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AgustaWestland Products

SERVICE BULLETIN

N° 189-188

DATE: September 9, 2021

REV. : /

TITLE

ATA 30 – WIPERS AND WINDSHIELD WASHING KIT

REVISION LOG

First Issue

1. PLANNING INFORMATION

A. EFFECTIVITY

Part I:

AW189 helicopters equipped with windshield washing kit P/N 8G3040F00111 and with one of the kits listed in the following table:

Description	P/N
LIPS kit	P/N 8G3000F00211 or P/N 8G3000F00212
FIPS kit	P/N 8G3000F00111 or P/N 8G3000F00311
Heated windshield kit	P/N 8G5610F00211
Glass windshield kit	P/N 8G5610F00111

Part II:

AW189 helicopters not equipped with windshield washing kit P/N 8G3040F00111 and equipped with one of the kits listed in the following table:

Description	P/N
LIPS kit	P/N 8G3000F00211 or P/N 8G3000F00212
FIPS kit	P/N 8G3000F00111 or P/N 8G3000F00311
Heated windshield kit	P/N 8G5610F00211
Glass windshield kit	P/N 8G5610F00111

B. COMPLIANCE

At Customer's option.

C. CONCURRENT REQUIREMENTS

N.A.

D. REASON

This Service Bulletin is issued in order to provide the necessary instructions on how to perform the installation of the kit wiper for glass windshield P/N 8G3040F00311 and kit windshield washing P/N 8G3040F00211.

E. DESCRIPTION

LHD developed an improved wipers installation and windshield washing system for AW189 helicopters. These new installations are compatible only with helicopters equipped with the glass windshield.

The new wipers kit P/N 8G3040F00311 introduces a new wiper blade with increased length in order to improve the pilot and co-pilot visibility in rainy conditions. Also the wiper arms have a new tubular and parallelogram geometry in order to increase the swept area. No changes have been introduced for wiper motors.

This Service Bulletin gives instructions on how to remove the existing wiper blades and arm and to replace with the new wiper installation P/N 8G3040A03611.

A new kit windshield washing system P/N 8G3040F00211 has also been developed. In this design, with respect to the current windshield washing system, the new wiper blade spray nozzle (P/N 8G3040V00451) has been designed to fit with the new blade installation.

For helicopters equipped with windshield washing kit, Part I of this Service Bulletin gives instructions on how to install the new windshield washing external parts P/N 8G3040A04111 on the wiper installation P/N 8G3040A03611.

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 thirty (30);

Part II: approximately twenty-two (22).

MMH are based on hands-on time and can change with helicopter configuration, personnel and facilities available. (If applicable) 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

PART I

WEIGHT (Kg)	0.87	
	ARM (mm)	**MOMENT (Kgmm)**
LONGITUDINAL BALANCE	1322.0	1150.1
LATERAL BALANCE	0.0	0.0

PART II

WEIGHT (Kg)	0.79	
	ARM (mm)	**MOMENT (Kgmm)**
LONGITUDINAL BALANCE	1306.0	1031.7
LATERAL BALANCE	0.0	0.0

I. REFERENCES

1) PUBLICATIONS

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-30-42-04-00A-920A-A	Right wiper blade - Replacement	I
DM04	89-A-30-42-05-00A-920A-A	Left wiper blade - Replacement	I
DM05	89-A-30-42-06-00A-520A-A	Right wiper arm - Remove procedure	I
DM06	89-A-30-42-07-00A-520A-A	Left wiper arm - Remove procedure	I
DM07	89-B-30-42-04-00A-920A-A	Right wiper blade - Replacement	I
DM08	89-B-30-42-05-00A-920A-A	Left wiper blade - Replacement	I
DM09	89-B-30-42-06-00A-720A-A	Right wiper arm - Install procedure	I
DM10	89-B-30-42-07-00A-720A-A	Left wiper arm - Install procedure	I

DATA MODULE		DESCRIPTION	PART
DM11	89-A-30-41-01-00A-920A-A	Right wiper blade - Replacement	II
DM12	89-A-30-41-02-00A-920A-A	Left wiper blade - Replacement	II
DM13	89-A-30-41-03-00A-520A-A	Right wiper arm - Remove procedure	II
DM14	89-A-30-41-04-00A-520A-A	Left wiper arm - Remove procedure	II
DM15	89-B-30-41-01-00A-920A-A	Right wiper blade - Replacement	II
DM16	89-B-30-41-02-00A-920A-A	Left wiper blade - Replacement	II
DM17	89-B-30-41-03-00A-720A-A	Right wiper arm - Install procedure	II
DM18	89-B-30-41-04-00A-720A-A	Left wiper arm - Install procedure	II
DM19	89-B-30-42-00-00A-320A-A	Windshield wiping/washing system kit - Operation test	I
DM20	89-B-30-41-00-00A-320A-A	Windshield wiping system - Operation test	II

2) ACRONYMS

AMDI	Aircraft Material Data Information
AMP	Aircraft Maintenance Publication
AR	As Required
DM	Data Module
DOA	Design Organization Approval
EASA	European Aviation Safety Agency
FIPS	Full Ice Protection System
I/D	Inner Diameter
IPD	Illustrated Parts Data
LHD	Leonardo Helicopters Division
LHS	Left Hand Side
LIPS	Limited Ice Protection System
MMH	Maintenance Man Hours
O/D	Outer Diameter
RHS	Right End Side

3) ANNEX

N.A.

J. PUBLICATIONS AFFECTED

N.A.

K. SOFTWARE ACCOMPLISHMENT SUMMARY

N.A.

2. MATERIAL INFORMATION

A. REQUIRED MATERIALS

1) PARTS

PART I

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
1	**8G3040F00211**		**KIT WINDSHIELD WASHING**	**REF**	**.**		
2	**8G3040A04111**		**WINDSHIELD WASHING EXTERNAL PARTS**	**REF**	**..**		
3	223350054		Rubber tube	4m	…	(1)	189-188L1
4	8G3040V00451		Wiper spray nozzle	2	…		189-188L1
5	A629A04HS	AW001CK04HS	Strap	4	…		189-188L1
6	**8G3040F00311**		**KIT WIPER FOR GLASS WINDSHIELD**	**REF**	**.**		
7	**8G3040A03611**		**WIPER INSTL**	**REF**	**..**		
8	3G3040A01451		Shaft	2	...		189-188L2
9	8G3040A03731		Bracket LHS assy	1	...		189-188L2
10	8G3040A03931		Bracket RHS assy	1	...		189-188L2
11	8G3040V00151		Wiper arm LH	1	...		189-188L2
12	8G3040V00251		Wiper arm RH	1	...		189-188L2
13	8G3040V00351		Wiper blade	2	...		189-188L2
14	A994A33T012B		Washer	2	...		189-188L2
15	MS17826-3		Nut	2	...		189-188L2
16	MS24665-153		Cotter pin	2	...		189-188L2
17	MS27039-1-09		Screw	4	...		189-188L2
18	MS27039-1-10		Screw	4	...		189-188L2
19	NAS1149D0332K		Washer	8	...		189-188L2
20	A629A04HS	AW001CK04HS	Strap	2	.		189-188L2

