

Bell Helicopter **TEXTRON**

A Subsidiary of Textron, Inc.

July 14, 2000

TO: All Owners/Operators of Bell 206A/B Helicopters

SUBJECT: REVISION "A" TO TECHNICAL BULLETIN 206-99-170,
SWASHPLATE DRIVE ASSEMBLY IMPROVED BUSHING 206-
010-810-101 AND SHIMMING PROCEDURE, INTRODUCTION
OF

Revision "A" to this bulletin is revised to provide the following changes:

- References BHT-ALL-SPM, reissued 11 October 1996 described on page 3 of 6. The reissued date has changed to 20 August 1999.
- Step 2 in PART II described on page 5 of 6 (adding the suffix FM) is deleted. The suffix FM is not required on this assembly. The new bushings are the direct replacement to the older style bushings.
- Figure 1 in the legend on page 6 of 6 is changed as follows:
 - Legend change to note references
 - Added the following note:
 - Idler lever 206-010-335-003 is part of idler lever assembly 206-010-335-001

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

NO 206-99-170

DATE 12-23-99

PAGE NO. 1 of 6

DATE: 07-14-00
REV. "A"

MODELS AFFECTED: 206 A/B Series

SUBJECT: **SWASHPLATE DRIVE ASSEMBLY
IMPROVED BUSHINGS 206-010-801-101 AND
SHIMMING PROCEDURE, INTRODUCTION
OF.**

HELICOPTERS AFFECTED: 206 A/B, S/N 4 through 4523, and 5101 through 5267.

[Model 206B S/N, 4524 and subsequent, and 5268 and subsequent will have the intent of this bulletin completed before delivery.]

COMPLIANCE: At the option of the customer.

DESCRIPTION:

This Technical Bulletin introduces a better bushing 206-010-801-101 to replace the bushings installed in the idler lever, 206-010-335-003/-105, of the swashplate drive assembly. The bushings are installed with peel shims to give a better fit and longer service life.

APPROVAL:

The engineering design aspects of this Technical Bulletin are Transport Canada approved.

MANPOWER:

Approximately 1.0 man-hour is necessary to accomplish this bulletin. Man-hours are based on hands-on time and can change because of the personnel and facilities that are available.

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MATERIAL:

Required Material:

The material that follows is necessary to do this bulletin and can be obtained through your Bell Helicopter Textron Supply Center.

<u>PART NUMBER</u>	<u>NOMENCLATURE</u>	<u>QUANTITY</u>
206-010-800-117	BUSHING, SPARE ASSY	1 (NOTE 1)
206-010-802-101	BUSHING	4

NOTE 1:

Bushing, Spare Assy. 206-010-800-117 consists of four (4) bushings 206-010-801-101, and two (2) shims 120-004C32E25.

Consumable Material:

The material that follows is necessary to do this bulletin; however, this material is considered consumable (bench stock) material and possibly does not require ordering, depending on the operators' consumable material stock levels. This material can be obtained through your Bell Helicopter Textron Supply Center.

<u>PART NUMBER</u>	<u>NOMENCLATURE</u>	<u>REF. NO.</u>
MIL-C-16173,GR1 2OZ	CORROSION PREVENTION COMPOUND	C-101
MIL-C-16173,GR2 6OZ	CORROSION PREVENTION COMPOUND	C-104
TT-N-95,TYII 1GAL	ALIPHATIC NAPHTHA	C-305
A. ■ 299-947-100TY2CL2G50	ADHESIVE	C-317
SCOTCHBRITE TY-A	ABRASIVE PAD	C-407

- NOTE -

The "C" REF. NO. above is a cross-reference to the consumable list found in the Standard Practices Manual.

SPECIAL TOOLS:

None required.

WEIGHT AND BALANCE:

Not affected.

ELECTRICAL LOAD DATA:

Not affected.

REFERENCES:

BHT-ALL-SPM, Reissue 20 August 1999.

Chapter 13, Consumable Materials.

BHT-206 A/B-MM-1, 07 January 1998.

Chapter 62, Rotating Controls.

