

Conditions	Requirements
Test Equipment	None
Support Equipment	Heat Lamp
Minimum Personnel Required	One
Consumable Materials	(C68), (C155), (C158), (C166), (C166A), (C168), (C177), (C237), (C244), (C261), (C262), (C264)
Special Environmental Conditions	None

- a. Open cowling at either side of transmission.
- b. Remove forward section of tail rotor driveshaft (paragraph 6-162).
- c. Drain oil level below tail rotor drive quill (2, figure 6-31).
- d. Remove nuts (5), washers (3 and 4), spacers (6), clamp (7), and bracket (9) with sump outlet hose assembly (8) from six studs securing tail rotor drive quill (2). Cut sealing compound from around outside of quill sleeve flange and jackscrew holes.

CAUTION

When using jackscrews to remove quill assembly, following procedures must be followed: The jackscrews must be screwed in evenly, exerting equal pressure on quill sleeve to prevent damage to flanges. Do not use force by prying to remove quill, in the event quill cannot be removed by using jackscrews, heat case, and use jackscrews. Do not use torch or open flame to heat case.

- e. Use three jackscrews (T33) to pull quill (2) from sump case. Remove jackscrews and discard preformed packing (1).
- f. Cover opening in sump case to prevent entry of foreign materials.

6-128. Disassembly - Tail Rotor Drive Quill.

WARNING

Remove plate assembly (21, figure 6-32) slowly so centering spring (20) will not fly out.

- a. Remove retaining ring (22), plate assembly (21) and centering spring (20).
- b. Remove retaining ring (19) and retainer (18) with packing (17).
- c. Use wrench (T30) to hold driveshaft coupling (6). Using male end of 1/2 inch square drive extension, remove coupling bolt (16), and ring spacer (15).
- d. Remove spherical coupling (14) with driveshaft coupling (6), and sleeve spacer (8).
- e. Cut and remove lockwire from ring (11).
- f. Using special tool (T60), remove ring (11) and seal (10).
- g. Press seal (10) from ring (11).
- h. Remove seal (7) from coupling (6) if damaged or shows signs of leakage.

6-129. Inspection - Tail Rotor Drive Quill.

- a. Visually inspect for oil leakage.

NOTE

External leakage from quill seal is not permitted. However, a small amount of seepage assures a satisfactory seal condition. Continuous flow (droplets) is considered excessive and will require seal replacement.

- b. Visually inspect sleeve assembly (5, figure 6-32) for cracks, chipping, scoring and abrasion. If crack is suspected, refer to TM 1-1520-256-23, AVUM/AVIM nondestruction inspection procedures for UH-1 helicopter series.
- c. Inspect roller bearings (3) and duplex bearings (13) for smoothness and freedom of movement.

(1) Inspect center spring (20) by applying a test load of 5.0 plus or minus 0.5 pounds to compress spring 1.5 plus or minus 0.10 inches. The spring should return to free length of 2.00 +/- 0.03 inches.