HUGHES SERVICE INFORMATION NOTICE

NOTICE NO. N-61
DATE Oct. 30, 1968

SUBJECT: INSPECTION - TAIL ROTOR FORK BOLTS, P/N 269A6235

MODELS AFFECTED: All 269 Series Helicopters equipped with P/N 269A6003 or 269A6004 High Tip Speed Tail Rotor Assembly

TIME OF COMPLIANCE: Shall be accomplished within next 50 hours of helicopter operation, unless already accomplished.

PREFACE:

The information given in this Service Information Notices lists procedures and criteria for a one-time inspection of the tail rotor fork bolts (269A6235) to ensure that bolts are free of cracks or other damage which could lead to ultimate bolt failure.

Reference

269A/A-1/TH-55A Handbook of Maintenance Instruction, Revised 1 June 1968
269B Handbook of Maintenance Instruction, Revised 1 July 1968

PARTS LIST

Nomenclature	Part No.	Qty.	Mfgr.
Pin, cotter	MS24665-151	2	Commercial
Pin, cotter	MS24665-155	2	Commercial

FORM NO. 9578A HTC AD REV 11-67

TOOLS & EQUIPMENT

Drill motor - portable	Commercial
Drill bit - #51 (0.065/0.072 in. dia.) carbide or diamond tipped	Commercial
Wrench - torque (0 to 600 inch pounds)	Commercial
Adapter - hex(7/32 inch)	Commercial
Kit-dye penetrant inspection	Commercial

MATERIALS

Primer - Zinc Chromate	Commercial

PROCEDURE

a. Remove bolt, nut, cupped and plain washers securing pitch control link to tail rotor blade control horn.

CAUTION

An out-of-balance condition of the tail assembly can result if the order of the bolt, nut, washer combination is not maintained.

b. Repeat step a. for opposite pitch control link.

c. Swing pitch control links back toward tail rotor transmission assembly.

d. Using screwdriver, remove four screws securing two end plates to either side of fork assembly; remove end plates and packings.

NOTE

For helicopter on which balance weight assembly is installed and fork bolts are preloaded, shims under plate assembly and balance weight assembly will also be removed.

e. Remove cotter pins installed through tail rotor hub and fork bolts.

f. Using torque wrench, with hex socket, check both fork bolts for 80 inch-pounds torque.

NOTE

(1) If bolt does not move at 80 inch-pounds torque, reassemble tail rotor components per steps i. through m.

(2) If bolt moves at or before 80 inch-pounds torque, perform following steps g. through m.

g. Remove fork bolts and perform dye penetrant inspection for cracking, fretting or other damage.

CAUTION

If cracking or other damage is noted, existing bolt(s) must be discarded and a new undrilled fork bolt(s) (P/N 269A6235) installed.

h. Install fork bolts and tighten to 160 inch-pounds torque; increase torque value in small increments from 160 to 190 inch-pounds until cotter pin hole in bolt aligns with hole in tail rotor hub.

NOTE

(1) If new undrilled fork bolt is installed, torque bolt to 160-190 inch-pounds and drill #51 hole through bolt. Use existing cotter pin hole in tail rotor hub as pilot hole.

(2) If existing fork bolt is reinstalled and cotter pin holes in bolt and hub will not align, drill new #51 hole through tail rotor hub and threaded portion of bolt shank, per dimensions shown in Figure 1, Detail A.

(3) If fork bolt already has two cotter pin holes drilled through shank and neither hole will align with holes in hub, install new undrilled bolt, per substep (1) above.

i. Install new MS24665-155 cotter pins through hub and bolts with wet zinc chromate.

j. Seat packing in groove in end of plate assemblies and install end plate assemblies with screws.

NOTE

For tail rotor assemblies on which balance weight assembly is used and fork bolts are preloaded: Reinstall shims, dimple down, between head of fork bolts and end plate assemblies; also, balance weight assembly is secured to fork over end plate assemblies with screws.

k. Connect pitch control link assemblies to tail rotor blade control horns. Torque to 30 to 40 inch-pounds and secure with MS24665-151 cotter pins.

CAUTION

An out-of-balance condition of tail rotor assembly can result if original order of the bolt, nut, washer combination is not maintained.

l. Check reassembly of tail rotor components for discrepancies.

m. Perform operational check of tail rotor drive system and flight control system.

