

DAIMLERCHRYSLER

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OFFICE OF  
DEFECTS INVESTIGATION

DaimlerChrysler Corporation

Stephan J. Speth

Director  
Vehicle Compliance & Safety Affairs

September 16, 2004

Mr. Kenneth N. Weinstein  
Associate Administrator, Safety Assurance  
National Highway Traffic Safety Administration  
400 Seventh Street, S.W.  
Washington, D.C. 20590

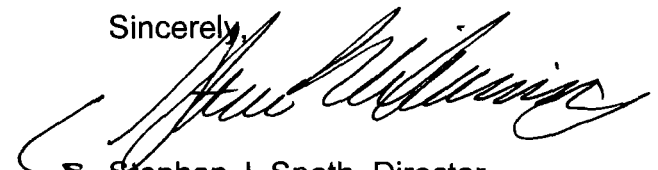
Dear Mr. Weinstein:

Reference: NHTSA Identification Number 04V-185

Enclosed are representative copies of communications relating to the 1998 through 2003 model year vehicles involved in the referenced recall. The exact number of manufactured vehicles in the recall is 43,434.

This completes DaimlerChrysler's package of information for this recall as required by the Defects Report Regulation.

Sincerely,

  
Stephan J. Speth, Director  
Vehicle Compliance and Safety Affairs

Enclosure: Recall #D20

cc: K. C. DeMeter

# DAIMLERCHRYSLER

September 2004

Dealer Service Instructions for:

## **Safety Recall D20 – ABS Wiring Corrosion**

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### **Models**

**1998-2003 (AB) Dodge Ram Van/Wagon**

*NOTE: This recall applies only to the above vehicles equipped with a 4-wheel Anti-lock Brake System (ABS) (sales code BGK).*

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

### **Subject**

Electrolyte (battery acid) from aftermarket batteries may leak onto an Antilock Brake System (ABS) wiring connector on about 43,000 of the above vehicles. This may cause the wiring to corrode and short circuit, which can result in an underhood fire.

### **Repair**

All vehicles must have a revised battery tray installed that will protect the ABS control module wiring harness connector from future electrolyte leakage. A cowl seal extension must also be installed on all vehicles to redirect any water draining from the windshield away from the battery.

The ABS control module wiring harness and connector must be inspected for electrolyte damage and repaired if necessary.

<b>Parts Information</b>
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**A. Battery Tray Package**

<u>Part Number</u>	<u>Description</u>
<b>CBEJD200</b>	<b>Battery Tray Package</b>

Each package contains the following components:

<u>Quantity</u>	<u>Description</u>
1	Battery Tray
1	Battery Tray Drain Tube
1	Cowl Seal Extension
1	Tie Strap

**Each dealer** to whom vehicles in the recall were invoiced will receive enough Battery Tray Packages to service about **10%** of those vehicles.

**B. Electrolyte Detection and Neutralizing Spray**

<u>Part Number</u>	<u>Description</u>
<b>CBEJD201</b>	<b>Electrolyte Detection and Neutralizing Spray</b>

**Each dealer** to whom vehicles in the recall were invoiced will receive ONE (1) bottle of Electrolyte Detection and Neutralizing Spray. Additional bottles of spray may be ordered as required. One bottle contains enough spray to repair four (4) vehicles.

**C. Wiring Harness/Connector Repair Package**

<u>Part Number</u>	<u>Description</u>
<b>CBEJD202</b>	<b>Wiring Harness Connector Repair Package</b>

**Each dealer** to whom vehicles in the recall were invoiced will receive ONE (1) Wiring Harness Connector Repair Package.

**NOTE: Very few vehicles are expected to require wiring harness/connector repair.**

**Service Procedure**

**A. Install Cowl Seal Extension**

1. Open the hood.
2. Using Mopar glass cleaner and a shop cloth, clean the plastic cowl panel where the cowl seal ends on the driver's side of the vehicle (Figure 1).
3. Test fit the cowl seal extension. Cut the cowl seal extension length so that the seal stops at the end of the plastic cowl panel (Figure 1).
4. Insert the cowl seal connector half way into the cowl seal extension (Figure 2).
5. Remove the protective plastic covering from the glue strip on the cowl seal extension.
6. Install the cowl seal extension connector into the original cowl seal end and firmly press the seal against the plastic cowl panel (Figure 2).
7. Continue with **Section B. Inspect ABS Control Module Wiring Harness Connector.**

