



A Textron Company

TECHNICAL BULLETIN

429-25-72

7 April 2025

MODEL AFFECTED: 429

SUBJECT: KEEL BEAM IMPROVED CORROSION
PREVENTION, INTRODUCTION OF

HELICOPTERS AFFECTED: Serial numbers 57001 through 57562.

[Serial number 57563 and subsequent will have the intent of this bulletin accomplished prior to delivery.]

COMPLIANCE: At customer's option.

DESCRIPTION:

Bell has implemented changes to the Model 429 Keel Beams and Sidebody assemblies to improve the corrosion resistance of the Keel Beams between fuselage stations 159.00 and 238.90. This bulletin provides instructions to add new drain holes and enlarge the existing ones. Additionally, it also provides instructions to apply a layer of polyurethane coating to the keel beams surfaces.

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 8 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:

None required

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.

<u>Part Number</u>	<u>Nomenclature</u>	<u>Qty (Note)</u>	<u>Reference *</u>
2230-00357-00	Coating, Polyurethane. color code 17925 (White) per AMS-STD-595.	2 GAL (1)	C-245
2010-00082-00	Sealant-654 SEMKIT PS870 A-2	6 OZ (1)	C-251
2100-00006-00	Cleaning Compound	5 GAL (1)	C-318
2230-00425-00	Primer, Epoxy Polyamide	1 PT (1)	C-204
2000-06383-00	Tape, Masking	1 ROLL (1)	C-426
5530-60870-00	Paper, Masking	1 ROLL (1)	C-420
2110-00010-00	Aliphatic Naphtha	1 GAL (1)	C-305

* 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.

SPECIAL TOOLS:

None required.

WEIGHT AND BALANCE:

Not affected.

ELECTRICAL LOAD DATA:

Not affected.

REFERENCES:

ALL-SPM, Standard Practices Manual, Chapter 4
ALL-SRM, Structural Repair Manual, Chapter 4
429-MM, Maintenance Manual, Chapter 53

PUBLICATIONS AFFECTED:

None affected.

ACCOMPLISHMENT INSTRUCTIONS:

1. Prepare the helicopter for maintenance.
2. Remove access covers 200BL and 200BR ([DMC-429-A-53-00-00-12A-520A-A](#)).
3. Remove access covers 300AL and 300AR ([DMC-429-A-53-00-00-14A-520A-A](#)).
4. Remove access covers 300BL and 300BR ([DMC-429-A-53-00-00-15A-520A-A](#)).

CAUTION

In order to avoid damaging the keel beam, ensure there is sufficient clearance prior to drilling the holes through the sidebody.

5. Add three new drain holes to the left sidebody as follows:
 - a. Mark the location of the three new drain holes as shown in Figure 1.
 - b. Drill three 0.375 inch (9.53 mm) holes through the sidebody. (ALL-SRM, Chapter 4).
6. Enlarge three existing drain holes on the left sidebody as follows:
 - a. At three locations shown in Figure 1, enlarge the existing 0.250 inch (6.35 mm) holes to a diameter of 0.375 inch (9.53 mm) (ALL-SRM, Chapter 4).
7. Add three new drain holes to the right sidebody as follows:
 - a. Mark the location of the new drain holes as shown in Figure 1.
 - b. Drill three 0.375 inch (9.53 mm) holes through the sidebody (ALL-SRM, Chapter 4).

8. Enlarge three existing drain holes on the right sidebody as follows:

- a. At three locations shown in Figure 1, enlarge the existing 0.250 inch (6.35 mm) holes to a diameter of 0.375 inch (9.53 mm) (ALL-SRM, Chapter 4).

-NOTE-

The following instructions are provided for the keel beam assembly on the left side. The instructions are the same for the keel beam assembly on the right side.