PUBLICATIONS AFFECTED:

BHT-206 A/B/B3-Series-IPB, Rev. 1, 31 January 1998.

Chapter 62, Main Rotor.

BHT-206B3-CR&O-1, Rev. 1, 22 August 1994.

Chapter 62, Main Rotor.

BHT-206 A/B-M&O-1, Rev. 41, 21 November 1995.

Chapter 4, Flight Controls.

ACCOMPLISHMENT INSTRUCTIONS:

PART I:

1. Remove the bushings as follows:
 - a. Remove the swashplate drive assembly from the helicopter (refer to Maintenance Manual, Chapter 62).
 - b. Get access to the idler lever (6, Figure 1).

█ A.

- c. Use an adequate arbor press and pressing plugs to remove the bushing (3) from the idler lever (6).
- d. Use an abrasive pad (C-407) to remove the remaining adhesive.
- e. Use a clean cloth moistened with aliphatic naphtha (C-305) and fully clean the bushing bores of the idler lever (6).

PART II

1. Install the new bushings (3, Figure 1) as follows:
 - a. Install the two bushings (3) into one end of the idler lever (6) without adhesive.
 - b. Install the bushing (2) in each bushing (3).
 - c. Install the collar set (5) between the lugs of the idler lever (6) and install the bolt (1).
 - d. Push the idler lever (6) to one side of the collar set (5).
 - e. Use a feeler gauge to measure the gap between the flanged bushing (8), installed in the collar set (5), and the bushing (3) installed in the idler lever (6).
 - f. Remove layers from the peel shim (4) to a thickness of .004 inch (0.10mm) less than the gap measured in Step e.
 - g. Remove the idler lever (6) from the collar set (5).
 - h. Install the peel shim (4) as follows:
 1. Apply a layer of adhesive (C-317) on the two sides of the peel shim (4).
 2. Install the peel shim (4) on the bushing (3).
 3. Apply a layer of adhesive (C-317) on the outer diameter of the bushing (3).
 4. Install the bushing (3) with the shim in the idler lever (6) adjacent to the nut (9).
 5. Apply a layer of adhesive (C-317) to the outer diameter of the opposite bushing (3) and install into the idler lever (6).

