

URGENT

*TB 1-1520-237-20-214

DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

MAINTENANCE MANDATORY RCS CSGLD-1860 (R1) ALL H-60 AIRCRAFT ONE-TIME INSPECTION OF THE MAIN ROTOR BLADE EXPANDABLE PIN P/N 70103-08107-101/102/103

Headquarters, Department of the Army, Washington, D. C.
25 August 1999

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THIS PUBLICATION IS EFFECTIVE UNTIL RESCINDED OR SUPERSEDED.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) the condition status symbol of the cited aircraft will be changed to a red horizontal dash // - //. The red horizontal dash // - // may be cleared when the inspection of paragraph 8 below is completed. The affected aircraft shall be inspected as soon as possible but no later than the task/inspection suspense date. Failure to comply with the requirements of this TB within the time frame will cause the status symbol to be upgraded to a red "X".

b. Aircraft in Depot Maintenance. Aircraft will not be released until compliance with this TB has been completed. The inspection requirements of para 8 are complied with and, if necessary, the correction procedures of para 9 are completed.

c. Aircraft Undergoing Maintenance. Aircraft will not be issued until compliance with this TB has been completed. The inspection requirements of para 8 are complied with and, if necessary, the correction procedures of para 9 are completed.

d. Aircraft in Transit.

(1) Surface/Air Shipment. Prior to first flight or within 14 days of arrival.

(2) Ferry Status.

(a) Inspect at final destination.

(b) Those aircraft that have a DD 250 and are at a contractor facility or Sikorsky Aircraft will be inspected IAW the inspection requirements of para 8 and, if necessary, the correction procedures of para 9 will be completed prior to ferry to final destination.

*This TB supersedes USAAMCOM Aviation Safety Action Message 2816323Z JUL 99, UH-60-99-ASAM-09.

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- e. Maintenance Trainers (Category A, and B). Same as paragraph 1.a.
- f. Component/Parts in Stock at All Levels (Depot and Others) Including War Reserves .

(1) Wholesale Stock. Report receipt of this message IAW paragraph 14c(1).

(2) Retail Stock. Report receipt of this TB IAW paragraph 14c(2). Upon receipt of this TB, commanders and others maintaining retail stock at installation level and below shall contact the support aviation unit to perform the inspection required by paragraph 8 and the correction procedures of paragraph 9 on discrepant materiel. Disposition of discrepant materiel will be IAW paragraph 10d. Report compliance with this message IAW paragraph 14d(2).

- g. Component/Parts In Work (Depot Levels and Others). N/A.

- 2. Task/Inspection Suspense Date.** Within next 10 flight hours/14 days.
- 3. Reporting Compliance Suspense Date.** No later than 19 August 1999 IAW 14.a of this TB.
- 4. Summary of the Problem.**

a. During routine maintenance, a main rotor blade expandable pin, P/N 70103-08107-102, was found to have an expandable "outer" segment without the slot that allows expansion and contact with the hole when the handle is rotated. Structural analysis revealed that the lack of a slot in one or more of the segments could impact the service life of the blade cuff and spindle. The amount of service life degradation is dependent upon the location of the discrepant segment of the pin, the location of the pin (i.e. lead or lag), the number of hours the discrepant pin has been installed, and the manufacturers specific pin configuration. A review of the manufacturing process revealed that all pins manufactured for the H-60 aircraft are suspect. A one-time inspection of all pins is necessary to locate any additional discrepant pins. For each non-conforming pin found, an engineering analysis is necessary to determine the impact on the fatigue life of the mating spindle and main rotor blade cuff. This impact can range, depending upon the previously mentioned factors, from no impact to a reduced life for the specific parts.

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

c. The purpose of this message is to implement a one-time inspection of H-60 main rotor expandable pin, P/N 70103-08107-101/102/103, for conformation and to implement a process to apply reduced service life on specific main rotor blade, blade cuff and spindle where appropriate and to remove P/N 70103-08107-101 expandable pins from service.

