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AgustaWestland Products

## SERVICE BULLETIN

# № 139-615

**DATE:** December 1, 2021 **REV.:** /

## TITLE

ATA 00 - INSTALLATION OF SPECIFIC VARIANTS FOR OFFSHORE CONFIGURATION

## **REVISION LOG**

First Issue

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



#### 1. PLANNING INFORMATION

#### A. EFFECTIVITY

#### <u>Part I</u>

AW139 helicopters S/Ns 41547, 41553, 41554, 41556, 31850 and 31856.

#### <u>Part II</u>

AW139 helicopters S/Ns 41547, 41553, 41554, 41556, 31850 and 31856.

#### <u>Part III</u>

AW139 helicopters S/Ns 41547, 41553, 41554, 41556 and 31850.

#### Part IV

AW139 helicopters S/Ns 41547, 41553, 41554, 41556, 31850, 31856 and 31867.

#### Part V

AW139 helicopters S/Ns 41547, 41553, 41554 and 41556.

#### Part VI

AW139 helicopters S/Ns 41547, 41553, 41554 and 41556.

#### **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 to perform the installation of some modifications required by the Customer to align the configuration of its fleet.

#### **E. DESCRIPTION**

Part I provides all necessary instructions to install kit soft separation wall kit P/N 4G2520F24411. The soft separation wall kit is installed at the STA 3120 behind the pilot seats to improve the pilots' comfort. The first aid kit will be installed behind the seat by means of Velcro straps.

Part II provides all necessary instructions to perform the interseat console variant P/N 3G0630P19411. The light and landing control panel is moved on the right side of the inter-seat console. The pocket for the QRH is installed on the left side of the interseat console.



Part III provides all necessary instructions to install the fuel protection plate P/N 3G2800A00711. The protection plate is installed around the fuel inlet to protect it from impact damage during the refueling operation.

Part IV provides all necessary instruction to install the AV900 protection cover P/N 3G2580P20511. A polycarbonate cover is installed to protect the AV900 panel on the window liner assy upper RH.

Part V provides all necessary instruction to install the TCAS cover P/N 3G5310P16111. A cover is installed on the TCAS Antenna provision on the rear lower panel to close the not used opening.

Part VI provides all necessary instruction to install the PBS NVG variant P/N 3G2320P00111. The PBS NVG variant C/A P/N 3G9C01A38001 is installed on the remote computer PBS to modify the illumination of the relative control panel.

#### 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) MMH;
- Part II: approximately two (2) MMH;
- Part III: approximately sixteen (16) MMH;
- Part IV: approximately eight (8) MMH;
- Part V: approximately sixteen (16) MMH;
- Part VI: approximately four (4) MMH.

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



#### H. WEIGHT AND BALANCE

#### <u>PART I</u>

Update the Chart A as described in the following procedure:

1.Existing entry in Chart A related to rigid bulkhead must be deleted:

2. The following entry in Chart A must be added:

#### P/N 4G2520F24411

"Kit soft separation wall STA3120"

WEIGHT (Kg)		9.1
	ARM (mm)	MOMENT (Kgmm)
LONGITUDINAL BALANCE	3120	28392
LATERAL BALANCE	0	0
PART II		
WEIGHT (Kg)	-	1.37
	ARM (mm)	MOMENT (Kgmm)
LONGITUDINAL BALANCE	3033	-4155.21
LATERAL BALANCE	0	0
PART III		
WEIGHT (Kg)		0.2
	ARM (mm)	MOMENT (Kgmm)
LONGITUDINAL BALANCE	6083	1216.6
LATERAL BALANCE	1052	210.4
PART IV		
WEIGHT (Kg)		0.3
	ARM (mm)	MOMENT (Kgmm)
LONGITUDINAL BALANCE	3545	1063.5
LATERAL BALANCE	1021	306.3
PART V		
N.A.		

#### <u>PART VI</u>

N.A.



