

ROUTINE

TB 1-1520-251-20-04

DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

INSPECTION FOR HUCK RIVETS (MS 90354-5) IMPROPERLY INSTALLED ON LEFT AND RIGHT SIDE HELICOPTER AIR DATA SYSTEM (HADS) SUPPORT HOUSING ON AH-64D AIRCRAFT

Headquarters, Department of the Army, Washington, D. C.
13 July 2001

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

NOTE

THIS PUBLICATION IS EFFECTIVE UNLESS RESCINDED OR SUPERSEDED.

1. Priority Classification. Routine.

- a. Aircraft in Use. The Tailboom and HADS of affected aircraft shall be inspected no later than (NLT) the next phase inspection.
- 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 issued until compliance with this TB has been completed.
- d. Aircraft in Transit.
 - (1) Surface/Air Shipment. Same as para 1a.
 - (2) Ferry Status.
 - (a) Same as para 1a.
 - (b) Those aircraft that have a DD 250 and are at Boeing will be inspected prior to ferry to 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). n/a
 - (1) Wholesale Stock -N/A
 - (2) Retail Stock - N/A

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- g. Component/Parts in Stock Including War Reserves at All Levels (Depot and Others). N/A
- 2. **Task/Inspection Suspense Date.** Within the next scheduled aircraft Phased Maintenance.
- 3. **Reporting Compliance Suspense Date.** N/A
- 4. **Summary of the Problem.**

a. Rivets have been improperly installed on the left and right (HADS) support housing. The tail boom also has 2 rivets improperly installed directly under the vertical stabilizer at the fuselage station (FS) 530 Waterline (WL) 139, and Buttline (BL) 00. The HADS rivets were installed with a GP752 single action gun instead of a Huck 200 double action gun with a 99-600 head. The rivets installed in the Tailboom may be of the wrong type. The rivets should be inspected and replaced if improperly installed.

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

c. The purpose of this TB is to ensure the replacement of improperly installed rivets.

5. **End Items to be inspected.** AH-64D aircraft. Serial Numbers PVD 1 through PVD 135 (S/N 96-5001 through S/N 99-5135), UK1 through UK11 (S/N ZJ166 through S/N ZJ176), and DN 1 through DN12 (S/N 98-0101 through S/N 98-0112).

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

NOMENCLATURE	PART NUMBER	NATIONAL STOCK NUMBER
Support Housing	7-511140308	N/A
Tailboom Assembly	7-311114000-601	N/A

7. **Parts to be Inspected.**

NOMENCLATURE	PART NUMBER	NATIONAL STOCK NUMBER
Rivet	MS90354-0504	5320-00-866-4988
Blind Fastner JO-Bolt/ VIS-U-LOC	HS5450-05-06	5320-01-243-4302

8. **Inspection Procedures.**

- a. The Huck rivets are located on the forward portion of the HADS support housing.

NOTE

Not all AH-64D aircraft will have Huck rivets installed on the HADS support housing.

(1) Inspect the MS90354-0504 Huck rivets for the presence of the locking ring. If the Locking ring is installed try to rotate the ring with a pair of pliers or equivalent tool. If the ring is missing or the fastener is loose it should be replaced immediately with an HS5450-05-04 JO-Bolt/ VIS-U-LOC Fastner. IAW para 9.A.

- b. Tailboom inspection for the rivets.

(1) Remove the Intermediate Gearbox fairing L510 and R510 to gain access. Visually inspect the area behind the Intermediate Gearbox.

(2) The two suspect MS90354 Huck rivets are located underneath the Vertical Stabilizer (FS) 530, Waterline (WL) 139, and Buttline (BL) 00.

(3) If the MS90354 Huck rivets are installed, repair IAW para 9.b. If there are 2 HS5450-05-06 JO-Bolt/ VIS-U-LOC Fastners installed, no further action is required.

9. Correction Procedures.

a. HADS rivets repair.

(1) Remove the seven rivets securing the HADS housing to the Nacelle IAW TM 1-1500-204-23-10, section 7, rivet removal.

(2) Deburr and inspect each hole for elongation or damage IAW TM 1-1500-204-23-10.

(3) If the rivet holes are undamaged and concentric, install new HS5450-05-04 JO-Bolt/ VIS-U-LOC fasteners. The hole diameter range is from 0.164 inch to 0.167 inch. If any of the hole diameters are larger than the hole ranges, such as elongated or damaged, ream and install next size fastener per TM 1-1500-204-23-10.

(4) Touch up the installed fasteners and exposed surfaces with primer (Mil-P-23377) and paint using Mil-C-46168 IAW TM 55-1500-345-23.

b. Tailboom rivets repair.

(1) Remove the Intermediate Gearbox or Vertical Stabilizer IAW the IETM removal procedures.

(2) Remove the two rivets installed in the Tailboom Assembly IAW TM 1-1500-204-23-10, section 7, rivet removal.

