

No. EC120-05A023

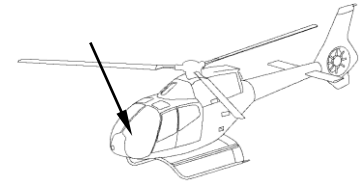
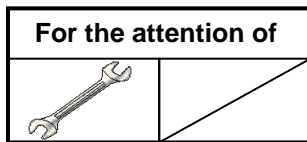
Civil version(s): B

ALERT SERVICE BULLETIN

PROTECTIVE MEASURE

INDICATING AND RECORDING SYSTEMS - Lighting and Ancillaries Control Unit (LACU) Inspection of the LACU

ATA: 31



Revision No.	Date of issue
Revision 0	2021-03-31

Summary:

The purpose of this ALERT SERVICE BULLETIN is to introduce a periodic cleaning to prevent short-circuit on the LACU printed circuit board.

Compliance:

It is mandatory to comply with this ALERT SERVICE BULLETIN except for [paragraph 3.D.](#)

No. EC120-05A023

1. PLANNING INFORMATION

1.A. EFFECTIVITY

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

Helicopters with serial number is from 1399 onward, equipped with the control unit "LACU" P/Ns 040101AB (7050A4314011) or 040101BA (7050A4314012) or 304-2610-00 (7050A4314013) or 304-2611-00 (7050A4314014),

Or

Helicopters on which Service Bulletin N° 31-004 was complied with.

NOTE

Refer to the Individual Inspection Log Book (RIC AMS) to identify the modification status of the helicopter.

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

The control unit "LACU" P/Ns are:

- 040101AB (7050A4314011),
- 040101BA (7050A4314012),
- 304-2610-00 (7050A4314013),
- 304-2611-00 (7050A4314014).

1.B. ASSOCIATED REQUIREMENTS

Not applicable.

1.C. REASON

During a mission on EC130 B4, a strong smell of burning was detected in the cabin with various lights coming on and going off on the LACU push buttons and the Caution and Warning Panel lights (CWPL) with their associated audio alarm.

The pilot returned to the base without any further consequences for the mission.

After investigation, the most likely scenario could be dust or FOD on the contacts of the push buttons leads to deteriorate the LACU printed circuit board.

The deterioration of the LACU can lead to the loss of the emergency flotation gear.

Consequently, the purpose of this ALERT SERVICE BULLETIN is to introduce a periodic cleaning to prevent court-circuit on the LACU printed circuit board.

1.D. DESCRIPTION

The goal of this ALERT SERVICE BULLETIN is to:

- record the position of all the push buttons,
- remove all the push buttons,
- vacuum the printed circuit board,
- make sure that there is no FOD on the contacts of the push buttons,
- install all the push buttons again.

No. EC120-05A023

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 operator must do the work on the helicopter.

Comply with Table No. 1 below:

Table No. 1			
Configuration	Flight hours (FH)	1 st application	Periodicity
Helicopters with emergency flotation gear	Less than 900 FH	Comply with paragraph 3. of this ALERT SERVICE BULLETIN before exceeding 1200 FH.	and, thereafter, comply with paragraph 3. of this ALERT SERVICE BULLETIN at intervals not to exceed 1320 FH
	More than 900 FH	Comply with paragraph 3. of this ALERT SERVICE BULLETIN not more than 300 flight hours or 12 months (the first limit you get to is applicable) after you received revision 0 of this ALERT SERVICE BULLETIN (refer to the issue date on the page footer).	
Helicopters without emergency flotation gear	Less than 600FH	Comply with paragraph 3. of this ALERT SERVICE BULLETIN before exceeding 1200 FH.	Refer to paragraph 3.D.
	More than 600 FH	Comply with paragraph 3. of this ALERT SERVICE BULLETIN not more than 600 flight hours or 24 months (the first limit you get to is applicable) after you received revision 0 of this ALERT SERVICE BULLETIN (refer to the issue date on the page footer).	

