

CLEANING & INSPECTION

CLEANING

Wash all parts except seals, in cleaning solvent. Dry all parts with compressed air. **DO NOT** spin bearings with compressed air.

INSPECTION

Bearings

1. Inspect bearings and replace if broken, worn or rough. Lubricate cleaned bearing. Hold bearing vertically by inner race and spin outer race by hand. **DO NOT** spin bearings with compressed air.
2. If roughness or vibration is noticed, bearing should be cleaned and lubricated again and retested. If roughness or vibration is noticed after 3 tests, replace bearing.
3. If bearings are in good condition, wrap bearings in clean, lint-free shop cloth and set aside until ready for installation.

Cases

Inspect transmission case, transfer case adapter and front bearing retainer for cracks, damaged bearing bores or threads. Remove all small nicks or burrs from front and rear of case.

Gears, Needle Bearings & Shafts

Inspect needle bearing rollers, shafts and washers for wear and damage. Check gears and other parts for wear, damage and chipped or broken teeth. Replace parts as necessary. Replace seal in input shaft bearing retainer.

Synchronizers

1. Inspect synchronizer blocking rings for widened index slots, rounded clutch teeth and smooth internal surfaces (must have machined grooves). With blocker ring on cone, distance between face of gear clutching teeth and face of blocking ring must not be less than .009" (.23 mm). See **Fig. 8**.
2. Check synchronizer sleeves for free movement on hubs. Ensure alignment marks (etched or painted marks) are properly indexed. Replace synchronizer components as necessary.