

TECHNICAL BULLETIN
Bell Helicopter **TEXTRON**

A Subsidiary of Textron Inc.

No. 206L-05-221

Date Oct 31, 2005

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| DATE |
| REV |

MODEL AFFECTED: 206L SERIES

SUBJECT: SLEEVE ASSEMBLY 206-010-454-113,
INTRODUCTION OF.

HELICOPTERS AFFECTED: Bell 206L helicopters serial number 45001 through 45153 and 46601 through 46617.

Bell 206L-1 helicopters serial number 45154 through 45790.

Bell 206L-3 helicopters serial number 51001 through 51612.

Bell 206L-4 helicopters serial number 52001 through 52295.

[Bell 206L-4 helicopters serial number 52296 and subsequent will have the intent of this bulletin accomplished prior to delivery]

COMPLIANCE: At Customer's Option

DESCRIPTION:

Sleeve bearing 206-010-459-001 may wear into the bearing bore of the sleeve assembly 206-010-454-001, /-005, /-107 or /-109 causing a loose fit between the two parts. Depending on the amount of wear on the bearing and sleeve assembly bore, this loose fit may contribute to M/R vibration or possible premature removal of the bearing and sleeve assembly.

This bulletin introduces an improved sleeve assembly 206-010-454-113 with bearing 206-010-459-001 bonded in place with sealant.

This bulletin also provides installation instructions for bonding the sleeve bearing 206-010-459-001 into the sleeve assembly 206-010-454-ALL with sealant.

APPROVAL:

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

MANPOWER:

No additional man-hours are required to accomplish this bulletin if performed during the next overhaul of the swashplate assembly.

MATERIALS:

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>Part Number</u> | <u>Nomenclature</u> | <u>Reference</u> |
|--------------------|----------------------|-------------------|
| AMS-S-8802 PT | Sealant | C-351 (Note 1) |
| ACETONE GALLON | ACETONE ASTM D329 | C-316 (Note 2) |
| PD680 TY2SOLVE | Solvent, Drycleaning | C-304 |
| TT-I735 ISOPROPYL | Isopropyl Alcohol | C-385 |
| MOBIL 28 | Grease | C-001 (Note 3) |

Notes:

1. As an alternative, AMS-S-8802 QT or AMS-S-8802 6OZ (C-351) may be ordered.
2. As an alternative, use Methyl Ethyl Ketone (C-309).
3. As an alternative, use AEROSHELL 22 (C-001) or NO.4 SILICONE (C-018).

SPECIAL TOOLS:

None required

WEIGHT AND BALANCE:

Not affected

ELECTRICAL LOAD DATA:

Not affected

REFERENCES:

BHT-206L-IPB Illustrated Parts Breakdown
BHT-206L-CR&O Component Repair and Overhaul

PUBLICATIONS AFFECTED:

BHT-206L-IPB Illustrated Parts Breakdown
BHT-206L-CR&O Component Repair and Overhaul

ACCOMPLISHMENT INSTRUCTIONS:

1. Remove and discard both sleeve bearings from sleeve assembly. Refer to BHT-206L-CR&O, Chapter 62, paragraph 62-53, step i.
2. Clean sleeve assembly with solvent (C-304).
3. Inspect sleeve assembly for condition. Refer to BHT-206L-CR&O, Chapter 62.
4. Manufacture a workaid to guide the sleeve assembly when positioning onto the swashplate support per step 10. Refer to Figure 2.
5. Apply grease (C-001) to the support section in contact with the sleeve bearings.
6. Clean sleeve bearing surfaces with a cloth dampened with acetone (C-316) or Isopropyl Alcohol (C-385).

-NOTE-

No adhesive squeeze out permitted on the bearing surface
or protruding above bearing surface.

7. Apply a bead of sealant (C-351) to the sleeve assembly upper bearing bore surface. Refer to Figure 1.
8. Insert a sleeve bearing in the sleeve assembly upper bearing bore. Allow end of sleeve bearing to overlap the 0.125 inch (3.175 mm) hole in sleeve assembly by approximately 0.250 inch (6.35 mm). Remove excess adhesive squeeze-out. Refer to Figure 1.

