SERVICE BULLETIN EC120

AIRBUS HELICOPTER
DIRECTION TECHNIQUE SUPPORT
13725 MARIGNANE CEDEX FRANCE

CIVIL VERSION(S): B

SERVICE BULLETIN

No. 25-001

SUBJECT: **EQUIPMENT AND FURNISHINGS**

Equipping The Helicopter With The Optional Emergency Flotation Gear (Fixed Parts)

LIST OF APPROVED REVISIONS	REVISION No. 2 APPROVED
No. 0: January 27, 1999 No. 1: April 05, 2002	Date: August 31, 2023

1. PLANNING INFORMATION

1.A. EFFECTIVITY

- Helicopter version(s): B.

- Component(s) affected: Emergency floatation gear.

- Spare part(s): None.

Refer to the Master Servicing Manual (MSM) chapter “OPTIONAL EQUIPMENT” to identify the incompatibilities when installing the fixed part of the harpoon installation.

1.B. ASSOCIATED REQUIREMENTS

Comply with Service Bulletin 25-004 (reinforcement of drag lug attachment) together with this Service Bulletin.

1.C. REASON

Revision 0 of this Service Bulletin:

Allowed the operator to equip the aircraft with the optional emergency floatation gear (fixed parts).
- Compliance with this Service Bulletin, jointly with installation of the removable parts, part number C256A720105100, described in AMM 25-67-00, 4-1, will allow the operator to keep the aircraft afloat in the event of ditching to enable safe evacuation of the crew.

Revision 1 of this Service Bulletin:

- Adds the weights and moments corresponding to the new cylinder and the new floats, for information purposes.
- Adds the new part numbers of the lightened removable parts, in place of part number C256A720105100, in paragraph 3.G of this Service Bulletin.
- Adds an elastomer lining between the landing gear rear attachment clamp and the helicopter structure.

Revision 2 of this Service Bulletin:

The purpose of revision 2 of this Service Bulletin is to delete the removable parts from this Service Bulletin. The installation of the removable parts is given through the Service Bulletin 25-032.

Revision 2 of this Service Bulletin does not affect compliance with the former revisions of this Service Bulletin.

1.D. DESCRIPTION

The installation includes:

- The creation of provisions
- The installation of mounts
- The installation of attachment clamps
- The cut-out of cowlings
- The installation of an electrical mounting plate
- The replacement of an indicator head
- The installation of an optional electrical harness
- The installation of an elastomer lining.

NOTE 1

These items must be installed on an aircraft equipped as follows:

- Landing gear equipped with fittings (m) (see detail A Figure 17).
- An electrical harness held in position with clamps (n) (ASNA-0021-25S18) and (o) (ASNA-0021-25S12) under frame X3048 on the RH side (see detail B Figure 17).
- Longitudinal beams reinforced at the front attachment fittings of the landing gear with reinforcements (p) (see section A-A Figure 18) and unfolding shims (q) (see detail B-B Figure 18).
- A "floatation gear" circuit-breaker (r) and "maplight" power supply on the cockpit circuit-breaker panel (see view C Figure 19)
- A "floatation gear" circuit-breaker (s) on the cargo compartment circuit-breaker panel (see detail B Figure 19).

1.E. COMPLIANCE

At the works: From serial number 1001 onwards.

Retrofit action: By the operator.

Spares: None.

1.F. APPROVAL

The technical content of this document is approved under the authority of the Design Organization Approval ref. EASA. 21J.700.

For helicopters operated outside the terrain regulated by the EASA, the application of this document is subject to validation provided by the responsible aviation authority of the state of registry.

1.G. MANPOWER

1.G.1. Aircraft equipped with provisions:

Qualification: 1 Fitter.
1 Electrician.

Time: Fitter: approximately 12 hours.
Electrician: approximately 24 hours.

1.G.2. Aircraft not equipped with provisions:

Qualification: 1 Fitter.
1 Electrician.

Time: Fitter: approximately 16 hours.
Electrician: approximately 24 hours.

1.G.3. Installation of the elastomer lining (pararaph 2.B.2.):

Qualification: 1 Fitter.

Time: Fitter: approximately 9 hours.

1.H. WEIGHT AND BALANCE

Fixed parts:
Weight: 3 kg
Moment: 11.760 m.kg

1.I. EFFECT ON ELECTRICAL LOADS

Negligible.

1.J. SOFTWARE MODIFICATION EMBODIMENT STATE

None.

1.K. REFERENCES

Refer to the: AIRCRAFT MAINTENANCE MANUAL
(AMM) 25-67-00, 3-1
(AMM) 53-70-00, 4-1
(AMM) 20-10-00, 3-15
(AMM) 20-10-00, 3-4
(AMM) 20-10-00, 3-22
(AMM) 24-00-00, 3-1
(AMM) 32-12-00, 4-1
(AMM) 05-10-00, 1-C
(AMM) 05-21-00, 1-B
(AMM) 05-25-00, 1-B
(AMM) 05-26-00, 6-2

Refer to the: INFORMATION NOTICE (IN) 3481-I-00: The Marketplace: an AirbusWorld eOrdering service
(IN) 3785-I-00: Introduction of the digital Service Bulletin reporting service SB Insight

1.L. OTHER DOCUMENTS CONCERNED

- FLM (Flight Manual) (Supplement 9-17, AERAZUR emergency floatation gear)
- IPC (Illustrated Parts Catalog)
- AMM (Aircraft Maintenance Manual)
- SDS (System Description Section)
- WDM (Wiring Diagrams Manual)
- MSM (Master Servicing Manual)

1.M. INTERCHANGEABILITY AND MIXABILITY OF PARTS

Not applicable.

2. ACCOMPLISHMENT INSTRUCTIONS

2.A. GENERAL

Comply with the general safety procedures described in AMM 24-00-00, 3-1.

2.B. OPERATIONAL PROCEDURE

2.B.1 Installation of fixed mechanical parts

a) Aircraft equipped with emergency floatation gear provisions:

Start the operational procedure at paragraph (c).

b) Aircraft not equipped with emergency floatation gear provisions:

Figure 1

- Remove the lower fairings (RH, center and forward) as per AMM 53-70-00, 4-1.
- Drill 3 holes (a) diameter 5.5 mm in frame at X3890 on RH side (view A)

Figure 2

- Drill 3 holes (b) diameter 5.2 mm at X3322.5 in the rib of the RH longitudinal beam (section A-A).
- Drill 3 holes (b) diameter 5.2 mm at X3610.65 in the rib of the RH longitudinal beam (section B-B).

Figure 3

- Remove clamp mount (u).
- Drill 1 hole (c) diameter 6.2 mm in mount (d) at 2370 on RH side (view B) and attach the self-locking nut (19) with rivets (20).
- Install clamp mount (u) with 2 rivets (20) at a distance of 60 mm from its former position (as per detail B).
- On frame at X2637 (view C) offer up mount (1), drill back frame and mount to 3.2 mm, attach mount with rivets (2).

c) Fitting-out the Structure

Figure 4

- Remove clamp mounts (v) on frames X3322.5 and X3610.5 then blank the holes with countersunk-head rivets (42).
- Remove the 2 clamp mounts (w) and install clamp mounts (40) with rivets (20), (as per detail A).
- Offer up the mounts (3) and attach them with items (4), (5) and (6) (as per sections A-A and B-B).
- Fit the grommets (7) on the mounts (3).
- Secure the fuel flow flexible ball-type control on the clamp mount located under mount (3) at X3322.5 (section B-B).
- Route the airspeed indicator control through grommet (7) of mount (3) at X3322.5.

Figure 5

- Remove the 3 clamp mounts (x) and blank the holes with rivets (20).
- Offer up the stop (8) and clamps (9), and attach them with items (10) (as per view A).

d) Fitting-out the Landing Gear

Remove the upper sections of the landing gear fairings as per AMM work card 32-12-00, 4-1.

Figure 6

- Offer up rear struts (12), fit pins (13), head up, fit pin stops (14), safety with safety pins (15) and connect safety pins together with lockwire (39) (as per view A, LH side, and view B, RH side).

e) Cutting-out the Landing Gear Fairings

Figure 7

- Cut out the LH landing gear fairing (e) (as per view A) and RH landing gear fairing (f) (as per view B).
- Bond sealing plates (16) using adhesive (17) as per AMM 20-10-00, 3-15.
- Install the landing gear fairings as per AMM 53-70-00, 4-1.

f) Cutting-out the Center Fairing

Figure 8

Cut out the lower center fairing (g) (as per section A-A)

NOTE 1

- The 50 mm-diameter cut-out is only produced on the RH side of the fairing, and the 70 mm-diameter cut-out (true size) is only on the LH side.
- Edge the cut-outs in the center fairing using item (18) for the 50 mm cut-out, and items (21) and (17) for the 70 mm cut-out.

g) Installation of the Mounting Plate Assembly

Figure 9

- Open the RH cargo compartment door.
- Drill 4 holes (h) to diameter 5.5 mm (as per detail A) in the mount (i) and electrically bond the holes as per AMM 20-10-00, 3-4.
- Route the electrical harness (11) and its terminal components (relays, circuit-breakers, terminal strip) via the identified area (j) (as per detail B).

Figure 10

- Attach the terminal components of the electrical harness (11) (see detail of components, figure 16) to mounting plate (24) (as per detail A), (attach the electrical harness neatly to the clamp mounts provided on the mounting plate).
- Attach the mounting plate (24) on mount (i) with items (26) and (27) (as per detail B).

h) Installation of the Optional Electrical Harness

Figure 11

- Attach clamp mounts (25) with rivets (29) (as per detail A).
- Drill one hole (k) to diameter 5.5 mm (as per detail A) and attach anchor nut (32) with rivets (28).
- Secure the mounting plate (30) with adhesive (31) (as per detail B).
- Attach the ground module (43) (as per detail B).

Figure 12

- Remove and discard indicator head (l).
- Install indicator head (23) in place of head (l) (as per detail C).

Figure 13

- Route electrical harness (11) (as per detail A and view B) and attach with clamps (33) and spreaders (34).

Figure 14

- In cargo compartment, on RH side:
- Remove inner panels (t) (as per view A).
- Attach the optional electrical harness (11) along the existing electrical harness of routes MP and E, with spreaders (34) and clamps (33) as per AMM 20-10-00, 3-22.

Figures 15, 16

- Connect the electrical harness (11) to the various connectors, with contacts (35), (36), (37) and (38).

i) Functional Tests

Refer to AMM 25-67-00, 5-1.

j) Reinstallation of Fairings

Reinstall the RH, center and forward lower fairings.

2.B.2. Installation of the elastomer lining between the landing gear and the structure rear attachment clamp (figure 20)

Before removing half-clamp (aa), note the direction of installation.
Release and unscrew the 2 screws (z). Recover the screws and the washers (bb).
Remove the half-clamp (aa) after clearing the grounding braid.
Insert the elastomer lining (41), and bond it as per AMM 20-10-00, 3-15, inside the half-clamp (aa) and inside the half-clamp that is still attached to the structure. Raise the helicopter slightly for this second operation.
Reinstall the equipped half-clamp (aa), using the 2 screws (z), after reinstalling the washers (bb) and the grounding braid, and comply with the tightening torque value as per AMM 20-10-00, 3-2.

2.C. IDENTIFICATION

- Record the full compliance with this Service Bulletin, with the revision number, in the helicopter documents.

- Record compliance with this Service Bulletin (see IN 3785-I-00 for instructions):
  QR code or hypertext link

NOTE 2

The recording of compliance with Service Bulletins in the SB Insight tool does not replace the recording in the helicopter documents.

SB EC120 25-001

2.D. OPERATING AND MAINTENANCE INSTRUCTIONS

- Operation: Refer to the Flight Manual (FLM).
- Maintenance: Refer to Aircraft Maintenance Manual (AMM).

- Maintenance: Refer to the Master Servicing Manual (MSM).

