

Civil versions: B, B1, B2, B3, BA, BB, D

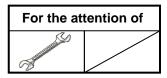
Military version: L1

ALERT SERVICE BULLETIN

SUBJECT: ELECTRICAL POWER - DC electrical power

Replacement of a power cable belonging to very cold weather starting optional equipment

Corresponds to modification 074838.



Revision No.	Date of issue		
Revision 0	2017-05-22		

Summary:

The purpose of this ALERT SERVICE BULLETIN is to replace the "+BATT" power cable in order to suppress the risk of rupture of the lug connected to the second battery.

Compliance:

Airbus Helicopters makes compliance with this ALERT SERVICE BULLETIN mandatory.

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1. PLANNING INFORMATION

1.A. EFFECTIVITY

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

Helicopters which complied with the very cold weather starting installation (double battery) and PRE MOD 074838.

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

"+BATT" cable of electrical harness P/N 350A62401600AA and/or 350A62018002AA and/or 350A62103000 and/or 350A62103001AA and/or 350A62103002AA and/or 350AE108656700.

1.B. ASSOCIATED REQUIREMENTS

Not applicable.

1.C. REASON

Airbus Helicopters has been notified of a crack case of a lug installed on a power cable of the very cold weather starting optional equipment.

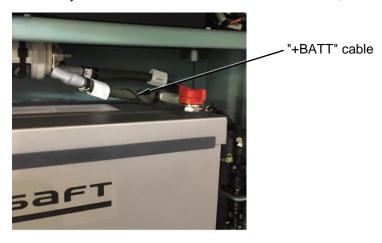
The rupture of this lug may enable the loose power cable to come into contact with an electrical ground. This scenario may cause a short-circuit.

The purpose of this ALERT SERVICE BULLETIN is to replace the "+BATT" power cable in order to suppress the risk of rupture of the lug connected to the second battery.

1.D. DESCRIPTION

This ALERT SERVICE BULLETIN consists in:

- replacing the "+BATT" cable of the very cold weather start harness with a new cable,



- bonding a teflon tape at the location of the resting point on the structure,
- installing a new polyamide washer and a new polyamide nut on the cable resting point,
- carrying out tests.

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1.E. COMPLIANCE

1.E.1. Compliance at the works

Helicopters/installed equipment or parts:

Airbus Helicopters makes compliance with instructions in paragraph 3. of this ALERT SERVICE BULLETIN mandatory before delivery of the helicopter.

Non-installed equipment or parts:

Upon receipt of this ALERT SERVICE BULLETIN discard the stock of electrical harnesses P/N 350A62401600AA and/or 350A62018002AA and/or 350A62103000 and/or 350A62103001AA and/or 350A62103002AA and/or 350A62108656700.

1.E.2. Compliance in service

The works must be performed on helicopter by the Operator.

Helicopters/installed equipment or parts:

Comply with paragraph 3. of this ALERT SERVICE BULLETIN as per the table below in the <u>660 flight hours</u> or at the latest within <u>12 months</u>, as from receipt of this ALERT SERVICE BULLETIN, issued on the date mentioned on page footer.

Configuration	Paragraph to be complied with
Helicopters which complied with the very cold weather starting installation (double battery) - installed very cold weather battery	Comply with paragraph 3. except for paragraph 3.B.2.b.
Helicopters which complied with the very cold weather starting installation (double battery) - non- installed very cold weather battery	Comply with paragraph 3. except for paragraph 3.B.2.a.

Airbus Helicopters makes compliance with this ALERT SERVICE BULLETIN mandatory.

Non-installed equipment or parts:

Modify stocks as per paragraph 3.B.5., before installation on helicopter and at the latest within 12 months, as from receipt of this ALERT SERVICE BULLETIN, issued on the date mentioned in page footer.

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1.F. APPROVAL

Approval of modifications:

The information or instructions relate to modification 074838 which was approved on April 27, 2017 under the authority of EASA Design Organization Approval No. 21J.700 for helicopters of civil versions subject to an Airworthiness Certificate.

The information or instructions relate to modification 074838 which was approved on April 27, 2017 by the Airbus Helicopters Airworthiness Department for export military versions.

