

URGENT

TB 1-1520-238-20-122

DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

INITIAL AND RECURRING INSPECTION OF TRANSMISSION ROTOR SUPPORT STRUT BARREL NUTS FOR ALL AH-64 AIRCRAFT

Headquarters, Department of the Army, Washington, D.C.
4 December 2001

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THIS PUBLICATION IS EFFECTIVE UNTIL RESCINDED OR SUPERSEDED.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 the DA Form 2408-13-1. Enter a red horizontal dash //--// status symbol with the following statement: "Inspect the transmission rotor support strut barrel nuts IAW AH-64-02-03 (TB 1-1520-238-20-122) NLT 18 December 2001." Clear the red horizontal dash //--// entry when the procedures IAW para 8 and 9 are completed. The affected aircraft shall be inspected as soon as practical but no later than 18 December 2001. Failure to comply with the requirements of this message within the time frame specified will cause the status symbol of the affected aircraft to be upgraded to a red //X//.

b. Aircraft in Maintenance Facility.

(1) Aircraft in AVUM, AVIM, or Depot - Commanders and facility managers will not issue aircraft until they are in compliance with this message.

(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 para 1a.

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

d. Maintenance Trainers (Category A and B). Same as para 1a.

This TB supersedes USAAMCOM Message 201900Z Nov 01 (AH-64-01-ASAM-08)

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- e. Component/Parts in Stock at All Levels (Depot and Others) Including War Reserves. N/A.
 - f. Components/Parts in Work (Depot Level and Others). N/A.
2. **Task/Inspection Suspense Date.** Complete the inspection IAW paragraph 8 NLT 18 December 2001.
 3. **Reporting Compliance Suspense Date.** Report compliance IAW para 14a(1) NLT 29 November 2001.
 4. **Summary of the Problem.**
 - a. AH-64-01-08 (TB 1-1520-238-20-120) required an initial torque check of the 4 bolts used to attach the transmission rotor support strut assemblies to the deck of the aircraft. In addition to other changes, that SOF also lowered the torque from 3500 inch pounds to 1900 inch pounds and established a recurring torque check of the bolts. Data gathered from the field has determined a need to change the recurring inspection procedures.
 - b. For manpower/downtime and funding impacts, see para 12.
 - c. The purpose of this TB is to revise the recurring inspection procedures IAW para 8c. All other procedures IAW AH-64-01-08 (TB 1-1520-238-20-120) remain the same.
 5. **End Items To Be Inspected.** All AH-64 series aircraft.
 6. **Assembly Components To Be Inspected.** Same as AH-64-01-08 (TB 1-1520-238-20-120).
 7. **Parts To Be Inspected.** Same as AH-64-01-08 (TB 1-1520-238-20-120).
 8. **Inspection Procedures.**
 - a. Initial Inspections – Same as AH-64-01-08 (TB 1-1520-238-20-120).
 - b. One Time Barrel Nut/Bolt Inspection – Same as AH-64-01-08 (TB 1-1520-238-20-120).
 - c. Recurring Inspection –
 - (1) Clear the red horizontal dash //--// entry required IAW paragraph 1a of AH-64-01-08.
 - (2) Perform the following recurring torque check every 20 flight hours/28 days.

NOTE

The recurring torque check is not required if HS4243V12H34/62 or HS4243-12H34/62 bolts are installed with HS5813-12 barrel nuts.

- (3) Remove lockwire from the bolt.
- (4) Using an appropriate mast support wrench per para 11 and torque wrench set at 1400 inch pounds, insure bolt does not turn.
- (5) If the bolt turns, replace nut and bolt IAW para 9 and contact Tech POC IAW para 16a.
- (6) If the bolt does not turn, set the torque wrench to 1900 inch pounds, and insure bolt is torqued to 1900 inch pounds.
 - (a) Mark head of bolt with torque stripe or white paint stripe to indicate a recurring torque check is required.
 - (b) Lockwire the bolt to the strut using the single fastener application, double twist, single hole method IAW TM 1-1500-204-23-6. This portion of the inspection is complete.
- (7) If lockwire is found broken during the recurring torque check, contact the Tech POC in para 16a immediately.
- (8) The recurring torque check is required until the barrel nut and/or bolt are removed and replaced with a HS5813-12 nut, a redesigned replacement nut for part number 7-311113224 (when available, new part number TBD) nut and/or bolt HS4243V12H34/62 or HS4243-12H34/62 prior to 2 August 2003 IAW para 9 of this SOF.

