# DaimlerChrysler

February 2004

Dealer Service Instructions for:

# Customer Satisfaction Notification No. C42 Powertrain Control Module Connectors

Effective immediately, all repairs on involved vehicles are to be performed according to this notification. Service Bulletin #08-031-03 is being cancelled. Those vehicles that have already had this repair performed, as determined by warranty records, have been excluded from this notification.

### **Models**

### 2003 (DR) Dodge Ram Pick-up Truck

NOTE: This notification applies only to the above vehicles equipped with a **5.9L Cummins diesel engine** (sales code ETC or ETH) and an automatic transmission (sales code DGP or DG8) built through July 9, 2003 (MDH 070916).

IMPORTANT: Some of the involved vehicles may be in dealer vehicle inventory. **Dealers should complete this repair on these vehicles before retail delivery.** Dealers should also perform this repair on vehicles in for service. Involved vehicles can be determined by using the VIP inquiry process.

# Subject

The Powertrain Control Module (PCM) electrical connectors on about 70,000 of the above trucks may allow water to enter into the connectors. Water and the resulting corrosion in a PCM connector can cause the speed control and/or transmission overdrive function to become inoperative.

# Repair

The three electrical connectors on the PCM must be removed and inspected for corrosion. If no corrosion is found, the connectors must be sealed by installing rubber O-rings onto the harness connectors.

If corrosion is found in the connector, the transmission wiring harness and PCM must be replaced.

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### **Parts Information**

# A. Harness Connector O-Ring Package

NOTE: Most vehicles will require this repair package.

**Part Number Description** 

CEH1C420 O-Ring Package

Each package contains three (3) O-rings.

**Each dealer**, to whom vehicles in the notification were invoiced, will receive enough O-ring packages to service about 10% of those vehicles.

## **B.** Transmission Wiring Harness and PCM

NOTE: The transmission wiring harness and PCM are only necessary if inspection determines replacement is required. <u>Very few vehicles</u> are expected to require transmission wiring harness and PCM replacement. If required, both the wiring harness and PCM must be replaced.

Part Number Description

56051861AA Transmission Wiring Harness (with manual transfer

case or 4x2)

56051862AA Transmission Wiring Harness (with electric shift transfer case)

PCM Part Number	Emissions Certification	5.9L Diesel Engine (Sales Code)	Transmission (Sales Code)
56040478AG	Federal	Standard Output (ETC)	47RE (DGP)
56040476AE	Federal	High Output (ETH)	48RE (DG8)
56028740AE	Federal	Standard Output (ETC)	48RE (DG8)
56040479AG	California	Standard Output (ETC)	47RE (DGP)
56028762AE	California	Standard Output (ETC)	48RE (DG8)

### **Service Procedure**

# A. Inspect Harness and Harness Connector for Corrosion

- 1. Open the hood.
- 2. Disconnect both negative battery cables.
- 3. Disconnect the three (3) harness connectors from the PCM (Figure 1).
- 4. Inspect the connectors and PCM for the presence of corrosion.
  - ➤ If <u>no corrosion</u> is found in the PCM connector and/or on the PCM pins continue with Section "B. Install Harness Connector O-rings."
  - ➤ If <u>corrosion</u> is found in the PCM harness connector and/or on the PCM pins continue with Section "C. Replace the PCM and Transmission Wiring Harness."

