Leonardo S.p.A.
Via Giovanni Agusta, 520
21017 Cascina Costa di Samarate (VA) Italy
Tel.: +39 0331 229111 - Fax: +39 0331 229605/222595

AgustaWestland Products

SERVICE BULLETIN

N° 139-619

DATE: February 18, 2021

REV. : /

TITLE

ATA 56 – REPLACEMENT OF BUBBLE WINDOW WITH STANDARD WINDOW

REVISION LOG

First Issue

1. PLANNING INFORMATION

A. EFFECTIVITY

AW139 helicopter S/N 41509.

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 standard window restore.

E. DESCRIPTION

The main purpose of this Service Bulletin is to remove the bubble windows P/N 3G5620L00251 and install the standard windows.

Other required changes are associated with this replacement:

- HEEL lights cabin windows variant P/N 3G3350A04311 consists of the HEELS high visibility structural provision P/N 3G5318A18911 and the installation of the power supply assy P/N 3G3350A01711, the battery assy P/N 3G3350A01811, the HEELS light assy P/N 3G3350A00611 and the C/As B1A298, B1B298 and B1B326;
- liner retromod P/N 3G2580P22211 consists of the replacement of the old liners (P/N 3G2580L03533 and P/N 3G2580L03634) with the new ones compatible with standard windows and HEELS (P/N 3G2580P02331 and P/N 3G2580P02233);
- exterior paint scheme retromod P/N 3G1110P00111 consists of painting around standard windows to indicate the new emergency exits.

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 thirty (30) MMH are deemed necessary.

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

H. WEIGHT AND BALANCE

WEIGHT (Kg)	1,39	
	ARM (mm)	**MOMENT (Kgmm)**
LONGITUDINAL BALANCE	3643	5.063,77
LATERAL BALANCE	123	170,97

I. REFERENCES

1) PUBLICATIONS

DATA MODULE		**DESCRIPTION**	**PART**
DM01	39-A-00-20-00-00A-120A-A	Helicopter on ground for a safe maintenance	-
DM02	39-A-06-41-00-00A-010A-A	Access doors and panels - General data	-
DM03	39-A-56-22-01-00A-920A-K	Left cabin bubble window - Replacement	-
DM04	39-A-56-22-02-00A-920A-K	Right cabin bubble window - Replacement	-
DM05	39-A-56-21-01-00A-920A-A	Left cabin window - Replacement	-
DM06	39-A-56-21-02-00A-920A-A	Right cabin window - Replacement	-
DM07	39-C-33-52-11-00A-921A-K	Left cabin window light - Replacement (remove and install a new item)	-

DATA MODULE		DESCRIPTION	PART
DM08	39-C-33-52-12-00A-921A-K	Right cabin window light - Replacement (remove and install a new item)	-
DM09	39-A-11-00-01-00A-720A-A	Decal - Install procedure	-
DM10	39-C-33-52-00-00A-340A-K	Emergency exit lighting system - Function test	-

2) ACRONYMS

AMDI	Aircraft Material Data Information
AMP	Aircraft Maintenance Publication
AR	As Required
AVCS	Active Vibration Control System
DM	Data Module
DOA	Design Organization Approval
EASA	European Aviation Safety Agency
HEELS	Helicopter Emergency Exit Lighting System
ICS	Intercommunication System
LHD	Leonardo Helicopters Division
MMH	Maintenance-Man-Hours

3) ANNEX

N.A.

J. PUBLICATIONS AFFECTED

N.A.

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	**3G2500P01511**		**BABCOCK VARIANT**	**REF**	**.**		**-**
2	**3G1110P00111**		**EXTERIOR PAINT SCHEME RETROMOD**	**REF**	**..**		**-**
3	**3G2580P22211**		**LINER RETROMOD**	**REF**	**..**		**-**
4	3G2580P02233		Window liner upr RH mod hoist breeze/HEELS	1	…	(1)	-
5	3G2580P02331		Window liner upr LH mod ICS with HEELS	1	…	(1)	-
6	999-2701-45-509		Decal	2	…		139-619L1
7	A180A005E2		Decal	2	…		139-619L1
8	A180A009E2		Decal	2	…		139-619L1
9	A487A003A		Strap assembly	2	…		139-619L1
10	MS27980-18B	MS27980-18N	Fastener	2	…		139-619L1
11	**3G3350A04311**		**HEEL LIGHTS CABIN WINDOWS VARIANT**	**REF**	**..**		**-**
12	001755-105-02	A593A-A05	Terminal board	1	…		139-619L1
13	3G3350A00611		HEELS light assy	2	…		139-619L1
14	3G3350A01711		Power supply assy	1	…		139-619L1
15	3G3350A01811		Battery assy	1	…		139-619L1
16	**3G5318A18911**		**HEELS HIGH VISIBILITY STRUCT PROV**	**REF**	**…**		**-**
17	3G3350V00351		Mounting bracket	2	….		139-619L1
18	A414A02V209E1		Connector support	2	….		139-619L1
19	MS27039-1-07		Screw	4	….		139-619L1
20	MS35207-260		Screw	8	….		139-619L1
21	NAS1149D0316J		Washer	8	….		139-619L1
22	NAS1832-3-5		Insert	4	….		139-619L1
23	NAS1836C08-13M		Insert	2	….		139-619L1
24	NAS1836C3-13M		Insert	8	….		139-619L1
25	3G9B01A29802	3G9B01A29801A10R	HEEL lights cabin windows C/A (B1A298)	1	…	(2)	139-619L1
26	3G9B01B29802	4G3350A00112A1R	HEEL lights cabin windows C/A (B1B298)	1	…	(2)	139-619L1
27	3G9B01B32602		HEEL lights cabin windows C/A (B1B326)	1	…	(2)	139-619L1
28	A366A3E12C		Stud	5	…		139-619L1
29	A388A3E12C		Standoff	3	…		139-619L1
30	A522A02A		Mounting rail	1	…		139-619L1
31	AW001CB04H		Clamp	6	…		139-619L1
32	AW001CB05H		Clamp	1	…		139-619L1
33	AW001CB06H		Clamp	6	…		139-619L1
34	AW001CL000A-X3		Electrical support	16	…		139-619L1
35	AW001CL001-N6		Electrical support	3	…		139-619L1
36	AW001CL005C01-X1		Electrical support	2	…		139-619L1
37	AW001CL009-CM		Electrical support	4	…		139-619L1
38	AW001CL509-N6		Electrical support	2	…		139-619L1
39	ED300BT7		Decal	1	…		139-619L1
40	ED300DS66		Decal	1	…		139-619L1
41	ED300DS67		Decal	1	…		139-619L1

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
42	ED300DS68		Decal	1	…		139-619L1
43	ED300DS69		Decal	1	…		139-619L1
44	ED300DS70		Decal	1	…		139-619L1
45	ED300DS86		Decal	1	…		139-619L1
46	ED300DS87		Decal	1	…		139-619L1
47	ED300DS88		Decal	1	…		139-619L1
48	ED300DS89		Decal	1	…		139-619L1
49	ED300DS90		Decal	1	…		139-619L1
50	ED300G7		Decal	1	…		139-619L1
51	ED300J283		Decal	1	…		139-619L1
52	ED300J284		Decal	1	…		139-619L1
53	ED300S113		Decal	1	…		139-619L1
54	ED300S114		Decal	1	…		139-619L1
55	ED300TB2047		Decal	1	…		139-619L1
56	ED300TB2054		Decal	1	…		139-619L1
57	ED300TB263		Decal	1	…		139-619L1
58	M85049/95-12A-A		Flange connector	2	…		139-619L1
59	MS21043L3	MS21043-3	Nut	5	…		139-619L1
60	MS35206-241		Screw	2	…		139-619L1
61	MS35489-20		Grommet	1	…		139-619L1
62	NAS1149D0332J		Washer	8	…		139-619L1
63	NAS1149D0416J		Washer	8	…		139-619L1
64	NAS1149DN816J		Washer	2	…		139-619L1
65	NAS1190E3P6AK		Screw	3	…		139-619L1
66	NAS1190E3P8AK		Screw	3	…		139-619L1
67	NAS1802-04-7		Screw	8	…		139-619L1
68	NAS1802-3-18		Screw	2	…		139-619L1
69	NAS620C6L		Washer	2	…		139-619L1
70	A523A-A01		Electrical contact	20	.		139-619L1
71	3P5330A18951		Window panel	2	.		139-619L1
72	3P5330A19852		Window seal profile	2	.	(3)	-
73	A417AG002TB		Seal profile	2.5 m	.		139-619L1
74	3P5330A19952		Window seal wedge	4	.		139-619L1

2) CONSUMABLES

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

#	Spec./LHD code number	DESCRIPTION	Q.TY	NOTE	PART
75	Commercial	City Grey S103 DELTRON BC Col. Gray Steel N° 41 Met.(FIAT 647) (M03) " grey steel m 103	AR	(4)	-
76	199-05-002 TY II, CL 2	Adhesive EA 934NA AERO (C397)	AR	(4)	-
77	A236A03AB	Nonmetallic channel	AR	(4)	-
78	A582A08 or EN6049-006-08-5	Tubing braided	AR	(4)	-

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
139-619L1	1	-	-
3G2580P02233	1	(1)	-
3G2580P02331	1	(1)	-

NOTES

(1) This P/N depends upon helicopter internal painting and may be supplied as a production P/N.

(2) All C/As B1BA298, B1B298 and B1B326 dash -02 are identical to dash -01.

(3) Window seal profile P/N 3P5330A19852 can be obtained from raw material P/N A417AG002TB.

(4) Item to be procured as local supply.

B. SPECIAL TOOLS

N.A.

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) 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) Shape the cables in order to prevent interference with the structure and the other existing installations, using where necessary suitable lacing cords.

e) During the installation of bonding braids or components requiring grounding, clean the surface structure in order to obtain a good ground contact.

f) Protect properly all those equipment not removed from area affected by the modification during installation procedure.

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

h) All lengths are in mm.

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 1 thru 12 and Figure 13 wiring diagram, gain access to the area affected by the installation and perform Babcock variant P/N 3G2500P01511 as described in the following procedure:
   - 2.1 With reference to Figure 1 Section A-A, remove the bubble window liner assy upr LH P/N 3G2580L03533 on LH side.
   - 2.2 With reference to Figure 1 Section A-A, remove the bubble window liner assy upr RH Goodrich P/N 3G2580L03634 on RH side.
   - 2.3 In accordance with the applicable steps of AMP DM 39-A-56-22-01-00A-920A-K

and with reference to Figure 2 Section A-A, Section B-B and View C-C, remove the bubble window P/N 3G5620L00251, the profile P/N 3G5620A00551, n°23 screws P/N AN525-10R9, n°6 special washer P/N 3G5620A01351 and n°4 screws P/N AN525-10R11 on the left side of the cabin.

2.4 In accordance with the applicable steps of AMP DM 39-A-56-22-02-00A-920A-K repeat step 2.3 for the right side of the cabin.

2.5 With reference to Figure 4 thru 12 and Figure 13 wiring diagram, perform HEEL lights cabin windows variant P/N 3G3350A04311 as described in the following procedure:

2.5.1 With reference to Figures 4 and 5, perform HEELS high visibility struct prov P/N 3G5318A18911 as described in the following procedure:

2.5.1.1 With reference to Figure 4 View F and Section G-G, temporarily locate the mounting bracket P/N 3G3350V00351 on the forward lower panel assy P/N 3P5331A02132 and countermark n°4 holes in accordance with the dimensioning shown.

2.5.1.2 With reference to Figure 4 View F and Section G-G, drill n°4 holes Ø11.48÷11.61 thru the forward lower panel assy P/N 3P5331A02132.

