AgustaWestland
A Finmeccanica Company

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

BOLLETTINO TECNICO

The technical content of this document is approved under the authority of DOA nr. EASA.21J.005

N° **139-144**

DATE March 05, 2013

REV. \

Compliance with this Bulletin is: **OPTIONAL**

SUBJECT: **KIT TRAFFIC ALERT AND COLLISION AVOIDANCE SYSTEM (TCAS) P/N 3G3450F00311, INSTALLATION OF.**

REASON: to provide all necessary instructions on how to perform the installation of the Traffic Alert and Collision Avoidance System (TCAS).

HELICOPTERS AFFECTED:

NOTE

The content of this Bollettino Tecnico is approved under EASA rules. For helicopters registered under other Aviation Authorities, before applying this Bollettino Tecnico, Customer must contact AW139 Customer Support Engineering (aw139.mbx@agustawestland.com) in order to verify if the installation subject of this Bollettino Tecnico is approved.

AW139 helicopters from S/N 31201 to S/N 31398 and from S/N 41201 to S/N 41293.

COMPLIANCE: at customer's option.

DESCRIPTION: Traffic Alert and Collision Avoidance System (TCAS) operates with the Air Traffic Control Transponder (ATC XPDR) system. The TCAS transmits interrogations to intruder aircraft through the ATC XPDR system to monitor the airspace around the helicopter and calculating safe limits around it and generating visual and audio warning of a potential collision.

Part I of this Bollettino Tecnico provides instructions to install all the relevant structural and electrical provisions.

Part II of this Bollettino Tecnico provides instructions to complete equipment installation.

Kit TCAS P/N 3G3450F00311 can be installed on AB139/AW139 helicopters from S/N 31005 to S/N 31157 (except S/N 31007) and from S/N 41001 to S/N 41023 by means of compliance with BT 139-025.

REQUIRED MANPOWER: to comply with this Bollettino Tecnico, the following Maintenance-Man-Hours (MMH) are deemed necessary:

Part I: approximately one hundred and twenty (120) MMH;

Part II: approximately eighty (80) MMH.

Maintenance-Man-Hours are based on hands-on time and can change with personnel and facilities available.

WARRANTY: N.A.

REQUIRED MATERIALS: the following materials are required for compliance with this Bollettino Tecnico:

NOTE

A new auxiliary C/B panel is required to apply this Bollettino Tecnico.

Customer must contact AW139 Customer Support Engineering (aw139.mbx@agustawestland.com) at least 3 months in advance from the scheduled Bollettino Tecnico application, to request the new auxiliary C/B panel.

Part I

P/N	*DESCRIPTION*	*Q.TY*	*NOTE*
4G3450A02411	***TCAS COMPLETE PROVISION***	***REF***	
Composed of:			
3G5310A18613	**STRUCTURAL PROVISION FOR TCAS TOP ANTENNA**	**REF**	
Composed of:			
MS21069L3	Nut plate self locking	..6	
MS21071L08	Nut plate self locking	..2	
3G3450A02411	**TCAS SUPPORT INSTALLATION**	**REF**	
Composed of:			
3G5315A54731	TCAS support assy	..1	
3G5315A60151	Cover	..1	(1)
MS27039-0808	Screw	..4	(1)
MS27039-1-08	Screw	..6	
NAS1149CN832R	Washer	..4	(1)
NAS1149D0332K	Washer	..6	
3G5310A33111	**TCAS STRUCTURAL PROVISION**	**REF**	
Composed of:			
3G5310A05632	Processor support assy	..1	
3G5315A19851	Cover	..1	(1)
3G5315A38631	FWD bracket assy	..1	

P/N	***DESCRIPTION***	***Q.TY***	***NOTE***
3G5315A38731	AFT bracket assy	..1	
A254AP10C1	Insert panel fastener	..4	
A254AS10D08	Insert panel fastener	..4	
A423A3C6	Nut plate self locking right angle bracket	..4	
A426A01V110A	Support connector	..1	
MS21069L3	Nut plate self locking	..7	
MS24694-C58	Screw	..4	(1)
MS27039-0805	Screw	..4	
MS27039-1-05	Screw	..2	
MS27039-1-07	Screw	..6	
MS35207-260	Screw	..2	
MS35207-262	Screw	..2	
NAS1149DN832J	Washer	..4	(1)
NAS1149D0332J	Washer	..6	
NAS1149D0332K	Washer	..6	
NAS1832-06-3	Insert screw thread	..2	
NAS1832-08-3	Insert screw thread	..4	
NAS1832-3-3	Insert screw thread	..2	
NAS1832-3-3M	Insert screw thread	..2	
NAS1836-3-13	Insert screw thread	..2	
999-5000-30-108	Insert screw thread	..6	
4G3450A02611	**TCAS ELECTRICAL PROVISION**	**REF**	
Composed of:			
3G9A01B27101	TCAS cable assembly (A1B271)	..1	(2)
3G9A02A24201	TCAS cable assembly (A2A242)	..1	
3G9A02B24602	TCAS cable assembly (A2B246)	..1	(2)
3G9B01B29001	TCAS cable assembly (B1B290)	..1	(3)(3)
3G9B01B30901	TCAS cable assembly (B1B309)	..1	

P/N	***DESCRIPTION***	***Q.TY***	***NOTE***
3G9B02B22801	TCAS cable assembly (B2B228)	..1	(3)
3G9C01B22301	TCAS cable assembly (C1B223)	..1	(4)
3G9C02B22201	TCAS cable assembly (C2B222)	..1	(4)
3G9C03B20401	TCAS cable assembly (C3B204)	..1	
3G9C03B20501	TCAS cable assembly (C3B205)	..1	
3G9C03B20601	TCAS cable assembly (C3B206)	..1	
3G9C03B20701	TCAS cable assembly (C3B207)	..1	
3G9C03B20801	TCAS cable assembly (C3B208)	..1	
3G9C03B20901	TCAS cable assembly (C3B209)	..1	
3G9C03B21001	TCAS cable assembly (C3B210)	..1	
3G9C03B21101	TCAS cable assembly (C3B211)	..1	
A363A01	Terminal stud	..1	
A366A3E08C	Stud adhesive bonded	..1	
A366A3E08C75	Stud adhesive bonded	..2	
A366A3E22C	Stud adhesive bonded	..1	
A366A3E32C	Stud adhesive bonded	..8	
A366A3E32C75	Stud adhesive bonded	..1	
A388A3E08C	Standoff adhesive bonded	..1	
A388A3E08C75	Standoff adhesive bonded	..1	
A608A01	Electrical load spreader plate	..1	
A630A04	Mounting base	..6	(5)
A630A12	Mounting base	..5	(6)
AW001TL3A08	Mounting base	..2	
A630A31	Mounting base	..2	(7)
A630A51	Mounting base	..15	(8)
A631A01A	Spacer cable bundles	..11	
DCC-02	Protective cap	..1	(1)
ED300A99GS1	Decal	..1	
ED300J344	Decal	..1	

B.T. 139-144

P/N	***DESCRIPTION***	***Q.TY***	***NOTE***
MS21042L3	Nut self locking	..20	
AS21919WDG11	Clamp	..8	
AS21919WDG12	Clamp	..2	
AS21919WDG02	Clamp	..1	
AS21919WDG03	Clamp	..1	
AS21919WDG04	Clamp	..84	
AS21919WDG05	Clamp	..4	
MS35207-260	Screw	..2	
MS35207-263	Screw	..4	
MS35207-264	Screw	..6	
MS35207-268	Screw	..1	
MS9592-014	Bracket	..1	
MS9592-027	Bracket	..6	
NAS1149D0332J	Washer	..38	
NAS1190E3P22AK	Screw self locking	..1	
NAS1190E3P5AK	Screw self locking	..1	
NAS1801-3-12	Screw	..1	
NAS1801-3-13	Screw	..3	
NAS1801-3-16	Screw	..3	
NAS1801-3-20	Screw	..2	
NAS1801-3-30	Screw	..1	
NAS1801-3-32	Screw	..1	
NAS1801-3-42	Screw	..1	
NAS1801-3-8	Screw	..2	
NAS1801-3-9	Screw	..2	
NAS43DD3-16N	Spacer	..1	
NAS43DD3-31N	Spacer	..6	
NAS43DD3-40N	Spacer	..2	
NAS43DD3-50N	Spacer	..1	

P/N	***DESCRIPTION***	***Q.TY***	***NOTE***
NAS43DD3-64N	Spacer	..2	
NAS43DD3-70N	Spacer	..1	
NAS43DD3-74N	Spacer	..4	
NAS43DD3-80N	Spacer	..1	
NAS43DD3-84N	Spacer	..6	
NAS813-10	Protective cap	..16	(1)
NAS813-32	Protective cap	..1	(1)
SK3000-2-S879	Plug connector	..1	
80-017-19	Grommet	..24	
999-1700-03-103	Grommet	..18	(9)

Part II

P/N	***DESCRIPTION***	***Q.TY***	***NOTE***
4G3450A02511	***TCAS INSTALLATION***	***REF***	
Composed of:			
047-12623-0001	Installation rack assembly	.1	
049-00066-0001	Angle rod	.1	
066-01177-0101	TCAS processor	.1	
071-00112-0200	Configuration module	.1	
071-01599-0100	Directional antenna	.2	
089-02161-0022	Lock nut 10-24	.2	
A631A01A	Spacer cable bundles	.2	
ED300A100	Decal	.1	
ED300A99	Decal	.1	
ED300E23	Decal	.1	
ED300E24	Decal	.2	
MS21042L08	Nut self locking extended	.4	
MS24693-C52	Screw	.4	
MS24693-C54	Screw	.4	

P/N	***DESCRIPTION***	***Q.TY***	***NOTE***
MS35206-227	Screw	.2	
MS35206-230	Screw	.4	
AW001CB07H	Clamp	.6	
NAS1149DN632J	Washer	.2	
NAS1149DN816J	Washer	.4	
999-1700-03-103	Grommet	.4	(9)
3G2490LXXXXX	Integrally lit auxiliary C/B panel	1	(10)(11)
MS3320-5	Circuit breaker	1	(11)
ED300CB161	Decal	1	(11)
	Option file	1	(12)

Moreover, the following consumable materials, or equivalent, are necessary to comply with this Bollettino Tecnico:

Spec./AW code number	**DESCRIPTION**	**Q.TY**	**NOTE**
MIL-PRF-23377, Ty I, Cl 2 /Code No. 900005211	Epoxy primer, or equivalent	AR	Local supply
199-05-002, Ty II, Cl 2/Code No. 900004603	Adhesive EA934NA (C054)	AR	Local supply
199-50-002, Ty I/Code No. 900001557	Araldit resin LY5138-2	AR	Local supply
199-05-002 Ty II Cl.3 /Code No. 900005009	Adhesive EPON 956NA (C193)	AR	Local supply
199-05-002 Ty I Cl.2 /Code No. 900000581	Adhesive Hysol EA9309NA (C231)	AR	Local supply
MIL-S-8802 Ty II Cl B4/Code No 900001596	Proseal 890 B4 (C020)	AR	Local supply
199-05-003, Ty I, Shape IIB/Code 900003986	Sealing compound Teflon Go AS-0107	AR	Local supply
Code No 900005223	Adhesive Calfilm GF2	20	
THT-21-437Y	Tape	AR	
A582A08	Nomex Sleeve	AR	

Spec./AW code number	DESCRIPTION	Q.TY	NOTE
A582A25	Nomex Sleeve	AR	(1)
A582A32	Nomex Sleeve	AR	(1)
A236A02AB	Non metallic channel	AR	
MS20426AD3-3	Rivet	0,01 Kg	
MS20426AD3-4	Rivet	0,01 Kg	
MS20470AD4-4	Rivet	0,01 Kg	
MS20426AD4-5	Rivet	0,01 Kg	
MS20470AD4-7	Rivet	0,01 Kg	
MS20470AD6-5	Rivet	0,01 Kg	
A556A-T22	Electrical Cable	2 M	(10)

NOTES:

(1) These items have to be requested only if Part I and Part II of this Bollettino Tecnico are not intended to be embodied at the same time.

(2) This item may be provided as production P/N 4G3450A02611A1R.

(3) This item may be provided as production P/N 4G3450A02611A2R.

(4) This item may be provided as production P/N 4G3450A02611A3R.

(5) P/N AW001CL509-N6 may be supplied as a valid alternative.

(6) P/N AW001CL504B-N6 may be supplied as a valid alternative.

(7) P/N AW001CL000A-X3 may be supplied as a valid alternative.

(8) P/N AW001CL001-N6 may be supplied as alternative.

(9) P/N AW002FT103 may be supplied as alternative.

(10) This P/N is not properly completed because it is depending on A/C configuration. To request the new panel, Customers must contact AW139 Product Support Engineering at least three months in advance of scheduled embodiment of this Bollettino Tecnico.

(11) These items have to be requested only if TCAS circuit breaker is not already present on the helicopter.

(12) Option File P/N is depending upon A/C configuration. The A/C configuration can be different from the one reported in relevant helicopter “Commessa di

Vendita" consequently a check is deemed necessary before the Customer requires AgustaWestland this P/N.

SPECIAL TOOLS: N.A.

WEIGHT AND BALANCE CHANGES: compliance with this Bollettino Tecnico has the following effects on A/C weight and balance:

Part I

WEIGHT (Kg)	***ARM (mm)***	***MOMENT (Kgmm)***
9.99	4434	44295.6

Part II

WEIGHT (Kg)	***ARM (mm)***	***MOMENT (Kgmm)***
6.87	5188	35641.5

REFERENCES:

- ✓ AW139 Aircraft Maintenance Publication (AMP)
- ✓ AW139 Aircraft Structural Repair Publication (ASRP)

PUBLICATIONS AFFECTED: N.A.

COMPLIANCE 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 sleeve P/N A582A25 where protection against chafing is required and where contact with structure may occur.

d) Exercise extreme care during drilling operations to prevent instruments, cables and hosing damage.

e) 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.

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

g) Let 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, open the access panels 131AL, 132AR 141AL, 142AR, 151AL, 150AL, 152AR and access doors 213AL and 183AL.
3. With reference to Figures 1, 2 and 4, install the top antenna structural provision P/N 3G5310A18613 as described in the following procedure:
   3.1 With reference to Figure 2, perform a cutout in indicated location on the rib of panel P/N 3P5331A54132.
   3.2 With reference to Figure 2, Figure 3 and Figure 4 View A and Section B-B, temporary locate the TCAS support assembly P/N 3G5315A54731 on the LH and RH upper brackets (P/N 3P5331A76151 and P/N 3P5331A76251) and on the LH and RH connectors supports (P/N 3G5315A25932 and P/N 3G5315A26032). Countermark in indicated positions n° 8 anchor nut holes.
   3.3 With reference to Figure 2, drill in indicated positions n°6 holes Ø 5.50 ÷ 5.70 through the LH and RH brackets and install n°6 anchor nuts P/N MS21069L3 by means of n°12 rivets P/N MS20426AD3-3.
   3.4 With reference to Figure 2, drill in indicated positions n°2 holes Ø 4.70 ÷ 5.00 through the LH and RH supports and install n°2 anchor nuts P/N MS21071L08 by means of n°4 rivets P/N MS20426AD3-3.
4. With reference to Figures 3 and 4, perform the installation of the TCAS support P/N 3G3450A02411 as described in the following procedure:
   4.1 With reference to Figure 4 View A, remove n°6 indicated screws. Keep fixing hardware for later reuse.
   4.2 With reference to Figure 4, install TCAS support assy P/N 3G5315A54731 by means of n°6 screws P/N MS27039-1-08, n°6 washers P/N NAS1149D0332K and n°6 screws removed at previous step 4.1.

NOTE

Perform the following step 4.3 only if Part II of this Bollettino Tecnico is not intended to be embodied immediately after Part I.

   4.3 With reference to Figure 4 View A, install the cover P/N 3G5315A60151 by means of n°4 screws P/N MS27039-0808 and n°4 washers P/N NAS1149CN832R.

5. If necessary remove interseat console lateral panels from the copilot side.
6. In accordance with AMP DM 39-A-25-11-01-00A-520A-A or DM 39-A-25-14-01-00A-520A-K or DM 39-A-25-15-01-00A-520A-K, remove the pilot seat.
7. In accordance with AMP DM 39-A-25-21-01-00A-520A-K or DM 39-A-25-22-01-00A-520A-K, remove the passenger seats.
8. In accordance with AMP and with reference to Figures 5 thru 15 gain access to the area affected by the modification and install TCAS structural provision P/N 3G5310A33111 as described in the following procedure:
   - 8.1 With reference to Figures 6 View A-A and 7 View AF-AF, install in indicated positions on the interseat console n°2 anchor nut P/N A423A3C6 by means of n°4 rivets P/N MS20470AD4-4.
   - 8.2 With reference to Figure 6 Detail D and Section N-N, countermark position of n°1 anchor nut hole in the RH longeron P/N 3P5331A03232.
   - 8.3 With reference to Figure 6 Detail D and Section N-N, drill in indicated position an hole Ø 4.90 ÷ 5.03 through the RH longeron and install n°1 anchor nut P/N MS21069L3 by means of n°2 rivets P/N MS20426AD3-4.
   - 8.4 With reference to Figure 7 Detail G, Section P-P and R-R, countermark positions of n°2 anchor nuts on the longeron RH P/N 3P5331A03232.
   - 8.5 With reference to Figure 7 Detail G, Section P-P and R-R, drill in indicated positions n°2 holes Ø 4.90 ÷ 5.03 through the RH longeron and install n°2 anchor nuts P/N MS21069L3 by means of n°4 rivets P/N MS20426AD3-4.
   - 8.6 With reference to Figure 8 View B-B and Figure 9 Section S-S, countermark position of n°1 anchor nut hole on the central frame P/N 3P5331A02931.
   - 8.7 With reference to Figure 8 View B-B and Figure 9 Section S-S, drill in indicated position an hole Ø 4.90 ÷ 5.03 through the RH central frame and install an anchor nut P/N MS21069L3 by means of n°2 rivets P/N MS20426AD3-4
   - 8.8 With reference to Figure 8 View F-F, install on the RH frame (ref. STA 4800) an anchor nut P/N A423A3C6 by means of n°2 rivets MS20470AD4-4.
   - 8.9 With reference to Figure 8 View C-C, install on the RH frame (ref. STA 3900) an anchor nut P/N A423A3C6 by means of n°2 P/N MS20470AD4-4.
   - 8.10 In accordance with ASRP DM 39-A-51-42-01-00A-720A-A and with reference to Figure 9 View E-E and Section T-T, drill in indicated positions n°2 holes Ø

14.25 ÷ 14.38 through panel top skin and honeycomb and install two inserts P/N NAS1832-3-3 by means of adhesive EA934NA.

8.11 In accordance with AMP DM 39-A-20-10-01-00A-259A-A and with reference to Figure 9 Section T-T, prepare the indicated area on the floor panel for a good electrical bonding.

8.12 With reference to Figure 9 Section T-T, install forward bracket P/N 3G5315A38631 by means of n°2 screws P/N MS35207-260 and n°2 washers P/N NAS1149D0332J.

8.13 In accordance with ASRP DM 39-A-51-42-03-00A-720A-A and with reference to Figure 10 view J-J and section U-U, drill in indicated positions n°6 holes Ø 9.50 ÷ 9.60 through the panel in the rear avionic bay and install six inserts P/N 999-5000-30-108 by means of adhesive EA934NA.

8.14 In accordance with ASRP DM 39-A-51-42-02-00A-720A-A and with reference to Figure 10 view J-J and section V-V, drill in indicated positions n°4 holes Ø 8.20 through the panel and install n°4 plugs P/N A254AP10C1 and n°4 sleeves P/N A254AAS10D08 by means of adhesive EA934NA.

8.15 With reference to Figure 10, install the processor support assembly P/N 3G5310A05632 by means of n°6 screws P/N MS27039-1-07, n°6 washers P/N NAS1149D0332K and n°4 screws P/N MS24694-C58.

8.16 In accordance with ASRP DM 39-A-51-42-01-00A-720A-A and with reference to Figure 10 View J-J and Figure 11 Detail W, drill in indicated positions n°2 holes Ø 14.25 ÷ 14.38 through the panel top skin and honeycomb and install n°2 inserts P/N NAS1832-06-3 by means of adhesive EA934NA.

8.17 In accordance with AMP DM 39-A-20-10-01-00A-259A-A and with reference to Figure 11 Detail W, prepare the indicated area for a good electrical bonding.

8.18 In accordance with ASRP DM 39-A-51-42-01-00A-720A-A and with reference to Figure 10 and Figure 11 View L-L and Section AA-AA, drill in indicated positions n°2 holes Ø 11.48 ÷ 11.61 through the top panel skin and honeycomb and install n°2 inserts P/N NAS1836-3-13 by means of adhesive EA934NA.

8.19 In accordance with AMP DM 39-A-20-10-01-00A-259A-A and with reference to Figure 11 Section AA-AA, prepare the indicated area for a good electrical bonding.

8.20 With reference to Figure 11 Section AA-AA, install the support P/N A426A01V110A by means of n°2 screws P/N MS27039-1-05 and n°2 washers P/N NAS1149D0332J.

8.21 With reference to Figure 12 view M-M, countermark position for a nut plate hole in the lower frame STA 7200.

8.22 With reference to Figure 12 view M-M and Section AB-AB, temporary locate the aft bracket assembly P/N 3G5315A38731 and countermark positions for n°2 holes.

8.23 In accordance with AMP DM 39-A-20-10-01-00A-259A-A and with reference to Figure 12, prepare the indicated area for a good electrical bonding.

8.24 With reference to Figure 12 view M-M and Section AB-AB, drill n°3 holes Ø 4.90 ÷ 5.03 (n°2 holes in previously marked positions) and install n°3 anchor nuts P/N MS21069L3 by means of n°6 rivets P/N MS20426AD3-4.

8.25 Install the aft bracket assembly P/N 3G5315A38731 by means of n°2 screws P/N MS35207-262 and n°2 washers P/N NAS1149D0332J.

8.26 In accordance with ASRP DM 39-A-51-42-01-00A-720A-A and with reference to Figure 13 view K-K and Section AC-AC, drill in indicated positions n°2 holes Ø 14.25 ÷ 14.38 through the panel top skin and honeycomb and install n°2 inserts P/N NAS1832-3-3M by means of adhesive EA934NA.

8.27 In accordance with ASRP DM 39-A-51-42-01-00A-720A-A and with reference to Figure 14 view H-H and Section AE-AE, drill in indicated positions n°4 holes Ø 14.25 ÷ 14.38 through the panel top skin and honeycomb and install inserts P/N NAS1832-08-3 by means of adhesive EA934NA.

8.28 With reference to Figures 14 View H-H and Figure 15 Section AD-AD, perform in indicated location a cutout through the internal skin and honeycomb of bottom lower panel P/N 3P5331A02231. Fill the honeycomb edge by means of adhesive EA934NA.

8.29 With reference to Figure 15, install where indicated three layers of excel fabric carbon fiber and bond by means of resin LY5138-2.

8.30 With reference to Figure 14 View H-H, drill in indicated positions n°4 holes Ø 19.50 through the external skin of the lower panel P/N 3P5331A02231.

NOTE

Perform the following step 8.31 only if Part II of this Bollettino Tecnico is not intended to be embodied immediately after Part I.

8.31 With reference to Figure 14 View H-H and Section AE-AE, install the cover P/N 3G5315A19851 by means of n°4 screws P/N MS27039-0805 and n°4 washers P/N NAS1149DN832J. Apply sealant tape Teflon Go AS-0107 to the mating area between the cover and the structure.

9. In accordance with AMP and with reference to Figures 16 thru 38, gain access to the area affected by the installation and install TCAS electrical provision P/N 4G3450A02611 as described in the following procedure:

NOTE

Install the following support and clamps only if necessary. The use of existing fixing supports and clamps is allowed.

9.1 In accordance with AMP DM-39-A-20-10-09-00A-920A-A and with reference to Figures 21 and 22, install in indicated locations on the interseat console n°2 studs P/N A366A3E08C75 and n°1 standoff P/N A388A3E08C75 by means of adhesive EA9309NA.

9.2 In accordance with AMP DM-39-A-20-10-09-00A-920A-A and with reference to Figures 27 and 28, install in indicated locations n°2 studs P/N A366A3E32C, n°1 stud P/N A366A3E22C and n°1 stud P/N A388A3E32C75 by means of adhesive EA9309NA.

9.3 In accordance with AMP DM-39-A-20-10-09-00A-920A-A and with reference to Figure 29, install in indicated locations n°2 studs P/N A366A3E32C by means of adhesive EA9309NA and applying PAF

9.4 With reference to Figures 27 and 28, install in indicated locations the n°4 cable mounting bases P/N A630A04 by means of n°4 rivets P/N MS20470AD4-7.

9.5 In accordance with AMP DM-39-A-20-10-09-00A-920A-A and with reference to Figure 29, install in indicated locations n°1 cable mounting base P/N AW001TL3A08 by means of adhesive EA9309NA.

9.6 In accordance with AMP DM-39-A-20-10-09-00A-920A-A and with reference to Figure 30 View K-K, install in indicated locations n°1 stud P/N A366A3E32C by means of adhesive EA9309NA.

9.7 In accordance with AMP DM-39-A-20-10-09-00A-920A-A and with reference to Figure 31 View L-L, install in indicated location n°1 cable mounting base P/N AW001TL3A08 by means of adhesive EA9309NA.

9.8 In accordance with AMP DM-39-A-20-10-09-00A-920A-A and with reference to Figure 31 View L-L, install in indicated location n°1 stud P/N A366A3E32C by means of adhesive EA9309NA.

9.9 With reference to Figures 31 View L-L, install in indicated locations n°2 cable mounting bases P/N A630A04 by means of n°2 rivets P/N MS20470AD4-7.

9.10 With reference to Figures 32 and 33, get access to the tunnel area under the fuel tank and remove the two flexible ducts of the heating system, if installed. Install in indicated locations n°15 cable mounting bases P/N A630A51 by means of adhesive EA956 and applying PAF.

9.11 With reference to Figure 33, install in indicated locations n°5 cable mounting bases P/N A630A12 by means of n°5 rivets P/N MS20470AD6-5.

9.12 In accordance with AMP DM-39-A-20-10-09-00A-920A-A and with reference to Figure 34, install in indicated locations n°2 studs P/N A366A3E32C by means of adhesive EA9309NA.

9.13 In accordance with AMP DM-39-A-20-10-09-00A-920A-A and with reference to Figure 36, install in indicated location n°1 stud P/N A388A3E08C by means of adhesive EA9309NA.

9.14 With reference to Figures 38, install in indicated location n°2 cable mounting bases P/N A630A31 by means of adhesive EA956.

9.15 In accordance with AMP DM 39-A-20-10-01-00A-259A-A and with reference to Figure 34, prepare the indicated area for good electrical bonding.

9.16 With reference to Figure 34, install in location 4 n°1 ground stud P/N A363A01 with n°1 electrical load spreader P/N A608A01 by means of two rivets P/N MS20426AD4-5.

9.17 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 34, install on the panel in a visible location the decal P/N ED300A99GS1.

9.18 With reference to Figure 17, install the relevant cable clamping on the previously indicated locations in interseat console area, under passenger cabin and in rear avionic bay.

9.19 With reference to Figures 19 thru 38, lay down the following cable assemblies following the existing route unless otherwise indicated on the figures:

- TCAS Cable Assy 3G9A01B27101 (A1B271);
- TCAS Cable Assy 3G9A02A24201 (A2A242);
- TCAS Cable Assy 3G9A02B24602 (A2B246);
- TCAS Cable Assy 3G9B01B29001 (B1B290);
- TCAS Cable Assy 3G9B01B30901 (B1B309);
- TCAS Cable Assy 3G9B02B22801 (B2B228);
- TCAS Cable Assy 3G9C01B22301 (C1B223);
- TCAS Cable Assy 3G9C02B22201 (C2B222);
- TCAS Cable Assy 3G9C03B20401 (C3B204);
- TCAS Cable Assy 3G9C03B20501 (C3B205);
- TCAS Cable Assy 3G9C03B20601 (C3B206);
- TCAS Cable Assy 3G9C03B20701 (C3B207);
- TCAS Cable Assy 3G9C03B20801 (C3B208);
- TCAS Cable Assy 3G9C03B20901 (C3B209);
- TCAS Cable Assy 3G9C03B21001 (C3B210);
- TCAS Cable Assy 3G9C03B21101 (C3B211).

NOTE

Perform the following step 9.20 only if Part II of this Bollettino Tecnico is not intended to be embodied immediately after Part I.

9.20 With reference to Figure 20 Detail B, Figure 30 View K-K, Figure 35 Detail P and Figure 38, protect and stow cable assemblies connectors as described in the following procedure:

9.20.1 Install the applicable protective cap on the connector assembly.

9.20.2 Cover with Meta-Aramid Nomex fiber sleeve and use cable straps to firmly tie down sleeve on the connector cabling.

9.20.3 Fasten the connector assemblies with cable straps

9.20.4 Fasten the cable assemblies to the indicated supports.

9.21 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 36, install the connector J344 in the bracket P/N A426A01V110A with the dust cover P/N SK3000-2-S879 and decal P/N ED300J344 on the panel on a visible area.

9.22 With reference to Figures 20 and Figure 45 wiring diagram, perform electrical connections of the C/A A2B246 between sectioning connector P107 and terminal block connector TB106P1, following indicated route. Secure the cable by means of existing hardware and lacing cord.

9.23 With reference to Figures 20 thru 23 and Figure 45 wiring diagram, perform electrical connections of the C/A A2B246 between pilot ICS panel connector PL24P2, MRC2 connector A8-6P3 and terminal block connector TB106P1, following indicated route. Secure the cable by means of existing hardware and lacing cord.

9.24 With reference to Figures 20 thru 23, Figure 26 and Figure 45 wiring diagram, perform electrical connections of the C/A A2B246 between MRC2 connector A8-6P3, terminal block connector TB106P1 and sectioning connector P110, following indicated route. Secure the cable by means of existing hardware and lacing cord.

9.25 With reference to Figures 20 thru 23, Figure 26 and Figure 47 wiring diagram, perform electrical connections of the C/A A2B246 between MAU2 connector A2-3P1, sectioning connector P107 and terminal block connector TB106P1, following indicated route. Secure the cable by means of existing hardware and lacing cord.

9.26 With reference to Figures 20 thru 23, Figure 26 and Figure 47 wiring diagram, perform electrical connections of the C/A A2B246 between terminal block connector TB106P1 and sectioning connector P110 following indicated route. Secure the cable by means of existing hardware and lacing cord.

9.27 With reference to Figures 19 and 21 and Figure 45 wiring diagram, perform electrical connections of the C/A A2A242 between MRC1 connector A7-6P3, copilot ICS panel PL8P2 and sectioning connector J107, following indicated route. Secure the cable by means of existing hardware and lacing cord.

9.28 With reference to Figure 19 and Figure 47 wiring diagram, perform electrical connections of the C/A A2A242 between MAU1 connector A1-3P1 and sectioning connector J107, following indicated route. Secure the cable by means of existing hardware and lacing cord.

9.29 With reference to Figures 26, 27, 28, 32, 34, 37 and Figures 46 and 47 wiring diagrams, perform electrical connections of the C/A B2B228 between sectioning connector J110 and sectioning connector J206, following indicated route. Secure the cable by means of existing hardware and lacing cord.

9.30 With reference to Figure 38 and Figures 46 and 47 wiring diagrams, perform electrical connections of the C/A C2B222 between sectioning connector P206, terminal block TB350, configuration module connector A100P1 and TCAS processor connector A99P10, following indicated route. Secure the cable by means of existing hardware and lacing cord.

9.31 With reference to Figure 38 and Figures 46 and 47 wiring diagrams, perform electrical connections of the C/A C2B222 between maintenance connector J344 and ground signal module TB350 and TCAS processor connector A99P10, following indicated route. Secure the cable by means of existing hardware and lacing cord.

9.32 With reference to Figure 25 and Figure 44 wiring diagram, perform electrical connections of the C/A B1B309 between circuit breaker panel connector PL1P10 and sectioning connector J212, following indicated route. Secure the cable by means of existing hardware and lacing cord.

9.33 With reference to Figures 22 and 26 and Figure 44 wiring diagram, perform electrical connections of the C/A A1B271 between terminal block TB150-1 and sectioning connector P102, following indicated route. Secure the cable by means of existing hardware and lacing cord.

9.34 With reference to Figures 26 and 37 and Figure 44 wiring diagram, perform electrical connections of the C/A B1B290 between sectioning connector J102

and terminal blockTB2046 and sectioning connector J204, following indicated route. Secure the cable by means of existing hardware and lacing cord.

9.35 With reference to Figures 26, 34, 36 and 37 and Figure 44 wiring diagram, perform electrical connections of the C/A B1B290 between sectioning connector P212, sectioning connector P204, DC power ground module TB306, TCAS processor ground stud A99GS1 and PCAS processor connector A99P10, following indicated route. Secure the cable by means of existing hardware and lacing cord.

9.36 With reference to Figures 19 thru 24, 28 thru 35 and Figure 44 wiring diagram, perform electrical connections of the C/A C3B204 between Upper TCAS antenna connector E23P1 and TCAS processor connector A99P1, following indicated route. Secure the cable by means of existing hardware and lacing cord.

9.37 With reference to Figures 19 thru 24, 28 thru 35 and Figure 44 wiring diagram, perform electrical connections of the C/A C3B205 between Upper TCAS antenna connector E23P2 and TCAS processor connector A99P2, following indicated route. Secure the cable by means of existing hardware and lacing cord.

