***TB 1-1520-237-20-205**

DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

ONE TIME INSPECTION FOR MAINTENANCE MANDATORY RCS CSGLD-1860 (R1), ALL H-60 AIRCRAFT, LOOSE HUCK BOLTS ON OVERHAULED PRIMARY SERVOS, YAW BOOST SERVOS, COLLECTIVE BOOST SERVOS AND TAIL ROTOR SERVOS

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

27 March 1998

NOTE

THIS PUBLICATION IS EFFECTIVE UNTIL RESCINDED OR SUPERSEDED.

1. **Priority Classification. Unclassified.**

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 practical but no later than the Task/Inspection suspense date. Failure to comply requirements of this Technical Bulletin within the time frame specified will cause the status symbol to be upgraded to a Red “X”.

b. Aircraft in Depot Maintenance. Aircraft will not be issued until compliance with this ASAM has been completed and the inspection requirements have been completed. The item identified as suspect IAW paragraph 8 must be replaced prior to issuance of aircraft to the field.

c. Aircraft Undergoing Maintenance. Aircraft will not be released until compliance with this ASAM has been completed.

d. Aircraft in Transit.

***This TB supersedes USAAMCOM Aviation Safety Action Message 101914Z Mar 98, UH-60-98-ASAM-**

(1) Surface/Air Shipment. Prior to first flight/within 10 days of arrival.

(2) Ferry Status. Inspect at final destination.

e. Maintenance Trainers (Category A and B). Same as paragraph la.

f. Component/Parts in Stock including War Reserves at All Levels (Depot and Others). Upon receipt of this Technical Bulletin the material condition tags of all items in all condition codes listed in paragraphs 6 shall be annotated to read "UH-60-98-ASAM-04. Loose Huck bolts on overhauled primary servos, yaw boost servos, collective boost servos and Tail Rotor Servos not complied with".

(1) Wholesale Stock. Report receipt of this message IAW paragraph 14d(1). Upon receipt of this TB all serviceable items (Condition codes //A//, //B//, //C//, //D//, and //E// listed in paragraphs 6 located in wholesale depot storage shall be placed in condition code //J// and tagged with a suspended tag/label. Material, DD form 1575/DD Form 1575-1. Do not remove original condition tags. Report compliance with this message IAW paragraph 14d (1).

(2) Retail Stock. Report receipt of this Technical Bulletin IAW paragraph 14d(2). Upon receipt of this Technical Bulletin Commanders and others maintaining retail stock at installation level and below shall contact the supported 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 10. Report compliance with this Technical Bulletin IAW paragraph 14d(2).

g. Components/Parts in work (Depot Level and others). Items listed in paragraphs 6 in work will not be issued until compliance with this Technical Bulletin is complete.

2. Task/Inspection Suspense Date. Within next 30 flight hours or 30 days, whichever occurs first.

3. Reporting Compliance Suspense Date. No later than 1 April 1998 per paragraph 14a of this Technical Bulletin.

4. Summary of the Problem.

a. Corpus Christi Army Depot (CCAD) improperly installed collars onto some of the swaged pins (Huck Bolts) during rework of the H-60 primary servo assembly, collective boost servo assembly, yaw boost servo assembly, and tail rotor servo assembly during overhaul.

(1) Some of the collars may too loose which could result in pin failure through fretting. Two of the pins on the primary servo can only be inspected after removal of the servo. The remainder of the pins are accessible while installed on the aircraft.

(2) All assemblies with a rework date of 31 July 1997 and prior have the suspect installation.

(3) CCAD has adjusted the rework procedures and any assemblies with a rework data after 31 July 1997 do not have the suspect installation.

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

c. The purpose of this Technical Bulletin is to require a visual and physical inspection of all H-60 aircraft for paragraph 6 servo assemblies with improperly installed swaged pin fasteners.

