

Civil version(s): B4

ALERT SERVICE BULLETIN

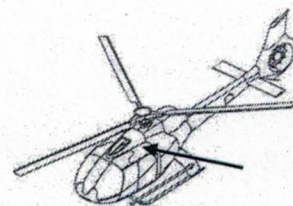
PROTECTIVE MEASURE

TIME LIMITS - MAINTENANCE CHECKS

DOORS - Sliding door - Sliding door opening mechanism

ATA: 52

For the attention of



Revision No.	Date of issue
Revision 0	2018-12-10

Summary:

Following the in-flight loss of a sliding door on an EC130 B4 helicopter, Airbus Helicopters makes it mandatory to check the load required to unlock the sliding door opening mechanism.

Compliance:

Airbus Helicopters renders compliance with this ALERT SERVICE BULLETIN mandatory.

1. PLANNING INFORMATION**1.A. EFFECTIVITY****1.A.1. Helicopters/installed equipment or parts**

On sliding doors installed on EC130 B4 helicopters.

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

Not applicable.

1.B. ASSOCIATED REQUIREMENTS

Not applicable.

1.C. REASON

The rear LH sliding door of an EC130 B4 helicopter opened in flight although it seemed correctly closed during the pilot's pre-flight check.

When the pilot started the emergency landing procedure, he heard a noise and simultaneously felt a jolt of the helicopter that was due to the separation of the sliding door.

After landing, impacts were found on the blades.

Consequently, pending a corrective measure, Airbus Helicopters makes it mandatory to check for correct operation of the sliding door locking system by measuring the load required to unlock the sliding door.

1.D. DESCRIPTION

This ALERT SERVICE BULLETIN consists in:

- Checking, with a spring scale, the load required to unlock the sliding door mechanism.

Then,

- Performing a periodic visual check of the rear LH upper catch.
- Performing a periodic check, with a spring scale, of the load required to unlock the sliding door mechanism.

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:

- Comply with paragraphs [3.A.](#) and [3.B.1.](#) of this ALERT SERVICE BULLETIN within 165 flight hours following receipt of this ALERT SERVICE BULLETIN issued on the date indicated at the bottom of the page.

Then, every 165 flight hours:

- Visually inspect the rear LH upper catch to make sure that the marks of the attachment screws of the rear LH upper catch are aligned as per paragraph [3.B.3.](#)

And, every 660 flight hours:

- With a spring scale, check the load required to operate the sliding door opening mechanism as per paragraph [3.B.1.](#)

Non-installed equipment or parts:

Not applicable.

1.F. APPROVALApproval of modifications:

Not applicable.

Approval of this document:

The technical information contained in this ALERT SERVICE BULLETIN Revision 0 was approved on December 10, 2018 under the authority of EASA Design Organization Approval No. 21J.700 for civil version helicopters subject to an Airworthiness Certificate.

1.G. MANPOWER

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

- Qualification: - 1 Mechanical Engineering Technician, or
Specialist: - 1 Pilot with the required qualification as per the local regulations in force.



The time for the operations is indicated for reference purposes only and based on a standard configuration.

- Time for the operations:
- approximately 5 minutes to check the alignment of the marks on the attachment screws of the rear LH upper catch,
 - approximately 15 minutes to check the load on the sliding door handle,
 - approximately 1 hour to adjust the sliding door.

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):

- 60-00-00, 3-1: General Safety Instructions - Mechanical Assemblies - General - Mechanics Systems

Standard Practices Manual (MTC):

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

- 20-03-03-101: Replacement and relocation of anchor nuts

1.L. OTHER AFFECTED PUBLICATIONS

This ALERT SERVICE BULLETIN will give rise to modification by Airbus Helicopters of the Aircraft Maintenance Manual (AMM).

AMM Task 52-12-00, 5-1 will be updated as part of a future revision to integrate the measurement of the load required to open the sliding door.

1.M. PART INTERCHANGEABILITY OR MIXABILITY

Not applicable.

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

Not applicable.

2.B. LOGISTIC INFORMATION

Not applicable.

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
Anchor nut	A/R	52358CBD050N	1		
Blind rivet	A/R	NAS1399CW3A2	2		
Screw	A/R	A0164TK050S016X	3		
Washer	A/R	C526A2386201	4		

Consumables to be ordered separately:

Refer to the Work Cards indicated in this ALERT SERVICE BULLETIN:

The consumables can be ordered separately from KLX AEROSPACE SOLUTIONS.

 Website: <https://www.klxaerospace.com/klxaero/>

Telephone: +1.305.925.2600

AOG: +1.305.471.8888

Special tools:

CAUTION

TAKE INTO ACCOUNT THE ACCURACY OF THE
 SPRING SCALE TO CHECK THE CRITERION
 DEFINED IN PARAGRAPH 3.B.1.

