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AgustaWestland Products

SERVICE BULLETIN

N° 139-588

DATE: March 25, 2021

REV. : /

TITLE

ATA 28 – AUXILIARY LONGITUDINAL FUEL TANK COMPLETION

REVISION LOG

First Issue

1. PLANNING INFORMATION

A. EFFECTIVITY

AW139 helicopters S/Ns 31764, 31766, 31791, 31796, 31820 and 31824.

B. COMPLIANCE

At Customer's option.

C. CONCURRENT REQUIREMENTS

Helicopters equipped with 2nd avionic bay installation must perform this Service Bulletin in conjunction with Service Bulletin 139-198.

D. REASON

This Service Bulletin is issued in order to provide the necessary instructions on how to complete the installation of the kit longitudinal auxiliary tank P/N 4G2800F00111.

E. DESCRIPTION

The Longitudinal Auxiliary Tank is a single additional fuel tank, anti-crash, bladder-type and it has a capacity of 400 kg/500 l.

Leonardo Helicopter Division has developed this Service Bulletin in order to install the auxiliary tank P/N 3G2810V01031 longitudinally mounted above the Number 1 fuel tank, the fuel vent line to connect it to the main tank vent line system and a new fuel control unit to provide Fuel Gauging Control Unit information.

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 one hundred twenty (120) MMH are deemed necessary.

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

H. WEIGHT AND BALANCE

WEIGHT (Kg)	35.8	
	ARM (mm)	**MOMENT (Kgmm)**
LONGITUDINAL BALANCE	6909	247342.2
LATERAL BALANCE	-239	-8556.2

I. REFERENCES

1) PUBLICATIONS

Following Data Modules refer to AMP:

DATA MODULE		**DESCRIPTION**	**PART**
DM01	39-A-00-20-00-00A-120A-A	Helicopter safety - Pre-operation (make helicopter safe for maintenance)	-
DM02	39-A-06-41-00-00A-010A-A	Access doors and panels - General data	-
DM03	39-B-28-15-01-00A-520A-K	Top panel - Remove procedure	-
DM04	39-B-28-15-03-00A-520A-K	Right side panel - Remove procedure	-
DM05	39-A-20-30-00-00A-010A-A	Standard practices - Fuel system - General data	-
DM06	39-A-20-10-09-00A-920A-A	Bonded studs - Replacement	-
DM07	39-A-28-42-05-00A-520A-A	Fuel control unit - Remove procedure	-
DM08	39-A-28-42-05-00A-720A-A	Fuel control unit - Install procedure	-
DM09	39-A-28-11-00-00A-364A-A	Fuel tank installation - Leak check	-
DM10	39-A-12-12-01-00A-221A-A	Number 1 fuel tank - Defuel and drain fuel	-
DM11	39-A-12-12-02-00A-221A-A	Number 2 fuel tank - Defuel and drain fuel	-
DM12	39-A-12-11-01-00A-211A-A	Fuel tanks - Refuel	-

2) ACRONYMS & ABBREVIATIONS

AMDI	Aircraft Material Data Information
AMP	Aircraft Maintenance Publication
DM	Data Module
DOA	Design Organization Approval
EASA	European Aviation Safety Agency
IPD	Illustrated Part Data
LH	Leonardo Helicopters
MMH	Maintenance-Man-Hours

3) ANNEX

N.A.

J. PUBLICATIONS AFFECTED

N.A.

K. SOFTWARE ACCOMPLISHMENT SUMMARY

N.A.

2. MATERIAL INFORMATION

A. REQUIRED MATERIALS

1) PARTS

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
1	**4G2800F00111**		**KIT LONGITUDINAL AUXILIARY TANK**	**REF**	**.**		**-**
2	3G2810A00551		Washer	4	..		139-588L1
3	3G2810A01431	509727	Vent pipe assy	1	..		139-588L1
4	3G2810A01531	509728	Vent pipe assy	1	..		139-588L1
5	3G2810A01631	509729	Vent pipe assy	1	..		139-588L1
6	3G2810A01731	509730	Vent pipe assy	1	..		139-588L1
7	3G2810V01031		Auxiliary tank SAR version	1	..		139-588L1
8	3G2840V00853		Fuel control unit	1	..		139-588L1
9	3G2870A02251		Sealing gasket	1	..		139-588L1
10	3G2870A02352		Protection plate	1	..		139-588L1
11	412-061-612-101		Cap fume boot	1	..		139-588L1
12	412-061-614-103		Doubler	1	..		139-588L1
13	507664		Grommet	1	..		139-588L1
14	507673		Velcro strip	24	..		139-588L1
15	508083		Flexible hose	1	..		139-588L1
16	508565-1		Bonding spacer assy	1	..		139-588L1
17	509731		Foam	1	..		139-588L1
18	509732		Foam	1	..		139-588L1
19	509733		Foam	1	..		139-588L1
20	A601A313	A601A3B13	Bonding and earthing vale assy	1	..		139-588L1
21	A601A320	A601A3B20	Bonding and earthing vale assy	1	..		139-588L1
22	A601A321	A601A3B21	Bonding and earthing vale assy	1	..		139-588L1
23	AN525-10R6		Screw	1	..		139-588L1
24	AN735D12		Clamp	7	..		139-588L1
25	AN735D18		Clamp	1	..		139-588L1
26	AN815-12D	AS5174D1212	Union	1	..		139-588L1
27	AS1034D1212	AS1034W1212	Elbow fitting	1	..		139-588L1
28	AW001DSD020EQ		Stencil	1	..		139-588L1
29	AW001DST050EQ		Stencil	1	..		139-588L1
30	AW001DSW010EQ		Stencil	1	..		139-588L1
31	M83413/8-D006BB		Bonding cable	2	..		139-588L1
32	MS21042L3		Nut	24	..		139-588L1
33	MS21919WDG12	AS21919WDG12	Clamp	9	..		139-588L1
34	MS21919WDG2	AS21919WDG02	Clamp	3	..		139-588L1
35	MS21919WDG8	AS21919WDG08	Clamp	1	..		139-588L1
36	MS24693S58	MS24693-S58	Screw	4	..		139-588L1
37	MS27039-1-06		Screw	5	..		139-588L1
38	MS27039-1-07		Screw	18	..		139-588L1
39	MS35333-40		Washer	8	..		139-588L1
40	MS9592-018		Bracket	3	..		139-588L1
41	MS9592-022		Bracket	1	..		139-588L1
42	MS9592-107		Bracket	2	..		139-588L1
43	NAS1149C0316R		Washer	5	..		139-588L1
44	NAS1149D0316J		Washer	19	..		139-588L1
45	NAS1149D0432K		Washer	8	..		139-588L1

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
46	NAS1924-58		Clamp	1	..		139-588L1
47	NAS43DD3-14N		Spacer	3	..		139-588L1
48	NAS43DD3-18N		Spacer	3	..		139-588L1
49	NAS6204-10		Bolt	8	..		139-588L1
50	**3G5306P55611**		**ALTERNATIVE STRUCTURAL PROVISON KIT BATTERY PARALLEL**	**REF**	**..**	**(1)**	**-**
51	NAS1832C3-3		Insert	4	…		-
52	**3G2810P00131**		**VARIANT FLEXIBLE HOSE INSTALLATION WITHOUT SECONDARY BAY**	**REF**	**..**	**(2)**	-
53	A388A3E24C75		Standoff	1	…		139-588L2
54	AS21919WDG17		Clamp	1	…		139-588L2
55	NAS1149C0332R		Washer	1	…		139-588L2
56	NAS1802-3-8		Screw	1	…		139-588L2
57	**3G5310P01511**		**STRUCTURAL VARIANT FOR AUXILIARY FUEL TANK WITHOUT BAY**	**REF**	**…**	**(2)**	-
58	A813A08CM		Insert	3	…..		139-588L2
59	3G5317A42731	3G5317A42731A4	FWD angle assy	2	…..		139-588L2
60	A813A08CM		Insert	8	….		139-588L2
61	3G5315A85731		Clip assy	3	….		139-588L2
62	3G5317A42831		Rear angle assy	1	….		139-588L2
63	3G5317A43931		Angle assy	1	….		139-588L2
64	3G5317A44031		Cover assy	1	….		139-588L2
65	AN525-832R6		Screw	7	….		139-588L2
66	MS27039-0804		Screw	6	….		139-588L2
67	MS35206-241		Screw	5	….		139-588L2
68	NAS1149DN832K		Washer	11	….		139-588L2
69	**3G5338P00411**		**AUXILIARY TANK PANEL STRUCTURAL RETROMOD**	**REF**	**…**	**(2)**	**-**
70	3G5338A04451		External profile	1	….		139-588L2
71	3G5338A04632		Upper left panel	1	….		139-588L2
72	MS20426AD3-5		Rivet	0.1 kg	….		139-588L2
73	MS20470AD4-6		Rivet	0.1 kg	….		139-588L2
74	MS20470AD5-7		Rivet	0.1 kg	….		139-588L2
75	MS27039-1-07		Screw	12	….		139-588L2
76	NAS1474A3		Nut plate	14	….		139-588L2

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
77	AWMS05-001 Type 1, Class B, Grade 2	Sealant MC-780 B	AR	(3)	-
78	AWMS05-001 Type 1, Class C, Grade 1	Sealant MC-780 C	AR	(3)	-
79	199-05-002 Type II, Class 2	Adhesive (C397)	AR	(3)	-
80	199-50-002 Type I	Araldit resin LY5138-2	AR	(3)	-
81	Commercial	01581 3 1200 Z6040 Excel fabrics 8H satin [EC9 34x2]	AR	(3)	-

#	Spec./LHD code number	DESCRIPTION	Q.TY	NOTE	PART
82	MMMA-1617, Type II	Adhesive	AR	(3)	-
83	Commercial	Tape GSC-21-99604-027 (width 50mm)	AR	(3)	-
84	Commercial	Tape GSC-21-99605-027 (width 30 mm)	AR	(3)	-
85	MIL-C-5040 Type III	Nylon cord (C118)	AR	(3)	-

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
139-588L1	1		-
139-588L2	1		-

NOTE

(1) The P/N 3G5306P55611 is applicable only if one of the following kits is installed:

- kit batteries start in parallel 27Ah and 44Ah P/N 4G2430F00811;
- kit batteries start in parallel P/N 4G2430F00713.

(2) The P/N 3G2810P00131 is applicable only to S/Ns 31796, 31820 and 31824.

(3) Item to be procured as local supply.

B. SPECIAL TOOLS

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

#	P/N	DESCRIPTION	Q.TY	NOTE	PART
86	Commercial	6 mOhm - 60 Ohm, Low Resistance Ohmmeter Ducter type D201	1	(B1)	-

SPECIAL TOOLS NOTE

(B1) Item to be procured as local supply.

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

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

f) All lengths are in mm.

1. In accordance with AMP DM 39-A-00-20-00-00A-120A-A prepare the helicopter on ground for a safe maintenance. Disconnect the battery, all electrical power sources and/or the external power supply.
2. In accordance with AMP DM 39-A-06-41-00-00A-010A-A and with reference to Figure 1 gain access to the area affected by the installation.
3. With reference to AMP DM 39-A-12-12-01-00A-221A-A and 39-A-12-12-02-00A-221A-A defuel the number 1 and the number 2 fuel tanks.
4. In accordance with the applicable steps of AMP DM 39-B-28-15-01-00A-520A-K, remove the top panel P/N 3G5338A06632 and retain existing hardware for later reuse.
5. In accordance with the applicable steps of AMP DM 39-B-28-15-03-00A-520A-K, remove the central panel P/N 3G5338A10231 and retain existing hardware for later reuse.
6. With reference to Figure 1 and Figures 7 thru 10, install the auxiliary tank fuel vent system as described in the following procedure:
   - 6.1 With reference to Figure 7 View T, gain access to RH venting line hose assy P/N 504038-2 and remove the cap P/N AN929-12D from the tee-fitting P/N AN824-12D.
   - 6.2 With reference to Figure 7 View T, connect the vent pipe assy

P/N 3G2810A01731 to the tee-fitting P/N AN824-12D and tighten the end fitting to the standard torque value.

6.3 With reference to Figure 8 Section W-W, secure the vent pipe assy P/N 3G2810A01731 by means of n°1 clamp P/N MS21919WDG12, n°2 nut P/N MS21042L3, n°1 screw P/N MS27039-1-07, n°1 bracket P/N MS9592-022, n°1 washer P/N NAS1149D0316J and n°1 spacer P/N NAS43DD3-14N.

6.4 Tighten the screw P/N MS27039-1-07 to a torque value of 5 thru 6.2 Nm.

6.5 With reference to Figure 7 View T and Figure 8 View U, connect the vent pipe assy P/N 3G2810A01631 to the vent pipe assy P/N 3G2810A01731 and tighten the end fitting to the standard torque value.

6.6 With reference to Figure 7 View T, connect the vent pipe assy P/N 3G2810A01531 to the vent pipe assy P/N 3G2810A01631 and tighten the end fitting to the standard torque value.

6.7 With reference to Figure 10 Section AB-AB, secure the vent pipe assy P/N 3G2810A01531 by means of n°1 clamp P/N MS21919WDG12, n°2 nuts P/N MS21042L3, n°1 screw P/N MS27039-1-07, n°1 bracket P/N MS9592-018, n°1 washer P/N NAS1149D0316J and n°1 spacer P/N NAS43DD3-14N.

6.8 With reference to Figure 10 Section AC-AC, secure the vent pipe assy P/N 3G2810A01531 by means of n°1 clamp P/N MS21919WDG12, n°2 nuts P/N MS21042L3, n°1 screw P/N MS27039-1-07, n°1 bracket P/N MS9592-107, n°1 washer P/N NAS1149D0316J and n°1 spacer P/N NAS43DD3-18N.

6.9 Tighten the two screws P/N MS27039-1-07 to a torque value of 5 thru 6.2 Nm.

6.10 With reference to Figure 7 View T and Figure 8 View U, connect the vent pipe assy P/N 3G2810A01431 to the vent pipe assy P/N 3G2810A01531 using n°1 union P/N AN815-12D. Tighten the end fittings to the standard torque value.

6.11 With reference to Figure 9 Section AA-AA, secure the vent pipe assy P/N 3G2810A01431 by means of n°1 clamp P/N MS21919WDG12, n°1 nut P/N MS21042L3 and n°1 spacer P/N NAS43DD3-18N.

NOTE

Following Step 6.12 is applicable only to S/N 31764 and 31766.

6.12 With reference to Figure 9 Section X-X, secure the vent pipe assy P/N 3G2810A01431 by means of n°1 clamp P/N MS21919WDG12, n°2 nuts P/N MS21042L3, n°1 screw P/N MS27039-1-07, n°1 bracket P/N MS9592-018, n°1 washer P/N NAS1149D0316J and n°1 spacer P/N NAS43DD3-18N.

6.13 With reference to Figure 10 Detail AD, secure the vent pipe assy

P/N 3G2810A01431 to the structure and to the existing cable P/N 3G9F11A00612 by means n°1 clamp P/N MS21919WDG12, n°1 clamp P/N MS21919WDG8, n°3 nuts P/N MS21042L3, n°2 screws P/N MS27039-1-07, n°1 bracket P/N MS9592-018, n°1 bracket P/N MS9592-107, n°3 washers P/N NAS1149D0316J and n°1 spacer P/N NAS43DD3-14N.

6.14 Tighten the three screws P/N MS27039-1-07 to a torque value of 5 thru 6.2 Nm.

6.15 With reference to Figure 8 Section V-V, install the bonding cable P/N A601A321 securing one end of cable to the vent pipe assy P/N 3G2810A01731 by means of n°1 clamp P/N AN735D12, n°1 screw P/N MS27039-1-07, n°1 washer P/N NAS1149D0316J and n°1 nut P/N MS21042L3.

6.16 With reference to Figure 10 View AE, secure the other end of the bonding cable P/N A601A321 to the structure by means of n°1 screw P/N MS27039-1-07, n°1 washer P/N NAS1149D0316J and n°1 nut P/N MS21042L3.

6.17 With reference to Figure 7 View T, install the bonding cable P/N A601A313 securing one end of cable to the vent pipe assy P/N 3G2810A01531 by means of n°1 clamp P/N AN735D12, n°1 screw P/N MS27039-1-07, n°1 washer P/N NAS1149D0316J and n°1 nut P/N MS21042L3.

6.18 With reference to Figure 7 View T, secure the other end of the bonding cable P/N A601A313 to the vent pipe assy P/N 3G2810A01431 by means of n°1 clamp P/N AN735D12, n°1 screw P/N MS27039-1-07, n°1 washer P/N NAS1149D0316J and n°1 nut P/N MS21042L3.

6.19 Tighten the two screws P/N MS27039-1-07 to a torque value of 5 thru 6.2 Nm.

6.20 With reference to Figure 7 View T, install n°2 bonding cables P/N M83413/8-D006BB on the vent pipe assy P/N 3G2810A01631 by means of n°1 clamp P/N AN735D12, n°1 screw P/N MS27039-1-07, n°1 washer P/N NAS1149D0316J and n°1 nut P/N MS21042L3.

6.21 With reference to Figure 7 View T, secure the other end of one of the bonding cables P/N M83413/8-D006BB to the vent pipe assy P/N 3G2810A01731 by means of n°1 clamp P/N AN735D12, n°1 screw P/N MS27039-1-07, n°1 washer P/N NAS1149D0316J and n°1 nut P/N MS21042L3.

6.22 With reference to Figure 7 View T, secure the other end of one of the bonding cables P/N M83413/8-D006BB to the vent pipe assy P/N 3G2810A01531 by means of n°1 clamp P/N AN735D12, n°1 screw P/N MS27039-1-07, n°1 washer P/N NAS1149D0316J and n°1 nut P/N MS21042L3.

6.23 Tighten the three screws P/N MS27039-1-07 to a torque value of 5 thru 6.2 Nm.

7. With reference to Figures 1 thru 6, install the auxiliary tank P/N 3G2810V01031 as described in the following procedure:

CAUTION

The fuel tank may be easily damaged. Do not use pointed or sharp edges tools when you touch or move the fuel tank. Do not put the fuel tank on surfaces which have sharp edges.

The fuel tank material is sensitive to light and low temperature conditions:

- Do not let the fuel tank in heavy light (such as sun rays) more than necessary
- Do not touch the fuel tank when the environment temperature is low

Damage to the fuel tank can occur if you do not obey these instructions.

