



# SCHWEIZER SERVICE NOTICE

NOTICE NO. N-208

DATE: 19 NOV 1986

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MANDATORY

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SUBJECT: IDENTIFICATION AND POSSIBLE REPLACEMENT OF TAIL ROTOR FORK BOLT.

MODELS AFFECTED:

- All 269 Series Helicopters equipped with a 269A6034 tail rotor assembly.
- All 269A6034 tail rotor assemblies in spares inventory.
- All 369A1602 tail rotor fork bolts in spares inventory.

TIME OF COMPLIANCE:

- Shall be accomplished within the next 10 hours of helicopter operation for all affected helicopters, unless already accomplished.
- Shall be accomplished on all 269A6034 tail rotor assemblies, in spares inventory, prior to installation into service, or within next three months, whichever occurs first.
- Shall be accomplished on all 369A1602 tail rotor fork bolts, in spares inventory, upon receipt of this Service Information Notice.

REFERENCE: 269 Series Basic HMI, reissued 15 March 1982.

269 Series - HMI Appendix C, Part VII, Issued 15 March 1976,  
Revised 15 December 1981.

Service Information Notice N-155.2, Issued 20 January 1981.

PREFACE: A possibility exists that the 369A1602 tail rotor fork bolts, manufactured between April 18, 1986 and August 28, 1986, did not receive proper processing at the manufacturer. Incomplete processing of these bolts can result in cracking and eventual bolt failure. This Service Information Notice provides instructions to identify and replace (as required) the suspect bolt. Compliance with this Service Information Notice is essential to ensure the continued airworthiness of all 269 Series Helicopters.

PARTS LIST

<u>Nomenclature</u>	<u>Part Number</u>	<u>Quantity</u>	<u>Source</u>
Bolt - tail rotor drive fork hinge	369A1602	1	SAC
Pin, Cotter	MS24665-153	1	Commercial
Washer, tang	HS1551S290	1	SAC

TOOLS AND EQUIPMENT

Torque Wrench	0 to 500 inch-pounds	Commercial
Bushing Wrench Set	PN 369A1600-80902	HH
Pin, Alignment:	1/4-inch drill rod - 0.2485/ 0.2495 inch diameter x 1.75 inches long, with one end chamfered or rounded off	Field Fabricate

PROCEDURE

- a. Visually examine the inscription on the tail rotor fork bolt (Figure 1).

NOTE

The head of properly processed bolts are inscribed as shown in Figure 1, Detail B. If the helicopter is equipped with an inscribed bolt (Figure 1, Detail B), further inspection and disassembly is not required. Record compliance with this Service Information Notice in Compliance Section of Helicopter Log Book, if the fork bolt is inscribed (Figure 1, Detail B).

- b. If the tail rotor fork bolt is not inscribed, determine the date of manufacture, per following note:

**NOTE**

Some 369A1602 tail rotor fork bolts manufactured in 1986 received incomplete processing. These bolts lack the inscription on the head (Figure 1, Detail B). However, since some properly processed fork bolts (369A1602) were manufactured without the inscription (prior to 1975), we cannot conclude that all uninscribed bolts were improperly processed. All uninscribed bolts manufactured in the year 1986 must be removed from service and stock. Uninscribed bolts whose manufacture date cannot be positively determined to be prior to 1986, must also be removed from service and stock.

- c. Check stock and remove all improperly processed bolts. (Contact your Schweizer Service Center or Distributor for disposition of bolts.)
- d. Remove improperly processed bolts from tail rotor assembly as follows:

**CAUTION**

When the blade and hub assembly is removed from the helicopter, and at all times when the pitch control links are disconnected, do not allow blade pitch angle to exceed 30 degrees from the neutral position. (See Figure 2.) Unrestricted rotation of blades on the hub can excessively bend or stretch the internal tension-torsion strap assembly and cause undetected damage to the strap assembly, and an out-of-balance condition for the tail rotor.

**CAUTION**

Do not remove hub-to-drive fork hinge bolt to remove tail rotor assembly. Damage to tail rotor gear box bearings may occur.

**NOTE**

To aid in ease of reassembly and proper tail rotor balance, mark and index hardware and parts as they are removed. Reinstallation of parts into original position will facilitate the proper balance of the tail rotor assembly.

- (1) If installed, remove tail rotor assembly (Basic HMI, Section 9). (Removal of pitch control assembly is not required.)
- (2) Disassemble tail rotor assembly into major assemblies (HMI Appendix C, Part VII, paragraph 2-3).
- (3) Remove fork bolt by following applicable instructions in HMI Appendix C, Part VII, paragraph 2-4.
- (4) Using a new fork bolt, reassemble hub and fork unit in accordance with HMI Appendix C, Part VII, Section 6 and Service Information Notice N-155.2.
- (5) Reinstall tail rotor assembly (Basic HMI, Section 9).
- (6) Perform testing and balancing procedures per HMI Appendix C, Part VII, Section 7.

