

**Diagnostic Sheet**

FROM: Maserati TSO  
TO: Maserati Network



PERSONAL SERVICE LAB

MASTERS OF CARE

# Rear Differential Oil Leakage - Grecale

DATE: December 5, 2025

This Diagnostic Sheet serves as a guide and provides additional diagnostic info related to rear differential unit seals on half shafts.

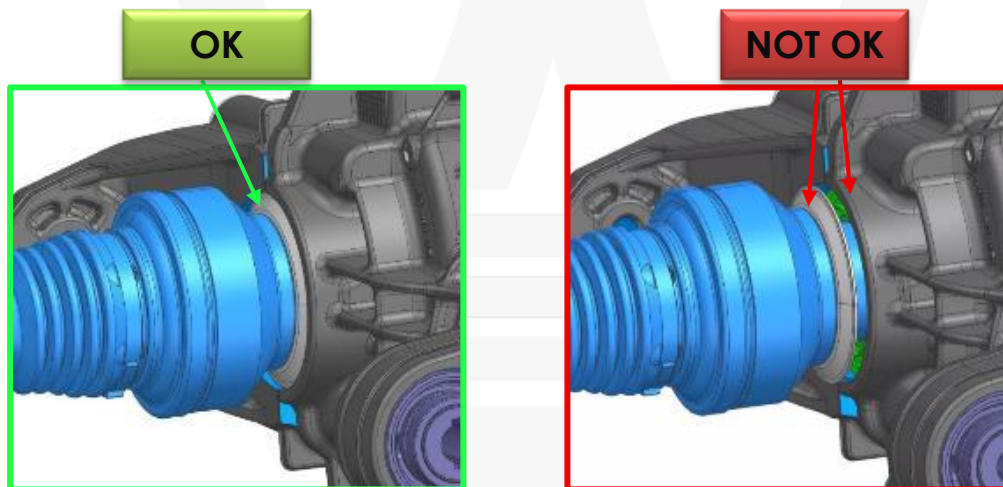
**MODELS INVOLVED:** M182 Grecale (All MY).

**Note:** Before replacing the rear differential or other related components, open a BOL as Technical Support attaching, for each step below, pictures and required measures to the BOL report; wait for information from our technical team on how to proceed.

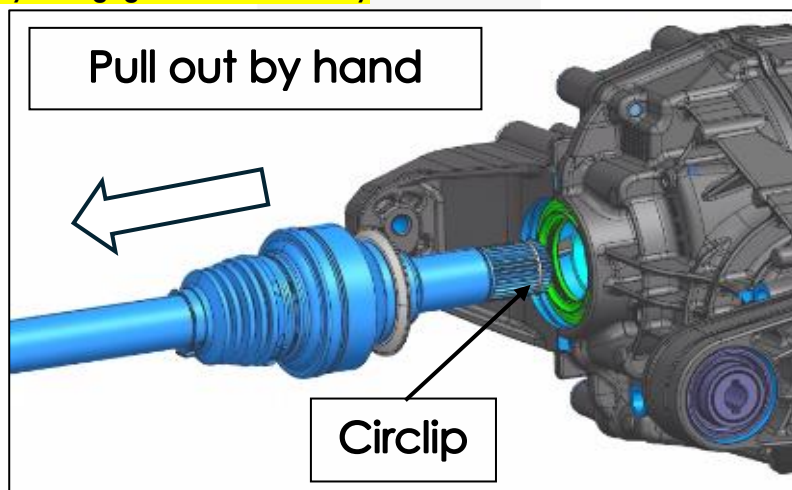
**CHECKS (to be performed on the side of the leakage or on both sides in case of double leakage):**

1) Check if the half shaft is assembled correctly:

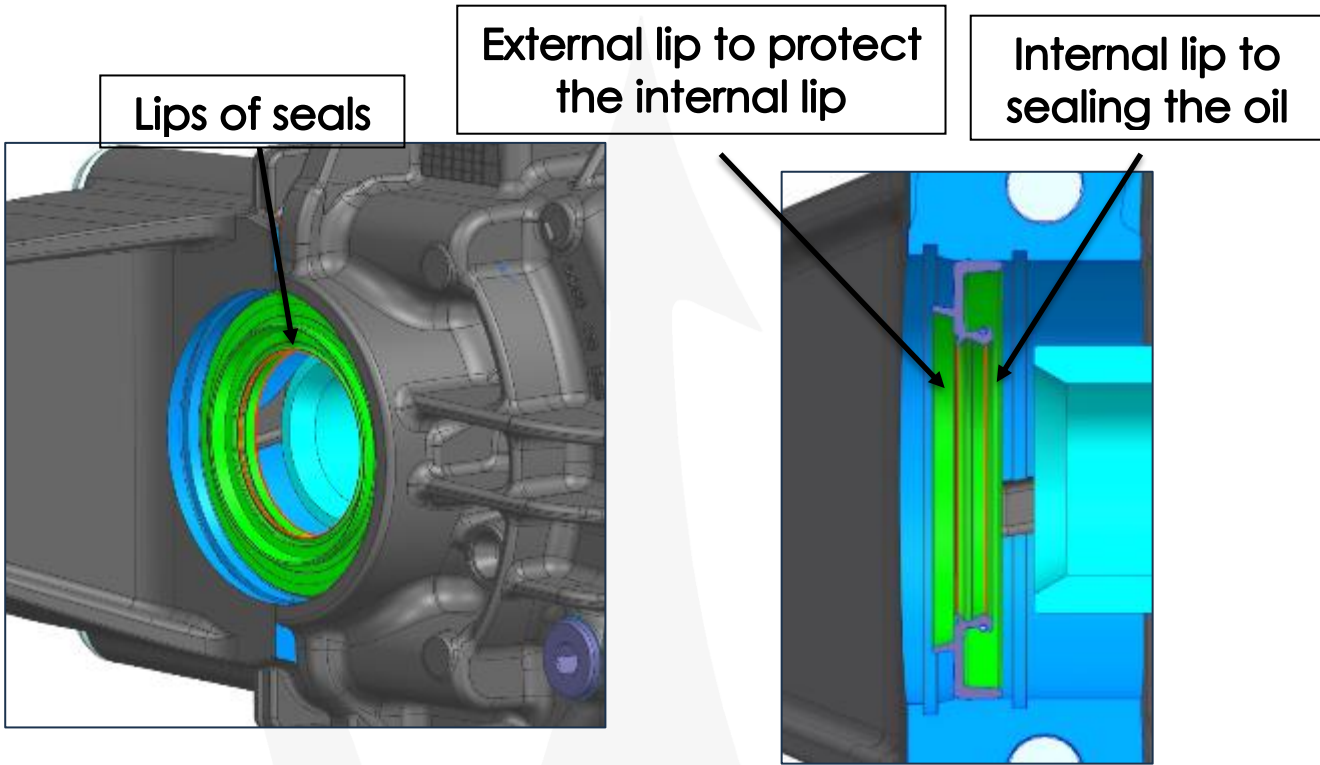
- Look at the position inside the Rear Differential Unit. The dust protection is always in the seat of the Rear Differential Unit housing.