NOTE

Before complying with the following procedures, refer to fuel-system standard practices. Make sure to follow standard practices during this procedure. Refer to AMP DM 39-A-20-30-00-00A-010A-A.

7.1 With reference to Figures 2 View C, apply n°3 velcro strips P/N 507673 on the top side of the auxiliary fuel tank and n°3 velcro strips P/N 507673 on the corresponding position on the tank top cover panel using the adhesive MMM-A-1617, Ty II.

7.2 With reference to Figures 3 View D, apply n°2 velcro strips P/N 507673 on the aft side of the auxiliary fuel tank and n°2 velcro strips P/N 507673 on the corresponding position on the tank aft cover panel using the adhesive MMM-A-1617, Ty II.

7.3 With reference to Figures 3 View D, apply n°2 velcro strips P/N 507673 on the forward side of the auxiliary fuel tank and n°2 velcro strips P/N 507673 on the corresponding position on the tank forward cover panel using the adhesive MMM-A-1617, Ty II.

7.4 With reference to Figures 3 View E, apply n°3 velcro strips P/N 507673 on the left side of the auxiliary fuel tank and n°3 velcro strips P/N 507673 on the corresponding position on the tank left cover panels using the adhesive MMM-A-1617, Ty II.

7.5 With reference to Figures 4 View F, apply n°2 velcro strips P/N 507673 on the right side of the auxiliary fuel tank and n°2 velcro strips P/N 507673 on the

corresponding position on the tank right cover panel using the adhesive MMM-A-1617, Ty II.

7.6 Cover rivets/nuts heads or any other protrusion in the fuel tank housing using the tape GSC-21-99604-027 or the tape GSC-21-99605-027 as necessary.

NOTE

If interference between plate P/N 3G2870A02352 and the structure is found, it is possible to trim part of the structure in order to obtain the correct coupling. Restore the surface finish before the plate installation.

7.7 With reference to Figure 5 View L and Figure 6 Section R-R, remove the plate P/N 3G5338A04151 and install the protection plate P/N 3G2870A02352 using existing hardware.

7.8 With reference to Figure 5 View L, seal all around the external perimeter of the protection plate P/N 3G2870A02352 with a fillet of sealant MC-780 B.

7.9 With reference to Figure 6 Section P-P, remove the auxiliary cap P/N 503770-1, the electrical bonding P/N 120-055-2-8 and related hardware from the main tank.

7.10 With reference to Figure 1, Figure 3 View D, Figure 4 View F, Figure 5 View L and Figure 6 Section N-N, install the foam P/N 509731 on the fuel tank housing using the sealant MC-780 C.

7.11 With reference to Figure 1, Figure 3 View E and Figure 4 Section G-G, install the foam P/N 509732 on the fuel tank housing using the sealant MC-780 C.

7.12 With reference to Figure 1, Figure 3 View E and Figure 4 Section H-H, install the foam P/N 509733 on the fuel tank housing using the sealant MC-780 C.

7.13 With reference to Figure 4 View F, remove the lateral access door from the auxiliary fuel tank and retain relevant hardware for later reuse.

7.14 Place the auxiliary fuel tank in its housing.

7.15 Fasten the auxiliary fuel tank rings to the tie-down rings on the structure with nylon cord MIL-C-5040 Type III.

7.16 Push the velcro patches on the auxiliary fuel tank against the applicable velcro patches on the structure. Do this from the inside of the auxiliary fuel tank through the lateral access door.

7.17 Through the lateral access door gain access to the interconnection with the main tank and make sure that the interconnection ducts are aligned.

7.18 With reference to Figure 6 Section P-P, install the bonding spacer assy P/N 508565-1 by means of n°1 screw AN525-10R6.

7.19 With reference to Figure 6 Section P-P, attach the auxiliary fuel tank

P/N 3G2810V01031 to the main tank by means of n°8 bolts P/N NAS6204-10, n°8 washers NAS1149D0432K and n°8 washers P/N MS35333-40.

7.20 Tighten the eight bolts P/N NAS6204-10 to a torque value of 5.65 thru 7.91 Nm.

NOTE

Following step 8 is applicable only to S/N 31796, 31820 and 31824.

8. With reference to Figures 12 thru 20, perform variant flexible hose installation without secondary bay P/N 3G2810P00131 as described in the following procedure:

8.1 With reference to Figures 13 and 14, perform the auxiliary tank panel structural retromod P/N 3G5338P00411 as described in the following procedure:

8.1.1 With reference to Figure 13 Detail A, remove the left upper vertical panel assy P/N 3G5338A15931 and retain existing hardware for later reuse.

8.1.2 With reference to Figure 13 Detail A, remove n°2 existing anchor nuts P/N NAS1474A3.

8.1.3 With reference to Figure 13 Detail A, temporarily locate the external profile P/N 3G5338A04451 on the upper left panel P/N 3G5338A04632 and countermark n°14 holes.

8.1.4 With reference to Figure 13 Detail A, drill n° 14 holes Ø5.16÷5.28 on the upper left panel P/N 3G5338A04632.

8.1.5 With reference to Figure 13 Detail A, install n°14 anchor nuts P/N NAS1474A3 on the external profile P/N 3G5338A04451 by means of n°28 rivets P/N MS20426AD3.

8.1.6 With reference to Figure 14 View C, remove n°4 rivets P/N MS20470AD5-6 and n°35 rivets P/N MS20470AD4-5 from the profile P/N 3P5338A10951.

8.1.7 With reference to Figure 14 View C and Section B-B, temporarily locate the profile P/N 3P5338A10951 on the external profile P/N 3G5338A04451, countermark and drill n°39 holes.

8.1.8 With reference to Figure 14 View C and Section B-B, install the external profile P/N 3G5338A04451 on the profile P/N 3P5338A10951 and the panel P/N 3P5338A02131 by means of n°4 rivets P/N MS20470AD5-7 and n°35 rivets P/N MS20470AD4-6.

8.1.9 With reference to Figure 13 Detail A, install the upper left panel P/N 3G5338A04632 on external profile P/N 3G5338A04451 by means of n°12 screws P/N MS27039-1-07 and n°2 existing screws.

8.1.10 With reference to Figure 13 Detail A, install the panel P/N 3P5338A01931 using existing hardware.

8.2 With reference to Figures 15 thru 18, perform the structural variant for auxiliary fuel tank without bay P/N 3G5310P01511 as described in the following procedure:

8.2.1 With reference to Figure 16 Section A-A, remove the panel assy ceiling closure P/N 3G2580A11731 and retain existing hardware for later reuse.

8.2.2 With reference to Figure 15, remove the panel assy ceiling closure P/N 3G2580A12533 and retain existing hardware for later reuse.

8.2.3 With reference to Figure 19, rework the panel assy ceiling closure P/N 3G2580A12533 to obtain the rear panel assy ceiling closure retromod P/N 3G2580P02631 as described in the following procedure:

8.2.3.1 With reference to Figure 19, perform the indicated cut-out on the panel assy ceiling closure P/N 3G2580A12533.

8.2.3.2 With reference to Figure 19 Section B-B, seal the cut-out edge with adhesive 199-05-002 Type II Class 2.

8.2.3.3 With reference to Figure 19 Section A-A and Section B-B, install n°3 inserts P/N A813A08CM on the panel assy ceiling closure P/N 3G2580A12533 by means of adhesive 199-05-002 Type II Class 2.

8.2.4 With reference to Figure 18, rework the top panel P/N 3G5338A06632 to obtain the top panel retromod P/N 3G5310P01531 as described in the following procedure:

8.2.4.1 With reference to Figure 18, install n°6 inserts P/N A813A08CM by means of adhesive 199-05-002 Type II Class 2 on the top panel P/N 3G5338A06632.

8.2.5 With reference to Figure 17 Section C-C, install n°2 inserts P/N A813A08CM by means of adhesive 199-05-002 Type II Class 2 on the upper left panel P/N 3G5338A04632.

8.2.6 With reference to Figure 15, install the top panel retromod P/N 3G5310P01531 using existing hardware.

8.2.7 With reference to Figure 16 Section A-A, install n°3 clip assy P/N 3G5315A85731, n°1 rear angle assy P/N 3G5317A42831 and n°1 angle assy P/N 3G5317A43931 on the cover assy P/N 3G5317A44031 by means of n°5 screws P/N AN525-832R6.

8.2.8 With reference to Figure 16 View looking forward and Figure 17 Section B-B, install the cover assy P/N 3G5317A44031 on the top panel retromod P/N 3G5310P01531 by means of n°6 screws P/N MS27039-0804 and n°6 washers P/N NAS1149DN832K.

8.2.9 With reference to Figure 15, install the rear panel assy closure retromod
P/N 3G2580P02631 using existing hardware.

8.2.10 With reference to Figure 16 and Figure 20, rework the panel assy ceiling closure P/N 3G2580A11731 to obtain the FWD panel assy ceiling closure retromod P/N 3G2580P02831 as described in the following procedure:

8.2.10.1 With reference to Figure 20, apply n°11 plies 01581 3 1200 Z6040 on the panel assy ceiling closure P/N 3G2580A11731 using Araldit resin LY5138-2.

8.2.10.2 With reference to Figure 20 drill n°2 rivet holes on each of the n°2 FWD angle assy P/N 3G5317A42731.

8.2.10.3 With reference to Figure 16 Section A-A, install n°2 FWD angle assy P/N 3G5317A42731 on the cover assy P/N 3G5317A44031 by means of n°2 screws P/N AN525-832R6.

8.2.10.4 With reference to Figure 16 Section A-A, install the panel assy ceiling closure P/N 3G2580A11731 using existing hardware.

8.2.10.5 With reference to Figure 16 Section A-A and Figure 20, drill n°4 holes on the panel assy ceiling closure P/N 3G2580A11731 according to the n°2 FWD angle assy P/N 3G5317A42731.

8.2.10.6 With reference to Figure 20, install n°4 rivets P/N MS20426AD3 to attach the panel assy ceiling closure P/N 3G2580A11731 to the n°2 FWD angle assy P/N 3G5317A42731.

8.3 With reference to Figure 16 Section A-A, attach n°3 clip assy P/N 3G5315A85731 to the FWD panel assy ceiling closure retromod P/N 3G2580P02831 by means of n°3 screws P/N MS35206-241 and n°3 washers P/N NAS1149DN832K.

8.4 With reference to Figure 16 Section A-A, attach n°1 rear angle assy P/N 3G5317A42831 and n°1 angle assy P/N 3G5317A43931 to the upper panel assy P/N 3G5338A04631 by means of n°2 screws P/N MS35206-241 and n°2 washers P/N NAS1149DN832K.

9. With reference to Figure 9 Detail Y, drill n°2 holes Ø7.0 through the cap fume boot

P/N 412-061-612-101 according to the holes on the doubler P/N 412-061-614-103.

NOTE

If interference between second avionic bay panel and flexible hose P/N 508083 is found, it is possible to trim part of the second avionic bay panel in order to obtain a good gap between the panel and the hose.

10. With reference to Figure 2 Detail B1, install the grommet P/N 507664 and the flexible hose P/N 508083 on the auxiliary fuel tank vent port and tighten the end fitting to the standard torque value. Make sure that the cable of auxiliary fuel tank connector passes through the grommet.
11. With reference to Figure 2 Detail B, install the cap fume boot P/N 412-061-612-101 and the doubler P/N 412-061-614-103 on the top panel by means of n°5 screws P/N MS27039-1-06 and n°5 washers P/N NAS1149C0316R.
12. Tighten the five screws P/N MS27039-1-06 to a torque value of 5 thru 6.2 Nm.
13. With reference to Figure 2 Detail B, secure the top side of the cap fume boot P/N 412-061-612-101 to the flexible hose P/N 508083 by means of n°1 clamp P/N NAS1924-58 and n°1 sealing gasket P/N 3G2870A02251.
14. With reference to Figure 2 Detail B, seal all around the sealing gasket with a fillet of sealant MC-780 B.
15. With reference to Figure 7 View T, connect the flexible hose P/N 508083 to the vent pipe P/N 3G2810A01431 with a 90° elbow fitting P/N AS1034D1212. Tighten the elbow fittings to the standard torque values.
16. With reference to Figure 7 View T, install the bonding cable P/N A601A320 on the vent pipe assy P/N 3G2810A01431 by means of n°1 clamp P/N AN735D12, n°1 screw P/N MS27039-1-07, n°1 washer P/N NAS1149D0316J and n°1 nut P/N MS21042L3.
17. With reference to Figure 9 Section Z-Z, connect the other end of the bonding cable P/N A601A320 to the flexible hose P/N 508083 by means of n°1 clamp P/N AN735D18, n°1 screw P/N MS27039-1-07, n°1 washer P/N NAS1149D0316J and n°1 nut P/N MS21042L3
18. Tighten the two screws P/N MS27039-1-07 to a torque value of 5 thru 6.2 Nm.
19. With reference to Figure 8 View U, secure the cable of auxiliary fuel tank connector to the vent pipe assy P/N 3G2810A01431 by means of n°3 clamps P/N MS21919WDG12, n°3 clamps P/N MS21919WDG2, n°3 screws P/N MS27039-1-07, n°3 washers P/N NAS1149D0316J and n°3 nuts P/N MS21042L3.
20. Tighten the three screws P/N MS27039-1-07 to a torque value of 5 thru 6.2 Nm.
21. Connect the auxiliary fuel tank connector to the connector on the structure.

22. With reference to Figure 4 View F, install the lateral access door on the auxiliary fuel tank using existing hardware.
23. With reference to Figure 6 Section M-M, attach the central panel P/N 3G5338A10231 to the auxiliary fuel tank P/N 3G2810V01031 by means of n°4 screws P/N MS24693-S58 and n°4 washers P/N 3G2810A00551.
24. Attach the central panel P/N 3G5338A10231 to the structure using existing hardware.
25. With reference to Figure 5 View K and Figure 6 Detail S, apply the stencils P/N AW001DSW010EQ and P/N AW001DSD020EQ on upper aft corner of central panel P/N 3G5338A10231.

NOTE

Following steps 26 and 27 are applicable only to S/N 31796, 31820 and 31824.

26. With reference to Figure 12 view B and Detail A and in accordance with AMP DM 39-A-20-10-09-00A-920A-A, install the standoff P/N A388A3E24C75 on the structure.
27. With reference to Figure 12 Detail A, View B and Detail C, secure the flexible hose P/N 508083 to the standoff by means of n°1 clamp P/N AS21919WDG17, n°1 screw P/N NAS1802-3-8 and n°1 washer P/N NAS1149C0332R.

NOTE

Following step 28 and related sub-steps are applicable only if the kit batteries start in parallel 27Ah and 44Ah P/N 4G2430F00811 or the kit batteries start in parallel P/N 4G2430F00713 is installed.

28. With reference to Figure 21, perform the alternative structural provision kit batteries parallel P/N 3G5306P55611 as described in the following procedure:
    - 28.1 With reference to Figure 21 Section B-B, drill n°4 holes Ø14.25÷14.38 on the panel P/N 3G5333A01534.
    - 28.2 With reference to Figure 21 Section B-B, install n°4 inserts P/N NAS1832C3-3 by means of adhesive 199-05-002 Type II Class 2 on the panel P/N 3G5333A01534.
    - 28.3 With reference to Figure 21 View A, prepare the surface around the drilled holes to assure ground contact.
29. With reference to Figure 11 and in accordance with AMP DM 39-A-28-42-05-00A-520A-A, remove the fuel control unit P/N 3G2840V00852.
30. With reference to Figure 11 and in accordance with AMP DM 39-A-28-42-05-00A-720A-A, install the fuel control unit P/N 3G2840V00853 using existing hardware.

31. With reference to Figure 1 Detail A, apply the stencil P/N AW001DST050EQ above the fuel filler neck on the right side of helicopter fuselage.
32. In accordance with AMP DM 39-A-28-11-00-00A-364A-A, perform the leak check of the fuel tank.
33. Perform electrical bonding check of the fuel venting pipes as described in the following procedure:

NOTE

Prior to measurement make sure that the calibration of the milliohm meter is correct and not expired.

Where possible, measurement must be carried out on clean metallic surfaces. If a measurement must be carried out on a finished surface it is permitted to perforate the finish by light contact pressure of the probe ends to ensure good electrical contact and not cause too much damage.

Use duplex probes unless access problems exist and position probes so that “P” (Potential) contacts are within current path (i.e. the innermost position among four probe contacts)

33.1 Measure electrical bonding on each of the following vent pipes and hose assemblies:

- Vent pipe assy P/N 3G2810A01731
- Vent pipe assy P/N 3G2810A01631
- Vent pipe assy P/N 3G2810A01531
- Vent pipe assy P/N 3G2810A01431
- Flexible hose P/N 508083.

33.2 Perform the measurement by placing probe A on pipe or hose assy and probe B on the local structure near the bonding cable connection.

33.3 Make sure that measured resistance at each position is less than 5 mΩ. If the measured resistance is more than 5 mΩ, improve metallic surface contacts at both ends of the affected bonding cable.

34. In accordance with AMP DM 39-A-12-11-01-00A-211A-A, refuel the fuel tanks.
35. In accordance with weight and balance changes, update the Chart A (see Rotorcraft Flight Manual, Part II, section 6).
36. Return the helicopter to flight configuration and record for compliance with this Service Bulletin on the helicopter logbook.

