

URGENT

TB 1-1520-251-20-05

DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

REPLACEMENT OF THE AUXILIARY POWER UNIT (APU) LIFTING LUG FOR AH-64D AIRCRAFT

Headquarters, Department of the Army, Washington, D. C.
21 June 2002

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THIS PUBLICATION IS EFFECTIVE UNTIL RESCINDED OR SUPERSEDED.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) make the following entry on DA Form 2408-13-1. Enter a red horizontal dash "-" with the following statement: "Inspect the APU lifting lug IAW TB 1-1520-251-20-05 within the next 10 hour/ 14 day inspection." The red horizontal dash "-" may be cleared when the inspection of paragraph 8 and 9 are completed. The affected aircraft shall be inspected as soon as practical but no later than the next 10 hour/ 14 day inspection. Failure to comply with the requirements of this message within the time frame will cause the status symbol to be upgraded to a red "x".

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

(1) Aircraft in AVUM/AVIM, and Depot. Same as paragraph 1a.

(2) Aircraft at Contractor Facility. Boeing will inspect DD 250 aircraft prior to those aircraft departing for ferry to final destination

c. Aircraft in Transit.

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

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

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

e. Component/Parts in Stock Including War Reserves at All Levels (Depot and Others). Upon receipt of this TB, the materiel condition tags of all items in all condition codes listed in paragraphs 6 and 7 shall be annotated to read "(TB 1-1520-251-20-05), "Replace APU lifting lug, not complied with".

(1) Wholesale Stock -N/A.

(2) Retail Stock - N/A.

f. Component/Parts in Work Including War Reserves at All Levels (Depot and Others). Items listed in paragraphs 6 and 7 in work will not be issued until compliance with this TB.

This TB supersedes USAAMCOM Message 281130Z May 02.

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2. Task/Inspection Suspense Date. Complete the inspection IAW paragraph 8 within 10 flight hours but NLT 11 April 2002 and report IAW paragraph 14a(2) NLT 17 June 2002.

3. Reporting Compliance Suspense Date. No later than 5 June 2002 per paragraph 14.a.1 of this TB.

4. Summary of the Problem.

a. Units have reported that the AH-64D APU two piece welded lifting lug (P/N 3870154-1) has broken during APU remove/installation from the aircraft. The lug is breaking at the weld at the lug and plate interface. A one piece lifting lug is available to replace the two piece lugs.

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

c. The purpose of this TB is to-

(1) Provide alternate APU removal and installation procedures for an APU with the two piece welded lifting lug.

(2) Required replacement of the two piece welded lifting lug with the one piece lug on or before 30 November 2002.

5. End Items to be inspected. All Army aircraft AH-64D.

6. Assembly Components to be Inspected.

NOMENCLATURE	PART NUMBER	NATIONAL STOCK NUMBER
APU	All	2835-01-493-9922

7. Parts to be Inspected.

NOMENCLATURE	PART NUMBER	NATIONAL STOCK NUMBER
Bolt, Eye	3870154-1	5306-01-478-3441

8. Inspection Procedures.

a. On or before the next 10 hour/ 14 day inspection perform the following-

(1) Gain access to the APU lifting lug IAW IETM.

(2) Inspect the APU for a one or two piece lifting lug.

(3) If a one piece lug is installed- inspection is complete. Clear the red horizontal "-".

(4) If a two piece welded lifting lug is installed proceed to paragraph 9.

9. Correction Procedures.

a. For APU's with the two piece lug installed -

(1) Clear the red horizontal dash "-" entry required IAW paragraph 1a of this message. Enter a red diagonal "/" status Symbol with the following statement: "alternate APU lifting Procedures required IAW TB 1-1520-238-20-05."

(2) Paint the two piece welded lug with bright red paint. As an indication that the alternate APU removal/installation.Procedures are required IAW with paragraph 9b and 9c.

(3) Enter a red diagonal "/" status symbol with the following statement: "replace APU lifting lug IAW TB 1-1520-238-20-05 NLT 30 November 2002."

b. Alternate APU removal procedure.–

NOTE

The removal procedure will utilize two CGU-1/B aircraft cargo tie downs looped around the APU and the overhead hoist lifting hook to form a sling to prevent the APU from falling if the lifting lug fails during removal.

- (1) Prepare the APU for removal IAW the procedures in the IETM, (APU system, APU, removal and install) up to the point of Connecting the lifting hook to the APU lifting lug.
- (2) Attach APU cable sling to overhead hoist and position. Hoist over APU.
- (3) Attach cable sling hooks to APU lift lug.
- (4) Install the fwd aircraft cargo tie down P/N CGU-1/B.

