

URGENT

TB 1-1520-240-20-153

DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

MANDATORY MAINTENANCE AND INSPECTION FOR AFT FUSELAGE BELLCRANK FASTENER ON ALL CH-47D, MH-47D AND MH-47E AIRCRAFT

Headquarters, Department of the Army, Washington, D. C.
17 February 2004

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

NOTE

THIS PUBLICATION IS EFFECTIVE UNTIL RESCINDED OR SUPERSEDED.

NOTE

In accordance with AR 95-1, Chapter 6, MACOM Commanders may authorize temporary exception from message requirements. Exception may only occur when combat operations or matter of life or death in civil disasters or other emergencies are so urgent that they override the consequences of continued aircraft operation.

1. Summary

a. Background - The baseline version of the CH-47D and the MH-47E Maintenance Manuals contain figures that are either incorrect or lack proper resolution, possibly causing incorrect Aft Fuselage Bellcrank fastener installation, and consequently causing reduced clearance between control system linkages.

b. Message Purpose -

- (1) Inspect bolt installations, on certain tunnel control linkage joints, for correct bolt orientations.
- (2) Remove incorrectly installed bolts and reinstall with correct bolt orientations.
- (3) Change the Technical Manual to reflect this ASAM.

2. **End Items Affected** All H-47 series aircraft.

3. **Assemblies/Components/Parts Affected**

a. Suspect/discrepant assemblies/components/parts -

Bolt, Close Tolerance P/N MS27576-5-19, NSN 5306-00-005-0743

This TB supersedes USAAMCOM Message, 031845Z FEB 04 CH-47-04-ASAM-01

b. Additional assemblies/components/parts to be inspected -

NOMENCLATURE	PART NUMBER	NATIONAL STOCK NUMBER
Washer, Flat	AN960-516L or NAS1149F0563P	5310-00-167-0836 or 5310-00-167-0820
Nut, Self-locking	MS21224-5	5310-00-151-5430
Pin, Cotter	MS24665-153	5310-00-234-1854
Assembly, Bellcrank	145C3516-1	1680-01-397-0417
Assembly, Link	145CS340-17	3040-01-308-7098
Assembly, Link	414C2520-3	3040-01-117-7349
Assembly, Link	414C2520-3	3040-01-117-7350

NOTE

When complying with the requirements of this message, complete forms and records entries in accordance with DA PAM 738-751. ULLS-A units will use appropriate "E" forms.

4. Initial TAMMS (The Army Maintenance Management System) Compliance Requirements

a. Upon receipt of this message, make the following entry on the DA Form 2408-13-1. Enter a Red Horizontal Dash // - // status symbol with the following statement: "Comply with requirements of CH-47-04-ASAM-01, before [####.#] aircraft hours, but no later than 17 FEB 04." (Calculate [####.#] as current aircraft flight hours plus 10 hours). Commanders who are unable to comply with the requirements of this message within the time frame specified will upgrade the affected aircraft status symbol to a red // X //.

NOTE

The TAMMS compliance reporting form is available at "www.redstone.army.mil/sof/tamms.xls" (use lower case letters only) or may be obtained from the units servicing LAR. Alternate forms may be approved by the AMCOM SOF Compliance Officer.

NOTE

The TAMMS Compliance Report only confirms the unit has made the initial logbook entry for assigned aircraft. TAMMS Compliance Reports will include aircraft serial numbers (in numerical order), date of entry on DA Form 2408-13-1, unit address, local POC name and phone number.

b. **TAMMS Compliance Report** Submit TAMMS Compliance Report via priority email to "safe-adm@redstone.army.mil" no later than 10 FEB 04 in accordance with AR 95-1. If email is not available, the report may be faxed to: SOF Compliance Officer at DSN 897-2111 or (256) 313-2111.

5. Task/Inspection Compliance Reporting Requirements

NOTE

The Task/Inspection Reporting Form is available at "www.redstone.army.mil/sof/log/xls" (use lower case letters only) or may be obtained from the units servicing LAR. This report will cite the message number, date of inspection, aircraft serial number, aircraft hours, component serial number, component hours, and results of the inspection.

a. Aircraft - Submit Task/Inspection Compliance Report for this message to Log POC no later than 20 FEB 04.

b. Retail Stock - N/A.

c. Wholesale Stock - N/A.

