



SCHWEIZER SERVICE NOTICE

NOTICE NO. N-59
DATE Oct. 9, 1968
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FAA APPROVED

MANDATORY

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SUBJECT:

**INSPECTION AND RETIREMENT, MAIN ROTOR
THRUST BEARING, P/N 269A5050-50 and -51.**

**INSPECTION, FIELD MODIFICATION - MAIN ROTOR
MAST, THRUST BEARING NUT AND SPACER TUBE**

MODELS AFFECTED:

**269A Helicopters Serial No's 0011 through 0979
269A-1 Helicopters Serial No's 0001 through 0041
269A-2 Helicopters Serial No. 0001
269B Helicopters Serial No's 0001 through 0370**

TIME OF COMPLIANCE: Within next 25 hours. See Page two for detail.

PREFACE:

The information in this Service Information Notice is as follows:

- STEP I -** Defines a new retirement schedule for the main rotor thrust bearing P/N 269A5050-50 and -51.
- STEP II -** Outlines a procedure to determine the condition of the main thrust bearing, whether it is properly installed and whether modification of the mast and thrust nut has been accomplished.
- STEP III -** Defines the proper method of modifying the mast, main rotor thrust bearing nut and spacer tube.

Reference

269A/A-1/TH-55A Handbook of Maintenance Instruction, Revised 1 June 1968
269A-2 Handbook of Maintenance Instruction, Addendum, Issued 1 April 1967
269B Handbook of Maintenance Instruction, Revised 1 July 1968

- TIME OF COMPLIANCE:
- STEP I - Shall be accomplished on thrust bearings having a total operating time of 275 hours or more within 25 hours of operating time; bearings having less than 275 hours shall be replaced upon reaching 300 hours of operating time.
 - STEP II - Shall be accomplished within next 25 hours of helicopter operation and at 150 hours of operation following initial inspection.
 - STEP III - Shall be accomplished following completion of Step II, if required.

PROCEDURE

STEP I - The main rotor drive shaft thrust bearing P/N 269A5050-50 and -51 service life is here by established at 300 hours of time in service.

- a. Replace main rotor drive shaft thrust bearing P/N 269A5050-50 and -51 with new -51 bearing in accordance with paragraph "INSTALLATION - MAIN ROTOR DRIVE SHAFT AND THRUST BEARING", Section IV of applicable HMI.

NOTE

When pressing bearing on shaft apply pressure to inner race of bearing only. Thrust bearing nut tang lockwasher must be replaced with a new washer P/N 269A1308 each time it is removed.

- b. Reassemble, install and inspect components per applicable HMI.
- c. It is requested that all defective bearings found be returned to Hughes Tool Company - Aircraft Division, Culver City, California. Attention: Customer Service Department.

STEP II - INSPECTION.

a. Remove main rotor drive shaft and thrust bearing per METHOD 2, paragraph "REMOVAL MAIN ROTOR DRIVE SHAFT AND THRUST BEARING", Section IV of applicable HMI.

CAUTION

Damage to bearing can result if excessive force is required when removing shaft and bearing from mast. The weight of the aircraft should be sufficient to unseat bearing. Replace bearing if force in addition to aircraft weight is required during removal.

- b. Inspect removed assembly and mast as follows:
1. Thrust bearing for roughness, corrosion, loss of lubricant, physical damage and evidence of excessive use of zinc chromate paste during prior installation. (Reference applicable HMI)
 2. Main rotor drive shaft, check for condition (refer to applicable HMI).
 3. Thrust bearing nut for corrosion, physical damage and completed modification.

NOTE

Modified nut will have four radial slots in the bottom of the unthreaded skirt which contacts the outer race of the thrust bearing. Unmodified nuts will be threaded to the point of contact with the bearing and will not be slotted.

4. Determine that 0.25 in. dia. drain hole is in aft side of mast and is clear of obstructions.
 5. Interior of main rotor mast for corrosion and physical damage, evidence of zinc chromate paste in thread relief above bearing bore and drain hole, and foreign matter accumulation at bottom of mast.
- c. Replace damaged parts with new parts if required. (Reference b.)
- d. Using suitable solvent and clean cloth, remove zinc chromate from thrust bearing.

CAUTION

Lubricant can be washed from bearing during cleaning if care is not exercised. Do not dip bearing in solvent.

- e. Accomplish Step III if thrust bearing nut has not been modified and mast does not have drain hole. (Reference b. (3) and (4).)
- f. Using suitable solvent and bristle brush, clean zinc chromate from bearing bore, drain hole and thread relief. (Reference b. (5).)
- g. If modification and/or parts replacement is not required re-assemble components per applicable HMI.

STEP III - REWORK MAIN ROTOR MAST AND THRUST BEARING NUT

- a. Remove main rotor blades. (Reference applicable HMI)
- b. Disassemble drive shaft, thrust nut, spacer tube and bearing.
- c. Install deflector P/N 269A1341 in accordance with paragraph, "FIELD MODIFICATION - MAIN ROTOR THRUST BEARING SPACER AND MAIN ROTOR MAST", steps a. through f., Section IV of applicable HMI if part is available. (See Figure 1.)
- d. Measure down from top of mast 0.62 in. on aft side of mast between two rivets right of aircraft centerline, center punch spot. (See Figure 1, Detail A).
- e. Stuff clean rags inside mast below thrust bearing flange.
- f. Using a 1/8 dia. drill bit, pilot drill hole from inside out in thread relief to correspond to center punch spot.
- g. Enlarge hole from outside using first a 3/16 dia. to 0.25 in. dia. drill bit; deburr and touch up with iridite or zinc chromate primer.

