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

AgustaWestland Products

SERVICE BULLETIN

OPTIONAL

N° 139-747

DATE: August 7, 2023

REV. : /

TITLE

ATA 53 - CABIN TIE DOWN (AMMO BOX) INSTALLATION

REVISION LOG

First Issue

1. PLANNING INFORMATION

A. EFFECTIVITY

All AW139 helicopters from S/N 41801 to S/N 41806.

B. COMPLIANCE

At Customer's option.

C. CONCURRENT REQUIREMENTS

N.A.

D. REASON

This Service Bulletin is issued in order to provide the necessary instruction on how to perform the installation of the kit mission equipment stowage provisions P/N 4G5331F00111.

LH issued this SB for the following reason:

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

E. DESCRIPTION

This Service Bulletin gives instructions to perform:

- the hoist structural provision P/N 3G5310A59812, which consists in the instruction to perform structural provision at STA 3900 to allow the installation of the support assy P/N 3G5316A47931 and the bracket assy P/N 3G5316A48531;
- the mission equipment stowage structural provision P/N 3G5311A69311, which consists in the instruction to install four supports (two on LH/RH frame STA 3120 and the other two on LH/RH frame STA 3900).

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 eighty (80) 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)	0.64	
	ARM (mm)	**MOMENT (kgmm)**
LONGITUDINAL BALANCE	3537	2263.68
LATERAL BALANCE	228	145.92

I. REFERENCES

I.1 PUBLICATIONS

Following Data Modules refer to AMP:

DATA MODULE		**DESCRIPTION**	**PART**
DM01	39-A-00-20-00-00A-120A-A	Helicopter on ground for a safe maintenance.	-
DM02	39-A-06-41-00-00A-010A-A	Access door panel remove procedure.	-

I.2 ACRONYMS & ABBREVIATIONS

AMDI	Aircraft Material Data Information
AMP	Aircraft Maintenance Publication
ATA	Air Transport Association
DM	Data Module
DOA	Design Organization Approval
EASA	European Aviation Safety Agency
IPD	Illustrated Parts Data Publication

ITEP	Illustrated Tools and Equipment Publication
LH	Leonardo Helicopters
MMH	Maintenance Man Hours
N.A.	Not Applicable
P/N	Part Number
S/N	Serial Number

I.3 ANNEX

N.A.

J. PUBLICATIONS AFFECTED

N.A.

K. SOFTWARE ACCOMPLISHMENT SUMMARY

N.A.

2. MATERIAL INFORMATION

A. REQUIRED MATERIALS

A.1 PARTS

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
1	**4G5331F00111**		**KIT MISSION EQUIPMENT STOWAGE PROVISIONS**	**REF**	.		-
2	**3G2591P02811**		**HOIST PENDANT VARIANT**	**REF**	..		-
3	**3G5310A59812**		**HOIST STRUCTURAL PROVISION**	**REF**	...		-
4	3G5316A47931		Support Assy	REF	....		-
5	3G5316A48531		Bracket Assy	REF	....		-
6	3G5316A48751		Shim	REF	....		-
7	MS27039-0806		Screw	REF	....		-
8	NAS1149DN832J		Washer	REF	....		-
9	NAS9301BNS-4-04	NAS9301B-4-04	Rivet	4	....		139-747L1
10	NAS9301BNS-4-03	CR3214-4-3	Rivet	2	....		139-747L1
11	**3G5310P31011**		**HOIST PENDANT STRUCTURAL RELOCATION VARIANT**	**REF**	..		-
12	**3G5311A69311**		**MISSION EQUIPMENT STOWAGE STRUCT. PROV.**	**REF**	..		-
13	3G5318A70051	3G5318A70051M01	Support RH	1	...		139-747L1
14	3G5318A70151		Support	2	...		139-747L1
15	3G5318A70631		Doubler assy LH	1	...		139-747L1
16	3G5318A70751	3G5318A70751M01	Support LH	1	...		139-747L1
17	3G5318A70851		Shim	2	...		139-747L1
18	3G5340A01551		Bush	4	...		139-747L1
19	HL20PB-5-4		Pin-rivet	6	...		139-747L1
20	HL86PBW-5	HL86PBW5	Pin-rivet collar	6	...		139-747L1
21	MS20426AD4-3		Rivet	0.1 kg	...		139-747L1
22	MS20470AD4-3		Rivet	0.1 kg	...		139-747L1
23	MS21225-4		Nut	4	...		139-747L1
24	MS24665-136		Cotter pin	4	...		139-747L1
25	MS90354-0502	MS90354S0502	Rivet	6	...		139-747L1
26	MS90354-0602	MS90354S0602	Rivet	2	...		139-747L1
27	NAS1149D0332J		Washer	1	...		139-747L1
28	NAS1149C0432B	NAS1149F0432P	Washer	8	...		139-747L1
29	NAS1802-3-11		Screw	6	...		139-747L1
30	NAS1802-3-9		Screw	1	...		139-747L1
31	NAS620C10L		Washer	6	...		139-747L1
32	NAS6604D7		Bolt	4	...		139-747L1
33	A407A3C2P		Nut plate	1	...		139-747L1
34	HL20PB5-3		Pin-rivet	3	...		139-747L1
35	NAS1097AD4		Rivet	1	...		139-747L1
36	**3G5318A69931**		**DOUBLER ASSY RH**	**REF**	...		-
37	3G5318A69951	3G5318A69951M01	Doubler RH	1	....		139-747L1
38	MS21075L3		Anchor nut	5	....		139-747L1
39	MS20426AD3-4		Rivet	0.1 kg	....		139-747L1
40	**3G5318A70631**		**DOUBLER ASSY LH**	**REF**	...		-
41	3G5318A70651	3G5318A70651M01	Doubler LH	1	....		139-747L1
42	MS21075L3		Anchor nut	2	....		139-747L1
43	MS21073L3		Nut	2	....		139-747L1
44	MS20426AD3-4		Rivet	0.1 kg	....		139-747L1

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
45	AW001CL002B-X1		Standoff	1	.		139-747L1

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

A.2 CONSUMABLES

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

#	SPEC./LHD CODE NUMBER	DESCRIPTION	Q.TY	NOTE	PART
46	A236A02AB	Non-metallic channel	AR	(1)	-
47	199-05-002 Type I, Class II	Adhesive EA9309.3NA AERO (C021)	AR	(1)	-

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

A.3 LOGISTIC MATRIX

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

LOGISTIC P/N	Q.TY (PER HELO)	NOTE	PART
139-747L1	1	-	-

NOTE

(1) Item to be procured as local supplied.

B. SPECIAL TOOLS

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

C. INDUSTRY SUPPORT INFORMATION

Customization.

3. ACCOMPLISHMENT INSTRUCTIONS

GENERAL NOTES

a) Place an identification tag on all components that are re-usable, including the attaching hardware that has been removed to gain access to the modification area and adequately protect them until their later re-use.
b) 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) Let adhesive cure at room temperature for at least 24 hours unless otherwise specified.
e) Exposed thread surface and nut must be protected using a layer of tectyl according to MIL-C-16173 grade I.
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 Figures 1 thru 9, remove all external panels, internal panels and internal liners as required to gain access to the area affected by the installation of the Kit Mission Equipment Stowage Provisions P/N 4G5331F00111.

NOTE

If necessary, while relocating the pendant, to avoid a tension in the cable, it is allowed to move up the relative standoff existing standoff of about 70÷80 mm.

3. With reference to Figures 1 thru 3, perform the Hoist Pendant Variant P/N 3G2591P02811 as described in the following procedure:
   3.1 With reference to Figure 1, remove all the components indicated installed on the bracket assy. Retain all components for later reuse.
   3.2 With reference to Figure 2 and 3, remove the hoist structural provision P/N 3G5310A59812 already installed on the helicopter as described in the

following procedure:

3.2.1 With reference to Figure 3, remove the bracket assy P/N 3G5316A48531 with n°4 screws P/N MS27039-0806 and n°4 washers P/N NAS1149DN832J from the support assy P/N 3G5316A47931. Retain all the components for later reuse.

3.2.2 With refence to Figure 3, remove the support assy P/N 3G5316A47931, n°2 shims P/N 3G5316A48751 and n°4 rivets P/N NAS9301BNS-4-04 from the frame 3900 RH P/N 3P5337A10453 and the door frame RH P/N 3P5330A01431. Retain the support assy and n°2 shims for later reuse.

NOTE

Instead of P/N NAS9301BNS-4-03 and P/N NAS9303BNS-4-3 it is possible to use P/N CR3213-4-03 and P/N CR3214-4-3.

3.2.3 With reference to Figure 3 Detail A, install n°2 rivets P/N NAS9301BNS-4-03 and n°2 rivets P/N NAS9303BNS-4-03 in order to plug the existing holes in the frame.

3.3 With reference to Figures 2 and 3, perform the hoist pendant structural relocation variant P/N 3G5310P31011, in order to relocate the Hoist Structural Provision P/N 3G5310A59812 already installed on the helicopter, as described in the following procedure:

NOTE

The support assy P/N 3G5316A47931 must be positioned as close as possible to the dimension shown, maintaining a minimum distance of 10mm between its holes centeres and the center of the rivets installed on the frame.

3.3.1 With reference to Figure 2 Detail A2 and Section C-C, temporarily locate the support assy P/N 3G5316A47931 on the frame 3900 RH P/N 3P5337A10453 and the door frame RH P/N 3P5330A01431 in accordance with the dimensions shown and countermark n°4 hole-positions.

