SUBJECT:
Power Distribution Center (PDC) service

OVERVIEW:
This bulletin announces the release of parts to repair the power distribution center.

MODELS:
1996 - 1999 (XJ) Cherokee
1997 - 1999 (TJ) Wrangler
1996 - 1998 (ZJ) Grand Cherokee
1996 - 1998 (ZG) Grand Cherokee (International markets)
1999 (WJ) Grand Cherokee

DISCUSSION:
A repair kit, p/n 05014460AA, has been released which will provide a method for repairing the PDC when internal damage has occurred. This will eliminate the need to replace the entire engine compartment wire harness, in most situations where an electrical problem has been traced to an internal problem in the PDC. The kit provides replacement components for the modules located in the PDC. Special Tool number 6680 is required for these repairs. This tool is available through Pentastar Service Equipment and is a required dealer tool.
The repair kit contains detailed instructions, which have been included with this bulletin for our convenience.

PARTS REQUIRED:
1 05014460AA PDC Repair Kit

EQUIPMENT REQUIRED:
Special Tool - 6680 - Connector Terminal Picks

POLICY: Information Only
DISASSEMBLY AND ASSEMBLY
POWER DISTRIBUTION CENTER -
XJ, TJ, ZJ, WJ

The Power Distribution Center (PDC) cover, the PDC housing lower cover, the PDC relay wedges, the PDC relay cassettes and the PDC B(+) terminal stud module (WJ only) are available for service replacement (Fig. 1 and Fig. 2). The PDC cover can be simply unlatched and removed from the PDC housing without the PDC being removed or disassembled. Service of the remaining PDC components requires that the PDC be removed from its mounting and disassembled. Refer to Wiring Repair in the index of this service manual for the location of the wiring repair procedures.

Fig. 1 WJ Power Distribution Center components

Fig. 2 XJ, TJ, ZJ Power Distribution Center components
(1) For XJ, TJ, ZJ disconnect and isolate the battery negative cable. For WJ remove the battery from the battery support. Refer to Battery in the index of the service manual for the location of the battery removal procedures.

(2) Unlatch and remove the cover from the PDC.

(3) Remove the battery wire harness PDC take out eyelet(s) from the PDC B (+) terminal stud(s).

(4) Disengage the latches on the PDC mounting bracket from the tabs on the PDC housing, and pull the PDC housing upward to disengage the mounting slots from the stanchions of the mounting bracket.

(5) Using a trim stick or another suitable wide fat-bladed tool, gently pry the latches on each side and one end of the PDC housing that secure the housing lower cover to the PDC and remove the housing lower cover (Fig. 3 and Fig. 4).

**Fig. 3 WJ PDC Housing Lower Cover Remove/Install**

![Diagram of WJ PDC Housing Lower Cover](image)

**Fig. 4 XJ, TJ, ZJ PDC Housing Lower Cover Remove/Install**

![Diagram of XJ, TJ, ZJ PDC Housing Lower Cover](image)

**PDC B (+) TERMINAL MODULE (WJ ONLY)**

(1) Remove the PDC housing lower cover.

(2) From the top of the PDC housing, use a small screwdriver or a terminal pick tool (Special Tool Kit 6680) to release the two latches that secure the B (+) terminal module in the PDC (Fig. 5).

**Fig. 5 WJ PDC B(+) Terminal Module Latches**

![Diagram of WJ PDC B(+) Terminal Module Latches](image)
(3) Gently and evenly press the two B (+) terminal studs down through the bus bar in the PDC.
(4) From the bottom of the PDC housing, remove the B (+) terminal module from the PDC (Fig. 6).

Fig. 6 WJ PDC B (+) Terminal Module Remove/Install

PDC RELAY WEDGE
(1) Remove the PDC housing lower cover.
(2) Remove each of the relays from the PDC relay wedge to be removed.
(3) From the bottom of the PDC housing, use a small screwdriver or a terminal pick tool (Special Tool Kit 6680) to release the two latches (yellow) that secure the relay wedge to the PDC relay cassette.
(4) From the top of the PDC housing, remove the relay wedge from the PDC relay cassette (Fig. 7).

Fig. 7 PDC Relay Wedge Remove/Install

PDC RELAY CASSETTE
(1) Remove the relay wedge from the PDC relay cassette to be removed.
NOTE: It may be necessary to remove relay cassettes that are not being serviced from the PDC housing in order to obtain sufficient clearance to access the faulty relay cassette. The same service procedure is repeated as necessary to remove each of the interfering relay wedges and relay cassettes from the PDC housing.