3. MATERIAL INFORMATION

3.A. MATERIAL - COST - AVAILABILITY

For all information, contact Customer Support.

3.B. INFORMATION CONCERNING INDUSTRIAL SUPPORT

None.

3.C. MATERIAL REQUIRED FOR EACH AIRCRAFT, ENGINE/COMPONENTS

Item	New P/N	Key Word	Former P/N and item	Qty	Instructions Disposition
	C533A111210171	EMERGENCY FLOATATION GEAR PROVISION KIT			
1	C256A7108101	MOUNT		1	
2	21215DC3208J	RIVET		3	
4	22125BC050016L	HEX. HEAD SCREW		6	
5	23111AG050LE	WASHER		15	
6	ASN52320BH050N	LOCK NUT		6	
11	C256A7920101	ELECTRICAL HARNESS		1	
19	52358CBD050N	ANCHOR NUT		1	
20	21217DC2406J	COUNTERSUNK-HEAD RIVET, 100°		14	
23	120M11Z31	INDICATOR HEAD		1	
24	C256A7143101	FLOATATION GEAR MTG. PLATE ASSY.		1	
25	E0607-01	CLAMP MOUNT		2	
26	22272BC040010L	MUSHROOM-HEAD SCREW		5	
27	23111AG040LE	WASHER		5	
28	21217DC2405J	COUNTERSUNK-HEAD RIVET 100°		2	
29	ASNA0078A402	BLIND RIVET		2	
30	ASMSA	MOUNTING PLATE		1	
32	52353CBD050N	ANCHOR NUT		1	
35	EN3155003F2222	CONTACT		6	
36	EN3155016M2018	CONTACT		16	
37	EN3155019F2020	CONTACT		8	
38	EN3155008M1614	CONTACT		2	
40	E0606-01	CLAMP MOUNT		3	
43	E0656A01N1SO	MODULE		1	

	C256A710105200	OPTIONAL EMERGENCY FLOATATION GEAR FIXED PARTS	
3	C256A7112101	FLOATATION GEAR CYLINDER MOUNT	2
5	23111AG050LE	WASHER	3
7	F85007-090-015S8	GROMMET	2
8	C256A7104101	FLOATATION GEAR REAR STOP	1
9	ASNA0021-25G10	CLAMP	3
10	22208BC050010L	SCREW	3
12	C256A7105202	REAR STRUT	2
13	C256A7106202	REAR STRUT PIN	2
14	C256A7111202	PIN STOP	2
15	23340AK2040LE	SAFETY PIN	4
16	C256A7110201	SEALING PLATE	2
17	DHS171-141.20	ADHESIVE	1
21	ASNA0114-2-31B6	EXTRUSION	4m
39	EN3628-050	LOCKWIRE	1m
33	E0043-1C0	CLAMP	3
42	21217DC3205J	RIVET	4

ORDER SEPARATELY

41	C321A2510201	ELASTOMER LINING	

ORDER AS REQUIRED BELOW AND AS PER TASKS MENTIONED IN THIS SERVICE BULLETIN

18	DHS268-114.20	COMPOUND	AR
34	E0688-01	SPREADER	AR
31	DHS172-172.20	ADHESIVE	AR

You can order the consumables from the AirbusWorld Marketplace through e-ordering (IN 3481-I-00).
If you can’t get access to e-ordering, please contact your Logistic Focal Point.

3.D. MATERIAL REQUIRED FOR EACH SPARE PART

Not applicable.

3.E. RE-IDENTIFIED PARTS

None.

3.F. TOOLING - COST - AVAILABILITY

None.

3.G. PROCUREMENT CONDITIONS

For any information concerning price of modification kits and/or components or for assistance, contact the Airbus Helicopters Network Sales and Customer Relations Department.

Order the required quantity

- Provisions kit C533A111210171 + Optional fixed parts C256A710105200
- Improved attachment of rear attachment clamp on structure C321A2510201 (FAM A00498, addition of elastomer lining)

from

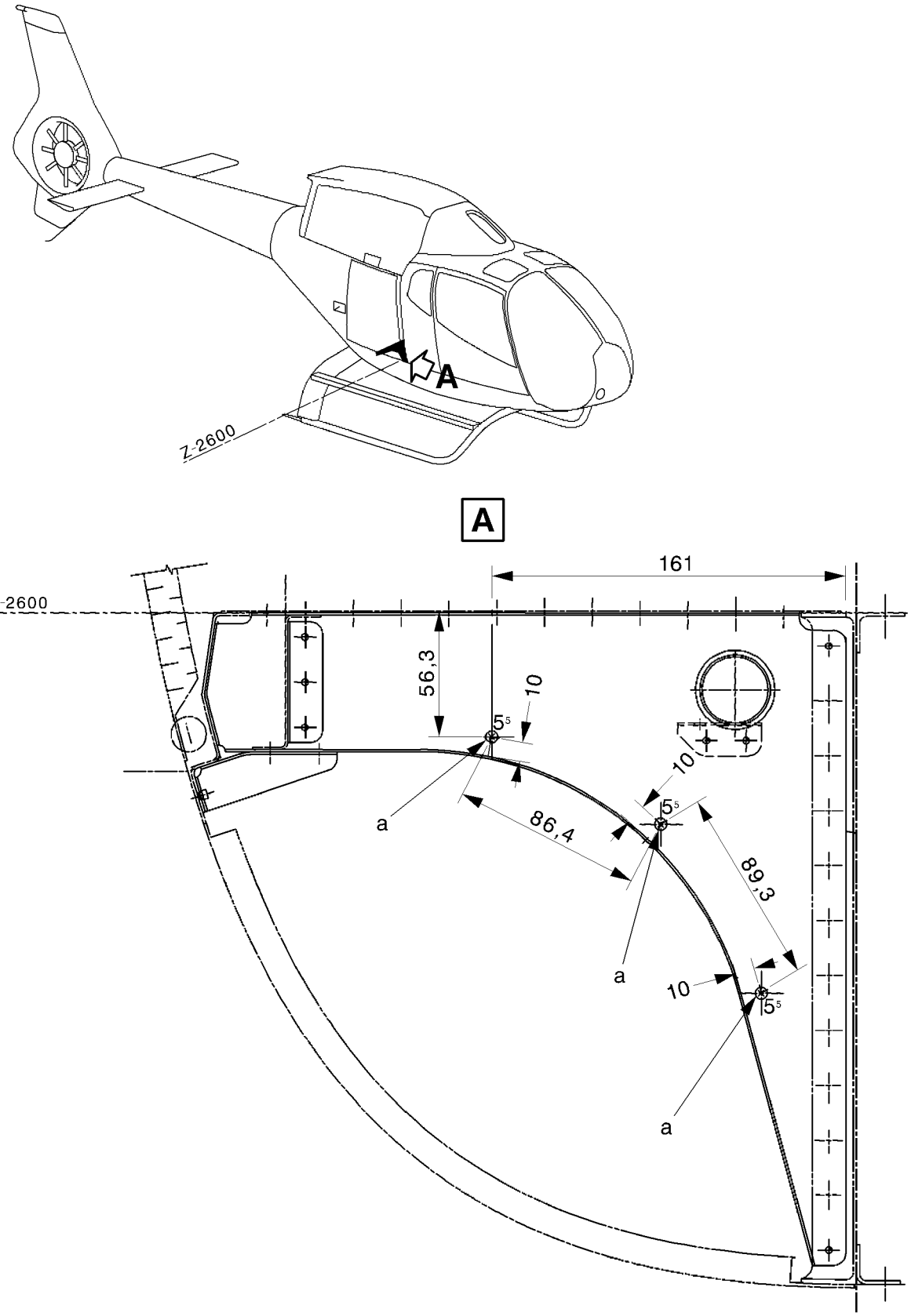
AIRBUS HELICOPTER
Etablissement de Marignane
Direction VENTES – Service Client
S.C
13725 MARIGNANE CEDEX (FRANCE)

NOTE

On the purchase order, please specify the mode of transport, the destination and serial numbers of the aircraft to modifiy.

4. APPENDIX

None.