9. Prepare the surfaces of the keel beam for paint as follows:

- a. Remove sealant at the junction between the sidebody and keel beam (Figure 2, Section A-A).
- b. Thoroughly clean the areas to be painted (Figure 2) using cleaning compound (C-318). Make sure that no contaminants or Corrosion Preventive Compound (CPC) remains.
- c. Inspect the keel beam and ensure there is no mechanical damage or corrosion.
- d. Very lightly abrade the primed surfaces using 400 grit sandpaper.
- e. Remove any sanding residue and degrease surfaces using aliphatic naphtha (C-305).

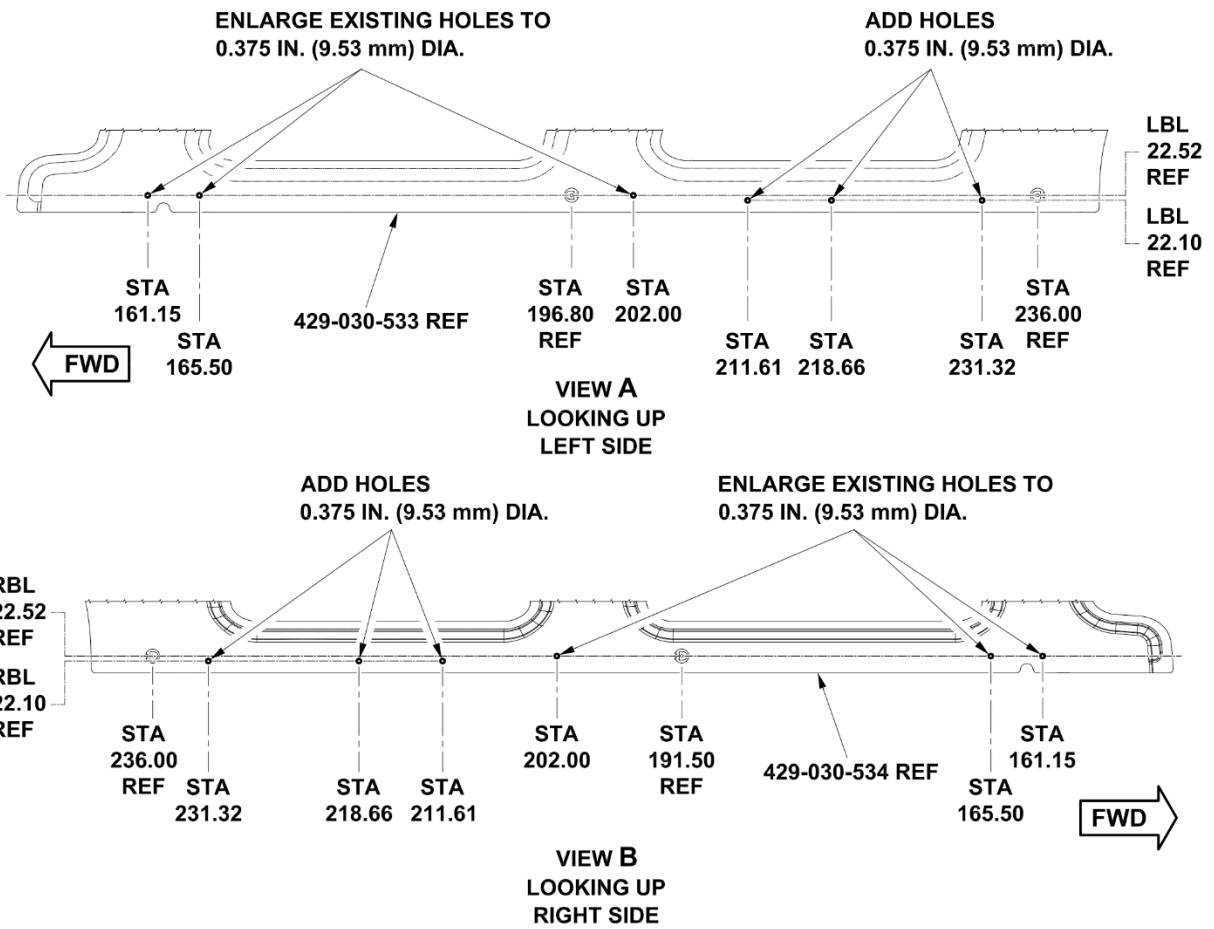
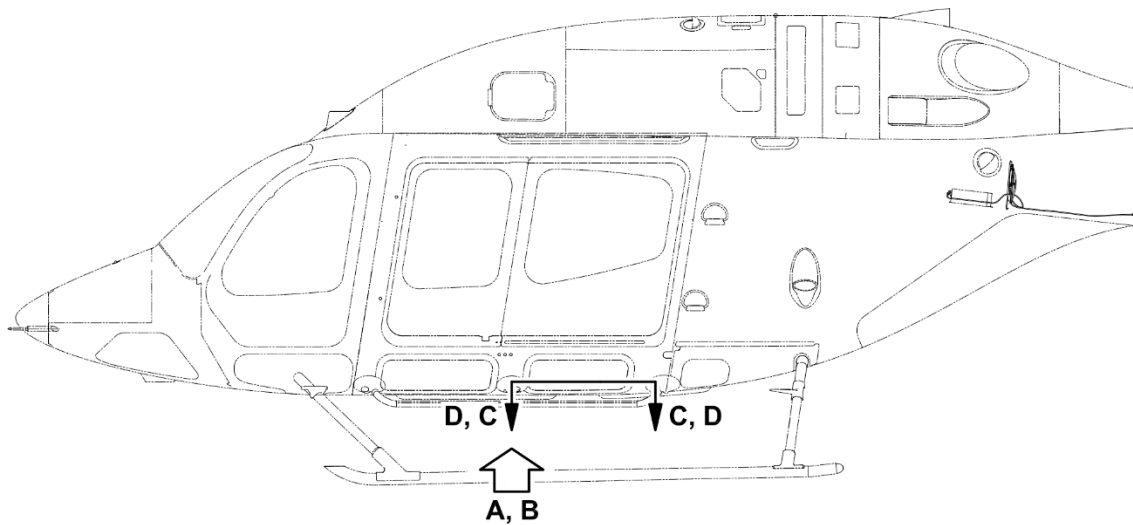
-NOTE-