9.38 With reference to Figures 19 thru 24, 28 thru 35 and Figure 44 wiring diagram, perform electrical connections of the C/A C3B206 between Upper TCAS antenna connector E23P3 and TCAS processor connector A99P3, following indicated route. Secure the cable by means of existing hardware and lacing cord.

9.39 With reference to Figures 19 thru 24, 28 thru 35 and Figure 44 wiring diagram, perform electrical connections of the C/A C3B207 between Upper TCAS antenna connector E23P4 and TCAS processor connector A99P4, following indicated route. Secure the cable by means of existing hardware and lacing cord.

9.40 With reference to Figures 27 thru 37 and Figure 44 wiring diagram, perform electrical connections of the C/A C3B208 between Lower TCAS antenna connector E24P1 and TCAS processor connector A99P5, following indicated route. Secure the cable by means of existing hardware and lacing cord.

9.41 With reference to Figures 27 thru 37 and Figure 44 wiring diagram, perform electrical connections of the C/A C3B209 between Lower TCAS antenna connector E24P2 and TCAS processor connector A99P6, following indicated route. Secure the cable by means of existing hardware and lacing cord.

9.42 With reference to Figures 27 thru 37 and Figure 44 wiring diagram, perform electrical connections of the C/A C3B210 between Lower TCAS antenna connector E24P3 and TCAS processor connector A99P7, following indicated route. Secure the cable by means of existing hardware and lacing cord.

9.43 With reference to Figures 27 thru 37 and Figure 44 wiring diagram, perform electrical connections of the C/A C3B211 between Lower TCAS antenna connector E24P4 and TCAS processor connector A99P8, following indicated route. Secure the cable by means of existing hardware and lacing cord.

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

NOTE

Perform the following steps 11 thru 17 only if Part II of this Bollettino Tecnico is not intended to be embodied immediately after Part I, otherwise record for compliance with Part I of this Bollettino Tecnico on helicopter log book and skip to step 7 of Part II of this Bollettino Tecnico.

11. In accordance with AMP DM 39-A-06-41-00-00A-010A-A, install all access panels previously removed to perform TCAS structural and electrical provisions.
12. Install interseat console lateral panels at the copilot side, if previously removed.
13. In accordance with AMP DM 39-A-25-21-01-00A-720A-K or DM 39-A-25-22-01-00A-720A-K, reinstall the passenger seats.
14. In accordance with AMP DM 39-A-25-11-01-00A-720A-A or DM 39-A-25-14-01-00A-720A-K or 39-A-25-15-01-00A-720A-K, reinstall the pilot seat.
15. In accordance with AMP, reinstall equipments previously removed from the interseat console extension and other areas of helicopter.
16. In accordance with weight and balance changes, update the Chart A (see Rotorcraft Flight Manual, Part II, section 6).
17. Return helicopter to flight configuration and record for compliance with Part I of this Bollettino Tecnico on helicopter log book.

Part II

NOTE

Perform the following steps from 1 thru 6 only if Part II of this Bollettino Tecnico has not been embodied immediately after Part I. Otherwise skip to step 7.

1. With reference to AMP DM 39-A-00-20-00-00A-120A-A prepare the helicopter for safe ground maintenance. Disconnect the battery and all the electrical power sources and/or the external power supply.
2. In accordance with AMP DM 39-A-25-21-01-00A-520A-K or DM 39-A-25-22-01-00A-520A-K, remove the passenger seats.
3. With reference to AMP DM 39-A-06-41-00-00A-010A-A, remove the access panels 141AL, 151AL, and open the access doors 183AL and 213AL.
4. With reference to Figure 4 View A, remove the cover P/N 3G5315A60151 fixed by means of n°4 screws P/N MS27039-0808 and n°4 washers P/N NAS1149CN832R.
5. With reference to Figure 14, remove the cover P/N 3G5315A19851 fixed by means of n°4 screws P/N MS27039-0805 and n°4 washers P/N NAS1149DN832J.
6. With reference to Figures 20 Detail B, 30 View K-K, 35 Detail P and 38, untie the connectors of the cable assemblies removing nomex, protective cap and where installed connector and cable assemblies from supports.

NOTE

Comply with the following step 7 only if TCAS circuit breaker is not already present on the helicopter.

7. Modify the Auxiliary C/B panel on the overhead panel, as described in the following procedure:

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

   7.1.2 Install where indicated on the new Integrally-lighted panel P/N 3G2490LXXXXX one circuit breaker P/N MS3320-5 for TCAS. Apply decal P/N ED300CB161 in an adjacent area

NOTE

Customer must contact AW139 PSE at least 3 months in advance of embodiment date of this Bollettino Tecnico in order to collect the exact W/D applicable to helicopter configuration.

7.1.3 With reference to Figure 44 wiring diagram, perform electrical connection between CB161 pin 2 and connector of the auxiliary circuit breaker panel PL1J10 pin C using A556AT Size 22 wire. CB161 has to be connected to 28V DC MAIN BUS 2 W22C.

8. With reference to Figures 39 thru 43, install TCAS equipment installation P/N 4G3450A02511 as described in the following procedure:

8.1 In accordance with AMP DM 39-A-34-44-03-00B-720A-K and with reference to Figure 40, install the Upper TCAS antenna E23 P/N 071-01599-0100 on the support by means of n°4 screws P/N MS24693-C54, n° 4 washer P/N NAS1149DN816J and n°4 nut P/N MS21042L08. Apply sealant Proseal 890B4 (C020) on the mating area between the antenna and the structure.

8.2 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 40, install decal P/N ED300E23 on the internal side of the Upper TCAS antenna.

8.3 In accordance with AMP DM 39-A-34-44-04-00A-720A-K and with reference to Figure 42, install the Bottom TCAS antenna E24 P/N 071-01599-0100 on the support by means of n°4 screws P/N MS24693-C52. Apply sealant Proseal 890B4 (C020) on the mating area between the antenna and the structure.

8.4 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 42, install decal P/N ED300E24 on the internal side of the Bottom TCAS antenna.

8.5 With reference to Figure 41, install the rack assembly P/N 047-12623-0001 by means of n°4 screws P/N MS35206-230.

8.6 In accordance with AMP DM 39-A-34-44-01-00A-720A-K and with reference to Figure 41, install the TCAS processor P/N 066-01177-0101 by means of n°2 lock nuts P/N 089-02161-0022 and angle rod P/N 049-00066-0001.

8.7 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 41, install decal P/N ED300A99 on a visible area.

8.8 In accordance with AMP DM 39-A-34-44-02-00A-720A-K and with reference to Figure 43, install the configuration module P/N 071-00112-0200.

8.9 In accordance with AMP DM 39-A-11-00-01-00A-720A-A and with reference to Figure 43, install decal P/N ED300A100 on a visible area.

9. In accordance with AMP DM 39-A-06-41-00-00A-010A-A, install all access panels previously removed to perform structural and electrical provisions.

CAUTION

The correct Option File P/N has to be required from the Customer to AgustaWestland, at least forty days before scheduled installation of this BT.

10. Ensure that the applicable Option File has been installed.
11. In accordance with AMP DM 39-A-34-44-00-00A-752A-K, load the data of the TCAS system.
12. Perform the functional checks of the TCAS system in accordance with the following AMP DMs:
    - 39-A-34-44-03-00A-369A-K, Upper Antenna-other checks.
    - 39-A-34-44-04-00A-369A-K, Lower Antenna-other checks
    - 39-A-34-44-00-00A-344C-K, TCAS Antenna elements-functional checks.
    - 39-A-34-44-00-00A-344B-K, TCAS Antenna-functional checks.
    - 39-A-34-44-00-00A-273A-K, TCAS-calibrate.
    - 39-A-34-44-00-00A-321-K, TCAS-operational checks.
13. In accordance with weight and balance changes, update the Chart A (see Rotorcraft Flight Manual, Part II, section 6).

NOTE

Update Chart A with Part I data too if Part I and Part II of this Bollettino Tecnico have been accomplished in the same time.

14. Return helicopter to flight configuration and record for compliance with Part II of this Bollettino Tecnico on helicopter log book.

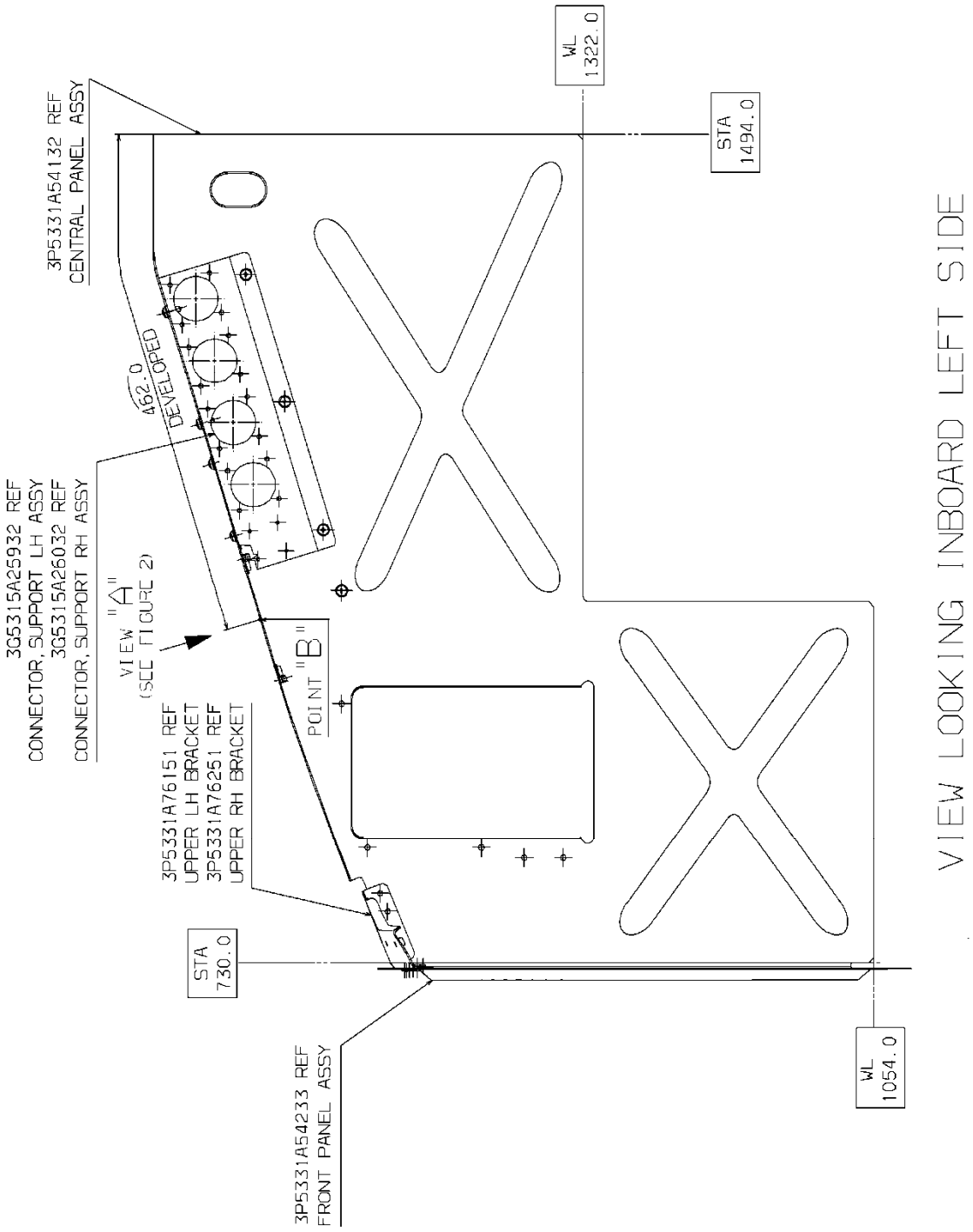

3P5331A54132 REF
CENTRAL PANEL ASSY
WL
1322.0
STA
1494.0
462.0
DEVELOPED
3G5315A25932 REF
CONNECTOR, SUPPORT LH ASSY
3G5315A26032 REF
CONNECTOR, SUPPORT RH ASSY
VIEW "A"
(SEE FIGURE 2)
POINT "B"
3P5331A76151 REF
UPPER LH BRACKET
3P5331A76251 REF
UPPER RH BRACKET
STA
730.0
3P5331A54233 REF
FRONT PANEL ASSY
WL
1054.0
VIEW LOOKING INBOARD LEFT SIDE

Figure 1

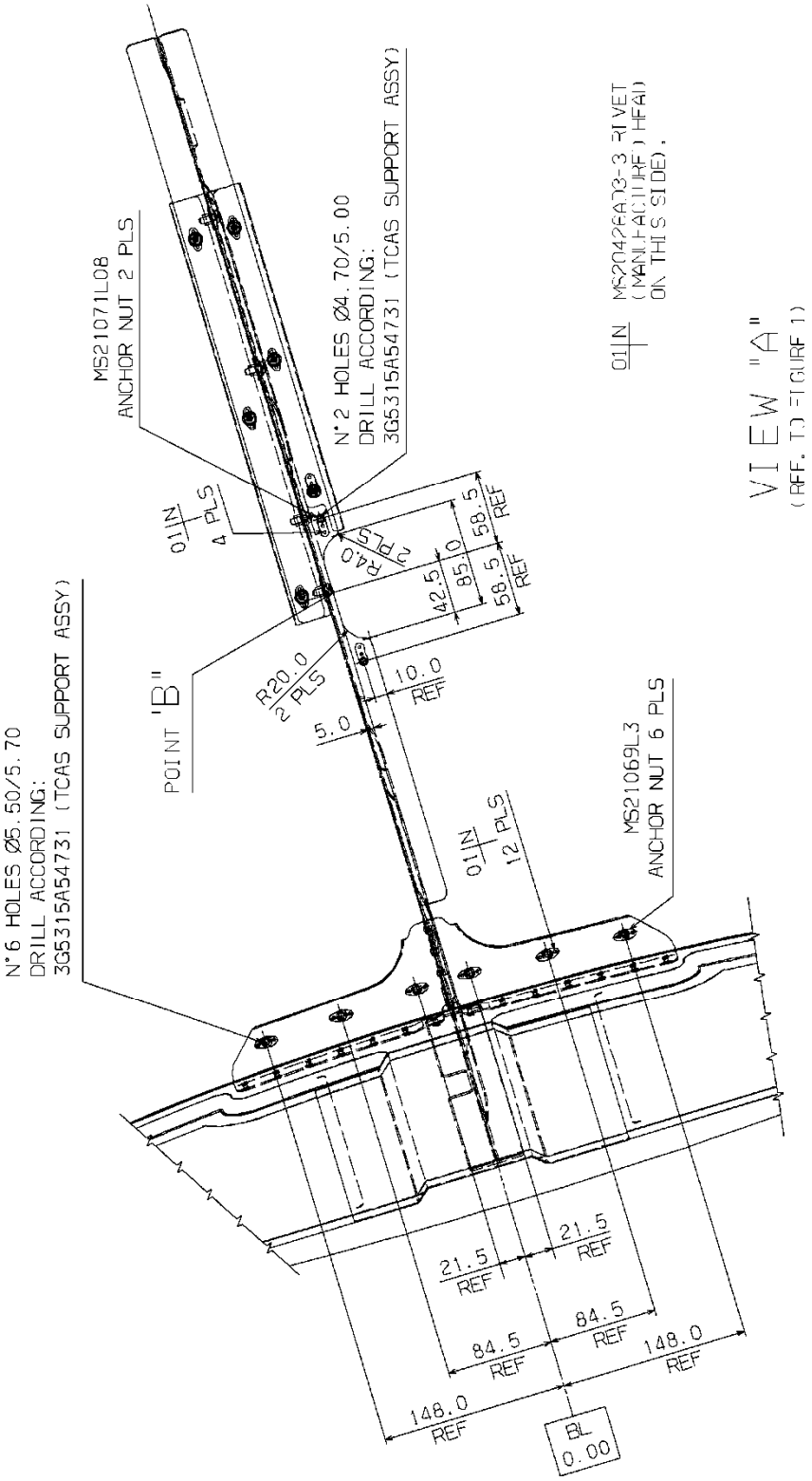

MS21071L08
ANCHOR NUT 2 PLS
N°2 HOLES Ø4.70/5.00
DRILL ACCORDING:
3G5315A54731 (TCAS SUPPORT ASSY)
01 IN
4 PLS
2 PLS R40
42.5
85.10
58.5 REF
58.5 REF
POINT 'B'
R20.0
2 PLS
10.0 REF
5.0
01 IN
12 PLS
MS21069L3
ANCHOR NUT 6 PLS
N°6 HOLES Ø5.50/5.70
DRILL ACCORDING:
3G5315A54731 (TCAS SUPPORT ASSY)
01 IN
MS20426AD3-3 RIVET
(MANUFACTURED HEAD
ON THIS SIDE).
VIEW "A"
(REF. TO FIGURE 1)
21.5 REF
21.5 REF
84.5 REF
84.5 REF
148.0 REF
148.0 REF
BL
0.00

Figure 2

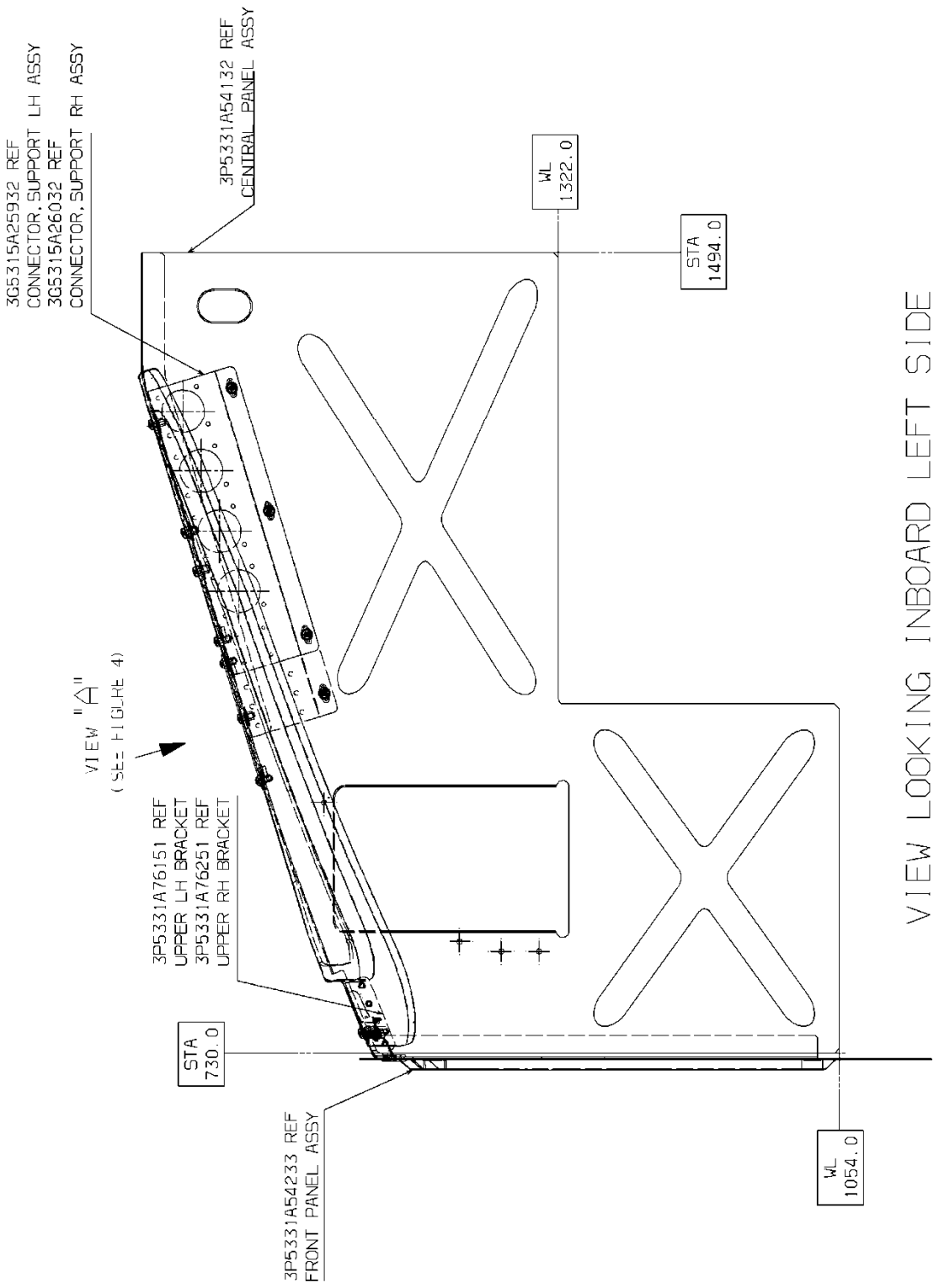

3G5315A25932 REF
CONNECTOR, SUPPORT LH ASSY
3G5315A26032 REF
CONNECTOR, SUPPORT RH ASSY
3P5331A54132 REF
CENTRAL PANEL ASSY
WL
1322.0
STA
1494.0
VIEW "A"
(SEE FIGURE 4)
3P5331A76151 REF
UPPER LH BRACKET
3P5331A76251 REF
UPPER RH BRACKET
STA
730.0
3P5331A54233 REF
FRONT PANEL ASSY
WL
1054.0
VIEW LOOKING INBOARD LEFT SIDE

Figure 3

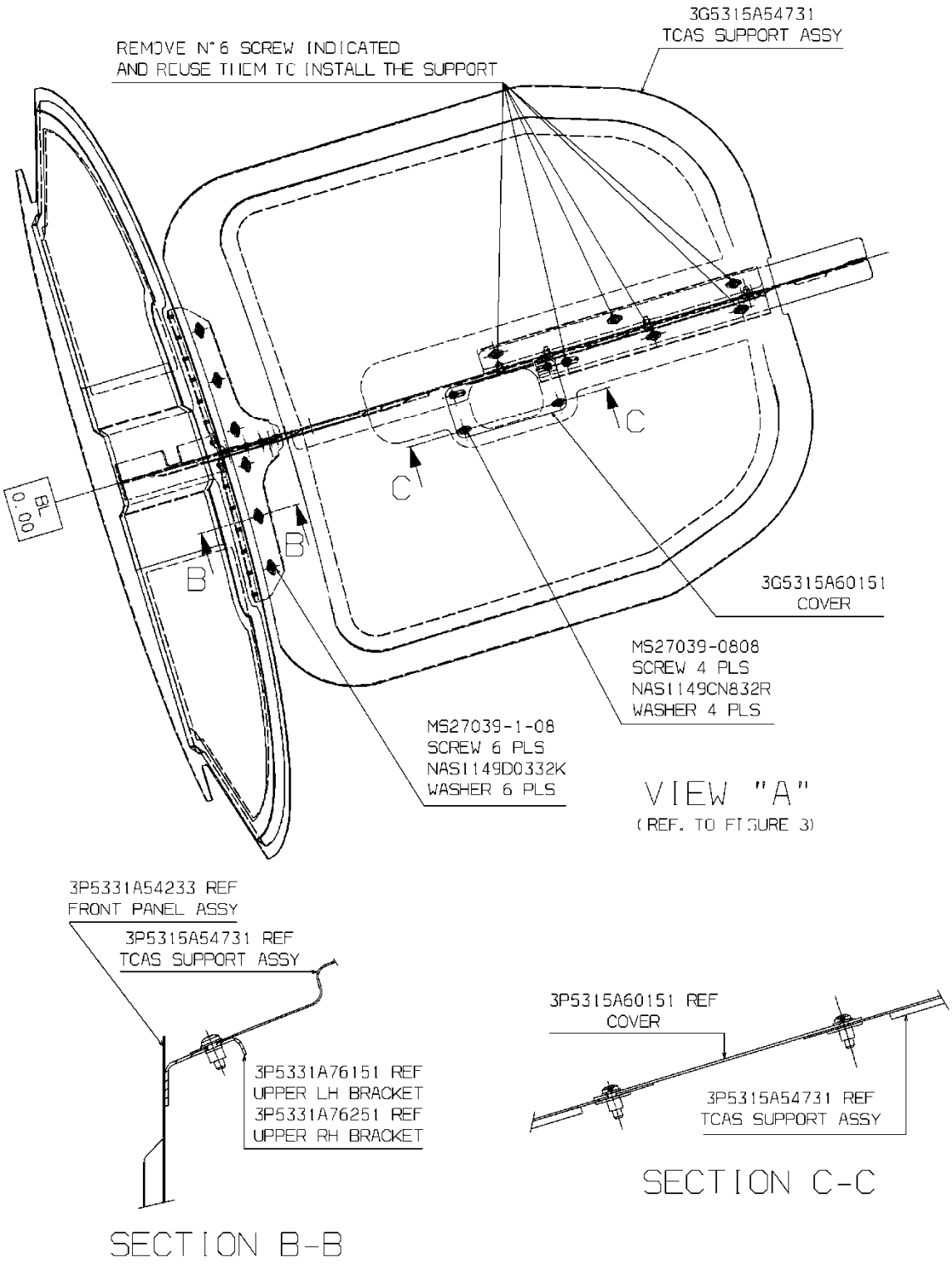

3G5315A54731
TCAS SUPPORT ASSY
REMOVE N°6 SCREW INDICATED
AND REUSE THEM TO INSTALL THE SUPPORT
C
C
B
B
3G5315A60151
COVER
MS27039-0808
SCREW 4 PLS
NAS1149CN832R
WASHER 4 PLS
MS27039-1-08
SCREW 6 PLS
NAS1149D0332K
WASHER 6 PLS
VIEW "A"
(REF. TO FIGURE 3)
3P5331A54233 REF
FRONT PANEL ASSY
3P5315A54731 REF
TCAS SUPPORT ASSY
3P5331A76151 REF
UPPER LH BRACKET
3P5331A76251 REF
UPPER RH BRACKET
SECTION B-B
3P5315A60151 REF
COVER
3P5315A54731 REF
TCAS SUPPORT ASSY
SECTION C-C

Figure 4

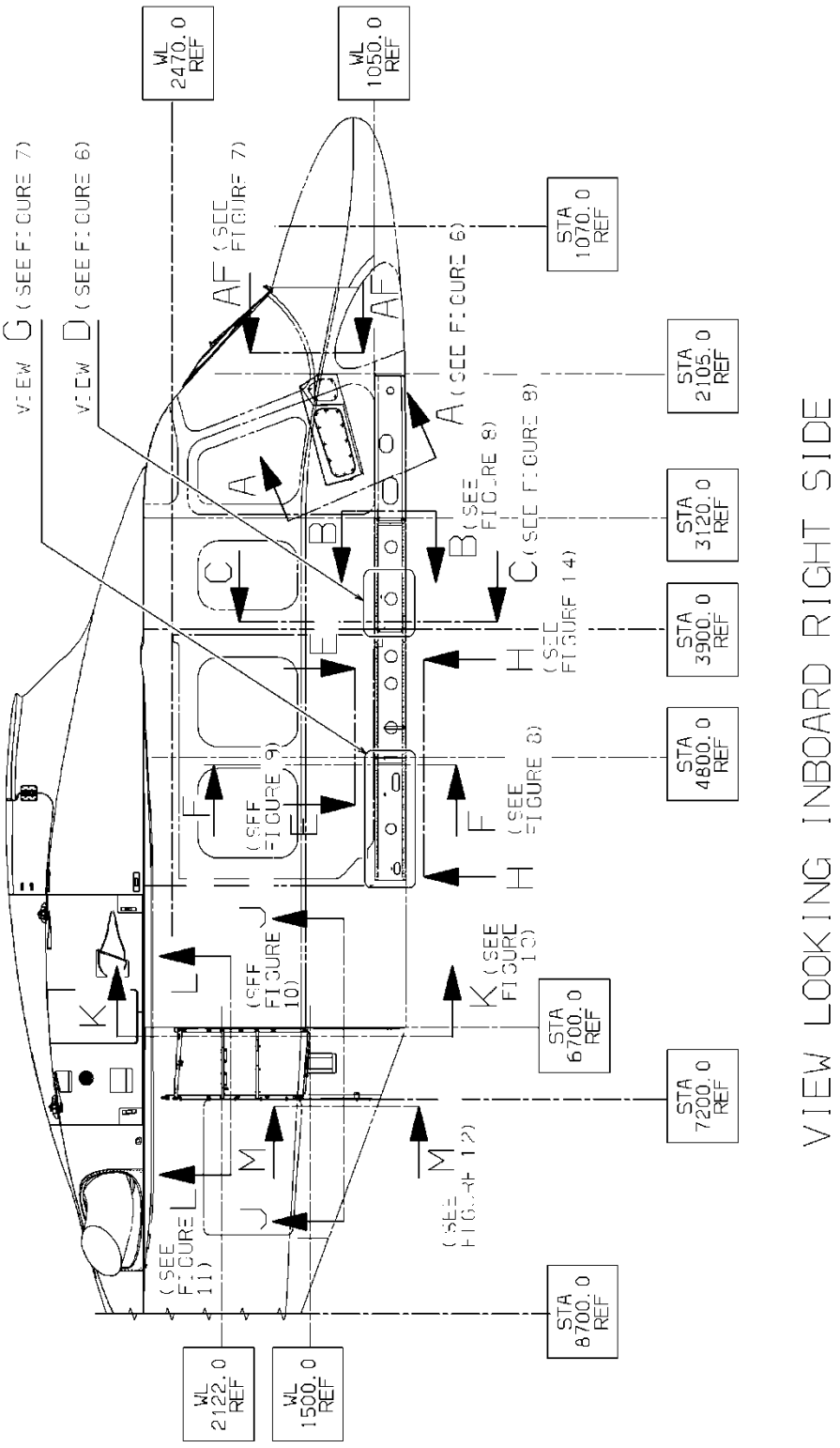

VIEW LOOKING INBOARD RIGHT SIDE
WL 2470.0 REF
WL 1050.0 REF
WL 2122.0 REF
WL 1500.0 REF
STA 1070.0 REF
STA 2105.0 REF
STA 3120.0 REF
STA 3900.0 REF
STA 4800.0 REF
STA 6700.0 REF
STA 7200.0 REF
STA 8700.0 REF
VIEW G (SEE FIGURE 7)
VIEW D (SEE FIGURE 6)
AF (SEE FIGURE 7)
A (SEE FIGURE 6)
B (SEE FIGURE 8)
C (SEE FIGURE 14)
H (SEE FIGURE 13)
F (SEE FIGURE 8)
E (SEE FIGURE 9)
K (SEE FIGURE 15)
J (SEE FIGURE 10)
L (SEE FIGURE 11)
M (SEE FIGURE 12)

Figure 5

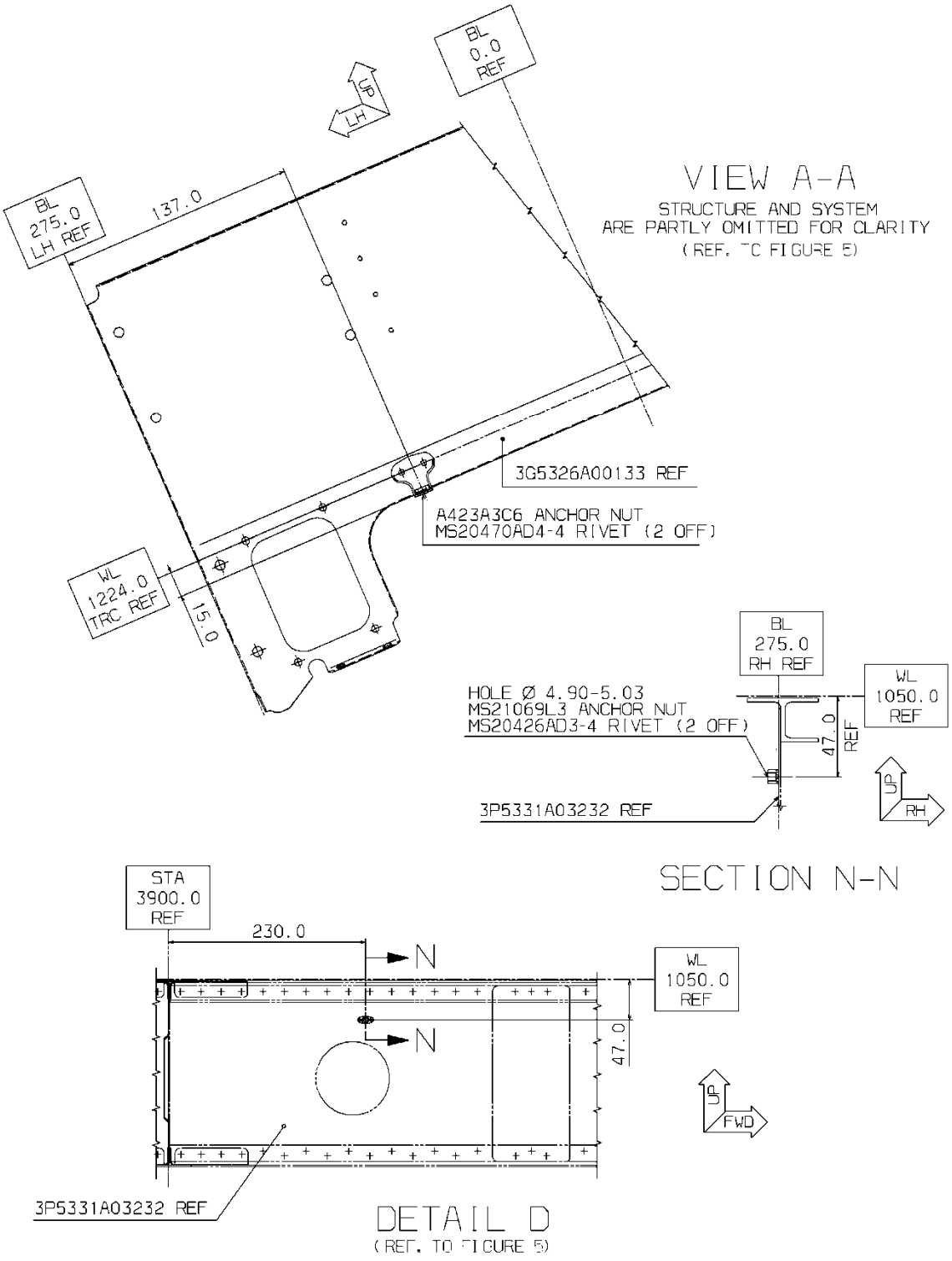

BL 0.0 REF
UP
LH
VIEW A-A
STRUCTURE AND SYSTEM ARE PARTLY OMITTED FOR CLARITY (REF. TO FIGURE 5)
BL 275.0 LH REF
137.0
3G5326A00133 REF
A423A3C6 ANCHOR NUT
MS20470AD4-4 RIVET (2 OFF)
WL 1224.0 TRC REF
15.0
BL 275.0 RH REF
WL 1050.0 REF
HOLE Ø 4.90-5.03
MS21069L3 ANCHOR NUT
MS20426AD3-4 RIVET (2 OFF)
47.0 REF
3P5331A03232 REF
UP
RH
SECTION N-N
STA 3900.0 REF
230.0
N
N
WL 1050.0 REF
47.0
UP
FWD
3P5331A03232 REF
DETAIL D
(REF. TO FIGURE 5)

