

URGENT

*TB 1-1520-248-20-48

DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

INSPECTION OF OIL COOLER SUPPORT INSTALLATION AND OIL COOLER FAN ON OH-58D HELICOPTER

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

6 February 2000

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NOTE

THIS PUBLICATION IS EFFECTIVE
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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. is completed. The affected aircraft shall be inspected as soon as practical but no later than the task/inspection suspense date. Failure to comply with 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 issued until compliance with this TB has been completed.

c. Aircraft Undergoing Maintenance. Aircraft will not be issued until compliance with this TB has been completed.

d. Aircraft in Transit.

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

(2) Ferry Status:

(a) Same as paragraph 1.a.

(b) Those aircraft that have a DD 250 and are at Bell Helicopter will be inspected prior to ferry to final destination.

e. Maintenance Trainers (Category A, B). Comply within 30 days of date time group of OH-58-00-ASAM-01.

f. Component/Parts in Stock Including War Reserves at All Levels (Depot and Others). Not applicable.

2. Task/Inspection Suspense Date. Complete inspection in accordance with paragraph 8 within the next 10 flight hours, but not later than 7 February 2000, and report in accordance with paragraph 14. b. as applicable.

3. Reporting Compliance Suspense Date. Report compliance in accordance with paragraph 14. a. of this TB no later than 14 February 2000.

* This Technical Bulletin supercedes OH-58-00-ASAM-01

4. Summary of the Problem.

a. Numerous reports from the field have indicated cracking of the oil cooler support panel in the area of the forward fanshaft bearing support inserts. A recent report indicated a cracked forward fanshaft bearing support bracket in addition to the cracked panel. The cause of cracking of the oil cooler support panel and support bracket are under investigation. One potential cause is an imbalance of the oil cooler fan caused by a disproportionate buildup of foreign material. A one time and recurring inspection of the fan will be initiated by this TB. In addition to the requirements of this TB, compliance with URGENT TB 1-1520-248-20-47, One Time Inspection and Repair of Oil Cooler Support Installation, P/N 406-030-117-125/129 on OH-58D Helicopter is required in accordance with paragraph 2. Task/Inspection Suspense date of the TB. This TB contains detailed inspection and repair of the support panel.

NOTE

This TB requires TB 1-1520-248-20-47 dated 31 December 1999 be recorded and complied with by the suspense time frame provided in TB 1-1520-248-20-47. TB 1-1520-248-20-47 was initially assigned to supercede OH-58-99-ASAM-05 and OH-58-99-ASAM-07 however this action was not completed. Do not confuse requirements of OH-58-99-ASAM-05 and OH-58-99-ASAM-07 with TB 1-1520-248-20-47. TB 1-1520-248-20-49 will be issued to supercede OH-58-99-ASAM-05 and OH-58-99-ASAM-07.

b. For manpower/downtime and funding impacts. See paragraph 12.

c. The purpose of this TB is to is threefold:

(1) Initiate a One Time Inspection of oil cooler support panel and forward fanshaft support bracket for cracks.

(2) Initiate a One Time and Recurring Inspection of oil cooler fan for cleanliness at every other 40 hour Progressive Phase Maintenance (PPM) Inspection.

(3) Establish a One Time Inspection of oil cooler support installation P/N 406-030-117-125/129 in accordance with TB 1-1520-248-20-47.

5. End Items to be inspected. All OH-58D aircraft.

6. Assembly Components to be Inspected...Not applicable.

7. Parts to be Inspected.

NOMENCLATURE	PART NUMBER	NATIONAL STOCK NUMBER
Oil Cooler Support Installation	406-030-117-125	1560-01-356-6007
Oil Cooler Support Instalation	406-030-117-129	1560-01-445-3364
Bracket FWD, Tail Rotor Bearing	406-040-323-101	1615-01-236-9653
Impeller, Oil Cooler	206-061-432-117	1615-01-359-6063

8. Inspection Procedures

a. Inspection of oil cooler support panel and forward fanshaft support bracket:

(1) Remove aft fairing assembly in accordance with Task 2-1-28.1, TM 55-1520-248-23-1.



S Naphtha/Naphthalene is combustible: do not use near welding area, flames, or on hot surface. Avoid prolonged or repeated contact with liquid. Contact of skin with liquid can cause irritation. Inhalation of vapors can cause irritation, giddiness, and drowsiness. If liquid contacts eyes; flush eyes thoroughly with water. If there is prolonged skin contact, wash contacted area with soap and water. If vapors caose dorwsiness, go to fresh air. Remove saturated clothing. If liquid is swallowed, do not try to vomit. In all cases get immediate medical attention. When handling liquid in an air-exhausted partially covered

tank, wear approved gloves. When handling in open container, wear approved gloves and goggles. If contact with vapor is likely, wear an approved respirator. Dispose liquid soaked rags in an approved metal container. Metal containers of liquid must be grounded to maintain electric continuity.

