A Textron Company

ALERT SERVICE BULLETIN 429-21-54

16 March 2021

MODEL AFFECTED: **429**

SUBJECT: **MAIN ROTOR TRANSMISSION DEBRIS PAN ASSEMBLY 429-040-407-101, ONE TIME INSPECTION OF.**

HELICOPTERS AFFECTED: **Serial numbers 57001 through 57401, 57404 through 57406, 57409 through 57412, 57416, 57417 and 57420 through 57422.**

[Serial numbers 57402, 57403, 57405, 57407, 57408, 57413 through 57415, 57418, 57419, 57423 and subsequent will have the intent of this bulletin accomplished prior to delivery.]

COMPLIANCE: Within 25 flight hours following the release of this bulletin

DESCRIPTION:

Bell has been informed of the possibility of incorrectly installing the debris pan 429-040-407-101. The cause is due to a mistake in Figure 1 of DMC-429-A-63-10-00-00A-720A-A, which shows the debris pan as being installed 180˚ from its correct position. This can result in lubricating oil not being supplied to the mast chip detector and to the mast spline from the #13 oil jet. Bell is introducing this bulletin which requires a one time inspection of the debris pan to verify that it is installed in the correct position. A Maintenance Manual revision is in work to correct the mistake in Figure 1. 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 1.0 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.

Part Number	Nomenclature	Qty (Note)
429-040-407-101	Pan Assembly	1 (1)
AS3209-265	Packing, Preformed	2 (2)
AS3209-266	Packing, Preformed	1 (2)
AS3209-008	Packing, Preformed	2 (2)
AS3209-109	Packing, Preformed	1 (2)

NOTES:

1. A replacement pan assembly is required only if the existing one is damaged beyond allowable repair.
2. This part is only required if the mast must be removed and re-installed.

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	Nomenclature	Qty (Note)	Reference *
See note 1	Lubricating oil	1 Qt (2, 3)	C-030
Commercial	Stainless Steel Wool	A/R (4, 5)	C-171
2000-09430-00	Sealant	50 g (2, 3)	C-308
2010-00118-00	Sealant	3.5 Oz (2, 3)	C-328
2100-00371-00	Alcoholic Phosphoric Cleaner	1 Gal (5)	C-344
Commercial	Abrasive Pad, Nylon Web, Aluminum Oxide	A/R (4, 5)	C-407
Commercial	Steel Wool	A/R (4, 5)	C-411
Commercial	India Stone	A/R (4, 5)	C-464

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

NOTES:

1. Use any oil listed in BHT-429-MD-1, Table 2-5.
2. 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.
3. This consumable is only required if the mast must be removed and re-installed.
4. As required.
5. This consumable is only required if the transmission debris pan seat requires repair.

SPECIAL TOOLS:

Borescope.

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-MM Maintenance Manual.

ACCOMPLISHMENT INSTRUCTIONS:

1. Inspect the helicopter logbooks and historical service records to see if the mast assembly has been removed previously. If the mast assembly was never removed, proceed to step 16. If the mast assembly has been previously removed proceed to next step.

2. Prepare the helicopter for maintenance.

3. Remove left or right transmission cowl assembly (600EL or 600ER) (DMC-429-A-53-00-00-46A-520A-A).

-NOTE-

If the borescope is small enough, it is not necessary to remove the mast chip detector housing.

4. Remove mast chip detector (DMC-429-A-63-20-00-16A-520A-A).

5. Using a borescope, inspect the debris pan assembly (1, Figure 1) for the presence of the opening for the lubricating oil as shown in Figure 1.

   a. If the edge of the debris pan opening is visible proceed to step 14.

   b. If the edge of the debris pan opening is not visible, proceed to next step.

6. Remove the mast assembly (DMC-429-A-63-10-00-00A-520A-A).

7. Inspect the debris pan assembly for presence of metal contamination. If there is presence of metal contamination, the mast assembly must be inspected and repaired. Send the main rotor mast assembly to Bell Customer Property Return by referring to the instructions provided in the Returns Process User Guide in the MyBell.com Help section.

8. Remove the debris pan (DMC-429-A-63-10-00-00A-520A-A).

9. Inspect the mast lower splines for wear (DMC-429-A-63-10-00-00A-310A-A).

10. Inspect the debris pan for deformation damage. If the debris pan is damaged, submit a request with photographs to Product Support Engineering at productsupport@bellflight.com for evaluation and disposition.