The information or instructions relate to modification 074838 which was approved on April 27, 2017 under the prerogatives of the recognition of design capability FRA21J-002-DGA for French Government helicopters.

Approval of this document:



The technical information contained in this ALERT SERVICE BULLETIN Revision 0 was approved on May 22, 2017 under the authority of EASA Design Organization Approval No. 21J.700 for helicopters of civil versions subject to an Airworthiness Certificate.

The technical information contained in this ALERT SERVICE BULLETIN Revision 0 was approved on May 22, 2017 by the Airbus Helicopters Airworthiness Department for export military versions.

The technical information contained in this ALERT SERVICE BULLETIN Revision 0 was approved on May 22, 2017 under the prerogatives of the recognition of design capability FRA21J-002-DGA for French Government helicopters.

1.G. MANPOWER



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

Qualification: 1 approved Technician.



Time for the operations is indicated for reference, for a standard configuration.

Time for the operations: 2 hours approximately for the approved Technician.



The estimated helicopter downtime is half a day approximately.

1.H. WEIGHT AND BALANCE



Negligible.

1.I. EFFECT ON ELECTRICAL LOADS

Not applicable.

1.J. SOFTWARE MODIFICATION EMBODIMENT RECORD

Not applicable.

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1.K. REFERENCES

For helicopters version B2 and B3:

- AMM: 24-00-00, 3-1: General Safety Instructions Electrical Power Supply System
- AMM: 24-30-00, 5-3a: Functional tests Cold weather starting POST MOD OP3828 PRE MOD 074280.
- AMM: 24-30-00, 5-3b: Functional tests Cold weather starting POST MOD OP3828 POST MOD 074280.
- AMM: 24-33-00, 4-1: Removal / Installation Battery.

For helicopters version B, B1, BA, BB, D and L1:

- MET: 24-00-00-301: General instructions.
- MET: 24-30-00-401: Batteries: Removal Installation.
- MET: 24-30-00-501: Operation testing.

For all versions:

- MTC: 20.02.05.404: Joining by bolts and nuts.
- MTC: 20.04.01.102: Use of cleaning products on individual parts and on aircraft.
- MTC: 20.07.03.406: Instructions applicable when working on an aircraft electrical circuit and power generating systems.
- MTC: 20.07.03.408: Appearance checks on an aircraft after an inspection or repair.
- MTC: 20.80.20.605: Application and Check of Tightening Torques on electrical connections.

1.L. DOCUMENTS AFFECTED



The modification will be integrated into the following manuals:

Illustrated Parts Catalog (IPC).

The impacted documents shall be updated during a future revision.

1.M. PART INTERCHANGEABILITY OR MIXABILITY

Interchangeability:

PRE and POST MOD cable is not interchangeable.

Mixability:

Not applicable.

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2. EQUIPMENT OR PARTS INFORMATION

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

Cost:

The kits and/or components will be delivered free of charge by Airbus Helicopters for 13 months as from receipt of the issue date of this ALERT SERVICE BULLETIN mentioned on page footer.

Availability:

The kits and/or components will be delivered upon Operator's order.

Procurement conditions:

Order as required

from

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

NOTE 1

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

NOTE 2

For ALERT SERVICE BULLETINS, order by: Telex: HELICOP 410 969F Fax: +33 (0)4.42.85.99.96.

2.B. INFORMATION CONCERNING INDUSTRIAL SUPPORT

Not applicable.

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2.C. MATERIAL REQUIRED FOR EACH HELICOPTER/COMPONENT

Kits or components to be ordered for one helicopter or one assembly:

Designation	Qty	New P/N	Item	Former P/N	Instruction
"+BATT" cable	1	350A08-8826-0051	1	"+BATT" cable of the very cold weather start harness 350A62-4016-00AA and/or 350A62-0180-02AA and/or 350A62-1030-00 and/or 350A62-1030-01AA and/or 350A62-1030-02AA and/or 350AE-1086-56700.	Scrap
Nut, polyamide Washer, polyamide	1 1	M8POLYAMIDE DIA.8POLYAMIDE	2		

Consumables to be ordered separately:

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

Designation	Qty	Product P/N	СМ	lte m
Teflon tape	0.05 m	A7068-40	/	4

The consumables can be ordered separately from the KLX AEROSPACE SOLUTIONS company.

