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AgustaWestland Products

SERVICE BULLETIN

RECOMMENDED

N° 189-300

DATE: September 5, 2023

REV. : /

TITLE

ATA 28 - FILLER CAP CORROSION PROTECTION

REVISION LOG

First Issue

1. PLANNING INFORMATION

A. EFFECTIVITY

Part I

All AW189 helicopters from S/N 49007 to S/N 49072 (S/N's 49024, 49036, 49040 and 49041 excluded).

Part II

All AW189 helicopters from S/N 89001 to S/N 89013 (S/N's 89005 and 89006 excluded) and from S/N 92001 to S/N 92010.

B. COMPLIANCE

NOTE

The compliance time is subject to the same tolerances as per AMPI Chap. 05 DM 89-A-05-11-00-00A-028E-P Inspection/task interval tolerances - General.

Part I

Within and not later than 4 year or at first tank removal whichever occurs first after the issue of this Service Bulletin.

Part II

Within and not later than 4 year or at first tank removal whichever occurs first after the issue of this Service Bulletin.

Leonardo Helicopters recommends the implementation of this SB in accordance with the indicated compliance time, with related tolerances as applicable. It is Operator's responsibility to properly plan and execute the SB application i.a.w. LH recommendations. The Operator remains liable for any deviation.

C. CONCURRENT REQUIREMENTS

N.A.

D. REASON

Leonardo Helicopters received some reports of corrosion localized between the fuel tank filler cap and the flange on the helicopter structure.

In order to improve the corrosion protection in the area and prevent further similar occurrences, Leonardo Helicopters issued this Service Bulletin that provides all necessary instructions on how to apply sealant between the fuel tank filler cap and the flange on the structure.

The SB gives instruction dedicated to all the different fuel tanks configuration.

Leonardo Helicopters issued this SB for the following reason:

Helicopter Reliability/Maintainability	✓
Product Improvement	
Obsolescence	
Customization	
Product/Capability Enhancement	

E. DESCRIPTION

This Service Bulletin provides the necessary instruction on how to improve the corrosion protection of the filler cap.

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, the following MMH are deemed necessary.

Part I: approximately two (2);

Part II: approximately two (2);

MMH are based on hands-on time and can change with helicopter configuration, personnel and facilities available. MMH are not comprehensive of the overall hours necessary to get access to work areas and to remove all the equipment that interferes with the application of the prescribed instructions.

H. WEIGHT AND BALANCE

N.A.

I. REFERENCES

I.1 PUBLICATIONS

Following Data Modules refer to AMP:

DATA MODULE		DESCRIPTION	PART
DM01	89-A-00-20-00-00A-120A-A	Helicopter on ground for a safe maintenance.	I,II
DM02	89-A-06-41-00-00A-010A-A	Access doors and panels - General data	I,II
DM03	89-A-12-11-01-00A-211A-A	Fuel tanks - Refuel	I,II
DM04	89-A-28-11-16-00B-520A-A	Filler cap (hinged) - Remove procedure	I,II
DM05	89-A-28-11-16-00B-720A-A	Filler cap (hinged) - Install procedure	I,II
DM06	89-A-28-11-19-00A-520A-A	Filler cap - Remove procedure	I,II
DM07	89-A-28-11-19-00A-720A-A	Filler cap - Install procedure	I,II

Following Data Modules refer to AMPI:

DATA MODULE		DESCRIPTION	PART
DM08	89-A-05-11-00-00A-028E-P	Inspection/task interval tolerances - General	-

I.2 ACRONYMS & ABBREVIATIONS

AMDI	Aircraft Material Data Information
AMP	Aircraft Maintenance Publication
AR	As Required
DM	Data Module
DOA	Design Organization Approval
EASA	European Union Aviation Safety Agency
IPD	Illustrated Part Data
ITEP	Illustrated Tools and Equipment Publication
MMH	Maintenance Man Hours
N.A.	Not Applicable
P/N	Part Number
RHS	Right Hand Side
SB	Service Bulletin
S/N	Serial Number

I.3 ANNEX

N.A.

J. PUBLICATIONS AFFECTED

N.A.

K. SOFTWARE ACCOMPLISHMENT SUMMARY

N.A.

