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AgustaWestland Products

SERVICE BULLETIN

N° 189-331

DATE: June 20, 2022

REV.: /

TITLE

ATA 24 - NUMBER 1 VOLTAGE CONVERTER UNIT TIGHTENING TORQUE CALIBRATION

REVISION LOG

First Issue



1. PLANNING INFORMATION

A. EFFECTIVITY

AW189 helicopters from S/N 49075 to S/N 49084, S/N 49086, S/N 49088 and S/N 89013.

B. COMPLIANCE

Within and not later than 100 flight hours or 3 months whichever occurs first after the issue of this Service Bulletin.

C. CONCURRENT REQUIREMENTS

N.A.

D. REASON

This Service Bulletin is issued in order to provide the necessary instructions on how to apply the right tightening torques to the terminal lug nuts on the Number 1 Voltage Converter Unit (VCU).

E. DESCRIPTION

LHD received a report about omitted tightening torque calibration procedure on Number 1 VCU on a batch of production helicopters.

Scope of this Service Bulletin is to provide instructions on how to remove and correctly reinstall the nuts that attach the terminal lugs on the Number 1 VCU tightening them to the correct torque value.

The missing application of this SB does not have any effects on the safety of operation but could lead to a degradation of the electrical performance.

F. APPROVAL

The technical content of this Service Bulletin is approved under the authority of DOA nr. EASA.21.J.005. For helicopters registered under other Aviation Authorities, before applying the Service Bulletin, applicable Aviation Authority approval must be checked within Leonardo Helicopters customer portal.

EASA states mandatory compliance with inspections, modifications or technical directives and related time of compliance by means of relevant Airworthiness Directives. If an aircraft listed in the effectivity embodies a modification or repair not LHD certified and affecting the content of this Service Bulletin, it is responsibility of the Owner/Operator to obtain a formal approval by Aviation Authority having jurisdiction on

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the aircraft, for any adaptation necessary before incorporation of the present Service Bulletin.

G. MANPOWER

To comply with this Service Bulletin four (4) MMH are deemed necessary.

MMH are based on hands-on time and can change with personnel and facilities available.

H. WEIGHT AND BALANCE

N.A.

I. REFERENCES

1) PUBLICATIONS

Following Data Modules refer to AMP:

DATA MODULE			DESCRIPTION	<u>PART</u>
	DM01	89-A-00-20-00-00A-120A-A	Helicopter on ground for a safe maintenance.	-
	DM02	89-A-06-41-00-00A-010A-A	Access doors and panels general data.	-
	DM03	89-A-24-31-01-00A-520A-A	Number 1 voltage converter unit (VCU1) remove procedure.	-
	DM04	89-A-24-31-01-00A-720A-A	Number 1 voltage converter unit (VCU1) install procedure.	-

2) ACRONYMS & ABBREVIATIONS

AMDI	Aircraft Material Data Information
AMP	Aircraft Maintenance Publication
DM	Data Module
DOA	Design Organization Approval
EASA	European Aviation Safety Agency
LH	Leonardo Helicopters
MMH	Maintenance Man Hours
P/N	Part Number
S/N	Serial Number
VCU	Voltage Converter Unit

3) ANNEX

N.A.

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J. PUBLICATIONS AFFECTED

N.A.

K. SOFTWARE ACCOMPLISHMENT SUMMARY

N.A.

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2. MATERIAL INFORMATION

A. REQUIRED MATERIALS

1) PARTS

N.A.

2) CONSUMABLES

N.A.

3) LOGISTIC MATRIX

N.A.

NOTE

N.A.

B. SPECIAL TOOLS

N.A.

C. INDUSTRY SUPPORT INFORMATION

N.A.

