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AgustaWestland Products

SERVICE BULLETIN

N° 139-624

DATE: March 18, 2022

REV. : A - May 25, 2023

TITLE

ATA 23 – SATCOM SKYTRACK ISAT-200A KIT INSTALLATION

REVISION LOG

Helicopters already compliant with previous issues of this Service Bulletin do not need any additional action.

Revision A is issued in order to extend applicability to all the helicopters from S/N 31201 and from S/N 41201 onwards, to add the installation of the plate identification P/N A016A004B1 in the Part II and to add the Part III in order to perform the installation of SATCOM ISAT-200 PTT variant P/N 3G4390P01111.

Revision bars identify changes.

1. PLANNING INFORMATION

A. EFFECTIVITY

Part I

All AW139 helicopters from S/N 31201 to S/N 31399, from S/N 31400 to S/N 31699, from S/N 31700 onwards, from S/N 41201 to S/N 41299, from S/N 41300 to S/N 41499 and from S/N 41501 onwards.

Part II

All AW139 helicopters from S/N 31201 to S/N 31399, from S/N 31400 to S/N 31699, from S/N 31700 onwards, from S/N 41201 to S/N 41299, from S/N 41300 to S/N 41499 and from S/N 41501 onwards, equipped with satcom ISAT-200A complete provision P/N 3G2310A13511.

Part III

All AW139 helicopters from S/N 31201 to S/N 31399, from S/N 31400 to S/N 31699, from S/N 31700 onwards, from S/N 41201 to S/N 41299, from S/N 41300 to S/N 41499 and from S/N 41501 onwards, equipped with kit satcom skytrack ISAT-200A P/N 4G2310F03012.

B. COMPLIANCE

At Customer's option.

C. CONCURRENT REQUIREMENTS

N.A.

D. REASON

This Service Bulletin is issued in order to provide the necessary instructions on how to perform the installation of the kit satcom skytrack ISAT-200A P/N 4G2310F03012.

E. DESCRIPTION

The skytrack ISAT-200 satellite communication system lets the flight crew to dial and receive phone calls to and from all places in the world. Also it lets transfer data through the iridium network.

The system includes a cockpit display panel installed in the interseat console in the cockpit, a dispatch voice interface installed in the interseat console adjacent to the cockpit display panel, a transceiver installed in the baggage compartment between STA 7200 and STA 6700 and an antenna installed on a fairing in the left side of the tail section.

Part I of this Service Bulletin provides all necessary instructions on how to perform the SATCOM ISAT-200A complete provision (electrical and structural).

Part II of this Service Bulletin provides all necessary instructions on how to perform the SATCOM ISAT-200A equipment installation.

Part III of this Service Bulletin provides all necessary instructions to perform the SATCOM ISAT-200 PTT variant P/N 3G4390P01111.

F. APPROVAL

The technical content of this Service Bulletin is approved under the authority of DOA nr. EASA.21.J.005. For helicopters registered under other Aviation Authorities, before applying the Service Bulletin, applicable Aviation Authority approval must be checked within Leonardo Helicopters customer portal.

EASA states mandatory compliance with inspections, modifications or technical directives and related time of compliance by means of relevant Airworthiness Directives.

If an aircraft listed in the effectivity embodies a modification or repair not LHD certified and affecting the content of this Service Bulletin, it is responsibility of the Owner/Operator to obtain a formal approval by Aviation Authority having jurisdiction on the aircraft, for any adaptation necessary before incorporation of the present Service Bulletin.

G. MANPOWER

To comply with this Service Bulletin the following MMH are deemed necessary:

Part I: approximately one-hundred and forty (140) MMH;

Part II: approximately forty (40) MMH;

Part III: approximately forty (40) MMH.

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

H. WEIGHT AND BALANCE

PART I

WEIGHT (kg)	5.94	
	ARM (mm)	**MOMENT (kgmm)**
LONGITUDINAL BALANCE	8812.0	52343.3
LATERAL BALANCE	-421.0	-2500.7

PART II

WEIGHT (kg)		3.01
	ARM (mm)	**MOMENT (kgmm)**
LONGITUDINAL BALANCE	5973.0	17978.7
LATERAL BALANCE	679.0	2043.8

PART III

WEIGHT (Kg)		2.3
	ARM (mm)	**MOMENT (kgmm)**
LONGITUDINAL BALANCE	3316.0	7626.8
LATERAL BALANCE	-404.0	-929.2

I. REFERENCES

1) PUBLICATIONS

Following Data Modules refer to AMP:

DATA MODULE		DESCRIPTION	PART
DM01	39-A-00-20-00-00A-120A-A	Helicopter on ground for a safe maintenance	I, II, III
DM02	39-A-06-41-00-00A-010A-A	Access doors and panels - General data	I, II, III
DM03	39-B-23-95-05-00A-720A-K	Mounting tray - Install procedure	I
DM04	39-A-11-00-01-00A-720A-A	Decal - Install procedure	I, II
DM05	39-B-23-95-01-00A-720A-K	Cockpit display panel - Install procedure	II
DM06	39-B-23-95-02-00A-720A-K	Dispatch voice interface - Install procedure	II
DM07	39-B-23-95-03-00A-720A-K	Transceiver - Install procedure	II
DM08	39-B-23-95-04-00A-720A-K	Antenna - Install procedure	II
DM09	39-A-24-91-04-00A-920A-K	Integrally lighted panel - Replacement	II
DM10	39-B-23-95-00-00A-320A-K	Satellite communication system - Operation test	II, III
DM11	39-A-20-10-08-00A-622A-A	Electrical contacts – Crimp	III

2) ACRONYMS & ABBREVATIONS

AMDI	Aircraft Material Data Information
AMP	Aircraft Maintenance Publication
CDP	Cockpit Display Panel

DM	Data Module
DOA	Design Organization Approval
DVI	Dispatch Voice Interface
EASA	European Union Aviation Safety Agency
GPS	Global Positioning System
IPD	Illustrated Parts Data
LH	Left Hand
LHD	Leonardo Helicopters Division
MMH	Maintenance-Man-Hours
P/N	Part Number
PTT	Push-To-Talk
S/N	Serial Number

3) ANNEX

N.A.

J. PUBLICATIONS AFFECTED

AW139 Illustrated Parts Data

K. SOFTWARE ACCOMPLISHMENT SUMMARY

N.A.

2. MATERIAL INFORMATION

A. REQUIRED MATERIALS

1) PARTS

PART I

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
1	**4G2310F03012**		**KIT SATCOM SKYTRACK ISAT-200A**	**REF**	**.**		**-**
2	**3G2310A13511**		**SATCOM ISAT-200A COMPLETE PROVISION**	**REF**	**..**		**-**
3	**3G5310A84311**		**SATCOM ISAT-200 STRUCTURAL PROVISION**	**REF**	**...**		**-**
4	3G5315A61632		Support assy	1	....		139-624L1
5	3G5315A61731		Cover assy	1	....		139-624L1
6	3G5316A95531		Bracket assy	1	....		139-624L1
7	A297A05TW04		Rivet	15	....		139-624L1
8	A297A05TW05		Rivet	10	....		139-624L1
9	MS27039-1-08		Screw	4	....		139-624L1
10	NAS1149D0332K		Washer	4	....		139-624L1
11	NAS1149DN832K		Washer	2	....		139-624L1
12	NAS1802-08-5		Screw	2	....		139-624L1
13	NAS1832-3-3M		Insert	4	....		139-624L1
14	NAS1836C08-13		Insert	2	....		139-624L1
15	**3G2310A13711**		**SATCOM ISAT-200A ELECTRICAL PROV**	**REF**	**...**		**-**
16	3G9A01A57201	3G2310A13711A1R	Satcom skytrac ISAT - 200A (A1A572)	1	....		139-624L1
17	3G9A02A50501		Satcom skytrac ISAT - 200A (A2A505)	1	....		139-624L1
18	3G9B01A97501	3G2310A13711A2R	Satcom skytrac ISAT - 200A (B1A975)	1	....		139-624L1
19	3G9B02A90701		Satcom skytrac ISAT - 200A (B2A907)	1	....		139-624L1
20	3G9C01A33401	3G2310A13711A3R	Satcom skytrac ISAT - 200A (C1A334)	1	....		139-624L1
21	3G9C02A38001		Satcom skytrac ISAT - 200A (C2A380)	1	....		139-624L1
22	3G9C03C26701		Satcom skytrac ISAT - 200A (C3C267)	1	....		139-624L1
23	3G9C03C26801		Satcom skytrac ISAT - 200A (C3C268)	1	....		139-624L1
24	3G9C03C26901		Satcom skytrac ISAT - 200A (C3C269)	1	....		139-624L1
25	3G9C03C27001		Satcom skytrac ISAT - 200A (C3C270)	1	....		139-624L1
26	3G9D03B23401		Satcom skytrac ISAT - 200A (D3B234)	1	....		139-624L1
27	3G9D03B23501		Satcom skytrac ISAT - 200A (D3B235)	1	....		139-624L1
28	999-2701-02-296		Decal	2	....		139-624L1
29	A388A3E06C		Standoff	7	....		139-624L1
30	A388A3E08C75		Standoff	2	....		139-624L1
31	A388A3E10C		Standoff	1	....		139-624L1
32	A388A3E16C		Standoff	4	....		139-624L1
33	A388A3E24C		Standoff	1	....		139-624L1

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
34	AW001CB03H		Clamp	1	....		139-624L1
35	AW001CB05H		Clamp	3	....		139-624L1
36	AW001CL001-N6		Support	2	....		139-624L1
37	AW001CL005C01-X1		Support	1	....		139-624L1
38	AW001CL503-N6		Support	1	....		139-624L1
39	AW001TL3A06		Anchor nut	3	....		139-624L1
40	AW001TL3A08		Anchor nut	1	....		139-624L1
41	AW002FT112		Grommet	36	....		139-624L1
42	DCC-02		Cap	1	....		139-624L1
43	DCC-03		Cap	1	....		139-624L1
44	ED300J3042		Decal	1	....		139-624L1
45	ED300J3044		Decal	1	....		139-624L1
46	ED300J3090		Decal	1	....		139-624L1
47	ED300J3091		Decal	1	....		139-624L1
48	MS21042L02		Nut	8	....		139-624L1
49	MS25281-R15		Clamp	34	....		139-624L1
50	MS35206-205		Screw	8	....		139-624L1
51	NAS1149D0316J		Washer	4	....		139-624L1
52	NAS1149D0332J		Washer	20	....		139-624L1
53	NAS1149DN216J		Washer	16	....		139-624L1
54	NAS1190E3P17AK		Screw	2	....		139-624L1
55	NAS1190E3P18AK		Screw	6	....		139-624L1
56	NAS1190E3P22AK		Screw	1	....		139-624L1
57	NAS1190E3P30AK		Screw	1	....		139-624L1
58	NAS1190E3P7AK		Screw	8	....		139-624L1
59	NAS1190E3P8AK		Screw	1	....		139-624L1
60	NAS1190E3P9AK		Screw	4	....		139-624L1
61	NAS1802-3-11		Screw	1	....		139-624L1
62	NAS1802-3-12		Screw	1	....		139-624L1
63	NAS1802-3-19		Screw	2	....		139-624L1
64	NAS1802-3-20		Screw	1	....		139-624L1
65	NAS1802-3-24		Screw	1	....		139-624L1
66	NAS1802-3-25		Screw	2	....		139-624L1
67	NAS1802-3-35		Screw	1	....		139-624L1
68	NAS1802-3-7		Screw	4	....		139-624L1
69	NAS1802-3-9		Screw	1	....		139-624L1
70	NAS43DD3-30N		Spacer	4	....		139-624L1
71	NAS43DD3-35N		Spacer	1	....		139-624L1
72	NAS43DD3-40N		Spacer	6	....		139-624L1
73	NAS43DD3-45N		Spacer	1	....		139-624L1
74	NAS43DD3-47N		Spacer	1	....		139-624L1
75	NAS43DD3-60N		Spacer	2	....		139-624L1
76	NAS43DD3-7N		Spacer	4	....		139-624L1
77	NAS43DD3-90N		Spacer	1	....		139-624L1

PART II

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
78	**4G2310F03012**		**KIT SATCOM SKYTRACK ISAT-200A**	**REF**	**.**		
79	**3G2310A13611**		**SATCOM ISAT-200A EQUIPMENT INSTL**	**REF**	**..**		
80	**3G2310I00631**		**ISAT-200A VCD**	**REF**	**...**		
81	101-200-07		ISAT-200A	1	....		139-624L4
82	A016A004B1		Plate identification	1	....		139-624L4
83	104-300-02		Cockpit display panel CDP-300C	1	...		139-624L4
84	105-300-02		Despatch voice interface DVI-300A	1	...		139-624L4
85	ED300A433		Decal	1	...		139-624L4
86	ED300E107		Decal	1	...		139-624L4
87	ED300PL144		Decal	1	...		139-624L4
88	ED300PL145		Decal	1	...		139-624L4
89	MS25083-2BB8	M83413/8-A008BB	Grounding cable assy	1	...		139-624L4
90	STS-ISAT-ANT		Antenna	1	...		139-624L4
91	3G2490LXXXXX		Integrally lit auxiliary C/B panel	1	.	(3)	-
92	MS3320-3		Breaker	1	.		139-624L4
93	ED300CB251		Decal	1	.		139-624L4
94	AW001YC01RED		Lock ring	1	.		139-624L4
95	MS27723-23		Switch	1	.		139-624L4
96	ED300S298		Decal	1	.		139-624L4
97	MS27488-16-2		Filler plug	2	.		139-624L4
98	A556A-T20		Wire	3 m	.		139-624L4
99	M39029/56-351		Terminal lug	1	.		139-624L4
100	M39029/1-100		Terminal lug	2	.		139-624L4
101	MS25036-149		Terminal lug	2	.		139-624L4

PART III

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
102	**4G2310F03012**		**KIT SATCOM SKYTRACK ISAT-200A**	**REF**	**.**		
103	**3G4390P01111**		**SATCOM ISAT-200 PTT VARIANT**	**REF**	**..**		
104	3G9A02A73201		SATCOM SKYTRAC ISAT-200 VARI	1	...		139-624L3
105	3G9B02L31801		SATCOM SKYTRAC ISAT-200 VARI	1	...		139-624L3
106	3G9C02A47601		SATCOM SKYTRAC ISAT-200 VARI	1	...		139-624L3
107	M39029/58-360		Electrical contact	5	...		139-624L3
108	M39029/56-348		Electrical contact	6	...		139-624L3
109	M39029/56-351		Electrical contact	1	...		139-624L3
110	M39029/58-363		Electrical contact	1	...		139-624L3
111	M39029/12-148		Electrical contact	1	...		139-624L3
112	M23053/8-004-C		Insulation sleeving	10	...		139-624L3

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

2) CONSUMABLES

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

#	SPEC./LHD CODE NUMBER	DESCRIPTION	Q.TY	NOTE	PART
113	AWMS05-001, TY:I, CL:B, DG:2	Sealant	AR	(1)	I
114	AWMS05-001, TY:I, CL:C, DG:1	Sealant	AR	(1)	I
115	199-05-002, TY:II, CL:2	Adhesive	AR	(1)	I
116	Commercial	Sealant TG8498	AR	(1)	I
117	A236A03AB	Adhesive rubber	AR	(1)	I, III
118	A582A25 or EN6049-006-25-5	Tubing braided	AR	(1)	I, III
119	MIL-S-8802 Ty II, Cl B-4	Sealant	AR	(1) (2)	II

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

3) LOGISTIC MATRIX

In order to apply this Service Bulletin, the following Logistic P/N can be ordered in accordance with the applicable notes:

LOGISTIC P/N	Q.TY (PER HELO)	NOTE	PART
139-624L1	1	-	I
139-624L4	1	-	II
3G2490LXXXXX	1	(3)	II
139-624L3	1		III

NOTE

(1) Item to be procured as local supply.

(2) Sealing compound MC236 (C465) spec. AWMS05-004 Type II can be used as a valid alternative.

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

B. SPECIAL TOOLS

N.A.

C. INDUSTRY SUPPORT INFORMATION

Customization.

3. ACCOMPLISHMENT INSTRUCTIONS

GENERAL NOTES

a) Place an identification tag on all components that are re-usable, including the attaching hardware that has been removed to gain access to the modification area and adequately protect them until their later re-use.

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

c) After drilling, remove all swarf and sharp edges. Apply on bare metal a light film of primer unless the hole is used for ground connection.

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

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

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

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

h) All lengths are in mm.

PART I

1. In accordance with AMP DM 39-A-00-20-00-00A-120A-A prepare the helicopter on ground for a safe maintenance. Disconnect the battery, all electrical power sources and/or the external power supply.
2. In accordance with AMP DM 39-A-06-41-00-00A-010A-A and with reference to Figures 1 thru 13, gain access to the area affected by the installation and perform SATCOM ISAT-200A complete provision P/N 3G2310A13511 as described in the following procedure:

   2.1 With reference to Figures 1 thru 3, perform satcom ISAT-200 structural provision P/N 3G5310A84311 as described in the following procedure:

2.1.1 With reference to Figure 2 View Looking Inboard Left Side, gain access to the rear fuselage assy.

2.1.2 With reference to Figure 2 View A-A and Section B-B, drill n°4 holes Ø14.25÷14.38 thru the FWD floor assy P/N 3P5340A44031 in accordance with the dimensioning shown.

2.1.3 With reference to Figure 2 Section B-B, install n°4 inserts P/N NAS1832-3-3M on the FWD floor assy P/N 3P5340A44031 by means of adhesive 199-05-002 Type II Class 2.

2.1.4 With reference to Figure 2 View A-A and Section K-K, clean the surface of the spar to obtain a good ground contact.