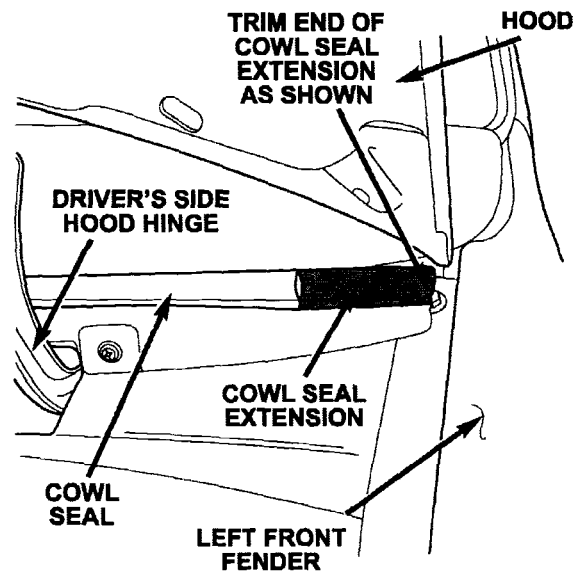


Figure 1

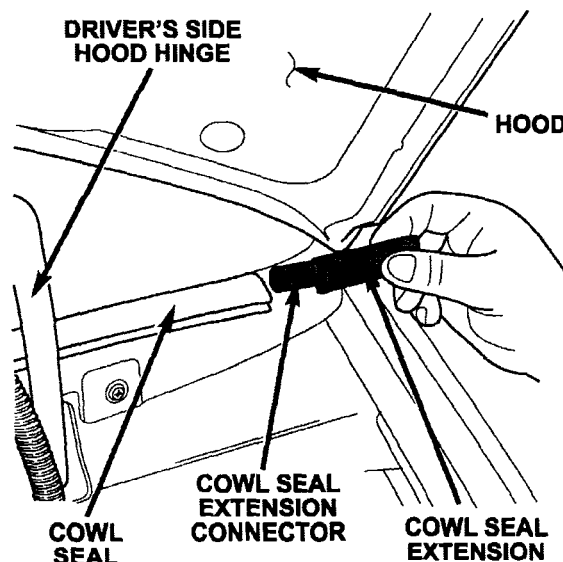


Figure 2

**Service Procedure (Continued)**

**B. Inspect ABS Control Module Wiring Harness Connector**

1. Turn the ignition switch to the “Off” position. Be certain that all electrical accessories are turned off.
2. Loosen the battery negative cable clamp pinch-bolt hex nut.
3. Disconnect the battery negative cable terminal clamp from the battery negative terminal post. If necessary, use a battery terminal puller to remove the terminal clamp from the battery post (Figure 3).

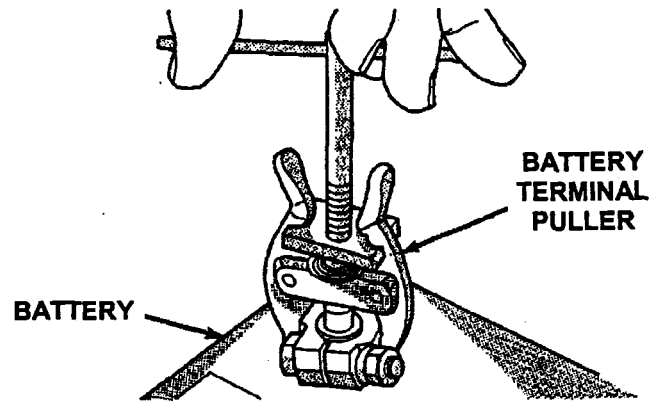


Figure 3

4. Loosen the battery positive cable terminal clamp pinch-bolt hex nut.
5. Disconnect the battery positive cable terminal clamp from the battery positive terminal post. If necessary, use a battery terminal puller to remove the terminal clamp from the battery post (Figure 3).

6. Remove the two nuts with washers that secure the battery hold down strap to the threaded end of the J-bolt and the long stud (Figure 4).
7. Remove the battery hold down strap from the top of the battery (Figure 4).
8. Remove the J-bolt from the holes in the battery tray support on the inboard side of the battery tray (Figure 4).