9. **Correction Procedures** – Same as AH-64-01-08 (TB 1-1520-238-20-120).
10. **Supply/Parts and Disposition** – Same as AH-64-01-08 (TB 1-1520-238-20-120).
11. **Special Tools and Fixtures Required** – Same as AH-64-01-08 (TB 1-1520-238-20-120)
12. **Application** – Same as AH-64-01-08 (TB 1-1520-238-20-120)
13. **References** – Same as AH-64-01-08 (TB 1-1520-238-20-120).
14. **Recording and Reporting Requirements.**
 - a. Aircraft –
 - (1) TAMMS Reporting Compliance Suspense – Upon entering requirements of this TB on DA Form 2408-13-1 for all effected aircraft, commanders will forward a priority message, datafax or email to: CDR, AMCOM, ATTN: AMSAM-SF-A (SOF Compliance Officer), Redstone Arsenal, AL 35898-5000, IAW AR 95-1, NLT date specified in para 3. Datafax number is DSN 897-2111 or (256) 313-2111. E-mail address is "SAFEADM@redstone.army.mil." The report will cite this message and TB 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 – N/A.
 - b. Wholesale Spare Parts/Assemblies – N/A.
 - c. Retail Spare Parts/Assemblies – N/A.
 - d. The following forms are applicable and are to be completed IAW DA PAM 738-751, 15 Mar 1999 – Same as AH-64-01-08 (TB 1-1520-238-20-120).
15. **Weight and Balance.** N/A.
16. **Points of Contact.**
 - a. Technical point of contacts for this TB are –
 - (1) Primary – Mr. Andy Fabery, AMSAM-RD-AE-I-P-A, DSN 897-4802 or (256) 313-4802, datafax is DSN 897-4923 or commercial (256) 313-4923. E-mail is "Andrew.Fabery@redstone.army.mil".
 - (2) Alternate – Mr. Ken Muzzo, AMSAM-RD-AE-I-P-A, DSN 897-4812 or (256) 313-4812, datafax is DSN 897-4923 or (256) 313-4923. Email is "Kenneth.Muzzo@redstone.army.mil."
 - b. Logistical point of contacts are –
 - (1) Primary – Mr. Steve Hayes, SFAE-AV-AAH-LF, DSN 897-4245 or (256) 313-4245, datafax is DSN 897-4343 or commercial (256) 313-4343. E-mail is "Steve.Hayes@peoavn.redstone.army.mil".
 - (2) Alternate – Mr. Jim Mason, SFAE-AV-AAH-LF, DSN 897-4242 or (256) 313-4242, datafax is DSN 897-4343 or (256) 313-4343. E-mail is "Masonj@peoavn.redstone.army.mil".
 - (3) Alternate – Mr. Mike Sharp, SFAE-AV-AAH-LF, DSN 897-4236 or (256) 313-4236, datafax is DSN 897-4343 or (256) 313-4343. E-mail is "Mike.Sharp@reoavn.redstone.army.mil".
 - c. Wholesale materiel point of contact (spares) is Mr. Paul Hughes, DSCR-XBD, DSN 695-6328 or commercial (804) 279-6328. Datafax is DSN 695-5695 or commercial (804) 279-5695. E-mail is "PHughes@dcsr.dla.mil".
 - d. Forms and records point of contact is Ms. Ann Waldeck, AMSAM-MMC-RE-FF, 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" .
 - e. Safety points of contact are –

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

(2) Alternate – Mr. Howard Chilton, AMSAM-SF-A, DSN 897-2068 or commercial (256) 313-2068. Datafax is DSN 897-2111 or commercial (256) 313-2111. E-mail is "Howard.Chilton@redstone.army.mil".

f. Foreign Military Sales (FMS) recipients requiring clarification of action advised by this TB should contact one of the following (Huntsville, AL, time is GMT minus 5 hours):

(1) Primary – Mr. Ronnie W. Sammons, AMSAM-SA-CS-NF, DSN 897-6656 or commercial (256) 313-6656. Datafax is DSN 897-6603 or commercial (256) 313-6603. E-mail is "Ronnie.Sammons@redstone.army.mil".

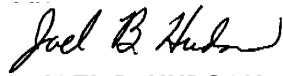
(2) Alternate – Mr. Paul W. Tarr, AMSAM-SA-CS-NF, DSN 897-6861 or (256) 313-6861. Datafax is DSN 897-6630 or (256) 313-6630. Email is "Tarrpw@redstone.army.mil".

g. After hours, contact the 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 the following address: 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". A reply will be furnished directly to you. Instructions for sending an electronic 2028 may be found at the back of this manual.

By Order of the Secretary of the Army:

Official: _____



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Secretary of the Army*
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DISTRIBUTION:

To be distributed in accordance with Initial Distribution Number (IDN) 314016 requirements for TB 1-1520-238-20-122.

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).

RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS



THEN...JOT DOWN THE DOPE ABOUT IT ON THIS FORM. CAREFULLY TEAR IT OUT, FOLD IT AND DROP IT IN THE MAIL.

SOMETHING WRONG WITH PUBLICATION

FROM: (PRINT YOUR UNIT'S COMPLETE ADDRESS)

DATE SENT

PUBLICATION NUMBER

PUBLICATION DATE

PUBLICATION TITLE

BE EXACT PIN-POINT WHERE IT IS

PAGE NO.

PARA-GRAPH

FIGURE NO.

