



NUMBER: 21-002-05 REV. A

GROUP: Transmission

DATE: May 7, 2005

THIS BULLETIN SUPERSEDES TECHNICAL SERVICE BULLETIN 21-002-05, DATED JANUARY 14, 2005, WHICH SHOULD BE REMOVED FROM YOUR FILES. ALL REVISIONS ARE HIGHLIGHTED WITH **ASTERISKS AND INCLUDES AN ADDITIONAL PART AND REVISED REPAIR PROCEDURES FOR 2004 SPRINTER VEHICLES.**

SUBJECT:

Automatic Transmission Fluid (ATF) Weepage

OVERVIEW:

This bulletin aids in diagnosis and repair of automatic transmission fluid weepage.

MODELS:

2005	(LX)	300/Magnum
2004-2005	(VA)	Sprinter
2005	(WK)	Grand Cherokee
2004 - 2005	(ZH)	Crossfire Coupe/Crossfire Roadster

NOTE: This bulletin applies to vehicles equipped with a NAG1 automatic transmission (sales code DGJ or DGU).

SYMPTOM/CONDITION:

Transmission fluid may be wicking in the right front corner of the transmission oil pan area.

DIAGNOSIS:

If the vehicle exhibits the Symptom/Condition, inspect the 13-pin connector plug guide bushing as a possible source of the transmission fluid weepage. If the weepage appears to be coming from above the transmission oil pan gasket, **DO NOT REPLACE THE TRANSMISSION OIL PAN GASKET**, perform the appropriate Repair Procedure.

PARTS REQUIRED:

Qty.	Part No.	Description
1	52108323AB	O-Ring, Transmission
1	52108324AB	O-Ring, Transmission
(AR)	05127382AA	Transmission Fluid Sprinter and Crossfire Coupe/Crossfire Roadster

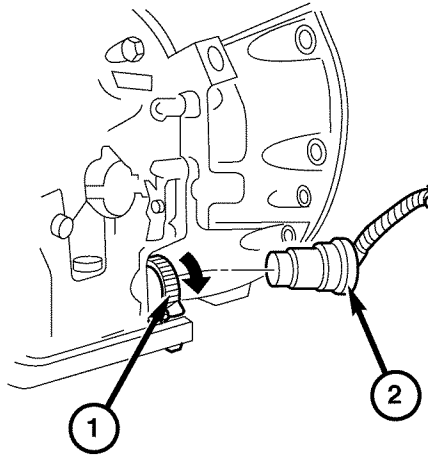


Stick with the Specialists™

Qty.	Part No.	Description
(AR)	05013457AA	Transmission Fluid 300/Magnum and Grand Cherokee
AR (1)	05166827AA	Plug, Adapter - 2004 Sprinter Only

LX VEHICLE REPAIR PROCEDURE:

1. Disconnect and isolate the negative battery cable.
2. Raise the vehicle on a suitable hoist.
3. Disconnect the 13-pin connector plug by turning the bayonet lock of the connector guide bushing counter clockwise (Fig. 1).
4. Place a suitable drain pan under the connector guide bushing to catch transmission fluid that may drain during the next step.
5. Using a 7 mm socket, loosen the bronze bolt securing the connector guide bushing. The bronze bolt is located in the center of the connector guide bushing (Fig. 2).



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Fig. 1 CONTROL HARNESS CONNECTOR