CAUTION

Use caution during the removal and installation process to ensure the cargo straps remain clear of all fuel lines and wire harnesses.

- (a) Thread tie down strap around PTO clutch, ensuring the strap is aft of hard fuel line and outboard of fuel solenoid and wire harness. Strap should lay in aft of the power takeoff (PTO) clutch.
- (b) Connect the tie down strap to complete the loop and lay top of loop over the overhead hoist lifting hook.
- (5) Installation of the aft aircraft cargo tie down strap P/N CGU-1/B.
 - (a) Thread strap around the forward end of the APU combustion section case (just aft of the fiberglass air inlet (plenum). The strap should be outboard of the clamp standoff and outboard of the igniter cable and wire harness. The strap should be inside of the hard fuel line on the left side of the APU plenum. Take special care that the strap is not putting stress on the fuel line.
 - (b) Connect the tie down strap to complete the loop and lay top of loop over the overhead hoist lifting hook.
- (6) Apply tension to the APU cable sling by raising the overhead hoist lift hook until there is no slack in the cable sling.
- (7) Remove slack from the forward and aft loops using the ratcheting mechanism provided. Verify all straps are free of obstructions and are not putting stress on fuel lines or cable harnesses.
- (8) Relieve weight of APU from APU mounts.
- (9) Continue with APU removal IAW the IETM (APU system, APU remove and install).

c. c. Alternate APU installation procedures–

- (1) Attach APU cable sling to overhead hoist and position hoist over APU.
 - (2) Attach cable sling hooks to APU lift lug.
 - (3) Install the forward aircraft tie down strap P/N CGU-1/B IAW paragraph 9b(4).
 - (4) Install the aft aircraft tie down strap P/N CGU-1/B IAW paragraph 9b(5).
 - (5) Apply tension to the APU cable sling by raising the overhead hoist lift hook until there is no slack in the cable sling.
 - (6) Remove slack from the forward and aft loops using the ratcheting mechanism provided.
 - (7) Install APU into the aircraft IAW the IETM (APU System, APU remove and install).
- d. On or before 30 November 2002 – replace the two piece welded lug with a one piece lug.

NOTE

The following procedure may be used to replace the lifting lug with the APU installed on, or removed from the aircraft. It is not necessary to remove the APU for the sole purpose of replacing the lifting lug.

(1) Remove the 2 bolts (p/n ms9556-07) and 2 washers (P/N AN960C10I) that fasten the top of the two piece inlet plenum together. Separate the plenum halves to form a gap of approximately one inch. This will provide sufficient space to loosen and slide the lifting lug bolts out one at a time.

(2) Remove the two piece welded lifting lug IAW the IETM (APU system, APU installation, power section assy, bracket, Lifting, APU, repair by remove and install).

NOTE

The mounting bolts are to be removed by rotating the gap formed in paragraph 9d(1) behind each of the four lifting lug mounting bolts and removing the bolts.

(3) Install the one piece lifting lug IAW the IETM (APU System, APU installation, power section assy, bracket, lifting, APU, repair by remove and install).

NOTE

The mounting bolts are to be installed by rotating the gap formed in paragraph 9d(1) behind each of the four lifting lug mounting bolt holes and installing the bolts.

(4) Install the 2 bolts and 2 washers to the upper inlet plenum and the lower inlet plenum. Torque to 30 inch pounds.

NOTE

When re-installing the upper and lower inlet plenum halves, insure that all gaskets are in place and that plenum edges are securely in place.

e. Clear the red diagonal “/” entries required by paragraph 9a(1) and 9a(3).

10. Supply/Parts and Disposition.

- a. Parts required—Items cited in paragraph 7 will be required to replace defective items.
- b. Requisitioning Instructions— Contact the Log POC paragraph 16b for requisitioning inspections.

NOTE

The lifting lug will be issued as a direct exchange at the contractor logistics support (CLS) window at no cost to the unit.

- c. Bulk and Consumable Materials. N/A.
- d. Disposition. Dispose of removed parts/components in accordance with normal supply procedures. A QDR is not required.
- 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. N/A.

12. Application.

- a. Category of Maintenance. AVUM. Aircraft downtime will be charged to AVUM.
- b. Time Required.
 - (1) To inspect the APU lifting lug— .5 man-hours using 1 person.
 - (2) To install a one piece APU lifting lug. 1.0 hours downtime for one end item.
 - (3) Total of 1.5 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. Interactive Electronic Technical Manual (IETM): TM 1-1520-Longbow/Apache IETM, CD No. 1, Version 3.1.2, Data 19 Nov. 98, CD Date 1 Dec 98 or subsequent.