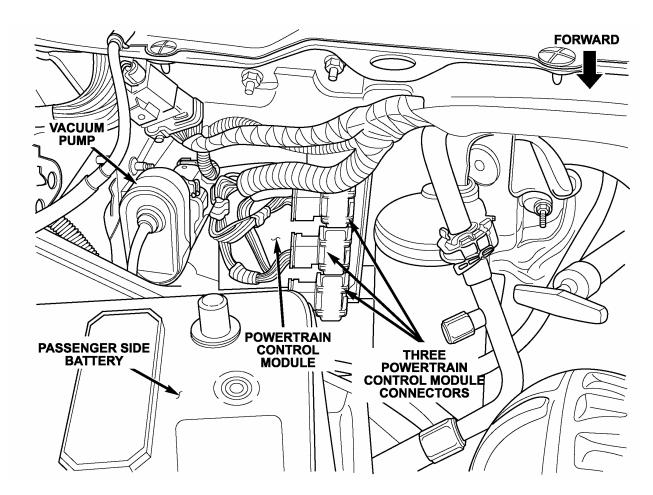
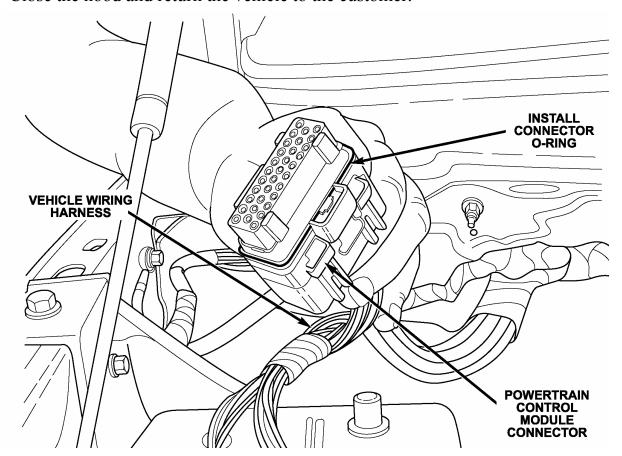


Figure 1

# **B. Install Harness Connector O-Rings**

- 1. Using a dry shop towel, clean off any dirt or moisture from the connector.
- 2. Install one of the supplied O-rings onto each of the three PCM harness connectors as shown in Figure 2.
- 3. Carefully connect the black (lowest) wiring harness connector to the PCM.
  - CAUTION: When connecting the harness connector to the PCM, push against the lock tabs. The connector is <u>fully seated when two clicks are heard</u>. Verify that the connector is fully engaged by attempting to gently pull the connector from the PCM.
- 4. Repeat Step 3 of this procedure for the white (center) connector and then the gray (top) connector.
- 5. Connect both negative battery cables. Tighten the battery cable terminal clamp pinch bolts to 35 in. lbs. (4 N·m).
- 6. Close the hood and return the vehicle to the customer.



**Figure 2- White Connector Shown** 

# C. Replace PCM and Transmission Wiring Harness

NOTE: Only those vehicles that have corrosion found during the inspection in Section A. require PCM and wiring harness replacement. <u>Very few vehicles</u> are expected to require PCM and wiring harness replacement.

IMPORTANT: Due to a revised seal design on the PCM, the PCM connectors on the new wiring harness do not require the installation of O-Rings.

- 1. Disconnect the 14-way wiring connector at the wiper cowl (Figure 3).
- 2. Disconnect the vacuum pump harness connector (Figure 3).
- 3. Disconnect wiring harness ground eyelet at the right fender (Figure 3).
- 4. Remove the wiring harness and harness cover from the wiper cowl.
- 5. Disconnect the bulk head connector (Figure 4).
- 6. Raise the vehicle on an appropriate hoist.

