

URGENT

TB 1-2840-229-20-11

DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

MANDATORY REPLACEMENT OF HIGH PRESSURE FUEL FITTING ON ALL UH-1 AND AH-1 SERIES AIRCRAFT FOR T53-L-13B ENGINES

Headquarters, Department of the Army, Washington, D. C.
24 March 1997

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THIS PUBLICATION IS EFFECTIVE UNTIL RESCINDED OR SUPERSEDED.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 TB, 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 para 8 is completed. The affected aircraft shall be inspected as soon as practical but no later than the task/inspection suspense date. Failure to comply with the requirements of this TB within the time frame will cause the status symbol to be upgraded to a **red X**.

b. Aircraft in Depot Maintenance. Aircraft will not be issued until compliance with this TB has been completed.

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

d. Aircraft in Transit.

(1) Surface/Air Shipment. Within 25 hours or 60 days of arrival.

(2) Ferry Status. Inspect at final destination.

e. Maintenance Trainers (Category A and B). N/A.

f. Component/Parts in Stock Including War Reserves at All Levels (Depot and Others). Upon receipt of this TB the materiel in condition code A listed in para 6 shall be placed in condition code D and retagged with a test/modification tag/label-materiel (blue color) DD Form 1578/1578-1. The authority block must reference inspection required per this Tb. Do not remove servicable tags. ATCOM will dispatch a maintenance team to the depots to inspect/repair and comply with TAMMS requirements. This command will coordinate with depot on maintenance team.

This TB supersedes USAATCOM (PROV) Message UH-1 -97-ASAM-03 and AH-1-97-ASAM-02.

TB 1-2840-229-20-11

- 2. **Task/Inspection Suspense Date.** Within 25 hours/60 days.
- 3. **Reporting Compliance Suspense Date.** No later than 11 April 1997 per para 14a of this TB.
- 4. **Summary of the Problem.**

a. An Inflight fire on a UH-1 aircraft has been determined to have originated from a cracked high pressure fuel fitting. Both the UH-1 and AH-1 helicopters use this fitting on the T53 engines. The fitting is made of aluminum. An analysis has shown that, in this application, the present aluminum fitting is insufficient in strength. To prevent future failures of these fittings, they are being removed from service and replaced by a stainless steel fitting.

b. For manpower/downtime and funding impacts, see para 12.

c. The purpose of this TB is to require a one time replacement of the aluminum high pressure fitting with a stainless steel fitting.

5. **End Items to be Inspected.** All UH-1H/V and AH-1 aircraft.

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

NOMENCLATURE	PART NUMBER	NATIONAL STOCK NUMBER
T53-L-13B	1-000-060-22	2840-00-134-4808
	1-000-060-23	2840-00-621-1860
Fuel Control Main	106500A1 (TA-7)	2915-01-218-9779
	100770A4 (TA-7)	2915-01-005-9197

7. **Parts to be Inspected.**

NOMENCLATURE	PART NUMBER	NATIONAL STOCK NUMBER
Nipple, Tube	MS24392D4	4730-00-834-9560
Alternate Hardware:		
Union, Flared Tube	AN815-4D	

8. **Inspection Procedures.**

a. The current nipple is used in five (5) locations on the T53 engine; the airbleed hose (1 each), IGV actuator (2 each), accessory drive gearbox (1 each), fuel lines (1 each), and main fuel control/overspeed governor (4 each). (Reference TM 1-2840-260-23P, figure 2, item 11; figure 4, item 11; figure 31, item 8; figure 47, item 25; and figure 51, item 6).

b. Implement replacement per para 9.

9. **Correction Procedures.**

NOTE

The approved item name is tube nipple, TM 55-2840-229-23 uses the item name union. Both terms are the same in intent.

NOTE

Do not remove fuel control to replace the nipples. Cap all fittings and hoses to prevent contamination.

a. Remove the current MS24392D4 nipple (5 locations as referenced in para 8a) in accordance with TM 55-2849-229-23. Removal and replacement of the bleed band high pressure fitting at the fuel control will be difficult. The clearance between the hex of the fitting and the surrounding housing is insufficient to allow a standard socket or wrench to be used. Remove this fitting as follows:

(1) Disconnect the wiring bundle aft of the fuel control and move it out of the way.

(2) Remove the fuel hose (figure 47, item 18).