**Ensure the circlip is fully seated in its groove as shown in the image. If the circlip is not properly engaged, the shaft may unintentionally disengage from the assembly.**



2) After disassembling the half shafts from the differential (refer to Technical Documentation for the procedures), without damaging the seals, check the condition of the seal lips. Look for any damage, chips, or pebbles inside the lips, or signs of impact on the internal parts (as shown in the pictures below):

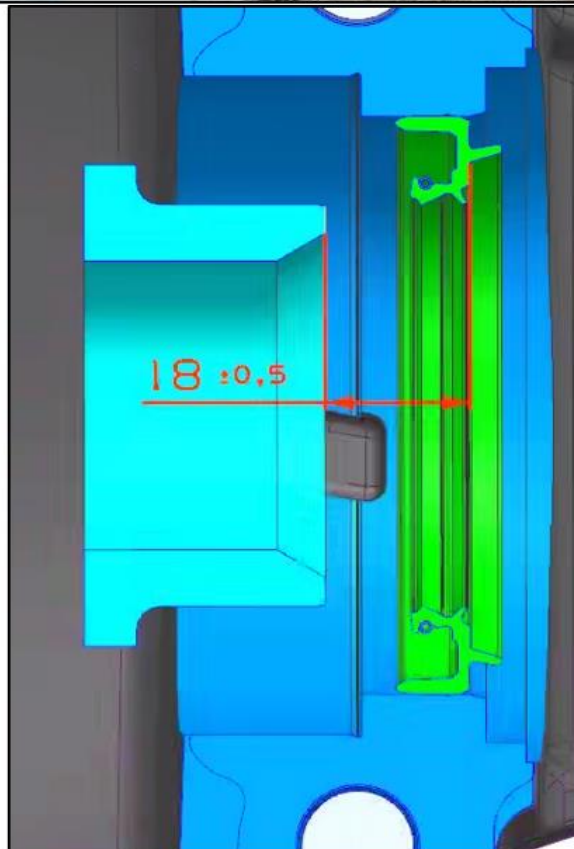
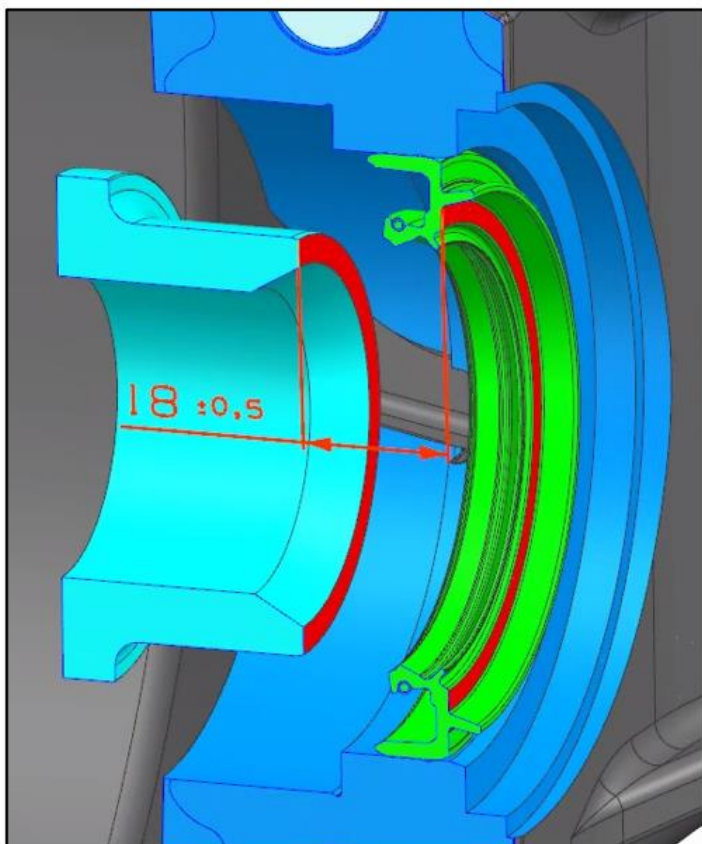
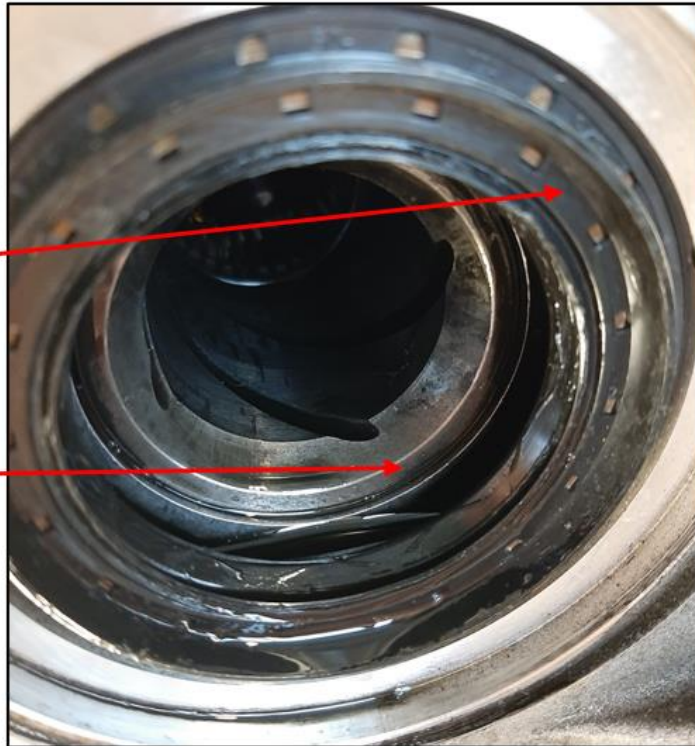
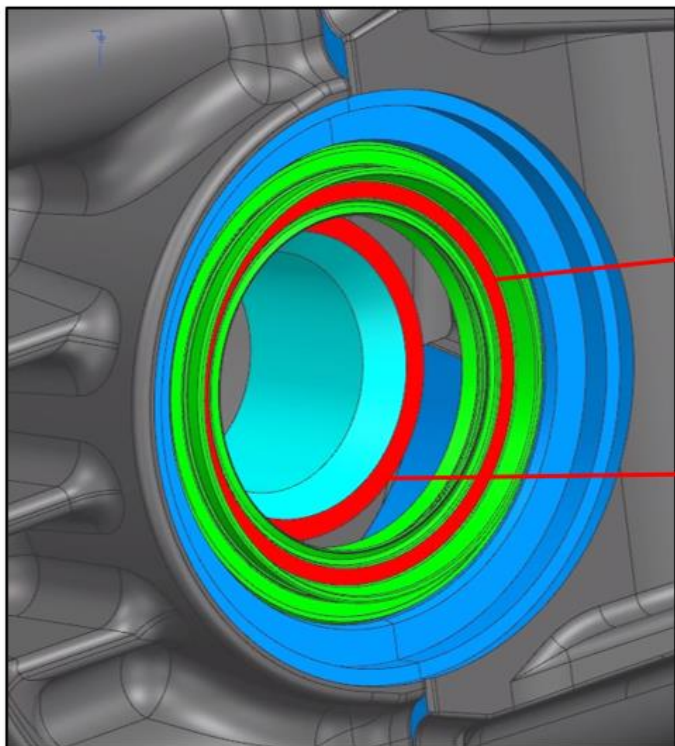