2.1.5 With reference to Figure 2 View A-A and Section K-K, temporarily locate the bracket assy P/N 3G5316A95531 on the FWD floor assy P/N 3P5340A44031.

2.1.6 With reference to Figure 2 View A-A and Section K-K, drill n°2 holes Ø11.48÷11.61 on the FWD floor assy P/N 3P5340A44031 in accordance with the dimensioning shown.

2.1.7 With reference to Figure 2 Section K-K, install n°2 inserts P/N NAS1836C08-13 on the FWD floor assy P/N 3P5340A44031 by means of adhesive 199-05-002 Type II Class 2.

2.1.8 With reference to Figure 2 View A-A and Section K-K, install the bracket assy P/N 3G5316A95531 on the FWD floor assy P/N 3P5340A44031 by means of n°2 screws P/N NAS1802-08-5 and n°2 washers P/N NAS1149DN832K.

2.1.9 With reference to Figure 1 View Looking Inboard Left side, gain access to the tail boom assy.

2.1.10 With reference to Figure 3 View G and Section F-F, perform the indicated cut-out on the RW tail gearbox fairing and on the bonding layer P/N 3G5355A06151 and prepare the surface to assure ground contact.

2.1.11 With reference to Figure 1 View C, temporarily locate the support assy P/N 3G5315A61632 on the RW tail gearbox fairing.

NOTE

Do not apply the sealant in the bonding layer zone.

NOTE

Use sealant AWMS05-001 Ty.I Gr.1 Cl.2 on the overlapping zone and AWMS05-001 Ty.I CL.B to create an adhesive bead around the part edge.

2.1.12 With reference to Figure 3 Section E-E, apply the sealant AWMS05-001 TY I, Gr 2, Cl B and AWMS05-001 TY I, Gr 1, Cl C around the perimeter of the RW tail gearbox fairing.

2.1.13 With reference to Figure 1 View C, install the support assy P/N 3G5315A61632 on the RW tail gearbox fairing by means of n°15 rivets P/N A297A05TW04 and n°10 rivets P/N A297A05TW05 in accordance with the pilot holes on the support assy P/N 3G5315A61632.

NOTE

Perform the following step 2.1.14 only if Part II of this Service Bulletin is not intended to be done immediately after Part I. Otherwise skip at step 2.2.

2.1.14 With reference to Figure 3 Section E-E, View H and Section J-J, install the cover assy P/N 3G5315A61731 on the support assy P/N 3G5315A61632 by means of n°4 screws P/N MS27039-1-08, n° 4 washers P/N NAS1149D0332K and sealant TG8498.

NOTE

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

NOTE

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

2.2 With reference to Figures 4 thru 11, perform satcom ISAT-200 electrical provision P/N 3G2310A13711 as described in the following procedure:

2.2.1 In accordance with the applicable steps of AMP DM 39-B-23-95-05-00A-720A-K and with reference to Figure 8 View A, install the processor tray P/N 102-200-05 by means of n°4

screws P/N NAS1802-3-7, n°4 washers P/N NAS1149D0316J and n°4 spacers P/N NAS43DD3-7.

2.2.2 With reference to Figure 8 View A, install n°2 supports P/N AW001CL001-N6 on the structure at locations n°2 and 3.

2.2.3 With reference to Figure 8 View B, install the standoff P/N A388A3E24C on the structure at location n°1.

2.2.4 With reference to Figure 8 View B, install the support P/N AW001CL503-N6 on the structure.

2.2.5 With reference to Figure 9 View Looking Rear Fuselage LH side, install the anchor nut P/N AW001TL3A08 on the structure at location n°1.

2.2.6 With reference to Figure 9 View Looking Rear Fuselage LH side, install n°4 standoffs P/N A388A3E16C at locations n°2, 3, 4 and 5.

2.2.7 With reference to Figure 9 View Looking Rear Fuselage LH side, install n°2 anchor nuts P/N AW001TL3A06 on the structure at locations n°6 and 8.

2.2.8 With reference to Figure 9 View Looking Rear Fuselage LH side, install the standoff P/N A388A3E06C at location n°7.

2.2.9 With reference to Figure 10 View Looking Tail LH side, install n°6 standoff P/N A388A3E06C at locations n°1, 2, 4, 5, 6 and 8.

2.2.10 With reference to Figure 10 View Looking Tail LH side, install the anchor nut P/N AW001TL3A06 on the structure at location n°3.

2.2.11 With reference to Figure 10 View Looking Tail LH side, install the support P/N AW001CL005C01-X1 at location n°7.

2.2.12 With reference to Figure11 View Looking Vertical Tail Fin, install n°2 standoffs P/N A388A3E08C75 at locations n°2 and 3.

2.2.13 With reference to Figure 11 View Looking Vertical Tail Rotor, install the standoff P/N A388A3E10C at location n°1.

2.2.14 With reference to Figures 4 thru 11, lay down the following cable assemblies on the existing routes unless otherwise indicated on the figures:

- 3G9A01A57201 satcom skytrac ISAT - 200A C/A (A1A572)
- 3G9A02A50501 satcom skytrac ISAT - 200A C/A (A2A505)
- 3G9B01A97501 satcom skytrac ISAT – 200A C/A (B1A975)
- 3G9B02A90701 satcom skytrac ISAT – 200A C/A (B2A907)
- 3G9C01A33401 satcom skytrac ISAT – 200A C/A (C1A334)
- 3G9C02A38001 satcom skytrac ISAT – 200A C/A (C2A380)

- 3G9C03C26701 satcom skytrac ISAT – 200A C/A (C3C267)
- 3G9C03C26801 satcom skytrac ISAT – 200A C/A (C3C268)
- 3G9C03C26901 satcom skytrac ISAT – 200A C/A (C3C269)
- 3G9C03C27001 satcom skytrac ISAT – 200A C/A (C3C270)
- 3G9D03B23401 satcom skytrac ISAT – 200A C/A (D3B234)
- 3G9D03B23501 satcom skytrac ISAT – 200A C/A (D3B235)

2.2.15 With reference to Figures 4 thru 11, secure the cable assemblies laid down at the previous step by means of existing hardware and lacing cords.

2.2.16 With reference to Figure 8 View A, install the clamp P/N AW001CB03H on the C/A C1A334 and the clamp P/N AW001CB05H on the C/A C2A380 to fix the C/As to the support by means of the screw P/N NAS1802-3-9 and the washer P/N NAS1149D0332J.

2.2.17 With reference to Figure 8 View B, install the clamp P/N MS25281-R15 on the C/A C3C269 and C/A C3C270 to fix the C/As to the standoff by means of the screw P/N NAS1190E3P8AK, the washer P/N NAS1149D0332J and the grommet P/N AW002FT112.

2.2.18 With reference to Figure 8 View B, install the grommet P/N AW002FT112 on the support on the C/A C3C269 and C/A C3C270.

2.2.19 With reference to Figure 9 View Looking Rear Fuselage LH side, apply adhesive rubber P/N A236A03AB in the indicated positions around the edges of the structure's holes.

2.2.20 With reference to Figure 9 View Looking Rear Fuselage LH side, install n°2 clamps P/N MS25281-R15 on the C/A C3C269 and C/A C3C270 to fix the C/As to n°2 anchor nuts by means of n°2 screws P/N NAS1802-3-19, n°2 washers P/N NAS1149D0332J, n°2 spacers P/N NAS43DD3-30N and n°2 grommets P/N AW002FT112.

2.2.21 With reference to Figure 9 View Looking Rear Fuselage LH side, install n°4 clamps P/N MS25281-R15 on the C/A C3C269 and C/A C3C270 to fix the C/As to n°4 standoffs by means of n°4 screws P/N NAS1190E3P9AK, n°4 washers P/N NAS1149D0332J and n°4 grommets P/N AW002FT112.

2.2.22 With reference to Figure 9 View Looking Rear Fuselage LH side, install the clamp P/N MS25281-R15 on the C/A C3C269 and C/A C3C270 to fix the C/As to the anchor nut by means of the screw

P/N NAS1802-3-20, the washer P/N NAS1149D0332J, the spacer P/N NAS43DD3-35N and the grommet P/N AW002FT112.

2.2.23 With reference to Figure 9 View Looking Rear Fuselage LH side, install the clamp P/N MS25281-R15 on the C/A C3C269 and C/A C3C270 to fix the C/As to the standoff by means of the screw P/N NAS1190E3P7AK, the washer P/N NAS1149D0332J and the grommet P/N AW002FT112.

2.2.24 With reference to Figure 10 View Looking Tail LH side, install n°6 clamps P/N MS25281-R15 on the C/A D3B234 and C/A D3B235 to fix the C/As to n°6 standoffs by means of n°6 screws P/N NAS1190E3P7AK, n°6 washers P/N NAS1149D0332J and n°6 grommets P/N AW002FT112.

2.2.25 With reference to Figure 10 View Looking Tail LH side, install the clamp P/N MS25281-R15 on the C/A D3B234 and C/A D3B235 to fix the C/As to the anchor nut by means of the screw P/N NAS1802-3-11, the washer P/N NAS1149D0332J and the grommet P/N AW002FT112.

2.2.26 With reference to Figure 10 View Looking Tail LH side, install n°3 clamps P/N MS25281-R15 on the C/A D3B234 and C/A D3B235 to fix the C/As to existing standoff by means of n°3 grommets P/N AW002FT112.

2.2.27 With reference to Figure 10 View Looking Tail LH side, remove existing screw and install the clamp P/N MS25281-R15 on the C/A D3B234 and C/A D3B235 to fix the C/As to existing anchor nut by means of the screw P/N NAS1802-3-25, the spacer P/N NAS43DD3-47N and the grommet P/N AW002FT112.

2.2.28 With reference to Figure 10 View Looking Tail LH side, install the grommet P/N AW002FT112 on the support on the C/A D3B234 and C/A D3B235.

2.2.29 With reference to Figure 10 View Looking Tail LH side, remove existing screw (on kit P/N 3G2560A02213) and install n°2 clamps P/N MS25281-R15 on the C/A D3B234 and C/A D3B235 to fix the C/As to existing standoffs by means of n°2 screws P/N NAS1190E3P17AK, n°2 spacers P/N NAS43DD3-30N and n°2 grommets P/N AW002FT112.

2.2.30 With reference to Figure 11 View Looking Vertical Tail Fin, remove existing screw and install the clamp P/N MS25281-R15 on the C/A D3B234 and C/A D3B235 to fix the C/As to existing anchor nut by means of the screw P/N NAS1802-3-35, the spacer P/N NAS43DD3-60N and the grommet P/N AW002FT112.

2.2.31 With reference to Figure 11 View Looking Vertical Tail Fin, install the clamp P/N MS25281-R15 on the C/A D3B234 and C/A D3B235 to fix the C/As to the standoff by means of the screw P/N NAS1190E3P30AK, the washer P/N NAS1149D0332J, the spacer P/N NAS43DD3-90N and the grommet P/N AW002FT112.

2.2.32 With reference to Figure 11 View Looking Vertical Tail Fin, install the clamp P/N MS25281-R15 on the C/A D3B234 and C/A D3B235 to fix the C/As to the standoff by means of the screw P/N NAS1190E3P22AK, the washer P/N NAS1149D0332J, the spacer P/N NAS43DD3-60N and the grommet P/N AW002FT112.

2.2.33 With reference to Figure 11 View Looking Vertical Tail Fin, remove existing screws and install n°6 clamps P/N MS25281-R15 on the C/A D3B234 and C/A D3B235 to fix the C/As to existing standoffs by means of n°6 screws P/N NAS1190E3P18AK, n°6 spacers P/N NAS43DD3-40N and n°6 grommets P/N AW002FT112.

2.2.34 With reference to Figure 11 View Looking Vertical Tail Fin, remove existing screw and install the clamp P/N MS25281-R15 on the C/A D3B234 and C/A D3B235 to fix the C/As to existing support by means of the screw P/N NAS1802-3-12, the spacer P/N NAS43DD3-45N and the grommet P/N AW002FT112.

2.2.35 With reference to Figure 11 View Looking Tail Rotor, remove existing screw and install the clamp P/N MS25281-R15 on the C/A D3B234 and C/A D3B235 to fix the C/As to existing standoff by means of the screw P/N NAS1802-3-25 and the grommet P/N AW002FT112.

2.2.36 With reference to Figure 11 View Looking Tail Rotor, remove existing screw and install the clamp P/N MS25281-R15 on the C/A D3B234 and C/A D3B235 to fix the C/As to existing standoff by means of the screw P/N NAS1802-3-24 and the grommet P/N AW002FT112.

2.2.37 With reference to Figure 11 View Looking Tail Rotor, install n°2 clamps P/N AW001CB05H on the C/A D3B234 and C/A D3B235 to fix the C/As to the standoff by means of the screw P/N NAS1190E3P7AK and the washer P/N NAS1149D0332J.

2.2.38 With reference to Figure 5, Figure 6 and Figure 14 wiring diagram, perform the electrical connection of C/A A1A572 to connector A7-6P1,

to connector P127, to connector TB123P1, to terminal board TB129/3 and to terminal board TB137/1.

2.2.39 With reference to Figure 5, Figure 6 and Figure 14, Figure 15 wiring diagram, perform the electrical connection of C/A A2A505 to connectors P133, PL144P1, PL145P1 and TB147P1.

2.2.40 With reference to Figure 5, Figure 6, Figure 7 and Figure 14, Figure 15 wiring diagram, perform the electrical connection of C/A B1A975 to connector J127, to connector J215 and to connector PL1P3.

2.2.41 With reference to Figure 6, Figure 7 and Figure 14 wiring diagram, perform the electrical connection of C/A B2A907 to connector J133 and to connector J217.

2.2.42 With reference to Figure 8 and Figure 15 wiring diagram, perform the electrical connection of C/A C1A334 to connector P215, to terminal board TB307 and to terminal board TB315.

2.2.43 In accordance with the applicable steps of AMP DM 39-B-23-95-05-00A-720A-K and with reference to Figure 8 View A, install the connector A433P1A and the connector A433P1B to the mounting tray.

2.2.44 With reference to Figure 8 View A and Figure 15 wiring diagram, perform the electrical connection of C/A C2A380 to connector A433P1A, to connector A433P1B and to connector P217.

2.2.45 With reference to Figure 8 View A and Figure 16 wiring diagram, perform the electrical connection of C/A C3C267 to connector A433P1A.

2.2.46 With reference to Figure 8 View A and Figure 16 wiring diagram, perform the electrical connection of C/A C3C268 to connector A433P1A.

2.2.47 With reference to Figure 8 View A, install the connector J3090 on the bracket assy P/N 3G5316A95531 (previously installed) by means of n°4 screws P/N MS35206-205, n°4 nuts P/N MS21042L02 and n° 8 washers P/N NAS1149DN216J.

2.2.48 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 8 View A, apply the decal P/N ED300J3090 next to the connector J3090.

2.2.49 With reference to Figure 8 View A, connect the connector P3090 to the connector J3090.

2.2.50 With reference to Figure 8 View A, install the connector J3091 on the bracket assy P/N 3G5316A95531 (previously installed) by means of n°4

screws P/N MS35206-205, n°4 nuts P/N MS21042L02 and n° 8 washers P/N NAS1149DN216J.

2.2.51 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 8 View A, apply the decal P/N ED300J3091 next to the connector J3091.

2.2.52 With reference to Figure 8 View A, connect the connector P3091 to the connector J3091.

2.2.53 With reference to Figure 10 View Looking Tail LH Side, connect the connector P3044 to the connector J3044 and the connector P3042 to the connector J3042.

2.2.54 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 10 View Looking Tail LH Side, apply n°2 decals P/N ED300J3044 and P/N 999-2701-02-296 next to the connector J3044 and n°2 decals P/N ED300J3042 and P/N 999-2701-02-296 next to the connector J3042.

NOTE

Perform the following step 2.2.55 and 2.2.56 if Part II of this Service Bulletin is not intended to be embodied immediately after Part I. Otherwise skip at step 2.2.57.

2.2.55 With reference to Figure 5 Detail C and Figure 6 View Looking Left Cockpit Pedestal, protect the connector PL145P1 with the protective cap P/N DCC-02 nomex fibre sleeve P/N A582A25 and tie strap P/N 900004953.

2.2.56 With reference to Figure 5 Detail C and Figure 6 View Looking Left Cockpit Pedestal, protect the connector PL144P1 with the protective cap P/N DCC-03 nomex fibre sleeve P/N A582A25 and tie strap P/N 900004953.

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

3. In accordance with weight and balance changes, update the Chart A (see Rotorcraft Flight Manual, Part II, section 6).
4. Return the helicopter to flight configuration and record for compliance with Part I of this Service Bulletin on the helicopter logbook.
5. Gain access to My Communications section on Leonardo WebPortal and compile the “Service Bulletin Application Communication”.

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

engineering.support.lhd@leonardo.com

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

AWPC.Engineering.Support@leonardocompany.us

PART II

1. In accordance with AMP DM 39-A-00-20-00-00A-120A-A prepare the helicopter on ground for a safe maintenance. Disconnect the battery, all electrical power sources and/or the external power supply.

NOTE

If necessary, in order to ensure a proper installation of the equipment, it is possible to use bolts (length only) and/or screws (length only) and/or spacers (length only) and/or washers (thickness only) of two increments greater or lesser with respect to the indicated ones.

2. In accordance with AMP DM 39-A-06-41-00-00A-010A-A and with reference to Figure 12, gain access to the area affected by the installation and perform the SATCOM ISAT-200A equipment installation P/N 3G2310A13611 as described in the following procedure:

2.1 With reference to Figure 13 View A, remove the panel P/N 999-0500-85-231 from the interseat console.

NOTE

Perform the following step 2.2 only if Part II of this Service Bulletin is not performed immediately after Part I. Otherwise skip at step 2.3

2.2 With reference to Figure 13 View A and Detail D, remove the tie straps, the nomex fibre sleeves and the protective caps from the connectors PL145P1 and PL144P1.

