URGENT

*TB 1-1520-238-20-132

DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

MAIN TRANSMISSION REPLACEMENT TIME, AH-64 SERIES HELICOPTERS

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

15 August 2003

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NOTE

THIS PUBLICATION IS EFFECTIVE UNTIL RESCINDED OR SUPER-SEDED.

NOTE

This Technical Bulletin (TB) is issued IAW AR 95-1 and has not been transmitted to units subordinate to addressees. Addressees will immediately retransmit this message to all subordinate units, activities or elements affected or concerned. MACOM's will immediately verify this transmission to the AMCOM SOF Compliance Officer (AMSAM-SF-A, safeadm@redstone.army.mil).

NOTE

MACOM commanders may authorize temporary exception from technical bulletin (TB) requirements IAW 95-1, Ch. 6. 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.

1. Summary -

- 1.1 Background SOF message AH-64-00-03 established a retirement life of 750 flight hours for the primary and secondary clutch assemblies inside the accessory gearbox portion of the main transmission. Recent re-examination of the probabilities, components, and flight history has resulted in an increase in the retirement life for these components.
- 1.2 TB Purpose -
- 1.2.1 Establish a new retirement life of 1000 flight hours for the primary and secondary clutch assemblies inside the accessory gearbox portion of the main transmission.

^{*}This TB supersedes TB 1-1520-238-20-132 dated 14 February 2003

- 1.2.2 Supercede the requirements imposed by AH-64-00-02 and AH-64-00-03 (TB 1-1520-238-20-99).
- 2. END ITEMS AFFECTED All AH-64 series aircraft.
- 3. ASSEMBLIES/COMPONENTS/PARTS AFFECTED -
- 3.1 Suspect/discrepant assemblies/components/parts

NOMENCLATURE	P/N	NSN
CLUTCH, SPRAG DRIVE	7-113100109	1615-01-172-5060

3.2 Additional assemblies/components/parts to be inspected –

NOMENCLATURE	P/N	NSN
MAIN TRANSMISSION	7-311310001/-5	1615-01-165-9452
	7-311310001-25	1615-01-224-4853
	7-311310001-27	1615-01-219-8667
	7-311310001-33	1615-01-234-2180
	7-311310001/-35	1615-01-243-4220
	7-311310001-37/-39	1615-01-252-6376
	7-311310001-41/43	1615-01-461-8845

NOTE

When complying with the requirements of this TB, complete forms and records entries IAW DA PAM 738-751. ULLS-A units will use appropriate "E" forms.

4. INITIAL TAMMS (THE ARMY MAINTENANCE MANAGEMENT SYSTEM) COMPLIANCE REQUIREMENTS –

4.1 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: "Comply with the requirements of AH-64-03-02 prior to the next flight but NLT 11 February 2003." 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.

NOTE

The TAMMS compliance reporting form is available at "www.redstone.army.mil/sof/tamms.xls" (use lower case letters only) or may be obtained from the units servicing LAR. Alternate forms may be approved by the AMCOM SOF Compliance Officer.

NOTE

The TAMMS Compliance Report only confirms the unit has made the initial logbook entry for assigned aircraft. TAMMS Compliance Reports will include aircraft serial numbers (in numerical order), date of entry on DA Form 2408-13-1, unit address, local POC name and phone number.

4.2 TAMMS Compliance Reports – Submit TAMMS Compliance Report via priority email to "safe-adm@redstone.army.mil" NLT 4 February 2003 IAW AR 95-1. If email is not available, the report may be faxed to: SOF Compliance Officer at DSN 897-2111 or (256) 313-2111.

5. TASK/INSPECTION COMPLIANCE REQUIREMENTS -

NOTE

The Task/Inspection Reporting Form is available at "www.redstone.ar-my.mil/sof/log.xls" (use lower case letters only) or may be obtained from the units servicing LAR. This report will cite the message number, date of inspection, aircraft serial number, aircraft hours, component serial number, component hours, and results of the inspection.

- 5.1 Aircraft Submit Task/Inspection Compliance Report for this TB to Log POC NLT 11 February 2003.
- 5.2 Retail Stock (Installation level and below) Submit Task/Inspection Compliance Report for this TB to Log POC NLT 11 February 2003.
- 5.3 Wholesale Stock (Including Depot Stock, Depot Maintenance and Single Stock Fund) Report compliance with this TB IAW paragraph 8 to Wholesale POC NLT 11 February 2003.