- 1 - BAYONET LOCK OF THE CONNECTOR GUIDE BUSHING
 2 - 13 PIN CONNECTOR PLUG
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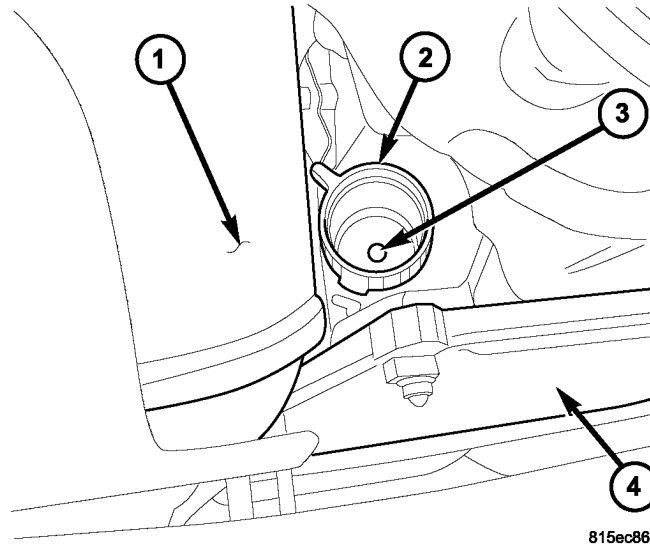
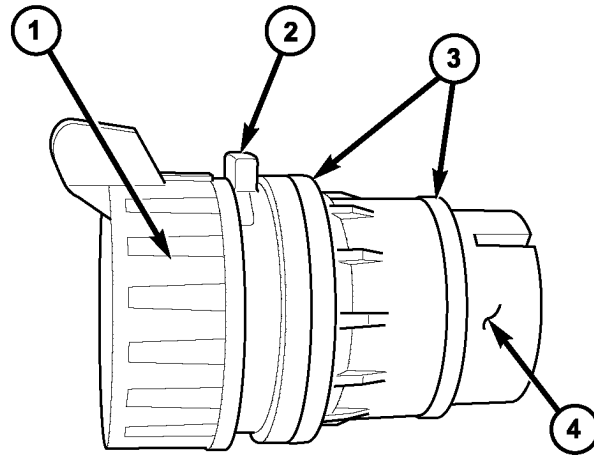


Fig. 2 BOLT SECURING THE CONNECTOR GUIDE BUSHING

- 1 - CATALYTIC CONVERTER (ZH AND WK MODELS ONLY)
- 2 - BAYONET LOCK
- 3 - BRONZE BOLT
- 4 - TRANSMISSION OIL PAN

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- 6. Remove the connector guide bushing from the transmission.
 - 7. If there is a locator tab present, using side cutter pliers, remove the locator tab on the connector guide bushing ([Fig. 3](#)).



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Fig. 3 BUSHING LOCATOR TAB LOCATION

- 1 - BAYONET LOCK
- 2 - LOCATOR TAB
- 3 - O-RING (2)
- 4 - CONNECTOR GUIDE BUSHING

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8. Using transmission fluid, lubricate and place 1 p/n 52108323AB o-ring and 1 p/n 52108324AB o-ring on the connector guide bushing.

NOTE: The o-rings are two different sizes. Be careful to place the new o-rings in the correct location.

- 9. Install the connector guide bushing in the transmission.
- 10. Tighten the bronze bolt securing the guide bushing in place. Tighten the bronze bolt to 2.5 N·m +/- 0.2 N·m (22 in. lbs +/- 2 in. lbs.) (Fig. 2).
- 11. Connect the 13-pin plug connector. Secure the connector by turning the bayonet lock of the connector guide bushing clockwise.
- 12. Clean the area of any residual transmission fluid which may be present as a result of the repair.
- 13. Lower the vehicle.
- 14. Connect the negative battery cable and reset the clock.

NOTE: Be sure to use the correct transmission fluid, Mopar p/n 05013457AA.

- 15. Check the transmission fluid and adjust as necessary. Refer to the service information available in TechCONNECT. Reference: Service Info, 21 - Transmission/Transaxle/Automatic - NAG1/Fluid - Standard Procedure.

VA VEHICLE REPAIR PROCEDURE:

- 1. Disconnect and isolate the negative battery cable.
- 2. Raise the vehicle on a suitable hoist.
- 3. Disconnect the 13-pin connector plug by turning the bayonet lock of the connector guide bushing counter clockwise (Fig. 1).

4. Place a suitable drain pan under the connector guide bushing to catch transmission fluid that may drain during the next step.
5. Using a 7 mm socket, loosen the bronze bolt securing the connector guide bushing. The bronze bolt is located in the center of the connector guide bushing (Fig. 2).
6. Remove the connector guide bushing from the transmission.
7. **2004 VA vehicles go to Step #8. 2005 VA vehicles go to Step #9.**
8. **Install a new connector guide bushing, p/n 05166827AA, in the transmission. Proceed to Step #12.**
9. If there is a locator tab present, using side cutter pliers, remove the locator tab on the connector guide bushing(Fig. 3).
10. Using transmission fluid, lubricate and place 1 p/n 52108323AB o-ring and 1 p/n 52108324AB o-ring on the connector guide bushing.