5. End Items to be inspected. All H-60 Aircraft.

6. Assembly Components to be Inspected.

Nomenclature	Part Numbers	MFG Part No.	NSN
Primary Servo Assembly	70410-02820-046/-050 /-051/-052/-053/-054	274000-1019/-1021/-1 025/-1027/-1031	1650-01-114-9539 1650-01-146-0879 1650-01-122-6334 1650-01-114-9538 1650-01-143-1226

Collective Boost Servo Assembly	70410-02920-043/-045 /-048/-049, 70410-02920-/-050/-0 51/-052/-053	274600-1009/-1017/-1 025/-1029/-1033/-1037 274600-1041/-1045	1650-01-084-2239 1650-01-138-6951 1650-01-144-0881 1650-01-119-7350 1650-01-106-1915 1650-01-246-9282 1650-01-249-4023 1650-01-140-0967
Yaw Boost Servo Assembly	70411-01-02910-046/- 050/-052/-054/-056 70410-02910-058/-063 /-065	274600-1011/-1019/-1 023/-1027/-1031/-1035 274600-1043/-1047	1650-01-093-2336 1650-01-255-2161 1650-01-255-2178 1650-01-226-1778 1650-01-286-8883 1650-01-123-7651 1650-01-329-7538 1650-01-143-1227
Tail Rotor Servo Assembly	70410-06520-044/-045 /-046	2227000-0/-13/-17	1650-01-127-7657 1650-01-125-5430 1650-01-305-6954

7. Parts to be Inspected. The particular swage pins to be inspected are identified in TM 1-1520-237-23P by volume number, figure, item numbers, and qty. per servo assembly. The items are listed below as a swaged pin/collar pair.

Nomenclature	Part No.	Volume	Figure	Items	QTY
	NAS1446-29	4	51	1 and 3	1
Pin Rivet, Grooved	NAS1448-31	4	51	5 and 7	1
Pin Rivet, Grooved	NAS1448-20	4	51	12 and 7	1
Pin Rivet, Grooved	NAS1446-08	4	51	41 and 7	1
Pin Rivet, Grooved	NAS1446-28	4	64	1 and 3	1
Pin Rivet, Grooved	NAS1448-31	4	64	5 and 7	1
Pin Rivet, Grooved	NAS1448-20	4	64	12 and 7	1
Pin Rivet, Grooved	NAS1448-22	4	64	16 and 7	1
Pin Rivet, Grooved	NAS1448-14	4	64	70 and 7	1
Pin Rivet, Grooved	NAS1448-09	4	67	2 and 3	2
Pin Rivet, Grooved	NAS1436-07	4	67	39 and 40	2
Pin Rivet, Grooved	NAS1446-07	4	68	1 and 2	2
Pin Rivet, Grooved	NAS1446-11	4	68	4 and 2	4
Pin Rivet, Grooved	202097-66	4	68	10 and 11	1
Pin Rivet, Grooved	NAS1438-10	4	90	6 and 7	2
Pin Rivet, Grooved	NAS1438-11	4	90	10 and 7	2

8. Inspection Procedures.

a. Visually inspect each paragraph 6 servo for a CCAD rework sticker attached to the servo. The sticker, which is a white rectangular sticker, approximately one inch by one and three quarters inch, will show “CCAD” in bold lettering.

b. If this white rectangular sticker showing CCAD as the rework activity is not on the servo, the inspection is complete.

c. If the rework activity code is “CCAD” and the rework date is after 7/97, the inspection is complete.

d. If the rework activity code is “CCAD” and the rework date is on or before 7/97, then continue with the inspection and replace IAW paragraph 9.

9. Correction Procedures.

a. Primary Servo. Physically test all nine Huck Bolts that can be touched without removing the servo. When the servo is installed on an aircraft, two Huck Bolts on each assembly cannot be touched and must be visually inspected using a mirror for any obvious damage.

(1) If any collar is missing or is loose (axial or radial play, or can rotate on the pin) with respect to the swaged pin (Huck Bolt), replace the servo immediately and the action is complete. The collar should not turn on the swage pin with finger pressure applied.

(2) Visual inspection is not sufficient to determine if the collar is tight,

(3) Turn in any rejected servo assemblies to supply.

(4) If the collars are tight on the swaged pins annotate the DA Form 2408-13-1 to replace the primary servo within 100 flight hours and the action is complete.

b. Yaw and collective boost and tail rotor servos. Physically test each paragraph 7 fastener (four on yaw boost assembly, five on collective boost assembly, four on tail rotor servo assembly) for a loost collar, The collar should not turn on the swage pin with finger pressure applied.

(1) If the collar is missing or has any axial or radial play, then replace the servo immediately and the action is complete.

