

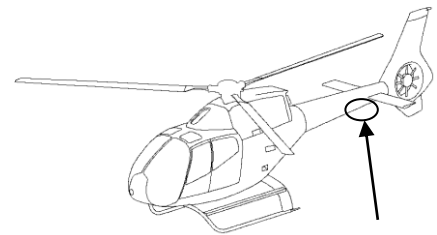
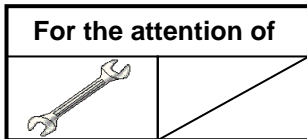
No. EC120-53A017

Civil version(s): B

ALERT SERVICE BULLETIN

PROTECTIVE MEASURE

FUSELAGE - Rear Fuselage Corrosion on the tail boom



Revision No.	Date of issue
Revision 0	2020-09-14
Revision 1	2020-11-26
Revision 2	2024-01-17

Summary:

The purpose of this ALERT SERVICE BULLETIN is to perform a check for corrosion and cracks at the VHF (Very High Frequency) antenna attachments on the tail boom.

Reason for the last revision:

The purpose of revision 2 of this ALERT SERVICE BULLETIN is to update the paragraph 3.D. following the integration of its contents in the documentation.

Compliance:

Compliance with this ALERT SERVICE BULLETIN is mandatory, except for paragraph 3.D.

Export Control:

US Export Control - No US content. This Item does not contain any U.S. origin ITAR or EAR content.
FR Export Control - Not Listed. This Item is not listed against the EC regulations in the EU/FR

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1. PLANNING INFORMATION

1.A. EFFECTIVITY

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

On all EC120 helicopters.

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

Tail booms, all Part Numbers.

1.B. ASSOCIATED REQUIREMENTS

Not applicable.

1.C. REASON

Revision 0:

Corrosion was found on the external tail boom skin, under the VHF antenna ([Figure 1](#)).

This galvanic type corrosion is due to:

- a contact between the aluminium skin and the stainless steel antenna attachment inserts,
- the protection which is not sufficient.

Corrosion propagation cannot be detected without removing the VHF antenna and requires thorough inspection.

If this corrosion is not detected, the tail boom can undergo to buckling during severe landing.

Consequently, Airbus Helicopters makes it mandatory to check the previously specified areas for corrosion.

Revision 1:

The purpose of Revision 1 of this ALERT SERVICE BULLETIN is to provide a repair solution introduced through Service Bulletin No. 53-018 (see paragraph 3.B.2.b.), which must be complied with if corrosion and/or cracks are found at the VHF antenna attachments on the tail boom.

Revision 1 of this ALERT SERVICE BULLETIN does not affect compliance with revision 0 of this ALERT SERVICE BULLETIN except for the helicopters on which corrosion and/or cracks were found during compliance with revision 0 of this ALERT SERVICE BULLETIN.

Revision 2:

The purpose of revision 2 of this ALERT SERVICE BULLETIN is to update the paragraph 3.D. following the integration of its contents in the documentation.

Revision 2 of this ALERT SERVICE BULLETIN has no effect on the compliance with former revisions of this ALERT SERVICE BULLETIN.

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1.D. DESCRIPTION

Compliance with this ALERT SERVICE BULLETIN consists in:

- removing the VHF antenna,
- making sure that there is no corrosion or crack under the VHF antenna,
- interpreting the results:
 - . if there is no corrosion and no crack, during reinstallation of the VHF antenna, embodying modification C008A0345050,
 - . if there is corrosion and/or crack, complying with Service Bulletin No. 53-018 (Repair at the tail boom VHF attachment).

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:

The work must be performed on the helicopter by the operator.

Comply with [paragraph 3.](#) of this ALERT SERVICE BULLETIN within 6 months from receipt of revision 0 of this ALERT SERVICE BULLETIN issued on the date indicated in the page footer.

Non-installed equipment or parts:

Before installing the tail boom identified in [paragraph 1.A.2.](#) of this ALERT SERVICE BULLETIN, check stocks and modify when applicable as per [paragraph 3.B.2.](#)

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



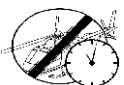
For compliance with this ALERT SERVICE BULLETIN, Airbus Helicopters recommends the following staff qualification:

Qualification: 1 Airframe Technician.



