

ALERT SERVICE BULLETIN

429-21-55

2 September 2021

MODEL AFFECTED: 429

SUBJECT: MAIN ROTOR PITCH CHANGE LINK UPPER

RETENTION BOLT 20-114C5P47AD, ONE-TIME

INSPECTION OF.

HELICOPTERS AFFECTED: Serial numbers 57001 through 57400, 57402

through 57406, 57409 through 57412.

[Serial numbers 57401, 57407, 57408, 57413 and subsequent will have the intent of this bulletin

accomplished prior to delivery.]

COMPLIANCE: Within 50 flight hours following the release date of this

bulletin.

DESCRIPTION:

Bell has implemented a change to introduce alternate bolts in the main rotor controls. As such the main rotor pitch change link upper retaining bolt part number can either be 50-047D5-44 or 20-114C5P47AD. Bell has received a field report of non-conforming 20-114C5P47AD bolts that have a greater grip length than the specification. There is a risk that the 90-099C5 nut can bottom out on the grip when it is torqued to the specified value, resulting in an improper clamp up of the assembly. A stock purge has been performed and all non-conforming bolts have been removed from the Bell spares inventory. Some discrepant bolts may have been distributed to the field before the issue was reported. Therefore, this bulletin mandates a one-time inspection of the 20-114C5P47AD bolts to identify the manufacturer and to replace any discrepant bolts that are found. 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 Product Support Engineering
Tel: 1-450-437-2862 / 1-800-363-8023 / productsupport@bellflight.com

MANPOWER:

Approximately 1.5 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 who find non- conforming bolts per the instructions in this ASB need to contact Warranty at 1.800.359.2355 extension option 3, or <u>warranty@bellflight.com</u>.

MATERIAL:

Required Material:

The following material is required for the accomplishment of this bulletin and may be obtained through your Bell Supply Center.

A/R (1, 2) A/R (1)

NOTES:

- 1. The quantity will depend on the number of discrepant bolts found during the inspection.
- 2. 50-047D5-44 bolts is an alternate part number and can be used instead of the 20-114C5P47AD bolt.

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 Supply Center.

Part Number	<u>Nomenclature</u>	Qty (Note)	Reference *
2100-00349-00	Corrosion Preventive Compound	2.5 (1)	C-101
2100-00350-00	Corrosion Preventive Compound	2.5 (1)	C-104

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

NOTE 1: Quantity indicated is the format that the product is delivered in. Actual quantity required to accomplish the instructions in this bulletin may be less than what has been delivered.

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 BHT-ALL-SPM Standard Practices Manual

PUBLICATIONS AFFECTED:

BHT-429-IPB Illustrated Parts Breakdown

ACCOMPLISHMENT INSTRUCTIONS:

- 1. Prepare the helicopter for maintenance.
- 2. Remove the corrosion preventative compound from the four (4) main rotor pitch change link upper retention bolt heads and inspect to identify the bolts:
 - a. If the bolt head has a " π " (pi) symbol (Figure 1), remove (DMC-429-A-62-30-00-00A-520A-A) and proceed to step 3.
 - b. If the bolt head does not have the " π " (pi) symbol, proceed to step 8.

- 3. Inspect the grip of the discrepant bolt for mechanical and wear damage.
 - a. If there are any signs of nicks, wear steps or deep scratches, proceed to the step 4.
 - b. If the bolt does not have any nicks, wear steps or deep scratches, proceed to step 6.
- 4. Inspect the main rotor grip horn bushings for signs of excessive wear or damage (DMC-429-A-62-20-00-00A-310A-A).
- 5. If the bushings do not meet the inspection criteria, send the grip to Bell Customer Property Return for repair (IL GEN-21-151).

-NOTE-

It is permissible to use bolt 50-047D5-44 as an alternate to 20-114C5P47AD.

-NOTE-

New bolts with the " π " (pi) symbol received from Bell after the release date of this bulletin are conforming and can be installed on the helicopter.

- 6. Discard the discrepant bolt(s) and replace with (a) serviceable 20-114C5P47AD bolt(s).
- 7. If you find a discrepant bolt, inform Bell Product Support Engineering by sending an e-mail at productsupport@bellflight.com. Make sure that the following information is included:
 - a. Helicopter serial number in the subject line.
 - b. ASB Number in the subject line: ASB 429-21-55
 - c. Photo of the discrepant bolt head.
- 8. Make an entry in the helicopter logbook and historical service records indicating compliance with this Alert Service Bulletin.



Figure 1 – Example of Main Rotor Pitch Link Upper Retention Bolt 20-114C5P47AD with the " π " (pi) symbol visible.