Technical Information
FROM: Maserati TSO
TO: Maserati Network

Maserati
PERSONAL SERVICE LAB
MASTERS OF CARE

Low-Speed Knock – Transfer Case Flange Rework

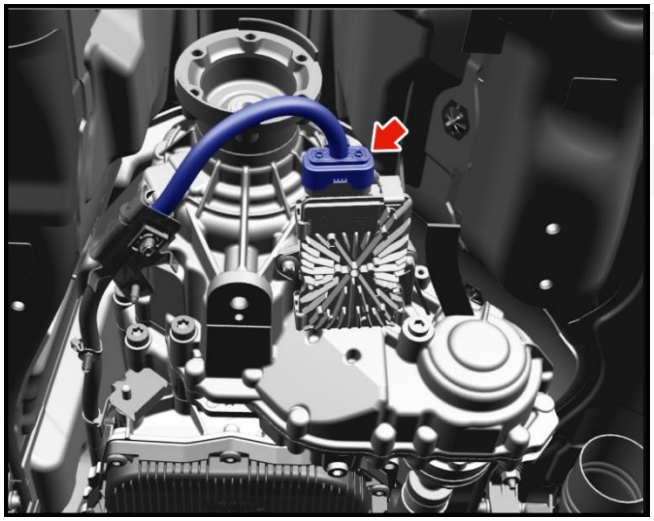
DATE: OCTOBER 30, 2025

This bulletin provides guidance to the authorized service network regarding a specific repair procedure applicable to the front axle transfer case. The intervention is intended to address a knocking noise that may occur during low-speed directional changes (Drive to Reverse and vice versa). The procedure outlined below aims to eliminate the noise by reconditioning the flange-to-shaft interface and ensuring correct component alignment and lubrication.

MODELS INVOLVED: Grecale (M182), GranTurismo (M189) and GranCabrio (M190). (All MY).

SECTION: 03.22-2 – FRONT WHEEL TRANSMISSION.

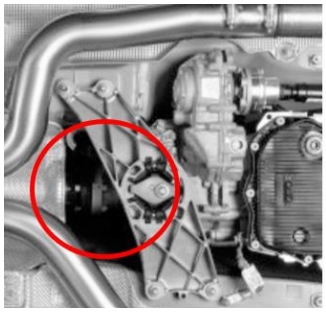
CONCERN DESCRIPTION: A knocking or clunking noise may be heard from the front axle area during low-speed parking maneuvers, particularly when shifting between Drive (D) and Reverse (R). Refer to the attached video for acoustic reference. Please note: **The video is for audio illustrative reference only.**



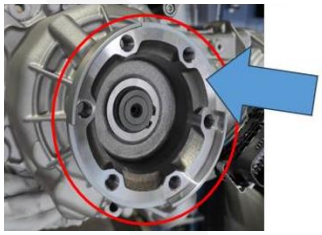
SERVICE PROCEDURE:

If the noise is confirmed, carry out the following steps:

1. Disconnect Rear Propeller Shaft
    - Loosen and remove the bolts securing the rear propeller shaft to the flange.
    - Carefully lower the prop shaft and set it aside laterally.




2. Relieve Circlip Tension
    - Using a plastic mallet, gently tap the flange further onto the shaft to reduce preload on the circlip and create clearance.




3. Remove Circlip
    - Carefully extract the circlip without overstretching it. Avoid deformation.


4. Index Flange Position
    - Mark the relative position between the flange and the shaft using a visible reference line.

5. Extract Flange
    - Use a commercially available puller (pulling range: 50–150 mm) to remove the flange from the shaft.


6. Clean Mating Surfaces
    - Clean and degrease the spline interface and flange bore.


⚠ Do not clean the shaft itself to avoid dislodging the radial seal spring.

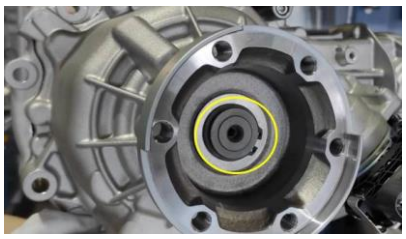
7. Apply Lubricant
    - Apply 1–2 grams of approved grease to the spline teeth and centring diameter of the flange.

⚠ Do not grease the shaft to prevent oil contamination.

Approved Greases:
- Klüberlub HE71-281.
- Klübersynth HIP84-401.
- Shell Gadus S3 V220C 2.

8. Reinstall Flange (180° Rotated)
    - Refit the flange onto the shaft, rotated 180° from its original position.
    - Tap it fully into place using a plastic mallet until the circlip groove is fully exposed.

9. Install Circlip
    - Fit the circlip into the groove and verify correct seating.
    - If damaged, replace with a new circlip: DIN471-28x2 (reinforced version).



10. Reconnect Propeller Shaft
    - Reattach the prop shaft to the flange and torque bolts to specification.
    - See section: “03.30.001 00 COMPLETE TRNSMISSION SHAFT” in TechDocs

Warranty Claim Information

Complete the warranty claim as follows:

Description	Code
Defect Code	67-NOISE, KNOCK
Component Code	3.22.005 (All-Wheel Drive Transfer Group)
Operation Code • Complete Driveshaft • Rework	 3.30.001.0 (Disconnect/Reconnect) 3.22.005A (0,20 h)

Any warranty repairs must include clear evidence of the above steps, attaching the relevant documentation either to the associated Blue on Line case (if required by current Blue on Line Policies) or to the warranty claim, in accordance with the guidelines outlined in bulletins MAS004908 and MAS004659.

We remain available for any further clarification.

Best regards

TECHNICAL SERVICE OPERATIONS