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DATE: 2 NOVEMBER 1981

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If PN 369H90123 Series Rotor Brake is NOT installed on helicopter:

Installation of failsafe device shall be accomplished within 100 hours of helicopter operation following receipt of parts, or within 180 days after date of this Notice, whichever is sooner. Procure required parts from your authorized HMI Service Center or Distributor upon receipt of this Notice.

Part IV - Shall be accomplished at intervals specified.

D. Weight and balance

Weight and balance not affected.

E. FAA Approval

FAA/DER APPROVED 2 November 1981

F. Parts/Supplies:

Procure parts required from your authorized MDHS Service Center or Distributor upon receipt of this Notice.

REPLACEMENT PARTS/SUPPLIES			
Nomenclature	Part No.	Qty.	Source
Bolt, Coupling	369D25530*	1	MDHS
Socket	369D25531*	1	MDHS
Socket	369A5516-9	AR	MDHS
Washer	NAS620C416L	3	MDHS
Washer	HS306-326	4**	MDHS

*A special price of \$105.70 for the PN 369D25530 coupling bolt, and \$109.30 for the PN 369D25531 socket has been established. This pricing will remain in effect through 31 December 1981.

**As required.

G. Materials:

MATERIAL	
Nomenclature	Source
Grease MIL-G-81322 Mobil Grease 28 Aeroshell 22	Mobil Oil Shell Oil
or Grease Lubriplate, 930-AA	Fiske Bros; Toledo, OH
Anti-seize compound MIL-A-907	Commercial

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MATERIAL (Cont.)	
Nomenclature	Source
Lockwire MS20995C	Commercial
Primer, zinc chromate TT-P-1757	Commercial

H. Tools and Equipment:

TOOLS AND EQUIPMENT	
Nomenclature	Source
Torque wrench – 0 to 500 inch-pounds	Commercial
Feeler Gage	Commercial

2. PART I – DEACTIVATION OF ROTOR BRAKE SYSTEM

- (1). Position rotor brake handle at UP position in retainer; secure handle to retainer with lockwire to prevent brake application (refer to HMI Appendix A).
- (2). Perform 100-hour inspection of forward flexible coupling, per Part II of this Notice.
- (3). Record compliance with Part I of this Notice in Compliance Record of helicopter Log Book.

3. PART II – 100-HOUR INSPECTION OF FORWARD FLEXIBLE COUPLING

- (1). Open tail rotor drive shaft access door (Section 2, Basic HMI).
- (2). Inspect tail rotor drive shaft forward flexible coupling as follows:
 - (a). Using mirror and bright light, visually inspect flexible coupling for any indication of cracks, corrosion, deformation or other physical damage. If any of the above deficiencies are noted or suspected, remove tail rotor drive shaft from helicopter and perform closer inspection (Section 9, Basic HMI).



- Do not disassembly flexible coupling
 - Do not immerse flexible coupling in fluids or cleaners such as magnetic particle, fluorescent penetrant, visible dye, etc.
 - Do not apply corrosion protection fluids unless coupling has been cleaned with solvent or detergent. Apply any corrosion protection fluid very sparingly to outside only.
- (3). Close tail rotor drive shaft access door.
 - (4). Record compliance with Part II of this Notice in Compliance Record of helicopter Log Book.