2.3 In accordance with AMP DM 39-B-23-95-01-00A-720A-K and with reference to Figure 13 View A, install the cockpit display panel CDP-300C P/N 104-300-02 in the interseat console.

2.4 In accordance with AMP DM 39-B-23-95-02-00A-720A-K and with reference to Figure 13 View A, install the dispatch voice interface DVI-300A P/N 105-300-02 in the interseat console.

2.5 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 13 View A, apply the decal P/N ED300PL145 on the cockpit display panel CDP-300C P/N 104-300-02 and the decal P/N ED300PL144 on the dispatch voice interface DVI-300A P/N 105-300-02.

2.6 In accordance with the applicable steps of AMP DM 39-B-23-95-03-00A-720A-K and with reference to Figure 13 View B and View E, install the transceiver ISAT-200A P/N 101-200-07 and the ground cable P/N MS25083-2BB8 on the tray.

2.7 With reference to Figure 18 View looking ISAT-200A VCD, install the plate identification P/N A016A004B1 on the transceiver ISAT-200A P/N 101-200-07,

and fill the fields according to vendor identification label shown in figure.

2.8 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 13 View B, apply the decal P/N ED300A433 on the transceiver ISAT-200A.

NOTE

Perform the following step 2.9 only if Part II of this Service Bulletin is not performed immediately after Part I. Otherwise skip at step 2.10.

2.9 With reference to Figure 12 View C, remove the cover P/N 3G5315A61731 from the support assy P/N 3G5315A61632. Retain the hardware for later reuse.

NOTE

If step 2.9 has been performed, install the antenna by means of existing removed hardware.

2.10 In accordance with AMP DM 39-B-23-95-04-00A-720A-K and with reference to Figure 12 View C, install the antenna (E107) STS-ISAT-ANT by means of n°4 screws P/N MS27039-1-08, n° 4 washers P/N NAS1149D0332K and sealant MIL-S-8802 Ty II, Cl B-4.

2.11 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 12 View C, apply the decal P/N ED300E107 on the internal side of the helicopter structure.

NOTE

If the bonding test result are not within the required range, make sure that the surfaces are cleaned in accordance with LH standard and repeat the test. If the bonding test result remains out of the required range, install a conductive gasket P/N A519A-A000 (gasket profile to suit equipment outline).

2.12 In accordance with AMP DM 39-B-23-95-00-00A-320A-K, perform the equipment bonding tests and perform the operational check of the satellite communication system.

NOTE

Customer must contact Product Support Engineering (engineering.support.lhd@leonardo.com) at least 3 months in advance of embodiment date of this Service Bulletin in order to receive information on the exact W/D applicable to the helicopter.

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

   3.1 With reference to AMP DM 39-A-24-91-04-00A-920A-K, remove from overhead Auxiliary C/B panel the existing Integrally-lighted panel.

   3.2 Install the circuit breaker P/N MS3320-3 where indicated on the new Integrally-lighted panel P/N 3G2490LXXXXX.

   3.3 In accordance with AMP DM 39-A-11-00-01-00A-720A-A, install n°1 decal P/N ED300CB251 in an area adjacent to the previously installed circuit breaker.

   3.4 Install the splitter P/N MS27723-23 on the new Integrally-lighted panel P/N 3G2490LXXXXX.

   3.5 In accordance with AMP DM 39-A-11-00-01-00A-720A-A, install n°1 decal P/N ED300S298 in an area adjacent to the previously installed splitter.

   3.6 Perform electrical connection between PL1J3 pin c and splitter S298 pin 3 by means of wire P/N A556A-T20. Use terminal lug P/N M39029/56-351 on PL1J3 side and terminal lug P/N M39029/1-100 on S298 side.

   3.7 Perform electrical connection between splitter S298 pin 2 and circuit breaker CB251 pin 2 by means of wire P/N A556A-T20. Use terminal lug P/N M39029/1-100 on S298 side and terminal lug P/N MS25036-149 on CB251 side.

   3.8 Perform electrical connection between circuit breaker CB251 pin 1 and 28V MAIN BUS 1 by means of wire P/N A556A-T20.

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

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

6. Gain access to My Communications section on Leonardo WebPortal and compile the “Service Bulletin Application Communication”.

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

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

   AWPC.Engineering.Support@leonardocompany.us

PART III

1. In accordance with AMP DM 39-A-00-20-00-00A-120A-A prepare the helicopter on ground for a safe maintenance. Disconnect the battery, all electrical power sources and/or the external power supply.
2. In accordance with AMP DM 39-A-06-41-00-00A-010A-A and with reference to Figures 17 thru 19, gain access to the area affected by the installation and perform the SATCOM ISAT-200 PTT variant P/N 3G4390P01111 installation as described in the following procedure:

NOTE

Where the wire/cable replacement is not practicable, identify the wires/cables previously marked with "laser" process ("laser marked") and reutilize, with yellow sleeve P/N A587A on both sides, indicating the complete marking in according to its related "from-to" applicable.

2.1 With reference to Figure 19 Wiring Diagram, remove the C/A A2A505 from the connector P133 and from the terminal board TB147P1.

NOTE

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

NOTE

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

2.2 With reference to Figures 17 and 18, lay down the following cable assemblies on the existing routes unless otherwise indicated on the figures:

- 3G9A02A73201 SATCOM SKYTRAC ISAT-200 VARIANT (A2A732)
- 3G9B02L31801 SATCOM SKYTRAC ISAT-200 VARIANT (B2L318)
- 3G9C02A47601 SATCOM SKYTRAC ISAT-200 VARIANT (C2A476)

2.3 With reference to Figures 17 and 18, secure the cable assemblies laid down at the previous step by means of the existing hardware and lacing cords.

2.4 In accordance with AMP DM 39-A-20-10-08-00A-622A-A and with reference to Figure 18 View looking inside LH nose and floor area, and Figure 19 Wiring Diagram, perform the electrical connections of the C/A A2A732 to the connectors

P133 and TB105P1.

2.5 In accordance with AMP DM 39-A-20-10-08-00A-622A-A and with reference to Figure 17 View looking down LH roof from STA 3120 to STA 5700, Figure 18 View looking inside LH nose and floor area, and Figure 19 Wiring Diagram, perform the electrical connections of the C/A B2L318 to the connectors J133, and J217.

2.6 In accordance with AMP DM 39-A-20-10-08-00A-622A-A and with reference to Figure 18 View looking outboard LH rear avionic bay, and Figure 19 Wiring Diagram, perform the electrical connections of the C/A C2A476 to the connectors P217 and A433P1B.

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

2.8 In accordance with AMP DM 39-B-23-95-00-00A-320A-K, perform the operational check of the satellite communication system.

3. In accordance with AMP DM 39-A-06-41-00-00A-010A-A re-install all external panels, internal panels and liners previously removed.
4. In accordance with weight and balance changes, update the Chart A (see Rotorcraft Flight Manual, Part II, section 6).
5. Return the helicopter to flight configuration and record for compliance with Part III of this Service Bulletin on the helicopter logbook.
6. Gain access to My Communications section on Leonardo WebPortal and compile the “Service Bulletin Application Communication”.

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

   engineering.support.lhd@leonardo.com

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

   AWPC.Engineering.Support@leonardocompany.us

SAT/COM ISAT-200
STRUCTURAL PROVISION

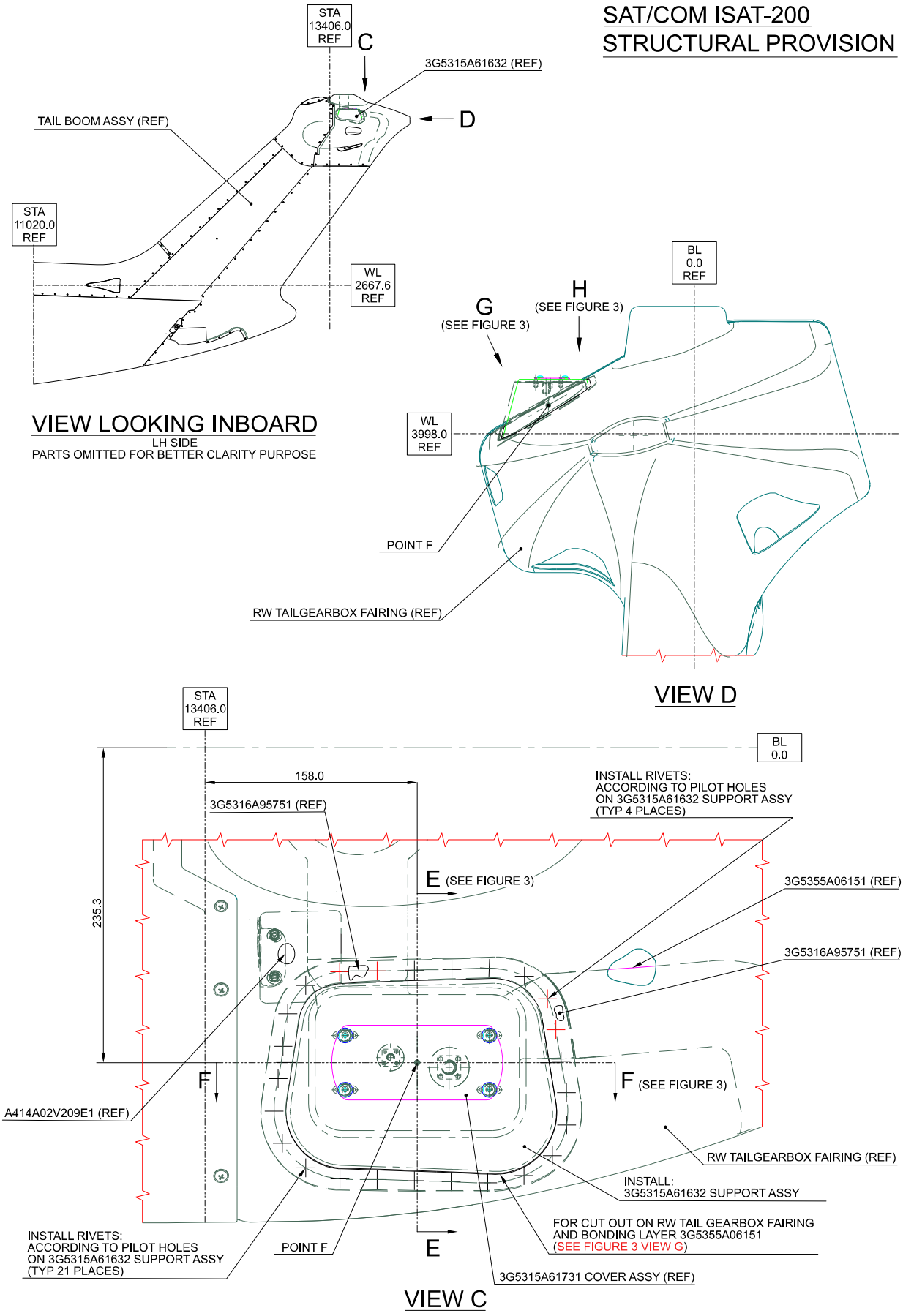


Figure 1

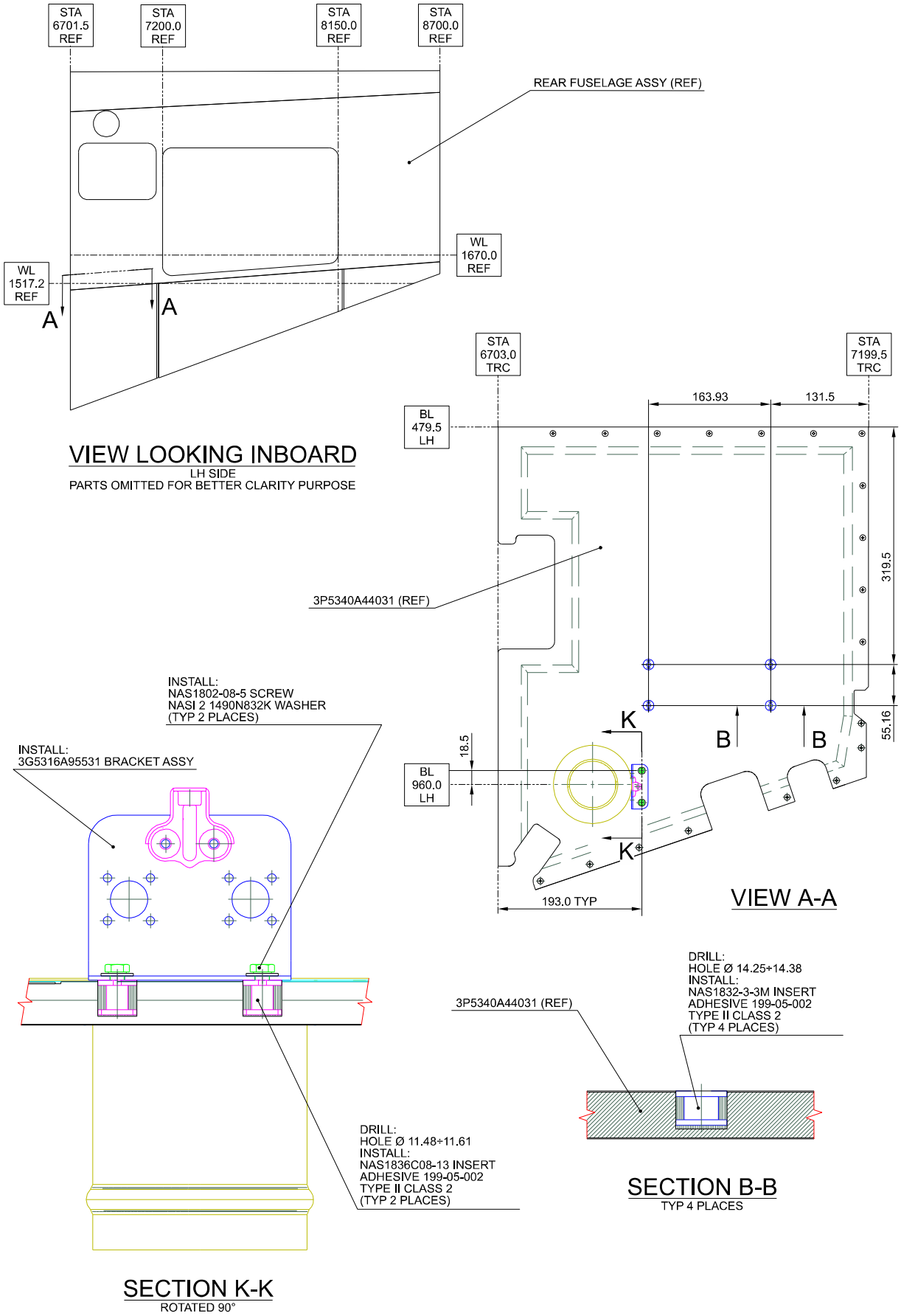

STA 6701.5 REF
STA 7200.0 REF
STA 8150.0 REF
STA 8700.0 REF
REAR FUSELAGE ASSY (REF)
WL 1670.0 REF
WL 1517.2 REF
A
A
VIEW LOOKING INBOARD
LH SIDE
PARTS OMITTED FOR BETTER CLARITY PURPOSE
STA 6703.0 TRC
STA 7199.5 TRC
163.93
131.5
BL 479.5 LH
3P5340A44031 (REF)
319.5
55.16
K
B
B
18.5
BL 960.0 LH
K
193.0 TYP
VIEW A-A
INSTALL:
NAS1802-08-5 SCREW
NASI 2 1490N832K WASHER
(TYP 2 PLACES)
INSTALL:
3G5316A95531 BRACKET ASSY
DRILL:
HOLE Ø 11.48÷11.61
INSTALL:
NAS1836C08-13 INSERT
ADHESIVE 199-05-002
TYPE II CLASS 2
(TYP 2 PLACES)
SECTION K-K
ROTATED 90°
3P5340A44031 (REF)
DRILL:
HOLE Ø 14.25÷14.38
INSTALL:
NAS1832-3-3M INSERT
ADHESIVE 199-05-002
TYPE II CLASS 2
(TYP 4 PLACES)
SECTION B-B
TYP 4 PLACES

