### Technical Service Bulletin

*NUMBER:* 03-04-00

GROUP: Axle & Propeller Shaft

DATE: June 23, 2000

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# THIS BULLETIN SUPERSEDES TECHNICAL SERVICE BULLETIN 03-07-99, DATED OCT. 29, 1999, WHICH SHOULD BE REMOVED FROM YOUR FILES. ALL REVISIONS ARE HIGHLIGHTED WITH \*\*ASTERISKS\*\* AND INCLUDE REVISED PART NUMBERS.

#### SUBJECT:

An Intermittent Bump Felt Shortly After The Vehicle Has Come To A Full Stop

#### **OVERVIEW**:

This bulletin involves replacement of the rear propeller shaft.

#### MODELS:

1999 – 2000 (WJ) Grand Cherokee

## NOTE: THIS BULLETIN APPLIES TO VEHICLES BUILT BEFORE SEPTEMBER 20, 1999 (MDH 0920XX).

#### SYMPTOM/CONDITION:

The vehicle owner may feel an intermittent bump (stop-bump) once the vehicle is brought to a full stop. This condition may occur 3 to 20 seconds following the stop or when the load on the rear driveline is reduced (e.g. when the applied brake pressure is decreased).

The repair technician may erroneously diagnose this condition as a delayed transmission down shift into first gear.

#### DIAGNOSIS:

The stop-bump condition may be the result of a binding between the splined surfaces of the rear propeller shaft slip yoke and the rear output shaft of either the transfer case or the transmission. As load on the driveline is reduced, the bound slip yoke will release suddenly causing a bump-like sensation. The condition may be intermittent. If the above condition has been experienced, then perform the Repair Procedure.

The splined surfaces on the slip yoke section of the new propeller shaft are nickel coated to reduce the opportunity of binding.

#### \*\*NOTE: A WJ EQUIPPED WITH A 4.0L ENGINE, A NV242 TRANSFER CASE, AND A 198 RBI (M35) REAR AXLE USES A DIFFERENT STYLE REAR PROPELLER SHAFT THAN THOSE WHICH ARE ADDRESSED IN THIS TECHNICAL SERVICE BULLETIN. FOR THIS VEHICLE, THE SPLINED SURFACES ON THE PROPELLER SHAFT SLIP YOKE AND THE TRANSFER CASE OUTPUT SHAFT ARE <u>GREASED</u> TO PREVENT A BINDING CONDITION AND DO NOT REQUIRE REPLACEMENT.\*\*

#### PARTS REQUIRED:

- 1 52099484AD Shaft, Drive (4.0L / 4x2 / 42RE / 198 RBI M35)
- 1 52099485AE Shaft, Drive (4.0L / 4x4 / 42RE / NV247 / 198 RBI M35)
- \*\*1 52099486AC Shaft, Drive (4.7L / 4x2 / 45RFE / 226 RBA M44)\*\*
- \*\*1 52099487AC Shaft, Drive (4.7L / 4x4 / 45RFE / NV247 / 226 RBA M44)\*\*
- \*\*1 52111483AB Shaft, Drive (4.0L / 4x4 / 42RE / NV247 / 226 RBA M44)\*\*
- \*\*1 52111490AB Shaft, Drive (4.7L / 4x4 / 45RFE / NV242HD / 226 RBA M44)\*\*

#### **REPAIR PROCEDURE:**

- 1. Raise and support the vehicle.
- 2. Shift the transmission and transfer case, if necessary, to their Neutral positions.
- 3. Remove the bolts holding the universal joint clamps to the pinion yoke.
- 4. Slide the propeller shaft forward to free the rear universal joint from the pinion yoke.
- 5. Slide the slip yoke off the transmission, or transfer case, output shaft and remove the propeller shaft.
- 6. Slide the new propeller shaft slip yoke onto the transmission or transfer case output shaft.
- 7. Position the universal joint into the pinion yoke.
- 8. Install the universal joint clamp and clamp bolts to the pinion yoke. Tighten the clamp bolts to 19 Nm (14 ft. lbs.).
- 9. Lower the vehicle.
- 10. Shift the transmission and transfer case to their Park positions.

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

#### TIME ALLOWANCE:

| Labor O | peration No: | 16-30-02-96 | 0.3 Hrs. |
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FAILURE CODE: P8 – New Part