2. MATERIAL INFORMATION

A. REQUIRED MATERIALS

A.1 PARTS

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

A.2 CONSUMABLES

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

#	SPEC./LHD CODE NUMBER	DESCRIPTION	Q.TY	NOTE	PART
1	AWMS05-001 Type 1, Class C, Grade 1	Sealant MC-780 C-2	AR	(1)	I,II
2	Commercial	PR-2201 Class B	AR	(1)	I,II

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

A.3 LOGISTIC MATRIX

N.A.

NOTES

(1) Item to be procured as local supply.

B. SPECIAL TOOLS

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

C. INDUSTRY SUPPORT INFORMATION

N.A.

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.

PART I

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, gain access to the fuel area.
3. In accordance with AMP DM 89-A-28-11-16-00B-520A-A and with reference to Figure 1, remove the filler cap P/N 4F2810V01551.
4. In accordance with AMP DM 89-A-28-11-19-00A-520A-A and with reference to Figure 1, remove the filler ring P/N 4F2810L04752 and the filler adapter P/N 4F2810V02851 with the related hardware.

NOTE

Apply sealant PR-2201 Class B between the filler ring P/N 4F2810L04752 and the filler adapter P/N 4F2810V02851. Make sure sealant does not overflow and does not cause problems when opening the filler cap P/N 4F2810V01551.

5. In accordance with AMP DM 89-A-28-11-19-00A-720A-A and with reference to Figure 1, re-install the filler ring P/N 4F2810L04752 and the filler adapter P/N 4F2810V02851 by means of the previously removed hardware (Ref. to Step 4).
6. In accordance with AMP DM 89-A-28-11-16-00B-720A-A and with reference to Figure 1, re-install the filler cap P/N 4F2810V01551 previously removed hardware (Ref. to Step 3).

NOTE

Following steps 7 thru 10 are applicable only to helicopters equipped with “kit pressure refuel” P/N 4F2810A04711 or P/N 8G2810A10011.

7. In accordance with applicable steps of AMP DM 89-A-12-11-01-00A-211A-A and with reference to Figure 2, remove the filler cap from the adaptor.

8. With reference to Figure 2, perform the corrosion protection with a full perimetrical sealing to the adaptor edge P/N 8G2810V07451 as indicated by means of sealant MC-780 C-2 (C465).
9. With reference to Figure 2, perform the corrosion protection with a full perimetrical sealing to the filler ring edge P/N 4F2810L05351 by means of sealant MC-780 C-2 (C465).
10. In accordance with applicable steps of AMP DM 89-A-12-11-01-00A-211A-A and with reference to Figure 2, re-install the filler cap on the adaptor.

NOTE

Following steps 11 thru 14 are applicable only to AW189 helicopters equipped with "main tank RHS kit" P/N 8G2810F00211.

11. In accordance with AMP DM 89-A-28-11-16-00B-520A-A and with reference to Figure 3, remove the filler cap P/N 4F2810V01551.
12. In accordance with AMP DM 89-A-28-11-19-00A-520A-A and with reference to Figure 3, remove the filler ring P/N 4F2810L04752 and the filler adapter P/N 4F2810V02851 with the related hardware.

NOTE

Apply sealant PR-2201 Class B between the filler ring P/N 4F2810L04752 and the filler adapter P/N 4F2810V02851. Make sure sealant does not overflow and does not cause problems when opening the filler cap P/N 4F2810V01551.

13. In accordance with AMP DM 89-A-28-11-19-00A-720A-A, re-install the filler ring P/N 4F2810L04752 and the filler adapter P/N 4F2810V02851 by means of the previously removed hardware (Ref. to Step 12).
14. In accordance with AMP DM 89-A-28-11-16-00B-720A-A, re-install the filler cap P/N 4F2810V01551 previously removed hardware (Ref. to Step 11).
15. Return the helicopter to flight configuration and record for compliance with Part I of this Service Bulletin on the helicopter logbook.
16. 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

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

    AWPC.Engineering.Support@leonardocompany.us

PART II

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, gain access to the fuel area.
3. In accordance with AMP DM 89-A-28-11-16-00B-520A-A and with reference to Figure 5 View A, remove the filler cap P/N 4F2810V01551.
4. In accordance with AMP DM 89-A-28-11-19-00A-520A-A and with reference to Figure 5 View A, remove the filler ring P/N 4F2810L04752 and the filler adapter P/N 4F2810V02851 with the related hardware.

NOTE

Apply sealant PR-2201 Class B between the filler ring P/N 4F2810L04752 and the filler adapter P/N 4F2810V02851. Make sure sealant does not overflow and does not cause problems when opening the filler cap P/N 4F2810V01551.