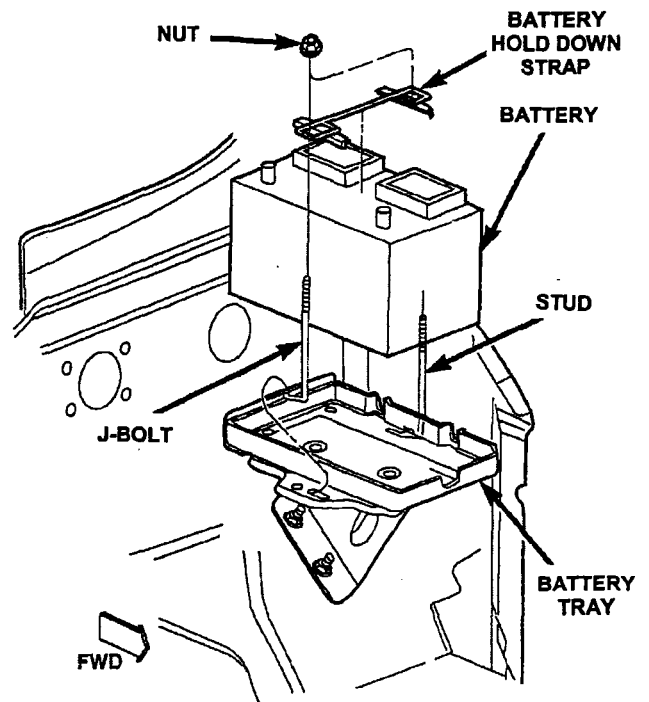


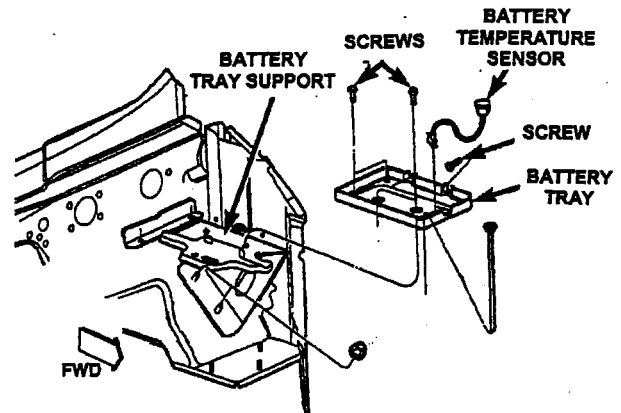
Figure 4

**Service Procedure (Continued)**

9. Carefully remove the battery from the battery tray.

**WARNING:** Wear a suitable pair of rubber gloves when removing the battery. Safety glasses should also be worn.

10. Remove the three screws that secure the bottom of the battery tray to the battery tray support (Figure 5).
11. Remove the two screws that secure the outboard side of the battery tray to the left cowl side panel (Figure 5).
12. Lift the battery tray slightly and disconnect the battery temperature sensor electrical connector.
13. Remove the battery tray and the drain tube from the vehicle as an assembly (Figure 5).



**Figure 5**

**Service Procedure (Continued)**

14. In the area below the battery location, inspect the front (large) wiring harness connector on the ABS control module for acid damage, by spraying the connector and surrounding area with the provided Electrolyte Detection and Neutralizing Spray (Figure 6).

- If the spray remains an orange color, there is no electrolyte (battery acid) on the ABS control module wiring harness connector. Continue with **Section E - Battery Tray Installation**.
- If the spray turns a purple color, continue with Step 15 of this procedure.

