

**ALERT SERVICE BULLETIN**

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

**NO. 427-01-04**

**DATE 10-12-01**

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

**MODEL AFFECTED: 427**

**SUBJECT: ENGINE-TO-TRANSMISSION DRIVESHAFT 206-340-300-105, INSPECTION OF**

**HELICOPTERS AFFECTED: Model 427 helicopters serial number 56001 and subsequent and 58001 and subsequent.**

**COMPLIANCE: Part I**

Within the next 100 hours or before November 12, 2001, whichever comes first, inspect the engine to transmission driveshaft P/N 206-340-300-105 Historical Service Record to determine if it was ever installed on a BHT model 407 helicopter. If the driveshaft was ever installed on a 407 helicopter perform Part II of this alert service bulletin.

**Part II**

If the P/N 206-340-300-105 driveshaft was operated on a model 407 helicopter, for any length of time, perform the following which applies:

Remove from service driveshaft P/N 206-340-300-105 that has more than 2500 flight-hours since new within 50 flight-hours or before November 12, 2001, whichever comes first.

Remove from service driveshaft P/N 206-340-300-105 that has accumulated between 1500 and 2500 flight-hours since new within 100 flight-hours or before December 12, 2001, whichever comes first.

Remove from service driveshaft P/N 206-340-300-105 that has accumulated between 1250 and 1500

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**AN APPROPRIATE ENTRY SHOULD BE MADE IN THE AIRCRAFT LOG BOOK UPON ACCOMPLISHMENT  
IF OWNERSHIP OF AIRCRAFT HAS CHANGED PLEASE FORWARD TO NEW OWNER**

flight-hours since new within 150 flight-hours or before January 15, 2002, whichever comes first.

Remove from service drive shaft P/N 206-340-300-105 that has accumulated less than 1250 flight hours since new before it accumulates 1250 flight hours.

**DESCRIPTION:**

Investigation by Bell Helicopter of the model 407 engine-to-transmission driveshaft assembly has revealed that wear at the flex frame bolted joint may result in loss of clamp-up and contribute to a crack initiation point.

This Alert Service Bulletin is issued to identify any drive shaft assembly P/N 206-340-300-105 that was ever operated on a Bell 407.

Any driveshaft assembly P/N 206-340-300-105 that has ever been operated on a model 407 must be removed from service in accordance with this bulletin, overhauled and reidentified as 206-340-300-107.

The P/N 206-340-300-107 driveshaft assembly can only be operated on the model 407.

Any P/N 206-340-300-105 driveshaft that has been operated exclusively on the Bell 206L-4 or Bell 427 is not affected by this bulletin.

**APPROVAL:**

The design engineering aspects of this bulletin are Transport Canada Approved.

**MANPOWER:**

Approximately 0.25 man-hours are required to complete Part I of this bulletin. Approximately 2 man-hours are required to complete of this bulletin. Man-hours are based on hands-on time, and may vary with personnel and facilities available.

**WARRANTY:**

Owners/operators of 427 helicopters who comply with the instructions outlined in this bulletin and discover an effected drive shaft should contact the BHTI Warranty Department at 817-280-3407 for warranty disposition instructions.

**MATERIAL:**

**Required Material:**

The following material is required for the accomplishment of this bulletin and may be obtained through your Bell Helicopter Textron Supply Center.

<u>Part Number</u>	<u>Nomenclature</u>	<u>Quantity</u>
206-340-300-105	Driveshaft	As required "Note 1"

**Note 1**

Quantity to be determined by completing accomplishment  
Instructions described in Part 1.

**SPECIAL TOOLS:**

407-240-009-101 Driveshaft tool set.

**WEIGHT AND BALANCE:**

Not affected.

**ELECTRICAL LOAD DATA:**

Not affected.

**REFERENCES:**

BHT-427 -IPB Illustrated Parts Breakdown.  
BHT-427 -MM Maintenance Manual.

**PUBLICATIONS AFFECTED:**

None affected.

**ACCOMPLISHMENT INSTRUCTIONS:**

**PART I**

1. Examine the engine – to – transmission driveshaft Historical Service Record to determine if the driveshaft was ever operated on the model 407.

2. If it is determined that the driveshaft was never operated on a 407 model no action is required by this ASB.
3. If it is determined that the driveshaft was operated on a 407 model, for any length of time, Part II of this ASB must be complied with.

**PART II**

1. Remove the engine-to-transmission driveshaft. Refer to BHT-427-mmm, Chapter 63.
2. When returning the driveshaft to Bell Helicopter for overhaul Include the following information:
  - a. Engine-to-transmission driveshaft Total Time Since New to include the history of installations/removals and installation on other helicopters, if applicable.
  - b. With a tag, identify the transmission end of drive shaft if possible.
3. Return the removed engine-to-transmission driveshaft to Bell Helicopter Textron at the following address:

**Customer Property Return (CPR)  
3000 South Norwood  
Hurst, Texas 76053**

4. Install 206-340-300-105 engine-to-transmission driveshaft. Refer to BHT-427MM Chapter 63, to install the engine-to-transmission driveshaft.
5. Make an entry in the aircraft permanent records to indicate compliance with the applicable parts of this bulletin.