2.5.1.3 With reference to Figure 4 Section G-G, install n°4 inserts P/N NAS1836C3-13M on the forward lower panel assy P/N 3P5331A02132 by means adhesive C397.

NOTE

Prepare and protect show surface for electrical bonding.

2.5.1.4 With reference to Figure 4 Section G-G, install the mounting bracket P/N 3G3350V00351 on the forward lower panel assy P/N 3P5331A02132 by means of n°4 screws P/N MS35207-260 and n°4 washers P/N NAS1149D0316J.

2.5.1.5 With reference to Figure 4 View F and Section H-H, drill n°2 holes Ø11.48÷11.61 thru the forward lower panel assy P/N 3P5331A02132 in accordance with the dimensioning shown.

2.5.1.6 With reference to Figure 4 Section H-H, install n°2 inserts P/N NAS1836C08-13M on the forward lower panel assy P/N 3P5331A02132 by means adhesive C397.

2.5.1.7 With reference to Figure 5 Detail D and Section E-E, temporarily locate the connector support P/N A414A02V209E1 on the side wall panel P/N 3P5335A00233 and countermark n°2 holes in

accordance with the dimensioning shown.

2.5.1.8 With reference to Figure 5 Detail D and Section E-E, drill n°2 holes Ø11.48÷11.61 on the side wall panel P/N 3P5335A00233.

2.5.1.9 With reference to Figure 5 Detail D and Section E-E, install n°2 inserts P/N NAS1832-3-5 on the side wall panel P/N 3P5335A00233 by means adhesive C397.

2.5.1.10 With reference to Figure 5 Detail D and Section E-E, install the connector support P/N A414A02V209E1 on the side wall panel P/N 3P5335A00233 by means of n°2 screws P/N MS27039-1-07.

2.5.1.11 With reference to Figure 5 Detail A and Section C-C repeat steps 2.5.1.1 thru 2.5.1.4 to install the mountain bracket P/N 3G3350V00351 on the side wall panel P/N 3P5337A00233.

2.5.1.12 With reference to Figure 5 Detail A and Section B-B repeat steps 2.5.1.7 thru 2.5.1.10 to install the connector support P/N A414A02V209E1 on the side wall panel P/N 3P5337A00233.

NOTE

Perform steps 2.5.2 and 2.5.3 only if the helicopter is NOT equipped with kit AVCS. Otherwise skip at step 2.5.4.

NOTE

Perform steps 2.5.2 only if the helicopter is NOT equipped with kit ICS P/N 3G2350A01014. Otherwise skip at step 2.5.3.

2.5.2 With reference to Figure 7 View A, install n°3 standoffs P/N A388A3E12C on the structure (STA 3899.0) in the locations n°11 thru n°13.

2.5.3 With reference to Figure 7 View A, install n°3 studs P/N A366A3E12C on the structure (STA 3899.0) in the locations n°8 thru n°10.

NOTE

Perform the following step 2.5.4 only if the helicopter is equipped with kit AVCS. Otherwise skip at step 2.5.5.

2.5.4 With reference to Figure 12 View A1, remove and re-install n°8 electrical supports P/N AW001CL001-N6 on the structure (STA3899.0) in the locations n°1 thru n°8.

2.5.5 With reference to Figure 8 View B-B, install the stud P/N A366A3E12C on the structure in the location n°2.

2.5.6 With reference to Figure 8 View B-B, install the electrical support P/N AW001CL005C01-X1 on the structure in the location n°1.

2.5.7 With reference to Figure 8 View B-B, install n°2 nonmetallic channels P/N A236A03AB on the hole edges shown on figure.

2.5.8 With reference to Figure 8 View D-D, install the electrical support P/N AW001CL509-N6 on the structure in the location n°7 by means of the washer P/N NAS620C6L.

2.5.9 With reference to Figure 8 View C-C, install the electrical support P/N AW001CL005C01-X1 on the structure in the location n°4.

2.5.10 With reference to Figure 8 View C-C, install the stud P/N A366A3E12C on the structure in the location n°3.

2.5.11 With reference to Figure 8 View C-C, install the electrical support P/N AW001CL001-N6 on the structure in the location n°5.

2.5.12 With reference to Figure 8 View C-C, install n°2 nonmetallic channels P/N A236A03AB on the hole edges shown on figure.

2.5.13 With reference to Figure 8 View D-D, install the electrical support P/N AW001CL509-N6 on the structure in the location n°6 by means of the washer P/N NAS620C6L.

2.5.14 With reference to Figure 9 View looking down center floor, install n°2 electrical supports P/N AW001CL001-N6 on the structure in the locations n°1 and n°2.

2.5.15 With reference to Figure 11 View looking LH pax door from internal side, install n°8 electrical supports P/N AW001CL000A-X3 on the internal liner in the locations n°1 thru n°8.

2.5.16 With reference to Figure 11 Detail F, install n°2 electrical supports P/N AW001CL009-CM on the internal liner in the locations n°9 and n°20.

2.5.17 With reference to Figure 10 View looking RH pax door from internal side, install n°8 electrical supports P/N AW001CL000A-X3 on the internal liner in the locations n°10 thru n°17.

2.5.18 With reference to Figure 10 Detail G, install n°2 electrical supports P/N AW001CL009-CM on the internal liner in the locations n°18 and n°19.

NOTE

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

NOTE

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.

2.5.19 With reference to Figure 6 thru 12, lay down the following cable assemblies on the existing routes unless otherwise indicated on the figures:

- 3G9B01A29802 HEEL lights cabin windows C/A (B1A298)
- 3G9B01B29802 HEEL lights cabin windows C/A (B1B298)
- 3G9B01B32602 HEEL lights cabin windows C/A (B1B326)

2.5.20 With reference to Figures 6 thru 12, secure the cable assemblies laid down at the previous step by means of existing hardware and lacing cords.

2.5.21 With reference to Figure 9 View looking down center floor, install the mounting rail P/N A522A02A on the structure by means of n°2 screws P/N MS35206-241 and n°2 washers P/N NAS1149DN816J.

2.5.22 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 9 View looking down center floor, install the decal P/N ED300TB263 next to the mounting rail P/N A522A02A.

2.5.23 With reference to Figure 9 View looking down center floor, install the terminal board P/N 001755-105-02 (TB263) on the mounting rail P/N A522A02A.

2.5.24 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 9 View looking down center floor, install the decal P/N ED300TB2047 next to the junction in-line TB2047.

2.5.25 With reference to Figure 9 View looking down center floor, install the power supply assy P/N 3G3350A01711 in its position on the structure.

2.5.26 With reference to Figure 9 View looking down center floor and Figure 13 wiring diagram, perform electrical connection of the cable on part of the power supply assy P/N 3G3350A01711 to the junction in-line TB2047, the terminal board TB263 and n°2 splices SPG7-1 and SPG7-2.

2.5.27 With reference to Figure 9 View looking down center floor, remove existing screws and install n°2 clamps P/N AW001CB04H on C/A B1B298 and C/A B1B326 by means of n°2 screws P/N NAS1802-3-18.

2.5.28 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 9 View looking down center floor, install the decal P/N ED300G7 next to the power supply assy P/N 3G3350A01711.

NOTE

Perform the following step 2.5.29 only if the helicopter is NOT equipped with kit ICS P/N 3G2350A01014. Otherwise skip at step 2.5.30.

2.5.29 With reference to Figure 7 View A, install n°3 clamps P/N AW001CB04H on C/A B1A298 by means of n°3 screws P/N NAS1190E3P6AK and n°3 washers P/N NAS1149D0332J.

NOTE

Perform the following step 2.5.30 only if the helicopter is equipped with kit ICS P/N 3G2350A01014. Otherwise skip at step 2.5.31.

2.5.30 With reference to Figure 7 View E-E, remove existing screws and install n°3 clamps P/N AW001CB06H on C/A B1A298 and C/A B2A204 by means of n°3 screws P/N NAS1190E3P8AK.

2.5.31 With reference to Figure 7 View A, install n°3 clamps P/N AW001CB06H on C/A B1B298 and C/A B1B326 by means of n°3 nuts P/N MS21043L3 and n°3 washers P/N NAS1149D0332J.

2.5.32 With reference to Figure 8 View B-B, install the flange connector P/N M85049/95-12A-A on the support by means of n°4 screws P/N NAS1802-04-7 and n°4 washers P/N NAS1149D0416J.

2.5.33 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 8 View B-B, install the decal P/N ED300J283 next to the connector J283.

2.5.34 With reference to Figure 8 View B-B, install the clamp P/N AW001CB04H on the C/A B1A298 by means of the nut P/N MS21043L3 and the washer P/N NAS1149D0332J.

2.5.35 With reference to Figure 8 View C-C, repeat step 2.5.32.

2.5.36 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 8 View C-C, install the decal P/N ED300J284 next to the connector J284.

2.5.37 With reference to Figure 8 View C-C, install the clamp P/N AW001CB05H on the C/A B1B298 and C/A B1B326 by means of the nut P/N MS21043L3 and the washer P/N NAS1149D0332J.

2.5.38 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 8 View C-C, install the decal P/N ED300TB2054 next to the junction in-line TB2054.

2.5.39 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 8 View C-C, install the battery assy P/N 3G3350A01811 on the mounting bracket previously installed and install the relevant decal P/N ED300BT7.

2.5.40 With reference to Figure 8 View C-C and Figure 13 wiring diagram, perform electrical connection of the cable on part of the battery assy P/N 3G3350A01811 to the junction in-line TB2054.

2.5.41 In accordance with AMP DM 39-C-33-52-12-00A-921A-K and with reference to Figure 10 View looking RH pax door from internal side and Figure 13 wiring diagram, install the HEELS light assy P/N 3G3350A00611 on the RH pax door. Perform electrical connection to connector P284.

2.5.42 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 10 View looking RH pax door from internal side, install the decal P/N ED300DS86, P/N ED300DS87, P/N ED300DS88, P/N ED300DS89 and P/N ED300DS90 next to the relevant light.

2.5.43 In accordance with AMP DM 39-C-33-52-11-00A-921A-K and with reference to Figure 11 view looking LH pax door from internal side and Figure 13 wiring diagram, install the HEELS light assy P/N 3G3350A00611 on the LH pax door. Perform electrical connection to connector P283.

2.5.44 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 11 view looking LH pax door from internal side, install the decal P/N ED300DS66, P/N ED300DS67, P/N ED300DS68, P/N ED300DS69 and P/N ED300DS70 next to the relevant light.

2.5.45 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 10 Detail G and Figure 11 Detail F, install the decal P/N ED300S114 next to the water sensor S114 and the decal ED300S113 next to the water sensor S113.

2.5.46 With reference to Figure 13 wiring diagram, perform electrical connection of C/A B1A298 to the terminal board TB263. Use n°10 electrical contacts P/N A523A-A01 (TB263 side).

2.5.47 With reference to Figure 8 View B-B and Figure 11 View looking LH pax door from internal side, connect the connector J283 to the connector P283.

2.5.48 With reference to Figure 13 wiring diagram, perform electrical connection of C/A B1B298 to the terminal board TB263 and to the splices SPG7-1 and SPG7-2. Use n°10 electrical contacts P/N A523A-A01 (TB263 side).

2.5.49 With reference to Figure 8 View C-C and Figure 10 View looking RH pax door from internal side, connect the connector J284 to the connector P284.

2.5.50 Perform a pin-to-pin continuity check of all the electrical connections made.

2.6 In accordance with the applicable steps of AMP DM 39-A-56-21-01-00A-920A-A and with reference to Figure 2 View looking inboard left side, install the window panel P/N 3P5330A18951, the window seal profile P/N 3P5330A19852 and n°2 window seal wedges P/N 3P5330A19952 on the left side of the cabin.