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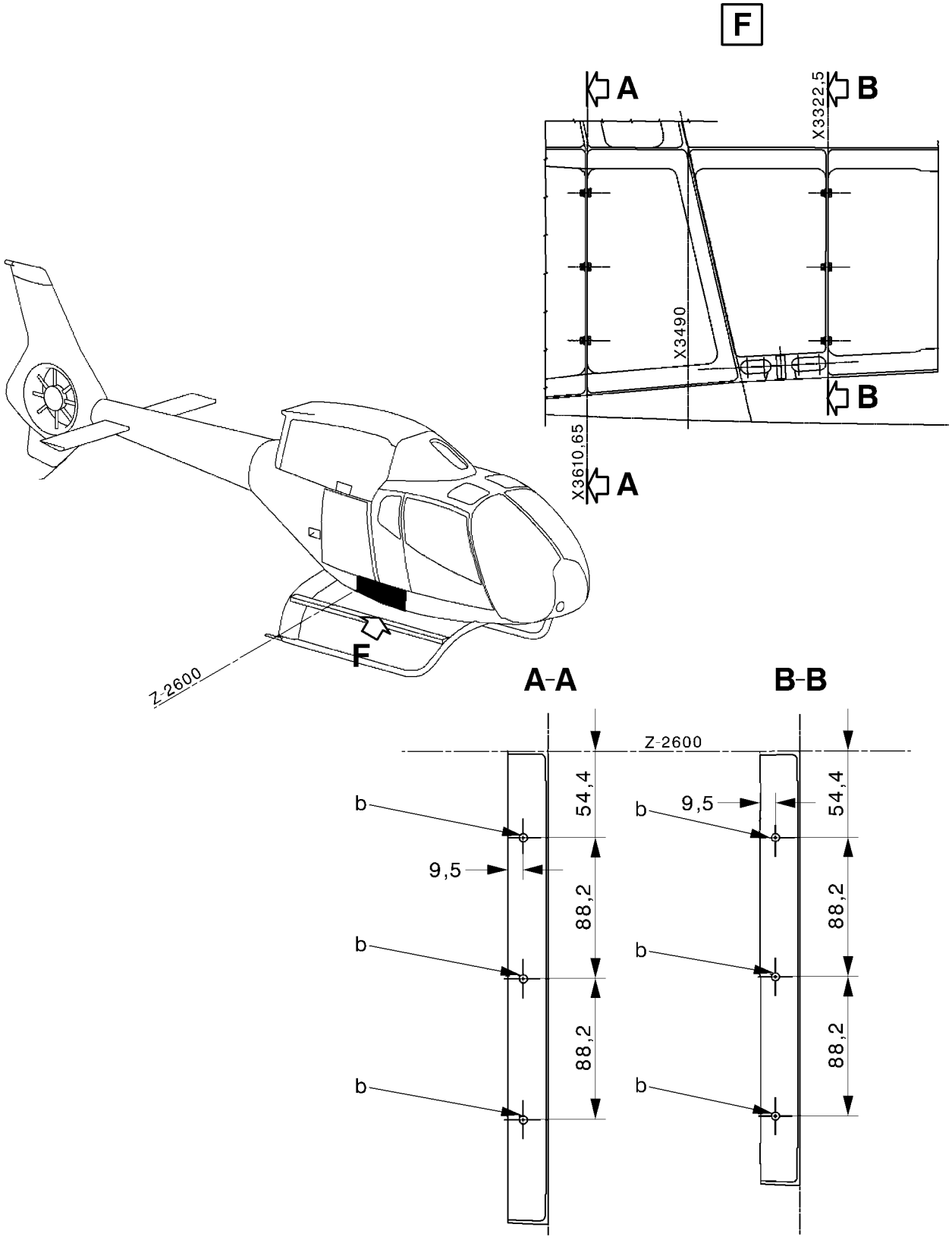
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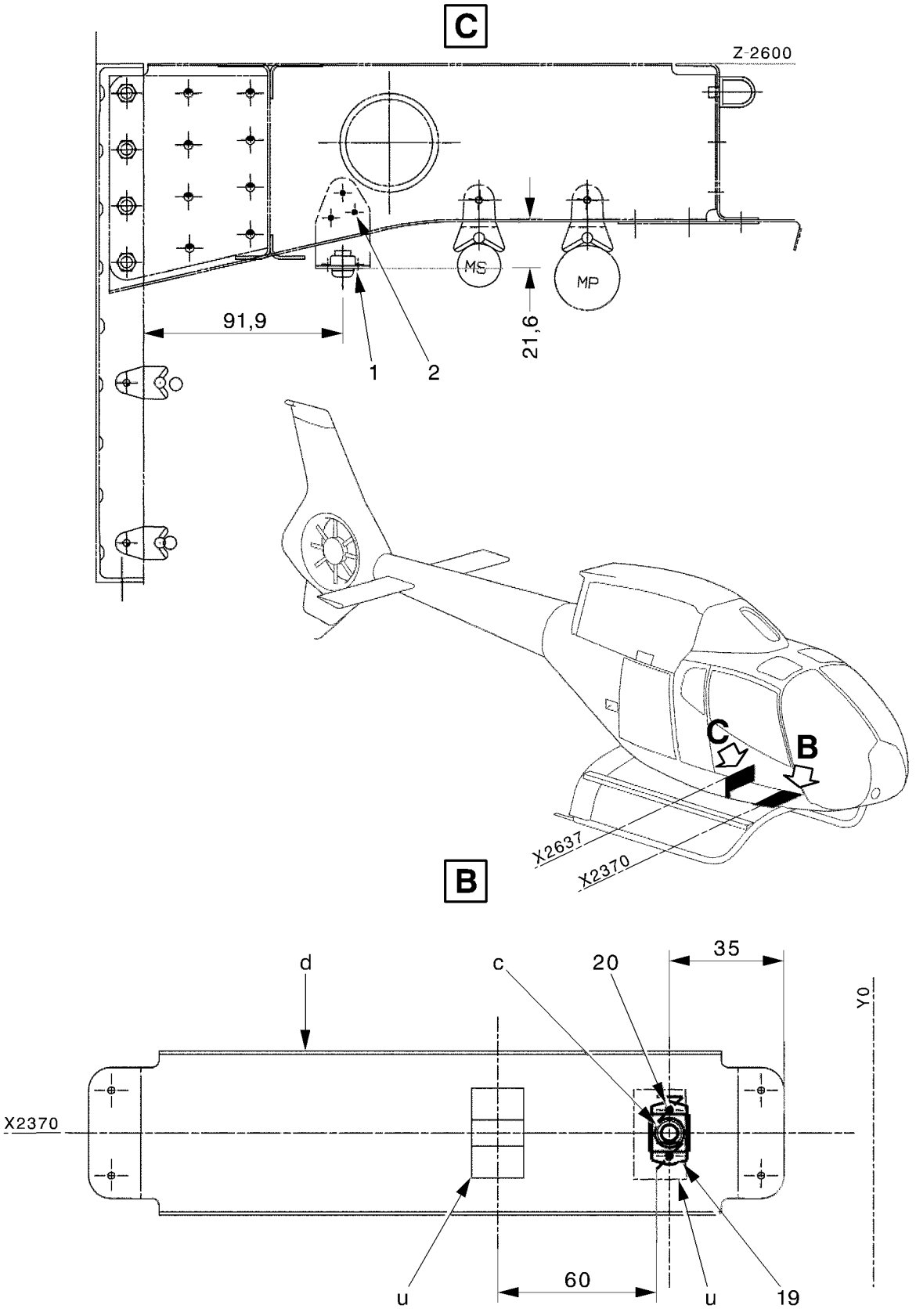
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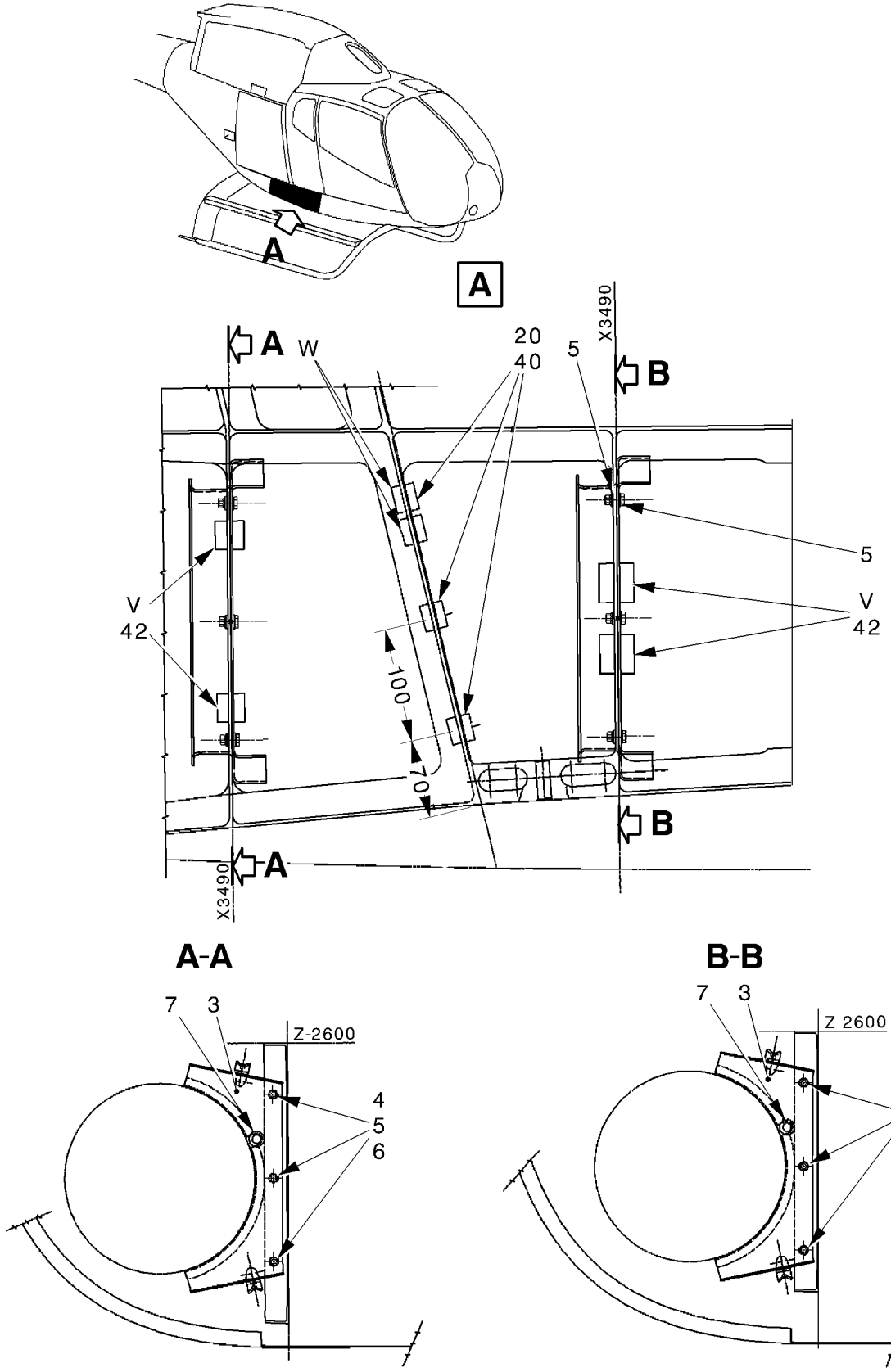
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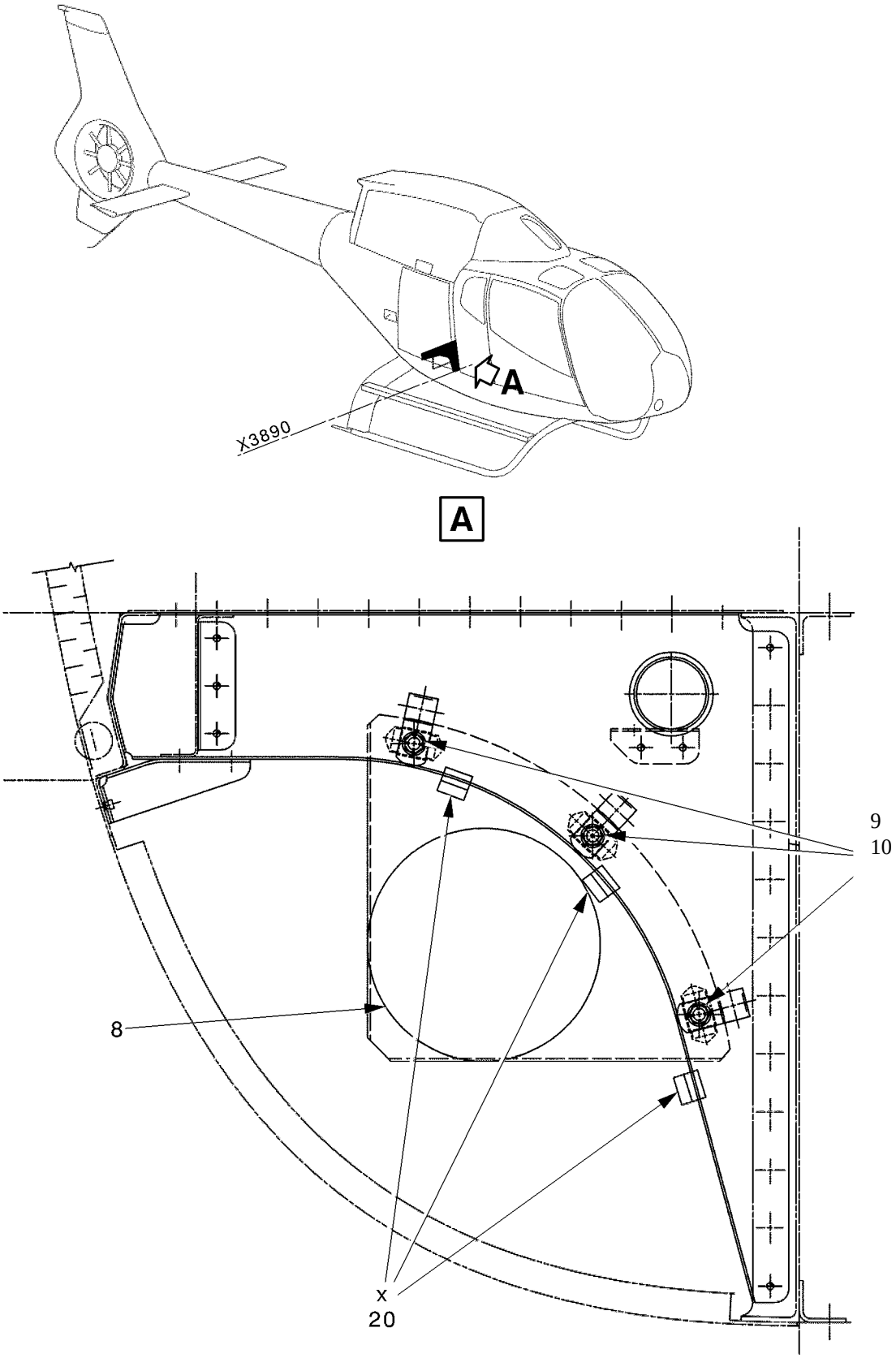
Figure 4