PART II

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
21	**8G3040F00311**		**KIT WIPER FOR GLASS WINDSHIELD**	**REF**	**.**		
22	**8G3040A03611**		**WIPER INSTL**	**REF**	**..**		
23	3G3040A01451		Shaft	2	...		189-188L2
24	8G3040A03731		Bracket LHS assy	1	...		189-188L2
25	8G3040A03931		Bracket RHS assy	1	...		189-188L2
26	8G3040V00151		Wiper arm LH	1	...		189-188L2
27	8G3040V00251		Wiper arm RH	1	...		189-188L2
28	8G3040V00351		Wiper blade	2	...		189-188L2
29	A994A33T012B		Washer	2	...		189-188L2
30	MS17826-3		Nut	2	...		189-188L2
31	MS24665-153		Cotter pin	2	...		189-188L2
32	MS27039-1-09		Screw	4	...		189-188L2
33	MS27039-1-10		Screw	4	...		189-188L2
34	NAS1149D0332K		Washer	8	...		189-188L2

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
35	MIL-S-46163 TY II, GR N Code No. 900004957	Sealing compound Loctite 242 (C031)	AR	(2)	I, II
36	MIL-PRF-16173 CL I, GR 1 Code No. 999999999000000191	Corrosion inhibitor	AR	(2)	I, II
37	MIL-PRF-16173 CL II, GR 1 Code 999999999000008482	Corrosion inhibitor	AR	(2)	I, II
38	BMS3-38 Code No. 999999999000017311	Corrosion protective compound Corban 27L (C075)	AR	(2)	I, II
39	AWMS05-001 TY I, CL C, GR 1 Code No. 999999999000009854	Sealant MC780 C-2 (C465)	AR	(2)	I, II
40	AWMS05-001 TY I, CL B, GR 2 Code No. 999999999000005965	Sealant MC780 B-2 (C465)	AR	(2)	I, II
41	MS20995C32	Lockwire	AR	(2)	I, II

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
189-188L1	1	(3)	I
189-188L2	1	(4)	I, II

NOTE

(1) Use rubber pipe 6.3 mm O/D, 4.2 mm I/D.

(2) Item to be procured as local supply.

(3) Item applicable only to helicopters equipped with windshield washing kit P/N 8G3040F00111.

(4) Item applicable to all helicopters affected.

B. SPECIAL TOOLS

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

C. INDUSTRY SUPPORT INFORMATION

Customization.

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) Let adhesive cure at room temperature for at least 24 hours unless otherwise specified.

c) Unless otherwise specified, in all level direct exposure zones and indirect medium level exposure zones, protect all removable fasteners that are not fully coated with polyurethane paint by means of MIL-PRF-16173 Class I, Grade 1 or MIL-PRF-16173 Class II, Grade 1.

d) At the end of the installation, touch up paint where necessary in accordance with the helicopter exterior paint scheme.

e) All lengths are in mm.

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 and with reference to Figures 1 and 3, gain access to the area affected by the installation and perform the following procedure:
   - 2.1 In accordance with the applicable steps of AMP DM 89-A-30-42-04-00A-920A-A and with reference to Figure 1 View A, remove the RH blade assy P/N 412-9010-83-103 from the RH arm P/N 3G3040A01951.
   - 2.2 In accordance with the applicable steps of AMP DM 89-A-30-42-05-00A-920A-A and with reference to Figure 1 View A, remove the left blade assy P/N 412-9010-83-103 from the LH arm P/N 3G3040A02051.
   - 2.3 In accordance with AMP DM 89-A-30-42-06-00A-520A-A and with reference to Figure 1 View A, remove the RH arm P/N 3G3040A01951. Retain hardware for later reuse.

2.4 In accordance with AMP DM 89-A-30-42-07-00A-520A-A and with reference to Figure 1 View A, remove the LH arm P/N 3G3040A02051. Retain hardware for later reuse.

2.5 With reference to Figure 3 View C, remove and retain the pipe joint P/N 3G3040A01651 from the bracket LH P/N 4F3040A00851 (upper side).

2.6 With reference to Figure 3 View C, loose the strap P/N A629A04HS and disconnect the rubber tube P/N 223350054 from the pipe joint P/N 3G3040A01651 on the bracket. Remove and retain the pipe joint from the bracket LH P/N 4F3040A00851 (lower side).

2.7 With reference to Figure 3 View C, remove and retain the pipe joint P/N 3G3040A01651 from the bracket RH P/N 4F3040A00951 (upper side).

2.8 With reference to Figure 3 View C, loose the strap P/N A629A04HS and disconnect the rubber tube P/N 223350054 from the pipe joint P/N 3G3040A01651 on the bracket. Remove and retain the pipe joint from the bracket RH P/N 4F3040A00951 (lower side).

2.9 With reference to Figure 1 View A, remove the bracket LH P/N 4F3040A00851, n°5 screws P/N MS27039-1-09 and n°5 washers P/N NAS1149D0332K.

2.10 With reference to Figure 1 View A, remove the bracket RH P/N 4F3040A00951, n°5 screws P/N MS27039-1-09 and n°5 washers P/N NAS1149D0332K.

3. With reference to Figures 1 thru 3, gain access to the area affected by the installation and perform the wiper instl P/N 8G3040A03611 as described in the following procedure:

3.1 With reference to Figure 2 Detail B, install the bracket LHS assy P/N 8G3040A03731 in position on the structure LH side by means of n°2 screws P/N MS27039-1-09, n°2 screws P/N MS27039-1-10 and n°4 washers P/N NAS1149D0332K.

3.2 With reference to Figure 3 View C, re-install the pipe joint P/N 3G3040A01651 (lower side) previously removed on the bracket LHS assy P/N 8G3040A03731 by means of adhesive sealant C465.

3.3 With reference to Figure 3 View C, re-connect the rubber tube P/N 223350054 to the pipe joint P/N 3G3040A01651 by means of the strap P/N A629A04HS.

3.4 With reference to Figure 3 View C, re-install the pipe joint P/N 3G3040A01651 (upper side) previously removed on the bracket LHS assy P/N 8G3040A03731 by means of sealant C465.

3.5 With reference to Figure 2 Detail B, install the shaft P/N 3G3040A01451 in its housing on the bracket LHS assy P/N 8G3040A03731.

NOTE

Make sure the wiper blade is correctly and tightly attached to the wiper arm.

3.6 In accordance with the applicable steps of AMP DM 89-B-30-42-05-00A-920A-A and with reference to Figure 1 View A and Figure 3 Detail D, install the wiper blade P/N 8G3040V00351 on the wiper arm LH P/N 8G3040V00151.

