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SERVICE BULLETIN

N° **139-632**

**OPTIONAL**

DATE: September 5, 2024

REV. : /

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**TITLE**

**ATA 99 - INSTALLATION OF KIT SIAP P/N 4G9900F00411**

**REVISION LOG**

First Issue

# 1. PLANNING INFORMATION

## A. EFFECTIVITY

AW139 helicopter S/N 31887.

## B. COMPLIANCE

At Customer's option.

## C. CONCURRENT REQUIREMENTS

N.A.

## D. REASON

This Service Bulletin is issued in order to provide the necessary instruction to install the kit SIAP P/N 4G9900F00411.

LHD issued this SB for the following reason:

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

## E. DESCRIPTION

Kit SIAP is a fully Integrated self-protection system designed to detect and identify weapon systems whose activities constitutes a menace to the helicopter.

The SIAP provides EW situational awareness and effective alarm indications in case active threats are detected and is able to deploy specific countermeasures against EW threats, either automatically or under pilot's control (manual dispensing).

The SIAP allows also recording the available information about the weapon system activities detected during the mission (event recording) and the path that has been flown by the helicopter. The data are stored permanently in organized data structure for post mission analysis.

Moreover, a Radar Warning system is installed, composed of five antennas capable of detecting emissions from radar emitters. The system furnishes 360 degrees coverage and provides the EWP/CDU with frequency characteristics and DOA of the threats.

This Service Bulletin is issued to allow the full installation of the kit SIAP, including a structural and electrical provision for the MILDS system fifth sensor.

## F. APPROVAL

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 five hundred (500) MMH are deemed necessary. 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

### SIAP POWER ELECTRICAL PROVISION P/N 3G2460A04911

WEIGHT (kg)	ARM (mm)	MOMENT (kgmm)
		2.7
LONGITUDINAL BALANCE	5769	15576.3
LATERAL BALANCE	-489	-1320.3

### SIAP POWER STRUCTURAL PROVISION P/N 3G5311A03513

WEIGHT (kg)	ARM (mm)	MOMENT (kgmm)
		2.8
LONGITUDINAL BALANCE	3833	10732.4
LATERAL BALANCE	-56	-156.8

### CYCLIC INSTALLATION VARIANT P/N 3G6706P01811

WEIGHT (kg)	ARM (mm)	MOMENT (kgmm)
		-0.2
LONGITUDINAL BALANCE	2420	-484
LATERAL BALANCE	-	-

**MILDS (SIAP) COMPLETE PROVISION P/N 3G9350A09011**

<b>WEIGHT (kg)</b>		<b>7.8</b>
	<b>ARM (mm)</b>	<b>MOMENT (kgmm)</b>
<b>LONGITUDINAL BALANCE</b>	5198	40544.4
<b>LATERAL BALANCE</b>	-183	-1427.4

**ECDS (SIAP) COMPLETE PROVISION P/N 3G9930A00911**

<b>WEIGHT (kg)</b>		<b>9.9</b>
	<b>ARM (mm)</b>	<b>MOMENT (kgmm)</b>
<b>LONGITUDINAL BALANCE</b>	8686	85991.4
<b>LATERAL BALANCE</b>	-220	-2178

**EWP (SIAP) COMPLETE PROVISION P/N 3G9960A01111**

<b>WEIGHT (kg)</b>		<b>7.1</b>
	<b>ARM (mm)</b>	<b>MOMENT (kgmm)</b>
<b>LONGITUDINAL BALANCE</b>	2633	18694.3
<b>LATERAL BALANCE</b>	-100	-710

**SIAP FIXED PARTS P/N 3G9960A01311**

<b>WEIGHT (kg)</b>		<b>10</b>
	<b>ARM (mm)</b>	<b>MOMENT (kgmm)</b>
<b>LONGITUDINAL BALANCE</b>	5259	52590
<b>LATERAL BALANCE</b>	-142	-1420

**SIAP REMOVABLE PARTS P/N 3G9900A00611**

<b>WEIGHT (kg)</b>		<b>21.9</b>
	<b>ARM (mm)</b>	<b>MOMENT (kgmm)</b>
<b>LONGITUDINAL BALANCE</b>	9317	204042.3
<b>LATERAL BALANCE</b>	-19	-416.1

## I. REFERENCES

### I.1 PUBLICATIONS

Following Data Modules refer to AMP:

<u>DATA MODULE</u>	<u>DESCRIPTION</u>	<u>PART</u>
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-11-00-01-00A-720A-A	Decal – Install procedure	-
DM04 39-A-20-00-00-00A-69CA-A	Assembled parts - Slippage Marks	-
DM05 39-A-20-10-01-00A-259A-A	Ground connections - Other procedures to protect surfaces	-
DM06 39-A-67-12-01-00A-520A-A	Pilot cyclic stick - Remove procedure	-
DM07 39-A-67-12-01-00A-720A-A	Pilot cyclic stick - Install procedure	-
DM08 39-A-67-12-02-00A-520A-A	Copilot cyclic stick - Remove procedure	-
DM09 39-A-67-12-02-00A-720A-A	Copilot cyclic stick - Install procedure	-

Following Data Modules refer to CSRP:

DM10 CSRP-A-51-42-00-00A-720A-D	Potted inserts - Install procedure	-
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### MAG SERVICE BULLETIN SB-AB1-052

### I.2 ACRONYMS & ABBREVIATIONS

AMDI	Aircraft Material Data Information
AMP	Aircraft Maintenance Publication
AR	As Required
CDU	Control & Display Unit
CSRP	Common Structural Repair Publication
DM	Data Module
DOA	Direction Of Arrival
ECDS	Enhanced Countermeasure Dispensing System
EIU	Expanded Interface Unit
EW	Electronic Warfare
EWCP	Electronic Warfare Control Panel
EWP	Electronic Warfare Processor

ITEP	Illustrated Tool and Equipment Publication
LHD	Leonardo Helicopters Division
MAG	Mecaer Aviation Group
MILDS	Missile Launch Detection System
MLG	Main Landing Gear
MMH	Maintenance Man Hours
RFM	Rotorcraft Flight Manual
SDU	Sequencer & Dispenser Unit
SIAP	Sistema Integrato di AutoProtezione
SPU	Signal Processing Unit
SSU	Safety Switch Unit
TWD	Thread Warning Display

### **I.3 ANNEX**

Annex A SIAP functional test

## **J. PUBLICATIONS AFFECTED**

N.A.

## **K. SOFTWARE ACCOMPLISHMENT SUMMARY**

N.A.

## 2. MATERIAL INFORMATION

### A. REQUIRED MATERIALS

#### A.1 PARTS

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
1	4G9900F00411		KIT SIAP	REF	.		
2	3G9960A01211		SIAP COMPLETE PROVISION	REF	..		
3	3G2460A04911		SIAP POWER ELECTRICAL PROVISION	REF	...		
4	3G2490L05551		Integrally Light Panel SIAP	1	....		
5	3G5311A03513		SIAP POWER STRUCTURAL PROVISION	REF	....		
6	3G5316A73231		Plate Assy	1	.....		
7	A824A01A-A1		Socket Relay Support	1	.....		
8	MS27039-1-07		Screw	4	.....		
9	NAS1149D0332K		Washer	4	.....		
10	NAS1835-3M		Insert	4	.....		
11	3G5317A56931		Plate Assy	1	....		
12	3G9B01L13801	3G2460A04911A1R	SIAP Power C/A (B1L138)	1	....		
13	3G9B01R02801		SIAP Power C/A (B1R028)	1	....		
14	3G9B01R02701		SIAP Power C/A (B1R027)	1	....		
15	3G9C01B35601		SIAP Power C/A (C1B356)	1	....		
16	999-5001-10-219		Plug Button	2	....		
17	999-8001-73-312		Bus Bar	1	....		
18	999-8001-73-412		Bus Bar	1	....		
19	A363A01		Stud	1	....		
20	A601A2B120		Bonding Cable Assy	1	....		
21	A631A01A		Spacer	2	....		
22	A648A01		Relay	1	....		
23	AW001CB07H		Clamp	1	....		
24	AW001CL001-N6		Support	1	....		
25	AW001YC01RED		Locking Ring	6	....		
26	ED300CB657		Decal	1	....		
27	ED300CB658		Decal	1	....		
28	ED300CB659		Decal	1	....		
29	ED300CB660		Decal	1	....		
30	ED300CB661		Decal	1	....		
31	ED300CB662		Decal	1	....		
32	ED300CB663		Decal	1	....		
33	ED300CB664		Decal	1	....		
34	ED300K438		Decal	1	....		
35	MS21043-08		Nut	1	....		
36	MS21043-3		Nut	2	....		
37	MS24693-S52		Screw	1	....		
38	MS3320-1		Circuit Breaker	2	....		
39	MS3320-15		Circuit Breaker	3	....		
40	MS3320-2		Circuit Breaker	1	....		
41	MS3320-3		Circuit Breaker	1	....		
42	MS3320-5		Circuit Breaker	1	....		
43	MS35207-262		Screw	2	....		
44	MS35338-42		Washer	2	....		
45	MS35649-282		Nut	1	....		

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
46	NAS1149D0332J		Washer	8	....		
47	NAS1149DN832H		Washer	3	....		
48	NAS1802-3-25		Screw	1	....		
49	NAS1802-3-6		Screw	4	....		
50	MS21069L06		Nut plate	4	....		
51	MS20426AD3		Rivet	AR	....		
52	MS90335-6		Connector	1	....		
<b>53</b>	<b>3G6706P01811</b>		<b>CYCLIC INSTALLATION VARIANT</b>	<b>REF</b>	<b>...</b>		
54	3G6712A00740		Pilot Cyclic Stick Assy (NVG)	1	....		
55	3G6712A00840		Copilot Cyclic Stick Assy (NVG)	1	....		
56	MS17825-4		Nut	2	....		
57	MS24665-136		Cotter Pin	2	....		
<b>58</b>	<b>3G9350A09011</b>		<b>MILDS (SIAP) COMPLETE PROVISION</b>	<b>REF</b>	<b>...</b>		
<b>59</b>	<b>3G5311A45411</b>		<b>MILDS FIFTH SENSOR STRUCTURAL PROVISION</b>	<b>REF</b>	<b>....</b>		
60	3G5315A09235		Support DAU Assy	2	....		
61	3G5318A15851		Connector Plate	1	....		
62	3G5318A15951		Connector Support	1	....		
63	A522A03A		Rail	1	....		
64	MS20426AD3-3		Rivet	4	....		
65	MS20470AD3-4		Rivet	6	....		
66	MS21069L08		Nut plate	2	....		
67	MS27039-08-06	MS27039-0806	Screw	6	....		
68	NAS1149DN816J		Washer	2	....		
69	NAS1149DN816K		Washer	6	....		
70	NAS1802-08-6		Screw	2	....		
71	NAS1832-08-3M		Insert	2	....		
<b>72</b>	<b>3G9350A08811</b>		<b>MILDS (SIAP) ELECTRICAL PROVISION</b>	<b>REF</b>	<b>....</b>		
73	3G9A01A69801		MILDS (SIAP) C/A (A1A698)	1	....		
74	3G9A02A63301	3G9350A08811A1R	MILDS (SIAP) C/A (A2A633)	1	....		
75	3G9A01B64201		MILDS (SIAP) C/A (A1B642)	1	....		
76	3G9A02B60701	3G9350A08811A2R	MILDS (SIAP) C/A (A2B607)	1	....		
77	3G9B01L14201		MILDS (SIAP) C/A (B1L142)	1	....		
78	3G9B02L14401	3G9350A08811A3R	MILDS (SIAP) C/A (B2L144)	1	....		
79	3G9B01R03301		MILDS (SIAP) C/A (B1R33)	1	....		
80	3G9B02B76201	3G9350A08811A4R	MILDS (SIAP) C/A (B2B762)	1	....		
81	3G9C01B35801		MILDS (SIAP) C/A (C1B358)	1	....		
82	3G9C02B40801	3G9350A08811A7R	MILDS (SIAP) C/A (C2B408)	1	....		
83	3G9D01B22701		MILDS (SIAP) C/A (D1B227)	1	....		
84	3G9D02B22801	3G9350A08811A8R	MILDS (SIAP) C/A (D2B228)	1	....		
85	A363A01		Ground Stud	5	....		
86	A366A3E08C		Stud	1	....		
87	A366A3E08C75		Stud	1	....		
88	A366A3E16C		Stud	1	....		
89	A366A3E22C		Stud	3	....		
90	A366A3E32C		Stud	1	....		
91	A593A-A08		Terminal Board	1	....		
92	A631A01A		Spacer	2	....		
93	A631A01B		Spacer	1	....		
94	AW001CB03H		Clamp	8	....		
95	AW001CB04H		Clamp	1	....		
96	AW001CB05H		Clamp	3	....		



#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
97	AW001CB08H		Clamp	8	.....		
98	AW001CB09H		Clamp	2	.....		
99	AW001TL3A06		Anchor Nut	2	.....		
100	ED300GS376		Decal	1	.....		
101	ED300J2454		Decal	1	.....		
102	ED300TB3066-3		Decal	1	.....		
103	M85049/95-14A-A		Flange	1	.....		
104	MS21043-3		Nut	6	.....		
105	MS9592-010		Bracket	1	.....		
106	NAS1149D0332J		Washer	10	.....		
107	NAS1149DN416J		Washer	4	.....		
108	NAS1190E3P15AK		Screw	1	.....		
109	NAS1190E3P8AK		Screw	1	.....		
110	NAS1802-04-7		Screw	4	.....		
111	NAS1802-3-10		Screw	3	.....		
112	NAS1802-3-17		Screw	1	.....		
113	NAS1802-3-30		Screw	1	.....		
114	NAS1802-3-9		Screw	2	.....		
115	NAS43DD3-22N		Spacer	1	.....		
116	NAS43DD3-44N		Spacer	2	.....		
117	NAS43DD3-45N		Spacer	3	.....		
118	M81824/1-1		Splice	3	.....		
119	A583A2418C		Cap	3	.....		
<b>120</b>	<b>3G9930A00911</b>		<b>ECDS (SIAP) COMPLETE PROVISION</b>	<b>REF</b>	<b>...</b>		
<b>121</b>	<b>3G9930A00711</b>		<b>ECDS (SIAP) ELECTRICAL PROVISION</b>	<b>REF</b>	<b>.....</b>		
122	3G9A01A69901	3G9930A00711A1R	ECDS (SIAP) C/A (A1A699)	1	.....		
123	3G9A02A63401	3G9930A00711A1R	ECDS (SIAP) C/A (A2A634)	1	.....		
124	3G9B01L14401	3G9930A00711A2R	ECDS (SIAP) C/A (B1L144)	1	.....		
125	3G9B02L14601	3G9930A00711A2R	ECDS (SIAP) C/A (B2L146)	1	.....		
126	3G9B02B76301	3G9930A00711A2R	ECDS (SIAP) C/A (B2B763)	1	.....		
127	3G9C01A38201	3G9930A00711A5R	ECDS (SIAP) C/A (C1A382)	1	.....		
128	3G9C01B35901	3G9930A00711A5R	ECDS (SIAP) C/A (C1B359)	1	.....		
129	3G9C01B36101	3G9930A00711A5R	ECDS POWER C/A (C1B361)	1	.....		
130	3G9C02B41101	3G9930A00711A4R	ECDS (SIAP) C/A (C2B411)	1	.....		
131	3G9D01A20901	3G9930A00711A4R	ECDS (SIAP) C/A (D1A209)	1	.....		
132	3G9D01B22801	3G9930A00711A4R	ECDS (SIAP) C/A (D1B228)	1	.....		
133	3G9D02B23001	3G9930A00711A4R	ECDS (SIAP) C/A (D2B230)	1	.....		
134	A363A01		Stud	1	.....		
135	A388A3E14C75		Stud	4	.....		
136	A593A-A02		Terminal Board	1	.....		
137	A593A-C01		Terminal Board	1	.....		
138	A631A01A		Spacers	2	.....		
139	A631A01B		Spacers	1	.....		
140	A648A01		Relay	1	.....		
141	AW001CB05H		Clamp	4	.....		
142	AW001CB07H		Clamp	3	.....		
143	AW001CB10H		Clamp	2	.....		
144	AW001CK03LC		Lacing Cord	AR	.....		
145	AW001CL001-N6		Support	2	.....		
146	D38999/33W17R		Cover	2	.....		
147	ED300GS381		Decal	1	.....		
148	ED300J3082		Decal	1	.....		
149	ED300J3084		Decal	1	.....		

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
150	ED300J417		Decal	1	.....		
151	ED300J418		Decal	1	.....		
152	ED300K440		Decal	1	.....		
153	ED300TB3066-1		Decal	1	.....		
154	ED300TB3066-2		Decal	1	.....		
155	M85049/95-16A-A		Flange	1	.....		
156	M85049/95-18A-A		Flange	2	.....		
157	M85049/95-20A-A		Flange	1	.....		
158	NAS1149D0332J		Washer	4	.....		
159	NAS1149DN416J		Washer	24	.....		
160	NAS1190E3P7AK		Screw	5	.....		
161	NAS1802-04-6		Screw	8	.....		
162	NAS1802-04-7		Screw	8	.....		
<b>163</b>	<b>3G9960A01111</b>		<b>EWP (SIAP) COMPLETE PROVISION</b>	<b>REF</b>	<b>...</b>		
<b>164</b>	<b>3G5311A45211</b>		<b>EWP (SIAP) STRUCTURAL PROVISION</b>	<b>REF</b>	<b>.....</b>		
165	3G5315P06831		USB Plate	1	.....		
166	3G5317A64131		Cover Plate Assy	1	.....		
167	3G5318A14231		Breakers Panel Support Assy	1	.....		
168	3G5318A15131		Upper Cover BL 600 RH Assy	1	.....		
169	3G5318A15231		Lower Cover BL 600 RH Assy	1	.....		
170	3G5318A15531		EWP Support Assy	2	.....		
171	3G5318A17351		Coupler Support	2	.....		
172	A297A04TW01		Rivet Blind	AR	.....		
173	A414A04V238A1		Support	1	.....		
174	MS20426AD3		Rivet	AR	.....		
175	MS21061-08	MS21061L08	Nut plate	2	.....		
176	MS21075-08	MS21075L08N	Nut plate	2	.....		
177	MS21071L08		Nut plate	4	.....		
178	MS21075L3	MS21075L3N	Anchor Nut	6	.....		
179	MS27039-1-06		Screw	2	.....		
180	MS27039-1-07		Screw	30	.....		
181	MS35207-229		Screw	4	.....		
182	NAS1149D0332J		Washer	26	.....		
183	NAS1149D0332K		Washer	6	.....		
184	NAS1835-3M		Insert	30	.....		
185	MS21069-06		Nut plate	2	.....		
186	MS21069-08		Nut plate	2	.....		
187	MS21069L06		Anchor nut	2	.....		
188	MS20426AD3		Rivet	AR	.....		
189	NAS1097AD3		Rivet	4	.....		
<b>190</b>	<b>3G9960A00911</b>		<b>EWP (SIAP) ELECTRICAL PROVISION</b>	<b>REF</b>	<b>.....</b>		
191	3G4620L00951		DATA BUS 1553 LANE A (SIAP)	1	.....		
192	3G4620L01051		DATA BUS 1553 LANE A (SIAP)	1	.....		
193	3G4620L01451	3G9960A00911A4R	DATA BUS 1553 LANE B (SIAP)	1	.....		
194	3G4620L01551		DATA BUS 1553 LANE B (SIAP)	1	.....		
195	3G9C01B35701		EWP (SIAP) C/A (C1B357)	1	.....		
196	3G9C02B40701		EWP (SIAP) C/A (C2B407)	1	.....		
197	3G4620L01151	3G9960A00911A5R	DATA BUS 1553 LANE A (SIAP)	1	.....		
198	3G4620L01251		DATA BUS 1553 LANE A	1	.....		

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
			(SIAP)				
199	3G4620L01651		DATA BUS 1553 LANE B (SIAP)	1	.....		
200	3G4620L01751		DATA BUS 1553 LANE B (SIAP)	1	.....		
201	3G9A01A69701		EWP (SIAP) C/A (A1A697)	1	.....		
202	3G9A02A63201		EWP (SIAP) C/A (A2A632)	1	.....		
203	3G9C03B31701		EWP (SIAP) C/A (C3B317)	1	.....		
204	3G4620L01351		DATA BUS 1553 LANE A (SIAP)	1	.....		
205	3G4620L01851	3G9960A00911A3R	DATA BUS 1553 LANE B (SIAP)	1	.....		
206	3G9B01R03201		EWP (SIAP) C/A (B1R32)	1	.....		
207	3G9B02B76101		EWP (SIAP) C/A (B2B761)	1	.....		
208	3G9A01B64101	3G9960A00911A2R	EWP (SIAP) C/A (A1B641)	1	.....		
209	3G9A02B60601		EWP (SIAP) C/A (A2B606)	1	.....		
210	D667-407XB15T1W-59		Cover	1	.....		
211	A366A3E14C		Stud	1	.....		
212	A388A3E08C75		Standoff	1	.....		
213	A388A3E16C75		Standoff	1	.....		
214	A522A03A		Rail	1	.....		
215	A593A-A01		Terminal Board	1	.....		
216	A593A-H01		Terminal Board	1	.....		
217	A593A-H06		Terminal Board	1	.....		
218	AW001CB03H		Clamp	1	.....		
219	AW001CB05H		Clamp	1	.....		
220	AW001CB06H		Clamp	1	.....		
221	AW001CK03LC		Lacing Cord	AR	.....		
222	AW001CL006AT01-X1		Support	2	.....		
223	AW001CL007-CM		Support	2	.....		
224	AW001CL510C-N6		Support	2	.....		
225	AW001CL510D-N6		Support	1	.....		
226	D38999/33W13R		Cover	1	.....		
227	ED300J1024		Decal	1	.....		
228	ED300J1045		Decal	1	.....		
229	ED300J1049		Decal	1	.....		
230	ED300J1127		Decal	1	.....		
231	ED300J1175		Decal	1	.....		
232	ED300LANE;A		Decal	1	.....		
233	ED300LANE;B		Decal	1	.....		
234	ED300LANE;DATA;BUS		Decal	1	.....		
235	ED300SIAP		Decal	1	.....		
236	ED300TB181-1		Decal	1	.....		
237	ED300TB183		Decal	1	.....		
238	ED300TB3064		Decal	1	.....		
239	EN6049-006-25-5		Nomex	AR	.....		
240	M85049/95-14A-A		Flange	1	.....		
241	M85049/95-16A-A		Flange	2	.....		
242	MS21043-3		Nut	1	.....		
243	MS24693-C272		Screw	3	.....		
244	MS27039-1-08		Screw	3	.....		
245	MS35206-229		Screw	2	.....		
246	MS35206-244		Screw	2	.....		

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
247	NAS1149D0332J		Washer	7	....		
248	NAS1149DN416J		Washer	8	....		
249	NAS1149DN432J		Washer	4	....		
250	NAS1149DN616J		Washer	2	....		
251	NAS1149DN816J		Washer	2	....		
252	NAS1190E3P5AK		Screw	1	....		
253	NAS1190E3P6AK		Screw	1	....		
254	NAS1802-04-10		Screw	4	....		
255	NAS1802-04-7		Screw	8	....		
256	NAS1802-06-6		Screw	2	....		
257	NAS1802-3-7		Screw	1	....		
258	NAS43DD3-25N		Spacer	1	....		
259	R686-404-1/9-A10-0		Mounting Tray	1	....		
260	A529A490-1502		Backshell	1	....		
<b>261</b>	<b>3G9960A01311</b>		<b>SIAP FIXED PARTS</b>	<b>REF</b>	<b>..</b>		
<b>262</b>	<b>3G9930A00811</b>		<b>ECDS (SIAP) EQUIPMENT INSTALLATION</b>	<b>REF</b>	<b>...</b>		
<b>263</b>	<b>3G9960A01011</b>		<b>EWP (SIAP) EQUIPMENT INSTALLATION</b>	<b>REF</b>	<b>...</b>		
264	1159-504-03		Expanded Interface Unit	1	....		
265	1259.007-01		EIU ECDS Support	1	....		
266	881-0790-03-101		EWCP	1	....		
267	ADB/A-R42LP-BK3A-S		Box Coupler	4	....		
268	AMB/A-D-ACB1-PG3A-P		Connector	4	....		
269	AW001CL001-N6	A631A01A	Support	1	....		
270	EA9900V511-001		Electronic Warfare Processor	1	....		
271	EA9900V513-001		TWD Panel	1	....		
272	ED300A690		Decal	1	....		
273	ED300A692		Decal	1	....		
274	ED300CP82		Decal	1	....		
275	ED300CP83		Decal	1	....		
276	ED300CP84		Decal	1	....		
277	ED300CP85		Decal	1	....		
278	ED300DS195		Decal	1	....		
279	ED300PL138		Decal	1	....		
280	MS21042L04		Nut	8	....		
281	NAS1149D0332J		Washer	10	....		
282	NAS1149DN416J		Washer	16	....		
283	NAS1802-04-7		Screw	8	....		
284	NAS1802-3-8		Screw	10	....		
285	A601A3B16		Bonding Cable	1	....		
<b>286</b>	<b>3G9900A00611</b>		<b>SIAP REMOVABLE PARTS</b>	<b>REF</b>	<b>..</b>		
<b>287</b>	<b>3G1110A30131</b>		<b>CHAFFS-FLARES ELEVAT. ANGLE PAINT</b>	<b>REF</b>	<b>...</b>		
288	3G1110A30151		Stencil Red	2	....		
289	3G1110A30152		Stencil Yellow	2	....		
290	3G1110A30154		Decal Graduated	2	....		
<b>291</b>	<b>3G9350A08911</b>		<b>MILDS (SIAP) EQUIPMENT INSTALLATION</b>	<b>REF</b>	<b>...</b>		
292	1101-450-01		Dispenser Cover	2	....		
293	1101.409-01		Magazine 1"X 1" Chaff	REF	....		
294	1101.409-02		Magazine 1"X 1" Flare	REF	....		

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
295	1101.409-03		Magazine 1"X 2" Flare	REF	....		
296	1155.500-01		Safety Switch Unit	1	....		
297	1160-504-03		Sequence Dispenser Unit	2	....		
298	3G9D12A00711		ECDS (SIAP) C/A (D2A7)	1	....		
299	3G9D12B10711		ECDS (SIAP) C/A (D2B107)	1	....		
300	50.2860.924.00		MILDS unit	4	....		
301	A601A3B50		Bonding Cable Assy	2	....		
302	A601A4B120		Bonding And Earthing Cable Assy	2	....		
303	A601A4B60		Bonding Cable Assy	2	....		
304	AW001CB09H		Clamp	2	....		
305	ED300A412		Decal	1	....		
306	ED300A682		Decal	1	....		
307	ED300A683		Decal	1	....		
308	ED300A684		Decal	1	....		
309	ED300A685		Decal	1	....		
310	ED300A691		Decal	1	....		
311	ED300A694		Decal	1	....		
312	LN9025-0410K		Washer	2	....		
313	LN9025-0510K		Washer	3	....		
314	LN9025-0610K		Washer	16	....		
315	LN9038K05010		Screw	3	....		
316	LN9038K06016		Screw	12	....		
317	LN9136-04018		Screw	32	....		
318	LN9338-04		Nut	2	....		
319	LN9338-06		Nut	4	....		
320	MS17986C509	NAS1335A5C09D	Quick Release Pin	1	....		
321	MS20995C32		Lock Wire	AR	....		
322	MS35338-43		Washer	2	....		
323	NAS1149D0332K		Washer	2	....		
324	NAS1756-24		Streamer Warning	1	....		
325	NAS1802-3-7		Screw	2	....		
<b>326</b>	<b>3G9900A00412</b>		<b>SUPPORT CHAFFS-FLARES INSTALLATION</b>	<b>REF</b>	<b>...</b>		
327	3G5316A73751		Safety Switch Plate	1	....		
328	3G5317A86231		Chaff-Flares Support Assy LH	1	....		
329	3G5317A86331		Chaff-Flares Support Assy RH	1	....		
330	HL20PB-8-4		Pin-Rivet	2	....		
331	HL86-8		Collar	2	....		
332	NAS1802-3-12		Screw	16	....		
333	A556A-T20		Wire	5 m	.		
334	3G1130A01254		AW139 Cockpit Logo Small	1	.		
335	3G1110A35652		Decal	1	.		
336	A520A01WPN		Terminal Board	1	.		
337	M85049/95-25A-A		Flange	1	.		
338	MS35206-229		Screw	4	.		
339	NAS1149DN616J		Washer	4	.		
340	M23053/8-004-C		Insulation Sleeving	6	.		
341	M81824/1-1		Splice	2	.		
342	LN65022-0506		Screw	4	.		
343	LN9025-0510L		Washer	4	.		
344	ACB1/PG-4P-S38		Connector	1	.		
345	ACB1/PG-3AP-S38		Connector	1	.		

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

Refer also to Annex A for the spares materials required to comply with this Service Bulletin.

## 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
346	MMM-A-132 Type 1, Class 3 199-05-002 Type II, Class 2	Adhesive EA934NA (C057)	AR	(1)	-
347	MMM-A-132, Type 2, Class II 199-05-002, Type I, Class 2	Adhesive EA9309.3NA (C021)	AR	(1)	-
348	WHPS083,TYPE P CLASSE B Code No. 99999999000010432	Sealant PR2200 or PR2201	AR	(1)	-
349	AWTR033	Glass dry fabric cloth HexForce 20749 1200 (C931)	AR	(1)	-
350	Commercial / 199-50-002 Type I	Araldit resin LY5138-2	AR	(1)	-
351	Commercial / 199-50-002 Type II	Hardener HY5173	AR	(1)	-
352	199-05-003 Type I, Class 2, Shape IIB	Sealant (C248)	AR	(1)	-
353	AWMS05-001 Type 1, Class A, Grade 2	Sealant MC-780 A-2 (C465)	AR	(1)	-
354	AWMS05-001 Type 1, Class B, Grade 2	Sealant MC-780 B-2 (C465)	AR	(1)	-
355	TT50 260SS	Tape 5453 (C223)	AR	(1)	-
356	Code No. 99999999000001675	Adhesive CB200-40 (C356)	AR	(1) (2)	-
357	EN6049-006-25-5	Nomex	AR	(1)	-

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

## A.3 LOGISTIC MATRIX

N.A.

### NOTE

- (1) Item to be procured as local supply.
- (2) Item to be used with mixing tool P/N 61608946.

## B. SPECIAL TOOLS

The following special tools, or equivalent, are necessary to accomplish this Service Bulletin:

#	P/N	DESCRIPTION	Q.TY	NOTE	PART
358	61608946	Mixing tool	1		-
359	AX-CD-02	Crimping Die	1		-

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

Refer also to Annex A for the special tools required to comply with this Service Bulletin.

## C. INDUSTRY SUPPORT INFORMATION

N.A.

### **3. ACCOMPLISHMENT INSTRUCTIONS**

#### **GENERAL NOTES**

- a) Place an identification tag on all components that are re-usable, including the attaching hardware that has been removed to gain access to the modification area and adequately protect them until their later re-use.
- b) Shape the cables in order to prevent interference with the structure and the other existing installations, using where necessary suitable lacing cords.
- c) Use edging P/N A236A on metallic edges which can damage cable assemblies and where abrasion may occur.
- d) Use braided tubing P/N A582A where cable assemblies chafing or contact with structure may occur.
- e) Exercise extreme care during drilling operations to prevent instruments, cables and hoses damage.
- f) 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.
- g) During the installation of bonding braids or components requiring grounding, clean the surface structure in order to obtain a good ground contact.
- h) Let adhesive cure at room temperature for at least 24 hours unless otherwise specified.
- i) Exposed thread surface and nut must be protected using a layer of tectyl according to MIL-C-16173 grade I.
- j) All lengths are in mm.
- k) Refer to Figure 113 for control panels installation position on the interseat console. Control panel position shown in other figures is for reference only.



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 installation and perform MILDS fifth sensor structural provision P/N 3G5311A45411 as described in the following procedure:
  - 2.1 With reference to Figure 3 Section F-F, install connector support P/N 3G5318A15951 by means of n°6 rivets P/N MS20470AD3.
  - 2.2 In accordance with CSRP DM CSRP-A-51-42-00-00A-720A-D and with reference to Figure 2 Section N-N, install n°2 inserts P/N°NAS1832-08-3 by means of adhesive EA934NA (C057) on the RH UPR panel assy P/N°3G5315A49131.
  - 2.3 With reference to Figure 2 Section M-M, install rail terminal module P/N°A522A03A by means of n°2 screws P/N°NAS1802-08-6 and n°2 washers P/N°NAS1149DN816J.
  - 2.4 With reference to Figure 4 Section G-G (Before rework), remove and discard RH plate P/N°3G5316A94251 and existing fasteners from RH support assy P/N°3G5316A93831.
  - 2.5 With reference to Figure 4 Section G-G (Rework dimension), perform indicated cut out on the RH support assy P/N 3G5316A93831.
  - 2.6 In accordance with AMP DM 39-A-20-10-01-00A-259A-A and with reference to Figure 4 Section G-G, prepare indicated contact surfaces to assure the correct electrical bonding.
  - 2.7 With reference to Figure 4 Section H-H, install n°2 nut plates P/N MS21069L08 by means of n°4 rivets P/N MS20426AD3 on the RH support assy P/N°3G5316A93831.

**NOTE**

Prepare contact surfaces of the connector plate P/N°3G5318A15851 as required to assure the correct electrical bonding.

- 2.8 With reference to Figure 4 Section G-G (After rework), install connector plate P/N°3G5318A15851 by means of n°6 screws P/N° MS27039-0806 and n°6 washers P/N° NAS1149DN816K on the RH support assy P/N°3G5316A93831.
3. In accordance with AMP DM 39-A-06-41-00-00A-010A-A and with reference to Figures 5 thru 18, gain access to the area affected by the installation and perform EWP (SIAP) structural provision P/N 3G5311A45211 as described in the following procedure:

- 3.1 With reference to Figure 6 Section E-E, perform cut-out according to standard n°999-0010-21-214 on the skin P/N 3G5326A00952.
- 3.2 With reference to Figure 6 Section E-E, drill n°2 holes as required according to connector ACB1/BK-4S-S34 on the skin P/N 3G5326A00952.
- 3.3 In accordance with AMP DM 39-A-20-10-01-00A-259A-A and with reference to Figure 6 Section E-E, remove paint and prepare indicated areas to assure the correct electrical bonding.
- 3.4 With reference to Figure 6 View B, install USB plate P/N 3G5316P06831.
- 3.5 With reference to Figure 8 View C, perform cut-out according to standard n°999-0010-21-218 on the instrument plate P/N 3G3110A00256.
- 3.6 In accordance with AMP DM 39-A-20-10-01-00A-259A-A and with reference to Figure 8 View C, remove paint and prepare indicated areas to assure the correct electrical bonding.
- 3.7 With reference to Figure 10 Detail G, remove AW139 logo P/N 3G1130A01251 and related fixing hardware.
- 3.8 With reference to Figure 10 Detail G, remove and discard n°4 nut plates from instrument plate P/N 3G3110A00256.
- 3.9 With reference to Figure 10 View AC-AC, fill n°2 existing holes by means of adhesive EA934NA (C057).
- 3.10 With reference to Figure 10 View AC-AC, install n°4 nut plates P/N MS21071L08 by means of n°8 rivets P/N MS20426AD3.
- 3.11 With reference to Figure 10 Detail G, install AW139 cockpit logo P/N 3G1130A01254 by means of related fixing hardware.
- 3.12 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 10 Detail G, install decal P/N 3G1110A35652.
- 3.13 With reference to Figure 10 View AC-AC, perform cut-out as indicated on the instrument plate P/N 3G3110A00256.
- 3.14 With reference to Figure 10 View AC-AC, drill n°4 holes  $\varnothing$  4.27÷4.39 on the instrument plate P/N 3G3110A00256.
- 3.15 With reference to Figure 10 View AC-AC, install n°2 anchor nuts P/N MS21075-08 and n°2 anchor nuts P/N MS21061-08 by means of n°8 rivets P/N MS20426AD3-4.

### NOTE

Perform the following step 3.16 only if TWD panel DS195 P/N EA9900V513-001 will not be immediately installed.

- 3.16 With reference to Figure 8 View C, install cover plate assy P/N 3G5317A64131 by means of n°4 screws P/N MS35207-229.
- 3.17 With reference to Figure 9 View D, drill n°2 holes  $\varnothing$  4.267÷4.394 and n°2 holes  $\varnothing$  3.683÷3.810 through the closing bulkhead P/N 3G3110A00953.
- 3.18 With reference to Figure 9 View D, install n°2 nut plates P/N MS21069-08 and n°2 nut plates P/N MS21069-06 by means of n°8 rivets P/N MS20426AD3.
- 3.19 In accordance with AMP DM 39-A-20-10-01-00A-259A-A and with reference to Figure 9 View D, prepare indicated areas to assure the correct electrical bonding.
- 3.20 With reference to Figure 9 View D and Figure 11 Detail F and Section H-H, temporarily locate support connector P/N A414A04V238A1 and countermark positions of n°2 anchor nut holes on the closing bulkhead P/N 3G3110A00953.
- 3.21 With reference to Figure 9 View D and Figure 11 Section H-H, drill n°2 holes  $\varnothing$  6.35÷6.47 in the previously countermarked positions through the closing bulkhead P/N 3G3110A00953.
- 3.22 With reference to Figure 9 View D, install n°2 anchor nuts P/N MS21075L3 by means of n°4 rivets P/N MS20426AD3.
- 3.23 In accordance with AMP DM 39-A-20-10-01-00A-259A-A and with reference to Figure 11 Section H-H, prepare indicated areas to assure the correct electrical bonding.
- 3.24 With reference to Figure 11 Detail F, install connector support P/N A414A04V238A1 by means of n°2 screws P/N MS27039-1-06 and n°2 washers P/N NAS1149D0332J.
- 3.25 In accordance with AMP DM 39-A-20-10-01-00A-259A-A and with reference to Figure 7 Detail N, remove paint and prepare indicated areas to assure the correct electrical bonding.
- 3.26 With reference to Figure 7 Section L-L and Section M-M, temporarily locate coupler support P/N 3G5318A17351 and countermark positions of n°4 insert holes on the compartment passenger subfloor P/N 3P5331A00233.
- 3.27 In accordance with CSRP DM CSRP-A-51-42-00-00A-720A-D and with reference to Figure 7 Section M-M, install n°4 inserts P/N NAS1835-3M by means of adhesive EA934NA (C057) on the previously countermarked positions on the compartment passenger subfloor.

- 3.28 With reference to Figure 7 Section L-L, install coupler support P/N 3G5318A17351 by means of n°4 screws P/N MS27039-1-07 and n°4 washers P/N NAS1149D0332J.
- 3.29 With reference to Figure 12 Detail P, remove cover BL600 RH assy P/N 3G5315A48231 and angular lower assy RH P/N 3G5315A76231.
- 3.30 With reference to Figure 16 Section T-T and Figure 17 Section AB-AB, perform indicated cut outs on the forward floor assy P/N 3P5340A44131. Seal all around the edge by means of adhesive EA934NA (C057).
- 3.31 Prepare a compound mixing 100 parts by weight of araldit resin LY5138-2 and 23 parts by weight of hardener HY5173.
- 3.32 With reference to Figure 17 Schematic section AB-AB, apply on the cut out edges n°2 plies of fiberglass fabric 20749-1200 (C931) soaked with the previously prepared compound. Let adhesive cure.
- 3.33 With reference to Figure 17 Section AB-AB, drill n°2 holes  $\varnothing$  5.74÷5.87 on the forward floor assy.
- 3.34 With reference to Figure 17 Section AB-AB, install n°2 anchor nuts P/N MS21075L3 by means of n°4 rivets P/N MS20426AD3.
- 3.35 In accordance with AMP DM 39-A-20-10-01-00A-259A-A and with reference to Figure 15 Section S1-S1, remove paint and prepare indicated areas to assure the correct electrical bonding.
- 3.36 With reference to Figure 14 Section S-S and Figure 15 Section S1-S1, temporarily locate n°2 EWP support assy P/N 3G5318A15531, coupler support P/N 3G5318A17351 and countermark positions of n°16 insert holes on the forward floor assy P/N 3P5340A44131.
- 3.37 With reference to Figure 14 Section S-S, temporarily locate BL600 RH lower cover assy P/N 3G5318A15231 and countermark positions of n°2 insert holes on the forward floor assy P/N 3P5340A44131 and n°2 anchor nut holes on the forward floor assy P/N 3P5340A44231.
- 3.38 With reference to Figure 14 Section S-S and Figure 17 Section AB-AB, perform the following procedure to install n°2 anchor nuts P/N MS21075L3 on the forward floor assy P/N 3P5340A44231:
  - 3.38.1 Perform cut out as required. Seal all around the edge by means of adhesive EA934NA (C057).
  - 3.38.2 Prepare a compound mixing 100 parts by weight of araldit resin LY5138-2 and 23 parts by weight of hardener HY5173.

- 3.38.3 Apply on the cut out edges n°2 plies of fiberglass fabric 20749-1200 (C931) soaked with the previously prepared compound. Let adhesive cure.
- 3.38.4 Drill n°2 holes  $\varnothing$  5.74÷5.87 on the forward floor assy.
- 3.38.5 Install n°2 anchor nuts P/N MS21075L3 by means of n°4 rivets P/N MS20426AD3.
- 3.39 In accordance with CSRP DM CSRP-A-51-42-00-00A-720A-D and with reference to Figure 14 Section S-S, Figure 15 Section S1-S1 and Figure 17 Section AA-AA, install n°18 inserts P/N NAS1835-3M by means of adhesive EA934NA (C057) on the previously countermarked positions on the forward floor assemblies P/N 3P5340A44131 and P/N 3P5340A44231.
- 3.40 With reference to Figure 14 Section S-S, install n°2 EWP support assemblies P/N 3G5318A15531 and coupler support P/N 3G5318A17351 by means of n°16 screws P/N MS27039-1-07 and n°16 washers P/N NAS1149D0332J.
- 3.41 In accordance with AMP DM 39-A-20-10-01-00A-259A-A and with reference to Figure 13 Section R1-R1, remove paint and prepare indicated areas to assure the correct electrical bonding.
- 3.42 With reference to Figure 13 Section R-R and Section R1-R1, temporarily locate EIU ECDS Support P/N 1259.007-01 and breakers panel support P/N 3G5318A14231 and countermark positions of n°8 insert holes on the RH lower panel assy P/N 3G5315A49532.
- 3.43 In accordance with CSRP DM CSRP-A-51-42-00-00A-720A-D and with reference to Figure 13 Section U-U and Section V-V, install n°8 inserts P/N NAS1835-3M by means of adhesive EA934NA (C057) on the previously countermarked positions on the RH lower panel assy P/N 3G5315A49532.
- 3.44 With reference to Figure 13 Section R-R, install breakers panel support P/N 3G5318A14231 by means of n°4 screws P/N MS27039-1-07 and n°4 washers P/N NAS1149D0332K.
- 3.45 With reference to Figure 12 Detail P, install BL600 RH upper cover assy P/N 3G5318A15131 and BL600 RH lower cover assy P/N 3G5318A15231 by means of n°6 screws P/N MS27039-1-07 and n°6 washers P/N NAS1149D0332J.
- 3.46 In accordance with AMP DM 39-A-20-10-01-00A-259A-A and with reference to Figure 18 View AC-AC and Detail AD, remove paint and prepare indicated areas to assure the correct electrical bonding.
- 3.47 With reference to Figure 18 Section AE-AE, drill n°2 holes  $\varnothing$  3.68÷3.81 through the right longeron P/N 3P5340A12053.

- 3.48 With reference to Figure 18 Section AE-AE, install n°2 anchor nut P/N MS21069L06 by means of n°4 rivets P/N°NAS1097AD3.
4. In accordance with AMP DM 39-A-06-41-00-00A-010A-A and with reference to Figures 19 thru 24, gain access to the area affected by the installation and perform SIAP power structural provision P/N 3G5311A03513 as described in the following procedure:
- Perform the following step 4.1 only if EWCP PL138 P/N 881-0790-03-101 will not be immediately installed.**
- 4.1 With reference to Figure 20 Section A-A, install plate assy P/N 3G5316A73231 on the interseat console.
- 4.2 In accordance with CSRP DM CSRP-A-51-42-00-00A-720A-D and with reference to Figure 24 Section E-E, install n°4 inserts P/N NAS1835-3M on the RH upper panel assy P/N 3G5315A49131 by means of adhesive EA934NA (C057).
- 4.3 In accordance with AMP DM 39-A-20-10-01-00A-259A-A and with reference to Figure 23 Section C1-C1, prepare indicated contact surfaces to assure the correct electrical bonding.
- 4.4 With reference to Figure 22 Section C-C, install socket relay support P/N°A824A01A-A1 on the RH upper panel assy P/N°3G5315A49131 by means of n°4 screws P/N°NAS1802 and n°4 washers P/N°NAS1149D0332K.
5. In accordance with AMP DM 39-A-06-41-00-00A-010A-A and with reference to Figure 25, gain access to the cockpit area and perform cyclic installation variant P/N 3G6706P01811 as described in the following procedure:
- 5.1 In accordance with AMP DM 39-A-67-12-01-00A-520A-A, remove pilot cyclic stick assy P/N 3G6712A00737.
- 5.2 In accordance with AMP DM 39-A-67-12-02-00A-520A-A, remove copilot cyclic stick assy P/N 3G6712A00837.

**NOTE**

**Performing following steps 5.3 and 5.4, tighten the bolts to 5.65÷7.91 Nm.**

- 5.3 In accordance with AMP DM 39-A-67-12-01-00A-720A-A, install pilot cyclic stick assy P/N 3G6712A00740.
- 5.4 In accordance with AMP DM 39-A-67-12-02-00A-720A-A, install copilot cyclic stick assy P/N 3G6712A00840.
6. In accordance with AMP DM 39-A-06-41-00-00A-010A-A and with reference to Figures 26 thru 36, gain access to the area affected by the installation and perform EWP (SIAP) electrical provision P/N 3G9960A00911 as described in the following procedure:

- 6.1 With reference to Figure 27, at position n°1, install support P/N AW001CL006AT01-X2 by means of adhesive EA9309.3NA (C021).
- 6.2 With reference to Figure 27, at position n°2, install standoff P/N A388A3E16C75 by means of adhesive EA9309.3NA (C021) and install clamp P/N AW001CB03H by means of washer P/N NAS1149D0332J and screw P/N NAS1190E3P6AK.
- 6.3 With reference to Figure 28, install TB179 terminal board P/N A520A01WPN and flange P/N M85049/95-25A-A, using n°4 screws P/N MS35206-229 and n°4 washers P/N NAS1149DN616J.
- 6.4 With reference to Figure 28, install rail P/N A522A03A on the back side of the instrument panel by means of n°2 screws P/N MS35206-244 and n°2 washers P/N NAS1149DN816J. Install TB181-1 terminal board P/N A593A-A01 on the rail.
- 6.5 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 28, install decal P/N ED300TB181-1 in an area adjacent to previously installed terminal board.
- 6.6 With reference to Figure 28, install TB183 terminal board P/N A593A-H01 by means of n°2 screws P/N MS35206-229 and n°2 washers P/N NAS1149DN616J.
- 6.7 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 28, install decal P/N ED300TB183 in an area adjacent to previously installed terminal board.
- 6.8 With reference to Figure 29, at position n°3, install spacer P/N A631A01B.
- 6.9 With reference to Figure 30, at position n°4, install support P/N AW001CL006AT01-X1 by means of adhesive EA9309.3NA (C021).
- 6.10 With reference to Figure 32, at position n°5, install support P/N AW001CL510C-N6 by means of adhesive EA9309.3NA (C021).
- 6.11 With reference to Figure 33, at position n°6, on existing hardware install clamp P/N AW001CB06H by means of washer P/N NAS1149D0332J and screw P/N NAS1802-3-7.
- 6.12 With reference to Figure 34, at position n°7, install stud P/N A366A3E14C by means of adhesive EA9309.3NA (C021) and install clamp P/N AW001CB05H and spacer P/N NAS43DD3-25N by means of washer P/N NAS1149D0332J and nut P/N MS21043-3.
- 6.13 With reference to Figure 34, at position n°8, install support P/N AW001CL510C-N6 by means of adhesive EA9309.3NA (C021).
- 6.14 With reference to Figure 34, at position n°9, install stud P/N A388A3E08C75 by means of adhesive EA9309.3NA (C021) and install clamp P/N AW001CB03H by means of washer P/N NAS1149D0332J and screw P/N NAS1190E3P5AK.

- 6.15 With reference to Figure 34, at position n°10, install support P/N AW001CL510D-N6 by means of adhesive EA9309.3NA (C021).
- 6.16 With reference to Figure 34, install EWP mounting tray P/N R686-404-1/9-A10-0 by means of n°3 screws P/N MS24693-C272, n°3 screws P/N MS27039-1-08 and n°3 washers P/N NAS1149D0332J.
- 6.17 With reference to Figure 35, at positions n°11 and n°12, install support P/N AW001CL007-CM by means of adhesive EA9309.3NA (C021).
- 6.18 With reference to Figure 36, install TB3064 terminal board P/N A593A-H06 by means of n°2 screws P/N NAS1802-06-6 and n°2 washers P/N NAS1149DN616J.
- 6.19 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 36, install decal P/N ED300TB3064 in an area adjacent to previously installed terminal board.
- 6.20 With reference to Figures 26 thru 36, lay down the cable assemblies listed below, following the existing routes unless otherwise indicated on the figures:
- DATA BUS 1553 LANE A (SIAP) P/N 3G4620L00951;
  - DATA BUS 1553 LANE A (SIAP) P/N 3G4620L01051;
  - DATA BUS 1553 LANE A (SIAP) P/N 3G4620L01151;
  - DATA BUS 1553 LANE A (SIAP) P/N 3G4620L01251;
  - DATA BUS 1553 LANE A (SIAP) P/N 3G4620L01351;
  - DATA BUS 1553 LANE B (SIAP) P/N 3G4620L01451;
  - DATA BUS 1553 LANE B (SIAP) P/N 3G4620L01551;
  - DATA BUS 1553 LANE B (SIAP) P/N 3G4620L01651;
  - DATA BUS 1553 LANE B (SIAP) P/N 3G4620L01751;
  - DATA BUS 1553 LANE B (SIAP) P/N 3G4620L01851;
  - EWP (SIAP) C/A P/N 3G9A01A69701 (A1A697);
  - EWP (SIAP) C/A P/N 3G9A01A69701 (A1B641);
  - EWP (SIAP) C/A P/N 3G9A01A69701 (A2A632);
  - EWP (SIAP) C/A P/N 3G9A01A69701 (A2B606);
  - EWP (SIAP) C/A P/N 3G9A01A69701 (B1R32);
  - EWP (SIAP) C/A P/N 3G9A01A69701 (B2B761);
  - EWP (SIAP) C/A P/N 3G9A01A69701 (C1B357);
  - EWP (SIAP) C/A P/N 3G9A01A69701 (C2B407);
  - EWP (SIAP) C/A P/N 3G9A01A69701 (C3B317).

Secure the cables by means of previously installed fixing hardware and existing hardware. If necessary, replace existing clamps with suitable clamps.



- 6.21 With reference to Figure 34, perform the electrical connection of DATA BUS 1553 LANE A (SIAP) P/N 3G4620L00951 between box coupler connector CP82-STUBP1 and EWP connector A690P1B.

**NOTE**

Before performing following step 6.22, if required, replace the existing EIU connector A692P4 with the connector P/N ACB1/PG-4P-S38. Use crimping die AX-CD-02.

- 6.22 With reference to Figure 34, perform the electrical connection of DATA BUS 1553 LANE A (SIAP) P/N 3G4620L01051 between box coupler connector CP82-STUBP2 and EIU connector A692P4.
- 6.23 With reference to Figures 27 and 32, perform the electrical connection of DATA BUS 1553 LANE A (SIAP) P/N 3G4620L01151 between box coupler connector CP84-STUBP1 and SENSOR HEAD UNIT 0 connector A683P2.
- 6.24 With reference to Figures 30 and 32, perform the electrical connection of DATA BUS 1553 LANE A (SIAP) P/N 3G4620L01251 between box coupler connector CP84-STUBP2 and connector J1045.
- 6.25 With reference to Figures 32 and 34, perform the electrical connection of DATA BUS 1553 LANE A (SIAP) P/N 3G4620L01351 between box coupler connectors CP84-BUSP1 and CP82-BUSP1.
- 6.26 With reference to Figure 34, perform the electrical connection of DATA BUS 1553 LANE B (SIAP) P/N 3G4620L01451 between box coupler connectors CP83-STUBP1 and EWP connector A690P1B.

**NOTE**

Before performing following step 6.27, if required, replace the existing EIU connector A692P5 with the connector P/N ACB1/PG-3AP-S38. Use crimping die AX-CD-02.

- 6.27 With reference to Figure 34, perform the electrical connection of DATA BUS 1553 LANE B (SIAP) P/N 3G4620L01551 between box coupler connector CP83-STUBP2 and EIU connector A692P5.
- 6.28 With reference to Figures 27 and 32, perform the electrical connection of DATA BUS 1553 LANE B (SIAP) P/N 3G4620L01651 between box coupler connector CP85-STUBP1 and SENSOR HEAD UNIT 0 connector A683P2.

- 6.29 With reference to Figures 30 and 32, perform the electrical connection of DATA BUS 1553 LANE B (SIAP) P/N 3G4620L01751 between box coupler connector CP85-STUBP2 and connector J1024.
- 6.30 With reference to Figures 32 and 34, perform the electrical connection of DATA BUS 1553 LANE B (SIAP) P/N 3G4620L01851 between box coupler connectors CP85-BUSP1 and CP83-BUSP1.
- 6.31 With reference to Figures 27 thru 30 and Figures 85, 87, 90 thru 92, 94 and 95 wiring diagrams, perform the electrical connection of C/A A1A697 between sectioning connectors J103, J111, J1049 and A59J1, terminal boards TB129/1, TB129/3, TB129/4, TB137/1, TB143/2, TB179P1 and TB183, light dimmer panel connector PL19P1, EWCP connector PL138P1, TWD panel connectors DS195P1 and DS195P2, diodes CR1277, CR1267 and CR1265.
- 6.32 With reference to Figures 27 thru 29 and Figures 85, 87, 89, 91, 94 and 96 wiring diagrams, perform the electrical connection of C/A A1B641 between sectioning connectors P103, P111, P120 and A58J1, terminal boards TB126P1, TB148P1 and TB150/1, light dimmer panel connector PL19P1, EWCP connector PL138P1, diode CR1265.
- 6.33 With reference to Figures 27 thru 30 and Figures 85, 87, 90, 92, 94 and 96 wiring diagrams, perform the electrical connection of C/A A2A632 between sectioning connectors J113 and J1175, terminal boards TB125P1, TB179P1 and TB181/1, diodes CR1269, CR1271, CR1273 and CR1275, splices SP10265 (P/N M81824/1-1), SP10266 (P/N M81824/1-1), SP10633, SP10634, SP10635 and SP10636, TWD panel connector DS195P2, EWCP connector PL138P1, copilot ICS panel connector PL24P2 and pilot ICS panel connector PL8P2.
- 6.34 With reference to Figures 28, 29 and Figures 85 and 96 wiring diagrams, perform the electrical connection of C/A A2B606 between sectioning connectors P113 and P122.
- 6.35 With reference to Figures 29, 31, 33 and Figures 85, 87, 89 and 96 wiring diagrams, perform the electrical connection of C/A B1R32 between sectioning connectors J120 and J202, splice SP21691.
- 6.36 With reference to Figures 29, 31, 33 and Figures 85 and 96 wiring diagrams, perform the electrical connection of C/A B2B761 between sectioning connectors J122 and J208.
- 6.37 With reference to Figures 33 thru 36 and Figures 85 thru 87, 89, 93 and 96 wiring diagrams, perform the electrical connection of C/A C1B357 between sectioning connector P202, EWP connectors A690P1A and A690P1B, circuit breakers CB661, CB662 and CB663, splice SP3700, terminal boards TB300/1 and TB3064.

**NOTE**

Remove existing straight backshell from connector A692P3 and replace it with 90° backshell P/N A529A490-1502.

- 6.38 With reference to Figures 33 thru 36 and Figures 86, 93 and 96 wiring diagrams, perform the electrical connection of C/A C2B407 between sectioning connector P208, EWP connectors A690P1A and A690P1B, splice SP3699, terminal boards TB300/1 and TB3064, EIU connector A692P3 and diode CR368.
- 6.39 With reference to Figures 28 thru 31, 33, 34 and Figure 88 wiring diagrams, perform the electrical connection of C/A C3B317 between sectioning connector J1127, EWP connector A690P1C and TWD panel connector DS195P2.

**NOTE**

Performing following steps 6.40 and 6.41, do not refer to Figure 29 for sectioning connector J1127 position.

- 6.40 Install sectioning connector J1127 by means of the flange P/N M85049/95-16A-A, n°4 screws P/N NAS1802-04-7 and n°4 washers P/N NAS1149DN416J, according to MAG Service Bulletin SB-AB1-052.
- 6.41 In accordance with AMP DM 39-A-11-00-01-00A-720A-A, install decal P/N ED300J1127 in an area adjacent to previously installed sectioning connector.
- 6.42 With reference to Figure 30 View A, install sectioning connector J1175 and cover connector P/N D667-407XB15T1W-59 by means of the flange P/N M85049/95-16A-A, n°4 screws P/N NAS1802-04-10 and n°4 washers P/N NAS1149DN416J.
- 6.43 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 30 View A, install decal P/N ED300J1175 in an area adjacent to previously installed sectioning connector.
- 6.44 With reference to Figure 30 Detail B, install sectioning connector J1049 and cover P/N D38999/33W13R by means of the flange P/N M85049/95-14A-A, n°4 screws P/N NAS1802-04-7 and n°4 washers P/N NAS1149DN432J.
- 6.45 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 30 Detail B, install decals P/N ED300J1049, P/N ED300LANE A, P/N ED300LANE B, P/N ED300LANE DATA BUS, P/N ED300SIAP in an area adjacent to previously installed sectioning connector.
- 6.46 With reference to Figure 30 Detail B, install n°2 protective caps on the connectors J1045 and J1024.

- 6.47 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 30 Detail B, install decals P/N ED300J1045 and P/N ED300J1024 in an area adjacent to previously installed terminal data busses.
- 6.48 Perform a pin-to-pin continuity check of all the electrical connections made.

**NOTE**

Perform the following step 6.49 only if EIU A692 P/N 1159-504-03 and box couplers CP82, CP83, CP84 and CP85 P/N ADB/A-R42-LP-BK3A-S will not be immediately installed.

- 6.49 With reference to Figures 32 and 34, protect and stow EIU connectors (A692P3, A692P4 and A692P5) and the box coupler connectors (CP82-BUSP1, CP82-STUBP2, CP83-STUBP2, CP83-STUBP1, CP83-BUSP1, CP82-STUBP1, CP84-BUSP1, CP85-BUSP1, CP84-STUBP1, CP84-STUBP2, CP85-STUBP1, CP85-STUBP2) as described in the following procedure:
  - 6.49.1 Apply the applicable protective cap on the connector.
  - 6.49.2 Cover with nomex fiber sleeves P/N EN6049-006-25-5 and use tie straps P/N AW001CK03LC to firmly tie down the sleeves on the connector.
  - 6.49.3 Use tie straps to fix the connector to the cable loom.
- 7. In accordance with AMP DM 39-A-06-41-00-00A-010A-A and with reference to Figures 37 thru 45, gain access to the area affected by the installation and perform SIAP power electrical provision P/N 3G2460A04911 as described in the following procedure:
  - 7.1 With reference to Figure 40, at position n°1, install support P/N°AW001CL001-N6 by means of adhesive EA9309.3NA (C021).
  - 7.2 With reference to Figure 40, at position n°2, install spacer P/N°A631A01A.
  - 7.3 With reference to Figure 43, at position n°3, remove and discard existing screw and install clamp P/N AW001CB07H by means of screw P/N NAS1802-3-25 on existing hardware.
  - 7.4 With reference to Figure 43, at position n°4, install spacer P/N°A631A01A.
  - 7.5 With reference to Figure 43, at position n°5, install ground stud P/N A363A01 by means of n°2 rivets P/N MS20426AD3A.
  - 7.6 With reference to Figure 45, rework plate assy P/N 3G5317A56931 as described in the following procedure:
    - 7.6.1 Perform cut-out according to standard n°999-0010-01-103.
    - 7.6.2 In accordance with AMP DM 39-A-20-10-01-00A-259A-A, prepare indicated contact surfaces to assure the correct electrical bonding.
    - 7.6.3 Drill n°4 holes  $\varnothing 3.87 \div 3.89$  through the plate assy.

- 7.6.4 Install n°4 nut plates P/N MS21069L06 by means of n°8 rivets P/N°MS20426AD3.
- 7.6.5 Remark the reworked plate assy as P/N°5000082859-31.
- 7.7 With reference to Figure 44 Detail C, install plate assy P/N°5000082859-31 on the breaker panel support P/N 3G5318A14231.
- 7.8 With reference to Figure 44 Detail C, install Integrally light panel SIAP P/N°3G2490L05551 by means of the four captive screws.
- 7.9 With reference to Figure 44 Detail C, install n°2 plugs button P/N°999-5001-10-219.
- 7.10 With reference to Figure 44 Detail C, install n°2 circuit breakers P/N°MS3320-1, circuit breaker P/N°MS3320-2, circuit breaker P/N°MS3320-3, circuit breaker P/N°MS3320-5, n°3 circuit breakers P/N°MS3320-15 and n°6 lock rings P/N°AW001YC01RED in the indicated positions.
- 7.11 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 44 Detail C, install decals P/N°ED300CB657, P/N°ED300CB658, P/N°ED300CB659, P/N°ED300CB660, P/N°ED300CB661, P/N°ED300CB662, P/N°ED300CB663 and P/N°ED300CB664 in an area adjacent to previously installed circuit breakers CB657, CB658, CB659, CB660, CB661, CB662, CB663 and CB664.
- 7.12 With reference to Figure 44 Detail D, install bonding cable assy P/N°A601A2B120 by means of n°2 washers P/N° MS35338-42, n°3 washers P/N°NAS1149DN832H, nut P/N°MS35649-282, nut P/N°MS21043-08 and screw P/N°MS24693-S52.
- 7.13 With reference to Figure 42, install bus bar P/N°999-8001-73-412 and bus bar P/N°999-8001-73-312 on the previously installed circuit breakers.
- 7.14 With reference to Figure 42, install terminal lugs W31B and W212A on the previously installed bus bars by means of n°2 screws P/N° MS35207-262, n°4 washers P/N° NAS1149D0332J and n°2 nuts P/N°MS21043-3.
- 7.15 With reference to Figures 37 thru 44, lay down the cable assemblies listed below, following the existing routes, unless otherwise indicated on the figures:
- ECDS (SIAP) C/A P/N 3G9B01L13801 (B1L138);
  - ECDS (SIAP) C/A P/N 3G9B01R02701 (B1R027);
  - ECDS (SIAP) C/A P/N 3G9B01R02801 (B1R028);
  - ECDS (SIAP) C/A P/N 3G9C01B35601 (C1B356).
- Secure the cables by means of previously installed fixing hardware and existing hardware. If necessary, replace existing clamps with suitable clamps.

- 7.16 With reference to Figures 40, 42, 43 and Figure 97 wiring diagram, perform the electrical connection of C/A B1L138 between diode module A77 and terminal lug W31B.
  - 7.17 With reference to Figures 38 thru 41 and Figures 97 and 98 wiring diagrams, perform the electrical connection of C/A B1R027 between EWCP connector PL138P1, sectioning connector J204 and terminal board TB2288.
  - 7.18 With reference to Figures 40, 42, 43 and Figure 97 wiring diagram, perform the electrical connection of C/A B1R028 between diode module A76 and terminal lug W32A.
  - 7.19 With reference to Figure 42, if connector J3080 is not present, install connector J3080 P/N MS90335-6, in the position previously reworked on the panel.
  - 7.20 With reference to Figures 41 thru 43 and Figures 97 and 98 wiring diagrams, perform the electrical connection of C/A C1B356 between terminal board TB3064, socket relays K438P1, sectioning connectors J3080 and P204, terminal lug W212A, circuit breakers CB657 and CB658.
  - 7.21 With reference to Figure 43 View B, install bonding cable P/N°A601A2B120 as required.
  - 7.22 With reference to Figure 42, on the bracket P/N A824A01A-A1 install K438P1 connector and then install relay P/N A648A01 (K438).
  - 7.23 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 42, install decal P/N ED300K438 in an area adjacent to previously installed relays.
  - 7.24 Perform a pin-to-pin continuity check of all the electrical connections made.
8. In accordance with AMP DM 39-A-06-41-00-00A-010A-A and with reference to Figures 46 thru 54, gain access to the area affected by the installation and perform ECDS (SIAP) electrical provision P/N 3G9930A00711 as described in the following procedure:
- 8.1 With reference to Figure 49, at position n°1, install spacer P/N A631A01B.
  - 8.2 With reference to Figure 49, at positions n°2 and n°3, install n°2 spacers P/N A631A01A.
  - 8.3 With reference to Figure 51, at position n°4, install ground stud P/N A363A01 by means of n°2 rivets P/N MS20426AD3A.
  - 8.4 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 51, install decal P/N ED300GS381 in an area adjacent to previously installed ground stud.
  - 8.5 With reference to Figure 52, at position n°5, remove and discard existing screw and install clamp P/N AW001CB07H by means of screw P/N NAS1190E3P7AK on existing hardware.

- 8.6 With reference to Figure 53, at positions n°6 and n°7, install n°2 studs P/N A388A3E14C75 by means of adhesive EA9309.3NA (C021) and install n°2 clamp P/N AW001CB05H, n°2 clamp P/N AW001CB10H by means of n°2 washers P/N NAS1149D0332J and n°2 screws P/N NAS1190E3P7AK.
- 8.7 With reference to Figure 54, at positions n°8 and n°9, install n°2 studs P/N A388A3E14C75 by means of adhesive EA9309.3NA (C021).
- 8.8 With reference to Figure 54, at positions n°10 and n°11, install n°2 supports P/N AW001CL001-N6 by means of adhesive EA9309.3NA (C021) and install n°2 clamp P/N AW001CB05H, n°2 clamp P/N AW001CB7H by means of n°2 washers P/N NAS1149D0332J and n°2 screws P/N NAS1190E3P7AK.
- 8.9 With reference to Figure 47, in case of interference of the terminal board connector TB179P1 with existing electrical support, relocate the electrical support by a displacement of 30 mm on BL and 30 mm on WL.
- 8.10 With reference to Figures 46 thru 54, lay down the cable assemblies listed below following the existing routess unless otherwise indicated on the figures:
- ECDS (SIAP) C/A P/N 3G9A01A69901 (A1A699);
  - ECDS (SIAP) C/A P/N 3G9A02A63401 (A2A634);
  - ECDS (SIAP) C/A P/N 3G9B01L14401 (B1L144);
  - ECDS (SIAP) C/A P/N 3G9B02B76301 (B2B763);
  - ECDS (SIAP) C/A P/N 3G9B02L14601 (B2L146);
  - ECDS (SIAP) C/A P/N 3G9C01A38201 (C1A382);
  - ECDS (SIAP) C/A P/N 3G9C01B35901 (C1B359);
  - ECDS POWER C/A P/N 3G9C01B36101 (C1B361);
  - ECDS (SIAP) C/A P/N 3G9C02B41101 (C2B411);
  - ECDS (SIAP) C/A P/N 3G9D01A20901 (D1A209);
  - ECDS (SIAP) C/A P/N 3G9D01B22801 (D1B228);
  - ECDS (SIAP) C/A P/N 3G9D02B23001 (D2B230).
- Secure the cables by means of previously installed fixing hardware and existing hardware. If necessary replace existing clamps with suitable clamps.
- 8.11 With reference to Figure 47 and Figure 105 wiring diagram, perform the electrical connection of C/A A1A699 between sectioning connector P135 and terminal board connector TB179P1.
- 8.12 With reference to Figure 47 and Figure 105 wiring diagram, perform the electrical connection of C/A A2A634 between sectioning connector P137 and terminal board TB181/1.