Website: http://www.klxaerospace.com/klxaero/

Telephone: +1.305.925.2600 AOG: +1.305.471.8888

2.D. EQUIPMENT OR PARTS TO BE RETURNED

Not applicable.

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3. ACCOMPLISHMENT INSTRUCTIONS

3.A. GENERAL

- Read and comply with instructions for joining by bolts and nuts as per MTC Work Card 20.02.05.404.
- Read and comply with general instructions as per AMM Task 24-00-00, 3-1.
- Read and comply with general instructions as per MET Task 24-00-00-301.

3.B. WORK STEPS

3.B.1. Preliminary steps

- Disconnect all electrical power supplies as per MTC Work Card 20.07.03.406.
- Install suitable access means.
- Remove and/or open all cowlings, panels, doors and equipment as required for access to work zones.

3.B.2. Improvement of the very cold weather starting installation (Figures 1 and 2)

3.B.2.a. Installed very cold weather battery (Detail B)

- Remove battery (g) and very cold weather battery (f) as per AMM Task 24-33-00, 4-1 or MET Task 24-30-00-401.
- Remove and retain nut (a) and washer (b).
- Disconnect "+BATT" cable (c) from terminal "27P" and scrap it.
- Remove and retain butterfly nut (d) from resting point assembly (e).
- Remove and retain resting point assembly (e).
- Clean the bonding surface of teflon tape (4) on the structure as per MTC Work Card 20.04.01.102 and as per Figure 2 Detail D.
- Position and bond teflon tape (4) onto T hole of resting point assembly (e) as per Figure 2 Detail D.
- Install resting point assembly (e) by means of the new polyamide washer (3) and the new polyamide nut (2).
- Tighten polyamide nuts to standard torque.
- Install butterfly nut (d) on resting point assembly (e).
- Connect the new "+BATT" cable (1) to terminal "27P" by means of washer (b) and nut (a).
- Tighten nut (a) as per MTC Work Card 20.80.20.605.
- Install batteries (g) and (f) as per AMM Task 24-33-00, 4-1 or MET Task 24-30-00-401.

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3.B.2.b. Non-installed very cold weather battery (Detail C)

- Remove very cold weather battery (g) as per AMM Task 24-33-00, 4-1 or MET Task 24-30-00-401.
- Remove and retain butterfly nut (d) from resting point assembly (e).
- Remove and retain nut (a) and washer (b).
- Disconnect "+BATT" cable (c) from terminal "27P" and scrap it.
- Remove and retain resting point assembly (e).
- Clean the bonding surface of teflon tape (4) on the structure as per MTC Work Card 20.04.01.102 and as per Figure 2 Detail D.
- Position and bond teflon tape (4) onto T hole of resting point assembly (e) as per Figure 2 Detail D.
- Install resting point assembly (e) by means of the new polyamide washer (3) and the new polyamide nut
- Tighten polyamide nuts to standard torque.
- Connect the new "+BATT" cable (1) to terminal "27P" by means of washer (b) and nut (a).
 Connect the new "+BATT" cable (1) to resting point assembly (e) by means of butterfly nut (d).
- Tighten nut (a) as per MTC Work Card 20.80.20.605.
- Install battery (g) and very cold weather battery (f) as per AMM Task 24-33-00, 4-1 or MET Task 24-30-00-401.

NOTE 1

The installation of very cold weather battery (f) is necessary to carry out the tests.

3.B.3. Tests

- Connect all electrical power supply sources as per MTC Work Card 20.07.03.406.
- Carry out tests as per AMM Task 24-30-00, 5-3a or 24-30-00, 5-3b or MET Task 24-30-00-501.

NOTE 2

In case of removal of the very cold weather battery, the "+BATT" cable must be mandatorily connected to resting point assembly (e).

3.B.4. Final steps

- Clean and recondition work zones and helicopter as per MTC Work Card 20.07.03.408.
- Install and/or close all cowlings, panels, doors and all equipment removed and/or opened during preliminary steps (paragraph 3.B.1.).
- Remove suitable access means.

