

POWER DISTRIBUTION SYSTEMS

TABLE OF CONTENTS

	page		page
DESCRIPTION AND OPERATION		REMOVAL AND INSTALLATION	
POWER DISTRIBUTION SYSTEM.....	1	FUSE BLOCK.....	2
POWER DISTRIBUTION CENTER (PDC)	1	POWER DISTRIBUTION CENTER (PDC)	2
FUSE BLOCK.....	2		

DESCRIPTION AND OPERATION

POWER DISTRIBUTION SYSTEM

This group covers the various standard and optional power distribution components used on this model. Refer to the Component Index of Group 8W - Wiring Diagrams for complete circuit diagrams of the various power distribution components.

The power distribution system for this vehicle is designed to provide safe, reliable, centralized and convenient to access distribution of the electrical current required to operate all of the many standard and optional factory-installed electrical and electronic powertrain, chassis, safety, comfort and convenience systems. At the same time, these systems were designed to provide centralized locations for conducting diagnosis of faulty circuits, and for sourcing the additional current requirements of many aftermarket vehicle accessory and convenience items.

These power distribution systems also incorporate various types of circuit control and protection features, including:

- Fuses
- Fuse cartridges
- Fusible links
- Automatic resetting circuit breakers
- Relays
- Flashers
- Timers
- Circuit splice blocks.

The power distribution system for this vehicle consists of the following components:

- Power Distribution Center (PDC)
- Fuse Block

Following are general descriptions of the major components in the power distribution system. Refer to the owner's manual in the vehicle glove box for more information on the features, use and operation of all of the power distribution system components.

POWER DISTRIBUTION CENTER (PDC)

All of the electrical current distributed throughout this vehicle is directed through the standard equip-

ment Power Distribution Center (PDC). The molded plastic PDC housing is located in the left front corner of the engine compartment, just behind the air cleaner housing and left of the battery (Fig. 1). The PDC housing has a molded plastic cover. The PDC cover is easily removed for service access and has a convenient fuse and relay layout label affixed to the inside surface of the cover to ensure proper component identification.

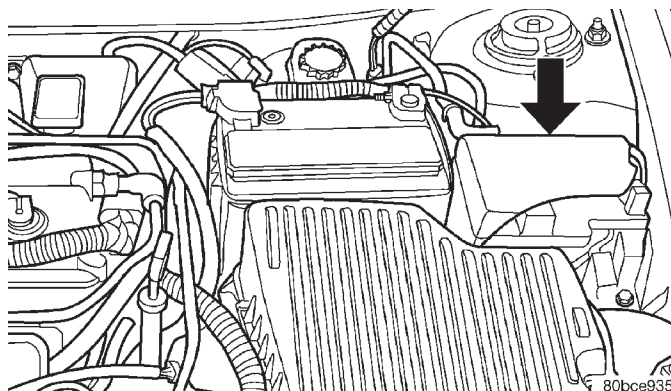


Fig. 1 Power Distribution Center (PDC) Location

The PDC housing is secured to the left inner fender well an indexing pin and one screw. All of the PDC outputs are through the integral engine compartment wire harness.

All of the current from the generator cable connection goes to the battery through a 140 ampere fusible link that is secured with a nut to the positive battery cable terminal. The PDC houses up to ten six fuse cartridges, which replace all in-line fusible links. The PDC also houses up to twelve blade-type fuses, up to three full International Standards Organization (ISO) relays, and up to eight mini International Standards Organization (ISO) relays. Internal connection of all the PDC circuits is accomplished by an intricate network of hard wiring and bus bars. Refer to **Power Distribution** in the Component Index of Group 8W - Wiring Diagrams for complete circuit diagrams.

DESCRIPTION AND OPERATION (Continued)

The fusible link, fuses and relays are available for service replacement. The PDC unit cannot be repaired and is only serviced as a unit with the engine compartment wire harness. If the PDC is faulty or damaged, the engine compartment wire harness assembly must be replaced.

FUSE BLOCK

An electrical Fuse Block is located in the left end of the instrument panel (Fig. 2). It serves to simplify and centralize numerous electrical components, as well as to distribute electrical current to many of the accessory systems in the vehicle.

