Technical Service Bulletin

NUMBER: 08-07-99

GROUP: Electrical

DATE: Mar. 12, 1999

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

INSTRUCTION SHEET - K6855329
PDC REPAIR KIT

96-99 (XJ) CHEROKEE, 97-99 (TJ) WRANGLER,
96-98 (ZJ) GRAND CHEROKEE, 99 (WJ) GRAND CHEROKEE

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.

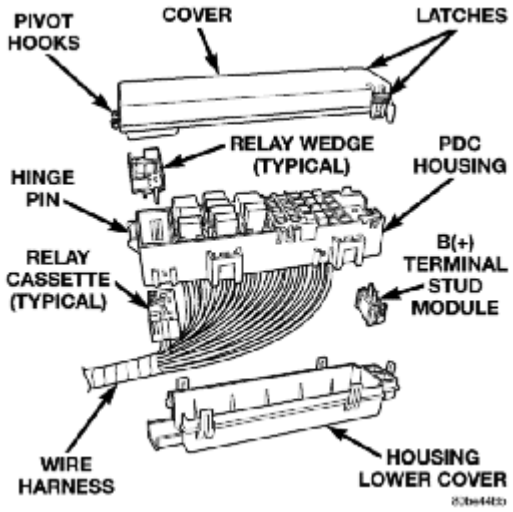


Fig. 1 WJ Power Distribution Center components

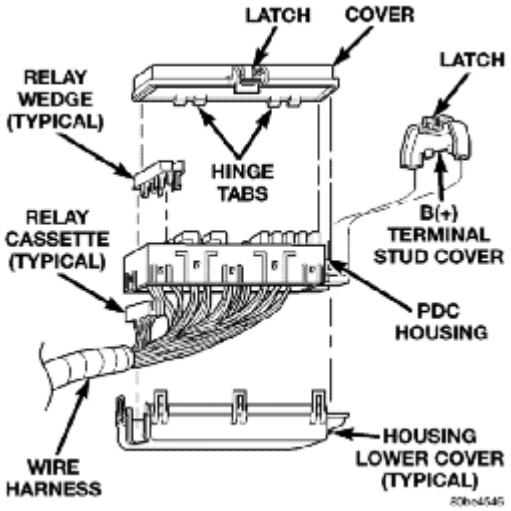


Fig. 2 XJ, TJ, ZJ Power Distribution Center components

DISASSEMBLY
PDC HOUSING LOWER COVER

(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

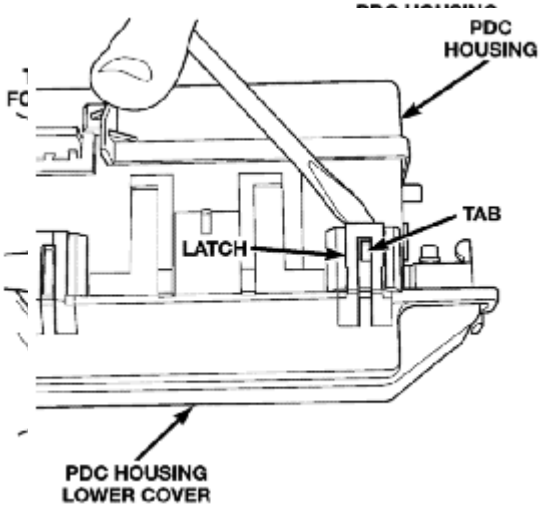
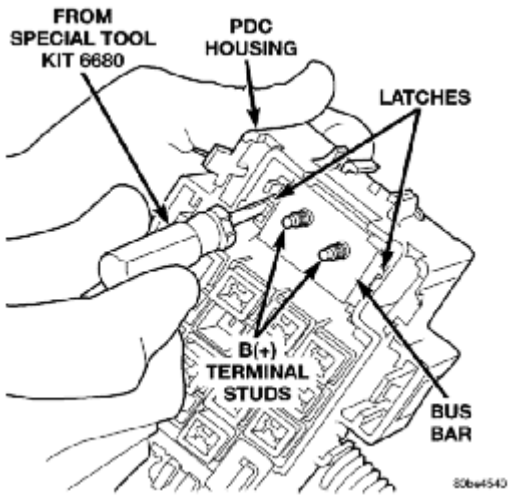


Fig. 4 XJ, TJ, ZJ PDC Housing Lower Cover Remove/Install

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



(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).