3.B.5. Work steps for non-installed equipment or parts

Discard "+BATT" cable of electrical harness P/N 350A62401600AA and/or 350A62018002AA and/or 350A62103000 and/or 350A62103001AA and/or 350A62103002AA and/or 350AE108656700 and replace it with a new cable P/N 350A0888260051.

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3.C. IDENTIFICATION

Identification of this document:

Record compliance with this ALERT SERVICE BULLETIN with the Revision number in the aircraft documents.

Identification of modifications on the documentation:

Record compliance with modification 074838 in the aircraft documents.

3.D. OPERATING AND MAINTENANCE INSTRUCTIONS

Not applicable.

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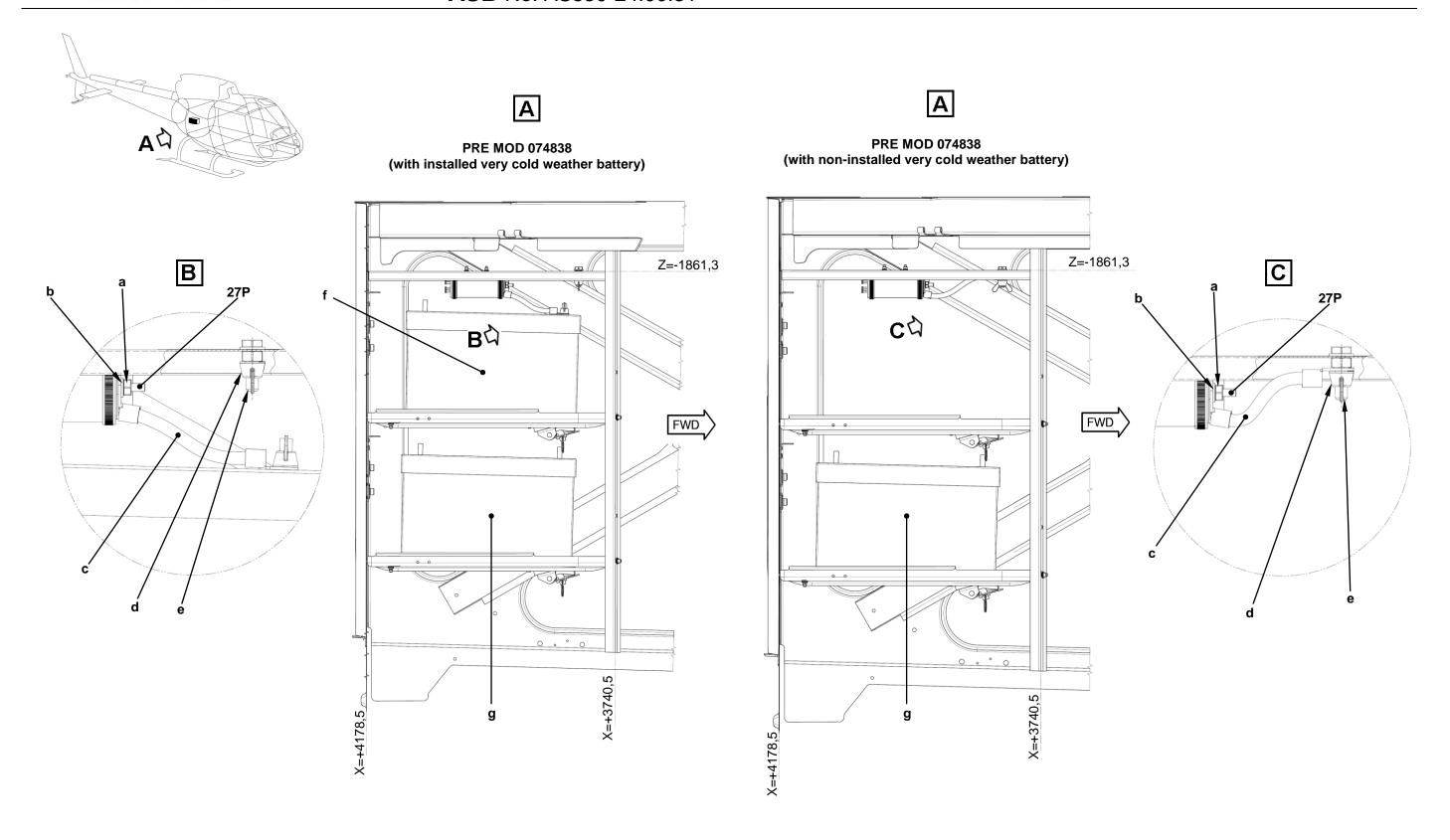