11. Inspect the visible internal portions of the transmission assembly for the presence of metal contamination and mechanical damage to the debris pan seat (Figure 2).

a. Repair mechanical damage with stainless steel wool (C-171) abrasive pad (C-407) or India stone (C-464), as applicable, in accordance with the instructions in the BHT-ALL-SPM, Chapter 3. The surface finish after repair must be 32 Roughness Height Rating (RHR) with a minimum radius of 0.100 inch (2.54 mm), unless otherwise specified.

b. Remove corrosion with a stainless steel wool (C-171), cleaner (C-344), abrasive pad (C-407), steel wool (C-411), or aluminum wool (C-422), as applicable, in accordance with the instructions provided in the BHT-ALL-SPM, Chapter 3.

c. If there is presence of metal contamination, the mast assembly must be inspected and repaired. Send the main rotor mast assembly to Bell Customer Property Return by referring to the instructions provided in the Returns Process User Guide in the MyBell.com Help section.

12. Reinstall a serviceable debris pan (DMC-429-A-63-10-00-00A-720A-A). Refer to Figure 3 of this bulletin for the correct orientation of the debris pan until the figure in the Maintenance Manual is corrected.

13. Reinstall a serviceable mast assembly (DMC-429-A-63-10-00-00A-720A-A).

14. Reinstall the mast chip detector (DMC-429-A-63-20-00-16A-720A-A).

15. Reinstall the left or right transmission cowl assembly (600EL or 600ER) (DMC-429-A-53-00-00-44A-720A-A)

16. Make an entry in the helicopter logbook and historical service records indicating compliance with this Alert Service Bulletin.

