# URGENT

\*TB 1-1520-240-20-133

## DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

## MANDATORY INSPECTION FOR UNTESTED FLIGHT SAFETY PARTS (FSP) TIE BAR PIN ASSEMBLIES, P/N 114R2168-3 AND 114R2168-4, ON ALL CH-47D, MH-47D AND MH-47E AIRCRAFT

Headquarters, Department of the Army, Washington, D. C. **9 January 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THIS PUBLICATION IS EFFECTIVE UNTIL RESCINDED OR SUPERSEDED.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 6–14A, 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 for untested flight safety part (FSP) P/N 114R2168-3 and 114R2168-4 tie bar pin assemblies in accordance with CH-47-01-ASAM-04 (TB 1-1520-240-20-133) at the next phase inspection, but no later than 31 December 2002." Clear the red horizontal dash //–// entry when the procedures in accordance with paragraphs 8 and 9 are completed. 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 Depot Commanders will not issue aircraft until they are in compliance with this Technical Bulletin.
  - c. Aircraft Undergoing Maintenance Same as paragraph 1a.
  - d. Aircraft in Transit.
    - (1) Surface/Air Shipment Same as paragraph 1a.
    - (2) Ferry Status Same as paragraph 1a.

<sup>\*</sup>This TB supersedesTB 1-1520-240-20-133, dated 20 DEC 2000 and This TB supersedesUSAAMCOM Messages 221335Z DEC 00 CH-47-01-ASAM-06.

- e. Maintenance Trainers (Category A and B). Comply no later than 15 May 2001.
- 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 "CH-47-01-ASAM-04 (TB 1–1520–240–20–133), inspection for untested FSP tie bar pins assemblies, P/N 114R2168-3 and 114R2168-4, not complied with".
  - (1) Wholesale Stock -N/A.
- (2) Retail Stock Upon receipt of this Technical Bulletin, 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. Dispose of discrepant materiel in accordance with paragraph 10d.
- 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 at the next phase inspection but no later than 31 December 2002 and report in accordance with paragraph 14b.
- **3**. **Reporting Compliance Suspense Date**. Report compliance in accordance with paragraph 14a no later than 8 January 2001.
- 4. Summary of the Problem.
- a. CH-47-01-ASAM-04 (TB 1-1520-240-20-133) was issued on 14 December 2000 requiring the inspection of Flight Safety Parts (FSP) 114R2168–3 and 114R2168–4, tie bar pin assemblies. Paragraphs 8a (3) and 8b (3) of the ASAM provided a listing of CAGE Codes to identify serviceable tie bar pins. It has since been determined that serviceable tie bar pins can be identified by an additional CAGE Code number.
  - b. For manpower/downtime and funding impacts see paragraph 12.
- c. The purpose of this Technical Bulletin is to add an additional CAGE Code to the listings at paragraphs 8a (3) (d) and 8b (3) (d).
- 5. End Items to be inspected. All H-47 series aircraft.
- 6. Assembly Components to be Inspected.

NOMENCLATURE	PART NUMBER	NATIONAL STOCK NUMBER
HEAD, ROTARY WING, FWD	145R2003-ALL	ALL
HEAD, ROTARY WING, AFT	145R22004-ALL	ALL

#### 7. Parts to be Inspected. .

NOMENCLATURE	PART NUMBER	NATIONAL STOCK NUMBER
TIE BAR PIN ASSEMBLY	114R2168-3	1615-00-740-6477
TIE BAR PIN ASSEMBLY	114R2168-4	1615-01-115-3619

#### 8. Inspection Procedures.

#### NOTE

There may be two different five digit Codes marked on the part. The five digit Code 81996 is not the manufacturers CAGE Code. If found, the number 81996 identifies the part as having been manufactured in accordance with a government Technical Data Package (TDP). Use the five-digit Codes in accordance with paragraphs 8a (3) and 8b (3) to determine the manufacturers CAGE Code.

- a. P/N 114R2168-3 tie bar pin assembly -
- (1) Locate the inboard tie bar pin assemblies, three (3) per rotor head, (TM 55-1520-240-23P, Figure 176, Item 51 or TM 1-1520-252-23P, Figure 05-5, Item 52).
- (2) Remove the pin for inspection. Refer to TM 55-1520-240-23-4, Task 5-23.1 (H-47D) or TM 1-1520-252-23-5, Task 5-30 (MH-47E).
- (3) Identify the five digit manufacturers CAGE Code or manufacturers name on the end of the pin. If the 114R2168-3 inboard tie bar pin is marked with one of the following CAGE Codes the pin is serviceable-
  - (a) CAGE Code 63259 (Boniface Tool and Die).
  - (b) CAGE Code 56811 (Olympic Tool and Machine).
  - (c) CAGE Code 77272 (Boeing).

#### NOTE

If the pin contains only one CAGE Code (81205) along with the part number, the pin is considered serviceable. If the pin contains two CAGE Codes (81205 and 81996) along with the part number, the part is considered unserviceable. The pins with these two CAGES could reflect an Army procurement which has been improperly identified.