Figure 6

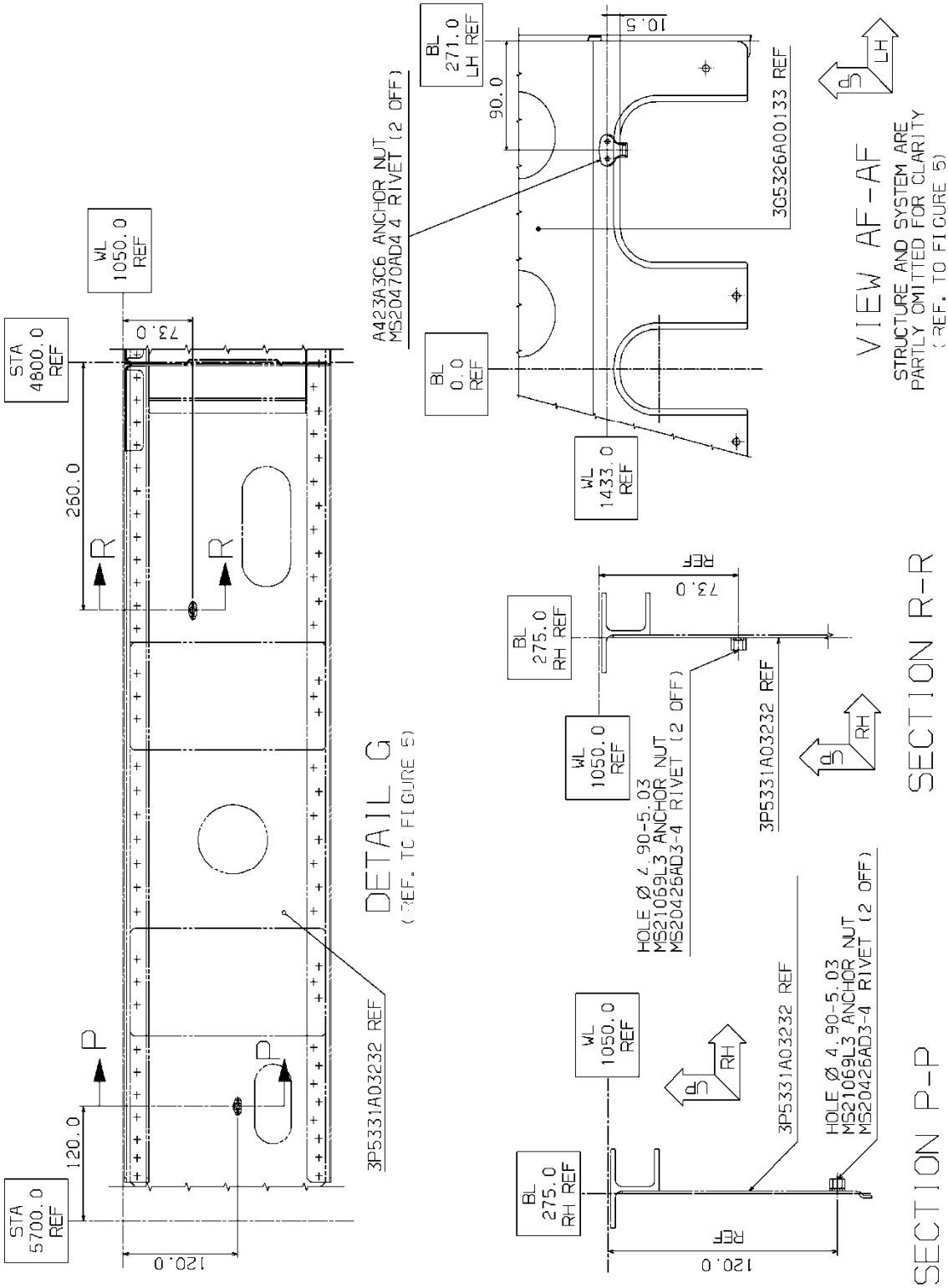

STA 4800.0 REF
STA 5700.0 REF
WL 1050.0 REF
260.0
120.0
73.0
120.0
P
R
3P5331A03232 REF
DETAIL G
(REF. TO FIGURE 5)
A423A3C6 ANCHOR NUT
MS20470AD4 4 RIVET (2 OFF)
BL 271.0 LH REF
90.0
10.5
3G5326A00133 REF
BL 0.0 REF
WL 1433.0 REF
LH
VIEW AF-AF
STRUCTURE AND SYSTEM ARE
PARTLY OMITTED FOR CLARITY
(REF. TO FIGURE 5)
BL 275.0 RH REF
WL 1050.0 REF
73.0
REF
HOLE Ø4.90-5.03
MS21069L3 ANCHOR NUT
MS20426AD3-4 RIVET (2 OFF)
3P5331A03232 REF
RH
SECTION R-R
SECTION P-P
120.0
REF

Figure 7

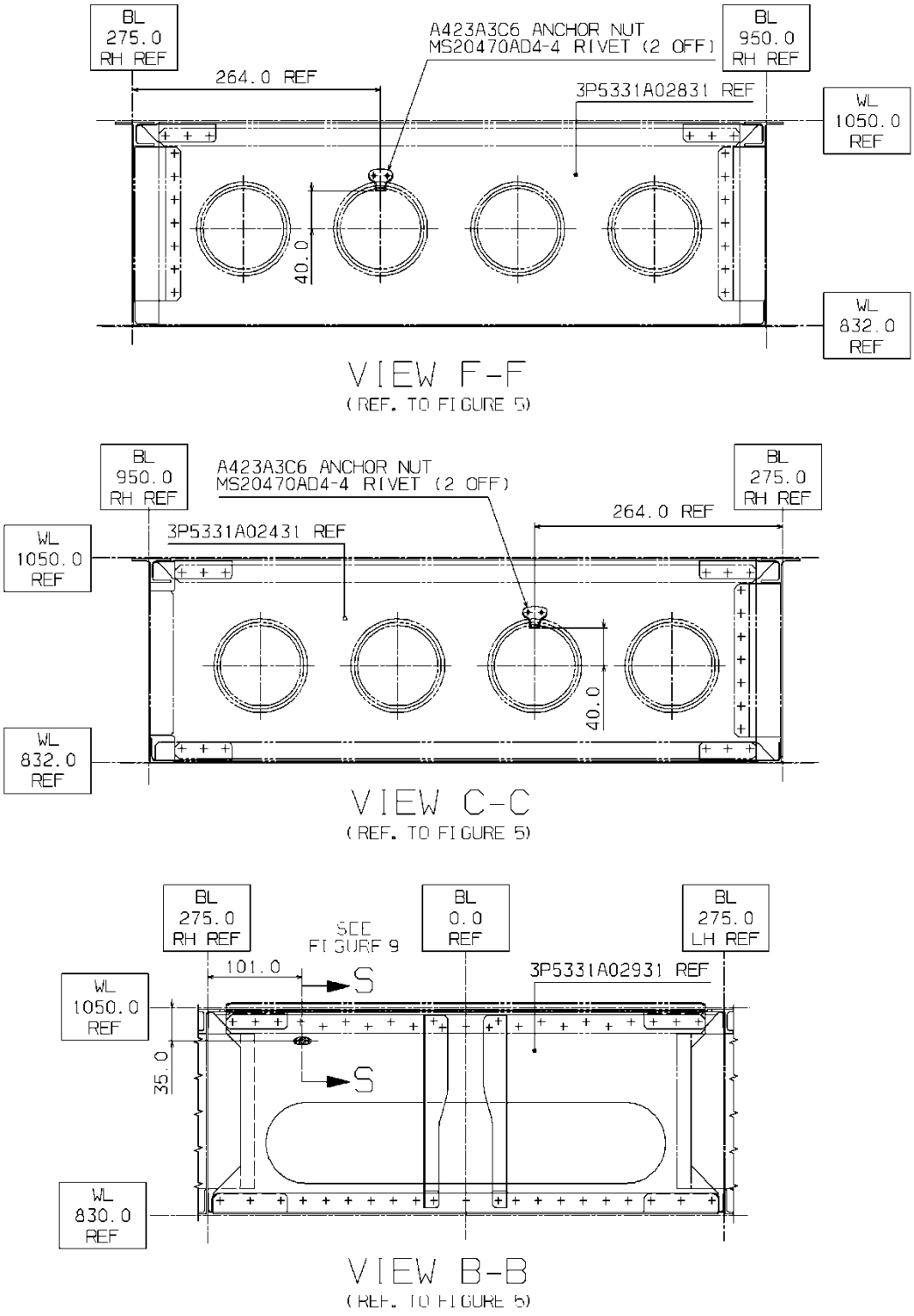

BL
275.0
RH REF
A423A3C6 ANCHOR NUT
MS20470AD4-4 RIVET (2 OFF)
BL
950.0
RH REF
264.0 REF
3P5331A02831 REF
WL
1050.0
REF
40.0
WL
832.0
REF
VIEW F-F
(REF. TO FIGURE 5)
BL
950.0
RH REF
A423A3C6 ANCHOR NUT
MS20470AD4-4 RIVET (2 OFF)
BL
275.0
RH REF
264.0 REF
3P5331A02431 REF
WL
1050.0
REF
40.0
WL
832.0
REF
VIEW C-C
(REF. TO FIGURE 5)
BL
275.0
RH REF
SEE
FIGURE 9
BL
0.0
REF
BL
275.0
LH REF
101.0
S
3P5331A02931 REF
WL
1050.0
REF
35.0
S
WL
830.0
REF
VIEW B-B
(REF. TO FIGURE 5)

Figure 8

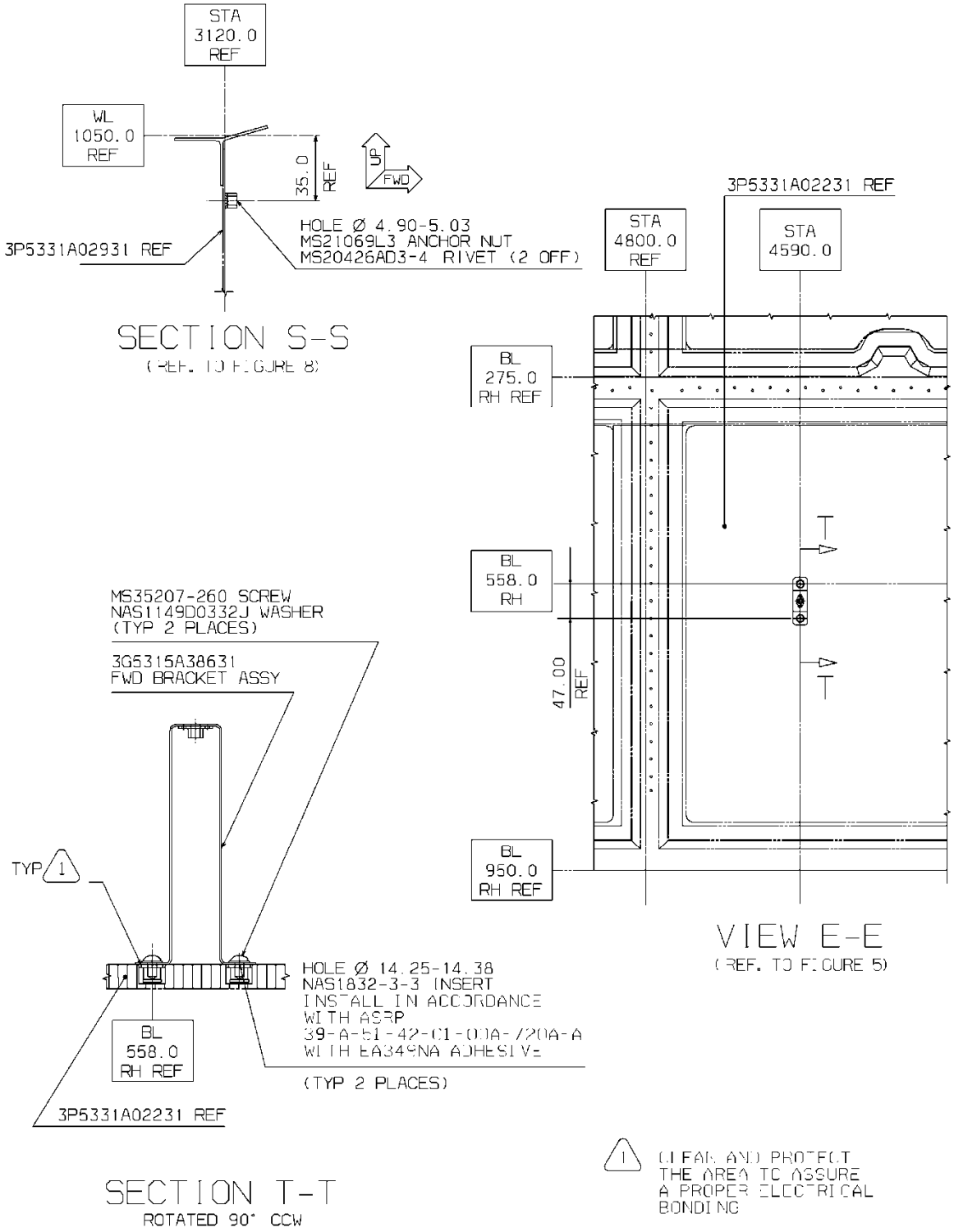

STA
3120.0
REF
WL
1050.0
REF
35.0
REF
UP
FWD
HOLE Ø 4.90-5.03
MS21069L3 ANCHOR NUT
MS20426AD3-4 RIVET (2 OFF)
3P5331A02931 REF
SECTION S-S
(REF. TO FIGURE 8)
3P5331A02231 REF
STA
4800.0
REF
STA
4590.0
BL
275.0
RH REF
BL
558.0
RH
47.00
REF
BL
950.0
RH REF
VIEW E-E
(REF. TO FIGURE 5)
MS35207-260 SCREW
NAS1149D0332J WASHER
(TYP 2 PLACES)
3G5315A38631
FWD BRACKET ASSY
TYP 1
HOLE Ø 14.25-14.38
NAS1832-3-3 INSERT
INSTALL IN ACCORDANCE
WITH ASRP
39-A-51-42-01-00A-720A-A
WITH EA349NA ADHESIVE
(TYP 2 PLACES)
BL
558.0
RH REF
3P5331A02231 REF
SECTION T-T
ROTATED 90° CCW
1
CLEAN AND PROTECT
THE AREA TO ASSURE
A PROPER ELECTRICAL
BONDING

Figure 9

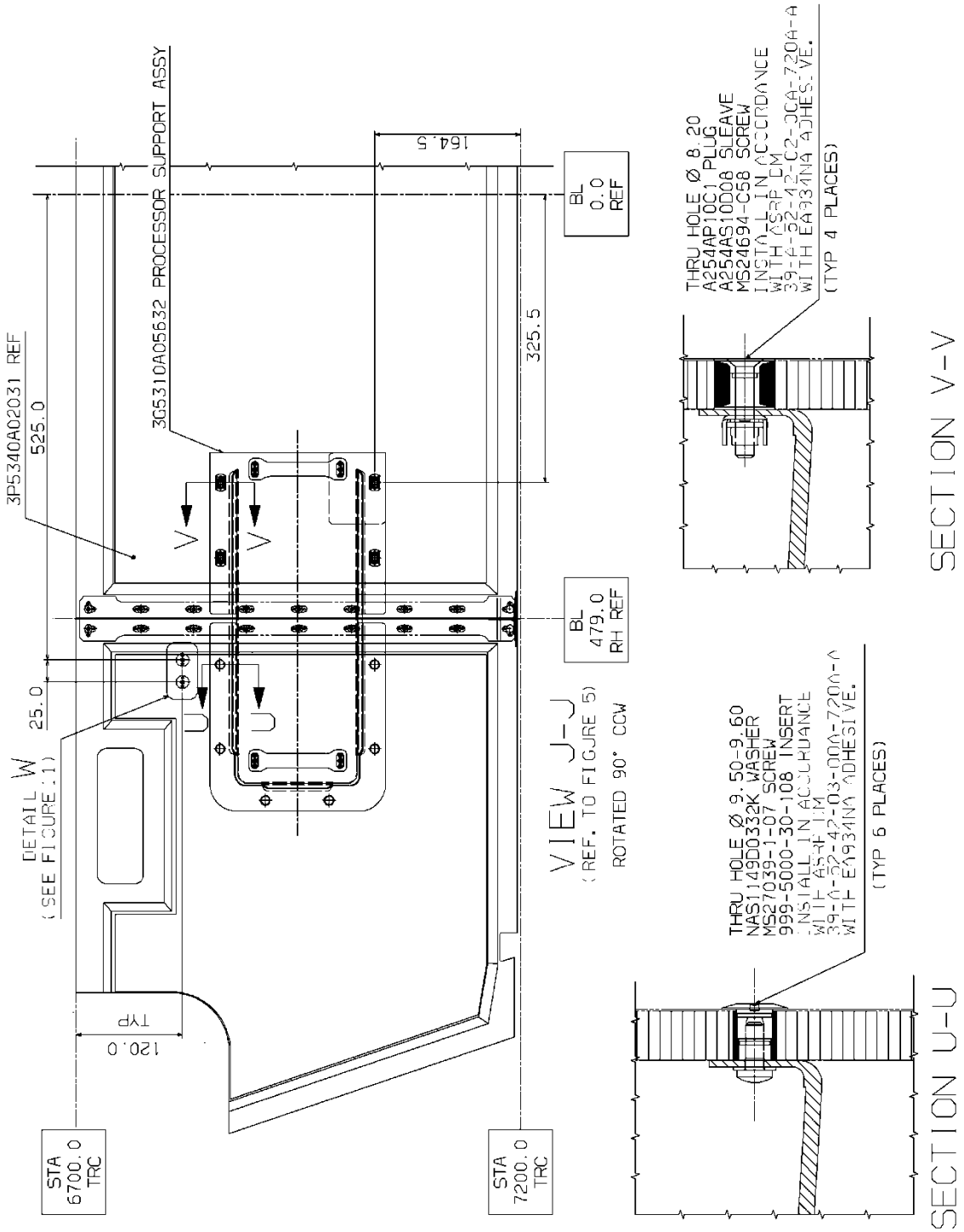

3G5310A05632 PROCESSOR SUPPORT ASSY
3P5340A02031 REF
525.0
164.5
325.5
BL 0.0 REF
BL 479.0 RH REF
STA 6700.0 TRC
STA 7200.0 TRC
120.0 TYP
25.0
DETAIL W
(SEE FIGURE 1)
VIEW J-J
(REF. TO FIGURE 5)
ROTATED 90° CCW
THRU HOLE Ø 8.20
A254AP10C1 PLUG
A254AS10D08 SLEAVE
MS24694-C58 SCREW
INSTALL IN ACCORDANCE
WITH ASRP LM
39-A-52-42-C2-JCA-7204-A
WITH EA934NA ADHESIVE.
(TYP 4 PLACES)
SECTION V-V
THRU HOLE Ø 9.50-9.60
NAS1149D0332K WASHER
MS27039-1-07 SCREW
999-5000-30-108 INSERT
INSTALL IN ACCORDANCE
WITH ASRP LM
39-A-52-42-03-DDA-7204-A
WITH EA934NA ADHESIVE.
(TYP 6 PLACES)
SECTION U-U

Figure 10

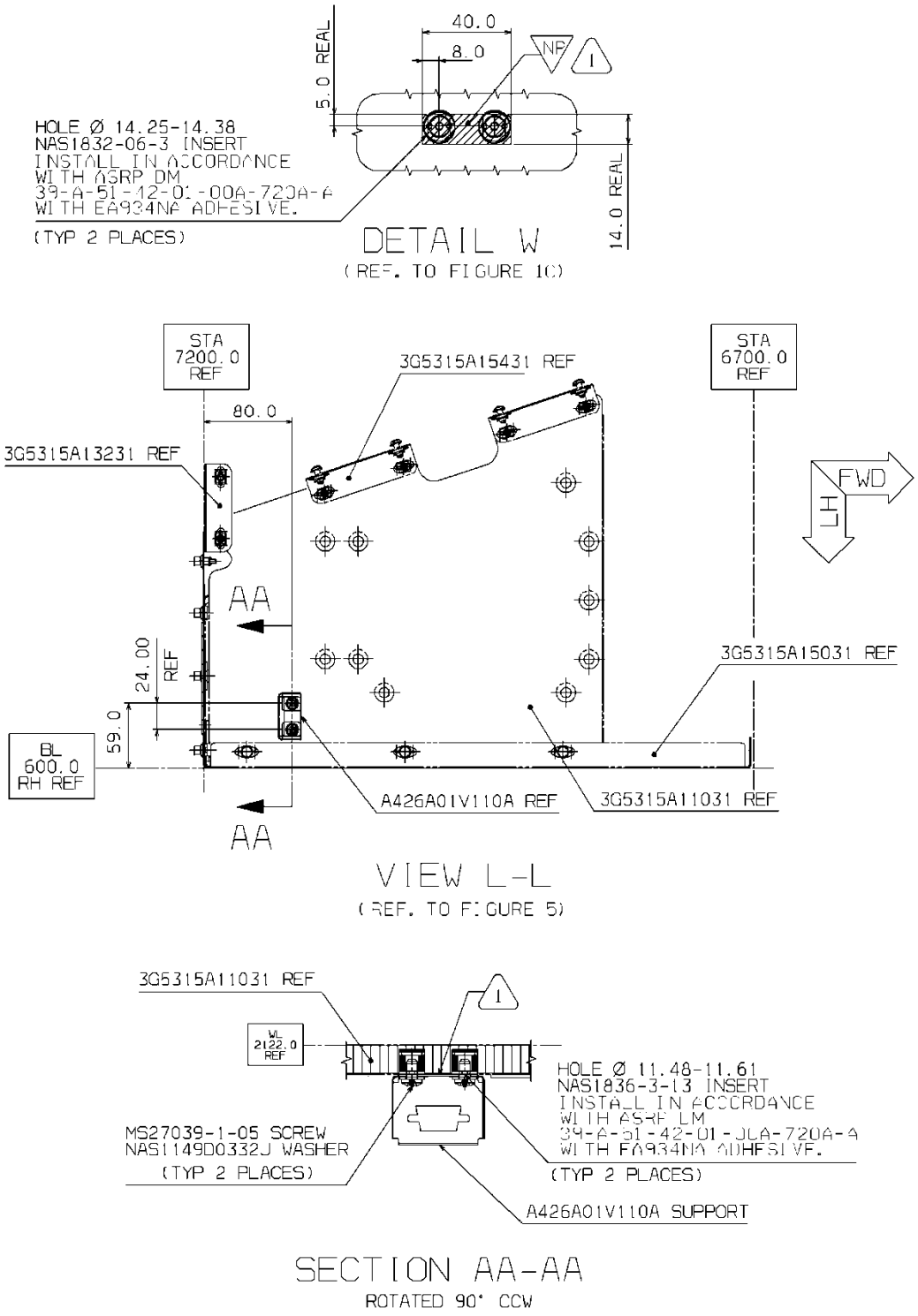

40.0
8.0
NP
1
5.0 REAL
14.0 REAL
HOLE Ø 14.25-14.38
NAS1832-06-3 INSERT
INSTALL IN ACCORDANCE
WITH ASRP DM
39-A-51-42-01-00A-720A-A
WITH EA934NA ADHESIVE.
(TYP 2 PLACES)
DETAIL W
(REF. TO FIGURE 10)
STA
7200.0
REF
STA
6700.0
REF
3G5315A15431 REF
80.0
3G5315A13231 REF
FWD
LH
AA
24.00
REF
59.0
BL
600.0
RH REF
3G5315A15031 REF
A426A01V110A REF
3G5315A11031 REF
AA
VIEW L-L
(REF. TO FIGURE 5)
3G5315A11031 REF
1
WL
2122.0
REF
HOLE Ø 11.48-11.61
NAS1836-3-13 INSERT
INSTALL IN ACCORDANCE
WITH ASRP LM
39-A-51-42-01-JLA-720A-A
WITH EA934NA ADHESIVE.
MS27039-1-05 SCREW
NAS1149D0332J WASHER
(TYP 2 PLACES)
(TYP 2 PLACES)
A426A01V110A SUPPORT
SECTION AA-AA
ROTATED 90° CCW

Figure 11

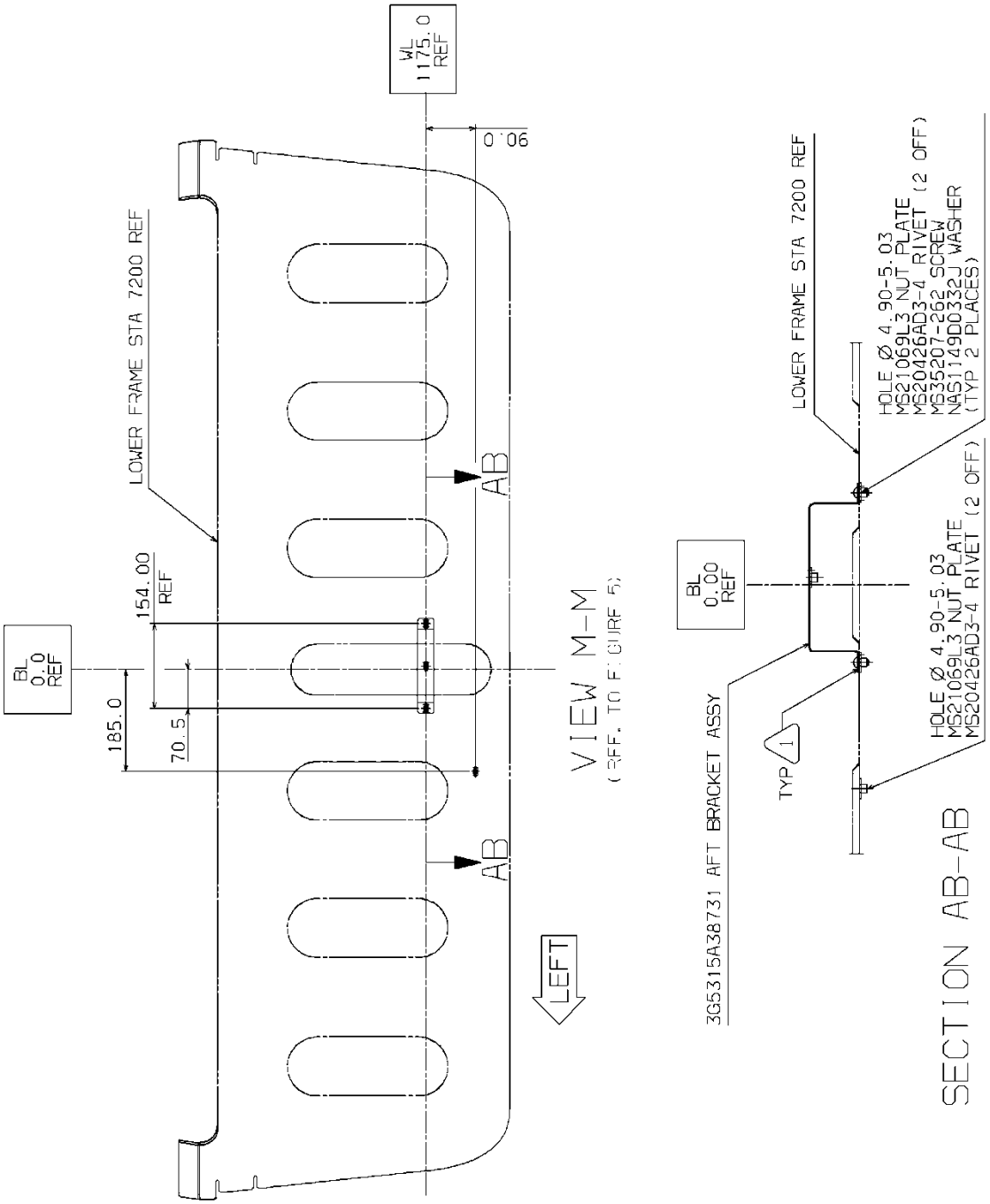
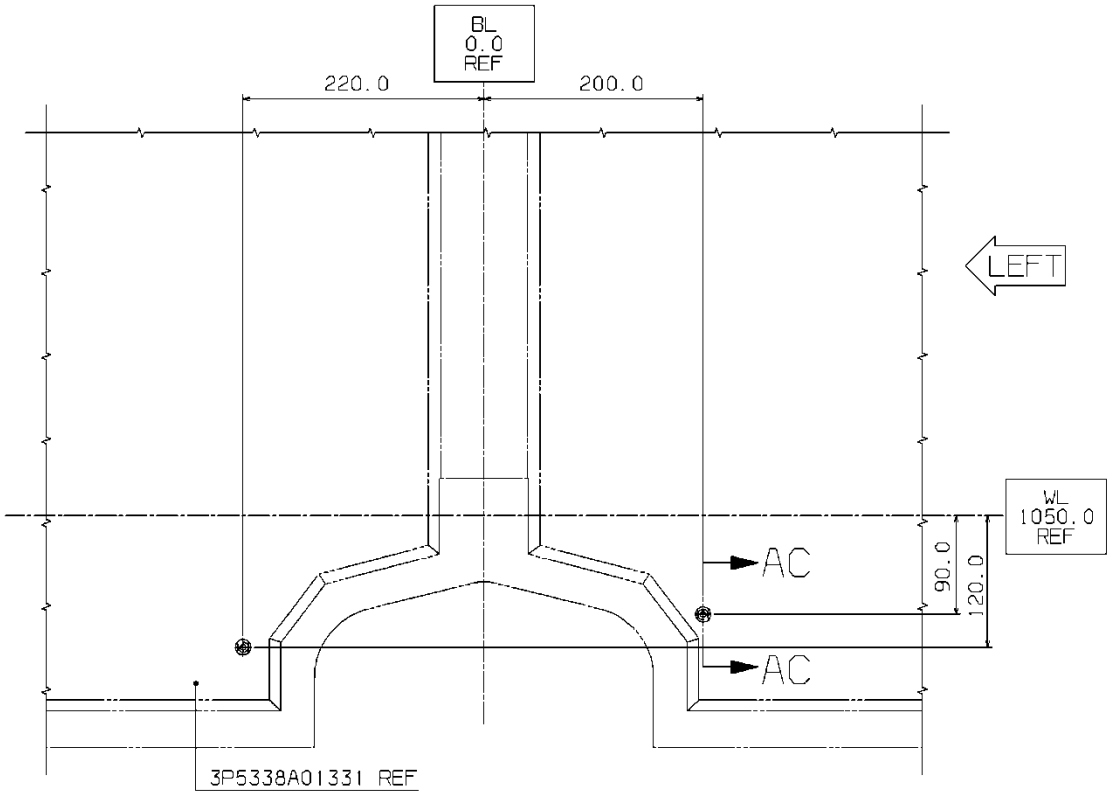
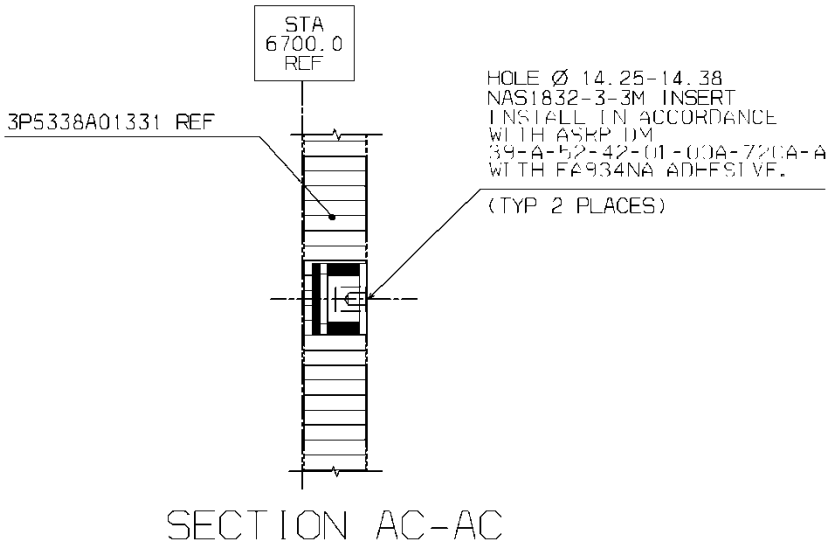