3.3.2 With reference to Figure 2 Detail A2 and Section C-C, drill n°4 holes thru the frame 3900 RH P/N 3P5337A10453 and the door frame RH P/N 3P5330A01431 in the previously countermarked positions.

NOTE

Prepare and deprotect both sides of the shims and the frame surface.

3.3.3 With reference to Figure 2 Detail A2 and Section C-C, reinstall the support assy P/N 3G5316A47931 and n°2 shims P/N 3G5316A48751 (one upper and one lower) on the frame 3900 RH P/N 3P5337A10453 and the door frame RH P/N 3P5330A01431 by means of n°4 rivets P/N NAS9301BNS-4-04.

3.3.4 With reference to Figure 2 Detail A1, reinstall the bracket assy P/N 3G5316A48531 on the support assy P/N 3G5316A47931 by means of n°4 screws P/N MS27039-0806 and n°4 washers P/N NAS1149DN832J.

NOTE

Skip steps 3.3.5 and 3.3.6 if the cut-out is already present.

3.3.5 With reference to Figure 2 Section B-B, perform the cut-out indicated on the cover P/N 3G5280A19751 in accordance with the dimensions shown.

3.3.6 With reference to Figure 2 Section B-B, install the non-metallic channel P/N A236A02AB all around the cut-out previously performed.

3.4 With reference to Figure 1 View A, re-install all the components indicated on the bracket assy.

4. With reference to Figures 4 thru 7, perform the Mission Equipment Stowage Structural Provision P/N 3G5311A69311 as described in the following procedure:

4.1 With reference to Figure 4 Detail C, remove n°4 existing rivets from the framing angle LH P/N 3G5330A47351 and the frame STA 3900 P/N 3P5337A10455.

4.2 With reference to Figure 4 Detail C, enlarge n°4 existing holes up to Ø4.17÷4.24 thru the framing angle LH P/N 3G5330A47351 and the frame STA 3900 P/N 3P5337A10455 in accordance with the support P/N 3G5318A70151.

4.3 Repeat steps from 4.1 to 4.2 for the frame STA 3900 RH P/N 3P5335A10455 on the RH side.

NOTE

With reference to steps 4.4 and 4.5, the rivet P/N MS90354-0502 and the rivet P/N MS90354-0602 can be replaced by rivet P/N MS90354-0505 and the rivet P/N MS90354-0605.

4.4 With reference to Figure 4 Detail C and Section D-D, install the support P/N 3G5318A70151 and the shim P/N 3G5318A70851 on the frame STA 3900 P/N 3P5337A10455 and the framing angle LH P/N 3G5330A47351 by means of n°4 rivets P/N MS90354-0502.

NOTE

The four rivets P/N MS90354-0502 can be replaced by n°2 rivets P/N MS90354-0502 and n°2 rivets P/N MS90354-0602

4.5 With reference to Figure 4 Detail C and Section D-D, install the support P/N 3G5318A70151 and the shim P/N 3G5318A70851 on the frame STA 3900 RH P/N 3P5335A10455 by means of n°2 rivets P/N MS90354-0502 and n°2 rivets P/N MS90354-0602

4.6 With reference to Figure 4 Detail C and Section E-E, install the bush P/N 3G5340A01551, n°2 washers P/N NAS1149C0432B, the bolt P/N NAS6604D7 and the nut P/N MS21225-4 on the support P/N 3G5318A70151 (frame STA 3900 LH P/N 3P5337A10455). Safety by means of the cotter pin P/N MS24665-136.

4.7 Repeat step 4.6 for the frame STA 3900 RH P/N 3P5335A10455 on the RH side.

4.8 With reference to Figure 5 View F2, remove the existing nut-plate P/N A407A3C2P from the frame STA 3120 left P/N 3G5335A00452.

4.9 With reference to Figure 6 View K1, remove the forward upper plate assy P/N 3G5300A02551, the nut-plate P/N MS2107 and n°4 rivets P/N MS20426AD4-5 from the frame STA 3120 left P/N 3G5335A00452.

4.10 With reference to Figure 6 View K1, remove the forward lower plate assy P/N 3G5300A02431 and n°3 rivets P/N MS20426AD4-5 from the frame STA 3120 left P/N 3G5335A00452.

4.11 With reference to Figure 5 View F1, remove the nut-plate P/N MS21073L3 and n°2 rivets P/N MS20426AD3 (WL 1200) from the frame STA 3120 left P/N 3G5335A00452.

4.12 With reference to Figure 5 View F1 and Figure 6 View K1, remove n°2 pin-rivets P/N HL20PB-5-3 and n°2 pin-rivet collars P/N HL86PBW-5 from the connector

P/N 3P5331A26151.

NOTE

As alternative perform steps from 4.16 to 4.24 (rivet holes mislocated).

NOTE

The three rivets P/N MS20426AD4-3 can be replaced by n°2 rivets P/N MS20426AD4-3 and the rivet P/N MS20470AD4-3.

4.13 With reference to Figure 6 View K1, install n°3 rivets P/N MS20426AD4-3 on the frame STA 3120 left P/N 3G5335A00452 in accordance with the dimensions shown.

4.14 With reference to Figure 5 Detail G, temporarily locate the support LH P/N 3G5318A70751 on the frame STA 3120 left P/N 3G5335A00452 and countermark n°2 hole-positions on the frame in accordance with dimensions shown and the existing hole (WL 1253.1).

4.15 With reference to Figure 5 Detail G, drill n°2 holes Ø5.74÷5.87 thru the frame STA 3120 left P/N 3G5335A00452 in the previously countermarked positions.

NOTE

Perform steps from 4.16 to 4.24 as alternative, if the rivet holes on the frame STA 3120 left P/N 3G5335A00452 are mislocated.

4.16 With reference to Figure 10, install the rivet P/N MS20470AD4 (WL 1287.1) on the frame STA 3120 left P/N 3G5335A00452 in order to plug the existing hole in the frame.

4.17 With reference to Figure 10, install the rivet P/N NAS1097AD4 (WL 1270.1) on the frame STA 3120 left P/N 3G5335A00452 in order to plug the existing hole in the frame.

4.18 With reference to Figure 10, install n°3 rivets P/N MS20426AD4 (WL 1151.4, WL 1168.4 and WL 1185.4) on the frame STA 3120 left P/N 3G5335A00452 in order to plug the existing holes in the frame. Touch countersink and shave flush both sides.

NOTE

The doubler fabricated on-site can be trimmed to fit the necessary dimensions.

4.19 With reference to Figure 10, fabricate the doubler plate (301 stainless steel,

160mm x 25mm x .02”), temporarily locate the doubler plate on the frame STA 3120 left P/N 3G5335A00452 and countermark n°2 hole-positions (WL 1253.1 and WL 1137.4) on the doubler plate.

4.20 With reference to Figure 10, drill n°2 nut-plate holes thru doubler plate in the previously countermarked positions.

NOTE

Adjust hole-positions orientation to ensure 2D edge margin from hole centers to frame edge and plugged holes.

4.21 With reference to Figure 10, temporarily locate the support LH P/N 3G5318A70751 on the frame STA 3120 left P/N 3G5335A00452 and on doubler plate and countermark n°2 hole-positions on the frame and on the doubler plate in accordance with the dimensions shown and the existing hole (WL 1253.1).

4.22 With reference to Figure 10, drill n°2 holes Ø5.74÷5.87 thru the frame STA 3120 left P/N 3G5335A00452 and the doubler plate in the previously countermarked positions.

4.23 With reference to Figure 10, install the doubler plate on the frame STA 3120 left P/N 3G5335A00452 by means of adhesive EA9309.3NA (C021).

4.24 With reference to Figure 10, install the nut-plate P/N MS21073 on the doubler plate.

4.25 With reference to Figures 5 and 8, assemble the doubler assy LH P/N 3G5318A70631 as described in the following procedure:

4.25.1 With reference to Figure 8, drill the hole Ø5.74÷5.87 and n°2 holes Ø4.15 thru the doubler LH P/N 3G5318A70651 in accordance with the dimensions shown.

NOTE

Remove all hardware interfering with installation of doubler assy LH P/N 3G5318A70631.

4.25.2 With reference to Figure 5 View F2, temporarily locate the doubler LH P/N 3G5318A70651 on the frame STA 3120 left P/N 3G5335A00452 and countermark n°6 hole-positions on the doubler LH.

4.25.3 With reference to Figure 8, drill n°6 holes Ø5.74÷5.87 thru the doubler LH P/N 3G5318A70651 in the previously countermarked positions.

4.25.4 With refence to Figure 8, remark the doubler LH as doubler assy LH P/N 3G5318A70631.

NOTE

Locate the doubler LH aligning it with the support LH P/N 3G5318A70751 on the frame STA 3120 LH.

4.26 With reference to Figure 5 View F2, temporarily locate the doubler LH P/N 3G5318A70651 on the frame STA 3120 left P/N 3G5335A00452 and countermark n°3 hole-positions on the frame.

NOTE

With respect to steps 4.27 and 4.28, anchor nuts shown in Figure 8 are only for reference. Their shape and P/N can vary according to the as-built.

4.27 With reference to Figure 5 View F2, drill the hole Ø5.74÷5.87 and n°2 holes Ø4.15 thru the frame STA 3120 left P/N 3G5335A00452 in the previously countermarked positions.

