

TRANSMISSION

1. Disassemble transmission to inspect all parts for damage or excessive wear, including the following:
 - a. Case: All sections for general condition; oil line and strainers for leaks, obstruction, or damage.
 - b. Mast driving flange: All splines and surfaces for burrs or surface damage; shear bolts for any damage.
 - c. Remove and disassemble freewheeling unit, to inspect all parts for wear and damage. Inspect springs for wear and correct radii; inspect spring retainer plates, for wear and cracks; replace as necessary. Check for free rotation and proper locking during and after reassembly.
 - d. All gears: Teeth, splines and surfaces for wear, chipping, scoring, cracks and other damage.
 - e. All bearings, rollers, races, and cages for smooth operation and freedom from wear or damage.
 - f. Clutch: Shoes for glazed or excessively worn linings and worn pins or bushings; drum for dimensional tolerances, out-of-round, scoring, or evidence of excessive heating. (Blue on drum is not cause for rejection.)
2. Inspect following parts by Magnaflux or Zyglo methods as indicated. M = Magnaflux. Z = Zyglo.

Tail Rotor Drive Assembly Sleeve	Z
Fan Drive Assembly Sleeve	Z
Transmission Case (All Sections)	Z
Attachment and Through Bolts	M
Upper Ring Gear	M
Upper Sun Gear	M
Upper and Lower Spiders	M
Pinion Pins	M
Pinion Bearing Inner Races	M
Pinion Gears	M
Driving Flange	M
Shear Bolts	M
Freewheeling Ring Gear	M
Freewheeling Outer Ring	M
Freewheeling Rollers	M
Lower Sun Gear	M
Fan Drive Bevel Gear	M
Accessory Drive Gear	M
Clutch Pivot Pins	M
Gear - Tail Rotor Drive Assembly	M
Gear - Generator Drive Assembly	M
Gear - Fan Drive Assembly	M
Pulley Retaining Bolt and Cones - Fan Drive	M

3. During and after reassembly, check for:
 - a. Free rotation and positive locking of freewheeling assembly.
 - b. All specified clearances and torques.
 - c. Proper tooth contact patterns and backlash of spiral bevel gears.
 - d. Clutch drum for running true.
 - e. Freedom of operation of complete assembly.

ADAPTER PLATE

1. Inspect trunnion pin holes in adapter plate for wear.
2. Inspect following parts by Magnaflux or Zyglo methods as indicated. M = Magnaflux. Z = Zyglo.

Adapter Plate (Oil scoop not removed)	Z
Trunnion Pins	M