37. Send the attached compliance form to the following mail box:

engineering.support.lhd@leonardocompany.com

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

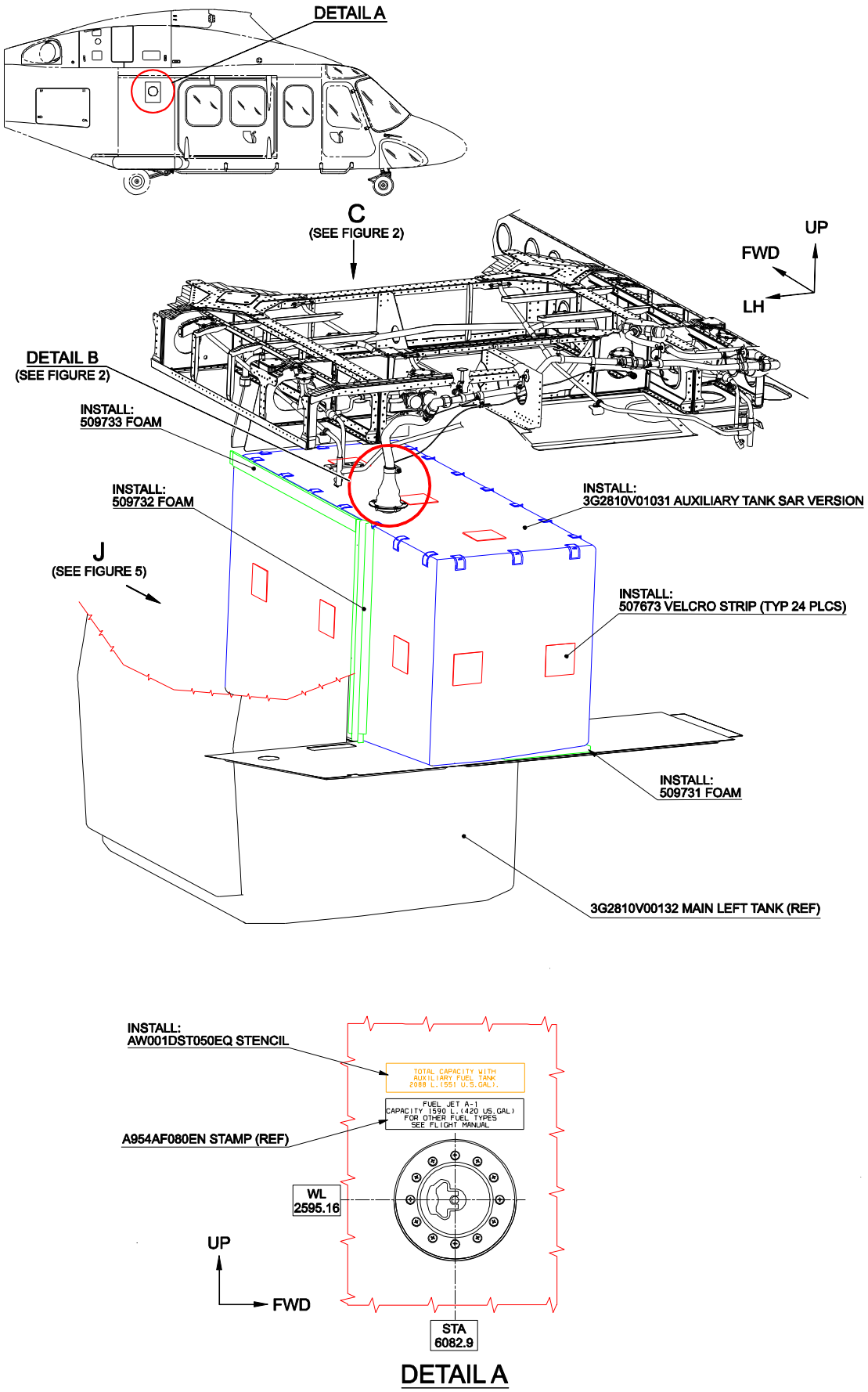
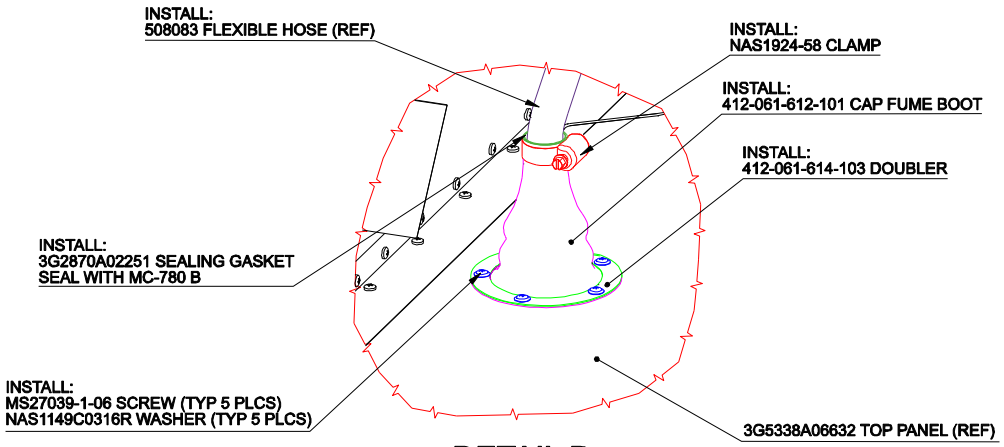
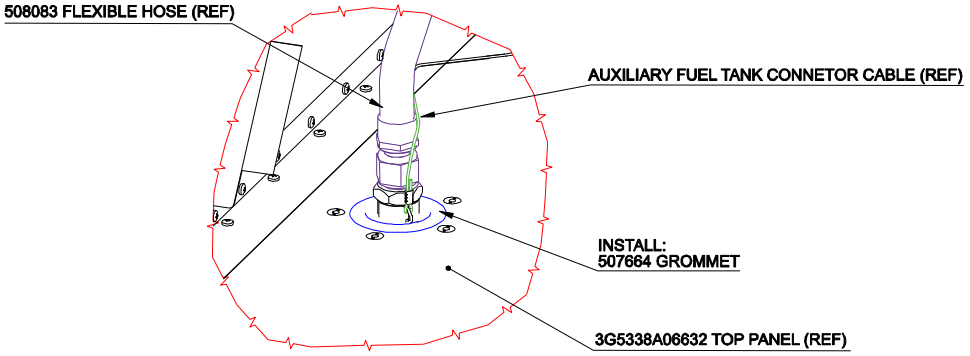

DETAIL A
C
(SEE FIGURE 2)
UP
FWD
LH
DETAIL B
(SEE FIGURE 2)
INSTALL:
509733 FOAM
INSTALL:
509732 FOAM
INSTALL:
3G2810V01031 AUXILIARY TANK SAR VERSION
J
(SEE FIGURE 5)
INSTALL:
507673 VELCRO STRIP (TYP 24 PLCS)
INSTALL:
509731 FOAM
3G2810V00132 MAIN LEFT TANK (REF)
INSTALL:
AW001DST050EQ STENCIL
TOTAL CAPACITY WITH
AUXILIARY FUEL TANK
2088 L.(551 U.S.GAL).
FUEL JET A-1
CAPACITY 1590 L.(420 US.GAL)
FOR OTHER FUEL TYPES
SEE FLIGHT MANUAL
A954AF080EN STAMP (REF)
WL
2595.16
UP
FWD
STA
6082.9
DETAIL A

Figure 1



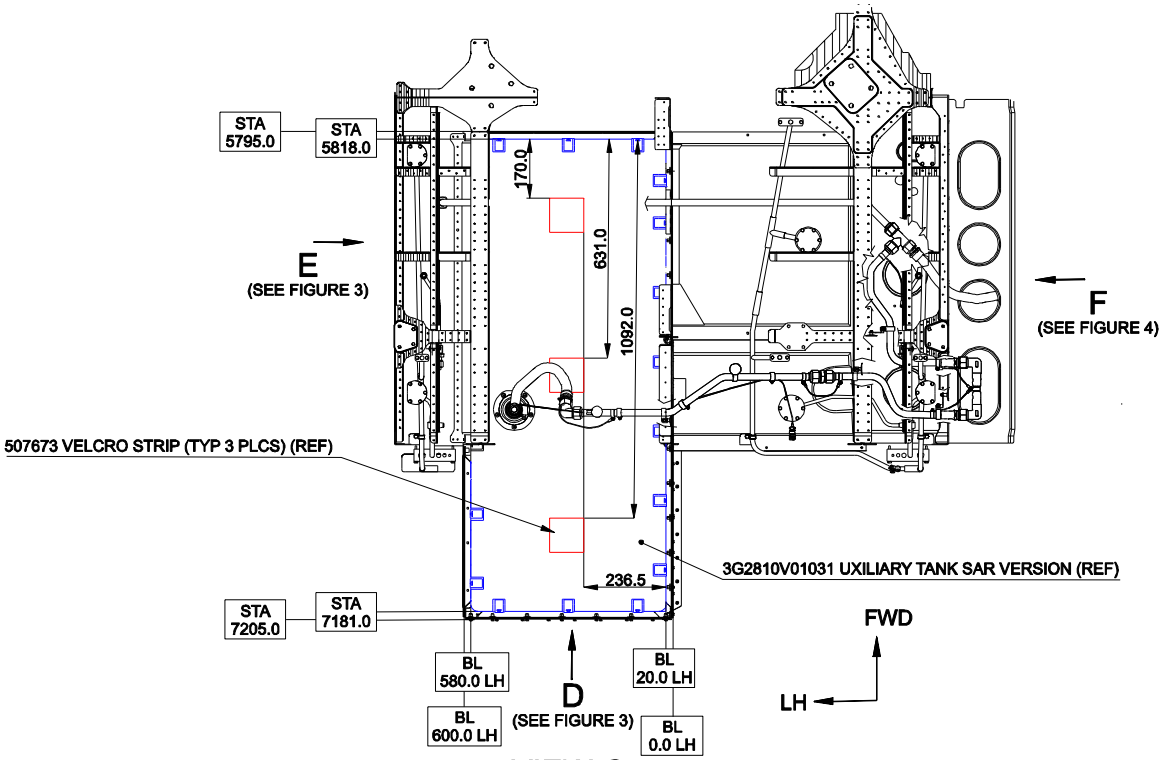
DETAIL B

(REFER TO FIGURE 1)



DETAIL B1

(REFER TO FIGURE 1)

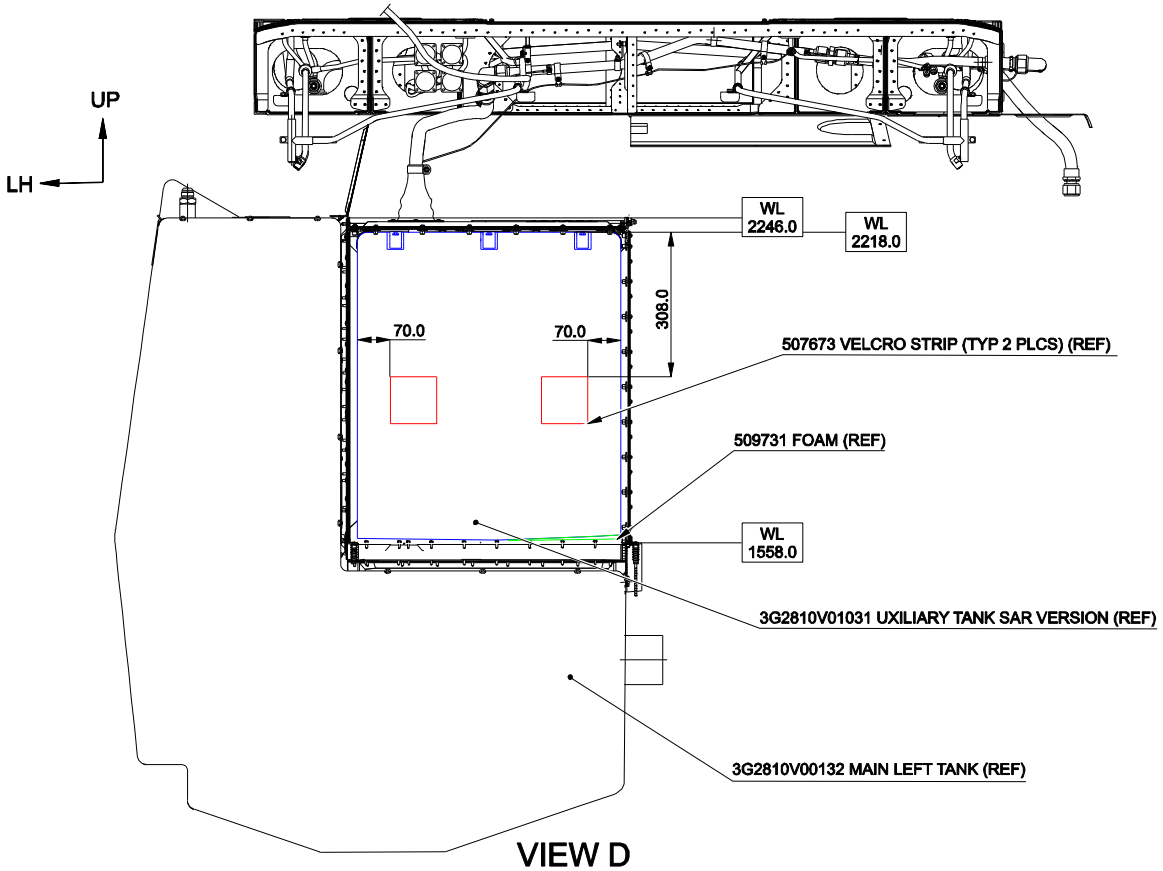


VIEW C

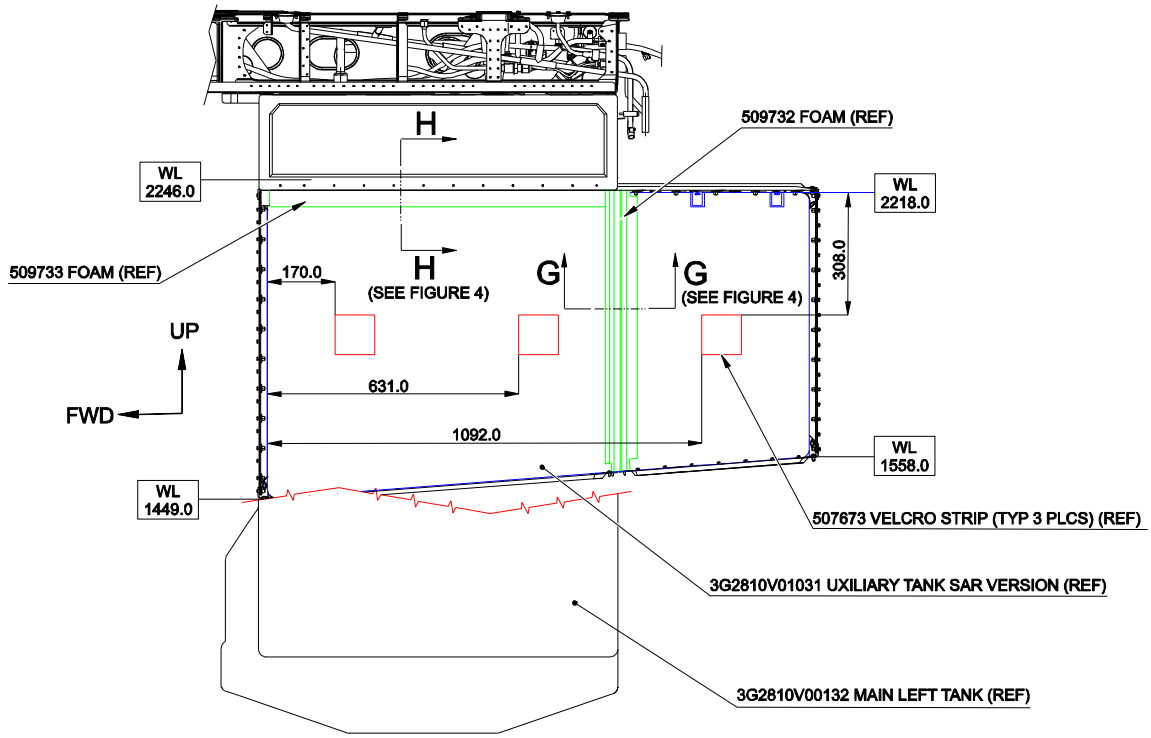
(REFER TO FIGURE 1)