5. In accordance with AMP DM 89-A-28-11-19-00A-720A-A and with reference to Figure 5 View A, re-install the filler ring P/N 4F2810L04752 and the filler adapter P/N 4F2810V02851 by means of the previously removed hardware (Ref. to Step 4).
6. In accordance with AMP DM 89-A-28-11-16-00B-720A-A and with reference to Figure 5 View A, re-install the filler cap P/N 4F2810V01551 previously removed hardware (Ref. to Step 3).
7. In accordance with AMP DM 89-A-28-11-16-00B-520A-A and with reference to Figure 5 View C, remove the filler cap P/N 4F2810V01551.
8. In accordance with AMP DM 89-A-28-11-19-00A-520A-A and with reference to Figure 5 View C, remove the filler ring P/N 4F2810L04752 and the filler adapter P/N 4F2810V02851 with the related hardware.

NOTE

Apply sealant PR-2201 Class B between the filler ring P/N 4F2810L04752 and the filler adapter P/N 4F2810V02851. Make sure sealant does not overflow and does not cause problems when opening the filler cap P/N 4F2810V01551.

9. In accordance with AMP DM 89-A-28-11-19-00A-720A-A and with reference to Figure 5 View C, re-install the filler ring P/N 4F2810L04752 and the filler adapter P/N 4F2810V02851 by means of the previously removed hardware (Ref. to Step 8).

10. In accordance with AMP DM 89-A-28-11-16-00B-720A-A and with reference to Figure 5 View C, re-install the filler cap P/N 4F2810V01551 previously removed hardware (Ref. to Step 7).
11. With reference to Figure 4 and Figure 5 View B, if “kit pressure refuel” is not installed, perform the corrosion protection with a full perimetrical sealing to the blanking cap edge P/N 4499-294A and to the heads of n°6 bolts P/N NAS6604-5 by means of sealant MC-780 C-2 (C465).

NOTE

Following steps 12 thru 15 are applicable only to AW189 helicopters equipped with “kit pressure refuel” P/N 4F2810A04711 or P/N 8G2810A10011.

12. In accordance with applicable steps of AMP DM 89-A-12-11-01-00A-211A-A and with reference to Figure 2, remove the filler cap from the adaptor.
13. With reference to Figure 2, perform the corrosion protection with a full perimetrical sealing to the adaptor edge P/N 8G2810V07451 as indicated by means of sealant MC-780 C-2 (C465).
14. With reference to Figure 2, perform the corrosion protection with a full perimetrical sealing to the filler ring edge P/N 4F2810L05351 by means of sealant MC-780 C-2 (C465).
15. In accordance with applicable steps of AMP DM 89-A-12-11-01-00A-211A-A and with reference to Figure 2, re-install the filler cap on the adaptor.
16. Return the helicopter to flight configuration and record for compliance with Part II of this Service Bulletin on the helicopter logbook.
17. 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
    and (for North, Central and South America) also to:
    AWPC.Engineering.Support@leonardocompany.us

