

**ALERT SERVICE BULLETIN**

**Bell Helicopter** **TEXTRON**  
A Subsidiary of Textron Inc.

**NO.** 407-03-59

**DATE** October 15, 2003

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<b>DATE</b>
<b>REV</b>

**MODEL AFFECTED:** 407

**SUBJECT:** ALL FORWARD and AFT CROSSTUBE ASSEMBLIES, PART NUMBERS AS DESCRIBED BELOW, ASSIGNMENT OF RIN (RETIREMENT INDEX NUMBER) TO

**HELICOPTERS AFFECTED:** All Model 407 helicopters, S/N 53000 and subsequent.

**PARTS AFFECTED:**

The affected crosstube assemblies are as follows:

<u>Crosstube description</u>	<u>BHT Crosstube assy. P/N</u>	<u>Alternate AAI (Note 2) crosstube assy. P/N</u>
Fwd, standard gear	407-050-101-101 and -103	407-722-101
Aft, standard gear	407-050-102-101 and -103	407-723-104
Fwd, high and lightweight float gear	407-050-201-101 and -103	407-724-101
Aft, high and lightweight float gear	407-050-202-101 and -103	407-725-104
Aft, high and lightweight float gear	407-704-007-119 (Note 1)	N/A

**NOTES:**

- (1) The aft crosstube assembly P/N 407-050-202-101 on your helicopter may have been modified to a P/N 407-704-007-119 per ASB 407-02-50. This crosstube assembly may have an assigned life per Table 1 of ASB 407-02-50. In such case, crosstube P/N 407-704-007-119 shall be retired whenever one of the following life limits is reached : the limit of regular landings applicable per ASB 407-02-50 or the RIN limit determined in this present bulletin.
- (2) Aeronautical Accessories Incorporated (AAI) crosstube assemblies listed above are BHT-approved production and spare alternates.

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407-050-201-103 or alt. 407-724-101	Crosstube assy., fwd, high gear and lightweight float kit	1
407-050-202-103 or alt. 407-725-104	Crosstube assy., aft, high gear and lightweight float kit	1

**Consumable materials:**

Additional consumable materials will be required if time expired parts are replaced.  
Refer to applicable Illustrated Parts Breakdown and Maintenance Manual.

**SPECIAL TOOLS:**

None required

**WEIGHT AND BALANCE:**

Not affected

**ELECTRICAL LOAD DATA:**

Not affected

**REFERENCES:**

BHT-407-IPB Illustrated Parts Breakdown  
BHT-407-MM Maintenance Manual  
ASB 407-02-50, revision A

**PUBLICATIONS AFFECTED:**

BHT-407-MM Maintenance Manual, Chapter 4.

**ACCOMPLISHMENT INSTRUCTIONS:**

**-NOTE-**

A run-on landing is defined as one where there is forward ground travel of the helicopter greater than three (3) feet with weight on the skids.

1. For crosstube assemblies in service with an unknown number of run-on landings, assume parts have accumulated ten (10) RINs for each 100 hours of helicopter total A/F time. For example: 5,000 hrs of A/F time = 500 RIN.
2. For new crosstube assemblies, count one (1) RIN for every run-on landing.
3. Record run-on landings in the helicopter log book. It is recommended that the operator create a separate column in the helicopter flight log book to record the run-on landing events on a daily basis.
4. Create a historical service record for each crosstube assembly indicating the new airworthiness service life, i.e. 5,000 RIN.
  - a) The part number and serial number of the BHT crosstube detail may be found vibro-etched on the LH cuff just above the skid saddle. The part number of the crosstube detail will end with either -115 or -117. Refer to Table 1 for the applicable BHT crosstube assembly part number. Use the related crosstube assembly part number and serial number on the historical record.
  - b) The AAI crosstube assemblies are identified by part number and serial number on the adhesive-backed data plate located on the aft center of the crosstube. Additionally, the AAI crosstube assemblies have the serial number impression stamped on the inboard aft quadrant of the LH cuff, just above the skid saddle.
  - c) If crosstube assembly 407-050-202-101 has been modified to P/N 407-704-007-119 per Part II of ASB 407-02-50, a historical service record should already exist for crosstube assembly P/N 407-704-007-119. Use the existing record to log RINs for run-on landing events. P/N 407-704-007-119 should be found vibro-etched on the RH cuff of the crosstube, just above the skid saddle.
5. Remove from service and replace crosstube assemblies that have reached 5,000 RIN. Refer to BHT-407-MM-5, chapter 32 for replacement instructions.
6. Mark removed crosstube assemblies to preclude any further use on helicopter.
7. Make an entry in the helicopter records to indicate compliance with this Alert Service Bulletin.

TABLE 1: CROSSTUBE DETAILS VS ASSEMBLIES

Crosstube assembly part number	Crosstube detail dash number (1)	
	-115	-117 (7)
407-050-101-101 (2)	X	
407-050-101-103 (2)		X
407-050-201-101 (3)	X	
407-050-201-103 (3)		X
407-050-102-101 (4)	X	
407-050-102-103 (4)		X
407-050-202-101 (5)	X	
407-050-202-103 (5)		X
407-704-007-119 (5) (6)	X	

## NOTES:

- (1) This is the dash number of the crosstube detail part number that is vibro-etched on the left-hand cuff of the crosstube, just above the left saddle. The first nine digits of the detail part number are the same as the first nine digits of the related assembly part number.  
Examples:  
Crosstube P/N 407-050-201-117 is part of High skid gear forward crosstube assembly P/N 407-050-201-103.  
Crosstube P/N 407-050-102-115 is part of Standard gear aft crosstube assembly P/N 407-050-102-101.
- (2) Standard gear forward crosstube assembly  
(3) High gear and Lightweight Float gear forward crosstube assembly  
(4) Standard gear aft crosstube assembly  
(5) High gear and Lightweight Float gear aft crosstube assembly  
(6) This crosstube assembly is modified from crosstube assembly P/N 407-050-202-101 further to completion of Part II of ASB 407-02-50, rev. A.  
(7) All the –117 crosstubes incorporate improved corrosion resistance