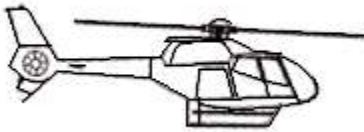


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Civil version(s): B

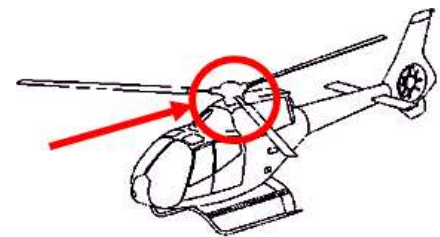


ALERT SERVICE BULLETIN

PROTECTIVE MEASURE

TIME LIMITS - MAINTENANCE CHECKS - Main Rotor Hub Inspection of rotating and non-rotating scissors bolts

ATA: 62



For the attention of



Revision No.	Date of issue
Revision 0	2019-06-11
Revision 1	2020-10-05
Revision 2	2023-02-08

Summary:

Airbus Helicopters was informed that during a pre-flight check one of the compass attachment bolts was found to be broken.

Corrosion beyond the permitted levels was observed on the broken bolt, and the other bolt was twisted.

Thus, this ALERT SERVICE BULLETIN consists in:

- . Making sure that the bolts of the rotating and non-rotating scissors do not rotate,
- . If necessary, replacing the attachment bolt(s).

Reason for last Revision:

The purpose of revision 2 of this ALERT SERVICE BULLETIN is to limit the effectivity to helicopters which have a scissors assembly P/N C623A2110104 and/or P/N C623A2110105.

Compliance:

Compliance with this ALERT SERVICE BULLETIN is mandatory.

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1. PLANNING INFORMATION

1.A. EFFECTIVITY

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

EC120 version B helicopters that have a scissors assembly P/N C623A2110104 and/or P/N C623A2110105.

NOTE

Refer to the Log Card (FM) of the blade to identify the current notification status of the equipment.

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

Scissors assembly P/N C623A2110104 and/or P/N C623A2110105.

1.B. ASSOCIATED REQUIREMENTS

Not applicable.

1.C. REASON

Revision 0:

Airbus Helicopters was informed that during a pre-flight check one of the compass attachment bolts was found to be broken.

Corrosion beyond the permitted levels was observed on the broken bolt, and the other bolt was twisted. Technical analysis of the event concluded that undetected seizure could block the pivot link of the scissors and cause a bolt to break.

Airbus Helicopters makes it mandatory to inspect the attachment bolts of the rotating and stationary scissors.

Revision 1:

Revision 1 of this ALERT SERVICE BULLETIN consists in adding precision to the procedure to improve the detection of the rotation.

Revision 1 of this ALERT SERVICE BULLETIN does not affect compliance with revision 0 of this ALERT SERVICE BULLETIN.

Revision 2:

Thanks to a complementary design and airworthiness analysis based on Return of Experience we have demonstrated that Ampep bushes assembled on scissors C623A2110103 were not leading to seizure.

Consequently, the purpose of revision 2 of this ALERT SERVICE BULLETIN is to limit the effectivity to helicopters which have a scissors assembly P/N C623A2110104 and/or P/N C623A2110105.

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

This ALERT SERVICE BULLETIN consists in:

- . Making sure that the bolts of the rotating and non-rotating scissors do not rotate,
- . If necessary, replacing the attachment bolt(s).

1.E. COMPLIANCE

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

Not applicable.

1.E.2. Compliance in service

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

Helicopters/installed equipment or parts:

- Within 50 flight hours from receipt of Revision 0 of this ALERT SERVICE BULLETIN issued on the date indicated in the page footer, comply with paragraph [3.B.2.a.](#),
- Within 50 flight hours from receipt of Revision 1 of this ALERT SERVICE BULLETIN issued on the date indicated in the page footer, comply with paragraph [3.B.2.b.](#),

Then,

During every "15 FH // 7 D check", comply with paragraph [3.B.2.c.](#)

Non-installed equipment or parts:

During the installation on the helicopter, comply with paragraphs [3.B.2.a.](#) and [3.B.2.b.](#)

1.F. APPROVAL



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

1.G. MANPOWER



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

Qualifications:

- 1 Mechanical Technician,
- 1 Pilot appropriately trained and certified, in compliance with the local regulations in force.