9. Repeat Step 7 and 8 for the installation of the lower sleeve bearing.

-NOTE-

To ensure a closer fit between the bearing and the swashplate support, it is recommended that the support used during this process be the same that will be used in the build-up of the swashplate.

10. Install workaid and position the sleeve assembly onto the swashplate support to maintain sleeve bearing inside diameter dimension while the sealant is curing. Allow sealant to cure for 24 hours. Refer to Figure 2.

11. Once adhesive is cured remove sleeve assembly from swashplate support. Remove the excess sealant squeeze out from bearing and support.

12. Clean all grease applied in step 5. above, from the support and the sleeve bearing surfaces.

13. Identify the sleeve assembly data plate with the use of a vibrating stylus. The depth of the vibroetch must not exceed 0.005 inch (0.127 mm). Change last digits of the part number adding the suffix "FM" as follows:

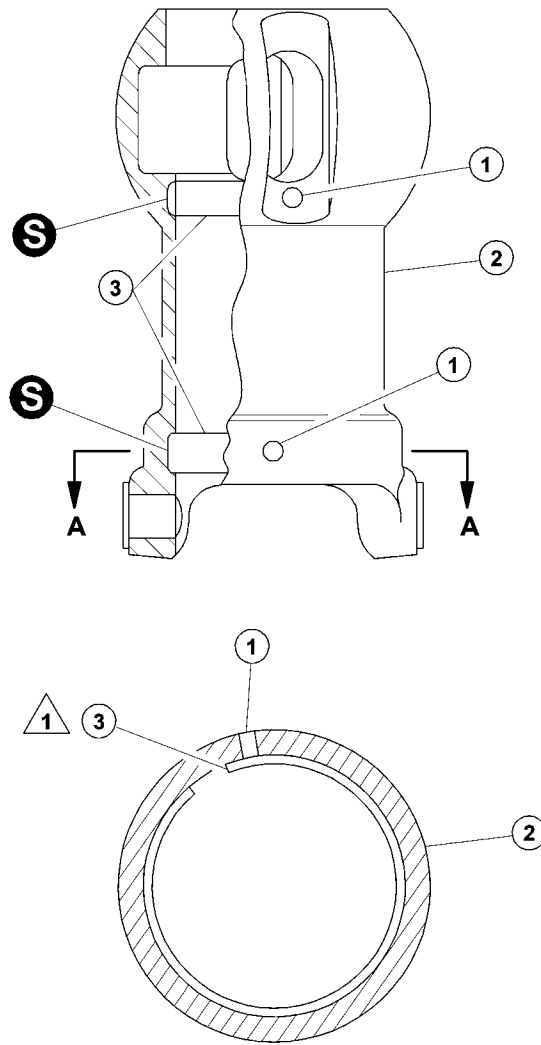
a) 206-010-454-001FM

b) 206-010-454-005FM

c) 206-010-454-107FM

d) 206-010-454-109FM

14. Make an entry in the Helicopter and the Component Historical Records to show that this technical bulletin has been accomplished.



