

# URGENT

\*TB 1-1520-243-20-28

## DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

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### ALL AH-1 AND UH-1 AIRCRAFT, ONE TIME INSPECTION OF MAGNETIC BRAKE

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

28 June 2001

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#### NOTE

THIS PUBLICATION IS EFFECTIVE UNTIL RESCINDED OR SUPERSEDED.

#### NOTE

This is a Aviation Safety Action Message/TB issued IAW AR 95-1, Chapter 6, 1 Sep 97. This message/TB has not been transmitted to units subordinate to addressees. Addressees should immediately retransmit this message/TB to all subordinate units, activities, or elements affected or concerned. The retransmittal shall reference this message/TB. Action addresses will immediately verify this transmission to CDR, AMCOM, ATTN: AMSAM-SF-A (SOF Compliance Officer).

#### 1. Priority Classification. URGENT.

#### NOTE

IAW AR 95-1, paragraph 6-14.a., MACOM commanders may authorize temporary exception from ASAM message requirements. 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.

**a. Aircraft in Use.** Upon receipt of this message/TB, make the following entry on the DA Form 2408-13-1. Enter a **Red HORIZONTAL DASH //--//** status symbol with the following statement: "Inspect Magnetic Brake (P/N 204-001--376-003) IAW AH-1--01--ASAM-01 or UH-1-01--ASAM-03 (TB 1-1520-243-20-28) NLT 31 July 2001." Clear the **RED HORIZONTAL DASH //--//** entry when the procedures IAW paragraphs 8 and 9 are completed. The affected aircraft shall be inspected as soon as practical but NLT 31 July 2001. Commanders who are unable to comply with the requirements of this message/TB within the timeframe specified will upgrade the affected aircraft status symbol to a **RED //X//**.

\*This TB supersedes USAAMCOM Aviation Safety Action Message 061915Z Jun 01, AH-1-01-ASAM-01 and UH-1-01--ASAM-03.

**b. Aircraft in Maintenance.**

(1) Aircraft in AVUM, AVIM, or Depot level maintenance – same as paragraph 1.a.

(2) Aircraft at contractor facility – Bell Helicopter Textron, U.S. Helicopters, Inc., etc., will inspect DD 250 aircraft prior to those aircraft departing for ferry to final destination.

**c. Aircraft in Transit.** Same as paragraph 1.a.

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

**e. Component/Parts in Stock at All Levels (Depot and Others) Including War Reserves.** Upon receipt of this message/TB, Depot and Materiel Activity Commanders will ensure the materiel condition tags of all items in all conditions codes listed in paragraph 6 are annotated to read: One time Inspections of Magnetic Brake, "AH-1-01-ASAM-01 or UH-1-01-ASAM-03, (TB 1-1520-243-20-28) Magnetic Brake Inspections, Not Complied With".

(1) **Wholesale Stock.** Not applicable.

(2) **Retail Stock.** Upon receipt of this message, commanders and Facility Managers maintaining retail stock at installation level and below shall contact the supported aviation unit to perform the procedures required IAW paragraphs 8 and 9 on suspect materiel. Disposition of discrepant materiel will be IAW paragraph 10.

**f. Components/Parts in Work. (Depot Level and Others).** Depot and other Maintenance Activity Commanders will ensure items listed in paragraphs 6 are not issued until they are in compliance with this message/TB.

**2. Task/Inspection Suspense Date.** Complete the inspection IAW paragraph 8 NLT 31 July 2001 and report IAW paragraph 14.b.

**3. Reporting Compliance Suspense Date.** Report compliance IAW paragraph 14.a.(1) no later than 27 June 2001.

**4. Summary of the Problem.**

**a.** Bell Helicopter Textron has recently received a report that Magnetic Brake (P/N 204-001-376-003) screws (P/N MS51959-3) had backed out which limited the travel of the arm assembly and caused increased resistance in the flight controls. If this occurred, the resistance of the effected flight control could cause the pilot to over control the aircraft in certain flight conditions. Investigation revealed the stop screws had been installed without the proper adhesive. These magnetic brakes were manufactured by Memcor--Truohm, INC. under their P/N MP498-3. Magnetic brakes manufactured by other manufacturers are not affected by this message/TB.

**b. For Manpower/Downtime and Funding Impacts.** See paragraph 12.

**c. The Purpose of this Message/TB is to:**

(1) Inspect all magnetic brakes, P/N 204-001-376-003, to determine the manufacturer.

(2) Verify the installation of the magnetic brake stop screws and repair if required.

