SECTION 27

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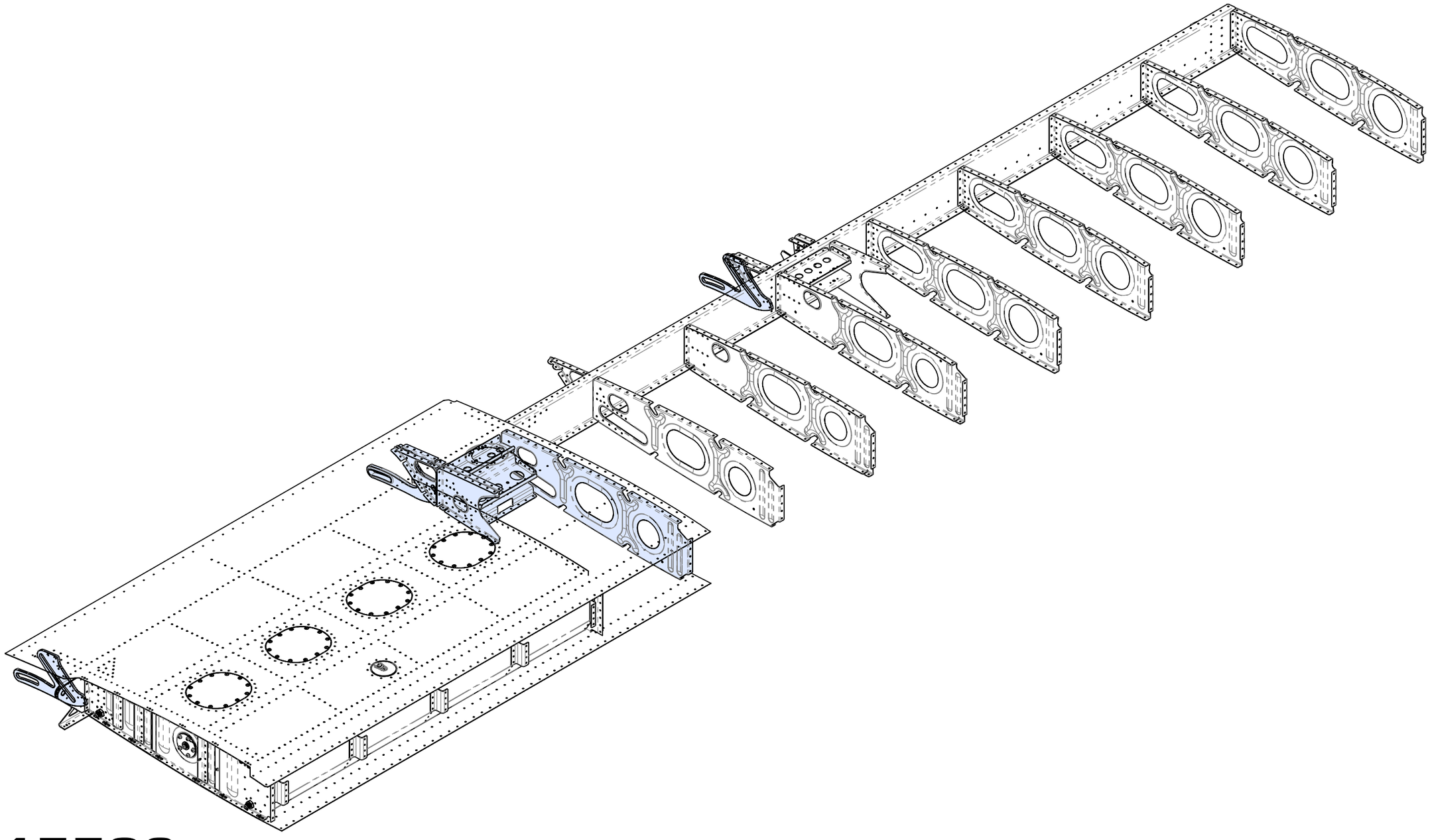
VAN'S AIRCRAFT



W-15506

INBOARD MIXER - REAR SPAR ASSEMBLY

ASSM PARTS LIST					
ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL	-L ASSM QTY.	-R ASSM QTY.
1	W-15014B-001	COVE RIB, FLAP TRACK, MID	.032 2024-T3 ALCLAD SHEET	1	1
2	W-15014B-002	COVE RIB, FLAP TRACK, MID	.032 2024-T3 ALCLAD SHEET	1	1
3	W-15033-001	FLAP TRACK, END	2024-T351	2	2
4	W-15034-001	FLAP TRACK, MID	2024-T351	1	1
5	W-15504-001	INBOARD MIXER BOX	SEE PARTS LIST	1	-
6	W-15504-002	INBOARD MIXER BOX	SEE PARTS LIST	-	1
7	W-15505-001	REAR-SPAR TANK ASSEMBLY	SEE PARTS LIST	1	-
8	W-15505-002	REAR-SPAR TANK ASSEMBLY	SEE PARTS LIST	-	1
9	AN470AD4-8	RIVET, SOLID UNIVERSAL	ALUMINUM	30	30
10	RIVET CR3213-4-3	RIVET, CHERRY	STEEL	39	39

BOM NOTE: Cherrymax blind rivets (grip as required) may be used (except as noted) in place of AN470AD4 rivets.

