DAIMLERCHRYSLER

February 2004

Distributor/Dealer Service Instructions for:

Customer Satisfaction Notification No. C44 Transmission Cooler Line

Models

2003−2004 (DR) Dodge Ram Pick−Up Trucks

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 DG8 or DGP)*** *built through November 24, 2003* ***(MDH 112407).***

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

Subject

The transmission cooler line on about 97,000 of the above vehicles (233 in Int'l markets) can transmit high pressure pulses when the vehicle is operated at heavy loads. These pulses may cause the engine−mounted transmission cooler to crack and leak fluid which could result in significant transmission damage.

Repair

The transmission cooler line must be replaced on all involved vehicles. In addition, the engine−mounted transmission cooler must be inspected and replaced if necessary.

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Parts Information

A. Transmission Cooler Line

Part Number	Description
CBLAC441	**Transmission Cooler Line**

Each Distributor/Dealer to whom vehicles in the notification were invoiced will receive enough transmission cooler lines to service about **10%** of those vehicles.

B. Transmission Cooler

Part Number	Description
CBLAC442	**Transmission Cooler − Engine−Mounted**

Due to the small number of involved vehicles expected to require **transmission cooler replacement,** no parts will be distributed initially. **Transmission coolers should be ordered only after inspection determines that replacement is required.** ***Very few vehicles are expected to require transmission cooler replacement.***

Service Procedure

A. Inspect Transmission Duty Cycle

NOTE: Only vehicles with high duty cycle operation, as determined by the inspection below, require transmission cooler replacement. Very few vehicles are expected to require transmission cooler replacement.

1. Connect the DRB III® to the data link connector located under the instrument panel. Turn the ignition key to the "ON" position.
2. Select #1 − **"DRB III Standalone"** from Main Menu screen.
3. Select #1 − **"1998 − 2004 Diagnostics"** from Standalone Main Menu screen.
4. Select #1 − **"All (Except Below)"** from 1998 − 2004 Diagnostics screen.
5. Select #1 − **"Engine"** from Select System screen.
6. Select #1 − **"Diesel"** from Engine Controller Type screen.
7. Press ENTER two (2) times to continue.
8. Select #2 − **"Duty Cycle Monitor"**.
9. Record the duty cycle value for the 91−100% range.
10. Press PAGE BACK to exit and then disconnect the DRB III.
11. ▶ **If the 91−100% duty cycle value is GREATER THAN 3.5%,** the engine−mounted transmission cooler must be replaced. Continue with **Section C − Replace Engine−Mounted Transmission Cooler and Cooler Line.**

    ▶ **If the 91−100% duty cycle value is 3.5% OR LESS,** the transmission cooler does NOT require replacement. Only the cooler line requires replacement.

12. Inspect the engine coolant for indications of contamination with transmission fluid. If the coolant is contaminated, the transmission cooler must be replaced and the coolant system must be flushed. Continue with **Section C − Replace Engine−Mounted Transmission Cooler and Cooler Line.**

13. Inspect the transmission fluid for indications of contamination with engine coolant. If the transmission fluid is contaminated, the transmission cooler must be replaced and the transmission must be rebuilt or replaced. Continue with **Section C − Replace Engine−Mounted Transmission Cooler and Cooler Line.**

14. Inspect the engine−mounted transmission cooler for signs of external fluid leakage. If the cooler shows signs of leakage, the engine−mounted transmission cooler must be replaced. Continue with **Section C − Replace Engine−Mounted Transmission Cooler and Cooler Line.**

15. If the engine coolant and transmission fluid were NOT contaminated and there are no external cooler leaks, continue with **Section B − Replace Transmission Cooler Line.**

B. Replace Transmission Cooler Line

1. Raise the vehicle on an appropriate hoist.
2. Disconnect the transmission cooler line from the transmission (Figure 1).
3. Disconnect the transmission cooler line from the engine−mounted transmission cooler (Figure 1).
4. Connect the new transmission cooler line to the engine−mounted transmission cooler (Figure 1). Hand−start the fitting but do not tighten.
5. Connect the transmission line to the transmission (Figure 1). Hand−start the fitting but do not tighten.