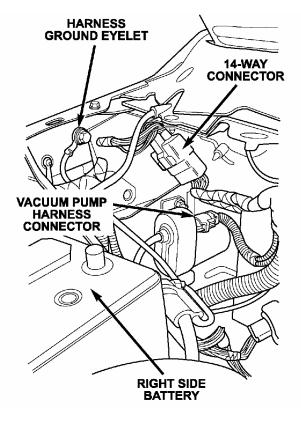


Figure 3

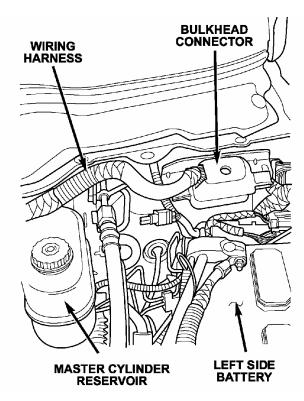


Figure 4

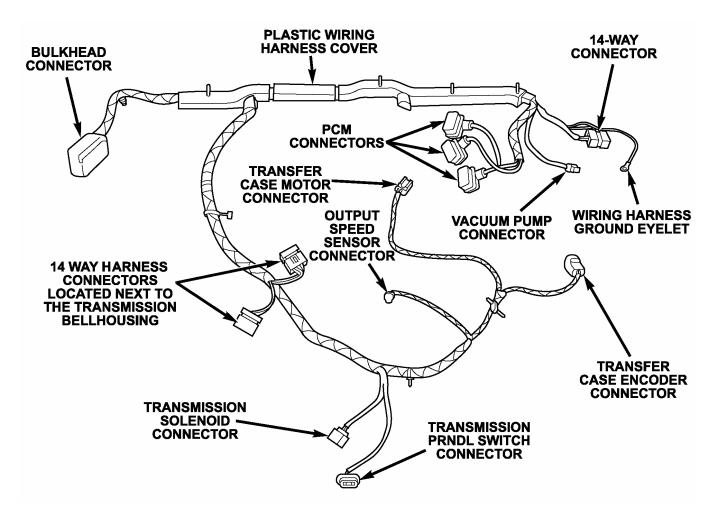


Figure 5 – Wiring Harness for Electric Shift Transfer Case Shown

- 7. Disconnect the two 14-way connectors located next to the transmission bell housing (Figure 5).
- 8. Disconnect the PRNDL switch connector (Figure 5).
- 9. Disconnect the transmission solenoid connector (Figure 5).
- 10. Disconnect the output speed sensor connector (Figure 5).
- 11. For trucks equipped with electric shift transfer case, disconnect the electric transfer case motor and encoder connectors (Figure 5).

12. Disconnect the wiring harness routing clips.

Important: Note the wiring harness routing before removing the harness from the vehicle.

- 13. Lower the vehicle.
- 14. Remove the transmission wiring harness from the vehicle.
- 15. Remove the PCM mounting screws and remove the PCM (Figure 6).

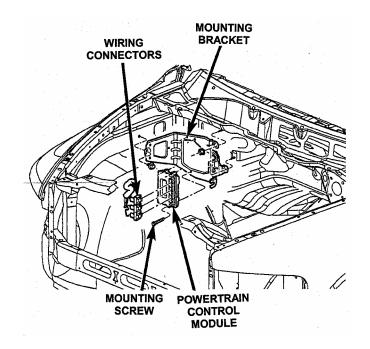


Figure 6

- 16. Install the new PCM into position. Tighten the mounting screws to 35 in. lbs. (4 N·m) (Figure 6).
- 17. Place the new harness into position.
- 18. Raise the vehicle on the hoist.
- 19. Install the wiring harness routing clips.
- 20. For trucks equipped with electric shift transfer case, connect the electric transfer case motor and encoder connectors (Figure 5).
- 21. Connect the output speed sensor connector (Figure 5).
- 22. Connect the transmission solenoid connector (Figure 5).
- 23. Connect the PRNDL switch connector (Figure 5).
- 24. Connect the two 14-way connectors located next to the transmission bell housing (Figure 5).

- 25. Lower the vehicle.
- 26. Connect the bulk head connector (Figure 4).
- 27. Install the wiring harness and plastic harness cover onto the wiper cowl.
- 28. Connect wiring harness ground eyelet at the fender (Figure 3).
- 29. Connect the vacuum pump harness connector (Figure 3).
- 30. Connect the 14-way connector near the wiper cowl (Figure 3).
- 31. Carefully connect the black (lowest) wiring harness connector to the PCM.

CAUTION: When connecting the harness connector to the PCM, push against the lock tabs. The connector is <u>fully seated when two clicks are heard</u>. Verify that the connector is fully engaged by attempting to gently pull the connector from the PCM.

NOTE: Due to a revised seal design on the PCM, the new wiring harness PCM connectors do not require the installation of O-Rings.

- 32. Repeat Step 31 of this procedure on the white (center) PCM connector and then the gray (top) PCM connector.
- 33. Connect both negative battery cables. Tighten the battery cable terminal clamp pinch bolts to 35 in. lbs. (4 N·m).

### **Completion Reporting and Reimbursement**

Claims for vehicles that have been serviced must be submitted on the DIAL System or on the DealerCONNECT Claim Entry Screen located on the Service tab. Claims submitted will be used by DaimlerChrysler to record Customer Satisfaction Notification service completions and provide dealer payments.

Use one of the following labor operation numbers and time allowances:

	Labor Operation <u>Number</u>	Time <u>Allowance</u>
Inspect harness connectors and PCM pins for corrosion and install 3 O-rings	08-C4-21-82	0.2 hours
Inspect harness connector and PCM pins for corrosion and replace		
PCM and wiring harness	08-C4-21-83	1.0 hours

Add the cost of the parts package plus applicable dealer allowance to your claim.

