



HN-212.2\*  
DN-153.2\*  
EN-43.2\*  
FN-32.2\*

# SERVICE BULLETIN

DATE: 21 APR 1989  
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**MANDATORY MANDATORY MANDATORY**

\* Supersedes Service Information Notices HN-212, DN-153, EN-43 and FN-32, dated 13 November 1987; and HN-212.1, DN-153.1, EN-43.1 and FN-32.1, dated 03 March 1989. HN-212.1, DN-153.1, EN-43.1 and FN-32.1 were canceled prior to publication and distribution to Owners, Operators and Service Centers.

**SUBJECT:** ONE-TIME INSPECTION AND REPLACEMENT OF TAIL ROTOR FORK BOLT (369A1602).

**MODELS AFFECTED:** All MD Helicopters, Inc. (MDHS) 369H Series helicopters, including 369A (OH-6A), 369D, 369E and 369F/FF Series helicopters equipped with uninscribed or 369A1602-BSC tail rotor fork bolts. All tail rotor fork bolts and tail rotor assemblies in Spares inventories.

**NOTE:** Helicopters equipped with 369A1602-3 tail rotor fork bolts **and** a MS21206C4 washer and all Spares Inventories that have been purged of uninscribed bolts are not affected by the requirements of this Notice.

**TIME OF COMPLIANCE:** **Part I** of this Service Information Notice shall be accomplished within the next 25 hours of operation. In addition, Part 1 of this Notice shall be accomplished on all tail rotor fork bolts and tail rotor assemblies in Spares inventories prior to being installed onto helicopters. Compliance to Part I is essential to ensure the continued airworthiness of all 369 Series helicopters.

**Part II** shall be accomplished at the next 300 hour or annual inspection or at the next disassembly of the tail rotor assembly, whichever occurs first.

**PREFACE:** **Part I** – The possibility exists that some 369A1602 tail rotor fork bolts, manufactured between April 8, 1986 and August 28, 1986, did not receive proper processing at the manufacturer. Inadequate processing of these bolts can result in cracking and eventual bolt failure. This Notice provides instructions to identify and replace those uninscribed bolts with properly inscribed bolts.

**Part II** – MDHI has developed an improved tail rotor fork bolt (369A1602-3). MDHI requires that all operators replace the 369A1602-(BSC) with the improved 369A1602-3 bolt to provide greater resistance to corrosion and a MS21206C4 to provide proper seating of the bolt head shank radius.

## REFERENCE PUBLICATIONS:

- 369H Basic HMI (CSP-H-2) Revised 15 January 1989
- 369D/E HMI Vol. I (CSP-D-2) Revised 01 March 1989
- 369F/FF HMI Vol. I (CSP-F-2) Revised 15 April 1986
- 369H Comp. Overhaul Man (CSP-H-5) Revised 15 March 1982
- 369DEF Comp. Overhaul Man (CSP-DEF-5) Revised 06 March 1989

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## PARTS LIST

<u>Nomenclature</u>	<u>Part No.</u>	<u>Qty.</u>	<u>Source</u>
Bolt, T/R Fork	369A1602-3	1*	MDHI
Washer	MS21206C4	1*	MDHI or Commercial

\* Two required on a four-bladed tail rotor assembly.

## TOOLS AND EQUIPMENT

<u>Nomenclature</u>	<u>Source</u>
Socket, 12 point spline drive (#10 bolt size)	Commercial

## PART I INSPECTION PROCEDURE

- a. Visually inspect all Spares inventories and tail rotor fork bolts installed on helicopters and tail rotor assemblies for proper inscription on the head of the bolt (see Figure 1 ).

### NOTE

- Uninscribed tail rotor fork bolts on helicopters shall be replaced, proceed to **Part II**.
- Remove all uninscribed tail rotor fork bolts from Spares inventories and scrap those fork bolts.

Record compliance to **Part I** of this Service Information Notice in the Compliance Record section of the helicopter Log Book.

## PART II - TAIL ROTOR FORK BOLT REPLACEMENT

- a. Remove tail rotor fork bolts from affected helicopters as follows:



- 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 to exceed 30 degrees from neutral position (see Figure 1). This is equal to blade pitch control movement of approximately one inch in either direction. Unrestricted rotation of blades on hub can excessively bend or stretch strap pack assembly and cause undetected damage to tail rotor assembly when reassembled.
- Do not remove hub-to-drive fork hinge bolt to remove tail rotor assembly. Damage to strap pack may occur.

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## NOTE

To prevent tail rotor balance problems, at reassembly of pans and hardware, mark exact number, locations and positions of all items before removal for correct reinstallation.

1. Remove tail rotor assembly (Basic HMI and HMI Vol. I, Section 8). Removal of pitch control assembly is not required.
2. Disassemble tail rotor assembly into major assemblies (HMI Appendix C and Component Overhaul Manual, Part VII).
3. Remove fork bolt and NAS620C-416L washer (if installed) (HMI Appendix C and Component Overhaul Manual, Part VII).