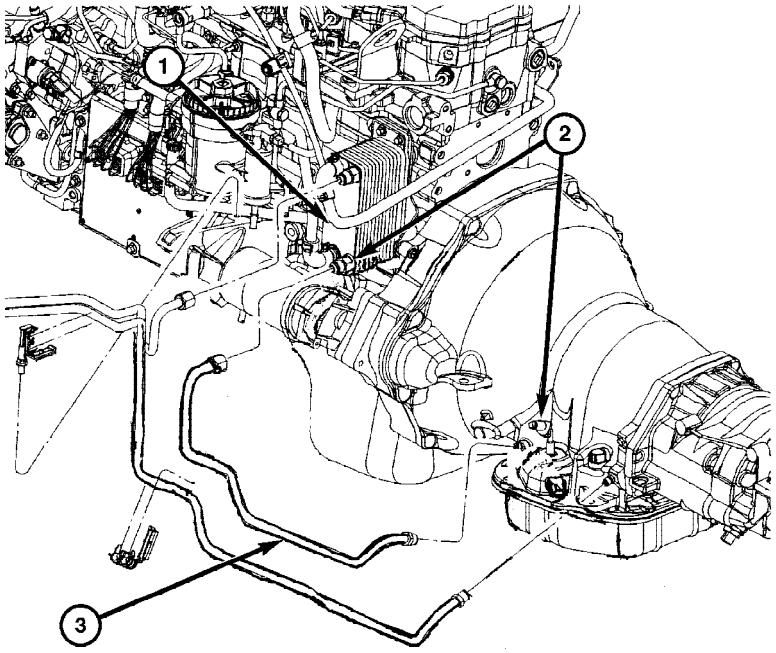

FIGURE 1

1−	ENGINE-MOUNTED TRANSMISSION COOLER
2−	REMOVE COOLER LINE FROM TRANSMISSION AND COOLER
3−	COOLER LINE

6. Check the alignment of the new cooler line (Figure 2). Make sure that the hose portion of the line is not contorted or twisted as this can cause the hose to fail.