- (d) CAGE Code 81205 (Boeing Seattle).
- (4) If the pin is serviceable, re-install in accordance with TM 55-1520-240-23-4, Task 5-23.2 (H-47D) or TM 1-1520-252-23-5, Task 5-32 (MH-47E) and proceed to paragraph 8b.
- (5) If the pin is unserviceable, or if the CAGE Code or manufacturers name cannot be identified, proceed to paragraph 8b.
  - b. P/N 114R2168-4 tie bar pin assembly -
- (1) Locate the outboard tie bar pin assemblies, three (3) per rotor head (TM 55-1520-240-23P, Figure 176, Item 86 or TM 1-1520-252-23P, Figure 05-4, Item 86).
- (2) Remove the pin for inspection. Refer to TM 55-1520-240-23-4, Task 5-23.1 (H-47D) or TM 1-1520-252-23-5, Task 5-30 (MH-47E).
- (3) Identify the five digit manufacturers CAGE Code or manufacturers name on the end of the pin. If the 114R2168-4 outboard tie bar pin is marked with one of the following CAGE Codes the pin is serviceable
  - (a) CAGE Code 63259 (Boniface Tool and Die).
  - (b) CAGE Code 56811 (Olympic Tool and Die).
  - (c) CAGE Code 77272 (Boeing).

#### NOTE

If the pin contains only one CAGE Code (81205) along with the part number, the pin is considered serviceable. If the pin contains two CAGE Codes (81205 and 81996) along with the part number, the part is considered unserviceable. The pins with these two CAGES could reflect an Army procurement which has been improperly identified.

- (d) CAGE Code 81205 (Boeing Seattle).
- (4) If all pins are serviceable, re-install in accordance with TM 55-1520-240-23-4, Task 5-23.2 (H-47D) or TM 1-1520-252-23-5, Task 5-32 (MH-47E) and proceed to paragraph 8c.
- (5) If either pin is unserviceable, or if the CAGE Code or manufacturers name cannot be identified, proceed to paragraph 9.

c. If all 114R2168-3 and 114R2168-4 tie bar pin assemblies are determined serviceable, the red horizontal dash //-// will be cleared and compliance with CH-47-01-ASAM-04 (TB 1-1520-240-20-133) will be noted.

#### 9. Correction Procedures.

- a. Remove and replace any unserviceable 114R2168-3 or 114R2168-4 tie bar pin with a part from the supply system that is serviceable as defined in paragraph 8 above.
  - (1) H-47D Aircraft Refer to TM 55-1520-240-23-4, Task 5-23.2 (Install).
  - (2) MH-47E Aircraft Refer to TM 1-1520-252-23-5, Task 5-32 (Install).
- b. After completion of the above correction procedure, the red horizontal dash // –// status symbol entry will be cleared and compliance with CH-47-01-ASAM-04 (TB 1-1520-240-20-133) will be noted.

#### 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 using normal supply procedures. All requisitions shall use project code (CC 57-59) "X0H", (X-RAY-ZERO-HOTEL).

#### NOTE

Project code "X0H", is required to track and establish a data base of stock fund expenditures incurred by the field as a result of SOF actions.

- c. Bulk and Consumable Materials N/A.
- d. Disposition Demilitarize/mutilate in accordance with TM 1-1500-328-23 any part/component which does not meet inspection criteria.
  - e. Disposition of Hazardous Material N/A.

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

## 12. Application.

- a. Category of Maintenance AVUM. Aircraft downtime will be charged to AVUM.
- b. Estimated Time Required-
  - (1) Total of 170 man-hour using 5 persons.
  - (2) Total of 34 hour downtime for one end item.
- c. Estimated Cost Impact to the Field.

NOMENCLATURE	PN/NSN	QUANTITY	COST EACH	TOTAL
TIE BAR PIN ASSEMBLY	114R2168-3/ 1615-00-740-6477	6	\$33.34	\$200.04
TIE BAR PIN ASSEMBLY	114R2168-4/ 1615-01-115-3619	6	\$63.05	\$378.30

**TOTAL COST PER AIRCRAFT = \$578.34** 

- 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 55-1520-240-23 and TM 1-1520-252-23 shall be changed to reflect this Technical Bulletin. A copy of this Technical Bulletin shall be inserted in the appropriate TM as authority to implement the change until the printed change is received.

#### 13. References.

- a. DA PAM 738-751, 15 MAR 99.
- b. TM 55-1520-240-23.
- c. TM 55-1520-240-23P.
- d. TM 1-1520-252-23.
- e. TM 1-1520-252-23P.
- f. TM 1-1500-328-23.

## 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 CH-47-01-ASAM-04 (TB 1-1520-240-20-133), 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 Message Receipt (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 Mar 99 -

#### NOTE

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

- (1) DA Form 2408–5–1, Equipment Modification Record (FWD/AFT Rotor Head Assemblies).
- (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 1574/DD Form 1574-1, Serviceable Tag/Label Materiel (color yellow). Annotate remarks block with "CH-47-01-ASAM-04 (TB 1-1520-240-20-133 ) not complied with."
- (6) DD Form 1577/DD Form 1577-1, Unserviceable (condemned) Tag/Label Materiel (color red). Annotate remarks block with "Condemned in accordance with CH-47-01-ASAM-04, (TB 1-1520-240-20-133), and mutilated in accordance with TM 1-1500-328-23."