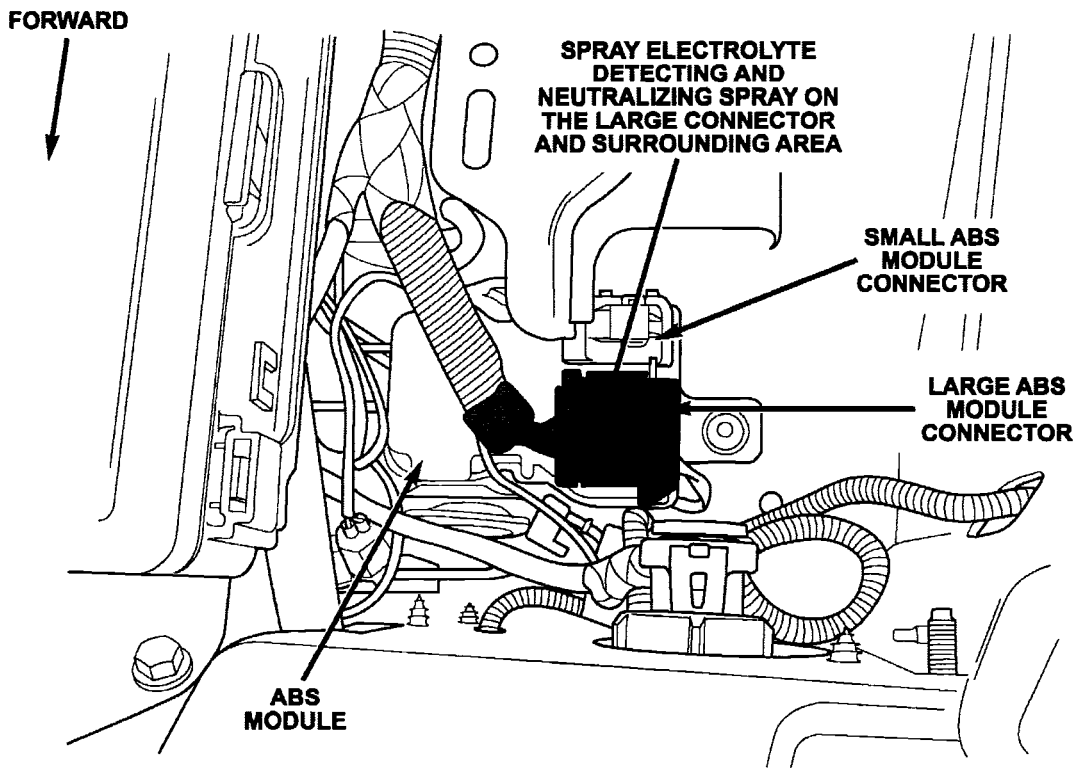


Figure 6

**Service Procedure (Continued)**

15. Disconnect the large ABS control module wiring harness connector from the ABS control module by first sliding the red lock tab forward. Then push down on the black release tab while pulling the connector from the module (Figure 7).

16. Inspect the large ABS control module wiring harness connector:

- If a heat damaged (melted) connector is found, replace the wiring harness connector. Continue with **Section C - ABS Control Module Wiring Harness Connector Replacement**. If no heat damage is found continue with inspection Step b.

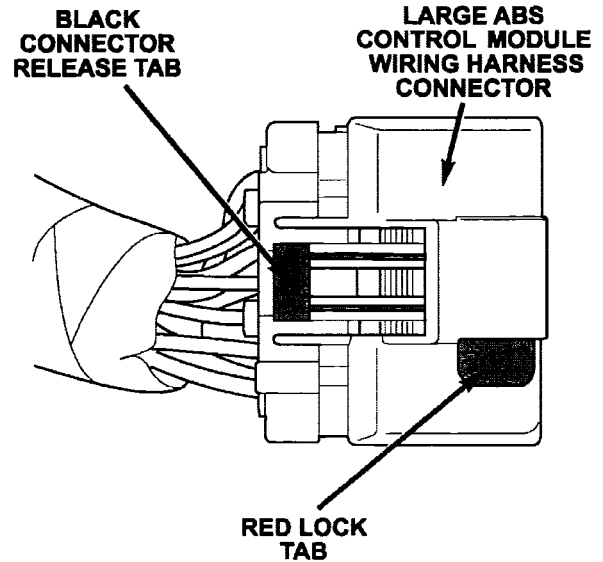


Figure 7

- Inspect the wire side and the terminal side of the large ABS control module wiring harness connector for green colored corrosion. If green colored corrosion is found in one or more of the connector cavities continue with **Section C - ABS Control Module Wiring Harness Connector Replacement**. If no green colored corrosion is found, continue with inspection Step c.
- Looking into the terminal side of the large ABS control module wiring harness connector, inspect the metal terminals for a dull finish or discoloration. If a dull finish or discoloration is found, continue with **Section C - ABS Control Module Wiring Harness Connector Replacement** because the original connector housing wire weather seals have been damaged. If no dull or discolored terminals are found continue with **Section E - Battery Tray Installation**.



## Service Procedure (Continued)

### C. ABS Control Module Wiring Harness Connector Replacement

**NOTE:** Only ABS control module wiring harness connectors with heat damage (melted), green wire terminals or dull/discolored terminals, as determined by the inspection in Section B, require replacement.