- 5. End Items to be inspected.** All H-60 aircraft.
- 6. Assembly components to be Inspected.** N/A.
- 7. Parts to be Inspected.**

NOMENCLATURE	PART NUMBER	NATIONAL STOCK NUMBER
Pin, Expandable Grip	70103-08107-101	5315-01-096-9173
Pin, Expandable Grip	70103-08107-102	5315-01-329-0707
Pin, Expandable Grip	70103-08107-103	NO NSN

8. Inspection Procedures.

a. Remove main rotor blade expandable pins IAW TM 1-1520-237-23 or TM 1-1520-250-23 from each rotor blade, one at a time.

b. Visually inspect each P/N 70103-08107-101/102/103 expandable pin for non-conforming outer segments. Between each "outer" segment is and "inner" segment that does not have a slot and appears to be a solid washer. When the handle is closed the inverted cone shaped outer (slotted) segments ride up on the cone shaped inner (un-slotted) segments causing the outer segments to expand. Expandable pins have a slot in every outer segment. Any missing, broken, solid, or partially slotted outer segments are cause for

rejection. A link to supplemental visual information on the allowable pin/slot configurations is available on the 1999 ASAM page of the Blackhawk web site: "http://www.uhpo.redstone.army.mil". If you are unable to access the web page contact either the technical or logistical poc listed at para 16a/b.

(1) Expandable pins manufactured by Apex Manufacturing Co. Inc. (CAGE 2V343) can be indentified by the serial number prefix "AP".

(2) Expandable pins manufactured by Monogram Aerospace (CAGE 98524) are indentified by serial number prefix "C416" or may not have a prefix.

(3) Expandable pins manufactured by Avibank Manufacturing (CAGE 84526) have serial number prefixes "D416" or "F416" or "AVK".

(4) Expandable pins manufactured by Shur-lock (CAGE 97393) which are indentified by serial number prefix "E416" or "SLFP" have a solid inner segment in the center of the pin which is as wide as an outer segment.

c. Replacement of all 70103-08107-101 pins is mandatory within 30 flight hours/42 days, whichever occurs first. When the replacement pin is received, remove the 101 pin, demil IAW TM 1-1500-328-23 and install a new pin. Report results of inspection IAW paragraph 14d.

d. If the expandable pin (P/N 70103-08107-102/103) conforms, the inspection is complete. Reinstall the pin IAW TM 1-1520-237-23 or TM 1-1520-250-23. Report results of inspection IAW paragraph 14d.

e. If the expandable pin does not conform to the required configuration, correct IAW paragraph 9.

9. Correction Procedures.

a. Replace discrepant pin immediately and dispose of discrepant pin IAW paragraph 10d.

b. Fax the special report of discrepant item IAW paragraph 14e to the AMCOM Utility Helicopter Systems Engineering, AMSAM-AR-E-I-C-U, commercial (256) 313-4923, DSN 897-4923. Call the technical point of contact in paragraph 16a to confirm receipt of fax.

(1) AMCOM engineering will complete the necessary engineering analysis and advise the logistical POC of the recommended disposition instructions. The logistical POC will contact the unit and provide final disposition instructions.

(2) The logistical POC will contact the unit POC if additional information on prior spindle and main rotor blade history is necessary to complete the evaluation of the discrepant part and its impact on attached components.

c. If disposition instructions have not been received from the logistical POC within 10 flight hours of replacement of pin, the aircraft must be grounded until receipt of disposition instructions. Units may choose to replace the affected attaching components in order to return the aircraft to flyable status. In this event, annotate records to reflect the removal and replacement of the main rotor spindle and main rotor blade where the discrepant expandable pin was installed. Hold the removed components pending disposition instructions.

NOTE

There is no calendar restriction, therefore, if the aircraft flight time is properly manages, the aircraft will remain in flyable status per DA Form 1352 until replacement parts are received.

d. Report results of inspection IAW 14b.