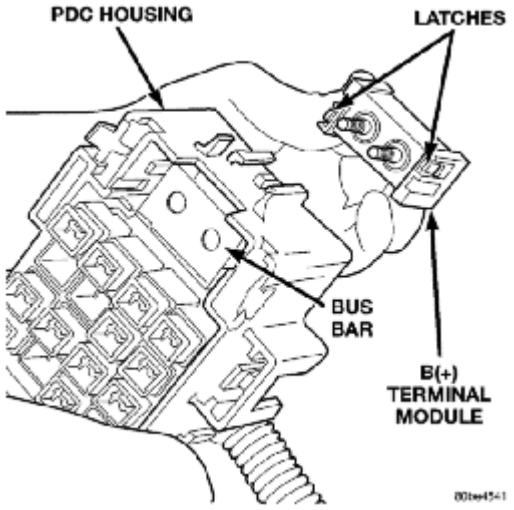


Fig. 6 WJ PDC B (+) Terminal Module Remove/Install

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).

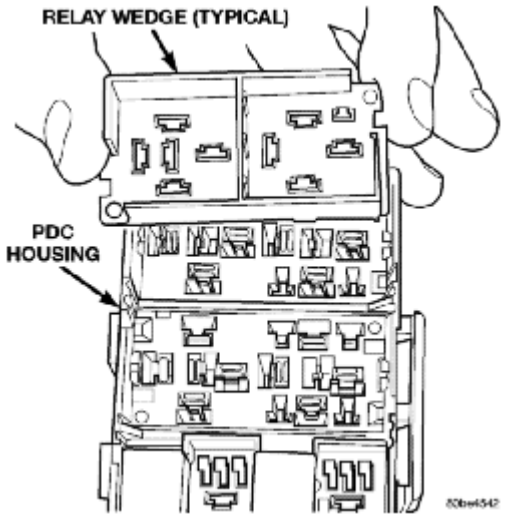


Fig. 7 PDC Relay Wedge Remove/Install

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).

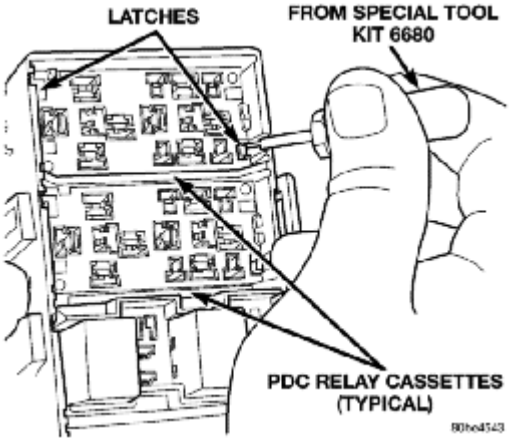


Fig. 8 PDC Relay Cassette Latches

(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).

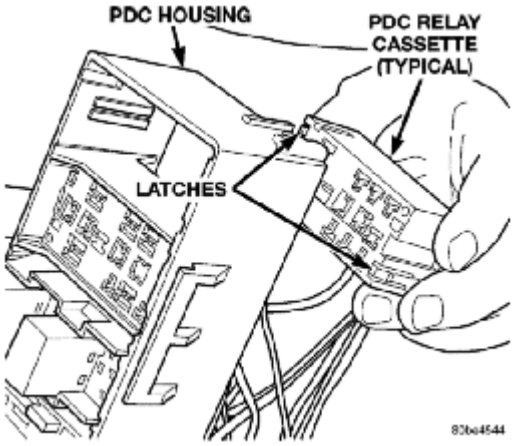


Fig. 9 PDC Relay Cassette Remove/Install

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.

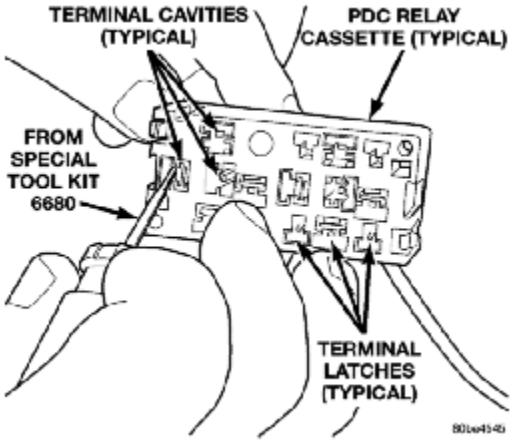


Fig. 10 PDC Relay Cassette Terminal Remove/Install

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.