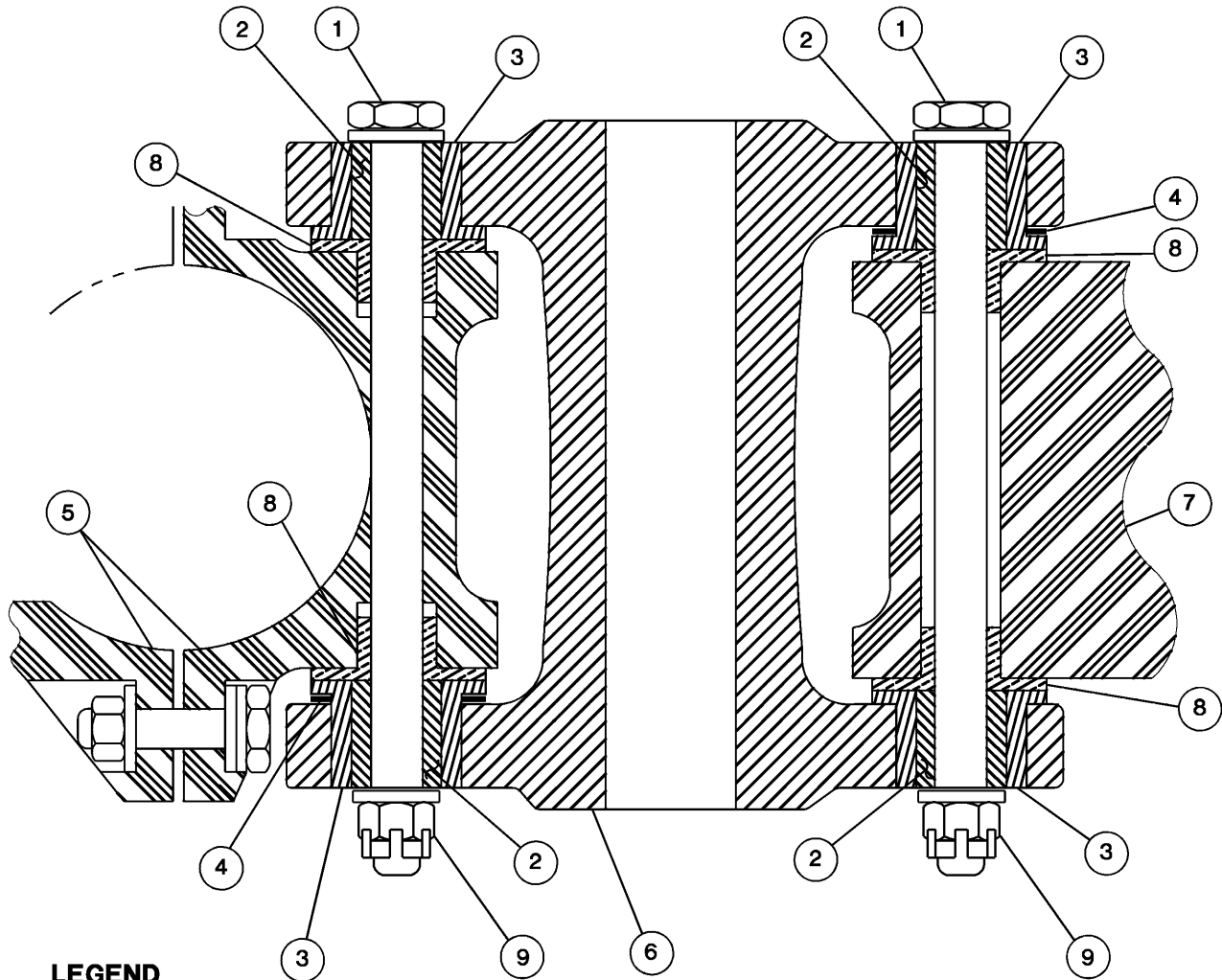
- i. Identify the collar set (5) end of the idler lever (6) with masking tape for identification during assembly.
- j. Do the Steps a. through g. on the opposite lugs of the idler lever (6). Use the link (7) as an alternative to the collar set (5).
- k. Install the peel shim (4) as follows:
 - 1. Apply a layer of adhesive (C-317) on the two sides of the peel shim (4).
 - 2. Install the peel shim (4) on the bushing (3).
 - 3. Apply adhesive on the outside diameter of bushing (3).
 - 4. Install the bushing (3) with the shim on the idler lever (6) adjacent to the bolt head (1).
 - 5. Apply a layer of adhesive (C-317) to the outer diameter of the opposite bushing (3) and install into the idler lever (6)
- l. Assemble the swashplate drive assembly before the adhesive cures.

- NOTE -

Make sure the collar set (5) is adjacent to the masking tape applied in Step i. Remove the masking tape after the assembly is completed.

- 2. Deleted.
- 3. Install the swashplate drive assembly on the helicopter (refer to Maintenance Manual, Chapter 62).
- 4. Make an entry in the helicopter Historical Records (HR) to show that you have completed this bulletin.
- 5. Make an entry in the Record of Technical Bulletins in the Maintenance Manual and the Illustrated Parts Breakdown to show that you have done this bulletin.

A.



LEGEND

A.

1. Bolt (REF).
2. Bushing (206-010-802-101). See Note 2.
3. Bushing (206-010-801-101). See Note 1.
4. Shim (120-004C32E25)
5. Collar set (REF).
6. Idler lever (206-010-335-003/105).
7. link assembly (REF).
8. Bushing (REF).
9. Nut (REF).

NOTES

1. As an alternative it is permissible to use bushing 206-010-337-001. Do not mix bushings of different part numbers.
2. As an alternative it is permissible to use bushing 206-010-338-001. Do not mix bushings of different part numbers.
- A.** 3. Idler lever 206-010-335-003 is part of idler lever assembly 206-010-335-001.

Figure 1. Swashplate Drive Assembly