PARTS OMITTED FOR BETTER CLARITY PURPOSE

Figure 2

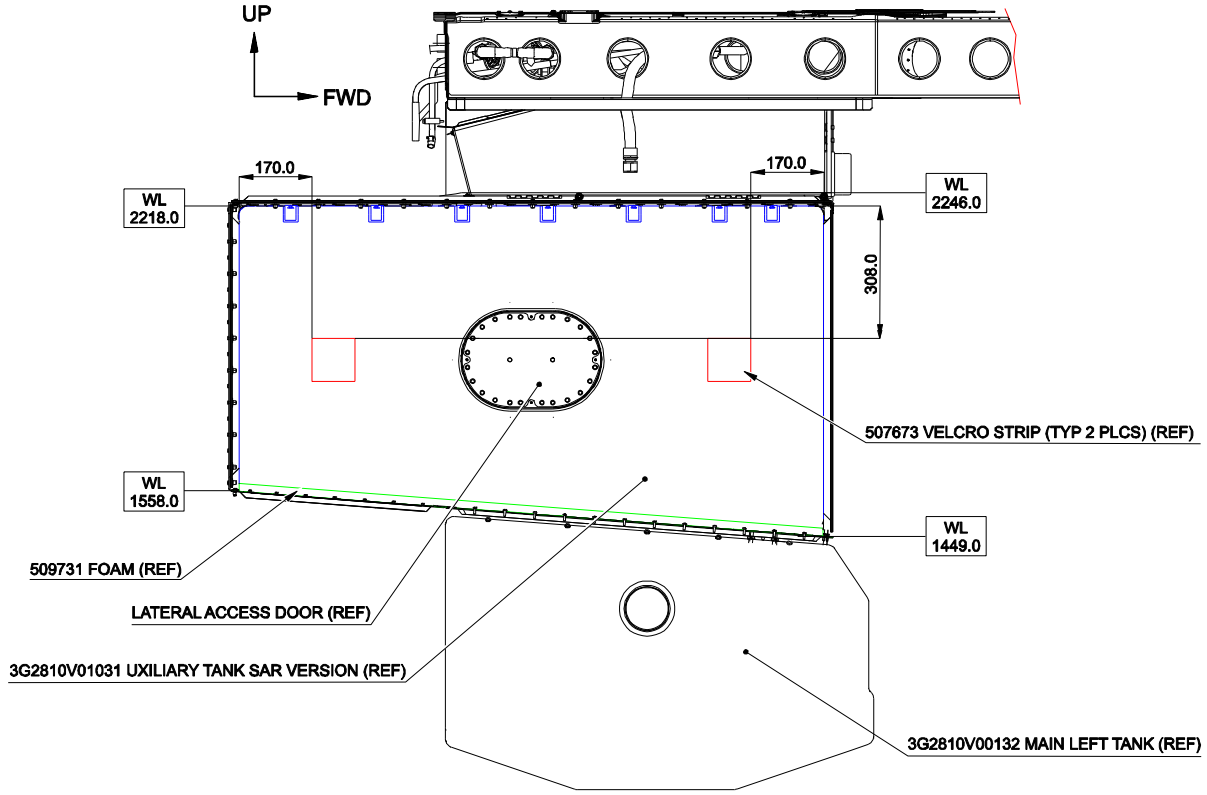


VIEW D
(REFER TO FIGURE 2)
AFT TANK SIDE SHOWN, TYPICAL FOR FWD SIDE
PARTS OMITTED FOR BETTER CLARITY PURPOSE

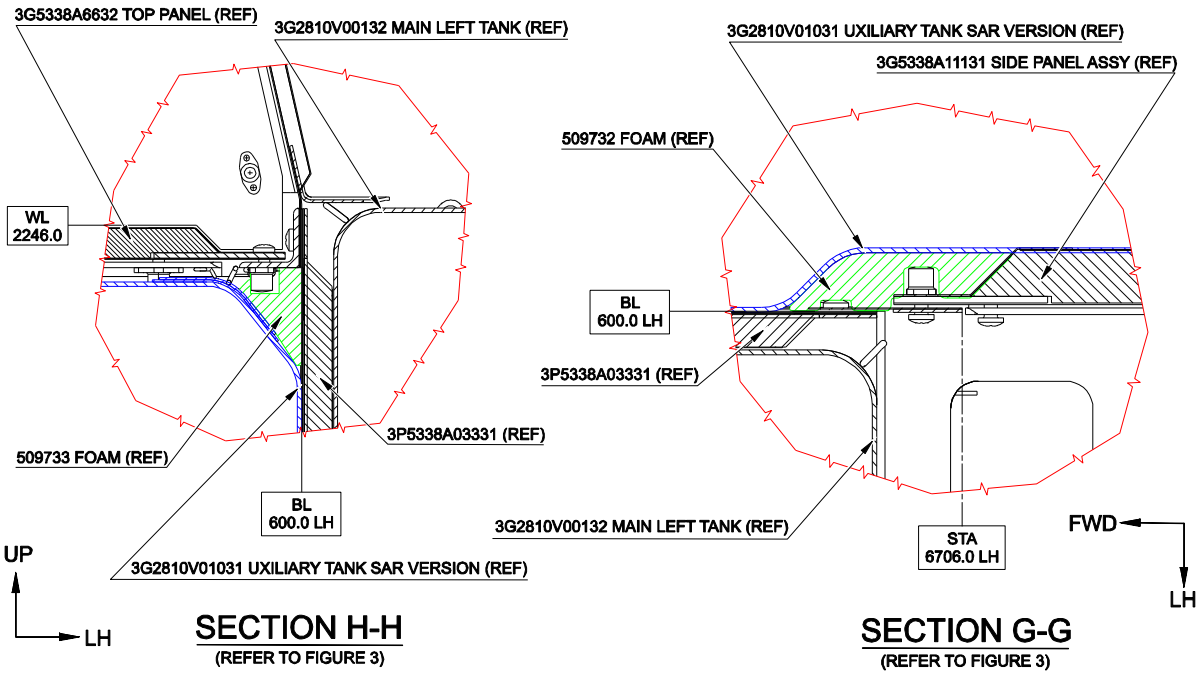


VIEW E
(REFER TO FIGURE 2)
PARTS OMITTED FOR BETTER CLARITY PURPOSE

Figure 3



VIEW F
(REFER TO FIGURE 2)
PARTS OMITTED FOR BETTER CLARITY PURPOSE



SECTION H-H
(REFER TO FIGURE 3)

SECTION G-G
(REFER TO FIGURE 3)

Figure 4

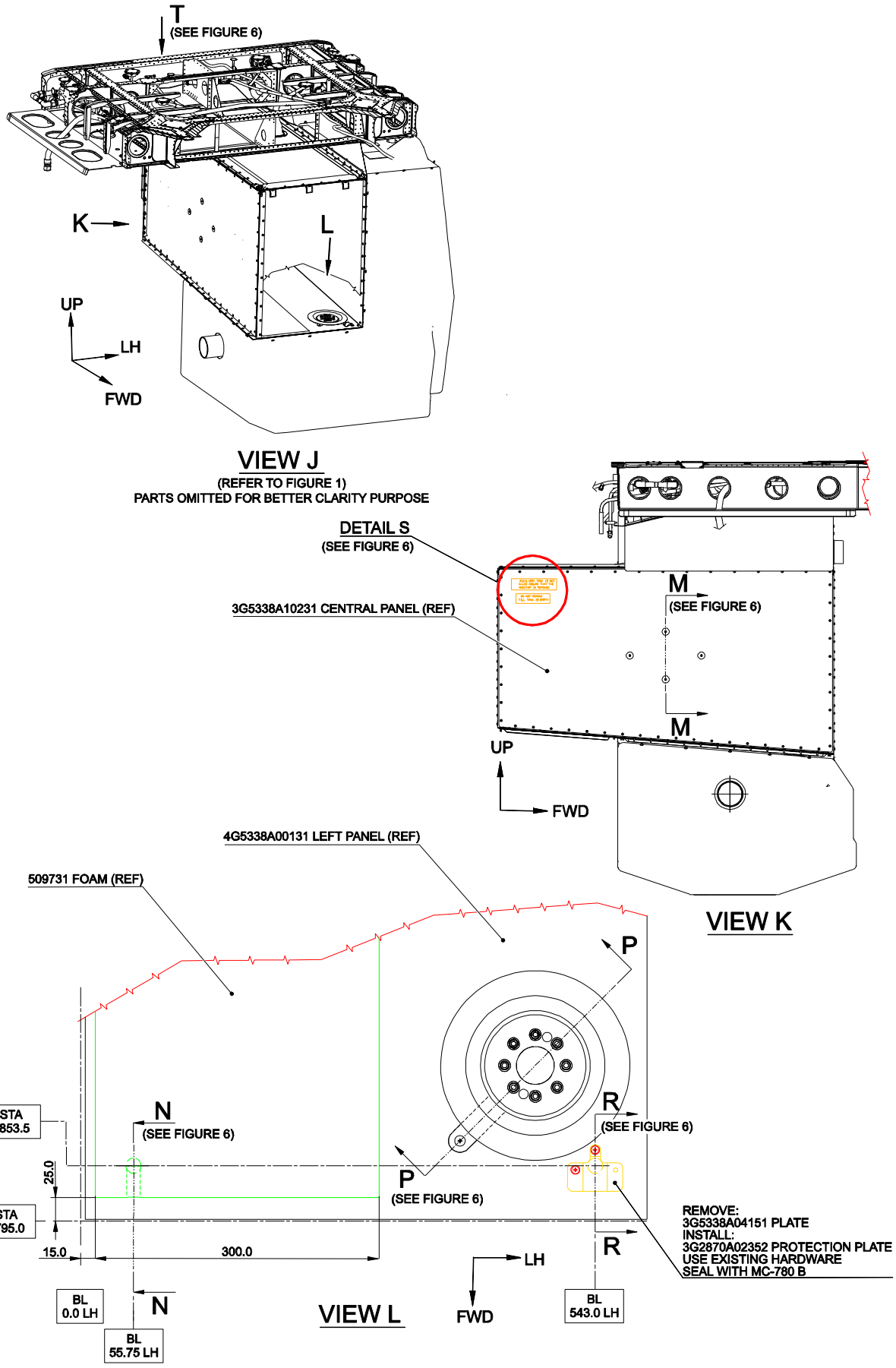

T
(SEE FIGURE 6)
K
L
UP
LH
FWD
VIEW J
(REFER TO FIGURE 1)
PARTS OMITTED FOR BETTER CLARITY PURPOSE
DETAIL S
(SEE FIGURE 6)
3G5338A10231 CENTRAL PANEL (REF)
M
(SEE FIGURE 6)
M
UP
FWD
VIEW K
4G5338A00131 LEFT PANEL (REF)
509731 FOAM (REF)
P
R
(SEE FIGURE 6)
N
(SEE FIGURE 6)
P
(SEE FIGURE 6)
STA
5853.5
STA
5795.0
25.0
15.0
300.0
BL
0.0 LH
BL
55.75 LH
N
VIEW L
LH
FWD
R
BL
543.0 LH
REMOVE:
3G5338A04151 PLATE
INSTALL:
3G2870A02352 PROTECTION PLATE
USE EXISTING HARDWARE
SEAL WITH MC-780 B

Figure 5

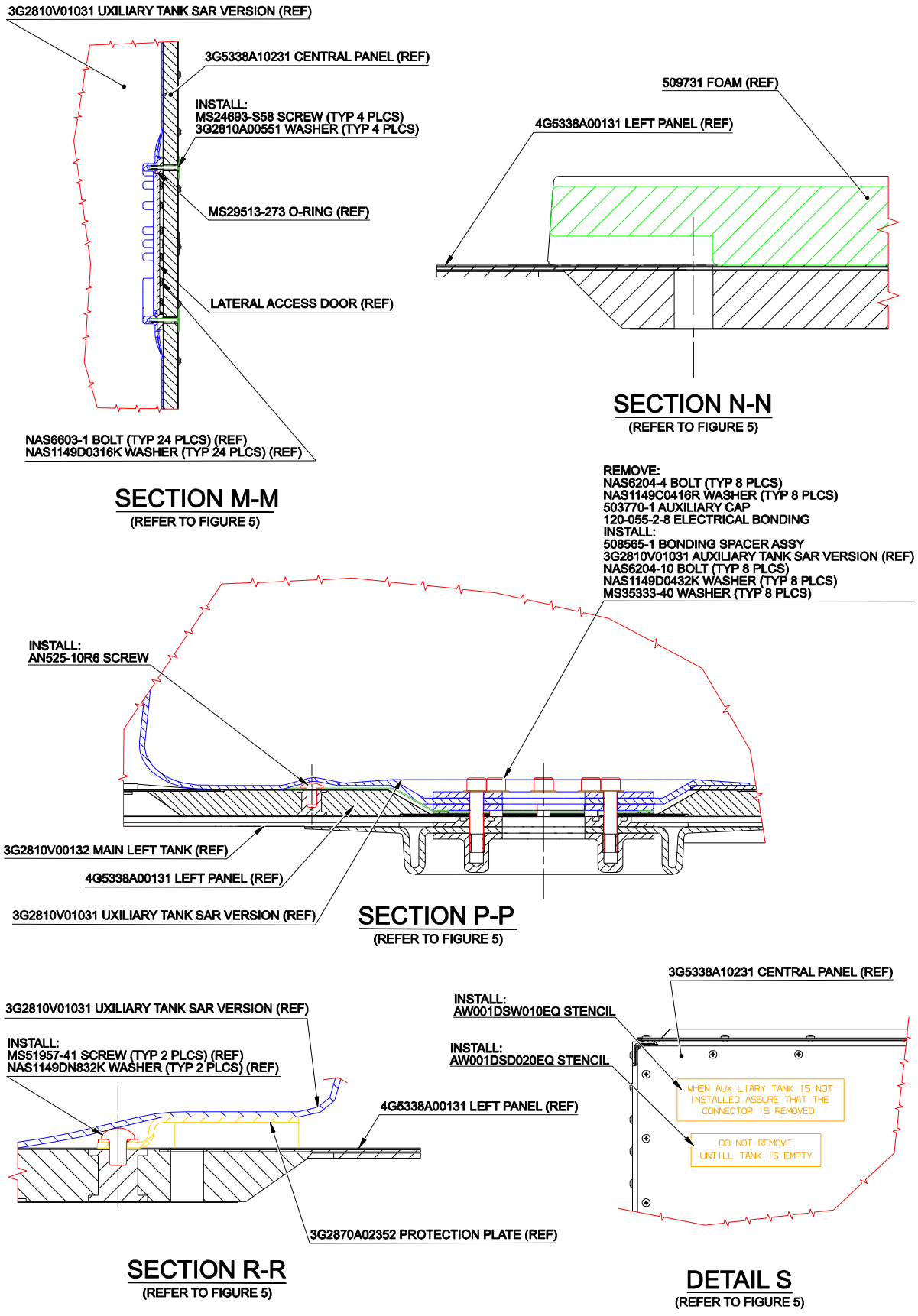

3G2810V01031 UXILIARY TANK SAR VERSION (REF)
3G5338A10231 CENTRAL PANEL (REF)
INSTALL:
MS24693-S58 SCREW (TYP 4 PLCS)
3G2810A00551 WASHER (TYP 4 PLCS)
MS29513-273 O-RING (REF)
LATERAL ACCESS DOOR (REF)
NAS6603-1 BOLT (TYP 24 PLCS) (REF)
NAS1149D0316K WASHER (TYP 24 PLCS) (REF)
SECTION M-M
(REFER TO FIGURE 5)
509731 FOAM (REF)
4G5338A00131 LEFT PANEL (REF)
SECTION N-N
(REFER TO FIGURE 5)
REMOVE:
NAS6204-4 BOLT (TYP 8 PLCS)
NAS1149C0416R WASHER (TYP 8 PLCS)
503770-1 AUXILIARY CAP
120-055-2-8 ELECTRICAL BONDING
INSTALL:
508565-1 BONDING SPACER ASSY
3G2810V01031 AUXILIARY TANK SAR VERSION (REF)
NAS6204-10 BOLT (TYP 8 PLCS)
NAS1149D0432K WASHER (TYP 8 PLCS)
MS35333-40 WASHER (TYP 8 PLCS)
INSTALL:
AN525-10R6 SCREW
3G2810V00132 MAIN LEFT TANK (REF)
4G5338A00131 LEFT PANEL (REF)
3G2810V01031 UXILIARY TANK SAR VERSION (REF)
SECTION P-P
(REFER TO FIGURE 5)
3G5338A10231 CENTRAL PANEL (REF)
INSTALL:
AW001DSW010EQ STENCIL
INSTALL:
AW001DSD020EQ STENCIL
3G2810V01031 UXILIARY TANK SAR VERSION (REF)
INSTALL:
MS51957-41 SCREW (TYP 2 PLCS) (REF)
NAS1149DN832K WASHER (TYP 2 PLCS) (REF)
4G5338A00131 LEFT PANEL (REF)
3G2870A02352 PROTECTION PLATE (REF)
WHEN AUXILIARY TANK IS NOT INSTALLED ASSURE THAT THE CONNECTOR IS REMOVED
DO NOT REMOVE UNTILL TANK IS EMPTY
SECTION R-R
(REFER TO FIGURE 5)
DETAIL S
(REFER TO FIGURE 5)

Figure 6

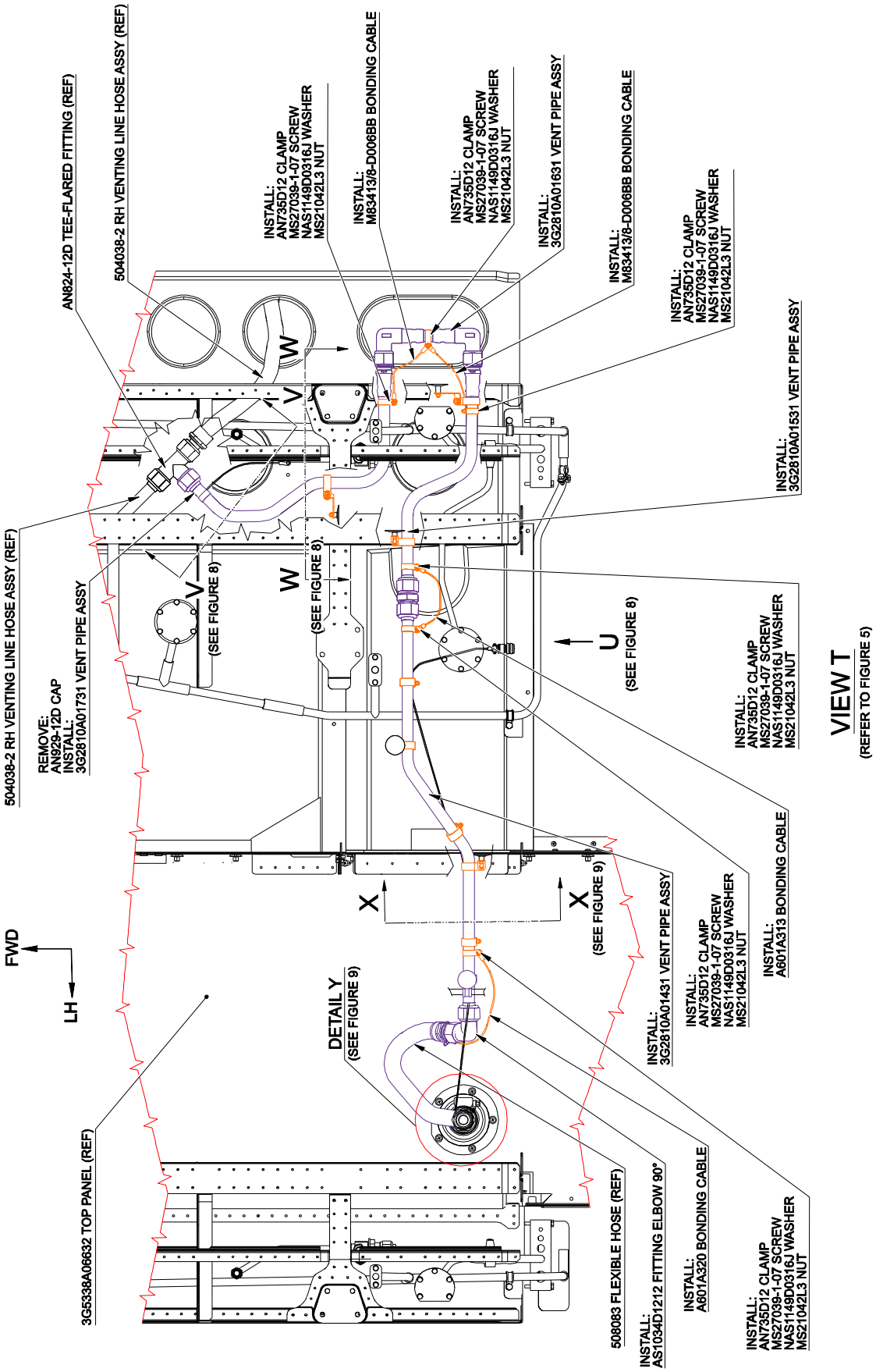

AN824-12D TEE-FLARED FITTING (REF)
504038-2 RH VENTING LINE HOSE ASSY (REF)
INSTALL:
AN735D12 CLAMP
MS27039-1-07 SCREW
NAS1149D0316J WASHER
MS21042L3 NUT
INSTALL:
M83413/8-D006BB BONDING CABLE
INSTALL:
AN735D12 CLAMP
MS27039-1-07 SCREW
NAS1149D0316J WASHER
MS21042L3 NUT
INSTALL:
3G2810A01631 VENT PIPE ASSY
INSTALL:
M83413/8-D006BB BONDING CABLE
INSTALL:
AN735D12 CLAMP
MS27039-1-07 SCREW
NAS1149D0316J WASHER
MS21042L3 NUT
INSTALL:
3G2810A01531 VENT PIPE ASSY
504038-2 RH VENTING LINE HOSE ASSY (REF)
REMOVE:
AN929-12D CAP
INSTALL:
3G2810A01731 VENT PIPE ASSY
V
(SEE FIGURE 8)
W
(SEE FIGURE 8)
U
(SEE FIGURE 8)
INSTALL:
AN735D12 CLAMP
MS27039-1-07 SCREW
NAS1149D0316J WASHER
MS21042L3 NUT
VIEW T
(REFER TO FIGURE 5)
FWD
LH
X
X
(SEE FIGURE 9)
DETAIL Y
(SEE FIGURE 9)
INSTALL:
3G2810A01431 VENT PIPE ASSY
INSTALL:
AN735D12 CLAMP
MS27039-1-07 SCREW
NAS1149D0316J WASHER
MS21042L3 NUT
INSTALL:
A601A313 BONDING CABLE
3G5338A06632 TOP PANEL (REF)
508083 FLEXIBLE HOSE (REF)
INSTALL:
AS1034D1212 FITTING ELBOW 90°
INSTALL:
A601A320 BONDING CABLE
INSTALL:
AN735D12 CLAMP
MS27039-1-07 SCREW
NAS1149D0316J WASHER
MS21042L3 NUT