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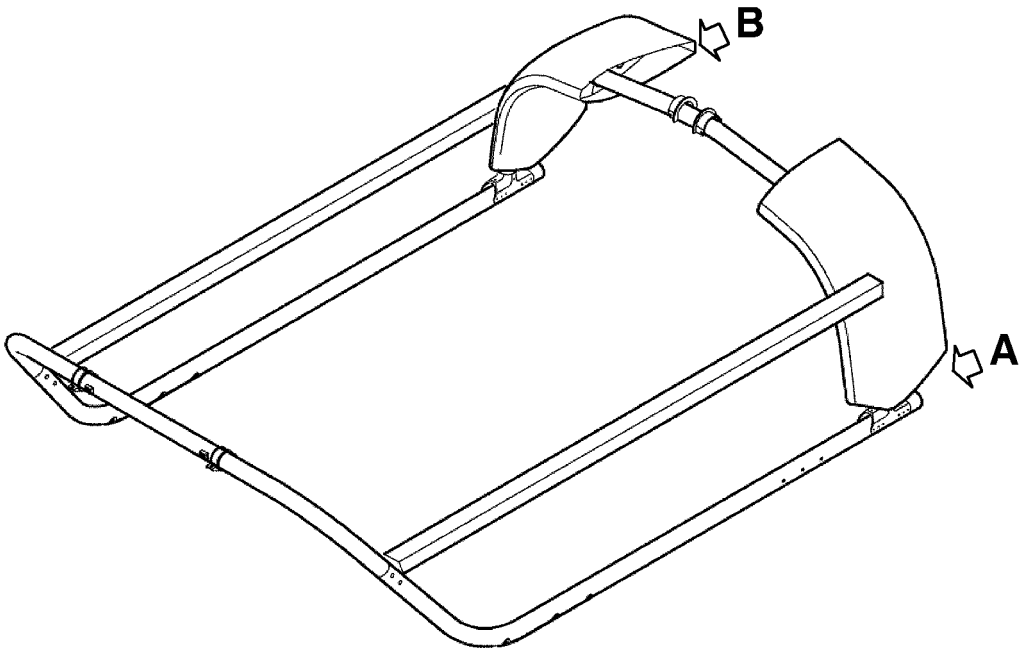

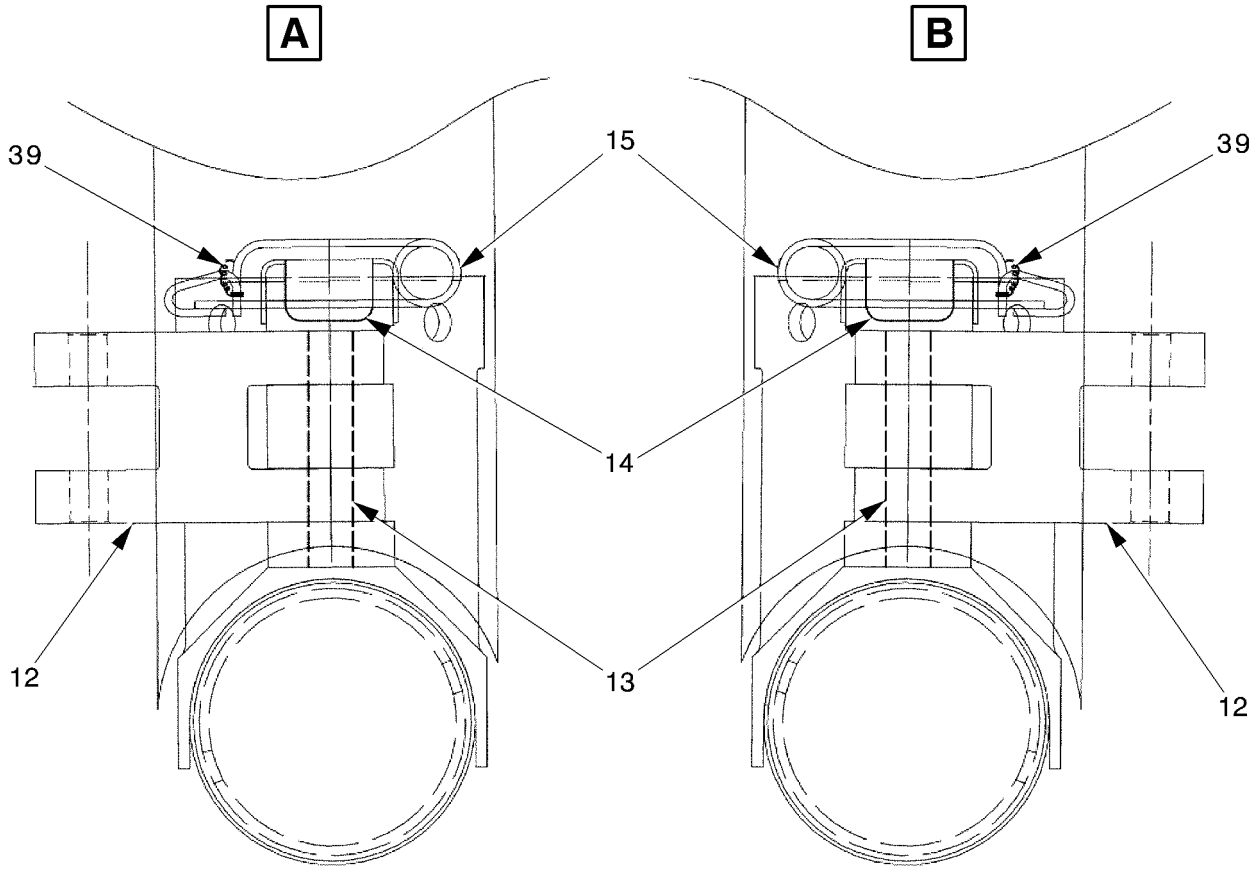

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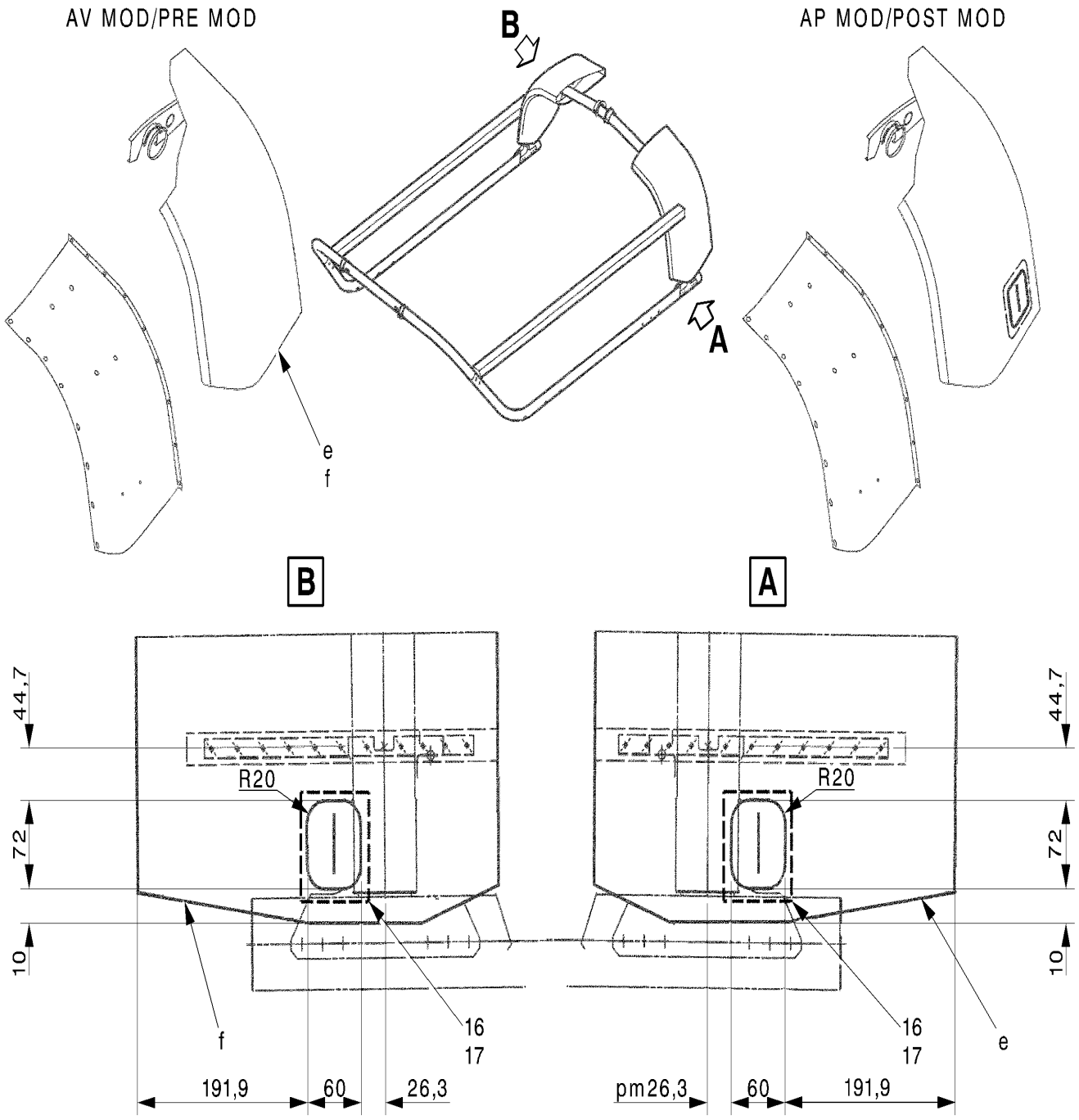
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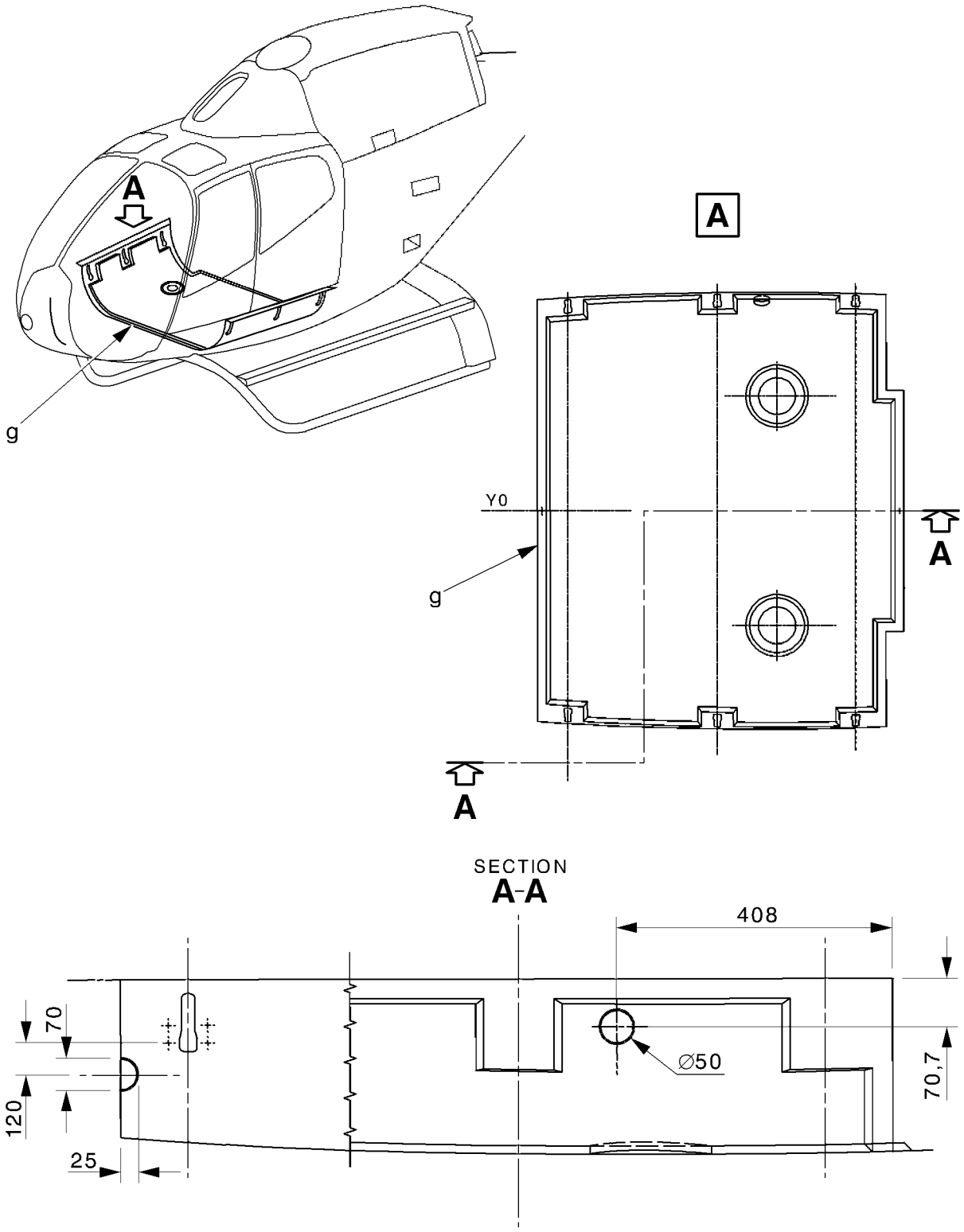
Figure 7



