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AgustaWestland Products

SERVICE BULLETIN

OPTIONAL

N° 139-481

DATE: May 24, 2017

REV. : A - May 28, 2024

TITLE

ATA 33 - INSTALLATION OF PULSE LIGHTS ON SPONSONS

REVISION LOG

The Revision A of this Service Bulletin cancels and supersedes the first issue.

Helicopters that have complied with the first issue of this Service Bulletin do not need any additional action.

Revision A of this Service Bulletin is issued to:

- update the Service Bulletin to the latest standard;
- introduce the accomplishment instructions and part list required to install the kit pulse lights P/N 4G3340F02711 on AW139 helicopters from S/N 31400 to S/N 31699 and from S/N 41300 to S/N 41499;
- introduce the accomplishment instructions and part list required to install the pulse light variant P/N 3G3340P02211.

Due to the large amount of modifications introduced in this new revision, revision bars are not shown.

1. PLANNING INFORMATION

A. EFFECTIVITY

Part I

All AW139 helicopters from S/N 31400 to S/N 31699 and from S/N 41300 to S/N 41499.

Part II

All AW139 helicopters from S/N 31700 onwards and from S/N 41500 onwards.

Part III

All AW139 helicopters from S/N 31400 to S/N 31699 and from S/N 41300 to S/N 41499, from S/N 31700 onwards and from S/N 41500 onwards that have already complied with Part I or Part II of this Service Bulletin or that are equipped with pulse lights complete provision P/N 3G3340A14811 or P/N 3G3340A14812.

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 kit pulse lights P/N 4G3340F02711 or kit pulse lights P/N 4G3340F02712.

LH issued this SB for the following reason:

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

E. DESCRIPTION

The pulse light system increases the visibility of the helicopter in flight and decreases the risk of birdstrikes.

The kit is composed by the following main items:

- two pulse lights installed in the front of the two sponsons;

- flash control unit installed under the floor of the right side of the cabin between STA 3900 and STA 4800;
- the relay K328 installed under the floor on the right side of the STA 4800 longheron.

A switch, installed on the auxiliary circuit breaker panel, allows the three operation positions:

- OFF: the system is inhibited;
- PULSE: the two pulse lights flash simultaneously;
- ACTIVE: the lights will flash simultaneously if the TCAS detects the presence of an aircraft.

Part I provides all necessary instructions on how to perform the installation of pulse lights complete provision P/N 3G3340A14811 of kit P/N 4G3340F02711.

Part II provides all necessary instructions on how to perform the installation of pulse lights complete provision P/N 3G3340A14812 of kit P/N 4G3340F02712.

Part III provides all necessary instructions on how to perform the installation of pulse lights equipment installations P/N 3G3340A15011 of both kits P/N 4G3340F02711 or P/N 4G3340F02712.

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 one hundred and fifty (150) MMH;

Part II: approximately two hundred and fifty (250) MMH;

Part III: approximately ten (20) MMH.

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

H. WEIGHT AND BALANCE

PART I

WEIGHT (Kg)		0,79
	ARM (mm)	**MOMENT (Kgmm)**
LONGITUDINAL BALANCE	4806	3797
LATERAL BALANCE	-143	-113

PART II

WEIGHT (Kg)		0,85
	ARM (mm)	**MOMENT (Kgmm)**
LONGITUDINAL BALANCE	4982	4235
LATERAL BALANCE	-286	-243

PART III

WEIGHT (Kg)		2,00
	ARM (mm)	**MOMENT (Kgmm)**
LONGITUDINAL BALANCE	5285	10570
LATERAL BALANCE	176	352

I. REFERENCES

I.1 PUBLICATIONS

Following Data Modules refer to AMP:

DATA MODULE		**DESCRIPTION**	**PART**
DM01	39-A-00-20-00-00A-120A-A	Helicopter on ground for a safe maintenance	All
DM02	39-A-06-41-00-00A-010A-A	Access doors and panels - General data.	All
DM03	39-A-11-00-01-00A-720A-A	Decal – Install procedure	All
DM04	39-A-20-10-01-00A-259A-A	Ground connections - Other procedures to protect surfaces	I, II
DM05	39-A-24-91-04-00A-920A-K	Integrally lighted panel - Replacement	III
DM06	39-A-33-67-00-00A-320A-K	Pulse Light System - Operation test	III
DM07	39-A-33-67-01-00A-720A-K	Left Pulse Light - Install Procedure	III

DATA MODULE		DESCRIPTION	PART
DM08	39-A-33-67-02-00A-720A-K	Right Pulse Light - Install Procedure	III
DM09	39-A-33-67-03-00A-720A-K	Control Unit - Install Procedure	III
DM10	39-A-52-44-01-00A-520A-A	Access panels - Remove procedure	I, II
DM11	39-A-52-44-01-00A-720A-A	Access panels - Install procedure	I, II

Following Data Modules refer to CSRP:

DATA MODULE		DESCRIPTION	PART
DM12	CSRP-A-51-42-00-00A-720A-D	Potted Inserts - Install procedure	I, II

I.2 ACRONYMS & ABBREVIATIONS

AMDI	Aircraft Material Data Information
AMP	Aircraft Maintenance Publication
AR	As Required
C/A	Cable Assy
CB	Circuit Breaker
CTRL	Control
DM	Data Module
DOA	Design Organization Approval
EASA	European Aviation Safety Agency
FH	Flight Hours
FWD	Forward
IPD	Illustrated Part Data
ITEP	Illustrated tool and equipment publication
LDG	Landing
LH	Left Hand
LHD	Leonardo Helicopters Division
LT	Light
MLG	Main Landing Gear
MMH	Maintenance Man Hours
N.A.	Not Applicable
PNL	Panel
P/N	Part Number
PWR	Power
RH	Right Hand

SB	Service Bulletin
S/N	Serial Number
TCAS	Traffic Alert and Collision Avoidance System

I.3 ANNEX

N.A.

J. PUBLICATIONS AFFECTED

N.A.

K. SOFTWARE ACCOMPLISHMENT SUMMARY

N.A.

2. MATERIAL INFORMATION

A. REQUIRED MATERIALS

A.1 PARTS

PART I

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
1	**4G3340F02711**		**KIT PULSE LIGHTS**	**REF**	**.**		**-**
2	**3G3340A14811**		**PULSE LIGHTS COMPLETE PROVISION**	**REF**	**..**		**-**
3	**3G3340A14911**		**PULSE LIGHTS ELECTRICAL PROVISION**	**REF**	**...**		**-**
4	3G9A01A55301		Pulse lights C/A (A1A553)	1	....		139-481L1
5	3G9A01B50801		Pulse lights C/A (A1B508)	1	....		139-481L1
6	3G9B01A83601		Pulse lights C/A (B1A836)	1	....		139-481L1
7	3G9B01B81001		Pulse lights C/A (B1B810)	1	....		139-481L1
8	3G9B11A08712		Cable assy LH LDG gear (B1A87)	1	....		139-481L1
9	3G9B11B09912		Cable assy RH LDG gear (B1B99)	1	....		139-481L1
10	3G9C01B30201		Pulse lights C/A (C1B302)	1	....	(3)	-
11	A647A01		Relay	1	....		139-481L1
12	A815A01A1		Support	1	....		139-481L1
13	AW001CL002C-X1		Support	1	....		139-481L1
14	ED300DS210J1		Decal	1	....		139-481L1
15	ED300DS211J1		Decal	1	....		139-481L1
16	ED300K328		Decal	1	....		139-481L1
17	M85049/138-41A		Cap	1	....		139-481L1
18	M85049/95-10A-A		Plate	2	....		139-481L1
19	NAS1149D0332J		Washer	2	....		139-481L1
20	NAS1149DN416J		Washer	8	....		139-481L1
21	NAS1802-04-6		Screw	8	....		139-481L1
22	NAS1802-3-7		Screw	2	....		139-481L1
23	**3G5310P09111**		**PULSE LIGHTS STRUCTURAL VARIANT**	**REF**	**...**	**(1)**	**-**
24	3G5311A38331		Support assy	1	....		-
25	MS20470AD4-7		Rivet	0.1 kg	....		-
26	**3G5311A07411**		**PULSE LIGHTS STRUCTURAL PROVISION**	**REF**	**...**		**-**
27	3G5311A08551		Pulse light bracket LH	1	....		139-481L1
28	3G5311A08651		Connector bracket	1	....		139-481L1
29	3G5311A08751		Pulse light bracket RH	1	....		139-481L1
30	3G5311A37451		Connector bracket RH	1	....		139-481L1
31	3G5339A00657	3G5339A00657A1	MLG FWD fairing RH	1	....		139-481L1
32	3G5339A00757	3G5339A00757A1	MLG FWD fairing LH	1	....		139-481L1
33	MS20426AD3-7		Rivet	0.1 kg	....		139-481L1
34	MS20470AD4-7		Rivet	0.1 kg	....		139-481L1
35	MS21069L3		Nut plate	4	....		139-481L1

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
36	NAS1832-3-3		Insert	4	....		139-481L1
37	**3G3340P00211**		**PULSE LIGHTS VARIANT**	**REF**	**..**	**(2)**	**-**
38	3G9C01B30301		Pulse lights variant C/A (C1B303)	1	...		-
39	**3G3340P02211**		**PULSE LIGHT VARIANT**	**REF**	**.**	**(9)**	**-**
40	**3G5310P33111**		**PULSE LIGHT CTRL UNIT VARIANT**	**REF**	**..**		**-**
41	MS20426AD3-4		Rivet	8	...		-
42	MS21075L3		Anchor nut	4	...		-

PART II

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
43	**4G3340F02712**		**KIT PULSE LIGHTS**	**REF**	**.**		**-**
44	**3G3340A14812**		**PULSE LIGHTS COMPLETE PROVISION**	**REF**	**..**		**-**
45	**3G3340A14912**		**PULSE LIGHTS ELECTRICAL PROVISION**	**REF**	**...**		**-**
46	3G9A01A55301		Pulse lights C/A (A1A553)	1	....		139-481L2
47	3G9A01B50801		Pulse lights C/A (A1B508)	1	....		139-481L2
48	3G9B01A83601		Pulse lights C/A (B1A836)	1	....		139-481L2
49	3G9B01B81001		Pulse lights C/A (B1B810)	1	....		139-481L2
50	3G9B11A08722		Cable assy LH LDG gear (B1A87)	1	....		139-481L2
51	3G9B11B09922		Cable assy RH LDG gear (B1B99)	1	....		139-481L2
52	3G9C01B30201		Pulse lights C/A (C1B302)	1	....	(3)	-
53	A647A01		Relay	1	....		139-481L2
54	A815A01A1		Support	1	....		139-481L2
55	AW001CL002C-X1		Support	1	....		139-481L2
56	ED300DS210J1		Decal	1	....		139-481L2
57	ED300DS211J1		Decal	1	....		139-481L2
58	ED300K328		Decal	1	....		139-481L2
59	M85049/138-41A		Cap	1	....		139-481L2
60	M85049/95-10A-A		Plate	2	....		139-481L2
61	NAS1149D0332J		Washer	2	....		139-481L2
62	NAS1149DN416J		Washer	8	....		139-481L2
63	NAS1802-04-6		Screw	8	....		139-481L2
64	NAS1802-3-7		Screw	2	....		139-481L2
65	**3G5260P00211**		**MLG FWD FAIRING VARIANT**	**REF**	**...**	**(4)**	**-**
66	3G5260A36632	3G5260A36632A1	Life raft fairing assy LH pulse light	1	....		-
67	3G5260A36731	3G5260A36731A1	Life raft fairing assy RH pulse light	1	....		-
68	**3G5311A07411**		**PULSE LIGHTS STRUCTURAL PROVISION**	**REF**	**...**		**-**
69	3G5311A08551		Pulse light bracket LH	1	....		139-481L2
70	3G5311A08651		Connector bracket LH	1	....		139-481L2
71	3G5311A08751		Pulse light bracket RH	1	....		139-481L2
72	3G5311A37451		Connector bracket RH	1	....		139-481L2
73	3G5339A00657	3G5339A00657A1	MLG FWD fairing	1	....	(5)	-

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
74	3G5339A00757	3G5339A00757A1	MLG FWD fairing	1	….	(5)	-
75	MS20426AD3-7		Rivet	0.1 kg	….		139-481L2
76	MS20470AD4-7		Rivet	0.1 kg	….		139-481L2
77	MS21069L3		Nut plate	4	….		139-481L2
78	NAS1832-3-3		Insert	4	….		139-481L2
79	**3G3340P00211**		**PULSE LIGHTS VARIANT**	**REF**	**..**	**(2)**	**-**
80	3G9C01B30301		Pulse lights variant C/A (C1B303)	1	…		-
81	**3G3340P02211**		**PULSE LIGHT VARIANT**	**REF**	**..**	**(10)**	**-**
82	**3G5310P33111**		**PULSELIGHT CTRL UNIT VARIANT**	**REF**	**…**		**-**
83	MS20426AD3-4		Rivet	8	….		-
84	MS21075L3		Anchor nut	4	….		-

PART III

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
85	**4G3340F02711 OR 4G3340F02712**		**KIT PULSE LIGHTS**	**REF**	**.**		**-**
86	**3G3340A15011**		**PULSE LIGHTS EQUIPMENT INSTALATION**	**REF**	**..**		**-**
87	025P0004-1		Pulselite CTRL unit	1	…		139-481L3
88	3G3340A15131		Pulse light assy (RH)	1	…		139-481L3
89	3G3340A18531		Pulse light assy (LH)	1	…		139-481L3
90	ED300A499		Decal	1	…		139-481L3
91	ED300DS210		Decal	1	…		139-481L3
92	ED300DS211		Decal	1	…		139-481L3
93	LN9025-0520L		Washer	8	…		139-481L3
94	LN9038K05018		Screw	8	…		139-481L3
95	NAS1149D0332J		Washer	4	…		139-481L3
96	NAS1802-3-6		Screw	4	…		139-481L3
97	3G2490LXXXXX		Aux CB Panel	1	.	(6)	-
98	MS3320-5		Breaker	1	.		139-481L3
99	MS3320-3		Breaker	1	.		139-481L3
100	ED300CB508		Decal	1	.		139-481L3
101	ED300CB509		Decal	1	.		139-481L3
102	MS24523-21		Switch	1	.		139-481L3
103	ED300S325		Decal	1	.		139-481L3
104	A556A-T16		Wire	2,5 m	.		139-481L3
105	A556A-T20		Wire	2,5 m	.		139-481L3
106	MS25036-153		Electrical contact	2	.		139-481L3
107	M39029/56-352		Electrical contact	2	.		139-481L3
108	M39029/56-351		Electrical contact	2	.		139-481L3
109	MS25036-101		Electrical contact	3	.		139-481L3
110	A523A-A02		Electrical contact	1	.		139-481L3

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

A.2 CONSUMABLES

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

#	SPEC./LHD CODE NUMBER	DESCRIPTION	Q.TY	NOTE	PART
111	MMM-A-132, Type II, Class 2 199-05-002 Type I, Class 2	Adhesive EA9309.3NA (C021)	AR	(7)	I, II
112	MMM-A-132, Type I, Class 3 199-05-002 Type II, Class 2	Adhesive EA934NA (C057)	AR	(7)	I, II
113	A236AXXX	Nonmetallic Channel	AR	(7) (8)	I, II
114	EN6049-006-XX-X or A582AXXX	Tubing braided	AR	(7) (8)	I, II
115	900004953 or AW001CK03LC	Lacing cord	AR	(7)	I, II
116	AW001CK01HS	Cable-tie	AR	(7)	I, II
117	A574A01-01	Insulation sleeving	AR	(7)	I, II
118	M23053/5-107-0	Insulation sleeving	AR	(7)	I, II

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

A.3 LOGISTIC MATRIX

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
139-481L1	1		I
3G5311A38331	1	(1)	
MS20470AD4-7	0.1 kg	(1)	
139-481L2	1		II
3G5260A36632A1 and 3G5260A36731A1	1	(4)	
3G5339A00657A1 and 3G5339A00757A1	1	(5)	
MS20426AD3-4	8	(10)	
MS21075L3	4	(10)	
3G9C01B30301	1	(2)	I, II
3G9C01B30201	1	(3)	
139-481L3	1		III
3G2490LXXXXX	1	(6)	

NOTES

(1) Applicable to helicopters equipped with kit hinged-sliding door foldable step P/N 3G5260F00219 or any other of its versions.

(2) Applicable to helicopters equipped with kit TCAS II P/N 4G3450F00211.

(3) Applicable to helicopters NOT equipped with kit TCAS II P/N 4G3450F00211.

(4) Applicable to helicopters equipped with kit flotation and life raft P/N 3G9560F00111 or kit life rafts P/N 4G2560F00811.

(5) Applicable to helicopters NOT equipped with kit flotation and life raft P/N 3G9560F00111 or kit life rafts P/N 4G2560F00811.

(6) The P/N is not properly completed because it is depending on the helicopter configuration. Customers must contact Product Support Engineering (engineering.support.lhd@leonardo.com) to request the new auxiliary CB panel at least three months in advance from the scheduled application of this Service Bulletin.

(7) Item to procured as local supply.

(8) Indicated P/N refer to a specific size. The last XXX digits can be different based on the actual required installation.

(9) Applicable only to helicopter S/N 31475.

(10) Applicable to helicopters equipped with foldable footstep installation for hinge door P/N 3G5260A00117.

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

c) Exercise extreme care during drilling operations to prevent instruments, cables and hoses damage.

d) 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.

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

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

g) Exposed thread surface and nut must be protected using a layer of tectyl according to MIL-C-16173 grade I.

h) All lengths are in mm.

PART I

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 4, gain access to the area affected by the modification and perform the pulse light structural provision P/N 3G5311A07411 as described in the following procedure:
   - 2.1 In accordance with AMP DM 39-A-52-44-01-00A-520A-A, remove the floor panels 142AR, 152AR, 140BL, 150AL, 151AL, 141AL.
   - 2.2 In accordance with AMP DM 39-A-52-44-01-00A-520A-A and with reference to Figure 1, remove the existing LH fairing (access panel 740AL).

2.3 In accordance with AMP DM 39-A-52-44-01-00A-520A-A and with reference to Figure 1, remove the existing RH fairing (access panel 750AR).

NOTE

The following steps 2.4 thru 2.7 are NOT applicable to helicopter S/N 31475.

NOTE

The following steps 2.4 thru 2.7 are NOT applicable to helicopters equipped with kit hinged-sliding door foldable step P/N 3G5260F00219.

2.4 With reference to Figure 2 View A-A and Section C-C, temporarily locate the Pulselite CTRL unit P/N 025P0004-1 and countermark n°4 insert holes.

2.5 With reference to Figure 2 View A-A and Section C-C, drill n°4 holes Ø 14.25÷14.33 in previously marked positions.

2.6 In accordance with CSRP DM CSRP-A-51-42-00-00A-720A-D and with reference to Figure 2 View A-A and Section C-C, install n°4 inserts P/N NAS1832-3-3 in the previous drilled holes by means of adhesive EA934NA (C057).

2.7 In accordance with AMP DM 39-A-20-10-01-00A-259A-A and with reference to Figure 2 View A-A, prepare the indicated surfaces on the passenger compartment subfloor to assure the correct electrical bonding.

2.8 With reference to Figure 4 View D, temporarily locate the relay support P/N A815A01A1 and countermark n°2 nut plate holes.

2.9 With reference to Figure 4 View D, drill n°2 holes Ø 5.15÷5.28 in previously marked positions.

2.10 With reference to Figure 4 View D, install n°2 nut plates P/N MS21069L3 by means of n°4 rivets P/N MS20426AD3-7.

2.11 In accordance with AMP DM 39-A-20-10-01-00A-259A-A and with reference to Figure 4 View D, prepare the indicated surfaces on the right frame assy STA4803 to assure the correct electrical bonding.

2.12 With reference to Figure 3 View E, remove existing nut plate from the indicated position.

2.13 With reference to Figure 3 View E, temporarily locate the connector bracket LH P/N 3G5311A08651 or the connector bracket RH P/N 3G5311A37451 and countermark the position of existing nut plate hole.

2.14 With reference to Figure 3 View E, drill the nut plate hole on the connector bracket LH P/N 3G5311A08651 or on the connector bracket RH P/N 3G5311A37451.

2.15 In accordance with AMP DM 39-A-20-10-01-00A-259A-A and with reference to Figure 3 and Figure 4 View F, prepare the indicated contact surfaces to assure the correct electrical bonding.

NOTE

If necessary, it is allowed to change the length of the rivets of one size.

NOTE

If necessary and only for S/N 31475, it is allowed to rework pulse light bracket LH P/N 3G5311A08551 or RH P/N 3G5311A08751 as strictly necessary to avoid interference with the surrounding installations.

2.16 With reference to Figure 3 and Figure 4 View F, install the pulse light bracket LH P/N 3G5311A08551 or the pulse light bracket RH P/N 3G5311A08751 by means of n°6 rivets P/N MS20470AD4-7.

2.17 With reference to Figure 3 View E, install the connector bracket LH P/N 3G5311A08651 or the connector bracket RH P/N 3G5311A37451 by means of n°2 rivets P/N MS20470AD4-7.

2.18 With reference to Figure 3 View E, install the nut plate P/N MS21069L3 through connector bracket and support by means of n°2 rivets P/N MS20426AD3.

2.19 Repeat steps 2.12 thru 2.18 for the other side of the helicopter.

NOTE

The following step 3 is applicable ONLY to helicopter S/N 31475.

3. In accordance with AMP DM 39-A-06-41-00-00A-010A-A and with reference to Figures 23 and 24, gain access to the area affected by the modification and perform the pulse light CTRL unit variant P/N 3G5310P33111 as described in the following procedure:

NOTE

If necessary, it is allowed to move the control unit provision position of 5 mm maximum towards the rear side.

3.1 With reference to Figure 24 View B-B, temporarily locate the pulselite CTRL unit P/N 025P0004-1 and countermark n°4 anchor nut holes.

3.2 With reference to Figure 24 View B-B, drill n°4 holes Ø 4.902÷5.029 in previously marked positions.

3.3 With reference to Figure 24 View B-B, install n°4 anchor nuts P/N MS21075L3 by means of n°8 rivets P/N MS20426AD3.

3.4 In accordance with AMP DM 39-A-20-10-01-00A-259A-A and with reference to Figure 24 View B-B, prepare the indicated surfaces on the passenger compartment subfloor to assure the correct electrical bonding.

NOTE

The following step 4 is applicable ONLY to helicopters equipped with kit hinged-sliding door foldable step P/N 3G5260F00219.

4. In accordance with AMP DM 39-A-06-41-00-00A-010A-A and with reference to Figures 5 and 6, gain access to the area affected by the modification and perform the pulse light structural variant P/N 3G5310P09111 as described in the following procedure:

4.1 In accordance with AMP DM 39-A-20-10-01-00A-259A-A and with reference to Figure 6 Detail B, prepare the indicated surfaces to assure the correct electrical bonding.

4.2 With reference to Figure 6 View A-A, install the support assy P/N 3G5311A38331 by means of n°8 rivets P/N MS20470AD4-7.

5. In accordance with AMP DM 39-A-06-41-00-00A-010A-A and with reference to Figures 7 thru 12, gain access to the area affected by the modification and perform the pulse light electrical provision P/N 3G3340A14911 as described in the following procedure:

5.1 With reference to Figure 10 Detail A, install the retainer P/N M85049/95-10A-A by means of n°4 screws P/N NAS1802-04-6 and n°4 washers P/N NAS1149DN416J.

5.2 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 10 Detail A, install the decal P/N ED300DS211J1 in an area adjacent to previously installed retainer.

5.3 With reference to Figure 12 Detail D, install the retainer P/N M85049/95-10A-A by means of n°4 screws P/N NAS1802-04-6 and n°4 washers P/N NAS1149DN416J.

5.4 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 12 Detail D, install the decal P/N ED300DS210J1 in an area adjacent to previously installed retainer.

5.5 With reference to Figure 11, at position n°1, install the support P/N AW001CL002C-X1 by means of adhesive EA9309.3NA (C021.

5.6 With reference to Figure 11, install the relay support P/N A815A01A1 by means of n°2 screws P/N NAS1802-3-7 and n°2 washers P/N NAS1149D0332J.

5.7 With reference to Figure 11, install the relay (K328) P/N A647A01.

5.8 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 11, install the decal P/N ED300K328 in an area adjacent to previously installed relay.

5.9 With reference to Figure 10, remove the existing cable assy LH LDG gear P/N 3G9B11A08711 (B1A87).

5.10 With reference to Figure 11, remove the existing cable assy RH LDG gear P/N 3G9B11B09911 (B1B99).

NOTE

Use edging P/N A236A on metallic edges which can damage cable assemblies and where abrasion may occur.

Use braided tubing P/N A582A where cable assemblies chafing or contact with structure may occur. Secure the cables by means of previously installed fixing hardware and existing hardware. If necessary replace existing clamps with suitable clamps.