(3) Modify a thin wall 11/16 inch 3/8 inch drive 12 point socket by grinding or turning the outside diameter, removing just enough material to allow it to fit onto the fitting and clear the surrounding housing. Approximate final dimensions will be 0.915 inch diameter and for a 0.100 inch length. Other methods of tool modifications are authorized as long as a modified tool fully engages the nipple hex.

(4) An alternate method of removal of the fitting is to use a pair of locking pliers (vice grips) on the threads of the aluminum fitting.

b. Install stainless steel nipples, MS24392J4, NSN 4730-00-684-6912, and preformed packing, MS83248/1-904, NSN 5330-00-020-0203, and torque nipple (all locations) to 55 to 65 in.-lbs.

10. Supply/Parts and Disposition.

a. Parts Required. **Items** cited in paragraph 9b will be required to replace defective items.

b. Requisitioning Instructions. Normal supply procedures.

c. Bulk and Consumable Materials. One 11/18 inch 3/8 drive 12 point socket modified per para 9a(3), and as stated in TB.

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

e. Disposition of Hazardous Material. N/A.

11. Special Tools, Jigs and Fixtures Required. N/A.

12. Application.

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

b. Estimated Time Required.

(1) Total of 8 manhours using 1 person.

(2) Total of 8 hours downtime for one end item.

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

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 1-2840-260-23P and TM 55-2840-229-23, DMWR 1-2840-113, and DMWR 55-2915-335 shall be changed to reflect this TB. A copy of this TB shall be inserted in the appropriate manuals as authority to implement the change until the printed change is received.

13. References.

a. TM 1-2840-260-23P.

b. TM 55-2846-229-23.

c. DMWR 1-2840-113.

d. DMWR 55-2915-335.

14. Recording and Reporting Requirements.

a. Reporting Compliance Suspense Date (Aircraft). Upon entering requirements of this TB on DA Form 2488-13-1 on all subject MDS aircraft, forward a priority message, datafax or E-Mail to Commander, ATCOM, ATTN: AMSAT-R-X (SOF Compliance Officer), per AR 95-3. Datafax number is DSN 693-2064 or Commercial (314) 263-2064. E-Mail address is "AMSATRXS@EMH4.STL.ARMY.MIL". The report will cite this TB number, date of entry In DA Form 2408-13-1, the aircraft mission design series and serial numbers of aircraft in numerical order.

TB 1-2840-229-20-11

- 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 June 1992:
 - (1) DA Form 2408-5-1, Equipment Modification Record (Component).
 - (2) DA Form 2408-13, Aircraft Status Information Record.
 - (3) DA Form 2408-13-1, Aircraft Inspection and Maintenance Record.
 - (4) DA Form 2408-15, Historical Record for Aircraft.

15. Weight and Balance. N/A.

16. Points of Contact.

- a. Logistical point of contact for this TB is Mr. Charlie Elkins, AMSAT-D-WAU, DSN 693-2004 or Commercial (314) 263-2004. FAX DSN 693-1508 or Commercial (314) 263-1508.
- b. Technical point of contact for this TB is Mr. Dan Flesher, AMSAT-R-EPE, DSN 693-0316 or Commercial (314) 263-0316.
- c. Forms and Records point of contact for this TB is Ms. Ann Waldeck, AMSAT-I-MDM, DSN 490-2318 or Commercial (314) 260-2318.
- d. Safety point of contact for this TB is Mr. Jim Wilkins, AMSAT-R-X, DSN 693-2258 or Commercial (314) 263-2256.
- e. Foreign Military Sales (FMS) recipients requiring clarification of action advised by this TB should contact CW5 Jay Nance/Mr. Ron Van Rees, AMSAT-D-S, DSN 693-7844/3216 or Commercial (314) 263-7844/3216.
- f. After hours contact ATCOM Command Operations Center (COC) DSN 693-2066/2067 or Commercial (314) 263-2066/2067.

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 Troop Command, ATTN: AMSAT-I-MP, 4300 Goodfellow Blvd., St. Louis, MO 63120-1798. You may also submit your recommended changes by E-Mail directly to <mpmt%avma28@st-louis-emh7.army.mil>. A reply will be furnished directly to you.

By Order of the Secretary of the Army:

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

Official:



JOEL B. HUDSON

*Administrative Assistant to the
Secretary of the Army*
03232

DISTRIBUTION:

To be distributed in accordance with DA Form 12-31-E, Mock no. 3694, requirements for TB 1-2840-229-20-11.

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: <mpmt%avma28@st-louis.emh7.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.

