



HUGHES SERVICE INFORMATION NOTICE

NOTICE NO. N-153.1*

DATE 28 October 1981

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*Supersedes Service Information Notice
No. N-153. Dated 1 September 1978

MANDATORY

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SUBJECT: INSPECTION AND REWORK OF LTS TAIL ROTOR HUB
PN 369A1725, 369A1725-5, and 369A1725-501

MODELS AFFECTED: Model 269C Helicopter Serial No. 0004 through 0716. All Model 269A, TH-55A, 269A-1 and 269B Helicopters equipped with LTS Tail Rotor Assembly, PN 269A6034 Series. The following Tail Rotor Hub Assemblies (separate or component of PN 269A6034 Tail Rotor Assembly) in Spares Inventory at date of this Notice:

All PN 369A1725 and 369A1725-501 Tail Rotor Hub Assemblies.

PN 369A1725-5 Tail Rotor Hub Assembly having Serial Numbers 001 through 862.

TIME OF COMPLIANCE: Shall be accomplished at next 100-Hour Periodic Inspection; or prior to installation of Spares assembly on helicopter; or within six months after date of this notice, whichever is soonest.

PREFACE: Field reports indicate that corrosion pitting in the root radii of the PN 369A1725 series tail rotor hub has occurred in service. This Service Information Notice provides instructions for identification and inspection of the hubs affected and application of a corrosion resistant coating at the radius area between the spindles and center portion of the hub.

It is to be noted that LTS tail rotor hub, PN 369A1700 and 269A6101 made from chrome plated steel are NOT affected by this Notice. Also the HTS high tip speed tail rotor hubs on Model 269A, 269A-1 and 269B helicopters are NOT affected.

References

269 Series - Basic HMI, Reissued 1 April 1980.

269 Series - HMI Appendix C, Component Overhaul; Issued 15 March 1976; Revision No. 1, 15 August 1980.

(|) Denotes portion of text added or revised.

Customer Service Department

TOOLS AND EQUIPMENT

Magnetic Particle Inspection Kit MIL-I-6868
Magnifying Glass - 10X
Oven, Baking or Heat Lamp
Brush, Paint - 1/16"

MATERIALS

Coating, Aluminum	Alumazite Z	HHI
Trichloroethane 1-1-1	O-T-620C	Commercial
Emery Cloth - Medium		Commercial
Emery Cloth - Fine or Crocus Cloth - Fine	P-C-458	Commercial

NOTE

Authorized HHI Service Centers may obtain one 4 oz. can without cost, if ordered prior to 30 November 1978. Owners/operators may purchase Alumazite Z through HHI Service Centers.

PART I - HUB IDENTIFICATION

a. Identify tail rotor hub as follows:

1. PN 369A1725-5 and PN 369A1725-501 hub assemblies are identified by part number and serial number on one of two data plates on hub (see Figure 1) and are to be inspected and reworked per Part II of this Notice, except as noted below.

NOTE

- (a) PN 369A1725-5 tail rotor hubs having Serial No. 001 through 862 and identified with either letter "Z" or letters "SP" following hub serial number do NOT require rework per Part II of this Notice.
- (b) PN 369A1725-5 tail rotor hubs having Serial No. 863 and subsequent do NOT require rework per Part II of this Notice.

- (c) PN 369A1725-501 tail rotor hubs identified with either letter "Z" or letters "SP" following hub serial number do NOT require rework per Part II of this Notice.
- 2. PN 369A1725 hub has silver appearance of stainless steel and is to be inspected and reworked per Part II of this Notice.
- 3. PN 369A1700 and 269A6101 hubs have gold tint from cadmium plating and are NOT affected by this Notice.

NOTE

- (a) If part number and color distinction cannot be determined, remove tail rotor assembly from helicopter, as applicable, and remove tail rotor blade per Basic HMI. Check ID of hub spindles for color as above.
- (b) If color of hub and color of ID of hub spindles cannot be determined, inspect and rework the hub per Part II of this Notice.

b. Record compliance with Part I of this Service Information Notice in Compliance Record of helicopter Log Book; or tag Spares hub assembly and record compliance when assembly is installed on helicopter.

