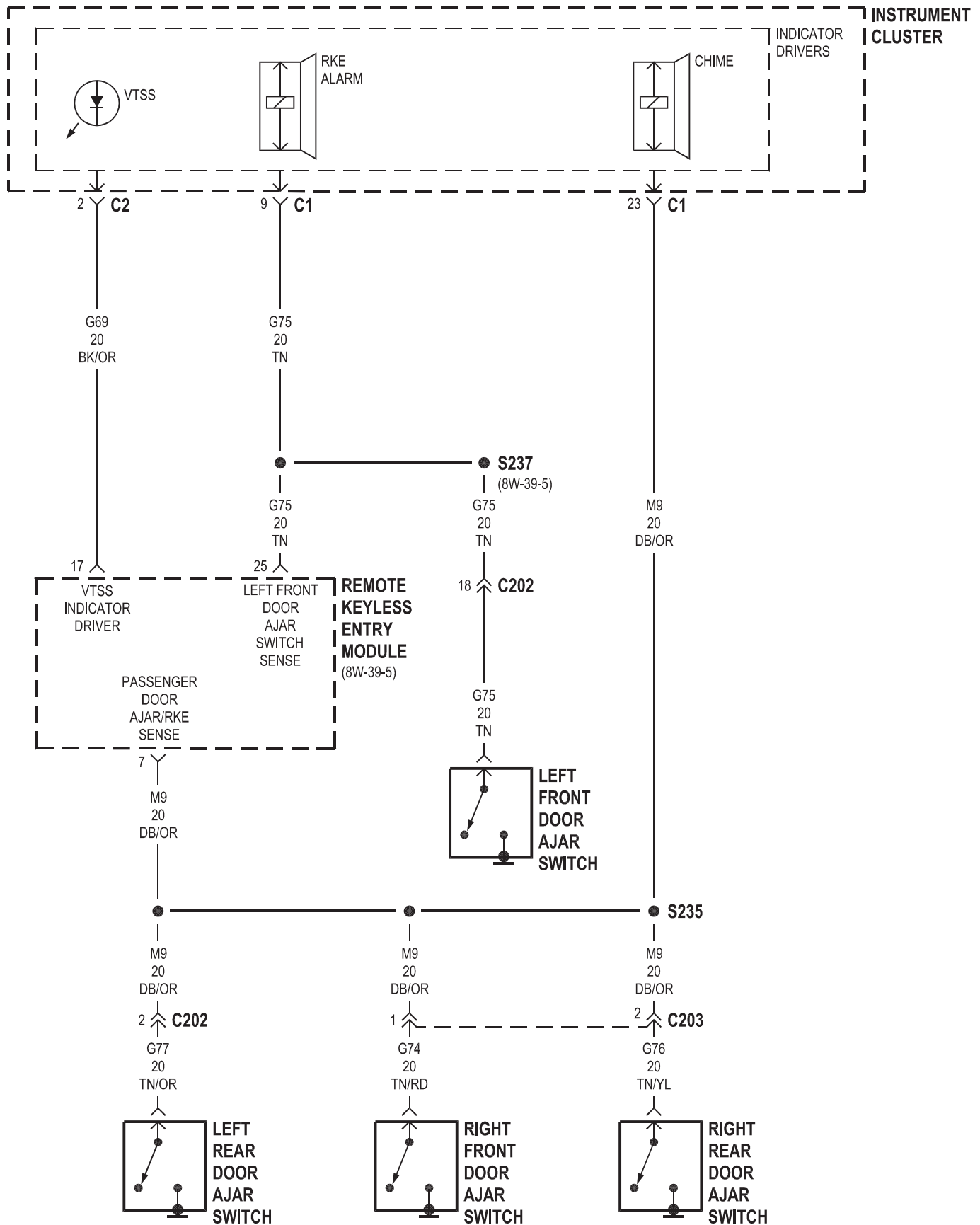


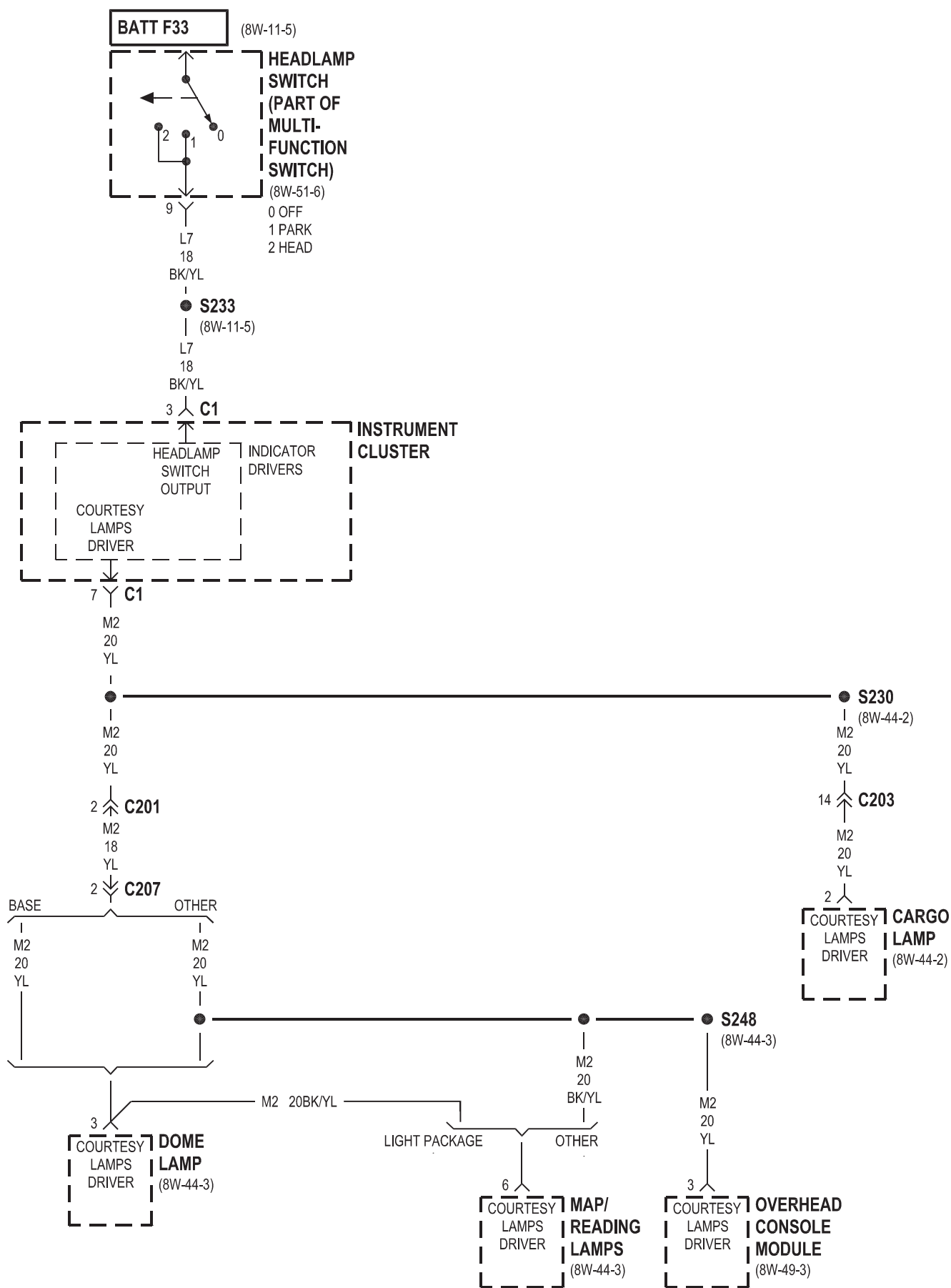
8W - 40 - 8

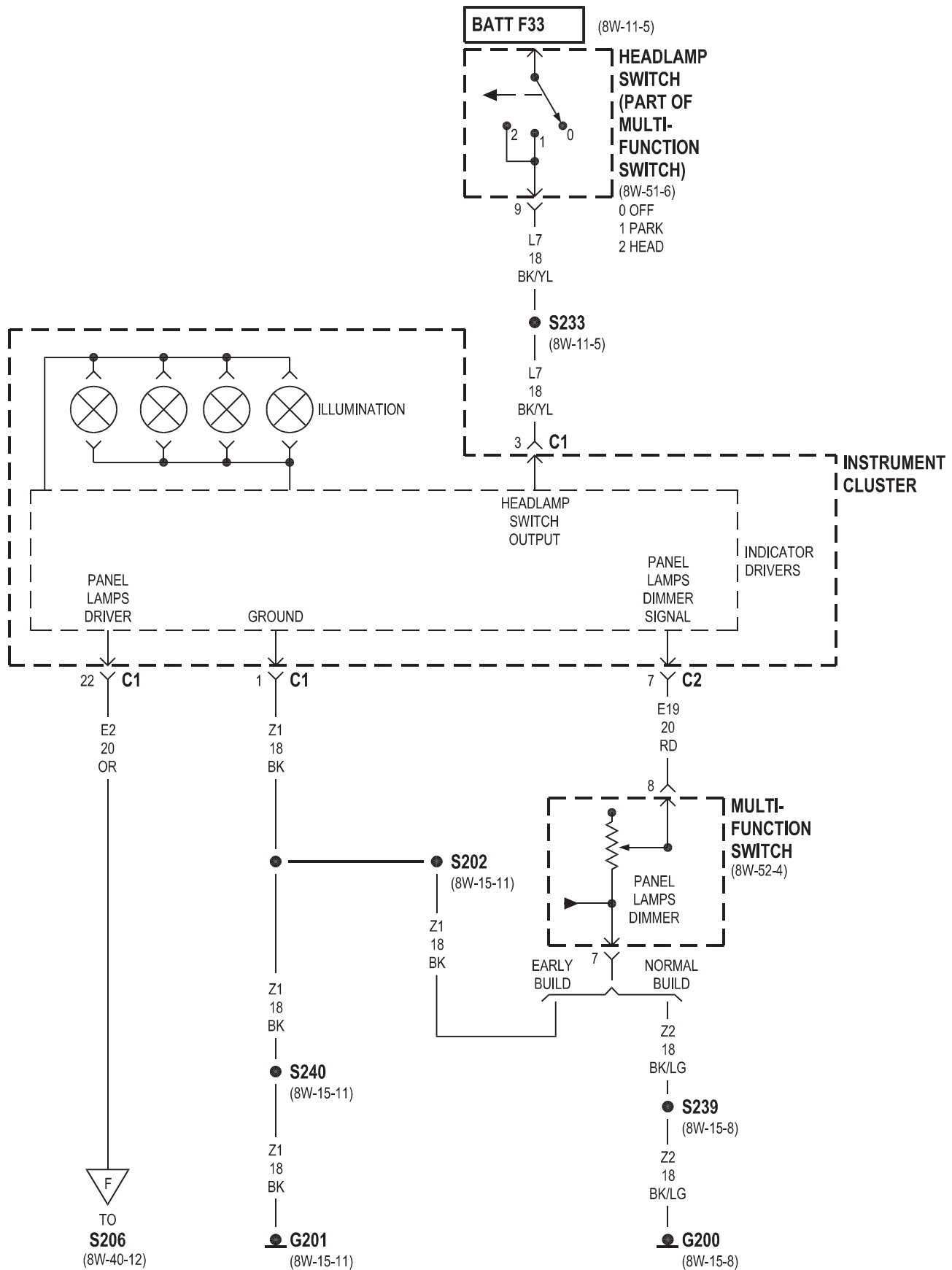
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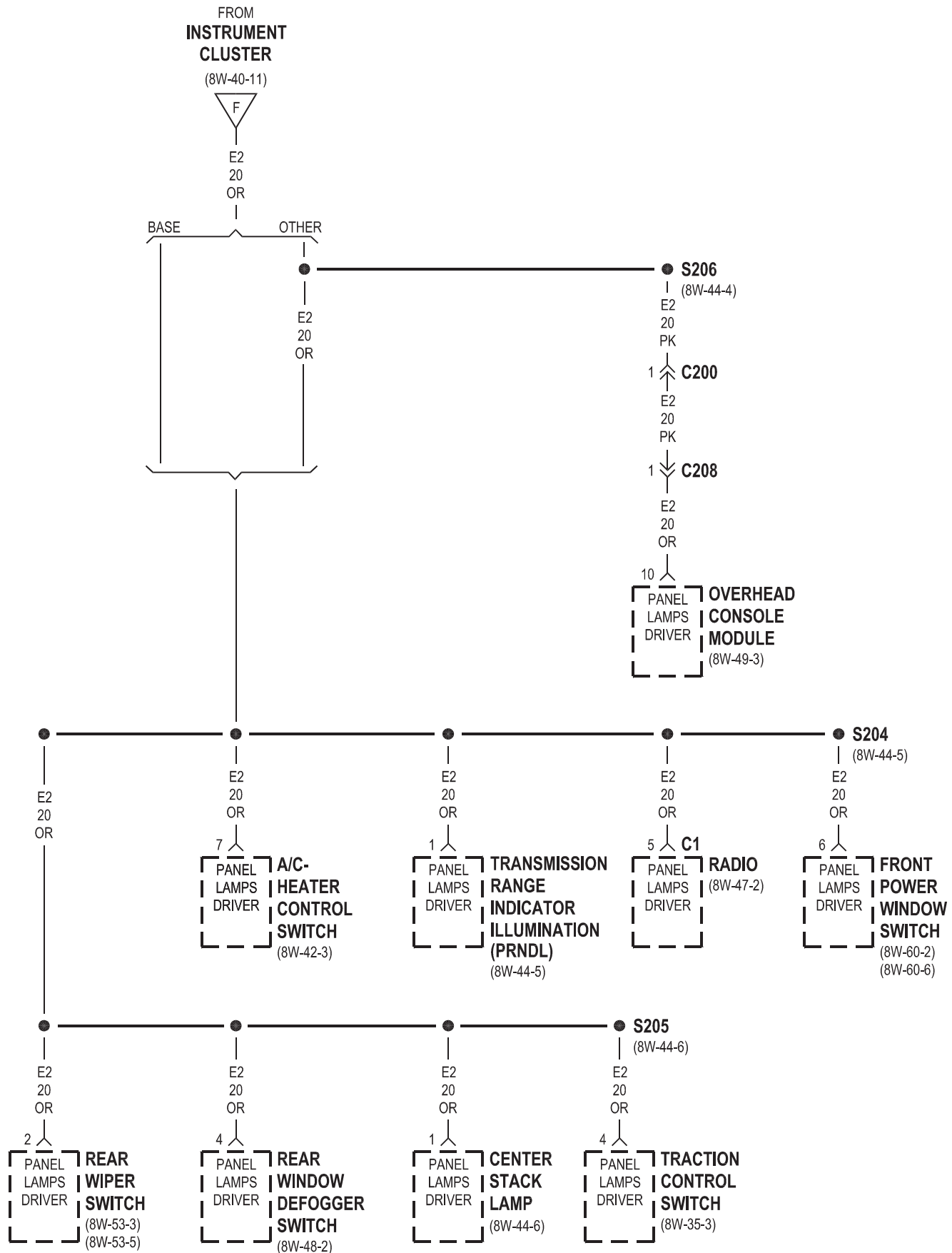
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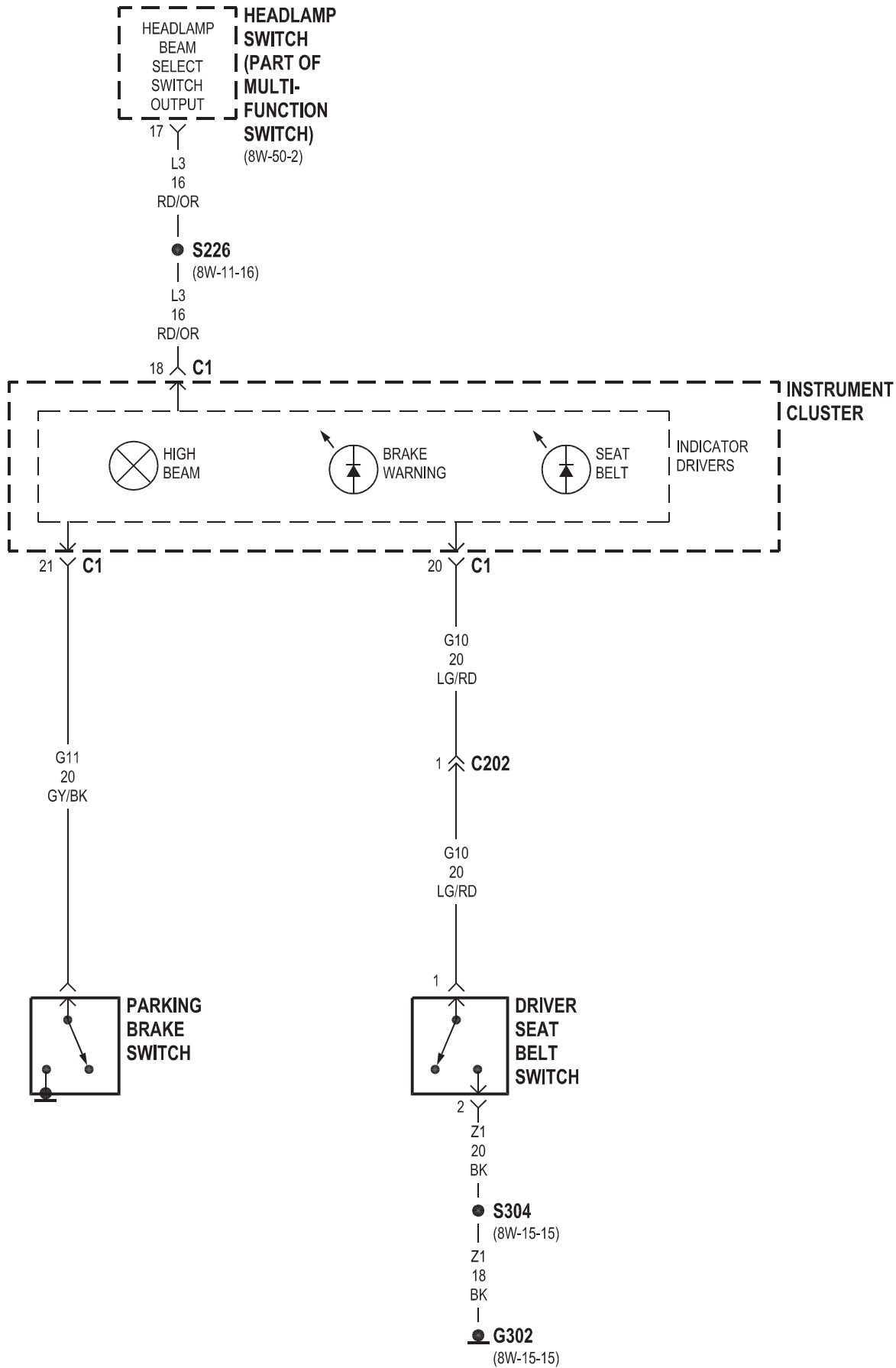


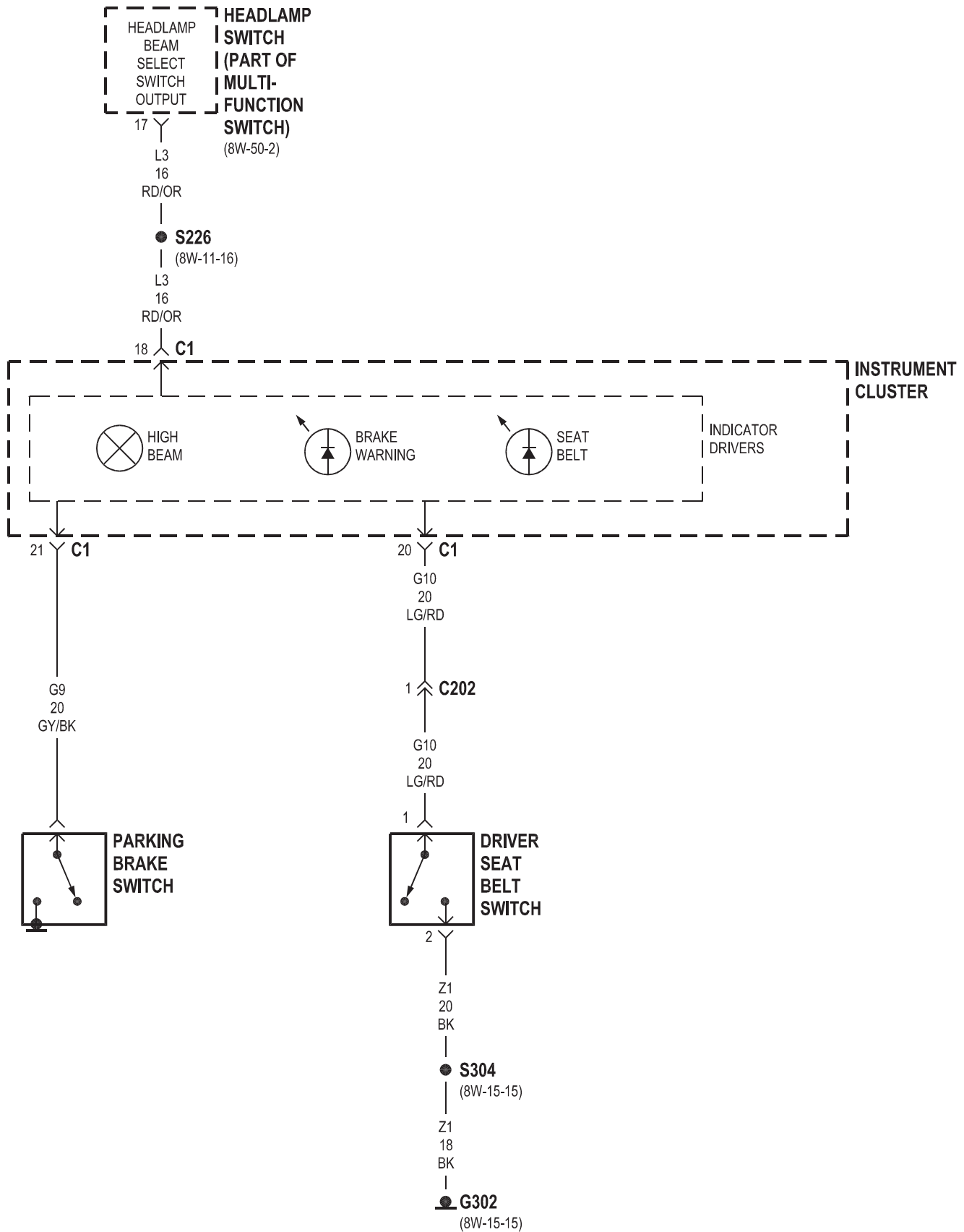


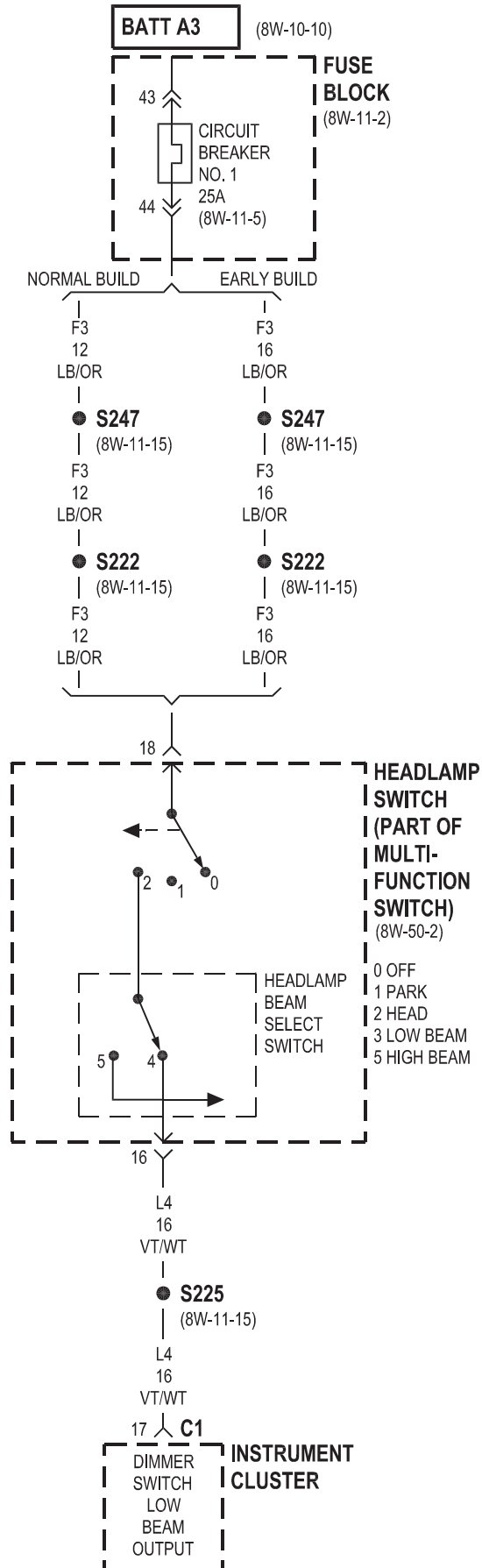




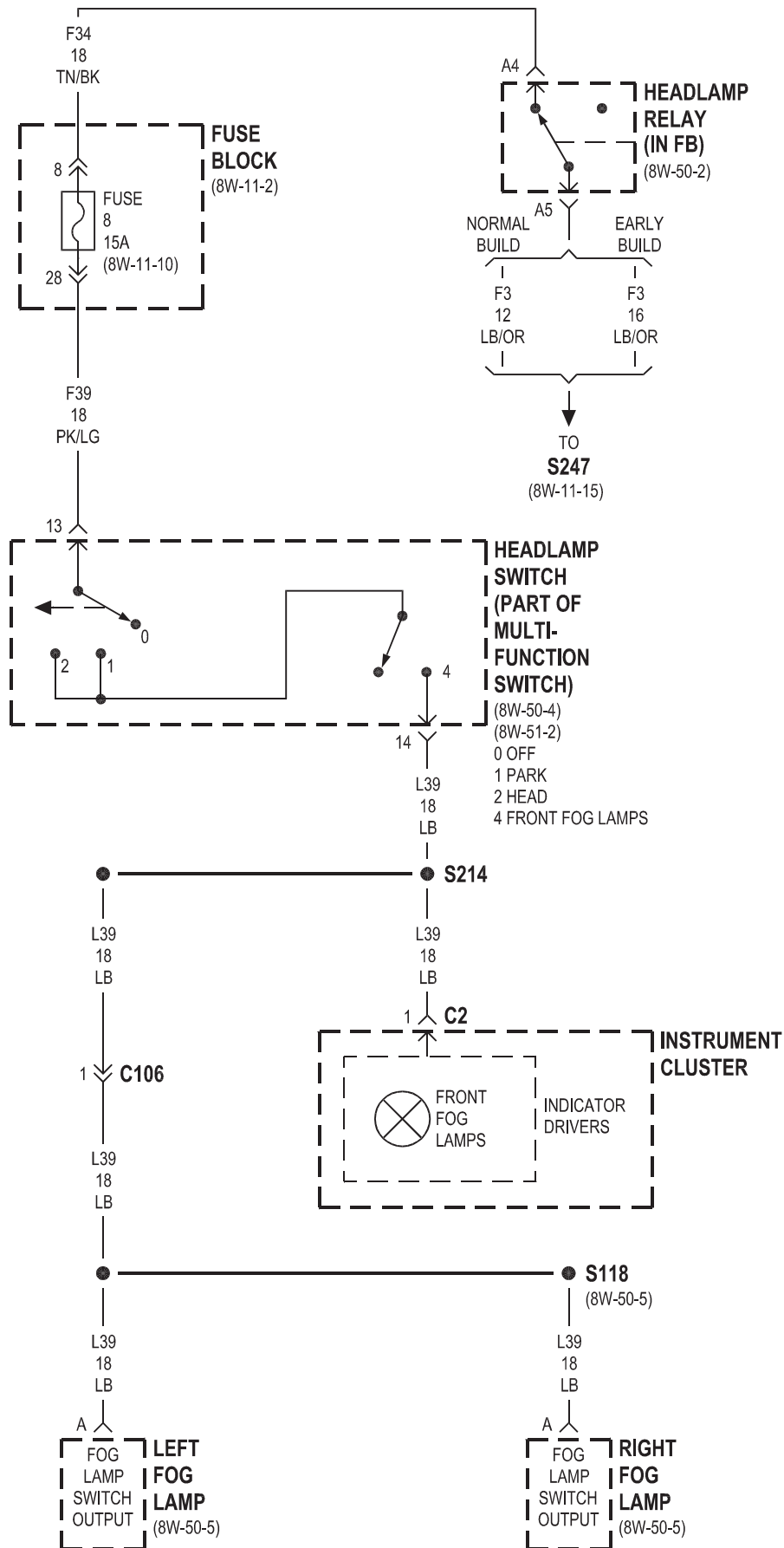






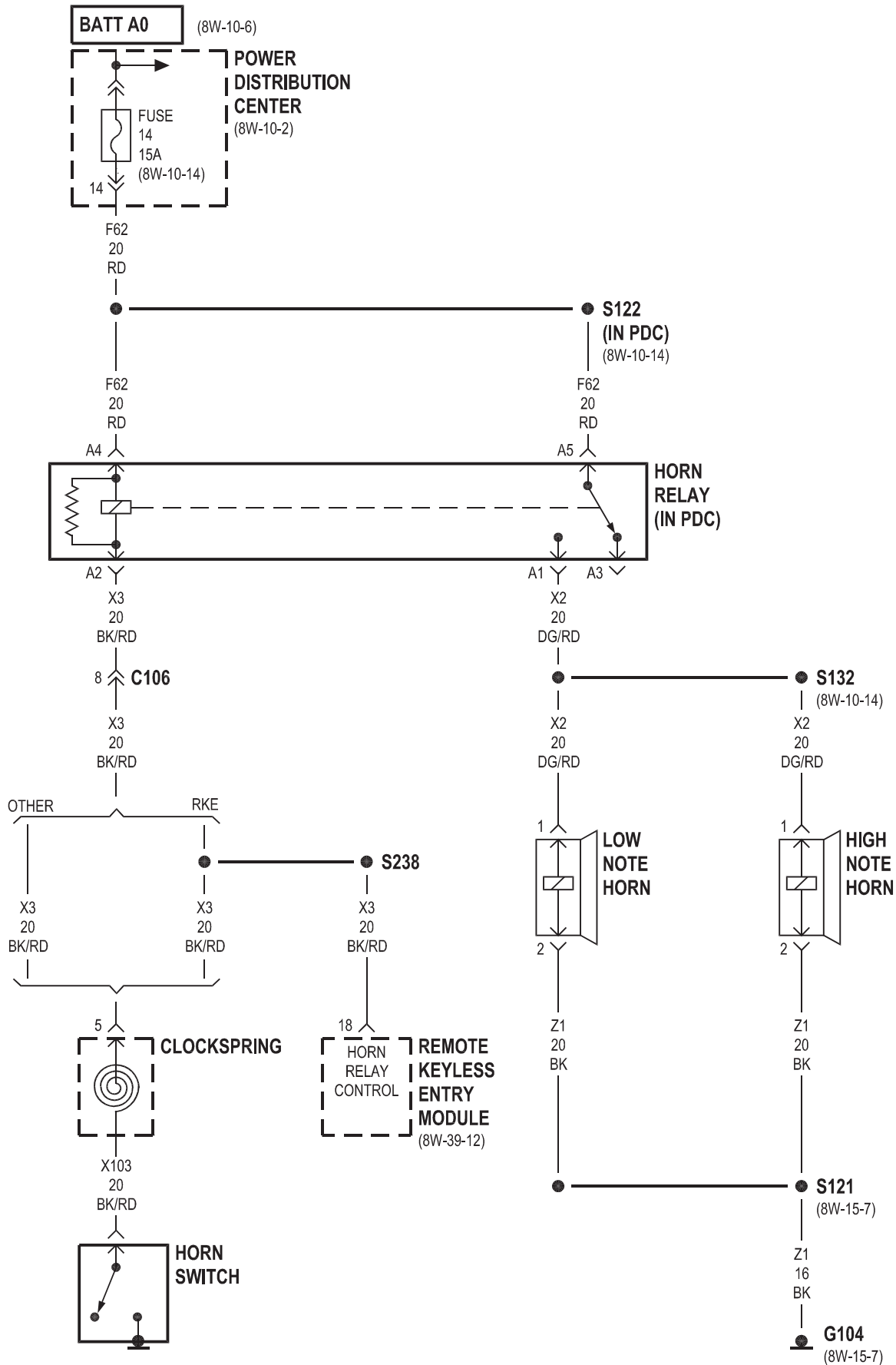


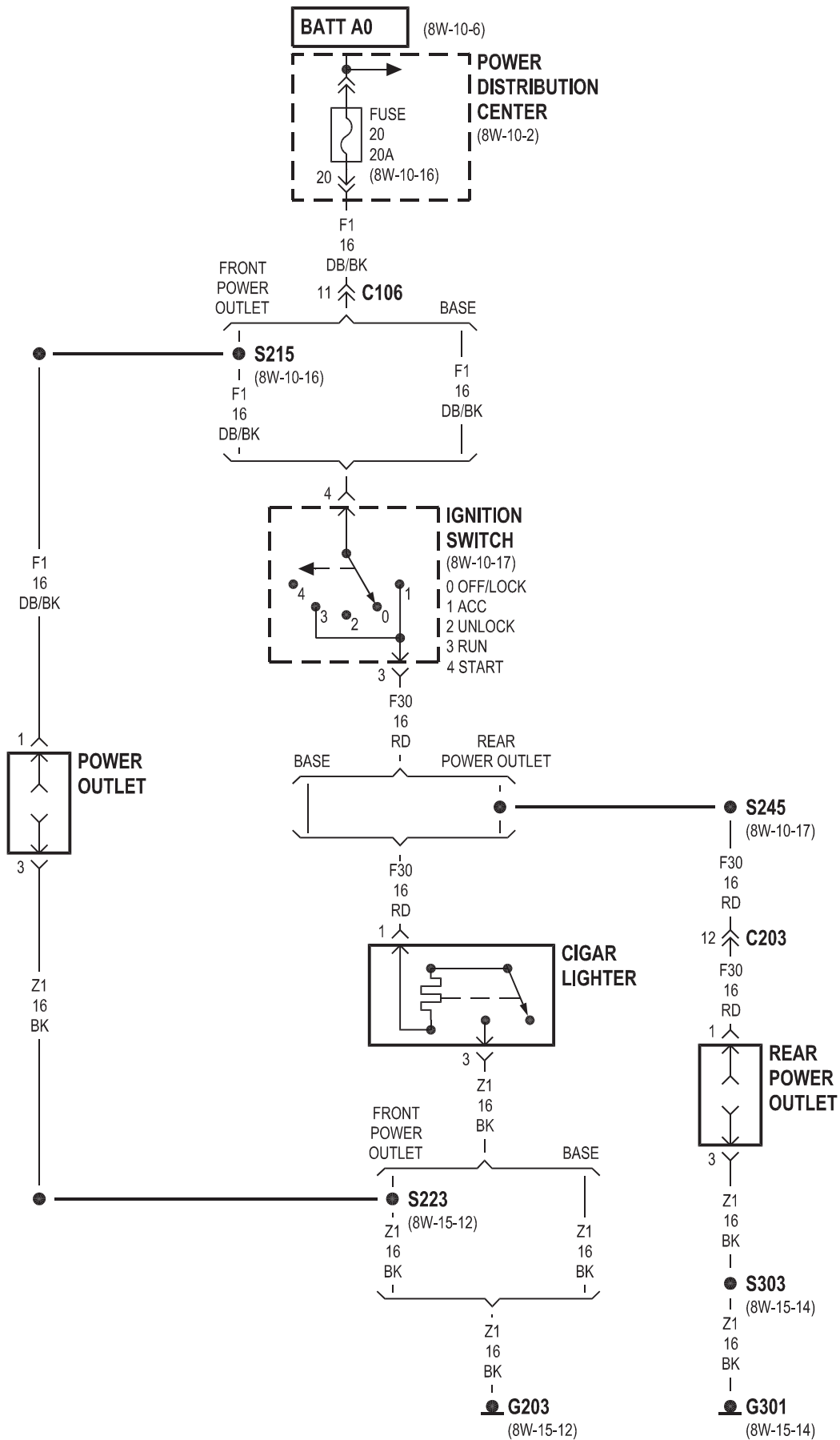




## 8W-41 HORN/CIGAR LIGHTER/POWER OUTLET

| <b>Component</b>     | <b>Page</b> | <b>Component</b>                  | <b>Page</b> |
|----------------------|-------------|-----------------------------------|-------------|
| Cigar Lighter .....  | 8W-41-3     | Horn Relay .....                  | 8W-41-2     |
| Clockspring .....    | 8W-41-2     | Horn Switch .....                 | 8W-41-2     |
| Fuse 14 (PDC) .....  | 8W-41-2     | Ignition Switch .....             | 8W-41-3     |
| Fuse 20 (PDC) .....  | 8W-41-3     | Low Note Horn .....               | 8W-41-2     |
| G104 .....           | 8W-41-2     | Power Distribution Center .....   | 8W-41-2, 3  |
| G203 .....           | 8W-41-3     | Power Outlet .....                | 8W-41-3     |
| G301 .....           | 8W-41-3     | Remote Keyless Entry Module ..... | 8W-41-2     |
| High Note Horn ..... | 8W-41-2     |                                   |             |

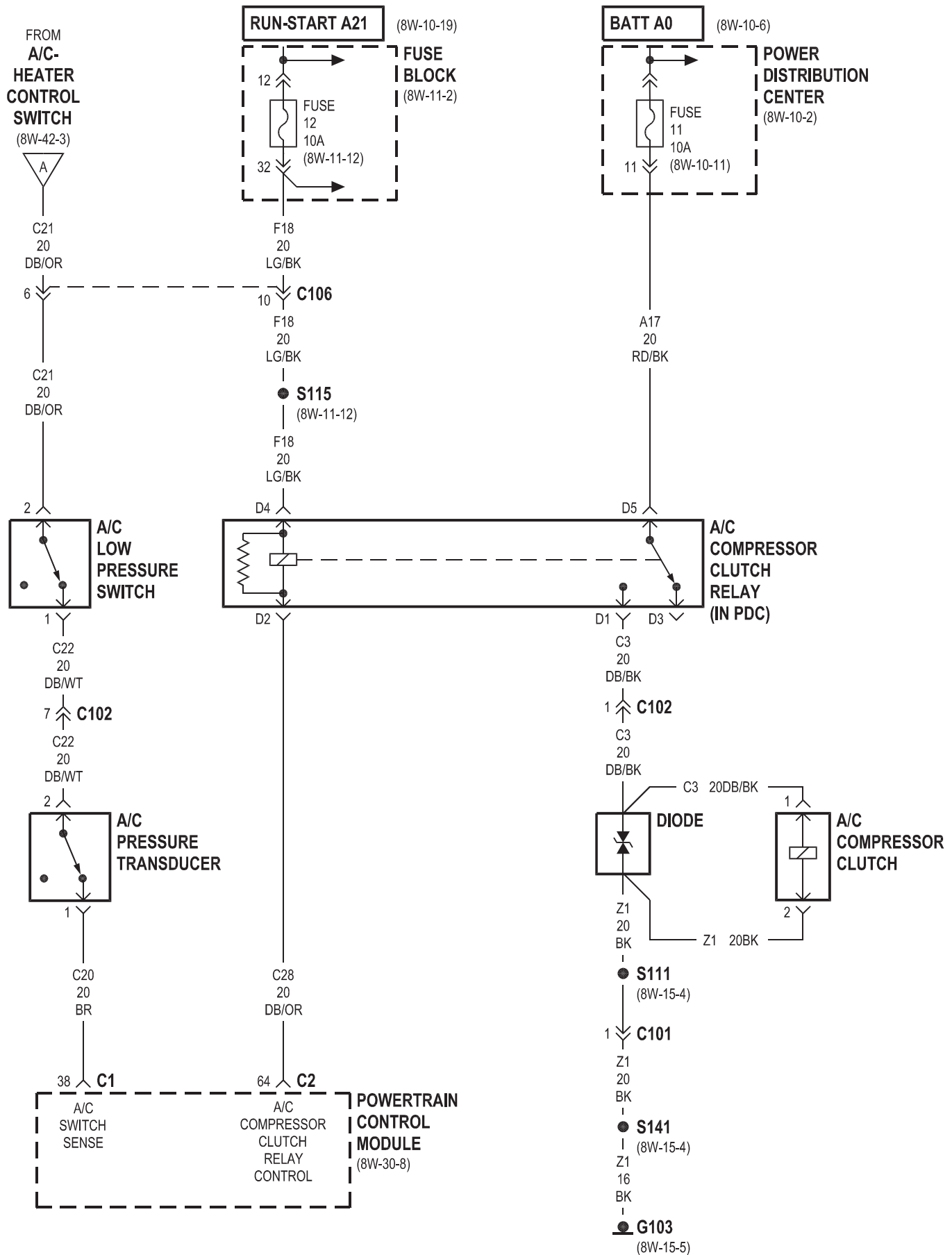


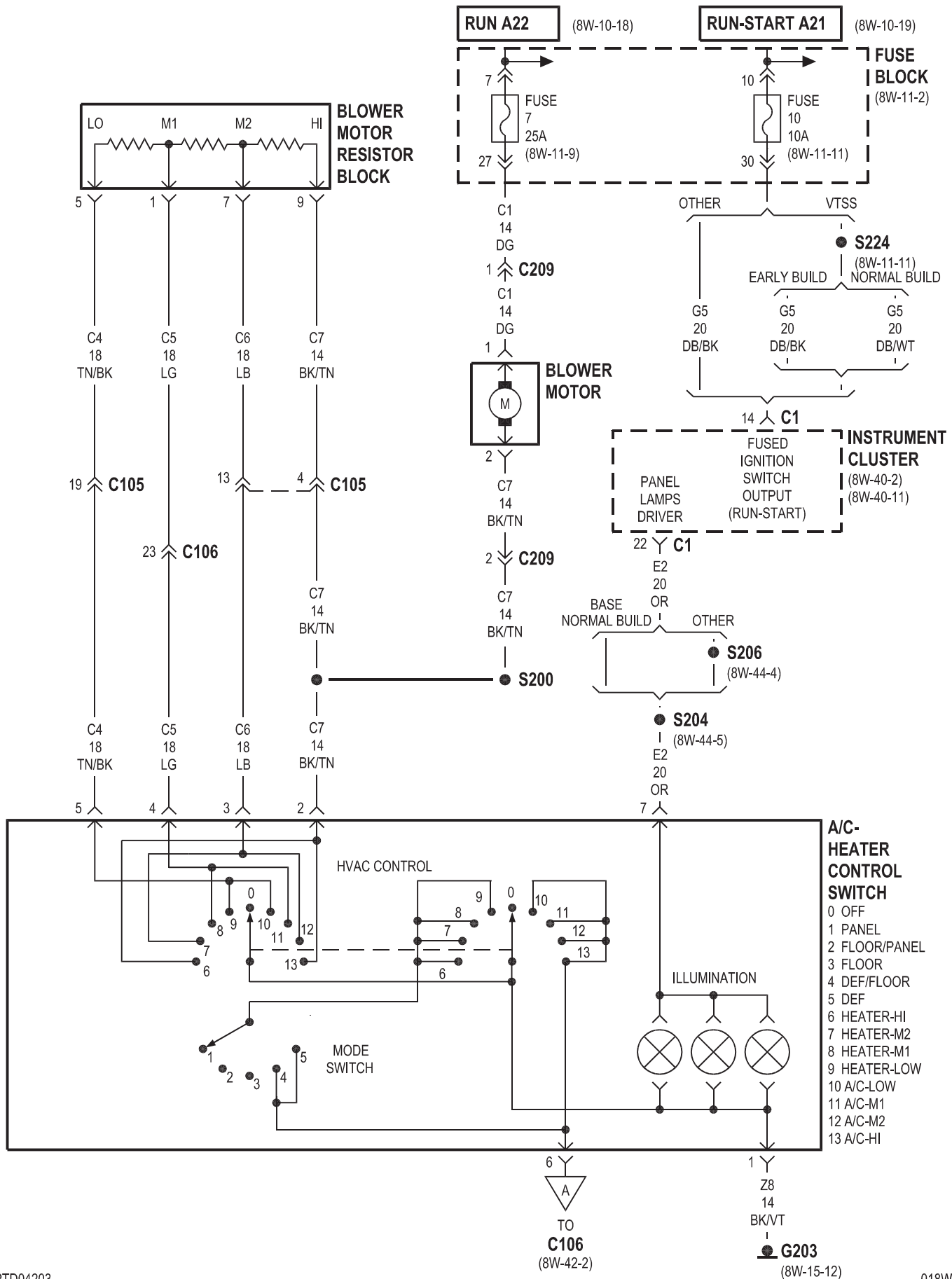




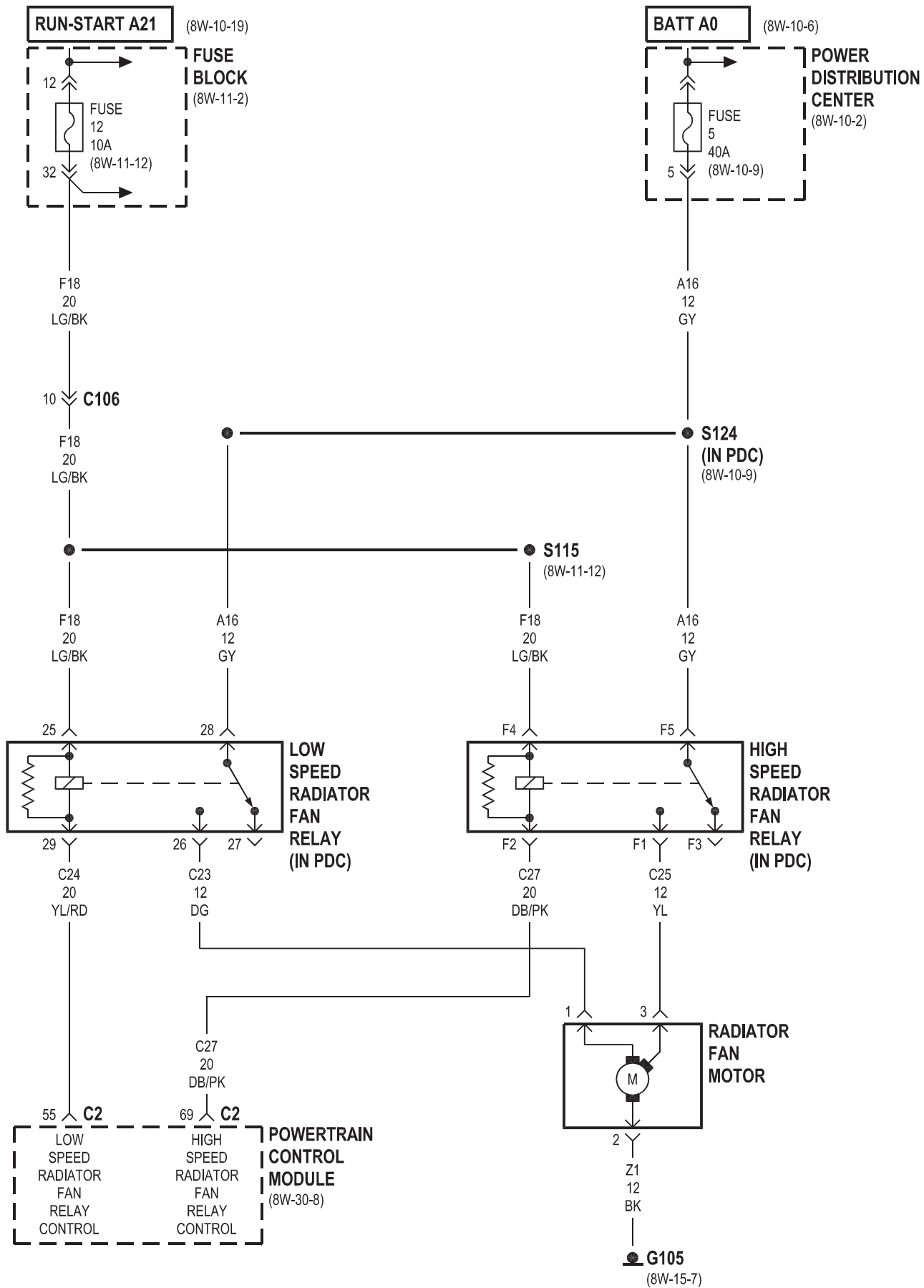
## 8W-42 AIR CONDITIONING-HEATER

| <b>Component</b>                      | <b>Page</b> | <b>Component</b>                        | <b>Page</b>   |
|---------------------------------------|-------------|-----------------------------------------|---------------|
| A/C Compressor Clutch . . . . .       | 8W-42-2     | Fuse 12 (FB) . . . . .                  | 8W-42-2, 4    |
| A/C Compressor Clutch Relay . . . . . | 8W-42-2     | Fuse Block . . . . .                    | 8W-42-2, 3, 4 |
| A/C Low Pressure Switch . . . . .     | 8W-42-2     | G103 . . . . .                          | 8W-42-2       |
| A/C Pressure Transducer . . . . .     | 8W-42-2     | G105 . . . . .                          | 8W-42-4       |
| A/C- Heater Control Switch . . . . .  | 8W-42-2, 3  | G203 . . . . .                          | 8W-42-3       |
| Blower Motor . . . . .                | 8W-42-3     | High Speed Radiator Fan Relay . . . . . | 8W-42-4       |
| Blower Motor Resistor Block . . . . . | 8W-42-3     | Instrument Cluster . . . . .            | 8W-42-3       |
| Diode . . . . .                       | 8W-42-2     | Low Speed Radiator Fan Relay . . . . .  | 8W-42-4       |
| Fuse 5 (PDC) . . . . .                | 8W-42-4     | Power Distribution Center . . . . .     | 8W-42-2, 4    |
| Fuse 7 (FB) . . . . .                 | 8W-42-3     | Powertrain Control Module . . . . .     | 8W-42-2, 4    |
| Fuse 10 (FB) . . . . .                | 8W-42-3     | Radiator Fan Motor . . . . .            | 8W-42-4       |
| Fuse 11 (PDC) . . . . .               | 8W-42-2     |                                         |               |



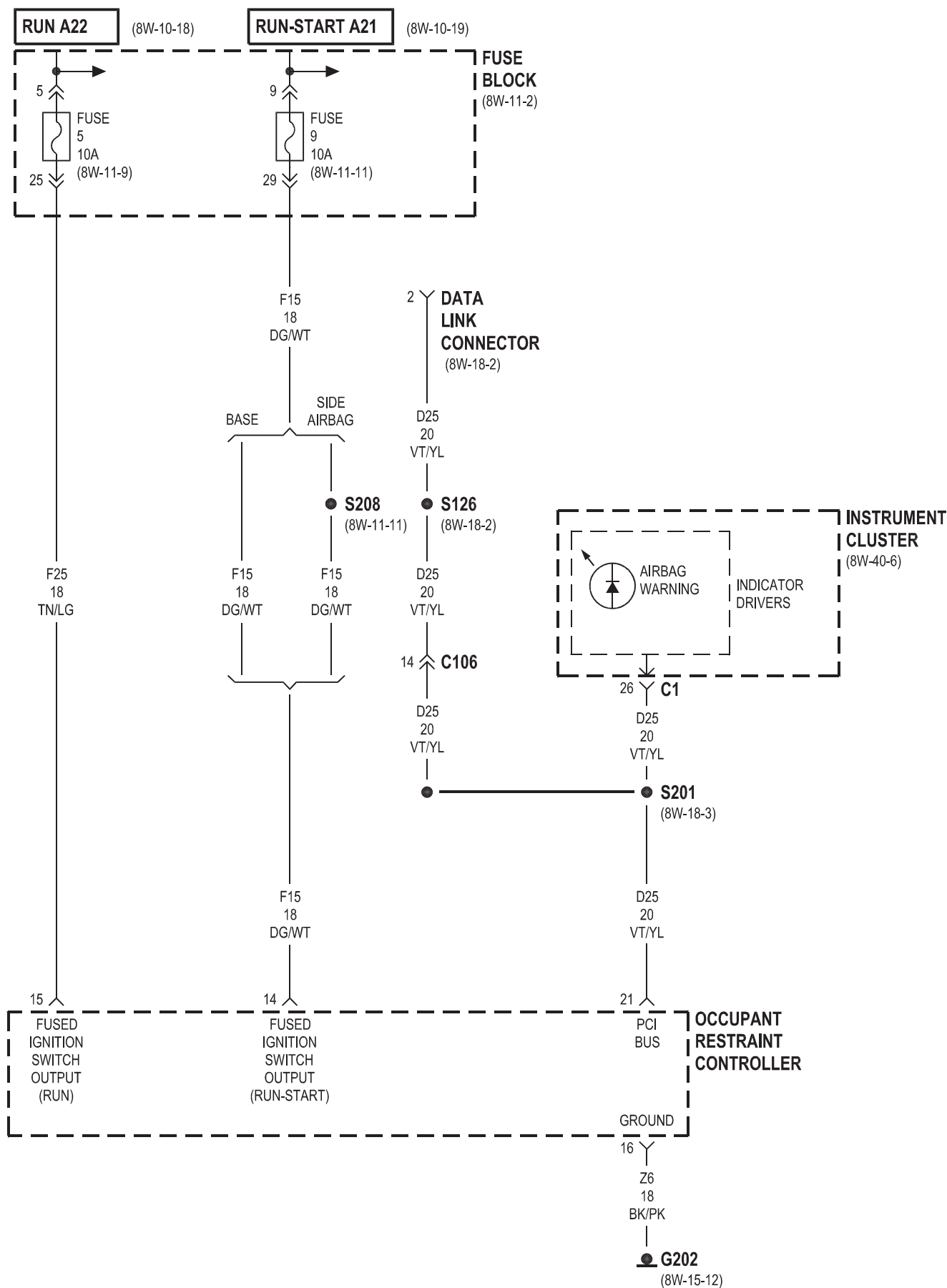


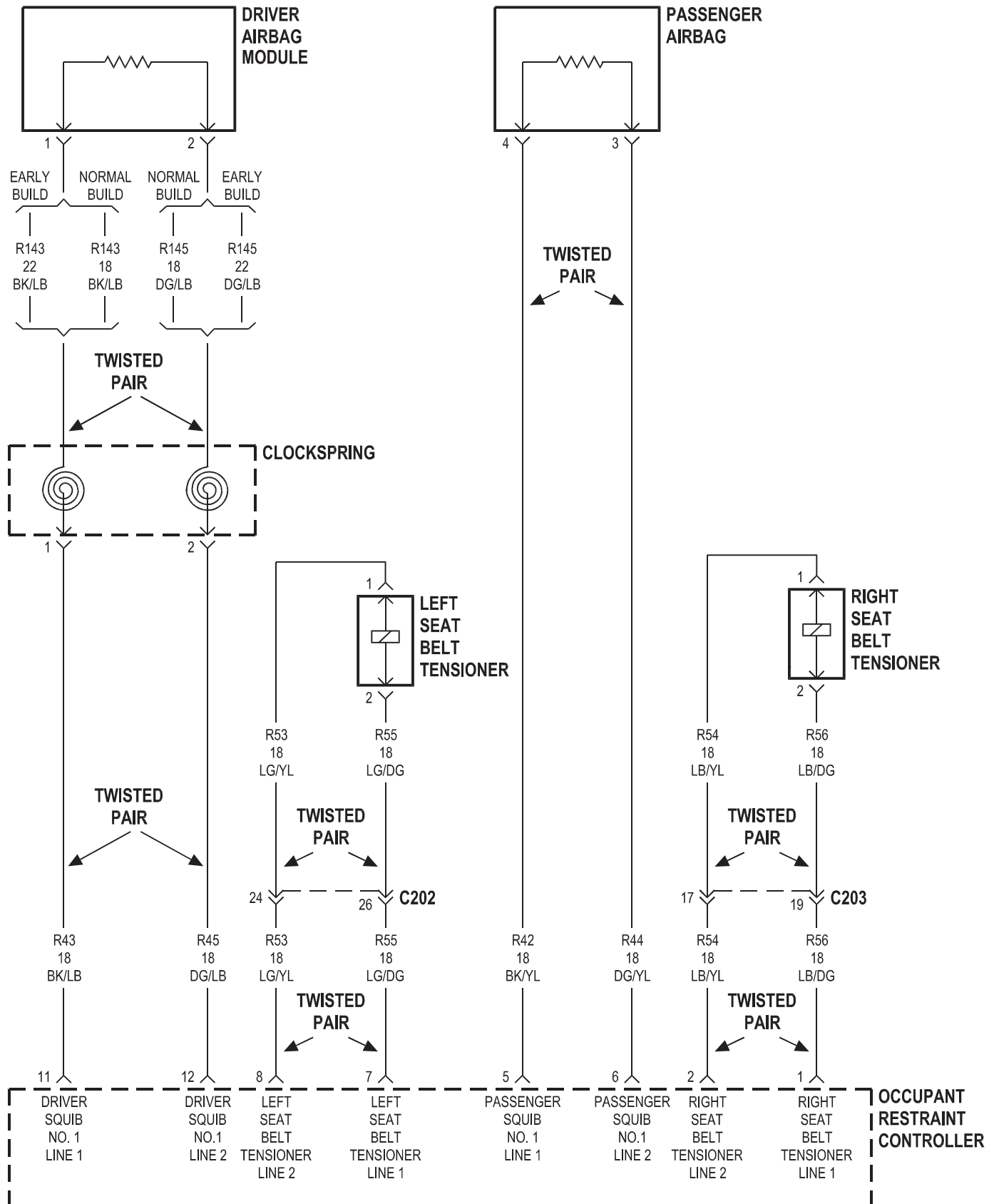




## 8W-43 OCCUPANT RESTRAINT SYSTEM

| <b>Component</b>               | <b>Page</b> | <b>Component</b>                                     | <b>Page</b> |
|--------------------------------|-------------|------------------------------------------------------|-------------|
| Clockspring . . . . .          | 8W-43-3     | Left Seat Airbag . . . . .                           | 8W-43-4     |
| Data Link Connector . . . . .  | 8W-43-2, 4  | Left Seat Belt Tensioner . . . . .                   | 8W-43-3     |
| Driver Airbag Module . . . . . | 8W-43-3     | Left Side Impact Airbag<br>Control Module . . . . .  | 8W-43-4     |
| Fuse 5 (FB) . . . . .          | 8W-43-2     | Occupant Restraint Controller . . . . .              | 8W-43-2, 3  |
| Fuse 9 (FB) . . . . .          | 8W-43-2, 4  | Passenger Airbag . . . . .                           | 8W-43-3     |
| Fuse Block . . . . .           | 8W-43-2, 4  | Right Seat Airbag . . . . .                          | 8W-43-4     |
| G202 . . . . .                 | 8W-43-2     | Right Seat Belt Tensioner . . . . .                  | 8W-43-3     |
| G303 . . . . .                 | 8W-43-4     | Right Side Impact Airbag<br>Control Module . . . . . | 8W-43-4     |
| G304 . . . . .                 | 8W-43-4     |                                                      |             |
| Instrument Cluster . . . . .   | 8W-43-2     |                                                      |             |

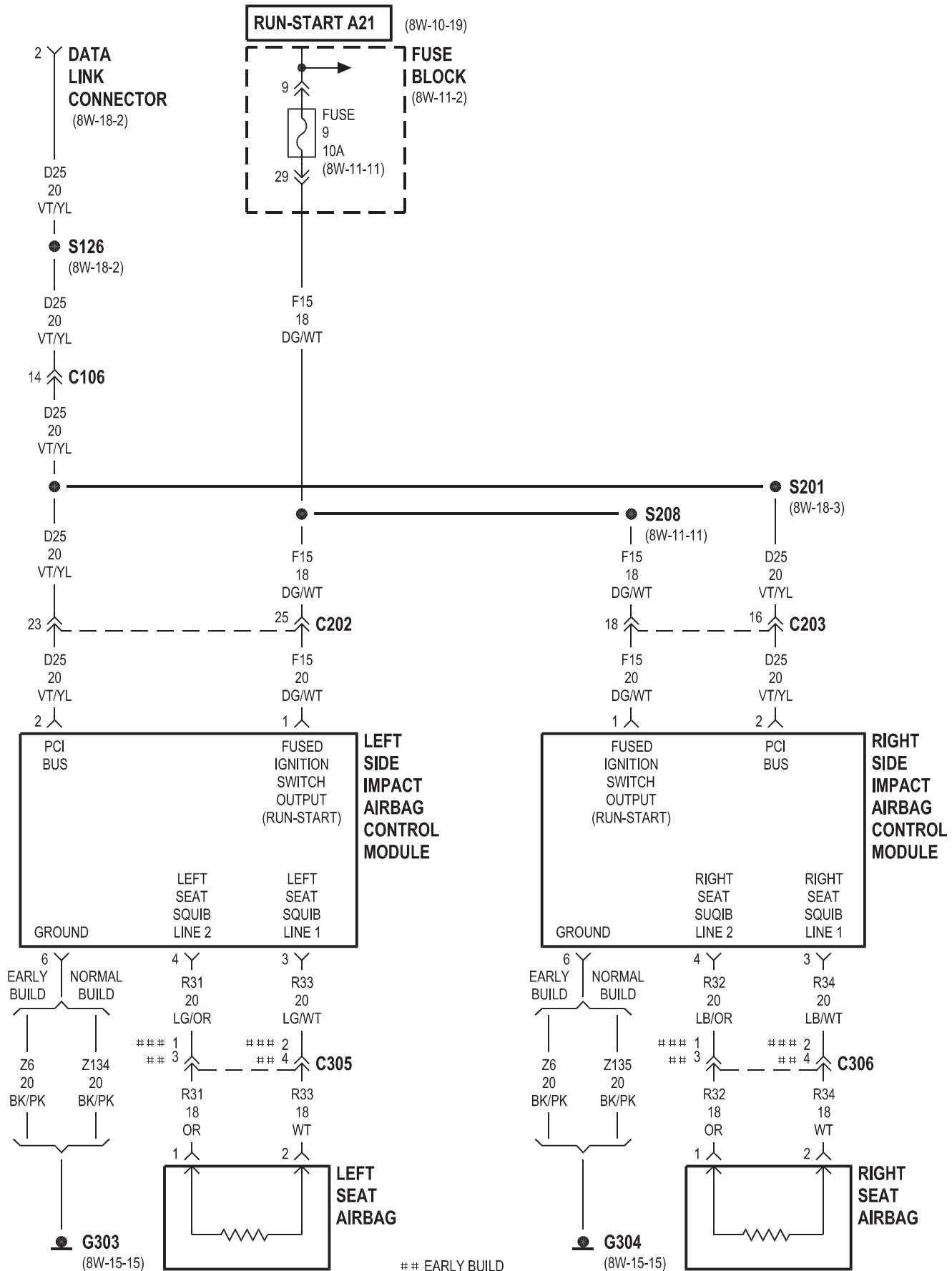




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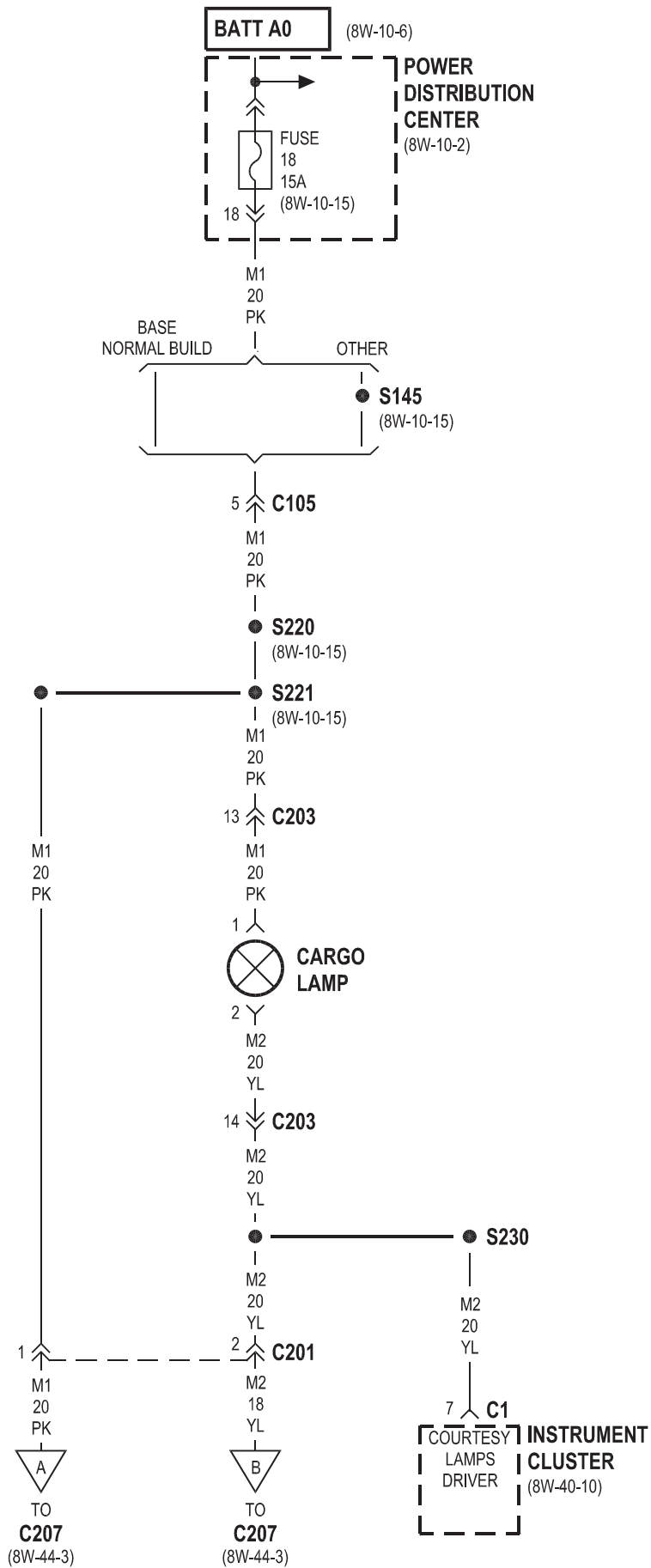
## 8W-43 OCCUPANT RESTRAINT SYSTEM SIDE AIRBAGS

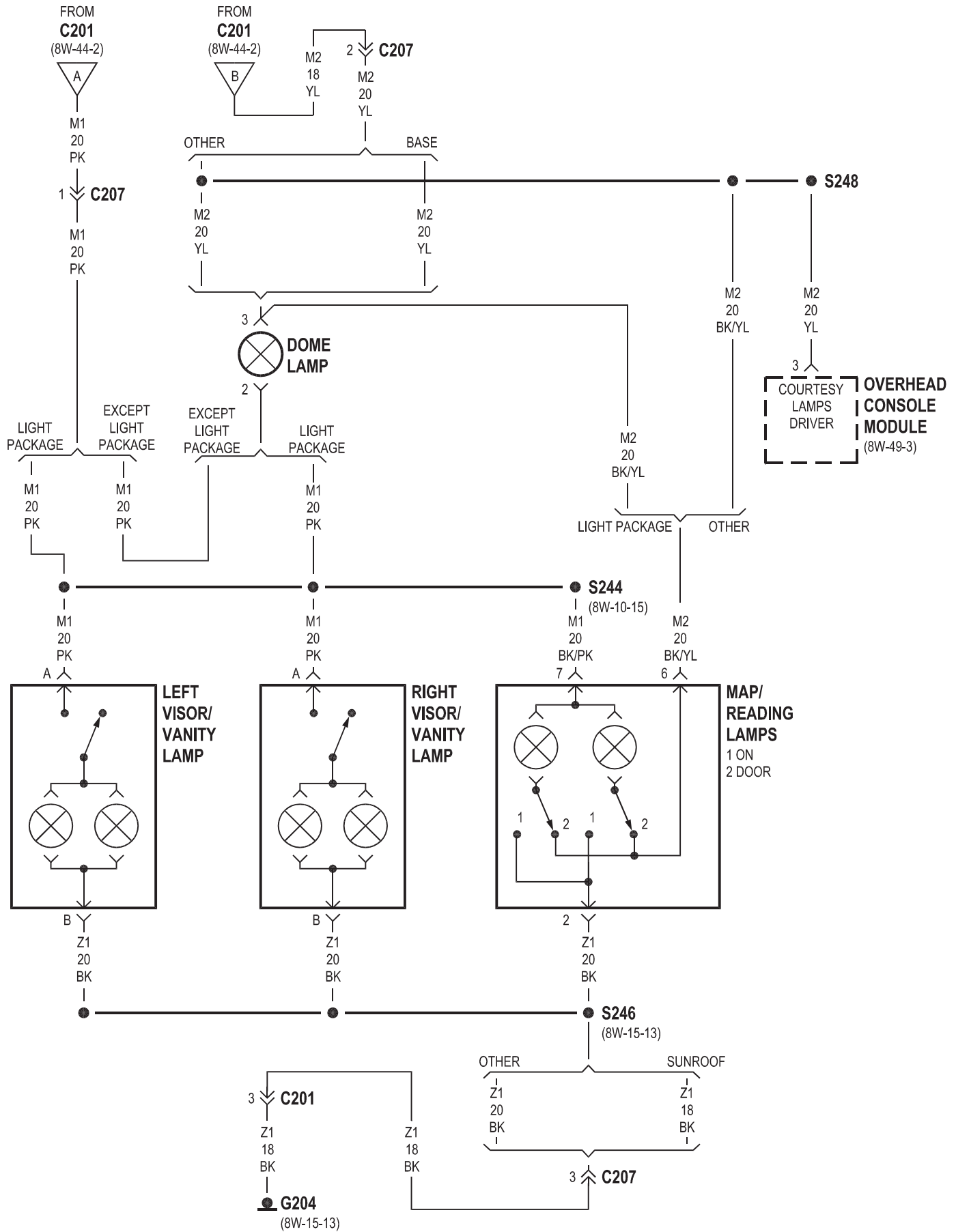
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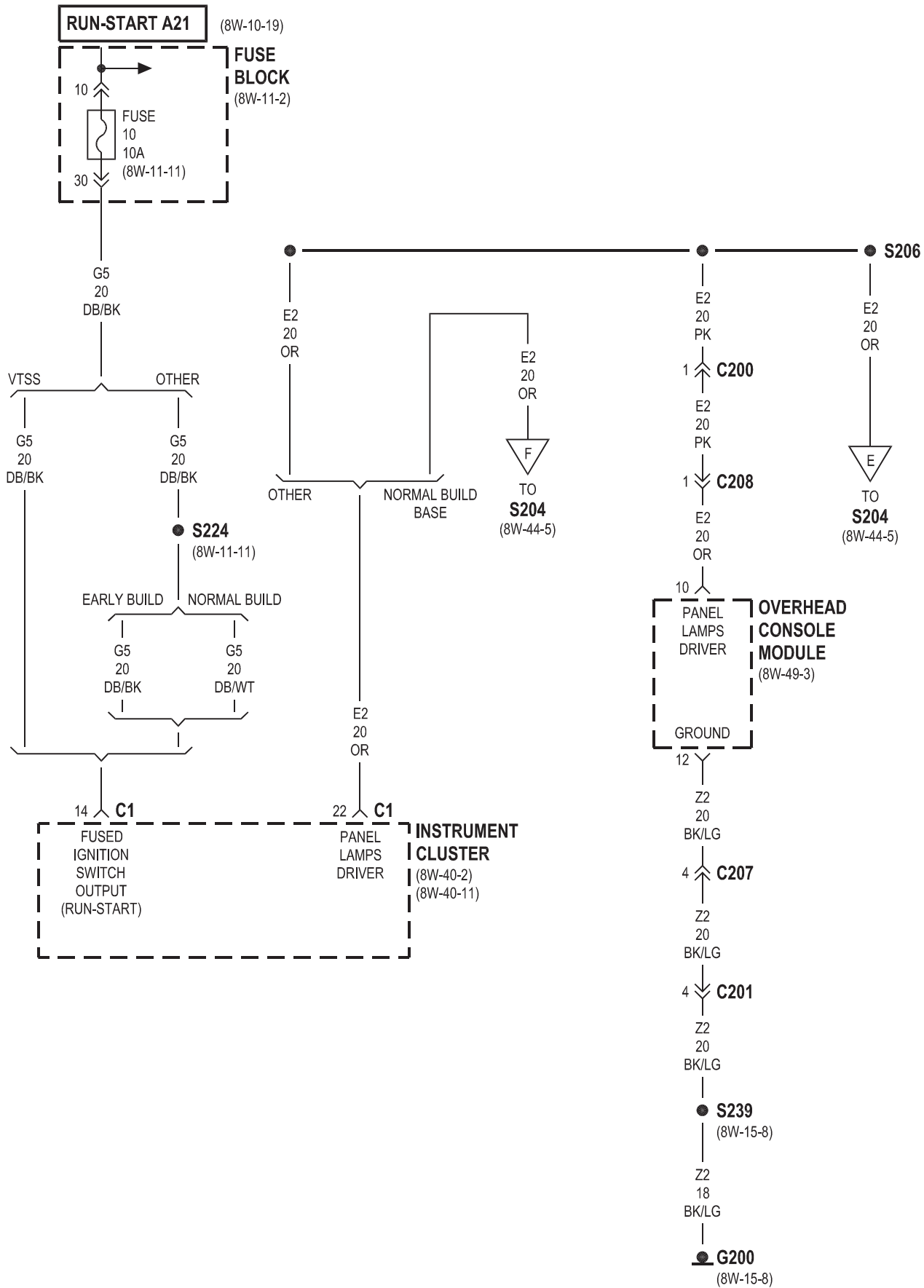
## 8W-44 INTERIOR LIGHTING

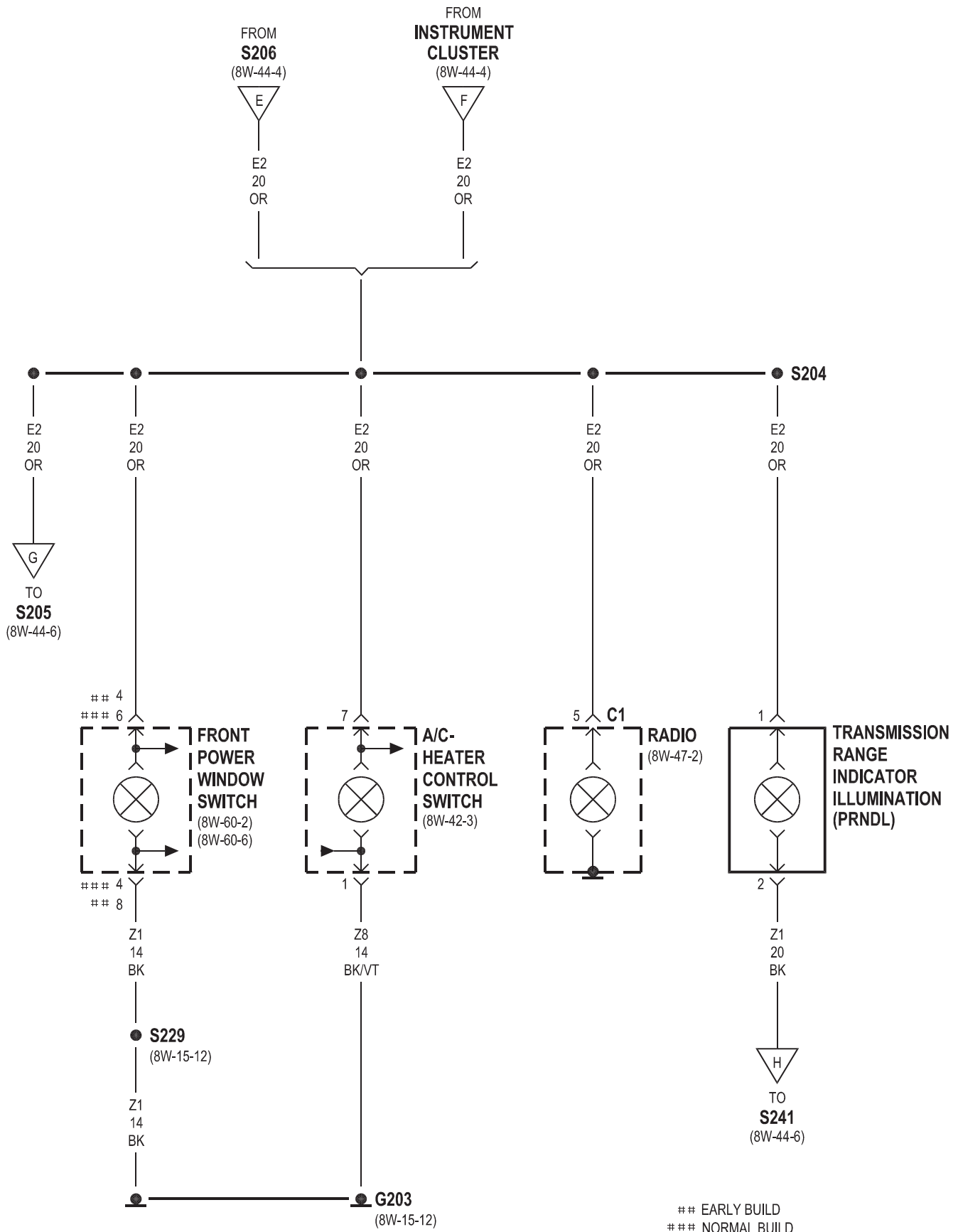
| <b>Component</b>                     | <b>Page</b> | <b>Component</b>                                       | <b>Page</b>   |
|--------------------------------------|-------------|--------------------------------------------------------|---------------|
| A/C- Heater Control Switch . . . . . | 8W-44-5     | Instrument Cluster . . . . .                           | 8W-44-2, 4, 5 |
| Cargo Lamp . . . . .                 | 8W-44-2     | Left Visor/Vanity Lamp . . . . .                       | 8W-44-3       |
| Center Stack Lamp . . . . .          | 8W-44-6     | Map/Reading Lamps . . . . .                            | 8W-44-3       |
| Dome Lamp . . . . .                  | 8W-44-3     | Overhead Console Module . . . . .                      | 8W-44-3, 4    |
| Front Power Window Switch . . . . .  | 8W-44-5     | Power Distribution Center . . . . .                    | 8W-44-2       |
| Fuse 10 (FB) . . . . .               | 8W-44-4     | Radio . . . . .                                        | 8W-44-5       |
| Fuse 18 (PDC) . . . . .              | 8W-44-2     | Rear Window Defogger Switch . . . . .                  | 8W-44-6       |
| Fuse Block . . . . .                 | 8W-44-4     | Rear Wiper Switch . . . . .                            | 8W-44-6       |
| G200 . . . . .                       | 8W-44-4     | Right Visor/Vanity Lamp . . . . .                      | 8W-44-3       |
| G201 . . . . .                       | 8W-44-6     | Traction Control Switch . . . . .                      | 8W-44-6       |
| G203 . . . . .                       | 8W-44-5     | Transmission Range Indicator<br>Illumination . . . . . | 8W-44-5, 6    |
| G204 . . . . .                       | 8W-44-3     |                                                        |               |

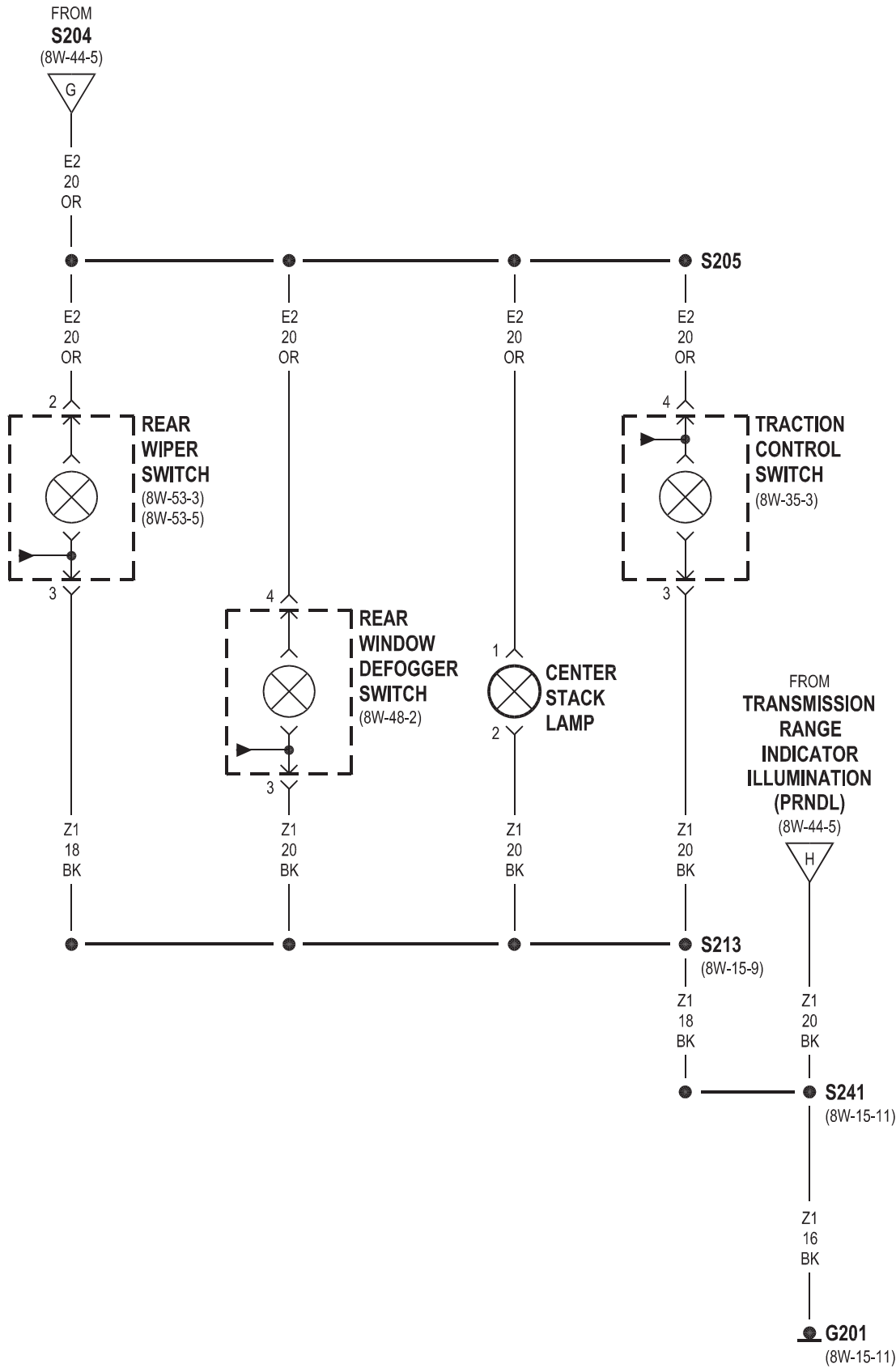






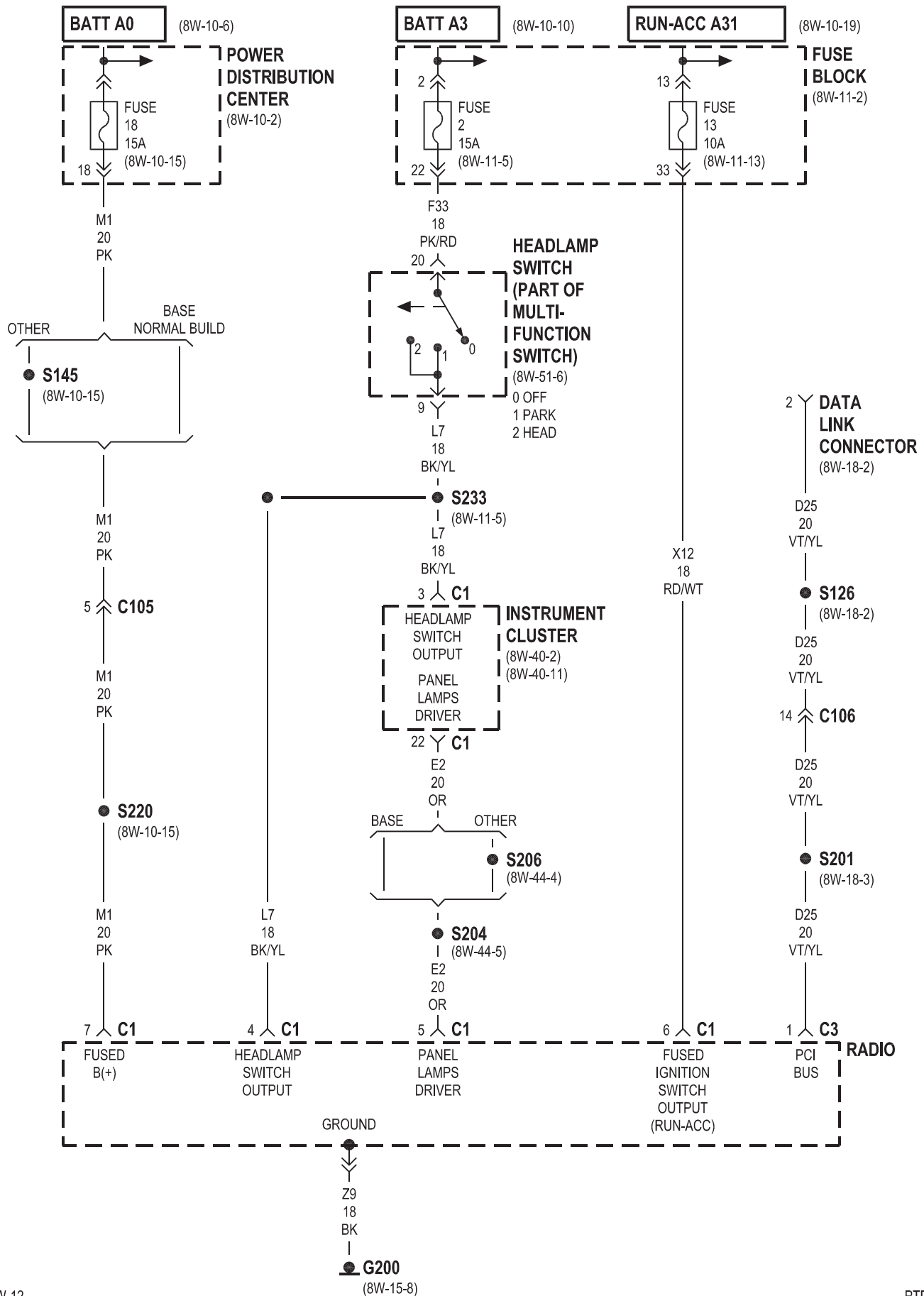


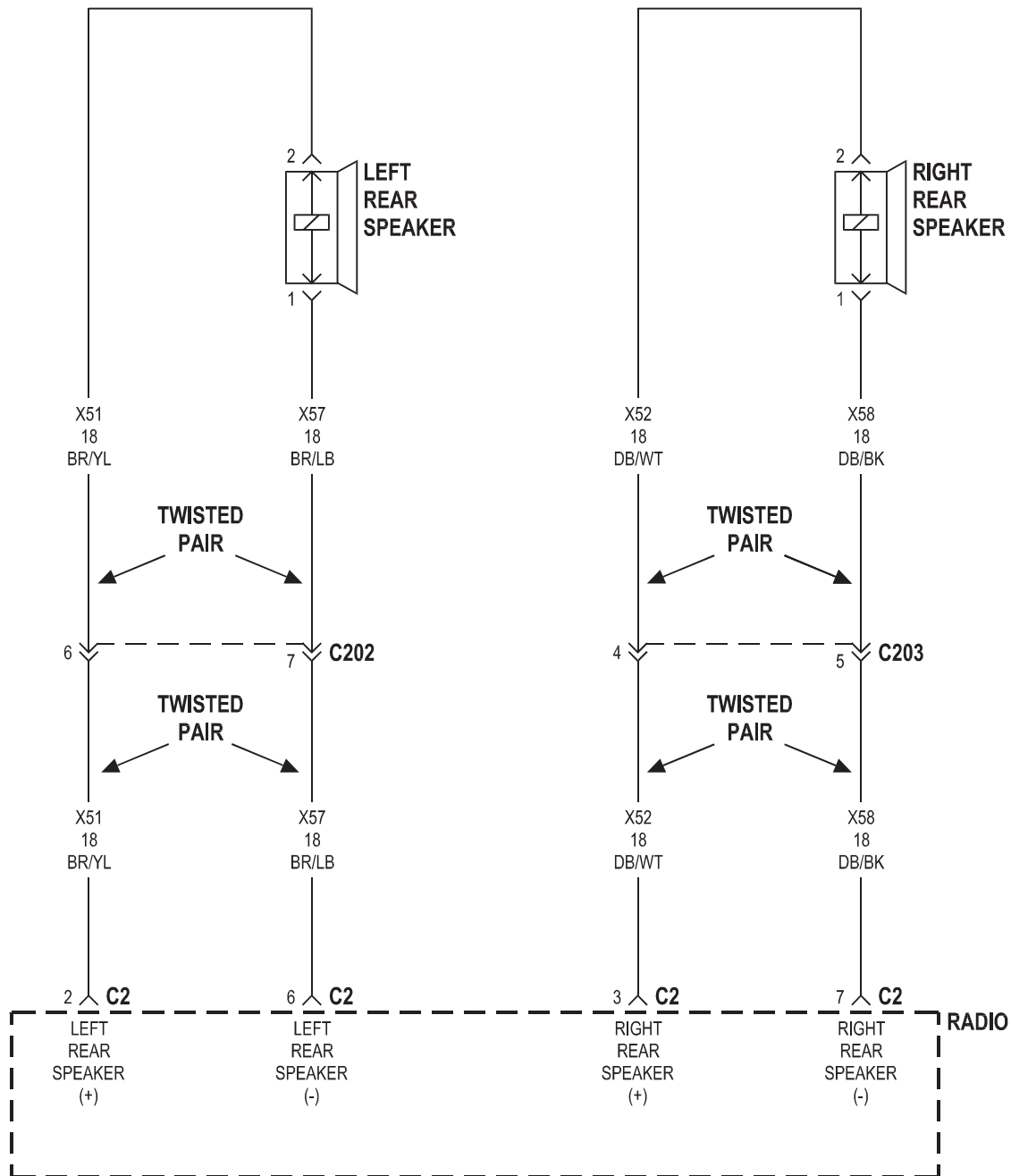


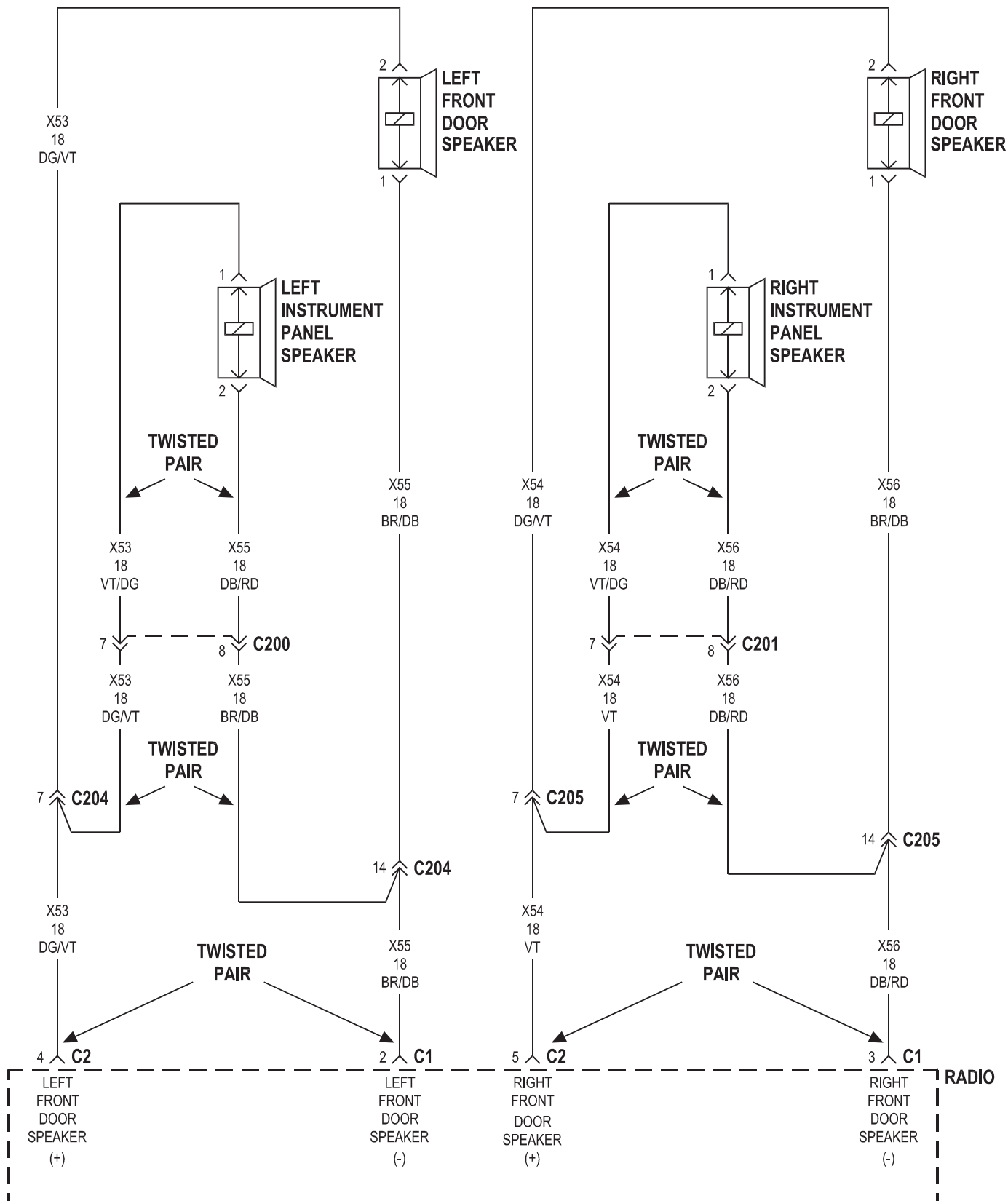


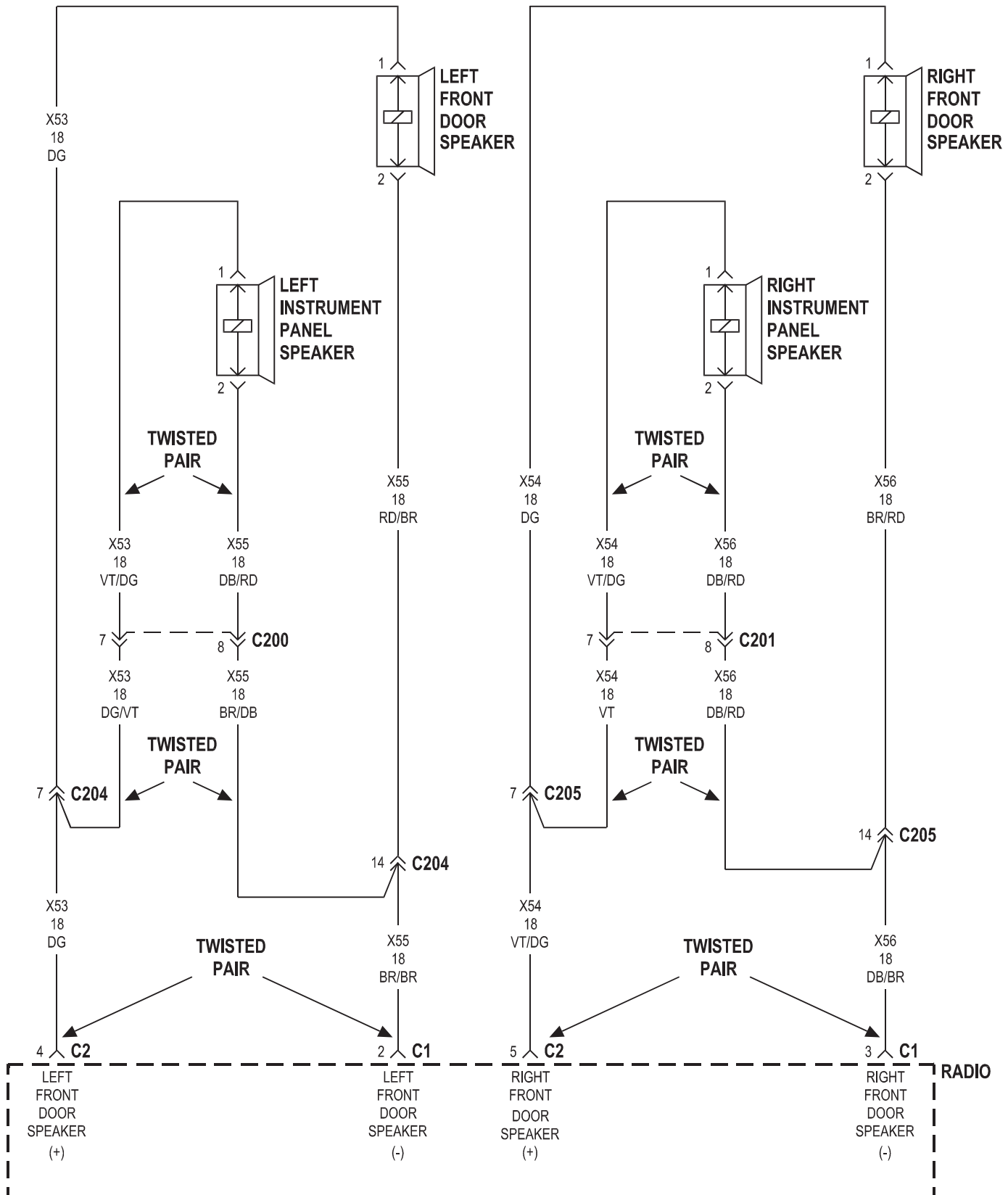
## 8W-47 AUDIO SYSTEM

| <b>Component</b>              | <b>Page</b> | <b>Component</b>                         | <b>Page</b>      |
|-------------------------------|-------------|------------------------------------------|------------------|
| Data Link Connector . . . . . | 8W-47-2     | Left Front Door Speaker . . . . .        | 8W-47-4, 5       |
| Fuse 2 (FB) . . . . .         | 8W-47-2     | Left Instrument Panel Speaker . . . . .  | 8W-47-4, 5       |
| Fuse 13 (FB) . . . . .        | 8W-47-2     | Left Rear Speaker . . . . .              | 8W-47-3          |
| Fuse 18 (PDC) . . . . .       | 8W-47-2     | Power Distribution Center . . . . .      | 8W-47-2          |
| Fuse Block . . . . .          | 8W-47-2     | Radio . . . . .                          | 8W-47-2, 3, 4, 5 |
| G200 . . . . .                | 8W-47-2     | Right Front Door Speaker . . . . .       | 8W-47-4, 5       |
| Headlamp Switch . . . . .     | 8W-47-2     | Right Instrument Panel Speaker . . . . . | 8W-47-4, 5       |
| Instrument Cluster . . . . .  | 8W-47-2     | Right Rear Speaker . . . . .             | 8W-47-3          |