Examples of damaged seals

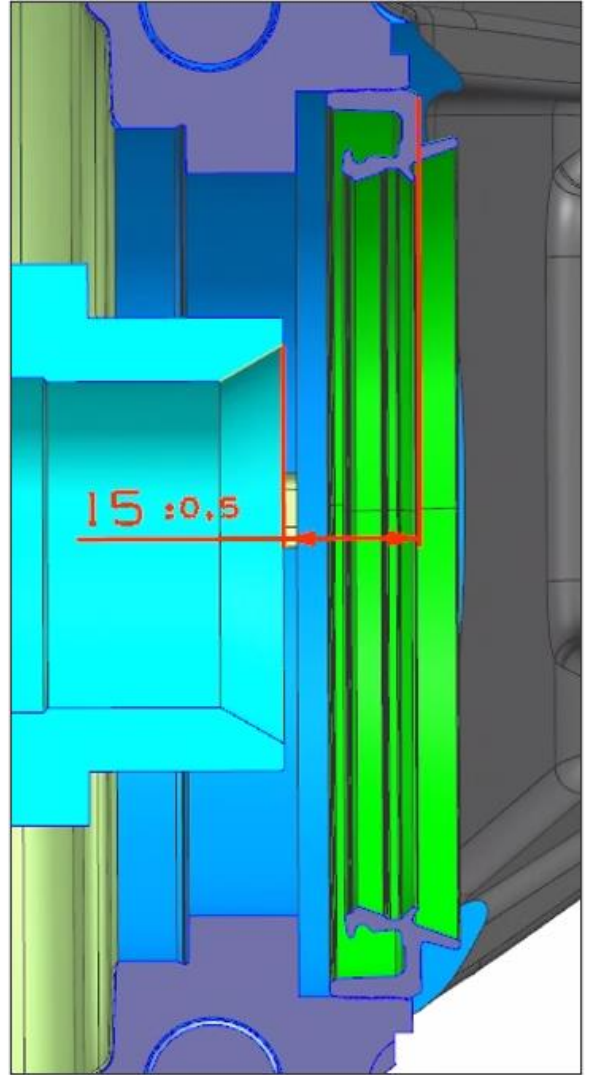
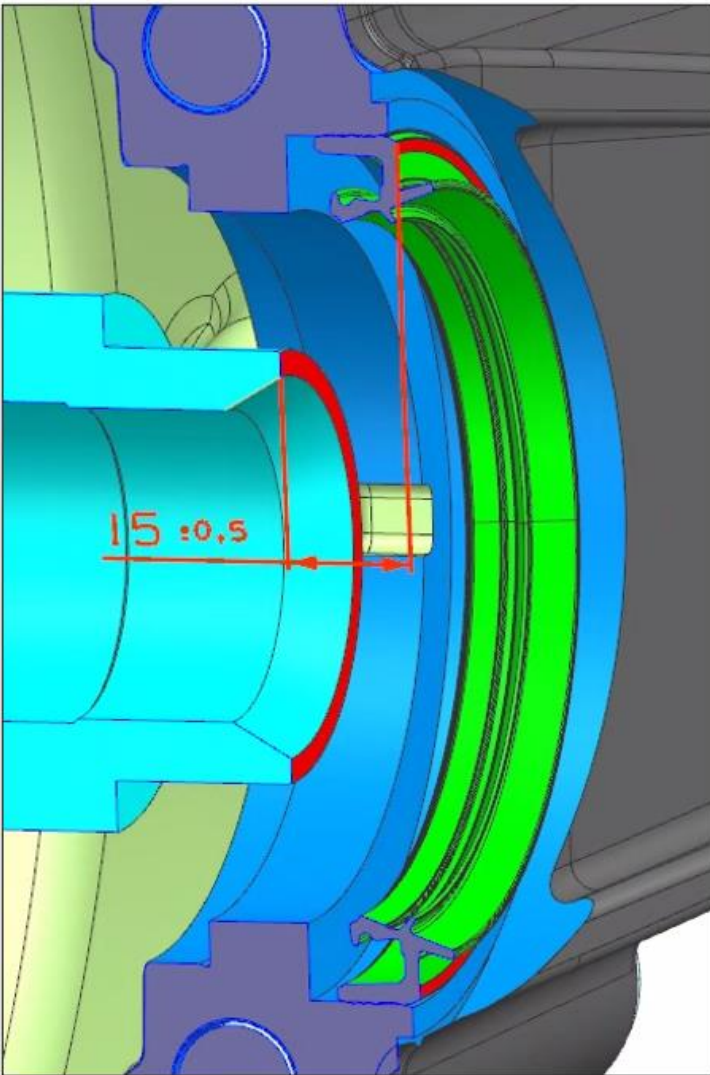
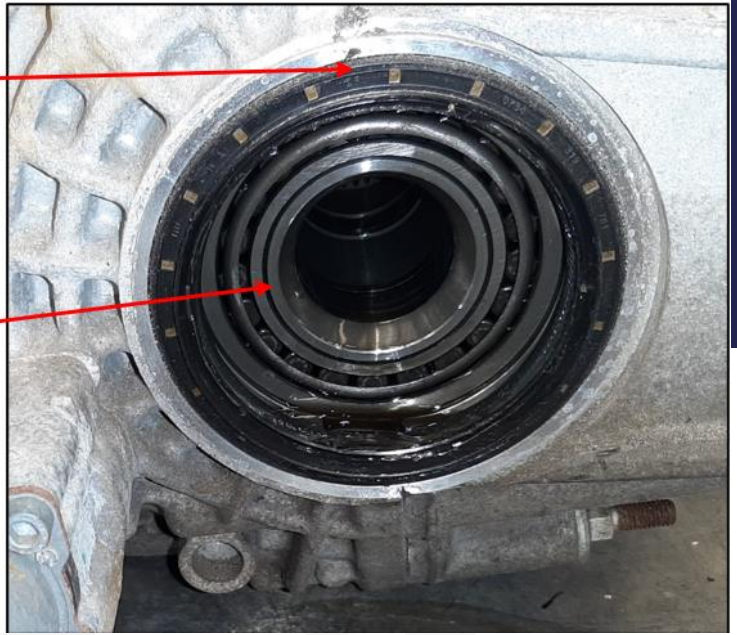
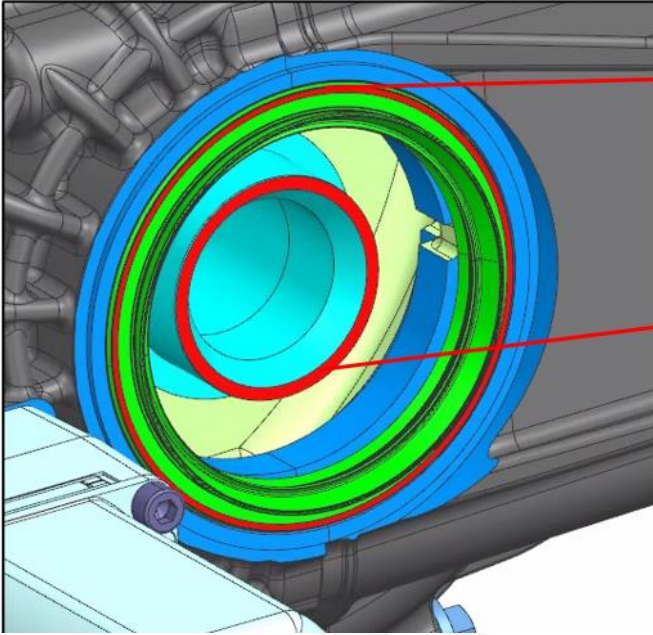


3) With the half shafts disassembled from the differential (DO NOT disassemble the differential), check the installation dimensions of seals:

