RWRG0040 - Low Range Synchronizer Failure

Symptom(s)
- Transmission grinds when shifting to low range
- Difficulty shifting to low range; hangs up or very slow to engage when air pressure is to specification

Cause
Material is missing from the low range synchronizer, burned or worn excessively, allowing the range shift to rake.

If the material appears to be stripped off the synchro ring, inspect for a possible heat exchanger failure.

Note: On FR models, the low range synchronizer may bottom in the reduction gear and material may just be glazed.

Repair Guideline
In the event of a material failure the mating gear and low range synchronizer must be replaced, even if the gear looks fine. The range yoke should be re-used unless the yoke pad thickness is worn to less than 0.400 at any point on the pad area. The new synchronizer material must be lubed prior to installation. Check for proper case alignment dowel pin installation. See Service Bulletin TMIB0139, available on Roadranger.com.

Note: Fretted or stepped range clutch teeth, broken blocker pins or broken synchronizers indicate torsional vibration, which is not covered by warranty.

Warranty Parts
- Synchronizer Kit
- Mating Reduction Gear
- Gasket Kit
- Output nut
- Range O-Ring or Piston Kit (if needed)
- Reduction Gear Washer (if needed)
- Seal Kit (if needed)

For part numbers refer to the Eaton InfoRanger site, www.inforanger.roadranger.com, or a current IPL.

Warranty Labor
- Air System Check per OEM SRT
- Auxiliary R&R per OEM SRT
- Bench Time per OEM SRT
- Shift Bar Housing R&R per OEM SRT (required on FR models)

Warranty Coding
Part: A-7254
Complaint: Grinding
Failure: Worn

Warranty Claim Filing
Reference warranty coverage. File pre-authorized warranty claim through appropriate OEM or through Direct Pay. Reference guideline number RWRG0040 in warranty claim text.

Note: Repairs that exceed parts and labor parameters cannot be pre-authorized.

Filing through Direct Pay
Click here for Direct Pay submission guidelines and claim forms:

Submission Guidelines and Claim Forms

Parts Disposition
Parts can be scrapped.

Warranty Disclaimer
If the failure is not the result of an accident, damage, negligence, abuse or misuse, improper installation or maintenance or any other conditions described in the Limits and Exclusions section of Warranty Manual TCWY0600, available on Roadranger.com, then Roadranger will treat the condition as covered under its warranty. However, this conclusion does not necessarily mean that a defect in fact exists. In all cases, Roadranger shall make the final determination and interpretation as to the warrantability of the Product.