2.7 In accordance with the applicable steps of AMP DM 39-A-56-21-02-00A-920A-A and with reference to Figure 2 View looking inboard left side, repeat step 2.6 for the right side of the cabin.

2.8 With reference to Figure 1, perform the liner retromod P/N 3G2580P22211 as described in the following procedure:

2.8.1 With reference to Figure 1 Section A-A and Section B-B, install the window liner upr LH mod ICS with HEELS P/N 3G2580P02331 by means of the strap assembly P/N A487A003A and the fastener P/N MS27980-18B.

2.8.2 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 1 Section A-A, install the decal P/N A180A009E2, the decal P/N A180A005E2 and the decal P/N 999-2701-45-509 on the window liner upr LH mod ICS with HEELS P/N 3G2580P02331.

2.8.3 With reference to Figure 1 Section A-A and Section B-B repeat steps 2.8.1 and 2.8.2 for the window liner upr RH mod hoist Breeze/HEELS P/N 3G2580P02233.

2.8.4 With reference to Figure 3 View looking inboard left side and Bottom view, perform the exterior paint scheme retromod P/N 3G1110P00111 painting with commercial paint as shown on figure and table.

3. In accordance with the applicable step of AMP DM 39-C-33-52-00-00A-340A-K perform the function test of the emergency exit lighting system.

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

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

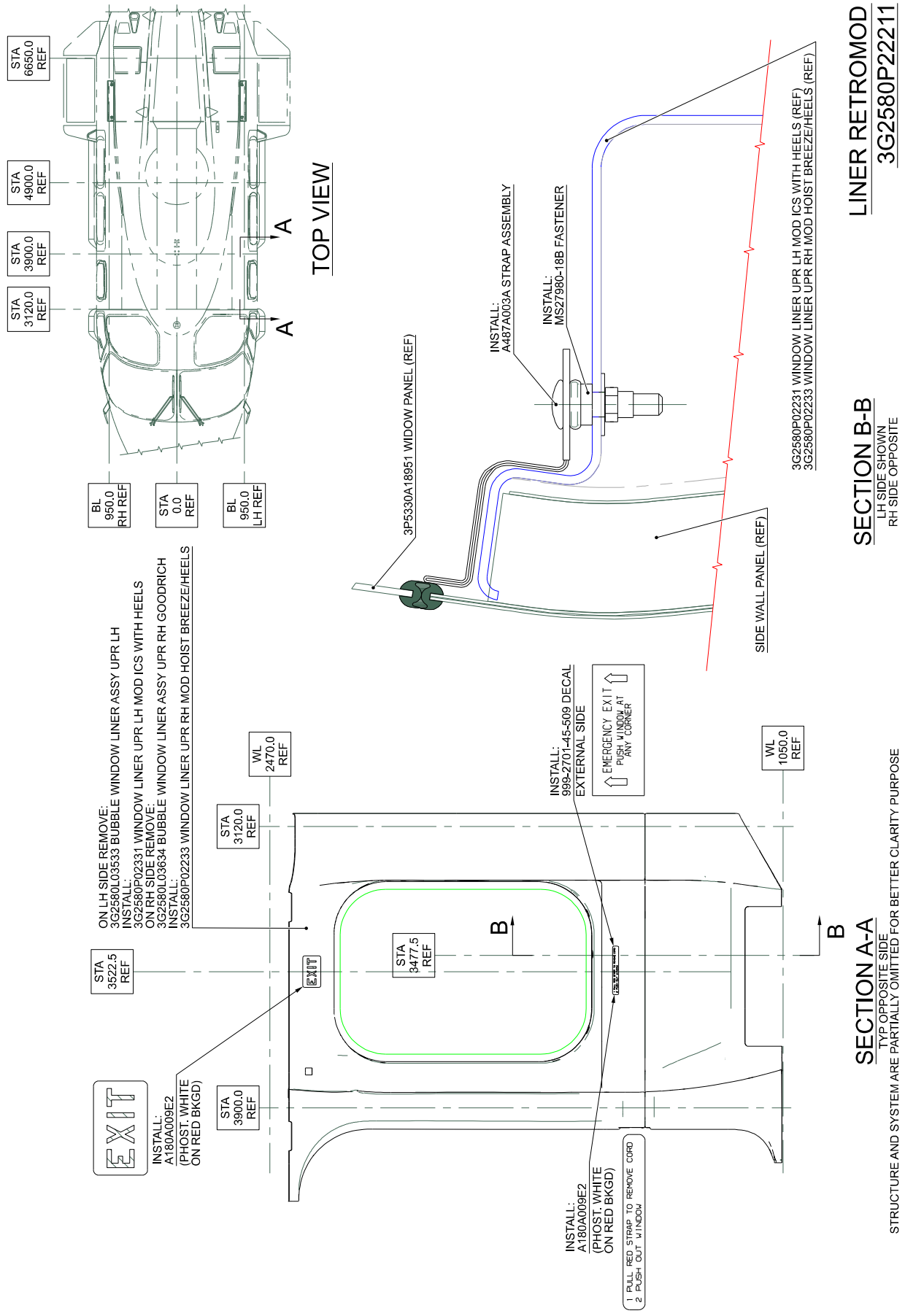

LINER RETROMOD
3G2580P22211
TOP VIEW
STA 6650.0 REF
STA 4900.0 REF
STA 3900.0 REF
STA 3120.0 REF
BL 950.0 RH REF
STA 0.0 REF
BL 950.0 LH REF
A
A
SECTION B-B
LH SIDE SHOWN
RH SIDE OPPOSITE
3P5330A18951 WIDOW PANEL (REF)
INSTALL:
A487A003A STRAP ASSEMBLY
INSTALL:
MS27980-18B FASTENER
3G2580P02231 WINDOW LINER UPR LH MOD ICS WITH HEELS (REF)
3G2580P02233 WINDOW LINER UPR RH MOD HOIST BREEZE/HEELS (REF)
SIDE WALL PANEL (REF)
ON LH SIDE REMOVE:
3G2580L03533 BUBBLE WINDOW LINER ASSY UPR LH
INSTALL:
3G2580P02331 WINDOW LINER UPR LH MOD ICS WITH HEELS
ON RH SIDE REMOVE:
3G2580L03634 BUBBLE WINDOW LINER ASSY UPR RH GOODRICH
INSTALL:
3G2580P02233 WINDOW LINER UPR RH MOD HOIST BREEZE/HEELS
WL 2470.0 REF
STA 3120.0 REF
STA 3522.5 REF
STA 3477.5 REF
STA 3900.0 REF
EXIT
INSTALL:
A180A009E2
(PHOST, WHITE
ON RED BKGD)
INSTALL:
999-2701-45-509 DECAL
EXTERNAL SIDE
EMERGENCY EXIT
PUSH WINDOW AT
ANY CORNER
WL 1050.0 REF
B
B
INSTALL:
A180A009E2
(PHOST, WHITE
ON RED BKGD)
1 PULL RED STRAP TO REMOVE CORD
2 PUSH OUT WINDOW
SECTION A-A
TYP OPPOSITE SIDE
STRUCTURE AND SYSTEM ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE

Figure 1

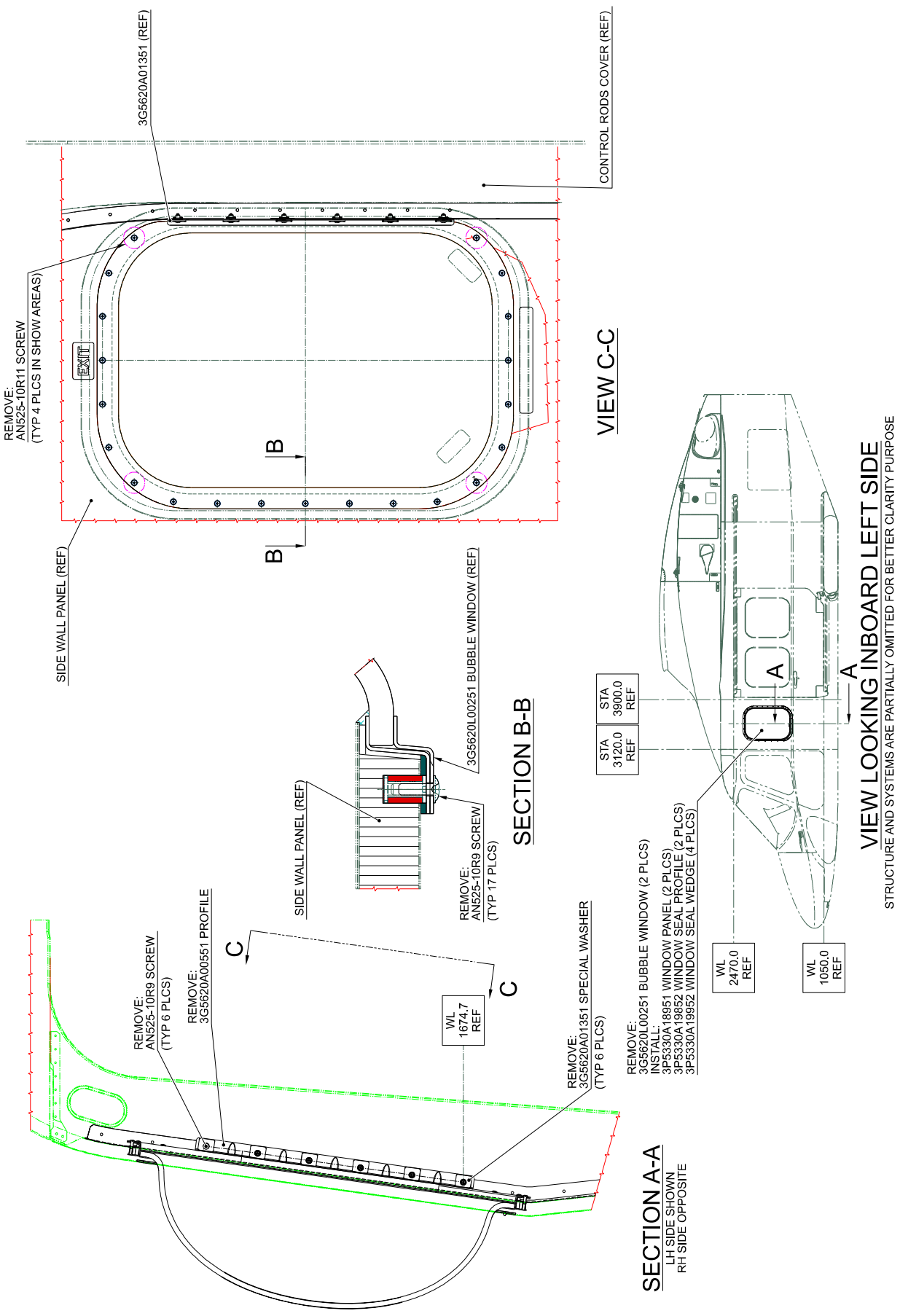

3G5620A01351 (REF)
CONTROL RODS COVER (REF)
REMOVE:
AN525-10R11 SCREW
(TYP 4 PLCS IN SHOW AREAS)
EXIT
B
B
SIDE WALL PANEL (REF)
VIEW C-C
3G5620L00251 BUBBLE WINDOW (REF)
SIDE WALL PANEL (REF)
REMOVE:
AN525-10R9 SCREW
(TYP 17 PLCS)
SECTION B-B
STA
3900.0
REF
STA
3120.0
REF
A
A
VIEW LOOKING INBOARD LEFT SIDE
STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE
REMOVE:
3G5620L00251 BUBBLE WINDOW (2 PLCS)
INSTALL:
3P5330A18951 WINDOW PANEL (2 PLCS)
3P5330A19852 WINDOW SEAL PROFILE (2 PLCS)
3P5330A19952 WINDOW SEAL WEDGE (4 PLCS)
WL
2470.0
REF
WL
1050.0
REF
REMOVE:
AN525-10R9 SCREW
(TYP 6 PLCS)
REMOVE:
3G5620A00551 PROFILE
C
C
WL
1674.7
REF
REMOVE:
3G5620A01351 SPECIAL WASHER
(TYP 6 PLCS)
SECTION A-A
LH SIDE SHOWN
RH SIDE OPPOSITE