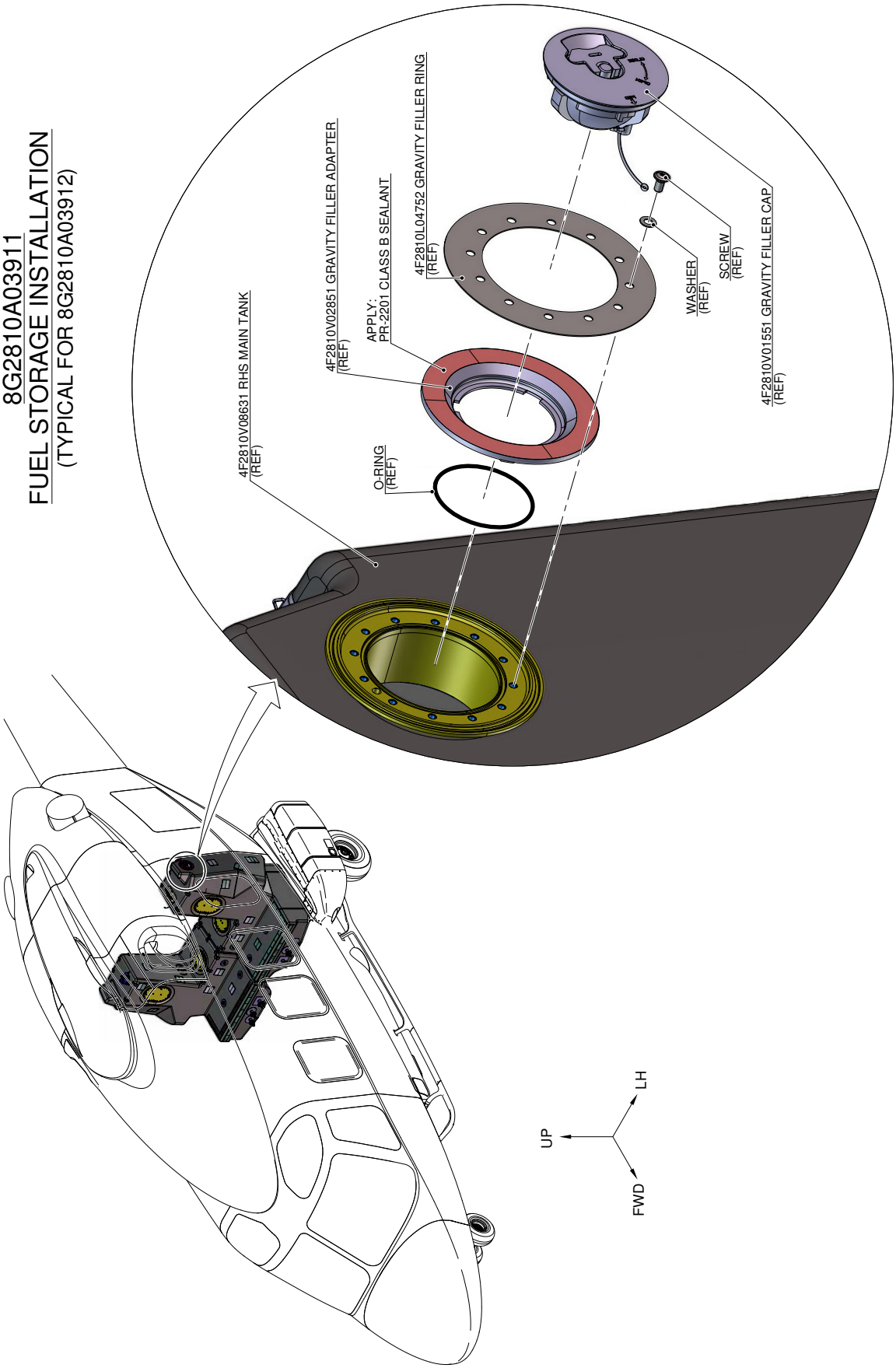
8G2810A03911
FUEL STORAGE INSTALLATION
(TYPICAL FOR 8G2810A03912)
4F2810V08631 RHS MAIN TANK (REF)
O-RING (REF)
4F2810V02851 GRAVITY FILLER ADAPTER (REF)
APPLY: PR-2201 CLASS B SEALANT
4F2810L04752 GRAVITY FILLER RING (REF)
WASHER (REF)
SCREW (REF)
4F2810V01551 GRAVITY FILLER CAP (REF)
UP
LH
FWD
APPLICABLE ONLY TO AW189 STANDARD CABIN HELICOPTERS (S/N 49XXX)