5.11 With reference to Figures 7 thru 12 lay down the following cable assemblies following the existing route unless otherwise indicated on the figures:

- P/N 3G9A01A55301 pulse lights C/A (A1A553);
- P/N 3G9A01B50801 pulse lights C/A (A1B508);
- P/N 3G9B01A83601 pulse lights C/A (B1A836);
- P/N 3G9B01B81001 pulse lights C/A (B1B810);
- P/N 3G9B11A08712 cable assy LH LDG gear (B1A87);
- P/N 3G9B11B09912 cable assy RH LDG gear (B1B99);

NOTE

P/N 3G9C01B30201 is NOT applicable to helicopters equipped with kit TCAS II P/N 4G3450F00211.

- P/N 3G9C01B30201 pulse lights C/A (C1B302);

NOTE

P/N 3G9C01B30301 is applicable to helicopters equipped with kit TCAS II P/N 4G3450F00211 (Ref. Figure 13).

- P/N 3G9C01B30301 pulse lights variant C/A (C1B303).

NOTE

If necessary, it is allowed to move the following electrical connections as reported:

- L2990C16-G form pin Y to pin R;
- L2991B22-G form pin F to pin Z;
- L2995A22-G form pin U to pin D;
- L2996A22-G form pin g to pin C;
- L2998B22N-G from pin F to Pin L.

5.12 With reference to Figures 8, 10 thru 12 and Figures 27 thru 29 wiring diagrams, perform electrical connections of cable assy B1B810 between sectioning connectors J106, J204, J2260, P249, relay socket K328P1, LT CTRL UNIT connector A499P1, circuit breaker panel connectors PL1P6 and PL1P8, splices SP20713, SP20714, SP20715 and SP20803, terminal boards TB250 and TB252.

5.13 With reference to Figure 8 and Figure 27 wiring diagram, perform electrical connections of cable assy A1B508 between LT CTRL PNL connectors PL2P1 and PL2P2 and sectioning connector P106.

5.14 With reference to Figure 10 and Figures 28 and 29 wiring diagrams, perform electrical connections of cable assy B1A836 between sectioning connectors J2259, J249, J135 and terminal board TB261.

5.15 With reference to Figure 10 and Figure 28 wiring diagram, perform electrical connections of cable assy B1A87 between sectioning connectors P2259 and DS211J1.

5.16 With reference to Figure 11 and Figure 28 wiring diagram, perform electrical connections of cable assy B1B99 between sectioning connectors P2260 and DS210J1.

NOTE

No connection to ground stud is required for the cable assy A1A553.

5.17 With reference to Figures 9, 10 and Figure 29 wiring diagram, perform electrical connections of cable assy A1A553 between terminal board TB143-2 and sectioning connector P135.

NOTE

The following step 5.18 is applicable to helicopters NOT equipped with kit TCAS II P/N 4G3450F00211.

5.18 With reference to Figure 12 and with reference to Figure 29 wiring diagram, perform electrical connections of cable assy C1B302 between sectioning connector P204 and TCAS I processor connector A99P10.

NOTE

The following step 5.19 is applicable to helicopters equipped with kit TCAS II P/N 4G3450F00211.

5.19 With reference to Figure 13 and with reference to Figure 30 wiring diagram, perform electrical connections of cable assy C1B303 between sectioning connector P204 and TCAS II processor connector A440P1E.

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

NOTE

Perform the following step 5.21 only if Part III of this Service Bulletin will not be embodied immediately after Part I.

5.21 With reference to Figure 11 Detail B, protect and stow the connector A499P1 as described in the following procedure:

5.21.1 Apply the plug protective P/N M85049/138-41A on the connector.

5.21.2 Cover with nomex P/N A582A32 and use cable straps to firmly tie down sleeve on the connector cablings.

5.21.3 Fasten the connector assemblies with cable straps.

6. In accordance with AMP DM 39-A-52-44-01-00A-720A-A and with reference to Figure 1, install the MLG FWD fairing LH P/N 3G5339A00757 (access panel 740AL) and the MLG FWD fairing RH P/N 3G5339A00657 (access panel 750AR).
7. In accordance with AMP DM 39-A-06-41-00-00A-010A-A, re-install all external panels and internal panels previously removed.
8. In accordance with weight and balance changes, update the Chart A (see Rotorcraft Flight Manual, Part II, section 6).
9. Return the helicopter to flight configuration and record for compliance with Part I of this Service Bulletin on the helicopter logbook.
10. Gain access to My Communications section on Leonardo WebPortal and compile the “Service Bulletin Application Communication”.

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

    engineering.support.lhd@leonardo.com

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

    AWPC.Engineering.Support@leonardocompany.us

PART II

1. In accordance with AMP DM 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 4, gain access to the area affected by the modification and perform the pulse light structural provision P/N 3G5311A07411 as described in the following procedure:
   - 2.1 In accordance with AMP DM 39-A-52-44-01-00A-520A-A, remove the floor panels 142AR, 152AR, 140BL, 150AL, 151AL, 141AL.
   - 2.2 In accordance with AMP DM 39-A-52-44-01-00A-520A-A and with aircraft configurations and with reference to Figure 1 or Figure 19, remove the existing LH fairing (access panel 740AL).
   - 2.3 In accordance with AMP DM 39-A-52-44-01-00A-520A-A and with aircraft configurations and with reference to Figure 1 or Figure 19, remove the existing RH fairing (access panel 750AR).

NOTE

The following steps 2.4 thru 2.7 are NOT applicable to helicopters equipped with foldable footstep installation for hinge door P/N 3G5260A00117.

   - 2.4 With reference to Figure 2 View A-A and Section C-C, temporarily locate the Pulselite CTRL unit P/N 025P0004-1 and countermark n°4 insert holes.
   - 2.5 With reference to Figure 2 View A-A and Section C-C, drill n°4 holes Ø 14.25÷14.33 in previously marked positions.
   - 2.6 In accordance with CSRP DM CSRP-A-51-42-00-00A-720A-D and with reference to Figure 2 View A-A and Section C-C, install n°4 inserts P/N NAS1832-3-3 in the previous drilled holes by means of adhesive EA934NA (C057).
   - 2.7 In accordance with AMP DM 39-A-20-10-01-00A-259A-A and with reference to Figure 2 View A-A, prepare the indicated surfaces on the passenger compartment subfloor to assure the correct electrical bonding.
   - 2.8 With reference to Figure 4 View D, temporarily locate the relay support P/N A815A01A1 and countermark n°2 nut plate holes.
   - 2.9 With reference to Figure 4 View D, drill n°2 holes Ø 5.15÷5.28 in previously marked positions.
   - 2.10 With reference to Figure 4 View D, install n°2 nut plates P/N MS21069L3 by means of n°4 rivets P/N MS20426AD3-7.

2.11 In accordance with AMP DM 39-A-20-10-01-00A-259A-A and with reference to Figure 4 View D, prepare the indicated surfaces on the right frame assy STA4803 to assure the correct electrical bonding.

2.12 With reference to Figure 3 View E, remove existing nut plate from the indicated position.

2.13 With reference to Figure 3 View E, temporarily locate the connector bracket LH P/N 3G5311A08651 or the connector bracket RH P/N 3G5311A37451 and countermark the position of existing nut plate hole.

2.14 With reference to Figure 3 View E, drill the nut plate hole on the connector bracket LH P/N 3G5311A08651 or on the connector bracket RH P/N 3G5311A37451.

2.15 In accordance with AMP DM 39-A-20-10-01-00A-259A-A and with reference to Figure 3 and Figure 4 View F, prepare the indicated contact surfaces to assure the correct electrical bonding.

NOTE

If necessary, it is allowed to change the length of the rivets of one size.

NOTE

If necessary and only for S/N 31875, it is allowed to rework pulse light bracket LH P/N 3G5311A08551 or RH P/N 3G5311A08751 as strictly necessary to avoid interference with the surrounding installations.

2.16 With reference to Figure 3 and Figure 4 View F, install the pulse light bracket LH P/N 3G5311A08551 or the pulse light bracket RH P/N 3G5311A08751 by means of n°6 rivets P/N MS20470AD4-7.

2.17 With reference to Figure 3 View E, install the connector bracket LH P/N 3G5311A08651 or the connector bracket RH P/N 3G5311A37451 by means of n°2 rivets P/N MS20470AD4-7.

2.18 With reference to Figure 3 View E, install the nut plate P/N MS21069L3 through connector bracket and support by means of n°2 rivets P/N MS20426AD3.

2.19 Repeat steps 2.12 thru 2.18 for the other side of the helicopter.

NOTE

The following step 3 is applicable ONLY to helicopters equipped with foldable footstep installation for hinge door P/N 3G5260A00117.

3. In accordance with AMP DM 39-A-06-41-00-00A-010A-A and with reference to Figures 23 and 24, gain access to the area affected by the modification and perform the pulse light CTRL unit variant P/N 3G5310P33111 as described in the following procedure:

NOTE

If necessary, it is allowed to move the control unit provision position of 5 mm maximum towards the rear side.

3.1 With reference to Figure 24 View B-B, temporarily locate the pulselite CTRL unit P/N 025P0004-1 and countermark n°4 anchor nut holes.

3.2 With reference to Figure 24 View B-B, drill n°4 holes Ø 4.902÷5.029 in previously marked positions.

3.3 With reference to Figure 24 View B-B, install n°4 anchor nuts P/N MS21075L3 by means of n°8 rivets P/N MS20426AD3.

3.4 In accordance with AMP DM 39-A-20-10-01-00A-259A-A and with reference to Figure 24 View B-B, prepare the indicated surfaces on the passenger compartment subfloor to assure the correct electrical bonding.

4. In accordance with AMP DM 39-A-06-41-00-00A-010A-A and with reference to Figures 14 thru 18, gain access to the area affected by the modification and perform the pulse light electrical provision P/N 3G3340A14912 as described in the following procedure:

4.1 With reference to Figure 16 Detail B, install the retainer P/N M85049/95-10A-A by means of n°4 screws P/N NAS1802-04-6 and n°4 washers P/N NAS1149DN416J.

4.2 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 16 Detail B, install the decal P/N ED300DS211J1 in an area adjacent to previously installed retainer.

4.3 With reference to Figure 17 Detail D, install the retainer P/N M85049/95-10A-A by means of n°4 screws P/N NAS1802-04-6 and n°4 washers P/N NAS1149DN416J.

4.4 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 17 Detail D, install the decal P/N ED300DS210J1 in an area adjacent to previously installed retainer.

4.5 With reference to Figure 17, at position n°1, install the support P/N AW001CL002C-X1 by means of adhesive EA9309.3NA (C021.

4.6 With reference to Figure 17, install the relay support P/N A815A01A1 by means of n°2 screws P/N NAS1802-3-7 and n°2 washers P/N NAS1149D0332J.

4.7 With reference to Figure 17, install the relay (K328) P/N A647A01.

4.8 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 17, install the decal P/N ED300K328 in an area adjacent to previously installed relay.

4.9 With reference to Figure 16, remove the existing cable assy LH LDG gear P/N 3G9B11A08721 (B1A87).

4.10 With reference to Figure 17, remove the existing cable assy RH LDG gear P/N 3G9B11B09921 (B1B99).

NOTE

Use edging P/N A236A on metallic edges which can damage cable assemblies and where abrasion may occur.

Use braided tubing P/N A582A where cable assemblies chafing or contact with structure may occur. Secure the cables by means of previously installed fixing hardware and existing hardware. If necessary replace existing clamps with suitable clamps.

4.11 With reference to Figures 13 thru 18 lay down the following cable assemblies following the existing route unless otherwise indicated on the figures:

- P/N 3G9A01A55301 pulse lights C/A (A1A553);
- P/N 3G9A01B50801 pulse lights C/A (A1B508);
- P/N 3G9B01A83601 pulse lights C/A (B1A836);
- P/N 3G9B01B81001 pulse lights C/A (B1B810);
- P/N 3G9B11A08722 cable assy LH LDG gear (B1A87);
- P/N 3G9B11B09922 cable assy RH LDG gear (B1B99);

NOTE

P/N 3G9C01B30201 is NOT applicable to helicopters equipped with kit TCAS II P/N 4G3450F00211.

- P/N 3G9C01B30201 pulse lights C/A (C1B302);

NOTE

P/N 3G9C01B30301 is applicable to helicopters equipped with kit TCAS II P/N 4G3450F00211 (Ref. Figure 13).

- P/N 3G9C01B30301 pulse lights variant C/A (C1B303).

NOTE

If necessary, it is allowed to move the following electrical connections as reported:

- L2990C16-G form pin Y to pin R;
- L2991B22-G form pin F to pin Z;
- L2995A22-G form pin U to pin D;
- L2996A22-G form pin g to pin C;
- L2998B22N-G from pin F to Pin L.

4.12 With reference to Figures 15 thru 18 and Figures 27 thru 29 wiring diagrams, perform electrical connections of cable assy B1B810 between sectioning connectors J106, J204, J2260, P249, relay socket K328P1, LT CTRL UNIT connector A499P1, circuit breaker panel connectors PL1P6 and PL1P8, splices SP20713, SP20714, SP20715 and SP20803, terminal boards TB250 and TB252.

4.13 With reference to Figure 15 and Figure 27 wiring diagram, perform electrical connections of cable assy A1B508 between LT CTRL PNL connectors PL2P1 and PL2P2 and sectioning connector P106.

4.14 With reference to Figures 15, 16 and Figures 28 and 29 wiring diagrams, perform electrical connections of cable assy B1A836 between sectioning connectors J2259, J249, J135 and terminal board TB261.

4.15 With reference to Figure 16 and Figure 28 wiring diagram, perform electrical connections of cable assy B1A87 between sectioning connectors P2259 and DS211J1.

4.16 With reference to Figure 17 and Figure 28 wiring diagram, perform electrical connections of cable assy B1B99 between sectioning connectors P2260 and DS210J1.

4.17 With reference to Figure 15 and Figure 29 wiring diagram, perform electrical connections of cable assy A1A553 between terminal board TB143-2 and sectioning connector P135.

NOTE

Following step 4.18 is applicable to helicopters NOT equipped with kit TCAS II P/N 4G3450F00211.

4.18 With reference to Figure 18 and with reference to Figure 29 wiring diagram, perform electrical connections of cable assy C1B302 between sectioning connector P204 and TCAS I processor connector A99P10.

NOTE

Following step 4.19 is applicable to helicopters equipped with kit TCAS II P/N 4G3450F00211.

4.19 With reference to Figure 13 and with reference to Figure 30 wiring diagram, perform electrical connections of cable assy C1B303 between sectioning connector P204 and TCAS II processor connector A440P1E.

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

NOTE

Perform the following step 4.21 only if Part III of this Service Bulletin will not been embodied immediately after Part II.

4.21 With reference to Figure 17 Detail C, protect and stow the connector A499P1 as described in the following procedure:

4.21.1 Apply the plug protective P/N M85049/138-41A on the connector.

4.21.2 Cover with nomex P/N A582A32 and use cable straps to firmly tie down sleeve on the connector cablings.

4.21.3 Fasten the connector assemblies with cable straps.

NOTE

Following step 5 is applicable to helicopters NOT equipped with kit flotation and life raft P/N 3G9560F00111 or kit life rafts P/N 4G2560F00811.

5. In accordance with AMP DM 39-A-52-44-01-00A-720A-A and with reference to Figure 1, install the MLG FWD fairing LH P/N 3G5339A00757 (access panel 740AL) and the MLG FWD fairing RH P/N 3G5339A00657 (access panel 750AR).

NOTE

Following step 6 is applicable to helicopters equipped with kit flotation and life raft P/N 3G9560F00111 or kit life rafts P/N 4G2560F00811.

6. In accordance with AMP DM 39-A-52-44-01-00A-720A-A and with reference to Figure 19, install the life raft fairing assy LH pulse light P/N 3G5260A36632 (access panel 740AL) and the life raft fairing assy RH pulse light P/N 3G5260A36731 (access panel 750AR).
7. In accordance with AMP DM 39-A-06-41-00-00A-010A-A, re-install all external panels and internal panels previously removed.
8. In accordance with weight and balance changes, update the Chart A (see Rotorcraft Flight Manual, Part II, section 6).
9. Return the helicopter to flight configuration and record for compliance with Part II of this Service Bulletin on the helicopter logbook.
10. Gain access to My Communications section on Leonardo WebPortal and compile the “Service Bulletin Application Communication”.

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

    engineering.support.lhd@leonardo.com

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

    AWPC.Engineering.Support@leonardocompany.us

PART III

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, remove the access panel 740AL, the access panel 750AR and the access panel 142AR.
3. In accordance with AMP DM 39-A-33-67-01-00A-720A-K and with reference to Figure 21, install the LH pulse light P/N 3G3340A18531 by means of n°4 bolts P/N LN9038K05018 and n°4 washers P/N LN9025-0520L.
4. In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 21, install the decal P/N ED300DS211 in an area adjacent to previously installed LH pulse light.
5. In accordance with AMP DM 39-A-33-67-02-00A-720A-K and with reference to Figure 21, install the RH pulse light P/N 3G3340A15131 by means of n°4 bolts P/N LN9038K05018 and n°4 washers P/N LN9025-0520L.
6. In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 21, install the decal P/N ED300DS210 in an area adjacent to previously installed RH pulse light.

NOTE

The following steps 7 thru 9 are NOT applicable to:

- helicopter S/N 31475;
- helicopters equipped with foldable footstep installation for hinge door P/N 3G5260A00117;
- helicopters equipped with kit hinged-sliding door foldable step P/N 3G5260F00219.

NOTE

Following step 7 must be performed only if the connector A499P1 is in the stowage position.

7. With reference to Figure 22 Detail B, untie the connector A499P1 from the stowage and remove the protective sleeves and plugs.
8. In accordance with AMP DM 39-A-33-67-03-00A-720A-K and with reference to Figure 22, install the control unit P/N 025P0004-1 by means of n°4 screws P/N NAS1802-3-6 and n°4 washers P/N NAS1149D0332J.
9. In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 22, install the decal P/N ED300A499 in an area adjacent to previously installed control unit.

NOTE

The following step 10 is applicable ONLY to helicopter S/N 31475 and to helicopters equipped with foldable footstep installation for hinge door P/N 3G5260A00117.

10. With reference to Figure 25, perform the pulse electrical variant P/N 3G3340P02311 as described in the following procedure:

NOTE

Following step 10.1 must be performed only if the connector A499P1 is in the stowage position.

10.1 With reference to Figure 25, untie the connector A499P1 from the stowage and remove the protective sleeves and plugs.

NOTE

- If the cable routing interferes with the control unit installation, it is allowed to reposition cable assemblies supports.
- If the life raft release cable assy interferes with the control unit installation, it is allowed to replace the anchor nut with a stud.

10.2 In accordance with AMP DM 39-A-33-67-03-00A-720A-K and with reference to Figure 25, install the control unit P/N 025P0004-1 by means of n°4 screws P/N NAS1802-3-6 and n°4 washers P/N NAS1149D0332J.

10.3 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 25, install the decal P/N ED300A499 in an area adjacent to previously installed control unit.

NOTE

The following step 11 is applicable ONLY to helicopters equipped with kit hinged-sliding door foldable step P/N 3G5260F00219.

11. With reference to Figure 26, perform the installation of the pulselite control unit P/N 025P0004-1 as described in the following procedure:

NOTE

Following step 11.1 must be performed only if the connector A499P1 is in the stowage position.

11.1 With reference to Figure 26, untie the connector A499P1 from the stowage and remove the protective sleeves and plugs.

11.2 In accordance with AMP DM 39-A-33-67-03-00A-720A-K and with reference to Figure 26, install the control unit P/N 025P0004-1 by means of n°4 screws P/N NAS1802-3-6 and n°4 washers P/N NAS1149D0332J on the support assy P/N 3G5311A38331.

11.3 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 26, install the decal P/N ED300A499 in an area adjacent to previously installed control unit.

12. Modify the overhead Auxiliary C/B panel as described in the following procedure:

NOTE

Customer must contact Product Support Engineering (engineering.support.lhd@leonardo.com) to request the exact W/D applicable to the helicopter configuration and the new C/B panel at least three months in advance from the scheduled application of this Service Bulletin.

12.1 With reference to AMP DM 39-A-24-91-04-00A-920A-K, remove from the Overhead C/B panel the existing Integrally-lit panel and install the new integrally-lit panel P/N 3G2490LXXXXX.

12.2 Install one circuit breaker P/N MS3320-5 in the position indicated as PULSE LT PWR on the new integrally-lit panel P/N 3G2490LXXXXX.

12.3 In accordance with AMP DM 39-A-11-00-01-00A-720A-A, install the decal P/N ED300CB508 in an area adjacent to previously installed circuit breaker.

12.4 Install one circuit breaker P/N MS3320-3 in the position indicated as PULSE LT CONTR on the new integrally-lit panel P/N 3G2490LXXXXX.

12.5 In accordance with AMP DM 39-A-11-00-01-00A-720A-A, install the decal P/N ED300CB509 in an area adjacent to previously installed circuit breaker.

12.6 Install switch P/N MS24523-21 in the position indicated as PULSE LTS ACTIVE on the new integrally-lit panel P/N 3G2490LXXXXX.

12.7 In accordance with AMP DM 39-A-11-00-01-00A-720A-A, install the decal P/N ED300S325 in an area adjacent to previously installed switch.

12.8 Perform electrical connection between circuit breaker CB509 pin 2 and connector of overhead circuit breaker panel PL1J8 pin Y using A556A-T16 wire. Use electrical contact P/N MS25036-153 for pin 2 of CB509 and electrical contact P/N M39029/56-352 for pin Y of PL1J8. CB509 has to be connected to a 28VDC MAIN BUS 1 W21, the most convenient one depending on helicopter configuration.

12.9 Perform electrical connection between circuit breaker CB508 pin 2 and connector of overhead circuit breaker panel PL1J8 pin F using A556A-T16 wire. Use electrical contact P/N MS25036-153 for pin 2 of CB508 and electrical contact P/N M39029/56-352 for pin F of PL1J8. CB508 has to be connected to a 28VDC MAIN BUS 1 W21, the most convenient one depending on helicopter configuration.

NOTE

If necessary, it is allowed to invert the connections:

- PL1J6 pin U connects to S235 pin 3;
- PL1J6 pin g connects to S235 pin 1.

12.10 Perform electrical connection between switch S325 pin 1 and 3 and connector of overhead circuit breaker panel PL1J6 pin U and pin g using A556A-T20 wire. Use electrical contacts P/N M39029/56-351 for pin U and pin g of PL1J6; use electrical contacts P/N MS25036-101 for pin 1 e 3 of switch S325.

12.11 Perform electrical connection between switch S325 pin 2 and a local ground TB using A556A-T20 wire. Use electrical contact P/N MS25036-101 for pin 2 of switch S325 and electrical contact P/N A523A-A02 for pin of TB.

13. In accordance with AMP DM 39-A-33-67-00-00A-320A-K, perform the operational test of the system.
14. In accordance with AMP DM 39-A-06-41-00-00A-010A-A, install the access panel 740AL, the access panel 750AR and the access panel 142AR.
15. In accordance with weight and balance changes, update the Chart A (see Rotorcraft Flight Manual, Part II, section 6).
16. Return the helicopter to flight configuration and record for compliance with Part III of this Service Bulletin on the helicopter logbook.
17. Gain access to My Communications section on Leonardo WebPortal and compile the “Service Bulletin Application Communication”.