- 8.13 With reference to Figures 47 thru 49 and Figure 105 wiring diagram, perform the electrical connection of C/A B1L144 between sectioning connectors J135 and P253.
- 8.14 With reference to Figures 48 and 49 and Figure 105 wiring diagram, perform the electrical connection of C/A B2B763 between sectioning connectors J2454 and P251.
- 8.15 With reference to Figures 48 and 49 and Figure 105 wiring diagram, perform the electrical connection of C/A B2L146 between sectioning connectors J137 and J251.
- 8.16 With reference to Figures 49, 50, 54 and Figure 106 wiring diagram, perform the electrical connection of C/A C1A382 between sectioning connectors J253 and P305.
- 8.17 With reference to Figures 51 thru 53 and Figures 100, 101, 103 and 106 wiring diagrams, perform the electrical connection of C/A C1B359 between terminal boards TB300-1, TB3066-1 and TB3066-2, ground terminal module TB3064, socket relays K438P1 and K440P1, splices SP21697, SP3701, SP3704, SP3705, SP3706, SP3707, SP3708, SP3709, EIU connectors A692P1, A692P2 and A692P3, circuit breaker CB660 and sectioning connector P3082.
- 8.18 With reference to Figures 51, 52 and Figure 99 wiring diagram, perform the electrical connection of C/A C1B361 between ground stud GS381, socket relay K438P1, terminal board TB3066-1, splice SP3698 and circuit breaker CB659.
- 8.19 With reference to Figures 49, 51 thru 53 and Figures 101, 103, 107 wiring diagrams, perform the electrical connection of C/A C2B411 between sectioning connectors P2454 and P3084, terminal boards TB300-1 and TB3066-2, EIU connector A692P3.
- 8.20 With reference to Figures 53, 54 and Figures 102 and 106 wiring diagrams, perform the electrical connection of C/A D1A209 between sectioning connectors J418, J417 and J305, terminal boards TB483, TB485, TB487, TB489, TB491, TB493 and SSU connector A412P1.
- 8.21 With reference to Figures 53, 54 and Figures 101, 102 and 106 wiring diagrams, perform the electrical connection of C/A D1B228 between sectioning connectors J3082, J417 and J418, splices SP4002, SP4003, SP4004, SP4005, SP4010, SP4011, and SSU connector A412P1.
- 8.22 With reference to Figures 53, 54 and Figures 101, 104 and 107 wiring diagrams, perform the electrical connection of C/A D2B230 between sectioning connectors J3084, J417, J418 and SSU connector A412P1.



- 8.23 With reference to Figure 52 View Looking Bay RH Side, on the existing bracket install K440P1 connector and then install relay P/N A648A01 (K440).
- 8.24 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 52, install decal P/N ED300K440 in an area adjacent to previously installed relay.
- 8.25 With reference to Figure 52 View Looking Bay RH Side, on the existing rail install terminal boards P/N A593A-A02 and P/N A593A-C01.
- 8.26 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 52, install decals P/N ED300TB3066-2 and P/N ED300TB3066-1 in an area adjacent to previously installed terminal boards.
- 8.27 With reference to Figure 53, install sectioning connector J418 by means of the flange P/N M85049/95-18A-A, n°4 screws P/N NAS1802-04-6 and n°4 washers P/N NAS1149DN416J.
- 8.28 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 53, install decal P/N ED300J418 in an area adjacent to previously installed connector J418.
- 8.29 With reference to Figure 54, install sectioning connector J417 by means of the flange P/N M85049/95-18A-A, n°4 screws P/N NAS1802-04-6 and n°4 washers P/N NAS1149DN416J.
- 8.30 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 54, install decal P/N ED300J417 in an area adjacent to previously installed connector J417.
- 8.31 Perform a pin-to-pin continuity check of all the electrical connections made.

**NOTE**

Perform the following step 8.32 only if expanded interface unit A692 P/N 1159-504-03 will not be immediately installed.

- 8.32 With reference to Figure 52 View Looking Bay RH Side and Detail C, protect and stow the cable connectors A692P1, A692P2 and A692P3 as described in the following procedure:
  - 8.32.1 Apply the applicable protective cap on the connector.
  - 8.32.2 Cover with nomex fiber sleeves P/N EN6049-006-25-5 and use tie straps P/N AW001CK03LC to firmly tie down the sleeves on the connector.
  - 8.32.3 Use tie straps to fix the connector to the cable loom.

### NOTE

Perform the following steps 8.33 and 8.34 only if sequencer & dispenser units A691 and A694 P/N 1160-504-03 will not be immediately installed.

- 8.33 With reference to Figure 53, stow sectioning connector J418 by means of cover P/N D38999/33W17R.
- 8.34 With reference to Figure 54, stow sectioning connector J417 by means of cover P/N D38999/33W17R.
- 8.35 With reference to Figure 53, install sectioning connector J3082 by means of the flange P/N M85049/95-20A-A, n°4 screws P/N NAS1802-04-7 and n°4 washers P/N NAS1149DN416J.
- 8.36 With reference to Figure 53, install sectioning connector J3084 by means of the flange P/N M85049/95-16A-A, n°4 screws P/N NAS1802-04-7 and n°4 washers P/N NAS1149DN416J.
- 8.37 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 53, install decals P/N ED300J3082 and P/N ED300J3084 in an area adjacent to previously installed connectors.
9. In accordance with AMP DM 39-A-06-41-00-00A-010A-A and with reference to Figures 55 thru 66, gain access to the area affected by the installation and perform MILDS (SIAP) electrical provision P/N 3G9350A08811 as described in the following procedure:
  - 9.1 With reference to Figure 56, at positions n°1, install ground stud P/N A363A01 by means of n°2 rivets P/N MS20426AD3A.
  - 9.2 With reference to Figure 56, at position n°2, install clamp P/N AW001CB08H on existing hardware, replace existing screw with screw P/N NAS1190E3P8AK.
  - 9.3 With reference to Figure 56, at position n°3, install clamp P/N AW001CB03H on existing hardware.
  - 9.4 With reference to Figure 57, at position n°4, install clamp P/N AW001CB03H on existing hardware, replace existing screw with screw P/N NAS1190E3P15AK.
  - 9.5 With reference to Figure 58, at positions n°5, install ground stud P/N A363A01 by means of n°2 rivets P/N MS20426AD3A.
  - 9.6 With reference to Figure 58, at position n°6, install P/N A366A3E08C by means of adhesive EA9309.3NA (C021) and install clamp P/N AW001CB09H by means of nut P/N MS21043-3, washer P/N NAS1149D0332J, screw NAS1802-3-9.
  - 9.7 With reference to Figure 60 View D, at position n°7, install stud P/N A366A3E08C75 by means of adhesive EA9309.3NA (C021) and install clamp P/N AW001CB09H, bracket P/N MS9592-010, n°2 nuts P/N MS21043-3, n°3 washers P/N NAS1149D0332J and screw P/N NAS1802-3-9.

- 9.8 With reference to Figure 60 View D, at position n°8, install clamp P/N AW001CB03H on existing hardware, replace existing screw with screw P/N NAS1802-3-17.
- 9.9 With reference to Figure 59, at positions n°9, install ground stud P/N A363A01 by means of n°2 rivets P/N MS20426AD3A.
- 9.10 With reference to Figure 61, at positions n°10 and n°11, install n°2 support P/N A631A01A.
- 9.11 With reference to Figure 61, at position n°12, install support P/N A631A01B.
- 9.12 With reference to Figure 63, at position n°13, install ground stud P/N A363A01 by means of n°2 rivets P/N MS20426AD3A.
- 9.13 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 63, install decal P/N ED300GS376 in an area adjacent to previously installed ground stud.
- 9.14 With reference to Figure 64, at position n°14, replace existing stud with stud P/N A366A3E32C by means of adhesive EA9309.3NA (C021) and install clamp P/N AW001CB08H and spacer P/N NAS43DD3-45N.
- 9.15 With reference to Figure 65, at position n°15, install clamp P/N AW001CB08H on existing hardware.
- 9.16 With reference to Figure 65, at positions n°16 and n°17, replace existing studs with n°2 studs P/N A366A3E22C by means of adhesive EA9309.3NA (C021) and install n°2 clamps P/N AW001CB08H and n° 2 spacers P/N NAS43DD3-44N.
- 9.17 With reference to Figure 65, at position n°18, install clamp P/N AW001CB08H on existing hardware and replace existing screw with screw P/N NAS1802-3-10.
- 9.18 With reference to Figure 65, at position n°19, install clamp P/N AW001CB08H, and spacer P/N NAS43DD3-45N on existing hardware and replace existing screw with screw P/N NAS1802-3-10.
- 9.19 With reference to Figure 66 View Looking Vertical Tail, at positions n°20, install ground stud P/N A363A01 by means of n°2 rivets P/N MS20426AD3A.
- 9.20 With reference to Figure 66 View Looking Vertical Tail, at position n°21, install stud P/N A366A3E16C by means of adhesive EA9309.3NA (C021) and install clamp P/N AW001CB08H, clamp P/N AW001CB04H, nut P/N MS21043-3, washer P/N NAS1149D0332J, spacer P/N NAS43DD3-22N.
- 9.21 With reference to Figure 66 View H, at position n°22, install stud P/N A366A3E22C by means of adhesive EA9309.3NA (C021) and install clamp P/N AW001CB03H, clamp P/N AW001CB05H, nut P/N MS21043-3, washer P/N NAS1149D0332J, spacer P/N NAS43DD3-45N.

- 9.22 With reference to Figure 66 View H, at positions n°23 and n°24, install N°2 anchor nuts P/N AW001TL3A06 by means of adhesive EA9309.3NA (C021) and install n°2 clamps P/N AW001CB03H, install n°2 clamps P/N AW001CB05H, install n°2 washers P/N NAS1149D332J, install n°2 screws P/N NAS1802-3-10 on existing hardware.
- 9.23 With reference to Figures 55 thru 66, lay down the following cable assemblies as indicated on the figures:
- MILDS SIAP C/A (A1A698) P/N 3G9A01A69801;
  - MILDS SIAP C/A (A1B642) P/N 3G9A01B64201;
  - MILDS SIAP C/A (A2A633) P/N 3G9A02A63301;
  - MILDS SIAP C/A (A2B607) P/N 3G9A02B60701;
  - MILDS SIAP C/A (B1L142) P/N 3G9B01L14201;
  - MILDS SIAP C/A (B1R33) P/N 3G9B01R03301;
  - MILDS SIAP C/A (B2B762) P/N 3G9B02B76201;
  - MILDS SIAP C/A (B2L144) P/N 3G9B02L14401;
  - MILDS SIAP C/A (C1B358) P/N 3G9C01B35801;
  - MILDS SIAP C/A (C2B408) P/N 3G9C02B40801;
  - MILDS SIAP C/A (D1B227) P/N 3G9D01B22701;
  - MILDS SIAP C/A (D2B228) P/N 3G9D02B22801.
- 9.24 With reference to Figures 56 thru 58 and Figure 110 wiring diagram, perform the electrical connection of C/A A1A698 between sectioning connectors J103 and P135, terminal boards TB179P1 and TB183, and sensor head unit 0 connector A683P1.
- 9.25 With reference to Figures 56 thru 58 and Figure 110 wiring diagram, perform the electrical connection of C/A A1B642 between sectioning connector P103 and sensor head unit 1 connector A682P1.
- 9.26 With reference to Figures 56 thru 58 and Figure 110 and 111 wiring diagrams, perform the electrical connection of C/A A2A633 between sectioning connectors J107 and P137, terminal board TB179P1 and sensor head unit 0 connector A683P2.
- 9.27 With reference to Figures 56 thru 58 and Figure 111 wiring diagram, perform the electrical connection of C/A A2B607 between sectioning connectors P103, P107 and sensor head unit 1 connector A682P2.
- 9.28 With reference to Figures 57, 59, 60 and Figure 109 wiring diagram, perform the electrical connection of C/A B1L142 between sectioning connectors J249 and J135.

- 9.29 With reference to Figures 59 thru 61 and Figure 109 wiring diagram, perform the electrical connection of C/A B1R33 between sectioning connectors J204 and P249. Apply n°3 caps P/N A583A2418C to wires T3870G22-G and T3875H22-G and stow on the sub-floor area as required according to Figure 60 View D.
- 9.30 With reference to Figures 57, 59 thru 61 and Figures 111 and 112 wiring diagrams, perform the electrical connection of C/A B2B762 between sectioning connectors J122, J2454 and P251. Install n°3 splices P/N M81824/1-1 on wires T3991C24-S and T3992C22-S and connect to the other sides of the splices the wires T3898A24-S and T3899A22-S according to Figure 111 wiring diagram. Route reworked wires on the sub-floor area as required according to Figure 60 View D.
- 9.31 With reference to Figures 57, 59, 60 and Figure 111 wiring diagram, perform the electrical connection of C/A B2L144 between sectioning connectors J137 and J251.
- 9.32 With reference to Figures 61 thru 64 and Figures 108 and 109 wiring diagrams, perform the electrical connection of C/A C1B358 between sectioning connectors P204 and P3082, terminal boards TB3064 and TB3066/3, ground stud GS376 and circuit breaker CB664.
- 9.33 With reference to Figures 61 thru 64 and Figure 112 wiring diagram, perform the electrical connection of C/A C2B408 between sectioning connectors P2454 and P3084.

**NOTE**

If sectioning connector J3082 is present on C/A D1B227, remove it and restore the connections on sectioning connector J3082 of C/A D1B228, according to Figure 112 wiring diagram.

- 9.34 With reference to Figures 64 thru 66 and Figure 108 wiring diagram, perform the electrical connection of C/A D1B227 between sectioning connectors J3082, sensor head unit 3 connector A685P1 and sensor head unit 2 connector A684P1.
- 9.35 With reference to Figure 66 and Figure 112 wiring diagram, open A685P2 connector and modify connections as described in the following procedure:
- 9.35.1 Remove wire T3904A22-S from pin 12 and from pin 18.
- 9.35.2 Connect wire T3904A22-S to pin 2 and pin 6.

### NOTE

If sectioning connector J3084 is present on C/A D2B228, remove it and restore the connections on sectioning connector J3084 of C/A D2B230, according to Figure 112 wiring diagram.

- 9.36 With reference to Figures 64 thru 66 and Figure 112 wiring diagram, perform the electrical connection of C/A D2B228 between sectioning connector J3084, sensor head unit 3 connector A685P2 and sensor head unit 2 connector A684P2.
- 9.37 With reference to Figure 61, install sectioning connector J2454 by means of the flange P/N M85049/95-14A-A, n°4 screws P/N NAS1802-04-7 and n°4 washers P/N NAS1149DN416J.
- 9.38 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 61, install decal P/N ED300J2454 in an area adjacent to previously installed connectors.
- 9.39 With reference to Figure 61, connect the sectioning connector P2454 to the sectioning connector J2454.
- 9.40 With reference to Figure 64, connect the sectioning connector P3082 to the sectioning connector J3082.
- 9.41 With reference to Figure 64, connect the sectioning connector P3084 to the sectioning connector J3084.
- 9.42 Perform a pin-to-pin continuity check of all the electrical connections made.
10. In accordance with AMP DM 39-A-06-41-00-00A-010A-A and with reference to Figures 69 thru 73, gain access to the area affected by the installation and perform EWP (SIAP) equipment installation P/N 3G9960A01011 as described in the following procedure:
  - 10.1 With reference to Figure 69 View A, remove n°3 lock rings P/N AW001YC01RED.
  - 10.2 With reference to Figure 70, if installed, remove plate assy P/N 3G5317A64131 and relevant fixing hardware.
  - 10.3 With reference to Figure 70, install DS195 TWD panel P/N EA9900V513-001 by means of existing hardware.
  - 10.4 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 70, install decal P/N ED300DS195 in an area adjacent to previously installed TWD panel.
  - 10.5 With reference to Figure 70, connect DS195P2 and DS195P1 connectors to DS195 TWD panel.
  - 10.6 With reference to Figure 71, if installed, remove plate assy P/N 3G5316A73231 and relevant fixing hardware.

- 10.7 With reference to Figure 71, install EWCP P/N 881-0790-03-101 by means of existing hardware.
- 10.8 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 71, install decal P/N ED300PL138 in an area adjacent to previously installed EWCP.
- 10.9 With reference to Figure 71 View C, connect PL138P1 connector to PL138 EWCP.
- 10.10 With reference to Figure 72, install n°2 box couplers P/N ADB/A-R42-LP-BK3A-S by means of n°4 screws P/N NAS1802-04-7, n°4 nuts P/N MS21042L04 and n°8 washers P/N NAS1149DN416J.
- 10.11 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 72, install decals P/N ED300CP84 and P/N ED300CP85 in an area adjacent to previously installed box couplers.
- 10.12 With reference to Figure 72, install n°2 plug terminators P/N AMB/A-D-ACB1-PG3A-P.

**NOTE**

Perform the following step 10.13 only if EIU connectors  
and box coupler connectors are stowed.

- 10.13 With reference to Figures 72 and 73, untie the EIU connectors (A692P3, A692P4, A692P5) and box coupler connectors (CP82-BUSP1, CP82-STUBP2, CP83-STUBP2, CP83-STUBP1, CP83-BUSP1 and CP82-STUBP1, CP84-BUSP1, CP85-BUSP1, CP84-STUBP1, CP84-STUBP2, CP85-STUBP1 and CP85-STUBP2) as follows:
  - 10.13.1 Remove the connectors from their supports.
  - 10.13.2 Remove the Meta-Aramid Nomex fiber sleeve.
  - 10.13.3 Remove the protective plugs from connectors.
- 10.14 With reference to Figure 72, connect the connectors CP84-BUSP1, CP85-BUSP1, CP84-STUBP1, CP84-STUBP2, CP85-STUBP1 and CP85-STUBP2 to box couplers CP84 and CP85 as required.
- 10.15 With reference to Figure 73, install support P/N°AW001CL001-N6 by means of adhesive EA9309.3NA (C021).
- 10.16 With reference to Figure 73, install EIU P/N 1159-504-03 by means of n°4 screws P/N LN65022-0506 and n°4 washers P/N LN9025-0510L on EIU mounting adapter P/N 1259.007-01.
- 10.17 With reference to Figure 73, install EIU mounting adapter P/N 1259.007-01 on the avionics bay panel by means of n°4 screws P/N NAS1802-3-8 and n°4 washers P/N NAS1149D0332J.

- 10.18 In accordance with AMP 39-A-11-00-01-00A-720A-A and with reference to Figure 73, install decal P/N ED300A692 in an area adjacent to previously installed A692 EIU.
  - 10.19 With reference to Figure 73, connect the connectors A692P3, A692P4 and A692P5 to A692 EIU as required.
  - 10.20 With reference to Figure 73 View F, install bonding cable P/N°A601A3B16.
  - 10.21 With reference to Figure 73, install Electronic Warfare Processor P/N EA9900V511-001 by means of n°6 screws P/N NAS1802-3-8 and n°6 washers P/N NAS1149D0332J.
  - 10.22 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 73, install decal P/N ED300A690 in an area adjacent to previously installed A690 EWP.
  - 10.23 With reference to Figure 73, install n°2 box couplers P/N ADB/A-R42-LP-BK3A-S by means of n°4 screws P/N NAS1802-04-7, n°4 nuts P/N MS21042L04 and n°8 washers P/N NAS1149DN416J.
  - 10.24 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 73, install decals P/N ED300CP82 and P/N ED300CP83 in an area adjacent to previously installed box couplers.
  - 10.25 With reference to Figure 73, install n°2 plug terminators P/N AMB/A-D-ACB1-PG3A-P.
  - 10.26 With reference to Figure 73, connect the connectors CP82-BUSP1, CP82-STUBP2, CP83-STUBP2, CP83-STUBP1, CP83-BUSP1 and CP82-STUBP1 to box couplers CP82 and CP83 as required.
11. In accordance with AMP DM 39-A-06-41-00-00A-010A-A and with reference to Figures 67 and 68, gain access to the area affected by the installation and perform ECDS (SIAP) equipment installation P/N 3G9930A00811 as described in the following procedure:

**NOTE**

Perform the following step 11.1 only if EIU connectors  
A692P1 and A692P2 are stowed.

- 11.1 With reference to Figure 68 Detail B, untie the connectors A692P1 and A692P2 as follows:
  - 11.1.1 Remove the connectors from their supports.
  - 11.1.2 Remove the Meta-Aramid Nomex fiber sleeve.
  - 11.1.3 Remove the protective plugs from connectors.
- 11.2 With reference to Figure 68, connect the connectors A692P1 and A692P2 to A692 EIU as required.



12. In accordance with AMP DM 39-A-06-41-00-00A-010A-A and with reference to Figure 74, gain access to the area affected by the installation and perform support CHAFFS-FLARES installation P/N 3G9900A00412 as described in the following procedure:
- 12.1 With reference to Figure 74 View A, if installed remove n°2 covers P/N 3G5316A73551 and relevant n°16 screws P/N NAS1802-3-9.
- 12.2 With reference to Figure 74 View A, install RH CHAFFS-FLARES support assy P/N 3G5317A86331 by means of n°8 screws P/N NAS1802-3-12 and n°8 washers P/N NAS1149C0332R.

**WARNING**

**AZIMUTH POSITION 10° MUST BE NEVER USED.**

**NOTE**

The suggested position of counter measure launch system for FLARES is:

FORWARD: 20° Azimuth; -20° ELEVATION.

AUTO Mode shall be inhibited at or below 45KIAS.

The suggested position of counter measure launch system for CHAFF is:

REARWARD: 20° Azimuth; -40° ELEVATION.

- 12.3 With reference to Figure 74 View C, install hi-lok pin P/N HL20PB-8-4 and collar P/N HL86-8 as required.
- 12.4 With reference to Figure 74 View A, install LH CHAFFS-FLARES support assy P/N 3G5317A86231 by means of n°8 screws P/N NAS1802-3-12 and n°8 washers P/N NAS1149C0332R.

**WARNING**

**AZIMUTH POSITION 10° MUST NEVER BE USED.**

**NOTE**

The suggested position of counter measure launch system for FLARES is:

FORWARD: 20° Azimuth; -20° ELEVATION.

AUTO Mode shall be inhibited at or below 45KIAS.

The suggested position of counter measure launch system for CHAFF is:

REARWARD: 20° Azimuth; -40° ELEVATION.

- 12.5 With reference to Figure 74 View C, install hi-lok pin P/N HL20PB-8-4 and collar P/N HL86-8 as required.

- 12.6 With reference to Figure 74 View B, if installed remove the plate assy P/N 3G5316A73831.
  - 12.7 With reference to Figure 74 View B, install the safety switch plate P/N 3G5316A73751 by means of existing hardware. Seal all around by means of sealant MC-780 B-2 (C465).
  - 12.8 In accordance with AMP DM 39-A-20-00-00-00A-69CA-A and with Figure 74, perform the paint marking of the assembled parts.
13. In accordance with AMP DM 39-A-06-41-00-00A-010A-A and with reference to Figures 75 thru 77, gain access to the area affected by the installation and perform CHAFFS-FLARES elevation angle paint P/N 3G1110A30131 as described in the following procedure:

**NOTE**

If the painted area is not clear on the background colour,  
it is allowed to change the background colour locally.

- 13.1 With reference to Figure 76, apply yellow paint 35-FS 33655 with the use of stencil yellow P/N 3G1110A30152 in the indicated areas on the LH CHAFFS-FLARES support assy P/N 3G5317A86231.
  - 13.2 With reference to Figure 76, apply red paint 35-FS 31136 with the use of stencil red P/N 3G1110A30151 in the indicated areas on the LH CHAFFS-FLARES support assy P/N 3G5317A86231.
  - 13.3 With reference to Figure 76, apply black paint 35-FS 37038 with the use of decal graduated P/N 3G1110A30154 in the indicated areas on the LH CHAFFS-FLARES support assy P/N 3G5317A86231
  - 13.4 With reference to Figure 77, repeat steps 13.1 thru 13.3 for RH CHAFFS-FLARES support assy P/N 3G5317A86331.
14. In accordance with AMP DM 39-A-06-41-00-00A-010A-A and with reference to Figures 78 thru 84, gain access to the area affected by the installation and perform MILDS (SIAP) equipment installation P/N 3G9350A08911 as described in the following procedure:
- 14.1 With reference to Figure 78 View A, remove n°3 lock rings P/N AW001YC01RED.
  - 14.2 With reference to Figure 79, if installed remove n°2 cover assemblies P/N 3G5316A74831 and relevant fixing hardware.
  - 14.3 With reference to Figure 79, install A682 MILDS unit P/N 50.2860.924.00 by means of n°8 screws P/N LN9136-04018.
  - 14.4 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 79, install decal P/N ED300A682 in an area adjacent to previously installed MILDS.

**NOTE**

Performing installation of the bonding cable at step 14.5,  
the use of an additional washer is allowed, if required.

- 14.5 With reference to Figures 79 and 80 View D-D, install bonding cable P/N A601A4B60 on existing ground stud and on A682 MILDS by means of nut P/N LN9338-06 and washer P/N LN9025-0610K.
- 14.6 With reference to Figure 80 View D-D and Figures 110 and 111 wiring diagrams, connect A682P1 and A682P2 connectors to A682 MILDS.
- 14.7 With reference to Figure 79, install A683 MILDS unit P/N 50.2860.924.00 by means of n°8 screws P/N LN9136-04018.
- 14.8 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 79, install decal P/N ED300A683 in an area adjacent to previously installed MILDS.

**NOTE**

Performing installation of the bonding cable at step 14.9,  
the use of an additional washer is allowed, if required.

- 14.9 With reference to Figures 79 and 80 View E-E, install bonding cable P/N A601A4B60 on existing ground stud and on A683 MILDS by means of nut P/N LN9338-06 and washer P/N LN9025-0610K.
- 14.10 With reference to Figure 80 View E-E and Figures 110 and 111 wiring diagrams, connect A683P1 and A683P2 connectors to A683 MILDS.
- 14.11 With reference to Figure 81, if installed remove n°2 cover assemblies P/N 3G5316A74831 and relevant fixing hardware.
- 14.12 With reference to Figure 81, install A684 MILDS unit P/N 50.2860.924.00 by means of n°8 screws P/N LN9136-04018.
- 14.13 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 81, install decal P/N ED300A684 in an area adjacent to previously installed MILDS.
- 14.14 With reference to Figures 81 and 84 View M-M, install bonding cable P/N A601A4B120 on existing ground stud and on A684 MILDS by means of nut P/N LN9338-06 and washer P/N LN9025-0610K.
- 14.15 With reference to Figure 84 View M-M and Figures 110 and 112 wiring diagrams, connect A684P1 and A684P2 connectors to A684 MILDS.
- 14.16 With reference to Figure 81, install A685 MILDS unit P/N 50.2860.924.00 by means of n°8 screws P/N LN9136-04018.

- 14.17 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 81, install decal P/N ED300A685 in an area adjacent to previously installed MILDS.
- 14.18 With reference to Figures 81 and 84 View L-L, install bonding cable P/N A601A4B120 on existing ground stud and on A685 MILDS by means of nut P/N LN9338-06 and washer P/N LN9025-0610K.
- 14.19 With reference to Figure 84 View L-L and Figures 108 and 112 wiring diagrams, connect A685P1 and A685P2 connectors to A685 MILDS.

**NOTE**

Refer to the applicable RFM to adjust the position of the  
A691 SDU at following step 14.20.

- 14.20 With reference to Figure 81, install A691 SDU P/N 1160.504-03 and dispenser cover P/N 1101-450-01, by means of n°6 screws P/N LN9038K06016, n°6 washers P/N LN9025-0610K and lockwire.
- 14.21 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 81, install decal ED300A691 in an area adjacent to previously installed A691 SDU.
- 14.22 With reference to Figure 83 View H, install clamp P/N AW001CB09H on existing hardware.
- 14.23 With reference to Figures 83 View H and 82 Detail N, install bonding cable P/N A601A3B50 by means of nut P/N LN9338-04, washer P/N LN9025-0410K, screw P/N NAS1802-3-7, lockwasher P/N MS35338-43 and washer P/N NAS1149D0332K.
- 14.24 With reference to Figure 83 View H, install ECDS (SIAP) C/A (D2A7) P/N 3G9D12A00711, secure the cable by means of previously installed fixing hardware, perform the electrical connection of A691P1 and A691P2 connectors to A691 SDU and P417 connector to J417 connector.

**NOTE**

Refer to the applicable RFM to adjust the position of the  
A694 SDU at following step 14.25.

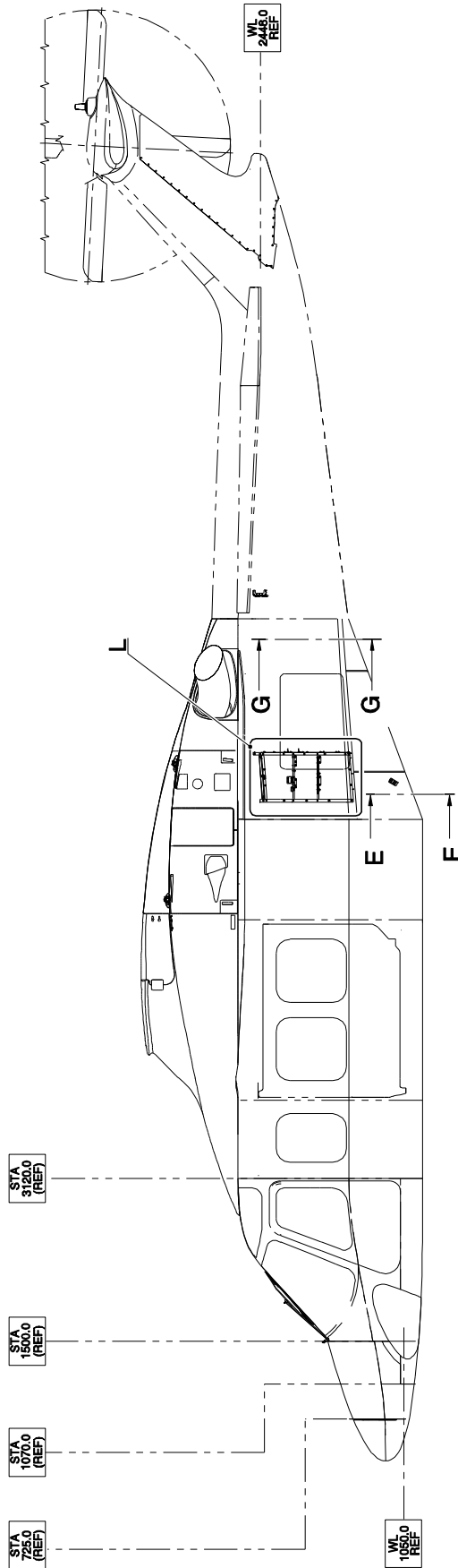
- 14.25 With reference to Figure 81, install A694 SDU P/N 1160.504-03 and dispenser cover P/N 1101-450-01, by means of n°6 screws P/N LN9038K06016, n°6 washers P/N LN9025-0610K and lockwire.
- 14.26 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 81, install decal ED300A694 in an area adjacent to previously installed A694 SDU.

- 14.27 With reference to Figure 82 View G, install clamp P/N AW001CB09H on existing hardware.
- 14.28 With reference to Figure 82 View G and Detail N, install bonding cable P/N A601A3B50 by means of nut P/N LN9338-04, washer P/N LN9025-0410K, screw P/N NAS1802-3-7, lockwasher P/N MS35338-43 and washer P/N NAS1149D0332K.
- 14.29 With reference to Figure 82 View G, install ECDS (SIAP) C/A (D2B107) P/N 3G9D12B10711, secure the cable by means of previously installed fixing hardware, perform the electrical connection of A694P1 and A694P2 connectors to A694 SDU and P418 connector to J418 connector.
- 14.30 With reference to Figure 74 View B and to Figure 83 Detail F, install A412 safety switch unit P/N 1155.500-01 as described in the following procedure:
  - 14.30.1 With reference to Figure 74 View B, remove the assembly of support P/N 3G5316A73631 and safety switch plate P/N 3G5316A73751 from the fuselage. Retain existing hardware for later reuse.
  - 14.30.2 With reference to Figure 83 Detail F, from the internal side of the support P/N 3G5316A73631, install A412 safety switch unit P/N 1155.500-01 fixing it to the safety switch plate P/N 3G5316A73751 by means of n°3 screws P/N LN9038K05010, n°3 washers P/N LN9025-0510K, lock wire P/N MS20995C32, safety pin P/N MS17986C509 and streamer warning P/N NAS1756-24.
  - 14.30.3 With reference to Figure 83 Detail F and Figures 101 and 102 wiring diagrams, connect A412P1 connector to A412 SSU.
  - 14.30.4 With reference to Figure 74 View B, re-install the support P/N 3G5316A73631 on the fuselage by means of previously removed hardware. Seal all around by means of sealant MC-780 B-2 (C465).
- 14.31 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 83 Detail F, install decal ED300A412 in an area adjacent to previously installed A412 SSU.
15. In accordance with Annex A, perform the SIAP functional test.
16. In accordance with weight and balance changes, update the Chart A (see Rotorcraft Flight Manual, Part II, section 6).
17. Return the helicopter to flight configuration and record for compliance with this Service Bulletin on the helicopter logbook.
18. Gain access to My Communications section on [Leonardo Customer Portal](#) and compile the “Service - Technical Bulletin Application”.

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

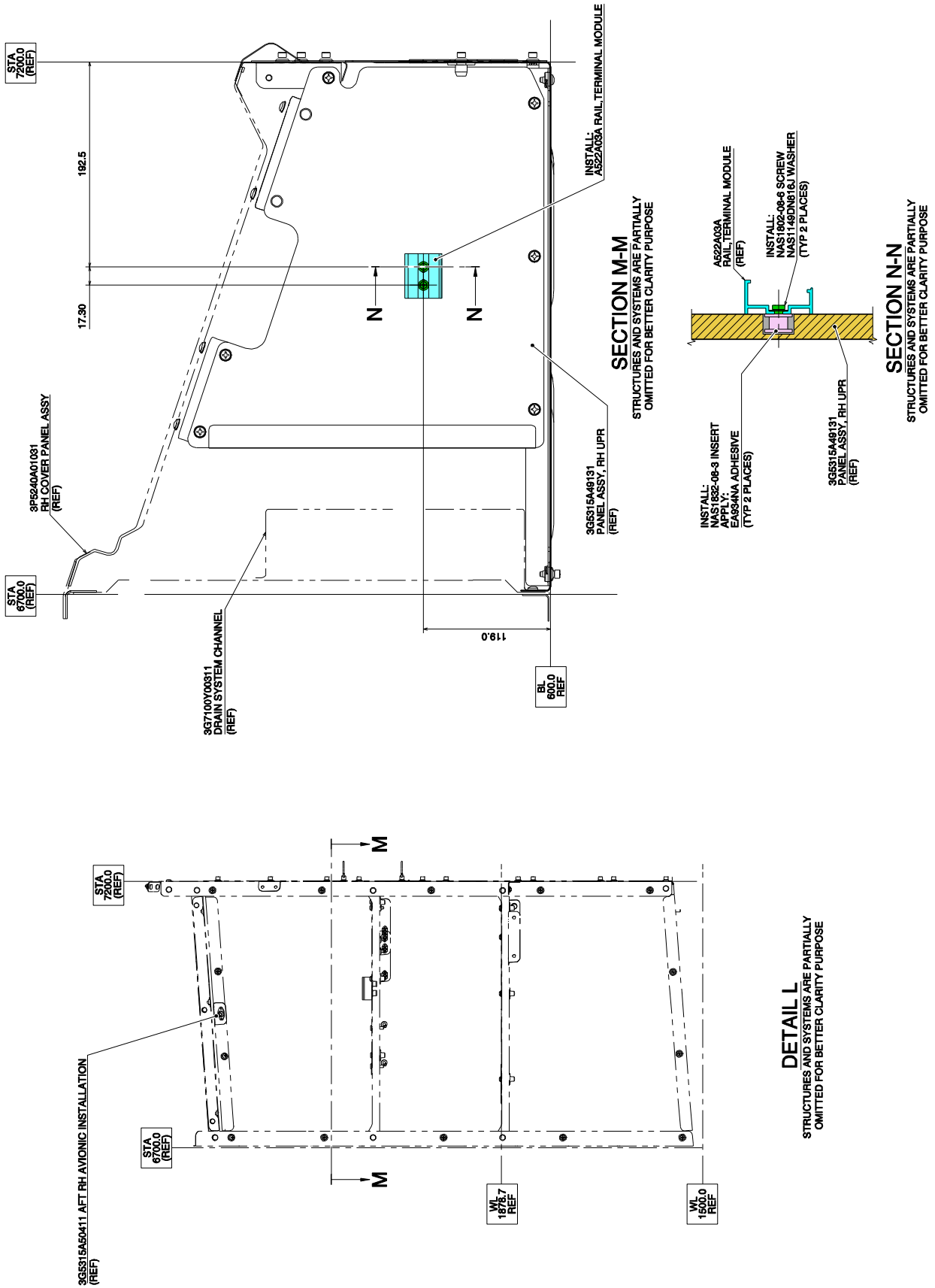
[engineering.support.lhd@leonardo.com](mailto:engineering.support.lhd@leonardo.com)

**3G5311A45411**  
**FIFTH SENSOR MILDS**  
**STRUCTURAL PROVISION**



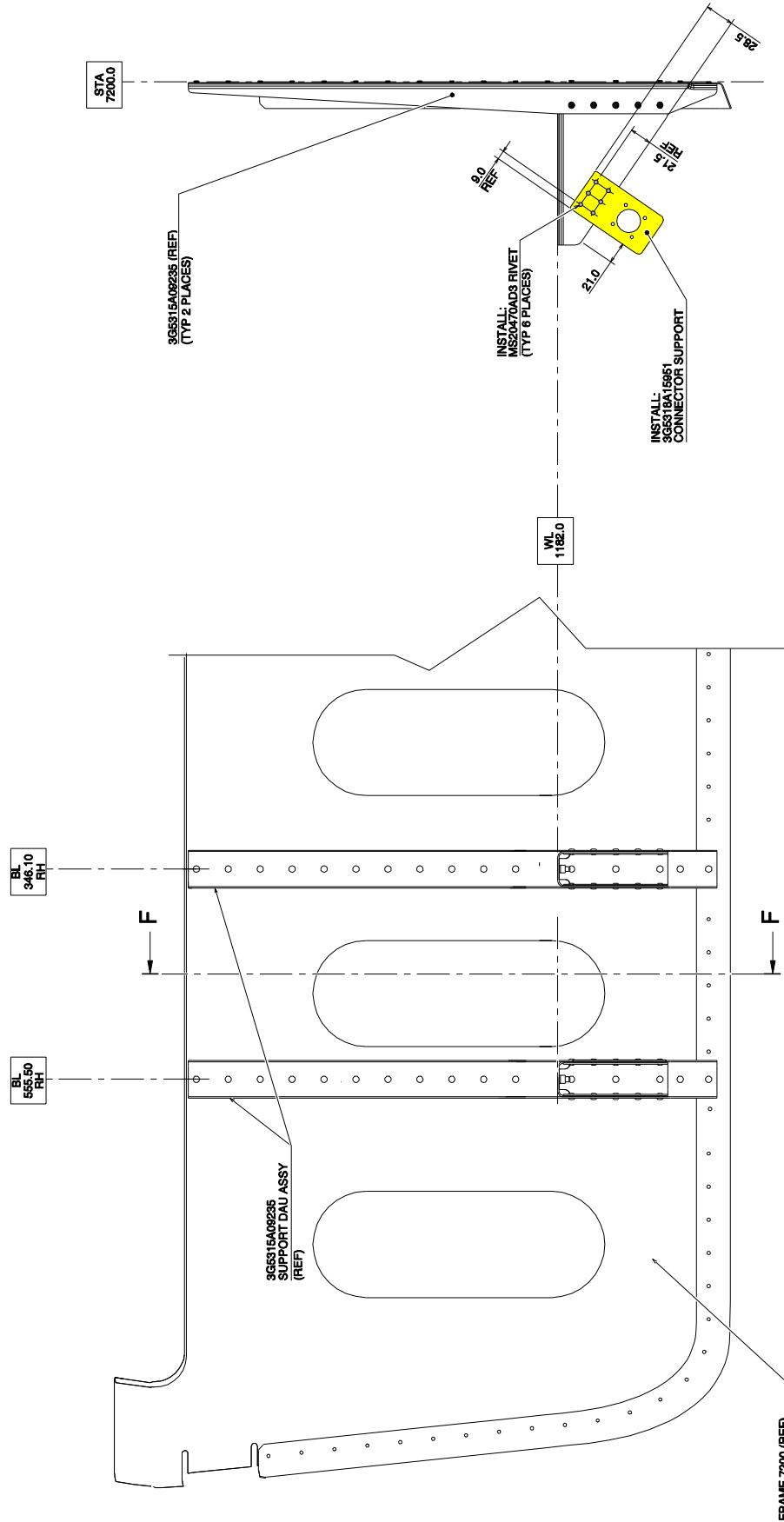
**VIEW LOOKING INBOARD LEFT SIDE**

**Figure 1**



**Figure 2**

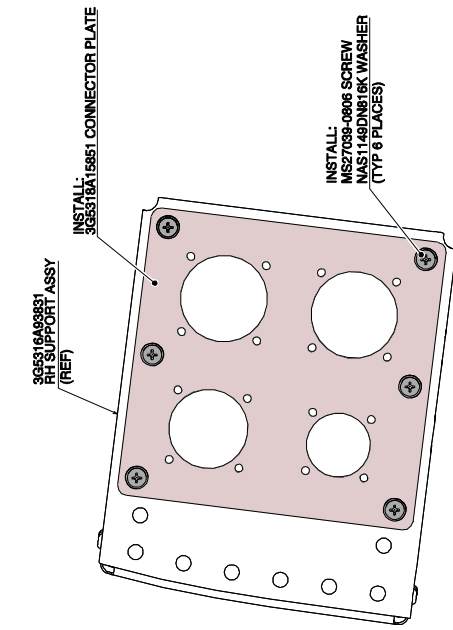




**SECTION F-F**  
STRUCTURES AND SYSTEMS ARE PARTIALLY  
OMITTED FOR BETTER CLARITY PURPOSE

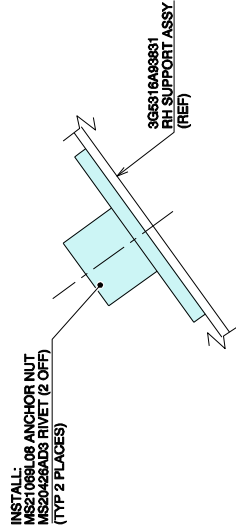
**SECTION E-E**  
STRUCTURES AND SYSTEMS ARE PARTIALLY  
OMITTED FOR BETTER CLARITY PURPOSE

**Figure 3**



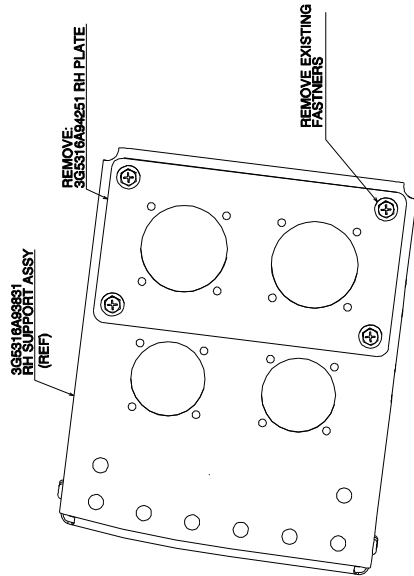
**SECTION G-G**

AFTER REWORK  
STRUCTURES AND SYSTEMS ARE PARTIALLY  
OMITTED FOR BETTER CLARITY PURPOSE



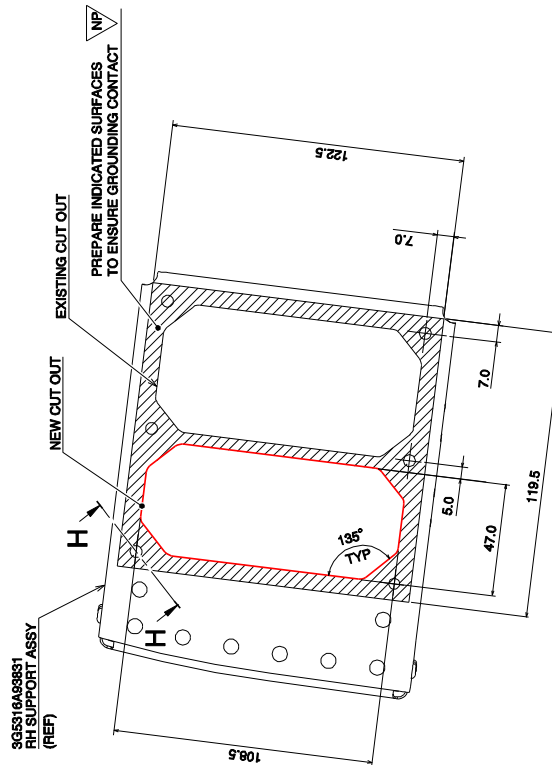
**SECTION H-H**

STRUCTURES AND SYSTEMS ARE PARTIALLY  
OMITTED FOR BETTER CLARITY PURPOSE



**SECTION G-G**

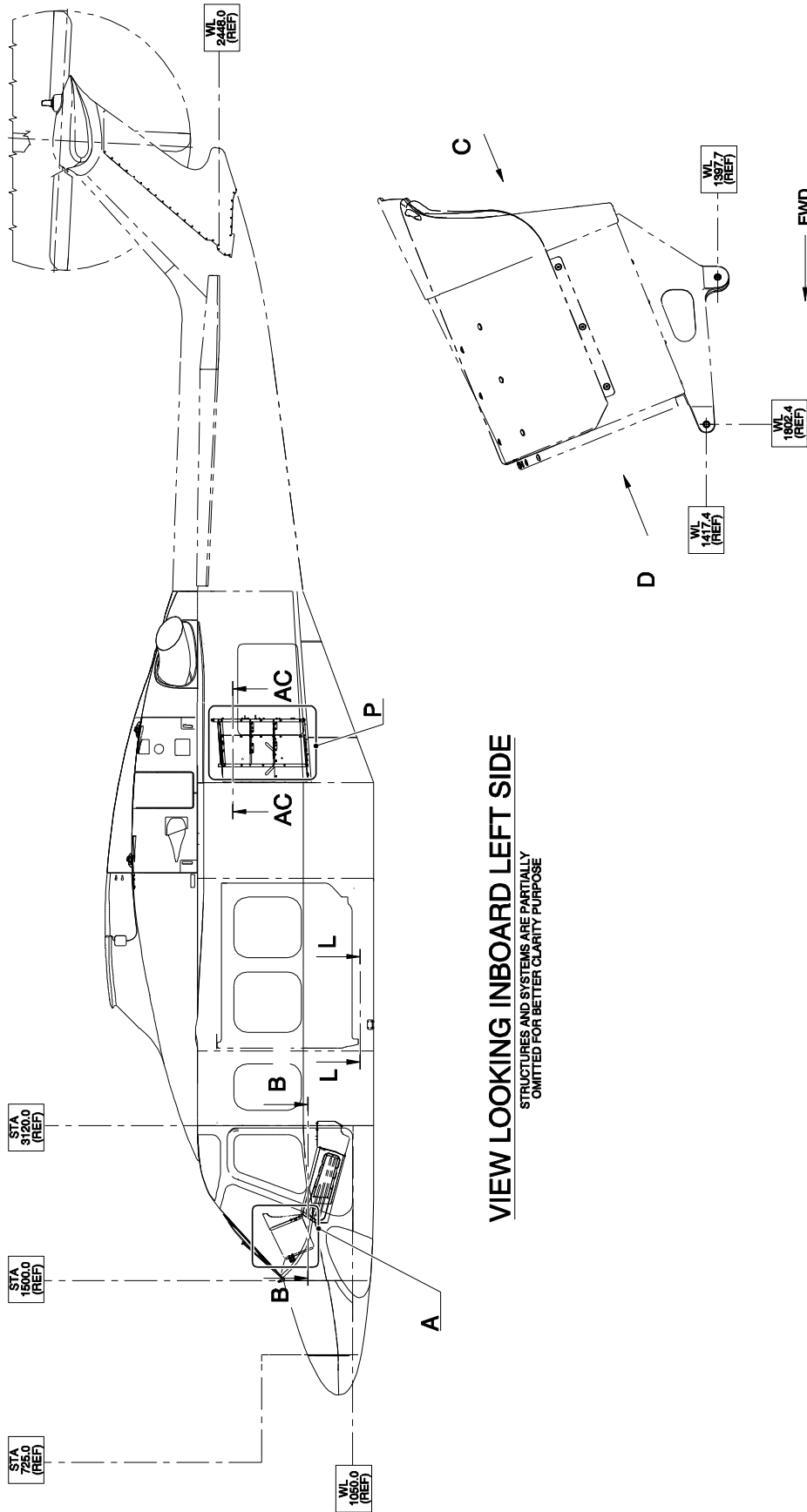
BEFORE REWORK  
STRUCTURES AND SYSTEMS ARE PARTIALLY  
OMITTED FOR BETTER CLARITY PURPOSE



**SECTION G-G**

REWORK DIMENSION  
STRUCTURES AND SYSTEMS ARE PARTIALLY  
OMITTED FOR BETTER CLARITY PURPOSE

**Figure 4**



**VIEW LOOKING INBOARD LEFT SIDE**

STRUCTURES AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE

**DETAIL A**

STRUCTURES AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE

**3G5311A45211**  
**EWP (SIAP)**  
**STRUCTURAL PROVISION**

**Figure 5**

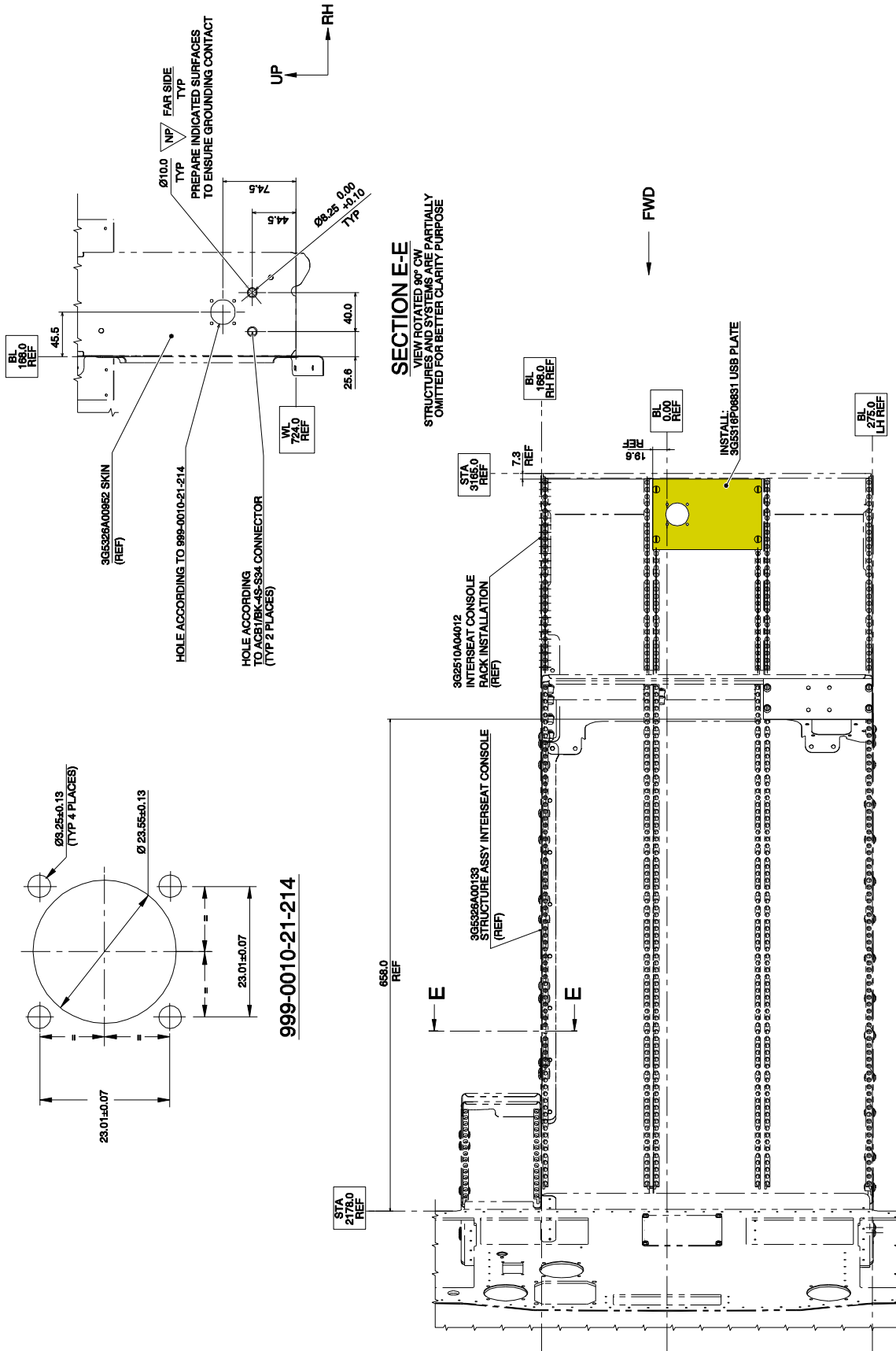
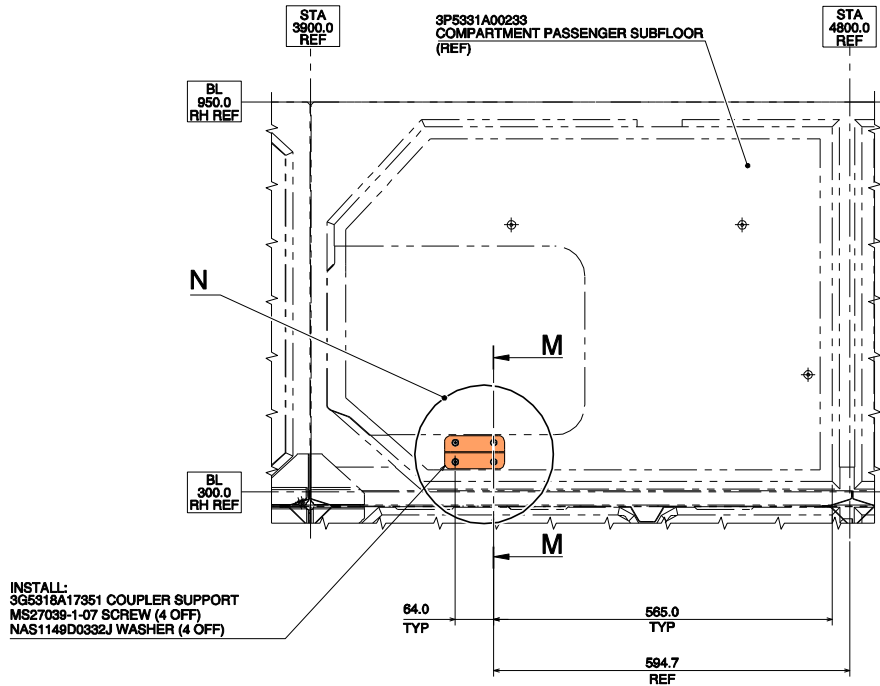


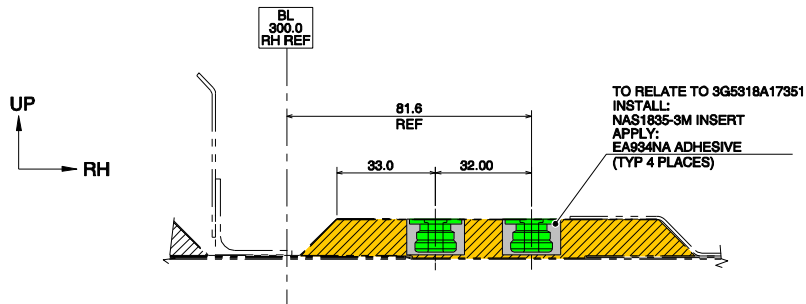
Figure 6

S.B. N°139-632 OPTIONAL  
DATE: September 5, 2024  
REVISION: /



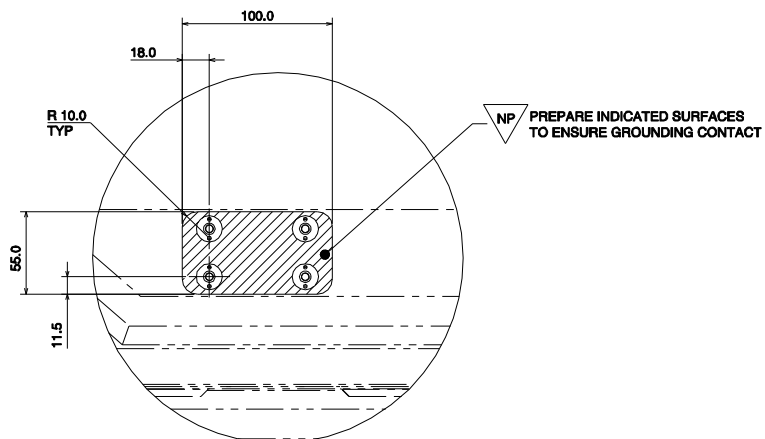
**SECTION L-L**

STRUCTURES AND SYSTEMS ARE PARTIALLY  
OMITTED FOR BETTER CLARITY PURPOSE



**SECTION M-M**

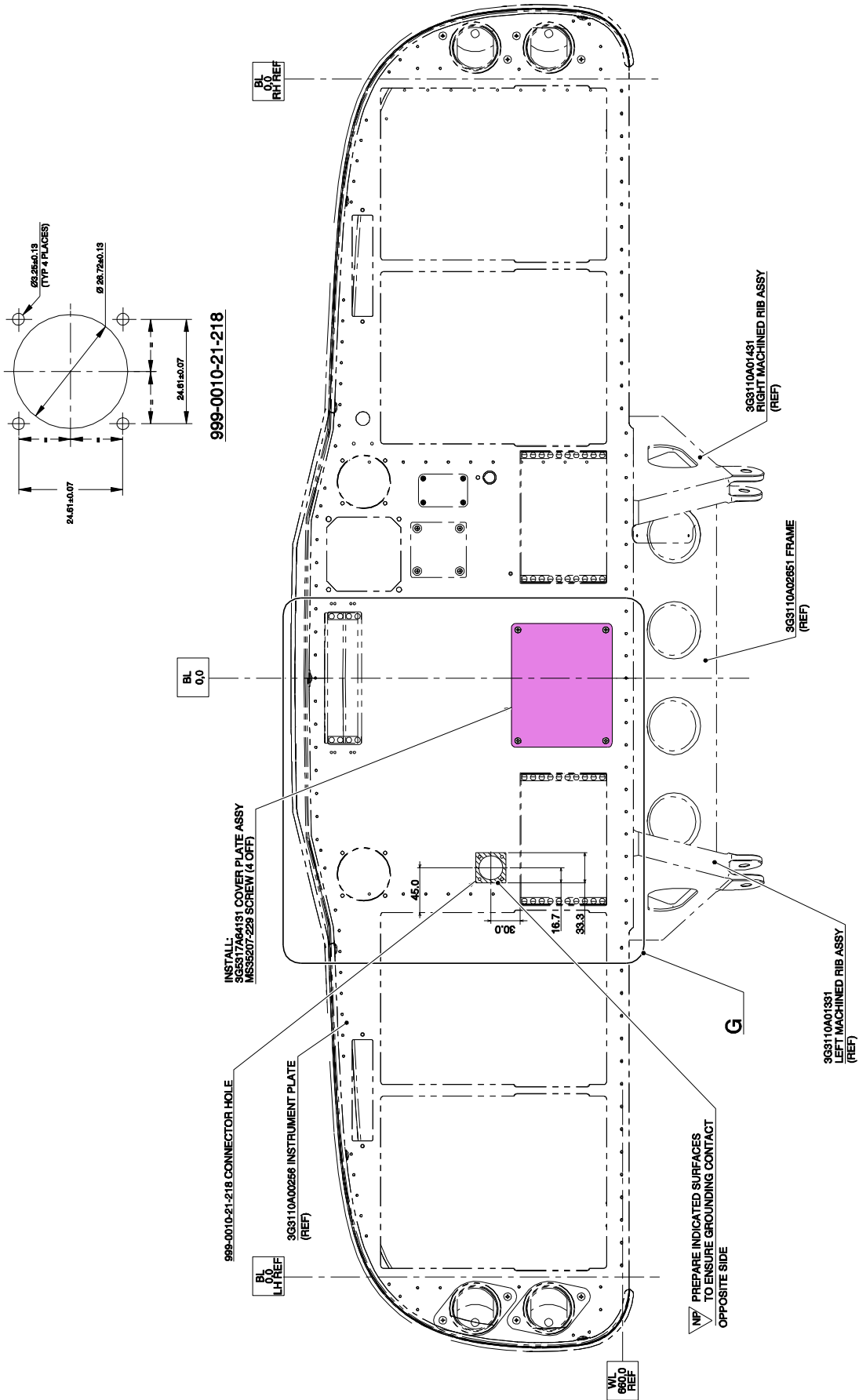
VIEW ROTATED 90° CW  
3G5318A17351, STRUCTURES AND SYSTEMS ARE PARTIALLY  
OMITTED FOR BETTER CLARITY PURPOSE



**DETAIL N**

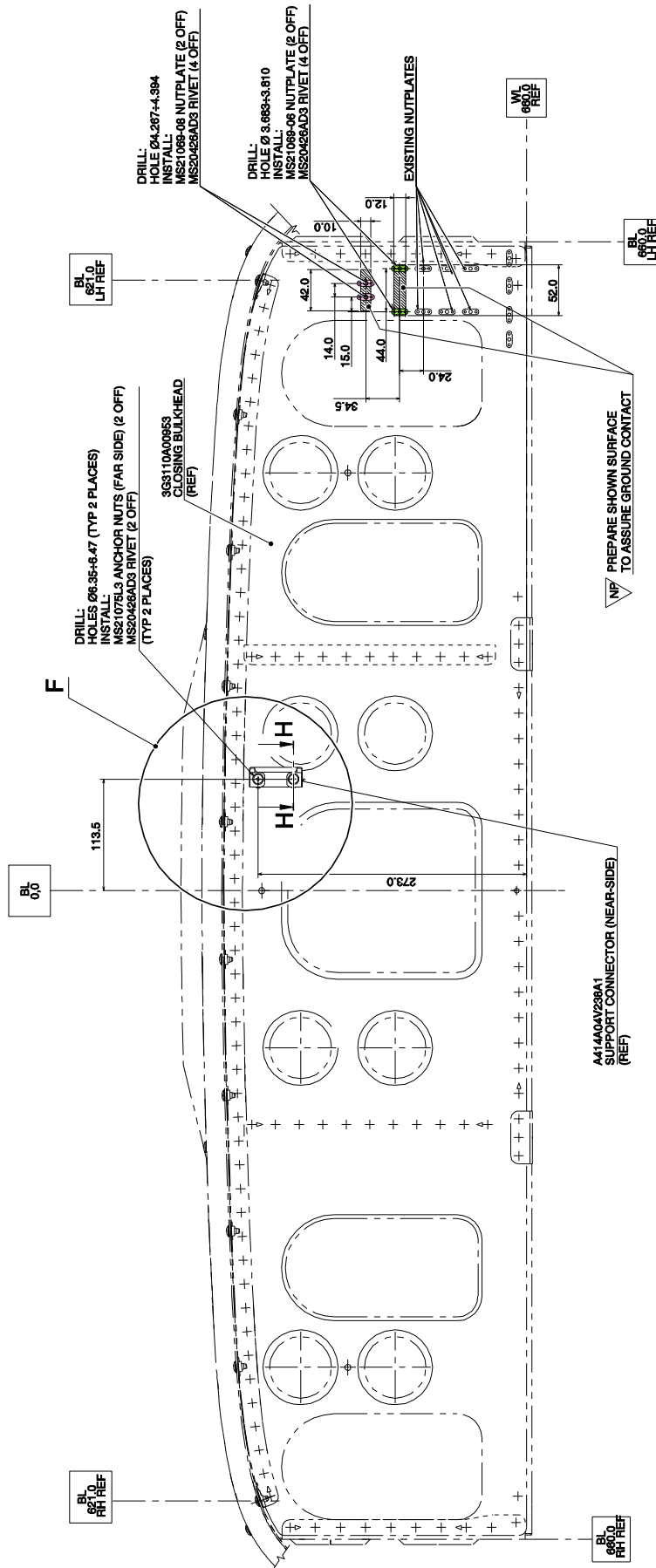
STRUCTURES AND SYSTEMS ARE PARTIALLY  
OMITTED FOR BETTER CLARITY PURPOSE

**Figure 7**



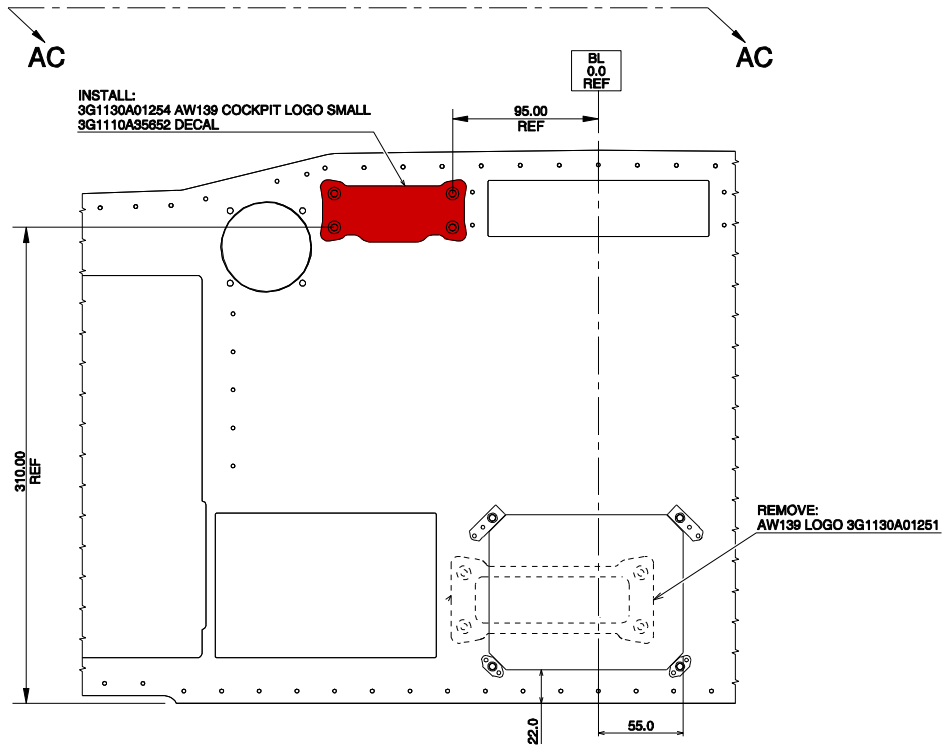
**Figure 8**

S.B. N°139-632 OPTIONAL  
DATE: September 5, 2024  
REVISION: /



**VIEW D**  
LEFT/RIGHT MACHINED RIBS, FRAME AND STRUCTURES AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE

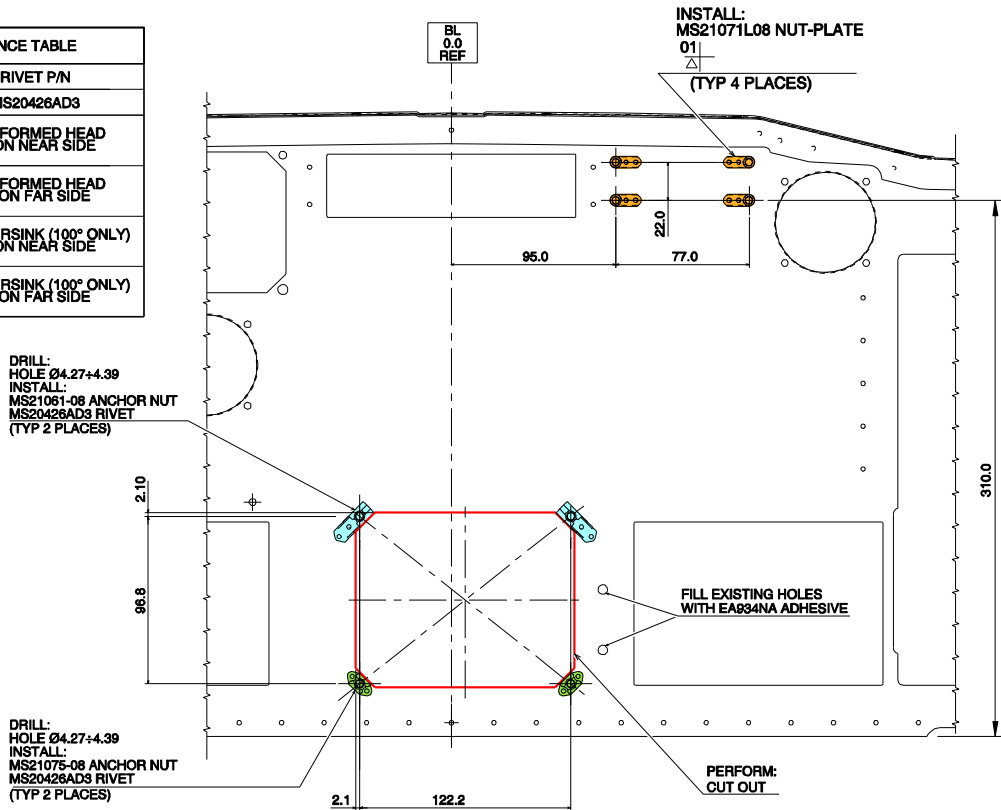
**Figure 9**



**DETAIL G**

STRUCTURES AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE

RIVET REFERENCE TABLE	
REF. N°	RIVET P/N
01	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