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

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Estimated Man-hours:

- . Approximately 5 minutes to apply the red line,
- . Approximately 5 minutes for the inspection,
- . If necessary, approximately 4 hours for the detailed inspections and replacement of the bolts, for the Mechanical Technician.



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

The estimated helicopter downtime is half a day if the bolts need to be replaced.

1.H. WEIGHT AND BALANCE

Not applicable.

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.

Aircraft Maintenance Manual

- AMM: 62-00-00,3-1: General Safety Instructions - Main Rotor
- AMM: 62-00-00,6-2: Checks after Maintenance Work - Main Rotor
- AMM: 62-32-00,4-1: Removal/Installation - Flared housing / Swashplates / Hub Couplings
- AMM: 62-32-00,6-1: Detailed Check - "Diapason" Scissors Link
- AMM: 62-32-00,6-2: Detailed check - Scissors link
- AMM: 62-32-00,6-3: Detailed check - Scissors link bush
- AMM: 62-32-00,6-7: Check - Hard spot on articulation of the scissors links
- AMM: 71-00-00,3-1: General Safety Instructions - Power Plant
- AMM: 71-10-00,4-1: Removal / Installation - Upper cowlings

Standard Practices Manual

- 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: 20-08-05-101: Drafting and updating the log card (FM) - General rules applicable to aircraft

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 AFFECTED PUBLICATIONS

Not applicable.

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 information about the price of the modification kits and/or components, or for aid, contact the Airbus Helicopters Network Sales and Customer Relations Department.

Availability

Contact the Sales and Customer Relations Department to know the delivery lead time.

Procurement

Send an order for the necessary quantities to the Airbus Helicopters Network Sales and Customer Relations Department:

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

In the purchase order, write the information that follows:

- The mode of transport
- The destination
- The serial numbers of the helicopters to change.

2.B. LOGISTIC INFORMATION

Not applicable.

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

Kits to be ordered for one helicopter or one assembly:

Key Word	Qty	New reference	Item	Former reference→	Instruction
Bolt	AR	DHS411-101.2118	1	DHS411-101.2118	Discard

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Consumables to be ordered separately:

Refer to the Work Cards and Tasks given in this ALERT SERVICE BULLETIN.

You can order the consumables from the AirbusWorld Marketplace through e-ordering (IN No. 3481-I-00). If you cannot get access to e-ordering, please contact your Logistic Focal Point.

Special tools:

Refer to the Work Card and Tasks given in this ALERT SERVICE BULLETIN.

2.D. EQUIPMENT OR PARTS TO BE RETURNED

Not applicable.

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3. ACCOMPLISHMENT INSTRUCTIONS

3.A. GENERAL

- As per Task 62-00-00,3-1 (AMM), read and comply with the general mechanical instructions.
- As per Task 71-00-00,3-1 (AMM), read and comply with the general power plant installation instructions.
- As per Work Card 20-07-03-406 (MTC), read and comply with the instructions applicable when working on an aircraft electrical circuit and power generating systems.

3.B. WORK STEPS

The procedure for only one scissors is described. Apply the same procedure on the other scissors.

3.B.1. Preliminary steps

- Install appropriate access equipment.
- Disconnect all electrical power supplies.
- Turn the main rotor blades to enable adequate access to the working area above the engine.
- If necessary, remove the engine cowling as per Task 71-10-00,4-1 (AMM).

3.B.2. Procedure ([Figure 1](#))



CAUTION

TAKE ALL NECESSARY PRECAUTIONS TO PREVENT FOREIGN OBJECTS FROM ENTERING THE ROTOR MAST SHAFT DURING THE ENTIRE OPERATION.



CAUTION

DO NOT PRESSURIZE THE HYDRAULIC CIRCUIT AND DO NOT ACTIVATE THE FLIGHT CONTROLS DURING THE ENTIRE TASK.

3.B.2.a. Application of the red line on the bolt head side

Draw the T1 and T2 lines with red paint on the scissors bolts as indicated in [Figure 1](#).