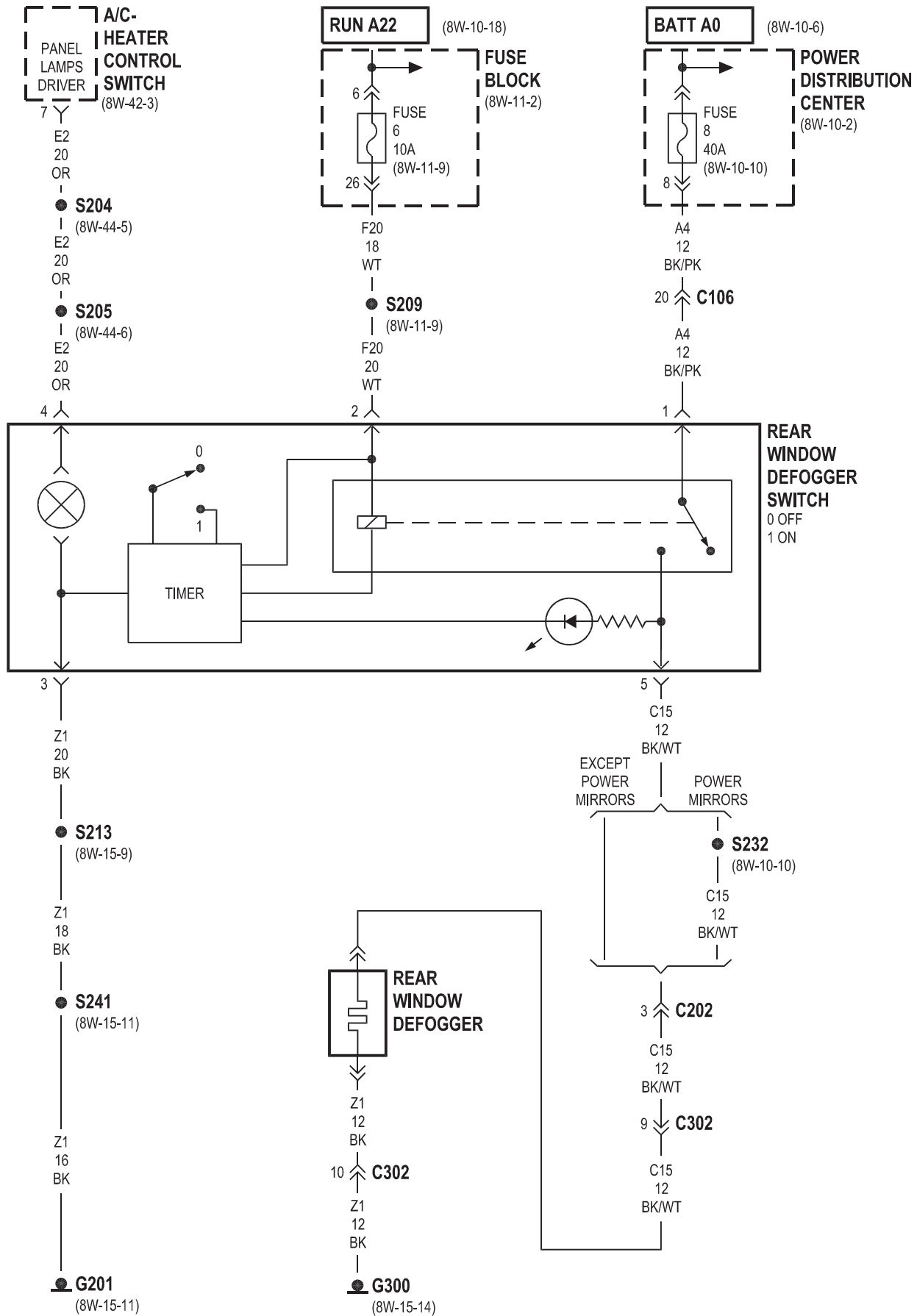






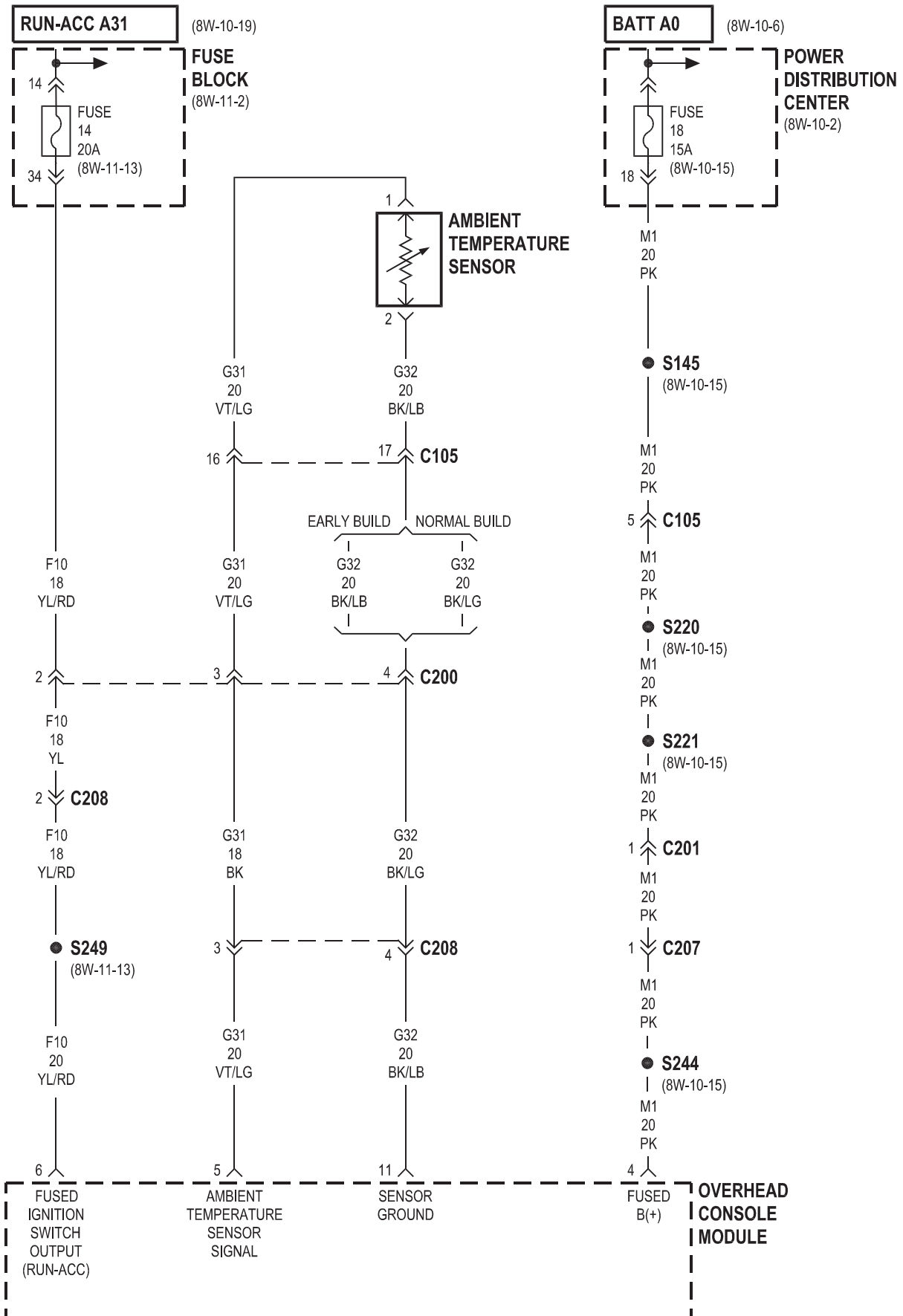
## 8W-48 REAR WINDOW DEFOGGER

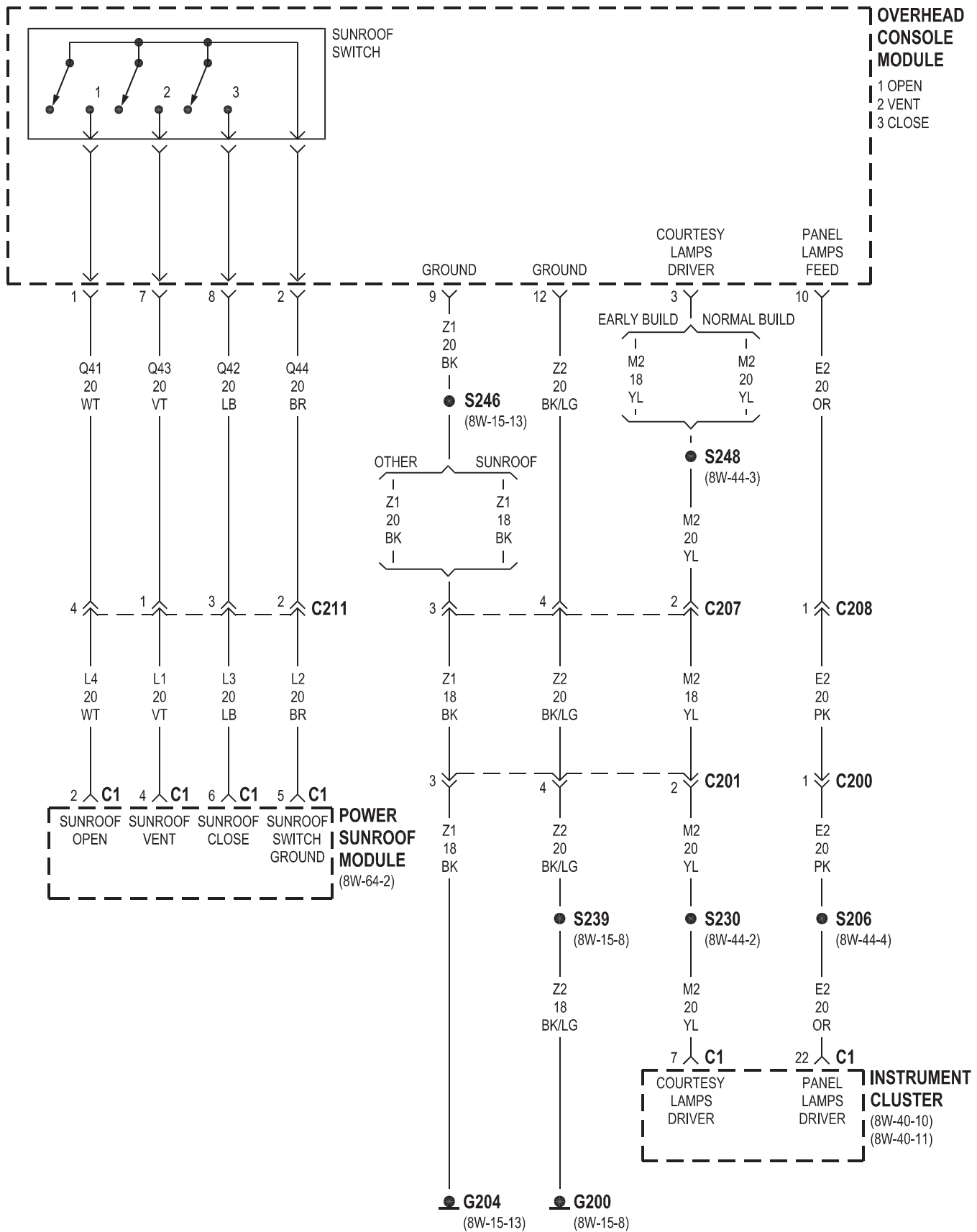
| <b>Component</b>                     | <b>Page</b> | <b>Component</b>                      | <b>Page</b> |
|--------------------------------------|-------------|---------------------------------------|-------------|
| A/C- Heater Control Switch . . . . . | 8W-48-2     | G300 . . . . .                        | 8W-48-2     |
| Fuse 6 (FB) . . . . .                | 8W-48-2     | Power Distribution Center . . . . .   | 8W-48-2     |
| Fuse 8 (PDC) . . . . .               | 8W-48-2     | Rear Window Defogger . . . . .        | 8W-48-2     |
| Fuse Block . . . . .                 | 8W-48-2     | Rear Window Defogger Switch . . . . . | 8W-48-2     |
| G201 . . . . .                       | 8W-48-2     |                                       |             |



## 8W-49 OVERHEAD CONSOLE

| <b>Component</b>                     | <b>Page</b> | <b>Component</b>                    | <b>Page</b> |
|--------------------------------------|-------------|-------------------------------------|-------------|
| Ambient Temperature Sensor . . . . . | 8W-49-2     | G204 . . . . .                      | 8W-49-3     |
| Fuse 14 (FB) . . . . .               | 8W-49-2     | Instrument Cluster . . . . .        | 8W-49-3     |
| Fuse 18 (PDC) . . . . .              | 8W-49-2     | Overhead Console Module . . . . .   | 8W-49-2, 3  |
| Fuse Block . . . . .                 | 8W-49-2     | Power Distribution Center . . . . . | 8W-49-2     |
| G200 . . . . .                       | 8W-49-3     | Power Sunroof Module . . . . .      | 8W-49-3     |



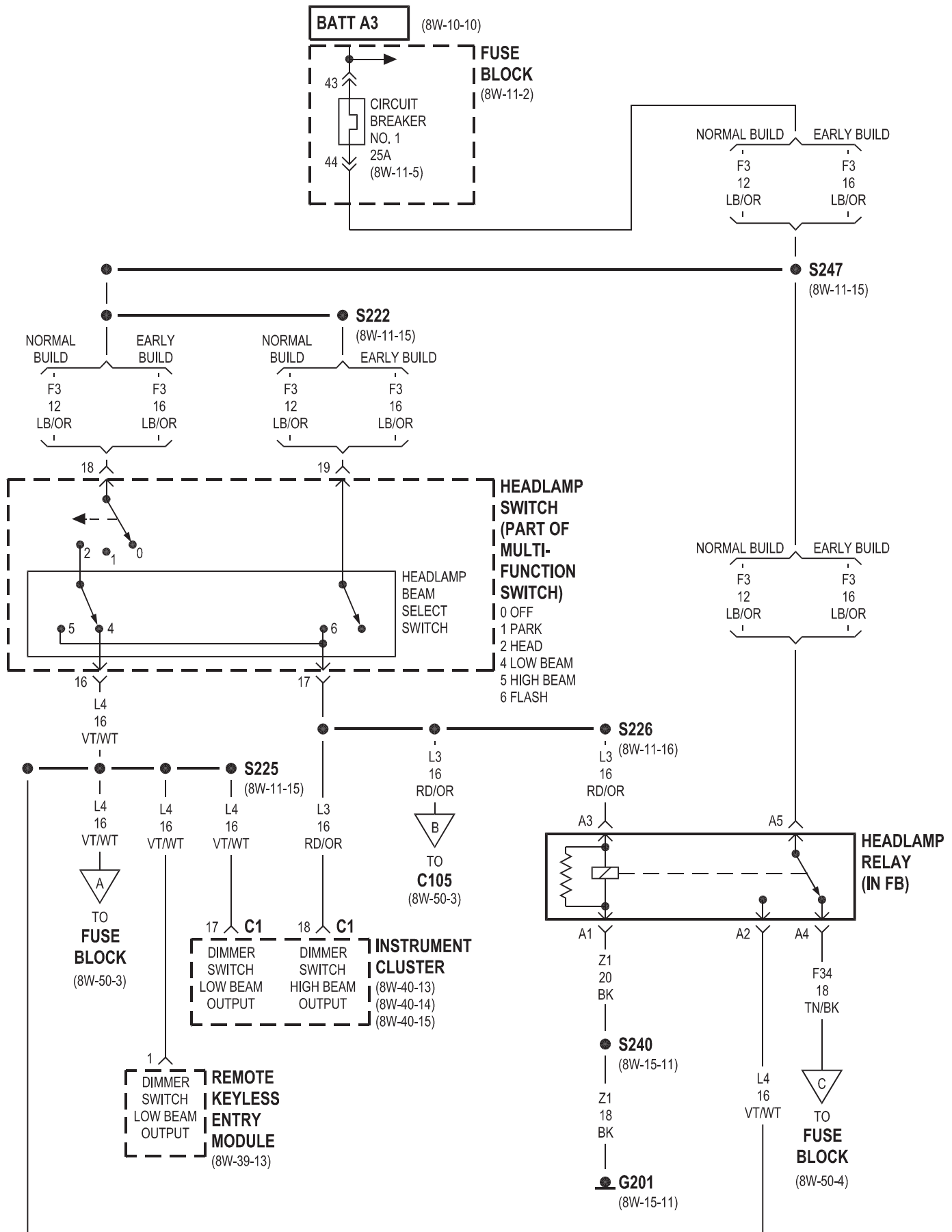


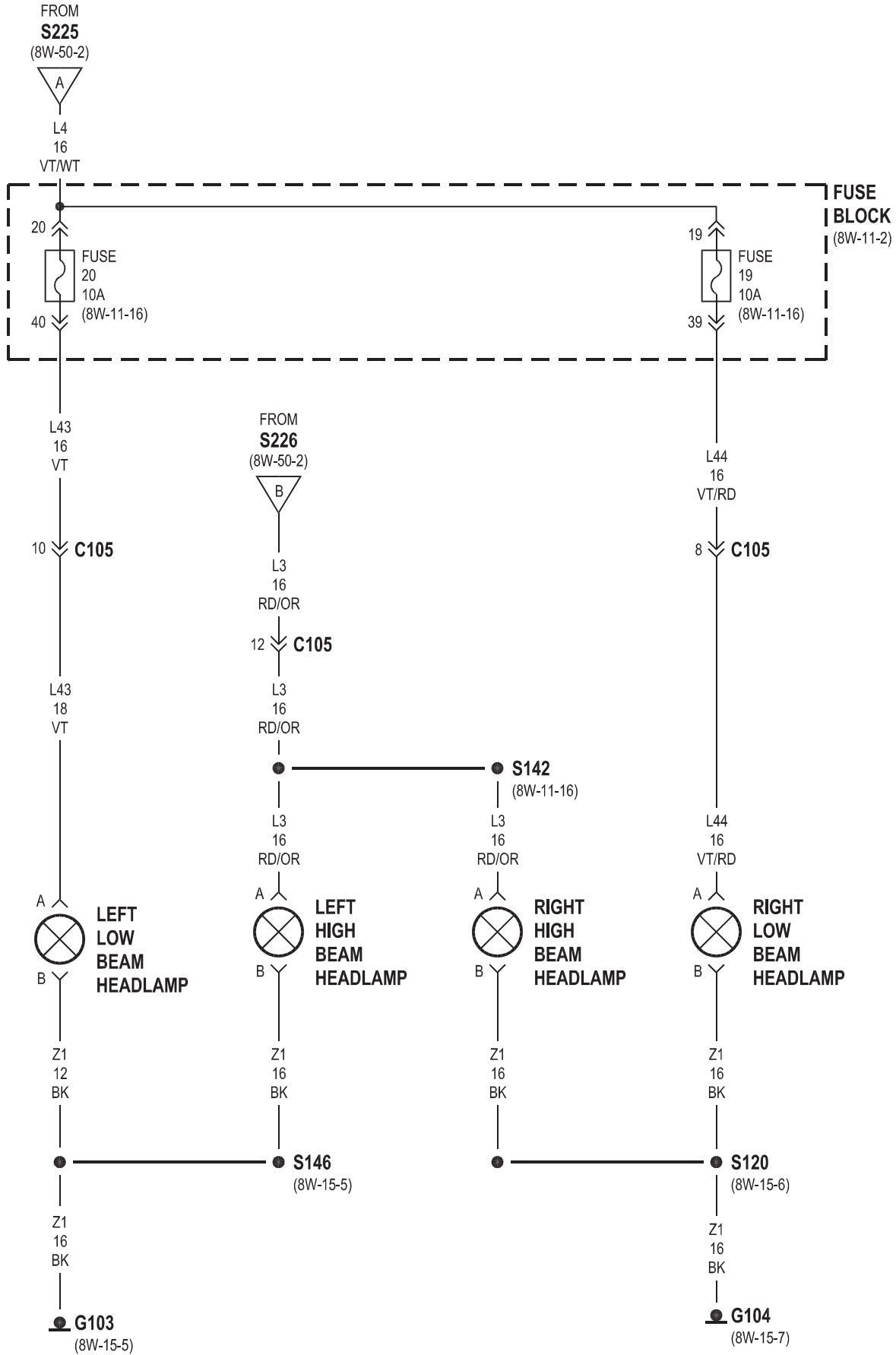


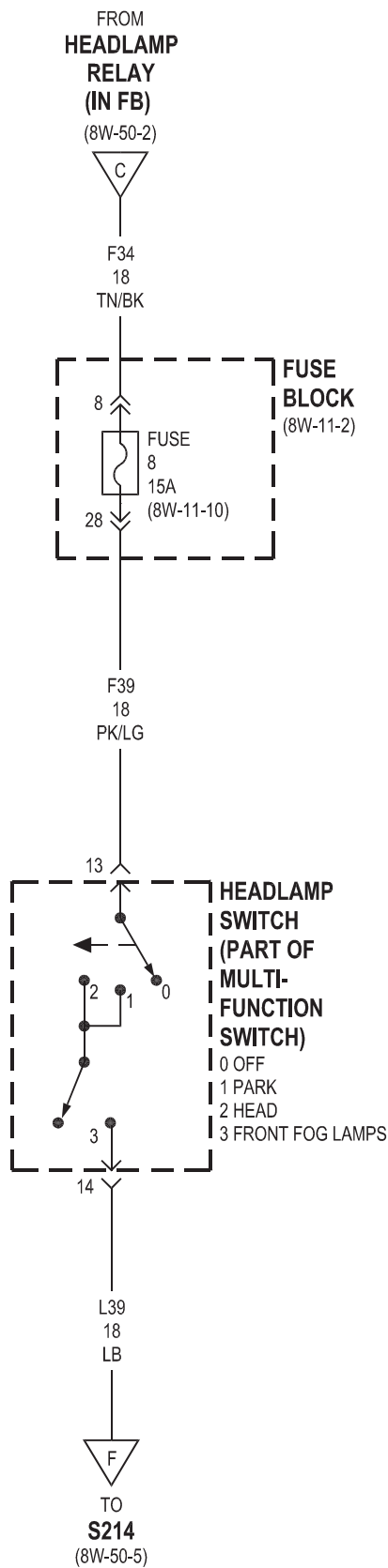
## 8W-50 FRONT LIGHTING

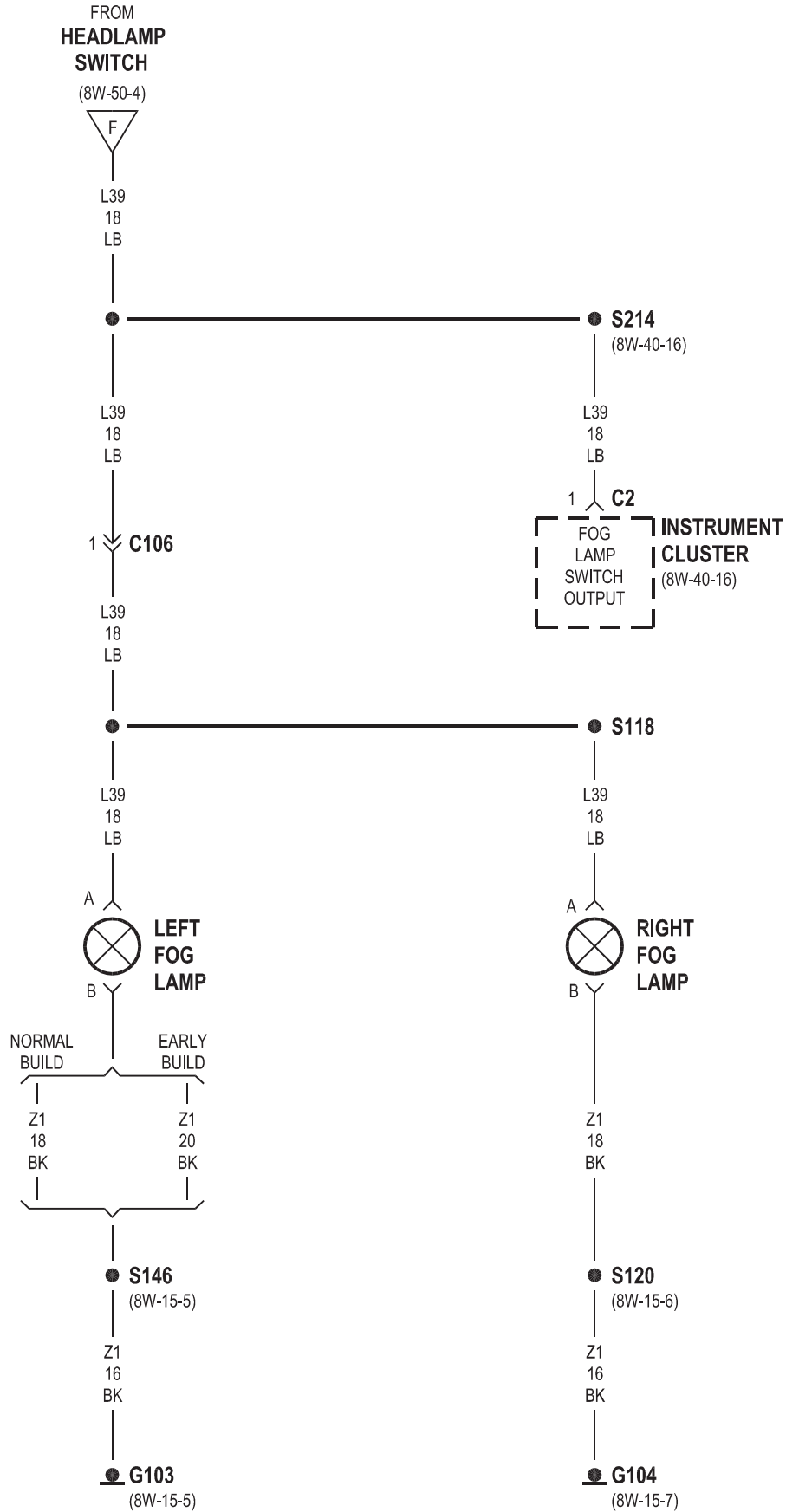
| <b>Component</b>                     | <b>Page</b>      | <b>Component</b>                            | <b>Page</b> |
|--------------------------------------|------------------|---------------------------------------------|-------------|
| Circuit Breaker No. 1 (FB) . . . . . | 8W-50-2          | Instrument Cluster . . . . .                | 8W-50-2, 5  |
| Fuse 2 (FB) . . . . .                | 8W-50-6          | Left Fog Lamp . . . . .                     | 8W-50-5     |
| Fuse 8 (FB) . . . . .                | 8W-50-4          | Left Front Park/Turn Signal Lamp . . . . .  | 8W-50-6     |
| Fuse 19 (FB) . . . . .               | 8W-50-3          | Left High Beam Headlamp . . . . .           | 8W-50-3     |
| Fuse 20 (FB) . . . . .               | 8W-50-3          | Left Low Beam Headlamp . . . . .            | 8W-50-3     |
| Fuse Block . . . . .                 | 8W-50-2, 3, 4, 6 | Remote Keyless Entry Module . . . . .       | 8W-50-2     |
| G103 . . . . .                       | 8W-50-3, 5, 6    | Right Fog Lamp . . . . .                    | 8W-50-5     |
| G104 . . . . .                       | 8W-50-3, 5, 6    | Right Front Park/Turn Signal Lamp . . . . . | 8W-50-6     |
| G201 . . . . .                       | 8W-50-2          | Right High Beam Headlamp . . . . .          | 8W-50-3     |
| Headlamp Relay . . . . .             | 8W-50-2, 4       | Right Low Beam Headlamp . . . . .           | 8W-50-3     |
| Headlamp Switch . . . . .            | 8W-50-2, 4, 5, 6 |                                             |             |

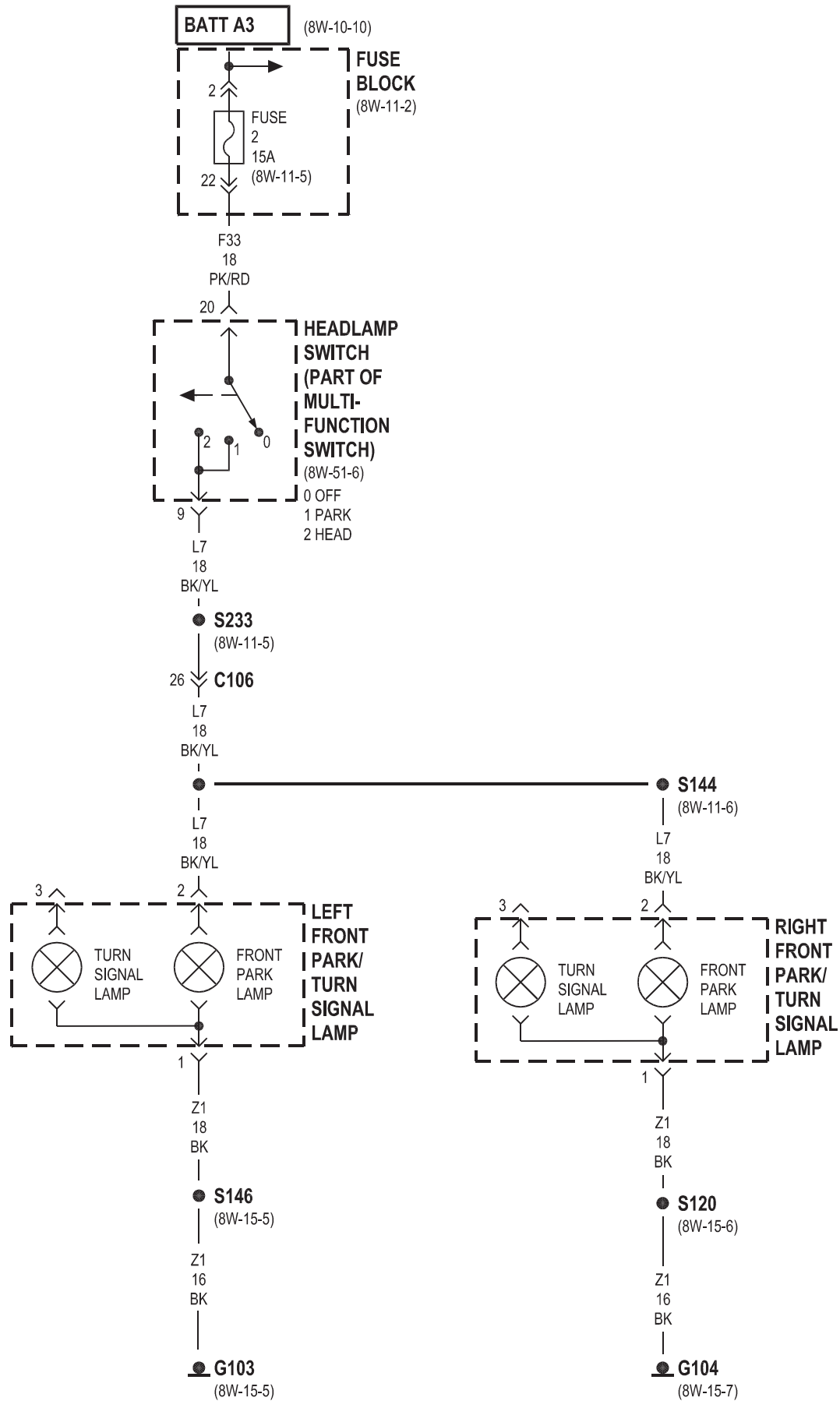






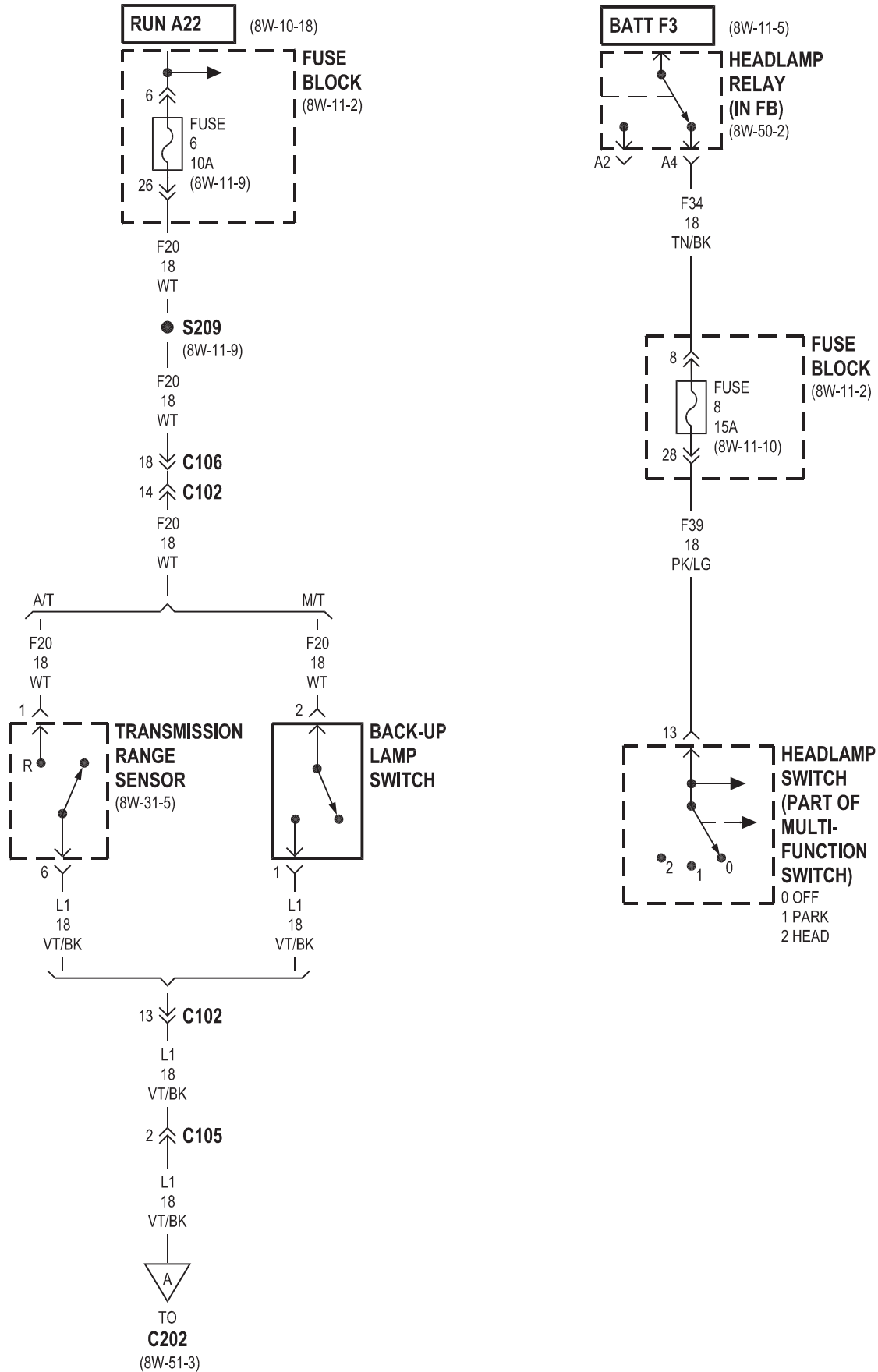


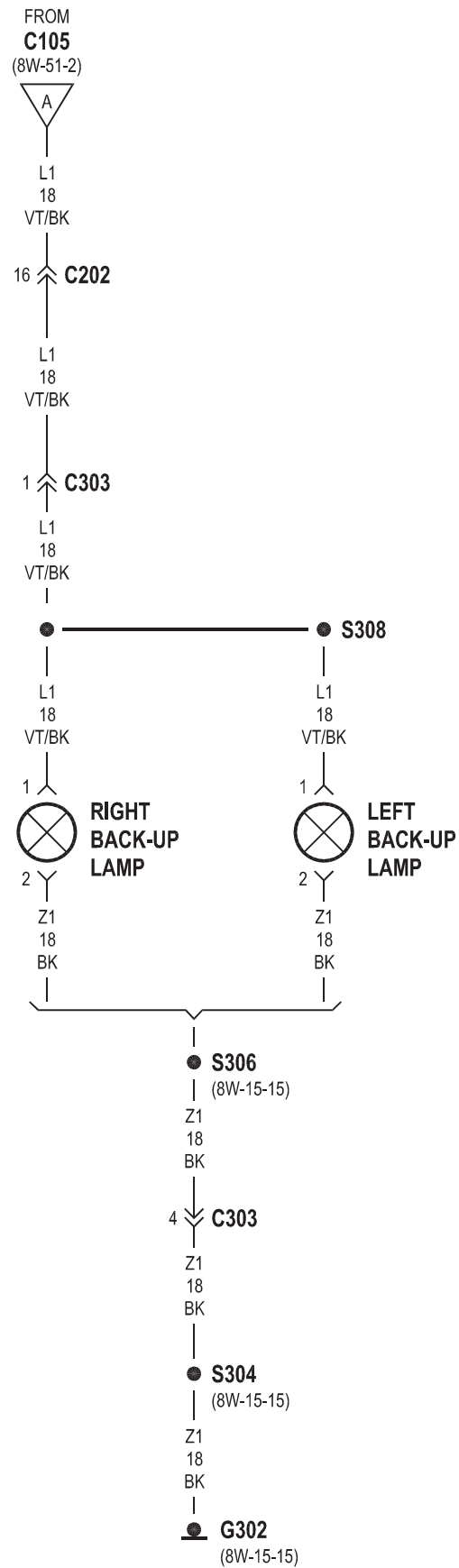




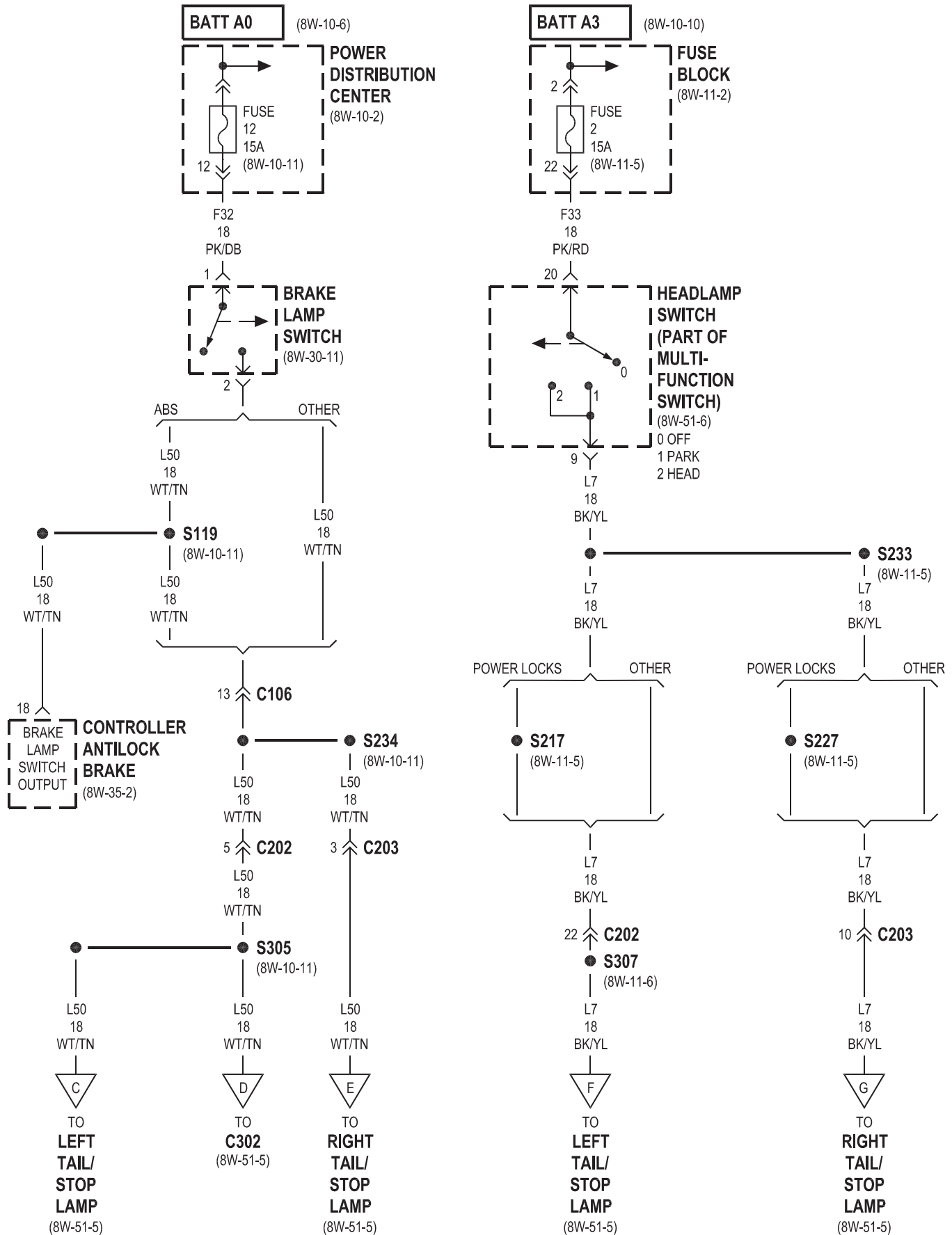
## 8W-51 REAR LIGHTING

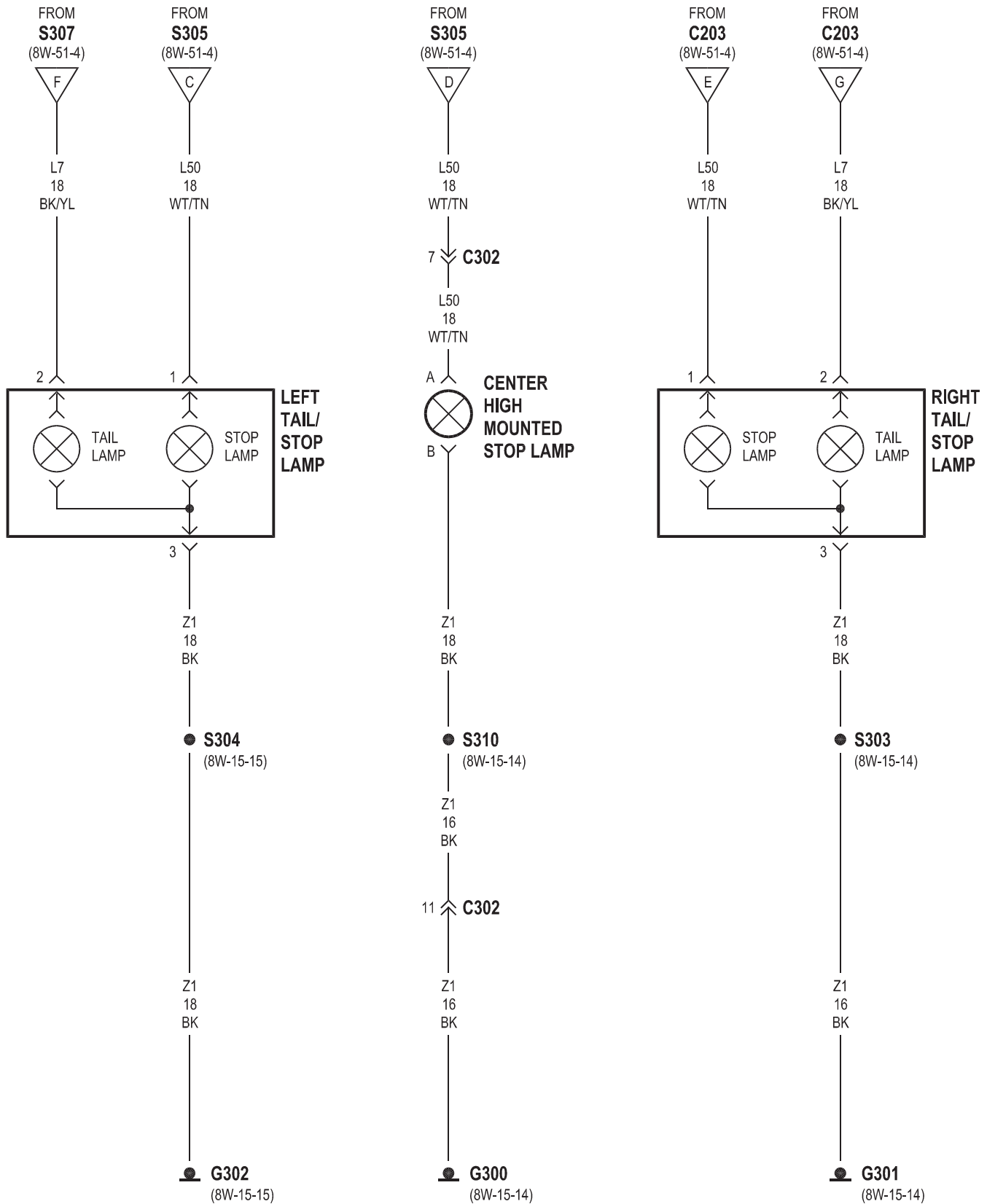
| <b>Component</b>                        | <b>Page</b>      | <b>Component</b>                      | <b>Page</b>      |
|-----------------------------------------|------------------|---------------------------------------|------------------|
| Back-Up Lamp Switch . . . . .           | 8W-51-2          | G302 . . . . .                        | 8W-51-3, 5, 7, 9 |
| Brake Lamp Switch . . . . .             | 8W-51-4          | Headlamp Relay . . . . .              | 8W-51-2          |
| Center High Mounted Stop Lamp . . . . . | 8W-51-5          | Headlamp Switch . . . . .             | 8W-51-2, 4, 6    |
| Controller Antilock Brake . . . . .     | 8W-51-4          | Left Back-Up Lamp . . . . .           | 8W-51-3          |
| Fuse 2 (FB) . . . . .                   | 8W-51-4, 6       | Left Rear Turn Signal Lamp . . . . .  | 8W-51-9          |
| Fuse 6 (FB) . . . . .                   | 8W-51-2          | Left Tail/Stop Lamp . . . . .         | 8W-51-4, 5       |
| Fuse 8 (FB) . . . . .                   | 8W-51-2          | License Lamp . . . . .                | 8W-51-7          |
| Fuse 12 (PDC) . . . . .                 | 8W-51-4          | Multi- Function Switch . . . . .      | 8W-51-8, 9       |
| Fuse 15 (FB) . . . . .                  | 8W-51-8          | Power Distribution Center . . . . .   | 8W-51-4, 8       |
| Fuse 19 (PDC) . . . . .                 | 8W-51-8          | Right Back-Up Lamp . . . . .          | 8W-51-3          |
| Fuse Block . . . . .                    | 8W-51-2, 4, 6, 8 | Right Rear Turn Signal Lamp . . . . . | 8W-51-9          |
| G200 . . . . .                          | 8W-51-8          | Right Tail/Stop Lamp . . . . .        | 8W-51-4, 5       |
| G201 . . . . .                          | 8W-51-8          | Stop Lamp . . . . .                   | 8W-51-5          |
| G300 . . . . .                          | 8W-51-5          | Tail Lamp . . . . .                   | 8W-51-5          |
| G301 . . . . .                          | 8W-51-5, 9       | Transmission Range Sensor . . . . .   | 8W-51-2          |

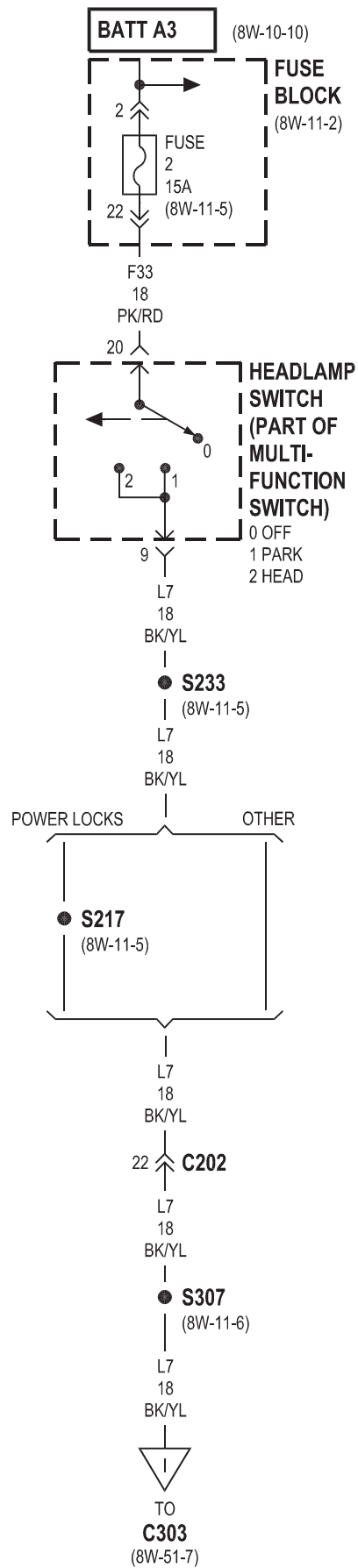


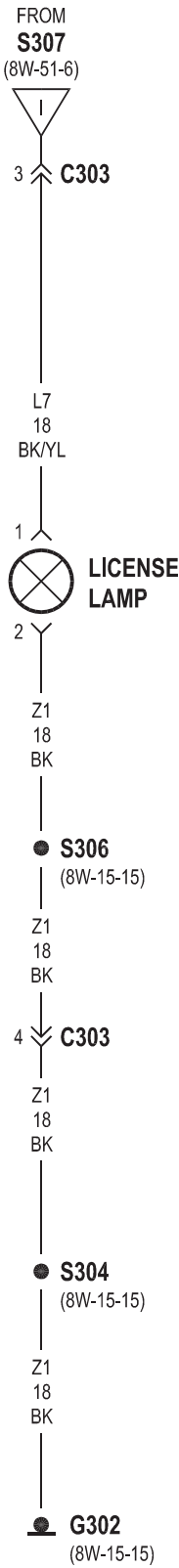


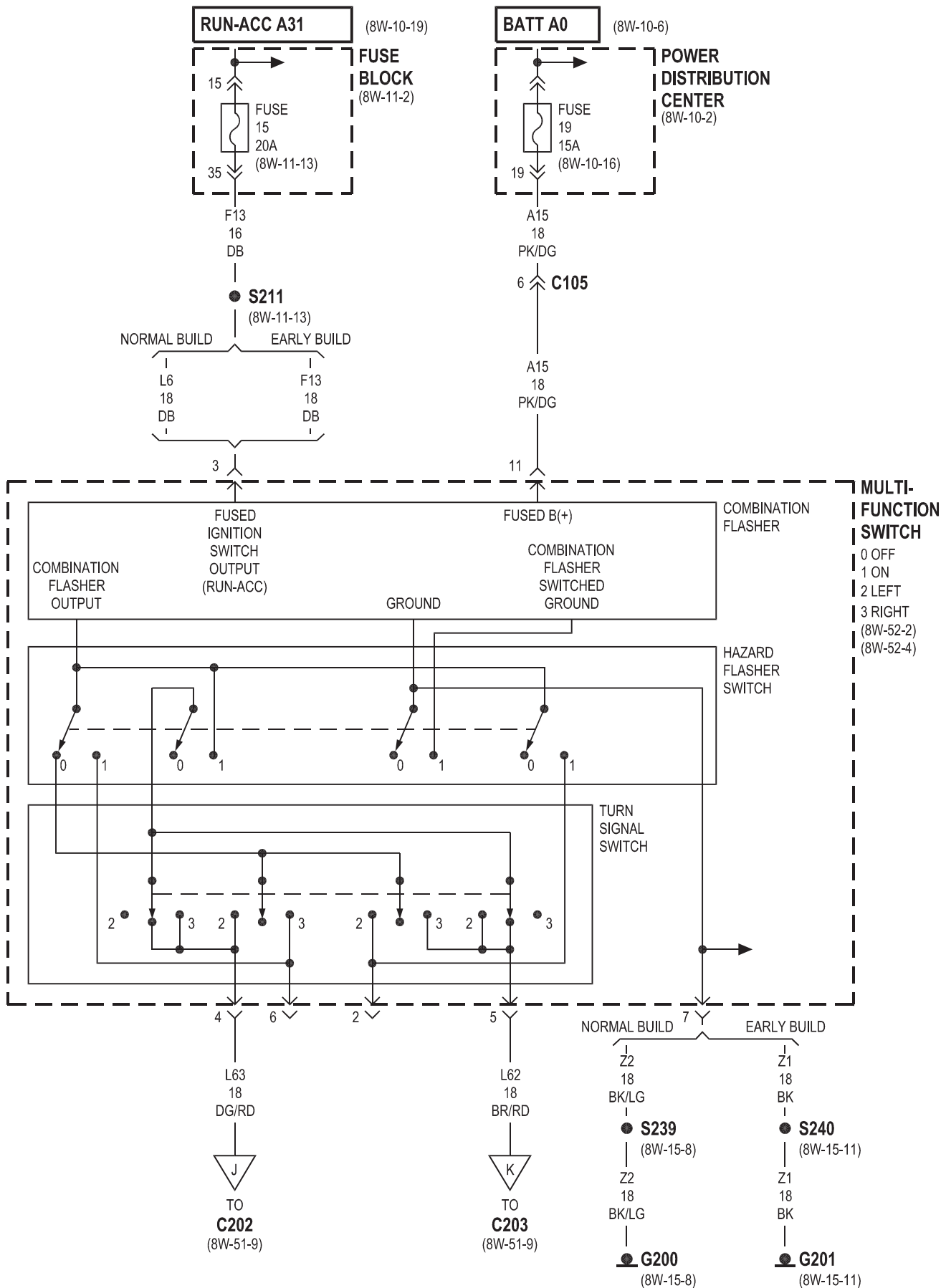


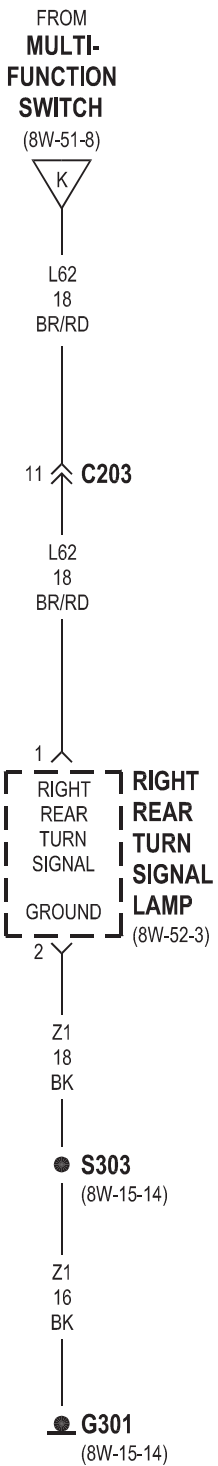
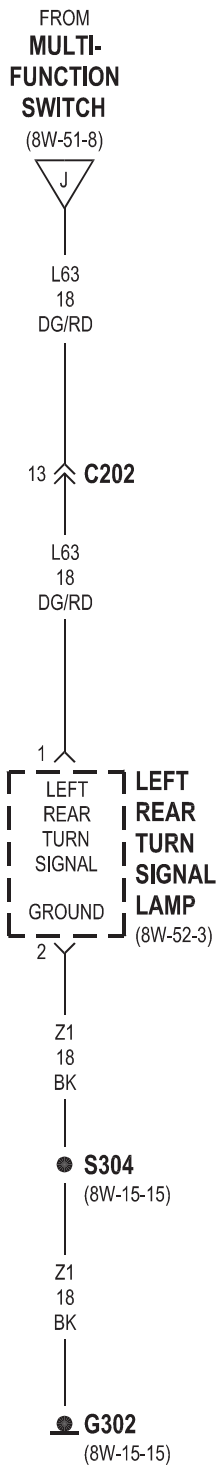










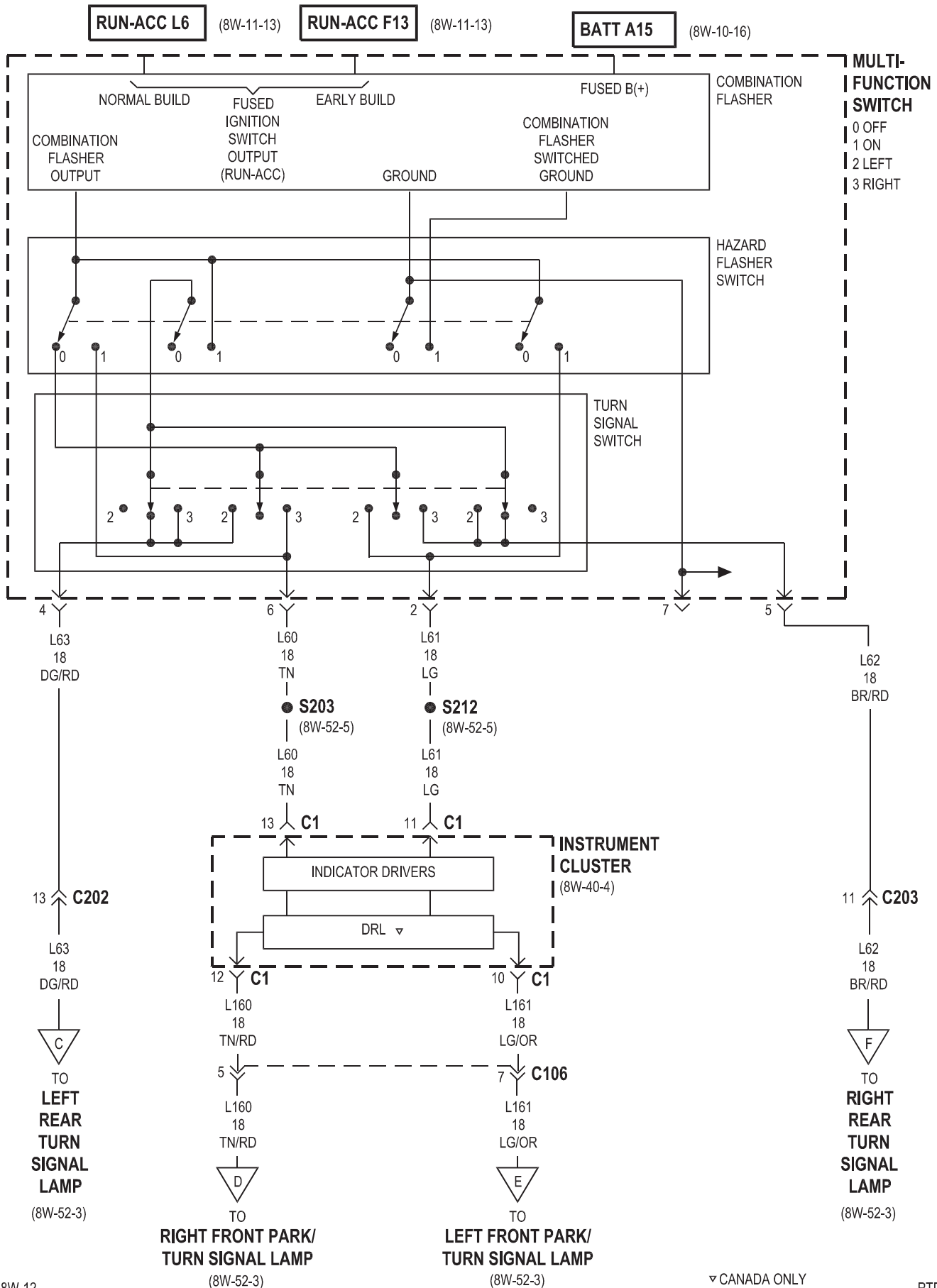


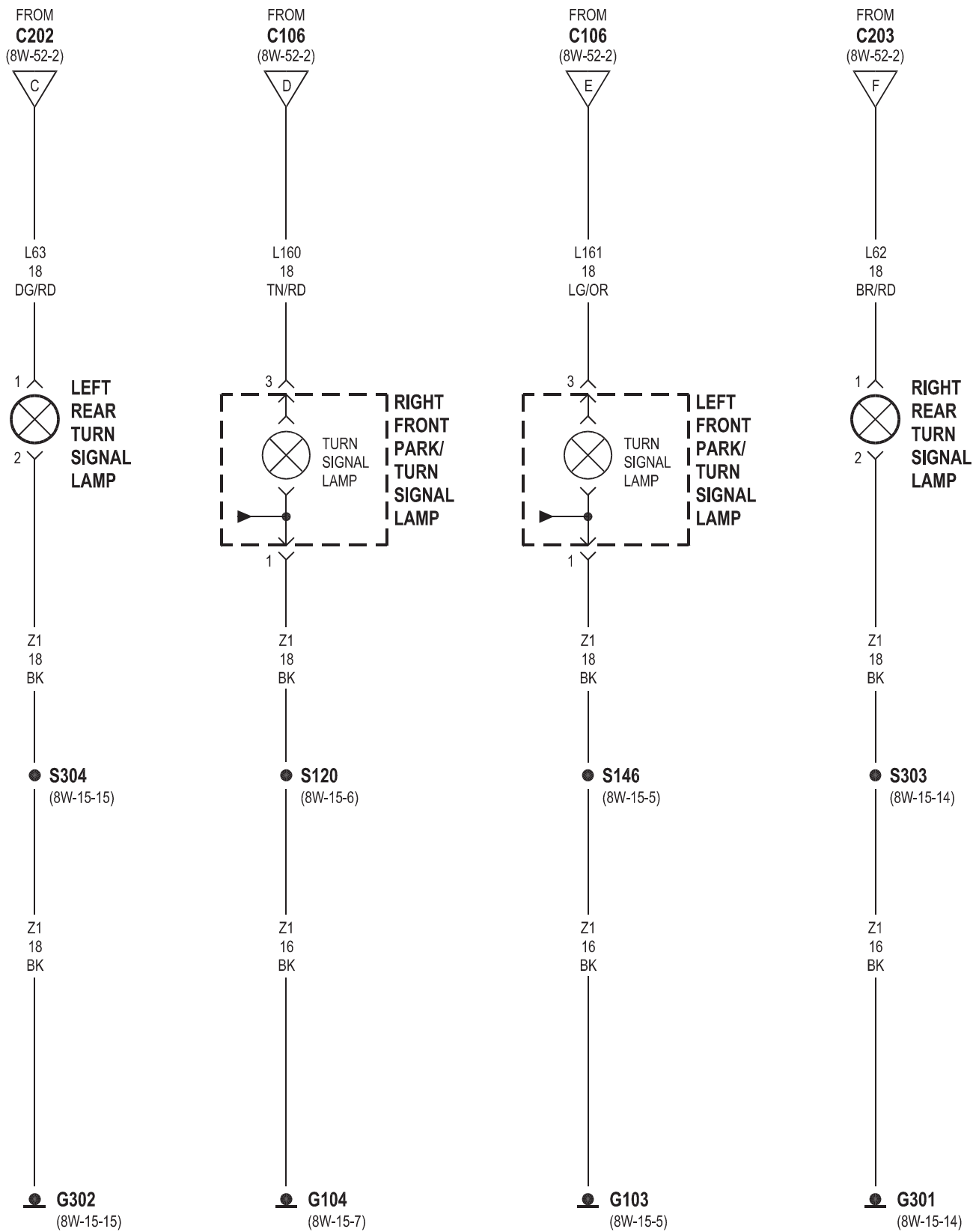


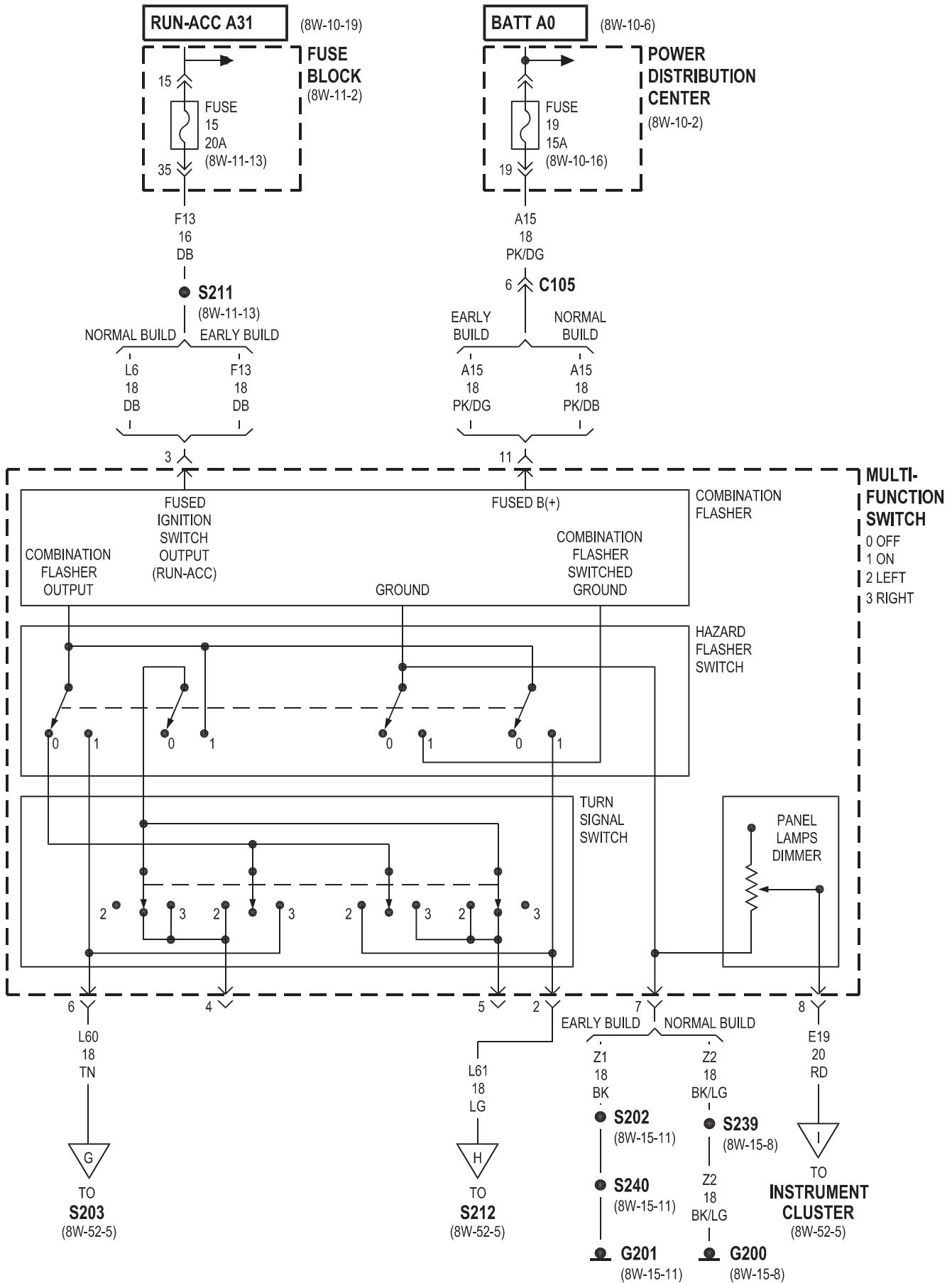
## 8W-52 TURN SIGNALS

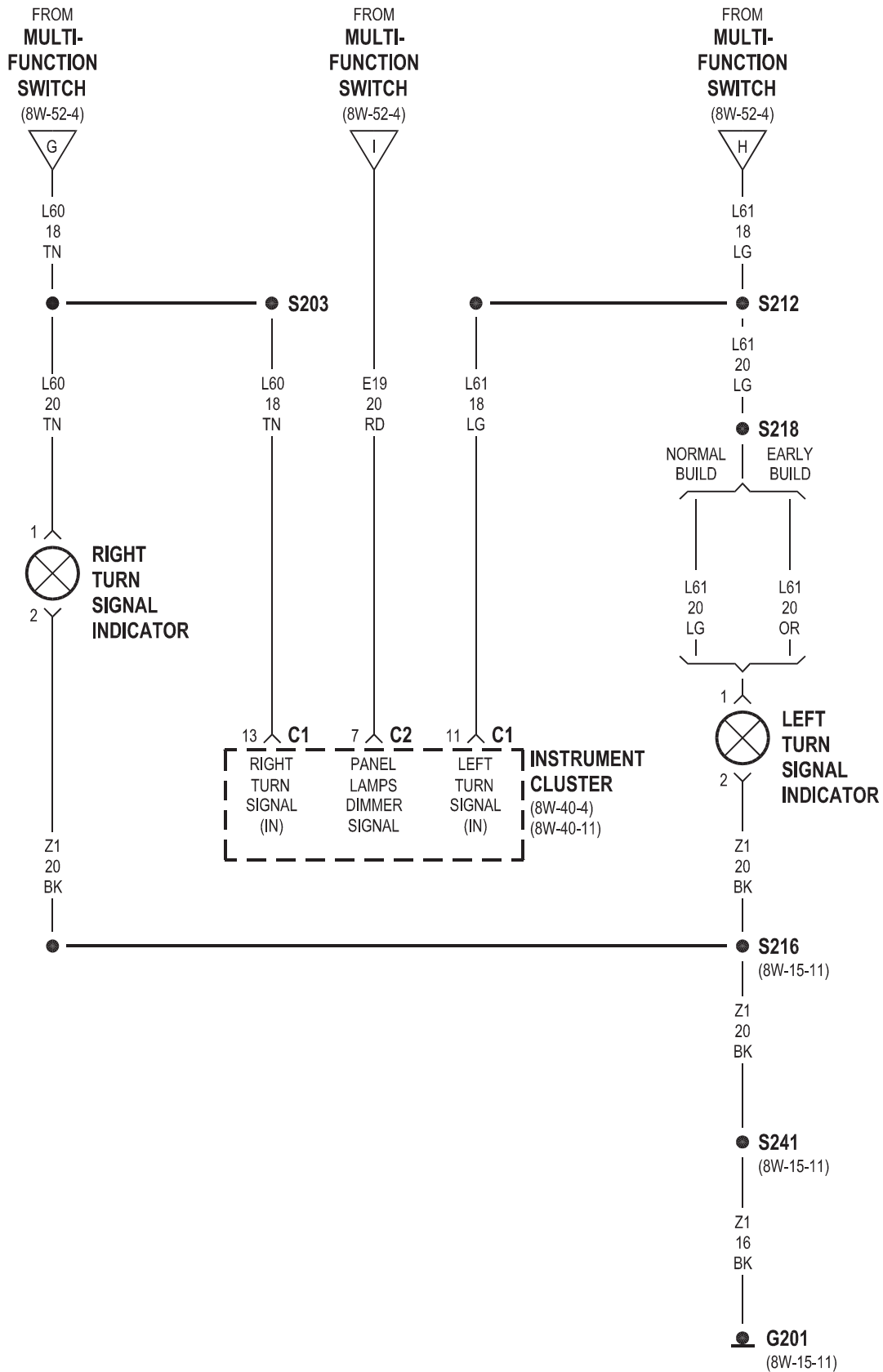
| <b>Component</b>             | <b>Page</b>   | <b>Component</b>                            | <b>Page</b>   |
|------------------------------|---------------|---------------------------------------------|---------------|
| Fuse 15 (FB) . . . . .       | 8W-52-4       | Left Front Park/Turn Signal Lamp . . . . .  | 8W-52-2, 3    |
| Fuse 19 (PDC) . . . . .      | 8W-52-4       | Left Rear Turn Signal Lamp . . . . .        | 8W-52-2, 3    |
| Fuse Block . . . . .         | 8W-52-4       | Left Turn Signal Indicator . . . . .        | 8W-52-5       |
| G103 . . . . .               | 8W-52-3       | Multi- Function Switch . . . . .            | 8W-52-2, 4, 5 |
| G104 . . . . .               | 8W-52-3       | Power Distribution Center . . . . .         | 8W-52-4       |
| G200 . . . . .               | 8W-52-4       | Right Front Park/Turn Signal Lamp . . . . . | 8W-52-2, 3    |
| G201 . . . . .               | 8W-52-4, 5    | Right Rear Turn Signal Lamp . . . . .       | 8W-52-2, 3    |
| G301 . . . . .               | 8W-52-3       | Right Turn Signal Indicator . . . . .       | 8W-52-5       |
| G302 . . . . .               | 8W-52-3       | Turn Signal Lamp . . . . .                  | 8W-52-3       |
| Instrument Cluster . . . . . | 8W-52-2, 4, 5 |                                             |               |







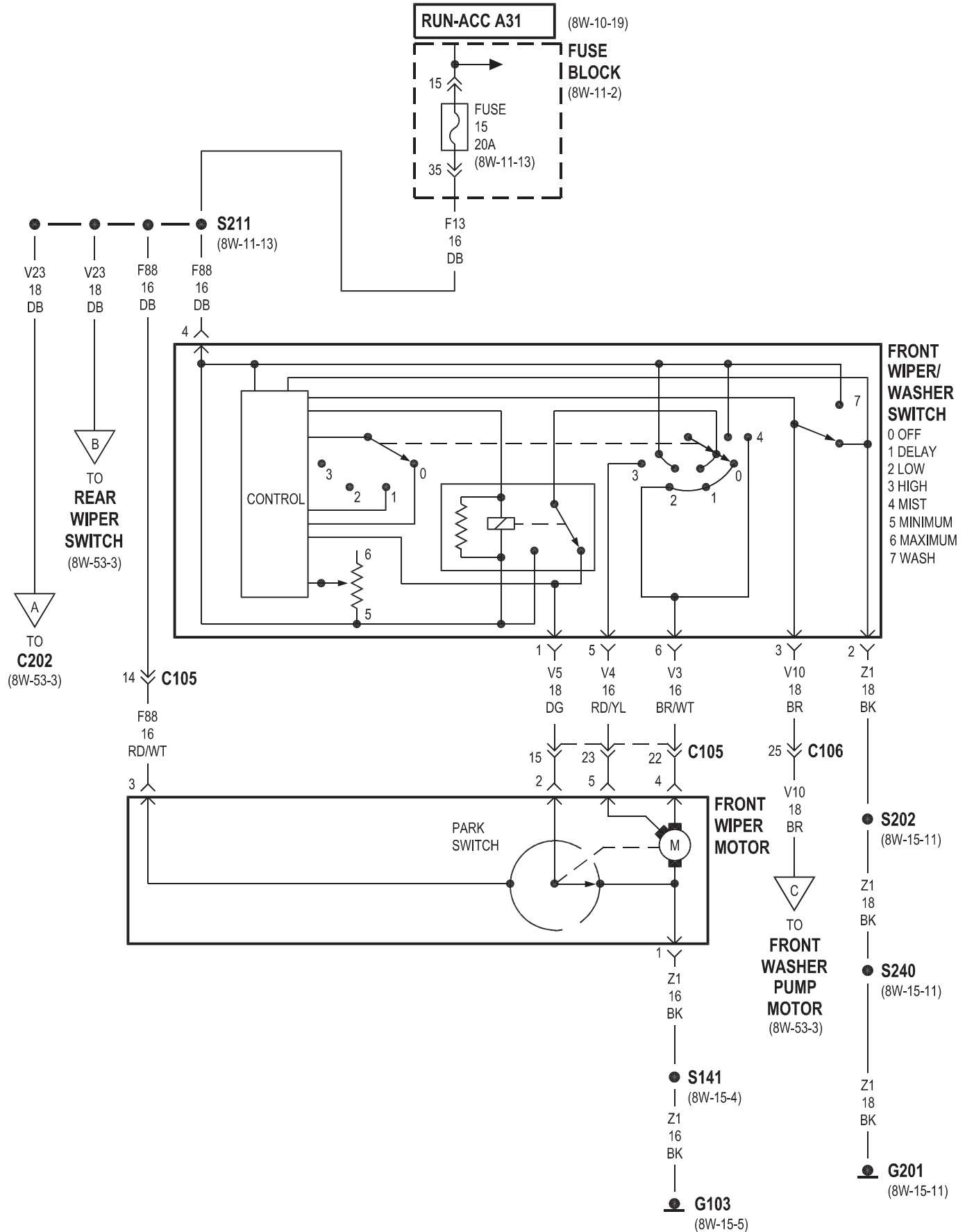




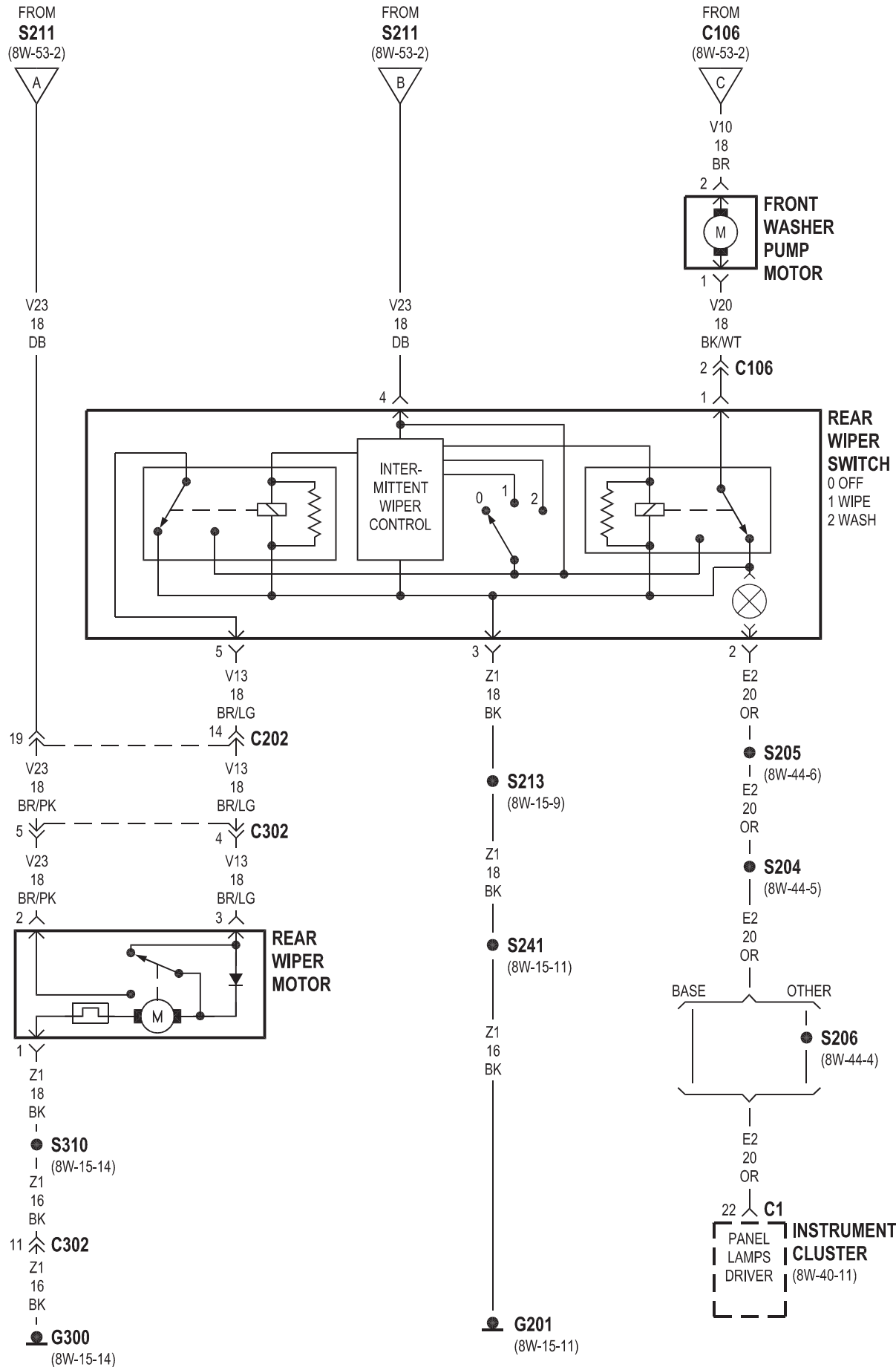


## 8W-53 WIPERS

| <b>Component</b>                    | <b>Page</b>   | <b>Component</b>             | <b>Page</b>      |
|-------------------------------------|---------------|------------------------------|------------------|
| Front Washer Pump Motor . . . . .   | 8W-53-2, 3, 5 | G201 . . . . .               | 8W-53-2, 3, 4, 5 |
| Front Wiper Motor . . . . .         | 8W-53-2, 4    | G300 . . . . .               | 8W-53-3, 5       |
| Front Wiper/Washer Switch . . . . . | 8W-53-2, 4    | Instrument Cluster . . . . . | 8W-53-3, 5       |
| Fuse 15 (FB) . . . . .              | 8W-53-2, 4    | Rear Wiper Motor . . . . .   | 8W-53-3, 5       |
| Fuse Block . . . . .                | 8W-53-2, 4    | Rear Wiper Switch . . . . .  | 8W-53-2, 3, 5    |
| G103 . . . . .                      | 8W-53-2, 4    |                              |                  |



## 8W-53 WIPERS NORMAL BUILD

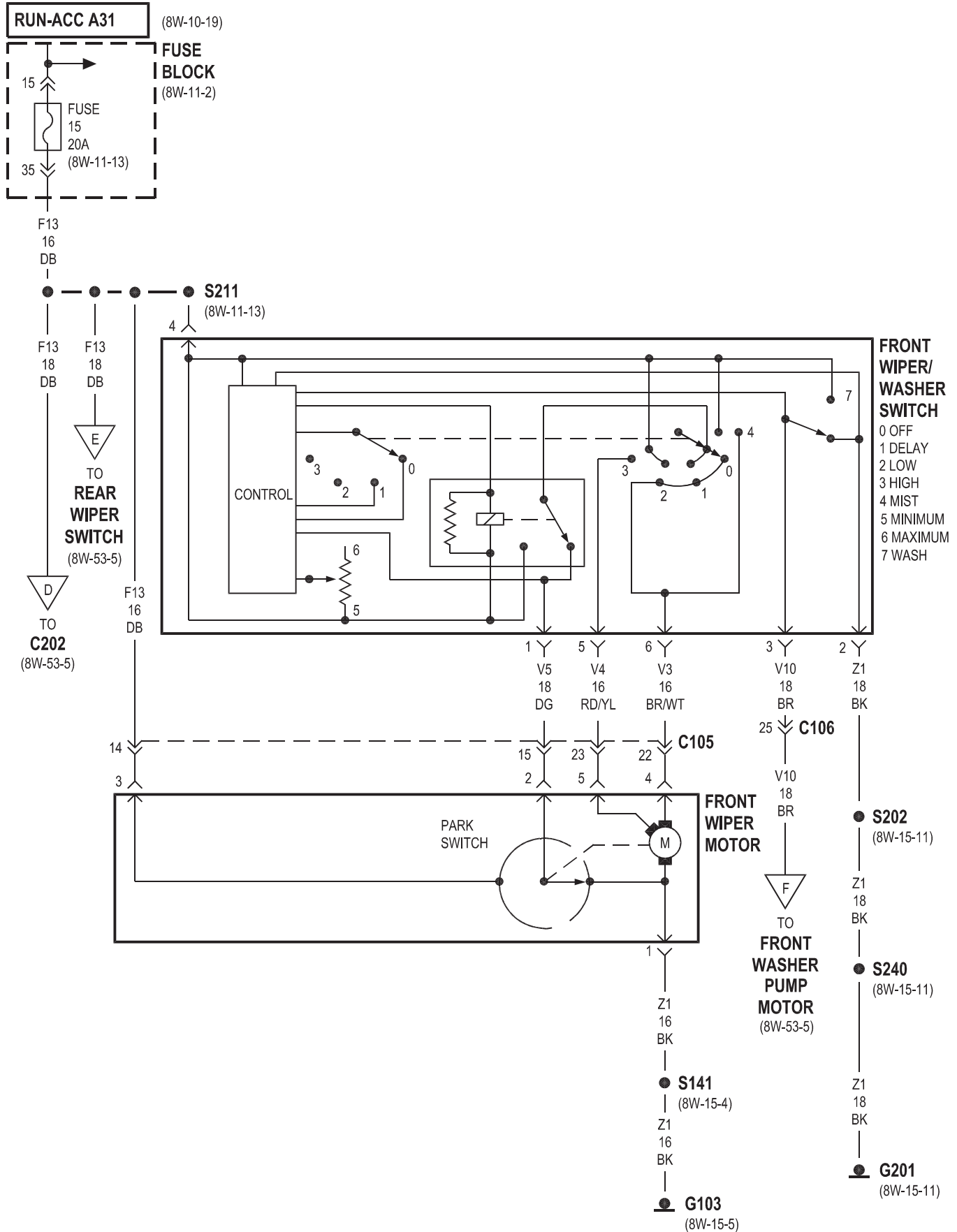




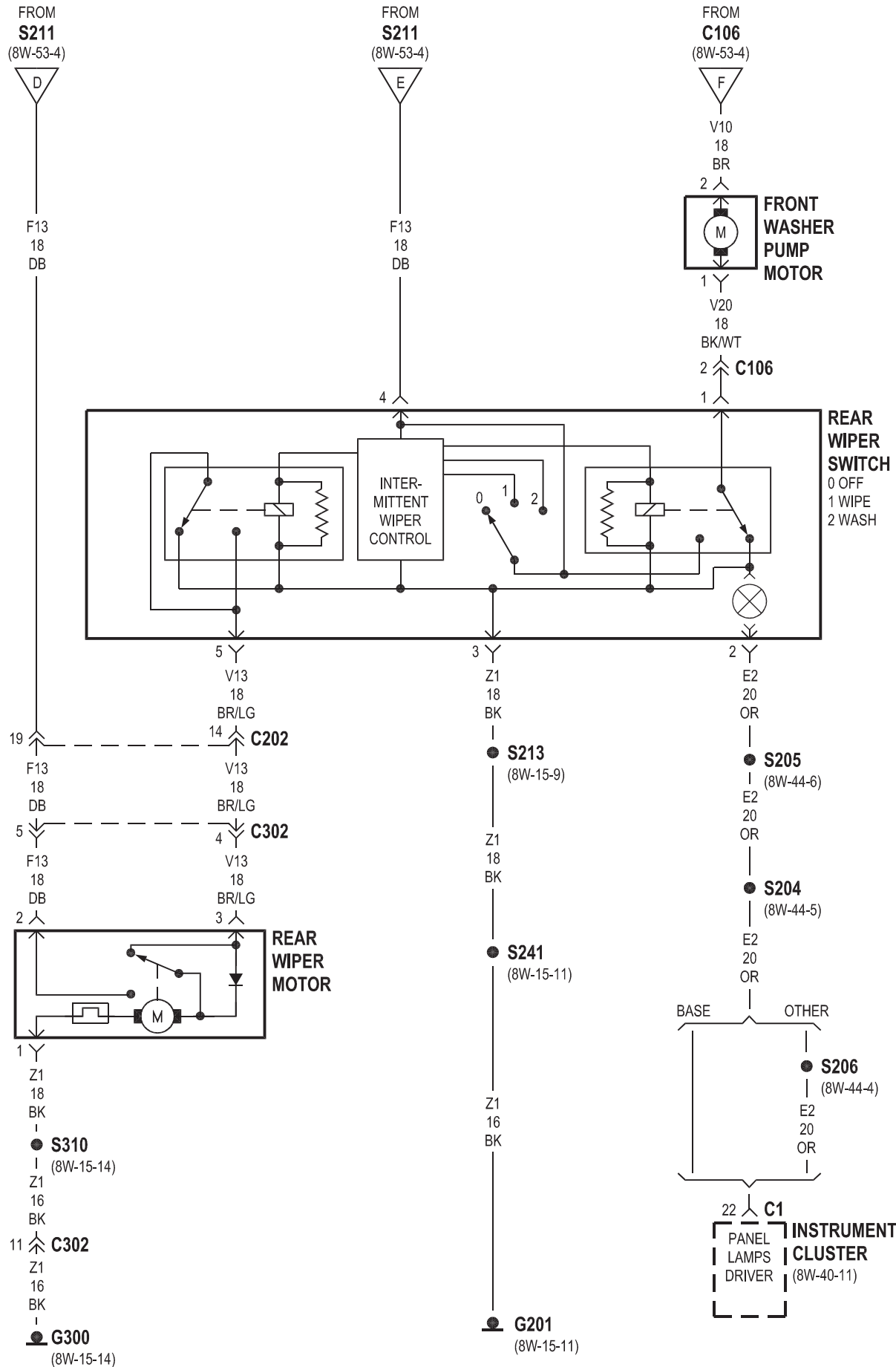
8W - 53 - 4

8W-53 WIPERS  
EARLY BUILD

PT



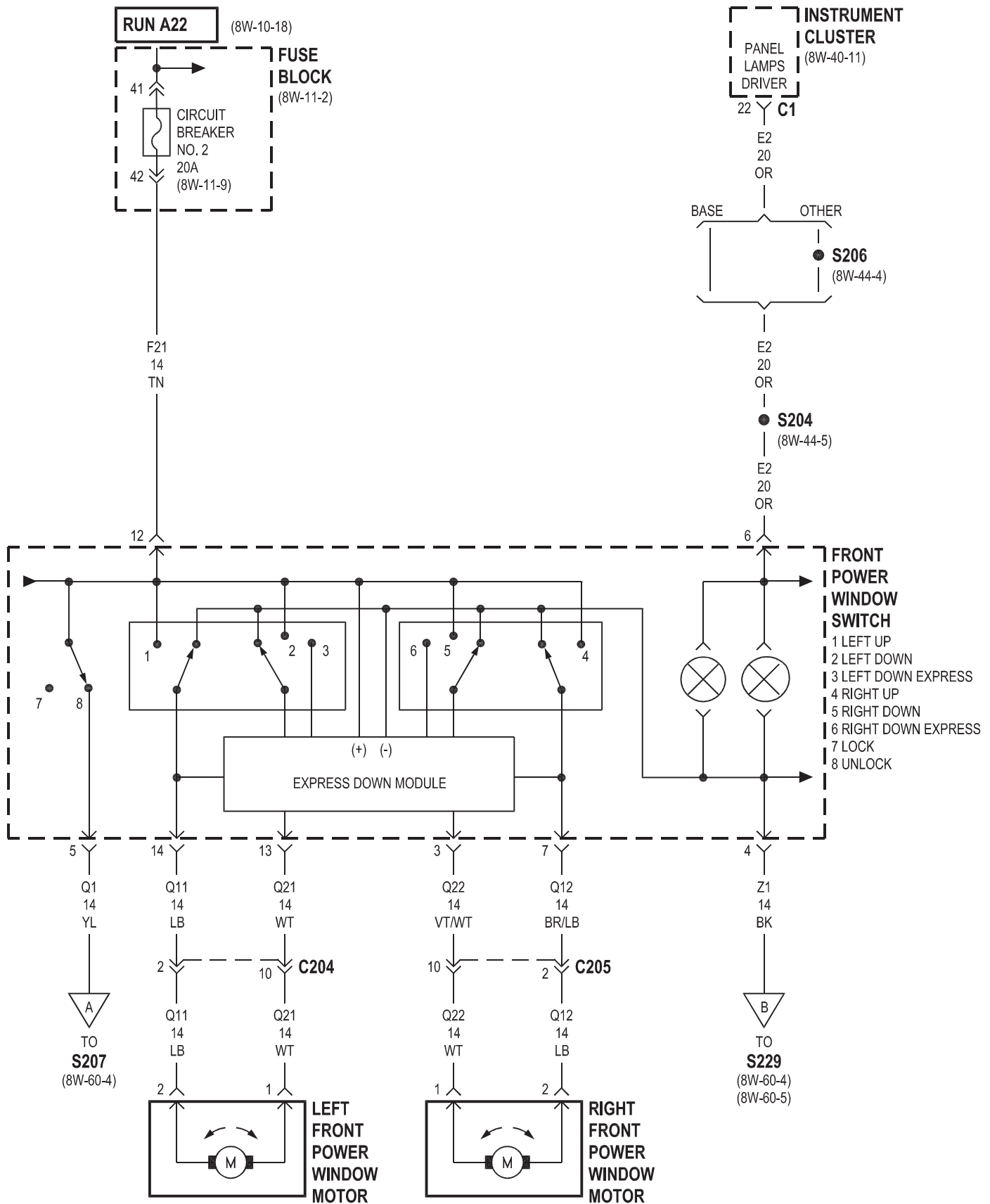
## 8W-53 WIPERS EARLY BUILD

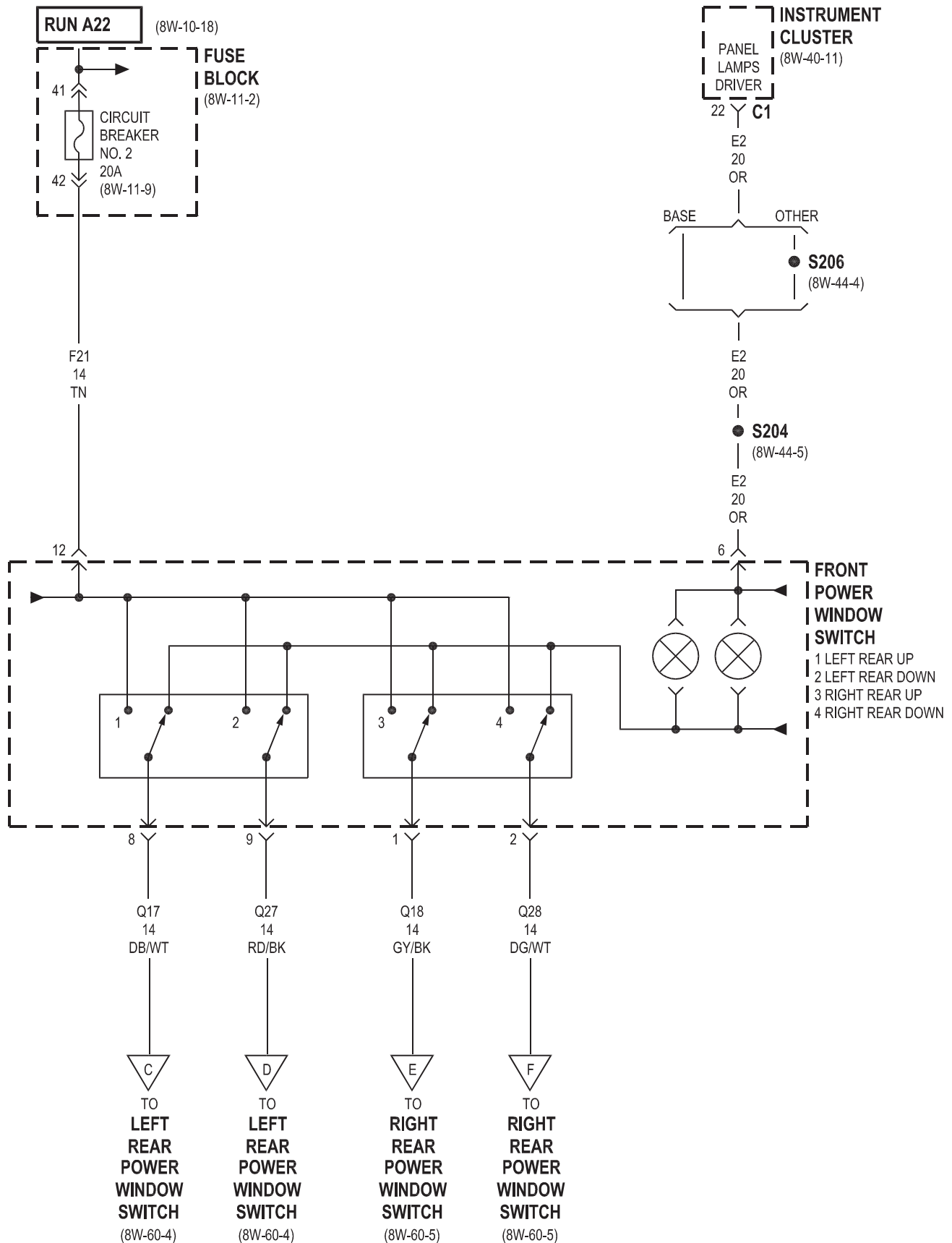


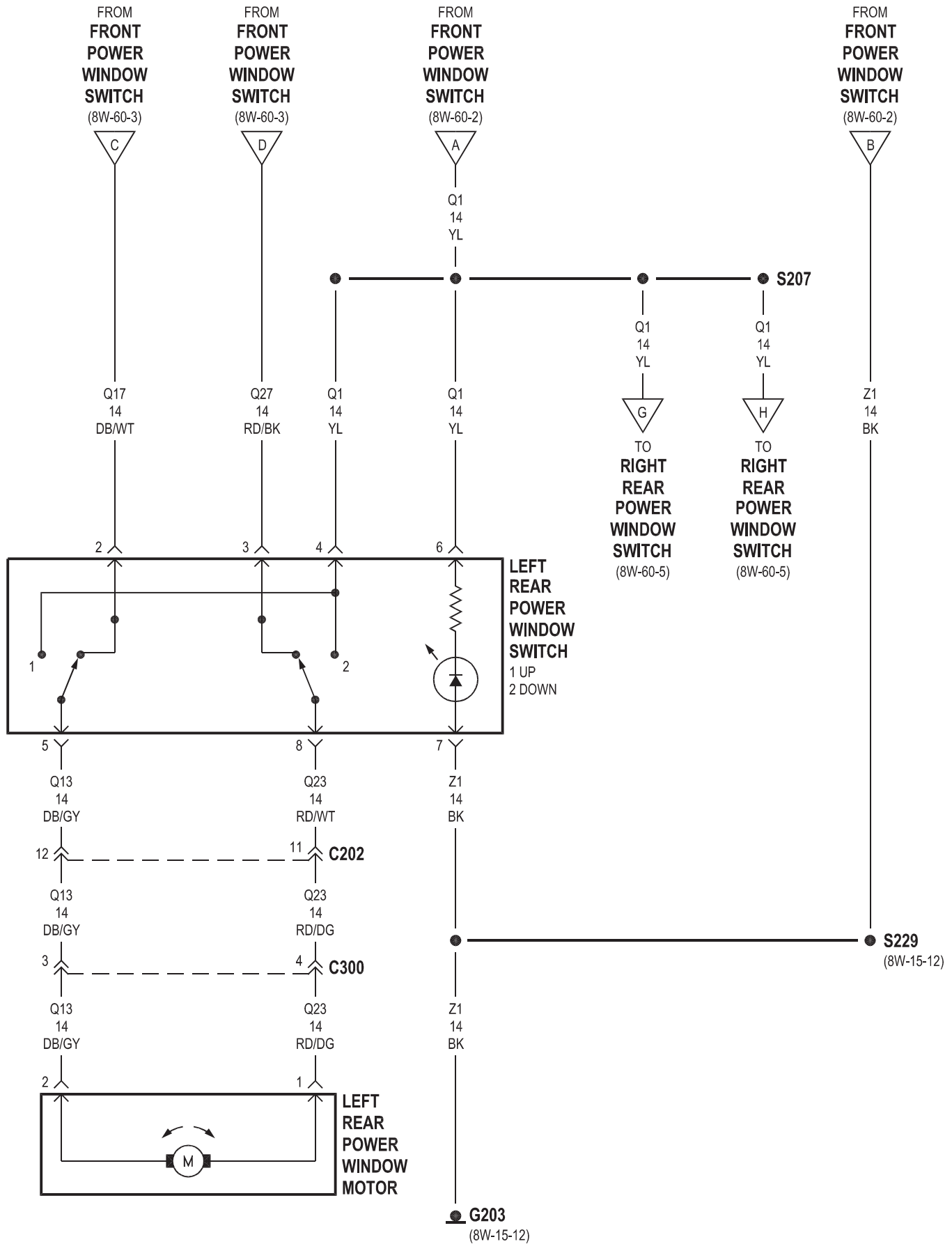


## 8W-60 POWER WINDOWS

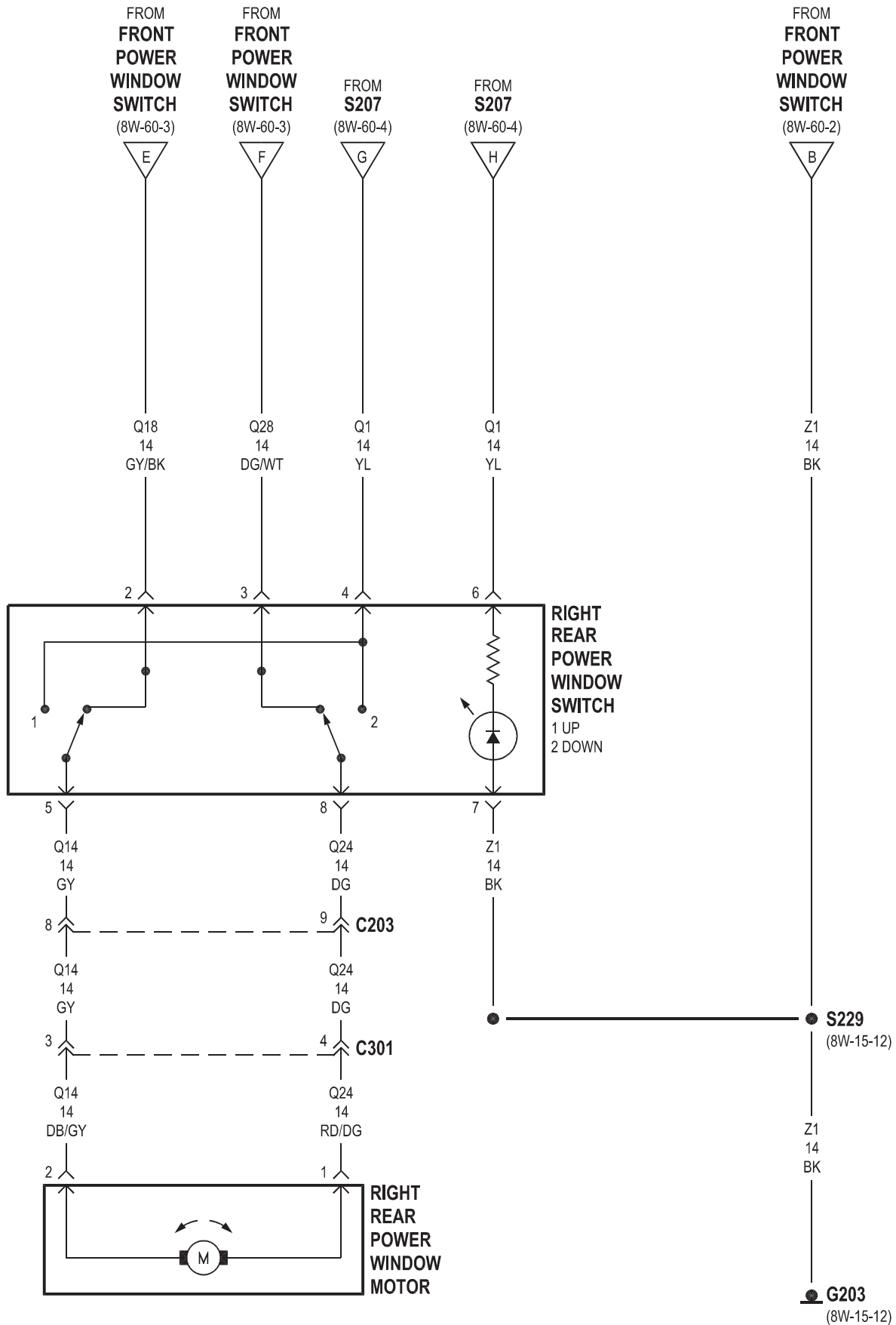
| <b>Component</b>                        | <b>Page</b>            | <b>Component</b>                         | <b>Page</b> |
|-----------------------------------------|------------------------|------------------------------------------|-------------|
| Circuit Breaker No. 2 (FB) . . . . .    | 8W-60-2, 3, 6          | Left Rear Power Window Motor . . . . .   | 8W-60-4, 7  |
| Front Power Window Switch . . . . .     | 8W-60-2, 3, 4, 5, 6, 7 | Left Rear Power Window Switch . . . . .  | 8W-60-3, 4  |
| Fuse Block . . . . .                    | 8W-60-2, 3, 6          | Rear Power Window Switch . . . . .       | 8W-60-7     |
| G203 . . . . .                          | 8W-60-4, 5, 7          | Right Front Power Window Motor . . . . . | 8W-60-2, 6  |
| Instrument Cluster . . . . .            | 8W-60-2, 3, 6          | Right Rear Power Window Motor . . . . .  | 8W-60-5, 7  |
| Left Front Power Window Motor . . . . . | 8W-60-2, 6             | Right Rear Power Window Switch . . . . . | 8W-60-5     |