NOTE

Before installation, apply on the motor shaft splined end corrosion protective compound Corban 27L C075 (refer to Figure 2 Section E-E).

3.7 In accordance with AMP DM 89-B-30-42-07-00A-720A-A and with reference to Figure 1 View A and Figure 2 Detail B and Section E-E, install the wiper arm LH P/N 8G3040V00151 and adjust the wiper arm and blade park position.

NOTE

Refer to DM 89-B-30-42-04-00A-920A-A for the RH wiper blade and to DM 89-B-30-42-06-00A-720A-A for the RH wiper arm.

3.8 Repeat steps from 3.1 thru 3.7 to install the bracket RHS assy P/N 8G3040A03931, the wiper arm RH P/N 8G3040V00251 and the RH wiper blade P/N 8G3040V00351.

4. With reference to Figures 1 and 3 perform the windshield washing external parts P/N 8G3040A04111 as described in the following procedure:

NOTE

Remove the clip from spray nozzle bar P/N 3G3040V01151 and install the bar on the wiper blade, then reinstall the clip.

4.1 With reference to Figure 3 Detail D, install the wiper spray nozzle P/N 8G3040V00451 on the left wiper blade P/N 8G3040V00351 by means of the nut and the cotter pin (hardware is part of P/N 8G3040V00451).

NOTE

Use rubber pipe (6.3 mm O/D, 4.2 mm I/D) with P/N 223350054 for wiper blade spray nozzle and arm coupling.

4.2 With reference to Figure 1 View A and Figure 3 Detail D and View C, insert the rubber tube P/N 223350054 into the wiper arm LH P/N 8G3040V00151 and

connect one end to the wiper spray nozzle P/N 8G3040V00451 and one end to the pipe joint P/N 3G3040A01651. Secure the two ends with n°2 straps P/N A629A04HS.

4.3 Repeat steps 4.1 and 4.2 to install the wiper spray nozzle P/N 8G3040V00451 on the RH wiper blade P/N 8G3040V00351 and the rubber tube P/N 223350054 into the wiper arm RH P/N 8G3040V00251.

5. After the installation perform the check of the bonding as follows:

5.1 The resistance between the LH, RH motor converter cases and the H/C structure shall be less than 5 milliohms.

5.2 The resistance between the LH, RH motor converter electrical connectors and the H/C structure shall be less than 10 milliohms.

6. In accordance with AMP DM 89-B-30-42-00-00A-320A-A, perform the windshield wiping/washing system operation test.

7. In accordance with weight and balance changes, update the Chart A (see Rotorcraft Flight Manual, Part II, section 6).

8. Return the helicopter to flight configuration and record for compliance with Part I of this Service Bulletin on the helicopter logbook.

9. Send the attached compliance form to the following mail box:

engineering.support.lhd@leonardocompany.com

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

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 and with reference to Figures 4 and 6, gain access to the area affected by the installation and perform the following procedure:
   - 2.1 In accordance with the applicable steps of AMP DM 89-A-30-41-01-00A-920A-A and with reference to Figure 4 View A, remove the RH blade assy P/N 204-070-907-11 from the RH arm P/N 139G14747-51.
   - 2.2 In accordance with the applicable steps of AMP DM 89-A-30-41-02-00A-920A-A and with reference to Figure 4 View A, remove the LH blade assy P/N 204-070-907-11 from the LH arm P/N 139G14747-51.
   - 2.3 In accordance with AMP DM 89-A-30-41-03-00A-520A-A and with reference to Figure 4 View A, remove the RH arm P/N 139G14747-51. Retain hardware for later reuse.
   - 2.4 In accordance with AMP DM 89-A-30-41-04-00A-520A-A and with reference to Figure 4 View A, remove the LH arm P/N 139G14747-51. Retain hardware for later reuse.
   - 2.5 With reference to Figure 6 View C, remove and retain the pipe end P/N 4F3040A01451 from the bracket LH P/N 4F3040A00851.
   - 2.6 With reference to Figure 6 View C, remove and retain the pipe end P/N 4F3040A01451 from the bracket RH P/N 4F3040A00851.
   - 2.7 With reference to Figure 4 View A, remove the bracket LH P/N 4F3040A00851, n°5 screws P/N MS27039-1-09 and n°5 washers P/N NAS1149D0332K.
   - 2.8 With reference to Figure 4 View A, remove the bracket RH P/N 4F3040A00951, n°5 screws P/N MS27039-1-09 and n°5 washers P/N NAS1149D0332K.
3. With reference to Figures 4 thru 6, gain access to the area affected by the installation and perform the wiper instl P/N 8G3040A03611 as described in the following procedure:
   - 3.1 With reference to Figure 5 Detail B, install the bracket LHS assy P/N 8G3040A03731 in position on the structure LH side by means of n°2 screws P/N MS27039-1-09, n°2 screws P/N MS27039-1-10 and n°4 washers P/N NAS1149D0332K.
   - 3.2 With reference to Figure 6 View C, re-install the pipe end P/N 4F3040A01451 previously removed on the bracket LHS assy P/N 8G3040A03731 by means of sealing compound C031.

3.3 With reference to Figure 5 Detail B, install the shaft P/N 3G3040A01451 in its housing on the bracket LHS assy P/N 8G3040A03731.

NOTE

Make sure the wiper blade is correctly and tightly attached to the wiper arm.

3.4 In accordance with the applicable steps of AMP DM 89-B-30-41-02-00A-920A-A and with reference to Figure 4 View A and Figure 6 Detail D, install the wiper blade P/N 8G3040V00351 on the wiper arm LH P/N 8G3040V00151.

NOTE

Before installation, apply on the motor shaft splined end corrosion protective compound Corban 27L C075 (refer to Figure 5 Section E-E).

3.5 In accordance with AMP DM 89-B-30-41-04-00A-720A-A and with reference to Figure 4 View A and Figure 5 Detail B and Section E-E, install the wiper arm LH P/N 8G3040V00151 and adjust the wiper arm and blade park position.

NOTE

Refer to DM 89-B-30-41-01-00A-920A-A for the RH wiper blade and to DM 89-B-30-41-03-00A-720A-A for the RH wiper arm.

3.6 Repeat steps from 3.1 thru 3.5 to install the bracket RHS assy P/N 8G3040A03931, the wiper arm RH P/N 8G3040V00251 and the RH wiper blade P/N 8G3040V00351.

4. After the installation perform the check of the bonding as follows:

4.1 The resistance between the LH, RH motor converter cases and the H/C structure shall be less than 5 milliohms.

4.2 The resistance between the LH, RH motor converter electrical connectors and the H/C structure shall be less than 10 milliohms.