WL 1175.0 REF
0.06
LOWER FRAME STA 7200 REF
154.00 REF
BL 0.0 REF
185.0
70.5
AB
AB
VIEW M-M
(REF. TO FIGURE 5)
LEFT
LOWER FRAME STA 7200 REF
HOLE Ø4.90-5.03
MS21069L3 NUT PLATE
MS20426AD3-4 RIVET (2 OFF)
MS35207-262 SCREW
NAS1149D0332J WASHER
(TYP 2 PLACES)
BL 0.00 REF
HOLE Ø4.90-5.03
MS21069L3 NUT PLATE
MS20426AD3-4 RIVET (2 OFF)
TYP
1
3G5315A38731 AFT BRACKET ASSY
SECTION AB-AB

Figure 12



VIEW K-K
(REF. TO FIGURE 5)



SECTION AC-AC

Figure 13

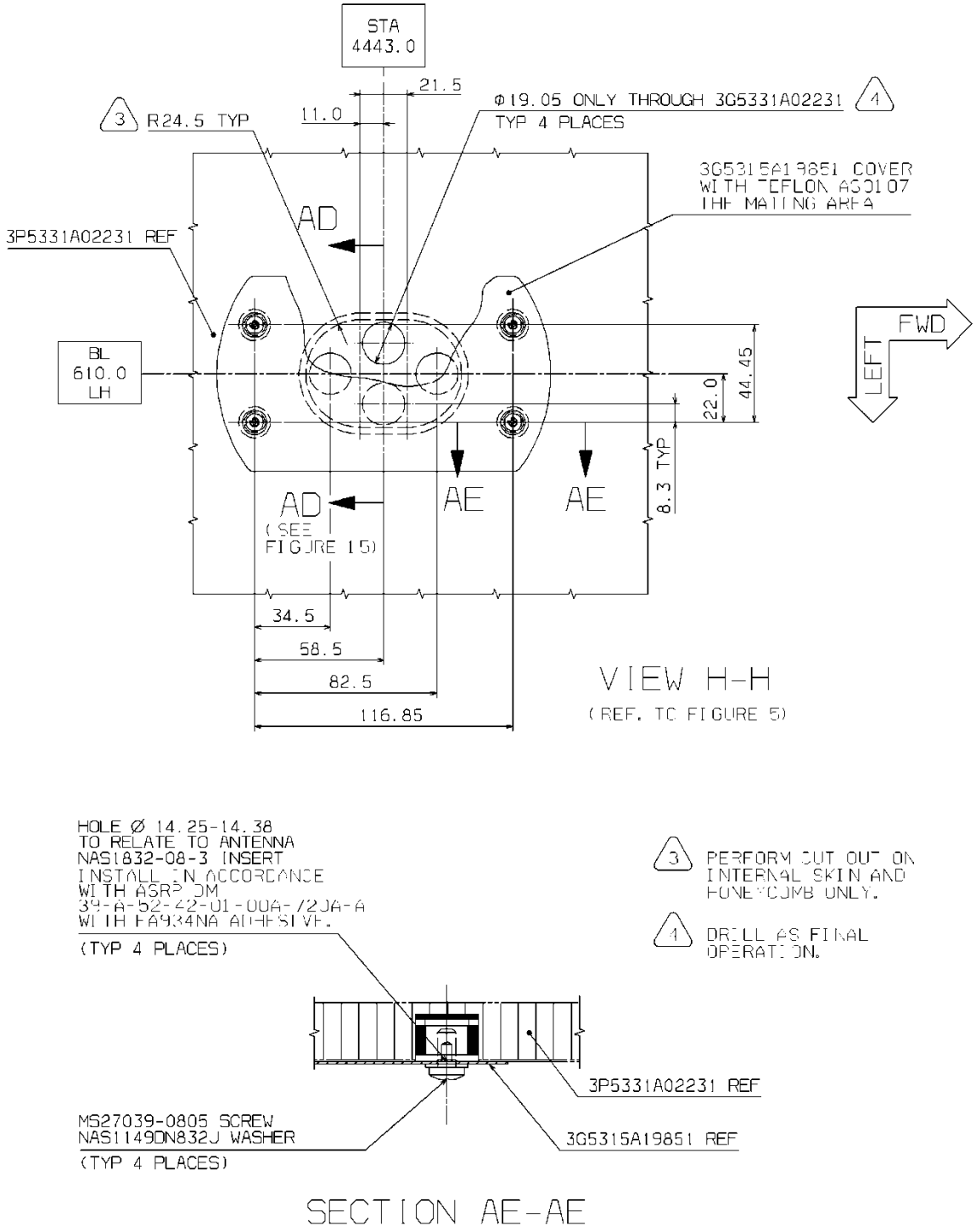
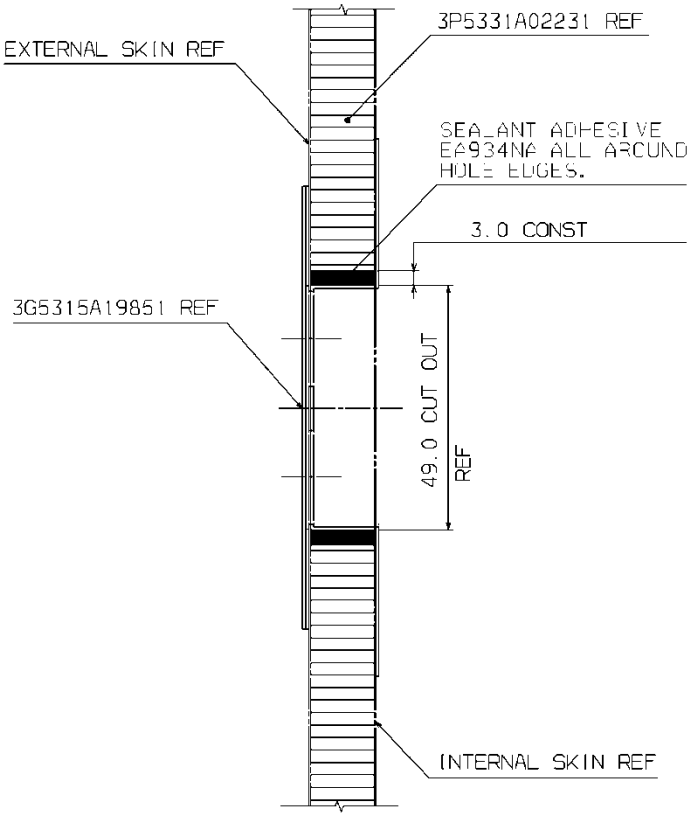
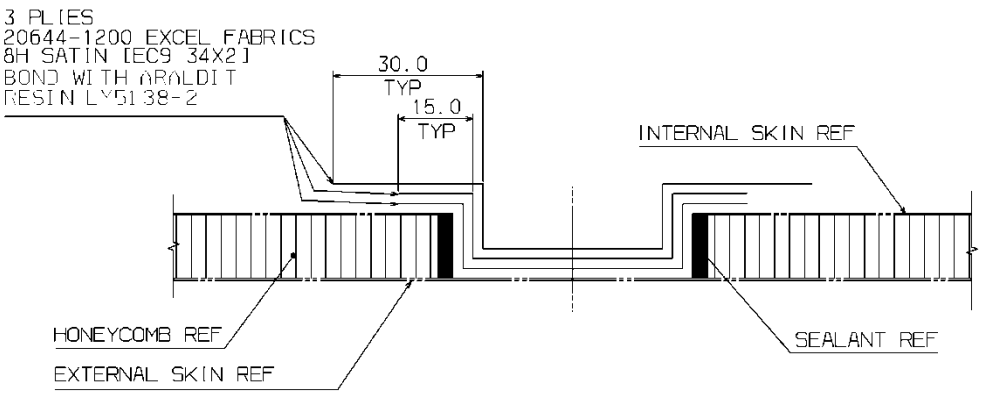

STA
4443.0
21.5
11.0
3 R24.5 TYP
Φ19.05 ONLY THROUGH 3G5331A02231 4
TYP 4 PLACES
3G5315A19851 COVER
WITH TEFLON AS0107
THIS MATING AREA
AD
3P5331A02231 REF
FWD
LEFT
BL
610.0
LH
44.45
22.0
8.3 TYP
AD
(SEE
FIGURE 15)
AE
AE
34.5
58.5
82.5
116.85
VIEW H-H
(REF. TO FIGURE 5)
HOLE Ø 14.25-14.38
TO RELATE TO ANTENNA
NAS1832-08-3 INSERT
INSTALL IN ACCORDANCE
WITH ASR5 DM
39-A-52-42-01-00A-72JA-A
WITH EA934NA ADHESIVE.
(TYP 4 PLACES)
3 PERFORM CUT OUT ON
INTERNAL SKIN AND
HONEYCOMB ONLY.
4 DRILL AS FINAL
OPERATION.
3P5331A02231 REF
MS27039-0805 SCREW
NAS1149DN832J WASHER
(TYP 4 PLACES)
3G5315A19851 REF
SECTION AE-AE

Figure 14



SECTION AD-AD
(REF. TO FIGURE 14)



SCHEMATIC SECTION AD-AD
ROTATED 90° CCW
TIPICAL FOR CUT OUT

Figure 15

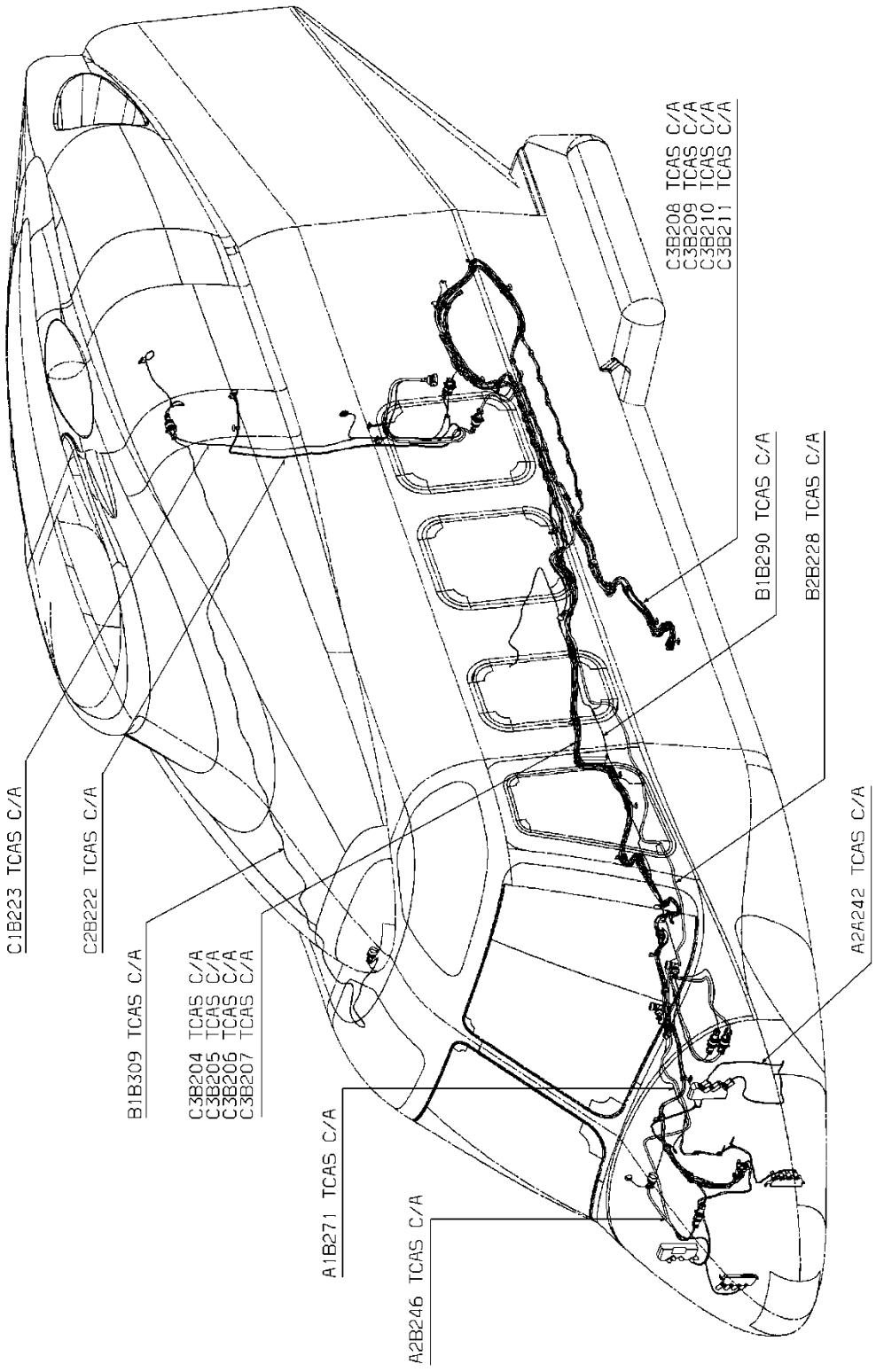

C1B223 TCAS C/A
C2B222 TCAS C/A
B1B309 TCAS C/A
C3B204 TCAS C/A
C3B205 TCAS C/A
C3B206 TCAS C/A
C3B207 TCAS C/A
A1B271 TCAS C/A
A2B246 TCAS C/A
C3B208 TCAS C/A
C3B209 TCAS C/A
C3B210 TCAS C/A
C3B211 TCAS C/A
B1B290 TCAS C/A
B2B228 TCAS C/A
A2A242 TCAS C/A

Figure 16

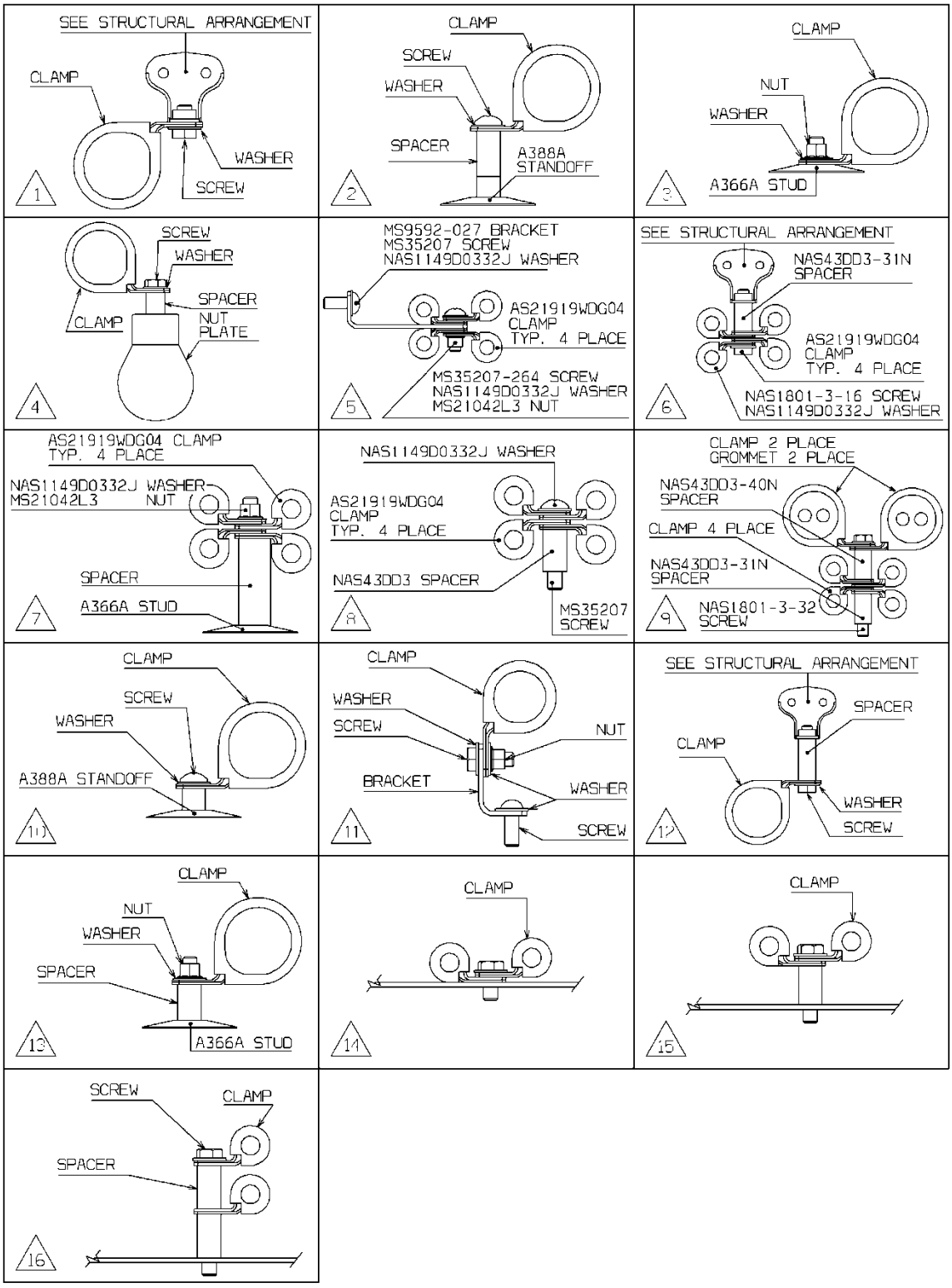
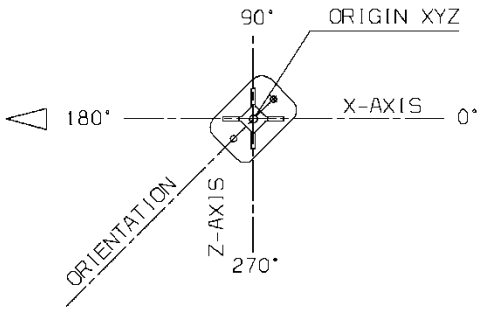

SEE STRUCTURAL ARRANGEMENT
CLAMP
WASHER
SCREW
1
CLAMP
SCREW
WASHER
SPACER
A388A STANDOFF
2
CLAMP
NUT
WASHER
A366A STUD
3
SCREW
WASHER
SPACER
CLAMP
NUT PLATE
4
MS9592-027 BRACKET
MS35207 SCREW
NAS1149D0332J WASHER
AS21919WDG04 CLAMP TYP. 4 PLACE
MS35207-264 SCREW
NAS1149D0332J WASHER
MS21042L3 NUT
5
SEE STRUCTURAL ARRANGEMENT
NAS43DD3-31N SPACER
AS21919WDG04 CLAMP TYP. 4 PLACE
NAS1801-3-16 SCREW
NAS1149D0332J WASHER
6
AS21919WDG04 CLAMP TYP. 4 PLACE
NAS1149D0332J WASHER
MS21042L3 NUT
SPACER
A366A STUD
7
NAS1149D0332J WASHER
AS21919WDG04 CLAMP TYP. 4 PLACE
NAS43DD3 SPACER
MS35207 SCREW
8
CLAMP 2 PLACE
GROMMET 2 PLACE
NAS43DD3-40N SPACER
CLAMP 4 PLACE
NAS43DD3-31N SPACER
NAS1801-3-32 SCREW
9
CLAMP
SCREW
WASHER
A388A STANDOFF
10
CLAMP
WASHER
SCREW
NUT
BRACKET
WASHER
SCREW
11
SEE STRUCTURAL ARRANGEMENT
SPACER
CLAMP
WASHER
SCREW
12
CLAMP
NUT
WASHER
SPACER
A366A STUD
13
CLAMP
14
CLAMP
15
SCREW
CLAMP
SPACER
16

Figure 17

ORIENTATION OF CABLE SUPPORTS

DIAGRAM IS BASIC FOR ORIENTATION OF ALL CABLE SUPPORTS IN RELATIONSHIP WITH H/C AXIS SYSTEM.
FOR ORIENTATION OF SUPPORT SEE COORDINATES TABLE

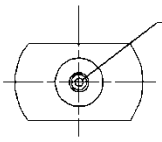


A630A12

XYZ INDICATES WHERE GIVEN COORDINATES

ARE LOCATED ON SUPPORT, SEE COORD. TABLE
LOCATION OF SUPPORT CAN BE BONDED WITH IN ±5 MM OF GIVEN COORDINATES. UNLESS OTHERWISE MENTIONED
ORIENTATION OF SUPPORT CAN BE BONDED WITH IN ±5° OF GIVEN VALUE. UNLESS OTHERWISE MENTIONED.

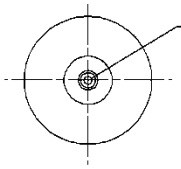
A366A3E--C75



XYZ INDICATES WHERE GIVEN COORDINATES

ARE LOCATED ON SUPPORT, SEE COORD. TABLE
LOCATION OF SUPPORT CAN BE BONDED WITH IN ±5 MM OF GIVEN COORDINATES. UNLESS OTHERWISE MENTIONED
ORIENTATION OF SUPPORT CAN BE BONDED WITH IN ±5° OF GIVEN VALUE. UNLESS OTHERWISE MENTIONED.

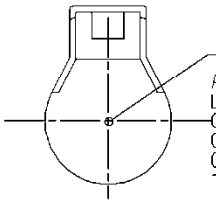
A366A3E--C
A388A3E--C



XYZ INDICATES WHERE GIVEN COORDINATES

ARE LOCATED ON SUPPORT, SEE COORD. TABLE
LOCATION OF SUPPORT CAN BE BONDED WITH IN ±5 MM OF GIVEN COORDINATES. UNLESS OTHERWISE MENTIONED
ORIENTATION OF SUPPORT CAN BE BONDED WITH IN ±5° OF GIVEN VALUE. UNLESS OTHERWISE MENTIONED.

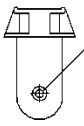
A630A3B



XYZ INDICATES WHERE GIVEN COORDINATES

ARE LOCATED ON SUPPORT, SEE COORD. TABLE
LOCATION OF SUPPORT CAN BE BONDED WITH IN ±5 MM OF GIVEN COORDINATES. UNLESS OTHERWISE MENTIONED
ORIENTATION OF SUPPORT CAN BE BONDED WITH IN ±5° OF GIVEN VALUE. UNLESS OTHERWISE MENTIONED.

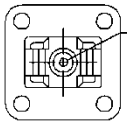
A630A04



XYZ INDICATES WHERE GIVEN COORDINATES

ARE LOCATED ON SUPPORT, SEE COORD. TABLE
LOCATION OF SUPPORT CAN BE BONDED WITH IN ±5 MM OF GIVEN COORDINATES. UNLESS OTHERWISE MENTIONED
ORIENTATION OF SUPPORT CAN BE BONDED WITH IN ±5° OF GIVEN VALUE. UNLESS OTHERWISE MENTIONED.

A630A31



XYZ INDICATES WHERE GIVEN COORDINATES

ARE LOCATED ON SUPPORT, SEE COORD. TABLE
SUPPORT SHALL BE LOCATED WITHIN ±5 MM OF GIVEN COORDINATES.
ORIENTATION OF SUPPORT SHALL BE WITHIN ±5° OF GIVEN VALUE UNLESS OTHERWISE NOTED.

Figure 18

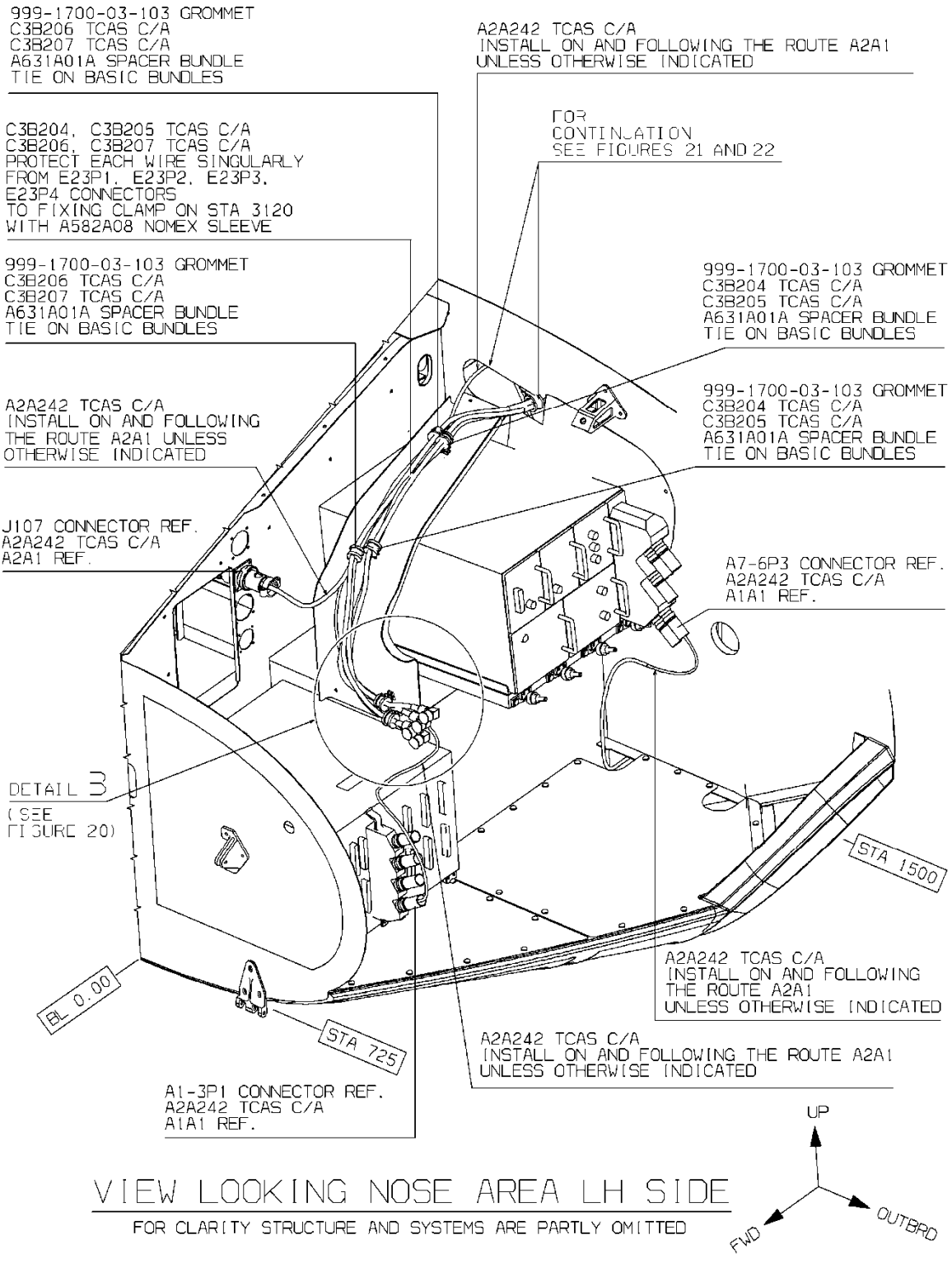

999-1700-03-103 GROMMET
C3B206 TCAS C/A
C3B207 TCAS C/A
A631A01A SPACER BUNDLE
TIE ON BASIC BUNDLES
A2A242 TCAS C/A
INSTALL ON AND FOLLOWING THE ROUTE A2A1
UNLESS OTHERWISE INDICATED
C3B204, C3B205 TCAS C/A
C3B206, C3B207 TCAS C/A
PROTECT EACH WIRE SINGULARLY
FROM E23P1, E23P2, E23P3,
E23P4 CONNECTORS
TO FIXING CLAMP ON STA 3120
WITH A582A08 NOMEX SLEEVE
FOR
CONTINUATION
SEE FIGURES 21 AND 22
999-1700-03-103 GROMMET
C3B206 TCAS C/A
C3B207 TCAS C/A
A631A01A SPACER BUNDLE
TIE ON BASIC BUNDLES
999-1700-03-103 GROMMET
C3B204 TCAS C/A
C3B205 TCAS C/A
A631A01A SPACER BUNDLE
TIE ON BASIC BUNDLES
A2A242 TCAS C/A
INSTALL ON AND FOLLOWING
THE ROUTE A2A1 UNLESS
OTHERWISE INDICATED
999-1700-03-103 GROMMET
C3B204 TCAS C/A
C3B205 TCAS C/A
A631A01A SPACER BUNDLE
TIE ON BASIC BUNDLES
J107 CONNECTOR REF.
A2A242 TCAS C/A
A2A1 REF.
A7-6P3 CONNECTOR REF.
A2A242 TCAS C/A
A1A1 REF.
DETAIL 3
(SEE
FIGURE 20)
STA 1500
A2A242 TCAS C/A
INSTALL ON AND FOLLOWING
THE ROUTE A2A1
UNLESS OTHERWISE INDICATED
BL 0.00
STA 725
A2A242 TCAS C/A
INSTALL ON AND FOLLOWING THE ROUTE A2A1
UNLESS OTHERWISE INDICATED
A1-3P1 CONNECTOR REF.
A2A242 TCAS C/A
A1A1 REF.
UP
FWD
OUTBRD
VIEW LOOKING NOSE AREA LH SIDE
FOR CLARITY STRUCTURE AND SYSTEMS ARE PARTLY OMITTED

Figure 19

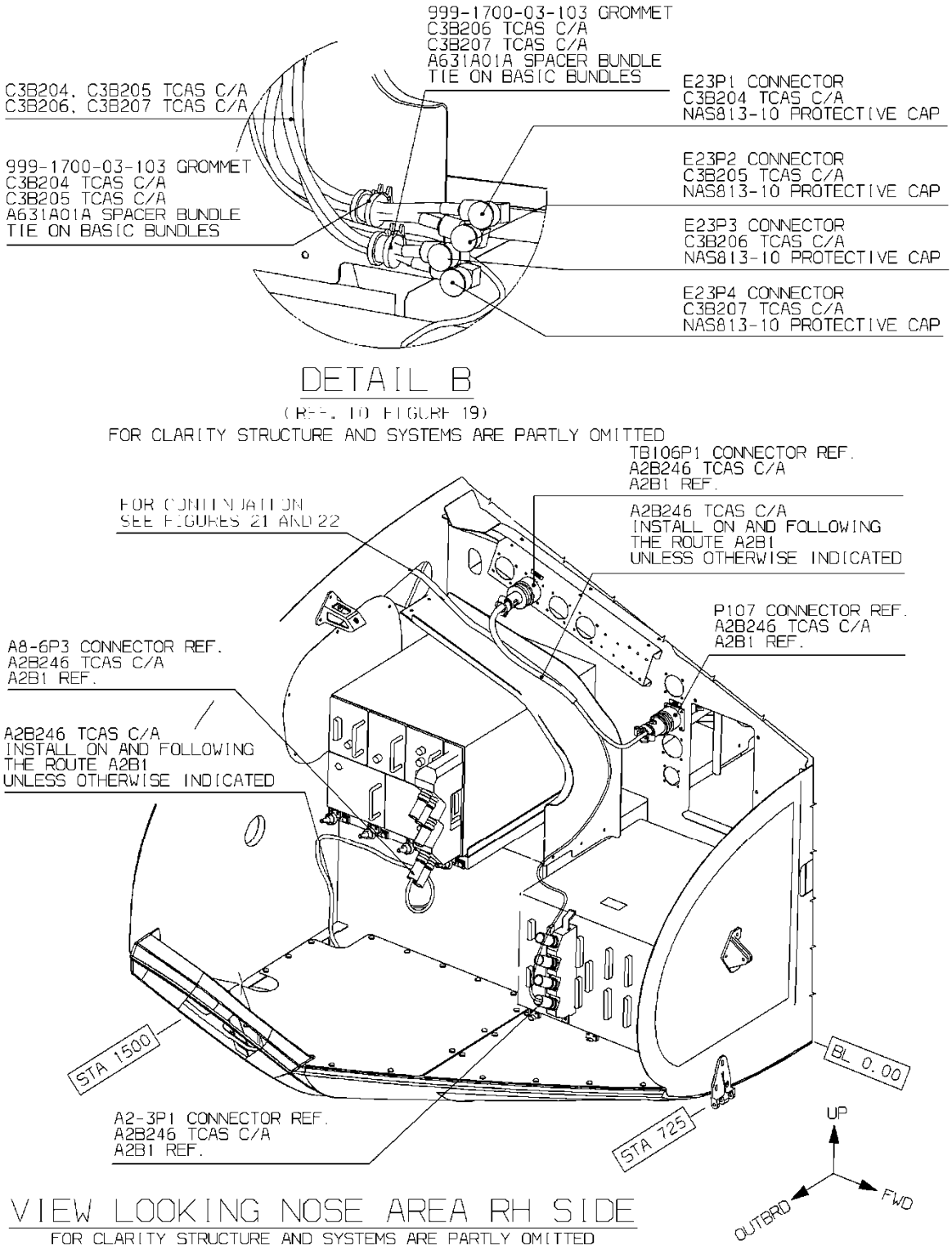
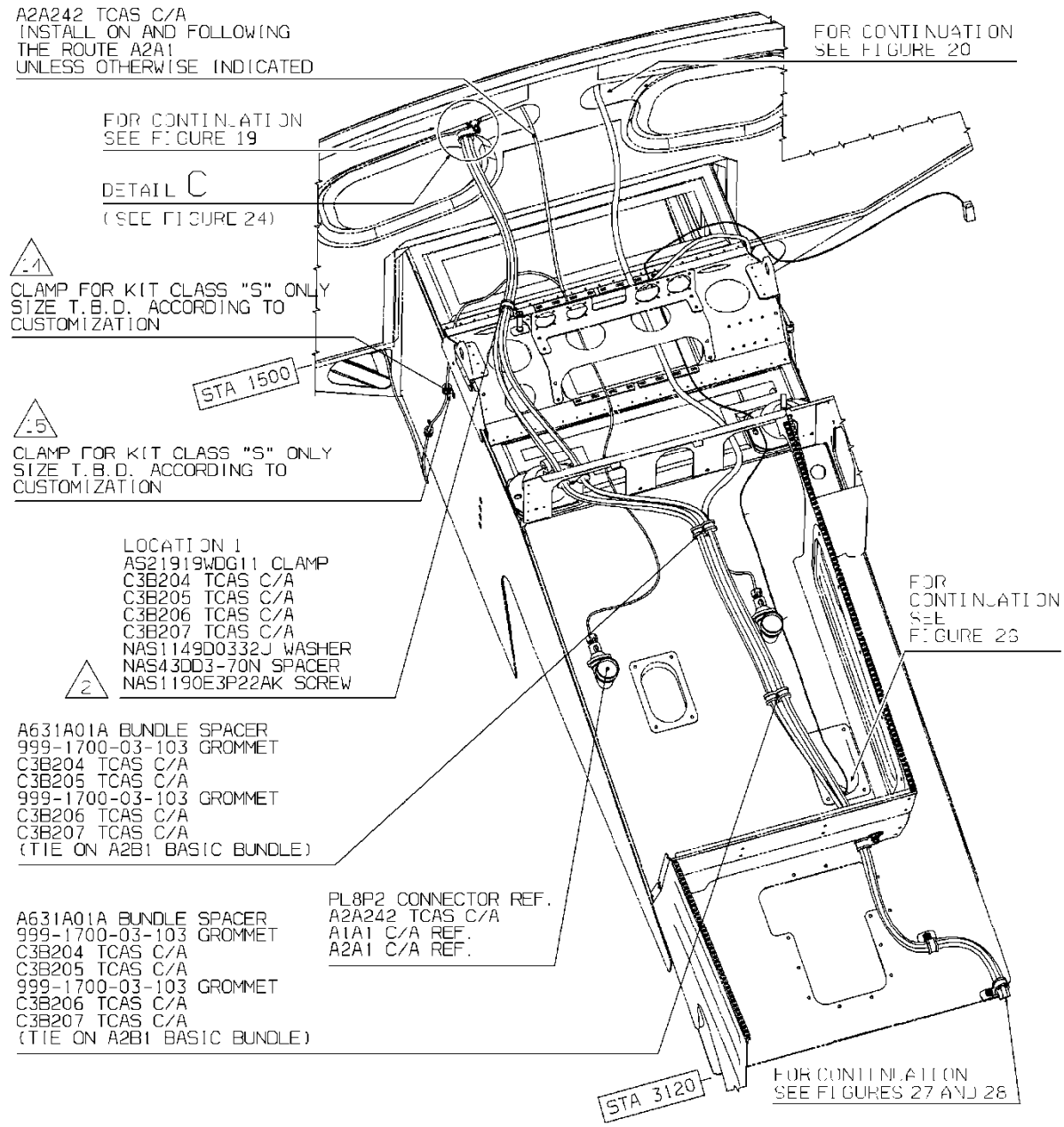

