

Civil versions: B4, T2

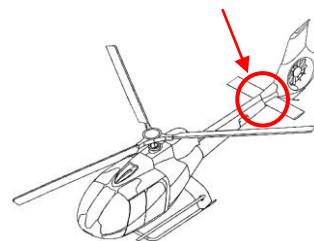
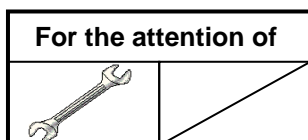
SERVICE BULLETIN

CORRECTIVE MEASURE

FUSELAGE - TAIL BOOM

Patches on the EC130 Fenestron / tail cone link

Corresponds to modification 074775



Revision No.	Date of issue
Revision 0	2017-11-24
Revision 1	2018-03-21
Revision 2	2018-07-25
Revision 3	2019-03-04
Revision 4	2020-04-28

Summary:

The purpose of this Service Bulletin is to reinforce the tail cone link and the Fenestron by installing 4 carbon patches (LH, RH, upper and lower sides).

Reason for last revision:

The purpose of revision 4 of this Service Bulletin is to process the obsolescence of the P15 touch-up pen, to modify the helicopter downtime and to enable crack detection by Eddy current.

Compliance:

Airbus Helicopters recommends compliance with this Service Bulletin.


[SB EC130 53-036](#)



COMPLIANCE WITH THIS SERVICE BULLETIN MUST BE ENSURED BY AIRBUS HELICOPTERS MARGNANE TECHNICIANS OR PERSONNEL WHO HAVE BEEN SPECIFICALLY TRAINED AND QUALIFIED BY AIRBUS HELICOPTERS.

1. PLANNING INFORMATION

1.A. EFFECTIVITY

1.A.1. Helicopters/installed equipment or parts

EC130 B4 and T2 version helicopters:

- on which modification 074609 (Tail boom EC130 B4 junction frame retrofit) was not embodied,
- on which the skin in the Fenestron/tail boom junction area was not repaired,
- on which modification 074775 (Reinforcement at EC130 tail boom/ Fenestron junction frame) was not embodied.



PRE MOD 074775



POST MOD 074775

NOTE

Refer to the aircraft individual inspection record (MOD record) and the aircraft log book to identify the actual configuration of the helicopter.

1.A.2. Non-installed equipment or parts

- Tail boom assembly P/N 350A23-0060-XXXX for B4 version helicopters.
- Tail boom assembly P/N 350A23-0030-XXXX for T2 version helicopters.
- Fairing P/N 350A23-4239-0102.
- Electrical bonding plate 350A23-4010-20.
- RH splice P/N 350A23-4215-20 or 350A23-4237-21.
- LH splice P/N 350A23-4237-20 or 350A23-4215-21.
- Angle P/N 350A23-4235-20.
- Angle P/N 350A23-4232-20.

1.B. ASSOCIATED REQUIREMENTS

Not applicable.

1.C. REASON

Revision 0:

Cracks have been detected in the junction frame located between the tail cone and the Fenestron, more specifically in the lower RH part of the frame. These cracks are likely to cause significant damage to the frame.

The solution consists in reinforcing the tail cone junction and the Fenestron by installing 4 carbon patches (LH, RH, upper and lower sides).

These patches will replace the two lateral splices of the tail cone which join the skins.

Revision 1:

The purpose of Revision 1 of this Service Bulletin is to extend the embodiment of the modification to all EC130 T2 and B4 version helicopters.

Revision 1 does not affect compliance with Revision 0 of this Service Bulletin.

Compliance with this Service Bulletin cancels the instructions of Emergency ALERT SERVICE BULLETIN No. 05A017 and Emergency ALERT SERVICE BULLETIN No. 53A019.

Revision 2:

The purpose of Revision 2 of this Service Bulletin is to improve the patch installation process.

Revision 2 does not affect compliance with Revision 1 of this Service Bulletin.

Revision 3:

The purpose of revision 3 of this Service Bulletin is to improve the patch installation procedure and to modify a rivet part number in the kit.

Revision 3 does not affect compliance with the previous revisions of this Service Bulletin.

Revision 4:

The purpose of revision 4 of this Service Bulletin is to process the obsolescence of the P15 touch-up pen, to modify the helicopter downtime and to enable crack detection by Eddy current.

Revision 4 does not affect compliance with the previous revisions of this Service Bulletin.

1.D. DESCRIPTION

This Service Bulletin consists in:

- checking by dye-penetrant or Eddy current that there are no cracks in the Fenestron/tail boom junction frame and in the skin before patch installation,
- removing the existing reinforcements,
- modifying the skin cut-out radius of the stabilizer opening,
- installing the reinforcement patches,
- modifying the electrical bonding path,
- modifying the fairing of the transmission shaft.

1.E. COMPLIANCE

1.E.1. Compliance at H/C manufacturer level

Not applicable.

1.E.2. Compliance in service

Helicopters/installed equipment or parts:

Airbus Helicopters recommends compliance with this Service Bulletin.

The preliminary steps (paragraph [3.B.1.](#)) and final steps (paragraph [3.B.3.](#)) must be performed on the helicopter by the operator.

The crack detection work described in paragraph [3.B.2.a.](#) must be performed by an airframe specialist qualified by Airbus Helicopters or by staff specializing in non-destructive testing.

The work steps for embodiment of modification 074775 listed in paragraph [3.B.2.](#), except paragraph [3.B.2.a.](#), must be performed by an airframe specialist specifically qualified for the modification by Airbus Helicopters.

Non-installed equipment or parts:

The build-up of stocks for compliance with this Service Bulletin is left to the operator's initiative.

1.F. APPROVAL

Approval of modifications:

The information or instructions relate to modification 074775, which was approved on November 10, 2017 by EASA for civil version helicopters subject to an Airworthiness Certificate.

Approval of this document:

The technical information contained in this Service Bulletin No. 53-036 Revision 0 was approved on November 24, 2017 under the authority of EASA Design Organization Approval No. 21J.700 for civil version helicopters subject to an Airworthiness Certificate.

The technical information contained in this Service Bulletin No. 53-036 Revision 1 was approved on March 12, 2018 under the authority of EASA Design Organization Approval No. 21J.700 for civil version helicopters subject to an Airworthiness Certificate.



The technical information contained in this Service Bulletin No. 53-036 Revision 2 was approved on July 24, 2018 under the authority of EASA Design Organization Approval No. 21J.700 for civil version helicopters subject to an Airworthiness Certificate.

The technical information contained in this Service Bulletin No. 53-036 Revision 3 was approved on February 28, 2019 under the authority of EASA Design Organization Approval 21J.700 for civil version helicopters subject to an Airworthiness Certificate.

The technical information contained in this Service Bulletin Revision 4 was approved on April 27, 2020 under the authority of EASA Design Organization Approval 21J.700 for civil version helicopters subject to an Airworthiness Certificate.

1.G. MANPOWER



For compliance with this Service Bulletin, Airbus Helicopters recommends the following staff qualifications:



Qualification: 1 Airframe Technician.

The Estimated Man-hours are indicated for reference purposes only and based on a standard helicopter configuration.

Time for the operations: approximately 90 hours for an Airframe Technician.



Estimated helicopter downtime is indicated for reference purposes only, based on a standard helicopter configuration.

Helicopter downtime is estimated at approximately 12 days (painting time excluded).

1.H. WEIGHT AND BALANCE

After embodiment of modification 074775:

Helicopters PRE MOD 073880
Weight: 1.52 kg.
Longitudinal moment: 13.21 m.kg.

Helicopters POST MOD 073880
Weight: 1.3 kg.
Longitudinal moment: 11.30 m.kg.

After work completion, record new weights and moments in your dedicated document.

1.I. POWER CONSUMPTION

Not applicable.

1.J. SOFTWARE UPGRADES/UPDATES

Not applicable.

1.K. REFERENCES

The following documents are necessary for compliance with this Service Bulletin:

- AMM: 07-00-00, 3-1: General Safety Instructions - Lifting and Shoring - Lifting and Shoring
AMM: 24-00-00, 3-1: General Safety Instructions - Electrical Power Supply System - Electrical power
AMM: 55-11-00, 4-1: Removal / Installation - Horizontal Stabilizer - Horizontal Stabilizer
AMM: 55-11-00, 4-1A: Removal / Installation - Horizontal Stabilizer PRE MOD 073840 - Horizontal Stabilizer
AMM: 55-11-00, 4-1B: Removal / Installation - Horizontal Stabilizer POST MOD 073840 - Horizontal Stabilizer
AMM: 60-00-00, 3-1: General Safety Instructions - Mechanical Assemblies - General - Mechanics Systems
AMM: 64-21-00, 4-1: Removal - Tail Rotor Hub - Tail Rotor Hub
AMM: 64-21-00, 4-2: Installation - Tail Rotor Hub - Tail Rotor Hub
AMM: 65-11-00, 4-5: Removal - Rear Shaft Section - Tail Rotor Drive Shaft
AMM: 65-11-00, 4-6: Installation - Rear Shaft Section - Tail Rotor Drive Shaft
AMM: 65-21-00, 4-1: Removal - TGB - Tail Gearbox
AMM: 65-21-00, 4-2: Installation - TGB - Tail Gearbox
- MTC: 20-02-04-401: Installation of rivets - pitch and edge distance - Riveting
MTC: 20-02-04-402: Installation of rivets - retrofitting and repair - Riveting
MTC: 20-02-04-601: General riveting acceptance requirements - Riveting
MTC: 20-02-05-401: Joining by riveting - Joining
MTC: 20-02-07-101: Electrical bonding: General - Electrical bonding
MTC: 20-02-07-401: Bonding procedure - Electrical bonding
MTC: 20-02-07-408: Use of electrical bonding tape "Conductive Hi-Tak Tape" - Electrical bonding
MTC: 20-02-09-101: Crack detection through dye-penetrant inspection: General - Crack detection
MTC: 20-02-09-601: Checking structural parts / components using the dye penetrant procedure - Crack detection
- MTC: 20-03-01-101: General repair instructions: General - General repair instructions
MTC: 20-03-01-102: Unriveting principle - General repair instructions
MTC: 20-03-02-101: Replacement of rivets: General - General rivet replacement principles
MTC: 20-03-02-405: Installation of blind bolts ASN-A 0026 - ASN-A 0027 and 0363 - General rivet replacement principles
MTC: 20-03-06-406: Structural repairs vacuum bag techniques - Structural repairs
MTC: 20-03-07-101: Repair and machining of composite material: General - Repair and machining of composite material
MTC: 20-03-07-402: Machining of carbon-epoxy, carbon-aluminum and carbon-titanium composite materials - Repair and machining of composite
- MTC: 20-04-01-102: Use of cleaning products on individual parts and on aircraft - Cleaning
MTC: 20-04-02-401: Chemical stripping of organic surface finishes - Stripping
MTC: 20-04-04-401: Preparation of surfaces before painting - Surface treatment before painting
MTC: 20-04-04-403: Touch-up of protective treatment with Alodine 1200 - Surface treatment before painting
MTC: 20-04-05-101: General information about painting means and paint touch-ups - Paint and primer application procedure
MTC: 20-04-05-402: Application of Epoxy primer P05-P20 - Paint and primer application procedure
MTC: 20-04-05-420: Use of Surfacer CA 8620 - Paint and primer application procedure
MTC: 20-04-05-601: Checks before and after paint application - Paint and primer application procedure
MTC: 20-05-01-102: General methods for applying sealing compounds - General sealing procedures
MTC: 20-05-01-222: Application of PR 1771 B2 sealant - General sealing procedures
MTC: 20-06-01-101: General rules for bonding with adhesives - Bonding with adhesives
MTC: 20-06-01-102: Bonding method - Bonding with adhesives
MTC: 20-06-01-411: Application of HYSOL EA 9396 cement - Bonding with adhesives

MTC: 20-06-01-418: Bonding with adhesive use of EA 9395 adhesive - Bonding with adhesives
MTC: 20-06-01-417: Application of CHO-BOND 584 conductive adhesive - Bonding with adhesives
MTC: 20-07-01-201: Handling of helicopters in a hangar and in a prepared area - Handling
MTC: 20-07-02-201: Helicopter parked in a repair shop - Safety instructions
MTC: 20-07-03-408: Appearance checks on an aircraft after an inspection or repair - Technical instructions
MTC: 20-08-05-103: Monitoring of parts in operation - marking - service life customization - General rules applicable to aircraft
MTC: 20-90-03-108: Detection by Eddy currents - Corrosion detection

1.L. OTHER AFFECTED PUBLICATIONS

The modification has been integrated into the following manuals:



- ALS (04-20-00, ATA 55),
- SIM.

These documents are issued as per subscriptions.

Revision of the Illustrated Parts Catalog (IPC) must be ordered by the customer.

1.M. PART INTERCHANGEABILITY OR MIXABILITY

Not applicable.

2. EQUIPMENT OR PARTS INFORMATION

2.A. EQUIPMENT OR PARTS: PRICE - AVAILABILITY - PROCUREMENT

2.A.1. Price - Availability - Procurement

Airbus Helicopters will provide the operations and/or components free of charge until 31/12/2022.

Delivery times will be communicated on operator's request by the Sales and Customer Relations Department.

Order the required quantities from the Sales and Customer Relations Department of the Airbus Helicopters network and **complete the form given in [Appendix 4.G.](#)**

Airbus Helicopters
 Etablissement de Marignane
 Direction Ventes et Relations Client
 13725 MARGNANE CEDEX
 FRANCE

NOTE 1

On the purchase order, please specify the mode of transport, the destination and the serial numbers of the helicopters to be modified.

2.A.2. Price

Paragraph	Kits / Consumables / Tools	Price information
2.C.1.	Kit: 350A07-4775-0072	1 free of charge per aircraft
2.C.2.	Equipment or parts to be ordered separately	Procurement incumbent on the Airbus Helicopters Technician
2.C.3.	Rivet kit	Procurement incumbent on the Airbus Helicopters Technician - See NOTE 3 of chapter 2.C.3.
2.C.4.	Consumables	Charged
2.C.5.	Tool kit: 350A07-4775-0051	1 free of charge per aircraft
2.C.6.	Special tools	Procurement incumbent on the Airbus Helicopters Technician

2.B. LOGISTIC INFORMATION

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

2.C. EQUIPMENT OR PARTS REQUIRED PER HELICOPTER/COMPONENT

 2.C.1. Kits to be ordered for one helicopter or one assembly:

Designation	Qty	New P/N	Item	Former P/N →	Instruction
<u>Fenestron/tail boom link reinforcement kit</u>		<u>350A07-4775-0072</u>			
RH patch	1	350A23-0781-0051	(1)		
Foil (patch/Fenestron splice)	1	350A23-0775-20	(2)		
Skin/patch splice	1	350A23-0778-2051	(3)		
Skin/patch splice	1	350A23-0778-2151	(4)		
Skin/patch splice	1	350A23-0778-2251	(5)		
Rivet (100° countersunk head)	10	ASNA2049DCJ3206	(6)		
LH patch	1	350A23-0782-0051	(34)		
Upper patch	1	350A23-0784-0051	(35)		
Lower patch	1	350A23-0783-0051	(36)		
Patch conductive seal	1	350A23-0777-2001	(42)		
Skin conductive seal	1	350A23-0777-2101	(43)		
LH bracket assembly	1	350A23-0776-0051	(45)	350A23-4232-20	Discard
RH bracket assembly	1	350A23-0776-0151	(46)	350A23-4235-20	Discard
Rivet (flat round-head)	10	ECS2151DXJ3206	(47)		

 2.C.2. Equipment or parts to be ordered separately

Designation	Qty	New P/N	Item	Former P/N →	Instruction
Indicating label	2	ECS2033.62	(48)		Bond

NOTE 2

The procurement of indicating labels is incumbent on the Airbus Helicopters Technician.

2.C.3. Equipment or parts supplied by the Airbus Helicopters Technician

Designation	Qty	New P/N	Item	Former P/N →	Instruction
<u>Patch rivet case</u>		<u>350A74-775R-IV71</u>			
Blind rivet	167	ASNA0363T0505	(8)		
Blind rivet	133	ASNA0363T0606	(9)		
Blind rivet	134	ASNA0363T0607	(10)		
Blind rivet	43	ASNA0363T0605	(11)		
Blind rivet	37	ASNA0363T0503	(12)		
Blind rivet	33	ASNA0363T0404	(13)		
Blind rivet	31	ASNA0363T0403	(14)		
Blind rivet	33	ASNA0363T0405	(15)		
Blind rivet	4	ASNA0363T0402	(16)		
Blind rivet	41	ASNA0363T0504	(17)		
Blind rivet	4	ASNA0363T0604	(18)		
Blind rivet	33	ASNA0363T0406	(19)		
Blind rivet	33	ASNA0363T0407	(20)		
Blind rivet	167	ASNA0363T0506	(21)		
Blind rivet	167	ASNA0363T0507	(22)		
Blind rivet	126	ASNA0363T0508	(23)		
Blind rivet	134	ASNA0363T0608	(24)		
Blind rivet	95	ASNA0363T0609	(25)		
Blind rivet	6	ASNA0363T0804	(26)		
Blind rivet	6	ASNA0363T0805	(27)		
Blind rivet	78	ASNA0363T0806	(28)		

Designation	Qty	New P/N	Item	Former P/N →	Instruction
<u>Patch rivet case (cont.)</u>		<u>350A74-775R-IV71</u>			
Blind rivet	78	ASNA0363T0807	(29)		
Blind rivet	78	ASNA0363T0808	(30)		
Blind rivet	78	ASNA0363T0809	(31)		

NOTE 3

The procurement of case P/N 350A74-775R-IV71 is incumbent on the Airbus Helicopters Technician. Each case will be complete upon delivery for first use. It is the Technician's responsibility to refill it before any further compliance with the Service Bulletin.

2.C.4. Consumables to be ordered separately

As per Work Cards and Tasks indicated in this Service Bulletin and the list below.

2.C.4.a. Consumables to be ordered from the company Airbus Helicopters

Airbus Helicopters
 Etablissement de Marignane
 Direction Ventes et Relations Client
 13725 MARGNANE CEDEX
 FRANCE

Designation	Qty	Consumables Reference	CM	Rep
Modeling clay	1 kg	PATE A MODELER /ECA 3177	CM 7036	(32)
Metal primer	1 kit (500ml)	ECS2209.15	/	(49)

Designation	Qty	Consumables Reference	CM	Rep
<u>Kit of polymerization cloth</u>	<u>1</u>	<u>350A08-4773-0099</u>		<u>For ref. (60) item for procedure</u>
Tear-ply fabric	3m ²	9760-20-100 (1305388)		For ref. (60a) item for procedure - SEE NOTE 4
Nylon Film (vacuum bag)	3m ²	FILMVACPACK7400 (1284710)		For ref. (60b) item for procedure - SEE NOTE 4
Felt (Bidim)	3m ²	ECA 3033.20 WL 5200 P3 (1762511)		For ref. (60c) item for procedure - SEE NOTE 4
CE mold removing film	3m ²	AIRWEAVEN10EP4,78 (1354416)		For ref. (60d) item for procedure - SEE NOTE 4

NOTE 4

The components items 60a, 60b, 60c and 60d are delivered through kit 350A08-4773-0099.

