URGENT

***TB 1-1520-238-20-84**

DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

INSPECTION OF IR JAMMER POWER LEADS FOR CHAFING AGAINST BELLCRANK, AH-64 HELICOPTER

Headquarters, Department of the Army, Washington, D. C.
15 December 1996

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

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 procedures in paragraph 8 are 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 the 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 released until compliance with this TB has been completed.

d. Aircraft in Transit.

(1) Surface/Air Shipment. Within 10 hours/14 days..

(2) Ferry Status.

(a) Inspect at final destination.

(b) Those aircraft that have a DD Form 250 and are at McDonnell Douglas Helicopter Systems (MDHS) will be inspected prior to ferry to final destination.

e. Maintenance Trainers (Category A, and B). Comply within 14 days of receipt of this TB.

f. Component/Parts in Stock Including War Reserves at All Levels (Depot and Others). N/A.

2. Task/Inspection Suspense Date. Within 10 hours/14 days.

*This TB supersedes USAATCOM Message 181600Z Nov 96. NOTE: The TB referenced in AH-64-ASAM-97-03 is incorrect. TB 1-1520-238-20-84 is correct.

3. Reporting Compliance Suspense Date. No later than 30 December 1996 per para 14a of this TB.

4. Summary of the Problem.

a. The Utah ANG reported (via a Category 1 Deficiency report) chafing and subsequent arcing and burning of the ALQ-144 radar jammer power lines on the aft mixer support bellcrank upon power up of the radar jammer. Without proper clamping and routing, chafing may occur when the collective is full up and the cyclic is forward, similar to a condition when the aircraft is in a 30^{o} dive.

b. For manpower/downtime and funding impacts refer to paragraph 12.

c. The purpose of the TB is to initiate a one-time inspection of the suspected area and direction to repair and reroute, as required.

5. End Items to be Inspected. All AH-64 aircraft will be inspected.

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

7. Parts to be Inspected.

NOMENCLATURE	PART NUMBER	NATIONAL STOCK NUMBER
Wire Harness (W119) Bellcrank	7-311 B24119-087 7-311511125	N/A 1680-01-225-2538 1680-01-161-1205

8. Inspection Procedures.

a. Remove access panels L200 and T225.

b. Locate ALQ-144 power cables along FS 219. With P949 connector connected to the transmitter and then again in the stow position, place the collective full up and the cyclic full forward. Note any contact between cables and bellcrank. No chafing is allowed. Any evidence of chafing requires repair in accordance with TM 1-1500-204-23. Note any evidence of damage to the bellcrank, and replace if required in accordance with TM 1-1520-238-23.

9. Correction Procedures.

a. Cables are usually securely fastened along the forward side of fuselage station 219 using two clamps, one attached directly onto the FS 219 frame and the other on the "L" bracket located approximately at 5.750 RBL and 185 WL. If installed and proper clearance is verified in all configurations, or if clearance of at least 1 -inch exists without the clamp installed on the "L" bracket, the inspection is complete.

NOTE

When these cables are rerouted, they will be stiff and should be carefully formed to ensure stress is limited to the connector as these cables are soldered onto the connector.

b. Aircraft not meeting these requirements will require installation of the clamp onto the "L" bracket using the appropriate hardware. The L-bracket is typically the one that is not installed. Verify proper clearance in all configurations.

10. Supply/Parts and Disposition.

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

b. Requisitioning Instructions. Requisition replacement parts through normal supply channels using normal supply procedures. All requisitions shall use project code "XCU" per this TB.

NOTE

Project code "XCU" is required to track and establish a data base of stock fund expenditures incurred by the field as a result of actions initiated by this TB.

c. Bulk and Consumable Materials. N/A.

d. Disposition. Dispose of removed parts/components in accordance with normal supply procedures.

e. Disposition of Hazardous Material. N/A.

11. Special Tools, Jigs and Fixtures Required. N/A.

12. Application.

a. Category of Maintenance. AVUM. Aircraft down time will be charged to AVUM.

b. Estimated Time Required.

(1) A total 4.0 man-hours using one person.

(2) A total of 4.0 hours down time for one end item.

c. Estimated Cost Impact of Stock Fund Items (only if bell crank is damaged):

NOMENCLATURE	PART NUMBER/ NATIONAL STOCK NUMBER	QUANTITY	COST EACH	TOTAL $
Bellcrank Clamp	7-311511125 M85052/1-9 (5340-01-132-0601)	1 1	$7284.00 $0.96	$7284.00 $0.96
Total cost per aircraft =				$7284.96

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.