#### I. REFERENCES

#### 1) PUBLICATIONS

Following Data Modules refer to AMP:

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DATA	MODULE	DESCRIPTION	PART
DM01	39-A-00-20-00-00A-120A-A	Helicopter on ground for a safe	All
		maintenance	
DM02	39-A-06-41-00-00A-010A-A	Access doors and panels -	I, II, IV
		General data.	
DM03	39-C-33-43-01-00A-520A-K	Light control panel - Remove procedure	П
DM04	39-C-33-43-01-00A-720A-K	Light control panel - Install	Ш
		procedure	
DM05	39-A-23-33-01-00A-520A-K	Control panel - Remove	Ш
		procedure	
DM06	39-A-23-33-01-00A-720A-K	Control panel - Install procedure	П
DM07	39-A-25-16-01-00A-720A-K	Flight manual case - Install	П
		procedures	
DM08	39-A-31-32-02-00A-520A-K	Cockpit display unit/data transfer	П
		unit (CDU/DTU) - Remove	
		procedure	
DM09	39-A-31-32-02-00A-720A-K	Cockpit display unit/data transfer	Ш
		unit (CDU/DTU) - Install	
		procedure	
	30 0 11 00 01 000 7200 0		
	39-A-11-00-01-00A-120A-A		111
Followi	ng document refer to MAG mar	nual:	

#### DOCUMENT

PART

Owner's Manual for FWD BULKHEAD INST. P/N 6AB1AD005-001	

#### 2) ACRONYMS

- AMDI Aircraft Material Data Information
- AMP Aircraft Maintenance Publication
- CDU Cockpit Display Unit
- DM Data Module
- DOA **Design Organization Approval**
- DTU Data Transfer Unit
- EASA **European Aviation Safety Agency**
- HUMS Health and Usage Monitoring System
- IPD Illustrated parts data
- LH Leonardo Helicopters
- Maintenance-Man-Hours MMH



- NVG Night Vision Goggles
- PBS Pax Briefing System
- PSU Passenger Service Unit
- QRH Quick Reference Handbook
- TCAS Traffic Alert and Collision Avoidance System

#### 3) ANNEX

N.A.

#### J. PUBLICATIONS AFFECTED

AW139 Aircraft Illustrated Parts Data Publication (IPD).

#### K. SOFTWARE ACCOMPLISHMENT SUMMARY

N.A.



### 2. MATERIAL INFORMATION

#### A. REQUIRED MATERIALS

#### 1) PARTS

#### <u>PART I</u>

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
1	4G2520F24411		KIT SOFT SEPARATION WALL STA3120	REF	•	-	-
2	3G2580L08731		Soft separation wall STA 3120	1		-	139-615L1
3	3G2580L08831		Soft frame STA 3120	1		-	139-615L1
4	A407A08C1P		Nut	15		-	139-615L1
5	AN525-832R8		Screw	15		-	139-615L1
6	3G2580P27211		LINERS INSTALLATION RETROMOD	REF	•	-	-
7	3G2580A66531	3G2580A66532 3G2580A66533	RH PSU liner NVG assy	REF	••	-	-
8	3G2580A66631		LH PSU liner NVG assy	REF	••	-	-
9	3G2580L06031	3G2580L06032	Liner assy ceiling FWD NVG hoist	REF	••	-	-

#### <u>PART II</u>

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
10	3G0630P19411		I/S CONSOLE VARIANT	REF	•	-	-
11	3G2510A05051		Support assy flight manual	1		-	139-615L2
12	999-0500-85-137		Plate assembly	1	••	-	139-615L2
13	3G2510A07952		Cover	1		-	139-615L2
14	MS35206-216		Screw	2		-	139-615L2
15	NAS1149DN432J		Washer	2		-	139-615L2
16	MS21042L04		Nut	2		-	139-615L2

#### <u>PART III</u>

#	P/N	ALTERNATIVE P/N	DESCRIPTION	RIPTION Q.TY		NOTE	LOG P/N
17	3G2800A00711		FUEL PROTECTION PLATE INSTALLATION	REF		-	-
18	3G2800A00251		Fuel protection plate	1	••	-	139-615L3
19	A954AF080EN		Stencil	1		-	139-615L3
20	A954AT050EN		Stencil	1		(1)	139-615L3
21	NAS9301B-4-01	NAS1720C4L1P	Rivet	8		-	139-615L3
22	NAS9301B-4-03		Rivet	3		-	139-615L3

