

URGENT

*TB 1-1520-237-20-245

DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

MAINTENANCE MANDATORY TECHNICAL, RCS CSGLD-1860 (R1), ALL H-60 SERIES AIRCRAFT, INSPECTION OF ENGINE CONTROL QUADRANT POWER CONTROL LEVER (PCL) WIRING

Headquarters, Department of the Army, Washington, D. C.
30 April 2002

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

1. Priority Classification. URGENT

NOTE

IAW AR 95-1, para 6-6a/6-14a, MACOM Commanders may authorize temporary exception from 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 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 Engine PCL Quadrant, IAW TB 1-1520-237-20-245 before completion of next PMS-2 but NLT 15 February, 2005." 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 NLT 15 February, 2005. 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 //.

b. Aircraft in Maintenance.

(1) Aircraft in AVUM, AVIM or Depot Level Maintenance. Same as paragraph 1.a..

(2) Aircraft at Contractor Facility - Sikorsky will inspect DD 250 aircraft prior to those aircraft departing for ferry to final destination.

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

* This TB supersedes USAAMCOM Aviation Safety Action Message (ASAM), 122030Z FEB 02, UH-60-02-ASAM-03 and TB 1-1520-237-20-245 dated 1 March 2002.

- d. Maintenance Trainers (Category A and B). Same as paragraph 1.a..
- e. Component/Parts in Stock at All Levels (Depot Level 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 before completion of next PMS-2 but NLT 15 February, 2005.

3. Reporting Compliance Suspense Date. Report compliance IAW paragraph 14.a.(1) NLT 20 February 2002.

4. Summary of Problem.

a. H-60 series helicopters have a history of electrical arcing and shorted micro-switches in the Engine PCL Quadrant wiring resulting from the PCL wiring chaffing on the PCL Quadrant housing as the pilot moves the PCL's from idle to fly or fly to idle. A manual change was issued to reduce the potential for wiring chaffing, detailing procedures to rectify the problem. Subsequent engineering evaluation has resulted in an improved configuration of the PCL Quadrant wiring, which provides greater security and stability of the wiring harness. Sikorsky has recently incorporated this improvement on production aircraft (SN 00-26868 and subsequent).

b. Manpower/downtime and funding impacts – See paragraph 12.

c. The purpose of this TB is to provide corrective procedures that will eliminate the wiring chaffing on the PCL quadrant housing for aircraft with SN prior to 00-26868.

5. End Items to be Inspected. All H-60 series aircraft.

6. Assembly Components to be Inspected.

NOMENCLATURE	PART NUMBER	NSN
Quadrant Assembly, No. 1	70301-01033-043	1680-01-123-2555
Quadrant Assembly, No. 2	70301-01033-044	1680-01-123-2539
Quadrant Assembly, No. 1	70301-85033-043	1680-01-242-9185
Quadrant Assembly, No. 2	70301-85033-044	1680-01-242-9186
Quadrant Assembly, No. 1	70301-01033-041	1680-01-095-7261
Quadrant Assembly, No. 1	70301-01033-045	1680-01-242-9185
Quadrant Assembly, No. 2	70301-01033-042	1680-01-095-7262
Quadrant Assembly, No. 2	70301-01033-046	1680-01-242-9186

7. Parts to be Inspected. N/A.

8. Inspection Procedures.

NOTE

Aircraft with serial number "00-26868" and subsequent have been modified by Sikorsky Aircraft Corporation.

a. If aircraft serial number is "00-26868" or subsequent, no additional inspection is required. The Red Horizontal Dash // - // entry from paragraph 1.a. will be cleared and compliance noted on DA Form 2408-15.

b. If aircraft serial number is prior to "00-26868", proceed to paragraph 9.

9. Correction Procedures.

a. Remove the #1 and #2 Engine Power Quadrant Assembly IAW TM 1-1520-237-23-3, paragraph 4-4-21, or TM 1-1520-250-23-3, paragraph 4.13.

NOTE

When removing the Engine Control Quadrant Power Lever, do not unsolder or otherwise disconnect the starter override and abort switches.

- b. Remove the #1 and #2 Engine Power Control Lever IAW TM 1-1520-237-23-3, paragraph 4-5-11, or TM 1-1520-250-23-3, paragraph 4.13.

NOTE

During disassembly, make repairs as required IAW TM 1-1520-237-23-3, paragraph 4-5-11, or TM 1-1520-250-23-3, paragraph 4.13.

- c. Disassemble the Engine Quadrant Power Lever IAW TM 1-1520-237-23-3, paragraph 4-5-11.
d. Using a #40 drill bit, drill two holes in the PCL shank.

(1) Locate the second hole approximately 0.375 inch above the starter abort switch bracket and approximately 0.125 inch from the edge of the PCL.

(2) Locate the second hole approximately 1.175 inch above the start abort switch bracket (In line with the first hole), and approximately 0.125 inch from the edge of the PCL.

WARNING

After drilling, each hole must be thoroughly de-burred.

- e. Install the #1 and #2 Engine Control Quadrant Power Lever IAW TM 1-1520-237-23-3, paragraph 4-5-11, or TM 1-1520-250-23-3, paragraph 4.13.
f. Trim grommet raw material so that eleven full teeth are shown and the ends are flush and square. Approximate length should be 1.375 inch long.

NOTE

When placing the grommet against the shank of the PCL Lever, the switch lead dressing may not allow the grommet to reach the starter abort switch bracket. Install the grommet as close to the switch bracket as possible.