999-1700-03-103 GROMMET
C3B206 TCAS C/A
C3B207 TCAS C/A
A631A01A SPACER BUNDLE
TIE ON BASIC BUNDLES
C3B204, C3B205 TCAS C/A
C3B206, C3B207 TCAS C/A
E23P1 CONNECTOR
C3B204 TCAS C/A
NAS813-10 PROTECTIVE CAP
999-1700-03-103 GROMMET
C3B204 TCAS C/A
C3B205 TCAS C/A
A631A01A SPACER BUNDLE
TIE ON BASIC BUNDLES
E23P2 CONNECTOR
C3B205 TCAS C/A
NAS813-10 PROTECTIVE CAP
E23P3 CONNECTOR
C3B206 TCAS C/A
NAS813-10 PROTECTIVE CAP
E23P4 CONNECTOR
C3B207 TCAS C/A
NAS813-10 PROTECTIVE CAP
DETAIL B
(REF. TO FIGURE 19)
FOR CLARITY STRUCTURE AND SYSTEMS ARE PARTLY OMITTED
TB106P1 CONNECTOR REF.
A2B246 TCAS C/A
A2B1 REF.
FOR CONTINUATION
SEE FIGURES 21 AND 22
A2B246 TCAS C/A
INSTALL ON AND FOLLOWING
THE ROUTE A2B1
UNLESS OTHERWISE INDICATED
P107 CONNECTOR REF.
A2B246 TCAS C/A
A2B1 REF.
A8-6P3 CONNECTOR REF.
A2B246 TCAS C/A
A2B1 REF.
A2B246 TCAS C/A
INSTALL ON AND FOLLOWING
THE ROUTE A2B1
UNLESS OTHERWISE INDICATED
STA 1500
BL 0.00
A2-3P1 CONNECTOR REF.
A2B246 TCAS C/A
A2B1 REF.
STA 725
UP
OUTBRD
FWD
VIEW LOOKING NOSE AREA RH SIDE
FOR CLARITY STRUCTURE AND SYSTEMS ARE PARTLY OMITTED

Figure 20



VIEW LOOKING DOWN INTERSEAT CONSOLE
AREA FROM STA 1500 TO STA 3120

FOR CLARITY STRUCTURE AND SYSTEMS ARE PARTLY OMITTED

LOCATION NUMBER	PART. NUMBER	STA	BL	WL	ORIENTATION
1	A388A3E08C75	1767	-161	1384	90°
2	A366A3E08C75	2992	154	1095	90°
3	A366A3E08C75	3110	227	1055	90°

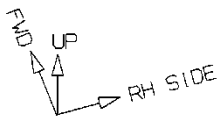
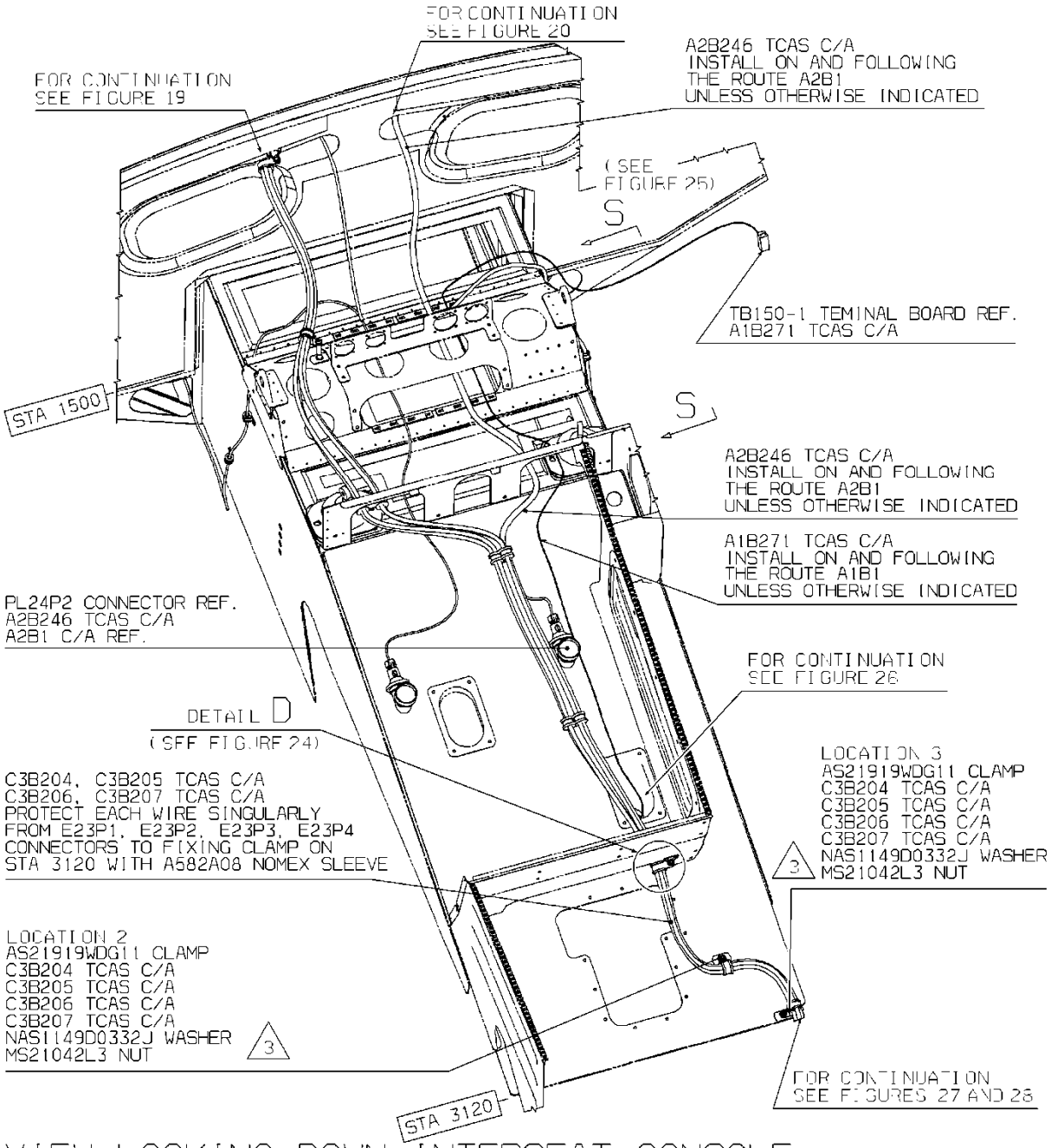


Figure 21



VIEW LOOKING DOWN INTERSEAT CONSOLE AREA FROM STA 1500 TO STA 3120

FOR CLARITY STRUCTURE AND SYSTEMS ARE PARTLY OMITTED

LOCATION NUMBER	PART NUMBER	STA	BL	WL	ORIENTATION
1	A388A3E08C75	1767	-161	1384	90°
2	A366A3E08C75	2992	154	1095	90°
3	A366A3E08C75	3110	227	1055	90°

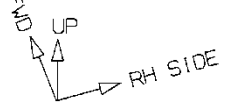


Figure 22

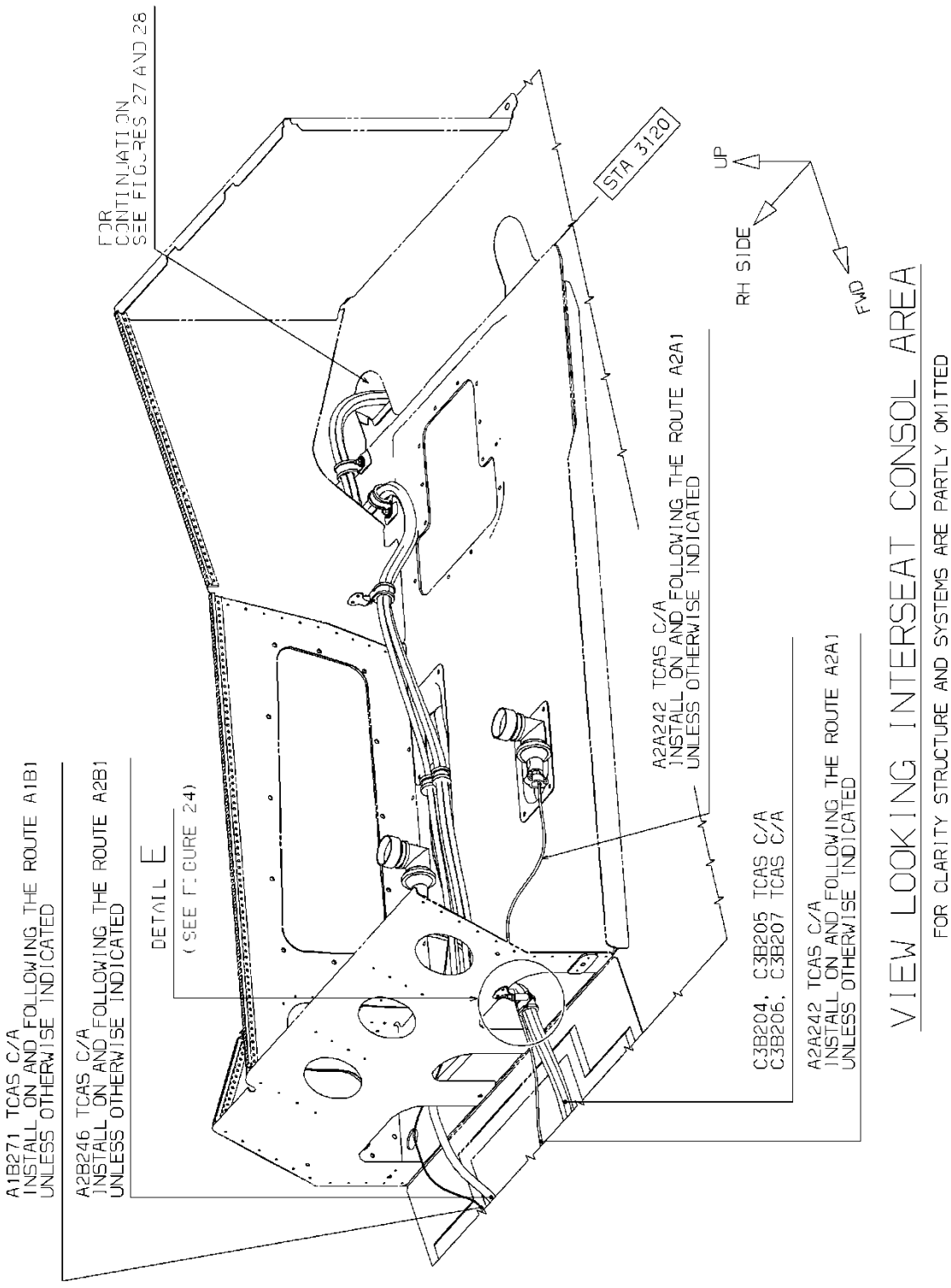
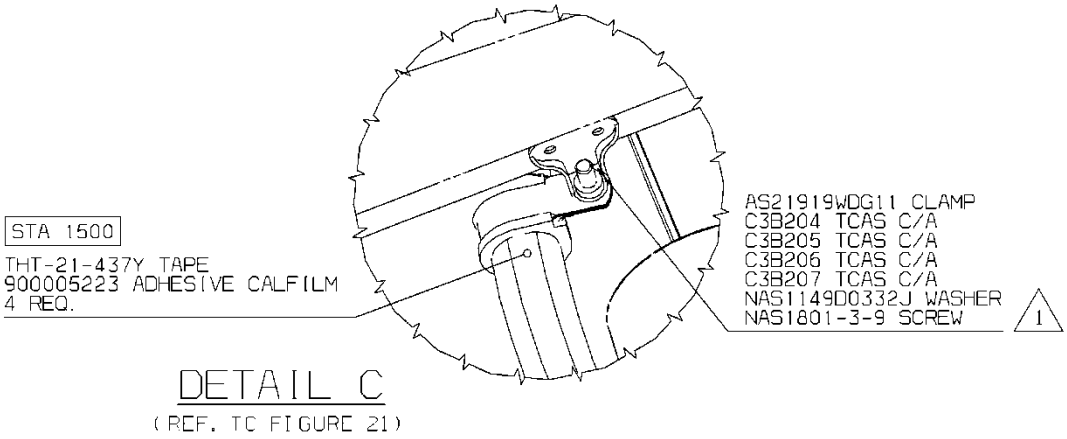

FOR
CONTINUATION
SEE FIGURES 27 AND 28
STA 3120
UP
RH SIDE
FWD
A1B271 TCAS C/A
INSTALL ON AND FOLLOWING THE ROUTE A1B1
UNLESS OTHERWISE INDICATED
A2B246 TCAS C/A
INSTALL ON AND FOLLOWING THE ROUTE A2B1
UNLESS OTHERWISE INDICATED
DETAIL E
(SEE FIGURE 24)
A2A242 TCAS C/A
INSTALL ON AND FOLLOWING THE ROUTE A2A1
UNLESS OTHERWISE INDICATED
C3B204, C3B205 TCAS C/A
C3B206, C3B207 TCAS C/A
A2A242 TCAS C/A
INSTALL ON AND FOLLOWING THE ROUTE A2A1
UNLESS OTHERWISE INDICATED
VIEW LOOKING INTERSEAT CONSOL AREA
FOR CLARITY STRUCTURE AND SYSTEMS ARE PARTLY OMITTED

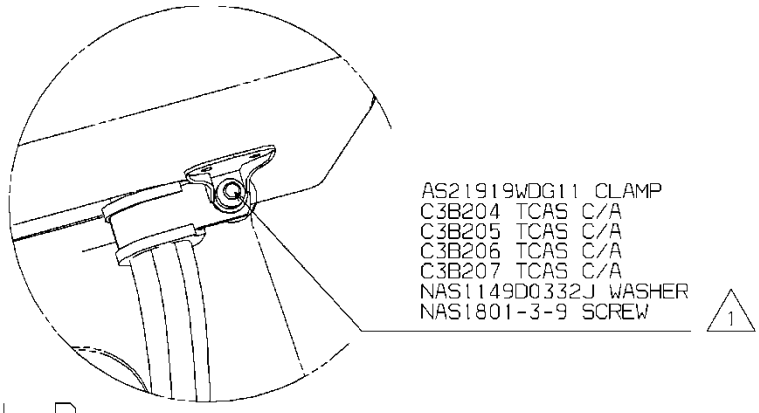
Figure 23



DETAIL C

(REF. TO FIGURE 21)

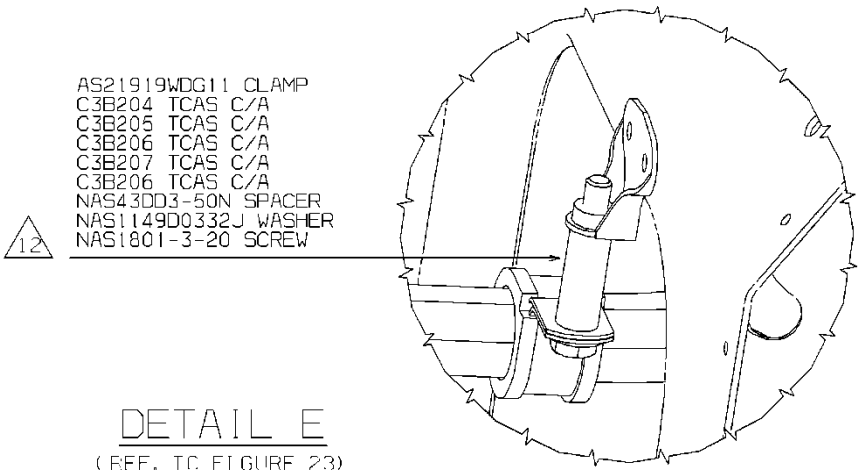
FOR CLARITY STRUCTURE AND SYSTEMS ARE PARTLY OMITTED



DETAIL D

(REF. TO FIGURE 22)

FOR CLARITY STRUCTURE AND SYSTEMS ARE PARTLY OMITTED



DETAIL E

(REF. TO FIGURE 23)

FOR CLARITY STRUCTURE AND SYSTEMS ARE PARTLY OMITTED

Figure 24

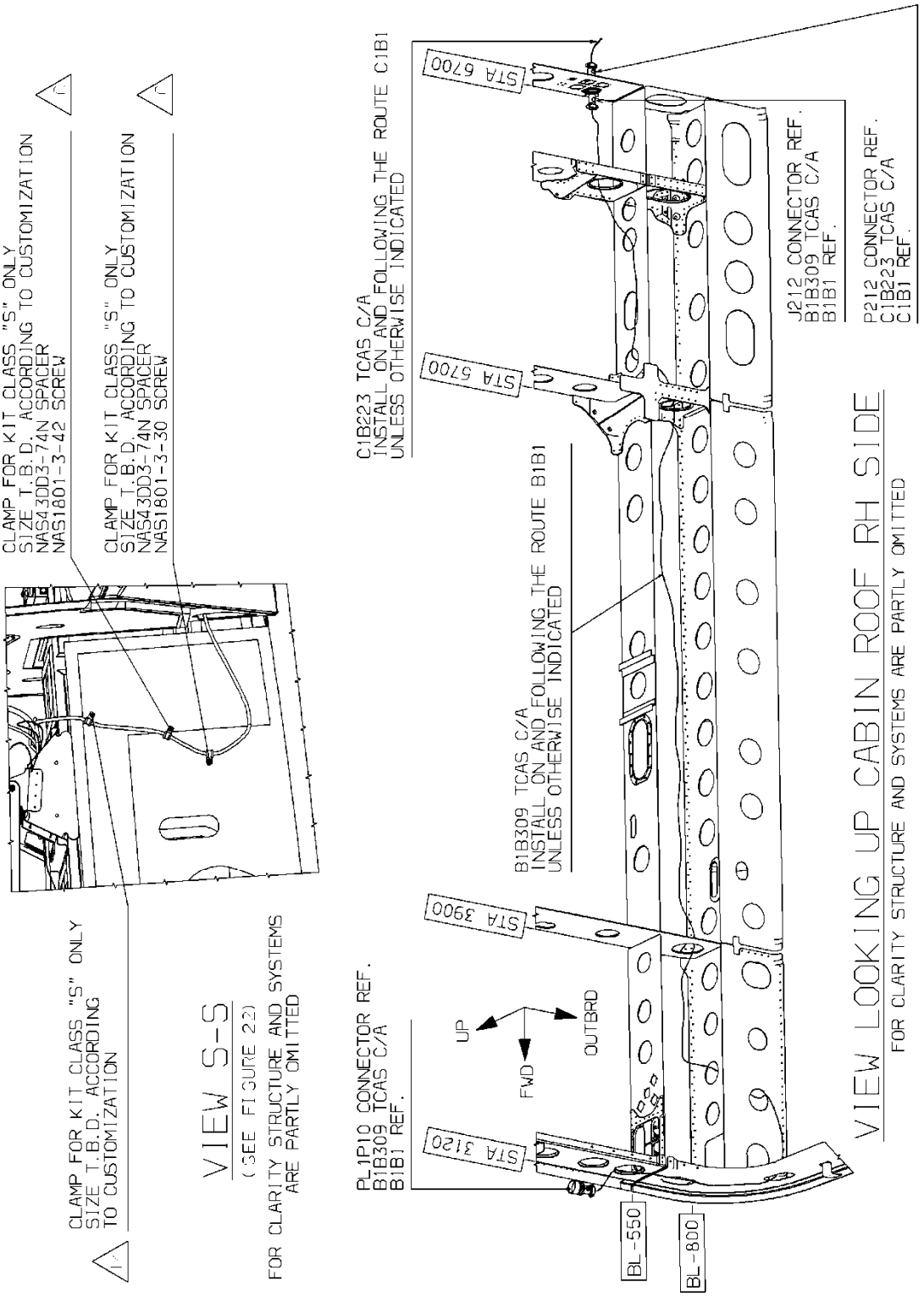

CLAMP FOR KIT CLASS "S" ONLY
SIZE T.B.D. ACCORDING TO CUSTOMIZATION
NAS43DD3-74N SPACER
NAS1801-3-42 SCREW
CLAMP FOR KIT CLASS "S" ONLY
SIZE T.B.D. ACCORDING TO CUSTOMIZATION
NAS43DD3-74N SPACER
NAS1801-3-30 SCREW
CLAMP FOR KIT CLASS "S" ONLY
SIZE T.B.D. ACCORDING TO CUSTOMIZATION
VIEW S-S
(SEE FIGURE 22)
FOR CLARITY STRUCTURE AND SYSTEMS ARE PARTLY OMITTED
C1B223 TCAS C/A
INSTALL ON AND FOLLOWING THE ROUTE C1B1
UNLESS OTHERWISE INDICATED
B1B309 TCAS C/A
INSTALL ON AND FOLLOWING THE ROUTE B1B1
UNLESS OTHERWISE INDICATED
P1.1P10 CONNECTOR REF.
B1B309 TCAS C/A
B1B1 REF.
J212 CONNECTOR REF.
B1B309 TCAS C/A
B1B1 REF.
P212 CONNECTOR REF.
C1B223 TCAS C/A
C1B1 REF.
STA 6700
STA 6700
STA 3900
STA 3120
UP
FWD
OUTBRD
BL-550
BL-800
VIEW LOOKING UP CABIN ROOF RH SIDE
FOR CLARITY STRUCTURE AND SYSTEMS ARE PARTLY OMITTED

Figure 25

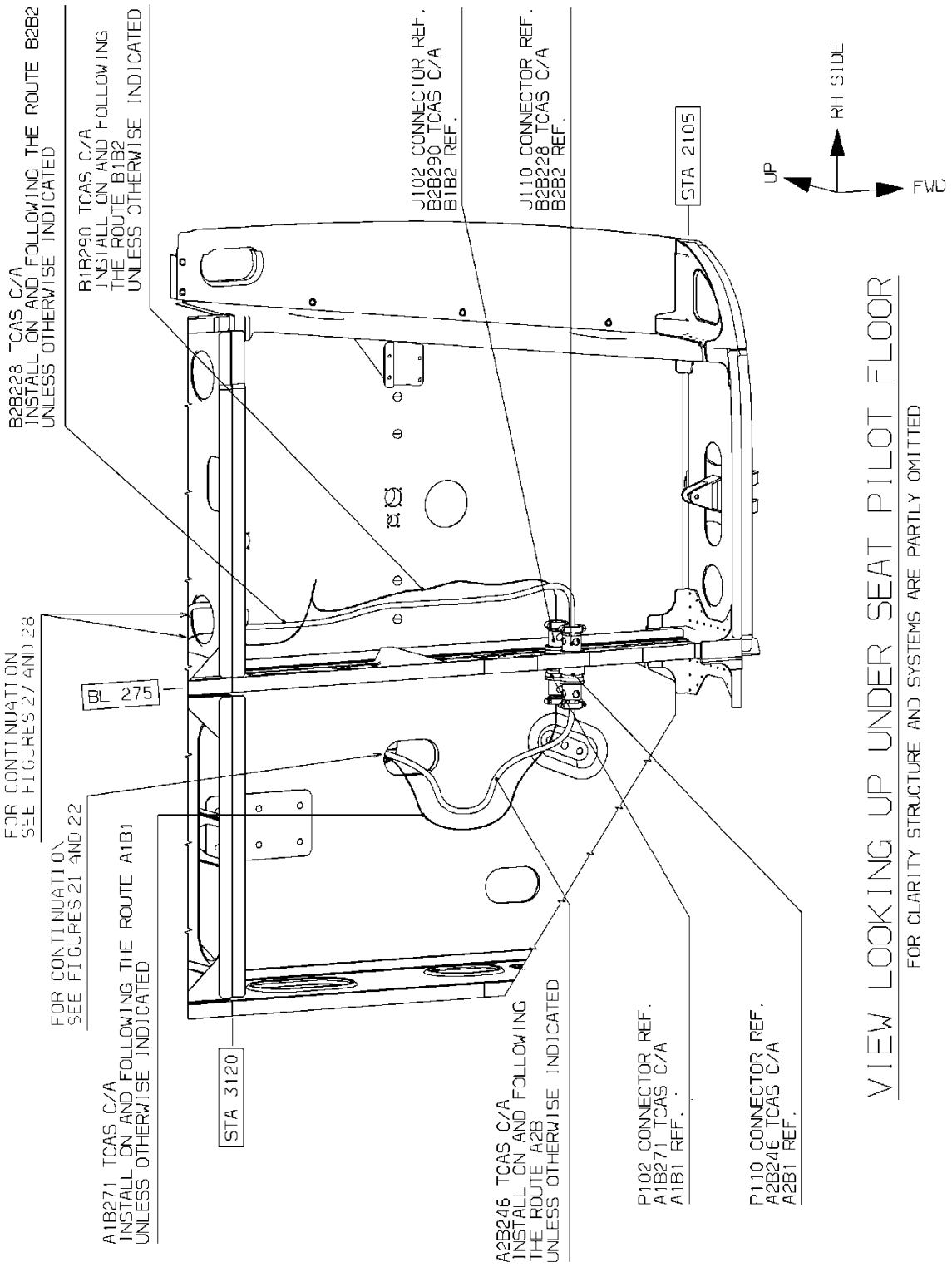
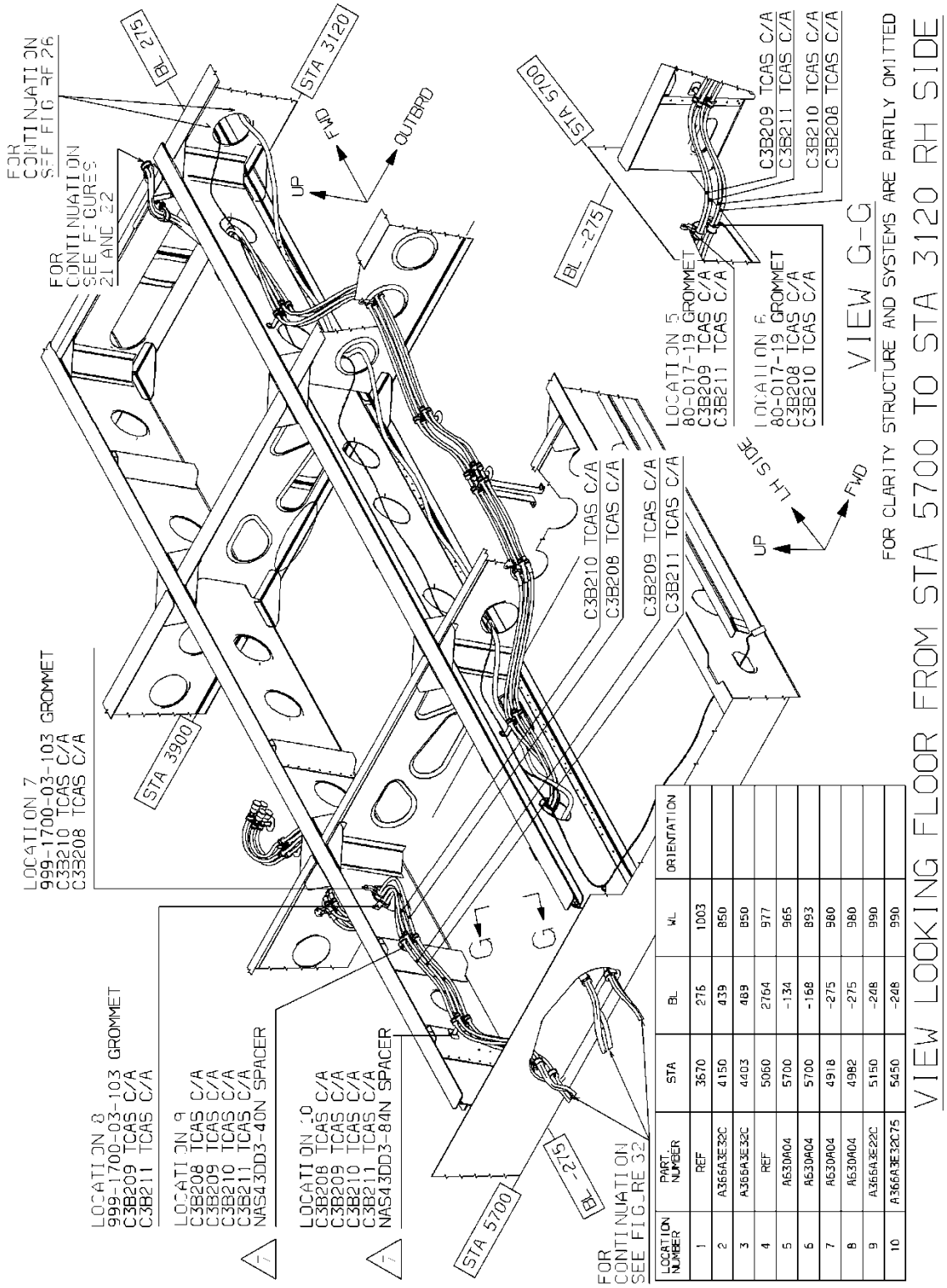
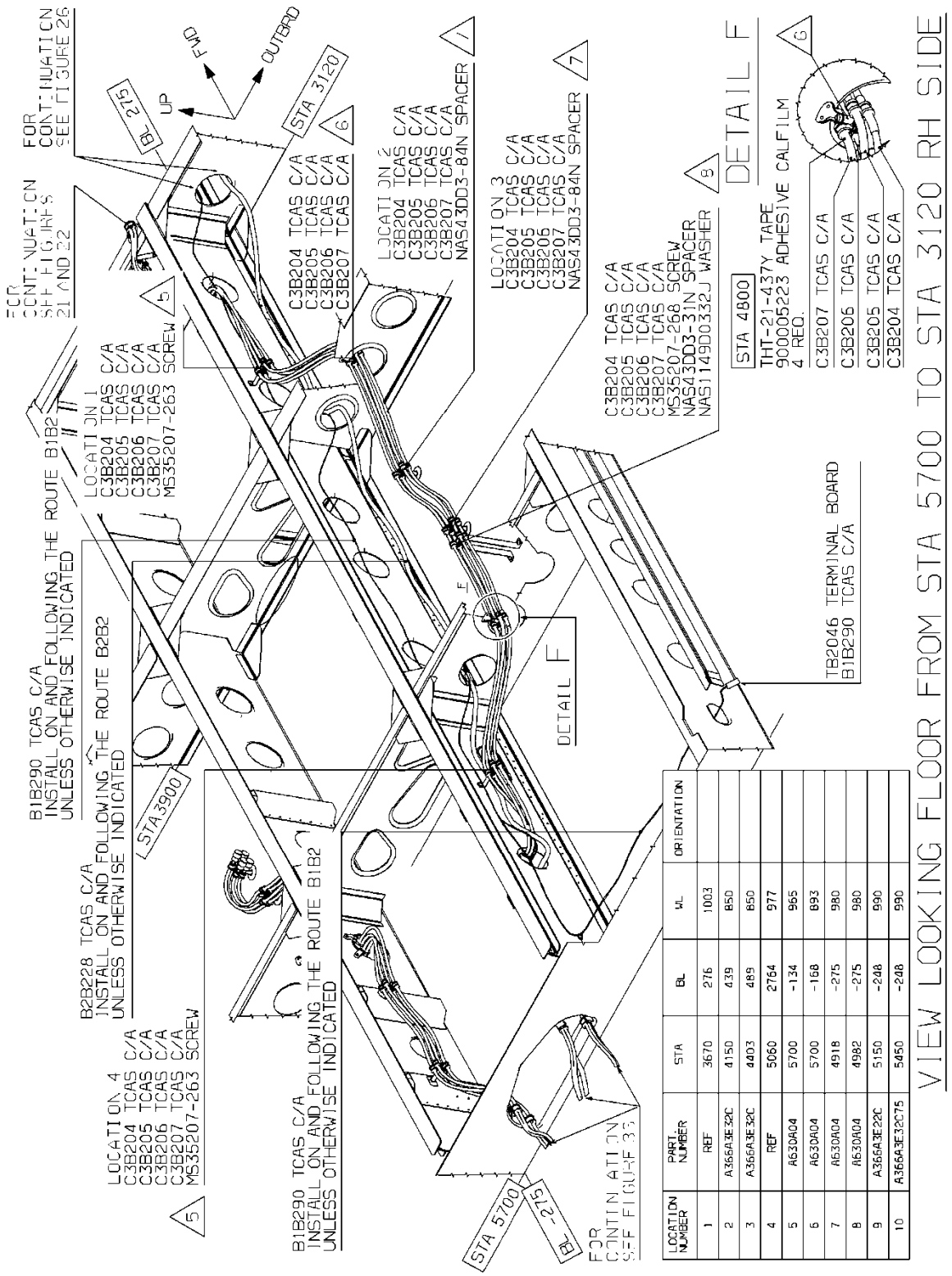

VIEW LOOKING UP UNDER SEAT PILOT FLOOR
FOR CLARITY STRUCTURE AND SYSTEMS ARE PARTLY OMITTED
UP
FWD
RH SIDE
STA 2105
STA 3120
BL 275
B2B228 TCAS C/A
INSTALL ON AND FOLLOWING THE ROUTE B2B2
UNLESS OTHERWISE INDICATED
B1B290 TCAS C/A
INSTALL ON AND FOLLOWING
THE ROUTE B1B2
UNLESS OTHERWISE INDICATED
J102 CONNECTOR REF.
B2B290 TCAS C/A
B1B2 REF.
J110 CONNECTOR REF.
B2B228 TCAS C/A
B2B2 REF.
FOR CONTINUATION
SEE FIGURES 2/4 AND 28
FOR CONTINUATION
SEE FIGURES 21 AND 22
A1B271 TCAS C/A
INSTALL ON AND FOLLOWING THE ROUTE A1B1
UNLESS OTHERWISE INDICATED
A2B246 TCAS C/A
INSTALL ON AND FOLLOWING
THE ROUTE A2B
UNLESS OTHERWISE INDICATED
P102 CONNECTOR REF.
A1B271 TCAS C/A
A1B1 REF.
P110 CONNECTOR REF.
A2B246 TCAS C/A
A2B1 REF.