1. Remove the secondary terminal lock from the original ABS control module wiring harness connector housing (Figure 8).
2. Some models may have two empty wire cavities in the ABS control module wiring harness connector housing. Insert the gray wire cavity plugs supplied with the repair kit into the correct cavities of the new ABS control module wiring harness connector.
3. The ABS control module wiring harness connector terminals that **do not** have heat damage, green corrosion or are **only** dull or discolored can be transferred to the new connector using the following process:
  - a. From the terminal side of the connector, insert a small pick into the connector next to the terminal and push on the terminal release arm while pulling on the wire.

**CAUTION:** Remove only one wire from the original connector at a time and note which connector cavity the wire is to be transfer into.

  - b. Using the electrolyte detection and neutralizing spray, lightly spray the removed wire until the spray remains an orange color. This may require two or three applications.
  - c. Using compressed air, carefully dry the terminal and wire.
  - d. Insert the terminal into the proper connector cavity of the new connector housing.
  - e. Repeat Steps a. through d. on all wires that need to be transferred to the new connector housing.

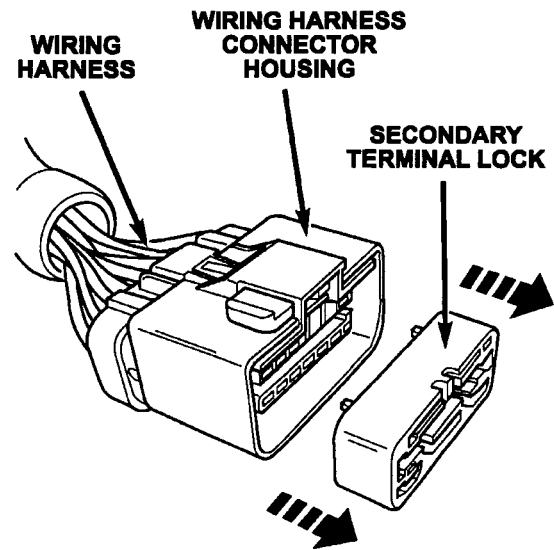


Figure 8

**Service Procedure (Continued)**

4. The ABS control module wiring harness connector terminals **with** heat damage and/or green corrosion must be replaced using the following process:

- a. Cut off the wire one inch back from the original ABS connector.
- b. Remove one-half (1/2) inch (13 mm) of insulation from the wire on the harness that needs to be spliced.

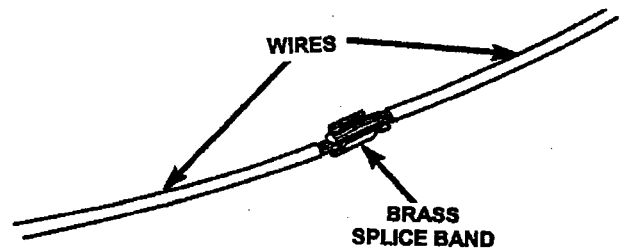


Figure 9

- c. Cut the replacement wire supplied in the connector repair kit to the required length. Then remove one-half (1/2) inch (13 mm) of insulation from the wire.
- d. Place a piece of sealant lined heat shrink tubing on one side of the wire.
- e. Place the strands of wire overlapping each other inside of the brass splice band (Figure 9).

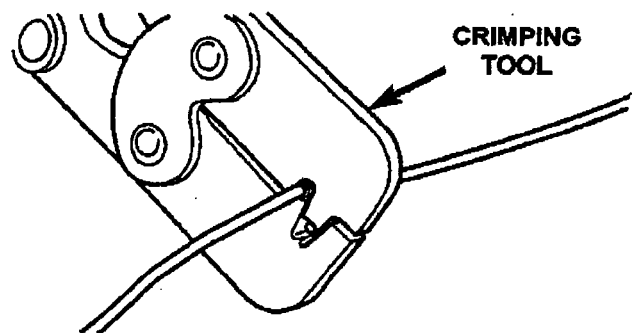


Figure 10

- f. Using crimp tool (Mopar P/N 05019912AA), crimp the brass splice band and wires together (Figure 10).

