RWRG0001 - Auxiliary Drive Gear Bearing Failure

Symptom(s)
- Growl noise only in low range, subsides in High range
- Lever moves fore and aft during acceleration and deceleration
- Lever jumps out (especially in reverse)

Cause
The auxiliary drive gear bearing can become pitted, loose and ultimately fail. Worse-case scenario is when the bearing cage breaks up. This can allow the auxiliary drive gear to be thrust for and aft causing additional damage to the main or auxiliary sections.

Repair Guideline
When the above complaint has been verified the transmission main box should be inspected through a PTO opening.

There are two levels of repair for a failed Auxiliary Drive Gear Bearing:

Repair Level 1:
If no bearing pieces are found through the PTO opening and the bearing cage is intact, pull auxiliary only to replace the failed bearing.

Repair Level 2:
If bearing cage pieces or balls are found through the PTO opening, the complete transmission should be removed. The mainshaft should be pulled, stripped down and inspected for possible gear hub or washer damage. The main case should be cleaned. The auxiliary section may only require flushing but should be visually inspected for damage.

Repair Strategy for Auxiliary section:
Visually inspect auxiliary countershaft front bearings for pitting, spalling, or severe debris dent damage (detectable by feel). These bearings are readily visible with the auxiliary removed. If there is no pitting on the rollers or races and the races (cups) have only a dull polish, light scratching or slight debris dents that cannot be detected with a fingernail while going around the race (not across it), they can be reused. If bearings are acceptable based on inspection, flush auxiliary section and reinstall.

Note: When pitting/spalling exists - disassemble auxiliary to replace auxiliary countershaft bearings and inspect remaining components.