

DATE

REV

MODEL AFFECTED: 430**SUBJECT:** SWASHPLATE DUPLEX BEARING P/N 430-310-450-101, REMOVAL FROM SERVICE**HELICOPTERS AFFECTED:** Model 430 Helicopters serial number 49001 through 49074.

Model 430 helicopters serial numbers 49075 and subsequent will have the intent of this bulletin accomplished prior to delivery.

COMPLIANCE: As soon as practical but no later than next annual inspection.**DESCRIPTION:**

Alert Service Bulletin 430-99-9 dated 03-03-99 introduced a recurring 50 hour inspection and special lubrication procedure for existing swashplate duplex bearing P/N 430-310-450-101.

This bulletin introduces an improved swashplate duplex bearing P/N 430-310-461-101. The bearing has been redesigned to new specifications, which will greatly improve the service life.

Installation of the new bearing P/N 430-310-461-101 will **delete** the recurring 50 hour inspection required by Alert Service Bulletin 430-99-9. A revision to the maintenance manual will address the lubrication requirement of the new bearing.

APPROVAL:

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

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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

MANPOWER:

Approximately 12 man-hours are required to complete this bulletin. Man-hours are based on hands-on time, and may vary with personnel and facilities available.

WARRANTY:

Owners/Operators of 430 helicopters that have the 430-310-450-101 swashplate bearings installed are eligible for a special 100% credit toward the replacement 430-310-461-101 bearing contained in the "Required Material" section of this bulletin.

To receive this credit:

- Order the replacement parts through an approved BHTI supply source.
- Comply with the instructions outlined in this bulletin no later than 02-28-2002.
- Submit a claim to BHTI Warranty Department within 30 days of complying with this bulletin.

- NOTE -

Customers who fail to comply with the instructions outlined in this bulletin prior to 02-28-2002 will not be eligible for the special credit.

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>
430-310-461-101	Bearing	1

Consumable Material:

The following material is required to accomplish this bulletin, but may not require ordering, depending on the operator's consumable material stock levels. This material may be obtained through your Bell Helicopter Textron Supply Center.

<u>Part Number</u>	<u>Nomenclature</u>	<u>Quantity</u>	<u>Reference</u>
MIL-G-81322 8OZ	Grease	A/R	C-001
PD680	Solvent	A/R	C-304

SPECIAL TOOLS:

Refer to BHT-430-CR&O-2

WEIGHT AND BALANCE:

Not affected.

ELECTRICAL LOAD DATA:

Not affected.

REFERENCES:

BHT-430-MM-2, Chapter 12

BHT-430-MM-6, Chapter 62

BHT-430-CR&O-2, Chapter 62

Alert Service Bulletin 430-99-9, Swashplate duplex bearing inspection

Technical Bulletin 430-00-25, Swashplate and support assembly, configuration change and upgrade

PUBLICATIONS AFFECTED:

BHT-430-MM-2, Chapter 12

BHT-430-MM-6, Chapter 62

ACCOMPLISHMENT INSTRUCTIONS:

- NOTE -

It is not necessary to remove the 430-310-453-101 seal to remove the bearing. Replace the seal(s) only if damaged.

1. Remove existing bearing P/N 430-310-450-101 in accordance with Chapter 62 of BHT-430-MM-6 and BHT-430-CR&O-2.
2. Prior to installation of the new bearing P/N 430-310-461-101, clean grease passages and re-identify swashplate rotating ring assembly P/N 430-010-401-101 as follows:

- A) Remove bearing assembly P/N 430-010-449-101 from the rotating ring to prevent contamination of the bearing during the cleaning operation.
- B) Immerse and wash the rotating ring in clean solvent (C-304) to remove all external grease and to clean grease out of the three slots at the bottom of the liner in the rotating ring.

CAUTION

Cover rotating ring and protect eyes prior to blowing grease and/or debris out of passageways.

- NOTE -

Temporary blockage (using locally manufactured plugs) of two (2) of the three (3) slots at the bottom of the liner in the rotating ring may be required to obtain complete clean-up of passageways

- C) Using compressed filtered air (moisture free), blow air through each of the three slots one at a time.
- D) Repeat steps B and C above until all grease and/or debris are purged out/expelled from the rotating ring assembly.
- E) Purge clean grease (C-001) through the two grease fittings in the rotating ring to remove any contaminated material that may have been pushed into the grease fitting ports by the compressed air.
- F) Repeat steps B and C above one more time until all grease and/or debris are purged out/expelled from the rotating ring assembly. If used, remove the plugs from the grease passageways.
- G) Dry out rotating ring grease passageways using compressed filtered air.
- H) Reinstall bearing assembly P/N 430-010-449-101 previously removed from the rotating ring assembly.

- NOTE -

The part number of the rotating ring assembly is vibroetched on the top surface of one of the ears for the main rotor pitch links.

- l) Using a vibrating stylus, line through the last dash portion (-101) of the part number. Reidentify rotating ring assembly from 430-010-401-101 to 430-010-401-105FM.
3. Install new bearing P/N 430-310-461-101 in accordance with Chapter 62 of BHT-430-CR&O-2.
4. Install swashplate assembly in accordance with Chapter 62 of BHT-430-MM-6.
5. Lubricate swashplate assembly with clean grease. (C-001)
6. Annotate helicopter records to reflect compliance with this bulletin.