

URGENT

*TB 1-2840-229-20-25

DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

ALL UH-1 AND AH-1 SERIES HELICOPTERS WITH T53 ENGINE INSTALLED AND ALL SPARE T53 ENGINES, MANDATORY INSTALLATION OF ROTARY (OIL) PUMP SCAVENGE STRAINER ELEMENT (CHUNK SCREEN)

Headquarters, Department of the Army, Washington, D. C.
10 December 1999

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

NOTE

THIS PUBLICATION IS EFFECTIVE UNTIL RESCINDED OR
SUPERSEDED.

1. Priority Classification. URGENT.

NOTE

See AR 95-1, paragraph 6-6.a., for exception authority of major
commanders.

a. Aircraft in Use. Upon receipt of the message/TB whichever occurs first, the condition status symbol of the cited aircraft will be changed to a **Red Horizontal -**. The **Red Horizontal -** entry shall state "Engine requires Chunk Screen IAW ASAM UH-1-00-ASAM-03 and AH-1-00-ASAM-02 (TB 1-2840-229-20-25)". The affected engines shall have the chunk screen installed as soon as practical but no later than the task/inspection suspense date. Failure to comply with the requirements of this message within the time frame will cause the status symbol to be upgraded to a **Red X**.

b. Aircraft in Depot Maintenance. Same as para 1a.

c. Aircraft Undergoing Maintenance. Same as paragraph 1.a.

d. Aircraft in Transit.

(1) **Surface/Air Shipment.** Same as paragraph 1.a.

*This TB supersedes USAAMCOM Aviation Safety Action Messages, AH-1-00-ASAM-02 and UH-1-00-ASAM-03, 151248Z, Nov 99, .

(2) **Ferry Status.** Same as paragraph 1.a.

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.** Upon receipt of the message/TB whichever occurs first, the material condition tags of all items in all condition codes listed in paragraph 6 shall be annotated to read "SOF UH-1-00-ASAM-03/AH-1-00-ASAM-02, (TB 1-2840-229-20-25), Mandatory installation of oil pump strainer element, Not Complied With."

(1) **Wholesale Stock.** N/A.

(2) **Retail Stock.** Upon receipt of this TB 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.

g. **Components/Parts in Work (Depot Level and Others).** Items listed in paragraph 6 in work will not be issued until compliance with this TB.

2. **Task/Inspection Suspense Date.** NLT 16 November 2000.

3. **Reporting Compliance Suspense Date.** No later than 9 Dec 1999 in accordance with paragraph 14.a. of this TB.

4. **Summary of the Problem.**

a. **Background.**

(1) During oil wetted component failure of the T53 engine, there is a probability of a secondary failure of the rotary (oil) pump. Debris that is fifteen (15) microns or larger in size will cause the pump driveshaft shear shaft to fail when the debris lodges between the pump gears. Installation of the chunk screen will eliminate the ingestion of debris larger than 15 microns and protect the rotary (oil) pump driveshaft from failure.

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

c. **The purpose of this TB is to:** Require the installation of the rotary (oil) pump scavenge strainer element (chunk screen).

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

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

NOMENCLATURE	PART NUMBER	NATIONAL STOCK NUMBER
Engine, Aircraft, Turbine	1-000-060-22	2840-00-134-4803
Engine, Aircraft, Turbine	1-000-060-23	2840-00-621-1860

7. **Parts to be Inspected.**

NOMENCLATURE	PART NUMBER	CAGE	NATIONAL STOCK NUMBER
Chunk Screen	29670	10989	4730-01-422-7845

8. **Inspection Procedures.**

a. Inspect the engine DA Form 2408-5/2408-5-1 for the part numbers in paragraph 7.

b. If the chunk screen is installed, the inspection is complete. Report compliance with this ASAM IAW para 14b.

- c. If the chunk screen is not installed, follow the correction procedures in para 9.

9. Correction Procedures.

NOTE

The AVUM task is better performed with the engine removed from the airframe. Recommend the chunk screen be installed at the next scheduled engine removal, but NLT the task/inspection suspense date IAW para 2.

- a. Remove the rotary (oil) pump (item 16, fig 61, TM 1-2840-260-23P) from the engine using TM 55-2840-229-23 paragraph 8-29.

