
DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

**FLEETWIDE ONE TIME REPLACEMENT OF THE OLD
AUXILIARY POWER UNIT (APU) FUEL NOZZLE
GASKET(P/N 3612610-1), ON ALL AH-64 AIRCRAFT**

Headquarters, Department of the Army, Washington, D. C.
3 May 1996

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

NOTE

THIS PUBLICATION IS EFFECTIVE UNTIL 3 May 1998 UNLESS SOONER RESCINDED OR SUPERSEDED.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 //--//** may be cleared when the inspection of paragraph 9 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 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 paragraph 1a.

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

d. Aircraft in Transit.

(1) Surface/Air Shipment. Prior to first flight.

(2) Ferry Status. Inspect at final destination.

(a) Replace at final destination.

(b) Those aircraft that have DD250 and are at McDonnell Douglas Helicopter Systems (MDHS) will be replaced prior to ferry to final destination.

e. Maintenance Trainers (Category A, B). Same as paragraph 1a.

f. Component/Parts in Stock Including War Reserves at All Levels (Depot and Others). Depot stocks have not had the gasket replaced. APUs overhauled after 1 June 1996, will have the gasket installed, therefore serviceability tags must be checked to determine date of last overhaul. If prior to 1 June 1996, user must replace gasket before APU is installed in the aircraft. For replacement gasket contact the logistical point of contact.

This TB supersedes USAATCOM Aviation Safety Aviation Message 151441Z April 96 AH-64-96-ASAM-06

2. **Task/inspection Suspense Date.** 60 days upon receipt of this TB.
3. **Reporting Compliance Suspense Date.** No later than 4 June 1996 per paragraph 14a of this TB.

4. **Summary of the Problem.**

a. During APU operation, a field unit discovered fuel or oil leakage from bottom of APU Fuel Nozzle. Inspection of the Fuel Nozzle revealed a defective gasket (P/N 3612610-1) initiated leakage. This may cause severe damage to the APU.

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

c. The purpose of this TB is to direct a one time replacement of ail AH-64 APU fuel nozzle gaskets and torque three machine bolts (P/N MS9565-06) to proper torque.

5. **End Items to be Inspected.** All AH-64 Aircraft.

6. **Assembly Components to be Inspected.** N/A

7. **Parts to be Inspected.** N/A

8. **Inspection Procedures.** N/A

9. **Correction Procedures,**

NOTE

The new fuel nozzle gaskets will be disseminated fleetwide. Contact Logistical point of contact per paragraph 16b.

- a. Safe the aircraft IAW reference 13a., task 1.57.
- b. Gain access to doors T250L, T250R, T290L, T290R, and L325 IAW reference 13a paragraph 2.2.
- c. Remove APU upper center cover in accordance with reference 13a. paragraph 15.41.3, step c (1) thru c (3).
- d. Disconnect "B" nut from fuel nozzle in accordance with reference 13a., paragraph 15.27.3, step c (1).
- e. Remove discrepant fuel nozzle gasket in accordance with reference 13a, paragraph 15.27.3, steps g(1) thru g(3).

WARNING

Compressed air shall not be used for cleaning purposes except where reduced to less than 30 psi and only then with effective chip guarding and personnel protection equipment.

WARNING

Dry deaning solvent is potentially dangerous to personnel and property. Use in well ventilated area as the fumes are dangerous if inhaled. Avoid repeated and prolonged skin contact. Do not use near open flame or excessive heat.

f. Clean fuel nozzle in accordance with reference 13a paragraph 1.47. Remove any residue dry cleaning solvent by drying part thoroughly with clean lint-free cloth or filtered compressed air.

