

# URGENT

\*TB 1-1520-240-20-103

## DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

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### ONE TIME INSPECTION OF AFT UPPER BOOST ACTUATORS TO STATIONARY SWASHPLATE RETAINING HARDWARE FOR ALL CH-47D, MH-47D, AND MH-47E AIRCRAFT

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Headquarters, Department of the Army, Washington, D.C.  
23 March 1998

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**DISTRIBUTION STATEMENT A:** Approved for public release; distribution is unlimited.

#### NOTE

THIS PUBLICATION IS EFFECTIVE UNTIL RESCINDED OR SUPERSEDED.

#### 1. Priority Classification. Urgent.

a. Aircraft in Use. Upon receipt of this Technical Bulletin (TB) the condition status symbol of the cited aircraft will be changed to a **red x**. The **red x** may be cleared when the inspection of paragraph 8 below is completed. The affected aircraft shall be inspected prior to the next flight.

b. Aircraft in Depot Maintenance. Same as paragraph 1a.

c. Aircraft Undergoing Maintenance. Aircraft will not be issued until compliance with this TB has been completed.

d. Aircraft in Transit.

(1) Surface/Air Shipment. Prior to first flight.

(2) Ferry Status. Same as paragraph 1a.

e. Maintenance Trainers (Category A and B). Comply within 30 days of receipt of this message.

f. Component/Parts in Stock Including War Reserves at All Levels (Depot and Others). N/A.

g. Component/Parts in Work (Depot and Others). N/A.

#### 2. Task/Inspection Suspense Date. Prior to next flight.

#### 3. Reporting Compliance Suspense Date. No later than 8 April 1998 per paragraph 14.a of this TB.

\*This TB supersedes USAAMCOM Message 181519Z MAR 98 CH-47-98-01 (SOF).

**4. Summary of the Problem.**

- a. Two reports have been received documenting that the wrong bolt was installed between the aft upper boost actuators and the aft stationary swashplate. Both aircraft had come out of the refurbishment/standardization program at CCAD. In addition, confusion may exist when trying to identify the correct bolt due to incorporation and labeling of the forward and aft controls installation on the same page of the parts manual.
- b. For manpower/downtime and funding impacts, see paragraph 12.
- c. The purpose of this TB is to require a one time verification of hardware installation of the aft upper boost actuators to stationary swashplate for proper attachment.

**5. End Items to be Inspected.** All CH/MH-47D/E aircraft.

**6. Assembly Components to be Inspected.**

NOMENCLATURE	PART NUMBER	NATIONAL STOCK NUMBER
Rotor Wing Head Controls Installation	145R3550-6	N/A

**7. Parts to be Inspected.**

NOMENCLATURE	PART NUMBER	NATIONAL STOCK NUMBER
Bolt	145R3650-1	1615-01-115-3609

**8. Inspection Procedures.**

- a. Prepare aircraft for safe ground maintenance.

**NOTE**

The 145R3650-1 bolt assembly consists of a P/N BACB30ST10-52 bolt and a P/N 145R3116-3 hat bushing. Bolts with the BACB30ST10-52 marking should also contain the Boeing P/N 145R3650-1 vibroetched in the dish area of the bolt. Bolts with BACB30ST10-52 marking only should be visually checked to insure the hat bushing is installed under the head of the bolt. If the hat bushing is not installed, replace bolt in accordance with paragraph 9.

- b. Inspect the head of the bolt which attaches both of the upper boost actuators (swiveling and pivoting) to the aft stationary swashplate. Refer to Reference 13a, Figure 177, Item 37 for CH/MH47D aircraft and Reference 13b, Figure 5-6, Item 37 for MH-47E aircraft. Both bolts part number should be 145R3650-1.

c. If part number 145R3650-1 bolts are installed, no further action is required. If other than this bolt is installed, proceed with correction procedures in paragraph 9.

**9. Correction Procedures.**

- a. Remove upper boost actuator (UBA) to stationary swashplate bolt only, in accordance with Reference 13c, Task 7-125 Pivoting and Task 7-127 Swiveling for CH/MH-47D aircraft and Reference 13d, Task 7-147 Pivoting and Task 7-149 Swiveling for MH-47E aircraft.

b. Inspect for damage to the UBA, swashplate. Repair damaged parts as authorized by References 13c and 13d.