13. References.

a. TM 1-1500-204-23

b. TM 1-1520-238-23

14. Recording and Reporting Requirements.

a. Reporting Compliance Suspense Date (Aircraft). 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 'AMSATRXS@EMH4.STL.ARMY. MIL". The report will cite this TB number, date of entry in DA Form 2403-13-1, 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 2408-13, Aircraft Status Information Record.

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

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

(4) DA Form 2408-16, Aircraft Component Historical Record (If bellcrank is replaced).

(5) DA Form 2410, Component Removal and Repair/Overhaul Record (If bellcrank is replaced).

15. Weight and Balance. N/A.

16. Points of Contact.

a. Technical Point of Contact for this TB is Mr. Matt Benzek, AMSAT-R-EIA, DSN 693-1680 or commercial (314) 263-1680.

b. Logistical Points of Contact for this TB are Mr. Jim Mason, SFAE-AV-AAH-LF, DSN 693-1947 or commercial (314) 263-1947.

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. Material Management Point of Contact for this TB is Mr. Bill Ebler, AMSAT-I-S, DSN 693-2730 or commercial (314)263-2730.

e. Safety Point of Contact for this TB is Mr. Jim Wilkins, AMSAT-R-X, DSN 693-2258 or commercial (314) 263-2258.

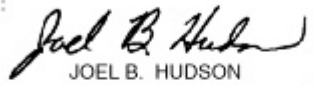
f. Foreign Military Sales (FMS) recipients requiring clarification of action advised by this TB should contact CW5 Jay Nance or Mr. Ron Van Rees, AMSAT-D-S, DSN 693-7844/3216 or commercial (314) 263-7844/3216.

g. After hours contact ATCOM Command Operations Center (COC), DSN 693-2066/2067 or commercial (314) 263-2066/2067.

17. Reporting of Errors and Recommending Improvements. You can help improve this TB. If you find any mistakes or if you know 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 also submit your recommended changes by E-mail directly to <mpmt/oavma28@st-louis-emh7.army.mil>. A reply will be furnished directly to you.

By Order of the Secretary of the Army:

Official:



JOEL B. HUDSON
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02810

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Chief of Staff

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THE METRIC SYSTEM AND EQUIVALENTS

'NEAR MEASURE

. 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

'VEIGHTS

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

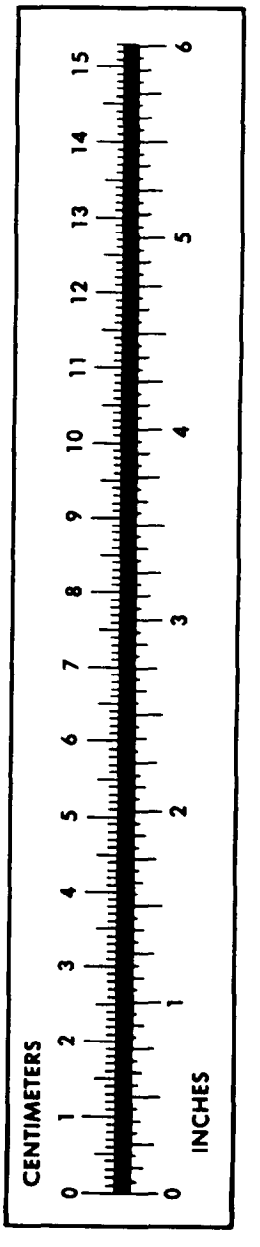
TEMPERATURE

5/9(°F - 32) = °C
212° Fahrenheit is evuivalent to 100° Celsius
90° Fahrenheit is equivalent to 32.2° Celsius
32° Fahrenheit is equivalent to 0° Celsius
9/5C° + 32 =°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
ıts	Liters	0.473
arts	Liters	0.946
allons	Liters	3.785
Ounces	Grams	28.349
Pounds	Kilograms	0.454
Short Tons	Metric Tons	0.907
Pound-Feet	Newton-Meters	1.356
Pounds per Square Inch	Kilopascals	6.895
Miles per Gallon	Kilometers per Liter	0.425
Miles per Hour	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
ers	Gallons	0.264
ms	Ounces	0.035
ograms	Pounds	2.205
Metric Tons	Short Tons	1.102
Newton-Meters	Pounds-Feet	0.738
Kilopascals	Pounds per Square Inch	0.145
lometers per Liter	Miles per Gallon	2.354
meters per Hour	Miles per Hour	0.621



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