#### PART IV

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
23	3G2580P20511		WINDOW LINER VARIANT FOR PROTECTION COVER AV900	REF		-	-
24	3G2580P20531		RH window liner mod	REF	••	(2)	-
25	3G2580L08631		Protection cover assy	1	••	-	139-615L4
26	AW002FB-R		Receptacle	2		-	139-615L4
27	MS20426AD3-7		Rivet	0.1 kg		-	139-615L4



#### <u>PART V</u>

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
28	3G5310P16111		TCAS STRUCTURAL RETROMOD	REF		-	-
29	3G5315A19851		Cover	1		-	139-615L5
30	MS27039-0805		Screw	4		-	139-615L5
31	NAS1149DN832J		Washer	4		-	139-615L5
32	NAS1832-08-3		Insert	4		-	139-615L5

#### PART VI

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
33	3G2320P00111		PBS NVG VARIANT	REF	•	-	-
34	3G9C01A38001		PBS NVG variant C/A (C1A380)	1	••	-	139-615L6
35	A578A05-9		Marker sleeve	2		-	139-615L6
36	A583A2610W		Electrical cap	1		-	139-615L6

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
37	3M SJ3571	Velcro tape	AR	(3)(4)(6)	I
38	3M AP 86A	Primer 86A (C198)	AR	(6)	I
39	199-05-107, Ty II, CI 5	Adhesive (C111)	AR	(6)	I
40	500218745	Adhesive S1184 (C327)	AR	(5)(6)	111
41	MC-780 B-2, Ty I, CI B, Gr 2	Sealant (C465)	AR	(6)	
42	AWMS05-001, Form I	Primer Naftoseal MC-115 (C591)	AR	(6)	111
43	199-05-03 Ty I, Cl 2, Sh II B	Sealant (C230)	AR	(6)	V
44	Commercial	Glass Fiber 20644-1200	AR	(6)	V
45	199-50-002, Ty I	Epoxy Resin Araldit LY5138-2	AR	(6)	V
46	199-05-002, Ty II, CI 2	Adhesive (C397)	AR	(6)	V
47	A236A02AB500	Edging	AR	(6)	VI
48	EN6049-006	Tubing braided	AR	(6)	VI

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
139-615L1	1	-	I
139-615L2	1	-	II
139-615L3	1	-	III
139-615L4	1	-	IV
139-515L5	1	-	V
139-515L6	1	-	VI



#### NOTE

- (1) Install decal P/N A954AT050EN only if the auxiliary fuel tank is required.
- (2) This item is obtained reworking existing window liner assy UPR RH P/N 3G2580L08231.
- (3) Use 3M hi-performance Velcro pile SJ3571: 25.4 mm width, 50.8 mm width.
- (4) It is admitted joint Velcro SJ3571 25.4 mm width to obtain size 50.8 mm width.
- (5) Adhesive CHO-BOND 584-29 is alternative to Adhesive S1184.
- (6) Item to be procured as local supply.

#### **B. SPECIAL TOOLS**

N.A.

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

Customization.

LEONA

#### 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.
- 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) During the installation of bonding braids or components requiring grounding, clean the surface structure in order to obtain a good ground contact.
- e) Protect properly all those equipment not removed from area affected by the modification during installation procedure.
- f) Let the adhesive cure at room temperature for at least 24 hours, unless otherwise specified.
- g) For construction reasons Velcro pile can be trimmed during installation.
- h) All lengths are in mm.