4.28 With reference to Figure 5 View F2 and Figure 8, install n°2 anchor nuts P/N MS21075L3 and n°2 anchor nuts P/N MS21073L3 on the doubler assy LH P/N 3G5318A70631 and on the frame STA 3120 left P/N 3G5335A00452 by means of n°8 rivets P/N MS20426AD3.

4.29 With reference to Figure 5 View F2, install the doubler assy LH P/N 3G5318A70631 on the frame STA 3120 left P/N 3G5335A00452 by means of n°2 pin-rivets P/N HL20PB-5-4 and n°2 pin-rivet collars P/N HL86PBW-5 and fix to the connector P/N 3P5331A26151 by means of n°2 pin-rivets P/N HL20PB-5-4 and n°2 pin-rivet collars P/N HL86PBW-5.

4.30 With reference to Figure 5 View F2, install the nut plate A407A3C2P on the doubler assy LH P/N 3G5318A70631. Apply the adhesive EA9309.3NA aero (C021).

4.31 With reference the Figure 5 Detail G, install the support LH P/N 3G5318A70751 on the frame STA 3120 left P/N 3G5335A00452 by means of n°3 washers P/N NAS620C10L and n°3 screws P/N NAS1802-3-11.

4.32 With reference to Figure 5 Detail G, install the bush P/N 3G5340A01551, n°2 washers P/N NAS1149C0432B, the bolt P/N NAS6604D7 and the nut P/N MS21225-4 on the support LH P/N 3G5318A70751 (frame STA 3120 LH P/N 3G5335A00452). Safety by means of the cotter pin P/N MS24665-136.

4.33 With reference to Figure 7 Detail J, remove n°2 existing pin-rivets P/N HL20PB-5-3 and n°2 existing pin-rivets collars P/N HL86PBW-5 from the connector P/N 3P5331A26251.

NOTE

Locate the support RH aligning the holes with those existing on the frame STA 3120.

4.34 With reference to Figure 7 Detail J, temporarily locate the support RH P/N 3G5318A70051 on the frame STA 3120 right P/N 3P5337A00452 in accordance with the dimensions shown and countermark the hole-position.

4.35 With reference to Figure 7 Detail J, drill the hole Ø5.74÷5.87 thru the frame STA 3120 right P/N 3P5337A00452 in the previously countermarked position.

4.36 With reference to Figures 7 and 9, assemble the doubler assy RH P/N 3G5318A69931 as described in the following procedure:

4.36.1 With reference to Figure 9 “Front View” drill n°2 holes Ø4.05÷4.55 thru the doubler 3G5318A69951 in the previously countermarked positions.

4.36.2 With reference to Figure 9 “Left View”, drill n°3 holes Ø5.74÷5.87 and n°2 holes thru the doubler RH P/N 3G5318A69951 in accordance with the dimensions shown.

NOTE

Remove all hardware interfering with installation of doubler assy RH P/N 3G5318A69931.

4.36.3 With reference to Figure 7 Detail J and View H, temporarily locate the doubler RH P/N 3G5318A69951 on the frame STA 3120 right P/N 3P5337A00452 and countermark n°3 hole-positions on the doubler RH.

4.36.4 With reference to Figure 9 “Front View”, drill n°3 holes Ø5.74÷5.87 thru the doubler RH P/N 3G5318A69951 in the previously countermarked positions.

4.36.5 With refence to Figure 9, remark the doubler RH as doubler assy RH P/N 3G5318A69931.

NOTE

Locate the doubler RH aligning it with the support RH P/N 3G5318A70051 on the frame STA 3120 RH.

4.37 With reference to Figure 7 View H, temporarily locate the doubler RH P/N 3G5318A69951 on the frame STA 3120 right P/N 3P5337A00452 and countermark n°2 hole-positions on the frame.

4.38 With reference to Figure 7 View H, drill n°2 holes Ø5.74÷5.87 thru the frame STA 3120 right P/N 3P5337A00452 in the previously countermarked positions.

4.39 With reference to Figure 7 and Figure 9, install n°5 anchor nuts

P/N MS21075L3 on the doubler assy RH P/N 3G5318A69931 and on the frame STA 3120 right P/N 3P5337A00452 by means of n°10 rivets P/N MS20426AD3.

4.40 With reference to Figure 7 View H and Detail J, install the doubler assy RH P/N 3G5318A69931 on the frame STA 3120 right P/N 3P5337A00452 by means of the washer P/N NAS1149D0332J and the screw P/N NAS1802-3-9 and fix to the connector P/N 3P5331A26251 by means of n°2 pin-rivets P/N HL20PB-5-4 and n°2 pin-rivet collars P/N HL86PBW-5.

4.41 With reference to Figure 7 Detail J, install the support RH P/N 3G5318A70051 on the frame STA 3120 right P/N 3P5337A00452 by means of n°3 washers P/N NAS620C10L and n°3 screws P/N NAS1802-3-11.

4.42 With reference to Figure 7 Detail J, install the bush P/N 3G5340A01551, n°2 washers P/N NAS1149C0432B, the bolt P/N NAS6604D7 and the nut P/N MS21225-4 on the support RH P/N 3G5318A70051 (frame STA 3120 RH P/N 3P5337A00452). Safety by means of the cotter pin P/N MS24665-136.

NOTE

Use the support P/N 3G5318A70751 to countermark the undrilled provisions onto the L/H liners 140AL, 141BL, & 141GL and drill the necessary holes to Ø 5.74÷5.87.

NOTE

Use the support 3G5318A70051 to countermark the provisions onto the R/H liners 142BR, 142FR, and drill the necessary holes to Ø 5.74÷5.87.

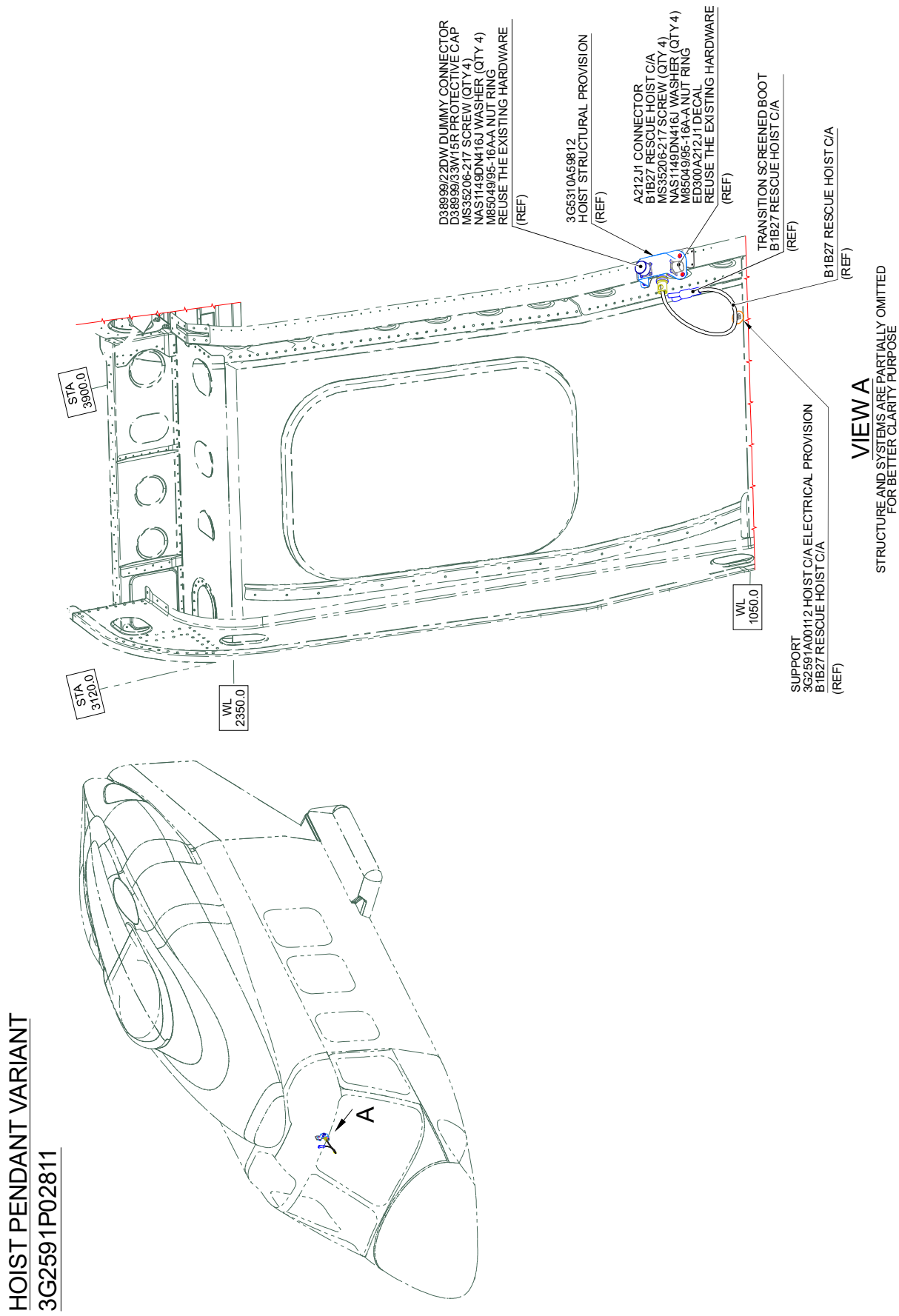
5. In accordance with the AMP DM 39-A-06-41-00-00A-010A-A, re-install all external panels, internal panels and internal liners previously removed.
6. In accordance with weight and balance changes, update the Chart A (see Rotorcraft Flight Manual, Part II, section 6).
7. Return the helicopter to flight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