2.C.4.b. Consumables to be ordered from BDSI

BDSI

Website: www.boeingdistribution.com

Telephone: +1.305.925.2600

Fax: +1.305.507.7191

AOG: +1.305.471.8888

AOG e-mail: AOGdesk@Boeingdistribution.com

Designation	Qty	Consumable P/N	CM	Item
Alodine sticker	1	ECS2338.10 or BONDERITE-M-CR1132AER0-40ML	CM 0316	(7)
Teflon tape	20 m	TEFLEASE MG2 50,8MM\PTFE or 108004ITL		(33)
Adhesive (liquid shim)	2 kg	EA 9395A/B or 106391ITL	CM 6041	(37)
Glass fiber fabric (for epoxy impregnation)	2 m ²	104030ITL	CM 7020	(38)
Adhesive	1 kg	104567ITL	CM 0616	(39)
Mould-release wax	500 g	180814ITL	CM 7010	(40)
Sealant (PR)	4	Naftoseal MC -780 B -1 or 215591ITL	CM 6068	(41)

Designation	Qty	Consumable P/N	CM	Item
Conductive adhesive (CHO-BOND)	20 g	118176ITL	CM 6244	(44)
Developer (ARDROX)	1	ARDROX NQ1 or 227157ITL		(50)
Red penetrant (ARDROX) (1 aerosol of 400ml)	1	907PB or 227176ITL		(51)
or				
Fluorescent penetrant (ARDROX) (1 aerosol of 400ml)	1	9VF2 or 105444ITL		(59)
Solvent (ARDROX)	1	9PR5 or 227152ITL		(52)
Sealing tape (GS seal)	15 m	106578ITL		(55)
C26	0,5 L	168243ITL	CM 4932	(57)

NOTE 5

It is possible to order the reference glass fiber fabric (38) alone or as part of the reference glass fiber fabric case (60).

2.C.5. Tool kit

As per Work Cards and Tasks indicated in this Service Bulletin and the list below:

Designation	Qty	Tool P/N or equivalent	Item	Instructions
<u>EC130 patch retrofit tool kit</u>		<u>350A07-4775-0051</u>		
Carbon drill Ø 2.5	5	A5720-02.5	(zz)	Patch jig-boring + predrilling
Carbon drill Ø 3.1	20	A5720-03.1	(yy)	Patch drilling for Ø 3.2 rivet installation
Carbon drill Ø 4	10	A5720-04	(xx)	Patch drilling for Ø 4.1 rivet installation
Carbon drill Ø 4.8	10	A5720-04.8	(ww)	Patch drilling for Ø 5 rivet installation
Reamer drill Ø 3.3	10	A5830-03.3	(vv)	Bore holes for Ø 3.2 rivet installation
Reamer drill Ø 4.2	10	A5830-04.2	(uu)	Bore holes for Ø 4.1 rivet installation
Reamer drill Ø 5.1	20	A5830-05.1	(tt)	Bore holes for Ø 5 rivet installation
Reamer drill Ø 6.6	5	A5830-06.6	(ss)	Bore holes for Ø 6.58 rivet installation

Designation	Qty	Tool P/N or equivalent	Item	Instructions
<u>EC130 patch retrofit tool kit (cont.)</u>		<u>350A07-4775-0051</u>		
Carbon drill Ø 6.5	3	A5720-06.5	(rr)	Patch drilling for Ø 6.58 rivet installation
Cobalt drill Ø 3.1	20	A1240-03.1	(qq)	Ø 3.2 hole drilling + Ø 3.2 rivet removal
Cobalt drill Ø 4	20	A1240-04	(pp)	Ø 4.1 hole drilling + Ø 4.1 rivet removal
Cobalt drill Ø 4.8	10	A1240-04.8	(oo)	Ø 5 hole drilling + Ø 5 rivet removal
Cobalt drill Ø 6.5	2	A1240-06.5	(nn)	Ø 6.5 hole drilling
Carbon drill Ø 5.5	5	A5720-05.5	(mm)	Ø 6.5 hole drilling
Carbon drill Ø 6	5	A5720-06	(ll)	Ø 6.5 hole drilling

2.C.6. Special tools

Designation	Qty	Tool P/N or equivalent	Item	Instructions
Set of spring fasteners (Ø 2.5 - Ø 3.2 - Ø 4 - Ø 4.8)	40 (per diameter)	Off the shelf	(kk)	Patch attachment
LH and RH stabilizer cut-out templates	1	350A08-4773-06TG	(bb)	Stabilizer cut-out
Set of drilling bushes (Ø 3.2 - Ø 3.3 - Ø 4.1 - Ø 4.2 - Ø 4.9 - Ø 5.1 - Ø 2.6 - Ø 6.7)	1 (per diameter)	Locally made	(ii)	Patch drilling
Rivet installation tool	1	G84	(hh)	Ø 5 + Ø 6.58 rivet installation
Pulling head	1	H856-6MB	(gg)	Ø 5 rivet installation with G84
Pulling head	1	H84A-8MB	(ff)	Ø 6.58 rivet installation with G84
Rivet installation tool	1	G800	(ee)	Ø 3.2 + Ø 4.1 rivet installation
Pulling head	1	H800	(dd)	Ø 3.2 + 4.1 rivet installation with G800
Anita case	1	Off the shelf	(cc)	Curing
Installation tool	1	G704B-SR	(aa)	Rivet installation
Sandpaper (P80, P120, P240 and P400)	1	Off the shelf	(zzz)	Stabilizer sanding and cut-out and electrical bonding check
Heating mat (500x500)	2	GMIHB050050-1Z-V*	(xxx)	LH and RH patch curing

2.C.6. Special tools (cont.)

Designation	Qty	Tool P/N or equivalent	Item	Instructions
Heating mat (200x400)	2	GMIHB020040-1Z-V*	(yyy)	Upper and lower patch curing
Heating mat (200x200)	1	GMIHB020020-1Z-V*	(www)	Foil curing
Magnifying glass	1	Off the shelf	(mm)	Dye penetrant inspection
Lamp	1	Off the shelf	(nn)	Dye penetrant inspection
MilliOhmmeter	1	Off the shelf	(vvv)	Continuity check

NOTE 6

The procurement of the templates (bb) is the responsibility of the Airbus Helicopters Technician or the Airbus Helicopters Approved Technician.

NOTE 7

* V = 1 for 120 Volts; V = 2 for 230 Volts (as per electrical standard of the country).

2.D. EQUIPMENT OR PARTS TO BE RETURNED

Not applicable.

3. ACCOMPLISHMENT INSTRUCTIONS

3.A. GENERAL

- As per Task 24-00-00, 3-1 (AMM), read and comply with the general electrical instructions.
- As per Task 60-00-00, 3-1 (AMM), read and comply with the general mechanical instructions.
- As per Work Card 20-02-04-401 (MTC), read and comply with the instructions concerning the installation of rivets - pitch and edge distance.
- As per Work Card 20-02-04-402 (MTC), read and comply with the instructions concerning the installation of rivets during retrofitting and repair.
- As per Work Card 20-02-04-601 (MTC), read and comply with the general riveting acceptance instructions.
- As per Work Card 20-02-05-401 (MTC), read and comply with the general instructions for joining by riveting.
- As per Work Card 20-02-07-101 (MTC), read and comply with the general instructions for electrical bonding.
- As per Work Card 20-02-07-401 (MTC), read and comply with the instructions concerning the electrical bonding procedure.
- As per Work Card 20-02-07-408 (MTC), read and comply with the instructions concerning the use of electrical bonding tape "Conductive Hi-Tak Tape".
- As per Work Card 20-03-01-101 (MTC), read and comply with the general repair instructions.
- As per Work Card 20-03-01-102 (MTC), read and comply with the unriveting instructions.
- As per Work Card 20-03-02-101 (MTC), read and comply with the general instructions for rivet replacement.
- As per Work Card 20-03-02-405 (MTC), read and comply with the general instructions for the installation of blind bolts ASN-A 0026 - ASN-A 0027 and 0363.
- As per Work Card 20-03-06-406 (MTC), read and comply with the instructions concerning structural repair and vacuum bag techniques.
- As per Work Card 20-03-07-101 (MTC), read and comply with the general instructions for repair and machining of composite material.
- As per Work Card 20-04-01-102 (MTC), read and comply with the general instructions for the use of cleaning products on individual parts and on aircraft.
- As per Work Card 20-04-02-401 (MTC), read and comply with the instructions for chemical stripping of organic surface finishes.
- As per Work Card 20-04-04-401 (MTC), read and comply with the methods for surface treatment before painting.
- As per Work Card 20-04-05-101 (MTC), read and comply with the general instructions concerning painting means and paint touch-ups.
- As per Work Card 20-04-05-420 (MTC), read and comply with the instructions for the use of Surfacer CA 8620.
- As per Work Card 20-04-05-601 (MTC), read and comply with the instructions for checks before and after paint application.
- As per Work Card 20-05-01-102 (MTC), read and comply with the general methods for applying sealing compounds.
- As per Work Card 20-05-01-222 (MTC), read and comply with the instructions concerning the application of PR 1771 B2 sealant.
- As per Work Card 20-06-01-101 (MTC), read and comply with the general rules for bonding with adhesives.
- As per Work Card 20-06-01-102 (MTC), read and comply with the bonding methods.
- As per Work Card 20-06-11-411 (MTC), read and comply with the instructions concerning the application of HYSOL EA 9396 cement.
- As per Work Card 20-06-01-417 (MTC), read and comply with the instructions concerning the application of CHO-BOND 584 conductive adhesive.
- As per Work Card 20-07-01-201 (MTC), read and comply with the instructions for handling aircraft parked in a repair shop.
- As per Work Card 20-07-02-201 (MTC), read and comply with the general instructions for helicopters parked in a repair shop.

3.B. WORK STEPS



CAUTION

THE PRELIMINARY STEPS (PARAGRAPH [3.B.1.](#)) AND FINAL STEPS (PARAGRAPH [3.B.3.](#)) ARE INCUMBENT ON THE CUSTOMER.

3.B.1. Preliminary steps

- Park the helicopter in a maintenance workshop.
- Install appropriate access equipment.
- Disconnect all electrical power supplies.
- Remove equipment and furnishings as required for access to the different work areas.
- Install a jack under the ventral fin to support the Fenestron, and under the tail structure as per AMM Task 07-00-00, 3-1 and the photos below.
- Remove the horizontal stabilizer as per AMM Task 55-11-00, 4-1 or 55-11-00, 4-1A or 55-11-00, 4-1B.
- Remove tail rotor drive cowlings (a).
- Disconnect the ball-type control.
- Remove the tail rotor hub, the tail gear box and the rear section as per Task 64-21-00, 4-1 (AMM), Task 65-11-00, 4-5 (AMM) and Task 65-21-00, 4-1 (AMM).



Fenestron



Rear Structure

3.B.2. Procedure

A video clip on the installation of carbon patches is available by clicking on the following link:

<https://dai.ly/k1AegQjHEXuEYYq9J9V>

The video clip is for information purposes only and to visualize the work to be performed. It does not replace the procedure described in the Service Bulletin.

3.B.2.a. Crack detection by dye-penetrant inspection or by Eddy current inspection

3.B.2.a.1. Crack detection on the outside of the junction frame (**Helicopters equipped with a tail boom with countersunk head rivets on the periphery of the tail boom/Fenestron junction**)

- Strip both rivet rows on the periphery of the junction, on the Fenestron side up to the tail boom skin, as per [Figure 1](#).
- Perform a dye penetrant inspection of the zone using dye penetrant inspection aerosol (50), (51) or (59) and (52) as per Work Card 20-02-09-101 (MTC) and 20-02-09-601 (MTC) or an inspection by Eddy current as per Work Card 20-90-03-108 (MTC).

NOTE 1

If a crack is found during the dye-penetrant inspection or Eddy current inspection, please contact the Airbus Helicopters Customer Service Technical Support by:

Fax: +33 (0)4.42.85.99.66

E-mail: support.technical-airframe.ah@airbus.com

If no cracks are found, comply with the procedure below.

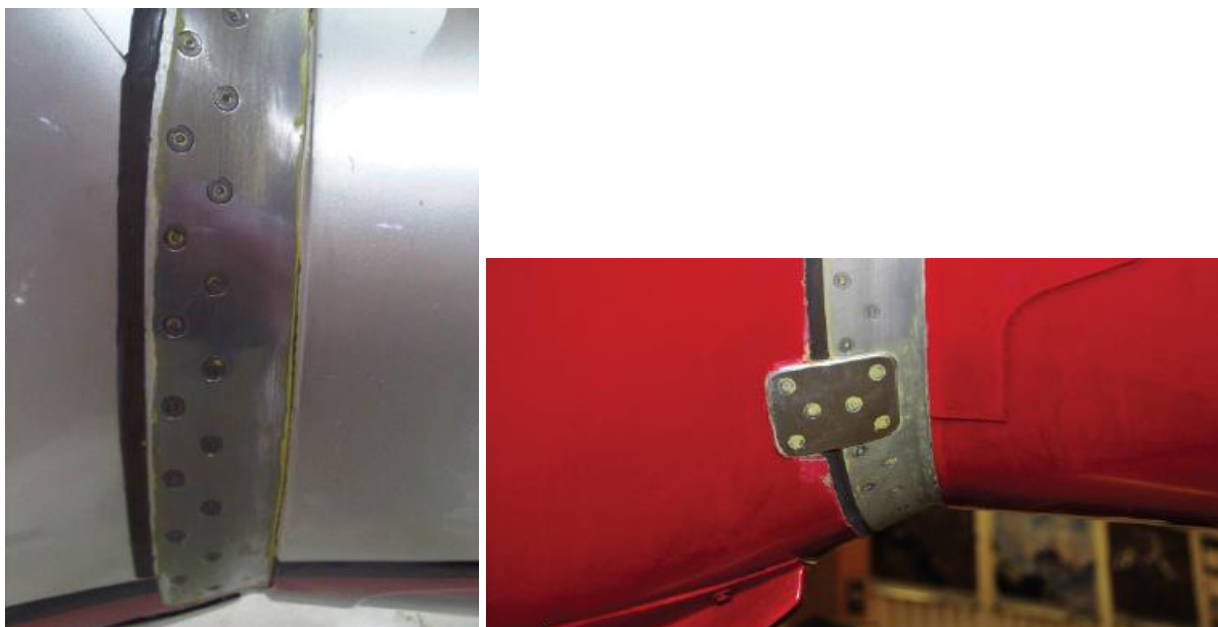


Figure 1

3.B.2.a.2. Detection of internal cracks of the skins and junction frame ([Figure 2](#))

- Strip the inside of the tail boom (LH and RH sides) lower part and start of the longerons using a paint thinner and appropriate abrasive paper.
- Perform a dye-penetrant inspection of the skins and junction frame, in the lower area, using the dye penetrant inspection aerosol (50), (51) or (59) and (52), as per Work Cards 20-02-09-101 (MTC) and 20-02-09-601 (MTC), as well as an in-depth visual inspection using a magnifying glass (mm) and a lamp (nn) or an inspection by Eddy current as per Work Card 20-90-03-108 (MTC).

NOTE 2

*If a crack is found during the dye-penetrant inspection or Eddy current inspection, please contact the Airbus Helicopters Customer Service Technical Support by:
Fax: +33 (0)4.42.85.99.66
E-mail: support.technical-airframe.ah@airbus.com
If no cracks are found, comply with the procedure below.*

3.B.2.b. Best practices - Rivet replacement

The area of the helicopter which is concerned by the rivet replacement is an area in which it is difficult to work. The airframe Technician must be made aware of the following points:

When removing rivets:

- Use a drilling machine with low rotational speed (500 rpm maximum).
- Use the drills recommended in [paragraph 2.C.5](#).
- Do not exceed 8 uses per drill (unlocking of a rivet).
- Do not jig-bore the rivet.
- Do not use any abrasive tools (round bur, etc.) to remove the locking ring.
- Do not machine the countersinks again.
- Make sure that there is no electrical sheath behind the junction frame.
- When drilling the rivet, do not force, let it progress and repeat if necessary.

**CAUTION**

DURING ANY DRILLING, BACK-DRILLING AND DRIVING-OUT OF THE TENSILE ROD, NO TOOL MUST COME INTO CONTACT WITH THE FENESTRON OR THE FRAME TO PREVENT IRREVERSIBLE DAMAGE.

When reboring holes:

- Make the reaming drill go in and out while the drilling machine rotates, do not force.
- The drill must follow the axis of the original hole.
- If non-conformity is observed after back-drilling, contact Airbus Helicopters at the address below.

NOTE 3

*Please contact the Airbus Helicopters Customer Service Technical Support:
Fax: +33 (0)4.42.85.99.66
E-mail: support.technical-airframe.ah@airbus.com*

**CAUTION**

THE REMOVAL OF THE LH AND RH SPLICES AND THE INSTALLATION OF THE LH AND RH PATCHES MUST BE PERFORMED AT THE SAME TIME.

**CAUTION**

THE UNRIVETING AND THE INSTALLATION OF THE LOWER AND UPPER PATCHES MUST BE PERFORMED AT THE SAME TIME.

**CAUTION**

IT IS PROHIBITED TO RIVET THE PATCHES DURING CURING OF LIQUID SHIM (37).

**CAUTION**

IF SCREW-TYPE SPRING FASTENERS (KK) ARE USED, THEY MUST BE TIGHTENED BY HAND.

3.B.2.c. Installation of the RH patch ([Figure 3](#), [Figure 4](#), [Figure 5](#), [Figure 6](#), [Figure 7](#), [Figure 8](#), [Figure 9](#), [Figure 11](#) and [Figure 13](#))

**CAUTION**

IF A REPLACEMENT OF THE LOWER SKIN, WHICH LED TO THE REMOVAL OF THE RH AND LH SPLICES, WAS PERFORMED BEFORE COMPLIANCE WITH THIS SERVICE BULLETIN, THE OPERATIONS INCLUDED IN PARAGRAPH 3.B.2.c., THE STRIPPING AND THE SPLICE REMOVAL OPERATIONS ARE NO LONGER APPLICABLE.

- Sand the paint of splice (b) or (c) and bonding plate (d) to reveal the rivet heads ([Figure 3](#) or [Figure 4](#)).
- Remove and discard splice (b) or (c), bonding plate (d) and attachment bracket (e).
- Position and mark patch (1) on the structure with a marker (Figure 5).

- Remove patch (1).
- Sand and strip the (metal) area of application of patch (1) until the rivets and copper strip (f) appear ([Figure 5](#) - Detail B).

- Discard the rivets.
- Identify and sand the area of application of foil (2) and splices (3) or (4) or (5) on the structure as per Figures 8 and 9.
- Cut and discard copper strip (f) in contact with patch (1) ([Figure 5](#) - Details B and C).

**CAUTION**

REMAINING COPPER STRIP (F) MUST NOT COME INTO CONTACT WITH PATCH (1). CLEARANCE BETWEEN PATCH (1) AND COPPER STRIP (F) MUST BE BETWEEN 0.5 MM AND 2 MM.

- Cut out the hatched area with cut-out template (jj) ([Figure 6](#) - Detail A).
- Deburr and sand sharp edges with sandpaper (zzz).
- Position and hold patch (1).

NOTE 4

If patch (1) is found to be unstable on the structure, position patch (1) in an optimum manner to balance the clearances.

- Predrill the existing holes of patch (1) in the structure with \varnothing 2.5 drill (zz) ([Figure 5](#) - Details A and C).
- Temporarily attach patch (1) with \varnothing 2.5 spring fasteners (kk) ([Figure 5](#) - Detail A).
- Jig-bore patch (1) from inside the tail boom, in accordance with the holes in the structure, using drill \varnothing 3.1 (yy) or \varnothing 4 (xx) or \varnothing 4.8 (ww).
- Remove patch (1).

**CAUTION**

BEFORE DRILLING THE HOLES, CHECK THAT THE DIAMETER IS CORRECT.

- Do not drill to the final diameter at this stage.
- On a work bench, predrill patch (1) with set of drilling bushes (ii) and drills \varnothing 3.1 (yy) or \varnothing 4 (xx) or \varnothing 4.8 (ww) as per [Figure 8](#) and [Figure 11](#).

**CAUTION**

IF THE COPPER FOIL OF PATCH (1) HAS DEBONDED, REPAIR AS PER [APPENDIX 4.B](#).