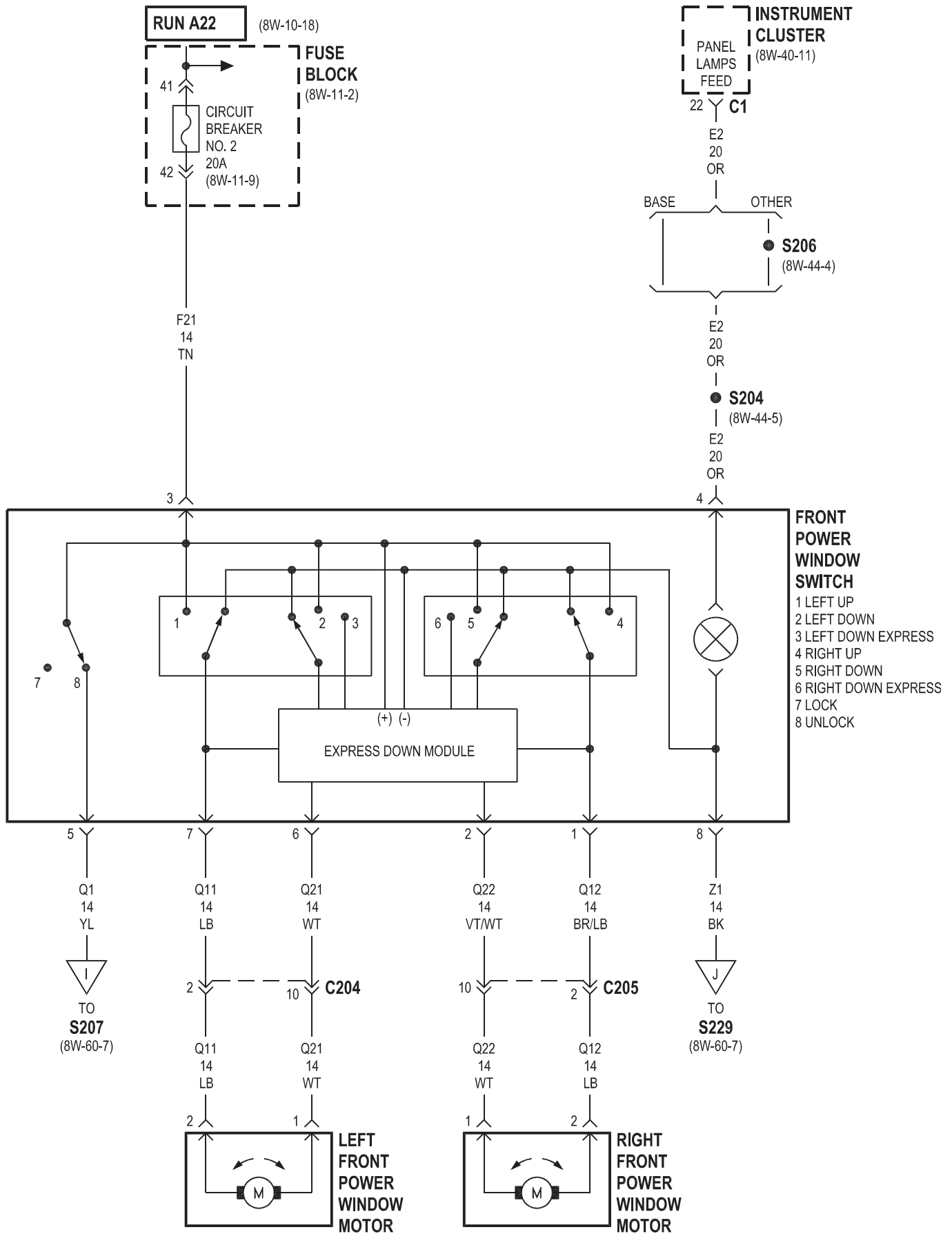


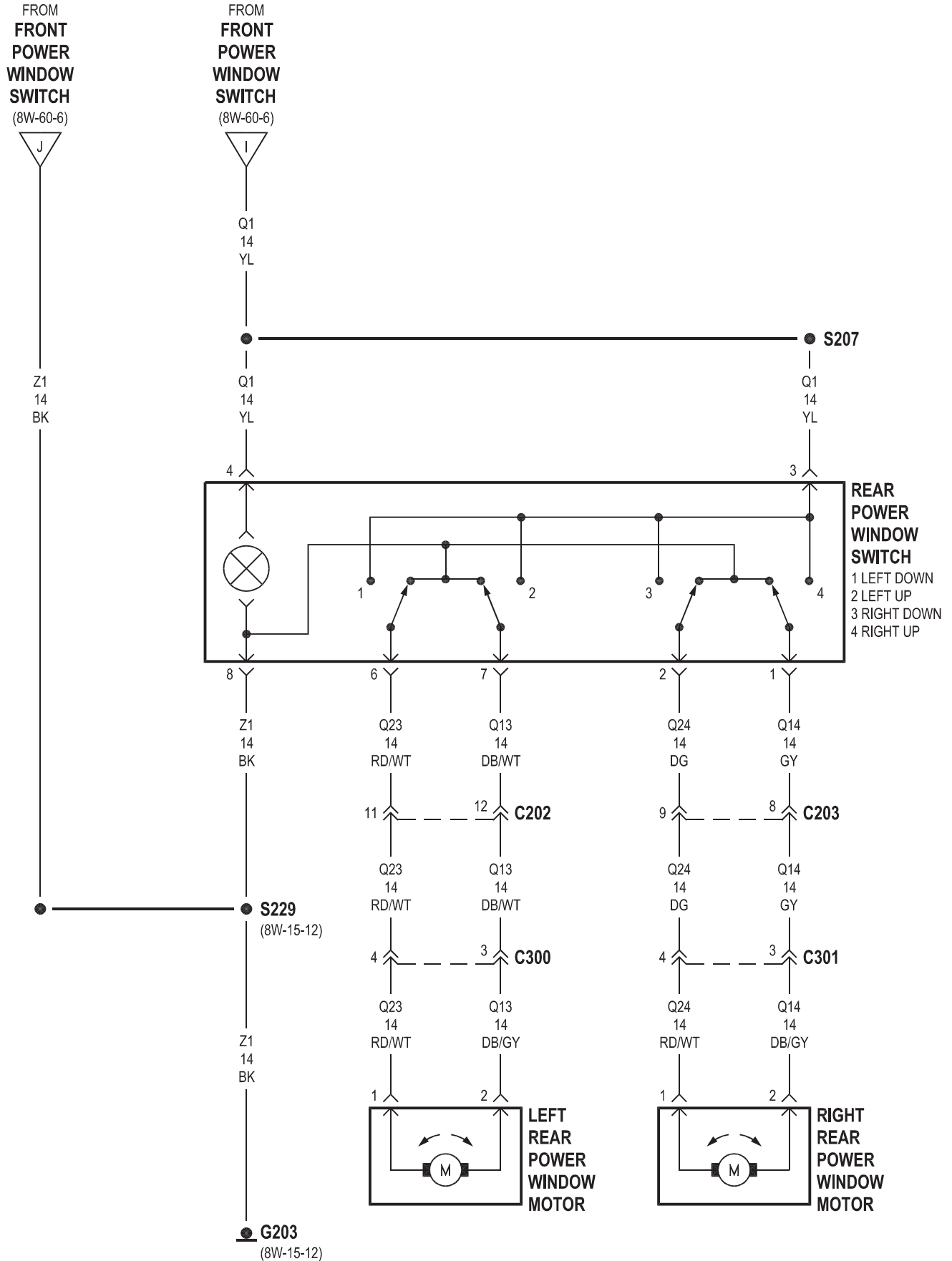


PT
8W-60 POWER WINDOWS  
NORMAL BUILD
8W - 60 - 5





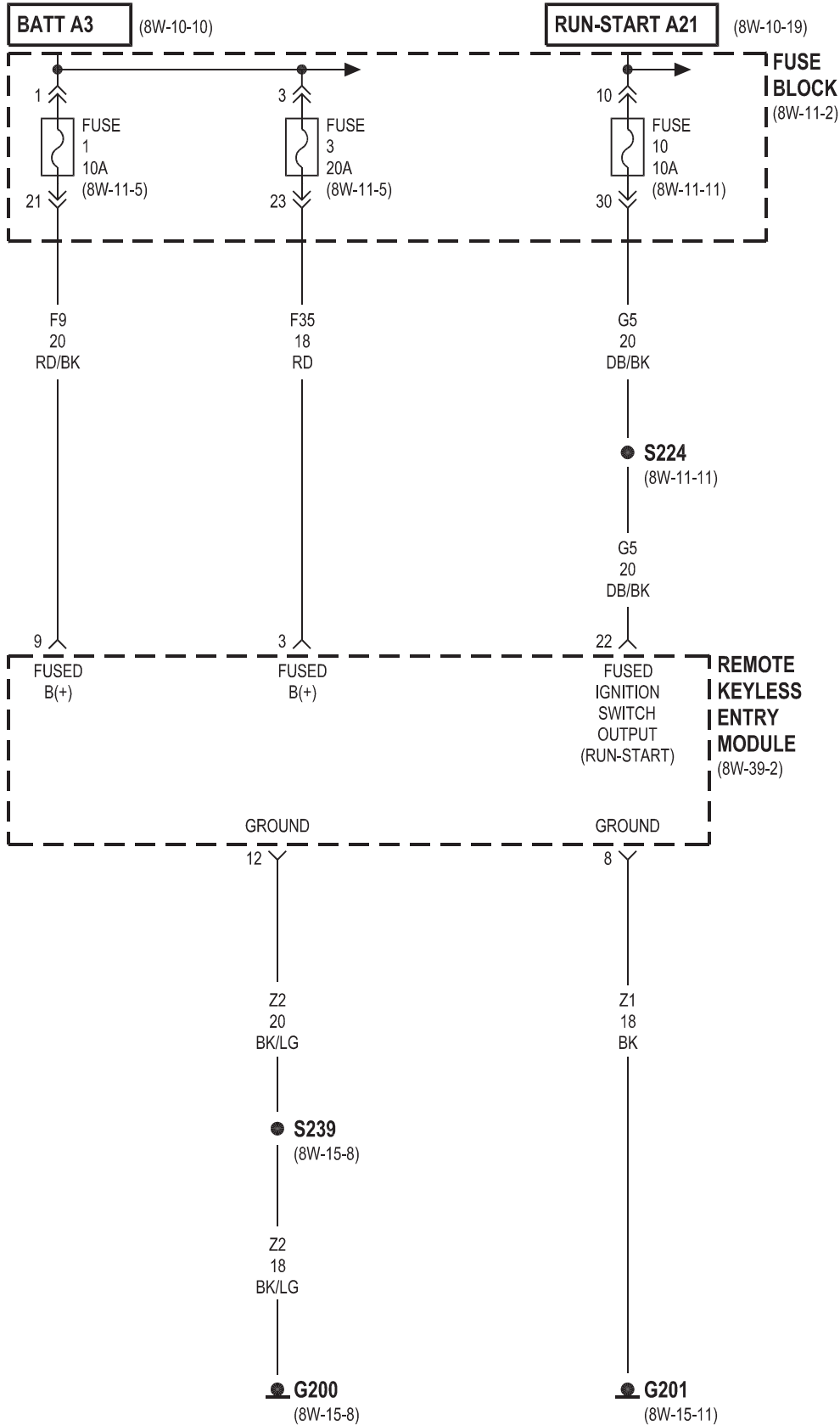


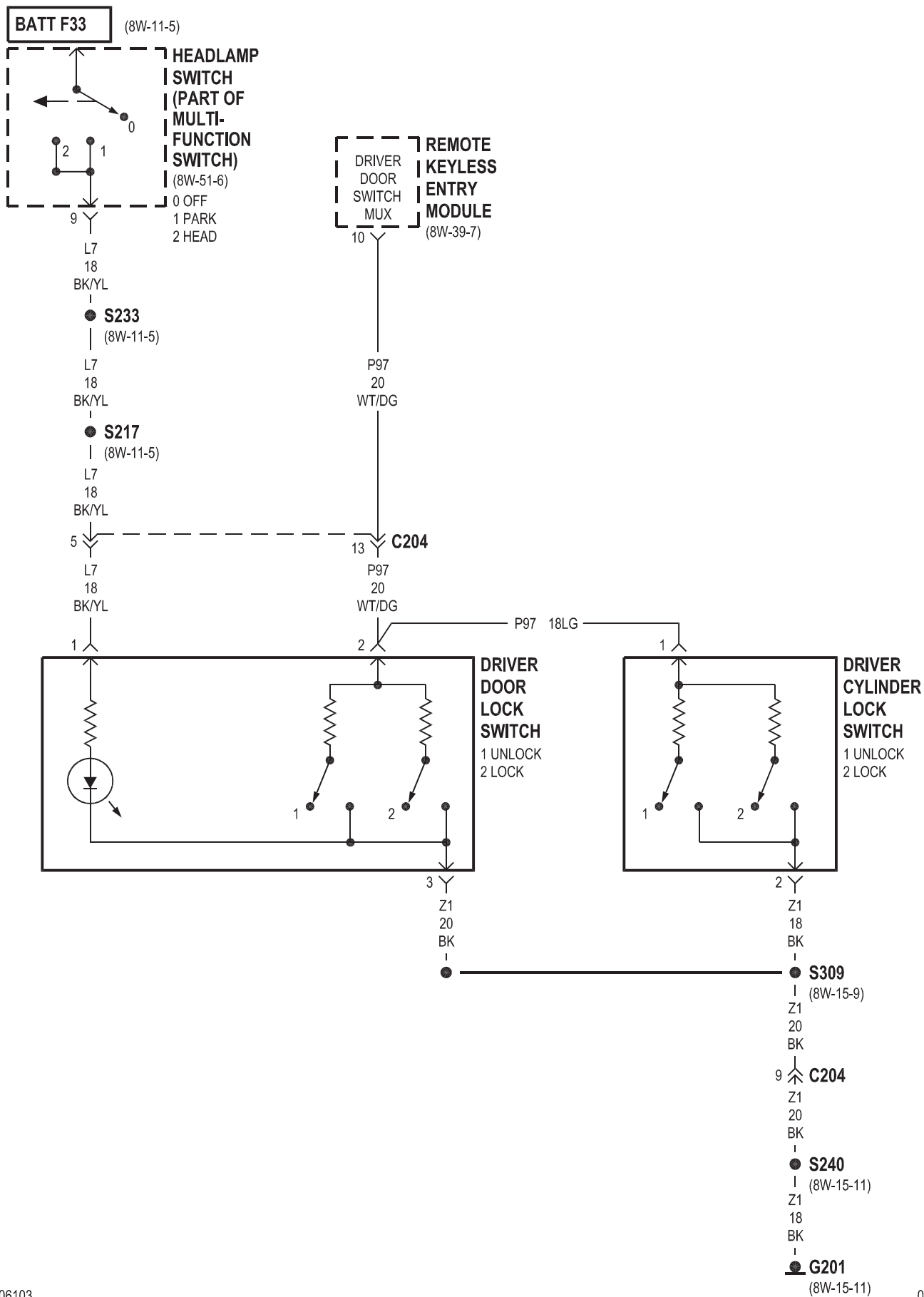


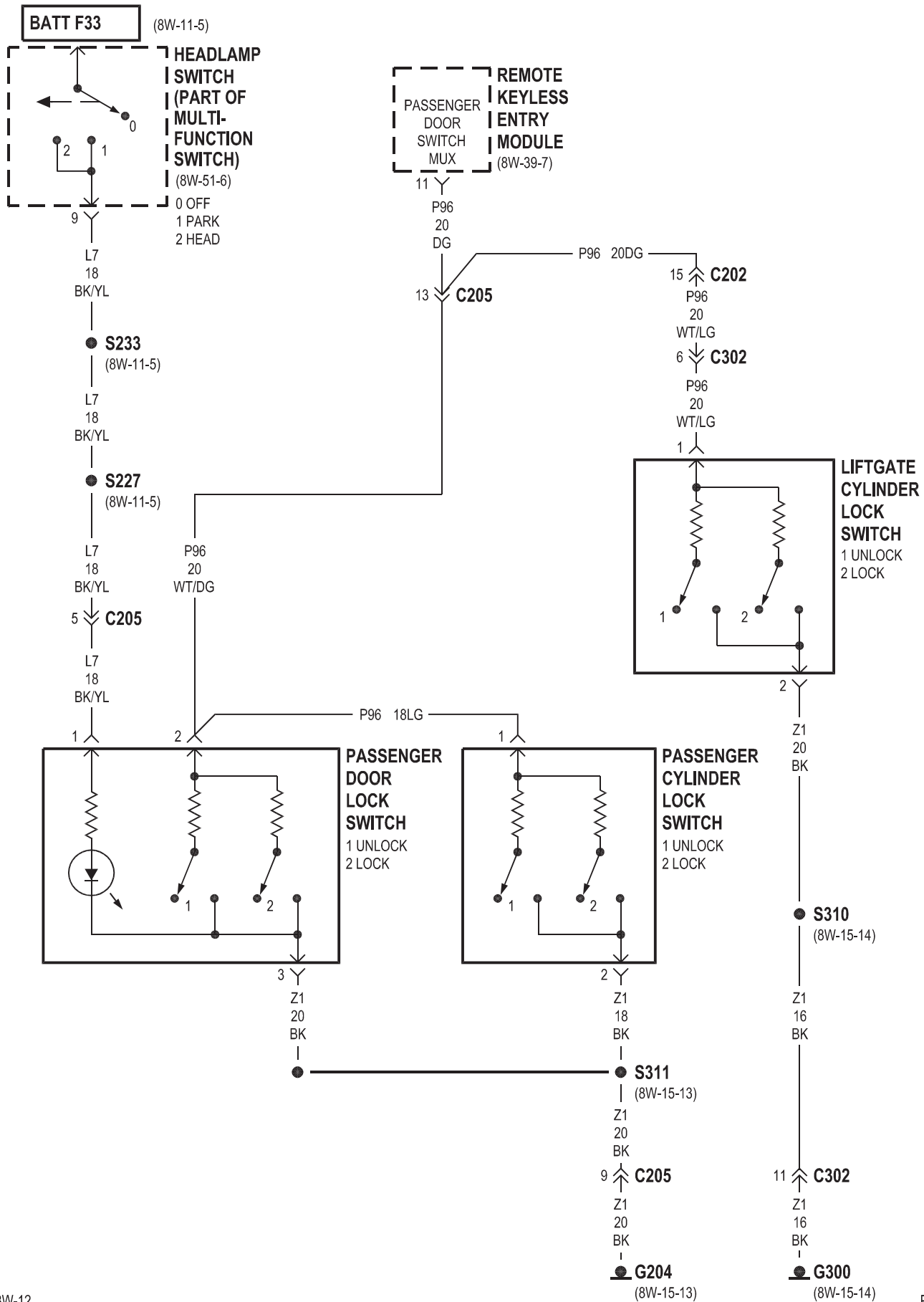


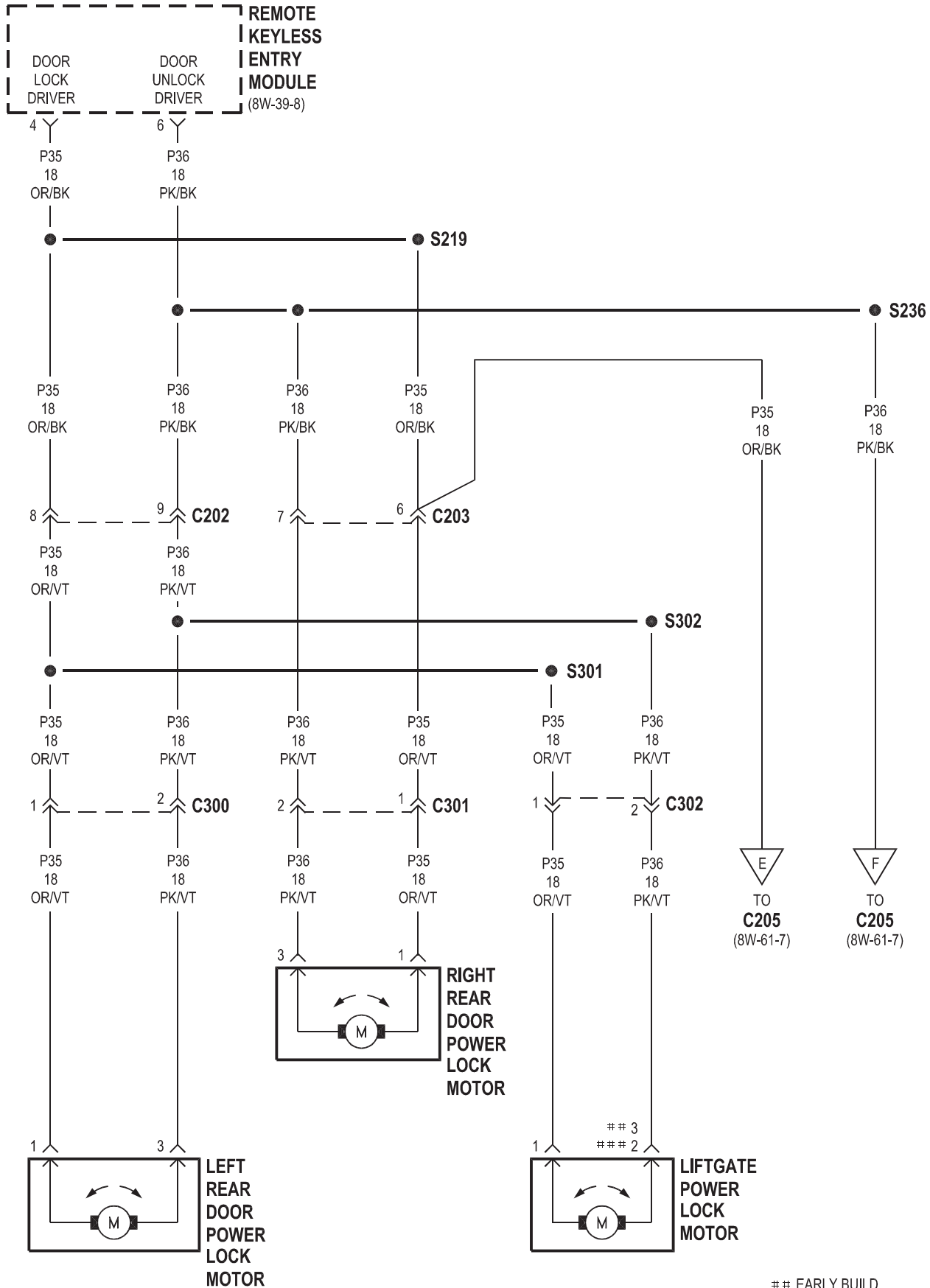
## 8W-61 POWER DOOR LOCKS

| <b>Component</b>                                      | <b>Page</b>   | <b>Component</b>                                         | <b>Page</b>               |
|-------------------------------------------------------|---------------|----------------------------------------------------------|---------------------------|
| Data Link Connector . . . . .                         | 8W-61-6       | Headlamp Switch . . . . .                                | 8W-61-3, 4                |
| Driver Cylinder Lock Switch . . . . .                 | 8W-61-3       | Left Rear Door Power Lock Motor . . . . .                | 8W-61-5                   |
| Driver Door Lock Motor . . . . .                      | 8W-61-7       | Liftgate Ajar Switch . . . . .                           | 8W-61-6                   |
| Driver Door Lock Switch . . . . .                     | 8W-61-3       | Liftgate Cylinder Lock Switch . . . . .                  | 8W-61-4                   |
| Driver Door Power Lock<br>Motor/Ajar Switch . . . . . | 8W-61-7, 8    | Liftgate Power Lock Motor . . . . .                      | 8W-61-5                   |
| Fuse 1 (FB) . . . . .                                 | 8W-61-2       | Passenger Cylinder Lock Switch . . . . .                 | 8W-61-4                   |
| Fuse 3 (FB) . . . . .                                 | 8W-61-2       | Passenger Door Lock Motor . . . . .                      | 8W-61-7                   |
| Fuse 10 (FB) . . . . .                                | 8W-61-2       | Passenger Door Lock Switch . . . . .                     | 8W-61-4                   |
| Fuse Block . . . . .                                  | 8W-61-2       | Passenger Door Power Lock<br>Motor/Ajar Switch . . . . . | 8W-61-7, 8                |
| G200 . . . . .                                        | 8W-61-2       | Remote Keyless Entry<br>Module . . . . .                 | 8W-61-2, 3, 4, 5, 6, 7, 8 |
| G201 . . . . .                                        | 8W-61-2, 3, 8 | Right Rear Door Power Lock Motor . . . . .               | 8W-61-5                   |
| G204 . . . . .                                        | 8W-61-4, 8    |                                                          |                           |
| G300 . . . . .                                        | 8W-61-4, 6    |                                                          |                           |

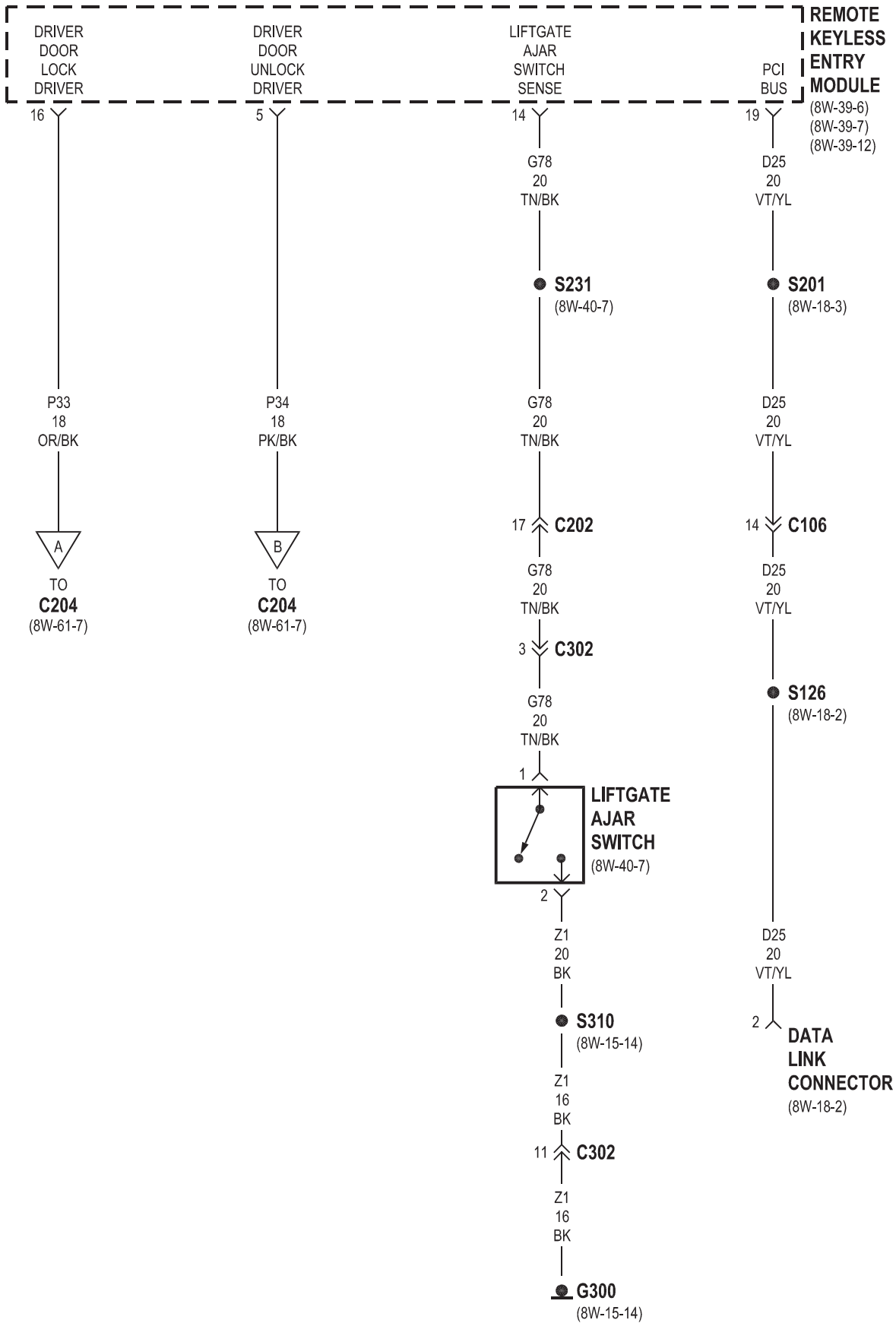


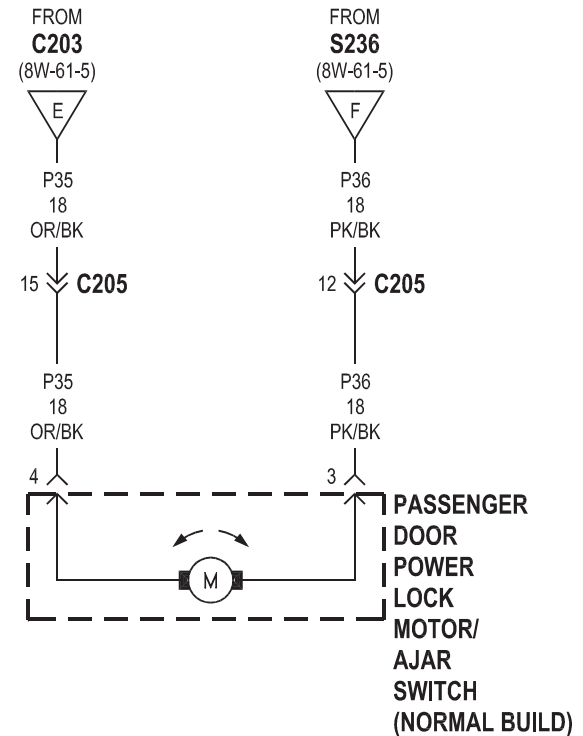
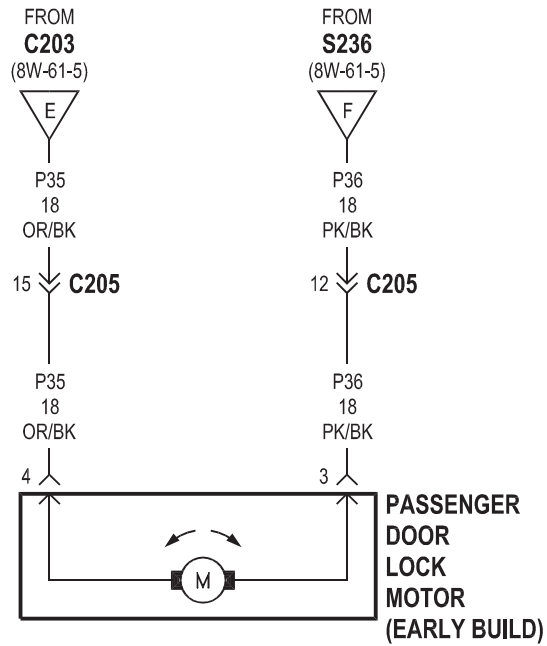
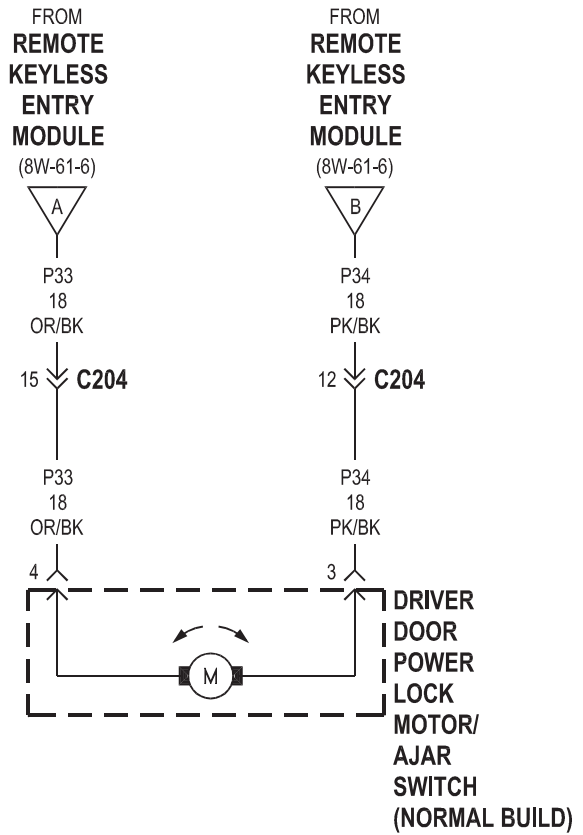
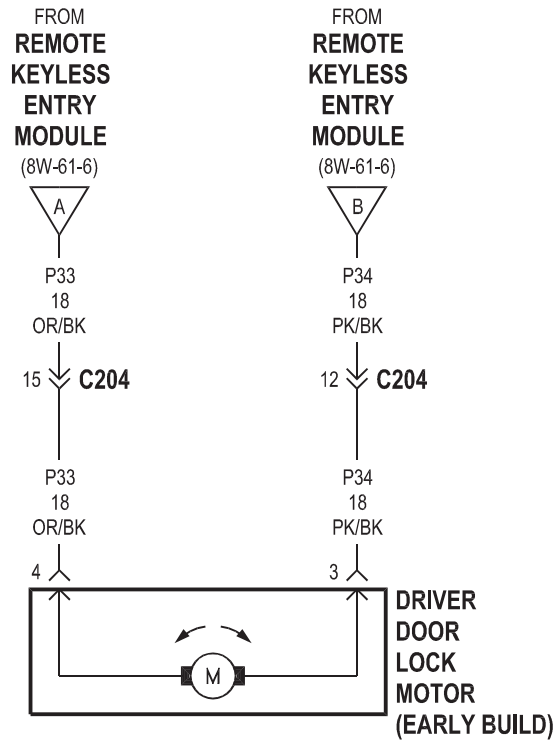


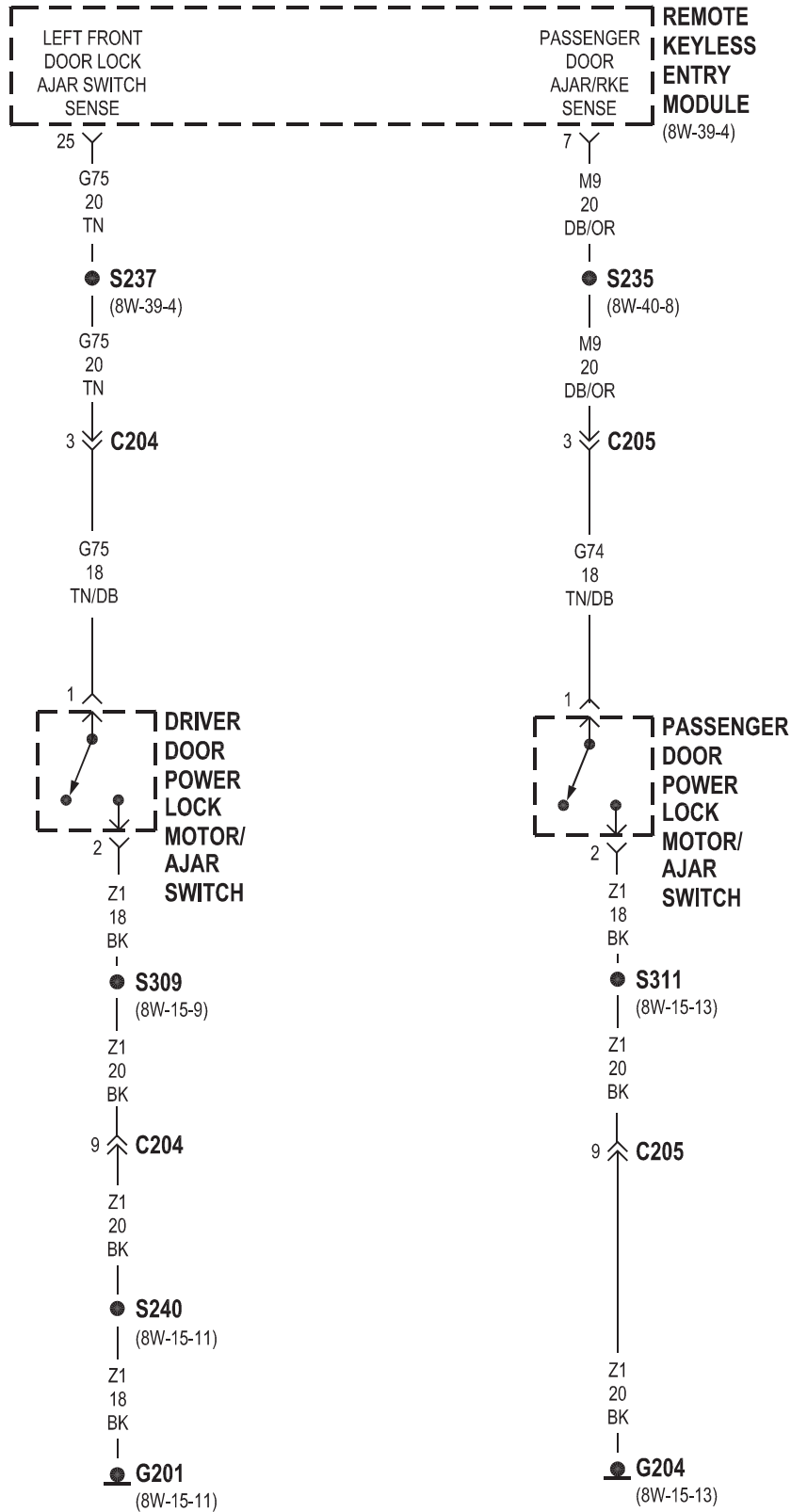








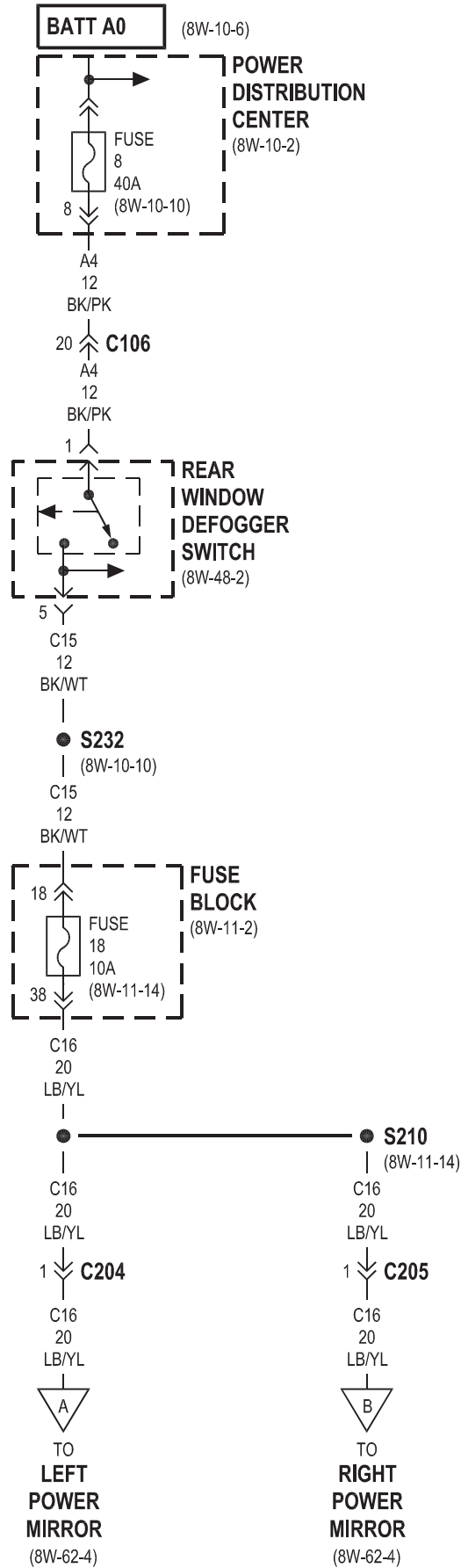


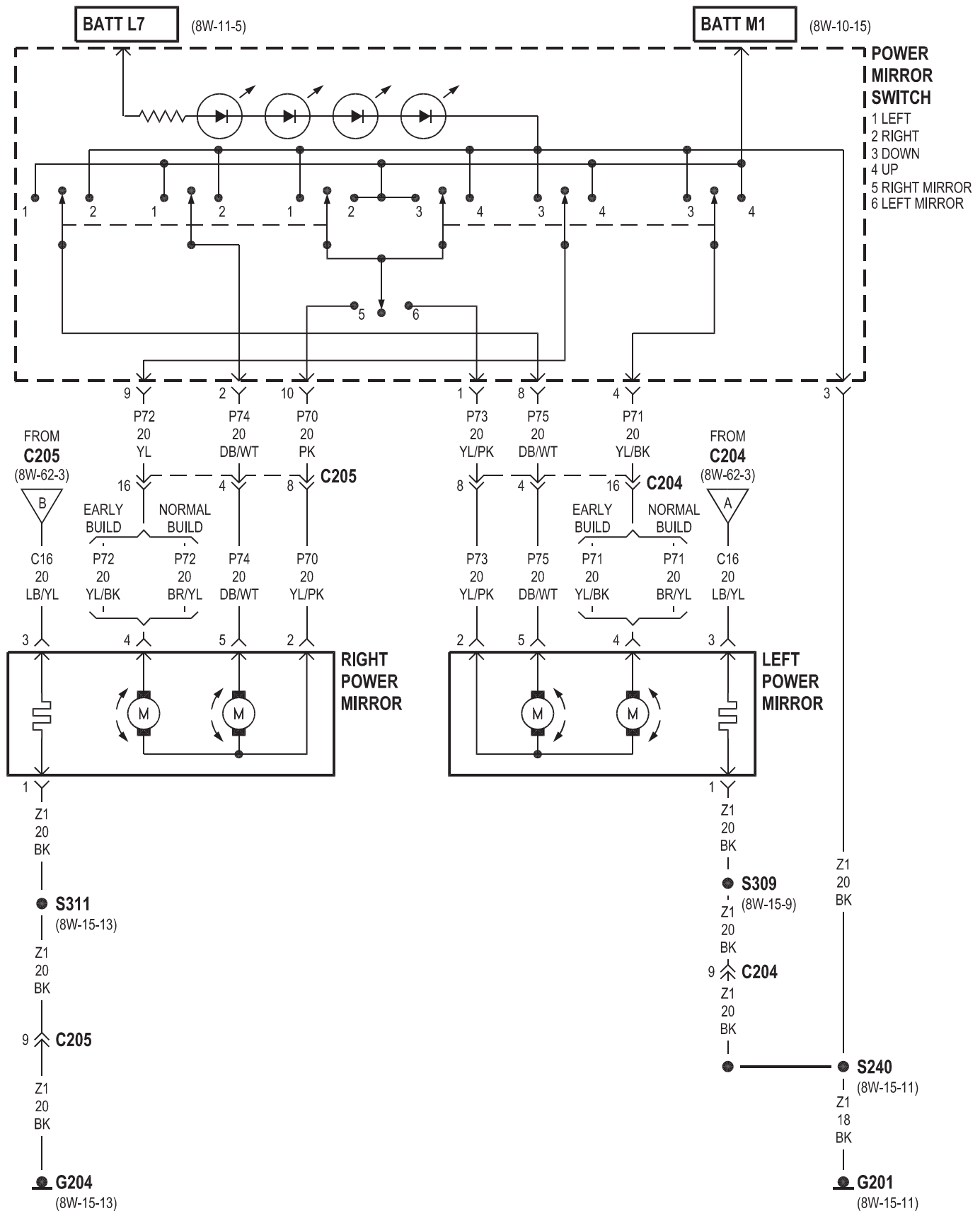


## 8W-62 POWER MIRRORS

| <b>Component</b>        | <b>Page</b> | <b>Component</b>                      | <b>Page</b> |
|-------------------------|-------------|---------------------------------------|-------------|
| Fuse 2 (FB) . . . . .   | 8W-62-2     | Headlamp Switch . . . . .             | 8W-62-2     |
| Fuse 8 (PDC) . . . . .  | 8W-62-3     | Left Power Mirror . . . . .           | 8W-62-3, 4  |
| Fuse 18 (FB) . . . . .  | 8W-62-3     | Power Distribution Center . . . . .   | 8W-62-2, 3  |
| Fuse 18 (PDC) . . . . . | 8W-62-2     | Power Mirror Switch . . . . .         | 8W-62-2, 4  |
| Fuse Block . . . . .    | 8W-62-2, 3  | Rear Window Defogger Switch . . . . . | 8W-62-3     |
| G201 . . . . .          | 8W-62-2, 4  | Right Power Mirror . . . . .          | 8W-62-3, 4  |
| G204 . . . . .          | 8W-62-4     |                                       |             |



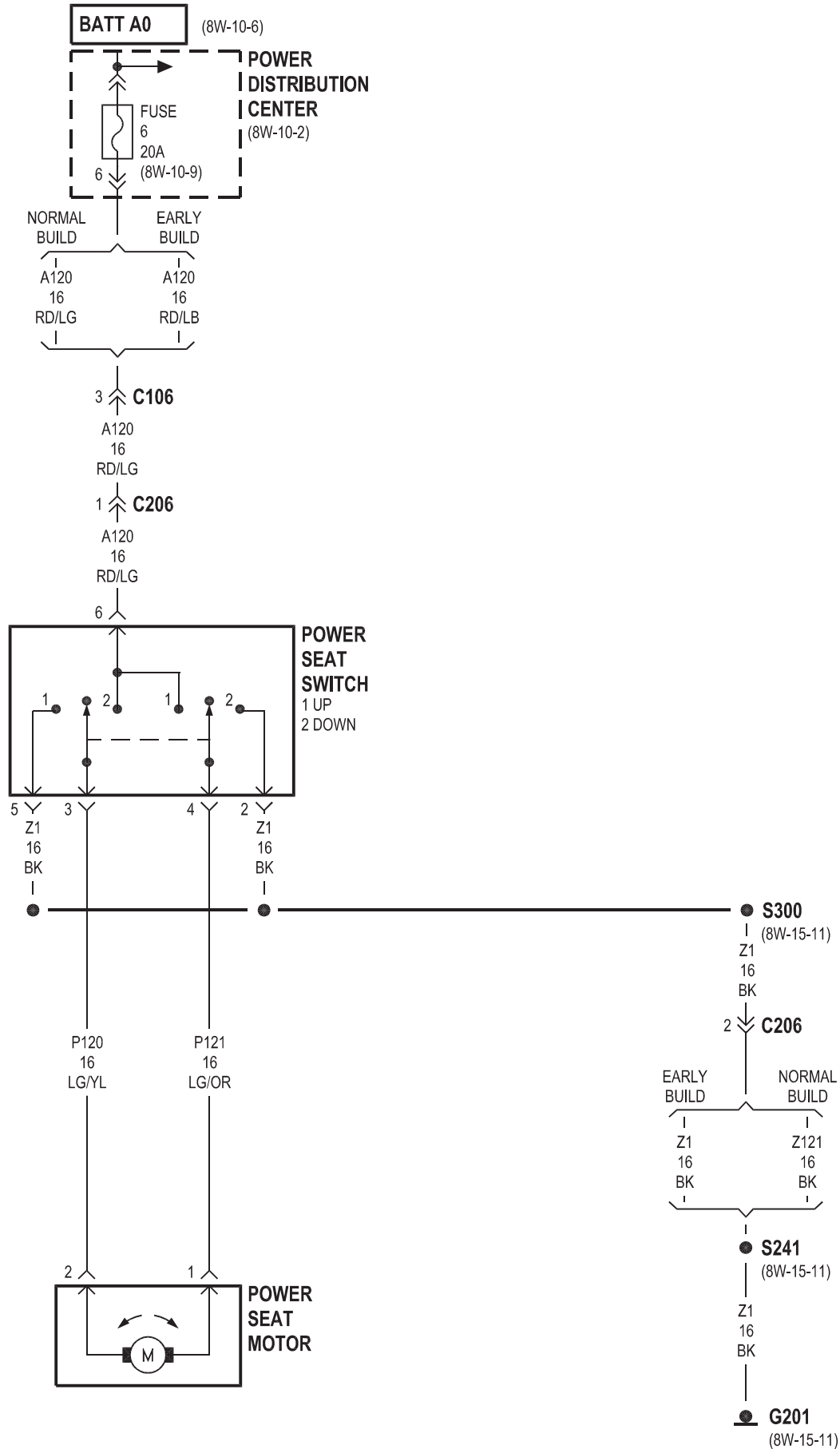


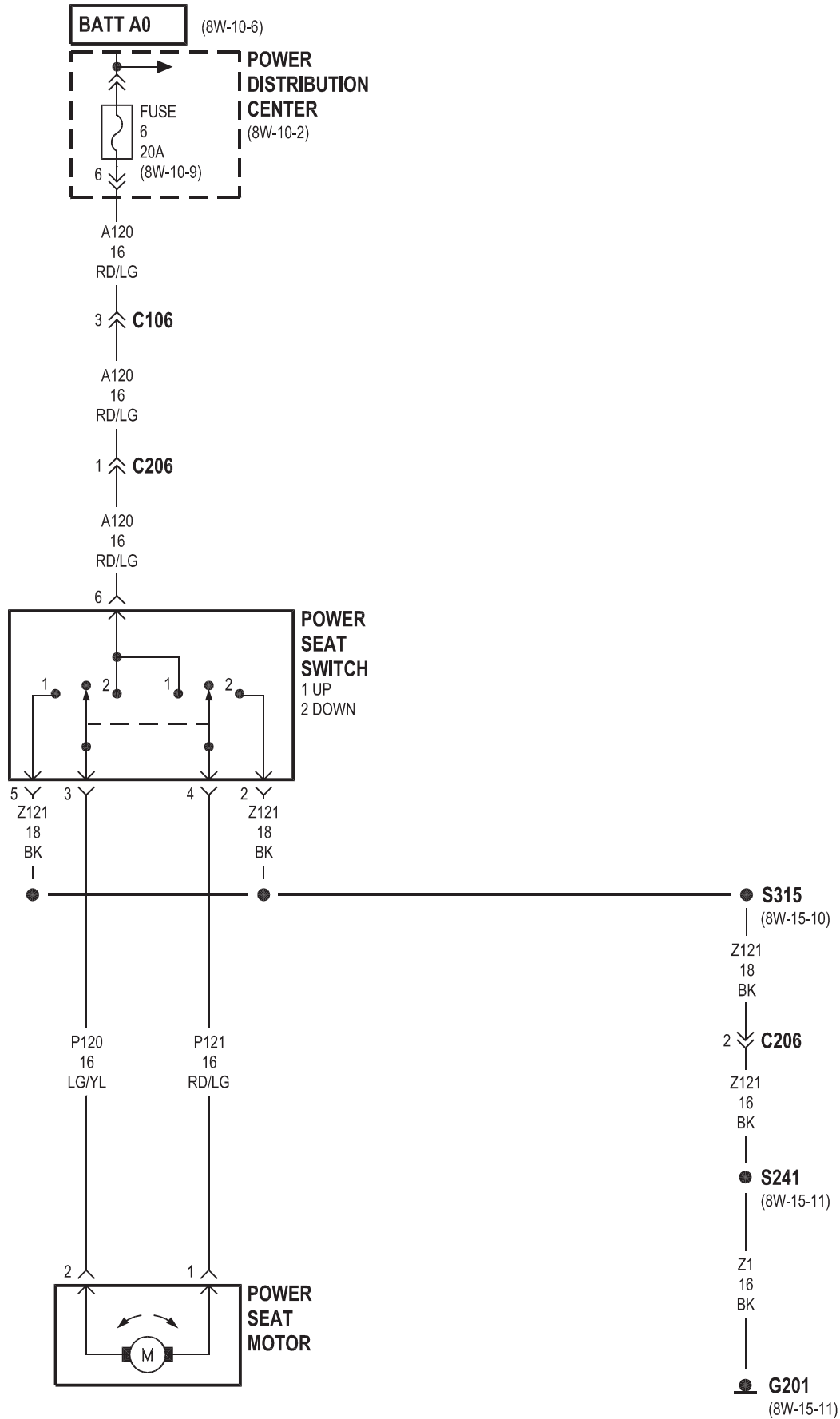


## 8W-63 POWER SEAT

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|--------------------------------------|-------------|-----------------------------------------|---------------------|
| Driver Heated Seat Back . . . . .    | 8W-63-5     | G201 . . . . .                          | 8W-63-2, 3, 4, 5, 6 |
| Driver Heated Seat Cushion . . . . . | 8W-63-5     | Heated Seat Relay . . . . .             | 8W-63-4             |
| Driver Heated Seat Module . . . . .  | 8W-63-5     | Passenger Heated Seat Back . . . . .    | 8W-63-6             |
| Driver Heated Seat Switch . . . . .  | 8W-63-5     | Passenger Heated Seat Cushion . . . . . | 8W-63-6             |
| Fuse 4 (FB) . . . . .                | 8W-63-4     | Passenger Heated Seat Module . . . . .  | 8W-63-6             |
| Fuse 4 (PDC) . . . . .               | 8W-63-4     | Passenger Heated Seat Switch . . . . .  | 8W-63-6             |
| Fuse 6 (FB) . . . . .                | 8W-63-4     | Power Distribution Center . . . . .     | 8W-63-2, 3, 4       |
| Fuse 6 (PDC) . . . . .               | 8W-63-2, 3  | Power Seat Motor . . . . .              | 8W-63-2, 3          |
| Fuse 17 (FB) . . . . .               | 8W-63-4     | Power Seat Switch . . . . .             | 8W-63-2, 3          |
| Fuse Block . . . . .                 | 8W-63-4     |                                         |                     |

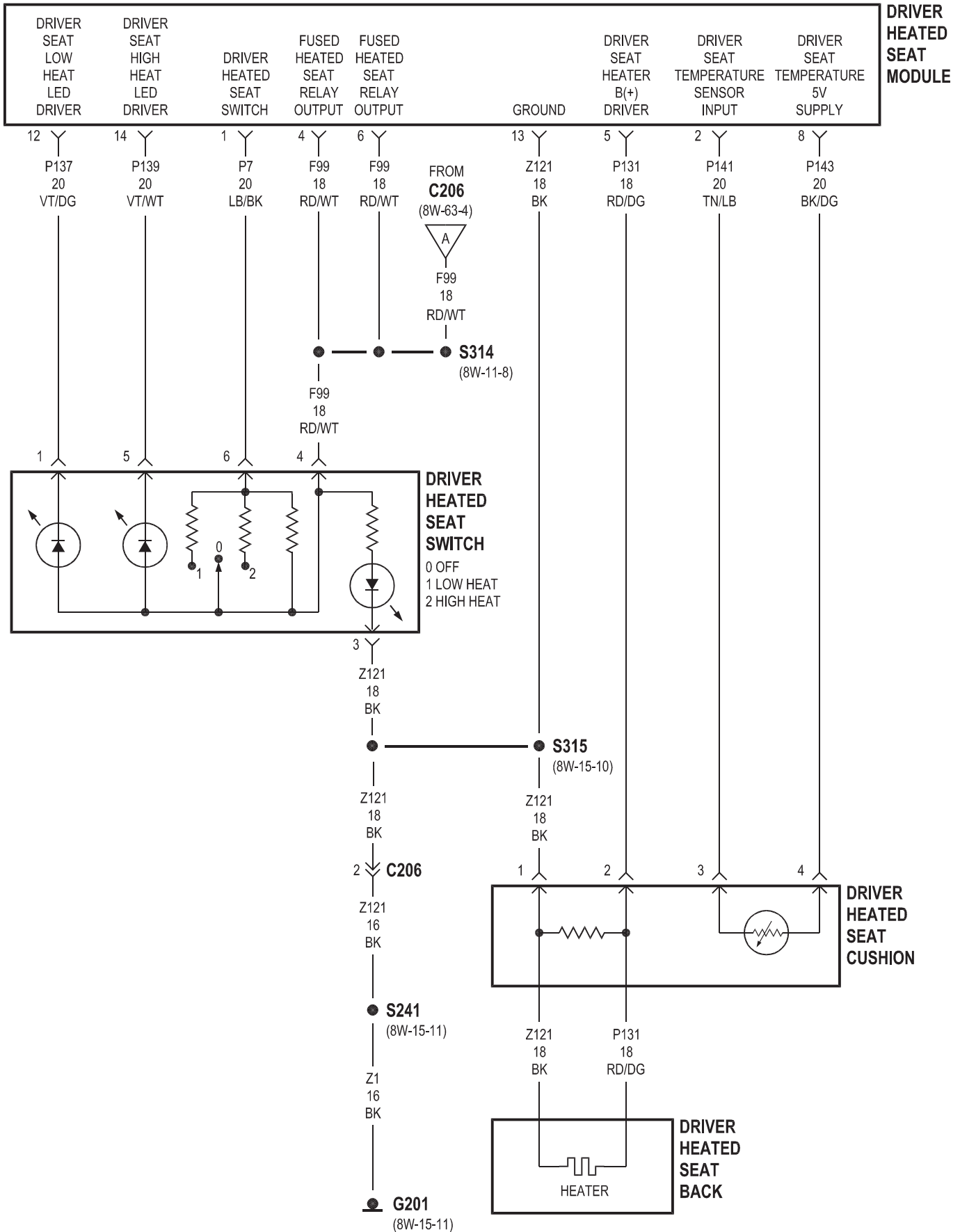








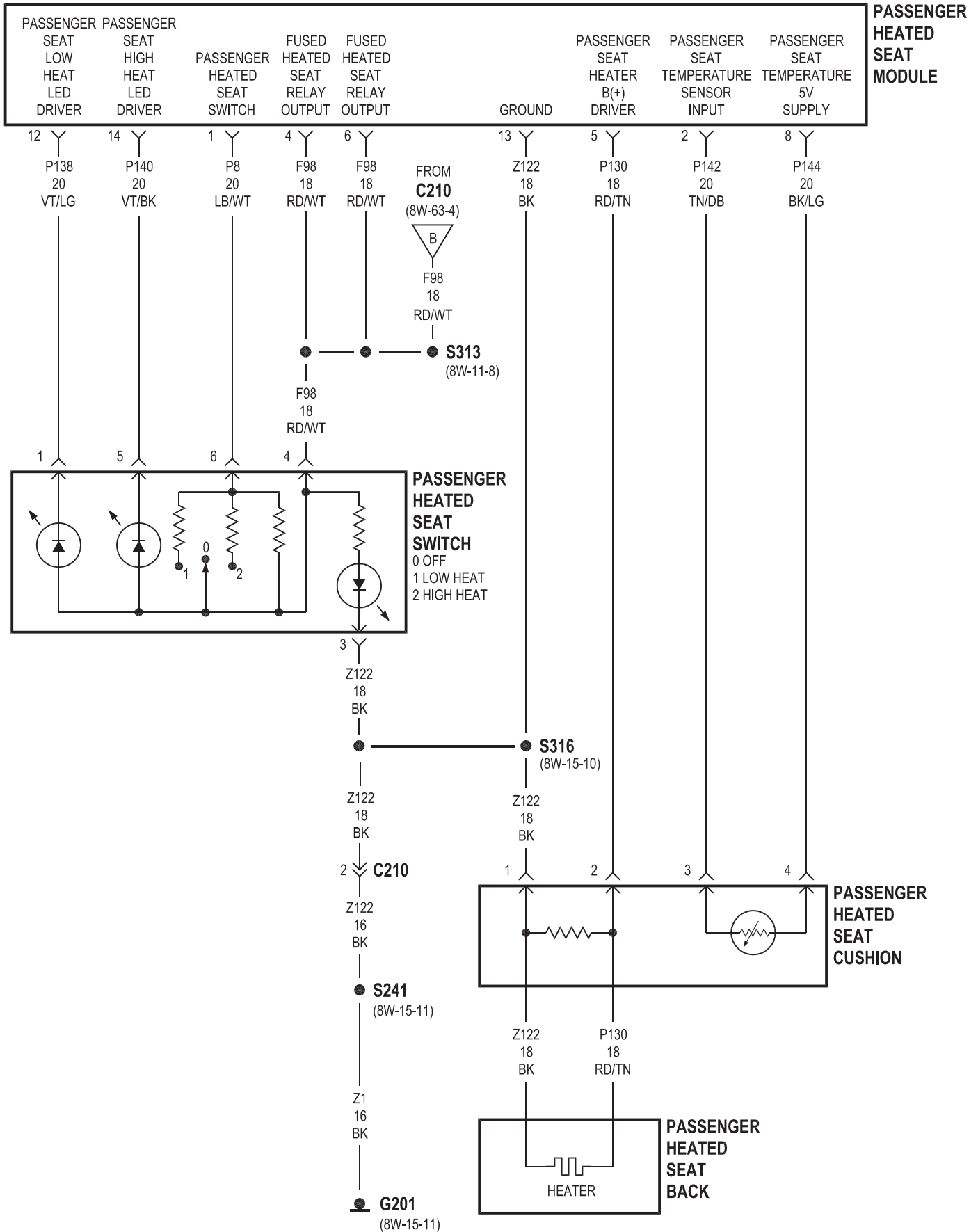
## PT 8W-63 POWER SEAT 8W - 63 - 5 NORMAL BUILD HEATED SEATS



8W - 63 - 6

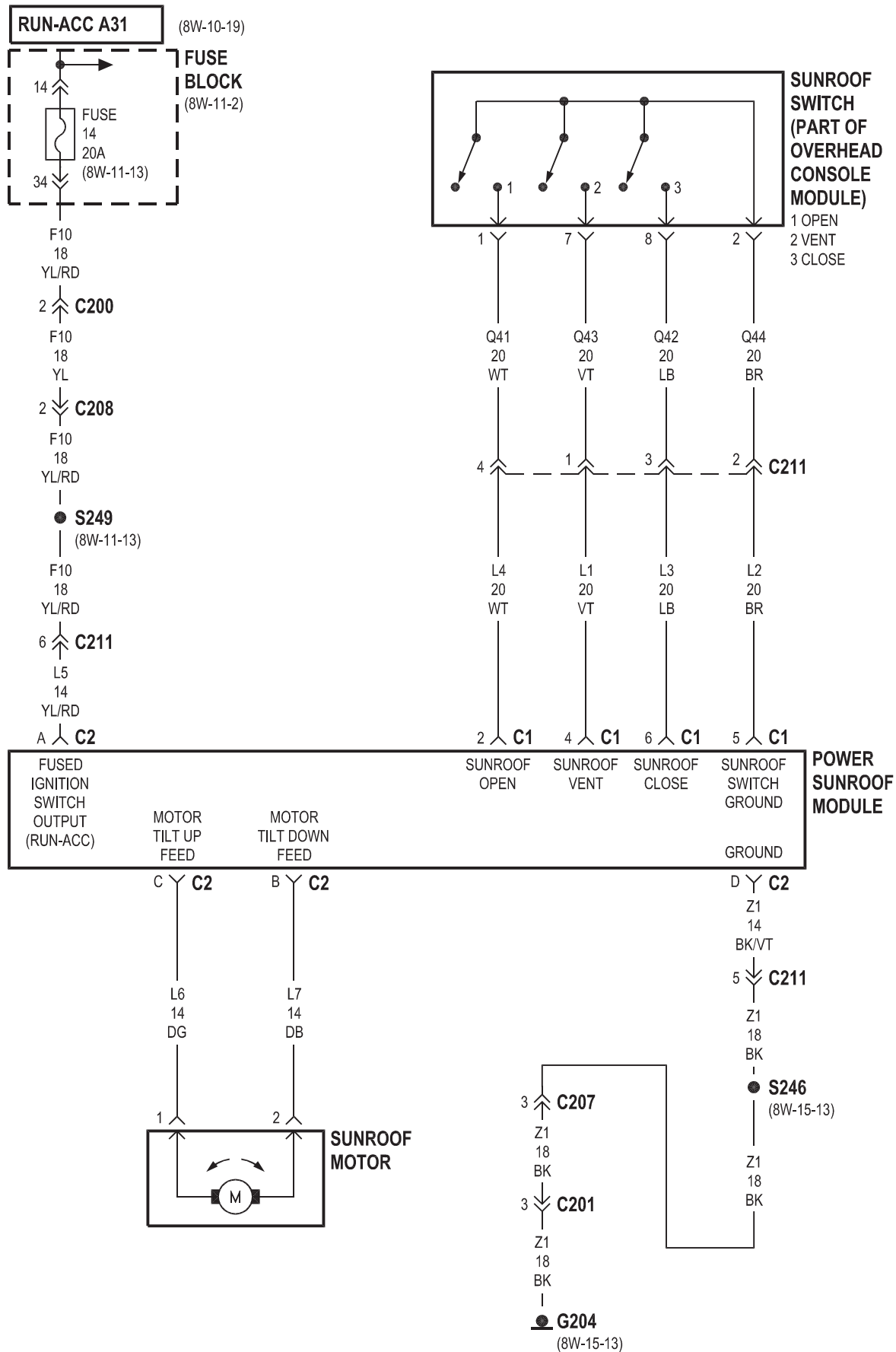
## 8W-63 POWER SEAT NORMAL BUILD HEATED SEATS

PT



## 8W-64 POWER SUNROOF

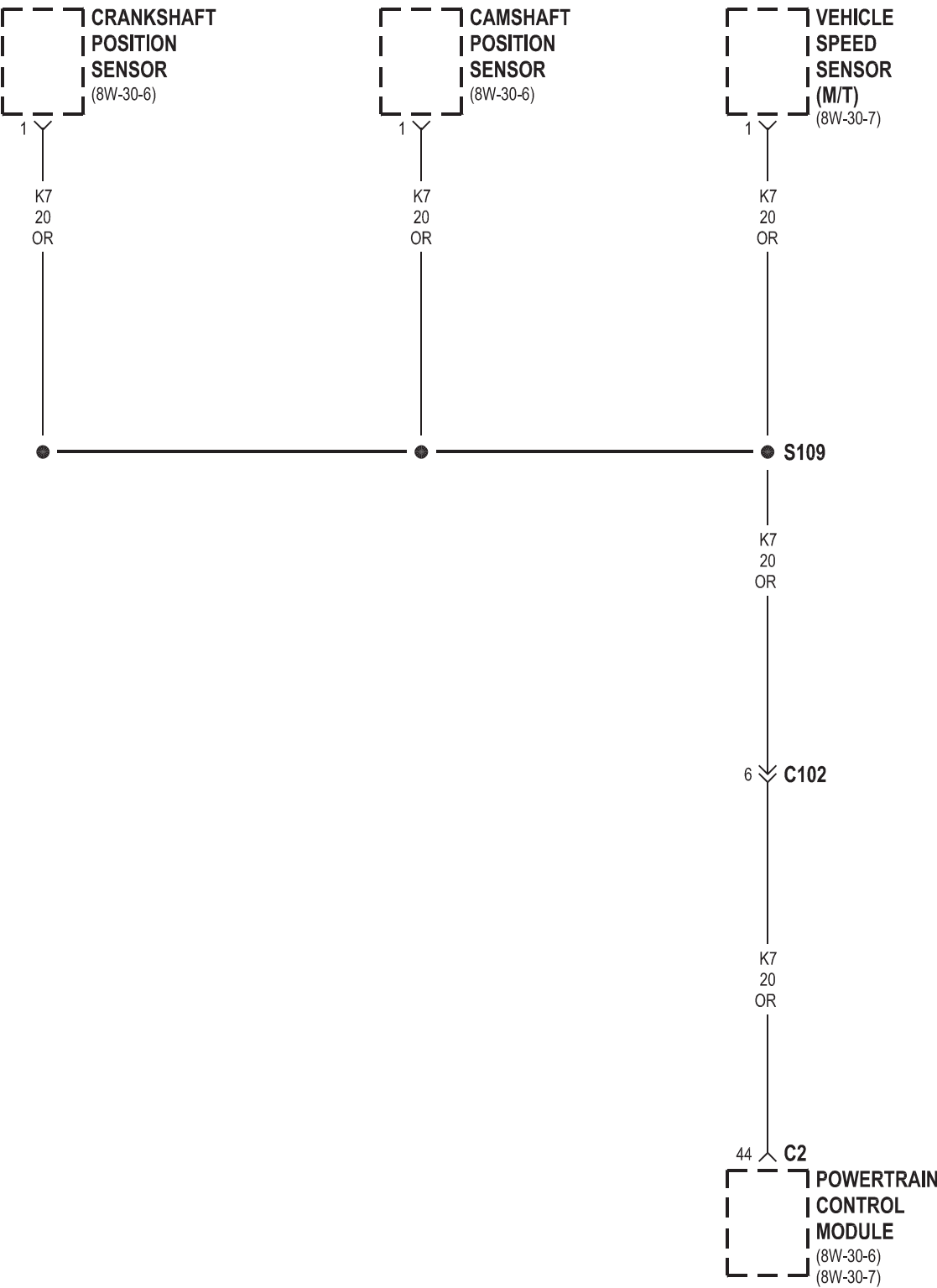
| <b>Component</b>       | <b>Page</b> | <b>Component</b>               | <b>Page</b> |
|------------------------|-------------|--------------------------------|-------------|
| Fuse 14 (FB) . . . . . | 8W-64-2     | Power Sunroof Module . . . . . | 8W-64-2     |
| Fuse Block . . . . .   | 8W-64-2     | Sunroof Motor . . . . .        | 8W-64-2     |
| G204 . . . . .         | 8W-64-2     | Sunroof Switch . . . . .       | 8W-64-2     |

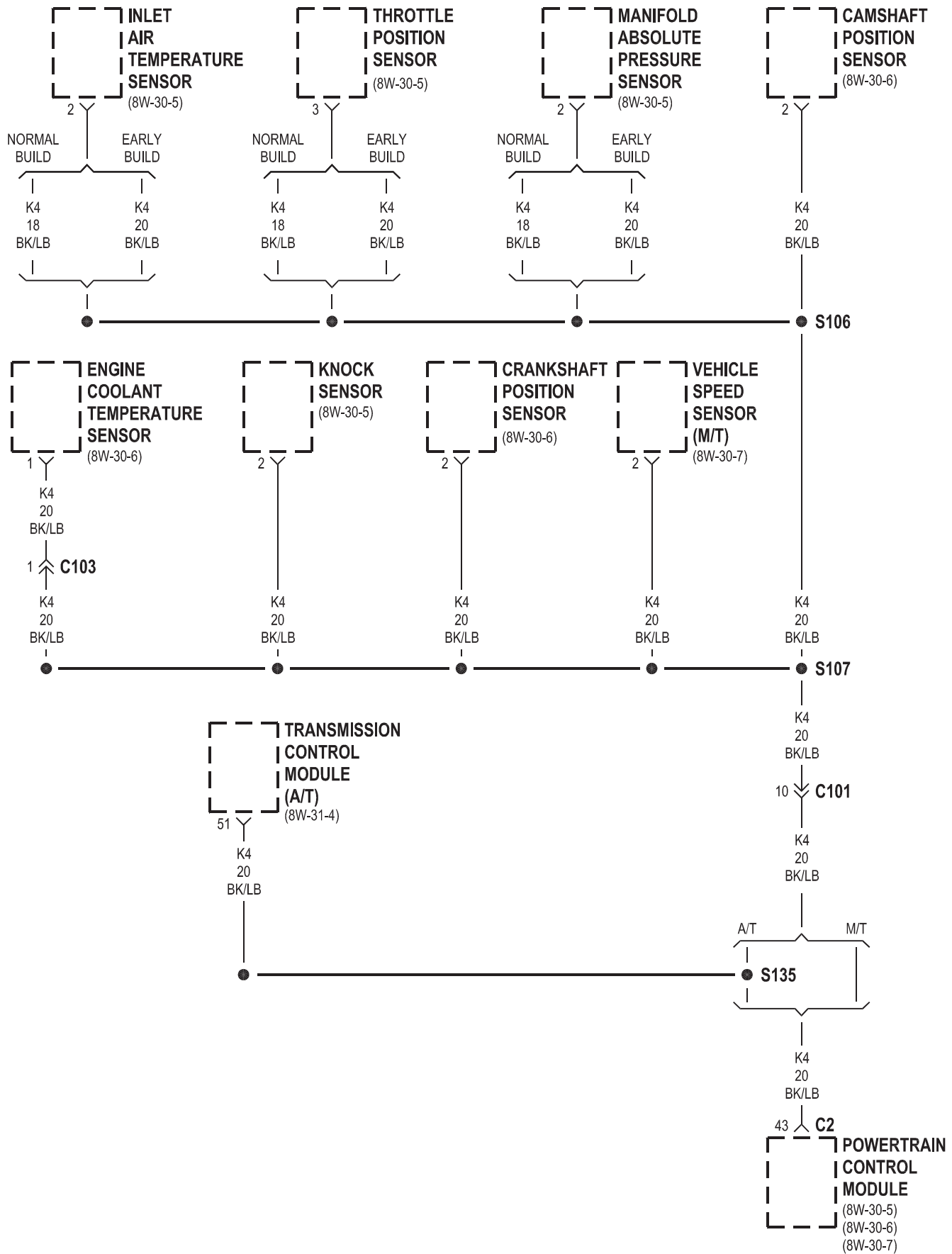


## 8W-70 SPLICE INFORMATION

| Component  | Page       | Component  | Page       |
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| S119 ..... | 8W-10-11   | S227 ..... | 8W-11-5    |
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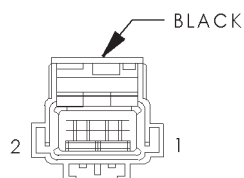
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# 2001 PT CRUISER SUPPLEMENT

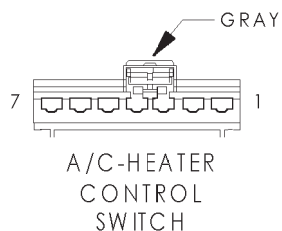
8W - 80 - 4

8W-80 CONNECTOR PINOUTS

PT



A/C  
COMPRESSOR  
CLUTCH



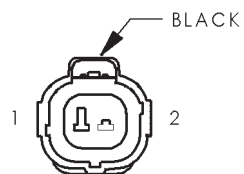
A/C-HEATER  
CONTROL  
SWITCH

A/C COMPRESSOR CLUTCH - BLACK 2 WAY

| CAV | CIRCUIT    | FUNCTION                           |
|-----|------------|------------------------------------|
| 1   | C3 20DB/BK | A/C COMPRESSOR CLUTCH RELAY OUTPUT |
| 2   | Z1 20BK    | GROUND                             |

A/C-HEATER CONTROL SWITCH - GRAY 7 WAY

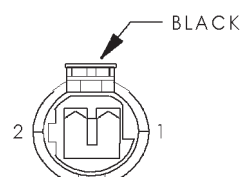
| CAV | CIRCUIT     | FUNCTION                 |
|-----|-------------|--------------------------|
| 1   | Z8 14BK/VT  | GROUND                   |
| 2   | C7 14BK/TN  | BLOWER MOTOR HIGH DRIVER |
| 3   | C6 18LB     | BLOWER MOTOR M2 DRIVER   |
| 4   | C5 18LG     | BLOWER MOTOR M1 DRIVER   |
| 5   | C4 18TN/BK  | BLOWER MOTOR LOW DRIVER  |
| 6   | C21 20DB/OR | A/C SWITCH SENSE         |
| 7   | E2 20OR     | PANEL LAMPS DRIVER       |



A/C LOW  
PRESSURE  
SWITCH

A/C LOW PRESSURE SWITCH - BLACK 2 WAY

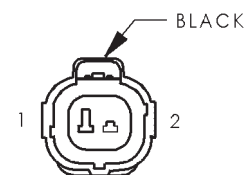
| CAV | CIRCUIT     | FUNCTION                       |
|-----|-------------|--------------------------------|
| 1   | C22 20DB/WT | A/C LOW PRESSURE SWITCH OUTPUT |
| 2   | C21 20DB/OR | A/C SWITCH SENSE               |



A/C  
PRESSURE  
TRANSDUCER

A/C PRESSURE TRANSDUCER - BLACK 2 WAY

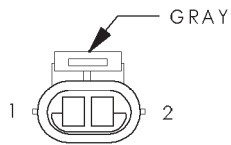
| CAV | CIRCUIT     | FUNCTION                       |
|-----|-------------|--------------------------------|
| 1   | C20 20BR    | A/C SWITCH SENSE               |
| 2   | C22 20DB/WT | A/C LOW PRESSURE SWITCH OUTPUT |



AMBIENT  
TEMPERATURE  
SENSOR

AMBIENT TEMPERATURE SENSOR - BLACK 2 WAY

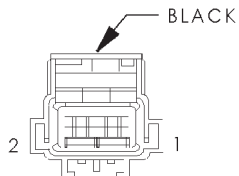
| CAV | CIRCUIT     | FUNCTION                          |
|-----|-------------|-----------------------------------|
| 1   | G31 20VT/LG | AMBIENT TEMPERATURE SENSOR SIGNAL |
| 2   | G32 20BK/LB | SENSOR GROUND                     |



BACK-UP  
LAMP  
SWITCH

BACK-UP LAMP SWITCH - GRAY 2 WAY

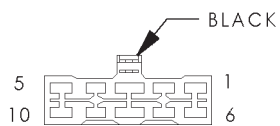
| CAV | CIRCUIT    | FUNCTION                           |
|-----|------------|------------------------------------|
| 1   | L1 18VT/BK | BACK-UP LAMP FEED                  |
| 2   | F20 18WT   | FUSED IGNITION SWITCH OUTPUT (RUN) |



BLOWER  
MOTOR

BLOWER MOTOR - BLACK 2 WAY

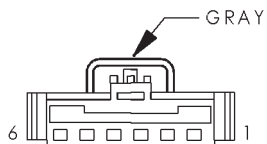
| CAV | CIRCUIT    | FUNCTION                           |
|-----|------------|------------------------------------|
| 1   | C1 14DG    | FUSED IGNITION SWITCH OUTPUT (RUN) |
| 2   | C7 14BK/TN | BLOWER MOTOR HIGH DRIVER           |



BLOWER  
MOTOR  
RESISTOR  
BLOCK

BLOWER MOTOR RESISTOR BLOCK - BLACK 10 WAY

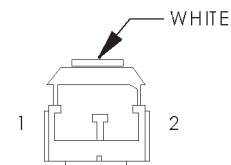
| CAV | CIRCUIT    | FUNCTION                 |
|-----|------------|--------------------------|
| 1   | C5 18LG    | BLOWER MOTOR M1 DRIVER   |
| 2   | -          | -                        |
| 3   | -          | -                        |
| 4   | -          | -                        |
| 5   | C4 18TN/BK | BLOWER MOTOR LOW DRIVER  |
| 6   | -          | -                        |
| 7   | C6 18LB    | BLOWER MOTOR M2 DRIVER   |
| 8   | -          | -                        |
| 9   | C7 14BK/TN | BLOWER MOTOR HIGH DRIVER |
| 10  | -          | -                        |



BRAKE  
LAMP  
SWITCH

BRAKE LAMP SWITCH - GRAY 6 WAY

| CAV | CIRCUIT     | FUNCTION                        |
|-----|-------------|---------------------------------|
| 1   | F32 18PK/DB | FUSED B(+)                      |
| 2   | L50 18WT/TN | BRAKE LAMP SWITCH OUTPUT        |
| 3   | V40 20DB/RD | SPEED CONTROL BRAKE LAMP OUTPUT |
| 4   | V32 20YL/RD | SPEED CONTROL SUPPLY            |
| 5   | Z1 20BK     | GROUND                          |
| 6   | K29 20WT/PK | BRAKE LAMP SWITCH SENSE         |

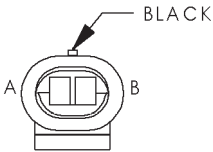


BRAKE  
TRANSMISSION  
SHIFT  
INTERLOCK  
SOLENOID

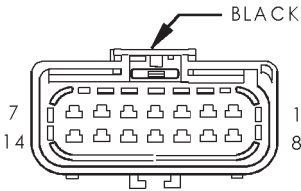
BRAKE TRANSMISSION SHIFT INTERLOCK SOLENOID - WHITE 2 WAY

| CAV | CIRCUIT     | FUNCTION                                 |
|-----|-------------|------------------------------------------|
| 1   | K29 20WT/PK | BRAKE LAMP SWITCH SENSE                  |
| 2   | F18 20LG/BK | FUSED IGNITION SWITCH OUTPUT (RUN-START) |

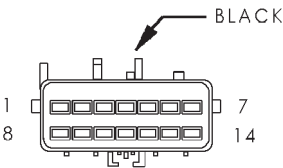




BRAKE  
WARNING  
INDICATOR  
SWITCH



C101



C101

BRAKE WARNING INDICATOR SWITCH - BLACK 2 WAY

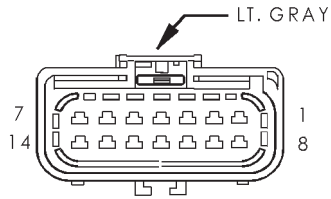
| CAV | CIRCUIT    | FUNCTION                           |
|-----|------------|------------------------------------|
| A   | G9 20GY/BK | RED BRAKE WARNING INDICATOR DRIVER |
| B   | Z1 20BK    | GROUND                             |

C101 - BLACK (HEADLAMP AND DASH SIDE)

| CAV | CIRCUIT            |
|-----|--------------------|
| 1   | Z1 20BK            |
| 2   | K39 20GY/RD        |
| 3   | K40 20BR/WT        |
| 4   | K59 20VT/BK        |
| 5   | F12 20DB/WT        |
| 6   | A142 18DG/OR       |
| 7   | K60 20YL/BK        |
| 8   | K21 20BK/RD        |
| 9   | K6 20VT/WT         |
| 10  | K4 20BK/LB         |
| 11  | G7 20WT/OR (M/T)   |
| 12  | K141 20TN/WT       |
| 13  | K119 20LG/BK (M/T) |
| 14  | T19 18WT (A/T)     |

C101 - BLACK (ENGINE SIDE)

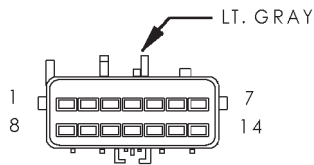
| CAV | CIRCUIT                    |
|-----|----------------------------|
| 1   | Z1 20BK                    |
| 2   | K39 20GY/RD (EARLY BUILD)  |
| 2   | K39 18GY/RD (NORMAL BUILD) |
| 3   | K40 20BR/WT (EARLY BUILD)  |
| 3   | K40 18BR/WT (NORMAL BUILD) |
| 4   | K59 20VT/BK (EARLY BUILD)  |
| 4   | K59 18VT/BK (NORMAL BUILD) |
| 5   | F12 20DB/WT                |
| 6   | A142 18DG/OR               |
| 7   | K60 20YL/BK (EARLY BUILD)  |
| 7   | K60 18YL/BK (NORMAL BUILD) |
| 8   | K21 20BK/RD (EARLY BUILD)  |
| 8   | K21 18BK/RD (NORMAL BUILD) |
| 9   | K6 20VT/WT                 |
| 10  | K4 20BK/LB                 |
| 11  | G7 20WT/OR (M/T)           |
| 12  | K141 20TN/WT               |
| 13  | K119 20LG/BK (M/T)         |
| 14  | T19 18WT (A/T)             |



C102

C102 - LT. GRAY (HEADLAMP AND DASH SIDE)

| CAV | CIRCUIT                            |
|-----|------------------------------------|
| 1   | C3 20DB/BK                         |
| 2   | K90 20TN                           |
| 3   | K24 20GY/BK (A/T)                  |
| 4   | K22 20OR/DB (A/T)                  |
| 5   | T40 14BR                           |
| 6   | K7 20OR                            |
| 7   | C22 20DB/WT                        |
| 8   | V32 20YL/RD                        |
| 9   | -                                  |
| 10  | Z12 18BK/TN                        |
| 11  | -                                  |
| 12  | T41 20YL/RD (LHD A/T NORMAL BUILD) |
| 12  | T41 20BK/WT (RHD A/T NORMAL BUILD) |
| 13  | L1 18VT/BK                         |
| 14  | F20 18WT                           |



C102

C102 - LT. GRAY (ENGINE SIDE)

| CAV | CIRCUIT           |
|-----|-------------------|
| 1   | C3 20DB/BK        |
| 2   | K90 20TN          |
| 3   | K24 20GY/BK (A/T) |
| 4   | K22 20OR/DB (A/T) |
| 5   | T40 14BR          |
| 6   | K7 20OR           |
| 7   | C22 20DB/WT       |
| 8   | V32 20YL/RD       |
| 9   | -                 |
| 10  | Z12 18BK/TN       |
| 11  | -                 |
| 12  | T41 20BK/WT (A/T) |
| 13  | L1 18VT/BK        |
| 14  | F20 18WT          |



C103

C103 - (INJECTOR HARNESS SIDE)

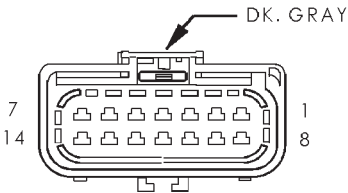
| CAV | CIRCUIT      |
|-----|--------------|
| 1   | K4 20BK/LB   |
| 2   | K2 20TN/BK   |
| 3   | K11 18WT/DB  |
| 4   | K12 18TN     |
| 5   | K13 18YL/WT  |
| 6   | K14 18LB/BR  |
| 7   | A142 18DG/OR |
| 8   | -            |



C103

C103 - (ENGINE SIDE)

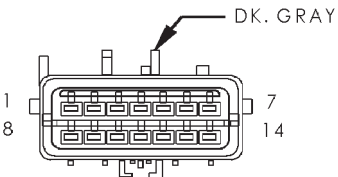
| CAV | CIRCUIT      |
|-----|--------------|
| 1   | K4 20BK/LB   |
| 2   | K2 20TN/BK   |
| 3   | K11 18WT/DB  |
| 4   | K12 18TN     |
| 5   | K13 18YL/WT  |
| 6   | K14 18LB/BR  |
| 7   | A142 18DG/OR |
| 8   | -            |



C104  
(A/T)

C104 (A/T) - DK. GRAY (HEADLAMP AND DASH SIDE)

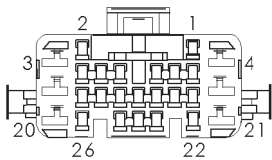
| CAV | CIRCUIT           |
|-----|-------------------|
| 1   | T13 20DB/BK       |
| 2   | T52 20RD/BK       |
| 3   | T47 18YL/BK       |
| 4   | T1 20LG/BK        |
| 5   | T3 20VT           |
| 6   | T42 20VT/WT       |
| 7   | T50 18DG          |
| 8   | T54 18VT/PK (RHD) |
| 8   | T54 20VT/PK (LHD) |
| 9   | T14 20LG/WT       |
| 10  | T9 18OR/BK        |
| 11  | T16 16RD          |
| 12  | T59 18PK          |
| 13  | T60 18BR          |
| 14  | T20 18LB          |



C104  
(A/T)

C104 (A/T) - DK. GRAY (ENGINE SIDE)

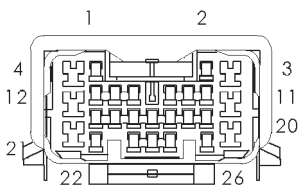
| CAV | CIRCUIT     |
|-----|-------------|
| 1   | T13 20DB/BK |
| 2   | T52 20RD/BK |
| 3   | T47 18YL/BK |
| 4   | T1 20LG/BK  |
| 5   | T3 20VT     |
| 6   | T42 20VT/WT |
| 7   | T50 18DG    |
| 8   | T54 18VT/PK |
| 9   | T14 20LG/WT |
| 10  | T9 18OR/BK  |
| 11  | T16 16RD    |
| 12  | T59 18PK    |
| 13  | T60 18BR    |
| 14  | T20 18LB    |



C105

C105 - (HEADLAMP AND DASH SIDE)

| CAV | CIRCUIT                        |
|-----|--------------------------------|
| 1   | B27 18RD/YL (TRACTION CONTROL) |
| 2   | L1 18VT/BK                     |
| 3   | A1 14RD                        |
| 4   | C7 14BK/TN                     |
| 5   | M1 20PK                        |
| 6   | A15 18PK/DG                    |
| 7   | X5 20LB/RD (SIREN)             |
| 8   | L44 16VT/RD                    |
| 9   | K29 20WT/PK                    |
| 10  | L43 18VT                       |
| 11  | A41 14YL                       |
| 12  | L3 16RD/OR                     |
| 13  | C6 18LB                        |
| 14  | F88 16RD/WT (NORMAL BUILD)     |
| 14  | F13 16DB (EARLY BUILD)         |
| 15  | V5 18DG                        |
| 16  | G31 20VT/LG (POWER SUNROOF)    |
| 17  | G32 20BK/LB (POWER SUNROOF)    |
| 18  | -                              |
| 19  | C4 18TN/BK                     |
| 20  | -                              |
| 21  | -                              |
| 22  | V3 16BR/WT                     |
| 23  | V4 16RD/YL                     |
| 24  | L60 18TN                       |
| 25  | L61 18LG                       |
| 26  | G70 20BR/TN (RKE)              |



C105

C105 - (INSTRUMENT PANEL SIDE)

| CAV | CIRCUIT                                       |
|-----|-----------------------------------------------|
| 1   | B27 18RD/YL (TRACTION CONTROL)                |
| 2   | L1 18VT/BK                                    |
| 3   | A1 14RD                                       |
| 4   | C7 14BK/TN                                    |
| 5   | M1 20PK                                       |
| 6   | A15 18PK/DG                                   |
| 7   | X5 20LB/RD (SIREN)                            |
| 8   | L44 16VT/RD                                   |
| 9   | K29 20WT/PK                                   |
| 10  | L43 16VT                                      |
| 11  | A41 14YL                                      |
| 12  | L3 16RD/OR                                    |
| 13  | C6 18LB                                       |
| 14  | F88 16DB (NORMAL BUILD)                       |
| 14  | F13 16DB (EARLY BUILD)                        |
| 15  | V5 18DG                                       |
| 16  | G31 20VT/LG (POWER SUNROOF)                   |
| 17  | G32 20BK/LB (POWER SUNROOF<br>EARLY BUILD)    |
| 17  | G32 20BK/LB (POWER SUNROOF NOR-<br>MAL BUILD) |
| 18  | -                                             |
| 19  | C4 18TN/BK                                    |
| 20  | -                                             |

# 2001 PT CRUISER SUPPLEMENT

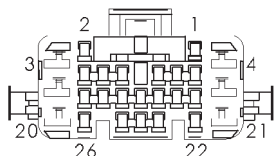
8W - 80 - 10

8W-80 CONNECTOR PINOUTS

PT

C105 - (INSTRUMENT PANEL SIDE)

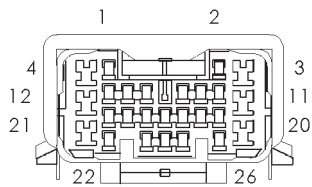
| CAV | CIRCUIT           |
|-----|-------------------|
| 21  | -                 |
| 22  | V3 16BR/WT        |
| 23  | V4 16RD/YL        |
| 24  | L60 18TN          |
| 25  | L61 18LG          |
| 26  | G70 20BR/TN (RKE) |



C106

C106 - (HEADLAMP AND DASH SIDE)

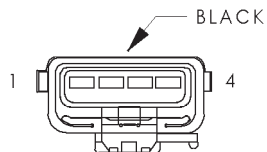
| CAV | CIRCUIT                                    |
|-----|--------------------------------------------|
| 1   | L39 18LB (FOG LAMPS)                       |
| 2   | V20 18BK/WT                                |
| 3   | A120 16RD/LB (RHD POWER SEAT NORMAL BUILD) |
| 3   | A120 16RD/LG (LHD POWER SEAT NORMAL BUILD) |
| 3   | A120 16RD/LB (POWER SEAT EARLY BUILD)      |
| 4   | A3 12RD/WT                                 |
| 5   | L160 18TN/RD                               |
| 6   | C21 20DB/OR                                |
| 7   | L161 18LG/OR                               |
| 8   | X3 20BK/RD                                 |
| 9   | G4 20DB                                    |
| 10  | F18 20LG/BK                                |
| 11  | F1 16DB/BK                                 |
| 12  | A35 12DB (POWER MIRRORS NORMAL BUILD)      |
| 13  | L50 18WT/TN                                |
| 14  | D25 20VT/YL                                |
| 15  | V37 20RD/LG                                |
| 16  | L13 20BR/YL (LAVALIER MODULE)              |
| 17  | -                                          |
| 18  | F20 18WT                                   |
| 19  | -                                          |
| 20  | A4 12BK/PK                                 |
| 21  | A2 12PK/BK                                 |
| 22  | F12 20DB/WT                                |
| 23  | C5 18LG                                    |
| 24  | F39 18PK/LG (FOG LAMPS)                    |
| 25  | V10 18BR                                   |
| 26  | L7 18BK/YL                                 |



C 106

C106 - (INSTRUMENT PANEL SIDE)

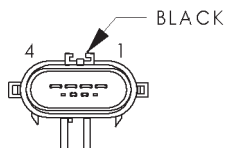
| CAV | CIRCUIT                               |
|-----|---------------------------------------|
| 1   | L39 18LB (FOG LAMPS)                  |
| 2   | V20 18BK/WT                           |
| 3   | A120 16RD/LG (POWER SEAT)             |
| 4   | A3 12RD/WT                            |
| 5   | L160 18TN/RD                          |
| 6   | C21 20DB/OR                           |
| 7   | L161 18LG/OR                          |
| 8   | X3 20BK/RD                            |
| 9   | G4 20DB                               |
| 10  | F18 20LG/BK                           |
| 11  | F1 16DB/BK                            |
| 12  | A35 12DB (POWER MIRRORS NORMAL BUILD) |
| 13  | L50 18WT/TN                           |
| 14  | D25 20VT/YL                           |
| 15  | V37 20RD/LG                           |
| 16  | L13 20BR/YL (LAVALIER MODULE)         |
| 17  | -                                     |
| 18  | F20 18WT                              |
| 19  | -                                     |
| 20  | A4 12BK/PK                            |
| 21  | A2 12PK/BK                            |
| 22  | F12 20DB/WT                           |
| 23  | C5 18LG                               |
| 24  | F39 18PK/LG (FOG LAMPS)               |
| 25  | V10 18BR                              |
| 26  | L7 18BK/YL                            |



C 109

C109 - BLACK (UNDERBODY SIDE)

| CAV | CIRCUIT    |
|-----|------------|
| 1   | B1 20YL/DB |
| 2   | B2 20YL    |
| 3   | B3 20LG/DB |
| 4   | B4 20LG    |



C 109

C109 - BLACK (HEADLAMP AND DASH SIDE)

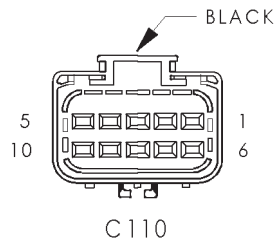
| CAV | CIRCUIT    |
|-----|------------|
| 1   | B1 18YL/DB |
| 2   | B2 18YL    |
| 3   | B3 18LG/DB |
| 4   | B4 18LG    |

# 2001 PT CRUISER SUPPLEMENT

8W - 80 - 12

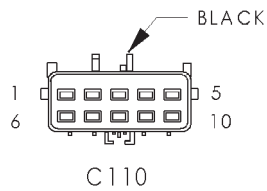
8W-80 CONNECTOR PINOUTS

PT



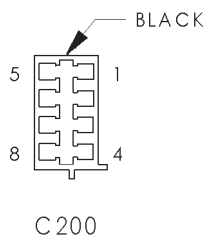
C110 - BLACK (UNDERBODY SIDE)

| CAV | CIRCUIT                            |
|-----|------------------------------------|
| 1   | G4 20DB                            |
| 2   | Z2 20BK/LG                         |
| 3   | A141 16DG/WT                       |
| 4   | Z1 16BK                            |
| 5   | K106 20WT/DG (LEAK DETECTION PUMP) |
| 6   | K107 20OR/YL (LEAK DETECTION PUMP) |
| 7   | F18 20LG/BK (LEAK DETECTION PUMP)  |
| 8   | -                                  |
| 9   | -                                  |
| 10  | -                                  |



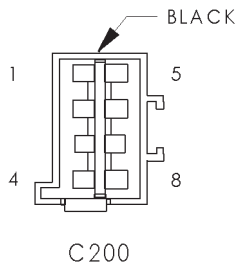
C110 - BLACK (HEADLAMP AND DASH SIDE)

| CAV | CIRCUIT                     |
|-----|-----------------------------|
| 1   | G4 20DB                     |
| 2   | Z2 20BK/LG (NORMAL BUILD)   |
| 2   | Z2 20BK (EARLY BUILD)       |
| 3   | A141 16DG/WT                |
| 4   | Z1 16BK                     |
| 5   | K106 20WT/DG                |
| 6   | K107 20OR/YL (EARLY BUILD)  |
| 6   | K107 20YL/BK (NORMAL BUILD) |
| 7   | F18 20LG/BK                 |
| 8   | -                           |
| 9   | -                           |
| 10  | -                           |



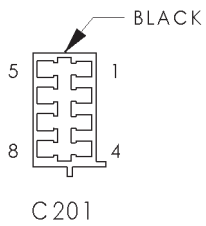
C200 - BLACK (INSTRUMENT PANEL SIDE)

| CAV | CIRCUIT                            |
|-----|------------------------------------|
| 1   | E2 20PK (PREMIUM)                  |
| 2   | F10 18YL/RD (PREMIUM)              |
| 3   | G31 20VT/LG (PREMIUM)              |
| 4   | G32 20BK/LB (PREMIUM EARLY BUILD)  |
| 4   | G32 20BK/LG (PREMIUM NORMAL BUILD) |
| 5   | -                                  |
| 6   | -                                  |
| 7   | X53 18DG (EARLY BUILD)             |
| 7   | X53 18DG/VT (NORMAL BUILD)         |
| 8   | X55 18RD/BR (EARLY BUILD)          |
| 8   | X55 18BR/DB (NORMAL BUILD)         |



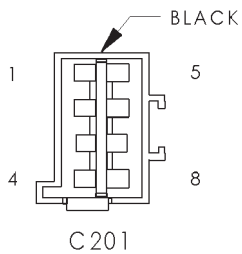
C200 - BLACK (LT/RT HEADLINER JUMPER SIDE)

| CAV | CIRCUIT      |
|-----|--------------|
| 1   | E2 20PK      |
| 2   | F10 18YL     |
| 3   | G31 18BK     |
| 4   | G32 20BK/LG  |
| 5   | G120 20WT/LB |
| 6   | -            |
| 7   | X53 18VT/DG  |
| 8   | X55 18DB/RD  |



C201 - BLACK (INSTRUMENT PANEL SIDE)

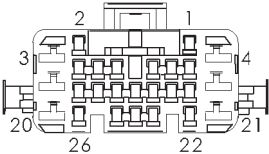
| CAV | CIRCUIT                    |
|-----|----------------------------|
| 1   | M1 20PK                    |
| 2   | M2 20YL                    |
| 3   | Z1 18BK (PREMIUM)          |
| 4   | Z2 20BK/LG                 |
| 5   | G120 20WT/LB (PREMIUM)     |
| 6   | -                          |
| 7   | X54 18VT/DG (EARLY BUILD)  |
| 7   | X54 18VT (NORMAL BUILD)    |
| 8   | X56 18DB/BR (EARLY BUILD)  |
| 8   | X56 18DB/RD (NORMAL BUILD) |



C201 - BLACK (LT/RT HEADLINER JUMPER SIDE)

| CAV | CIRCUIT      |
|-----|--------------|
| 1   | M1 20PK      |
| 2   | M2 18YL      |
| 3   | Z1 18BK      |
| 4   | Z2 20BK/LG   |
| 5   | G120 20WT/LB |
| 6   | -            |
| 7   | X54 18VT/DG  |
| 8   | X56 18DB/RD  |

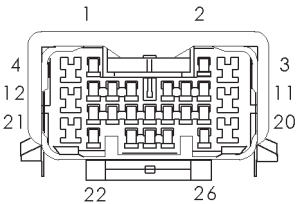




C 202

C202 - (INSTRUMENT PANEL SIDE)

| CAV | CIRCUIT                    |
|-----|----------------------------|
| 1   | G10 20LG/RD                |
| 2   | M9 20DB/OR                 |
| 3   | C15 12BK/WT                |
| 4   | -                          |
| 5   | L50 18WT/TN                |
| 6   | X51 18BR/YL                |
| 7   | X57 18BR/LB                |
| 8   | P35 18OR/BK (POWER LOCKS)  |
| 9   | P36 18PK/BK (POWER LOCKS)  |
| 10  | -                          |
| 11  | Q23 14RD/WT                |
| 12  | Q13 14DB/WT (EARLY BUILD)  |
| 12  | Q13 14DB/GY (NORMAL BUILD) |
| 13  | L63 18DG/RD                |
| 14  | V13 18BR/LG                |
| 15  | P96 20DG (POWER LOCKS)     |
| 16  | L1 18VT/BK                 |
| 17  | G78 20TN/BK                |
| 18  | G75 20TN (EARLY BUILD)     |
| 19  | F13 18DB (EARLY BUILD)     |
| 19  | V23 18DB (NORMAL BUILD)    |
| 20  | -                          |
| 21  | -                          |
| 22  | L7 18BK/YL                 |
| 23  | D25 20VT/YL (EXCEPT BASE)  |
| 24  | R53 18LG/YL                |
| 25  | F15 18DG/WT (EXCEPT BASE)  |
| 26  | R55 18LG/DG                |



