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**SERVICE BULLETIN**

**N° 189-299**

**DATE:** May 15, 2023

**REV. :** /

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**TITLE**

**ATA 53 - INTERMEDIATE GEARBOX HINGED ACCESS PANEL RETROMOD**

**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 thru S/N 49084 (S/N's 49024, 49036, 49040, 49041 excluded), from S/N 89001 thru S/N 89013 (S/N's 89005 and 89006 excluded) and from S/N 92001 to S/N 92010.

### **B. COMPLIANCE**

Recommended at first suitable occasion.

### **C. CONCURRENT REQUIREMENTS**

N.A.

### **D. REASON**

This Service Bulletin is issued in order to provide the necessary instruction on how to perform the IGB hinged access panel retromod P/N 8G5355P00511.

### **E. DESCRIPTION**

LHD receive a report of an IGB access panel found partially detached after a flight on an AW189 helicopters. The investigation showed that the damage has been caused by the failure of the hinge pins of the IGB access panel.

A new design has been developed by LHD in order to enhance the structural resistance of the hinge pins of the IGB access cover. The new design will prevent possible damage to the IGB access cover.

This Service Bulletin gives instruction on how to apply retromod P/N 8G5355P00511 and install plate assy P/N 8G5355A05731 to the inspection door vent assy P/N 8G5350A13031.

### **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 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:

<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-06-41-00-00A-010A-A	Access doors and panels – General data	-

### 2) ACRONYMS & ABBREVIATIONS

AMDI	Aircraft Material Data Information
AMP	Aircraft Maintenance Publication
AR	As Required
ATA	Air Transport Association
DM	Data Module
DOA	Design Organization Approval
EASA	European Aviation Safety Agency
IGB	Intermediate Gearbox
IPD	Illustrated Parts Data
ITEP	Illustrated Tool and Equipment Publication
LH	Leonardo Helicopters
MMH	Maintenance Man Hours
N.A.	Not Applicable
P/N	Part Number

### 3) ANNEX

N.A.

## **J. PUBLICATIONS AFFECTED**

AW189 Illustrated Parts Data (IPD).

## **K. SOFTWARE ACCOMPLISHMENT SUMMARY**

N.A.

## 2. MATERIAL INFORMATION

### A. REQUIRED MATERIALS

#### 1) PARTS

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
1	8G5355P00511		IGB HINGED ACCESS PANEL RETROMOD	REF	.		
2	8G5355A05731		Plate assy	1	..		189-299L1
3	A220A07	AW002FB07P	Turnlock fastener	2	..		189-299L1
4	A297A04TW03		Rivet	3	..		189-299L1

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

#### 2) CONSUMABLES

The following consumable materials, or equivalent, are necessary to accomplish this Service Bulletin:

#	SPEC./LHD CODE NUMBER	DESCRIPTION	Q.TY	NOTE	PART
5	AWMS05-001 TY I, CL C, GR 1	Sealant MC780 C (C465)	AR	(1)	-
6	199-05-002 TY I, CL 2	Adhesive EA9309.3NA (C021)	AR	(1)	-
7	AWTR033	Fiberglass HexForce 20749 1200 (C931)	AR	(1)	-

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

#### 3) LOGISTIC MATRIX

In order to apply this Service Bulletin, the following Logistic P/N can be ordered in accordance with the applicable notes:

LOGISTIC P/N	Q.TY (PER HELO)	NOTE	PART
189-299L1	1	-	-

#### NOTE

(1) Item to be procured as local supply.

### 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**

WARRANTY: 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.
  - b) Exercise extreme care during drilling operations to prevent instruments, cables and hoses damage.
  - c) After drilling, remove all swarf and sharp edges. Apply on bare metal a light film of primer unless the hole is used for ground connection.
  - d) Let adhesive cure at room temperature for at least 24 hours unless otherwise specified.
  - e) All lengths are in mm.
1. In accordance with AMP 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 AMP DM 89-A-06-41-00-00A-010A-A and with reference to Figures 1 and 2, remove from the helicopter the access panel 493A and install the IGB hinged access panel retromod P/N 8G5355P00511 as described in the following procedure:
    - 2.1 With reference to Figure 1 View A "Was", remove the hinge P/N MS20257P3-300 and n°6 existing rivets from the IGB cover assy P/N 8G5355A07331 and the inspection door vent assy P/N 8G5350A13031.
    - 2.2 With reference to Figure 2 View B, enlarge n°2 existing holes up to  $\varnothing 9.28 \div 9.78$  thru the IGB cover assy P/N 8G535A07331.