#### <u>PART I</u>

- 1. In accordance with AMP DM 39-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.
- In accordance with AMP DM 39-A-06-41-00-00A-010A-A and with reference to Figures 1 thru 9, gain access to the affected area.
- 3. In accordance with applicable steps of Owner's Manual for FWD BULKHEAD INST Appendix Z, remove the rigid bulkhead currently installed on the helicopter.
- With reference to Figures 1 thru 9, install the kit soft separation wall STA3120 P/N 4G2520F24411 as described in the following procedure:
  - 4.1 With reference to Figure 2 and Figure 4 Detail F, remove the window liner assy upper RH, the window liner assy lower RH and retain existing hardware for later



reuse.

- 4.2 With reference to Figure 3 Section J-J, remove the foam until polycarbonate from the window liner assy upper RH and from the window liner assy lower RH, in accordance with the dimensioning shown.
- 4.3 With reference to Figure 4 Detail F, drill n°3 holes Ø5.16÷5.28 on the window liner assy upper RH.
- 4.4 With reference to Figure 4 Detail F, drill n°2 holes Ø5.16÷5.28 on the window liner assy lower RH.
- 4.5 With reference to Figure 4 Detail F, install n°5 anchor nuts P/N A407A08C1P by means of adhesive 199-05-107 Type II Class 5 on the window liner assy upper RH and window liner assy lower RH.
- 4.6 With reference to Figure 3 Section B-B and Figure 4 Detail F, install the Velcro tape SJ3571 by means of the Primer 86A on the window liner assy upper RH and window liner assy lower RH, in accordance with the dimensioning shown.
- 4.7 With reference to Figure 5 Detail E, remove the window liner assy upper LH, the window liner assy lower LH and retain existing hardware for later reuse.
- 4.8 Repeat the steps from 4.2 to 4.6 for the window liner assy upper LH and window liner assy lower LH.
- 4.9 With reference to Figure 6 View C, remove the LH PSU liner NVG assy, the RH PSU liner NVG assy and retain existing hardware for later reuse.
- 4.10 With reference to Figure 6 View C and Section G-G, remove the upper external foam, the upper layer of polycarbonate and the internal foam until the lower layer of polycarbonate from the LH PSU liner NVG assy, in accordance with the dimensioning shown.
- 4.11 With reference to Figure 6 View C and Section G-G, drill hole Ø5.16÷5.28 on the LH PSU liner NVG assy, in accordance with the dimensioning shown.
- 4.12 With reference to Figure 6 View C and Section G-G, install the anchor nut P/N A407A08C1P by means of adhesive 199-05-107 Type II Class 5 on the LH PSU liner NVG assy.
- 4.13 With reference to Figure 6 View C and Section G-G, install the Velcro tape SJ3571 by means of the Primer 86A on the LH PSU liner NVG assy, in accordance with the dimensioning shown.
- 4.14 Repeat the steps from 4.10 to 4.13 for the RH PSU liner NVG assy.
- 4.15 With reference to Figure 6 View C, remove the ceiling cover assy and retain existing hardware for later reuse.
- 4.16 With reference to Figure 6 View C and Section G-G, remove the upper external foam, the upper layer of polycarbonate and the internal foam until the lower layer



of polycarbonate from the ceiling cover assy, in accordance with the dimensioning shown.

