

# Technical Service Bulletin

**NUMBER:** 03-03-99

**GROUP:** Axles and Propshafts

**DATE:** May 28, 1999

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**SUBJECT:**

Noisy Front Propeller Shaft Rear Constant Velocity Joint

**OVERVIEW:**

This bulletin involves creating a vent channel across the end of the transfer case front output shaft and replacing the front propeller shaft.

**MODELS:**

1999 (WJ) Grand Cherokee

**NOTE: THIS BULLETIN APPLIES TO VEHICLES BUILT PRIOR TO MARCH 14, 1999 (MDH 0314XX).**

**SYMPTOM/CONDITION:**

While driving, a noise may be noticed coming from the front propeller shaft. The noise may sound like popping, snapping, and/or grinding. A driveline vibration may also be noticed. Closer inspection of the front propeller shaft may reveal a loss of lubricant from the rear constant velocity (CV) joint. The loss of lubricant may be due to a torn CV joint boot

The condition may be the result of an interference fit between the back of the rear CV joint and the end of the transfer case front output shaft. This interference fit may cause the vent hole on the back of the rear CV joint to become blocked (sealed over). If the vent on the joint becomes blocked, it may cause pressure to build within the joint which may result in damage to boot of the rear CV joint.

**DIAGNOSIS:**

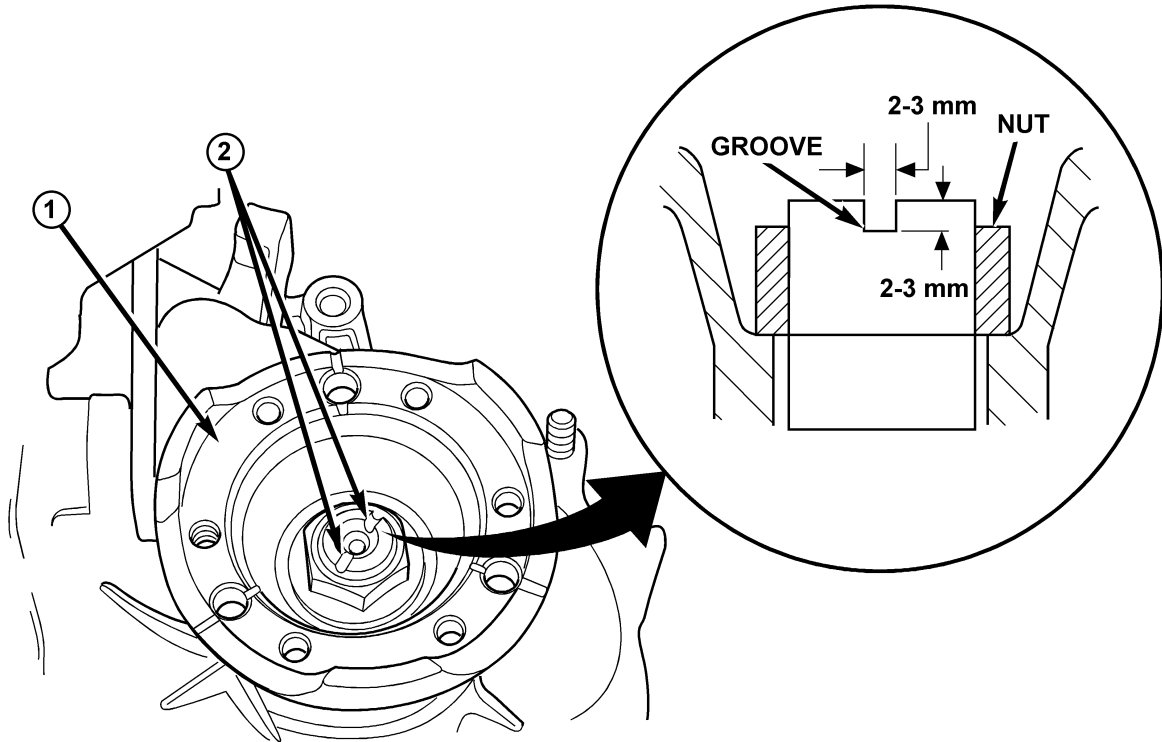
- 1). Move the transfer case selector to the neutral position.
- 2). Raise and support the vehicle on a suitable lift.
- 3). Inspect the front propeller shaft rear CV joint boot. Look for evidence of loss lubricant or for a boot tear. There may be wear rings around the boot.
- 4). If the CV joint boot is torn and/or leaking lubricant, and there is no evidence of external damage to the joint, then perform the Repair Procedure. Once the propeller shaft is removed, a wear ring may be present on the back side of the rear CV joint (due to contact with the end of the transfer case front output shaft).

**PARTS REQUIRED:**

1	52099497AC	Propeller Shaft, Front 4.0L
1	52099498AB	Propeller Shaft, Front 4.7L
1	52099499AC	Propeller Shaft, Front 3.1L

**REPAIR PROCEDURE:**

1. Remove the front propeller shaft from the vehicle.
2. With a suitable grinder, grind a vent channel (groove) across the end of the transfer case front output shaft. The vent channel should be 2 - 3 mm (0.118 inches) wide and a depth of 2 - 3 mm (0.118 inches) (Figure 1).



1 - COMPANION FLANGE, TRANSFER CASE FROM OUTPUT SHAFT
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2 - VENT CHANNEL (3mm WIDE BY 3mm DEEP)
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Figure 1

3. Position the new front propeller shaft under the vehicle with the rear CV joint over the transfer case companion flange.
4. Place the front CV joint into the axle pinion companion flange. The front CV joint should rotate freely in the pinion flange
5. Loosely install bolts to hold the rear CV joint to the transfer case companion flange.
6. Install bolts that hold the front CV joint to the axle pinion companion flange. Tighten the bolts to 32 Nm (23.5 ft. lbs.).
7. Tighten the bolts that hold the rear CV joint to the transfer case companion flange to 32 Nm (23.5 ft. lbs.).

- 8. Lower the vehicle, shift the transfer case selector out of neutral, and road test to verify the repair.

**POLICY:** Reimbursable within the provisions of the warranty.

**TIME ALLOWANCE:**

Labor Operation No: 16-30-02-95 .....0.5 Hrs.

**FAILURE CODE:** P8 – New Part