Figure 7

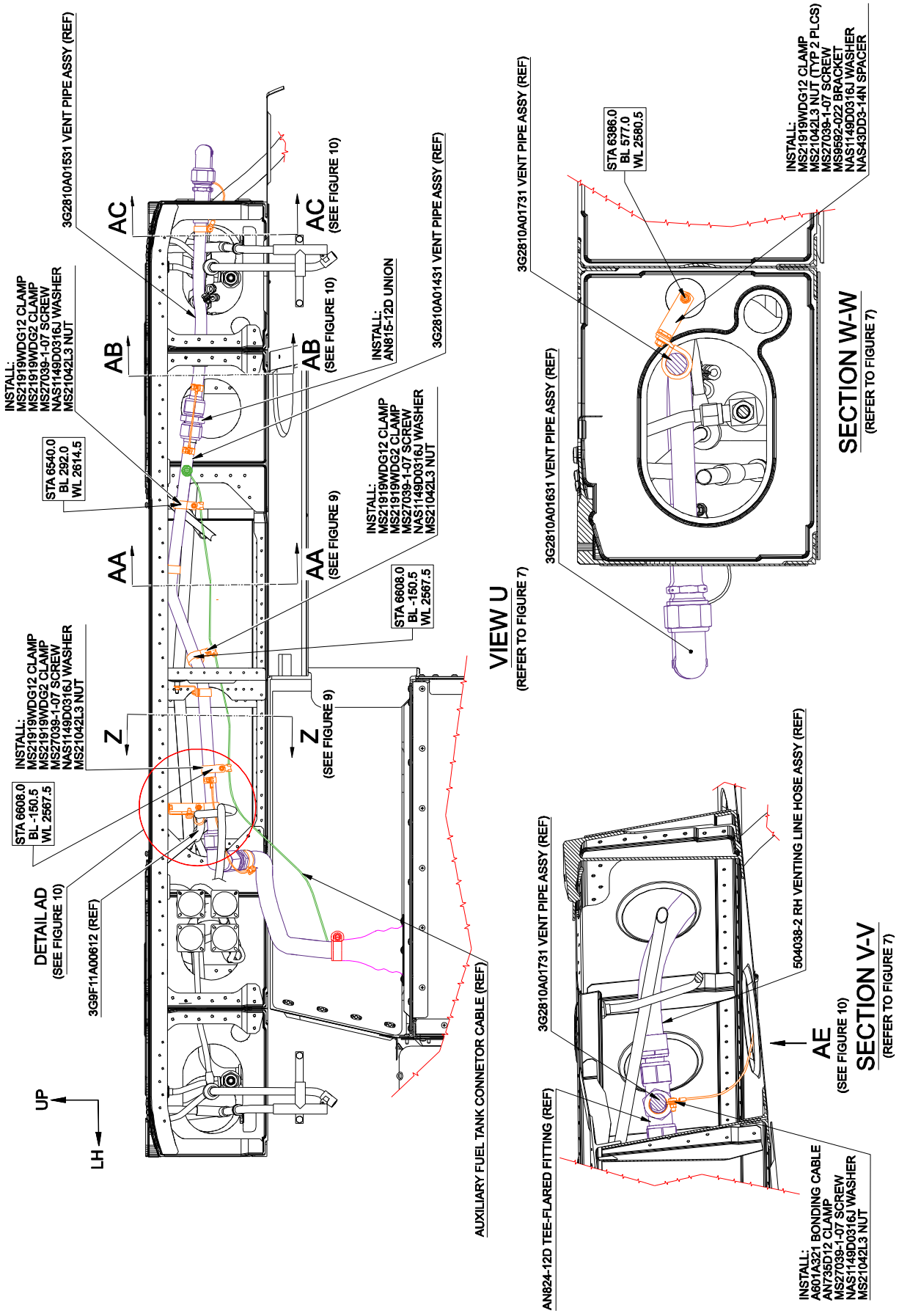

3G2810A01531 VENT PIPE ASSY (REF)
INSTALL:
MS21919WDG12 CLAMP
MS21919WDG2 CLAMP
MS27039-1-07 SCREW
NAS1149D0316J WASHER
MS21042L3 NUT
STA 6540.0
BL 292.0
WL 2614.5
AC
AB
AA
Z
AC (SEE FIGURE 10)
AB (SEE FIGURE 10)
AA (SEE FIGURE 9)
Z (SEE FIGURE 9)
INSTALL:
AN815-12D UNION
3G2810A01431 VENT PIPE ASSY (REF)
INSTALL:
MS21919WDG12 CLAMP
MS21919WDG2 CLAMP
MS27039-1-07 SCREW
NAS1149D0316J WASHER
MS21042L3 NUT
STA 6608.0
BL -150.5
WL 2567.5
INSTALL:
MS21919WDG12 CLAMP
MS21919WDG2 CLAMP
MS27039-1-07 SCREW
NAS1149D0316J WASHER
MS21042L3 NUT
STA 6608.0
BL -150.5
WL 2567.5
DETAIL AD
(SEE FIGURE 10)
3G9F11A00612 (REF)
AUXILIARY FUEL TANK CONNETOR CABLE (REF)
UP
LH
VIEW U
(REFER TO FIGURE 7)
3G2810A01731 VENT PIPE ASSY (REF)
3G2810A01631 VENT PIPE ASSY (REF)
STA 6386.0
BL 577.0
WL 2580.5
INSTALL:
MS21919WDG12 CLAMP
MS21042L3 NUT (TYP 2 PLCS)
MS27039-1-07 SCREW
MS9532-022 BRACKET
NAS1149D0316J WASHER
NAS43DD3-14N SPACER
SECTION W-W
(REFER TO FIGURE 7)
3G2810A01731 VENT PIPE ASSY (REF)
504038-2 RH VENTING LINE HOSE ASSY (REF)
AE
(SEE FIGURE 10)
SECTION V-V
(REFER TO FIGURE 7)
AN824-12D TEE-FLARED FITTING (REF)
INSTALL:
A601A321 BONDING CABLE
AN735D12 CLAMP
MS27039-1-07 SCREW
NAS1149D0316J WASHER
MS21042L3 NUT

Figure 8

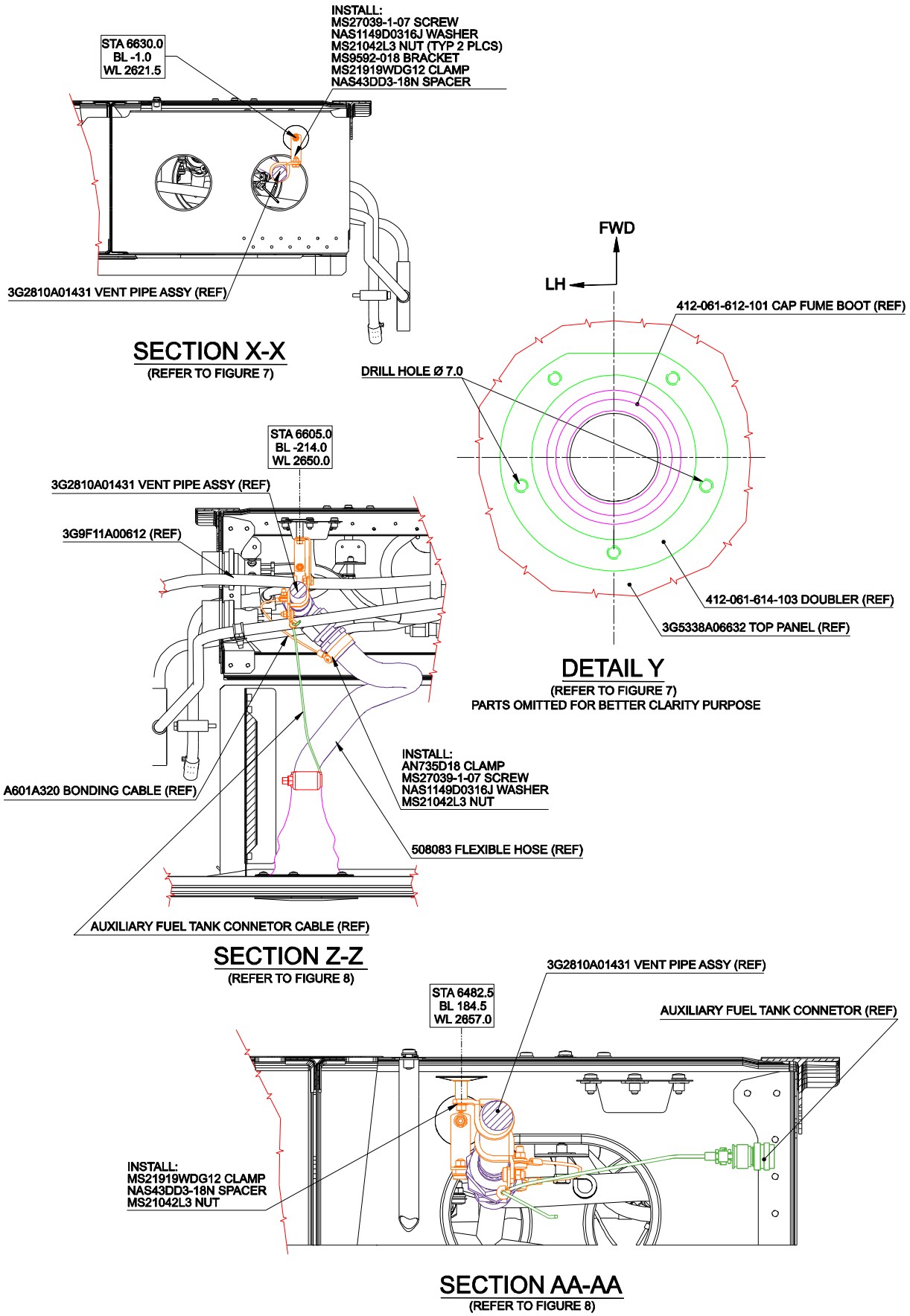

INSTALL:
MS27039-1-07 SCREW
NAS1149D0316J WASHER
MS21042L3 NUT (TYP 2 PLCS)
MS9592-018 BRACKET
MS21919WDG12 CLAMP
NAS43DD3-18N SPACER
STA 6630.0
BL -1.0
WL 2621.5
3G2810A01431 VENT PIPE ASSY (REF)
SECTION X-X
(REFER TO FIGURE 7)
FWD
LH
412-061-612-101 CAP FUME BOOT (REF)
DRILL HOLE Ø 7.0
412-061-614-103 DOUBLER (REF)
3G5338A06632 TOP PANEL (REF)
DETAIL Y
(REFER TO FIGURE 7)
PARTS OMITTED FOR BETTER CLARITY PURPOSE
STA 6605.0
BL -214.0
WL 2650.0
3G2810A01431 VENT PIPE ASSY (REF)
3G9F11A00612 (REF)
INSTALL:
AN735D18 CLAMP
MS27039-1-07 SCREW
NAS1149D0316J WASHER
MS21042L3 NUT
A601A320 BONDING CABLE (REF)
508083 FLEXIBLE HOSE (REF)
AUXILIARY FUEL TANK CONNETOR CABLE (REF)
SECTION Z-Z
(REFER TO FIGURE 8)
3G2810A01431 VENT PIPE ASSY (REF)
STA 6482.5
BL 184.5
WL 2657.0
AUXILIARY FUEL TANK CONNETOR (REF)
INSTALL:
MS21919WDG12 CLAMP
NAS43DD3-18N SPACER
MS21042L3 NUT
SECTION AA-AA
(REFER TO FIGURE 8)

Figure 9

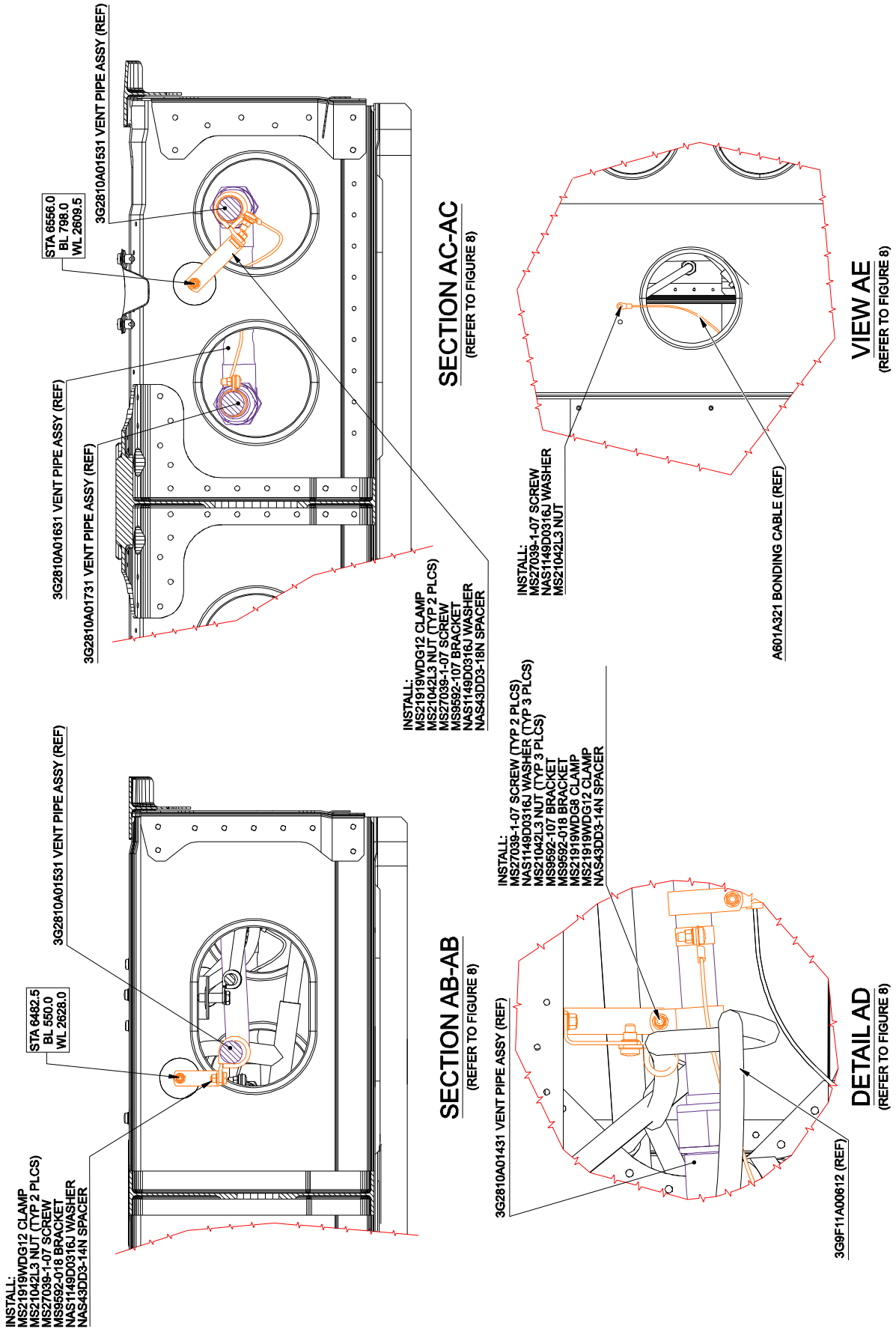
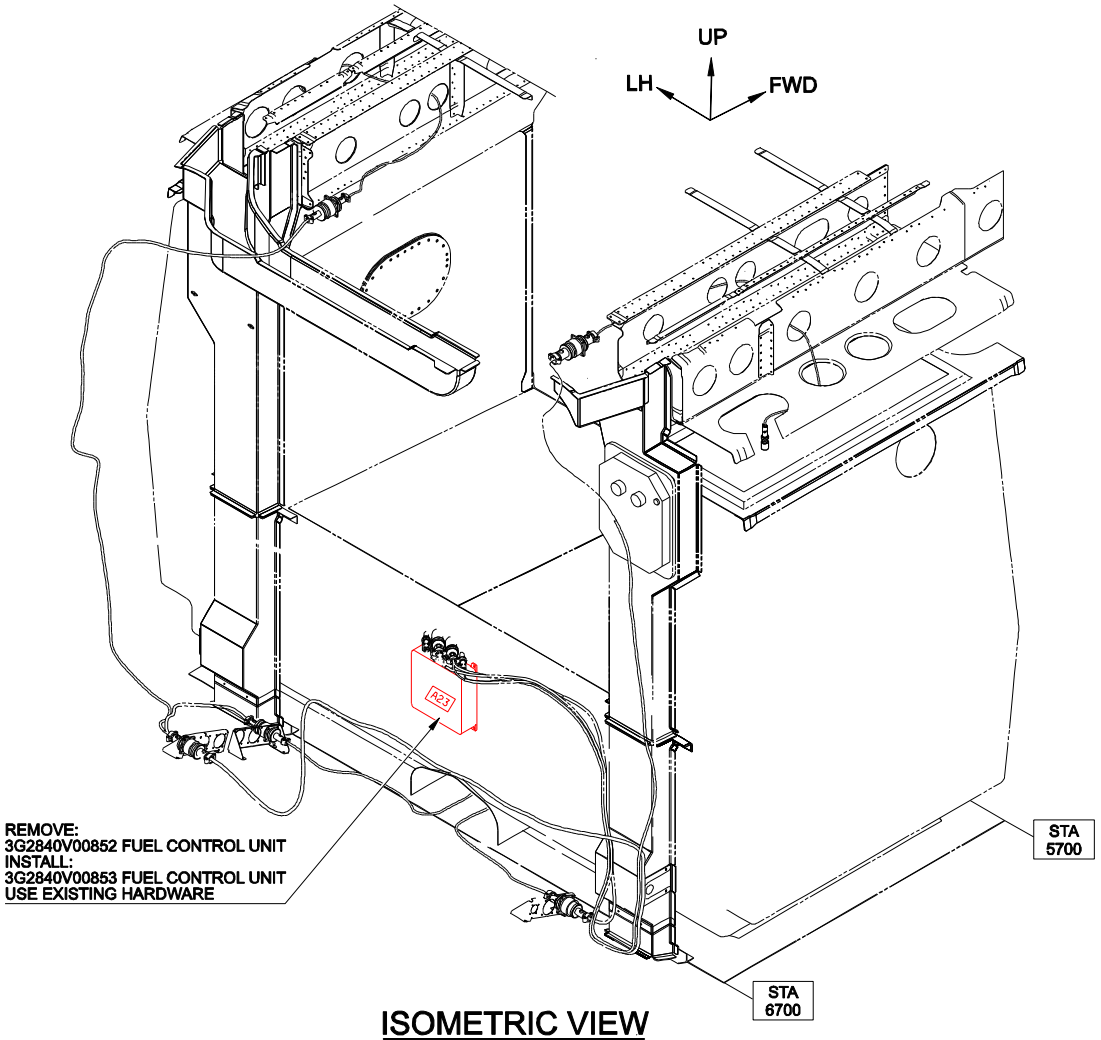