- 4.17 With reference to Figure 6 View C and Section G-G, drill hole Ø5.16÷5.28 on the ceiling cover assy, in accordance with the dimensioning shown.
- 4.18 With reference to Figure 6 View C and Section G-G, install the anchor nut P/N A407A08C1P by means of adhesive 199-05-107 Type II Class 5 on the ceiling cover assy.
- 4.19 With reference to Figure 6 View C and Section G-G, install the Velcro tape SJ3571 by means of the Primer 86A on the ceiling cover assy, in accordance with the dimensioning shown.
- 4.20 With reference to Figure 6 View C and Section G-G, remove the centre lining panel and retain existing hardware for later reuse.
- 4.21 With reference to Figure 6 View C and Section G-G, remove the upper external foam, the upper layer of polycarbonate and the internal foam until the lower layer of polycarbonate from the liner assy ceiling forward, in accordance with the dimensioning shown.
- 4.22 With reference to Figure 6 View C and Section G-G, drill n°2 holes Ø5.16÷5.28 on the liner assy ceiling forward, in accordance with the dimensioning shown.
- 4.23 With reference to Figure 6 View C and Section G-G, install n°2 anchor nuts P/N A407A08C1P by means of adhesive 199-05-107 Type II Class 5 on the liner assy ceiling forward.
- 4.24 With reference to Figure 6 View C and Section G-G, install the Velcro tape SJ3571 by means of the Primer 86A on the liner assy ceiling forward, in accordance with the dimensioning shown.
- 4.25 With reference to Figure 7 View D and Section H-H, install the Velcro tape SJ3571 by means of the Primer 86A on the passenger floor, the cover assy and the RH cover, in accordance with the dimensioning shown.
- 4.26 With reference to Figure 8 View L, View K and Section M-M, install the Velcro tape SJ3571 by means of the Primer 86A on the ceiling panel support assy, the cover STA3120 upper RH assy, the cover STA3120 upper LH assy, the cover STA3120 lower RH assy, the cover STA3120 lower LH assy, the lower fairing assy STA3120 and the LH cover assy in accordance with the dimensioning shown.
- 4.27 With reference to Figure from 3 thru 8, install the Velcro tape SJ3571 by means of the Primer 86A on the soft frame STA3120 P/N 3G2580L08831 and the soft separation wall STA3120 P/N 3G2580L08831, according to the dimensioning shown.
- 4.28 With reference to Figure 3 View A, Figure 7 and Figure 8, install the soft frame



STA3120 P/N 3G2580L08831 and the soft separation wall STA3120 P/N 3G2580L08831 on the structure.

- 4.29 With reference to Figure 4 Detail F, install the window liner assy upper RH on the structure by means of the existing hardware.
- 4.30 With reference to Figure 4 Detail F, install the window liner assy lower RH on the structure by means of the existing hardware.
- 4.31 With reference to Figure 3 Section J-J and Figure 4 Detail F, fix the soft frame STA3120 P/N 3G2580L08831 to the window liner assy upper RH and the window liner assy lower RH by means of n°5 screws P/N AN525-832R8.
- 4.32 With reference to Figure 5 Detail E, install the window liner assy upper LH on the structure by means of the existing hardware.
- 4.33 With reference to Figure 5 Detail E, install the window liner assy lower LH on the structure by means of the existing hardware.
- 4.34 With reference to Figure 3 View A, Section J-J and Figure 5 Detail E, fix the soft frame STA3120 P/N 3G2580L08831 to the window liner assy upper LH and the window liner assy lower RH by means of n°5 screws P/N AN525-832R8.
- 4.35 With reference to Figure 6 View C, install the liner assy ceiling forward on the structure by means of the existing hardware.
- 4.36 With reference to Figure 3 View A and Figure 6 View C, fix the soft frame STA3120
  P/N 3G2580L08831 to the liner assy ceiling forward by means of n°2 screws
  P/N AN525-832R8.
- 4.37 With reference to Figure 6 View C, install the ceiling cover assy on the structure by means of the existing hardware.
- 4.38 With reference to Figure 3 View A and Figure 6 View C, fix the soft frame STA3120 P/N 3G2580L08831 on the ceiling cover assy by means of the screw P/N AN525-832R8.
- 4.39 With reference to Figure 6 View C, install RH PSU liner NVG assy on the structure by means of the existing hardware.
- 4.40 With reference to Figure 3 View A and Figure 6 View C, fix the soft frame STA3120 P/N 3G2580L08831 to the RH PSU liner NVG assy by means of the screw P/N AN525-832R8.
- 4.41 With reference to Figure 6 View C, install LH PSU liner NVG assy on the structure by means of the existing hardware.
- 4.42 With reference to Figure 3 View A and Figure 6 View C, fix the soft frame STA3120P/N 3G2580L08831 to the LH PSU liner NVG assy by means of the screwP/N AN525-832R8.
- 4.43 With reference to Figure 9 View N, install the Velcro tape SJ3571 by means of the



Primer 86A on the rear of the pilot seat, according to the dimensioning shown.

