URGENT

***TB1-1520-237-20-199**

DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

ALL UH-60 HELICOPTERS SERIES WITH THE INTERNAL RESCUE HOIST BRACKET ASSEMBLY P/N 70800-02508-046

Headquarters, Department of the Army, Washington, D.C.

9 October 1997

NOTE

THIS PUBLICATION IS EFFECTIVE UNTIL RESCINDED OR SUPERSEDED.

1. Priority Classification. URGENT.

a. Aircraft in use. Upon receipt of this technical bulletin the condition status symbol of the cited aircraft will be changed to a Red Horizontal Dash // - //. The Red Horizontal Dash // - // may be cleared when the inspection of paragraph 8 below is completed. The affected aircraft shall be inspected, as soon as practical but no later than the Task/Inspection suspense date. Failure to comply requirements of this Technical Bulletin within the time frame specified will cause the status symbol to be upgraded to a Red " X".

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

c. Aircraft undergoing maintenance. Same as paragraph 1.a.

d. Aircraft in transit.

(1) Surface/Air shipment. Same as paragraph 1.a.

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

e. Maintenance Trainers. (Category A and B). Same as paragraph 1.a.

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

(1) Wholesale Stock. N/A
(2) Retail Stock. N/A

*This TB supersedes USAATCOM Aviation Safety Action Message 1315022 AUG 97, UH60-97-ASAM-17

g. Component/Parts in stock at all levels (Depot Level And Others). Items listed in paragraphs 6 and 7 in work will not be issued until compliance with this Technical Bulletin.

2. Task/Inspection Suspense Date. Within next 10 flight hours/14days.

3. Reporting Compliance Suspense Date. No later than 5 September per paragraph 14.a of this TB.

4. Summary of Problem.

a. The UH-60 internal rescue hoist bracket assembly, aluminum structural plate, P/N 70800-02508-108, (Cage Code 78286) has been identified as cracking from the hole for the stud that holds the high performance hoist to the forward end of the bracket. Cracking of the -108 aluminum structural plate is caused by a preloading condition as a result of improper initial installation procedures, and as a result of subsequent incorrect installation of the hoist, and/or as a result of this part being locally manufactured which precludes the proper heat treatment or bend radius of the -108 aluminum structural plate.

NOTE

Only aluminum structural plates, P/N 70800-02508-108, (CAGE CODE 78286) are authorized to be installed on the internal rescue hoist bracket assembly.

b. For manpower/downtime and funding impacts see paragraph 12.

c. The purpose of this TB is to require a visual inspection of all aluminum structural plates, P/N 70800-02508-108 for cracking and to determine if this part has been locally manufactured. In Addition, visually inspect for cracks in the BL 34.50 beam. All internal rescue hoist bracket assemblies P/N 70800-02508-046 are to be removed and reinstalled on a onetime basis utilizing the procedure included in this TB.

5. End Items to be inspected. All UH-60 aircraft, with the internal rescue hoist bracket assembly P/N 70800-02508-046 installed.

6. Assembly Components to be inspected.

Nomenclature	Part No.	NSN
Internal Rescue Hoist Bracket Assembly	70800-02508-046	1560-01-242-1657

7 . Parts to be inspected.

Nomenclature	Part No.	NSN	QTY
Aluminum Structural Plate	70800-02508-108	1560-01-207-7478	

8. Inspection Procedures.

At the next 10-hour/14 day inspection, remove the PM 70800-02508-046-bracket assembly. Visually inspect the aluminum structural plate P/N 70800-02508-108 for evidence of cracking and to determine if this part has been locally manufactured. In Addition, visually inspect for cracks in the BL 34.50 beam.

9. Correction Procedures. Replace any 70800-02508-108 aluminum structural plates found to be cracked of if this part has been locally manufactured. At the next 10 hour 14 day inspection, remove and

reinstall all 70800-02508-046 bracket assemblies utilizing the following rescue hoist installation procedure on a one time basis to eliminate the possibility of preloading this part.