Figure 1

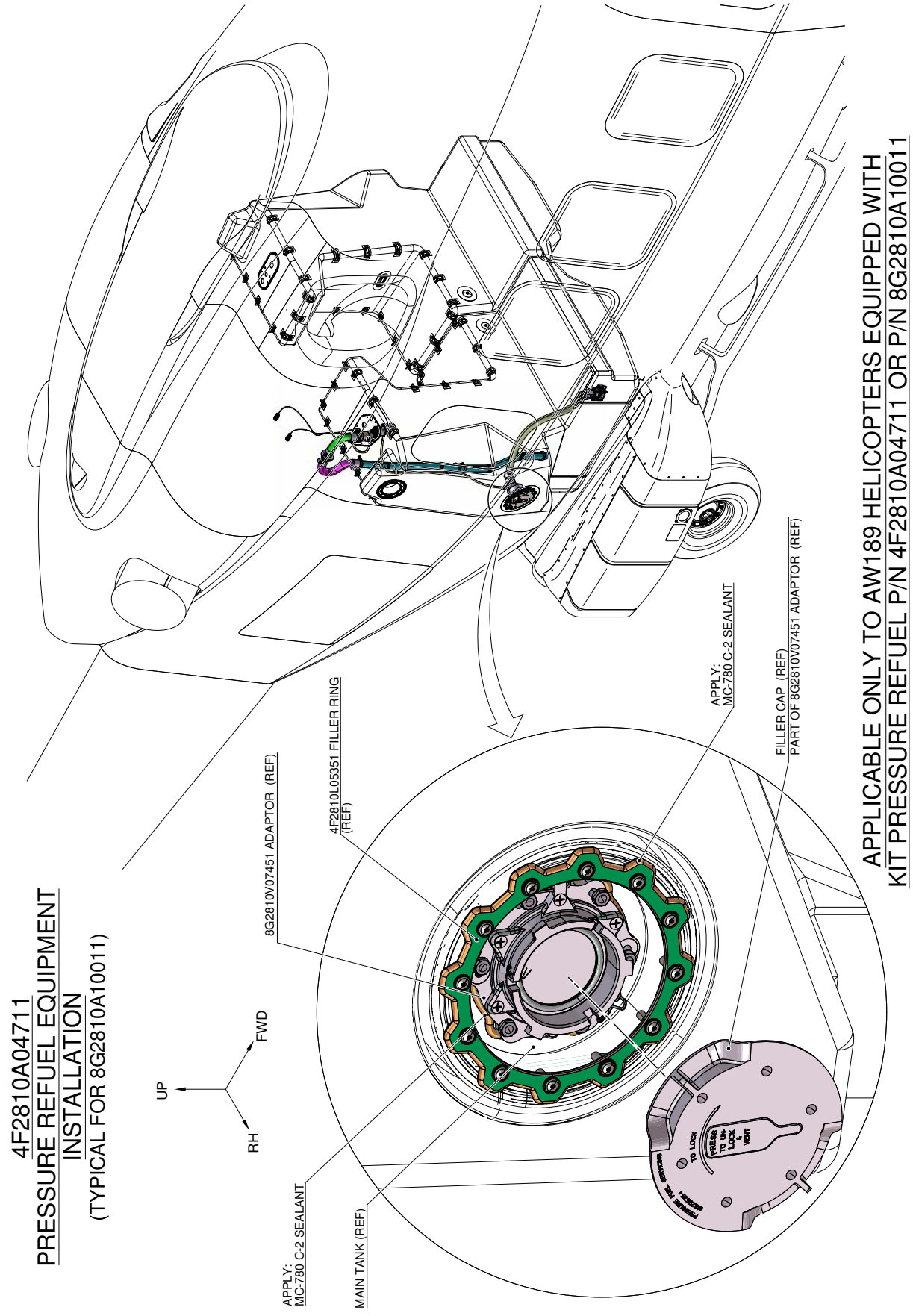
4F2810A04711
PRESSURE REFUEL EQUIPMENT
INSTALLATION
(TYPICAL FOR 8G2810A10011)
APPLICABLE ONLY TO AW189 HELICOPTERS EQUIPPED WITH
KIT PRESSURE REFUEL P/N 4F2810A04711 OR P/N 8G2810A10011
UP
FWD
RH
8G2810V07451 ADAPTOR (REF)
4F2810L05351 FILLER RING
(REF)
APPLY:
MC-780 C-2 SEALANT
FILLER CAP (REF)
PART OF 8G2810V07451 ADAPTOR (REF)
APPLY:
MC-780 C-2 SEALANT
MAIN TANK (REF)
TO LOCK
PRESS
TO UN-
LOCK
VENT