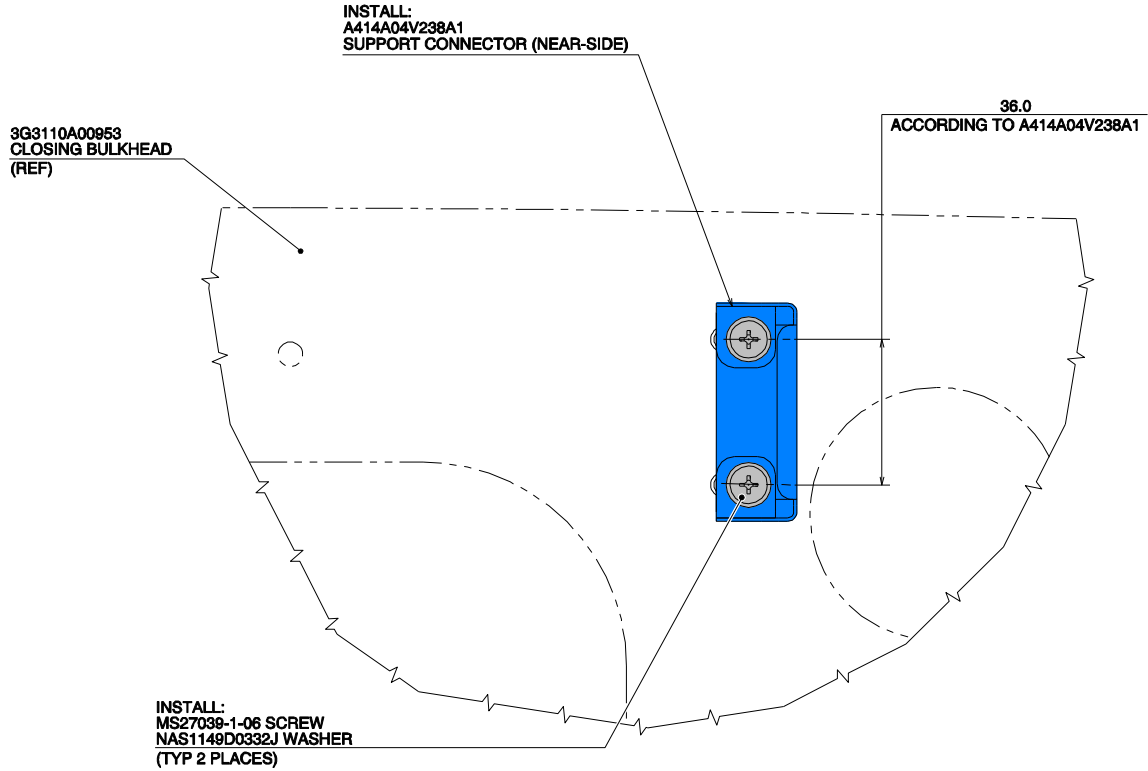
**VIEW AC-AC**

STRUCTURES AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE

**Figure 10**

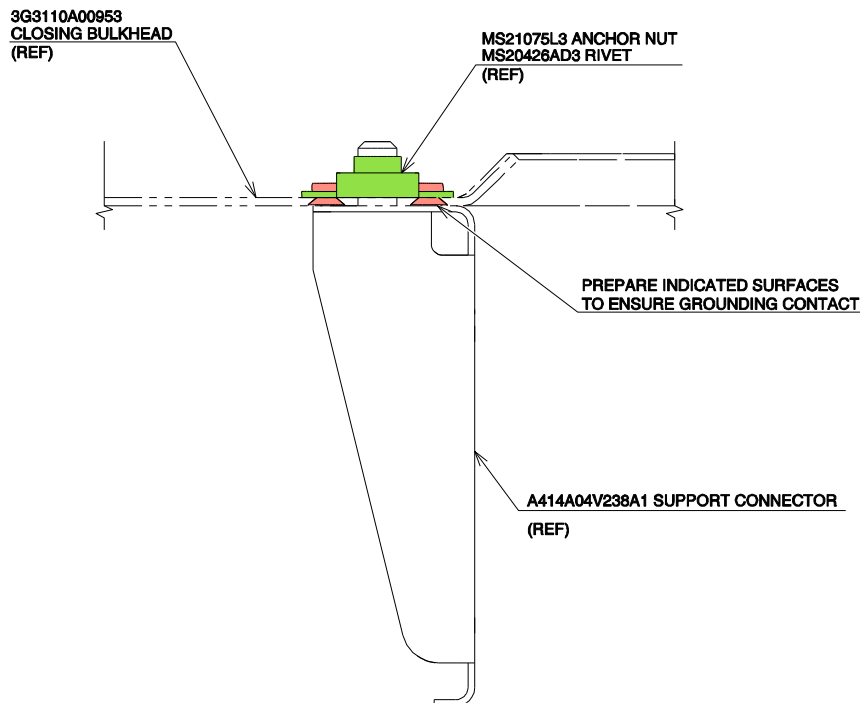
S.B. N°139-632 OPTIONAL  
DATE: September 5, 2024  
REVISION: /





**DETAIL F**

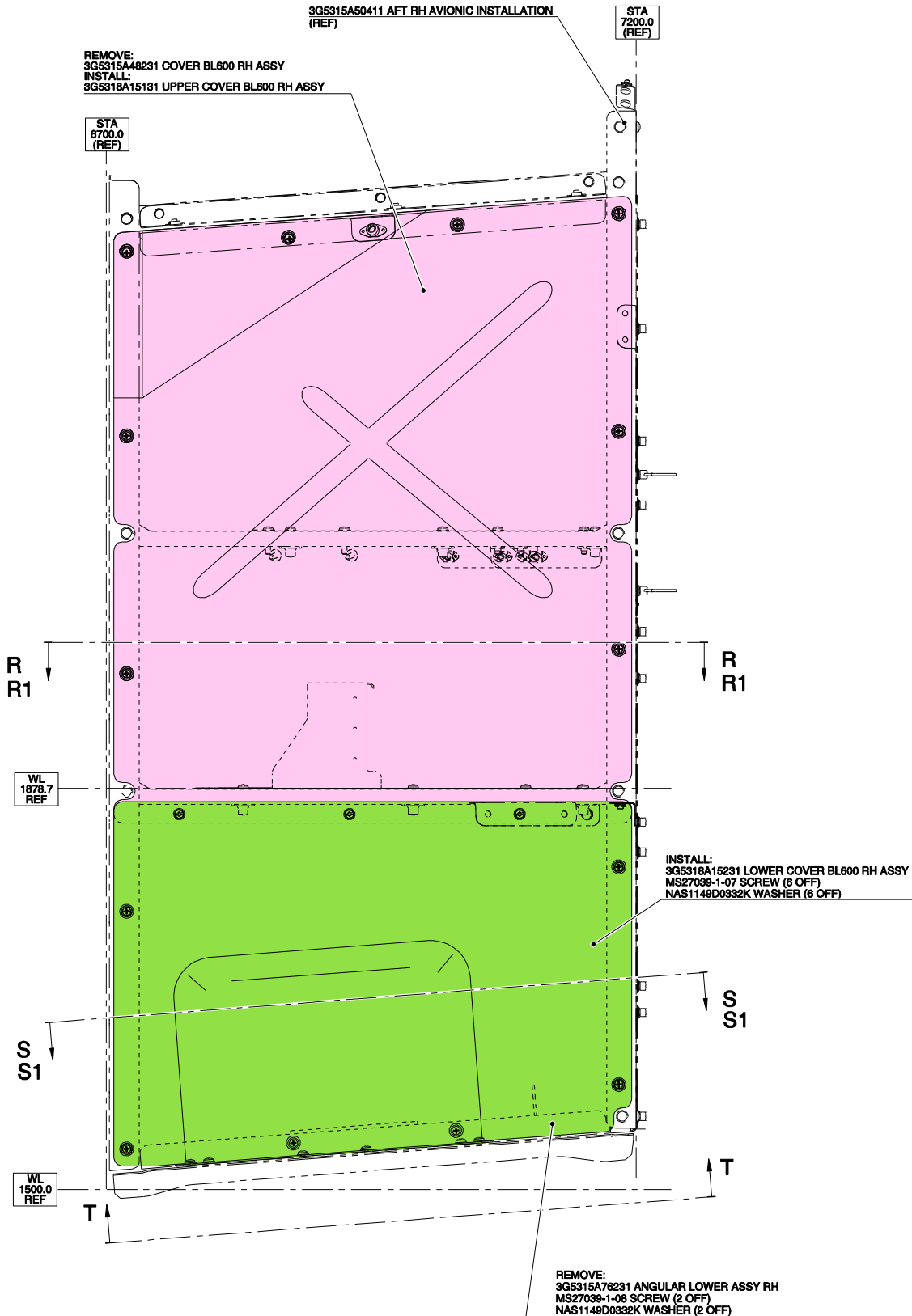
STRUCTURES AND SYSTEMS ARE PARTIALLY  
OMITTED FOR BETTER CLARITY PURPOSE



**SECTION H-H**

STRUCTURES AND SYSTEMS ARE PARTIALLY  
OMITTED FOR BETTER CLARITY PURPOSE

**Figure 11**



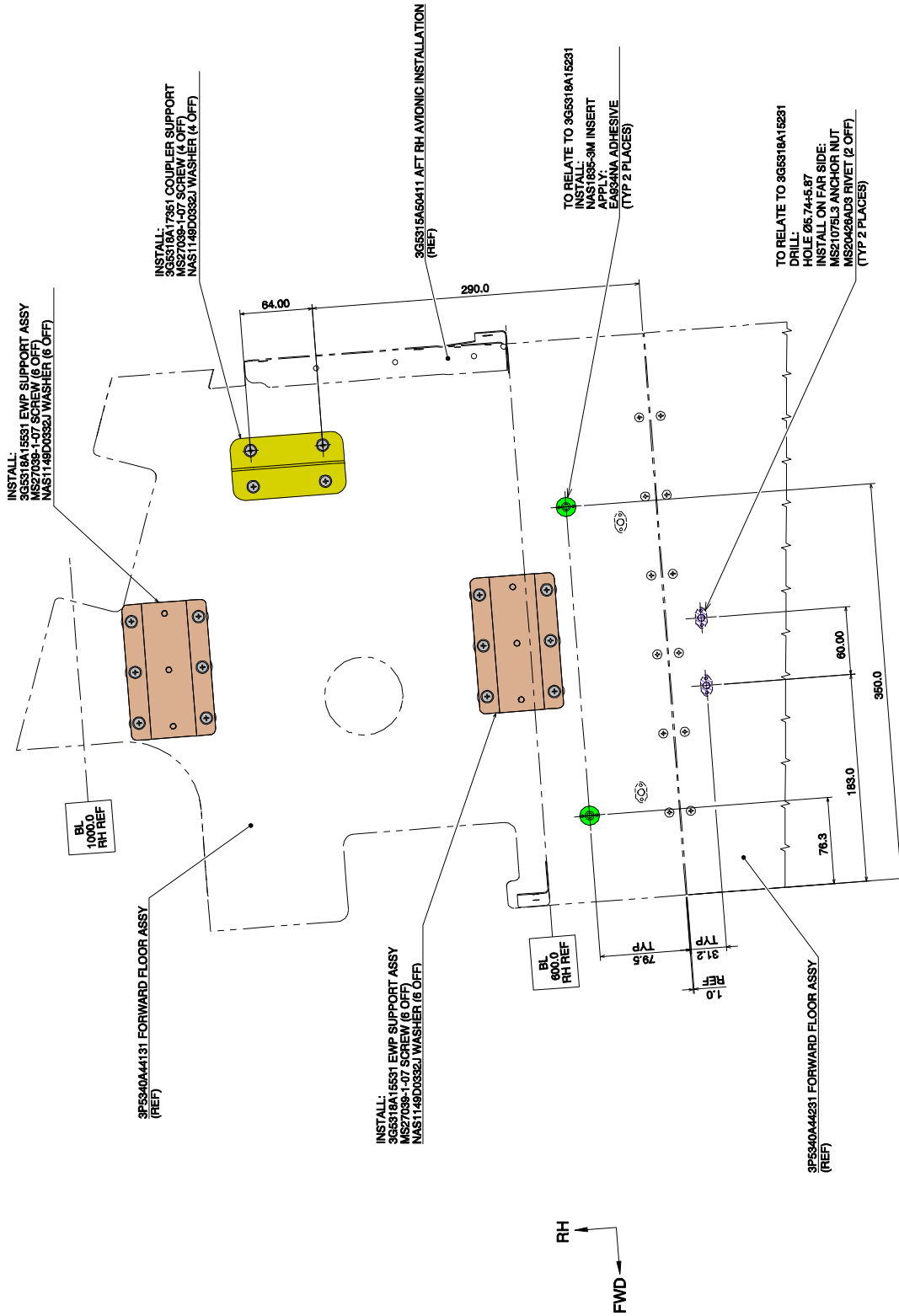
**DETAIL P**

STRUCTURES AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE

**Figure 12**

S.B. N°139-632 OPTIONAL  
DATE: September 5, 2024  
REVISION: /





**SECTION S-S**  
STRUCTURES AND SYSTEMS ARE PARTIALLY  
OMITTED FOR BETTER CLARITY PURPOSE

**Figure 14**

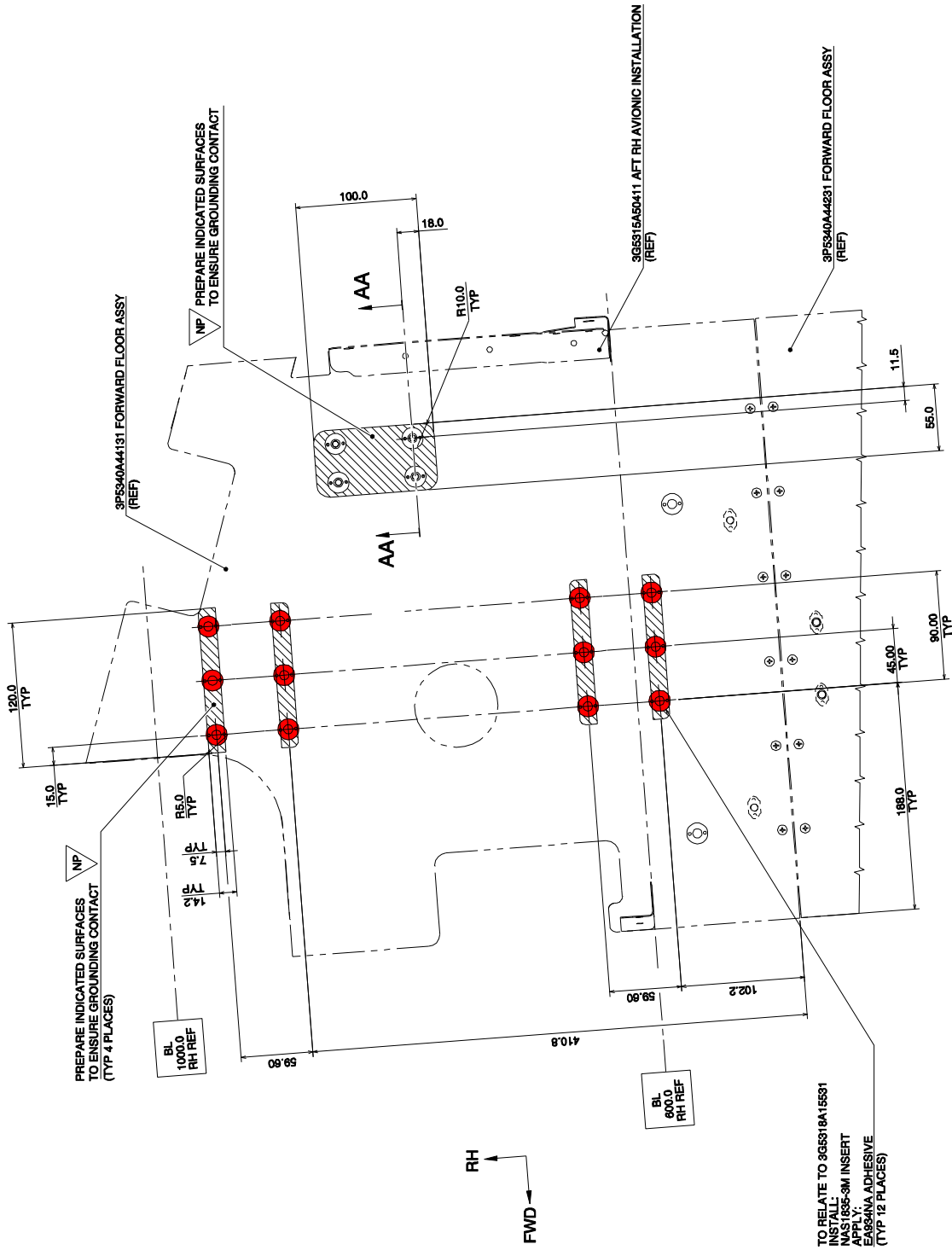
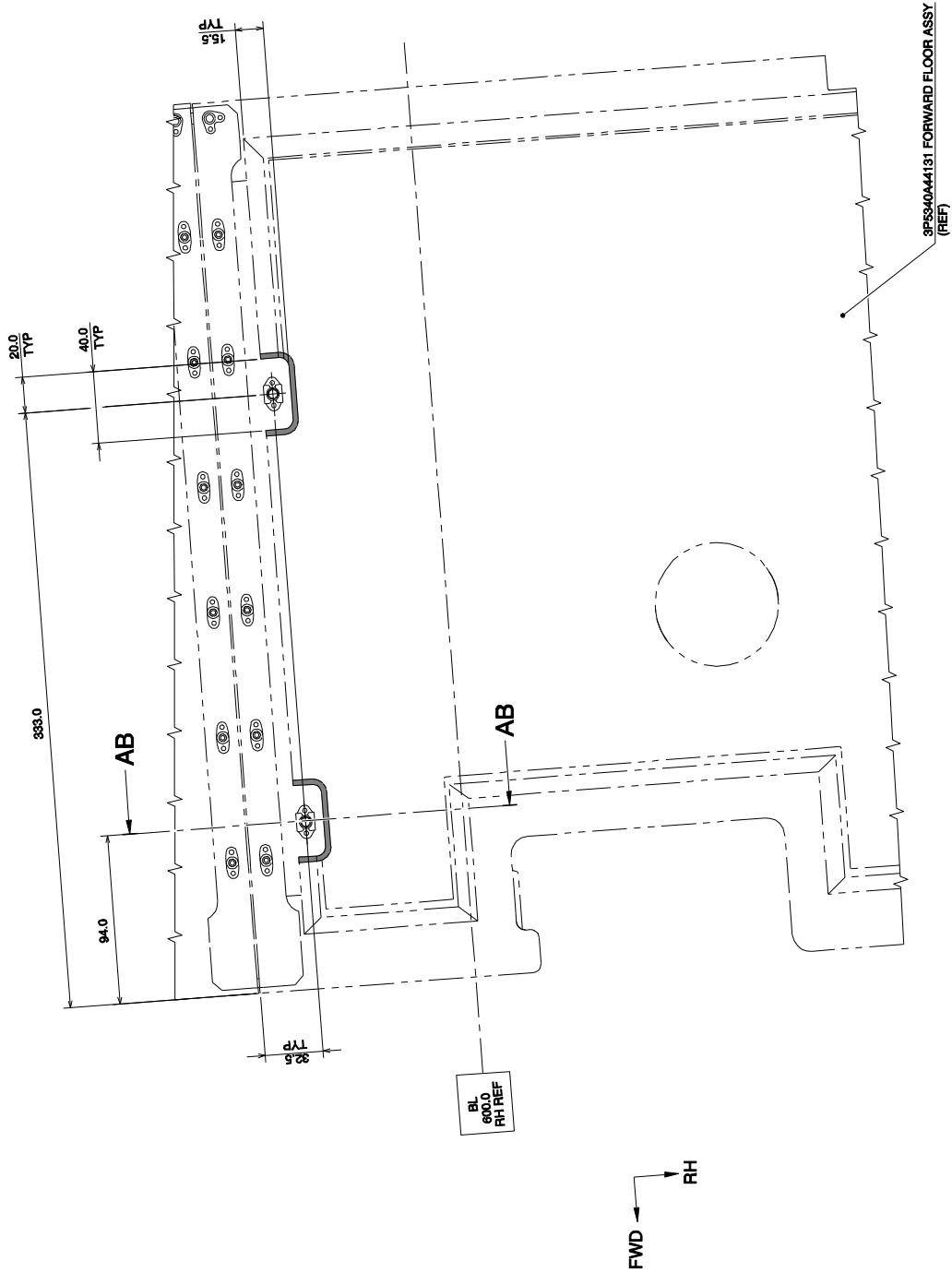


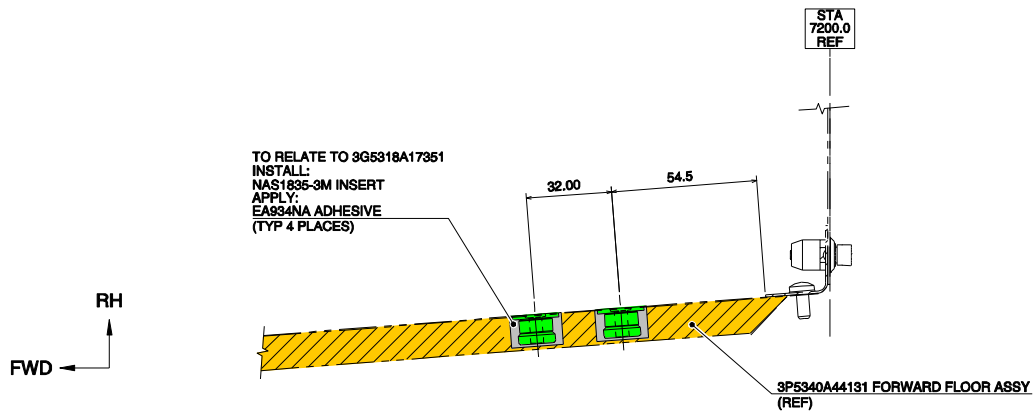
Figure 15



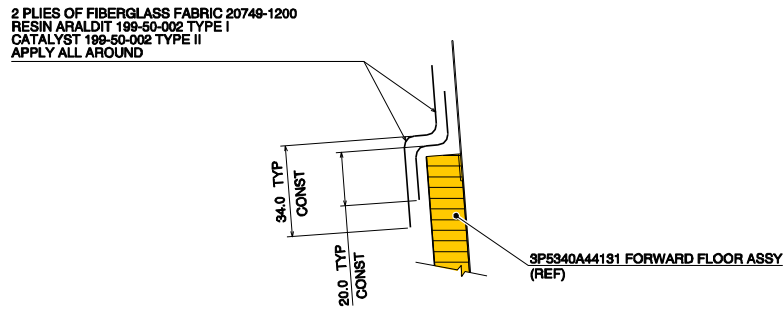
**SECTION T-T**  
STRUCTURES AND SYSTEMS ARE PARTIALLY  
OMITTED FOR BETTER CLARITY PURPOSE

**Figure 16**

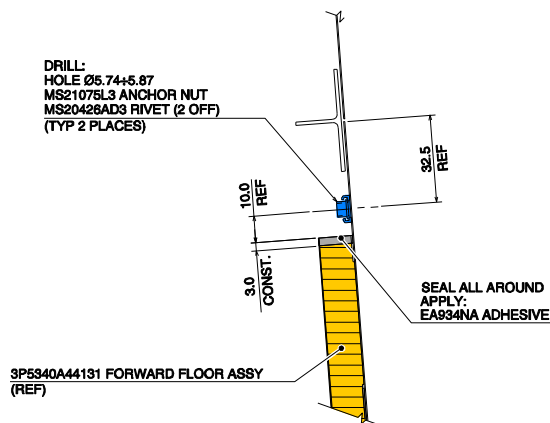
S.B. N°139-632 OPTIONAL  
DATE: September 5, 2024  
REVISION: /



**SECTION AA-AA**  
STRUCTURES AND SYSTEMS ARE PARTIALLY  
OMITTED FOR BETTER CLARITY PURPOSE

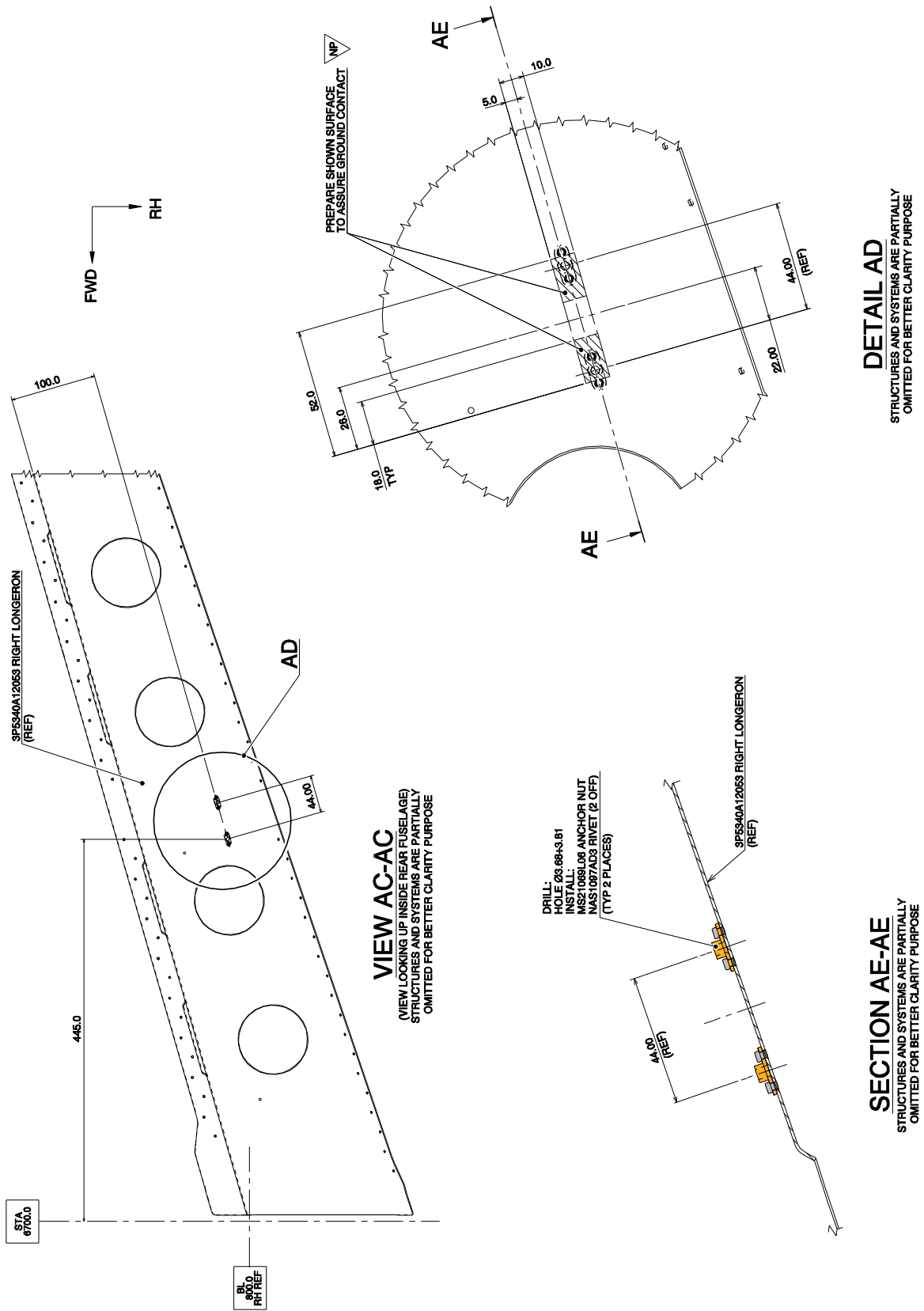


**SCHEMATIC SECTION AB-AB**  
STRUCTURES AND SYSTEMS ARE PARTIALLY  
OMITTED FOR BETTER CLARITY PURPOSE



**SECTION AB-AB**  
STRUCTURES AND SYSTEMS ARE PARTIALLY  
OMITTED FOR BETTER CLARITY PURPOSE

**Figure 17**

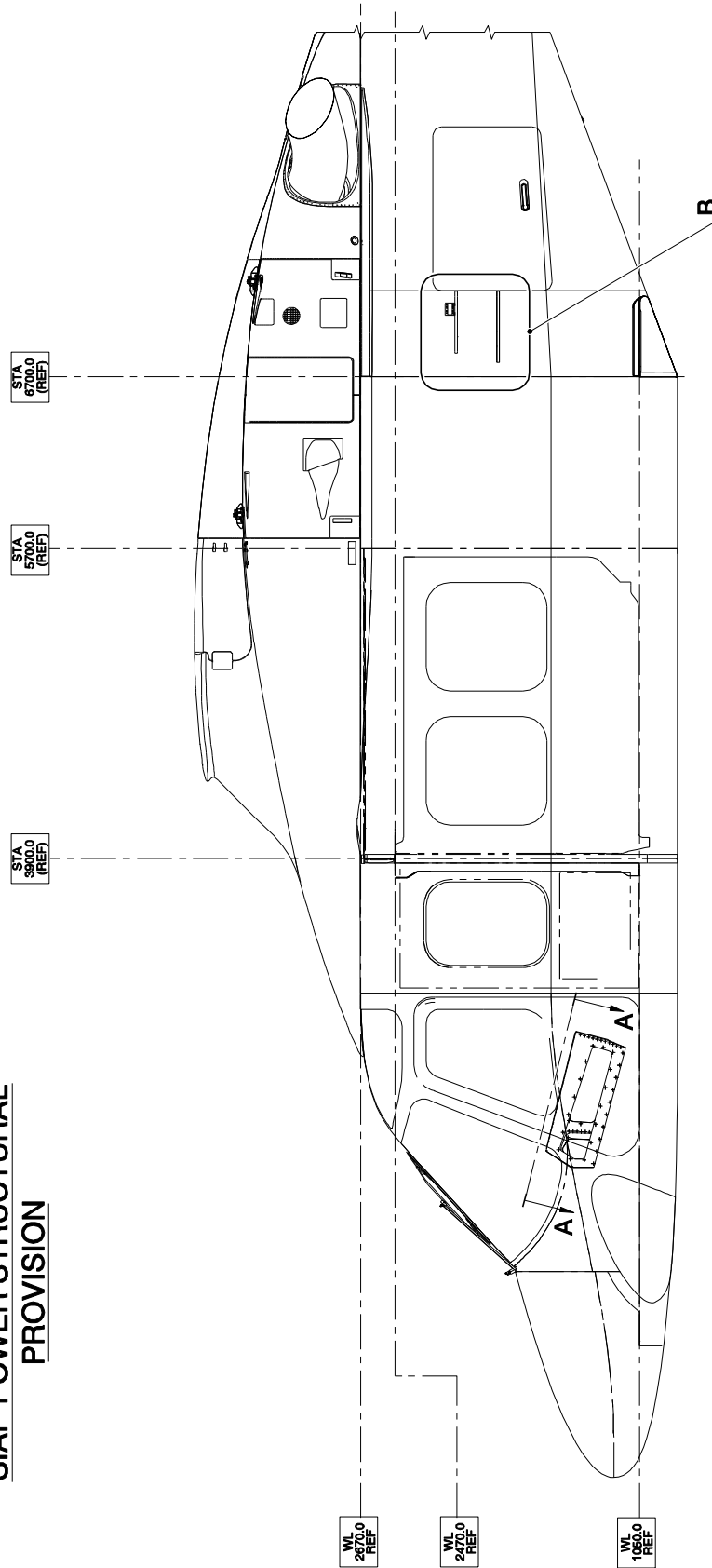


**Figure 18**

S.B. N°139-632 OPTIONAL  
DATE: September 5, 2024  
REVISION: /

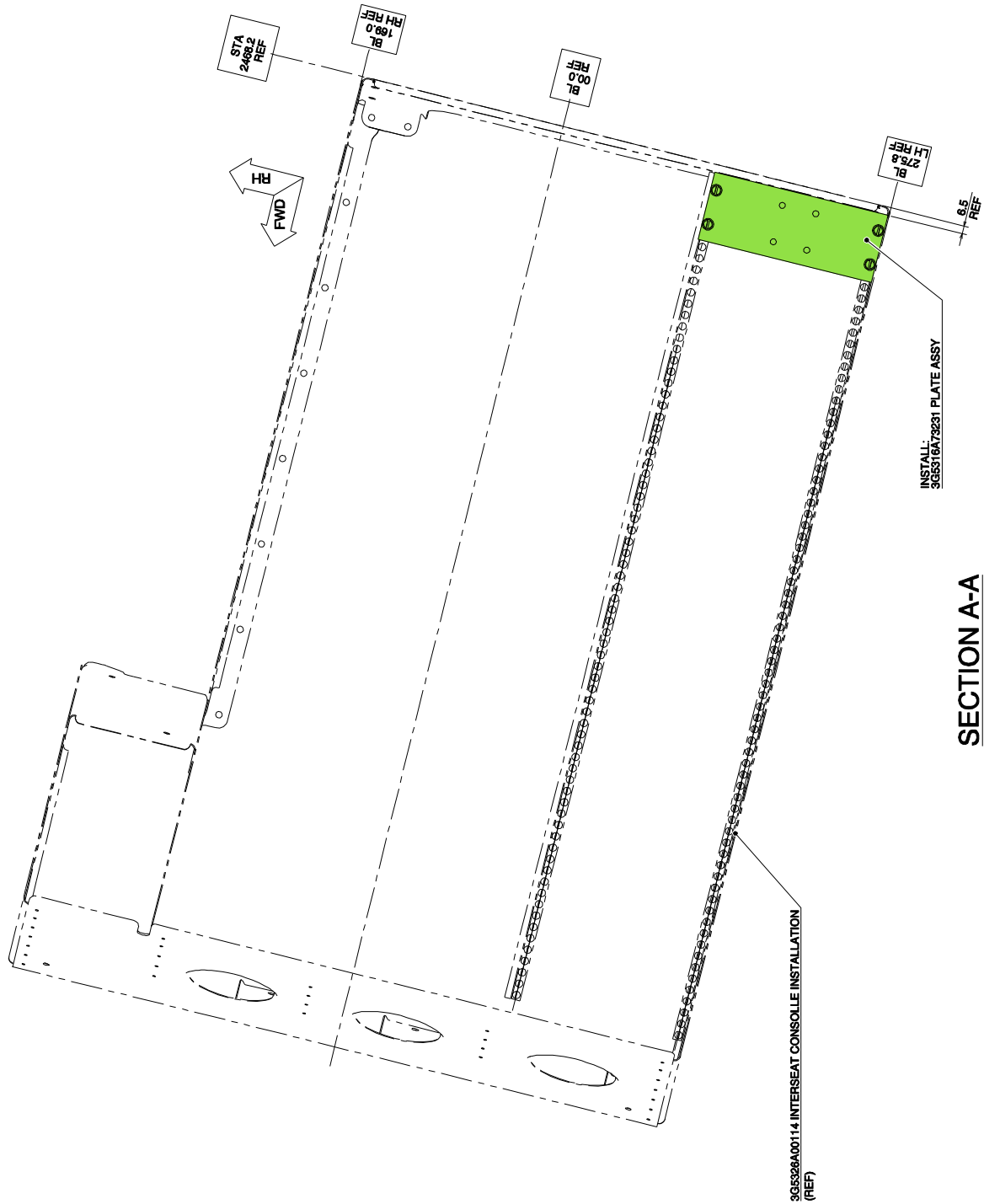


**3G5311A03513**  
**SIAP POWER STRUCTURAL**  
**PROVISION**



**VIEW LOOKING INBOARD LEFT SIDE**  
STRUCTURES AND SYSTEMS ARE PARTIALLY  
OMITTED FOR BETTER CLARITY PURPOSE

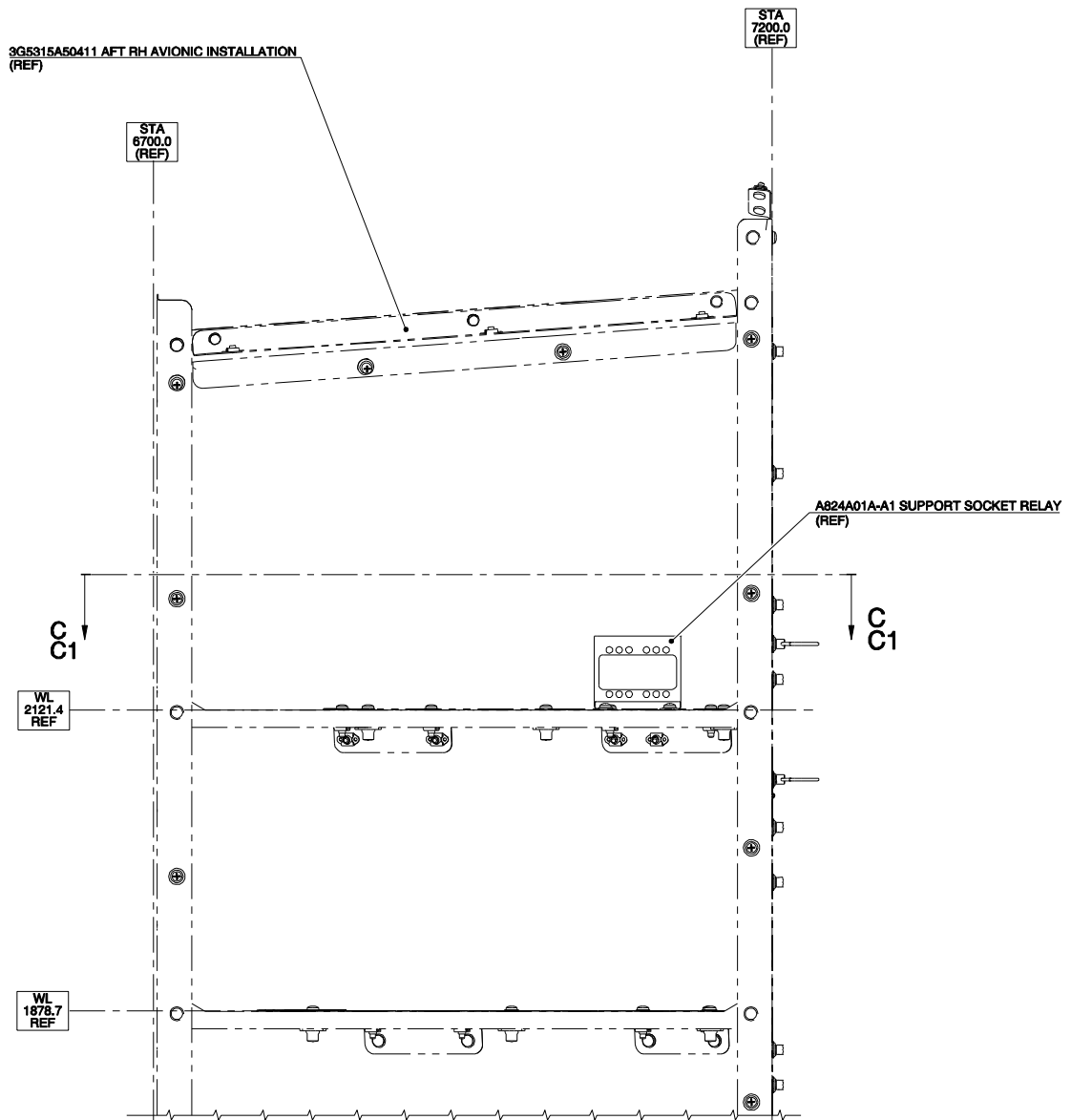
**Figure 19**



**SECTION A-A**  
STRUCTURES AND SYSTEMS ARE PARTIALLY  
OMITTED FOR BETTER CLARITY PURPOSE

**Figure 20**

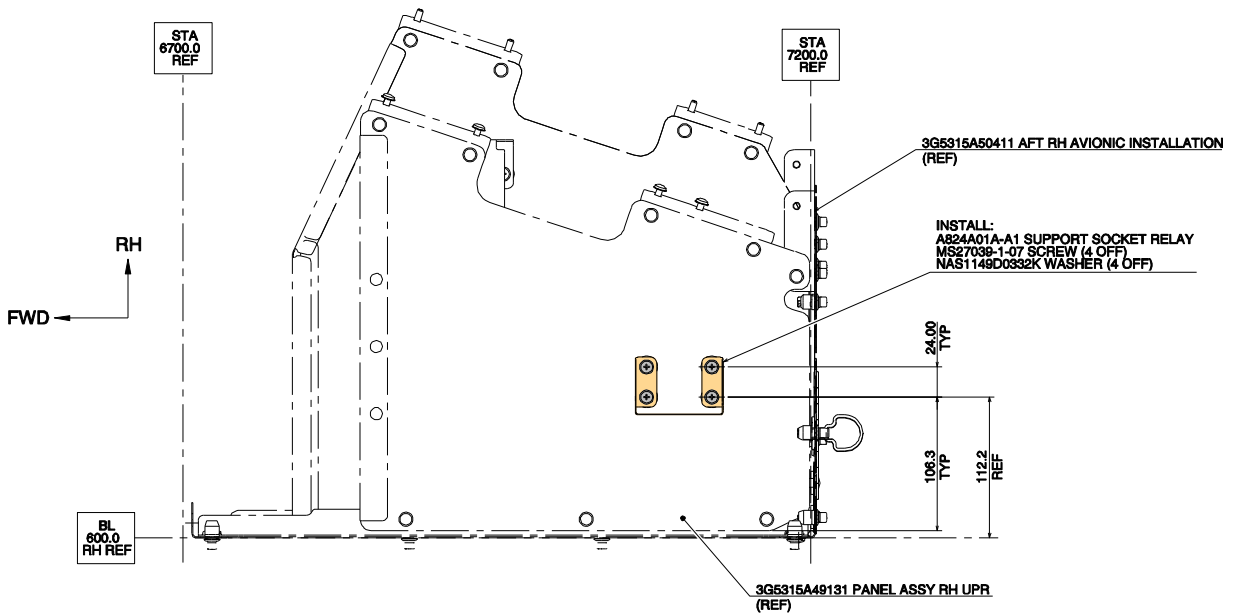
S.B. N°139-632 OPTIONAL  
DATE: September 5, 2024  
REVISION: /



**DETAIL B**

STRUCTURES AND SYSTEMS ARE PARTIALLY  
OMITTED FOR BETTER CLARITY PURPOSE

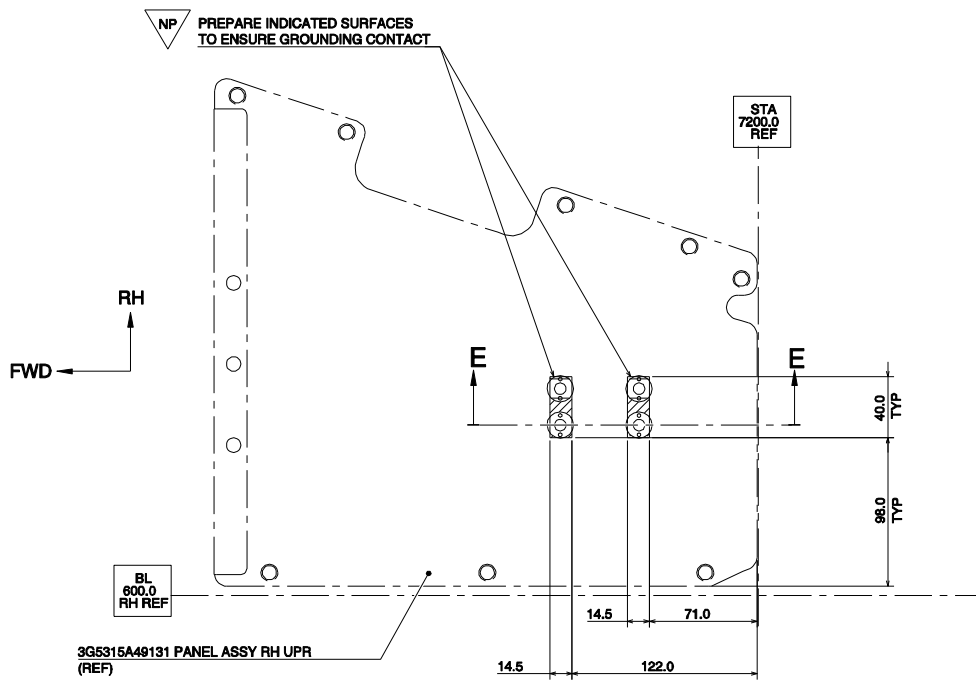
**Figure 21**



**SECTION C-C**  
STRUCTURES AND SYSTEMS ARE PARTIALLY  
OMITTED FOR BETTER CLARITY PURPOSE

**Figure 22**

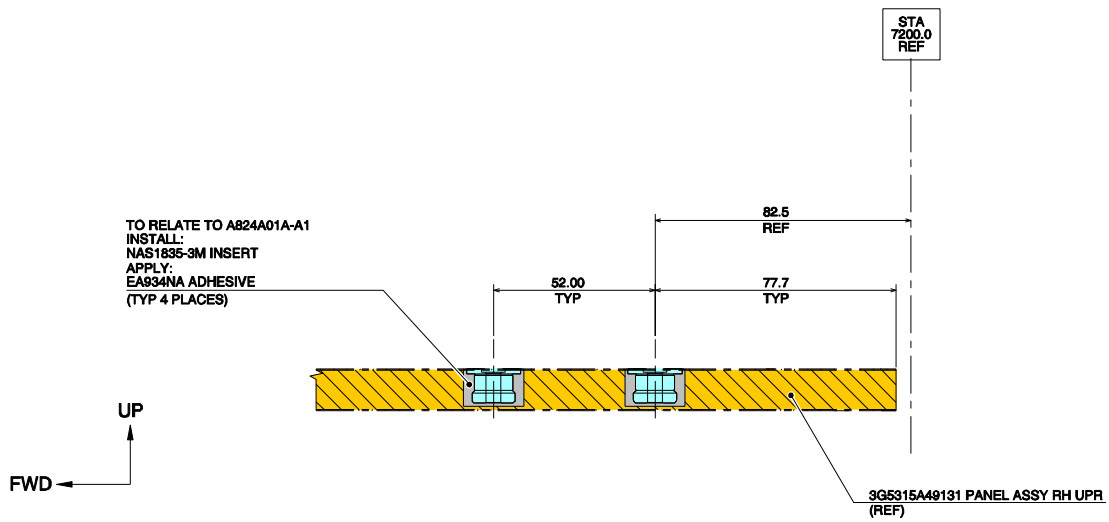
S.B. N°139-632 OPTIONAL  
DATE: September 5, 2024  
REVISION: /



**SECTION C1-C1**

A824A01A-A1. STRUCTURES AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE

**Figure 23**



**SECTION E-E**  
STRUCTURES AND SYSTEMS ARE PARTIALLY  
OMITTED FOR BETTER CLARITY PURPOSE

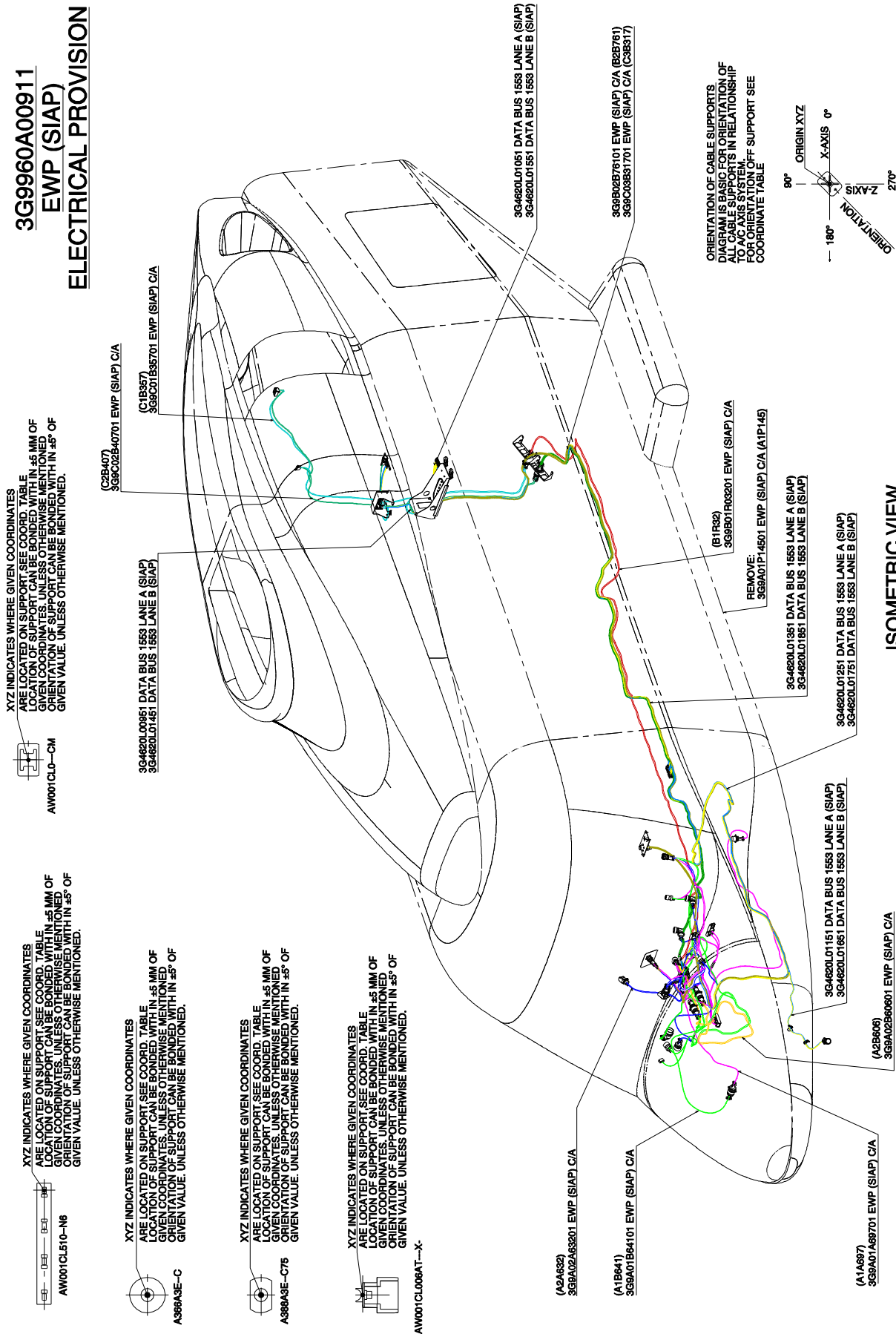
**Figure 24**

S.B. N°139-632 OPTIONAL  
DATE: September 5, 2024  
REVISION: /



**3G9960A00911**  
**EWP (SIAP)**

**ELECTRICAL PROVISION**



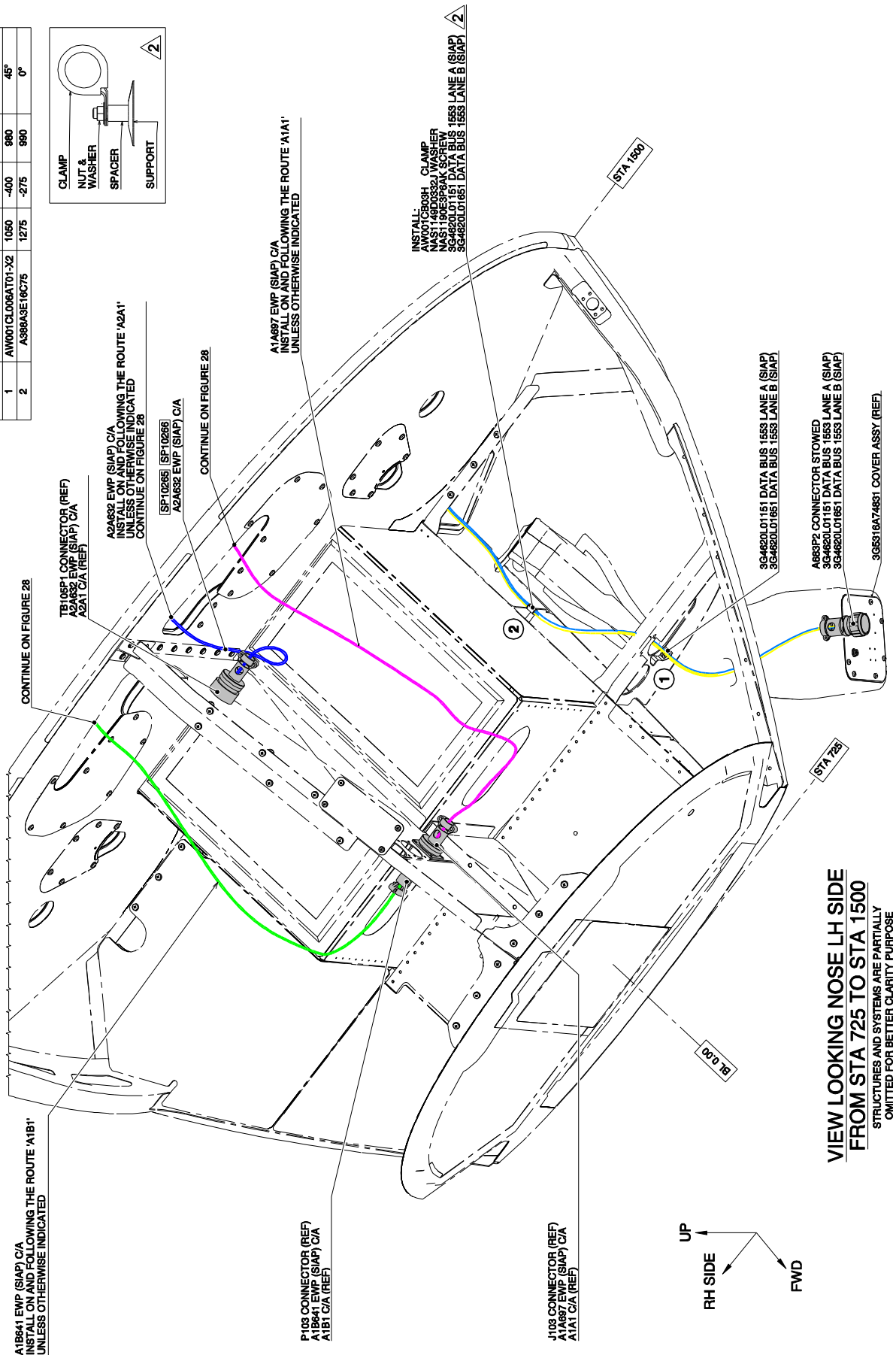
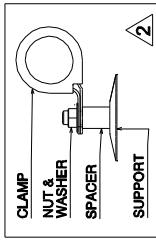
**ISOMETRIC VIEW**

**Figure 26**

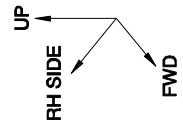
S.B. N°139-632 OPTIONAL  
DATE: September 5, 2024  
REVISION: /



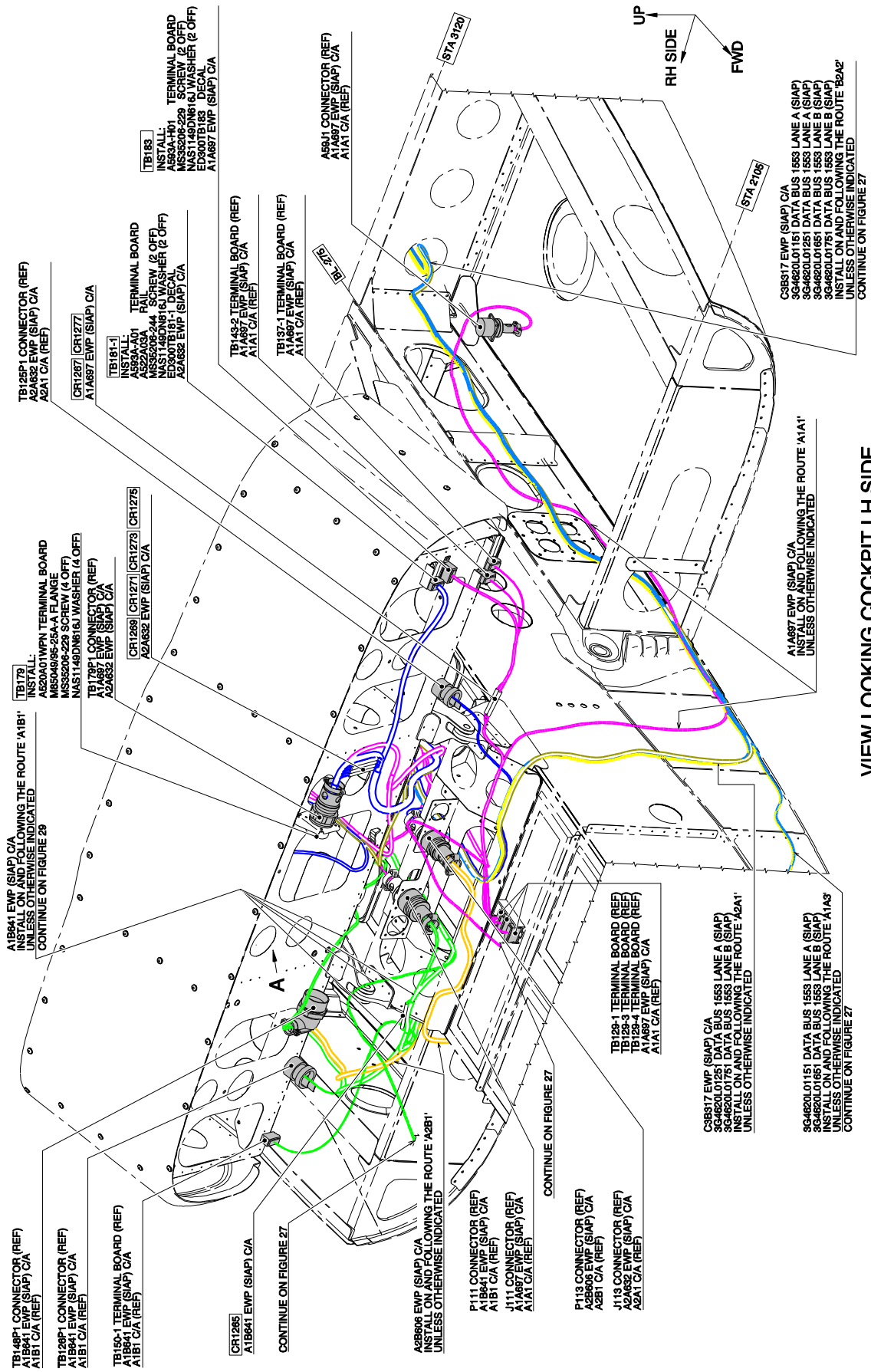
LOCATION NUMBER	PART NUMBER	STA	BL	WL	ORIENTATION
1	AW001CLO6A701-X2	1050	-400	860	45°
2	A388A3E16C75	1275	-275	860	0°



**VIEW LOOKING NOSE LH SIDE  
FROM STA 725 TO STA 1500**  
STRUCTURES AND SYSTEMS ARE PARTIALLY  
OMITTED FOR BETTER CLARITY PURPOSE

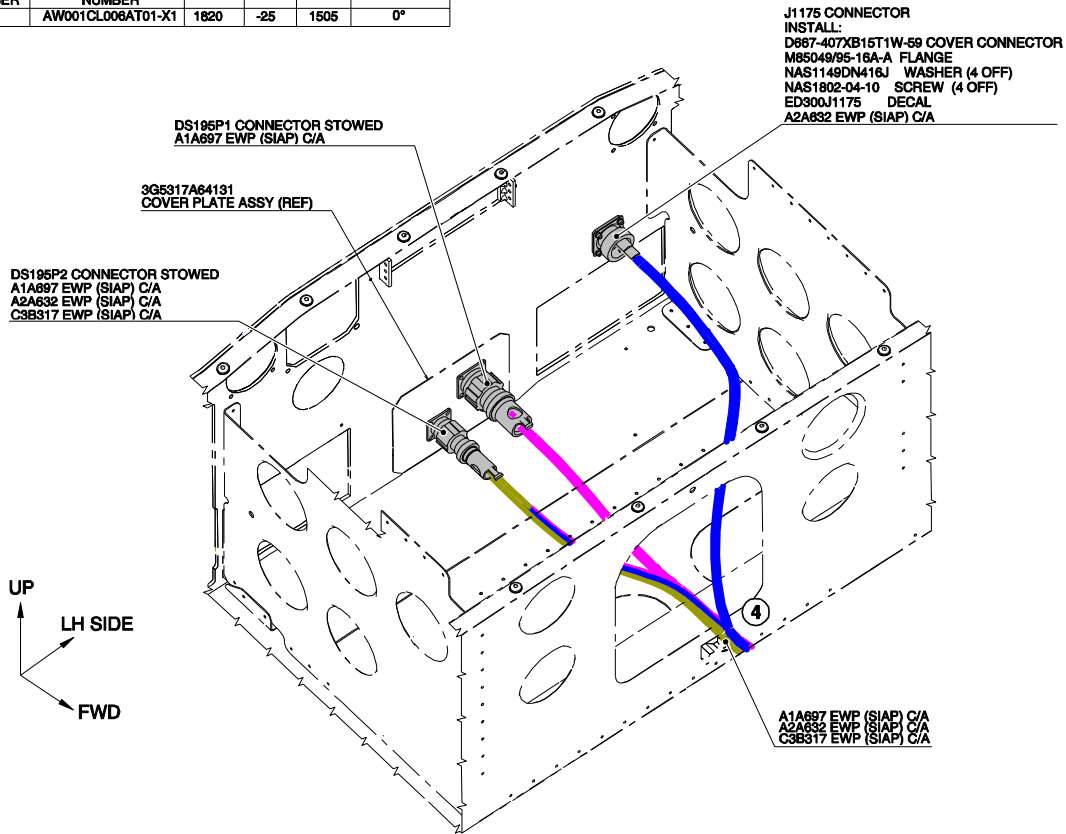


**Figure 27**





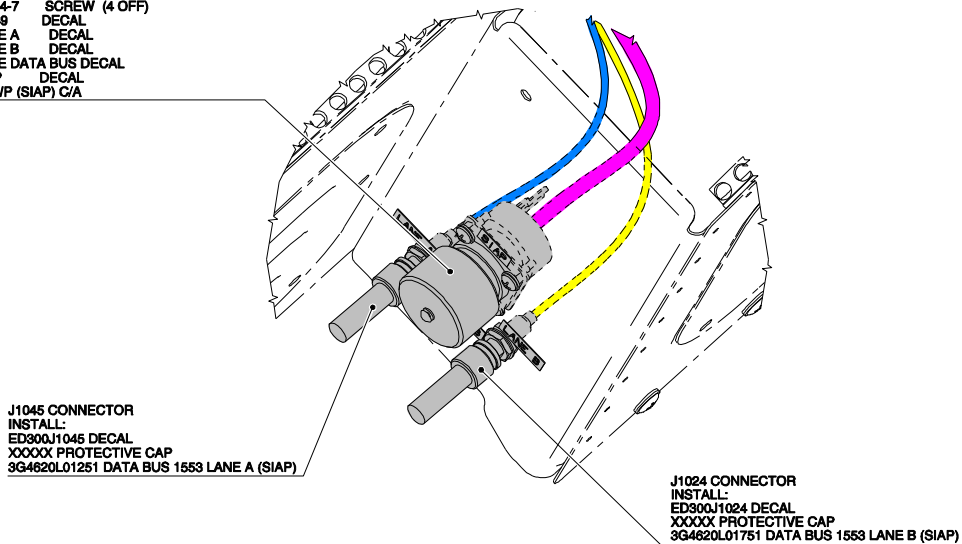
LOCATION NUMBER	PART. NUMBER	STA	BL	WL	ORIENTATION
4	AW001CL006AT01-X1	1820	-25	1505	0°



**VIEW A**

STRUCTURES AND SYSTEMS ARE PARTIALLY  
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**J1049 CONNECTOR**  
INSTALL:  
D38999/33W13R COVER  
M85049/95-14A-A FLANGE  
NAS1149DN432J WASHER (4 OFF)  
NAS1802-04-7 SCREW (4 OFF)  
ED300J1049 DECAL  
ED300LANE A DECAL  
ED300LANE B DECAL  
ED300LANE DATA BUS DECAL  
ED300SIAP DECAL  
A1A697 EWP (SIAP) C/A



**DETAIL B**

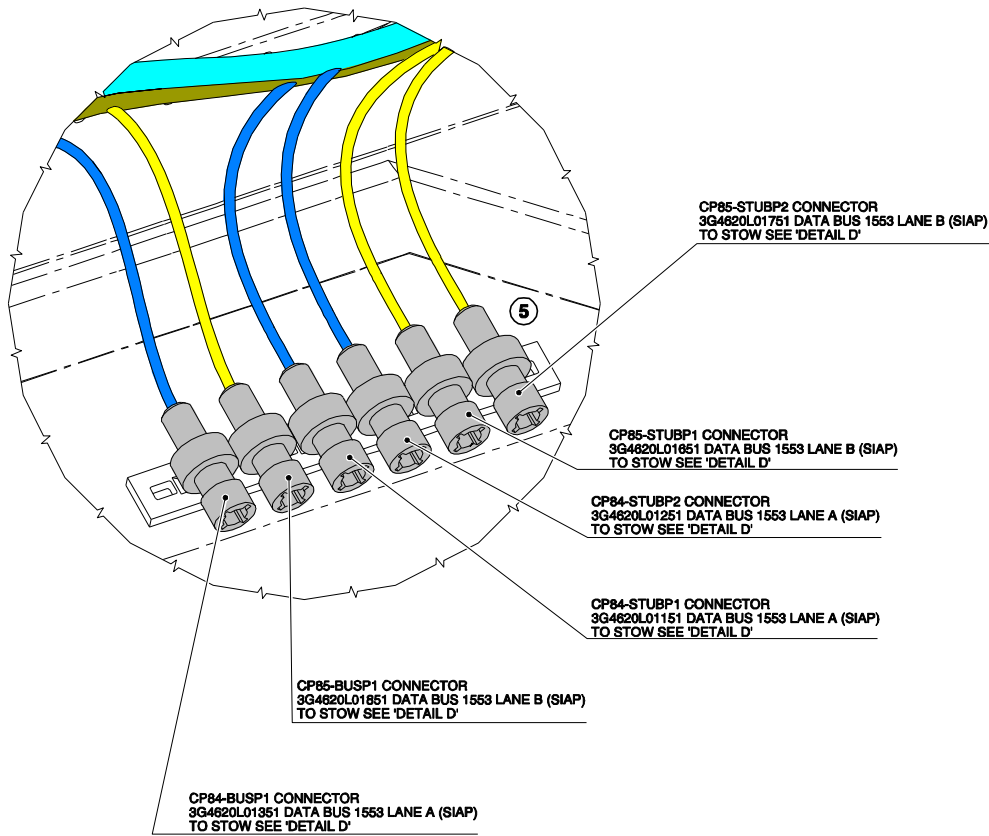
STRUCTURES AND SYSTEMS ARE PARTIALLY  
OMITTED FOR BETTER CLARITY PURPOSE

**Figure 30**

S.B. N°139-632 OPTIONAL  
DATE: September 5, 2024  
REVISION: /



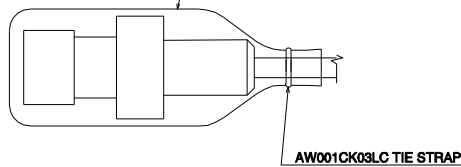
LOCATION NUMBER	PART. NUMBER	STA	BL	WL	ORIENTATION
5	AW001CL510C-N6	4085	380	845	0°



### DETAIL C

STRUCTURES AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE

EN6049-008-25-5 META-ARAMID FIBRE (NOMEX)



INSERT THE CONNECTOR ASSEMBLY INTO THE PROTECTIVE PLUG.  
COVER WITH THE NOMEX FIBRE SLEEVE AND USE THE CABLE STRAPS TO TIE UP SLEEVE FIRMLY TO THE CONNECTOR CABLING.  
USE CABLE STRAPS TO FIX THE CONNECTOR ASSY TO THE CABLE LOOM.