SECTION AC-AC
(REFER TO FIGURE 8)
3G2810A01531 VENT PIPE ASSY (REF)
STA 6556.0
BL 798.0
WL 2609.5
3G2810A01631 VENT PIPE ASSY (REF)
3G2810A01731 VENT PIPE ASSY (REF)
INSTALL:
MS21919WDG12 CLAMP
MS21042L3 NUT (TYP 2 PLCS)
MS27039-1-07 SCREW
MS9592-107 BRACKET
NAS1149D0316J WASHER
NAS43DD3-18N SPACER
VIEW AE
(REFER TO FIGURE 8)
INSTALL:
MS27039-1-07 SCREW
NAS1149D0316J WASHER
MS21042L3 NUT
A601A321 BONDING CABLE (REF)
SECTION AB-AB
(REFER TO FIGURE 8)
3G2810A01531 VENT PIPE ASSY (REF)
STA 6482.5
BL 550.0
WL 2628.0
INSTALL:
MS21919WDG12 CLAMP
MS21042L3 NUT (TYP 2 PLCS)
MS27039-1-07 SCREW
MS9592-018 BRACKET
NAS1149D0316J WASHER
NAS43DD3-14N SPACER
DETAIL AD
(REFER TO FIGURE 8)
INSTALL:
MS27039-1-07 SCREW (TYP 2 PLCS)
NAS1149D0316J WASHER (TYP 3 PLCS)
MS21042L3 NUT (TYP 3 PLCS)
MS9592-107 BRACKET
MS9592-018 BRACKET
MS21919WDG8 CLAMP
MS21919WDG12 CLAMP
NAS43DD3-14N SPACER
3G2810A01431 VENT PIPE ASSY (REF)
3G9F11A00612 (REF)

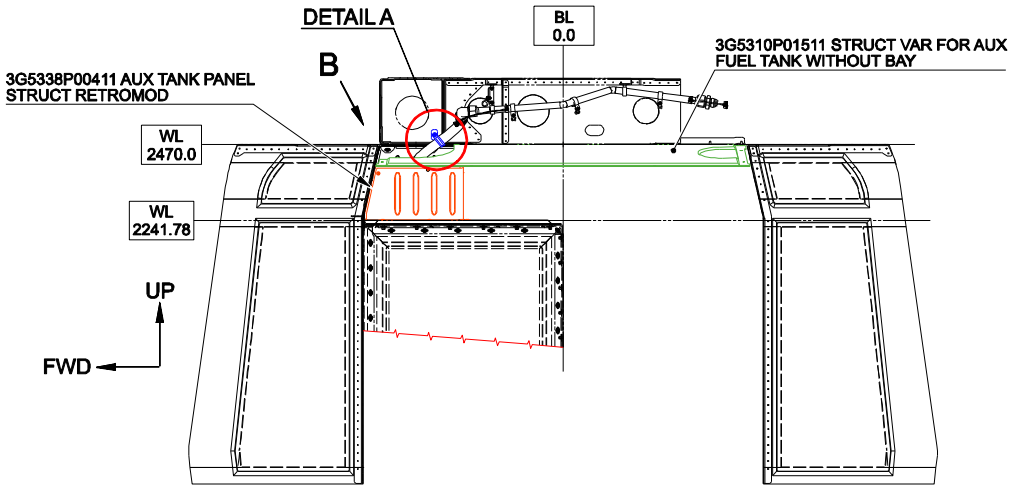
Figure 10



ISOMETRIC VIEW

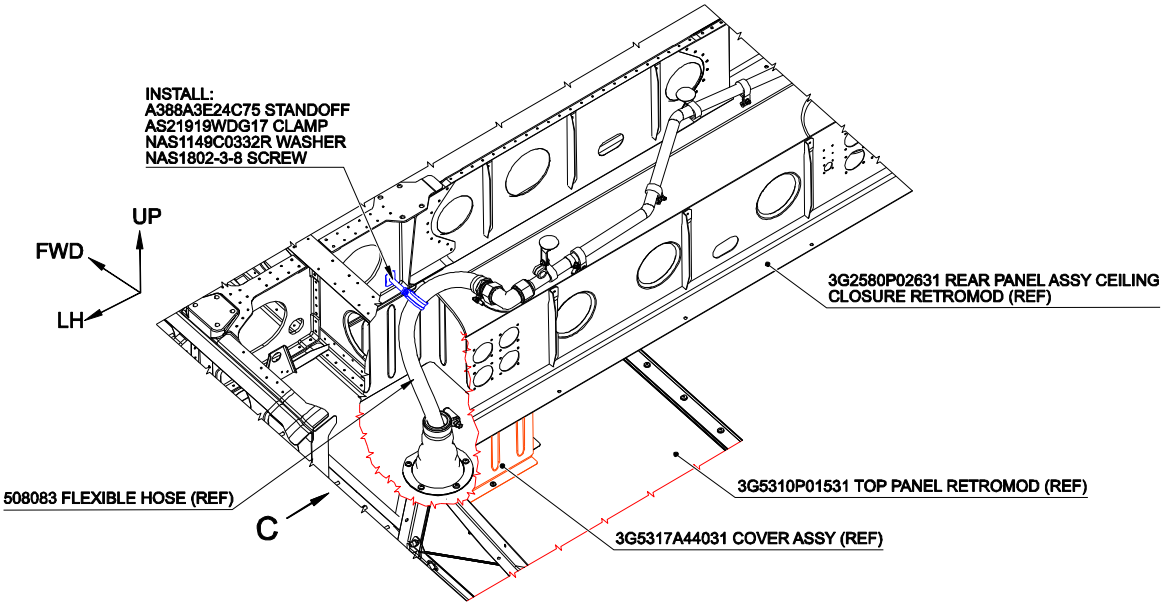
Figure 11

VAR FLEXIBLE HOSE INSTALLATION WITHOUT SECONDARY BAY
3G2810P00131

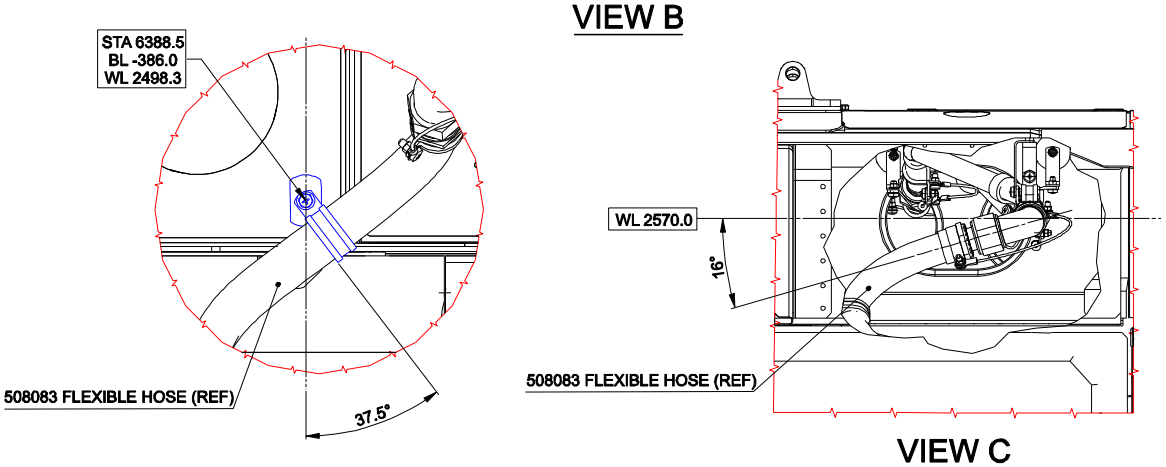


VIEW LOOKING FORWARD

STRUCTURE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE



VIEW B



DETAIL A

VIEW C

Figure 12

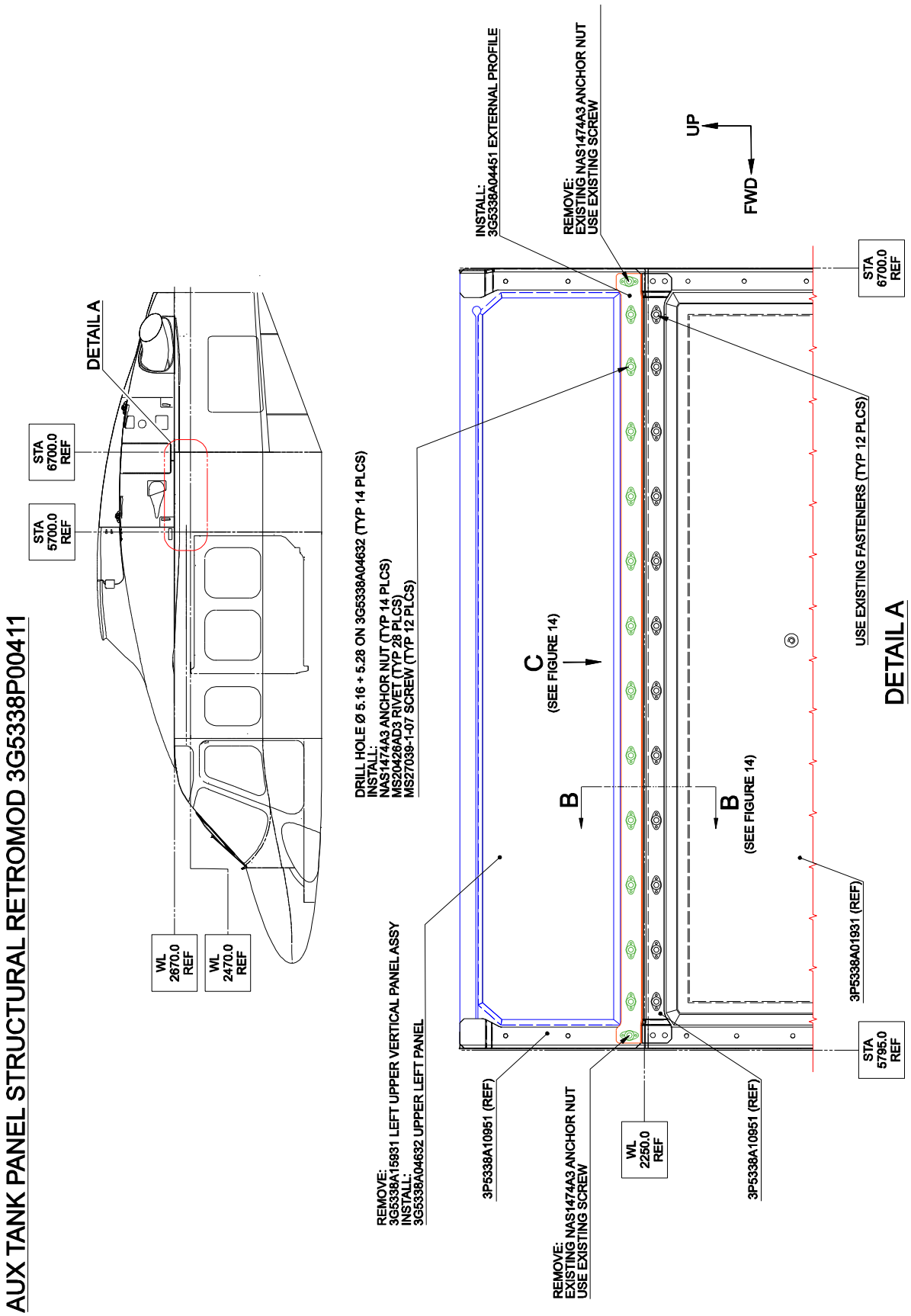

AUX TANK PANEL STRUCTURAL RETROMOD 3G5338P00411
DETAIL A
STA 6700.0 REF
STA 5700.0 REF
WL 2670.0 REF
WL 2470.0 REF
DRILL HOLE Ø 5.16 + 5.28 ON 3G5338A04632 (TYP 14 PLCS)
INSTALL:
NAS1474A3 ANCHOR NUT (TYP 14 PLCS)
MS20426AD3 RIVET (TYP 28 PLCS)
MS27039-1-07 SCREW (TYP 12 PLCS)
REMOVE:
3G5338A15931 LEFT UPPER VERTICAL PANEL ASSY
INSTALL:
3G5338A04632 UPPER LEFT PANEL
INSTALL:
3G5338A04451 EXTERNAL PROFILE
REMOVE:
EXISTING NAS1474A3 ANCHOR NUT
USE EXISTING SCREW
UP
FWD
C
(SEE FIGURE 14)
B
B
(SEE FIGURE 14)
USE EXISTING FASTENERS (TYP 12 PLCS)
DETAIL A
3P5338A01931 (REF)
3P5338A10951 (REF)
REMOVE:
EXISTING NAS1474A3 ANCHOR NUT
USE EXISTING SCREW
WL 2250.0 REF
3P5338A10951 (REF)
STA 6700.0 REF
STA 5795.0 REF

Figure 13

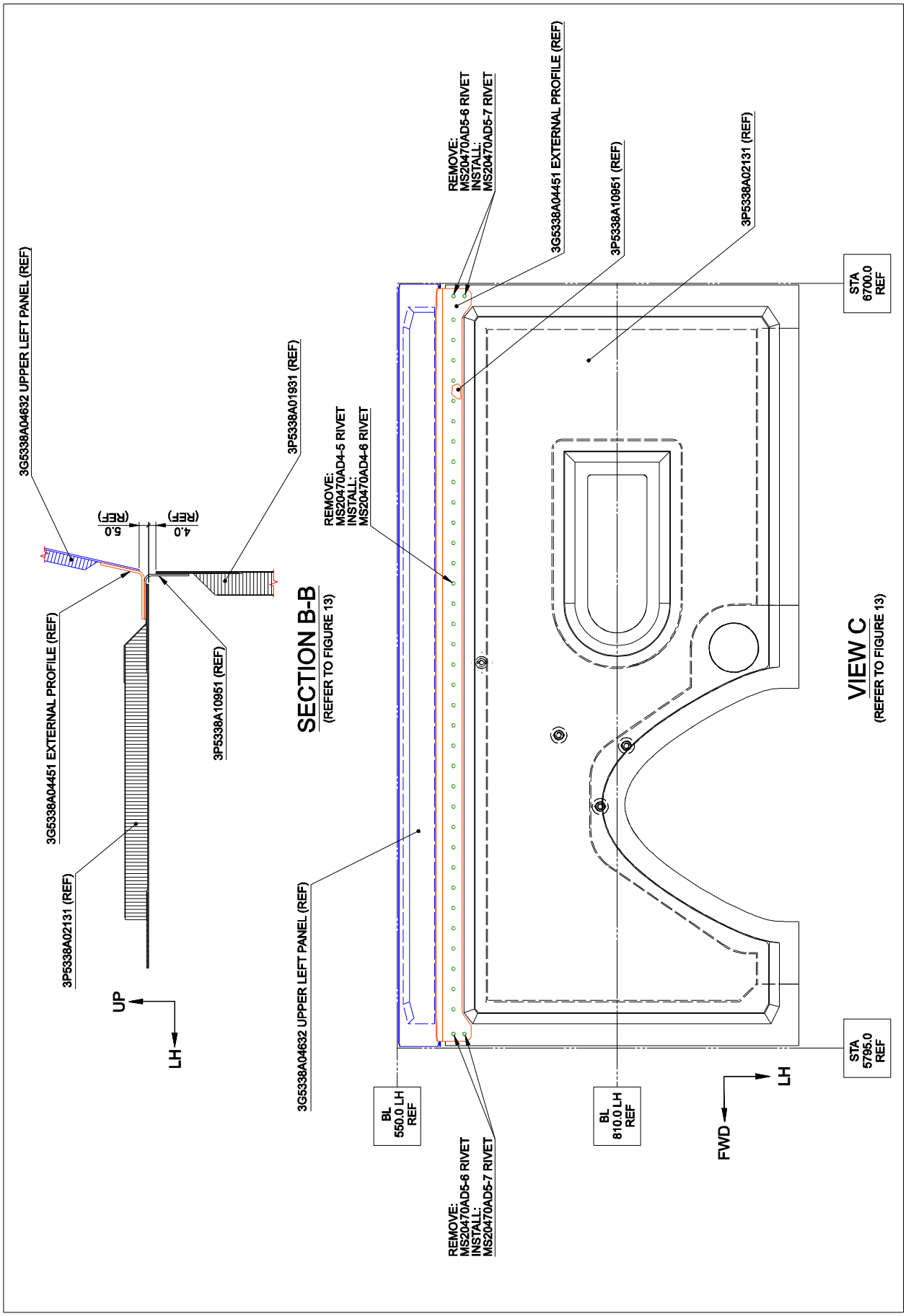

3G5338A04632 UPPER LEFT PANEL (REF)
3P5338A01931 (REF)
5.0 (REF)
4.0 (REF)
3G5338A04451 EXTERNAL PROFILE (REF)
3P5338A10951 (REF)
3P5338A02131 (REF)
UP
LH
SECTION B-B
(REFER TO FIGURE 13)
REMOVE:
MS20470AD4-5 RIVET
INSTALL:
MS20470AD4-6 RIVET
REMOVE:
MS20470AD5-6 RIVET
INSTALL:
MS20470AD5-7 RIVET
3G5338A04451 EXTERNAL PROFILE (REF)
3P5338A10951 (REF)
3P5338A02131 (REF)
STA 6700.0 REF
STA 5795.0 REF
VIEW C
(REFER TO FIGURE 13)
3G5338A04632 UPPER LEFT PANEL (REF)
BL 550.0 LH REF
BL 810.0 LH REF
REMOVE:
MS20470AD5-6 RIVET
INSTALL:
MS20470AD5-7 RIVET
FWD
LH