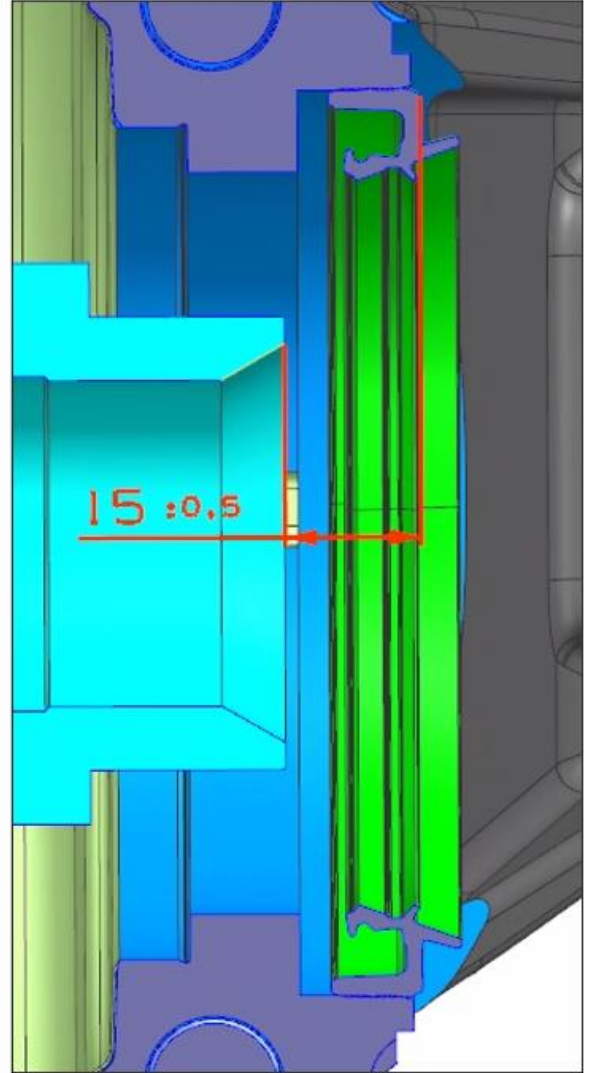
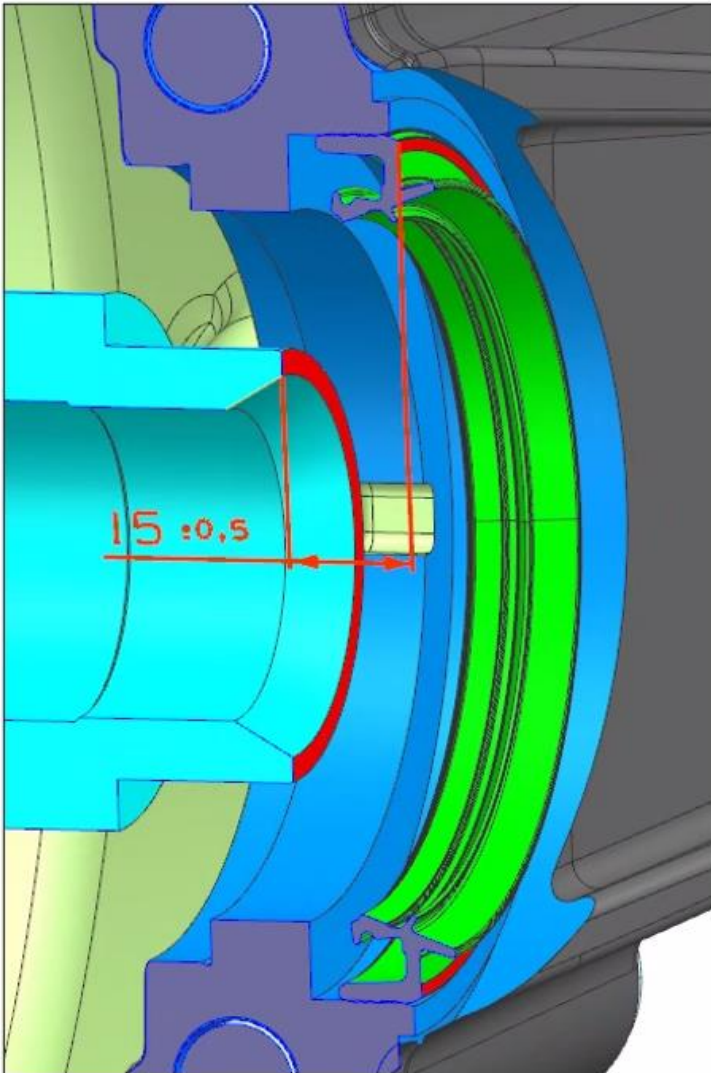
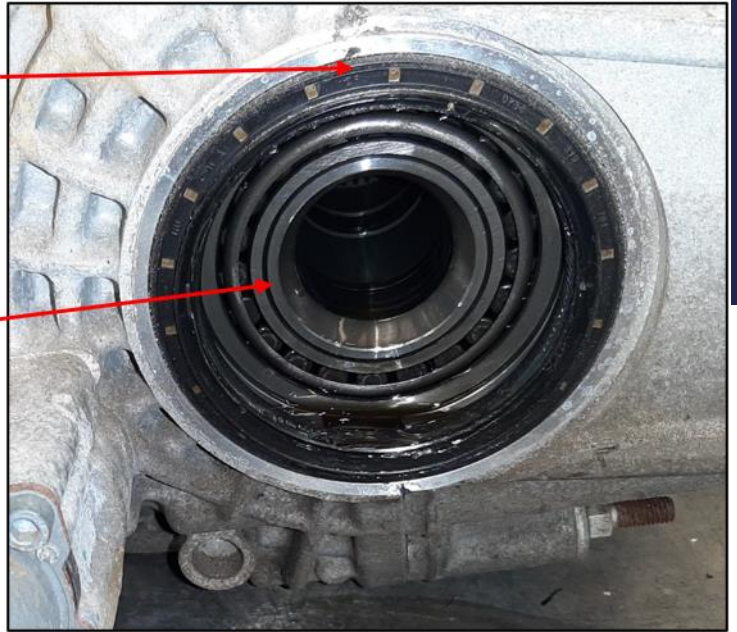
