

URGENT

*TB 1-1520-238-20-134

DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

INSPECTION AND TORQUE CHECK PYLON ATTACHMENT BOLTS, AH-64 SERIES AIRCRAFT

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

10 March 2003

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NOTE

THIS PUBLICATION IS EFFECTIVE UNTIL RESCINDED OR SUPERSEDED.

NOTE

This Technical Bulletin (TB) is issued IAW AR 95-1 and has not been transmitted to units subordinate to addressees. Addressees will immediately retransmit this message to all subordinate units, activities or elements affected or concerned. MACOM's will immediately verify this transmission to the AMCOM SOF Compliance Officer (AMSAM-SF-A, safeadm@redstone.army.mil).

NOTE

MACOM commanders may authorize temporary exception from technical bulletin (TB) requirements IAW AR 95-1, Ch. 6. Exception may only occur when combat operations or matter of life or death in civil disasters or other emergencies are so urgent that they override the consequences of continued aircraft operation.

1. Summary –

1.1 Background – There has been four incidents reported by field units of the bolts used to attach the pylons to the wing breaking off. A dual pylon bolt failure could cause the separation of the pylon from the wing.

1.2 TB Purpose –

1.2.1 Perform an initial inspection and lower the torque for the pylon attachment bolts.

1.2.2 Perform a recurring pylon mounting bolt torque check.

*This TB supersedes USAAMCOM Aviation Safety of Flight Message AH-64-03-ASAM-05 241600Z FEB 03.

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2. **END ITEMS AFFECTED** – All AH-64 series aircraft.

3. **ASSEMBLIES/COMPONENTS/PARTS AFFECTED** –

NOMENCLATURE	P/N	NSN
Nut, Self-Locking, Barrel	HS4379-6	5310-01-182-5147
Bolt, Close Tolerance	HS5271-6-21	5306-01-179-0902

NOTE

When complying with the requirements of this TB, complete forms and records entries IAW DA PAM 738-751. ULLS-A units will use appropriate “E” forms.

4. **INITIAL TAMMS (THE ARMY MAINTENANCE MANAGEMENT SYSTEM) COMPLIANCE REQUIREMENTS** –

4.1 Upon receipt of this TB, make the following entry on the DA Form 2408-13-1. Enter a Red Horizontal Dash //–// status symbol with the following statement: “Comply with the requirements of AH-64-03-ASAM-05 NLT 24 March 2003.” Commanders who are unable to comply with the requirements of this TB within the time frame specified will upgrade the affected aircraft status symbol to a red X.

NOTE

The TAMMS compliance reporting form is available at “www.redstone.army.mil/sof/tamms.xls” (use lower case letters only) or may be obtained from the units servicing LAR. Alternate forms may be approved by the AMCOM SOF Compliance Officer.

NOTE

The TAMMS Compliance Report only confirms the unit has made the initial logbook entry for assigned aircraft. TAMMS Compliance Reports will include aircraft serial numbers (in numerical order), date of entry on DA Form 2408-13-1, unit address, local POC name and phone number.

4.2 TAMMS Compliance Report – Submit TAMMS Compliance Report via priority email to “safeadm@redstone.army.mil” NLT 3 March 2003 IAW AR 95-1. If email is not available, the report may be faxed to: SOF Compliance Officer at DSN 897-2111 or (256) 313-2111.

5. **TASK/INSPECTION COMPLIANCE REQUIREMENTS** –

NOTE

The Task/Inspection Reporting Form is available at “www.redstone.army.mil/sof/log.xls” (use lower case letters only) or may be obtained from the units servicing LAR. This report will cite the message number, date of inspection, aircraft serial number, aircraft hours, component serial number, component hours, and results of the inspection.

5.1 Aircraft – Submit Task/Inspection Compliance Report for this TB to Log POC NLT 27 March 2003.

5.2 Retail Stock (Installation level and below) – N/A.

5.3 Wholesale Stock (Including Depot Stock, Depot Maintenance and Single Stock Fund) – N/A.

6. SPECIAL PROVISIONS TO TB REQUIREMENTS (AIRCRAFT) –

6.1 Aircraft in AVUM, AVIM, or Depot level maintenance – Commanders, facility managers and contractors will not issue aircraft until they are in compliance with this message.

6.2 Aircraft at Contractor Facility – DD 250 aircraft will be inspected prior to departing for ferry to final destination.

6.3 Aircraft in Surface/Air Shipment – Unit Commanders in receipt of deployment orders may defer the initial inspection for aircraft scheduled to depart before the date specified in Paragraph 4.1. (Initial TAMMS Compliance Requirement) as follows – Comply with message requirements NLT 30 days upon arrival at final destination.