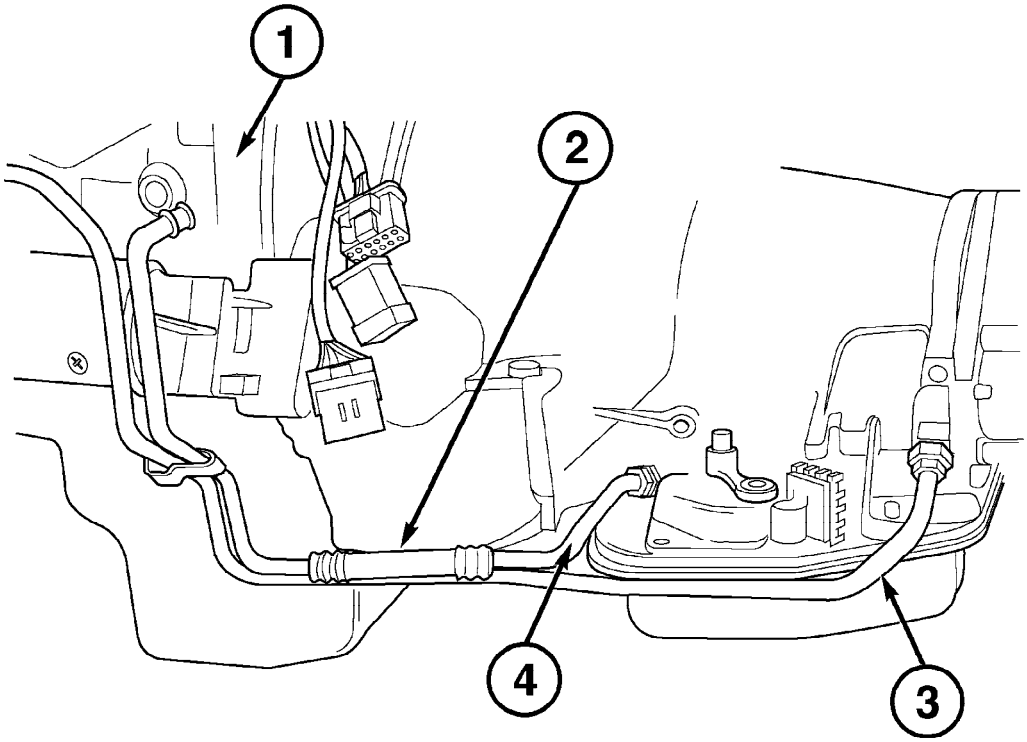

FIGURE 2

1−	ENGINE-MOUNTED TRANSMISSION COOLER
2−	ENSURE THAT THE HOSE SECTION OF THE COOLER LINE IS NOT CONTORTED OR TWISTED AND THAT IT REMAINS PARALLEL WITH THE RETURN LINE
3−	RETURN LINE
4−	COOLER LINE

7. Keeping the cooler line aligned properly, tighten the cooler line−to−transmission fitting to 280 in−lbs (32 N·m).

8. Keeping the cooler line aligned properly, tighten the cooler line−to−cooler fitting to 280 in−lbs (32 N·m).

9. Check the alignment of the new cooler line. Make sure that the hose portion of the line is not contorted or twisted. If the hose portion is twisted or contorted, loosen both cooler line fittings and repeat Steps 6−8.

10. Lower the vehicle, start the engine and ensure that there are no cooler line leaks.

11. Check the transmission fluid level and adjust if necessary.

12. Return the vehicle to the customer.

C. Replace Engine−Mounted Transmission Cooler and Cooler Line

NOTE: The following procedure is only required if the engine−mounted transmission cooler requires replacement per the inspection in Section "A." ***Very few vehicles are expected to require transmission cooler replacement.***

1. Disconnect the negative battery cable from each battery.

2. Open the radiator drain plug and drain the coolant from the radiator into an appropriate container. Save the coolant for later re−use.

WARNING: Do not loosen the radiator drain plug with the system hot and under pressure. Serious burns from coolant can occur.

3. If the engine coolant is contaminated with transmission fluid, the cooling system must be flushed to remove the contamination. Follow the procedure in Section 7 − Cooling in the 2004 DR Service Manual to flush the cooling system.

4. Raise the vehicle on an appropriate hoist.

5. Remove the three (3) starter mounting bolts (Figure 3).

6. Move the starter forward far enough to clear the bell housing, then tilt the nose of the starter downwards and lower the starter enough to remove the nuts that secure the wiring harness to the starter. Remove the starter from the engine and set it aside.