#### **NOTE**

Ensure there is no fiber damages while implementing this repair.

- 2.3 With reference to Figure 2 View B, fill the redundant hole in the IGB cover assy P/N 8G5355A07331 in accordance with the following procedure:
  - 2.3.1 Sand lightly to remove raised or rough surface.
  - 2.3.2 Apply 15mm layer of fiberglass (C931) with a brush on the far side of the hole indicated. Cover with release film.

- 2.3.3 Apply adhesive EA9309.3NA (C021) inside the hole using a spatula or tongue depressor.
- 2.3.4 Apply 15mm layer of fiberglass (C931) with a brush on the uncovered side of the hole. Cover with release film.
- 2.3.5 When cure is complete, remove the material covering the repair and clean the surface by lightly sanding.
- 2.3.6 Perform a visual inspection after the repair to verify the repaired area restores the contour and is sanded smooth and blended flush to the part.

**NOTE**

- Apply a layer of sealant MC780 C (C465) on faying surfaces.
- Wet assemble fixing fasteners using sealant MC780 C (C465).

- 2.4 With reference to Figure 1 View A “Becomes” and Figure 2 View C, install the plate assy P/N 8G5355A05731 to the inspection door vent assy P/N 8G5350A13031 by means of n°3 rivets P/N A297A04TW03 and to the IGB cover assy P/N 8G5355A07331 by means of n°4 turnlock fasteners P/N A220A07.
3. In accordance with AMP DM 89-A-06-41-00-00A-010A-A, re-install the reworked access panel 493A.
4. Return the helicopter to flight configuration and record for compliance with this Service Bulletin on the helicopter logbook.
5. Gain access to My Communications section on Leonardo WebPortal and compile the “Service Bulletin Application Communication”.

As an alternative, send the attached compliance form to the following mail box:

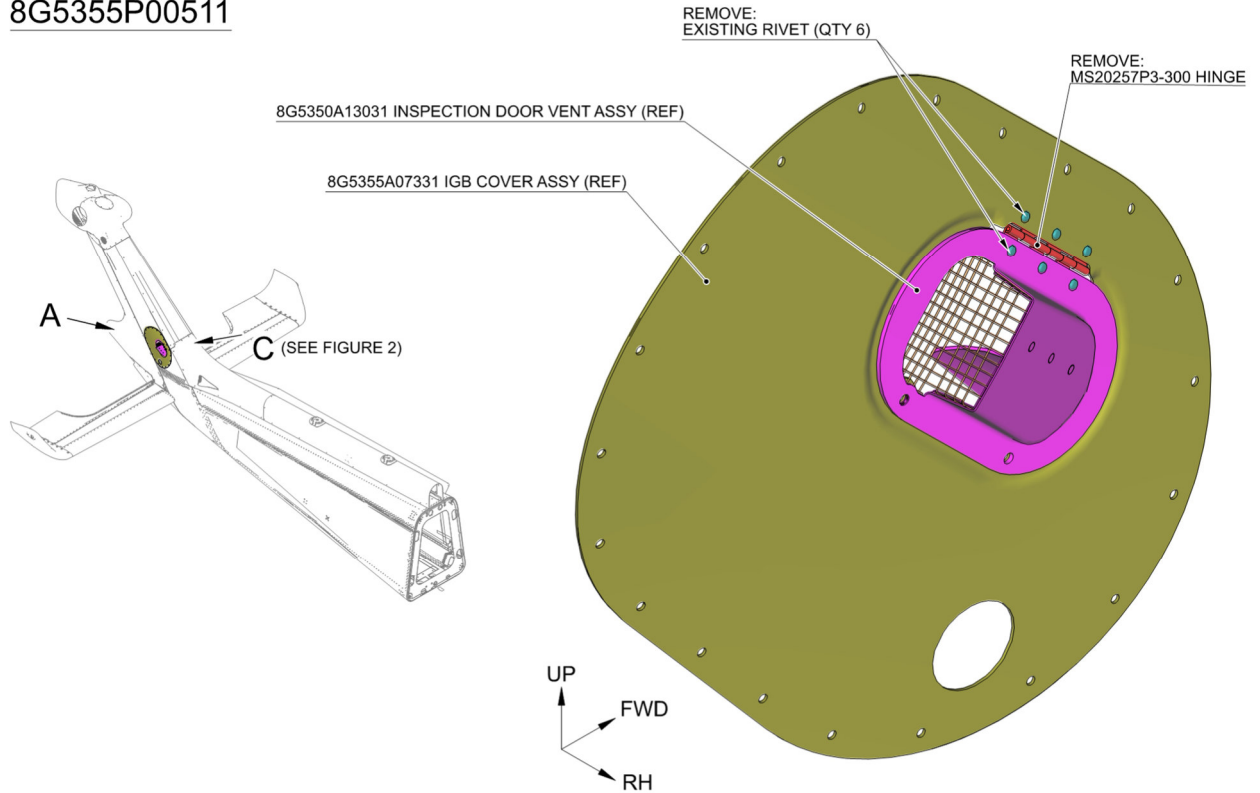
[engineering.support.lhd@leonardo.com](mailto:engineering.support.lhd@leonardo.com)

and (for North, Central and South America) also to:

[AWPC.Engineering.Support@leonardocompany.us](mailto:AWPC.Engineering.Support@leonardocompany.us)

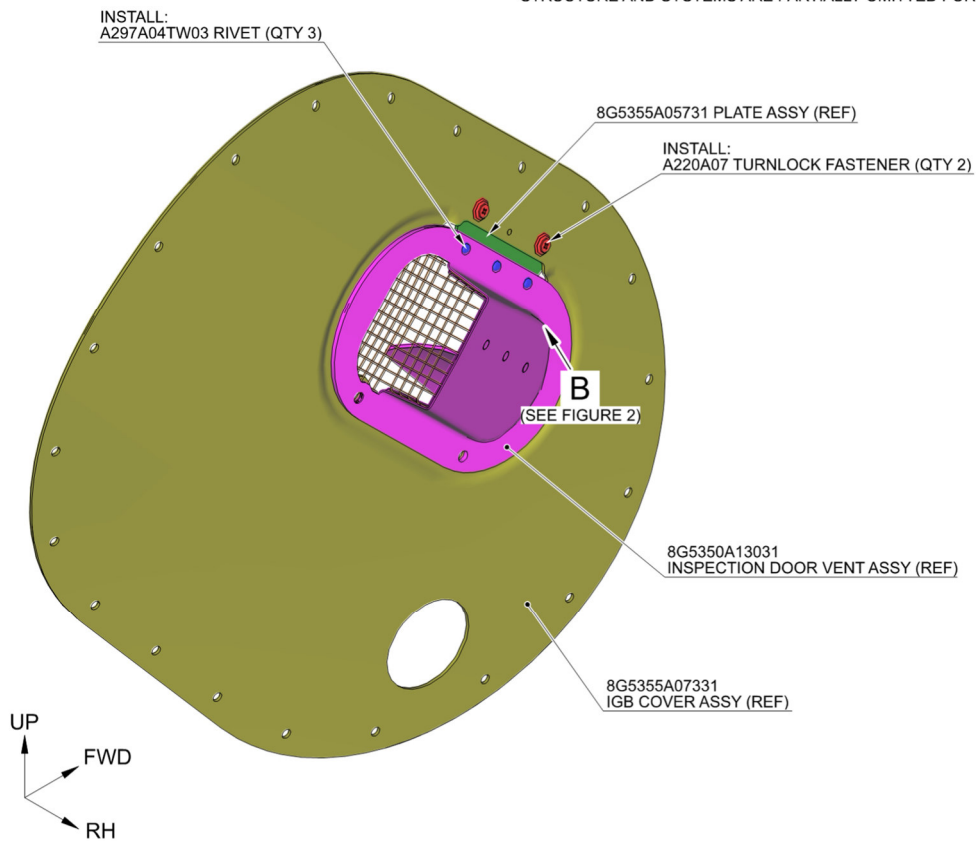


**IGB HINGED ACCESS PANEL RETRO MOD**  
**8G5355P00511**



**VIEW A - WAS**

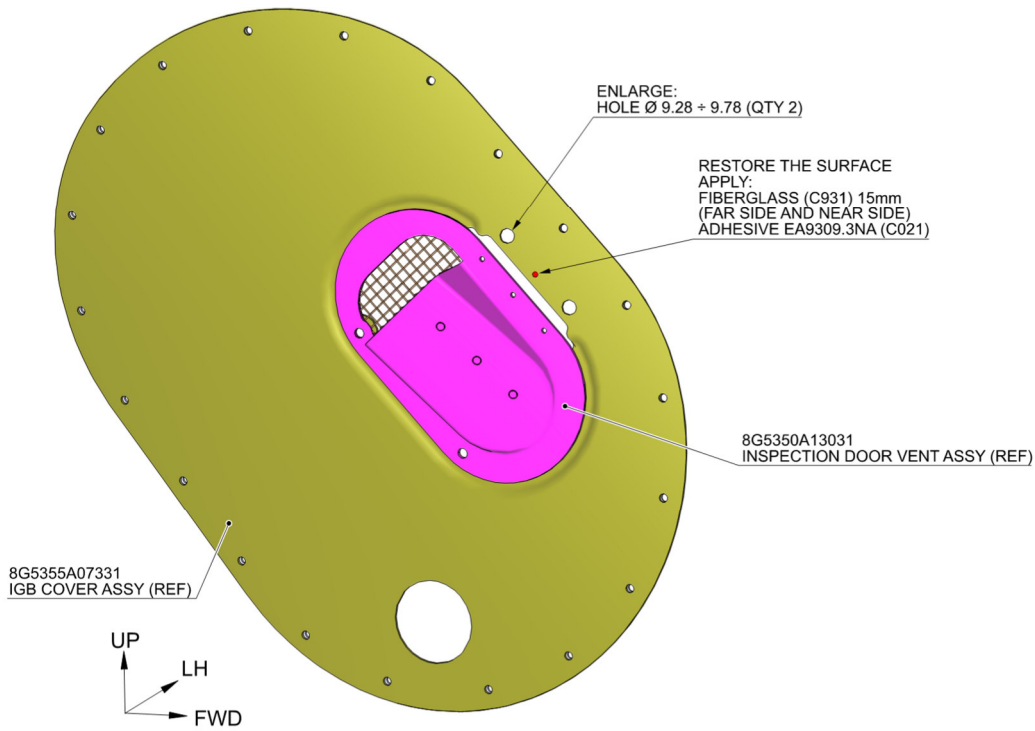
STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE



**VIEW A - BECOMES**

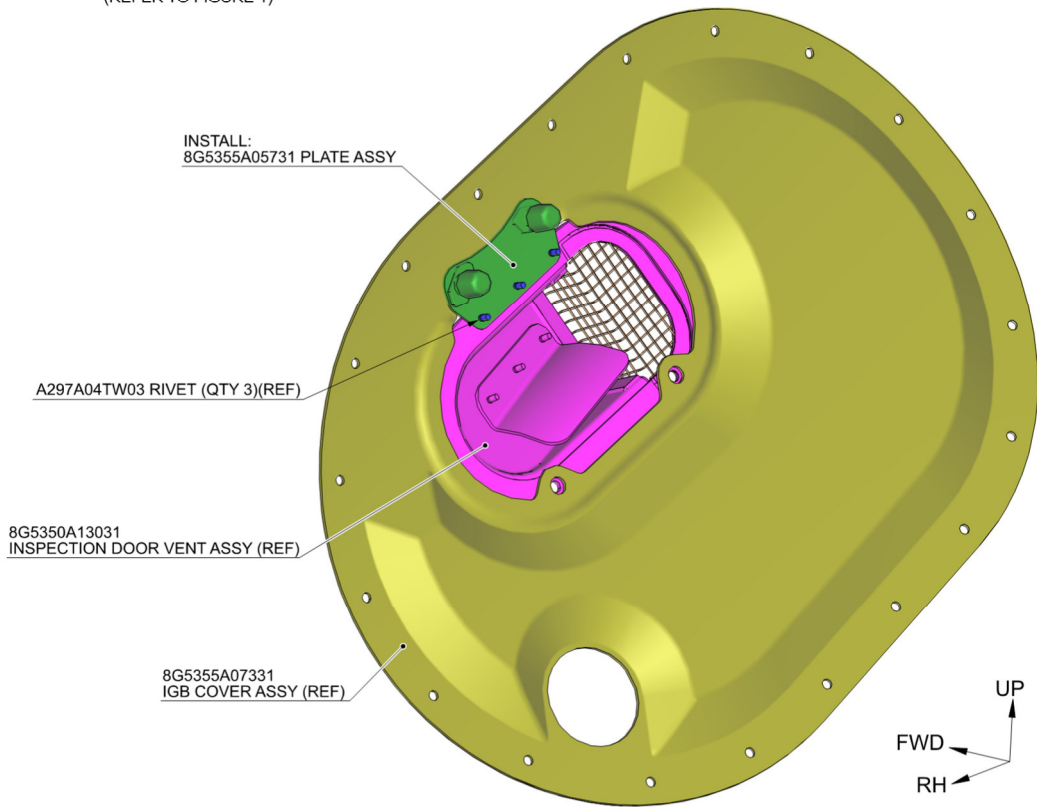
STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE

**Figure 1**



**VIEW B**

STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE (REFER TO FIGURE 1)



**VIEW C**

STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE (REFER TO FIGURE 1)

**Figure 2**

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.