Figure 2

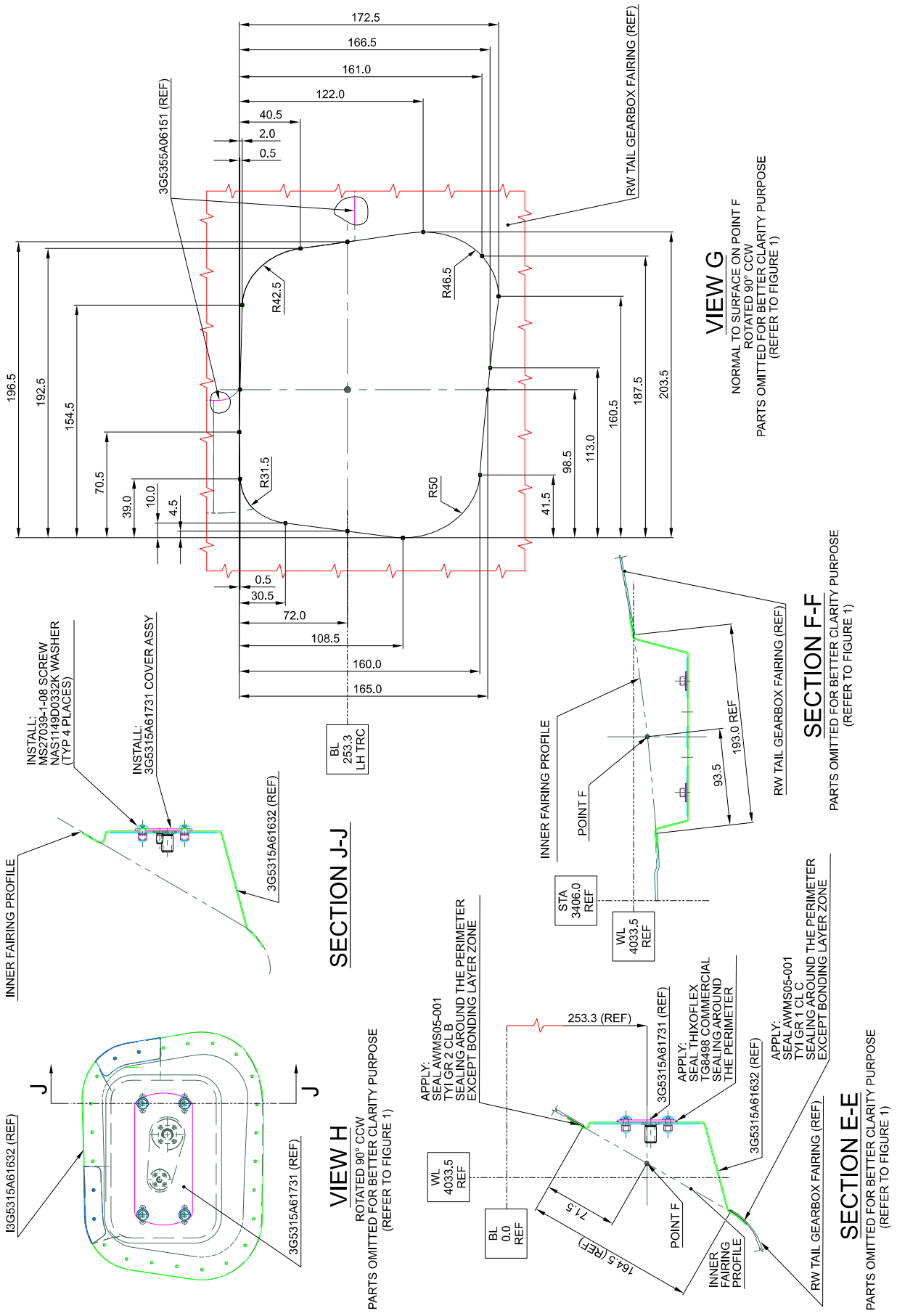

VIEW G
NORMAL TO SURFACE ON POINT F
ROTATED 90° CCW
PARTS OMITTED FOR BETTER CLARITY PURPOSE
(REFER TO FIGURE 1)
RW TAIL GEARBOX FAIRING (REF)
3G5355A06151 (REF)
172.5
166.5
161.0
122.0
40.5
2.0
0.5
R42.5
R46.5
R31.5
R50
196.5
192.5
154.5
70.5
39.0
10.0
4.5
98.5
113.0
160.5
187.5
203.5
41.5
0.5
30.5
72.0
108.5
160.0
165.0
BL 253.3 LH TRC
SECTION J-J
INSTALL: MS27039-1-08 SCREW NAS1149D0332K WASHER (TYP 4 PLACES)
INSTALL: 3G5315A61731 COVER ASSY
3G5315A61632 (REF)
INNER FAIRING PROFILE
VIEW H
ROTATED 90° CCW
PARTS OMITTED FOR BETTER CLARITY PURPOSE
(REFER TO FIGURE 1)
J
J
I3G5315A61632 (REF)
3G5315A61731 (REF)
SECTION F-F
PARTS OMITTED FOR BETTER CLARITY PURPOSE
(REFER TO FIGURE 1)
RW TAIL GEARBOX FAIRING (REF)
INNER FAIRING PROFILE
POINT F
193.0 REF
93.5
STA 3406.0 REF
WL 4033.5 REF
APPLY: SEAL AWMS05-001 TY1 GR 2 CL B SEALING AROUND THE PERIMETER EXCEPT BONDING LAYER ZONE
253.3 (REF)
3G5315A61731 (REF)
APPLY: SEAL THIXOFLEX TG8498 COMMERCIAL SEALING AROUND THE PERIMETER
3G5315A61632 (REF)
APPLY: SEAL AWMS05-001 TY1 GR 1 CL C SEALING AROUND THE PERIMETER EXCEPT BONDING LAYER ZONE
WL 4033.5 REF
BL 0.0 REF
71.5
164.5 (REF)
POINT F
INNER FAIRING PROFILE
RW TAIL GEARBOX FAIRING (REF)
SECTION E-E
PARTS OMITTED FOR BETTER CLARITY PURPOSE
(REFER TO FIGURE 1)

Figure 3

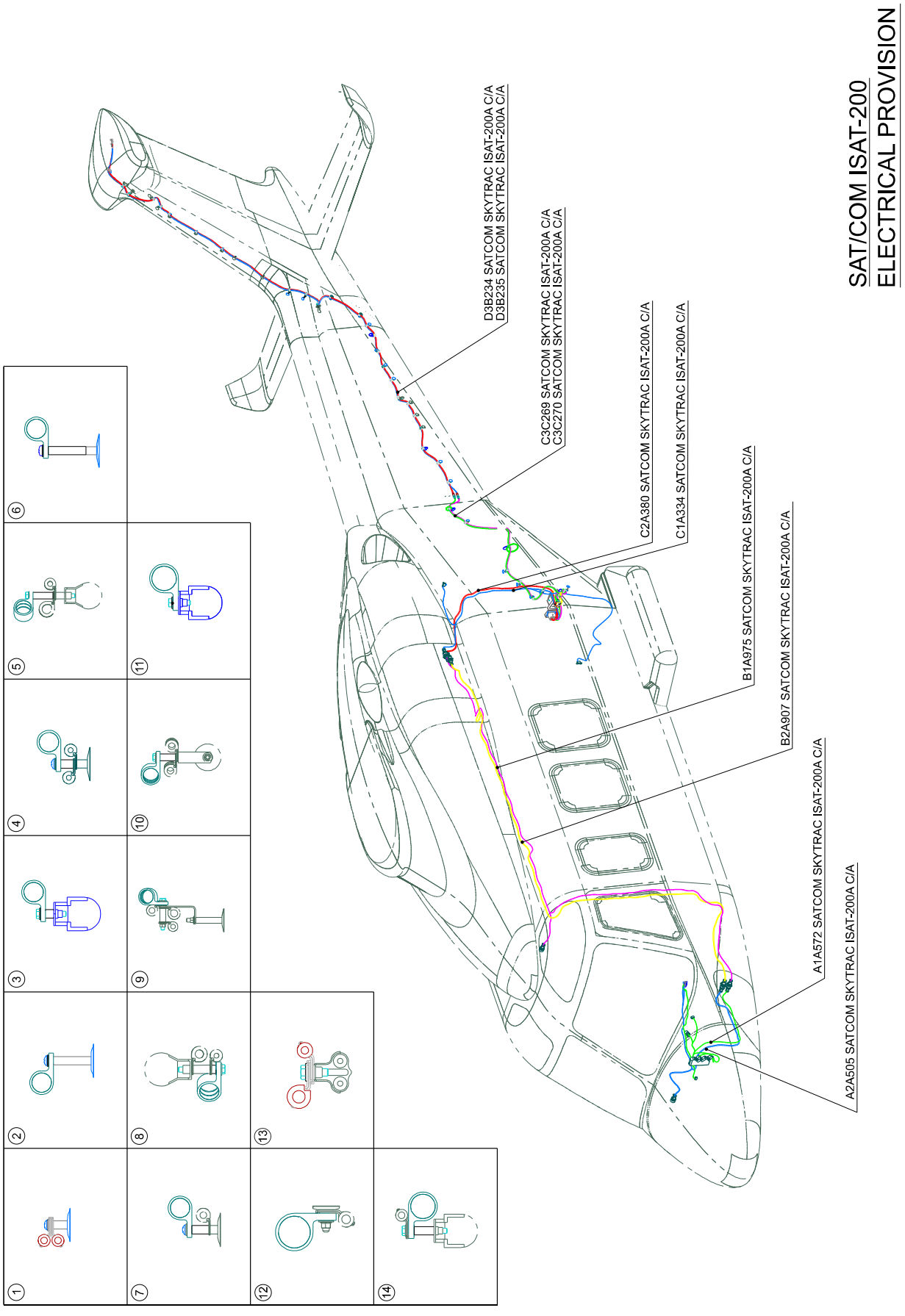

SAT/COM ISAT-200
ELECTRICAL PROVISION
D3B234 SATCOM SKYTRAC ISAT-200A C/A
D3B235 SATCOM SKYTRAC ISAT-200A C/A
C3C269 SATCOM SKYTRAC ISAT-200A C/A
C3C270 SATCOM SKYTRAC ISAT-200A C/A
C2A380 SATCOM SKYTRAC ISAT-200A C/A
C1A334 SATCOM SKYTRAC ISAT-200A C/A
B1A975 SATCOM SKYTRAC ISAT-200A C/A
B2A907 SATCOM SKYTRAC ISAT-200A C/A
A1A572 SATCOM SKYTRAC ISAT-200A C/A
A2A505 SATCOM SKYTRAC ISAT-200A C/A
1
2
3
4
5
6
7
8
9
10
11
12
13
14

Figure 4

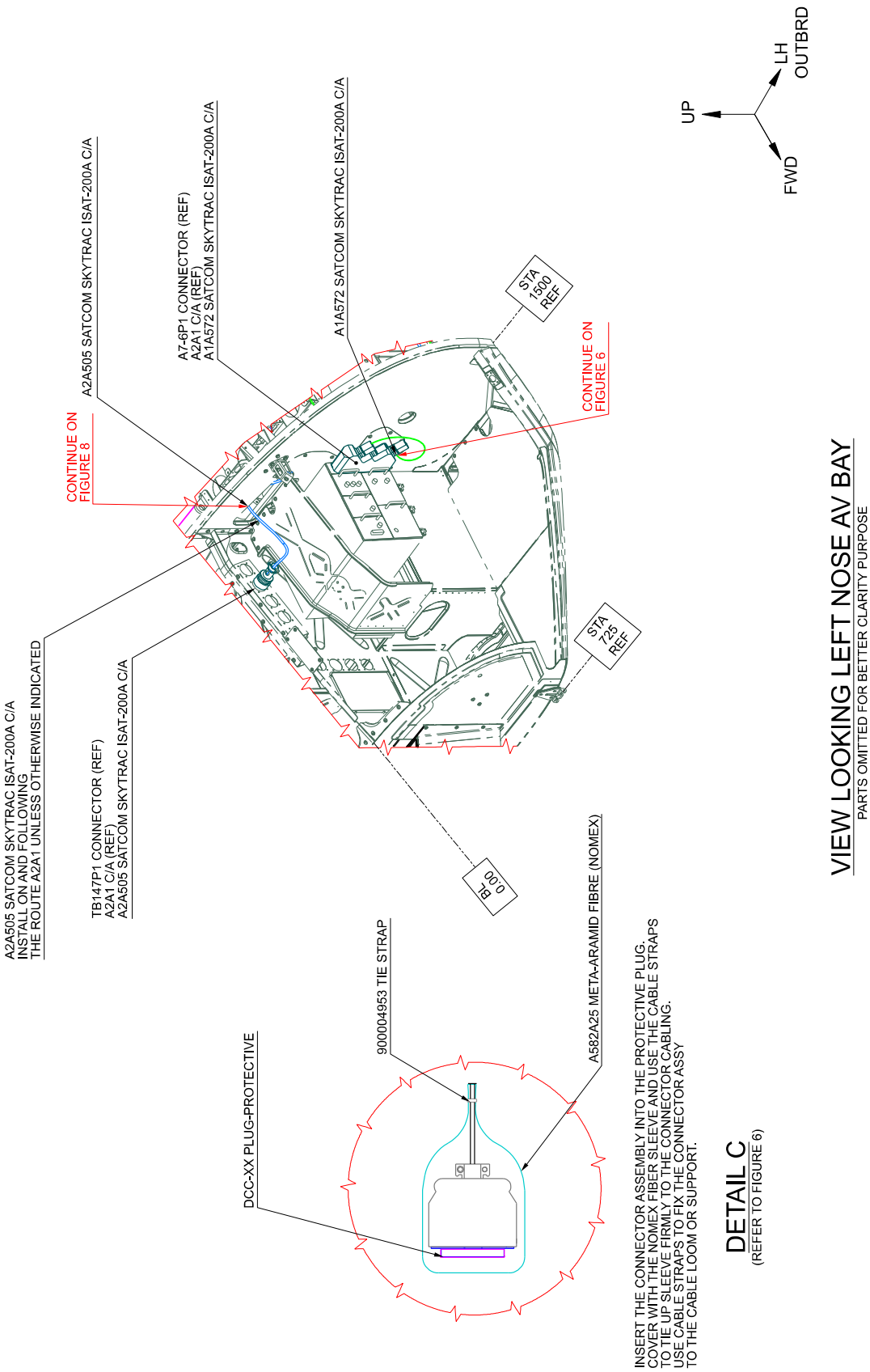

VIEW LOOKING LEFT NOSE AV BAY
PARTS OMITTED FOR BETTER CLARITY PURPOSE
UP
LH
OUTBRD
FWD
A2A505 SATCOM SKYTRAC ISAT-200A C/A
A7-6P1 CONNECTOR (REF)
A2A1 C/A (REF)
A1A572 SATCOM SKYTRAC ISAT-200A C/A
A1A572 SATCOM SKYTRAC ISAT-200A C/A
STA 1500 REF
CONTINUE ON FIGURE 8
CONTINUE ON FIGURE 6
A2A505 SATCOM SKYTRAC ISAT-200A C/A
INSTALL ON AND FOLLOWING
THE ROUTE A2A1 UNLESS OTHERWISE INDICATED
TB147P1 CONNECTOR (REF)
A2A1 C/A (REF)
A2A505 SATCOM SKYTRAC ISAT-200A C/A
STA 725 REF
BL 0.00
DETAIL C
(REFER TO FIGURE 6)
DCC-XX PLUG-PROTECTIVE
900004953 TIE STRAP
A582A25 META-ARAMID FIBRE (NOMEX)
INSERT THE CONNECTOR ASSEMBLY INTO THE PROTECTIVE PLUG.
COVER WITH THE NOMEX FIBER 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 OR SUPPORT.