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

   engineering.support.lhd@leonardo.com

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

   AWPC.Engineering.Support@leonardocompany.us



HOIST PENDANT VARIANT
3G2591P02811

Figure 1

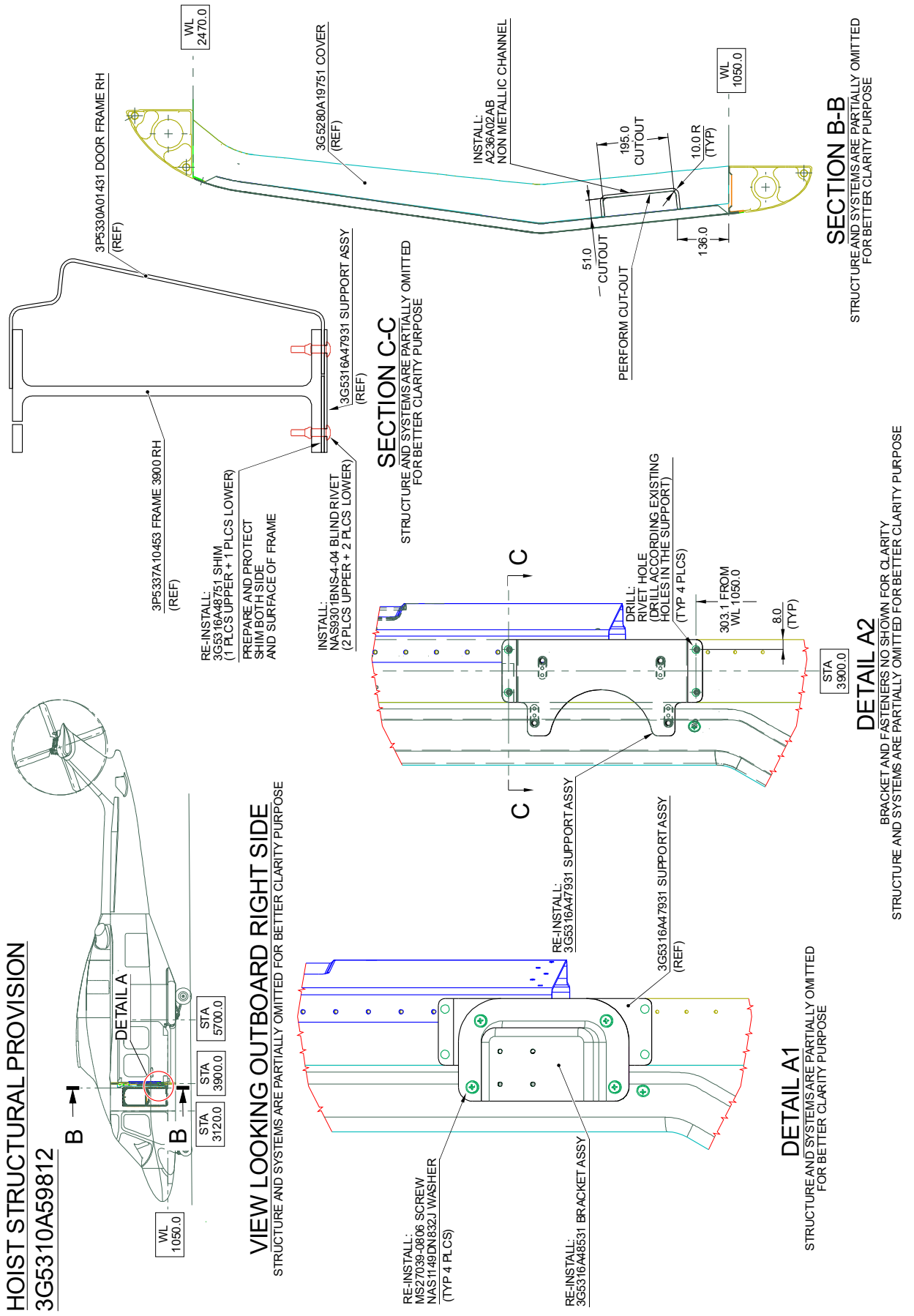

HOIST STRUCTURAL PROVISION
3G5310A59812
VIEW LOOKING OUTBOARD RIGHT SIDE
STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE
DETAIL A
B
B
WL 1050.0
STA 3120.0
STA 3900.0
STA 5700.0
3P5337A10453 FRAME 3900 RH (REF)
3P5330A01431 DOOR FRAME RH (REF)
WL 2470.0
3G5280A19751 COVER (REF)
INSTALL: A236A02AB NON METALLIC CHANNEL
WL 1050.0
195.0 CUTOUT
10.0 R (TYP)
51.0 CUTOUT
136.0
PERFORM CUT-OUT
SECTION B-B
STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE
RE-INSTALL: 3G5316A48751 SHIM (1 PLCS UPPER + 1 PLCS LOWER)
PREPARE AND PROTECT SHIM BOTH SIDE AND SURFACE OF FRAME
INSTALL: NAS9301BNS-4-04 BLIND RIVET (2 PLCS UPPER + 2 PLCS LOWER)
3G5316A47931 SUPPORT ASSY (REF)
SECTION C-C
STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE
C
C
DRILL: RIVET HOLE (DRILL ACCORDING EXISTING HOLES IN THE SUPPORT) (TYP 4 PLCS)
303.1 FROM WL 1050.0
8.0 (TYP)
STA 3900.0
DETAIL A2
BRACKET AND FASTENERS NO SHOWN FOR CLARITY
STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE
RE-INSTALL: 3G5316A47931 SUPPORT ASSY
3G5316A47931 SUPPORT ASSY (REF)
RE-INSTALL: MS27039-0806 SCREW NAS1149DN832J WASHER (TYP 4 PLCS)
RE-INSTALL: 3G5316A48531 BRACKET ASSY
DETAIL A1
STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE

Figure 2

HOIST PENDANT STRUCTURAL RELOCATION VARIANT
3G5310P31011

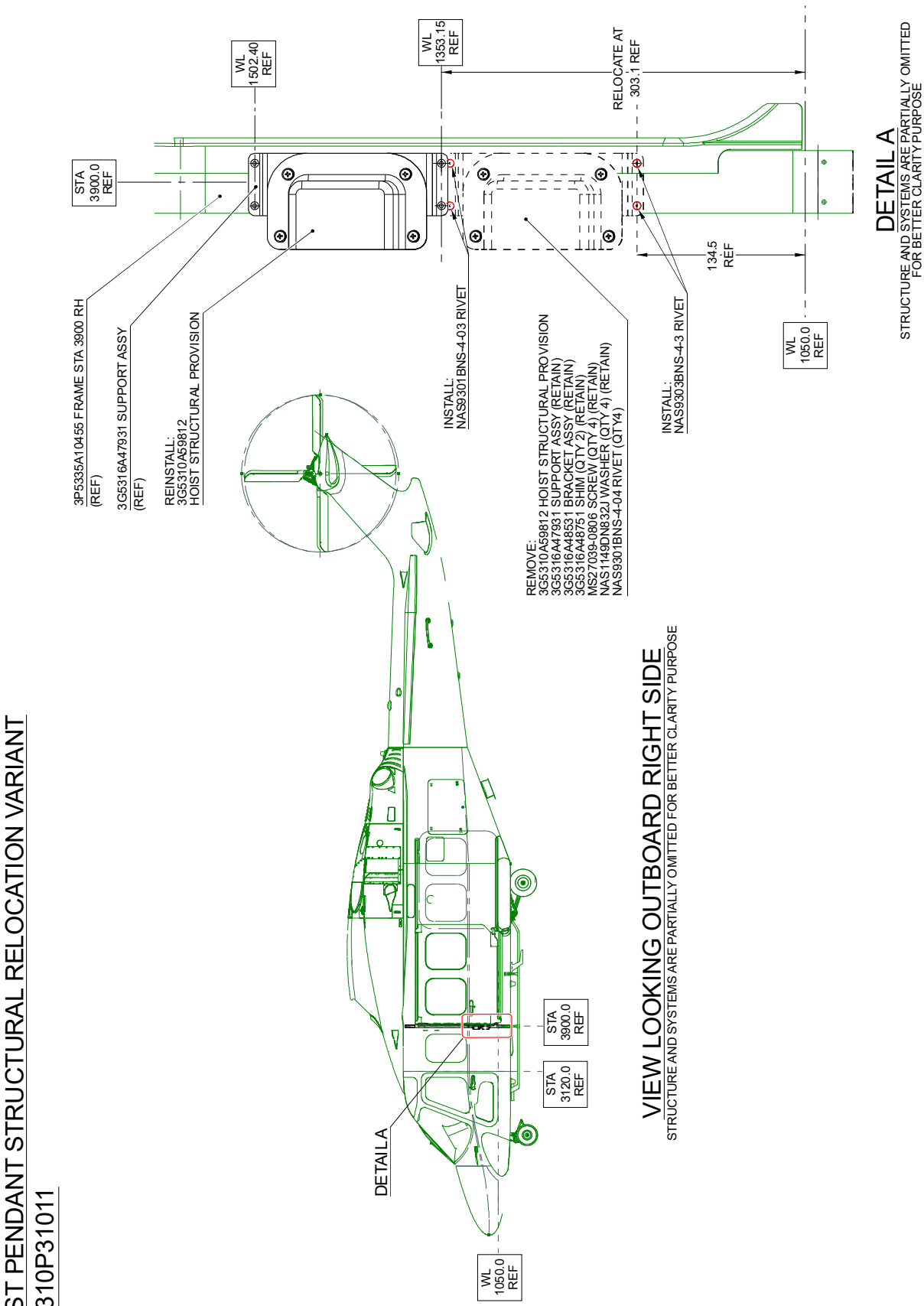


Figure 3

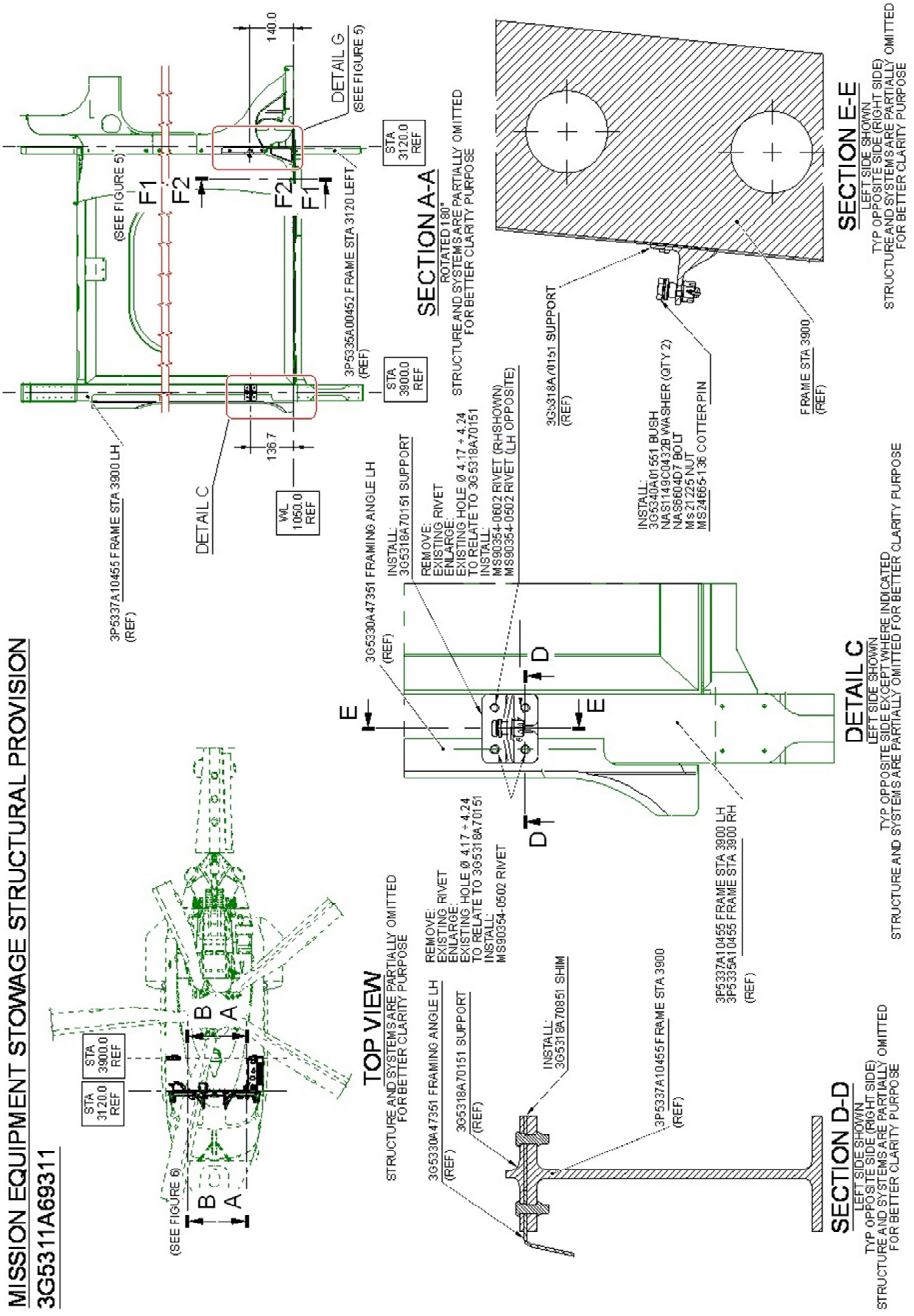

MISSION EQUIPMENT STOWAGE STRUCTURAL PROVISION
3G5311A69311
SECTION A-A
ROTATED 180°
STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE
SECTION E-E
LEFT SIDE SHOWN
TYP OPPOSITE SIDE (RIGHT SIDE)
STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE
DETAIL C
LEFT SIDE SHOWN
TYP OPPOSITE SIDE EXCEPT WHERE INDICATED
STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE
TOP VIEW
STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE
SECTION D-D
LEFT SIDE SHOWN
TYP OPPOSITE SIDE (RIGHT SIDE)
STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE
DETAIL C
DETAIL G
(SEE FIGURE 5)
(SEE FIGURE 6)
3P5337A10455 FRAME STA 3900 LH (REF)
3P5335A00452 FRAME STA 3120 LEFT (REF)
3P5337A10455 FRAME STA 3900 (REF)
3P5337A10455 FRAME STA 3900 LH
3P5335A10455 FRAME STA 3900 RH (REF)
3G5330A47351 FRAMING ANGLE LH (REF)
3G5318A70151 SUPPORT (REF)
INSTALL: 3G5318A70151 SUPPORT
REMOVE: EXISTING RIVET ENLARGE: EXISTING HOLE Ø 4.17 ÷ 4.24 TO RELATE TO 3G5318A70151
INSTALL: MS90354-0502 RIVET (RHSHOWN) MS90354-0502 RIVET (LH OPPOSITE)
INSTALL: 3G5340A01551 BUSH NAS1149C0432B WASHER (QTY 2) NAS6604D7 BOLT MS21225 NUT MS24665-136 COTTER PIN
INSTALL: 3G5318A70851 SHIM
STA 3900.0 REF
STA 3120.0 REF
WL 1050.0 REF
140.0
136.7
F1
F2
A
B
D
E