6. Special Provisions To Message Requirements (Aircraft) -

- a. Aircraft in AVUM, AVIM, or Depot level maintenance - Commanders, facility managers and contractors will not issue aircraft until they are in compliance with this message.
- b. Aircraft at Contractor Facility - Contractors will inspect DD250 aircraft prior to those aircraft departing for ferry to final destination.
- c. Aircraft in Transit - Unit Commanders in receipt of deployment orders and are unable to comply prior to the date specified paragraph 4.a. may defer initial requirements in accordance with surface/air shipment or ferry status instructions, as appropriate.
 - (1) Surface/air shipment - Within 10 aircraft hours/14 days of arrival.
 - (2) Ferry status/Aircraft away from home station - Comply with message requirements upon arrival at final destination.
- d. Maintenance Trainers (Cat A and B) - Comply with message requirements no later than 3 MAR 04.

7. Technical Procedures/Instructions - The baseline version of the CH-47D Maintenance Manual, TM 55-1520-240-23-9, Tasks 11-238, 11-239, 11-244, 11-245, 11-246, and 11-247, contain figures that are either incorrect or lack proper resolution, possibly causing incorrect fastener installation, and consequently causing reduced clearance between control system linkages. Change 1 of TM 55-1520-240-23-9 corrects the top figure on page 11-962 in Task 11-247 for bolt orientation; it does not correct the remaining task figures. The MH-47E Maintenance Manual, TM 1-1520-252-23-13, Tasks 11-256, 11-257, 11-262 and Task 11-263 also contain figures that show incorrect fastener installation. Additionally, many of the figures in these tasks do not include orientation designators, i.e., outboard/inboard, forward/aft direction arrows, which aid in orienting the technician.

NOTE

Figures 389 and 390 of TM 55-1520-240-23P-3, 15 Sep 03 (C/MH-47D) and Figures 11-14 and 11-15 of TM 1-1520-252-23P-3 (MH-47E) should be referenced in performing this inspection.

NOTE

The figure on page 11-952 in Task 11-244 of the CH-47D Maintenance Manual TM 55-1520-240-23-9 does not have adequate resolution to show the bolt orientation. All four bolts at Station 444.5 should be shown with the bolt heads facing inboard.

- a. Inspection Procedure -
 - (1) Prepare aircraft for safe ground maintenance.
 - (2) Reference Task 11-244 of TM 55-1520-240-23-9, page 11-952 (CH-47D) and Reference Task 11-262 of TM 1-1520-252-23-13 (MH-47E). Inspect Item 15 (4 places) at Station 444.5 to determine if the bolt heads face inboard.
 - (3) If all 4 bolt heads face inboard, the inspection is complete. Proceed to paragraph 8.xx
 - (4) If all 4 bolt heads do not face inboard, proceed to paragraph 7.c.
- b. Fastener Removal, Inspection and Replacement -

NOTE

The figure on page 11-952 in Task 11-244 of TM 55-1520-240-23-9 (CH-47D) does not have adequate resolution to show the correct bolt orientation. All four bolts at Station 444.5 should be shown with the bolt heads facing inboard. The figure on page of Task 11-262 of TM 1-1520-252-23-13 (MH-47E) is incorrect. All four bolts at Station 444.5 should be shown with the bolts heads facing inboard.

NOTE

It is not necessary to remove correctly installed fastener hardware unless it prevents removal of incorrectly installed fastener hardware, or visual inspection indicates damage to correctly installed fastener hardware or control linkage hardware.

- (1) Perform Task 11-244 of TM 55-1520-240-23-9 (C/MH-47D), Task 11-262 of TM 1-1520-252-23-13 (MH-47E) to remove incorrectly installed fastener hardware.
- (2) Inspect the parts at Station 444.5 listed in paragraphs 3.1 and 3.2 of this message for abnormal wear or abrasion. If cotter pins are removed discard and replace with new ones.

NOTE

Three figures on pages 11-957 and 11-958 in Task 11-244 of TM 55-1520-240-23-9 (CH-47D) either do not have adequate resolution to show the correct bolt orientation, or are incorrect. All four bolts at Station 444.5 should be shown with the bolt heads facing inboard. Three figures on pages 1 and 2 of Task 11-264 of TM 1-1520-252-23-13 (MH-47E) either do not have adequate resolution to show bolts at Station 444.5 should be shown with the bolt heads facing inboard.

