

**NUMBER:** 05-005-17

**GROUP:** 05 - Brakes

**DATE:** October 25, 2017

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THIS SERVICE BULLETIN IS ALSO BEING RELEASED AS RAPID RESPONSE TRANSMITTAL (RRT) 17-100. ALL APPLICABLE SOLD AND UN-SOLD RRT VIN'S HAVE BEEN LOADED. TO VERIFY THAT THIS RRT SERVICE ACTION IS APPLICABLE TO THE VEHICLE, USE VIP OR PERFORM A VIN SEARCH IN TECHCONNECT. ALL REPAIRS ARE REIMBURSABLE WITHIN THE PROVISIONS OF WARRANTY.

## SUBJECT:

Left Front Brake Hose Weepage

#### **OVERVIEW:**

This bulletin involves inspecting the left front brake hose and Wheel Speed Sensor (WSS) wire harness, replace if needed.

# **MODELS:**

2017	(D2)	RAM 3500 Pickup
2017	(DD)	RAM 3500 Cab Chassis
2017	(DF)	RAM 3500 <10K LB Cab Chassis
2017	(DJ)	RAM 2500 Pickup
2017	(DX)	RAM Truck (Mexico)

NOTE: This bulletin applies to vehicles within the following markets/countries: NAFTA, EMEA, LATAM, and APAC.

NOTE: This bulletin applies to vehicles built on or after July 06, 2017 (MDH 0706XX) and on or before July 25, 2017 (MDH 0725XX) equipped with Man Shift-On-The-Fly Transfer Case (Sales Code DK1) or Elec Shift-On-The-fly Transfer Case (Sales Code DK3).

### SYMPTOM/CONDITION:

Customers may notice a low brake fluid and/or Anti-Lock Brake System (ABS) warning indicator(s) illumination. Upon further investigation the technician may find that one or more of the following Diagnostic Trouble Codes (DTCs) have been set:

- C0031-1D Left Front Wheel Speed Sensor Circuit Current Out Of Range.
- C0031-2F Left Front Wheel Speed Sensor Signal Erratic.
- C0031-62 Left Front Wheel Speed Sensor Signal Compare Failure.
- C0049-7B Brake Fluid Low Fluid Level.

# **DIAGNOSIS:**

Using a Scan Tool (wiTECH) with the appropriate Diagnostic Procedures available in TechCONNECT, verify all related systems are functioning as designed. If DTCs or symptom conditions, other than the ones listed above are present, record the issues on the repair order and repair as necessary before proceeding further with this bulletin.

If a customer's VIN is listed in VIP or your RRT VIN list, perform the repair. If any vehicle not on the VIN list exhibits the symptom/condition or DTC, perform the repair.

# PARTS REQUIRED:

Qty.	Part No.	Description
1 (AR)	68224903AG	Hose, Brake, Left Front
1 (AR)	06512427AA	Bolt, Banjo
2 (AR)	06502114	Gasket (Copper Washer), Brake Hose to Caliper
(AR)	04318080AD	Brake Fluid, DOT 3
1 (AR)	68267479AB	Sensor, Anti-Lock Brake (WSS)



Fig. 1
Left Front Brake Hose

# **INSPECTION PROCEDURE:**

1. Raise and support the vehicle. Refer to the detailed service procedures available in DealerCONNECT> TechCONNECT under: Service Info>04 - Vehicle Quick Reference/Hoisting/ Standard Procedure.

2. Check if there is 15 mm (0.59 in) or less of clearance between the left front brake hose and the high point of the front axle, pinion flange, (Fig. 2) and (Fig. 4).

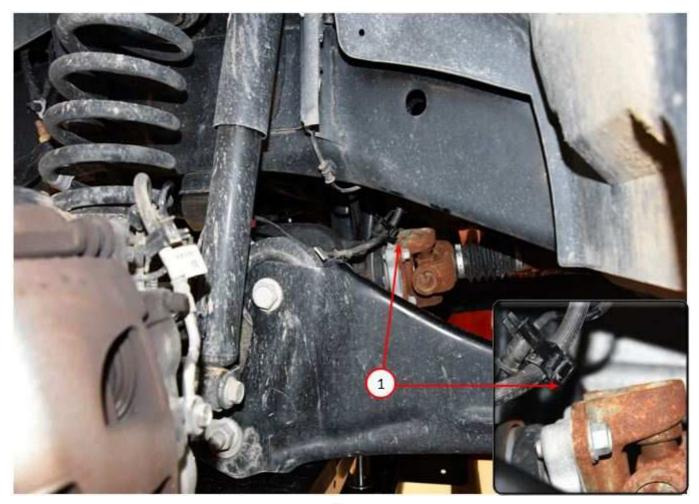


Fig. 2
Front Propeller Shaft (Drive Shaft)

1 - Check Air Gap In This Location

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- 3. Is the clearance 15 mm (0.59 in) or less, (Fig. 3) and (Fig. 4)?
  - YES>>> Proceed to Step 4 of the Inspection Procedure.
  - NO >>> This bulletin has been completed. Use inspection LOP (05-30-05-99) to close the active RRT.