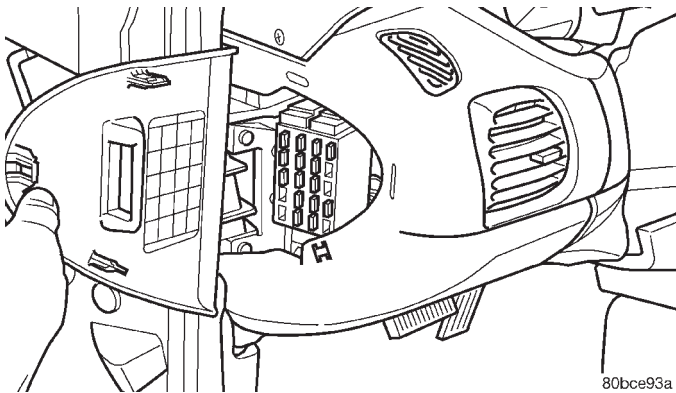


Fig. 2 Fuse Block Location

The Fuse Block is positioned on a mounting bracket up and under the left instrument panel. It is secured by two screws. The fuse block is concealed behind the left instrument panel end cap. The left end cap is a snap-fit access cover that conceals the fuse block fuses. A fuse layout placard is on the back of the end cap to ensure proper fuse identification.

The fuse block houses blade-type fuses and automatic resetting circuit breakers (Fig. 3). Internal connection of all the fuse block circuits is accomplished by an intricate network of hard wiring and bus bars. Refer to **Junction Block** in the Component Index of Group 8W - Wiring Diagrams for complete circuit diagrams.

The fuses and circuit breakers are available for service replacement. The fuse block unit cannot be repaired and is only serviced as an assembly. If any circuit or the fuse block housing is faulty or damaged, the entire fuse block and instrument panel wire harness assembly must be replaced.

REMOVAL AND INSTALLATION

FUSE BLOCK

WARNING: ON VEHICLES EQUIPPED WITH AIR-BAGS, REFER TO GROUP 8M - PASSIVE RESTRAINT SYSTEMS BEFORE ATTEMPTING ANY

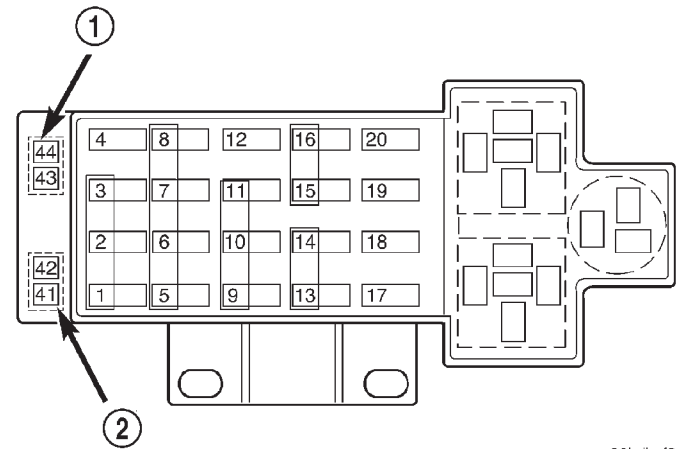


Fig. 3 Fuse Block

- 1 - CIRCUIT BREAKER 2
2 - CIRCUIT BREAKER 1

STEERING WHEEL, STEERING COLUMN, OR INSTRUMENT PANEL COMPONENT DIAGNOSIS OR SERVICE. FAILURE TO TAKE THE PROPER PRECAUTIONS COULD RESULT IN ACCIDENTAL AIR-BAG DEPLOYMENT AND POSSIBLE PERSONAL INJURY.

REMOVAL

The Fuse Block is serviced with the instrument panel wire harness. If service is required to the fuse block, the entire instrument panel harness must be replaced.

(1) The instrument panel must be removed from the vehicle. Refer to Group 8E-Instrument Panel and Systems for Instrument Panel Removal and Installation.

(2) With the instrument panel on the bench, de-trim the instrument panel enough to gain access to all screws and connectors to remove instrument panel wire harness with fuse block.

INSTALLATION

For installation, reverse the above procedures. Ensure that the wire terminals and connectors are in good condition and connectors are properly installed.