NOTE

The figure on page 11-928 in Task 11-238 of TM 55-1520-240-23-9 (CH-47D) is incorrect. All four bolts at Station 444.5 should be shown with the bolt heads facing inboard. The figure on page 2 of Task 11-256 of TM 1-1520-252-23-13 (MH-47E) is incorrect. All four bolts at Station 444.5 should be shown with the bolt heads facing inboard.

NOTE

The figure on page 11-930 in Task 11-239 of TM 55-1520-240-23-9 (CH-47D) does not have adequate resolution and is incorrect. All four bolts at Station 444.5 should be shown with the bolt heads facing inboard. The figure on page 2 of Task 11-257 of TM 1-1520-252-23-13 (MH-47E) is incorrect. All four bolts at Station 444.5 should be shown with the bolt heads facing inboard.

(a) If either bellcrank (P/N 145C3516-1) exhibits cracks or abnormal wear or abrasion, remove per TM 55-1520-240-23-9, Task 11-246 and replace per Task 11-264 (C/MH-47D) or remove per TM 1-1520-252-23-13, Task 11-264 and replace per Task 11-265 (MH-47E).

(b) If any connecting links (P/N's 145CS340-17, 414C2530-3, 145C2501-2, 414C2520-4) exhibit cracks or abnormal wear of abrasion, remove per TM 55-1520-240-23-9 Tasks 11-238 and/or 11-244, and replace per Tasks 11-239 and/or 11-245 (C/MH-47D); or remove per TM 1-1520-252-23-13 Tasks 11-256 and/or 11-262, and replace per Tasks 11-257 and/or 11-263 (MH-47E)

NOTE

The bottom figure on page 11-955 in Task 11-245 of TM 55-1520-240-23-9 is incorrect. The figure on page in Task 11-262 and page 4 (Change 4) in Task 11-263 TM 1-1520-252-23-13 is incorrect. The bolt heads for all four bolts should face inboard.

NOTE

The two outboard bolts should be installed first in the step below.

(3) Perform Steps 10 through 12 of Task 11-245 of TM 55-1520-240-23-9 (C/MH-47D) to reinstall each of the 4 sets of fastener hardware or perform Steps 10 through 12 of Task 11-263 of TM 1-1520-252-23-13 (MH-47E), the inspection is complete. Proceed to paragraph 7c.

c. Clear the initial entry from paragraph 4.a. and note compliance on the Aircraft DA Form 2408-15.

8. Procedures/Instructions for Assemblies/Components/Parts in Work or in Stock (At all levels including War Reserves). N/A.

9. Special Tools and Fixtures Required. N/A.

10. Supply/Parts (Requisition/Disposition)

a. Parts Required –

Nomenclature	P/N	NSN	Qty	Cost ea.	Total \$
Bolt, Close Tolerance	MS27576-5-19	5306-00-005-0743	4	\$14.77	\$59.08
Washer, Flat	AN960-516L or NAS1149F0563P	5310-00-167-0836 or 5310-00-167-0820	10 10	\$0.68 (HD) \$1.06 (HD)	\$0.07 \$0.11
Nut, Self-Locking	MS21224-5	5310-00-151-5430	8	\$1.92	\$15.36
Pin, Cotter	MS24665-153	5315-00-234-1854	8	\$1.28 (HD)	\$0.13
Assembly, Bell-crank	145C3516-1	1680-01-397-0417	2	\$1170.00	\$2340.00
Assembly, Link	145CS340-17	3040-01-308-7098	2	\$1036.00	\$2072.00
Assembly, Link	414C2520-3	3040-01-117-7349	1	\$997.00	\$997.00
Assembly, Link	414C2520-4	3040-01-117-7350	1	\$975.00	\$975.00

Total cost per Aircraft (if all parts replaced) = \$6458.75

b. Bulk and Consumable Materials – N/A

c. Requisitioning Instructions – Requisition replacement parts using normal supply procedures. All requisitions shall use Project Code (CC 57-59) “X2K” (X-ray-two-kilo).

NOTE

Project Code “X2K” is required to track and establish a data base of stock fund expenditures incurred by the field as a result of message actions.

d. Disposition of discrepant parts/components – Demilitarize/mutilate in accordance with TM 1-1500-328-23.

e. Disposition of hazardous material – N/A.