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

    engineering.support.lhd@leonardo.com

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

    AWPC.Engineering.Support@leonardocompany.us

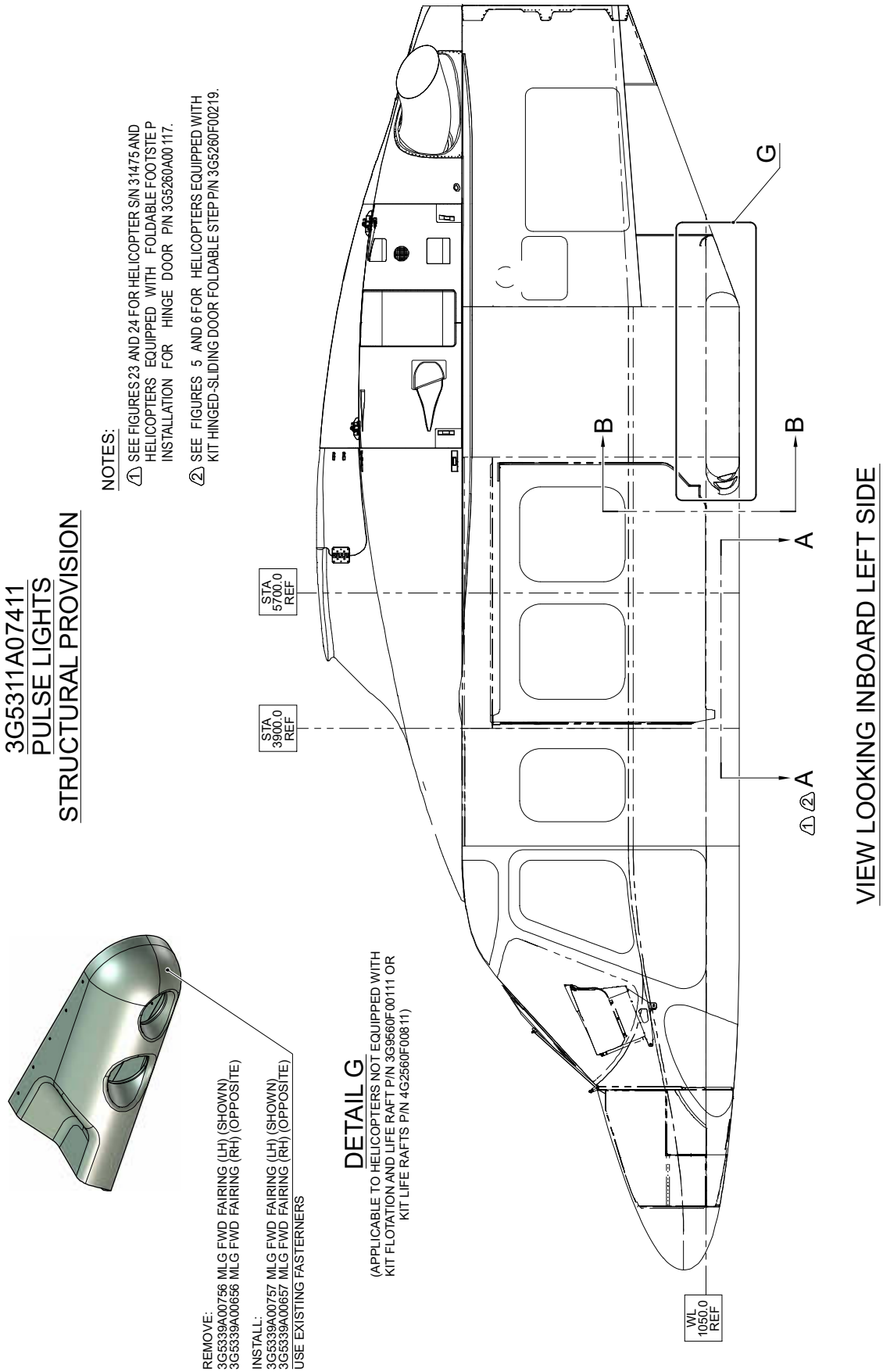

3G5311A07411
PULSE LIGHTS
STRUCTURAL PROVISION
NOTES:
1 SEE FIGURES 23 AND 24 FOR HELICOPTER S/N 31475 AND HELICOPTERS EQUIPPED WITH FOLDABLE FOOTSTEP INSTALLATION FOR HINGE DOOR P/N 3G5260A00117.
2 SEE FIGURES 5 AND 6 FOR HELICOPTERS EQUIPPED WITH KIT HINGED-SLIDING DOOR FOLDABLE STEP P/N 3G5260F00219.
STA 5700.0 REF
STA 3900.0 REF
WL 1050.0 REF
G
B
B
A
1 2 A
VIEW LOOKING INBOARD LEFT SIDE
DETAIL G
(APPLICABLE TO HELICOPTERS NOT EQUIPPED WITH KIT FLOTATION AND LIFE RAFT P/N 3G9560F00111 OR KIT LIFE RAFTS P/N 4G2560F00811)
REMOVE:
3G5339A00756 MLG FWD FAIRING (LH) (SHOWN)
3G5339A00656 MLG FWD FAIRING (RH) (OPPOSITE)
INSTALL:
3G5339A00757 MLG FWD FAIRING (LH) (SHOWN)
3G5339A00657 MLG FWD FAIRING (RH) (OPPOSITE)
USE EXISTING FASTENERS

Figure 1

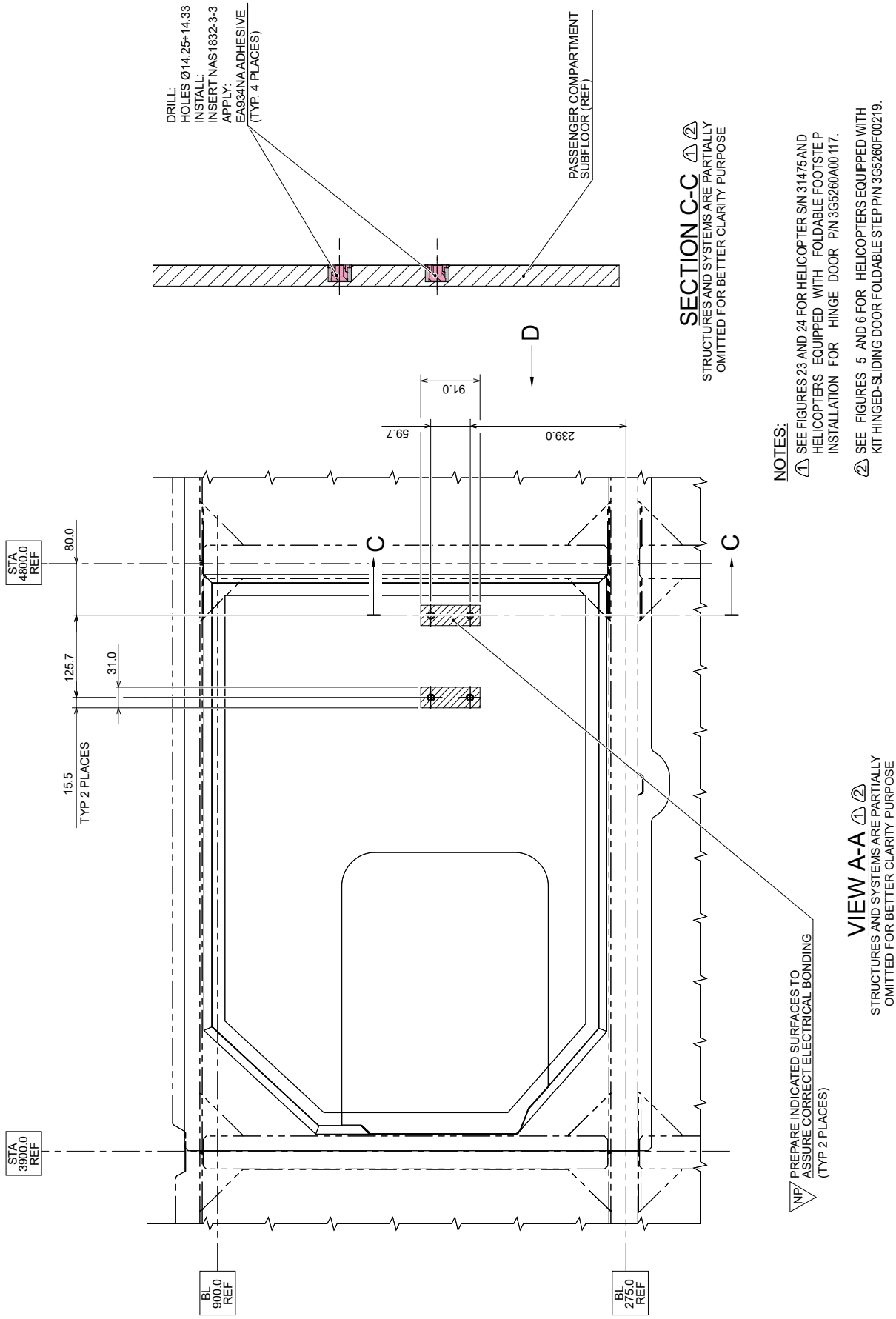

DRILL:
HOLES Ø14.25÷14.33
INSTALL:
INSERT NAS1832-3-3
APPLY:
EA934NA ADHESIVE
(TYP. 4 PLACES)
PASSENGER COMPARTMENT
SUBFLOOR (REF)
SECTION C-C ① ②
STRUCTURES AND SYSTEMS ARE PARTIALLY
OMITTED FOR BETTER CLARITY PURPOSE
NOTES:
① SEE FIGURES 23 AND 24 FOR HELICOPTER S/N 31475 AND
HELICOPTERS EQUIPPED WITH FOLDABLE FOOTSTE P
INSTALLATION FOR HINGE DOOR P/N 3G5260A00117.
② SEE FIGURES 5 AND 6 FOR HELICOPTERS EQUIPPED WITH
KIT HINGED-SLIDING DOOR FOLDABLE STEP P/N 3G5260F00219.
D
91.0
59.7
239.0
C
C
STA
4800.0
REF
80.0
125.7
31.0
15.5
TYP 2 PLACES
STA
3900.0
REF
BL
900.0
REF
BL
275.0
REF
NP
PREPARE INDICATED SURFACES TO
ASSURE CORRECT ELECTRICAL BONDING
(TYP 2 PLACES)
VIEW A-A ① ②
STRUCTURES AND SYSTEMS ARE PARTIALLY
OMITTED FOR BETTER CLARITY PURPOSE

Figure 2

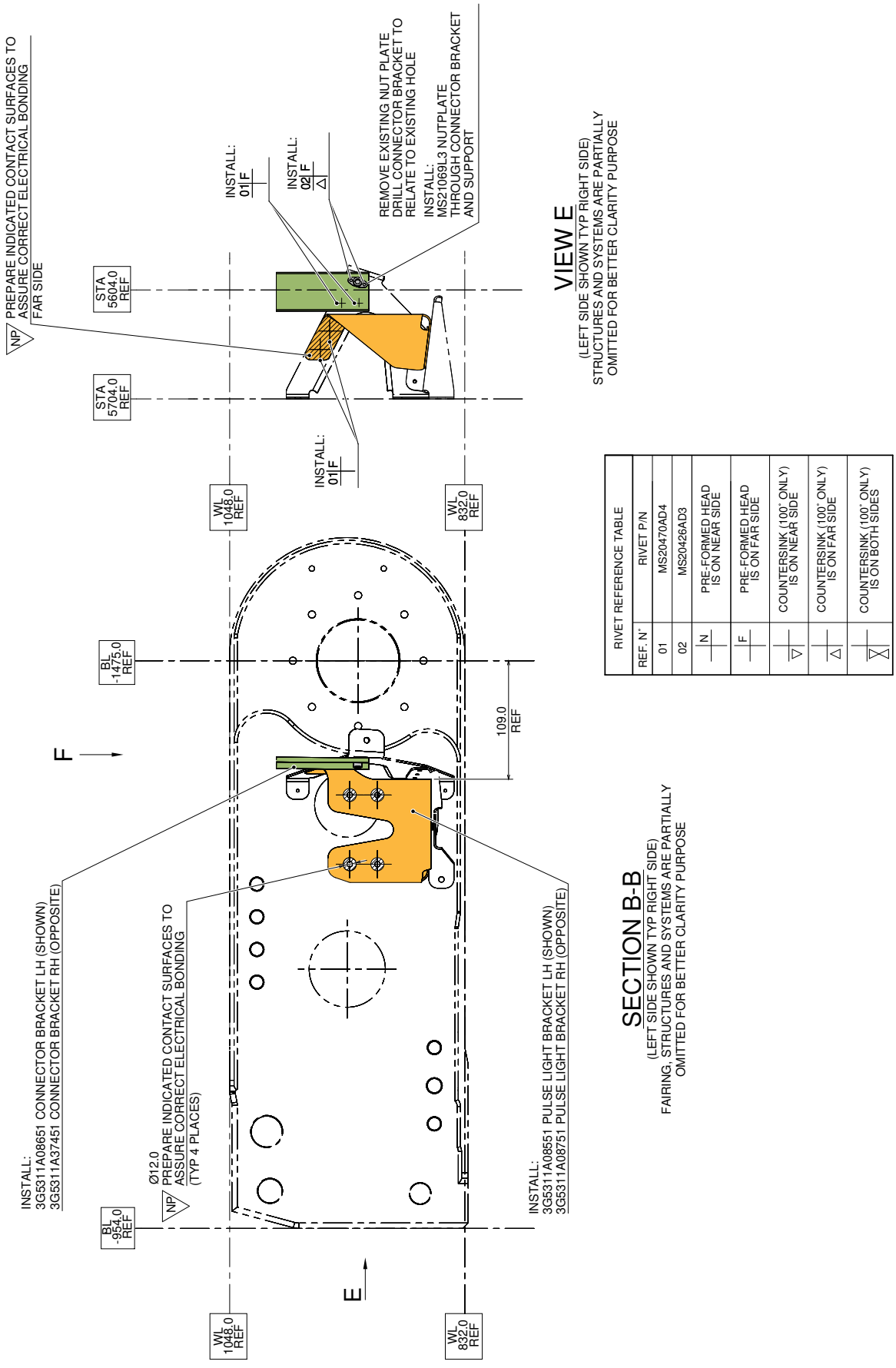
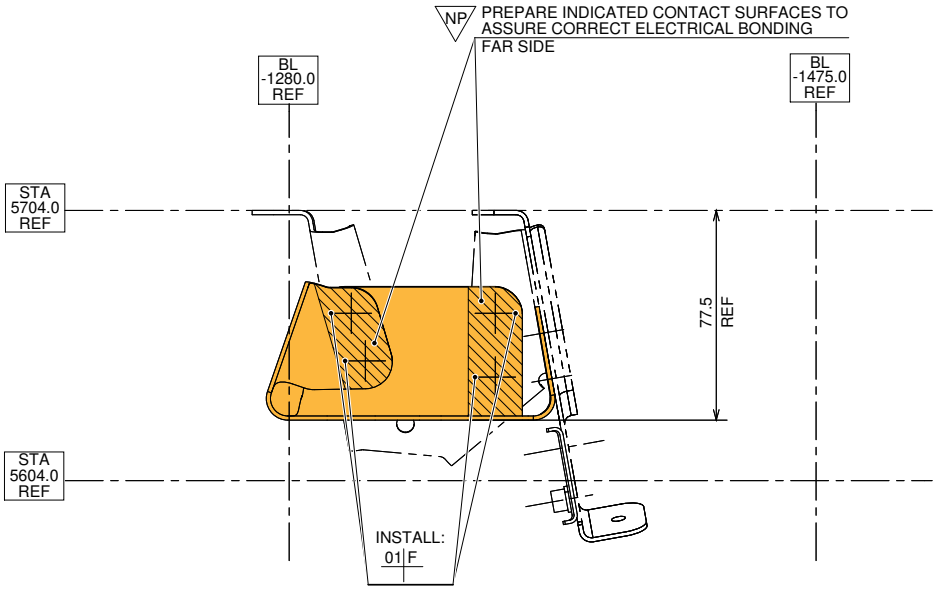
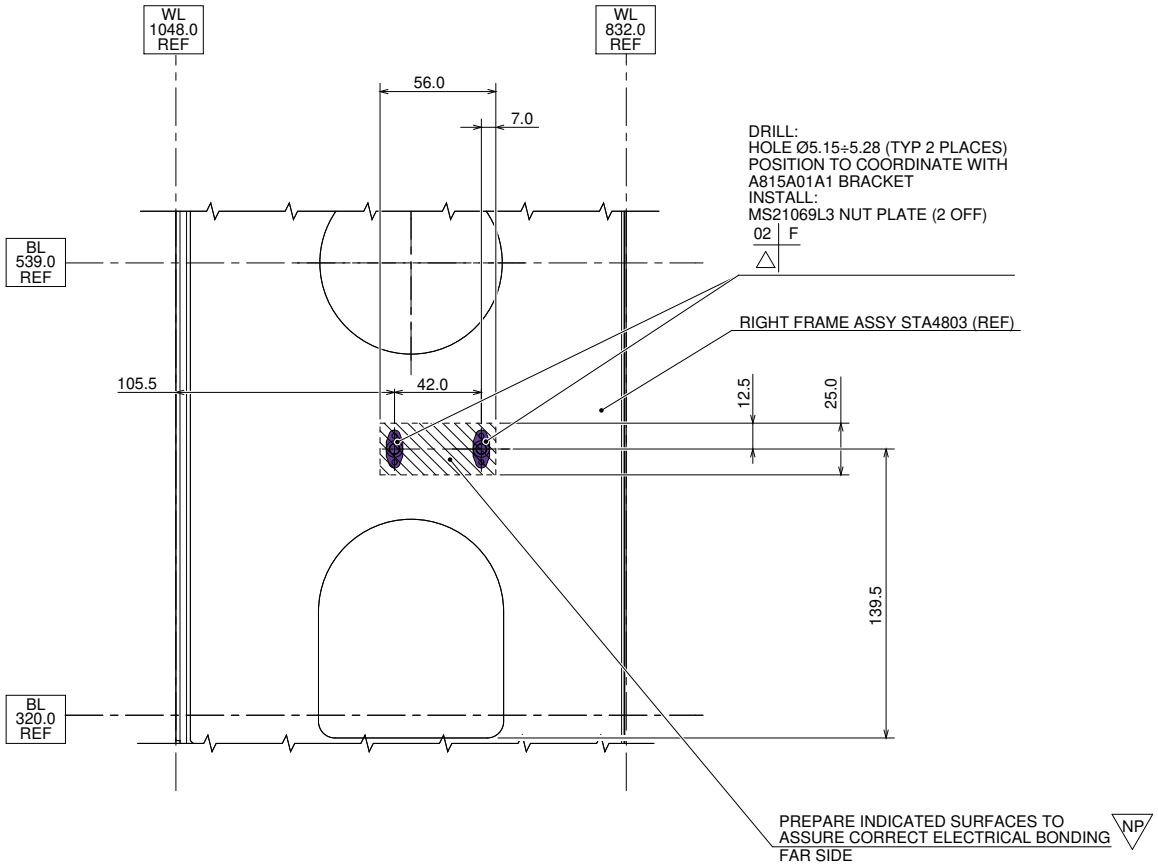

NP PREPARE INDICATED CONTACT SURFACES TO ASSURE CORRECT ELECTRICAL BONDING
FAR SIDE
STA 5604.0 REF
STA 5704.0 REF
INSTALL: 01 F
INSTALL: 02 F
REMOVE EXISTING NUT PLATE DRILL CONNECTOR BRACKET TO RELATE TO EXISTING HOLE
INSTALL: MS21069L3 NUTPLATE THROUGH CONNECTOR BRACKET AND SUPPORT
INSTALL: 01 F
WL 1048.0 REF
WL 832.0 REF
VIEW E
(LEFT SIDE SHOWN TYP RIGHT SIDE)
STRUCTURES AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE
RIVET REFERENCE TABLE
REF. N° | RIVET P/N
01 | MS20470AD4
02 | MS20426AD3
N | PRE-FORMED HEAD IS ON NEAR SIDE
F | PRE-FORMED HEAD IS ON FAR SIDE
COUNTERSINK (100° ONLY) IS ON NEAR SIDE
COUNTERSINK (100° ONLY) IS ON FAR SIDE
COUNTERSINK (100° ONLY) IS ON BOTH SIDES
BL -1475.0 REF
F
109.0 REF
INSTALL: 3G5311A08651 CONNECTOR BRACKET LH (SHOWN) 3G5311A37451 CONNECTOR BRACKET RH (OPPOSITE)
Ø12.0 NP PREPARE INDICATED CONTACT SURFACES TO ASSURE CORRECT ELECTRICAL BONDING (TYP 4 PLACES)
BL -954.0 REF
INSTALL: 3G5311A08551 PULSE LIGHT BRACKET LH (SHOWN) 3G5311A08751 PULSE LIGHT BRACKET RH (OPPOSITE)
E
WL 1048.0 REF
WL 832.0 REF
SECTION B-B
(LEFT SIDE SHOWN TYP RIGHT SIDE)
FAIRING, STRUCTURES AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE

Figure 3



VIEW F

STRUCTURES AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE



VIEW D

STRUCTURES AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE

Figure 4

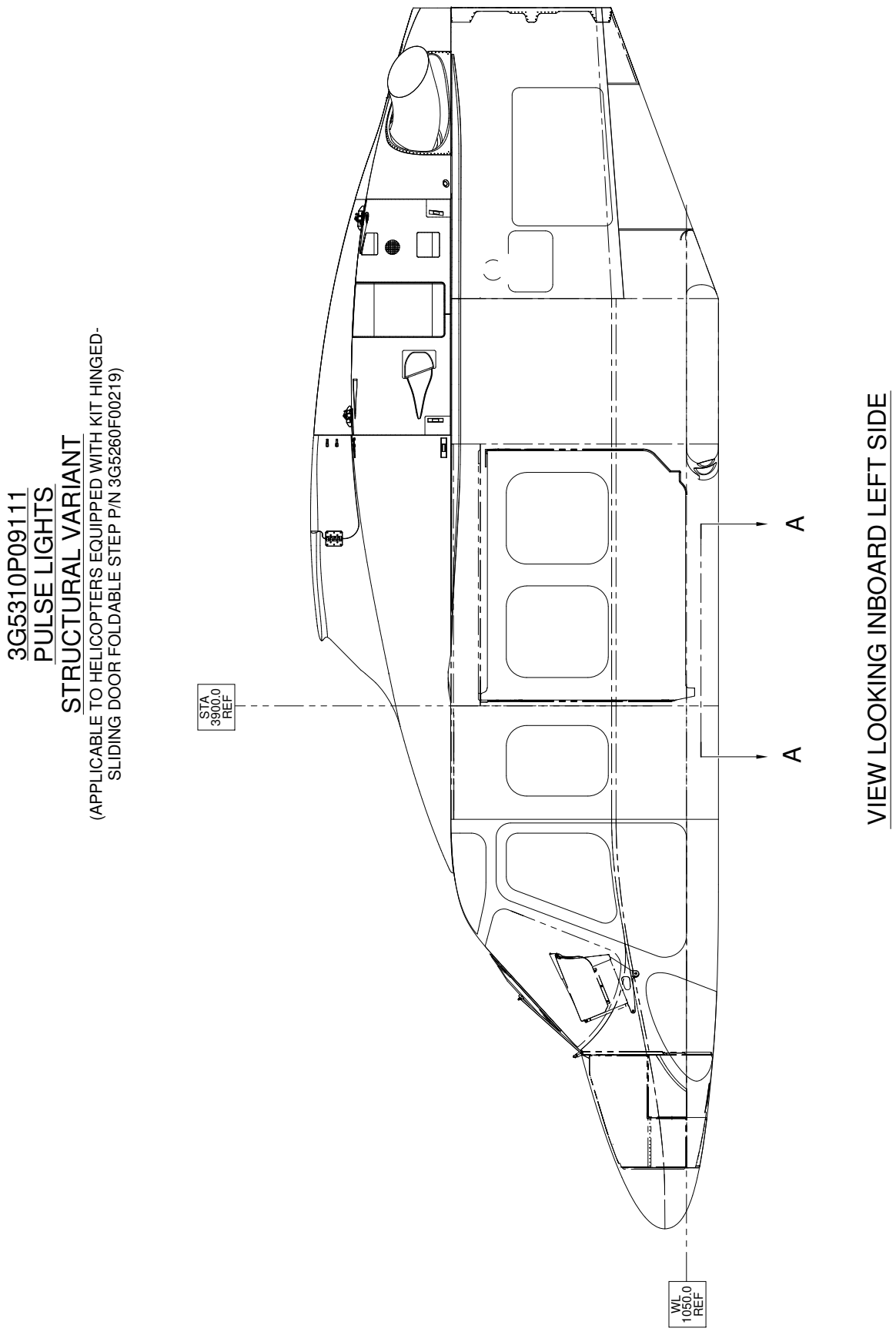
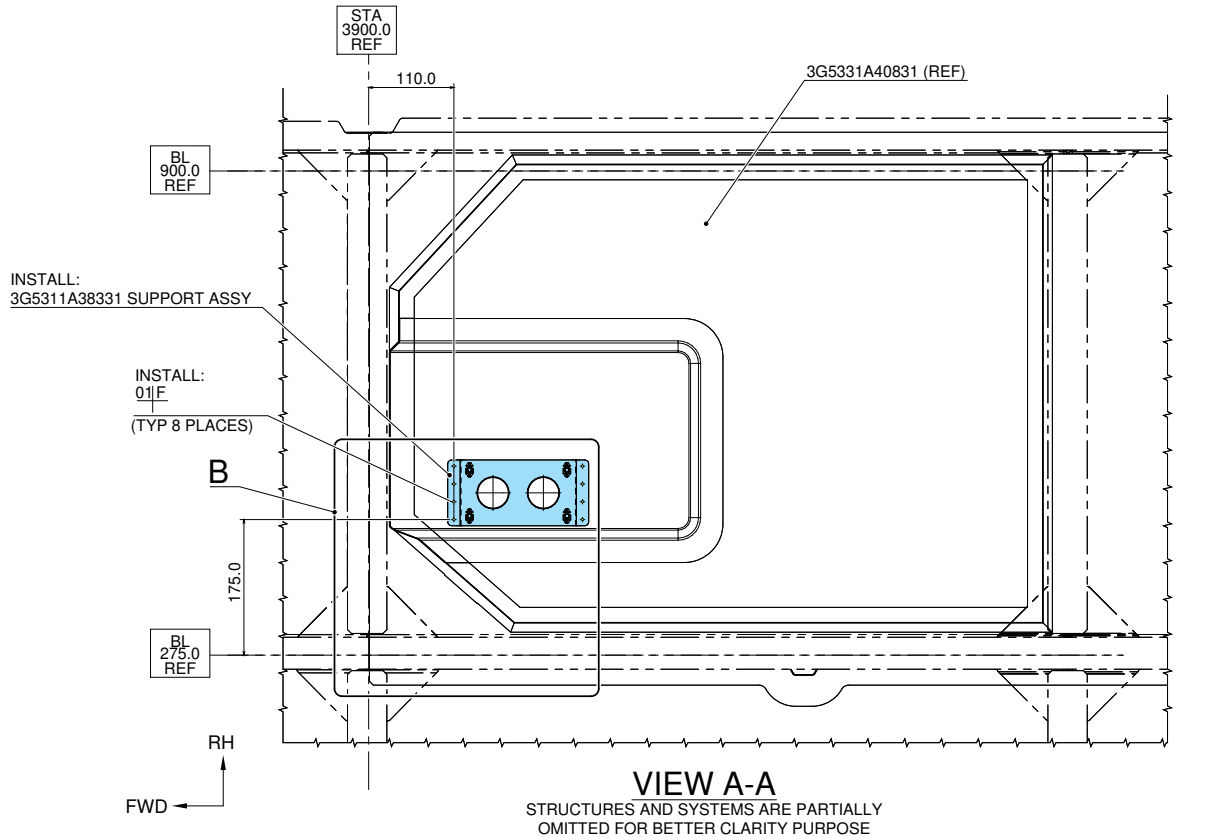
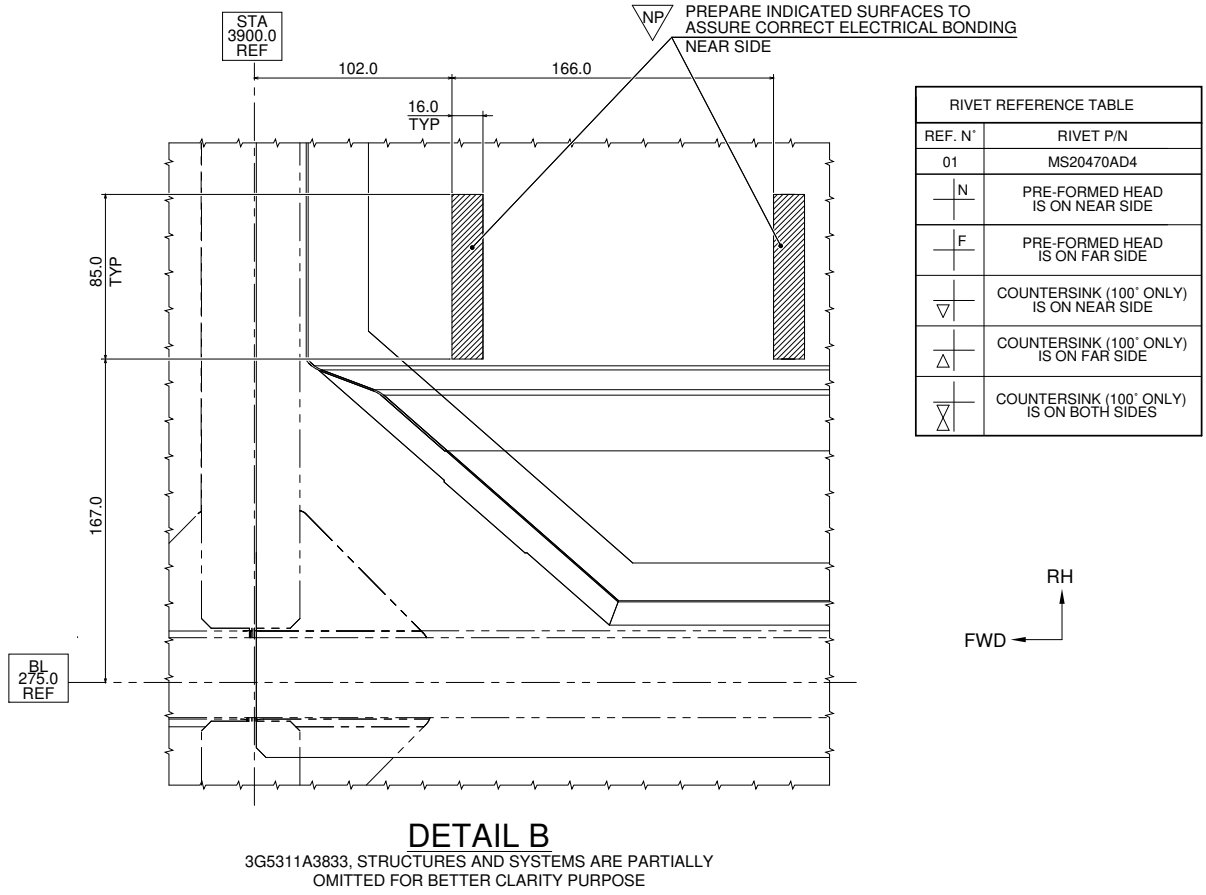