## NOTE

Contact an Approved MDHI Service Center or Distributor for disposition of removed bolt.



- A MS21206C4 washer must be installed with a 369A1602-3 tail rotor fork bolt.
4. Install a 369A1602-3 fork bolt along with a MS21206C4 washer with the countersunk side towards the bolt head and reassemble hub and fork unit (HMI Appendix C and Component Overhaul Manual, Part VII).
  5. Perform testing and balancing procedures (HMI Appendix C, Part VIII and Component Overhaul Manual, Part VII).
- b. Record compliance with Part II of this Notice in the Compliance Record section of the helicopter Log Book.

**WEIGHT AND BALANCE:** Weight and balance not affected.

The resultant alteration to affected models as described by procedures in this Notice has been shown to comply with Federal Aviation Regulations and is FAA Approved.

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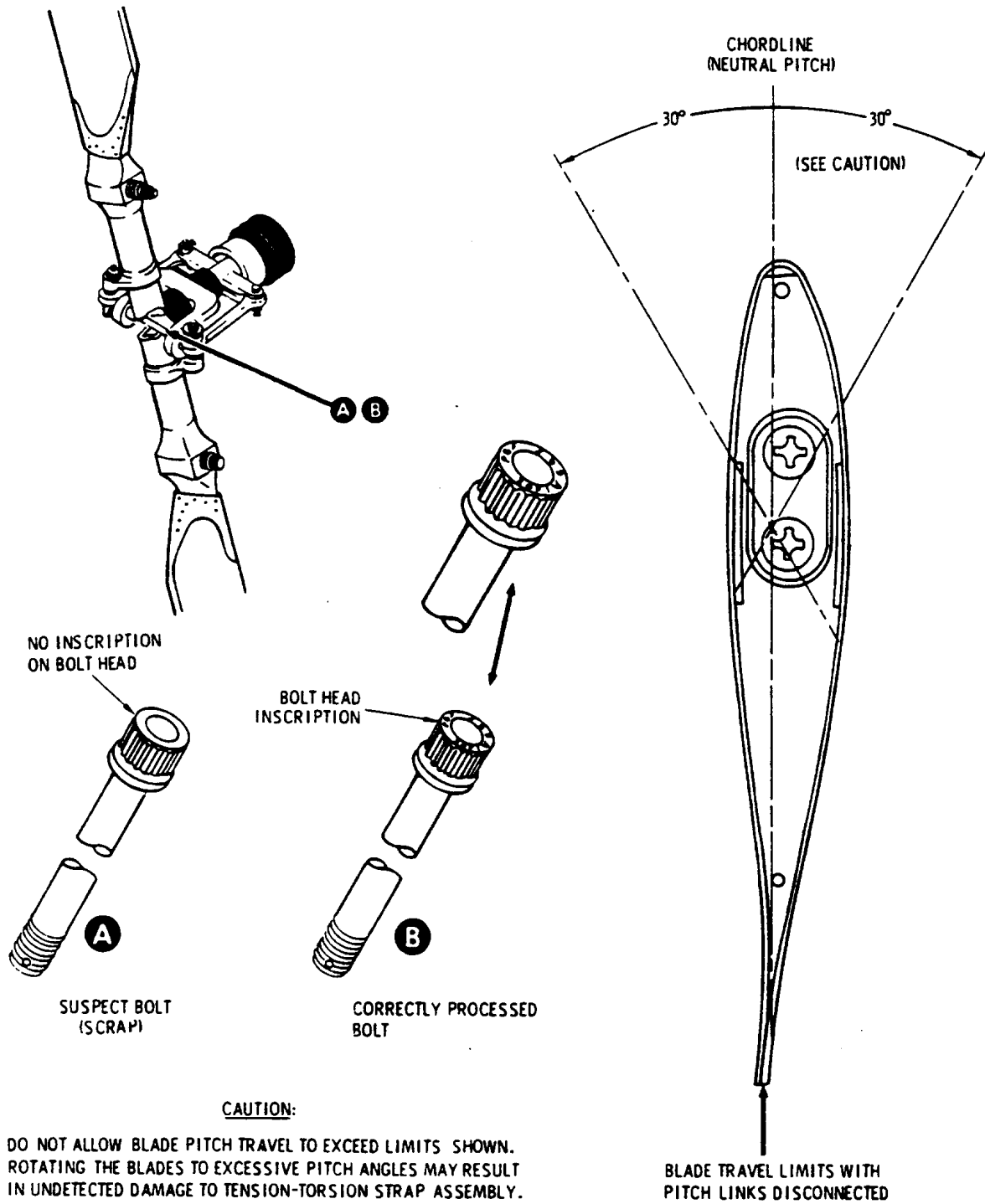
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Figure 1. Inspection of Tail Rotor Fork Bolt.

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