Step 1. Remove the 70800-02508-046 airframe bracket assembly from the aircraft and inspect for any indication of wear or other cracks (BL 34.50 Beam). Replace any worn, cracked and or locally manufactured structural plates as required, and perform standard sheet metal repair on any cracks found on BL 34.50 beam. When replacing the 70800-02508-108 and -109 (-046 bracket assembly) make sure the -108 and -109 are assembled such that they are oriented with the -108 flange, which mates with the 70800-02508-043 channel assembly, in a waterline plane. Additionally, the flange of the -109, which mates with the BL 34.50 beam, must make contact with the beam such than no gaps exceed .005 inches.

Step 2. Loosely attach 70800-02508-046 bracket assembly to the to the channel assembly P/N 70800-02508-043.

Step 3. Loosely attach the -043 channel assembly and the -046 to the cabin ceiling with bolts and washers.

Step 4. Using available tolerance between the screws/studs and holes, tighten screws to provide the Best fit of the -046 bracket to the longitudinal aircraft frame member located at BL 34.50.

Step 5. Verify that the interface of the -046 bracket matches to longitudinal aircraft frame member Located at BL 34.50 with a feeler gauge at the heel and toe edges. A maximum mismatch Of .005 is permissible, No other gaps are allowed at the interface.

Step 6. Verify the hole location of the -046 bracket to assure proper alignment with the longitudinal' Aircraft frame member. Shim as required to maintain the conditions of step 5. If misaligned Condition exist perform a standard sheet metal repair on the inboard side of the Longitudinal aircraft frame member at BL 34.50 and re-drill the holes to assure no preload Condition exists. Torque bolts to 47-53 inch pounds.

Step 7. Install stud in channel and bracket with washers and nut. Torque nut to 165-275 inch Pounds. Install cotter pin.

Step 8. Slide plate over floor fitting, while positioning quick disconnect fitting over other floor fitting.

Step 9. Secure adapter plate to floor fitting with quick disconnect fitting.

Step 10. Release hoist reaction arm from stud on hoist post. Remove release pin connecting Reaction arm assembly to post.

Step 11. Place reaction arm in horizontal position. Install release pin.

Step 12. Remove release pins from bottom of base plate.

Caution

If reaction are is moved and hits mechanical stops before Lining up UH-60 (Aircraft Position 3) holes, move reaction arm in other direction until holes line up. Do not force arm.

Step 13. Move reaction arm until UH-60 (Aircraft Position 3) holes in lower baseplate line up with holes in reaction arm. Install release pins.

Caution

Two or more persons shall handle hoist during installation.

Step 14. Lift hoist into helicopter. Release quick release adapters at top and bottom of hoist.

Step 15. Position so quick disconnect adapters mate with adapter plate and are directly under channel anchor stud.

Caution

Make sure that reaction arm and hoist base plate quick disconnect release adapters connect to adapter plate anchor studs. Do not over extend vertical adjustment as it may cause hoist binding and damage helicopter structure.

Step 16. Pull vertical adjustment lock knob, turn vertical adjustment detent until quick release adapter Can be locked over channel anchor stud. Do not lift the quick release adapter to engage the stud. Adjustment by use of the vertical adjustment detent only will provide vertical play.

Step 17. Lock all quick-release adapters.

NOTE

Use hydraulic fluid, TM 1-1520-237-23, Item 190, appendix D
When using hoist in temperature below minus 40 degrees Fahrenheit (minus 40 degrees Celsius).

Step 18. Fill winch and boom head with dexron automatic transmission fluid TM 1-1520-237-23, Item 448, appendix D until all three oil level indicators show full (figure 16-23, sheet 2, detail C).

Step 19. Remove protective cap from cable cutter cartridge and remove aluminum shorting strips Installed between cartridge electrical connector pins. Save protective cap and shorting strips.

Step 20. Connect cable cutter harness to cable cutter cartridge electrical connector.

Step 21. Place hoist control box helicopter position switch S-1 to 2-4.

Step 22. Disconnect cable cutter harness from cable cutter cartridge electrical connector. Install Aluminum shorting strips between pins of cartridge electrical connector, and install protective cap on connector.

Step 23. Remove the hoist and check the -046 bracket for cracks after 5 flight hours with the hoist Installed. If there are no cracks present, the aircraft is released for normal hoist use.

10. Supply/Parts and Disposition.

a. Parts Required. Items cited in paragraph 6 and 7 might be required to replace defective items.

b. Requisitioning Instructions. Requisition replacement parts using normal supply procedures. All requisitions shall use project code (cc 57-59) “XDO”.