5. In accordance with AMP DM 89-B-30-41-00-00A-320A-A, perform the windshield wiping system operation test.

6. In accordance with weight and balance changes, update the Chart A (see Rotorcraft Flight Manual, Part II, section 6).

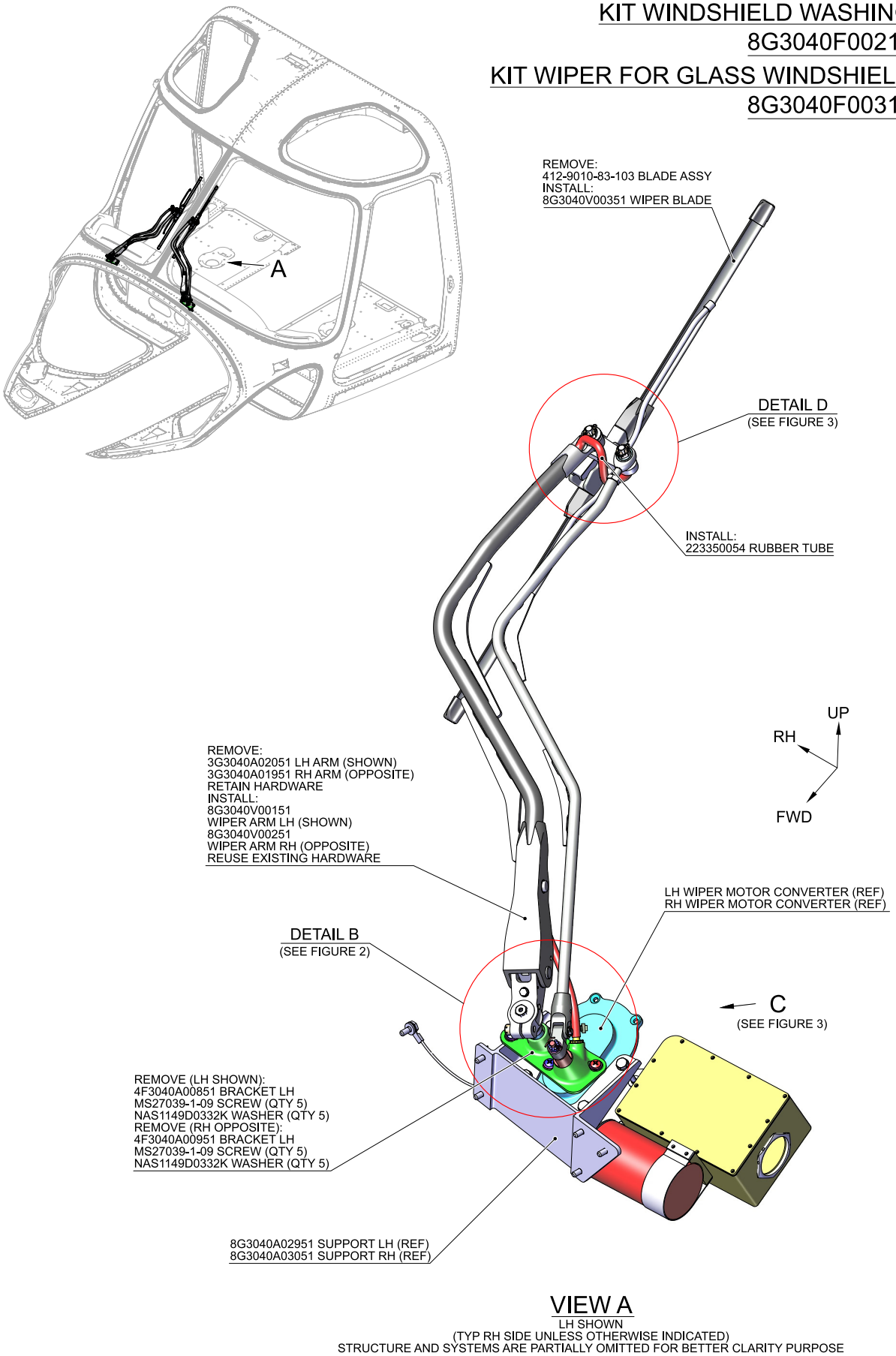
7. Return the helicopter to flight configuration and record for compliance with Part II of this Service Bulletin on the helicopter logbook.

8. Send the attached compliance form to the following mail box:

   engineering.support.lhd@leonardocompany.com

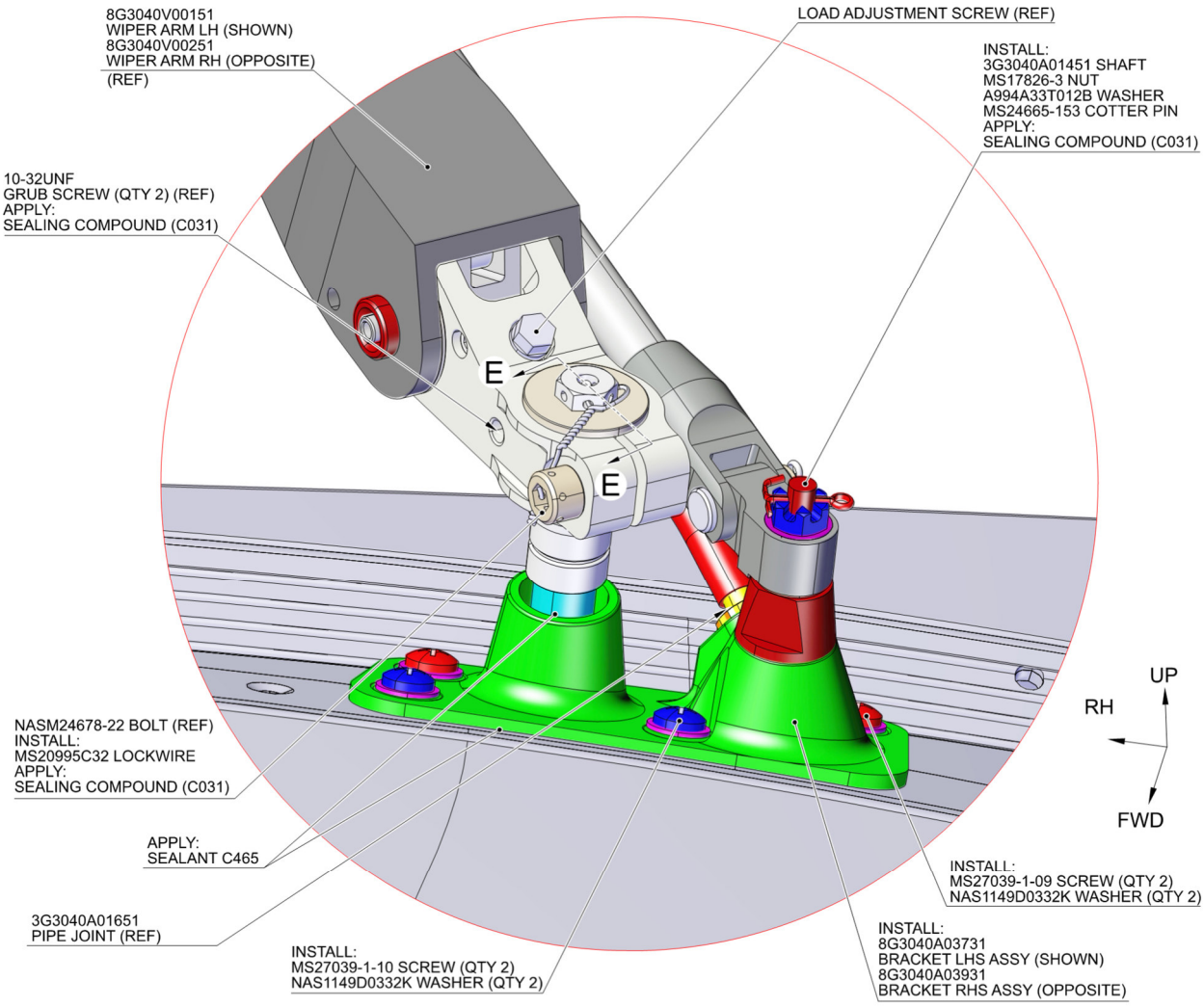
   As an alternative, gain access to My Communications section on Leonardo WebPortal and compile the “Service Bulletin Application Communication”.