If polyurethane coating (C-245) is to be applied to the primer touch-ups 8 hours or more after its application, prepare the areas in accordance with steps 9.c and 9.d.

-NOTE-

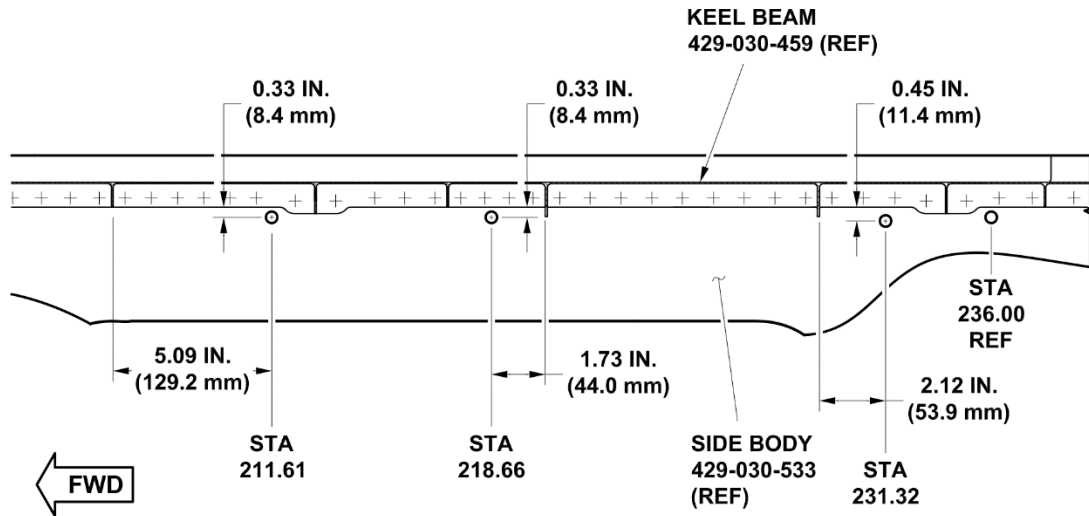
The polyurethane coating (C-245) layer on the surfaces of the keel beam shall be uniform and no primer must be apparent through the coating.