Figure 2

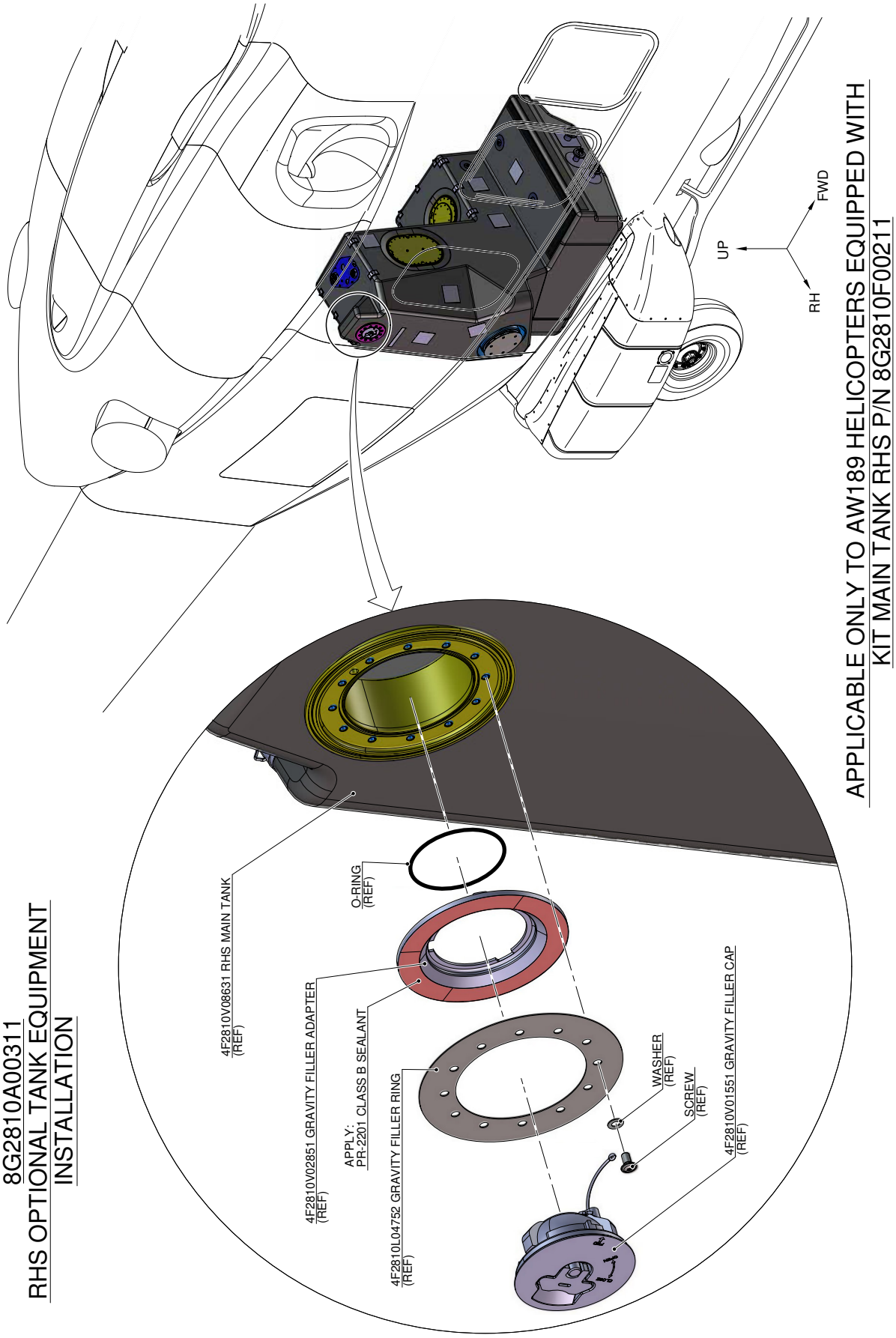
8G2810A00311
RHS OPTIONAL TANK EQUIPMENT
INSTALLATION
APPLICABLE ONLY TO AW189 HELICOPTERS EQUIPPED WITH
KIT MAIN TANK RHS P/N 8G2810F00211
UP
FWD
RH
4F2810V08631 RHS MAIN TANK
(REF)
O-RING
(REF)
4F2810V02851 GRAVITY FILLER ADAPTER
(REF)
APPLY:
PR-2201 CLASS B SEALANT
4F2810L04752 GRAVITY FILLER RING
(REF)
WASHER
(REF)
SCREW
(REF)
4F2810V01551 GRAVITY FILLER CAP
(REF)