C 202

C202 - (LEFT BODY SIDE)

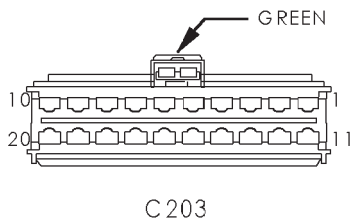
| CAV | CIRCUIT                       |
|-----|-------------------------------|
| 1   | G10 20LG/RD                   |
| 2   | G77 20TN/OR (EARLY BUILD)     |
| 2   | G77 20DB/OR (NORMAL BUILD)    |
| 3   | C15 12BK/WT (NORMAL BUILD)    |
| 4   | Q1 14YL (NORMAL BUILD)        |
| 5   | L50 18WT/TN                   |
| 6   | X51 18BR/YL                   |
| 7   | X57 18BR/LB                   |
| 8   | P35 18OR/VT (POWER LOCKS)     |
| 9   | P36 18PK/VT (POWER LOCKS)     |
| 10  | -                             |
| 11  | Q23 14RD/WT (EARLY BUILD)     |
| 11  | Q23 14RD/DG (NORMAL BUILD)    |
| 12  | Q13 14DB/GY (NORMAL BUILD)    |
| 12  | Q13 14DB/WT (EARLY BUILD)     |
| 13  | L63 18DG/RD                   |
| 14  | V13 18BR/LG                   |
| 15  | P97 20WT/LG (RHD POWER LOCKS) |

# 2001 PT CRUISER SUPPLEMENT

PT ————— 8W-80 CONNECTOR PINOUTS ————— 8W - 80 - 15

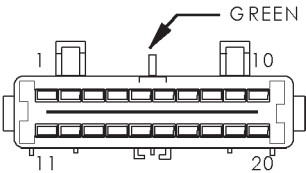
C202 - (LEFT BODY SIDE)

| CAV | CIRCUIT                       |
|-----|-------------------------------|
| 15  | P96 20WT/LG (LHD POWER LOCKS) |
| 16  | L1 18VT/BK                    |
| 17  | G78 20TN/BK                   |
| 18  | G75 20TN (EARLY BUILD)        |
| 19  | F13 18DB (EARLY BUILD)        |
| 19  | V23 18BR/BK (NORMAL BUILD)    |
| 20  | -                             |
| 21  | -                             |
| 22  | L7 18BK/YL                    |
| 23  | D25 20VT/VL (EXCEPT BASE)     |
| 24  | R53 18LG/YL                   |
| 25  | F15 20DG/WT (EXCEPT BASE)     |
| 26  | R55 18LG/DG                   |



C203 - GREEN (INSTRUMENT PANEL SIDE)

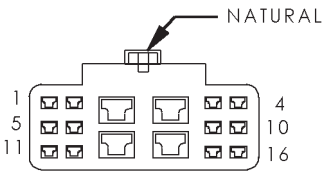
| CAV | CIRCUIT                   |
|-----|---------------------------|
| 1   | M9 20DB/OR (EARLY BUILD)  |
| 2   | M9 20DB/OR                |
| 3   | L50 18WT/TN               |
| 4   | X52 18DB/WT               |
| 5   | X58 18DB/BK               |
| 6   | P35 18OR/BK (POWER LOCKS) |
| 6   | P35 18OR/BK (POWER LOCKS) |
| 7   | P36 18PK/BK (POWER LOCKS) |
| 8   | Q14 14GY                  |
| 9   | Q24 14DG                  |
| 10  | L7 18BK/YL                |
| 11  | L62 18BR/RD               |
| 12  | F30 16RD (EXCEPT BASE)    |
| 13  | M1 20PK                   |
| 14  | M2 20YL                   |
| 15  | -                         |
| 16  | D25 20VT/YL (EXCEPT BASE) |
| 17  | R54 18LB/YL               |
| 18  | F15 18DG/WT (EXCEPT BASE) |
| 19  | R56 18LB/DG               |
| 20  | -                         |



C203

C203 - GREEN (RIGHT BODY SIDE)

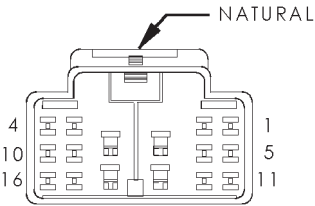
| CAV | CIRCUIT                    |
|-----|----------------------------|
| 1   | G74 20TN/RD                |
| 2   | G76 20TN/YL (EARLY BUILD)  |
| 2   | G76 20DB/OR (NORMAL BUILD) |
| 3   | L50 18WT/TN                |
| 4   | X52 18DB/WT                |
| 5   | X58 18DB/BK                |
| 6   | P35 18OR/VT                |
| 7   | P36 18PK/VT (POWER LOCKS)  |
| 8   | Q14 14GY                   |
| 9   | Q24 14DG                   |
| 10  | L7 18BK/YL                 |
| 11  | L62 18BR/RD                |
| 12  | F30 16RD (EXCEPT BASE)     |
| 13  | M1 20PK                    |
| 14  | M2 20YL                    |
| 15  | -                          |
| 16  | D25 20VT/YL (EXCEPT BASE)  |
| 17  | R54 18LB/YL                |
| 18  | F15 20DG/WT (EXCEPT BASE)  |
| 19  | R56 18LB/DG                |
| 20  | -                          |



C204

C204 - NATURAL (FRONT DOOR SIDE)

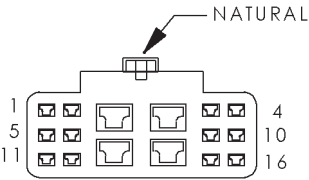
| CAV | CIRCUIT                                  |
|-----|------------------------------------------|
| 1   | C16 20LB/YL (POWER MIRRORS)              |
| 2   | Q11 14LB                                 |
| 3   | G75 18TN/DB (NORMAL BUILD)               |
| 4   | P75 20DB/WT (POWER MIRRORS)              |
| 5   | L7 18BK/YL (POWER LOCKS)                 |
| 6   | -                                        |
| 7   | X53 18DG (EARLY BUILD)                   |
| 7   | X53 18DG/VT (NORMAL BUILD)               |
| 8   | P73 20YL/PK (POWER MIRRORS)              |
| 9   | Z1 18BK (BASE NORMAL BUILD)              |
| 9   | Z1 20BK (POWER LOCKS)                    |
| 10  | Q21 14WT                                 |
| 12  | P34 18PK/BK (POWER LOCKS)                |
| 13  | P97 20WT/DG (POWER LOCKS)                |
| 14  | X55 18BR/RD (EARLY BUILD)                |
| 14  | X55 18RD/BR (NORMAL BUILD)               |
| 15  | P33 18OR/BK (POWER LOCKS)                |
| 16  | P71 20YL/BK (POWER MIRRORS EARLY BUILD)  |
| 16  | P71 20BR/YL (POWER MIRRORS NORMAL BUILD) |



C 204

C204 - NATURAL (INSTRUMENT PANEL SIDE)

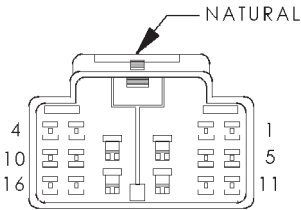
| CAV | CIRCUIT                     |
|-----|-----------------------------|
| 1   | C16 20LB/YL (POWER MIRRORS) |
| 2   | Q11 14LB                    |
| 3   | G75 20TN (NORMAL BUILD)     |
| 4   | P75 20DB/WT (POWER MIRRORS) |
| 5   | L7 18BK/YL (POWER LOCKS)    |
| 7   | X53 18DG (EARLY BUILD)      |
| 7   | X53 18DG (EARLY BUILD)      |
| 7   | X53 18DG/VT (NORMAL BUILD)  |
| 7   | X53 18DG/VT (NORMAL BUILD)  |
| 8   | P73 20YL/PK (POWER MIRRORS) |
| 9   | Z1 20BK                     |
| 10  | Q21 14WT                    |
| 11  | -                           |
| 12  | P34 18PK/BK (POWER LOCKS)   |
| 13  | P97 20WT/DG (POWER LOCKS)   |
| 14  | X55 18RD/BR (EARLY BUILD)   |
| 14  | X55 18BR/DB (NORMAL BUILD)  |
| 14  | X55 18BR/DB (NORMAL BUILD)  |
| 14  | X55 18RD/BR (EARLY BUILD)   |
| 15  | P33 18OR/BK (POWER LOCKS)   |
| 16  | P71 20YL/BK (POWER MIRRORS) |



C 205

C205 - NATURAL (FRONT DOOR SIDE)

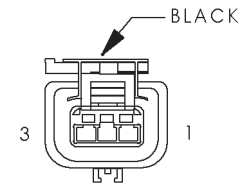
| CAV | CIRCUIT                                       |
|-----|-----------------------------------------------|
| 1   | C16 20LB/YL (POWER MIRRORS)                   |
| 2   | Q12 14LB                                      |
| 3   | G74 20TN/DB (NORMAL BUILD)                    |
| 4   | P74 20DB/WT (POWER MIRRORS)                   |
| 5   | L7 18BK/YL (POWER LOCKS)                      |
| 6   | -                                             |
| 7   | X54 18VT/DG (EARLY BUILD)                     |
| 7   | X54 18VT (NORMAL BUILD)                       |
| 8   | P70 20YL/PK (LHD POWER MIRRORS)               |
| 9   | Z1 18BK (BASE NORMAL BUILD)                   |
| 9   | Z1 20BK (POWER MIRRORS)                       |
| 10  | Q22 14WT                                      |
| 11  | -                                             |
| 12  | P36 18PK/BK (POWER MIRRORS)                   |
| 13  | P96 20WT/DG (POWER MIRRORS)                   |
| 14  | X56 18BR/RD (EARLY BUILD)                     |
| 14  | X56 18DB/RD (NORMAL BUILD)                    |
| 15  | P35 18OR/BK (POWR LOCKS)                      |
| 16  | P72 20YL/BK (POWER MIRRORS<br>EARLY BUILD)    |
| 16  | P72 20BR/YL (POWER MIRRORS NOR-<br>MAL BUILD) |



C 205

C205 - NATURAL (INSTRUMENT PANEL SIDE)

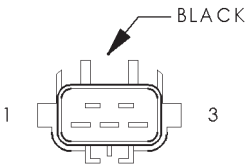
| CAV | CIRCUIT                     |
|-----|-----------------------------|
| 1   | C16 20LB/YL (POWER MIRRORS) |
| 2   | Q12 12 BR/LB                |
| 3   | M9 20DB/OR (NORMAL BUILD)   |
| 4   | P74 20DB/WT (POWER MIRRORS) |
| 5   | L7 18BK/YL (POWER LOCKS)    |
| 6   | -                           |
| 7   | X54 18VT/DG (EARLY BUILD)   |
| 7   | X54 18VT/DG (EARLY BUILD)   |
| 7   | X54 18VT (NORMAL BUILD)     |
| 7   | X54 18VT (NORMAL BUILD)     |
| 8   | P70 20PK (POWER MIRRORS)    |
| 9   | Z1 20BK (POWER MIRRORS)     |
| 10  | Q22 14VT/WT                 |
| 11  | -                           |
| 12  | P36 18PK/BK (POWER MIRRORS) |
| 13  | P96 20DG (POWER LOCKS)      |
| 13  | P96 20DG (POWER MIRRORS)    |
| 14  | X56 18DB/BR (EARLY BUILD)   |
| 14  | X56 18BR/DB (NORMAL BUILD)  |
| 14  | X56 18BR/DB (NORMAL BUILD)  |
| 14  | X56 18DB/BR (EARLY BUILD)   |
| 15  | P35 18OR/BK (POWER LOCKS)   |
| 16  | P72 20YL (POWER MIRRORS)    |



C 206  
(NORMAL BUILD)

C206 (NORMAL BUILD) - BLACK (INSTRUMENT  
PANEL SIDE)

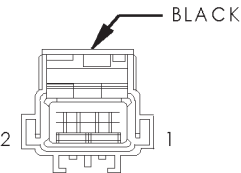
| CAV | CIRCUIT                    |
|-----|----------------------------|
| 1   | A120 16RD/LG               |
| 2   | Z121 16BK                  |
| 3   | F99 18RD/WT (HEATED SEATS) |



C 206  
(NORMAL BUILD)

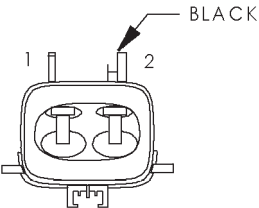
C206 (NORMAL BUILD) - BLACK (POWER  
HEIGHT ADJUSTER SIDE)

| CAV | CIRCUIT                       |
|-----|-------------------------------|
| 1   | A120 16RD/LG                  |
| 2   | Z121 18BK (HEATED SEATS)      |
| 2   | Z1 16BK (EXCEPT HEATED SEATS) |
| 3   | F99 18RD/WT (HEATED SEATS)    |



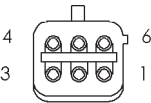
C206  
(EARLY BUILD)

| C206 (EARLY BUILD) - BLACK (INSTRUMENT PANEL SIDE) |              |                       |
|----------------------------------------------------|--------------|-----------------------|
| CAV                                                | CIRCUIT      | FUNCTION              |
| 1                                                  | A120 16RD/LG | FUSED B(+)            |
| 2                                                  | Z1 16BK      | COURTESY LAMPS DRIVER |



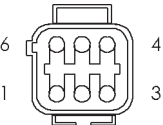
C206  
(EARLY BUILD)

| C206 (EARLY BUILD) - BLACK (POWER HEIGHT ADJUSTER) |              |                       |
|----------------------------------------------------|--------------|-----------------------|
| CAV                                                | CIRCUIT      | FUNCTION              |
| 1                                                  | A120 16RD/LG | FUSED B(+)            |
| 2                                                  | Z1 16BK      | COURTESY LAMPS DRIVER |



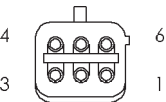
C207

| C207 - (DOME LAMP SIDE) |                                |
|-------------------------|--------------------------------|
| CAV                     | CIRCUIT                        |
| 1                       | M1 20PK                        |
| 2                       | M2 20YL                        |
| 3                       | Z1 18BK (POWER SUNROOF)        |
| 3                       | Z1 20BK (EXCEPT POWER SUNROOF) |
| 4                       | Z2 20BK/LG (OVERHEAD CONSOLE)  |
| 5                       | G120 20WT/LB (ALARM)           |
| 6                       | -                              |



C207

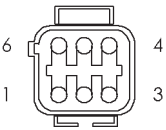
| C207 - (LT/RT HEADLINER JUMPER SIDE) |              |
|--------------------------------------|--------------|
| CAV                                  | CIRCUIT      |
| 1                                    | M1 20PK      |
| 2                                    | M2 18YL      |
| 3                                    | Z1 18BK      |
| 4                                    | Z2 20BK/LG   |
| 5                                    | G120 20WT/LB |
| 6                                    | -            |



C208

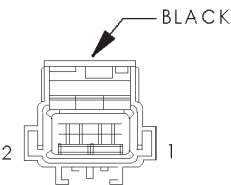
| C208 - (DOME LAMP SIDE) |             |
|-------------------------|-------------|
| CAV                     | CIRCUIT     |
| 1                       | E2 20OR     |
| 2                       | F10 18YL/RD |
| 3                       | G31 20VT/LG |
| 4                       | G32 20BK/LB |
| 5                       | -           |
| 6                       | -           |

2001 PT CRUISER SUPPLEMENT



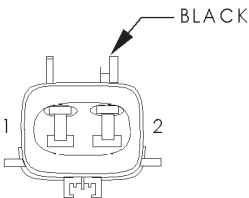
C 208

| C208 - (LT/RT HEADLINER JUMPER SIDE) |             |
|--------------------------------------|-------------|
| CAV                                  | CIRCUIT     |
| 1                                    | E2 20PK     |
| 2                                    | F10 18YL    |
| 3                                    | G31 18BK    |
| 4                                    | G32 20BK/LG |
| 5                                    | -           |
| 6                                    | -           |



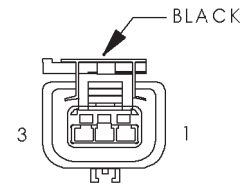
C 209

| C209 - BLACK (INSTRUMENT PANEL SIDE) |            |
|--------------------------------------|------------|
| CAV                                  | CIRCUIT    |
| 1                                    | C1 14DG    |
| 2                                    | C7 14BK/TN |



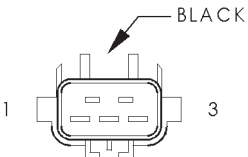
C 209

| C209 - BLACK (LHD HEATER JUMPER SIDE) |            |
|---------------------------------------|------------|
| CAV                                   | CIRCUIT    |
| 1                                     | C1 14DG    |
| 2                                     | C7 14BK/TN |



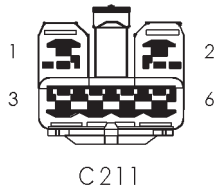
C 210  
(HEATED SEATS)  
(NORMAL BUILD)

| C210 (HEATED SEATS) (NORMAL BUILD) -<br>BLACK (INSTRUMENT PANEL SIDE) |             |
|-----------------------------------------------------------------------|-------------|
| CAV                                                                   | CIRCUIT     |
| 1                                                                     | -           |
| 2                                                                     | Z122 16BK   |
| 3                                                                     | F98 18RD/WT |



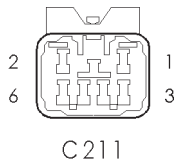
C 210  
(HEATED SEATS)  
(NORMAL BUILD)

| C210 (HEATED SEATS) (NORMAL BUILD) -<br>BLACK ( HEATED SEAT SIDE) |             |
|-------------------------------------------------------------------|-------------|
| CAV                                                               | CIRCUIT     |
| 1                                                                 | -           |
| 2                                                                 | Z122 18BK   |
| 3                                                                 | F98 18RD/WT |



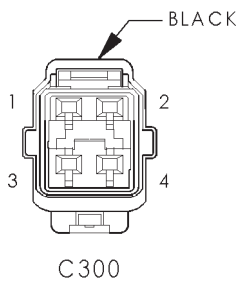
C211 - (DOME LAMP SIDE)

| CAV | CIRCUIT     |
|-----|-------------|
| 1   | Q43 20VT    |
| 2   | Q44 20BR    |
| 3   | Q42 20LB    |
| 4   | Q41 20WT    |
| 5   | Z1 18BK     |
| 6   | F10 18YL/RD |



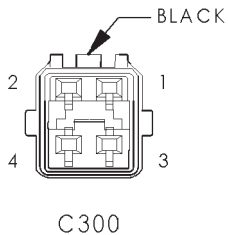
C211 - (POWER SUNROOF SIDE)

| CAV | CIRCUIT    |
|-----|------------|
| 1   | L1 20VT    |
| 2   | L2 20BR    |
| 3   | L3 20LB    |
| 4   | L4 20WT    |
| 5   | Z1 14BK/VT |
| 6   | L5 14YL/RD |



C300 - BLACK (LEFT BODY SIDE)

| CAV | CIRCUIT                    |
|-----|----------------------------|
| 1   | P35 18OR/VT (POWER LOCKS)  |
| 2   | P36 18PK/VT (POWER LOCKS)  |
| 3   | Q13 14DB/GY (NORMAL BUILD) |
| 3   | Q13 14DB/WT (EARLY BUILD)  |
| 4   | Q23 14RD/DG (NORMAL BUILD) |
| 4   | Q23 14RD/WT (EARLY BUILD)  |



C300 - BLACK (REAR DOOR SIDE)

| CAV | CIRCUIT                    |
|-----|----------------------------|
| 1   | P35 18OR/VT (POWER LOCKS)  |
| 2   | P36 18PK/VT (POWER LOCKS)  |
| 3   | Q13 14DB/GY                |
| 4   | Q23 14RD/WT (EARLY BUILD)  |
| 4   | Q23 14RD/DG (NORMAL BUILD) |

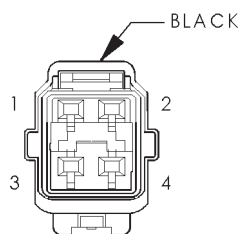


# 2001 PT CRUISER SUPPLEMENT

8W - 80 - 22

8W-80 CONNECTOR PINOUTS

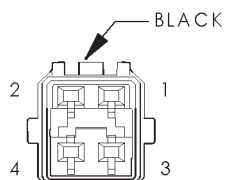
PT



C 301

C301 - BLACK (RIGHT BODY SIDE)

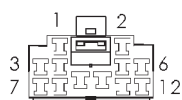
| CAV | CIRCUIT                   |
|-----|---------------------------|
| 1   | P35 18OR/VT (POWER LOCKS) |
| 2   | P36 18PK/VT (POWER LOCKS) |
| 3   | Q14 14GY                  |
| 4   | Q24 14DG                  |



C 301

C301 - BLACK (REAR DOOR SIDE)

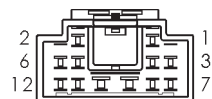
| CAV | CIRCUIT                    |
|-----|----------------------------|
| 1   | P35 18OR/VT (POWER LOCKS)  |
| 2   | P36 18PK/VT (POWER LOCKS)  |
| 3   | Q14 14DB/GY                |
| 4   | Q24 14RD/WT (EARLY BUILD)  |
| 4   | Q24 14RD/DG (NORMAL BUILD) |



C 302

C302 - (LIFTGATE SIDE)

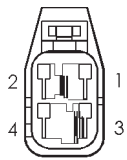
| CAV | CIRCUIT                    |
|-----|----------------------------|
| 1   | P35 18OR/VT (POWER LOCKS)  |
| 2   | P36 18PK/VT (POWER LOCKS)  |
| 3   | G78 20TN/BK                |
| 4   | V13 18BR/LG                |
| 5   | F13 18DB (EARLY BUILD)     |
| 5   | V23 18BR/PK (NORMAL BUILD) |
| 6   | P96 20WT/LG                |
| 7   | L50 18WT/TN                |
| 8   | -                          |
| 9   | C15 12BK/WT                |
| 10  | Z1 12BK                    |
| 11  | Z1 16BK                    |
| 12  | -                          |



C 302

C302 - (LEFT BODY SIDE)

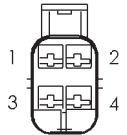
| CAV | CIRCUIT                    |
|-----|----------------------------|
| 1   | P35 18OR/VT (POWER LOCKS)  |
| 2   | P36 18PK/VT (POWER LOCKS)  |
| 3   | G78 20TN/BK                |
| 4   | V13 18BR/LG                |
| 5   | F13 18DB (EARLY BUILD)     |
| 5   | V23 18BR/PK (NORMAL BUILD) |
| 6   | P96 20WT/LG                |
| 7   | L50 18WT/TN                |
| 8   | -                          |
| 9   | C15 12BK/WT                |
| 10  | Z1 12BK                    |
| 11  | Z1 16BK                    |
| 12  | -                          |



C 303

C303 - (LEFT BODY SIDE)

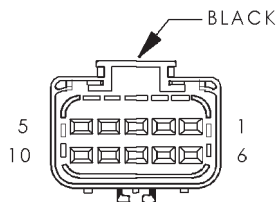
| CAV | CIRCUIT    |
|-----|------------|
| 1   | L1 18VT/BK |
| 2   | -          |
| 3   | L7 18BK/YL |
| 4   | Z1 18BK    |



C 303

C303 - (REAR FASCIA SIDE)

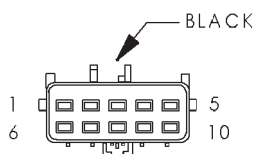
| CAV | CIRCUIT    |
|-----|------------|
| 1   | L1 18VT/BK |
| 2   | -          |
| 3   | L7 18BK/YL |
| 4   | Z1 18BK    |



C 304

C304 - BLACK (FUEL TANK SIDE)

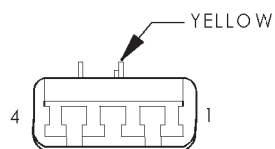
| CAV | CIRCUIT                            |
|-----|------------------------------------|
| 1   | Z1 16BK                            |
| 2   | Z2 20BK/LG                         |
| 3   | G4 20DB                            |
| 4   | A141 16DG/WT                       |
| 5   | F18 20LG/BK (LEAK DETECTION PUMP)  |
| 6   | K106 20WT/DG (LEAK DETECTION PUMP) |
| 7   | K107 20OR/YL (LEAK DETECTION PUMP) |
| 8   | -                                  |
| 9   | -                                  |
| 10  | -                                  |



C 304

C304 - BLACK (UNDERBODY SIDE)

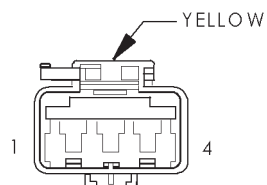
| CAV | CIRCUIT                            |
|-----|------------------------------------|
| 1   | Z1 16BK                            |
| 2   | Z2 20BK/LG                         |
| 3   | G4 20DB                            |
| 4   | A141 16DG/WT                       |
| 5   | F18 20LG/BK (LEAK DETECTION PUMP)  |
| 6   | K106 20WT/DG (LEAK DETECTION PUMP) |
| 7   | K107 20OR/YL (LEAK DETECTION PUMP) |
| 8   | -                                  |
| 9   | -                                  |
| 10  | -                                  |



C305  
(EARLY BUILD)

C305 (EARLY BUILD) - YELLOW (LEFT BODY SIDE)

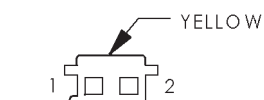
| CAV | CIRCUIT     |
|-----|-------------|
| 1   | -           |
| 2   | -           |
| 3   | R31 20LG/OR |
| 4   | R33 20LG/WT |



C305  
(EARLY BUILD)

C305 (EARLY BUILD) - YELLOW (SIDE AIR BAG SIDE)

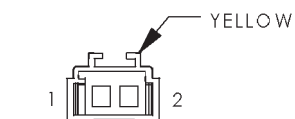
| CAV | CIRCUIT  |
|-----|----------|
| 1   | -        |
| 2   | -        |
| 3   | R31 18OR |
| 4   | R33 18WT |



C305  
(NORMAL BUILD)

C305 (NORMAL BUILD) - YELLOW (LEFT BODY SIDE)

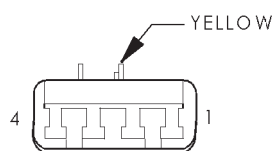
| CAV | CIRCUIT     |
|-----|-------------|
| 1   | R31 20LG/OR |
| 2   | R33 2LG/WT  |



C305  
(NORMAL BUILD)

C305 (NORMAL BUILD) - YELLOW (SIDE AIR BAG SIDE)

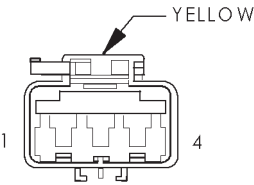
| CAV | CIRCUIT  |
|-----|----------|
| 1   | R31 18OR |
| 2   | R33 18WT |



C306  
(EARLY BUILD)

C306 (EARLY BUILD) - YELLOW (RIGHT BODY SIDE)

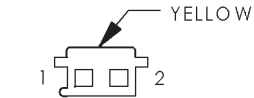
| CAV | CIRCUIT     |
|-----|-------------|
| 1   | -           |
| 2   | -           |
| 3   | R32 20LB/OR |
| 4   | R34 20LB/WT |



C306  
(EARLY BUILD)

C306 (EARLY BUILD) - YELLOW (SIDE AIR BAG  
SIDE)

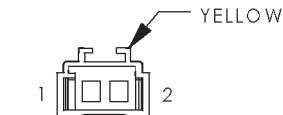
| CAV | CIRCUIT  |
|-----|----------|
| 1   | -        |
| 2   | -        |
| 3   | R32 18OR |
| 4   | R34 18WT |



C306  
(NORMAL BUILD)

C306 (NORMAL BUILD) - YELLOW (RIGHT  
BODY SIDE)

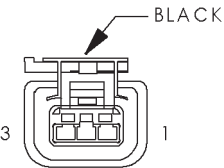
| CAV | CIRCUIT     |
|-----|-------------|
| 1   | R32 20LB/OR |
| 2   | R34 20LB/WT |



C306  
(NORMAL BUILD)

C306 (NORMAL BUILD) - YELLOW (SIDE AIR  
BAG SIDE)

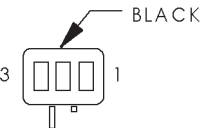
| CAV | CIRCUIT  |
|-----|----------|
| 1   | R32 18OR |
| 2   | R34 18WT |



CAMSHAFT  
POSITION  
SENSOR

CAMSHAFT POSITION SENSOR - BLACK 3 WAY

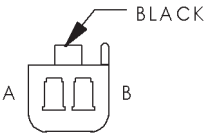
| CAV | CIRCUIT     | FUNCTION                        |
|-----|-------------|---------------------------------|
| 1   | K7 20OR     | 8V SUPPLY                       |
| 2   | K4 20BK/LB  | SENSOR GROUND                   |
| 3   | K44 20TN/YL | CAMSHAFT POSITION SENSOR SIGNAL |



CARGO  
LAMP

CARGO LAMP - BLACK 3 WAY

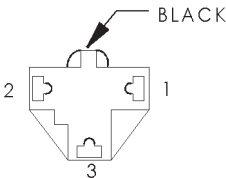
| CAV | CIRCUIT | FUNCTION              |
|-----|---------|-----------------------|
| 1   | M1 20PK | FUSED B(+)            |
| 2   | M2 20YL | COURTESY LAMPS DRIVER |
| 3   | -       | -                     |



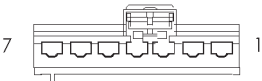
CENTER  
HIGH  
MOUNTED  
STOP  
LAMP



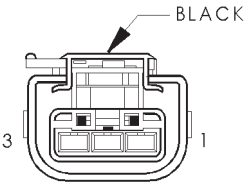
CENTER  
STACK  
LAMP



CIGAR LIGHTER



CLOCKSPRING



CLUTCH PEDAL  
POSITION SWITCH  
(UP)  
(M/T)

CENTER HIGH MOUNTED STOP LAMP - BLACK 2 WAY

| CAV | CIRCUIT     | FUNCTION                 |
|-----|-------------|--------------------------|
| A   | L50 18WT/TN | BRAKE LAMP SWITCH OUTPUT |
| B   | Z1 18BK     | GROUND                   |

CENTER STACK LAMP - 2 WAY

| CAV | CIRCUIT | FUNCTION           |
|-----|---------|--------------------|
| 1   | E2 20OR | PANEL LAMPS DRIVER |
| 2   | Z1 20BK | GROUND             |

CIGAR LIGHTER - BLACK 3 WAY

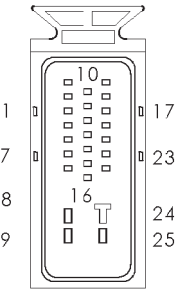
| CAV | CIRCUIT  | FUNCTION                               |
|-----|----------|----------------------------------------|
| 1   | F30 16RD | FUSED IGNITION SWITCH OUTPUT (RUN-ACC) |
| 2   | -        | -                                      |
| 3   | Z1 16BK  | GROUND                                 |

CLOCKSPRING - 7 WAY

| CAV | CIRCUIT     | FUNCTION                    |
|-----|-------------|-----------------------------|
| 1   | R43 18BK/LB | DRIVER SQIB NO. 1 LINE 1    |
| 2   | R45 18DG/LB | DRIVER SQIB NO. 1 LINE 2    |
| 3   | -           | -                           |
| 4   | -           | -                           |
| 5   | X3 20BK/RD  | HORN RELAY CONTROL          |
| 6   | V37 20RD/LG | SPEED CONTROL SWITCH SIGNAL |
| 7   | Z2 20BK/LG  | GROUND                      |

CLUTCH PEDAL POSITION SWITCH (UP) (M/T) - BLACK 3 WAY

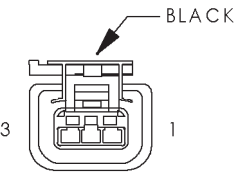
| CAV | CIRCUIT                    | FUNCTION                       |
|-----|----------------------------|--------------------------------|
| 1   | K119 20LG/BK               | CLUTCH UPSTOP SWITCH SIGNAL    |
| 2   | Z12 20BK/TN                | GROUND                         |
| 3   | T41 20BK/WT (EARLY BUILD)  | CLUTCH INTERLOCK SWITCH SIGNAL |
| 3   | T41 20YL/RD (NORMAL BUILD) | CLUTCH INTERLOCK SWITCH SIGNAL |



CONTROLLER  
ANTILOCK  
BRAKE

CONTROLLER ANTILOCK BRAKE - 25 WAY

| CAV | CIRCUIT     | FUNCTION                                      |
|-----|-------------|-----------------------------------------------|
| 1   | B8 18RD/DB  | LEFT FRONT WHEEL SPEED SENSOR SIGNAL          |
| 2   | B9 18RD     | LEFT FRONT WHEEL SPEED SENSOR 12 VOLT SUPPLY  |
| 3   | -           | -                                             |
| 4   | F12 18DB/WT | FUSED IGNITION SWITCH OUTPUT (RUN-START)      |
| 5   | B3 18LG/DB  | LEFT REAR WHEEL SPEED SENSOR SIGNAL           |
| 6   | B4 18LG     | LEFT REAR WHEEL SPEED SENSOR 12 VOLT SUPPLY   |
| 7   | -           | -                                             |
| 8   | Z1 12BK     | GROUND                                        |
| 9   | A20 12RD/DB | FUSED B(+)                                    |
| 10  | D25 18VT/YL | PCI BUS                                       |
| 11  | -           | -                                             |
| 12  | -           | -                                             |
| 13  | -           | -                                             |
| 14  | -           | -                                             |
| 15  | B27 18RD/YL | TRACTION CONTROL SWITCH SENSE                 |
| 16  | -           | -                                             |
| 17  | -           | -                                             |
| 18  | L50 18WT/TN | BRAKE LAMP SWITCH OUTPUT                      |
| 19  | B6 18WT/DB  | RIGHT FRONT WHEEL SPEED SENSOR SIGNAL         |
| 20  | B7 18WT     | RIGHT FRONT WHEEL SPEED SENSOR 12 VOLT SUPPLY |
| 21  | -           | -                                             |
| 22  | B2 18YL     | RIGHT REAR WHEEL SPEED SENSOR 12 VOLT SUPPLY  |
| 23  | B1 18YL/DB  | RIGHT REAR WHEEL SPEED SENSOR SIGNAL          |
| 24  | Z1 12BK     | GROUND                                        |
| 25  | A10 12RD/DG | FUSED B(+)                                    |



CRANKSHAFT  
POSITION  
SENSOR

CRANKSHAFT POSITION SENSOR - BLACK 3 WAY

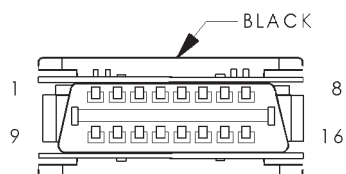
| CAV | CIRCUIT     | FUNCTION                          |
|-----|-------------|-----------------------------------|
| 1   | K7 20OR     | 8V SUPPLY                         |
| 2   | K4 20BK/LB  | SENSOR GROUND                     |
| 3   | K24 20GY/BK | CRANKSHAFT POSITION SENSOR SIGNAL |

# 2001 PT CRUISER SUPPLEMENT

8W - 80 - 28

8W-80 CONNECTOR PINOUTS

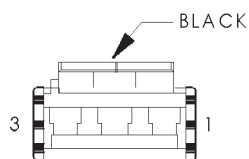
PT



DATA LINK CONNECTOR

DATA LINK CONNECTOR - BLACK 16 WAY

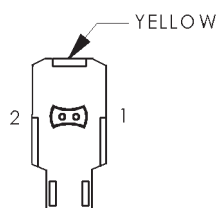
| CAV | CIRCUIT          | FUNCTION          |
|-----|------------------|-------------------|
| 1   | -                | -                 |
| 2   | D25 20VT/YL      | PCI BUS           |
| 3   | -                | -                 |
| 4   | Z12 20BK/TN      | GROUND            |
| 5   | Z11 20BK/WT      | GROUND            |
| 6   | D20 20LG         | SCI RECEIVE       |
| 7   | D21 20PK         | SCI TRANSMIT      |
| 8   | -                | -                 |
| 9   | -                | -                 |
| 10  | -                | -                 |
| 11  | -                | -                 |
| 12  | -                | -                 |
| 13  | -                | -                 |
| 14  | D6 20PK/LB (A/T) | SCI RECEIVE (A/T) |
| 15  | -                | -                 |
| 16  | A14 18RD/WT      | FUSED B(+)        |



DOME LAMP

DOME LAMP - BLACK 3 WAY

| CAV | CIRCUIT    | FUNCTION                             |
|-----|------------|--------------------------------------|
| 1   | -          | -                                    |
| 2   | M1 20PK    | FUSED B(+)                           |
| 3   | M2 20BK/YL | COURTESY LAMP DRIVER (LIGHT PACKAGE) |
| 3   | M2 20YL    | COURTESY LAMP DRIVER                 |



DRIVER AIRBAG MODULE

DRIVER AIRBAG MODULE - YELLOW 2 WAY

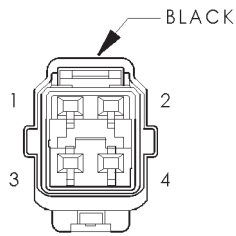
| CAV | CIRCUIT                     | FUNCTION                  |
|-----|-----------------------------|---------------------------|
| 1   | R143 18BK/LB (NORMAL BUILD) | DRIVER SQUIB NO. 1 LINE 1 |
| 1   | R143 22BK/LB (EARLY BUILD)  | DRIVER SQUIB NO. 1 LINE 2 |
| 2   | R145 18DG/LB (NORMAL BUILD) | DRIVER SQUIB NO. 1 LINE 1 |
| 2   | R145 22DG/LB (EARLY BUILD)  | DRIVER SQUIB NO. 1 LINE 2 |



DRIVER CYLINDER LOCK SWITCH

DRIVER CYLINDER LOCK SWITCH - 2 WAY

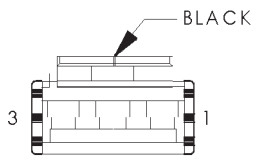
| CAV | CIRCUIT  | FUNCTION               |
|-----|----------|------------------------|
| 1   | P97 18LG | DRIVER DOOR SWITCH MUX |
| 2   | Z1 18BK  | GROUND                 |



DRIVER DOOR  
LOCK MOTOR  
(EARLY BUILD)

DRIVER DOOR LOCK MOTOR (EARLY BUILD) - BLACK 4 WAY

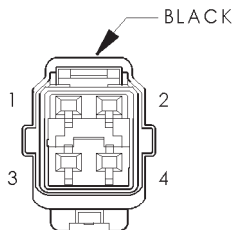
| CAV | CIRCUIT     | FUNCTION                  |
|-----|-------------|---------------------------|
| 1   | -           | -                         |
| 2   | -           | -                         |
| 3   | P34 18PK/BK | DRIVER DOOR UNLOCK DRIVER |
| 4   | P33 18OR/BK | DRIVER DOOR LOCK DRIVER   |



DRIVER  
DOOR LOCK  
SWITCH

DRIVER DOOR LOCK SWITCH - BLACK 3 WAY

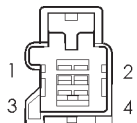
| CAV | CIRCUIT     | FUNCTION               |
|-----|-------------|------------------------|
| 1   | L7 18BK/YL  | HEADLAMP SWITCH OUTPUT |
| 2   | P97 18LG    | DRIVER DOOR SWITCH MUX |
| 2   | P97 20WT/DG | DRIVER DOOR SWITCH MUX |
| 3   | Z1 20BK     | GROUND                 |



DRIVER DOOR  
POWER LOCK  
MOTOR/AJAR  
SWITCH  
(NORMAL BUILD)

DRIVER DOOR POWER LOCK MOTOR/AJAR SWITCH (NORMAL BUILD) - BLACK 4 WAY

| CAV | CIRCUIT     | FUNCTION                      |
|-----|-------------|-------------------------------|
| 1   | G75 18TN/DB | DRIVER DOOR AJAR SWITCH SENSE |
| 2   | Z1 18BK     | GROUND                        |
| 3   | P34 18PK/BK | DRIVER DOOR UNLOCK DRIVER     |
| 4   | P33 18OR/BK | DRIVER DOOR LOCK DRIVER       |

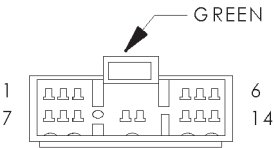


DRIVER  
HEATED SEAT  
CUSHION  
(NORMAL BUILD)

DRIVER HEATED SEAT CUSHION (NORMAL BUILD) - 4 WAY

| CAV | CIRCUIT      | FUNCTION                             |
|-----|--------------|--------------------------------------|
| 1   | Z121 18BK    | GROUND                               |
| 2   | P131 18RD/DG | DRIVER SEAT HEATER B(+) DRIVER       |
| 3   | P141 20TN/LB | DRIVER SEAT TEMPERATURE SENSOR INPUT |
| 4   | P143 20BK/DG | DRIVER SEAT TEMPERATURE 5V SUPPLY    |

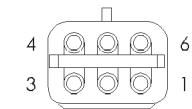




DRIVER  
HEATED SEAT  
MODULE  
(NORMAL BUILD)

DRIVER HEATED SEAT MODULE (NORMAL BUILD) - GREEN 14 WAY

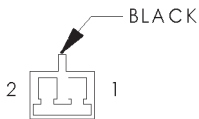
| CAV | CIRCUIT      | FUNCTION                             |
|-----|--------------|--------------------------------------|
| 1   | P7 20LB/BK   | DRIVER HEATED SEAT SWITCH            |
| 2   | P141 20TN/LB | DRIVER SEAT TEMPERATURE SENSOR INPUT |
| 3   | -            | -                                    |
| 4   | F99 18RD/WT  | FUSED HEATED SEAT RELAY OUTPUT       |
| 5   | P131 18RD/DG | DRIVER SEAT HEATER B(+) DRIVER       |
| 6   | F99 18RD/WT  | FUSED HEATED SEAT RELAY OUTPUT       |
| 7   | -            | -                                    |
| 8   | P143 20BK/DG | DRIVER SEAT TEMPERATURE 5V SUPPLY    |
| 9   | -            | -                                    |
| 10  | -            | -                                    |
| 11  | -            | -                                    |
| 12  | P137 20VT/DG | DRIVER SEAT LOW HEAT LED DRIVER      |
| 13  | Z121 18BK    | GROUND                               |
| 14  | P139 20VT/WT | DRIVER SEAT HIGH HEAT LED DRIVER     |



DRIVER  
HEATED SEAT  
SWITCH  
(NORMAL BUILD)

DRIVER HEATED SEAT SWITCH (NORMAL BUILD) - 6 WAY

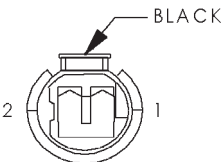
| CAV | CIRCUIT      | FUNCTION                        |
|-----|--------------|---------------------------------|
| 1   | P137 20VT/DG | DRIVER SEAT LOW HEAT LED DRIVER |
| 2   | -            | -                               |
| 3   | Z121 18BK    | GROUND                          |
| 4   | F99 18RD/WT  | FUSED HEATED SEAT RELAY OUTPUT  |
| 5   | P139 20VT/WT | DRIVER SEAT HIGH LED DRIVER     |
| 6   | P7 20LB/BK   | DRIVER HEATED SEAT SWITCH       |



DRIVER  
SEAT BELT  
SWITCH

DRIVER SEAT BELT SWITCH - BLACK 2 WAY

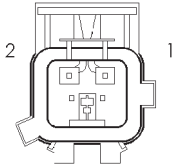
| CAV | CIRCUIT     | FUNCTION               |
|-----|-------------|------------------------|
| 1   | G10 20LG/RD | SEAT BELT SWITCH SENSE |
| 2   | Z1 20BK     | GROUND                 |



EGR  
SOLENOID

EGR SOLENOID - BLACK 2 WAY

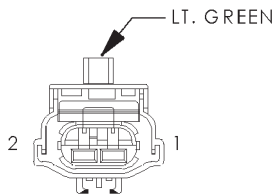
| CAV | CIRCUIT      | FUNCTION                         |
|-----|--------------|----------------------------------|
| 1   | A142 18DG/OR | AUTOMATIC SHUT DOWN RELAY OUTPUT |
| 2   | K35 20GY/YL  | EGR SOLENOID CONTROL             |



ENGINE COOLANT  
TEMPERATURE  
SENSOR

ENGINE COOLANT TEMPERATURE SENSOR - 2 WAY

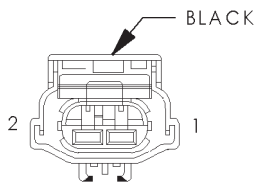
| CAV | CIRCUIT    | FUNCTION                                 |
|-----|------------|------------------------------------------|
| 1   | K4 20BK/LB | SENSOR GROUND                            |
| 2   | K2 20TN/BK | ENGINE COOLANT TEMPERATURE SENSOR SIGNAL |



ENGINE OIL  
PRESSURE  
SWITCH

ENGINE OIL PRESSURE SWITCH - LT. GREEN 2 WAY

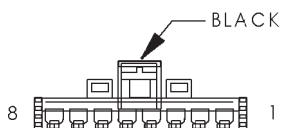
| CAV | CIRCUIT | FUNCTION                         |
|-----|---------|----------------------------------|
| 1   | G6 20GY | ENGINE OIL PRESSURE SWITCH SENSE |
| 2   | -       | -                                |



EVAP  
PURGE  
SOLENOID

EVAP PURGE SOLENOID - BLACK 2 WAY

| CAV | CIRCUIT                     | FUNCTION                    |
|-----|-----------------------------|-----------------------------|
| 1   | K108 20VT/RD (EARLY BUILD)  | EVAP PURGE SOLENOID SENSE   |
| 1   | K108 20WT/TN (NORMAL BUILD) | EVAP PURGE SOLENOID SENSE   |
| 2   | K52 20PK/BK                 | EVAP PURGE SOLENOID CONTROL |



FRONT  
POWER  
WINDOW  
SWITCH  
(EARLY BUILD)

FRONT POWER WINDOW SWITCH (EARLY BUILD) - BLACK 8 WAY

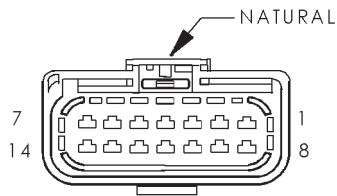
| CAV | CIRCUIT     | FUNCTION                           |
|-----|-------------|------------------------------------|
| 1   | Q12 14BR/LB | PASSENGER WINDOW DRIVER (UP)       |
| 2   | Q22 14VT/WT | PASSENGER WINDOW DRIVER (DOWN)     |
| 3   | F21 14TN    | FUSED IGNITION SWITCH OUTPUT (RUN) |
| 4   | E2 20OR     | PANEL LAMPS DRIVER                 |
| 5   | Q1 14YL     | POWER WINDOW SWITCH FEED           |
| 6   | Q21 14WT    | DRIVER WINDOW DRIVER (DOWN)        |
| 7   | Q11 14LB    | DRIVER WINDOW DRIVER (UP)          |
| 8   | Z1 14BK     | GROUND                             |

# 2001 PT CRUISER SUPPLEMENT

8W - 80 - 32

8W-80 CONNECTOR PINOUTS

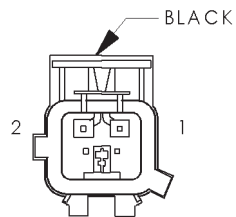
PT



FRONT  
POWER  
WINDOW  
SWITCH  
(NORMAL BUILD)

FRONT POWER WINDOW SWITCH (NORMAL BUILD) - NATURAL 14 WAY

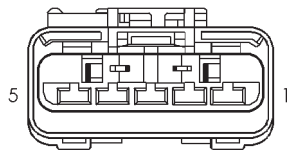
| CAV | CIRCUIT     | FUNCTION                           |
|-----|-------------|------------------------------------|
| 1   | Q18 14GY/BK | RIGHT REAR WINDOW DRIVER (UP)      |
| 2   | Q28 14DG/WT | RIGHT REAR WINDOW DRIVER (DOWN)    |
| 3   | Q22 14VT/WT | PASSENGER WINDOW DRIVER (DOWN)     |
| 4   | Z1 14BK     | GROUND                             |
| 5   | Q1 14YL     | WINDOW SWITCH FEED                 |
| 6   | E2 200R     | PANEL LAMPS DRIVER                 |
| 7   | Q12 14BR/LB | PASSENGER WINDOW DRIVER (UP)       |
| 8   | Q17 14DB/WT | LEFT REAR WINDOW DRIVER (UP)       |
| 9   | Q27 14RD/BK | LEFT REAR WINDOW DRIVER (DOWN)     |
| 10  | -           | -                                  |
| 11  | -           | -                                  |
| 12  | F21 14TN    | FUSED IGNITION SWITCH OUTPUT (RUN) |
| 13  | Q21 14WT    | DRIVER WINDOW DRIVER (DOWN)        |
| 14  | Q11 14LB    | DRIVER WINDOW DRIVER (UP)          |



FRONT  
WASHER PUMP  
MOTOR

FRONT WASHER PUMP MOTOR - BLACK 2 WAY

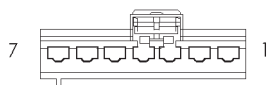
| CAV | CIRCUIT     | FUNCTION                  |
|-----|-------------|---------------------------|
| 1   | V20 18BK/WT | REAR WASHER MOTOR CONTROL |
| 2   | V10 18BR    | WASHER PUMP CONTROL       |



FRONT  
WIPER  
MOTOR

FRONT WIPER MOTOR - 5 WAY

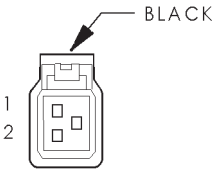
| CAV | CIRCUIT                    | FUNCTION                               |
|-----|----------------------------|----------------------------------------|
| 1   | Z1 16BK                    | GROUND                                 |
| 2   | V5 18DG                    | WIPER PARK SWITCH SENSE                |
| 3   | F13 16DB (EARLY BUILD)     | FUSED IGNITION SWITCH OUTPUT (RUN-ACC) |
| 3   | F88 16RD/WT (NORMAL BUILD) | FUSED IGNITION SWITCH OUTPUT (RUN-ACC) |
| 4   | V3 16BR/WT                 | LOW SPEED WIPER SWITCH OUTPUT          |
| 5   | V4 16RD/YL                 | WIPER SWITCH HIGH SPEED OUTPUT         |



FRONT  
WIPER/  
WASHER  
SWITCH

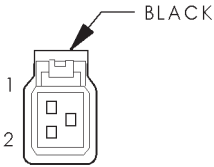
FRONT WIPER/WASHER SWITCH - 7 WAY

| CAV | CIRCUIT                 | FUNCTION                               |
|-----|-------------------------|----------------------------------------|
| 1   | V5 18DG                 | WIPER SWITCH MODE SENSE                |
| 2   | Z1 18BK                 | GROUND                                 |
| 3   | V10 18BR                | WASHER SWITCH SENSE                    |
| 4   | F13 16DB (EARLY BUILD)  | WASHER SWITCH SENSE                    |
| 4   | F88 16DB (NORMAL BUILD) | FUSED IGNITION SWITCH OUTPUT (RUN-ACC) |
| 5   | V4 16RD/YL              | WIPER HIGH/LOW RELAY HIGH SPEED OUTPUT |
| 6   | V3 16BR/WT              | WIPER HIGH/LOW RELAY LOW SPEED OUTPUT  |
| 7   | -                       | -                                      |



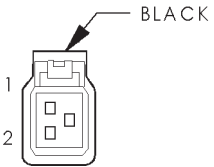
FUEL  
INJECTOR  
NO. 1

| FUEL INJECTOR NO. 1 - BLACK 2 WAY |              |                                  |
|-----------------------------------|--------------|----------------------------------|
| CAV                               | CIRCUIT      | FUNCTION                         |
| 1                                 | K11 18WT/DB  | FUEL INJECTOR NO. 1 DRIVER       |
| 2                                 | A142 18DG/OR | AUTOMATIC SHUT DOWN RELAY OUTPUT |



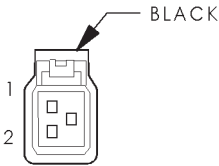
FUEL  
INJECTOR  
NO. 2

| FUEL INJECTOR NO. 2 - BLACK 2 WAY |              |                                  |
|-----------------------------------|--------------|----------------------------------|
| CAV                               | CIRCUIT      | FUNCTION                         |
| 1                                 | K12 18TN     | FUEL INJECTOR NO. 2 DRIVER       |
| 2                                 | A142 18DG/OR | AUTOMATIC SHUT DOWN RELAY OUTPUT |



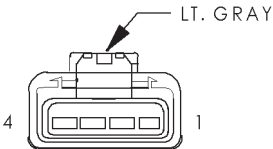
FUEL  
INJECTOR  
NO. 3

| FUEL INJECTOR NO. 3 - BLACK 2 WAY |              |                                  |
|-----------------------------------|--------------|----------------------------------|
| CAV                               | CIRCUIT      | FUNCTION                         |
| 1                                 | K13 18YL/WT  | FUEL INJECTOR NO. 3 DRIVER       |
| 2                                 | A142 18DG/OR | AUTOMATIC SHUT DOWN RELAY OUTPUT |



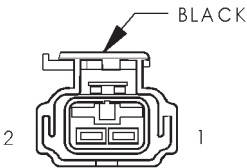
FUEL  
INJECTOR  
NO. 4

| FUEL INJECTOR NO. 4 - BLACK 2 WAY |              |                                  |
|-----------------------------------|--------------|----------------------------------|
| CAV                               | CIRCUIT      | FUNCTION                         |
| 1                                 | K14 18LB/BR  | FUEL INJECTOR NO. 4 DRIVER       |
| 2                                 | A142 18DG/OR | AUTOMATIC SHUT DOWN RELAY OUTPUT |



FUEL  
PUMP  
MODULE

| FUEL PUMP MODULE - LT. GRAY 4 WAY |              |                          |
|-----------------------------------|--------------|--------------------------|
| CAV                               | CIRCUIT      | FUNCTION                 |
| 1                                 | Z1 16BK      | GROUND                   |
| 2                                 | Z2 20BK/LG   | GROUND                   |
| 3                                 | G4 20DB      | FUEL LEVEL SENSOR SIGNAL |
| 4                                 | A141 16DG/WT | FUEL PUMP RELAY OUTPUT   |



GENERATOR

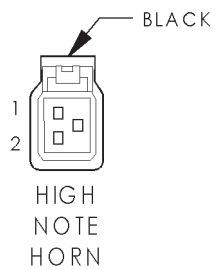
| GENERATOR - BLACK 2 WAY |              |                                  |
|-------------------------|--------------|----------------------------------|
| CAV                     | CIRCUIT      | FUNCTION                         |
| 1                       | K20 18DG     | GENERATOR FIELD                  |
| 2                       | A142 18DG/OR | AUTOMATIC SHUT DOWN RELAY OUTPUT |

# 2001 PT CRUISER SUPPLEMENT

8W - 80 - 34

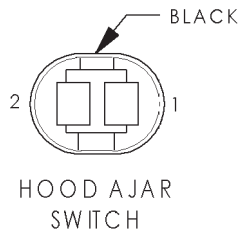
8W-80 CONNECTOR PINOUTS

PT



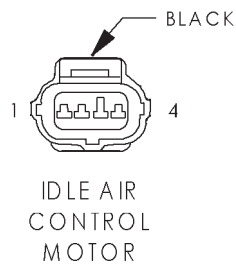
HIGH NOTE HORN - BLACK 2 WAY

| CAV | CIRCUIT    | FUNCTION          |
|-----|------------|-------------------|
| 1   | X2 20DG/RD | HORN RELAY OUTPUT |
| 2   | Z1 20BK    | GROUND            |



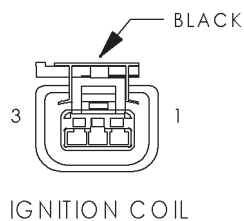
HOOD AJAR SWITCH - BLACK 2 WAY

| CAV | CIRCUIT     | FUNCTION               |
|-----|-------------|------------------------|
| 1   | G70 20BR/TN | HOOD AJAR SWITCH SENSE |
| 2   | Z1 20BK     | GROUND                 |



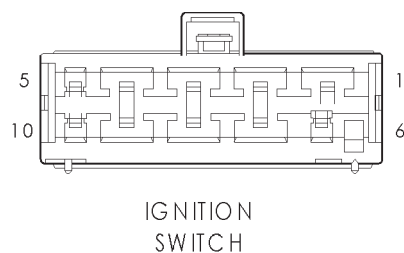
IDLE AIR CONTROL MOTOR - BLACK 4 WAY

| CAV | CIRCUIT                    | FUNCTION                      |
|-----|----------------------------|-------------------------------|
| 1   | K39 20GY/RD (EARLY BUILD)  | IDLE AIR CONTROL NO. 1 DRIVER |
| 1   | K39 18GY/RD (NORMAL BUILD) | IDLE AIR CONTROL NO. 1 DRIVER |
| 2   | K60 20YL/BK (EARLY BUILD)  | IDLE AIR CONTROL NO. 2 DRIVER |
| 2   | K60 18YL/BK (NORMAL BUILD) | IDLE AIR CONTROL NO. 2 DRIVER |
| 3   | K40 20BR/WT (EARLY BUILD)  | IDLE AIR CONTROL NO. 3 DRIVER |
| 3   | K40 18BR/WT (NORMAL BUILD) | IDLE AIR CONTROL NO. 3 DRIVER |
| 4   | K59 20VT/BK (EARLY BUILD)  | IDLE AIR CONTROL NO. 4 DRIVER |
| 4   | K59 18VT/BK (NORMAL BUILD) | IDLE AIR CONTROL NO. 4 DRIVER |



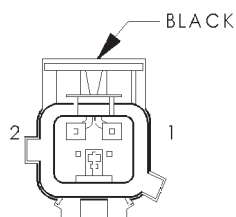
IGNITION COIL - BLACK 3 WAY

| CAV | CIRCUIT      | FUNCTION                         |
|-----|--------------|----------------------------------|
| 1   | K17 18DB/TN  | IGNITION NO. 2 DRIVER            |
| 2   | A142 18DG/OR | AUTOMATIC SHUT DOWN RELAY OUTPUT |
| 3   | K19 18BK/GY  | IGNITION COIL NO. 1 DRIVER       |

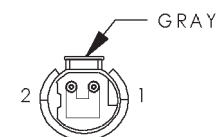


IGNITION SWITCH - 10 WAY

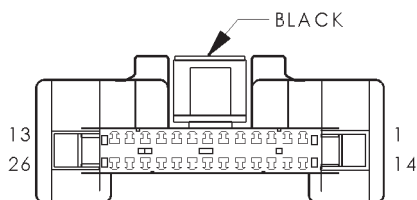
| CAV | CIRCUIT     | FUNCTION                               |
|-----|-------------|----------------------------------------|
| 1   | A1 14RD     | FUSED B(+)                             |
| 2   | A21 14DB    | IGNITION SWITCH OUTPUT (RUN-START)     |
| 3   | F30 16RD    | IGNITION SWITCH OUTPUT (RUN-ACC)       |
| 4   | F1 16DB/BK  | FUSED B(+)                             |
| 5   | G26 20LB    | KEY-IN IGNITION SWITCH SENSE           |
| 6   | A41 14YL    | FUSED IGNITION SWITCH OUTPUT (START)   |
| 7   | A31 14BK/WT | FUSED IGNITION SWITCH OUTPUT (RUN-ACC) |
| 8   | A22 12BK/OR | FUSED IGNITION SWITCH OUTPUT (RUN)     |
| 9   | A2 12PK/BK  | FUSED B(+)                             |
| 10  | -           | -                                      |



INLET AIR  
TEMPERATURE  
SENSOR



INPUT SPEED  
SENSOR



INSTRUMENT  
CLUSTER C1

INLET AIR TEMPERATURE SENSOR - BLACK 2 WAY

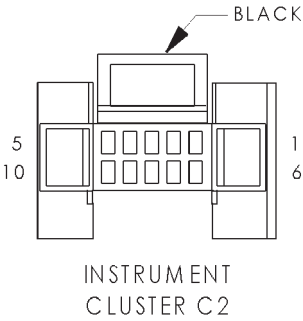
| CAV | CIRCUIT                    | FUNCTION                            |
|-----|----------------------------|-------------------------------------|
| 1   | K21 18BK/RD (NORMAL BUILD) | INLET AIR TEMPERATURE SENSOR SIGNAL |
| 1   | K21 20BK/RD (EARLY BUILD)  | No Function Defined                 |
| 2   | K4 20BK/LB (EARLY BUILD)   | SENSOR GROUND                       |
| 2   | K4 18BK/LB (NORMAL BUILD)  | SENSOR GROUND                       |

INPUT SPEED SENSOR - GRAY 2 WAY

| CAV | CIRCUIT     | FUNCTION                  |
|-----|-------------|---------------------------|
| 1   | T13 20DB/BK | SPEED SENSOR GROUND       |
| 2   | T52 20RD/BK | INPUT SPEED SENSOR SIGNAL |

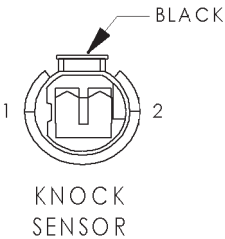
INSTRUMENT CLUSTER C1 - BLACK 26 WAY

| CAV | CIRCUIT                                                 | FUNCTION                                 |
|-----|---------------------------------------------------------|------------------------------------------|
| 1   | Z1 18BK                                                 | GROUND                                   |
| 2   | Z2 20BK/LG (NORMAL BUILD)                               | GROUND                                   |
| 3   | L7 18BK/YL                                              | HEADLAMP SWITCH OUTPUT                   |
| 4   | M1 20PK                                                 | FUSED B(+)                               |
| 5   | -                                                       | -                                        |
| 6   | -                                                       | -                                        |
| 7   | M2 20YL                                                 | COURTESY LAMPS DRIVER                    |
| 8   | -                                                       | -                                        |
| 9   | G75 20TN (LHD)                                          | LEFT DOOR AJAR SWITCH SENSE              |
| 9   | G74 20TN/RD (RHD)                                       | RIGHT DOOR AJAR SWITCH SENSE             |
| 10  | L161 18LG/OR                                            | LEFT TURN SIGNAL (OUT)                   |
| 11  | L61 18LG                                                | LEFT TURN SIGNAL (IN)                    |
| 12  | L160 18TN/RD                                            | RIGHT TURN SIGNAL (OUT)                  |
| 13  | L60 18TN                                                | RIGHT TURN SIGNAL (IN)                   |
| 14  | G5 20DB/BK (EXCEPT SENTRY KEY IMMOBILIZER NORMAL BUILD) | FUSED IGNITION SWITCH OUTPUT (RUN-START) |
| 14  | G5 20DB/BK (EARLY BUILD)                                | FUSED IGNITION SWITCH OUTPUT (RUN-START) |
| 14  | G5 20DB/WT (SENTRY KEY IMMOBILIZER NORMAL BUILD)        | FUSED IGNITION SWITCH OUTPUT (RUN-START) |
| 15  | -                                                       | -                                        |
| 16  | -                                                       | -                                        |
| 17  | L4 16VT/WT                                              | DIMMER SWITCH LOW BEAM OUTPUT            |
| 18  | L3 16RD/OR                                              | DIMMER SWITCH HIGH BEAM OUTPUT           |
| 19  | G26 20LB                                                | KEY-IN IGNITION SWITCH SENSE             |
| 20  | G10 20LG/RD                                             | SEAT BELT SWITCH SENSE                   |
| 21  | G9 20GY/BK (EARLY BUILD)                                | RED BRAKE WARNING INDICATOR DRIVER       |
| 21  | G11 20GY/BK                                             | RED BRAKE WARNING INDICATOR DRIVER       |
| 22  | E2 20OR                                                 | PANEL LAMPS DRIVER                       |
| 23  | M9 20DB/OR                                              | PASSENGER DOOR AJAR/RKE SENSE            |
| 24  | G78 20TN/BK                                             | LIFTGATE AJAR SWITCH SENSE               |
| 25  | -                                                       | -                                        |
| 26  | D25 20VT/YL                                             | PCI BUS                                  |



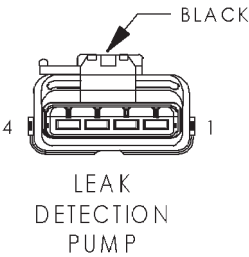
INSTRUMENT CLUSTER C2 - BLACK 10 WAY

| CAV | CIRCUIT                       | FUNCTION                       |
|-----|-------------------------------|--------------------------------|
| 1   | L39 18LB (FOG LAMPS)          | INSTRUMENT CLUSTER C2 - 10 WAY |
| 2   | G69 20BK/OR (POWER MIRRORS)   | VTSS INDICATOR DRIVER          |
| 3   | -                             | -                              |
| 4   | -                             | -                              |
| 5   | -                             | -                              |
| 6   | L38 18BR/WT (BUILT-UP-EXPORT) | REAR FOG LAMP SWITCH OUTPUT    |
| 7   | E19 20RD                      | PANEL LAMPS DIMMER SIGNAL      |
| 8   | -                             | -                              |
| 9   | G4 20DB                       | FUEL LEVEL SENSOR SIGNAL       |
| 10  | -                             | -                              |



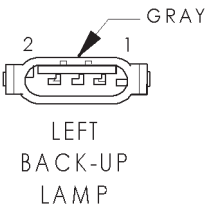
KNOCK SENSOR - BLACK 2 WAY

| CAV | CIRCUIT     | FUNCTION            |
|-----|-------------|---------------------|
| 1   | K42 20DB/LG | KNOCK SENSOR SIGNAL |
| 2   | K4 20BK/LB  | SENSOR GROUND       |



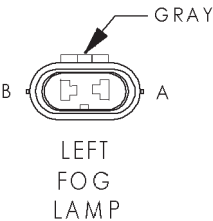
LEAK DETECTION PUMP - BLACK 4 WAY

| CAV | CIRCUIT      | FUNCTION                                 |
|-----|--------------|------------------------------------------|
| 1   | -            | -                                        |
| 2   | F18 20LG/BK  | FUSED IGNITION SWITCH OUTPUT (RUN-START) |
| 3   | K106 20WT/DG | LEAK DETECTION PUMP SOLENOID CONTROL     |
| 4   | K107 20OR/YL | LEAK DETECTION PUMP SWITCH SENSE         |



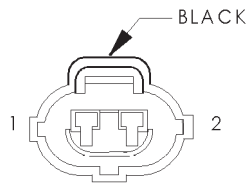
LEFT BACK-UP LAMP - GRAY 2 WAY

| CAV | CIRCUIT    | FUNCTION          |
|-----|------------|-------------------|
| 1   | L1 18VT/BK | BACK-UP LAMP FEED |
| 2   | Z1 18BK    | GROUND            |



LEFT FOG LAMP - GRAY 2 WAY

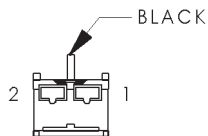
| CAV | CIRCUIT                | FUNCTION               |
|-----|------------------------|------------------------|
| A   | L39 18LB               | FOG LAMP SWITCH OUTPUT |
| B   | Z1 18BK (NORMAL BUILD) | GROUND                 |
| B   | Z1 20BK (EARLY BUILD)  | GROUND                 |



LEFT FRONT  
DOOR AJAR  
SWITCH  
(BASE)  
(NORMAL BUILD)

LEFT FRONT DOOR AJAR SWITCH (BASE) (NORMAL BUILD) - BLACK 2 WAY

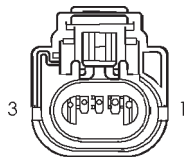
| CAV | CIRCUIT     | FUNCTION                    |
|-----|-------------|-----------------------------|
| 1   | G75 18TN/DB | LEFT DOOR AJAR SWITCH SENSE |
| 2   | Z1 18BK     | GROUND                      |



LEFT FRONT  
DOOR SPEAKER

LEFT FRONT DOOR SPEAKER - BLACK 2 WAY

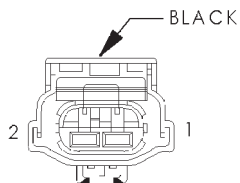
| CAV | CIRCUIT                    | FUNCTION               |
|-----|----------------------------|------------------------|
| 1   | X53 18DG (EARLY BUILD)     | LEFT FRONT SPEAKER (+) |
| 1   | X55 18BR/DB (NORMAL BUILD) | LEFT FRONT SPEAKER (-) |
| 2   | X55 18BR/RD (EARLY BUILD)  | LEFT FRONT SPEAKER (-) |
| 2   | X53 18DG/VT (NORMAL BUILD) | LEFT FRONT SPEAKER (+) |



LEFT FRONT  
PARK/TURN  
SIGNAL LAMP

LEFT FRONT PARK/TURN SIGNAL LAMP - 3 WAY

| CAV | CIRCUIT      | FUNCTION               |
|-----|--------------|------------------------|
| 1   | Z1 18BK      | GROUND                 |
| 2   | L7 18BK/YL   | HEADLAMP SWITCH OUTPUT |
| 3   | L161 18LG/OR | LEFT TURN SIGNAL (OUT) |



LEFT FRONT  
POWER WINDOW  
MOTOR

LEFT FRONT POWER WINDOW MOTOR - BLACK 2 WAY

| CAV | CIRCUIT  | FUNCTION                  |
|-----|----------|---------------------------|
| 1   | Q21 14WT | DRIVER WINDOW DRIVER DOWN |
| 2   | Q11 14LB | DRIVER WINDOW DRIVER UP   |

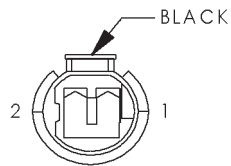


# 2001 PT CRUISER SUPPLEMENT

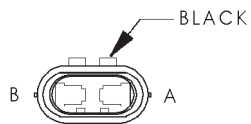
8W - 80 - 38

8W-80 CONNECTOR PINOUTS

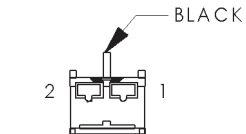
PT



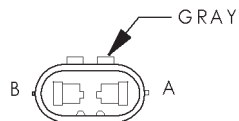
LEFT FRONT  
WHEEL SPEED  
SENSOR



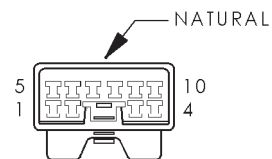
LEFT  
HIGH BEAM  
HEADLAMP



LEFT  
INSTRUMENT  
PANEL SPEAKER



LEFT LOW  
BEAM  
HEADLAMP



LEFT  
POWER MIRROR

LEFT FRONT WHEEL SPEED SENSOR - BLACK 2 WAY

| CAV | CIRCUIT    | FUNCTION                                     |
|-----|------------|----------------------------------------------|
| 1   | B9 18RD    | LEFT FRONT WHEEL SPEED SENSOR 12 VOLT SUPPLY |
| 2   | B8 18RD/DB | LEFT FRONT WHEEL SPEED SENSOR SIGNAL         |

LEFT HIGH BEAM HEADLAMP - BLACK 2 WAY

| CAV | CIRCUIT    | FUNCTION                       |
|-----|------------|--------------------------------|
| A   | L3 16RD/OR | DIMMER SWITCH HIGH BEAM OUTPUT |
| B   | Z1 16BK    | GROUND                         |

LEFT INSTRUMENT PANEL SPEAKER - BLACK 2 WAY

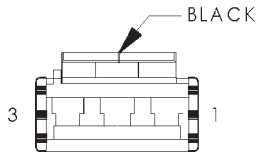
| CAV | CIRCUIT     | FUNCTION                          |
|-----|-------------|-----------------------------------|
| 1   | X53 18VT/DG | LEFT INSTRUMENT PANEL SPEAKER (+) |
| 2   | X55 18DB/RD | LEFT INSTRUMENT PANEL SPEAKER (-) |

LEFT LOW BEAM HEADLAMP - GRAY 2 WAY

| CAV | CIRCUIT  | FUNCTION                   |
|-----|----------|----------------------------|
| A   | L43 18VT | FUSED LEFT LOW BEAM OUTPUT |
| B   | Z1 12BK  | GROUND                     |

LEFT POWER MIRROR - NATURAL 10 WAY

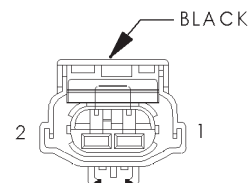
| CAV | CIRCUIT                    | FUNCTION                              |
|-----|----------------------------|---------------------------------------|
| 1   | Z1 20BK                    | GROUND                                |
| 2   | -                          | LEFT/RIGHT MIRROR RIGHT/DOWN MOVEMENT |
| 2   | P73 20YL/PK                | LEFT MIRROR RIGHT/DOWN MOVEMENT       |
| 3   | C16 20LB/YL                | REAR WINDOW DEFOGGER SWITCH OUTPUT    |
| 4   | P71 20YL/BK (EARLY BUILD)  | LEFT MIRROR UP MOVEMENT               |
| 4   | P71 20BR/YL (NORMAL BUILD) | LEFT MIRROR UP MOVEMENT               |
| 5   | P75 20DB/WT                | LEFT MIRROR LEFT MOVEMENT             |
| 6   | -                          | -                                     |
| 7   | -                          | -                                     |
| 8   | -                          | -                                     |
| 9   | -                          | -                                     |
| 10  | -                          | -                                     |



LEFT REAR  
DOOR POWER  
LOCK MOTOR

LEFT REAR DOOR LOCK MOTOR - BLACK 3 WAY

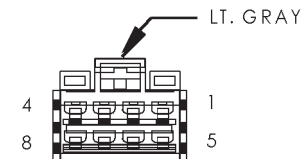
| CAV | CIRCUIT     | FUNCTION           |
|-----|-------------|--------------------|
| 1   | P35 18OR/VT | DOOR LOCK DRIVER   |
| 2   | -           | -                  |
| 3   | P36 18PK/VT | DOOR UNLOCK DRIVER |



LEFT REAR  
POWER WINDOW  
MOTOR

LEFT REAR POWER WINDOW MOTOR - BLACK 2 WAY

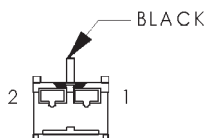
| CAV | CIRCUIT                    | FUNCTION                     |
|-----|----------------------------|------------------------------|
| 1   | Q23 14RD/DG (NORMAL BUILD) | LEFT REAR WINDOW DRIVER DOWN |
| 1   | Q23 14RD/WT (EARLY BUILD)  | LEFT REAR WINDOW DRIVER DOWN |
| 2   | Q13 14DB/GY                | WINDOW LEFT REAR B(+) UP     |



LEFT REAR  
POWER WINDOW  
SWITCH  
(NORMAL BUILD)

LEFT REAR POWER WINDOW SWITCH (NORMAL BUILD) - LT. GRAY 8 WAY

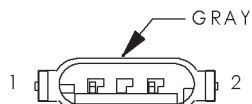
| CAV | CIRCUIT     | FUNCTION                       |
|-----|-------------|--------------------------------|
| 1   | -           | -                              |
| 2   | Q17 14DB/WT | LEFT REAR WINDOW DRIVER (UP)   |
| 3   | Q27 14RD/BK | LEFT REAR WINDOW DRIVER (DOWN) |
| 4   | Q1 14YL     | WINDOW SWITCH FEED             |
| 5   | Q13 14DB/GY | WINDOW LEFT REAR B(+) UP       |
| 6   | Q1 14YL     | WINDOW SWITCH FEED             |
| 7   | Z1 14BK     | GROUND                         |
| 8   | Q23 14RD/WT | WINDOW LEFT REAR B(+) DOWN     |



LEFT REAR  
SPEAKER

LEFT REAR SPEAKER - BLACK 2 WAY

| CAV | CIRCUIT     | FUNCTION              |
|-----|-------------|-----------------------|
| 1   | X57 18BR/LB | LEFT REAR SPEAKER (-) |
| 2   | X51 18BR/YL | LEFT REAR SPEAKER (+) |



LEFT REAR  
TURN SIGNAL  
LAMP

LEFT REAR TURN SIGNAL LAMP - GREEN 2 WAY

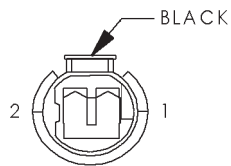
| CAV | CIRCUIT     | FUNCTION              |
|-----|-------------|-----------------------|
| 1   | L63 18DG/RD | LEFT REAR TURN SIGNAL |
| 2   | Z1 18BK     | GROUND                |

# 2001 PT CRUISER SUPPLEMENT

8W - 80 - 40

8W-80 CONNECTOR PINOUTS

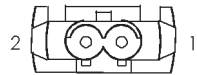
PT



LEFT REAR  
WHEEL SPEED  
SENSOR

LEFT REAR WHEEL SPEED SENSOR - BLACK 2 WAY

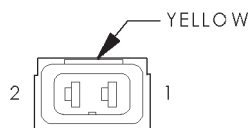
| CAV | CIRCUIT    | FUNCTION                                    |
|-----|------------|---------------------------------------------|
| 1   | B4 20LG    | LEFT REAR WHEEL SPEED SENSOR 12 VOLT SUPPLY |
| 2   | B3 20LG/DB | LEFT REAR WHEEL SPEED SENSOR SIGNAL         |



LEFT  
SEAT AIRBAG

LEFT SEAT AIRBAG - 2 WAY

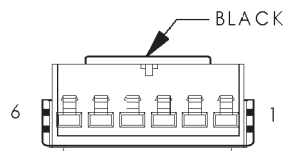
| CAV | CIRCUIT  | FUNCTION               |
|-----|----------|------------------------|
| 1   | R31 18OR | LEFT SEAT SQUIB LINE 2 |
| 2   | R33 18WT | LEFT SEAT SQUIB LINE 1 |



LEFT  
SEAT BELT  
TENSIONER

LEFT SEAT BELT TENSIONER - YELLOW 2 WAY

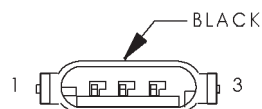
| CAV | CIRCUIT     | FUNCTION                        |
|-----|-------------|---------------------------------|
| 1   | R53 18LG/YL | LEFT SEAT BELT TENSIONER LINE 2 |
| 2   | R55 18LG/DG | LEFT SEAT BELT TENSIONER LINE 1 |



LEFT SIDE  
IMPACT AIRBAG  
CONTROL MODULE  
(FULL OPTIONS)

LEFT SIDE IMPACT AIRBAG CONTROL MODULE (FULL OPTIONS) - BLACK 6 WAY

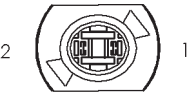
| CAV | CIRCUIT                     | FUNCTION                                 |
|-----|-----------------------------|------------------------------------------|
| 1   | F15 20DG/WT                 | FUSED IGNITION SWITCH OUTPUT (RUN-START) |
| 2   | D25 20VT/YL                 | PCI BUS                                  |
| 3   | R33 20LG/WT                 | LEFT SEAT SQUIB LINE 1                   |
| 4   | R31 20LG/OR                 | LEFT SEAT SQUIB LINE 2                   |
| 5   | -                           | -                                        |
| 6   | Z6 20BK/PK (EARLY BUILD)    | GROUND                                   |
| 6   | Z134 20BK/PK (NORMAL BUILD) | GROUND                                   |



LEFT TAIL/  
STOP LAMP

LEFT TAIL/STOP LAMP - BLACK 3 WAY

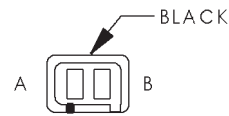
| CAV | CIRCUIT     | FUNCTION                 |
|-----|-------------|--------------------------|
| 1   | L50 18WT/TN | BRAKE LAMP SWITCH OUTPUT |
| 2   | L7 18BK/YL  | HEADLAMP SWITCH OUTPUT   |
| 3   | Z1 18BK     | GROUND                   |



LEFT TURN  
SIGNAL  
INDICATOR

LEFT TURN SIGNAL INDICATOR - 2 WAY

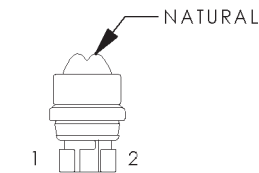
| CAV | CIRCUIT                 | FUNCTION         |
|-----|-------------------------|------------------|
| 1   | L61 20OR (EARLY BUILD)  | LEFT TURN SIGNAL |
| 1   | L61 20LG (NORMAL BUILD) | LEFT TURN SIGNAL |
| 2   | Z1 20BK                 | GROUND           |



LEFT VISOR/  
VANITY LAMP

LEFT VISOR/VANITY LAMP - BLACK 2 WAY

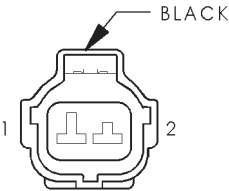
| CAV | CIRCUIT | FUNCTION   |
|-----|---------|------------|
| A   | M1 20PK | FUSED B(+) |
| B   | Z1 20BK | GROUND     |



LICENSE LAMP

LICENSE LAMP - NATURAL 2 WAY

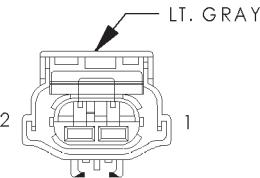
| CAV | CIRCUIT    | FUNCTION               |
|-----|------------|------------------------|
| 1   | L7 18BK/YL | HEADLAMP SWITCH OUTPUT |
| 2   | Z1 18BK    | GROUND                 |



LIFTGATE  
AJAR SWITCH

LIFTGATE AJAR SWITCH - BLACK 2 WAY

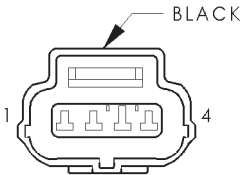
| CAV | CIRCUIT     | FUNCTION                   |
|-----|-------------|----------------------------|
| 1   | G78 20TN/BK | LIFTGATE AJAR SWITCH SENSE |
| 2   | Z1 20BK     | GROUND                     |



LIFTGATE  
CYLINDER  
LOCK SWITCH

LIFTGATE CYLINDER LOCK SWITCH - LT. GRAY 2 WAY

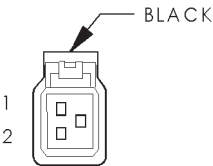
| CAV | CIRCUIT     | FUNCTION                  |
|-----|-------------|---------------------------|
| 1   | P96 20WT/LG | PASSENGER DOOR SWITCH MUX |
| 2   | Z1 20BK     | GROUND                    |



LIFTGATE  
POWER LOCK  
MOTOR

LIFTGATE POWER LOCK MOTOR - BLACK 4 WAY

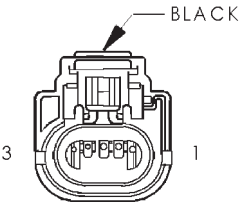
| CAV | CIRCUIT                    | FUNCTION           |
|-----|----------------------------|--------------------|
| 1   | P35 18OR/VT                | DOOR LOCK DRIVER   |
| 2   | P36 18PK/VT (NORMAL BUILD) | DOOR UNLOCK DRIVER |
| 3   | P36 18PK/VT (EARLY BUILD)  | DOOR UNLOCK DRIVER |
| 4   | -                          | -                  |



LOW NOTE  
HORN

LOW NOTE HORN - BLACK 2 WAY

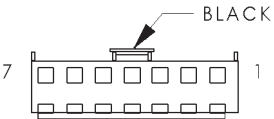
| CAV | CIRCUIT    | FUNCTION          |
|-----|------------|-------------------|
| 1   | X2 20DG/RD | HORN RELAY OUTPUT |
| 2   | Z1 20BK    | GROUND            |



MANIFOLD  
ABSOLUTE  
PRESSURE  
SENSOR

MANIFOLD ABSOLUTE PRESSURE SENSOR - BLACK 3 WAY

| CAV | CIRCUIT                   | FUNCTION          |
|-----|---------------------------|-------------------|
| 1   | K1 18DG/RD (NORMAL BUILD) | MAP SENSOR SIGNAL |
| 1   | K1 20DG/RD (EARLY BUILD)  | MAP SENSOR SIGNAL |
| 2   | K4 18BK/LB (NORMAL BUILD) | SENSOR GROUND     |
| 2   | K4 20BK/LB (EARLY BUILD)  | SENSOR GROUND     |
| 3   | K6 18VT/WT (NORMAL BUILD) | 5V SUPPLY         |
| 3   | K6 20VT/WT (EARLY BUILD)  | 5V SUPPLY         |



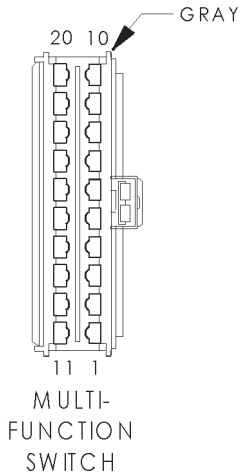
MAP/  
READING  
LAMPS

MAP/READING LAMPS - BLACK 7 WAY

| CAV | CIRCUIT    | FUNCTION              |
|-----|------------|-----------------------|
| 1   | -          | -                     |
| 2   | Z1 20BK    | GROUND                |
| 3   | -          | -                     |
| 4   | -          | -                     |
| 5   | -          | -                     |
| 6   | M2 20BK/YL | COURTESY LAMPS DRIVER |
| 7   | M1 20BK/PK | FUSED B(+)            |

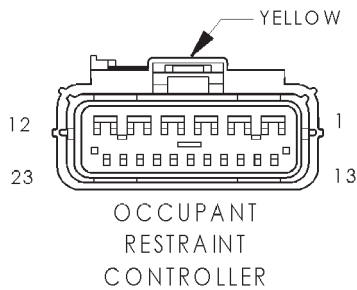
# 2001 PT CRUISER SUPPLEMENT

PT ————— 8W-80 CONNECTOR PINOUTS ————— 8W - 80 - 43



MULTI-FUNCTION SWITCH - GRAY 20 WAY

| CAV | CIRCUIT                    | FUNCTION                               |
|-----|----------------------------|----------------------------------------|
| 1   | -                          | -                                      |
| 2   | L61 18LG                   | LEFT TURN SIGNAL                       |
| 3   | F13 18DB (EARLY BUILD)     | FUSED IGNITION SWITCH OUTPUT (RUN-ACC) |
| 3   | L6 18DB (NORMAL BUILD)     | FUSED IGNITION SWITCH OUTPUT (RUN-ACC) |
| 4   | L63 18DG/RD                | LEFT REAR TURN SIGNAL                  |
| 5   | L62 18BR/RD                | RIGHT REAR TURN SIGNAL                 |
| 6   | L60 18TN                   | RIGHT TURN SIGNAL                      |
| 7   | Z1 18BK (EARLY BUILD)      | GROUND                                 |
| 7   | Z2 18BK/LG (NORMAL BUILD)  | GROUND                                 |
| 8   | E19 20RD                   | PANEL LAMPS DIMMER SIGNAL              |
| 9   | L7 18BK/YL                 | HEADLAMP SWITCH OUTPUT                 |
| 10  | -                          | -                                      |
| 12  | -                          | -                                      |
| 13  | F39 18PK/LG (NORMAL BUILD) | FUSED HEADLAMP RELAY OUTPUT            |
| 14  | L39 18LB                   | FOG LAMP SWITCH OUTPUT                 |
| 15  | -                          | -                                      |
| 16  | L4 16VT/WT                 | DIMMER SWITCH LOW BEAM OUTPUT          |
| 17  | L3 16RD/OR                 | DIMMER SWITCH HIGH BEAM OUTPUT         |
| 18  | F3 12LB/OR (NORMAL BUILD)  | FUSED B(+)                             |
| 18  | F3 16LB/OR (EARLY BUILD)   | FUSED B(+)                             |
| 19  | F3 16LB/OR (EARLY BUILD)   | FUSED B(+)                             |
| 19  | F3 12LB/OR (NORMAL BUILD)  | FUSED B(+)                             |
| 20  | F33 18PK/RD                | FUSED B(+)                             |



OCCUPANT RESISTANT CONTROLLER - YELLOW 23 WAY

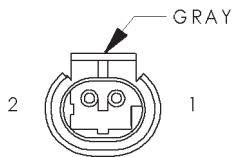
| CAV | CIRCUIT                    | FUNCTION                                 |
|-----|----------------------------|------------------------------------------|
| 1   | R56 18LB/DG                | RIGHT SEAT BELT TENSIONER LINE 1         |
| 2   | R54 18LB/YL                | RIGHT SEAT BELT TENSIONER LINE 2         |
| 3   | -                          | -                                        |
| 4   | -                          | -                                        |
| 5   | R42 18BK/YL                | PASSENGER SQUIB NO. 1 LINE 1             |
| 6   | R44 18DG/YL                | PASSENGER SQUIB NO. 1 LINE 2             |
| 7   | R55 18LG/DG                | LEFT SEAT BELT TENSIONER LINE 1          |
| 8   | R53 18LG/YL                | LEFT SEAT BELT TENSIONER LINE 2          |
| 9   | -                          | -                                        |
| 10  | -                          | -                                        |
| 11  | R43 18BK/LB                | DRIVER SQUIB NO. 1 LINE 1                |
| 12  | R45 18DG/LB                | DRIVER SQUIB NO. 1 LINE 2                |
| 13  | -                          | -                                        |
| 14  | F15 18DG/WT                | FUSED IGNITION SWITCH OUTPUT (RUN-START) |
| 15  | F25 18TN/LG                | FUSED IGNITION SWITCH OUTPUT (RUN)       |
| 16  | Z6 18BK/PK                 | GROUND                                   |
| 17  | -                          | -                                        |
| 18  | -                          | -                                        |
| 19  | -                          | -                                        |
| 20  | -                          | -                                        |
| 21  | D25 20VT/YL (NORMAL BUILD) | PCI BUS                                  |
| 22  | -                          | -                                        |
| 23  | -                          | -                                        |

# 2001 PT CRUISER SUPPLEMENT

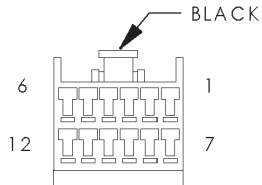
8W - 80 - 44

8W-80 CONNECTOR PINOUTS

PT



OUTPUT  
SPEED  
SENSOR



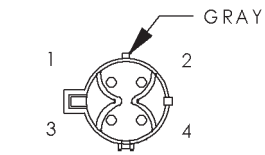
OVERHEAD  
CONSOLE  
MODULE

OUTPUT SPEED SENSOR - GRAY 2 WAY

| CAV | CIRCUIT     | FUNCTION                   |
|-----|-------------|----------------------------|
| 1   | T13 20DB/BK | SPEED SENSOR GROUND        |
| 2   | T14 20LG/WT | OUTPUT SPEED SENSOR SIGNAL |

OVERHEAD CONSOLE MODULE - BLACK 12 WAY

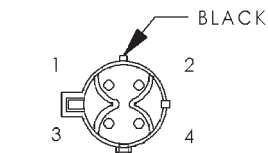
| CAV | CIRCUIT                  | FUNCTION                               |
|-----|--------------------------|----------------------------------------|
| 1   | Q41 20WT (POWER SUNROOF) | SUNROOF OPEN                           |
| 2   | Q44 20BR (POWER SUNROOF) | SUNROOF SWITCH GROUND                  |
| 3   | M2 18YL (EARLY BUILD)    | COURTESY LAMPS DRIVER                  |
| 3   | M2 20YL (NORMAL BUILD)   | COURTESY LAMPS DRIVER                  |
| 4   | M1 20PK                  | FUSED B(+)                             |
| 5   | G31 20VT/LG              | AMBIENT TEMPERATURE SENSOR SIGNAL      |
| 6   | F10 20YL/RD              | FUSED IGNITION SWITCH OUTPUT (RUN-ACC) |
| 7   | Q43 20VT (POWER SUNROOF) | SUNROOF VENT                           |
| 8   | Q42 20LB (POWER SUNROOF) | SUNROOF CLOSE                          |
| 9   | Z1 20BK                  | GROUND                                 |
| 10  | E2 20OR                  | PANEL LAMPS FEED                       |
| 11  | G32 20BK/LB              | SENSOR GROUND                          |
| 12  | Z2 20BK/LG               | GROUND                                 |



OXYGEN SENSOR  
1/1 UPSTREAM

OXYGEN SENSOR 1/1 UPSTREAM - GRAY 4 WAY

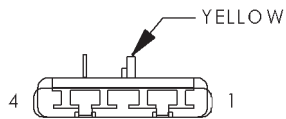
| CAV | CIRCUIT      | FUNCTION                         |
|-----|--------------|----------------------------------|
| 1   | A142 18DG/OR | AUTOMATIC SHUT DOWN RELAY OUTPUT |
| 2   | K79 20OR/RD  | OXYGEN SENSOR 1/1 CONTROL        |
| 3   | K127 20BK/OR | OXYGEN SENSOR GROUND             |
| 4   | K41 20BK/DG  | OXYGEN SENSOR 1/1 SIGNAL         |



OXYGEN SENSOR  
1/2 DOWNSTREAM

OXYGEN SENSOR 1/2 DOWNSTREAM - BLACK 4 WAY

| CAV | CIRCUIT      | FUNCTION                         |
|-----|--------------|----------------------------------|
| 1   | A142 18DG/OR | AUTOMATIC SHUT DOWN RELAY OUTPUT |
| 2   | Z1 20BK      | GROUND                           |
| 3   | K127 20BK/OR | OXYGEN SENSOR GROUND             |
| 4   | K141 20TN/WT | OXYGEN SENSOR 1/2 SIGNAL         |



PASSENGER  
AIRBAG

PASSENGER AIRBAG - YELLOW 4 WAY

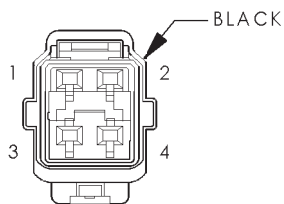
| CAV | CIRCUIT     | FUNCTION                     |
|-----|-------------|------------------------------|
| 1   | -           | -                            |
| 2   | -           | -                            |
| 3   | R44 18DG/YL | PASSENGER SQUIB NO. 1 LINE 2 |
| 4   | R42 18BK/YL | PASSENGER SQUIB NO. 1 LINE 1 |



PASSENGER  
CYLINDER  
LOCK SWITCH

PASSENGER CYLINDER LOCK SWITCH - 2 WAY

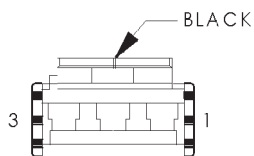
| CAV | CIRCUIT  | FUNCTION                  |
|-----|----------|---------------------------|
| 1   | P96 18LG | PASSENGER DOOR SWITCH MUX |
| 2   | Z1 18BK  | GROUND                    |



PASSENGER  
DOOR LOCK  
MOTOR  
(EARLY BUILD)

PASSENGER DOOR LOCK MOTOR (EARLY BUILD) - BLACK 4 WAY

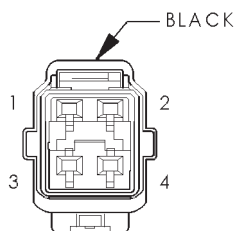
| CAV | CIRCUIT     | FUNCTION           |
|-----|-------------|--------------------|
| 1   | -           | -                  |
| 2   | -           | -                  |
| 3   | P36 18PK/BK | DOOR UNLOCK DRIVER |
| 4   | P35 18OR/BK | DOOR LOCK DRIVER   |



PASSENGER  
DOOR LOCK  
SWITCH

PASSENGER DOOR LOCK SWITCH - BLACK 3 WAY

| CAV | CIRCUIT     | FUNCTION                  |
|-----|-------------|---------------------------|
| 1   | L7 18BK/YL  | HEADLAMP SWITCH OUTPUT    |
| 2   | P96 18LG    | PASSENGER DOOR SWITCH MUX |
| 2   | P96 20WT/DG | PASSENGER DOOR SWITCH MUX |
| 3   | Z1 20BK     | GROUND                    |

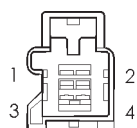


PASSENGER  
DOOR POWER  
LOCK MOTOR/  
AJAR SWITCH  
(NORMAL BUILD)

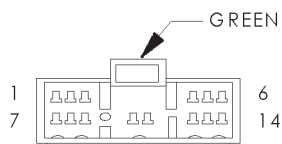
PASSENGER DOOR POWER LOCK MOTOR/AJAR SWITCH (NORMAL BUILD) - BLACK 4 W

| CAV | CIRCUIT     | FUNCTION                         |
|-----|-------------|----------------------------------|
| 1   | G74 18TN/DB | PASSENGER DOOR AJAR SWITCH SENSE |
| 2   | Z1 18BK     | GROUND                           |
| 3   | P36 18PK/BK | PASSENGER DOOR UNLOCK DRIVER     |
| 4   | P35 18OR/BK | PASSENGER DOOR LOCK DRIVER       |

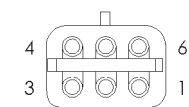




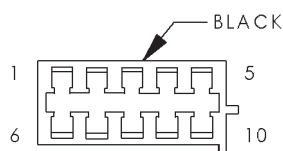
PASSENGER  
HEATED SEAT  
CUSHION  
(NORMAL BUILD)



PASSENGER  
HEATED SEAT  
MODULE  
(NORMAL BUILD)



PASSENGER  
HEATED SEAT  
SWITCH  
(NORMAL BUILD)



POWER MIRROR  
SWITCH

PASSENGER HEATED SEAT CUSHION (NORMAL BUILD) - 4 WAY

| CAV | CIRCUIT      | FUNCTION                                |
|-----|--------------|-----------------------------------------|
| 1   | Z122 18BK    | GROUND                                  |
| 2   | P130 18RD/TN | PASSENGER SEAT HEATER B(+) DRIVER       |
| 3   | P142 20TN/DB | PASSENGER SEAT TEMPERATURE SENSOR INPUT |
| 4   | P144 20BK/LG | PASSENGER SEAT TEMPERATURE 5V SUPPLY    |

PASSENGER HEATED SEAT MODULE (NORMAL BUILD) - GREEN 14 WAY

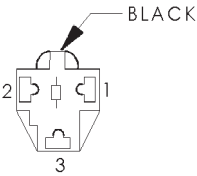
| CAV | CIRCUIT      | FUNCTION                                |
|-----|--------------|-----------------------------------------|
| 1   | P8 20LB/WT   | PASSENGER HEATED SEAT SWITCH            |
| 2   | P142 20TN/DB | PASSENGER SEAT TEMPERATURE SENSOR INPUT |
| 3   | -            | -                                       |
| 4   | F98 18RD/WT  | FUSED HEATED SEAT RELAY OUTPUT          |
| 5   | P130 18RD/TN | PASSENGER SEAT HEATER B(+)              |
| 6   | F98 18RD/WT  | FUSED HEATED SEAT RELAY OUTPUT          |
| 7   | -            | -                                       |
| 8   | P144 20BK/LG | PASSENGER SEAT TEMPERATURE 5V SUPPLY    |
| 9   | -            | -                                       |
| 10  | -            | -                                       |
| 12  | P138 20VT/LG | PASSENGER SEAT LOW HEAT LED DRIVER      |
| 13  | Z122 18BK    | GROUND                                  |
| 14  | P140 20VT/BK | PASSENGER SEAT HIGH HEAT LED DRIVER     |

PASSENGER HEATED SEAT SWITCH (NORMAL BUILD) - 6 WAY

| CAV | CIRCUIT      | FUNCTION                            |
|-----|--------------|-------------------------------------|
| 1   | P138 20VT/LG | PASSENGER SEAT LOW HEAT LED DRIVER  |
| 2   | -            | -                                   |
| 3   | Z122 18BK    | GROUND                              |
| 4   | F98 18RD/WT  | FUSED HEATED SEAT RELAY OUTPUT      |
| 5   | P140 20VT/BK | PASSENGER SEAT HIGH HEAT LED DRIVER |
| 6   | P8 20LB/WT   | PASSENGER HEATED SEAT SWITCH        |

POWER MIRROR SWITCH - BLACK 10 WAY

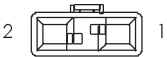
| CAV | CIRCUIT     | FUNCTION                         |
|-----|-------------|----------------------------------|
| 1   | P73 20YL/PK | LEFT MIRROR RIGHT/DOWN MOVEMENT  |
| 2   | P74 20DB/WT | RIGHT MIRROR LEFT MOVEMENT       |
| 3   | Z1 20BK     | GROUND                           |
| 4   | P71 20YL/BK | LEFT MIRROR UP MOVEMENT          |
| 5   | -           | -                                |
| 6   | L7 20BK/YL  | HEADLAMP SWITCH OUTPUT           |
| 7   | M1 20PK     | FUSED B(+)                       |
| 8   | P75 20DB/WT | LEFT MIRROR LEFT MOVEMENT        |
| 9   | P72 20YL    | RIGHT MIRROR UP MOVEMENT         |
| 10  | P70 20PK    | RIGHT MIRROR RIGHT/DOWN MOVEMENT |



POWER OUTLET

POWER OUTLET - BLACK 3 WAY

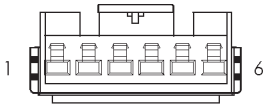
| CAV | CIRCUIT    | FUNCTION                               |
|-----|------------|----------------------------------------|
| 1   | F30 16RD   | FUSED IGNITION SWITCH OUTPUT (RUN-ACC) |
| 1   | F1 16DB/BK | FUSED B(+)                             |
| 2   | -          | -                                      |
| 2   | -          | -                                      |
| 3   | Z1 16BK    | GROUND                                 |
| 3   | Z1 16BK    | GROUND                                 |