### DETAIL D

Figure 32

S.B. N°139-632 OPTIONAL  
DATE: September 5, 2024  
REVISION: /



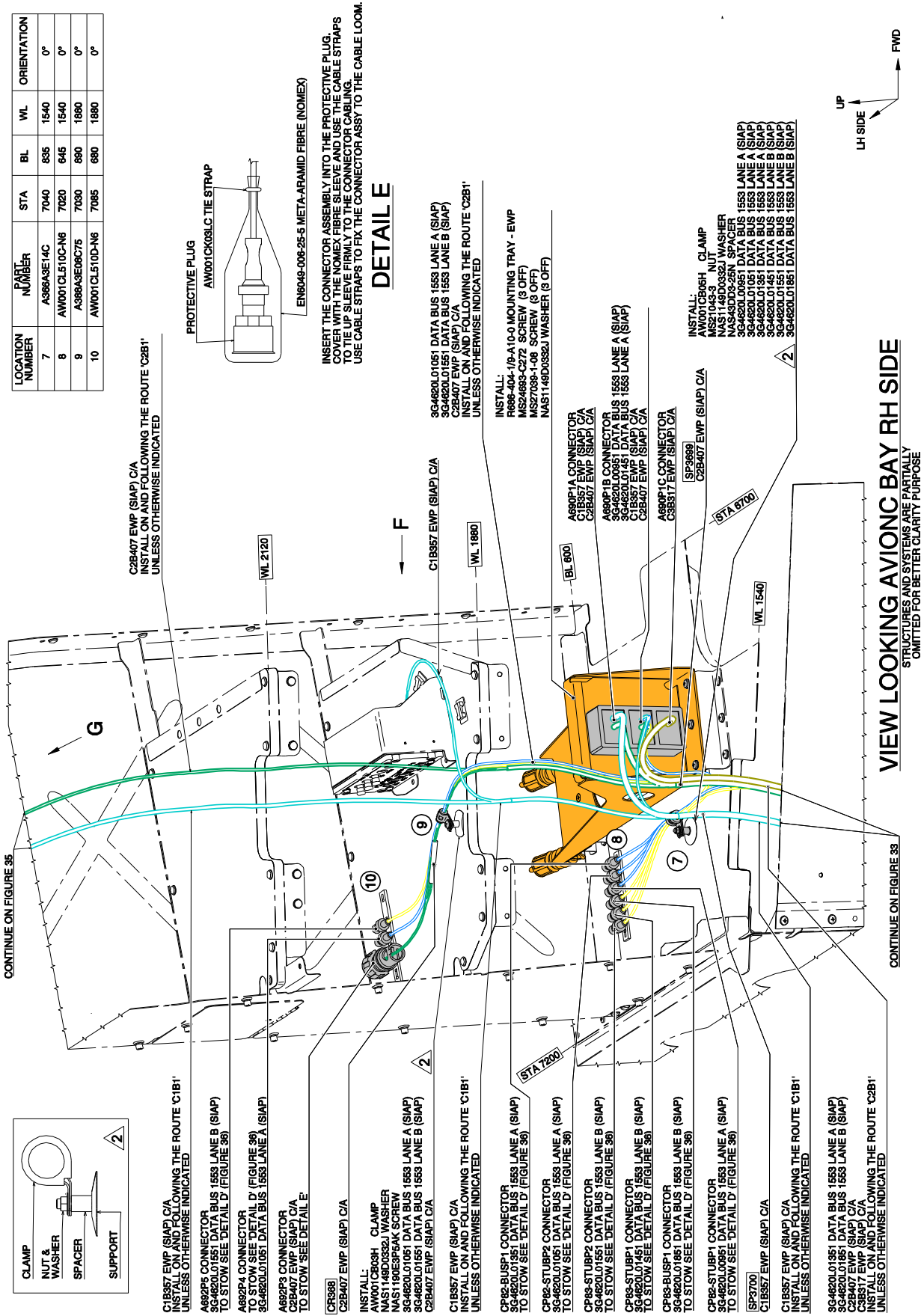
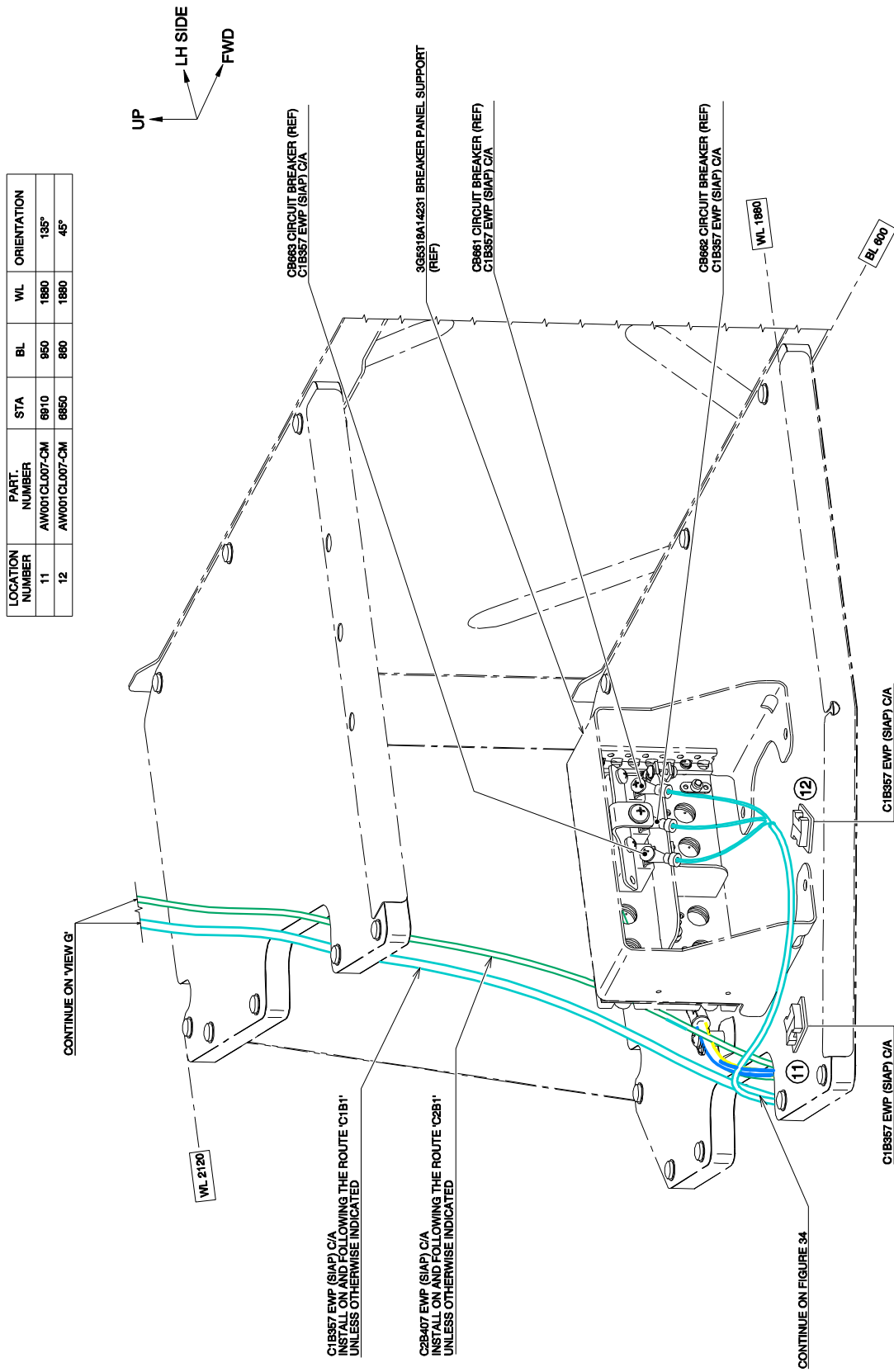


Figure 34

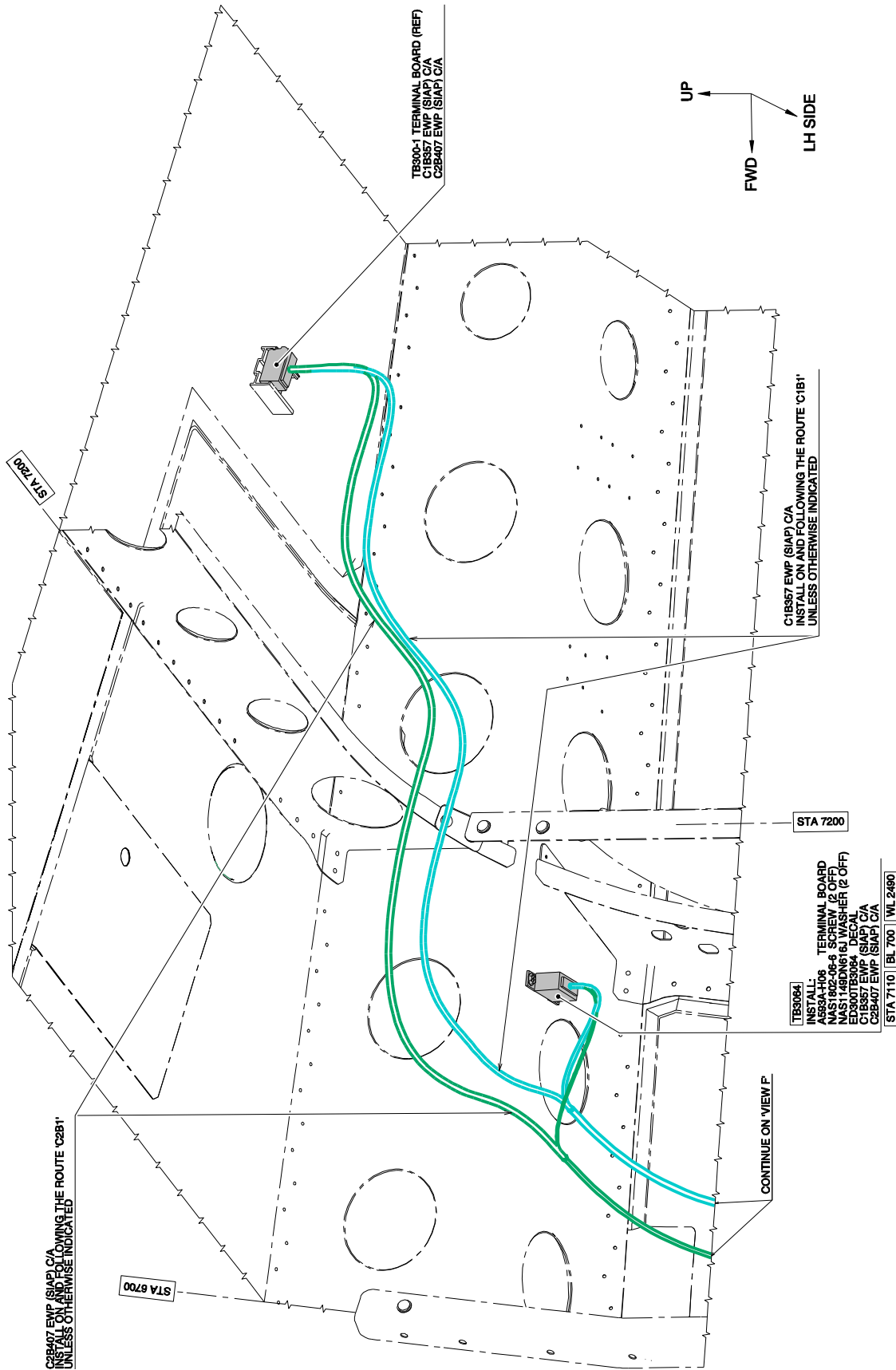
S.B. N°139-632 OPTIONAL  
DATE: September 5, 2024  
REVISION: /





**VIEW F**  
STRUCTURES AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE

**Figure 35**

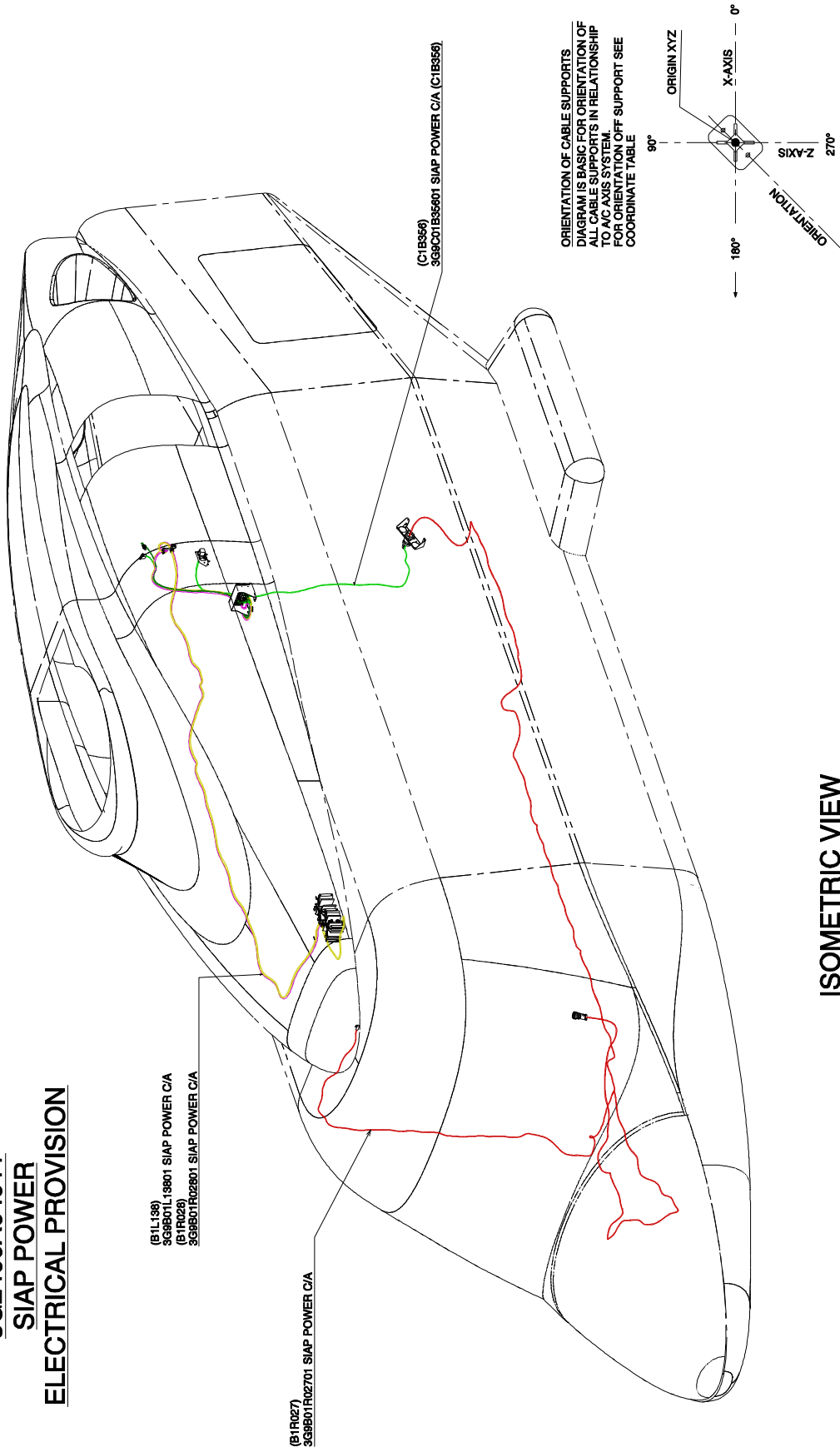


**VIEW G**  
STRUCTURES AND SYSTEMS ARE PARTIALLY  
OMITTED FOR BETTER CLARITY PURPOSE

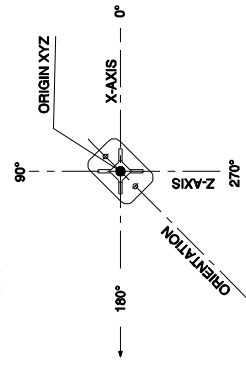
**Figure 36**

S.B. N°139-632 OPTIONAL  
DATE: September 5, 2024  
REVISION: /

**3G2460A04911**  
**SIAP POWER**  
**ELECTRICAL PROVISION**



ORIENTATION OF CABLE SUPPORTS  
DIAGRAM IS BASIC FOR ORIENTATION OF  
ALL CABLE SUPPORTS IN RELATIONSHIP  
TO A/C AXIS SYSTEM.  
FOR ORIENTATION OFF-SUPPORT SEE  
COORDINATE TABLE



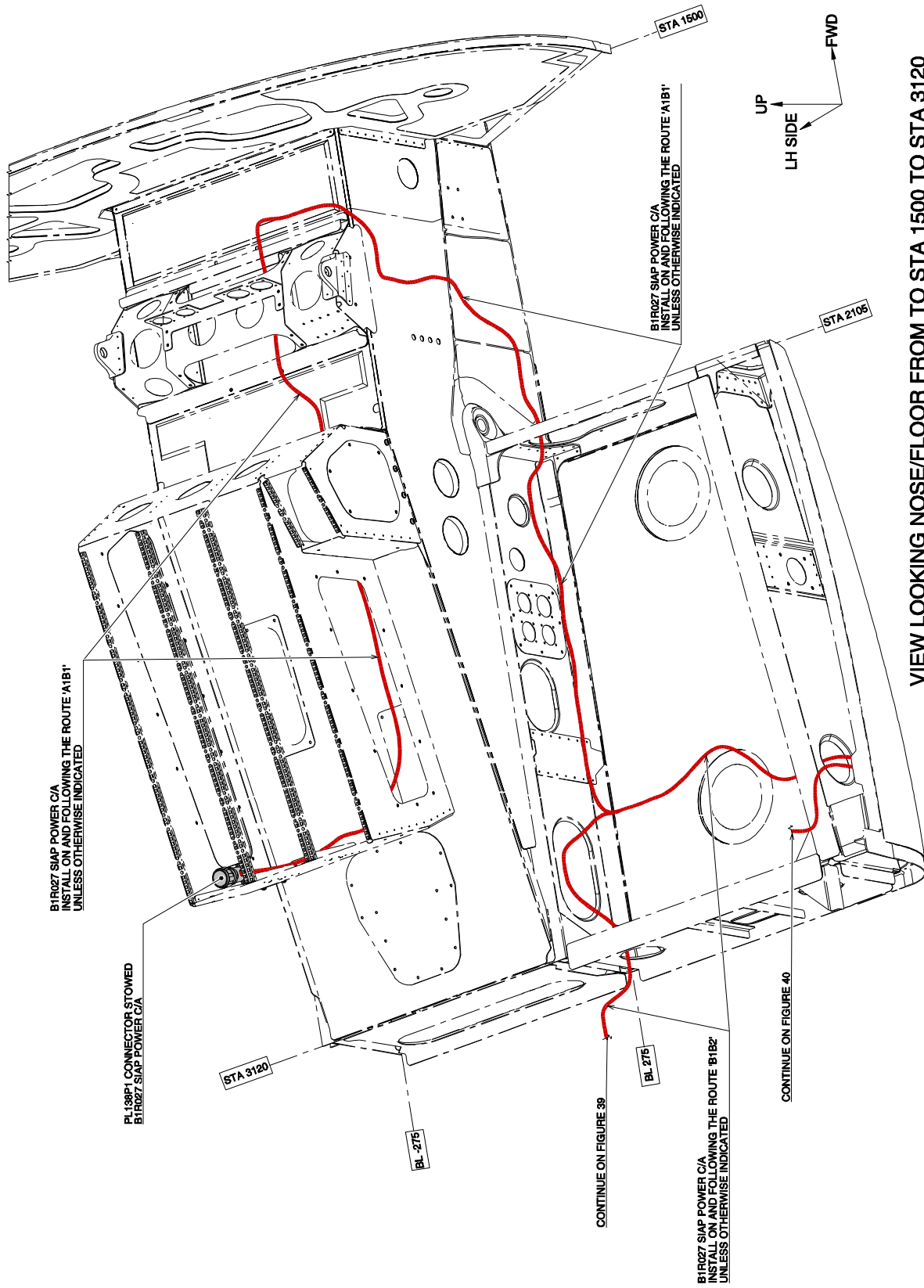
XYZ INDICATES WHERE GIVEN COORDINATES  
ARE LOCATED ON SUPPORT. SEE COORD. TABLE  
LOCATION OF SUPPORT CAN BE BONDED WITH IN  $\pm 5$  MM OF  
GIVEN COORDINATES. UNLESS OTHERWISE MENTIONED  
ORIENTATION OF SUPPORT CAN BE BONDED WITH IN  $\pm 5^\circ$  OF  
GIVEN VALUE. UNLESS OTHERWISE MENTIONED.



AW001CL001-46

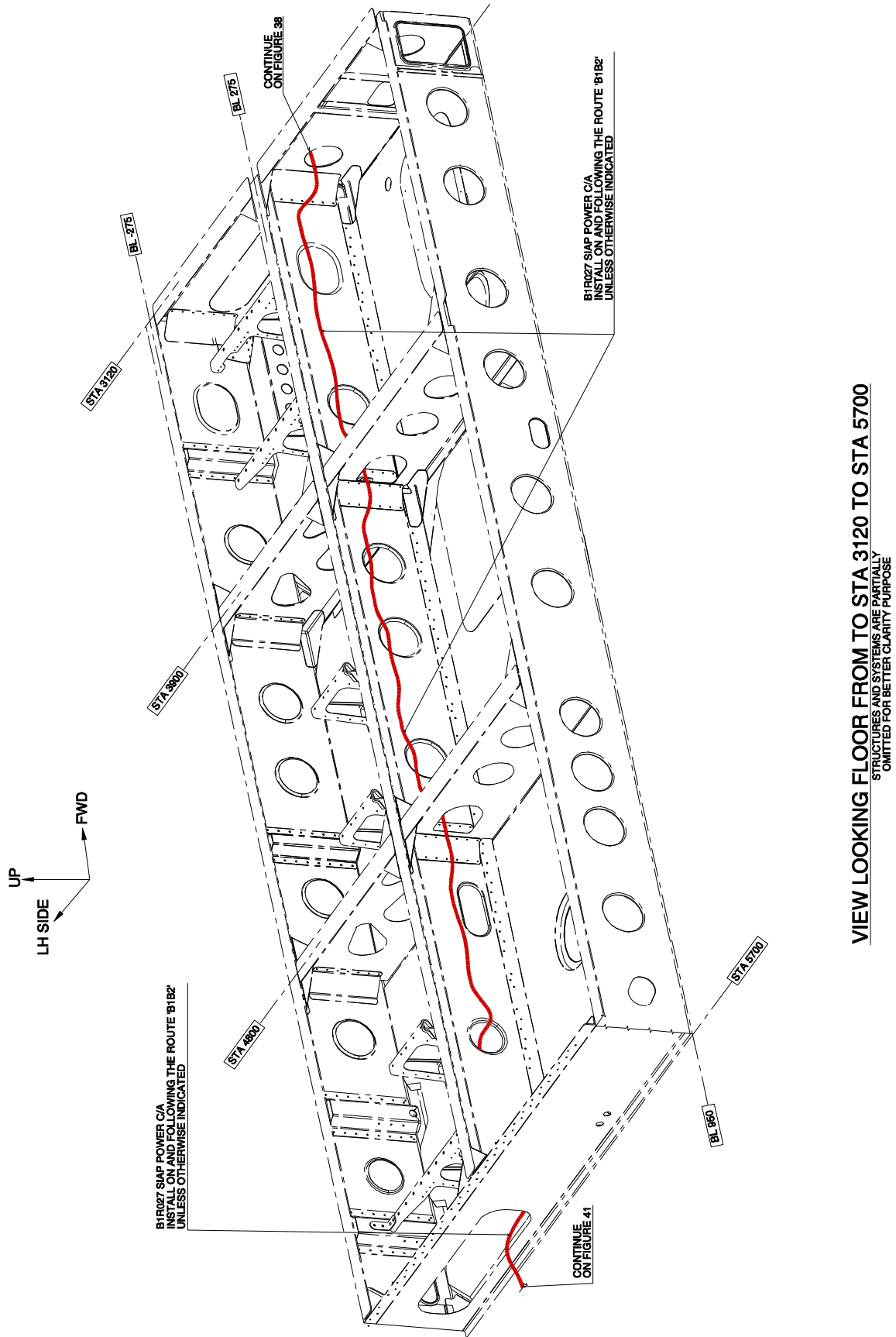
**ISOMETRIC VIEW**

**Figure 37**



**VIEW LOOKING NOSE/FLOOR FROM TO STA 1500 TO STA 3120**  
STRUCTURES AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE

**Figure 38**



**Figure 39**

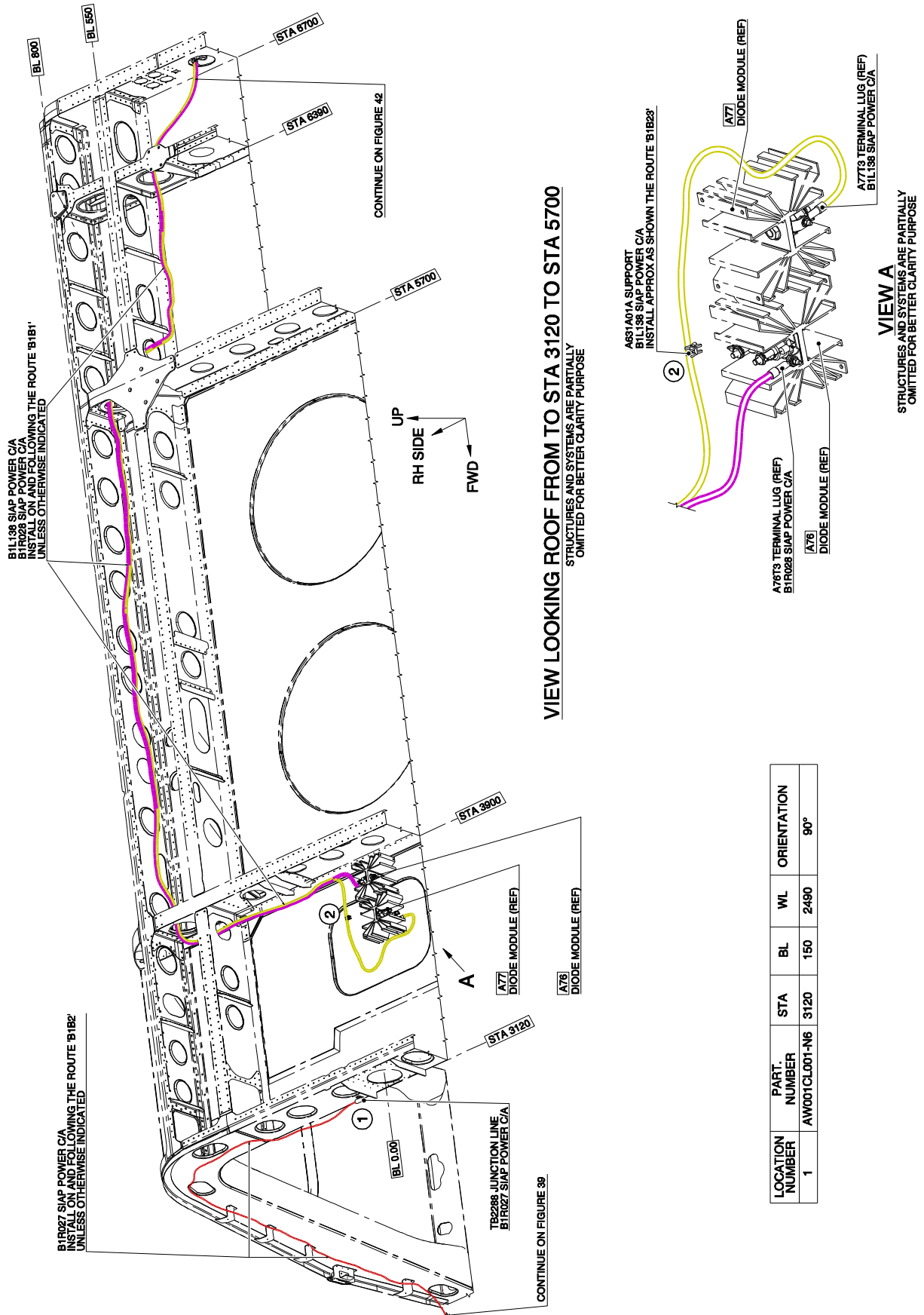
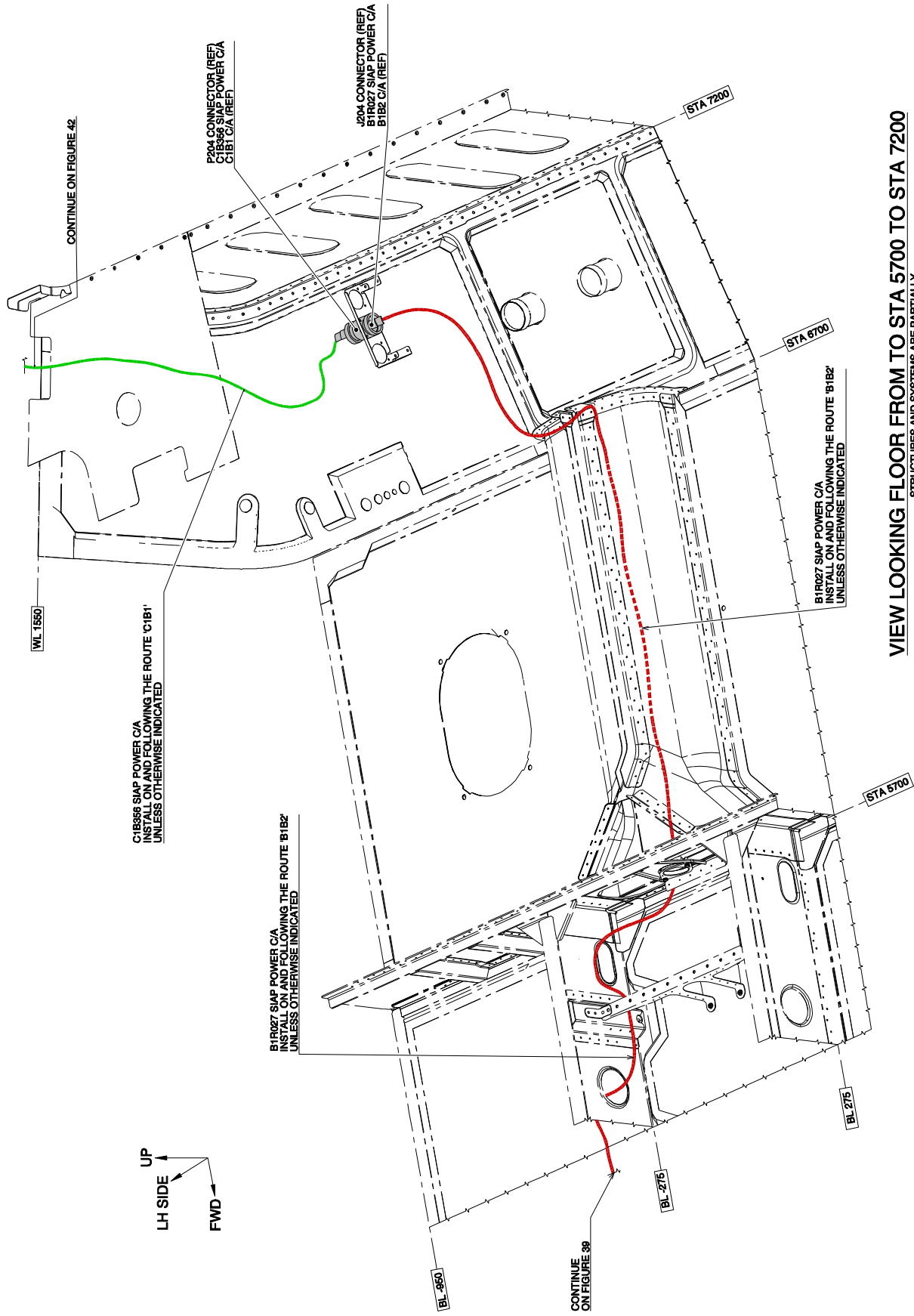


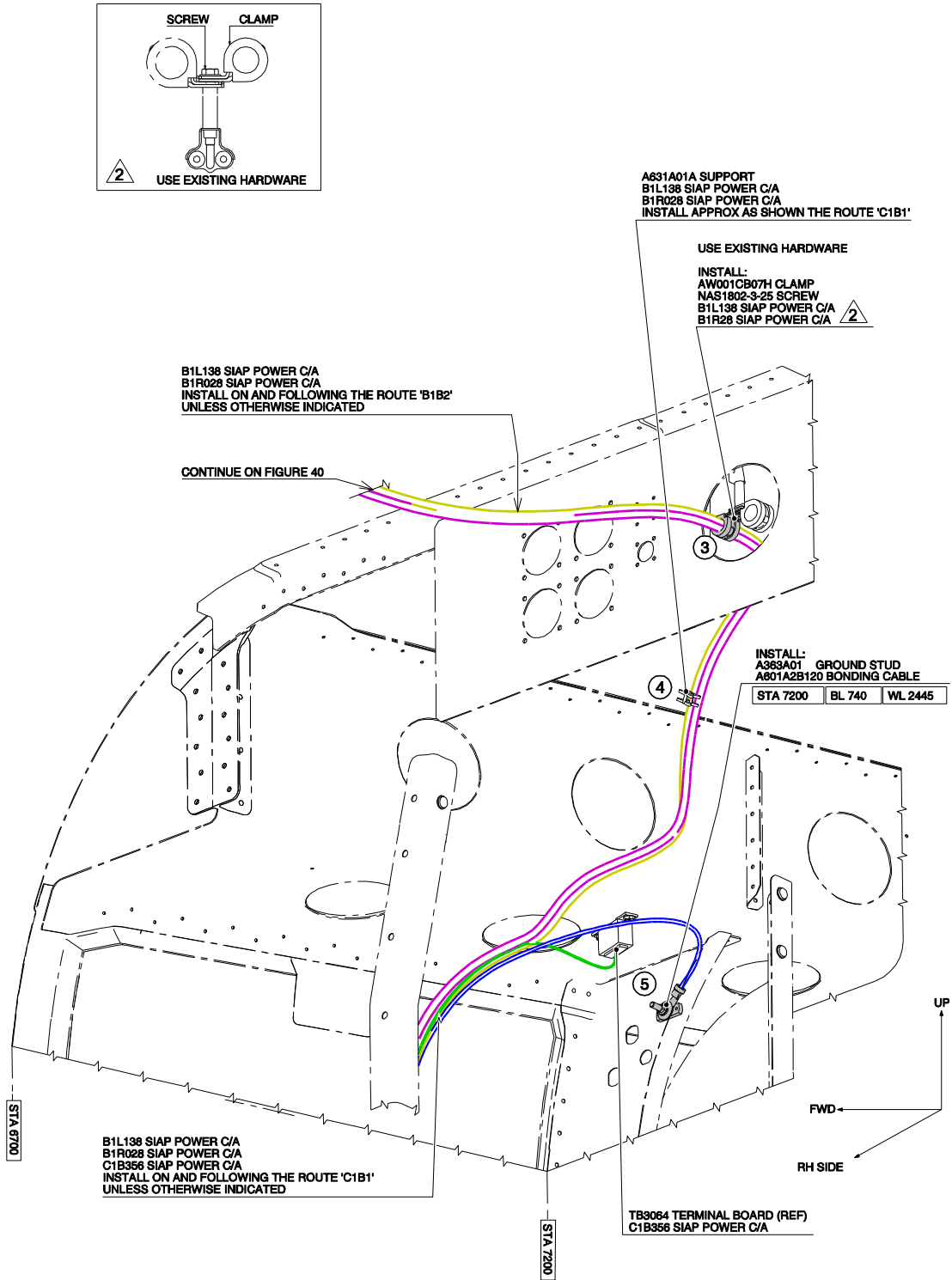
Figure 40



**Figure 41**



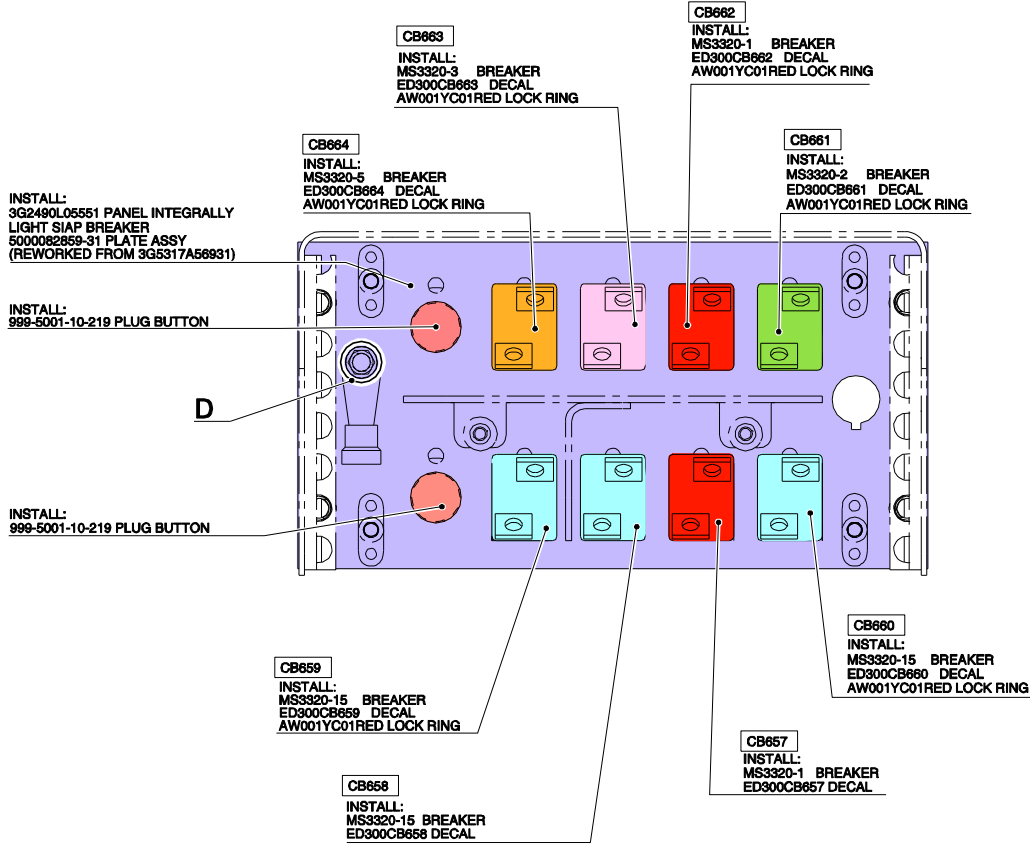




**VIEW B**

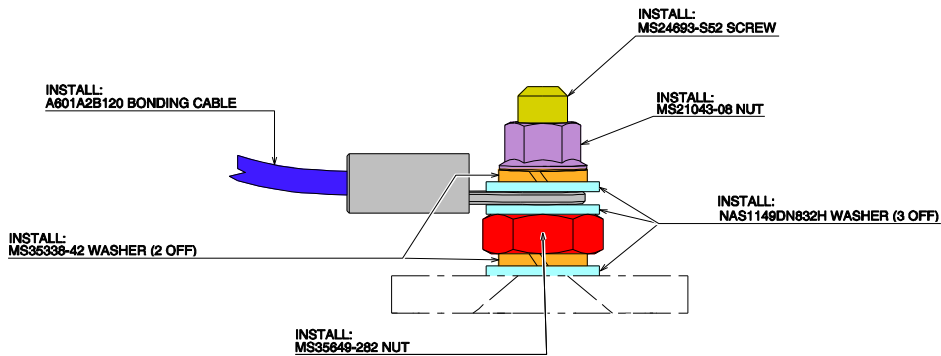
STRUCTURES AND SYSTEMS ARE PARTIALLY  
OMITTED FOR BETTER CLARITY PURPOSE

**Figure 43**



**DETAIL C**

STRUCTURES AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE



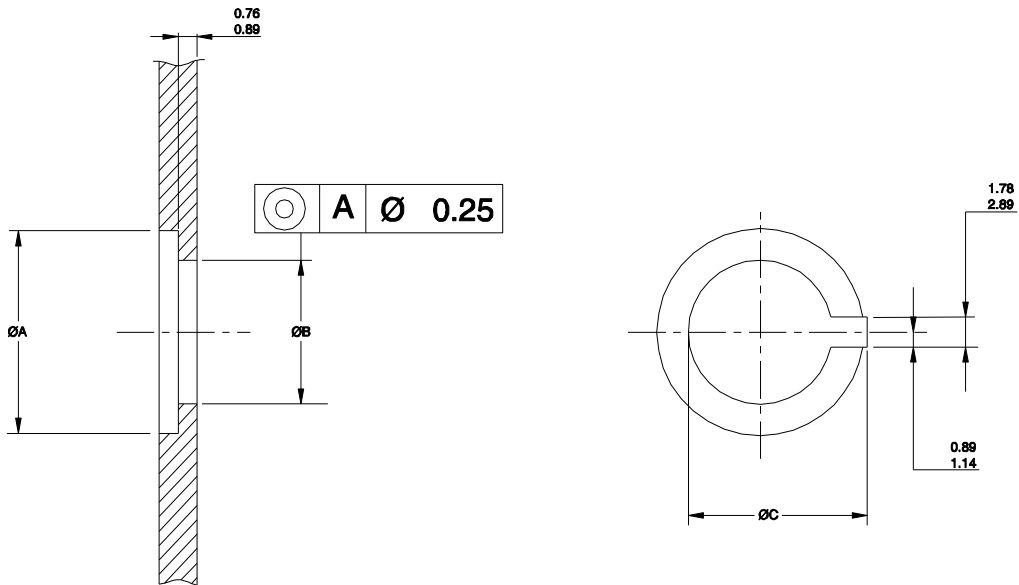
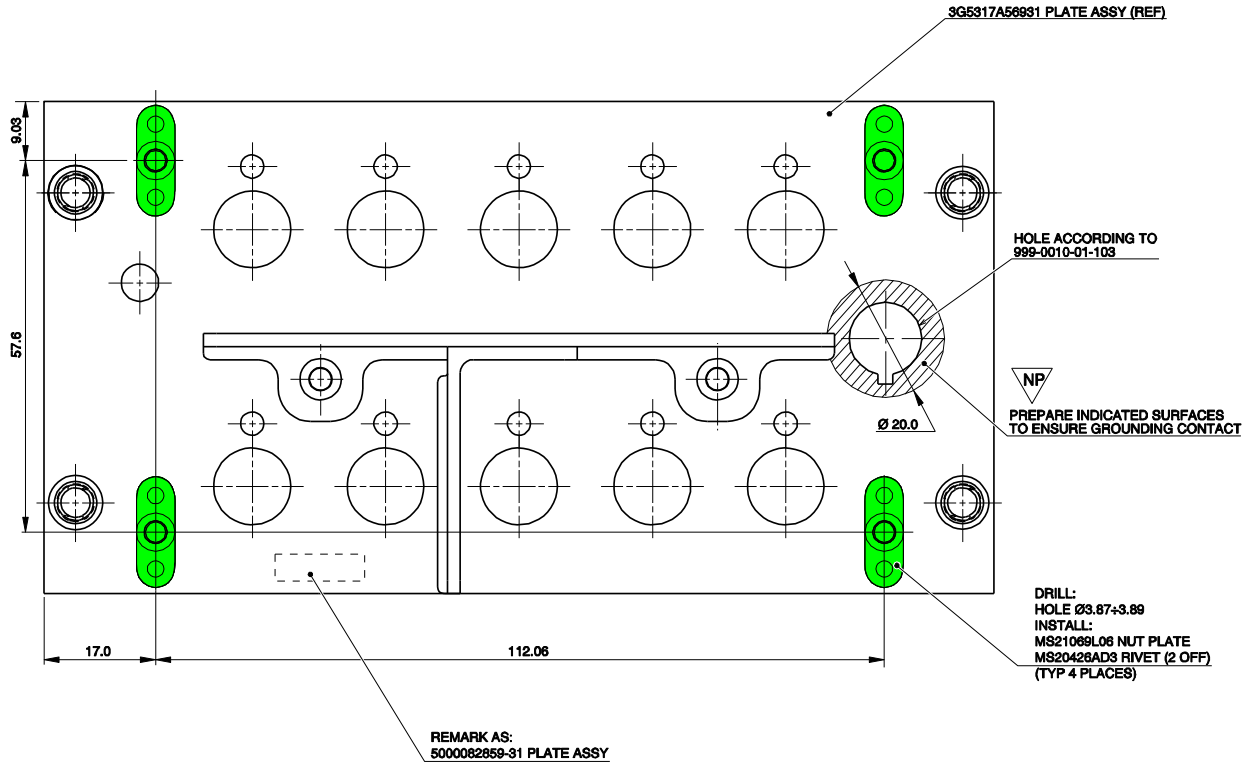
**DETAIL D**

STRUCTURES AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE

**Figure 44**

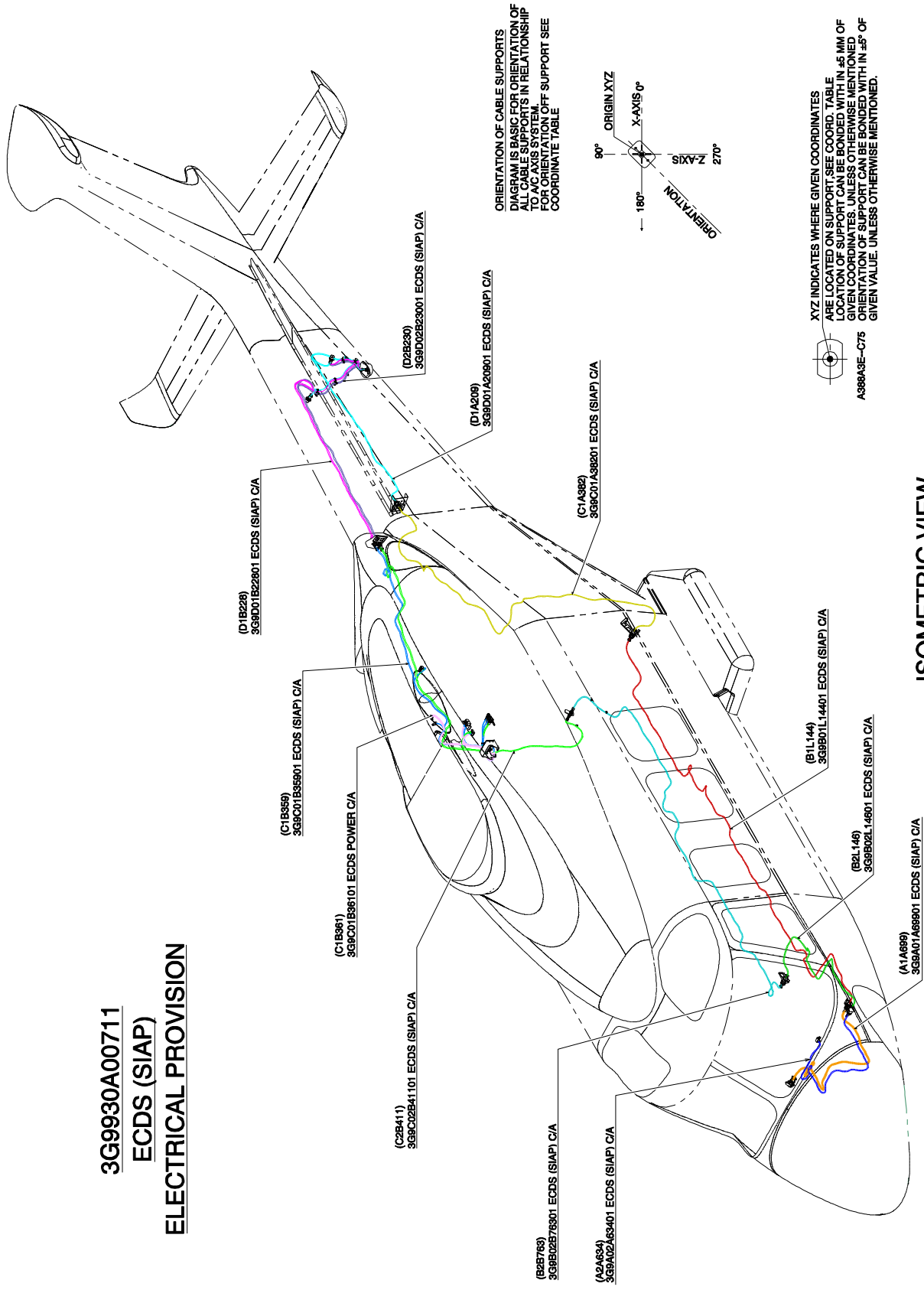
S.B. N°139-632 OPTIONAL  
DATE: September 5, 2024  
REVISION: /

**REWORK DETAIL**  
**3G5317A56931 PLATE ASSY**



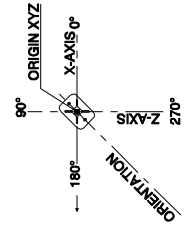
**999-0010-01-103**

**Figure 45**



**3G9930A00711**  
**ECDS (SIAP)**  
**ELECTRICAL PROVISION**

ORIENTATION OF CABLE SUPPORTS  
 DIAGRAM IS BASIC FOR ORIENTATION OF  
 ALL CABLES SUPPORTS IN RELATIONSHIP  
 TO A388A3E-C75 HELICOPTER.  
 FOR ORIENTATION OFF SUPPORT SEE  
 COORDINATE TABLE

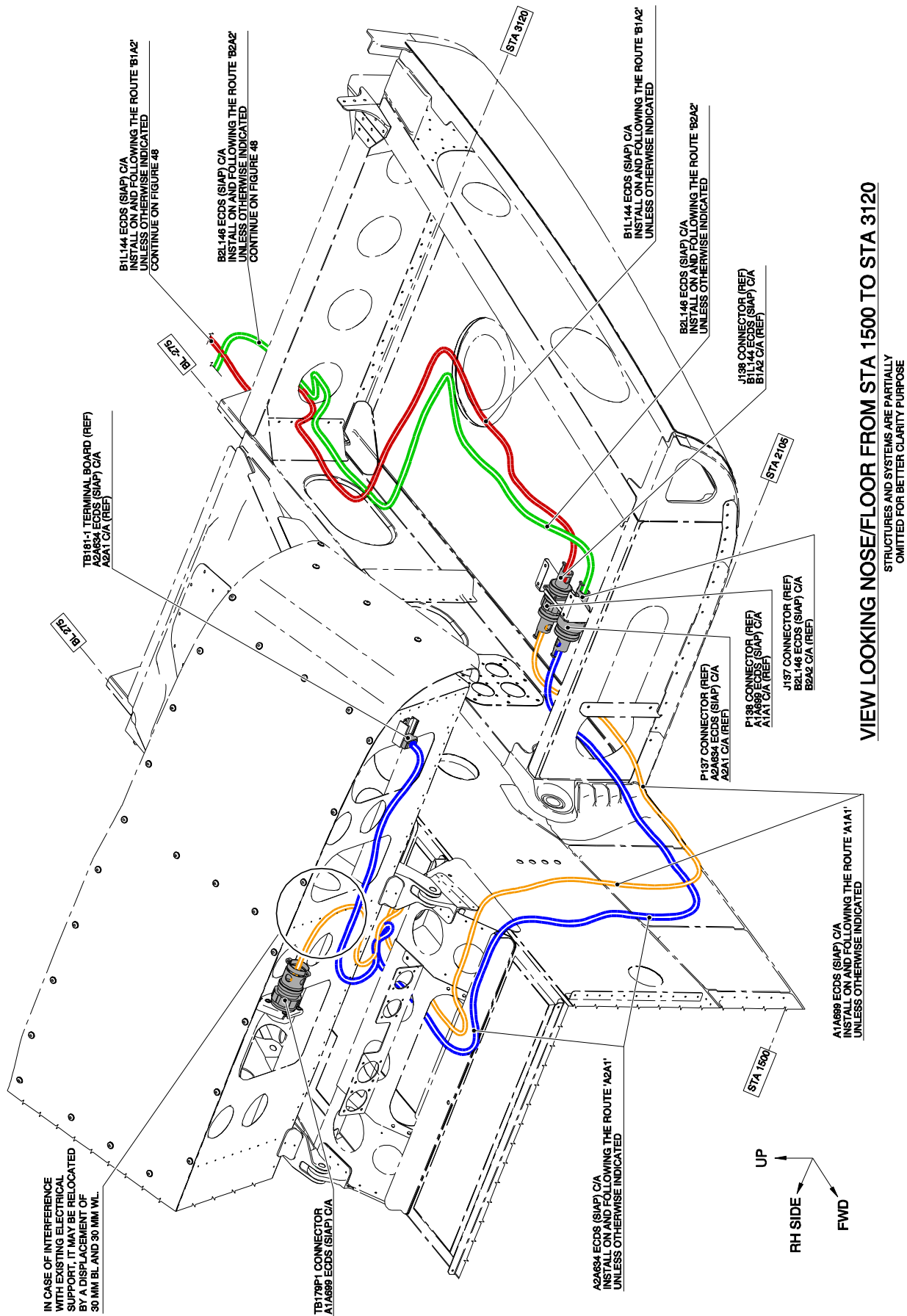


XYZ INDICATES WHERE GIVEN COORDINATES  
 ARE LOCATED ON SUPPORT-SEE COORD. TABLE  
 LOCATION OF SUPPORT CAN BE BONDED WITH IN 45 MM OF  
 CENTERLINE OF SUPPORT. THE CENTERLINE OF  
 ORIENTATION OF SUPPORT CAN BE BONDED WITH IN 45° OF  
 GIVEN VALUE, UNLESS OTHERWISE MENTIONED.  
 A388A3E-C75

**ISOMETRIC VIEW**

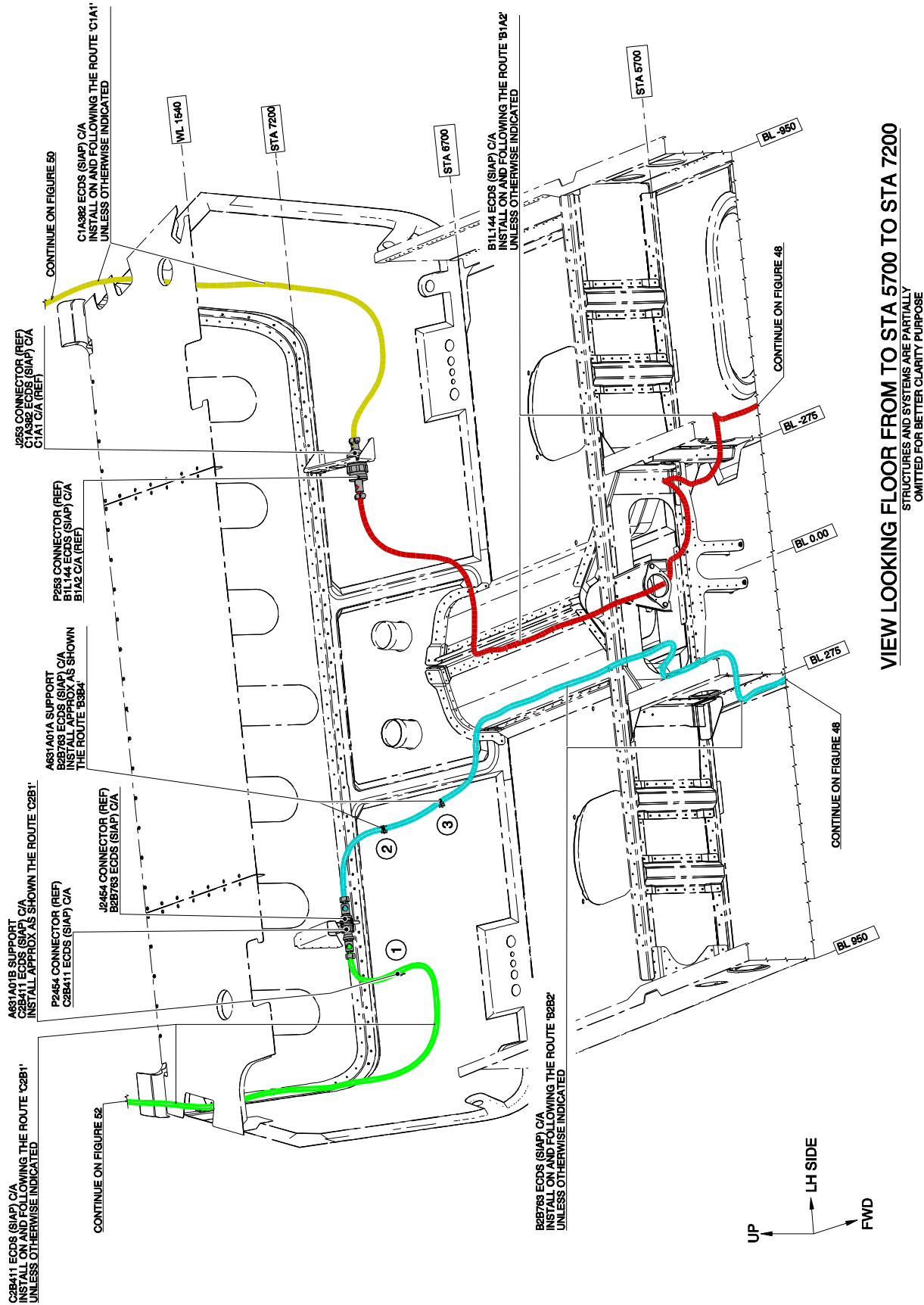
Figure 46

S.B. N°139-632 OPTIONAL  
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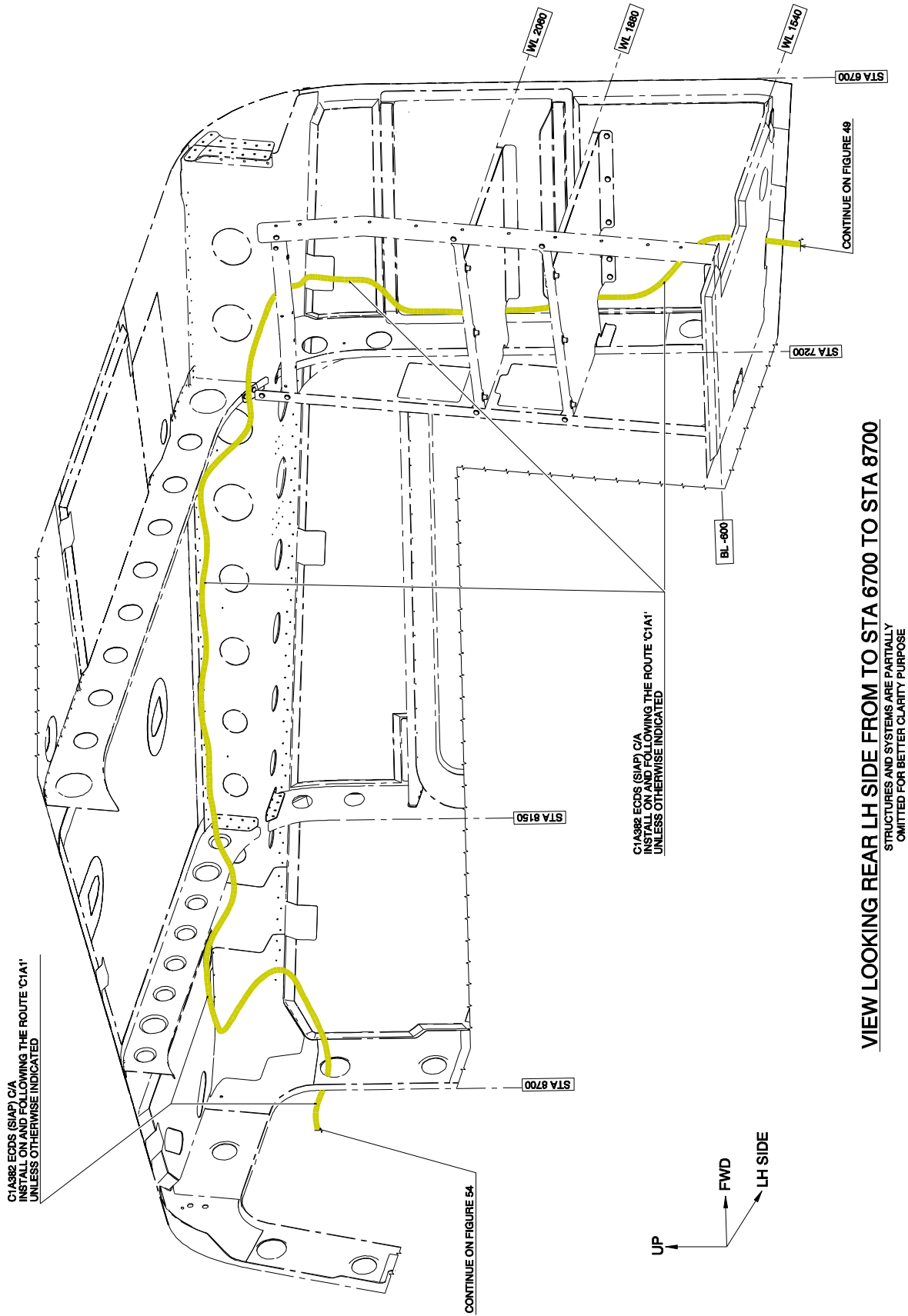


**Figure 47**





**Figure 49**

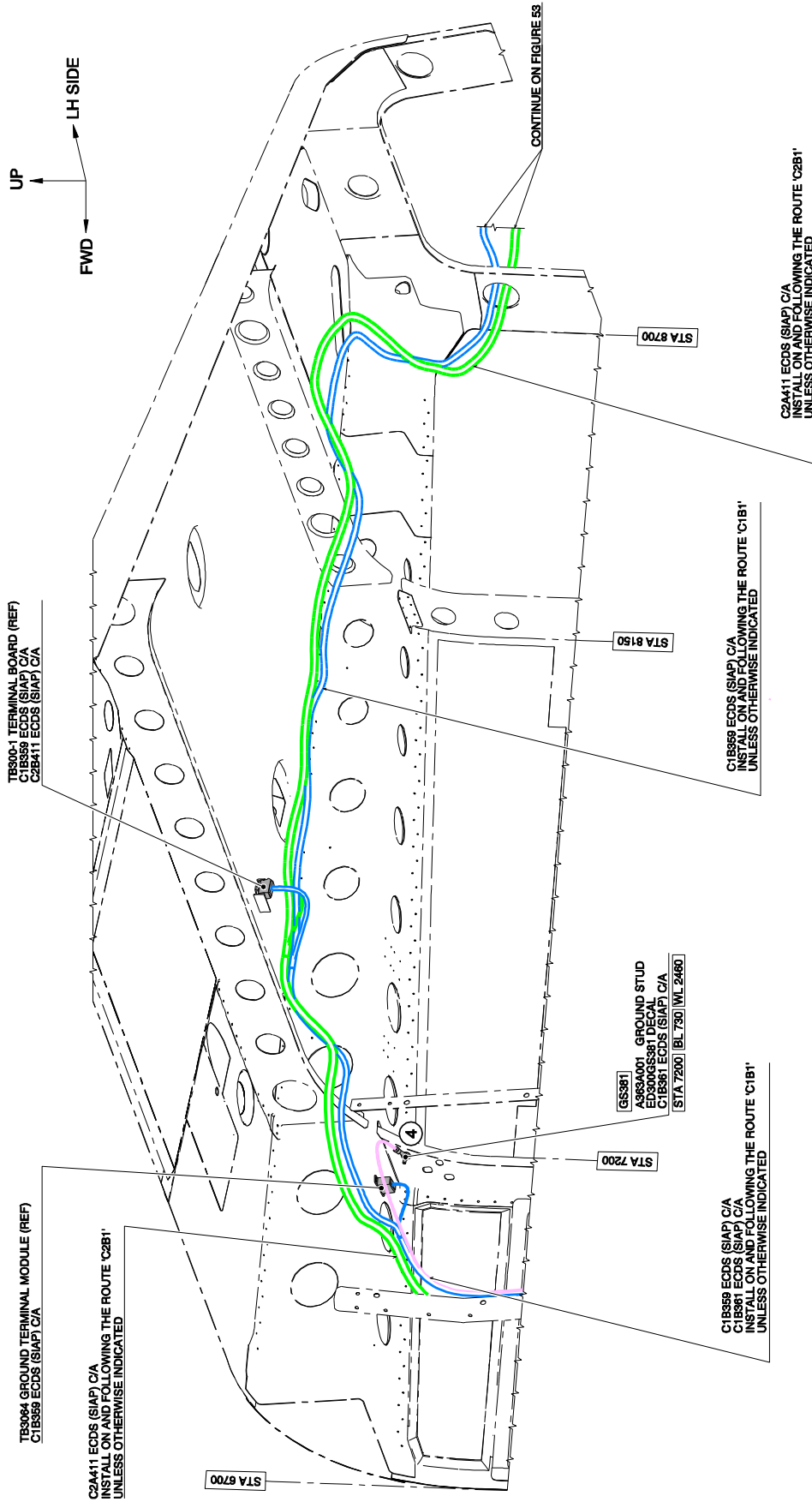


**VIEW LOOKING REAR LH SIDE FROM TO STA 6700 TO STA 8700**

STRUCTURES AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE

**Figure 50**

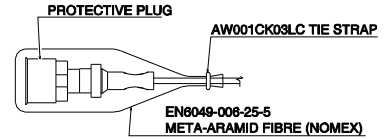
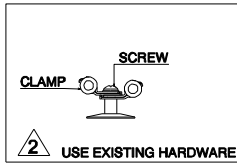




**VIEW LOOKING ROOF REAR RH SIDE FROM TO STA 6700 TO STA 8700**

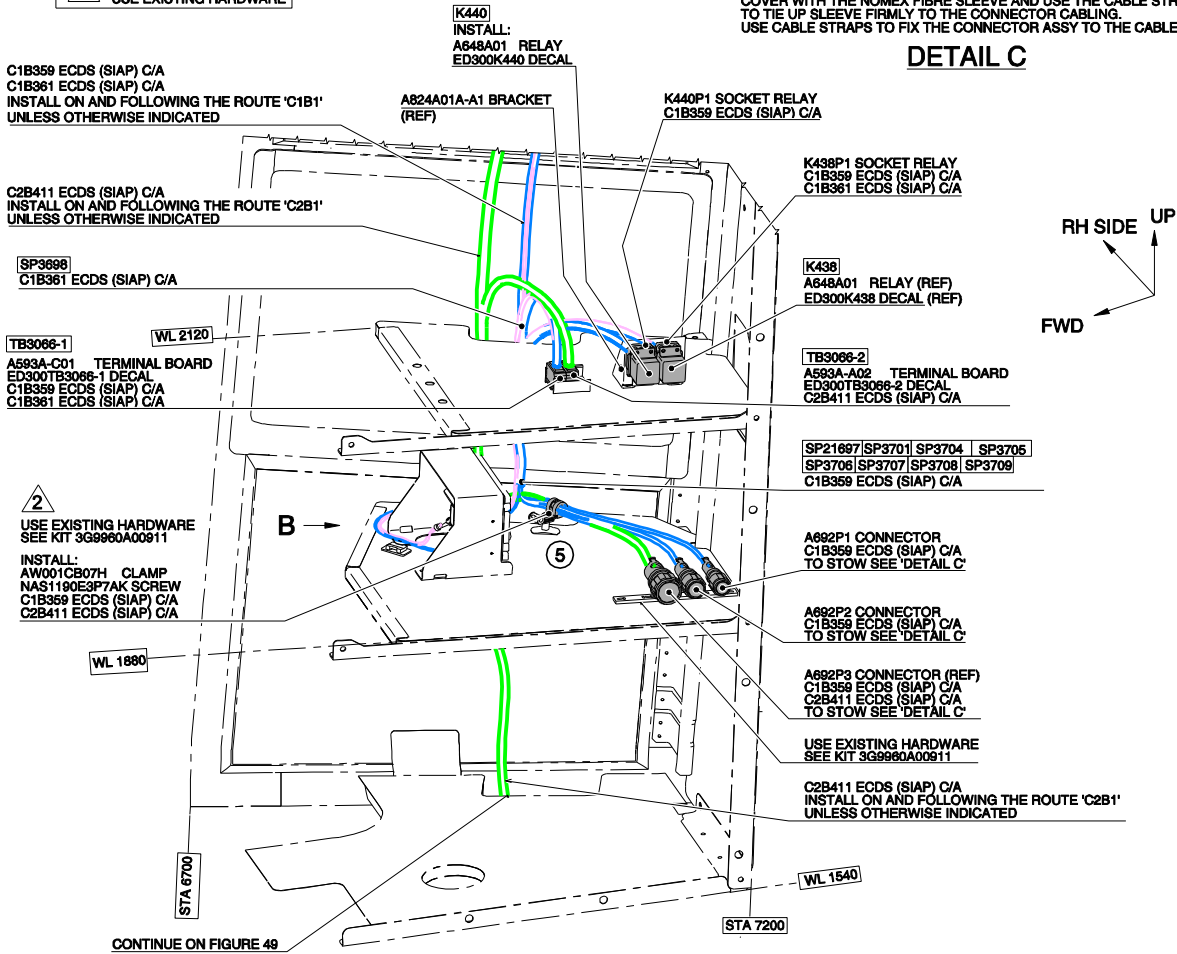
STRUCTURES AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE

**Figure 51**



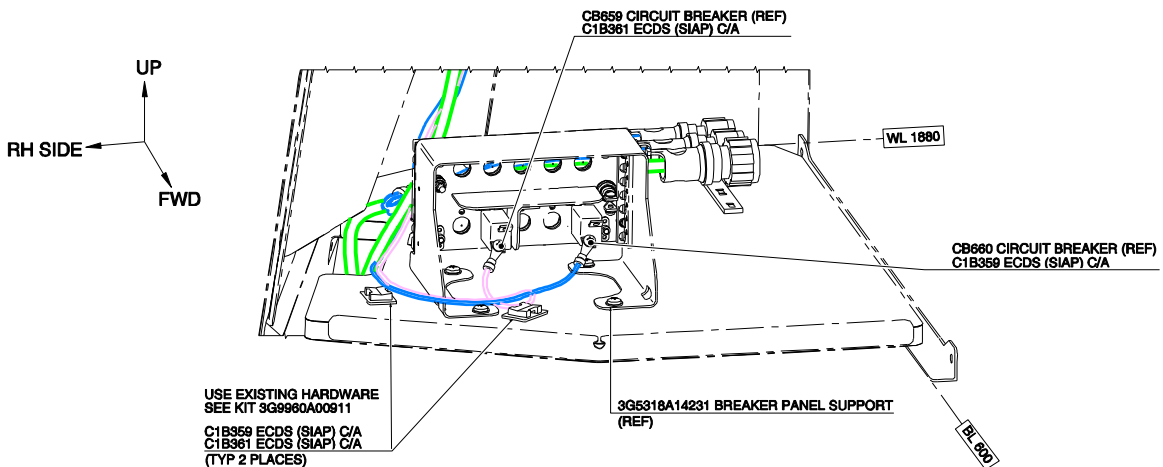
INSERT THE CONNECTOR ASSEMBLY INTO THE PROTECTIVE PLUG. COVER WITH THE NOMEX FIBRE SLEEVE AND USE THE CABLE STRAPS TO TIE UP SLEEVE FIRMLY TO THE CONNECTOR CABLING. USE CABLE STRAPS TO FIX THE CONNECTOR ASSY TO THE CABLE LOOM.