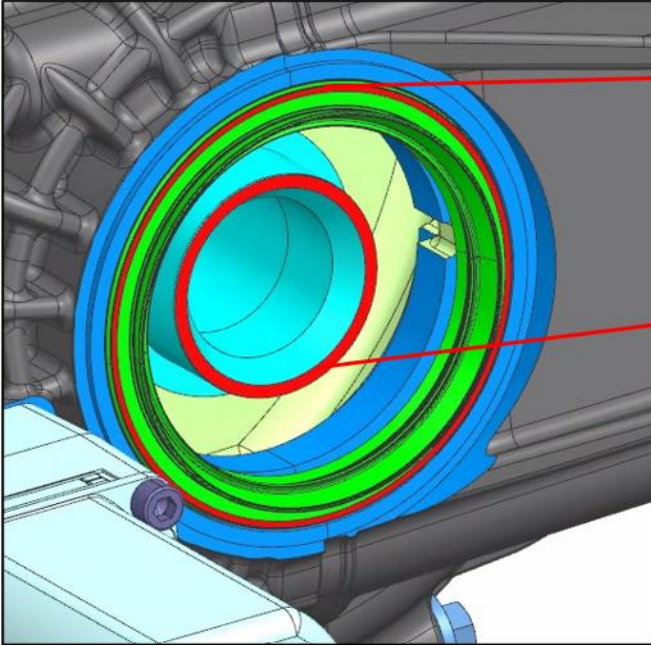
- Rear Differential Unit OPEN for both sides (left and right):  $18 \pm 0,5$  mm



