Bell Helicopter
A Textron Company

ALERT SERVICE BULLETIN 429-15-26

7000000141

7 December 2015

**MODEL AFFECTED:** **429**

**SUBJECT:** **TAIL ROTOR PITCH LINK CORROSION INSPECTION, INTRODUCTION OF**

**HELICOPTERS AFFECTED:** **PART I: Serial numbers 57001 through 57149, 57151 through 57169, 57171 through 57197, 57199 through 57214, 57216 through 57227, 57229 through 57234, 57236, 572338, 57239, 57242 through 57245, 57248, 57250, 57251, 57254, 57256 through 57259, 57266, 57268, 57269,**

**Part II: Serial numbers 57001 through 57309.**

[Serial number 57150, 57170, 57198, 57215, 57228, 57235, 57237, 57240, 57241, 57243, 57244, 57246, 57247, 57249, 57252, 57253, 57255, 57260 through 57265, 57267, 57270 and subsequent will have the intent of Part I of this bulletin accomplished prior to delivery.]

**COMPLIANCE:** **Part I**: Accomplish this bulletin within 10 flight hours or before March 7, 2016.

**Part II:** Accomplish every 50 hours after the accomplishment of **Part I** of this bulletin.

**DESCRIPTION:**

Bell Helicopter has received reports of corrosion on tail rotor pitch links present between the roll staked lip of the 429-312-107-103 bearing and the beveled edge of the 429-012-112-101/-103 tail rotor pitch link. **Part I** of this bulletin introduces an inspection for corrosion and the application of sealant. **Part II** of this bulletin introduces

a repetitive inspection. Applicability of this bulletin to any spare part shall be determined prior to its installation on an affected helicopter.

**APPROVAL:**

The engineering design aspects of this bulletin are Transport Canada Civil Aviation (TCCA) approved.

**CONTACT INFO:**

For any questions regarding this bulletin, please contact:

Bell Helicopter Product Support Engineering - Intermediate Helicopters
Tel: 450-437-2077 / 1-800-463-3036 / pseinter@bh.com

**MANPOWER:**

Approximately 4 man-hours are required to complete this bulletin. This estimate is 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 will be eligible to receive non prorated replacement pitch links when applicable. In order to receive special warranty consideration, file a warranty claim in VISTA and attach high resolution photographs of any corroded pitch links. Bell Helicopter has recently introduced enhancements to the VISTA Portal which allocates specific warranty entitlement for a helicopter by serial number. The Product Service Letter (PSL) number which will be listed below the bulletin number on the introduction page is going to be a required field when submitting a claim for replacement parts, labor, and/or freight. If you receive an ASB or TB that does not have a PSL number, then there is no warranty entitlement for that bulletin.

Labor entitlement:

**Part I** initial compliance only: $340.00 USD

To receive parts and labor under warranty:

- Comply with the instructions contained in this bulletin no later than the applicable date in the “Compliance Section”.
- If there is a PSL number identified in the bulletin, you will be required to enter this PSL number which will validate warranty entitlement for the selected helicopter. Please make sure that you use the Bulletin tab on the warranty section in VISTA to file your claim.

**Note**:
Customers who fail to comply with the instructions in this bulletin before March 7, 2016 will not be eligible for the special warranty listed above.

**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.

| Part Number | Nomenclature | Qty |
|---|---|---|
| 429-012-112-101 | Pitch Link | A/R |
| 429-012-112-103 | Pitch Link | A/R |
| MS24665-155 | Cotter Pin | A/R |

**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.

| Part Number | Nomenclature | Qty | Reference * |
|---|---|---|---|
| | | | |
| MIL-PRF-81733 | Sealant | A/R | C-251 |
| Commercial | Isopropyl Alcohol | A/R | C-285 |
| AS100028 | LockWire | A/R | C-405 |

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

**SPECIAL TOOLS:**

None required.

**WEIGHT AND BALANCE:**

Not affected.

**ELECTRICAL LOAD DATA:**

Not affected.

**REFERENCES:**

BHT-429-IPB, Illustrated Parts Breakdown
BHT-429-MM, Maintenance Manual

**PUBLICATIONS AFFECTED:**

BHT-429-MM, Maintenance Manual

**ACCOMPLISHMENT INSTRUCTIONS:**

**Part I. Initial inspection for tail rotor pitch link corrosion.**

1. Prepare the helicopter for maintenance.

**CAUTION**

Carefully remove and install the lockwire in the tail rotor pitch horns to prevent damage to the lockwire attachment hole.