10. Apply polyurethane coating (C-245) to the keel beam as follows:
 - a. Using tape (C-426) and paper (C-420) as required, mask around areas to be painted (Figure 2).
 - b. Touch-up any missing primer (C-204) on the surfaces of the keel beam. Allow primer (C-204) to dry for a minimum of 1 hour.
 - c. Apply polyurethane coating (C-245) on the surfaces of the keel beam. Dry film thickness to be 0.0016 to 0.0024 inch (0.041 to 0.061 mm).
11. Once polyurethane coating (C-245) is fully cured, fillet seal the junction between the sidebody and keel beam using sealant (C-251) (Figure 2, Section A-A).
12. Install access covers 300BL and 300BR ([DMC-429-A-53-00-00-15A-720A-A](#)).
13. Install access covers 300AL and 300AR ([DMC-429-A-53-00-00-14A-720A-A](#)).
14. Install access covers 200BL and 200BR ([DMC-429-A-53-00-00-12A-720A-A](#)).
15. Make an entry in the helicopter logbook and historical service records indicating compliance with this Technical Bulletin.

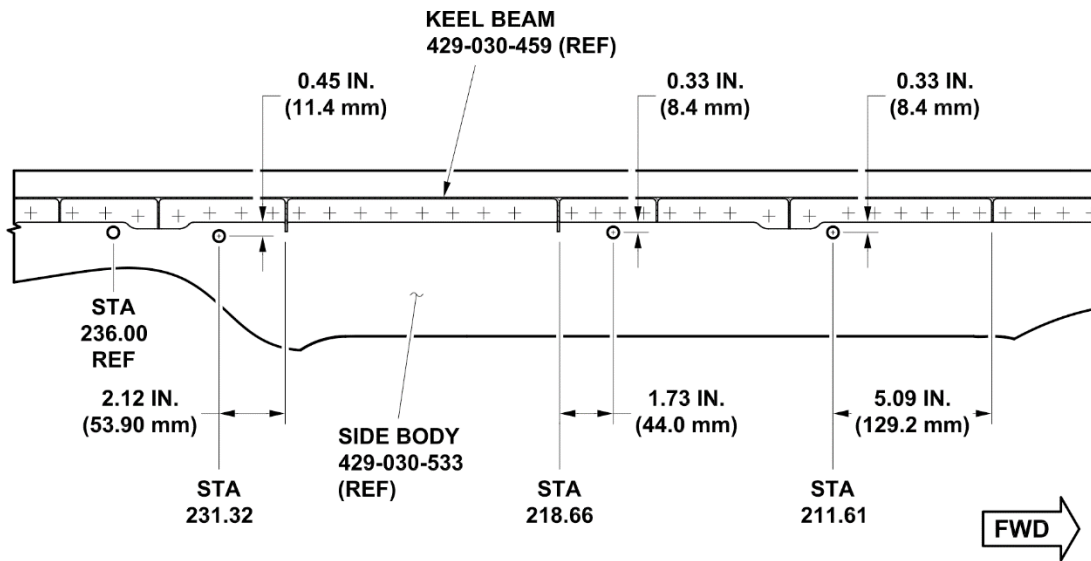


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Figure 1 (Sheet 1 of 2) – Sidebody Drain Holes