Figure 26



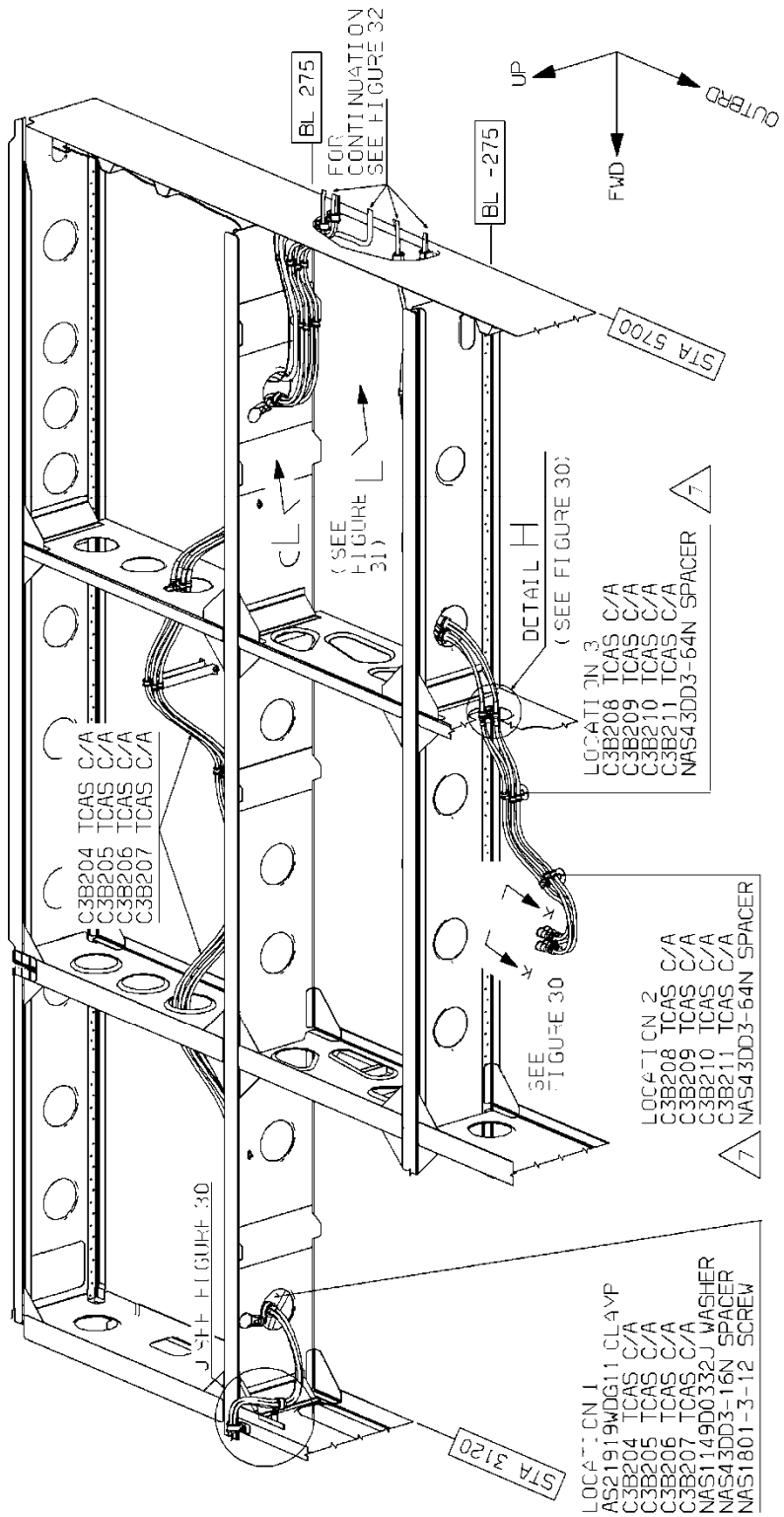
LOCATION NUMBER	PART NUMBER	STA	BL	WL	ORIENTATION
1	REF	3670	276	1003	
2	A366A3E32C	4150	439	850	
3	A366A3E32C	4403	489	850	
4	REF	5060	2764	977	
5	A630A04	5700	-134	965	
6	A630A04	5700	-168	893	
7	A630A04	4918	-275	980	
8	A630A04	4982	-275	980	
9	A366A3E22C	5150	-248	990	
10	A366A3E32C75	5450	-248	990	

Figure 27



LOCATION NUMBER	PART NUMBER	STA	BL	WL	ORIENTATION
1	REF	3670	276	1003	
2	A366A3E32C	4150	439	850	
3	A366A3E32C	4403	489	850	
4	REF	5060	2764	977	
5	A630A04	5700	-134	965	
6	A630A04	5700	-168	893	
7	A630A04	4918	-275	980	
8	A630A04	4982	-275	980	
9	A366A3E22C	5150	-248	990	
10	A366A3E32C75	5450	-248	990	

Figure 28

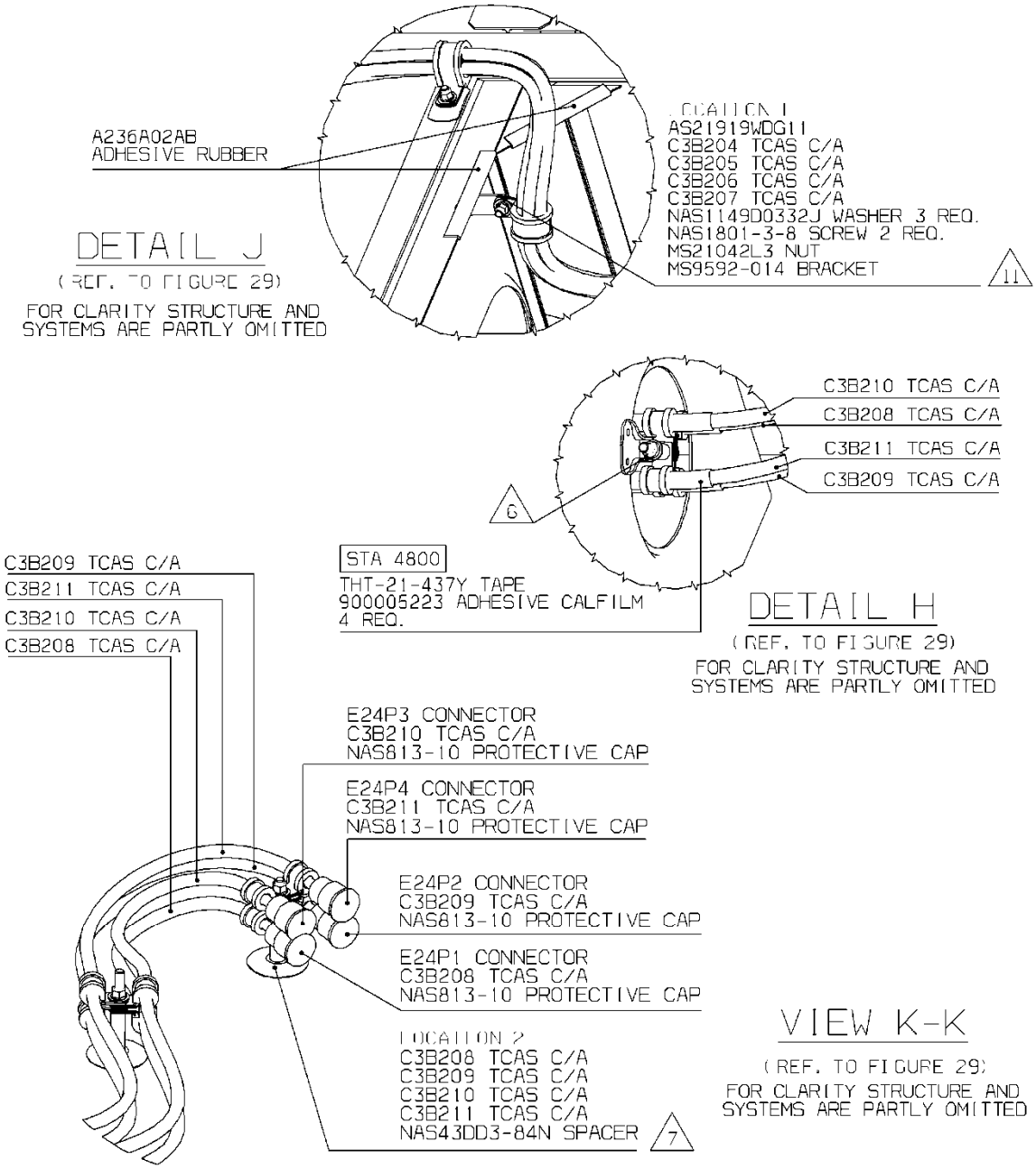


LOCATION NUMBER	PART NUMBER	STA	BL	WL	ORIENTATION
1	AW10111-3A18	3316	275	1014	30°
2	A366A3E32C	4465	-510	850	
3	A366A3E32C	4610	-395	850	

VIEW LOOKING FLOOR FROM STA 5700 TO STA 3120

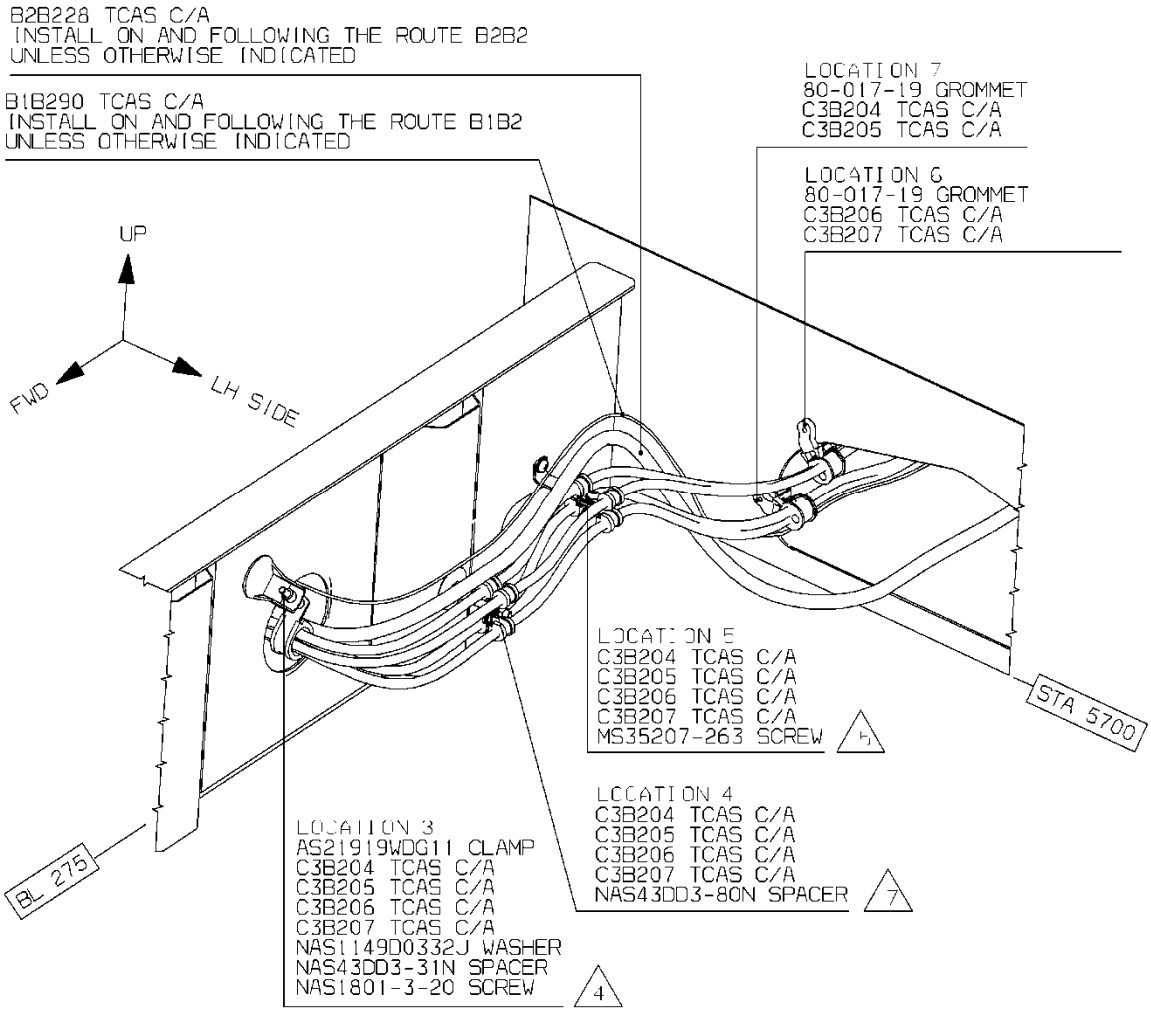
FOR CLARITY STRUCTURE AND SYSTEMS ARE PARTLY OMITTED

Figure 29



LOCATION NUMBER	PART. NUMBER	STA	BL	WL	ORIENTATION
1	REF.	3122	174	1015	
2	A366A3E32C	4339	-541	850	

Figure 30



VIEW L-L

(REF. TO FIGURE 29)

FOR CLARITY STRUCTURE AND SYSTEMS ARE PARTLY OMITTED

LOCATION NUMBER	PART. NUMBER	STA	BL	WL	ORIENTATION
3	AW001TL3A08	5258	275	991	-30°
4	A366A3E32C	5450	248	901	
5	REF	5580	275	930	
6	A630A04	5700	134	965	
7	A630A04	5700	168	893	

Figure 31

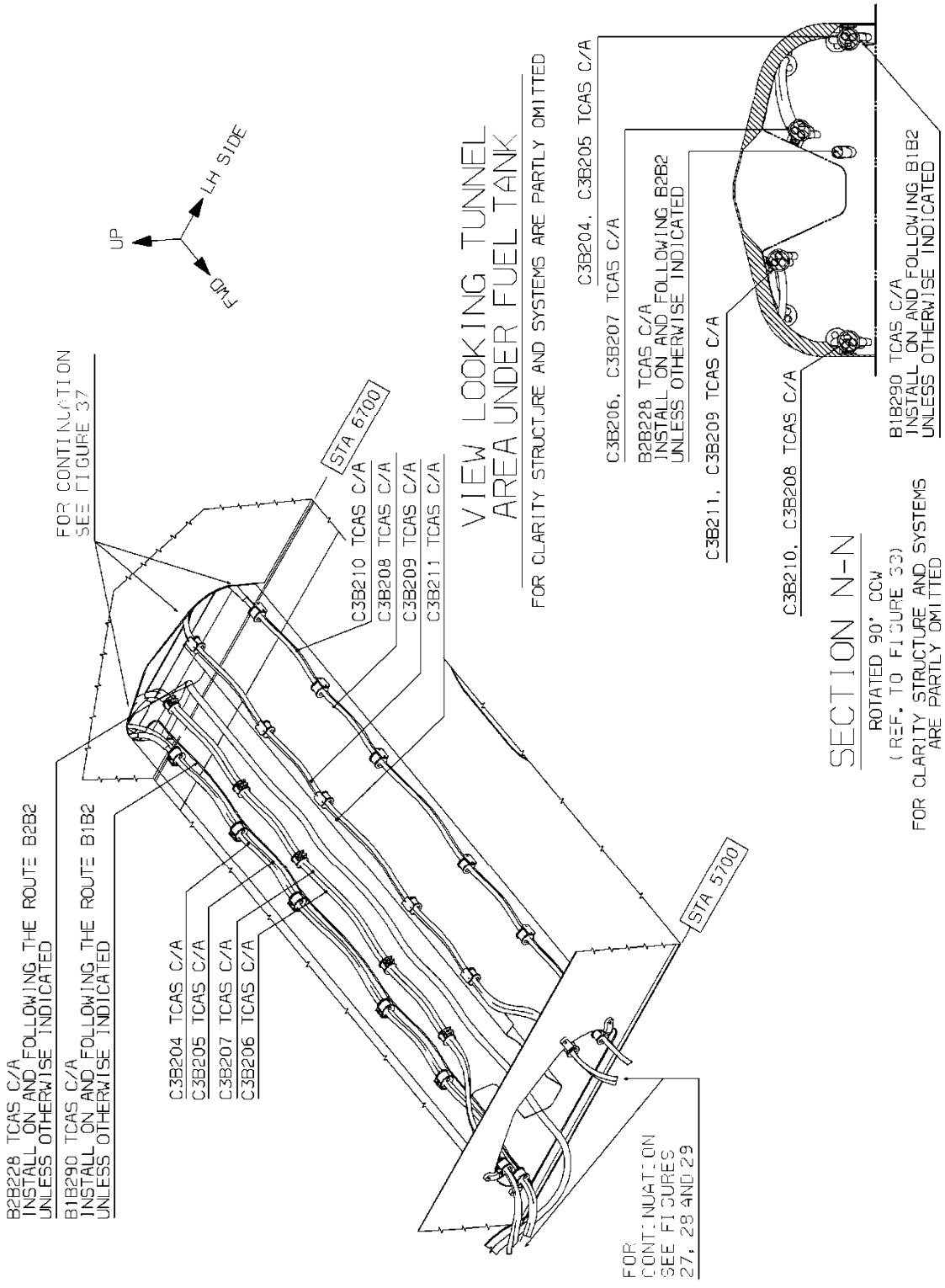
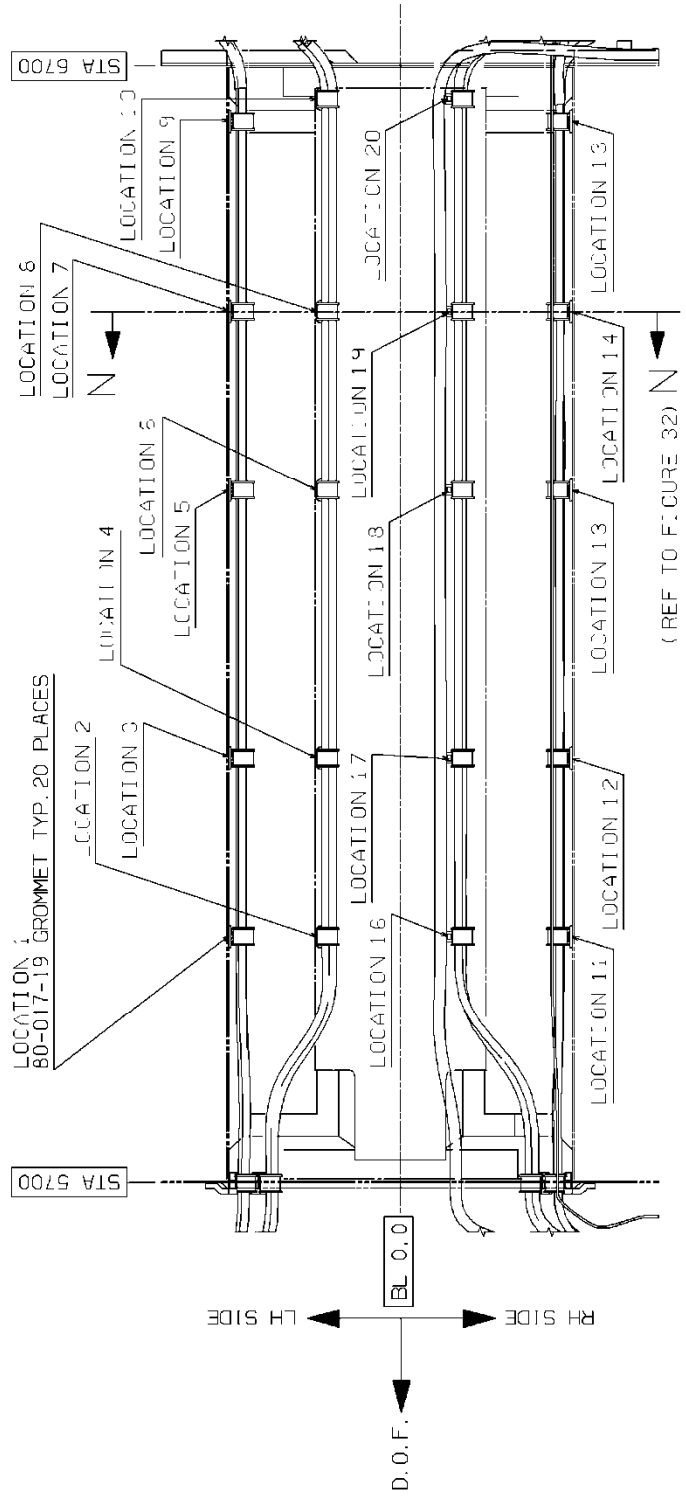

VIEW LOOKING TUNNEL AREA UNDER FUEL TANK
FOR CLARITY STRUCTURE AND SYSTEMS ARE PARTLY OMITTED
UP
LH SIDE
FWD
FOR CONTINUATION SEE FIGURE 37
STA 6700
STA 5700
C3B210 TCAS C/A
C3B208 TCAS C/A
C3B209 TCAS C/A
C3B211 TCAS C/A
C3B204 TCAS C/A
C3B205 TCAS C/A
C3B207 TCAS C/A
C3B206 TCAS C/A
B2B228 TCAS C/A INSTALL ON AND FOLLOWING THE ROUTE B2B2 UNLESS OTHERWISE INDICATED
B1B290 TCAS C/A INSTALL ON AND FOLLOWING THE ROUTE B1B2 UNLESS OTHERWISE INDICATED
FOR CONTINUATION SEE FIGURES 27, 28 AND 29
SECTION N-N
ROTATED 90° CCW
(REF. TO FIGURE 33)
FOR CLARITY STRUCTURE AND SYSTEMS ARE PARTLY OMITTED
C3B204, C3B205 TCAS C/A
C3B206, C3B207 TCAS C/A
B2B228 TCAS C/A INSTALL ON AND FOLLOWING B2B2 UNLESS OTHERWISE INDICATED
C3B211, C3B209 TCAS C/A
C3B210, C3B208 TCAS C/A
B1B290 TCAS C/A INSTALL ON AND FOLLOWING B1B2 UNLESS OTHERWISE INDICATED

Figure 32



VIEW LOOKING UP TUNNEL AREA

FOR CLARITY STRUCTURE AND SYSTEMS ARE PARTLY OMITTED

LOCATION NUMBER	PART NUMBER	STA	BL	WL	ORIENTATION
1	A630A51	5920	-154	882	0°
2	A630A51	5920	-68	960	0°
3	A630A51	6080	-154	882	0°
4	A630A51	6080	-68	960	0°
5	A630A51	6320	-154	882	0°
6	A630A51	6320	-68	960	0°
7	A630A51	6840	-154	882	0°
8	A630A51	6840	-68	960	0°
9	A630A51	6650	-154	882	0°
10	A630A51	6670	-68	960	0°

LOCATION NUMBER	PART NUMBER	STA	BL	WL	ORIENTATION
11	A630A51	5920	154	882	0°
12	A630A51	6080	154	882	0°
13	A630A51	6320	154	882	0°
14	A630A51	6480	154	882	0°
15	A630A51	6650	154	882	0°
16	A630A12	5920	43	933	0°
17	A630A12	6080	43	933	0°
18	A630A12	6320	43	933	0°
19	A630A12	6480	43	933	0°
20	A630A12	6670	43	933	0°

Figure 33

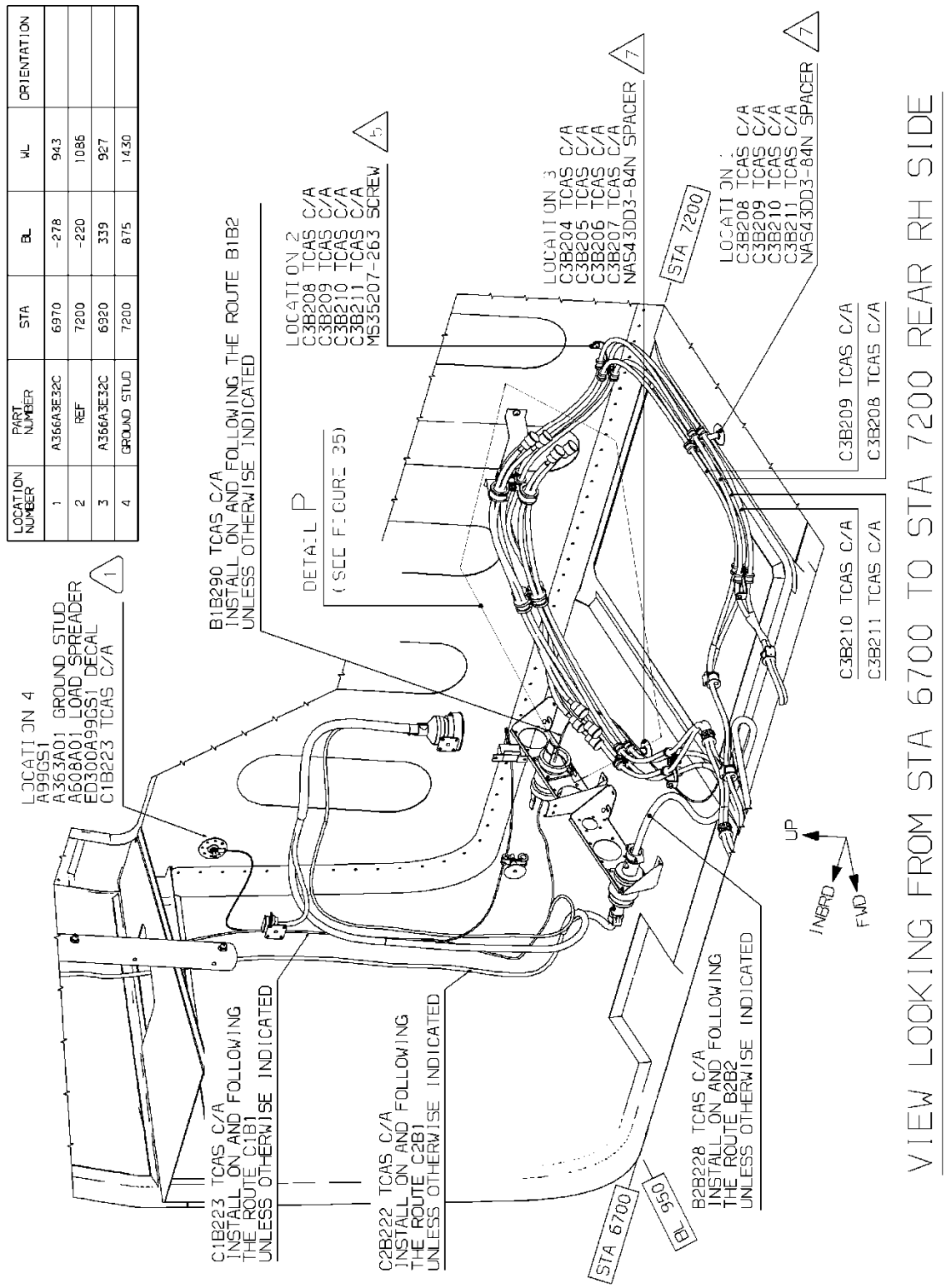

LOCATION NUMBER | PART NUMBER | STA | BL | WL | ORIENTATION
1 | A366A3E32C | 6970 | -278 | 943
2 | REF | 7200 | -220 | 1086
3 | A366A3E32C | 6920 | 339 | 927
4 | GROUND STUD | 7200 | 875 | 1430
LOCATION 4
A99GS1
A363A01 GROUND STUD
A608A01 LOAD SPREADER
ED300A99GS1 DECAL
C1B223 TCAS C/A
1
B1B290 TCAS C/A
INSTALL ON AND FOLLOWING THE ROUTE B1B2
UNLESS OTHERWISE INDICATED
DETAIL P
(SEE FIGURE 35)
LOCATION 2
C3B208 TCAS C/A
C3B209 TCAS C/A
C3B210 TCAS C/A
C3B211 TCAS C/A
MS35207-263 SCREW
5
LOCATION 3
C3B204 TCAS C/A
C3B205 TCAS C/A
C3B206 TCAS C/A
C3B207 TCAS C/A
NAS43DD3-84N SPACER
7
STA 7200
LOCATION 1
C3B208 TCAS C/A
C3B209 TCAS C/A
C3B210 TCAS C/A
C3B211 TCAS C/A
NAS43DD3-84N SPACER
7
C3B209 TCAS C/A
C3B208 TCAS C/A
C3B210 TCAS C/A
C3B211 TCAS C/A
C1B223 TCAS C/A
INSTALL ON AND FOLLOWING
THE ROUTE C1B1
UNLESS OTHERWISE INDICATED
C2B222 TCAS C/A
INSTALL ON AND FOLLOWING
THE ROUTE C2B1
UNLESS OTHERWISE INDICATED
B2B228 TCAS C/A
INSTALL ON AND FOLLOWING
THE ROUTE B2B2
UNLESS OTHERWISE INDICATED
STA 6700
BL 950
UP
INBRD
FWD
VIEW LOOKING FROM STA 6700 TO STA 7200 REAR RH SIDE
FOR CLARITY STRUCTURE AND SYSTEMS ARE PARTLY OMITTED