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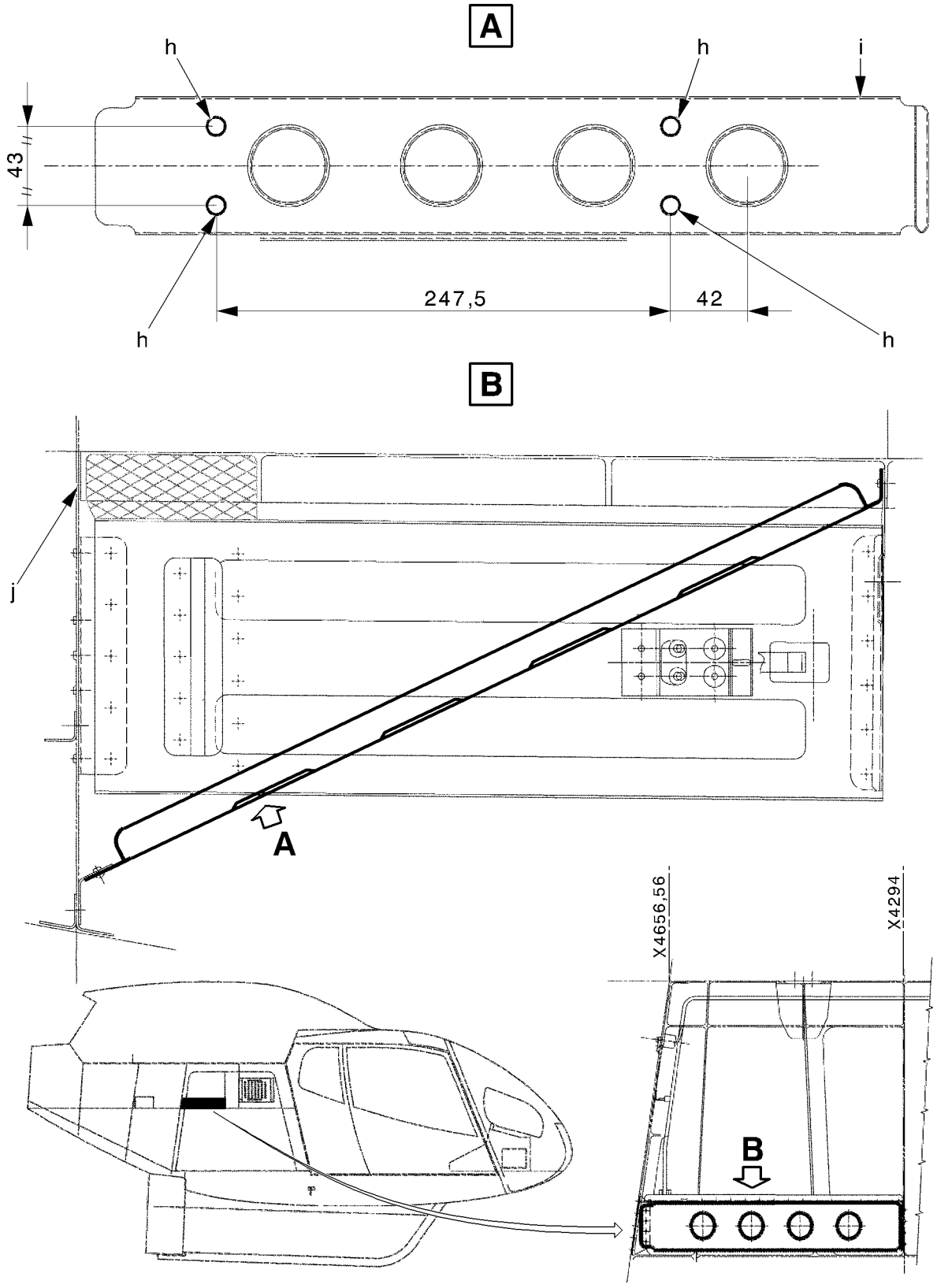

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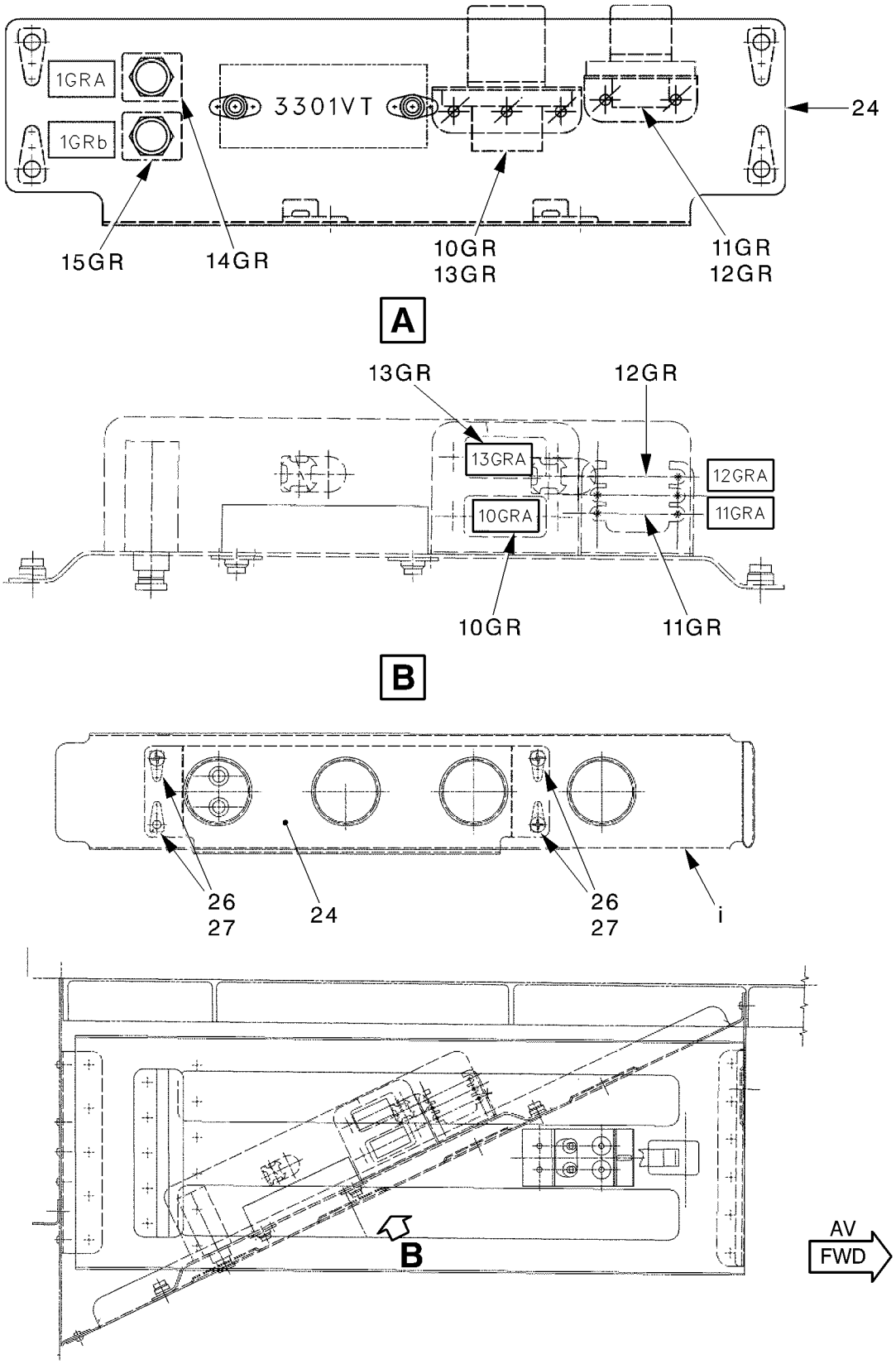
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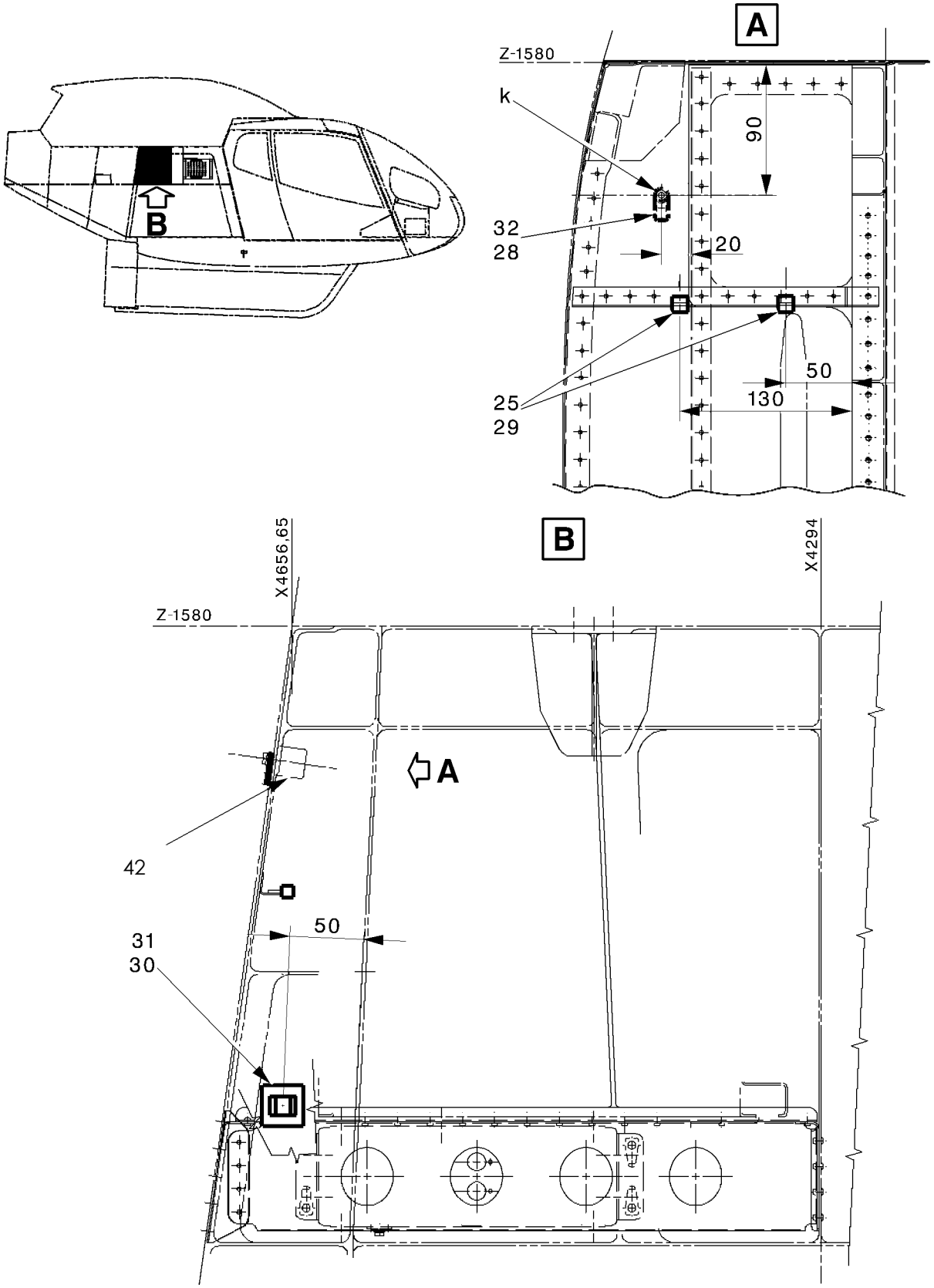