POWER DISTRIBUTION CENTER (PDC)

The Power Distribution Center (PDC) is serviced as a unit with the engine compartment wire harness. If any internal circuit of the PDC or the PDC housing is faulty or damaged, the entire PDC and engine compartment wire harness unit must be replaced.

REMOVAL AND INSTALLATION (Continued)

REMOVAL

(1) Disconnect and isolate the battery negative cable (Fig. 4).

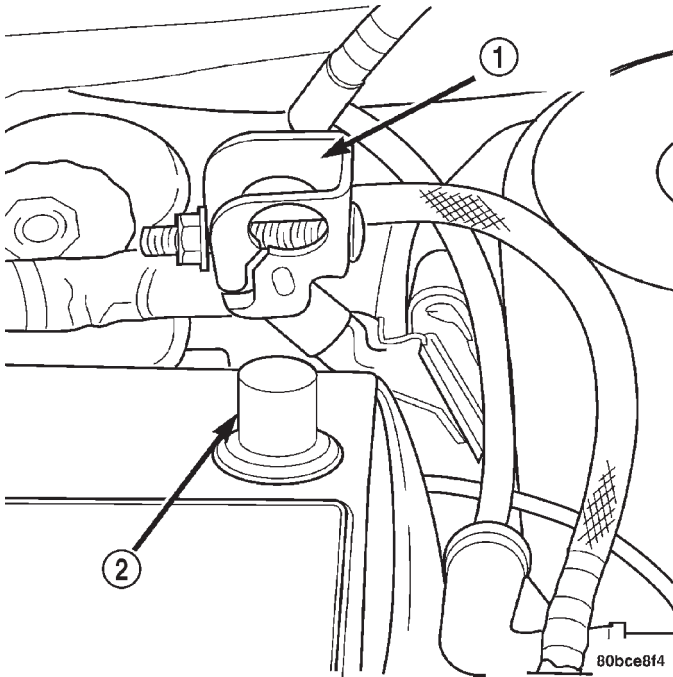


Fig. 4 Battery Negative Cable Remove/Install

- 1 - NEGATIVE CABLE
2 - NEGATIVE BATTERY POST

(2) Disconnect each of the engine compartment wire harness connectors. Refer to **8W-90 - Connector Locations** in Group 8W - Wiring Diagrams for more information on the locations of the affected connectors.

(3) Remove the fasteners that secure each of the engine compartment wire harness ground eyelets to the vehicle body and chassis components. Refer to **8W-90 - Connector Locations** in Group 8W - Wiring Diagrams for more information on the ground eyelet locations.

(4) Disengage each of the retainers that secure the engine compartment wire harness to the vehicle body and chassis components. Refer to **8W-90 - Connec-**

tor Locations in Group 8W - Wiring Diagrams for more information on the retainer locations.

(5) Remove the one screw and disengage the PDC housing from the left inner fender well.

(6) Remove the PDC and the engine compartment wire harness from the engine compartment as a unit.

INSTALLATION

NOTE: If the power distribution center (PDC) is being replaced with a new unit, be certain to transfer each of the fuses and relays from the old power distribution center to the proper cavities of the new power distribution center. Refer to **Power Distribution in Group 8W - Wiring Diagrams** for the proper power distribution center cavity assignments.

(1) Position the PDC in the engine compartment.
(2) Align the PDC mounting pin with the inner fender well hole.

(3) Place PDC down in engine compartment and install retaining screw.

(4) Route the engine compartment wire harness from the PDC through the engine compartment, engaging each of the harness retainers to the mounting provisions in the vehicle body and chassis components. Refer to **8W-90 - Connector Locations** in Group 8W - Wiring Diagrams for more information on the harness routing and retainer locations.

(5) Install and tighten the fasteners that secure each of the engine compartment wire harness ground eyelets to the vehicle body and chassis components. Refer to **8W-90 - Connector Locations** in Group 8W - Wiring Diagrams for more information on the ground eyelet locations.

(6) Reconnect each of the engine compartment wire harness connectors. Refer to **8W-90 - Connector Locations** in Group 8W - Wiring Diagrams for more information on the locations of the affected connectors.

(7) Torque nut retaining positive battery cable at PDC to 96 - 141 N·m (85 - 130 in. lbs.).

(8) Reconnect the battery negative cable.