Figure 14

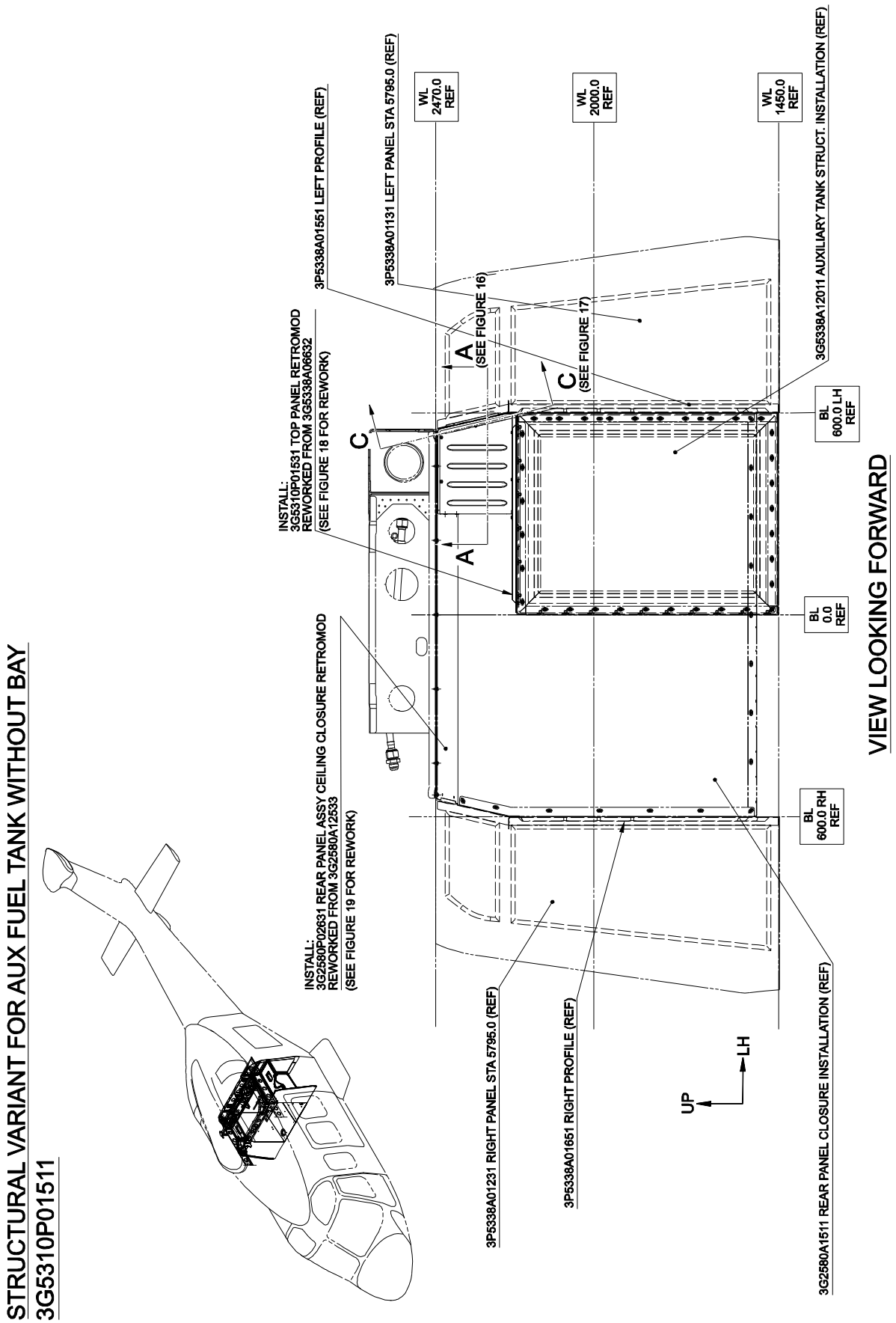
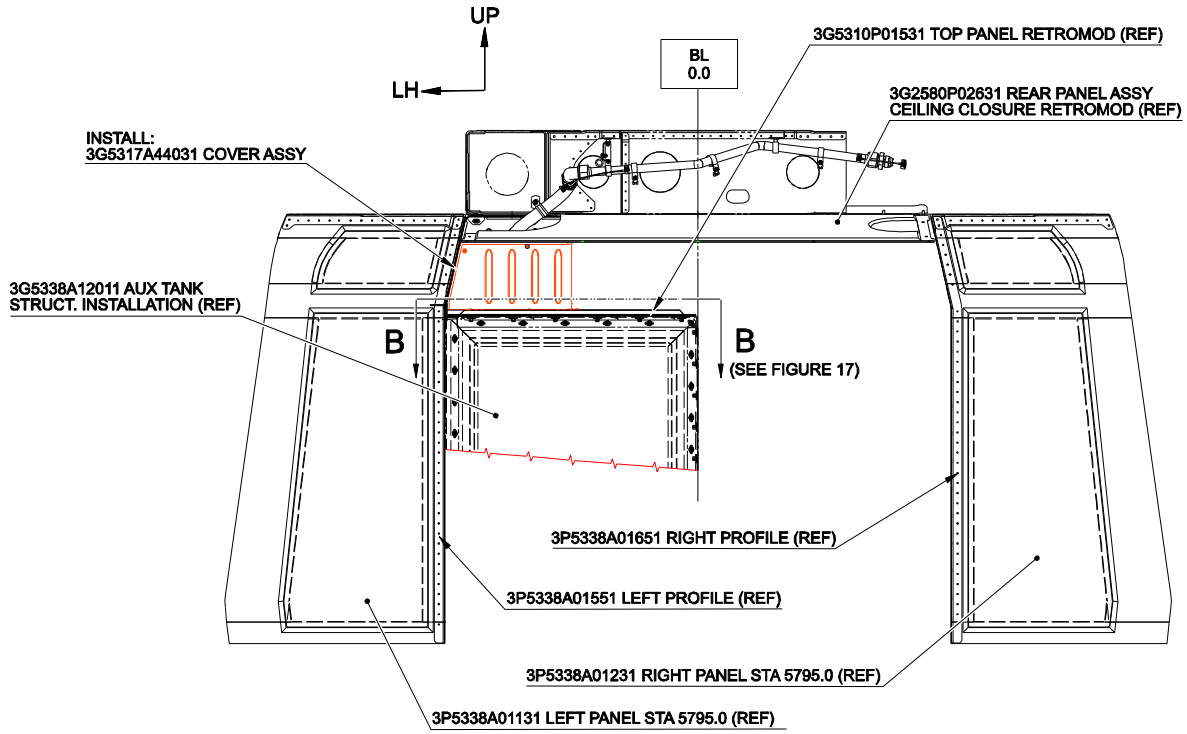
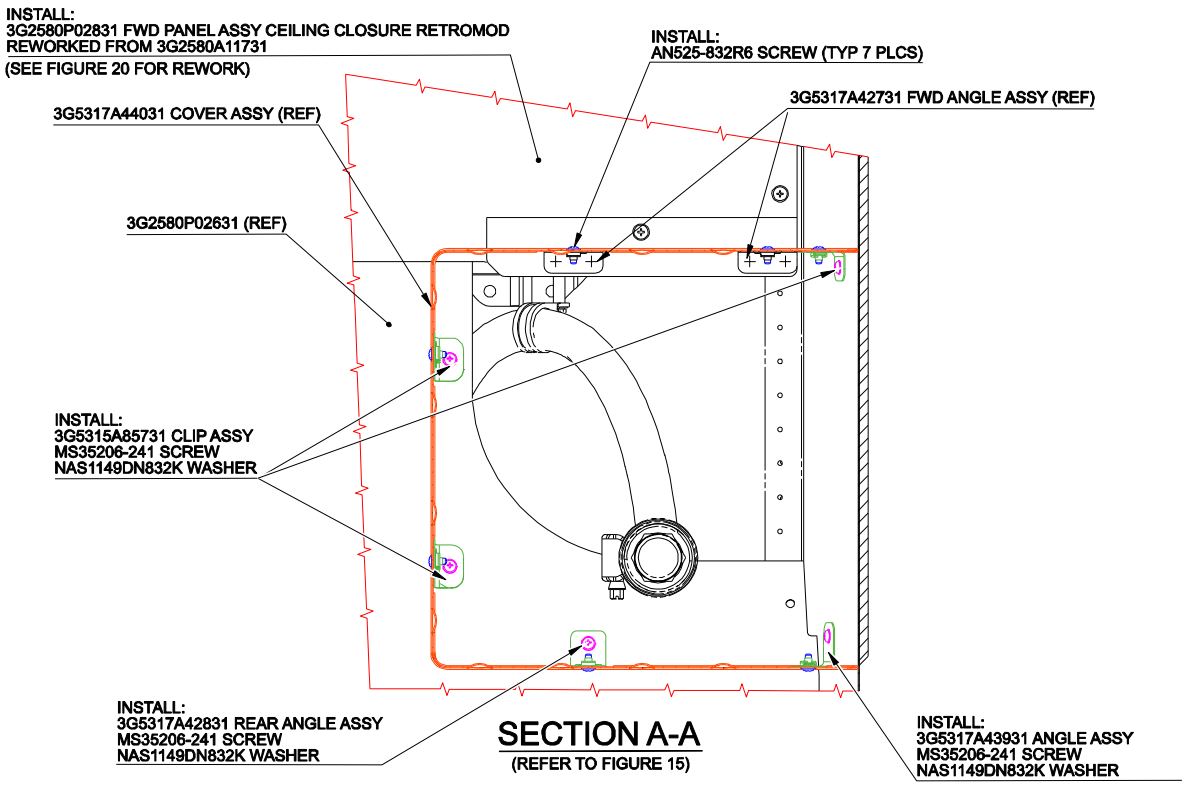

STRUCTURAL VARIANT FOR AUX FUEL TANK WITHOUT BAY
3G5310P01511
VIEW LOOKING FORWARD
3P5338A01551 LEFT PROFILE (REF)
3P5338A01131 LEFT PANEL STA 5795.0 (REF)
WL 2470.0 REF
WL 2000.0 REF
WL 1450.0 REF
A (SEE FIGURE 16)
C (SEE FIGURE 17)
3G5338A12011 AUXILIARY TANK STRUCT. INSTALLATION (REF)
INSTALL: 3G5310P01531 TOP PANEL RETROMOD REWORKED FROM 3G5338A06632 (SEE FIGURE 18 FOR REWORK)
BL 600.0 LH REF
BL 0.0 REF
BL 600.0 RH REF
INSTALL: 3G2580P02631 REAR PANEL ASSY CEILING CLOSURE RETROMOD REWORKED FROM 3G2580A12533 (SEE FIGURE 19 FOR REWORK)
3P5338A01231 RIGHT PANEL STA 5795.0 (REF)
3P5338A01651 RIGHT PROFILE (REF)
3G2580A1511 REAR PANEL CLOSURE INSTALLATION (REF)
UP
LH

Figure 15

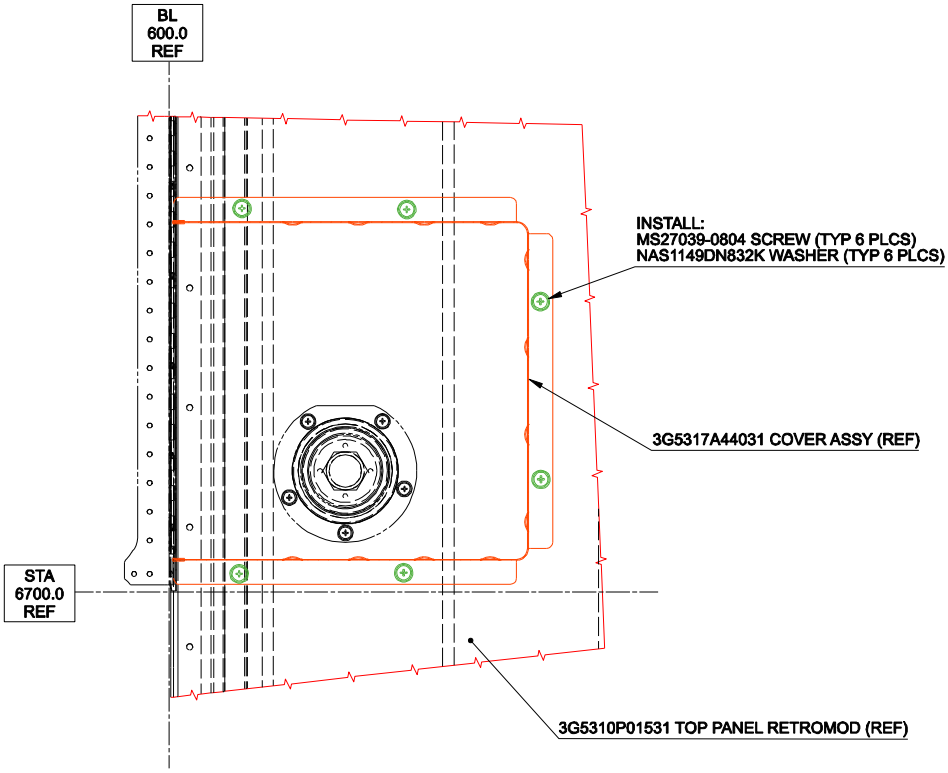


VIEW LOOKING AFTER

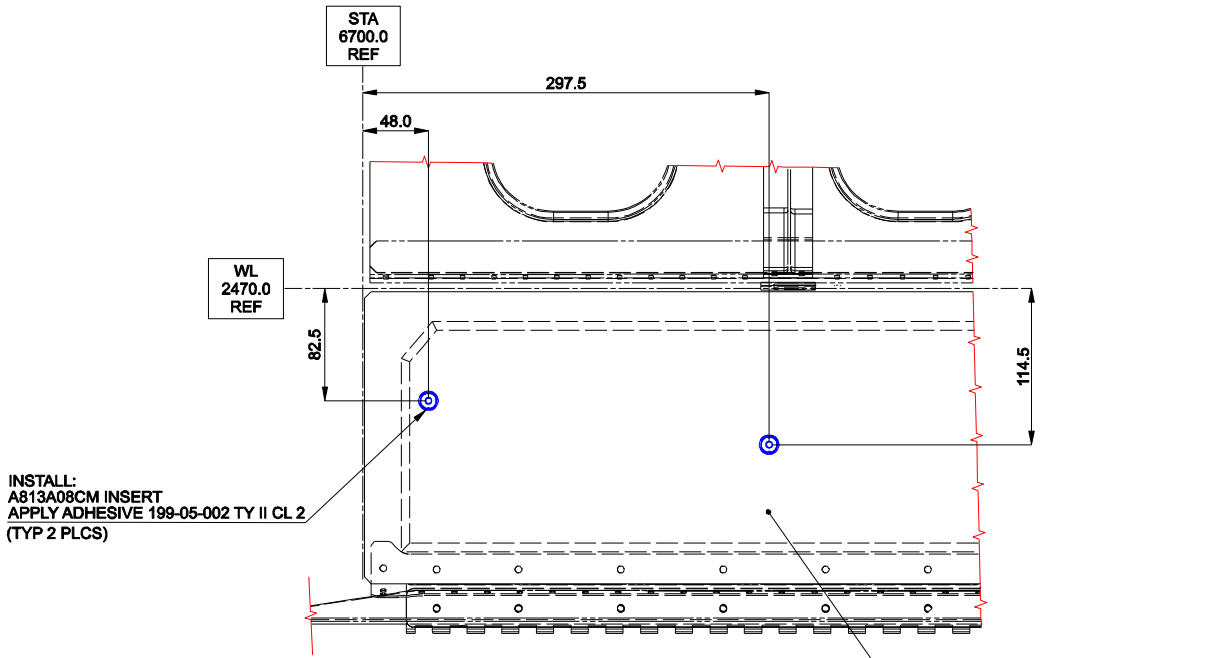


SECTION A-A
(REFER TO FIGURE 15)