**DETAIL C**



**VIEW LOOKING BAY RH SIDE**

STRUCTURES AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE



**VIEW B**

STRUCTURES AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE

**Figure 52**

S.B. N°139-632 OPTIONAL  
DATE: September 5, 2024  
REVISION: /

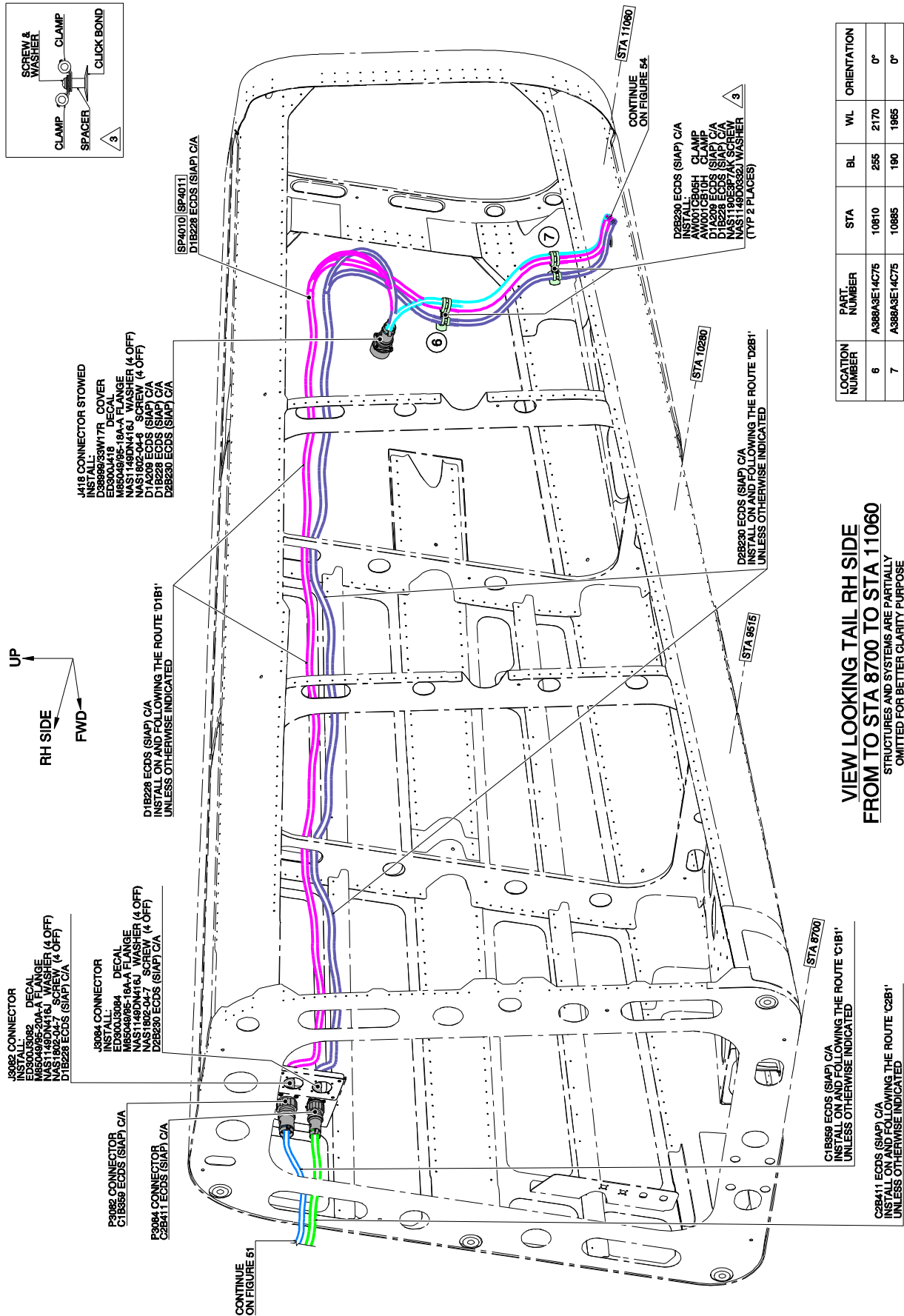


Figure 53



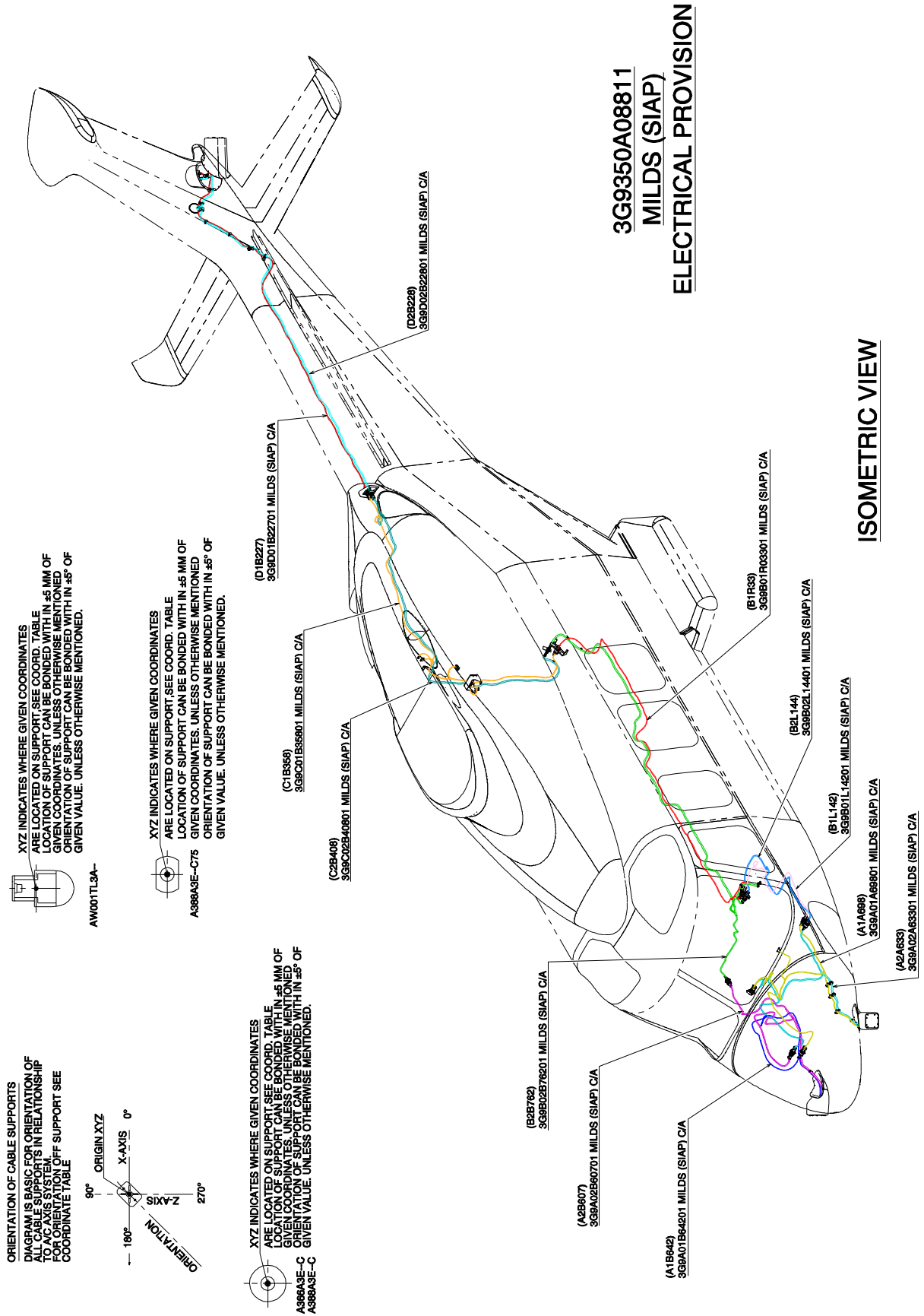
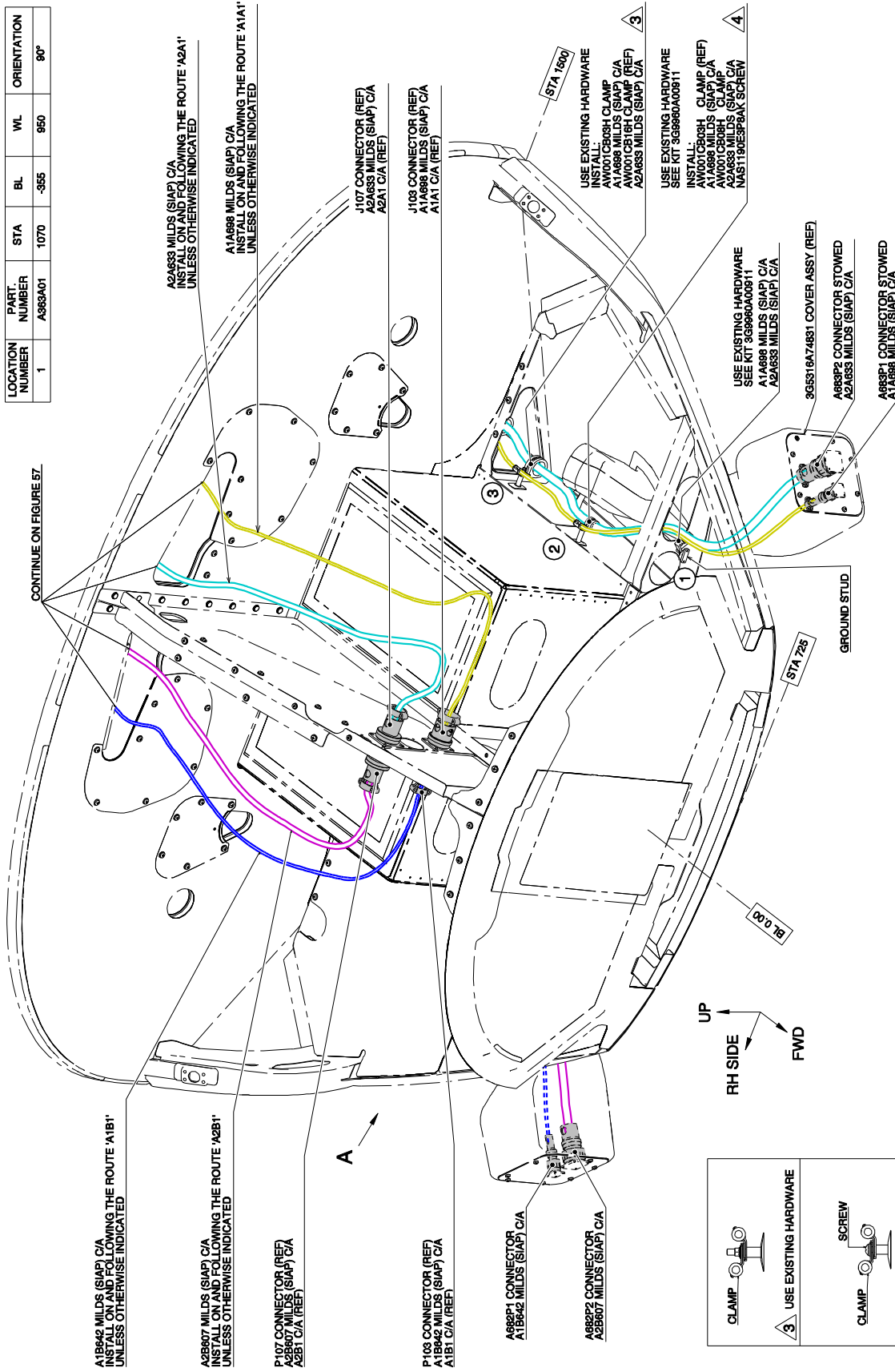


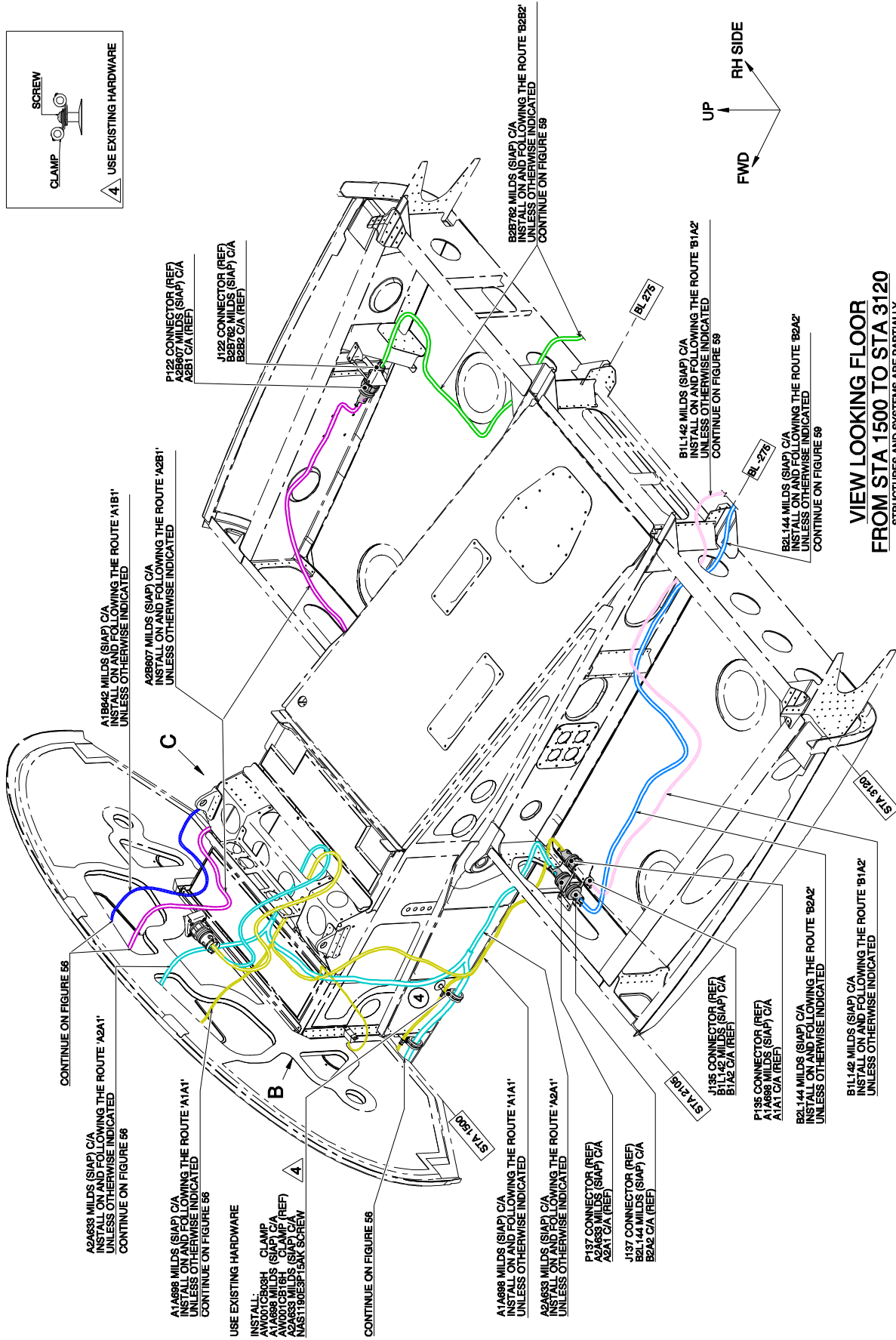
Figure 55

LOCATION NUMBER	PART. NUMBER	STA	BL	WL	ORIENTATION
1	A983A01	1070	-355	950	90°



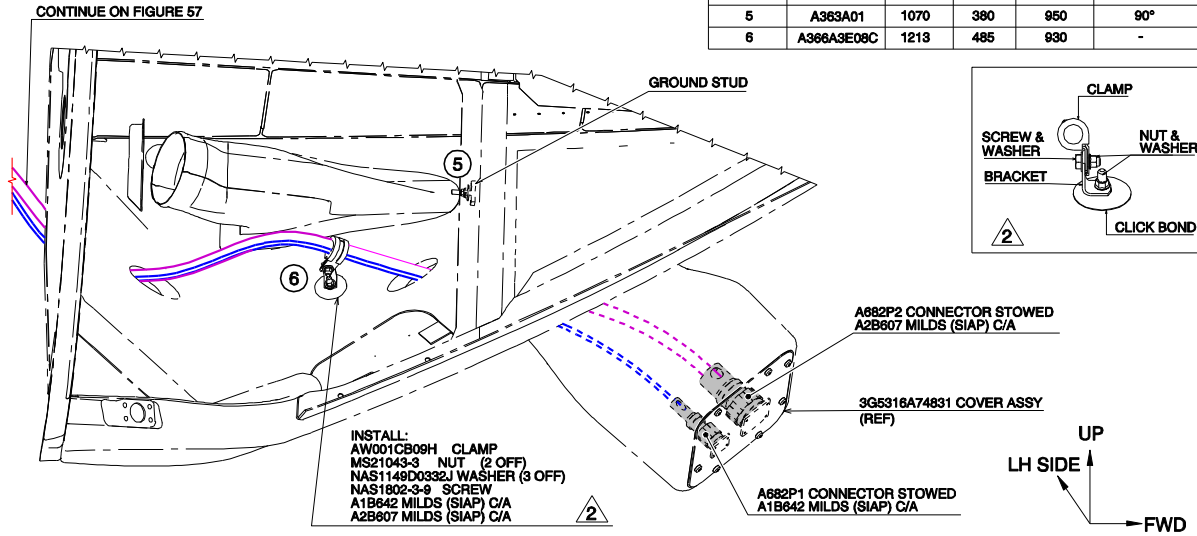
**VIEW LOOKING NOSE LH SIDE FROM STA 725 TO STA 1500**  
STRUCTURES AND SYSTEMS ARE PARTIALLY  
OMITTED FOR BETTER CLARITY PURPOSE

**Figure 56**



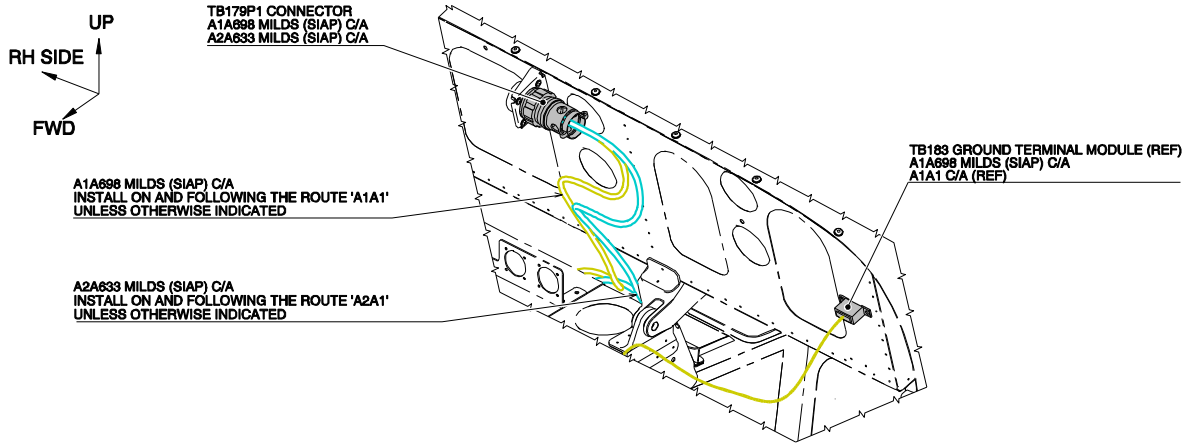
**Figure 57**

LOCATION NUMBER	PART NUMBER	STA	BL	WL	ORIENTATION
5	A363A01	1070	380	950	90°
6	A366A3E08C	1213	485	930	-



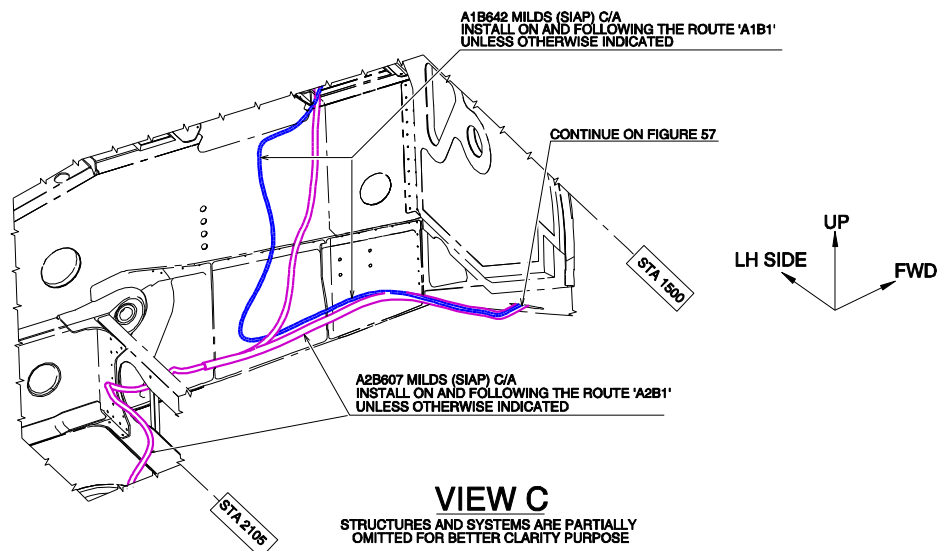
### VIEW A

STRUCTURES AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE



### VIEW B

STRUCTURES AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE

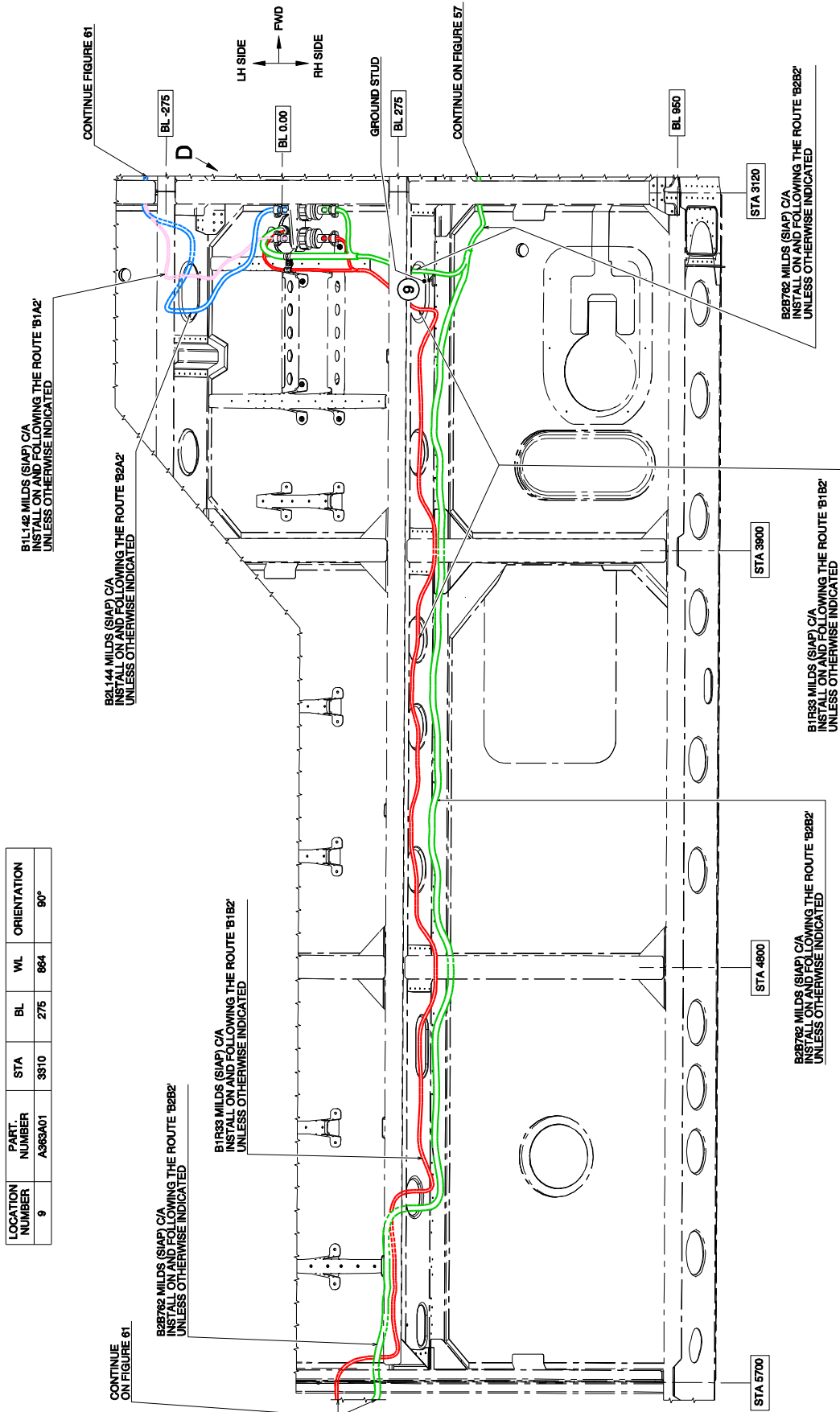


### VIEW C

STRUCTURES AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE

Figure 58



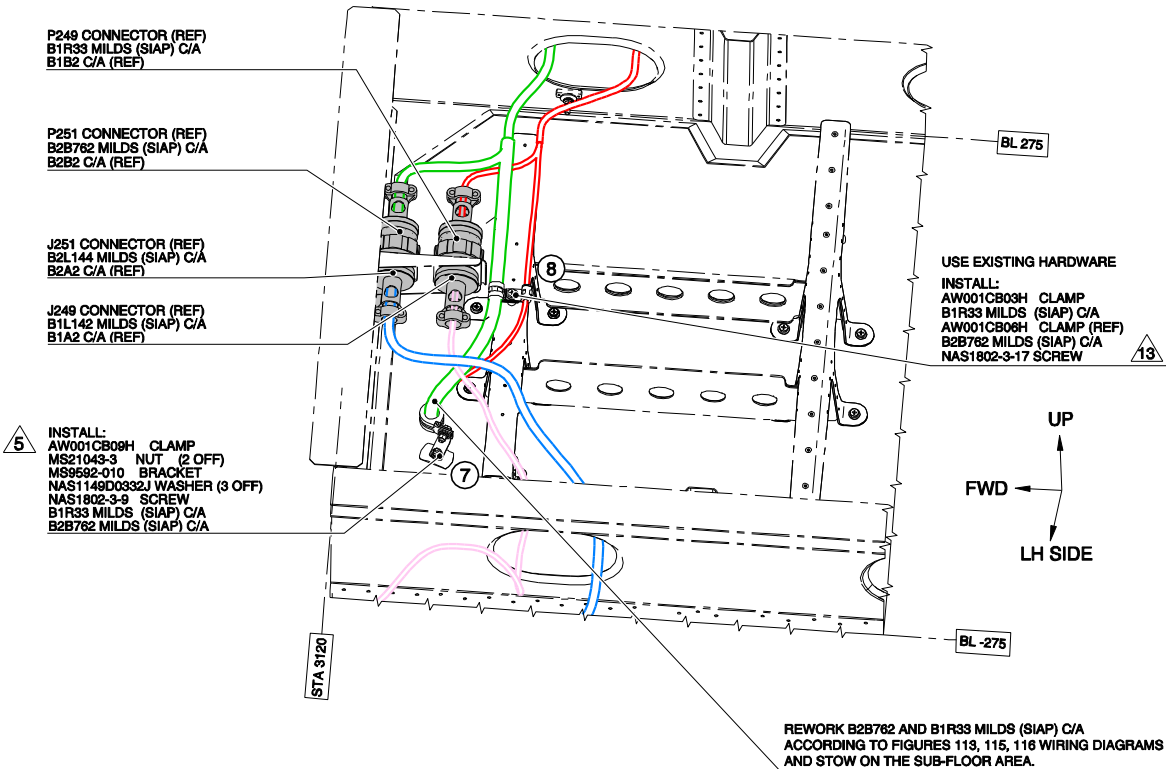
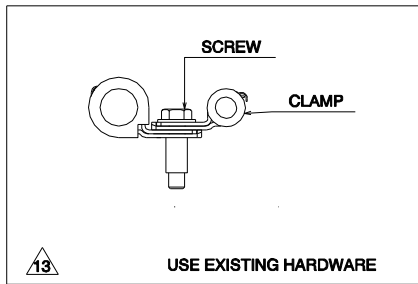
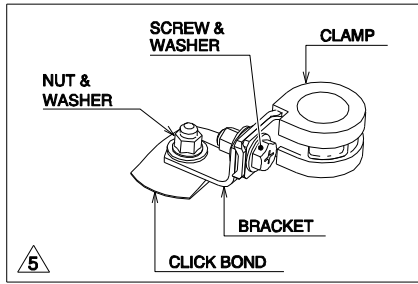


**VIEW LOOKING FLOOR FROM STA 3120 TO STA 5700**

STRUCTURES AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE

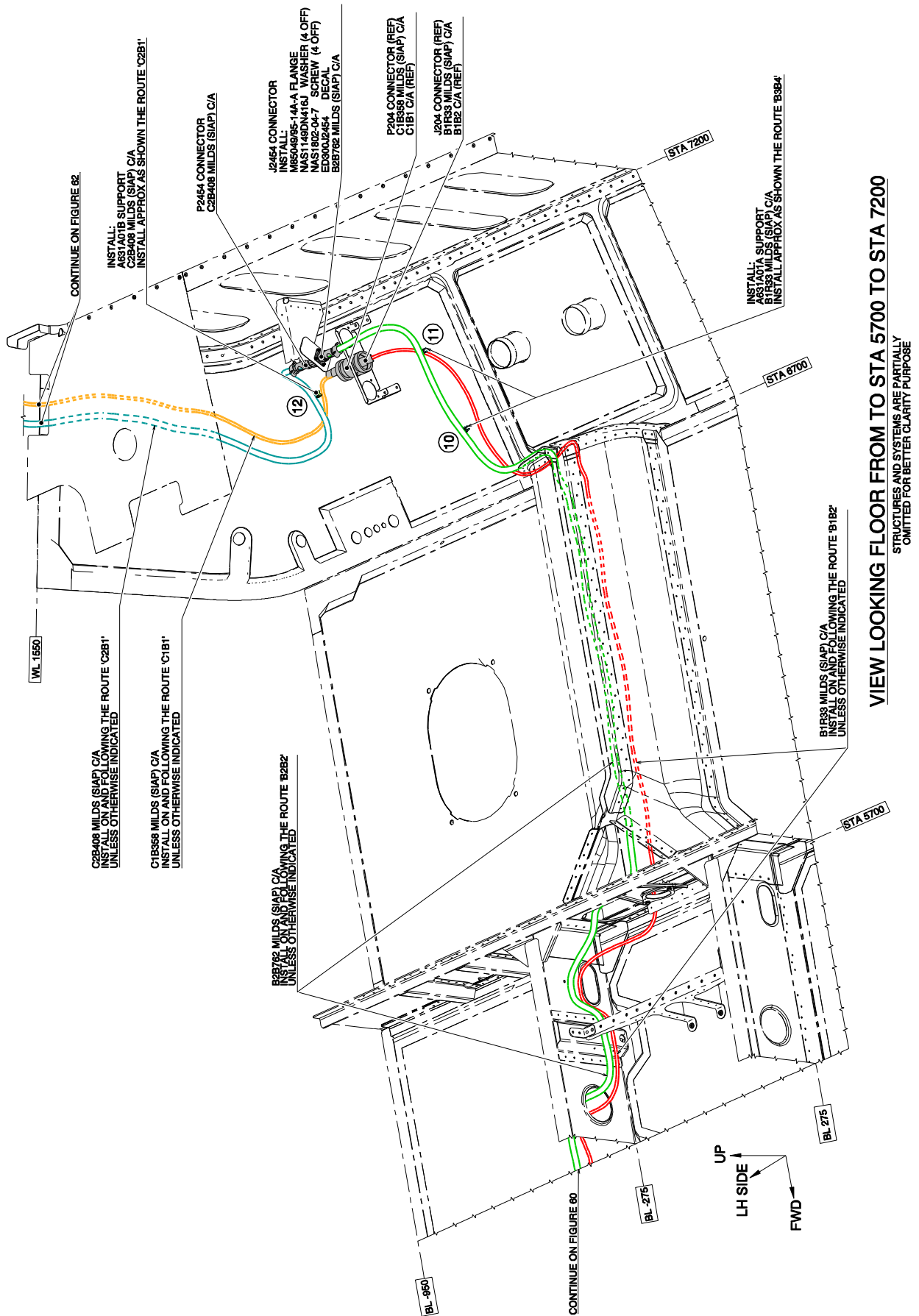
**Figure 59**

LOCATION NUMBER	PART. NUMBER	STA	BL	WL	ORIENTATION
7	A366A3E08C75	3210	-120	844	45°

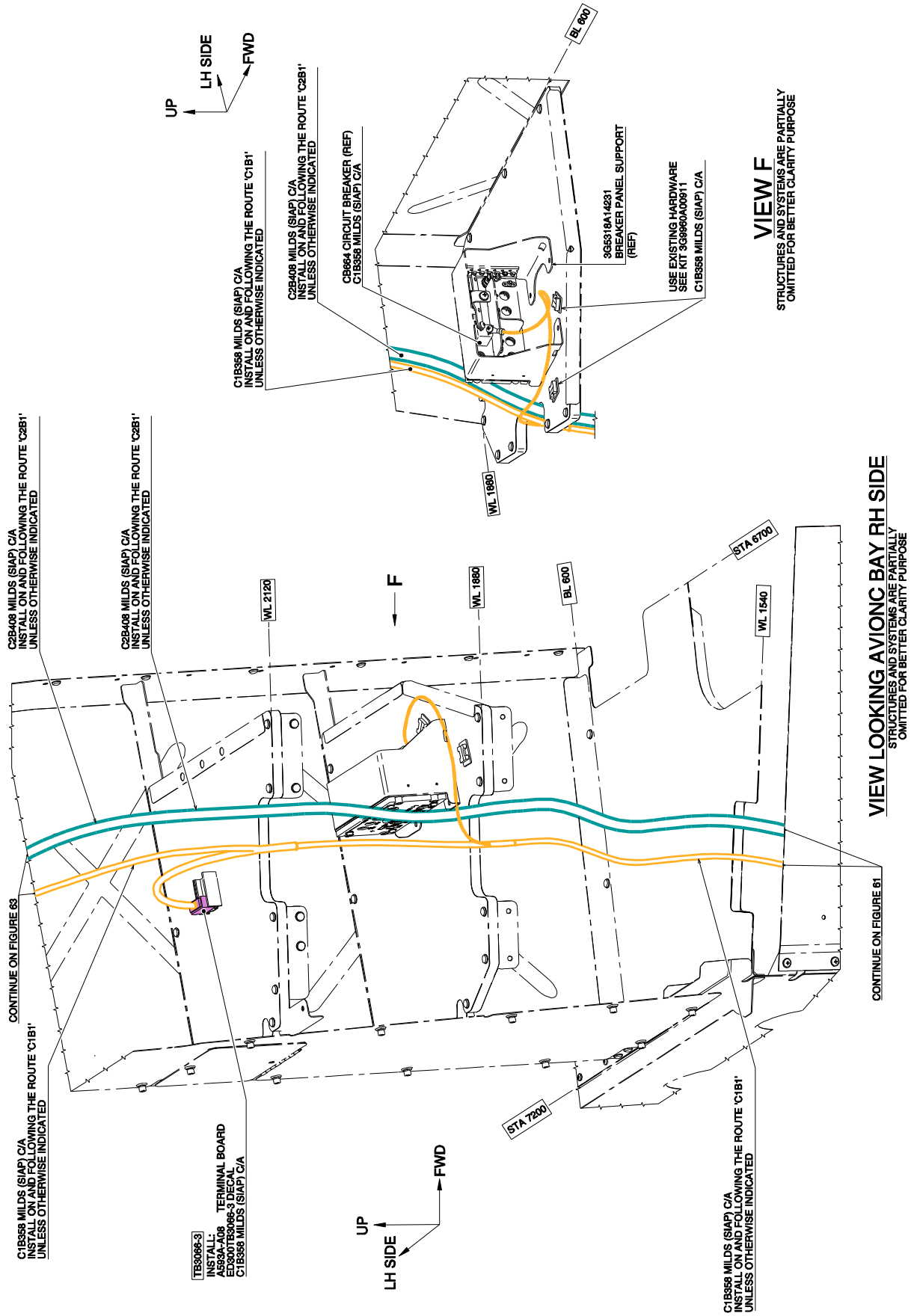


**VIEW D**  
STRUCTURES AND SYSTEMS ARE PARTIALLY  
OMITTED FOR BETTER CLARITY PURPOSE

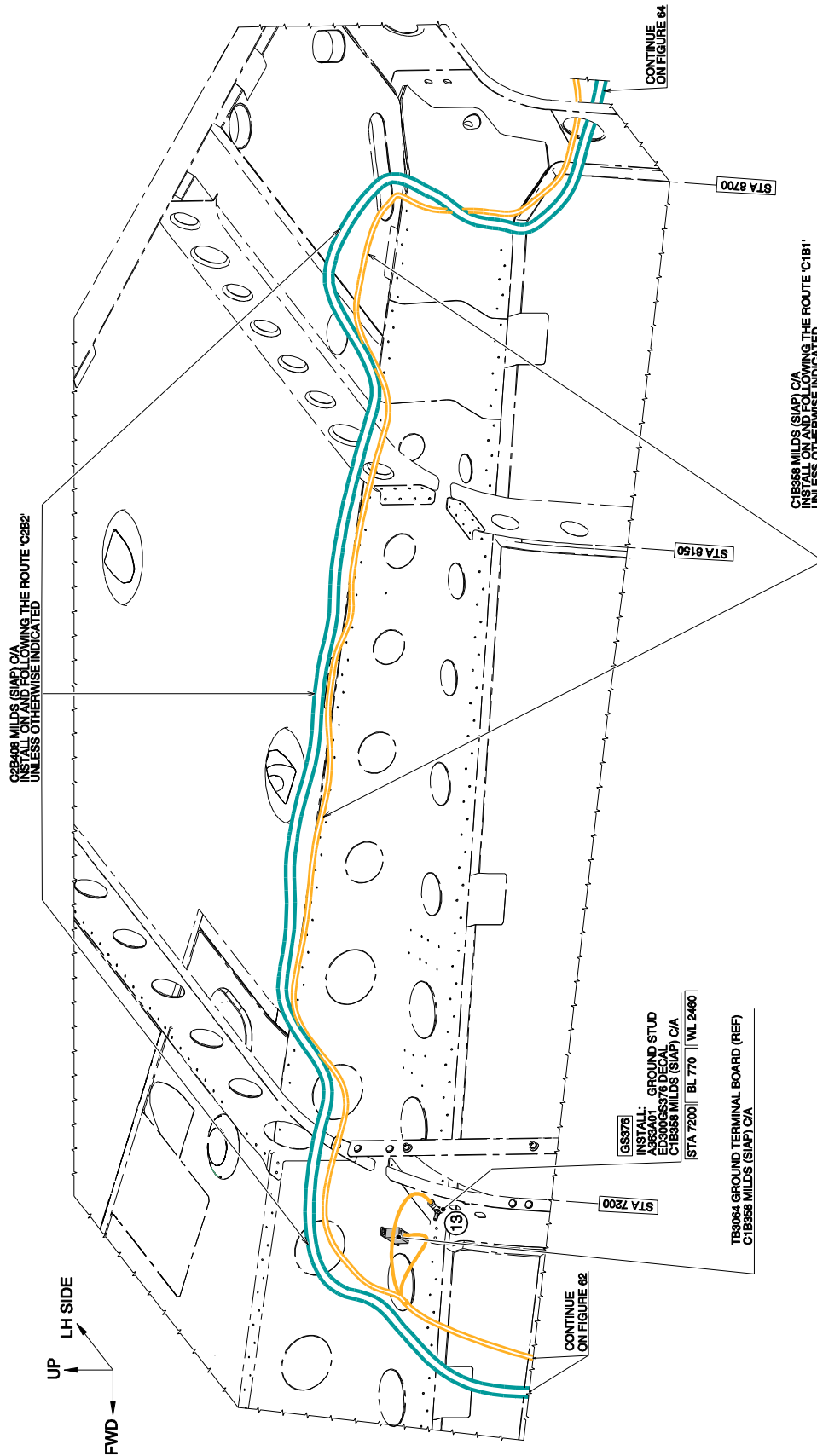
**Figure 60**



**Figure 61**

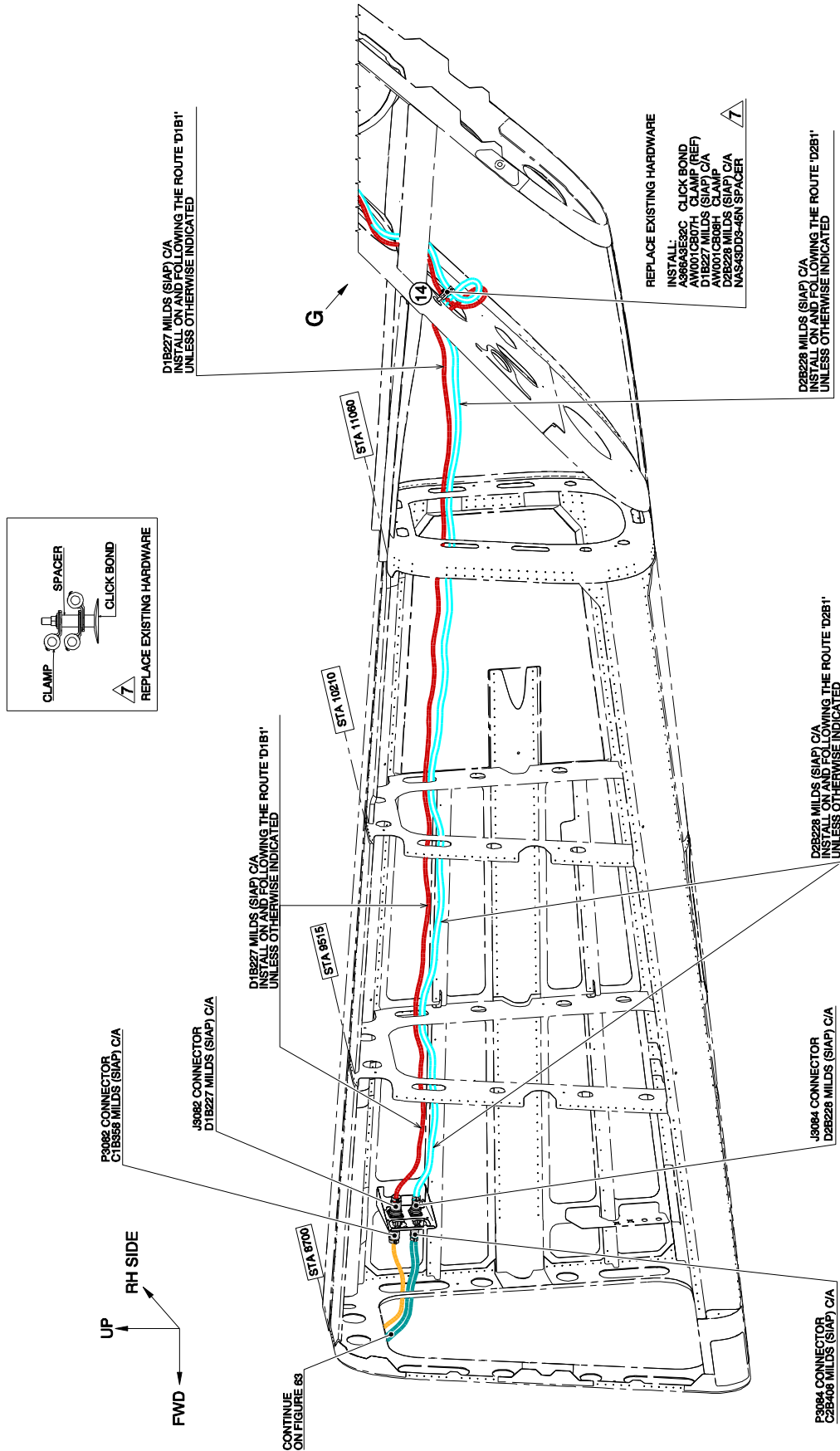


**Figure 62**



**VIEW REAR ROOF RH SIDE FROM TO STA 7200 TO STA 8700**  
 STRUCTURES AND SYSTEMS ARE PARTIALLY  
 OMITTED FOR BETTER CLARITY PURPOSE

**Figure 63**



**VIEW TAIL RH SIDE FROM TO STA 8700 TO STA 11060**

STRUCTURES AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE

**Figure 64**

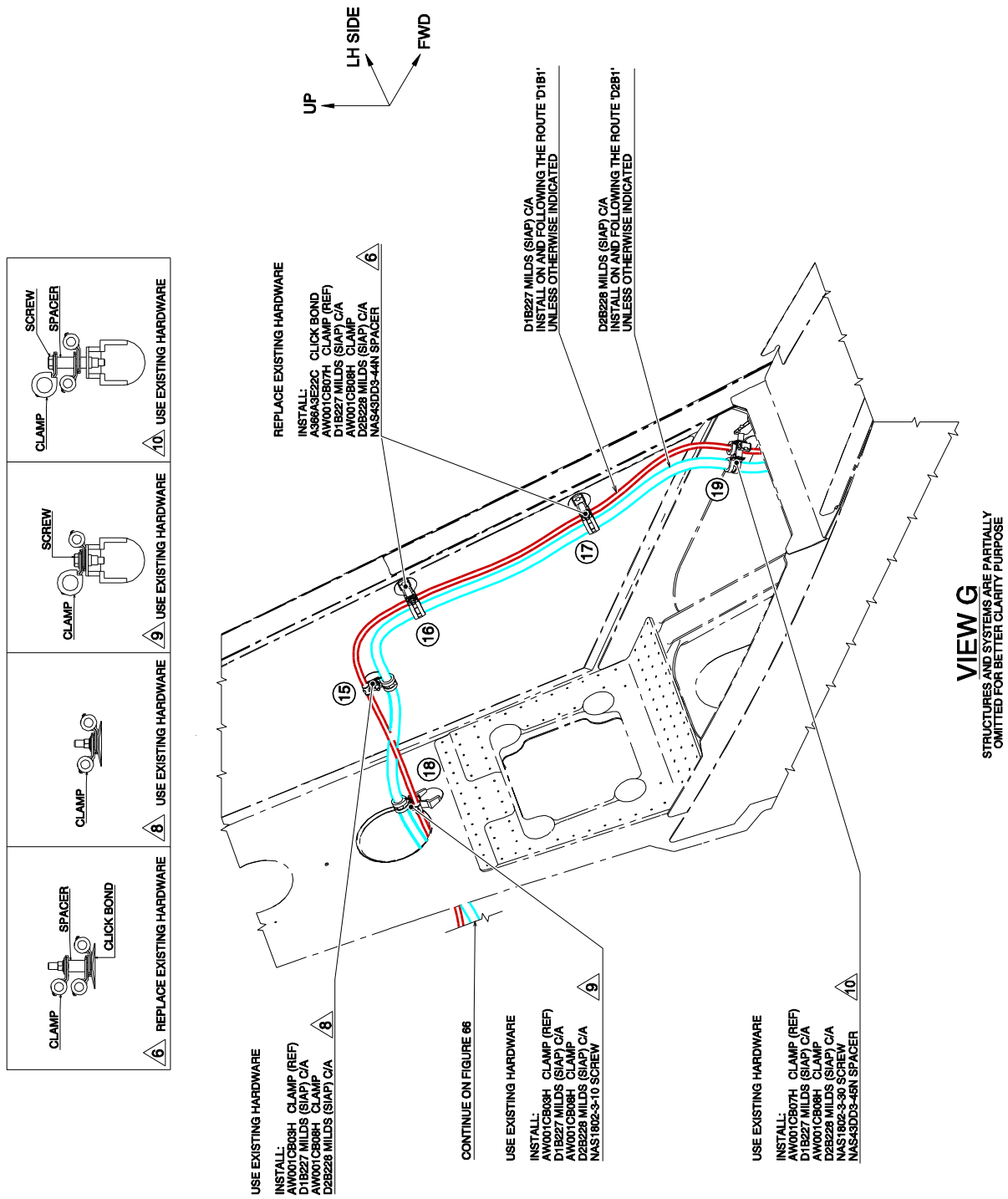
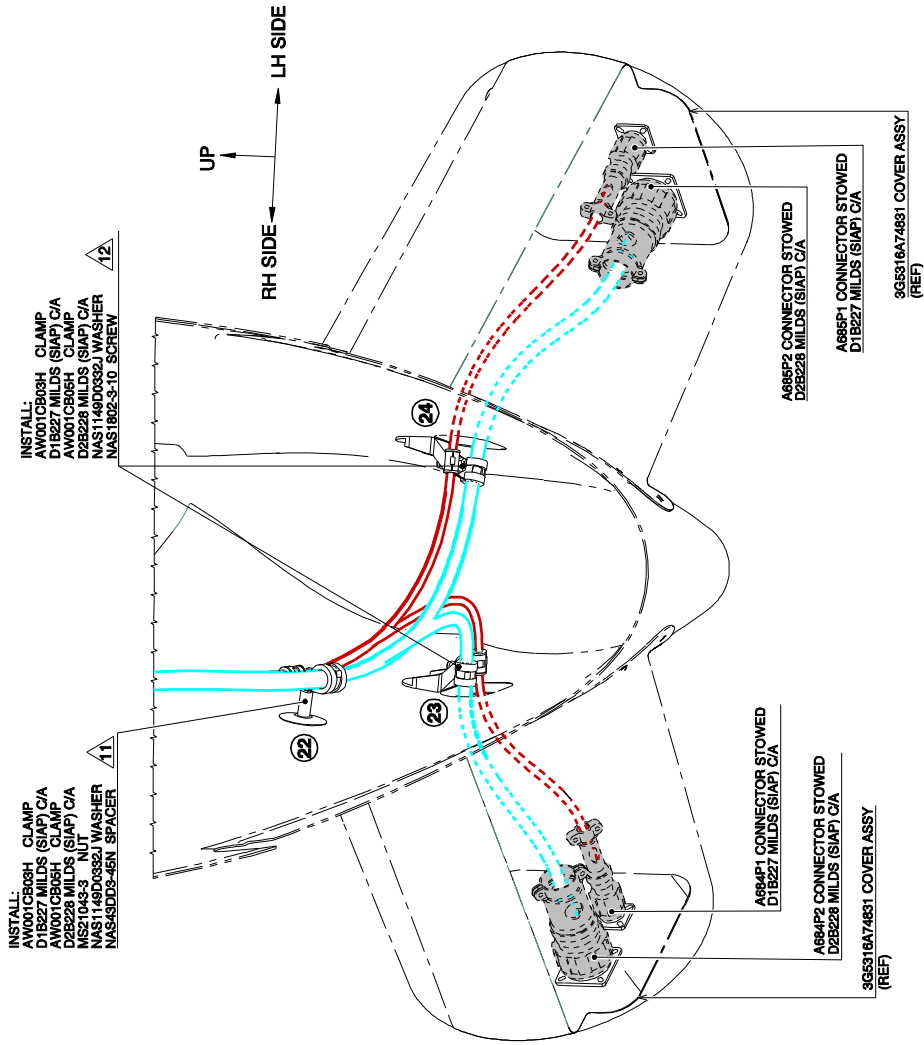


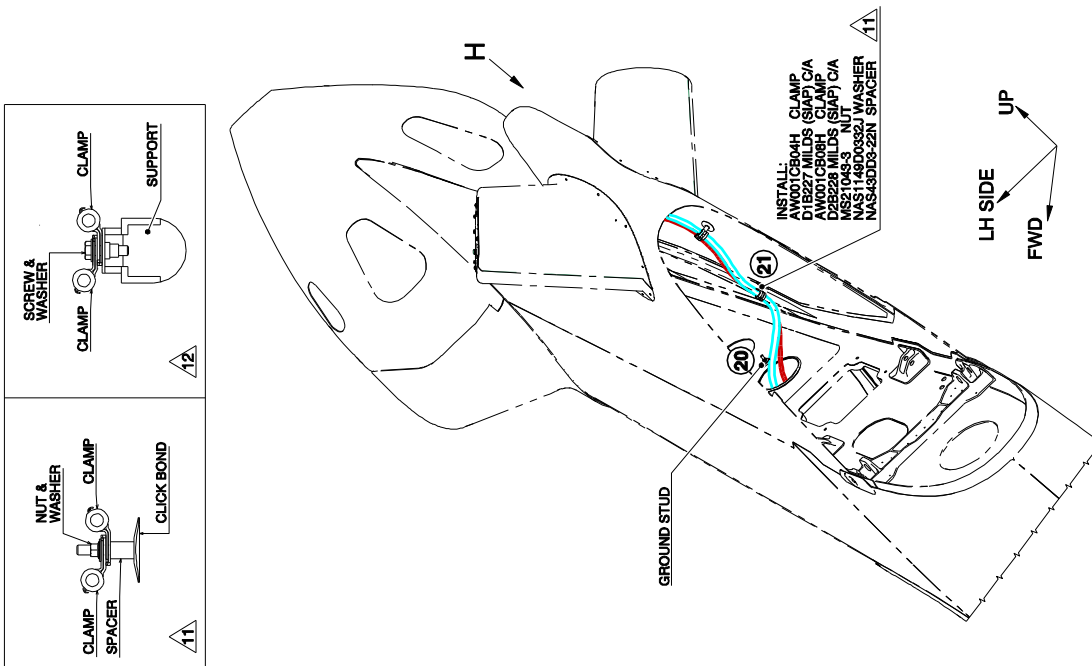
Figure 65

LOCATION NUMBER	PART NUMBER	STA	BL	WL	ORIENTATION
20	A363A01	12815	5	2600	90°
21	A366A3E18C	12700	63	2660	-
22	A366A3E22C	12850	33	2465	-
23	AW001TL3A06	13015	0	2465	180°
24	AW001TL3A06	12885	-160	2465	180°



**VIEW H**

STRUCTURES AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE



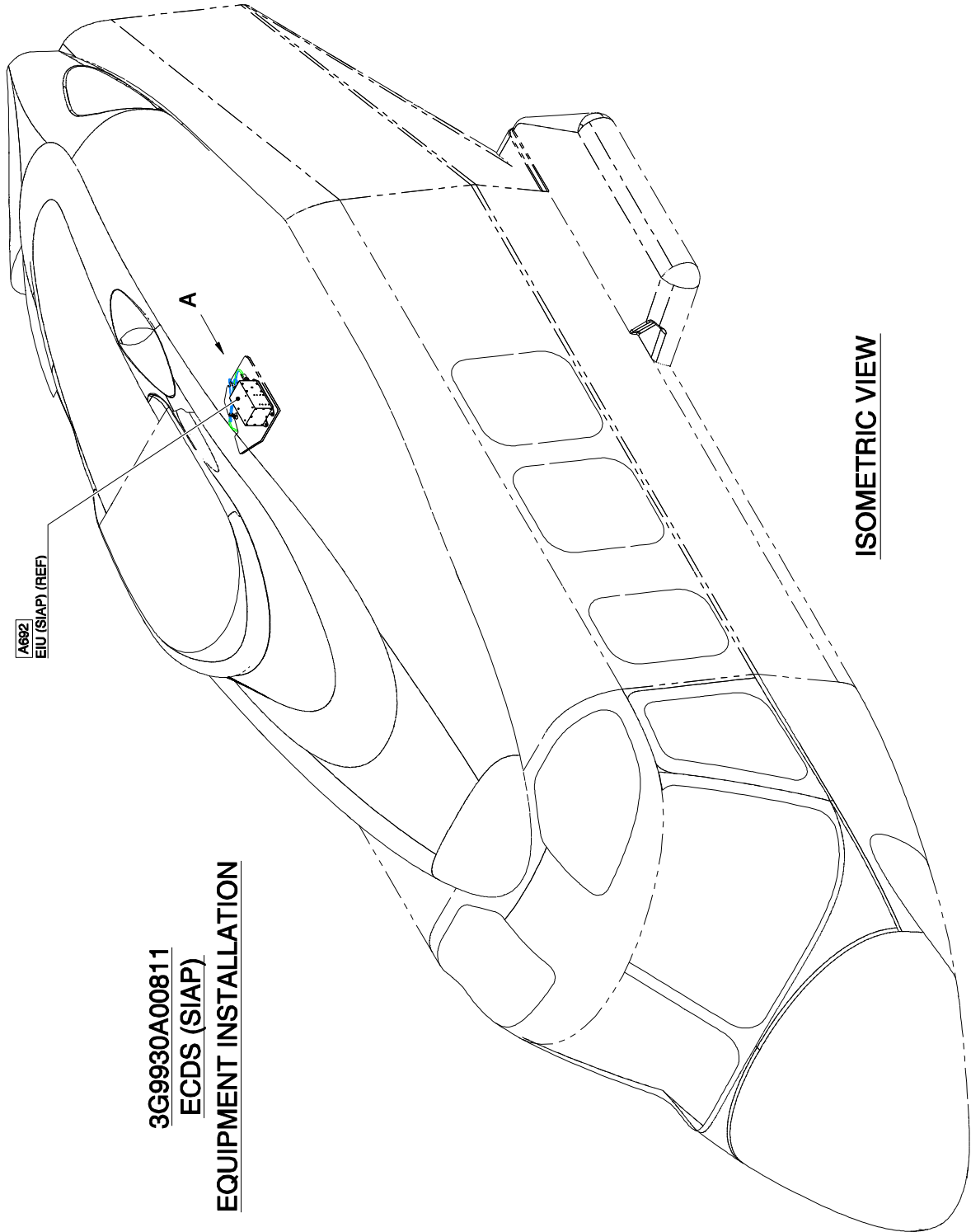
**VIEW LOOKING VERTICAL TAIL**

STRUCTURES AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE

Figure 66

S.B. N°139-632 OPTIONAL  
DATE: September 5, 2024  
REVISION: /





**3G9930A00811**  
**ECDS (SIAP)**  
**EQUIPMENT INSTALLATION**

**ISOMETRIC VIEW**

**Figure 67**

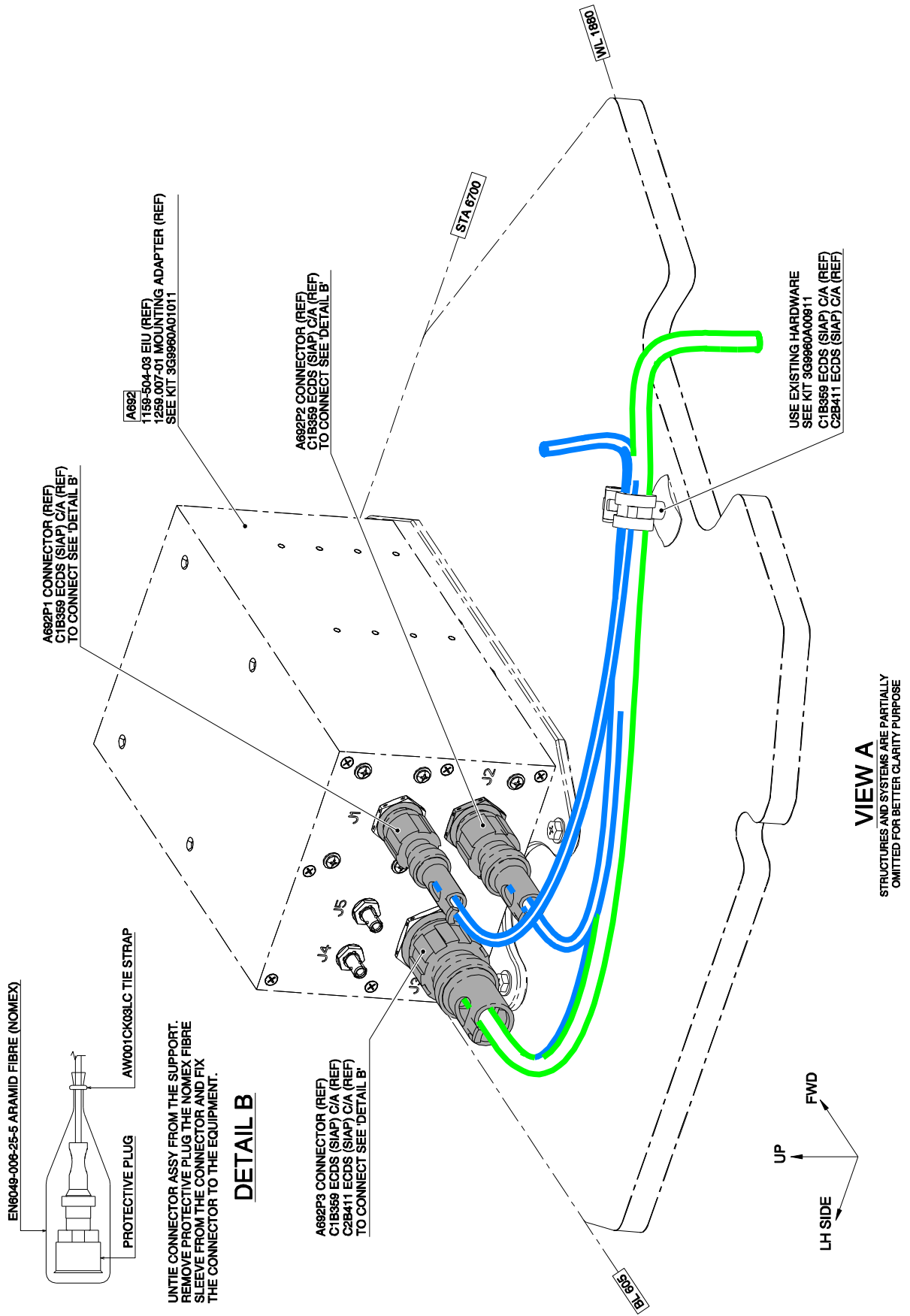
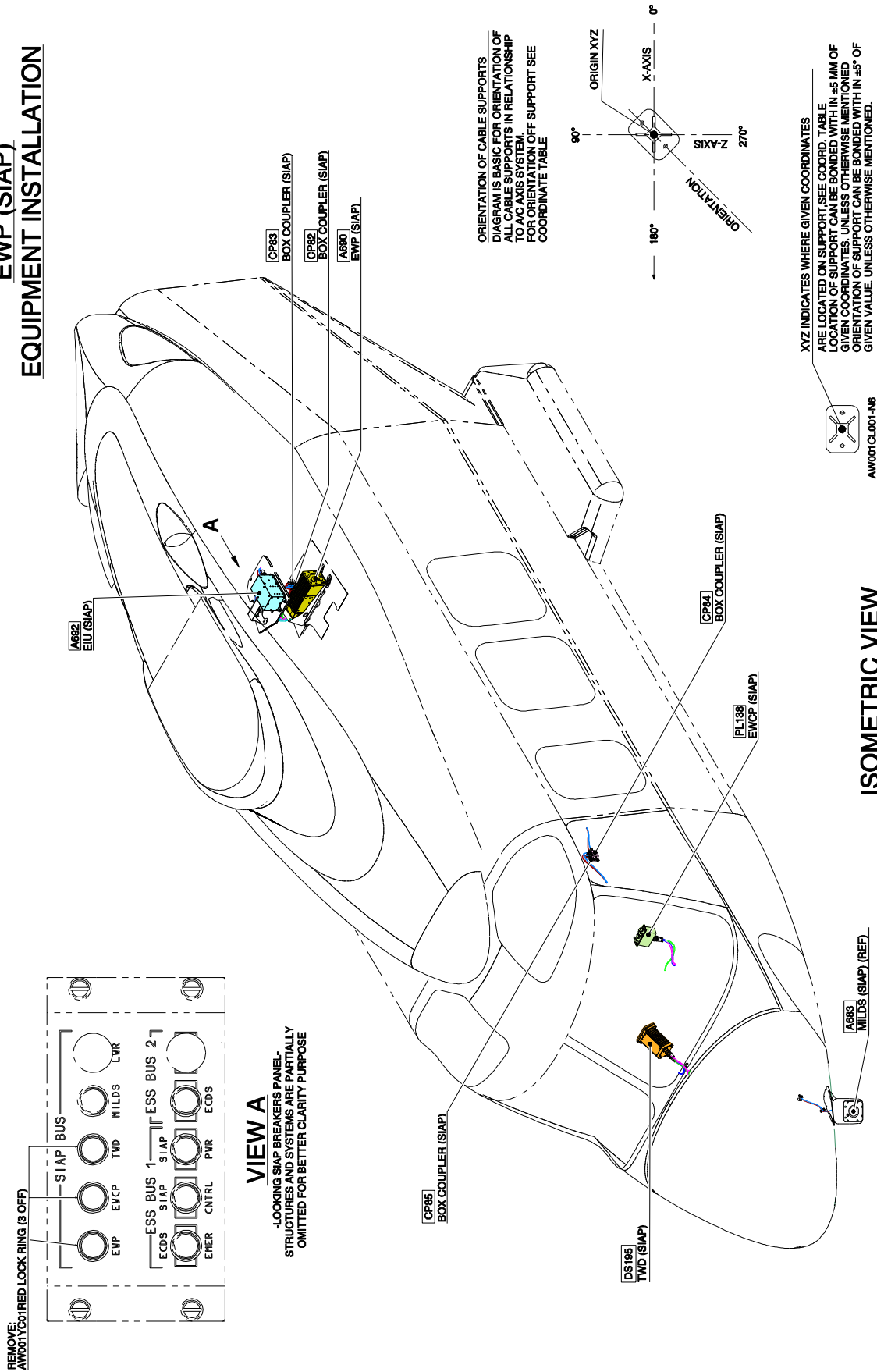


Figure 68

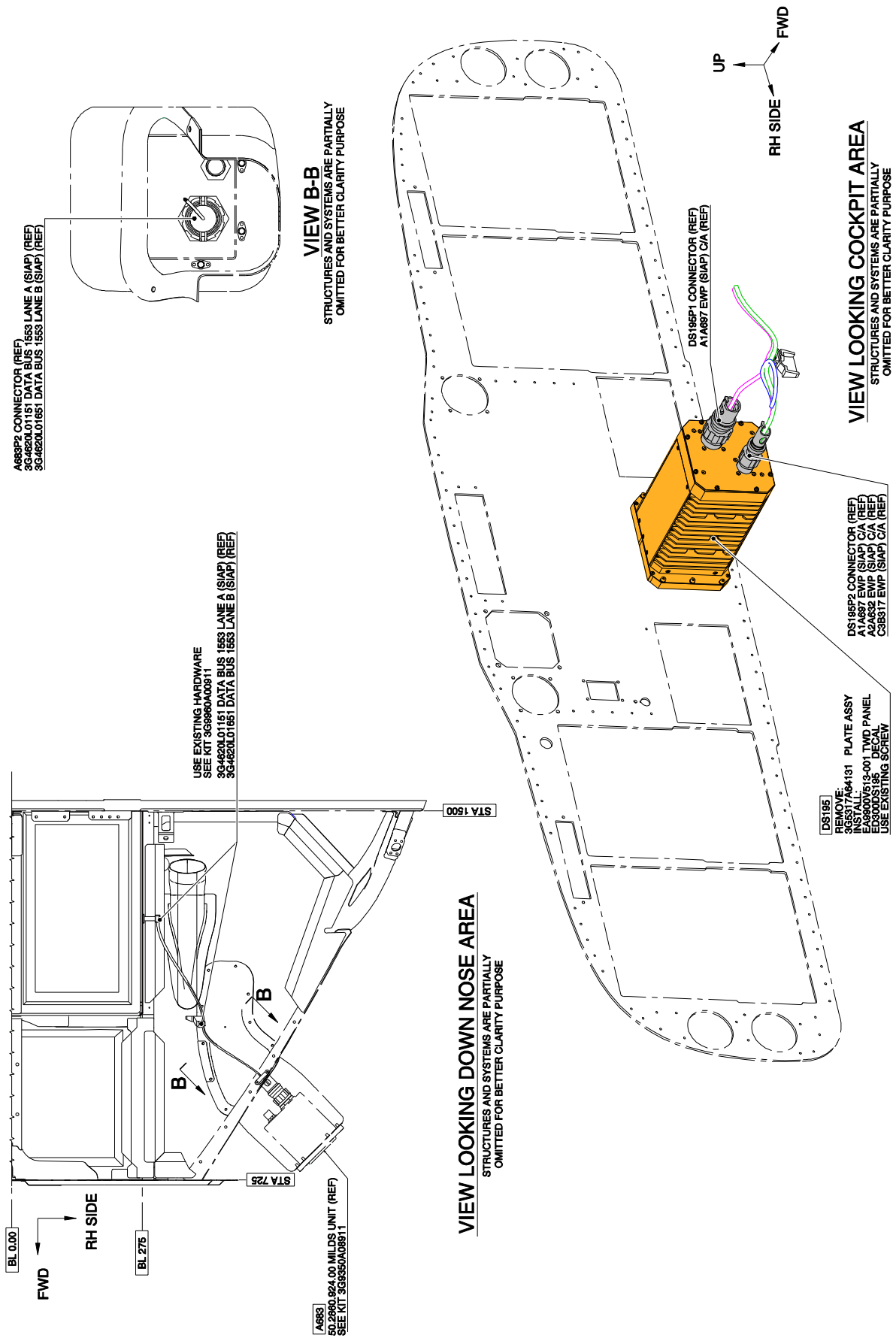
S.B. N°139-632 OPTIONAL  
DATE: September 5, 2024  
REVISION: /