- c. Contact the logistical POC listed at paragraph 16b for instructions regarding bushing replacement.

**10. Supply/Parts and Disposition.**

- a. Parts Required. Items cited in paragraph 7 may be required to replace defective items.
- b. Requisitioning Instructions. Requisition replacement parts through normal supply channels using normal supply procedures. All requisitions shall use project code (CC 57-59) 'XDW, 'X-RAY-DELTA-WHISKEY" per this TB.

**NOTE**

Project code "XDW, "X-RAY-DELTA-WHISKEY" is required to track and establish a database of stock fund expenditures incurred by the field as a result of SOF actions.

c. Bulk and Consumable Materials. N/A.

d. Disposition. N/A.

e. Disposition of Hazardous Material. In accordance with Environmental Protection Agency directives as implemented by your Servicing Environmental Coordinator (AR 200-1).

**11. Special Tools, Jigs and Fixtures Required.**

a. Servo Cylinder Safety Blocks.

b. Pitch Link Lock Pins.

**12. Application.**

a. Category of Maintenance. AVUM. Aircraft downtime will be charged to AVUM.

b. Estimated Time Required.

(1) For Inspection.

(a) Total of .25 man-hours using one person.

(b) Total of .25 hours downtime for one end item.

(2) For Replacement.

(a) Total of 6 man-hours using three people.

(b) Total of 2 hours downtime for one end item.

c. Estimated Cost Impact of Stock Fund Items to the Field.

NOMENCLATURE	PART NUMBER/ NATIONAL STOCK NUMBER	QUANTITY	COST EACH	TOTAL \$
Bolt	145R3650-1 1615-01-115-3609	2	\$113.00	\$222.00
Bushing	114R3116-54 3120-01-066-5380	2	\$ 5.13	\$ 10.26
Bushing	145R3116-2 3120-01-129-7649	2	\$ 6.94	\$ 13.88
Cotter Pin	MS24665-374 5315-00-241-7332	2	\$ 3.33	\$ 6.66
Nut	AN320-10 5310-00-176-8114	2	\$ 24.77	\$ 49.54
Washer	AN960-1016 5310-00-167-0625	2	\$ 3.45	\$ 69.00
Maximum total cost per aircraft = \$371.34				

d. TB/MWOs to be Applied Prior to or Concurrently with this Inspection. N/A.

e. Publications Which Require Change as a Result of This Inspection. TM 55-1520-240-23P and TM 1-1520-252-23P shall be changed to better differentiate forward and aft controls installation.

**13. References.**

- a. TM 55-1520-246-23P, CH-47D RPSTL.
- b. TM 1-1520-252-23P, MH-47E RPSTL.
- c. TM 55-1520-240-23, CH-47D Maintenance Manual
- d. TM 1-1520-252-23, MH-47E Maintenance Manual

**14. Recording and Reporting Requirements.**

a. Reporting Compliance Suspense Date (Aircraft). Upon entering requirements of this message on DA Form 2406-13-1 on all subject MDS aircraft, forward a priority message, datafax or e-mail to Cdr, AMCOM, ATTN: AMSAM-SF-A (SOF Compliance Officer), in accordance with AR 95-1. Datafax number is DSN 897-2111 or (256)313-2111. E-mail address is 'safeadm@redstone.army.mil'. The report will cite this message number, date of entry in DA Form 2408-13-1, the aircraft mission design series and serial numbers of aircraft in numerical order.

b. Task/Inspection Reporting Suspense Date (Aircraft). Report any instance of the improper bolt installation to logistical POC in paragraph 16b.

c. Reporting Message Receipt (Spares). N/A.

d. Task/inspection Reporting Suspense Date (Spares). N/A.

e. The following forms are applicable and are to be completed in accordance with DA PAM 738-751,15 June 1992:

**NOTE**

For units using ULLS-A, use applicable 'E' forms.