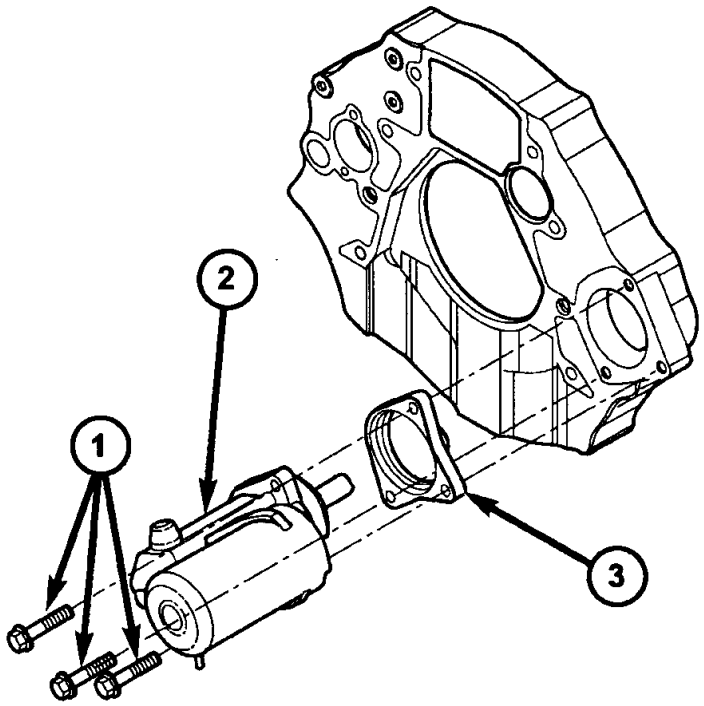

FIGURE 3

1−	MOUNTING BOLTS
2−	STARTER
3−	ADAPTER (IF EQUIPPED)

7. Disconnect the transmission cooler line from the transmission (Figure 4).

8. If the transmission fluid is contaminated with engine coolant, the rest of the cooler system must be flushed and the transmission must be rebuilt or replaced. Follow the procedure in Section 21 − Transmission in the 2004 DR Service Manual and Warranty Rebuild/Replace policies to repair the transmission if the fluid is contaminated.

IMPORTANT: When rebuilding the transmission, all friction material, rubber−based seals and the torque converter must be replaced. In addition, the transmission cooler lines and radiator mounted cooler must be flushed.