- If necessary:
 - . Blank holes N with rivets (6) as per [Figure 7](#) - Detail A and SECTION B-B.
 - . Drill holes O to diameter 4 with drill \varnothing 4 (pp) as per dimensions of [Figure 8](#) - Detail B.
- If necessary:
 - . Remove existing rivets (j) ([Figure 13](#)).
 - . Apply sealant (41) to rivets (47).
 - . Install rivets (47) instead of rivets (j).
- Drill the holes in the structure to match patch (1) as per [Figures 8](#) and [11](#).

If during removal of rivets, the existing holes are \varnothing 4 (countersunk) or \varnothing 4.8 or \varnothing 5, drill back the holes to \varnothing 6.5 as per area M of [Figure 8](#).

- Clean the area.
- Check the clearances and install shims as per [Appendices 4.D.](#) and [4.E.](#)
- Remove spring fasteners (kk).
- Drill liquid shim (37) and bore patch (1) as per [Figure 8](#) and [Figure 11](#).
- Coat the rivets with sealant (41).

For the Ø 6.5 back-drilled holes, drill liquid shim (37) and bore with drills (rr) and (ss) and install rivets (26) or (27) or (28) or (29) or (30) or (31) as per the thickness to be tightened (Area M - Figure 8).

- Rivet patch (1), except in the hatched area of foil (2) and the area of splice (3) or (4) or (5) and the attachment holes of bracket (46) as per Figures 8 and 11 and the table given in [Appendix 4.C.](#)
- Position and mark foil (2) and splices (3) or (4) or (5) as per [Figure 8](#) and [Figure 9](#).
- Sand the hatched area of foil (2) until the copper strip on patch (1) appears as per Figure 8 and Figure 9 - Detail B.
- Sand the hatched area of splice (3) or (4) or (5) until the copper strip on patch (1) appears as per Figure 9 - Detail C.
- Ensure electrical bonding of foil (2).
- Apply CHO-BOND adhesive (44) to foil (2) and to the structure (Figure 8 and Figure 9 - SECTION F-F).
- Position and hold the foil on the structure.
- Apply fabric (60a) from the fabrics case (60) to the foil with adhesive (39) in accordance with the hatched area shown in [Figure 5](#) - Detail C and [Figure 8](#).
- Leave to cure for 1h at 65°C under a vacuum bag, using:
 - . the fabrics case (60),
 - . the Anita case (cc) and
 - . the heating mat (www).
- Drill foil (2) from inside the tail boom, in accordance with the structure as per Figure 7.
- Coat the rivets with sealant (41).
- Rivet foil (2) as per the table given in [Figure 8](#).
- Position and drill splice (3) or (4) or (5) from inside the tail boom, in accordance with the structure as per Figure 8.
- Remove splice (3) or (4) or (5).
- Drill holes J ([Figure 8](#)) at equal distance ([Figure 5](#) - Detail E).
- Ensure electrical bonding of splice (3) or (4) or (5).
- Sand the surface of splice (3) or (4) or (5) in contact with patch (1) and the structure.
- Apply Alodine (7) to splice (3) or (4) or (5).
- Apply seals (42) and (43) to splice (3) or (4) or (5) as per Figure 9 - SECTION E-E.
- Coat the rivets with sealant (41).
- Rivet splice (3) or (4) or (5) as per Figure 8.
- Perform an electrical bonding test as per [Appendix 4.I.](#)

3.B.2.d. Installation of the LH patch ([Figure 3](#), [Figure 4](#), [Figure 6](#), [Figure 7](#), [Figure 10](#), [Figure 11](#) and [Figure 13](#))



CAUTION

IF A REPLACEMENT OF THE LOWER SKIN, WHICH LED TO THE REMOVAL OF THE RH AND LH SPICES, WAS PERFORMED BEFORE COMPLIANCE WITH THIS SERVICE BULLETIN, THE OPERATIONS INCLUDED IN PARAGRAPH 3.B.2.d., THE STRIPPING AND THE SPLICE REMOVAL OPERATIONS ARE NO LONGER APPLICABLE.

**CAUTION**

IF A Ø 6.58 RIVET IS INSTALLED IN THE AREA OF THE FRAME, THE DISTANCE BETWEEN THE LH PATCH AND THE CENTER OF THE RIVET MUST BE 7.5 MM MIN. REFER TO [APPENDIX 4.A.2.](#)

- Sand splice (h) or (j) to reveal the rivet heads ([Figure 3](#) or [Figure 4](#)).
- Remove and discard splice (h) or (j) and attachment bracket (e).
- Position and mark patch (34) on the structure ([Figure 10](#)).
- Remove patch (34).
- Sand and strip the area of application of patch (34) until the rivets appear.
- Discard the rivets.
- Cut out the hatched area with cut-out template (bb) ([Figure 6](#) - Detail B).
- Deburr and sand sharp edges with sandpaper (zzz).
- Position and hold patch (34).

NOTE 5

If patch (1) is found to be unstable on the structure, position patch (1) in an optimum manner to balance the clearances.

- Predrill the existing holes of patch (34) in the structure with Ø 2.5 drill (zz).
- Temporarily attach patch (34) with Ø 2.5 spring fasteners (kk).
- Jig-bore patch (34) from inside the tail boom, in accordance with the holes in the structure, using drills Ø 3.1 (yy) or Ø 4 (xx) and Ø 4.8 (ww).
- Remove patch (34).

**CAUTION**

BEFORE DRILLING THE HOLES, CHECK THAT THE DIAMETER IS CORRECT.

- Do not drill to the final diameter at this stage.
- On a work bench, predrill patch (1) with drilling bushes (ii) and drills Ø 3.1 (yy) or Ø 4 (xx) or Ø 4.8 (ww) as per [Figure 10](#) and [Figure 11](#).
- If necessary:
 - . Blank holes N with rivets (6) as per [Figure 7](#) - Detail B and SECTION B-B.
 - . Drill holes P to diameter 4 with drill Ø 4 (pp) as per dimensions of [Figure 10](#) - Detail B.
- If necessary:
 - . Remove existing rivets (j) ([Figure 13](#)).
 - . Apply sealant (41) to rivets (47).
 - . Install rivets (47) instead of rivets (j).
- Drill the holes in the structure to match patch (34) as per Figures 10 and 11.

If during removal of rivets, the existing holes are Ø 4 (countersunk) or Ø 4.8 or Ø 5, drill back the holes to Ø 6.5 as per area R of Figure 9.

- Clean the area.
- Check the clearances and install shims as per [Appendices 4.D.](#) and [4.E.](#)
- Remove spring fasteners (kk).
- Drill liquid shim (37) and bore patch (34) as per [Figure 10](#) and [Figure 11.](#)
- Coat the rivets with sealant (41).

For the \varnothing 6.5 back-drilled holes, drill and bore with drills (rr) and (ss) and install rivets (26) or (27) or (28) or (29) or (30) or (31) as per the thickness to be tightened (Area R - Figure 10).

- Rivet patch (34), except the attachment holes of bracket (45) as per Figures 10 and 11 and the table given in [Appendix 4.C.](#)

3.B.2.e. Installation of the upper patch ([Figure 11](#))

- Position and mark patch (35) on the structure ([Figure 11](#) - Detail A).
- Remove patch (35).
- Sand and strip the area of application of patch (35) until the rivets appear.
- Discard the rivets.

- Position and hold patch (35).
- Jig-bore patch (35) from inside the tail boom, in accordance with the holes in the structure, using drills \varnothing 3.1 (yy) or \varnothing 4 (xx) and \varnothing 4.8 (ww).
- Remove patch (35).



CAUTION

BEFORE DRILLING THE HOLES, CHECK THAT THE DIAMETER IS CORRECT.

- Do not drill to the final diameter at this stage.
- On a work bench, drill patch (35) with drilling bushes (ii) and drills \varnothing 3.1 (yy) or \varnothing 4 (xx) or \varnothing 4.8 (ww) as per [Figure 11.](#)
- Drill the holes in the structure to match patch (35) as per Figure 11.

If during removal of rivets, the existing holes are \varnothing 4 (countersunk) or \varnothing 4.8 or \varnothing 5, drill back the holes to \varnothing 6.5 as per Area S of Figure 10.

- Clean the area.
- Check the clearances and install shims as per [Appendices 4.D.](#) and [4.E.](#)

- Remove spring fasteners (kk).
- Drill liquid shim (37) and bore patch (35) as per [Figure 11.](#)
- Coat the rivets with sealant (43).

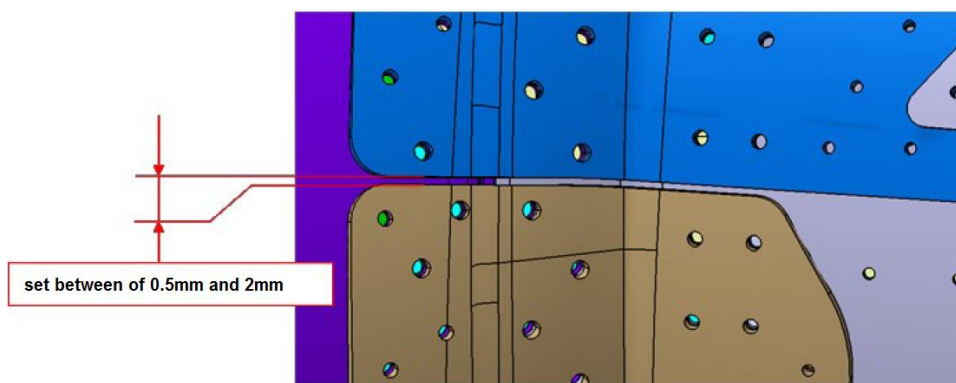
For the \varnothing 6.5 back-drilled holes, drill and bore with drills (rr) and (ss) and install rivets (26) or (27) or (28) or (29) or (30) or (31) as per the thickness to be tightened (Area S - Figure 11).

- Rivet patch (35) as per Figure 11 and the table given in [Appendix 4.C.](#)

3.B.2.f. Installation of the lower patch (Figure 12)

 **CAUTION**

WHEN POSITIONING LOWER PATCH (36), IF THERE IS A PROBLEM FOR ASSEMBLY, TRIM LOWER PATCH (36) AS PER MTC WORK CARD 20-03-07-402 UNTIL OBTAINING A CLEARANCE OF 0.5 MM TO 2 MM (SEE FIGURE BELOW) IN RELATION TO RH PATCH (1) AND LH PATCH (34) AND COMPLY WITH THE EDGE DISTANCE CRITERIA AS PER [APPENDIX 4.A.1.](#)


 **CAUTION**

WHEN INSTALLING THE RIVETS (G) (SEE FIGURE 12), IF THERE IS ANY INTERFERENCE BETWEEN THE FRAME AND THE RIVETS, IT IS PERMITTED TO ADJUST THE LINE OF THE FRAME BY MAX. 1 MM (SEE PHOTO BELOW) WITH SANDPAPER (P120). BE CAREFUL NOT TO DAMAGE THE SURFACE DURING THE ADJUSTMENT. DEBURR AND PERFORM A DYE-PENETRANT INSPECTION OF THE ADJUSTED AREA AS DESCRIBED IN PARAGRAPH 3.B.2.a.2.



- Position and mark patch (36) on the structure ([Figure 12](#) - Detail A).
- Remove patch (36).
- Sand and strip the area of application of patch (36) until the rivets appear.

NOTE 6

It is possible that rivet U ([Figure 12](#) - Detail B) is not visible. Light sanding, without deteriorating the copper mesh, is authorized.

- Discard the rivets.
- Position and hold patch (36).

NOTE 7

If patch (1) is found to be unstable on the structure, position patch (1) in an optimum manner to balance the clearances.

- Predrill the existing holes of patch (36) in the structure with \varnothing 2.5 drill (zz).
- Temporarily attach patch (36) with \varnothing 2.5 spring fasteners (kk).
- Jig-bore patch (36) from inside the tail boom, in accordance with the holes in the structure, using drills \varnothing 3.1 (yy), \varnothing 4 (xx) and \varnothing 4.8 (ww).
- Remove patch (36).

**CAUTION**

BEFORE DRILLING THE HOLES, CHECK THAT THE DIAMETER IS CORRECT.

- On a work bench, drill patch (36) with drilling bushes (ii) and drills \varnothing 3.1 (yy) or \varnothing 4 (xx) or \varnothing 4.8 (ww) as per the table given in [Figure 12](#).
- Drill the holes in the structure to match patch (36) as per [Figure 12](#).

If during removal of rivets, the existing holes are \varnothing 4 (countersunk) or \varnothing 4.8 or \varnothing 5, drill back the holes to \varnothing 6.5 as per Area T of [Figure 12](#).

- Check the clearances and shims as per [Appendices 4.D.](#) and [4.E.](#)
- Remove spring fasteners (kk).
- Drill liquid shim (37) and bore patch (36) as per [Figure 12](#) and the table given in [Appendix 4.C.](#)
- Coat the rivets with sealant (41).

For the \varnothing 6.5 back-drilled holes, drill and bore with drills (rr) and (ss) and install rivets (26) or (27) or (28) or (29) or (30) or (31) as per the thickness to be tightened (Area T - [Figure 12](#)).

- Rivet patch (36) as per [Figure 12](#) and the table given in [Appendix 4.C.](#)
- Apply sealant (41) to the circumference of patch (1), (34), (35) and (36)
- Leave to dry.

3.B.2.g. Mounting complement ([Figure 11](#) and [Figure 14](#))

As per [Figure 14](#)

- Adjust rear fairing (a) on the LH and RH sides as per dimensions.

As per [Figure 11](#)

- Install brackets (45) and (46) on modified rear fairing (a).
- Install rear fairing (a) on the transmission.
- Jig-bore brackets (45) and (46) from inside the tail boom to match the holes in the structure.
- Remove rear fairing (a).
- Remove brackets (45) and (46).
- On a work bench, drill and bore brackets (45) and (46) to $\varnothing 4$ with drills (xx) and (uu).
- Apply sealant (41) to rivets (17).
- Position and attach bracket (46) on the RH patch and bracket (45) on the LH patch with rivets (17).

- If necessary, perform P15 and C26 touch-ups in the inner and outer visible areas of the tail boom after the installation of patches as per MTC Work Cards 20-04-05-402 and MTC Work Card 20-04-05-420.
- If necessary, perform the paint touch-ups as per MTC Work Card 20-04-05-101.

NOTE 8

Paint touch-ups are incumbent on the operator.

- Re-identify the fairing and the tail boom assembly as per [paragraph 3.C.](#) and [Appendix 4.F.](#)
- Complete the table in [Appendix 4.H.](#)

3.B.3. Final steps

- Clean and recondition the work areas and the helicopter as per MTC Work Card 20-07-03-408.
- Install again the rear section, the tail gear box and the tail rotor hub as per Task 65-11-00, 4-6 (AMM), Task 65-21-00,4-2 (AMM) and Task 64-21-00, 4-2 (AMM).
- Reconnect the ball-type control.
- Re-install the horizontal stabilizer as per AMM Task 55-11-00, 4-1 or 55-11-00, 4-1A or 55-11-00, 4-1B.
- Re-install tail rotor drive cowlings (a).
- Remove the jack from under the ventral fin and under the tail structure.
- Remove the access equipment.
- Reconnect all electrical power supplies.
- Remove the access equipment.
- Return the helicopter to flight configuration.

3.C. RECORD OF COMPLIANCE

Compliance with this document:

- Record full compliance with this Service Bulletin, with the revision number, in the helicopter documents.
- Please confirm compliance with this Service Bulletin:
QR-Code or hypertext link



NOTE 9

The recording of compliance with Service Bulletins in the R-Text tool does not replace the recording in the helicopter documents.

[SB EC130 53-036](#)

Tracking of modifications in the documentation:

Record full embodiment of modification 074775 in the helicopter documents.

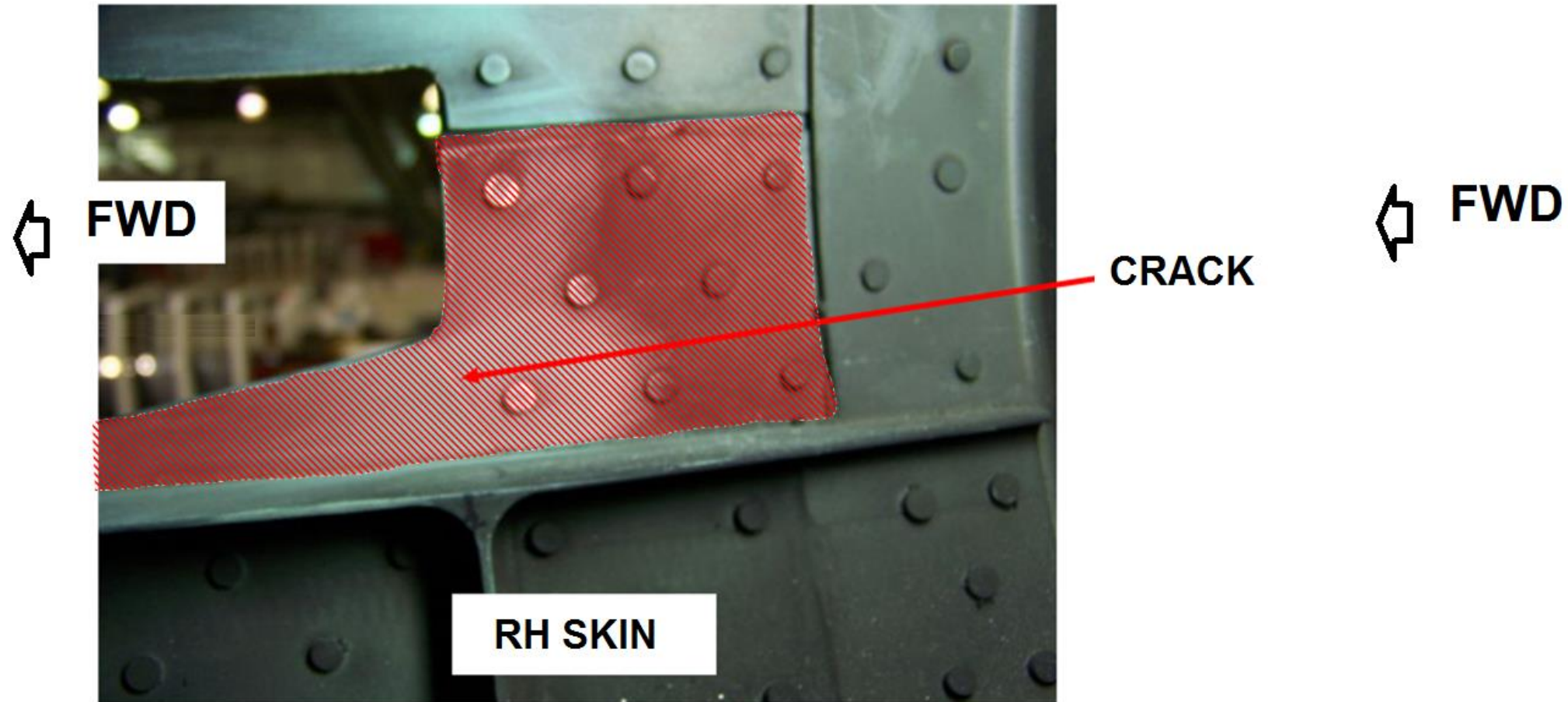
Identification of modifications on equipment or parts:

Identify the parts/assemblies as per the table below and MTC Work Card 20-08-05-103.

Designation	Former P/N	New P/N	MOD	Type of marking
Fairing	350A23-4239-0102	350A08-4773-40 + SB No. 53-036	074775	Ink
Tail boom assembly	350A23-0060-XXXX (for B4 version helicopters) 350A23-0030-XXXX (for T2 version helicopters)	350A23-0060-XXXX + SB No. 53-036 (for B4 version helicopters) 350A23-0030-XXXX (for T2 version helicopters) + SB No. 53-036	074775	Ink

3.D. OPERATING AND MAINTENANCE INSTRUCTIONS

Not applicable.