NOTE: The o-rings are two different sizes. Be careful to place the new o-rings in the correct location.

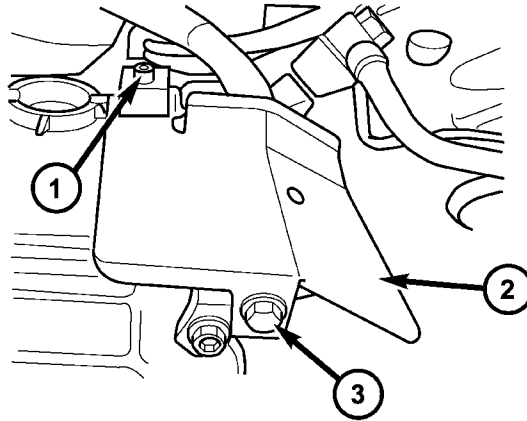
11. Install the connector guide bushing in the transmission.
12. Tighten the bronze bolt securing the guide bushing in place. Tighten the bronze bolt to 2.5 N·m +/- 0.2 N·m (22 in. lbs +/- 2 in. lbs.) (Fig. 2).
13. Connect the 13-pin plug connector. Secure the connector by turning the bayonet lock of the connector guide bushing clockwise.
14. Clean the area of any residual transmission fluid which may be present as a result of the repair.
15. Lower the vehicle.
16. Connect the negative battery cable.

NOTE: Be sure to use the correct transmission fluid, Mopar p/n 05127382AA.

17. Check the transmission fluid and adjust as necessary. Refer to the service information available in TechCONNECT. Reference: Service Info, 21 - Transmission/Transaxle/Automatic - NAG1/Fluid - Standard Procedure.

WK VEHICLE REPAIR PROCEDURE:

1. Disconnect and isolate the negative battery cable.
2. Raise the vehicle on a suitable hoist.
3. Remove the bolt and loosen the screw securing the 13 pin connector heat shield in the right front corner of the transmission assembly (Fig. 4). Remove the heat shield.



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Fig. 4 13 PIN CONNECTOR HEAT SHIELD

- 1 - LOOSEN SCREW
- 2 - 13 PIN CONNECTOR HEAT SHIELD
- 3 - REMOVE BOLT

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- 4. Disconnect the 13-pin connector plug by turning the bayonet lock of the connector guide bushing counter clockwise (Fig. 1).
 - 5. Place a suitable drain pan under the connector guide bushing to catch transmission fluid that may drain during the next step.
 - 6. Using a 7 mm socket, loosen the bronze bolt securing the connector guide bushing. The bronze bolt is located in the center of the connector guide bushing (Fig. 2).
 - 7. Remove the connector guide bushing from the transmission.
 - 8. If there is a locator tab present, using side cutter pliers, remove the locator tab on the connector guide bushing (Fig. 3).
 - 9. Using transmission fluid, lubricate and place 1 p/n 52108323AB o-ring and 1 p/n 52108324AB o-ring on the connector guide bushing.

NOTE: The o-rings are two different sizes. Be careful to place the new o-rings in the correct location.

- 10. Install the connector guide bushing in the transmission.
- 11. Tighten the bronze bolt securing the guide bushing in place. Tighten the bronze bolt to 2.5 N·m +/- 0.2 N·m (22 in. lbs +/- 2 in. lbs.) (Fig. 2).
- 12. Connect the 13-pin plug connector. Secure the connector by turning the bayonet lock of the connector guide bushing clockwise.
- 13. Position the 13 pin connector heat shield and install the bolt and tighten the screw securing the heat shield in the right front corner of the transmission assembly (Fig. 4).
- 14. Clean the area of any residual transmission fluid which may be present as a result of the repair.
- 15. Lower the vehicle.
- 16. Connect the negative battery cable.