3.B.2.b. Application of the red line on the nut side

Draw the T3 and T4 lines with red paint on the scissors nuts as indicated in [Figure 1](#).

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3.B.2.c. Inspection ([Figure 1](#))

- If paragraph [3.B.2.b.](#) has not been complied with:
 - . Make sure that the lines T1 and T2 are aligned.
 - . Make sure that the pin (f) is in good condition (no twist, no shearing, no rupture), see example of damage on [Figure 2](#).
- If the lines T1 and T2 are aligned and the pin (f) is in good condition:
 - . Continue the flights.
- If the lines T1 and T2 are not aligned and/or the pin (f) is not in good condition:
 - . Perform a detailed inspection, on a workbench, of:
 - .. The delta-shaped scissors link (c) as per Task 62-32-00,6-1 (AMM).
 - .. The scissors link (d) as per Task 62-32-00,6-2 (AMM).
 - .. The bush (e) of the scissors link as per Task 62-32-00,6-3 (AMM).
 - . Replace the bolt(s) (a):

NOTE 1

In case of doubt or misalignment, contact Airbus Helicopters before replacing the bolts:

- Fax: +33 (0)4.42.85.99.66.

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

- .. Discard the bolt(s) (a).
- .. Install the scissors (b) using the bolt(s) (1) as per Task 62-32-00,4-1 (AMM).
- .. check for hard points on the scissors link hinge (b) as per Task 62-32-00,6-7 (AMM).
- . Clean the existing T1 and T2 red lines.
- . Comply with paragraph [3.B.2.a.](#)
- If paragraph [3.B.2.b.](#) has been complied with:
 - . Make sure that the lines T1 and T2 are aligned.
 - . Make sure that the pin (f) is in good condition (no twist, no shearing, no rupture), see example of damage on [Figure 2](#).
 - . Make sure that the lines T3 and T4 are aligned.
- If the lines T1 and T2 are aligned and the lines T3 and T4 are aligned and the pin (f) is in good condition:
 - . Continue the flights.
- If the lines T1 and T2 are not aligned and/or the lines T3 and T4 are not aligned and/or the pin (f) is not in good condition:
 - . Perform a detailed inspection, on a workbench, of:
 - .. The delta-shaped scissors link (c) as per Task 62-32-00,6-1 (AMM).
 - .. The scissors link (d) as per Task 62-32-00,6-2 (AMM).
 - .. The bush (e) of the scissors link as per Task 62-32-00,6-3 (AMM).
 - . Replace the bolt(s) (a):

NOTE 2

If there is a doubt or misalignment, contact Airbus Helicopters before replacing the bolts:

- Fax: +33 (0)4.42.85.99.66.

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

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- .. Discard the bolt(s) (a).
- .. Install the scissors (b) using the bolt(s) (1) as per Task 62-32-00,4-1 (AMM).
- .. Check for hard points on the scissors link hinge (b) as per Task 62-32-00,6-7 (AMM).
- . Clean the existing T1 and T2 red lines.
- . Clean the existing T3 and T4 red lines.
- . Comply with paragraphs [3.B.2.a.](#) and [3.B.2.b.](#)

3.B.3. Final steps

- If the engine cowling was removed, install it as per Task 71-10-00,4-1 (AMM).
- If the bolts were replaced, perform the checks after intervention as per Task 62-00-00,6-2 (AMM).
- Clean and repair the work areas and the helicopter as per Work Card 20-07-03-408 (MTC).
- Connect all electrical power sources again.
- Clear the access equipment.
- Set the helicopter into flight configuration.