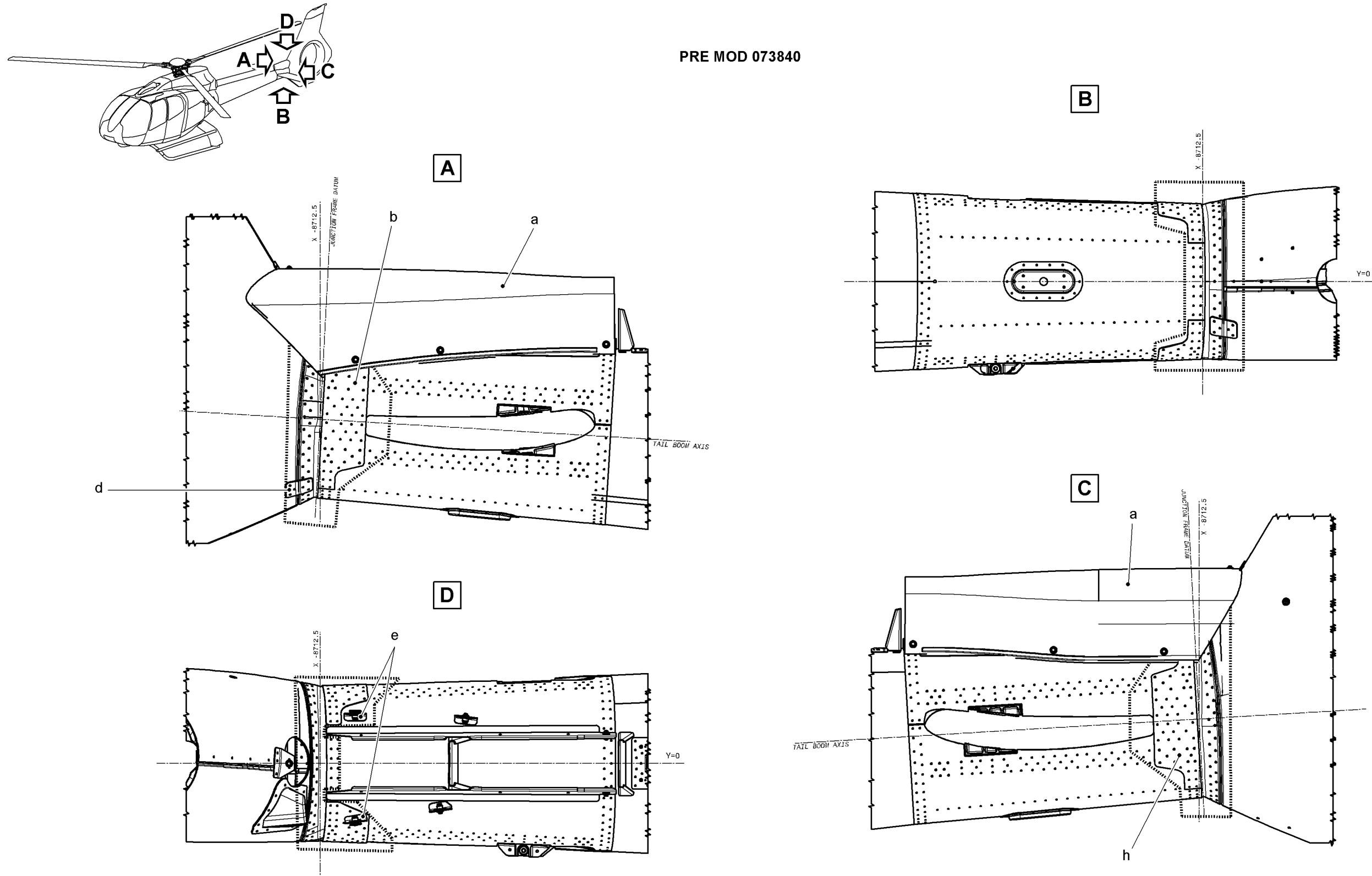
Dye-penetrant inspection of the skin



Dye-penetrant inspection of the junction frame

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PRE MOD 073840

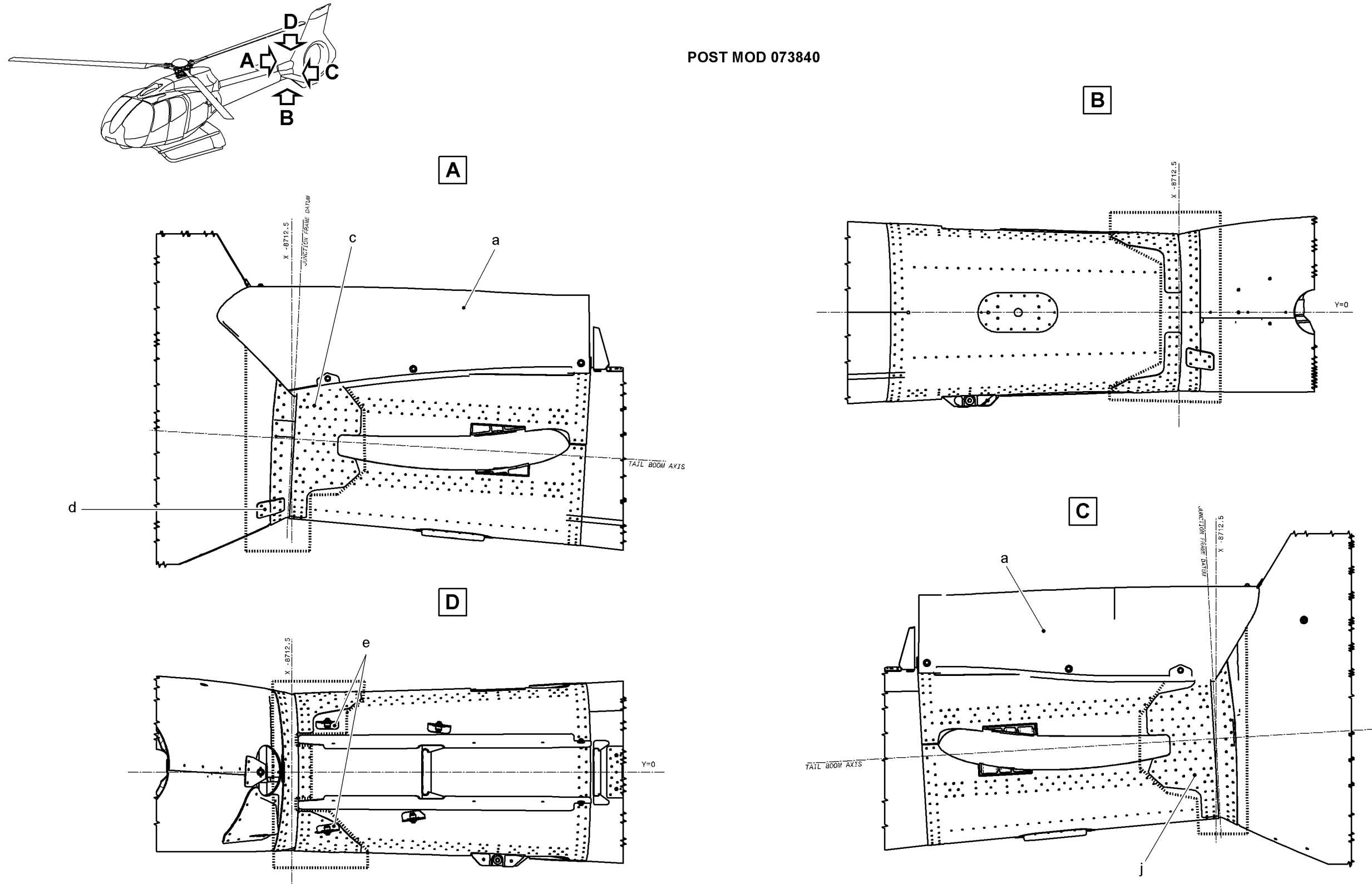


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Figure 3 (Helicopters PRE MOD 073880)

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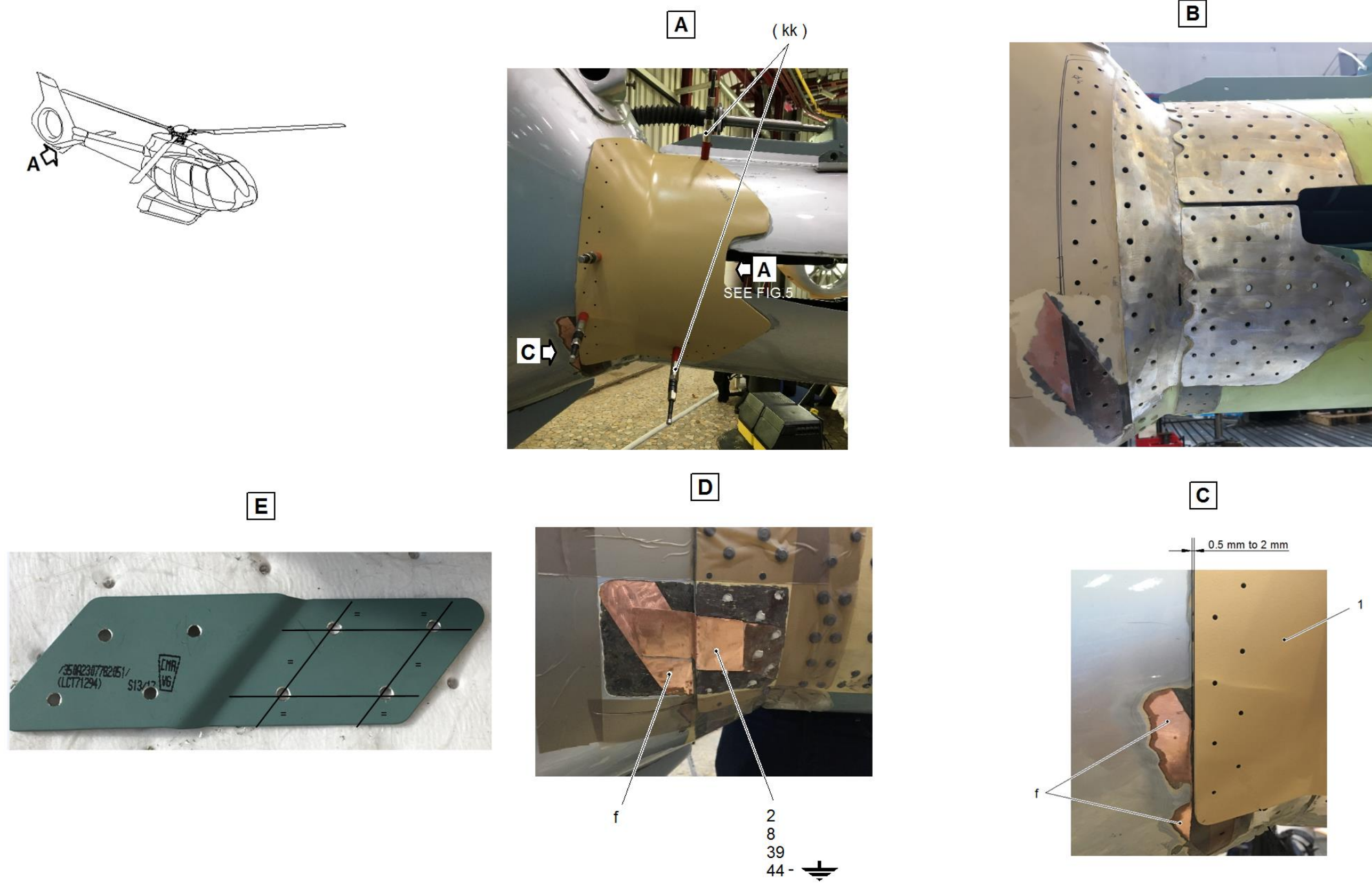
POST MOD 073840



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Figure 4 (Helicopters POST MOD 073840)

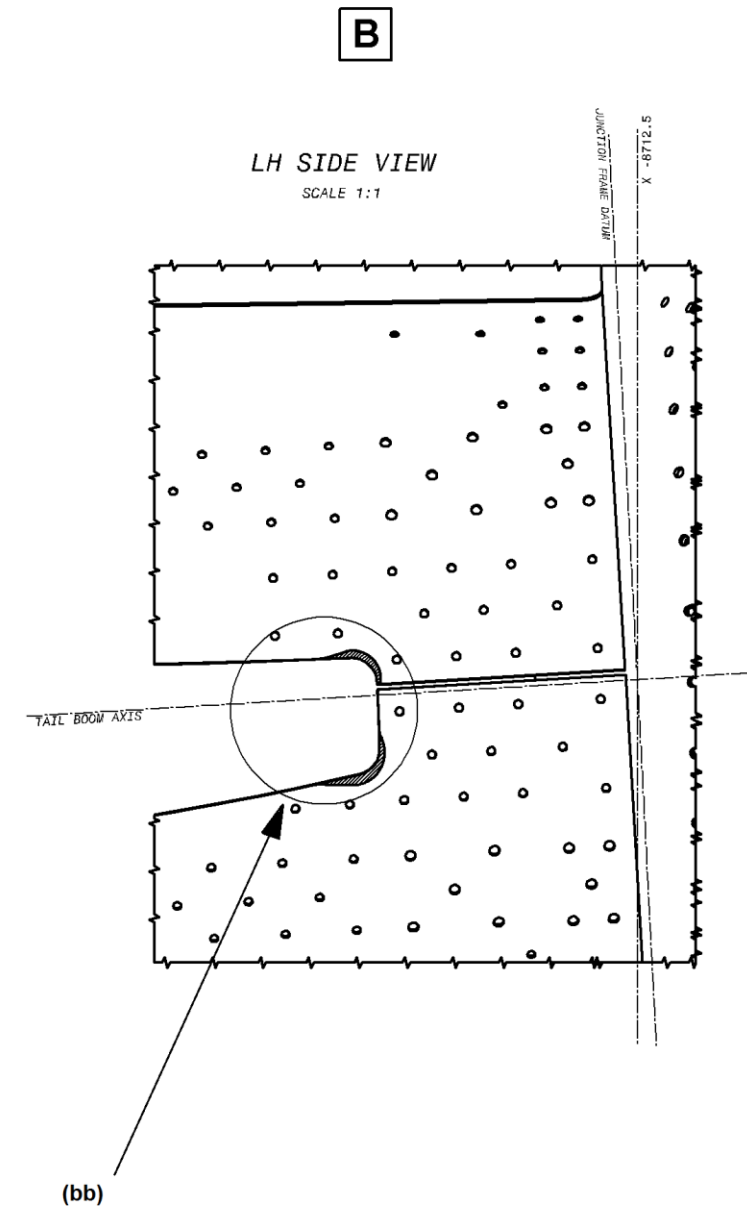
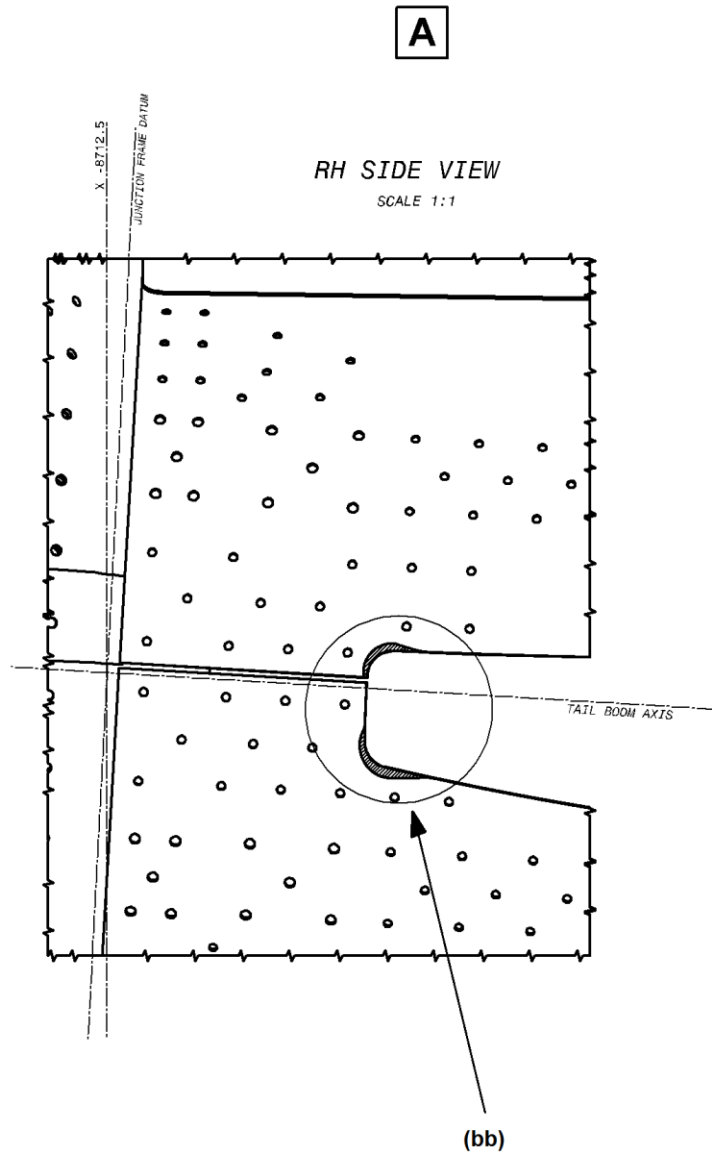
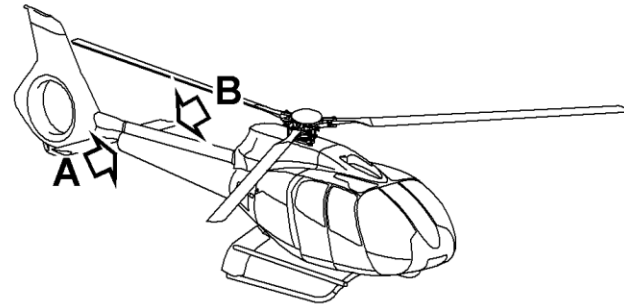
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Figure 5

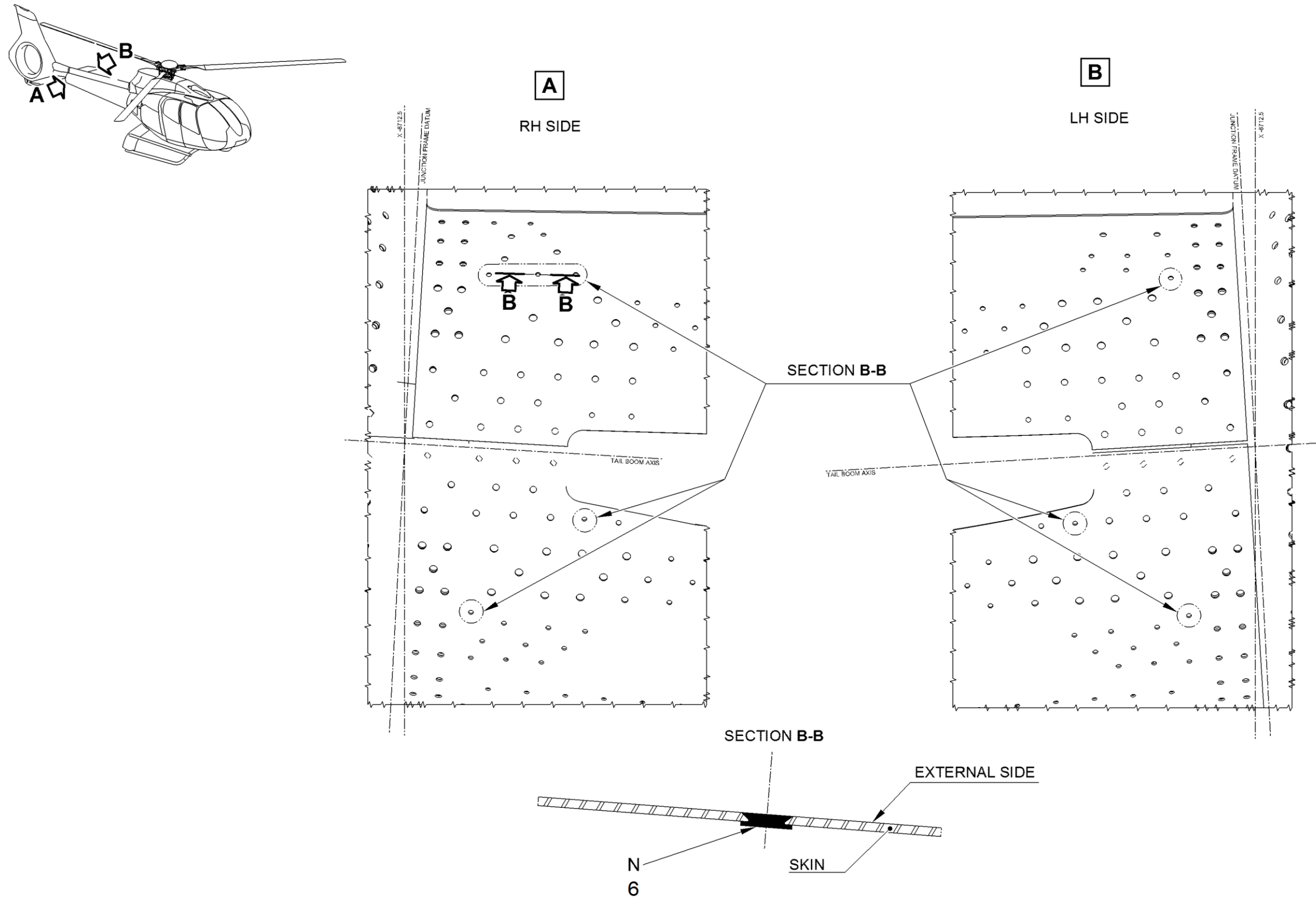
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Return to paragraph [3.B.2.c](#).
Return to paragraph [3.B.2.d](#).