- 4.44 With reference to Figure 9 Pilot seat Isoview, install the existing first aid kit in the new position on the rear of the pilot seat.
- 5. In accordance with weight and balance changes, update the Chart A (see Rotorcraft Flight Manual, Part II, section 6).
- 6. Return the helicopter to flight configuration and record for compliance with Part I of this Service Bulletin on the helicopter logbook.
- 7. 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".



#### <u>PART II</u>

- 1. In accordance with AMP DM 39-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.
- In accordance with AMP DM 39-A-06-41-00-00A-010A-A and with reference to Figures 10 thru 12, gain access to the affected area and perform the interseat console variant P/N 3G0630P19411 as described in the following procedure:
  - 2.1 With reference to Figure 11 view A and in accordance with applicable steps of AMP DM 39-C-33-43-01-00A-520A-K remove the light and landing LT control panel PL2 and retain existing hardware for later reuse.
  - 2.2 With reference to Figure 11 View A, remove the plate assy P/N 999-0500-85-237 from the LH side of the interseat console.
  - 2.3 With reference to Figure 11 View A, remove the plate assy P/N 999-0500-85-213 from the LH side of the interseat console.
  - 2.4 With reference to Figure 12 View A1 and in accordance with applicable steps of AMP DM 39-A-25-16-01-00A-720A-K install the support assy flight manual P/N 3G2510A05051.
  - 2.5 With reference to Figure 11 View A and in accordance with the applicable steps of AMP DM 39-A-23-33-01-00A-520A-K remove the external loudspeaker (400W) P/N 4G2350F00611.
  - 2.6 With reference to Figure 11 View A and in accordance with the applicable steps of AMP DM 39-A-31-32-02-00A-520A-K remove the HUMS control panel P/N 4G3130F00113.
  - 2.7 With reference to Figure 11 View A, remove the plate assy P/N 999-0500-85-207 from the RH side of the interseat console.
  - 2.8 With reference to Figure 11 View A, remove the plate assy P/N 999-0500-85-237 from the RH side of the interseat console.
  - 2.9 With reference to Figure 12 View A1 and in accordance with the applicable steps of AMP DM 39-C-33-43-01-00A-720A-K install the light and landing LT control panel PL2.
  - 2.10 With reference to Figure 12 View A1 and in accordance with the applicable steps of AMP DM 39-A-23-33-01-00A-720A-K install the external loudspeaker (400W) P/N 4G2350F00611.
  - 2.11 With reference to Figure 12 View A1 and in accordance with the applicable steps of AMP DM 39-A-31-32-02-00A-720A-K install the HUMS control panel P/N 4G3130F00113.
  - 2.12 With reference to Figure 12 View A1 install the plate assembly



P/N 999-0500-85-137.

- 2.13 With reference to Figure 11 View A remove the dummy connector.
- 2.14 With reference to Figure 11 View A remove the connector.
- 2.15 With reference to Figure 12 View A1 install the cover P/N 3G2510A07952 by means of n°2 screws P/N MS35206-216, n°2 washers P/N NAS1149DN432J and n°2 nuts P/N MS21042L04.
- 3. Return the helicopter to flight configuration and record for compliance with Part II of this Service Bulletin on the helicopter logbook.
- 4. 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".



#### <u>PART III</u>

- 1. In accordance with AMP DM 39-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. With reference to Figures 13 and 14, perform the fuel protection plate installation P/N 3G2800A00711 as described in the following procedure:
  - 2.1 With reference to Figure 14 Detail B, remove n°3 existing rivets from the right panel assy P/N 3P5338A01631 in accordance with the position shown.
  - 2.2 With reference to Figure 13 Detail A, temporarily locate the fuel protection plate P/N 3G2800A00251 and countermark the edges of the fuel protection plate P/N 3G2800A00251 on right panel assy P/N 3P5338A01631.
  - 2.3 With reference to Figure 13 Detail A and Figure 14 Detail B, remove the paint and the protective finish from the right panel assy P/N 3P5338A01631 in accordance to the fuel protection plate countermark.
  - 2.4 With reference to Figure 13 Detail A and Figure 14 Detail B, bond the fuel protection plate P/N 3G2800A00251 on right panel assy P/N 3P5338A01631 by means of adhesive S1184.

