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Case Number: S230300002 REV. A

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Symptom/Vehicle Issue: Ratchet Type Click, Clicking Noise Heard In Four Wheel Drive (4WD) While Turning.

Discussion: Some customers may experience a ratcheting type click noise from the front axle/driveline while turning in 4WD. The noise can be heard in both 4WD high and low, while making both right and left, moderate to hard, turns. There will not be any Diagnostic Trouble Codes (DTCs) setting when this occurs.

If the technician is working on a vehicle with the above condition, please perform the following diagnosis and repair procedure.

Diagnosis:

NOTE: Only perform the following diagnosis steps on low traction surfaces (e.g. grass, gravel, snow, or wet pavement). Performing these steps on dry pavement may produce false results.

1. Start the vehicle and place the 4WD system into 4WD high mode.

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.



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NOTE: The noise may be more detectable while turning to the left.

2. In a safe area, drive the vehicle between 1-5 mph (1-8 kph) while turning the steering wheel between $\frac{1}{4}$ turn and full lock. Is the ratcheting/click noise heard from the front driveline?
 - a. Yes>>> Proceed to (Step 3).
 - b. No>>> This document no longer applies. Please refer to normal published diagnostics.
3. Place the 4WD system back into 2WD mode.

NOTE: Ensure that 4WD mode is fully disengaged before proceeding to the next step. If necessary, shift the transmission to reverse then back to drive and/or drive the vehicle for a short distance in a straight line.

4. In a safe area, drive the vehicle again between 1-5 mph (1-8 kph) while turning the steering wheel between $\frac{1}{4}$ turn and full lock. Is the ratcheting/click noise heard from the front driveline?
 - a. Yes>>> This document no longer applies. Please refer to normal published diagnostics.
 - b. No>>> Follow the repair procedure below.

Repair Procedure:

1. Replace the front driveshaft. For detailed repair procedures refer to Service Library Service Information Section 03 – Differential Driveline > Driveshaft > Shaft, Drive, Front > Removal and Installation.

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