- g. **Solder the connection together using rosin core type solder. DO NOT use acid core solder.**

**CAUTION: All splices must be properly soldered. Failure to properly solder these wiring connectors can cause the ABS to become inoperative in the future.**

- h. Center the shrink tubing over the splice joint. Using a heat gun, heat the surface of the shrink tubing until the shrink tubing is tightly sealed and sealant comes out of both ends of the shrink tubing (Figure 11).

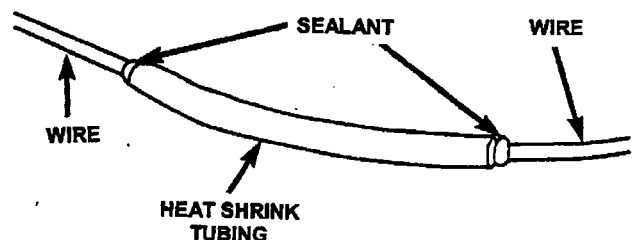


Figure 11

- 5. After all of the terminals have been transferred or replaced, install the blue secondary terminal lock into the ABS control module wiring harness connector (Figure 8).

**Service Procedure (Continued)**

6. Using a small mirror (Snap-on GA295 or equivalent), inspect the ABS control module connector pins for green corrosion and the connector housing for heat damage (Figure 12).

- ABS control module connectors found **with** green corroded pins continue with **Section D - ABS Control Module Replacement**.
- ABS control module connector housings found **with** heat damage continue with **Section D - ABS Control Module Replacement**.
- ABS control module connectors found **without** heat damage or green corroded pins continue with **Section E - Battery Tray Installation**.

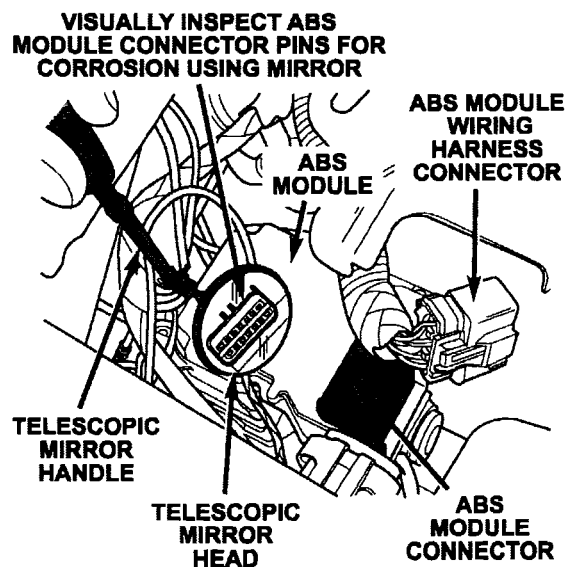


Figure 12

**D. ABS Control Module Replacement**

**NOTE: Only ABS control modules with a heat damaged (melted) connector or green corroded connector pins, as determined by the inspection in Section B and C, require replacement. Very few vehicles are expected to require ABS control module replacement.**

<u>Part Number</u>	<u>Description</u>
05018806AC	ABS Control Module (1500 Series)
05018422AC	ABS Control Module (2500/3500 Series)

1. Disconnect the small ABS control module wiring connector from the ABS control module (Figure 13).
2. Remove the four mounting screws on the ABS control module (Figure 13).

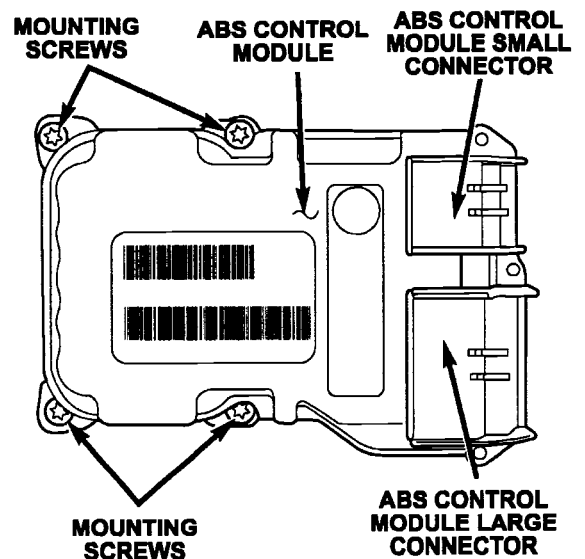


Figure 13

### **Service Procedure (Continued)**

3. Lift the module from the ABS hydraulic control unit and disconnect the solenoid connector located on the bottom side of the ABS control module.
4. Remove the ABS control module from the vehicle and discard.
5. Using a clean shop towel, clean the ABS control module mounting surface on the ABS hydraulic control unit.
6. Connect the solenoid connector to the new ABS control module and then place the module into position on the ABS hydraulic control unit.
7. Install the four ABS control module mounting screws. Tighten the screws to 39 in. lbs (4.4 N·m).
8. Continue with **Section E - Battery Tray Installation.**