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

Estimated Man-hours: 4 hours for the Airframe Technician for the inspection and the application of the MOD C008A0345050.



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

Helicopter downtime is estimated at one half-day.

1.H. WEIGHT AND BALANCE



There is no change in weight and moment.

1.I. POWER CONSUMPTION

Not applicable.

1.J. SOFTWARE UPGRADES/UPDATES

Not applicable.

1.K. REFERENCES

The following documents are required for compliance with this ALERT SERVICE BULLETIN.

Standard Practices Manual (MTC):

MTC: 20-02-05-404: Assembly by screws and nuts - Joining

MTC: 20-02-07-407: Use of conductive paste CHO-LUB E117 - Electrical bonding

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: 20-04-04-403: Touch-up of the Alodine 1200 protection (Bonderite M-Cr 1200) - Surface treatment before painting

MTC: 20-05-01-222: Application of PR 1771 B2 sealant - General sealing procedures

MTC: 20-05-01-223: Use of Sealing compounds sealing 1776 B2 / 1776 S - General sealing procedures

MTC: 20-05-01-401: Use of THIXOFLEX and SLG products - General sealing procedures

MTC: 20-07-03-406: Instructions applicable when working on an aircraft electrical circuit and power generating systems - Technical 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: 20-90-01-106: Pitting corrosion - General information on corrosion

MTC: 20-90-03-102: Visual inspection - Corrosion detection

Aircraft Maintenance Manual (AMM):

AMM: 23-13-02,4-1: Removal / Installation - Antenna on Tail Boom

AMM: 23-13-02,5-1: Functional Tests - KY 196A VHF/AM System

Information Notice (IN):

IN: 3481-I-00: The Marketplace: an Airbusworld eOrdering service

IN: 3785-I-00: Introduction of the digital Service Bulletin reporting SB Insight

Service Bulletin:

Service Bulletin No. 53-018 Repair at the tail boom VHF attachment

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1.L. OTHER AFFECTED PUBLICATIONS



CAUTION

TO COMPLY WITH THIS ALERT SERVICE BULLETIN, THE OPERATOR MUST MAKE SURE THAT ALL THE MAINTENANCE DOCUMENTS REQUIRED FOR THE MAINTENANCE OF THIS INSTALLATION ARE AVAILABLE. IF NOT, IT IS THE OPERATOR'S RESPONSIBILITY TO OBTAIN THE DOCUMENTS FROM THE USUAL AIRBUS HELICOPTERS CONTACT.

The manuals shown below are updated with the modification:

- Illustrated Parts Catalog (IPC),
- Aircraft Maintenance Manual (AMM),
- Master servicing Manual (MSM).

You will receive the documents to which you subscribe.

1.M. PART INTERCHANGEABILITY OR MIXABILITY

Not applicable.

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2. EQUIPMENT OR PARTS INFORMATION

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

Price

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

Availability

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

Procurement

Order the required quantity from the Airbus Helicopters Network Sales and Customer Relations Department:

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

NOTE

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

2.B. LOGISTIC INFORMATION

Not applicable.

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

Equipment or parts to be ordered separately:

Key Word	Qty	New P/N	Item	Old P/N →	Instruction
Screw	3	22256BC050012L	1		

Consumables to be ordered separately:

As per Work Cards indicated in this ALERT SERVICE BULLETIN and the list below:

Key Word	Qty	P/N	CM	Item
Conductive past	AR	ECS2241.20	132	2
Sealing compound	AR	ECS2339.60	6068	3
Sealing compound	AR	ECS2253.10	6267	4
Sealing compound	AR	ECS2068.10	6240	5
Cleaning agent	AR	ECA 3061.10	2996	6
Chemical transformation agent	AR	ECS2338.10	316	7

You can send an order for the consumables from the AirbusWorld Marketplace through e-ordering (IN 3481-I-00).