Figure 5

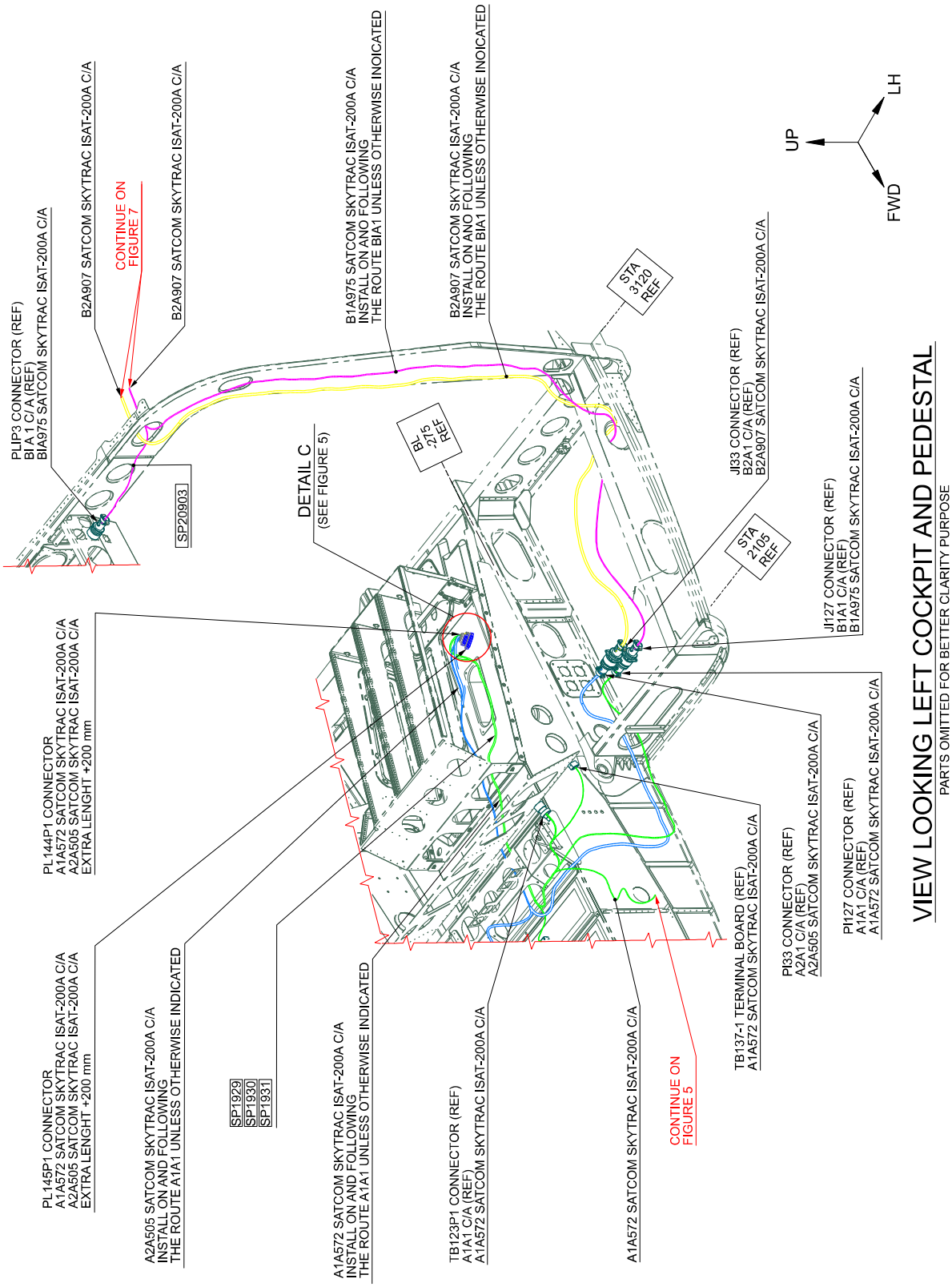

VIEW LOOKING LEFT COCKPIT AND PEDESTAL
PARTS OMITTED FOR BETTER CLARITY PURPOSE
UP
LH
FWD
PLJP3 CONNECTOR (REF)
BI A 1 C/A (REF)
BIA975 SATCOM SKYTRAC ISAT-200A C/A
B2A907 SATCOM SKYTRAC ISAT-200A C/A
CONTINUE ON FIGURE 7
B2A907 SATCOM SKYTRAC ISAT-200A C/A
SP20903
B1A975 SATCOM SKYTRAC ISAT-200A C/A
INSTALL ON ANO FOLLOWING
THE ROUTE BIA1 UNLESS OTHERWISE INOICATED
B2A907 SATCOM SKYTRAC ISAT-200A C/A
INSTALL ON ANO FOLLOWING
THE ROUTE BIA1 UNLESS OTHERWISE INOICATED
DETAIL C
(SEE FIGURE 5)
BL 27.5 REF
STA 3120 REF
STA 2105 REF
JI33 CONNECTOR (REF)
B2A1 C/A (REF)
B2A907 SATCOM SKYTRAC ISAT-200A C/A
JI127 CONNECTOR (REF)
B1A1 C/A (REF)
B1A975 SATCOM SKYTRAC ISAT-200A C/A
PL144P1 CONNECTOR
A1A572 SATCOM SKYTRAC ISAT-200A C/A
A2A505 SATCOM SKYTRAC ISAT-200A C/A
EXTRA LENGHT +200 mm
PL145P1 CONNECTOR
A1A572 SATCOM SKYTRAC ISAT-200A C/A
A2A505 SATCOM SKYTRAC ISAT-200A C/A
EXTRA LENGHT +200 mm
A2A505 SATCOM SKYTRAC ISAT-200A C/A
INSTALL ON AND FOLLOWING
THE ROUTE A1A1 UNLESS OTHERWISE INDICATED
SP1929
SP1930
SP1931
A1A572 SATCOM SKYTRAC ISAT-200A C/A
INSTALL ON AND FOLLOWING
THE ROUTE A1A1 UNLESS OTHERWISE INDICATED
TB123P1 CONNECTOR (REF)
A1A1 C/A (REF)
A1A572 SATCOM SKYTRAC ISAT-200A C/A
A1A572 SATCOM SKYTRAC ISAT-200A C/A
CONTINUE ON FIGURE 5
TB13Z-1 TERMINAL BOARD (REF)
A1A572 SATCOM SKYTRAC ISAT-200A C/A
PI33 CONNECTOR (REF)
A2A1 C/A (REF)
A2A505 SATCOM SKYTRAC ISAT-200A C/A
PI127 CONNECTOR (REF)
A1A1 C/A (REF)
A1A572 SATCOM SKYTRAC ISAT-200A C/A

Figure 6

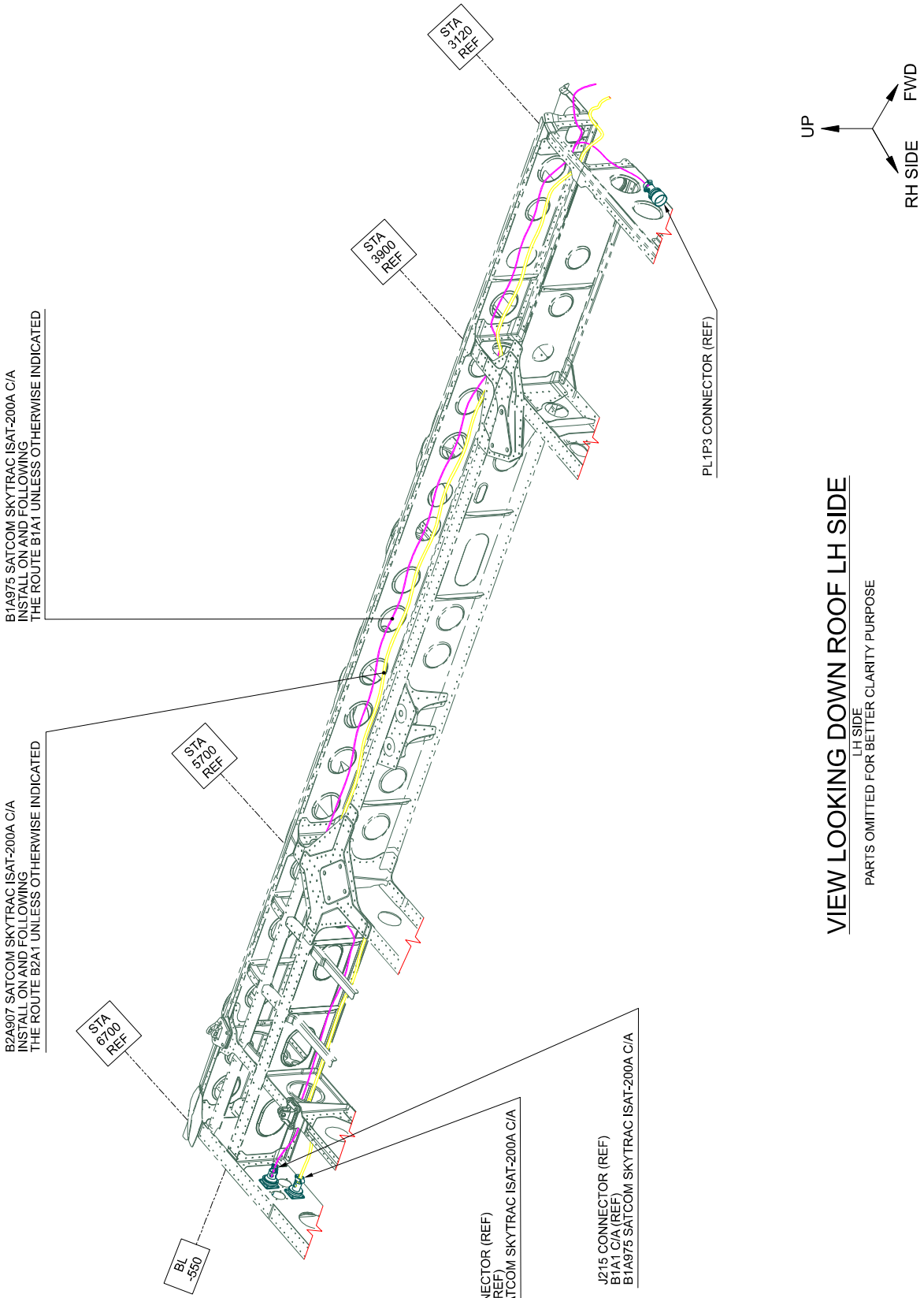

VIEW LOOKING DOWN ROOF LH SIDE
LH SIDE
PARTS OMITTED FOR BETTER CLARITY PURPOSE
UP
FWD
RH SIDE
STA 3120 REF
STA 3900 REF
STA 5700 REF
STA 6700 REF
BL -550
PL1P3 CONNECTOR (REF)
B1A975 SATCOM SKYTRAC ISAT-200A C/A
INSTALL ON AND FOLLOWING
THE ROUTE B1A1 UNLESS OTHERWISE INDICATED
B2A907 SATCOM SKYTRAC ISAT-200A C/A
INSTALL ON AND FOLLOWING
THE ROUTE B2A1 UNLESS OTHERWISE INDICATED
J217 CONNECTOR (REF)
B2A1 C/A (REF)
B2A907 SATCOM SKYTRAC ISAT-200A C/A
J215 CONNECTOR (REF)
B1A1 C/A (REF)
B1A975 SATCOM SKYTRAC ISAT-200A C/A

Figure 7

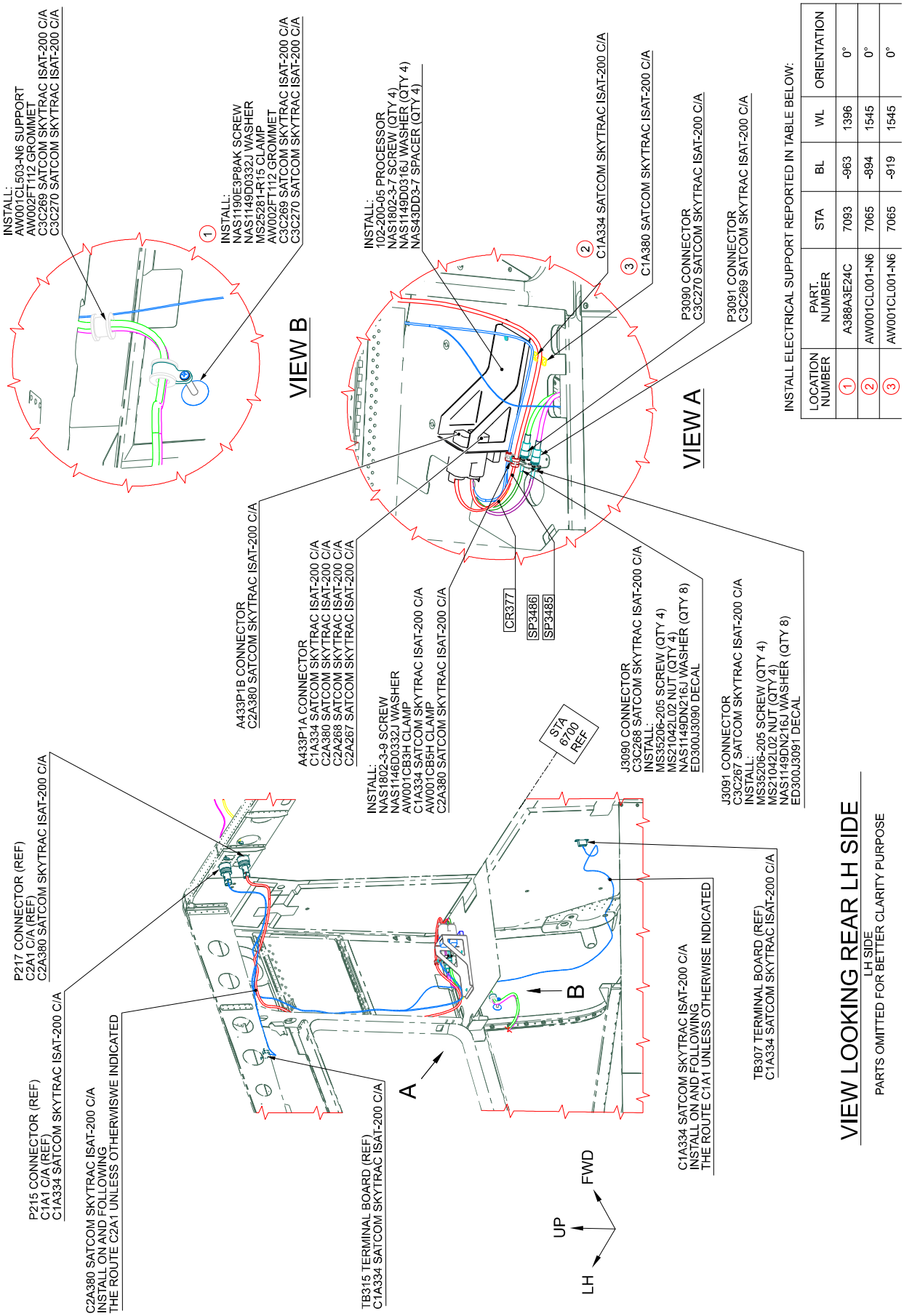
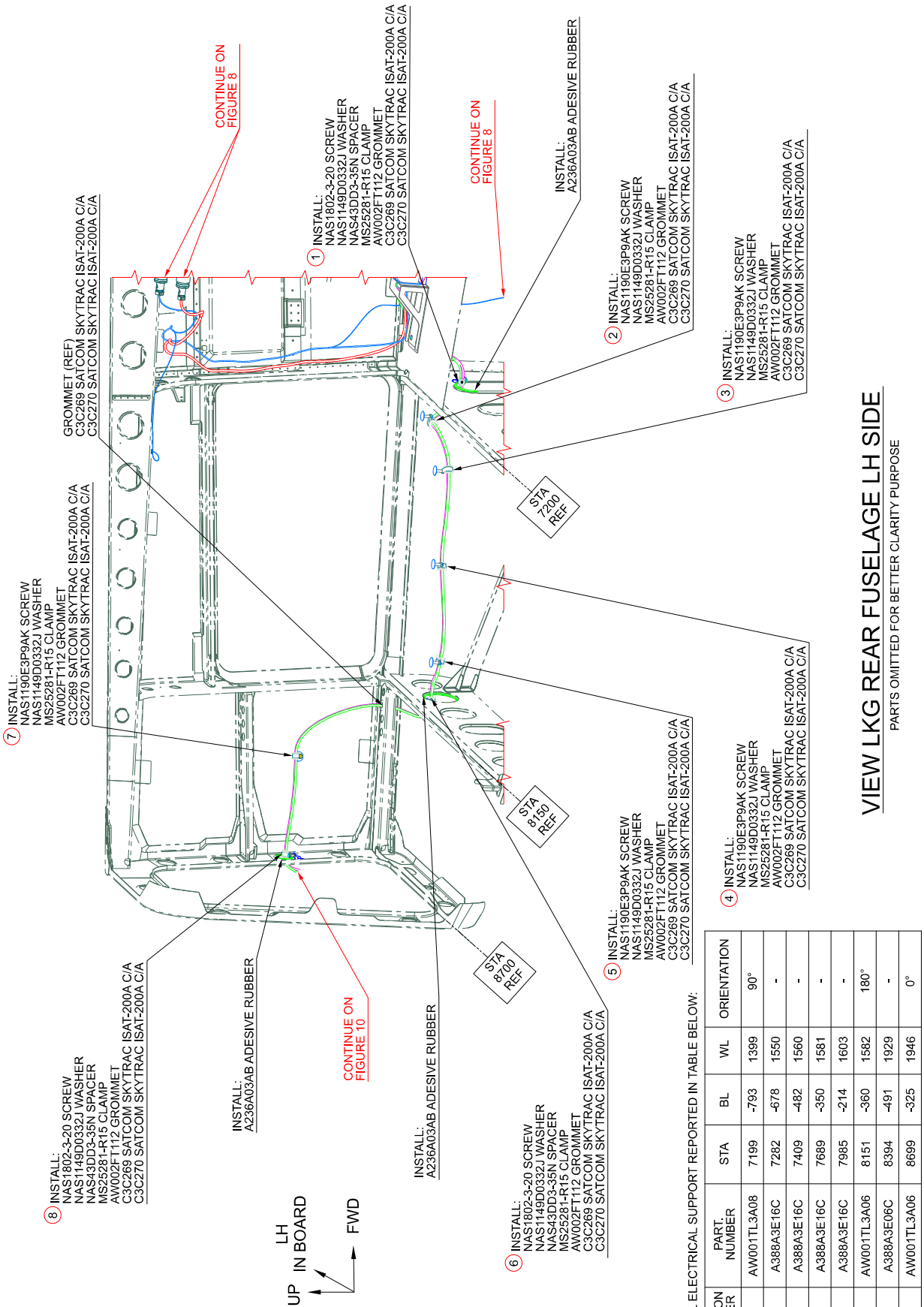

VIEW LOOKING REAR LH SIDE
LH SIDE
PARTS OMITTED FOR BETTER CLARITY PURPOSE
VIEW B
VIEW A
INSTALL ELECTRICAL SUPPORT REPORTED IN TABLE BELOW:
LOCATION NUMBER
PART NUMBER
STA
BL
WL
ORIENTATION
1 A388A3E24C 7093 -963 1396 0°
2 AW001CL001-N6 7065 -894 1545 0°
3 AW001CL001-N6 7065 -919 1545 0°
INSTALL:
AW001CL503-N6 SUPPORT
AW002FT112 GROMMET
C3C269 SATCOM SKYTRAC ISAT-200 C/A
C3C270 SATCOM SKYTRAC ISAT-200 C/A
INSTALL:
NAS1190E3P8AK SCREW
NAS1149D0332J WASHER
MS25281-R15 CLAMP
AW002FT112 GROMMET
C3C269 SATCOM SKYTRAC ISAT-200 C/A
C3C270 SATCOM SKYTRAC ISAT-200 C/A
INSTALL:
102-200-05 PROCESSOR
NAS1802-3-7 SCREW (QTY 4)
NAS1149D0316J WASHER (QTY 4)
NAS43DD3-7 SPACER (QTY 4)
C1A334 SATCOM SKYTRAC ISAT-200 C/A
C1A380 SATCOM SKYTRAC ISAT-200 C/A
P3090 CONNECTOR
C3C270 SATCOM SKYTRAC ISAT-200 C/A
P3091 CONNECTOR
C3C269 SATCOM SKYTRAC ISAT-200 C/A
A433P1B CONNECTOR
C2A380 SATCOM SKYTRAC ISAT-200 C/A
A433P1A CONNECTOR
C1A334 SATCOM SKYTRAC ISAT-200 C/A
C2A380 SATCOM SKYTRAC ISAT-200 C/A
C2A268 SATCOM SKYTRAC ISAT-200 C/A
C2A267 SATCOM SKYTRAC ISAT-200 C/A
INSTALL:
NAS1802-3-9 SCREW
NAS1146D0332J WASHER
AW001CB3H CLAMP
C1A334 SATCOM SKYTRAC ISAT-200 C/A
AW001CB5H CLAMP
C2A380 SATCOM SKYTRAC ISAT-200 C/A
CR377
SP3486
SP3485
J3090 CONNECTOR
C3C268 SATCOM SKYTRAC ISAT-200 C/A
INSTALL:
MS35206-205 SCREW (QTY 4)
MS21042L02 NUT (QTY 4)
NAS1149DN216J WASHER (QTY 8)
ED300J3090 DECAL
J3091 CONNECTOR
C3C267 SATCOM SKYTRAC ISAT-200 C/A
INSTALL:
MS35206-205 SCREW (QTY 4)
MS21042L02 NUT (QTY 4)
NAS1149DN216J WASHER (QTY 8)
ED300J3091 DECAL
STA 6700 REF
P217 CONNECTOR (REF)
C2A1 C/A (REF)
C2A380 SATCOM SKYTRAC ISAT-200 C/A
P215 CONNECTOR (REF)
C1A1 C/A (REF)
C1A334 SATCOM SKYTRAC ISAT-200 C/A
C2A380 SATCOM SKYTRAC ISAT-200 C/A
INSTALL ON AND FOLLOWING
THE ROUTE C2A1 UNLESS OTHERWISWE INDICATED
TB315 TERMINAL BOARD (REF)
C1A334 SATCOM SKYTRAC ISAT-200 C/A
C1A334 SATCOM SKYTRAC ISAT-200 C/A
INSTALL ON AND FOLLOWING
THE ROUTE C1A1 UNLESS OTHERWISE INDICATED
TB307 TERMINAL BOARD (REF)
C1A334 SATCOM SKYTRAC ISAT-200 C/A
A
B
UP
FWD
LH