**5. End Items to be inspected.** All AH-1 and UH-1 series aircraft.

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

NOMENCLATURE	PART NUMBER	NATIONAL STOCK NUMBER
Brake, Magnetic	204-001-376-003	ALL

**7. Parts to be Inspected.**

NOMENCLATURE	PART NUMBER	NATIONAL STOCK NUMBER
Screw	MS51959-3	5305-00-727-8833

**8. Inspection Procedures.**

- a. Gain access to all magnetic brakes IAW procedures contained in the appropriate technical manual.
- b. Determine the Manufacturer's Part Number located on the Magnetic Brake Data Plate.
- c. If the Manufacturer's part number is MP498-3, proceed to paragraph 9.a.
- d. If the Manufacturer's part number is not MP498-3, the inspection is complete and the **RED HORIZONTAL DASH //--//** entry may be cleared.

**9. Corrective Procedures.**

- a. If the Manufacturer's part numbers MP498-3, remove suspect magnetic brakes IAW procedures contained in the appropriate technical manual.
- b. Apply 10 inch-pounds of torque counterclockwise to the two MS51959-3 screws located on the magnetic brake housing next to the magnetic brake arm.
- c. If no movement is detected, reinstall the magnetic brake IAW with procedures contained in the appropriate technical manual and clear the **RED HORIZONTAL DASH //--//** entry.
- d. If movement is detected, repair as follows:
  - (1) Remove the two screws and stop limits from the magnetic brake.
  - (2) Remove the old sealant from the screws and the magnetic brake screw holes.
  - (3) Apply loctite (NSN 8030-00-081-2340) to the screw threads and install the two screws with the two stop limits hand tight.
  - (4) Adjust the stop limits IAW appropriate maintenance manual task.
  - (5) Torque screws to 5 to 10 inch-pounds.
  - (6) Reinstall magnetic brake IAW procedures contained in the appropriate maintenance manual and clear the **RED HORIZONTAL DASH //--//** entry.

**10. Supply/Parts and Disposition.**

- a. **Parts Required.** Not applicable.
- b. **Requisitioning Instructions.** Not applicable.
- c. **Bulk and Consumable Materials.**

NOMENCLATURE	PART NUMBER	NATIONAL STOCK NUMBER
Sealing Compound (Loctite)	08931	8030-00-081-2340

- d. **Disposition.** Not applicable.

e. **Disposition of Hazardous Materiel.** Not applicable.

11. **Special Tools, Jigs and Fixtures Required.** Not applicable.

12. **Application.**

a. **Category of Maintenance.** AVUM. Aircraft downtime will be charged to AVUM maintenance. Report Aircraft Non-Mission Capable Maintenance (NMCM) while undergoing inspection and correction IAW this message/TB.

b. **Estimated Time Required.**

(1) Time to complete inspection:

(a) Total of 0.5 man--hours using 1 person.

(b) Total of 0.5 hours downtime for one end item.

(2) Time for repair/replacement:

(a) Total of 3.0 man--hours using 1 person.

(b) Total of 3.0 hours downtime for one end item.

c. **Estimated Cost Impact to the Field.**

NOMENCLATURE	P/N	NSN	QTY.	COST EA.
Sealing Compound		8030-00-081--2340	1	\$1.79
<b>TOTAL COST PER AIRCRAFT</b>		\$1.79		

d. **TB/MWOs to be Applied Prior to or Concurrently with this Inspection.** Not applicable.

e. **Publications Which Require Change as a Result of this Inspection.** Not applicable.

13. **References.**

a. DA PAM 738-751, 15 Mar 99.

b. TM 1--1520-248-23.

c. TM 55-1520-210-23.

d. TM 55-1520-228-23.

e. TM 55-1520-236-23.

14. **Recording and Reporting Requirements.**

a. **Aircraft:**

(1) **Reporting Compliance Suspense Date (Aircraft).** Upon entering requirements of this message/TB on DA Form 2408-13-1 on all subject mission design series (MDS) aircraft, Commanders will forward a priority message, datafax or E--mail to CDR, 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 <safeadm@redstone.army.mil>. The report will cite OH-58-01-ASAM-03 (TB 1--1520-228-20-85), date of entry on DA Form 2408-13--1, aircraft MDS, and serial numbers of aircraft in numerical order.

(2) **Task/Inspection Reporting Suspense Date (Aircraft).** Not applicable.

**b. Wholesale Spare Parts/Assemblies.**

(1) **Reporting Message Receipt.** Not applicable

(2) **Task/Inspection Reporting Suspense.** Not applicable.