If you cannot get access to e-ordering, please contact your Logistic Focal Point.

2.D. EQUIPMENT OR PARTS TO BE RETURNED

Not applicable.

3. ACCOMPLISHMENT INSTRUCTIONS

3.A. GENERAL

- As per Work Card 20-02-05-404 (MTC), read and comply with the instructions concerning assembling by screws and nuts.
- As per Work Card 20-04-01-102 (MTC), read and comply with the instructions for the use of cleaning products on individual parts and on aircraft.
- As per Work Card 20-90-03-102 (MTC), read and comply with the instructions for corrosion visual inspection.

3.B. WORK STEPS

3.B.1. Preliminary steps

- Disconnect all the electrical power supplies as per Work Card 20-07-03-406 (MTC).
- Install the access equipment.

3.B.2. Procedure (Figures [1](#) and [2](#))

3.B.2.a. Check for corrosion under the VHF antenna base support

- Remove the VHF antenna (a) as per Task 23-13-02,4-1 (AMM).
- Discard the screws (c).
- Make sure that there is no aluminum oxide (white powder) on the skin area (b) and on the screw holes (d).
- Clean the skin area (b) using the cleaning agent (6).
- Make sure that there is no pitting corrosion on the skin area (b), on the screw holes (d) and on the edge (e) of the screw holes (d) located between the skin area (b) and the insert (f) (see [Figure 2](#), SECTION D-D) as per Work Card 20-90-01-106 (MTC).
- Make sure that there are no crack on the skin area (b) and on the screw holes (d).
- Interpret the results as per paragraph 3.B.2.b.

3.B.2.b. Interpretation of the results

- If there is no corrosion and no crack:
 - . comply with paragraph 3.B.2.c.
- If there is corrosion and/or crack:
 - . comply with Service Bulletin No. 53-018.

3.B.2.c. Embodiment of MOD C008A0345050

- Strip the skin area (b) as per Work Card 20-04-02-401 (MTC).
- Touch up the area (b) using chemical transformation agent (7) as per Work Card 20-04-04-403 (MTC).
- Apply conductive past (2) on the area (b) as per Work Card 20-02-07-407 (MTC).
- Connect the coaxial connector (g).
- Apply sealing compound (4) around the coaxial connector (g) as per Work Card 20-05-01-401 (MTC).
- Install the VHF antenna (a) using screws (1).
- Tighten the screws (1) to the standard torque.
- Apply a bead of sealant (3) around the antenna (a) as per Work Card 20-05-01-222 (MTC).
- Apply sealing compound (5) on the screw heads (1) as per Work Card 20-05-01-223 (MTC).

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3.B.3. Tests

- Set the helicopter to test condition.
- Perform a functional test as per Task 23-13-02,5-1 (AMM).

3.B.4. Final steps

- Perform an aspect check on the helicopter after inspection or repair as per Work Card 20-07-03-408 (MTC).
- Connect all the electrical power supplies as per Work Card 20-07-03-406 (MTC).
- Remove the access equipment.

3.C. RECORD OF COMPLIANCE

Compliance with this document:

Record full compliance with this ALERT SERVICE BULLETIN, with the revision number, in the helicopter documents.

Record compliance with this ALERT SERVICE BULLETIN (see IN 3785-I-00 for instructions):
QR-Code or hypertext link



NOTE

The recording of compliance with ALERT SERVICE BULLETINS in the SB Insight tool does not replace the recording in the helicopter documents.

[ASB EC120-53A017](#)

Tracking of modifications in the documentation:

Record full embodiment of modification C008A0345050 in the helicopter documents.

Identification of modifications on equipment or parts:

Record the embodiment of modification C008A0345050 on the tail boom identification plate (or on the internal skin near the identification plate) using indelible ink as per Work Card 20-08-05-103 (MTC).

3.D. OPERATING AND MAINTENANCE INSTRUCTIONS

Operating instructions:

Not applicable.

Maintenance instructions:

Refer to the Aircraft Maintenance Manual (AMM) in force.

Refer to the Master Servicing Manual (MSM) in force.