7. TECHNICAL PROCEDURES/INSTRUCTIONS –

7.1 Initial Inspection – On or before the next 30 days, lower the torque on the pylon mounting bolts as follows.

NOTE

This procedure is to be performed on one bolt at a time and is typical for all four pylon bolts.

- 7.1.1 Remove external stores IAW TM 9-1090-208-23-1 or IETM.
 - 7.1.2 Remove bolt and washer, TM 1-1520-238-23P, Figure 697, Item 1 and 2, or the IETM, from the pylon.
 - 7.1.3 Inspect bolt for damage. None allowed.
 - 7.1.4 Lubricate the bolt threads using MIL-T-83483.
 - 7.1.5 Reinstall bolt and washer.
 - 7.1.6 Torque bolt to 350 inch-pounds.
 - 7.1.7 Repeat paragraph 7.1.1. to 7.1.6. for the remaining mounting bolts for each pylon.
 - 7.1.8 Clear the initial entry from para 4.1. and note compliance on DA Form 2408–15.
 - 7.1.9 Annotate the DA Form 2408–18 with a recurring 30 day inspection (IAW para 7.2.) for the pylon mounting bolt torque check. ULLS–A Units will use an “800” inspection number for the recurring 30 day pylon mounting bolt torque check.
- 7.2 Recurring Inspection – Every 30 days perform the following recurring pylon mounting bolt torque check.
- 7.2.1 Using an appropriate torque wrench set at 315 inch-pounds, insure bolt does not turn.
 - 7.2.1.1 If bolt turns – Proceed to either paragraph 7.3. (AH-64A) or paragraph 7.4. (AH-64D) of this TB and replace both the bolt and barrel nut.
 - 7.2.1.2 If bolt does not turn – Set torque wrench to 350 inch-pounds and insure bolt is torqued.
 - 7.2.2 This recurring inspection will be required until hardware to replace bolt HS5271-6-21 and barrel nut HS4379-6 is available and installed. When the hardware becomes available, a future TB will be published providing the part numbers for the new bolt and barrel nut.

NOTE

The procedures in paragraphs 7.3. and 7.4. are written for removal and replacement of all four pylon barrel nuts. If only one barrel nut is being replaced, only remove those components required to assist in the access to the barrel nut being replaced.

- 7.3 AH-64A Pylon barrel nut replacement procedures.
 - 7.3.1 Remove external stores IAW TM 9-1090-208-23-1.
 - 7.3.2 Remove the pylons IAW TM 1-1520-238-23 paragraph 16.2.
 - 7.3.3 Remove access covers RW7, RW8, LW7 and LW8.

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7.3.4 For the right wing outboard pylon –

7.3.4.1 Remove the four screws, washers and nuts used to attach connector 4J508 to the wing.

7.3.4.2 Detach connector P106 from the anti-collision light.

7.3.4.3 Remove the two screws and washers that attach the remote control circuit breaker CB204 to the mounting plate.

7.3.4.4 If needed, to gain access to the aft inboard barrel nut, remove the four screws, washers and nuts used to attach connector 4J505 to the wing.

7.3.4.5 Using a suitable tool, such as a scribe, remove barrel nuts and retainers. Carefully move disconnected components as required to assist in the access to the barrel nuts.

7.3.4.6 Install new barrel nuts and retainers in the support holes.

7.3.4.7 Reinstall connector 4J508, connector P106, the remote control circuit breaker CB204, and (if removed) connector 4J505.

7.3.5 For the right wing inboard pylon –

7.3.5.1 Remove the four screws, washers and nuts used to attach connector 3J508 to the wing.

7.3.5.2 Using a suitable tool, such as a scribe, remove barrel nuts and retainers. Carefully move connector 3J508 as required to assist in the access to the barrel nuts.

7.3.5.3 Install new barrel nuts and retainers in the support holes.

7.3.5.4 Reinstall connector 3J508.

7.3.6 For the left wing outboard pylon –

7.3.6.1 Remove the four screws, washers and nuts used to attach connector 1J505 to the wing.

7.3.6.2 Detach connector P105 from the anti-collision light.

7.3.6.3 Remove the two screws and washers that attach the remote control circuit breaker CB201 to the mounting plate.

7.3.6.4 If needed, to gain access to the aft inboard barrel nut, remove the four screws, washers and nuts used to attach connector 1J508 to the wing.

7.3.6.5 Using a suitable tool, such as a scribe, remove barrel nuts and retainers. Carefully move disconnected components as required to assist in the access to the barrel nuts.