9. Lower the vehicle to a working level.

10. Remove the left front wheel and tire assembly.

11. Remove the left front wheel well inner fender shield.

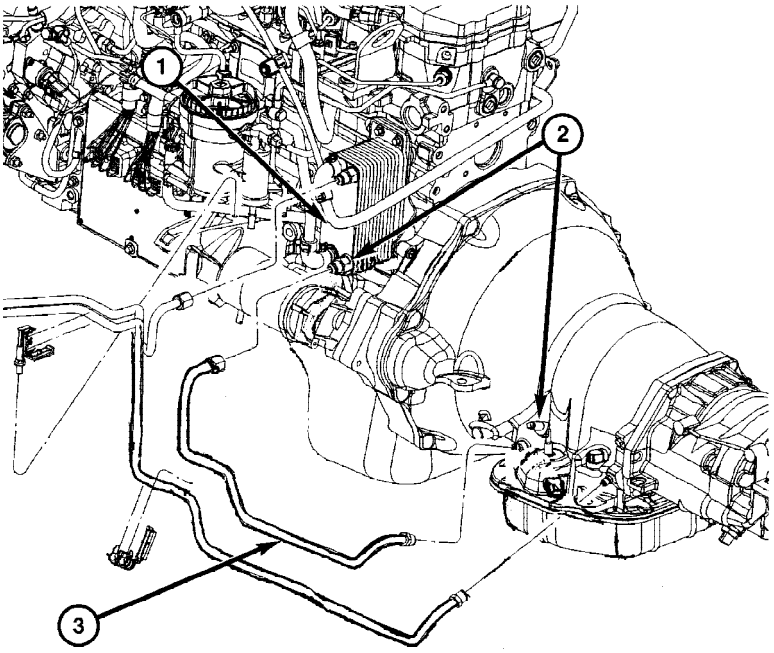

FIGURE 4

1−	ENGINE-MOUNTED TRANSMISSION COOLER
2−	REMOVE COOLER LINE FROM TRANSMISSION AND COOLER
3−	COOLER LINE

12. Disconnect the transmission cooler line from the engine−mounted transmission cooler (Figure 4).

13. Disconnect the transmission cooler outlet line from the engine−mounted transmission cooler (Figure 4).

14. Disconnect the coolant inlet and outlet hoses from the engine−mounted transmission cooler (Figure 5).

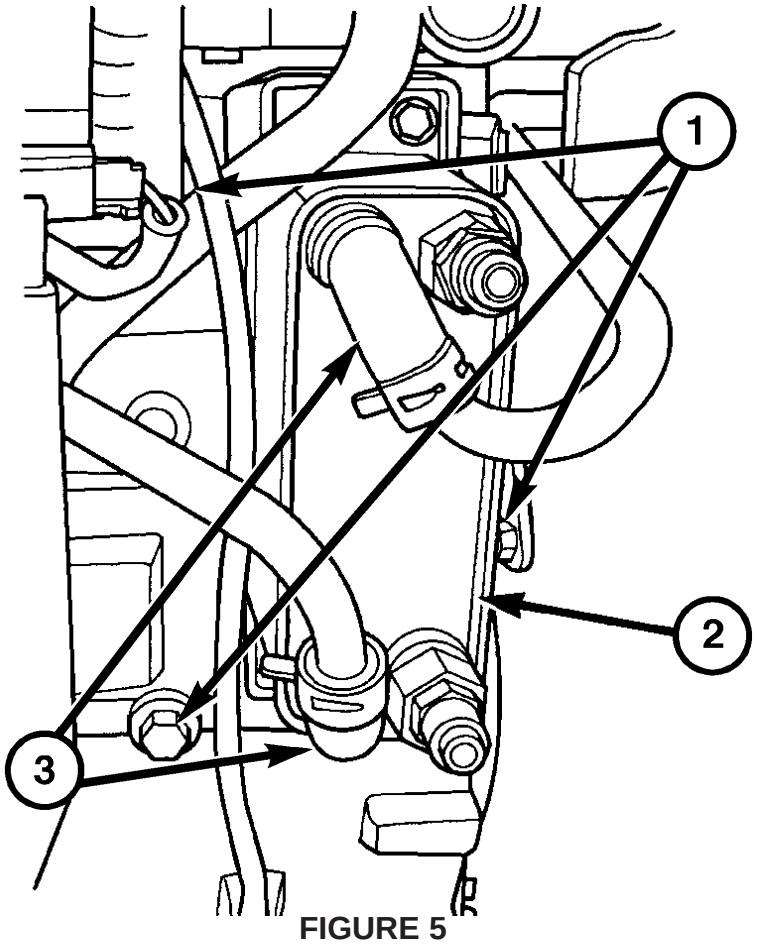

FIGURE 5

1−	COOLER BRACKET MOUNTING BOLT LOCATIONS
2−	ENGINE-MOUNTED TRANSMISSION COOLER
3−	COOLANT HOSES

15. Remove the wiring harness clip from the cooler bracket.

16. Remove the three (3) transmission cooler bracket fasteners (Figure 5) and then remove the cooler and bracket from the engine as an assembly.

17. Install the new transmission cooler and bracket assembly (Figure 5). Hand start the three (3) mounting fasteners only.

18. Tighten the lower cooler bracket−to−cylinder block mounting bolt to 57 ft−lbs (77 N·m).

19. Tighten the upper cooler bracket−to−cylinder block mounting bolt to 18 ft−lbs (24 N·m).

20. Tighten the lower cooler bracket−to−transmission adapter mounting bolt to 18 ft−lbs (24 N·m).

21. Connect the coolant inlet and outlet hoses to the transmission cooler. Make sure that the hose clamps are installed inboard of the upset bead.

22. Connect the transmission cooler outlet line to the transmission cooler. Tighten the fitting to 280 in−lbs (32 N·m).

23. Connect the wiring harness clip to the cooler bracket.

24. Install the left front inner fender shield.

25. Install the left front wheel and tire assembly. Tighten the lug nuts to 135 ft−lbs (180 N·m).

26. Raise the vehicle fully.

27. Connect the new transmission cooler line to the transmission cooler (Figure 4). Hand−start the fitting but do not tighten.

28. Connect the transmission cooler line to the transmission (Figure 4). Hand−start the fitting but do not tighten.

29. Check the alignment of the new cooler line (Figure 6). Make sure that the hose portion of the line is not contorted or twisted as this can cause the hose to fail.