**c. Retail Spare Parts/Assemblies:**

(1) **Reporting Message Receipt.** Not applicable.

(2) **Task/Inspection Reporting Suspense.** Not applicable.

**d. The Following Forms are Applicable and are to be Completed in Accordance with DA Pamphlet 738-751, dated 15 March 1999:**

**NOTE**

Unit Level Logistics System--Aviation (ULLS--A) users will use applicable electronic "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.

(4) DD Form 1574/DD Form 1574-1, Serviceable Tag/Label – Materiel (Color Yellow). Annotate remarks block with "AH-1-01-ASAM-01 or UH-1-01-ASAM-03 (TB 1-1520-243-20-28), not complied with"

(5) DD Form 1577-2/DD Form 1577-3, Unserviceable (Reparable) tag/label – Materiel (Color Green). Annotate remarks block with "Unserviceable IAW AH-1-01-ASAM-01 or UH-1-01-ASAM-03 (TB 1-1520-243-20-28)."

**15. Weight and Balance.** N/A.

**16. Points of Contact:**

**a.** Technical point of contact for this TB is: Mr. Thaddeus Baranowski, AMSAM-RD-AE--I-D-O, DSN 645-9625 or Commercial (256) 955-9625. Datafax is DSN 645-9536 or Commercial (256) 955-9536. E-mail is <thaddeus.baranowski@UH.redstone.army.mil>.

**b.** Logistical point of contact for this TB is SSG Tim Hardin, AMSAM-DSA-ASH-L, DSN 645-7934 or Commercial (256) 955-7934. Datafax is DSN 645-7125 or Commercial (256) 955-7125. E-mail is <timothy.hardin@redstone.army.mil>.

**c.** Wholesale Materiel Point of Contact (Spares) is: Mr. Dale Uckele, AMSAM-MMC-AV-SA, DSN 897-1542, or (256) 313-1542. Datafax is DSN 897-1541. E-mail is <dale.uckele@redstone.army.mil>.

**d.** 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>.

**e.** Safety points of contact for this TB are:

(1) Primary – Mr. Randall Rushing (SAIC), AMSAM-SF-A, DSN 897-2092 or (256) 313-2092. Datafax is DSN 897-2111 or (256) 313-2111. E-mail is <randall.rushing@redstone.army.mil>.

(2) Alternate – Mr. Ron Price, AMSAM--SF-A, DSN 788-8636 or Commercial (256) 842-8636. Datafax is DSN 897-2111 or Commercial (256) 313-2111. E-mail is <ron.price@redstone.army.mil>.

f. Foreign Military Sales recipients requiring clarification of action advised by this TB should contact:

(1) Primary -- 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>.

(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. E-mail is <paul.tarr@redstone.army.mil>.

g. After hours contact the AMCOM Command Operations Center (COC) DSN 897--2066/2067 or Commercial (256) 313--2066/2067. Huntsville, AL, is GMT minus 5 hours.

**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, Alabama 35898--5000. A reply will be furnished to you. You may also send in your comments electronically to our E-mail address at <2028@redstone.army.mil>, or by datafax at DSN 788--6546 or commercial (256) 842--6546. Instructions for sending a DA Form 2028 by E-mail may be found at the back of most Technical Manuals.

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*  
0117003

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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

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

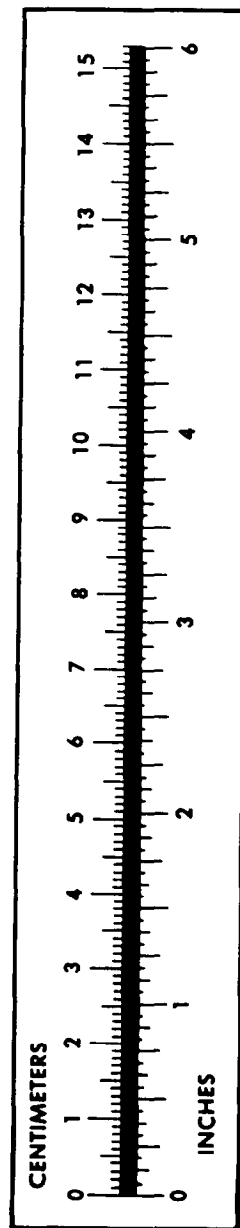
## TEMPERATURE

$5/9(^{\circ}\text{F} - 32) = ^{\circ}\text{C}$   
 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: 079083-000**