KIT WINDSHIELD WASHING
8G3040F00211
KIT WIPER FOR GLASS WINDSHIELD
8G3040F00311

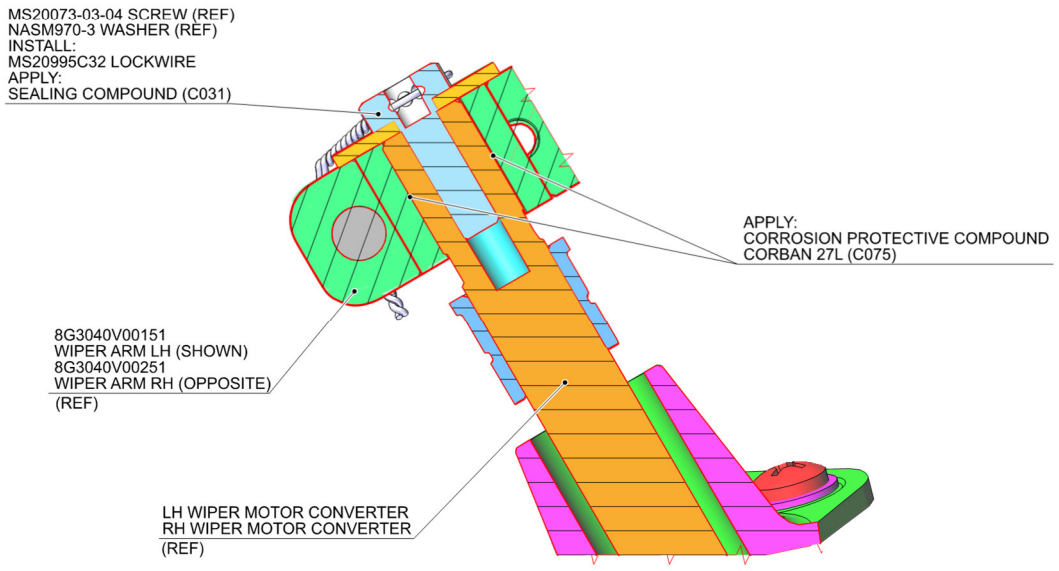


VIEW A
LH SHOWN
(TYP RH SIDE UNLESS OTHERWISE INDICATED)
STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE

Figure 1

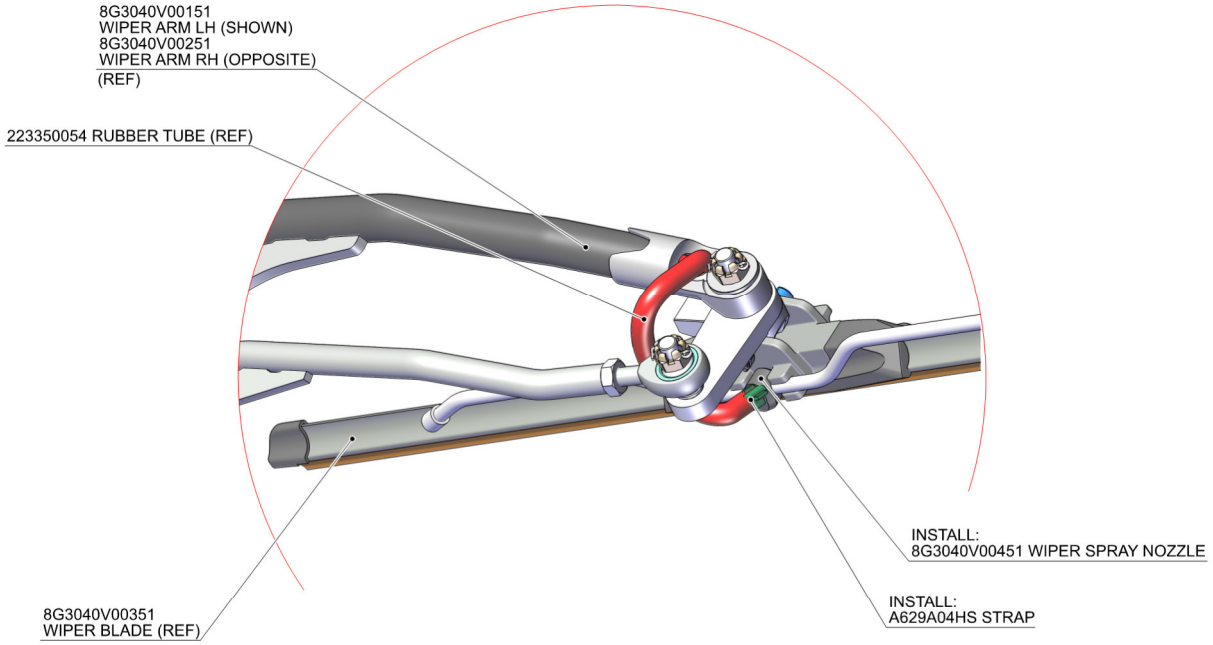


DETAIL B
LH SHOWN
(TYP RH SIDE UNLESS OTHERWISE INDICATED)
STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE
(REFER TO FIGURE 1)