Figure 6 (Skin cut-out on the RH and LH sides)

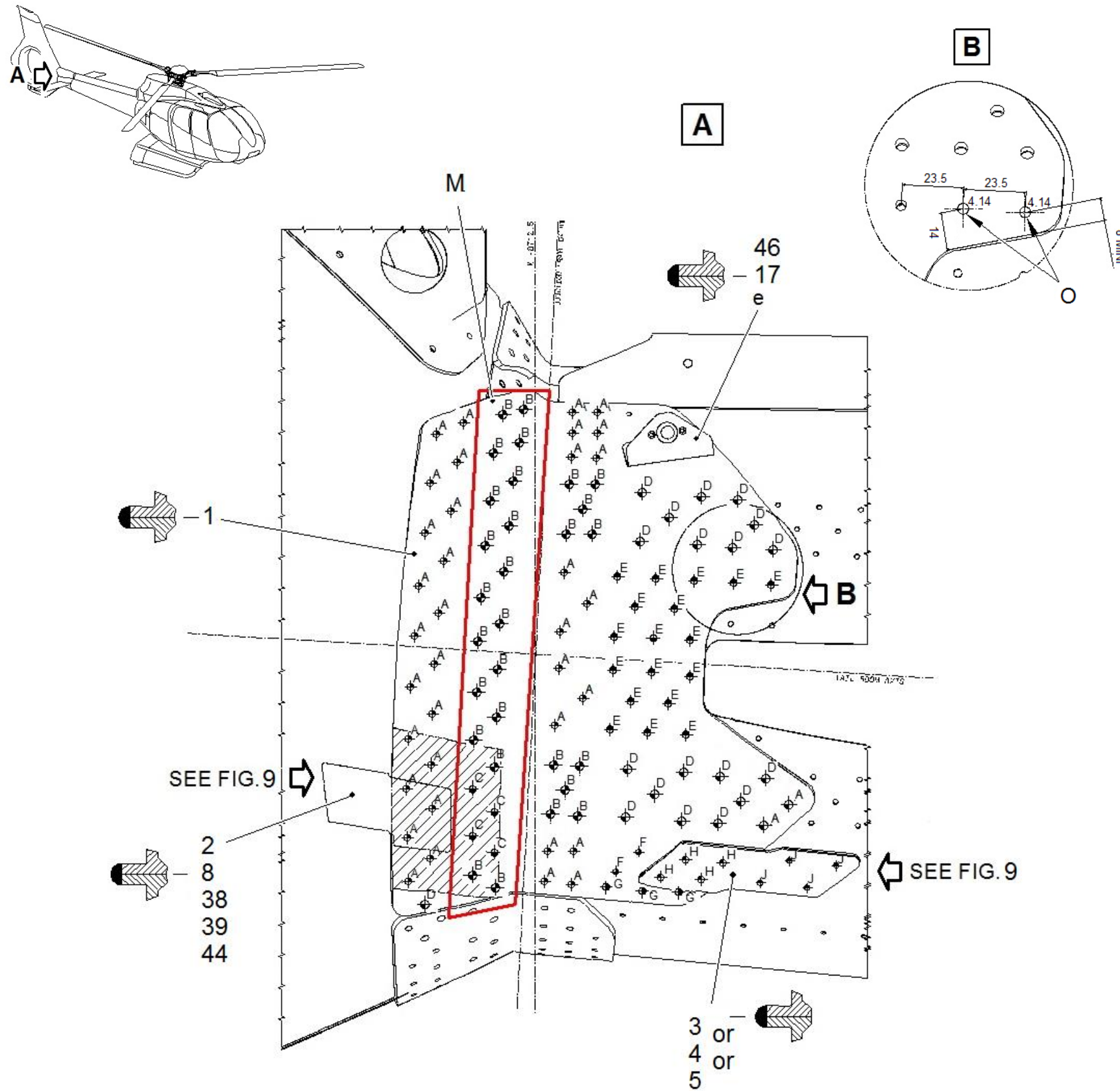
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Return to paragraph [3.B.2.c](#).
Return to paragraph [3.B.2.d](#).

Figure 7 (Blanking of holes at the edge distance limit)

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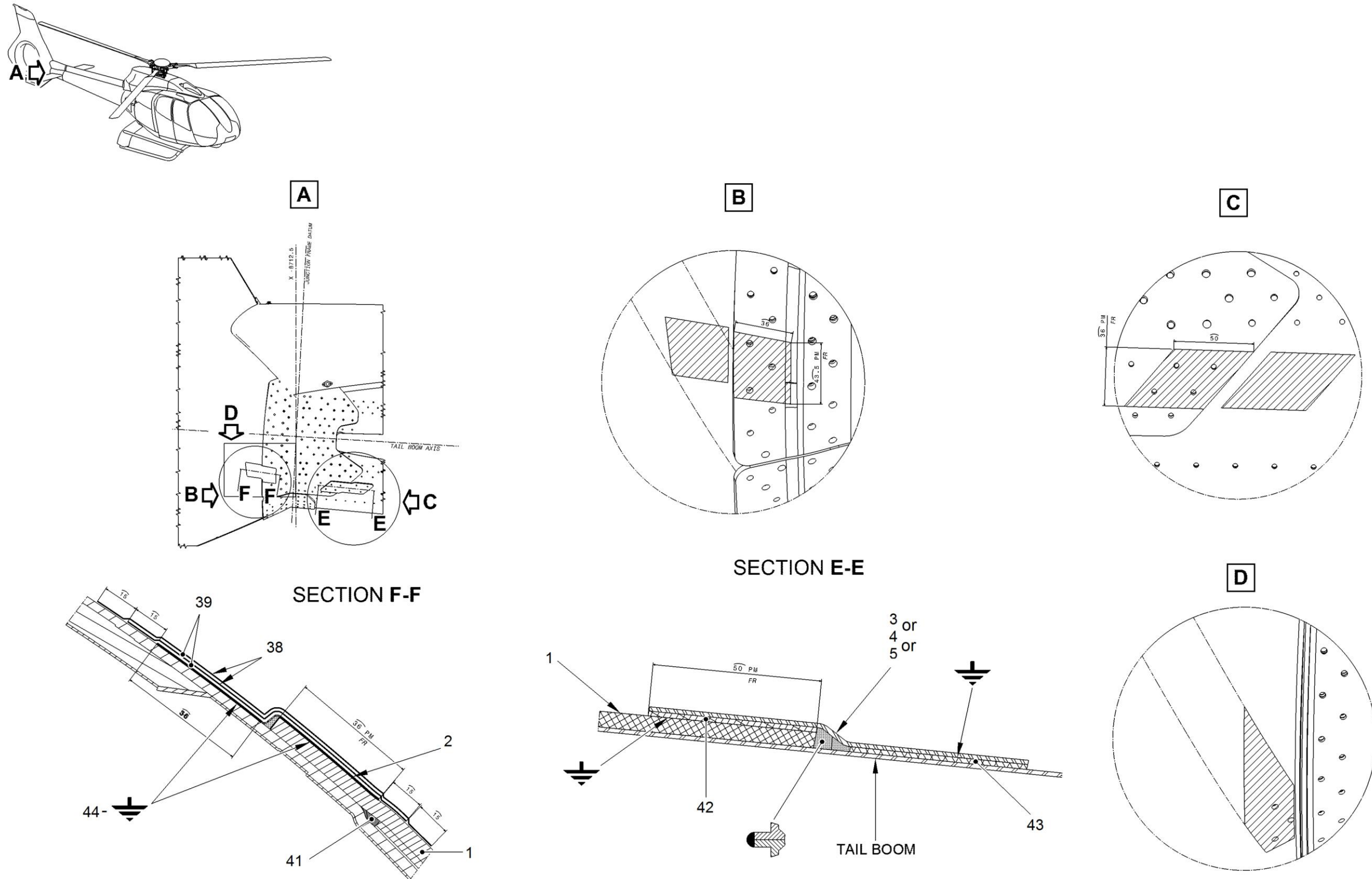


Items holes	Rivets		Variant Rivets		Final diameter
	Items SB	References	Items SB	References	
A	8	ASNA0363T0505	21	ASNA0363T0506	ø 4,1
			22	ASNA0363T0507	
			23	ASNA0363T0508	
B	9	ASNA0363T0606	10	ASNA0363T0607	ø 5
			24	ASNA0363T0608	
			25	ASNA0363T0609	
B (FRAME AREA)	HELICOPTER POST MOD 073880		HELICOPTER POST MOD 073880		ø 5
	9	ASNA0363T0606	10	ASNA0363T0607	
			24	ASNA0363T0608	
	HELICOPTER PRE MOD 073880		HELICOPTER PRE MOD 073880		ø 6,58
	28	ASNA0363T0806	29	ASNA0363T0807	
			30	ASNA0363T0808	
C	10	ASNA0363T0607	24	ASNA0363T0608	ø 5
			25	ASNA0363T0609	
C (FRAME AREA)	HELICOPTER POST MOD 073880		HELICOPTER POST MOD 073880		ø 5
	10	ASNA0363T0607	24	ASNA0363T0608	
			25	ASNA0363T0609	
	HELICOPTER PRE MOD 073880		HELICOPTER PRE MOD 073880		ø 6,58
29	ASNA0363T0807	30	ASNA0363T0808		
		31	ASNA0363T0809		
D	11	ASNA0363T0605	9	ASNA0363T0606	ø 5
			10	ASNA0363T0607	
			24	ASNA0363T0608	
E	12	ASNA0363T0503	17	ASNA0363T0504	ø 4,1
			8	ASNA0363T0505	
			21	ASNA0363T0506	
			22	ASNA0363T0507	
F	13	ASNA0363T0404	15	ASNA0363T0405	ø 3,2
			19	ASNA0363T0406	
			20	ASNA0363T0407	
G	14	ASNA0363T0403	13	ASNA0363T0404	ø 3,2
			15	ASNA0363T0405	
			19	ASNA0363T0406	
			20	ASNA0363T0407	
H	15	ASNA0363T0405	19	ASNA0363T0406	ø 3,2
			20	ASNA0363T0407	
J	16	ASNA0363T0402	14	ASNA0363T0403	ø 3,2
			13	ASNA0363T0404	

Return to paragraph [3.B.2.c.](#)

Figure 8 (Installation of RH patch rivets)

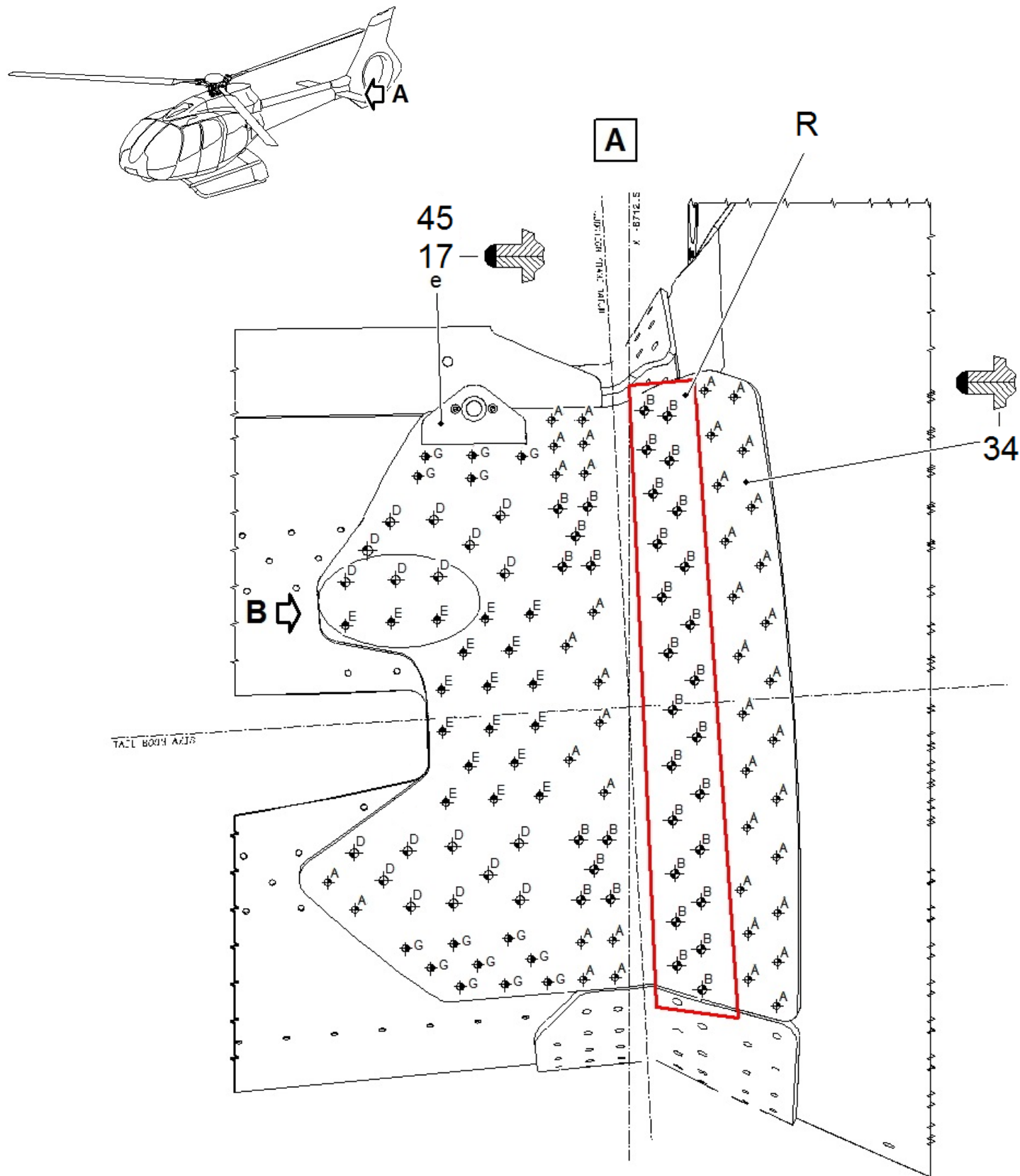
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Figure 9 (Electrical bonding rework)

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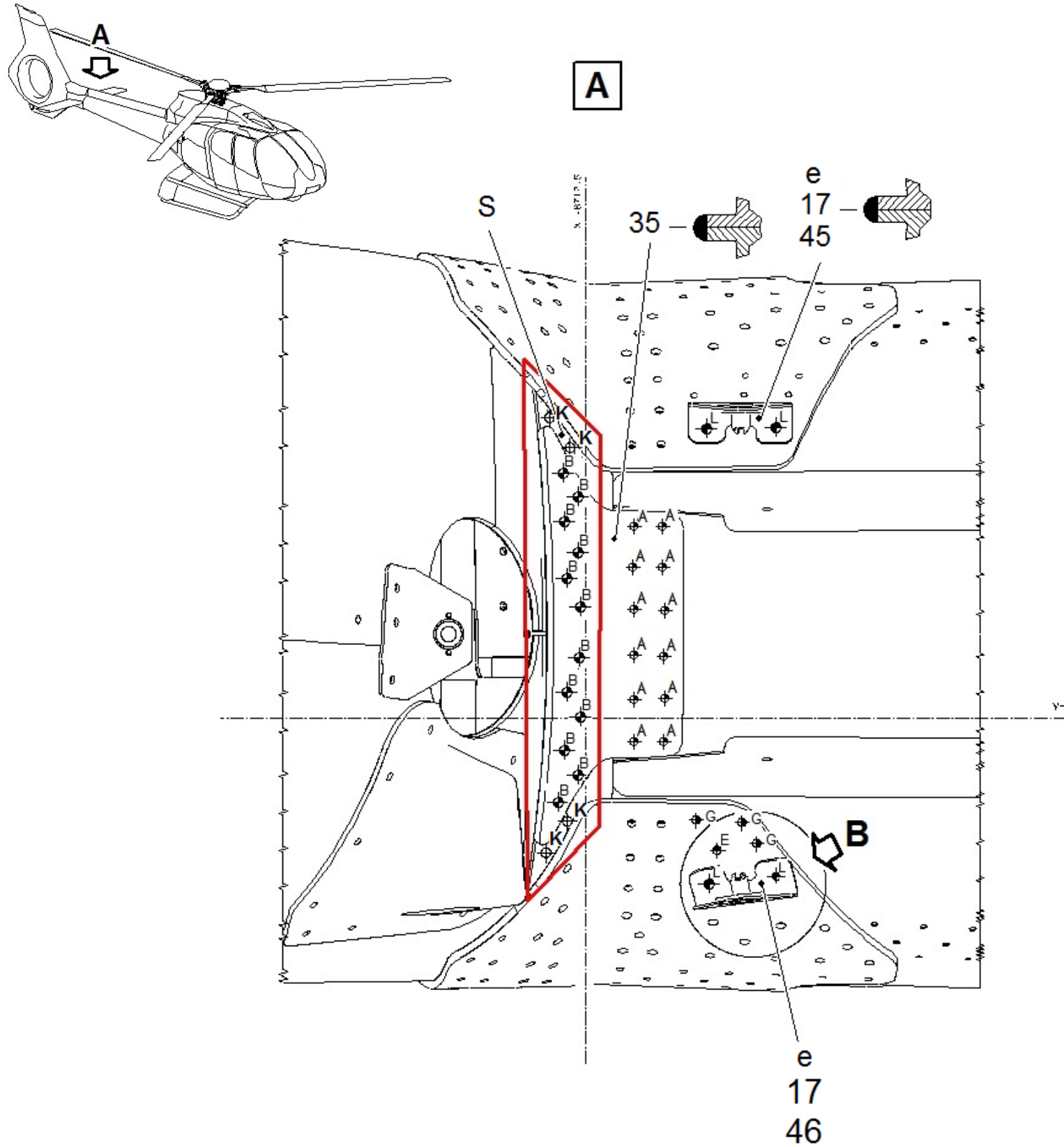