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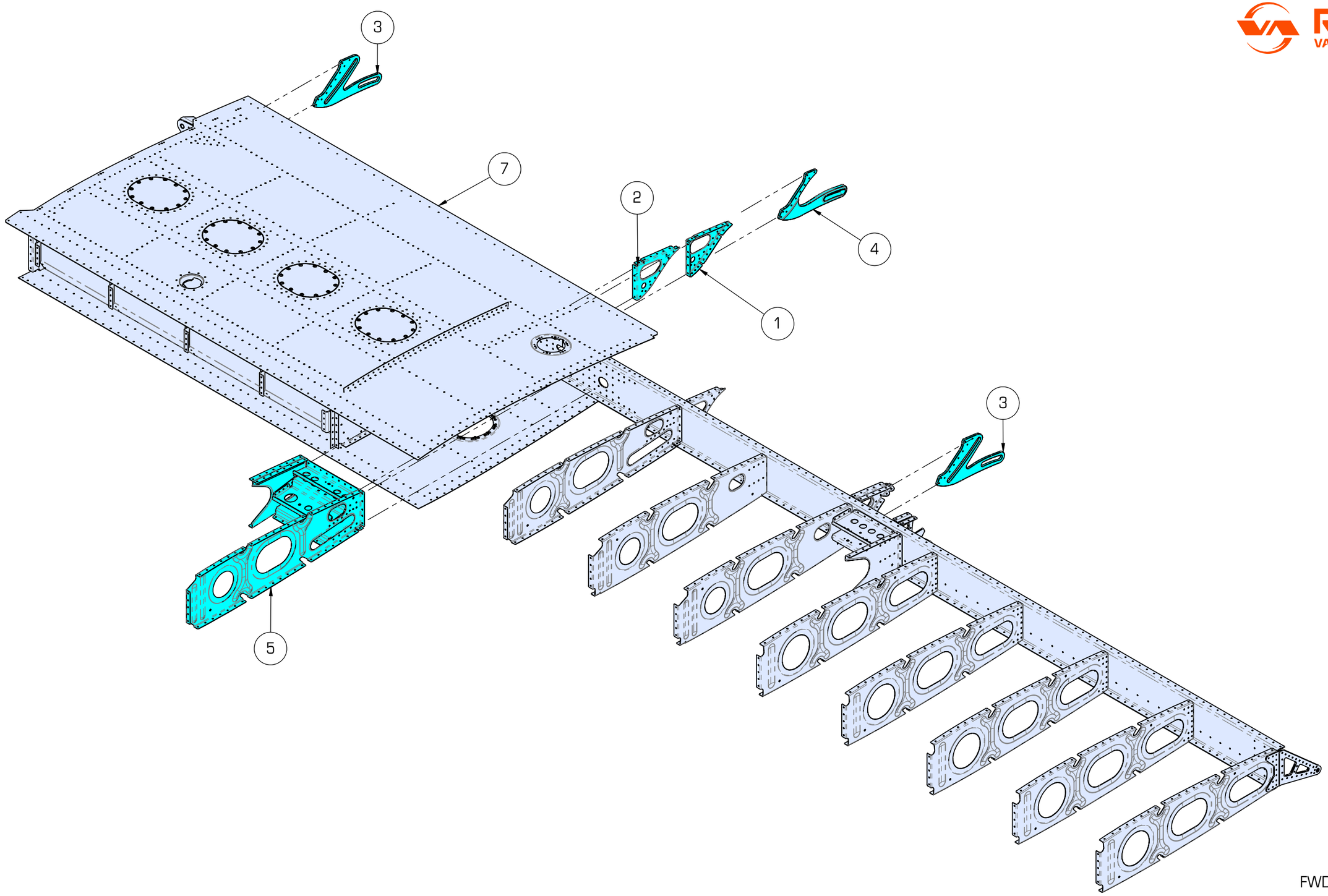
VAN'S AIRCRAFT

NOTE: Except where separate instructions and/or figures exist for both left and right sides of the aircraft, only the left side parts, assemblies, or installations will be shown.

It is the builder's choice as to whether to complete all steps for the left side before repeating those steps for the right side or to complete each step for both left and right sides before moving to the next step.

W-15506 ASSEMBLY

RV-15
VAN'S AIRCRAFT



W-15506 ASSEMBLY

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VAN'S AIRCRAFT

Applicable Section References:

- **Section 5.1** - Aluminum Priming & Painting
- **Section 5.2** - Edge Finishing, Deburring & Scratch Removal
- **Section 5.3** - Marking Parts
- **Section 5.4** - Riveting
- **Section 5.12** - Vinyl Coating
- **Section 5.13** - Fluting
- **Section 5.26** - Hardware Reference

Tools & Consumables Used This Section:

- Bucking Bar
- Deburring Tools
- Die Set [Universal Head]
- Fluting Tools
- Rivet Gun
- Rivet Puller
- Rivet Squeezer
- Spring Clecos [1/8: VANS P/N "TOOL CL 18"]

Part Preparation:

- ☐ **Step 1:** Layout all parts
- ☐ **Step 2:** Deburr edges in all parts
- ☐ **Step 3:** Flute and straighten all rib flanges
- ☐ **Step 4:** Prime all parts as required

BUILDER FEEDBACK QR CODE

www.vansaircraft.com/kit-assembly-instructions-feedback/

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
5	W-15504-001	INBOARD MIXER BOX	1
7	W-15505-001	REAR-SPAR TANK ASSEMBLY	1