POWER  
SEAT  
MOTOR

POWER SEAT MOTOR - 2 WAY

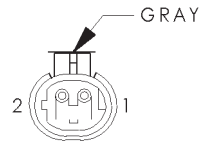
| CAV | CIRCUIT                            | FUNCTION         |
|-----|------------------------------------|------------------|
| 1   | P121 16LG/OR (EXCEPT HEATED SEATS) | SEAT DOWN DRIVER |
| 1   | P121 16RD/LG (HEATED SEATS)        | SEAT DOWN DRIVER |
| 2   | P120 16LG/YL                       | SEAT UP DRIVER   |



POWER  
SEAT  
SWITCH

POWER SEAT SWITCH - 6 WAY

| CAV | CIRCUIT                                  | FUNCTION         |
|-----|------------------------------------------|------------------|
| 1   | -                                        | -                |
| 2   | Z121 18BK (HEATED SEATS NORMAL BUILD)    | GROUND           |
| 2   | Z1 16BK (EXCEPT HEATED SEATS)            | GROUND           |
| 3   | P120 16LG/YL                             | SEAT UP DRIVER   |
| 4   | P121 16RD/LG (HEATED SEATS NORMAL BUILD) | SEAT DOWN DRIVER |
| 4   | P121 16LG/OR (EXCEPT HEATED SEATS)       | SEAT DOWN DRIVER |
| 5   | Z121 18BK (HEATED SEATS NORMAL BUILD)    | GROUND           |
| 5   | Z1 16BK (EXCEPT HEATED SEATS)            | GROUND           |
| 6   | A120 16RD/LG                             | FUSED B(+)       |



POWER STEERING  
PRESSURE SWITCH

POWER STEERING PRESSURE SWITCH - GRAY 2 WAY

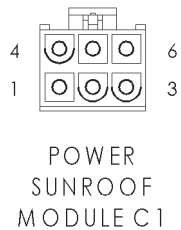
| CAV | CIRCUIT     | FUNCTION                             |
|-----|-------------|--------------------------------------|
| 1   | K10 20DB/OR | POWER STEERING PRESSURE SWITCH SENSE |
| 2   | Z1 20BK     | GROUND                               |

# 2001 PT CRUISER SUPPLEMENT

8W - 80 - 48

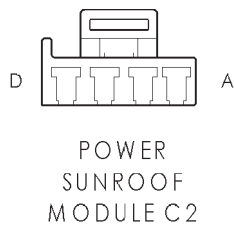
8W-80 CONNECTOR PINOUTS

PT



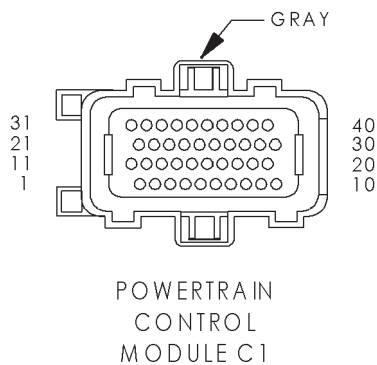
POWER SUNROOF MODULE C1 - 6 WAY

| CAV | CIRCUIT | FUNCTION              |
|-----|---------|-----------------------|
| 1   | -       | -                     |
| 2   | L4 20WT | SUNROOF OPEN          |
| 3   | -       | -                     |
| 4   | L1 20VT | SUNROOF VENT          |
| 5   | L2 20BR | SUNROOF SWITCH GROUND |
| 6   | L3 20LB | SUNROOF CLOSE         |



POWER SUNROOF MODULE C2 - 4 WAY

| CAV | CIRCUIT    | FUNCTION                               |
|-----|------------|----------------------------------------|
| A   | L5 14YL/RD | FUSED IGNITION SWITCH OUTPUT (RUN-ACC) |
| B   | L7 14DB    | MOTOR TILT DOWN FEED                   |
| C   | L6 14DG    | MOTOR TILT UP FEED                     |
| D   | Z1 14BK/VT | GROUND                                 |



POWERTRAIN CONTROL MODULE C1 - GRAY 40 WAY

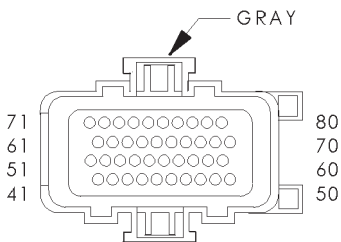
| CAV | CIRCUIT            | FUNCTION                                 |
|-----|--------------------|------------------------------------------|
| 1   | -                  | -                                        |
| 2   | -                  | -                                        |
| 3   | K17 18DB/TN        | IGNITION COIL NO. 2 DRIVER               |
| 4   | -                  | -                                        |
| 5   | V32 20YL/RD        | SPEED CONTROL SUPPLY                     |
| 6   | A142 18DG/OR       | AUTOMATIC SHUT DOWN RELAY OUTPUT         |
| 7   | K13 18YL/WT        | FUEL INJECTOR NO. 3 DRIVER               |
| 8   | K20 18DG           | GENERATOR FIELD                          |
| 9   | -                  | -                                        |
| 10  | Z12 18BK/TN        | GROUND                                   |
| 11  | K19 18BK/GY        | IGNITION COIL NO. 1 DRIVER               |
| 12  | G6 20GY            | ENGINE OIL PRESSURE SWITCH SENSE         |
| 13  | K11 18WT/DB        | FUEL INJECTOR NO. 1 DRIVER               |
| 14  | -                  | -                                        |
| 15  | -                  | -                                        |
| 16  | K14 18LB/BR        | FUEL INJECTOR NO. 4 DRIVER               |
| 17  | K12 18TN           | FUEL INJECTOR NO. 2 DRIVER               |
| 18  | K79 20OR/RD        | OXYGEN SENSOR 1/1 CONTROL                |
| 19  | -                  | -                                        |
| 20  | F12 20DB/WT        | FUSED IGNITION SWITCH OUTPUT (RUN-START) |
| 21  | -                  | -                                        |
| 22  | -                  | -                                        |
| 23  | K119 20LG/BK (M/T) | CLUTCH UPSTOP SWITCH SIGNAL              |
| 24  | -                  | -                                        |
| 25  | K42 20DB/LG        | KNOCK SENSOR SIGNAL                      |
| 26  | K2 20TN/BK         | ENGINE COOLANT TEMPERATURE SENSOR SIGNAL |
| 27  | K127 20BK/OR       | OXYGEN SENSOR GROUND                     |
| 28  | -                  | -                                        |
| 29  | -                  | -                                        |

# 2001 PT CRUISER SUPPLEMENT

PT ————— 8W-80 CONNECTOR PINOUTS ————— 8W - 80 - 49

POWERTRAIN CONTROL MODULE C1 - GRAY 40 WAY

| CAV | CIRCUIT                    | FUNCTION                           |
|-----|----------------------------|------------------------------------|
| 30  | K41 20BK/DG                | OXYGEN SENSOR 1/1 SIGNAL           |
| 31  | K90 20TN                   | ENGINE STARTER MOTOR RELAY CONTROL |
| 32  | K24 20GY/BK                | CRANKSHAFT POSITION SENSOR SIGNAL  |
| 33  | K44 20TN/YL                | CAMSHAFT POSITION SENSOR SIGNAL    |
| 34  | -                          | -                                  |
| 35  | K22 20OR/DB (EARLY BUILD)  | THROTTLE POSITION SENSOR SIGNAL    |
| 35  | K22 18OR/DB (NORMAL BUILD) | THROTTLE POSITION SENSOR SIGNAL    |
| 36  | K1 20DG/RD (EARLY BUILD)   | MAP SENSOR SIGNAL                  |
| 36  | K1 18DG/RD (NORMAL BUILD)  | MAP SENSOR SIGNAL                  |
| 37  | -                          | -                                  |
| 38  | C20 20BR                   | A/C SWITCH SENSE                   |
| 39  | -                          | -                                  |
| 40  | K35 20GY/YL                | EGR SOLENOID CONTROL               |



POWERTRAIN  
CONTROL  
MODULE C2

POWERTRAIN CONTROL MODULE C2 - GRAY 40 WAY

| CAV | CIRCUIT                     | FUNCTION                              |
|-----|-----------------------------|---------------------------------------|
| 41  | V37 20RD/LG                 | SPEED CONTROL SWITCH SIGNAL           |
| 42  | -                           | -                                     |
| 43  | K4 20BK/LB                  | SENSOR GROUND                         |
| 44  | K7 20OR                     | 8V SUPPLY                             |
| 45  | K10 20DB/OR                 | STEERING PRESSURE SWITCH SENSE        |
| 46  | A14 18RD/WT                 | FUSED B(+)                            |
| 47  | Z11 18BK/WT                 | GROUND                                |
| 48  | K40 20BR/WT                 | IDLE AIR CONTROL NO. 3 DRIVER         |
| 49  | K60 20YL/BK                 | IDLE AIR CONTROL NO. 2 DRIVER         |
| 50  | Z12 18BK/TN                 | GROUND                                |
| 51  | K141 20TN/WT                | OXYGEN SENSOR 1/2 SIGNAL              |
| 52  | K21 20BK/RD                 | INLET AIR TEMPERATURE SENSOR SIGNAL   |
| 53  | -                           | -                                     |
| 54  | -                           | -                                     |
| 55  | C24 20YL/RD                 | LOW SPEED RADIATOR FAN RELAY CONTROL  |
| 56  | V36 20TN/RD (SPEED CONTROL) | SPEED CONTROL VACUUM SOLENOID CONTROL |
| 57  | K39 20GY/RD                 | IDLE AIR CONTROL NO. 1 DRIVER         |
| 58  | K59 20VT/BK                 | IDLE AIR CONTROL NO. 4 DRIVER         |
| 59  | D25 20VT/YL                 | PCI BUS                               |
| 60  | -                           | -                                     |
| 61  | K6 20VT/WT                  | 5V SUPPLY                             |
| 62  | K29 20WT/PK                 | BRAKE LAMP SWITCH SENSE               |
| 63  | T10 20YL/DG (A/T)           | TORQUE MANAGEMENT REQUEST SENSE       |
| 64  | C28 20DB/OR                 | A/C COMPRESSOR CLUTCH RELAY CONTROL   |
| 65  | D21 20PK                    | SCI TRANSMIT                          |
| 66  | G7 20WT/OR                  | VEHICLE SPEED SENSOR SIGNAL           |
| 67  | K51 20DB/YL                 | AUTOMATIC SHUT DOWN RELAY CONTROL     |
| 68  | K52 20PK/BK                 | EVAP PURGE SOLENOID CONTROL           |
| 69  | C27 20DB/PK                 | HIGH SPEED RADIATOR FAN RELAY CONTROL |
| 70  | K108 20WT/TN (NORMAL BUILD) | EVAP PURGE SOLENOID SENSE             |
| 70  | K108 20VT/RD (EARLY BUILD)  | EVAP PURGE SOLENOID SENSE             |
| 71  | G9 20GY/BK                  | RED BRAKE WARNING INDICATOR DRIVER    |
| 72  | K107 20OR/YL (EARLY BUILD)  | LEAK DETECTION PUMP SWITCH SENSE      |
| 72  | K107 20YL/BK (NORMAL BUILD) | LEAK DETECTION PUMP SWITCH SENSE      |
| 73  | -                           | -                                     |

# 2001 PT CRUISER SUPPLEMENT

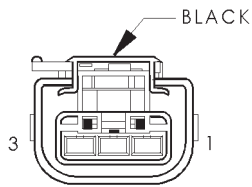
8W - 80 - 50

8W-80 CONNECTOR PINOUTS

PT

POWERTRAIN CONTROL MODULE C2 - GRAY 40 WAY

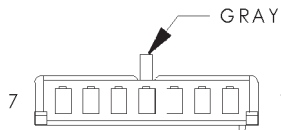
| CAV | CIRCUIT                             | FUNCTION                                                                       |
|-----|-------------------------------------|--------------------------------------------------------------------------------|
| 74  | K31 20BR                            | FUEL PUMP RELAY CONTROL                                                        |
| 75  | D20 20LG                            | SCI RECEIVE                                                                    |
| 76  | T41 20YL/RD (M/T, A/T NORMAL BUILD) | PARK/NEUTRAL POSITION SWITCH SENSE (A/T), CLUTCH INTERLOCK SWITCH SIGNAL (M/T) |
| 76  | T41 20BK/WT (M/T, A/T EARLY BUILD)  | CLUTCH INTERLOCK SWITCH SIGNAL, PARK/NEUTRAL POSITION SWITCH SENSE             |
| 77  | K106 20WT/DG                        | LEAK DETECTION PUMP SOLENOID CONTROL                                           |
| 78  | -                                   | -                                                                              |
| 79  | -                                   | -                                                                              |
| 80  | V35 20LG/RD (SPEED CONTROL)         | SPEED CONTROL VENT SOLENOID CONTROL                                            |



RADIATOR FAN MOTOR

RADIATOR FAN MOTOR - BLACK 3 WAY

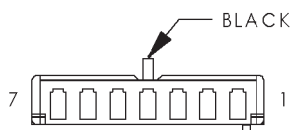
| CAV | CIRCUIT  | FUNCTION                             |
|-----|----------|--------------------------------------|
| 1   | C23 12DG | LOW SPEED RADIATOR FAN RELAY OUTPUT  |
| 2   | Z1 12BK  | GROUND                               |
| 3   | C25 12YL | HIGH SPEED RADIATOR FAN RELAY OUTPUT |



RADIO C1

RADIO C1 - GRAY 7 WAY

| CAV | CIRCUIT                    | FUNCTION                               |
|-----|----------------------------|----------------------------------------|
| 1   | -                          | -                                      |
| 2   | X55 18BR/DB (NORMAL BUILD) | LEFT FRONT SPEAKER (-)                 |
| 2   | X55 18RD/BR (EARLY BUILD)  | LEFT FRONT SPEAKER (-)                 |
| 3   | X56 18DB/RD                | RIGHT FRONT SPEAKER (-)                |
| 4   | L7 18BK/YL                 | HEADLAMP SWITCH OUTPUT                 |
| 5   | E2 20OR                    | PANEL LAMPS DRIVER                     |
| 6   | X12 18RD/WT                | FUSED IGNITION SWITCH OUTPUT (RUN-ACC) |
| 7   | M1 20PK                    | FUSED B(+)                             |



RADIO C2

RADIO C2 - BLACK 7 WAY

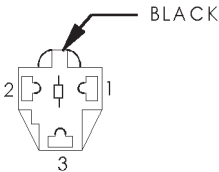
| CAV | CIRCUIT                    | FUNCTION                |
|-----|----------------------------|-------------------------|
| 1   | -                          | -                       |
| 2   | X51 18BR/YL                | LEFT REAR SPEAKER (+)   |
| 3   | X52 18DB/WT                | RIGHT REAR SPEAKER (+)  |
| 4   | X53 18DG (EARLY BUILD)     | LEFT FRONT SPEAKER (+)  |
| 4   | X53 18DG/VT (NORMAL BUILD) | LEFT FRONT SPEAKER (+)  |
| 5   | X54 18BR/LB (EARLY BUILD)  | RIGHT FRONT SPEAKER (+) |
| 5   | X54 18VT (NORMAL BUILD)    | RIGHT FRONT SPEAKER (+) |
| 6   | X57 18BR/LB                | LEFT FRONT SPEAKER (-)  |
| 7   | X58 18DB/BK                | RIGHT REAR SPEAKER (-)  |



RADIO C3

RADIO C3 - 2 WAY

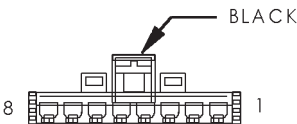
| CAV | CIRCUIT      | FUNCTION |
|-----|--------------|----------|
| 1   | D25 D20VT/YL | PCI BUS  |
| 2   | -            | -        |



REAR POWER  
OUTLET

REAR POWER OUTLET - BLACK 3 WAY

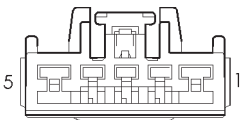
| CAV | CIRCUIT  | FUNCTION                               |
|-----|----------|----------------------------------------|
| 1   | F30 16RD | FUSED IGNITION SWITCH OUTPUT (RUN-ACC) |
| 2   | -        | -                                      |
| 3   | Z1 16BK  | GROUND                                 |



REAR POWER  
WINDOW SWITCH  
(EARLY BUILD)

REAR POWER WINDOW SWITCH (EARLY BUILD) - BLACK 8 WAY

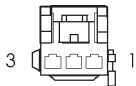
| CAV | CIRCUIT     | FUNCTION                        |
|-----|-------------|---------------------------------|
| 1   | Q14 14GY    | POWER WINDOW RIGHT REAR B(+) UP |
| 2   | Q24 14DG    | POWER WINDOW RIGHT REAR (DOWN)  |
| 3   | Q1 14YL     | POWER WINDOW SWITCH FEED        |
| 4   | Q1 14YL     | POWER WINDOW SWITCH FEED        |
| 5   | -           | -                               |
| 6   | Q23 14RD/WT | LEFT REAR WINDOW DRIVER (DOWN)  |
| 7   | Q13 14DB/WT | POWER WINDOW LEFT REAR B(+) UP  |
| 8   | Z1 14BK     | GROUND                          |



REAR WINDOW  
DEFOGGER  
SWITCH

REAR WINDOW DEFOGGER SWITCH - 5 WAY

| CAV | CIRCUIT     | FUNCTION                           |
|-----|-------------|------------------------------------|
| 1   | A4 12BK/PK  | FUSED B(+)                         |
| 2   | F20 20WT    | FUSED IGNITION SWITCH OUTPUT (RUN) |
| 3   | Z1 20BK     | GROUND                             |
| 4   | E2 20OR     | PANEL LAMPS DRIVER                 |
| 5   | C15 12BK/WT | REAR WINDOW DEFOGGER RELAY OUTPUT  |



REAR  
WIPER MOTOR

REAR WIPER MOTOR - 3 WAY

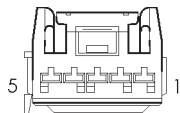
| CAV | CIRCUIT                    | FUNCTION                               |
|-----|----------------------------|----------------------------------------|
| 1   | Z1 18BK                    | GROUND                                 |
| 2   | F13 18DB (EARLY BUILD)     | FUSED IGNITION SWITCH OUTPUT (RUN-ACC) |
| 2   | V23 18BR/PK (NORMAL BUILD) | FUSED IGNITION SWITCH OUTPUT (RUN-ACC) |
| 3   | V13 18BR/LG                | REAR WIPER MOTOR CONTROL               |

# 2001 PT CRUISER SUPPLEMENT

8W - 80 - 52

8W-80 CONNECTOR PINOUTS

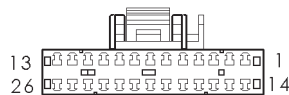
PT



REAR WIPER  
SWITCH

REAR WIPER SWITCH - 5 WAY

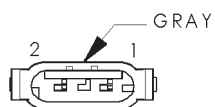
| CAV | CIRCUIT                 | FUNCTION                               |
|-----|-------------------------|----------------------------------------|
| 1   | V20 18BK/WT             | REA WASHER MOTOR CONTROL               |
| 2   | E2 200R                 | PANEL LAMPS DRIVER                     |
| 3   | Z1 18BK                 | GROUND                                 |
| 4   | F13 18DB (EARLY BUILD)  | FUSED IGNITION SWITCH OUTPUT (RUN-ACC) |
| 4   | V23 18DB (NORMAL BUILD) | FUSED IGNITION SWITCH OUTPUT (RUN-ACC) |
| 5   | V13 18BR/LG             | REAR WIPER MOTOR CONTROL               |



REMOTE KEYLESS  
ENTRY MODULE

REMOTE KEYLESS ENTRY MODULE - 26 WAY

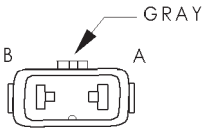
| CAV | CIRCUIT                     | FUNCTION                                 |
|-----|-----------------------------|------------------------------------------|
| 1   | L4 16VT/WT                  | DIMMER SWITCH LOW BEAM OUTPUT            |
| 2   | L7 18BK/YL                  | HEADLAMP SWITCH OUTPUT                   |
| 3   | F35 18RD                    | FUSED B(+)                               |
| 4   | P35 18OR/BK                 | DOOR LOCK DRIVER                         |
| 5   | P34 18PK/BK                 | DRIVER DOOR UNLOCK DRIVER                |
| 6   | P36 18PK/BK                 | DOOR UNLOCK DRIVER                       |
| 7   | M9 20DB/OR                  | PASSENGER DOOR AJAR/RKE SENSE            |
| 8   | Z1 18BK                     | GROUND                                   |
| 9   | F9 20RD/BK                  | FUSED B(+)                               |
| 10  | P97 20WT/DG                 | DRIVER DOOR SWITCH MUX                   |
| 11  | P96 20DG                    | PASSENGER DOOR SWITCH MUX                |
| 12  | Z2 20BK/LG                  | GROUND                                   |
| 13  | -                           | -                                        |
| 14  | G78 20TN/BK                 | LIFTGATE AJAR SWITCH SENSE               |
| 15  | X5 20LB/RD                  | SIREN CONTROL                            |
| 16  | P33 18OR/BK                 | DRIVER DOOR LOCK DRIVER                  |
| 17  | G69 20BK/OR                 | VTSS INDICATOR DRIVER                    |
| 18  | X3 20BK/RD                  | HORN RELAY CONTROL                       |
| 19  | D25 20VT/YL                 | PCI BUS                                  |
| 20  | G120 20WT/LB (NORMAL BUILD) | INTRUSION SENSOR SIGNAL                  |
| 21  | -                           | -                                        |
| 22  | G5 20DB/BK                  | FUSED IGNITION SWITCH OUTPUT (RUN-START) |
| 23  | G70 20BR/TN                 | HOOD AJAR SWITCH SENSE                   |
| 24  | -                           | -                                        |
| 25  | G75 20TN                    | DRIVER DOOR AJAR SWITCH SENSE            |
| 26  | -                           | -                                        |



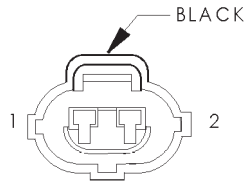
RIGHT  
BACK-UP  
LAMP

RIGHT BACK-UP LAMP - GRAY 2 WAY

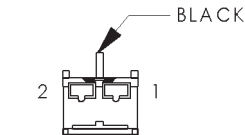
| CAV | CIRCUIT    | FUNCTION          |
|-----|------------|-------------------|
| 1   | L1 18VT/BK | BACK-UP LAMP FEED |
| 2   | Z1 18BK    | GROUND            |



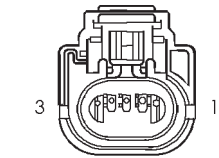
RIGHT  
FOG LAMP



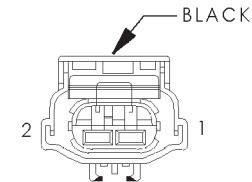
RIGHT FRONT  
DOOR AJAR  
SWITCH  
(BASE)  
(NORMAL BUILD)



RIGHT FRONT  
DOOR SPEAKER



RIGHT FRONT PARK/  
TURN SIGNAL LAMP



RIGHT FRONT  
POWER WINDOW  
MOTOR

RIGHT FOG LAMP - GRAY 2 WAY

| CAV | CIRCUIT  | FUNCTION               |
|-----|----------|------------------------|
| A   | L39 18LB | FOG LAMP SWITCH OUTPUT |
| B   | Z1 18BK  | GROUND                 |

RIGHT FRONT DOOR AJAR SWITCH (BASE) (NORMAL BUILD) - BLACK 2 WAY

| CAV | CIRCUIT     | FUNCTION                     |
|-----|-------------|------------------------------|
| 1   | G74 18TN/DB | RIGHT DOOR AJAR SWITCH SENSE |
| 2   | Z1 18BK     | GROUND                       |

RIGHT FRONT DOOR SPEAKER - BLACK 2 WAY

| CAV | CIRCUIT                    | FUNCTION                |
|-----|----------------------------|-------------------------|
| 1   | X54 18DG (EARLY BUILD)     | RIGHT FRONT SPEAKER (-) |
| 1   | X56 18BR/DB (NORMAL BUILD) | RIGHT FRONT SPEAKER (-) |
| 2   | X56 18BR/RD (EARLY BUILD)  | RIGHT FRONT SPEAKER (+) |
| 2   | X54 18DG/VT (NORMAL BUILD) | RIGHT FRONT SPEAKER (+) |

RIGHT FRONT PARK/TURN SIGNAL LAMP - 3 WAY

| CAV | CIRCUIT      | FUNCTION                   |
|-----|--------------|----------------------------|
| 1   | Z1 18BK      | GROUND                     |
| 2   | L7 18BK/YL   | HEADLAMP SWITCH OUTPUT     |
| 3   | L160 18TN/RD | RIGHT FRONT TURN LAMP FEED |

RIGHT FRONT POWER WINDOW MOTOR - BLACK 2 WAY

| CAV | CIRCUIT  | FUNCTION                  |
|-----|----------|---------------------------|
| 1   | Q22 14WT | DRIVER WINDOW DRIVER DOWN |
| 2   | Q12 14LB | DRIVER WINDOW DRIVER UP   |

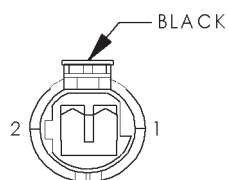


# 2001 PT CRUISER SUPPLEMENT

8W - 80 - 54

8W-80 CONNECTOR PINOUTS

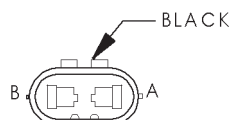
PT



RIGHT FRONT  
WHEEL SPEED  
SENSOR

RIGHT FRONT WHEEL SPEED SENSOR - BLACK 2 WAY

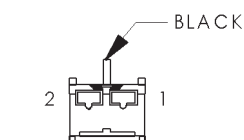
| CAV | CIRCUIT    | FUNCTION                                          |
|-----|------------|---------------------------------------------------|
| 1   | B7 18WT    | RIGHT FRONT WHEEL SPEED SENSO 12 VOLT SIG-<br>NAL |
| 2   | B6 18WT/DB | RIGHT FRONT WHEEL SPEED SENSOR SIGNAL             |



RIGHT  
HIGH BEAM  
HEADLAMP

RIGHT HIGH BEAM HEADLAMP - BLACK 2 WAY

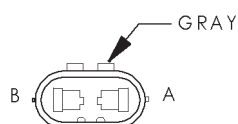
| CAV | CIRCUIT    | FUNCTION                       |
|-----|------------|--------------------------------|
| A   | L3 16RD/OR | DIMMER SWITCH HIGH BEAM OUTPUT |
| B   | Z1 16BK    | GROUND                         |



RIGHT  
INSTRUMENT  
PANEL SPEAKER

RIGHT INSTRUMENT PANEL SPEAKER - BLACK 2 WAY

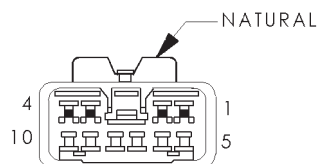
| CAV | CIRCUIT     | FUNCTION                           |
|-----|-------------|------------------------------------|
| 1   | X54 18VT/DG | RIGHT INSTRUMENT PANEL SPEAKER (+) |
| 2   | X56 18DB/RD | RIGHT INSTRUMENT PANEL SPEAKER (-) |



RIGHT  
LOW BEAM  
HEADLAMP

RIGHT LOW BEAM HEADLAMP - GRAY 2 WAY

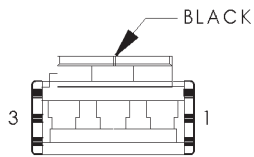
| CAV | CIRCUIT     | FUNCTION                    |
|-----|-------------|-----------------------------|
| A   | L44 16VT/RD | FUSED RIGHT LOW BEAM OUTPUT |
| B   | Z1 16BK     | GROUND                      |



RIGHT  
POWER MIRROR

RIGHT POWER MIRROR - NATURAL 10 WAY

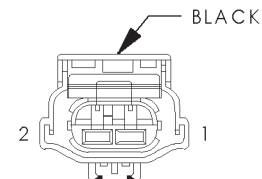
| CAV | CIRCUIT                    | FUNCTION                           |
|-----|----------------------------|------------------------------------|
| 1   | Z1 20BK                    | GROUND                             |
| 2   | P70 20YL/PK                | RIGHT MIRROR RIGHT/DOWN MOVEMENT   |
| 3   | C16 20LB/YL                | REAR WINDOW DEFOGGER SWITCH OUTPUT |
| 4   | P72 20YL/BK (EARLY BUILD)  | RIGHT MIRROR UP MOVEMENT           |
| 4   | P72 20BR/YL (NORMAL BUILD) | RIGHT MIRROR UP MOVEMENT           |
| 5   | P74 20DB/WT                | RIGHT MIRROR LEFT MOVEMENT         |
| 6   | -                          | -                                  |
| 7   | -                          | -                                  |
| 8   | -                          | -                                  |
| 9   | -                          | -                                  |
| 10  | -                          | -                                  |



RIGHT REAR  
DOOR POWER  
LOCK MOTOR

RIGHT REAR DOOR POWER LOCK MOTOR - BLACK 3 WAY

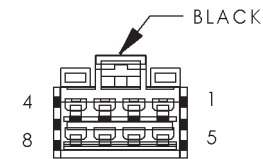
| CAV | CIRCUIT     | FUNCTION           |
|-----|-------------|--------------------|
| 1   | P35 18OR/VT | DOOR LOCK DRIVER   |
| 2   | -           | -                  |
| 3   | P36 18PK/VT | DOOR UNLOCK DRIVER |



RIGHT REAR  
POWER WINDOW  
MOTOR

RIGHT REAR POWER WINDOW MOTOR - BLACK 2 WAY

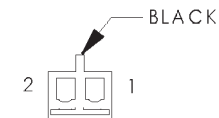
| CAV | CIRCUIT                    | FUNCTION                  |
|-----|----------------------------|---------------------------|
| 1   | Q24 14RD/WT (EARLY BUILD)  | WINDOW RIGHT REAR (DOWN)  |
| 1   | Q24 14RD/DG (NORMAL BUILD) | WINDOW RIGHT REAR (DOWN)  |
| 2   | Q14 14DB/GY                | WINDOW RIGHT REAR B(+) UP |



RIGHT REAR  
POWER WINDOW  
SWITCH  
(NORMAL BUILD)

RIGHT REAR POWER WINDOW SWITCH (NORMAL BUILD) - BLACK 8 WAY

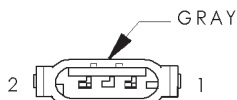
| CAV | CIRCUIT     | FUNCTION                        |
|-----|-------------|---------------------------------|
| 1   | -           | -                               |
| 2   | Q18 14GY/BK | RIGHT REAR WINDOW DRIVER (UP)   |
| 3   | Q28 14DG/WT | RIGHT REAR WINDOW DRIVER (DOWN) |
| 4   | Q1 14YL     | WINDOW SWITCH FEED              |
| 5   | Q14 14GY    | WINDOW RIGHT REAR B(+) UP       |
| 6   | Q1 14YL     | WINDOW SWITCH FEED              |
| 7   | Z1 14BK     | GROUND                          |
| 8   | Q24 14DG    | WINDOW RIGHT REAR B(+) DOWN     |



RIGHT REAR  
SPEAKER

RIGHT REAR SPEAKER - BLACK 2 WAY

| CAV | CIRCUIT     | FUNCTION               |
|-----|-------------|------------------------|
| 1   | X58 18DB/BK | RIGHT REAR SPEAKER (-) |
| 2   | X52 18DB/WT | RIGHT REAR SPEAKER (+) |



RIGHT  
REAR TURN  
SIGNAL LAMP

RIGHT REAR TURN SIGNAL LAMP - GRAY 2 WAY

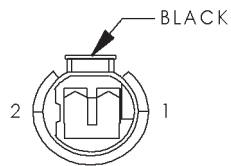
| CAV | CIRCUIT     | FUNCTION               |
|-----|-------------|------------------------|
| 1   | L62 18BR/RD | RIGHT REAR TURN SIGNAL |
| 2   | Z1 18BK     | GROUND                 |

# 2001 PT CRUISER SUPPLEMENT

8W - 80 - 56

8W-80 CONNECTOR PINOUTS

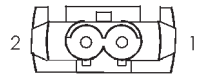
PT



RIGHT REAR  
WHEEL SPEED  
SENSOR

RIGHT REAR WHEEL SPEED SENSOR - BLACK 2 WAY

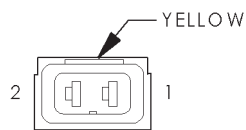
| CAV | CIRCUIT    | FUNCTION                                     |
|-----|------------|----------------------------------------------|
| 1   | B2 20YL    | RIGHT REAR WHEEL SPEED SENSOR 12 VOLT SUPPLY |
| 2   | B1 20YL/DB | RIGHT REAR WHEEL SPEED SENSOR SIGNAL         |



RIGHT  
SEAT AIRBAG

RIGHT SEAT AIRBAG - 2 WAY

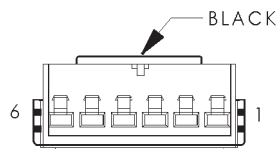
| CAV | CIRCUIT  | FUNCTION                |
|-----|----------|-------------------------|
| 1   | R32 18OR | RIGHT SEAT SQUIB LINE 2 |
| 2   | R34 18WT | RIGHT SEAT SQUIB LINE 1 |



RIGHT  
SEAT BELT  
TENSIONER

RIGHT SEAT BELT TENSIONER - YELLOW 2 WAY

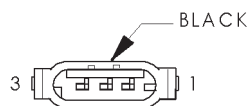
| CAV | CIRCUIT     | FUNCTION                         |
|-----|-------------|----------------------------------|
| 1   | R54 18LB/YL | RIGHT SEAT BELT TENSIONER LINE 2 |
| 2   | R56 18LB/DG | RIGHT SEAT BETL TENSIONER LINE 1 |



RIGHT SIDE  
IMPACT AIRBAG  
CONTROL MODULE  
(FULL OPTIONS)

RIGHT SIDE IMPACT AIRBAG CONTROL MODULE (FULL OPTIONS) - BLACK 6 WAY

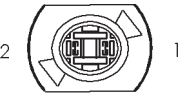
| CAV | CIRCUIT                     | FUNCTION                                 |
|-----|-----------------------------|------------------------------------------|
| 1   | F15 20DG/WT                 | FUSED IGNITION SWITCH OUTPUT (RUN-START) |
| 2   | D25 20VT/YL                 | PCI BUS                                  |
| 3   | R34 20LB/WT                 | RIGHT SEAT SQUIB LINE 1                  |
| 4   | R32 20LB/OR                 | RIGHT SEAT SQUIB LINE 2                  |
| 5   | -                           | -                                        |
| 6   | Z6 20BK/PK (EARLY BUILD)    | GROUND                                   |
| 6   | Z135 20BK/PK (NORMAL BUILD) | GROUND                                   |



RIGHT TAIL/  
STOP LAMP

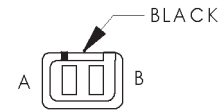
RIGHT TAIL/STOP LAMP - BLACK 3 WAY

| CAV | CIRCUIT     | FUNCTION                 |
|-----|-------------|--------------------------|
| 1   | L50 18WT/TN | BRAKE LAMP SWITCH OUTPUT |
| 2   | L7 18BK/YL  | HEADLAMP SWITCH OUTPUT   |
| 3   | Z1 18BK     | GROUND                   |



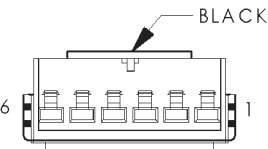
RIGHT TURN  
SIGNAL  
INDICATOR

| RIGHT TURN SIGNAL INDICATOR - 2 WAY |          |                   |
|-------------------------------------|----------|-------------------|
| CAV                                 | CIRCUIT  | FUNCTION          |
| 1                                   | L60 20TN | RIGHT TURN SIGNAL |
| 2                                   | Z1 20BK  | GROUND            |



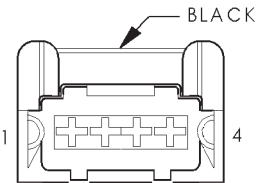
RIGHT VISOR/  
VANITY LAMP

| RIGHT VISOR/VANITY LAMP - BLACK 2 WAY |         |            |
|---------------------------------------|---------|------------|
| CAV                                   | CIRCUIT | FUNCTION   |
| A                                     | M1 20PK | FUSED B(+) |
| B                                     | Z1 20BK | GROUND     |



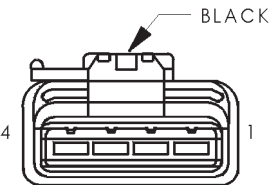
SENTRY KEY  
IMMOBILIZER  
MODULE

| SENTRY KEY IMMOBILIZER MODULE - BLACK 6 WAY |             |                                          |
|---------------------------------------------|-------------|------------------------------------------|
| CAV                                         | CIRCUIT     | FUNCTION                                 |
| 1                                           | -           | -                                        |
| 2                                           | D25 20VT/YL | PCI BUS                                  |
| 3                                           | -           | -                                        |
| 4                                           | G5 20DB/BK  | FUSED IGNITION SWITCH OUTPUT (RUN-START) |
| 5                                           | Z2 20BK/LG  | GROUND                                   |
| 6                                           | M1 20PK     | FUSED B(+)                               |



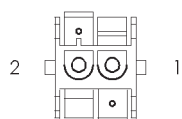
SIREN  
(EXCEPT BASE)

| SIREN (EXCEPT BASE) - BLACK 4 WAY |            |               |
|-----------------------------------|------------|---------------|
| CAV                               | CIRCUIT    | FUNCTION      |
| 1                                 | X5 20LB/RD | SIREN CONTROL |
| 2                                 | X5 20LB/RD | SIREN CONTROL |
| 3                                 | Z1 20BK    | GROUND        |
| 4                                 | M1 20PK    | FUSED B(+)    |



SPEED  
CONTROL SERVO

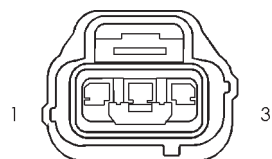
| SPEED CONTROL SERVO - BLACK 4 WAY |             |                                        |
|-----------------------------------|-------------|----------------------------------------|
| CAV                               | CIRCUIT     | FUNCTION                               |
| 1                                 | V36 20TN/RD | SPEED CONTROL VACUUM SOLENOID CONTROL  |
| 2                                 | V35 20LG/RD | SPEED CONTROL VENT SOLENOID CONTROL    |
| 3                                 | V40 20DB/RD | SPEED CONTROL BRAKE LAMP SWITCH OUTPUT |
| 4                                 | Z1 20BK     | GROUND                                 |



SUNROOF  
MOTOR

SUNROOF MOTOR - 2 WAY

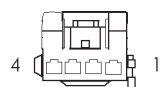
| CAV | CIRCUIT | FUNCTION             |
|-----|---------|----------------------|
| 1   | L6 14DG | MOTOR TILT UP FEED   |
| 2   | L7 14DB | MOTOR TILT DOWN FEED |



THROTTLE  
POSITION  
SENSOR

THROTTLE POSITION SENSOR - 3 WAY

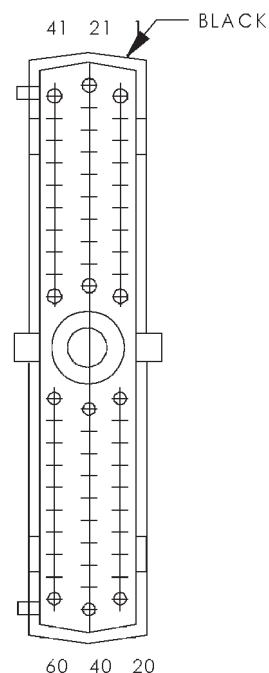
| CAV | CIRCUIT                    | FUNCTION                        |
|-----|----------------------------|---------------------------------|
| 1   | K6 20VT/WT (EARLY BUILD)   | 5V SUPPLY                       |
| 1   | K6 18VT/WT (NORMAL BUILD)  | 5V SUPPLY                       |
| 2   | K22 20OR/DB (EARLY BUILD)  | THROTTLE POSITION SENSOR SIGNAL |
| 2   | K22 18OR/DB (NORMAL BUILD) | THROTTLE POSITION SENSOR SIGNAL |
| 3   | K4 20BK/LB (EARLY BUILD)   | SENSOR GROUND                   |
| 3   | K4 18BK/LB (NORMAL BUILD)  | SENSOR GROUND                   |



TRACTION  
CONTROL  
SWITCH

TRACTION CONTROL SWITCH - 4 WAY

| CAV | CIRCUIT     | FUNCTION                      |
|-----|-------------|-------------------------------|
| 1   | -           | -                             |
| 2   | B27 18RD/YL | TRACTION CONTROL SWITCH SENSE |
| 3   | Z1 20BK     | GROUND                        |
| 4   | E2 20OR     | PANEL LAMPS DRIVER            |



TRANSMISSION  
CONTROL  
MODULE  
(A/T)

TRANSMISSION CONTROL MODULE (A/T) - BLACK 60 WAY

| CAV | CIRCUIT     | FUNCTION                                 |
|-----|-------------|------------------------------------------|
| 1   | T1 20LG/BK  | TRS OVERDRIVE SENSE                      |
| 2   | -           | -                                        |
| 3   | T3 20VT     | TRS 3 SENSE                              |
| 4   | -           | -                                        |
| 5   | -           | -                                        |
| 6   | K24 20GY/BK | CRANKSHAFT POSITION SENSOR SIGNAL        |
| 7   | D21 20PK    | SCI TRANSMIT                             |
| 8   | A41 16YL    | FUSED IGNITION SWITCH OUTPUT (START)     |
| 9   | T9 18OR/BK  | OVERDRIVE PRESSURE SWITCH SENSE          |
| 10  | T10 20YL/DG | TORQUE MANAGEMENT REQUEST SENSE          |
| 11  | F18 20LG/BK | FUSED IGNITION SWITCH OUTPUT (RUN-START) |
| 12  | K22 20OR/DB | THROTTLE POSITION SENSOR SIGNAL          |
| 13  | T13 20DB/BK | SPEED SENSOR GROUND                      |
| 14  | T14 20LG/WT | OUTPUT SPEED SENSOR SIGNAL               |
| 15  | T15 20LG    | TRANSMISSION CONTROL RELAY CONTROL       |
| 16  | T16 16RD    | TRANSMISSION CONTROL RELAY OUTPUT        |
| 17  | T16 16RD    | TRANSMISSION CONTROL RELAY OUTPUT        |
| 18  | -           | -                                        |
| 19  | T19 18WT    | 2-4 SOLENOID CONTROL                     |
| 20  | T20 18LB    | LOW/REVERSE SOLENOID CONTROL             |
| 21  | -           | -                                        |
| 22  | -           | -                                        |
| 23  | -           | -                                        |

# 2001 PT CRUISER SUPPLEMENT

PT **8W-80 CONNECTOR PINOUTS** **8W - 80 - 59**

TRANSMISSION CONTROL MODULE (A/T) - BLACK 60 WAY

| CAV | CIRCUIT                    | FUNCTION                               |
|-----|----------------------------|----------------------------------------|
| 24  | -                          | -                                      |
| 25  | -                          | -                                      |
| 26  | -                          | -                                      |
| 27  | -                          | -                                      |
| 28  | -                          | -                                      |
| 29  | -                          | -                                      |
| 30  | -                          | -                                      |
| 31  | -                          | -                                      |
| 32  | -                          | -                                      |
| 33  | -                          | -                                      |
| 34  | -                          | -                                      |
| 35  | -                          | -                                      |
| 36  | -                          | -                                      |
| 37  | -                          | -                                      |
| 38  | -                          | -                                      |
| 39  | -                          | -                                      |
| 40  | -                          | -                                      |
| 41  | T41 20BK/WT (EARLY BUILD)  | PARK/NEUTRAL POSITION SWITCH SENSE     |
| 41  | T41 20YL/RD (NORMAL BUILD) | PARK/NEUTRAL POSITION SWITCH SENSE     |
| 42  | T42 20VT/WT                | TRS 1-2 SENSE                          |
| 43  | D25 20VT/YL                | PCI BUS                                |
| 44  | -                          | -                                      |
| 45  | -                          | -                                      |
| 46  | D6 20PK/LB                 | SCI RECEIVE (A/T)                      |
| 47  | T47 18YL/BK                | 2-4 PRESSURE SWITCH SENSE              |
| 48  | -                          | -                                      |
| 49  | -                          | -                                      |
| 50  | T50 18DG                   | LOW/REVERSE PRESSURE SWITCH SENSE      |
| 51  | K4 20BK/LB                 | SENSOR GROUND                          |
| 52  | T52 20RD/BK                | INPUT SPEED SENSOR SIGNAL              |
| 53  | Z14 16BK/YL                | GROUND                                 |
| 54  | T54 20VT/PK (NORMAL BUILD) | TRANSMISSION TEMPERATURE SENSOR SIGNAL |
| 54  | T54 20VT/PK (EARLY BUILD)  | TRANSMISSION TEMPERATURE SENSOR SIGNAL |
| 55  | -                          | -                                      |
| 56  | A30 16RD/WT                | FUSED B(+)                             |
| 57  | Z13 16BK/RD (NORMAL BUILD) | GROUND                                 |
| 58  | G7 20WT/OR                 | VEHICLE SPEED SENSOR SIGNAL            |
| 59  | T59 18PK                   | UNDERDRIVE SOLENOID CONTROL            |
| 60  | T60 18BR                   | OVERDRIVE SOLENOID CONTROL             |



TRANSMISSION RANGE INDICATOR ILLUMINATION (PRNDL) - BLACK 2 WAY

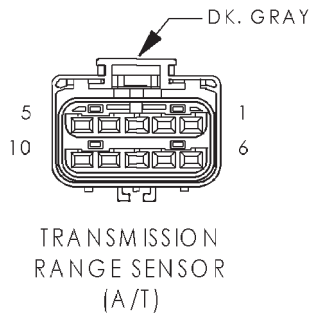
| CAV | CIRCUIT | FUNCTION           |
|-----|---------|--------------------|
| 1   | E2 20OR | PANEL LAMPS DRIVER |
| 2   | Z1 20BK | GROUND             |

# 2001 PT CRUISER SUPPLEMENT

8W - 80 - 60

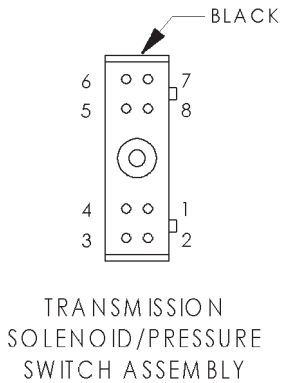
8W-80 CONNECTOR PINOUTS

PT



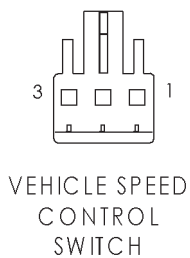
TRANSMISSION RANGE SENSOR (A/T) - DK. GRAY 10 WAY

| CAV | CIRCUIT                    | FUNCTION                               |
|-----|----------------------------|----------------------------------------|
| 1   | F20 18WT                   | FUSED IGNITION SWITCH OUTPUT (RUN)     |
| 2   | -                          | -                                      |
| 3   | T13 20DB/BK                | SPEED SENSOR GROUND                    |
| 4   | T54 18VT/PK                | TRANSMISSION TEMPERATURE SENSOR SIGNAL |
| 5   | T41 20BK/WT (EARLY BUILD)  | PARK/NEUTRAL POSITION SWITCH SENSE     |
| 5   | -                          | -                                      |
| 6   | L1 18VT/BK                 | TRS REVERSE SENSE                      |
| 7   | T1 20LG/BK                 | TRS OVERDRIVER SENSE                   |
| 8   | T3 20VT                    | TRS 3 SENSE                            |
| 9   | T42 20VT/WT                | TRS 1-2 SENSE                          |
| 10  | T41 20BK/WT (NORMAL BUILD) | PARK/NEUTRAL POSITION SWITCH SENSE     |
| 10  | T41 20BK/WT                | PARK/NEUTRAL POSITION SWITCH SENSE     |



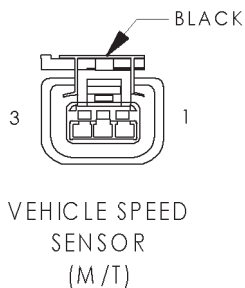
TRANSMISSION SOLENOID/PRESSURE SWITCH ASSEMBLY - BLACK 8 WAY

| CAV | CIRCUIT     | FUNCTION                          |
|-----|-------------|-----------------------------------|
| 1   | T47 18YL/BK | 2-4 PRESSURE SWITCH SENSE         |
| 2   | T50 18DG    | LOW/REVERSE PRESSURE SWITCH SENSE |
| 3   | T9 18OR/BK  | OVERDRIVE PRESSURE SWITCH SENSE   |
| 4   | T16 16RD    | TRANSMISSION CONTROL RELAY OUTPUT |
| 5   | T59 18PK    | UNDERDRIVE SOLENOID CONTROL       |
| 6   | T60 18BR    | OVERDRIVE SOLENOID CONTROL        |
| 7   | T20 18LB    | LOW/REVERSE SOLENOID CONTROL      |
| 8   | T19 18WT    | 2-4 SOLENOID CONTROL              |



VEHICLE SPEED CONTROL SWITCH - 3 WAY

| CAV | CIRCUIT                     | FUNCTION                           |
|-----|-----------------------------|------------------------------------|
| 1   | Z2 22BK/LG (EARLY BUILD)    | GROUND                             |
| 1   | V131 20RD/LG (NORMAL BUILD) | SPEED CONTROL SWITCH SIGNAL        |
| 2   | -                           | -                                  |
| 3   | V37 22RD/LG (EARLY BUILD)   | VEHICLE SPEED SENSOR SWITCH SIGNAL |
| 3   | Z123 20BK/LG                | GROUND                             |



VEHICLE SPEED SENSOR (M/T) - BLACK 3 WAY

| CAV | CIRCUIT    | FUNCTION                    |
|-----|------------|-----------------------------|
| 1   | K7 20OR    | 8V SUPPLY                   |
| 2   | K4 20BK/LB | SENSOR GROUND               |
| 3   | G7 20WT/LB | VEHICLE SPEED SENSOR SIGNAL |

## 8W-90 CONNECTOR/GROUND LOCATIONS

## TABLE OF CONTENTS

page

## CONNECTOR/GROUND LOCATIONS

DESCRIPTION . . . . . 1

CONNECTOR/GROUND  
LOCATIONS

## DESCRIPTION

This section provides illustrations identifying connector and ground locations in the vehicle. A connector

and ground index is provided. Use the wiring diagrams in each section for connector and ground identification. Refer to the index for the proper figure number. For items that are not shown in this section N/S is placed in the Fig. column.

| Connector Name/Number                       | Color | Location                                           | Fig.       |
|---------------------------------------------|-------|----------------------------------------------------|------------|
| A/C Compressor Clutch                       | BK    | Lower Front of Engine                              | 3          |
| A/C - Heater Control Switch                 | GY    | Center of Instrument Panel                         | 19         |
| A/C Low Pressure Switch                     | BK    | Right Rear of Engine Compartment                   | 5, 7, 8    |
| A/C Pressure Transducer                     | BK    | Lower Front of Engine                              | 3          |
| Ambient Temperature Sensor                  | BK    | Left Front Wheel Housing                           | 5          |
| Ash Receiver Lamp                           |       | Top of Ash Tray                                    | 12         |
| Back-Up Lamp Switch                         | GY    | Front of Engine Compartment on Manual Transmission | 3          |
| Blower Motor                                | BK    | Right Rear of Instrument Panel                     | 20         |
| Blower Motor Resistor Block                 | BK    | Right Side of Cowl Panel                           | 9, 10      |
| Brake Lamp Switch                           | GY    | Left Side of Brake Pedal                           | 10         |
| Brake Transmission Shift Interlock Solenoid | WT    | Below Steering Column                              | 14         |
| Brake Warning Indicator Switch              | BK    | Left Rear of Engine Compartment                    | 5          |
| C101                                        | BK    | Front Left Side of Engine Compartment              | 3, 5       |
| C102                                        | LT GY | Front Left Side of Engine Compartment              | 3, 5       |
| C103                                        |       | Front Side of Engine                               | 3          |
| C104                                        | DK GY | Front Left Side of Engine Compartment              | 3          |
| C105                                        |       | Left Side of Instrument Panel                      | 10, 21     |
| C106                                        |       | Left Side of Instrument Panel                      | 10, 21     |
| C109                                        | BK    | Lower Right Side of Engine Compartment             | 7          |
| C110                                        | BK    | Lower Right Side of Engine Compartment             | 7          |
| C200                                        | BK    | Left Side of Instrument Panel                      | 21         |
| C201                                        | BK    | Left Side of Instrument Panel                      | 20         |
| C202                                        |       | Left Kick Panel                                    | 21, 23     |
| C203                                        | GN    | Lower Right Kick Panel                             | 20, 22     |
| C204                                        | NAT   | Left Side of Instrument Panel                      | 21, 23     |
| C205                                        | NAT   | Upper Right Kick Panel                             | 20, 22, 27 |



# 2001 PT CRUISER SUPPLEMENT

8W - 90 - 2 ————— 8W-90 CONNECTOR/GROUND LOCATIONS ————— PT

## CONNECTOR/GROUND LOCATIONS (Continued)

| Connector Name/Number                    | Color | Location                                  | Fig.       |
|------------------------------------------|-------|-------------------------------------------|------------|
| C206                                     | BK    | Below Driver's Seat                       | 17         |
| C207                                     |       | Right Side of Instrument Panel            | N/S        |
| C208                                     |       | Left Side of Instrument Panel             | 13         |
| C209                                     | BK    | Right Rear of Instrument Panel            | N/S        |
| C210                                     | BK    | Below Driver Seat                         | N/S        |
| C211                                     | BK    | Below Driver Seat                         | N/S        |
| C300                                     | BK    | Left B-Pillar                             | 24, 28     |
| C301                                     | BK    | Right B-Pillar                            | 25, 28     |
| C302                                     |       | Top Left of Liftgate                      | 30, 32, 33 |
| C303                                     |       | Left Rear Quarter                         | 29, 34     |
| C304                                     | BK    | At Fuel Tank                              | N/S        |
| C305                                     | YL    | Left Rear of Front Console                | 23         |
| C306                                     | YL    | Left Side of Front Console                | 22         |
| Camshaft Position Sensor                 | BK    | On Engine Left Side of Engine Compartment | 4          |
| Cargo Lamp                               | BK    | Cargo Area                                | 26         |
| Center High Mounted Stop Lamp            | BK    | Top of Liftgate                           | 32, 33     |
| Center Stack Lamp                        |       | Bottom Center of Instrument Panel         | 19         |
| Cigar Lighter                            | BK    | Bottom Center of Instrument Panel         | 17         |
| Clockspring                              |       | Bottom of Steering Wheel                  | 14         |
| Clutch Pedal Position Switch             | BK    | Left Side of Steering Column              | 10         |
| Controller Antilock Brake                |       | Left Side Engine Compartment              | 5          |
| Crankshaft Position Sensor               | BK    | Lower Right Side of Engine                | 4          |
| Data Link Connector                      | BK    | Left Side of Instrument Panel             | 10         |
| Dome Lamp                                | BK    | Center of Headliner                       | N/S        |
| Driver Airbag Module                     | YL    | Front of Steering Wheel                   | N/S        |
| Driver Cylinder Lock Switch              |       | Driver Door                               | N/S        |
| Driver Door Power Lock Motor/Ajar Switch | BK    | Driver Door                               | N/S        |
| Driver Door Lock Switch                  | BK    | Driver Door                               | N/S        |
| Driver Heated Seat Cushion               |       | Driver Seat                               | N/S        |
| Driver Seat Belt Switch                  | BK    | Lower Left B-Pillar                       | 24         |
| EGR Solenoid                             | BK    | Right Rear of Engine                      | 4          |
| Engine Coolant Temperature Sensor        |       | Side of Radiator                          | N/S        |
| Engine Oil Pressure Switch               | LT GN | Right Rear of Engine Compartment          | 4          |
| Engine Starter Motor                     |       | Lower Right Side of Engine                | 3, 6       |
| EVAP Purge Solenoid                      | BK    | Lower Right Rear of Engine Compartment    | 5          |
| Front Power Window Switch                | NAT   | Top Center of Instrument Panel            | 19         |
| Front Washer Pump Motor                  | BK    | Attached to Washer Reservoir              | 10         |
| Front Wiper Motor                        |       | Center of Cowl Panel                      | 10         |
| Front Wiper/Washer Switch                |       | Part of Multi-Function Switch             | 14         |
| Fuel Injector No.1                       | BK    | At Injector                               | N/S        |
| Fuel Injector No.2                       | BK    | At Injector                               | N/S        |

# 2001 PT CRUISER SUPPLEMENT

PT ————— 8W-90 CONNECTOR/GROUND LOCATIONS ————— 8W - 90 - 3

## CONNECTOR/GROUND LOCATIONS (Continued)

| Connector Name/Number            | Color | Location                                    | Fig.   |
|----------------------------------|-------|---------------------------------------------|--------|
| Fuel Injector No.3               | BK    | At Injector                                 | N/S    |
| Fuel Injector No.4               | BK    | At Injector                                 | N/S    |
| Fuel Pump Module                 | LT GY | On Fuel Tank                                | N/S    |
| Fuse Block                       |       | Left Bottom of Instrument Panel             | 14, 21 |
| G100                             |       | Left Front Engine Compartment               | 6      |
| G101                             |       | At Battery Tray                             | 6      |
| G102                             |       | Left Fender Area                            | 5, 10  |
| G103                             |       | Left Fender Area                            | 5, 10  |
| G104                             |       | Right Fender Area                           | 7      |
| G105                             |       | Left Front Inner Fender                     | N/S    |
| G200                             |       | Center Rear of Instrument Panel             | 15     |
| G201                             |       | Center Rear of Instrument Panel             | 15, 21 |
| G202                             |       | Left Kick Panel                             | N/S    |
| G203                             |       | Center Rear of Instrument Panel             | 15     |
| G204                             |       | Left Kick Panel                             | 20     |
| G300                             |       | Left Rear Quarter                           | 29, 30 |
| G301                             |       | Right Rear Quarter                          | 26     |
| G302                             |       | Upper Left Rear Cargo Area                  | 29     |
| G303                             |       | Left B-Pillar                               | 24     |
| G304                             |       | Lower Right B-Pillar                        | 25     |
| Generator                        | BK    | Lower Right Side of Engine                  | 4, 6   |
| High Note Horn                   | BK    | Left Inner Fender                           | 5      |
| Hood Ajar Switch                 | BK    | Left Rear Engine Compartment                | 5      |
| Idle Air Control Motor           | BK    | Top of Engine                               | 4      |
| Ignition Coil                    | BK    | Right Rear of Engine                        | 4      |
| Ignition Switch                  |       | Right Side of Steering Column               | 14     |
| Inlet Air Temperature Sensor     | BK    | Left Side Engine Compartment on Engine      | 4      |
| Input Speed Sensor               | GY    | Front of Engine Compartment on Transmission | 3      |
| Instrument Cluster C1            | BK    | Driver's Side of Instrument Panel           | 12, 14 |
| Instrument Cluster C2            | BK    | Driver's Side of Instrument Panel           | 12, 14 |
| Knock Sensor                     | BK    | Front of Engine Compartment on Engine       | 3      |
| Leak Detection Pump              | BK    | Near Fuel Tank Module                       | N/S    |
| Left Back-Up Lamp                | GY    | Left Side of Rear Fascia                    | 34     |
| Left Fog Lamp                    | GY    | Lower Left Front Fascia                     | 5      |
| Left Front Door Ajar Switch      | BK    | Left B-Pillar                               | 24     |
| Left Front Door Speaker          | BK    | Left Door                                   | N/S    |
| Left Front Park/Turn Signal Lamp | BK    | Left Front of Vehicle                       | 2      |
| Left Front Power Window Motor    | BK    | Left Front Door                             | N/S    |
| Left Front Wheel Speed Sensor    | BK    | Left Front Wheel Opening                    | N/S    |
| Left High Beam Headlamp          | BK    | At Headlamp Assembly                        | 2      |
| Left Instrument Panel Speaker    | BK    | Left Upper Instrument Panel                 | N/S    |

# 2001 PT CRUISER SUPPLEMENT

8W - 90 - 4 ————— 8W-90 CONNECTOR/GROUND LOCATIONS ————— PT

## CONNECTOR/GROUND LOCATIONS (Continued)

| Connector Name/Number                       | Color | Location                                    | Fig.   |
|---------------------------------------------|-------|---------------------------------------------|--------|
| Left Low Beam Headlamp                      | GY    | At Headlamp Assembly                        | 2      |
| Left Power Mirror                           | NAT   | Left Front Door                             | N/S    |
| Left Rear Door Ajar Switch                  |       | Above Left Rear Wheel Well                  | 29     |
| Left Rear Door Power Lock Motor             | BK    | Rear of Left Rear Door                      | N/S    |
| Left Rear Power Window Motor                | BK    | Left Rear Door                              | N/S    |
| Left Rear Power Window Switch               | LT GY | Rear of Front Center Console                | 17     |
| Left Rear Speaker                           | BK    | Left C-Pillar                               | 30     |
| Left Rear Turn Signal Lamp                  | GY    | In Rear Lamp Assembly                       | 29, 34 |
| Left Rear Wheel Speed Sensor                | BK    | Left Rear Wheel Opening                     | N/S    |
| Left Seat Belt Tensioner                    | YL    | Left B-Pillar                               | 24     |
| Left Side Impact Airbag Control Module      | BK    | Lower Left B-Pillar                         | 24     |
| Left Tail/Stop Lamp                         | BK    | In Rear Lamp Assembly                       | 29, 34 |
| Left Turn Signal Indicator                  |       | Left Top Side of Instrument Panel           | 12     |
| Left Visor/Vanity Lamp                      | BK    | Left Front Side of Headliner                | N/S    |
| License Lamp                                | NAT   | Center of Rear Fascia                       | 34     |
| Liftgate Ajar Switch                        | BK    | Bottom of Liftgate                          | 31     |
| Liftgate Cylinder Lock Switch               | LT GY | Inside Liftgate                             | 31     |
| Liftgate Power Lock Motor                   | BK    | Inside Liftgate                             | 31     |
| Low Note Horn                               | BK    | Left Inner Fender                           | 5      |
| Manifold Absolute Pressure Sensor           | BK    | Top Rear of Engine                          | 4      |
| Map/Reading Lamps                           | BK    | Front Headliner                             | N/S    |
| Multi-Function Switch                       | GY    | Steering Column                             | 14     |
| Noise Suppressor                            |       | Left Side Engine Compartment on Engine      | 4      |
| Occupant Restraint Controller               | YL    | Forward of Front Console                    | 17     |
| Output Speed Sensor                         | GY    | Front of Engine Compartment on Transmission | 3      |
| Overhead Console Module                     | BK    | Front Center of Headliner                   | N/S    |
| Oxygen Sensor 1/1 Upstream                  | GY    | Left Side Engine Compartment                | 4      |
| Oxygen Sensor 1/2 Downstream                | BK    | Left Side Engine Compartment                | 4      |
| Parking Brake Switch                        |       | Rear of Front Center Console                | 17     |
| Passenger Airbag                            | YL    | Passenger Side of Instrument Panel          | 18, 20 |
| Passenger Cylinder Lock Switch              |       | Passenger Door                              | 27     |
| Passenger Door Power Lock Motor/Ajar Switch | BK    | Passenger Door                              | 27     |
| Passenger Door Lock Switch                  | BK    | Passenger Door                              | 27     |
| Passenger Heated Seat Cushion               |       | Passenger Seat                              | N/S    |
| Passenger Heated Seat Module                | GN    | Passenger Seat                              | N/S    |
| Passenger Heated Seat Switch                |       | Passenger Seat                              | N/S    |
| Power Distribution Center                   |       | Left Side of Engine Compartment             | 5, 6   |
| Power Mirror Switch                         | BK    | Left Side of Instrument Panel               | 21     |
| Power Outlet                                | BK    | Top of Front Console                        | 11, 19 |
| Power Seat Motor                            |       | Inside Driver Seat                          | N/S    |

# 2001 PT CRUISER SUPPLEMENT

PT ————— 8W-90 CONNECTOR/GROUND LOCATIONS ————— 8W - 90 - 5

## CONNECTOR/GROUND LOCATIONS (Continued)

| Connector Name/Number                   | Color | Location                        | Fig.   |
|-----------------------------------------|-------|---------------------------------|--------|
| Power Seat Switch                       |       | Below Driver Seat               | N/S    |
| Power Steering Pressure Switch          | GY    | Left Rear Engine Compartment    | 5      |
| Power Sunroof Module C1                 |       | Right Side of Sunroof           | 16     |
| Power Sunroof Module C2                 |       | Sunroof                         | N/S    |
| Powertrain Control Module C1            | GY    | Left Side Engine Compartment    | 4      |
| Powertrain Control Module C2            | GY    | Left Side Engine Compartment    | 5      |
| Radiator Fan Motor                      | BK    | Front Center Engine Compartment | 5      |
| Radio C1                                | GY    | Center of Instrument Panel      | 11, 19 |
| Radio C2                                | BK    | Center of Instrument Panel      | 11, 19 |
| Radio C3                                |       | Center of Instrument Panel      | 11, 19 |
| Rear Power Outlet                       | BK    | Right Rear Cargo Area           | 26     |
| Rear Window Defogger                    |       | Left Rear Liftgate              | 32     |
| Rear Window Defogger Switch             |       | Lower Center Instrument Panel   | 11, 19 |
| Rear Wiper Motor                        |       | Center of Liftgate              | 31     |
| Rear Wiper Switch                       |       | Lower Center Instrument Panel   | 11, 19 |
| Remote Keyless Entry Module             |       | Upper Center Instrument Panel   | 11, 15 |
| Right Back-Up Lamp                      | GY    | Right Side of Rear Fascia       | 34     |
| Right Fog Lamp                          | GY    | Lower Right Front Fascia        | 1, 5   |
| Right Front Door Ajar Switch            | BK    | Right B-Pillar                  | 25, 28 |
| Right Front Door Speaker                | BK    | Right Door                      | 27     |
| Right Front Park/Turn Signal Lamp       |       | Right Front of Vehicle          | 5      |
| Right Front Power Window Motor          |       | Right Front Door                | 27     |
| Right Front Wheel Speed Sensor          | BK    | Right Front Wheel Opening       | 7      |
| Right High Beam Headlamp                | BK    | Right Front Headlamp Assembly   | 5      |
| Right Instrument Panel Speaker          | BK    | Right Upper Instrument Panel    | N/S    |
| Right Low Beam Headlamp                 | GY    | Right Front Headlamp Assembly   | 5      |
| Right Power Mirror                      | NAT   | Right Front Door                | 27     |
| Right Rear Door Ajar Switch             |       | Right C-Pillar                  | 26     |
| Right Rear Door Power Lock Motor        | BK    | Right Rear Door                 | 28     |
| Right Rear Power Window Motor           | BK    | Right Rear Door                 | 28     |
| Right Rear Power Window Switch          | BK    | Rear of Front Center Console    | N/S    |
| Right Rear Speaker                      | BK    | Right Side Shelf Panel          | 26     |
| Right Rear Turn Signal Lamp             | GY    | In Rear Lamp Assembly           | 26     |
| Right Rear Wheel Speed Sensor           | BK    | Right Rear Wheel Opening        | N/S    |
| Right Seat Airbag                       |       | Right Seat                      | N/S    |
| Right Seat Belt Tensioner               | YL    | Right B-Pillar                  | 25     |
| Right Side Impact Airbag Control Module | BK    | Lower Right B-Pillar            | 25     |
| Right Tail/Stop Lamp                    | BK    | In Rear Lamp Assembly           | 26     |
| Right Turn Signal Indicator             |       | Right Side of Instrument Panel  | 12     |
| Right Visor/Vanity Lamp                 | BK    | Right Front Headliner           | N/S    |
| Sentry Key Immobilizer Module           | BK    | Right of Steering Column        | 14     |

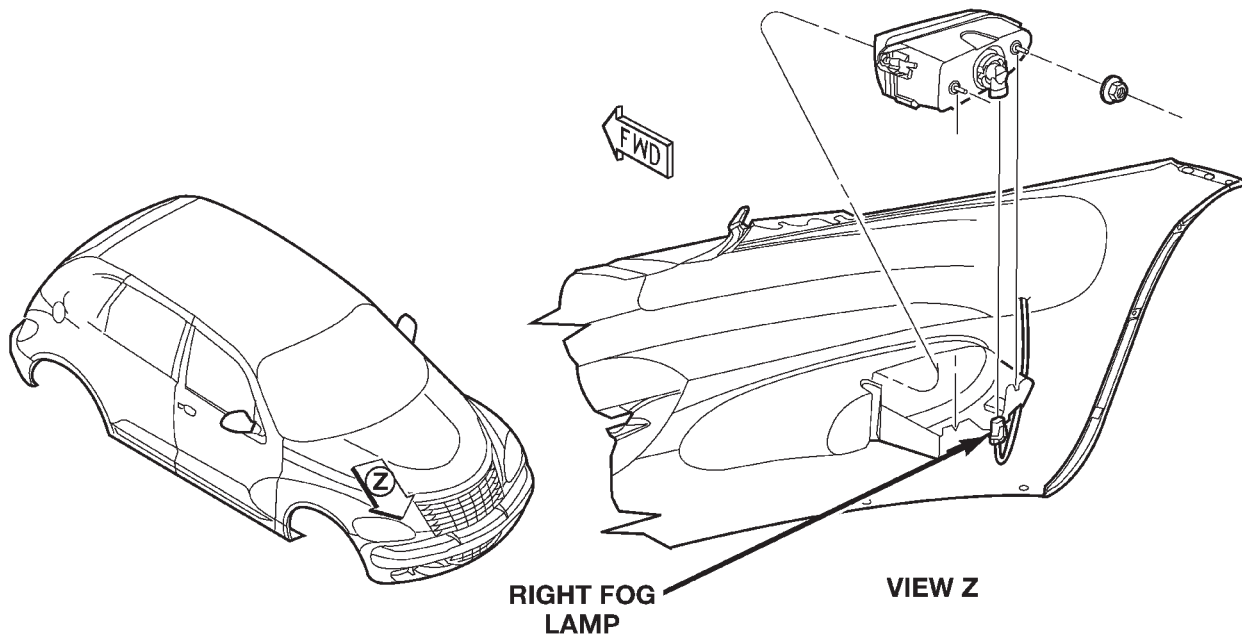
## 2001 PT CRUISER SUPPLEMENT

8W - 90 - 6 ————— 8W-90 CONNECTOR/GROUND LOCATIONS ————— PT

### CONNECTOR/GROUND LOCATIONS (Continued)

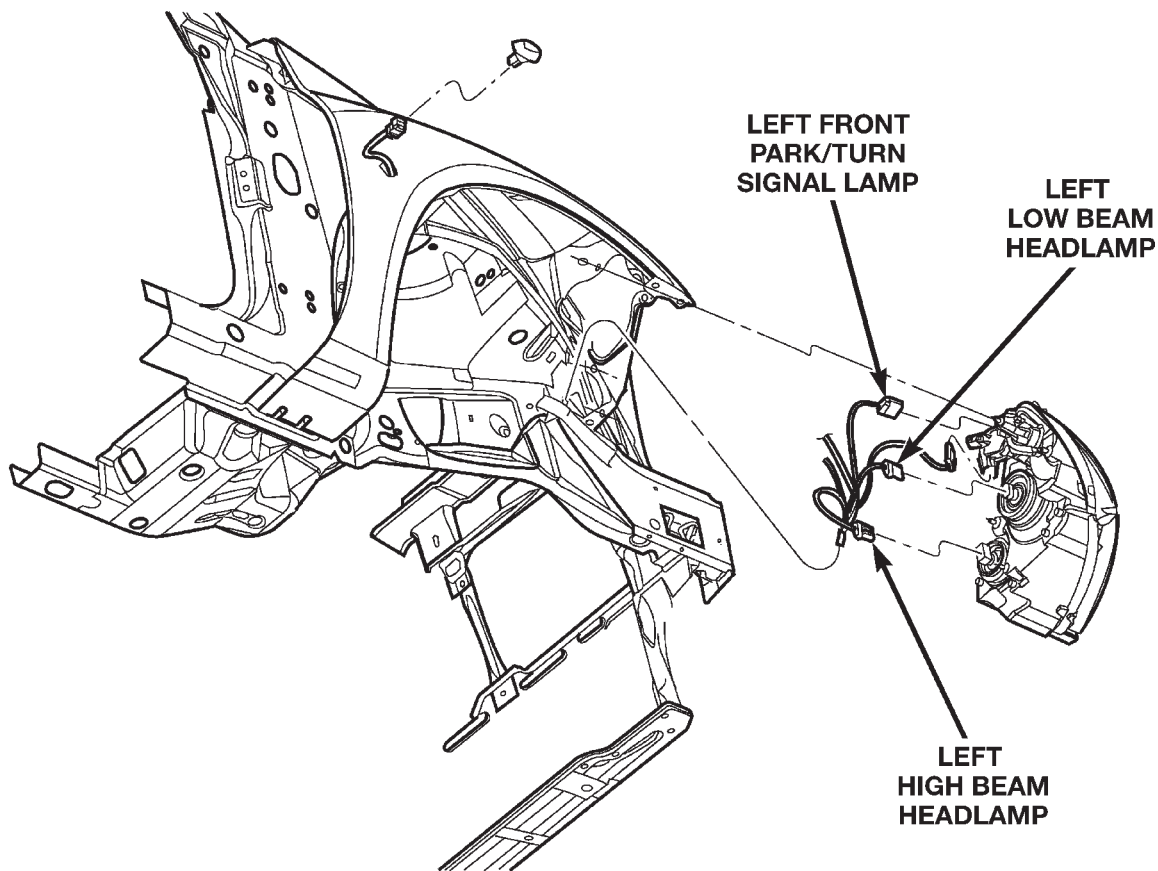
| Connector Name/Number                             | Color | Location                                    | Fig.   |
|---------------------------------------------------|-------|---------------------------------------------|--------|
| Speed Control Servo                               | BK    | Right Rear Corner of Engine Compartment     | 5, 7   |
| Sunroof Motor                                     |       | Right Side of Sunroof Assembly              | N/S    |
| Sunroof Switch                                    | BK    | Part of Overhead Console                    | N/S    |
| Throttle Position Sensor                          |       | On Throttle Body                            | 4      |
| Traction Control Switch                           |       | Lower Center of Instrument Panel            | 11, 19 |
| Transmission Control Module                       | BK    | Left Front of Engine Compartment            | N/S    |
| Transmission Range Indicator Illumination (PRNDL) | BK    | Left Side of Transmission Selection Lever   | 17     |
| Transmission Range Sensor                         | DK GY | Front of Engine Compartment on Transmission | 3      |
| Transmission Solenoid/Pressure Switch Assembly    | BK    | Front of Engine Compartment on Transmission | 3      |
| Vehicle Speed Control Switch                      |       | At Steering Wheel                           | N/S    |
| Vehicle Speed Sensor                              | BK    | Front of Engine Compartment on Transmission | N/S    |

## CONNECTOR/GROUND LOCATIONS (Continued)



**Fig. 1 RIGHT FOG LAMP**

80c07004



**Fig. 2 LEFT FRONT LAMPS**

80c07005

## CONNECTOR/GROUND LOCATIONS (Continued)

80c41c6a

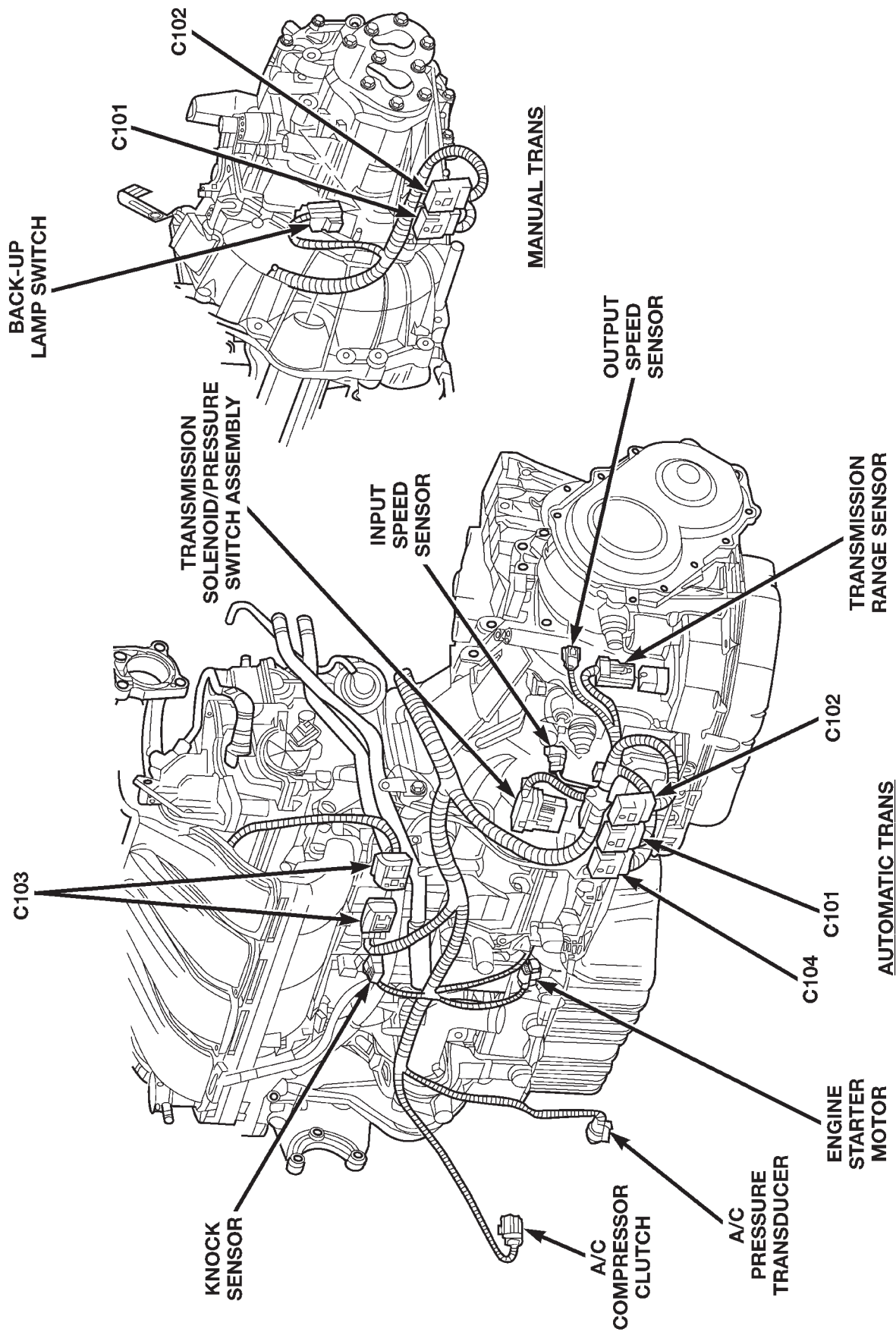
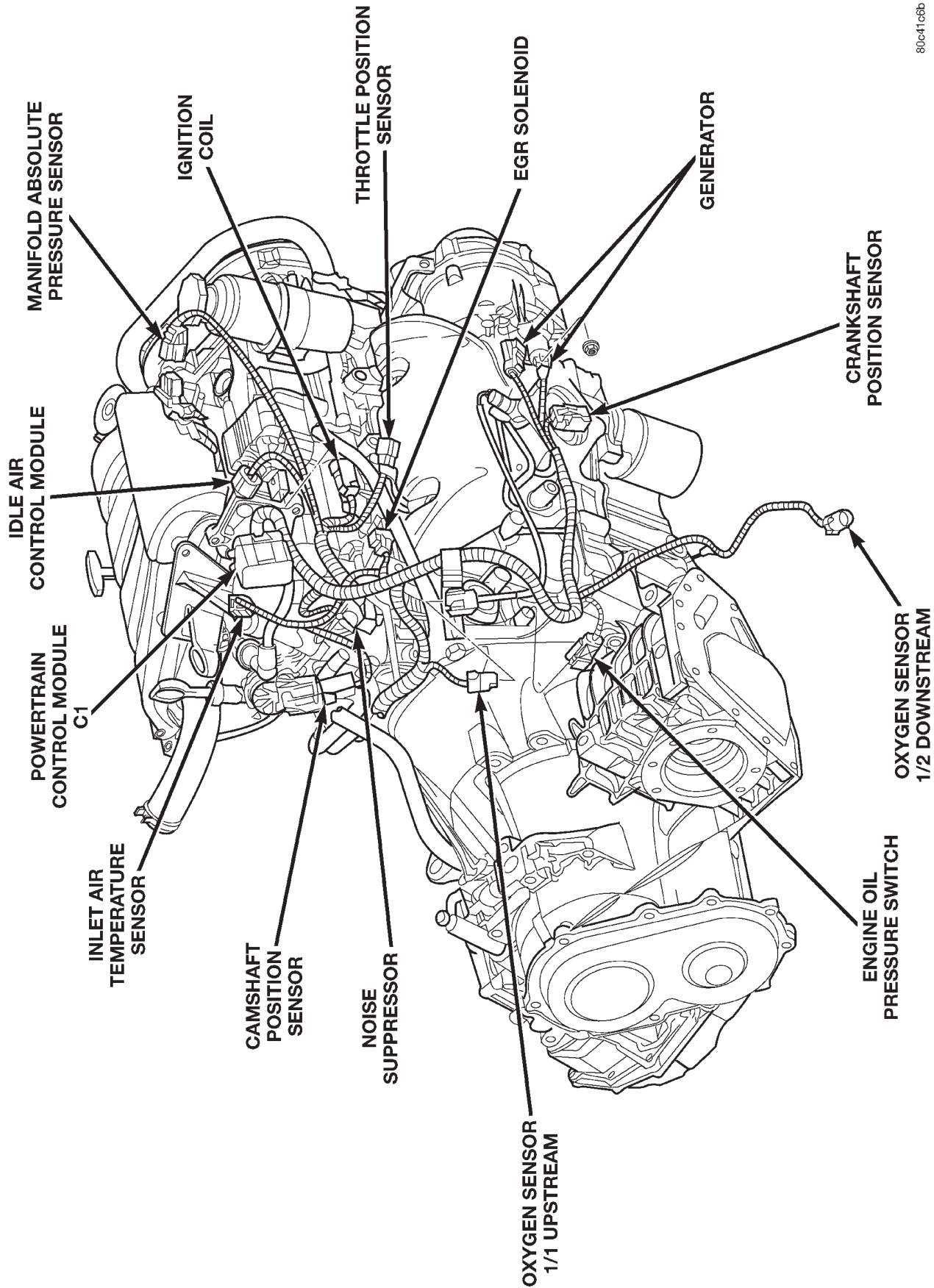


Fig. 3 ENGINE TRANSMISSION ASSEMBLY



## CONNECTOR/GROUND LOCATIONS (Continued)

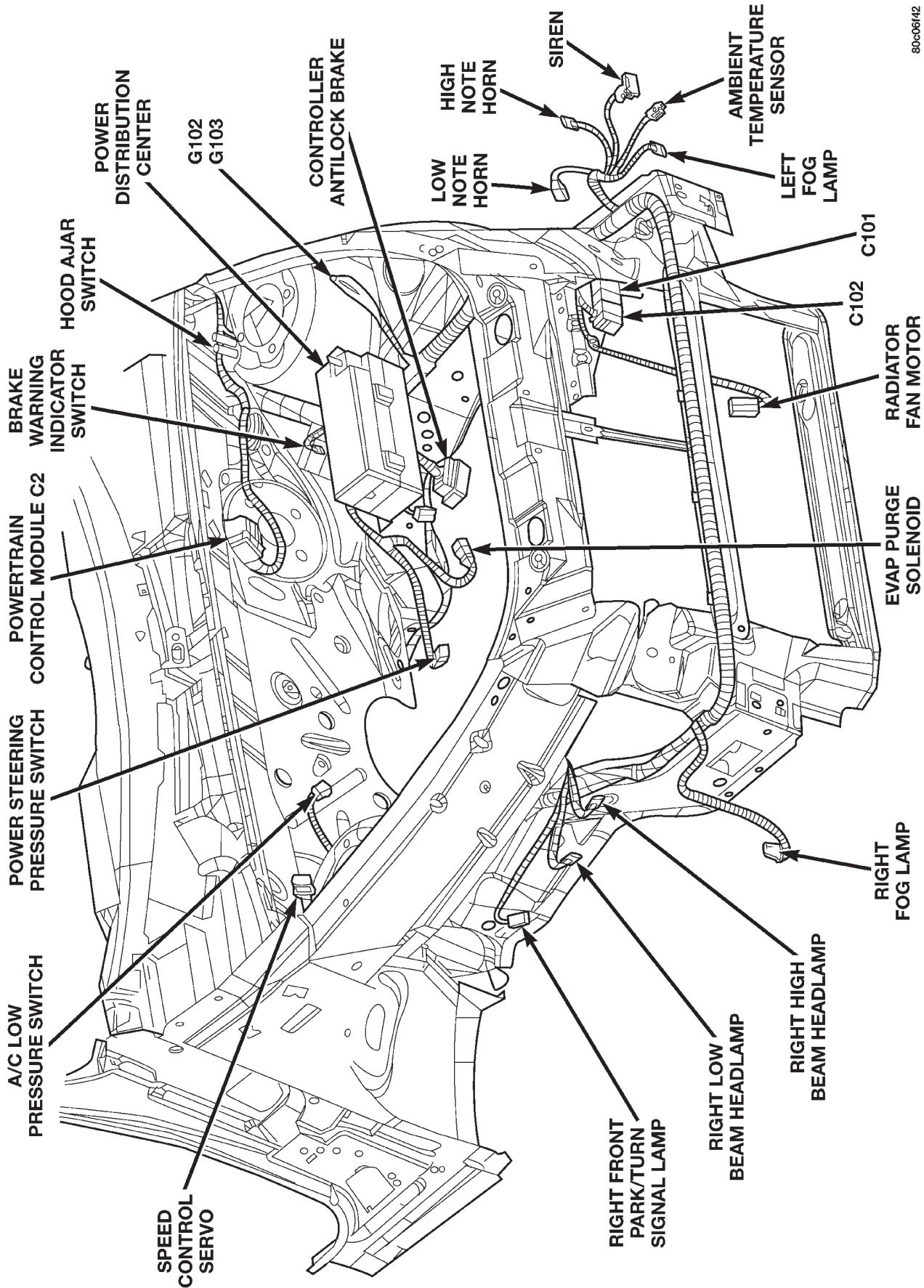


80c41c6b

Fig. 4 ENGINE TRANSMISSION ASSEMBLY



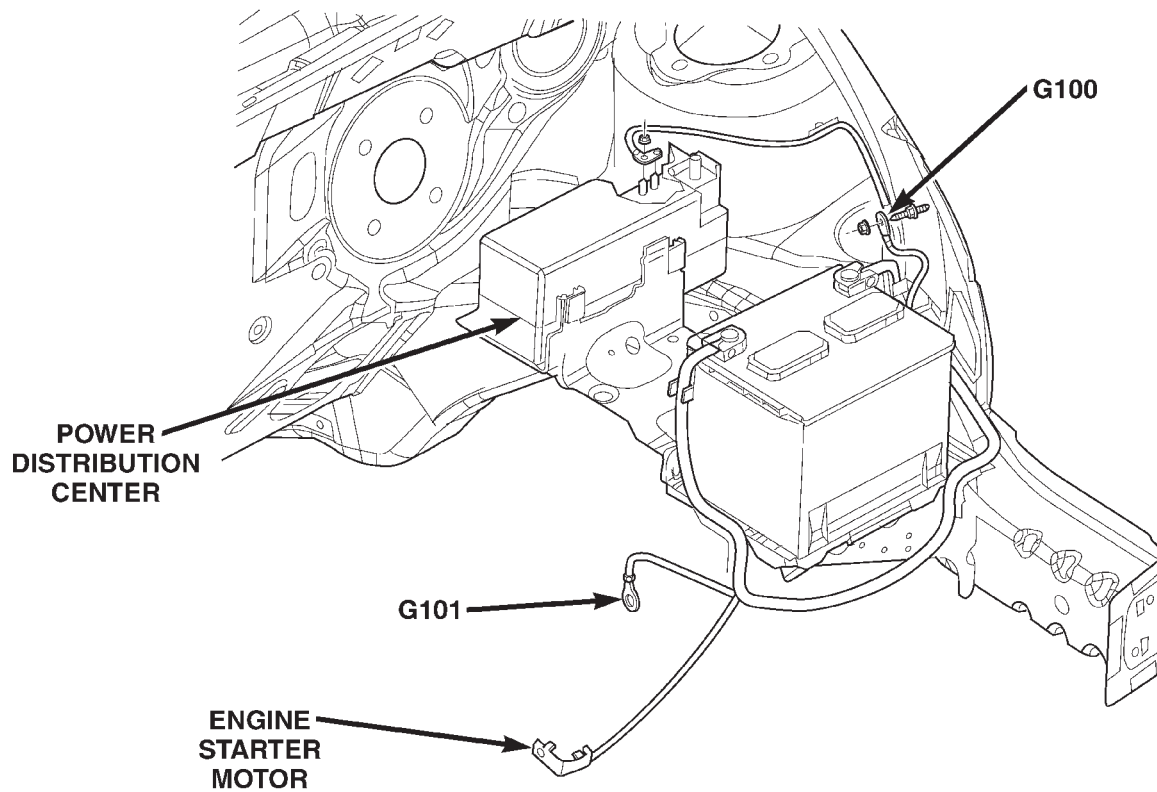
## CONNECTOR/GROUND LOCATIONS (Continued)



80c06142

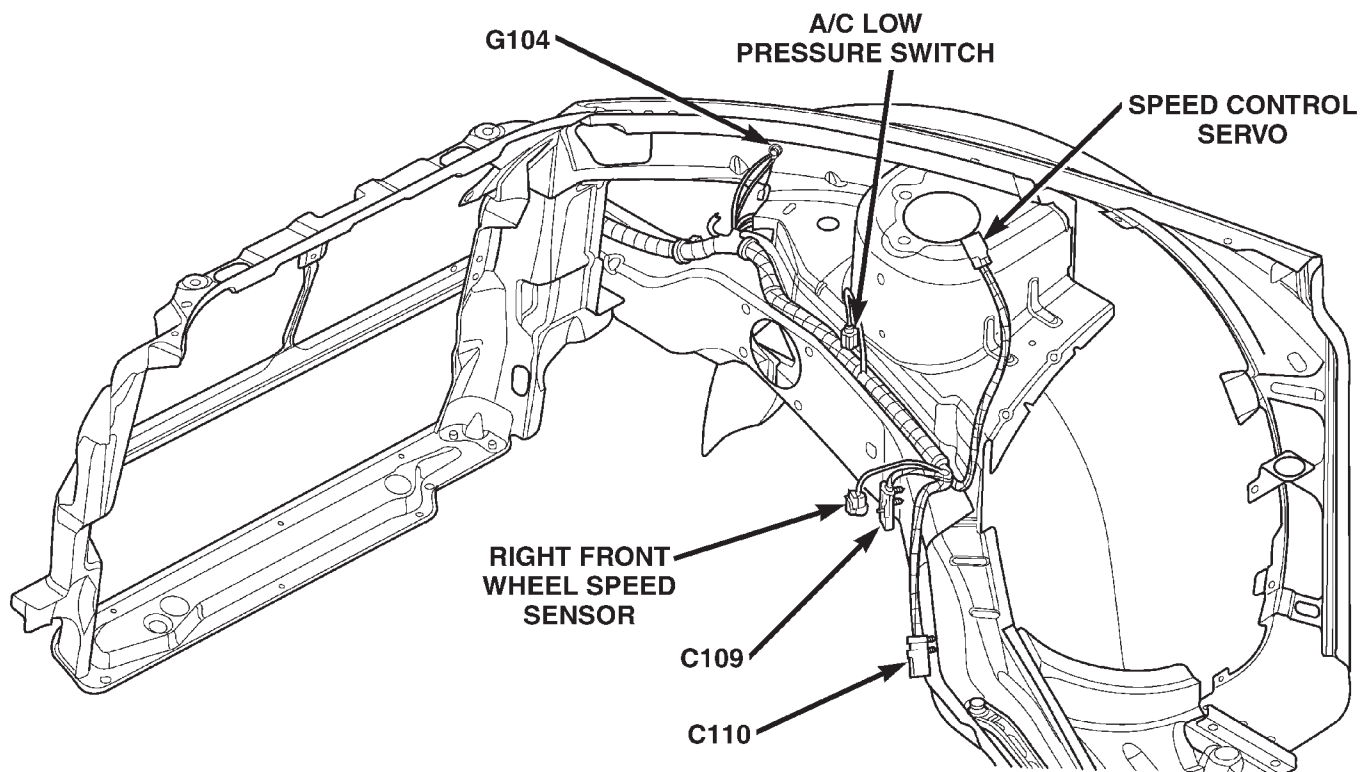
Fig. 5 ENGINE COMPARTMENT

## CONNECTOR/GROUND LOCATIONS (Continued)



**Fig. 6 LEFT SIDE ENGINE COMPARTMENT**

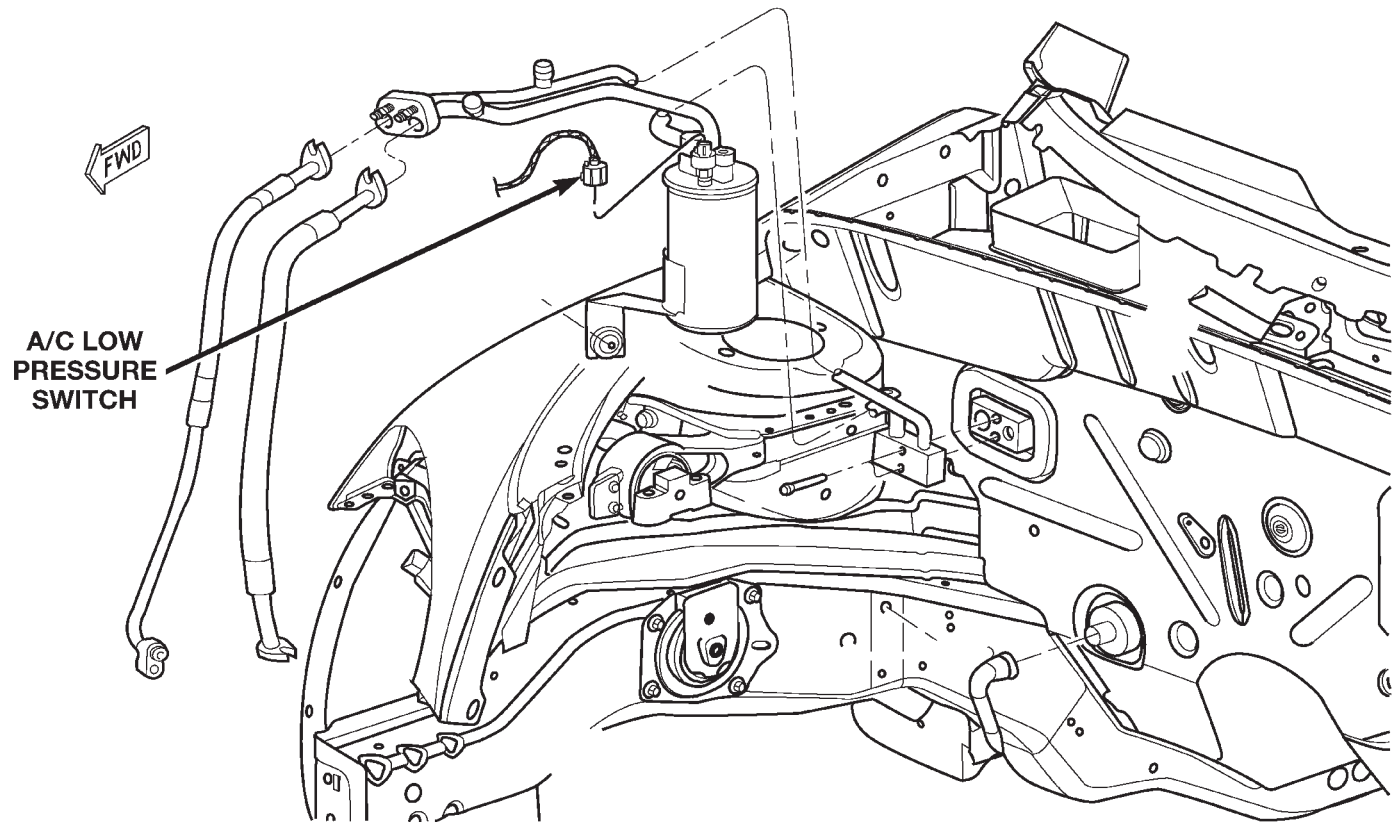
80c06f50



**Fig. 7 RIGHT SIDE ENGINE COMPARTMENT**

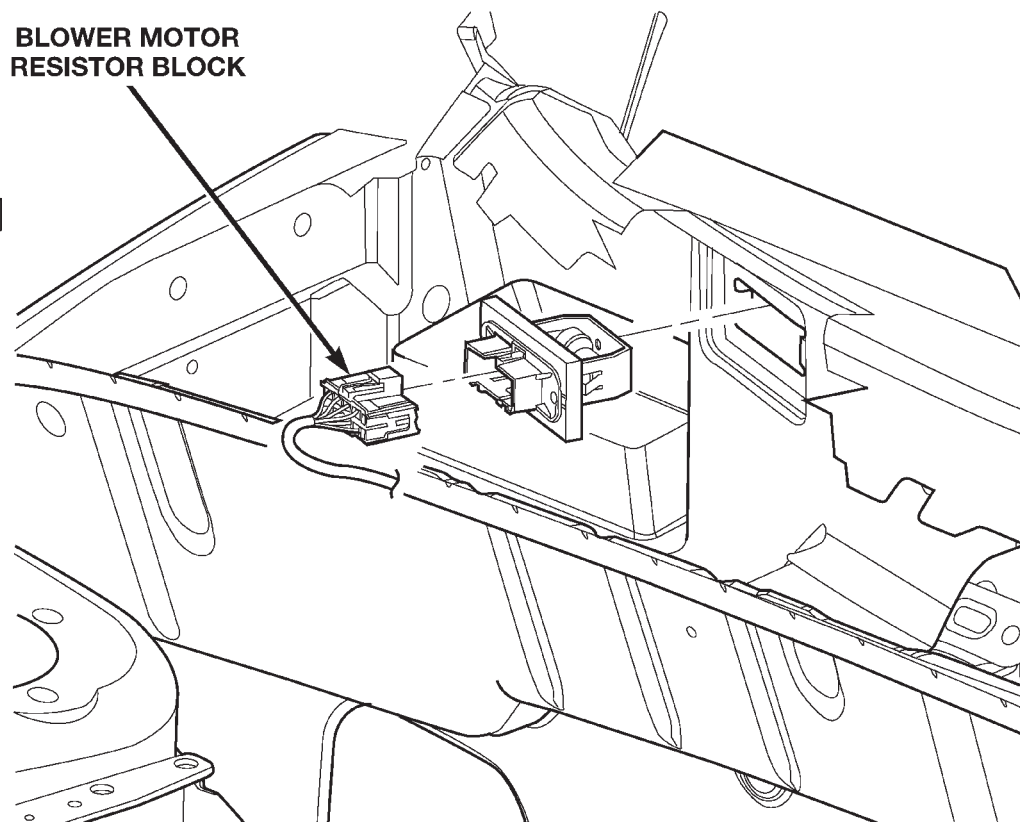
80c07007

## CONNECTOR/GROUND LOCATIONS (Continued)



80c07008

**Fig. 8 RIGHT REAR ENGINE COMPARTMENT**



80c0700b

**Fig. 9 RIGHT COWL PANEL**

## CONNECTOR/GROUND LOCATIONS (Continued)

80c41c6d

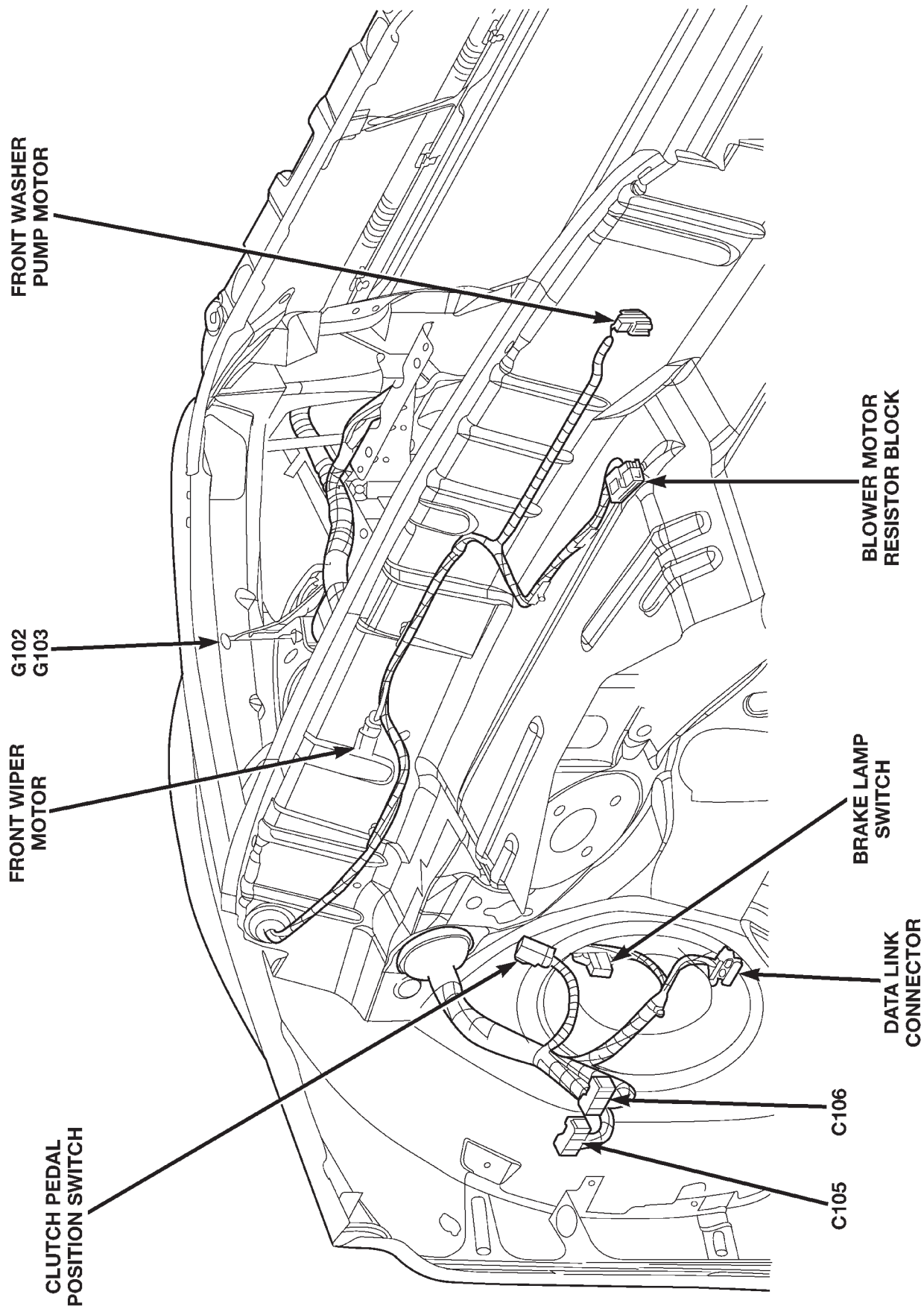


Fig. 10 LEFT SIDE COWL PANEL

## CONNECTOR/GROUND LOCATIONS (Continued)

80c06f51

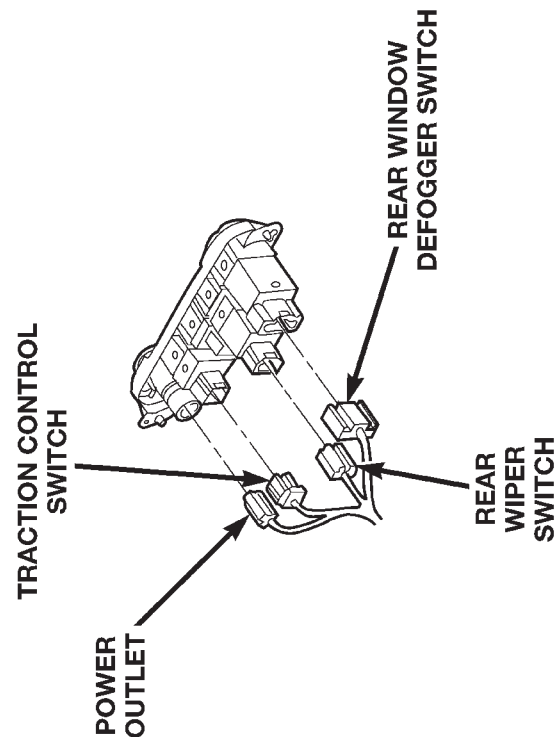
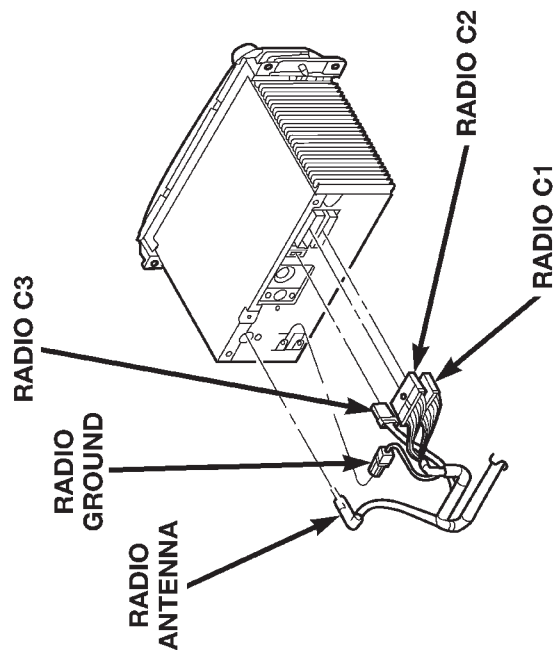
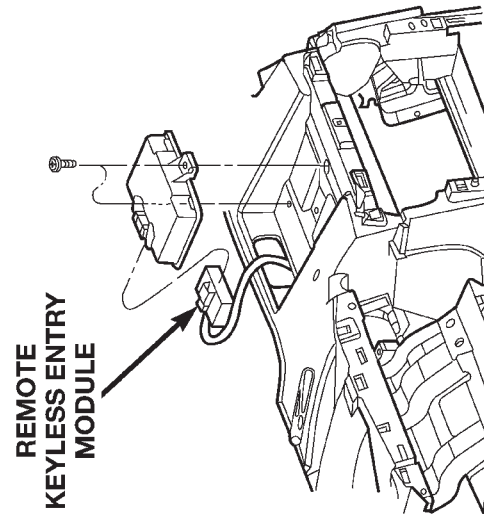
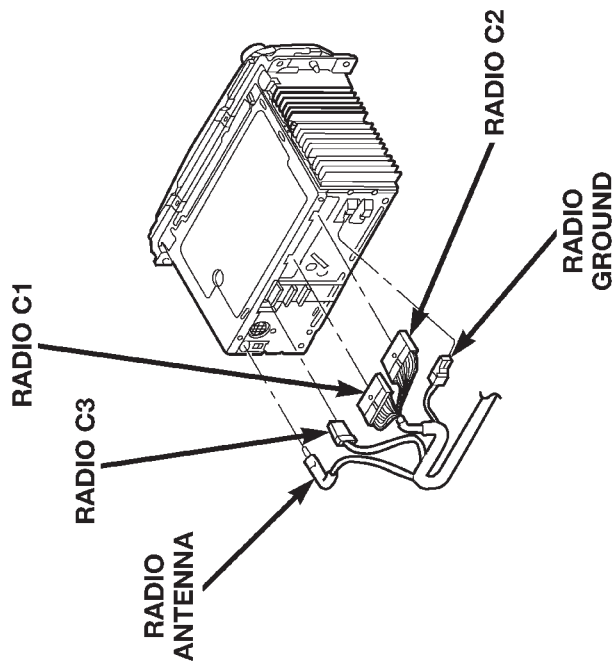