Figure 2

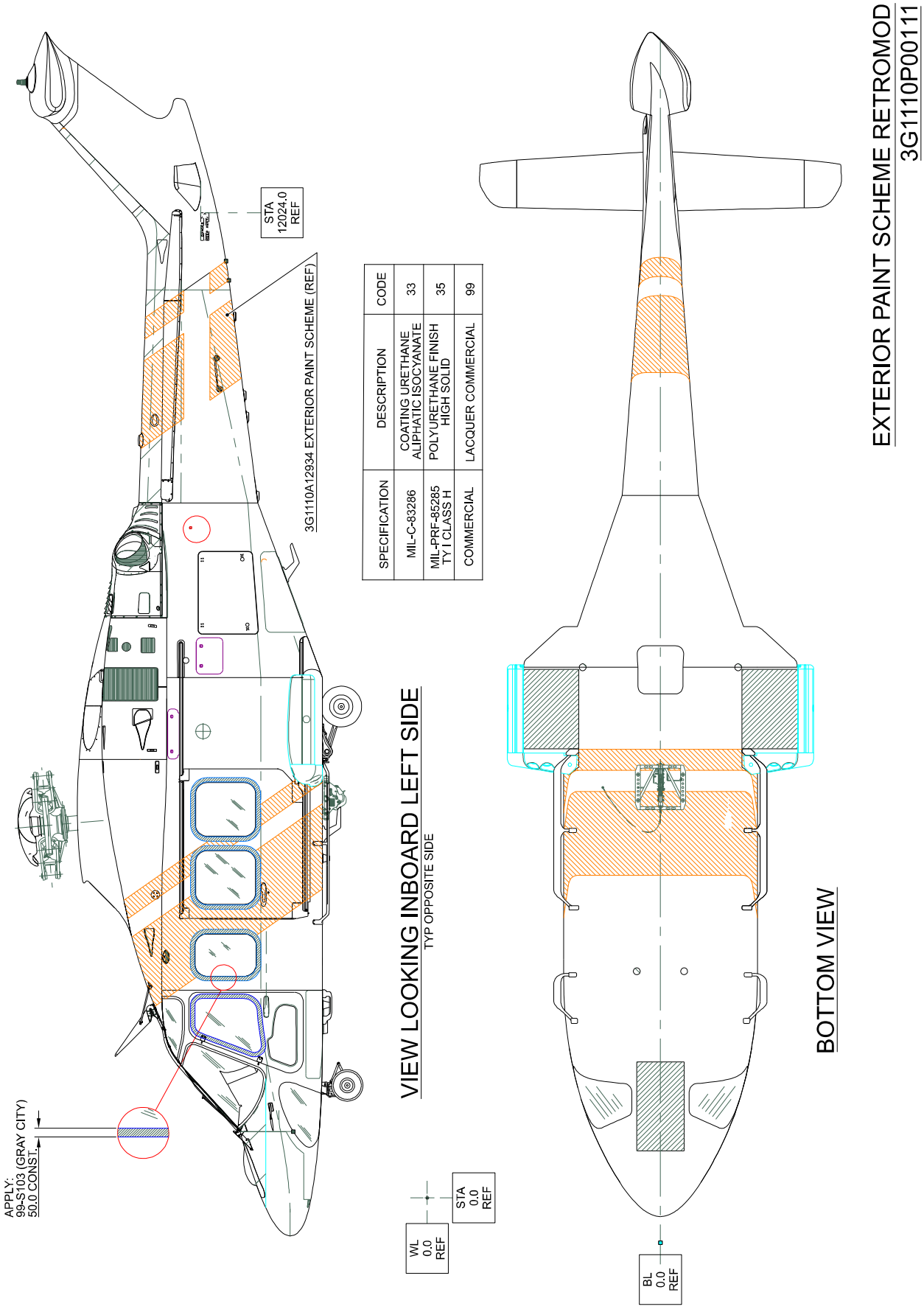

EXTERIOR PAINT SCHEME RETROMOD
3G1110P00111
SPECIFICATION
DESCRIPTION
CODE
MIL-C-83286
COATING URETHANE ALIPHATIC ISOCYANATE
33
MIL-PRF-85285 TY I CLASS H
POLYURETHANE FINISH HIGH SOLID
35
COMMERCIAL
LACQUER COMMERCIAL
99
3G1110A12934 EXTERIOR PAINT SCHEME (REF)
STA 12024.0 REF
APPLY:
99-S103 (GRAY CITY)
50.0 CONST.
VIEW LOOKING INBOARD LEFT SIDE
TYP OPPOSITE SIDE
WL 0.0 REF
STA 0.0 REF
BOTTOM VIEW
BL 0.0 REF

Figure 3

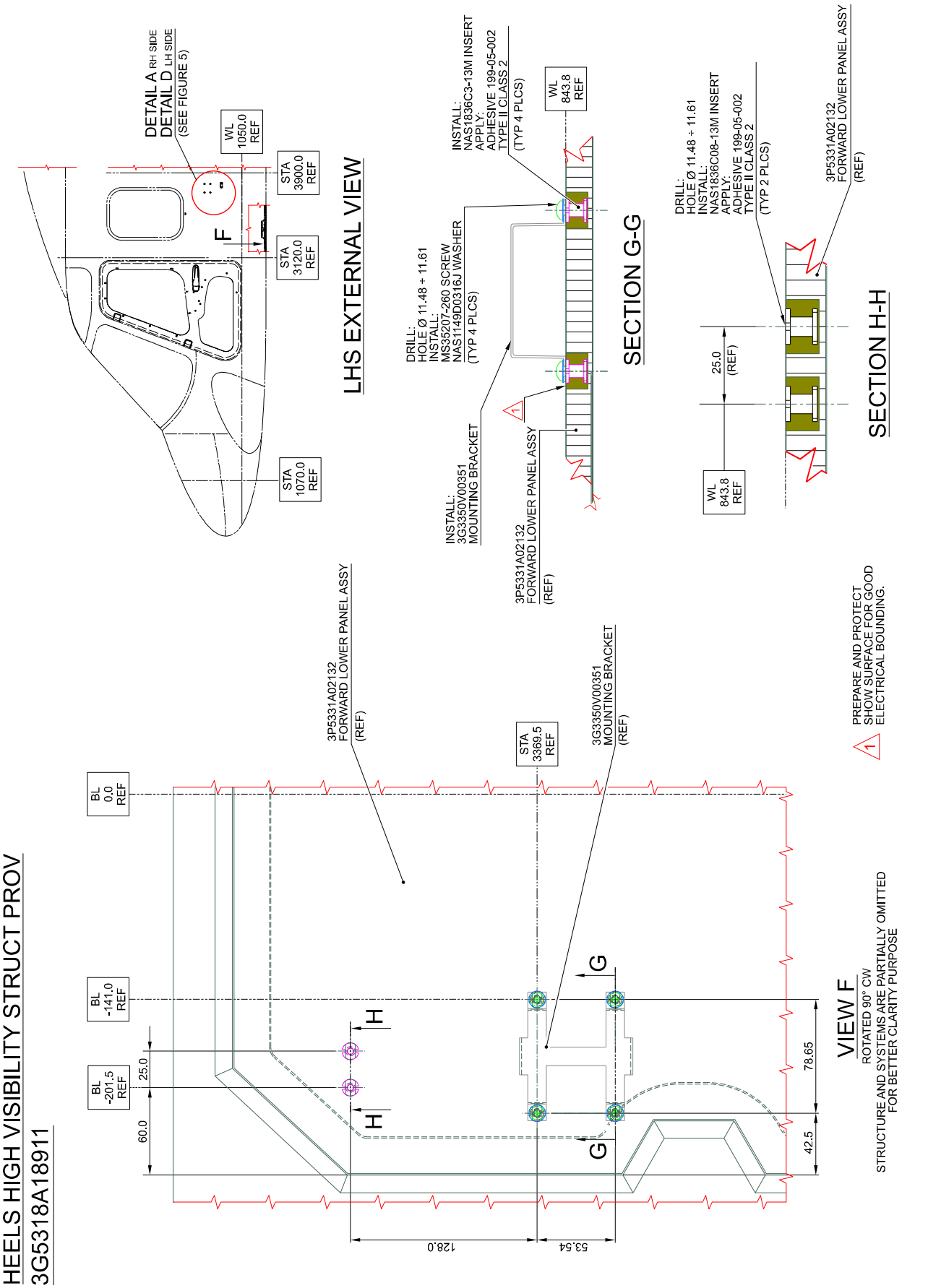

HEELS HIGH VISIBILITY STRUCT PROV
3G5318A18911
LHS EXTERNAL VIEW
DETAIL A RH SIDE
DETAIL D LH SIDE
(SEE FIGURE 5)
WL 1050.0 REF
STA 3900.0 REF
STA 3120.0 REF
STA 1070.0 REF
F
SECTION G-G
INSTALL:
NAS1836C3-13M INSERT
APPLY:
ADHESIVE 199-05-002
TYPE II CLASS 2
(TYP 4 PLCS)
WL 843.8 REF
DRILL:
HOLE Ø 11.48 ÷ 11.61
INSTALL:
MS35207-260 SCREW
NAS1149D0316J WASHER
(TYP 4 PLCS)
INSTALL:
3G3350V00351
MOUNTING BRACKET
3P5331A02132
FORWARD LOWER PANEL ASSY
(REF)
SECTION H-H
DRILL:
HOLE Ø 11.48 ÷ 11.61
INSTALL:
NAS1836C08-13M INSERT
APPLY:
ADHESIVE 199-05-002
TYPE II CLASS 2
(TYP 2 PLCS)
25.0
(REF)
WL 843.8 REF
3P5331A02132
FORWARD LOWER PANEL ASSY
(REF)
VIEW F
ROTATED 90° CW
STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED
FOR BETTER CLARITY PURPOSE
BL 0.0 REF
BL -141.0 REF
BL -201.5 REF
25.0
60.0
STA 3369.5 REF
3P5331A02132
FORWARD LOWER PANEL ASSY
(REF)
3G3350V00351
MOUNTING BRACKET
(REF)
G
H
78.65
42.5
128.0
53.54
1
PREPARE AND PROTECT
SHOW SURFACE FOR GOOD
ELECTRICAL BOUNDING.

