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**SERVICE BULLETIN**

**N° 189-328**

**DATE:** May 19, 2022

**REV. :** /

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**TITLE**

**ATA 24 – AC GENERATOR INSTALLATION O-RING REPLACEMENT**

**REVISION LOG**

First Issue

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An appropriate entry should be made in the aircraft log book upon accomplishment.  
If ownership of aircraft has changed, please, forward to new owner.

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## **1. PLANNING INFORMATION**

### **A. EFFECTIVITY**

All AW189 helicopters from S/N 49007 to S/N 49045 (S/N's 49024, 49036, 49040 and 49041 excluded), from S/N 89001 to S/N 89004 and from S/N 92001 to S/N 92010.

### **B. COMPLIANCE**

Within 400 FH or 1 year or at 1200 FH scheduled inspection of the starter generator drive shaft (AMPI Chapter 5 task 24-13) 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 instruction on how to perform the replacement of the AC generator O-ring P/N M83248/1-210 or P/N AS3209-210 with the new O-ring P/N A866A01833W.

### **E. DESCRIPTION**

Following some reports of problems of grease leakage and corrosion at the interface between the generators and the engines and/or APU, a new O-ring has been introduced in configuration. This Service Bulletin is issued in order to provide the instructions on how to install the new O-ring. The missed application of this SB doesn't have effects on the safety of operation but could burden the maintenance activities of the helicopter.

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

## G. MANPOWER

To comply with this Service Bulletin eight (8) 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:

<u>DATA MODULE</u>	<u>DESCRIPTION</u>	<u>PART</u>
DM01 89-A-00-20-00-00A-120A-A	Helicopter on ground for a safe maintenance.	-
DM02 89-A-24-21-01-00A-520A-A	Number 1 AC generator - Remove procedure	-
DM03 89-A-24-21-01-00A-720A-A	Number 1 AC generator - Install procedure	-
DM04 89-A-24-21-02-00A-520A-A	Number 2 AC generator - Remove procedure	-
DM05 89-A-24-21-02-00A-720A-A	Number 2 AC generator - Install procedure	-
DM06 89-A-24-21-10-00A-520A-A	Auxiliary power unit generator - Remove procedure	-
DM07 89-A-24-21-10-00A-720A-A	Auxiliary power unit generator - Install procedure	-

### 2) ACRONYMS & ABBREVIATIONS

AMDI	Aircraft Material Data Information
AMP	Aircraft Maintenance Publication
APU	Auxiliary Power Unit
DM	Data Module
DOA	Design Organization Approval
EASA	European Aviation Safety Agency
LHD	Leonardo Helicopters
MMH	Maintenance Man Hours

### 3) ANNEX

N.A.

## **J. PUBLICATIONS AFFECTED**

AW189 Illustrated Part Data (IPD).

## **K. SOFTWARE ACCOMPLISHMENT SUMMARY**

N.A.

## **2. MATERIAL INFORMATION**

### **A. REQUIRED MATERIALS**

#### **1) PARTS**

<b>#</b>	<b>P/N</b>	<b>ALTERNATIVE P/N</b>	<b>DESCRIPTION</b>	<b>Q.TY</b>	<b>LVL</b>	<b>NOTE</b>	<b>LOG P/N</b>
1	A866A01833W		O-ring	3	.	-	-

Refer also to IPD for the spares materials required to comply with the AMP DMs referenced in the accomplishment instructions.

#### **2) CONSUMABLES**

Refer also to AMDI for the consumable materials required to comply with the AMP DM referenced in the accomplishment instructions.

#### **3) LOGISTIC MATRIX**

N.A.

### **B. SPECIAL TOOLS**

Refer also to ITEP for the special tools required to comply with the AMP DM referenced in the accomplishment instructions.

### **C. INDUSTRY SUPPORT INFORMATION**

Owners/Operators who comply with the instructions of this Service Bulletin no later than the applicable date in the “Compliance” section will be eligible to receive required materials on free of charge basis, except for Consumable Materials and Special Tools. NOTE: Customers who fail to comply with the instructions in this Service Bulletin before the compliance date are not eligible for the aforementioned special policy. Please Issue relevant MMIR form to your Warranty Administration Dpt..

### **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 re-use.
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. Replace the O-ring on the AC generator on the Number 1 engine in accordance with the following procedure:
    - 2.1 In accordance with applicable steps of DM 89-A-24-21-01-00A-520A-A, remove and discard the O-ring P/N M83248/1-210 or P/N AS3209-210 from the drive shaft of the generator.
    - 2.2 In accordance with applicable steps of DM 89-A-24-21-01-00A-720A-A, reinstall the drive shaft with the new O-ring P/N A866A01833W.
  3. Replace the O-ring on the Number 2 engine AC generator. Refer to Step 2 and the applicable steps of DM 89-A-24-21-02-00A-520A-A and DM 89-A-24-21-02-00A-720A-A.
  4. Replace the O-ring on the APU AC generator. Refer to Step 2 and the applicable steps of DM 89-A-24-21-10-00A-520A-A and DM 89-A-24-21-10-00A-720A-A.
  5. Return the helicopter to flight configuration and record for compliance with this Service Bulletin on the helicopter logbook.
  6. Send the attached compliance form to the following mail box:  
[engineering.support.lhd@leonardo.com](mailto:engineering.support.lhd@leonardo.com)

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

Please send to the following address:  <b>LEONARDO S.p.A.</b> <b>CUSTOMER SUPPORT &amp; SERVICES - ITALY</b>  <b>PRODUCT SUPPORT ENGINEERING &amp; LICENSES DEPT.</b> Via Giovanni Agusta, 520 21017 Cascina Costa di Samarate (VA) - ITALY Tel.: +39 0331 225036 Fax: +39 0331 225988	<b>SERVICE BULLETIN COMPLIANCE FORM</b>	Date:
Number:		
Revision:		

Customer Name and Address:	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.