Fig. 11 RADIO



## CONNECTOR/GROUND LOCATIONS (Continued)

80c41cbf

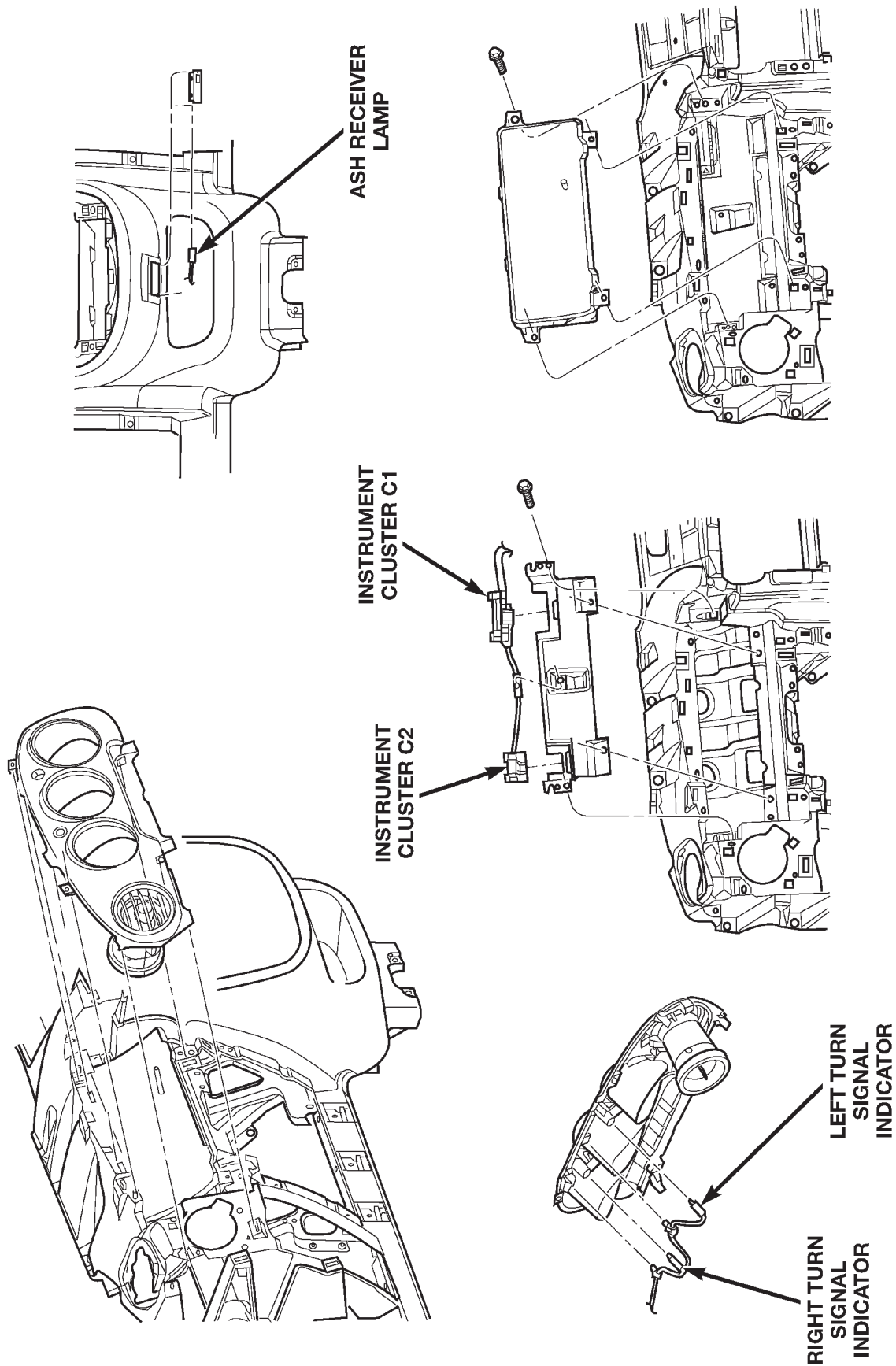
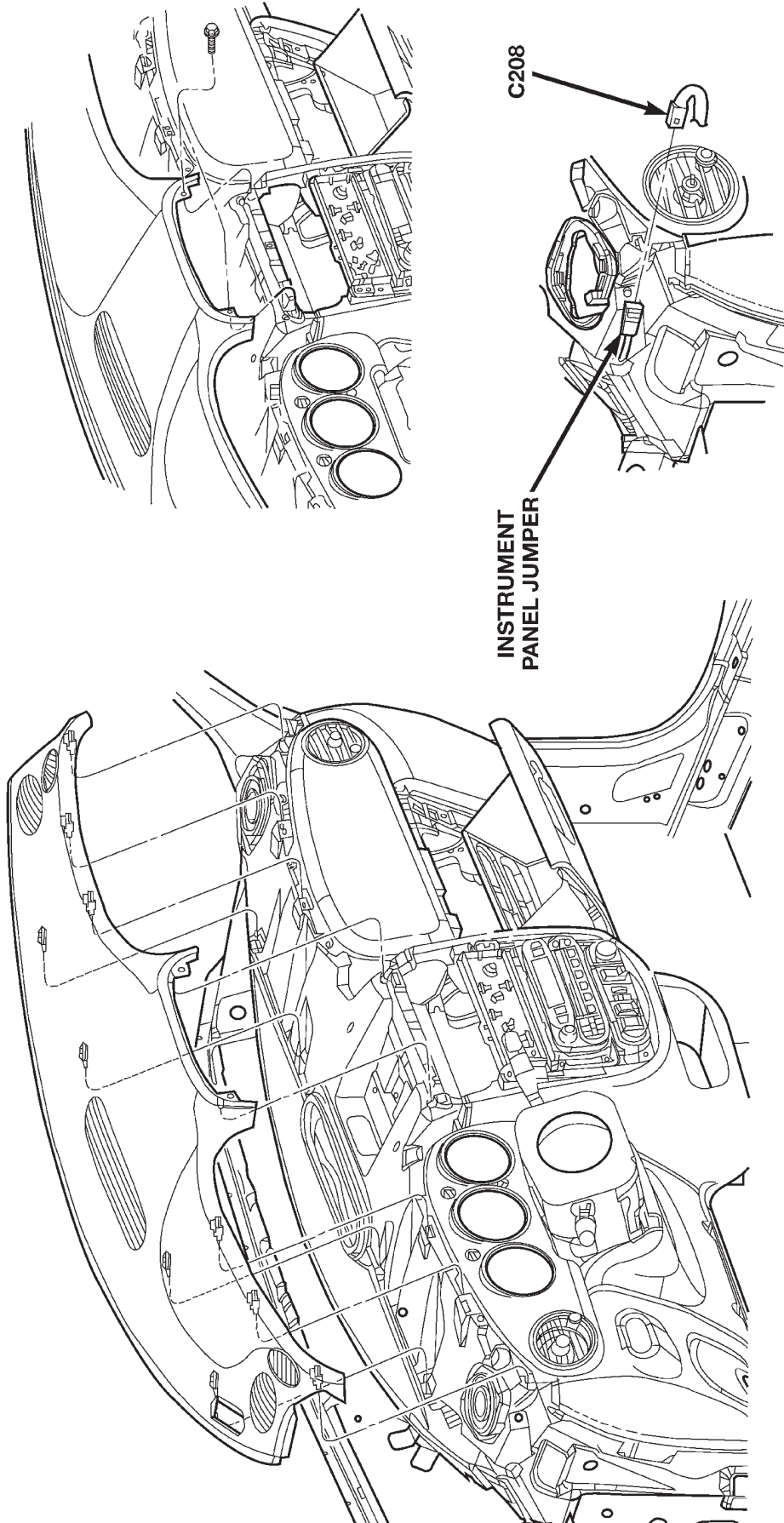


Fig. 12 INSTRUMENT CLUSTER

## CONNECTOR/GROUND LOCATIONS (Continued)



80c-41cc1

Fig. 13 INSTRUMENT PANEL JUMPER

## CONNECTOR/GROUND LOCATIONS (Continued)

80c06f52

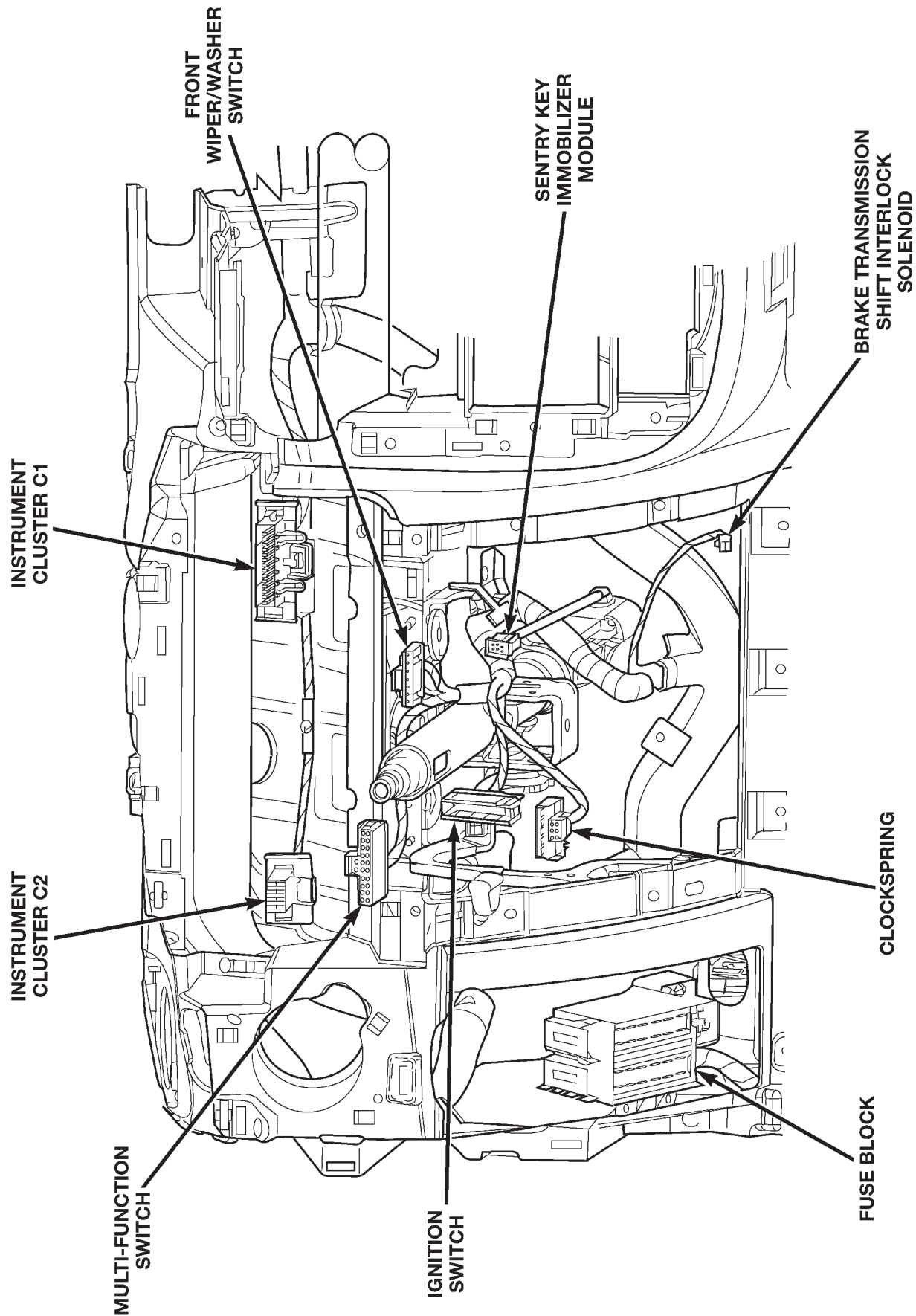
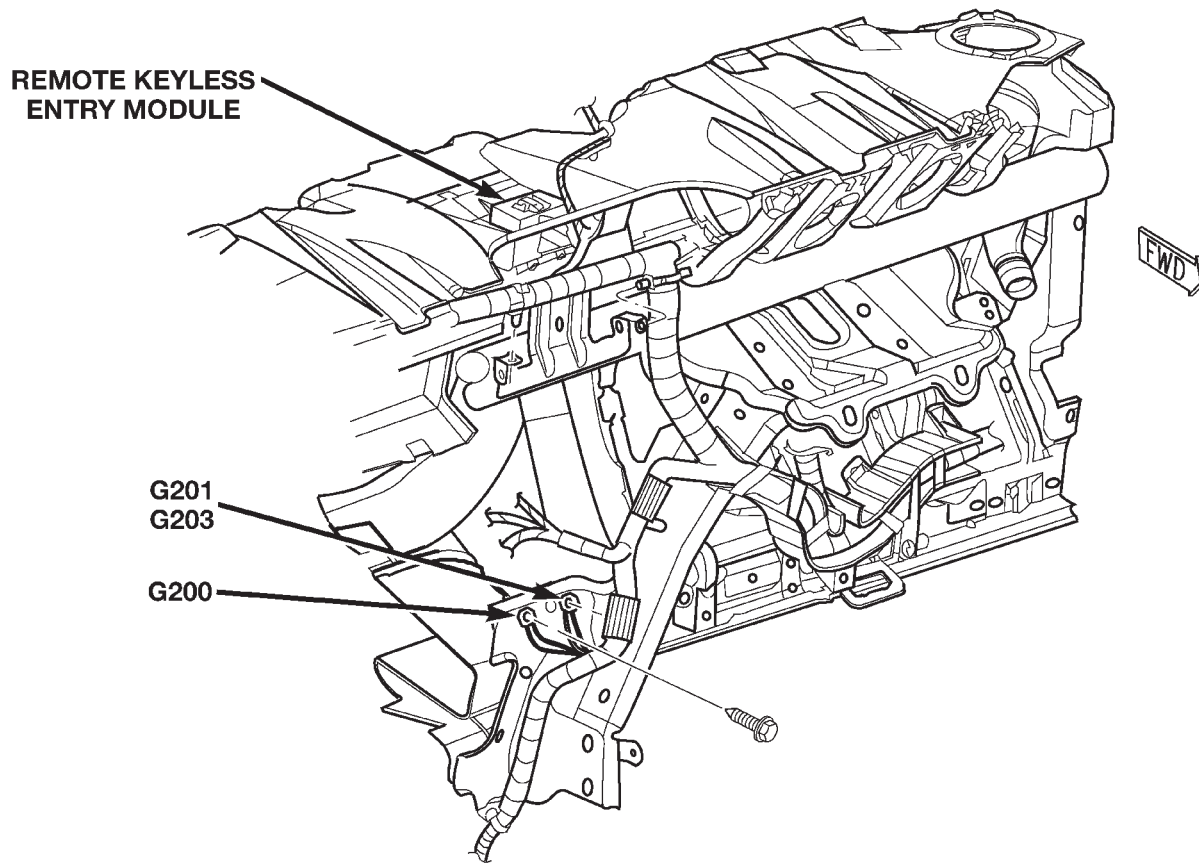


Fig. 14 LEFT SIDE INSTRUMENT PANEL



## CONNECTOR/GROUND LOCATIONS (Continued)



80c0700c

*Fig. 15 REAR CENTER OF INSTRUMENT PANEL*

## CONNECTOR/GROUND LOCATIONS (Continued)

80c06f53

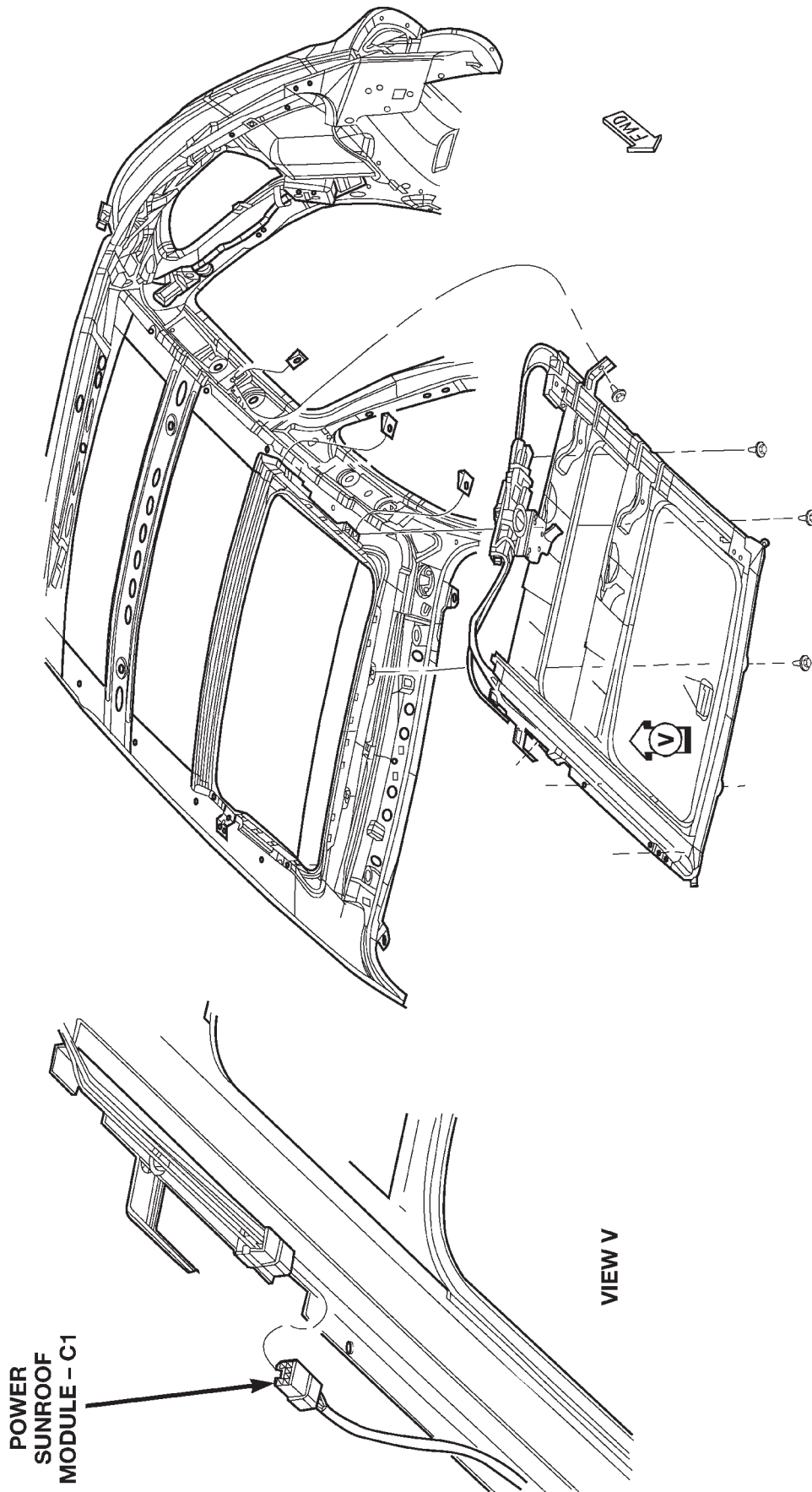


Fig. 16 SUNROOF

## CONNECTOR/GROUND LOCATIONS (Continued)

80c06f54

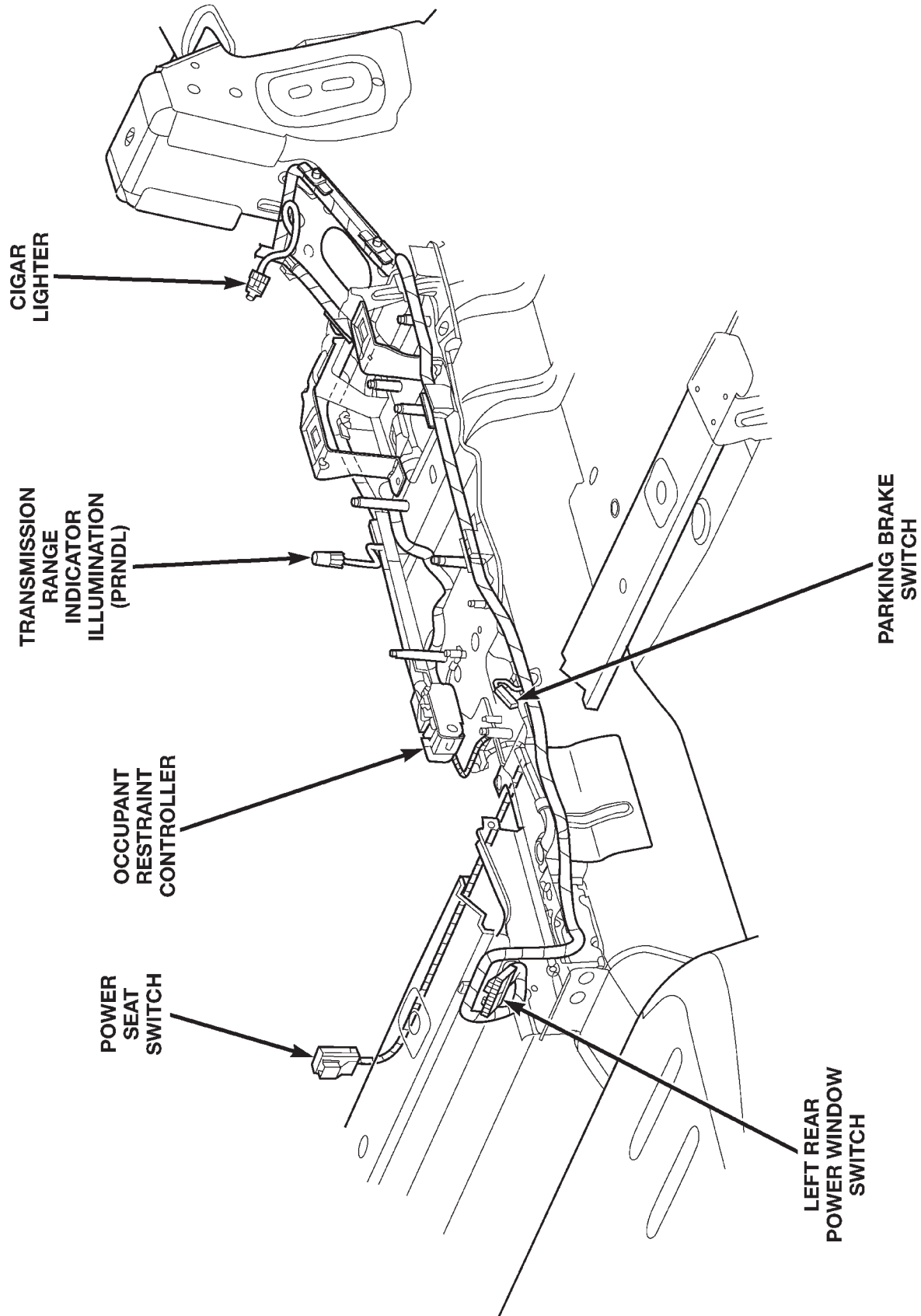
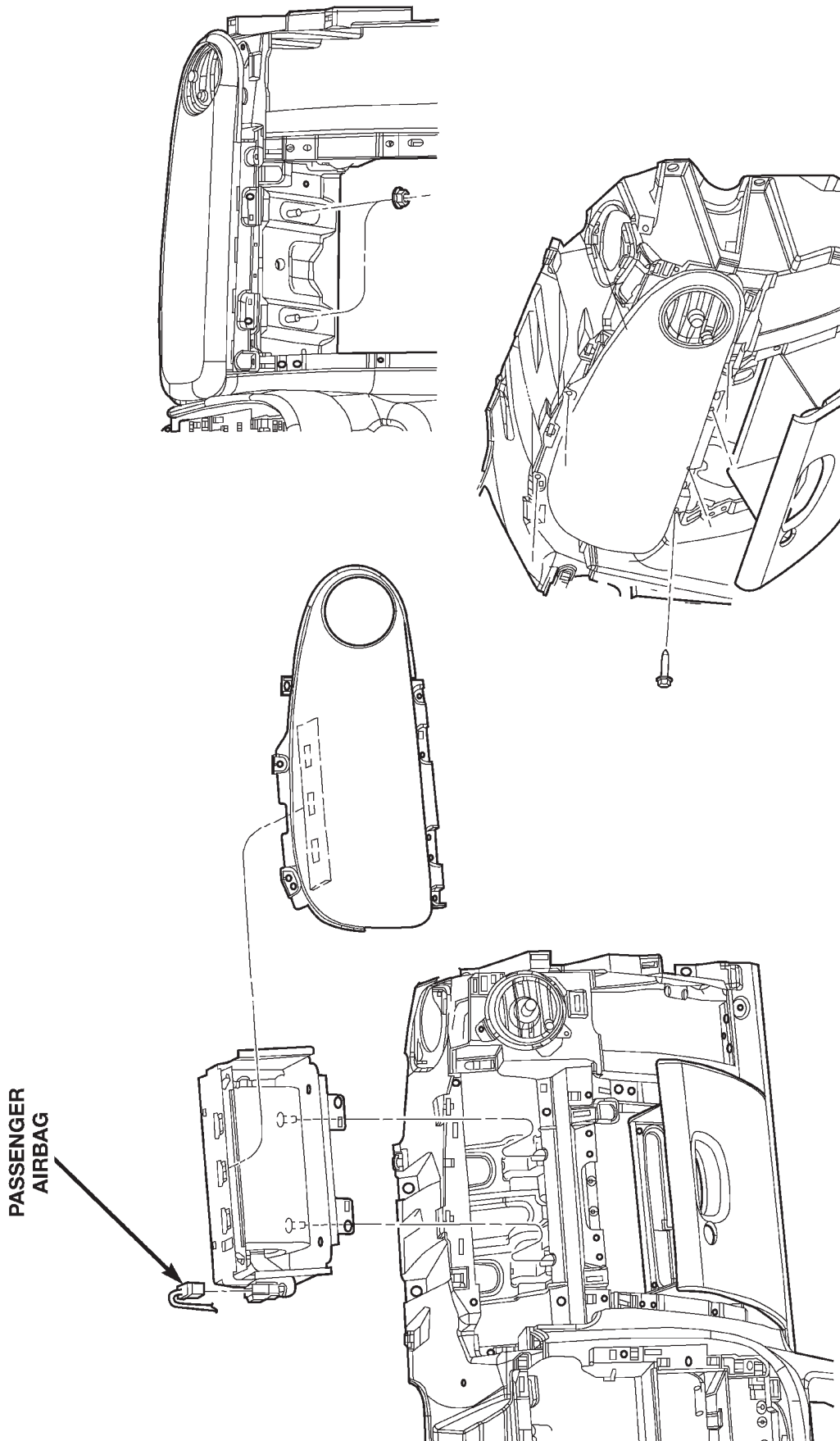


Fig. 17 CENTER CONSOLE

## CONNECTOR/GROUND LOCATIONS (Continued)



80c41cc6

Fig. 18 PASSENGER SIDE AIRBAG

## CONNECTOR/GROUND LOCATIONS (Continued)

80c06/43

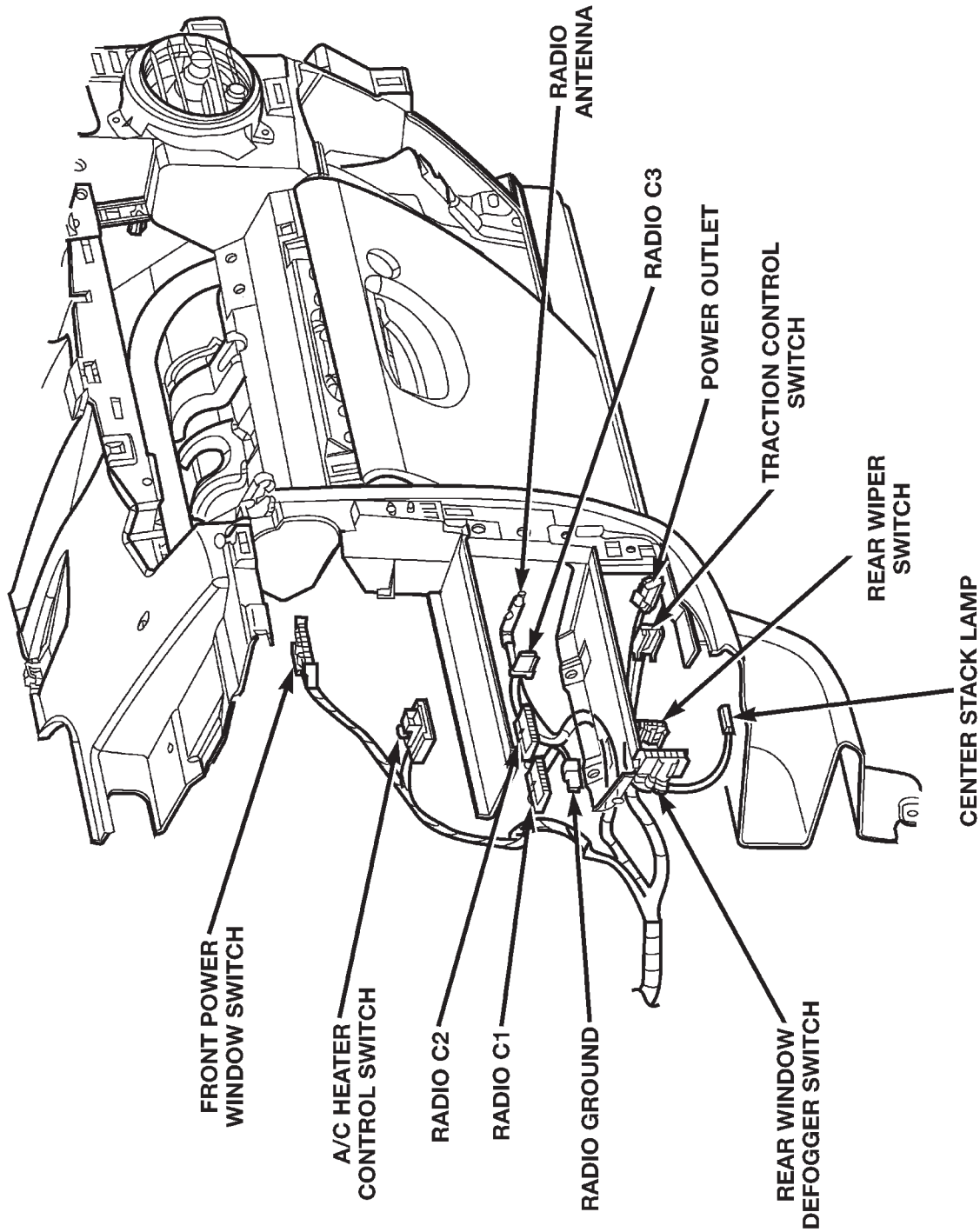


Fig. 19 CENTER OF INSTRUMENT PANEL

## CONNECTOR/GROUND LOCATIONS (Continued)

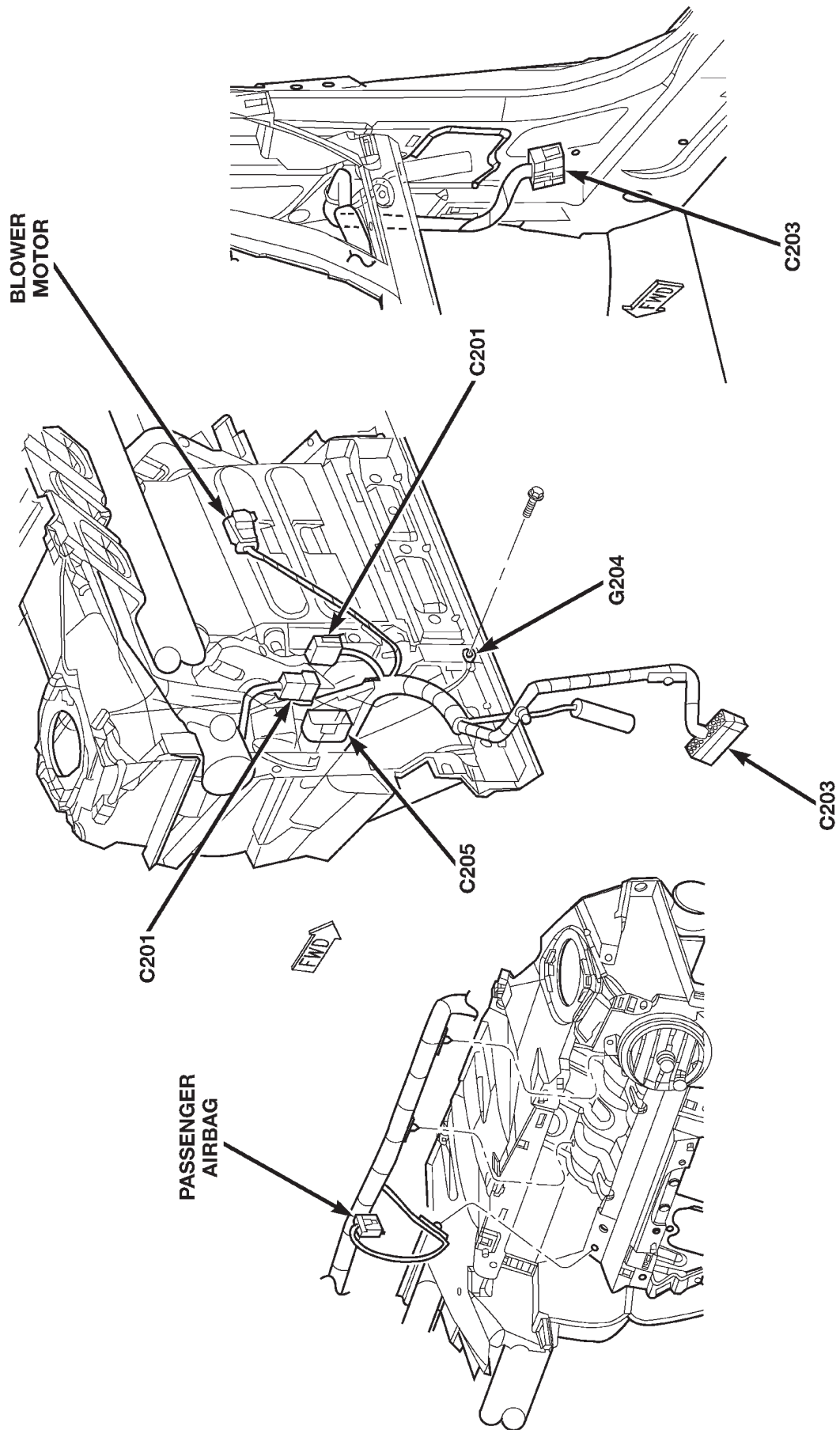
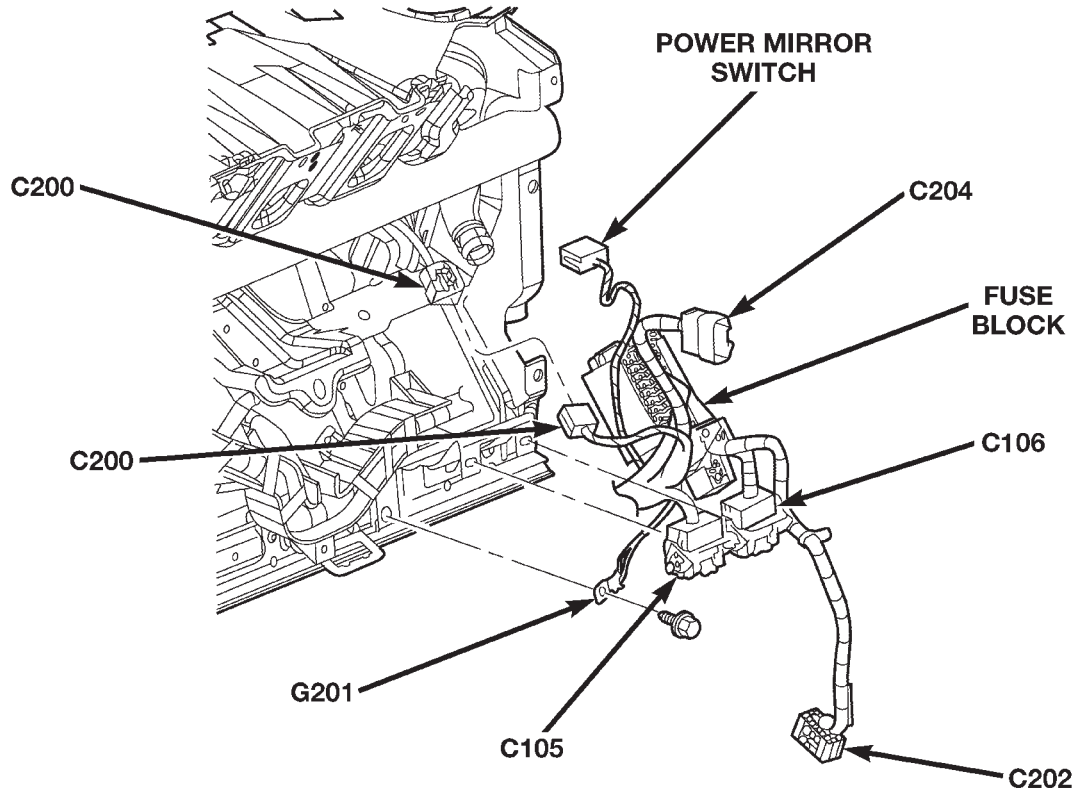


Fig. 20 RIGHT REAR INSTRUMENT PANEL

## CONNECTOR/GROUND LOCATIONS (Continued)



80c0700f

*Fig. 21 LEFT REAR OF INSTRUMENT PANEL*



## CONNECTOR/GROUND LOCATIONS (Continued)

80c41cca

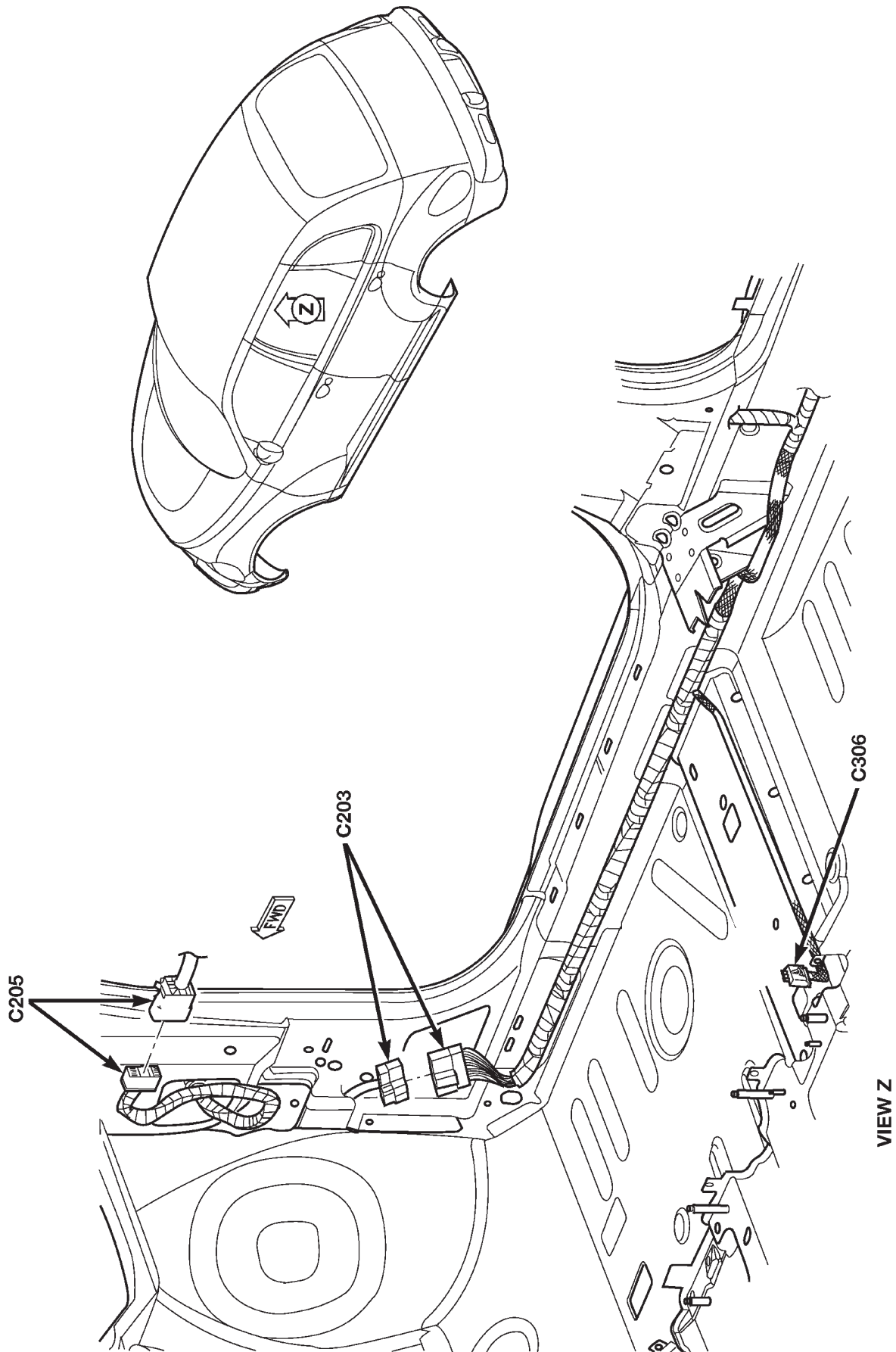
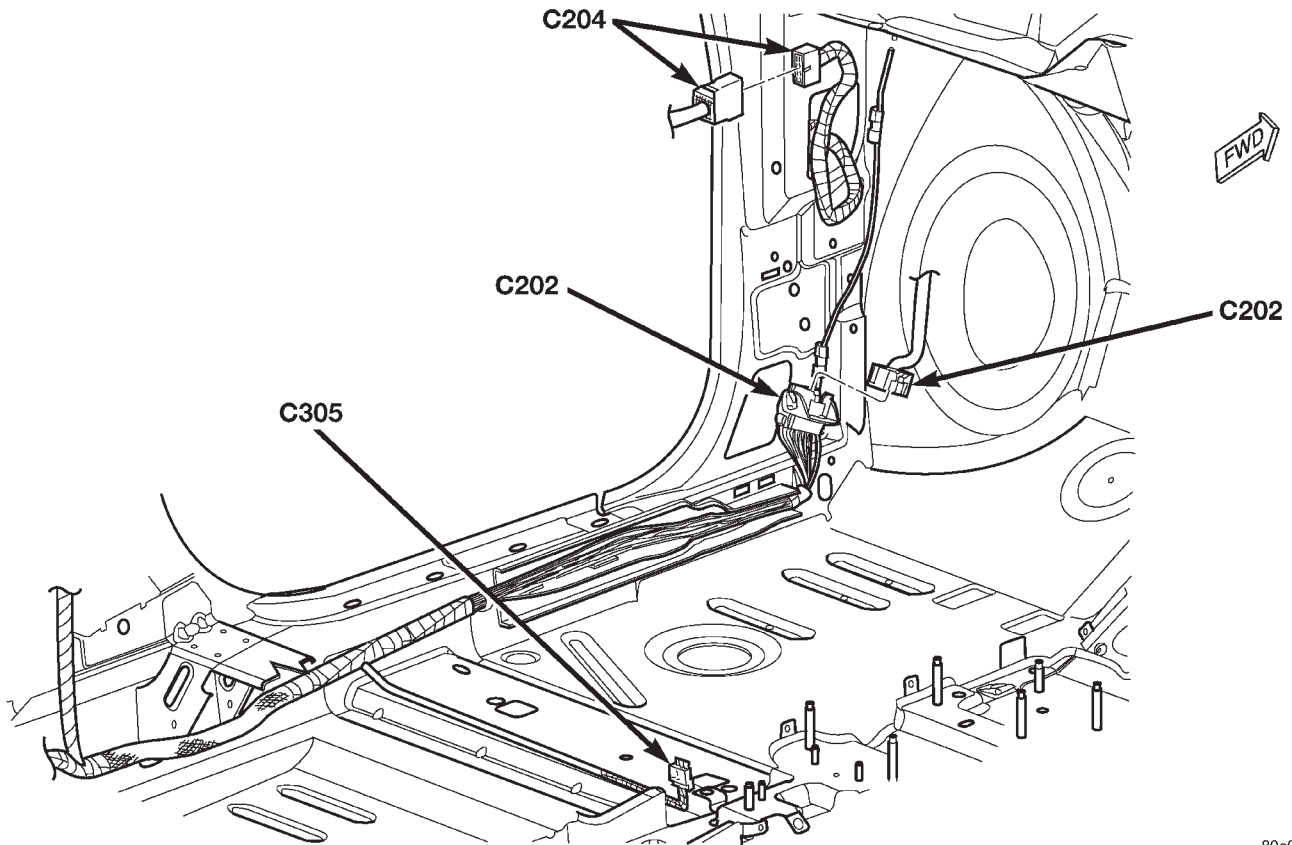


Fig. 22 RIGHT FRONT BODY

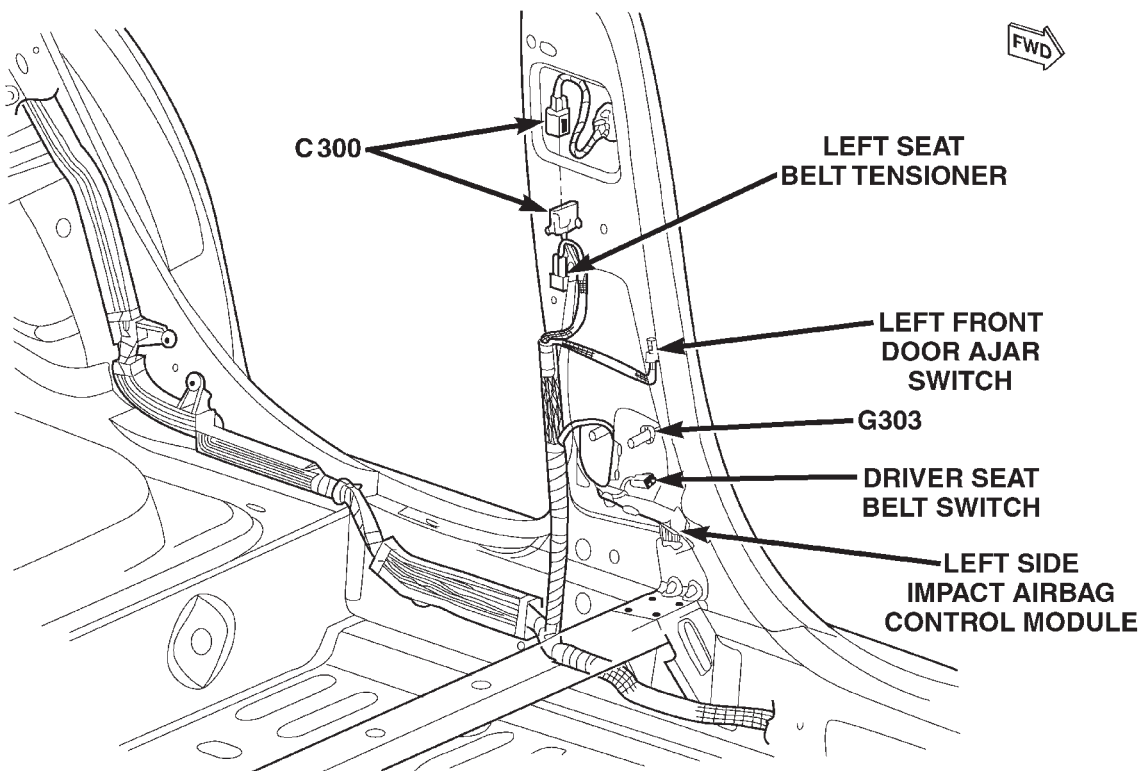


## CONNECTOR/GROUND LOCATIONS (Continued)



80c07016

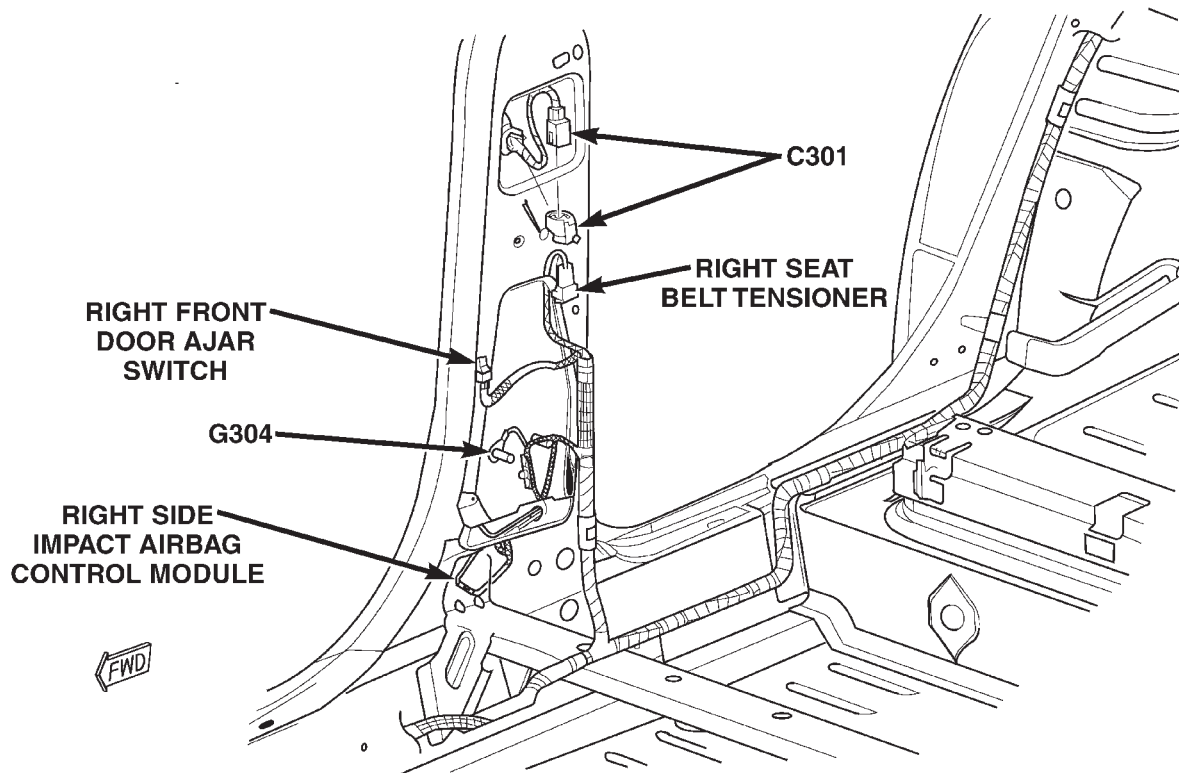
**Fig. 23 LEFT FRONT BODY**



80c06f56

**Fig. 24 LEFT SIDE BODY**

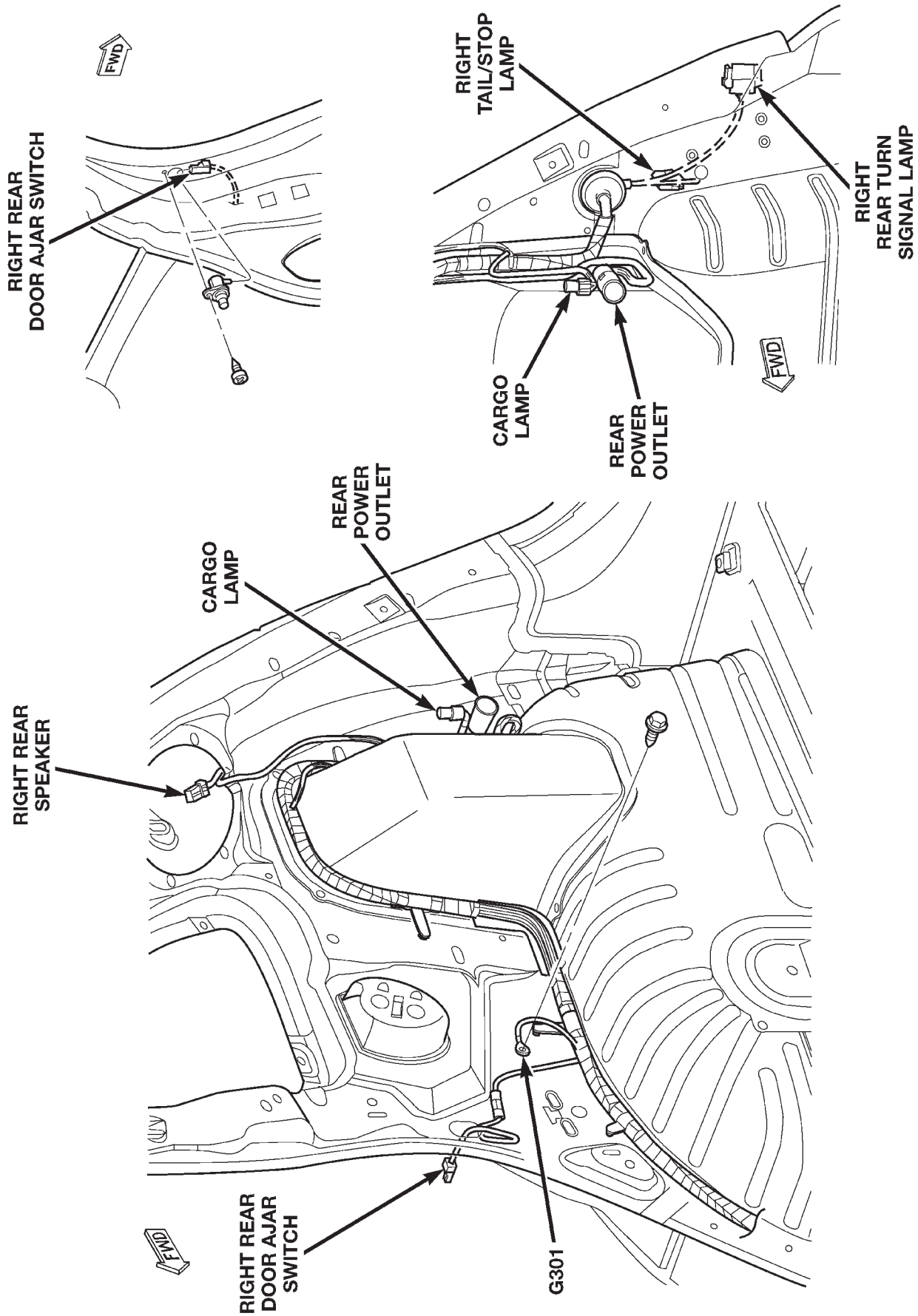
## CONNECTOR/GROUND LOCATIONS (Continued)



80c06f69

*Fig. 25 RIGHT REAR BODY*

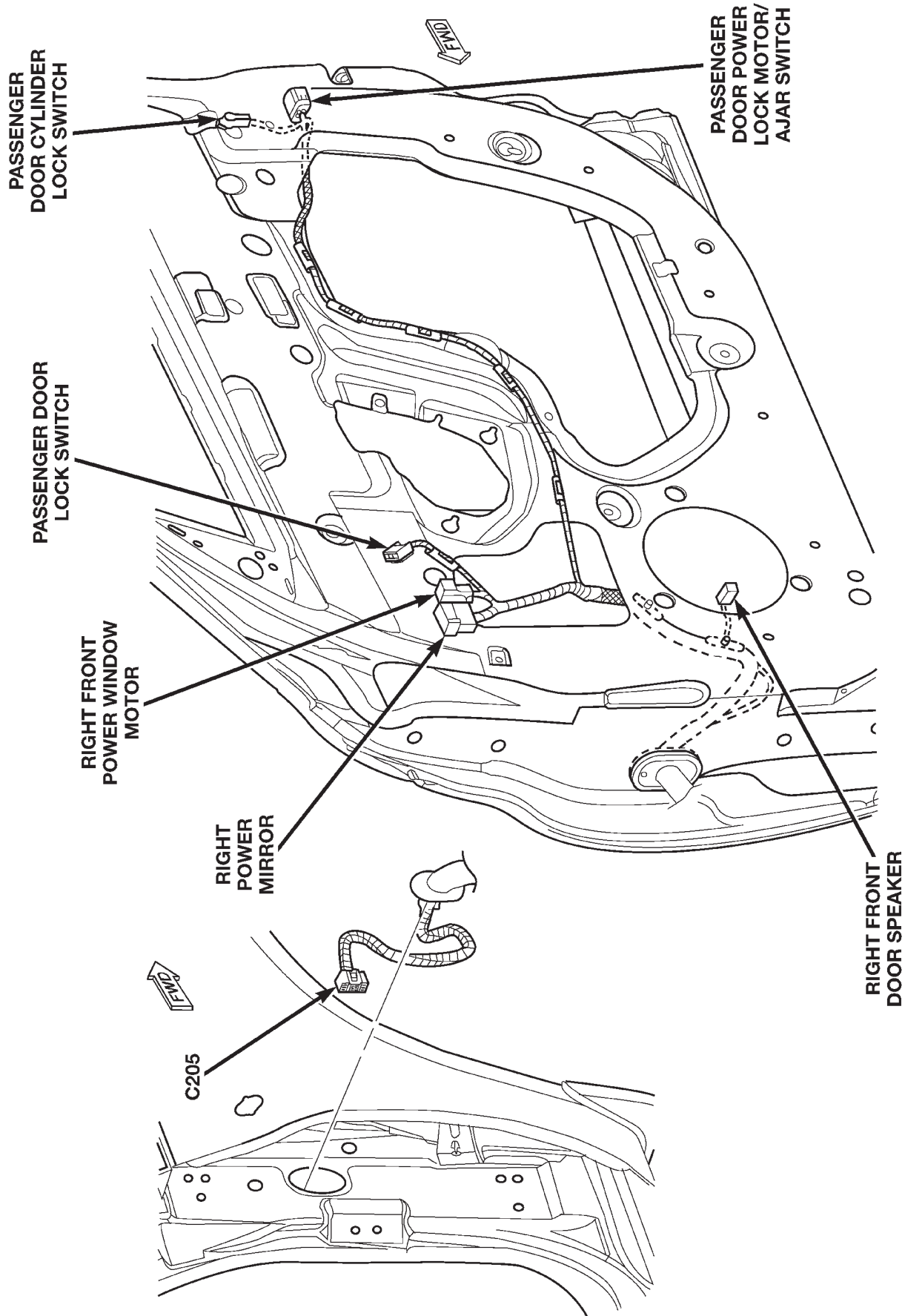
## CONNECTOR/GROUND LOCATIONS (Continued)



80c06157

Fig. 26 RIGHT REAR QUARTER

## CONNECTOR/GROUND LOCATIONS (Continued)



80c06f58

Fig. 27 RIGHT FRONT DOOR (LEFT FRONT DOOR SIMILAR)

## CONNECTOR/GROUND LOCATIONS (Continued)

80c08f59

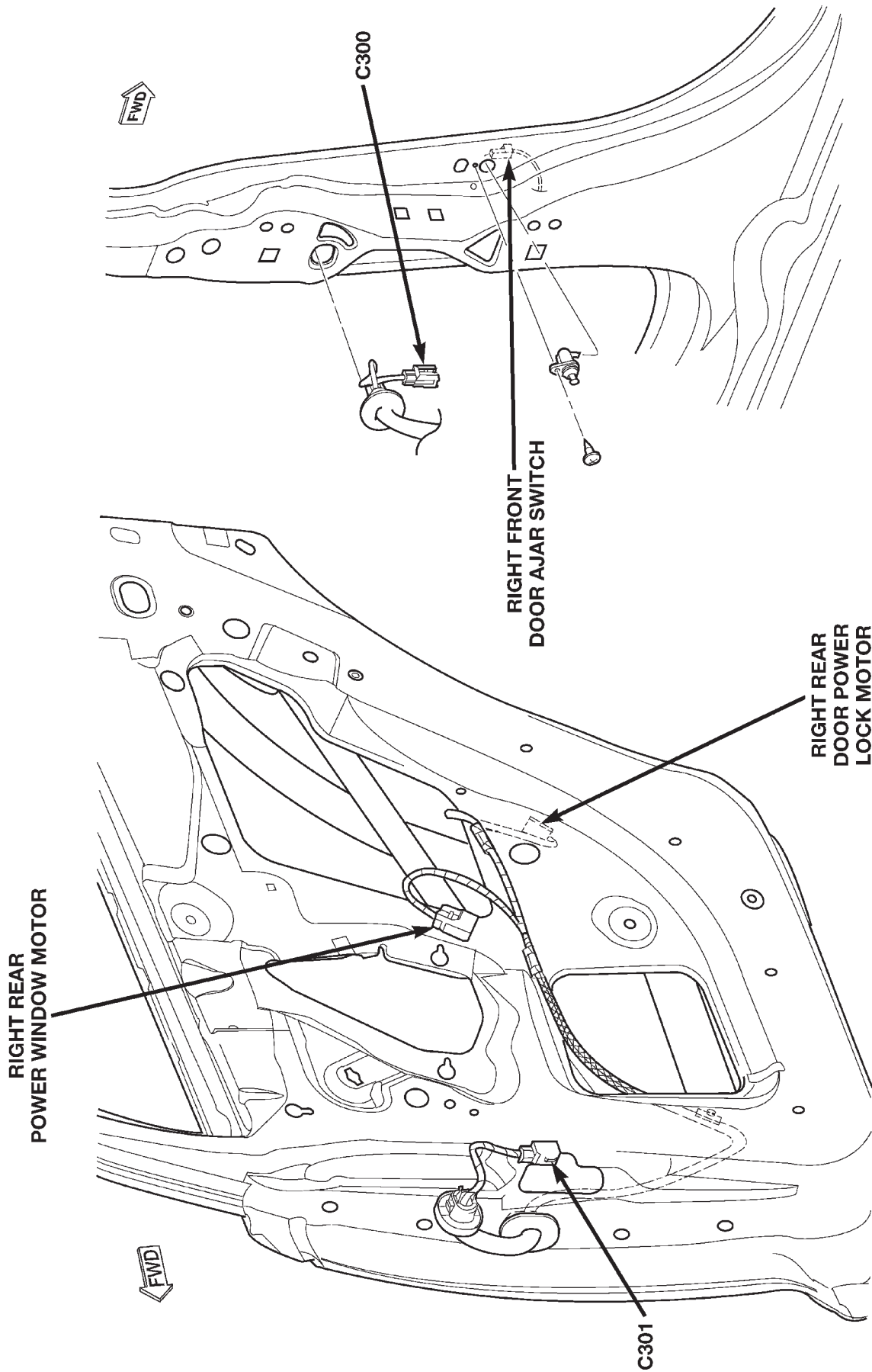
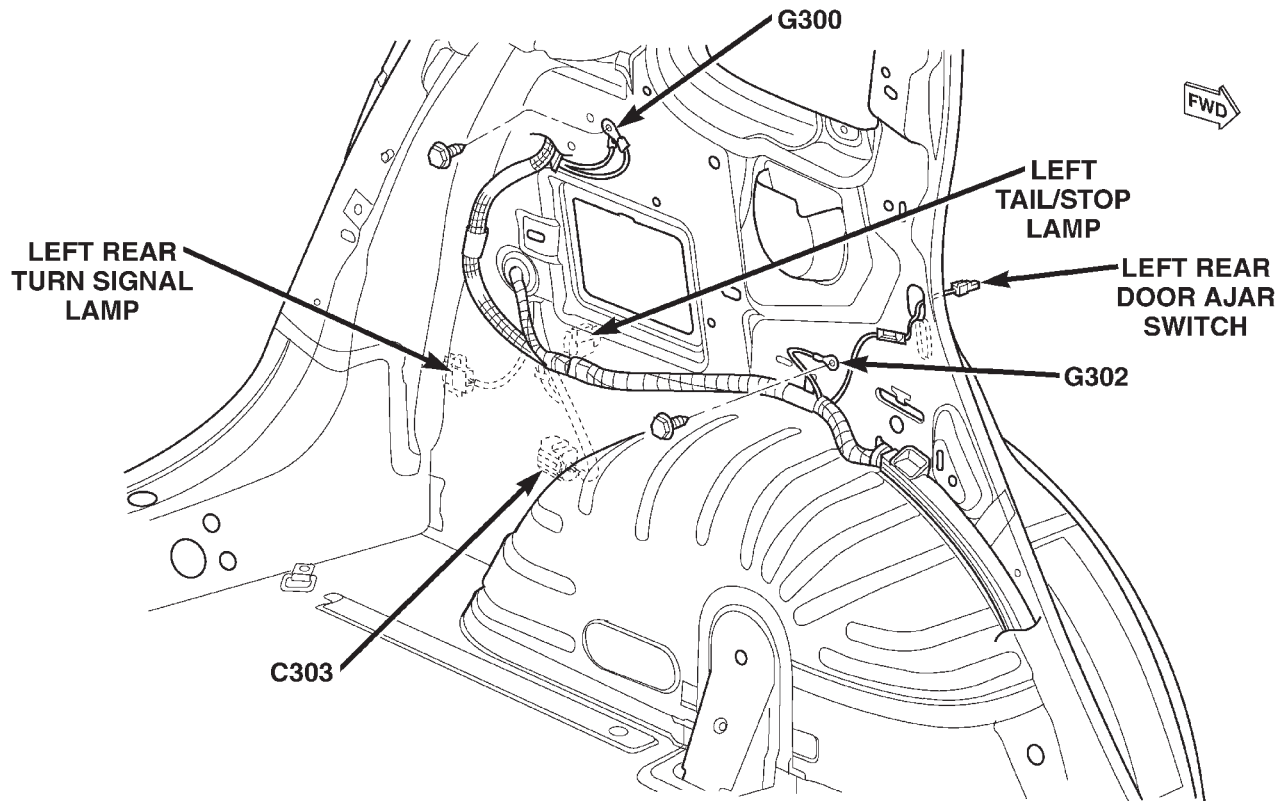


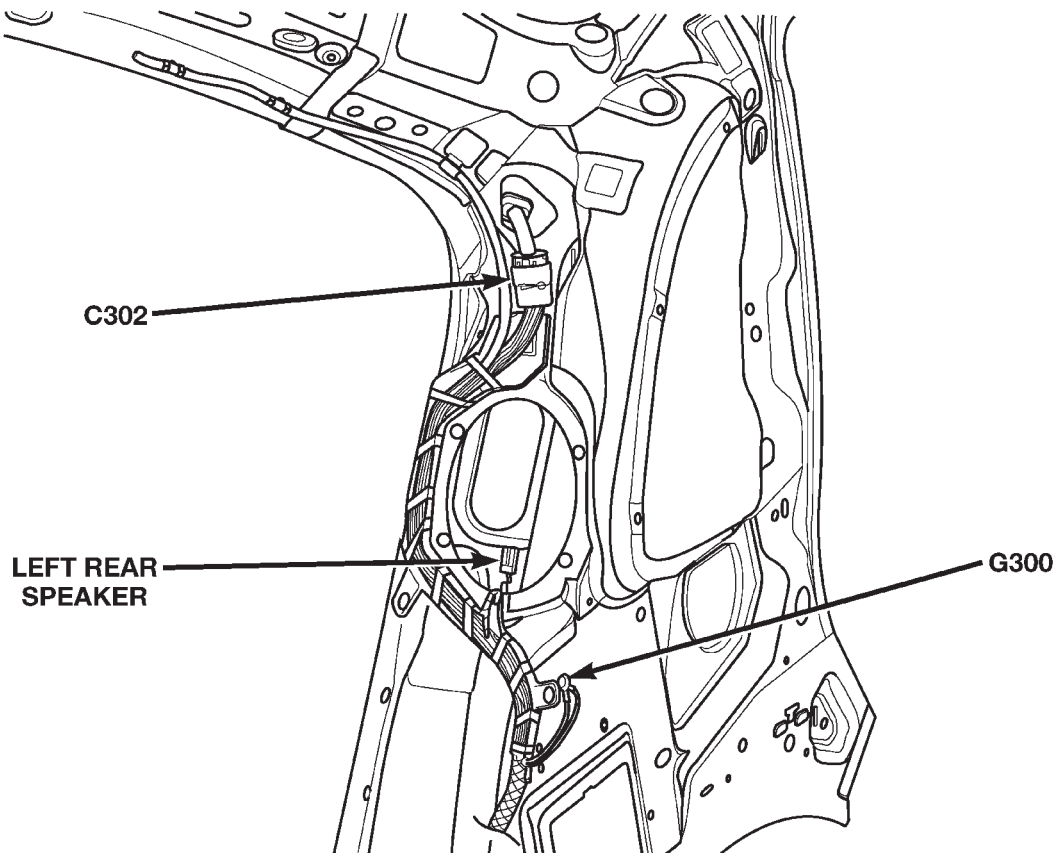
Fig. 28 RIGHT REAR DOOR

## CONNECTOR/GROUND LOCATIONS (Continued)



**Fig. 29 LEFT SIDE CARGO AREA**

80c07019



**Fig. 30 LEFT REAR SPEAKER**

80c06f60



## CONNECTOR/GROUND LOCATIONS (Continued)

80c06f61

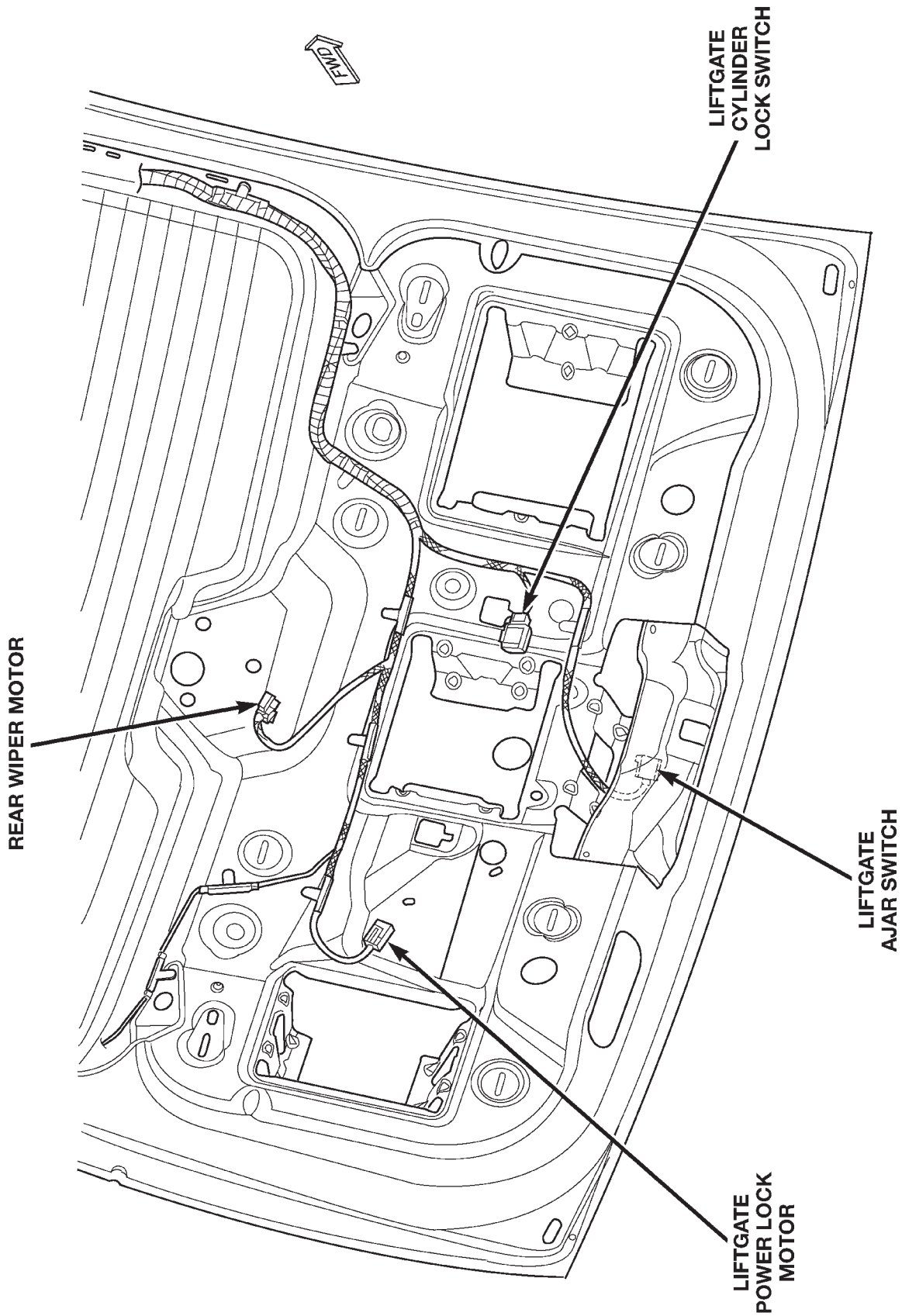
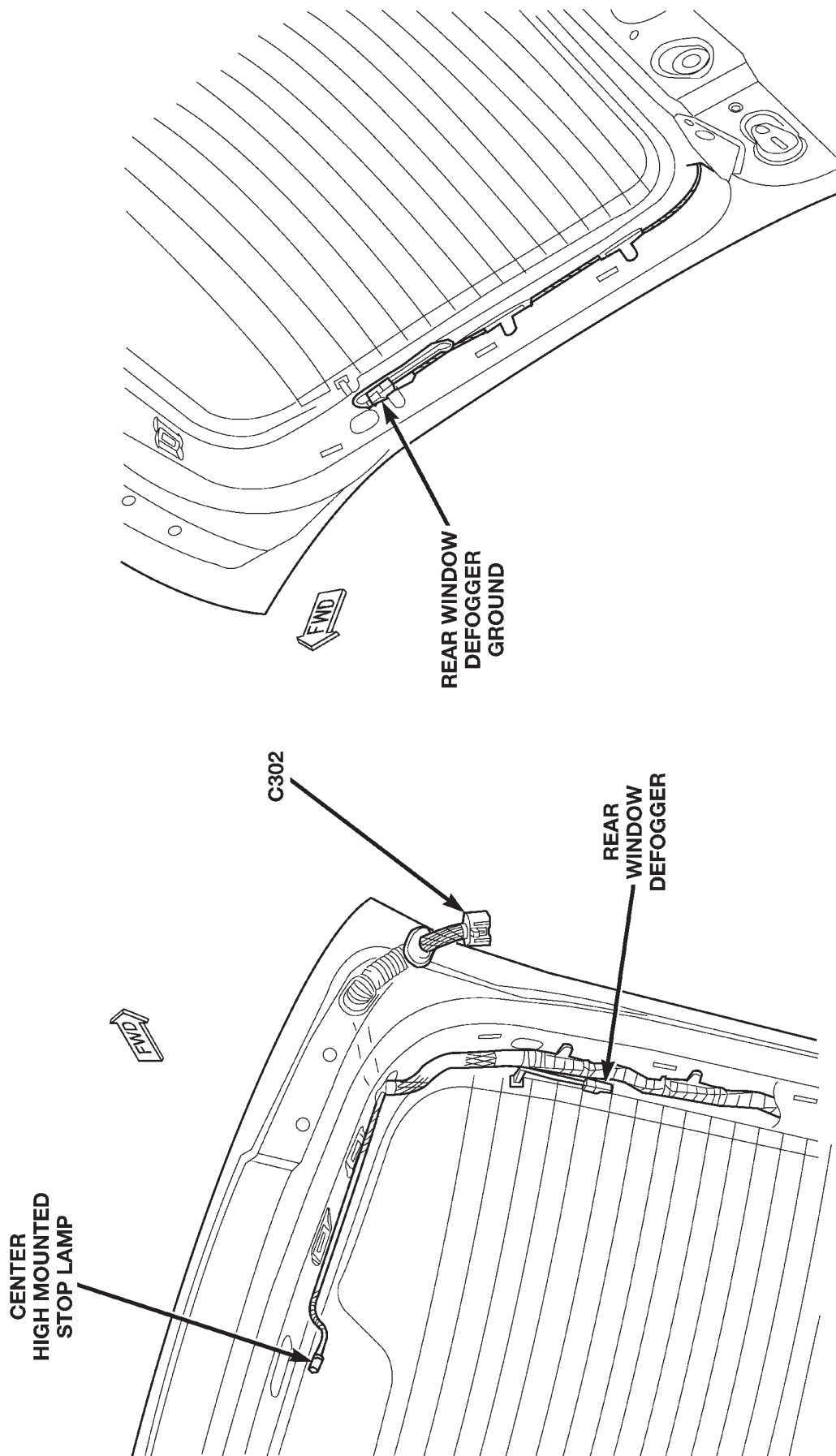


Fig. 31 LOWER LIFTGATE

## CONNECTOR/GROUND LOCATIONS (Continued)

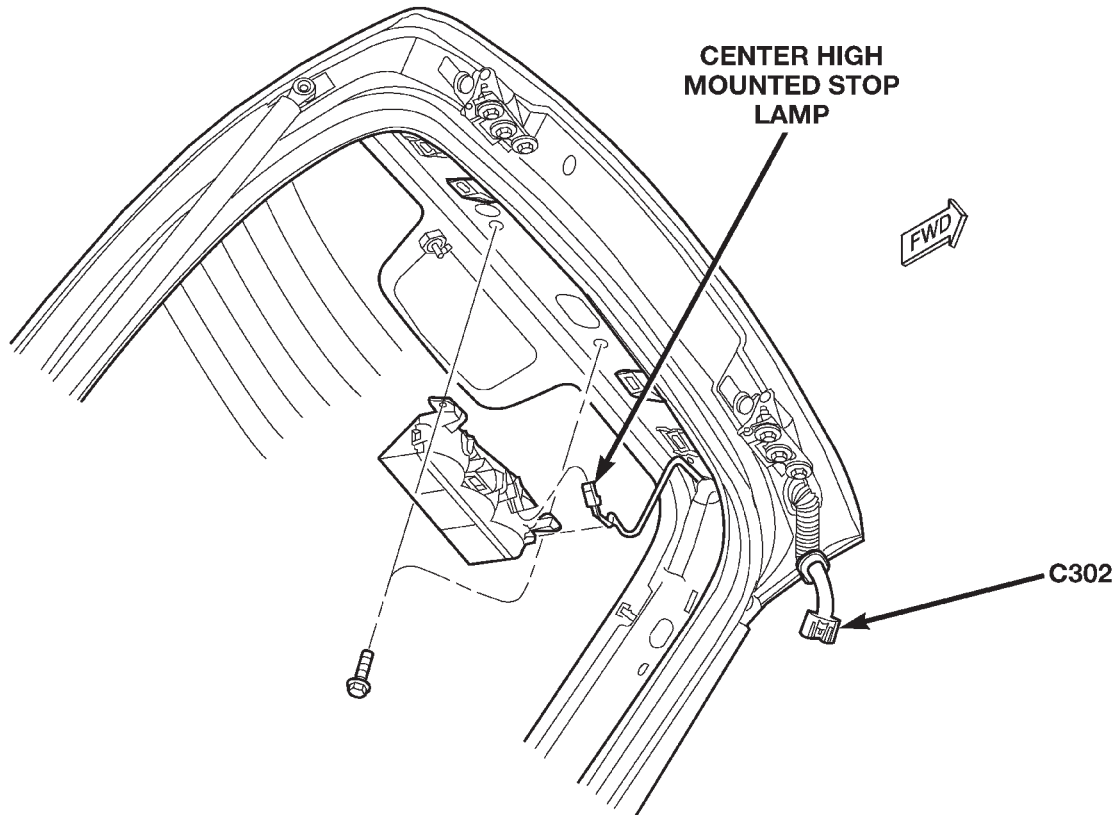


80c-41ccf

Fig. 32 HEATED REAR WINDOW



## CONNECTOR/GROUND LOCATIONS (Continued)



80c0701b

**Fig. 33 CENTER HIGH MOUNTED STOP LAMP**

## CONNECTOR/GROUND LOCATIONS (Continued)

80c41cd0

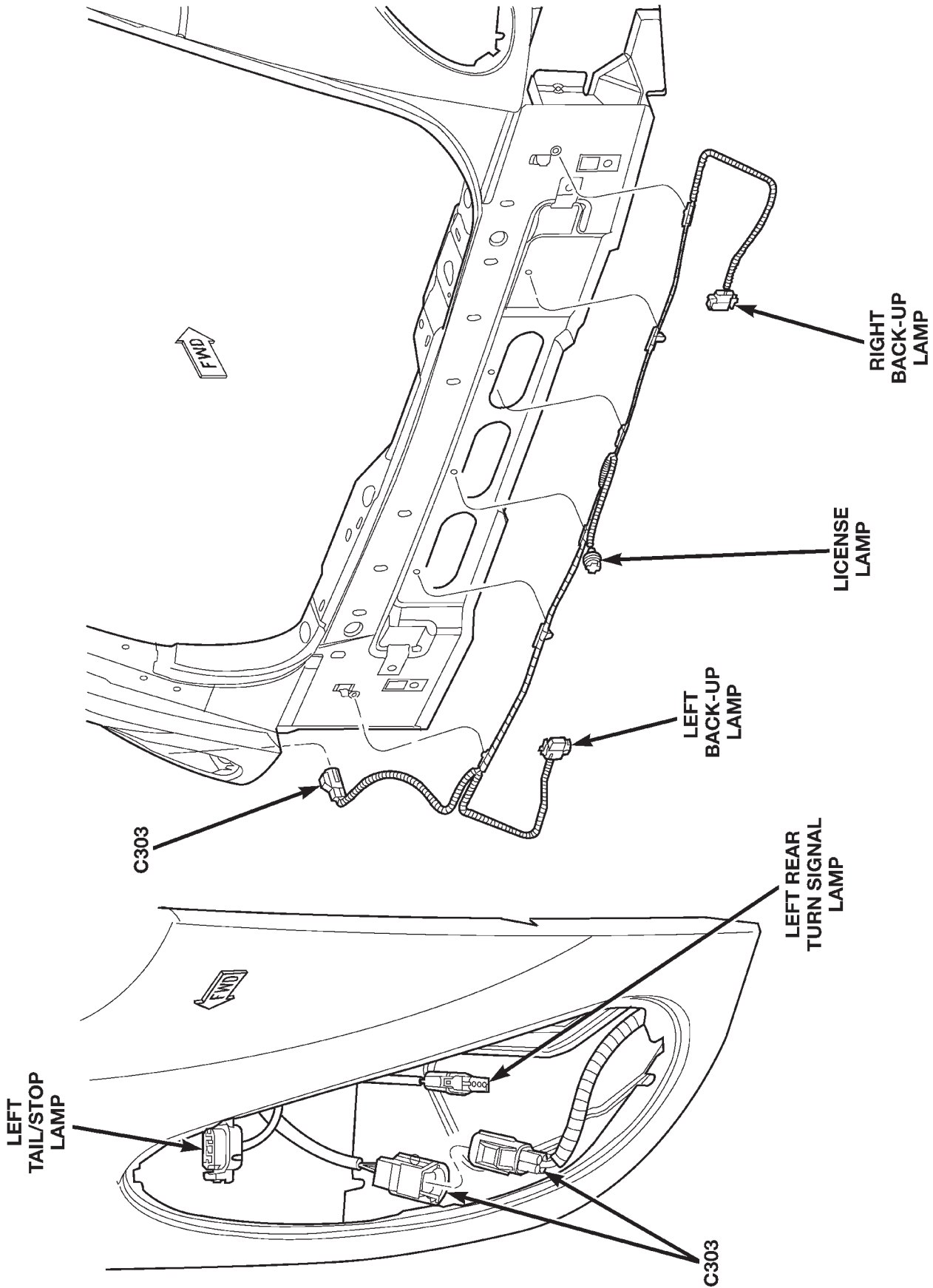


Fig. 34 BACK-UP LAMPS



## 8W-95 SPLICE LOCATIONS

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page

**SPLICE LOCATIONS**

DESCRIPTION . . . . . 1

**SPLICE LOCATIONS****DESCRIPTION**

This section provides illustrations identifying the general location of wiring splices in this vehicle. A

splice index is provided. Use the wiring diagrams in each section for splice number identification. Refer to index for proper splice number. For splices that are not shown in the figures N/S is placed in the Fig. column.

| Splice        | Location                                    | Fig. |
|---------------|---------------------------------------------|------|
| S100          | Near T/O for Fuel Injectors                 | N/S  |
| S101          | Near Engine Starter Eyelet                  | 2    |
| S102          | Near T/O for Inline C103                    | 3    |
| S103          | Near T/O for Powertrain Control Module - C1 | 4    |
| S104 (Diode)  | Near T/O for Engine Starter                 | 3    |
| S105          | Near T/O for Powertrain Control Module - C1 | 4    |
| S106          | Near T/O for Camshaft Position Sensor       | 4    |
| S107          | Near T/O for C103, Left Side of Engine      | 3    |
| S108          | Near T/O for EGR Solenoid                   | 4    |
| S109          | Near T/O for Engine Oil Pressure Switch     | 4    |
| S110          | Near T/O for Inlet Air Temperature Sensor   | 4    |
| S111 (MTX)    | Near T/O for Back-up Lamp Switch            | 3    |
| S111 (ATX)    | Near T/O for Input Speed Sensor             | 3    |
| S112          | Near T/O for Powertrain Control Module - C1 | 4    |
| S113          | Near T/O for Grounds G102/G103              | 1    |
| S114          | In T/O for Inline C104 (F)                  | 3    |
| S115          | Near T/O for Grounds G102/G103              | 1    |
| S116          | Near T/O for Grounds G102/G103              | 1    |
| S117          | Near T/O for Radiator Fan Motor             | 6    |
| S118          | Near T/O for Transmission Control Module    | 6    |
| S119          | Near T/O for Controller Antilock Brake      | 2    |
| S120          | Near T/O for Right Headlamp Assembly        | 1    |
| S121          | Near T/O for Speed Control Servo            | 5    |
| S122 (IN PDC) | Inside of Power Distribution Center (PDC)   | 2    |
| S123 (IN PDC) | Inside of Power Distribution Center (PDC)   | 2    |
| S124 (IN PDC) | Inside of Power Distribution Center (PDC)   | 2    |
| S125 (IN PDC) | Inside of Power Distribution Center (PDC)   | 2    |
| S126          | Near Data Link Connector                    | 6    |
| S127          | Near Brake Lamp Switch                      | 6    |

# 2001 PT CRUISER SUPPLEMENT

8W - 95 - 2 ————— 8W-95 SPLICE LOCATIONS ————— PT

## SPLICE LOCATIONS (Continued)

| Splice | Location                                                   | Fig.  |
|--------|------------------------------------------------------------|-------|
| S128   | Near T/O for Powertrain Control Module - C2                | 1     |
| S129   | Near T/O for Powertrain Control Module - C2                | 1     |
| S130   | Near T/O for Powertrain Control Module - C2                | 1     |
| S131   | Near T/O for Powertrain Control Module - C2                | 1     |
| S132   | Near T/O for Right Front Fog Lamp                          | 1     |
| S133   | Inside of Power Distribution Center (PDC)                  | 2     |
| S134   | Near T/O for Left Front Fog Lamp                           | 6     |
| S135   | Near T/O for C101, C102, C104                              | 1     |
| S136   | Near T/O for Transmission Control Module                   | 1     |
| S137   | Near T/O for Transmission Control Module                   | N/S   |
| S138   | In T/O for Siren                                           | 1     |
| S139   | Near T/O for Left Front Fog Lamp                           | 1     |
| S140   | Near T/O for Grounds G102/G103                             | 1     |
| S141   | Near T/O for EVAP Purge Solenoid                           | 1     |
| S142   | Near T/O for Radiator Fan Motor                            | 6     |
| S143   | Near T/O for Powertrain Control Module - C2                | 1     |
| S144   | Near T/O for Left Low Beam Headlamp                        | 6     |
| S145   | Near T/O for Powertrain Control Module - C2                | 1     |
| S146   | Near T/O for Left Headlamp Assembly                        | 1     |
| S200   | Near T/O for A/C-Heater Control Switch                     | 8     |
| S201   | Near T/O for Brake Transmission Shift Interlock Solenoid   | 7     |
| S202   | Near T/O for Brake Transmission Shift Interlock Solenoid   | 7     |
| S203   | Near Right Turn Signal Indicator                           | 7     |
| S204   | Near T/O for A/C-Heater Control Module                     | 8     |
| S205   | Near T/O for Rear Window Defogger Switch                   | 8     |
| S206   | Near T/O for Instrument Cluster, C1                        | 7     |
| S207   | Between T/O for Cigar Lighter and Parking Brake Switch     | 12    |
| S208   | Near T/O for Passenger Airbag                              | 8     |
| S209   | Near T/O for Rear Window Defogger and Rear Wiper Switches  | 8     |
| S210   | Near T/O for Inline C205 to Right Front Door               | 11    |
| S211   | Near T/O for Wiper/Washer Switch and Multi-Function Switch | 7     |
| S212   | Near T/O for Instrument Cluster - C1                       | 7     |
| S213   | Near T/O for Rear Window Defogger and Rear Wiper Switches  | 8     |
| S214   | Near T/O for Instrument Cluster - C1                       | 7     |
| S215   | Near T/O for Brake Shift Interlock Solenoid                | 10    |
| S216   | Near Right Turn Signal Indicator                           | 7     |
| S217   | Between T/O for Inline C105 and C106                       | 9     |
| S218   | Near Right Turn Signal Indicator                           | 7     |
| S219   | Near T/O for Remote Keyless Entry Module                   | 10    |
| S220   | Near T/O for Brake Shift Interlock Solenoid                | 10    |
| S221   | Near T/O for Passenger Airbag                              | 7, 10 |

# 2001 PT CRUISER SUPPLEMENT

PT **8W-95 SPLICE LOCATIONS** 8W - 95 - 3

## SPLICE LOCATIONS (Continued)

| Splice | Location                                                           | Fig. |
|--------|--------------------------------------------------------------------|------|
| S222   | Near T/O for Sentry Key Immobilizer Module                         | 7    |
| S223   | Near T/O for Ground G203                                           | 10   |
| S224   | Between S215 and S238                                              | 10   |
| S225   | Between T/O for Brake Shift Interlock Solenoid and Ignition Switch | 7    |
| S226   | Between T/O for Brake Shift Interlock Solenoid and Ignition Switch | 7    |
| S227   | In T/O for Inline C203                                             | 11   |
| S228   | Near T/O for Power Mirror Switch                                   | 9    |
| S229   | Near T/O for Grounds G200 and G203                                 | 10   |
| S230   | In T/O for Inline C203                                             | 11   |
| S231   | Near T/O for Instrument Cluster - C1                               | 10   |
| S232   | Near T/O for Rear Window Defogger and Rear Wiper Switches          | 8    |
| S233   | Near T/O for Turn Signal Indicators                                | 10   |
| S234   | Near T/O for Brake Transmission Shift Interlock Solenoid           | 10   |
| S235   | Near T/O for Inline C201                                           | 11   |
| S236   | Near T/O for Remote Keyless Entry Module                           | 10   |
| S237   | Near T/O for Instrument Cluster - C1                               | 7    |
| S238   | Near T/O for Brake Transmission Shift Interlock Solenoid           | 10   |
| S239   | Near T/O for Ground G200/G203                                      | 10   |
| S240   | Near T/O for Ground G201                                           | 9    |
| S241   | Near T/O for Ground G200/G203                                      | 10   |
| S242   | Near T/O for Power Mirror Switch                                   | 9    |
| S243   | Near T/O for Remote Keyless Entry Module                           | 10   |
| S244   | Near T/O for Visor/Vanity Lamp                                     | N/S  |
| S245   | In T/O for Ignition Switch                                         | 7    |
| S246   | Between Splices S248 and S244                                      | N/S  |
| S247   | Near T/O for Brake Transmission Shift Interlock Solenoid           | 10   |
| S248   | Near T/O for Overhead Console                                      | N/S  |
| S249   | In T/O for Overhead Console                                        | N/S  |
| S250   | Near T/O for Power Mirror Switch                                   | 9    |
| S251   | Near T/O for Inline C203                                           | 11   |
| S252   | Near T/O for Inline C202                                           | 9    |
| S253   | Near T/O for Inline C202                                           | 9    |
| S254   | Near T/O for Instrument Cluster - C1                               | 7    |
| S300   | Near T/O for Power Seat Switch                                     | N/S  |
| S301   | Front of Left Rear Wheel Housing                                   | 13   |
| S302   | In Trough Near Left Rear Door                                      | 13   |
| S303   | Base of Right Rear Wheel Housing                                   | 15   |
| S304   | Top of Left Rear Wheel Housing                                     | 14   |
| S305   | Near T/O for Left Rear Door Ajar Switch                            | 14   |
| S306   | Near T/O for License Lamp                                          | N/S  |

# 2001 PT CRUISER SUPPLEMENT

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## SPLICE LOCATIONS (Continued)

| Splice       | Location                                       | Fig. |
|--------------|------------------------------------------------|------|
| S307         | Near T/O for Left Rear Door Ajar Switch        | 14   |
| S308         | Near T/O for License Lamp                      | N/S  |
| S309 (LEFT)  | Near T/O for Left/Right Front Door Lock Switch | 16   |
| S310         | Near T/O for Rear Window Defogger (Ground)     | N/S  |
| S311 (RIGHT) | Near T/O for Left/Right Front Door Lock Switch | 16   |
| S312         | Near T/O for Licence Lamp                      | N/S  |
| S313         | Near T/O for Passenger Heated Seat Module      | N/S  |
| S314         | Near T/O for Passenger Heated Seat Module      | N/S  |
| S315         | Near T/O for Passenger Heated Seat Module      | N/S  |
| S316         | Near T/O for Passenger Heated Seat Module      | N/S  |