**3G9960A01011**  
**EWP (SIAP)**  
**EQUIPMENT INSTALLATION**



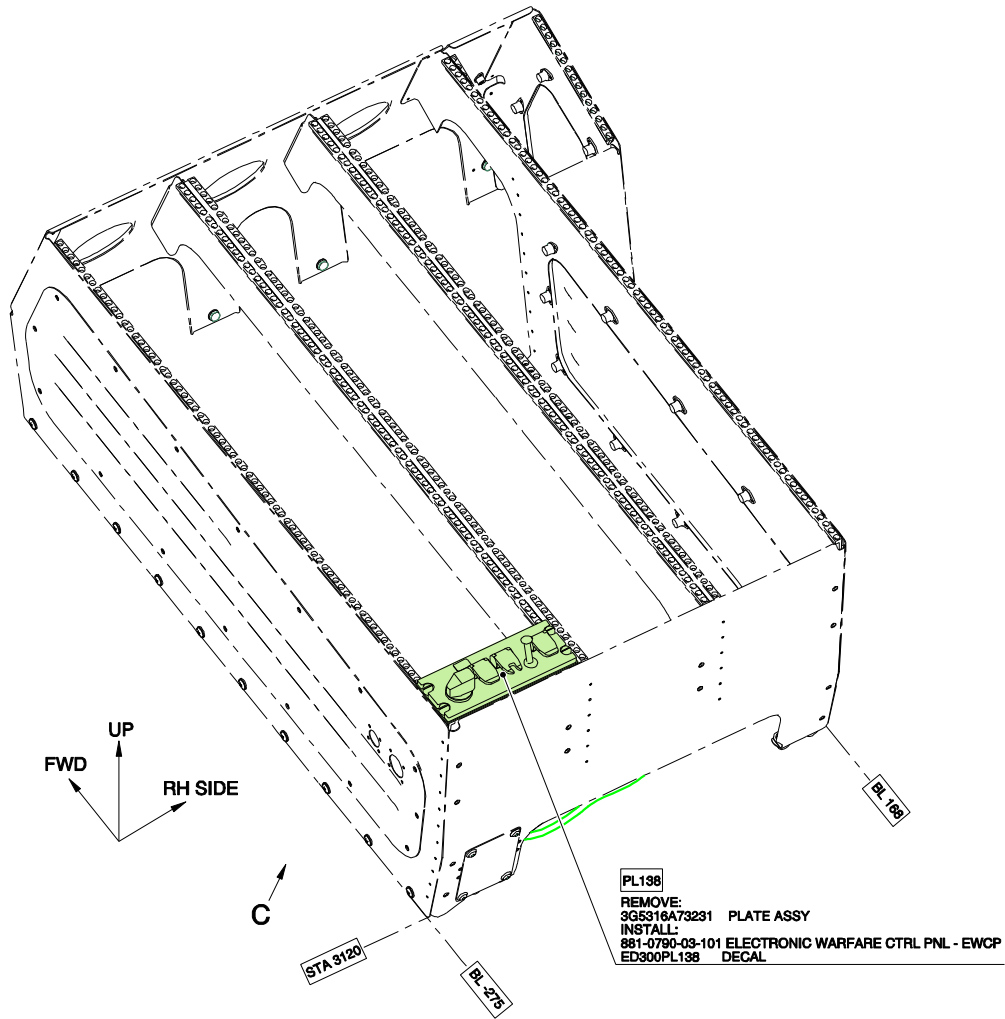
**ISOMETRIC VIEW**

**Figure 69**



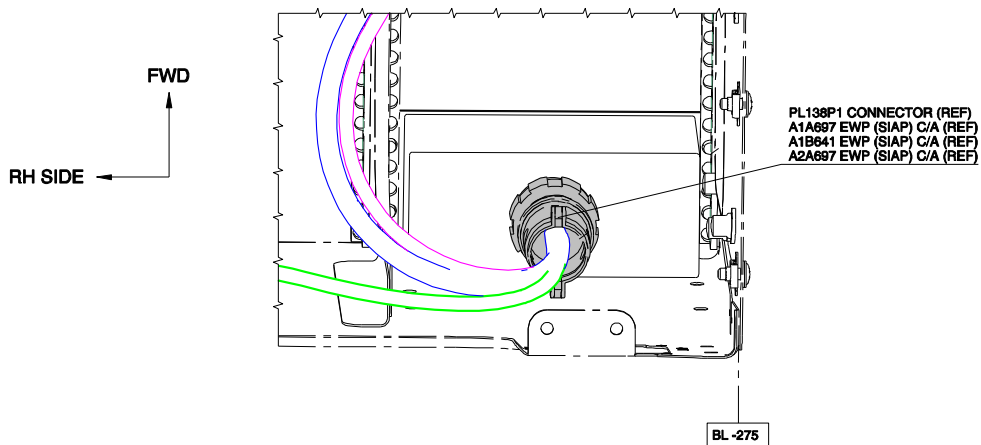
**Figure 70**

S.B. N°139-632 OPTIONAL  
DATE: September 5, 2024  
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**VIEW LOOKING I/S CONSOLE AREA**

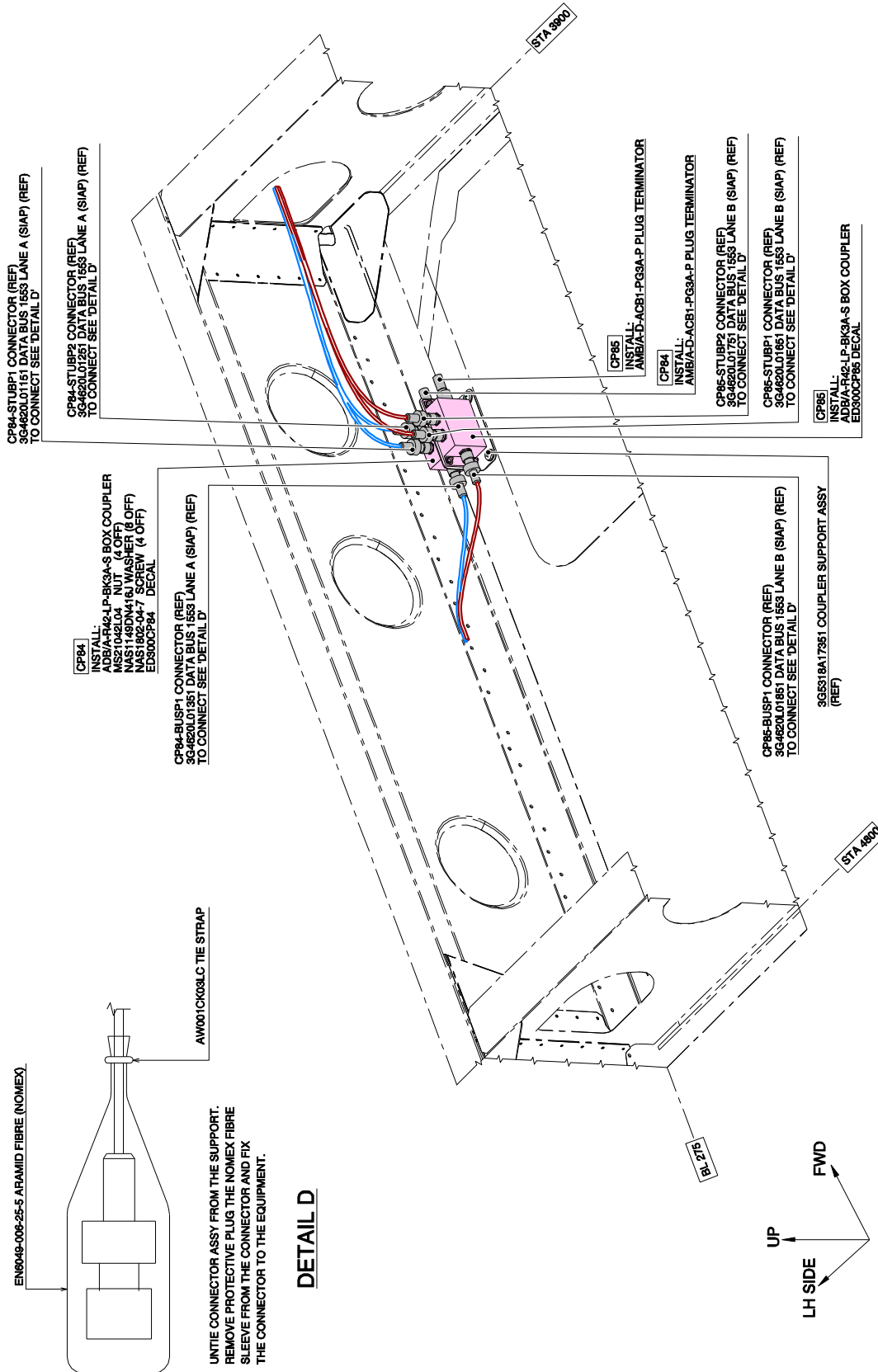
STRUCTURES AND SYSTEMS ARE PARTIALLY  
OMITTED FOR BETTER CLARITY PURPOSE



**VIEW C**

STRUCTURES AND SYSTEMS ARE PARTIALLY  
OMITTED FOR BETTER CLARITY PURPOSE

**Figure 71**



**VIEW LOOKING FLOOR FROM TO STA 3900 TO STA 4800**

STRUCTURES AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE

**Figure 72**

S.B. N°139-632 OPTIONAL  
DATE: September 5, 2024  
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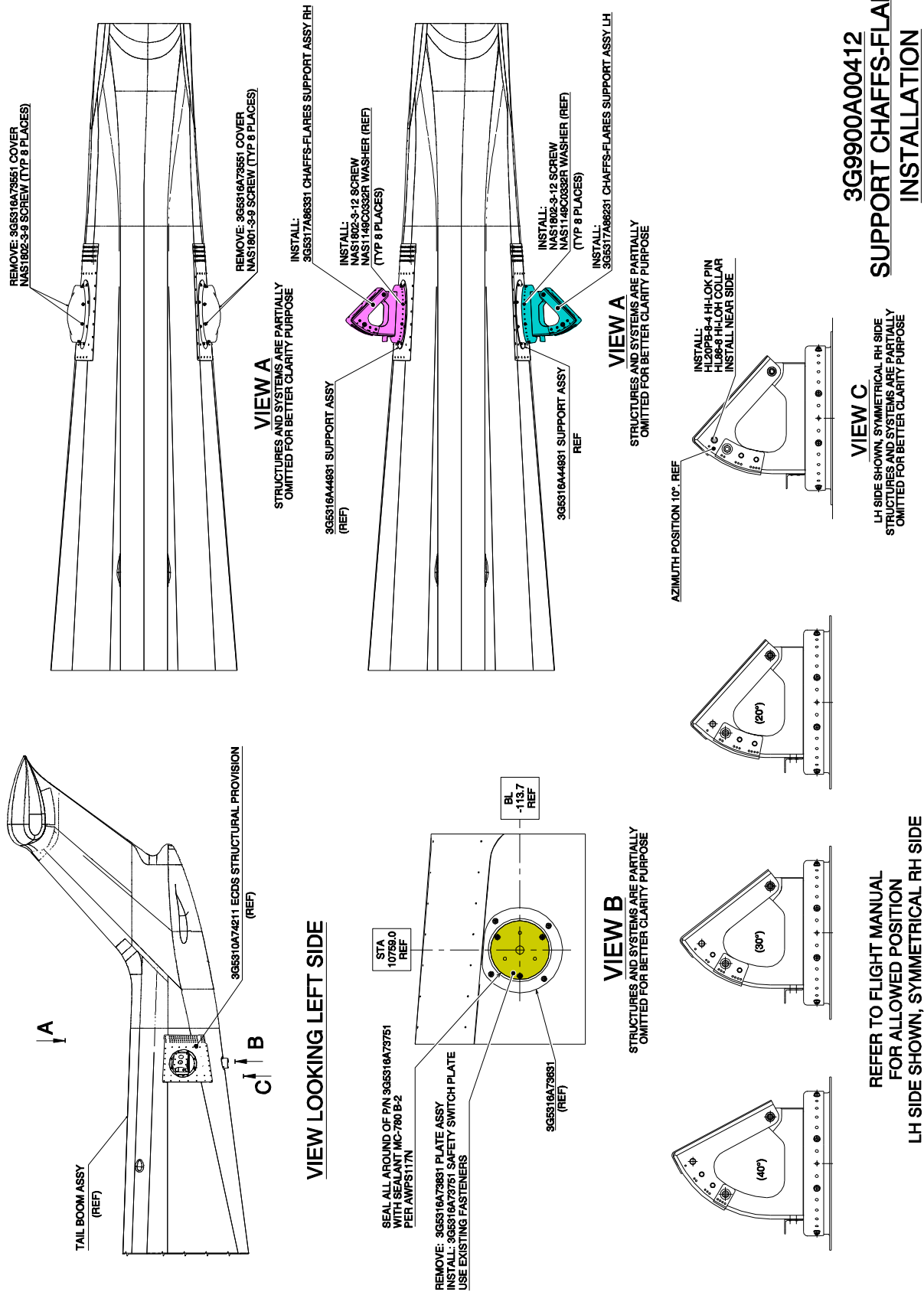
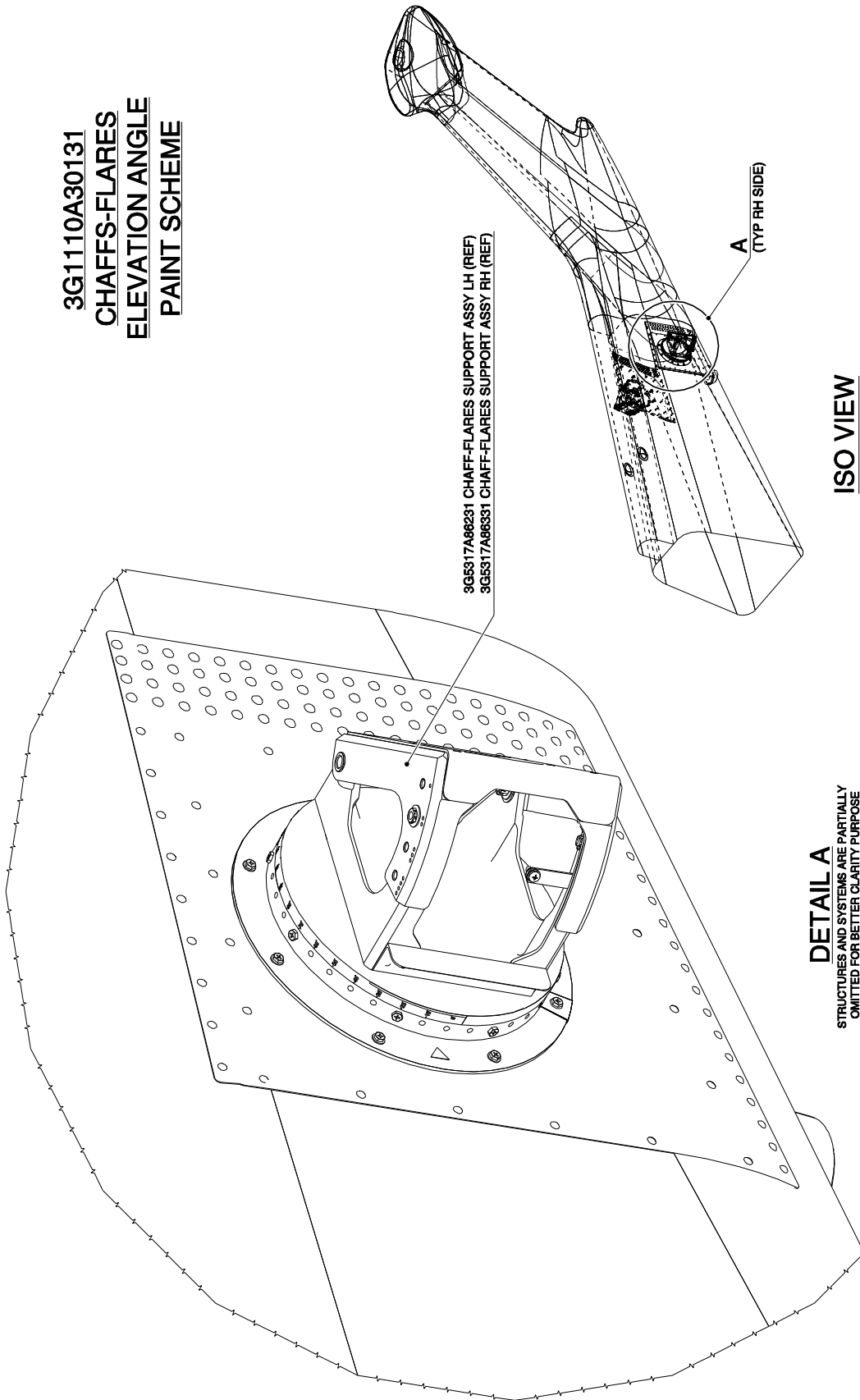


Figure 74



**3G1110A30131**  
**CHAFFS-FLARES**  
**ELEVATION ANGLE**  
**PAINT SCHEME**

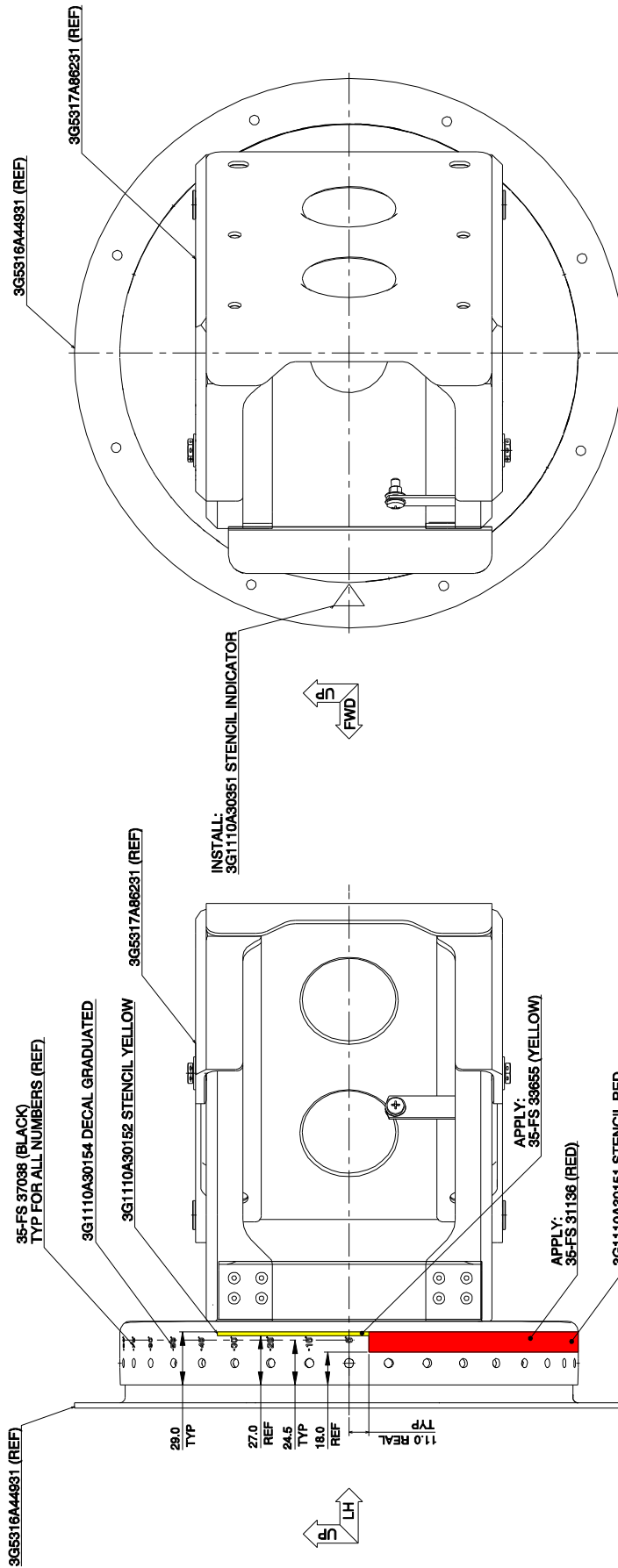


**ISO VIEW**

**DETAIL A**

STRUCTURES AND SYSTEMS ARE PARTIALLY  
OMITTED FOR BETTER CLARITY PURPOSE

**Figure 75**

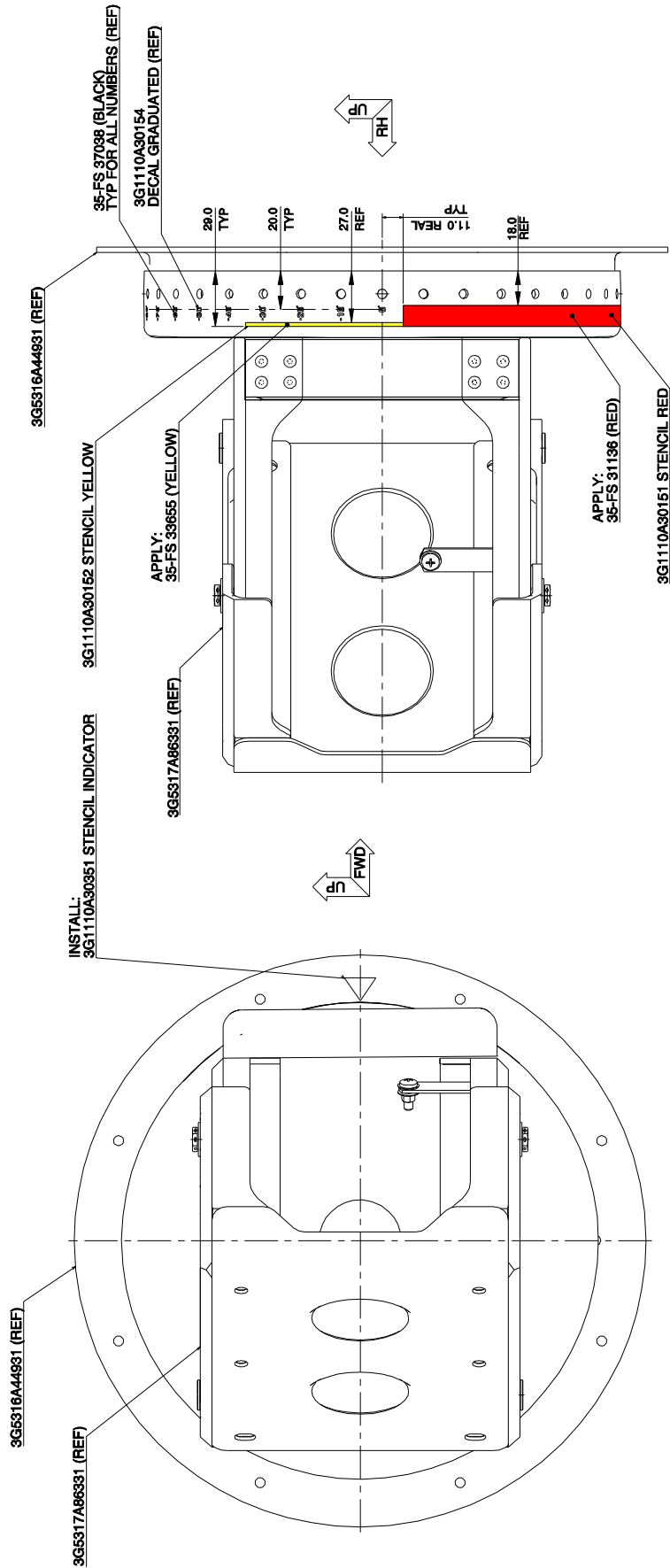


**VIEW LOOKING LEFT SIDE**  
NORMAL TO PANEL PLANE

PAINT CODE			
SPECIFICATION	DESCRIPTION	CODE	COLOURS
MIL-PRF-85285 TY I, CLASS H	POLYURETHANE FINISH HIGH SOLID	35-FS 37038	BLACK PER FED-STD-595
		35-FS 31136	RED PER FED-STD-595
		35-FS 33655	YELLOW PER FED-STD-595

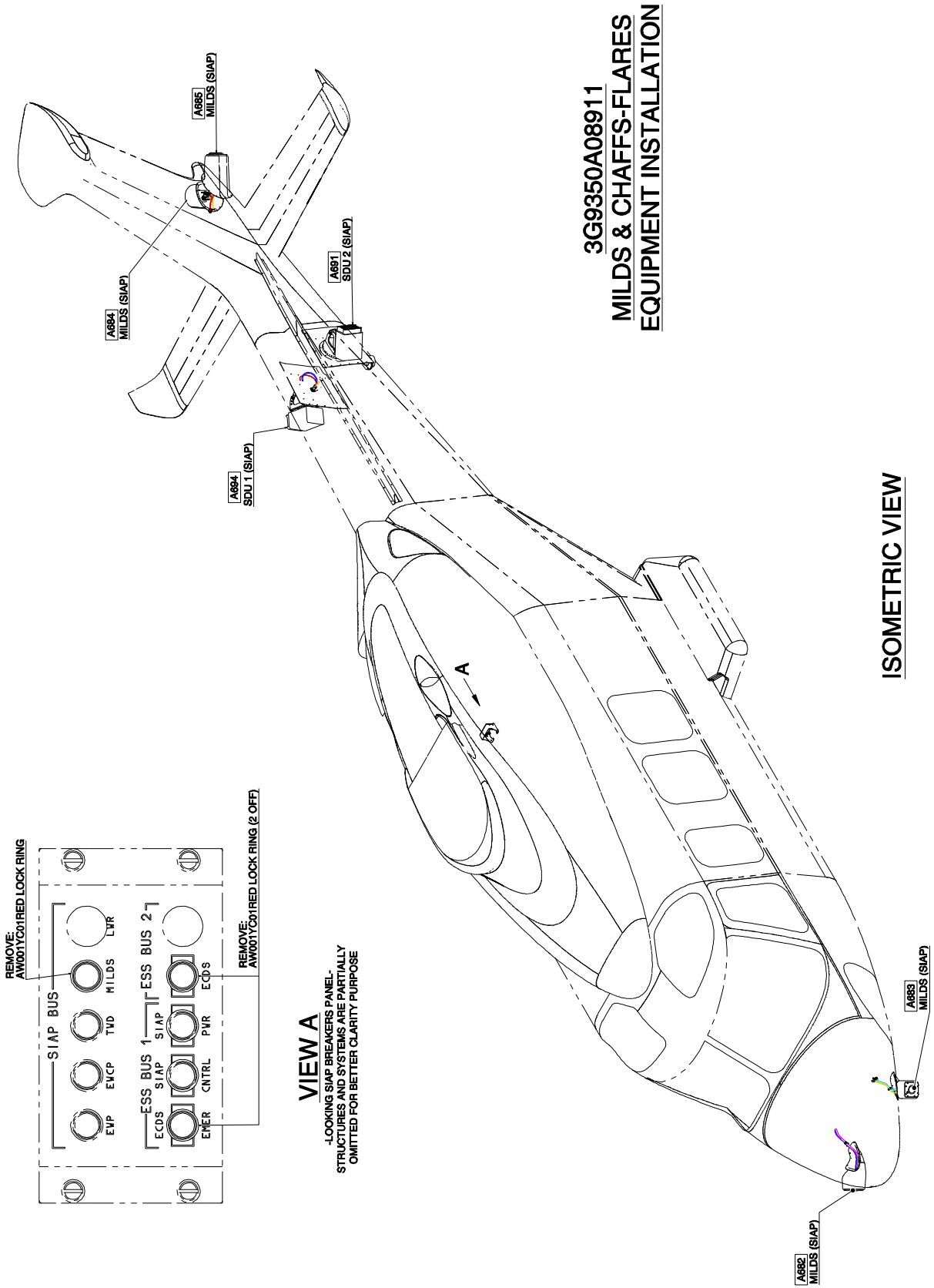
Figure 76

S.B. N°139-632 OPTIONAL  
DATE: September 5, 2024  
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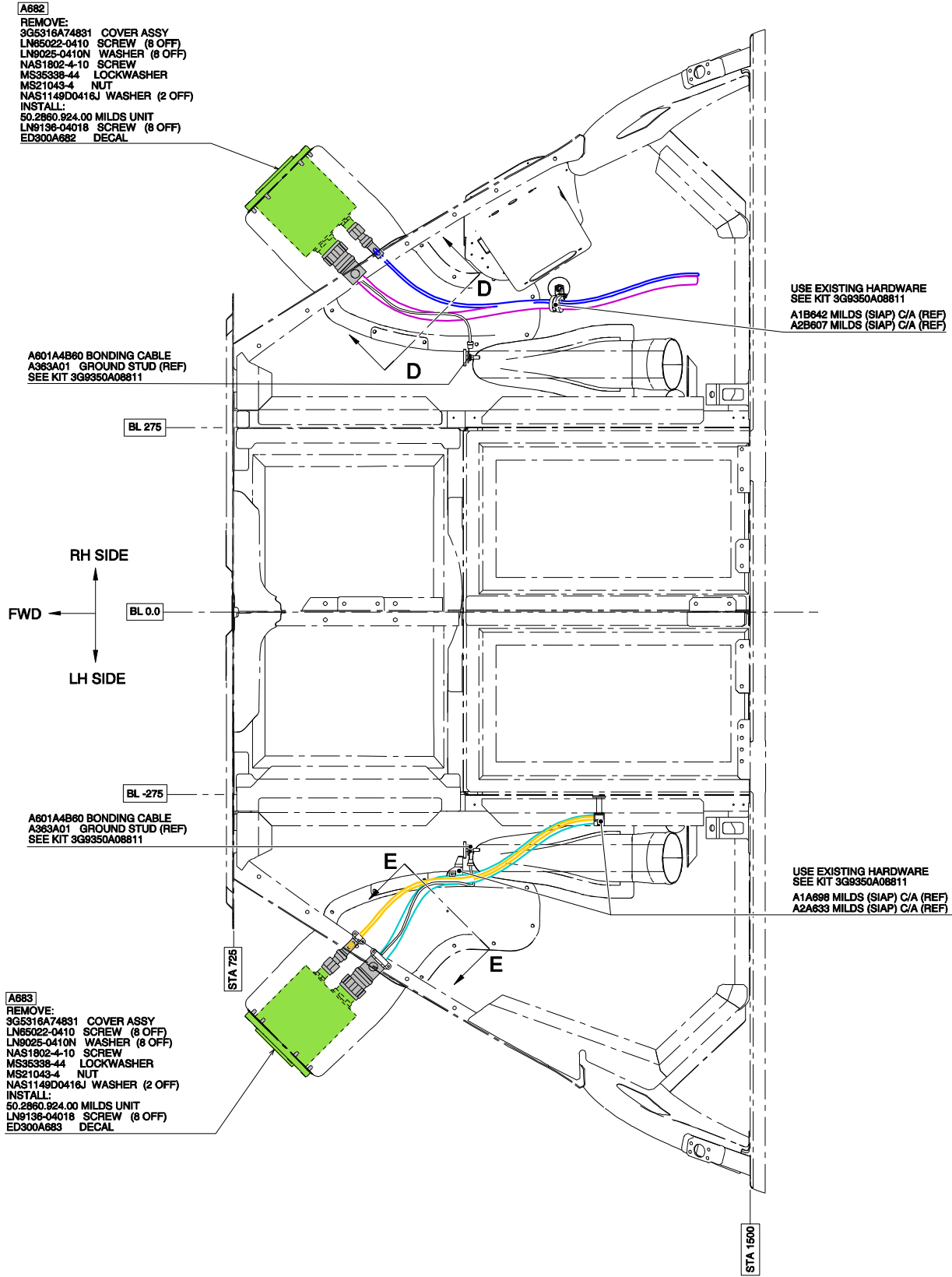
**VIEW LOOKING RIGHT SIDE**  
NORMAL TO PANEL PLANE

**Figure 77**



**Figure 78**

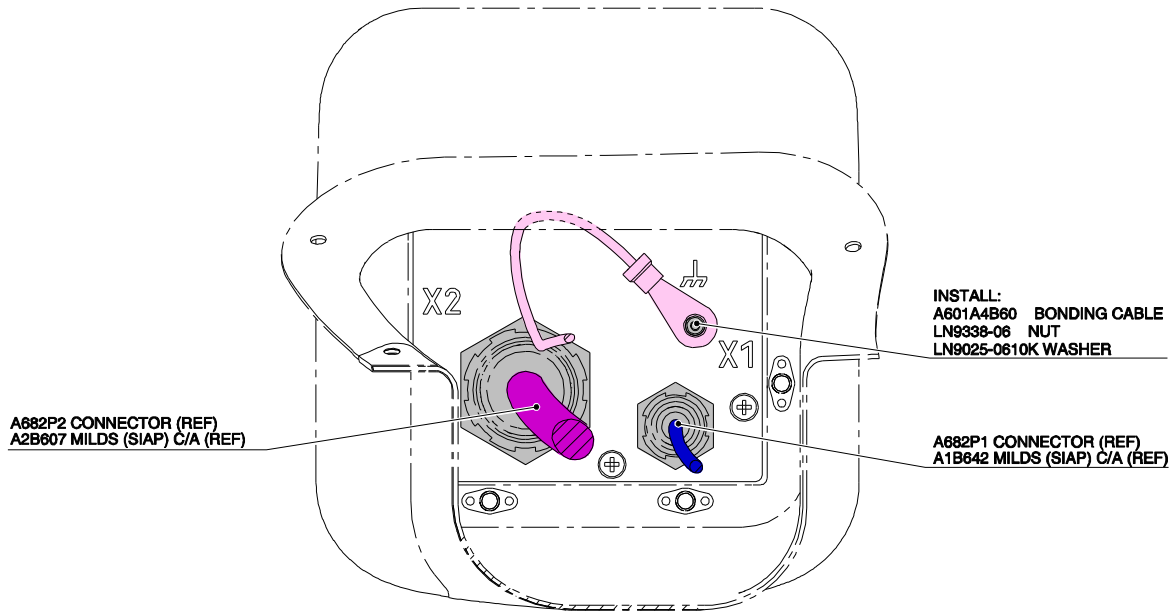
S.B. N°139-632 OPTIONAL  
DATE: September 5, 2024  
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**VIEW LOOKING DOWN NOSE AREA**

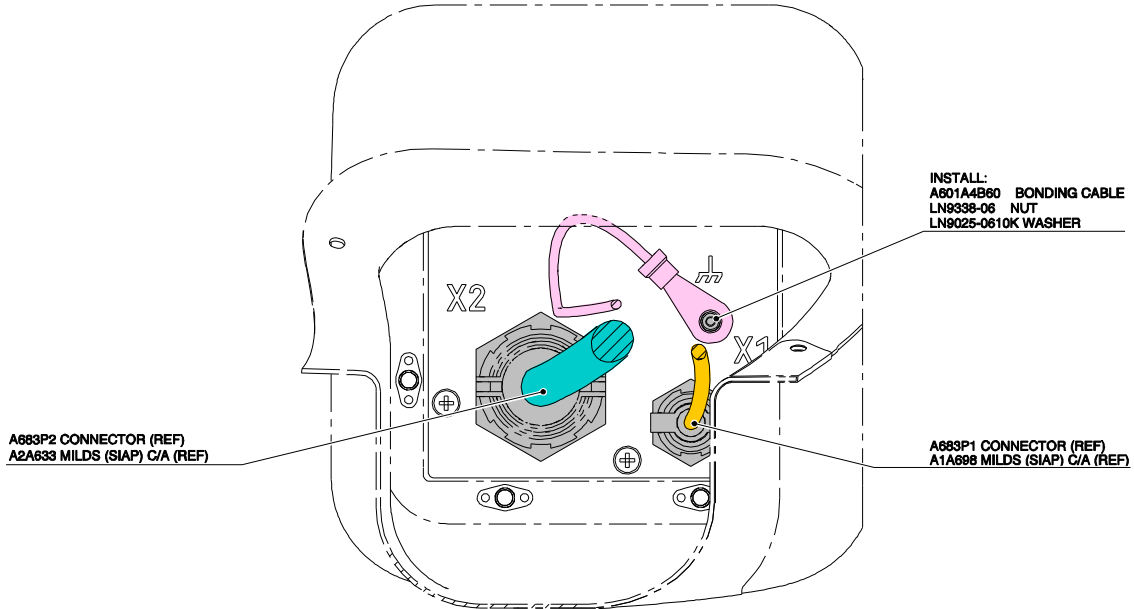
STRUCTURES AND SYSTEMS ARE PARTIALLY  
OMITTED FOR BETTER CLARITY PURPOSE

**Figure 79**



**VIEW D-D**

STRUCTURES AND SYSTEMS ARE PARTIALLY  
OMITTED FOR BETTER CLARITY PURPOSE

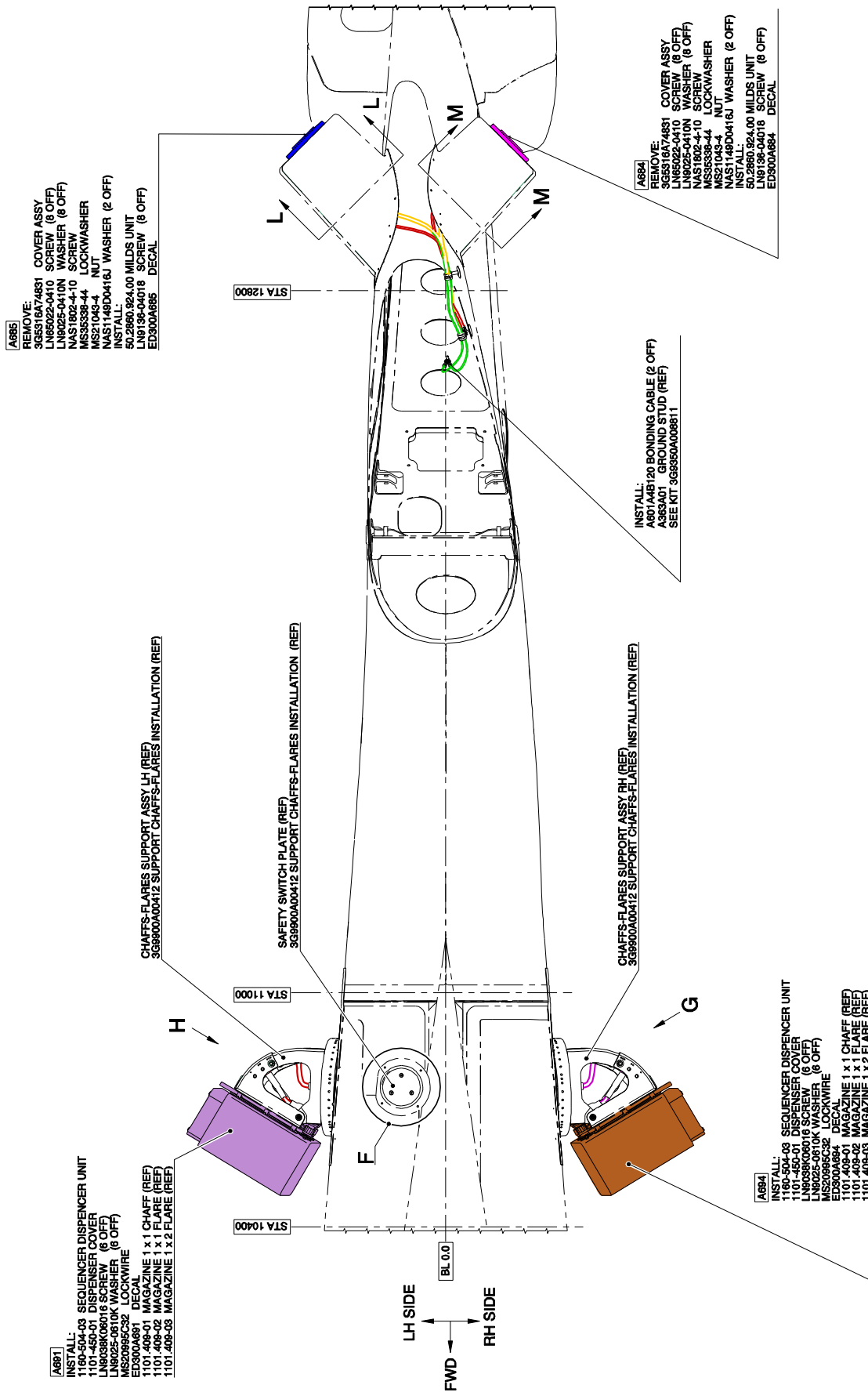


**VIEW E-E**

STRUCTURES AND SYSTEMS ARE PARTIALLY  
OMITTED FOR BETTER CLARITY PURPOSE

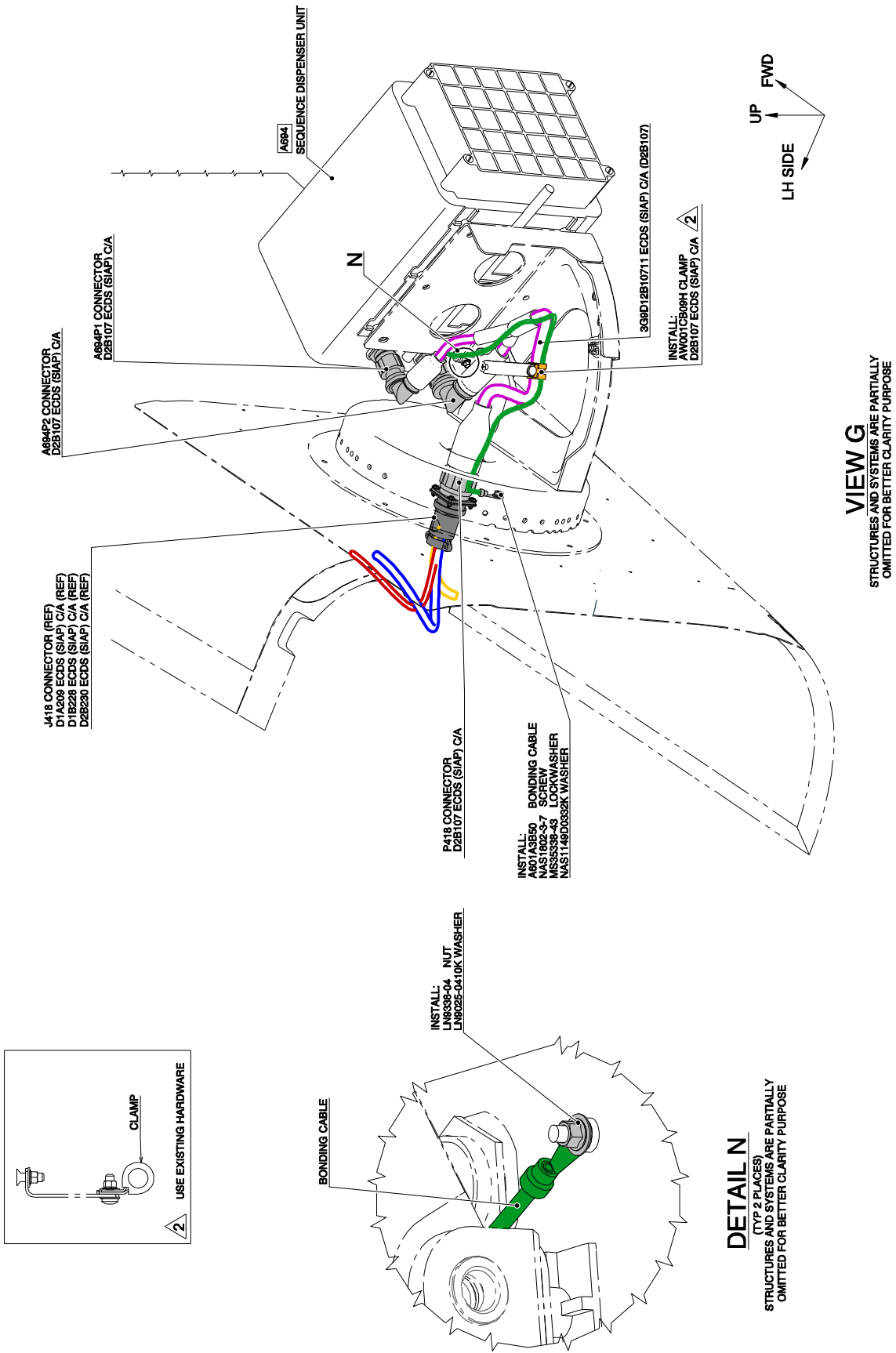
**Figure 80**

S.B. N°139-632 OPTIONAL  
DATE: September 5, 2024  
REVISION: /



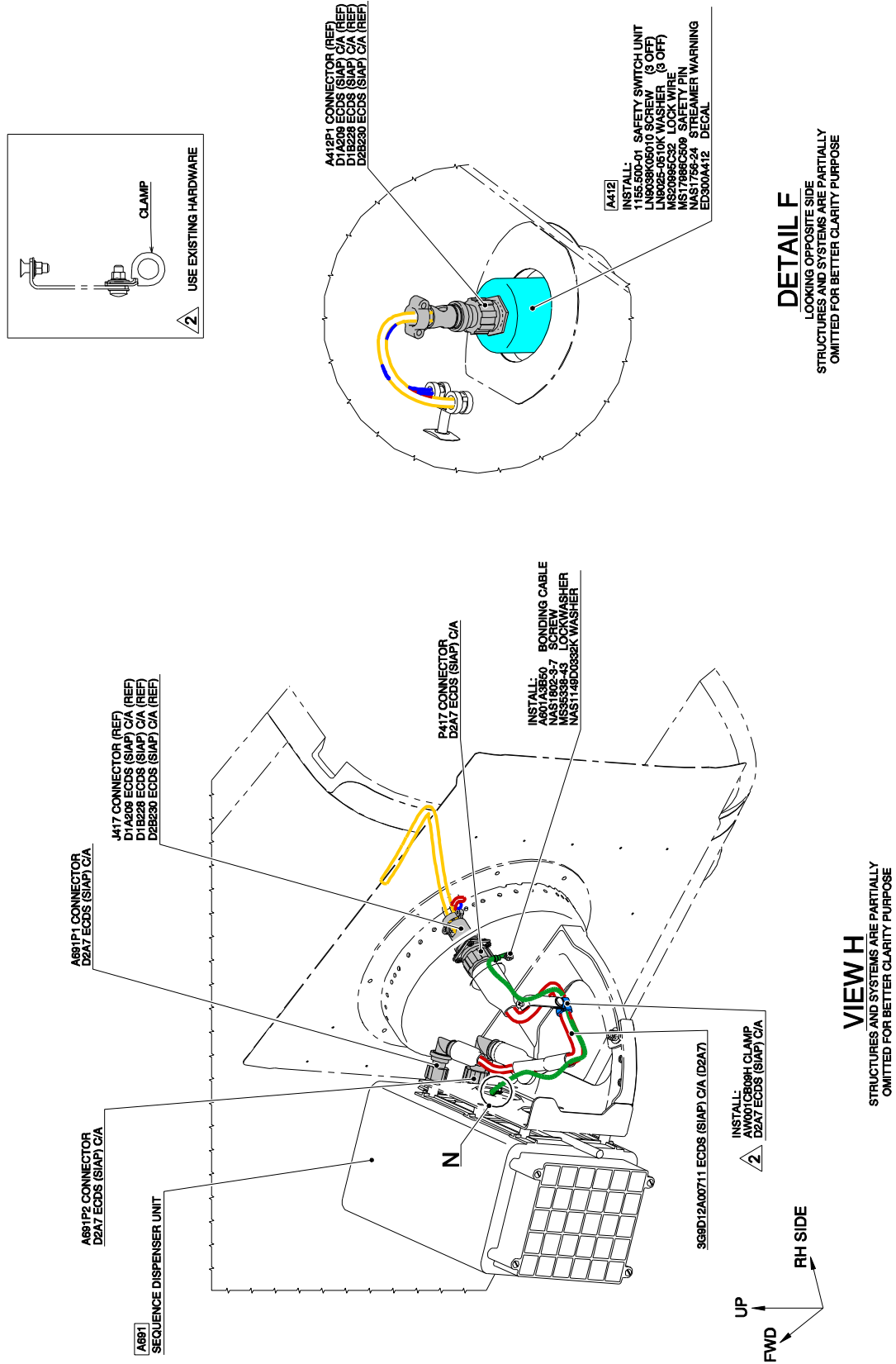
**VIEW LOOKING UP TAIL**  
STRUCTURES AND SYSTEMS ARE PARTIALLY  
OMITTED FOR BETTER CLARITY PURPOSE

**Figure 81**

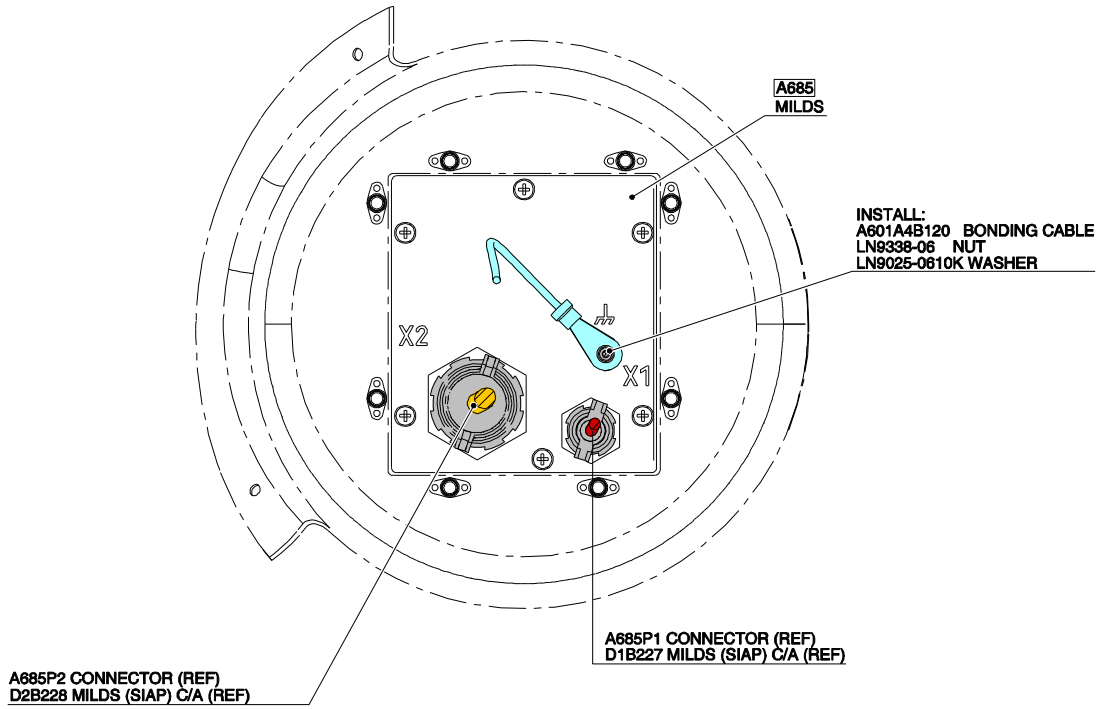


**Figure 82**

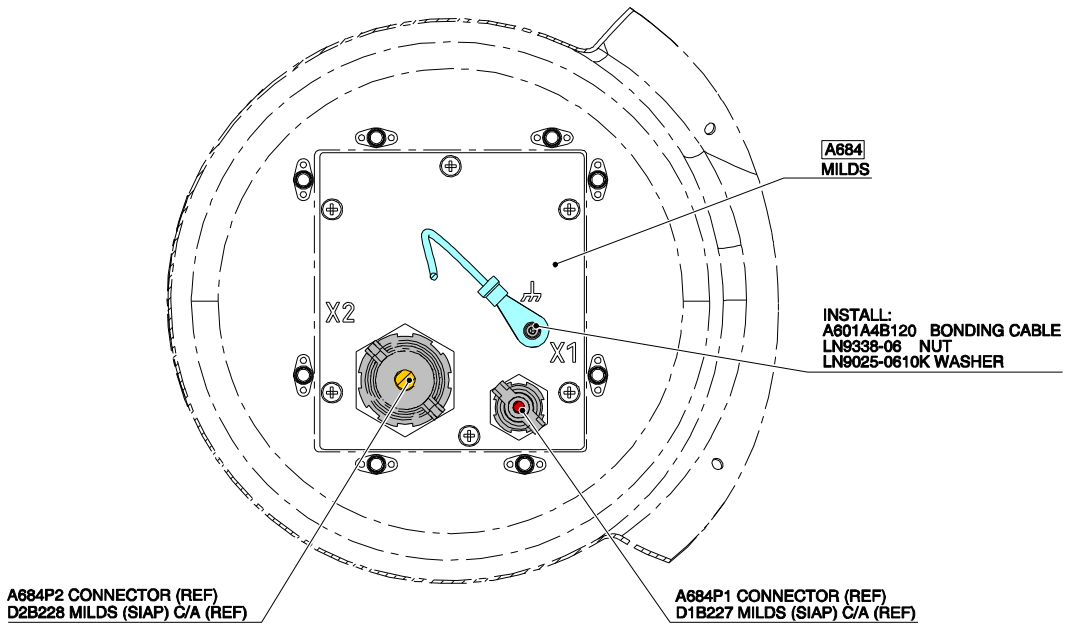




**Figure 83**

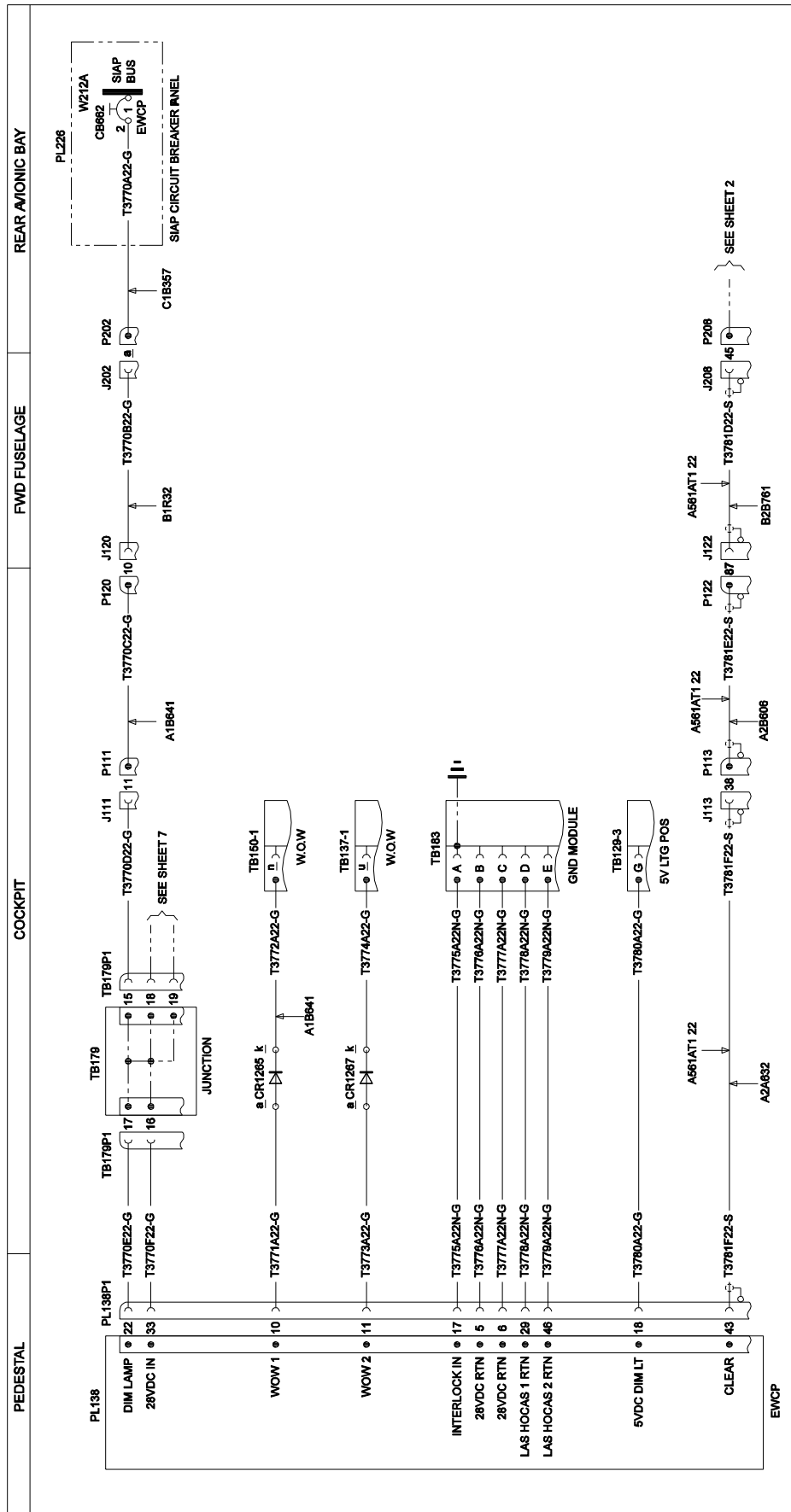


**VIEW L-L**  
STRUCTURES AND SYSTEMS ARE PARTIALLY  
OMITTED FOR BETTER CLARITY PURPOSE



**VIEW M-M**  
STRUCTURES AND SYSTEMS ARE PARTIALLY  
OMITTED FOR BETTER CLARITY PURPOSE

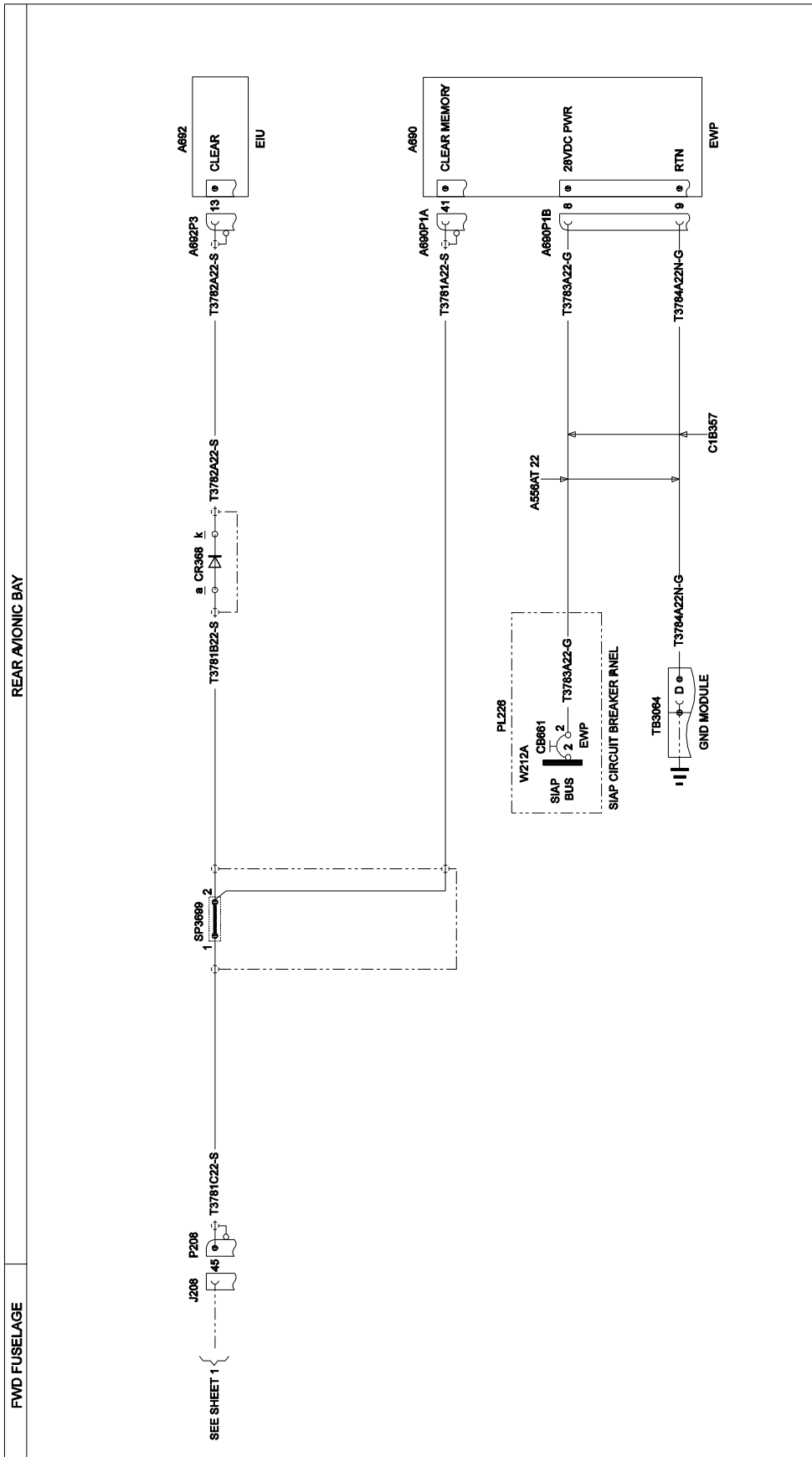
**Figure 84**



**3G9960W00311**  
**WIRING DIAGRAM EWP (SIAP)**  
SHEET 1

**FUNCTIONAL NOTES**  
ALL CABLES ARE IN LOOM A1A897 UNLESS SPECIFIED  
ALL CABLES ARE OF TYPE A566AT 22 UNLESS SPECIFIED

**Figure 85**

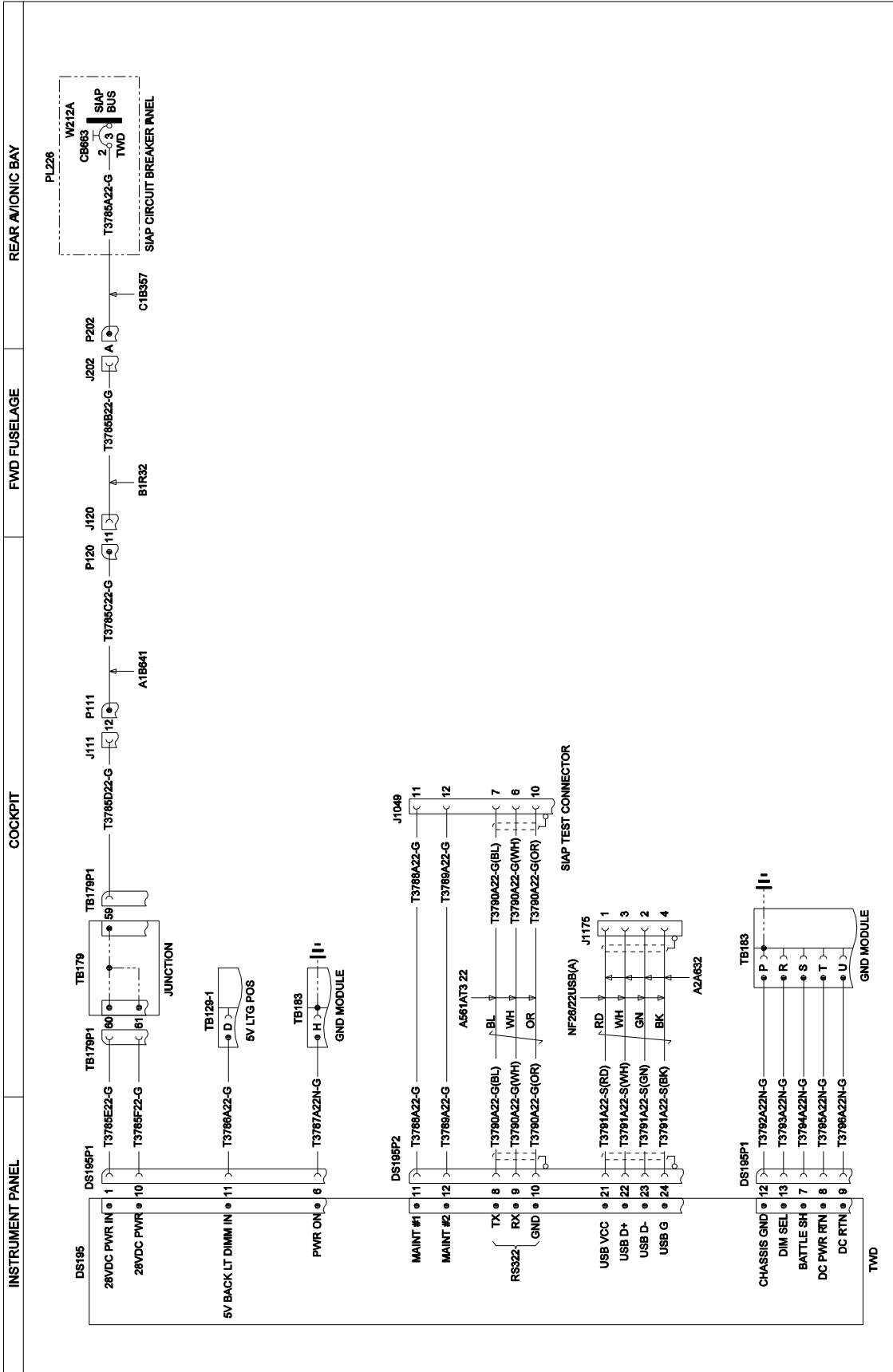


**3G9960W00311**  
**WIRING DIAGRAM EWP (SIAP)**  
SHEET 2

**FUNCTIONAL NOTES**  
ALL CABLES ARE IN LOOM C2B407 UNLESS SPECIFIED  
ALL CABLES ARE OF TYPE A561AT1 22 UNLESS SPECIFIED

**Figure 86**

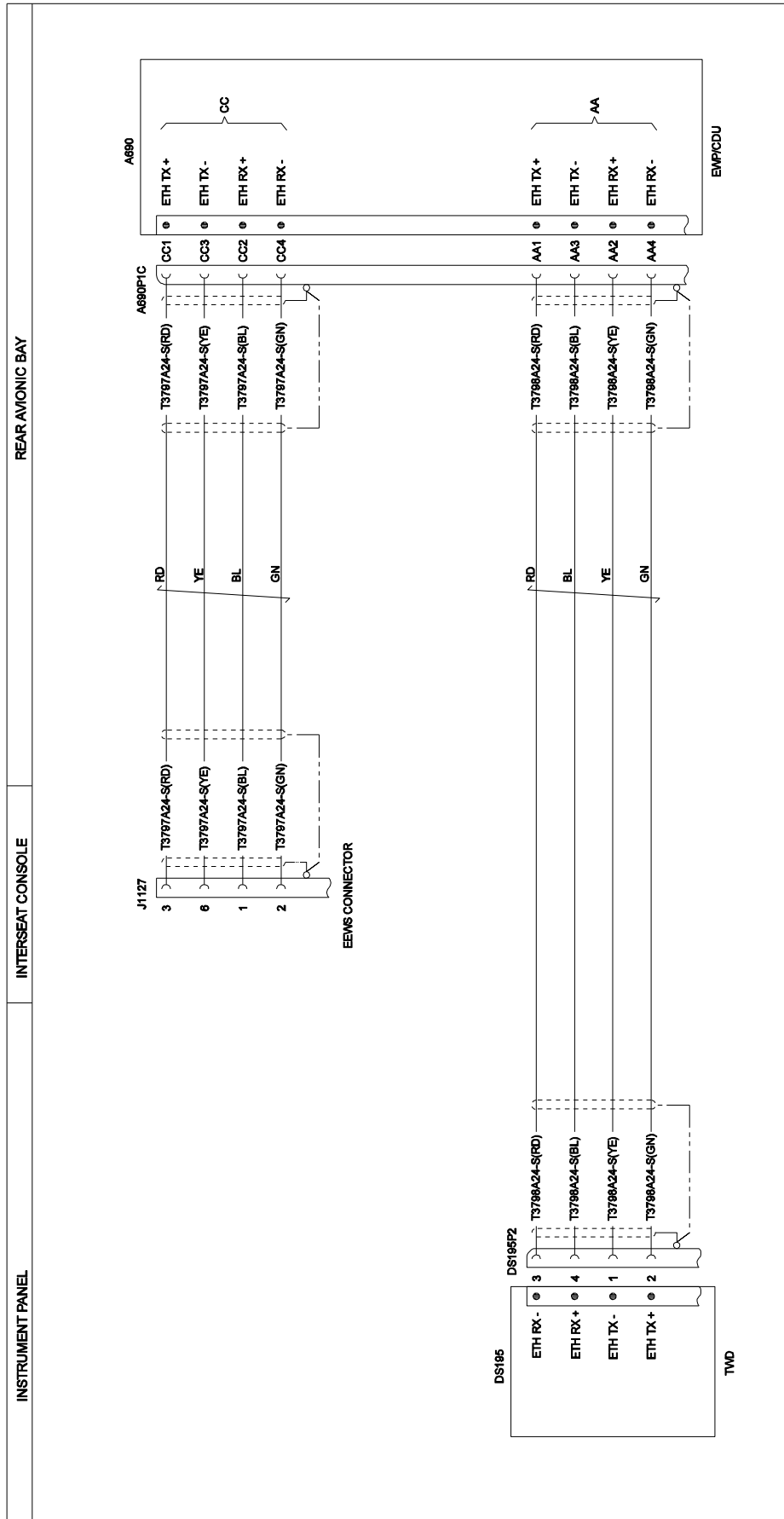
S.B. N°139-632 OPTIONAL  
DATE: September 5, 2024  
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**3G9960W00311**  
**WIRING DIAGRAM EWP (SIAP)**  
SHEET 3