3G5310P09111
PULSE LIGHTS
STRUCTURAL VARIANT
(APPLICABLE TO HELICOPTERS EQUIPPED WITH KIT HINGED-
SLIDING DOOR FOLDABLE STEP P/N 3G5260F00219)
STA
3900.0
REF
A
A
WL
1050.0
REF
VIEW LOOKING INBOARD LEFT SIDE

Figure 5





RIVET REFERENCE TABLE	
REF. N°	RIVET P/N
01	MS20470AD4
N	PRE-FORMED HEAD IS ON NEAR SIDE
F	PRE-FORMED HEAD IS ON FAR SIDE
	COUNTERSINK (100° ONLY) IS ON NEAR SIDE
	COUNTERSINK (100° ONLY) IS ON FAR SIDE
	COUNTERSINK (100° ONLY) IS ON BOTH SIDES

Figure 6

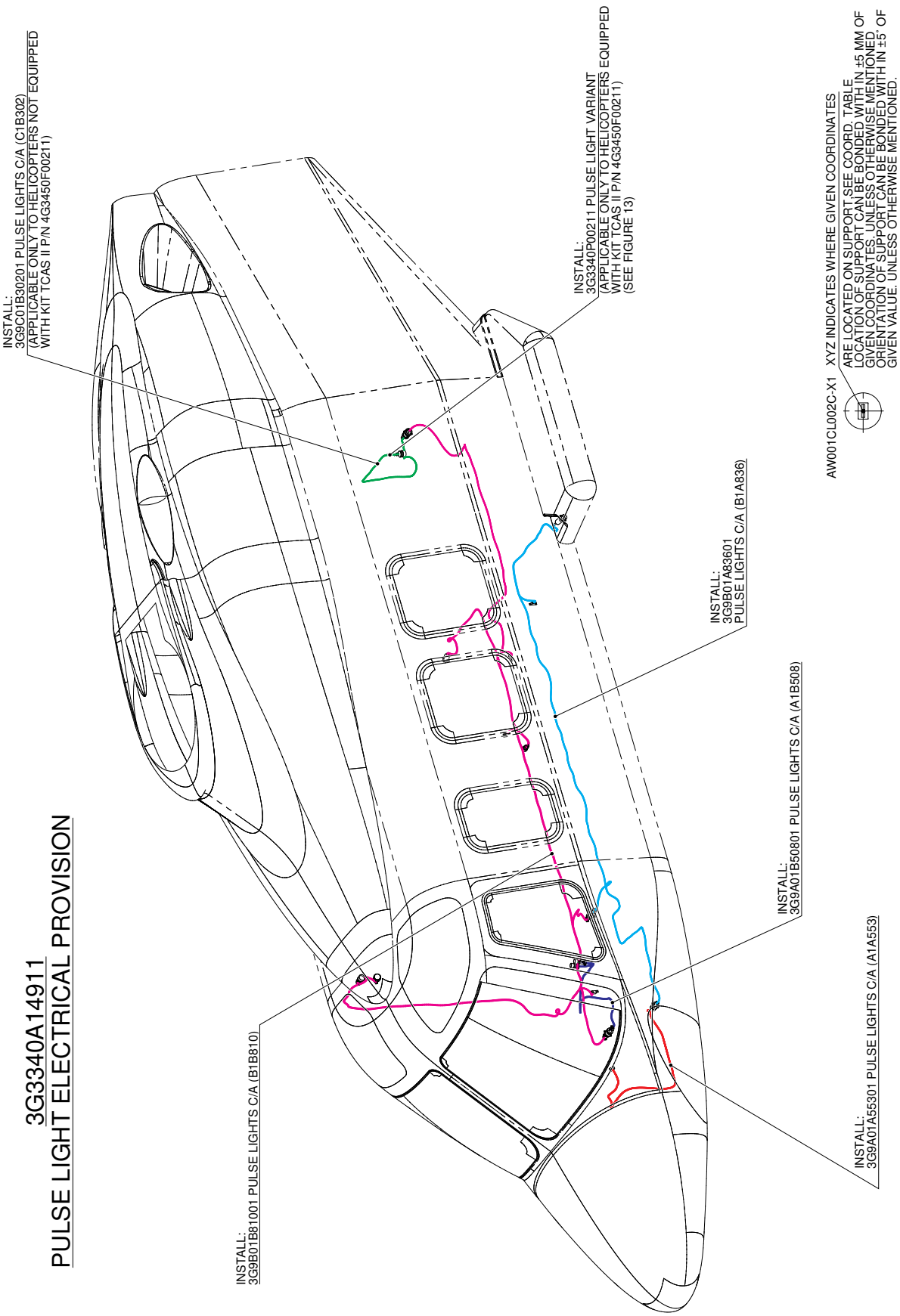

3G3340A14911
PULSE LIGHT ELECTRICAL PROVISION
INSTALL:
3G9C01B30201 PULSE LIGHTS C/A (C1B302)
(APPLICABLE ONLY TO HELICOPTERS NOT EQUIPPED WITH KIT TCAS II P/N 4G3450F00211)
INSTALL:
3G3340P00211 PULSE LIGHT VARIANT
(APPLICABLE ONLY TO HELICOPTERS EQUIPPED WITH KIT TCAS II P/N 4G3450F00211)
(SEE FIGURE 13)
AW001CL002C-X1 XYZ INDICATES WHERE GIVEN COORDINATES ARE LOCATED ON SUPPORT. SEE COORD. TABLE LOCATION OF SUPPORT CAN BE BONDED WITH IN ±5 MM OF GIVEN COORDINATES, UNLESS OTHERWISE MENTIONED. ORIENTATION OF SUPPORT CAN BE BONDED WITH IN ±5° OF GIVEN VALUE. UNLESS OTHERWISE MENTIONED.
INSTALL:
3G9B01A83601
PULSE LIGHTS C/A (B1A836)
INSTALL:
3G9A01B50801 PULSE LIGHTS C/A (A1B508)
INSTALL:
3G9A01A55301 PULSE LIGHTS C/A (A1A553)
INSTALL:
3G9B01B81001 PULSE LIGHTS C/A (B1B810)

Figure 7

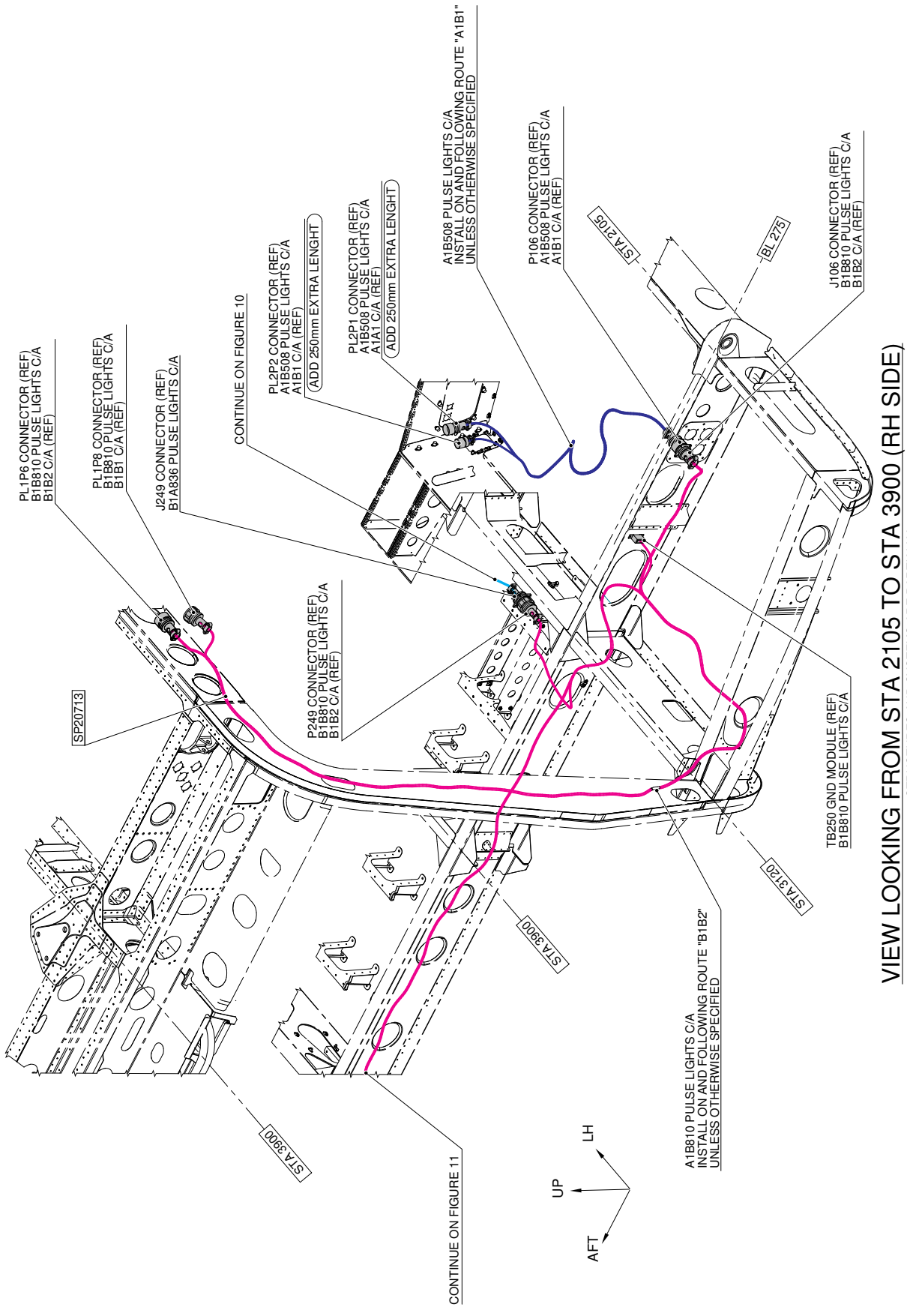

VIEW LOOKING FROM STA 2105 TO STA 3900 (RH SIDE)
STRUCTURES AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE
PL1P6 CONNECTOR (REF)
B1B810 PULSE LIGHTS C/A
B1B2 C/A (REF)
PL1P8 CONNECTOR (REF)
B1B810 PULSE LIGHTS C/A
B1B1 C/A (REF)
J249 CONNECTOR (REF)
B1A836 PULSE LIGHTS C/A
CONTINUE ON FIGURE 10
PL2P2 CONNECTOR (REF)
A1B508 PULSE LIGHTS C/A
A1B1 C/A (REF)
ADD 250mm EXTRA LENGHT
PL2P1 CONNECTOR (REF)
A1B508 PULSE LIGHTS C/A
A1A1 C/A (REF)
ADD 250mm EXTRA LENGHT
A1B508 PULSE LIGHTS C/A
INSTALL ON AND FOLLOWING ROUTE "A1B1"
UNLESS OTHERWISE SPECIFIED
P106 CONNECTOR (REF)
A1B508 PULSE LIGHTS C/A
A1B1 C/A (REF)
STA 2105
BL 275
J106 CONNECTOR (REF)
B1B810 PULSE LIGHTS C/A
B1B2 C/A (REF)
SP20713
P249 CONNECTOR (REF)
B1B810 PULSE LIGHTS C/A
B1B2 C/A (REF)
TB250 GND MODULE (REF)
B1B810 PULSE LIGHTS C/A
STA 3120
STA 3900
A1B810 PULSE LIGHTS C/A
INSTALL ON AND FOLLOWING ROUTE "B1B2"
UNLESS OTHERWISE SPECIFIED
STA 3900
CONTINUE ON FIGURE 11
LH
UP
AFT

Figure 8

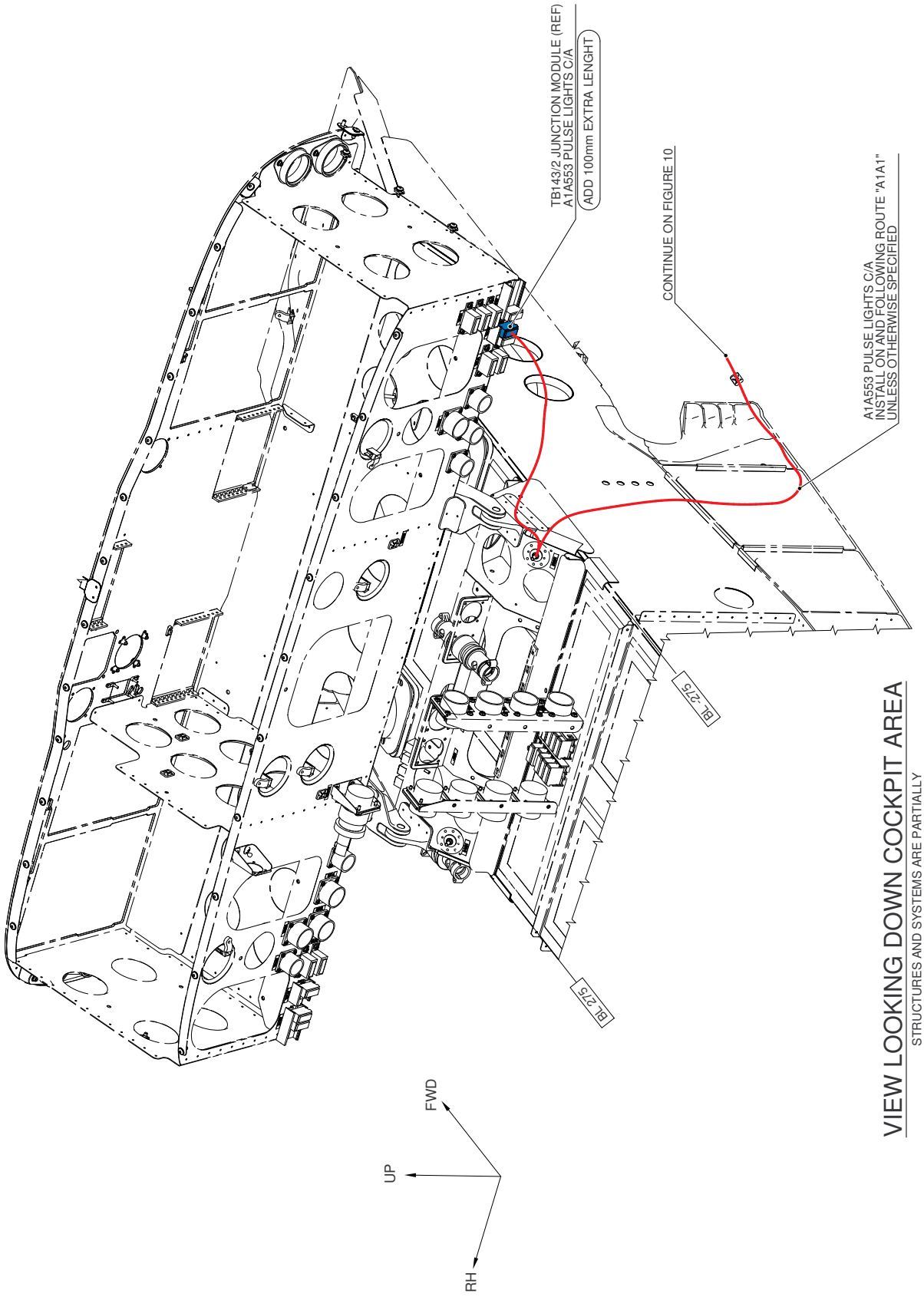

TB143/2 JUNCTION MODULE (REF)
A1A553 PULSE LIGHTS C/A
ADD 100mm EXTRA LENGHT
CONTINUE ON FIGURE 10
A1A553 PULSE LIGHTS C/A
INSTALL ON AND FOLLOWING ROUTE "A1A1"
UNLESS OTHERWISE SPECIFIED
BL 215
BL 215
VIEW LOOKING DOWN COCKPIT AREA
STRUCTURES AND SYSTEMS ARE PARTIALLY
OMITTED FOR BETTER CLARITY PURPOSE
FWD
UP
RH

Figure 9

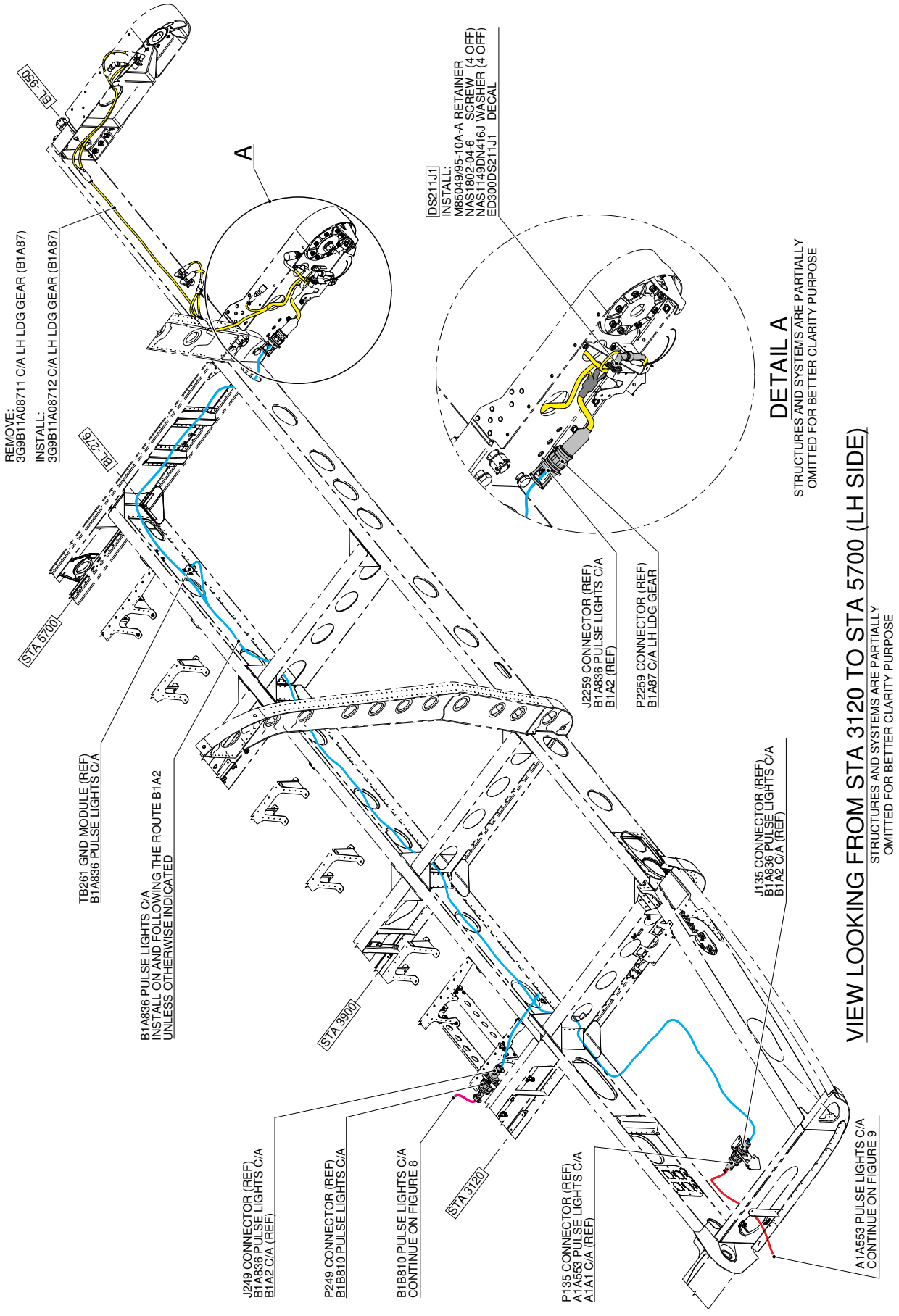
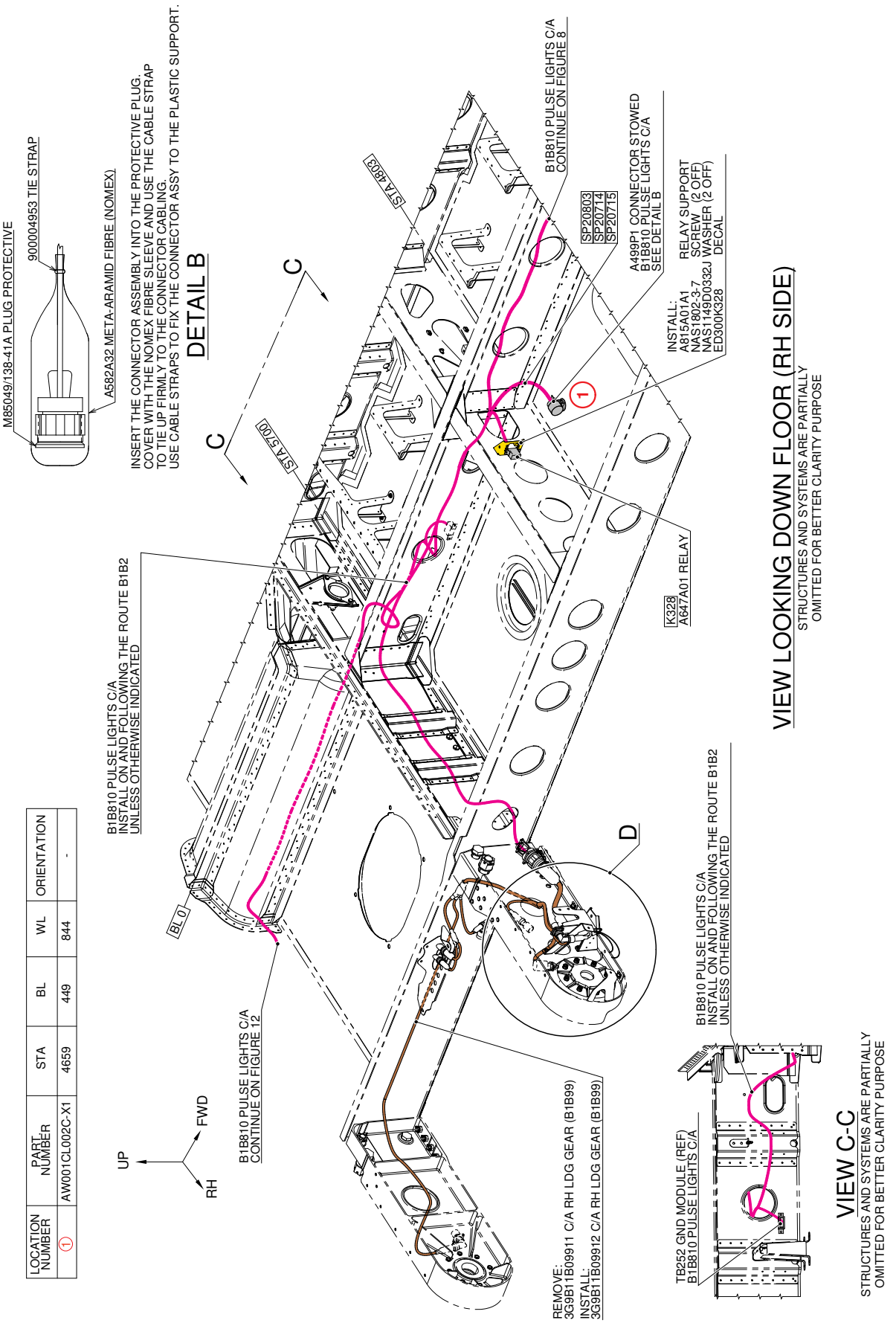

