URGENT

*TB 1-2840-229-20-12

DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

REVISION OF TB 1-2840-229-20-11, 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. 15 January 1998

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

NOTE

THIS PUBLICATION IS EFFECTIVE UNTIL RESCINDED OR SUPERSEDED

NOTE

This TB supersedes TB 1-2840-229-20-11 (UH-1-97-ASAM-30 AND AH-1-97-ASAM-02) Mandatory Replacement of High Pressure Fuel Fitting on All UH-1 and AH-1 Series Aircraft for T53-L-13B Engines.

- 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 paragraph 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 may be released prior to compliance with this TB. The aircraft must still meet the task inspection suspense date.

*This TB supersedes TB 1-2840-229-29-11, 24 March 97, and USAATCOM Aviation Safety Action Messages UH-1-97-ASAM-04,221400Z May 97 and AH-1-97-ASAM-04 221400Z May 97.

- 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 paragraph 6. shall be placed in condition code D and retagged with a DD Form 157611576-1) Test/Modification Tag/Label-Materiel (blue color). The authority block must reference the inspection required per this TB. Do not remove serviceable tags. AMCOM will dispatch a maintenance team to the depots to inspect/repair and comply with TAMMS-A requirements. This command will coordinate with depot on maintenance team.
- 2. Task/Ispection Suspense Date. Within 150 hours after receipt of this TB, or 01 Dec 97, whichever occurs first.
- 3. Reporting Compliance Suspense Date. No later than 11 April 1997 per paragraph 14.a. of this TB.
- 4. Summary of Problem.
- a. This TB supersedes TB 1-2840-229-20-11 (UH-1-97-ASAM- and AH-1-97-ASAM-02) to provide additional task compliance time to preclude widespread grounding because of the depletion of replacement parts. An evaluation of the risk of extending the compliance interval has been accomplished. It has been determined the level of risk has not increased by extending the compliance time.

NOTE

Original TB 1-2840-229-20-11 was a result of cracking in four of the nine aluminum High Pressure Fuel Fittings installed. Because the part numbers for all nine fittings are the same, all nine fittings need to be changed. This action will eliminate the possibility of incorrect installation of the fittings during future maintenance.

- b. For Manpower/Downtime and Funding Impacts See Paragraph 12.
- **c.** The purpose of this TB is to require a one-time replacement of the Aluminum High Pressure Fuel Fittings on those aircraft where these fittings have not yet been replaced with stainless steel fittings, and to provide additional part numbers and compliance time.
- **5. End items to be Inspected.** All those UH-1HN and AH-1 series aircraft which have not had High Pressure Fuel Fittings changed.
- 6. Assembly Components Affected.

NOMENCLATURE	PART NUMBER	NATIONAL STOCK NUMBER
T53-L-138	1-000-060-22 1-000-060-23	2840-00-134-4803 2840-00-621-1860
Fuel Control, Main	106500A1 (TA-7) 100770A4 (TA-7)	2915-01-216-9779 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 AN8154D

8. Inspection Procedures.

- **a.** The current nipple is used in the following five (5) locations on the T53 engine (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): 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).
 - b. Implement replacement per paragraph 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 to replace the nipples. Cap all fittings and hoses to prevent contamination.

- **a.** Remove the current MS24392D4 nipple (5 locations as referenced in paragraph 8.a.) in accordance with TM 55-2840-229-23. 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. The approximate final dimensions will be an 0.915 inch diameter and 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 alternative method of removal of the fitting is to use a pair of locking pliers (vice grips) on the threads of the aluminum fitting.

TB 1-2840-229-20-12

b. Install stainless steel nipples (identified below) and preformed packing (P/N MS83248/1-904, NSN 5330-00-020-0203). Torque nipple (all locations) to 55 to 65 in-lbs.

NSN	PART NUMBER(S)
4730-00-684-6912 4730-00-875-8264 4730-00-974-6379	MS24392J4 AN815-4J AN815-4K, AN815-4S, MS24392K4, MS24392S4
4730-01-065-8423	AN815-4J

- 10. Supply/Parts and Disposition.
 - a. Parts Required. Items cited in paragraph 9.b. will 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) XDF.

NOTE

Project Code XDF is required to track and establish a data base of stock fund expenditures incurred by the field as a result of SOF actions.

NOTE

Due to the limited supply of fittings, units shall verify existing requisitions with sister units to confirm if additional fittings are available without depleting current stock.