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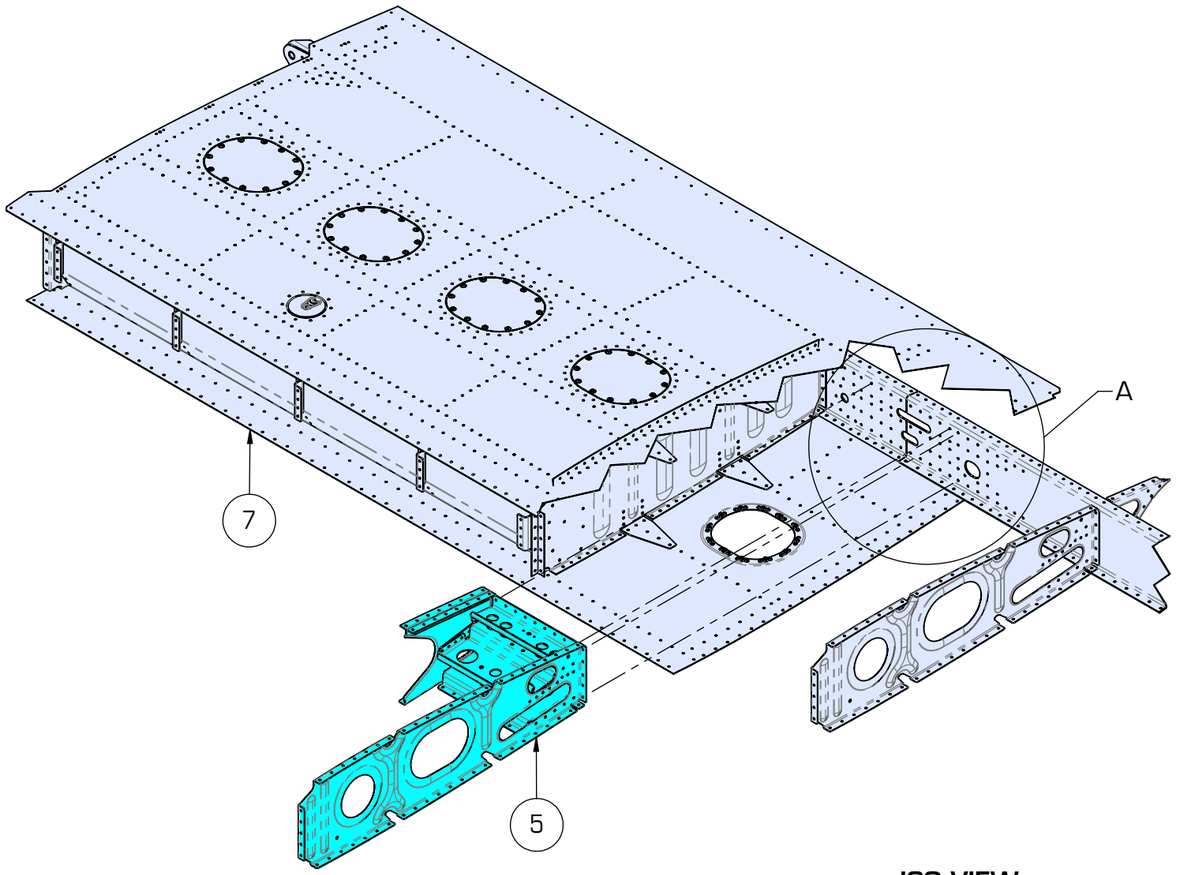
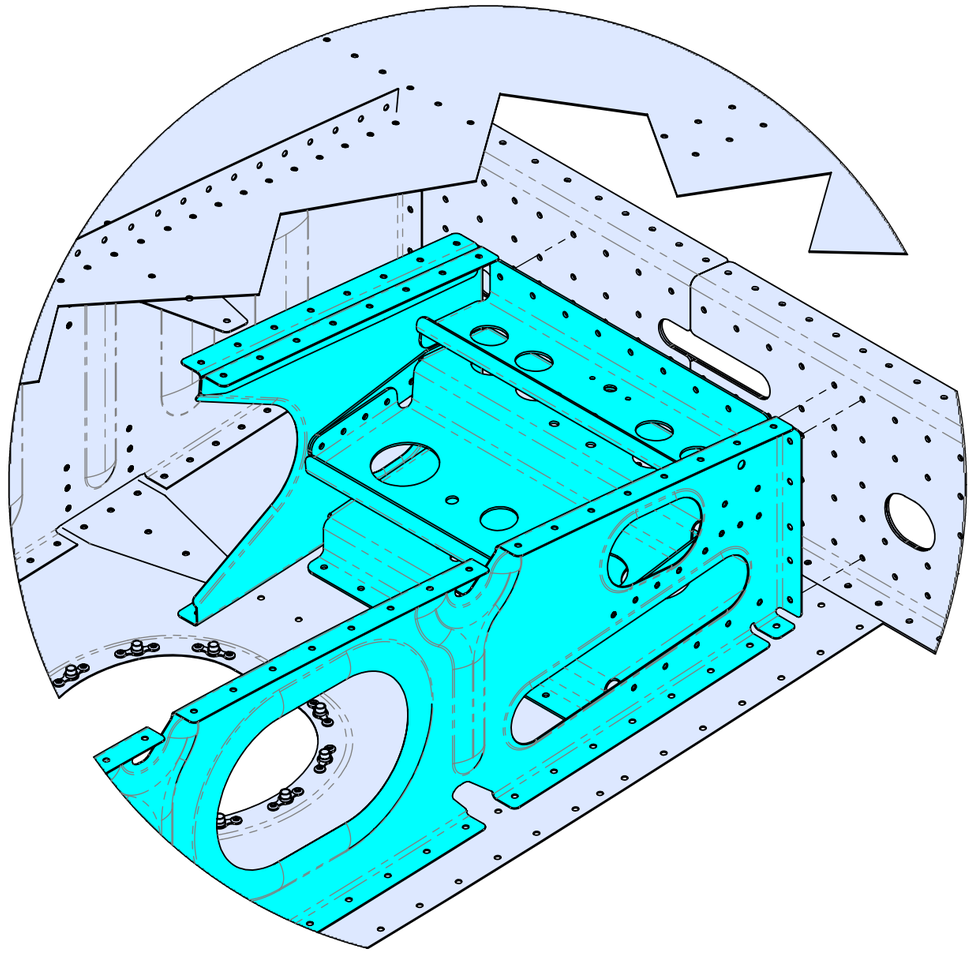
VAN'S AIRCRAFT

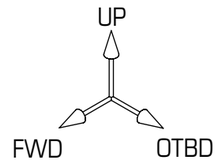
☐ **Step 1:** Cleco (5) into (7)