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3. ACCOMPLISHMENT INSTRUCTIONS

GENERAL NOTES

- a) Place an identification tag on all components that are re-usable, including the attaching hardware that has been removed to gain access to the modification area and adequately protect them until their later reuse.
- 1. In accordance with DM 89-A-00-20-00-00A-120A-A, prepare the helicopter on ground for a safe maintenance. Disconnect the battery, all electrical power sources and/or the external power supply.
- 2. In accordance with DM 89-A-06-41-00-00A-010A-A, remove all external panels, internal panels and internal liners as required to gain access to the area affected and perform the following procedure:
 - 2.1 In accordance with applicable steps of AMP DM 89-A-24-31-01-00A-520A-A and with reference to Figure 1 View A, get access to VCU 1 and temporarily remove the indicated nuts from the two terminal lugs.
 - 2.2 In accordance with applicable steps of AMP DM 89-A-24-31-01-00A-720A-A and with reference to Figure 1 View A, reinstall the previously removed nuts on the terminal lugs and tighten them to the correct torque value.
- 3. In accordance with AMP DM 89-A-06-41-00-00A-010A-A re-install all external panels, internal panels and liners previously removed.
- 4. Return the helicopter to flight configuration and record for compliance with this Service Bulletin on the helicopter logbook.
- 5. Send the attached compliance form to the following mail box:

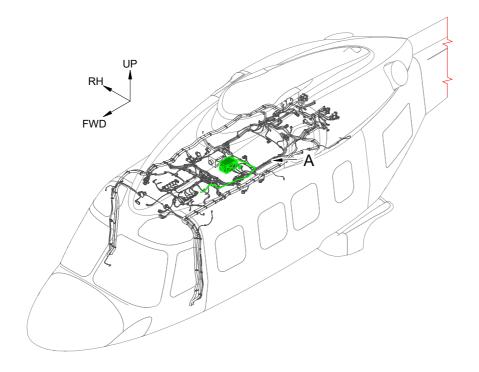
engineering.support.lhd@leonardo.com

As an alternative, gain access to My Communications section on Leonardo WebPortal and compile the "Service Bulletin Application Communication".

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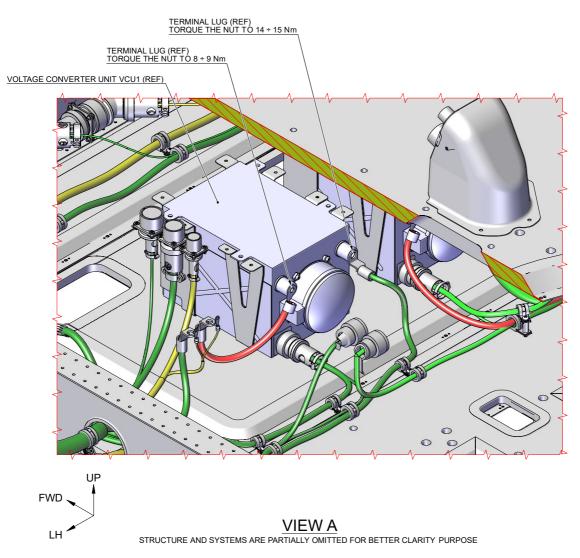


Figure 1

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Please send to the followi	SERVICE BULLETIN COMPLIANCE FORM			Date:					
LEONARDO S.p.	A.								
CUSTOMER SUPPORT & SE		Number:							
PRODUCT SUPPORT ENGINEE	RING & LICENSES DEPT.								
Via Giovanni Agusta, 520 21017 Cascina Costa di Samara	Revision:								
Tel.: +39 0331 225036 Fax: +39	0331 225988								
Customer Name and Addre			Telephone:						
		Fax:							
				B.T. Compliance Date:					
Helicopter Model	S/N		Total Number		Total Hours	T.S.O.			
Remarks:									
Information:									
We request your cooperation in filling this form, in order to keep out statistical data relevant to aircraft configuration up-to-date. The form should be filled in all its parts and sent to the above address or you can communicate the application also via Technical Bulletin Application Communication Section placed in									

Leonardo AW Customer Portal - MyCommunications Area. We thank you beforehand for the information given.