Figure 4

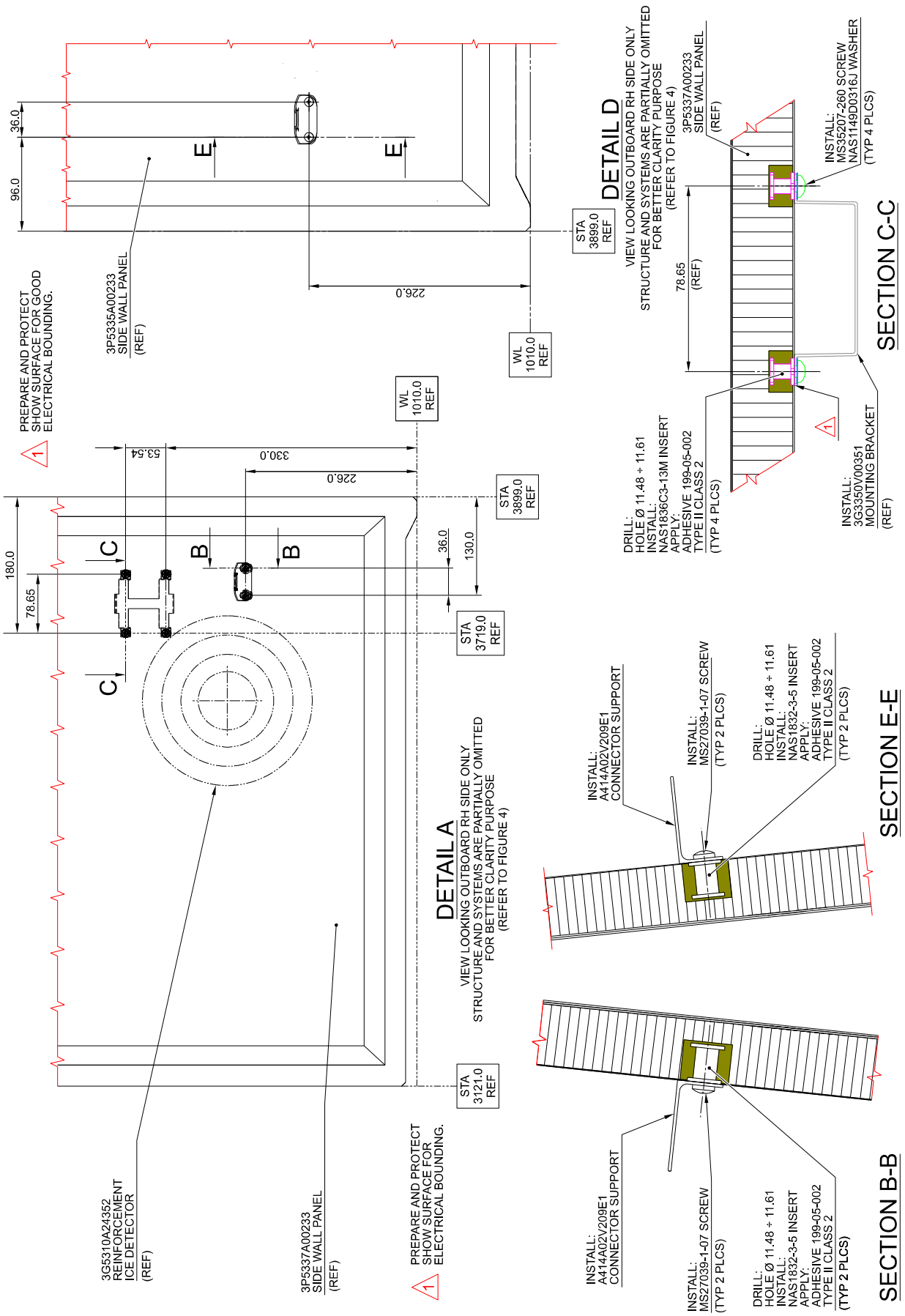

DETAIL D
VIEW LOOKING OUTBOARD RH SIDE ONLY
STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE (REFER TO FIGURE 4)
3P5337A00233 SIDE WALL PANEL (REF)
78.65 (REF)
INSTALL: MS35207-260 SCREW NAS1149D0316J WASHER (TYP 4 PLCS)
DRILL: HOLE Ø 11.48 ÷ 11.61
INSTALL: NAS1836C3-13M INSERT
APPLY: ADHESIVE 199-05-002 TYPE II CLASS 2 (TYP 4 PLCS)
INSTALL: 3G3350V00351 MOUNTING BRACKET (REF)
SECTION C-C
DETAIL A
VIEW LOOKING OUTBOARD RH SIDE ONLY
STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE (REFER TO FIGURE 4)
INSTALL: A414A02V209E1 CONNECTOR SUPPORT
INSTALL: MS27039-1-07 SCREW (TYP 2 PLCS)
DRILL: HOLE Ø 11.48 ÷ 11.61
INSTALL: NAS1832-3-5 INSERT
APPLY: ADHESIVE 199-05-002 TYPE II CLASS 2 (TYP 2 PLCS)
SECTION E-E
SECTION B-B
PREPARE AND PROTECT SHOW SURFACE FOR GOOD ELECTRICAL BOUNDING.
3P5335A00233 SIDE WALL PANEL (REF)
3G5310A24352 REINFORCEMENT ICE DETECTOR (REF)
3P5337A00233 SIDE WALL PANEL (REF)
STA 3899.0 REF
STA 3719.0 REF
STA 3121.0 REF
WL 1010.0 REF
36.0
96.0
180.0
78.65
53.54
330.0
226.0
130.0
B
C
E

Figure 5

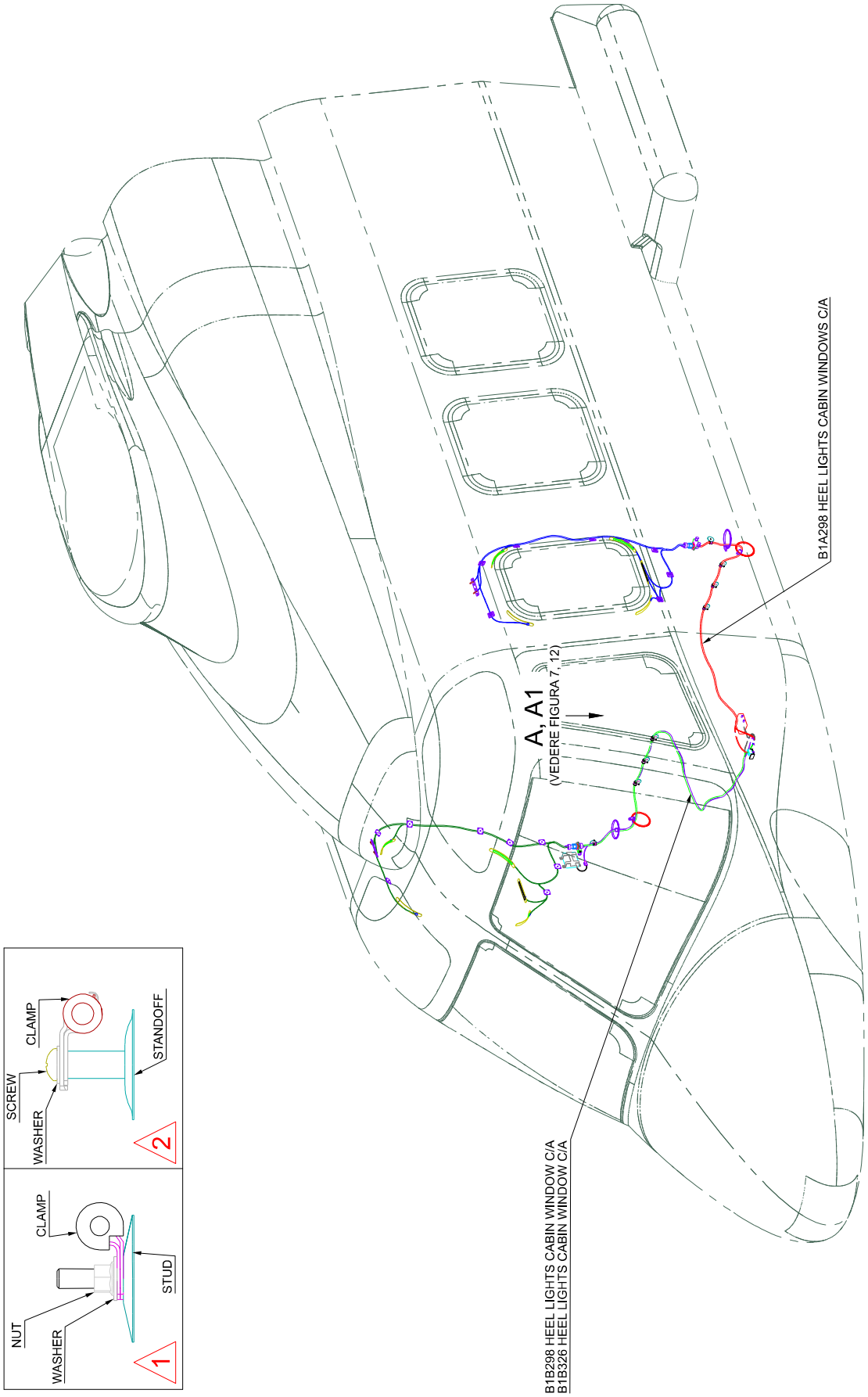
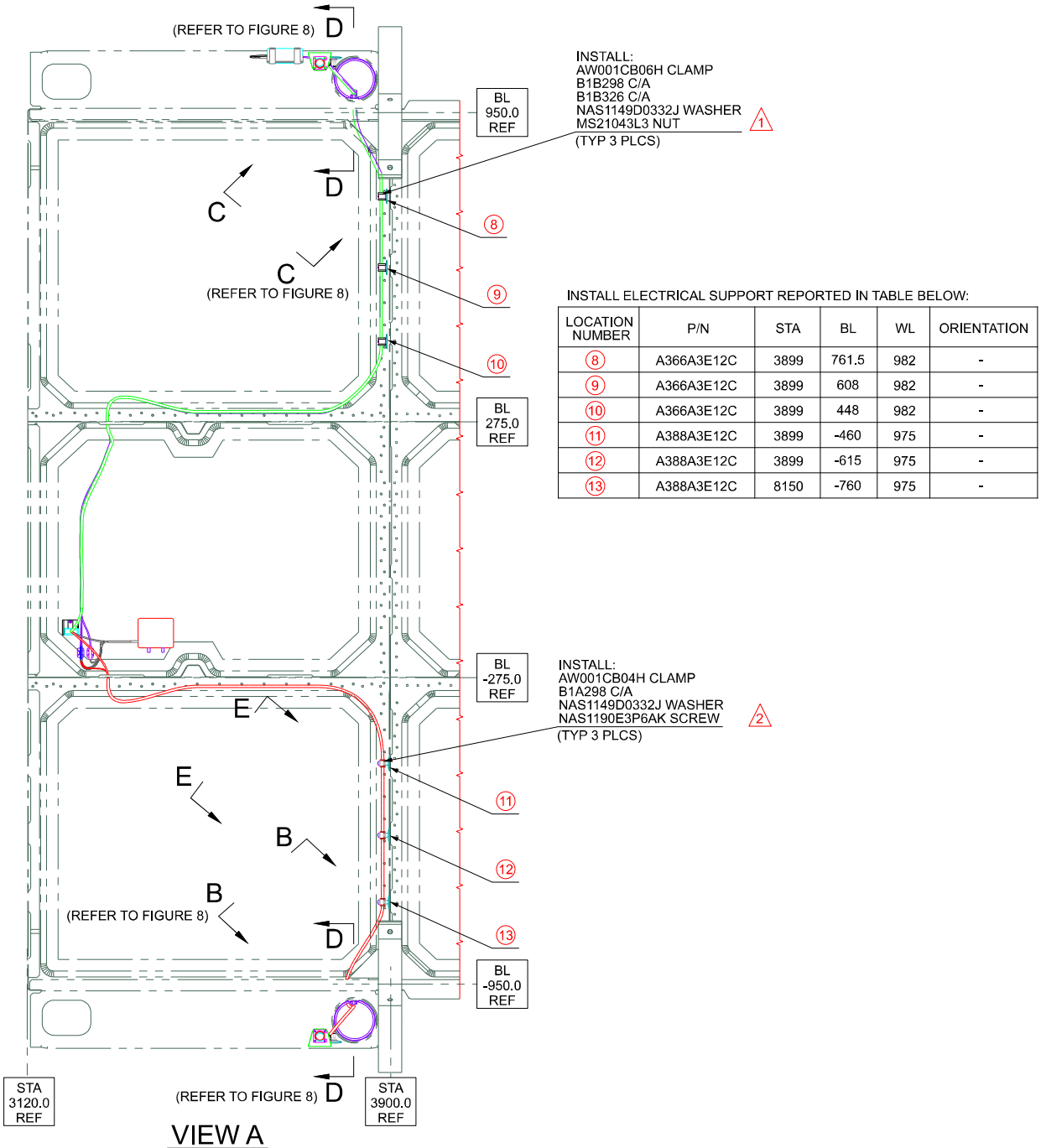