NOTE

When performing next and subsequent preflight inspections, pay particular attention to hinge area teetering bearings for proper freedom.

WEIGHT AND BALANCE DATA

Weight and balance not affected.

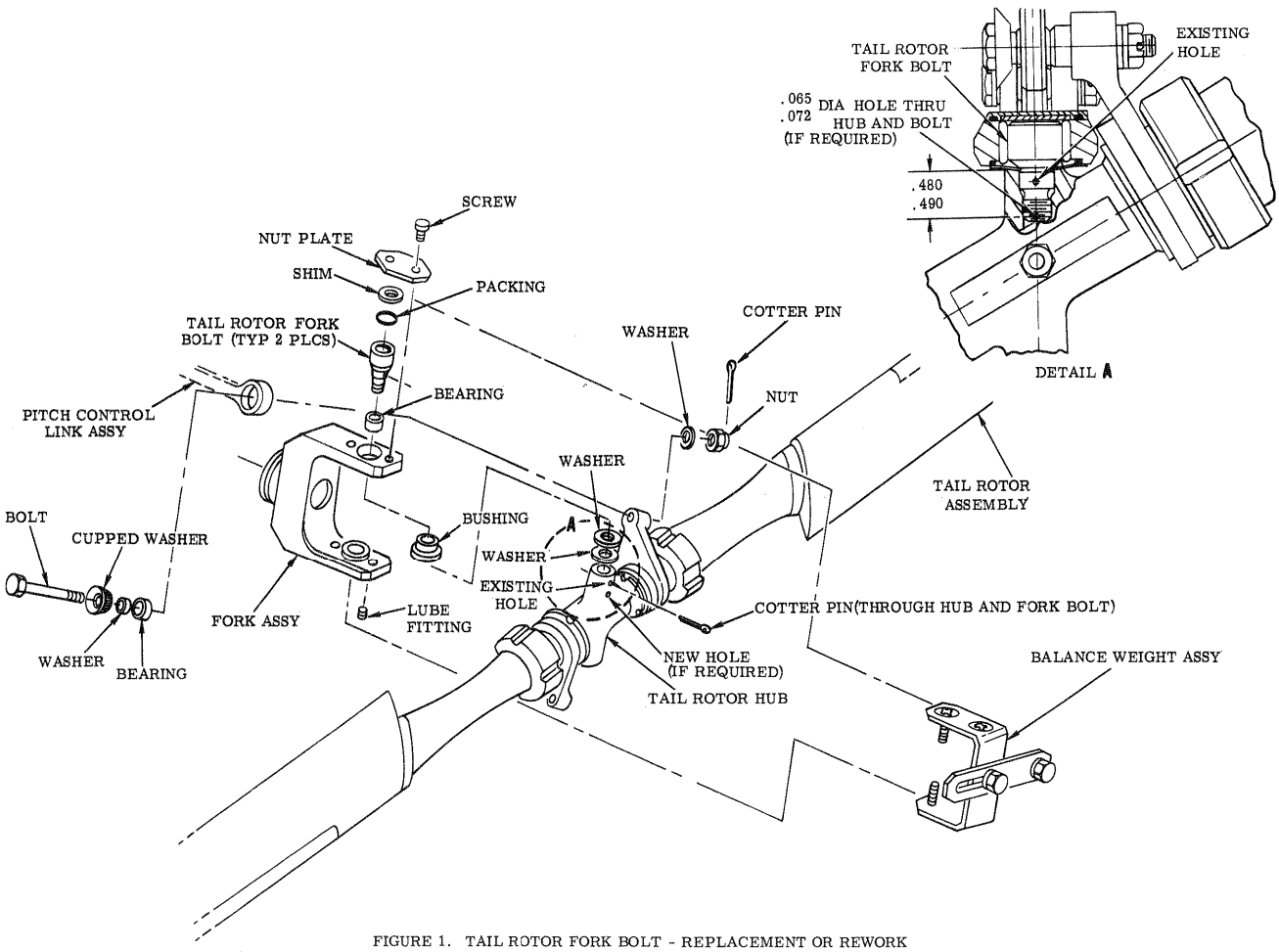

FIGURE 1. TAIL ROTOR FORK BOLT - REPLACEMENT OR REWORK