- **c. Bulk and Consumable Materials.** One 11/16 inch, 3/8 inch drive 12-point socket modified per paragraph 9.a.(3).
- **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. Modified tool as specified in paragraph 9.a.(3).
- 12. Application.
 - a. Category of Maintenance. AVUM. Aircraft downtime will be charged to AVUM.
 - b. Estimated Time Required.
 - (1) Total of 6 manhours using 1 person.
 - (2) Total of 6 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.** The following publications 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.
 - a. TM 1 -2840-260-23P
 - **b.** TM 55-2840-229-23
 - **c.** DMWR 1-2840-113
 - **d.** DMWR 55-2915-335

13. References.

- a. TM 1 -2840-260-23P
- **b.** TM 55-2840-229-23
- **c.** DMWR 1-2840-113
- d. DMWR 55-2915-335

14. Recording and Reporting Requirements.

- a. Reporting Compliance Suspense Date (Aircraft). In accordance with AR 95-1, upon entering requirements of this TB on DA Form 2408-13-1 for all subject MDS Aircraft, forward a priority message, datafax or E-mail to CDR, AMCOM, ATTN: AMSAM-SF-A (SOF Compliance Officer). Datafax number is DSN 897-2111 or (205) 313-2111. E-mail address is <safeadm@redstone.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.
 - b. Task/Inspection Reporting Suspense Date (Aircraft). N/A.
 - c. Reporting Compliance Suspense Date (Wholesale Spares). N/A.
 - d. Task/Inspection Reporting Suspense Date (Wholesale Spares). N/A.
- e. The following forms are applicable and are to be completed IAW DA Pamphlet 736-751, 15 Jun 92.
 - (1) DA Form 2408-4, Uncorrected Fault Record.
 - (2) DA Form 2408-5-1, Equipment Modification Record.
 - (3) DA Form 2408-13, Aircraft Status Information Record.
 - (4) DA Form 2408-13-1) Aircraft Inspection and Maintenance Record.
- 15. Weight and Balance. N/A.
- 16. Points of Contact.
- **a.** Logistical POC for UH-1 aircraft is Mr. Charles Elkins, AMSAM-DSA-UH-U, DSN 645-0073 or (205) 955-0073. Datafax is DSN 645-6590 or (205) 955-6590. E-mail is <elkins-ce@redstone.army.mil>.

- b. Technical points of contact for this TB are Mr. Ralph Vemmer, AMSAM-AR-E-I-B, DSN 645-0663 or (205) 955-0663, datafax DSN 645-6590 or (205) 955-6590, E-mail <vemmer-rc@redstone.army.mil or Mr. Mark Heitert, AMSAM-AR-EPE, DSN 897-4968 or (205) 313-4968, datafax (205) 313-4961, E-mail <heitertm@redstone.army.mil>.
- c. Forms and Records POC for this TB is Ms. Ann Waldeck, AMSAM-MMC-RE-F DSN 876-5564 or (205) 876-5564. Datafax is DSN 746-4904 or (205) 876-4904. E-mail is <waldeckab@redstone.army.mil>.
- d. Safety POC for this TB is Mr. Robert Brock, AMSAM-SF-A, DSN 788-8632 or (205) 842-8632. Datafax is DSN 897-2111 or (205) 313-2111. E-mail is cbrock-rd@redstone.armv.mil>.
- e. Foreign Military Sales (FMS) recipients requiring clarification of action advised by this TB should contact Mr. Ronnie W. Sammons, AMSAM-SA-CS-NF, DSN 897-0869 or (205) 313-0869. Datafax is DSN 897-0411 or (205) 313-0411. E-mail is <sammons-rw@redstone.army.mil> (Huntsville is GMT minus 6 hrs).
- f. After hours contact AMCOM command operations center (COC) DSN 897-2066/2067 or (205) 313-2066/2067.
- 17. Reporting of Errors and Recommending improvements. You can help improve this TB. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Mail your letter, DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to: Commander, U.S. Army Aviation and Missile Command, ATTN: AMSAM-MMC-LS-LP, Redstone Arsenal, Alabama 35898-5230. A reply will be furnished to you.

You may also send in your comments electronically to our E-mail address: <is-lp@redstone.army.mil> by datafax: commercial (205) 842-6546 or DSN 788-6546.

By Order of the Secretary of the Army:

Official:

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