Items holes	Rivets		Variant Rivets		Final diameter
	Items SB	References	Items SB	References	
A	8	ASNA0363T0505	21	ASNA0363T0506	∅ 4,1
			22	ASNA0363T0507	
			23	ASNA0363T0508	
B	9	ASNA0363T0606	10	ASNA0363T0607	∅ 5
			24	ASNA0363T0608	
			25	ASNA0363T0609	
B (FRAME AREA)	HELICOPTER POST MOD 073880		HELICOPTER POST MOD 073880		∅ 5
	9	ASNA0363T0606	10	ASNA0363T0607	
			24	ASNA0363T0608	
			25	ASNA0363T0609	
	HELICOPTER PRE MOD 073880		HELICOPTER PRE MOD 073880		∅ 6,58
	28	ASNA0363T0806	29	ASNA0363T0807	
30			ASNA0363T0808		
31			ASNA0363T0809		
D	11	ASNA0363T0605	9	ASNA0363T0606	∅ 5
			10	ASNA0363T0607	
			24	ASNA0363T0608	
E	12	ASNA0363T0503	17	ASNA0363T0504	∅ 4,1
			8	ASNA0363T0505	
			21	ASNA0363T0506	
			22	ASNA0363T0507	
G	14	ASNA0363T0403	13	ASNA0363T0404	∅ 3,2
			15	ASNA0363T0405	
			19	ASNA0363T0406	
			20	ASNA0363T0407	

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Figure 10 (Installation of LH patch rivets)

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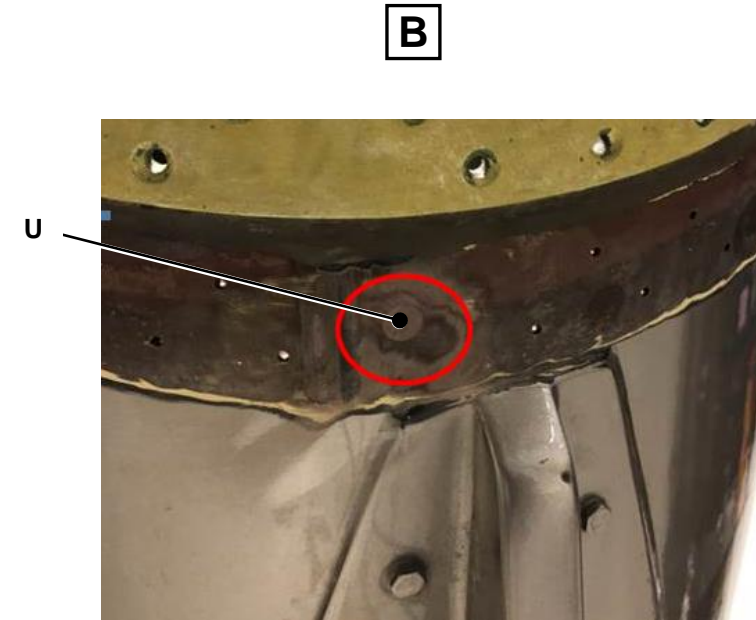
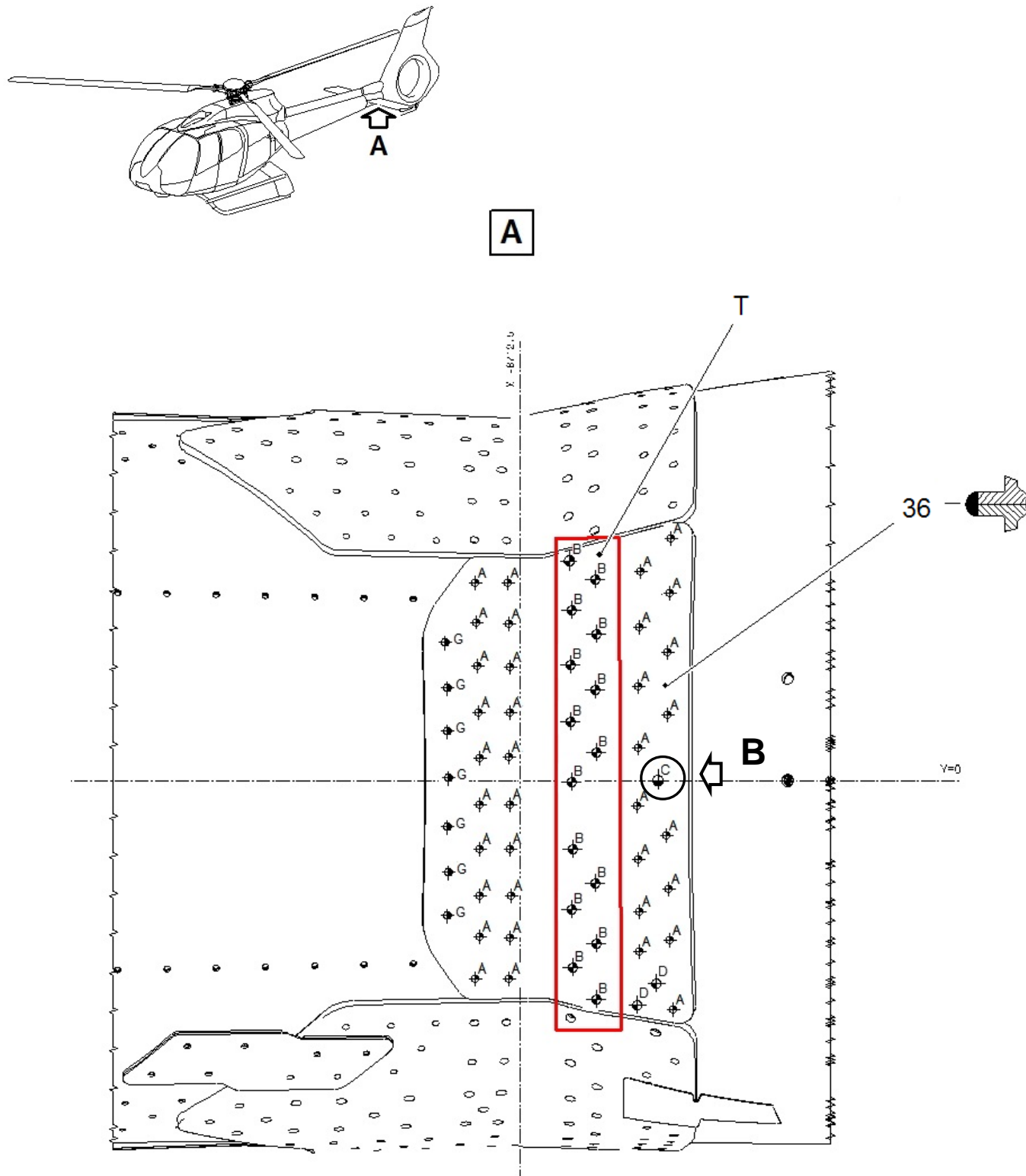


Items holes	Rivets		Variant Rivets		Final diameter
	Items SB	References	Items SB	References	
A	8	ASNA0363T0505	21	ASNA0363T0506	Ø 4,1
			22	ASNA0363T0507	
			23	ASNA0363T0508	
B (FRAME AREA)	HELICOPTER POST MOD 073880		HELICOPTER POST MOD 073880		Ø 5
	9	ASNA0363T0606	10	ASNA0363T0607	
			24	ASNA0363T0608	
			25	ASNA0363T0609	
	HELICOPTER PRE MOD 073880		HELICOPTER PRE MOD 073880		Ø 6,58
	28	ASNA0363T0806	29	ASNA0363T0807	
30			ASNA0363T0808		
31			ASNA0363T0809		
E	12	ASNA0363T0503	17	ASNA0363T0504	Ø 4,1
			8	ASNA0363T0505	
			21	ASNA0363T0506	
			22	ASNA0363T0507	
G	14	ASNA0363T0403	13	ASNA0363T0404	Ø 4,1
			15	ASNA0363T0405	
			19	ASNA0363T0406	
			20	ASNA0363T0407	
K (FRAME AREA)	HELICOPTER POST MOD 073880		HELICOPTER POST MOD 073880		Ø 5
	18	ASNA0363T0604	11	ASNA0363T0605	
			9	ASNA0363T0606	
	HELICOPTER PRE MOD 073880		HELICOPTER PRE MOD 073880		Ø 6,58
	26	ASNA0363T0804	27	ASNA0363T0805	
28			ASNA0363T0806		
L	17	ASNA0363T0504	8	ASNA0363T0505	Ø 4,1
			21	ASNA0363T0506	
			22	ASNA0363T0507	

Return to paragraph [3.B.2.c.](#)
 Return to paragraph [3.B.2.d.](#)
 Return to paragraph [3.B.2.e.](#)
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Figure 11 (Installation of upper patch rivets)

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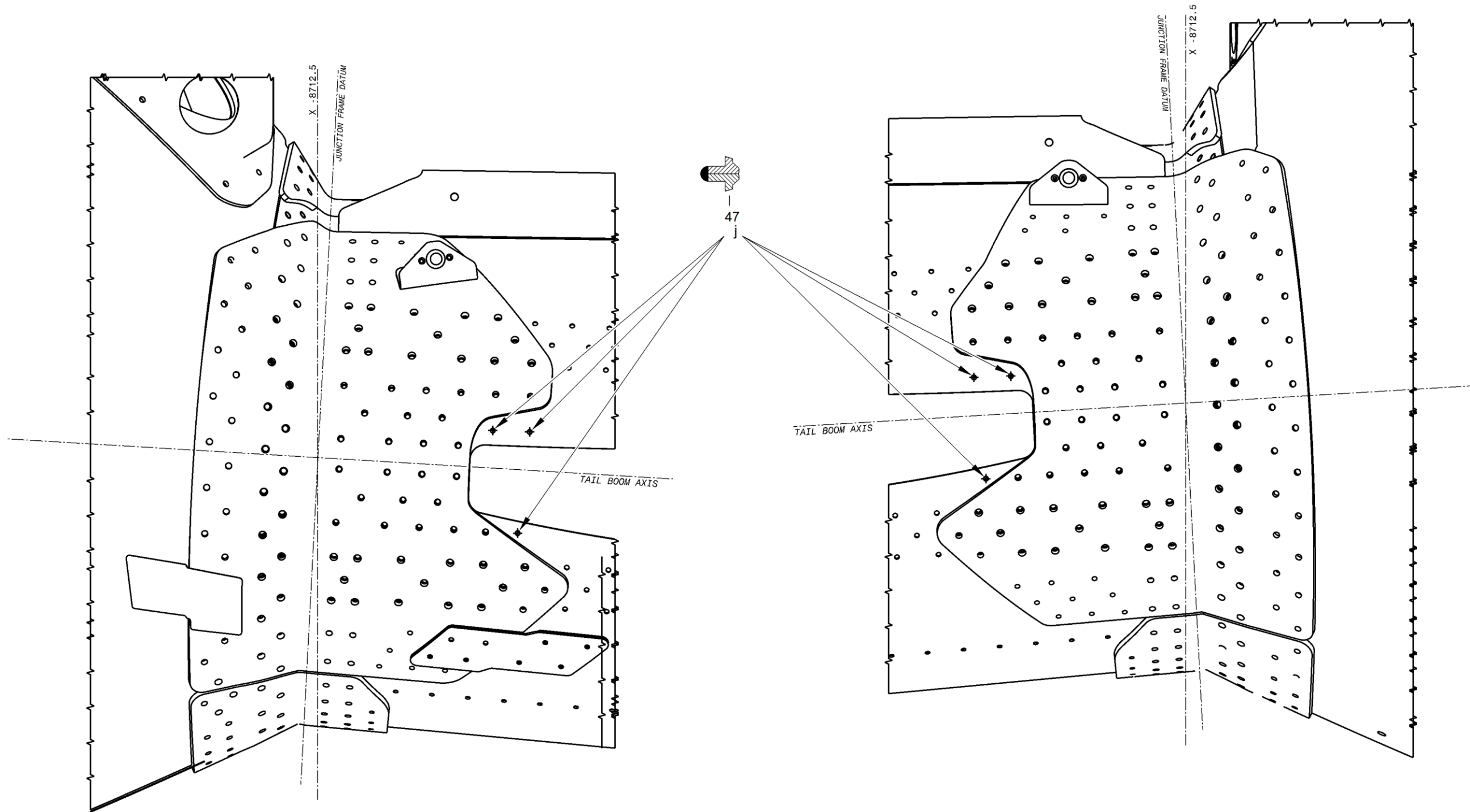


Items holes	Rivets		Variant Rivets		Final diameter
	Items SB	References	Items SB	References	
A	8	ASNA0363T0505	21	ASNA0363T0506	Ø 4,1
			22	ASNA0363T0507	
			23	ASNA0363T0508	
B	9	ASNA0363T0606	10	ASNA0363T0607	Ø 5
			24	ASNA0363T0608	
			25	ASNA0363T0609	
B (FRAME AREA)	HELICOPTER POST MOD 073880		HELICOPTER POST MOD 073880		Ø 5
	9	ASNA0363T0606	10	ASNA0363T0607	
			24	ASNA0363T0608	
			25	ASNA0363T0609	
	HELICOPTER PRE MOD 073880		HELICOPTER PRE MOD 073880		Ø 6,58
	28	ASNA0363T0806	29	ASNA0363T0807	
			30	ASNA0363T0808	
31			ASNA0363T0809		
C	10	ASNA0363T0607	24	ASNA0363T0608	Ø 5
			25	ASNA0363T0609	
D	11	ASNA0363T0605	9	ASNA0363T0606	Ø 5
			10	ASNA0363T0607	
			24	ASNA0363T0608	
G	14	ASNA0363T0403	13	ASNA0363T0404	Ø 3,2
			15	ASNA0363T0405	
			19	ASNA0363T0406	
			20	ASNA0363T0407	

Return to paragraph [3.B.2.f](#).

Figure 12 (Installation of upper patch rivets)

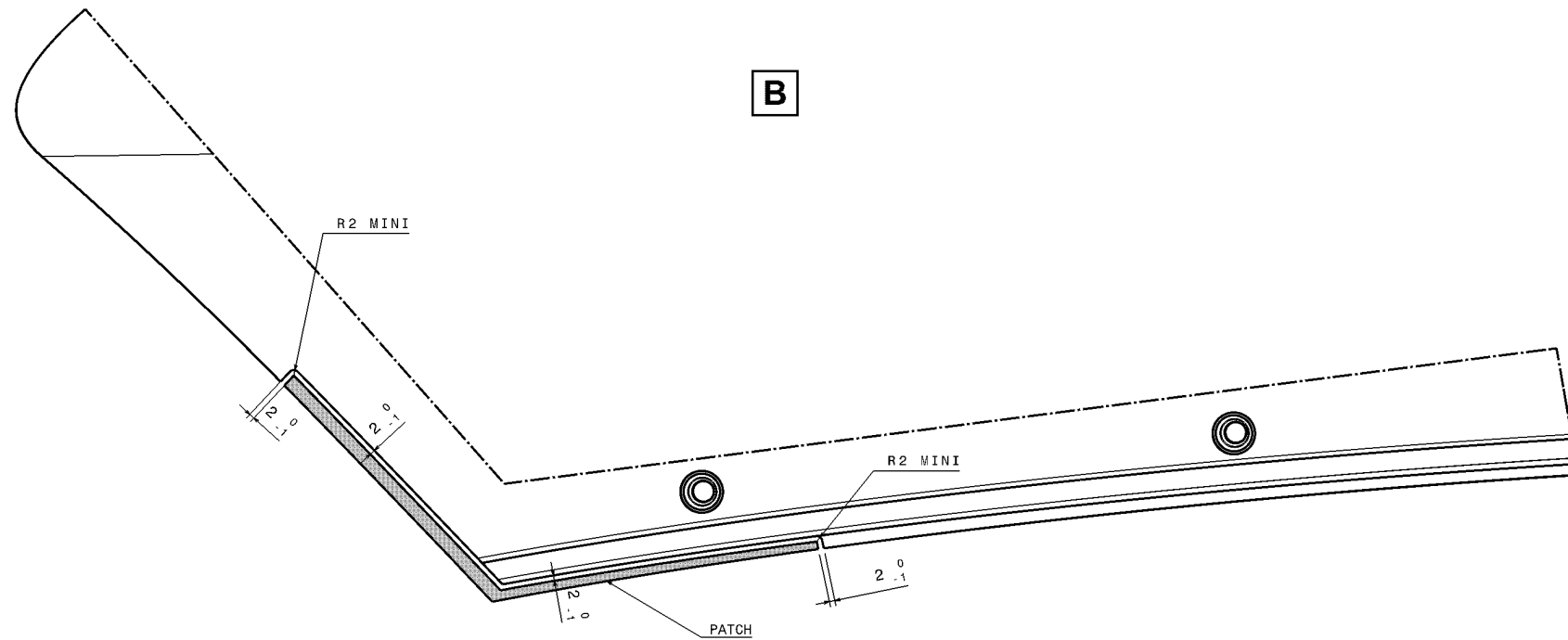
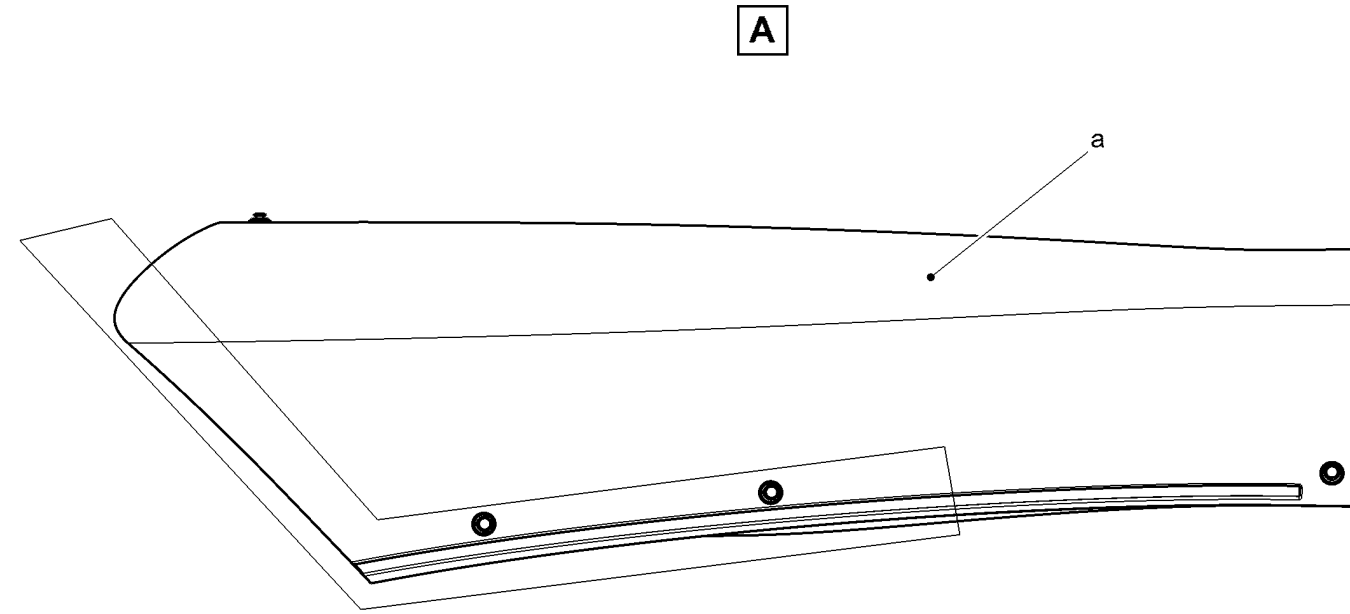
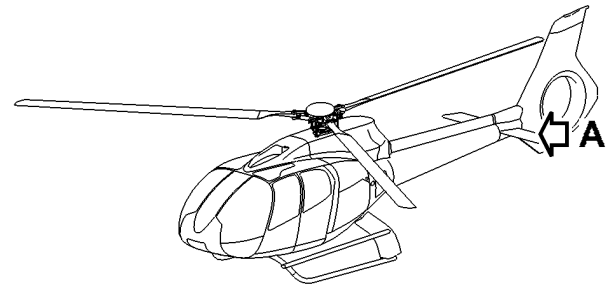
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Return to paragraph [3.B.2.c.](#)
Return to paragraph [3.B.2.d.](#)