NOTE

Hole will come through inside of mast angling up 15°
through thread relief.

- h. Remove rags from inside of mast, remove all metal particles.
- i. Inspect hole for discrepancies.
- j. Modify main rotor bearing thrust nut in accordance with information shown in Figure 1.

- k. Touch-up reworked areas with iridite or zinc chromate primer.
- l. Inspect modified nut for discrepancies.

WEIGHT AND BALANCE DATA

Weight and balance not affected.

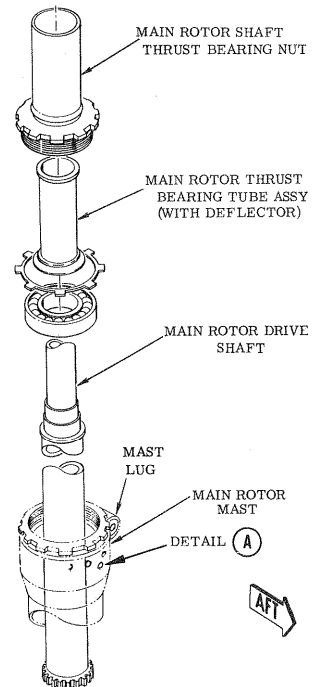
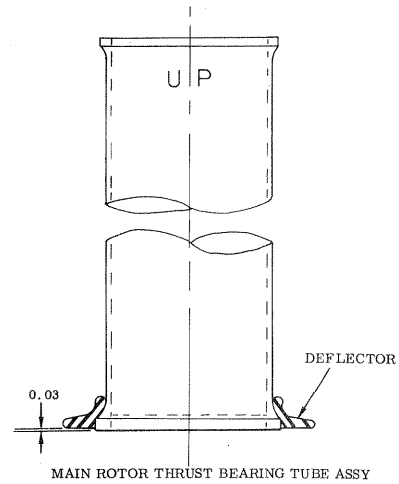
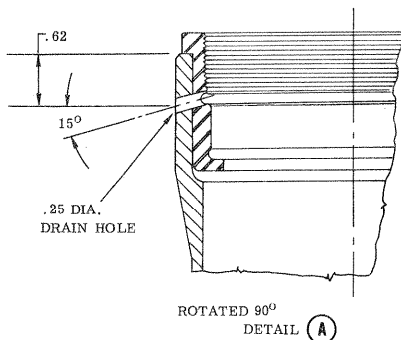
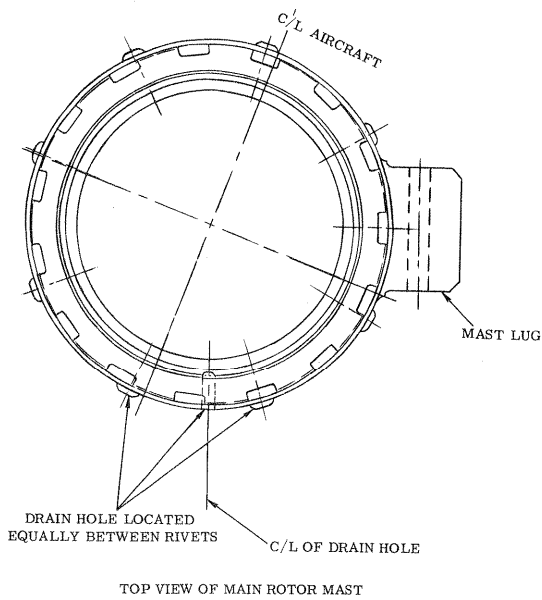
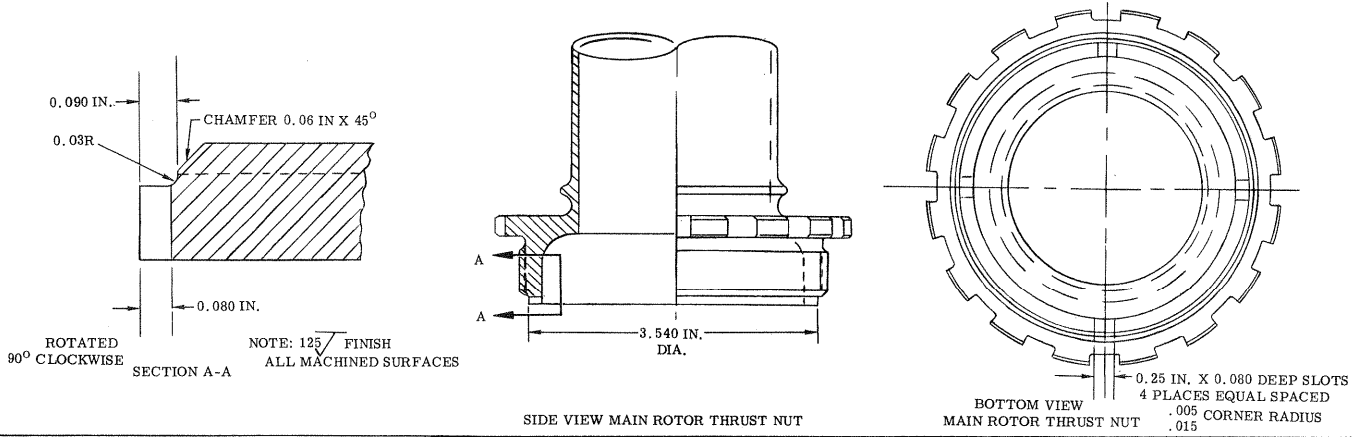


FIGURE 1. MODIFICATION-MAIN ROTOR MAST