(2) If any of the collars on any single assembly is loose (can rotate on the pin) but does not have any axial or radial play annotate the DA Form 2408-13-1 to replace the servo within the next 100 flight hours and the action is complete.

(3) If the collars are tight on the swaged pins annotate the DA Form 2408-13-1 for replacement of the servo no later than the next phase inspection and the action is complete.

10. Supply/Parts and Disposition.

a. Parts Required. Items cited in paragraph 6 may be required to replace defective items.

b. Requisitioning Instructions. Requisition replacement parts using normal supply procedures. All requisitions will use project code (CC 57-59) “XDU” X-RAY DELTA-UNIFORM.

NOTE

Project code XDU 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. Dispose of removed parts/components using normal supply procedures. All turn-in documents will include project code (CC 57-59) “XDU”.

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 charged to AVUM.

b. Estimated Time Required.

(1) Initial inspection. Total of 1.0 Man-hours using 1 person.

(2) Replacing each primary servo. Total of 3.5 Man-hours, each servo, using 1 person.

(3) Replacing each yaw boost, collective boost servo, or Tail Rotor Servo. Total of 3.5 Man-hours each servo using 1 person.

c. Estimated Cost Impact to the Field. The following items may be required to replace discrepant paragraph 6 assemblies.

Nomenclature	Part Number	NSN	QTY	Cost Each	Total
Primary Servo Assy	274000-1031	1650-01-143-1226	3	$30,411.00	$11,041.00
Collective Boost Servo Assy	274600-1045	1650-01-140-0967	1	$17,060.00	$17,060.00
Yaw Boost Servo Assy	274600-1047	1650-01-143-1227	1	$17,060.00	$17,060.00
Trail Rotor Servo Assy	2227000-17	1650-01-305-6954	1	$20,153.00	$20,153.00
				TOTAL COST PER AIRCRAFT=	$139,487.00

d. TB/MWOs to be applied prior to or concurrently with this inspection. N/A.

e. Publications which require change as a result of the inspection. N/A.

13. References

a. TM 1-1520-237-23P.

b. TM 1-1520-250-23P.

14. Recording and Reporting Requirements.

a. Reporting compliance suspense date (Aircraft). Upon entering requirements of this Technical Bulletin on DA Form 2408-13-1 on all MDS aircraft, forward a priority message, datafax or E-Mail to Commander, AMCOM, ATTN: AMSAM-SF-A (SOF Compliance Officer), Redstone Arsenal, AL 35898-5222, IAW AR 95-1. Datafax number is DSN 897-2111 or (205) 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 prior TB to the Logistical POC identified in paragraph 16b. The report will cite this TB number, date of inspection. Aircraft serial number, aircraft and component hours, and results of the inspection to include cage code, serial number of each inspected servo assembly, and whether cleared, replaced, or deferred Maintenance. Inspection and reports will be completed no later than 14 days after Task/Inspection suspense date.

c. Reporting Message Receipt (SPARES). N/A.

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

(1) Materiel in Wholesale Depot Storage. Report compliance with this Technical Bulletin to the wholesale materiel point of contact (SPARES) listed in paragraph 16c within 14 days of this TB on DA Form 1225. Provide the cost of compliance with this Technical Bulletin to include an estimate of the cost reimbursable funding required to move serviceable items on hand listed in paragraphs 6 to **a** work area, unpack the materiel, repack the materiel after inspection by AMCOM inspectors, and to return the materiel to storage, as appropriate. Report by original serviceable condition code, the quantity of materiel place in condition code “J”. include in the report a list of items inspected by serial number. Report by E-mail or datafax and provide

local point of contact. Provide a copy of this report to the Logistical POC in paragraph 16b. Assets identified as serviceable will be removed from condition code//J// and returned to their original condition code. The DD Form 1575/1575-1 (Brown Tag) will be removed.

(2) Materiel in Retail Storage. Report compliance with this Technical Bulletin to the Logistical point of contact in paragraph 16b within 14 days of the date of this Technical Bulletin. Report the quantity inspected by serial number, initial condition code and the resulting condition code. Report by E-mail or data-fax and provide local point of contact.

e. The following forms are applicable and are to be completed IAW DA PAM 738-751, 15 June 1992.