10. Supply/Parts and Disposition.

a. Parts Required. Items cited below may be required to replace defective items.

NOMENCLATURE	PART NUMBER	NATIONAL STOCK NUMBER
Pin, Expanding Grip	70103-08107-102	5315-01-329-0707
Blade, Main Rotor	70150-09100-043	1615-01-106-1903
Rotary Head Spindle	70102-08200-069	1615-01-442-6926

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b. Requisitioning Instructions. Requisition replacement parts using normal supply procedures. All requisitions shall use project code "CC 57-59" "XFW" "X-RAY-FOXTROT-WHISKEY".

NOTE

Project code "XFW", X-RAY-FOXTROT-WHISKEY" is required to track and establish a data base of stock fund expenditures incurred by the field as a result of SOF actions.

c. Bulk and Consumable Materials. N/A.

d. Disposition. Submit CAT 1 QDR on each discrepant expandable pin and hold exhibit pending disposition instructions through normal channels. All turn-in documents must include project code (CC-57-59) "XFW", "X-RAY-FOXTROT-WHISKEY" .

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 maintenance.

b. Estimated Time Required.

(1) Total of 2 man-hours using 2 persons.

(2) Total of 1 hour downtime for one end item.

c. Estimated Cost Impact to the Field.

NOMENCLATURE	PART NUMBER	NATIONAL STOCK NUMBER	QTY	COST EA.
Pin, Expanding Grip	70103-08107-102	5315-01-329-0707	1	\$176.42
Blade, Main Rotor	70150-09100-043	1615-01-106-1903	1	\$101,590.00
Rotary Head Spindle	70102-08200-069	1615-01-442-6926	1	\$7,904.00
TOTAL AIRCRAFT COST				\$109,175.42

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. N/A.

13. References.

a. TB 1-1520-237-20-130 (UH-60-93-ASAM-03)

b. TM 1-1520-237-23

c. TM 1-1520-250-23

d. TM 1-1500-328-23

14. Recording and Reporting Requirements.

a. Reporting compliance Suspense Date (Aircraft). Upon entering requirements of this TB 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. Datafax number is DSN 897-2111 or commercial (256) 313-2111. E-Mail address is "SAFEADM@REDSTONE.ARMY.MIL". The report will cite this TB number, date of entry in DA Form 2408-13-1, the aircraft mission design series and serial numbers of aircraft in numerical order.

b. Task/Inspection reporting suspense date (Aircraft) – Upon completion of inspection, units will forward a priority message to the logistical POC listed in paragraph 16b. The report will cite

UH-60-99-ASAM-09, (TB 1-1520-237-20-214) date of inspection, aircraft serial number, aircraft hours, and results of the inspection. Inspection and reports will be completed no later than 3 September 1999. Negative reports are required.

c. Reporting Message Receipt (Spares).

(1) Materiel In Wholesale Depot Storage. Report receipt of this TB by email or datafax to the wholesale materiel (spares) point of contact listed in paragraph 16c within 3 working days from the date of this message. Provide local POC.

(2) Materiel in Retail Storage. Report receipt of this message by e-mail or datafax to the logistical POC listed in paragraph 16 b within 7 days from the date of this message. Provide local POC.

d. Task/Inspection Reporting Suspense Date (Spares).

(1) Materiel In Wholesale Depot Storage. Upon receipt of this TB a depot inspection of the whole-sale stock will either be in process or already completed. This depot inspection team was instructed to inspect paragraph 7 part IAW paragraph 8 and in addition to the inspection requirements to the following:

(a) Provide serial numbers and the manufacturer's cage code of discrepant stock to the wholesale point of contact in paragraph 16c.

(b) Reclassify discrepant stock to condition code "H". All other stock is to remain in its original condition code.

