

URGENT

TB 1-1520-240-20-136

DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

ONE TIME INSPECTION FOR PROPER INSTALLATION OF DROOP STOPS ON ALL CH-47D, MH-47D AND MH-47E AIRCRAFT

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

5 February 2001

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

NOTE

THIS PUBLICATION IS EFFECTIVE UNTIL RESCINDED OR SUPERSEDED.

1. Priority Classification. Urgent

NOTE

In accordance with AR 95-1, paragraph 6-6A, MACOM Commanders may authorize temporary exception from ASAM message requirements. 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.

a. Aircraft in Use. Upon receipt of this Technical Bulletin, make the following entry on the DA Form 2408-13-1. Enter a red horizontal dash // - // status symbol with the following statement: "Inspect Droop Stops in accordance with SOF CH-47-01-02, TB 1-1520-240-20-136 prior to next engine start (rotors turning)." Clear the red horizontal dash // - // entry when the procedures in accordance with paragraphs 8 and 9 are completed. The affected aircraft shall be inspected prior to next engine start (rotors turning). Commanders who are unable to comply with the requirements of this Technical Bulletin within the time frame specified will upgrade the affected aircraft status symbol 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. Same as paragraph 1a.

(2) Ferry Status.

(a) Same as paragraph 1a.

This TB supersedes USAAMCOM Message 030504Z FEB 01 SOF CH-47-01-02.

TB 1-1520-240-20-136

(b) Boeing Company will inspect DD 250 aircraft prior to those aircraft departing for ferry to final destination.

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

f. Component/Parts in Stock at All Levels (Depot and Others). Including War Reserves – Upon receipt of this Technical Bulletin, Depot and Materiel Activity Commanders will ensure the materiel condition tags of all items in all condition codes listed in paragraphs 6 and 7 are annotated to read “SOF CH-47-01-02 (TB 1-1520-240-20-136), Inspection of Droop Stops Not Complied With.”

(1) Wholesale Stock -- Upon receipt of this message, Depot and Materiel Activity Commanders will ensure all serviceable items (condition codes //A//, //B//, //C//, //D// and //E//) listed in paragraphs 6 and 7 located in Wholesale Depot Storage shall be placed in condition code //J// and tagged with a suspended Tag/Label – Materiel, DD Form 1576/DD Form 1576-1. Do not remove original condition tags. Report compliance with this Technical Bulletin in accordance with paragraph 14D (1).

(2) Retail Stock – Upon receipt of this message, Commanders and Facility Managers maintaining retail stock at Installation level and below shall contact the supported aviation unit to perform the procedures required in accordance with paragraphs 8 and 9 on suspect materiel. Report compliance with this Technical Bulletin in accordance with paragraph 14D (2).

g. Components/Parts in Work (Depot Level and Others) – Depot and other Maintenance Activity Commanders will ensure items listed in paragraphs 6 and 7 are not issued until they are in compliance with this Technical Bulletin.

2. Task/Inspection Suspense Date. Complete the inspection in accordance with paragraph 8 prior to next engine start (rotors turning), but no later than 12 February 2001.

3. Reporting Compliance Suspense Date. Report compliance in accordance with paragraph 14a no later than 12 February 2001.

4. Summary of the Problem.

a. While conducting an accident investigation, incorrectly installed droop stops were discovered.

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

c. The purpose of this Technical Bulletin is to perform a one time inspection for proper installation of droop stops. Aircraft with all droop stops installed correctly will be cleared for engine starts (rotors turning) and subsequent flight. Aircraft with any improperly installed droop stops will remain grounded until further guidance is provided in a follow-on Safety of Flight (SOF) message.

5. End Items to be inspected. All CH-47D and MH-47D/E Aircraft.

6. Assembly Components to be Inspected.

NOMENCLATURE	PART NUMBER	NATIONAL STOCK NUMBER
ROTOR HEAD	145R2003-All	N/A
ROTOR HEAD	145R2004-All	N/A

7. Parts to be Inspected.

NOMENCLATURE	PART NUMBER	NATIONAL STOCK NUMBER
DROOP STOP, FWD	114R2063-7	1615-00-967-9759
DROOP STOP, AFT	114R2087-3	1615-01-199-1785

8. Inspection Procedures.

a. Prepare aircraft for safe ground maintenance.

b. Perform visual inspection of the three forward droop stops part number 114R2063-7. This stop has one chamfered edge along its length. If this chamfered edge is installed towards the radius of the pitch shaft's droop stop boss, the installation is correct.

c. Perform visual inspection of the three aft droop stops part number 114R2087-3 for the following:

(1) This stop shall have a total of four holes. 2 for droop stop installation and 2 holes are for droop stop shroud shield installation which are located just outboard of the droop stop bolt holes. Shroud may or may not be installed.

NOTE

The aft droop stop has two chamfered edges but has only one on the side with bolt holes.