NOTE

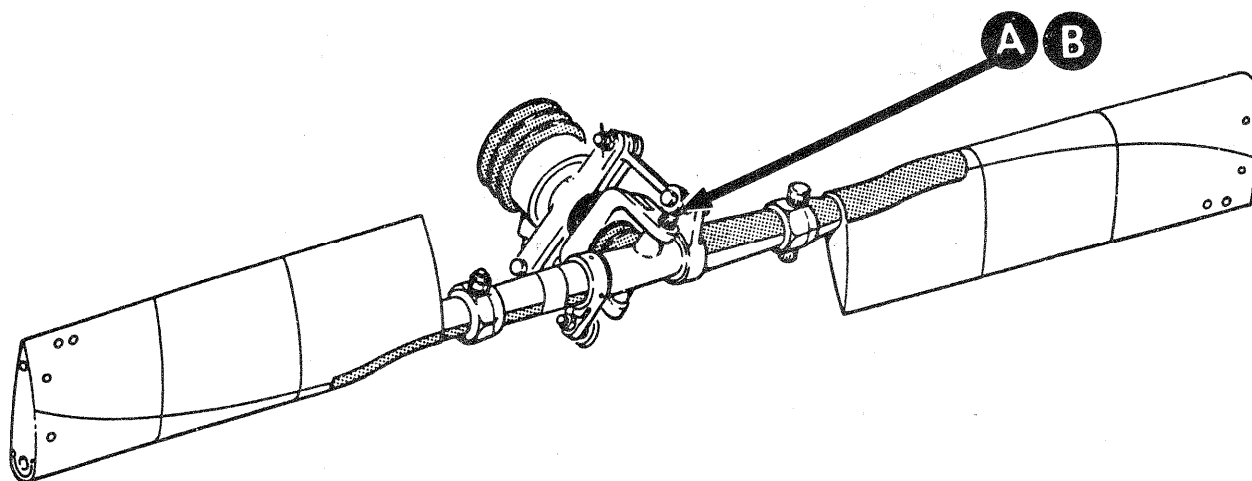
A labor allowance of two and one-half hours for tail rotors requiring removal or disassembly will be compensated for compliance with this Service Information Notice. Warranty claims must be filed with SAC Warranty Department by an authorized SAC Distributor or Service Center within 90 days of issue date of this Notice.

- (6) Contact your SAC Service Center or Distributor for disposition of removed bolt.
- e. Record compliance with this Service Information Notice in Compliance Section of Helicopter Log Book.

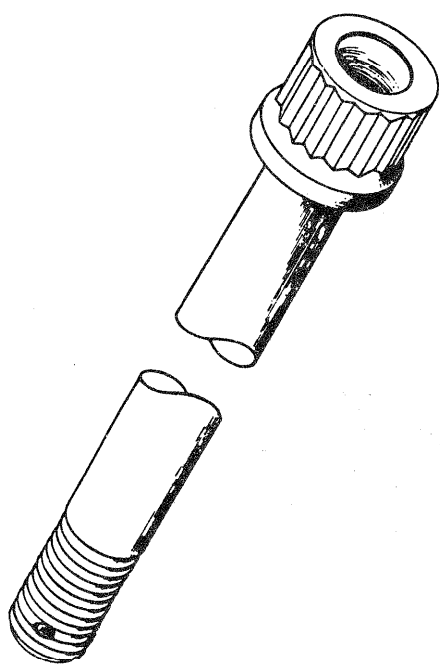
**WEIGHT AND BALANCE DATA**

Weight and balance not affected.

The procedures and information provided by this Service Information Notice has been shown to comply with applicable Federal Aviation Regulations and is FAA approved.