Figure 4

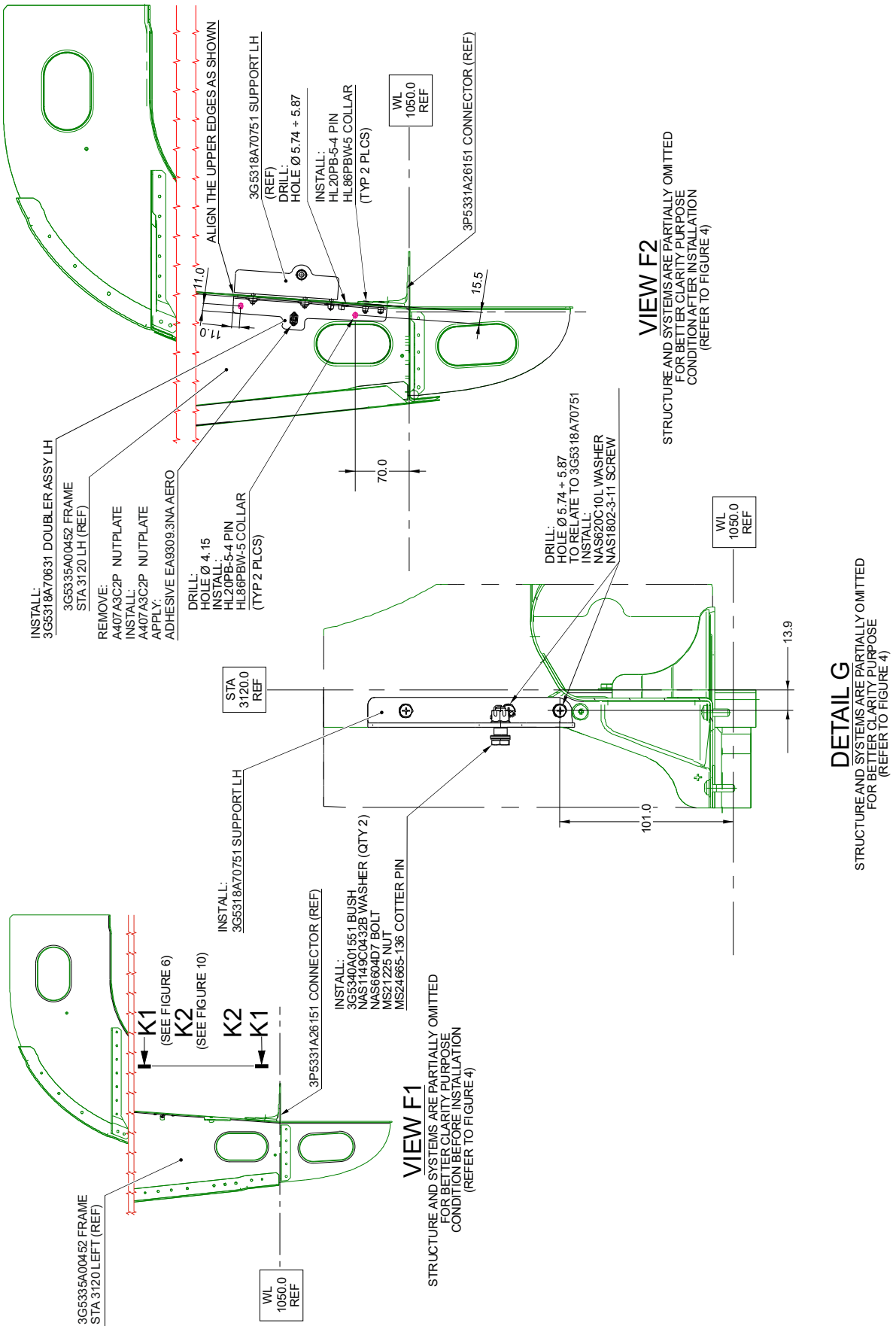

INSTALL:
3G5318A70631 DOUBLER ASSY LH
3G5335A00452 FRAME
STA 3120 LH (REF)
REMOVE:
A407A3C2P NUTPLATE
INSTALL:
A407A3C2P NUTPLATE
APPLY:
ADHESIVE EA9309.3NA AERO
DRILL:
HOLE Ø 4.15
INSTALL:
HL20PB-5-4 PIN
HL86PBW-5 COLLAR
(TYP 2 PLCS)
ALIGN THE UPPER EDGES AS SHOWN
3G5318A70751 SUPPORT LH
(REF)
DRILL:
HOLE Ø 5.74 ÷ 5.87
INSTALL:
HL20PB-5-4 PIN
HL86PBW-5 COLLAR
(TYP 2 PLCS)
WL
1050.0
REF
3P5331A26151 CONNECTOR (REF)
11.0
11.0
15.5
70.0
VIEW F2
STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED
FOR BETTER CLARITY PURPOSE
CONDITION AFTER INSTALLATION
(REFER TO FIGURE 4)
DRILL:
HOLE Ø 5.74 ÷ 5.87
TO RELATE TO 3G5318A70751
INSTALL:
NAS620C10L WASHER
NAS1802-3-11 SCREW
STA
3120.0
REF
INSTALL:
3G5318A70751 SUPPORT LH
INSTALL:
3G5340A01551 BUSH
NAS1149C0432B WASHER (QTY 2)
NAS6604D7 BOLT
MS21225 NUT
MS24665-136 COTTER PIN
13.9
101.0
DETAIL G
STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED
FOR BETTER CLARITY PURPOSE
(REFER TO FIGURE 4)
K1
(SEE FIGURE 6)
K2
(SEE FIGURE 10)
K2
K1
3P5331A26151 CONNECTOR (REF)
VIEW F1
STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED
FOR BETTER CLARITY PURPOSE
CONDITION BEFORE INSTALLATION
(REFER TO FIGURE 4)
3G5335A00452 FRAME
STA 3120 LEFT (REF)
WL
1050.0
REF

Figure 5

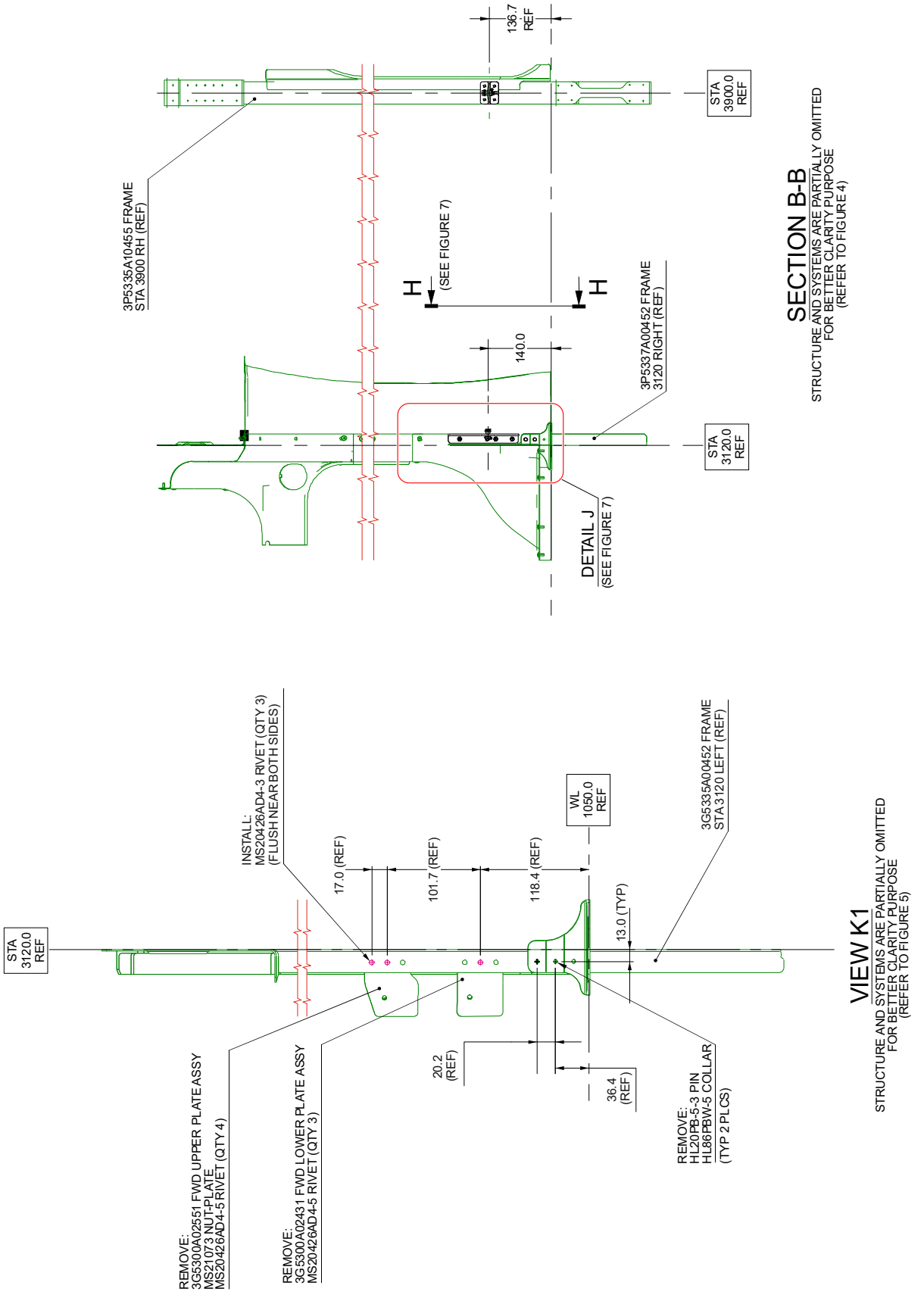

136.7
REF
STA
3900.0
REF
3P5335A10455 FRAME
STA 3900 RH (REF)
H
(SEE FIGURE 7)
H
140.0
3P5337A00452 FRAME
3120 RIGHT (REF)
STA
3120.0
REF
DETAIL J
(SEE FIGURE 7)
SECTION B-B
STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED
FOR BETTER CLARITY PURPOSE
(REFER TO FIGURE 4)
INSTALL:
MS20426AD4-3 RIVET (QTY 3)
(FLUSH NEAR BOTH SIDES)
17.0 (REF)
101.7 (REF)
118.4 (REF)
WL
1050.0
REF
3G5335A00452 FRAME
STA 3120 LEFT (REF)
13.0 (TYP)
STA
3120.0
REF
20.2
(REF)
36.4
(REF)
REMOVE:
3G5300A02551 FWD UPPER PLATE ASSY
MS21073 NUT-PLATE
MS20426AD4-5 RIVET (QTY 4)
REMOVE:
3G5300A02431 FWD LOWER PLATE ASSY
MS20426AD4-5 RIVET (QTY 3)
REMOVE:
HL20PB-5-3 PIN
HL86PBW-5 COLLAR
(TYP 2 PLCS)
VIEW K1
STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED
FOR BETTER CLARITY PURPOSE
(REFER TO FIGURE 5)