VIEW LOOKING FROM STA 3120 TO STA 5700 (LH SIDE)
STRUCTURES AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE
DETAIL A
STRUCTURES AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE
REMOVE: 3G9B11A08711 C/A LH LDG GEAR (B1A87)
INSTALL: 3G9B11A08712 C/A LH LDG GEAR (B1A87)
DS211J1 INSTALL: M85049/95-10A-A RETAINER NAS1802-04-6 SCREW (4 OFF) NAS1149DN416J WASHER (4 OFF) ED300DS211J1 DECAL
BL -960
BL -276
STA 5700
STA 3900
STA 3120
TB261 GND MODULE (REF) B1A836 PULSE LIGHTS C/A
B1A836 PULSE LIGHTS C/A INSTALL ON AND FOLLOWING THE ROUTE B1A2 UNLESS OTHERWISE INDICATED
J2259 CONNECTOR (REF) B1A836 PULSE LIGHTS C/A B1A2 (REF)
P2259 CONNECTOR (REF) B1A87 C/A LH LDG GEAR
J135 CONNECTOR (REF) B1A836 PULSE LIGHTS C/A B1A2 C/A (REF)
J249 CONNECTOR (REF) B1A836 PULSE LIGHTS C/A B1A2 C/A (REF)
P249 CONNECTOR (REF) B1B810 PULSE LIGHTS C/A
B1B810 PULSE LIGHTS C/A CONTINUE ON FIGURE 8
P135 CONNECTOR (REF) A1A553 PULSE LIGHTS C/A A1A1 C/A (REF)
A1A553 PULSE LIGHTS C/A CONTINUE ON FIGURE 9

Figure 10



LOCATION NUMBER	PART NUMBER	STA	BL	WL	ORIENTATION
1	AW001CL002C-X1	4659	449	844	-

Figure 11

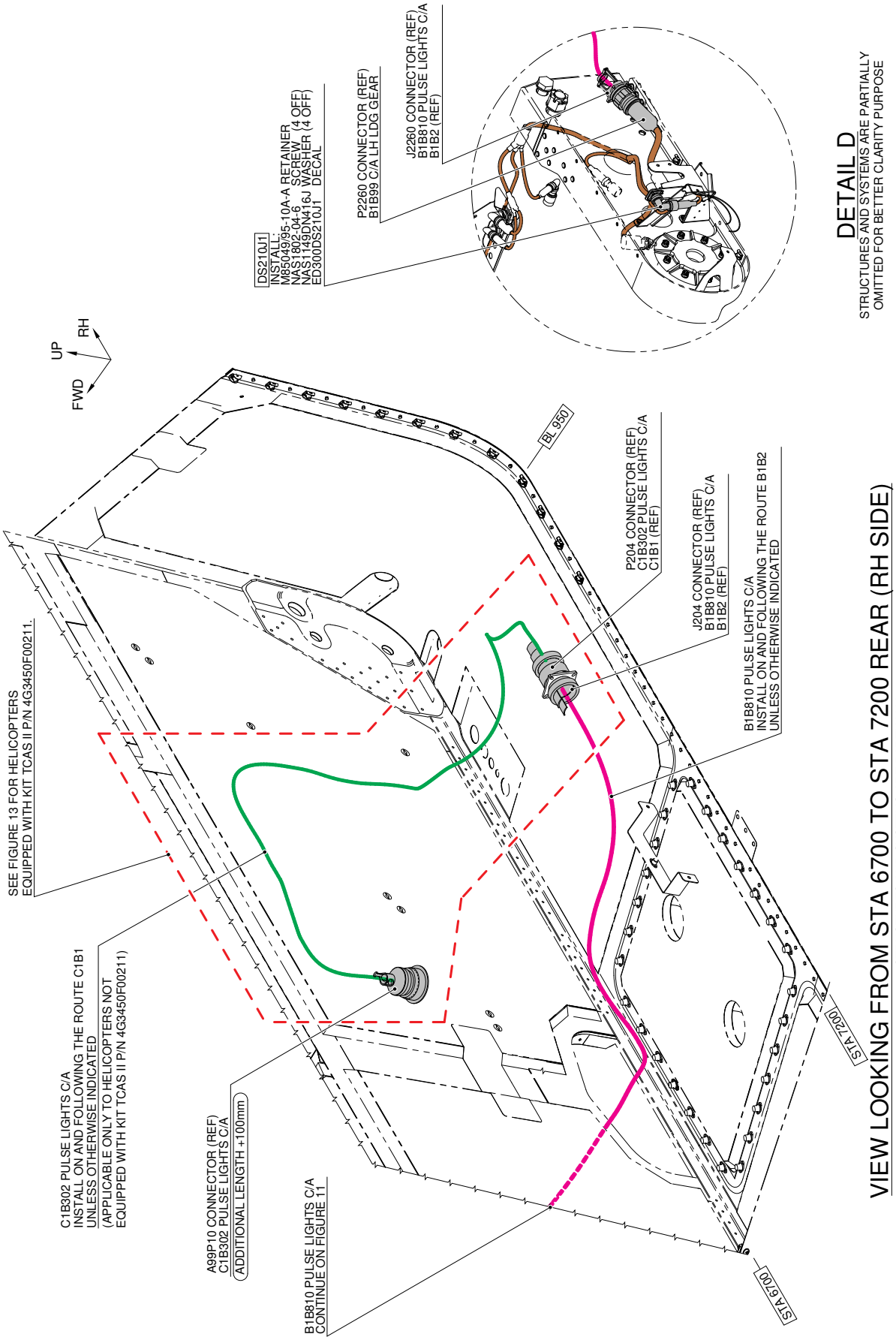

DETAIL D
STRUCTURES AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE
J2260 CONNECTOR (REF)
B1B810 PULSE LIGHTS C/A
B1B2 (REF)
P2260 CONNECTOR (REF)
B1B99 C/A LH LDG GEAR
DS210J1
INSTALL:
MS24995-10A-A RETAINER
MS21980-204-63 SCREW
NAS1149DN416J WASHER (4 OFF)
ED300DS210J1 DECAL
UP
RH
FWD
VIEW LOOKING FROM STA 6700 TO STA 7200 REAR (RH SIDE)
STRUCTURES AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE
BL 950
P204 CONNECTOR (REF)
C1B302 PULSE LIGHTS C/A
C1B1 (REF)
J204 CONNECTOR (REF)
B1B810 PULSE LIGHTS C/A
B1B2 (REF)
B1B810 PULSE LIGHTS C/A
INSTALL ON AND FOLLOWING THE ROUTE B1B2
UNLESS OTHERWISE INDICATED
SEE FIGURE 13 FOR HELICOPTERS
EQUIPPED WITH KIT TCAS II P/N 4G3450F00211.
C1B302 PULSE LIGHTS C/A
INSTALL ON AND FOLLOWING THE ROUTE C1B1
UNLESS OTHERWISE INDICATED
(APPLICABLE ONLY TO HELICOPTERS NOT
EQUIPPED WITH KIT TCAS II P/N 4G3450F00211)
A99P10 CONNECTOR (REF)
C1B302 PULSE LIGHTS C/A
(ADDITIONAL LENGTH +100mm)
B1B810 PULSE LIGHTS C/A
CONTINUE ON FIGURE 11
STA 6700
STA 7200

Figure 12

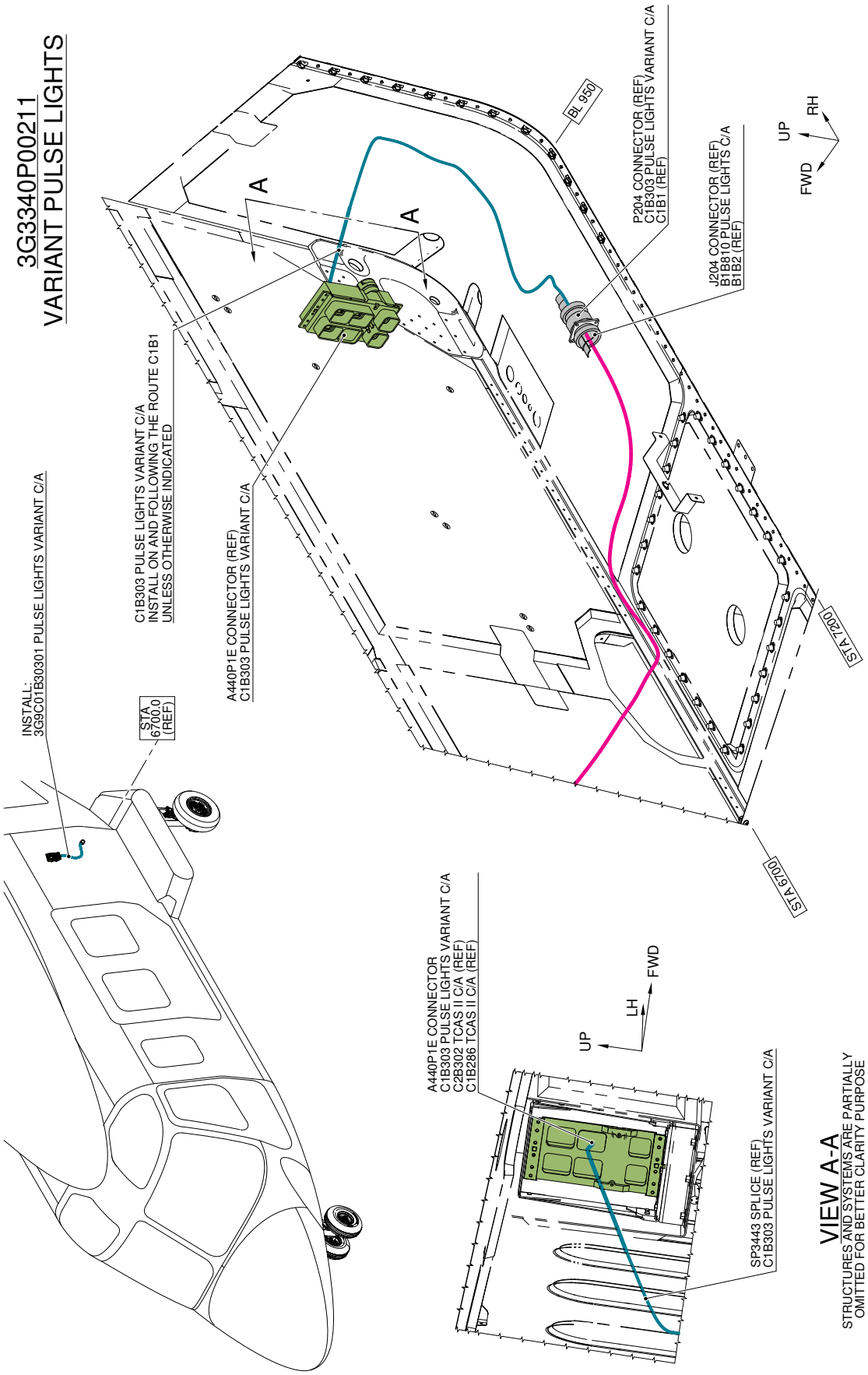

3G3340P00211
VARIANT PULSE LIGHTS
INSTALL:
3G9C01B30301 PULSE LIGHTS VARIANT C/A
STA 6700.0 (REF)
C1B303 PULSE LIGHTS VARIANT C/A
INSTALL ON AND FOLLOWING THE ROUTE C1B1
UNLESS OTHERWISE INDICATED
A440P1E CONNECTOR (REF)
C1B303 PULSE LIGHTS VARIANT C/A
A
A
BL 950
P204 CONNECTOR (REF)
C1B303 PULSE LIGHTS VARIANT C/A
C1B1 (REF)
J204 CONNECTOR (REF)
B1B810 PULSE LIGHTS C/A
B1B2 (REF)
UP
RH
FWD
STA 7200
STA 6700
VIEW LOOKING FROM STA 6700 TO STA 7200 REAR (RH SIDE)
STRUCTURES AND SYSTEMS ARE PARTIALLY
OMITTED FOR BETTER CLARITY PURPOSE
A440P1E CONNECTOR
C1B303 PULSE LIGHTS VARIANT C/A
C2B302 TCAS II C/A (REF)
C1B286 TCAS II C/A (REF)
UP
LH
FWD
SP3443 SPLICE (REF)
C1B303 PULSE LIGHTS VARIANT C/A
VIEW A-A
STRUCTURES AND SYSTEMS ARE PARTIALLY
OMITTED FOR BETTER CLARITY PURPOSE

Figure 13

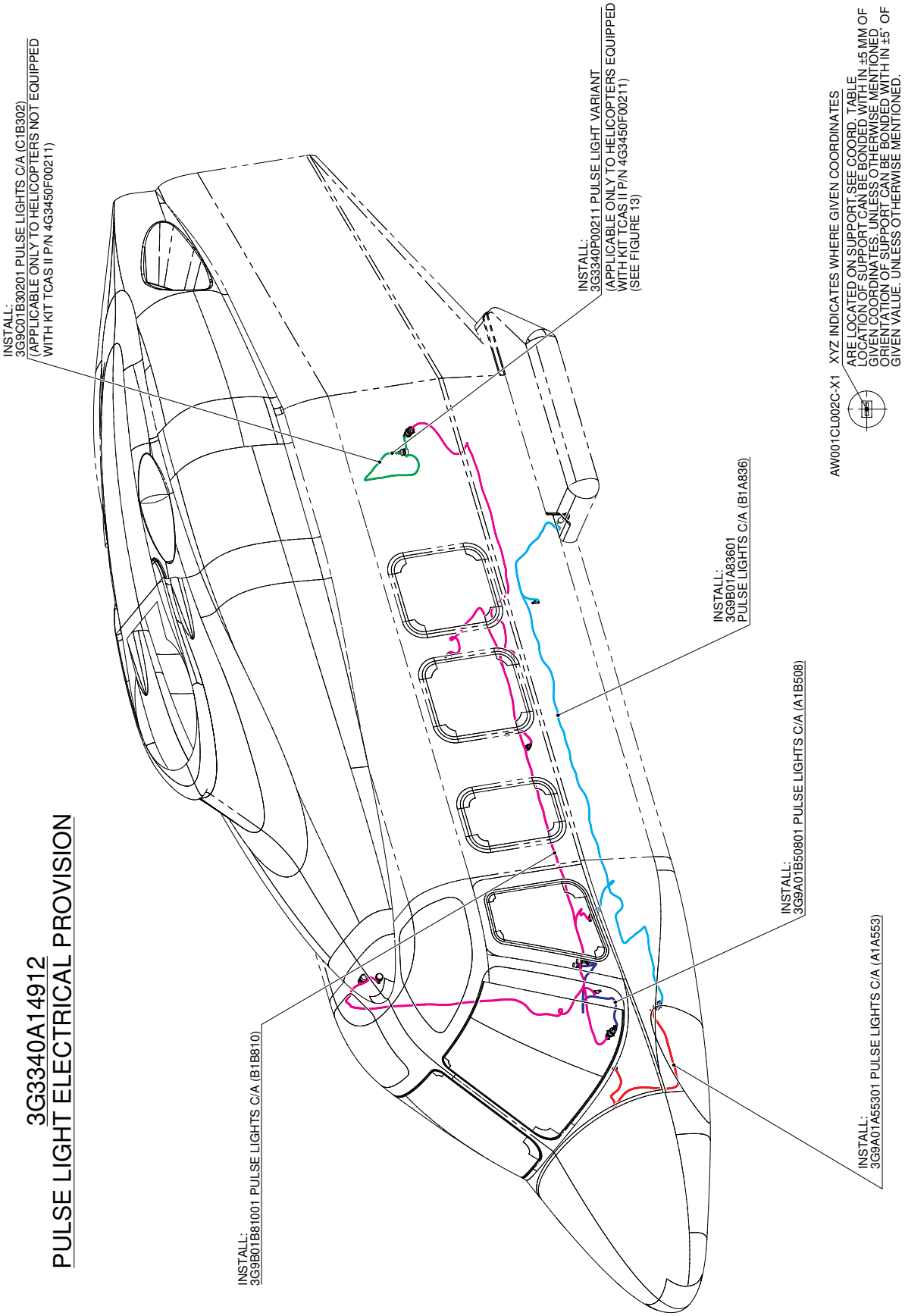

3G340A14912
PULSE LIGHT ELECTRICAL PROVISION
INSTALL:
3G9C01B30201 PULSE LIGHTS C/A (C1B302)
(APPLICABLE ONLY TO HELICOPTERS NOT EQUIPPED
WITH KIT TCAS II P/N 4G3450F00211)
INSTALL:
3G3340P00211 PULSE LIGHT VARIANT
(APPLICABLE ONLY TO HELICOPTERS EQUIPPED
WITH KIT TCAS II P/N 4G3450F00211)
(SEE FIGURE 13)
AW001CL002C-X1 XYZ INDICATES WHERE GIVEN COORDINATES
ARE LOCATED ON SUPPORT. SEE COORD. TABLE
LOCATION OF SUPPORT CAN BE BONDED WITH IN ±5 MM OF
GIVEN COORDINATES. UNLESS OTHERWISE MENTIONED
ORIENTATION OF SUPPORT CAN BE BONDED WITH IN ±5° OF
GIVEN VALUE. UNLESS OTHERWISE MENTIONED.
INSTALL:
3G9B01A83601
PULSE LIGHTS C/A (B1A836)
INSTALL:
3G9A01B50801 PULSE LIGHTS C/A (A1B508)
INSTALL:
3G9A01A55301 PULSE LIGHTS C/A (A1A553)
INSTALL:
3G9B01B81001 PULSE LIGHTS C/A (B1B810)

Figure 14

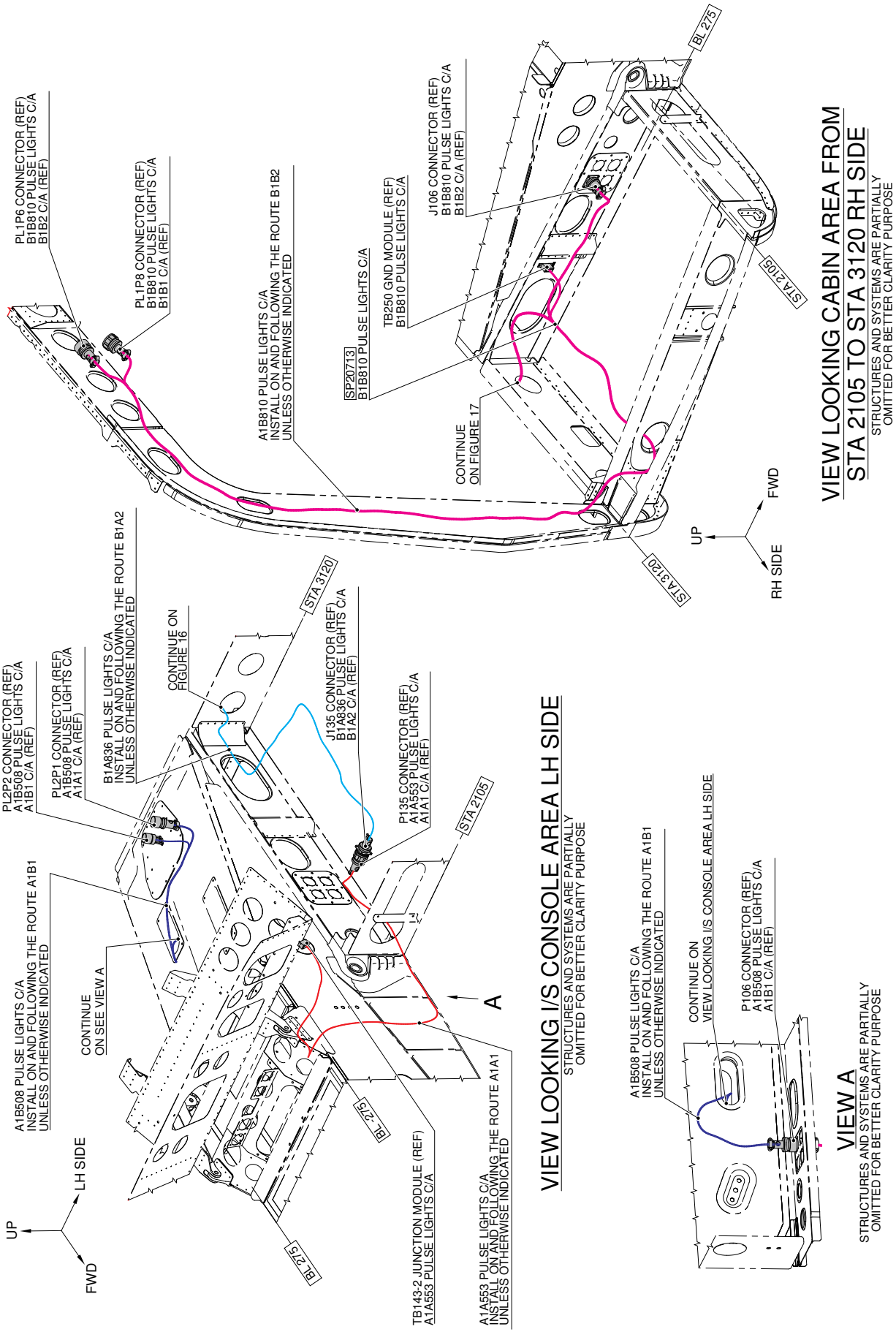

PL1P6 CONNECTOR (REF)
B1B810 PULSE LIGHTS C/A
B1B2 C/A (REF)
PL1P8 CONNECTOR (REF)
B1B810 PULSE LIGHTS C/A
B1B1 C/A (REF)
A1B810 PULSE LIGHTS C/A
INSTALL ON AND FOLLOWING THE ROUTE B1B2
UNLESS OTHERWISE INDICATED
SP20713
B1B810 PULSE LIGHTS C/A
TB250 GND MODULE (REF)
B1B810 PULSE LIGHTS C/A
J106 CONNECTOR (REF)
B1B810 PULSE LIGHTS C/A
B1B2 C/A (REF)
BL 275
STA 2105
CONTINUE
ON FIGURE 17
STA 3120
UP
FWD
RH SIDE
VIEW LOOKING CABIN AREA FROM
STA 2105 TO STA 3120 RH SIDE
STRUCTURES AND SYSTEMS ARE PARTIALLY
OMITTED FOR BETTER CLARITY PURPOSE
PL2P2 CONNECTOR (REF)
A1B508 PULSE LIGHTS C/A
A1B1 C/A (REF)
PL2P1 CONNECTOR (REF)
A1B508 PULSE LIGHTS C/A
A1A1 C/A (REF)
B1A836 PULSE LIGHTS C/A
INSTALL ON AND FOLLOWING THE ROUTE B1A2
UNLESS OTHERWISE INDICATED
CONTINUE ON
FIGURE 16
STA 3120
J135 CONNECTOR (REF)
B1A836 PULSE LIGHTS C/A
B1A2 C/A (REF)
P135 CONNECTOR (REF)
A1A553 PULSE LIGHTS C/A
A1A1 C/A (REF)
STA 2105
A1B508 PULSE LIGHTS C/A
INSTALL ON AND FOLLOWING THE ROUTE A1B1
UNLESS OTHERWISE INDICATED
CONTINUE
ON SEE VIEW A
A
BL 275
BL 275
TB143-2 JUNCTION MODULE (REF)
A1A553 PULSE LIGHTS C/A
A1A553 PULSE LIGHTS C/A
INSTALL ON AND FOLLOWING THE ROUTE A1A1
UNLESS OTHERWISE INDICATED
UP
LH SIDE
FWD
VIEW LOOKING I/S CONSOLE AREA LH SIDE
STRUCTURES AND SYSTEMS ARE PARTIALLY
OMITTED FOR BETTER CLARITY PURPOSE
A1B508 PULSE LIGHTS C/A
INSTALL ON AND FOLLOWING THE ROUTE A1B1
UNLESS OTHERWISE INDICATED
CONTINUE ON
VIEW LOOKING I/S CONSOLE AREA LH SIDE
P106 CONNECTOR (REF)
A1B508 PULSE LIGHTS C/A
A1B1 C/A (REF)
VIEW A
STRUCTURES AND SYSTEMS ARE PARTIALLY
OMITTED FOR BETTER CLARITY PURPOSE