- b. Install chunk screen (P/N 29670, CAGE 10989, NSN 4730-01-422-7845) with the screen extending into the accessory gearbox. The chunk screen is installed in the rotary (oil) pump scavenge inlet port (lower hole).

NOTE

The chunk screen has no effect on either the oil debris detection system (ODDS) or chip detectors on NON-ODDS equipped airframes.

NOTE

By the location of the chunk screen, it is self-cleaning each time the engine is shut down. Any accumulation of debris will fall into the accessory gearbox sump.

- c. Reinstall the rotary (oil) pump using the installation procedure per paragraph 8-34 of TM 55-2840-229-23.

- d. Reinstall engine. A maintenance operational check (MOC) is required.

- e. Annotate the DA Form 2408-5-1 IAW paragraph 14e.

10. Supply/Parts and Disposition.

- a. **Requisitioning Instructions** – Chunk screens are being provided at no cost to units from the Utility PMO using the following procedures.

(1) Units shall provide a consolidated list of engine serial numbers (installed and spare) to their supporting MACOMS IAW paragraph 14b.(1).

(2) The MACOMS will provide their consolidated unit lists, to include shipping instructions, for their total requirements of the chunk screens to the logistic POC in paragraph 16c IAW paragraph 14b.(2).

(3) Upon consolidation of the MACOM requirements, AMCOM will direct the shipments of chunk screens to the four Army National Guard (ARNG) Aviation Classification and Repair Activity Depots (AVCRADS) and authorized installation Directorate of Logistics (DOL) per the MACOMS requirements.

(4) FMS and all others will requisition the chunk screen through normal supply procedures.

- b. **Bulk and Consumable Materials** –

NOMENCLATURE	NATIONAL STOCK NUMBER	P/N	QTY	PRICE
O-ring	5330-00-166-1066	M83248/1-115	1	\$0.14
O-ring	5330-00-167-5111	M83248/1-122	2	\$0.14

- c. **Disposition** – Disposal of removed parts/components by using normal supply procedures.

d. **Disposition of Hazardous Material** – N/A.

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 1.0 man-hours using 1 person.

NOTE

Calculated downtime does not include removal, reinstallation and MOC of the engine from the airframe.

(2) Total of 1.0 hours downtime for one engine.

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

NOMENCLATURE	NATIONAL STOCK NUMBER	P/N	QTY	PRICE
O-ring	5330-00-166-1066	M83248/1-115	1	\$0.14
O-ring	5330-00-167-5111	M83248/1-122	2	\$0.14

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 SOF message/TB.**

(1) DMWR 1-2840-113 series, AED P3145.

(2) TM 1-2840-260-23P, incorporated in change 4.

(3) TM 55-2840-229-23, incorporated in change 24.

13. **References.**

a. DMWR 1-2840-113 series.

b. TM 1-2840-260-23P.

c. TM 55-2840-229-23 series.

14. **Recording and Reporting Requirements.**

a. **Reporting Compliance Suspense Date (Aircraft).** Upon entering requirements of this message/TB on DA Form 2408-13-1 on all subject MDS aircraft, 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. Datafax number is DSN 897-2111 or (256) 313-2111. E-mail address is <safeadm@redstone.army.mil>. The report will cite this message/TB number, date of entry in DA Form 2408-13-1, the aircraft Mission Design Series (MDS) and serial numbers of aircraft in numerical order.

b. **Task/Inspection Reporting Suspense Date (Aircraft).**

NOTE

The shipments of chunk screens will be done through commercial carriers so an "in the clear address", POC, and commercial phone number must be included with all reports.

(1) Upon completion of inspection, units will forward a priority message to their supporting MACOM. The report will cite this message/TB number, date of inspection, aircraft serial number, NSN of engine, engine serial number, and engine time since new (TSN). Inspection reports will be completed no later than 15 days from the date of this message.

(2) The MACOMS shall provide a priority message to the logistic POC in paragraph 16c. The report will be consolidated by unit and will cite this message/TB number, date of inspection, aircraft serial number, NSN of engine, engine serial number, and engine TSN. The MACOM consolidated inspection reports will be completed NLT 30 days from the date of this message.

c. **Reporting message/TB Receipt (Spares).** N/A.

d. **Task/Inspection reporting suspense date (Spares).**

(1) **Material in Wholesale Depot Storage.** N/A.