**FUNCTIONAL NOTES**  
ALL CABLES ARE IN L00M1A987 UNLESS SPECIFIED  
ALL CABLES ARE OF TYPE A566AT 22 UNLESS SPECIFIED

**Figure 87**



**3G9960W00311**  
**WIRING DIAGRAM EWP (SIAP)**  
SHEET 4

**FUNCTIONAL NOTES**  
ALL CABLES ARE IN LOOM C3B317 UNLESS SPECIFIED  
ALL CABLES ARE OF TYPE NF24Q100-01 UNLESS SPECIFIED

**Figure 88**

S.B. N°139-632 OPTIONAL  
DATE: September 5, 2024  
REVISION: /

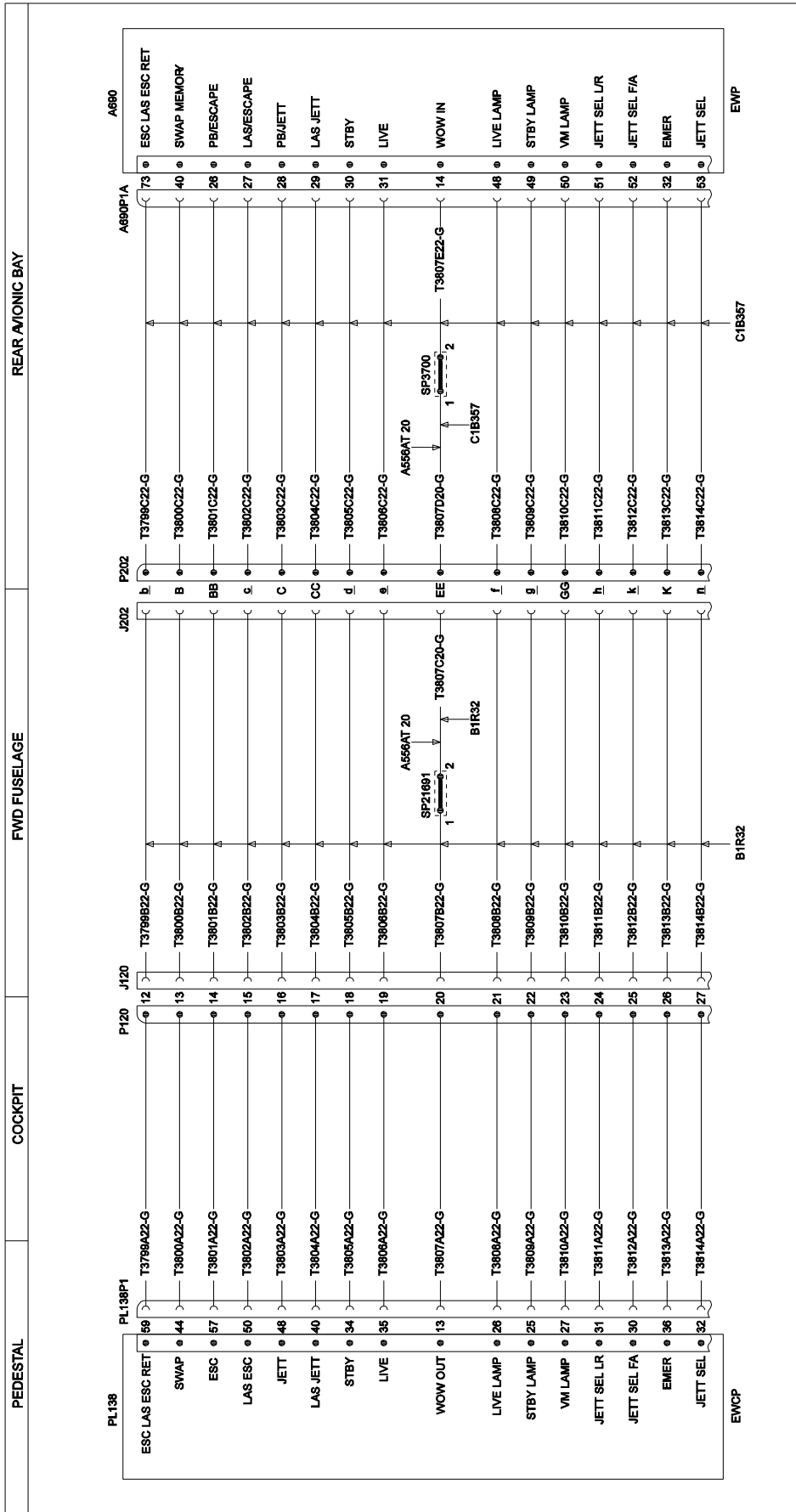
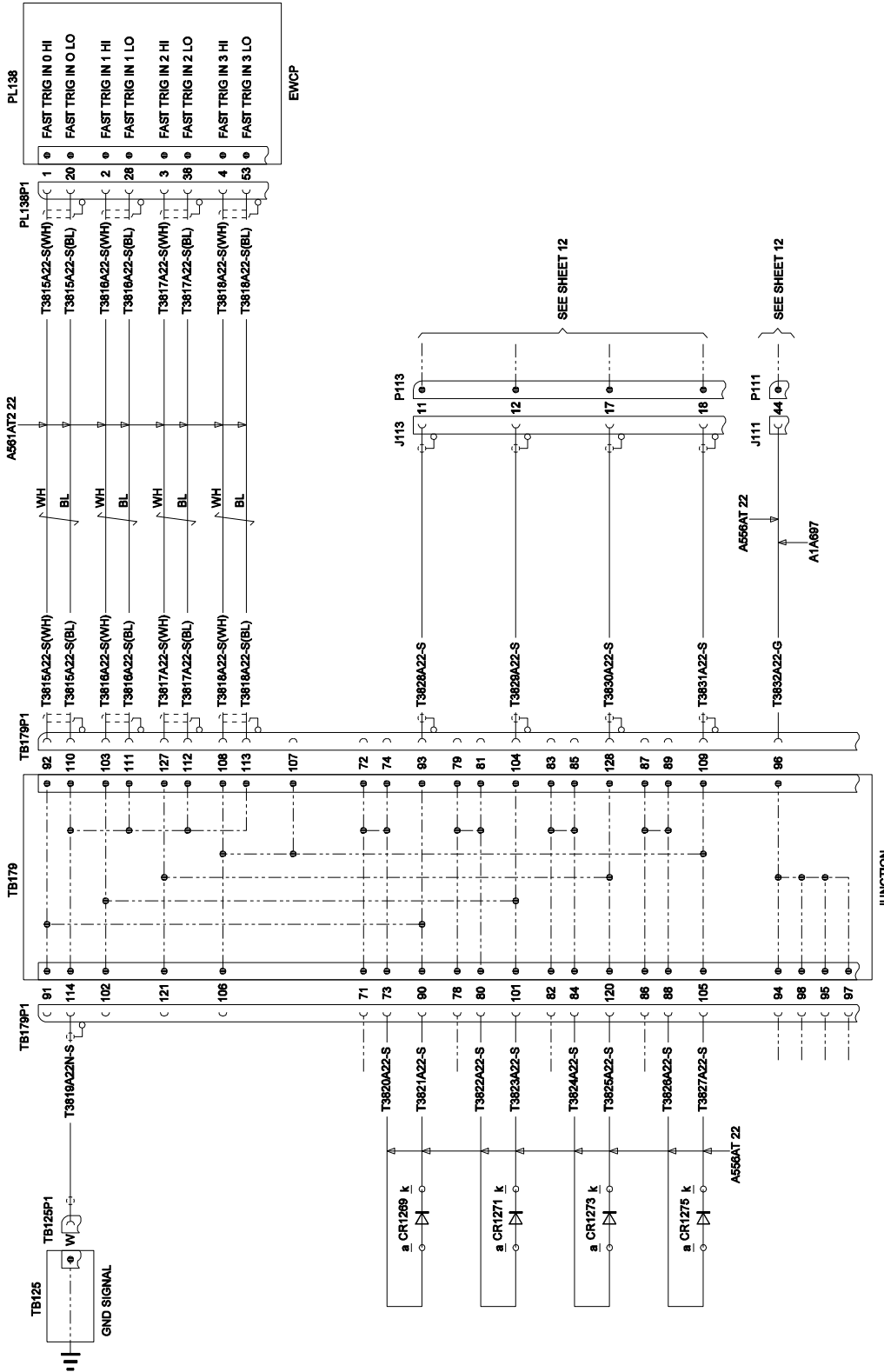


Figure 89

FUNCTIONAL NOTES  
 ALL CABLES ARE IN LOOM A1B641 UNLESS SPECIFIED  
 ALL CABLES ARE OF TYPE A556AT 22 UNLESS SPECIFIED

PEDESTAL

COCKPIT



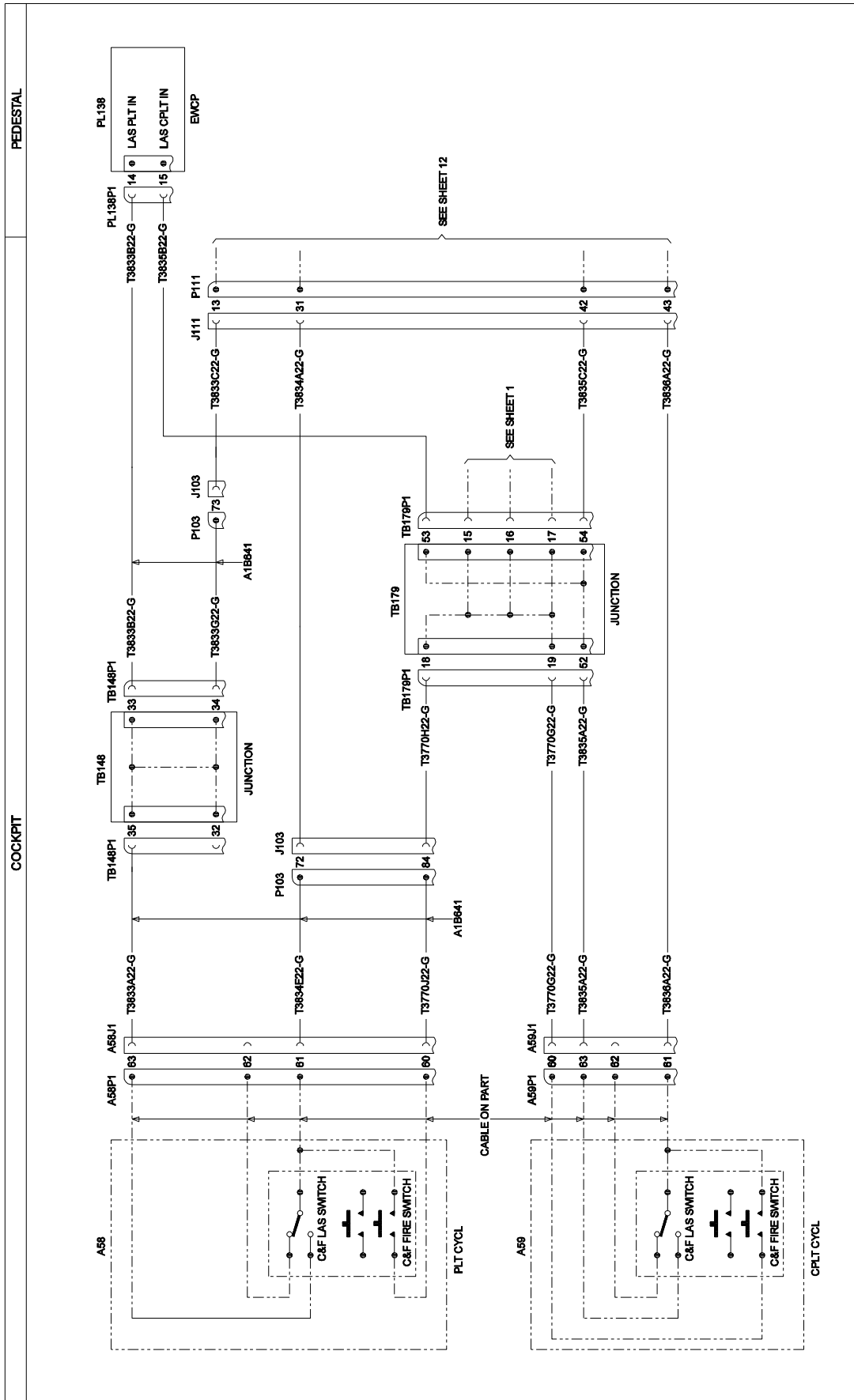
**3G9960W00311**  
**WIRING DIAGRAM EWP (SIAP)**  
SHEET 6

**FUNCTIONAL NOTES**  
ALL CABLES ARE IN LOOM A2A632 UNLESS SPECIFIED  
ALL CABLES ARE OF TYPE A561AT1 22 UNLESS SPECIFIED

Figure 90

S.B. N°139-632 OPTIONAL  
DATE: September 5, 2024  
REVISION: /

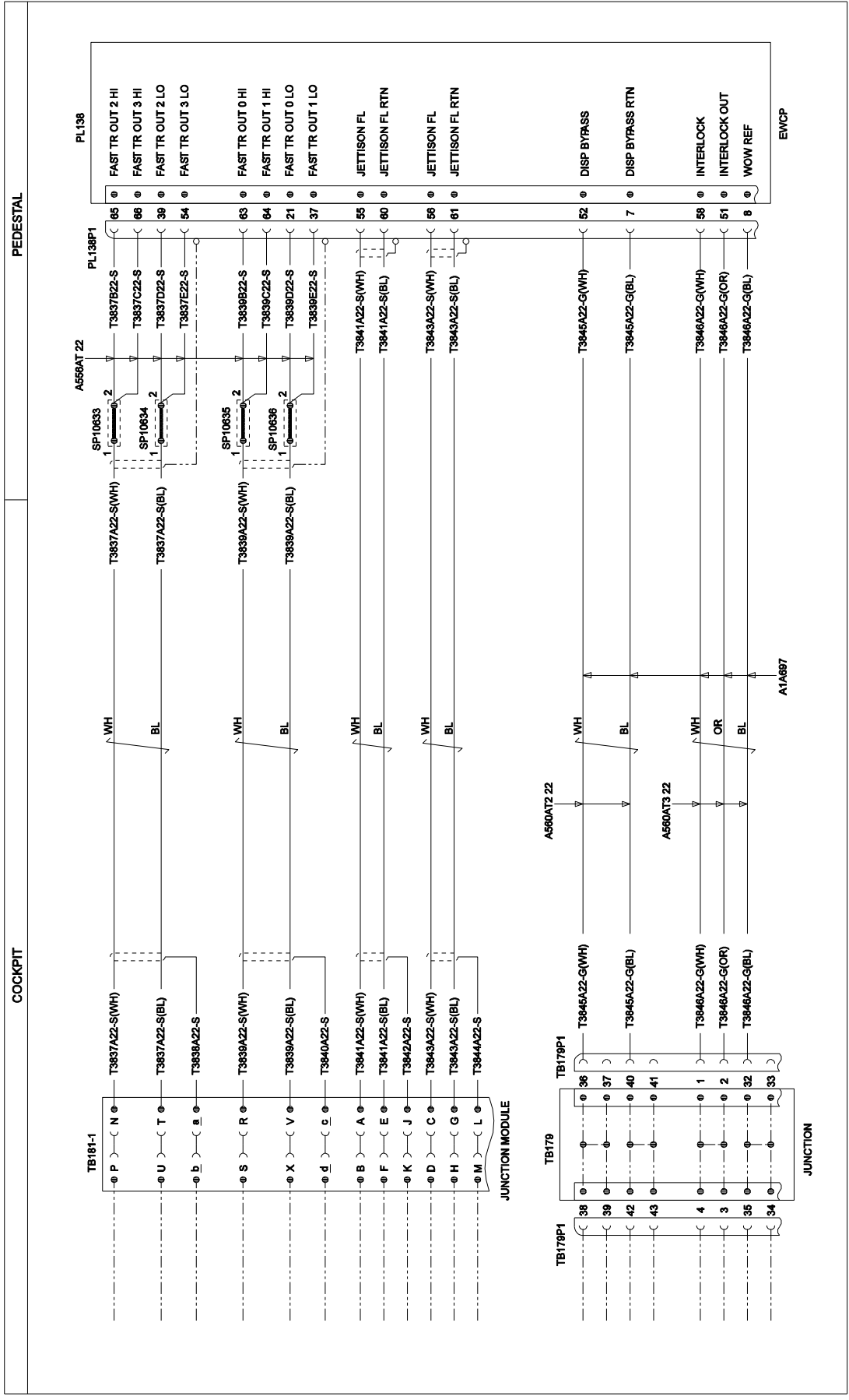




3G9960W00311  
**WIRING DIAGRAM EMP (SIAP)**  
 SHEET 7

**FUNCTIONAL NOTES**  
 ALL CABLES ARE IN LOOM A1A697 UNLESS SPECIFIED  
 ALL CABLES ARE OF TYPE A566AT 22 UNLESS SPECIFIED

**Figure 91**

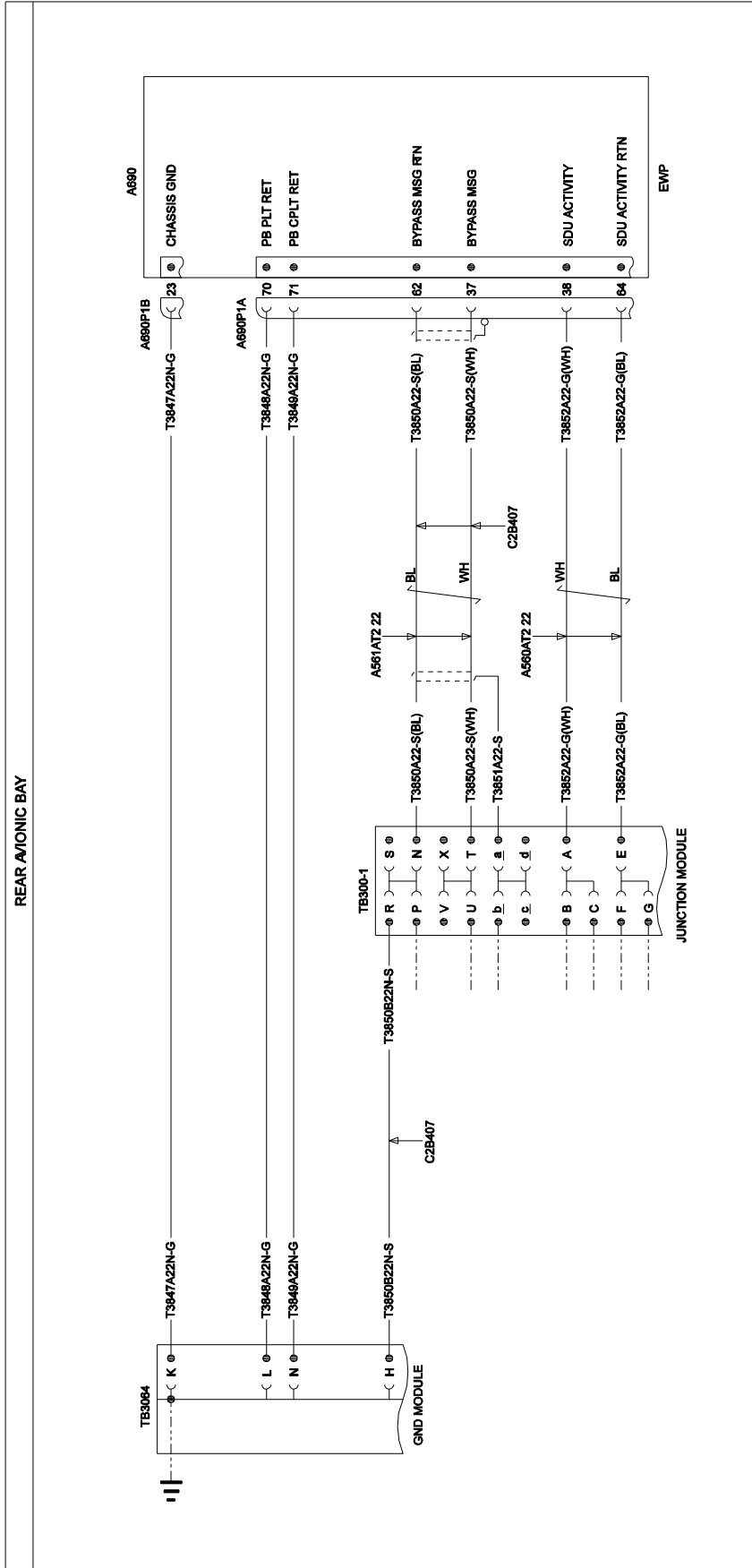


3G9960W00311  
**WIRING DIAGRAM EWP (SIAP)**  
 SHEET 8

**FUNCTIONAL NOTES**  
 ALL CABLES ARE IN LOOM A2A632 UNLESS SPECIFIED  
 ALL CABLES ARE OF TYPE A561AT2 22 UNLESS SPECIFIED

Figure 92

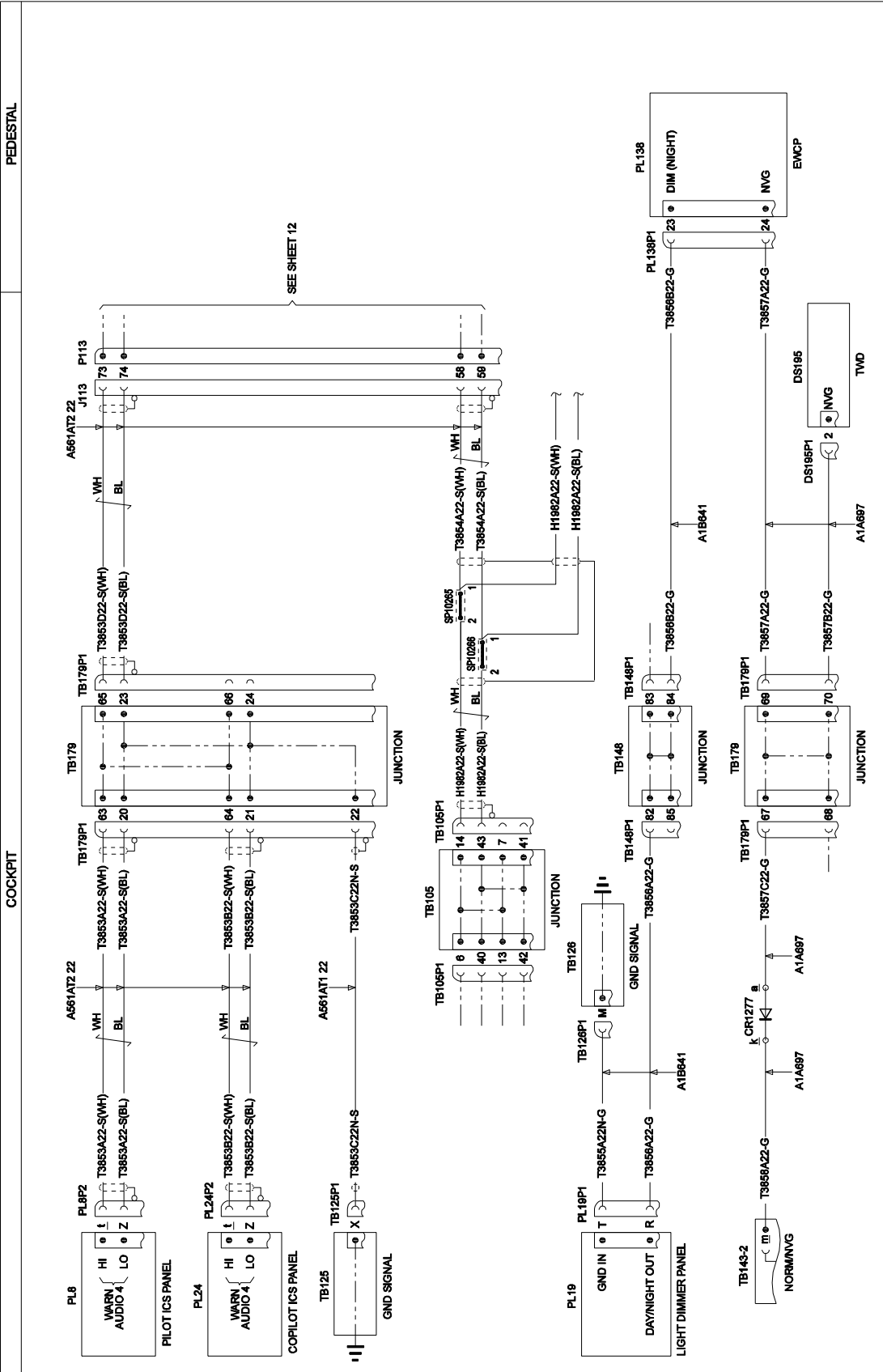
S.B. N°139-632 OPTIONAL  
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3G9960W00311  
**WIRING DIAGRAM EWP (SIAP)**  
SHEET 9

**FUNCTIONAL NOTES**  
ALL CABLES ARE IN LOOM C1B357 UNLESS SPECIFIED  
ALL CABLES ARE OF TYPE A566AT 22 UNLESS SPECIFIED

**Figure 93**

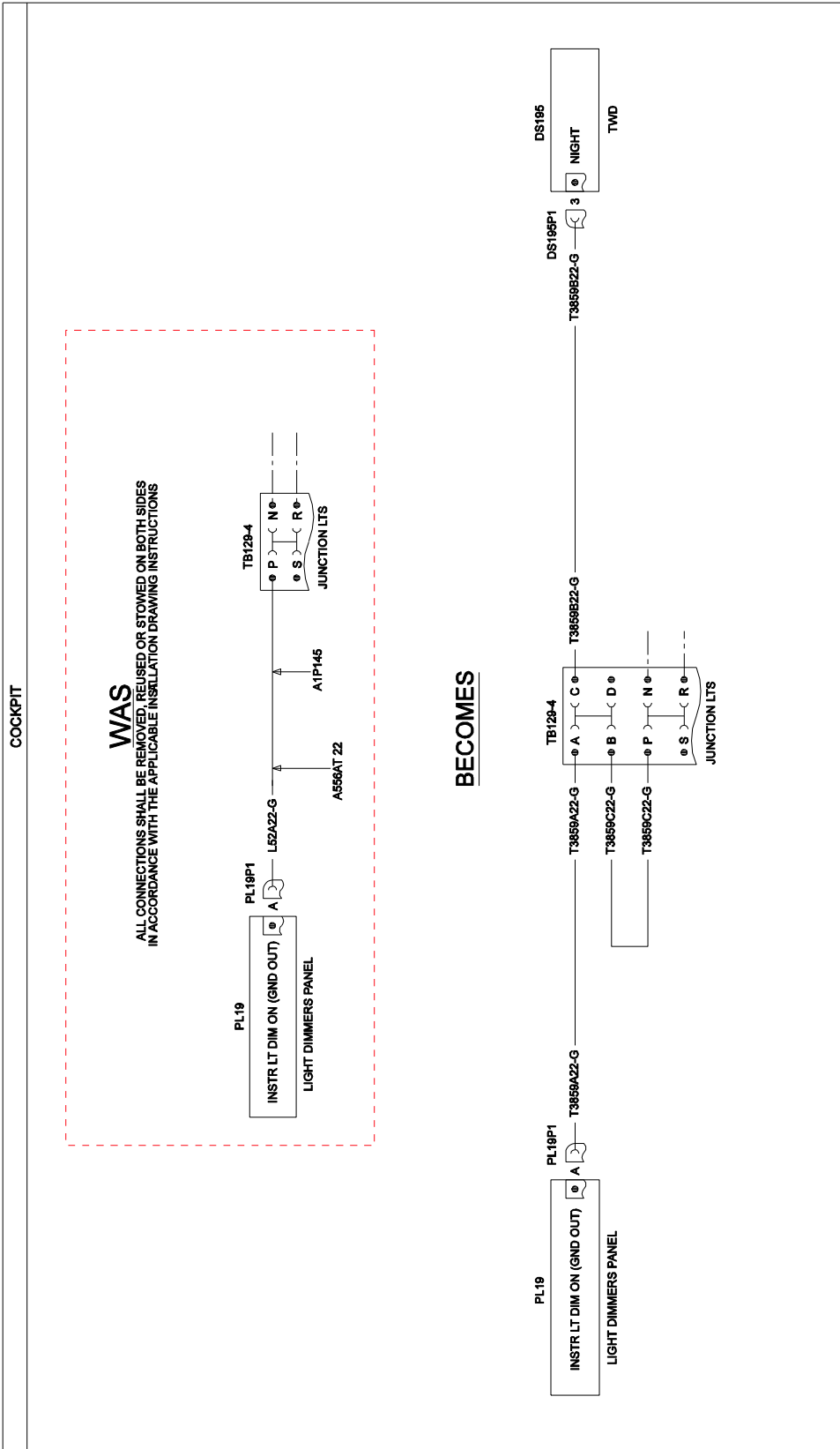


3G9960W00311  
**WIRING DIAGRAM EWP (SIAP)**  
SHEET 10

**FUNCTIONAL NOTES**  
ALL CABLES ARE IN LOOM A2A632 UNLESS SPECIFIED  
ALL CABLES ARE OF TYPE A566AT 22 UNLESS SPECIFIED

Figure 94

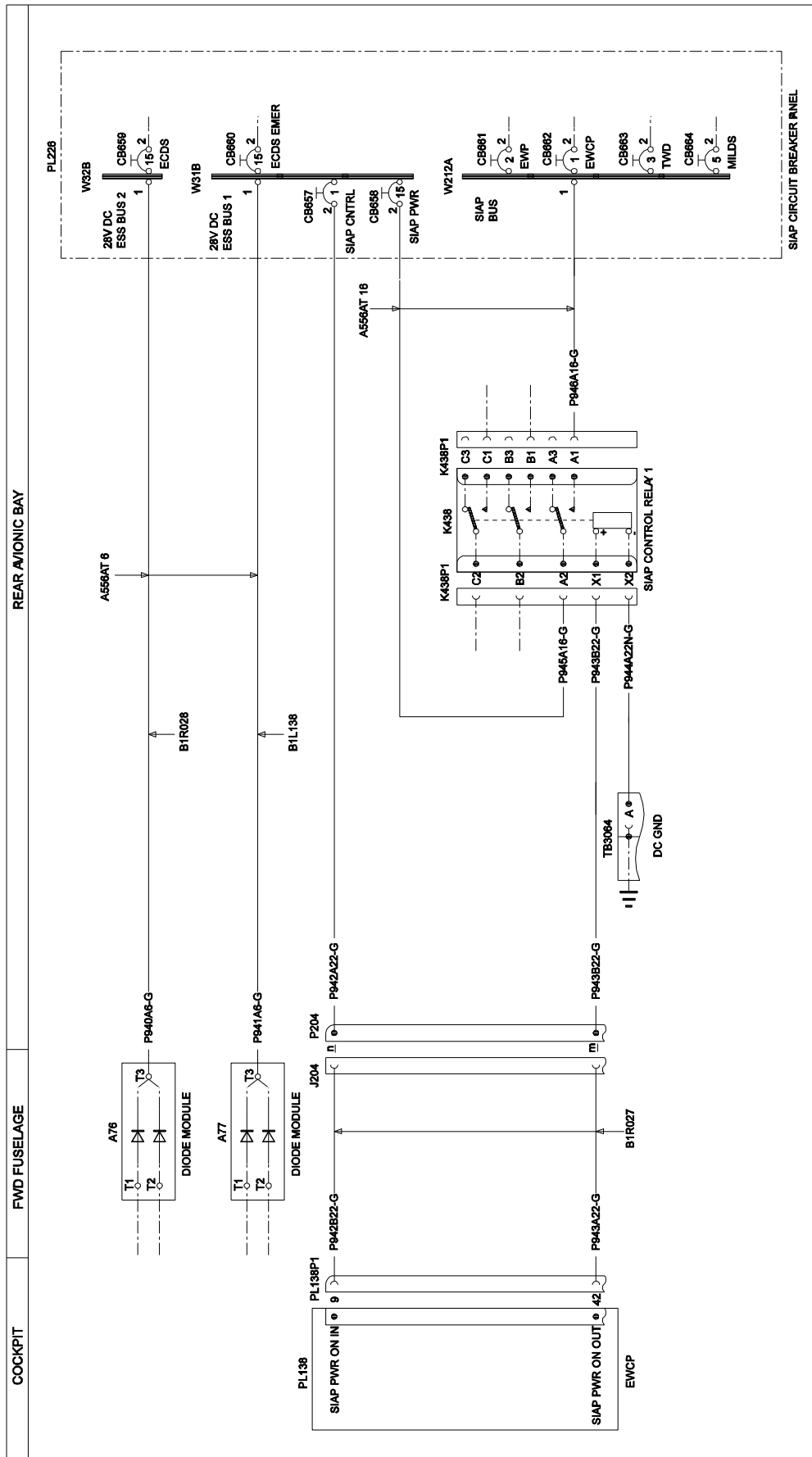
S.B. N°139-632 OPTIONAL  
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**FUNCTIONAL NOTES**  
ALL CABLES ARE IN LOOM A1A997 UNLESS SPECIFIED  
ALL CABLES ARE OF TYPE A556AT 22 UNLESS SPECIFIED

**Figure 95**





**3G2460W09711**  
**WIRING DIAGRAM SIAP POWER**  
SHEET 1

**FUNCTIONAL NOTES**  
ALL CABLES ARE IN LOOM C18356 UNLESS SPECIFIED  
ALL CABLES ARE OF TYPE A556AT 22 UNLESS SPECIFIED

**Figure 97**

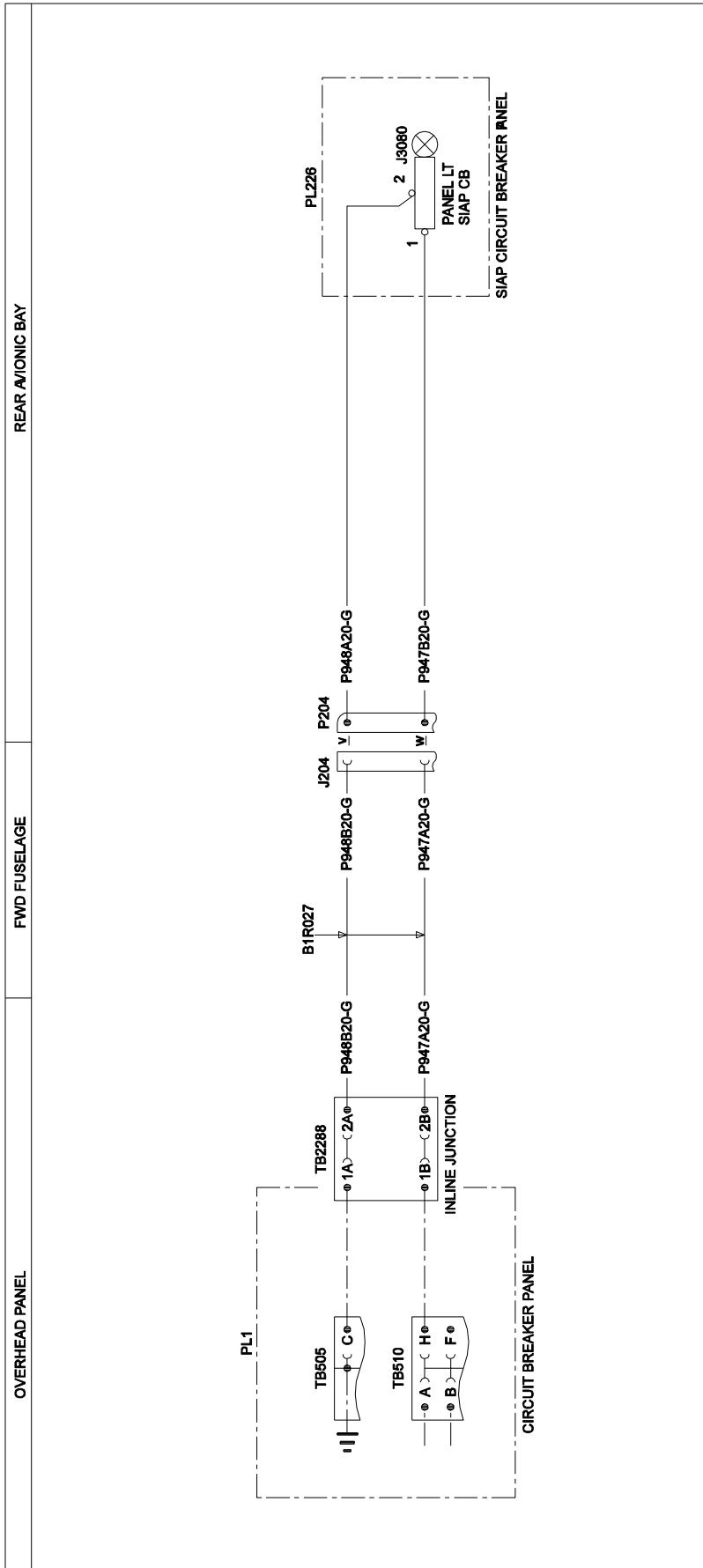


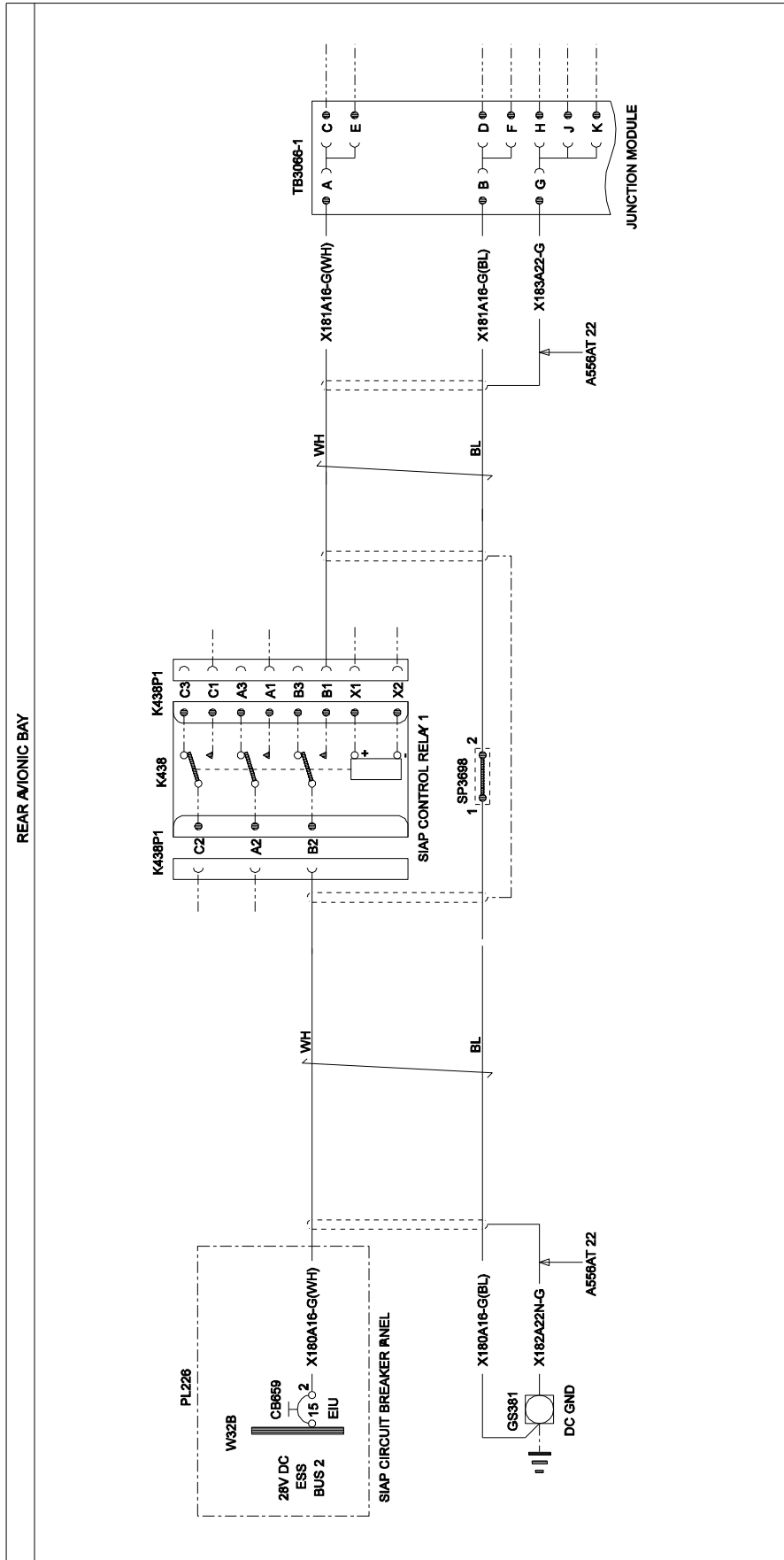
Figure 98

3G2460W09711  
WIRING DIAGRAM SIAP POWER  
SHEET 2

FUNCTIONAL NOTES  
ALL CABLES ARE IN LOOM C1B356 UNLESS SPECIFIED  
ALL CABLES ARE OF TYPE BA556AT 20 UNLESS SPECIFIED

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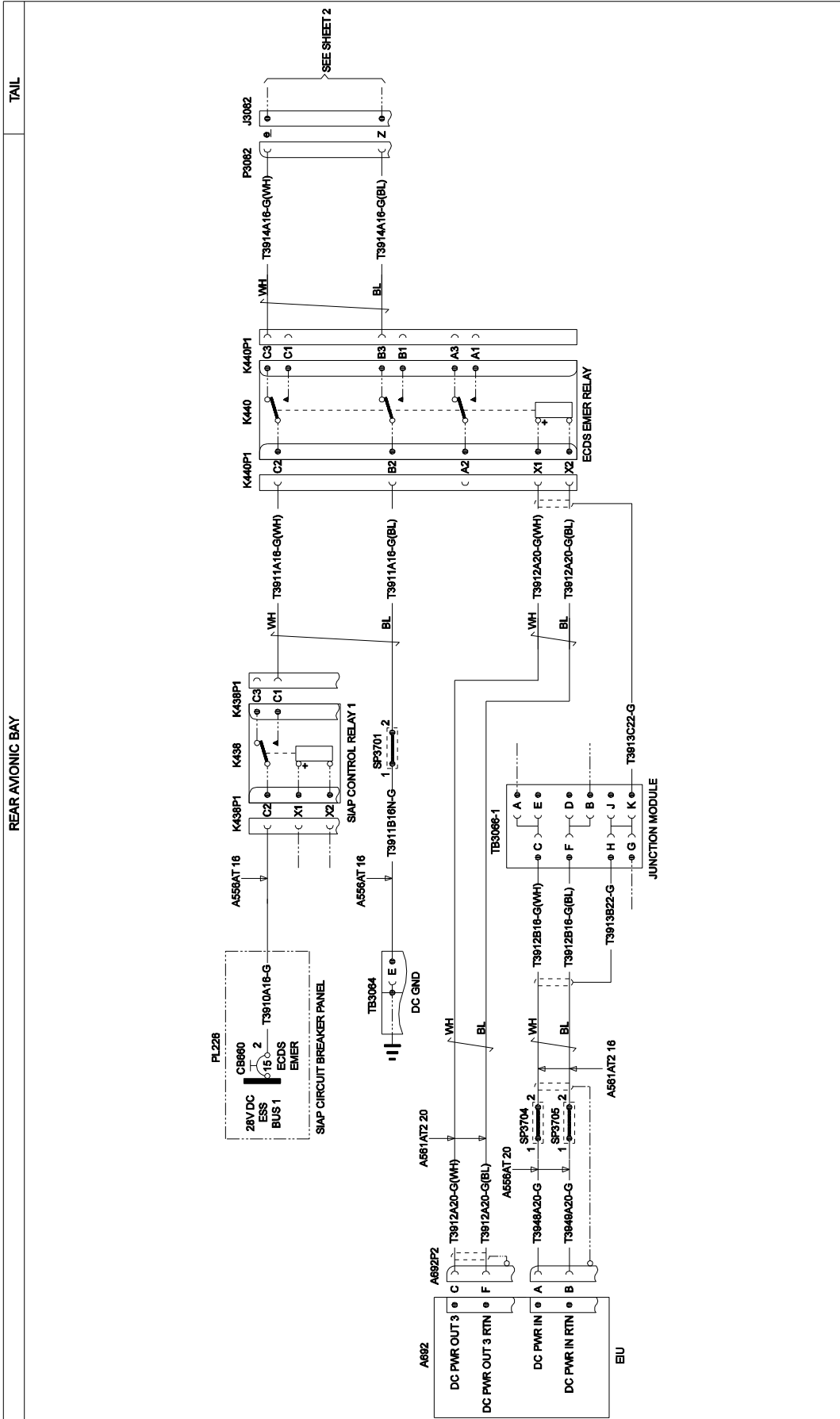




**3G2420W00911**  
**WIRING DIAGRAM ECDS POWER**

**FUNCTIONAL NOTES**  
ALL CABLES ARE IN LOOM C18361 UNLESS SPECIFIED  
ALL CABLES ARE OF TYPE A561AT2 16 UNLESS SPECIFIED

**Figure 99**



TAIL

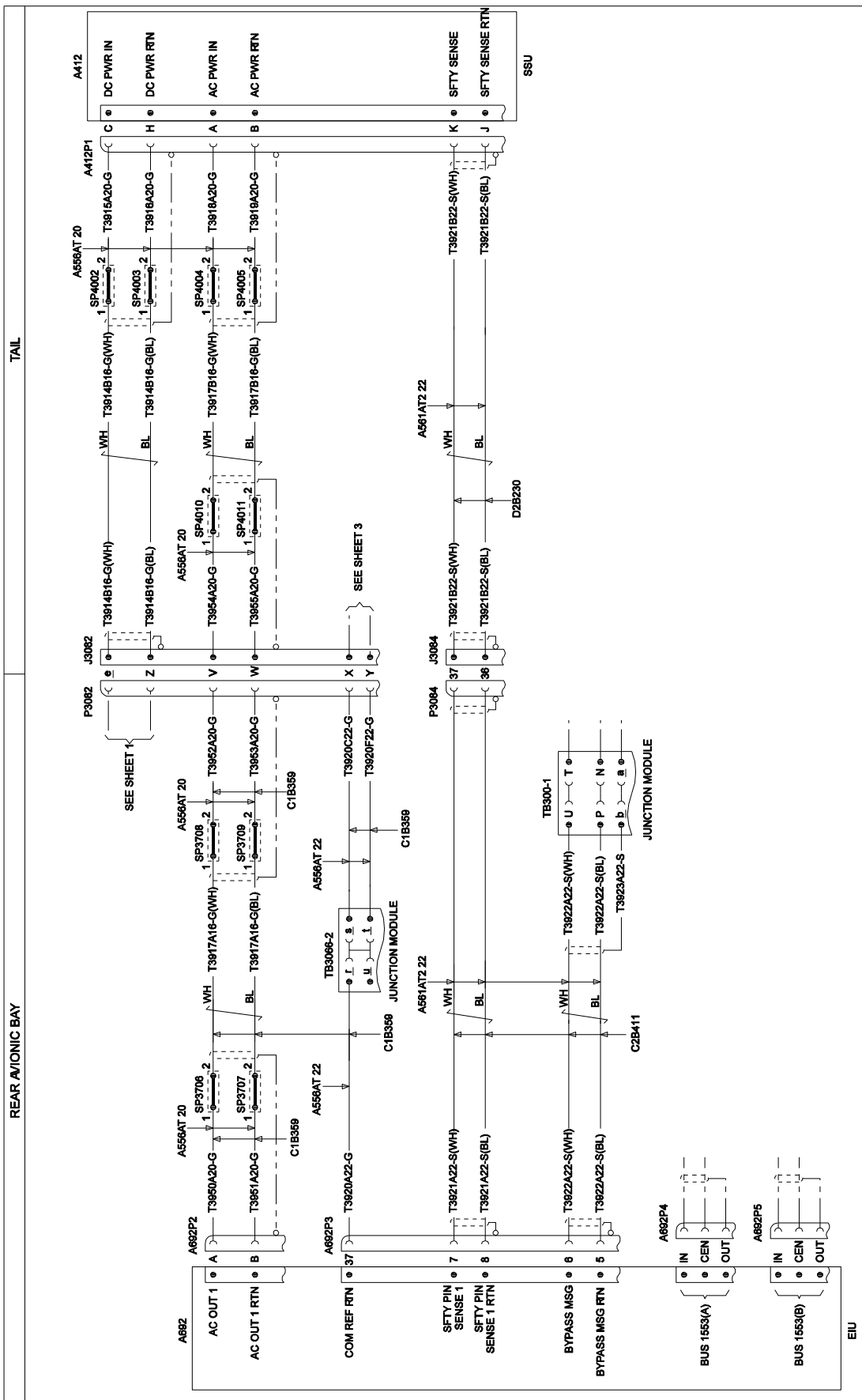
REAR AVIONIC BAY

3G9930W00411  
WIRING DIAGRAM ECDS (SIAP)  
SHEET 1

FUNCTIONAL NOTES  
ALL CABLES ARE IN LOOM C1B359 UNLESS SPECIFIED  
ALL CABLES ARE OF TYPE A560ATZ 16 UNLESS SPECIFIED

Figure 100

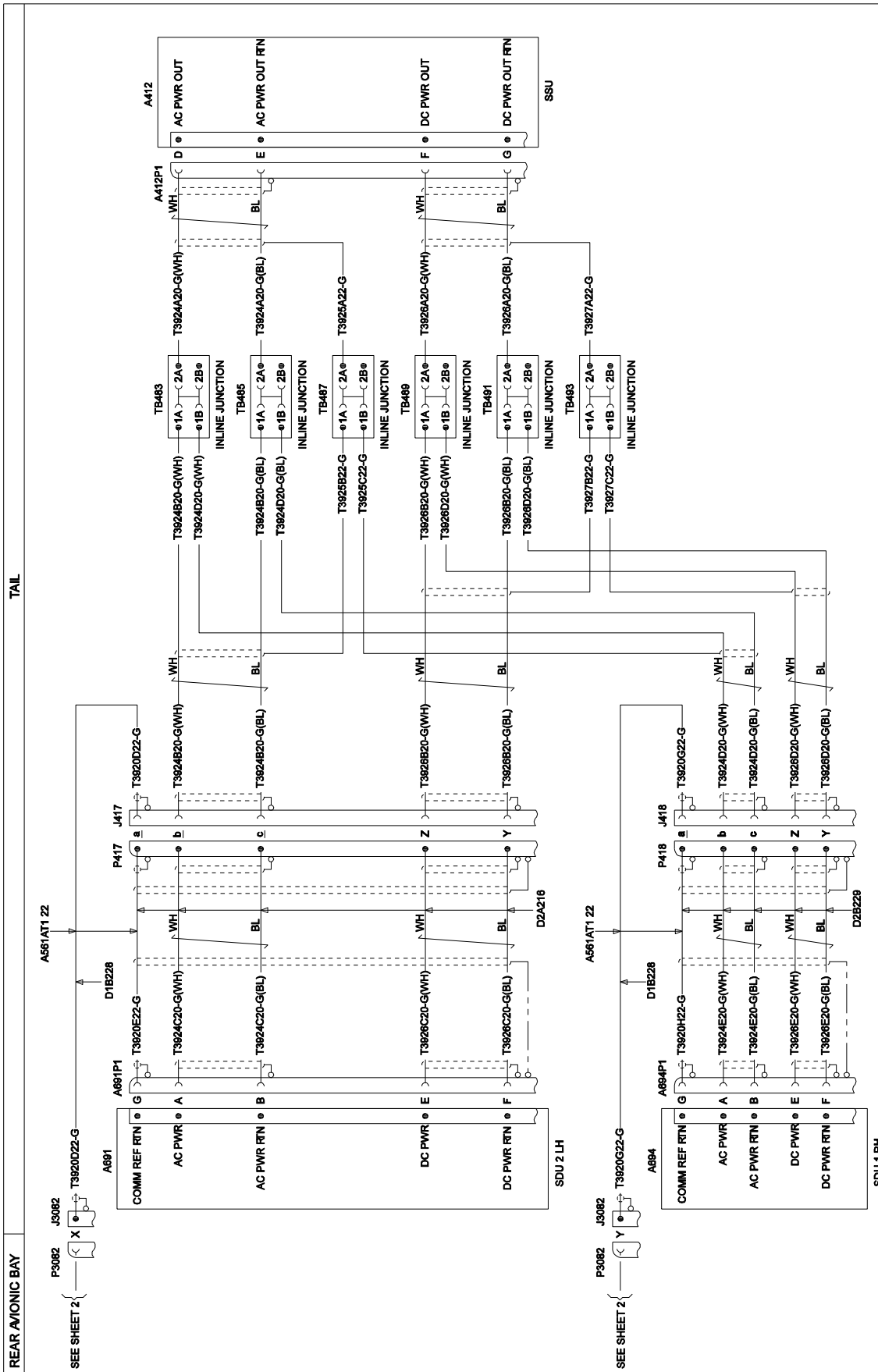
S.B. N°139-632 OPTIONAL  
DATE: September 5, 2024  
REVISION: /



**3G9930W00411**  
**WIRING DIAGRAM ECDS (SIAP)**  
SHEET 2

**FUNCTIONAL NOTES**  
ALL CABLES ARE IN LOOM D1B228 UNLESS SPECIFIED  
ALL CABLES ARE OF TYPE A561AT2 16 UNLESS SPECIFIED

**Figure 101**



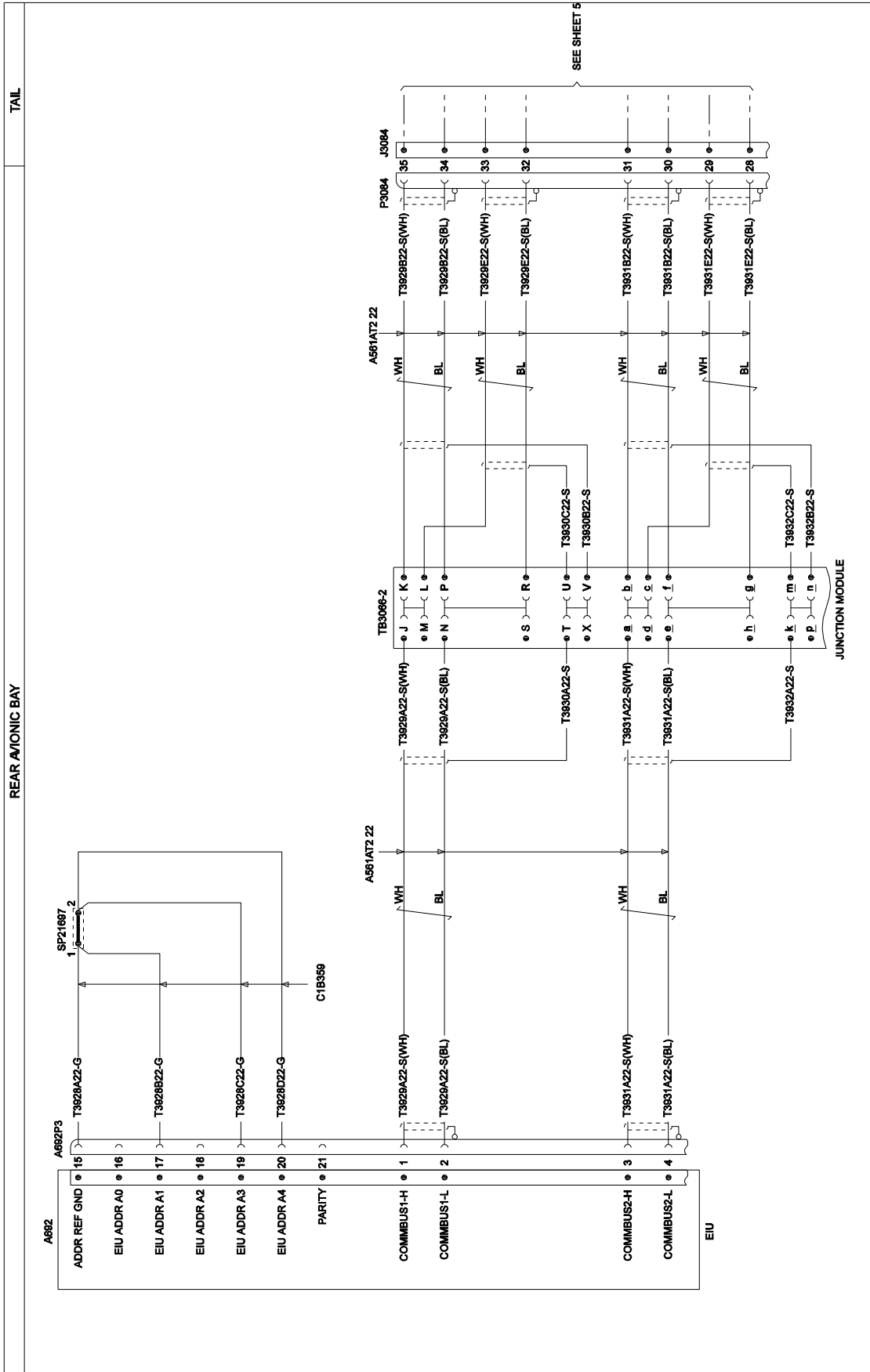
**FUNCTIONAL NOTES**  
ALL CABLES ARE IN LOOM D1A209 UNLESS SPECIFIED  
ALL CABLES ARE OF TYPE A561K2 20 UNLESS SPECIFIED

**Figure 102**

S.B. N°139-632 OPTIONAL  
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REVISION: /

TAIL

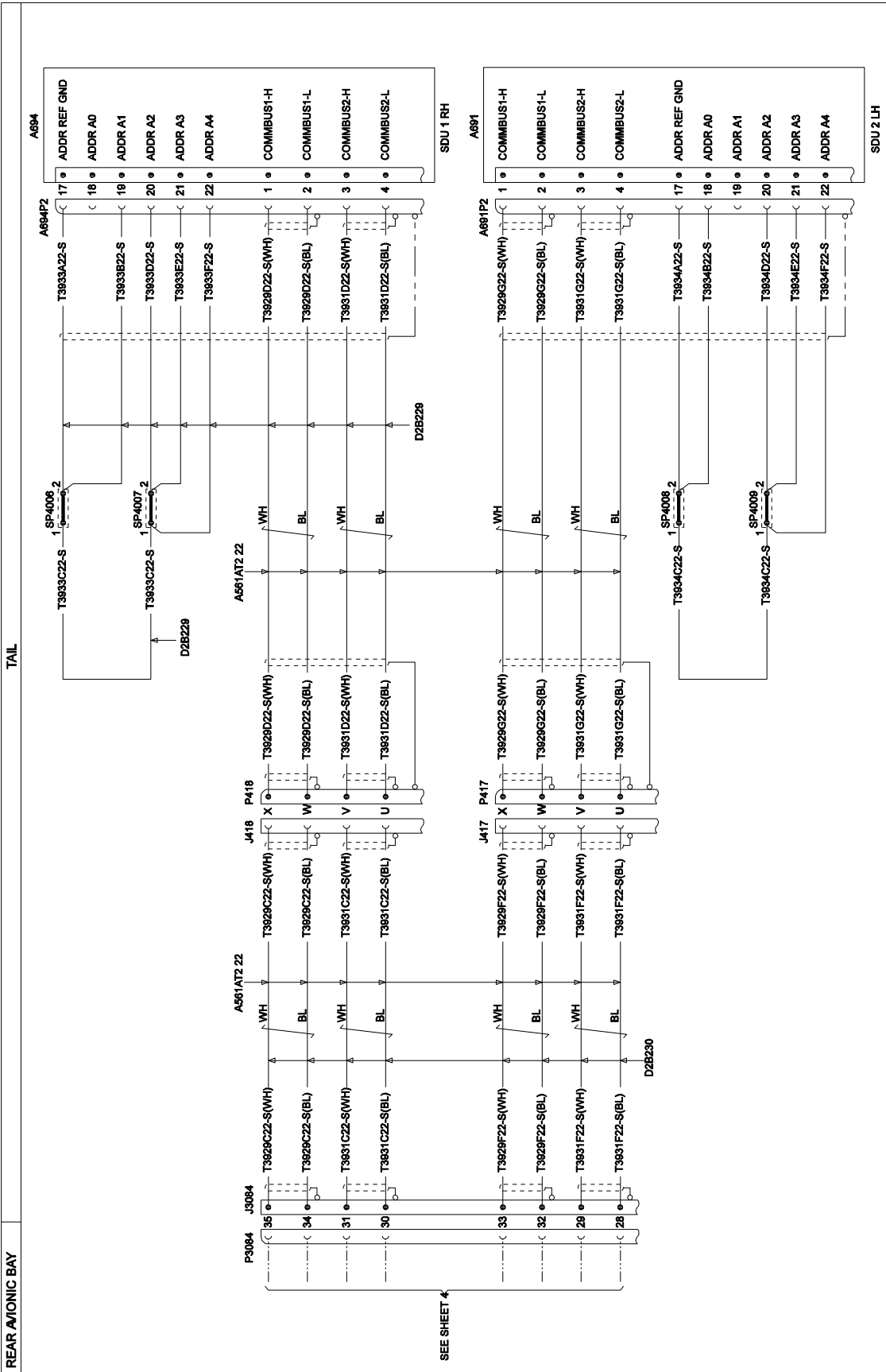
REAR AVIONIC BAY



**3G9930W00411**  
**WIRING DIAGRAM ECDS (SIAP)**  
SHEET 4

**FUNCTIONAL NOTES**  
ALL CABLES ARE IN LOOM C2B411 UNLESS SPECIFIED  
ALL CABLES ARE OF TYPE A566AT 22 UNLESS SPECIFIED

Figure 103

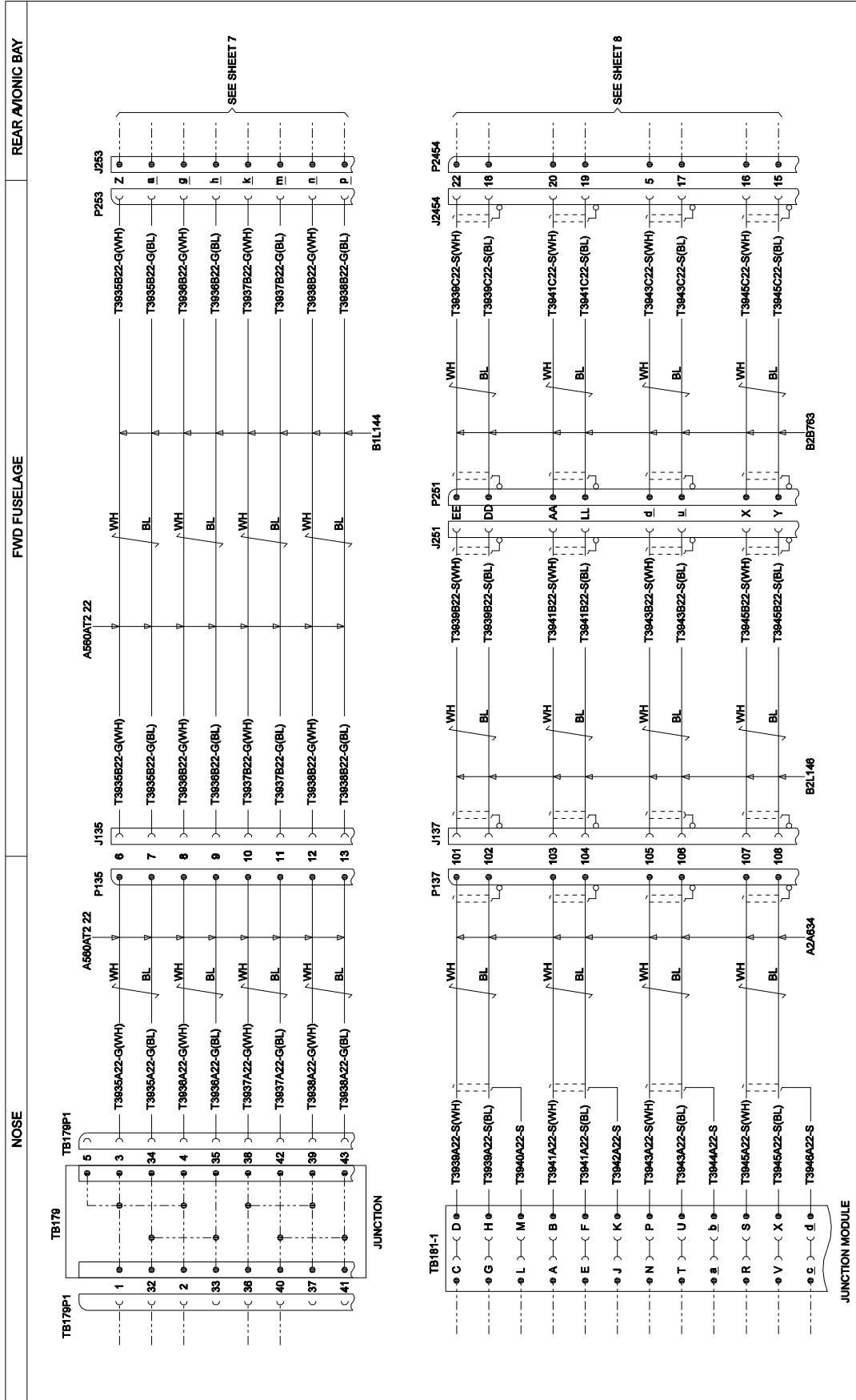


**3G9930W00411**  
**WIRING DIAGRAM ECDS (SIAP)**  
SHEET 5

FUNCTIONAL NOTES  
ALL CABLES ARE IN LOOMD2A216 UNLESS SPECIFIED  
ALL CABLES ARE OF TYPBA566AT 22 UNLESS SPECIFIED

**Figure 104**

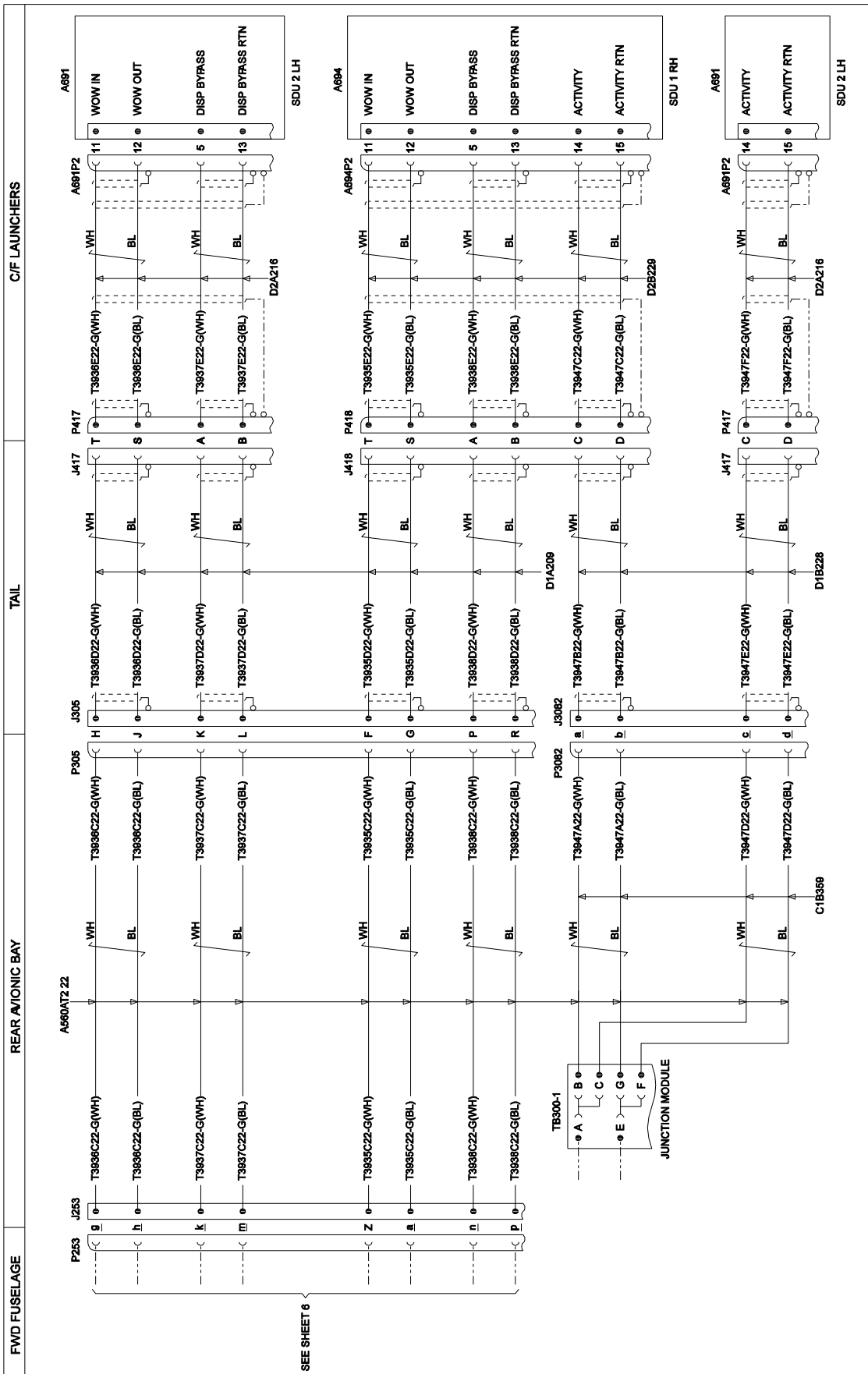
S.B. N°139-632 OPTIONAL  
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**3G9930W00411**  
**WIRING DIAGRAM ECDS (SIAP)**  
 SHEET 6