Figure 34

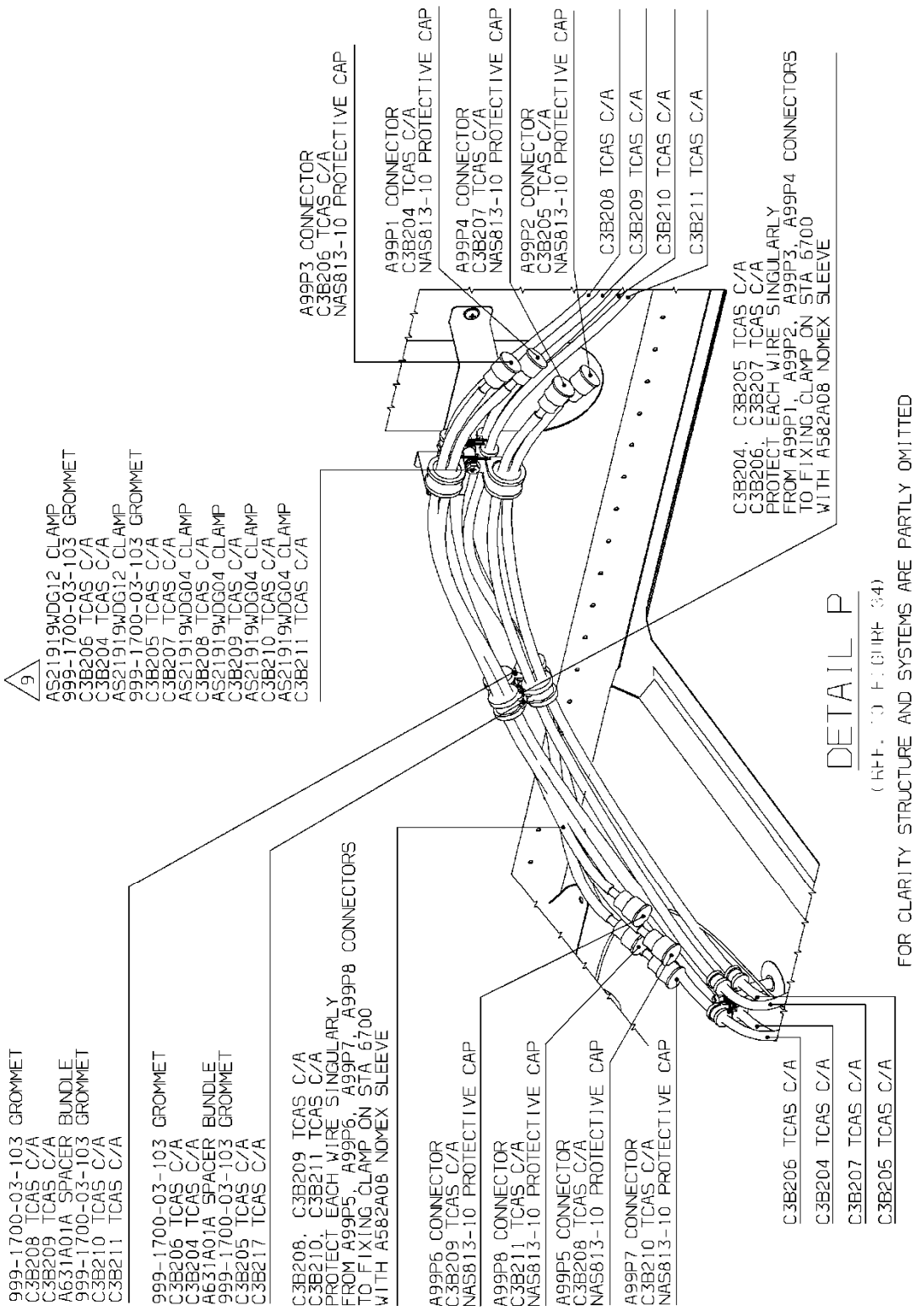

999-1700-03-103 GROMMET
C3B208 TCAS C/A
C3B209 TCAS C/A
A631A01A SPACER BUNDLE
999-1700-03-103 GROMMET
C3B210 TCAS C/A
C3B211 TCAS C/A
999-1700-03-103 GROMMET
C3B206 TCAS C/A
C3B204 TCAS C/A
A631A01A SPACER BUNDLE
999-1700-03-103 GROMMET
C3B205 TCAS C/A
C3B217 TCAS C/A
C3B208, C3B209 TCAS C/A
C3B210, C3B211 TCAS C/A
PROTECT EACH WIRE SINGULARLY
FROM A99P5, A99P6, A99P7, A99P8 CONNECTORS
TO FIXING CLAMP ON STA 6700
WITH A582A08 NOMEX SLEEVE
A99P6 CONNECTOR
C3B209 TCAS C/A
NAS813-10 PROTECTIVE CAP
A99P8 CONNECTOR
C3B211 TCAS C/A
NAS813-10 PROTECTIVE CAP
A99P5 CONNECTOR
C3B208 TCAS C/A
NAS813-10 PROTECTIVE CAP
A99P7 CONNECTOR
C3B210 TCAS C/A
NAS813-10 PROTECTIVE CAP
C3B206 TCAS C/A
C3B204 TCAS C/A
C3B207 TCAS C/A
C3B205 TCAS C/A
9
AS21919WDG12 CLAMP
999-1700-03-103 GROMMET
C3B206 TCAS C/A
C3B204 TCAS C/A
AS21919WDG12 CLAMP
999-1700-03-103 GROMMET
C3B205 TCAS C/A
C3B207 TCAS C/A
AS21919WDG04 CLAMP
C3B208 TCAS C/A
AS21919WDG04 CLAMP
C3B209 TCAS C/A
AS21919WDG04 CLAMP
C3B210 TCAS C/A
AS21919WDG04 CLAMP
C3B211 TCAS C/A
A99P3 CONNECTOR
C3B206 TCAS C/A
NAS813-10 PROTECTIVE CAP
A99P1 CONNECTOR
C3B204 TCAS C/A
NAS813-10 PROTECTIVE CAP
A99P4 CONNECTOR
C3B207 TCAS C/A
NAS813-10 PROTECTIVE CAP
A99P2 CONNECTOR
C3B205 TCAS C/A
NAS813-10 PROTECTIVE CAP
C3B208 TCAS C/A
C3B209 TCAS C/A
C3B210 TCAS C/A
C3B211 TCAS C/A
C3B204, C3B205 TCAS C/A
C3B206, C3B207 TCAS C/A
PROTECT EACH WIRE SINGULARLY
FROM A99P1, A99P2, A99P3, A99P4 CONNECTORS
TO FIXING CLAMP ON STA 6700
WITH A582A08 NOMEX SLEEVE
DETAIL P
FOR CLARITY STRUCTURE AND SYSTEMS ARE PARTLY OMITTED

Figure 35

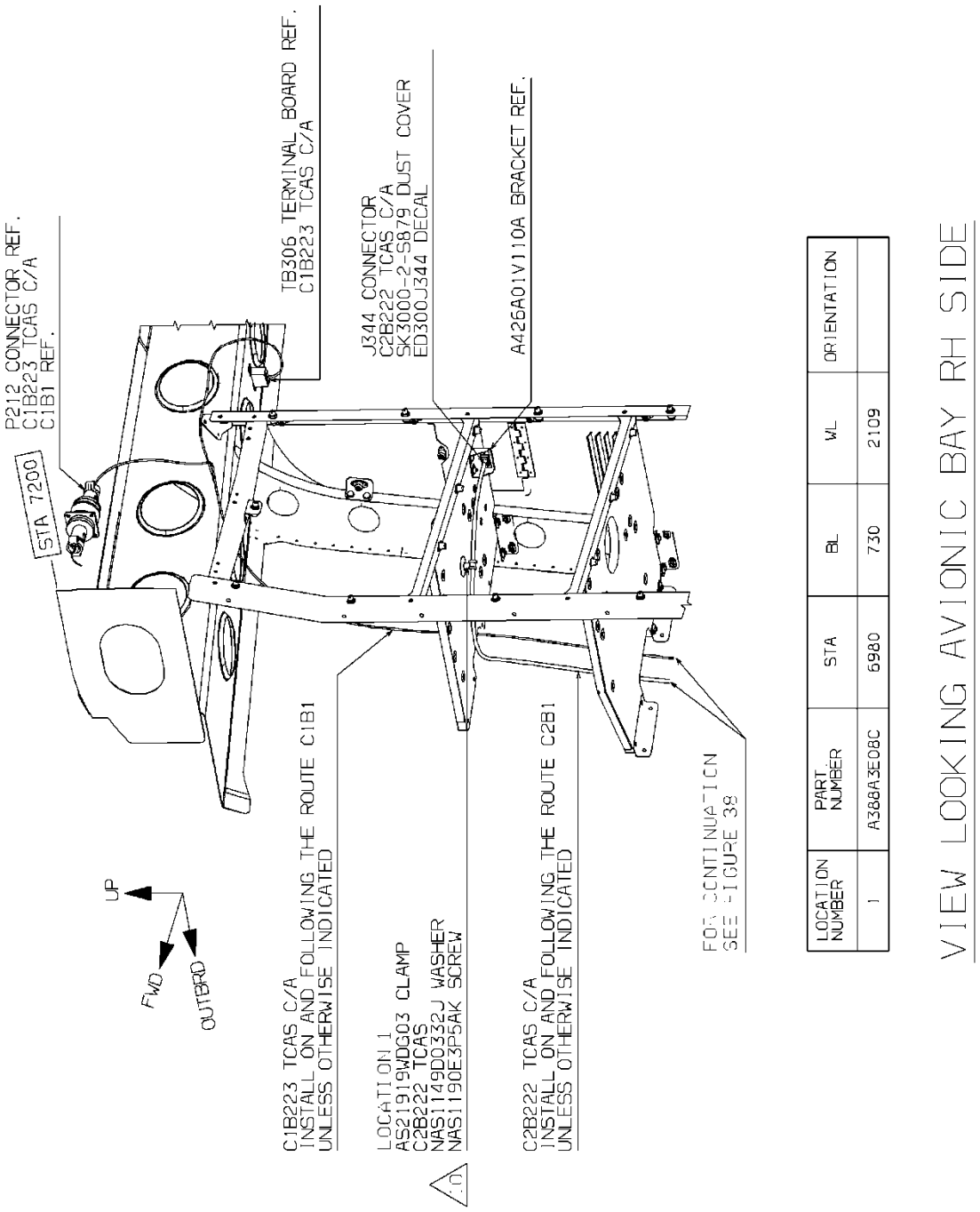
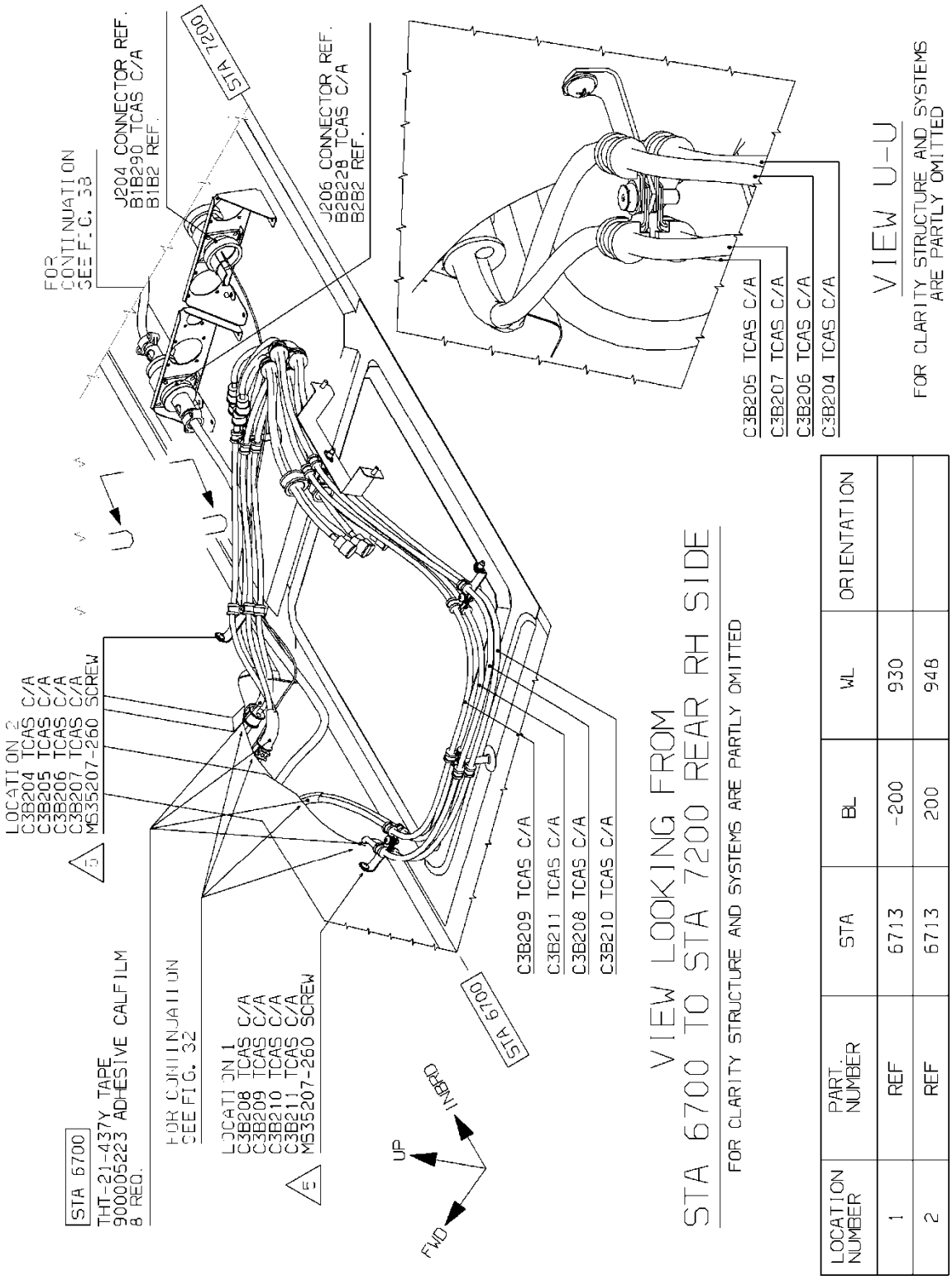
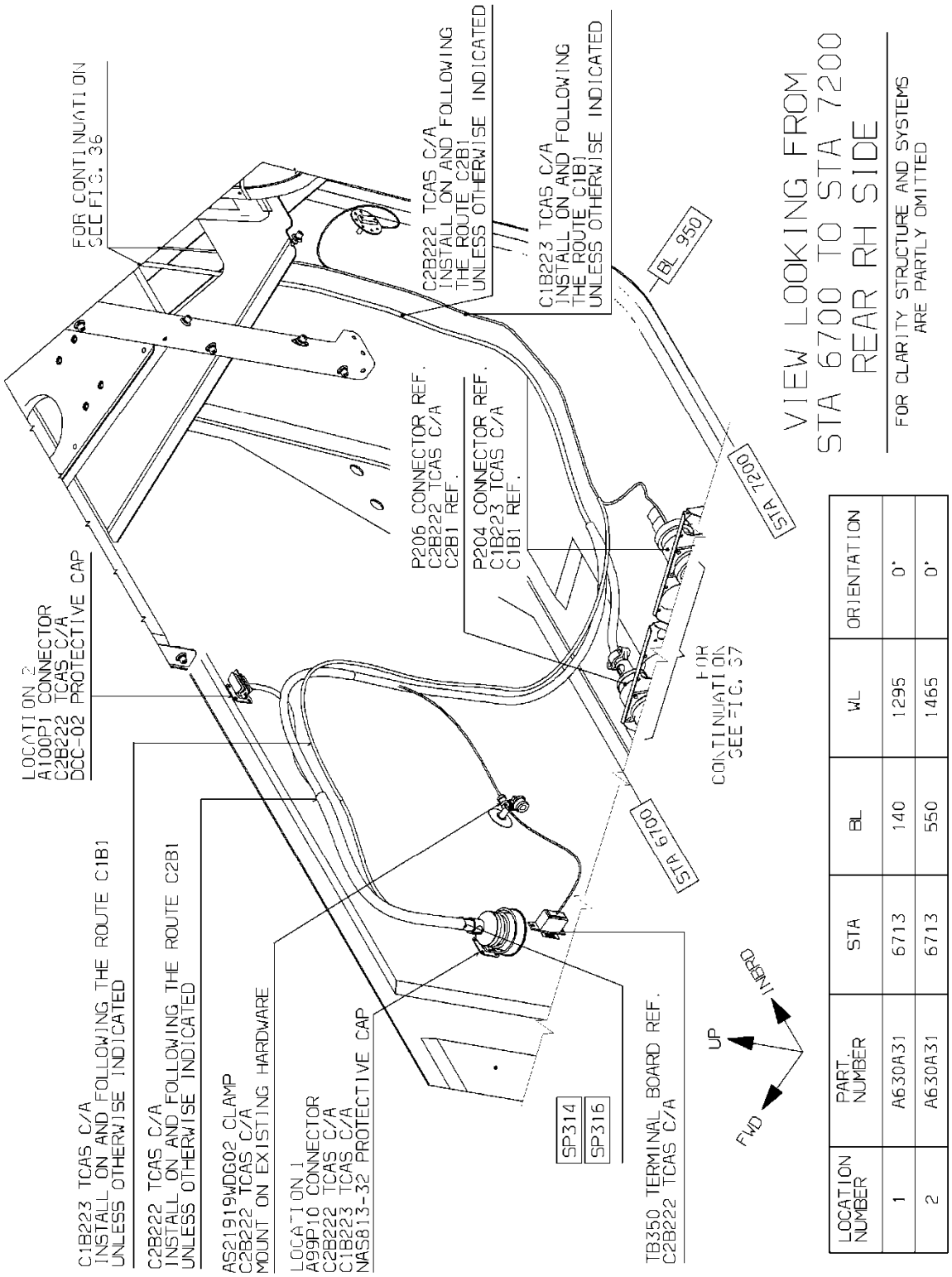

P212 CONNECTOR REF.
C1B223 TCAS C/A
C1B1 REF.
STA 7200
TB306 TERMINAL BOARD REF.
C1B223 TCAS C/A
J344 CONNECTOR
C2B222 TCAS C/A
SK3000-2-S879 DUST COVER
ED300J344 DECAL
A426A01V110A BRACKET REF.
UP
FWD
OUTBRD
C1B223 TCAS C/A
INSTALL ON AND FOLLOWING THE ROUTE C1B1
UNLESS OTHERWISE INDICATED
LOCATION 1
AS21919WDG03 CLAMP
C2B222 TCAS
NAS1149D0332J WASHER
NAS1190E3P5AK SCREW
C2B222 TCAS C/A
INSTALL ON AND FOLLOWING THE ROUTE C2B1
UNLESS OTHERWISE INDICATED
FOR CONTINUATION
SEE FIGURE 38
LOCATION NUMBER
PART NUMBER
STA
BL
WL
ORIENTATION
1
A388A3E08C
6980
730
2109
VIEW LOOKING AVIONIC BAY RH SIDE
FOR CLARITY STRUCTURE AND SYSTEMS ARE PARTLY OMITTED

Figure 36



LOCATION NUMBER	PART NUMBER	STA	BL	WL	ORIENTATION
1	REF	6713	-200	930	
2	REF	6713	200	948	

Figure 37



LOCATION NUMBER	PART NUMBER	STA	BL	WL	ORIENTATION
1	A630A31	6713	140	1295	0°
2	A630A31	6713	550	1465	0°

Figure 38

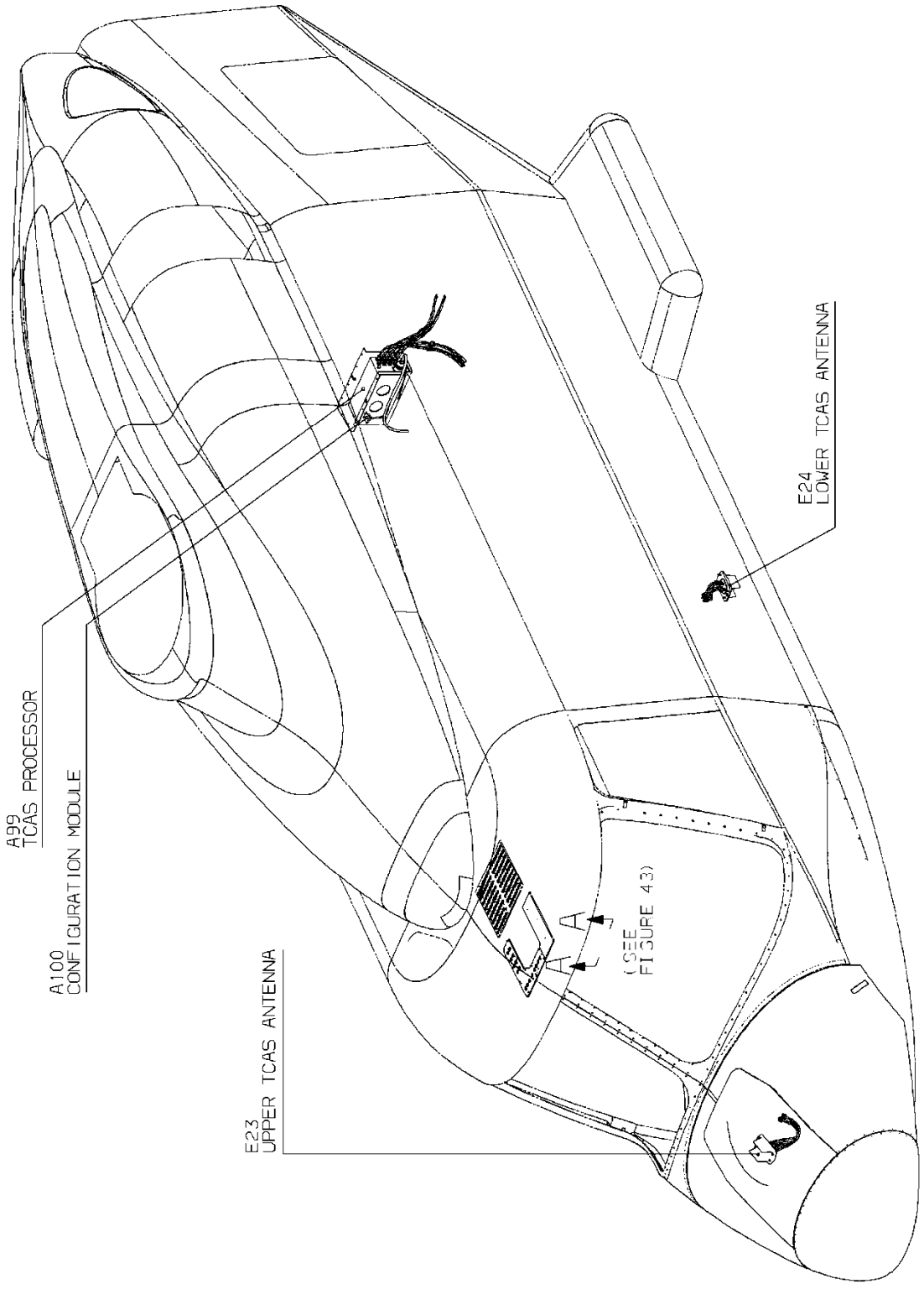
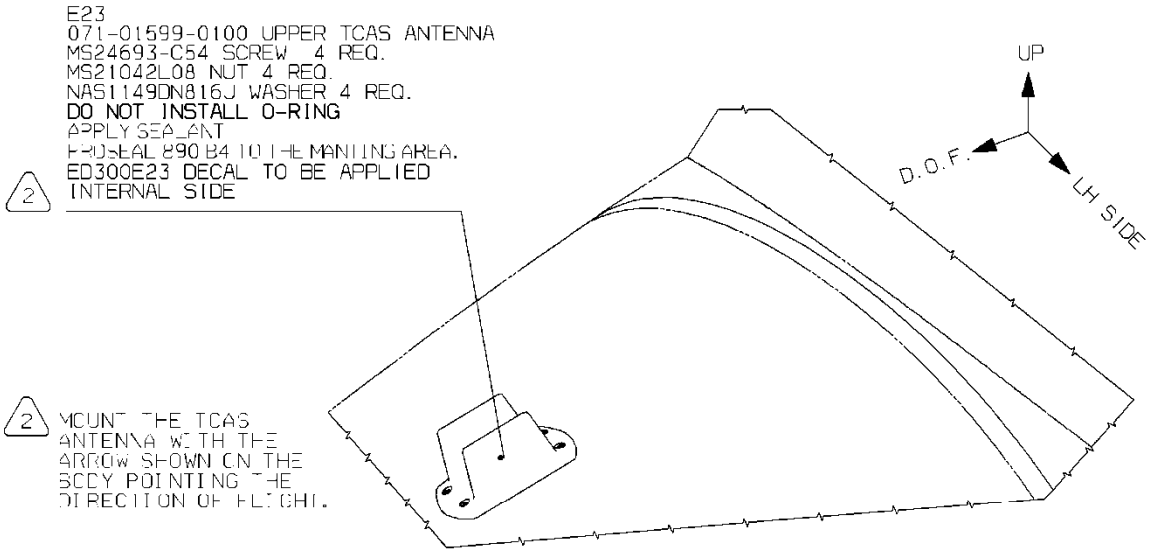
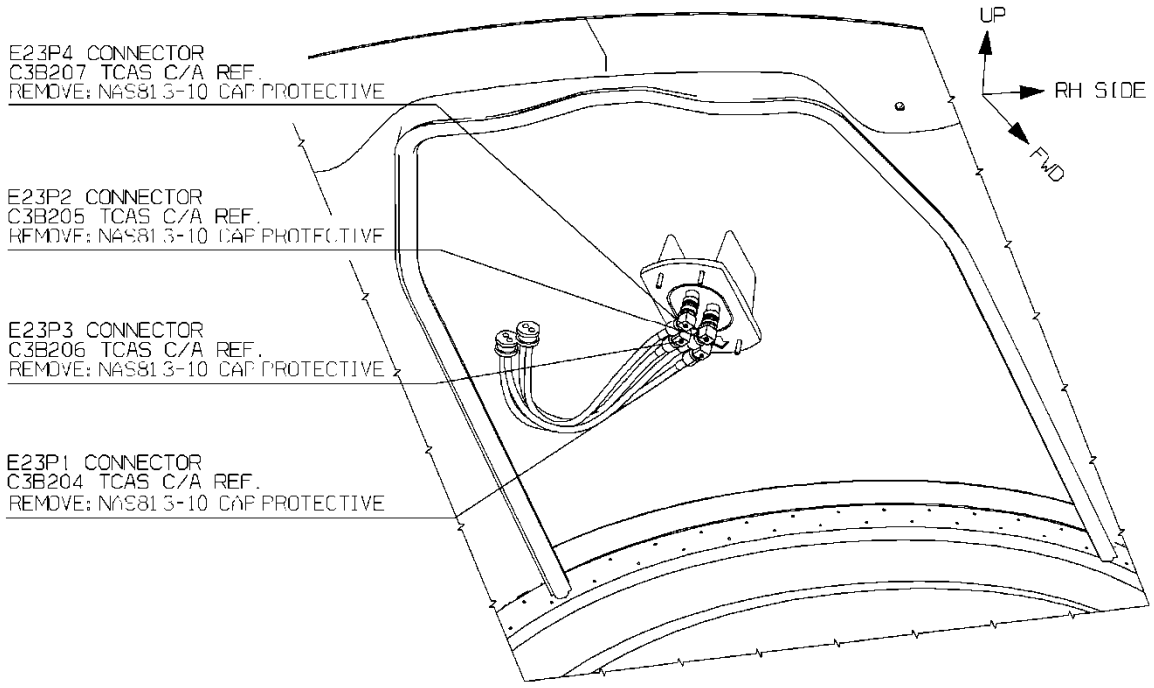

A99
TCAS PROCESSOR
A100
CONFIGURATION MODULE
E23
UPPER TCAS ANTENNA
E24
LOWER TCAS ANTENNA
A
(SEE
FIGURE 43)

Figure 39



VIEW LOOKING UPPER TCAS ANTENNA
ON RADOME EXTERNAL SKIN

FOR CLARITY STRUCTURE AND SYSTEMS ARE PARTLY OMITTED



VIEW LOOKING UPPER TCAS ANTENNA
FROM INSIDE RADOME

FOR CLARITY STRUCTURE AND SYSTEMS ARE PARTLY OMITTED

Figure 40

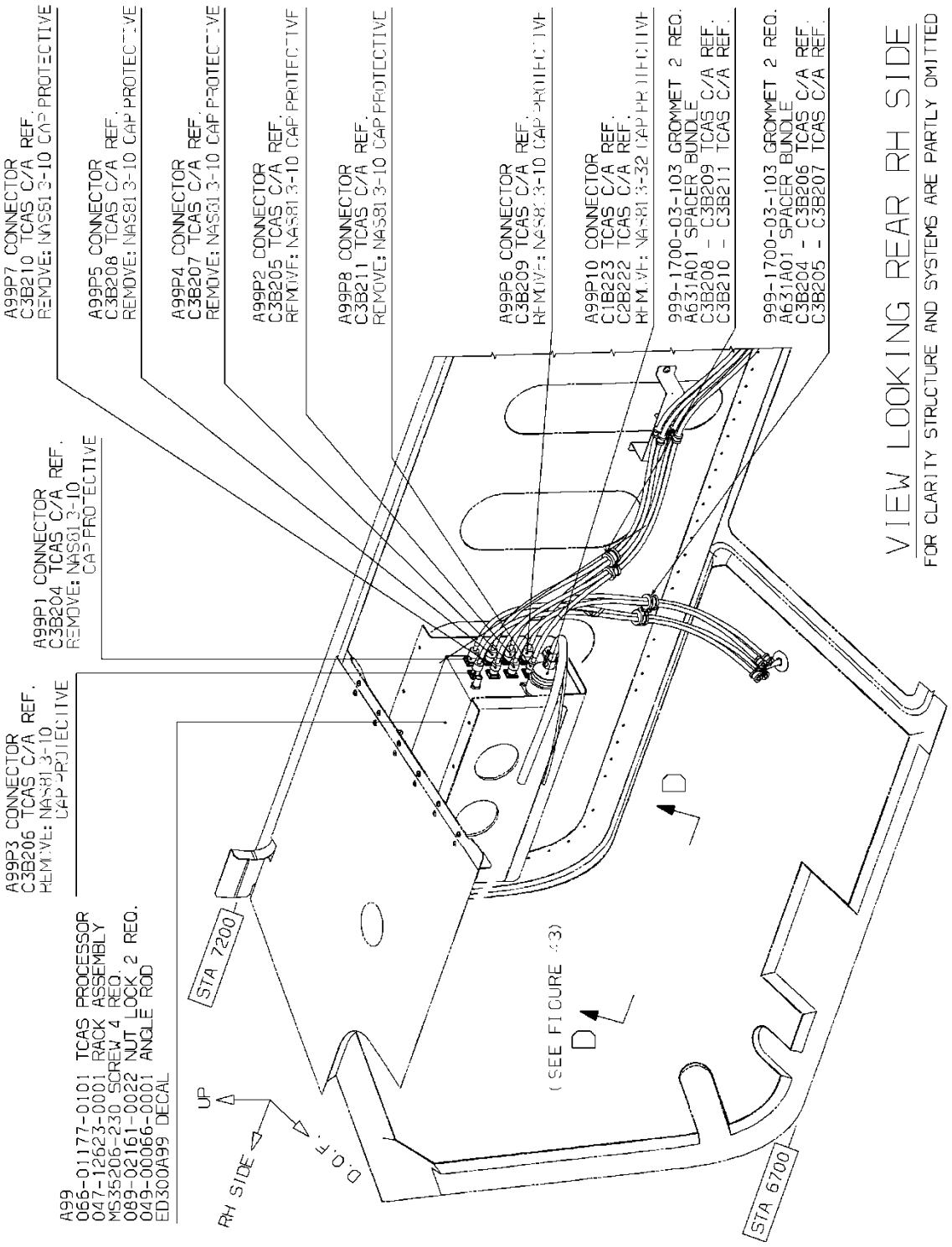
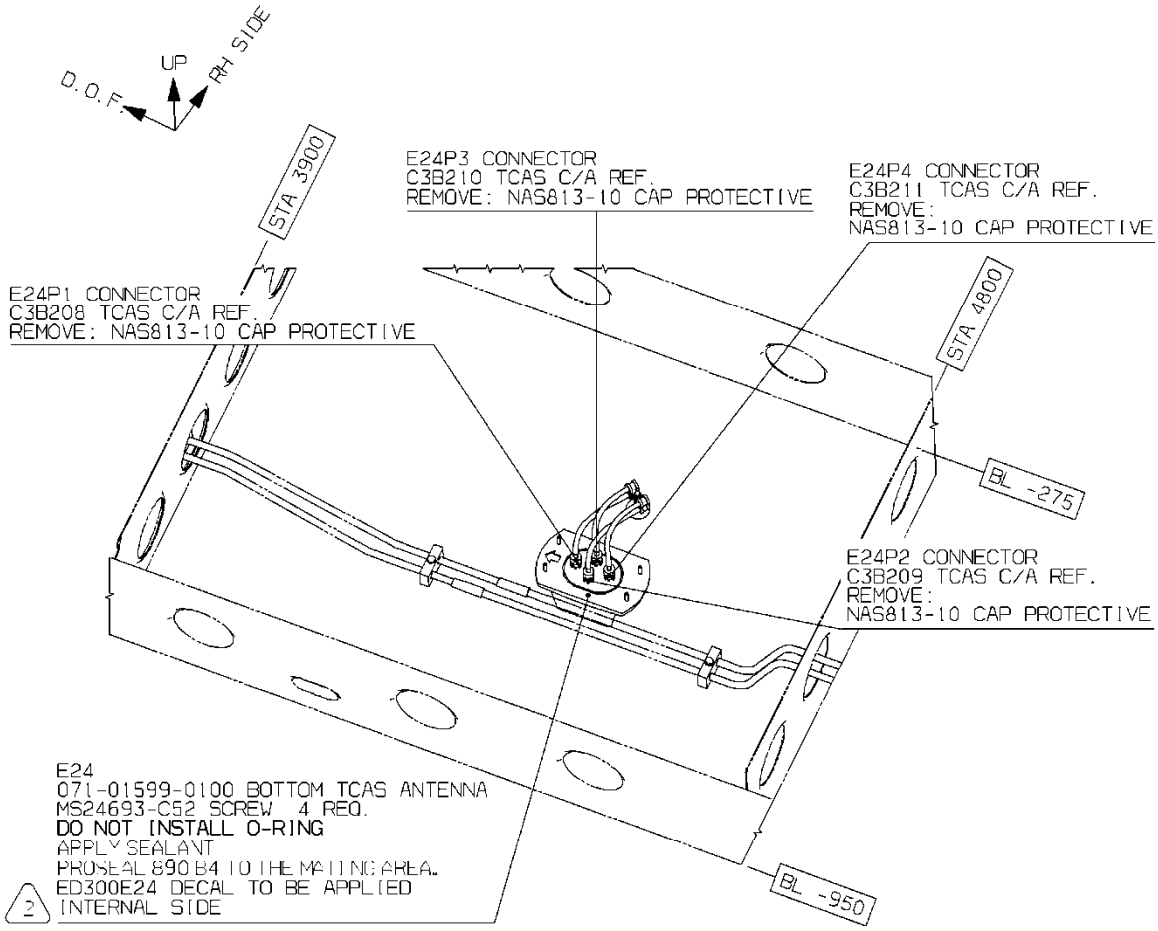