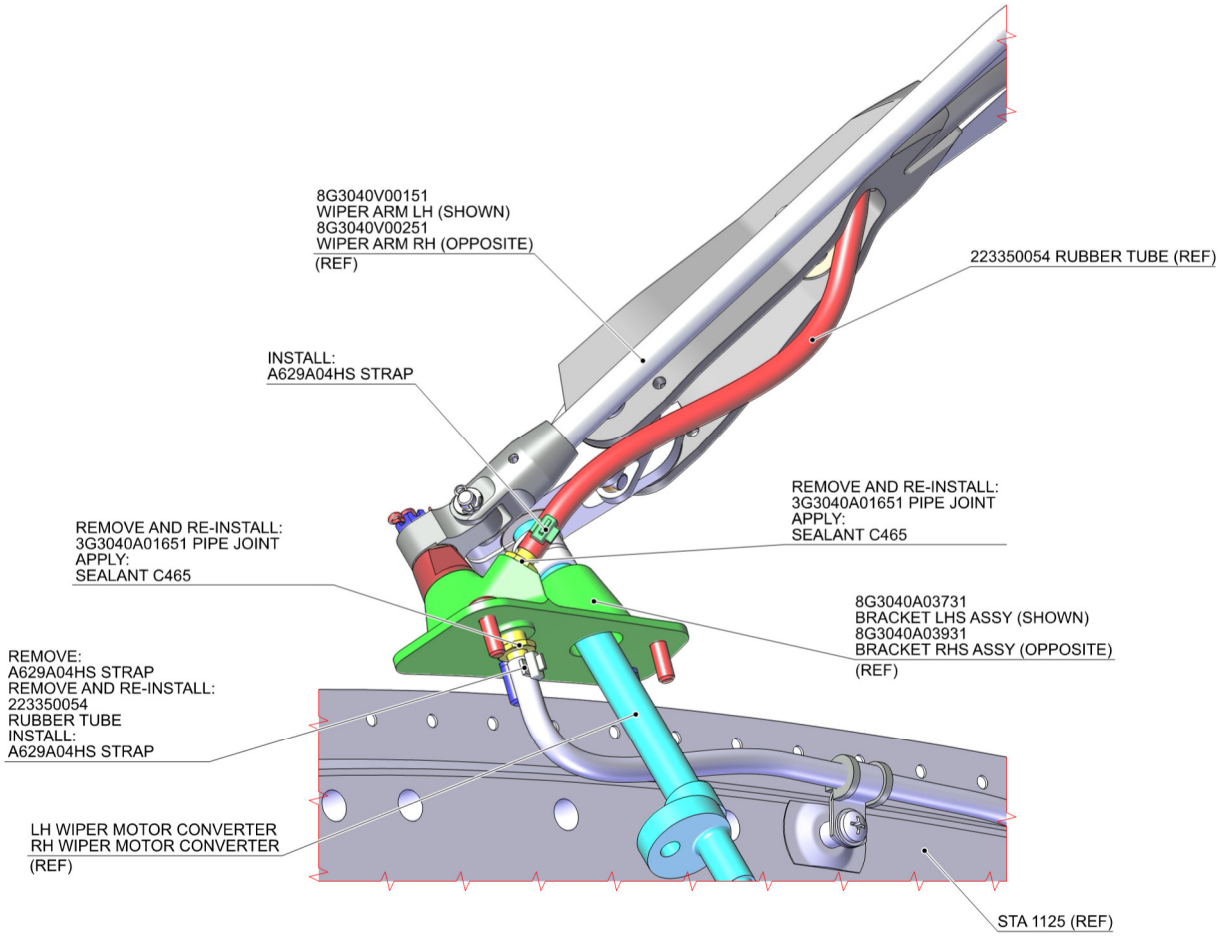


SECTION E-E

Figure 2



DETAIL D
(REFER TO FIGURE 1)



VIEW C
LH SHOWN
(TYP RH SIDE UNLESS OTHERWISE INDICATED)
STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE
(REFER TO FIGURE 1)