Figure 16

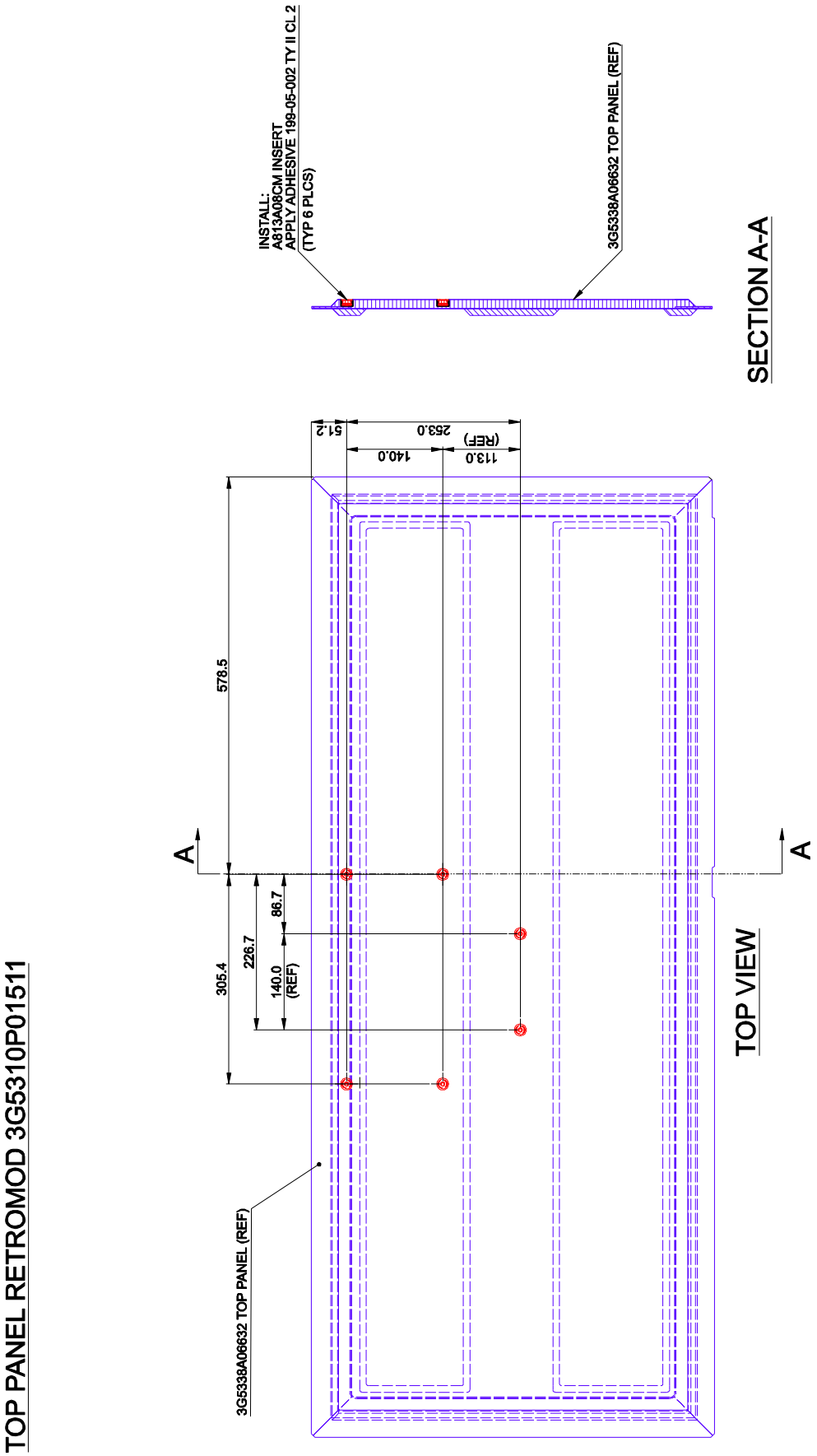


SECTION B-B
(REFER TO FIGURE 16)



SECTION C-C
(REFER TO FIGURE 15)

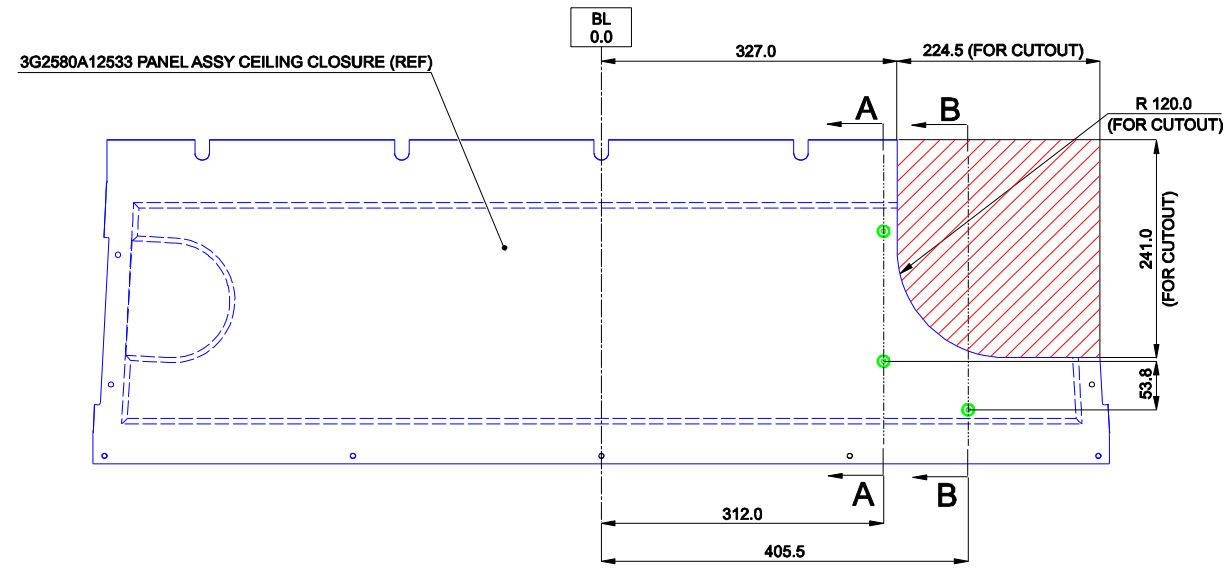
Figure 17

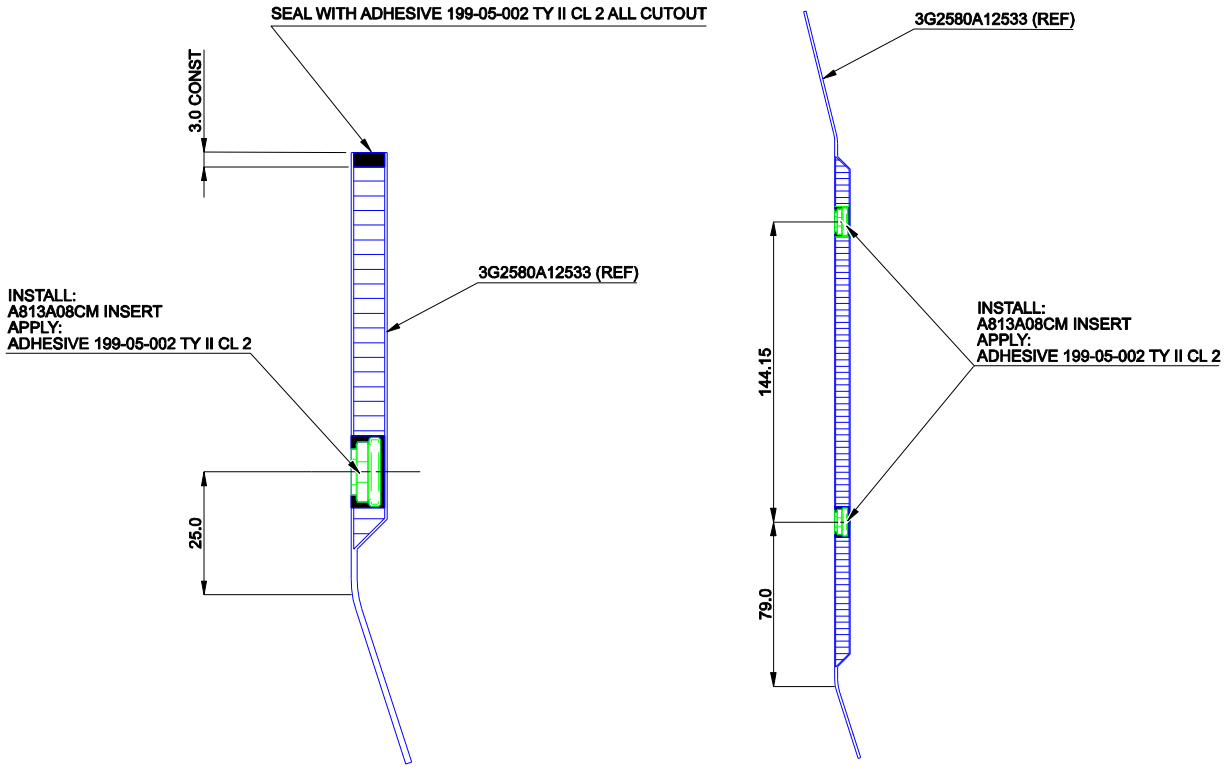


TOP PANEL RETROMOD 3G5310P01511

Figure 18

REAR PANEL ASSY CEILING CLOSURE RETROMOD
3G2580P02631



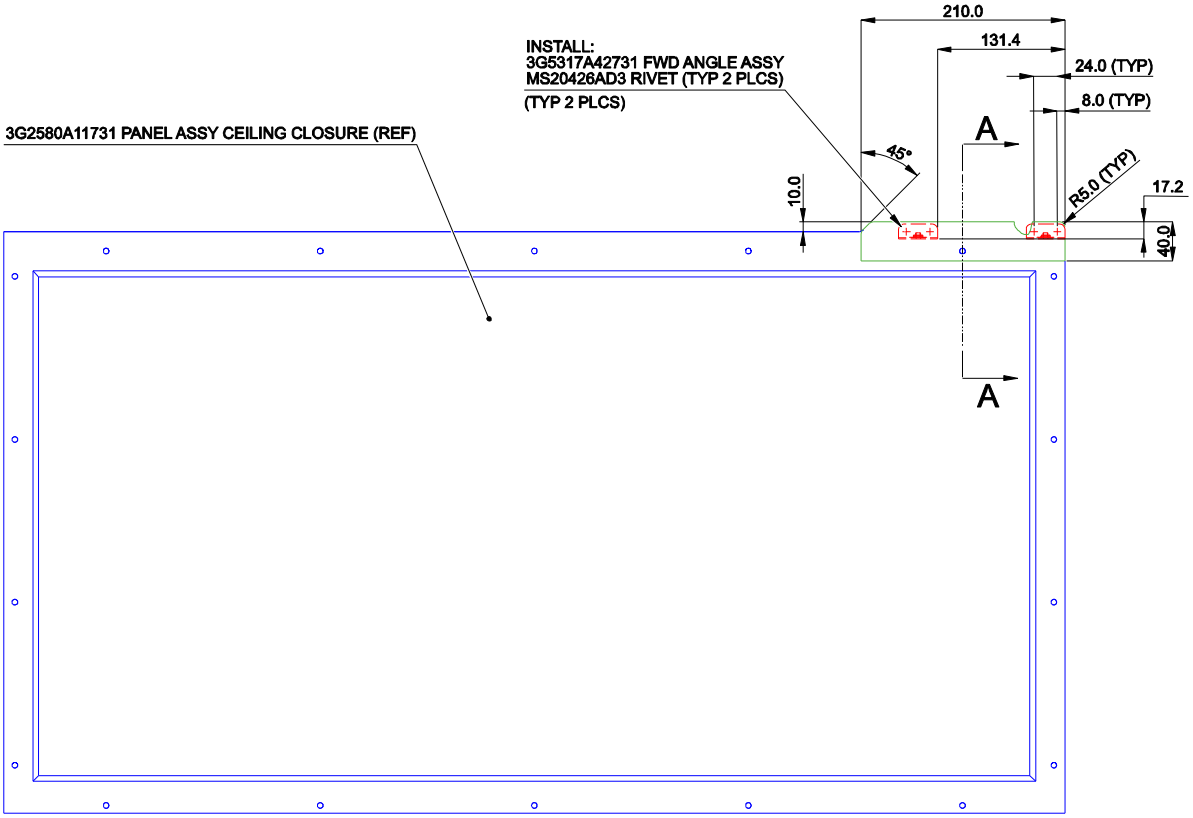


SECTION B-B

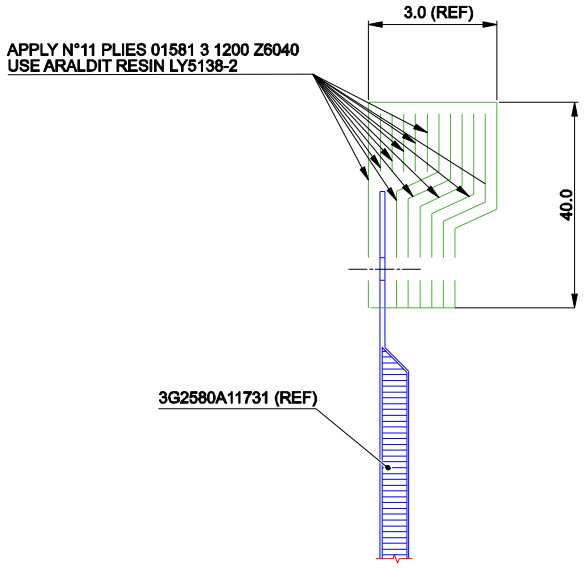
SECTION A-A

Figure 19

FWD PANEL ASSY CEILING CLOSURE RETROMOD
3G2580P02831



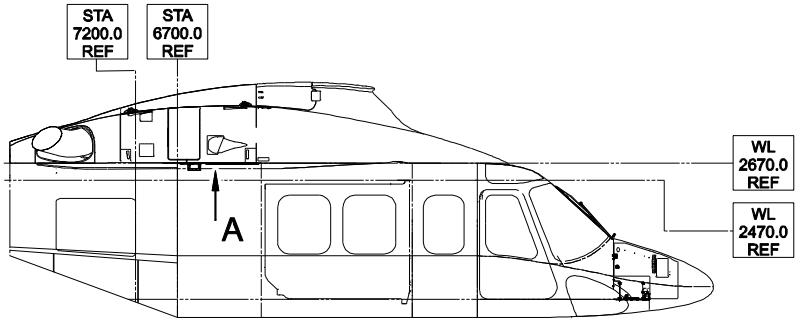
BOTTOM VIEW



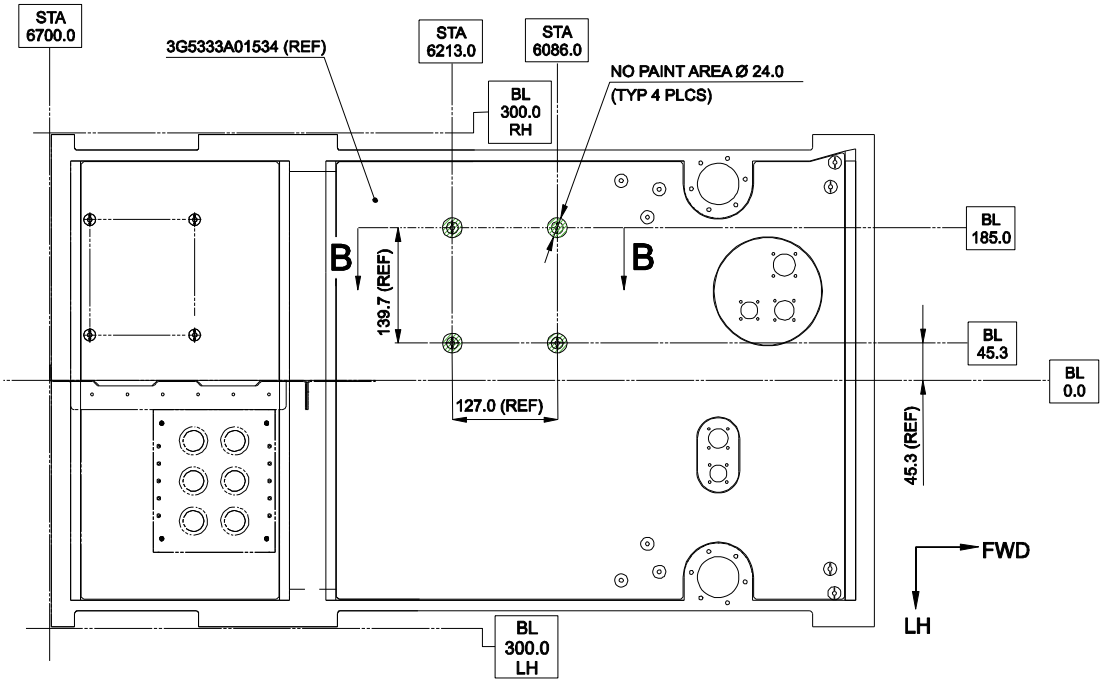
SECTION A-A

Figure 20

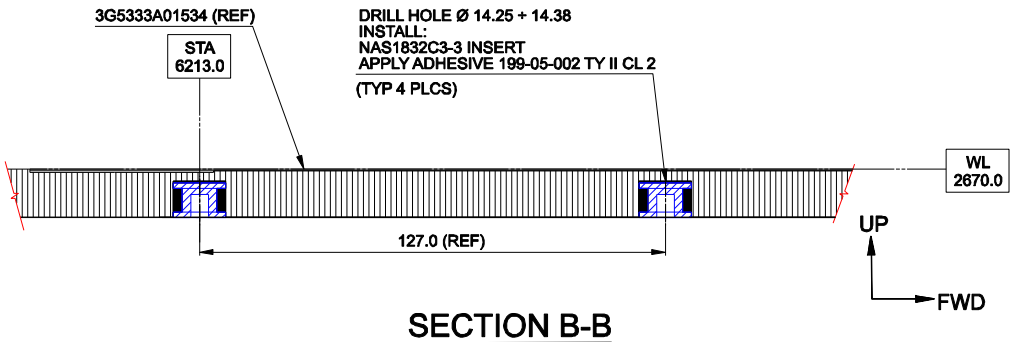
ALTERNATIVE STRUCTURAL PROVISION BATTERY PARALLEL 3G5306P55611



VIEW LOOKING INBOARD RIGHT SIDE



VIEW A



SECTION B-B

Figure 21

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.