Figure 15

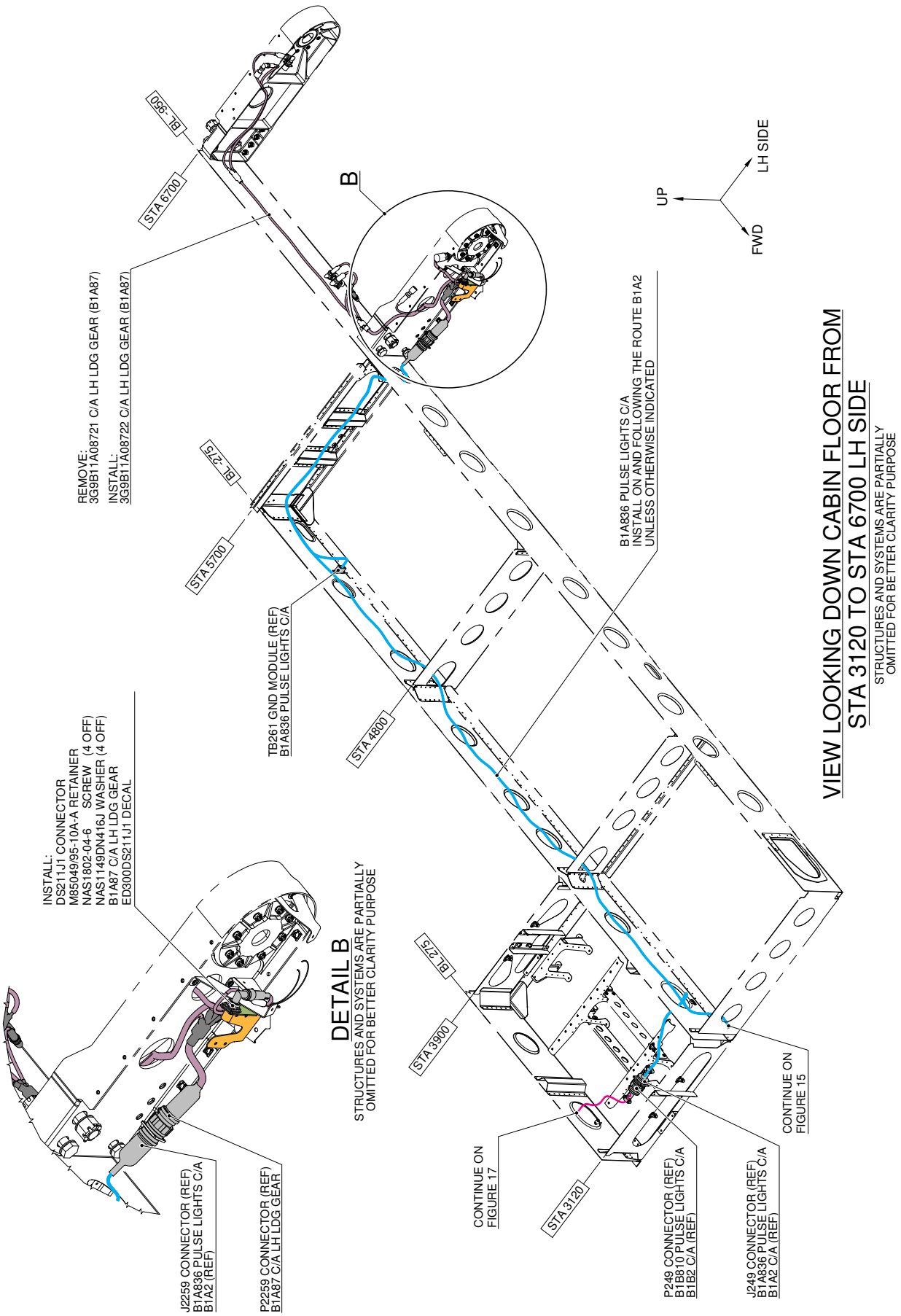

VIEW LOOKING DOWN CABIN FLOOR FROM
STA 3120 TO STA 6700 LH SIDE
STRUCTURES AND SYSTEMS ARE PARTIALLY
OMITTED FOR BETTER CLARITY PURPOSE
LH SIDE
UP
FWD
B
DETAIL B
STRUCTURES AND SYSTEMS ARE PARTIALLY
OMITTED FOR BETTER CLARITY PURPOSE
REMOVE:
3G9B11A08721 C/A LH LDG GEAR (B1A87)
INSTALL:
3G9B11A08722 C/A LH LDG GEAR (B1A87)
B1A836 PULSE LIGHTS C/A
INSTALL ON AND FOLLOWING THE ROUTE B1A2
UNLESS OTHERWISE INDICATED
TB261 GND MODULE (REF)
B1A836 PULSE LIGHTS C/A
INSTALL:
DS211J1 CONNECTOR
M85049/95-10A-A RETAINER
NAS1802-04-6 SCREW (4 OFF)
NAS1149DN416J WASHER (4 OFF)
B1A87 C/A LH LDG GEAR
ED300DS211J1 DECAL
J2259 CONNECTOR (REF)
B1A836 PULSE LIGHTS C/A
B1A2 (REF)
P2259 CONNECTOR (REF)
B1A87 C/A LH LDG GEAR
CONTINUE ON
FIGURE 17
P249 CONNECTOR (REF)
B1B810 PULSE LIGHTS C/A
B1B2 C/A (REF)
J249 CONNECTOR (REF)
B1A836 PULSE LIGHTS C/A
B1A2 C/A (REF)
CONTINUE ON
FIGURE 15
BL -950
BL -275
BL -275
STA 6700
STA 5700
STA 4800
STA 3900
STA 3120

Figure 16

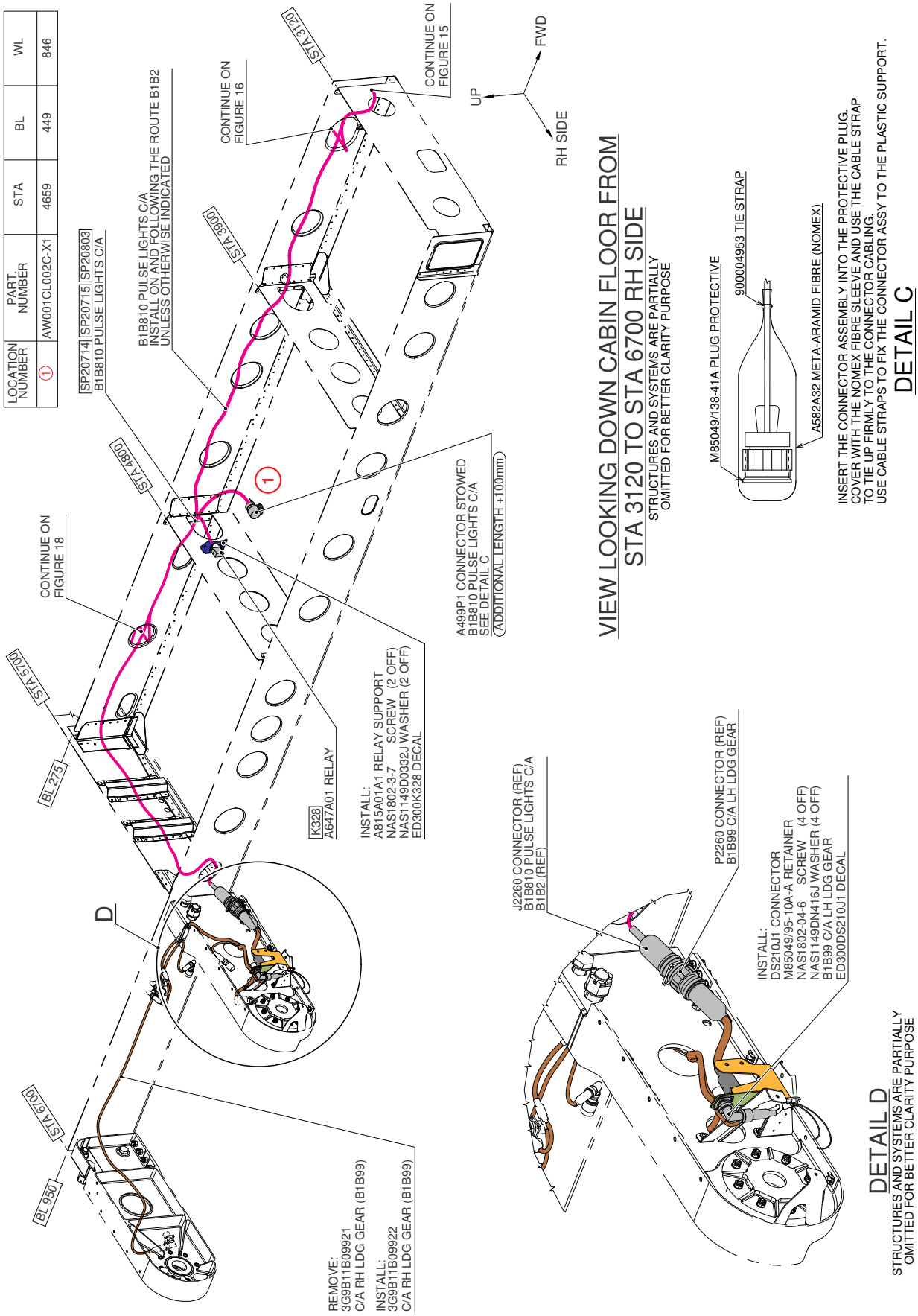

LOCATION NUMBER
PART NUMBER
STA
BL
WL
1
AW001CL002C-X1
4659
449
846
SP20714 SP20715 SP20803
B1B810 PULSE LIGHTS C/A
B1B810 PULSE LIGHTS C/A INSTALL ON AND FOLLOWING THE ROUTE B1B2 UNLESS OTHERWISE INDICATED
CONTINUE ON FIGURE 16
CONTINUE ON FIGURE 15
CONTINUE ON FIGURE 18
STA 3120
STA 3900
STA 4800
STA 5700
STA 6700
BL 275
BL 950
UP
FWD
RH SIDE
A499P1 CONNECTOR STOWED B1B810 PULSE LIGHTS C/A SEE DETAIL C
ADDITIONAL LENGTH +100mm
K328
A647A01 RELAY
INSTALL:
A815A01A1 RELAY SUPPORT
NAS1802-3-7 SCREW (2 OFF)
NAS1149D0332J WASHER (2 OFF)
ED300K328 DECAL
REMOVE:
3G9B11B09921
C/A RH LDG GEAR (B1B99)
INSTALL:
3G9B11B09922
C/A RH LDG GEAR (B1B99)
D
VIEW LOOKING DOWN CABIN FLOOR FROM STA 3120 TO STA 6700 RH SIDE
STRUCTURES AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE
M85049/138-41A PLUG PROTECTIVE
900004953 TIE STRAP
A582A32 META-ARAMID FIBRE (NOMEX)
INSERT THE CONNECTOR ASSEMBLY INTO THE PROTECTIVE PLUG, COVER WITH THE NOMEX FIBRE SLEEVE AND USE THE CABLE STRAP TO TIE UP FIRMLY TO THE CONNECTOR CABLING.
USE CABLE STRAPS TO FIX THE CONNECTOR ASSY TO THE PLASTIC SUPPORT.
DETAIL C
J2260 CONNECTOR (REF)
B1B810 PULSE LIGHTS C/A
B1B2 (REF)
P2260 CONNECTOR (REF)
B1B99 C/A LH LDG GEAR
INSTALL:
DS210J1 CONNECTOR
M85049/95-10A-A RETAINER
NAS1802-04-6 SCREW (4 OFF)
NAS1149DN416J WASHER (4 OFF)
B1B99 C/A LH LDG GEAR
ED300DS210J1 DECAL
DETAIL D
STRUCTURES AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE

Figure 17

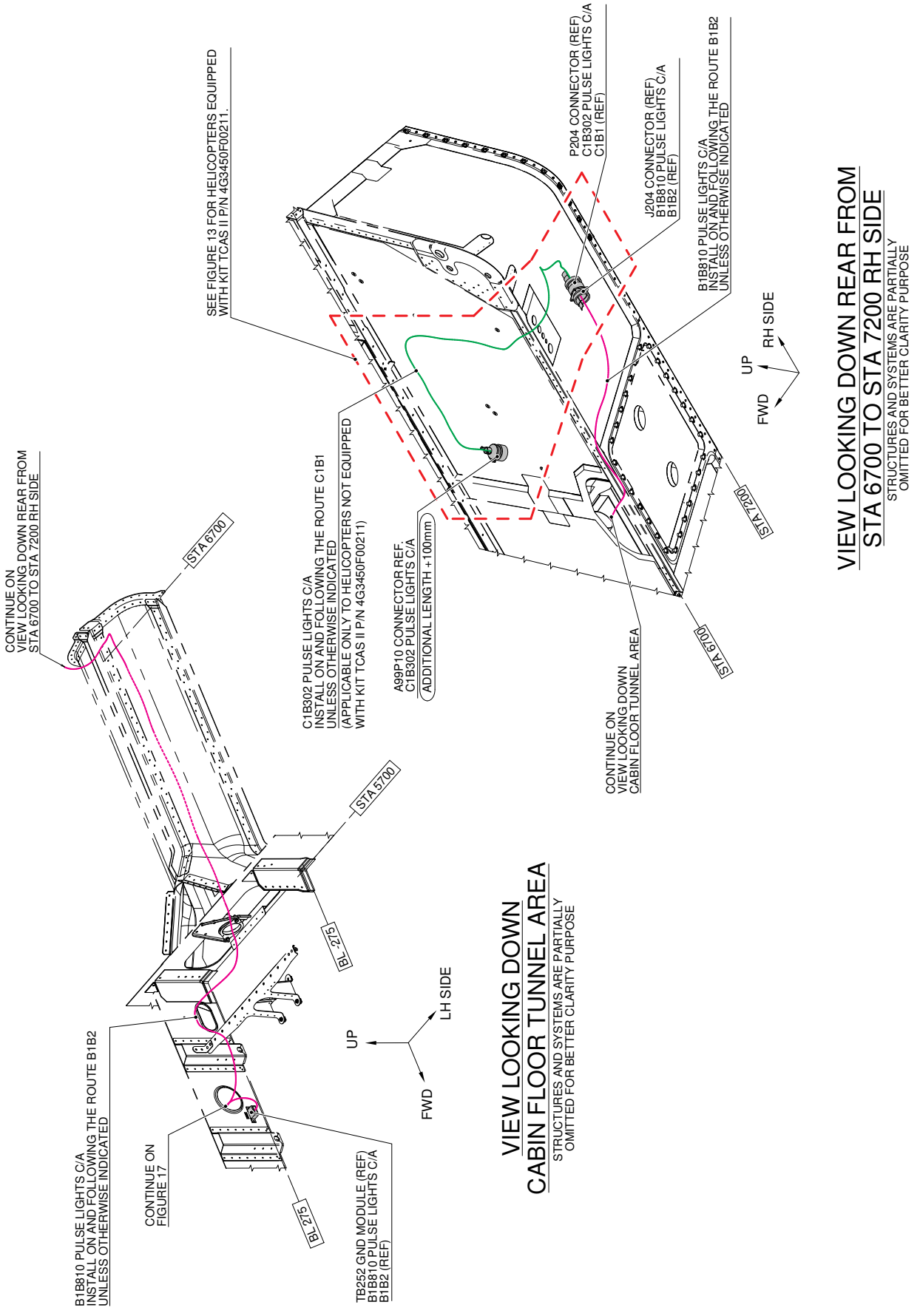

SEE FIGURE 13 FOR HELICOPTERS EQUIPPED WITH KIT TCAS II P/N 4G3450F00211.
P204 CONNECTOR (REF)
C1B302 PULSE LIGHTS C/A
C1B1 (REF)
J204 CONNECTOR (REF)
B1B810 PULSE LIGHTS C/A
B1B2 (REF)
B1B810 PULSE LIGHTS C/A
INSTALL ON AND FOLLOWING THE ROUTE B1B2
UNLESS OTHERWISE INDICATED
UP
FWD
RH SIDE
STA 7200
STA 6700
CONTINUE ON
VIEW LOOKING DOWN REAR FROM
STA 6700 TO STA 7200 RH SIDE
C1B302 PULSE LIGHTS C/A
INSTALL ON AND FOLLOWING THE ROUTE C1B1
UNLESS OTHERWISE INDICATED
(APPLICABLE ONLY TO HELICOPTERS NOT EQUIPPED
WITH KIT TCAS II P/N 4G3450F00211)
A99P10 CONNECTOR REF.
C1B302 PULSE LIGHTS C/A
ADDITIONAL LENGTH +100mm
CONTINUE ON
VIEW LOOKING DOWN
CABIN FLOOR TUNNEL AREA
VIEW LOOKING DOWN REAR FROM
STA 6700 TO STA 7200 RH SIDE
STRUCTURES AND SYSTEMS ARE PARTIALLY
OMITTED FOR BETTER CLARITY PURPOSE
STA 5700
BL -275
B1B810 PULSE LIGHTS C/A
INSTALL ON AND FOLLOWING THE ROUTE B1B2
UNLESS OTHERWISE INDICATED
CONTINUE ON
FIGURE 17
BL 275
TB252 GND MODULE (REF)
B1B810 PULSE LIGHTS C/A
B1B2 (REF)
UP
FWD
LH SIDE
VIEW LOOKING DOWN
CABIN FLOOR TUNNEL AREA
STRUCTURES AND SYSTEMS ARE PARTIALLY
OMITTED FOR BETTER CLARITY PURPOSE

Figure 18

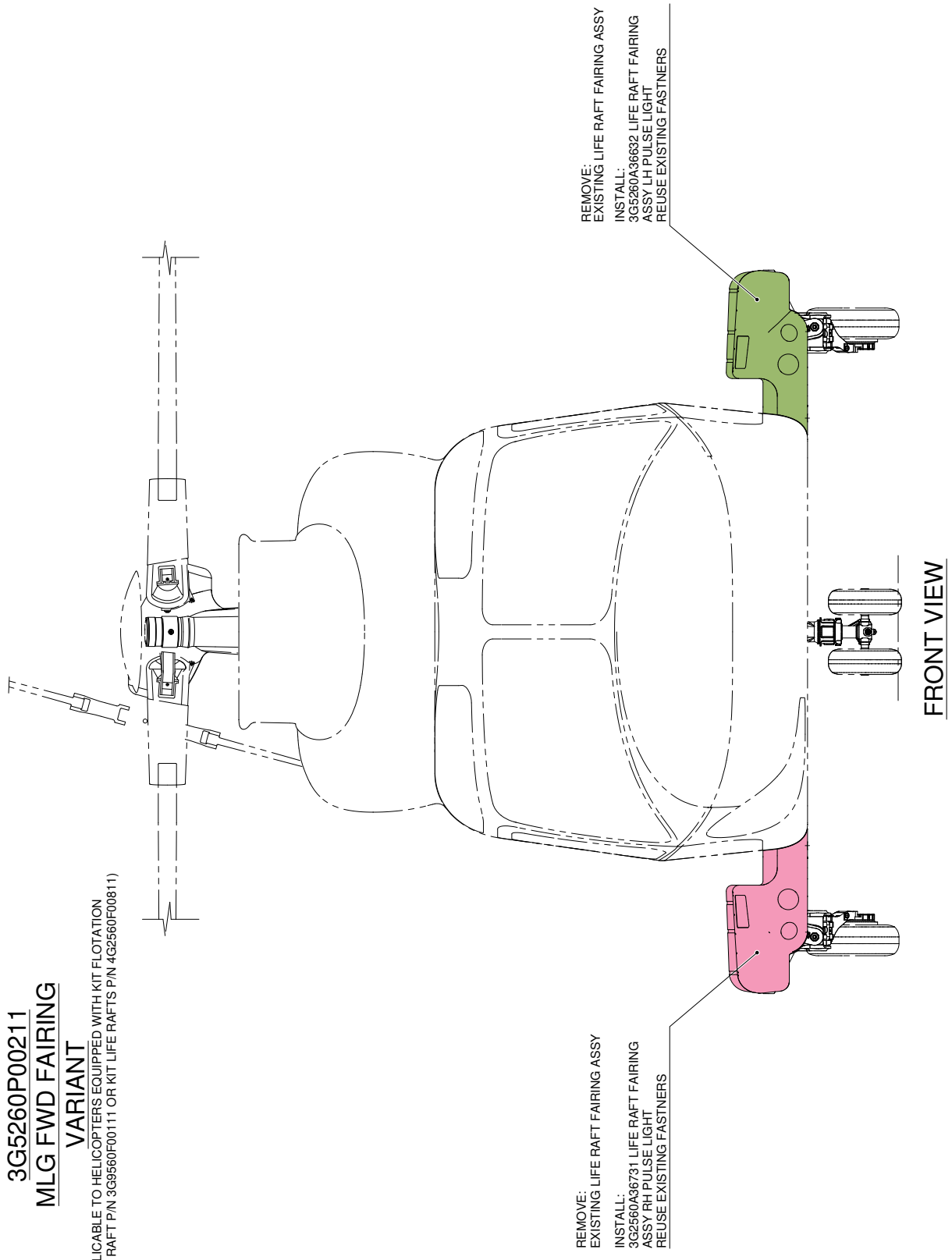

3G5260P00211
MLG FWD FAIRING
VARIANT
(APPLICABLE TO HELICOPTERS EQUIPPED WITH KIT FLOTATION
AND LIFE RAFT P/N 3G9560F00111 OR KIT LIFE RAFTS P/N 4G2560F00811)
REMOVE:
EXISTING LIFE RAFT FAIRING ASSY
INSTALL:
3G5260A36632 LIFE RAFT FAIRING
ASSY LH PULSE LIGHT
REUSE EXISTING FASTNERS
REMOVE:
EXISTING LIFE RAFT FAIRING ASSY
INSTALL:
3G2560A36731 LIFE RAFT FAIRING
ASSY RH PULSE LIGHT
REUSE EXISTING FASTNERS
FRONT VIEW