### **E. Battery Tray Installation**

1. If disconnected, spray the ABS control module connector and the ABS control module wiring harness connector with Electrolyte Detection and Neutralizing spray to ensure that all traces of acid have been neutralized.

**NOTE: When the spray remains an orange color, any remaining battery acid has been neutralized.**

2. Using compressed air, carefully blow out the connector until completely dry.
3. If previously disconnected, connect the large and/or small wiring harness connectors to the ABS control module.
4. Transfer the battery temperature sensor from the old battery tray to the new battery tray (Figure 14). Then discard the old battery tray.
5. Place a small bead of RTV silicone rubber adhesive (P/N 04883971) onto the base of the new drain tube grommet.

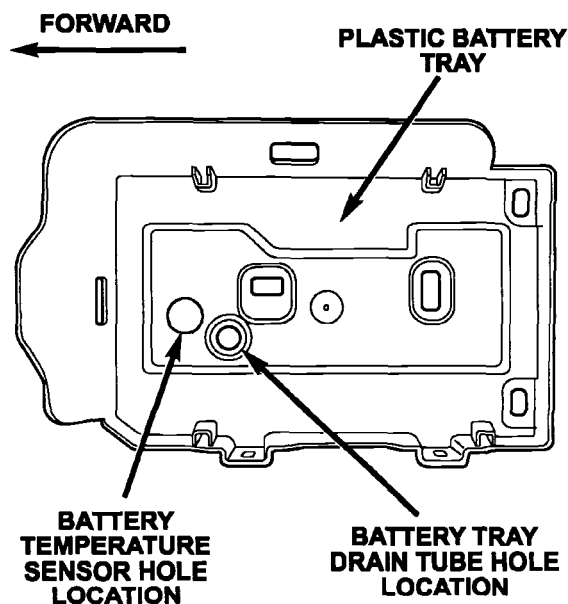


Figure 14

**Service Procedure (Continued)**

6. Snap the new drain tube into position on the new battery tray (Figure 14).
7. While installing the new battery tray into position, route the drain tube through the original hole in the fender panel (Figure 15) and connect the battery temperature sensor electrical connector.
8. Install the battery tray mounting bolts. Tighten the bolts to 95 in. lbs. (10.7 N·m).
9. Install the battery onto the new battery tray.
10. Install the “J” hook and battery hold down bracket.
11. Install the battery hold down retaining nuts. Tighten the nuts to 24 in. lbs. (2.7 N·m).
12. Connect the positive battery cable to the positive battery post. Tighten the retaining nut to 70 in. lbs. (7.9 N·m).
13. Connect the negative battery cable to the negative battery post. Tighten the retaining nut to 70 in. lbs. (7.9 N·m).
14. From inside the left wheel well housing, secure the battery tray drain tube to the frame rail bracket with the provided plastic tie strap (Figure 16).

