

ALERT SERVICE BULLETIN

Bell Helicopter **TEXTRON**

A Subsidiary of Textron Inc.

NO. 206L-00-116

DATE 03-10-00

PAGE 1 of 8

DATE

REV

MODELS AFFECTED: 206L, L1 AND L3

SUBJECT: COLLECTIVE LEVER ASSEMBLY
206-010-467-001, MODIFICATION AND NEW
COLLECTIVE LEVER ASSEMBLY /-105,
INTRODUCTION OF.

HELICOPTERS AFFECTED: 206L, S/N 45004 through 45153, and 46601
through 46617;
206L1, S/N 45154 through 45790;
206L3, S/N 51001 through 51612.

COMPLIANCE: Part I :
Within the next 30 days after you get this bulletin.

Part II :
At the next removal of the collective lever assembly
206-010-467-001, no later than 31 January 2001, or
as directed by Part I.

DESCRIPTION:

Bell Helicopter has found that on the collective lever assembly 206-010-467-001, with a raised forging boss remaining (on the "TOP" side of the lever at the end that contains the spherical bearing), a low clearance or a fouling condition with the swashplate outer ring 206-010-453 can result.

The low clearance or fouling condition can be seen only when the collective stick is in the full down position and the cyclic stick is in full forward position.

PART I of this bulletin will have you examine the collective lever assembly 206-010-467-001 to determine if there is a raised forging boss, and verify that it has sufficient clearance with the swashplate outer ring.

PART II of this bulletin gives the instructions to modify the collective lever assembly by removing the raised forging boss.

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A new collective lever assembly 206-010-467-105, that has no raised forging boss, has been created. This lever is the direct spares replacement for the old lever assembly /-001.

APPROVAL:

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

MANPOWER:

Approximately 0.5 man-hour is necessary to complete Part I and approximately 2.0 man-hours are necessary to complete Part II of this bulletin. Man-hours are based on hands-on time and can change because of the personnel and facilities available.

MATERIAL:

Required Material:

None required.

Consumable Material:

The material that follows is necessary to complete this bulletin, but this material is consumable (bench stock) material and does not require ordering depending on the operator's consumable material stock levels. This material can be obtained through your Bell Helicopter Textron Supply Center.

<u>PART NUMBER</u>	<u>NOMENCLATURE</u>	<u>REFERENCE NO.</u>
MIL-C-81706 1 QT	Alodine 1200	C-100
MIL-C-85582, TYI, CL2	Epoxy Polyamide Primer	C-204 (NOTE 1)
P-C-451	Aluminium Oxide Cloth (220 grit) and (400 grit)	C-406 (NOTE 2)
TT-N-95, TYII, 1 GAL	Alphatic naphtha	C-305
MILC 85285, TYI, 36440	Paint, Light Gull Gray	C-245 (NOTE 3)

NOTES:

1. Epoxy Polyamide Primer MIL-P-23377 can be used as an alternative.
2. Aluminium Oxide abrasive paper can be used as an alternative.
3. Acrylic Lacquer MIL-L-81352 can be used as an alternative.

- NOTE -

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

SPECIAL TOOLS:

None required.

WEIGHT AND BALANCE:

Not affected.

ELECTRICAL LOAD DATA:

Not affected.

REFERENCES:

BHT-206L-MM, Maintenance Manual.

Chapter 62

BHT-206L1-MM, Maintenance Manual.

Chapter 62

BHT-206L3-MM, Maintenance Manual.

Chapter 62

BHT-ALL-SPM, Standard Practice Manual.

PUBLICATIONS AFFECTED:

BHT-206L-SERIES-IPB, Illustrated Parts Breakdown.

Chapter 62

ACCOMPLISHMENT INSTRUCTIONS:

PART I: INSPECTION OF COLLECTIVE LEVER ASSEMBLY 206-010-467-001 AND CLEARANCE VERIFICATION.