PART II - HUB INSPECTION AND REWORK

- a. As applicable, remove tail rotor assembly from helicopter and remove tail rotor blade assemblies, per Basic HMI. Disassemble hub and drive fork assembly, per Component Overhaul Manual (HMI Appendix C).
- b. Clean hub with trichloroethane.
- c. Using 10X glass, inspect hub for cracks, corrosion or other damage. Pay particular attention to area of 0.13 radii between the spindles and center portion of the hub. (See Figure 1.)

NOTE

- (1) Indications of cracking are cause for hub rejection, except as noted below.
 - (a) Minor surface imperfections or discontinuities in the unmachined center

of the hub may appear to indicate cracking. This area may be dressed with medium grade emery cloth for minimum material removal to remove the imperfections.

- (2) If corrosion or pitting is noted, clean hub surface with fine emery cloth or crocus cloth.
- (3) If surface repair was performed in (1)(a) or (2) above, clean hub with trichloroethane and reinspect hub with 10X glass. Pay particular attention to 0.13 radius areas on both sides of the hub.
- (4) If hub is rejected, contact HHI Customer Service Department for disposition.

d. Magnetic particle inspect hub for cracks per MIL-I-6868. Pay particular attention to 0.13 radius areas on both sides of the hub.

e. Rework hub as follows, using Alumazite Z:

1. Shake contents of container thoroughly.
2. Brush a thin (0.002 to 0.005 inch) even coat onto cleaned surface of 0.13 radius areas on both sides of hub. (See Figure 1.) Limit width of aluminum coating to 0.25 inch to prevent contact with feathering bearings.
3. Allow a flash-off (drying) time of 8 to 10 minutes.
4. Bake hub for 1 hour at 375° to 425° F in oven or use heat lamps.
5. Air cool hub.

f. To denote rework of 369A1725-5 or 369A1725-501 hub, add letter "Z" following serial number on hub data plate; to denote rework of 369A1725 hub, add letter "Z" following part number on tail rotor assembly data plate. (See Figure 1.)

g. Reassemble tail rotor hub and drive fork assembly, per Component Overhaul Manual (HMI Appendix C). Reinstall tail rotor blade assemblies, per Basic HMI.

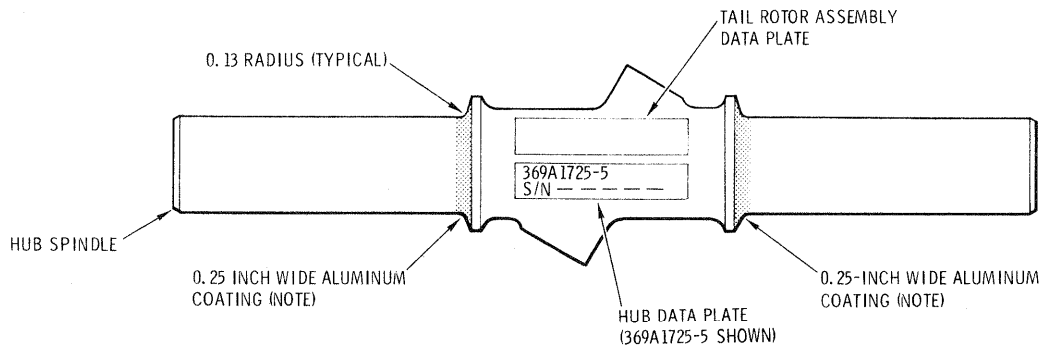
h. As applicable, reinstall tail rotor assembly on helicopter per Basic HMI.

i. Record compliance with Part II of this Notice in Compliance Record of helicopter Log Book; or tag Spares hub assembly and record compliance when assembly is installed on helicopter.

WEIGHT AND BALANCE DATA

Weight and balance not affected.

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NOTE:

LIMIT WIDTH OF ALUMINUM COATING TO 0.25-INCH TO PREVENT CONTACT WITH FEATHERING BEARINGS.

88-248A

Figure 1. Rework of tail rotor hub assembly