4. PART III – INSTALLATION OF FAILSAFE DEVICE

- (1). Remove and inspect tail rotor drive shaft, per Section 9 of Basic

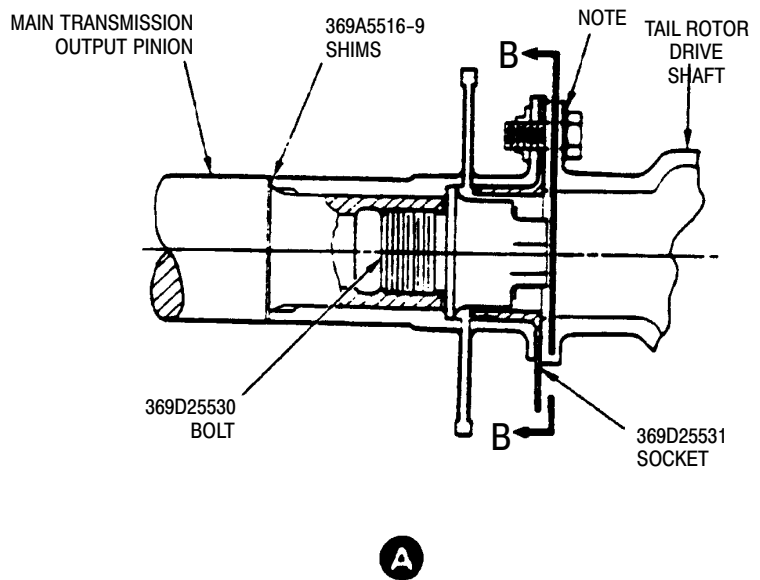
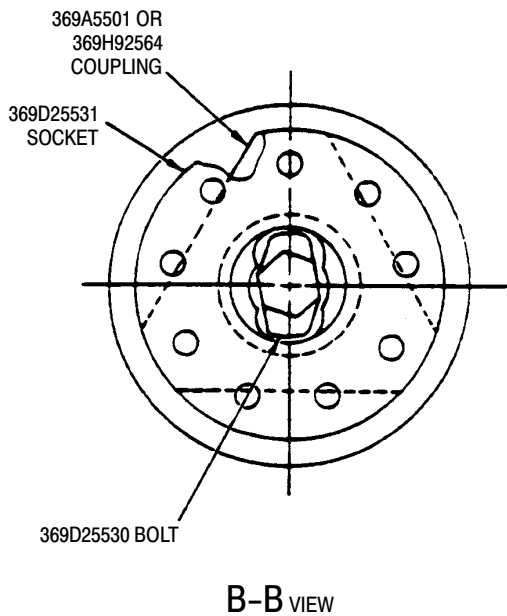
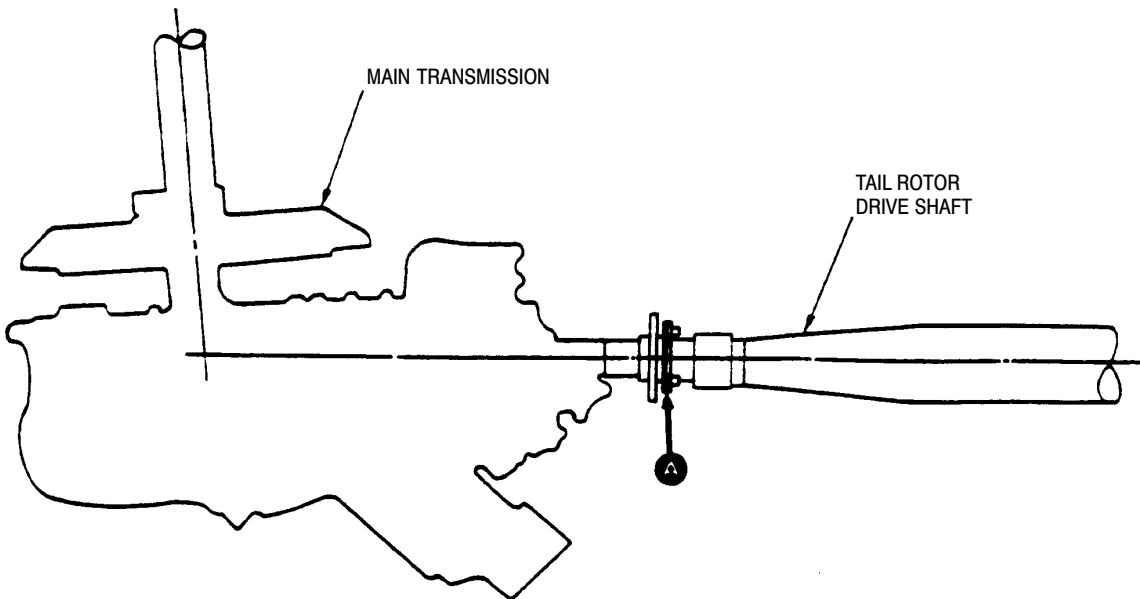
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NOTE:
NAS620C416L WASHER REPLACES EXISTING NAS620C416 WASHER (3 PLACES).

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Figure 1. Installation of Failsafe Device at Tail Rotor Driveshaft Forward Coupling

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- (2). Remove and inspect flexible couplings (and disc brake components if rotor brake is installed) on main and tail rotor transmission gearshafts. (Refer to Section 9 of Basic HMI, and Section 12 of HMI Appendix A if applicable).

NOTE: Retain 369A5516-9 shims for reinstallation.