ISO VIEW



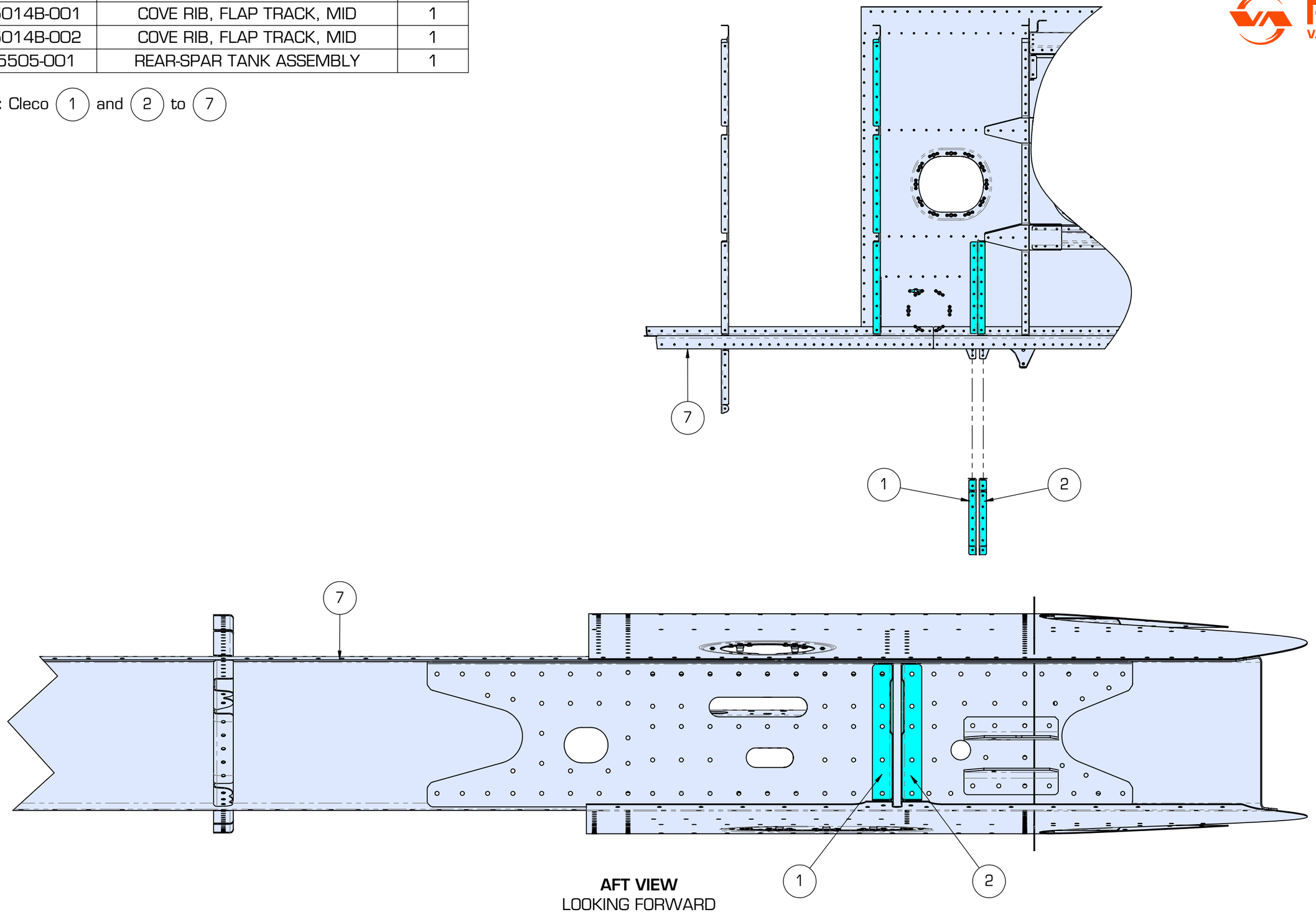
DETAIL A



W-15506 ASSEMBLY

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	W-15014B-001	COVE RIB, FLAP TRACK, MID	1
2	W-15014B-002	COVE RIB, FLAP TRACK, MID	1
7	W-15505-001	REAR-SPAR TANK ASSEMBLY	1

☐ **Step 1:** Cleco (1) and (2) to (7)