7.3.6.6 Install new barrel nuts and retainers in the support holes.

7.3.6.7 Reinstall connector 1J505, connector P105, the remote control circuit breaker CB201, and if removed connector 1J508.

7.3.7 For the left wing inboard pylon –

7.3.7.1 Remove the four screws, washers and nuts used to attach connector 2J505 to the wing.

7.3.7.2 Using a suitable tool, such as a scribe, remove barrel nuts and retainers. Carefully move connector 2J505 as required to assist in the access to the barrel nuts.

7.3.7.3 Install new barrel nuts and retainers in the support holes.

7.3.7.4 Reinstall connector 2J505.

7.3.8 Reinstall access covers RW7, RW8, LW7 and LW8.

NOTE

Ensure lubricate (MIL-T-83483) is applied to the bolt threads and the bolt is torqued to 350 inch-pounds.

7.3.9 Reinstall the pylons IAW TM 1-1520-238-23 section 16.2.

7.4 AH-64D Pylon barrel nut replacement procedures –

7.4.1 Remove external stores IAW the IETM.

- 7.4.2 Remove the pylons IAW the IETM.
- 7.4.3 Remove access covers RW7, RW8, 5RW14, 5RW15, LW7, LW8, 5LW14, and 5LW15.
- 7.4.4 For the right wing outboard pylon –
 - 7.4.4.1 Remove the four screws, washers and nuts used to attach connector 4J833 to the wing.
 - 7.4.4.2 Remove the four screws, washers and nuts used to attach connector 4J894 to the wing.
 - 7.4.4.3 If needed to assist in access to the barrel nuts remove the four screws, washers, and nuts used to attach connector 4J831 to the wing.
 - 7.4.4.4 Using a suitable tool, such as a scribe, remove barrel nuts and retainers. Carefully move disconnected components as required to assist in the access to the barrel nuts.
 - 7.4.4.5 Install new barrel nuts and retainers in the support holes.
 - 7.4.4.6 Reinstall connector 4J833, J894, and if removed, connector 4J831.
- 7.4.5 For the right wing inboard pylon –
 - 7.4.5.1 Remove the four screws, washers and nuts used to attach connector 3J833 to the wing.
 - 7.4.5.2 Using a suitable tool, such as a scribe, remove barrel nuts and retainers. Carefully move disconnected components as required to assist in the access to the barrel nuts.
 - 7.4.5.3 Install new barrel nuts and retainers in the support holes.
 - 7.4.5.4 Reinstall connector 3J833.
- 7.4.6 For the left wing outboard pylon –
 - 7.4.6.1 Remove the four screws, washers and nuts used to attach connector 1J831 to the wing.
 - 7.4.6.2 Remove the four screws, washers and nuts used to attach connector J893 to the wing.
 - 7.4.6.3 If needed to assist in access to the barrel nuts remove the four screws, washers, and nuts used to attach connector 1J833 to the wing.
 - 7.4.6.4 Using a suitable tool, such as a scribe, remove barrel nuts and retainers. Carefully move disconnected components as required to assist in the access to the barrel nuts.
 - 7.4.6.5 Install new barrel nuts and retainers in the support holes.
 - 7.4.6.6 Reinstall connector 1J831, J893, and if removed, connector 1J833.
- 7.4.7 For the left wing inboard pylon –
 - 7.4.7.1 Remove the four screws, washers and nuts used to attach connector 2J831 to the wing.
 - 7.4.7.2 Using a suitable tool, such as a scribe, remove barrel nuts and retainers. Carefully move disconnected components as required to assist in the access to the barrel nuts.
 - 7.4.7.3 Install new barrel nuts and retainers in the support holes.
 - 7.4.7.4 Reinstall connector 2J831.
- 7.4.8 Reinstall access covers RW7, RW8, 5RW14, 5RW15, LW7, LW8, 5LW14, and 5LW15.

NOTE

Ensure lubricate (MIL-T-83483) is applied to the bolt threads and the bolt is torqued to 350 inch-pounds.

- 7.4.9 Reinstall the pylons IAW the IETM.

8. PROCEDURES/INSTRUCTIONS FOR ASSEMBLIES/COMPONENT/PARTS IN WORK OR IN STOCK (AT ALL LEVELS INCLUDING WAR RESERVES) – N/A.