S Isopropyl alcohol is flammable: do not use near open flame, near welding area, or on hot surface. Do not use while smoking or while others are smoking. Inhalation of vapors can cause drowsiness, dizziness, and headache. If liquid touches skin or eyes, flush thoroughly with water. Remove contaminated clothing. If vapors cause drowsiness, go to fresh air. When handling large quantities (greater than one gallon) work at air exhausted workbench or covered tank. Store solvent and liquid soaked clothes in in an approved grounded metal container.

S Denatured ethyl alcohol and its vapors are flammable and explosive, do not use where others are smoking. POISON, do not ingest. Ingestion will cause vomiting, stupor, and collapse. Inhalation of vapors may cause headache and drowsiness. If vapors cause drowsiness, go to fresh air. Immediately remove wet clothing. When working with denatured ethyl alcohol, wear approved respirator, gloves, and goggles. If splash could occur, wear an approved face shield over goggles. In case of contact with eyes, flush with water for at least 20 minutes and obtain medical attention. Dispose of liquid soaked rags in approved metal container. Metal container must be grounded to maintain electrical continuity.

(2) Using wiping rag D53, (TM 55-1520-248-23-6) dampened with aliphatic Naptha D59, denatured alcohol D150, or isopropyl alcohol D7, (TM 55-1520-248-23-6); thoroughly clean area around forward fanshaft support bracket inserts on oil cooler panel and lower portion of forward fanshaft bearing support bracket.

(3) Using a flashlight and 10X magnification, inspect oil cooler panel area around forward fanshaft bearing support bracket inserts for cracked skin.

(4) Inspect for interference between doublers under firewall and forward fanshaft bearing support bracket inserts.

(5) Using a flashlight and 10X magnification, inspect forward fanshaft bearing support bracket for cracks in areas of mounting feet and bend radius.

(6) Install aft fairing assembly in accordance with Task 2-1-28.1, TM 55-1520-248-23-1

(7) Ensure areas in steps (2) through (5) are thoroughly inspected during PPM inspections 6.1, 6.2, and 10.1 in accordance with TM 1-1520-248-PPM.

b. Inspection of oil cooler impeller fan.

(1) Remove aft fairing assembly in accordance with Task 2-1-28.1, TM 55-1520-248-23-1.

(2) Inspect impeller fan for build up of dirt, oil, sand, grease, etc.

(3) Any build up of foreign material on impeller fan is potential for a out of balance condition. Clean impeller in accordance with paragraph 9. c.

(4) Install aft fairing assembly in accordance with Task 2-1-28.1, TM 55-1520-248-23-1.

(5) A recurring inspection of oil cooler impeller fan shall be accomplished at every other 40 hour PPM inspection.

c. Establish a One Time Inspection of the oil cooler support installation P/N 406-030-117-125/129 in accordance with TB 1-1520-248-20-47 not later than paragraph 2. Task/Inspection suspense date of the TB. Report compliance with TB 1-1520-248-20-47 in accordance with instructions provided in the TB.

9. Correction Procedures.

a. If oil cooler panel or forward fanshaft bearing support bracket are cracked, parts will require replacement. Contact the technical point of contact, paragraph 16. a. and the logistics point of contact, paragraph 16. b. and submit a category 1 Quality Deficiency Report (QDR). Forward fanshaft bearing support bracket shall be replaced in accordance with Task 6-6-14.1, TM 55-1520-248-23-3.

b. If there is interference between doublers under firewall and forward bearing support bracket inserts, contact technical point of contact, paragraph 16. a.

c. Clean oil cooler impeller as follows:

(1) Remove aft fairing assembly in accordance with Task 2-1-28.1, TM 55-1520-248-23-1.

WARNING

Wear rubber gloves, chemical or splash proof goggles during cleaning operations using cleaning compound. If cleaner is splashed in eyes, rinse thoroughly with water for 15 minutes and obtain medical attention. Remove clothing saturated with cleaning solution immediately and flush exposed skin area with fresh water, until solution is removed.

(2) Using aircraft surface cleaning compound, or equivalent, and water, clean oil cooler blower. Remove any build up of foreign material from impeller blades.

(3) Thoroughly rinse using clean water and low pressure spray.

(4) Wipe impeller blades dry using lint free cloth.

(5) Install aft fairing assembly in accordance with Task 2-1-28.1, TM 55-1520-248-23-1.

d. Compliance with the inspection and correction procedures in TB 1-1520-248-20-47, will be in accordance with the TB.

10. Supply/Parts and Disposition.

a. Parts Required. Items cited in paragraph 7 may be required to replace unserviceable items.

b. Requisitioning Instructions. Requisition replacement parts through normal supply channels using normal supply procedures. All requisitions shall use project code (CC 57-59) "XGA" (XRAY-GULF-ALPHA).