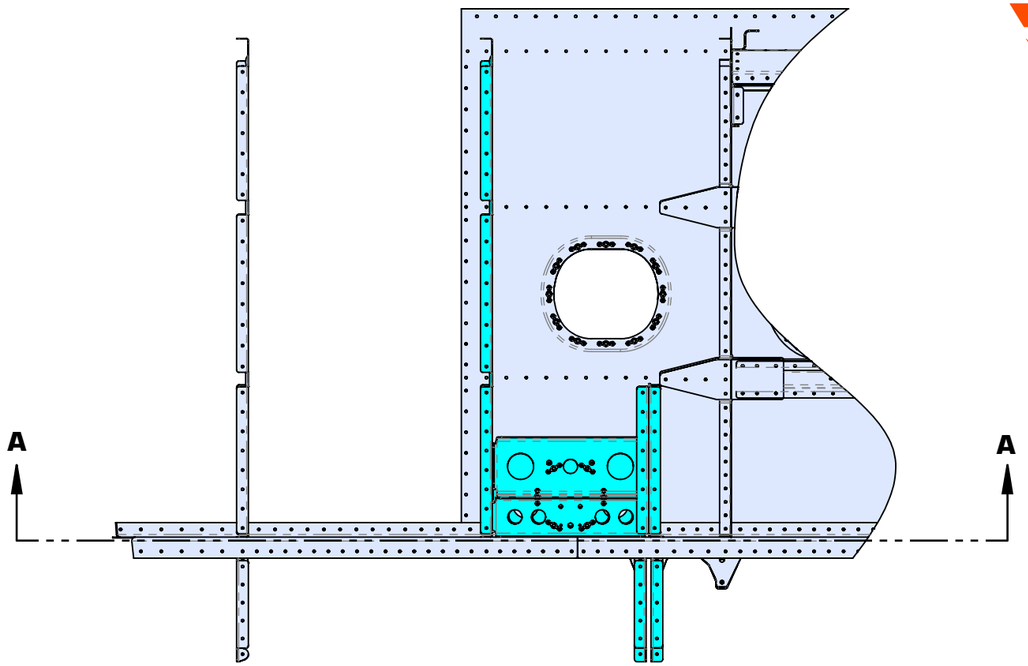


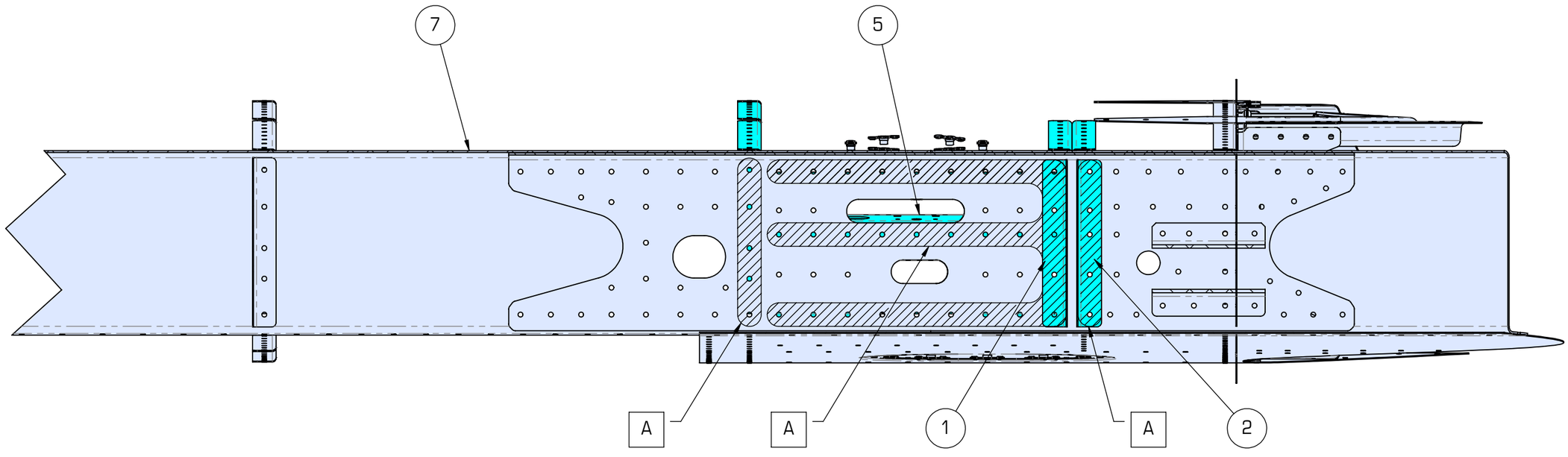
AFT VIEW
LOOKING FORWARD

W-15506 ASSEMBLY

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	W-15014B-001	COVE RIB, FLAP TRACK, MID	1
2	W-15014B-002	COVE RIB, FLAP TRACK, MID	1
5	W-15504-001	INBOARD MIXER BOX	1
7	W-15505-001	REAR-SPAR TANK ASSEMBLY	1
10	RIVET CR3213-4-3	RIVET, CHERRY	39

☐ **Step 1:** Rivet (5) (7) (1) and (5) (7) (2) with (10) in [A]





SECTION A-A
AFT VIEW LOOKING FORWARD

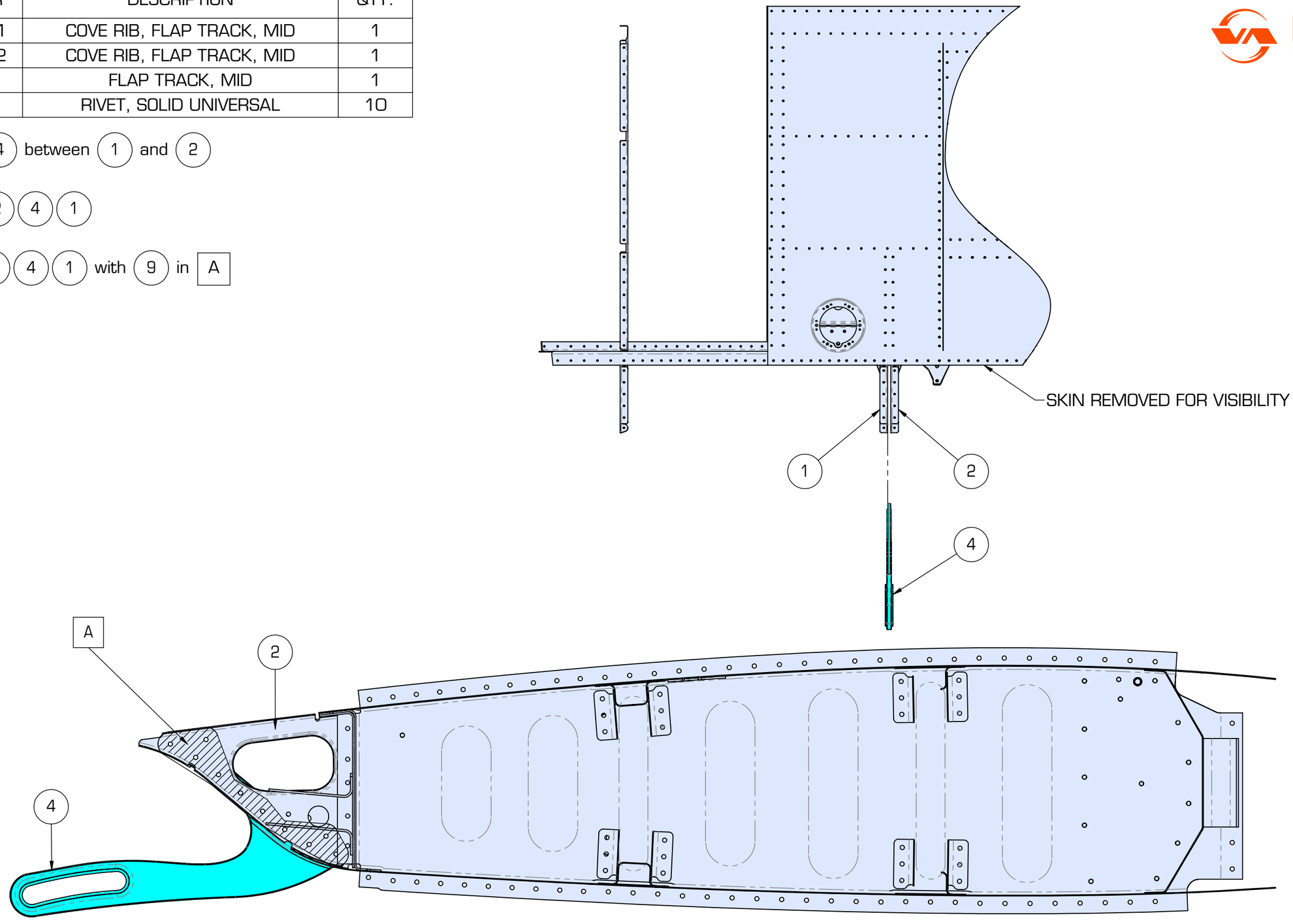
W-15506 ASSEMBLY

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	W-15014B-001	COVE RIB, FLAP TRACK, MID	1
2	W-15014B-002	COVE RIB, FLAP TRACK, MID	1
4	W-15034-001	FLAP TRACK, MID	1
9	AN470AD4-8	RIVET, SOLID UNIVERSAL	10

