



A Textron Company

ALERT SERVICE BULLETIN

429-21-56

21 October 2021

MODEL AFFECTED: 429

SUBJECT: SWASHPLATE INPUT TUBES 429-001-020-101 AND -107, INSPECTION OF.

HELICOPTERS AFFECTED: Parts I and II – Serial numbers 57001 and subsequent

COMPLIANCE: **Part I** – For helicopters that have exceeded 12 months time in service or for helicopters that have exceeded 12 months since the last 2 year inspection, do the inspection within 50 hours or 3 months, whichever comes first following the release of this bulletin. Helicopters that have not yet reached 12 months time in service do not need to comply with **Part I** but must comply with **Part II** of this bulletin.

Part II – Every 12 months.

DESCRIPTION:

Bell has received a report of a swashplate cyclic input tube 429-001-020-101 exhibiting corrosion indications. Upon further investigation, it was discovered that stress corrosion cracking occurred in the swaged portion of the aluminum alloy tube near the rod end 407-001-404-105. This bulletin mandates an initial detailed inspection of the cyclic input tube assemblies and also requires a recurring 12 month inspection. Furthermore, Bell is adding a reporting requirement in this bulletin to gather data from the field. This data will be used to make an informed decision on an eventual terminating action for this bulletin. 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 0.5 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:

There is no warranty credit applicable for parts or 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 Supply Center.

<u>Part Number</u>	<u>Nomenclature</u>	<u>Qty (Note)</u>
429-001-020-101	Swashplate Tube Assy	1 (1)
429-001-020-107	Swashplate Tube Assy	1 (1)

NOTE 1: The swashplate tube assembly is only needed if the inspection reveals any defects that require the replacement of the tube assembly.

Consumable Material:

None required.

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

1. Prepare the helicopter for maintenance.
2. Remove the transmission cowl assemblies (600EL and 600ER) on both sides of the helicopter (DMC-429-A-53-00-00-46A-520A-A).
3. Do a detailed inspection of the swashplate input tube assemblies as follows:

-NOTE-

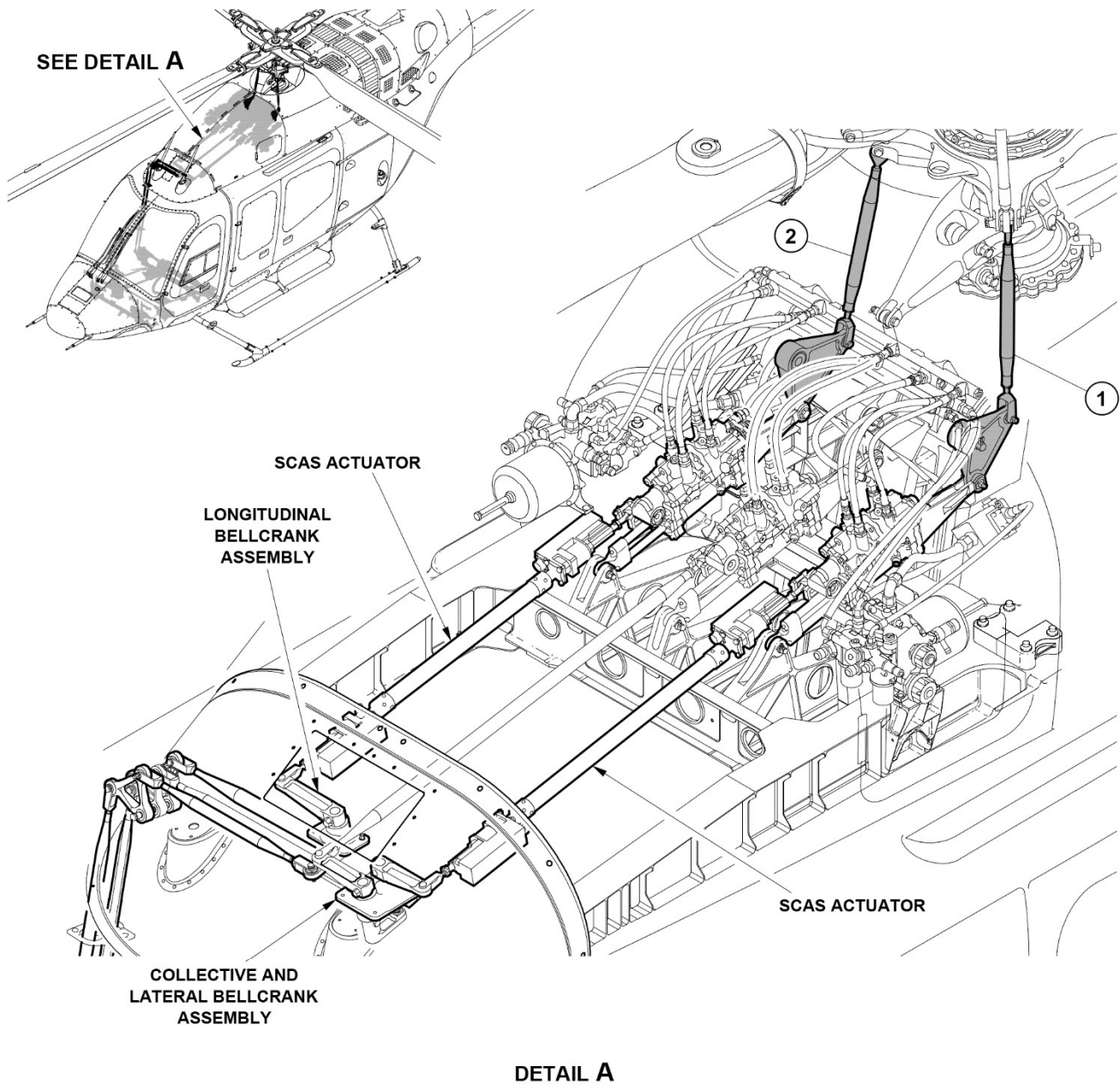
Refer to DMC-429-A-67-10-00-11A-310A-A for the damage limits applicable to the parts.

- a. Examine the swashplate input tube assemblies (1 and 2, Figure 1), paying particular attention to corrosion damage (as shown in Figure 2), cracks, wear, mechanical damage, and excessive axial/radial play of the rod end bearing. As required, replace or repair the part (DMC-429-A-67-10-00-11A-520A-A).
4. Complete Table 1 and submit the results by doing the following:
 - a. In the subject line of the e-mail, include the helicopter serial number, the helicopter total time since new and the ASB number (ASB 429-21-56).
 - b. If a defect is found during the inspection, provide the details such as the wear or damage measurements and high quality photos.
 - c. Send the e-mail to productsupport@bellflight.com.

5. Make an entry in the helicopter logbook and historical service records indicating compliance with **Part I** of this Alert Service Bulletin.

Part II – Recurring Inspection

1. Do steps 1 to 4 of **Part I** of this bulletin.
2. Make an entry in the helicopter logbook and historical service records indicating compliance with **Part II** of this Alert Service Bulletin.



1. Swashplate input tube 429-001-020-101
2. Swashplate input tube 429-001-020-107

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Figure 1 – Swashplate Cyclic Input Tubes



Figure 2 – Corrosion on Swashplate Cyclic Input Tube

Table 1 – Swashplate Input Tube Inspection Results

Date:	
Helicopter Serial Number:	
Helicopter Total Time Since New (TTSN):	
Country:	

Date When Swashplate Input Tubes Were Last Inspected:	
TTSN When Swashplate Input Tubes Were Last Inspected:	
Did You Find Any Defects? (Yes/No)	
If Applicable, Which Part Number Was the Defect Found On? (429-001-020-101, 429-001-020-107 or Both)	
*Type of Defect(s) Found (If Applicable)?	
Corrective Action Taken (If Applicable)?	

*** Defect types are: Cracks, Wear, Mechanical Damage, Corrosion Damage, and excessive axial/radial play of the rod end bearing.**