Figure 6

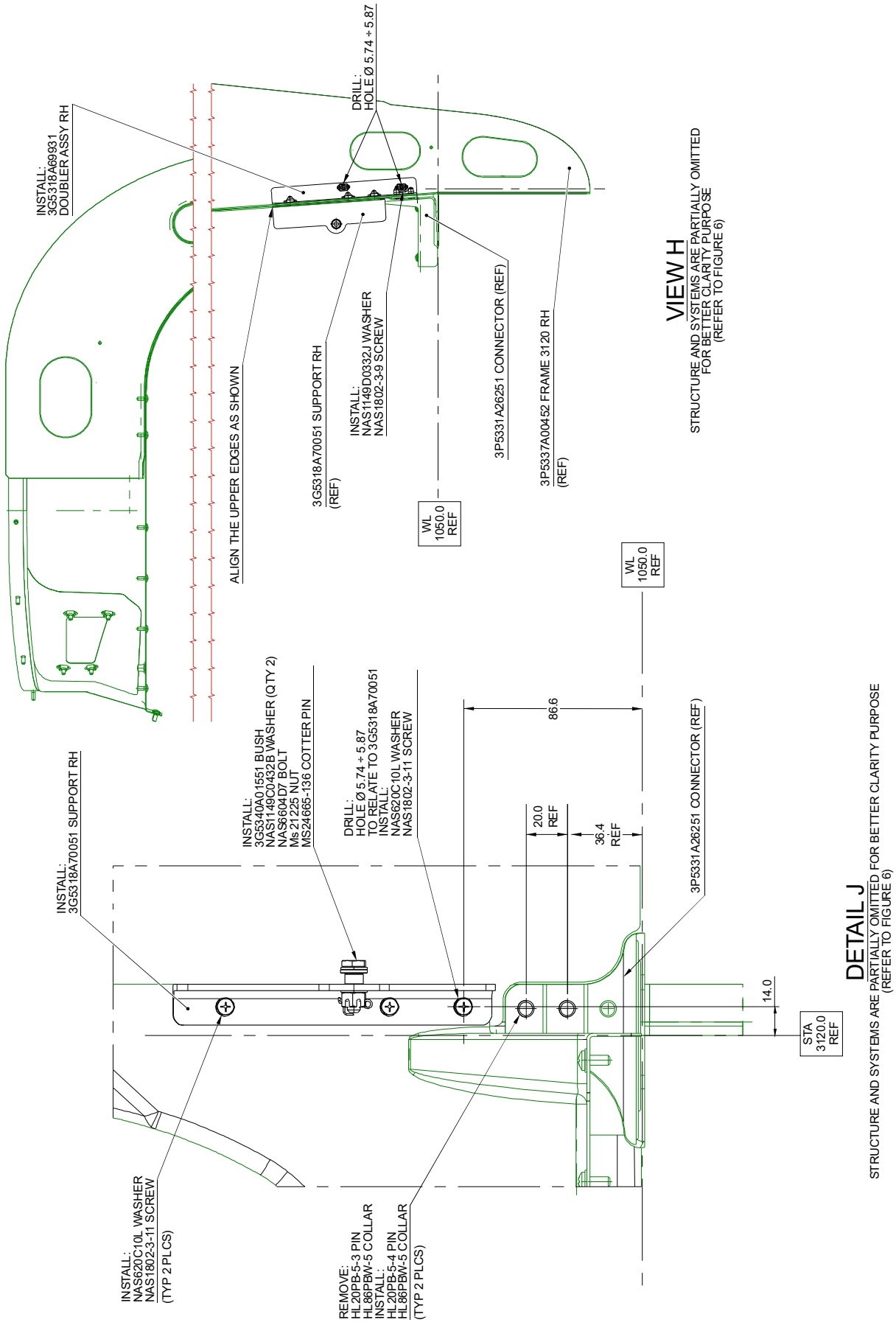

INSTALL:
3G5318A69931
DOUBLER ASSY RH
DRILL:
HOLE Ø 5.74 ÷ 5.87
ALIGN THE UPPER EDGES AS SHOWN
3G5318A70051 SUPPORT RH
(REF)
INSTALL:
NAS1149D0332J WASHER
NAS1802-3-9 SCREW
3P5331A26251 CONNECTOR (REF)
3P5337A00452 FRAME 3120 RH
(REF)
WL
1050.0
REF
VIEW H
STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED
FOR BETTER CLARITY PURPOSE
(REFER TO FIGURE 6)
INSTALL:
3G5318A70051 SUPPORT RH
INSTALL:
3G5340A01551 BUSH
NAS1149C0432B WASHER (QTY 2)
NAS6604D7 BOLT
Ms 21225 NUT
MS24665-136 COTTER PIN
DRILL:
HOLE Ø 5.74 ÷ 5.87
TO RELATE TO 3G5318A70051
INSTALL:
NAS620C10L WASHER
NAS1802-3-11 SCREW
86.6
20.0
REF
36.4
REF
3P5331A26251 CONNECTOR (REF)
14.0
STA
3120.0
REF
DETAIL J
STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE
(REFER TO FIGURE 6)
INSTALL:
NAS620C10L WASHER
NAS1802-3-11 SCREW
(TYP 2 PLCS)
REMOVE:
HL20PB-5-3 PIN
HL86PBW-5 COLLAR
INSTALL:
HL20PB-5-4 PIN
HL86PBW-5 COLLAR
(TYP 2 PLCS)

Figure 7

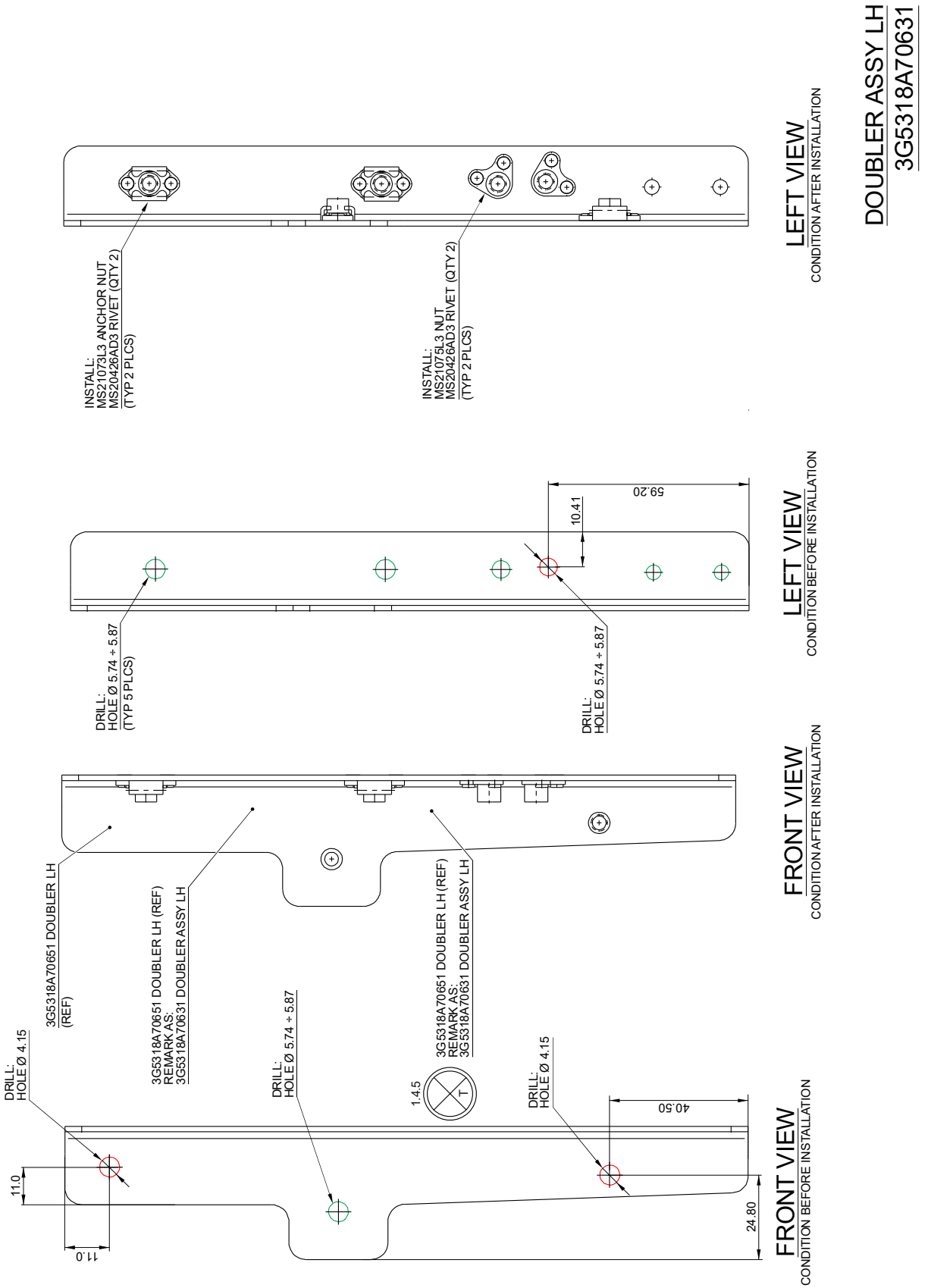

DOUBLER ASSY LH
3G5318A70631
LEFT VIEW
CONDITION AFTER INSTALLATION
INSTALL:
MS21073L3 ANCHOR NUT
MS20426AD3 RIVET (QTY 2)
(TYP 2 PLCS)
INSTALL:
MS21075L3 NUT
MS20426AD3 RIVET (QTY 2)
(TYP 2 PLCS)
LEFT VIEW
CONDITION BEFORE INSTALLATION
59.20
10.41
DRILL:
HOLE Ø 5.74 ÷ 5.87
(TYP 5 PLCS)
DRILL:
HOLE Ø 5.74 ÷ 5.87
FRONT VIEW
CONDITION AFTER INSTALLATION
3G5318A70651 DOUBLER LH
(REF)
3G5318A70651 DOUBLER LH (REF)
REMARK AS:
3G5318A70631 DOUBLER ASSY LH
DRILL:
HOLE Ø 5.74 ÷ 5.87
3G5318A70651 DOUBLER LH (REF)
REMARK AS:
3G5318A70631 DOUBLER ASSY LH
1.4.5
T
DRILL:
HOLE Ø 4.15
DRILL:
HOLE Ø 4.15
40.50
11.0
11.0
24.80
FRONT VIEW
CONDITION BEFORE INSTALLATION