2. Remove all tail rotor pitch link assemblies (BHT-429-MM-1, Chapter 67).

-NOTE-

Do not clean the affected area prior to the accomplishment of step 3. The aluminum oxide corrosion product will appear as a white crystalline material in contrast with the black finish and any accumulated soot.

3. Use 10X magnification to inspect all eight tail rotor pitch link bearing bores for corrosion evident by the presence of aluminum oxide extruding from between the roll staked lip of the bearing outer race and the pitch link bearing bore (Figure 1). If corrosion is found, replace the affected pitch link.

4. If no corrosion is found in the previous step, clean the area thoroughly with isopropyl alcohol (C-285) and inspect using 10X magnification. If corrosion is found, replace the affected pitch link.

5. If no corrosion is found in the previous step, remove any traces of torque stripe and clean the affected area with isopropyl alcohol (C-285). Apply corrosion preventative sealant (C-251) MIL-PRF-81733 to the bearing roll stake lip and the pitch link (Figure 2). Make sure that there are no pin holes or voids in the sealant. The thickness of the sealant should not exceed 0.025 inch (0.64 mm), should extend

over roll staked lip by 0.030 inch (0.76 mm) min and remain clear of the bearing ball.

6. With a white permanent fine point marker, re-identify the tail rotor pitch links as 429-012-112-101FM and 429-012-112-103FM.

7. Install all tail rotor pitch link assemblies (BHT-429-MM-1, Chapter 67).

8. Make an entry in the helicopter logbook indicating compliance with **Part I** of this Alert Service Bulletin.

**Part II**. **Repetitive inspection for sealant condition.**

-NOTE-

In order to align maintenance intervals, the requirements of **Part II** of this service bulletin may be accomplished in conjunction with ASB 429-15-16.

1. Inspect the tail rotor pitch links for condition of applied sealant. If sealant is damaged, reapply as per **Part I** of this bulletin.

2. Make an entry in the helicopter logbook indicating compliance with **Part II** of this Alert Service Bulletin.

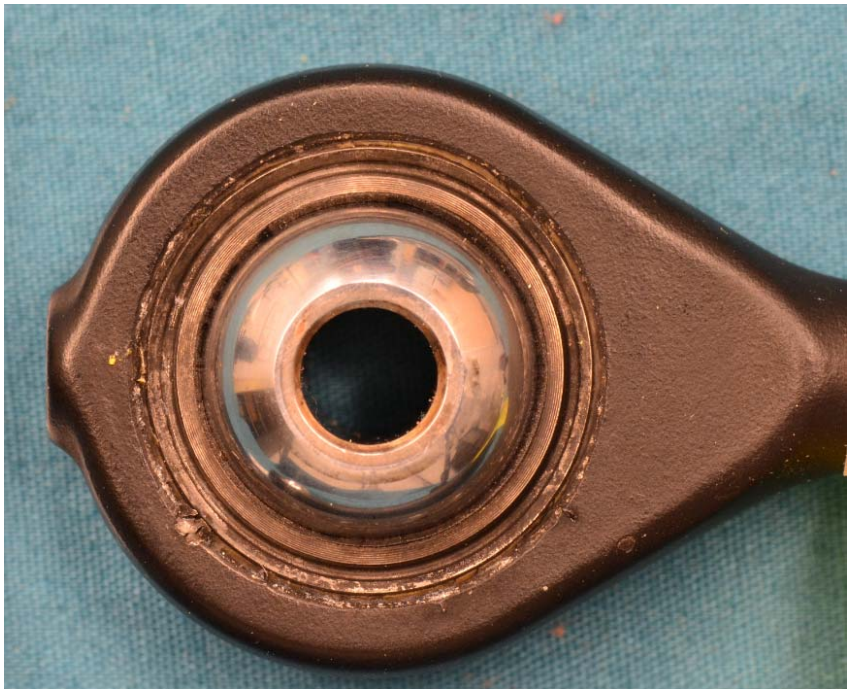

**Figure 1 - Pitch Link Corrosion**

**Figure 2 - Sealant Application**