#### <u>NOTE</u>

# In alternative to rivet P/N NAS9301B4-01 use rivet P/N NAS1720C4-1P.

- 2.5 With reference to Figure 14 Detail B and Section C-C, fix the fuel protection plate P/N 3G2800A00251 on right panel assy P/N 3P5338A01631 by means of n°3 rivets P/N NAS9301B-4-03 and n°8 rivets P/N NAS9301B-4-01 in accordance with the dimensioning shown.
- 2.6 With reference to Figure 13 Detail A, apply sealant MC-780 B-2, Ty I, Cl B, Gr 2 and Primer Naftoseal MC-115 on the indicated contour.

#### <u>NOTE</u>

# Install the decal P/N A954AT050EN only if the auxiliary fuel tank is required.

- 2.7 With reference to Figure 13 Detail A and in accordance with AMP DM 39-A-11-00-01-00A-720A-A, install the decal P/N A954AF080EN and decal P/N A954AT050EN on the right panel assy P/N 3P5338A01631 in accordance with the dimensioning shown.
- 3. Return the helicopter to flight configuration and record for compliance with Part III of this Service Bulletin on the helicopter logbook.
- 4. 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 IV

- 1. In accordance with AMP DM 39-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 39-A-06-41-00-00A-010A-A and with reference to Figures 15 and 16, gain access to the affected area and perform the window liner variant for protection cover AV900 P/N 3G2580P20511 as described in the following procedure:
  - 2.1 With reference to Figure 15, remove the window liner assy UPR RH P/N 3G2580L08231 and retain the hardware for later reuse.
  - 2.2 With reference to Figure 16 Section B-B and Section C-C, remove the foam from the window liner assy UPR RH P/N 3G2580L08231 in accordance with the dimensioning shown.
  - 2.3 With reference to Figure 15 Section A-A, install n°2 receptacles P/N AW002FB-R by means of n°4 rivets P/N MS20426AD3-7 on the window liner assy UPR RH P/N 3G2580L08231 in accordance with the dimensioning shown.
  - 2.4 With reference to Figure 15 Section A-A, install the protection cover assy P/N 3G2580L08631 on the window liner assy UPR RH P/N 3G2580L08231 by means of n°2 receptacles P/N AW002FB-R.
  - 2.5 With reference to Figure 15 View looking outboard RH, remark the so obtained window liner assy as 3G2580P20531 by means of an indelible marker.
  - 2.6 With reference to Figure 15 View looking outboard RH, install the RH window liner mod P/N 3G2580P20531 by means of existing hardware previously removed.
- 3. Return the helicopter to flight configuration and record for compliance with Part IV of this Service Bulletin on the helicopter logbook.
- 4. 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".



#### <u>PART V</u>

- 1. In accordance with AMP DM 39-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. With reference to Figures 17 and 18, gain access to the affected area and perform the TCAS structural retromod P/N 3G5310P16111 as described in the following procedure:
  - 2.1 With reference to Figure 17 View A-A and Figure 18 Section D-D, remove the repair sheet metal P/N 3G5306P46153, the plate P/N 3G5306P46155 and the honeycomb P/N 3G5306P46154.