Figure 8

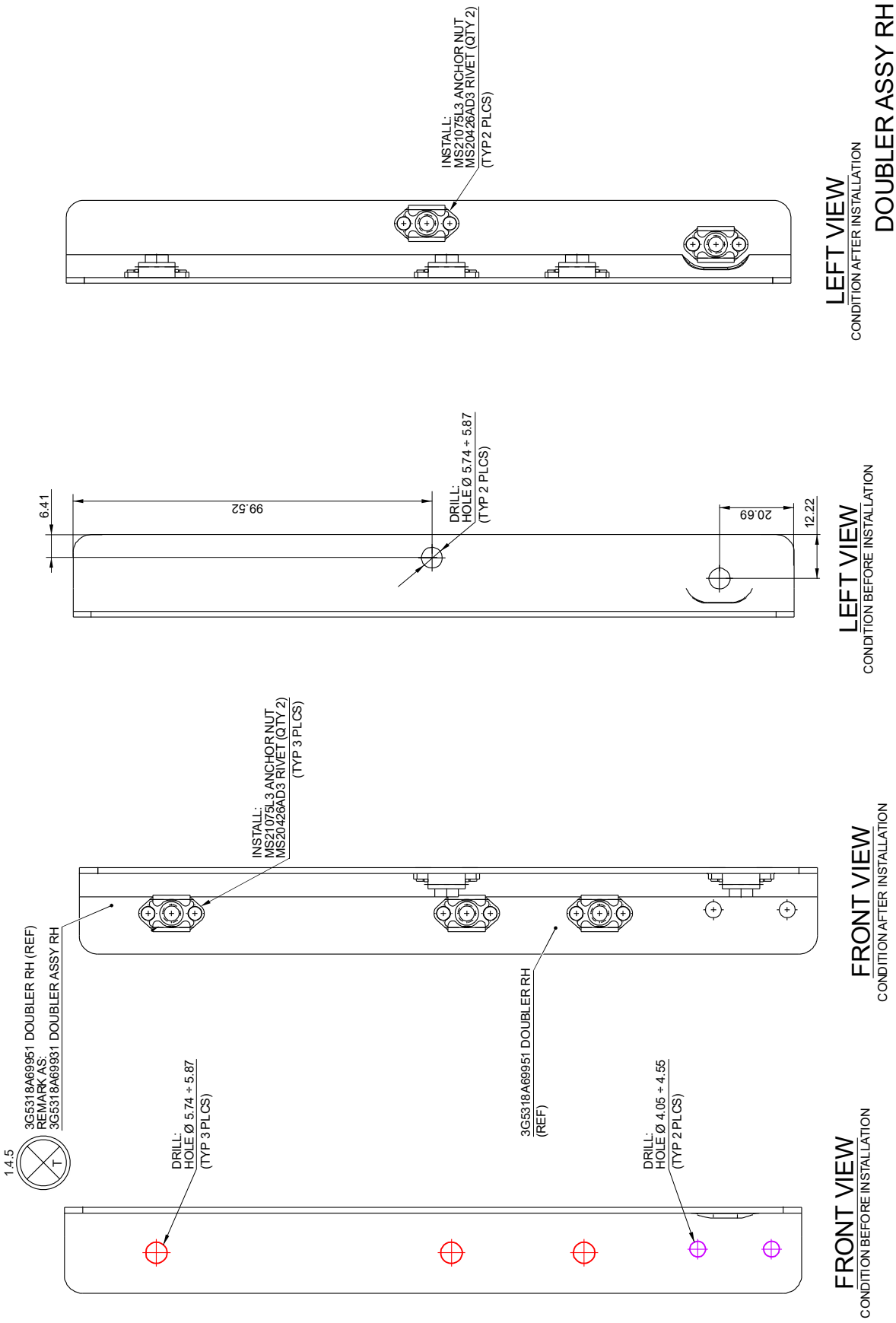

DOUBLER ASSY RH
3G5318A69931
LEFT VIEW
CONDITION AFTER INSTALLATION
INSTALL:
MS21075L3 ANCHOR NUT
MS20426AD3 RIVET (QTY 2)
(TYP 2 PLCS)
LEFT VIEW
CONDITION BEFORE INSTALLATION
6.41
99.52
DRILL:
HOLE Ø 5.74 ÷ 5.87
(TYP 2 PLCS)
20.69
12.22
FRONT VIEW
CONDITION AFTER INSTALLATION
INSTALL:
MS21075L3 ANCHOR NUT
MS20426AD3 RIVET (QTY 2)
(TYP 3 PLCS)
3G5318A69951 DOUBLER RH (REF)
REMARK AS:
3G5318A69931 DOUBLER ASSY RH
3G5318A69951 DOUBLER RH
(REF)
1.4.5
T
DRILL:
HOLE Ø 5.74 ÷ 5.87
(TYP 3 PLCS)
DRILL:
HOLE Ø 4.05 ÷ 4.55
(TYP 2 PLCS)
FRONT VIEW
CONDITION BEFORE INSTALLATION

Figure 9

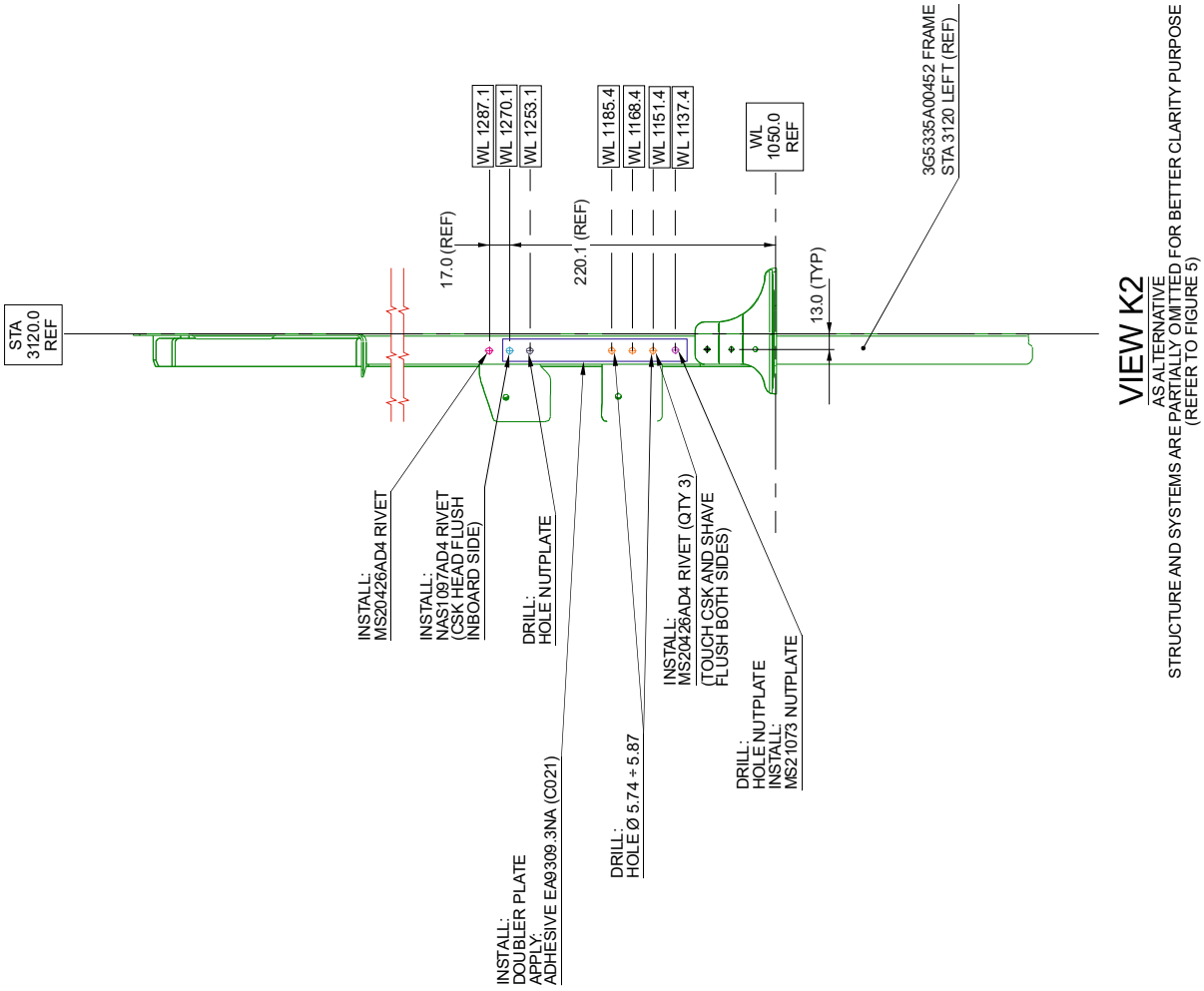

VIEW K2
AS ALTERNATIVE
STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE
(REFER TO FIGURE 5)
STA 3120.0 REF
WL 1287.1
WL 1270.1
WL 1253.1
WL 1185.4
WL 1168.4
WL 1151.4
WL 1137.4
WL 1050.0 REF
17.0 (REF)
220.1 (REF)
13.0 (TYP)
3G5335A00452 FRAME STA 3120 LEFT (REF)
INSTALL: MS20426AD4 RIVET
INSTALL: NAS1097AD4 RIVET (CSK HEAD FLUSH INBOARD SIDE)
DRILL: HOLE NUTPLATE
INSTALL: DOUBLER PLATE
APPLY: ADHESIVE EA9309.3NA (C021)
DRILL: HOLE Ø 5.74 ÷ 5.87
INSTALL: MS20426AD4 RIVET (QTY 3) (TOUCH CSK AND SHAVE FLUSH BOTH SIDES)
DRILL: HOLE NUTPLATE
INSTALL: MS21073 NUTPLATE

Figure 10

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.