1. Examine if there is a raised forging boss on the collective lever assembly 206-010-467-001 installed on helicopters and in spares stock (Refer to Figure I).
 - a. If the collective lever assembly 206-010-467-001 installed on helicopters have a raised forging boss, do Step 2.
 - b. If the collective levers 206-010-467-001 in the spares stock have a raised forging boss, do PART II of this bulletin before you install it on a helicopter.
 - c. If the collective lever does not have a raised forging boss, the bulletin is complete. Make an entry in the Helicopter Historical Records (HR) to show that this Alert Service Bulletin is complete.
2. Do a check for fouling or low clearance condition as follows:
 - a. Disconnect the main rotor pitch links (1, Figure 2) from the swashplate outer ring (2) (Refer to Maintenance Manual, Chapter 62).
 - b. Disconnect the idler link (3) from the swashplate outer ring (2).
 - c. Remove the lower side of the boot (5) from swashplate outer ring (2).
 - d. Push the collective stick completely to the down position, cyclic stick completely forward, and hold them in this position.

CAUTION

WHEN ROTATING SWASHPLATE OUTER RING, MAKE SURE IT DOES NOT CONTACT THE COLLECTIVE LEVER ASSEMBLY. IF A CONTACT IS MADE, DAMAGE TO THE OUTER RING CAN OCCUR.

- e. Slowly rotate the swashplate outer ring (2) by hand to do a check of the clearance between the collective lever assembly (4) and both swashplate outer ring horns. Use a feeler gauge to verify that the clearance between the collective lever assembly raised forging boss and both outer ring horns is more than 0.060 inch (1.52 mm) (Refer to Figure 2).

- If there is no clearance or if the clearance is 0.060 inch (1.52 mm) or less at one of the outer ring horns, do PART II of this bulletin immediately.
 - If the clearance is more than 0.060 inch (1.52 mm), the aircraft is serviceable and can be returned to flight status. If you choose you can do PART II of this bulletin now or at the next removal of the collective lever assembly 206-010-467-001, but no later than 31 January 2001.
- f. Install main rotor pitch links (1), idler link (3), and boot (5) removed earlier (Refer to applicable 206L model Maintenance Manual).

**PART II: MODIFICATION OF THE COLLECTIVE LEVER ASSEMBLY
206-010-467-001.**

1. Remove collective lever assembly 206-010-467-001 from helicopter (Refer to applicable 206L model Maintenance Manual).

CAUTION

DO NOT USE A POWER TOOL TO REMOVE TOOL BOSS. USE OF POWER TOOL CAN DAMAGE 206-010-467-001 COLLECTIVE LEVER ASSEMBLY.

- NOTE -

Remove only the raised forging boss at the collective lever assembly end that contains the spherical bearing.

2. Use a double cut smooth file to remove the raised forging boss on the "TOP" side of the lever at the end that contains the spherical bearing. Remove only sufficient material to follow the lever contour (Refer to Figure 2, Detail A).
3. Finish the reworked area by hand-sanding lengthwise with 220 grit followed by 400 grit Aluminium Oxide Cloths.
4. Do a Fluorescent Penetrant Inspection in the area where the raised forging boss has been removed.

- NOTE -

Make sure that the Alodine, the primer, and the paint do not come in contact with the spherical bearing.

5. Apply Alodine 1200 (C-100) chemical film treatment to the bare metal surface.
6. Apply one mist coat of Epoxy Polyamide Primer (C-204).
7. Apply two coats of paint (C-245).