- g. Place grommet against the shank of the PCL Lever directly above the starter abort switch bracket. Nest the abort switch harness between the grommet teeth.

NOTE

When securing the harness/grommet make sure the lacing tape is positioned between the teeth prior to tightening.

- h. Using the two #40 holes secure the harness/grommet with the lacing tape (MIL-T-43435, 4020-00-080-0473) (TWO PLACES). Thoroughly clean the work area of all FOD.

- i. Adjust the starter abort speed switch IAW TM 1-1520-237-23-3, paragraph 4-4-24, or TM 1-1520-250-23-3, paragraph 4.13.

CAUTION

Damage to wiring will result if caution is not used when installing covers on Engine Control Quadrant PCL. Carefully position wires and install covers.

- j. Install the #1 and #2 Engine Control Quadrant IAW TM 1-1520-237-23-3, paragraph 4-4-21, or TM 1-1520-250-23-3, paragraph 4.13. The Red Horizontal Dash // - // entry from paragraph 1.a. will be cleared and compliance noted on DA Form 2408-15.

10. Supply/Parts and Disposition.

- a. Parts Required - Items cited in paragraph 10.c. may be required for corrective procedures.
- b. Requisitioning Instructions - Requisition replacement parts using normal supply procedures.
- c. Bulk and Consumable Materials -

NOTE

The lacing tape is shipped as a roll of 1,500 feet. This should only be ordered at AVIM level.

NOMENCLATURE	PART NUMBER	NSN
Lacing Tape	MIL-T-43435	4020-00-080-0473
Grommet Raw Material	MS 21266-3N	5325-00-926-1394

- d. Disposition - N/A.

11. Special Tools, and Fixtures Required. N/A.

12. Application.

a. Category of Maintenance. AVIM. Report aircraft non-mission capable maintenance (NMCM) while undergoing inspection and correction IAW this TB.

b. Estimated Time Required.

(1)Time to Complete Inspection - Total of 0.5 man-hours using one person.

(2)Time For Repair/Replacement -

(a) Total of 4 man-hours using 1 person.

(b) Total of 4 hours downtime for one end item.

c. Estimated cost impact to the field. N/A.

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. TM 1-1520-237-23-3 and TM 1-1520-250-23-3 shall be changed to reflect this message. A copy of this message shall be inserted in the appropriate TM as authority to implement the change until printed change is received.

13. References.

- a. DA PAM 738-751, 15 Mar 99.
- b. TM 1-1520-237-23-3, 29 May 98.
- c. TM 1-1520-250-23-3, 28 Jul 00.

14. Recording and Reporting Requirements.

a. Aircraft:

(1)TAMMS Reporting Compliance Suspense.

Upon entering requirements of this message on DA Form 2408-13-1 for all affected 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 paragraph 3.. Datafax number is DSN 897-2111 or (256) 313-2111. Email 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.

(2)Task/Inspection Reporting Suspense. N/A.

b. Wholesale Spare Parts/Assemblies. N/A.

c. Retail Spare Parts/Assemblies. N/A.

(1)Reporting message receipt. N/A.

(2)Task/Inspection Reporting Suspense - Commanders and facility managers will report inspection results to the Logistical Point Of Contact in paragraph 16.b. NLT date specified in paragraph 1.e.(2). Report the quantity inspected by condition code and the resulting condition code. Report by email or datafax and provide local point of contact.

d. 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. Technical point of contact is Mr. Gary Trotter, AMSAM-RD-AE-I-D-U, DSN 897-2350 ext 9693, comm. 256-705-9693, Fax 256-705-9893, email gary.trotter@rdec.redstone.army.mil.

b. Logistical point of contact is Mr. Joe Hoover, AMSAM-DSA-UH-L, DSN 645-7898 or (256) 955-7898, datafax is DSN 897-3778 or (256)313-3778. Email is "joe.hoover@uh.redstone.army.mil"

c. Forms and Records Point Of Contact is Ms. Ann Waldeck, AMSAM-MMC-MA-NM, DSN 746-5564 or (256)897-5564, Datafax is DSN 746-4904 or (256) 876-4904. Email is "ann.waldeck@redstone.army.mil".

d. Safety points of contact are:

(1)Primary - Mr. Randall Rushing (SAIC), AMSAM-SF-A, DSN 897-2092 or (256) 313-2092, Fax is DSN 897-2111 or (256) 313-2111. Email is "randall.rushing@redstone.army.mil".

(2)Alternate - Mr. Ron Price, AMSAM-SF-A, DSN 788-8636 or (256) 842-8636, datafax is DSN 897-2111 or (256) 313-2111. Email is "ron.price@redstone.army.mil".

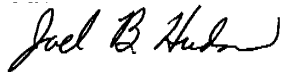
e. Foreign Military Sales recipients requiring clarification of action advised by this TB should contact Mr. Ronnie W. Sammons, AMSAM-SA-CS-NF, DSN 897-6856 or (256) 313-6856. Datafax is DSN 897-6630 or (256) 313-6630. Email "ronnie.sammons@redstone.army.mil".

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

17. Reporting of Errors and Recommended 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 35898-5000. A reply will be furnished directly to you. You may also submit your recommended changes by email directly to 2028@redstone.army.mil. 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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Administrative Assistant to the
Secretary of the Army

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

DISTRIBUTION:

To be distributed in accordance with Initial Distribution Number (IDN) 314035, requirements for TB 1-1520-237-20-245.

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.