### 15. Weight and Balance. N/A.

#### 16. Points of Contact.

- a. Technical point of contact for this Technical Bulletin is Mr. Larry Wieschhaus, AMSAM-RD-AE-I-P-C, DSN 897-3341 or commercial (256) 313-3341, datafax is DSN 897-4348 or commercial (256) 313-4348. E-mail is "larry.wieschhaus@redstone.army.mil".
- b. Logistical point of contact for this Technical Bulletin is Mr. Bill Olson, SFAE-AV-CH-L, DSN 897-3379 or commercial (256) 313-3379, datafax is 897–4348. E-mail is "william.olson@peoavn.redstone.army.mil".
- c. Forms and Records point of contact for this Technical Bulletin 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".

#### TB 1-1520-240-20-133

- d. Safety Points of Contact are -
- (1) Primary Mr. Harry Trumbull (SAIC), AMSAM–SF–A, DSN 897–2095 or commercial (256) 313–2095, datafax is DSN 897–2111 or commercial (256) 313–2111. E-mail is "harry.trumbull@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 "russell.peusch@redstone.army.mil".
- e. 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 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".
- f. 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.

## By Order of the Secretary of the Army:

Official:

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

Joel B Hul JOEL B. HUDSON Administrative Assistant to the Secretary of the Army 0101105

## **DISTRIBUTION:**

To be distributed in accordance with Initial Distribution Number (IDN) 313960, requirements for TB 1-1520-240-20-133.

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

Address: 4300 Park
 City: Hometown

5. *St*: MO6. *Zip*: 77777

Date Sent: 19-OCT-93
 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:* 118. *Page:* 219. *Paragraph:* 3

20. Line: 4 21. NSN: 5 22. Reference: 6 23. Figure: 7 24. Table: 8

26. *Total:* 123

25. Item: 9

27. **Text:** 

This is the text for the problem below line 27.

## RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS

	SOMETHING WRONG WITH PUBLICATION  FROM: (PRINT YOUR UNIT'S COMPLETE ADDRESS)  THENJOT DOWN THE DOPE ABOUT IT ON THIS FORM. CAREFULLY TEAR IT OUT, FOLD IT AND DROP IT IN THE MAIL.  DATE SENT							
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PREVIOUS EDITIONS ARE OBSOLETE. P.S.--IF YOUR OUTFIT WANTS TO KNOW ABOUT YOUR RECOMMENDATION MAKE A CARBON COPY OF THIS AND GIVE IT TO YOUR HEADQUARTERS.

## 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

#### **YEIGHTS**

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**

 $5/9(^{\circ}F - 32) = ^{\circ}C$ 

212° Fahrenheit is evuivalent to 100° Celsius

90° Fahrenheit is equivalent to 32.2° Celsius

32° Fahrenheit is equivalent to 0° Celsius

 $9/5C^{\circ} + 32 = {\circ}F$ 

#### **APPROXIMATE CONVERSION FACTORS**

TO CHANGE	TO	MULTIPLY BY
Inches	Centimeters	2.540
Feet	Meters	0.305
Yards	Meters	
Miles	Kilometers	1.609
Square Inches	Square Centimeters	6.451
Square Feet	Square Meters	
Square Yards	Square Meters	0.836
Square Miles	Square Kilometers	2.590
Acres	Square Hectometers	
Cubic Feet	Cubic Meters	
Cubic Yards	Cubic Meters	
Fluid Ounces	Milliliters	
nts	Liters	
arts	Liters	0.946
allons	Liters	3.785
Ounces	Grams	28.349
Pounds	Kilograms	0.454
Short Tons	Metric Tons	
Pound-Feet	Newton-Meters	
Pounds per Square Inch	Kilopascals	
Miles per Gallon	Kilometers per Liter	
Miles per Hour	Kilometers per Hour	
•		

TO CHANGE	то	MULTIPLY BY
Centimeters	Inches	0.394
Meters	Feet	3.280
Meters	Yards	
Kilometers	Miles	
Square Centimeters	Square Inches	
Square Meters	Square Feet	
Square Meters	Square Yards	1 196
Square Kilometers	Square Miles	0.386
Square Hectometers	Acres	
Cubic Meters	Cubic Feet	
Cubic Meters	Cubic Yards	
Milliliters	Fluid Ounces	
Liters	Pints	
Liters	Quarts	
'ers	Gallons	
.ms	Ounces	
.ograms	Pounds	
Metric Tons.	Short Tons	
Newton-Meters	Pounds-Feet	
Kilopascals	Pounds per Square Inch .	
ometers per Liter	Miles per Square Inch .	9 254
meters per Hour	Miles per Gallon	
miecers per mour	Miles per Hour	U.OZI



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