Fig. 3
Take Measurements In This Location

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Fig. 4
Measure Between The Flange And Harness

- 4. Check for any signs of the propeller shaft rubbing on the left front brake hose or WSS harness. Are there rub marks on the hose or wire harness?
  - YES>>> Proceed to Step 5.
  - NO >>> Proceed to Step 1 of the Repair Procedure.
- 5. Which part has rub marks on it?
  - Left front brake hose has rub marks on it. Proceed to Step 4 of the Repair Procedure.
  - Left front WSS harness has rub marks on it. Proceed to Step 6 of the Repair Procedure.

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#### REPAIR PROCEDURE:

NOTE: The reduced clearance is caused by the Wheel Speed Sensor (WSS) jumper harness, twisted around the brake hose. Removing the twist will correct this issue.

- 1. Remove the four WSS jumper harness grommets, from the retainer clips as seen in (Fig. 5).
- 2. Reinstall the four grommets into the retainers, starting with number 1. Install the grommets in order 1, 2, 3 and 4, workout any twist within the harness.

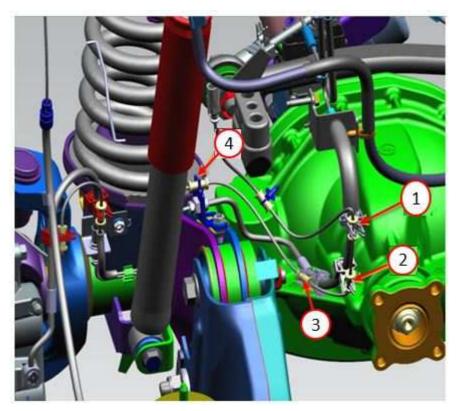


Fig. 5
Reinstall The WSS Jumper Harness In Order 1 Through 4

- 3. Proceed to Step 7 of the Repair Procedure.
- 4. Replace the left front brake hose. Refer to the detailed service procedures available in DealerCONNECT> TechCONNECT under: 05 Brakes/05 Brakes, Base/Hydraulic/Mechanical/Tubes And Hoses, Brake/Removal and Installation.
- 5. Proceed to Step 7.
- 6. Replace the left front WSS. Refer to the detailed service procedures available in DealerCONNECT> TechCONNECT under: 05 Brakes/05 Brakes, ABS/Electrical/Sensor, Wheel Speed, Front/Removal and Installation.
- 7. Check if there is 15 mm (0.59 in) or less of clearance between the left front brake hose and the front propeller shaft (Fig. 3) and (Fig. 4).

# NOTE: If any of the left front WSS DTC stay active after attempting to clear them, normal diagnostic must be performed.

- 8. Clear all DTCs that may have been set when performing this procedure.
- 9. Lower the vehicle. Refer to the detailed service procedures available in DealerCONNECT> TechCONNECT under: Service Info>04 Vehicle Quick Reference/Hoisting/Standard Procedure.

## **POLICY:**

Reimbursable within the provisions of the warranty.

# TIME ALLOWANCE:

Labor Operation No:	Description	Skill Category	Amount
05-30-05-99	Brake hose, Inspect Only (2 - Skilled)	4 - Chassis	0.2 Hrs.
05-30-05-9A	Brake hose, Inspect and Reroute Wheel Speed Sensor (WSS) Harness (2 - Skilled)	4 - Chassis	0.2 Hrs.
05-30-05-9B	Brake hose, Inspect, Replace and Reroute Wheel Speed Sensor (WSS) Harness (2 - Skilled)	4 - Chassis	0.4 Hrs.
08-14-18-9E	Wheel Speed Sensor (WSS) Harness, Inspect and Replace (2 - Skilled)	4 - Chassis	0.4 Hrs.
05-30-05-9C	Brake Hose and Wheel Speed Sensor (WSS) Harness, Inspect and Replace (2 - Skilled)	4 - Chassis	0.7 Hrs.
08-14-18-62	Spacer Plate, Dual Rear Wheel Equipped (2 - Skilled)	4 - Chassis	0.2 Hrs.

# **FAILURE CODE:**

Service Action
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