6. SPECIAL PROVISIONS TO TB REQUIREMENTS (AIRCRAFT) -

- 6.1 Aircraft at Contractor Facility Inspect DD 250 aircraft prior to those aircraft departing for ferry to final destination.
- 6.2 Aircraft in Transit —
- 6.2.1 Surface/air shipment Comply with TB requirements prior to first flight after arrival.
- 6.2.2 Ferry status/Aircraft away from home station Comply with TB requirements upon arrival at final destination.
- 6.3 Aircraft on Red X status symbol will be maintained in flyable storage. Ground run-ups at normal operating rotor RPM are authorized.

7. TECHNICAL PROCEDURES/INSTRUCTIONS -

- 7.1 Update the Overhaul/Replacement Time on the Main Transmission DA Form 2408-16, Block 6J (O/H or Replacement Life), as follow Sprag Clutches (primary and secondary), 1000 hours and recalculate replacement due time in Block 6K.
- 7.2 If any of the following fault events occur during aircraft operation, replace the main transmission and submit a Category 1 Deficiency Report (QDR).
- 7.2.1 The APU will not start (hang-start), and no deficiencies are noted during normal APU trouble shooting (not an APU problem).
- 7.2.2 The APU moves rotor system during APU start.
- 7.2.3 Engines fail to operate the accessory gearbox when NP/NR is advanced beyond 95 percent.
- 7.2.4 Accessory gearbox seizes.
- 7.2.5 Pilot notes simultaneous failure of AC electrical, hydraulic, and pneumatic subsystems.
- 7.3 Clear the initial entry from paragraph 4.1. and note compliance on DA Form 2408-5-1 (*Main Transmission and both sprag clutches). If sprag clutches serial numbers are not known note compliance only on Main Transmission 2408-5-1.
- **8.** PROCEDURES/INSTRUCTIONS FOR ASSEMBLIES/COMPONENT/PARTS IN WORK OR IN STOCK (AT ALL LEVELS INCLUDING WAR RESERVES) Annotate the serviceability tag with: "AH-64-00-02, Main Transmission Replacement Time, not complied with". Do not remove original condition tags".
- 8.1 Items in Retail Stock Commanders and facility managers that maintain retail stock at installation level and below will complete the following procedures.
- 8.1.1 Suspend issue of affected items until in compliance with TB requirements.
- 8.1.2 Contact the supported Aviation unit, as required, to perform the procedures as required on affected items.

TB 1-1520-238-20-132

- 8.1.3 Comply with inspection and correction procedures as required to return items to serviceable stock.
- 8.1.4 Submit a Task/Inspection report IAW paragraph 5.
- 8.2 Items in Single Stock Fund and in Work (Overhaul/Repair Facility) -
- 8.2.1 Depot, unit and other maintenance activity commanders will ensure items listed in paragraph 3 are not issued until they are in compliance with this TB.
- 8.2.2 Submit Task/Inspection Compliance Report for this TB to Wholesale POC NLT 11 February 2003.
- 8.3 Items in Wholesale Stock N/A.

9. SPECIAL TOOLS AND FIXTURES REQUIRED - N/A.

10. SUPPLY/PARTS (REQUISITION/DISPOSITION) -

10.1 Parts Required -

Nomenclature	Part No./NSN	Qty	Cost ea.	Total \$
Main Transmission	As per paragraph 3	1	\$297,216	\$297,216
			Total cost per aircraft= \$297,216	

- 10.2 Bulk and consumable materials N/A.
- 10.3 Requisitioning instructions Requisition replacement parts using normal supply procedures.
- 10.4 Disposition of discrepant parts/components Return defective assets using the normal material return program.
- 10.5 Disposition of hazardous material IAW Environmental Protection Agency directives as implemented by your servicing environmental coordinator (AR 200-1).

11. MAINTENANCE APPLICATION -

- 11.1 Category of maintenance AVUM.
- 11.2 Estimated time required –
- 11.2.1 Time to complete records check total of 0.5 man-hour using 1 person with 0.0 hours downtime per end item.
- 11.2.2 Time for remove/replacement transmission total of 16 man-hours using 2 persons with 8 hours downtime per end item.