9. SPECIAL TOOLS AND FIXTURES REQUIRED – N/A.

10. SUPPLY/PARTS (REQUISITION/DISPOSITION) –

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10.1 Parts Required –

Nomenclature	Part No./NSN	Qty	Cost ea.	Total \$
Nut, Self-Locking, Barrel	HS4379-6 5310-01-182-5147	16	\$19.97	\$319.52
Bolt, Close Tolerance	HS5271-6-21 5306-01-179-0902	16	37.90	606.40
Retain, Nut and Bolt	HS4380-6 5340-01-182-5154	16	13.18	210.88
Total cost per aircraft =				\$1136.80

10.2 Bulk and consumable materials –

NOMENCLATURE	P/N	NSN
Lubricant	MIL-T-83483	8030-00-087-8630

10.3 Requisitioning instructions – Requisition replacement parts using normal supply procedures. All requisitions shall use Project Code (CC 57-59) “X2C” (X-ray Two Charlie).

NOTE

Project Code “X2C” is required to track and establish a data base of stock fund expenditures incurred by the field as a result of TB actions.

10.4 Disposition of discrepant parts/components – Demilitarize/mutilate IAW TM 1-1500-328-23 any unserviceable barrel nuts or bolts removed.

10.5 Disposition of hazardous material – N/A.

11. MAINTENANCE APPLICATION –

11.1 Category of maintenance – AVUM. Aircraft downtime will be charged to AVUM.

11.2 Estimated time required –

11.2.1 Time to lower the torque – total of ten man-hours using one person with ten hours downtime per end item.

11.2.2 Time to perform the recurring torque check – total of one man-hour using one person with one hour downtime per end item.

12. PUBLICATION REQUIREMENTS –

12.1 References –

12.1.1 AR 95-1.

12.1.2 DA Pam 738-751 Mar 99.

12.1.3 TM 1-1500-328-23 Jul 99.

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

12.1.5 Interactive Electronic Technical Manual (IETM): TM 1-1520-Longbow/Apache IETM, CD dated 29 May 2002 or subsequent.

12.1.6 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.

12.1.7 TM 9-1090-208-23-1.

12.2 Publication changes – The following publications shall be changed to reflect this message. A copy of this message will be used as authority to implement the change until the official change is received.

12.2.1 TM 1-1520-238-23 will be changed to the lower torque of 350 inch-pounds with lubrication on the pylon bolts.

12.2.2 TM 1-1520-Longbow/Apache IETM will be changed to the lower torque of 350 inch-pounds with lubrication on the pylon bolts.

13. POINTS OF CONTACT –

13.1 Technical POC is – Mr. Andy Fabery, AMSAM-RD-AE-I-P-A, DSN 897-2350 ext. 9825 or (256) 705-9825. Fax is (256) 705-9918. Email is “andrew.fabery@rdec.redstone.army.mil”.

13.2 Logistical POCs are –

13.2.1 Primary – Mr. Mike Sharp, DSN 897-4044 or (256) 313-4044, fax is (256) 313-4374. Email is “mike.sharp@peoavn.redstone.army.mil”.

13.2.2 Alternate – Mr. Wayne Fusselman, DSN 897-4043 or (256) 313-4043, fax (256) 313-4374. Email is “wayne.fusselman@peoavn.redstone.army.mil”.

13.3 Wholesale Material POC (spares) is Mr. H.E. Rowland, DLA, DSN 695-6054 or (804) 279-6054. Fax is DSN 695-5695. Email is “H.Rowland@dla.mil”.

13.4 Forms and records POC is Ms. Ann Waldeck, AMSAM-MMC-MA-NM, DSN 746-5564 or (256) 876-5564. Fax is DSN 746-4904 or (256) 876-4904. Email is “ann.waldeck@redstone.army.mil”.

13.5 Safety POCs are –

13.5.1 Primary – Mr. Harry Trumbull (SAIC), AMSAM-SF-A, DSN 897-2095 or (256) 313-2095. Fax is DSN 897-2111 or (256) 313-2111. Email is “harry.trumbull@redstone.army.mil”.

13.5.2 Alternate – Mr. Howard Chilton, AMSAM-SF-A, DSN 897-2068 or (256) 313-2068. Fax is DSN 897-2111 or (256) 313-2111. Email is “howard.chilton@redstone.army.mil”.

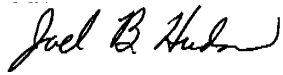
13.6 Foreign Military Sales recipients requiring clarification of this message should contact Mr. Ronnie W. Sammons, AMSAM-SA-AS-UT, DSN 897-0407 or (256) 313-0407. Fax is DSN 897-0411 or (256) 313-0411. Email is “ronnie.sammons@redstone.army.mil”.

13.7 After hours, contact the AMCOM Operations Center (AOC) DSN 897-2066/7 or (256) 313-2066/7.

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By Order of the Secretary of the Army:

Official:



JOEL B. HUDSON

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0306503

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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:** date time group
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.