NOTE: See the Warranty Administration Manual, Recall Claim Processing Section, for complete claim processing instructions.

# **Parts Return**

Not required.

# **Dealer Notification**

All dealers will receive a copy of this dealer notification letter by DMAIL and by mail. Two additional copies will be sent through the DCMMS. DealerCONNECT will be updated to include this notification in the near future.

#### **Vehicle lists, Global Recall System, VIP and Dealer Follow up**

All involved vehicles have been entered into the DealerCONNECT Global Recall System (GRS) and Vehicle Information Plus (VIP) for dealer inquiry as needed. Involved dealers were also mailed a copy of their vehicle (VIN) list with the dealer notification letter.

GRS provides involved dealers with an <u>updated</u> VIN list of <u>their incomplete</u> vehicles. The owner's name, address and phone number are listed if known. Completed vehicles are removed from GRS within several days of repair claim submission.

To use this system, click on the "Service" tab and then click on "Global Recall System." Your dealer's VIN list for each recall displayed can be sorted by: those vehicles that were unsold at recall launch, those with a phone number, city, zip code, or VIN sequence.

**Dealers should perform this repair on all unsold vehicles** <u>before</u> **retail delivery.** Dealers should also use the VIN list to follow up with all owners to schedule appointments for this repair.

Recall VIN lists may contain confidential, restricted owner name and address information that was obtained from the Department of Motor Vehicles of various states. Use of this information is permitted for this recall only and is strictly prohibited from all other use.

# **Owner Notification and Service Scheduling**

All involved vehicle owners known to DaimlerChrysler are being notified of the service requirement by mail. They are requested to schedule appointments for this service with their dealers. A copy of the owner letter is attached.

Enclosed with each owner letter is an Owner Notification Form. The involved vehicle and notification are identified on the form for owner or dealer reference as needed.

### **Additional Information**

If you have any questions or need assistance in completing this action, please contact your Service and Parts District Manager.

Customer Services Field Operations DaimlerChrysler Corporation

## DaimlerChrysler

# CUSTOMER SATISFACTION NOTIFICATION -- POWERTRAIN CONTROL MODULE CONNECTORS

Dear Dodge Ram Truck Owner:

The satisfaction of our customers is very important to DaimlerChrysler. Because of this, we are requesting owners of some **2003 model year Dodge Ram Pick-up Trucks** equipped with a 5.9L Cummins diesel engine and an automatic transmission to contact their dealer to have the following service performed.

The problem is...

The Powertrain Control Module (PCM) electrical connectors on your truck (identified on the enclosed form) may allow water to enter into the connectors. Water and the resulting corrosion in a PCM connector can cause the speed control and/or transmission overdrive function to become inoperative.

What DaimlerChrysler and your dealer will do...

**DaimlerChrysler will repair your vehicle free of charge (parts and labor).** To do this, your dealer will inspect the PCM connectors for corrosion. If no corrosion is found, an additional seal will be installed onto each of the PCM connectors. If corrosion is found, the PCM and transmission wiring harness will be replaced. Installation of the connector seals will take less than ½ hour to complete. Another hour will be required if the PCM and wiring harness requires replacement. However, additional time may be necessary depending on how dealer appointments are scheduled and processed.

What you must do...

- ➤ Simply **contact your dealer** right away to schedule a service appointment. Ask the dealer to hold the parts for your vehicle or to order them before your appointment.
- ➤ Bring the enclosed form with you to your dealer. It identifies the required service to the dealer.

If you need help...

If you have questions or concerns which your dealer is unable to resolve, please contact DaimlerChrysler at 1-800-853-1403.

If you have already experienced PCM connector corrosion and have paid to have it repaired, you may send your original receipts and/or other adequate proof of payment to the following address for reimbursement: DaimlerChrysler, P.O. Box 610207, Port Huron, MI 48061-0207, Attention: Reimbursement.

We are sorry for any inconvenience, but we believe that properly sealed PCM connectors will help to ensure your continuing satisfaction with your vehicle. Thank you for your attention to this important matter.

Buckle up for Safety Customer Services Field Operations
DaimlerChrysler Corporation

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