## SPLICE LOCATIONS (Continued)

80c06662

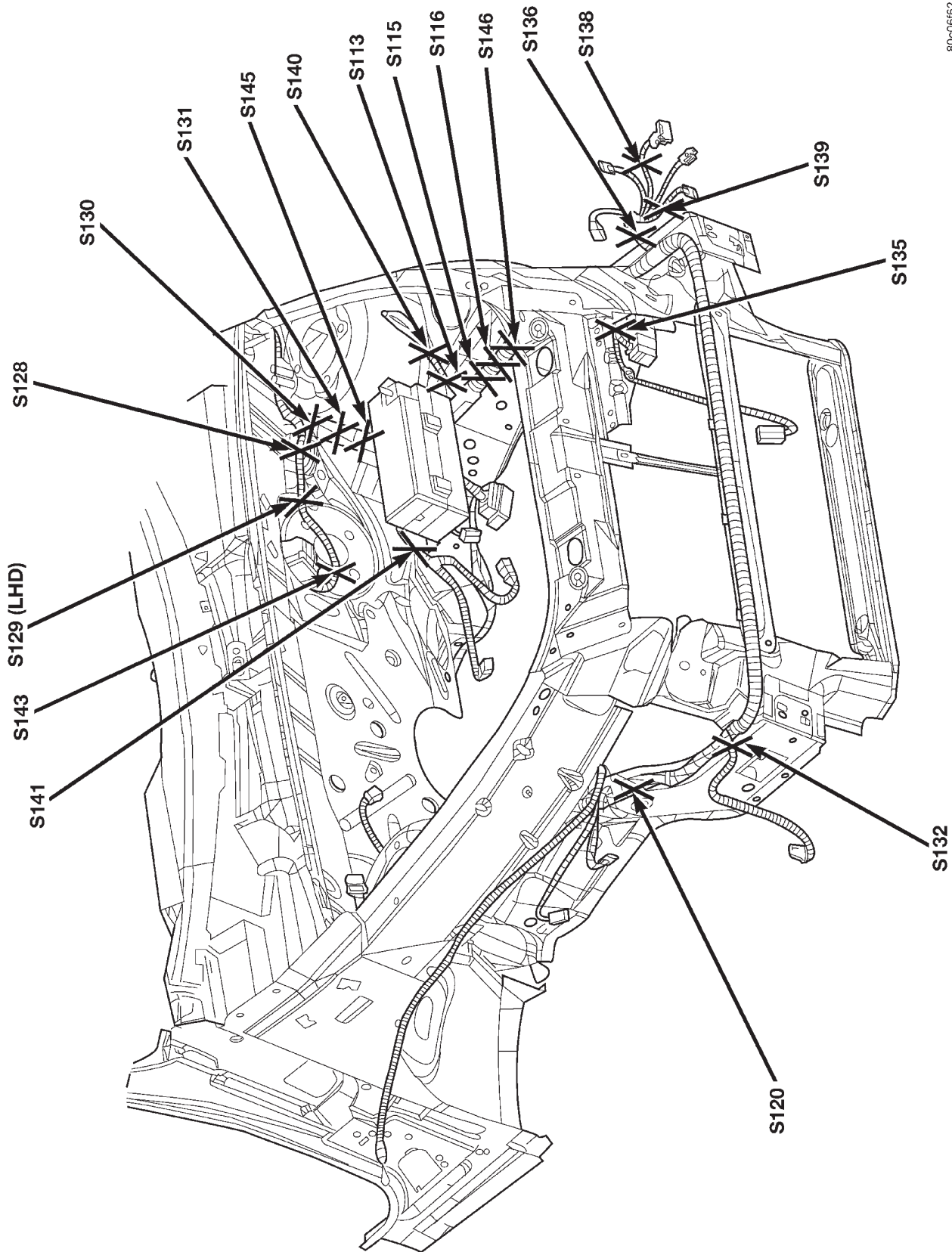


Fig. 1 ENGINE COMPARTMENT SPLICES



## SPLICE LOCATIONS (Continued)

80c06f63

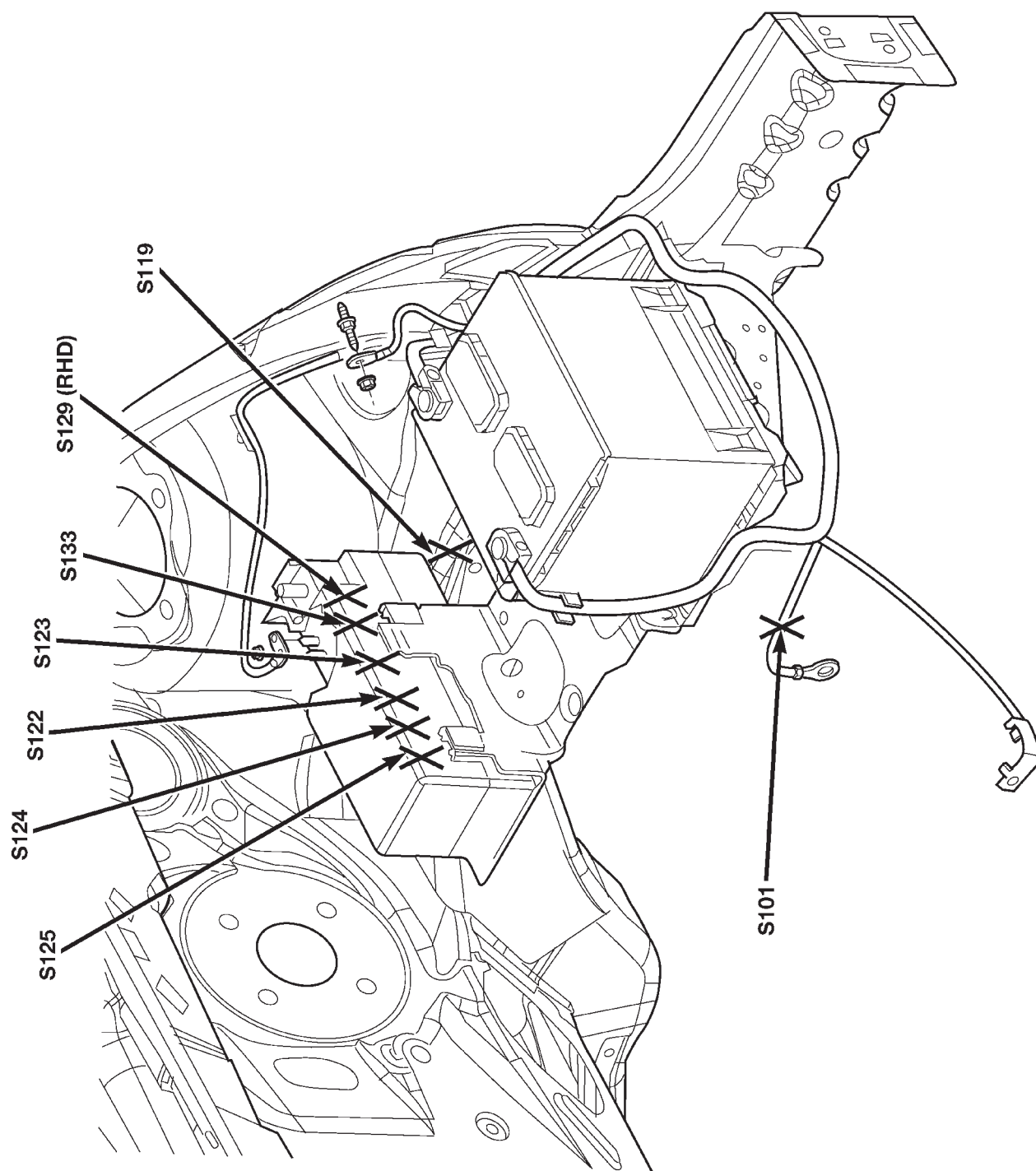


Fig. 2 LEFT ENGINE COMPARTMENT SPLICES

## SPLICE LOCATIONS (Continued)

80c06f14

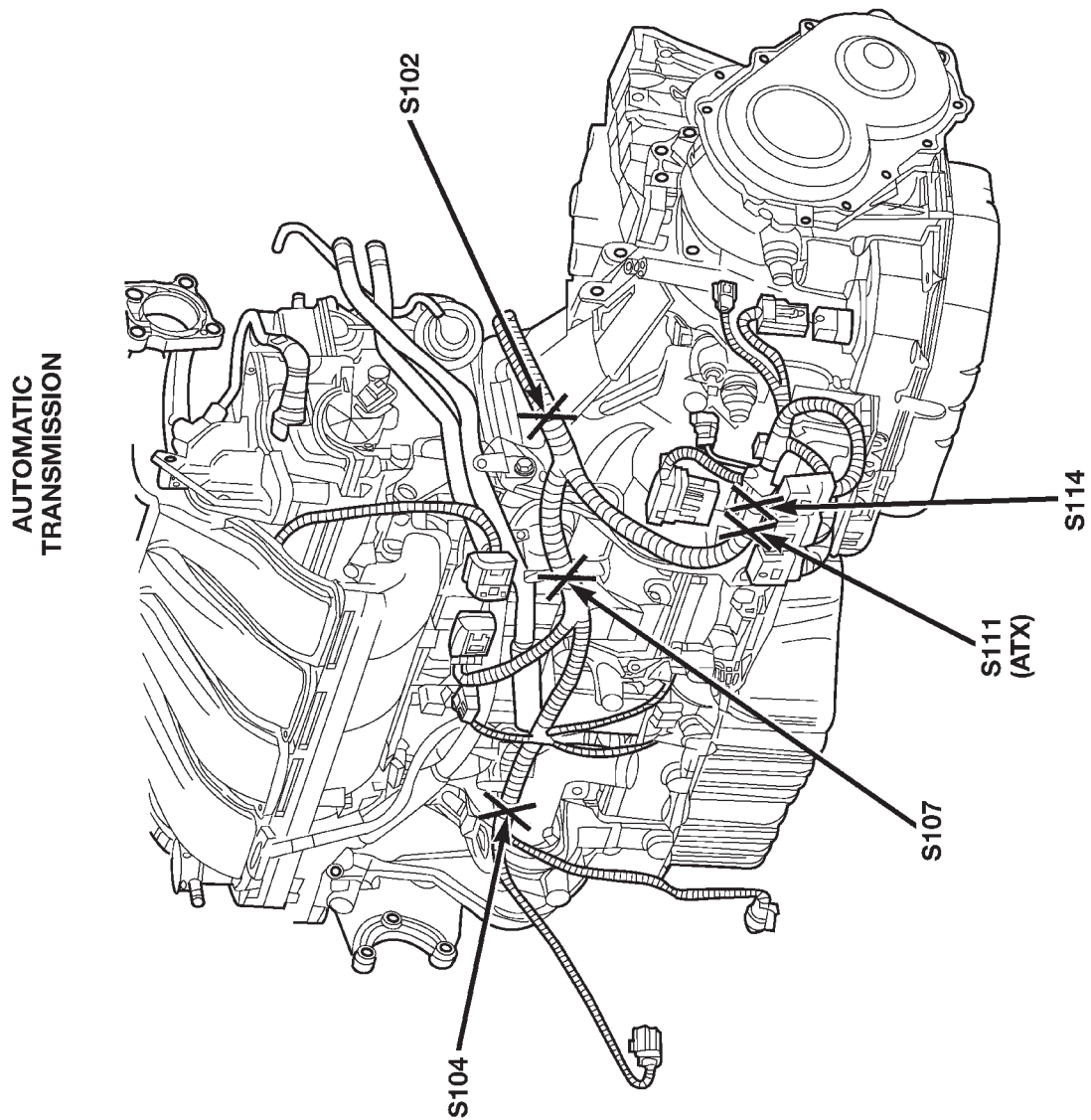
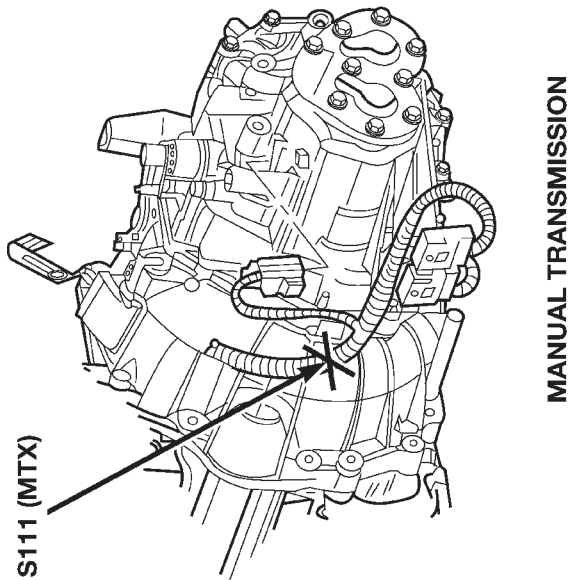


Fig. 3 TRANSMISSION SPLICES

## SPLICE LOCATIONS (Continued)

80c06r15

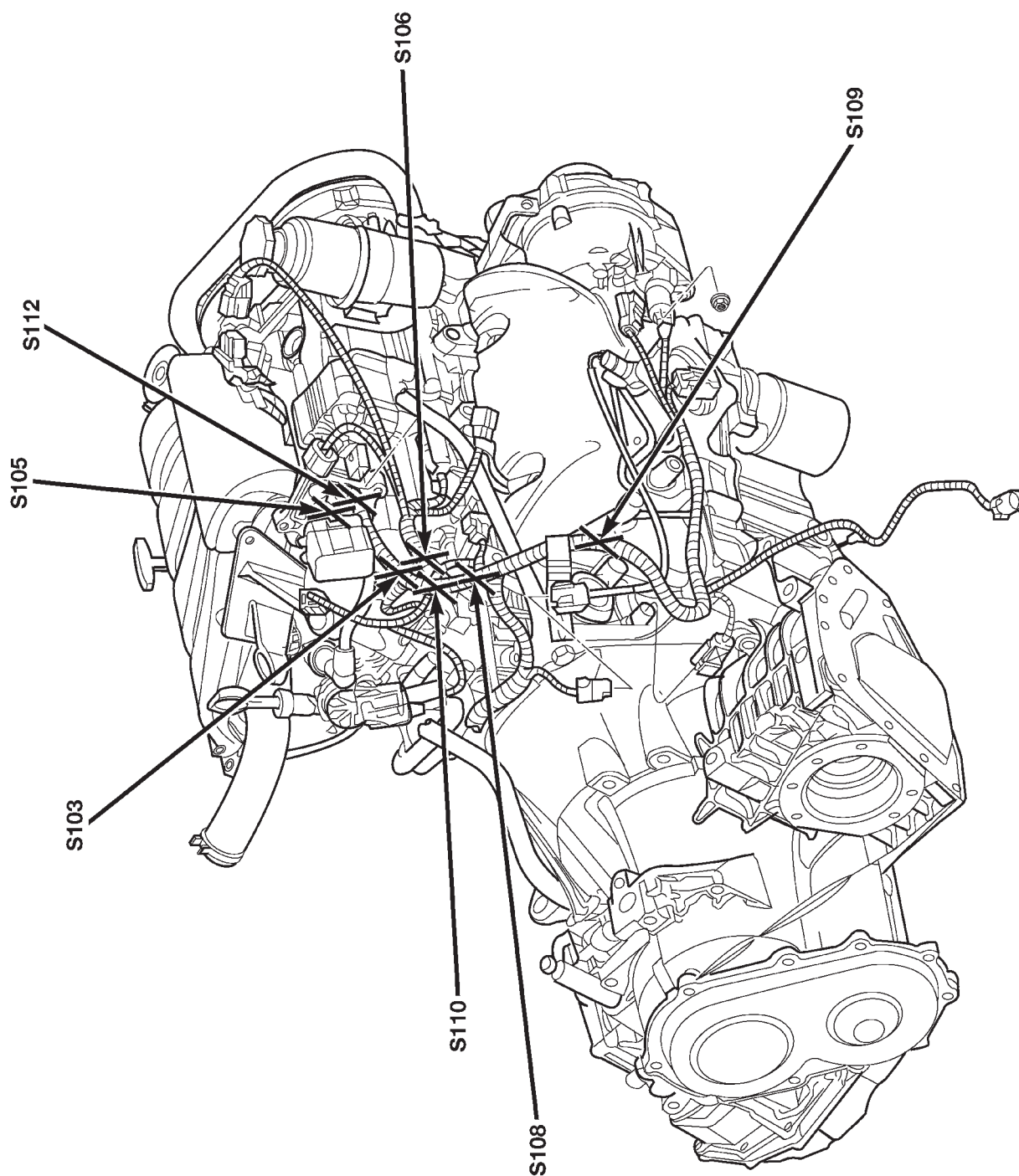
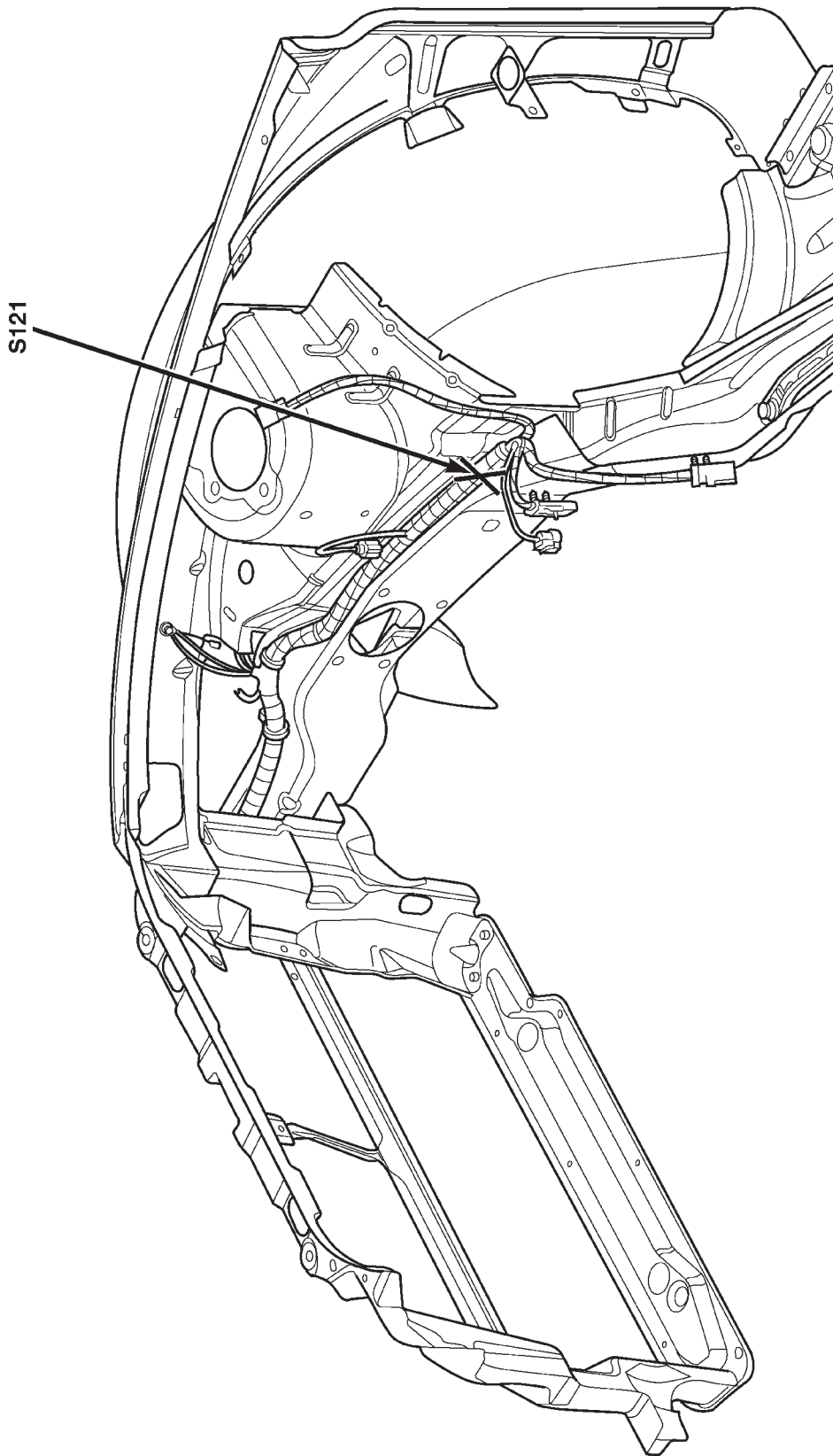


Fig. 4 ENGINE/TRANSMISSION SPLICES

## SPLICE LOCATIONS (Continued)



80c06f16

Fig. 5 ENGINE COMPARTMENT SPLICES RIGHT SIDE

## SPLICE LOCATIONS (Continued)

80c0617

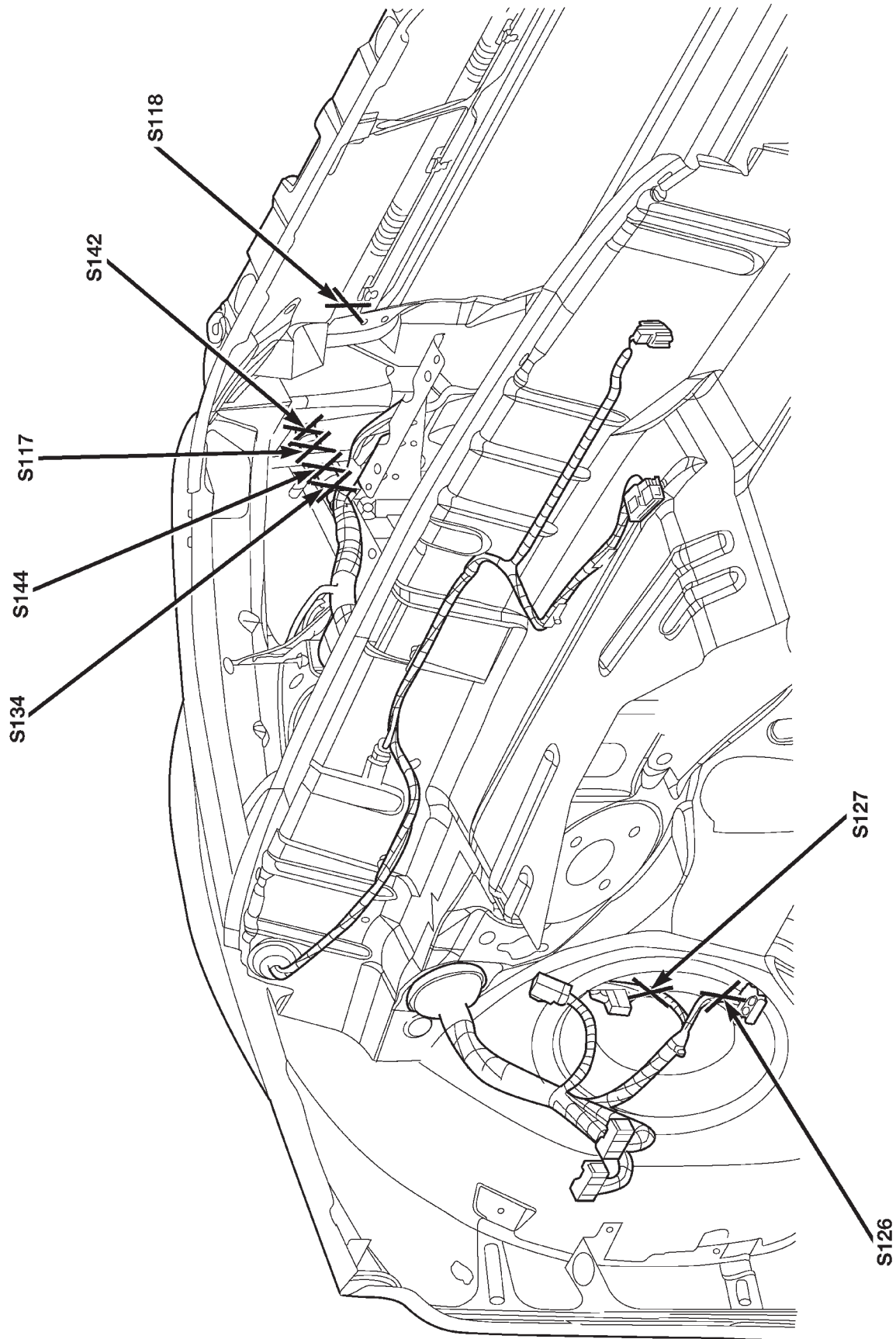


Fig. 6 LEFT COWL PANEL SPLICES

## SPLICE LOCATIONS (Continued)

80c06f64

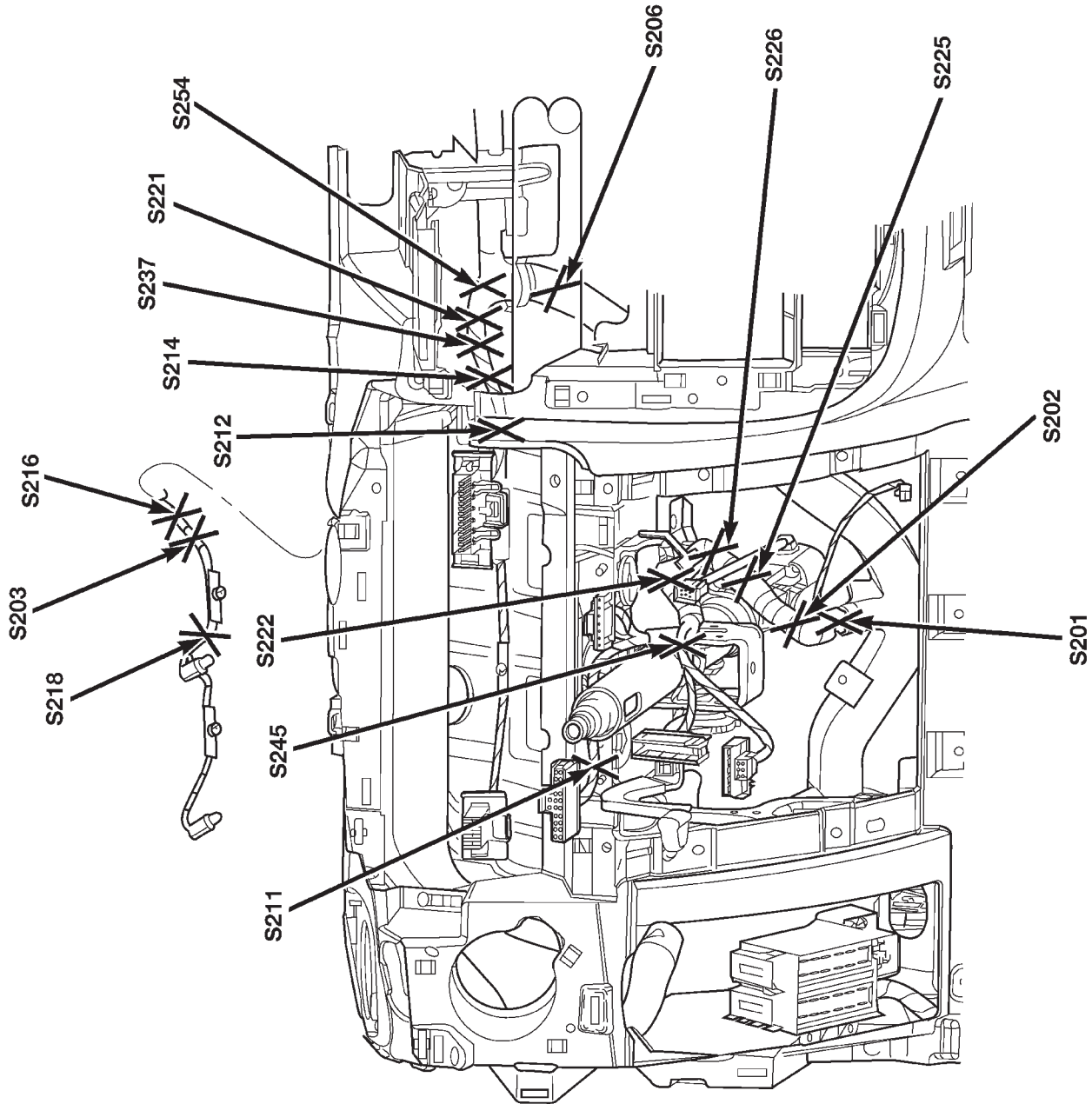
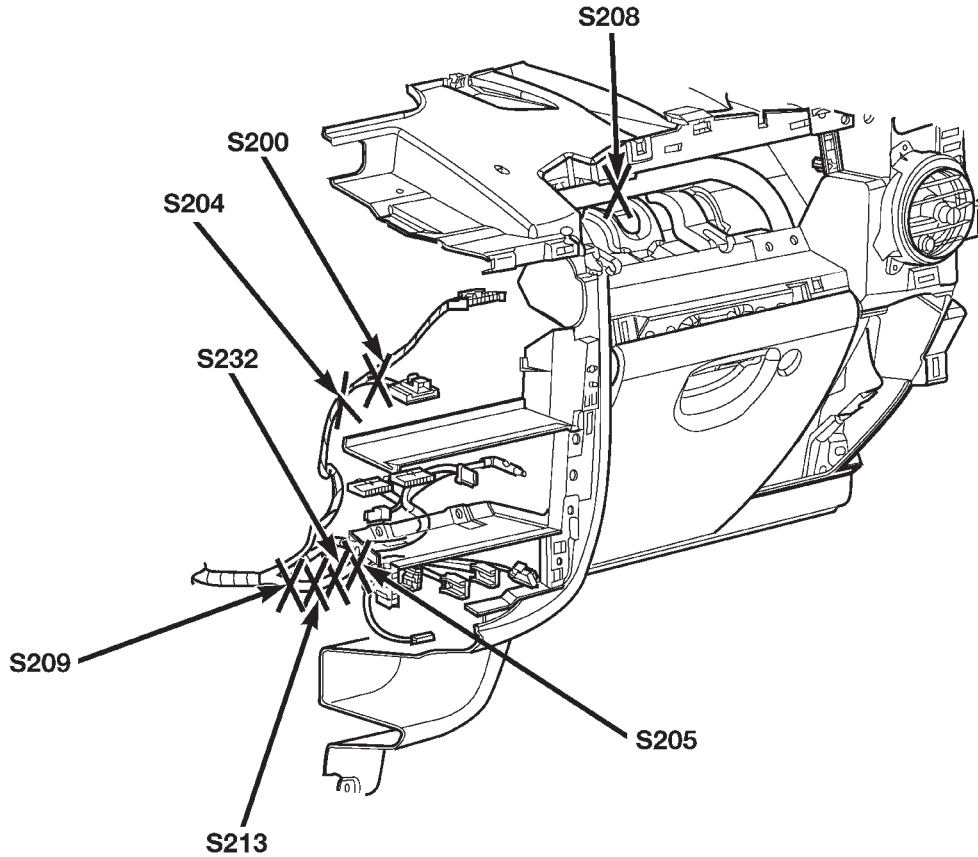


Fig. 7 LEFT INSTRUMENT PANEL SPLICES

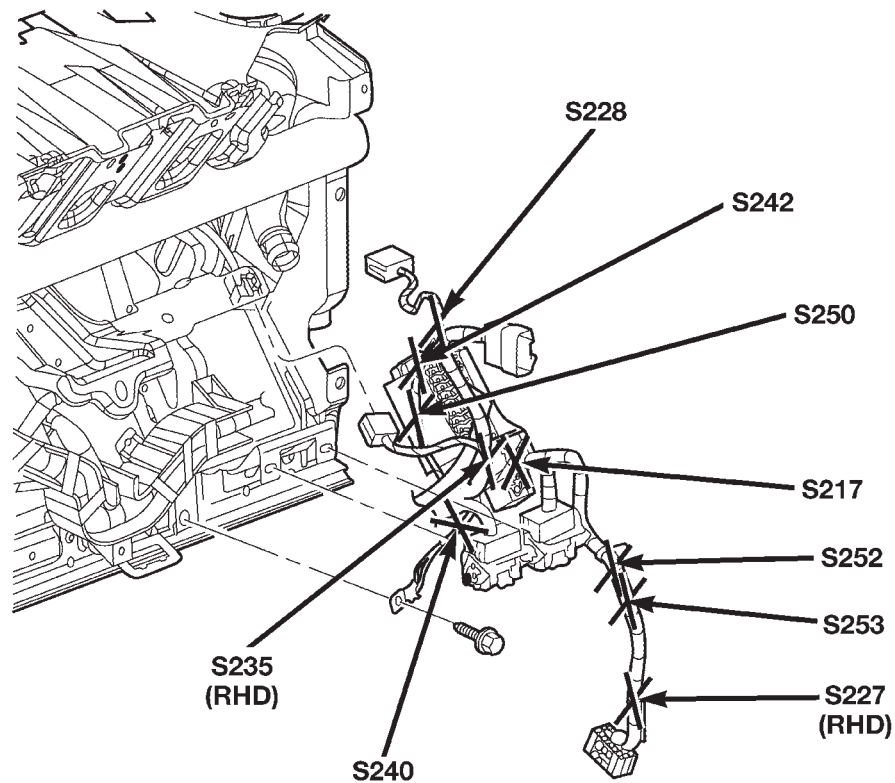


## SPLICE LOCATIONS (Continued)



80c06f65

**Fig. 8 CENTER AND RIGHT INSTRUMENT PANEL SPLICES**



80c06f66

**Fig. 9 LEFT REAR INSTRUMENT PANEL SPLICES**

## SPLICE LOCATIONS (Continued)

80c0667

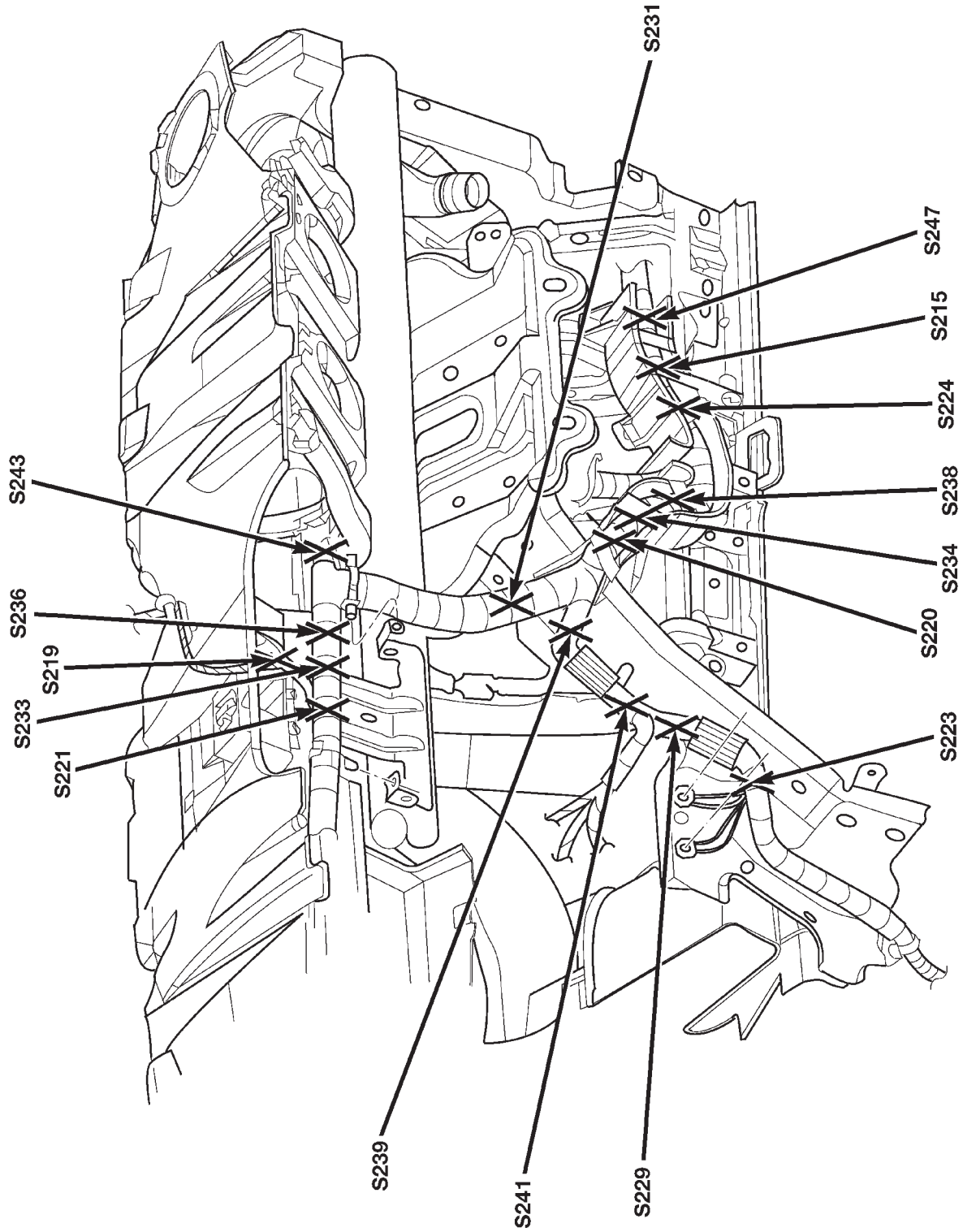
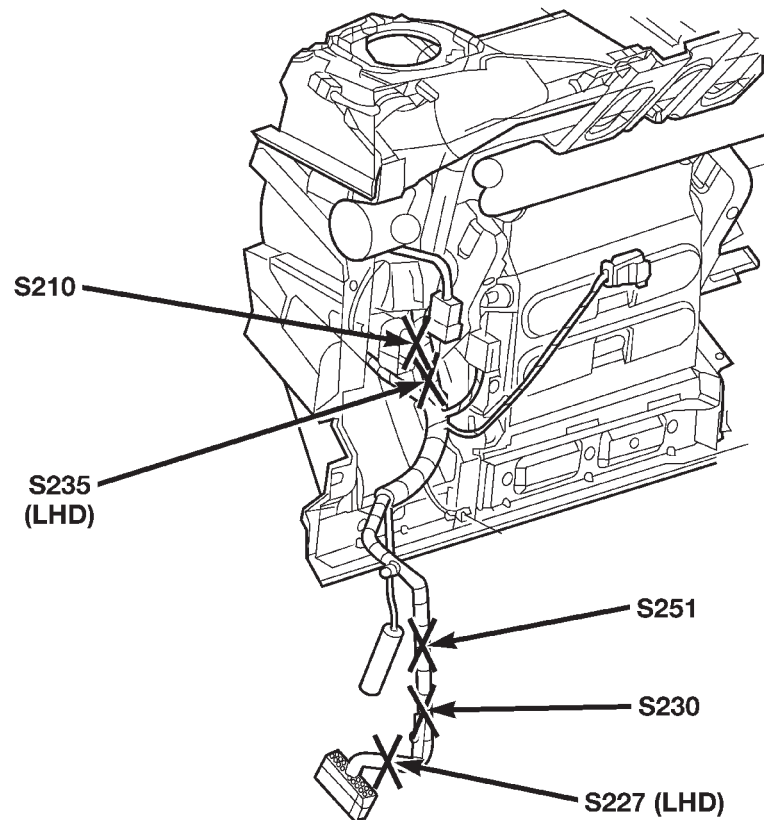


Fig. 10 CENTER REAR INSTRUMENT PANEL



## SPLICE LOCATIONS (Continued)



80c06f68

*Fig. 11 RIGHT REAR INSTRUMENT PANEL SPLICES*

## SPLICE LOCATIONS (Continued)

80c06124

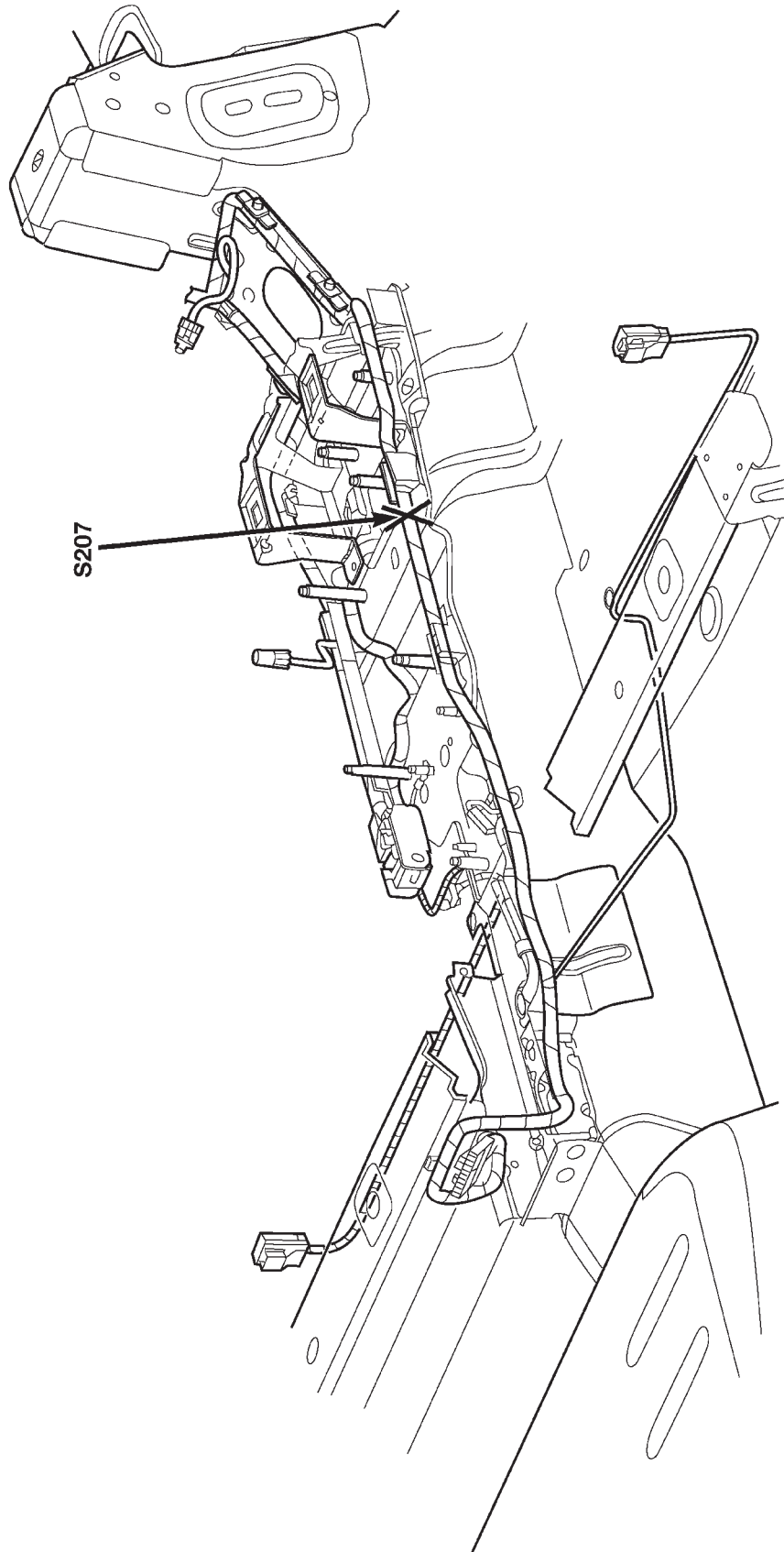


Fig. 12 CONSOLE SPLICES

## SPLICE LOCATIONS (Continued)

80c06f25

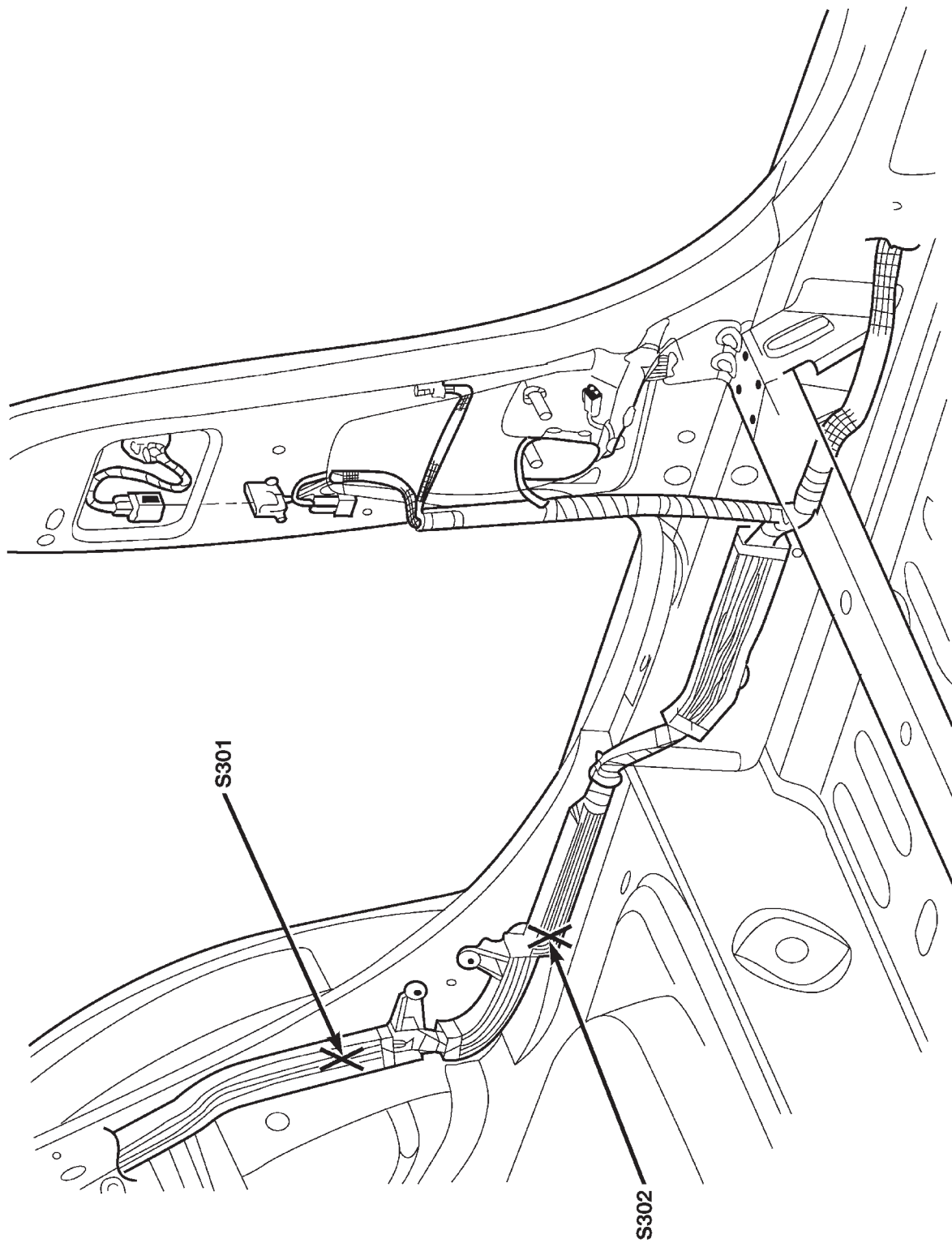


Fig. 13 LEFT REAR BODY SPLICES

## SPLICE LOCATIONS (Continued)

80c06r26

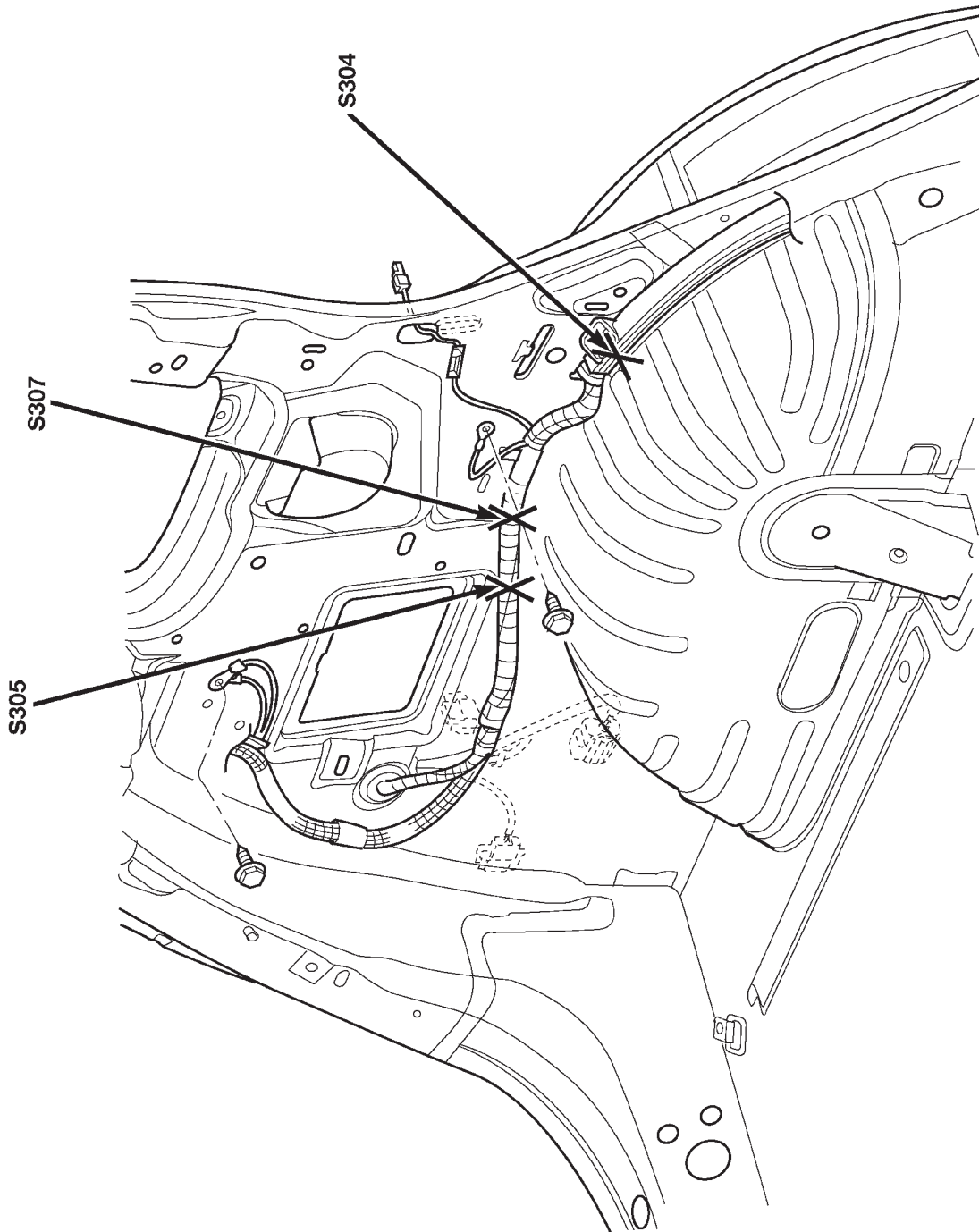


Fig. 14 LEFT SIDE CARGO SPLICES

## SPLICE LOCATIONS (Continued)

80c06#27

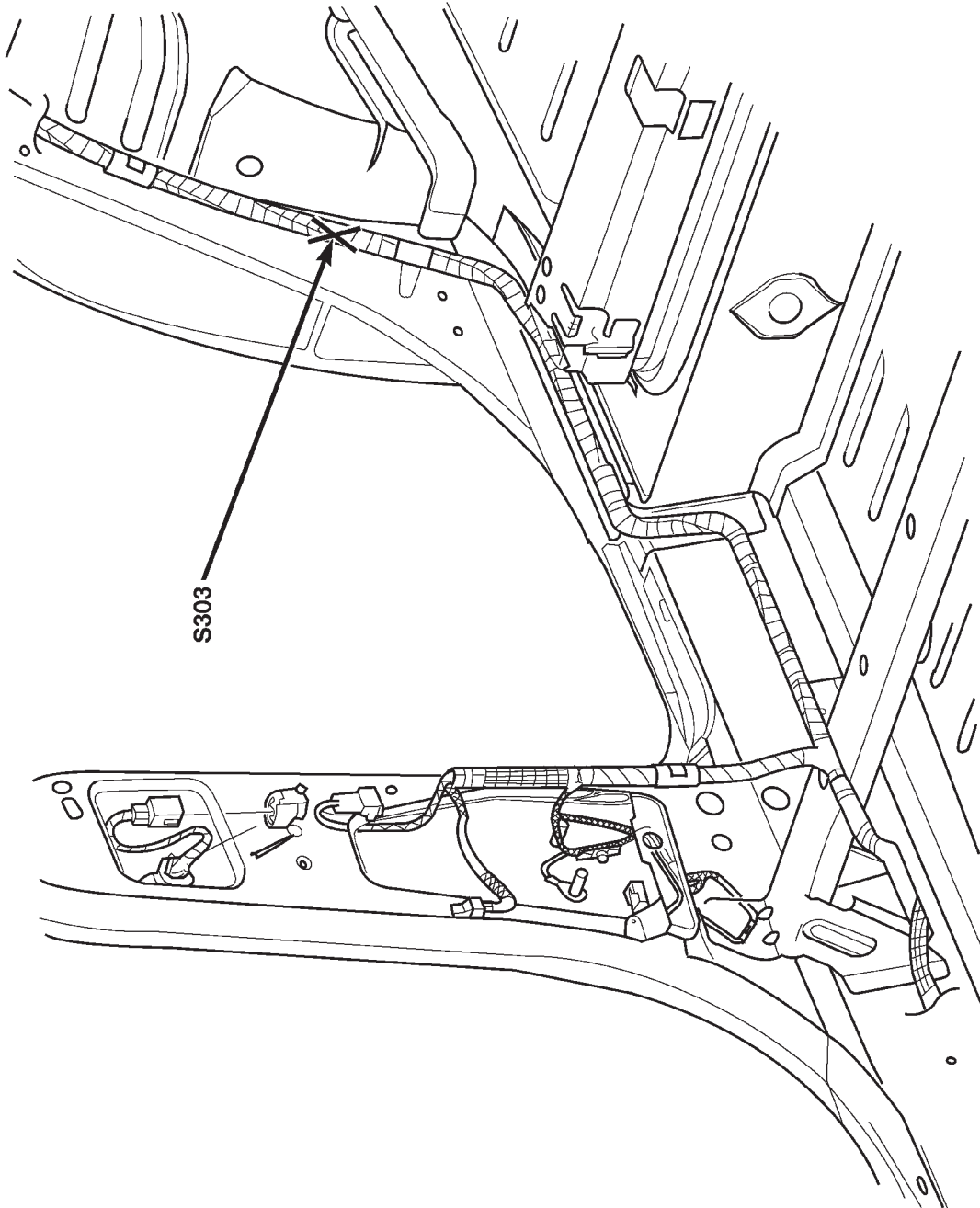


Fig. 15 RIGHT REAR BODY SPLICES

## SPLICE LOCATIONS (Continued)

80c06128

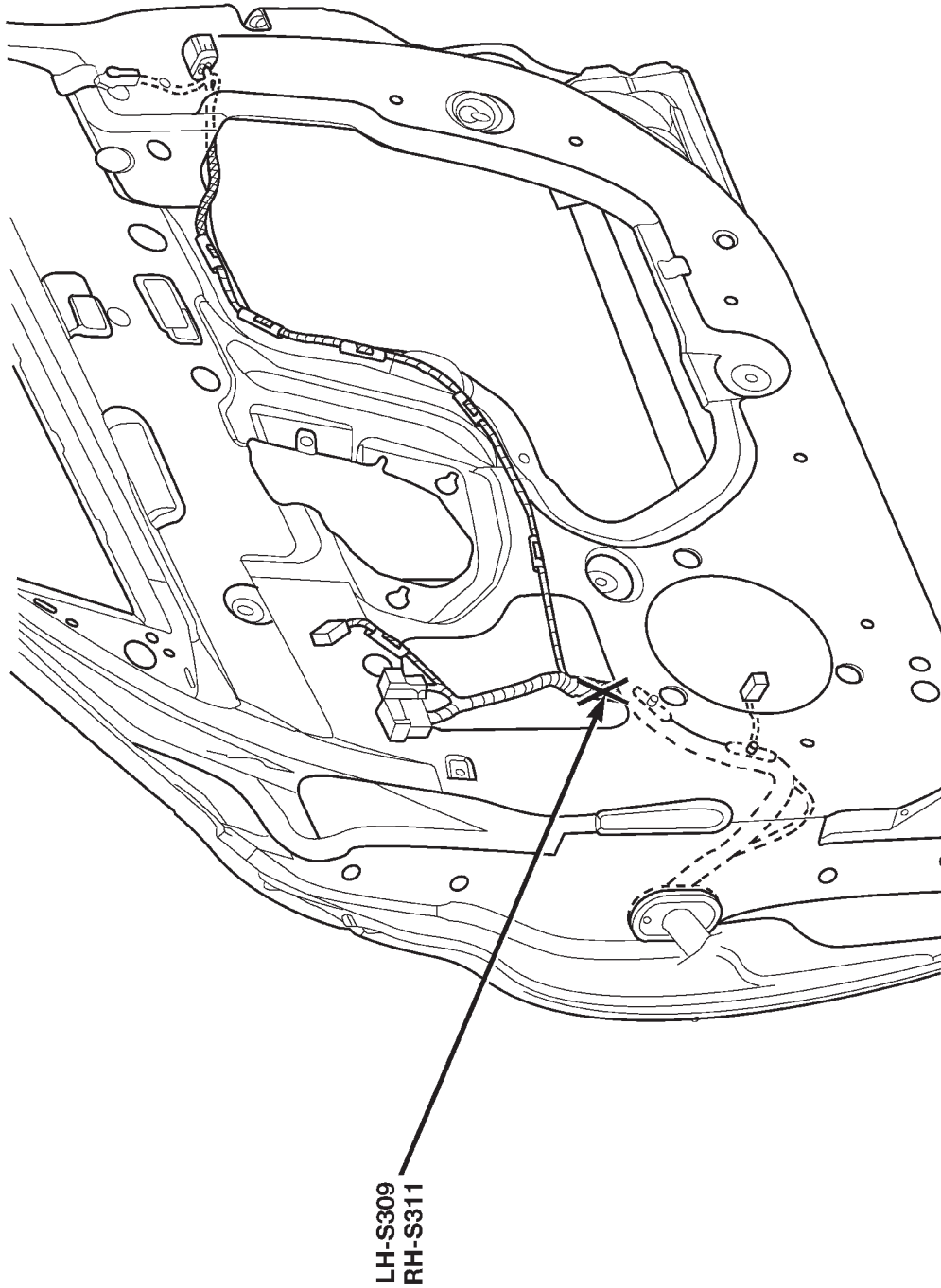


Fig. 16 LEFT/RIGHT DOOR SPLICES



STEERING

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STEERING

WARNINGS AND CAUTIONS

WARNING: POWER STEERING FLUID, ENGINE PARTS AND EXHAUST SYSTEM MAY BE EXTREMELY HOT IF ENGINE HAS BEEN RUNNING. DO NOT START ENGINE WITH ANY LOOSE OR DISCONNECTED HOSES. DO NOT ALLOW HOSES TO TOUCH HOT EXHAUST MANIFOLD OR CATALYST.

WARNING: FLUID LEVEL SHOULD BE CHECKED WITH THE ENGINE OFF TO PREVENT PERSONAL INJURY FROM MOVING PARTS.

CAUTION: When the system is open, cap all open ends of the hoses, power steering pump fittings or power steering gear ports to prevent entry of foreign material into the components.

CAUTION: Do not use any type of automatic transmission fluid in the power steering system. Use only correct Mopar® Power Steering Fluid (MS-9933) or equivalent.



## PUMP

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## PUMP

STANDARD PROCEDURE - POWER STEERING  
PUMP INITIAL OPERATION

**WARNING:** THE FLUID LEVEL SHOULD BE CHECKED AND ADJUSTED WITH THE ENGINE OFF TO PREVENT INJURY FROM MOVING ENGINE COMPONENTS.

**CAUTION:** Use only Mopar® Power Steering Fluid (MS-9933). Do not use automatic transmission fluid. Do not overfill.

The fluid level should read between the minimum and maximum area of the COLD range when the fluid is at normal temperature, approximately 21°C to 27°C (70°F to 80°F).

(1) Fill the power steering fluid reservoir to the proper level and let the fluid settle for at least two minutes.

(2) Start the engine and let run for a few seconds, then turn the engine off.

(3) Add fluid if necessary. Repeat the above procedure until the fluid level remains constant after running the engine.

(4) Raise the front wheels off the ground.

(5) Start the engine. Slowly turn the steering wheel right and left, lightly contacting the wheel stops.

(6) Add power steering fluid if necessary.

(7) Lower the vehicle and turn the steering wheel slowly from lock to lock.

(8) Stop the engine. Check the fluid level and refill as required.

(9) If the fluid is extremely foamy, allow the vehicle to stand a few minutes and repeat the above procedure.

## FLUID

STANDARD PROCEDURE - POWER STEERING  
FLUID LEVEL CHECKING

**WARNING:** FLUID LEVEL SHOULD BE CHECKED WITH THE ENGINE OFF TO PREVENT PERSONAL INJURY FROM MOVING PARTS.

**CAUTION:** Use only Mopar® Power Steering Fluid (MS-9933) or equivalent designed for this power steering system. Do not use automatic transmission fluid.

The power steering fluid level can be viewed through the side of the power steering fluid reservoir. There are two ranges listed on the dipstick, COLD and HOT. When the fluid is at normal ambient temperature, approximately 21°C to 27°C (70°F to 80°F), the fluid level should read between the minimum and maximum area of the cold range. When the fluid is hot, fluid level is allowed to read up to the highest end of the HOT range.

In all power steering systems, use only Mopar® Power Steering Fluid (MS-9933), or its equivalent. Before opening power steering system, wipe the reservoir filler cap free of dirt and debris. Do not overfill the power steering system.

## HOSES

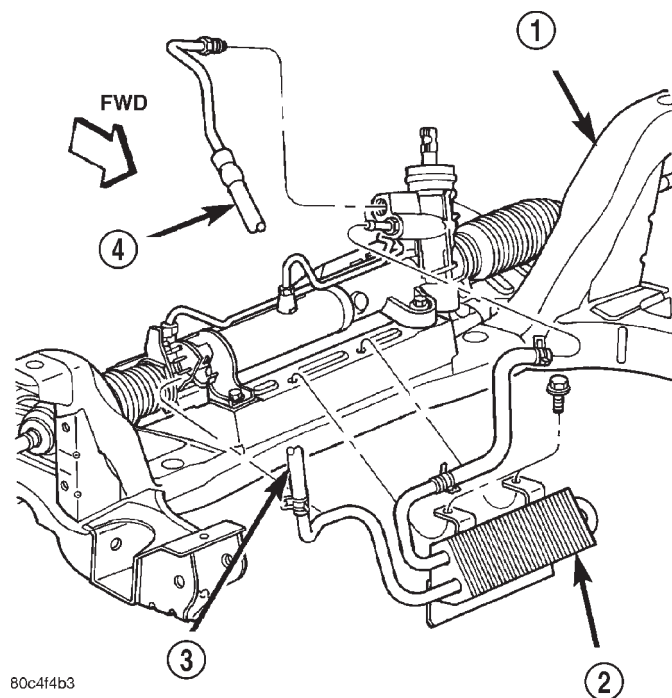
### REMOVAL - POWER STEERING FLUID RETURN HOSE

**NOTE:** Before proceeding with this procedure, review **WARNINGS AND CAUTIONS**.

(1) Siphon as much fluid as possible from the power steering fluid reservoir.

(2) Raise the vehicle. Refer to **HOISTING** in **LUBRICATION AND MAINTENANCE**.

(3) Remove the hose clamp securing the return hose to the power steering fluid cooler (Fig. 1). Slide the hose off the end of the cooler tube.

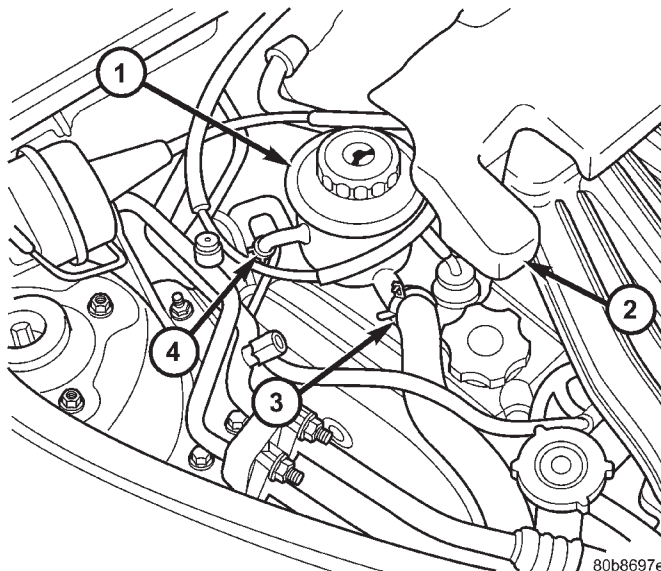


**Fig. 1 Return Hose At Cooler**

- 1 - CROSSMEMBER
- 2 - COOLER
- 3 - RETURN HOSE
- 4 - PRESSURE HOSE
- 5 - FWD

(4) Lower the vehicle.

(5) Remove the hose clamp securing the return hose to the power steering fluid reservoir (Fig. 2). Slide the hose off the end of the reservoir fitting and remove from vehicle.



**Fig. 2 Hose Connection At Reservoir**

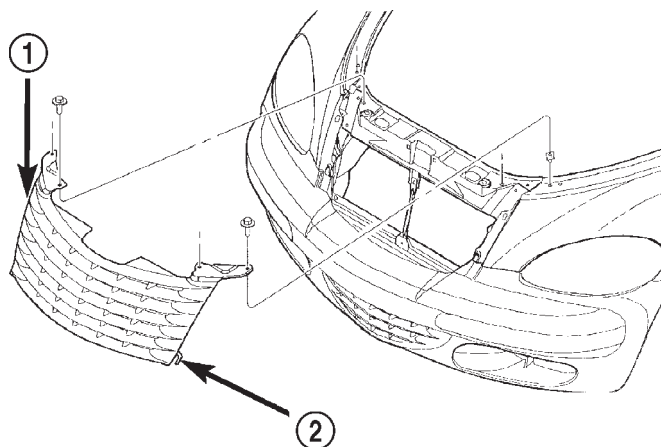
- 1 - POWER STEERING FLUID RESERVOIR
- 2 - ENGINE COVER
- 3 - SUPPLY HOSE
- 4 - RETURN HOSE

### REMOVAL - POWER STEERING FLUID SUPPLY HOSE

**NOTE:** Before proceeding with this procedure, review **WARNINGS AND CAUTIONS**.

(1) Siphon as much fluid as possible from the power steering fluid reservoir.

(2) Remove the grille from the front of the vehicle (Fig. 3).



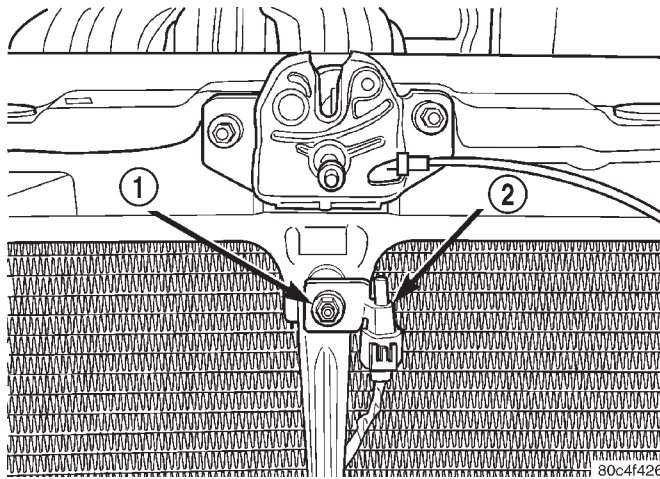
**Fig. 3 Grille Attachment**

- 1 - GRILLE
- 2 - RETAINER

## HOSES (Continued)

(3) Remove the hood-opening weather-strip from across the radiator closure panel.

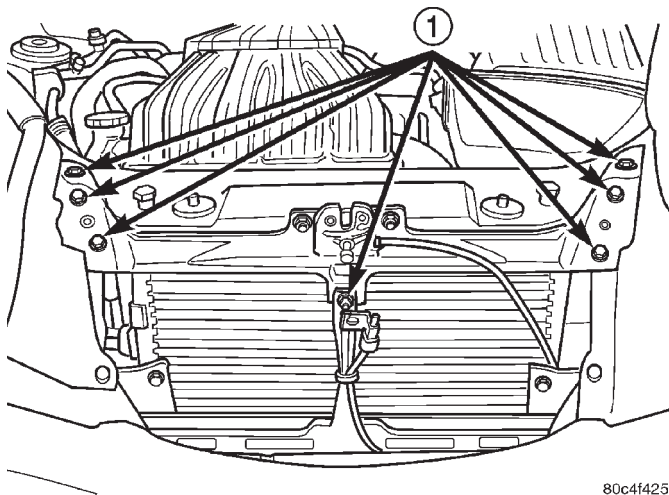
(4) Remove the ambient temperature sensor from the radiator closure panel (Fig. 4).



**Fig. 4 Ambient Temperature Sensor**

- 1 - FASTENER
- 2 - SENSOR

(5) Remove the fasteners securing the radiator closure panel in place (Fig. 5), then remove the panel.

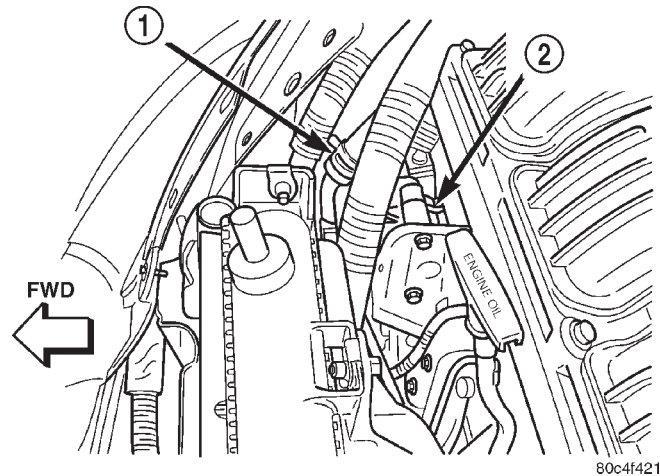


**Fig. 5 Radiator Closure Panel**

- 1 - FASTENERS

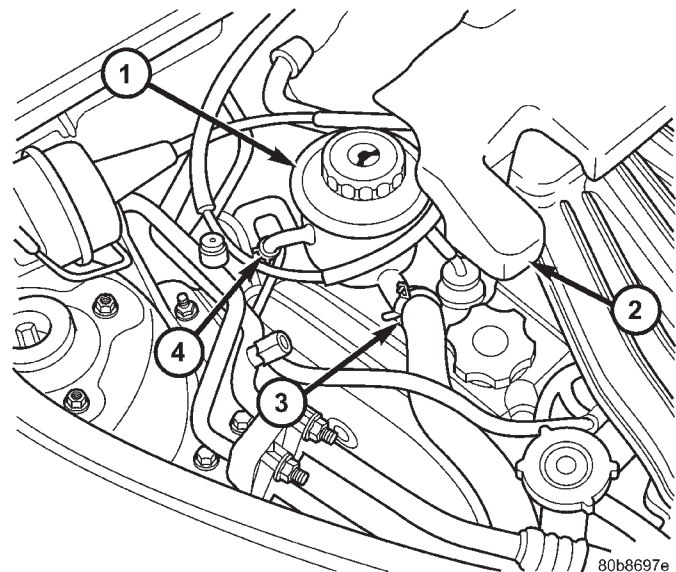
(6) Remove the clamp securing the supply hose to the power steering pump supply fitting (Fig. 6), then remove the hose from the supply fitting.

(7) Remove the hose clamp securing the supply hose to the power steering fluid reservoir (Fig. 7). Slide the hose off the end of the reservoir fitting and remove from vehicle.



**Fig. 6 Supply Hose At Pump**

- 1 - SUPPLY HOSE CLAMP
- 2 - POWER STEERING PUMP
- 3 - FWD



**Fig. 7 Hose Connection At Reservoir**

- 1 - POWER STEERING FLUID RESERVOIR
- 2 - ENGINE COVER
- 3 - SUPPLY HOSE
- 4 - RETURN HOSE

## INSTALLATION - POWER STEERING FLUID RETURN HOSE

**NOTE:** Before proceeding with this procedure, review **WARNINGS AND CAUTIONS**.

(1) Slide a hose clamp onto the power steering fluid reservoir end of the hose far enough to clear the molded fitting on the reservoir once the hose is installed.

## HOSES (Continued)

(2) Install the power steering return hose into the engine compartment from the top. First, place the reservoir end of the hose onto the molded fitting on the power steering fluid reservoir, then route the rest of the hose down the rear of the engine (Fig. 2).

(3) Expand the hose clamp and slide it onto the fluid reservoir fitting. Secure the clamp once it is past the bead formed into the fluid reservoir fitting.

(4) Raise the vehicle.

**CAUTION:** The power steering fluid hoses must remain away from the exhaust system, vehicle components, and unfriendly surfaces that can cause possible damage to the power steering hoses.

(5) Using a lint free towel, wipe clean the open power steering hose end and the power steering fluid cooler tube.

(6) Install a hose clamp onto the end of the hose far enough to clear the fitting on the steering gear or cooler once the hose is installed.

(7) Slide the hose onto the end of the cooler tube (Fig. 1). Install the hose clamp past the bead formed into the end of the cooler tube and secure in place.

(8) Lower the vehicle.

(9) Perform the POWER STEERING PUMP INITIAL OPERATION procedure to properly fill and bleed the power steering system.

(10) Check for leaks at all hose connections.

## INSTALLATION - POWER STEERING FLUID SUPPLY HOSE

**NOTE:** Before proceeding with this procedure, review WARNINGS AND CAUTIONS.

(1) Slide hose clamps onto both ends of the power steering fluid supply hose far enough to clear the fittings on the reservoir and pump once the hose is installed.

(2) Install the power steering supply hose into the engine compartment. First, route the pump end of the hose down to the pump supply fitting, then place the reservoir end of the hose onto the molded fitting of the power steering fluid reservoir (Fig. 7).

(3) Expand the hose clamp at the fluid reservoir and slide it over the hose and fitting. Secure the clamp once it is past the bead formed into the fluid reservoir fitting.

(4) Expand the remaining hose clamp and slide it over the hose and pump supply fitting (Fig. 6). Secure the clamp once it is past the bead formed into the fluid reservoir fitting.

**CAUTION:** Make sure the hose routing is above the engine timing chain cover. The power steering fluid

supply hose must remain clear of any unfriendly surface that can cause possible damage to it.

(5) Install the radiator closure panel and fasten it in place (Fig. 5).

(6) Install the ambient temperature sensor on the radiator closure panel (Fig. 4).

(7) Install the hood-opening weather-strip across the radiator closure panel.

(8) Install the grille on the front of the vehicle (Fig. 3).

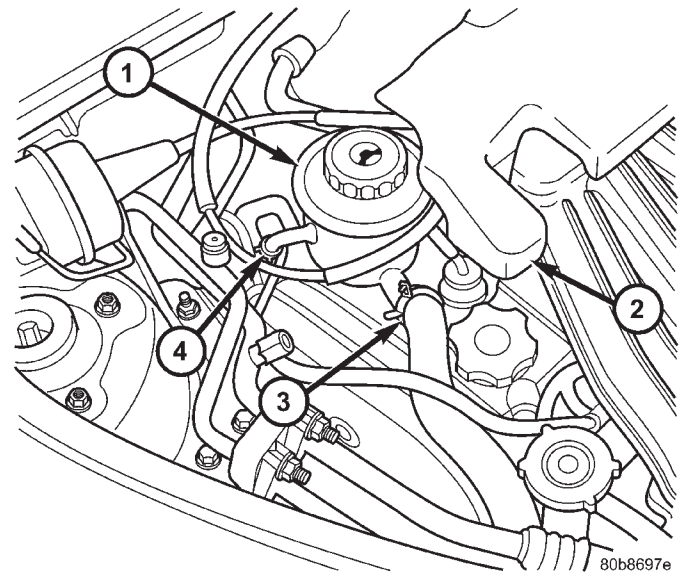
(9) Perform the POWER STEERING PUMP INITIAL OPERATION procedure to properly fill and bleed the power steering system.

(10) Check for leaks at all hose connections.

## RESERVOIR

### DESCRIPTION

The power steering system uses a remote mounted fluid reservoir. The power steering fluid reservoir is mounted to above the engine head cover and is attached to the backside of the engine (Fig. 8).



**Fig. 8 Hose Connection At Reservoir**

- 1 - POWER STEERING FLUID RESERVOIR
- 2 - ENGINE COVER
- 3 - SUPPLY HOSE
- 4 - RETURN HOSE

### OPERATION

The power steering fluid reservoir stores fluid for the power steering system.

### REMOVAL

(1) Remove the filler cap from remote power steering fluid reservoir (Fig. 9).



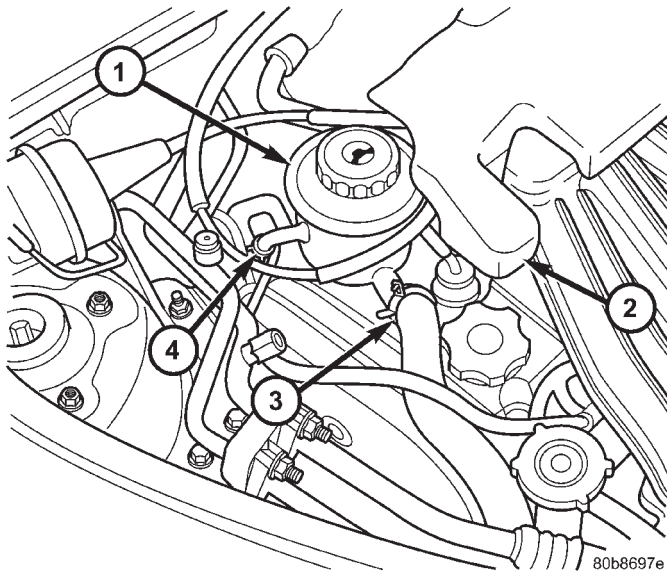
## RESERVOIR (Continued)

(2) Siphon as much fluid as possible from the fluid reservoir.

(3) Remove the plastic engine cover.

(4) Remove the clamp attaching the supply hose to the power steering fluid reservoir (Fig. 9). Remove the hose from the reservoir.

(5) Remove the clamp attaching the return hose to the power steering fluid reservoir (Fig. 9). Remove the hose from the reservoir.



**Fig. 9 Hose Connection At Reservoir**

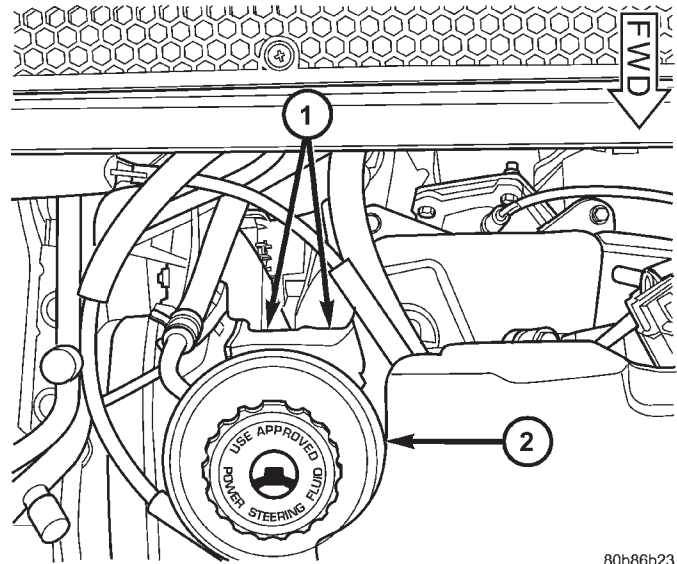
- 1 - POWER STEERING FLUID RESERVOIR
- 2 - ENGINE COVER
- 3 - SUPPLY HOSE
- 4 - RETURN HOSE

(6) Remove the 2 bolts fastening the reservoir to the rear of the engine (Fig. 10)

## INSTALLATION

(1) Install the power steering fluid reservoir bracket to the engine with mounting bolts (Fig. 10). Tighten bolts to 10 N·m (90 in.lb.).

**NOTE:** Make sure the throttle cable is routed in front of the reservoir just below the upper lip.



**Fig. 10 Power Steering Fluid Reservoir Mounting**

- 1 - MOUNTING BOLTS
- 2 - POWER STEERING FLUID RESERVOIR

(2) Install the fluid supply hose onto the power steering fluid reservoir fitting (Fig. 9).

(3) Slide the hose clamp on the fluid supply hose up into position on the fluid reservoir and install it. Be sure hose clamp is installed past bead on fluid reservoir fitting.

**CAUTION:** Make sure the supply hose is routed above the engine timing chain cover but below engine wiring harness. The power steering fluid supply hose must remain clear of any unfriendly surface that can cause possible damage to it.

(4) Install the fluid return hose onto the power steering fluid reservoir fitting (Fig. 9).

(5) Slide the hose clamp on the fluid supply hose up into position on the fluid reservoir and install it. Be sure hose clamp is installed past bead on fluid reservoir fitting.

(6) Install plastic engine cover.

(7) Fill the fluid reservoir to the proper level with Mopar® power steering fluid or equivalent.

(8) Start the engine and let run for a few seconds, then turn the engine off.

(9) Add fluid if necessary.

(10) Install the filler cap.

## TRANSAXLE

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## A578 MANUAL TRANSAXLE

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## INPUT SHAFT

### DISASSEMBLY

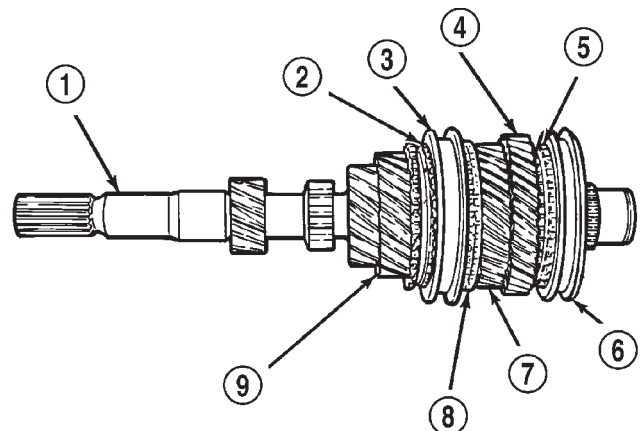
Before disassembly of the input shaft, it is necessary to check the synchronizer stop ring gap. Use a feeler gauge to measure the gaps between the stop rings and the speed gears. The correct gaps are listed below:

- 1st - 0.522-2.208 mm (0.021-0.087 in)
- 2nd - 0.522-2.208 mm (0.021-0.087 in)
- 3rd - 0.73-1.53 mm (0.029-0.060 in)
- 4th - 0.77-1.57 mm (0.030-0.062 in).
- 5th - 0.73-1.53 mm (0.029-0.060 in)

If a stop ring gap does not fall within the specifications, it must be inspected for wear and replaced. If the 1st or 2nd synchronizer stop ring is worn beyond specifications, the complete output shaft assembly must be replaced.

The input shaft incorporates the 3rd, 4th, and 5th speed gears and synchronizers on the assembly (Fig. 1).

(1) Install bearing splitter behind 5th speed gear. Remove snap ring at 5th synchronizer hub on input shaft (Fig. 2).

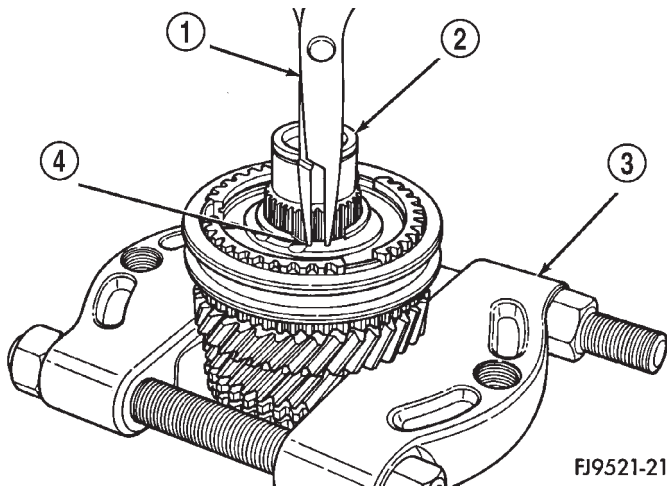


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**Fig. 1 Input Shaft**

- 1 - INPUT SHAFT
- 2 - STOP RING
- 3 - SLEEVE
- 4 - 5TH SPEED GEAR
- 5 - STOP RING
- 6 - SLEEVE
- 7 - 4TH SPEED GEAR
- 8 - STOP RING
- 9 - 3RD SPEED GEAR

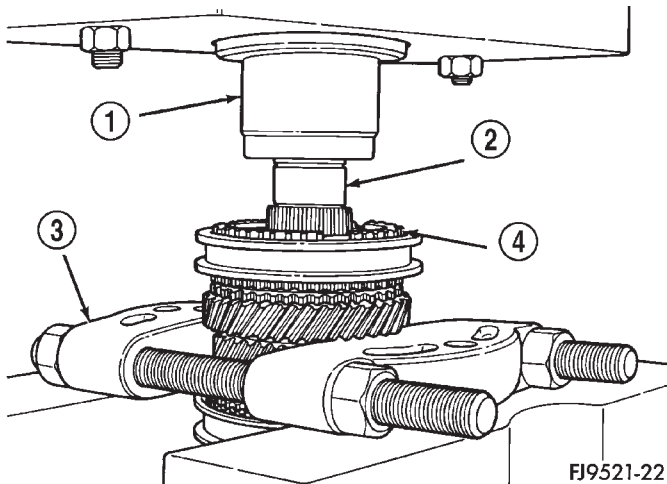
### INPUT SHAFT (Continued)



**Fig. 2 5th Synchro and Hub Snap Ring Removal**

- 1 - SNAP RING PLIERS
- 2 - INPUT SHAFT
- 3 - BEARING SPLITTER
- 4 - SNAP RING

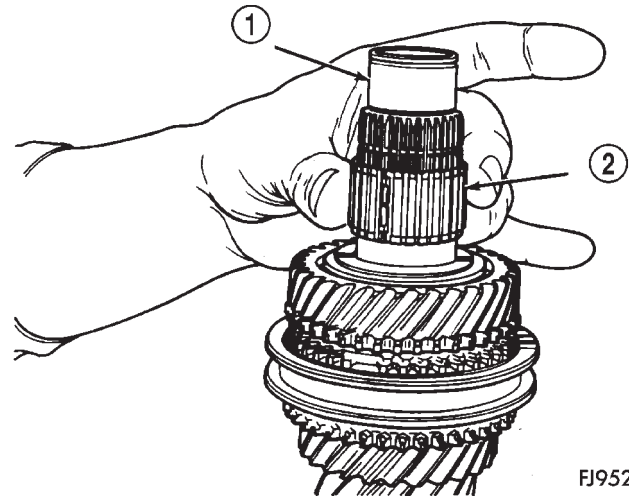
(2) Remove synchronizer and gear using shop press (Fig. 3).



**Fig. 3 Remove Synchronizer Using Shop Press**

- 1 - PRESS RAM
- 2 - INPUT SHAFT
- 3 - BEARING SPLITTER
- 4 - SYNCHRONIZER ASSEMBLY

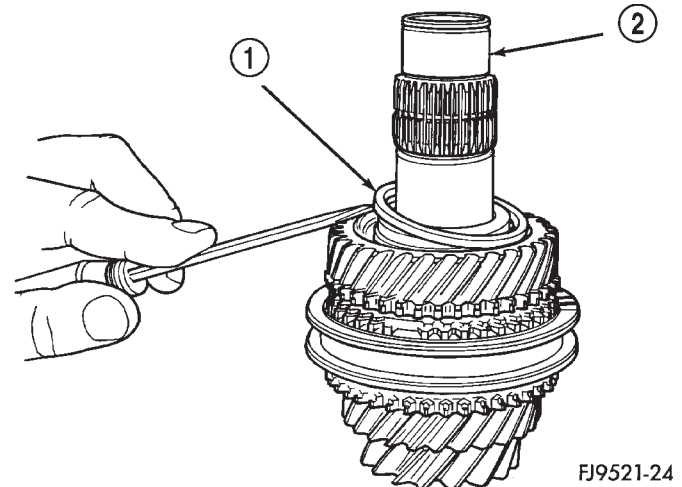
(3) Remove caged needle bearing (Fig. 4).



**Fig. 4 Caged Needle Bearing Removal**

- 1 - INPUT SHAFT
- 2 - CAGED NEEDLE BEARING

(4) Remove 4-5 gears split thrust washer ring (Fig. 5).

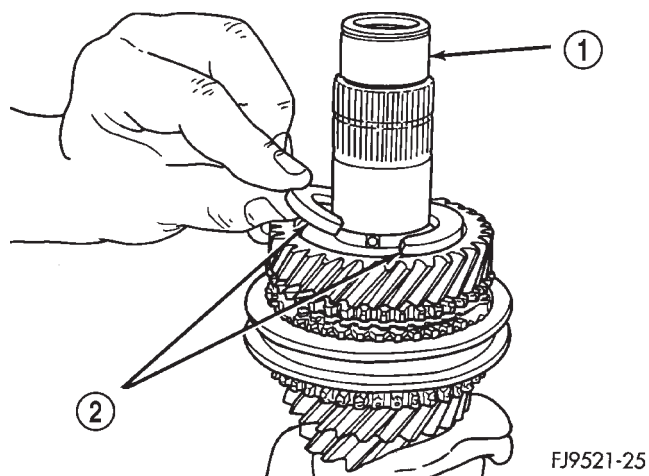


**Fig. 5 Split Thrust Washer Ring**

- 1 - SPLIT THRUST WASHER RING
- 2 - INPUT SHAFT

## INPUT SHAFT (Continued)

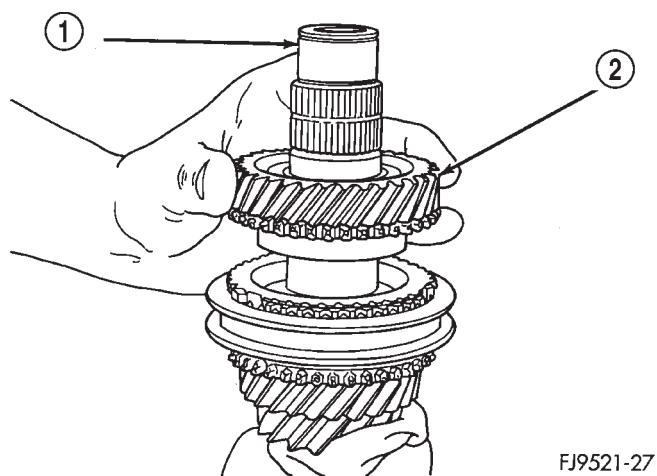
(5) Remove split thrust washer (Fig. 6).



**Fig. 6 Split Thrust Washer Removal**

- 1 - INPUT SHAFT
- 2 - SPLIT THRUST WASHER

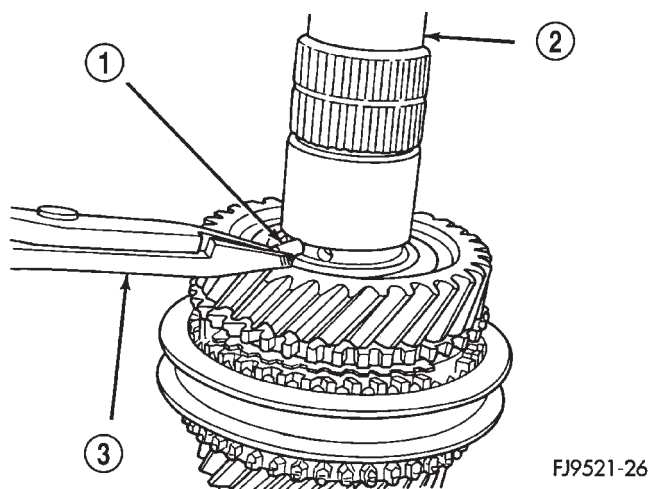
(7) Remove 4th gear (Fig. 8).



**Fig. 8 4th Gear Removal**

- 1 - INPUT SHAFT
- 2 - 4TH GEAR

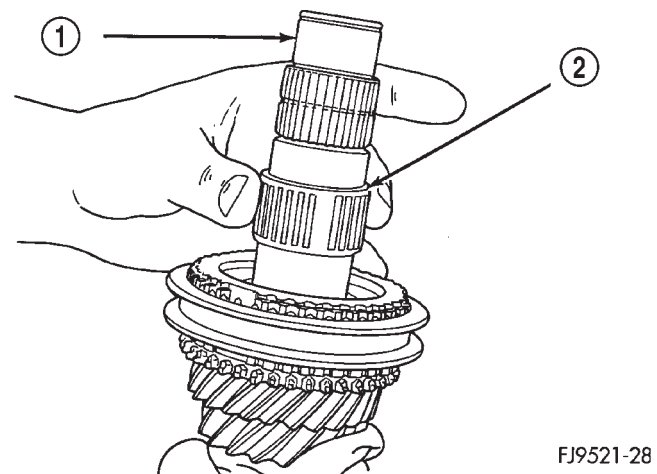
(6) Remove split thrust washer separation pin (Fig. 7).



**Fig. 7 Split Thrust Washer Separation Pin**

- 1 - SEPARATION PIN
- 2 - INPUT SHAFT
- 3 - PLIERS

(8) Remove 4th gear caged needle bearing (Fig. 9). Check the caged needle bearing for a broken retention spring.



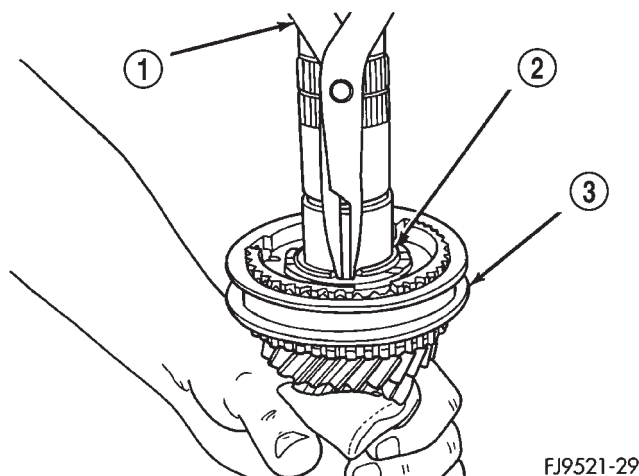
**Fig. 9 Caged Needle Bearing Removal**

- 1 - INPUT SHAFT
- 2 - CAGED NEEDLE BEARING



## INPUT SHAFT (Continued)

(9) Remove blocking ring. Remove 3-4 synchronizer hub retaining snap ring (Fig. 10).

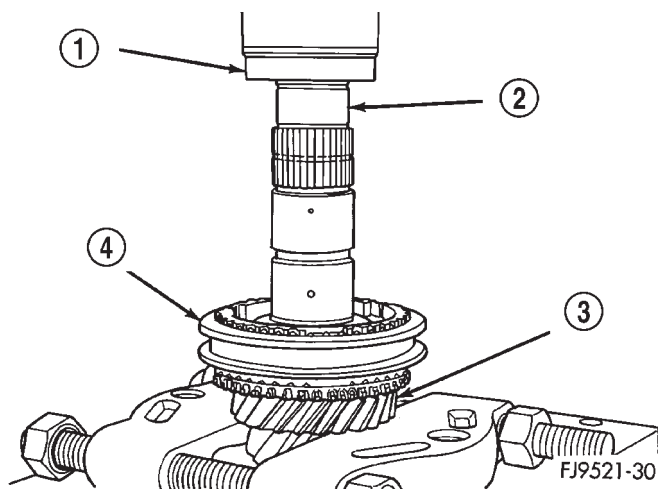


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**Fig. 10 3-4 Synchronizer Hub Snap Ring**

- 1 - SNAP RING PLIERS
- 2 - SYNCHRO SNAP RING
- 3 - SYNCHRONIZER ASSEMBLY

(10) Install input shaft in shop press. Using bearing splitter, remove 3-4 synchronizer and 3rd gear (Fig. 11).



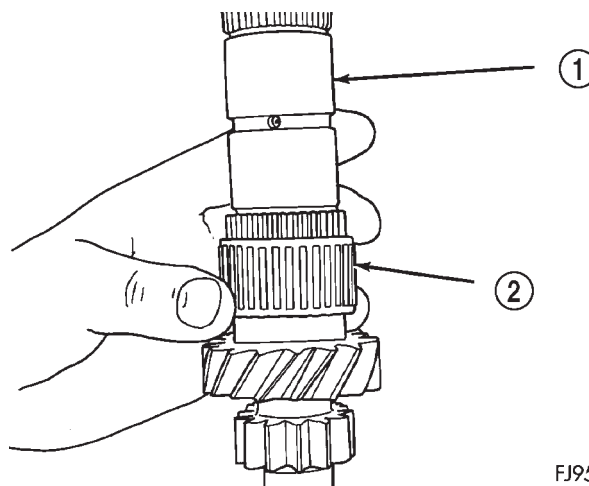
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**Fig. 11 3rd Gear Removal**

- 1 - PRESS RAM
- 2 - INPUT SHAFT
- 3 - 3RD GEAR
- 4 - SYNCHRONIZER ASSEMBLY

(11) Remove 3rd gear caged needle bearing (Fig. 12). Inspect needle bearing for a broken retention spring

(12) Inspect the input shaft for worn or damaged bearing races or chipped gear teeth. Replace as necessary.



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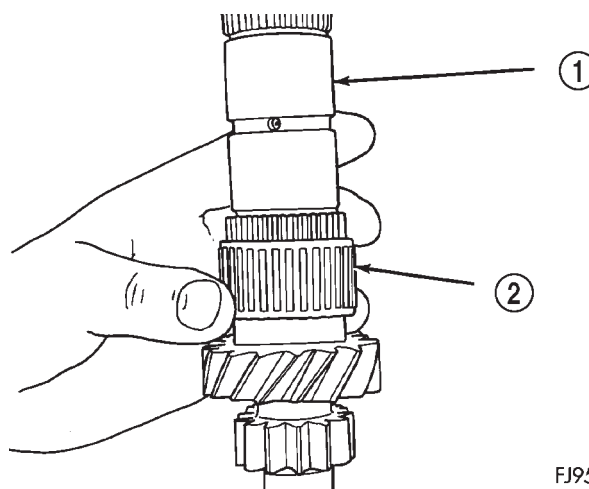
**Fig. 12 3rd Gear Caged Needle Bearing**

- 1 - INPUT SHAFT
- 2 - 3RD GEAR CAGED NEEDLE BEARING

## ASSEMBLY

The snap rings that are used on the input shaft are available in select fit sizes. Use the thickest snap ring that fits in each snap ring groove.

- (1) Place input shaft into shop press.
- (2) Install 3rd gear caged needle bearing (Fig. 13).



FJ9521-31

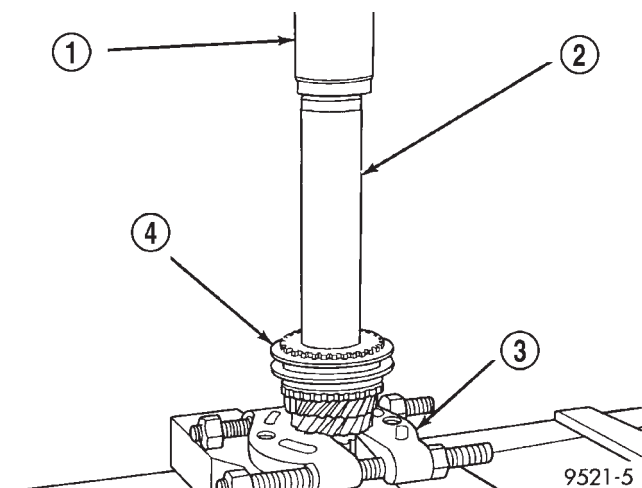
**Fig. 13 3rd Gear Caged Needle Bearing**

- 1 - INPUT SHAFT
- 2 - 3RD GEAR CAGED NEEDLE BEARING

(3) Install 3rd gear and 3-4 synchronizer onto input shaft. Install Tool #C-3717 over input shaft and press on synchronizer hub and 3rd gear (Fig. 14). The synchronizer hub has the letter **U** stamped on the top face of the hub. This designates that the hub must be installed with the **U** facing upward.

(4) Install 3-4 synchronizer snap ring into slot on input shaft.

## INPUT SHAFT (Continued)



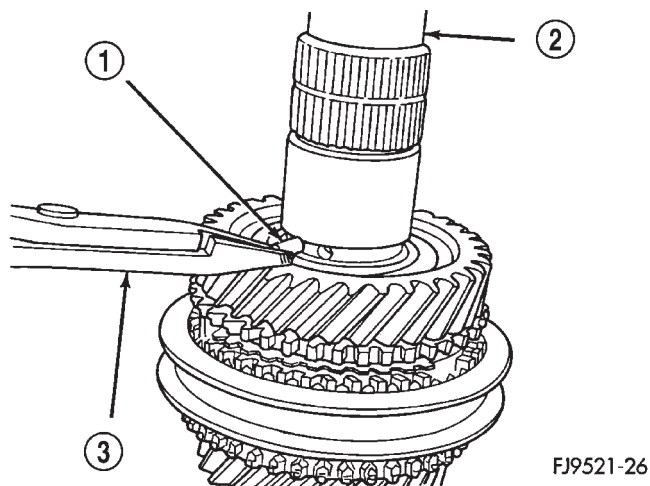
**Fig. 14 Press On 3rd Gear Synchronizer Hub**

- 1 - PRESS RAM
- 2 - SPECIAL TOOL C-3717
- 3 - BEARING SPLITTER
- 4 - 3RD GEAR SYNCHRONIZER ASSEMBLY

(5) Install blocking ring into 3-4 synchronizer. Install 4th gear caged needle bearing .

(6) Install 4th gear onto input shaft.

