# URGENT

**TB 1–2840–263–01**

# DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

# ONE TIME INSPECTION AND RECURRING INSPECTION OF NEW SELF SEALING MAGNETIC CHIP DETECTORS OH–58D(R) HELICOPTER ENGINES

**Headquarters, Department of the Army, Washington, D. C.**
**4 May 2000**



**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UNTIL RESCINDED OR SUPERSEDED.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 entry shall state "Inspect magnetic plug (chip detectors) TB 1–2840–263–01 at the next scheduled 20 hour engine inspection and subsequent 20 hour scheduled inspection." The red horizontal dash may be cleared when the inspection criteria in paragraph 8 and corrective actions in paragraph 9 are completed. The affected aircraft shall be inspected as soon as practical but no later than the next 20 hour engine inspection. 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. Same as paragraph 1. a.

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

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

e. Maintenance Trainers (Category A and B ). Not applicable.

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

**2. Task/Inspection Suspense Date.** At the next scheduled 20 hour engine inspection and report in accordance with paragraph 14. b.

**3. Reporting Compliance Suspense Date.** Report compliance in accordance with paragraph 14. a. no later than 4 May 2000.

This TB supersedes OH–58–00–ASAM–02, 131240Z Apr. 00

**4**. **Summary of the Problem**.

a. Rolls–Royce Allison reports some new self sealing magnetic plugs (chip detectors) which were removed during scheduled inspections, have been found to contain enough metal that the magnetic plug (chip detector) light in the cockpit should have illuminated. There was no light reported. This was due to the arrangement of the metal on the plug and the gap not being bridged. Rolls–Royce Allison is reviewing the sensitivity of the new self sealing magnetic chip detector.

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

c. The purpose of this TB is to establish an inspection requirement for the engine magnetic plug (chip detector) at the scheduled 20 hour engine inspection. The initial inspection shall include an inspection of the scavenge oil filter and engine gearbox oil filter screen. This inspection This inspection is in addition to the inspection of the magnetic plug (chip detector) which is currently called out in TM 1–2840–263–23.

**5**. **End Items to be Inspected.** All OH–58D(R) aircraft with the Rolls–Royce Allison model 250–C30R/3 engine.

**6**. **Assembly Components to be inspected.** Not applicable.

**7**. **Parts to be Inspected**.

| NOMENCLATURE | PART NUMBER | NATIONAL STOCK NUMBER |
|---|---|---|
| | | |
| Plug, Magnetic Quick Disconnect | 23064626 | 4370–01–471–5501 |
| Plug, Magnetic Quick Disconnect | 23062026 | 2995–01–471–5496 |
| Element Filter, Lube Oil | 6898947 | 2945–01–211–2267 |
| Element Strainer, SE | 1742510 | 4730–01–294–4283 |

**8**. **Inspection Procedures.**

a. Remove, inspect, clean and install oil filter element, PN 6898947 in accordance with TM 1–2840–263–23.

b. Remove and inspect scavenge oil filter, PN 1742510. Replace if necessary, otherwise reinstall in accordance with TM 55–1520–248–23, Task 4–4–17.

c. Remove each of the two magnetic plug (chip detectors) from engine power and accessory gearbox and check for evidence of metal particles and proceed as follows:

(1) If no metal chips, flakes, slivers or paste are found, inspection is complete and aircraft may be returned to service.

(2) If chips, flakes, slivers or paste are found; proceed with correction procedures of paragraph 9.

**9**. **Correction Procedures.**

a. If paste is found refer to TM 1–2840–263–23 for maintenance procedures.

b. If chips or flakes exceeding 1/32 inch in diameter, or more than four slivers are found on chip detector, change status symbol of aircraft to a red X and contact area contractor field service representative for disposition instructions.

c. If chips or flakes less than 1/32 inch in diameter, or fewer than four slivers are found on chip detector, Do the following:

(1) Drain and flush engine oil system.

(2) Run engine and accomplish a 30 minute ground run at power (ground idle) with rotors turning.

(3) Shut down and allow engine to cool. Remove magnetic plugs (chip detectors).