30. Keeping the cooler line aligned properly, tighten the cooler line−to−transmission fitting to 280 in−lbs (32 N·m).

31. Keeping the cooler line aligned properly, tighten the cooler line−to−cooler fitting to 280 in−lbs (32 N·m).

32. Check the alignment of the new cooler line. Make sure that the hose portion of the line is not contorted or twisted. If the hose portion is twisted or contorted, loosen both cooler line fittings and repeat Steps 29−31.

33. Position the starter onto the engine.

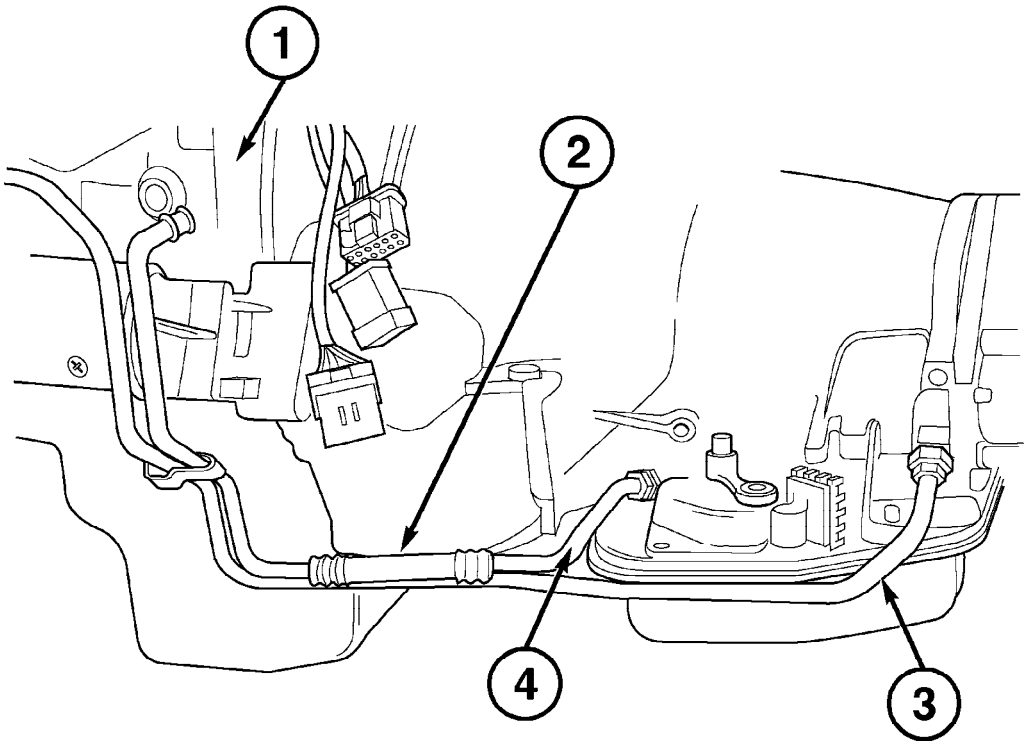

FIGURE 6

1−	ENGINE-MOUNTED TRANSMISSION COOLER
2−	ENSURE THAT THE HOSE SECTION OF THE COOLER LINE IS NOT CONTORTED OR TWISTED AND THAT IT REMAINS PARALLEL WITH THE RETURN LINE
3−	RETURN LINE
4−	COOLER LINE

34. Install the starter wiring. Tighten the large battery cable nut to 120 in−lbs (14 N·m). Tighten the smaller starter solenoid nut to 55 in−lbs (6 N·m).

35. Position the starter into the bell housing (Figure 3). Install the three (3) starter mounting bolts and then tighten the bolts to 32 ft−lbs (43 N·m).

