

(3) Remove packing (6) from retainer (5). Tag retainer for reassembly in same location.

(4) Use wrench (T30) to hold outer coupling (10), use a square adapter through wrench and remove retainer bolt (7) and washer (8) from pinion shaft (18).

(5) Remove inner coupling (9) and outer coupling (10) from splines of pinion shaft (18). Remove inner coupling from outer coupling.

(6) Press seal (11) from outer coupling (10).

(7) Cut and remove lockwire securing nut (16).

(8) Use fixture (T54) to hold sleeve (19) with pins engaged through sleeve flange. Use wrench (T60) to remove nut (16).

(9) Remove packing (17) from nut (16).

(10) Remove packing (20) from sleeve (19).

(11) Press seal (15) from nut (16).

f. Cut lockwire and remove vent cap (127).

g. Unfasten safety. Remove filler cap assembly (26).

h. Remove magnetic detector assembly from intermediate gearbox as follows:

(1) Push in on magnetic chip detector (31 or 32) as far as possible and turn counterclockwise to disengage from self-closing valve (29 or 34) and pull out.

(2) Remove self-closing valve (29 or 34).

#### 6-185. Cleaning - Intermediate Gearbox.

a. Wipe inner and outer couplings (9 and 10, figure 6-51) with clean cloths.

### WARNING

**Cleaning materials are flammable and toxic. Avoid skin contact and breathing of solvent vapors.**

b. (AVIM) Clean other parts in solvent (C261). Dry with filtered compressed air.

c. Clean vent cap (27) as follows:

(1) Wash vent cap in dry cleaning solvent (C261).

(2) Flush breather passage with cleaning solvent (C261).

(3) Dry with filtered compressed air.

#### 6-186. Inspection - Intermediate Gearbox.

a. (AVIM) Inspect gearbox case assembly for mechanical damage and corrosion (figure 6-51.1). If crack is suspected, refer to TM 1-1520-256-23, AVUM/AVIM nondestruction inspection procedures for UH-1 helicopter series.

b. Inspect inner coupling (9) and outer coupling (10) for wear, damage, pitting or corrosion. Refer to limits chart (figure 6-47), for typical coupling dimensions. Superficial corrosion (removable with abrasive pads (C11), is the only corrosion repair allowed). Corrosion pits are causes for rejection. If crack is suspected, refer to TM 1-1520-256-23, AVUM/AVIM nondestruction inspection procedures for UH-1 helicopter series.

c. (AVIM) Inspect gear for cracks, nicks or galling. If crack is suspected, refer to TM 1-1520-256-23, AVUM/AVIM nondestruction inspection procedures for UH-1 helicopter series.

d. (AVIM) Check bearings for smooth rotation. Bearings are to be checked prior to quill disassembly.

e. (AVIM) Check inside of case for ferrous metal articles that indicate bearing failure.

f. Inspect centering spring (3) by applying a test load of  $5.0 \pm 0.5$  pounds to compress spring to  $1.500 \pm 0.10$  inches. Spring should return to free length of  $2.00 \pm 0.03$  inches.

#### NOTE

External leakage of seal is not permitted. A small amount of seepage, however, is normal. Continuous dripping is excessive and requires seal replacement.

g. (AVIM) Inspect seals for leakage.

h. Inspect intermediate gearbox sleeve and pinion shaft. If crack is suspected, refer to TM 1-1520-256-23, Technical Manual Aviation Unit Maintenance (AVUM) and Aviation Intermediate Maintenance Manual (AVIM) Manual Nondestructive Inspection Procedures for UH-1 helicopter series.

i. Inspect intermediate gearbox quill bevel gearshaft teeth for cracks.