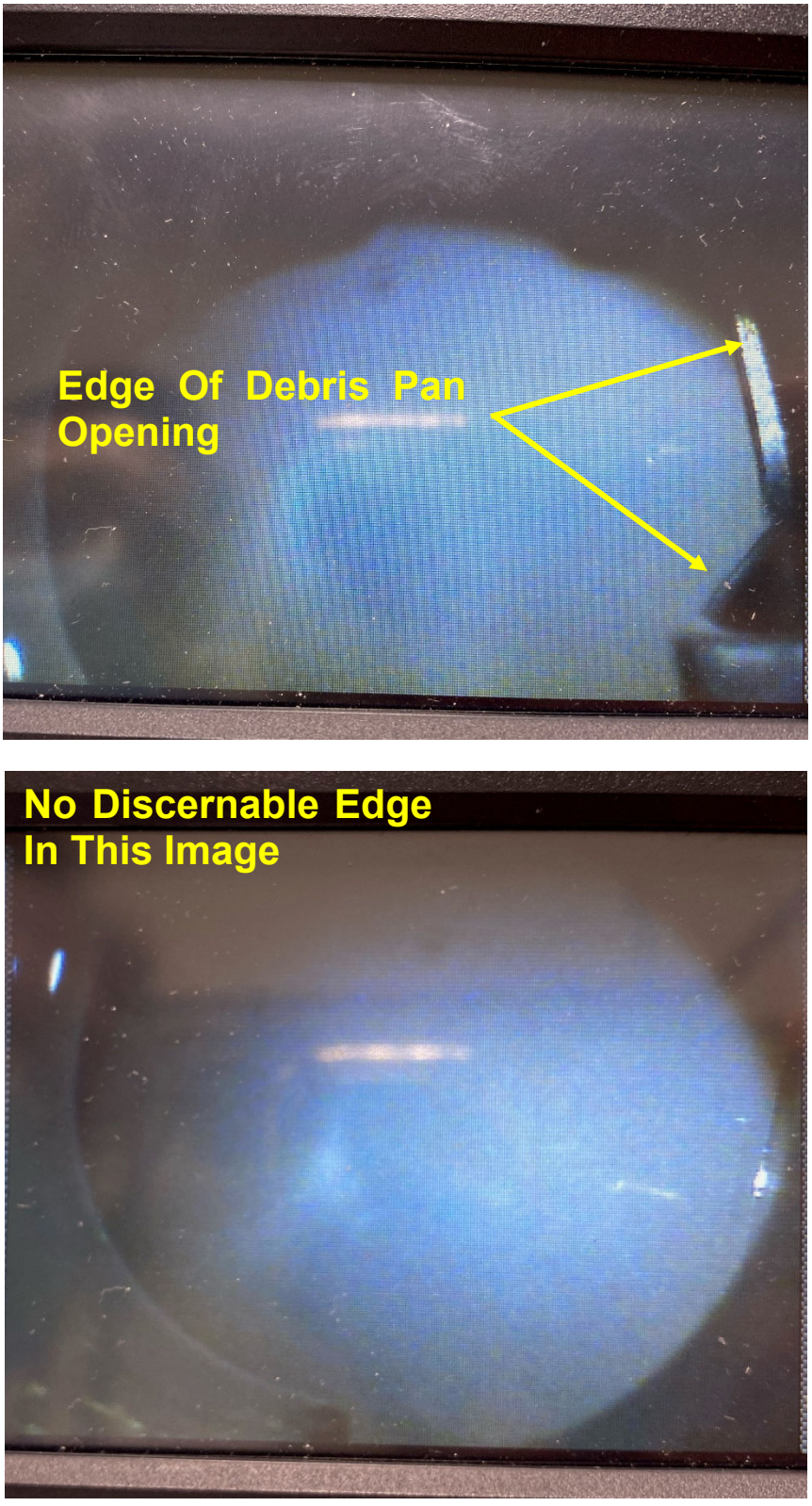
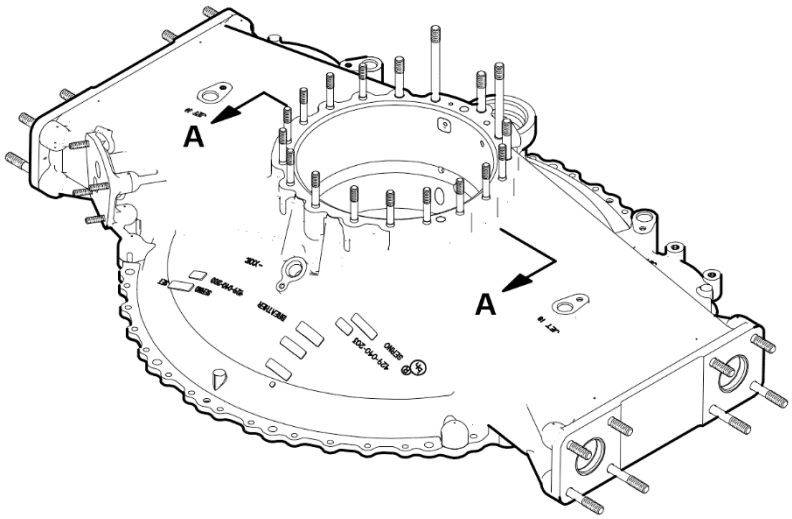
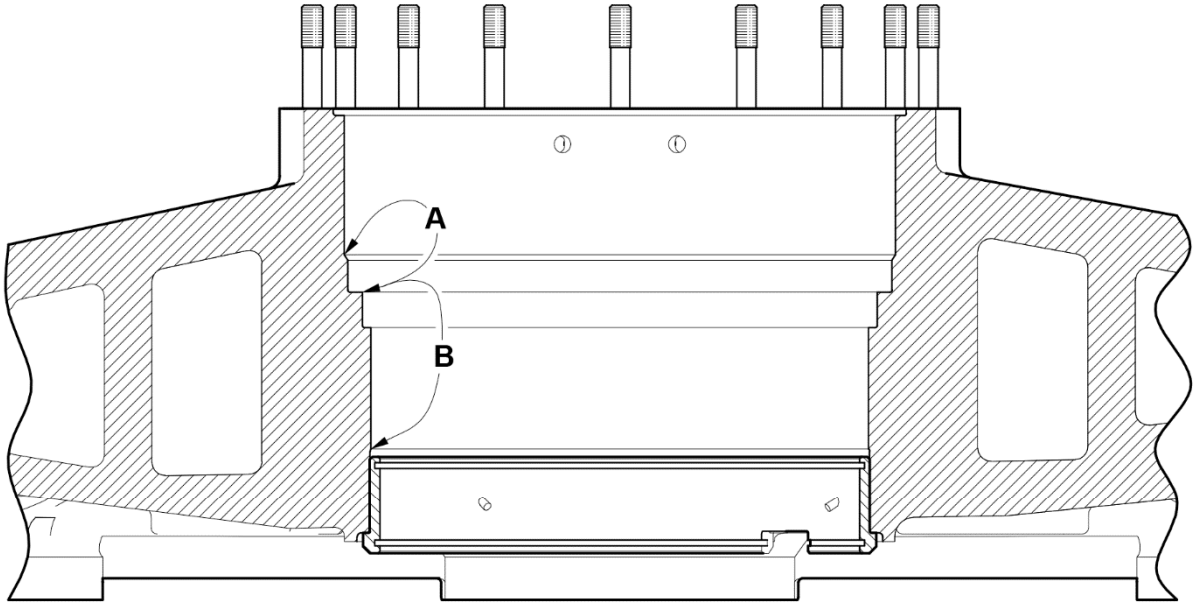


Figure 1 – Borescope Inspection Of The Debris Pan Assembly



TOP CASE ASSEMBLY (429-040-203)
MATERIAL: ALUMINUM



SECTION A-A

NO.	REF LTR	CHARACTERISTIC	INSPECTION METHOD	LIMIT
1.	A	Mechanical/corrosion damage	Visual	None permitted.
2.	B	Mechanical/corrosion damage	Visual/measure	0.010 inch (0.25 mm) maximum depth and no more than 10% of total area of surface or diameter.