☐ **Step 1:** Insert (4) between (1) and (2)

☐ **Step 2:** Cleco (2) (4) (1)

☐ **Step 3:** Rivet (2) (4) (1) with (9) in [A]



INBOARD VIEW
LOOKING OUTBOARD

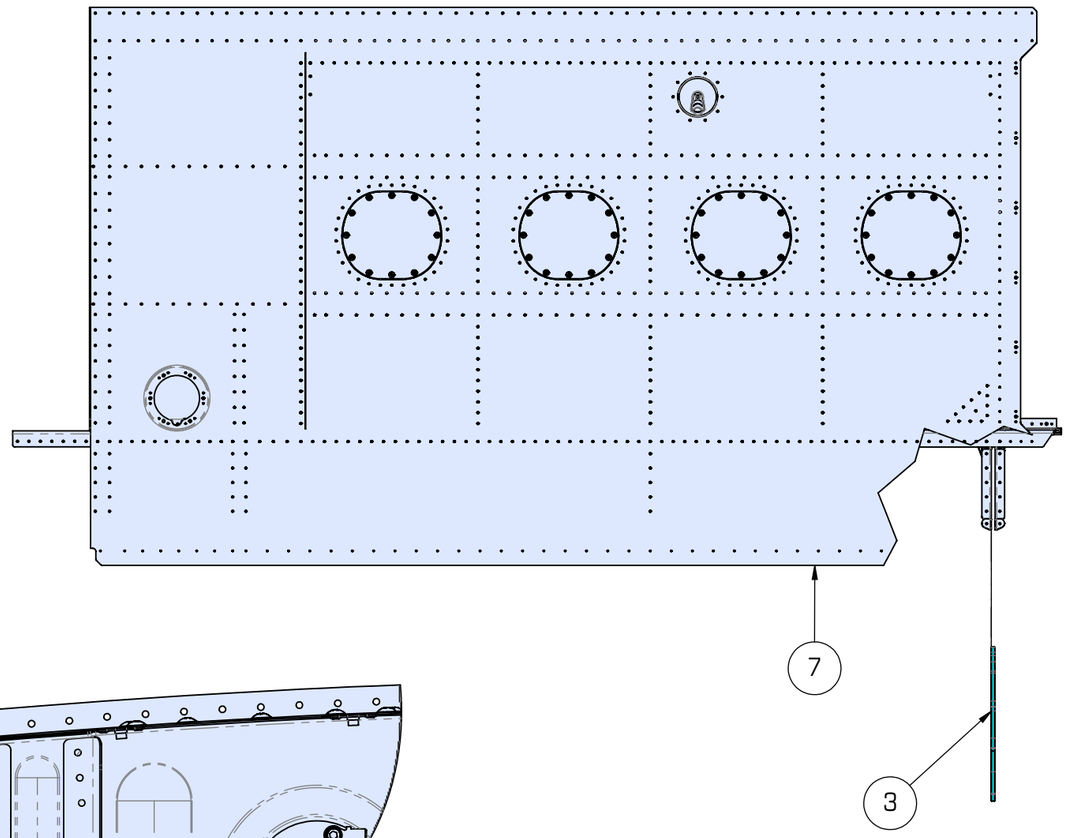
W-15506 ASSEMBLY

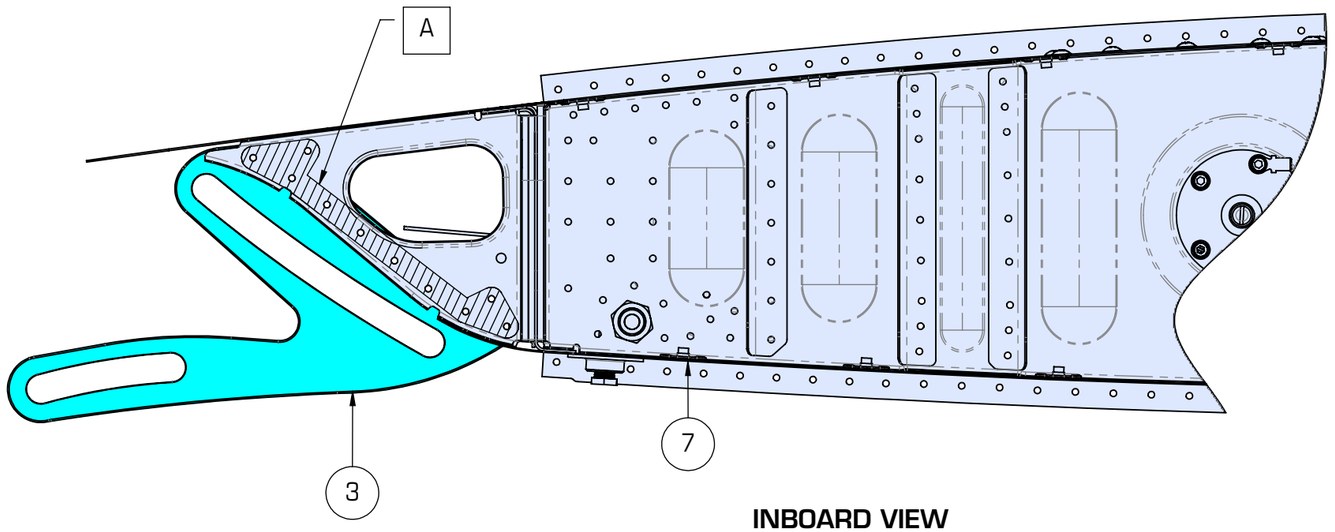
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
3	W-15033-001	FLAP TRACK, END	1
7	W-15505-001	REAR-SPAR TANK ASSEMBLY	1
9	AN470AD4-8	RIVET, SOLID UNIVERSAL	10

NOTE: Due to the difficulty of riveting area [A] it is recommended that a long reach yoke be utilized.