36. Lower the vehicle.

37. Connect both negative battery cables.

38. Fill the engine cooling system with coolant. Re−use the original coolant if it was not contaminated.

39. Start the engine and check for any leaks.

40. Check the transmission fluid level and adjust if necessary.

Completion Reporting and Reimbursement

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

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

	Labor Operation Number	Time Allowance
Check transmission duty cycle and replace cooler line	21−C4−41−82	0.6 hours
Check transmission duty cycle and replace cooler line and cooler assembly	21−C4−41−83	2.4 hours
Check transmission duty cycle, replace cooler line and cooler assembly and flush cooling system	21−C4−41−84	2.7 hours
Check transmission duty cycle, replace cooler line and cooler assembly and rebuild transmission	21−C4−41−85	10.9 hours
Check transmission duty cycle, replace cooler line and cooler assembly, rebuild transmission and flush cooling system	21−C4−41−86	11.2 hours
Check transmission duty cycle, replace cooler line and cooler assembly and replace transmission (includes diagnostic teardown)	21−C4−41−87	6.0 hours
Check transmission duty cycle, replace cooler line and cooler assembly, replace transmission and flush cooling system (includes diagnostic teardown)	21−C4−41−88	6.3 hours

Completion Reporting and Reimbursement (Continued)

Related Operations: (only for use with labor operations that include transmission repair or replace)

Skid Plate Equipped	21−00−02−60	0.2 hours
Two Piece Propeller Shaft Equipped	21−00−02−62	0.2 hours
4x4 Equipped	21−00−02−66	0.8 hours

Add the cost of the parts package(s) plus applicable Distributor/Dealer allowance to your claim.

Distributor/Dealer Notification and Vehicle List

Regional offices will receive an electronic list of involved vehicles. The Vehicle List is arranged by Distributor/Dealer code and in Vehicle Identification Number (VIN) sequence. The lists are for Distributor/Dealer reference in arranging for service of involved vehicles.

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Vehicle Lists, Global Recall System, VIP and Distributor/Dealer Follow Up

All involved vehicles have been entered into the Global Recall System (GRS) and Vehicle Information Plus (VIP) for Distributor/Dealer inquiry as needed.

GRS provides involved Distributors/Dealers with an updated VIN list of their incomplete vehicles. Completed vehicles are removed from GRS within several days of repair claim submission.

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

Owner Notification and Service Scheduling

All involved vehicle owners should be notified of the service requirement by their Distributor/Dealer. Owners are requested to schedule appointments for this service. A sample copy of the owner notification letter is attached.

Additional Information

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

International Service and Parts
DaimlerChrysler Corporation

DAIMLERCHRYSLER

CUSTOMER SATISFACTION NOTIFICATION
TRANSMISSION COOLER LINE

Dear Ram Diesel Truck Owner:

The satisfaction of our customers is very important to DaimlerChrysler. Because of this, we are requesting owners of some 2003 and 2004 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 transmission cooler line on your truck can transmit high pressure pulses when the vehicle is operated at heavy loads. These pulses may cause the engine−mounted cooler to crack and leak fluid which could result in significant transmission damage.**
What DaimlerChrysler and your dealer will do...	**DaimlerChrysler will repair your vehicle free of charge (parts and labor).** To do this, your dealer will replace the transmission cooler line. The engine−mounted transmission cooler will also be inspected and replaced if necessary. Cooler line replacement will take about one hour to complete. Cooler replacement, if required, will take another two hours. 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 part for your vehicle or to order it before your appointment.
If you need help...	If you have trouble getting your vehicle serviced, please contact the DaimlerChrysler **Distributor** nearest your location. A representative will assist you in getting your vehicle serviced. This information can be found in the Customer Assistance section of your Owner's Manual.

If you have already experienced the problem described above and have paid to have it repaired, contact the DaimlerChrysler **Distributor** nearest your location for reimbursement procedures.

We apologize for any inconvenience, but we believe that this service will help to ensure your continuing satisfaction with your vehicle. Thank you for your attention to this important matter.

International Service and Parts
DaimlerChrysler Corporation
C44

Buckle up for Safety

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