22005_001

Figure 2 – Debris Pan Seat Damage Limits

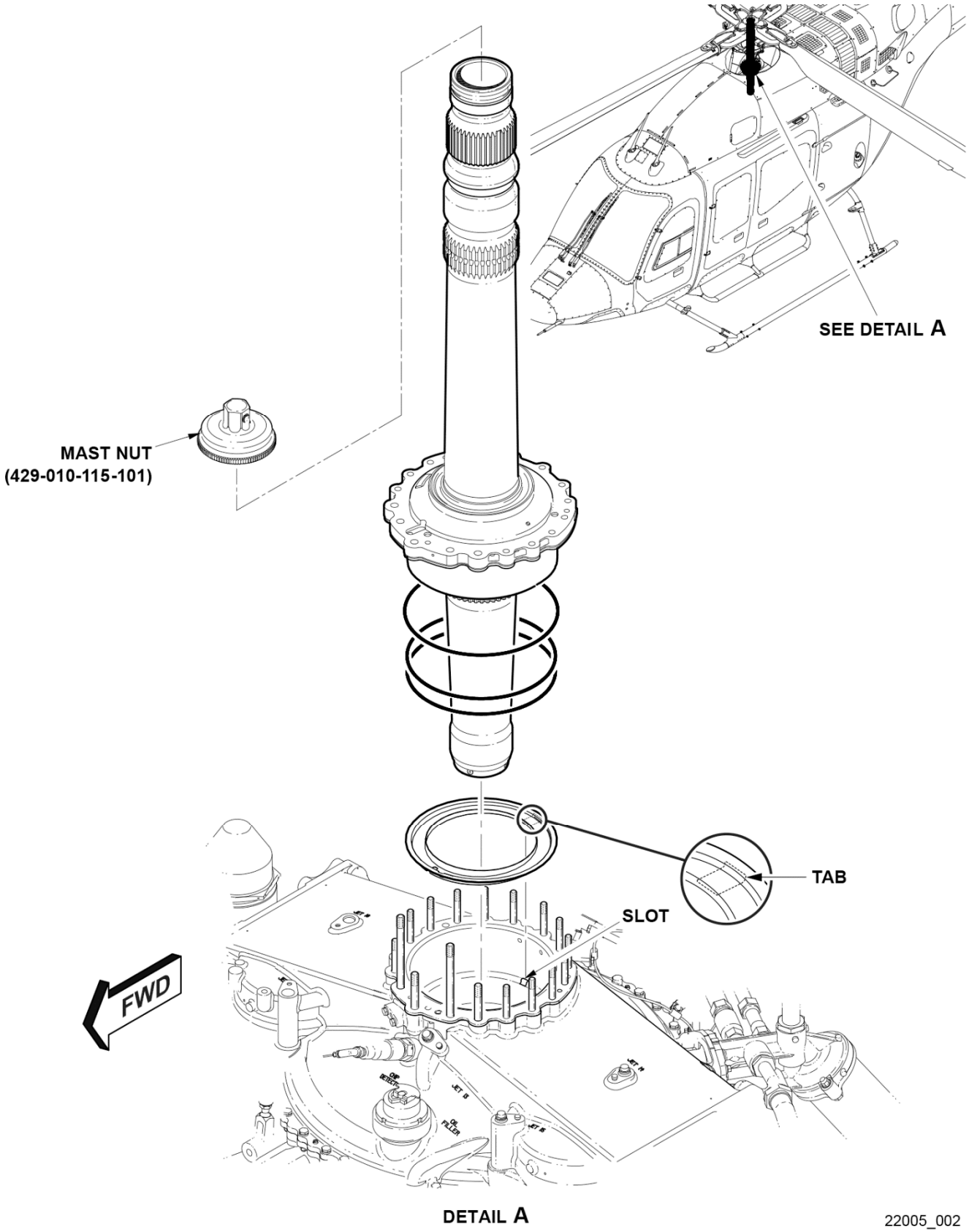


Figure 3 – Correct Installation of The Debris Pan