Figure 1



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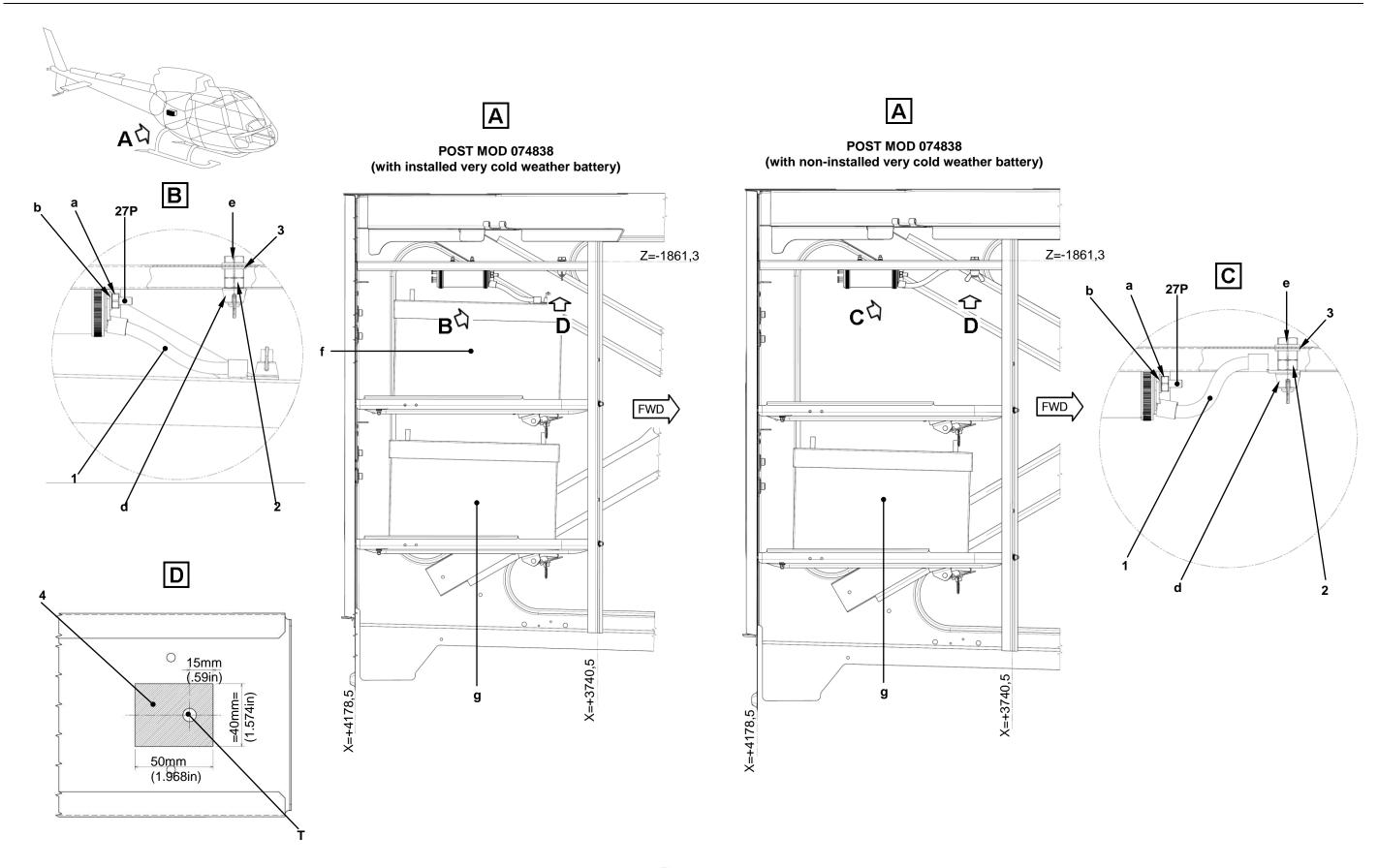


Figure 2