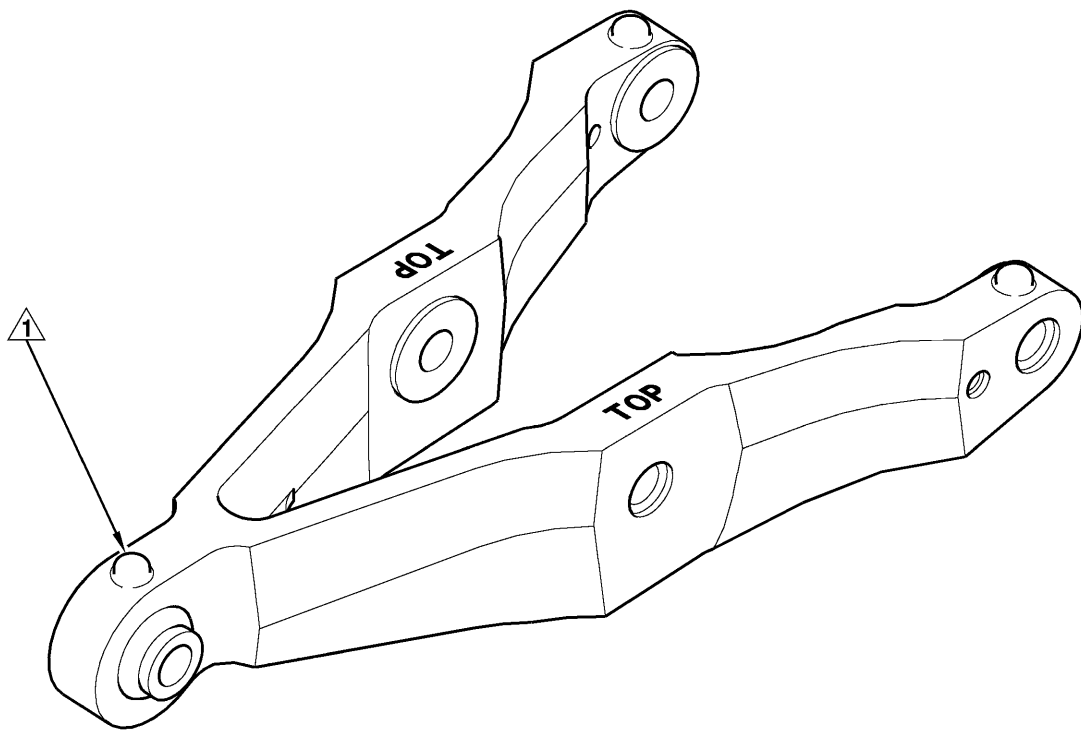
- NOTE -

The depth of the vibroetch must not to exceed 0.005 inch (0.13 mm).


8. Use a vibrating stylus to mark the collective lever as follows:

206-010-467-001 FM.

9. After you mark the collective lever assembly, apply chemical film treatment (C-100) to the bare metal surfaces.
10. Apply Epoxy Polyamide Primer (C-204) and paint (C-245) to the treated surfaces as necessary.
11. Make an entry in the Helicopter and the component Historical Records (HR) to show that this Alert Service Bulletin is completed.