NO: 08-12-99 Rev. A

SUBJECT: Electronic Vehicle Information Center (EVIC) temperature sensor display

DATE: Sep. 24, 1999

THIS BULLETIN SUPERSEDES TECHNICAL SERVICE BULLETIN NUMBER 08-12-99, DATED MAY 7, 1999, WHICH SHOULD BE REMOVED FROM YOUR FILES. THIS BULLETIN REVISES THE PROCEDURE AND AN INCORRECT CABLE CONNECTOR. THE REVISION IS HIGHLIGHTED WITH **ASTERISKS.**

OVERVIEW:

This bulletin involves flash reprogramming the Body Control Module (BCM).

SYMPTOM/CONDITION:

The outside temperature reading displayed in the overhead console can, in certain low speed driving situations, display an incorrect value. The system was originally programmed to delay the temperature update in the module, if you were, for example, stuck in traffic. This was done to avoid the effect of road temperatures or engine compartment heat from influencing the temperature reading. One example of a situation that can occur is when a vehicle is parked in a garage in cold temperatures. The garage could be 20 degrees warmer than the outside air temperature. If the vehicle was started and did not reach speeds over 25 MPH, the display will update at start up and may not update again until the vehicle reached speeds over 25 MPH. This would cause a 20-degree discrepancy on the display. New programming has been implemented in the Body Control Module (BCM) to reduce the likelihood of this occurrence.

DIAGNOSIS:

1. Connect the DRB III® to the vehicle diagnostic connector using cable CH 7001.
2. From the DRB III main menu, select "1", DRB III® Standalone.
3. From the DRB III®, select 1999 Diagnostics.
4. From the diagnostic menu, select "Body".
5. From the Body menu, select "Body Computer".
6. From the Body Computer options, select "Module Display".
7. Check the "Version" code. If it is 19, no update is necessary. If it is less than 19, perform the Repair Procedure to update the software.

REPAIR PROCEDURE:

THIS REPAIR IS COMPATIBLE WITH DAIMLERCHRYSLER'S MOBILE SERVICE PROGRAM AND DOES NOT REQUIRE HOISTS OR OTHER FULL SERVICE FACILITY SPECIAL EQUIPMENT.

1. Connect the DRB III® to the MDS2 using cables **CH7025 and CH7035A**.
2. From the DRB III® main menu select "2", "Connect the MDS2".

3. From the DRB III® select "2", "Run MDS2 application".
4. From MDS2 select "YME session".
5. From MDS2 select "1999 WJ Grand Cherokee and the appropriate engine", then click "OK".
6. From MDS2 select "Flash".
7. From MDS2 enter the TSB number and click on "Show Updates".
8. From MDS2 highlight the available software update, then click "Download Software".
9. A pop up message will indicate that the download was successful, when it does, disconnect the DRB III® from the MDS2.
10. Connect the DRB III® to the vehicle to be flashed using cable CH7001.
11. From the DRB III® main menu select "2", "Connect to MDS2 ".
12. From the DRB III® select " 2", "Run MDS2 Application".
13. From the DRB III® select "2", "Program Vehicle Controllers".
14. The DRB III® will then highlight the BCM part number and status as "loaded in DRB III® ".
15. From the DRB III®, highlight the appropriate version, then press enter and follow the instructions on the DRB III®.
16. After the programming is complete, the DRB III® will ask if you want to reprogram another controller. Select yes or no and follow the instructions on the screen.

NOTE: SELECTING NO WILL ERASE THE FLASH PROGRAM FROM THE DRB III® MEMORY. ONLY SELECT NO IF THERE ARE NO OTHER CONTROLLERS TO BE FLASHED.

NOTE: LABELS INDICATING THE NEW PART NUMBER ARE NOT REQUIRED FOR BODY CONTROL MODULE REPROGRAMMING.

POLICY:

Reimbursable within the provisions of the warranty.

TIME ALLOWANCE:

Labor Op. No.	Time
08-19-60-91	0.2 Hrs.

FAILURE CODE:

Code	Description
FM	Flash Module