- g. After cleaning use 25 PSIG air, applied to fuel nozzle inlet, to blow cleaning solvent from interior of nozzle.
- h. Install nozzle with new gasket (P/N 3830475-1) in accordance with reference 13a. paragraph 15.27.6, steps a(1) thru a(3).
- i. Reinstall 'B' nut to fuel nozzle in accordance with reference 13a., paragraph 15.27.6, steps d(1) and d(3). Torque 'B' nut to 115 inch-pounds.
- j. Perform Power Up Check in accordance with maintenance procedures In reference 13b paragraph 15.10.
- k. Torque three bolts to 50 inch-pounds using a torque wrench and lockwire all three bolts In accordance with reference 13a paragraph 15.27.6, step b.
- l. If necessary, torque 'B' nut to 115 inch-pounds.
- m. Reinstall APU upper center cover per reference 13a. paragraph 15.42.3, steps u thru v.
- n. Secure access doors T250L, T250R, T290L, and L325.

10. Supply/Parts and Disposition.

- a. Parts Required. New fuel nozzle gasket, P/N 3830475-1.
- b. Requisitioning Instructions. Contact the Logistical point of contact for a free Issue of new fuel nozzle gaskets per paragraph 16b.
- c. Bulk and Consumable Materials.

NOMENCLATURE	PART NUMBER	NSN
Antiseize Compound	MIL-A-907	8030-00-597-5367
Nonelectrical Wire	MS20995N32	9525-00-529-0442
Cleaning Cloth	MIL-C-85043	7920-00-044-9281
Dry Cleaning Solvent	P-D-680	6850-01-331-3350

- d. Disposition. Dispose of removed parts/components In accordance with normal supply procedures. A QDR is not required.
- e. 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. Time Required.
 - (1) Total of 2 man-hours using 2 persons for replacement.
 - (2) Total 2 hours downtime for one end item.
- c. Estimated Cost Impact of Stock Fund Items to the Field. N/A
- 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 Inspection. TM 1-1520-238-23P and TM 1 -2835-213-23P 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 1-1520-238-23. Aviation Unit and Intermediate Maintenance Manual, dated 16 May 1994.
- b. TM 1-1520-238-T-8, Aviation and Intermediate Troubleshooting Manual, dated 30 April 1992.

14. Recording and Reporting Requirements.

a. Upon entering requirements of this TB on DA Form 2408-13-1 on all subject MDHS aircraft forward a priority message, datafax or E-Mail to Commander, ATCOM, ATTN: AMSAT-R-X (SOF Compliance Officer), per AR 95-3. Datafax number is DSN 693-2064 or commercial (314) 263-2064. E-Mail address is "AM-SATRXS@EMH4.STL.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). N/A.
- c. Reporting compliance suspense date (Spares). N/A
- d. Task/Inspection reporting suspense date (Spares). N/A.
- e. The following forms are applicable and are to be completed in accordance with DA PAM 738-751 ,15 June 1992:
 - (1) DA Form 2408-5-1, Equipment Modification Record, APU.
 - (2) DA Form 2408-13, Aircraft Inspection and Record.
 - (3) DA Form 2408-13-1, Aircraft Inspection and Maintenance Record.
 - (4) DA Form 2408-15, Historical Record for Aircraft.

15. Weight and Balance. N/A.


16. Points of Contact.

- a. Technical point of contact for this TB is Mr. Fred Banks, AMSAT-R-EIA, DSN 693-3243 or commercial (314)263-3243.
- b. Logistical point of contact for this TB is Mr. Jim Mason or Mr. Hopkins, SFAE-AV-AAH-LF, DSN 693-1947/1944 or commercial (314)263-1947/1944.
- c. Forms and records point of contact for this TB is Ms. Ann Waldeck, AMSAT-I-MDM, DSN 490-2318 or commercial (314)260-2318.
- d. Safety point of contact for this TB is Mr. Jim Wilkins. AMSAT-R-X, DSN 693-2258 or commercial (314)263-2258.
- e. Foreign Military Sales (FMS) recipients requiring clarification of action advised by this TB should contact Mr. Ron Van Rees or CW5 Jay Nance, AMSAT-I-IAF, DSN 693-3826/3659 or commercial (314)263-3826/3659.
- f. After hours contact ATCOM Command Operations Center (COC) DSN 693-2066/7 or commercial (314)263-2066/7.