(1) DA Form 2408-5-1, Equipment Modification Record (Primary Servo Assembly and Tail Rotor Servo Assembly).

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

(3) DA Form 2408-13-1, Aircraft Inspection and Maintenance Record.

(4) DA Form 2408-14, Uncorrected Fault Record. Used to Record Servo Requiring Replacement at next 100 Flight hours.

(5) DA Form 2408-15, Historical Record for Aircraft. The DA Forms 2408-15 and 2408-5-1 are required because all assembly components to be inspected are not tracked.

(6) DA Form 2408-16, Aircraft Components Historical Record.

(7) DA Form 2410, Component Removal and Repair/Overhaul Record. Use only if Primary Servo assembly and/or Tail Rotor Servo Assembly is replaced.

(8) DD Form 1574/DD Form 1574-1, Serviceable Tag/Label Materiel (Color yellow). Annotate Remarks block with “Inspected Serviceable IAW UH-60-98-ASAM-04”.

(9) DD Form 1575/DD Form1575-1, Suspended Tag/Label Materiel (Color Brown). Annotate Remarks Block with “suspended IAW UH-60-ASAM-04”.

(10) DD Form 1577/DD Form 1577-1, Unserviceable (condemned) Tag/label. Materiel (Color Red). Annotate Remarks Block with “Condemned IAW UH-60-98-ASAM-04 and mutilated IAW TM 1-1500-328-23”.

(11) DD Form 1577-2/DD Form 1577-3, unserviceable (Reparable) Tag/Label. Materiel (Color Green). Annotate Remarks Block with “Unserviceable IAW UH-60-98-ASAM-04”.

15. Weight and Balance. N/A.

16. Points of Contact.

a. Technical point of contact for this TB is Mr. Jay Merkel, AMSAM-AR-E-I-CU, DSN 645-0667 or (205) 955-0667. Datafax DSN 645-6590 or (205) 955-6590, E-mail is “merkel-j@avrdecr.redstone,army.mil”.

b. Logistical point of contact for this TB is Mr. Joe Hoover, AMSAM-DSA-UH-L, DSN 645-7898 or (205)-955-7898. Datafax is DSN 645-6590 or 205) 955-6590. E-mail is hoover-jl@redstone.army.mil”.

c. Wholesale Materiel point of contact (SPARES) point of contact is Mr. D. Alexander, AMSAM-MMC-VS-UB, DSN 897-1300 or (205) 313-1300. Datafax is DSN 897-1563 or (205) 313-1563. E-mail is “alexander-dl@exchange1.redstone.army.mil”.

d. Forms and Records point of contact for this TB is Ms. Ann Waldeck, AMSAM-MMC-RE-F DSN 876-5564 or (205)746-5564, Datafax is DSN 897-4904 or (205) 313-4904. E-mail is “waldeck-ab@redstone.army.mil”.

e. Safety point of contact for this TB is Mr. Ed Goad, AMSAM-SF-A, DSN 897-2095 or (205) 313-2095, Datafax is DSN 897-2111 or (205) 313-2111 E-mail is “goad-er@redstone.army.mil”.

f. Foreign Military Sales (FMS) recipients requiring clarification of action advised by this TB should contact CW5 Hoseph L. Wittstrom, Security Assistance Management, AMSAM-SA-CS-NF, DSN 897-0681

or (205) 313-0681.E-mail is “Wittstorm-jl@resstone.army.mil” or Mr. Ronnie W. Sammons, AMSAM-SA-CS-NF, DSN 897-0869 or (205) 313-0869. Datafax is DSN 897-0411 or (205) 313-0411. E-mail is “sammons-rw@redstone.army.mil” (Huntsville, AL is GMT minus 6 hrs).

g. After hours contact AMCOM Command Operations Center (COC) DSN 897-2066/7 or (205) 313-2066/7.

17. Reporting of Errors and Recommending improvements. You can help improve this TB. You may submit your recommended changes by E-mail directly to Is-lp@redstone.army.mil. A reply will be furnished 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:

DENNIS J. REIMER
General, United States Army
Chief of Staff

Official:

JOEL B. HUDSON
Administrative Assistant to the
Secretary of the Army
04726

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To be distributed in accordance with Initial Distribution Number (IDN) 313752, requirements for TB 1-1520-237-20-205.

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: Is-lp@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.

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