Figure 19

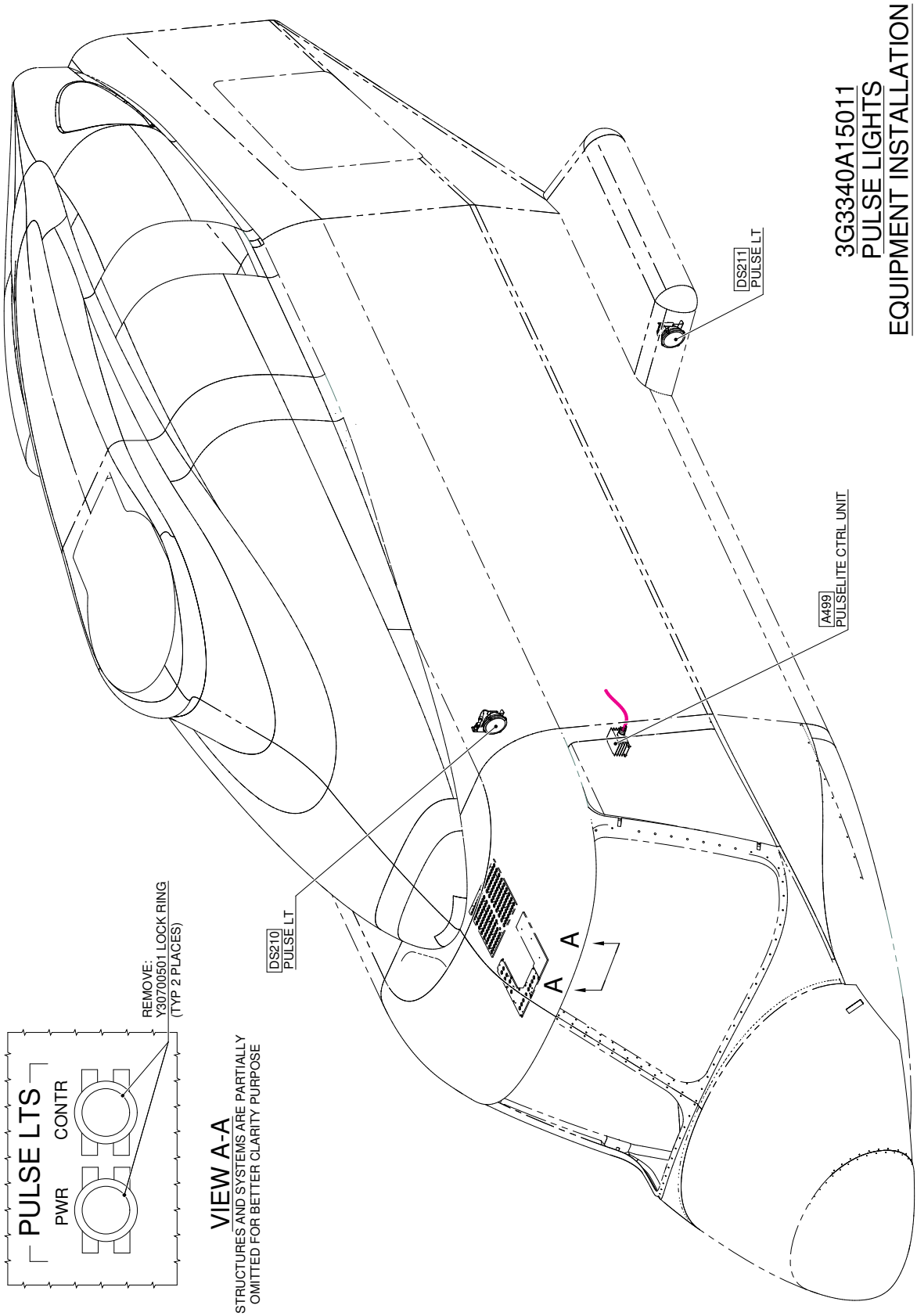

3G3340A15011
PULSE LIGHTS
EQUIPMENT INSTALLATION
DS211
PULSE LT
A499
PULSELITE CTRL UNIT
DS210
PULSE LT
A
A
REMOVE:
Y30700501 LOCK RING
(TYP 2 PLACES)
PULSE LTS
PWR
CONTR
VIEW A-A
STRUCTURES AND SYSTEMS ARE PARTIALLY
OMITTED FOR BETTER CLARITY PURPOSE

Figure 20

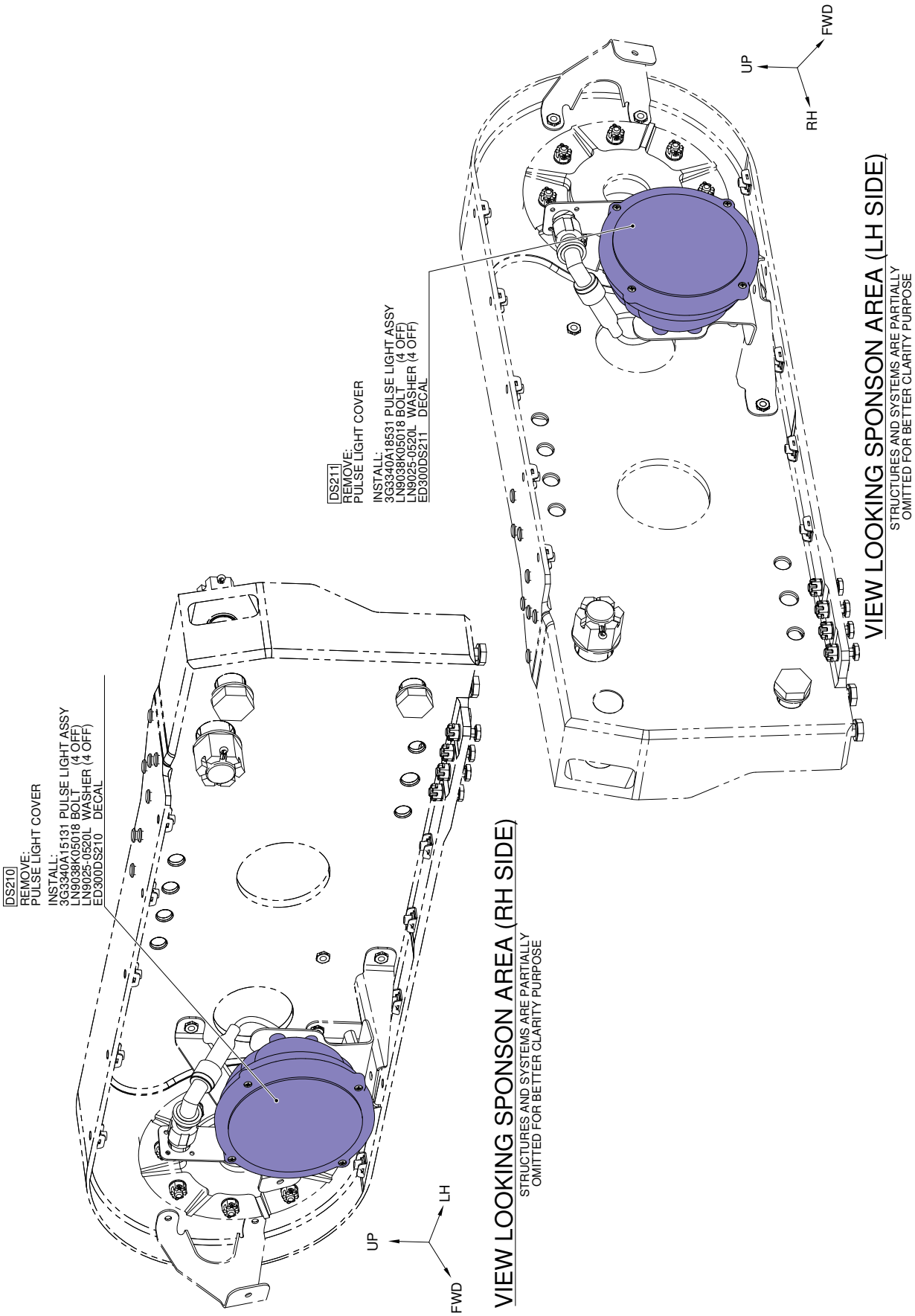
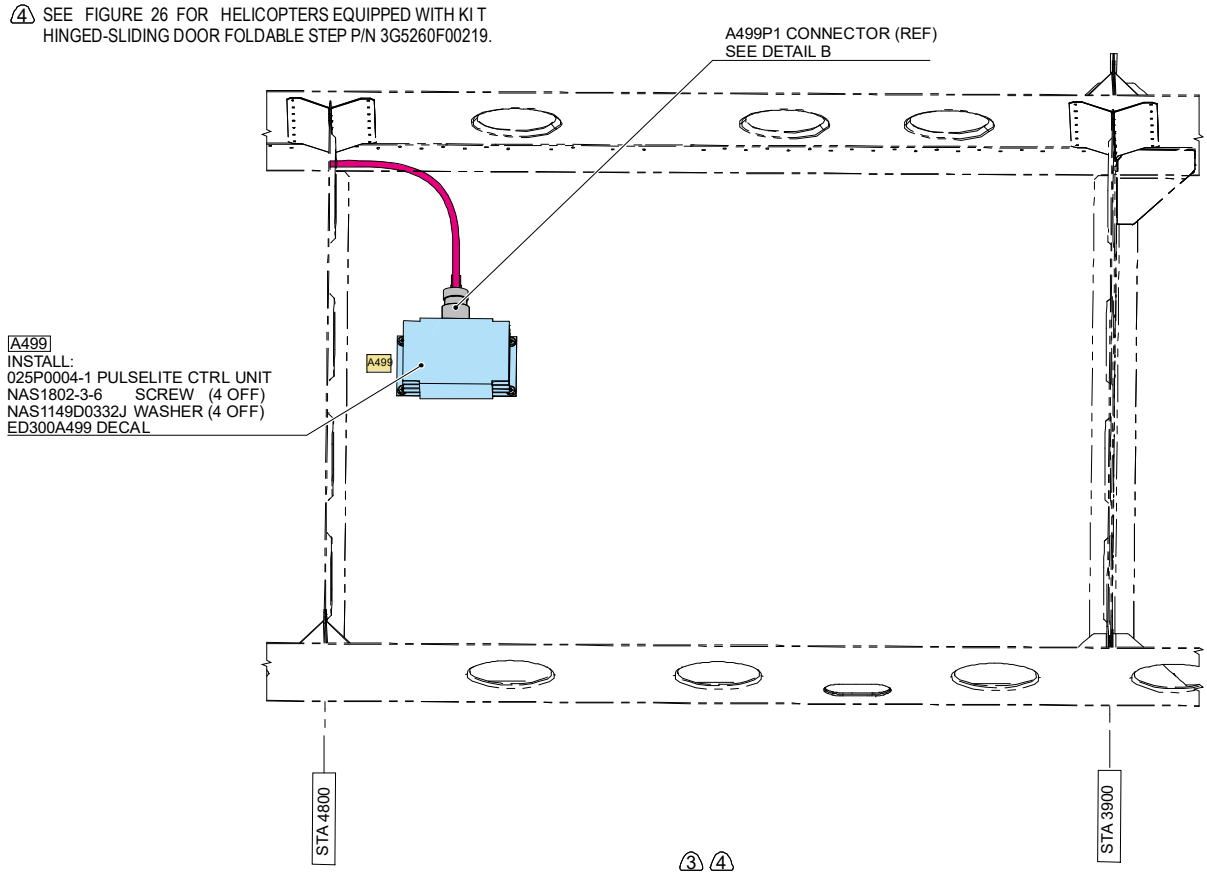

DS210
REMOVE:
PULSE LIGHT COVER
INSTALL:
3G3340A15131 PULSE LIGHT ASSY
LN9038K05018 BOLT (4 OFF)
LN9025-0520L WASHER (4 OFF)
ED300DS210 DECAL
UP
LH
FWD
VIEW LOOKING SPONSON AREA (RH SIDE)
STRUCTURES AND SYSTEMS ARE PARTIALLY
OMITTED FOR BETTER CLARITY PURPOSE
DS211
REMOVE:
PULSE LIGHT COVER
INSTALL:
3G3340A18531 PULSE LIGHT ASSY
LN9038K05018 BOLT (4 OFF)
LN9025-0520L WASHER (4 OFF)
ED300DS211 DECAL
UP
RH
FWD
VIEW LOOKING SPONSON AREA (LH SIDE)
STRUCTURES AND SYSTEMS ARE PARTIALLY
OMITTED FOR BETTER CLARITY PURPOSE

Figure 21

NOTES:

③ SEE FIGURE 25 FOR HELICOPTER S/N 31475 AND HELICOPTERS EQUIPPED WITH FOLDABLE FOOTSTEP INSTALLATION FOR HINGE DOOR P/N 3G5260A00117.

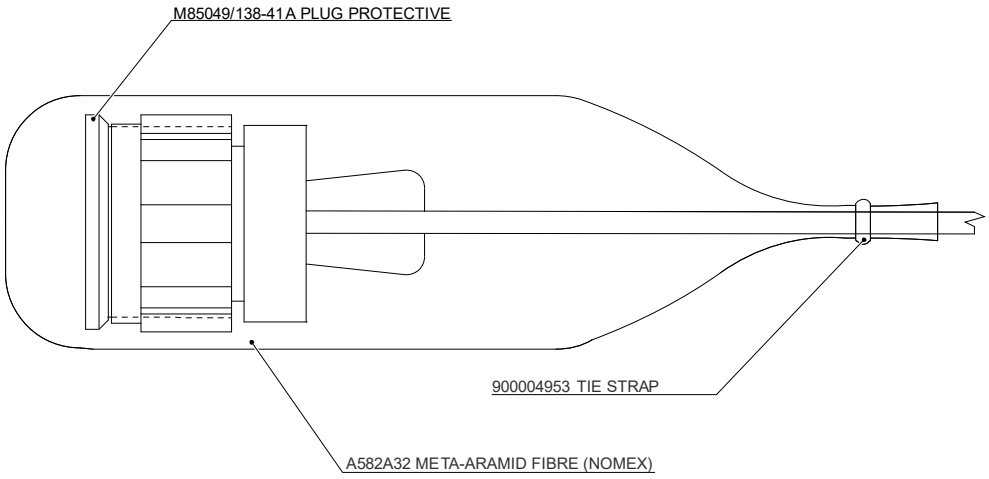
④ SEE FIGURE 26 FOR HELICOPTERS EQUIPPED WITH KI T HINGED-SLIDING DOOR FOLDABLE STEP P/N 3G5260F00219.



③④

VIEW LOOKING DOWN FLOOR FROM STA 3900 TO STA 4800 (RH SIDE)

STRUCTURES AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE



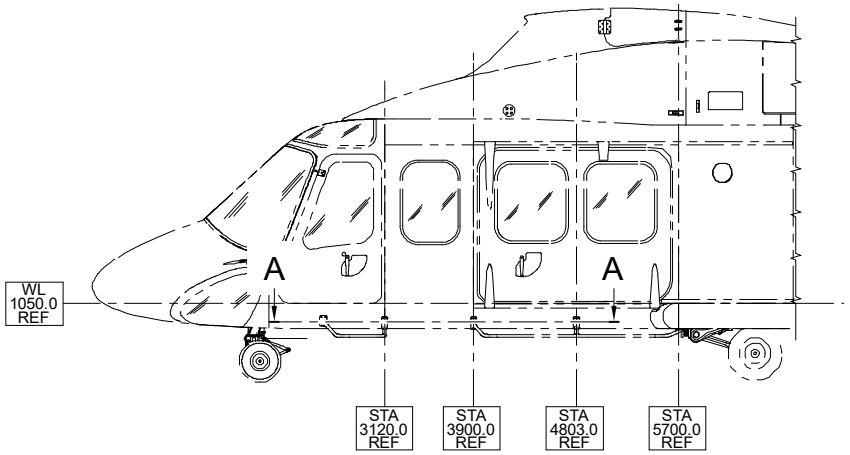
UNTIE THE CONNECTOR ASSEMBLY FROM THE LOOM.
REMOVE THE NOMEX FIBRE SLEEVE AND THE PROTECTIVE PLUG FROM THE CONNECTOR AND FIX THE CONNECTOR TO THE EQUIPMENT.

DETAIL B

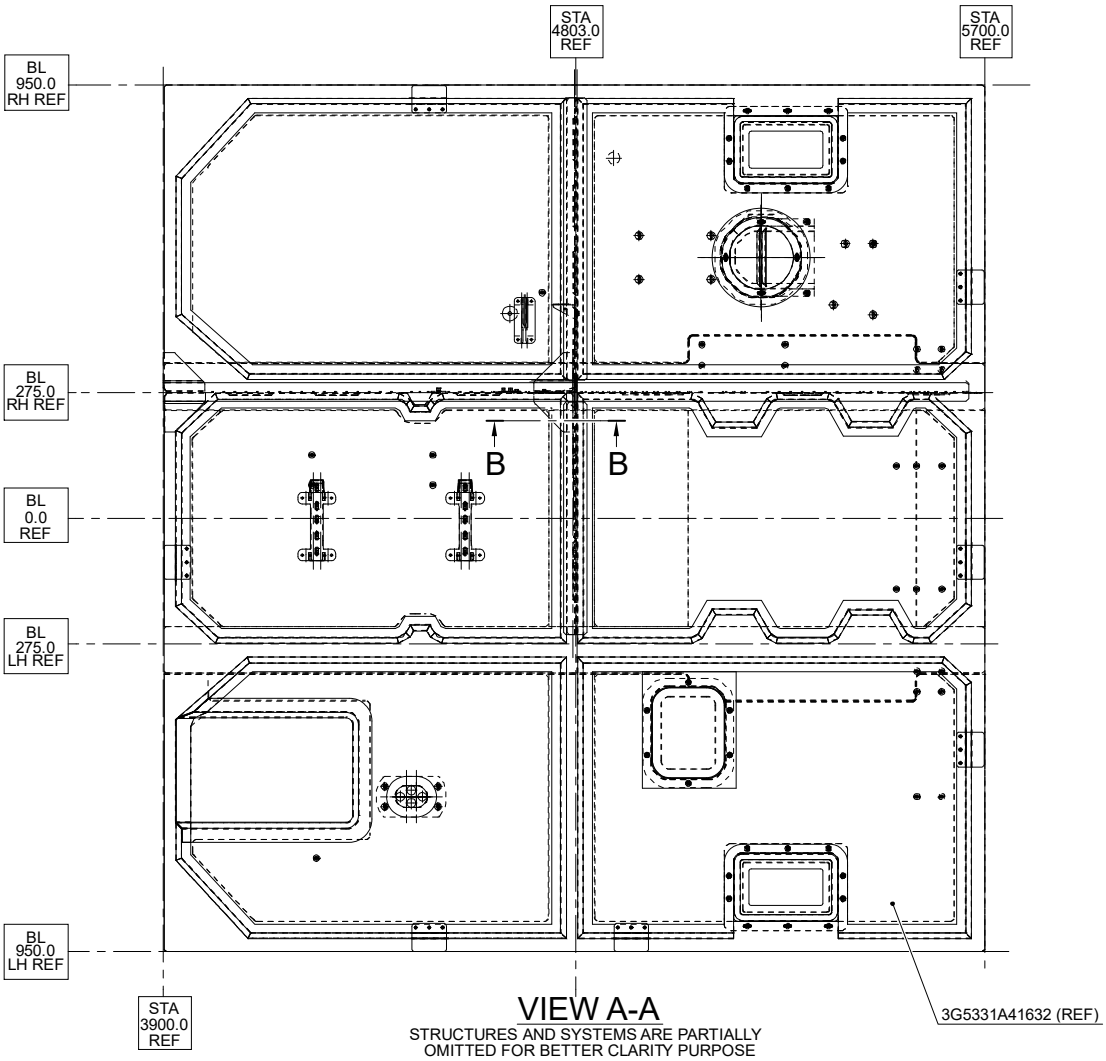
Figure 22

3G5310P33111
PULSE LIGHT CONTROL UNIT
VARIANT

(APPLICABLE TO HELICOPTER S/N 31475 AND APPLICABLE TO HELICOPTERS EQUIPPED WITH FOLDABLE FOOTSTEP INSTALLATION FOR HINGE DOOR P/N 3G5260A00117)



VIEW LOOKING INBOARD



VIEW A-A

STRUCTURES AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE

Figure 23

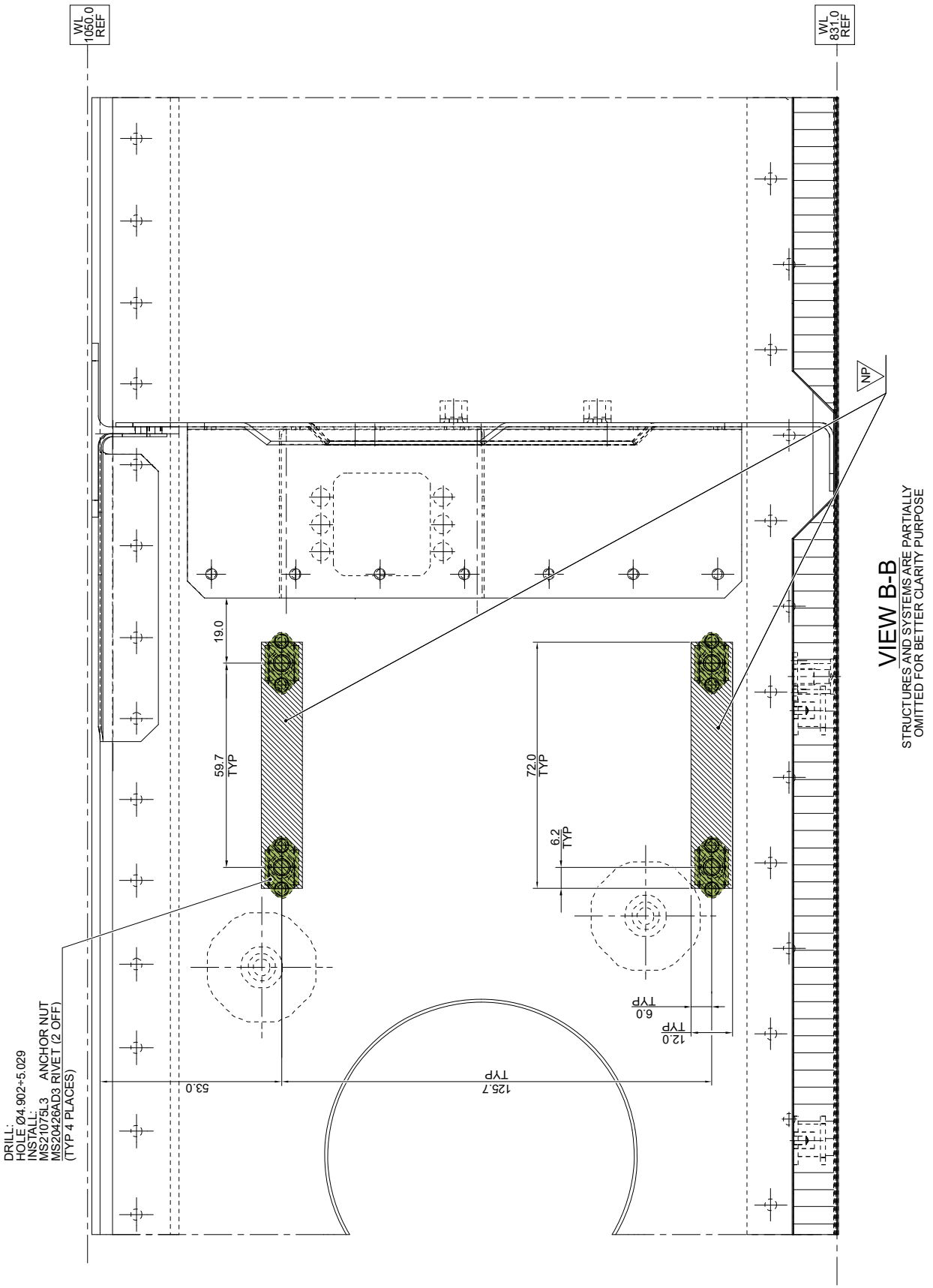

WL 1050.0 REF
WL 831.0 REF
NP
VIEW B-B
STRUCTURES AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE
19.0
59.7 TYP
72.0 TYP
6.2 TYP
6.0 TYP
12.0 TYP
125.7 TYP
53.0
DRILL:
HOLE Ø4.902÷5.029
INSTALL:
MS21075L3 ANCHOR NUT
MS20426AD3 RIVET (2 OFF)
(TYP 4 PLACES)