Figure 3

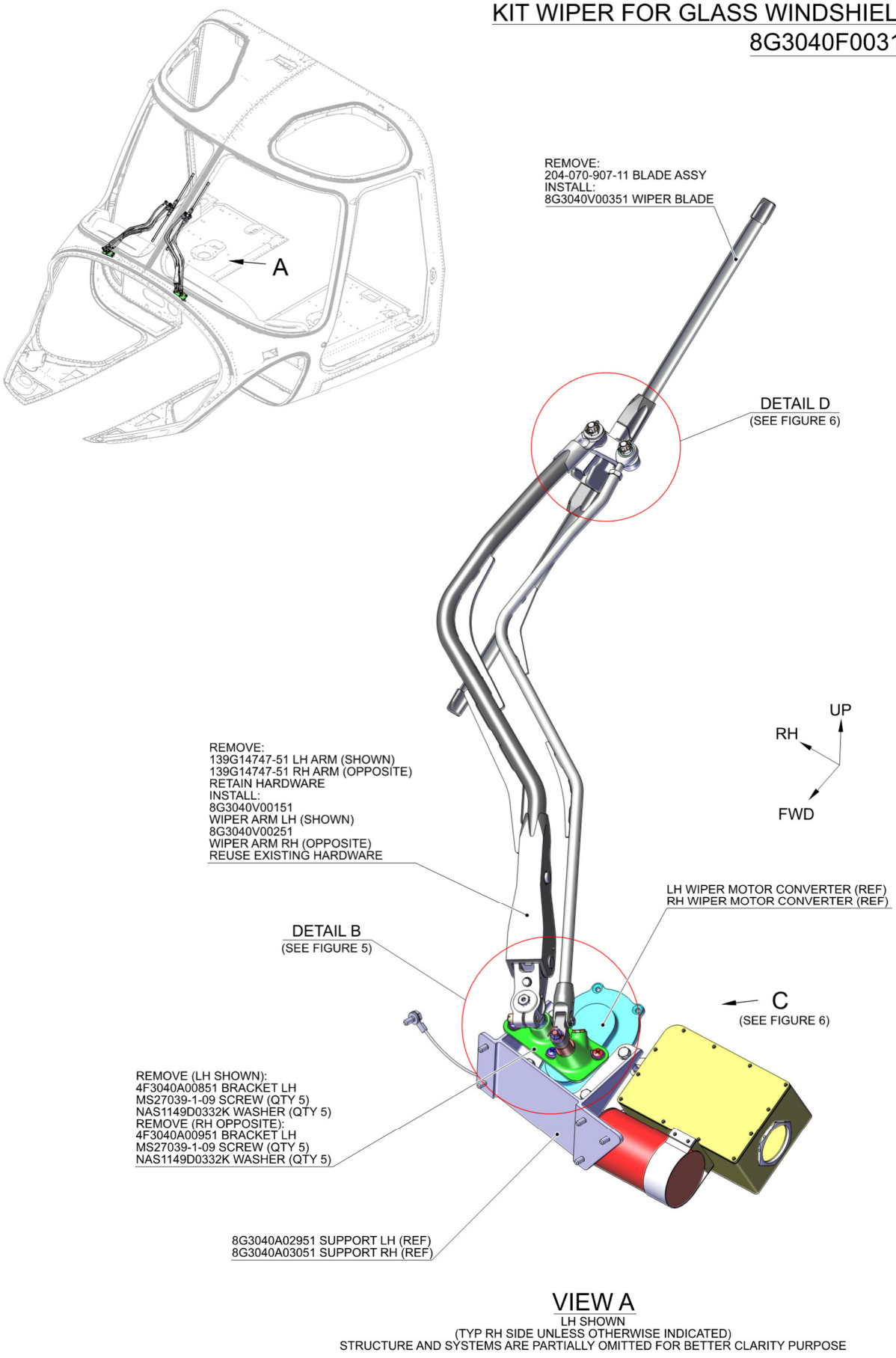
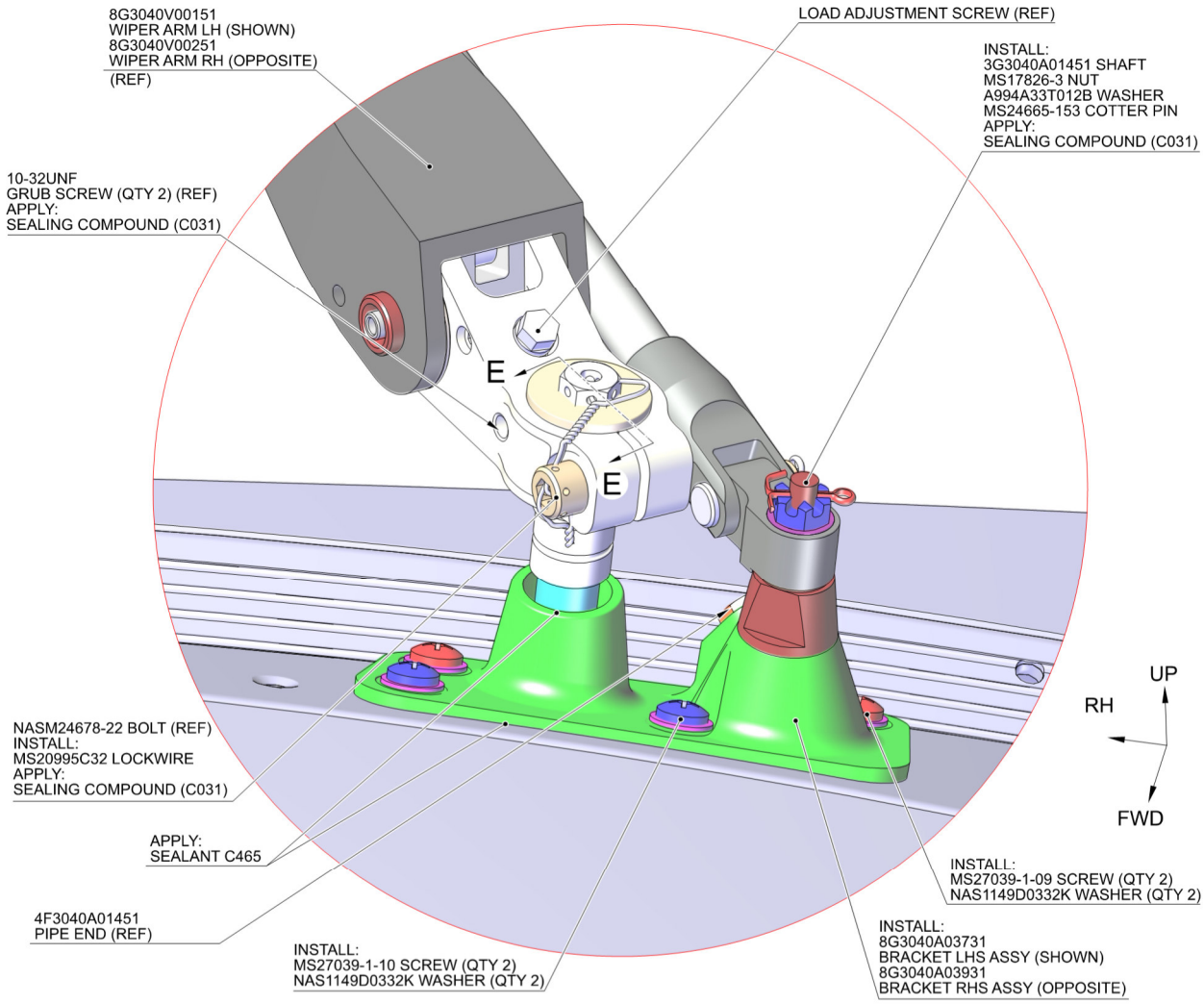
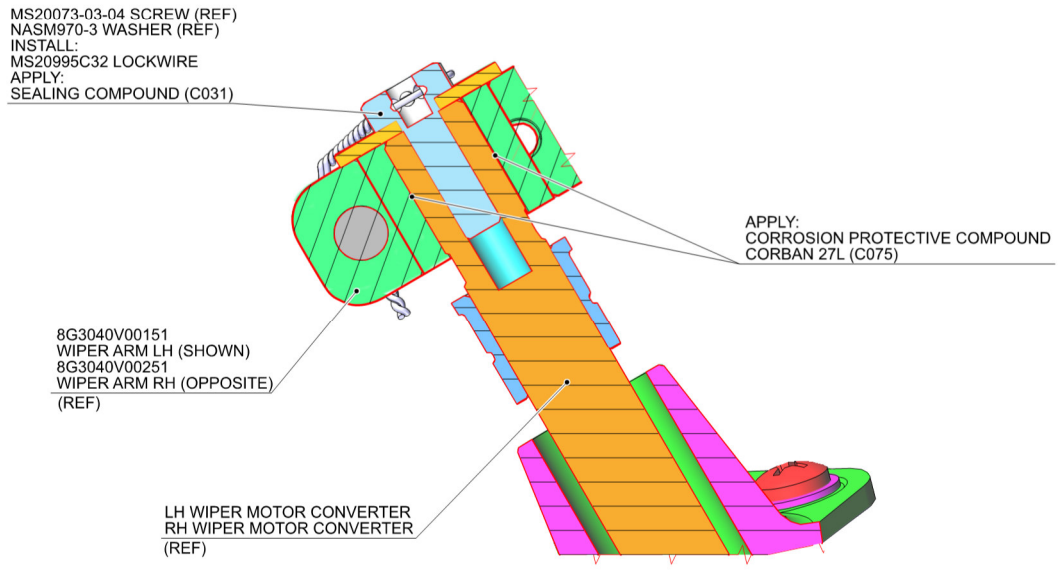