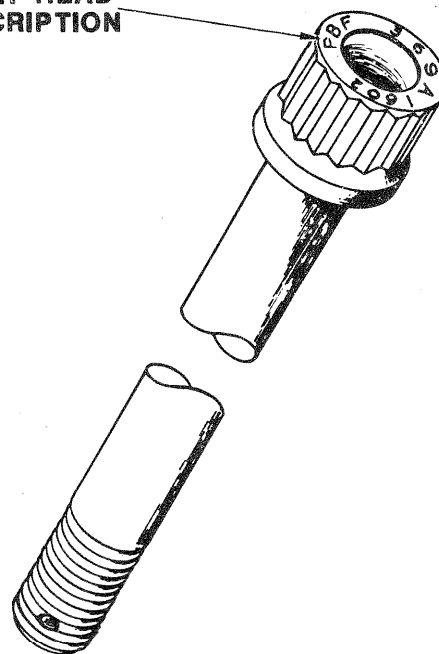


**TAIL ROTOR ASSEMBLY**



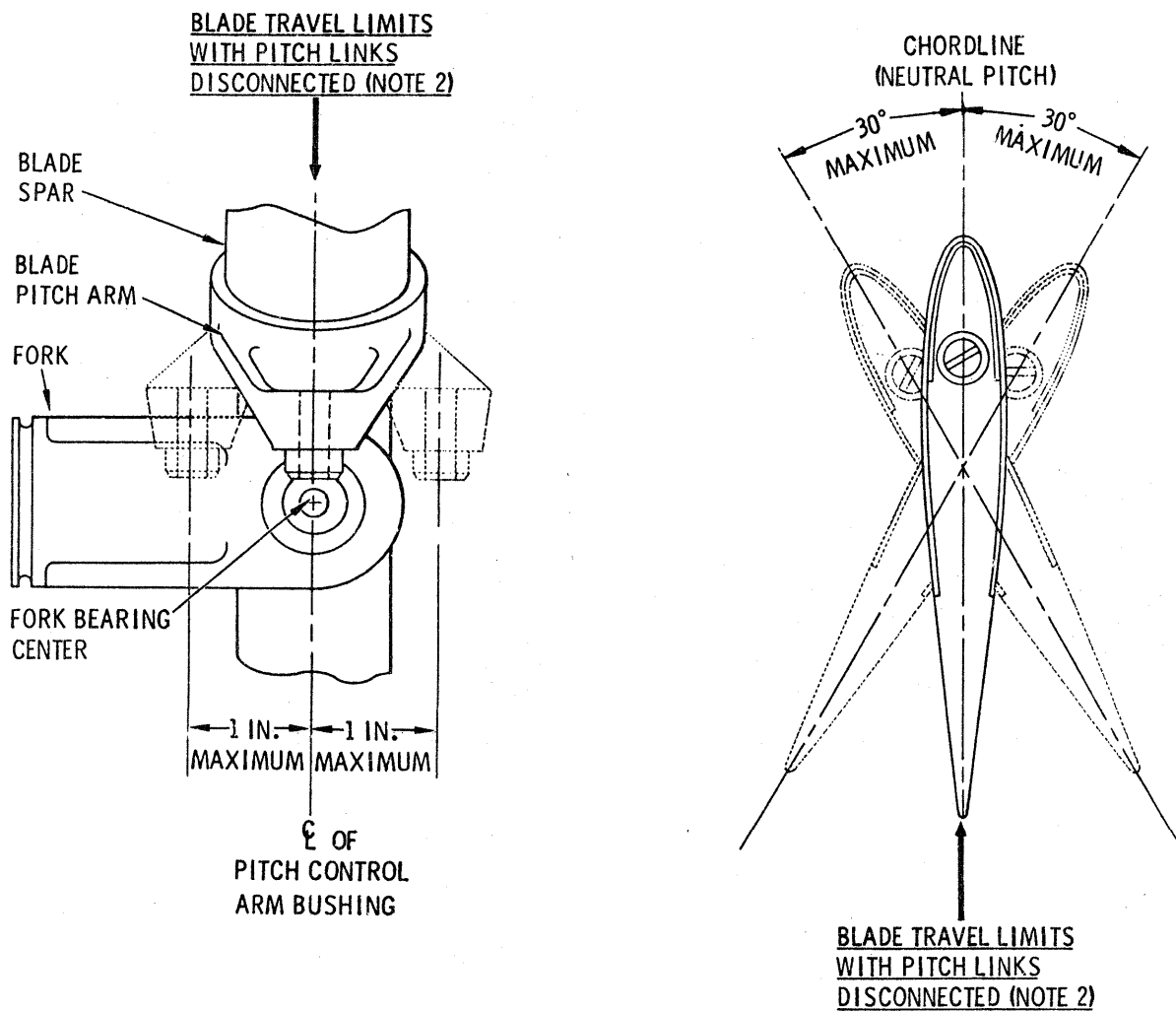
**DETAIL A. SUSPECT BOLT**

**BOLT HEAD  
INSCRIPTION**



**DETAIL B. CORRECTLY  
PROCESSED BOLT**

**FIGURE 1.**



**NOTE 2. CAUTION:** DO NOT ALLOW BLADE PITCH TRAVEL TO EXCEED LIMITS SHOWN. ROTATING THE BLADES TO EXCESSIVE PITCH ANGLES MAY RESULT IN UNDETECTED DAMAGE TO TENSION-TORSION STRAP ASSY.

**FIGURE 2.**