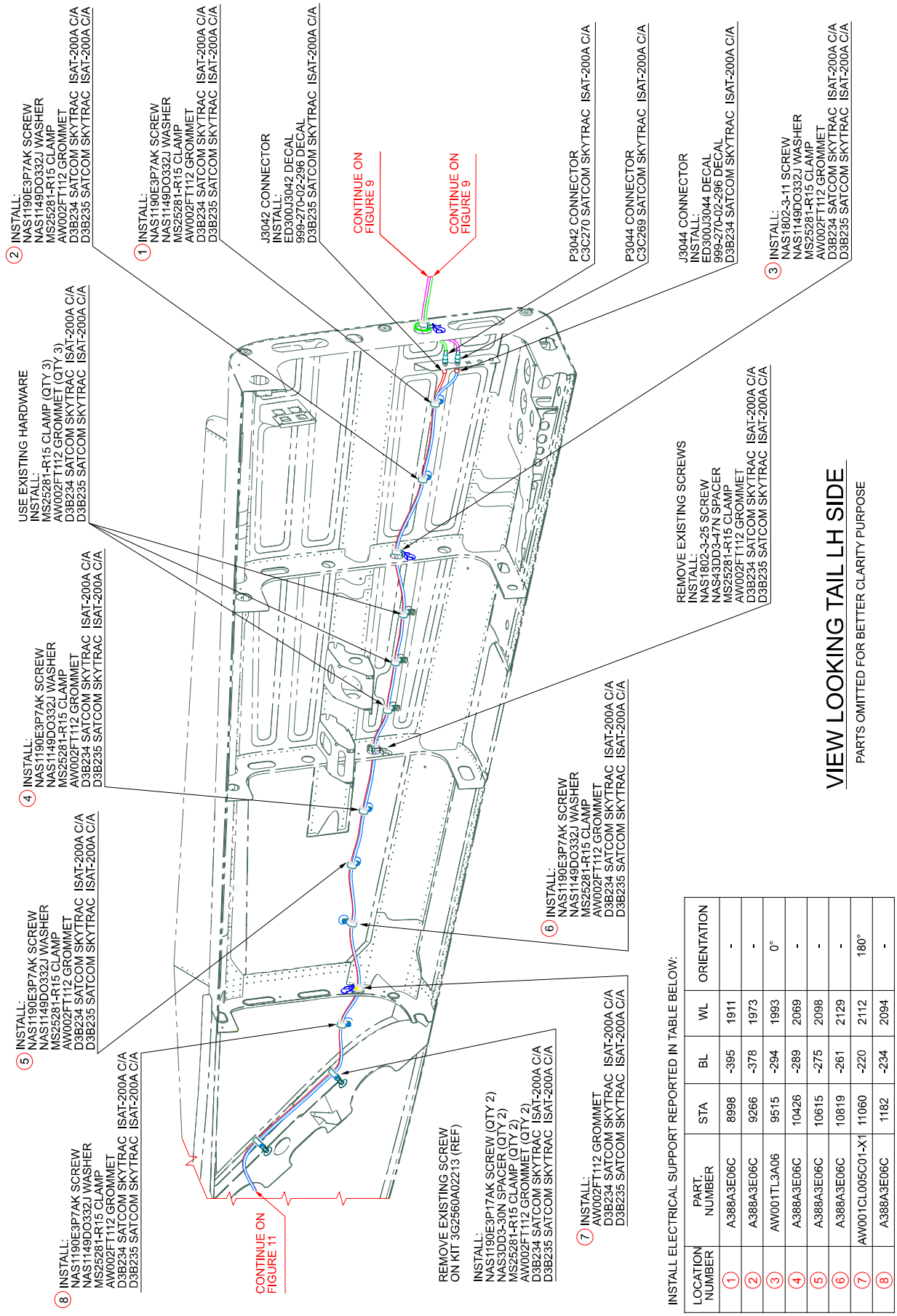
Figure 8



INSTALL ELECTRICAL SUPPORT REPORTED IN TABLE BELOW:

LOCATION NUMBER	PART. NUMBER	STA	BL	WL	ORIENTATION
①	AW001TL3A08	7199	-793	1399	90°
②	A388A3E16C	7282	-678	1550	-
③	A388A3E16C	7409	-482	1560	-
④	A388A3E16C	7689	-350	1581	-
⑤	A388A3E16C	7985	-214	1603	-
⑥	AW001TL3A06	8151	-360	1582	180°
⑦	A388A3E06C	8394	-491	1929	-
⑧	AW001TL3A06	8699	-325	1946	0°

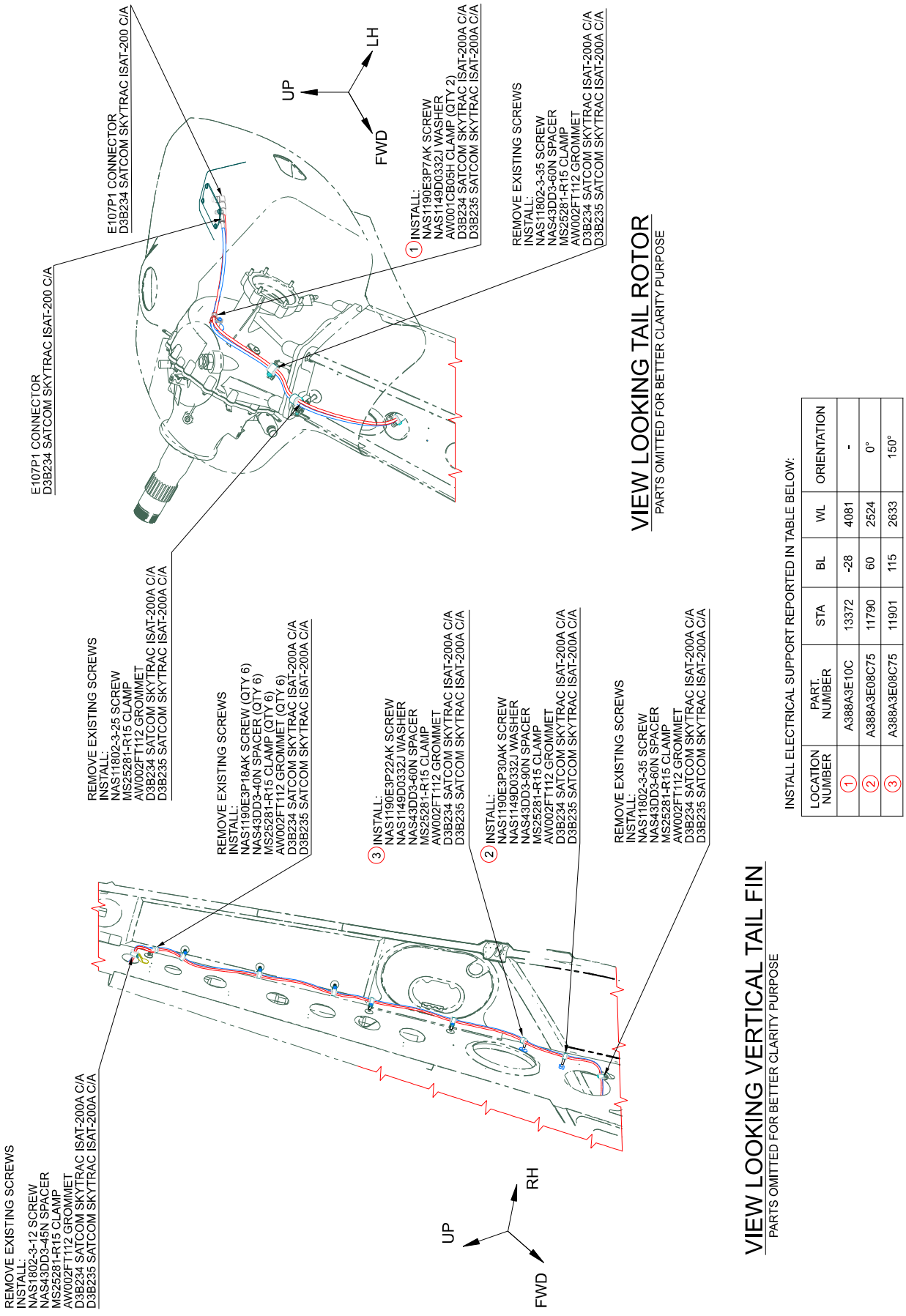
Figure 9



INSTALL ELECTRICAL SUPPORT REPORTED IN TABLE BELOW:

LOCATION NUMBER	PART NUMBER	STA	BL	WL	ORIENTATION
1	A388A3E06C	8998	-395	1911	-
2	A388A3E06C	9266	-378	1973	-
3	AW001TL3A06	9515	-294	1993	0°
4	A388A3E06C	10426	-289	2069	-
5	A388A3E06C	10615	-275	2098	-
6	A388A3E06C	10819	-261	2129	-
7	AW001CL005C01-X1	11060	-220	2112	180°
8	A388A3E06C	1182	-234	2094	-

Figure 10



INSTALL ELECTRICAL SUPPORT REPORTED IN TABLE BELOW:

LOCATION NUMBER	PART. NUMBER	STA	BL	WL	ORIENTATION
1	A388A3E10C	13372	-28	4081	-
2	A388A3E08C75	11790	60	2524	0°
3	A388A3E08C75	11901	115	2633	150°

Figure 11

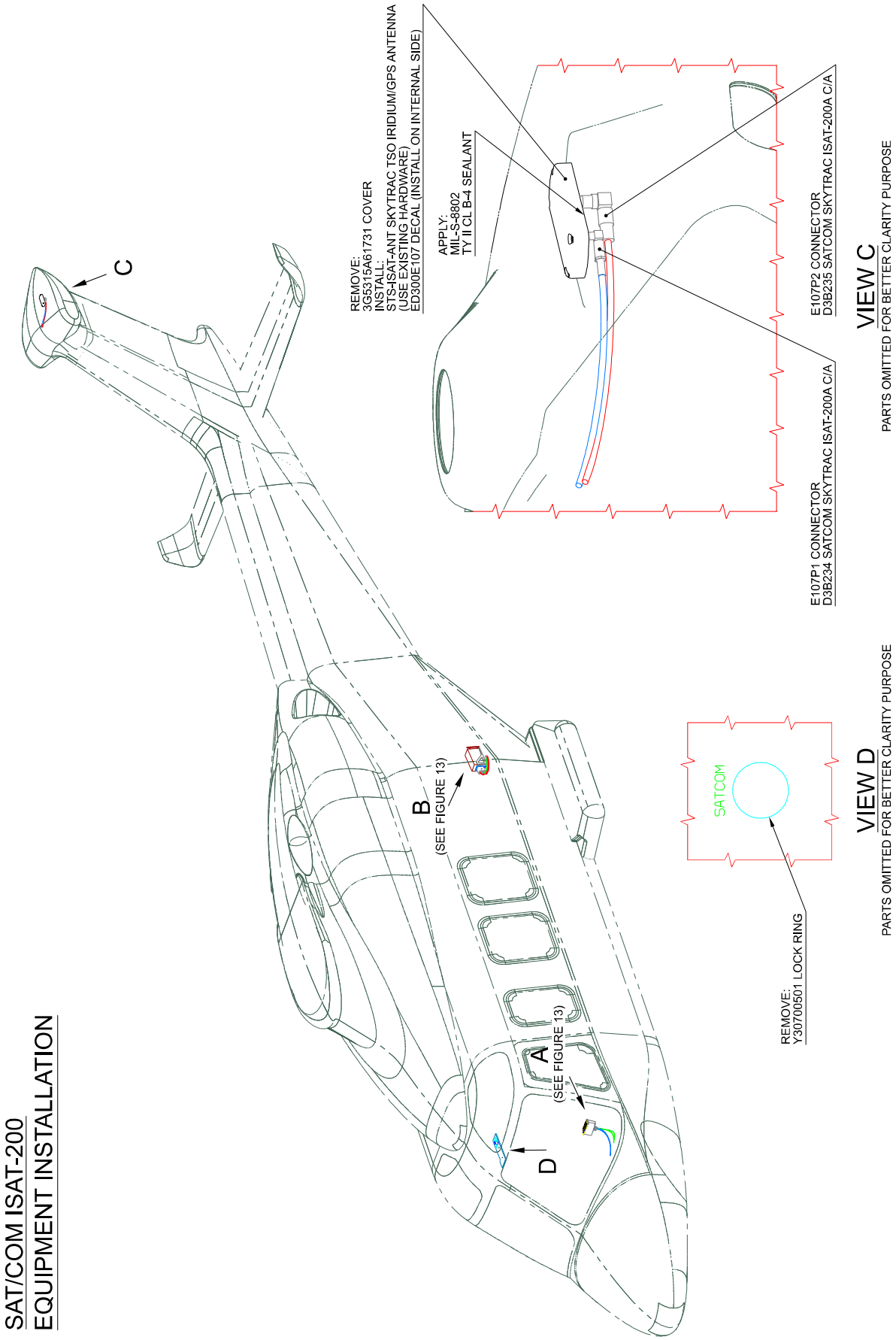

SAT/COM ISAT-200
EQUIPMENT INSTALLATION
C
B
(SEE FIGURE 13)
A
(SEE FIGURE 13)
D
REMOVE:
3G53154A61731 COVER
INSTALL:
STS-ISAT-ANT SKYTRAC TSO IRIDIUM/GPS ANTENNA
(USE EXISTING HARDWARE)
ED300E107 DECAL (INSTALL ON INTERNAL SIDE)
APPLY:
MIL-S-8802
TY II CL B-4 SEALANT
E107P2 CONNECTOR
D3B235 SATCOM SKYTRAC ISAT-200A C/A
E107P1 CONNECTOR
D3B234 SATCOM SKYTRAC ISAT-200A C/A
VIEW C
PARTS OMITTED FOR BETTER CLARITY PURPOSE
SATCOM
REMOVE:
Y30700501 LOCK RING
VIEW D
PARTS OMITTED FOR BETTER CLARITY PURPOSE