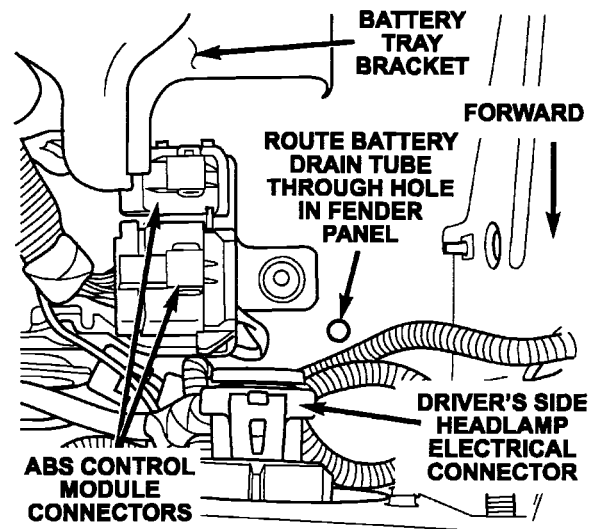


Figure 15

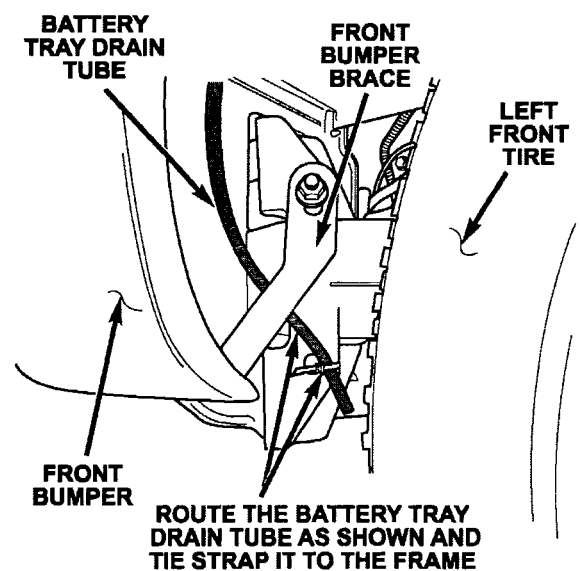


Figure 16

**Completion Reporting and Reimbursement**

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

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

	<b><u>Labor Operation Number</u></b>	<b><u>Time Allowance</u></b>
Install cowl seal extension, replace battery tray and inspect for electrolyte on the ABS Control Module wiring harness connector.	08-D2-01-82	0.5 hours
Install cowl seal extension and replace battery tray and ABS Control Module wiring harness connector.	08-D2-01-83	1.0 hours
Install cowl seal extension and replace battery tray, ABS Control Module wiring harness connector and ABS Control Module.	08-D2-01-84	1.1 hours

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

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

**Parts Return**

Not required.

**Dealer Notification and Vehicle List**

All dealers will receive a copy of this dealer recall notification letter by first class mail. Two additional copies will be sent through the DCMMS. DealerCONNECT will be updated to include this recall 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 recall notification letter.

GRS provides involved dealers with an updated VIN list of their incomplete 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 must perform this repair on all unsold vehicles before 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 first class mail. They are requested to schedule appointments for this service with their dealers. A generic copy of the owner letter is attached.

Enclosed with each owner letter is an Owner Notification postcard to allow owners to update our records if applicable.

## **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

*Buckle up  
for Safety!*

## **SAFETY RECALL – ANTILOCK BRAKE SYSTEM WIRING CORROSION**

Dear: (Name)

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act.

DaimlerChrysler Corporation has decided that a defect, which relates to motor vehicle safety, exists in some **1998 through 2003 model year Dodge Ram Van and Wagon vehicles equipped with a 4-wheel anti-lock brake system (ABS).**

***The problem is...*** Electrolyte (battery acid) from aftermarket batteries may leak onto an ABS wiring connector on your vehicle (VIN: xxxxxxxxxxxxxxxxx). This may cause the wiring to corrode and short circuit, which can result in an underhood fire.

***What your dealer will do...*** DaimlerChrysler will repair your vehicle free of charge (parts and labor). To do this, your dealer will replace the battery tray to prevent future electrolyte leakage. In addition, the ABS wiring will be inspected and repaired if necessary. The work will take about one hour to complete. However, additional time may be necessary depending on how dealer appointments are scheduled and processed.

***What you must do to ensure your safety...*** 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. **Remember to bring this letter with you to your 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.

Please help us update our records, by filling out the enclosed prepaid postcard, if any of the conditions listed on the card apply to you or your vehicle. Be sure to print the last eight (8) characters of the VIN (VVVVVVVV) and notification code D20 on the postcard.

If you have already experienced ABS control module wiring harness 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.

If your dealer fails or is unable to remedy this defect without charge and within a reasonable time, you may submit a written complaint to the Administrator, National Highway Traffic Safety Administration, 400 Seventh Street, S.W., Washington, DC 20590, or call the toll-free Auto Safety Hotline at 1-888-327-4236.

We're sorry for any inconvenience, but we are sincerely concerned about your safety. Thank you for your attention to this important matter.

Customer Services Field Operations  
DaimlerChrysler Corporation  
Notification Code D20

*Note to lessors receiving this recall: Federal regulation requires that you forward this recall notice to the lessee within 10 days.*