B1A298 HEEL LIGHTS CABIN WINDOWS C/A
A, A1
(VEDERE FIGURA 7, 12)
B1B298 HEEL LIGHTS CABIN WINDOW C/A
B1B326 HEEL LIGHTS CABIN WINDOW C/A
SCREW
CLAMP
STANDOFF
WASHER
2
NUT
CLAMP
STUD
WASHER
1

Figure 6

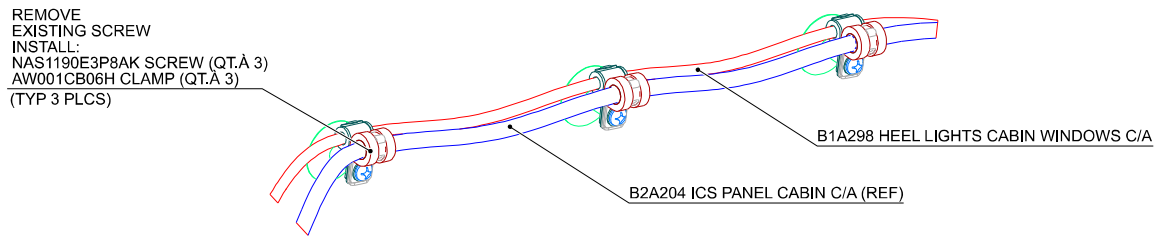


INSTALL ELECTRICAL SUPPORT REPORTED IN TABLE BELOW:

LOCATION NUMBER	P/N	STA	BL	WL	ORIENTATION
8	A366A3E12C	3899	761.5	982	-
9	A366A3E12C	3899	608	982	-
10	A366A3E12C	3899	448	982	-
11	A388A3E12C	3899	-460	975	-
12	A388A3E12C	3899	-615	975	-
13	A388A3E12C	8150	-760	975	-

VIEW A

STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED
FOR BETTER CLARITY PURPOSE
(REFER TO FIGURE 6)



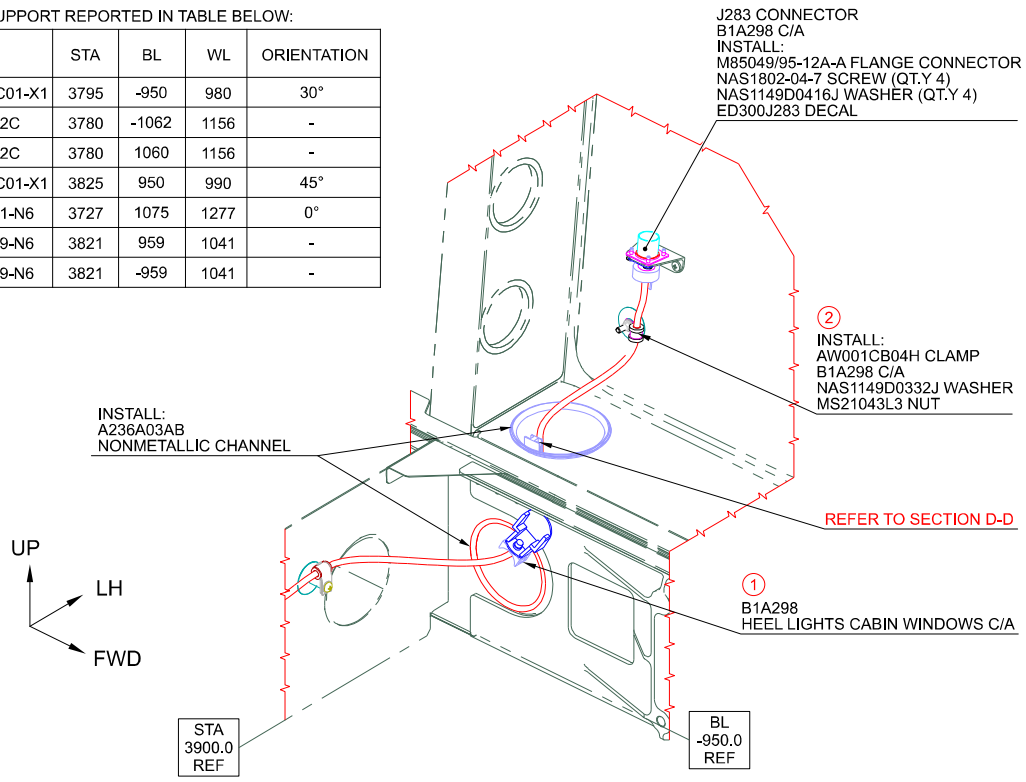
VIEW E-E

APPLICABLE IF KIT ICS P/N 3G2350A01014 INSTALLED

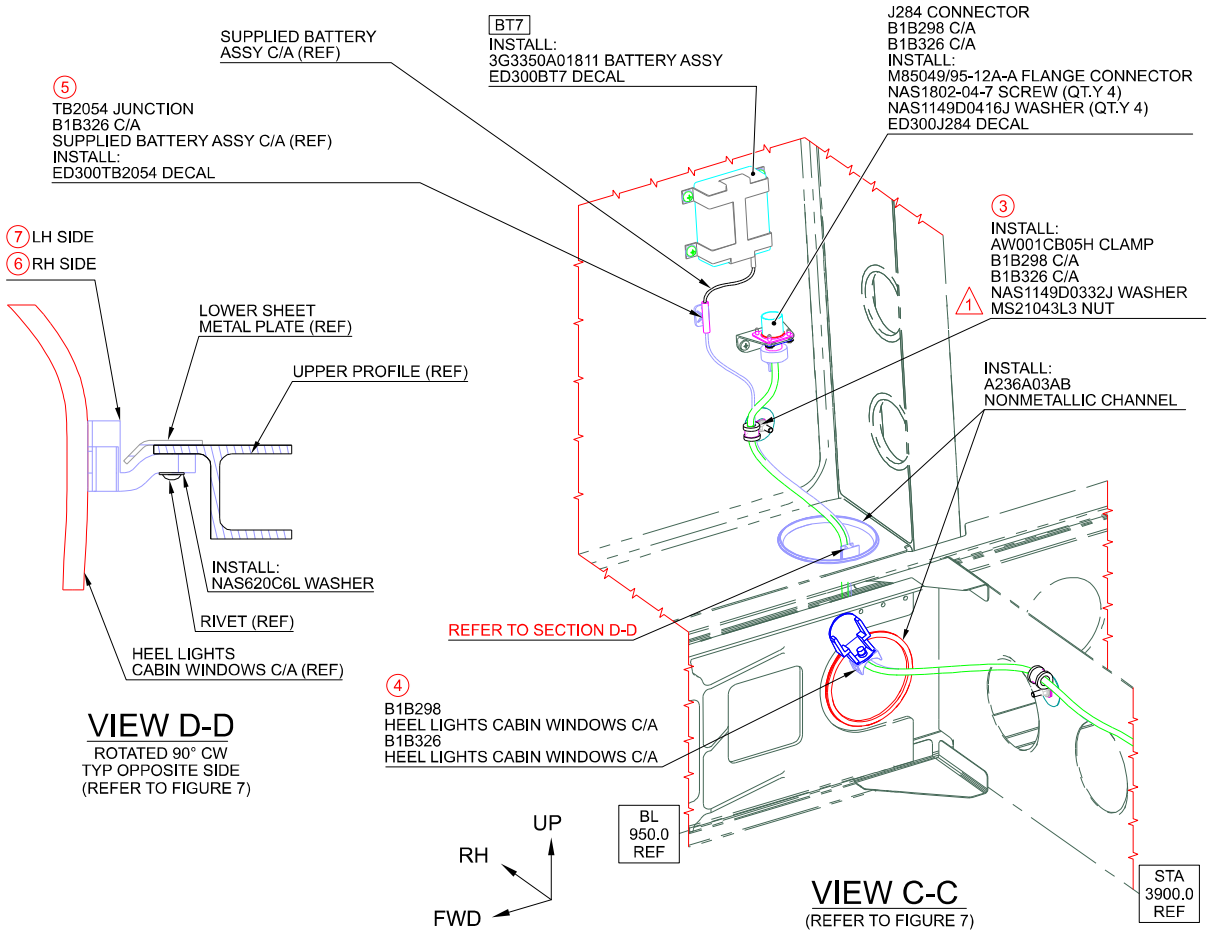
Figure 7

INSTALL ELECTRICAL SUPPORT REPORTED IN TABLE BELOW:

LOCATION NUMBER	P/N	STA	BL	WL	ORIENTATION
1	AW001CL005C01-X1	3795	-950	980	30°
2	A366A3E12C	3780	-1062	1156	-
3	A366A3E12C	3780	1060	1156	-
4	AW001CL005C01-X1	3825	950	990	45°
5	AW001CL001-N6	3727	1075	1277	0°
6	AW001CL509-N6	3821	959	1041	-
7	AW001CL509-N6	3821	-959	1041	-



VIEW B-B
(REFER TO FIGURE 7)



VIEW D-D
ROTATED 90° CW
TYP OPPOSITE SIDE
(REFER TO FIGURE 7)

VIEW C-C
(REFER TO FIGURE 7)