A
REMOVE:
204-070-907-11 BLADE ASSY
INSTALL:
8G3040V00351 WIPER BLADE
DETAIL D
(SEE FIGURE 6)
UP
RH
FWD
REMOVE:
139G14747-51 LH ARM (SHOWN)
139G14747-51 RH ARM (OPPOSITE)
RETAIN HARDWARE
INSTALL:
8G3040V00151
WIPER ARM LH (SHOWN)
8G3040V00251
WIPER ARM RH (OPPOSITE)
REUSE EXISTING HARDWARE
LH WIPER MOTOR CONVERTER (REF)
RH WIPER MOTOR CONVERTER (REF)
DETAIL B
(SEE FIGURE 5)
C
(SEE FIGURE 6)
REMOVE (LH SHOWN):
4F3040A00851 BRACKET LH
MS27039-1-09 SCREW (QTY 5)
NAS1149D0332K WASHER (QTY 5)
REMOVE (RH OPPOSITE):
4F3040A00951 BRACKET LH
MS27039-1-09 SCREW (QTY 5)
NAS1149D0332K WASHER (QTY 5)
8G3040A02951 SUPPORT LH (REF)
8G3040A03051 SUPPORT RH (REF)
VIEW A
LH SHOWN
(TYP RH SIDE UNLESS OTHERWISE INDICATED)
STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE

Figure 4

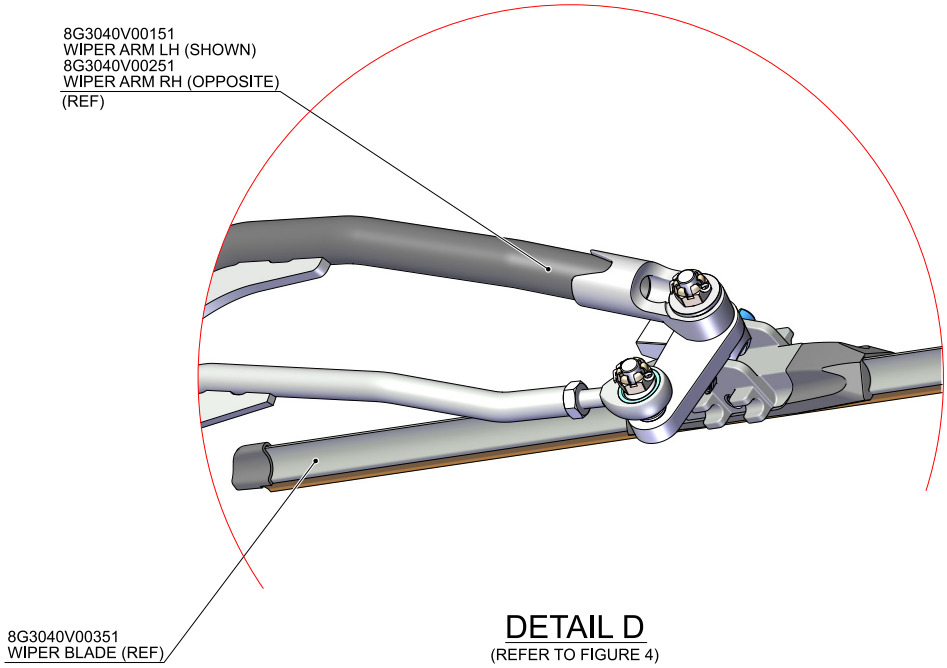


DETAIL B
LH SHOWN
(TYP RH SIDE UNLESS OTHERWISE INDICATED)
STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE
(REFER TO FIGURE 4)

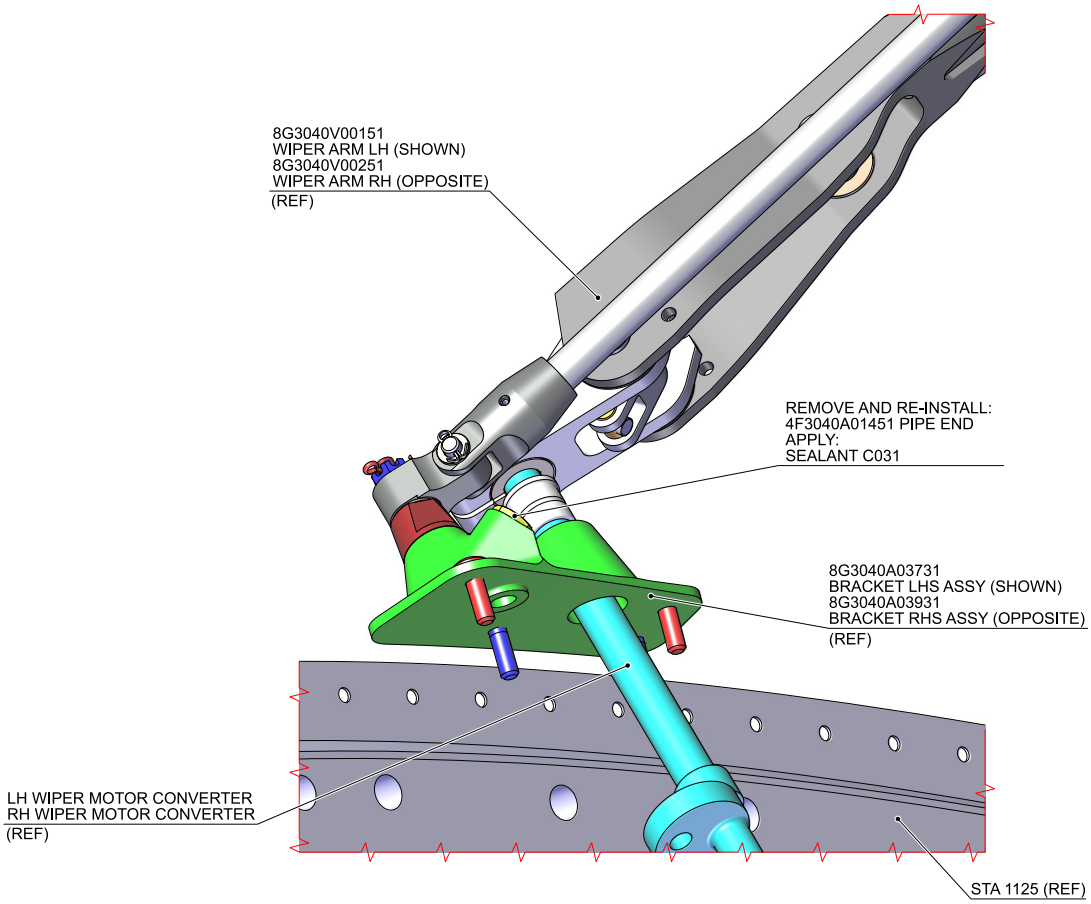


SECTION E-E

Figure 5



DETAIL D
(REFER TO FIGURE 4)



VIEW C
LH SHOWN
(TYP RH SIDE UNLESS OTHERWISE INDICATED)
STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE
(REFER TO FIGURE 4)

Figure 6

LEONARDO
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.