(1) DA Form 2408-13, Aircraft Status Information Record.

(2) DA Form 2408-13-1, Aircraft Inspection and Maintenance Record.

(3) DA Form 2408-15, Historical Record for Aircraft.

(4) DA Form 2408-16, Aircraft Component Historical Record (only if bolts are replaced).

(5) DA Form 2410, Component Removal and Repair/Overhaul Record (for local use only if bolts are replaced).

**15. Weight and Balance.** N/A.

**16. Points of Contact.**

a. Technical point of contact for this TB is Mr. Larry Wieschhaus, AMSAM-AR-E-I-C-H, DSN 897-4296 or commercial (256) 313-4296. Datafax is DSN 897-4296. E-mail is wieschhausl@avrdecr.redstone.army.mil.

b. Logistical point of contact for this TB is Mr. Norm Huston, SFAE-AV-CH-L, DSN 746-4289 or commercial (256) 876-4289. E-mail is hustonn@peoavn.redstone.army.mil.

c. Forms and records point of contact for this TB is Ms. Ann Waldeck, AMSAM-MMC-RE-FF, DSN 746-5564 or commercial (256) 876-5564. Datafax is DSN 746-4904. E-mail is waldeck-ab@redstone.army.mil.

d. Safety point of contact for this TB is Mr. Dave Scott, AMSAM-SF-A, DSN 897-2068 or commercial (256) 313-2068. Datafax is DSN 897-2111. E-mail is scott-dc@redstone.army.mil. Alternate point of contact is Mr. Teng Ooi, AMSAM-SF-A, DSN 897-2094 or (256) 313-2094. Datafax is DSN 897-2111. E-mail is ooi-tk@redstone.army.mil.

e. Foreign Military Safes (FMS) recipients requiring clarification of action advised by this TB should contact CW5 Joseph L. Wittstrom, Security Assistance Management, AMSAM-SA, DSN 897-0681 or (256)

313-0661. E-mail is wittstrom-jl@redstone.army.mil or Mr. Ronnie W. Sammons, AMSAM-SA-CS-NF, DSN 897-0869 or (256) 313-0869. Datafax is DSN 897-0411 or (256) 313-0411. E-mail is sammons-rw@redstone.army.mil. (Huntsville, AL is GMT minus 6 hours.)

f. After hours, contact the AMCOM Command Operations Center (COC) DSN 897-2066/7 or commercial (256) 313-2066/7.

**17. Reporting of Errors and Recommending Improvements.** You can improve this TB. If you find any mistakes or if you know of a way to improve these procedures, please let us know. Mail your letter or DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to: Commander, US Army Aviation and Missile Command, ATTN: AMSAM-MMC-LS-LP, Redstone Arsenal, AL 35898-5230. You may also submit your recommended changes by e-mail directly to ls-lp@redstone.army.mil. Instructions for sending an electronic 2028 may be found at the back of this manual. A reply will be furnished directly to you.

By Order of the Secretary of the Army:

Official:



JOEL B. HUDSON

*Administrative Assistant to the  
Secretary of the Army*  
03862

DENNIS J. REIMER  
*General, United States Army  
Chief of Staff*

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From: Whomever" <whomever@avma27.army.mil>

To: ls-lp@redstone.army.mil

Subject: DA Form 2028

1. **From:** Joe Smith
2. Unit: home
3. **Address:** 4300 Park
4. **City:** Hometown
5. **St:** MO
6. **Zip:** 77777
7. **Date Sent:** 19-OCT-93
8. **Pub no:** 55-2840-229-23
9. Pub Title: TM
10. **Publication Date:** 04-JUL-85
11. Change Number: 7
12. Submitter Rank: MSG
13. **Submitter FName:** Joe
14. Submitter MName: T
15. **Submitter LName:** Smith
16. **Submitter Phone:** 123-123-1234
17. **Problem:** 1
18. Page: 2
19. Paragraph: 3
20. Line: 4
21. NSN: 5
22. Reference: 6
23. Figure: 7
24. Table: 8
25. Item: 9
26. Total: 123
27. **Text:**

This is the text for the problem below line 27.