TABLE NO.

IN THIS SPACE, TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT.

TEAR ALONG PERFORATED LINE

PRINTED NAME, GRADE OR TITLE AND TELEPHONE NUMBER

SIGN HERE

THE METRIC SYSTEM AND EQUIVALENTS

WEIGHT MEASURE

1 Centimeter = 10 Millimeters = 0.01 Meters = 0.3937 Inches
 1 Meter = 100 Centimeters = 1000 Millimeters = 39.37 Inches
 1 Kilometer = 1000 Meters = 0.621 Miles

WEIGHTS

1 Gram = 0.001 Kilograms = 1000 Milligrams = 0.035 Ounces
 1 Kilogram = 1000 Grams = 2.2 lb.
 1 Metric Ton = 1000 Kilograms = 1 Megagram = 1.1 Short Tons

LIQUID MEASURE

1 Milliliter = 0.001 Liters = 0.0338 Fluid Ounces
 1 Liter = 1000 Milliliters = 33.82 Fluid Ounces

SQUARE MEASURE

1 Sq. Centimeter = 100 Sq. Millimeters = 0.155 Sq. Inches
 1 Sq. Meter = 10,000 Sq. Centimeters = 10.76 Sq. Feet
 1 Sq. Kilometer = 1,000,000 Sq. Meters = 0.386 Sq. Miles

CUBIC MEASURE

1 Cu. Centimeter = 1000 Cu. Millimeters = 0.06 Cu. Inches
 1 Cu. Meter = 1,000,000 Cu. Centimeters = 35.31 Cu. Feet

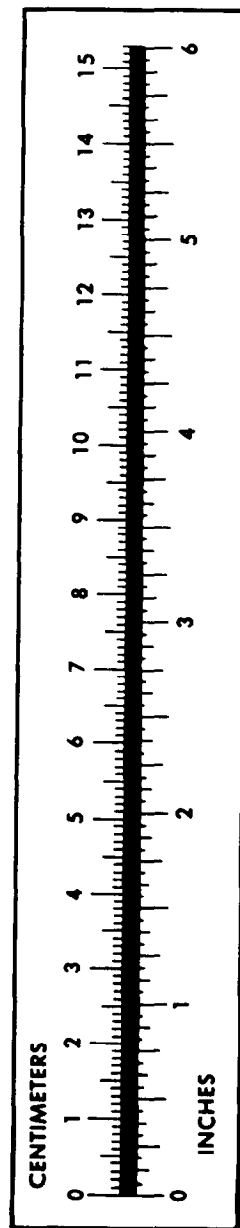
TEMPERATURE

$5/9(^{\circ}\text{F} - 32) = ^{\circ}\text{C}$
 212° Fahrenheit is equivalent to 100° Celsius
 90° Fahrenheit is equivalent to 32.2° Celsius
 32° Fahrenheit is equivalent to 0° Celsius
 $9/5^{\circ}\text{C} + 32 = ^{\circ}\text{F}$

APPROXIMATE CONVERSION FACTORS

TO CHANGE	TO	MULTIPLY BY
Inches	Centimeters	2.540
Feet	Meters	0.305
Yards	Meters	0.914
Miles	Kilometers	1.609
Square Inches	Square Centimeters	6.451
Square Feet	Square Meters	0.093
Square Yards	Square Meters	0.836
Square Miles	Square Kilometers	2.590
Acres	Square Hectometers	0.405
Cubic Feet	Cubic Meters	0.028
Cubic Yards	Cubic Meters	0.765
Fluid Ounces	Milliliters	29.573
its	Liters	0.473
arts	Liters	0.946
allons	Liters	3.785
Ounces	Grams	28.349
Pounds	Kilograms	0.454
Short Tons	Metric Tons	0.907
Pound-Feet	Newton-Meters	1.356
Pounds per Square Inch	Kilopascals	6.895
Miles per Gallon	Kilometers per Liter	0.425
Miles per Hour	Kilometers per Hour	1.609

TO CHANGE	TO	MULTIPLY BY
Centimeters	Inches	0.394
Meters	Feet	3.280
Meters	Yards	1.094
Kilometers	Miles	0.621
Square Centimeters	Square Inches	0.155
Square Meters	Square Feet	10.764
Square Meters	Square Yards	1.196
Square Kilometers	Square Miles	0.386
Square Hectometers	Acres	2.471
Cubic Meters	Cubic Feet	35.315
Cubic Meters	Cubic Yards	1.308
Milliliters	Fluid Ounces	0.034
Liters	Pints	2.113
Liters	Quarts	1.057
ers	Gallons	0.264
ms	Ounces	0.035
ograms	Pounds	2.205
Metric Tons	Short Tons	1.102
Newton-Meters	Pounds-Feet	0.738
Kilopascals	Pounds per Square Inch	0.145
ometers per Liter	Miles per Gallon	2.354
ometers per Hour	Miles per Hour	0.621



PIN: 079455-000