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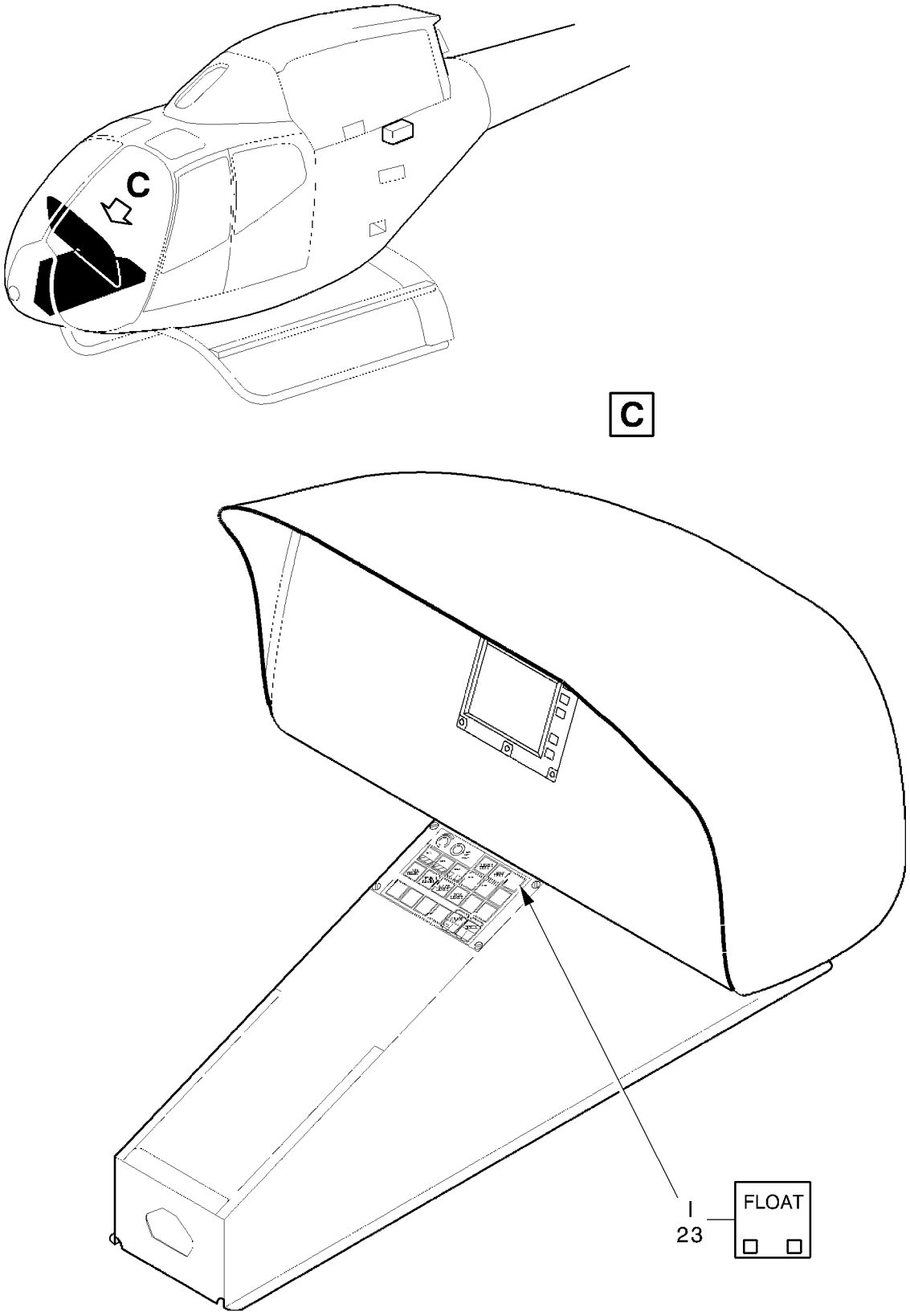

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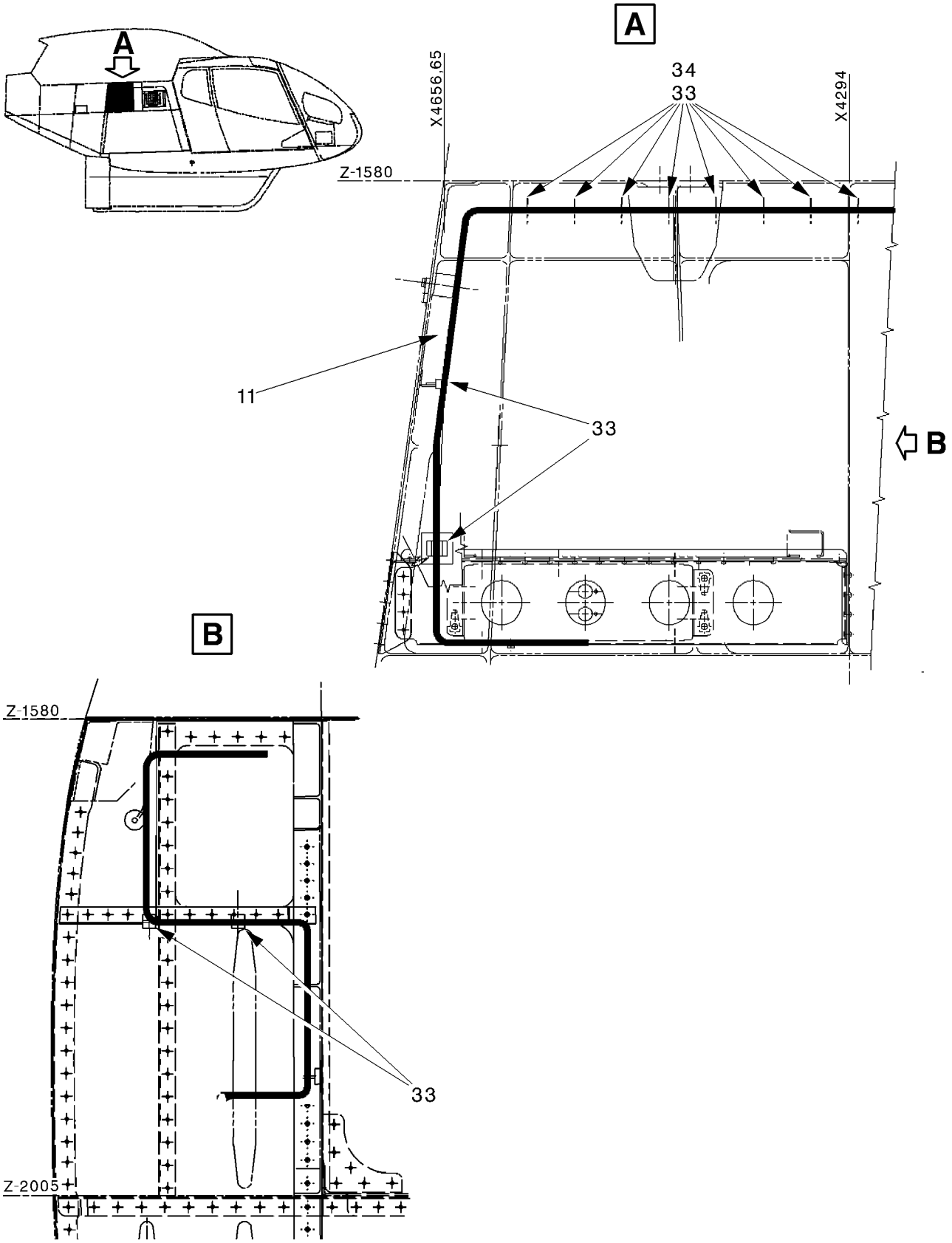

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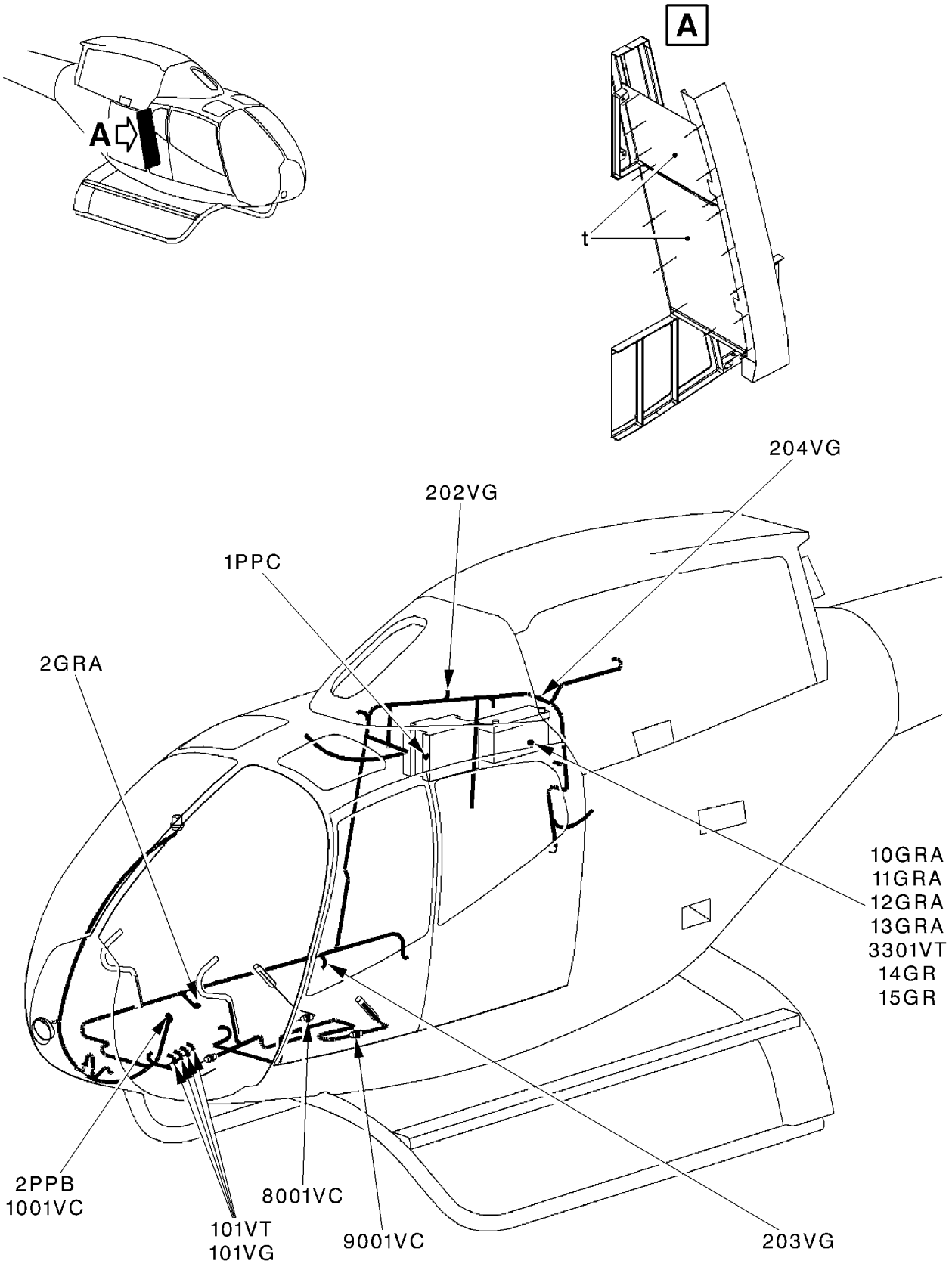