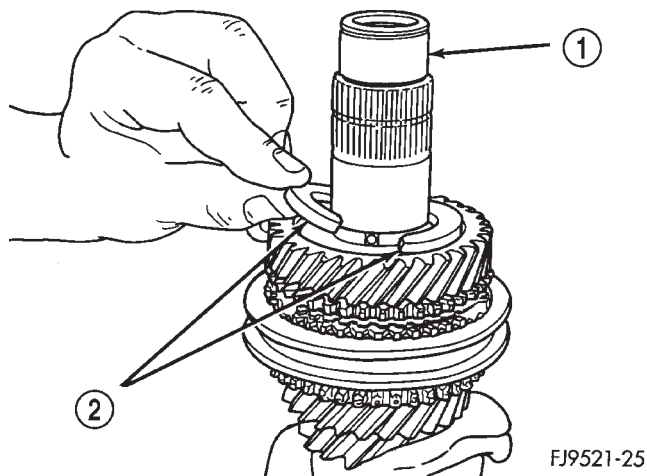
(7) Install 4-5 split thrust washer separation pin (Fig. 15).



**Fig. 15 Split Thrust Washer Separation Pin**

- 1 - SEPARATION PIN
- 2 - INPUT SHAFT
- 3 - PLIERS

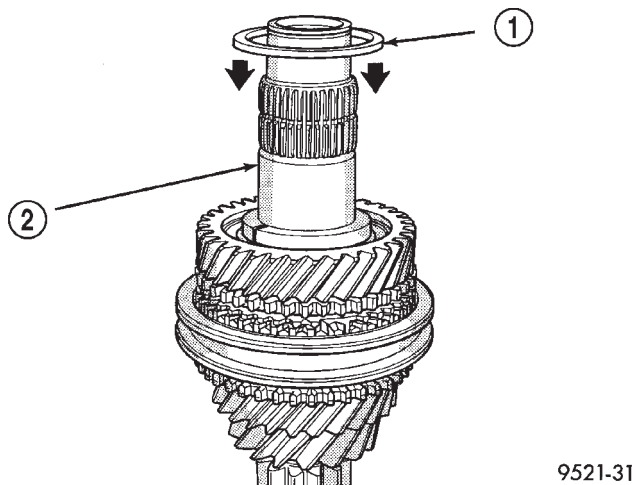
(8) Install split thrust washer onto input shaft (Fig. 16).



**Fig. 16 Split Thrust Washer Installation**

- 1 - INPUT SHAFT
- 2 - SPLIT THRUST WASHER

(9) Install split thrust washer retaining ring (Fig. 17).

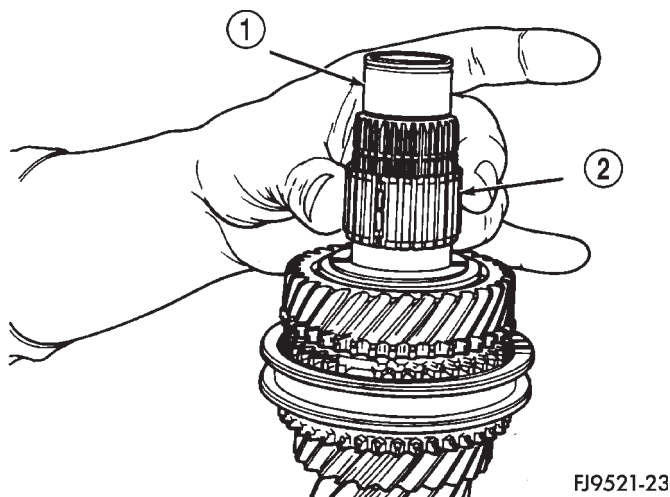


**Fig. 17 Retaining Ring Installation**

- 1 - SPLIT THRUST WASHER RING
- 2 - INPUT SHAFT

## INPUT SHAFT (Continued)

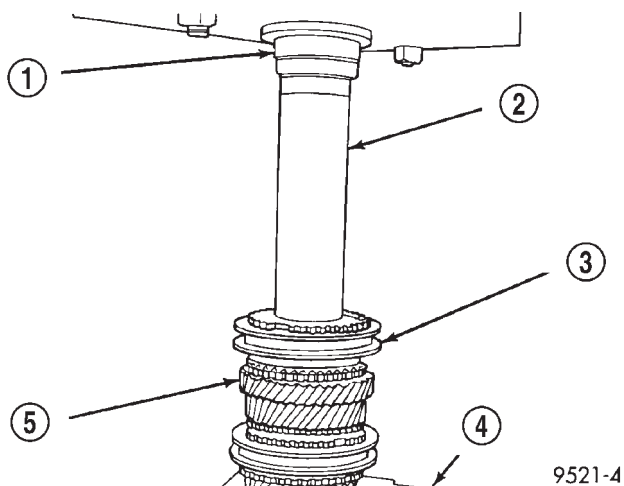
(10) Install 5th gear caged needle bearing (Fig. 18).



**Fig. 18 Caged Needle Bearing Installation**

- 1 - INPUT SHAFT
- 2 - CAGED NEEDLE BEARING

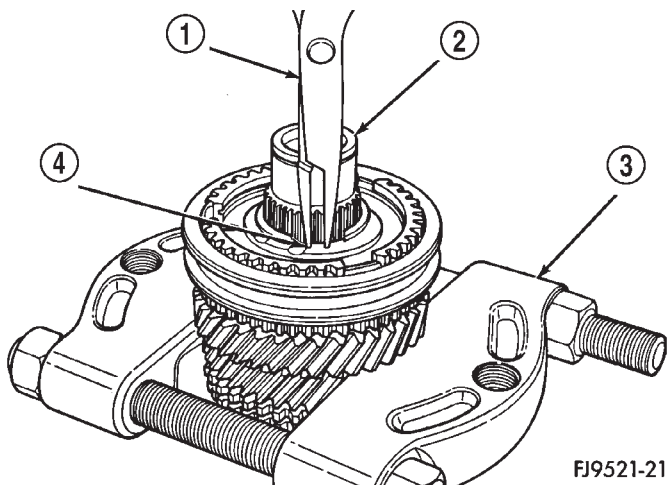
(11) Using special tool #C-3717, install 5th speed gear and synchronizer (Fig. 19). The 5th gear synchronizer hub has the letter **S** stamped on the top face of the hub. This designates that the hub must be installed with the **S** facing upward.



**Fig. 19 5th Speed Gear Installation**

- 1 - PRESS RAM
- 2 - SPECIAL TOOL C-3717
- 3 - SYNCHRONIZER ASSEMBLY
- 4 - BEARING SPLITTER
- 5 - 5TH SPEED GEAR

(12) Install 5th gear synchronizer snap ring (Fig. 20).



**Fig. 20 5th Gear Synchronizer Snap Ring Installation**

- 1 - SNAP RING PLIERS
- 2 - INPUT SHAFT
- 3 - BEARING SPLITTER
- 4 - SNAP RING

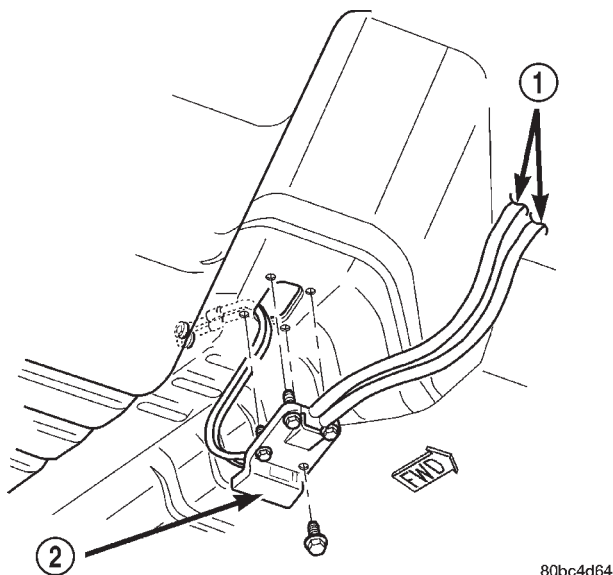
## GEARSHIFT CABLE

## INSTALLATION

**CAUTION:** Gearshift cable bushings must not be lubricated or the bushings will swell and split.

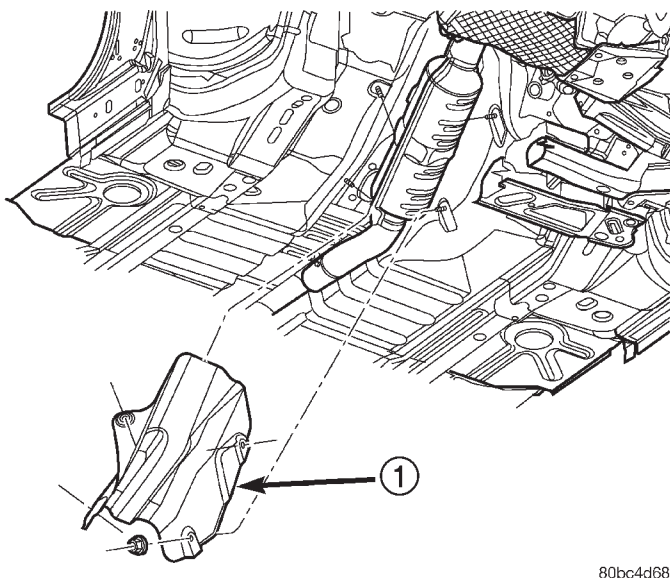
- (1) Raise vehicle on hoist.
- (2) Install cable assembly through floor pan opening and secure to floor pan with grommet plate and one screw (Fig. 21). Make sure the three grommet plate studs protrude through cable assembly and floor pan and tighten screw to 7 N·m (60 in. lbs.).
- (3) Route transaxle end of cable assembly into engine compartment and over transaxle assembly.
- (4) Install converter heat shield (Fig. 22).
- (5) Lower vehicle.
- (6) Install gearshift cables to mounting bracket and fasten with NEW clips (Fig. 23). Make sure clips are installed flush to bracket.

## GEARSHIFT CABLE (Continued)



**Fig. 21 Shift Cable Assembly at Floor Pan**

- 1 - CABLE ASSEMBLY
- 2 - GROMMET PLATE

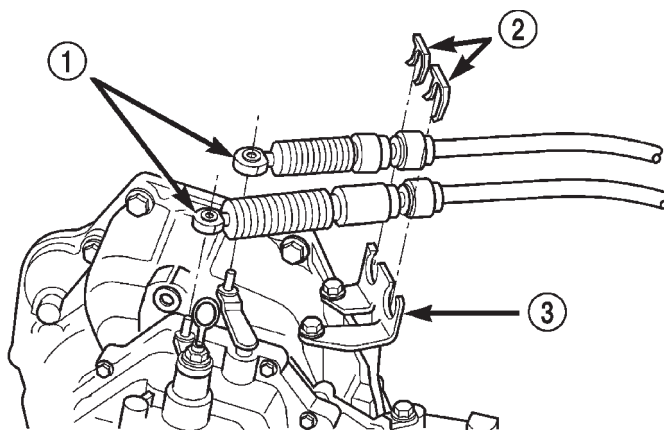


**Fig. 22 Converter Heat Shield Removal/Installation**

- 1 - CONVERTER HEAT SHIELD

(7) Connect gearshift selector and crossover cable to shift levers at transaxle (Fig. 23).

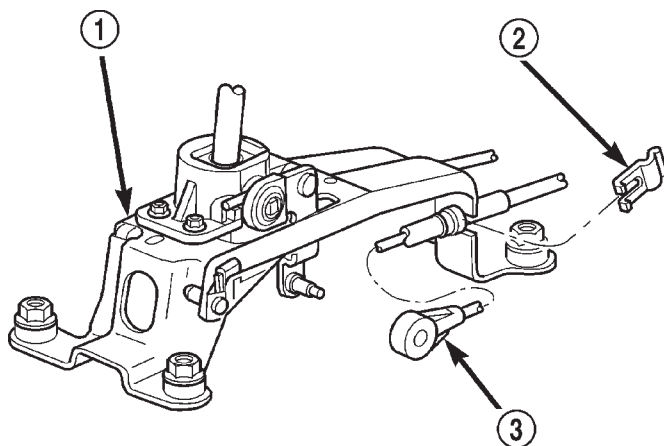
(8) Install and tighten the three grommet plate-to-floor pan nuts to 6 N·m (50 in. lbs.) torque.



**Fig. 23 Shift Cables at Transaxle**

- 1 - SHIFT CABLES
- 2 - CLIPS
- 3 - BRACKET

(9) Install selector cable to shifter lever and secure cable to shifter bracket. Install clip (Fig. 24).



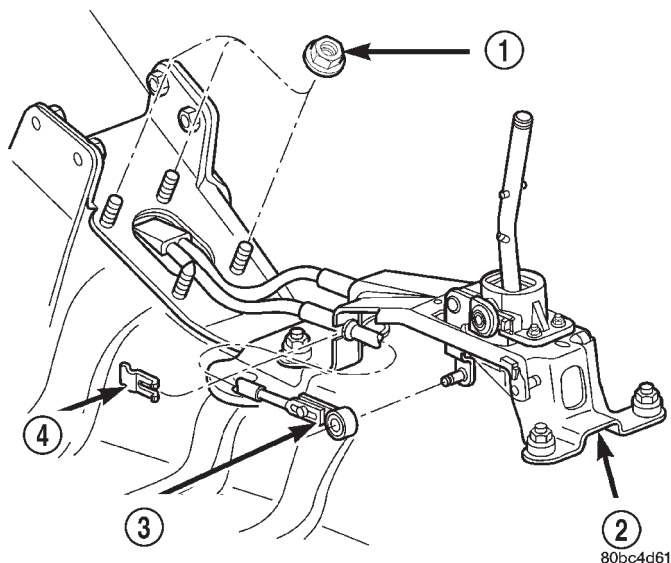
**Fig. 24 Selector Cable at Shifter Assembly**

- 1 - SHIFTER
- 2 - CLIP
- 3 - SELECTOR CABLE

(10) Install crossover cable to shifter lever and secure cable to shifter bracket. Install clip (Fig. 25).

**NOTE: Only the crossover cable is adjustable. The selector cable does not have any adjustment capabilities.**

## GEARSHIFT CABLE (Continued)



**Fig. 25 Crossover Cable at Shifter Assembly**

- 1 - GROMMET PLATE NUT
- 2 - SHIFTER
- 3 - CROSSOVER CABLE
- 4 - CLIP

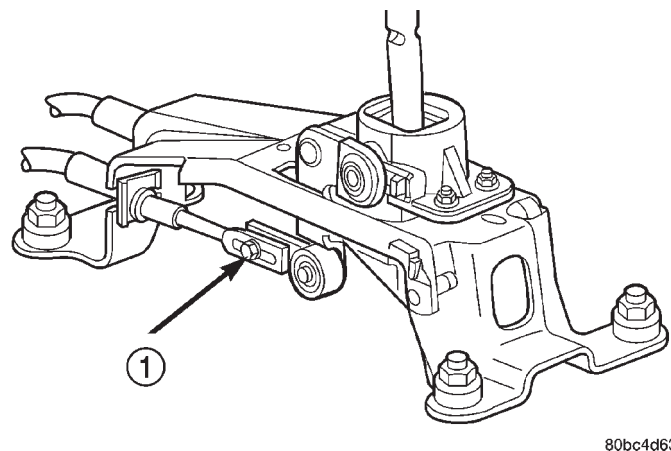
**(11) Adjust crossover cable as follows:**

(a) Loosen adjusting screw on crossover cable at shifter (Fig. 26).

(b) The gearshift mechanism and transaxle crossover lever are spring-loaded and self-centering. Alignment pins used in the past are not required anymore. Allow gearshift mechanism and transaxle crossover lever to relax in their neutral positions. To ensure the gearshift mechanism crossover link is in the proper position, place the shifter in 3rd or 4th gear if necessary. Torque adjustment screw to 8 N·m (70 in. lbs.). Care must be taken to avoid moving the shift mechanism off-center during screw tightening.

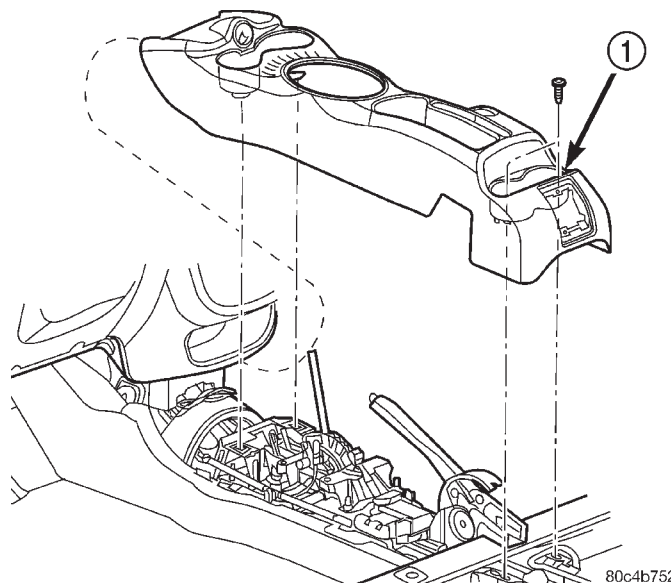
(c) Perform functional check by shifting transaxle into all gears.

(12) Install center console assembly (Fig. 27). Verify that boot is not pinched at console opening before tightening.



**Fig. 26 Crossover Cable Adjustment Screw**

- 1 - CROSSOVER ADJUSTMENT SCREW



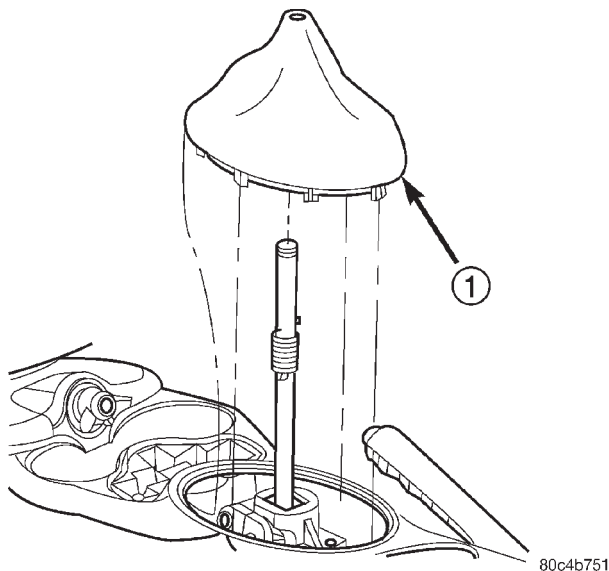
**Fig. 27 Center Console Removal/Installation - Typical**

- 1 - CENTER CONSOLE



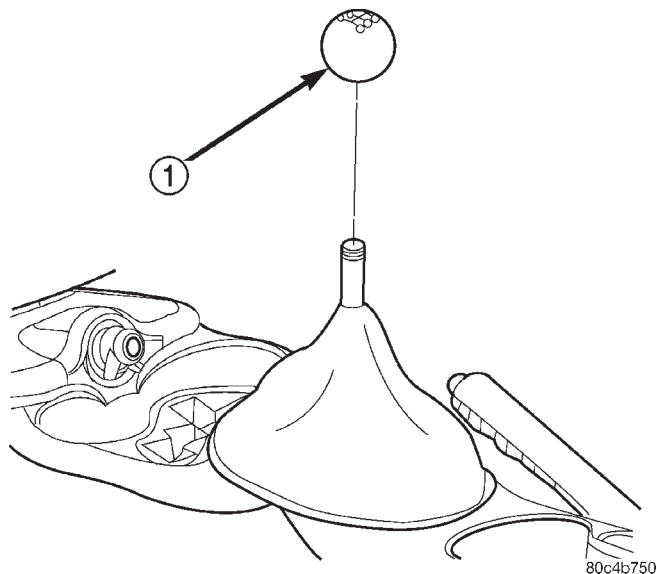
## GEARSHIFT CABLE (Continued)

(13) Position gearshift boot (Fig. 28) over the gearshift mechanism and engage tab on mount ring at front to opening in console. Apply hand pressure to engage bosses on mount ring of boot to console opening slots.

**Fig. 28 Gearshift Boot**

1 - GEARSHIFT BOOT

(14) Position gearshift knob hole over the gearshift mechanism (Fig. 29) and align the shift pattern.

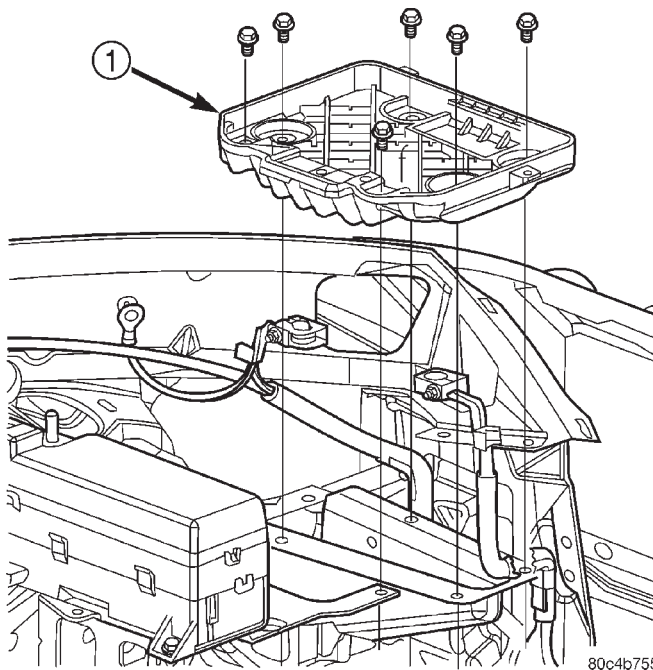
**Fig. 29 Gearshift Knob Removal/Installation**

1 - GEARSHIFT KNOB

(15) Strike knob with rubber mallet to engage knob to mechanism.

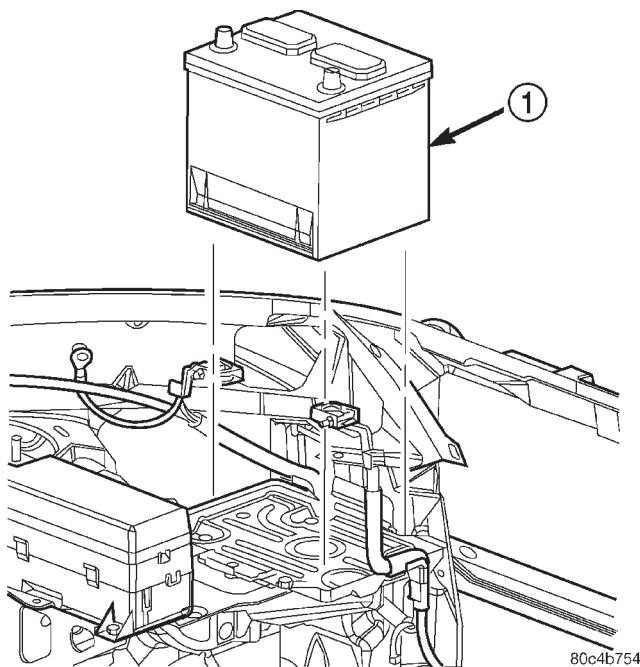
(16) Verify that shift pattern is aligned properly.

(17) Install battery tray (Fig. 30).

**Fig. 30 Battery Tray Removal/Installation**

1 - BATTERY TRAY

(18) Install battery and hold-down clamp (Fig. 31).

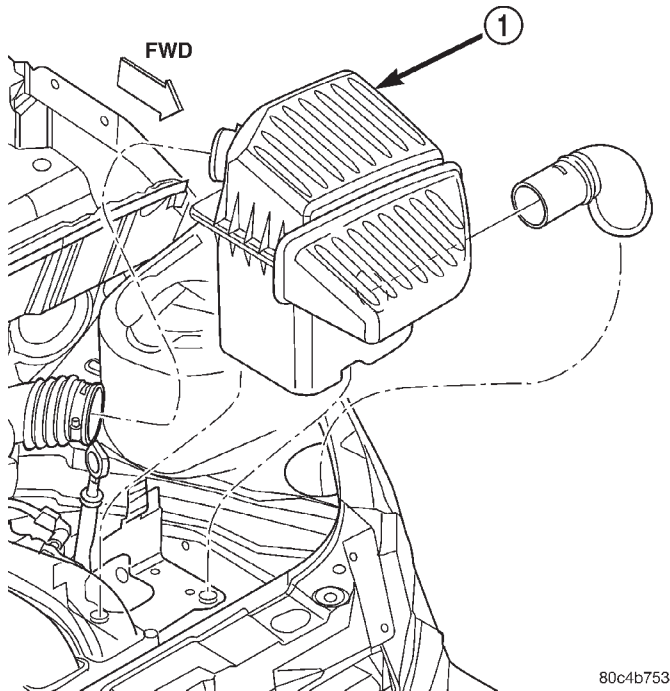
**Fig. 31 Battery Removal/Installation**

1 - BATTERY

(19) Install the air cleaner assembly (Fig. 32).

(20) Connect battery cables.

## GEARSHIFT CABLE (Continued)

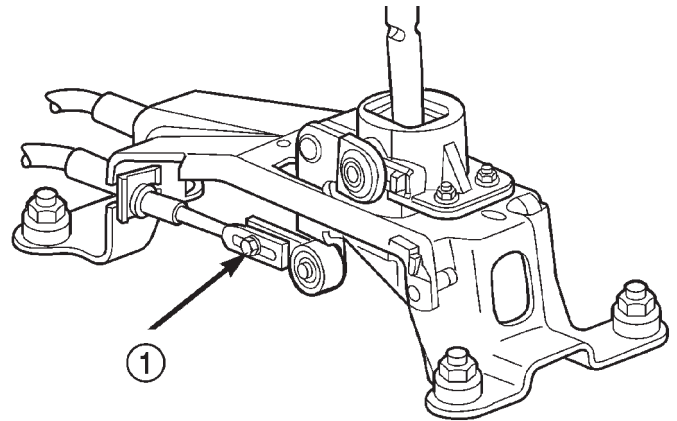
**Fig. 32 Air Cleaner Assembly Removal/Installation**

1 - AIR CLEANER ASSEMBLY

**ADJUSTMENT - GEARSHIFT CROSSOVER CABLE**

(1) Remove center console from vehicle. (Refer to 23 - BODY/INTERIOR/CENTER CONSOLE - REMOVAL)

(2) Loosen adjusting screw on crossover cable at shifter (Fig. 33).



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**Fig. 33 Loosen Crossover Cable Adjustment Screw**

1 - CROSSOVER ADJUSTMENT SCREW

(3) The gearshift mechanism and transaxle crossover lever are spring-loaded and self-centering. Alignment pins used in the past are not required anymore. Allow gearshift mechanism and transaxle crossover lever to relax in their neutral positions. To ensure the gearshift mechanism crossover link is in the proper position, place the shifter in 3rd or 4th gear if necessary. Torque adjustment screw to 8 N·m (70 in. lbs.). Care must be taken to avoid moving the shift mechanism off-center during screw tightening.

(4) Reinstall center console. Reinstall boot and knob. (Refer to 23 - BODY/INTERIOR/CENTER CONSOLE - INSTALLATION)

## BODY

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## DOOR - FRONT

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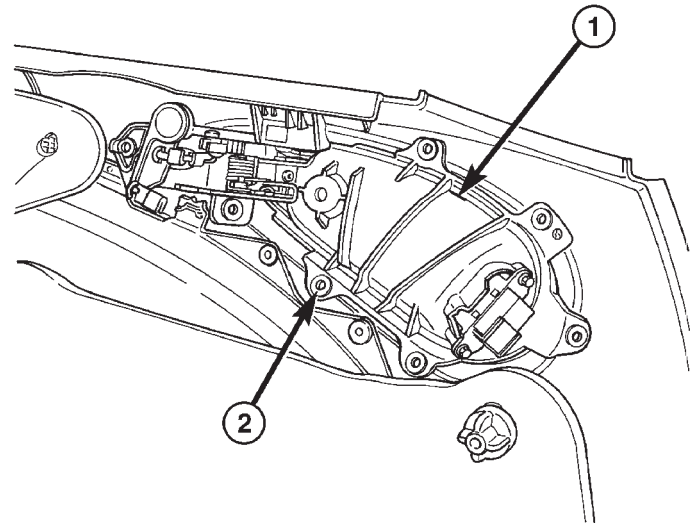
## INSIDE HANDLE ACTUATOR

### REMOVAL

- (1) Remove the door trim panel.

**CAUTION:** Do not use a drill to remove the heat stakes.

- (2) Remove the heat stakes using a razor knife or equivalent and remove the door handle (Fig. 1).  
 (3) Remove the front door inside remote handle/power door lock switch bezel.



**Fig. 1 Inside Handle Actuator**

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- 1 - INSIDE HANDLE ACTUATOR  
 2 - HEAT STAKES

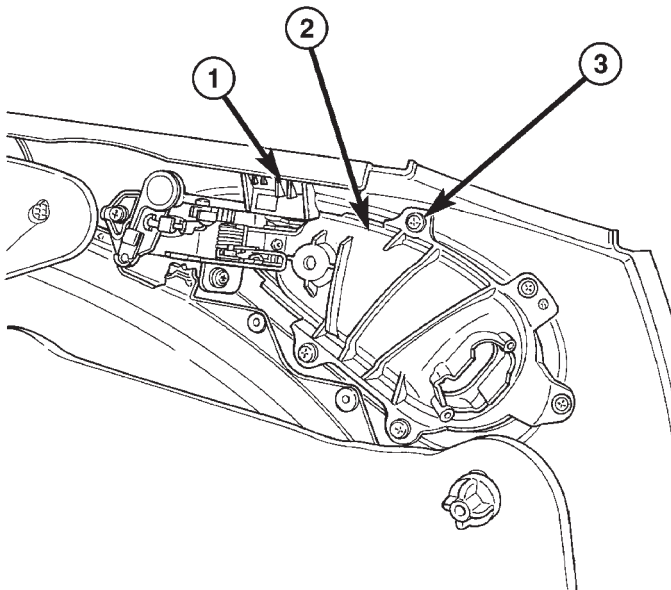


## INSIDE HANDLE ACTUATOR (Continued)

**INSTALLATION**

**NOTE:** Clean the excess heat staking off of the studs to aid installation.

- (1) Install the new inside door handle, install the screws and hand tighten (Fig. 2).
- (2) If necessary renew the upper heat stake. Refer to page 23-28 for heat staking procedure (Fig. 2).
- (3) Install the remote handle/power door lock switch bezel.
- (4) Install the door trim panel.



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**Fig. 2 Front Door Inside Handle Actuator**

- 1 - HEAT STAKE LOCATION
- 2 - INSIDE HANDLE ACTUATOR
- 3 - PHILLIPS TYPE SCREWS

## SEATS

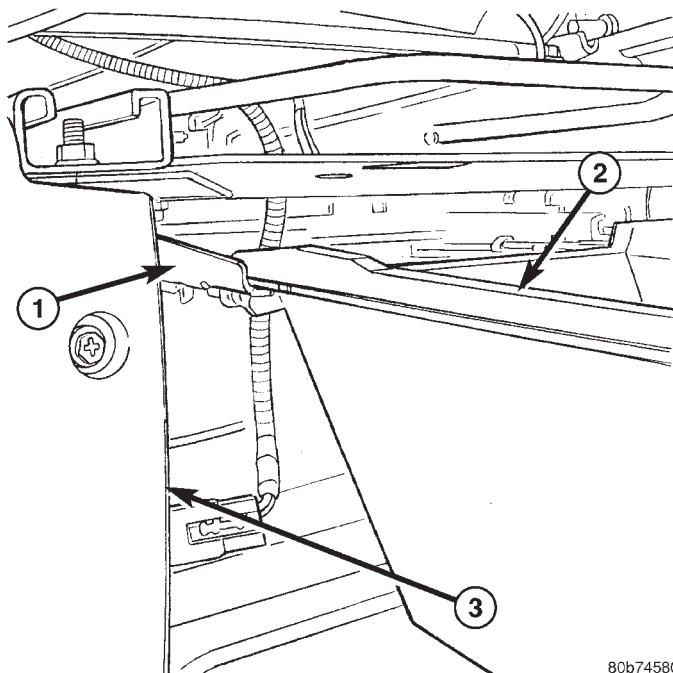
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## UNDER SEAT STORAGE BIN

## REMOVAL

- (1) Open cargo bin.
- (2) Pull cargo bin out until it reaches the end of the guide (Fig 1).
- (3) Lift upward on cargo bin and remove.

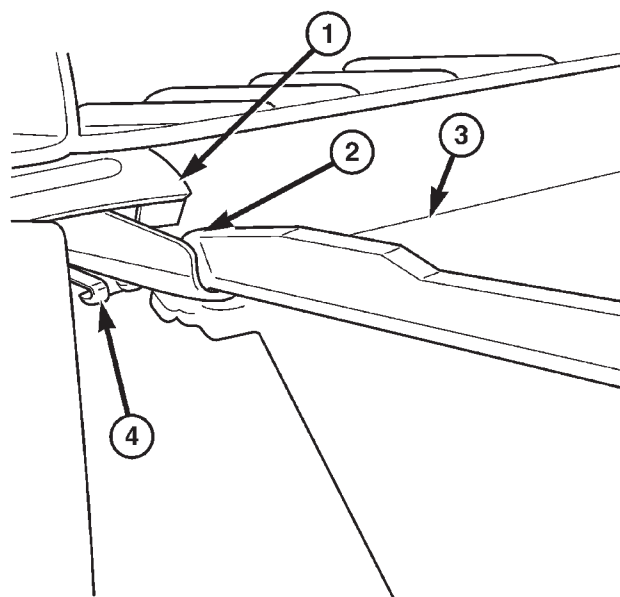
**Fig. 1 Cargo Bin**

- 1 - CARGO BIN TRACK
- 2 - CARGO BIN
- 2 - SEAT TRIM

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## INSTALLATION

- (1) Position cargo bin into cargo bin guides.
- (2) Lift upward on front of cargo bin to engage cargo bin stop.
- (3) Slide cargo bin to the fully closed position (Fig. 2).



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**Fig. 2 Cargo Bin guide**

- 1 - CARGO BIN STOP - SEAT SIDE
- 2 - CARGO BIN STOP - CARGO BIN SIDE
- 3 - CARGO BIN
- 2 - CARGO BIN GUIDE

## STATIONARY GLASS

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## WINDSHIELD

## DESCRIPTION

Windshields are made of two pieces of glass with a plastic inner layer. Windshields and selected stationary glass are structural members of the vehicle. The windshield glass is bonded to the windshield frame with urethane adhesive.

Windshields and other stationary glass protect the occupants from the effects of the elements. Windshields are also used to retain some airbags in position during deployment.

The windshield is attached to the window frame with urethane adhesive. The urethane adhesive is applied cold and seals the surface area between the window opening and the glass. The primer adheres the urethane adhesive to the windshield.

It is difficult to salvage a windshield during the removal operation. The windshield is part of the structural support for the roof. The urethane bonding used to secure the windshield to the fence is difficult to cut or clean from any surface. If the moldings are set in urethane, it would also be unlikely they could be salvaged. Before removing the windshield, check the availability of the windshield and moldings from the parts supplier.

## RECOMMENDED TOOLS AND ADHESIVE

- Fein® Power Cutout Knife
- Equalizer® Magnum, Interior Auto Glass Cut Out Knife

## ADHESIVE, PRIMER AND CLEANER

The urethane adhesive holding the windshield to the opening pinch weld (fence) can be cut using a sharp cold knife from the exterior of the vehicle. Using the cold knife method is effective if the windshield is already broken. If the glass must be salvaged, cutting the urethane adhesive from the interior of the vehicle using a reciprocating or oscillating power knife is recommended.

## RECOMMENDED TOOLS AND ADHESIVE

The following urethane adhesive systems are OEM certified and conform to the FMVSS 212 windshield retention standard and the FMVSS 216 roof crush standard.

## WINDSHIELD SAFETY PRECAUTIONS

**WARNING: DO NOT OPERATE THE VEHICLE WITHIN 24 HOURS OF WINDSHIELD INSTALLATION. IT TAKES AT LEAST 24 HOURS FOR URETHANE ADHESIVE TO CURE. IF IT IS NOT CURED, THE WINDSHIELD MAY NOT PERFORM PROPERLY IN AN ACCIDENT.**

**URETHANE ADHESIVES ARE APPLIED AS A SYSTEM. USE GLASS CLEANER, GLASS PREP SOLVENT, GLASS PRIMER, AND PINCH WELD (FENCE) PRIMER PROVIDED BY THE ADHESIVE MANUFACTURER. IF NOT, STRUCTURAL INTEGRITY COULD BE COMPROMISED.**

**CHRYSLER DOES NOT RECOMMEND GLASS ADHESIVE BY BRAND. TECHNICIANS SHOULD REVIEW PRODUCT LABELS AND TECHNICAL DATA SHEETS, AND USE ONLY ADHESIVES THAT THEIR MANUFACTURES WARRANT WILL RESTORE A VEHICLE TO THE REQUIREMENTS OF FMVSS 212. TECHNICIANS SHOULD ALSO INSURE THAT PRIMERS AND CLEANERS ARE COMPATIBLE WITH THE PARTICULAR ADHESIVE USED.**

**BE SURE TO REFER TO THE URETHANE MANUFACTURER'S DIRECTIONS FOR CURING TIME SPECIFICATIONS, AND DO NOT USE ADHESIVE AFTER ITS EXPIRATION DATE.**

**VAPORS THAT ARE EMITTED FROM THE URETHANE ADHESIVE OR PRIMER COULD CAUSE PERSONAL INJURY. USE THEM IN A WELL-VENTILATED AREA. SKIN CONTACT WITH URETHANE ADHESIVE SHOULD BE AVOIDED. PERSONAL INJURY MAY RESULT. ALWAYS WEAR EYE AND HAND PROTECTION WHEN WORKING WITH GLASS.**

## WINDSHIELD (Continued)

**CAUTION:** Protect all painted and trimmed surfaces from coming in contact with urethane or primers. Be careful not to damage painted surfaces when removing moldings or cutting urethane around windshield.

**REMOVAL - INTERIOR METHOD**

The urethane adhesive holding the windshield to the opening pinch weld (fence) can be cut using a sharp cold knife from the exterior of the vehicle. Using the cold knife method is effective if the windshield is already broken. If the glass must be salvaged, cutting the urethane adhesive from the interior of the vehicle using a reciprocating or oscillating power knife is recommended.

- (1) Remove inside rear view mirror.
- (2) Remove instrument panel top cover, refer to Instrument Panel.
- (3) Remove A-pillar trim.
- (4) Place protective covers over instrument panel and hood.
- (5) Using a reciprocating or oscillating power knife, cut urethane adhesive holding the windshield to the A-pillars, roof header and cowl pinch weld fences. Refer to instructions provided with the equipment being used.
- (6) Remove windshield from vehicle.

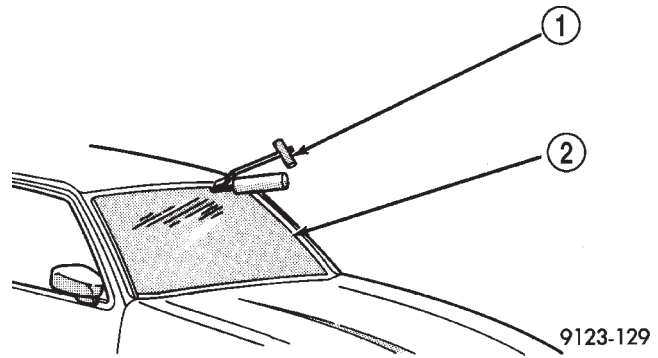
**REMOVAL - EXTERIOR METHOD**

The urethane adhesive holding the windshield to the opening pinch weld (fence) can be cut using a sharp cold knife from the exterior of the vehicle. Using the cold knife method is effective if the windshield is already broken. If the glass must be salvaged, cutting the urethane adhesive from the interior of the vehicle using a reciprocating or oscillating power knife is recommended.

- (1) Remove inside rear view mirror.
- (2) Remove windshield wiper arms.
- (3) Remove cowl cover.
- (4) Place protective covers over instrument panel and hood.
- (5) Remove windshield A-pillar trim.
- (6) Using a sharp cold knife, cut urethane adhesive holding the windshield to the A-pillars, roof header and cowl pinch weld fences (Fig. 1). A power cutting device can be used if available.
- (7) Remove windshield from vehicle.

**INSTALLATION**

**CAUTION:** Open the left front door glass before installing windshield to avoid pressurizing the passenger compartment. If a door is slammed before urethane bonding is cured, water leaks can result.



**Fig. 1 Cut Urethane Around Windshield**

- 1 - COLD KNIFE  
2 - WINDSHIELD ASSEMBLY WITH ENCAPSULATION

Allow the urethane at least 24 hours to cure before returning the vehicle to use.

To avoid stressing the replacement windshield, the urethane bonding material on the windshield fence should be smooth and consistent to the shape of the replacement windshield. The support spacers should be cleaned and properly installed on weld studs or repair screws at bottom of windshield opening.

- (1) Verify support spacers in windshield opening. If not present, install spacers as indicated (Fig. 3).
- (2) Verify squeak tape on roof panel hooks. If not present, install squeak tape (Fig. 3). Section C-C.
- (3) Verify replacement windshield has squeak tape and anti-squeak lube. If not present, install squeak tape and anti-squeak lube (Fig. 2).
- (4) Position windshield into opening by installing encapsulation locator pin then loading the encapsulation hooks onto the panel hooks (Fig. 4).
- (5) Verify glass encapsulation lays evenly along roof panel and that there is no gapping of the encapsulation squeak tape to the windshield opening. If gaps are present, the pinch weld fence must be formed to the shape of the new glass.
- (6) Remove replacement windshield from opening.
- (7) Position the windshield inside up on a suitable work surface with two padded, wood 10 cm by 10 cm by 50 cm (4 in. by 4 in. by 20 in.) blocks, placed parallel 75 cm (2.5 ft.) apart (Fig. 5).

**WARNING: DO NOT USE SOLVENT BASED GLASS CLEANER TO CLEAN WINDSHIELD BEFORE APPLYING GLASS PREP AND PRIMER. POOR ADHESION CAN RESULT.**

- (8) Clean inside of windshield with ammonia based glass cleaner and lint-free cloth.
- (9) Apply Glass Prep adhesion promoter 25 mm (1 in.) wide around perimeter of windshield and wipe with clean/dry lint-free cloth until no streaks are visible.

## WINDSHIELD (Continued)

(10) Apply Glass Primer 25 mm (1 in.) wide around perimeter of windshield. Allow at least three minutes drying time.

(11) Apply a bead of urethane on windshield glass as indicated (Fig. 5).

(12) With the aid of a helper, position the windshield over the windshield opening and install encapsulation locator pin then load encapsulation hooks onto the roof panel hooks.

(13) Push windshield into opening until no gap encapsulation lays evenly along roof panel and there is no gapping of encapsulation squeak tape to the windshield opening

(14) Clean excess urethane from exterior with Mopar, Super clean or equivalent.

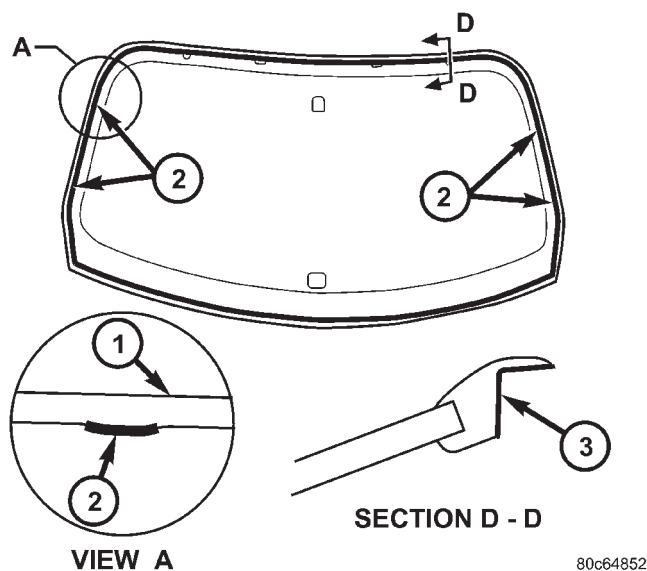
(15) Apply tape to windshield assembly as required if gap exists around windshield opening.

(16) After urethane has cured, remove tape strips and water test windshield to verify repair.

(17) Install cowl covers.

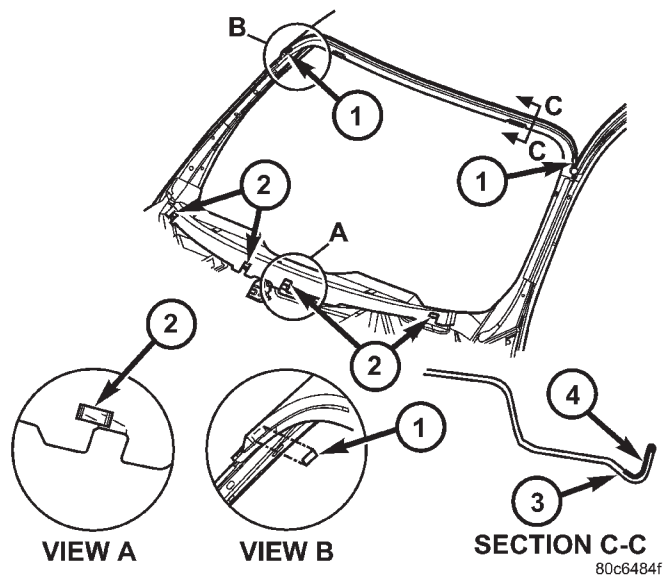
(18) Install inside rear view mirror.

(19) Allow urethane to cured for 10-12 hours. Remove tape strips and water test windshield.



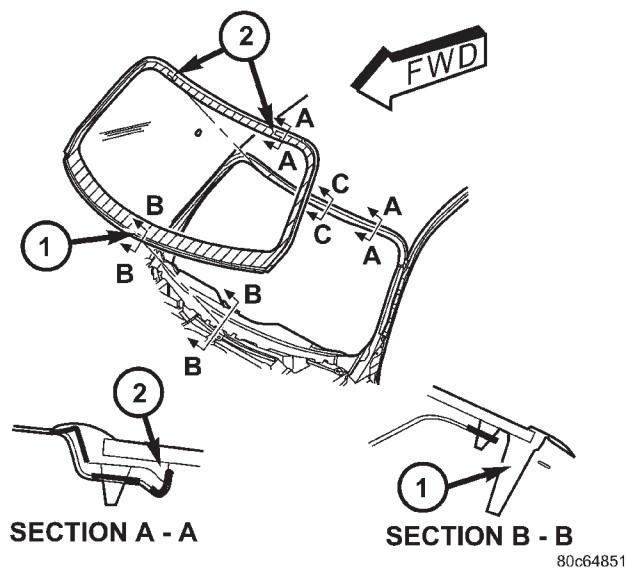
**Fig. 2 WINDSHIELD INSTALLATION**

- 1 - WINDSHIELD ASSEMBLY WITH ENCAPSULATION
- 2 - ENCAPSULATION SQUEAK REDUCTION TAPE
- 3 - ANTI-SQUEAK LUBRICANT



**Fig. 3 WINDSHIELD SUPPORTS**

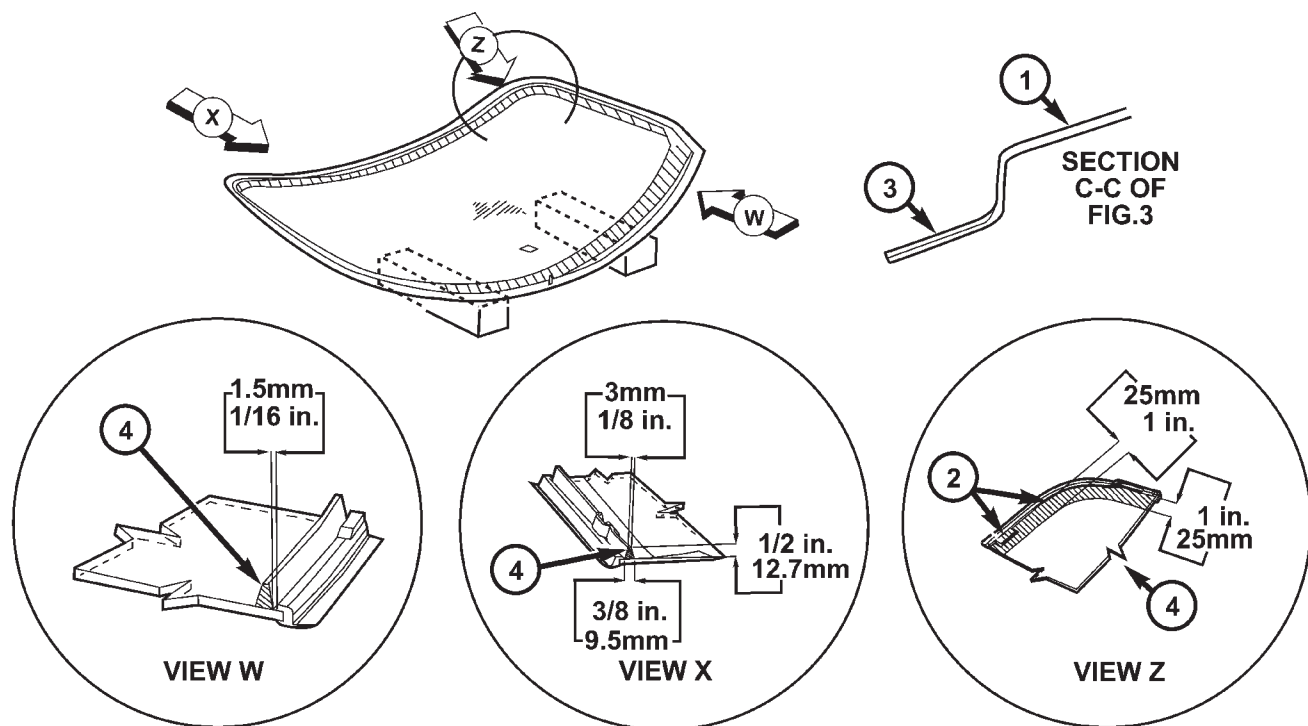
- 1 - SUPPORT SPACERS ON ROOF PANEL (9mm X 20mm X 3mm)
- 2 - SUPPORT SPACERS ON COWL PANEL (9mm X 20mm X 6mm)
- 3 - ROOF PANEL HOOK
- 4 - ROOF PANEL SQUEAK REDUCTION TAPE



**Fig. 4 WINDSHIELD LOADING**

- 1 - ENCAPSULATION LOCATOR PIN
- 2 - ENCAPSULATION HOOK

## WINDSHIELD (Continued)



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**Fig. 5 URETHANE APPLICATION**

1 - WINDSHIELD ASSEMBLY WITH ENCAPSULATION  
2 - GLASS PRIMERS

3 - WINDSHIELD OPENING PRIMER  
4 - URETHANE

**BACKLITE****REMOVAL**

**WARNING:** DO NOT OPERATE THE VEHICLE WITHIN 24 HOURS OF WINDSHIELD INSTALLATION. IT TAKES AT LEAST 24 HOURS FOR URETHANE ADHESIVE TO CURE. IF IT IS NOT CURED, THE WINDSHIELD MAY NOT PERFORM PROPERLY IN AN ACCIDENT. BE SURE TO REFER TO THE URETHANE MANUFACTURER'S DIRECTIONS FOR CURING TIME SPECIFICATIONS, AND DO NOT USE ADHESIVE AFTER ITS EXPIRATION DATE.

**CAUTION:** Open the left front door glass before installing the rear window to avoid pressurizing the passenger compartment if a door is slammed before the urethane bonding is fully cured. Water leaks can result

Refer to the Windshield Removal procedure for a description of tools and adhesive systems that are recommended for use in this procedure.

- (1) Remove liftgate trim panels (Fig. 6).
- (2) Disconnect wire connectors from rear window defogger (Fig. 7).

- (3) Disconnect and remove CHMSL lamp.

**WARNING:** WEAR EYE AND HAND PROTECTION WHEN HANDLING SAFETY GLASS. PERSONAL INJURY CAN RESULT.

**CAUTION:** Do not damage body or trim finish when cutting out glass or applying fence primer.

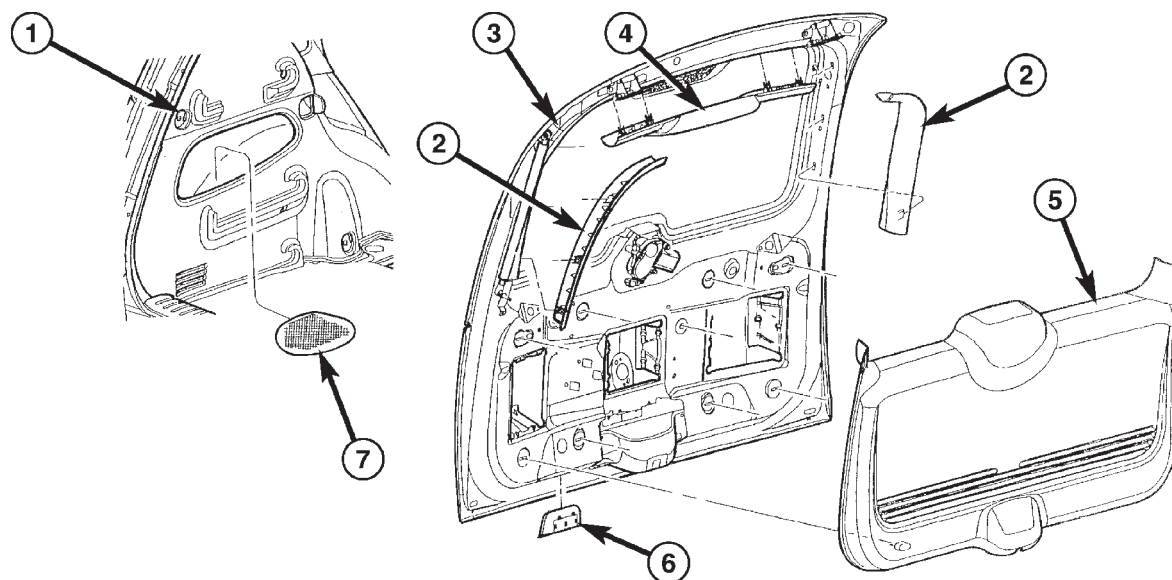
- (4) Cut the urethane around the perimeter of the rear window glass. Refer to Windshield for proper procedures.

- (5) Remove the rear window from the vehicle.

- (6) Prepare the work area, window fence, and glass the same way as described in the Windshield Installation procedure.



## BACKLITE (Continued)

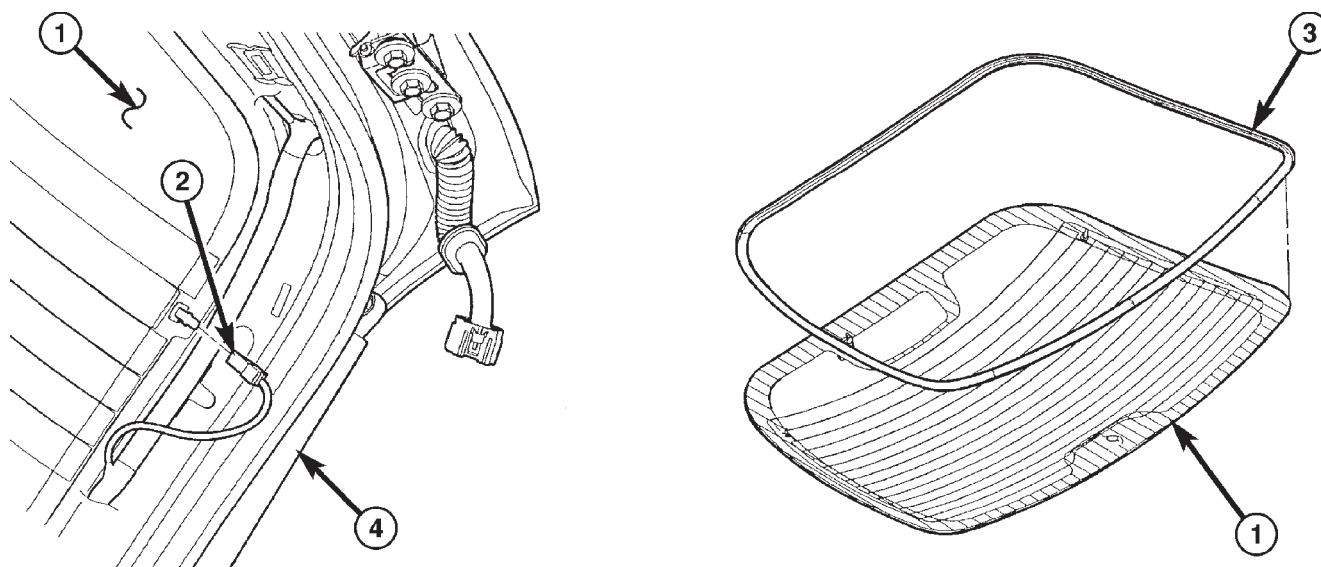


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**Fig. 6 Liftgate Trim Panels**

- 1 – EDGE OF LIFTGATE TROUGH
- 2 – LIFTGATE HALO
- 3 – LIFTGATE
- 4 – CHMSL COVER TRIM

- 5 – LIFTGATE TRIM PANEL
- 6 – LIFTGATE PULL CUP
- 7 – REAR CONVENIENCE BEZEL



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**Fig. 7 Rear Window Glass**

- 1 – LIFTGATE WINDOW GLASS
- 2 – REAR WINDOW DEFOGGER CONNECTOR

- 3 – LIFTGATE GLASS MOLDING
- 4 – LIFTGATE INNER PANEL

## BACKLITE (Continued)

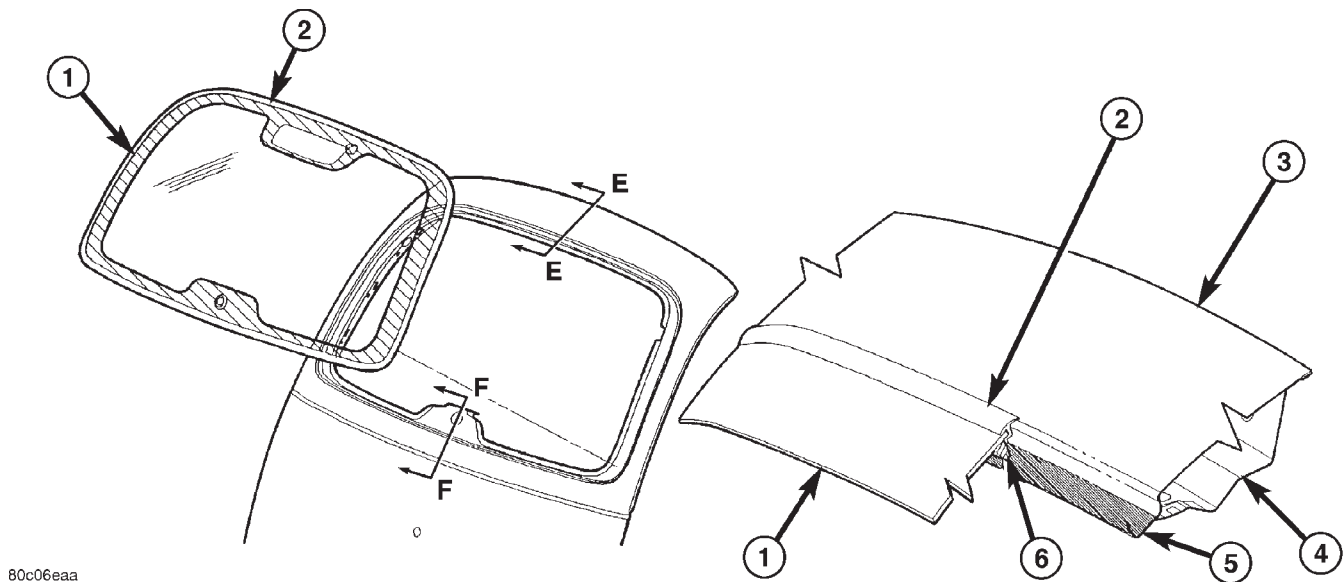
## INSTALLATION

**WARNING: DO NOT OPERATE THE VEHICLE WITHIN 24 HOURS OF WINDSHIELD INSTALLATION. IT TAKES AT LEAST 24 HOURS FOR URETHANE ADHESIVE TO CURE. IF IT IS NOT CURED, THE WINDSHIELD MAY NOT PERFORM PROPERLY IN AN ACCIDENT. BE SURE TO REFER TO THE URETHANE MANUFACTURER'S DIRECTIONS FOR CURING TIME SPECIFICATIONS, AND DO NOT USE ADHESIVE AFTER ITS EXPIRATION DATE.**

**CAUTION: Open the left front door glass before installing the rear window to avoid pressurizing the passenger compartment if a door is slammed before the urethane bonding is fully cured. Water leaks can result.**

Refer to the Windshield Removal procedure for a description of tools and adhesive systems that are recommended for use in this procedure.

- (1) Install the Liftgate window molding on glass.
- (2) Apply a 10 mm (0.4 in.) bead of urethane around the perimeter of the glass.
- (3) Place liftgate window glass into position (Fig. 8).
- (4) Install the glass in the same manner described in the Windshield Install.
- (5) Connect rear window defogger wiring (Fig. 7).
- (6) After urethane has cured, water test rear window to verify repair. Verify rear window defogger operation.
- (7) Install and connect the CHMSL lamp.
- (8) Install liftgate trim panels (Fig. 6).



**Fig. 8 Liftgate Window Glass Installation**

- 1 – LIFTGATE WINDOW GLASS
- 2 – LIFTGATE GLASS MOLDING
- 3 – LIFTGATE OUTER PANEL

- 4 – LIFTGATE INNER PANEL
- 5 – CLEAN WITH VM & P NAPHTHA & PRIMER BLACK OUT GLASS PAINT
- 6 – HIGH VISCOSITY ADHESIVE



## QUARTER WINDOW

### REMOVAL

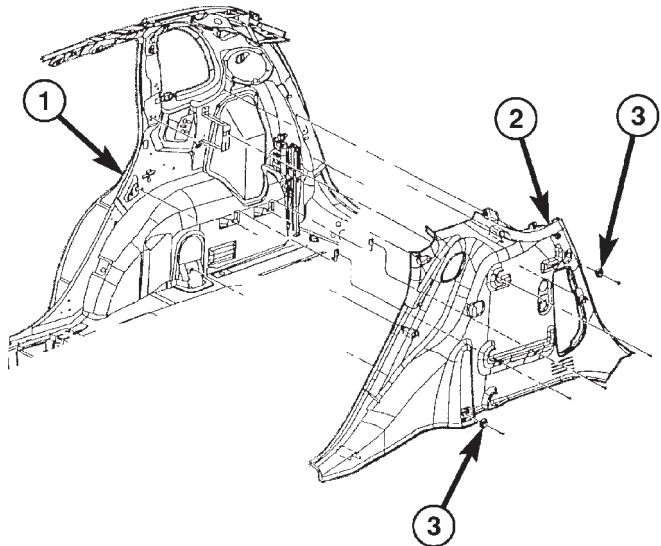
Refer to the Windshield Removal procedure for a description of tools and adhesive systems that are recommended for use in this procedure.

- (1) Open liftgate
- (2) Remove C & D Pillar upper trim panel (Fig. 9).
- (3) Remove lower quarter trim panel as necessary (Fig. 10).
- (4) Remove nuts attaching quarter window glass. (Fig. 11).

**WARNING: WEAR EYE AND HAND PROTECTION WHEN HANDLING SAFETY GLASS. PERSONAL INJURY CAN RESULT.**

**CAUTION: Do not damage body or trim finish when cutting out glass or applying fence primer.**

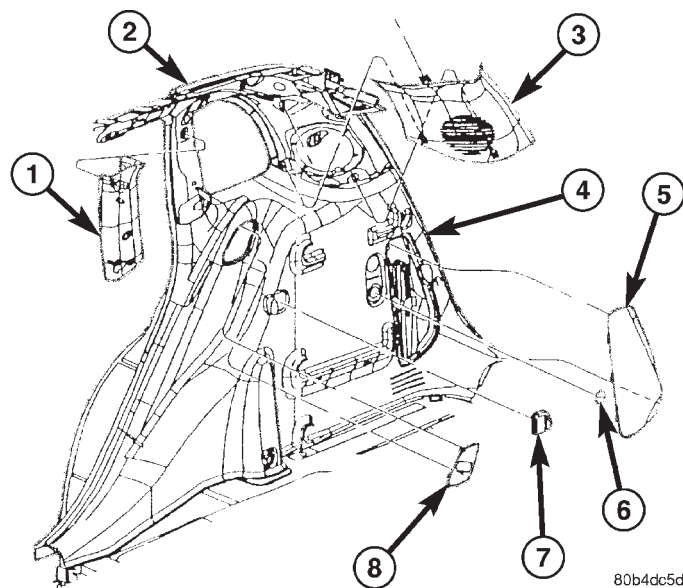
- (5) Remove the quarter window glass from the vehicle by pushing on glass from inside of vehicle.



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**Fig. 10 Lower Quarter Trim**

- 1 – REAR QUARTER PANEL
- 2 – REAR QUARTER TRIM PANEL
- 3 – CARGO TIE DOWN QUARTER TRIM LOWER LOOP



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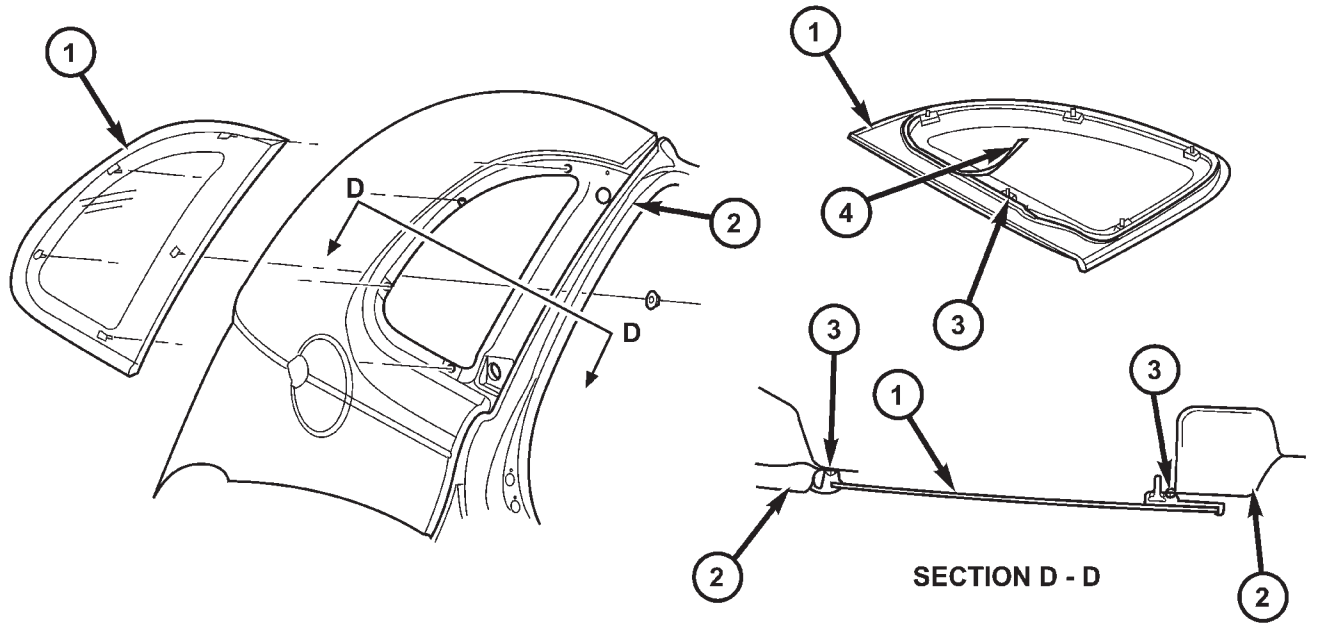
**Fig. 9 Quarter Trim Panel**

- 1 – C-PILLAR UPPER TRIM PANEL
- 2 – REAR QUARTER PANEL
- 3 – D-PILLAR UPPER TRIM PANEL
- 4 – QUARTER LOWER TRIM PANEL
- 5 – JACK STORAGE ACCESS DOOR
- 6 – QUARTER TRIM PANEL LOWER PLUG
- 7 – VERTICAL BUMPER
- 8 – SEAT LATCH STRIKER COVER

### INSTALLATION

- (1) Prepare window fence by removing existing butyl.
- (2) Remove butyl release paper on outer glass.
- (3) Place quarter window glass into position.
- (4) Install quarter window glass attaching nuts.
- (5) Water test quarter window glass to verify repair.
- (6) Install lower quarter trim, and C& D-Pillar trim (Fig. 9) and (Fig. 10).
- (7) Close liftgate.

## QUARTER WINDOW (Continued)



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**Fig. 11 Quarter Window Glass**

1 - QUARTER WINDOW GLASS  
2 - C-PILLAR

3 - BUTYL  
4 - BUTYL RELEASE PAPER

## SUNROOF

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**SUNROOF**

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**SUNROOF****DIAGNOSIS AND TESTING – SUNROOF**

Before beginning sunroof diagnostics verify that all other power accessories are in proper operating condition. Refer to Sunroof Diagnostic Chart for possible causes. If not, a common electrical problem may exist. For circuit, splice and component descriptions refer to Section 8 - ELECTRICAL/WIRING DIAGRAM INFORMATION - DESCRIPTION. Check the condition of the circuit protection (20 amp circuit breaker in cavity 19 of the Junction Block). Inspect all wiring connector pins for proper engagement and continuity. Check for battery voltage at the power

sunroof controller, refer to Section 8W - WIRING DIAGRAMS, for circuit information. If battery voltage of more than 10 volts is detected at the controller, proceed with the following tests (the controller will not operate at less than 10 volts).

Before beginning diagnosis for wind noise or water leaks, verify that the problem was not caused by releasing the control switch before the sunroof was fully closed. The sunroof module has a water-management system. If however, the sunroof glass is in a partial closed position, high pressure water may be forced beyond the water management system boundaries and onto the headlining.

| CONDITION       | STEP | CORRECTION                                                                                                                                                                                |
|-----------------|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sunroof Binding | 1    | If sunroof stops in the wrong position, see timing procedure.                                                                                                                             |
|                 | 2    | 2a) If glass does not pop out of opening adjust glass fore and aft in opening.                                                                                                            |
|                 |      | 2b) Check seal for damage or contamination by foreign substance.                                                                                                                          |
|                 | 3    | If sunshade is not on track and not traveling freely install shade guides to tracks per manual and test the sunroof.<br>NOTE: Rear flange of sunshade should be rearward of water trough. |
|                 | 4    | If motor is not running freely when removed from sunroof module refer to electrical failure section.                                                                                      |
|                 | 5    | If cables do not move freely with motor removed then check for broken or disengaged trough guide.                                                                                         |
| Wind Noise      | 1    | If sunroof is open when condition occurs, inspect deflector for broken hinges or other damaged components. If damaged, replace with service deflector kit #05016634AC.                    |
|                 |      | Note: There may be a degree of buffeting or booming with sunroof glass is fully open. This condition is normal. To minimize it simply close the glass partially.                          |
|                 | 2    | If sunroof is closed when the condition occurs adjust glass panel to assure proper fit of glass to roof panel.                                                                            |

## SUNROOF (Continued)

| CONDITION                                                          | STEP | CORRECTION                                                                                                                                                                                |
|--------------------------------------------------------------------|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Water Leaks                                                        | 1    | If glass is not flush to panel when closed.                                                                                                                                               |
|                                                                    |      | 1a) adjust glass per service manual and verify function.                                                                                                                                  |
|                                                                    |      | 1b) check seal for damages (cuts, gaps, etc.).                                                                                                                                            |
|                                                                    | 2    | If drain tubes (four tubes) are not draining properly,                                                                                                                                    |
|                                                                    |      | 2a) check for kinks, blockage or obstructions,                                                                                                                                            |
|                                                                    |      | 2b) verify that tubes are attached to sunroof frame.                                                                                                                                      |
|                                                                    | 3    | If drain tubes are draining properly remove headliner and check for leaks at drain spouts.                                                                                                |
| Inoperative or Improper Operation of Sunroof (Electrical Failures) | 1    | If controller is not getting power and wire harness does not have continuity from terminal to terminal, replace wire harness.                                                             |
|                                                                    | 2    | If controller is not getting power and the wire harness has continuity from terminal to terminal check for blown fuses or other wiring problems exterior to sunroof.                      |
|                                                                    | 3    | Use a multimeter to check if user switch lines go to ground when the switch is activated (open: pin B, vent: pin D, close: pin F). If no go to step 4; if yes go to step 5.               |
|                                                                    | 4    | Unplug switch from controller harness, and use a multimeter to check if pins 4 and 6, 4 and 5, and 4 and 7 short when switch is pressed. If no replace switch; if yes replace controller. |
|                                                                    | 5    | If motor is not getting power and motor harness is not continuous replace harness.                                                                                                        |
|                                                                    |      | If motor is not getting power and motor harness is continuous replace controller.                                                                                                         |
|                                                                    |      | If motor is getting power, replace motor.                                                                                                                                                 |

**WATER DRAINAGE AND WIND NOISE DIAGNOSIS**

The sliding glass panel is designed to seal water entry with a snug fit between the roof and the seal. The fit can be checked by inserting a piece of paper between the roof and the seal. The piece of paper should have some resistance when pulled out when the glass panel is in the closed position. The sunroof housing will drain off a minimum amount of water. Excessive wind noise could result if the gap clearances are exceeded. The sunroof glass panel may need to be adjusted. Refer to Section 23 - BODY/SUNROOF/GLASS PANEL - DESCRIPTION

Adequate drainage is provided by a drain trough in the sunroof housing which encircles the sliding glass panel and leads to drain hoses. If a wet headliner or other water leak complaints are encountered, before performing any adjustments, first ensure that the

drainage system is not plugged or disconnected. Use a pint container to pour water into the sunroof housing drain trough. If water flow is restricted, use compressed air to blow out any material plugging the drain system. Retest system again.

To further check for a disconnected drain hose:

(1) Remove A-pillar trim, sun visors, and map lamps/mini console.

(2) Remove sunroof opening trim lace. Refer to Section 23 - BODY/SUNROOF/OPENING TRIM LACE - REMOVAL.

(3) Lower headliner as necessary to gain access to sunroof housing drain tubes. Refer to Section 23 - BODY/INTERIOR/HEADLINER - REMOVAL

(4) Repair as necessary.



## HEATING &amp; AIR CONDITIONING

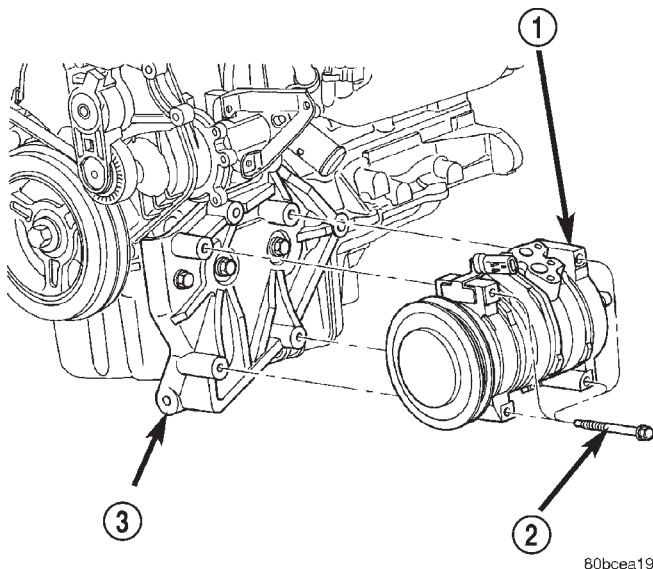
## PLUMBING

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## A/C COMPRESSOR

## DESCRIPTION

**Fig. 1 Compressor**

- 1 - A/C COMPRESSOR
- 2 - MOUNTING BOLTS
- 3 - LOWER FRONT STRUT-TO-ENGINE BRACKET

The compressor (Fig. 1) used on this vehicle can be one of two models, depending upon the transmission in the vehicle. Vehicles with a manual transmission use the Nippondenso 10S15 compressor, while vehicles with an automatic transmission use the Nippondenso 10S17 unit. These compressors use an aluminum swash plate, teflon coated pistons and aluminum sleeveless cylinder walls. A high pressure cut out switch is located on the back cover of the compressor.

The compressor is secured to the lower front strut-to-engine bracket with four screws. The lower front strut-to-engine bracket is located on the lower, forward skirt of the engine block which is located in the right front corner of the engine compartment.

The compressor cannot be repaired. If faulty or damaged, the entire compressor unit must be replaced. The compressor clutch, pulley, clutch coil and the high pressure cut out switch are available for service replacement.

**OPERATION**

The compressor is driven by the engine through an electric clutch, drive pulley and belt arrangement. The compressor is lubricated by refrigerant oil that is circulated throughout the refrigerant system with the refrigerant.

The compressor draws in low-pressure refrigerant vapor from the evaporator through its suction port. It then compresses the refrigerant into a high-pressure, high-temperature refrigerant vapor. The compressor pumps high-pressure refrigerant vapor to the condenser through the compressor discharge port.

**DIAGNOSIS AND TESTING - COMPRESSOR NOISE**

Excessive noise while the A/C is being used, can be caused by loose mounts, loose clutch, or high operating pressure. Verify compressor drive belt condition, proper refrigerant charge and head pressure before compressor repair is performed.

If the A/C drive belt slips at initial start-up, it does not necessarily mean the compressor has failed.

With the close tolerances of a compressor it is possible to experience a temporary lockup. The longer the A/C system is inactive, the more likely the condition to occur.

## A/C COMPRESSOR (Continued)

This condition is the result of normal refrigerant movement within the A/C system caused by temperature changes. The refrigerant movement may wash the oil out of the compressor.

## REMOVAL

The compressor may be removed from the mounting bracket and repositioned without disconnecting the refrigerant lines or discharging the refrigerant system. Discharging is not necessary if servicing the compressor clutch or clutch coil, the engine, the cylinder head or the generator.

**WARNING: REVIEW THE WARNINGS AND CAUTIONS IN THE FRONT OF THIS GROUP BEFORE PERFORMING THE FOLLOWING OPERATION.**

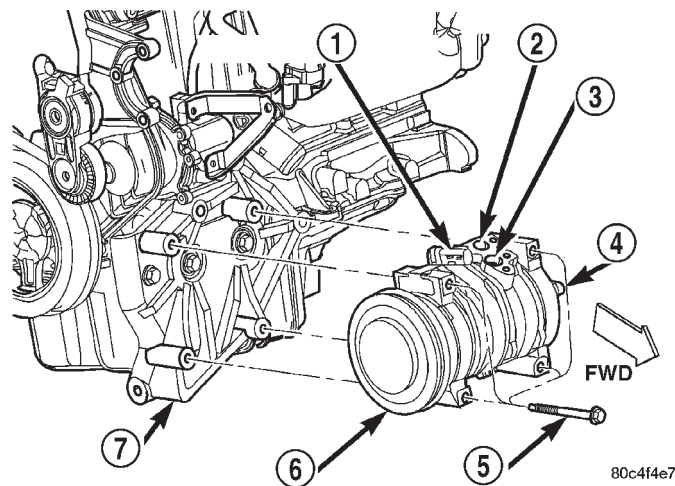
(1) Recover the refrigerant from the refrigerant system. Refer to **Refrigerant Recovery** in this group for the proper procedures.

(2) Disconnect and isolate the battery negative cable.

(3) Raise and support the vehicle.

(4) Remove the serpentine drive belt. Refer to **Cooling System** for the proper procedures.

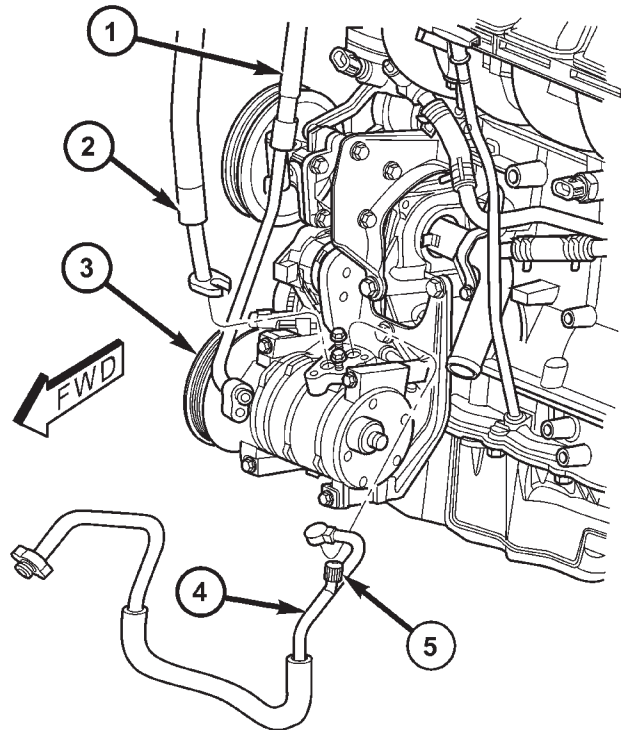
(5) Disconnect the engine wire harness connectors from the compressor clutch coil connector and the high pressure cut out switch (Fig. 2).



**Fig. 2 A/C Compressor Remove/Install**

- 1 - CLUTCH COIL CONNECTOR
- 2 - DISCHARGE PORT
- 3 - SUCTION PORT
- 4 - HIGH PRESSURE CUT-OUT SWITCH
- 5 - SCREW
- 6 - COMPRESSOR
- 7 - BRACKET

(6) Remove the screw that secures the suction line fitting to the compressor suction port (Fig. 3).



**Fig. 3 A/C Refrigerant Lines - Compressor**

- 1 - LIQUID LINE
- 2 - SUCTION LINE
- 3 - COMPRESSOR
- 4 - DISCHARGE LINE
- 5 - HIGH SIDE SERVICE PORT

(7) Disconnect the suction line fitting from the compressor suction port.

(8) Remove the rubber O-ring seal from the refrigerant line fitting of the suction line and discard.

(9) Install plugs in, or tape over the opened compressor suction port and the refrigerant line fitting of the suction line.

(10) Remove the screw that secures the discharge line fitting to the compressor discharge port.

(11) Disconnect the discharge line fitting from the compressor discharge port.

(12) Remove the rubber O-ring seal from the refrigerant line fitting of the discharge line and discard.

(13) Install plugs in, or tape over the opened compressor discharge port and the refrigerant line fitting of the discharge line.

(14) Remove the four screws that secure the compressor to the lower front strut-to-engine bracket.

(15) Remove the compressor from the engine compartment.



## A/C COMPRESSOR (Continued)

## INSTALLATION

The compressor may be removed from the mounting bracket and repositioned without disconnecting the refrigerant lines or discharging the refrigerant system. Discharging is not necessary if servicing the compressor clutch or clutch coil, the engine, the cylinder head or the generator.

**WARNING: REVIEW THE WARNINGS AND CAUTIONS IN THE FRONT OF THIS GROUP BEFORE PERFORMING THE FOLLOWING OPERATION.**

**NOTE:** If a replacement compressor is being installed, be certain to check the refrigerant oil level. See Refrigerant Oil Level in this group for the procedures. Use only refrigerant oil of the type recommended for the compressor in the vehicle.

(1) Position the compressor into the engine compartment.

(2) Install and tighten the four screws that secure the compressor to the lower front strut-to-engine bracket. Tighten the screws to 28.3 N·m (250 in. lbs.).

(3) Remove the tape or plugs from the compressor discharge port and the refrigerant line fitting of the discharge line.

(4) Lubricate a new rubber O-ring seal with clean refrigerant oil and install it on the refrigerant line fitting of the discharge line. Use only the specified O-rings as they are made of a special material for the R-134a system. Use only refrigerant oil of the type recommended for the compressor in the vehicle.

(5) Reconnect the discharge line fitting to the compressor discharge port.

(6) Install and tighten the screw that secures the discharge line fitting to the compressor discharge port. Tighten the screw to 12.2 N·m (108 in. lbs.).

(7) Remove the tape or plugs from the compressor suction port and the refrigerant line fitting of the suction line.

(8) Lubricate a new rubber O-ring seal with clean refrigerant oil and install it on the refrigerant line fitting of the suction line. Use only the specified O-rings as they are made of a special material for the R-134a system. Use only refrigerant oil of the type recommended for the compressor in the vehicle.

(9) Reconnect the suction line fitting to the compressor suction port.

(10) Install and tighten the screw that secures the suction line fitting to the compressor suction port. Tighten the screw to 12.2 N·m (108 in. lbs.).

(11) Reconnect the engine wire harness connectors to the compressor clutch coil connector and the high pressure cut out switch.

(12) Reinstall the serpentine drive belt. Refer to **Cooling System** for the proper procedures.

(13) Lower the vehicle.

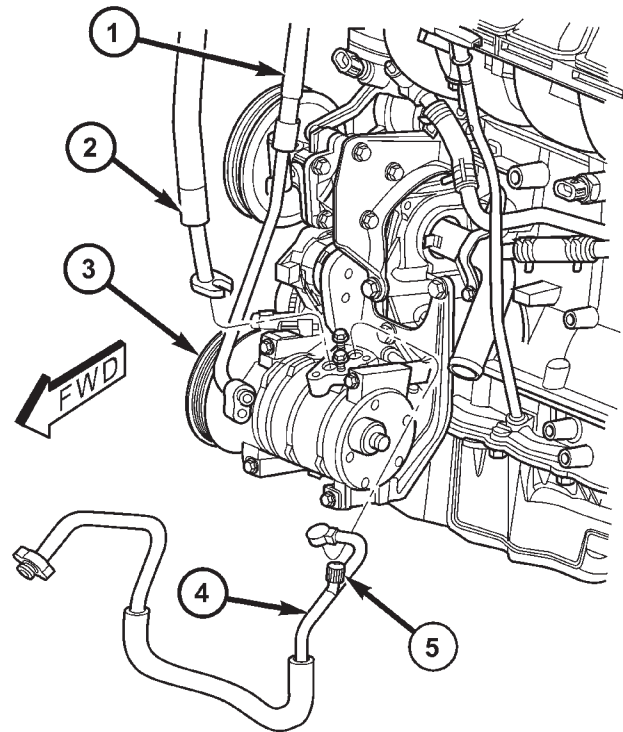
(14) Reconnect the battery negative cable.

(15) Evacuate the refrigerant system. Refer to **Refrigerant System Evacuate** in this group for the proper procedures.

(16) Charge the refrigerant system. Refer to **Refrigerant System Charge** in this group for the proper procedures.

## SUCTION LINE

## DESCRIPTION



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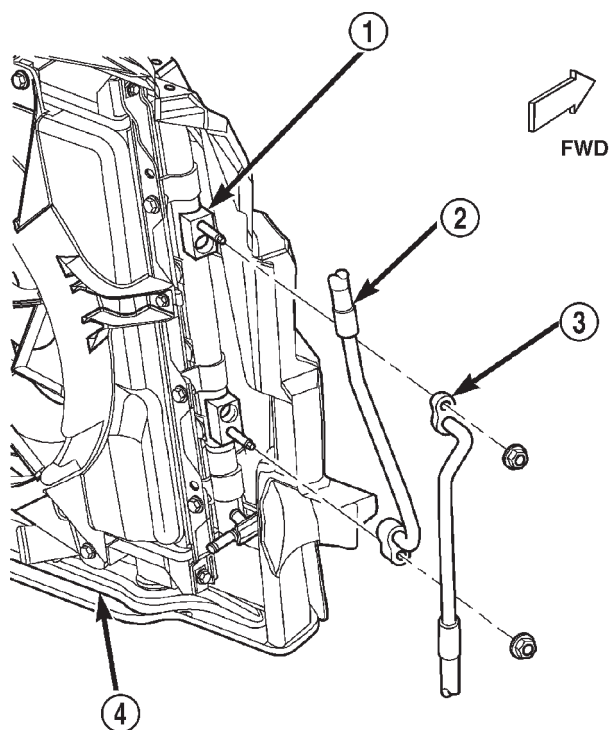
**Fig. 4 A/C Refrigerant Lines - Compressor**

- 1 - LIQUID LINE
- 2 - SUCTION LINE
- 3 - COMPRESSOR
- 4 - DISCHARGE LINE
- 5 - HIGH SIDE SERVICE PORT

The refrigerant lines and hoses (Fig. 4) , (Fig. 5) and (Fig. 6) are used to carry the refrigerant between the various air conditioning system components. A barrier hose design with a nylon tube, which is sandwiched between rubber layers, is used for the R-134a air conditioning system on this vehicle. This nylon tube helps to further contain the R-134a refrigerant, which has a smaller molecular structure than R-12 refrigerant. The ends of the refrigerant hoses are made from lightweight aluminum or steel, and commonly use braze-less fittings.



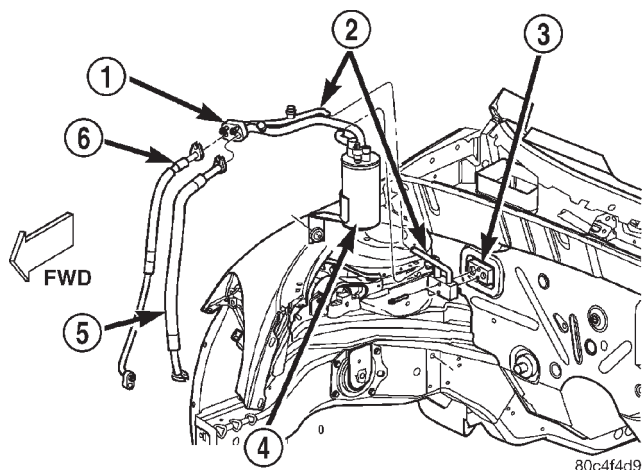
## SUCTION LINE (Continued)



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**Fig. 5 A/C Refrigerant Lines - Condenser**

- 1 - CONDENSER
- 2 - LIQUID LINE
- 3 - DISCHARGE LINE
- 4 - COOLING MODULE



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**Fig. 6 A/C Refrigerant Lines - Accumulator/ Evaporator**

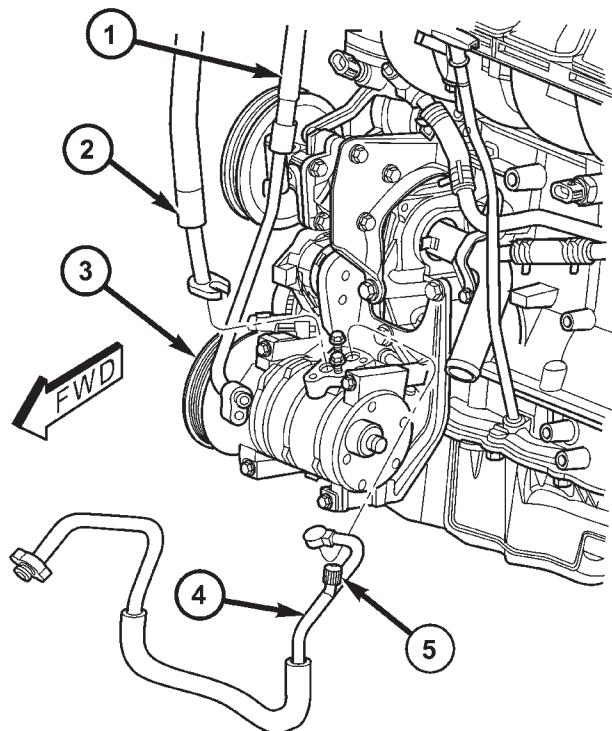
- 1 - MID-LINE CONNECTOR BLOCK
- 2 - SUCTION & LIQUID LINE ASSEMBLY
- 3 - EVAPORATOR
- 4 - ACCUMULATOR
- 5 - SUCTION LINE
- 6 - LIQUID LINE

Any kinks or sharp bends in the refrigerant plumbing will reduce the capacity of the entire air conditioning system. Kinks and sharp bends reduce the flow of refrigerant in the system. A good rule for the flexible hose refrigerant lines is to keep the radius of all bends at least ten times the diameter of the hose. In addition, the flexible hose refrigerant lines should be routed so they are at least 80 millimeters (3 inches) from the exhaust manifold.

**OPERATION**

The refrigerant lines used for this vehicle are common between the two optional engines in order to reduce complexity. The following refrigerant lines are available for service replacement on this vehicle:

- **Discharge line** - The discharge line is a flexible hose type line that is connected from the discharge port of the compressor to the inlet (upper fitting) of the condenser. It has no serviceable parts except the rubber O-ring seals used on the fittings at each end of the line. If the discharge line is damaged or faulty, it must be replaced (Fig. 7).



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**Fig. 7 A/C Refrigerant Lines - Compressor**

- 1 - LIQUID LINE
- 2 - SUCTION LINE
- 3 - COMPRESSOR
- 4 - DISCHARGE LINE
- 5 - HIGH SIDE SERVICE PORT

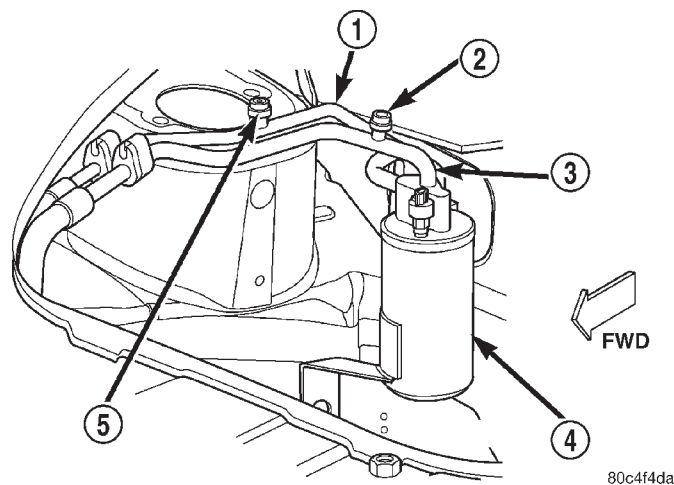
- **Liquid line** - The liquid line is a flexible hose type line that is connected between the outlet (lower

## SUCTION LINE (Continued)

fitting) of the condenser and the mid-line connector block of the suction and liquid line assembly. The liquid line also contains the variable orifice valve. It has no serviceable parts except the rubber O-ring seals used on the fittings at each end of the line. If the liquid line or the variable orifice valve are damaged or faulty, the liquid line unit must be replaced.

- **Suction line** - The suction line is a flexible hose type line that is connected between the mid-line connector block of the suction and liquid line assembly and the suction port of the compressor. It has no serviceable parts except the rubber O-ring seals used on the fittings at each end of the line. If the suction line is damaged or faulty, it must be replaced.

- **Suction and liquid line assembly** - The suction and liquid line assembly is a formed tubing type line assembly that includes the mid-line connector block, a connector block for the evaporator, inlet and outlet line fittings for the accumulator and both A/C service ports (Fig. 8). The A/C service port caps, the A/C service port valve cores, the gasket used to seal the connector block at the evaporator and the rubber O-ring seals for the line fittings at the accumulator are all available for service replacement. If any other part of the suction and liquid line assembly is damaged or faulty, the assembly must be replaced.



**Fig. 8 A/C Service Ports**

- 1 - LIQUID
- 2 - LOW SIDE SERVICE PORT
- 3 - SUCTION
- 4 - ACCUMULATOR
- 5 - HIGH SIDE SERVICE PORT

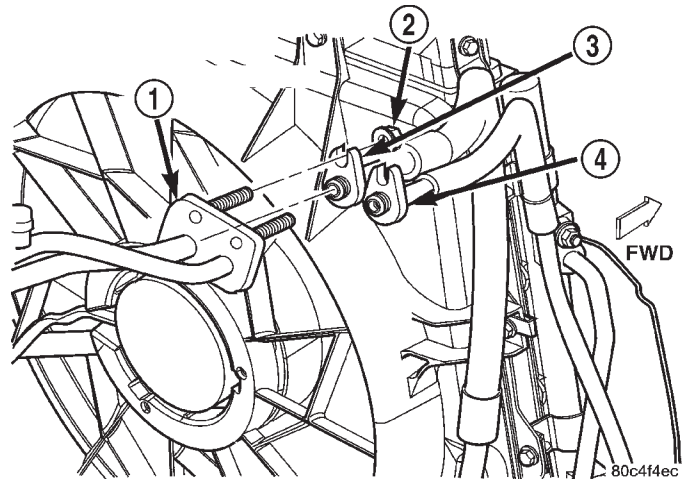
High pressures are produced in the refrigerant system when the air conditioning compressor is operating. Extreme care must be exercised to make sure that each of the refrigerant line connections is pressure-tight and leak free. It is a good practice to inspect all flexible hose refrigerant lines at least once a year to make sure they are in good condition and properly routed.

## REMOVAL

**WARNING: REVIEW THE WARNINGS AND CAUTIONS IN THE FRONT OF THIS GROUP BEFORE PERFORMING THE FOLLOWING OPERATION.**

(1) Recover the refrigerant from the refrigerant system. Refer to **Refrigerant Recovery** in this group for the proper procedures.

(2) Remove the nut that secures the suction line fitting (inboard fitting) to the mid-line connector block of the suction and liquid line assembly (Fig. 9).



**Fig. 9 A/C Refrigerant Lines - Mid-Line Connector**

- 1 - SUCTION AND LIQUID LINE ASSEMBLY MID-LINE CONNECTOR BLOCK
- 2 - NUT
- 3 - SUCTION LINE
- 4 - LIQUID LINE

(3) Disconnect the suction line fitting from the mid-line connector block of the suction and liquid line assembly.

(4) Remove the rubber O-ring seal from the refrigerant line fitting of the suction line and discard.

(5) Install plugs in, or tape over the opened mid-line connector block suction line port and the refrigerant line fitting of the suction line.

(6) Raise and support the vehicle.

(7) Remove the screw that secures the suction line fitting to the compressor discharge port (Fig. 10).

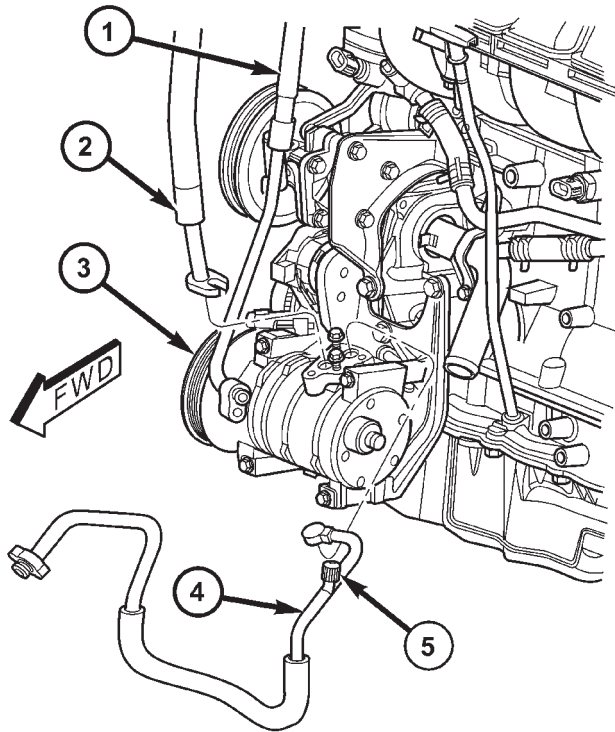
(8) Disconnect the suction line fitting from the compressor suction port.

(9) Remove the rubber O-ring seal from the refrigerant line fitting of the suction line and discard.

(10) Install plugs in, or tape over the opened compressor suction port and the refrigerant line fitting of the suction line.

(11) Remove the suction line from the engine compartment.

## SUCTION LINE (Continued)



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**Fig. 10 A/C Refrigerant Lines - Compressor**

- 1 - LIQUID LINE
- 2 - SUCTION LINE
- 3 - COMPRESSOR
- 4 - DISCHARGE LINE
- 5 - HIGH SIDE SERVICE PORT

**INSTALLATION**

**WARNING: REVIEW THE WARNINGS AND CAUTIONS IN THE FRONT OF THIS GROUP BEFORE PERFORMING THE FOLLOWING OPERATION.**

(1) Position the suction line into the engine compartment.

(2) Remove the tape or plugs from the compressor suction port and the refrigerant line fitting of the suction line.

(3) Lubricate a new rubber O-ring seal with clean refrigerant oil and install it on the refrigerant line fitting of the suction line. Use only the specified O-rings as they are made of a special material for the R-134a system. Use only refrigerant oil of the type recommended for the compressor in the vehicle.

(4) Reconnect the suction line fitting to the compressor suction port.

(5) Install and tighten the screw that secures the suction line fitting to the compressor suction port. Tighten the screw to 12.2 N·m (108 in. lbs.).

(6) Lower the vehicle.

(7) Remove the tape or plugs from the mid-line connector block suction line port and the refrigerant line fitting of the suction line.

(8) Lubricate a new rubber O-ring seal with clean refrigerant oil and install it on the refrigerant line fitting of the suction line. Use only the specified O-rings as they are made of a special material for the R-134a system. Use only refrigerant oil of the type recommended for the compressor in the vehicle.

(9) Reconnect the suction line fitting to the mid-line connector block suction line port of the suction and liquid line assembly.

(10) Install and tighten the nut that secures the suction line fitting to the mid-line connector block of the suction and liquid line assembly. Tighten the nut to 4.5 N·m (40 in. lbs.).

(11) Evacuate the refrigerant system. Refer to **Refrigerant System Evacuate** in this group for the proper procedures.

(12) Charge the refrigerant system. Refer to **Refrigerant System Charge** in this group for the proper procedures.

# SERVICE MANUAL COMMENTS

What features do you find most useful? \_\_\_\_\_

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What errors have you found? Please include page number. \_\_\_\_\_

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What topics are hard to locate, confusing, or not covered completely? \_\_\_\_\_

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What comments or suggestions do you have? \_\_\_\_\_

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