Figure 13 (Installation of rivets on skins)

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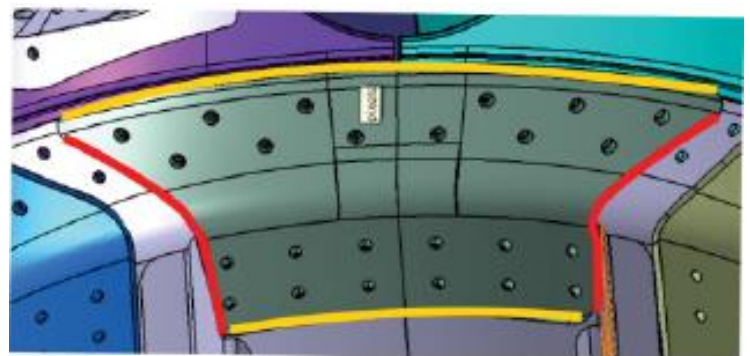
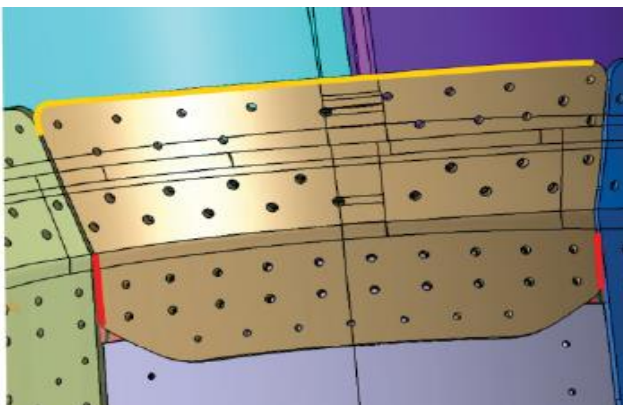
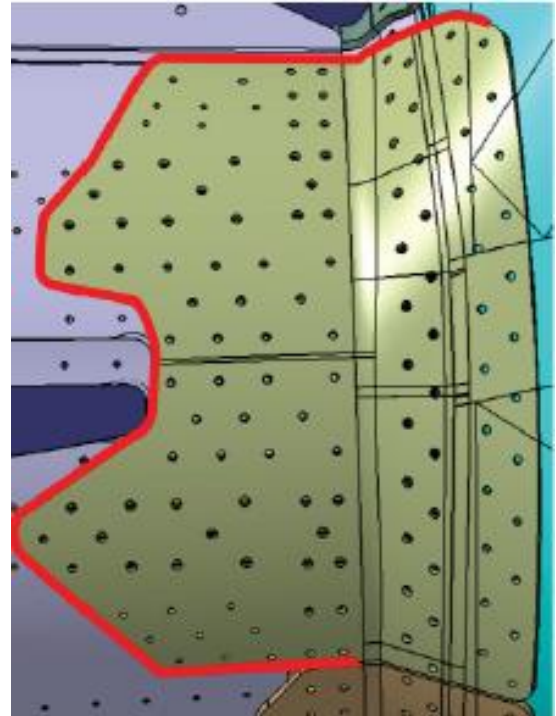
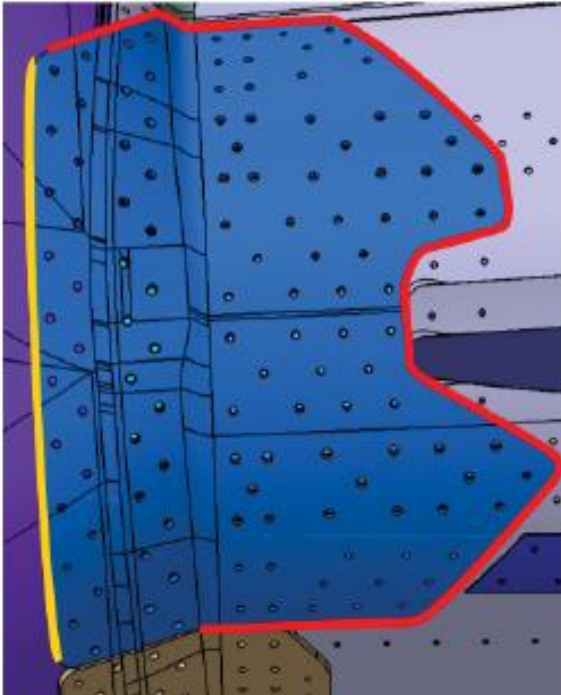
Return to paragraph [3.B.2.g.](#)

Figure 14 (Transmission fairing cut-out)

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4. APPENDIX

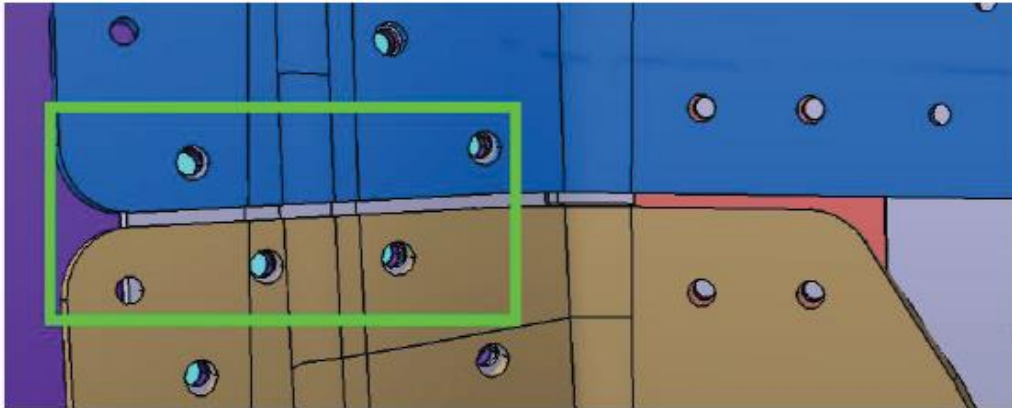
4.A. EDGE DISTANCE ACCEPTANCE CRITERIA



— Min. edge distance: $1.5 \cdot D$
— Min. edge distance: $2 \cdot D$
D: Diameter of the definitive hole

4.A.1. EDGE DISTANCE BETWEEN THE LATERAL PATCHES AND THE LOWER PATCH

In the areas of juxtaposition of the lateral patches and the lower patch, the minimum distance between the holes and the edge is 5 mm.



RH patch / lower patch



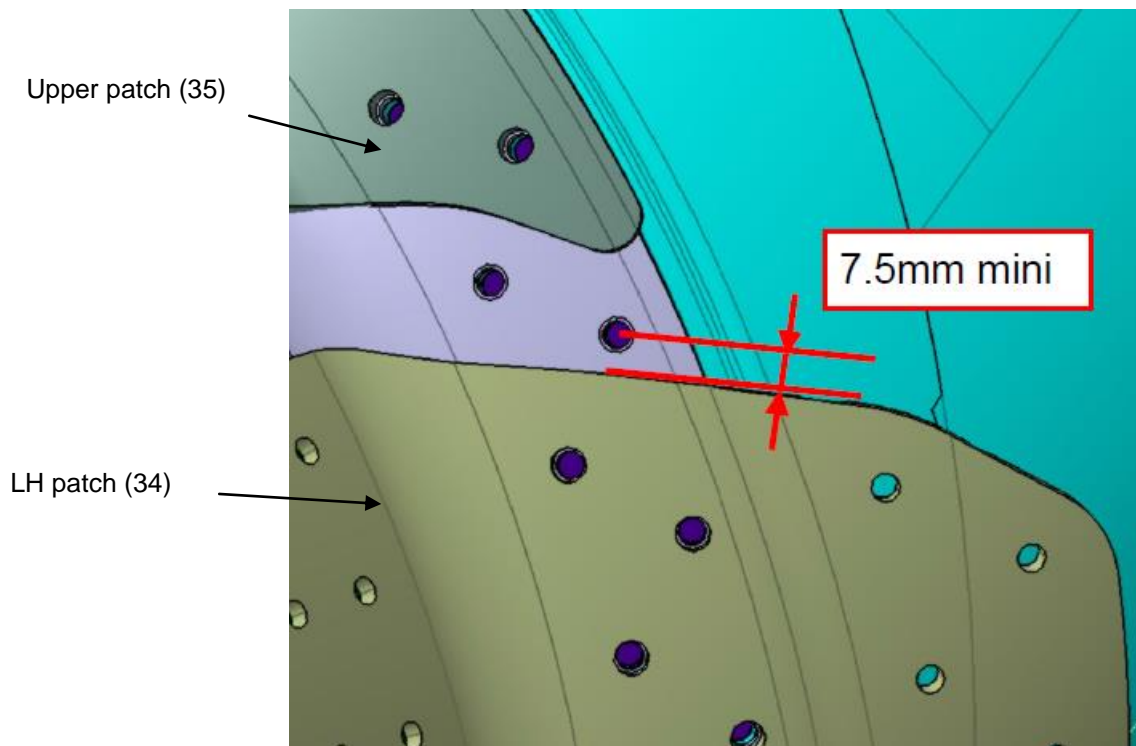
LH patch / lower patch

- If the dimensions are not complied with, trim the patch(es) as per MTC Work Card 20-03-07-402 by complying with the edge distance criteria above.
- Protect the patch(es) with C26 (57) as per MTC Work Card 20-04-05-420.

Return to paragraph [3.B.2.f](#).

4.A.2. EDGE DISTANCE BETWEEN THE LH PATCH AND THE CENTER OF THE FRAME RIVET

- When positioning LH patch (34), if a $\varnothing 6.58$ rivet is installed in the area of the frame, check that the distance between the center of the rivet and the edge of patch (34) is greater than or equal to 7.5 mm min.



- If the dimension is not complied with, trim LH patch (34) as per MTC Work Card 20-03-07-402 by complying with the edge distance criteria above (4.A.).
- Protect the patch(es) with C26 (57) as per MTC Work Card 20-04-05-420.

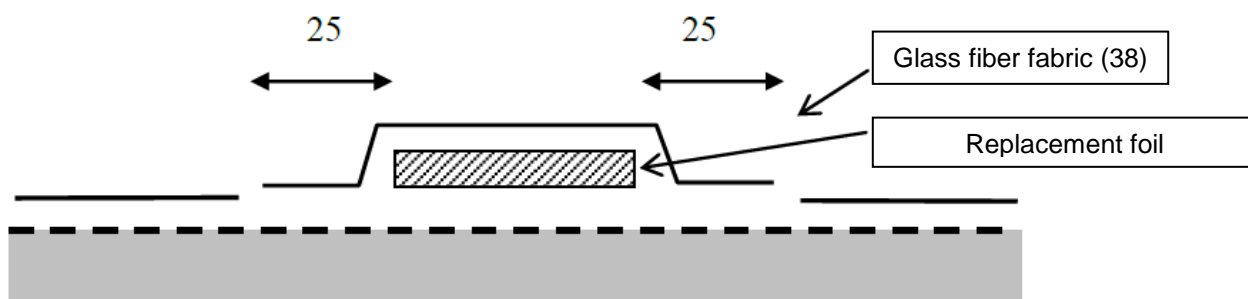
Return to paragraph [3.B.2.d.](#)

4.B. REPAIR OF THE DAMAGED FOIL

The damaged part of the foil is replaced with an equivalent foil with an overlapping length equal to the width of the strip.

To ensure correct electrical contact, two methods are possible:

- The replacement foil will be riveted onto the original foil. The pressure of the rivet heads ensures satisfactory contact.
- The two foils are bonded on top of each other with conductive adhesive (44). A rivet installed in the overlap area holds the repaired foil. The repaired foil is encapsulated with glass fiber fabric (38) impregnated with Adhesive (39).



The damaged foil must be removed as follows:

- identify the repair area,
- initiate a rupture on both sides of the damaged foil with a cutter,
- carefully remove the foil.

Return to paragraph [3.B.2.c](#).

4.C. IDENTIFICATION OF DIAMETER / THICKNESS TO BE TIGHTENED

Length code	Grip length		Diameter code											
			04				05				06			
			L ref.		M max.		L ref.		M max.		L ref.		M max.	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
01	.031 .095	0,79 2,41	.258	6.55	.330	8.38	.274	6,96	.414	10,52	-	-	-	-
02	.157 .094	3,99 2,39	.321	8.15	.393	9.98	.336	8,53	.476	12,09	.355	9,02	.521	13,23
03	.220 .156	5,59 3,96	.383	9.73	.455	11.56	.398	10,11	.539	13,69	.417	10,59	.584	14,83
04	.282 .219	7,16 5,56	.446	11.33	.518	13.16	.460	11,68	.602	15,29	.480	12,19	.647	16,43
05	.345 .281	8,76 7,14	.508	12.90	.580	14.73	.523	13,28	.664	16,87	.542	13,77	.709	18,00
06	.407 .344	10,34 8,74	.570	14.48	.642	16.31	.585	14,86	.727	18,47	.605	15,37	.772	19,61
07	.470 .406	11,94 10,31	.633	16.08	.704	17.88	.648	16,46	.789	20,04	.667	16,94	.834	21,18
08	.532 .469	13,51 11,91	-	-	-	-	.710	18,03	.852	21,64	.730	18,54	.897	22,78
09	.595 .531	15,11 13,49	-	-	-	-	.773	19,63	.914	23,22	.792	20,12	.959	24,36
10	.657 .594	16,67 15,09	-	-	-	-	.835	21,21	.977	24,82	.855	21,72	1.022	25,96
11	.720 .656	18,29 16,66	-	-	-	-	.898	22,81	1.039	26,39	.917	23,29	1.084	27,53
12	.782 .719	19,86 18,26	-	-	-	-	.960	24,38	1.102	27,99	.980	24,89	1.147	29,13
13	.845 .781	21,46 19,84	-	-	-	-	1.023	25,98	1.164	29,57	1.042	26,47	1.209	30,71
14	.907 .844	23,04 21,44	-	-	-	-	1.085	27,56	1.227	31,17	1.105	28,07	1.272	32,31
15	.970 .906	24,64 23,01	-	-	-	-	1.148	29,16	1.289	32,74	1.167	29,64	1.334	33,88

Length code	Grip length		Diameter code							
			08				10			
			L ref.		M max.		L ref.		M max.	
	in	mm	in	mm	in	mm	in	mm	in	mm
03	.220 .156	5,59 3,96	.479	12,17	.645	16,38	.550	13,97	.716	18,19
04	.282 .219	7,16 5,56	.541	13,74	.708	17,98	.613	15,57	.779	19,79
05	.345 .281	8,76 7,14	.604	15,34	.770	19,56	.675	17,15	.841	21,36
06	.407 .344	10,34 8,74	.666	16,92	.833	21,16	.738	18,75	.904	22,96
07	.470 .406	11,94 10,31	.729	18,52	.895	22,73	.800	20,32	.966	24,54
08	.532 .469	13,51 11,91	.791	20,09	.958	24,33	.863	21,92	1.029	26,14
09	.595 .531	15,11 13,49	.854	21,69	1.020	25,91	.925	23,50	1.091	27,71
10	.657 .594	16,67 15,09	.916	23,27	1.083	27,51	.988	25,10	1.155	29,34
11	.720 .656	18,29 16,66	.979	24,87	1.145	29,08	1.050	26,67	1.219	30,96
12	.782 .719	19,86 18,26	1.041	26,44	1.208	30,68	1.113	28,27	1.279	32,43
13	.845 .781	21,46 19,84	1.104	28,04	1.270	32,26	1.175	29,85	1.341	34,06
14	.907 .844	23,04 21,44	1.166	29,62	1.332	33,83	1.238	31,45	1.404	35,56
15	.970 .906	24,64 23,01	1.229	31,22	1.395	35,43	1.300	33,02	1.466	37,23
16	1.032 .969	26,21 24,61	1.291	32,79	1.458	37,03	1.363	34,62	1.529	38,83

Return to paragraph [3.B.2.c.](#)

Return to paragraph [3.B.2.d.](#)

Return to paragraph [3.B.2.e.](#)

Return to paragraph [3.B.2.f.](#)

4.D. CHECK OF CLEARANCES

- On patches (1), (34), (35) and (36), trace lines 40 to 50 mm apart from each other to create a grid pattern similar to [Figures 15](#), [16](#), [17](#) and [18](#).
- At the intersections of these lines, dispose blocks of modeling clay (32) with a diameter of 3 mm and a height of 5 mm approximately, avoiding the holes.
- On the structure, apply teflon tape (33) to the entire surface covered with patches.
- Uniformly pin 30% of the holes with the set of spring fasteners (kk).



CAUTION

IF SCREW-TYPE SPRING FASTENERS (KK) ARE USED, THEY MUST BE TIGHTENED BY HAND.

NOTE 1

The installation of spring fasteners (kk) must be performed from the center of the patches toward the outside.

- Remove spring fasteners (kk) and check clearances with a depth gage (minimum precision 1/10^e mm).
- The values must be marked in Figure 15 for RH patch (1), Figure 16 for LH patch (34), Figure 17 for upper patch (35) and Figure 18 for lower patch (36).
- Discard teflon tape (33) and modeling clay (32) once the clearances have been measured.
- Clean and prepare the surfaces as per MTC Work Card 20-04-04-401.
- Protect the metal areas previously stripped with Alodine (7) and metal primer (49) as per MTC Work Card 20-04-04-403 (Figure 5 - Detail B).

Return to paragraph [3.B.2.c](#).

Return to paragraph [3.B.2.d](#).

Return to paragraph [3.B.2.e](#).

Return to paragraph [3.B.2.f](#).