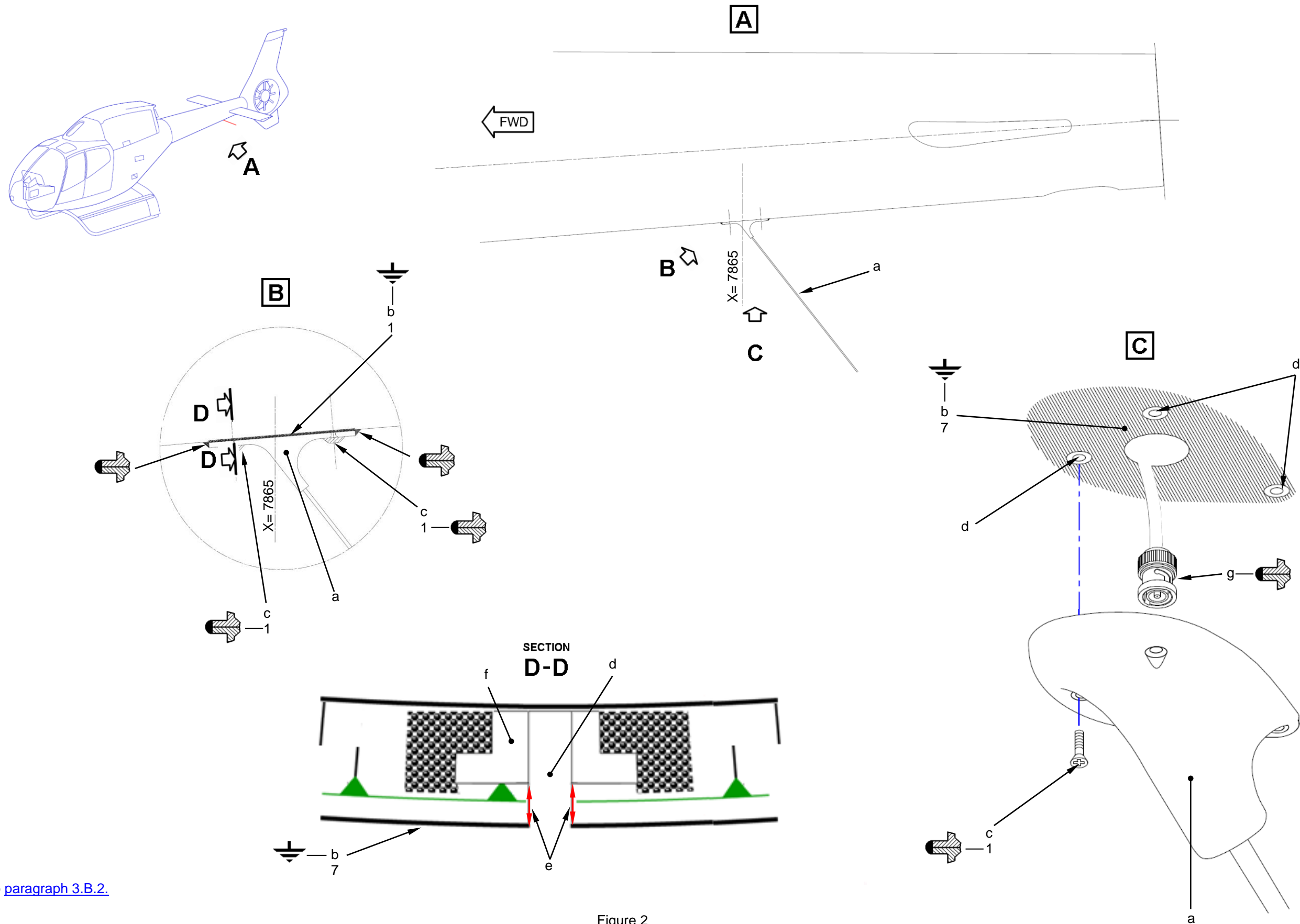
Example of corrosion and aluminium oxide



Example of corrosion and aluminium oxide

Return to [paragraph 1.C.](#)

Figure 1



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

Figure 2