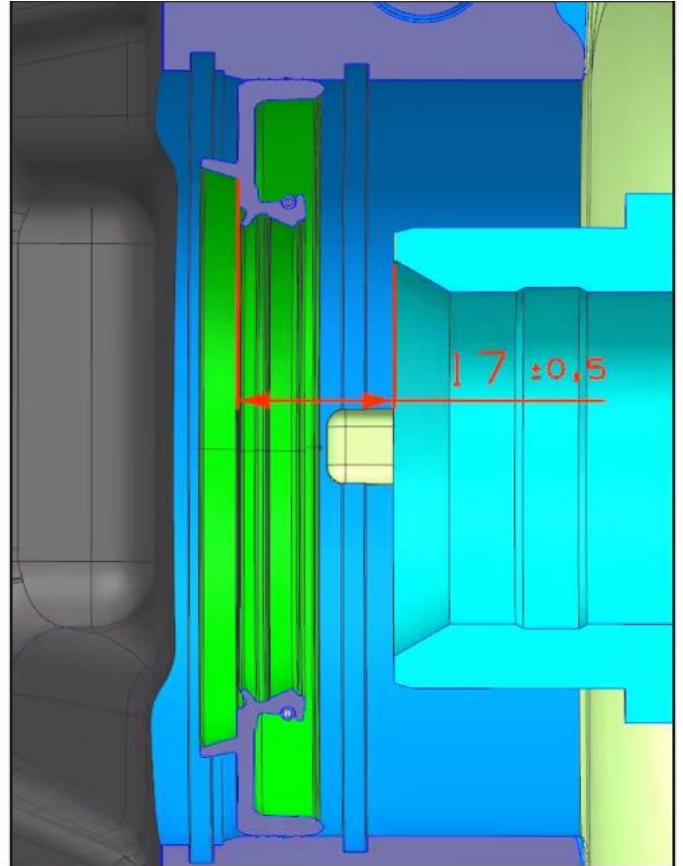
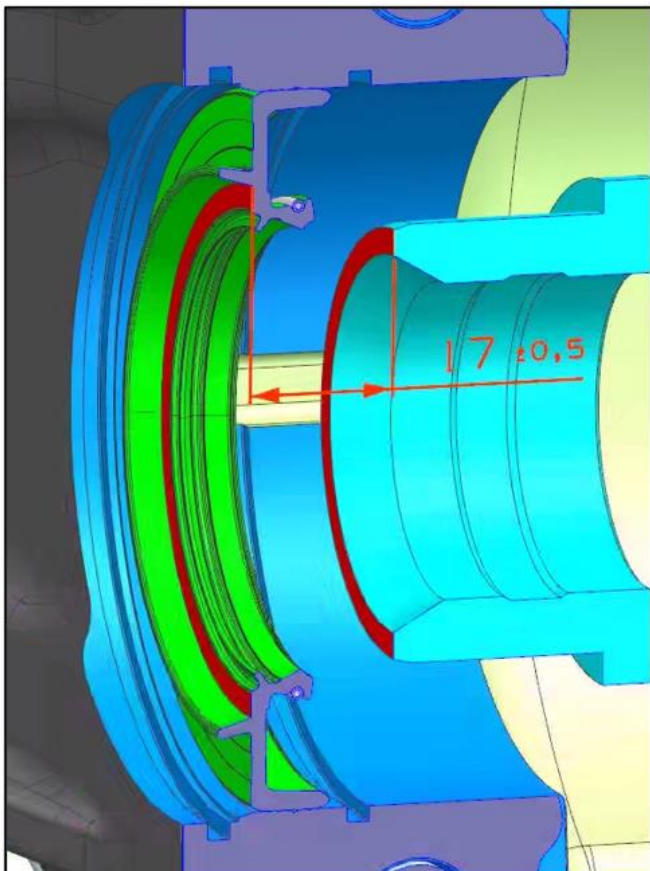
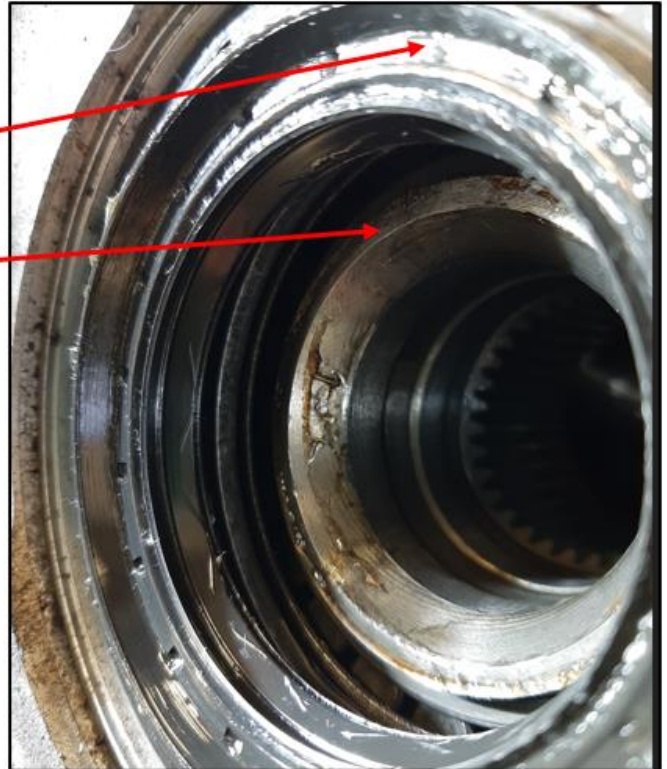
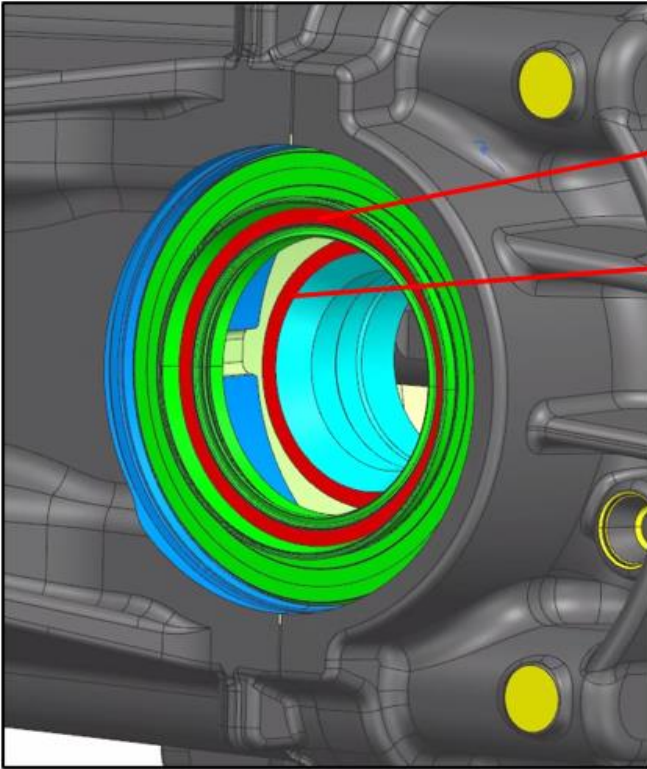
- Rear Differential Unit mLSD for both sides (left and right):  $15 \pm 0,5$  mm