A99P7 CONNECTOR
C3B210 TCAS C/A REF.
REMOVE: NAS813-10 CAP PROTECTIVE
A99P5 CONNECTOR
C3B208 TCAS C/A REF.
REMOVE: NAS813-10 CAP PROTECTIVE
A99P4 CONNECTOR
C3B207 TCAS C/A REF.
REMOVE: NAS813-10 CAP PROTECTIVE
A99P2 CONNECTOR
C3B205 TCAS C/A REF.
REMOVE: NAS813-10 CAP PROTECTIVE
A99P8 CONNECTOR
C3B211 TCAS C/A REF.
REMOVE: NAS813-10 CAP PROTECTIVE
A99P6 CONNECTOR
C3B209 TCAS C/A REF.
REMOVE: NAS813-10 CAP PROTECTIVE
A99P10 CONNECTOR
C1B223 TCAS C/A REF.
C2B222 TCAS C/A REF.
REMOVE: NAS813-32 CAP PROTECTIVE
999-1700-03-103 GROMMET 2 REQ.
A631A01 SPACER BUNDLE
C3B208 - C3B209 TCAS C/A REF.
C3B210 - C3B211 TCAS C/A REF.
999-1700-03-103 GROMMET 2 REQ.
A631A01 SPACER BUNDLE
C3B204 - C3B206 TCAS C/A REF.
C3B205 - C3B207 TCAS C/A REF.
A99P1 CONNECTOR
C3B204 TCAS C/A REF.
REMOVE: NAS813-10
CAP PROTECTIVE
A99P3 CONNECTOR
C3B206 TCAS C/A REF.
REMOVE: NAS813-10
CAP PROTECTIVE
A99
056-01177-0101 TCAS PROCESSOR
047-12623-0001 RACK ASSEMBLY
MS35206-230 SCREW 4 REQ.
089-02161-0022 NUT LOCK 2 REQ.
049-00066-0001 ANGLE ROD
ED300A99 DECAL
STA 7200
STA 6700
UP
RH SIDE
O.B.F.
(SEE FIGURE 43)
D
D
VIEW LOOKING REAR RH SIDE
FOR CLARITY STRUCTURE AND SYSTEMS ARE PARTLY OMITTED

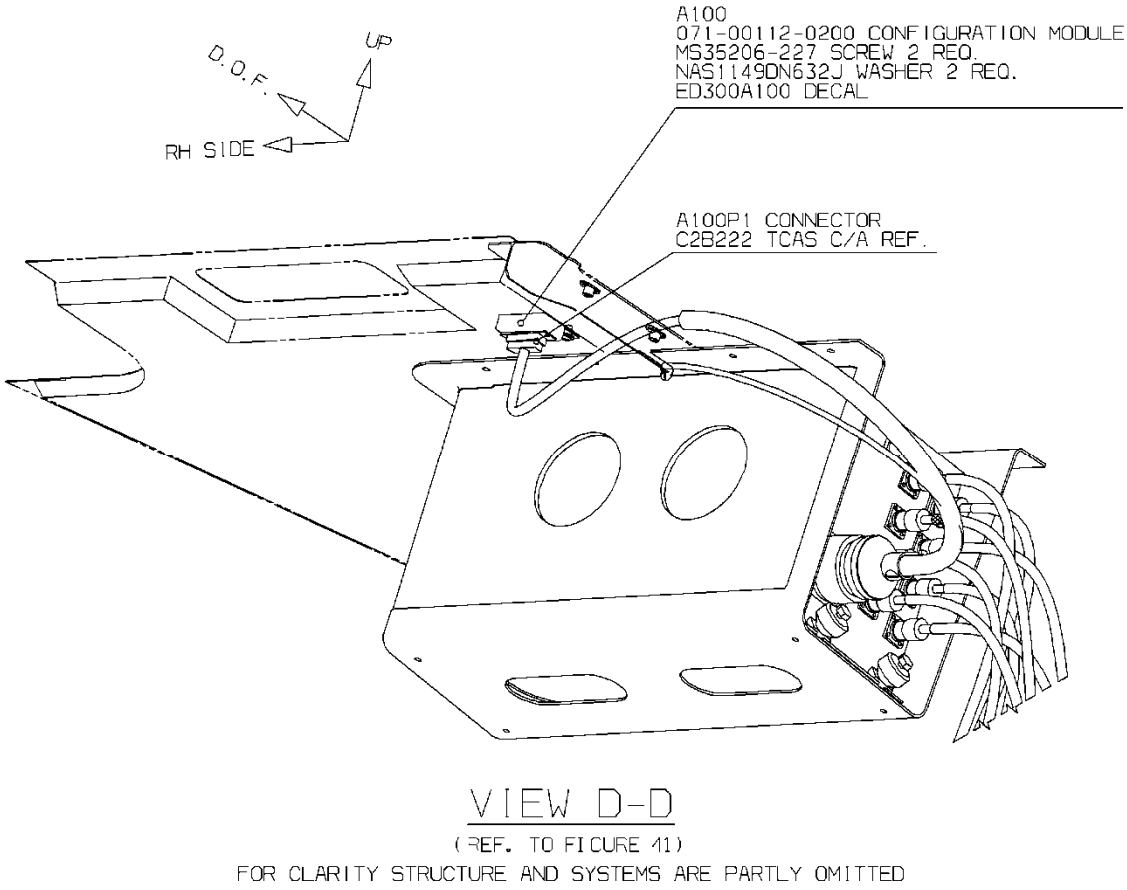
Figure 41



VIEW LOOKING DOWN CABIN UNDER FLOOR LH SIDE

FOR CLARITY STRUCTURE AND SYSTEMS ARE PARTLY OMITTED

Figure 42


A100
071-00112-0200 CONFIGURATION MODULE
MS35206-227 SCREW 2 REQ.
NAS1149DN632J WASHER 2 REQ.
ED300A100 DECAL
A100P1 CONNECTOR
C2B222 TCAS C/A REF.
D.O.F.
UP
RH SIDE
VIEW D-D
(REF. TO FIGURE 41)
FOR CLARITY STRUCTURE AND SYSTEMS ARE PARTLY OMITTED

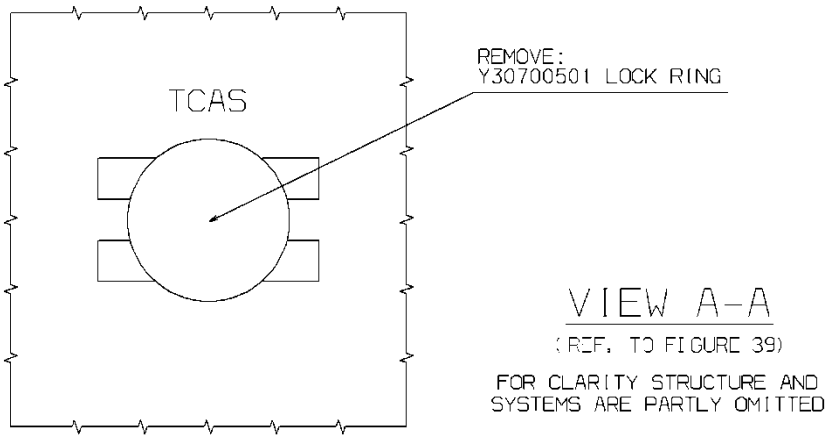

TCAS
REMOVE:
Y30700501 LOCK RING
VIEW A-A
(REF. TO FIGURE 39)
FOR CLARITY STRUCTURE AND
SYSTEMS ARE PARTLY OMITTED

Figure 43

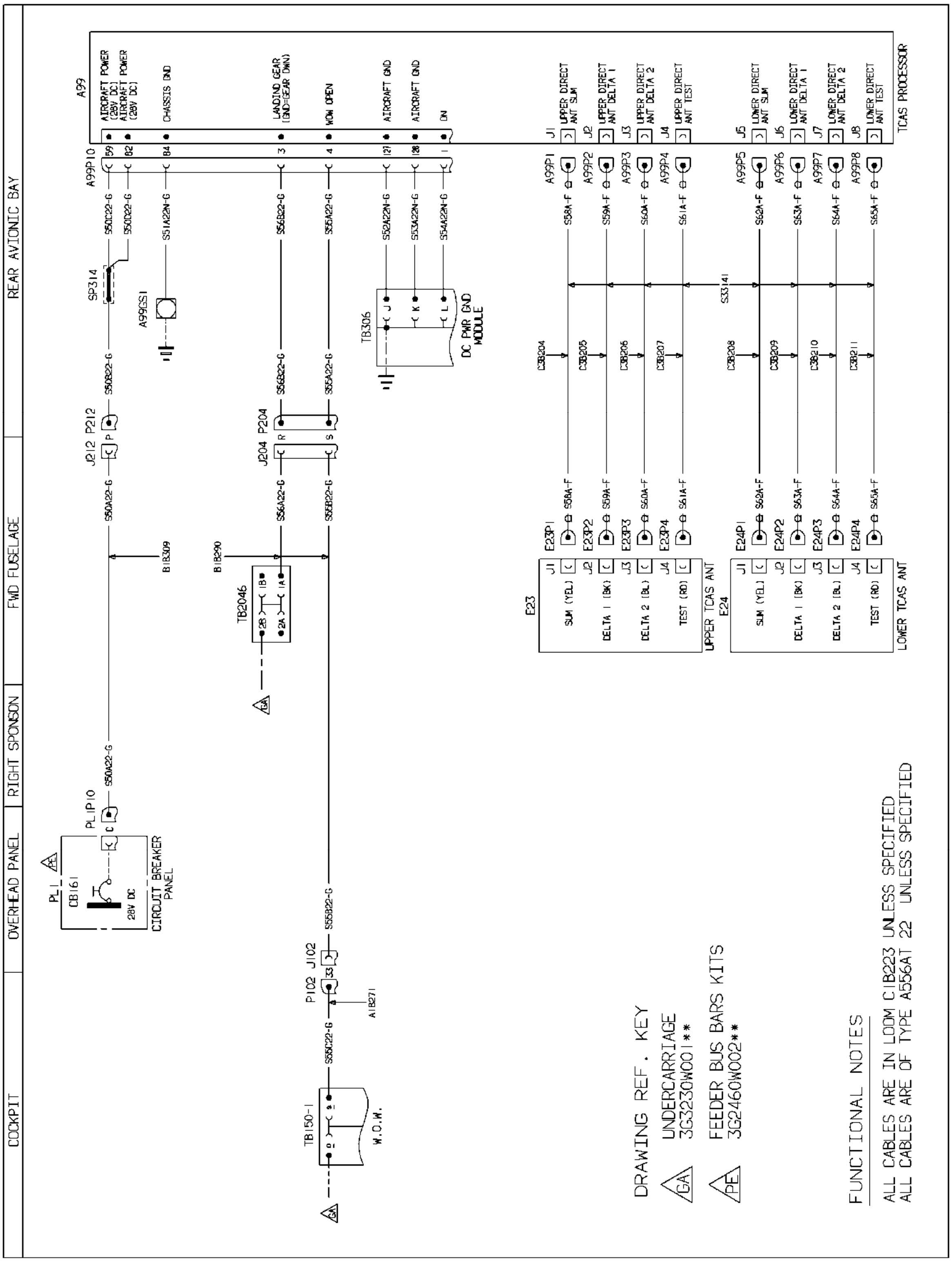

COCKPIT
OVERHEAD PANEL
RIGHT SPONSON
FWD FUSELAGE
REAR AVIONIC BAY
CIRCUIT BREAKER PANEL
W.O.W.
DC PWR GND MODULE
TCAS PROCESSOR
UPPER TCAS ANT
LOWER TCAS ANT
DRAWING REF. KEY
UNDERCARRIAGE
3G3230W001**
FEEDER BUS BARS KITS
3G2460W002**
FUNCTIONAL NOTES
ALL CABLES ARE IN LOOM C1B223 UNLESS SPECIFIED
ALL CABLES ARE OF TYPE A556AT 22 UNLESS SPECIFIED

Figure 44

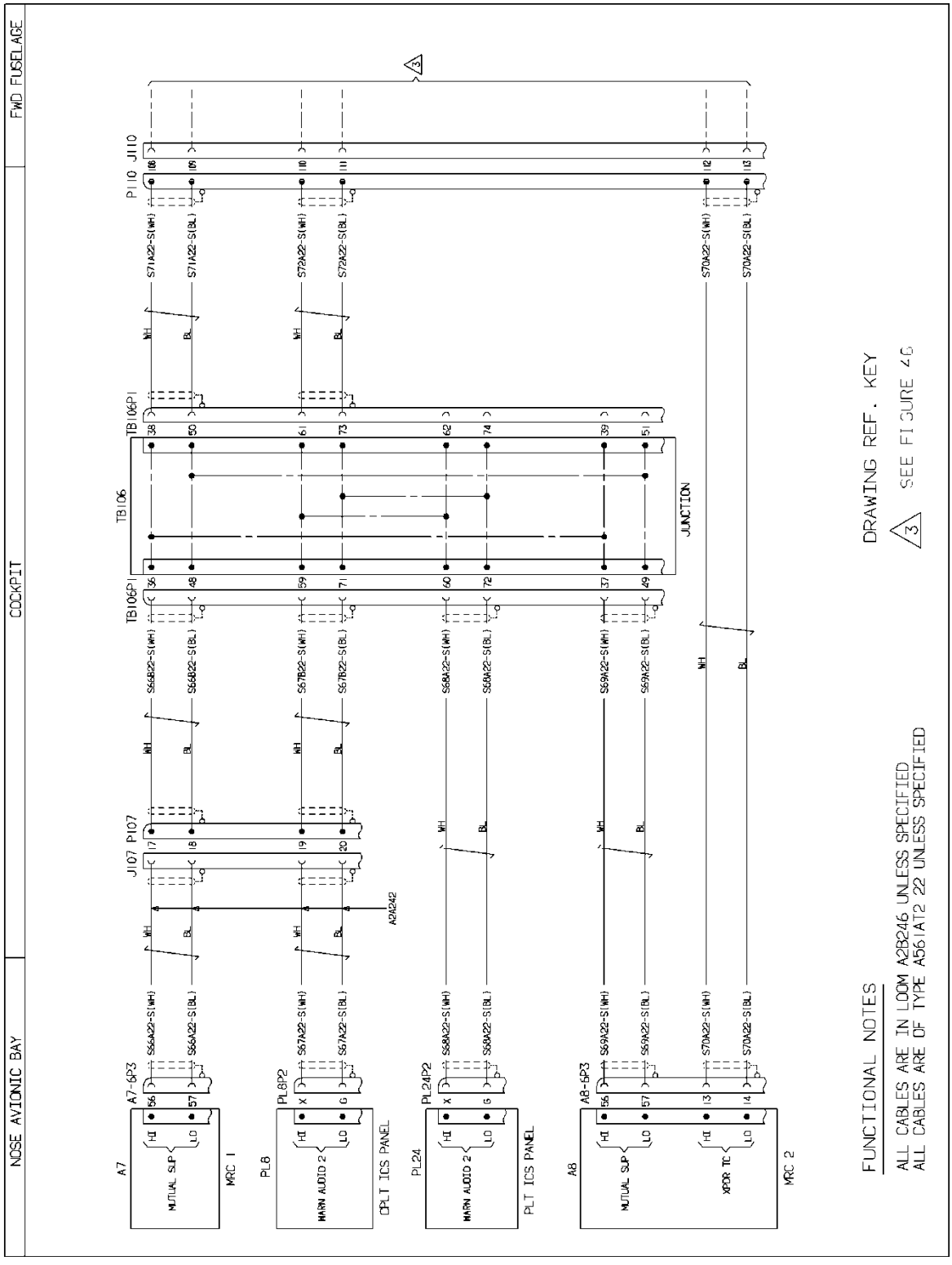

NOSE AVIONIC BAY
COCKPIT
FWD FUSELAGE
A7
A7-6P3
MUTUAL SUP
MRC 1
PL8
PL8P2
MARN AUDIO 2
CPLT ICS PANEL
PL24
PL24P2
MARN AUDIO 2
PLT ICS PANEL
A8
A8-6P3
MUTUAL SUP
XPDR TC
MRC 2
J107 P107
TB106
TB106P1
TB106P1
P110 J110
JUNCTION
A2A242
DRAWING REF. KEY
3 SEE FIGURE 46
FUNCTIONAL NOTES
ALL CABLES ARE IN LOOM A2B246 UNLESS SPECIFIED
ALL CABLES ARE OF TYPE A561AT2 22 UNLESS SPECIFIED

Figure 45

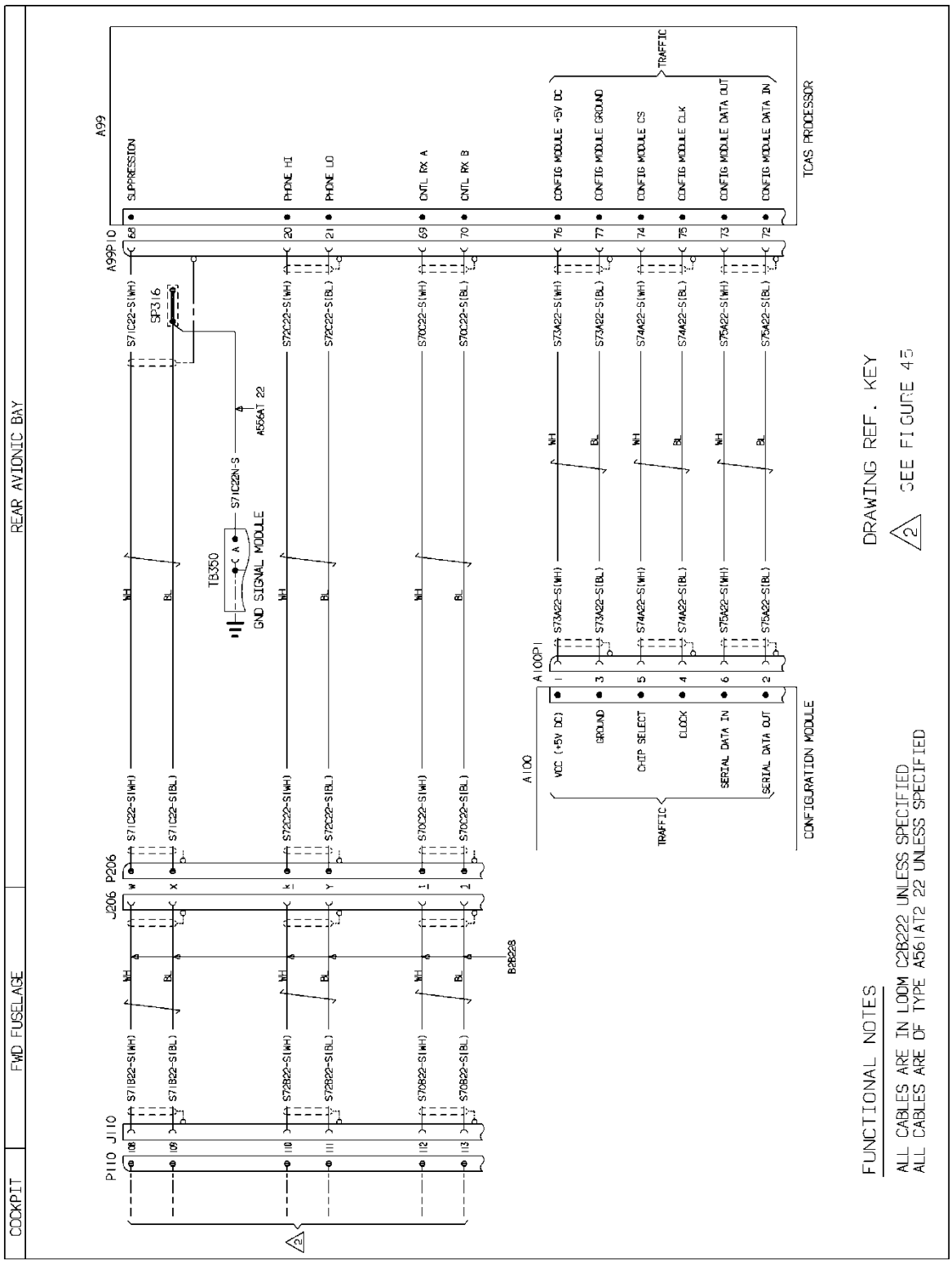

COCKPIT
FWD FUSELAGE
REAR AVIONIC BAY
A99
A99P10
SUPPRESSION
PHONE HI
PHONE LO
CNTL RX A
CNTL RX B
CONFIG MODULE +5V DC
CONFIG MODULE GROUND
CONFIG MODULE CS
CONFIG MODULE CLK
CONFIG MODULE DATA OUT
CONFIG MODULE DATA IN
TRAFFIC
TCAS PROCESSOR
SP316
TB350
GND SIGNAL MODULE
S71C22N-S
A556AT 22
P110 J110
J206 P206
B28228
A100
A100P1
VCC (+5V DC)
GROUND
CHIP SELECT
CLOCK
SERIAL DATA IN
SERIAL DATA OUT
CONFIGURATION MODULE
DRAWING REF. KEY
2 SEE FIGURE 45
FUNCTIONAL NOTES
ALL CABLES ARE IN LOOM C28222 UNLESS SPECIFIED
ALL CABLES ARE OF TYPE A56IAT2 22 UNLESS SPECIFIED

Figure 46

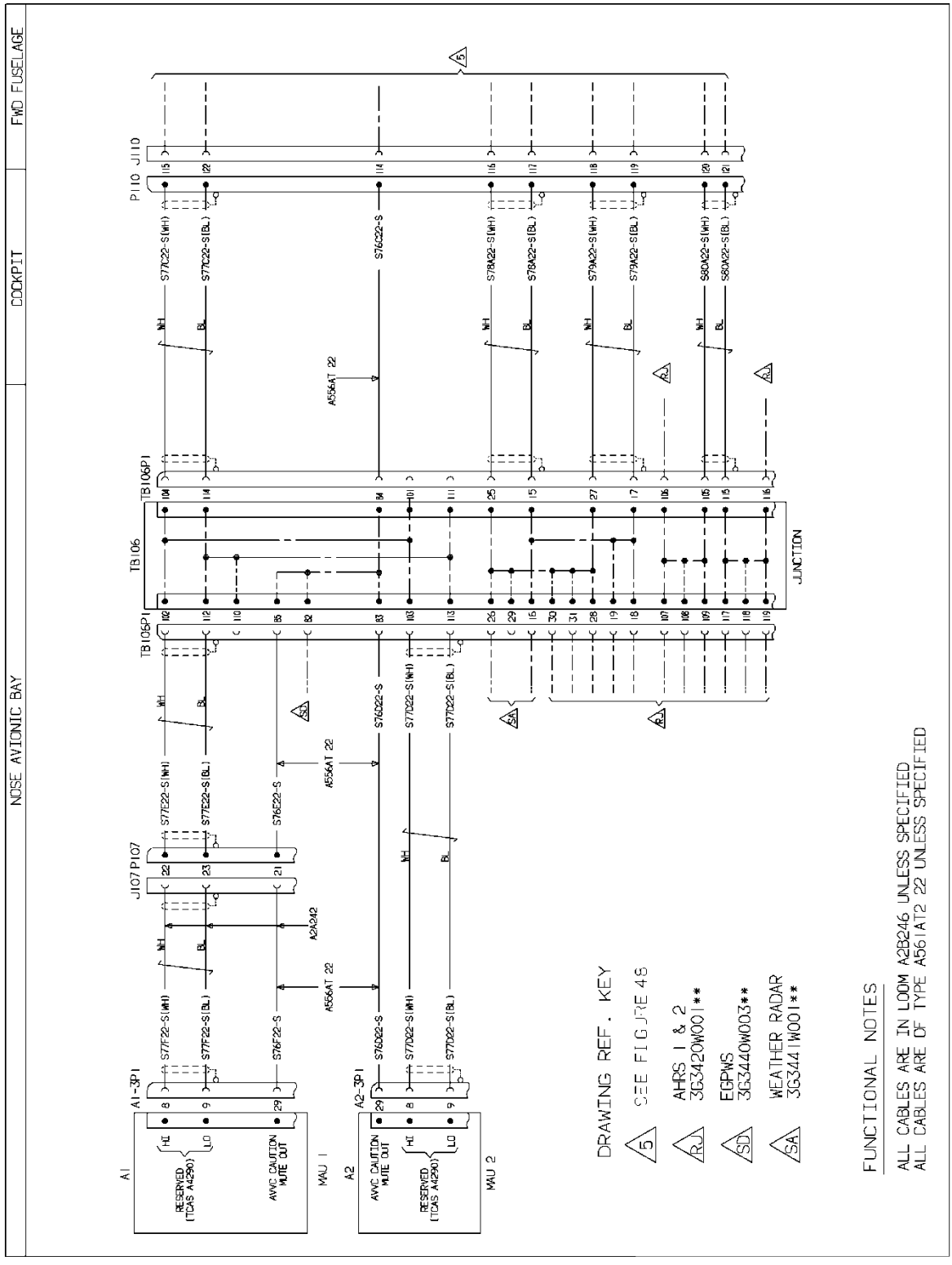

NOSE AVIONIC BAY
COCKPIT
FWD FUSELAGE
JUNCTION
DRAWING REF. KEY
SEE FIGURE 48
AHRS 1 & 2
3G3420W0001**
EGPWS
3G3440W0003**
WEATHER RADAR
3G3441W0001**
FUNCTIONAL NOTES
ALL CABLES ARE IN LOOM A2B246 UNLESS SPECIFIED
ALL CABLES ARE OF TYPE A561AT2 22 UNLESS SPECIFIED
MAU 1
MAU 2
RESERVED (TCAS A4290)
AWC CAUTION MUTE OUT

Figure 47

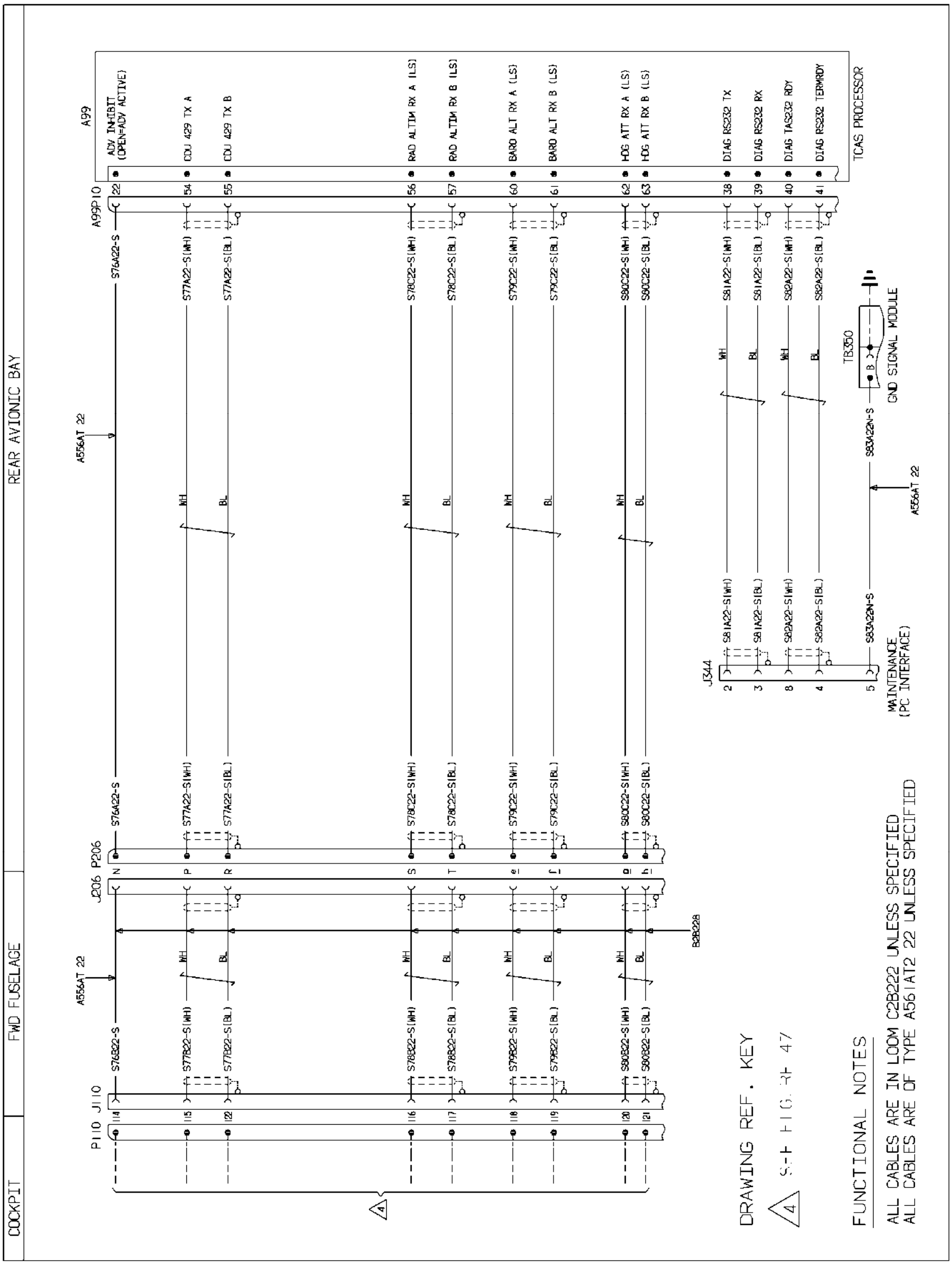

COCKPIT
FWD FUSELAGE
REAR AVIONIC BAY
A99
TCAS PROCESSOR
ADV INHIBIT (OPEN=ADV ACTIVE)
CDU 429 TX A
CDU 429 TX B
RAD ALTIM RX A (LS)
RAD ALTIM RX B (LS)
BARO ALT RX A (LS)
BARO ALT RX B (LS)
HDG ATT RX A (LS)
HDG ATT RX B (LS)
DIAG RS232 TX
DIAG RS232 RX
DIAG TAS232 RDY
DIAG RS232 TERMRDY
A99P10
P110 J110
J206 P206
J344
TB350
GND SIGNAL MODULE
MAINTENANCE (PC INTERFACE)
A556AT 22
B2B228
DRAWING REF. KEY
FUNCTIONAL NOTES
ALL CABLES ARE IN LOOM C2B222 UNLESS SPECIFIED
ALL CABLES ARE OF TYPE A561AT2 22 UNLESS SPECIFIED

Figure 48

AgustaWestland
A Finmeccanica Company

Prego spedire a questo indirizzo: *Please send to the following address:* **AGUSTAWESTLAND S.p.A.** CUSTOMER SUPPORT & SERVICES - ITALY PRODUCT SUPPORT ENGINEERING DPT. Via del Gregge, 100 21015 Lonate Pozzolo (VA) - ITALY Tel.: +39 0331 664905 Fax: +39 0331 664684	**MODULO APPLICAZIONE BOLLETTINO TECNICO** *TECHNICAL BULLETIN COMPLIANCE FORM*	Data: *Date:*
	Numero: *Number:*	
	Revisione: *Revision:*	

Denominazione Cliente ed Indirizzo: *Customer Name and Address:*	Telefono: *Telephone:*
	Fax:
	Data Applicazione B.T.: *B.T. Compliance Date:*

Modello Elicottero *Helicopter Model*	S/N	Matricola *Tail Number*	Ore Totali *Total Hours*	Ore D.U.R. *T.S.O.*

Note:
Remarks:

Informazioni:
Information:

Al fine di gestire le varianti alla configurazione base, in relazione all'emissione del Bollettino Tecnico, preghiamo di voler compilare il presente modulo in tutte le sue parti e spedirlo all'indirizzo sopra indicato. Si ringrazia per la gentile collaborazione data.

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. We thank you beforehand for the information given.