Figure 3

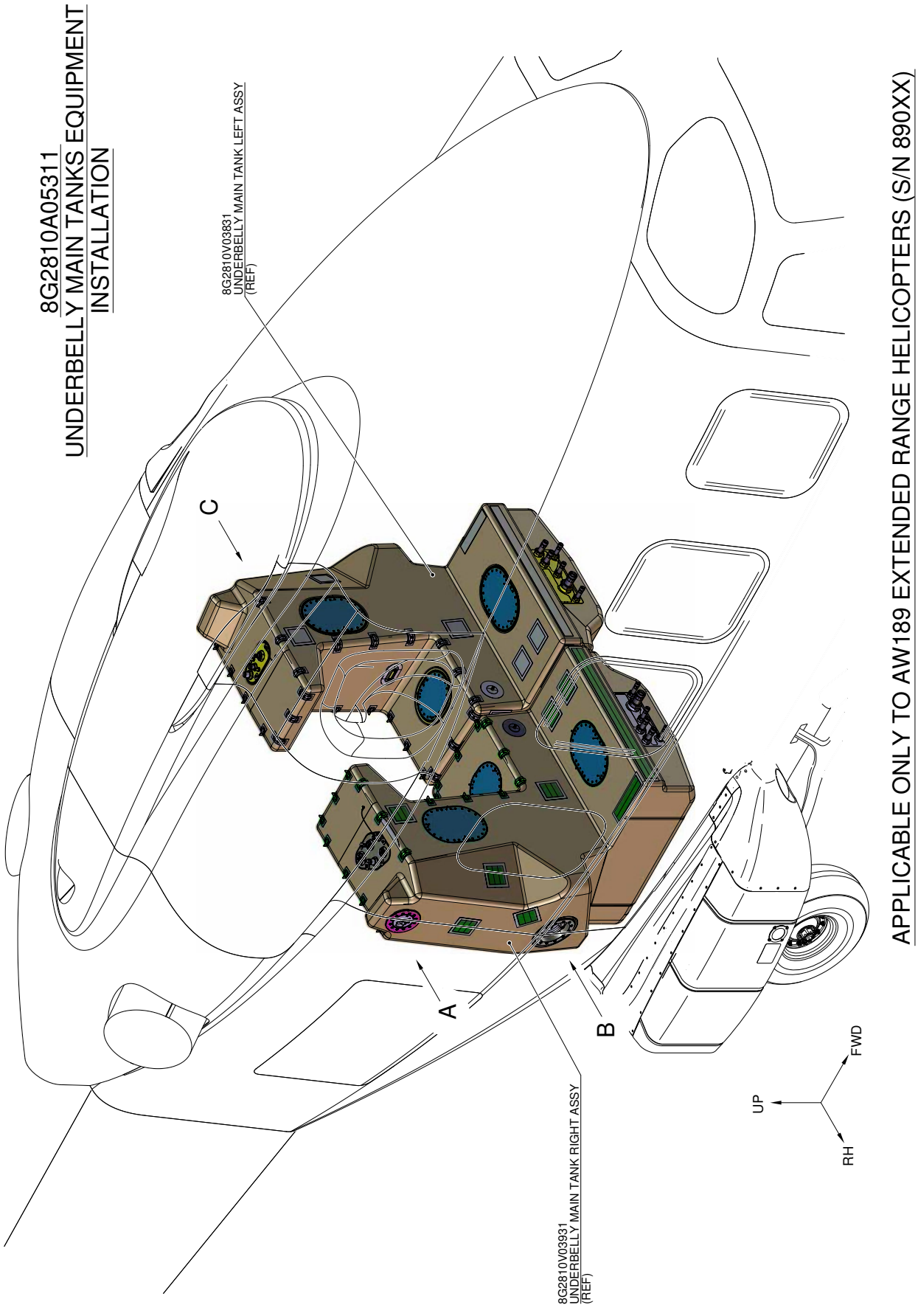
8G2810A05311
UNDERBELLY MAIN TANKS EQUIPMENT
INSTALLATION
APPLICABLE ONLY TO AW189 EXTENDED RANGE HELICOPTERS (S/N 890XX)
8G2810V03831
UNDERBELLY MAIN TANK LEFT ASSY
(REF)
8G2810V03931
UNDERBELLY MAIN TANK RIGHT ASSY
(REF)
A
B
C
FWD
UP
RH