(c) Annotate the box as well as tag the part with the following annotation: "Inspected IAW UH-60-99-ASAM-09 (TB 1-1520-237-214)"

(2) Materiel In Retail Storage. Report compliance with this TB to the logistical POC in paragraph 16b within 14 days of the date of this TB. Report the quantity inspected by condition code and the resulting condition code. Report by e-mail or datafax and provide local point of contact.

e. Special Report of Discrepant Item. Within 24 hours of discovery of a discrepant item, submit a report directly to the AMCOM Utility Helicopters System Engineering, AMSAM-AR-E-I-C-U, datafax (256) 313-4923, DSN 897-4923 or alternate datafax (256) 955-6590, DSN 645-6590. A form to record this data is available on the safety page of the UH PMO website <http://www.uhpo.redstone.army.mil>. If unable to access the PMO web page, contact the technical or logistical POC in paragraph 16a/b to receive a copy of the report form via email or fax,. The report shall contain the following information. Subject: "Report of Discrepant Main Rotor Expandable Pin, ASAM UH-60-99-09", (TB 1-1520-237-20-214).

(1) Location of discrepant pin position (lead or lag).

(2) Part number and serial number of discrepant pin and location(s) of discrepant segment(s), time since new and time since installed in associated spindle and cuff.

(3) Part number, serial number, and component total time of associated main rotor spindle.

(4) Part number, serial number, and component total time of associated main rotor blade.

(5) Part number, serial number, and component total time of associated main rotor blade cuff.

(6) Contact information (POC, commercial and DSN telephone numbers, unit, location, fax number, email address).

f. The following forms are applicable and are to be completed IAW DA Pam 738-751, 15 March 1999.

NOTE

ULLS-A Users will use the applicable "E" Forms.

(1) DA Form 2408-5-1, Equipment Modification Record (Blade Expandable Pin).

(2) DA Form 2408-13, Aircraft Status Information Record.

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- (3) DA Form 2408-13-1, Aircraft Inspection and Maintenance Record.
- (4) DA Form 2408-14, Uncorrected Fault Record.
- (5) DA Form 2408-15, Historical Record for Aircraft. (List serial number of pins inspected).
- (6) DA Form 2408-16, Aircraft Component Historical Record.
- (7) DA Form 2410, Component Removal and Repair Overhaul Record (Only if pin, main rotor blade or spindle are removed).
- (8) DD Form 1574/DD Form 1574-1, Serviceable Tag/Label – Materiel (Color Yellow). Annotate remarks block with “Inspected serviceable IAW UH-60-99-ASAM-09 (TB 1-1520-237-20-214).
- (9) DD Form 1577/DD Form 1577-1, unserviceable (condemned) tag/label – materiel (color red). Annotate remarks block with “condemned IAW UH-60-99-ASAM-99 (TB 1-1520-237-20-214) and mutilated IAW TM 1-1500-328-23.”