Figure 8

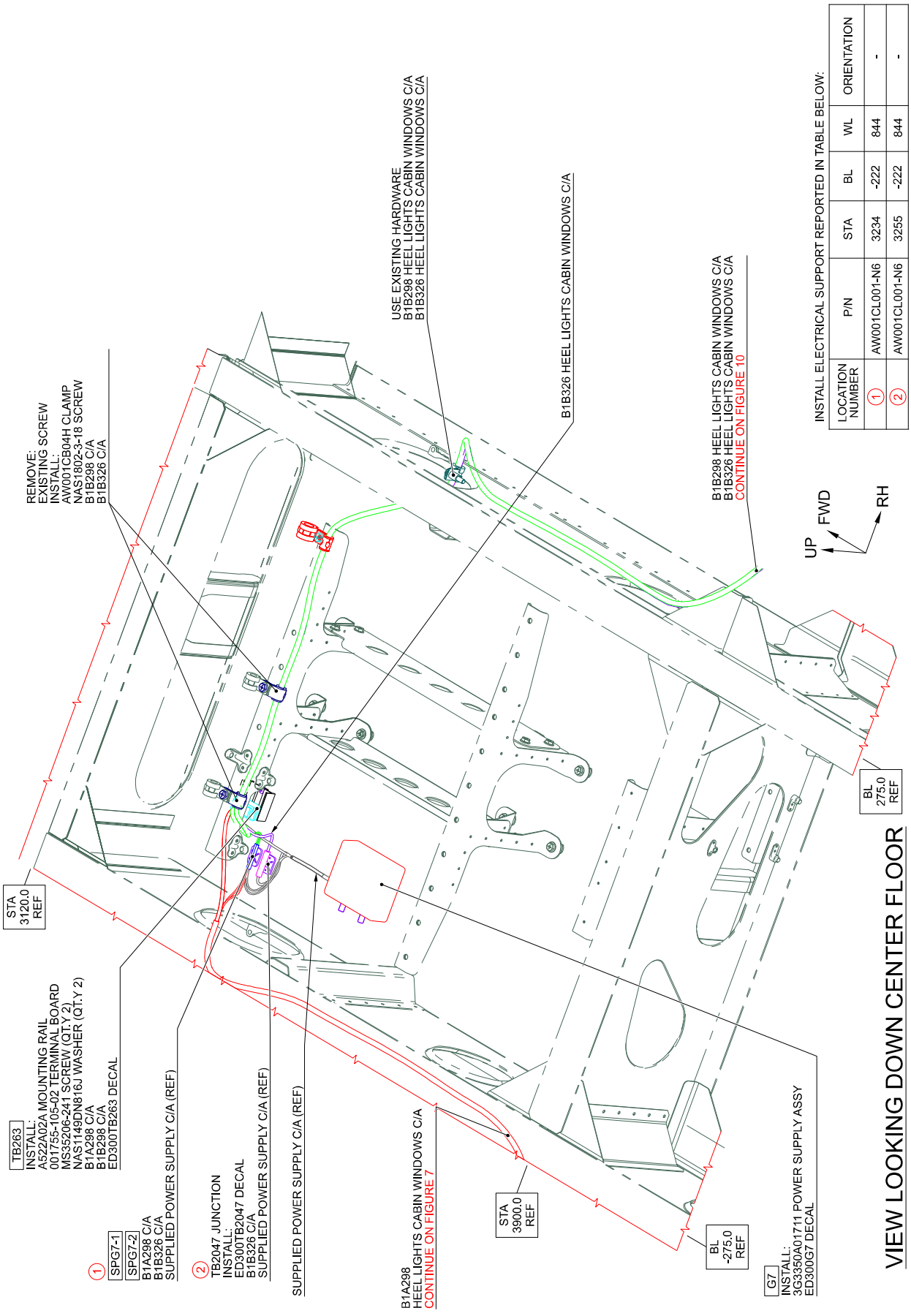
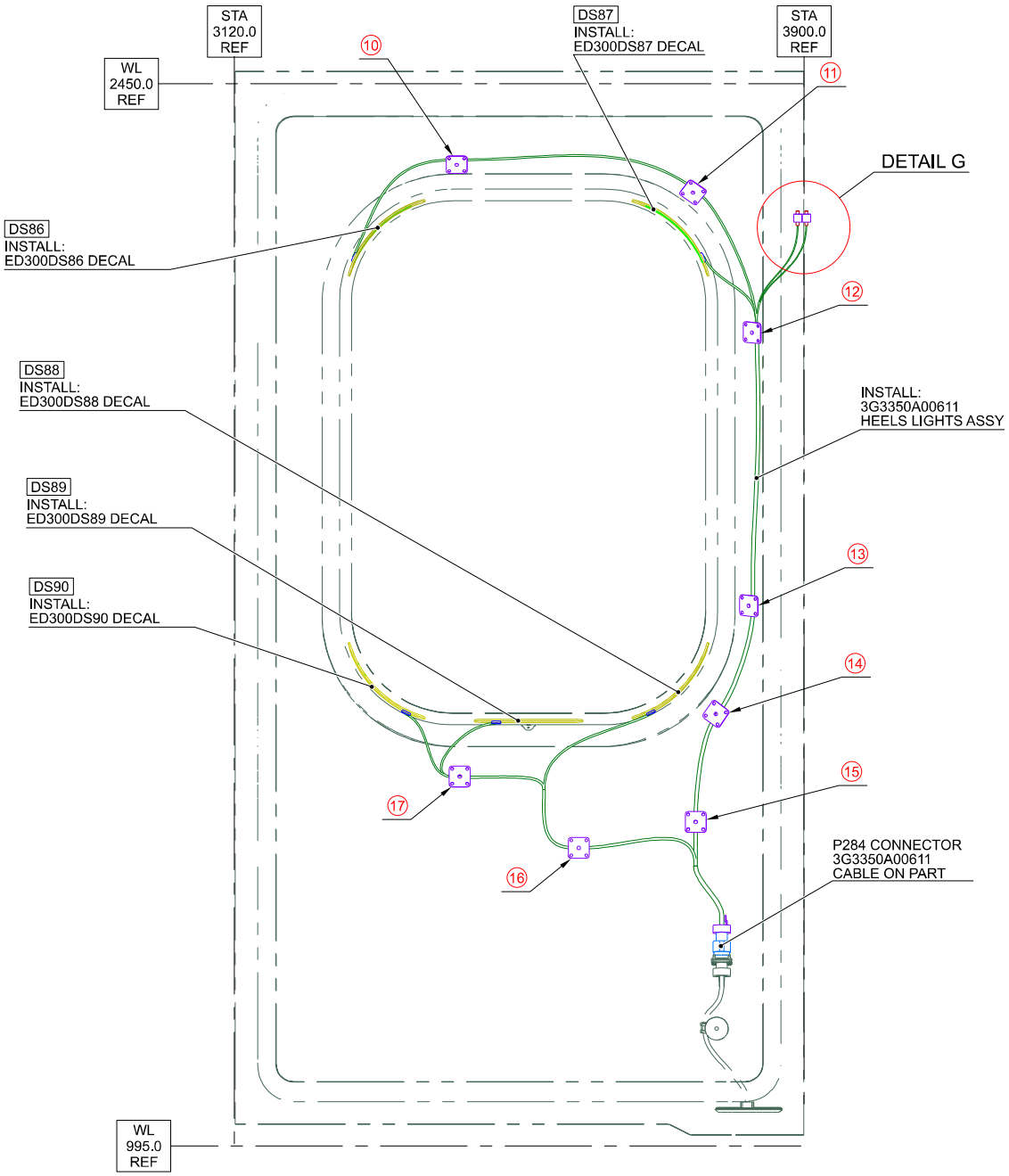

VIEW LOOKING DOWN CENTER FLOOR
INSTALL ELECTRICAL SUPPORT REPORTED IN TABLE BELOW:
LOCATION NUMBER | P/N | STA | BL | WL | ORIENTATION
1 | AW001CL001-N6 | 3234 | -222 | 844 | -
2 | AW001CL001-N6 | 3255 | -222 | 844 | -
UP
FWD
RH
REMOVE:
EXISTING SCREW
INSTALL:
AW001CB04H CLAMP
NAS1802-3-18 SCREW
B1B298 C/A
B1B326 C/A
USE EXISTING HARDWARE
B1B298 HEEL LIGHTS CABIN WINDOWS C/A
B1B326 HEEL LIGHTS CABIN WINDOWS C/A
B1B326 HEEL LIGHTS CABIN WINDOWS C/A
B1B298 HEEL LIGHTS CABIN WINDOWS C/A
B1B326 HEEL LIGHTS CABIN WINDOWS C/A
CONTINUE ON FIGURE 10
STA 3120.0 REF
TB263
INSTALL:
A522A02A MOUNTING RAIL
001755-105-02 TERMINAL BOARD
MS35206-241 SCREW (QT.Y 2)
NAS1149DN816J WASHER (QT.Y 2)
B1A298 C/A
B1B298 C/A
ED300TB263 DECAL
1
SPG7-1
SPG7-2
B1A298 C/A
B1B326 C/A
SUPPLIED POWER SUPPLY C/A (REF)
2
TB2047 JUNCTION
INSTALL:
ED300TB2047 DECAL
B1B326 C/A
SUPPLIED POWER SUPPLY C/A (REF)
SUPPLIED POWER SUPPLY C/A (REF)
B1A298
HEEL LIGHTS CABIN WINDOWS C/A
CONTINUE ON FIGURE 7
STA 3900.0 REF
BL -275.0 REF
G7
INSTALL:
3G3350A01711 POWER SUPPLY ASSY
ED300G7 DECAL
BL 275.0 REF

Figure 9

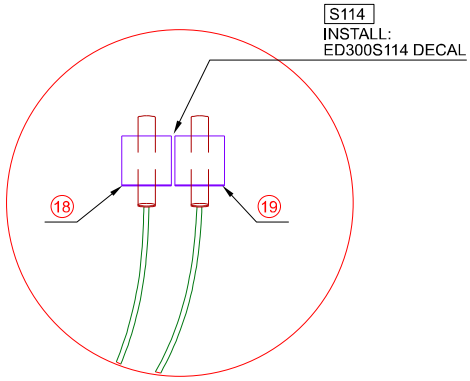


VIEW LOOKING RH PAX DOOR FROM INTERNAL SIDE

STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE

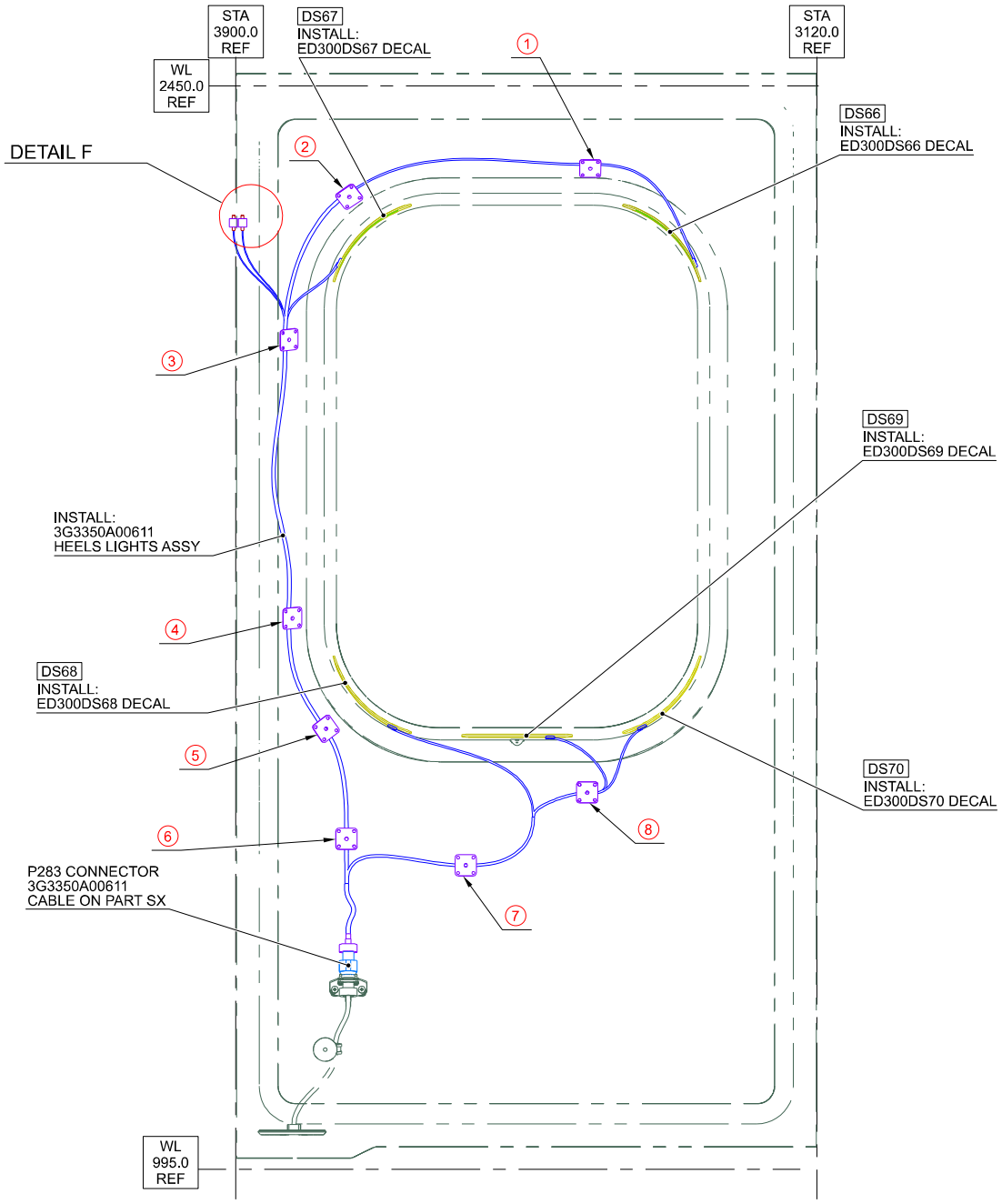
INSTALL ELECTRICAL SUPPORT REPORTED IN TABLE BELOW:

LOCATION NUMBER	P/N	STA	BL	WL	ORIENTATION
10	AW001CL000A-X3	3424	930	2339	0°
11	AW001CL000A-X3	3748	941	2301	45°
12	AW001CL000A-X3	3828	939	2109	0°
13	AW001CL000A-X3	3824	1017	1735	0°
14	AW001CL000A-X3	3779	1051	1587	45°
15	AW001CL000A-X3	3751	1020	1439	0°
16	AW001CL000A-X3	3591	1019	1403	0°
17	AW001CL000A-X3	3428	1023	1501	45°
18	AW001CL009-CM	3891	907	2266	0°
19	AW001CL009-CM	3891	907	2266	0°



DETAIL G

Figure 10

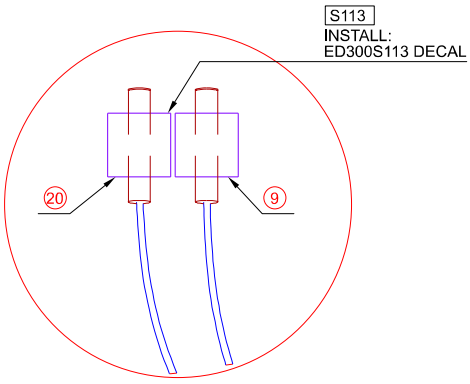


VIEW LOOKING LH PAX DOOR FROM INTERNAL SIDE

STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE

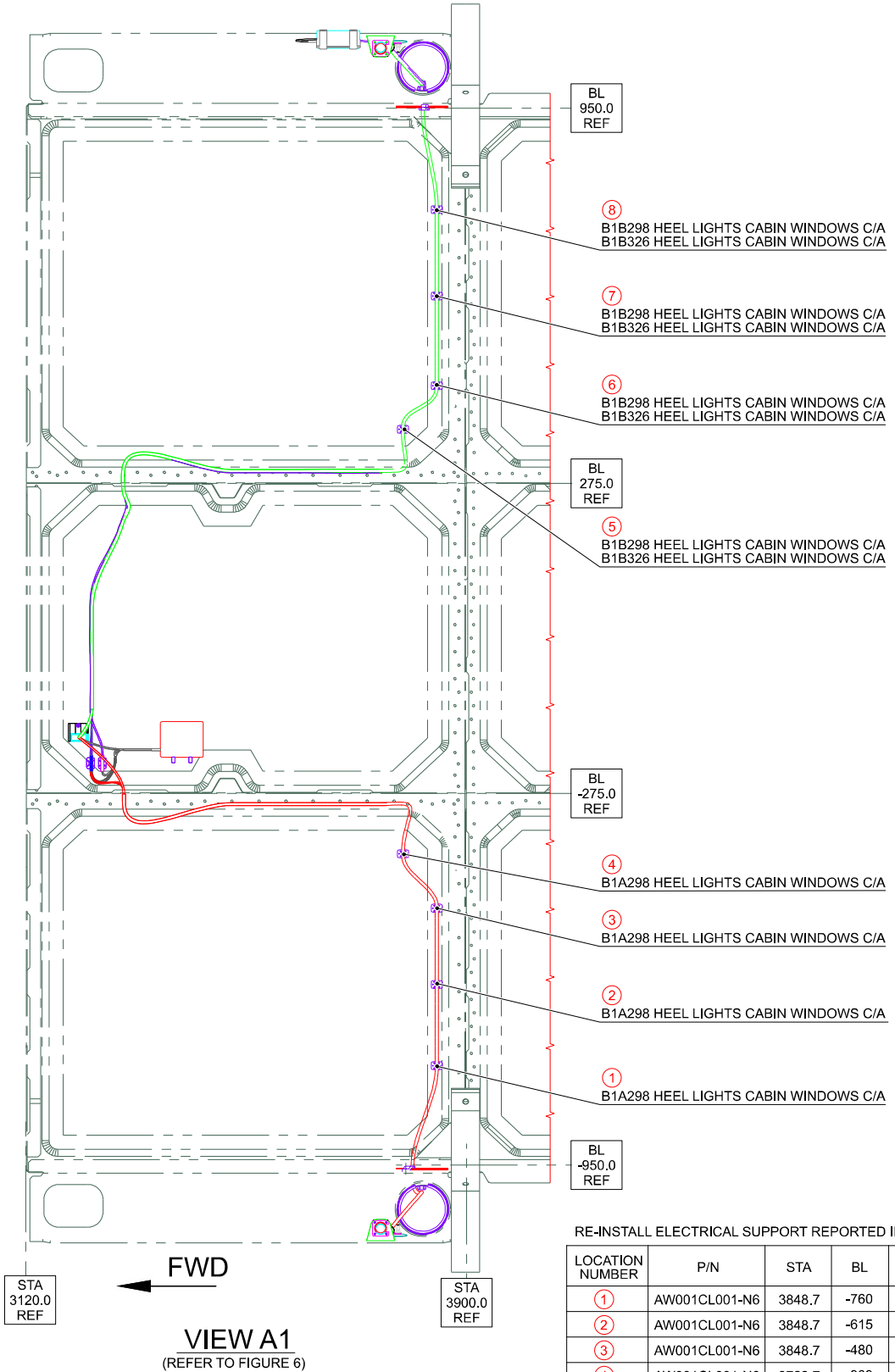
INSTALL ELECTRICAL SUPPORT REPORTED IN TABLE BELOW:

LOCATION NUMBER	P/N	STA	BL	WL	ORIENTATION
1	AW001CL000A-X3	3424	-930	2339	0°
2	AW001CL000A-X3	3748	-941	2301	45°
3	AW001CL000A-X3	3828	-939	2109	0°
4	AW001CL000A-X3	3824	-1017	1735	0°
5	AW001CL000A-X3	3779	-1051	1587	45°
6	AW001CL000A-X3	3751	-1020	1439	0°
7	AW001CL000A-X3	3591	-1019	1403	0°
8	AW001CL000A-X3	3428	-1023	1501	45°
9	AW001CL009-CM	3891	-907	2266	0°
20	AW001CL009-CM	3903	-907	2266	0°



DETAIL F

Figure 11



VIEW A1
(REFER TO FIGURE 6)

RE-INSTALL ELECTRICAL SUPPORT REPORTED IN TABLE BELOW:

LOCATION NUMBER	P/N	STA	BL	WL	ORIENTATION
1	AW001CL001-N6	3848.7	-760	833.5	0°
2	AW001CL001-N6	3848.7	-615	833.5	0°
3	AW001CL001-N6	3848.7	-480	833.5	0°
4	AW001CL001-N6	3788.7	-383	833.5	0°
5	AW001CL001-N6	3788.7	371	833.5	0°
6	AW001CL001-N6	3848.7	448	833.5	0°
7	AW001CL001-N6	3848.7	608	833.5	0°
8	AW001CL001-N6	3848.7	761	833.5	0°

Figure 12

3G3350W00911

WIRING DIAGRAM HEEL LIGHTS

SHEET 1

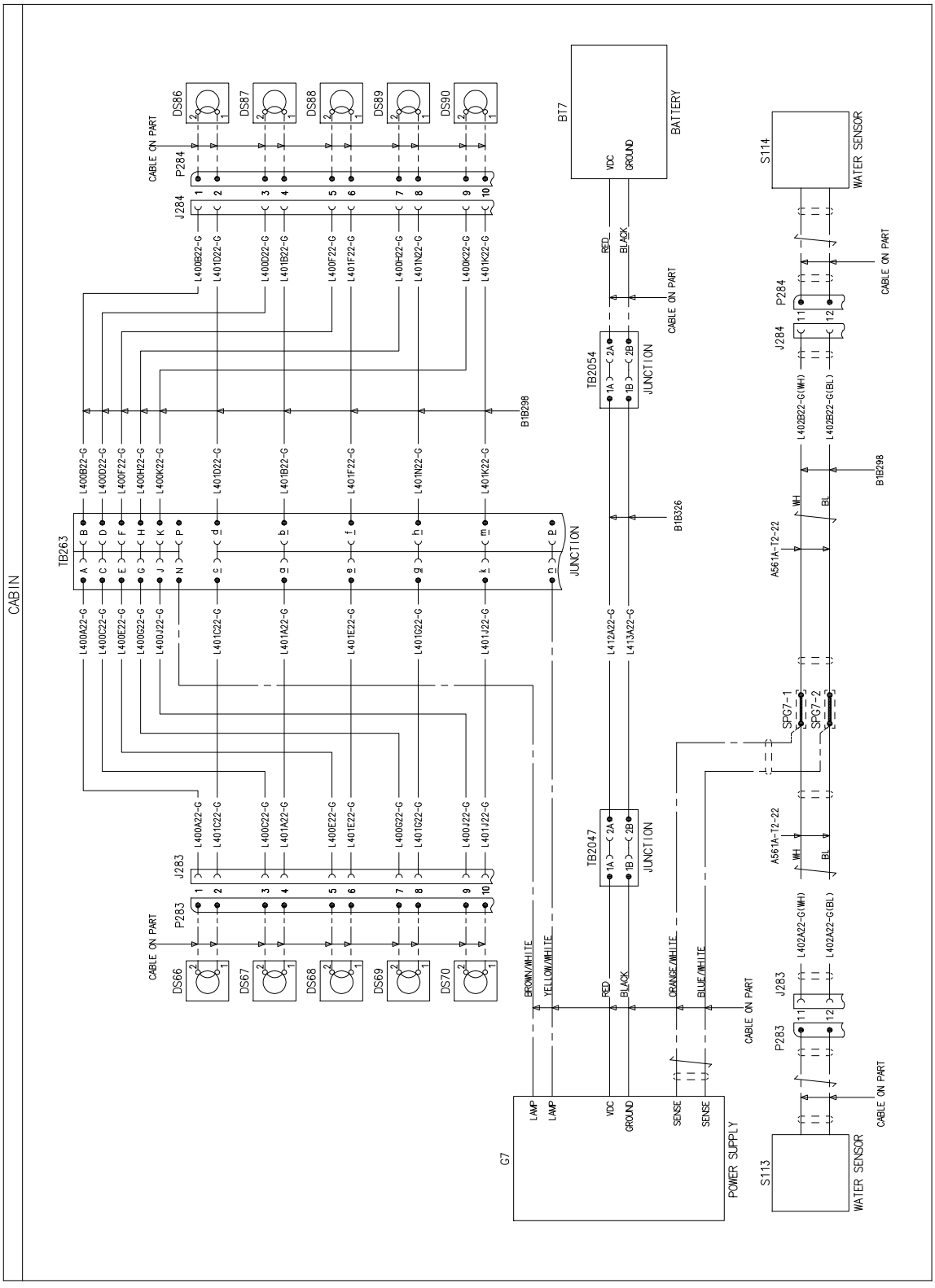


Figure 13

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.