11. Maintenance Application

a. Category of maintenance – AVUM

b. Estimated time required –

(1) Time to complete inspection – Total of 0.5 man-hours using 1 persons with 0 hours downtime per end item.

(2) Time for repair/replacement – total of 6 man-hours using 2 persons with 3 hours downtime per end item.

12. Publication Requirements

a. References –

(1) AR 95-1.

(2) DA Pam 738-751.

(3) TM 55-1520-240-23

(4) TM 55-1520-240-23P-3, 15 Sep 03

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(5) TM 1-1520-252-23

(6) TM 1-1520-252-23P-3

b. Publication Changes – TM 55-1520-240-23 and TM 1-1520-252-23 shall be changed to reflect this message. A copy of this message will be used as authority to implement the change until the official change is received.

13. Points of Contact

a. Technical points of contact are –

(1) Primary - Michael B. Moore, AMSRD-AMR-AE-C, DSN 897-2350, ext. 9842 or (256) 705-9842. Fax is DSN 897-2350, ext. 9900 or (256) 705-9900. Email is "mooremb@rdec.redstone.army.mil."

(2) Alternate – Dennis W. Ganey, AMSRD-AMR-AE-C, DSN 897-2350, ext. 9828 or (256) 705-9828. Fax is DSN 897-2350, ext. 9900 or (256) 705-9900. Email is "ganeydw@rdec.redstone.army.mil".

b. Logistical points of contact are –

(1) Primary – Bill Olson, SFAE-AV-CH-CS, DSN 897-3379 or commercial (256) 313-3379. Fax is 897-4348 or (256) 313-4348. E-mail is "william.olson@peoavn.redstone.army.mil".

(2) Alternate – Jack Martin (AEPCO), SFAE-AV-CH-CS, DSN 897-3617 or (256) 313-3617. Fax is DSN 897-4348 or (256) 313-4348. Email is "jack.martin@peoavn.redstone.army.mil".

c. Wholesale Material point of contact (spares) is Ms. Geri Reddy, AMSAM-MMC-AV-CA, DSN 897-1454 or (256) 313-1454. Fax is DSN 897-1106 or . Email is "geri.reddy@redstone.army.mil".

d. Forms and Records point of contact is Ms. Ann Waldeck, AMSAM-MMC-MA-NM, DSN 746-5564 or (256) 876-5564. Fax is DSN 746-4904 or (256) 876-4904. E-mail is "ann.waldeck@redstone.army.mil".

e. Safety points of contact are –

(1) Primary – Mr. Frank Rosebery (SAIC), AMSAM-SF-A, DSN 788-8631 or (256) 842-8631. Fax is DSN 897-2111 or (256) 313-2111. E-mail is "frank.rosebery@redstone.army.mil".

(2) Alternate – Mr. Russ Peusch, AMSAM-SF-A, DSN 788-8632 or (256) 842-8632. Fax is DSN 897-2111 or (256) 313-2111. E-mail is "russel.peusch@redstone.army.mil".

f. Foreign Military Sales point of contact is Mr. Ronnie W. Sammons, AMSAM-SA-AS-UT, DSN 897-0875 or (256) 313-0875. Fax is DSN 897-0411 or (256) 313-0411. E-mail is "sammonsrw@redstone.army.mil".

g. After hours, contact the AMCOM OPERATIONS CENTER (AOC) DSN 897-2066/7 or (256) 313-2066/7.

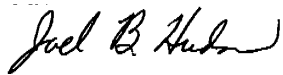
NOTE

A listing of published safety messages can be viewed at "<https://ams14.redstone.army.mil/safety/sof/index/html>". This is a secured website which requires an Army Knowledge Online (AKO) ID and password.

By Order of the Secretary of the Army:

Official:

PETER J. SCHOOMAKER
General, United States Army
Chief of Staff



JOEL B. HUDSON
Administrative Assistant to the
Secretary of the Army
0404203

DISTRIBUTION:

To be distributed in accordance with Initial Distribution Number (IDN) 314111, requirements for TB 1-1520-240-20-153.

These are the instructions for sending an electronic 2028

The following format must be used if submitting an electronic 2028. The subject line must be exactly the same and all fields must be included; however only the following fields are mandatory: 1, 3, 4, 5, 6, 7, 8, 9, 10, 13, 15, 16, 17, and 27.

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

To: 2028@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.