(2) If a chamfered edged is installed facing the radius of the pitch shaft's droop stop boss, the installation is correct.

9. Correction Procedures.

a. Aircraft which have all droop stops installed correctly:

Aircraft may perform engine starts (rotors turning) and are cleared for subsequent flight. Compliance with this Technical Bulletin shall be noted.

b. If an aircraft has one or more incorrectly installed droop stops, change the aircraft condition status symbol to a red //X// and enter the following statement on the DA Form 2408-13-1: "Aircraft grounded in accordance with SOF CH-47-01-02 for improperly installed droop stop (s)." Do not perform engine starts (rotors turning) on aircraft with incorrectly installed droop stop (s). Additional information will be forthcoming in a follow-up message.

10. Supply/Parts and Disposition. N/A.

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

12. Application.

a. Category of Maintenance – AVUM. Aircraft downtime will be charged to AVUM Maintenance. Report aircraft non-mission capable maintenance (NMCM) while undergoing inspection and correction in accordance with this Technical Bulletin.

b. Estimated Time Required-

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

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

c. Estimated Cost Impact 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 – N/A.

13. References.

a. DA PAM 738-751.

b. TM 55-1520-240-23 & P.

14. Recording and Reporting Requirements.

a. Reporting Compliance Suspense Date (Aircraft). Upon entering requirements of this Technical Bulletin on DA Form 2408-13-1 on all subject MDS aircraft, Commanders will 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 Technical Bulletin number, date of entry in DA Form 2408-13-1, the aircraft mission design series and serial numbers of aircraft in numerical order.

TB 1-1520-240-20-136

b. Task/Inspection Reporting Suspense Date (Aircraft). Commanders will forward a priority message to the technical point of contact listed at paragraph 16b of this Technical Bulletin. The report will cite this Technical Bulletin number, date of inspection, aircraft serial number, aircraft and component hours, and results of the inspection. Inspection and reports will be completed no later than 14 February 2001.

c. Reporting Message Receipt (SPARES).

(1) Materiel in Wholesale Depot Storage -- N/A.

(2) Materiel in Retail Storage -- N/A.

d. Task/Inspection Reporting Suspense Date (SPARES).

(1) Materiel in Wholesale Depot Storage -- Depot and Materiel Activity Commanders will report compliance with this Technical Bulletin to the logistical point of contact (SPARES) listed in paragraph 16b no later than 14 February 2001 on DD Form 1225. Provide the cost of compliance with this message to include an estimate of the cost reimbursable funding required to move serviceable items on hand listed in paragraphs 6 and 7 to a work area, unpack the materiel, repack the materiel after inspection by AMCOM inspectors, and to return the materiel to storage, as appropriate. Report, by original serviceable condition code, the quantity of materiel placed in condition code //J//. Report by email or datafax and provide local point of contact.

(2) Materiel in Retail Storage -- Commanders and Facility Managers will report compliance with this Technical bulletin to the logistical point of contact in paragraph 16b no later than 14 February 2001. Report the quantity inspected by condition code and the resulting condition code. Report by email or datafax and provide local point of contact.

e. The following Forms are applicable and are to be completed in accordance with DA Pam 738-751, 15 Mar 99 --

NOTE

ULLS-A users will use applicable "E" Forms.

(1) DA Form 2408-5-1, Equipment Modification Record (Fwd/Aft Rotor Head)

(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) DD Form 1575/DD Form 1575-1, Suspended Tag/Label -- Materiel (color brown). (Annotate remarks block with "Suspended in accordance with CH-47-01-02 (TB 1-1520-240-20-136)."

15. Weight and Balance. N/A.

16. Points of Contact.

a. Technical points of contact are:

(1) Dennis Ganey, AMSAM-RD-AE-I-P-C, DSN 897-3361 or commercial (256) 313-3361, datafax is (256) 313-4348. E-mail is "dennis.ganey@redstone.army.mil".

(2) Mr. Steven Riebeling, AMSAM-RD-AE-I-P-C, DSN 897-3338 or commercial (256) 313-3338, datafax is (256) 313-4348. E-mail is "steven.riebeling@redstone.army.mil".

b. Logistical point of contact is Mr. Bill Olson, SFAE-AV-CH-L, DSN 897-3379 or commercial (256) 313-3379, datafax is DSN 897-4348. E-mail is "william.olson@peoavn.redstone.army.mil".

c. Wholesale Materiel point of contact (SPARES) -- N/A.

d. Forms and Records point of contact is Ms. Ann Waldeck, AMSAM-MMC-RE-FF, DSN 746-5564 or commercial (256) 876-5564, datafax is DSN 746-4904. E-mail is "ann.waldeck@redstone.army.mil".

e. Safety points of contact are –

(1) Primary – Mr. Frank Roseberry (SAIC), AMSAM-SF-A, DSN 788-8631 or commercial (256) 842-8631, datafax is DSN 897-2111 or commercial (256) 313-2111. E-mail is “frank.rosebery@redstone.army.mil”.