☐ **Step 1:** Cleco (3) to (7)

☐ **Step 2:** Rivet (3) to (7) with (9) in [A]



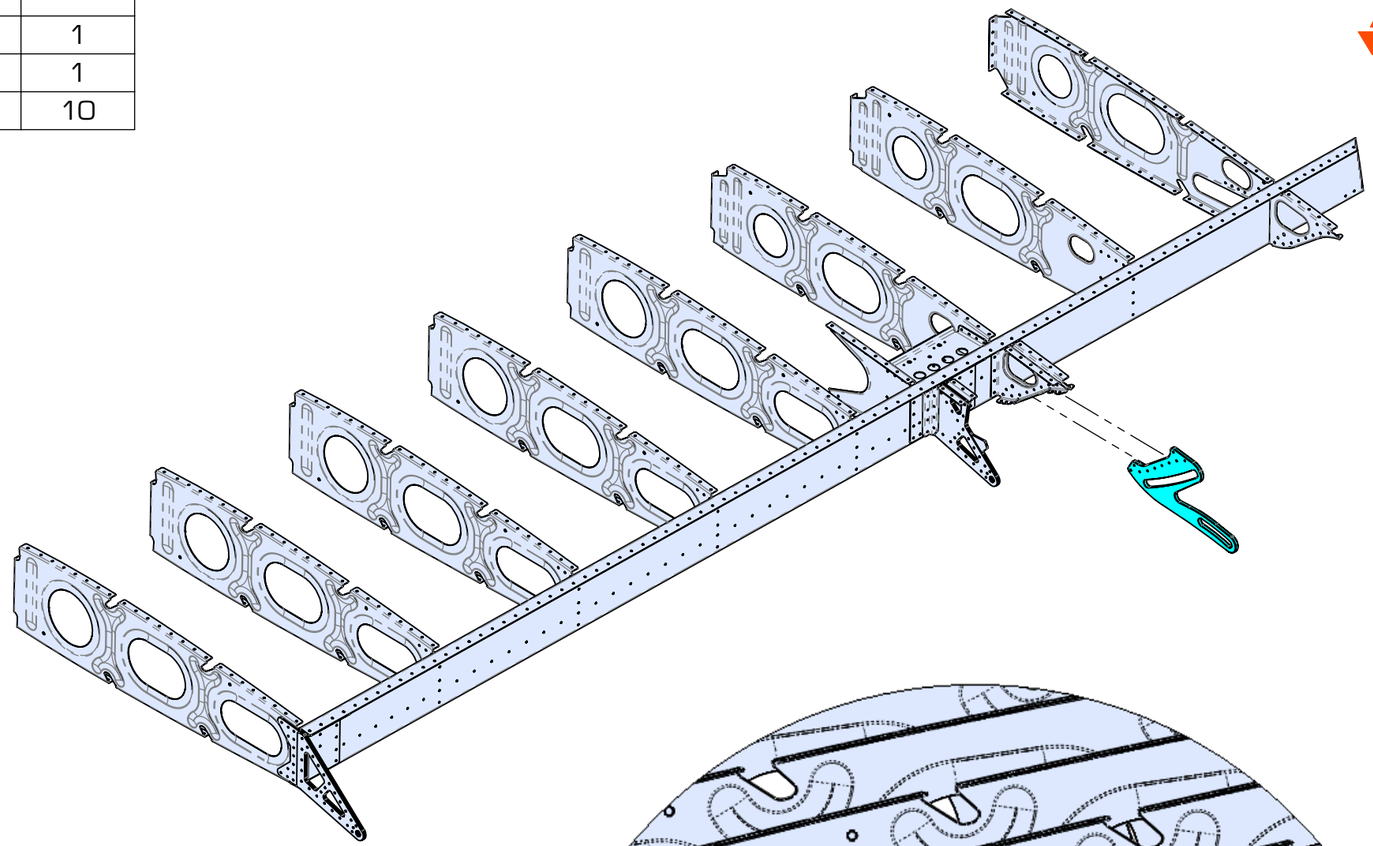


INBOARD VIEW
LOOKING OUTBOARD

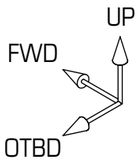
W-15506 ASSEMBLY

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
3	W-15033-001	FLAP TRACK, END	1
7	W-15505-001	REAR-SPAR TANK ASSEMBLY	1
9	AN470AD4-8	RIVET, SOLID UNIVERSAL	10