**FUNCTIONAL NOTES**  
 ALL CABLES ARE IN LOOM A1A699 UNLESS SPECIFIED  
 ALL CABLES ARE OF TYPFA561AT2 Z2 UNLESS SPECIFIED

Figure 105



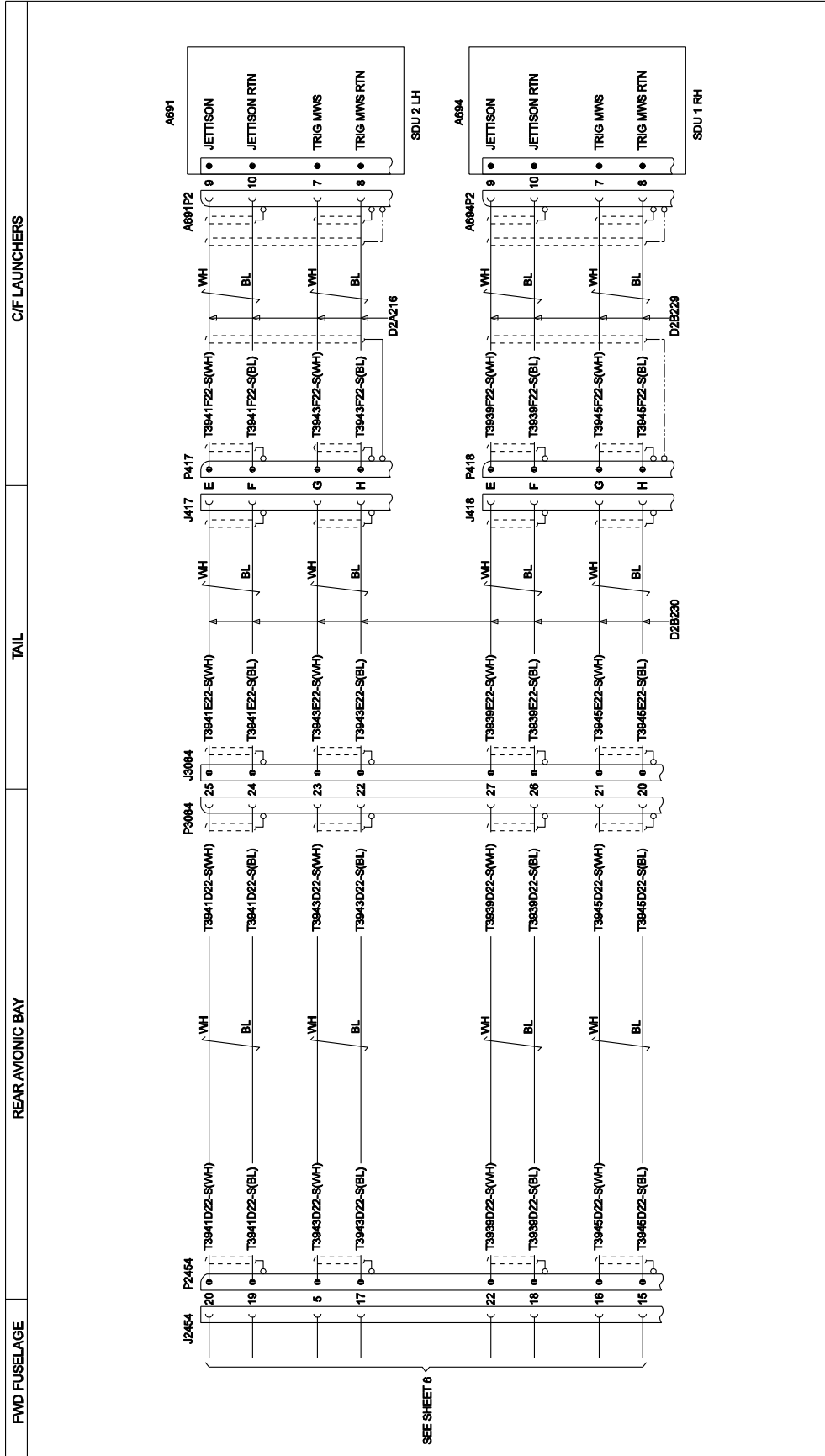
**3G9930W00411**  
**WIRING DIAGRAM ECDS (SIAP)**  
SHEET 7

FUNCTIONAL NOTES  
ALL CABLES ARE IN LOOM C1A382 UNLESS SPECIFIED  
ALL CABLES ARE OF TYPE BA561AT2 22 UNLESS SPECIFIED

Figure 106

S.B. N°139-632 OPTIONAL  
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REVISION: /

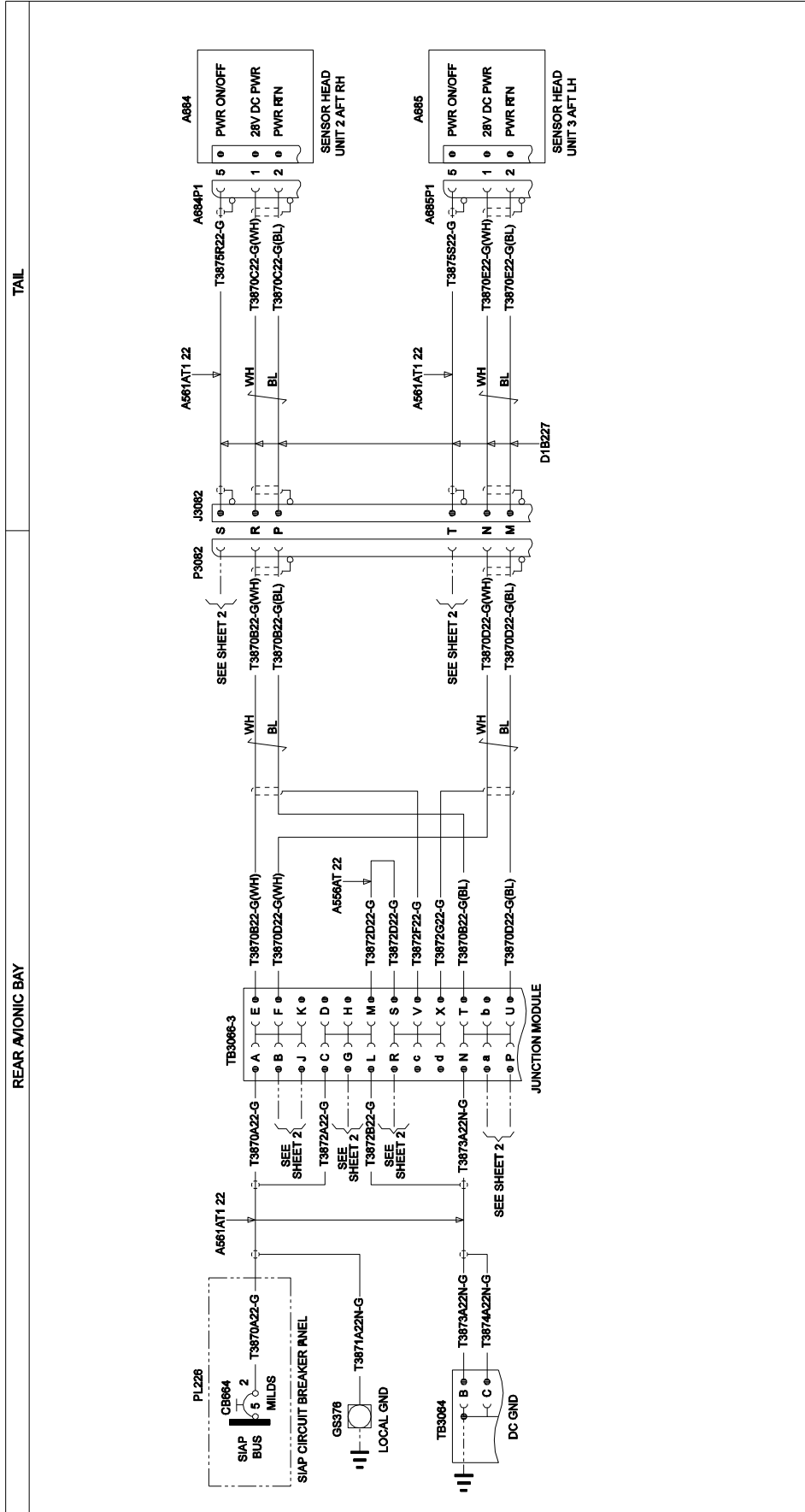




**3G9930W00411**  
**WIRING DIAGRAM ECDS (SIAP)**  
SHEET 8

**FUNCTIONAL NOTES**  
ALL CABLES ARE IN LOOM C28411 UNLESS SPECIFIED  
ALL CABLES ARE OF TYPE A561AT2 Z2 UNLESS SPECIFIED

**Figure 107**



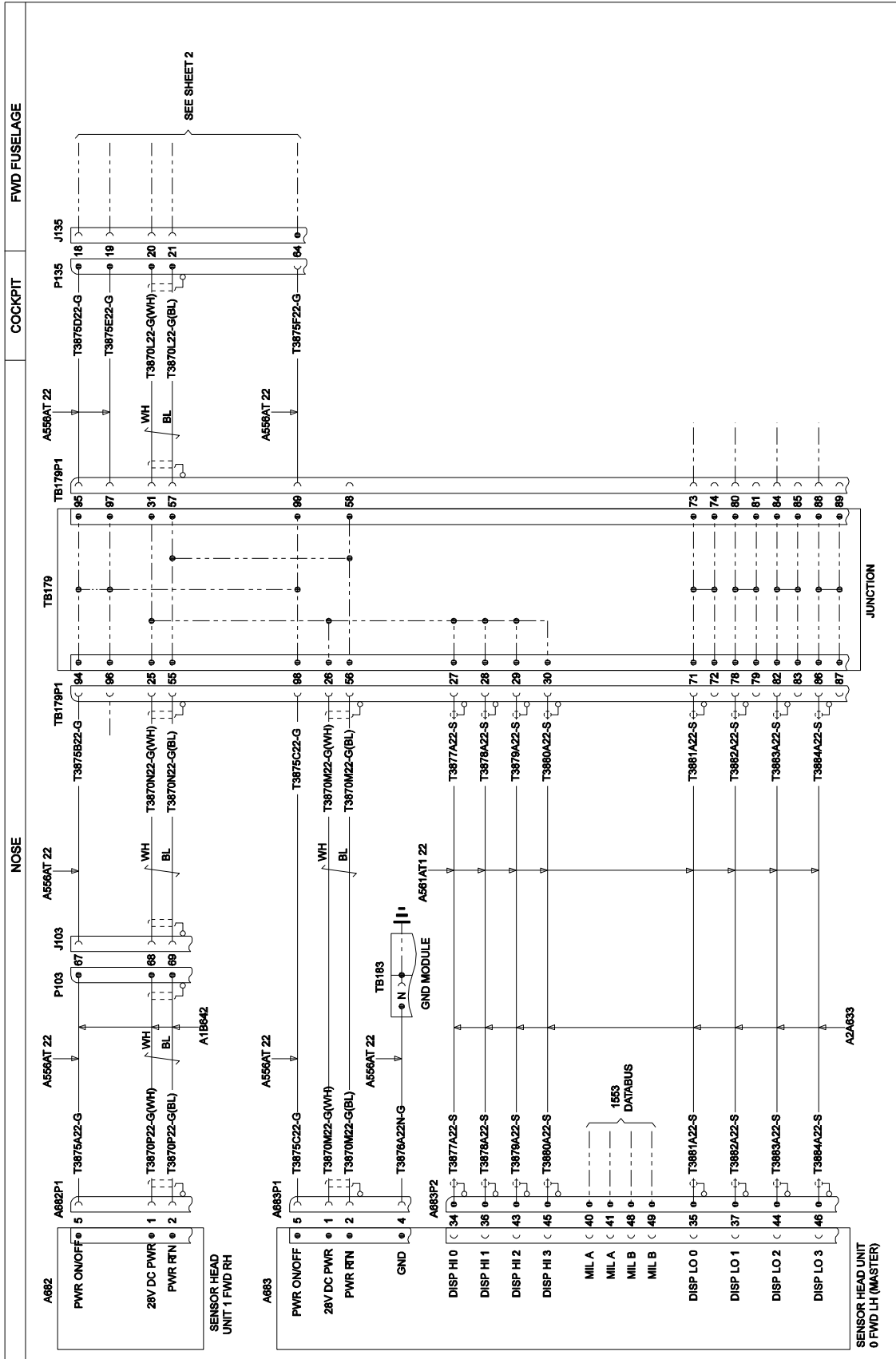
**3G9350W06311**  
**WIRING DIAGRAM MILDS (SIAP)**  
SHEET 1

**FUNCTIONAL NOTES**  
ALL CABLES ARE IN LOOM C1B358 UNLESS SPECIFIED  
ALL CABLES ARE OF TYPE A561AT2 22 UNLESS SPECIFIED

**Figure 108**

S.B. N°139-632 OPTIONAL  
DATE: September 5, 2024  
REVISION: /





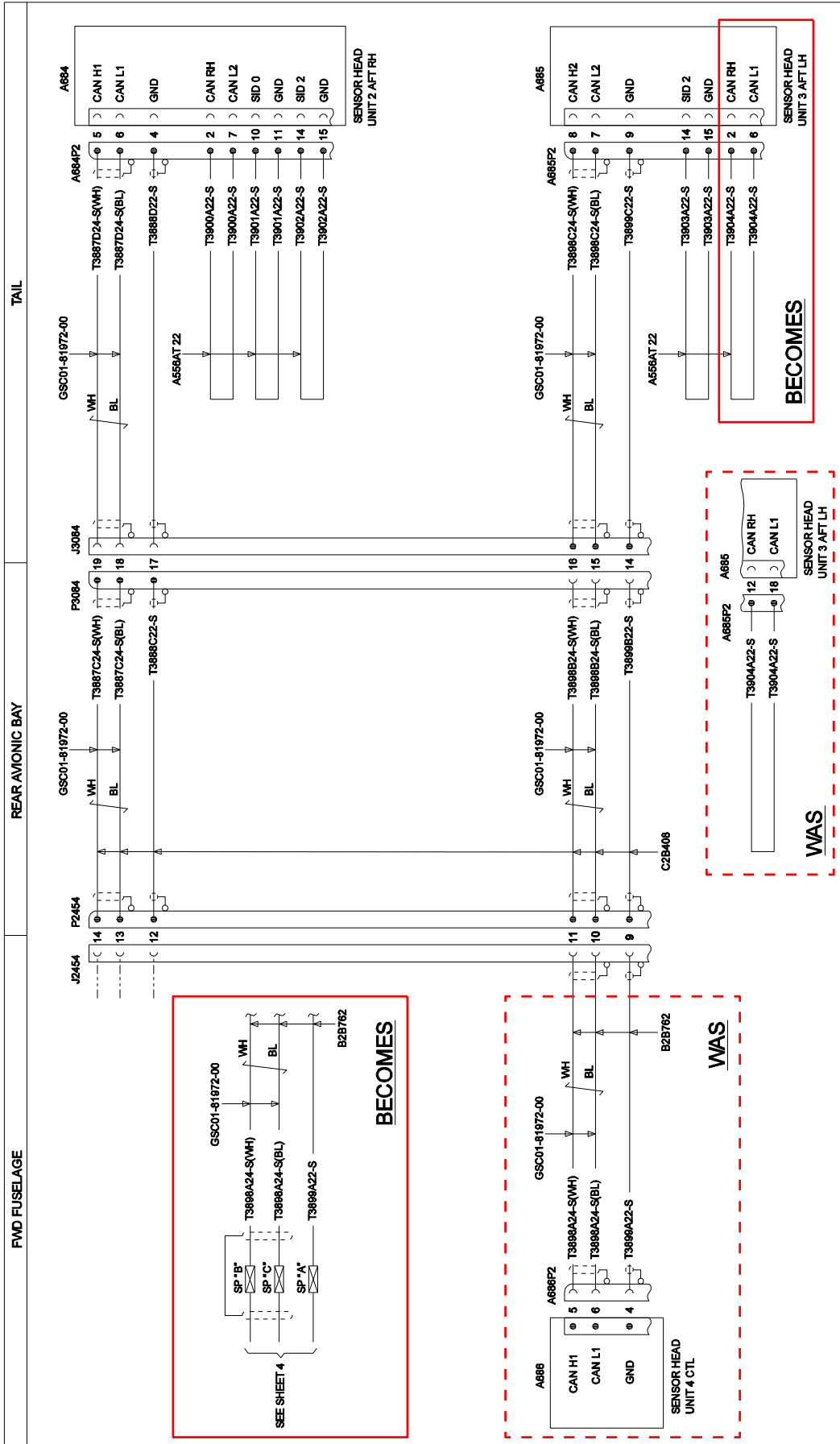
**3G9350W06311**  
**WIRING DIAGRAM MILDS (SIAP)**  
SHEET 3

**FUNCTIONAL NOTES**  
ALL CABLES ARE IN LOOM A1A698 UNLESS SPECIFIED  
ALL CABLES ARE OF TYPE A561AT2 22 UNLESS SPECIFIED

**Figure 110**

S.B. N°139-632 OPTIONAL  
DATE: September 5, 2024  
REVISION: /





3G9350W06311  
WIRING DIAGRAM MILDS (SIAP)  
SHEET 5

FUNCTIONAL NOTES  
ALL CABLES ARE IN LOOM D2B228 UNLESS SPECIFIED  
ALL CABLES ARE OF TYPE A561AT1 22 UNLESS SPECIFIED

Figure 112

S.B. N°139-632 OPTIONAL  
DATE: September 5, 2024  
REVISION: /

PANEL INSTALLATION ON INTERSEAT CONSOLE

BECOMES



WAS

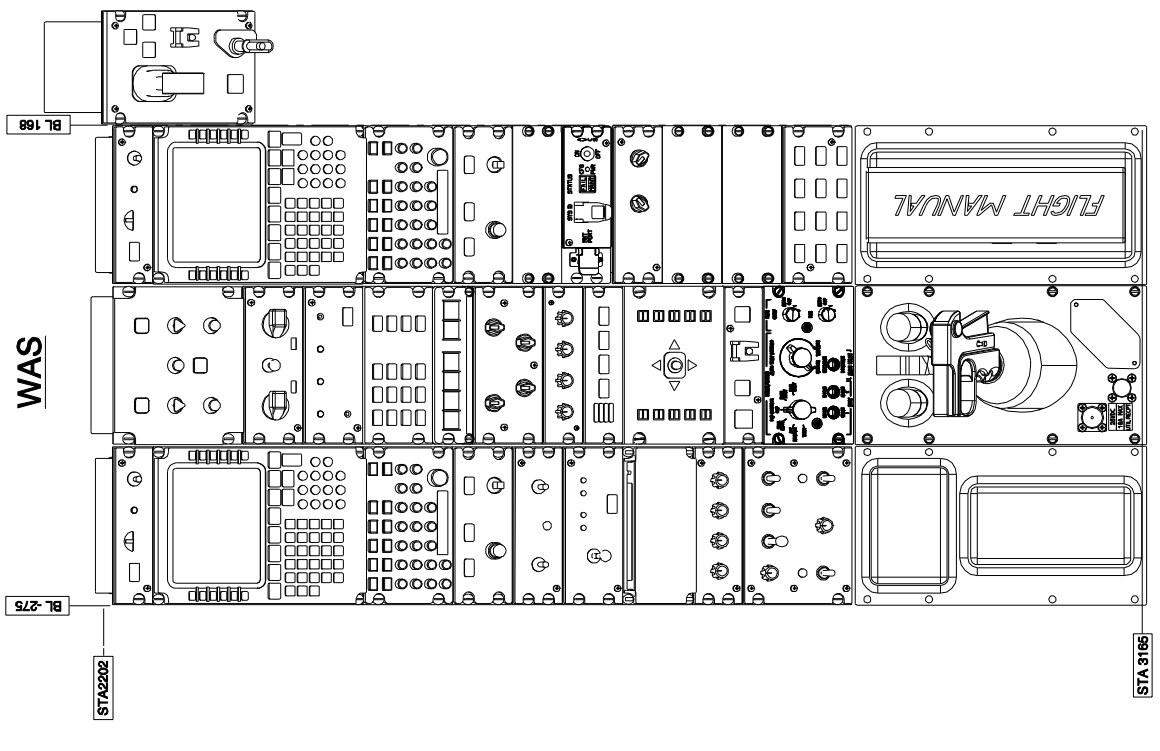


Figure 113

# ANNEX A

## SIAP FUNCTIONAL TEST



## TEST PREREQUISITES

1. Check that all the SIAP basic configuration P/Ns are correct. Fill table on the right.	ITEM	P/N	QTY	CHECK	
	EWCP	881-0790-03-101	1	<input type="checkbox"/>	
	EWP	EA9900V511-001	1	<input type="checkbox"/>	
	TWD	EA9900V513-001	1	<input type="checkbox"/>	
	MILDS	50.2860.924.00	4	<input type="checkbox"/>	
	SDU	1160-504-03	2	<input type="checkbox"/>	
	SSU	MS17986C509 pin NAS1756-24 band	2	<input type="checkbox"/>	
	EIU	1159-504-03	1	<input type="checkbox"/>	
Cyclic Grip	3G6712V00260	2	<input type="checkbox"/>		
2. The SIAP basic configuration wiring harnesses pin to pin must have been performed on the helicopter					<input type="checkbox"/>
3. Verify no decoy (chaff and/or flare) is loaded into the SDU. <b><u>Warning:</u></b> the procedure shall be executed without decoys in the SDU, because the procedure sets the SDU to fire mode in flight (through the WOW switches).					<input type="checkbox"/>

## TOOLS REQUIRED & TEST SETUP

1.	DC External Power Bench (28VDC).	<input type="checkbox"/>
2.	Tester, conductor pins and wire extensions for troubleshooting operation.	<input type="checkbox"/>
3.	WOW Switches	<input type="checkbox"/>
4.	Jumpers	<input type="checkbox"/>
5.	Headset kit for ICS system	<input type="checkbox"/>
6.	28 VDC generator	<input type="checkbox"/>
7.	<p>USB pen, 64 MB minimum.</p> <p><i>Before starting the procedure for the first time, the USB shall be sent to LHD Engineering Department for library load. The following SIAP, TWD and AUDIO libraries for testing shall be loaded into the USB:</i></p> <ul style="list-style-type: none"> <li>○ 'SA3_TWD.STL'</li> <li>○ 'ANNA.SAU'</li> <li>○ 'SA3_ATP_LIB_JAC.SLB'</li> </ul> <p>(these libraries were generated by a dedicated SW)</p>	<input type="checkbox"/>
8.	<p>FL-AGE TEST SET M-008/B    PN 8009.001-01</p> <p><i>Composed of:</i></p> <ul style="list-style-type: none"> <li>○ Control unit Assy P/N 1209.500-02</li> <li>○ Active Interface Adapter Assy P/N 1209.501-02</li> </ul>	<input type="checkbox"/>
9.	EWS Threats simulator mod MISSIM (PN 1012267-101) or BARINGA MWR Simulator (P/N EU00018-01-FG)	<input type="checkbox"/>

## CIRCUIT BREAKERS CONFIGURATION

1. Verify that all the Electrical Distribution System Circuit Breakers are pushed in except IGN #1/2 and START #1/2.	<input type="checkbox"/>																		
2. Verify that all the avionic Circuit Breakers are pushed in.	<input type="checkbox"/>																		
3. Verify the following circuit breakers are Pulled out:	<table border="1"> <thead> <tr> <th>CIRCUIT BREAKER</th> <th>CHECK</th> </tr> </thead> <tbody> <tr> <td>SIAP CNTRL (CB657 1A)</td> <td><input type="checkbox"/></td> </tr> <tr> <td>SIAP PWR (CB658 15A)</td> <td><input type="checkbox"/></td> </tr> <tr> <td>ECDS EMER (CB660 15A)</td> <td><input type="checkbox"/></td> </tr> <tr> <td>ECDS (CB659-15A)</td> <td><input type="checkbox"/></td> </tr> <tr> <td>MILDS (CB664 5A)</td> <td><input type="checkbox"/></td> </tr> <tr> <td>EWP (CB661 2A)</td> <td><input type="checkbox"/></td> </tr> <tr> <td>EWCP (CB662 1A)</td> <td><input type="checkbox"/></td> </tr> <tr> <td>TWD (CB663 3A)</td> <td><input type="checkbox"/></td> </tr> </tbody> </table>	CIRCUIT BREAKER	CHECK	SIAP CNTRL (CB657 1A)	<input type="checkbox"/>	SIAP PWR (CB658 15A)	<input type="checkbox"/>	ECDS EMER (CB660 15A)	<input type="checkbox"/>	ECDS (CB659-15A)	<input type="checkbox"/>	MILDS (CB664 5A)	<input type="checkbox"/>	EWP (CB661 2A)	<input type="checkbox"/>	EWCP (CB662 1A)	<input type="checkbox"/>	TWD (CB663 3A)	<input type="checkbox"/>
CIRCUIT BREAKER	CHECK																		
SIAP CNTRL (CB657 1A)	<input type="checkbox"/>																		
SIAP PWR (CB658 15A)	<input type="checkbox"/>																		
ECDS EMER (CB660 15A)	<input type="checkbox"/>																		
ECDS (CB659-15A)	<input type="checkbox"/>																		
MILDS (CB664 5A)	<input type="checkbox"/>																		
EWP (CB661 2A)	<input type="checkbox"/>																		
EWCP (CB662 1A)	<input type="checkbox"/>																		
TWD (CB663 3A)	<input type="checkbox"/>																		
4. The helicopter external power port shall be connected to the External Power Bench set to 28V DC	<input type="checkbox"/>																		

## EWP, EWCP, TWD POWER CHECKS

1. With the helicopter power set to OFF, disconnect the following connectors: PL138P1 (EWCP) DS195P1 (TWD) A690P1 and A690P2 (EWP) A683P2 (Sensor Head Unit 0) A691P2 (SDU 2 LH) A694P2 (SDU 1 RH)	<input type="checkbox"/>
2. Verify the diode presence and its correct installation ( $\geq 0.5VDC$ reading on the tester display) (multi-meter set for diode measurement) between the following pins: 2.1. A683P2-35 (Pos. Anode) and A690P1A-15 (Neg. Cathode) 2.2. A683P2-35 (Pos. Anode) and PL138P1A-1 (Neg. Cathode)	<input type="checkbox"/>
3. Verify the diode presence and its correct installation ( $\geq 0.5VDC$ reading on the tester display) (multi-meter set for diode measurement) between the following pins: 3.1. A683P2-37 (Pos. Anode) and A690P1A-19 (Neg. Cathode) 3.2. A683P2-37 (Pos. Anode) and PL138P1A-2 (Neg. Cathode)	<input type="checkbox"/>
4. Verify the diode presence and its correct installation ( $\geq 0.5VDC$ reading on the tester display) (multi-meter set for diode measurement) between the following pins:	<input type="checkbox"/>

4.1. A683P2-44 (Pos. Anode) and A690P1A-5 (Neg. Cathode)	
4.2. A683P2-44 (Pos. Anode) and PL138P1A-3 (Neg. Cathode)	
5. Verify the diode presence and its correct installation ( $\geq 0.5\text{VDC}$ reading on the tester display) (multi-meter set for diode measurement) between the following pins:	<input type="checkbox"/>
5.1. A683P2-46 (Pos. Anode) and A690P1A-7 (Neg. Cathode)	
5.2. A683P2-46 (Pos. Anode) and PL138P1A-4 (Neg. Cathode)	
6. Verify the continuity between the following pins:	<input type="checkbox"/>
6.1. PL138-66P1 and A691P2-7	
6.2. PL138-54P1 and A691P2-8	
7. Verify the continuity between the following pins:	<input type="checkbox"/>
7.1. PL138-63P1 and A694P2-7	
7.2. PL138-21P1 and A694P2-8	
8. Verify the continuity between the following pins:	<input type="checkbox"/>
8.1. PL138P1-65 and A691P2-7	
8.2. PL138P1-39 and A691P2-8	
9. Verify the continuity between the following pins:	<input type="checkbox"/>
9.1. PL138P1-64 and A694P2-7	
9.2. PL138P1-37 and A694P2-8	
10. Reconnect connectors A683P2, A691P2, A694P2.	<input type="checkbox"/>
11. Power ON the helicopter.	<input type="checkbox"/>
12. Push in the CB657 (SIAP CNTRL) and the CB658 (SIAP PWR).	<input type="checkbox"/>
13. Verify the voltage across pins 9 and 6 of the connector PL138P1 (EWCP) is 28 V DC. The PIN 9 is the positive pin.	<input type="checkbox"/>
14. Verify the voltage across pins 33 and 5 of the connector PL138P1 (EWCP) is 0 V DC.	<input type="checkbox"/>
15. Verify the voltage across pins 1 and 2 of the connector DS195P1 (TWD) is 0 V DC.	<input type="checkbox"/>
16. Verify the voltage across pins 8 and 9 of the connector A690P2 (EWP) is 0 V DC.	<input type="checkbox"/>
17. Pull out the CB657 (SIAP CNTRL)	<input type="checkbox"/>
18. Put a jumper between the pins 9 and 42 of connector PL138P1 (EWCP).	<input type="checkbox"/>
19. Push in the CB657 (SIAP CNTRL) & CB662 (EWCP)	<input type="checkbox"/>
20. Verify the voltage across pins 33 and 5 of the connector PL138P1 (EWCP) is 28 VDC. The PIN 33 is the positive pin.	<input type="checkbox"/>

21. Push IN CB663 (TWD)	<input type="checkbox"/>
22. Verify the voltage across pins 1 and 6 of the connector DS195P1 (TWD) is 28 VDC. The PIN 1 is the positive pin.	<input type="checkbox"/>
23. Verify the voltage across pins 10 and 6 of the connector DS195P1 (TWD) is 28 VDC. The PIN 10 is the positive pin.	<input type="checkbox"/>
24. Verify the voltage across pins 8 and 9 of the connector A690P2 (EWP) is 28 VDC. The PIN 8 is the positive pin.	<input type="checkbox"/>
25. Push IN CB661 (EWP)	<input type="checkbox"/>
26. Lift up the flip guard of the Late Arm Switch on the PLT Cyclic stick and press the C/F FIRE momentary push-button and verify the 28 V DC is present across the following pins: <ul style="list-style-type: none"> <li>- 33 and 70 of connector A690P1</li> <li>- 36 and 71 of connector A690P1</li> <li>- 14 and 29 of connector PL138P1</li> </ul> (the positive pins are: 33, 36, 14)	<input type="checkbox"/>
27. Lift up the flip guard of the Late Arm Switch on the CPLT Cyclic stick and press the C/F FIRE momentary push-button and verify the 28 V DC is present across the following pins: <ul style="list-style-type: none"> <li>- 34 and 71 of connector A690P1</li> <li>- 9 and 71 of connector A690P1</li> <li>- 15 and 29 of connector PL138P1</li> </ul> (the positive pins are: 34, 9, 15)	<input type="checkbox"/>
28. Set the tester for conductivity test. Connect the black probe to the ground and the red probe to the following pins one at the time: <ul style="list-style-type: none"> <li>- 3 of the connector DS195P1 (instrument knob)</li> <li>- 23 of the connector PL138P1 (console knob)</li> </ul> Enter the Night condition and verify a ground is measured by the tester.	<input type="checkbox"/>
29. Put the tester in diode test. Connect the black probe to the ground and the red probe to the following pins one at the time: <ul style="list-style-type: none"> <li>- 2 of the connector DS195P1</li> <li>- 24 of the connector PL138P1</li> </ul> Enter the NVG condition and verify that the voltage measured by the tester drops (about 0.6). <b>NOTE: Applicable only if the helicopter is NVG compatible</b>	<input type="checkbox"/>
30. With WOW simulator set to Ground verify the <u>ground</u> in the following pins one at the item: <ul style="list-style-type: none"> <li>- 10 of the connector PL138P1</li> <li>- 11 of the connector PL138P1</li> </ul>	<input type="checkbox"/>
31. Set the WOW Switches to FLIGHT and verify the change of the status ( <u>Open</u> ) with respect to the previous test of the following pins:	<input type="checkbox"/>

- 10 of the connector PL138P1 - 11 of the connector PL138P1	
32. Move the instrument dimming control and verify the voltage of the pin 11 of the connector DS195P1 moves from 0 to 5 V.	<input type="checkbox"/>
33. Move the console dimming control and verify the voltage of the pins 18 of connector PL138P1 moves from 0 to 5 V.	<input type="checkbox"/>
34. Pull out the CB657 (SIAP CNTRL), remove the jumper on connector PL138P1 (EWCP)	<input type="checkbox"/>
35. Verify the continuity between the following pins: 35.1. A690P1-73 and PL138P1-59 35.2. A690P1-30 and PL138P1-34 35.3. A690P1-31 and PL138P1-35 35.4. A690P1-32 and PL138P1-36 35.5. A690P1-41 and PL138P1-43 35.6. A690P1-40 and PL138P1-44 35.7. A690P1-26 and PL138P1-57 35.8. A690P1-27 and PL138P1-50 35.9. A690P1-28 and PL138P1-48 35.10. A690P1-29 and PL138P1-40	<input type="checkbox"/>
36. Reconnect all connectors previously disconnected.	<input type="checkbox"/>

### ECDS POWER CHECKS

1. Disconnect the mating connector K438P1	<input type="checkbox"/>				
2. Push in following circuit breakers: CB657 (SIAP CNTRL) – CB659 (ECDS) and CB660 (ECDS EMER) and verify that the CB658 (SIAP PWR) is pushed in	<input type="checkbox"/>				
3. Verify 28 VDC is present on K438P1-A2, K438P1-B2 and K438P1-C2	<input type="checkbox"/>				
4. Pull out the following circuit breakers: CB657 – CB658 – CB659 and CB660	<input type="checkbox"/>				
5. Verify about 0 VDC is present on K438P1-A2, K438P1-B2 and K438P1-C2	<input type="checkbox"/>				
6. Reconnect the mating connector K438P1	<input type="checkbox"/>				
7. Disconnect the following connectors:	<table border="1"> <tr> <td>A691P1 (SDU 2 LH)</td> <td><input type="checkbox"/></td> </tr> <tr> <td>A694P1 (SDU 1 RH)</td> <td><input type="checkbox"/></td> </tr> </table>	A691P1 (SDU 2 LH)	<input type="checkbox"/>	A694P1 (SDU 1 RH)	<input type="checkbox"/>
A691P1 (SDU 2 LH)	<input type="checkbox"/>				
A694P1 (SDU 1 RH)	<input type="checkbox"/>				
8. Ensure the Safety Pin is inserted in the SSU	<input type="checkbox"/>				

9. Push in the following circuit breakers: CB657 – CB658 – CB659 and CB660	<input type="checkbox"/>
10. Verify the voltage across the pins A and B of A691P1 and A694P1 is 0 VDC (the positive pins is: A)	<input type="checkbox"/>
11. Verify the voltage across the pins E and F of A691P1 and A694P1 is 0 VDC (the positive pins is: E)	<input type="checkbox"/>
12. Move the EWCP master selector to STBY position	<input type="checkbox"/>
13. Verify the voltage across the pins A and B of A691P1 and A694P1 is 0 VDC	<input type="checkbox"/>
14. Verify the voltage across the pins E and F of A691P1 and A694P1 is 0 VDC	<input type="checkbox"/>
15. Remove the Safety Pin from the SSU	<input type="checkbox"/>
16. Verify the voltage across the pins A (+) and B(-) of A691P1 and A694P1 is 28 VDC	<input type="checkbox"/>
17. Verify the voltage across the pins E and F of A691P1 and A694P1 is 0 VDC	<input type="checkbox"/>
18. Pull out the circuit breaker ECDS (CB659)	<input type="checkbox"/>
19. Verify the voltage across the pins A and B of A691P1 and A694P1 is 0 VDC	<input type="checkbox"/>
20. Verify the voltage across the pins E (+) and F(-) of A691P1 and A694P1 is 28 VDC	<input type="checkbox"/>
21. Disconnect the connector A692P3 (EIU)	<input type="checkbox"/>
22. Press the ERASE button on the EWCP and contemporaneously verify the diode presence and its correct installation ( $\geq 0.5\text{VDC}$ reading on the tester display), during the erase activation. For this purpose set the negative probe on pin 13 of A692P3 (Neg. Cathode) and the positive probe on a ground reference point (Pos. Anode)	<input type="checkbox"/>
23. Move the EWCP master selector to OFF	<input type="checkbox"/>
24. Reconnect all the connectors previously disconnect	<input type="checkbox"/>
25. Disconnect the connector P3082	<input type="checkbox"/>
26. Move the EWCP master selector to STBY	<input type="checkbox"/>
27. Verify across the pins <u>e</u> and Z of P3082 is 28 VDC ( <u>e</u> is the positive pin)	<input type="checkbox"/>
28. Move the EWCP master selector to OFF	<input type="checkbox"/>
29. Pull out the circuit breaker ECDS EMERG (CB660)	<input type="checkbox"/>
30. Reconnect all the connectors previously disconnected.	<input type="checkbox"/>

## MILDS POWER CHECKS

<p>1. Disconnect the following connectors:</p>	<table border="1"> <tr> <td data-bbox="836 259 1358 320">A682P1 A682P2 (MILDS 1 FWD RH)</td> <td data-bbox="1358 259 1434 320"><input type="checkbox"/></td> </tr> <tr> <td data-bbox="836 320 1358 380">A683P1 A683P2 (MILDS 0 FWD LH)</td> <td data-bbox="1358 320 1434 380"><input type="checkbox"/></td> </tr> <tr> <td data-bbox="836 380 1358 441">A684P1 A684P2 (MILDS 2 AFT RH)</td> <td data-bbox="1358 380 1434 441"><input type="checkbox"/></td> </tr> <tr> <td data-bbox="836 441 1358 501">A685P1 A685P2 (MILDS 3 AFT LH)</td> <td data-bbox="1358 441 1434 501"><input type="checkbox"/></td> </tr> </table>	A682P1 A682P2 (MILDS 1 FWD RH)	<input type="checkbox"/>	A683P1 A683P2 (MILDS 0 FWD LH)	<input type="checkbox"/>	A684P1 A684P2 (MILDS 2 AFT RH)	<input type="checkbox"/>	A685P1 A685P2 (MILDS 3 AFT LH)	<input type="checkbox"/>	
A682P1 A682P2 (MILDS 1 FWD RH)	<input type="checkbox"/>									
A683P1 A683P2 (MILDS 0 FWD LH)	<input type="checkbox"/>									
A684P1 A684P2 (MILDS 2 AFT RH)	<input type="checkbox"/>									
A685P1 A685P2 (MILDS 3 AFT LH)	<input type="checkbox"/>									
<p>2. Verify the continuity between the following pins (Power check between MILDS):</p> <p>2.1. A683P1-1 and A682P1-1</p> <p>2.2. A683P1-2 and A682P1-2</p> <p>2.3. A682P1-1 and A684P1-1</p> <p>2.4. A682P1-2 and A684P1-2</p> <p>2.5. A684P1-1 and A685P1-1</p> <p>2.6. A684P1-2 and A685P1-2</p>		<input type="checkbox"/>								
<p>3. Verify the continuity between the following pins (for MILDS 0):</p> <p>3.1. A683P2-10 and A683P2-11</p> <p>3.2. A683P2-12 and A683P2-13</p> <p>3.3. A683P2-14 and A683P2-15</p>		<input type="checkbox"/>								
<p>4. Verify the continuity between the following pins (for MILDS 1):</p> <p>4.1. A682P2-12 and A682P2-13</p> <p>4.2. A682P2-14 and A682P2-15</p>		<input type="checkbox"/>								
<p>5. Verify the continuity between the following pins (for MILDS 2):</p> <p>5.1. A684P2-10 and A684P2-11</p> <p>5.2. A684P2-14 and A684P2-15</p>		<input type="checkbox"/>								
<p>6. Verify the continuity between the following pins (for MILDS 3):</p> <p>6.1. A685P2-14 and A685P2-15</p>		<input type="checkbox"/>								
<p>7. Verify the continuity between the following pins (<i>Can bus continuity check between MILDS</i>):</p> <p>7.1. A682P2-5 and A683P2-8 (<i>between 0-1</i>)</p> <p>7.2. A682P2-6 and A683P2-7</p> <p>7.3. A682P2-7 and A684P2-6 (<i>between 1-2</i>)</p> <p>7.4. A682P2-8 and A684P2-5</p> <p>7.5. A683P2-5 and A685P2-8 (<i>between 0-3</i>)</p> <p>7.6. A683P2-6 and A685P2-7</p> <p>7.7. A685P2-2 and A685P2-6</p>		<input type="checkbox"/>								



<p>8. Verify the continuity between the following pins (<i>ground reference points between MILDS</i>).</p> <p>8.1. A683P2-9 and A682P2-4</p> <p>8.2. A682P2-9 and A684P2-4</p> <p>8.3. A683P2-4 and A685P2-9</p>	<input type="checkbox"/>
<p>9. Reconnect all the connectors previously disconnected</p>	<input type="checkbox"/>

**BONDING CHECKS**

**NOTE: The measure of Bonding shall be performed between the LRU power connector and local structure**

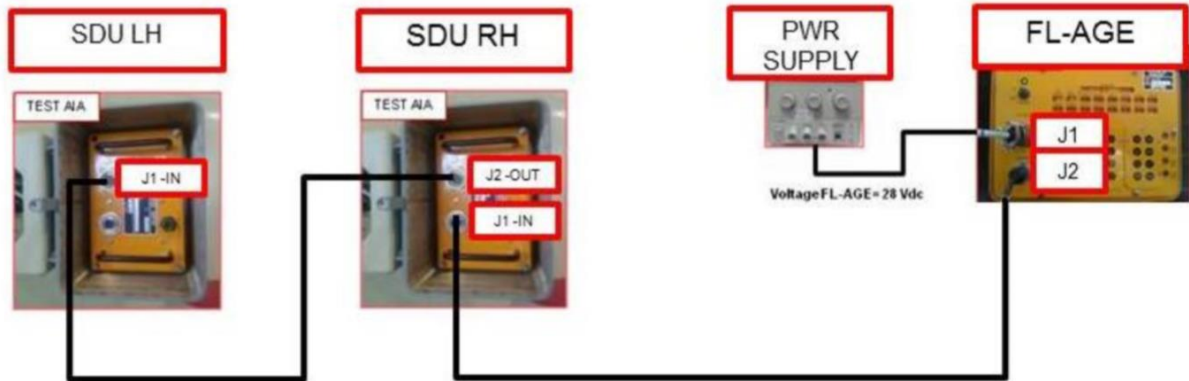
<p>1. Measure the bonding of each MILDS sensor head and write the values in the following table:</p> <table border="1" data-bbox="475 696 1197 965"> <thead> <tr> <th>SENSOR HEAD</th> <th>EXPECTED VALUE</th> <th>MEASURED VALUE</th> </tr> </thead> <tbody> <tr> <td>UNIT 0 FWD LH</td> <td>≤ 5 mΩ</td> <td></td> </tr> <tr> <td>UNIT 1 FWD RH</td> <td>≤ 5 mΩ</td> <td></td> </tr> <tr> <td>UNIT 2 AFT H</td> <td>≤ 5 mΩ</td> <td></td> </tr> <tr> <td>UNIT 3 AFT LH</td> <td>≤ 5 mΩ</td> <td></td> </tr> </tbody> </table>	SENSOR HEAD	EXPECTED VALUE	MEASURED VALUE	UNIT 0 FWD LH	≤ 5 mΩ		UNIT 1 FWD RH	≤ 5 mΩ		UNIT 2 AFT H	≤ 5 mΩ		UNIT 3 AFT LH	≤ 5 mΩ		<input type="checkbox"/>
SENSOR HEAD	EXPECTED VALUE	MEASURED VALUE														
UNIT 0 FWD LH	≤ 5 mΩ															
UNIT 1 FWD RH	≤ 5 mΩ															
UNIT 2 AFT H	≤ 5 mΩ															
UNIT 3 AFT LH	≤ 5 mΩ															
<p>2. Measure the bonding of the EIU and write the values in the following table:</p> <table border="1" data-bbox="475 1126 1197 1223"> <thead> <tr> <th></th> <th>EXPECTED VALUE</th> <th>MEASURED VALUE</th> </tr> </thead> <tbody> <tr> <td>EIU</td> <td>≤ 10 mΩ</td> <td></td> </tr> </tbody> </table>		EXPECTED VALUE	MEASURED VALUE	EIU	≤ 10 mΩ		<input type="checkbox"/>									
	EXPECTED VALUE	MEASURED VALUE														
EIU	≤ 10 mΩ															
<p>3. Measure the bonding of the SDU and SSU and write the values in the following table:</p> <table border="1" data-bbox="475 1310 1197 1518"> <thead> <tr> <th>LRU</th> <th>EXPECTED VALUE</th> <th>MEASURED VALUE</th> </tr> </thead> <tbody> <tr> <td>SDU left</td> <td>≤ 10 mΩ</td> <td></td> </tr> <tr> <td>SDU right</td> <td>≤ 10 mΩ</td> <td></td> </tr> <tr> <td>SSU</td> <td>≤ 10 mΩ</td> <td></td> </tr> </tbody> </table>	LRU	EXPECTED VALUE	MEASURED VALUE	SDU left	≤ 10 mΩ		SDU right	≤ 10 mΩ		SSU	≤ 10 mΩ		<input type="checkbox"/>			
LRU	EXPECTED VALUE	MEASURED VALUE														
SDU left	≤ 10 mΩ															
SDU right	≤ 10 mΩ															
SSU	≤ 10 mΩ															
<p>4. Measure the bonding of the EWCP in the interseat console and verify it is ≤ 10 mΩ</p> <table border="1" data-bbox="475 1641 1197 1738"> <thead> <tr> <th>LRU</th> <th>EXPECTED VALUE</th> <th>MEASURED VALUE</th> </tr> </thead> <tbody> <tr> <td>EWCP</td> <td>≤ 10 mΩ</td> <td></td> </tr> </tbody> </table>	LRU	EXPECTED VALUE	MEASURED VALUE	EWCP	≤ 10 mΩ		<input type="checkbox"/>									
LRU	EXPECTED VALUE	MEASURED VALUE														
EWCP	≤ 10 mΩ															
<p>5. Measure the bonding of the EWP and write the values in the following table:</p> <table border="1" data-bbox="475 1874 1197 1971"> <thead> <tr> <th>LRU</th> <th>EXPECTED VALUE</th> <th>MEASURED VALUE</th> </tr> </thead> <tbody> <tr> <td>EWP</td> <td>≤ 10 mΩ</td> <td></td> </tr> </tbody> </table>	LRU	EXPECTED VALUE	MEASURED VALUE	EWP	≤ 10 mΩ		<input type="checkbox"/>									
LRU	EXPECTED VALUE	MEASURED VALUE														
EWP	≤ 10 mΩ															

<p>6. Measure the bonding of the TWD in the cockpit and verify it is <math>\leq 10 \text{ m}\Omega</math></p> <table border="1" data-bbox="435 235 1158 331"> <thead> <tr> <th>LRU</th> <th>EXPECTED VALUE</th> <th>MEASURED VALUE</th> </tr> </thead> <tbody> <tr> <td>TWD</td> <td><math>\leq 10 \text{ m}\Omega</math></td> <td></td> </tr> </tbody> </table>	LRU	EXPECTED VALUE	MEASURED VALUE	TWD	$\leq 10 \text{ m}\Omega$		<input type="checkbox"/>									
LRU	EXPECTED VALUE	MEASURED VALUE														
TWD	$\leq 10 \text{ m}\Omega$															
<p>7. Measure the bonding of the BOX COUPLERS and verify that is <math>\leq 10 \text{ m}\Omega</math></p> <table border="1" data-bbox="435 421 1158 685"> <thead> <tr> <th>Box Coupler</th> <th>EXPECTED VALUE</th> <th>MEASURED VALUE</th> </tr> </thead> <tbody> <tr> <td>CP82</td> <td><math>\leq 10 \text{ m}\Omega</math></td> <td></td> </tr> <tr> <td>CP83</td> <td><math>\leq 10 \text{ m}\Omega</math></td> <td></td> </tr> <tr> <td>CP84</td> <td><math>\leq 10 \text{ m}\Omega</math></td> <td></td> </tr> <tr> <td>CP85</td> <td><math>\leq 10 \text{ m}\Omega</math></td> <td></td> </tr> </tbody> </table>	Box Coupler	EXPECTED VALUE	MEASURED VALUE	CP82	$\leq 10 \text{ m}\Omega$		CP83	$\leq 10 \text{ m}\Omega$		CP84	$\leq 10 \text{ m}\Omega$		CP85	$\leq 10 \text{ m}\Omega$		<input type="checkbox"/>
Box Coupler	EXPECTED VALUE	MEASURED VALUE														
CP82	$\leq 10 \text{ m}\Omega$															
CP83	$\leq 10 \text{ m}\Omega$															
CP84	$\leq 10 \text{ m}\Omega$															
CP85	$\leq 10 \text{ m}\Omega$															
<p>8. After completion of the bonding tests, ensure all the SIAP unit connectors are fastened and all the SIAP units are properly installed</p>	<input type="checkbox"/>															

**FL-AGE PREPARATION**

The FL-AGE and the AIA units shall be connected to the SDU units following this procedure:

- Ensure that the Safety Pin is inserted
  - If present, remove the Dispenser Unit from SDU LH and RH
  - Install the FL-AGE and Test AIA and relevant cables as showed in the following figure
- NOTE: All cables are furnished with FL-AGE kit**



The SIAP system uses the following SDU configuration rule:

SDU #	POSITION
SDU1	FWD RH
SDU2	FWD LH

The system libraries are programmed in order to have:

POSITION	MAGAZINE
FWD RH	CHAFF
FWD LH	FLARE


The TEST A.I.A units shall be connected in series to the FL-AGE and the first unit is the DISP1, the second unit is the DISP2. The flare cable shall be installed on the A.I.A. which monitors flare ejection and attached to the SDU flare sensor.


The configuration of the FL-AGE described below represents the following configuration:

Dispenser	Magazine	Location
DISP1	ID 02 = CHAFF	Right
DISP2	ID 05 = FLARE	Left

1. Before starting this section, ensure the EWCP master selector is OFF and all the SIAP breakers are IN.	<input type="checkbox"/>																								
2. Verify that the Safety PIN is installed.	<input type="checkbox"/>																								
3. Install the first magazine unit TEST A.I.A. in the SDU1 (Right)	<input type="checkbox"/>																								
4. Install the second magazine unit TEST A.I.A. in the SDU2 (Left)	<input type="checkbox"/>																								
5. Ensure the FL-AGE is supplied by 28 VDC	<input type="checkbox"/>																								
6. Turn ON the power switch and wait until the message “FL-AGE READY” appears	<input type="checkbox"/>																								
7. Push “SEL “ button and keep pushing it until message “MAGAZINE COMMAND” will appear on the display MESSAGE	<input type="checkbox"/>																								
<p>8. Pres ENT and execute the following sequence:</p> <table border="1" data-bbox="544 808 1249 1615"> <thead> <tr> <th>Command / Data</th> <th>Message on FL-AGE display</th> </tr> </thead> <tbody> <tr> <td>ENT</td> <td>DISPENSER : 01</td> </tr> <tr> <td>ENT</td> <td>ID: **</td> </tr> <tr> <td>02</td> <td>ID: 02 (CHAFF 1 X 1)</td> </tr> <tr> <td>ENT</td> <td>PAYLOAD: SINGLE</td> </tr> <tr> <td>ENT</td> <td>MAGAZINE COMMAND</td> </tr> <tr> <td>ENT</td> <td>DISPENSER : 01</td> </tr> <tr> <td>02</td> <td>DISPENSER : 02</td> </tr> <tr> <td>ENT</td> <td>ID: **</td> </tr> <tr> <td>05</td> <td>ID: 5 (FLARE 1 X 1)</td> </tr> <tr> <td>ENT</td> <td>PAYLOAD: SINGLE</td> </tr> <tr> <td>RST</td> <td>The menu is changed</td> </tr> </tbody> </table>	Command / Data	Message on FL-AGE display	ENT	DISPENSER : 01	ENT	ID: **	02	ID: 02 (CHAFF 1 X 1)	ENT	PAYLOAD: SINGLE	ENT	MAGAZINE COMMAND	ENT	DISPENSER : 01	02	DISPENSER : 02	ENT	ID: **	05	ID: 5 (FLARE 1 X 1)	ENT	PAYLOAD: SINGLE	RST	The menu is changed	<input type="checkbox"/>
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ENT	ID: **																								
05	ID: 5 (FLARE 1 X 1)																								
ENT	PAYLOAD: SINGLE																								
RST	The menu is changed																								
9. Power cycle the FL-AGE	<input type="checkbox"/>																								
<p>10. After the power up, verify the following configurations of the dispensers appears:</p> <table border="1" data-bbox="593 1785 999 1919"> <thead> <tr> <th>DISP1</th> <th>DISP2</th> </tr> </thead> <tbody> <tr> <td>P01</td> <td>P02</td> </tr> </tbody> </table>	DISP1	DISP2	P01	P02	<input type="checkbox"/>																				
DISP1	DISP2																								
P01	P02																								


## LIBRARY LOAD AND VERIFICATION

1. Power on the helicopter	<input type="checkbox"/>
2. Set the WOW switches to On Ground	<input type="checkbox"/>
3. Ensure the Safety Pin is properly inserted	<input type="checkbox"/>
4. Insert the USB that contains the libraries	<input type="checkbox"/>
5. Power on the SIAP system by moving the EWCP master selector to STBY and wait until STBY and LIVE lamp on EWCP are blinking	<input type="checkbox"/>
6. If 'NO LIBRARIES FOUND' is displayed in yellow on the TWD <div style="text-align: center;">  </div> Press simultaneously MFK4 and MFK5 for few seconds to perform a reset	<input type="checkbox"/>
7. When SIAP INITIALIZING page appears on TWD 7.1. Press UPDN (MFK7) to enter in the SIAP UPLOAD/DOWNLOAD page 7.2. Press LOAD (MFK8) 7.3. Find SA3_ATP_LIB_JAC.SLB using up and down arrows located in the MFK5 and MFK6 7.4. Press LOAD and wait up to msg FILE UPLOADED is expired	<input type="checkbox"/>
8. Press RTN (MFK8) to revert on SIAP UPLOAD/DOWNLOAD	<input type="checkbox"/>
9. On SIAP UPLOAD/DOWNLOAD page Press LIB (MFK6)	<input type="checkbox"/>
10. Verify that the SA3_ATP_LIB_JAC.SLB is loaded	<input type="checkbox"/>
11. Press ACT (on MFK located in the relevant left side on TWD)	<input type="checkbox"/>
12. Press RTN (MFK8) to revert to the previous page	<input type="checkbox"/>
13. On SIAP UPLOAD/DOWNLOAD page Press MNT (MFK4)	<input type="checkbox"/>
14. Verify that INVALID ICS LIB is displayed	<input type="checkbox"/>
15. Press RTN (MFK8) to exit from MAINTENANCE pages	<input type="checkbox"/>
16. UPDN (MFK7) to enter in the SIAP UPLOAD/DOWNLOAD page	<input type="checkbox"/>
<i>To be performed only for first installation - START</i>	
17. On the Left side on TWD Press MFK AU	<input type="checkbox"/>

18. Select 'ANNA.SAU'	<input type="checkbox"/>
19. Press LOAD	<input type="checkbox"/>
20. Wait up to msg FILE UPLOADED is expired on the TWD. At load completion, the UP/DOWNLOAD page returns.	<input type="checkbox"/>
21. Verify that INVALID ICS LIB is not displayed	<input type="checkbox"/>
22. Press RTN function key (MFK8) to exit from the MAINTENANCE pages	<input type="checkbox"/>
<i>To be performed only for first installation - END</i>	
23. On SIAP UPLOAD/DOWNLOAD page Press ALRM (MFK1) to enter in OPERATIVE mode	<input type="checkbox"/>
24. On SIAP INITIALIZING page verify that the library is loading with incrementing percentage	<input type="checkbox"/>
25. After the completion of the loading, verify the TWD page is 'ALARM Page'	<input type="checkbox"/>
<p>26. On this page of TWD, verify:</p> <p>26.1. The heading rose is depicted in white</p> <p>26.2. The helicopter heading is displayed in green</p> <p>26.3. A yellow flag is present due to the Safety Switch inserted</p> <p>26.4. 'AIRCRAFT ON GROUND – WOW' is displayed</p> <p>26.5. STBY status is displayed on top left</p> <p>26.6. No red box NAV, CFD or MILDS is displayed</p> <p>26.7. Red boxes CH and FL are displayed due to the safety pin</p> <p>26.8. Verify no yellow square is present, which alerts about a maintenance failure.</p>	<input type="checkbox"/>
27. Reset the FL-AGE (keep RST button pressed for 3 seconds) and remove the Safety Pin	<input type="checkbox"/>
28. Verify the yellow flag disappears and two yellow magazine rectangles with a black line inside appear instead	<input type="checkbox"/>
29. Verify CH 30 and FL 30 are displayed in green on the TWD	<input type="checkbox"/>
<p>30. On the TWD move to the DECOY status (Page button) page and verify that the indications displayed are in accordance with following picture:</p> 	<input type="checkbox"/>
31. On SIAP UPLOAD/DOWNLOAD page Press ALRM (MFK1) TWD on 'ALARM Page'	<input type="checkbox"/>
32. Pull out MILDS circuit breaker and verify the red box MWS appears on the TWD	<input type="checkbox"/>

33. Push in MILDS circuit breaker and wait until the red box MWS disappears from the TWD	<input type="checkbox"/>
34. Press MNT →SNSR on the TWD and turn Off the MILDS: pushing PWR ON (MFK5)	<input type="checkbox"/>
35. Verify the red box MWS appears on the TWD	<input type="checkbox"/>
36. Press PWR ON (MFK5) on the TWD and turn the MILDS ON	<input type="checkbox"/>
37. Verify the red box MWS disappears on the TWD (wait about 20-30 sec)	<input type="checkbox"/>
38. Pull out the ECDS circuit breaker	<input type="checkbox"/>
39. Press RTN soft key (MFK8) and Return on the Main Menu page	<input type="checkbox"/>
40. Press ALRM soft key (MFK1)	<input type="checkbox"/>
41. Verify the red box CFD appears on the TWD	<input type="checkbox"/>
42. On the TWD, verify the SDU rectangles are red with xcross black	<input type="checkbox"/>
43. On the EWCP, move the master selector to EMER	<input type="checkbox"/>
44. Verify on the TWD the SDU rectangles become green	<input type="checkbox"/>
45. Push in the ECDS circuit breaker	<input type="checkbox"/>
46. On the EWCP, move the master selector to STBY	<input type="checkbox"/>
47. On the TWD press UPDN → ALRM → SIAP INITIALIZING page appears	<input type="checkbox"/>
48. On the TWD verify that the CFD warning message disappear	<input type="checkbox"/>
49. On the TWD verify that the SDU rectangles are red with xcross black disappear	<input type="checkbox"/>
50. Pull out the MAU 1 circuit breakers and verify the red box NAV and HFI appears on the TWD	<input type="checkbox"/>
51. Push in the MAU 1 circuit breakers and verify that the previous warning messages disappear on the TWD	<input type="checkbox"/>
52. Insert the Safety Pin and verify that FLAG YELLOW appears	<input type="checkbox"/>

**AUDIO LEVEL**

1. Ensure the EWCP master selector is set to STBY	<input type="checkbox"/>
2. Connect the PLT and CPLT headphones to the ICS	<input type="checkbox"/>
3. On the TWD press SET (CMFK1) and adjust the audio level through AUDIO LEVEL 	<input type="checkbox"/>
4. Listen to the audio in the PLT headphone and tune the level by using the arrow keys of the TWD	<input type="checkbox"/>
5. Listen to the audio in the CPLT headphone and tune the level by using the arrow keys of the TWD	<input type="checkbox"/>
6. Press ENT to confirm	<input type="checkbox"/>

**MILDS FUNCTIONAL TEST PROCEDURE**

1. Set the WOW switches to 'In Air' and reset the FL-AGE (keep RST button pressed for 3 seconds)	<input type="checkbox"/>
2. Remove the Safety Pin (Note: if CFD in red appears on the TWD for few seconds, do not care because it is correct)	<input type="checkbox"/>
3. Move the EWCP master selector to LIVE	<input type="checkbox"/>
4. Verify the MAN status is shown on the TWD top left	<input type="checkbox"/>
5. Verify the magazine rectangles are displayed in full green on the TWD	<input type="checkbox"/>
6. Verify MP01 is displayed on the TWD (Manual Program 1 is the default program)	<input type="checkbox"/>
7. Lift up the flip guard of the Late Arm Switch on the PLT Cyclic stick and press the C/F FIRE momentary push-button	<input type="checkbox"/>
8. On the TWD verify 'CFD MANUAL PROG' displayed	<input type="checkbox"/>
9. Verify the FL counter has decremented of 2 on the TWD	<input type="checkbox"/>
10. Verify the CH counter is unchanged on the TWD	<input type="checkbox"/>
11. Verify on the FL-AGE that 2 flare and 0 chaff have been fired	<input type="checkbox"/>
12. Lift up the flip guard of the Late Arm Switch on the CPLT Cyclic stick and press the C/F FIRE momentary push-button	<input type="checkbox"/>
13. On the TWD verify 'CFD MANUAL PROG' is displayed	<input type="checkbox"/>



14. Verify the FL counter has decremented of 2 on the TWD	<input type="checkbox"/>
15. Verify the CH counter is unchanged on the TWD	<input type="checkbox"/>
16. Verify on the FL-AGE that 2 flare and 0 chaff have been fired	<input type="checkbox"/>
17. Lift up the flip guard of the SURVIVE function on the EWCP and press the button	<input type="checkbox"/>
18. Verify 'CFD DISPENCE SURVIVE' appears on the TWD	<input type="checkbox"/>
19. Verify that the FL counter decrements of 2 flares on the TWD and the CH counter decrements of 2 chaffs	<input type="checkbox"/>
20. Verify on the FL-AGE that the DISP2 counter increments of 2 units and the DISP1 counter increments of 2 units	<input type="checkbox"/>
21. Verify that the EWCP master selector is set to LIVE	<input type="checkbox"/>
22. On the TWD press SET → SET →FAST TR and set "FT ON"	<input type="checkbox"/>
23. Verify 'FT ON' on the TWD	<input type="checkbox"/>
24. Press ENT	<input type="checkbox"/>
25. Power on the MISSIM simulator and load the proper configuration file	<input type="checkbox"/>
26. Point the simulator at the MILDS sensor head number 1 (FWD RH) and fire	<input type="checkbox"/>
27. Verify the trace on the TWD (DOA + deg) + listen to the warning 'Missile' using the PLT/CPLT headphone + verify decoy launch (Flares) on the TWD and on the FL-AGE.	<input type="checkbox"/>
28. On the TWD press SET → SET →FAST TR and set "FT OFF"	<input type="checkbox"/>
29. Verify 'FT OFF' on the TWD	<input type="checkbox"/>
30. Press ENT	
31. On the TWD enter MODE (2 items) and select AUTO MODE	<input type="checkbox"/>
32. Verify AUTO is displayed on the TWD (top left)	<input type="checkbox"/>
33. For each MILDS sensor head (0 FWD LH, 1 AFT LH, 2 AFT RH, 3 FWD RH), fire at the MILDS sensor head with the MISSIM and verify: <ul style="list-style-type: none"> <li>33.1. the trace on the TWD (DOA + deg) is correct</li> <li>33.2. the aural warning 'Missile' is loud and clear on the PLT/CPLT headphone</li> <li>33.3. the decoy launch (Flares) is properly recorded and displayed by the TWD and the FL-AGE</li> </ul>	<input type="checkbox"/>

34. Move the EWCP master selector to EMER	<input type="checkbox"/>
35. Verify EMER is displayed on the TWD top left	<input type="checkbox"/>
36. Lift up the flip guard of the Late Arm Switch on the PLT Cyclic stick and press the C/F FIRE momentary push-button	<input type="checkbox"/>
37. Verify the decoy has been fired on both the TWD and FL-AGE (1 CH & 2FL)	<input type="checkbox"/>
38. Lift up the flip guard of the DISCH function on the EWCP and press the button	<input type="checkbox"/>
39. Verify 'DISCH DISCHARGING' appears on the TWD	<input type="checkbox"/>
40. Verify both CH and FL counters decrements to 0	<input type="checkbox"/>
41. Verify 'DECOYS DISCHARGED' appears on the TWD when all the decoys have been discharged and that all the decoys have been fired on the FL-AGE	<input type="checkbox"/>
42. Move the EWCP master selector to STBY	<input type="checkbox"/>
43. Insert the safety pin	<input type="checkbox"/>
44. Reset the FL_AGE by pressing RST (keep RST pressed for 3 seconds)	<input type="checkbox"/>
45. Remove the safety pin	<input type="checkbox"/>
46. Move the EWCP master selector to LIVE and verify on the TWD that the system is operative with 30 CH and 30 FL	<input type="checkbox"/>
47. Pull out the ECDS CB	<input type="checkbox"/>
48. Verify on the TWD that: <ul style="list-style-type: none"> <li>48.1. the red box CFD appears</li> <li>48.2. CH and FL counters are 00 and red coloured</li> <li>48.3. the dispenser rectangles are red and double crossed</li> </ul>	<input type="checkbox"/>
49. Move the EWCP master selector to EMER	<input type="checkbox"/>
50. Verify the dispenser rectangles turn green and are not crossed	<input type="checkbox"/>
51. On the EWCP, lift up the flip guard of the DISCH function and press the button	<input type="checkbox"/>
52. Very 'CFD DISCHARGING' is displayed on the bottom of the TWD	<input type="checkbox"/>
53. After the 'CFD DISCHARGING' has disappeared, check on the FL-AGE that all the decoys have been fired (30 + 30)	<input type="checkbox"/>

54. Move the EWCP master selector to OFF, set the WOW switches to ground and push in the ECDS CB	<input type="checkbox"/>
55. Insert the safety pin	<input type="checkbox"/>
56. Reset the FL_AGE by pressing RST (keep RST pressed for 3 seconds)	<input type="checkbox"/>
57. Remove the safety pin	<input type="checkbox"/>

### LIBRARY ERASE

1. Move the EWCP master selector to STBY	<input type="checkbox"/>
2. On SIAP INITIALIZING page verify that the library is loading with incrementing percentage	<input type="checkbox"/>
3. After the completion of the loading, verify the TWD page is 'ALARM Page'	<input type="checkbox"/>
4. Move the EWCP master selector to LIVE	<input type="checkbox"/>
5. Lift up the flip guard of the ERASE function on the EWCP and press the button	<input type="checkbox"/>
6. Verify the red box CFD appears on the TWD	<input type="checkbox"/>
7. Verify 'STBY' appears on the TWD	<input type="checkbox"/>
8. Verify the STBY light blinks on the EWCP	<input type="checkbox"/>
9. Move the EWCP master selector to STBY	<input type="checkbox"/>
10. Press UP/DOWNLOAD on the TWD and verify on the TWD the following: Active Lib = None	<input type="checkbox"/>
11. On the TWD, Press LIB soft key (MFK6) and verify that the SIAP EWP LIBRARIES is empty	<input type="checkbox"/>

### INITIAL CONDITIONS RESTORING

1. Move the EWCP master selector to OFF	<input type="checkbox"/>
2. Remove the WOW switches	<input type="checkbox"/>
3. Insert the Safety Pin	<input type="checkbox"/>
4. Uninstall the A.I.A and FL-AGE	<input type="checkbox"/>
5. Leave all the circuit breakers pushed in	<input type="checkbox"/>

