RWRG0033 - Output Bearing Failure

Symptom(s)
- Vibration
- Noise
- Rear seal leakage
- Auxiliary slip out
- Raking on range shifts or
- Excessive movement of the output shaft

Cause
The output bearing may have started to pit, become loose or failed. There may be signs of heat on the inner bearing. The cage may have broken and the rollers escaped.

Background
Bearing Failure:
In the early stages of failure, the bearing rollers begin to pit on the ends and/or the races begin to spall. As the damage continues, the bearing loosens and ultimately fails. Sometimes heat results and the bearing can become darkened from heat.

Note: Output bearings can fail due to lack of lube. Verify by inspecting the transmission gearing. If there are signs of low lube damage on the base box or auxiliary section gear teeth, the failure is determined to be the result of a low lube condition and is not covered under warranty. Excessive vibration from other driveline problems can result in an output bearing failure also.

Output Bearing Flange Breakage:
Manufacturing tolerances of the bearing flange and bearing cover can result in too little flange clamp allowing bearing race movement. This can result in a broken output-bearing flange. Vehicle driveline failures can cause the flange to break too. Most failures result in a failed synchronizer and are bought in with a raking complaint.

In March 2005, improvements went into affect including a new rear bearing cover design* and a new edge molded rear bearing cover gasket. Production units will include a tag under one of the rear bearing cover fasteners identifying the updated cover and instructing the use of gasket part number 1009551 only.

*The counter bore on the old style cover had a depth of 0.1460-.149". Current spec is 0.117-0.120".

Repair Guideline
Upon disassembly, inspect the auxiliary for damage. If the bearing has spun in the bore, check the clearance between the new bearing outer race and the auxiliary case. If it exceeds .004", the case should be replaced.

For flange breakage failures, the rear bearing cover should be updated to the new design. When ordering the old bearing cover part number, it will be replaced by the new p/n with the new gasket included.

Note: New gasket part number 1009551 must not be used with the old style bearing cover, nor should the old gasket part number 4302247 be used with the new design cover.

Warranty Labor
- Auxiliary R&R per OEM SRT
- Auxiliary Overhaul per OEM SRT

Warranty Coding
Part: 5556503
Complaint: Vibration, oil leak or grinds
Failure: Spalled or broken
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, 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.