(2) From the top of the PDC housing, use a small screwdriver or a terminal pick tool (Special Tool Kit 6680) to release the two latches that secure the relay cassette in the PDC (Fig. 8).

![Fig. 8 PDC Relay Cassette Latches](image)

(3) Gently and evenly press the relay cassette down through the PDC housing.
(4) From the bottom of the PDC housing, remove the relay cassette from the PDC (Fig. 9).

![Fig. 9 PDC Relay Cassette Remove/Install](image)

CAUTION: Do not remove the wiring and terminals from the terminal cavities of the faulty PDC relay cassette at this time. Refer to the Assembly procedure that follows for the proper procedures for transferring the wiring and terminals to the replacement PDC relay cassette.
ASSEMBLY
PDC RELAY CASSETTE
(1) Move the faulty PDC relay cassette with its wiring away from the bottom of the PDC housing far enough to allow the replacement relay cassette to be installed into the PDC. (2) Using the faulty relay cassette as a guide, be certain that the replacement relay cassette is correctly oriented before installing it into the PDC housing.
(3) From the bottom of the PDC housing, align and insert the replacement relay cassette into the PDC. Press the relay cassette up into the PDC until both of the latches are fully engaged.

CAUTION: Proper care must be taken to be certain that the wiring and terminals from the faulty PDC relay cassette are installed in the correct terminal cavities of the replacement relay cassette. To prevent mistakes it is recommended that the wiring and terminals be removed from the faulty relay cassette one cavity at a time, repaired or spliced as necessary, then installed securely into the correct cavity of the replacement relay cassette. If you are not absolutely certain into which cavity a terminal should be installed, refer to Power Distribution in the index of the service manual for the location of complete circuit diagrams covering the PDC.

(4) While pulling gently on the wire from the bottom of the faulty PDC relay cassette, use a terminal pick tool (Special Tool Kit 6680) from the top of the relay cassette to release the latch that secures the terminal in the relay cassette terminal cavity (Fig. 10).
(5) From the bottom of the faulty PDC relay cassette, remove the wire and terminal from the relay cassette terminal cavity.
(6) Make all necessary repairs and splices to the wire for the removed terminal. Refer to Wiring Repair in the index of this service manual for the location of the wiring repair procedures.
(7) From the bottom of the PDC housing, align and insert the removed wire and terminal into the correct terminal cavity of the replacement relay cassette. Push the wire and terminal up into the relay cassette terminal cavity until it is fully engaged by the latch.
(8) Repeat Steps (4), (5), (6) and (7) one wire and terminal at a time until each of the wires and terminals have been transferred from the faulty PDC relay cassette into the replacement relay cassette.
(9) Install the PDC relay wedge into the replacement PDC relay cassette.

PDC RELAY WEDGE
(1) From the top of the PDC housing, align and insert the PDC relay wedge latch arms into the correct cavities in the relay cassette.
(2) Gently and evenly press the PDC relay wedge down into the relay cassette until both of the latches are fully engaged.
(3) Install each of the removed relays into the proper cavities of the PDC relay wedge.
(4) Install the PDC housing lower cover.

**PDC B(+) TERMINAL MODULE (WJ ONLY)**
(1) From the bottom of the PDC housing, align and insert the B(+) terminal module into the PDC.
(2) From the bottom of the PDC housing, align and insert the two studs of the PDC B(+) terminal module through the bus bar in the PDC.
(3) From the bottom of the PDC housing, press the B(+) terminal module gently and evenly into the PDC until both of the latches are fully engaged.
(4) Install the PDC housing lower cover.

**PDC HOUSING LOWER COVER**
(1) Align the PDC housing lower cover to the bottom of the PDC.
(2) Press the PDC housing lower cover gently and evenly onto the PDC until each of the latches that secure the cover to the PDC is fully engaged.
(3) Engage the mounting slots on the PDC housing with the stanchions of the PDC mounting bracket and push the unit downward until the mounting bracket latches fully engage the mounting tabs on the PDC housing.
(4) Install the battery wire harness PDC take out eyelet(s) over the two PDC B(+) terminal stud(s).
(5) Install and tighten the nut(s) that secure the eyelet(s) of the battery wire harness PDC take outs to the B(+) terminal stud(s). Tighten the nut(s) to 11.3 Nm (100 in. lbs.).
(6) Install the cover onto the PDC.