3.C. RECORD OF COMPLIANCE

Compliance with this document:

- Record the full compliance with this ALERT SERVICE BULLETIN, with the revision number, in the Log Card (FM). Refer to Work Card 20-08-05-101 (MTC).
- Record compliance with this ALERT SERVICE BULLETIN (see IN 3785-I-00 for instructions):
QR code or hypertext link



NOTE 3

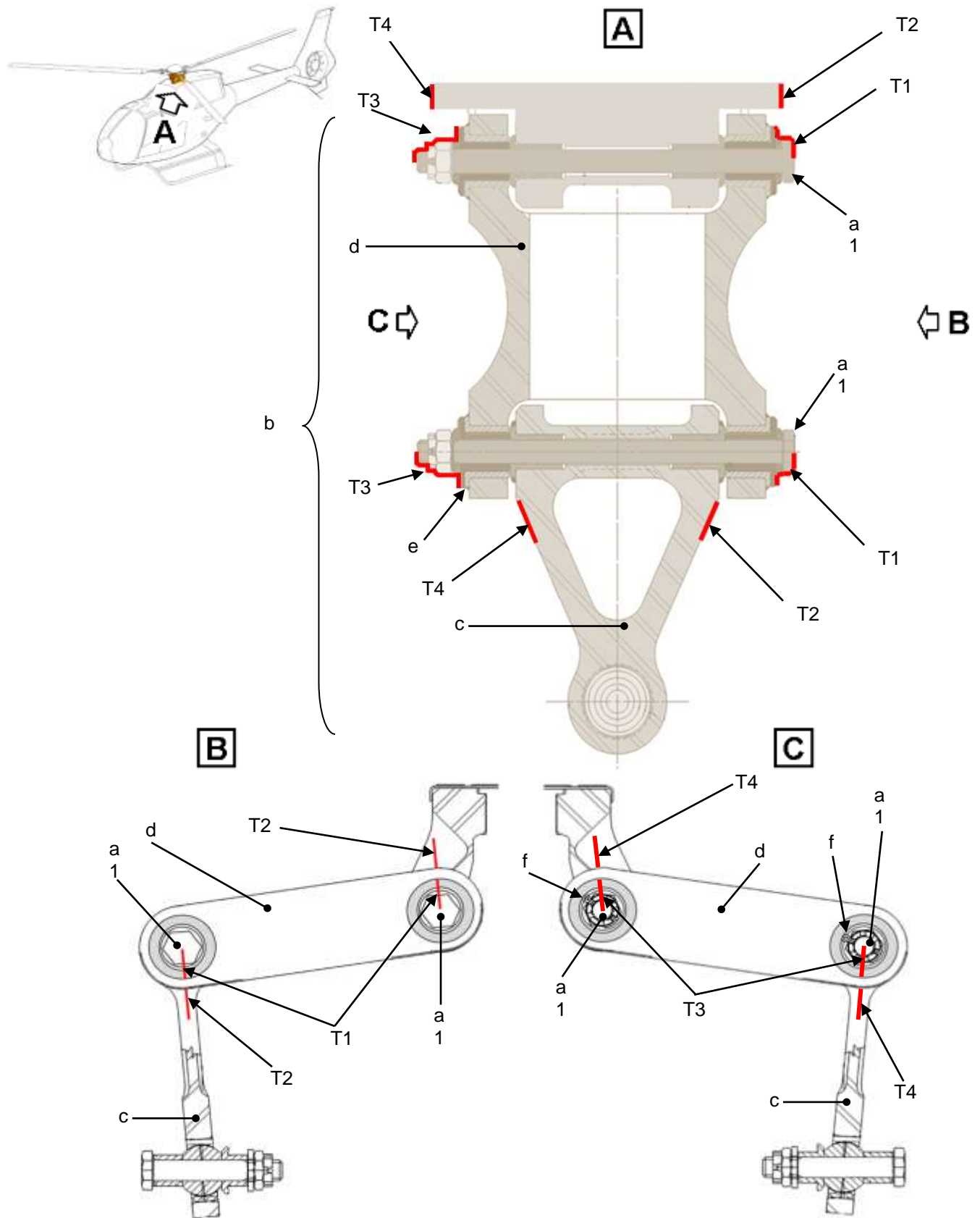
*The recording of compliance with
ALERT SERVICE BULLETIN in the
SB Insight tool does not replace the recording in the
helicopter documents.*

[ASB EC120-05A019](#)

3.D. OPERATING AND MAINTENANCE INSTRUCTIONS

Not applicable.

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Return to paragraphs [3.B.2.a.](#) and [3.B.2.b.](#)

Figure 1



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

Figure 2