#### **NOTE**

# Perform the cut on internal skin and honeycomb core only.

- 2.2 With reference to Figure 17 View A-A and Section B-B, perform the cut out of the rear lower panel P/N 3P5331A02231 in accordance with the dimensioning shown.
- 2.3 With refere to Figure 17 View A-A and Section B-B apply adhesive (C397) on the wall of the cut-out in accordance with the dimensioning shown.
- 2.4 With refere to Figure 18 Schematic Section B-B, install n°3 plies of glass fiber 20644-1200 by means of the Epoxy Resin Araldit LY5138-2 in accordance with the dimensioning shown.
- 2.5 With referce to Figure 17 View A-A and Figure 18 Section C-C, remove the existing inserts.
- 2.6 With refere to Figure 17 View A-A and Figure 18 Section C-C, drill n° 4 holes Ø14.25÷14.38 and install n°4 inserts P/N NAS1832-08-3 by means of adhesive (C397).
- 2.7 With reference to Figure 16 View A-A and Figure 18 Section C-C, bond the cover P/N 3G5315A19851 to the external skin of the rear lower panel P/N 3P5331A02231 by means of the sealant (C230).
- 2.8 With reference to Figure 16 View A-A and Figure 18 Section C-C, fix the 3G5315A19851 to the inserts P/N NAS1832-08-3 by means of n°4 washers P/N NAS1149DN832J and n°4 screws P/N MS27039-0805.
- 2.9 With reference to Figure 16 View A-A, drill n° 4 holes Ø19.05 through the rear lower panel P/N 3P5331A02231.
- Return the helicopter to flight configuration and record for compliance with Part V of this Service Bulletin on the helicopter logbook.
- 4. 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".



#### <u>PART VI</u>

- 1. In accordance with AMP DM 39-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.
- In accordance with AMP DM 39-A-06-41-00-00A-010A-A and with reference to Figure 19, gain access to the affected area and perform the installation of PBS NVG variant P/N 3G2320P00111 as described in the following procedure:

#### <u>NOTE</u>

Use the edging P/N A236A on edges which are liable to cause damage to cable assemblies or where abrasion may occur.

#### <u>NOTE</u>

Install the tubing braided P/N A582A where protection against chafing and prevention of contact with structure may occur, but the tubing protection is not substitute for good routing practice.

- With reference to Figure 19 View B and Figure 20 Wiring Diagram, disconnect wire "R1402D22-G" of the C/A C1A247 from pin 24 of remote computer PBS connector A244P1 and stow by means of the electrical cap P/N A583A2610W (CE3047).
- 2.2 With reference to Figure 19 and Figure 20 Wiring Diagram, remark the cable assy as "C1A380" by means of n°2 marker sleeves P/N A578A02-9.
- 3. Return the helicopter to flight configuration and record for compliance with Part VI of this Service Bulletin on the helicopter logbook.
- 4. 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 SOFT SEPARATION WALL STA3120 4G2520F24411



## NOSE COCKPIT AND FUSELAGE

S.B. N°139-615 DATE: December 1, 2021 REVISION: / Figure 1





VIEW LOOKING OUTBOARD RIGHT SIDE

PARTS OMITTED FOR BETTER CLARITY PURPOSE



S.B. N°139-615 DATE: December 1, 2021 REVISION: /





S.B. N°139-615 DATE: December 1, 2021 REVISION: /





SOFT SEPARATION WALL STA 3120 P/N 3G2580L08731 AND SOFT FRAME STA 3120 P/N 3G2580L08831 OMITTED FOR BETTER CLARITY PURPOSE (REFER TO FIGURE 2)











Figure 8









# I/S CONSOLE VARIANT ARAMCO 3G0630P19411

& LEONARDO



(REFER TO FIGURE 10)

S.B. N°139-615 DATE: December 1, 2021 REVISION: / Figure 11

& LEONARDO





#### FUEL PROTECTION PLATE INSTALLATION 3G2800A00711











VIEW LOOKING OUTBOARD

RH SIDE PARTS OMITTED FOR BETTER CLARITY PURPOSE



SECTION A-A







#### TCAS STRUCTURAL RETROMOD 3G5310P16111



Figure 17

\* LEONARDO HEI ICOPTERS







S.B. N°139-615 DATE: December 1, 2021 REVISION: /









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CUSTOMER SUPPORT & SE	ERVICES - ITALY	Number:				
PRODUCT SUPPORT ENGINEE	RING & LICENSES DEPT.					
21017 Cascina Costa di Samara Tel.: +39 0331 225036 Fax: +39	ate (VA) - ITALY 0331 225988	Revision:				
Customer Name and Addre	ess:			Telephone:		
				Fax:		
				B.T. Compli	ance Date:	
Helicopter Model	S/N		Total N	umber	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.