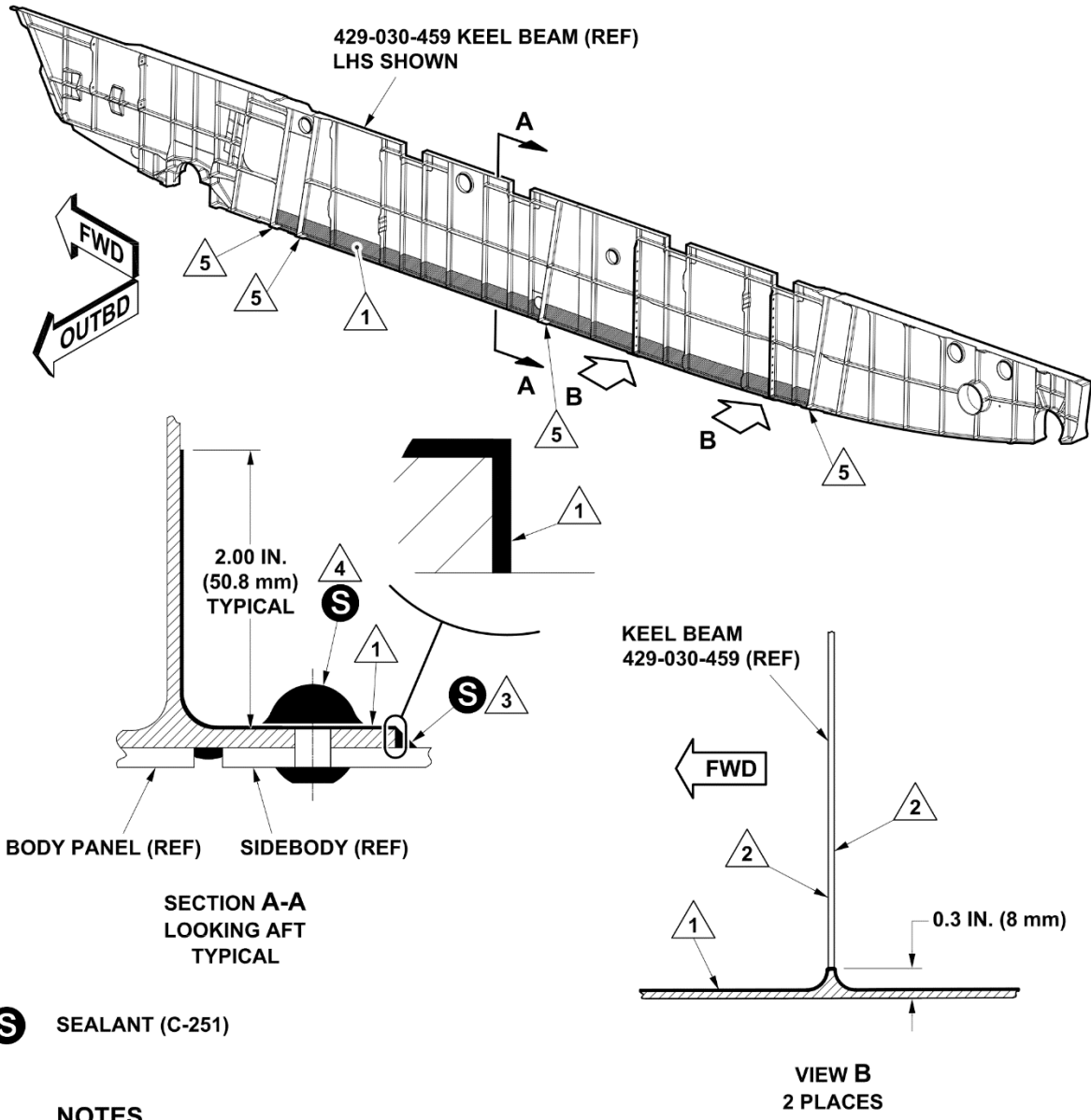
SECTION C-C
LOOKING DOWN
LEFT SIDE



SECTION D-D
LOOKING DOWN
RIGHT SIDE

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Figure 1 (Sheet 2 of 2) – Sidebody Drain Holes



NOTES

- 1 Apply Polyurethane coating (C-245). Dry film thickness to be 0.0016 to 0.0024 inch (0.041 to 0.061 mm).
- 2 Omit polyurethane coating (C-245), both sides of the stiffener.
- 3 Fillet seal using sealant (C-251).
- 4 Overcoat fasteners tails using sealant (C-251)
- 5 Locally overspay over adjacent mating frame with polyurethane coating (C-245).

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Figure 2 – Keel Beam Protection