

ALERT SERVICE BULLETIN

214-13-74

PSL 7000000005

23 January 2013

Revision A, 25 March 2013

MODEL AFFECTED: 214B/B-1

SUBJECT: P/N 214-040-606-005/-101 TAIL ROTOR HANGER BEARING, INSPECTION AND REPLACEMENT OF

HELICOPTERS AFFECTED: Serial numbers 28001 through 28070.

COMPLIANCE:

PART 1 (Inspection):

Within 25 flight hours following receipt of this ASB and every 10 flight hours thereafter until defective bearings can be replaced.

PART 2 (Replacement):

Within the next 500 flight hours after receipt of this ASB, but no later than **31 December 2013**

DESCRIPTION:

Revision A changes the Part 2 compliance.

Bell Helicopter has been notified by its supplier that all P/N 214-040-606-005/-101 bearings delivered to Bell Helicopter between May 2011 and June 2012 were manufactured with the wrong seal material. This seal material does not meet the Bell operating/environmental temperature specifications and under extreme conditions could result in seal failure and grease loss. Defective bearings can be identified by a black colored seal. Bearings with the correct seal material will have a red/orange to brown colored seal.

Part 1 of this bulletin requires an inspection of all installed bearings within 25 flight hours and a recurring inspection of each defective bearing every 10 flight hours thereafter until the bearing can be replaced. Part 2 requires replacement of all defective bearings within 500 flight hours but not later than 31 December 2013.

Applicability of this bulletin to any spare part shall be determined prior to its installation on an affected aircraft.

APPROVAL:

The engineering design aspects of this bulletin are FAA/ODA approved.

CONTACT INFO:

For any questions regarding this bulletin, please contact:

Bell Helicopter Product Support Engineering - Medium Military Helicopters
Tel: 817-280-3548 / mts-medium@bh.com

MANPOWER:

Approximately 2.5 man-hours are required to complete Part 1 of this bulletin. Approximately 3.0 man-hours per bearing hanger assembly are required to complete Part 2 of this bulletin.

These estimates are based on hands-on time, and may vary with personnel and facilities available.

WARRANTY:

Owners / Operators of Bell Helicopters who comply with the instructions in this Bulletin and identify bearings either installed on aircraft or in stock will be eligible to receive a credit for a replacement bearing.

To receive this credit:

- Comply with the instructions contained in this Bulletin no later than the applicable hours or no later than date in the “compliance section” of this ASB.
- Purchase replacement parts as required in the materials section of this bulletin from a Bell approved source.
- Submit an MMIR to the Bell Warranty Department.

Customers who fail to comply with the instructions in this Bulletin before the compliance hours or date 31 December 2013 are not eligible for the special warranty credit listed above. There is no labor associated with this bulletin.

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>Qty</u> |
|--------------------|---------------------|------------|
| 214-040-606-101 | Bearing | AR |

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>Qty</u> | <u>Reference</u> * |
|--------------------|---------------------|------------|--------------------|
| AS3209-235 | Packing | AR | |
| AS3209-237 | Packing | AR | |
| Mobil 28 | Grease | AR | C-001 |
| 204-040-755-005 | Tube Pack | AR | C-015 |

* C-XXX numbers refer to the consumables list in BHT-ALL-SPM Standard Practices Manual

SPECIAL TOOLS:

None required.

WEIGHT AND BALANCE:

Not affected.

ELECTRICAL LOAD DATA:

Not affected.

REFERENCES:

BHT-214B-IPB Illustrated Parts Breakdown
BHT-214B-MM Maintenance Manual
BHT-214B-CR&O-1 Component Repair and Overhaul Manual

PUBLICATIONS AFFECTED:

None affected.

ACCOMPLISHMENT INSTRUCTIONS:

PART 1 - INSPECTION

1. Inspect all P/N 214-040-606-005/-101 Bearings, installed on the helicopter, in spare hanger bearing assemblies, or stocked as individual spares for defective seals as noted below and shown in Figure 1:
 - a. The correct seal material will have a red/orange to brown color. As necessary, gently wipe the face of the seal with a clean cloth to remove any dried grease or dirt. Inspect both sides of the bearing.
 - b. Incorrect seal material will have a black color.
2. Bearings with the correct seal material (red/orange to brown in color) are acceptable and may be continued in service without further action.
3. Bearings with the wrong seal material (black) are to be disposed of as follows:
 - a. Bearings installed on the helicopter:
 - (1) Inspect each bearing with black seals for leakage/slung grease and/or evidence of damage to the bearing.
 - (a) Grease leakage and/or evidence of bearing damage requires the bearing to be removed from service before further flight.
 - (b) If there is no evidence of grease leakage or bearing damage, the bearing may be continued in service subject to a visual inspection each 10 flight hours until replacement of the bearing is accomplished in accordance with Part 2. Inspect per paragraph 3.a.(1) above.
 - (2) Installed bearings with black colored seals which subsequently exhibit grease leakage, slung grease, or damaged bearings must be removed from service before further flight.
 - b. Bearings with black seals installed on spare hanger bearing assemblies must be replaced prior to installation of the hanger assembly on the helicopter.
 - c. Individual spare bearings with black colored seals may not be installed. Bearings in un-opened, original, Bell packaging should be returned to Bell for recycling. Contact Bell Helicopter Warranty Administration for return information.

PART 2 - REPLACEMENT

1. All installed bearings with defective seals must be replaced within 500 flight hours after receipt of this ASB or by 31 December 2013, whichever occurs first.
2. Refer to 214B Maintenance and Component Repair and Overhaul Manuals for replacement procedures.



BEARING SEALS MADE WITH THE CORRECT MATERIAL
WILL HAVE A RED/ORANGE TO BROWN COLOR



BEARING SEALS MADE WITH THE INCORRECT MATERIAL
WILL HAVE A BLACK COLOR

FIGURE 1