12. PUBLICATION REQUIREMENTS -

- 12.1 References -
- 12.1.1 AR 95-1 Flight Regulations 01 SEP 97.
- 12.1.2 DA Pam 738-751 The Army Maintenance Management System (TAMMS).
- 12.1.3 TM 1-1520-238-10 Operator's Manual for Helicopter, Attack, AH-64A Apache 31 AUG 94.
- 12.1.4 TM 1-1520-238-CL Operator's Checklist for Helicopter, Attack, AH-64A Apache 31 AUG 94.
- 12.1.5 TM 1-1520-238-MTF Maintenance Test Flight Manual for Helicopter, Attack, AH-64A Apache 31 AUG 94.
- 12.1.6 TM 1-1520-251-10 Operator's Manual for Helicopter, Attack, AH-64D Longbow Apache 29 MAR 02.
- 12.1.7 TM 1-1520-251-CL Operator's Checklist for Helicopter, Attack, AH-64D Longbow Apache 15 MAR 98.
- 12.1.8 TM 1-1520-251-MTF Maintenance Test Flight Manual for Helicopter, Attack, AH-64D Longbow Apache 15 MAR 98
- 12.1.9 IETM for AH-64D.
- 12.2 Publication changes N/A.

13. POINTS OF CONTACT -

- 13.1 Technical POC is Mr. Ken Muzzo, AMSAM-RD-AE-I-P-A, DSN 897-2350 ext 9846 or (256) 705-9846. Fax is (256) 705-9918. Email is "kenneth.muzzo@rdec.redstone.army.mil".
- 13.2 Logistical POCs are -
- 13.2.1 Primary Mr. Mike Sharp, DSN 897-4044 or (256) 313-4044, fax is (256) 313-4374. Email is "mike.sharp@peoavn.redstone.army.mil".
- 13.2.2 Alternate Mr. Steve Hayes, SFAE-AV-AAH-LF, DS 897-4045 or (256) 313-4045, fax is DSN 897-4343 or (256) 897-4343. Email is "steve.hayes@peoavn.redstone.army.mil".
- 13.3 Wholesale Material POC (spares) is Ms. Theresa Dougherty, , AMSAM-MMC-AV-AA, DSN 897-1347 or (256) 313-1347 Email is "theresa.dougherty@redstone.army.mil".
- 13.4 Forms and records POC is Ms. Ann Waldeck, AMSAM-MMC-MA-NM, DSN 746-5564 or (256) 876-5564. Fax is DSN 746-4904 or (256) 876-4904. Email is "ann.waldeck@redstone.army.mil".
- 13.5 Safety POCs are -
- 13.5.1 Primary Mr. Harry Trumbull (SAIC), AMSAM-SF-A, DSN 897-2095 or (256) 313-2095. Fax is DSN 897-2111 or (256) 313-2111. Email is "harry.turmbull@redstone.army.mil"
- 13.5.2 Alternate Mr. Howard Chilton, AMSAM-SF-A, DSN 897-2068 or (256) 313-2068, fax is DSN 897-2111 or (256) 313-2111. Email is "howard.chilton@redstone.army.mil".
- 13.6 Foreign Military Sales recipients requiring clarification of this message should contact Mr. Ronnie W. Sammons, AMSAM-SA-AS-UT, DSN 897-0407 or (256) 313-0407. Fax is DSN 897-0411 or (256) 313-0411. Email is "ronnie.sammons@redstone.army.mil".
- 13.7 After hours, contact the AMCOM Operations Center (AOC) DSN 897-2066/7 or (256) 313-2066/7.

By Order of the Secretary of the Army

PETER J. SCHOOMAKER General, United States Army Chief of Staff

Official:

Joel B Hul JOEL B. HUDSON Administrative Assistant to the Secretary of the Army

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To: <2028@redstone.army.mil>

Subject: DA Form 2028

1. *From:* Joe Smith

2. Unit: home

Address: 4300 Park
 City: Hometown

5. *St:* MO6. *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
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13. Submitter FName: Joe
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