Figure 12

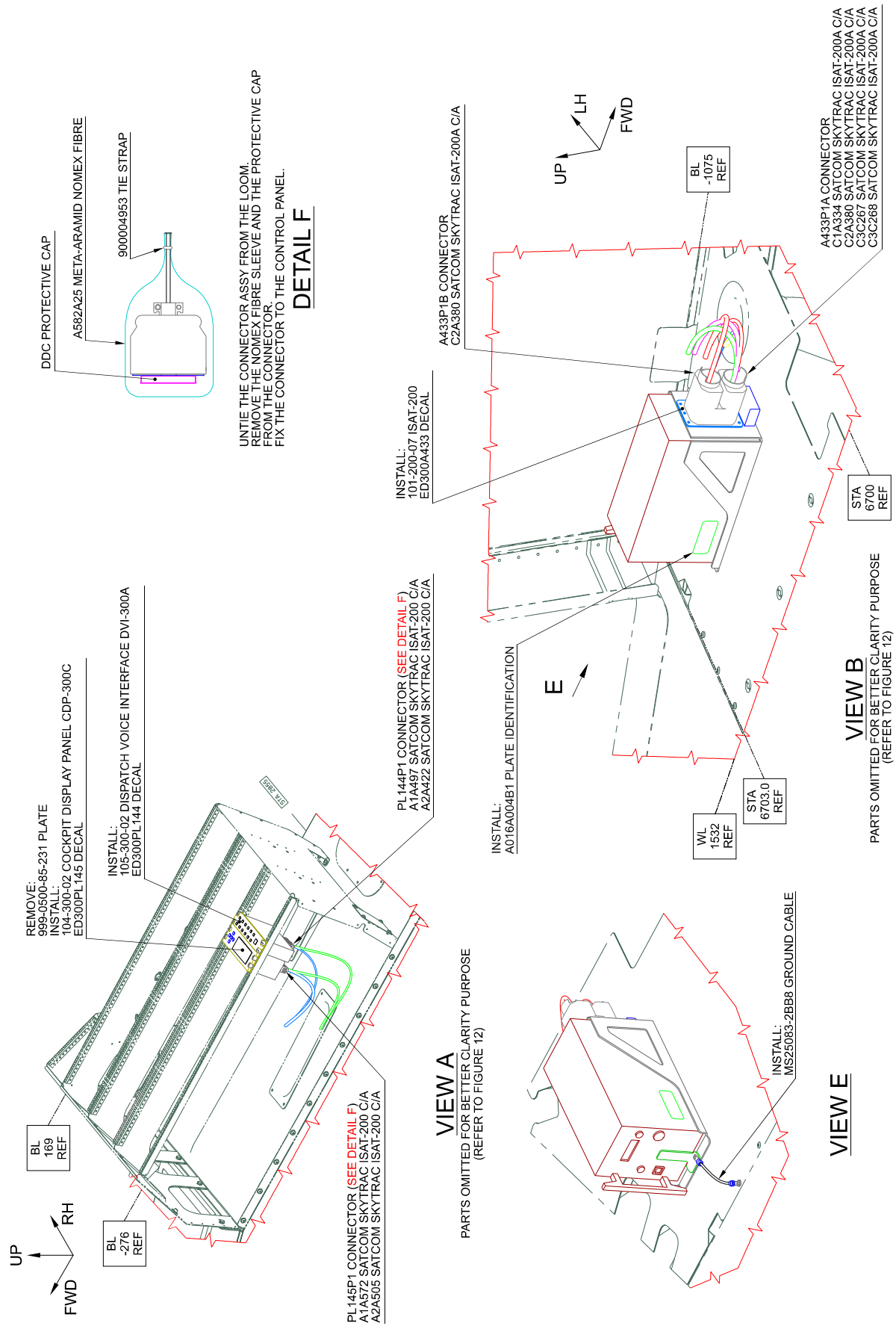

DDC PROTECTIVE CAP
A582A25 META-ARAMID NOMEX FIBRE
900004953 TIE STRAP
UNTIE THE CONNECTOR ASSY FROM THE LOOM.
REMOVE THE NOMEX FIBRE SLEEVE AND THE PROTECTIVE CAP FROM THE CONNECTOR.
FIX THE CONNECTOR TO THE CONTROL PANEL.
DETAIL F
REMOVE:
999-0500-85-231 PLATE
INSTALL:
104-300-02 COCKPIT DISPLAY PANEL CDP-300C
ED300PL145 DECAL
INSTALL:
105-300-02 DISPATCH VOICE INTERFACE DVI-300A
ED300PL144 DECAL
SCALE 1:1.5
PL144P1 CONNECTOR (SEE DETAIL F)
A1A497 SATCOM SKYTRAC ISAT-200 C/A
A2A422 SATCOM SKYTRAC ISAT-200 C/A
PL145P1 CONNECTOR (SEE DETAIL F)
A1A572 SATCOM SKYTRAC ISAT-200 C/A
A2A505 SATCOM SKYTRAC ISAT-200 C/A
BL 169 REF
BL -276 REF
UP
RH
FWD
VIEW A
PARTS OMITTED FOR BETTER CLARITY PURPOSE
(REFER TO FIGURE 12)
A433P1B CONNECTOR
C2A380 SATCOM SKYTRAC ISAT-200A C/A
INSTALL:
101-200-07 ISAT-200
ED300A433 DECAL
INSTALL:
A016A004B1 PLATE IDENTIFICATION
E
UP
LH
FWD
BL -1075 REF
A433P1A CONNECTOR
C1A334 SATCOM SKYTRAC ISAT-200A C/A
C2A380 SATCOM SKYTRAC ISAT-200A C/A
C3C267 SATCOM SKYTRAC ISAT-200A C/A
C3C268 SATCOM SKYTRAC ISAT-200A C/A
STA 6700 REF
STA 6703.0 REF
WL 1532 REF
VIEW B
PARTS OMITTED FOR BETTER CLARITY PURPOSE
(REFER TO FIGURE 12)
INSTALL:
MS25083-2BB8 GROUND CABLE
VIEW E

Figure 13

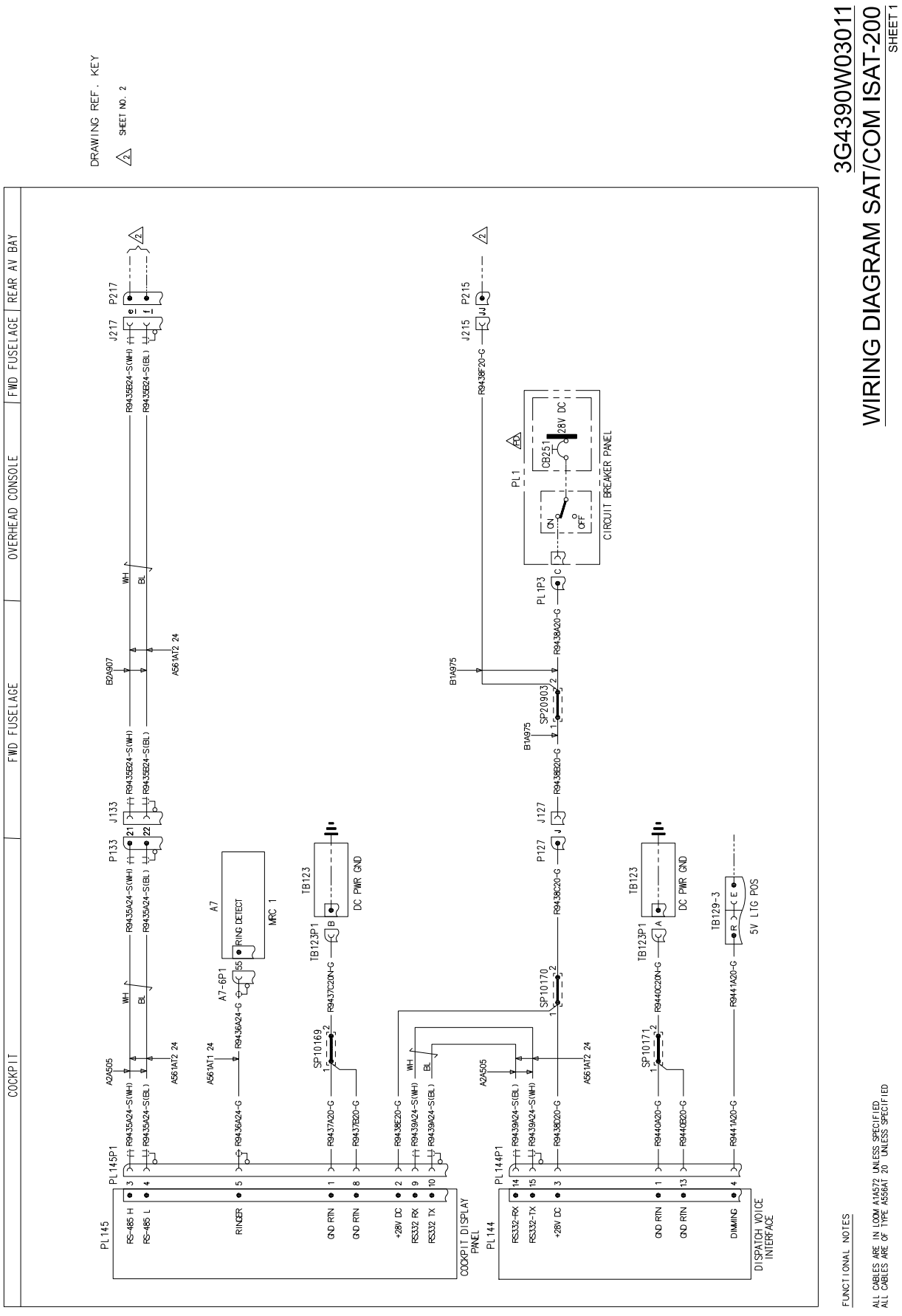

3G4390W03011
WIRING DIAGRAM SAT/COM ISAT-200
SHEET 1
COCKPIT
FWD FUSELAGE
OVERHEAD CONSOLE
FWD FUSELAGE
REAR AV BAY
DRAWING REF. KEY
SHEET NO. 2
PL145
PL145P1
RS-485 H
RS-485 L
RINGER
GND RTN
GND RTN
+28V DC
RS332 RX
RS332 TX
COCKPIT DISPLAY PANEL
PL144
PL144P1
RS332-RX
RS332-TX
+28V DC
GND RTN
GND RTN
DIMMING
DISPATCH VOICE INTERFACE
A2A505
A561AT1 24
A561AT2 24
R9435A24-S(WH)
R9435A24-S(BL)
R9436A24-G
R9437A20-G
R9437B20-G
R9438E20-G
R9439A24-S(WH)
R9439A24-S(BL)
R9438D20-G
R9440A20-G
R9440B20-G
R9441A20-G
WH
BL
A7
A7-6P1
55
RING DETECT
MRC 1
TB123
TB123P1
B
A
DC PWR GND
SP10169
SP10170
SP10171
P133
J133
21
22
B2A907
P217
J217
e
f
R9435B24-S(WH)
R9435B24-S(BL)
P127
J127
R9438C20-G
R9438B20-G
B1A975
SP20903
P215
J215
J
R9438F20-G
PL1
CB251
28V DC
ON
OFF
CIRCUIT BREAKER PANEL
PL1P3
C
R9438A20-G
TB129-3
R
E
5V LTG POS
FUNCTIONAL NOTES
ALL CABLES ARE IN LOOM A11572 UNLESS SPECIFIED
ALL CABLES ARE OF TYPE A556AT 20 UNLESS SPECIFIED

Figure 14

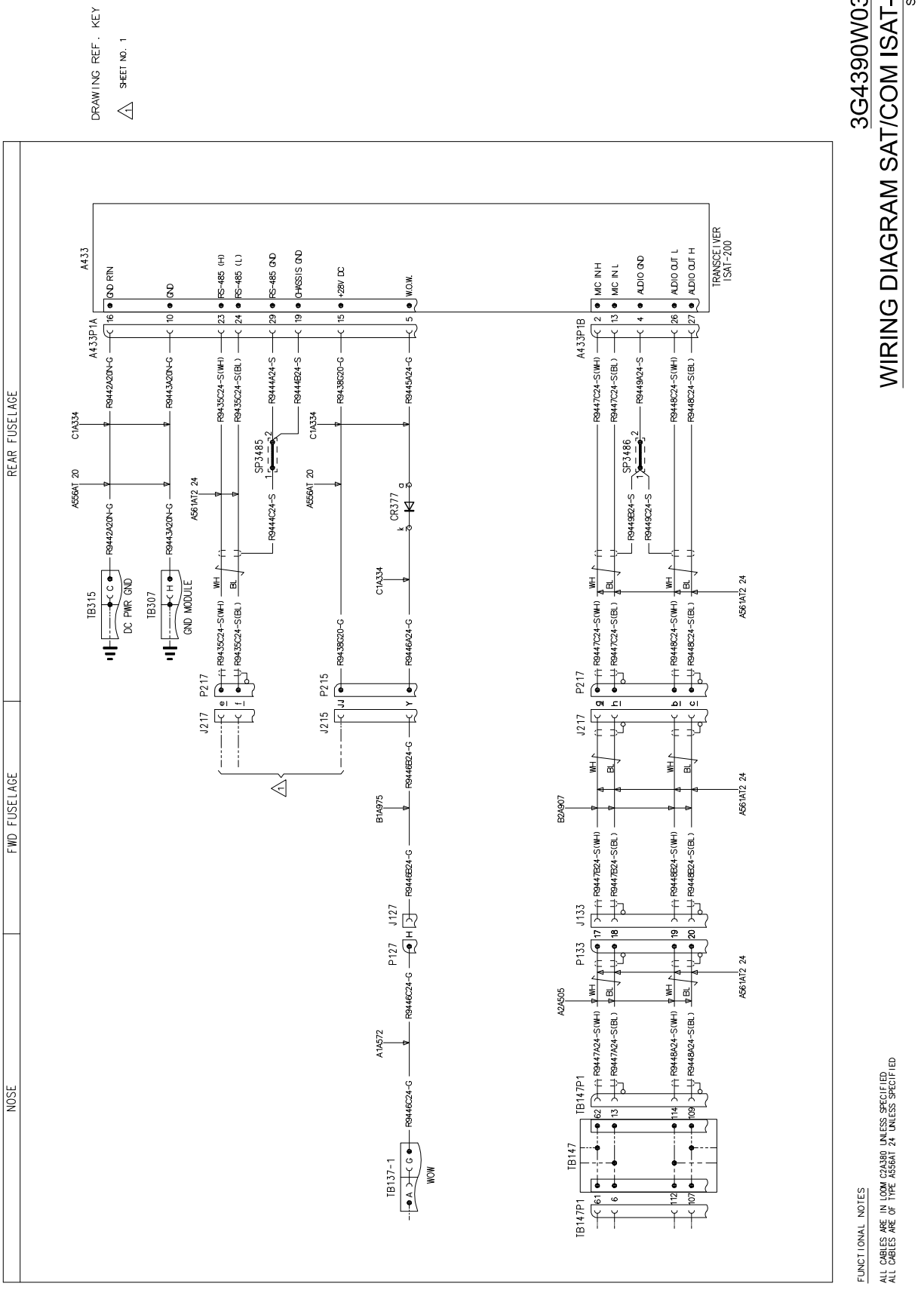

3G4390W03011
WIRING DIAGRAM SAT/COM ISAT-200
SHEET 2
DRAWING REF. KEY
SHEET NO. 1
NOSE
FWD FUSELAGE
REAR FUSELAGE
TRANSCEIVER ISAT-200
A433
A433P1A
A433P1B
GND RTN
GND
RS-485 (H)
RS-485 (L)
RS-485 GND
CHASSIS GND
+28V DC
W.O.W.
MIC IN H
MIC IN L
AUDIO GND
AUDIO OUT L
AUDIO OUT H
TB315
DC PWR GND
TB307
GND MODULE
TB137-1
WOW
TB147
TB147P1
P217
J217
P215
J215
P127
J127
P133
J133
SP3485
SP3486
CR377
A1A572
B1A975
A2A505
B2A907
C1A334
A556AT 20
A561AT2 24
FUNCTIONAL NOTES
ALL CABLES ARE IN LOOM C2A380 UNLESS SPECIFIED
ALL CABLES ARE OF TYPE A556AT 24 UNLESS SPECIFIED

Figure 15

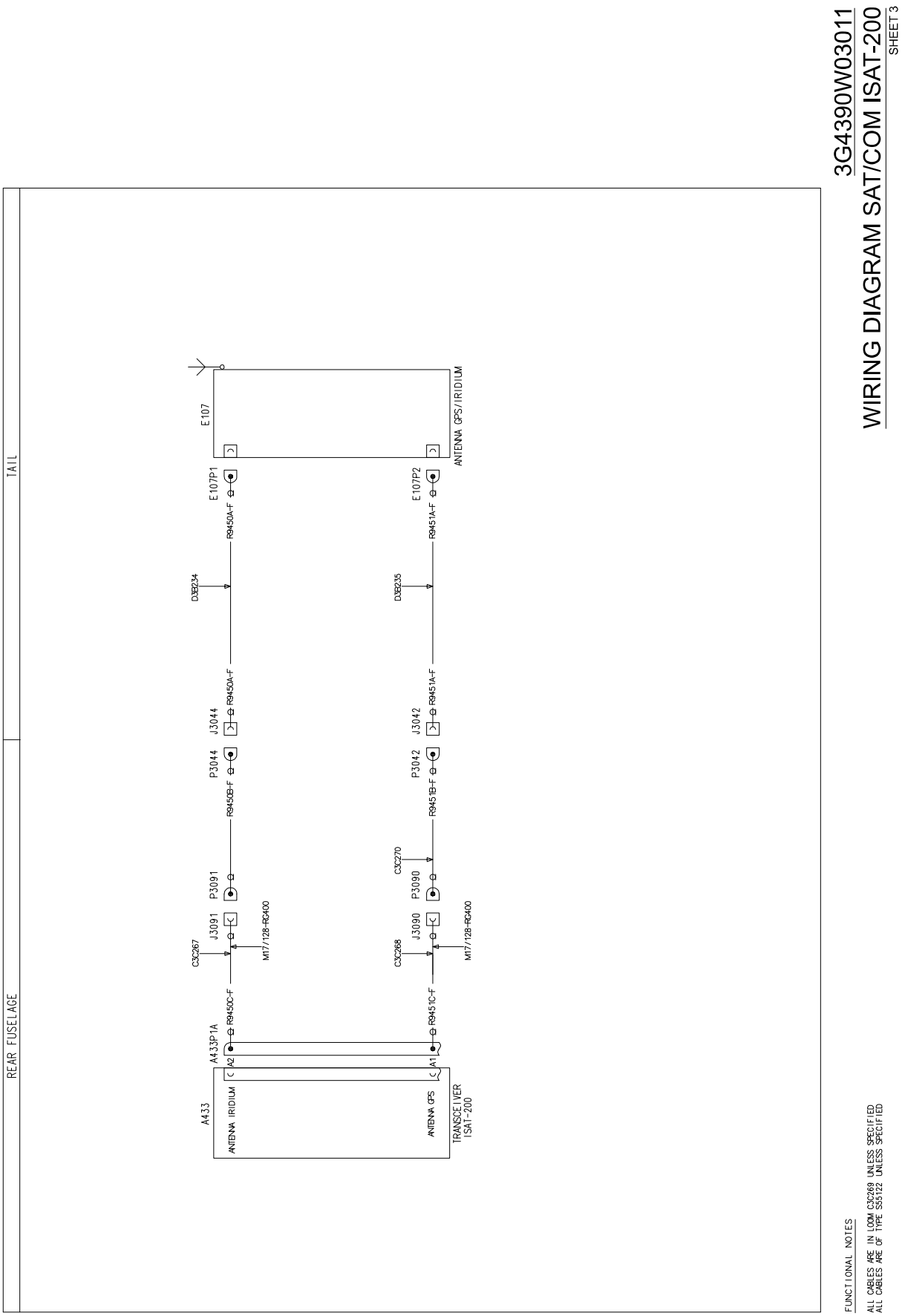

3G4390W03011
WIRING DIAGRAM SAT/COM ISAT-200
SHEET 3
TAIL
REAR FUSELAGE
E107
ANTENNA GPS/IRIDIUM
E107P1
E107P2
R9450A-F
R9451A-F
D3E234
D3E235
J3044
J3042
P3044
P3042
R9450B-F
R9451B-F
C3C270
P3091
P3090
J3091
J3090
C3C267
C3C268
M17/128-RG400
R9450C-F
R9451C-F
A433P1A
A2
A1
A433
ANTENNA IRIDIUM
ANTENNA GPS
TRANSCEIVER
ISAT-200
FUNCTIONAL NOTES
ALL CABLES ARE IN LOOM C3C269 UNLESS SPECIFIED
ALL CABLES ARE OF TYPE SS5122 UNLESS SPECIFIED