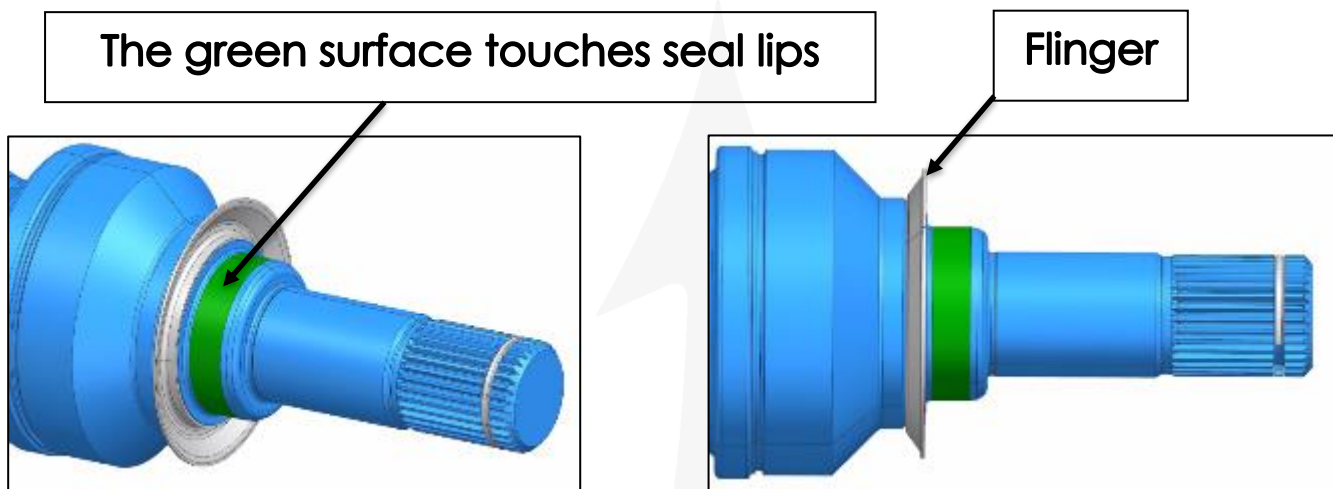
- Rear Differential Unit **eLSD** for right side  $15 \pm 0,5$  mm, left side  $17 \pm 0,5$  mm