NOTE

Project code "XGA" is required to track and establish a data base of stock fund expenditures incurred by the field as a result of Safety of Flight actions.

c. Bulk and Consumable Materials.

NOMENCLATURE	PART NUMBER	NATIONAL STOCK NUMBER
Rag, Wiping	A-A-531, GR B	7920-00-205-1711
Naphtha, Aliphatic	TT-N-95, Type II	6810-00-238-8119
Alcohol, Denatured	O-E-760	6810-00-205-6786
Alcohol, Isopropyl	TT-I-735, Type I	6810-00-855-6160
Cleaning Compound, Acft Exterior	MIL-C-85570	6850-01-237-7482

d. Disposition. Hold any discrepant parts/components pending disposition instructions from technical point of contact in paragraph 16. a.

e. Disposition of Hazardous Material. In accordance with Environmental Protection Agency directives as implemented by your servicing environmental coordinator, AR 200-1.

11. Special Tools, Jigs and Fixtures Required. As required.

12. Application.

a. Category of Maintenance. AVUM. Aircraft downtime will be charged to AVUM.

b. Time Required. Estimated time required for the inspection in accordance with paragraph 8. a. and 8. b.

(1) Total of 1 man hour man-hours using one person.

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

c. Estimated time required for the inspection in accordance with paragraph 8. c., in accordance with TB 1-1520-248-20-47.

d. Estimated Cost Impact of Stock Fund Items to the Field, if oil cooler support panel or bearing hanger bracket requires replacement.

NOMENCLATURE	NATIONAL STOCK NUMBER	QUANTITY	COST EACH
Oil Cooler Support Installation	1560-01-356-6007	1	\$ 2848.00
	OR		
Oil Cooler Support Installation	1560-01-445-3364	1	2054.00
Bracket FWD, Tail Rotor Bearing	1615-01-236-9653	1	389.00

Approximate Total cost per aircraft = \$ 3237.00

e. Disposition. Dispose of removed parts/components in accordance with normal supply procedures. A QDR is not required.

f. TB/MWOs to be Applied Prior to or Concurrently with this Inspection. TB 1-15220-248-20-47.

g. Publications Which Require Change as a Result of This Inspection. TM 1-1520-248-PPM and TM 55-1520-248-23-3 shall be changed to reflect this TB. A copy of this TB shall be inserted in the appropriate TM as authority to implement the change until the printed change is received.

13. References.

- a. TM 55-1520-248-23-1
- b. TM 55-1520-248-23-3
- c. TM 55-1520-248-23-6
- d. TM 55-1520-248-PPM

14. Recording and Reporting Requirements.

a. 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: AMSAT-C-XS (SOF Compliance Officer), Redstone Arsenal, AL. 35898-5222. per 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). No special report of results of this inspection is required.

c. Report Message Receipt (Spares). Not applicable.

d. Task/Inspection Reporting Suspense Date (Spares). Not applicable.

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

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 2408-13-2 Related Maintenance Action Record.

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

(5) DA Form 2408-18, Equipment Inspection List. Use this form for inspection of oil cooler fan at every other PPM inspection until it is incorporated into the PPM manual. ULLS-A units use one of the 800 inspection numbers until it is incorporated into the PPM manual.

15. Weight and Balance. Not applicable.

16. Points of Contact.

a. Technical point of contact for this TB is Mr. Kevin Cahill, AMSAM-RD-AE-I-D-O, DSN 645-9544, or commercial (256) 955-9544, datafax DSN 645-9536 or (256) 955-9536. E-Mail is "kevin.cahill@redstone.army.mil".

b. Logistical point of contact for this TB is SSG., Timothy Harden, AMSAM-DSA-ASH-L, DSN 645-7934 or commercial (256) 955-7934, datafax DSN 645-7934 or commercial (256) 955-7934. E-Mail, "timothy.harden@redstone.army.mil".

c. Wholesale Materials point of contact (Spares) is Mr. John Jensen, AMSAM-MMC-VS-AO, DSN 897-1390 or commercial (256) 313-1390, datafax DSN 788-6758 or commercial (256) 842-6758. E-Mail, "jensen-jo@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 commercial (256) 876-5564, datafax DSN 746-4904 or commercial (256) 876-4904. E-Mail, "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 DSN 897-2111 or commercial (256) 313-2111. E-Mail "price-sf@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 897-0410 or commercial (256) 313-0410. E-Mail "wittstrom-jl@redstone.army.mil" or Mr. Ronnie W. Sammons, AMSAM-SA-CS-NF, DSN 897-0408 or commercial (256) 313-0408. datafax DSN 897-0411 or commercial (256) 313-0411. E-Mail "sammons-rw@redstone.army.mil. Redstone Arsenal, AL. is Greenwich Mean Time minus 6 hours.

g. After hours contact ATCOM Command Operations Center (COC) DSN 897-2066/7 or commercial (256) 313-2066/7.

By Order of the Secretary of the Army:

Official:



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