Figure 14

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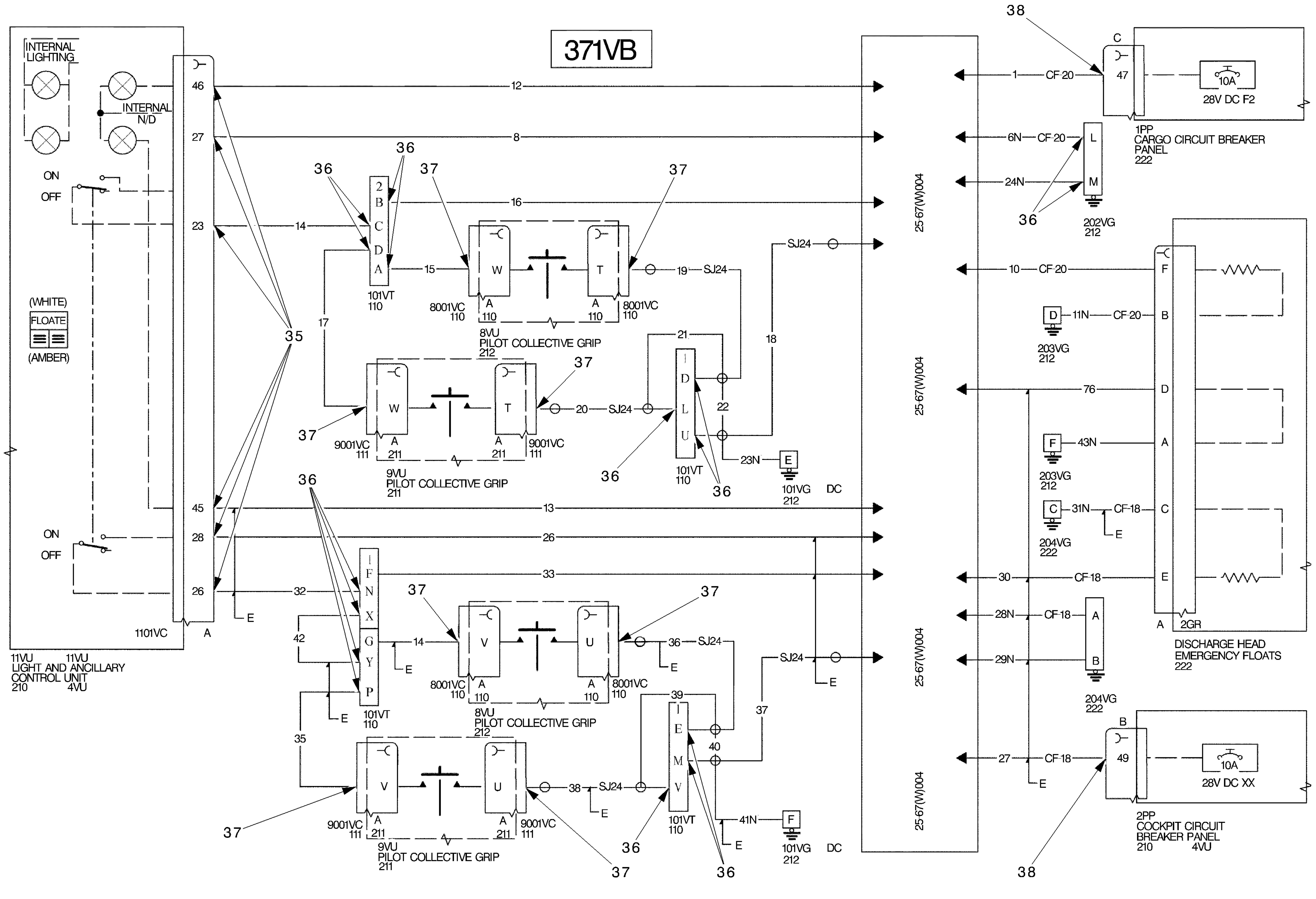
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101VT 110
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Figure 15

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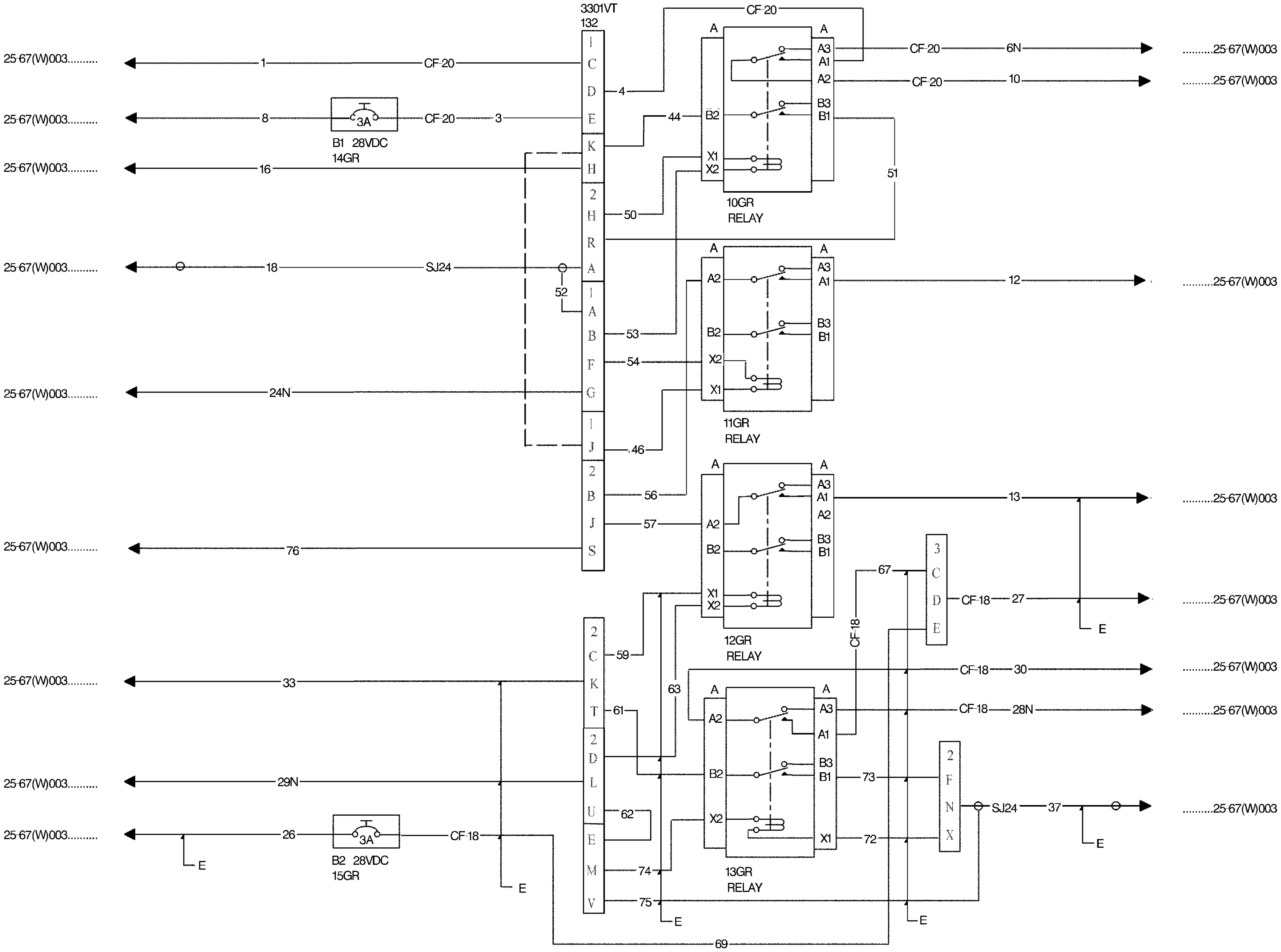
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Figure 16

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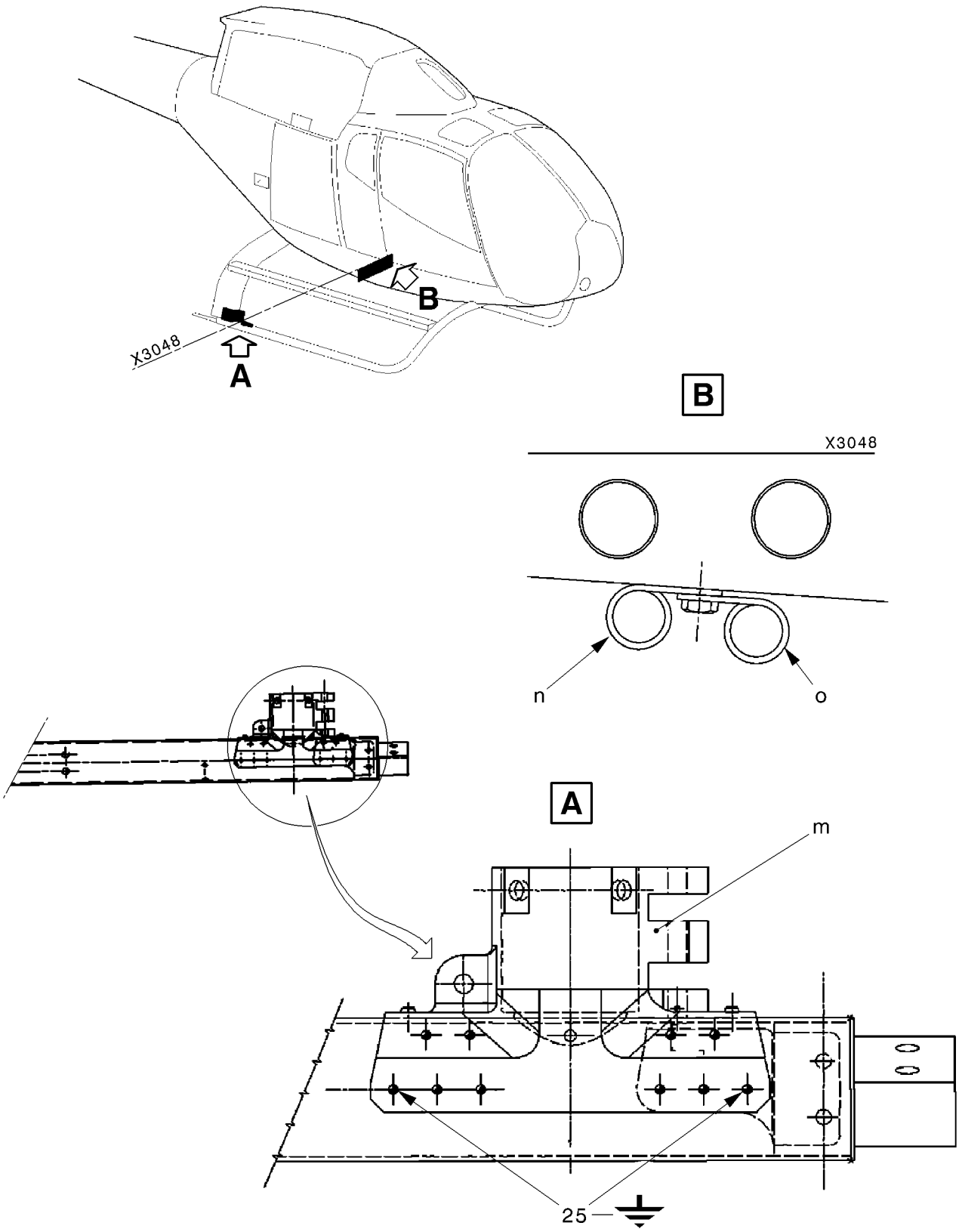