Figure 4

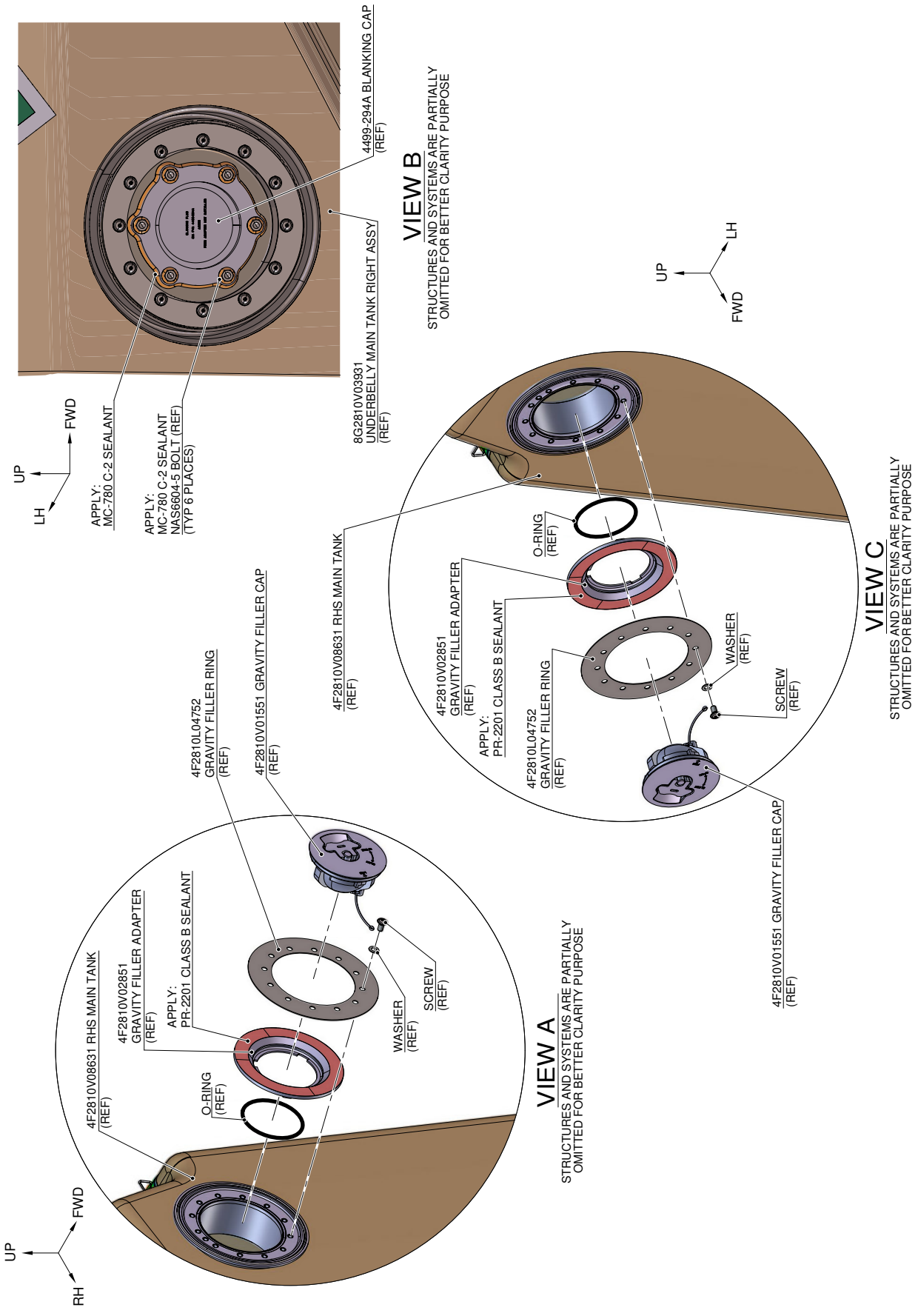
VIEW B
STRUCTURES AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE
4499-294A BLANKING CAP (REF)
8G2810V03931 UNDERBELLY MAIN TANK RIGHT ASSY (REF)
APPLY: MC-780 C-2 SEALANT
APPLY: MC-780 C-2 SEALANT NAS6604-5 BOLT (REF) (TYP 6 PLACES)
UP
FWD
LH
VIEW C
STRUCTURES AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE
4F2810V08631 RHS MAIN TANK (REF)
4F2810V02851 GRAVITY FILLER ADAPTER (REF)
APPLY: PR-2201 CLASS B SEALANT
4F2810L04752 GRAVITY FILLER RING (REF)
O-RING (REF)
WASHER (REF)
SCREW (REF)
4F2810V01551 GRAVITY FILLER CAP (REF)
VIEW A
STRUCTURES AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE
4F2810V08631 RHS MAIN TANK (REF)
4F2810V02851 GRAVITY FILLER ADAPTER (REF)
APPLY: PR-2201 CLASS B SEALANT
4F2810L04752 GRAVITY FILLER RING (REF)
4F2810V01551 GRAVITY FILLER CAP (REF)
O-RING (REF)
WASHER (REF)
SCREW (REF)
UP
FWD
RH

Figure 5

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HELICOPTERS

AgustaWestland Products

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