Non-installed equipment or parts:

Comply with [paragraph 3.B.2.](#) of this ALERT SERVICE BULLETIN before you install the control unit "LACU" P/N identified in [Paragraph 1.A.2.](#)

1.F. APPROVAL

Approval of modifications:

Not applicable.



Approval of this document:

The technical information contained in this ALERT SERVICE BULLETIN Revision 0 was approved on March 26, 2021 under the authority of EASA Design Organization Approval No. 21J.700 for civil version helicopters subject to an Airworthiness Certificate.

1.G. MANPOWER



Airbus Helicopters recommends that the personnel who will do this ALERT SERVICE BULLETIN have this qualification:

Qualification: 1 Electrical Technician.



The man-hours are an estimate given for information only and for a standard helicopter configuration.

Estimated Man-hours: 2 hours for the Electrical Technician.

The helicopter downtime is an estimate given for information only and for a standard helicopter configuration.



The estimate of the helicopter downtime is two days.

1.H. WEIGHT AND BALANCE

Not applicable.

1.I. POWER CONSUMPTION

Not applicable.

1.J. SOFTWARE UPGRADES/UPDATES

Not applicable.

1.K. REFERENCES

These documents are necessary to comply with this ALERT SERVICE BULLETIN:

Standard Practices Manual (MTC):

MTC: 20-07-02-201: Helicopter parked in a repair shop - Safety instructions

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

Aircraft Maintenance Manual (AMM):

AMM: 24-00-00,3-1: General Safety Instructions - Electrical Power Supply System

AMM: 31-42-00,5-1A: Adjustments and Functional Tests - LACU 911TS08

AMM: 31-42-00,5-1B: Adjustments and Functional Tests - LACU 040101AB

AMM: 31-42-00,8-2: Replacement - Push-Button

Information Notice (IN):

IN: 3643-I-00: Introduction of the digital Service Bulletin reporting R-Text

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

1.L. OTHER AFFECTED PUBLICATIONS



CAUTION

TO COMPLY WITH THIS ALERT SERVICE BULLETIN, THE OPERATOR MUST MAKE SURE THAT ALL THE MAINTENANCE DOCUMENTS NECESSARY FOR THE MAINTENANCE OF THIS INSTALLATION ARE AVAILABLE. IF THEY ARE NOT AVAILABLE, THE OPERATOR MUST CONTACT AIRBUS HELICOPTERS TO GET THESE DOCUMENTS.

The inspection will be added to the following manuals:

- Master Servicing Manual (MSM),
- Aircraft Maintenance Manual (AMM).

The documents MSM and AMM will be updated during one of the next revision.

1.M. PART INTERCHANGEABILITY OR MIXABILITY

Not applicable.

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 times.

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 MARIGNANE 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.

Send your order for ALERT SERVICE BULLETINS to:

Telex: HELICOP 410 969F

Fax: +33 (0)4.42.85.99.96

2.B. LOGISTIC INFORMATION

Not applicable.

No. EC120-05A023

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

Consumables to be ordered separately:

As per Work Cards and Tasks mentioned in this ALERT SERVICE BULLETIN.

You can order the consumables from the AirbusWorld Marketplace through e-ordering (IN No. 3481-I-00).

Special tools:

As per Work Cards and Tasks mentioned in this ALERT SERVICE BULLETIN and list below:

Key Word	Qty	Tool P/N or equivalent	Item
Digital camera	1	Commercial P/N	zz
Magnifying glass	1	Commercial P/N	yy
Vacuum cleaner	1	Commercial P/N	xx

2.D. EQUIPMENT OR PARTS TO BE RETURNED

Not applicable.

3. ACCOMPLISHMENT INSTRUCTIONS

3.A. GENERAL

- Comply with the instructions on the Instructions applicable when working on an aircraft electrical circuit and power generating systems refer to the Work Card 20-07-03-406 (MTC).
- Comply with the general Safety instructions, refer to the General Safety Instructions Task 24-00-00,3-1 (AMM).

3.B. WORK STEPS

3.B.1. Preliminary steps

- Park the helicopter in a hangar as per Work Card 20-07-02-201 (MTC).
- Disconnect all the electrical power supplies.
- Install the access equipment.