17. Reporting of Errors and Recommending Improvements. You can help 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 Troop Command, ATTN: AMSAT-I-MP, 4300 Goodfellow Blvd., St. Louis, MO 63120-1798. A reply will be furnished to you. You may submit your recommended changes by E-mail directly to <mpmt%avma28@st-louis-emh7.army.mil>. A reply will be furnished directly to you.

By Order of the Secretary of the Army:

Official:


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THE METRIC SYSTEM AND EQUIVALENTS

WEIGHT MEASURE

1 Centimeter = 10 Millimeters = 0.01 Meters = 0.3937 Inches
 1 Meter = 100 Centimeters = 1000 Millimeters = 39.37 Inches
 1 Kilometer = 1000 Meters = 0.621 Miles

WEIGHTS

1 Gram = 0.001 Kilograms = 1000 Milligrams = 0.035 Ounces
 1 Kilogram = 1000 Grams = 2.2 lb.
 1 Metric Ton = 1000 Kilograms = 1 Megagram = 1.1 Short Tons

LIQUID MEASURE

1 Milliliter = 0.001 Liters = 0.0338 Fluid Ounces
 1 Liter = 1000 Milliliters = 33.82 Fluid Ounces

SQUARE MEASURE

1 Sq. Centimeter = 100 Sq. Millimeters = 0.155 Sq. Inches
 1 Sq. Meter = 10,000 Sq. Centimeters = 10.76 Sq. Feet
 1 Sq. Kilometer = 1,000,000 Sq. Meters = 0.386 Sq. Miles

CUBIC MEASURE

1 Cu. Centimeter = 1000 Cu. Millimeters = 0.06 Cu. Inches
 1 Cu. Meter = 1,000,000 Cu. Centimeters = 35.31 Cu. Feet

TEMPERATURE

$5/9(^{\circ}\text{F} - 32) = ^{\circ}\text{C}$
 212° Fahrenheit is equivalent to 100° Celsius
 90° Fahrenheit is equivalent to 32.2° Celsius
 32° Fahrenheit is equivalent to 0° Celsius
 $9/5^{\circ}\text{C} + 32 = ^{\circ}\text{F}$

APPROXIMATE CONVERSION FACTORS

TO CHANGE	TO	MULTIPLY BY
Inches	Centimeters	2.540
Feet	Meters	0.305
Yards	Meters	0.914
Miles	Kilometers	1.609
Square Inches	Square Centimeters	6.451
Square Feet	Square Meters	0.093
Square Yards	Square Meters	0.836
Square Miles	Square Kilometers	2.590
Acres	Square Hectometers	0.405
Cubic Feet	Cubic Meters	0.028
Cubic Yards	Cubic Meters	0.765
Fluid Ounces	Milliliters	29.573
arts	Liters	0.473
gallons	Liters	0.946
Ounces	Liters	3.785
Pounds	Grams	28.349
Short Tons	Kilograms	0.454
Pound-Feet	Metric Tons	0.907
Pounds per Square Inch	Newton-Meters	1.356
Miles per Gallon	Kilopascals	6.895
Miles per Hour	Kilometers per Liter	0.425
	Kilometers per Hour	1.609

TO CHANGE	TO	MULTIPLY BY
Centimeters	Inches	0.394
Meters	Feet	3.280
Meters	Yards	1.094
Kilometers	Miles	0.621
Square Centimeters	Square Inches	0.155
Square Meters	Square Feet	10.764
Square Meters	Square Yards	1.196
Square Kilometers	Square Miles	0.386
Square Hectometers	Acres	2.471
Cubic Meters	Cubic Feet	35.315
Cubic Meters	Cubic Yards	1.308
Milliliters	Fluid Ounces	0.034
Liters	Pints	2.113
Liters	Quarts	1.057
gallons	Gallons	0.264
ounces	Ounces	0.035
pounds	Pounds	2.205
Metric Tons	Short Tons	1.102
Newton-Meters	Pounds-Feet	0.738
Kilopascals	Pounds per Square Inch	0.145
Kilometers per Liter	Miles per Gallon	2.354
Kilometers per Hour	Miles per Hour	0.621



PIN: 074727-000