Figure 24

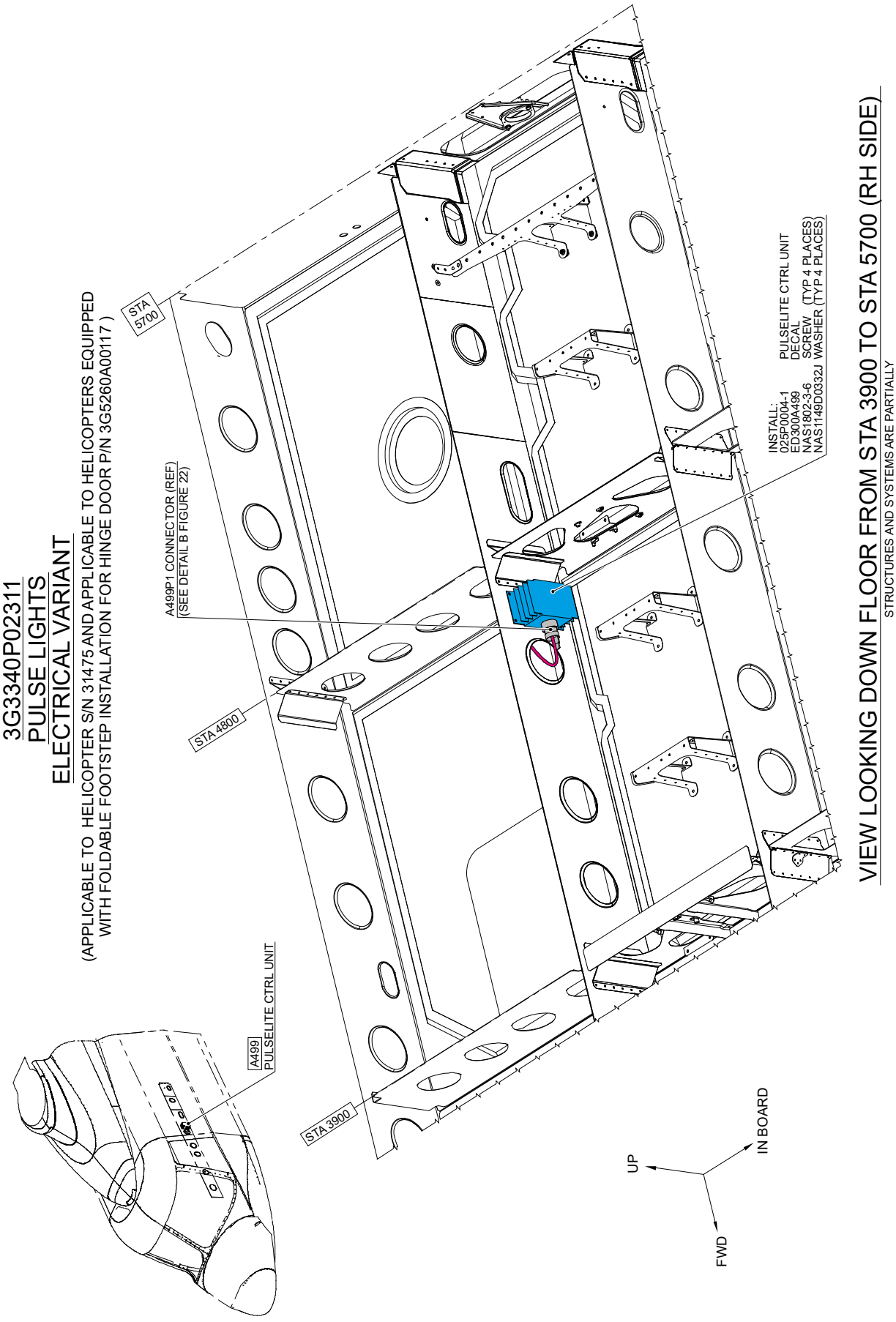
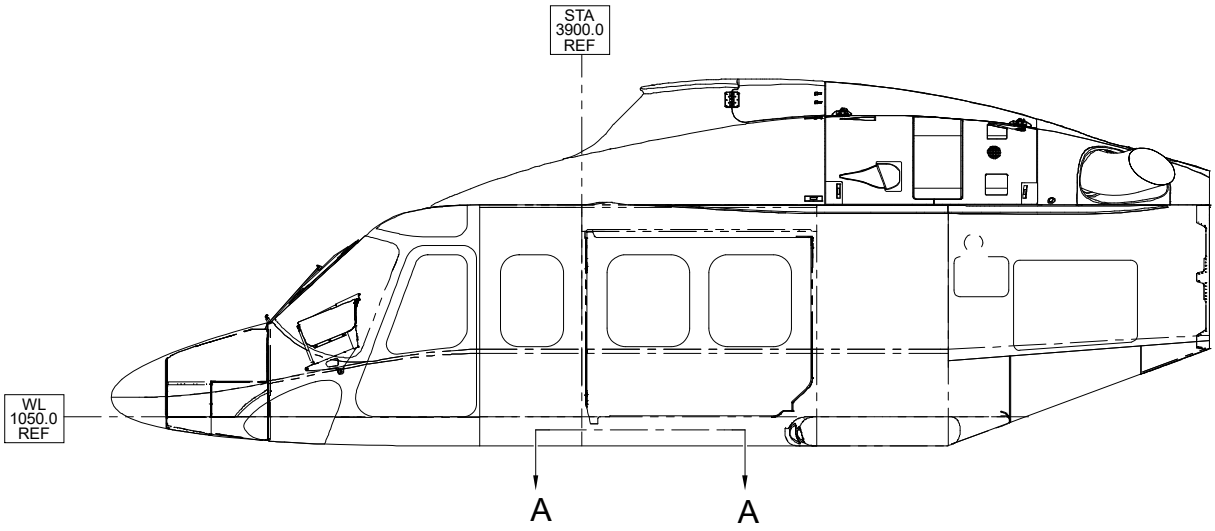
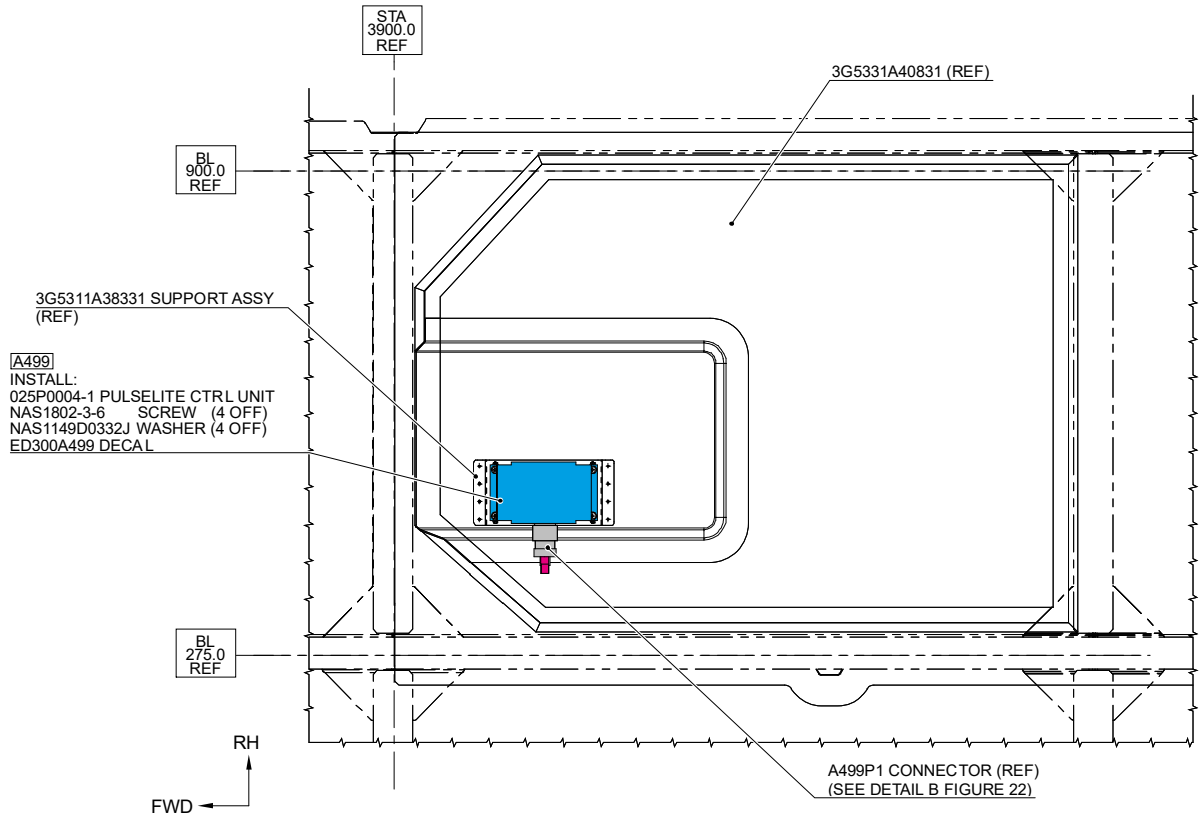

3G3340P02311
PULSE LIGHTS
ELECTRICAL VARIANT
(APPLICABLE TO HELICOPTER S/N 31475 AND APPLICABLE TO HELICOPTERS EQUIPPED WITH FOLDABLE FOOTSTEP INSTALLATION FOR HINGE DOOR P/N 3G5260A00117)
VIEW LOOKING DOWN FLOOR FROM STA 3900 TO STA 5700 (RH SIDE)
STRUCTURES AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE
STA 5700
STA 4800
STA 3900
A499P1 CONNECTOR (REF) (SEE DETAIL B FIGURE 22)
INSTALL:
025P0004-1 PULSELITE CTRL UNIT
ED300A499 DECAL
NAS1802-3-6 SCREW (TYP 4 PLACES)
NAS1149D0332J WASHER (TYP 4 PLACES)
A499 PULSELITE CTRL UNIT
UP
IN BOARD
FWD

Figure 25



VIEW LOOKING INBOARD LEFT SIDE

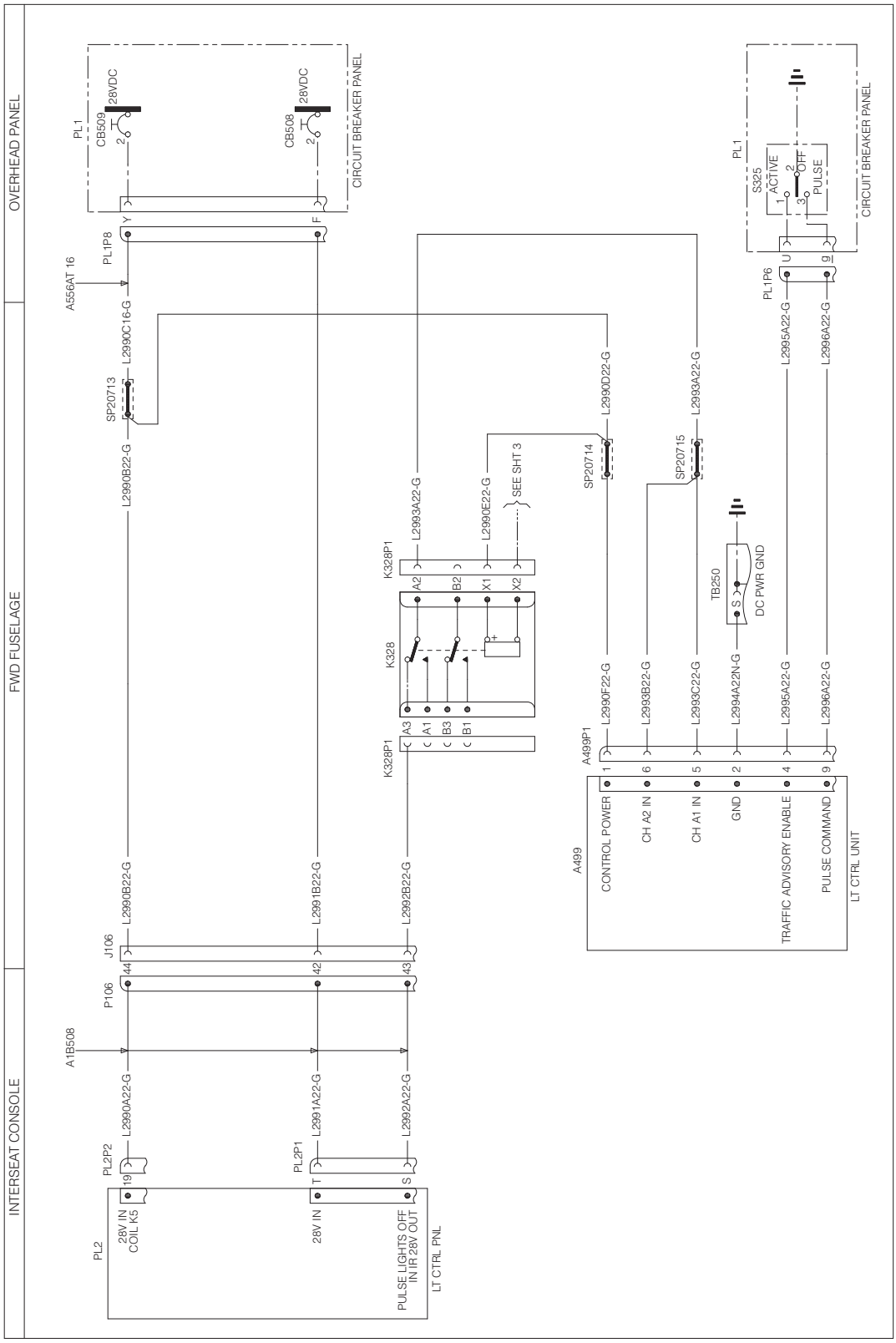


VIEW A-A

STRUCTURES AND SYSTEMS ARE PARTIALLY
OMITTED FOR BETTER CLARITY PURPOSE

Figure 26

3G3340W10911
WIRING DIAGRAM PULSE LIGHTS
SHEET 1



FUNCTIONAL NOTES
ALL CABLES ARE IN LOOM B1B810 UNLESS SPECIFIED
ALL CABLES ARE OF TYPE A556AT 22 UNLESS SPECIFIED

Figure 27

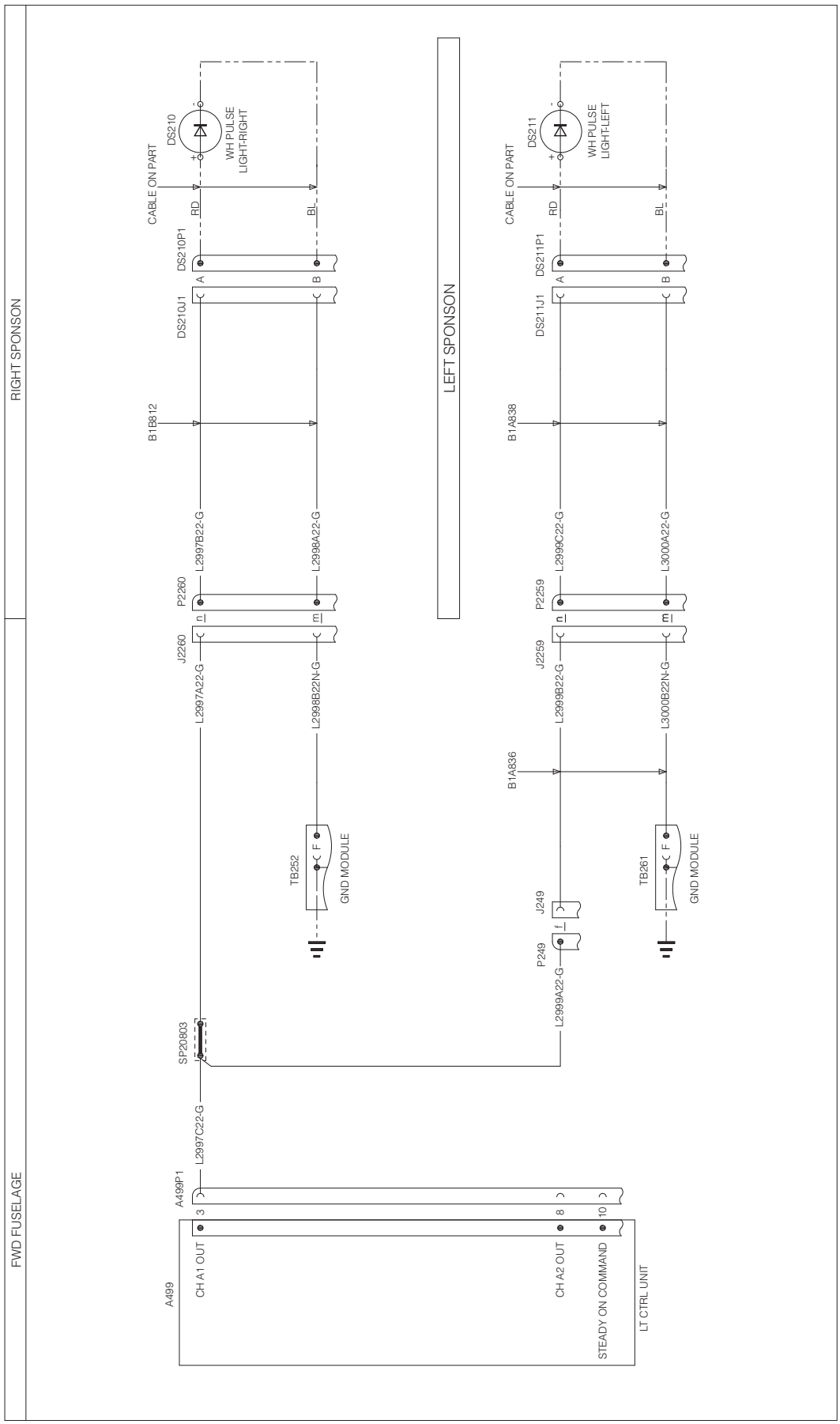

3G3340W10911
WIRING DIAGRAM PULSE LIGHTS
SHEET 2
FWD FUSELAGE
RIGHT SPONSON
LEFT SPONSON
A499
CH A1 OUT
CH A2 OUT
STEADY ON COMMAND
LT CTRL UNIT
A499P1
L2997C22-G
SP20803
L2997A22-G
L2998B22N-G
L2997B22-G
L2998A22-G
J2260
P2260
DS210J1
DS210P1
CABLE ON PART
DS210
WH PULSE LIGHT-RIGHT
RD
BL
B1B812
TB252
GND MODULE
L2999A22-G
P249
J249
L2999B22-G
L3000B22N-G
J2259
P2259
DS211J1
DS211P1
DS211
WH PULSE LIGHT-LEFT
L2999C22-G
L3000A22-G
B1A836
TB261
GND MODULE
FUNCTIONAL NOTES
ALL CABLES ARE IN LOOM B1B810 UNLESS SPECIFIED
ALL CABLES ARE OF TYPE A556AT 22 UNLESS SPECIFIED

Figure 28

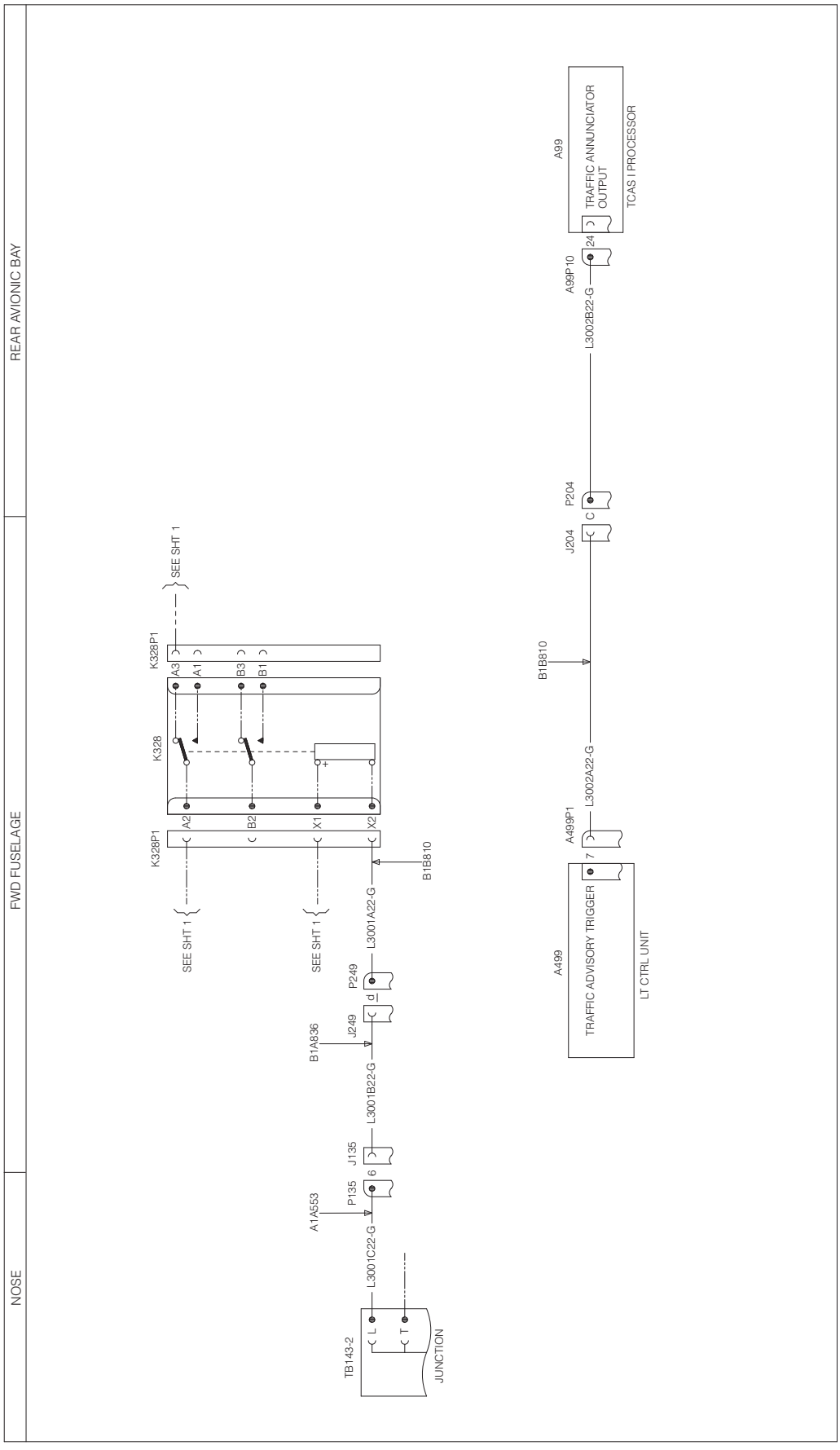
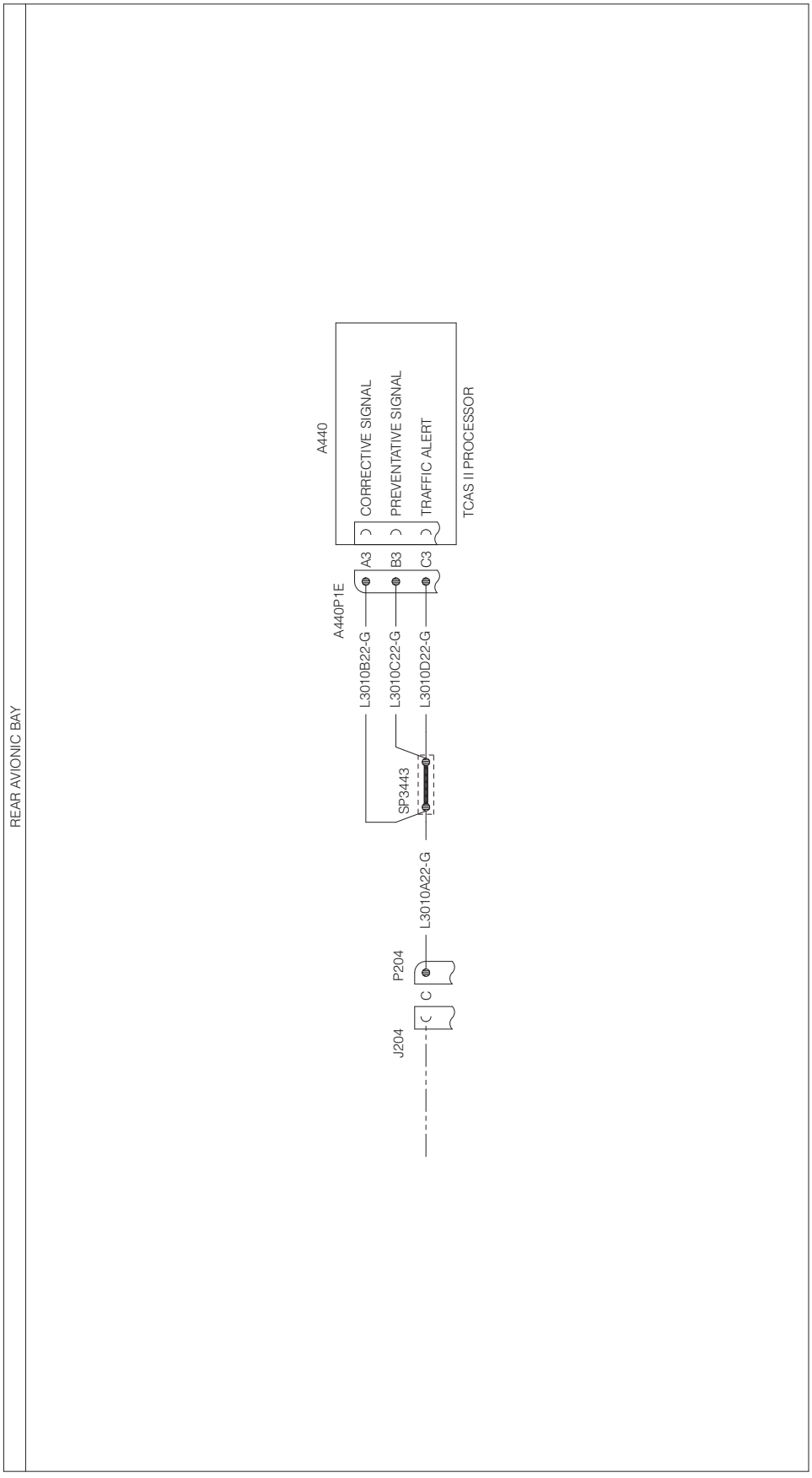

NOSE
FWD FUSELAGE
REAR AVIONIC BAY
3G3340W10911
WIRING DIAGRAM PULSE LIGHTS
SHEET 3
A99
TRAFFIC ANNUNCIATOR OUTPUT
TCAS I PROCESSOR
A99P10
24
L3002B22-G
P204
C
J204
B1B810
L3002A22-G
A499P1
7
A499
TRAFFIC ADVISORY TRIGGER
LT CTRL UNIT
K328P1
A3
A1
B3
B1
K328
A2
B2
X1
X2
SEE SHT 1
B1B810
L3001A22-G
P249
d
J249
B1A836
L3001B22-G
J135
6
P135
A1A553
L3001C22-G
TB143-2
L
T
JUNCTION
FUNCTIONAL NOTES
ALL CABLES ARE IN LOOM C1B302 UNLESS SPECIFIED
ALL CABLES ARE OF TYPE A556AT 22 UNLESS SPECIFIED

Figure 29

3G3340W11011
WIRING DIAGRAM PULSE LIGHTS VARIANT



FUNCTIONAL NOTES
ALL CABLES ARE IN LOOM C1B303 UNLESS SPECIFIED
ALL CABLES ARE OF TYPE A556AT 22 UNLESS SPECIFIED

Figure 30

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.