Figure 16

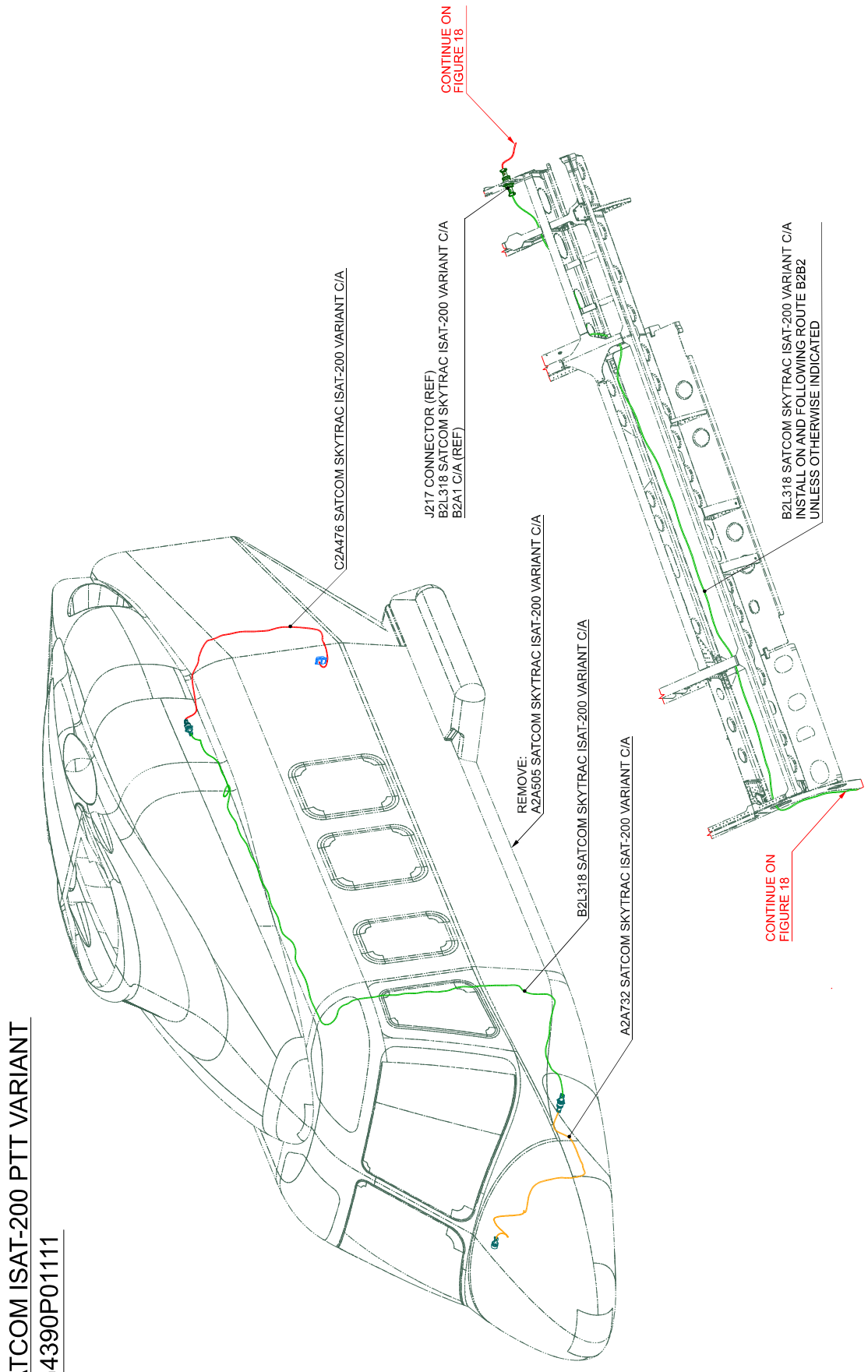

SATCOM ISAT-200 PTT VARIANT
3G4390P01111
VIEW LOOKING DOWN LH ROOF FROM STA 3120 TO STA 5700
STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE
CONTINUE ON FIGURE 18
J217 CONNECTOR (REF)
B2L318 SATCOM SKYTRAC ISAT-200 VARIANT C/A
B2A1 C/A (REF)
C2A476 SATCOM SKYTRAC ISAT-200 VARIANT C/A
REMOVE:
A2A505 SATCOM SKYTRAC ISAT-200 VARIANT C/A
B2L318 SATCOM SKYTRAC ISAT-200 VARIANT C/A
A2A732 SATCOM SKYTRAC ISAT-200 VARIANT C/A
B2L318 SATCOM SKYTRAC ISAT-200 VARIANT C/A
INSTALL ON AND FOLLOWING ROUTE B2B2
UNLESS OTHERWISE INDICATED
CONTINUE ON FIGURE 18

Figure 17

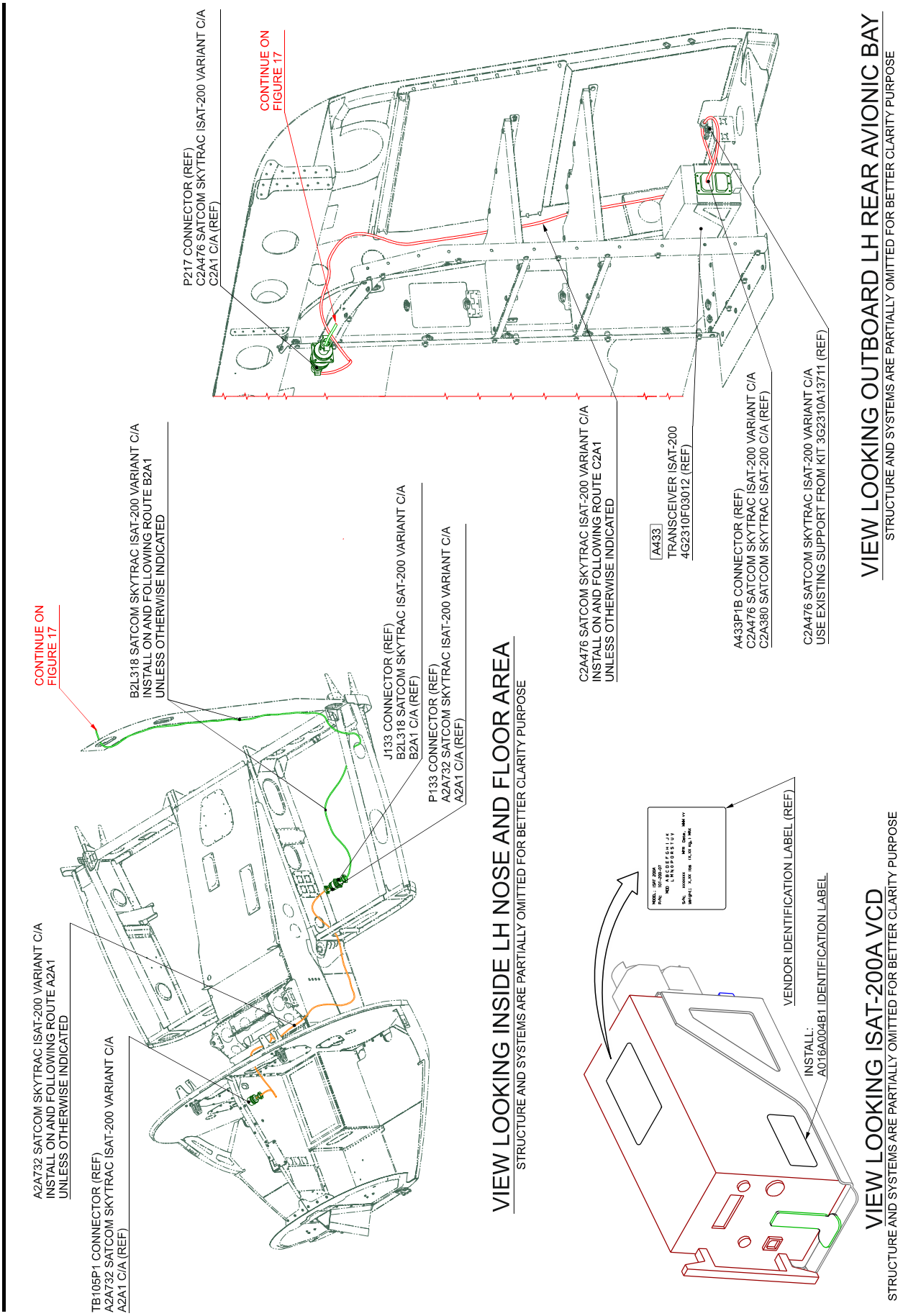
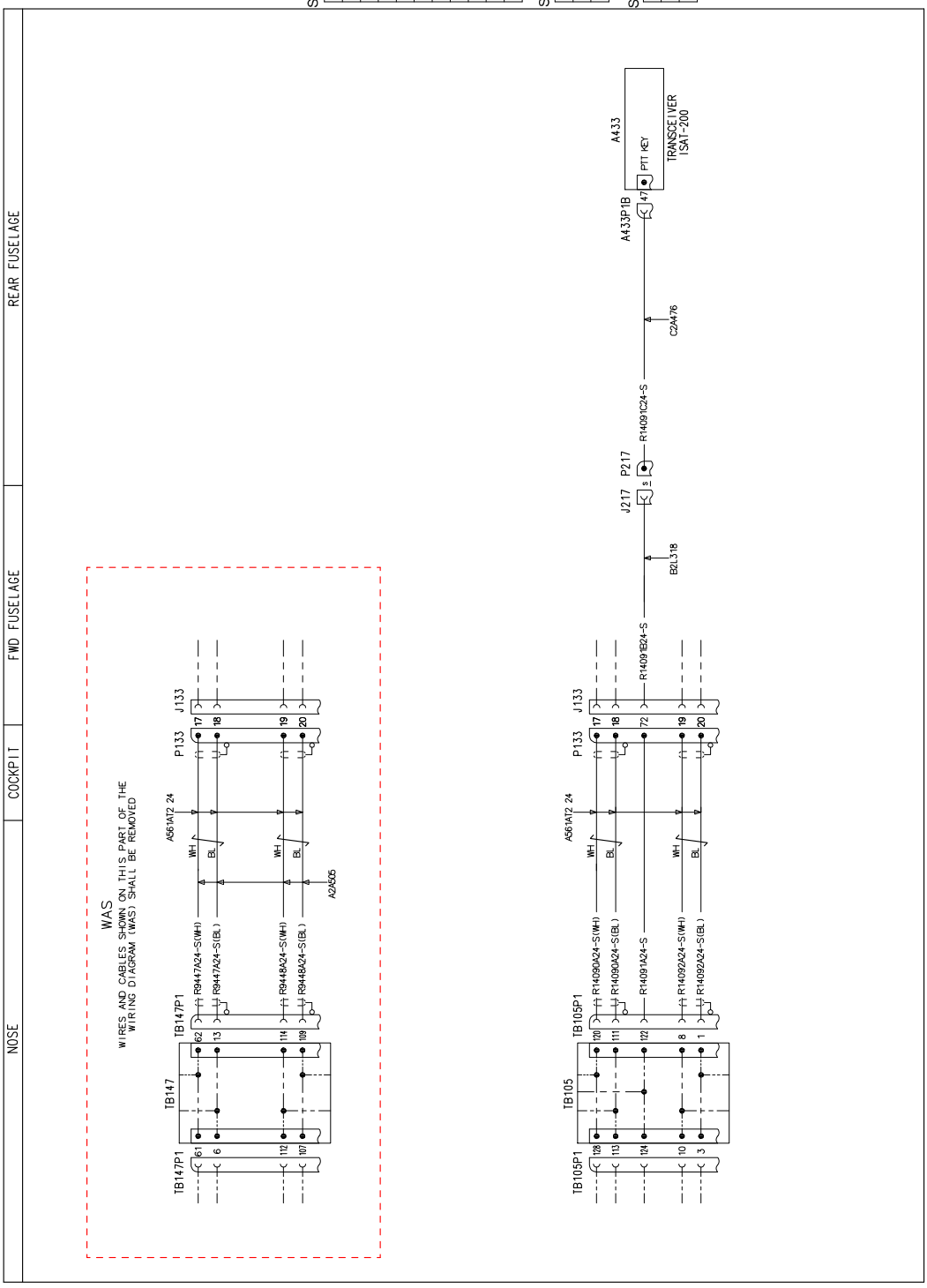

P217 CONNECTOR (REF)
C2A476 SATCOM SKYTRAC ISAT-200 VARIANT C/A
C2A1 C/A (REF)
CONTINUE ON
FIGURE 17
C2A476 SATCOM SKYTRAC ISAT-200 VARIANT C/A
INSTALL ON AND FOLLOWING ROUTE C2A1
UNLESS OTHERWISE INDICATED
A433
TRANSCEIVER ISAT-200
4G2310F03012 (REF)
A433P1B CONNECTOR (REF)
C2A476 SATCOM SKYTRAC ISAT-200 VARIANT C/A
C2A380 SATCOM SKYTRAC ISAT-200 C/A (REF)
C2A476 SATCOM SKYTRAC ISAT-200 VARIANT C/A
USE EXISTING SUPPORT FROM KIT 3G2310A13711 (REF)
VIEW LOOKING OUTBOARD LH REAR AVIONIC BAY
STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE
CONTINUE ON
FIGURE 17
B2L318 SATCOM SKYTRAC ISAT-200 VARIANT C/A
INSTALL ON AND FOLLOWING ROUTE B2A1
UNLESS OTHERWISE INDICATED
J133 CONNECTOR (REF)
B2L318 SATCOM SKYTRAC ISAT-200 VARIANT C/A
B2A1 C/A (REF)
P133 CONNECTOR (REF)
A2A732 SATCOM SKYTRAC ISAT-200 VARIANT C/A
A2A1 C/A (REF)
A2A732 SATCOM SKYTRAC ISAT-200 VARIANT C/A
INSTALL ON AND FOLLOWING ROUTE A2A1
UNLESS OTHERWISE INDICATED
TB105P1 CONNECTOR (REF)
A2A732 SATCOM SKYTRAC ISAT-200 VARIANT C/A
A2A1 C/A (REF)
VIEW LOOKING INSIDE LH NOSE AND FLOOR AREA
STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE
VENDOR IDENTIFICATION LABEL (REF)
INSTALL:
A016A004B1 IDENTIFICATION LABEL
VIEW LOOKING ISAT-200A VCD
STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE

Figure 18

WIRING DIAGRAM SATCOM ISAT-200 VARIANT

3G4390W04411



SATCOM SKYTRAC ISAT-200 VARIANT (A2A732)

CABLE ASSY	REF-DES	PIN	CONTACT P/N	INSULATION SLEEVING
A2A732	P133	19	M39029/58-360	M23053/8-004-C
A2A732	TB105P1	8	M39029/56-348	M23053/8-004-C
A2A732	P133	20	M39029/58-360	M23053/8-004-C
A2A732	TB105P1	1	M39029/56-348	M23053/8-004-C
A2A732	TB105P1	111	M39029/56-348	M23053/8-004-C
A2A732	P133	18	M39029/58-360	M23053/8-004-C
A2A732	TB105P1	120	M39029/56-348	M23053/8-004-C
A2A732	P133	17	M39029/58-360	M23053/8-004-C
A2A732	TB105P1	122	M39029/56-348	M23053/8-004-C
A2A732	P133	72	M39029/58-360	M23053/8-004-C

SATCOM SKYTRAC ISAT-200 VARIANT (B2L318)

CABLE ASSY	REF-DES	PIN	CONTACT P/N	INSULATION SLEEVING
B2L318	J133	72	M39029/56-348	-
B2L318	J217	s	M39029/56-351	-

SATCOM SKYTRAC ISAT-200 VARIANT (C2A476)

CABLE ASSY	REF-DES	PIN	CONTACT P/N	INSULATION SLEEVING
C2A476	P217	s	M39029/58-363	-
C2A476	A433P1B	47	M39029/12-148	-

FUNCTIONAL NOTES

ALL CABLES ARE IN LOOM A2A732 UNLESS SPECIFIED
ALL CABLES ARE OF TYPE A556AT 24 UNLESS SPECIFIED

Figure 19

LEONARDO
HELICOPTERS

AgustaWestland Products

Please send to the following address: **LEONARDO S.p.A.** **CUSTOMER SUPPORT & SERVICES - ITALY** **PRODUCT SUPPORT ENGINEERING & LICENSES DEPT.** Via Giovanni Agusta, 520 21017 Cascina Costa di Samarate (VA) - ITALY Tel.: +39 0331 225036 Fax: +39 0331 225988	**SERVICE BULLETIN COMPLIANCE FORM**	Date:
	Number:	
	Revision:	

Customer Name and Address:	Telephone:
	Fax:
	B.T. Compliance Date:

Helicopter Model	S/N	Total Number	Total Hours	T.S.O.

Remarks:

Information:

We request your cooperation in filling this form, in order to keep out statistical data relevant to aircraft configuration up-to-date. The form should be filled in all its parts and sent to the above address or you can communicate the application also via Technical Bulletin Application Communication Section placed in Leonardo AW Customer Portal - MyCommunications Area. We thank you beforehand for the information given.