Figure 17

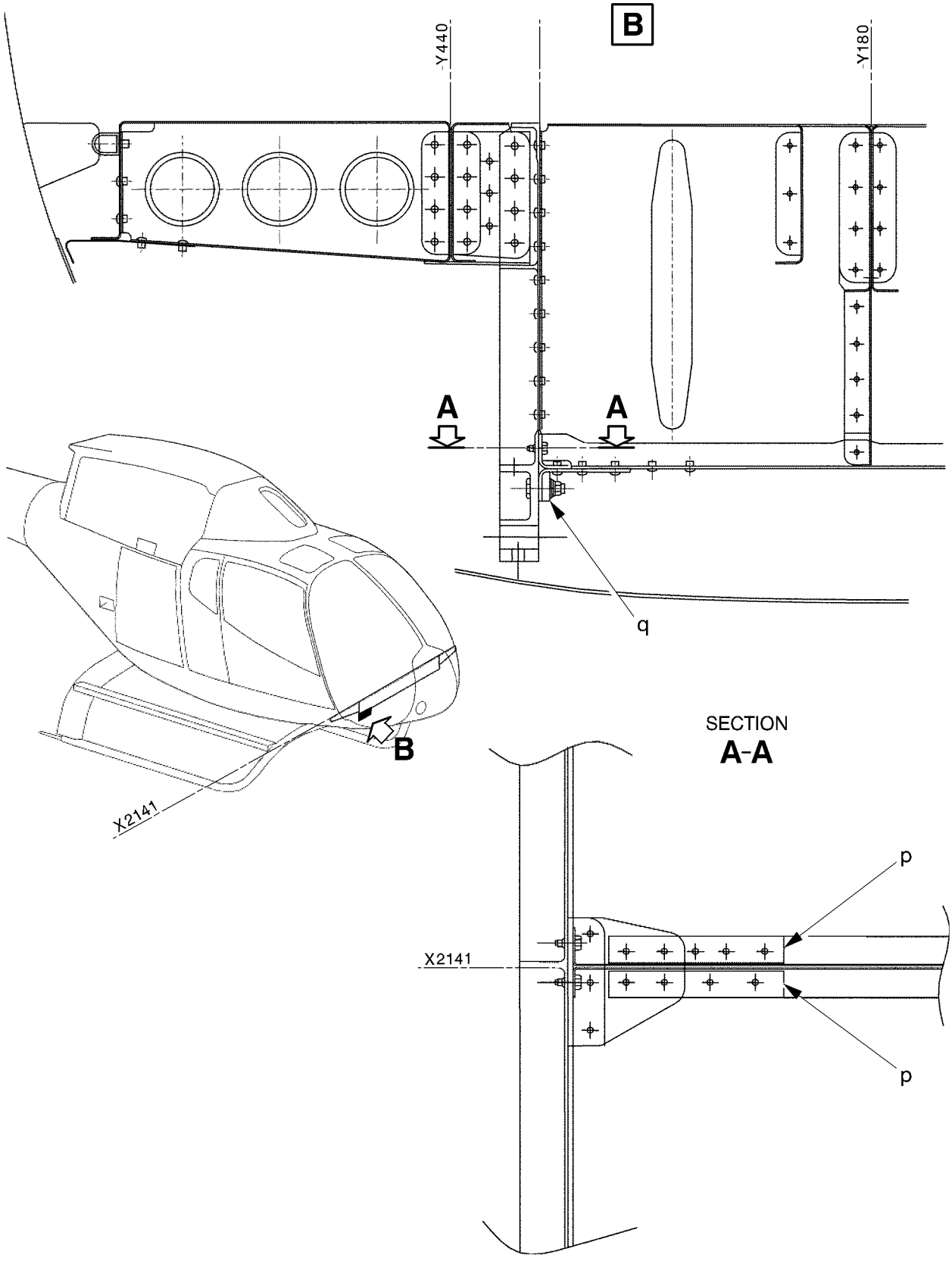

Figure 18

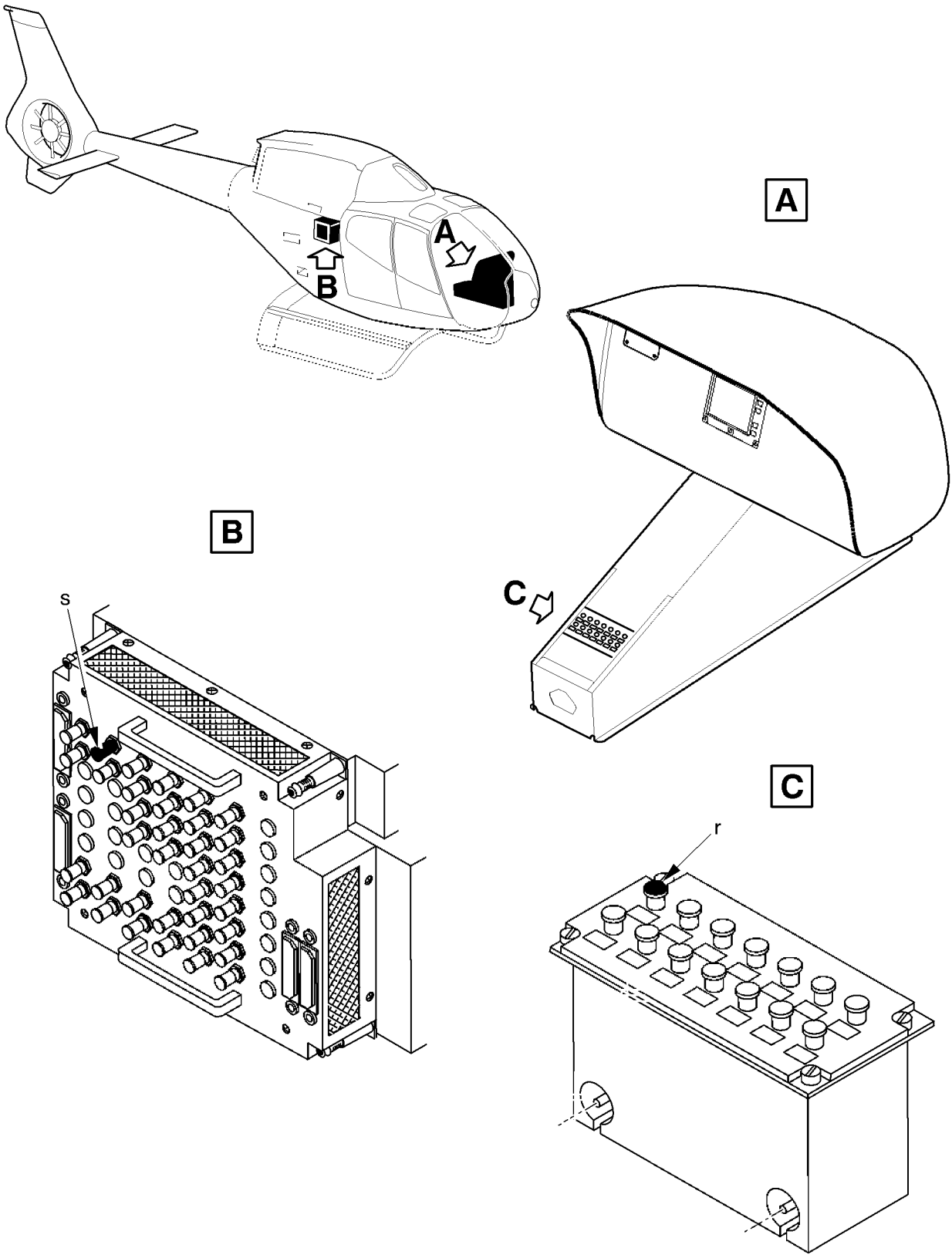

Figure 19

REAR ATTACHMENT CLAMP

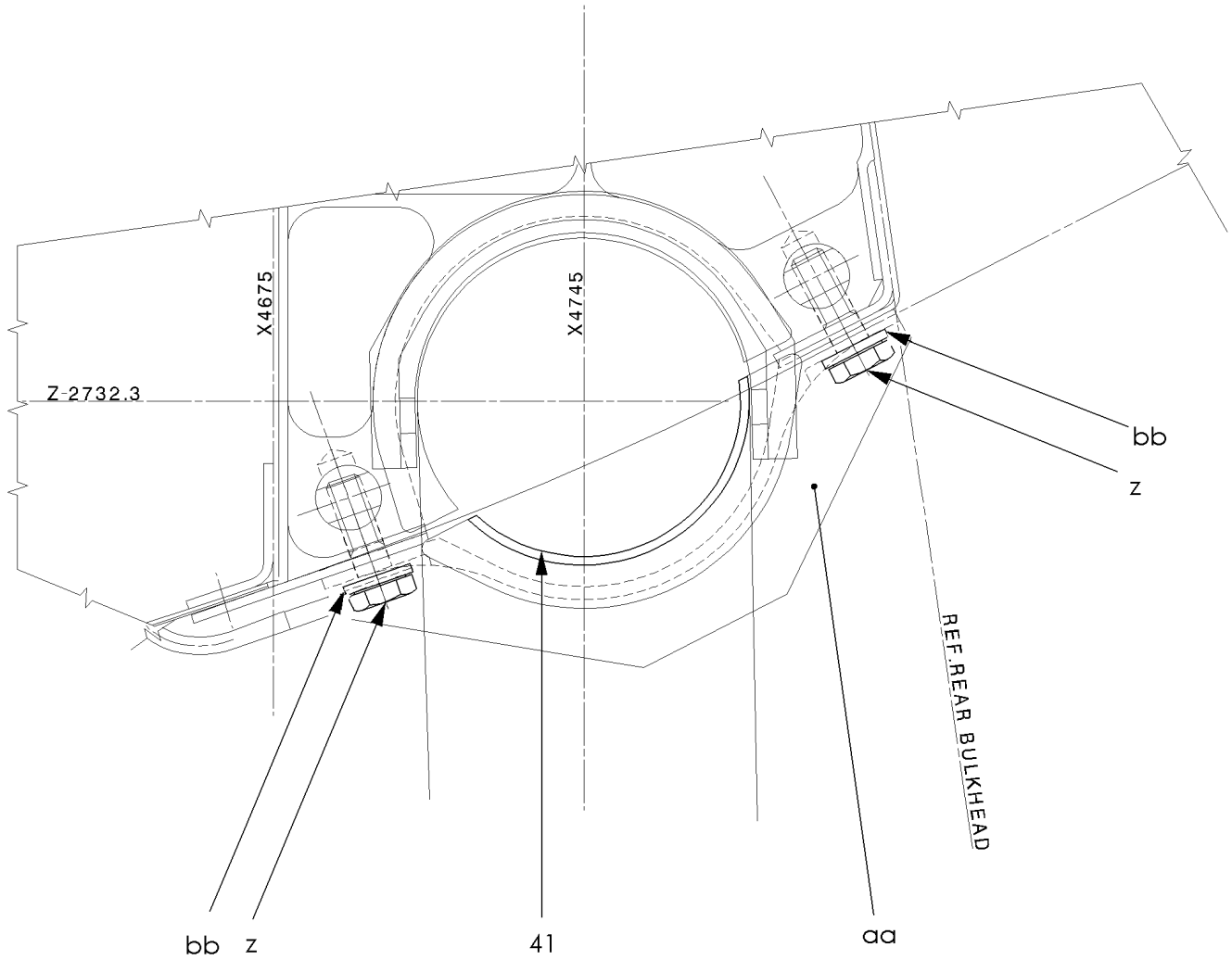

Figure 20