

TECHNICAL BULLETIN

NO. 407-98-10

Bell Helicopter **TEXTRON**

DATE 7-10-1998

A Division of Textron Canada Ltd.

DATE

REV.

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MODELS AFFECTED: 407

SUBJECT: **TAIL ROTOR DRIVE SPLINE LUBRICANT, INTRODUCTION OF.**

HELICOPTERS AFFECTED: 407, Serial Numbers 53000 through 53292.

[Helicopter Serial Numbers 53293 and subsequent will have the intent of this bulletin completed before delivery.]

COMPLIANCE: At the decision of the operator, but it is recommended at the next scheduled inspection and each 100 hours thereafter.

DESCRIPTION: Field operation has shown that the dry film lubricant (used on the splines of the oil cooler blower fan shaft P/N 406-040-320-101) does not let the flywheel adapter and the sliding adapter move freely on the fan shaft.

This technical bulletin gives the application of spline lubricant grease to the splines of the flywheel adapter, the sliding adapter and the oil cooler fan shaft. Also, this grease will increase the service life of the flywheel, the sliding adapter and the oil cooler blower fan shaft.

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

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MANPOWER:

Approximately 2.0 man-hours are necessary to complete this bulletin. Man-hours are based on hands-on time and can change because of the personnel and facilities available.

MATERIAL:

Required Material:

None.

Consumable Material:

The material that follows is necessary to complete the Bulletin, however this material is consumable (bench stock) material and 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>REFERENCE NO.</u>
Royco 22MS	SPLINE LUBRICANT (GREASE) MIL-G-81827	C-525
ALTERNATES:		
Mobil grease 29	SPLINE LUBRICANT (GREASE) MIL-G-81827	C-525
Aeroshell grease 23C	SPLINE LUBRICANT (GREASE) MIL-G-81827	C-525

- NOTE -

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

SPECIAL TOOLS:

None.

WEIGHT AND BALANCE:

Not affected.

ELECTRICAL LOAD DATA:

Not affected.

REFERENCES:

BHT-407-MM-7, rev.3-, 28 October 1996:

Chapter 65, Tail rotor drive.

PUBLICATIONS AFFECTED:

BHT-407-MM-2, rev.2-, 01 June 1996:

Chapter 12, Servicing.

BHT-407-MM-7, rev.3-, 28 October 1996:

Chapter 65, Tail rotor drive.

BHT-ALL-SPM, reissue 1, 11 October 1996:

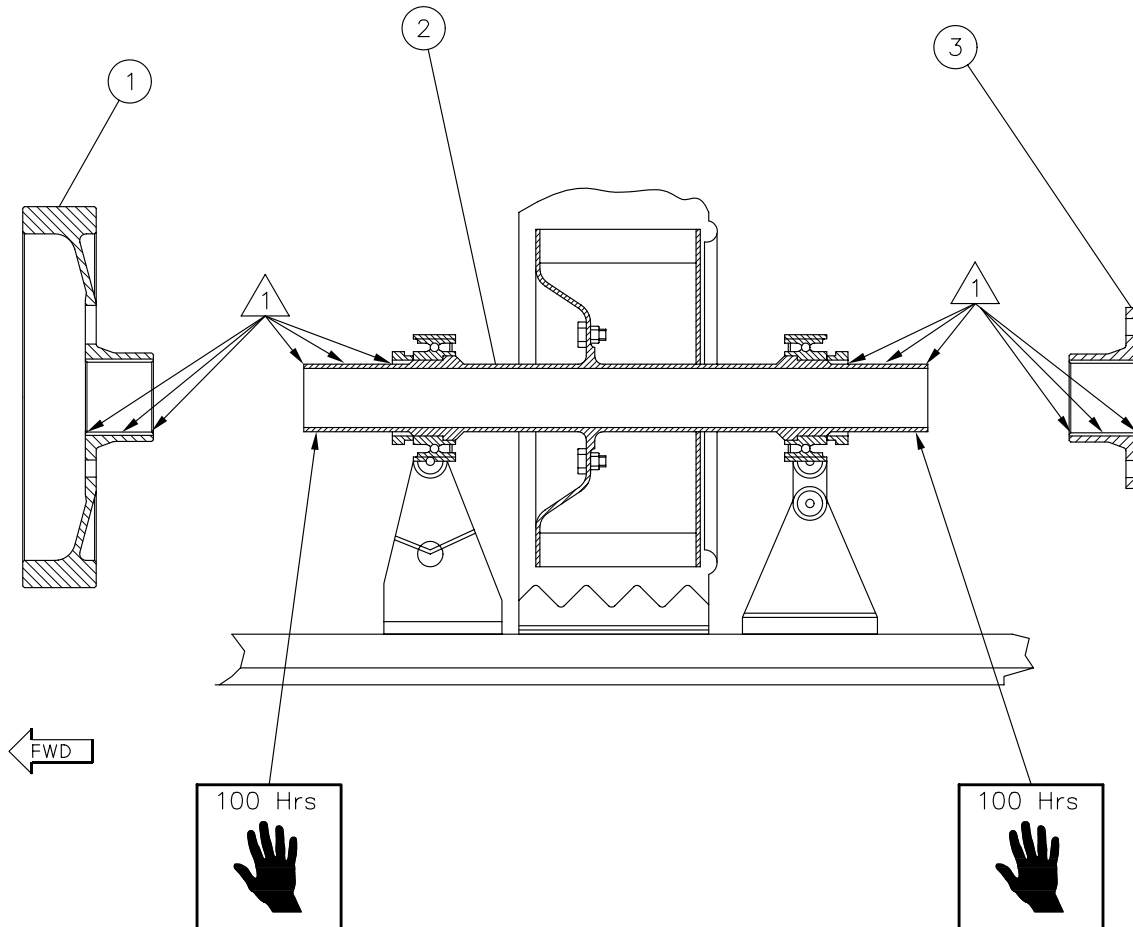
Chapter 13, Consumable.

ACCOMPLISHMENT INSTRUCTIONS:

1. Do the servicing that follows at the subsequent scheduled inspection.
2. Remove the forward short shaft P/N 406-040-315 (BHT-407-MM-7, Chapter 65).
3. Remove the aft short shaft P/N 407-040-325 (BHT-407-MM-7, Chapter 65).
4. Clean all of the parts (BHT-407-MM-7, Chapter 65).
5. Examine the splines of the oil cooler blower shaft (2, Figure 1), the flywheel adapter (1), and the sliding adapter (3) for condition.

6. Examine the dry film lubricant on the splines of the oil cooler blower shaft (2) for condition. If necessary, apply dry film lubricant (BHT-407-MM-7, Chapter 65, Figure 65-19).
7. Apply the grease lubricant (C-525) as follows:
 - a. Use an acid brush and apply a thick layer of grease (C-525) to the splines of the flywheel adapter (1), the sliding adapter (3), and the oil cooler blower shaft (2).
 - b. Install the flywheel adapter (1) and the sliding adapter (3).
 - c. Remove unwanted grease lubricant (C-525).
8. Install the forward short shaft P/N 406-040-315 (BHT-407-MM-7, Chapter 65).
9. Install the aft short shaft P/N 407-040-325 (BHT-407-MM-7, Chapter 65).
10. Do this servicing again after 100 hours of operation.
11. Make an entry in the helicopter historical records to show that you have completed this bulletin.
12. Make an entry in the Record of Technical Bulletins in the Maintenance Manual to show that you have completed this bulletin.

1. Flywheel adapter
2. Oil cooler blower shaft
3. Sliding adapter



NOTES:

- 1 Apply the grease lubricant (C-525) to the length of the splines of the flywheel adapter, the oil cooler blower shaft and the sliding adapter.
2. After the installation of the adapters on the oil cooler blower shaft, remove the unwanted grease (C-525).

Figure 1. Tail rotor drive splines - Grease lubrication