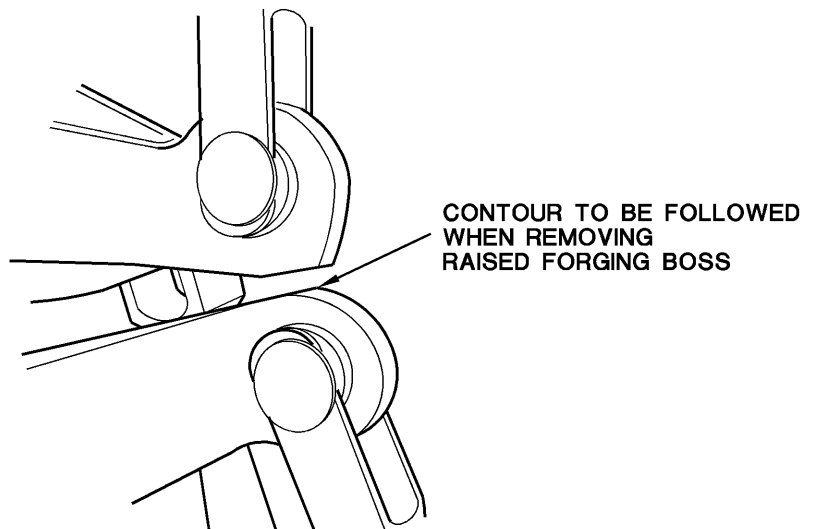
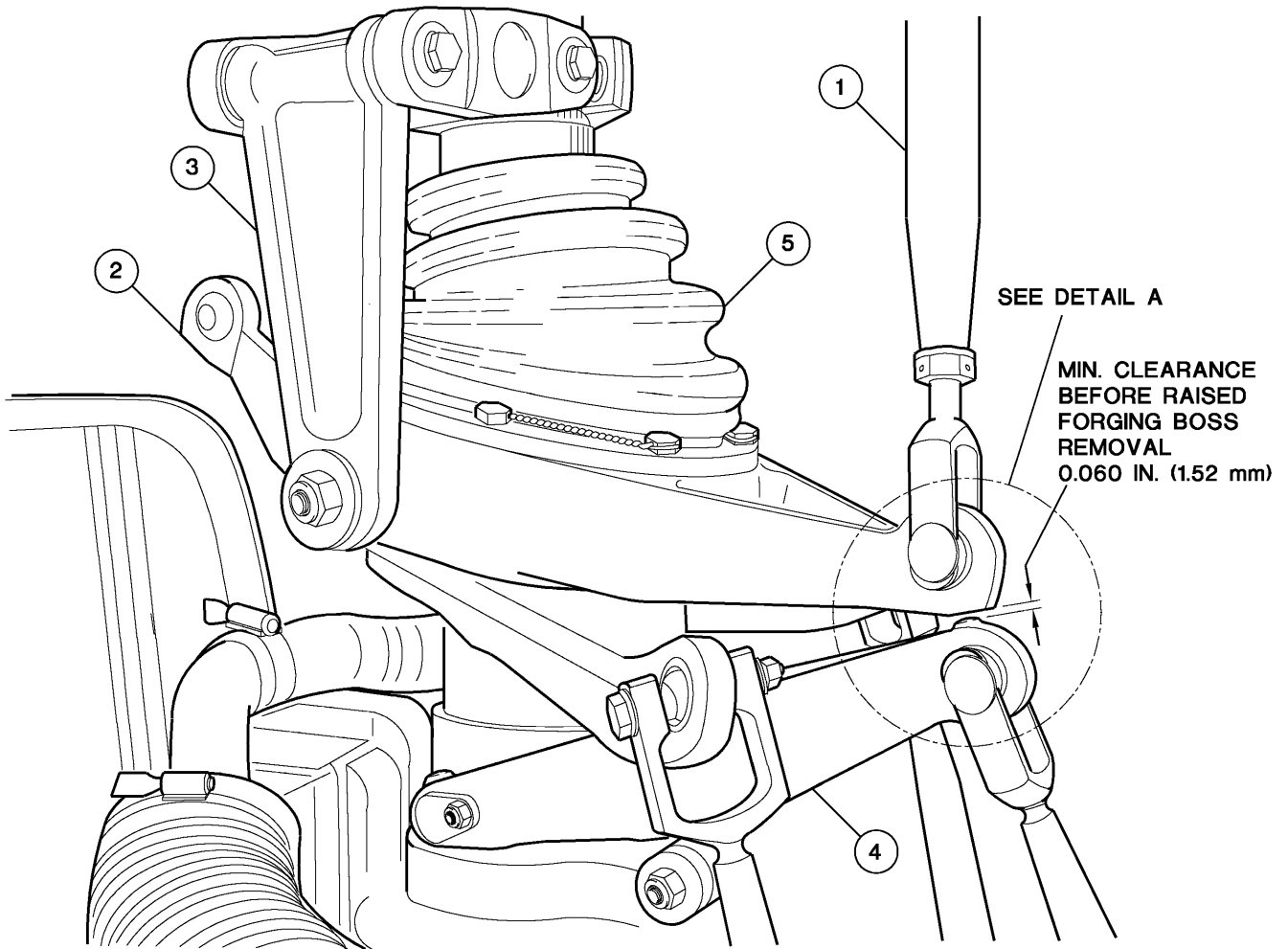


NOTE

 Raised forging boss to be removed.

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Figure 1. Collective Lever Assembly – Raised Forging Boss – Removal



LEGEND

- 1. Pitch link.
- 2. Swashplate outer ring.
- 3. Idler link.
- 4. Collective lever assembly.
- 5. Boot.

DETAIL A - BOSS REMOVED

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Figure 2. Collective Lever Assembly – Clearance Check/Contour with Boss Removed