(3) Deburr and inspect each hole for elongation or damage IAW TM 1-1500-204-23-10.

(4) IF the rivet holes are undamaged and concentric, install new HS5450-05-06 JO-Bolt/ VIS-U-LOC fasteners. The hole diameter range is from 0.1635 inch to 0.1645 inch. If any of the hole diameters are larger than the hole ranges, such as elongated or damaged, ream and install next size fastener per TM 1-1500-204-23-10.

(5) Touch up the installed fasteners and exposed surfaces with primer (Mil-P-23377) and paint using Mil-C-46168 IAW TM 55-1500-345-23.

(6) Reinstall Intermediate Gearbox or Vertical Stabilizer IAW the IETM.

10. Supply/Parts and Disposition.

a. Parts Required. Items cited in paragraph 7 may be required to replace unserviceable items.

b. Requisitioning Instructions. N/A.

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. 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. Time Required.

(1) Total of 3 man-hours using 1 person for HADS.

(2) Total of 4 man-hours using 1 person for Tailboom.

(3) Total of 7 hours downtime for one end item.

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

NOMENCLATURE	PART NUMBER/ NATIONAL STOCK NUMBER	QUANTITY	COST EACH	TOTAL \$
Blind Fastner/ VIS-U-LOC	5320-01-243-4304	14	\$ 7.80	\$ 109.20
Blind Fastner/ VIS-U-LOC	5320-01-243-4302	2	\$ 5.23	\$ 10.46
Maximum total cost per aircraft = \$ 119.66				

d. Disposition. Dispose of removed parts/components in accordance with normal supply procedures. A QDR is not required.

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. N/A.

13. References.

a. 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.

b. TM 1-1520-238-23, Aviation Unit and Intermediate Maintenance Manual for AH-64A Apache Attack Helicopter, 16 May 94.

c. TM 1-1520-238-23P, Aviation Unit and Intermediate Maintenance Repair Parts and Special Tools List for AH-64A Apache Attack Helicopter, 27 March 95.

d. TM 1-1500-204-23-10, Aviation Unit and Intermediate Maintenance Manual for General Aircraft Maintenance, Vol 10, 31 July 92.

e. TM 55-1500-345-23, Painting and Marking of Army Aircraft, 12 June 86.

14. Recording and Reporting Requirements.

a. Reporting. N/A

b. Task/Inspection reporting suspense date (aircraft)- N/A.

c. Reporting compliance suspense date (spares)-

d. Task/Inspection reporting suspense date (spares)-

(1) Materiel in Wholesale Depot Storage- N/A.

(2) Materiel in Retail Storage- Report receipt of this TB by E-mail or Datafax to the Logistical Point of Contact listed in para 16B within 14 days from the date of this message. Report quantity inspected by condition code and the resulting condition code. Report by E-mail or datafax. Provide local Point of Contact.

e. 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 2408-13, 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. Maintenance point of contact for this TB is Mr. Malcolm Fuller, AMSAM-MMC-AV-AB, DSN 897-1337 or commercial (256) 313-1337, Datafax is DSN 897-1557. E-mail is Malcolm.Fuller@redstone.army.mil.

b. Technical point of contact for this TB is Mr. Andy Fabery, AMSAM-RD-AR-E-I-P-A, DSN 897-4802 or commercial (256) 313-4802. Datafax is DSN 897-4923 or (256) 313-4923 E-mail is Andrew.Fabery@redstone.army.mil.

c. Forms and records point of contact for this TB is Ms. Ann Waldeck, AMSAM-MMC-MA-MN, 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. Foreign Military Sales (FMS) recipients requiring clarification of action advised by this TB should contact CW5 Joseph L. Wittstrom, Security Assistance Management, AMSAM-SA, DSN 897-0681 or commercial (256) 313-0681, E-mail is wittstrom-jl@redstone.army.mil. or Mr. Ronnie W. Sammons, AMSAM-SA-CS-NF, DSN 897-0869 or commercial (256) 313-0869, Datafax is DSN 897-0411 or commercial (256) 313-0411, E-mail is sammons-rw@redstone.army.mil. Huntsville, AL is GMT minus 6 hours.

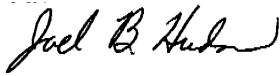
e. After hours contact AMCOM Command Operations Center (COC) DSN 897-2066/7 or commercial (256) 313-2066/7.

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 Missile Command, ATTN.: AMSAM-MMC-MA-NP, Redstone Arsenal, AL 35898-5230. You may also submit your recommended changes by E-mail directly to 2028@redstone.army.mil. Instructions for sending an electronic 2028 may be found at the back of this manual. A reply will be furnished directly to you.

By Order of the Secretary of the Army:

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

Official:



JOEL B. HUDSON
Administrative Assistant to the
Secretary of the Army
 0117907

DISTRIBUTION:

To be distributed in accordance with Initial Distribution Number (IDN) 313983, requirements for TB 1-1520-251-20-04.

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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: <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.