- (3). Install one 0.010-inch shim forward of flexible coupling on main transmission output shaft as shown in Figure 1. Coat coupling splines with grease and new 369D25530 coupling bolt threads with anti-seize compound before assembly. Install existing flexible coupling (and disc brake components as applicable) and tighten new coupling bolt to 250 to 300 inch-pounds.
- (4). Install one 0.010-inch shim aft of flexible coupling on tail rotor transmission input shaft. Coat coupling splines with grease and coupling bolt with anti-seize compound before assembly. Install coupling and tighten coupling bolt to 250 to 300 inch-pounds.
- (5). Position new 369D25531 socket on aft face of forward coupling so that three of the nine holes are indexed to the three nutplates of the coupling in such a way that maximum clearance is obtained between the bolt key and socket as shown in Figure 1, View B-B. Visually verify proper clearance before installing tail rotor drive shaft.
- (6). Reinstall tail rotor drive shaft per Basic HMI, except tighten at-tach bolts finger tight only at forward coupling and socket. Replace existing NAS620C416 washers with NAS620C416L washers, three places.
- (7). Obtain 0.010 to 0.20 inch gap between forward flange of tail rotor drive shaft and aft side of socket, using the following procedure:
 - (a). Back-off three attach bolts on forward flange of tail rotor drive shaft assembly 0.050 to 0.100 inch.
 - (b). Push and hold tail rotor output shaft of main rotor transmission forward (into transmission) to remove end play. If rotor brake is installed, make certain that brake pucks do not restrict axial travel of tail rotor output shaft.
 - (c). Remove end play in tail rotor transmission by applying force to tail rotor blades in opposite direction of operational rotation (while still holding tail rotor transmission output shaft to prevent rotation. Do not push tail rotor drive shaft fore or aft.
 - (d). Measure gap between socket and flange of tail rotor drive shaft (socket flange must be in full contact with flange of flexible coupling).
 - (e). Add required number of shims behind flexible coupling at main transmission end of tail rotor drive shaft, to obtain specified gap of 0.010 to 0.020 inch.

NOTE:

- If less than specified gap (0.010 to 0.020 inch) exists under minimum shim requirements, install maximum of one HS306-326 washer on each of the four tail rotor transmission mounting studs, between gearbox housing and boom fitting. Apply zinc chromate primer to both sides of washer at installation.
 - After washer installation, repeat steps (7).(a). thru (7).(e). above. Also perform rigging of tail rotor controls, per Section 8 of Basic HMI.
- (8). Complete installation of tail rotor drive shaft assembly, and rotor disc brake components if applicable. (Refer to Basic HMI and HMI Appendix A if applicable.)

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- (9). Record installation of failsafe device, per Part III of this Notice in Component Record of helicopter Log Book.

NOTE:

- If rotor brake system was deactivated per Part I of this Notice, remove lockwire securing rotor brake handle to retainer. Perform operational check of rotor brake system per HMI Appendix A.
 - Installation of failsafe device lifts the inspection requirements specified in Part II of this Notice.
- (10). Record compliance with Part III of this Notice in Compliance Record of helicopter Log Book.
- (11). Perform check of forward flexible coupling and failsafe device at intervals specified in Part IV of this Notice.

5. PART IV – CHECK OF FORWARD 'FLEXIBLE COUPLING

NOTE: For all Model 369H Series helicopters with failsafe device installed, the tail rotor drive shaft forward flexible coupling is to be checked periodically as follows:

- (1). At Each Pilot Preflight Check:

Rock tail rotor back and forth in plane of rotation. If blade can move in excess of 0.75 inch (1.93 cm) at the blade tip without rotation of main rotor blades, check for proper condition of tail rotor drive shaft to forward flexible coupling. (Section 9, Basic HMI). Replace coupling as required.

- (2). At Each Aircraft/Engine Shutdown:

If thumping or rapping is heard from drive train during final revolutions of tail rotor blades, check tail rotor drive shaft forward flexible coupling for proper condition. (Section 9, Basic HMI). Replace coupling as required.

- (3). At Each Annual or 300-Hour Inspection:

With tail rotor drive shaft removed, inspect flexible couplings per Section 9 of Basic HMI. Also visually inspect forward coupling bolt and socket for indications of contact. Do not loosen or remove coupling bolt. If signs of contact are noted, remove and reinstall socket and/or coupling bolt per Part I of this Notice. Reposition socket and/or bolt so that maximum clearance is obtained between bolt key and socket. (See View B-B, Figure 1). Visually verify proper clearance before reinstalling tail rotor drive shaft.