3.B.2. Procedure (Figures 1 and 2)

- Take a picture of the LACU (a) using the digital camera (zz) (not shown) (Figure 2).

NOTE 1

The picture records the position of all the push buttons (b).

NOTE 2

Figures 1 and 2 are given as an indication in order to indicate the push button (b) positions.

- Remove all the push buttons (b) from the LACU (a) as per the principle of the Task 31-42-00,8-2 (AMM) (Figure 1).

NOTE 3

Inspection of the push buttons (b) and the printed circuit board (c) does not require to remove LACU.

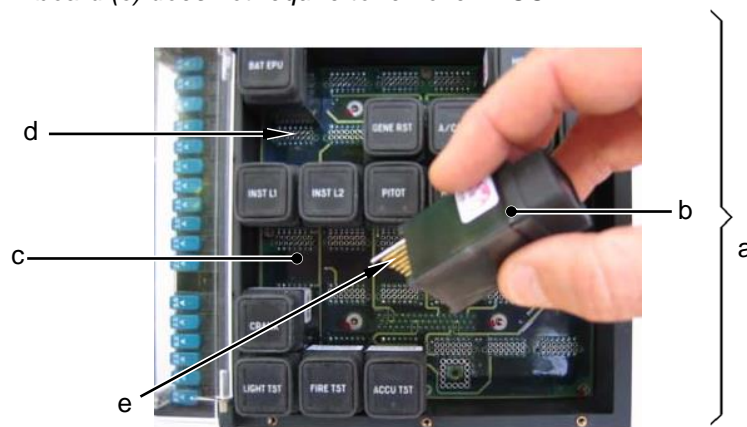


Figure 1

No. EC120-05A023

- Vacuum the printed circuit board (c) using the vacuum cleaner (xx) (not shown).
- Make sure that there is no dust or FOD (any element liable to create a short circuit) on the printed circuit board (c).
- Do a visual inspection of the contacts (e) of each push buttons (b) using the magnifying glass (yy) (not shown) to make sure that there is no dust or FOD (Figure 1).
- Install all the push buttons (b) on the LACU (a) using the picture previously taken and as per the principle of the Task 31-42-00,8-2 (AMM).

3.B.3. Tests

- Set the helicopter to the test condition.
- Energize the helicopter electrical power systems.
- Do a functional test of the LACU (a) as per Task 31-42-00,5-1A or 31-42-00,5-1B (AMM).

3.B.4. Final steps

- Do an aspect check of 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 the full compliance with this ALERT SERVICE BULLETIN, with the revision number, in the helicopter documents.

Record compliance with this ALERT SERVICE BULLETIN (see IN 3643-I-00 for instructions):
QR code or hypertext



NOTE 4

*The recording of compliance with
ALERT SERVICE BULLETINS in the R-Text tool does not
replace the recording in the helicopter documents.*

[ASB EC120-05A023](#)

No. EC120-05A023

3.D. OPERATING AND MAINTENANCE INSTRUCTIONS

Operating instructions:

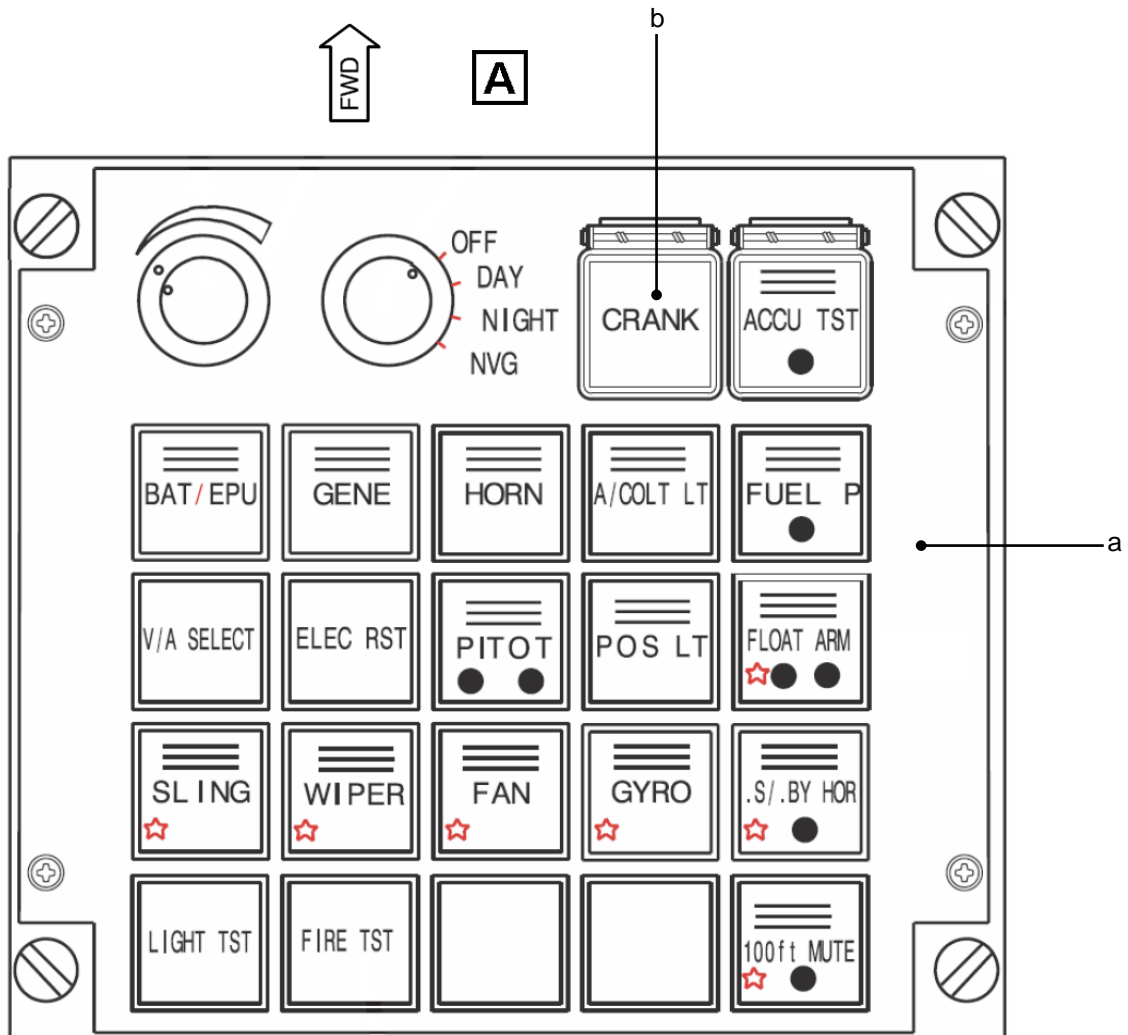
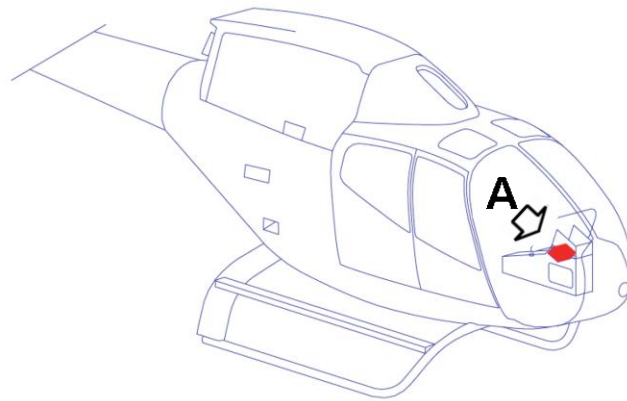
Not applicable.

Maintenance instructions:

For helicopters without emergency flotation gear, comply with [paragraph 3.](#) of this ALERT SERVICE BULLETIN every 1320FH.

The MSM (chapter 05) and the AMM will integrate maintenance instructions during a future revision. When these instructions are integrated, refer to the MSM (chapter 05) and the AMM.

No. EC120-05A023



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

Figure 2