SECTION A-A

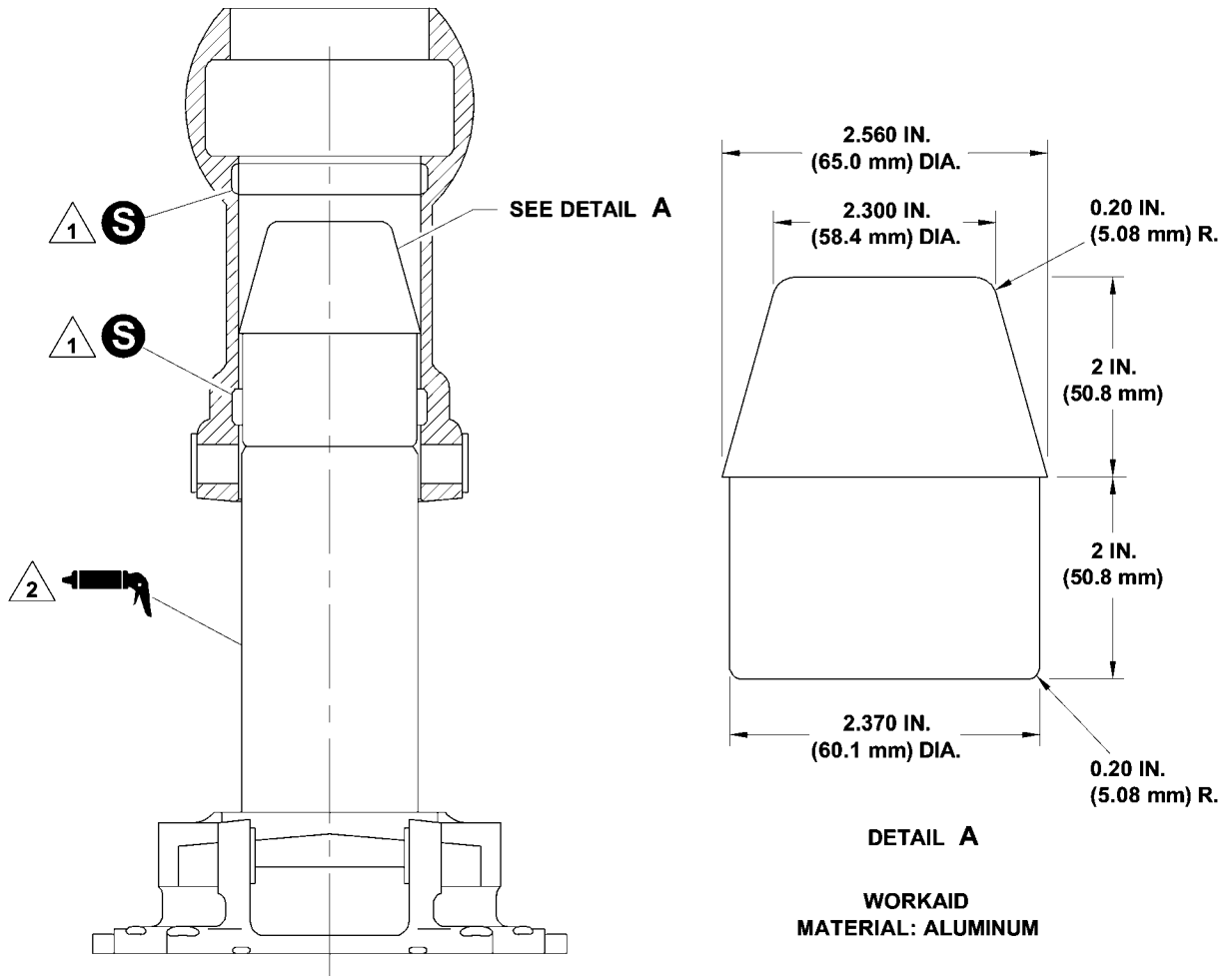
- 1. 0.125 IN. (3.175 mm) diameter hole
- 2. Sleeve assembly
- 3. Sleeve bearing

S AMS-S-8802 Sealant (C-351)

NOTES

- 1** Position the end of the sleeve bearing approximately 0.250 IN. (6.35 mm) from the hole in sleeve assembly.
- 2. Sleeve bearing bore wear limits inside diameter minimum 2.750 IN. (69.85 mm) maximum 2.753 IN. (69.92 mm)

Figure 1. Pivot sleeve bearing - replacement



NOTES

- 1 No sealant squeeze out permitted on the bearing surface or protruding above bearing surface.
- 2 Lubricate support with grease (C-001) to avoid the pivot bearing from bonding to the support.
- 3. When bonding the bearings to the pivot sleeve, it is recommended to use the same support that will be used to build-up the swashplate, to match the diameter.

 GREASE (C-001)

 SEALANT (C-351)

Figure 2. Pivot sleeve bearing - replacement