

**NUMBER:** 19-005-02

**GROUP:** Steering

**DATE:** May 20, 2002

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THIS BULLETIN SUPERSEDES TECHNICAL SERVICE BULLETINS 19-06-00, DATED SEPT. 15, 2000, AND 19-003-01 REV. A, DATED AUG. 24, 2001, WHICH SHOULD BE REMOVED FROM YOUR FILES AND NOTED IN THE 2000 TECHNICAL SERVICE BULLETIN MANUAL (PUBLICATION NO. 81-170-00001). ALL REVISIONS ARE HIGHLIGHTED WITH \*\*ASTERISKS\*\* AND INCLUDE REVISED PARTS AND REPAIR PROCEDURES FOR VEHICLES EQUIPPED WITH A 4.0L ENGINE. THE PARTS AND REPAIR PROCEDURE REMAIN THE SAME FOR VEHICLES EQUIPPED WITH A 4.7L ENGINE AND NON-HYDRAULIC COOLING.

### SUBJECT:

Steering Honk On 4.0L And 4.7L LHD Grand Cherokee Vehicles

### **OVERVIEW:**

This bulletin involves the replacement of the power steering pressure and return hoses and tube.

### **MODELS:**

1999 - 2002	(WJ)	Grand Cherokee (Domestic and International Markets)
2001 - 2002	(WG)	Grand Cherokee (International Markets)

NOTE: THIS BULLETIN APPLIES TO 1999 - 2000 4.7L AND 1999 - 2002 4.0L GRAND CHEROKEE VEHICLES THAT ARE LEFT HAND DRIVE (LHD) AND ARE NOT EQUIPPED WITH HYDRAULIC COOLING.

### SYMPTOM/CONDITION:

Some vehicles may exhibit a honk-like sound from the power steering system. This sound occurs most often during a low speed right hand turn, as would occur during parking lot maneuvers.

### **DIAGNOSIS:**

If the customer indicates that the above condition is present, perform the section of the Repair Procedure that is appropriate for the equipped engine.

### PARTS REQUIRED:

Qty.	Part No.	Description
1	04883077	Fluid, Power Steering (MS-5931 quart)
1	05080950AA	Hose, Pressure (4.7L)
1	52088116AB	Fitting, Pressure Hose - Quick Connect At Pump (4.7L)

Qty.	Part No.	Description
1	05080951AA	Hose, Return (4.7L)
2	**06504502**	Clamp, Hose (4.0L or 4.7L)
1	**52088452AE**	Hose, Pressure (4.0L)
1	**52088774AC**	Hose, Return (4.0L)
1	**52088775AB**	Tube, Return (4.0L)
6	**34201631**	Rivet, Plastic Black (Front Fascia - 4.0L)
1	**06102141AA**	Screw, Pressure Hose (6 mm - 4.0L)

### REPAIR PROCEDURE:

### \*\*IF VEHICLE IS EQUIPPED WITH A 4.0L ENGINE:\*\*

1. Remove the front fascia panel.

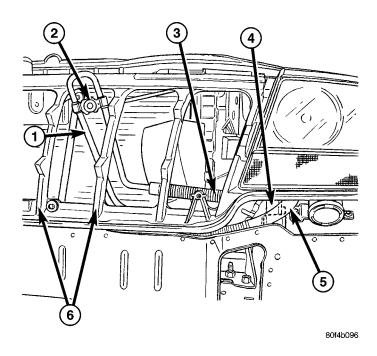


Fig. 1 HOSE INSTALLED THROUGH GRILL

- 1 New Power Steering Pressure Hose
- 2 Bracket For Attaching Hose To Lower Radiator Support Panel
- 3 Pump End Of Hose Route Hose Next To Radiator
- 4 Radiator Support Post
- 5 Gear End Of Hose Route Hose Under Left Headlamp
- 6 Opening In Radiator Grill Support Panel
- 2. Remove the air cleaner housing.
- 3. Remove the left side headlamp housing module.
- 4. Clean the area where the power steering pressure hose connects to the steering gear and pump.
- 5. Wipe filler cap clean, siphon fluid out of the power steering fluid reservoir.

- 6. Remove the old power steering pressure hose from the power steering pump and steering gear.
- 7. Feed the new pressure hose, p/n 52088452AE, through the opening in the grill support panel (Fig. 1).
- 8. Perform this step and the next step at the same time. Route the steering pump end of the pressure hose through the opening next to the radiator and under black air deflector.

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- Route the steering gear end of the pressure hose through the opening under the left headlamp. If equipped, be careful not to damage the leak detection pump hose/nipple or its electrical harness/connector.
- 10. Loose fit the fittings of the new power steering pressure hose to the steering pump and steering gear.
- 11. Secure the section of the new pressure hose, that is located in front of the radiator, to the lower radiator panel with the attaching screw (p/n 06102141AA). Seat the black air deflector into place and around the new pressure hose (Fig. 2).

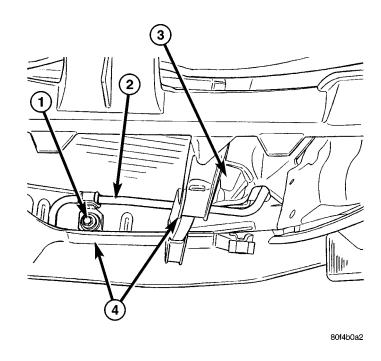


Fig. 2 HOSE ATTACHMENT TO BODY

- 1 Screw Securing Pressure Hose To Lower Radiator Panel
- 2 New Power Steering Pressure Hose
- 3 Black Air Deflector
- 4 Radiator Grill Support Panel
- 12. Remove the old power steering return hose from the reservoir.
- 13. Remove the old power steering return hose and return tube from the steering gear.
- 14. Loose fit the new return tube (p/n 52088775AB) to the steering gear.
- 15. Slide two hose clamps (p/n 06504502) over the new return hose (p/n 52088774AC). Loose fit the new return hose to the new return tube and reservoir.
- 16. Make sure that there are not kinks or interference with the pressure hose and return hose (Fig. 3).