NOTE

Project Code “XDO” 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 Material. N/A.

d. Disposition. Dispose of removed parts/components in accordance with normal supply procedures.

e. Disposition of Hazardous Material. IAW environmental protection agency directives as implemented by your servicing environmental coordinator (AR 200-1).

11. Special Tools, Jigs and Fixtures Required. As required.

12. Application.

a. Category of Maintenance. AVUM, aircraft downtime will be charged to AVUM.

b. Estimated Time Required for Inspection.

(1) Total of 3.5 man-hours using one person.

(2) Total of 3.5 hours downtime for one end item.

c. Estimated Time Required To Replace.

(1) Total of 6 man-hours using one person.

(2) Total of 3.50 hours downtime for one end item.

d. Estimated cost impact of stock fund items to the field

Nomenclature	Part No.	NSN	QTY	COST EA
Aluminum Structural Plate	70800-02508-108	1560-01-207-7478	1	$55.43

e. TB/MWOS to be Applied Prior to or Concurrently with this Inspection. N/A.

f. Publications Which Require Change as a Result of This Inspection. TM 1-1520-237-23 and TM 1-1520-250-23 shall be changed to reflect this TB. A copy of this TB shall be inserted in the appropriate TM as authority to implement the change until the printed change is received.

13. References.

a. TM 1-1520-237-23.

b. TM 1-1520-250-23.

14. Recording and Reporting Requirements.

a. Reporting Compliance Suspense Date (Aircraft). Upon entering requirements of this Technical Bulletin on DA Form 2408-13-1 on all subject Mission Design Series (MDS) aircraft, forward a priority message, Datafax or e-mail to Commander, AMCOM, ATTN: AMSAM-SF-A (SOF Compliance Officer), per AR 95-3. Datafax Number is DSN 788-8643 or Commercial (205) 842-8643. E-mail address is safeadm@redstone.army.mil. The report will cite this Technical Bulletin 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). N/A.

c. Reporting Compliance Suspense Date (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 Jun 92.

(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.

15. Weight and Balance. N/A.

16. Points of Contact.

a. Technical point of contact for this TB is Mr. William Brooks, AMSAT-R-ECU, DSN 693-1688 or commercial 314-263-1688. E-mail is brooksw@stl.army.mil.

b. Logistical point of contact for this TB is Ms. Barb Quick, AMSAM-DSA-UH-L DSN 955-0350 or commercial 205 876-0350.

c. Forms and Records point of contact for this TB is Ms. Ann Waldeck, AMSAM-MMC-RE-F, DSN 876-5564 or (205) 876-5564, Datafax is DSN 876-4904. E-mail is Waldeck-ab@redstone.army.mil.

d. Safety Point of contact for this TB is Mr. Dave Scott, ASAM-SF-A, DSN 788-8620 or commercial 205-842-8620, Datafax is 205-842-8643. E-mail is scott-dc@ccsmpt.redstone.army.mil.

e. Foreign Military Sales (FMS), Recipients requiring clarification of action advised by this TB should contact Mr. Ronnie Sammons, AMSAM-SA-CS-NF, DSN 897-0869 or commercial 205-313-0869. Datafax is 205-313-0411. (Huntsville, AL is GMT minus 6 HRS)

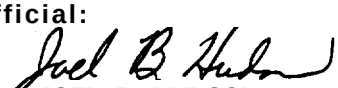
f. After hours, contact AMCOM Command Operations Center (COC), DSN 897-2066/7 or Commercial (205) 313-2066/7.

17. Reporting of Errors and Recommending Improvements. You can help improve this TB. If you find any mistakes or it you know of a way to improve these procedures, Please let us know. You may submit your recommended changes by E-mail directly to Is-Ip@redstone.army.mil. A reply will be furnished directly to you. Instructions for sending an electronic 2028 may be found at the back of this manual.

By Order of the Secretary of the Army:

DENNIS J. REIMER
General, United States Amy
Chief of Staff

Official:



JOEL B. HUDSON
Administrative Assistant to the Secretary of the Army
03855

DISTRIBUTION:
To be distributed in accordance with Initial Distribution Number (IDN) 313716, requirements for TB 1-1520-237-20-199

ELECTRONIC DA FORM 2028 INSTRUCTIONS

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@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:*** AL
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.