Key Word	Qty	Material P/N or equivalent	Item
Spring scale	1	Off the shelf	ZZ

2.D. EQUIPMENT OR PARTS TO BE RETURNED

Not applicable.

3. ACCOMPLISHMENT INSTRUCTIONS

3.A. GENERAL

Read and comply with the general mechanical instructions as per AMM Task 60-00-00, 3-1.
 Read and comply with the instructions for assembly by bolts and nuts as per MTC Work Card 20-02-05-404.
 Read and comply with the instructions for replacing and relocating anchor nuts as per MTC Work Card 20-03-03-101.

3.B. WORK STEPS

3.B.1. Measurement of the load required to operate the sliding door opening mechanism (Figures 1 and 2)

- With spring scale (zz) and **as per Figure 1**, measure the load required to operate the sliding door opening mechanism by pulling the external handle of the sliding door.

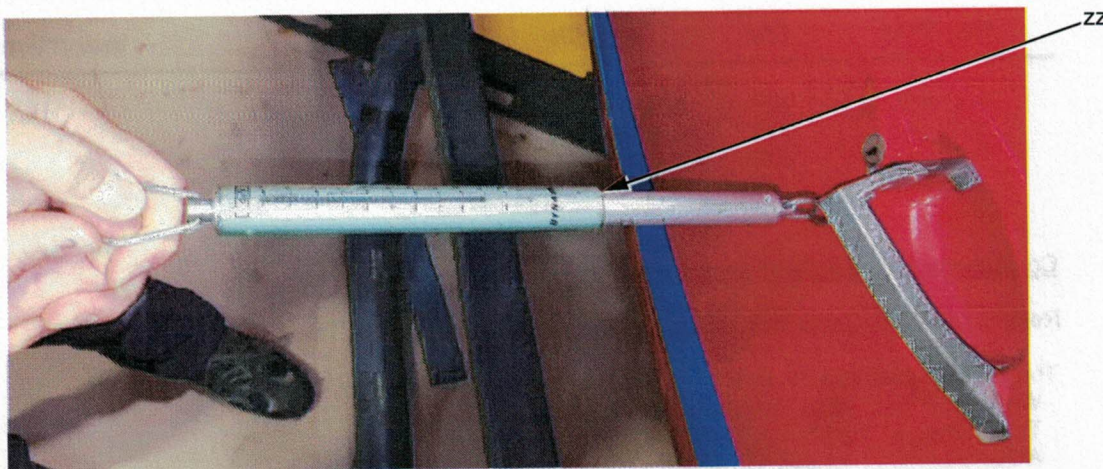


Figure 1

Interpretation of the results:

- . If the load required to operate the sliding door opening mechanism **is greater than or equal to 4 daN** (9 lbf):
 - .. If missing, trace a mark on both attachment screws (d) **as per Detail B of Figure 2**.
 - .. Comply with paragraph **3.C.** and continue flights.
- . If the load required to operate the sliding door opening mechanism **is strictly less than 4 daN** (9 lbf):
 - .. Adjust the rear upper LH catch of the sliding door as per paragraph **3.B.2**.

NOTE 1

The adjustment is considered correct and the marks traced when the measured load required to operate the sliding door opening mechanism is greater than or equal to 4 daN (9 lbf).

3.B.2. Adjustment of rear upper LH catch (a) (Figure 2)

- Delete the marks, if any.
- Loosen attachment screws (d) (Figure 2) without removing them.
- Relocate rear LH upper catch (a) to the inside of the helicopter as per AMM Task 52-12-00, 5-1.
- Tighten attachment screws (d).
- With spring scale (zz) and as per Figure 1, measure the load required to operate the sliding door opening mechanism as per paragraph [3.B.1.](#)

3.B.3. Visual inspection of the marks of the attachment screws of rear LH upper catch (a), (Figure 2)

- Visually check if the marks are aligned.

Interpretation of the results:**. If the 2 marks are aligned:**

- .. Leave as is.
- .. Comply with paragraph [3.C](#) and continue flights.

. If one of the two marks is no longer aligned:

- .. Inspect the rear LH upper catch as per paragraph [3.B.4.](#)
- .. Adjust the rear upper LH catch of the sliding door as per paragraph [3.B.2.](#)

3.B.4. Inspection of rear LH upper catch (a), (Figure 2)

- Remove attachment screws (d) and washers (e), (Figure 2).
- Remove rear LH upper catch (a).
- Make sure that there is no sealant between rear LH upper catch (a) and the helicopter airframe.
 - . If there is no sealant:
 - .. install rear LH upper catch (a) with washers (e) and attachment screws (d),
 - .. tighten screws (d) by hand to make sure that anchor nut (b) is locked.
 - if anchor nut (b) is locked (tightening by hand impossible):
 - . tighten attachment screws (d),
 - . comply with paragraph [3.B.1.](#)
 - .. if 1 of the 2 anchor nuts (b) is not locked (tightening by hand possible):
 - . replace both anchor nuts (b) as per paragraph [3.B.5.](#),
 - . comply with paragraph [3.B.1.](#)
 - . If there is sealant:
 - .. remove the sealant,
 - .. install rear LH upper catch (a) with washers (e) and attachment screws (d),
 - .. tighten screws (d) by hand to make sure that anchor nut (b) is locked.
 - if anchor nut (b) is locked (tightening by hand impossible):
 - . tighten attachment screws (d),
 - . comply with paragraph [3.B.1.](#)
 - .. if 1 of the 2 anchor nuts (b) is not locked (tightening by hand possible):
 - . replace both anchor nuts (b) as per paragraph [3.B.5.](#),
 - . comply with paragraph [3.B.1.](#)