15. Weight and Balance. N/A.

16. Points of Contact.

- a. For technical assistance, contact (256) 313-4914, DSN 897-4914. Technical point of contact for this TB is Mr. Greg Kirchhofer, AMSAM-AR-E-I-C-U, DSN 897-4914 or commercial (256) 313-4914 or DSN 645-0668, commercial (256) 955-0668, E-Mail is greg.kirchhofer@uh.redstone.army.mil. Datafax is DSN 897-4923 or (256) 313-4923 or DSN 645-6590, (256) 955-6590.
- b. Logistical point of contact for this TB is Mr. Joe Hoover, AMSAM-DSA-UH-L, DSN 645-7898 or commercial (256) 955-7898, Datafax is DSN 897-3778 or commercial (256) 313-3778. E-mail is joe.hoover@uh.redstone.army.mil
- c. Wholesale materiel POC (Spares) is Ms. Julia Moore, AMSAM-MMC-VS-UA, DSN 897-1176 or (256) 313-1176, Datafax is DSN 897-1572 or commercial (256) 313-1572. E-mail is moore-ju@exchange1.redstone.army.mil.
- d. Forms and records point of contact for this TB is Ms. Ann Waldeck, AMSAM-MMC-RE-FF, DSN 746-5564 or (256) 876-5564, Datafax is DSN 746-4904. E-mail is waldeck-ab@redstone.army.mil.
- e. Safety point of contact for this TB is Mr. Ron Price, AMSAM-SF-A, DSN 788-8636 or commercial (256) 842-8636, Datafax is (256) 313-2111. E-mail is ron.price@redstone.army.mil.
- f. 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 8978-0681 or (256) 313-0681. E-mail is wittstrom-jl@redstone.army.mil or Mr. Ronnie W. Sammons, AMSAM-SA-CS-NF, DSN 897-0869 or (256) 313-0869. Datafax is DSN 897-0411 or (256) 313-0411. E-mail sammons-rw@redstone.army.mil. Huntsville, Alabama is GMT minus 6 hours.
- g. After hours contact AMCOM Command Operations Center (COC) DSN 897-2066/7 or commercial (314)263-2066/7.

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-LS-LP, Redstone Arsenal, AL 35898-5000. You may also

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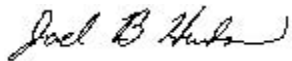
submit your recommended changes by E-mail directly to ls-lp@redstone.army.mil. A reply will be furnished directly to you. Instructions for sending an electronic 2028 may be found at the back of this manual.

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By Order of the Secretary of the Army:

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

Official:



JOEL B. HUDSON
Administratrive Assistant to the
Secretary of the Army
9922301

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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.

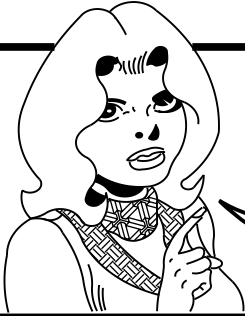
From: "Whomever" <whomever@avma27.army.mil>

To: <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.

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 THIS PUBLICATION?

FROM: (PRINT YOUR UNIT'S COMPLETE ADDRESS)

PFC John DOE
CO A 3rd Engineer Bn
Ft. Leonardwood, MO 63108

DATE SENT

22 August 1992

PUBLICATION NUMBER

TM 1-1520-250-10

PUBLICATION DATE

15 June 1992

PUBLICATION TITLE

Operator's Manual MH60K Helicopter

BE EXACT...PIN-POINT WHERE IT IS

PAGE NO

6

PARA-GRAPH

2-1
a

FIGURE NO

4-3

TABLE NO

B 1

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

In line 6 of paragraph 2-1a the manual states the engine has 6 cylinders. The engine on my set only has 4 cylinders. Change the manual to show 4 cylinders.

Callout 16 on figure 4-3 is pointed at a bolt. In key to figure 4-3, item 16 is called a shim—Please correct one or the other

PRINTED NAME, GRADE OR TITLE, AND TELEPHONE NUMBER

JOHN DOE, PFC (268) 317-7111

SIGN HERE

JOHN DOE

John Doe

DA FORM 1 JUL 79 2028-2

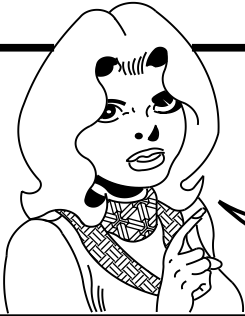
PREVIOUS EDITIONS ARE OBSOLETE
DRSTS-M Overprint 1, 1 Nov 80

P.S.--IF YOUR OUTFIT WANTS TO KNOW ABOUT YOUR RECOMMENDATION MAKE A CARBON COPY OF THIS AND GIVE IT TO YOUR HEADQUARTERS

AK2534 SA

TEAR ALONG PERFORATED LINE

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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 THIS 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

DA FORM 2028-2
1 JUL 79

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ST. LOUIS, MO 63120-1798