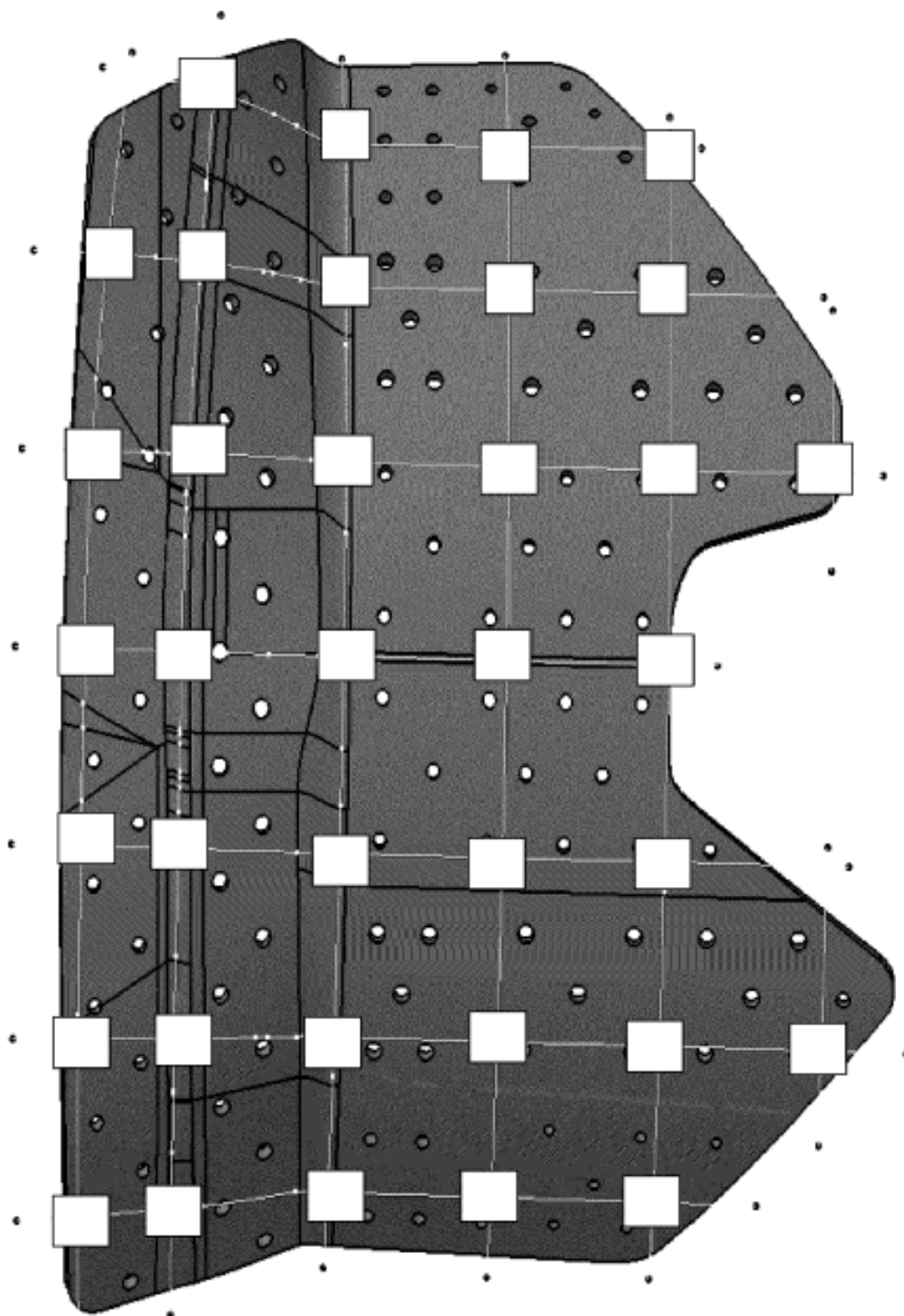


Figure 15 (RH patch)



Figure 16 (LH patch)

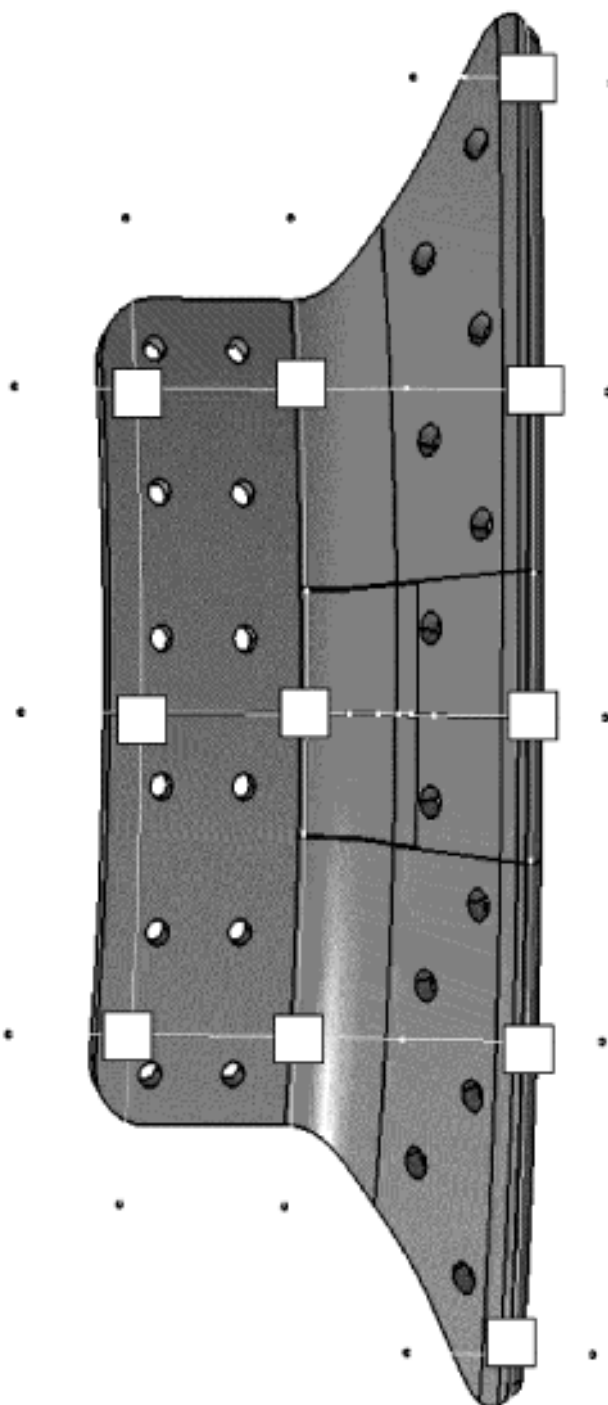


Figure 17 (upper patch)

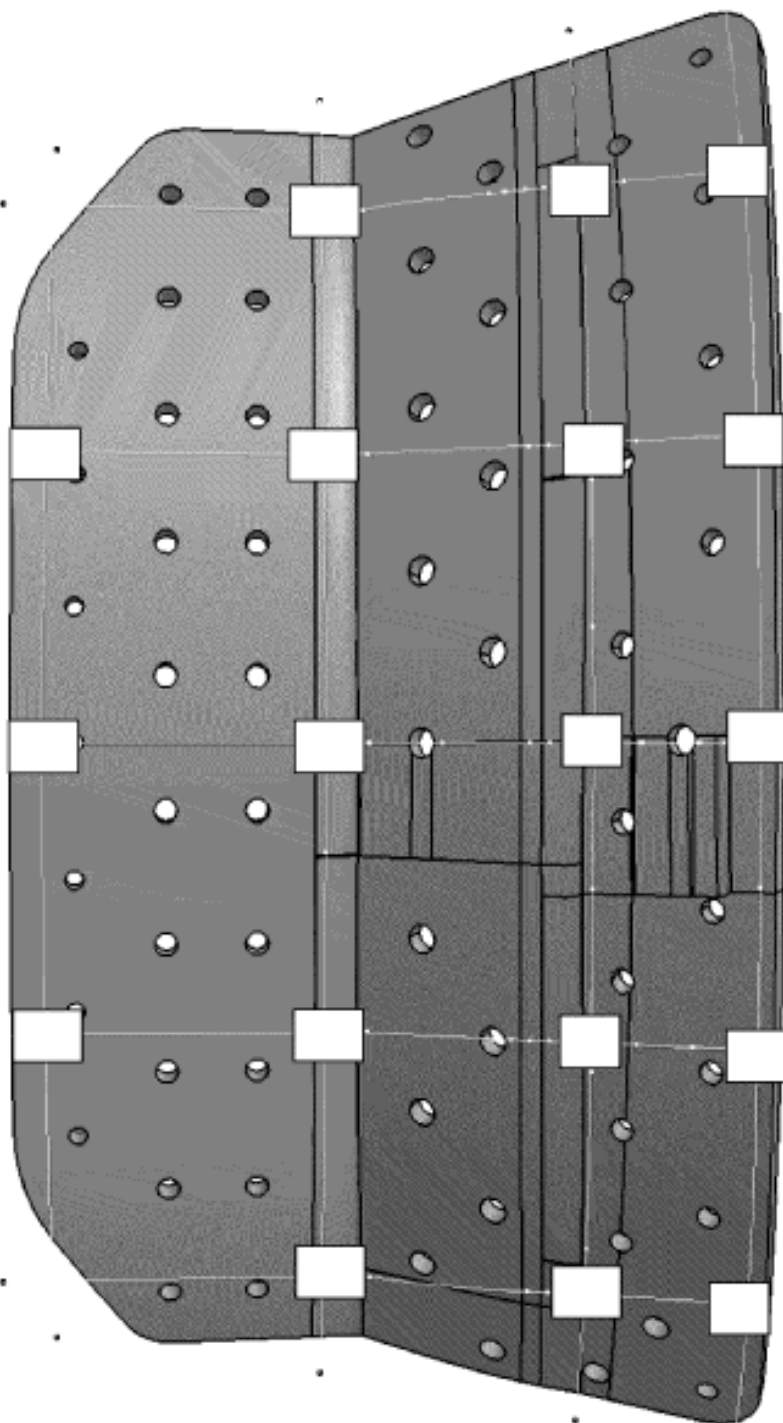


Figure 18 (lower patch)

4.E. SHIMMING**CAUTION**

BEFORE APPLYING LIQUID SHIM (37) TO THE PATCHES, COAT SPRING FASTENERS (KK), THE INSIDE OF THE TAIL BOOM AND THE EXTERNAL FACE OF THE PATCHES WITH MOULD-RELEASE WAX (40) AND PREPARE THE SURFACES (PATCH + STRUCTURE) BEFORE BONDING AS PER MTC WORK CARD 20-06-01-101.

If clearance is less than 2 mm:

- Install patches (1), (34), (35) and (36) with liquid shim (37).
- Uniformly pin 30% of the holes with spring fasteners (kk), from the center toward the outside.
- Clean excess liquid shim (37).
- Leave to cure for 12h at 23°C minimum.

If clearance is between 2 mm and 3 mm:

- Install one ply of glass fiber fabric (38) on the structure side with adhesive (39).
- Leave to cure in a vacuum bag at 65°C for at least 1h using Anita case (cc) or for 12h at 23°C.

NOTE 2

After this first stage of shimming, residual clearance of approximately 1 mm must be ensured.

- Install patch (1) or (34) or (35) or (36) with liquid shim (37).
- Leave to cure for 12h at 23°C minimum.

Example:

If clearance is 2.5 mm, shim 1.5 mm with plies of glass fiber fabric (38) and adhesive (39) and finalize the shimming with liquid shim (37).

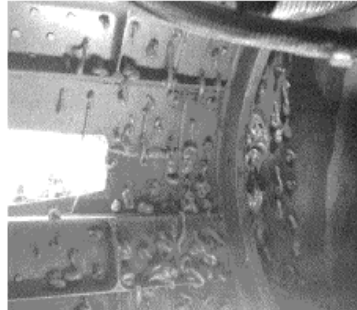
If clearance is greater than 3 mm:

- Ask for advice from the Airbus Helicopters Design Office.

**CAUTION**

IF TEMPERATURE IS BELOW 23°C, THE CURING TIME MUST BE 24 HOURS MINIMUM.

To ensure correct distribution of liquid shim (37), check that excess liquid shim (37) overflows via all the holes and edges of parts.

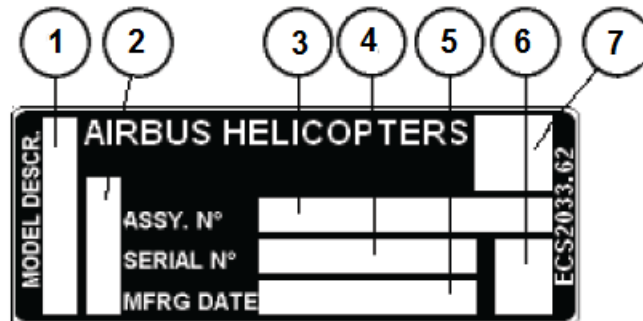


CAUTION

**COMPLETE CURING OF LIQUID SHIM (37) TAKES
1H AT 65°C WITH ANITA CASE (CC) AND HEATING
MATS (XXX) AND (YYY).**

**THE HELICOPTER CANNOT RETURN TO SERVICE
BEFORE.**

Return to paragraph [3.B.2.c](#).
Return to paragraph [3.B.2.d](#).
Return to paragraph [3.B.2.e](#).
Return to paragraph [3.B.2.f](#).

4.F. INDICATING LABEL


Item	Title	Description
1	MODEL DESCR.	EC130 B4 or EC130 T2
2	-	MOD 074775
3	ASSY No.	SB 53-036
4	SERIAL NUMBER	Number: TB XXXXX
5	MFRG DATE	Date of compliance with Service Bulletin (MM/YY)
6	-	-
7	CONTROL	Repair Technician's Signature

 Return to paragraph [3.B.2.g.](#)

4.G. INFORMATION REPORT BEFORE PATCH INSTALLATION

The table below must be completed before the patch installation and returned to the Airbus Helicopters Customer Service Technical Support:

Fax: +33 (0)4.42.85.99.66

E-mail: support.technical-airframe.ah@airbus.com

Or <https://keycopter.airbus.com/web/guest/service-bulletin-customer>


CAUTION

A TIME LIMIT OF 2 MONTHS IS NECESSARY BEFORE IT IS POSSIBLE TO BEGIN INSTALLATION OF THE PATCHES (AVAILABILITY OF THE KITS AND OF THE QUALIFIED PERSONNEL).

PLEASE TAKE THIS TIME LIMIT INTO ACCOUNT WHEN COMPLETING THIS INFORMATION SHEET.

Date:		
Customer:		
E-mail for contact:		
Aircraft S/N:		
Tail boom S/N:		
Tail boom P/N:		
Helicopter configuration:	PRE MOD 073880	POST MOD 073880
Air conditioning (YES/NO)		
Radio Altimeter (YES/NO)		
Deadline wished for the intervention		
RDAS / SB implemented (YES/NO)		
Comments:		

Return to paragraph [2.A.](#)

4.H. INFORMATION REPORT AFTER PATCH INSTALLATION

The table below must be completed after the patch installation on the helicopter by the Airbus Helicopters qualified Technician and returned to the Airbus Helicopters Customer Service Technical Support:

Fax: +33 (0)4.42.85.99.66

E-mail: support.technical-airframe.ah@airbus.com

Or <https://keycopter.airbus.com/web/guest/service-bulletin-techrep>

Date:		
Customer:		
Technician name:		
Aircraft S/N:		
Tail boom S/N:	TBXXXX	
Tail boom P/N:	350AXX-XXXX-XXXX	
Helicopter configuration:	PRE MOD 073880	POST MOD 073880
Comments:		

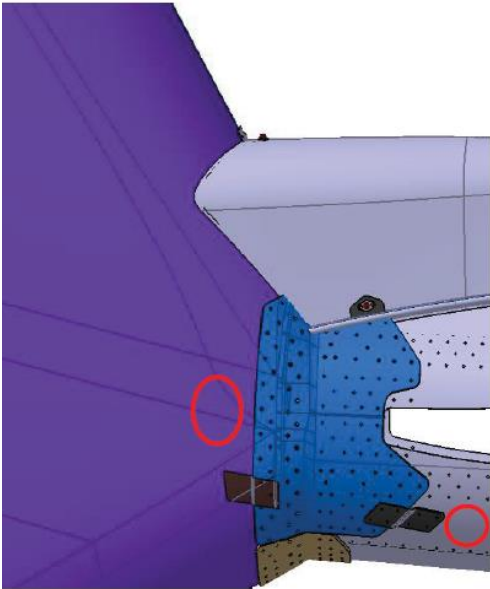
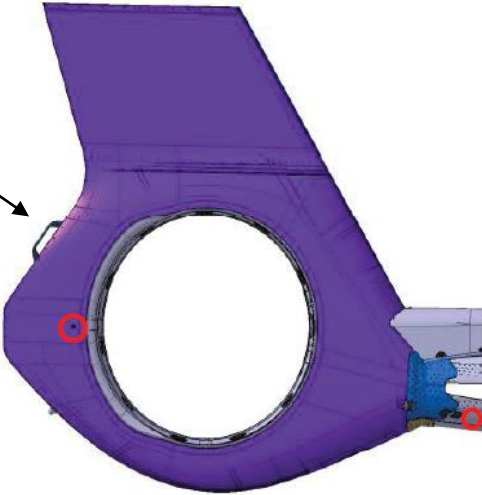
Return to paragraph [3.B.2.g.](#)

4.I. ELECTRICAL BONDING TEST

4.I.1. Procedure

The points to be tested are as follows:

- lower part of the foil / coupling cone. Pmax: 3 mOhm,
- screw RH half-fenestron / coupling cone. Pmax: 302.5 mOhm.

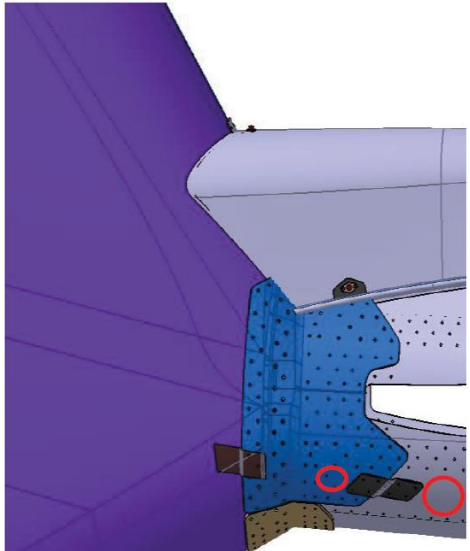
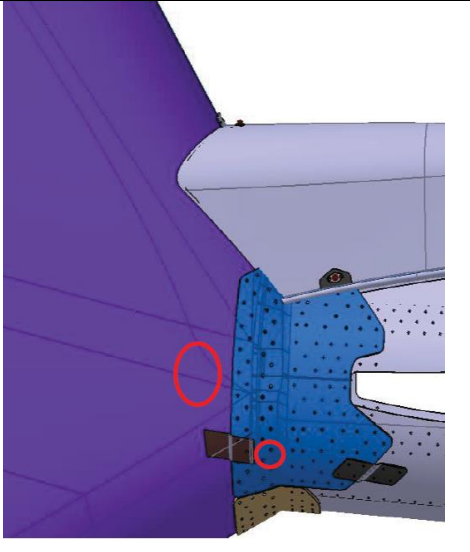
Electrical continuity test			
Action	Tool / Products	Instructions	Comments / Illustrations
Continuity test between the coupling cone and the lower part of the Fenestron foil.	Abrasive paper, grain 80 to 240 MilliOhmmeter (vzv)	Strip a small surface in the lower part of the foil next to the patch / Fenestron electrical bonding link. Perform the same operation on the skin of the coupling cone. Test the continuity with the MilliOhmmeter Theoretical value defined in the DQ. Record the measured value.	
Continuity test between the bonding braid attachment screw and the coupling cone	Abrasive paper grain 80 to 240 MilliOhmmeter (vzv)	Strip the bonding braid attachment screw or Measure the bonding braid through the access hatch. Test the continuity with the MilliOhmmeter Theoretical value defined in the DQ. Record the measured value in the DQ.	

After the electrical bonding test, reprotect the stripped areas as per MTC Work Cards 20-04-05-402 and 20-04-05-420.

If electrical bonding is incorrect, perform the tests below to detect the location of the electrical bonding problem.

The points to be tested are as follows:

- lower part of the foil / patch. Pmax: 1 mOhm,
- patch / coupling cone. Pmax: 2 mOhm.

Electrical continuity test			
Action	Tool / Products	Instructions	Comments / Illustrations
Continuity test between the coupling cone and the patch	Abrasive paper grain 80 to 240 MilliOhmmeter (vzv)	Strip a small surface on the lower part of the foil next to the patch / skin electrical bonding link. Perform the same operation on the skin of the coupling cone. Test the continuity with the MilliOhmmeter Theoretical value defined in the DQ. Record the measured value in the DQ.	
Continuity test between the patch and the lower part of the Fenestron foil.	Abrasive paper grain 80 to 240 MilliOhmmeter (vzv)	Strip a small surface in the lower part of the foil next to the patch / Fenestron electrical bonding link. Perform the same operation on the patch. Test the continuity with the MilliOhmmeter Theoretical value defined in the DQ. Record the value.	

Once the damaged area has been detected, contact the Airbus Helicopters Customer Service Technical Support:

Fax: +33 (0)4.42.85.99.66

E-mail: support.technical-airframe.ah@airbus.com

4.1.2. Value recording from the electrical continuity test

Actions	Date	Inspection stamp		Comments
		1	2	
Continuity test between the coupling cone and the lower part of the Fenestron foil.				
Continuity test between the bonding braid attachment screw and the coupling cone.				

 Return to paragraph [3.B.2.c.](#)