(2) Alternate – Mr. Russell Peusch, AMSAM-SF-A, DSN 788-8632 or commercial (256) 842-8632, datafax is DSN 897-2111 or commercial (256) 313-2111. E-mail is “russel.peusch@redstone.army.mil”.

f. Foreign Military Sales recipients requiring clarification of action advised by this Technical Bulletin should contact:

(1) CW5 Joseph L. Wittstrom, Security Assistance Management, AMSAM-SA, DSN 897-0410 or commercial (256) 313-0410. E-mail is “wittstromjl@redstone.army.mil”

(2) Mr. Ronnie W. Sammons, AMSAM-SA-CS-NF, DSN 897-0408 or commercial (256) 313-0408, datafax is DSN 897-0411 or commercial (256) 313-0411. E-mail is “sammonsrw@redstone.army.mil”.

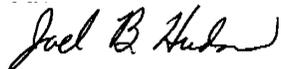
g. After hours contact the AMCOM COMMAND OPERATIONS CENTER (COC) DSN 897-2066/7 or commercial (256) 313-2066/7. Huntsville, AL is GMT minus 6 hours.

TB 1-1520-240-20-136

By Order of the Secretary of the Army:

ERIC K. SHINSEKI
General, United States Army
Chief of Staff

Official:



JOEL B. HUDSON
Administrative Assistant to the
Secretary of the Army
0103803

DISTRIBUTION:

To be distributed in accordance with Initial Distribution Number (IDN) 313967, requirements for TB 1-1520-240-20-136.

The following format must be used if submitting an electronic 2028. The subject line must be exactly the same and all fields must be included; however only the following fields are mandatory: 1, 3, 4, 5, 6, 7, 8, 9, 10, 13, 15, 16, 17, and 27.

From: "Whomever" <whomever@avma27.army.mil>

To: <ls-lp-@redstone.army.mil>

Subject: DA Form 2028

1. **From:** Joe Smith
2. **Unit:** home
3. **Address:** 4300 Park
4. **City:** Hometown
5. **St:** MO
6. **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
12. **Submitter Rank:** MSG
13. **Submitter FName:** Joe
14. **Submitter MName:** T
15. **Submitter LName:** Smith
16. **Submitter Phone:** 123-123--1234
17. **Problem: 1**
18. **Page:** 2
19. **Paragraph:** 3
20. **Line:** 4
21. **NSN:** 5
22. **Reference:** 6
23. **Figure:** 7
24. **Table:** 8
25. **Item:** 9
26. **Total:** 123
27. **Text:**

This is the text for the problem below line 27.

RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS



THEN...JOT DOWN THE DOPE ABOUT IT ON THIS FORM. CAREFULLY TEAR IT OUT, FOLD IT AND DROP IT IN THE MAIL.

SOMETHING WRONG WITH PUBLICATION

FROM: (PRINT YOUR UNIT'S COMPLETE ADDRESS)

DATE SENT

PUBLICATION NUMBER

PUBLICATION DATE

PUBLICATION TITLE

BE EXACT PIN-POINT WHERE IT IS

PAGE NO.

PARA-GRAPH

FIGURE NO.

TABLE NO.

IN THIS SPACE, TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT.

TEAR ALONG PERFORATED LINE

PRINTED NAME, GRADE OR TITLE AND TELEPHONE NUMBER

SIGN HERE

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

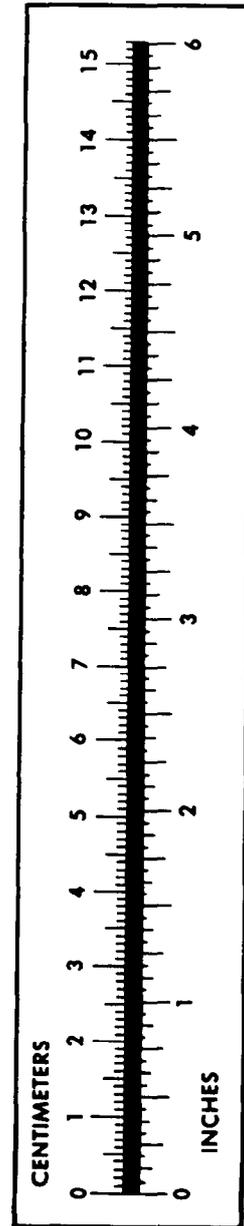
TEMPERATURE

$5/9(^{\circ}\text{F} - 32) = ^{\circ}\text{C}$
 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
its	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
ometers per Liter	Miles per Gallon	2.354
ometers per Hour	Miles per Hour	0.621



PIN: 078868-000