3.B.5. Replacement of the anchor nuts of rear LH upper catch (a). (Figure 2)

- Remove attachment screws (d) and check their condition, (Detail B, Figure 2).
- Remove washers (e) and check their condition.
- Remove rear LH upper catch (a), (Detail A, Figure 2).
- Remove and discard rivets (c) and anchor nuts (b).
- Install anchor nuts (1) with rivets (2).
- Install rear LH upper catch (a) with washers (e) or (4) and attachment screws (d) or (3).

3.C. COMPLIANCE CONFIRMATIONCompliance with this document:

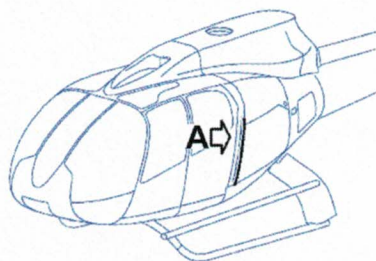
Record compliance with this ALERT SERVICE BULLETIN, with its revision number, in the helicopter documents.

Tracking of modifications in the documentation:

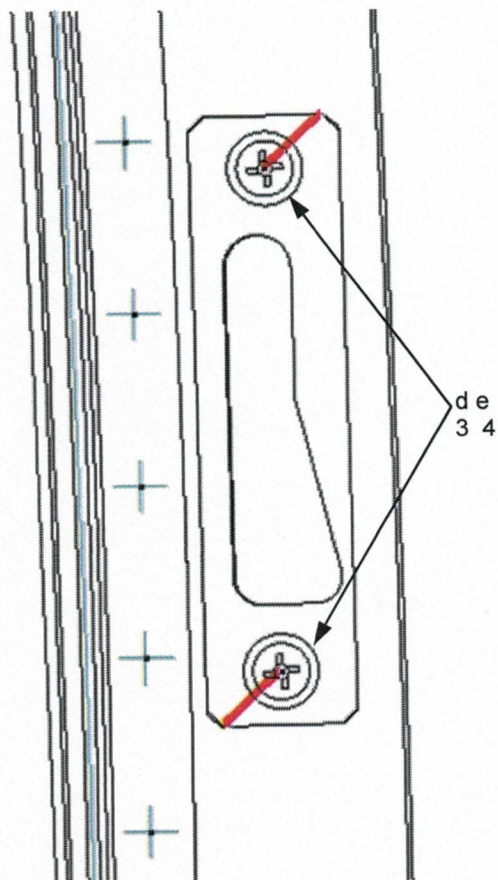
Not applicable.

3.D. OPERATING AND MAINTENANCE INSTRUCTIONS

Not applicable.



B



Example of marking

A

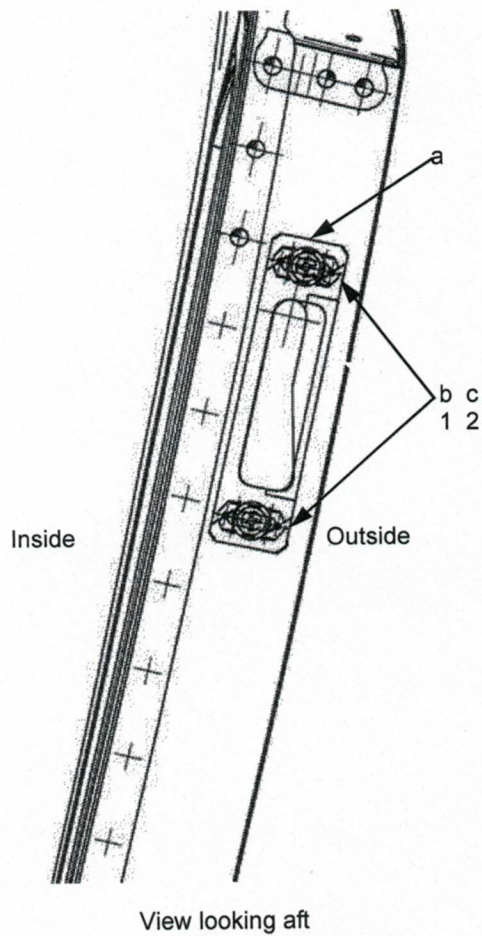


Figure 2