

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

**NO** 407-01-29

**DATE** 01-30-01

**PAGE NO.** 1 of 4

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

**MODELS AFFECTED:** 407

**SUBJECT:** **GROOVED FREEWHEELING CONE SET 407-040-548-101, INTRODUCTION OF.**

**HELICOPTERS AFFECTED:** 407, Serial numbers 53000 through 53447.

[Helicopters Serial Number 53448 and subsequent will have the intent of this bulletin completed before delivery].

**COMPLIANCE:** At Customer's Option.

**DESCRIPTION:**

It has been reported to Bell Helicopter that cone set 406-040-548-101 can fall off the freewheel output shaft during installation. This bulletin introduces cone set P/N 406-040-548-101 to correct this problem. This new cone set is manufactured with a groove on the outer diameter of the cone that allows the installation of packing P/N M83248/1-018. Use of this new packing makes sure that the cone set remains in position during the installation of the spacer and the freewheel aft support assembly.

Cone set 407-040-548-101 and packing M83248/1-018 are the direct replacement for cone set 406-040-548-101.

**APPROVAL:**

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

**MANPOWER :**

No additional man-hours will be required when cone set replacement is accomplished at freewheel installation.

7851 60540

**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>
407-040-548-101	Split cone set	1
M83248/1-018	Packing	1

**Consumable Material:**

The following material is required to accomplish this bulletin, however this material is considered consumable (bench stock) material and may not require ordering depending on the operators consumable material stock levels. This material may be obtained through your Bell Helicopter Textron Supply Center.

<u>NOMENCLATURE</u>	<u>REFERENCE NO.</u>
ULTRACHEM ASSEMBLY FLUID NO. 1	C-024

- NOTE -

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

**SPECIAL TOOLS:**

No additional tools are required. Refer to the applicable Maintenance Manual and Component Repair and Overhaul Manual.

**WEIGHT AND BALANCE:**

Not affected.

**ELECTRICAL LOAD DATA:**

Not affected.

**REFERENCES:**

BHT-407-MM-6, 14 April 1998:

Chapter 63, Main Rotor Drive.

**PUBLICATIONS AFFECTED:**

BHT-407-MM-6, Rev. 6, 14 April 1998:

Chapter 63, Main Rotor Drive.

BHT-407-IPB, Rev. 3, 16 December 1996:

Chapter 63, Main Rotor Drive.

BHT-407-CR&O, Rev. 1, 15 December 1997

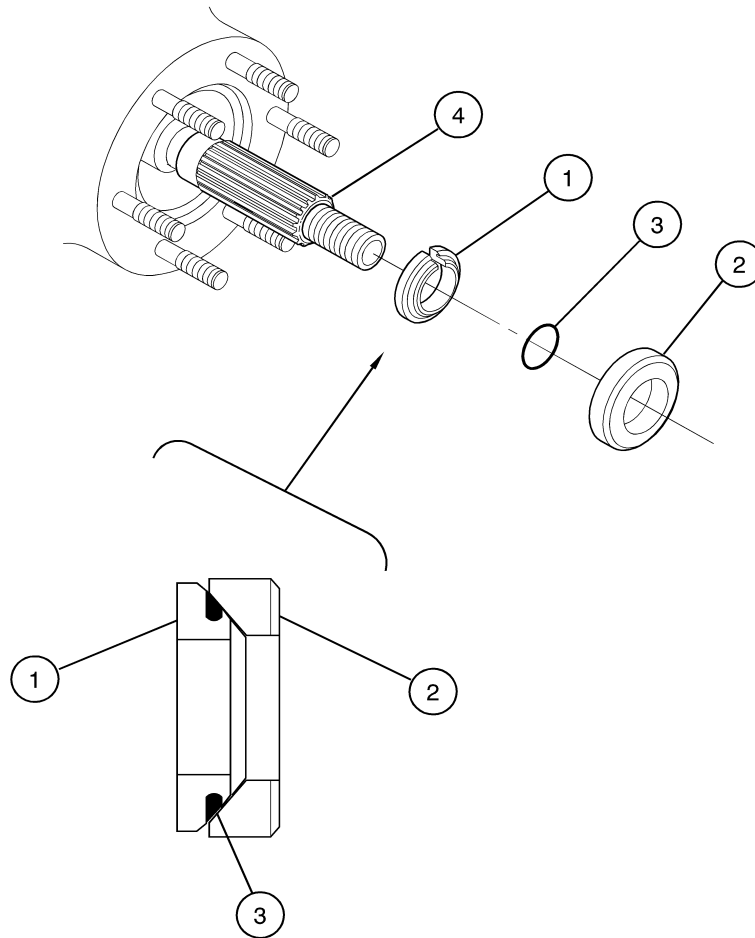
Chapter 63-30, Drive System Freewheel.

**ACCOMPLISHMENT INSTRUCTIONS:**

1. Install the cone set (1, figure 1) as follows:
  - a. Install cone set (1) in the groove of the aft end of the freewheeling shaft (4).
  - b. Lubricate the packing (3) with assembly fluid (C-024, BHT-ALL-SPM).
  - c. Install the packing (3) in the groove of the cone set (1).
  - d. Install the spacer (2).
2. Complete the installation of the freewheel assembly (BHT-407-MM, Chapter 63).
3. Re-identify the freewheel assembly as follows:
  - a. If the forward seal, 407-340-102-101, is not installed as per TB 407-00-27, re-identify the freewheel assembly as follows:

406-040-500-123FM
  - b. If the forward seal, 407-340-102-101, is installed as per TB 407-00-27, re-identify the freewheel assembly as follows:

406-040-500-~~127~~-131FM
4. Make an entry in the freewheeling installation Historical Record to show that this Technical Bulletin is completed.



**LEGEND**

- 1. Grooved cone set (407-040-548-101)
- 2. Spacer (406-040-549-101)
- 3. Packing (M83248/1-018)
- 4. Output shaft (406-040-517-101)

**Figure 1. Grooved Cone Set - Installation**