(4) Inspect magnetic plugs (chip detectors). If no metal particles are found; return aircraft to service.

(5) If metal particles are found on magnetic plug (chip detector) repeat steps 9. c. (1) through 9. c. (4) for a total of three attempts.

(6) If three attempts to clear magnetic plug (chip detector) of metal particles fail, change status symbol of aircraft to red X and contact area contractor field representative for disposition instructions.

d. If metal particles are found on magnetic plug (chip detector) during three consecutive 20 hour chip detector inspections, change status symbol of aircraft to a red X and contact area contractor representative for disposition instructions. Annotate inspection on DA Form 2408–5–1 for the engine.

**10**. **Supply Parts and Disposition.**

a. Parts Required. Items cited in paragraphs 6 and 7 may be required to replace unserviceable items.

b. Requisitioning Instructions. Contact logistical point of contact in paragraph 16. b. for requisitioning instructions.

c. Bulk and Consumable Materials. Items listed in Task 4–4–17, TM 55–1520–248–23.

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

e. Disposition of Hazardous Material. Not applicable.

**11**. **Special Tools, Jigs, and Fixtures.** Not applicable

**12**. **Application.**

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

b. Time Required.

(1) Total of 0.5 man-hours using 1 person.

(2) Total of 0.5 hours downtime for one end item.

c. Estimated Cost Impact to the Field. Not applicable

d. TB/MWOs to be Applied Prior to or Concurrently with this Inspection. Not applicable.

e. Publications Which Require Change as a Result of This Inspection. TM 1–2840–263–23 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 55–1520–248–23–2

b. TM 1–1520–248–23P

c. TM 1–2840–263–23

d. TM 1–2840–263–23P

e. DA Pam 738–751

**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: AMSAM–SF–A (SOF Compliance Officer), Redstone Arsenal, AL. 35898–5000, in accordance with 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). Units will forward a priority message to: Commander, AMCOM, ATTN: AMSAM–DSA–AS–ASH–L, DSN 645–7441, E–Mail raymond.hensely@redstone.army.mil, only if engine fails inspection and correction procedures of paragraphs 8. and 9. The report will cite this TB number, date of inspection, engine serial number, component hours, and results of the inspection. Inspection and reports will be completed no later than seven days after Task/Inspection Suspense Date.

c. The following forms are applicable and are to be completed in accordance with DA PAM 738-751, 15 March 1999.

**NOTE**

ULLS–A users will use applicable E forms.

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

(5) DA Form 2408–16, Aircraft Component Historical Record. (Only if engine is removed)

(6) DA Form 2408-18, Equipment Inspection List.

**NOTE**

ULLS–A users will use an 800 inspection number

(7) DA Form 2410, Component Removal and Repair/Overhaul Record. (Only if engine is removed/replaced)

(8) DD Form 1574–1, Serviceable Tag/Label Material (color yellow). Annotate remarks block with "Inspected serviceable in accordance with TB 1–2840–263–01.

**15**. **Weight and Balance.** Not applicable.

**16**. **Points of Contact.**

a. Technical point of contact for this TB is Mr. Skip Jackson, AMSAM–RD–AE–I–D–O, DSN 645–9625 or commercial (256) 955–9625, or datafax DSN 645–9536. E–Mail is skip.jackson@redstone.army.mil.

b. Logistical point of contact for this TB is Mr.Ray Hensley, AMSAM–DSA–ASH, DSN 645–7441 or commercial (256) 955–7441. E–Mail is raymond.hensley@redstone.army.mil

c. Wholesale materiel point of contact (spares) is Mr. John Jensen, AMSAM–MMC–VS–AO, DSN 897–1390 or commercial (256) 313–1390, datafax DSN 788–6758. E–Mail is 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 764–4904. 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 (256) 313–2111. E–Mail is ron.price@redstone.army.mil.

f. After hours contact AMCOM Command Operations Center (COC) DSN 897–2066/7 or commercial (256) 313–2006/7.

By Order of the Secretary of the Army:

Official:

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DISTRIBUTION:

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