



## STAR ONLINE PUBLICATION



**Case Number:** S2003000001 REV. E

**Release Date:** August 2022

**Symptom/Vehicle Issue:** Noise From The Front Axle Area Over Bumps

**Discussion:** Some customers may experience a grinding, rumbling, or whirring type noise from the front axle. The noise can be intermittent or constant, and typically happens at 30mph (48kph) or higher when hitting a bump or irregularity in the road. In addition, it may also be noted that the noise is not present in 4wd.

If a technician receives a vehicle in for repair with the above condition, please perform the following diagnosis and repair procedure.

### **Diagnosis:**

1. Drive the vehicle with the transfer case in 2wd mode to duplicate the noise concern.
2. With the noise occurring, shift the transfer case from 2wd to 4wd. Was the noise eliminated?
  - a. Yes>>> Proceed to (**Step 3**).
  - b. No>>> This document does not apply. Continue with normal diagnostics and repair as necessary.
3. Remove the Front Axle Disconnect (FAD). Please refer to Service Library Service Information Section 03 – Differential Driveline > Actuator/Motor > Removal and Installation > Front Axle Disconnect (FAD).
4. Inspect both the intermediate and output shafts for excessive radial play. Excessive radial play in the output shaft is an indication of intermediate shaft bushing wear.
5. Inspect the intermediate and output shaft's outer splines for signs of scoring or other damage.

This document does not authorize warranty repairs. This communication documents a record of past experiences. STAR Online does not provide any conclusions about what is wrong with the vehicle. Rather, it captures all previous cases known that appear to be similar or related to the vehicle symptom / condition. You are the expert, and you are responsible for deciding on the appropriate course of action.

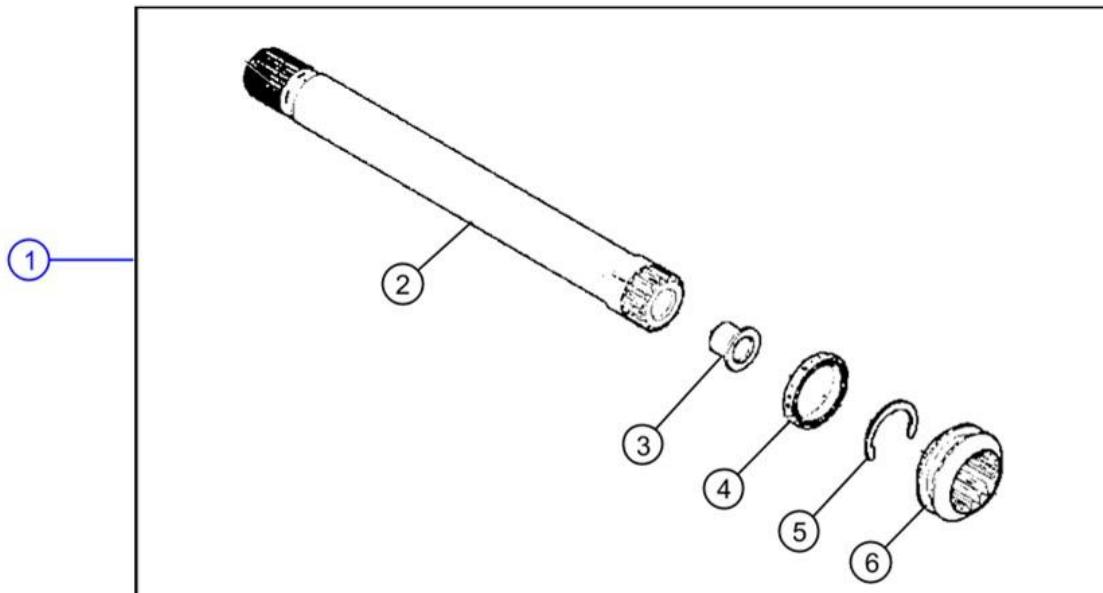
**Contact STAR Center, or your Technical Assistance Center Via TechConnect, eCONTACT or Service Library entry if no solution is found.**



6. Did the output shaft have excessive radial play and/or are there signs of damage/scoring on the outer splines?
  - a. Yes>>> Please perform the repair procedure.
  - b. No>>> This document no longer applies. Please continue with normal diagnostics for the concern and repair as necessary.

### Repair Procedure:

1. Replace both the Intermediate Shaft assembly (**Figure 1**) **AND** the output shaft. Refer to detailed replacement procedures in Service Library Service Information Section 03 – Differential and Driveline > Shafts, Axle/Drive/Half > Removal and Installation > Front Halfshafts.



1. Intermediate shaft kit. 2. Intermediate shaft. 3. Intermediate shaft bushing. 4. Intermediate Shaft Bearing. 5. Snap ring. 6. Shift Collar

**Figure 1.**

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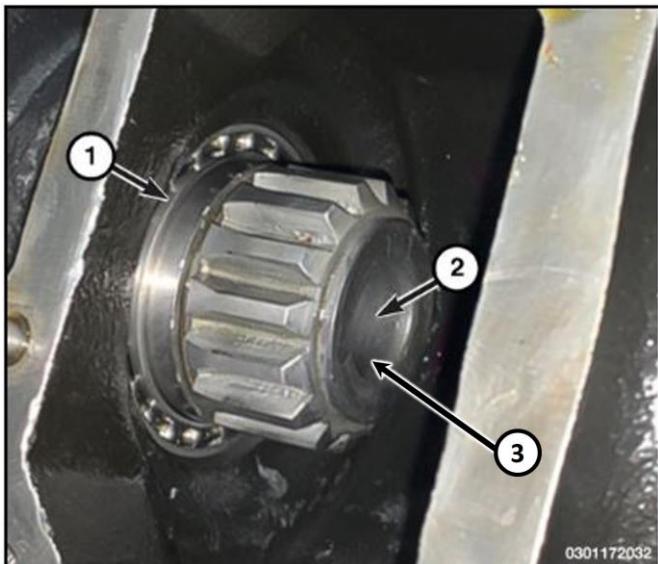
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**NOTE: Replace the Intermediate Shaft as an entire assembly. Intermediate shaft assemblies are available through Mopar as a complete kit.**

**NOTE: The output shaft must also be replaced.**

2. While installing the new intermediate shaft assembly, apply a thin layer of grease to the inner diameter of the intermediate shaft bushing using Mopar pn# 05083149AA (MS-6560) or equivalent. Please see (**Figure 2**).



1. Intermediate shaft bearing.
2. Intermediate shaft bushing.
3. Grease application area.

**Figure 2.**

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