13. References.

- a. TM 1-1500-328-23, Aeronautical Equipment Maintenance Management Policies and Procedures, 30 July 1999
- b. Interactive Electronic Technical Manual (IETM): TM 1-1520-Longbow/Apache IETM, CD No. 1, Version 3.1.2, Data 19 Nov. 98, CD Date 1 Dec 98 or subsequent.

14. Recording and Reporting Requirements.

- a. Aircraft-
 - (1) TAMMS reporting compliance suspense - Upon entering requirements of this TB 1-1520-238-20-121 on DA Form 2408-13-1 on all subject MDS aircraft, forward a priority message, Datafax or E-Mail to Commander, AMCOM, ATTN: AMSAM-SF-A (SOF Compliance Officer), Redstone Arsenal, AL 35898-5000 IAW AR 95-1 NLT date specified in paragraph 3. Datafax number is DSN 897-2111 or commercial (256) 313-2111. E-Mail address is "SAFEADMS@REDSTONE.ARMY.MIL". The report will cite this TB 1-1520-251-20-05 number, date of entry in DA Form 2408-13-1, the aircraft mission design series and serial numbers of aircraft in numerical order.
 - (2) Task/Inspection reporting suspense date (aircraft) - N/A.
- b. Wholesale Spare Parts/Assemblies- N/A.
- c. Materiel in Retail Storage- N/A.
- d. The following forms are applicable and are to be completed in accordance with DA PAM 738-751, 15 Mar 99:

NOTE

- ULLS-A users will use applicable "E" forms
 - (1) DA Form 2408-5-1, Equipment Modification Record (APU).
 - (2) DA Form 2408-13, Aircraft Status Information Record.
 - (3) DA Form 2408-13-1, Aircraft Inspection and Maintenance Record.
 - (4) DD Form 1577/DD Form 1577-1, Unserviceable (Condemned) Tag/Label- Materiel (Color Red). Annotate remarks block with "Unserviceable IAW SOF AH-64-02-ASAM- 03 (TB 1-1520-251-20-01)."

15. Weight and Balance. N/A.

16. Points of Contact.

- a. Technical points of contact are:
 - (1) Primary - Mr. Skip Jackson, AMSAM-RD-AE-P, DSN 897-5232 ext. 5232 or commercial (256) 319-5232. Datafax is (256) 709-9922 E-mail is Skip.Jackson@rdec.redstone.army.mil.
 - (2) Alternate- Mr. Andy Fabery, AMSAM-RD-AE-I-P-A, DSN 897-5232 ext. 7825 or commercial (256) 705-9825. E-mail is Andrew.Fabery@rdec.redstone.army.mil.
- b. Logistical point of contact for this TB is:
 - (1) Primary- Mr. Steve Hayes, SFAE-AV-AAH-LF, DSN 897-4245 or commercial (256) 313-4245. Datafax is DSN 897-4343 or (256) 313-4343. E-mail is Steve.Hayes@peoavn.redstone.army.mil.

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(2) Alternate- Mr. Mike Sharp, SFAE-AV-AAH-LF, DSN 897-4236 or commercial (256) 313-4236. Datafax is DSN 897-4343 or (256) 313-4343. E-mail is Mike.Sharp@peoavn.redstone.army.mil.

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

d. Safety point of contact for this TB is:

(1) Primary - Mr. Harry Trumbull (SAIC), AMSAM-SF-A, DSN 897-2095 or commercial (256) 313-2095. Datafax is DSN 897-2111 or (256) 313-2111. E-mail is Harry.Trumbull@peoavn.redstone.army.mil.

(2) Alternate - Mr. Joseph Creekmore AMSAM-SF-A, DSN 897-2090 or commercial (256) 313-2090. Datafax is DSN 897-2111 or commercial (256) 313-2111. E-mail is Howard.Chilton@redstone.army.mil.

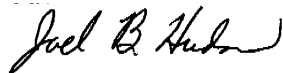
e. Foreign Military Sales (FMS) recipients requiring clarification of action advised by this TB should contact - (Huntsville, AL is GMT minus 6 hours.) Mr. Ronnie W. Sammons, AMSAM-SA-CS-NF, DSN 897-6856 or commercial (256) 313-6856. Datafax is DSN 897-6630 or commercial (256) 313-6630. E-mail is Ronnie.Sammons@redstone.army.mil.

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

By Order of the Secretary of the Army:

Official:

ERIC K. SHINSEKI
General, United States Army
Chief of Staff



JOEL B. HUDSON
Administrative Assistant to the
Secretary of the Army
0215701

DISTRIBUTION:

To be distributed in accordance with Initial Distribution Number (IDN) 314055, requirements for TB 1-1520-251-20-05.

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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.