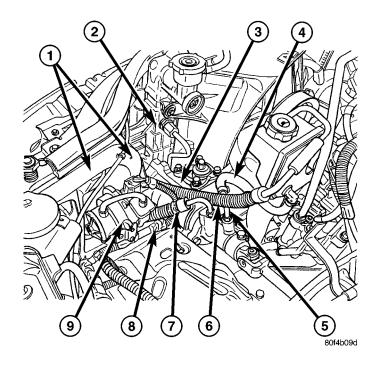


Fig. 3 ENGINE COMPARTMENT HOSE ROUTING

- 1 Radiator Support
- 2 Radiator
- 3 Power Steering Gear
- 4 New Power Steering Return Hose
- 5 New Power Steering Return Tube
- 6 Steering Pump End Of The New Pressure Hose
- 7 Steering Gear End Of the New Pressure Hose
- 8 Harness To The Leak Detection Pump
- 9 Leak Detection Pump
- 17. Hand tighten the fittings on the pressure hose and return tube. Finish tightening all three fittings to 28 Nm (21 ft. lbs.).
- 18. Tighten both hose clamps at each end of the new return hose.
- 19. Install the left side headlamp housing module.
- 20. Install the air cleaner housing.
- 21. Install the front fascia panel.
- 22. To properly fill and bleed the power steering system, refer to the section below entitled: POWER STEERING PUMP INITIAL OPERATION TO FILL AND BLEED.

### IF VEHICLE IS EQUIPPED WITH A 4.7L ENGINE:

- 1. Remove the air cleaner housing.
- 2. Clean the areas where the power steering pressure and return hoses are connected.
- 3. Wipe filler cap clean, siphon fluid out of the power steering fluid reservoir.
- 4. Remove the power steering pressure hose from the power steering pump and steering gear.
- 5. Install the new power steering pressure hose quick connect fitting, p/n 52088116AB, to the power steering pump.

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- 6. Install the new power steering pressure hose, p/n 05080950AA, to the steering pump and steering gear. Tighten both fittings to 28 Nm (21 ft. lbs.).
- 7. Remove the metal return tube from the power steering gear. Remove the short rubber hose that was used to connect the metal return tube to the oil cooler.
- 8. Slide a hose clamp, p/n 06504502, onto the new return hose, p/n 05080951AA.
- 9. Loose fit the new return hose onto the oil cooler and power steering gear. Make sure that the hose is not kinked.

## NOTE: DO NOT USE ANY LUBRICANT TO ASSIST IN THE INSTALLATION OF THE NEW RETURN HOSE TO THE OIL COOLER. THIS CONNECTION MUST REMAIN A DRY FIT.

- 10. Tighten the hose clamp to secure the oil cooler end of the return hose to the oil cooler.
- 11. Tighten the return hose steering gear fitting to 28 Nm (21 ft. lbs.).
- 12. Install the air cleaner housing.
- 13. To properly fill and bleed the power steering system, refer to the section below entitled: POWER STEERING PUMP INITIAL OPERATION TO FILL AND BLEED

### POWER STEERING PUMP - INITIAL OPERATION TO FILL AND BLEED:

Wipe filler cap clean, then check the fluid level. The dipstick should indicate COLD when the fluid is at normal ambient temperature.

1. Fill the pump fluid reservoir to the proper level and let the fluid settle for at least two minutes.

## WARNING: THE FLUID LEVEL SHOULD BE CHECKED WITH THE ENGINE OFF TO PREVENT INJURY FROM MOVING COMPONENTS

# CAUTION: USE MOPAR POWER STEERING FLUID, P/N 04883077, OR EQUIVALENT. DO NOT USE AUTOMATIC TRANSMISSION FLUID AND DO NOT OVERFILL.

- 2. Start the engine and let run for a few seconds, then turn the engine off.
- 3. Add fluid if necessary. Repeat the above procedure until the fluid level remains constant after running the engine.
- 4. Raise the front wheels off the ground.
- 5. Slowly turn the steering wheel all the way to the right and then all the way to the left. Lightly contact the wheel stops at the end of each turn. Complete at least 10 of these right and left cycles.

## NOTE: THE POWER STEERING SYSTEM MUST BE BLEED THOROUGHLY. TRAPPED AIR MAY CAUSE HONK-LIKE SOUNDS.

- 6. Check the fluid level and add fluid if necessary.
- 7. Lower the vehicle, start the engine and turn the steering wheel slowly from lock to lock.
- 8. Stop the engine and check the fluid level. Refill as required.
- 9. If fluid is extremely foamy or milky looking, allow the vehicle to stand a few minutes and repeat the procedure.

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# CAUTION: DO NOT RUN A VEHICLE WITH FOAMY FLUID FOR AN EXTENDED PERIOD. THIS MAY CAUSE PUMP DAMAGE.

### **POLICY:**

Reimbursable within the provisions of the warranty.

### TIME ALLOWANCE:

Labor Operation No:	Description	Amount
19-50-10-97	Hose, Power Steering - Replace Both Pressure And Return (4.7L engine)	0.5 Hrs.
19-50-10-99	Hose, Power Steering - Replace Both Pressure And Return (4.0L engine)	1.2 Hrs.

### FAILURE CODE:

P8 New Part	