(2) **Material in Retail Storage.** Report compliance with this message/TB to the logistical point of contact listed at paragraph 16.c within 15 days of the date of this message.

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

NOTE

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

(1) DA Form 2408-5-1, Equipment Modification Record (Engine).

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

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

(4) DA Form 2408-14-1, Uncorrected Fault Record.

(5) DA Form 2408-15, Historical Record for Aircraft.

(6) DA Form 2410, Component Removal and Repair/Overhaul Record (if required).

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

16. **Points of Contact.**

a. MACOM POCs –

MACOM	POC	PHONE
AMC	JOHN SAVELLI	DSN 7679891 or (703) 617-9891
FORSCOM	MSG TUCKER	DSN 367-6239
MDW	RAY TANGUAY	DSN 656-7608
MEDCOM	LT SEAN JEHU	DSN 558-8184
NGB	MS. MORGAN (AH-1)	DSN 327-7728 or (703) 607-7728
NGB	CW4 TAYLOR (UH-1)	DSN 327-7727 or (703) 607-7727
SMDC	MSG JERRELL	DSN 254-2140
OTC	LEWIS SHEPPARD	DSN 236-4704
TRADOC	JUDY DYER	DSN 680-5683
USAREUR	DAVE SPINKS	011-49-631-413-8900
USARPAC	MILT FORD	DSN 438-8623
USAR	MONTE MCDONALD	DSN 367-8310 or (404) 464-8310

b. Technical point of contact for this message/TB is Mr. Mark Heitert, AMSAM-AR-AE-P-E, DSN 897-4964 or (256) 313-4964; Datafax is 897-4961. E-mail is <mark.heitert@redstone.army.mil>..

c. Logistical point of contact for this message/TB is Mr. Charles Elkins, AMSAM-DSA-UH-L, DSN 645-0073 or (256) 955-0073; Datafax is DSN 645-6590 or (256) 955-6590. Mail address is CDR, AMCOM, ATTN: AMSAM-DSA-UH-L (ATTN: C Elkins), Bldg. 5308, 4Th Floor, Redstone Arsenal, AI 35898-5000. E-mail is <charlie.elkins@uh.redstone.army.mil>.

d. Wholesale Materiel point of contact (spares) is Ms. Lynn Schupbach, DSCC-ADBA-AS, DSN 850-4616 or (614) 692-4616; Datafax is DSN 867-1603 or (614) 693-1603. E-mail is <lynn_schupbach@dsc.dla.mil>.

e. Forms and records point of contact for this message/TB is Ms. Ann Waldeck, AMSAM-MMC-RE-FF, DSN 746-5564 or (256) 876-5564; Datafax is DSN 746-4904 or (256) 876-4904; E-mail is <waldeck-ab@redstone.army.mil>.

f. Safety point of contact for this message/TB is Mr. Robert D. Brock, AMSAM-SF-A, DSN 788-8632 or (256) 842-8632; Datafax is DSN 897-2111 or (256) 313-2111; E-mail is <bob.brock@redstone.army.mil>.

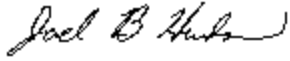
g. Foreign Military Sales (FMS) recipients requiring clarification of action advised by this message/TB should contact either CW5 Joseph L. Wittstrom, Security Assistance Management, AMSAM-SA, DSN 897-0681 or commercial (256) 313-0681; E-mail is <wittstrom-jl@redstone.army.mil>. Alternate POC is Mr. 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 is <sammons-rw@redstone.army.mil>. Huntsville, Alabama is GMT minus 6 hrs.

h. After hours contact AMCOM Command Operations Center (COC) DSN 897-2066/2067 or commercial (256) 313-2066/2067.

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, Alabama 35898-5230. A reply will be furnished to you. You may also send in your comments electronically to our E-mail address at <ls-lp@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:

Official:



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Distribution:

To be distributed in accordance with Initial Distribution Number (IDN) 313866 requirements for TB 1-2840-229-20-25.