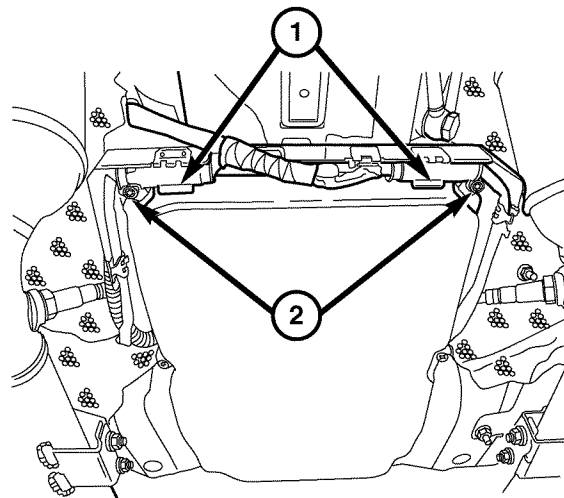
NOTE: Be sure to use the correct transmission fluid, Mopar p/n 05013457AA.

17. Check the transmission fluid and adjust as necessary. Refer to the service information available in TechCONNECT. Reference: Service Info, 21 - Transmission/Transaxle/Automatic - NAG1/Fluid - Standard Procedure.

ZH VEHICLE REPAIR PROCEDURE:

1. Disconnect and isolate the negative battery cable.
2. Raise the vehicle on a suitable hoist.
3. Disconnect the oxygen sensor harness connectors and reposition the oxygen sensor harness out of the way (Fig. 5).
4. Remove the oxygen sensor heat shield bolts and the heat shield (Fig. 5).
5. Remove the bolt and loosen the screw securing the 13 pin connector heat shield in the right front corner of the transmission assembly (Fig. 4). Remove the heat shield and set it aside.
6. Disconnect the 13-pin connector plug by turning the bayonet lock of the connector guide bushing counter clockwise (Fig. 1).
7. Place a suitable drain pan under the connector guide bushing to catch transmission fluid that may drain during the next step.
8. Using a 7 mm socket, loosen the bronze bolt securing the connector guide bushing. The bronze bolt is located in the center of the connector guide bushing (Fig. 2).
9. Remove the connector guide bushing from the transmission.
10. If there is a locator tab present, using side cutter pliers, remove the locator tab on the connector guide bushing (Fig. 3).
11. Using transmission fluid, lubricate and place 1 p/n 52108323AB o-ring and 1 p/n 52108324AB o-ring on the connector guide bushing.

NOTE: The o-rings are two different sizes. Be careful to place the new o-rings in the correct location.



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Fig. 5 OXYGEN SENSOR HEAT SHIELD

- 1 - OXYGEN SENSOR CONNECTORS
- 2 - HEAT SHIELD BOLTS

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12. Install the connector guide bushing in the transmission.

13. Tighten the bronze bolt securing the guide bushing in place. Tighten the bronze bolt to 2.5 N·m +/- 0.2 N·m (22 in. lbs +/- 2 in. lbs.) (Fig. 2).
14. Connect the 13-pin plug connector. Secure the connector by turning the bayonet lock of the connector guide bushing clockwise.
15. Position the 13 pin connector heat shield and install the bolt and screw securing the heat shield in the right front corner of the transmission assembly (Fig. 4).
16. Position the oxygen sensor heat shield onto the transmission housing and install the screw and bolt which secure the shield in place.(Fig. 5).
17. Connect the oxygen sensor harness connectors and secure the wiring harness in the oxygen sensor heat shield (Fig. 5).
18. Clean the area of any residual transmission fluid which may be present as a result of the repair.
19. Lower the vehicle.
20. Connect the negative battery cable.

NOTE: Be sure to use the correct transmission fluid, Mopar p/n 05127382AA.

21. Check the transmission fluid and adjust as necessary. Refer to the service information available in TechCONNECT. Reference: Service Info, 21 - Transmission/Transaxle/Automatic - NAG1/Fluid - Standard Procedure.

POLICY:

Reimbursable within the provisions of the warranty.

TIME ALLOWANCE:

Labor Operation No:	Description	Amount
21-10-20-90	Guide Bushing Seals, Replace	0.4 Hrs.
21-10-19-90	Adapter Plug/Guide Bushing, Replace	0.4 Hrs 2004 VA Only

FAILURE CODE:

71	Oil Leak
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