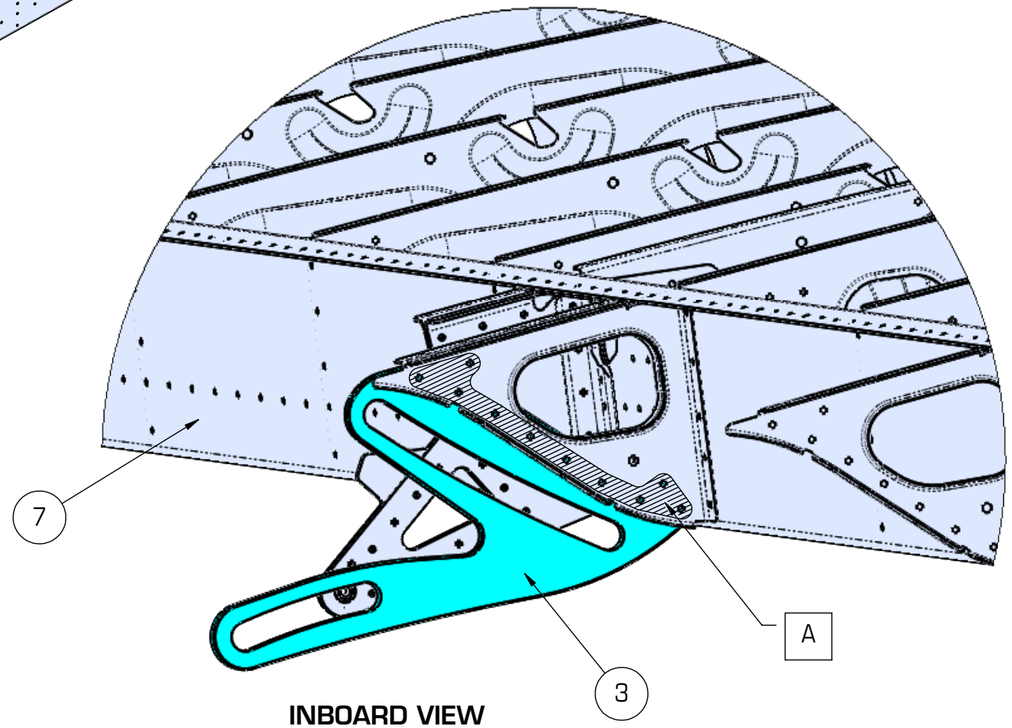
- ☐ **Step 1:** Insert (3) into (7)
- ☐ **Step 2:** Cleco (3) to (7)
- ☐ **Step 3:** Rivet (3) to (7) with (9) in [A]



ISO VIEW



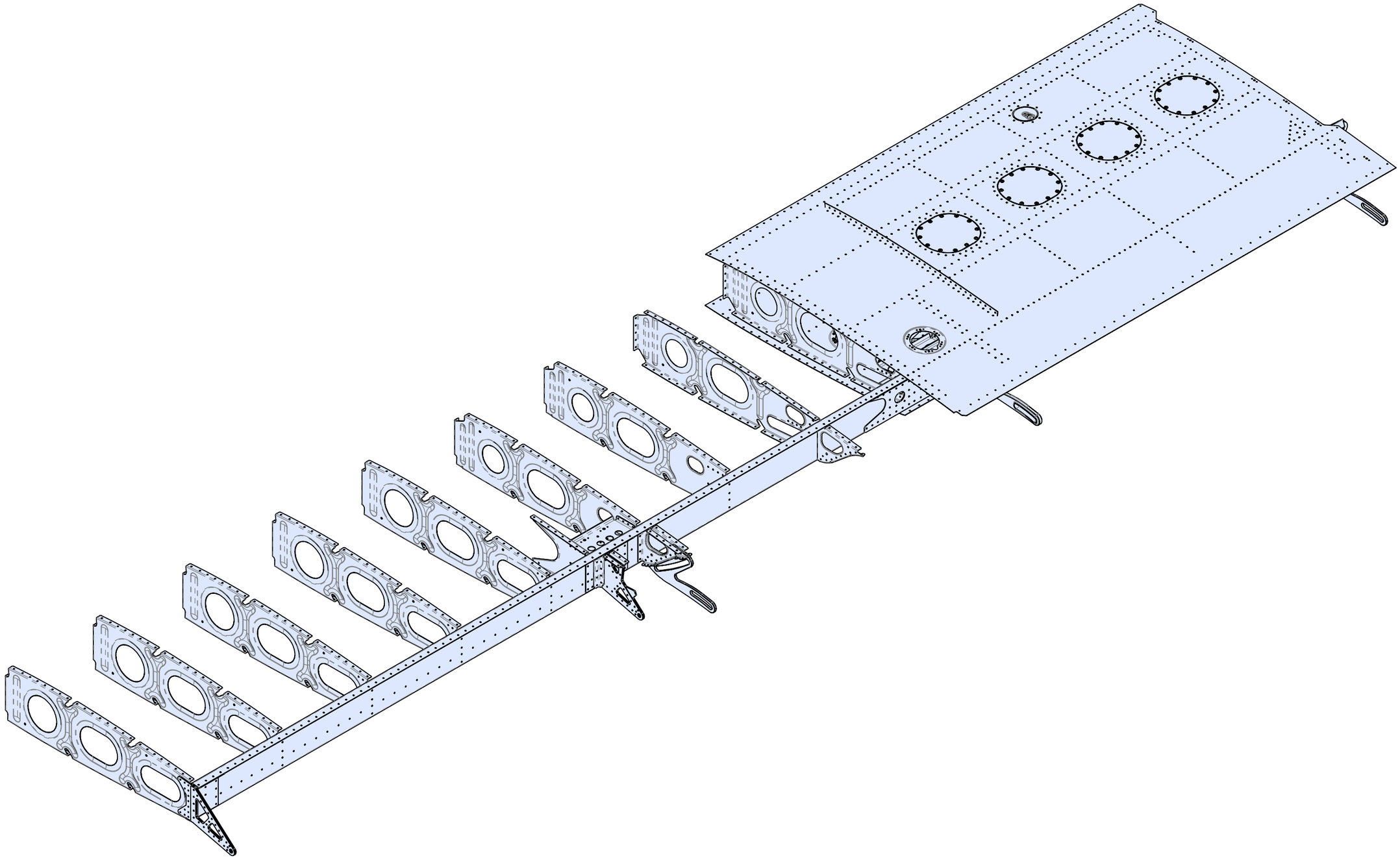
ALIGNMENT DETAIL



INBOARD VIEW
LOOKING FORWARD/OUTBOARD

W-15506 ASSEMBLY

W-15506-001 ASSEMBLY COMPLETE



W-15506 ASSEMBLY

BUILDER 1 NAME _____ SIGNATURE _____ DATE _____

BUILDER 2 NAME _____ SIGNATURE _____ DATE _____

START DATE DATE _____

END DATE DATE _____

HOURS QTY _____

INSPECTED BY NAME _____ SIGNATURE _____ DATE _____

RV-15
VAN'S AIRCRAFT

MODIFICATIONS _____

_____

REPAIRS _____

_____

ISSUES _____

_____

NAME _____ SIGNATURE _____ DATE _____

W-15506 ASSEMBLY