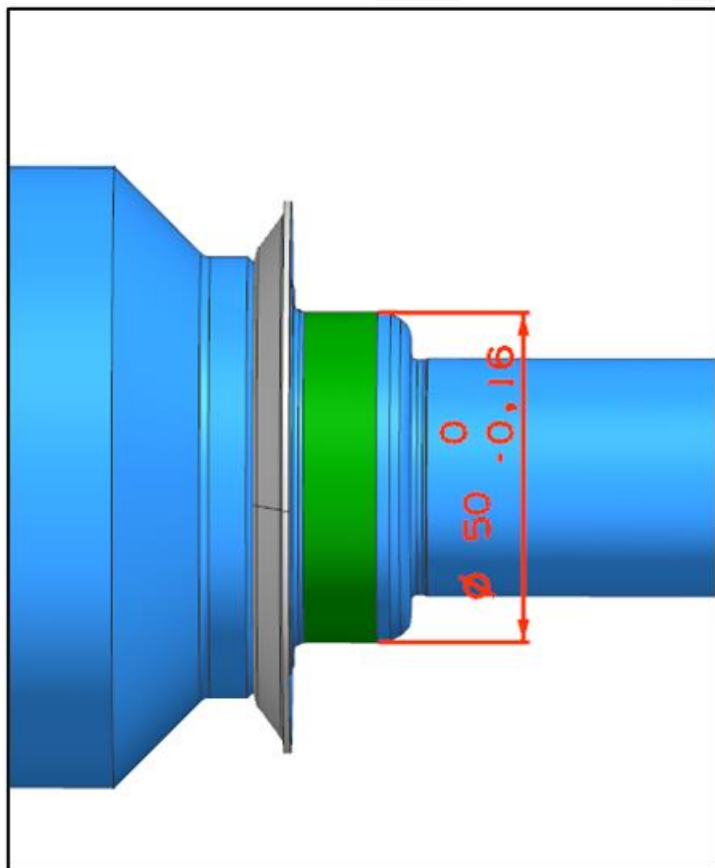
- Rear Differential Unit eLSD for left side  $17 \pm 0,5$  mm:



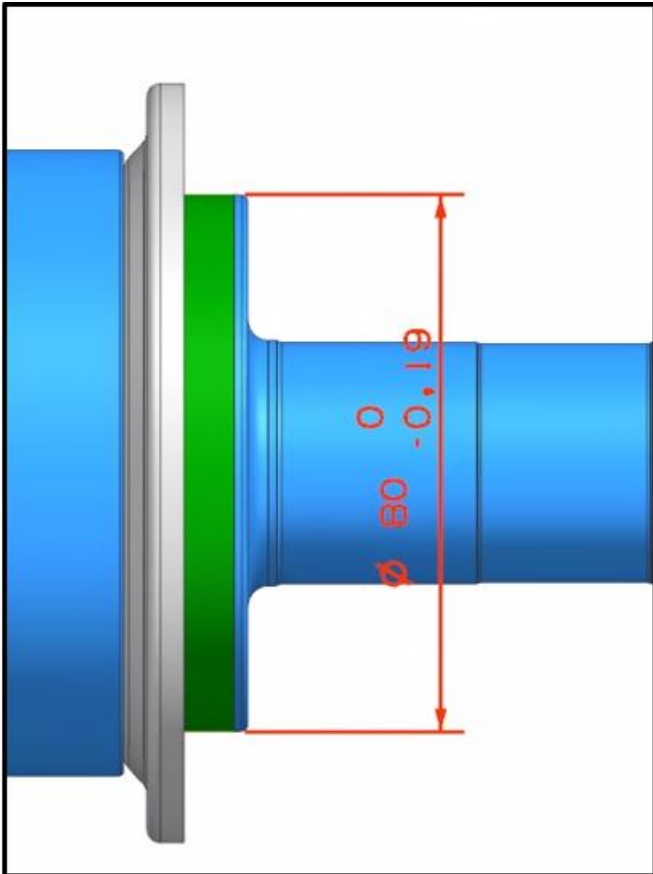
- 4) Check the surface (in green color below) on the half shafts where the oil is sealed. There must be no visible marks, scratches, or oxidation stains. There must be no deformation present on the flinger, as this could damage the seals.



- 1) Check the diameter of the half shafts as shown in the picture below:
- Half shaft used for Rear Differential Unit OPEN both sides and mLSD both sides and eLSD only left side:  $d = 50 (+0; -0,16)$  mm:



- Half shaft used for Rear Differential Unit eLSD only right side:  $d = 80 (+0; - 0,19)$  mm:



## Warranty Claim Information

Use the following codes for the warranty claim related to the above checks:

Description	Code
Component Code	3.21.002 Right Side– 3.21.003 Left Side
Removal and Refitting	Refer to the technical documentation for selecting the correct vehicle and type of differential.
Checks from #1 to #5	3.21.002.B (0,15 h) Right side 3.21.003.B (0,15 h) Left side

**NOTE: Maserati reserves the right to modify or cancel claims that do not meet the criteria outlined in this communication.**

Please do not hesitate to contact us if you have any questions.

Best regards,

TECHNICAL SERVICE OPERATIONS