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**SERVICE BULLETIN**

**N° 139-618**

**DATE:** May 11, 2021

**REV. :** /

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**TITLE**

**ATA 71 – TUNNEL ASSY RETROMOD**

**REVISION LOG**

First Issue

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An appropriate entry should be made in the aircraft log book upon accomplishment.  
If ownership of aircraft has changed, please, forward to new owner.

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## **1. PLANNING INFORMATION**

### **A. EFFECTIVITY**

#### **Part I**

AW139 helicopters equipped with tunnel assy P/N 3G7130A13433 or P/N 3G7130A13434 or P/N 3G7130P00131.

#### **Part II**

AW139 helicopters equipped with tunnel assy P/N 3G7130A13431 or P/N 3G7106P10031.

### **B. COMPLIANCE**

At Customer's option.

### **C. CONCURRENT REQUIREMENTS**

N.A.

### **D. REASON**

Leonardo Helicopter Division has developed this Service Bulletin in order to perform the installation of the tunnel assy and firewalls retromod P/N 3G7130P01611 and the tunnel assy and firewalls retromod P/N 3G7130P01811.

### **E. DESCRIPTION**

In order to adapt previous tunnel assy configurations with the last one, Leonardo Helicopter Division has developed two dedicated retromods.

With Part I of this Service Bulletin, tunnel assy P/N 3G7130A13435 is installed to replace tunnel assy P/N 3G7130A13433 or P/N 3G7130A13434 through tunnel assy and firewalls retromod P/N 3G7130P01611.

With Part II of this Service Bulletin, tunnel assy P/N 3G7130A13435 is installed to replace tunnel assy P/N 3G7130A13431 through tunnel assy and firewalls retromod P/N 3G7130P01811.

### **F. APPROVAL**

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

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

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

## G. MANPOWER

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

Part I: approximately fifty-five (55) MMH;

Part II: approximately sixty (60) MMH;

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

## H. WEIGHT AND BALANCE

### PART I

WEIGHT (Kg)	ARM (mm)	MOMENT (Kgmm)
		0.77
<b>LONGITUDINAL BALANCE</b>	6974	5369.98
<b>LATERAL BALANCE</b>	-3	-2.31

### PART II

WEIGHT (Kg)	ARM (mm)	MOMENT (Kgmm)
		1.11
<b>LONGITUDINAL BALANCE</b>	6960	7725.6
<b>LATERAL BALANCE</b>	-3	-3.33

## I. REFERENCES

### 1) PUBLICATIONS

Following Data Modules refer to AMP:

<u>DATA MODULE</u>	<u>DESCRIPTION</u>	<u>PART</u>
DM01 39-A-00-20-00-00A-120A-A	Helicopter on ground for a safe maintenance.	All
DM02 39-C-78-10-01-00A-520A-A	Rear exhaust module - Remove procedure	II
DM03 39-A-71-32-01-00A-921A-A	Tunnel assembly - Replacement (remove and install a new item)	All

<u>DATA MODULE</u>	<u>DESCRIPTION</u>	<u>PART</u>
DM04 39-C-78-10-01-01A-520A-B	Left/right ejector - Remove procedure	All
DM05 39-C-78-10-01-01A-720A-B	Left/right ejector - Install procedure	All
DM06 39-C-78-10-03-00A-520A-A	Left cover - Remove procedure	All
DM07 39-C-78-10-03-00A-720A-A	Left cover - Install procedure	All
DM08 39-C-78-10-04-00A-520A-A	Left exhaust duct - Remove procedure	All
DM09 39-C-78-10-04-00A-720A-A	Left exhaust duct - Install procedure	All
DM10 39-C-78-10-05-00A-520A-A	Right cover - Remove procedure	All
DM11 39-C-78-10-05-00A-720A-A	Right cover - Install procedure	All
DM12 39-C-78-10-06-00A-520A-A	Right exhaust duct - Remove procedure	All
DM13 39-C-78-10-06-00A-720A-A	Right exhaust duct - Install procedure	All

## 2) ACRONYMS & ABBREVIATIONS

AMD I	Aircraft Material Data Information
AMP	Aircraft Maintenance Publication
DM	Data Module
DOA	Design Organization Approval
EASA	European Aviation Safety Agency
ITEP	Illustrated tool and equipment publication
LHD	Leonardo Helicopters
MMH	Maintenance Man Hours
P/N	Part Number
SB	Service Bulletin

## 3) ANNEX

N.A.

## J. PUBLICATIONS AFFECTED

N.A.

## K. SOFTWARE ACCOMPLISHMENT SUMMARY

N.A.

## 2. MATERIAL INFORMATION

### A. REQUIRED MATERIALS

#### 1) PARTS

##### PART I

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
<b>1</b>	<b>3G7130P01611</b>		<b>TUNNEL ASSY AND FIREWALLS RETROMOD</b>	<b>REF</b>	.		-
2	3G7130A13435	3G7130A13435A	Tunnel Assy	1	..		139-618L1
		3G7130A26152	Seal	2	..		
3	3G7130A35131		Support Skin LH Assy	1	..		139-618L1
4	3G7130A35231		Support Skin RH Assy	1	..		139-618L1
5	3G7130A35431		Support Connection RH Assy	1	..		139-618L1
6	3G7130A35531		Support Connection LH Assy	1	..		139-618L1
7	NAS1149C0332R		Washer	16	..		139-618L1
8	NAS1802-3-6		Screw	8	..		139-618L1
9	NAS1802-3-8		Screw	8	..		139-618L1
<b>10</b>	<b>3G7810P02231</b>		<b>REAR FIREWALLS MODULE RETROMOD</b>	<b>REF</b>	..	<b>(1)</b>	-
11	3G7810A19651	3G7810A19651M01	Left Shelf	1	...	(1)	139-618L2
12	3G7810A19751	3G7810A19751M01	Right Shelf	1	...	(1)	139-618L2
13	MS20615-3M3R		Rivet	2	...	(1)	139-618L2
14	MS20615-4M4		Rivet	0.1 kg	...	(1)	139-618L2
15	MS20615-4M4R		Rivet	10	...	(1)	139-618L2
16	NAS1200-3-4		Rivet	4	...	(1)	139-618L2

##### PART II

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
<b>17</b>	<b>3G7130P01811</b>		<b>TUNNEL ASSY AND FIREWALLS RETROMOD</b>	<b>REF</b>	.		-
18	3G7130A13435	3G7130A13435A	Tunnel Assy	1	..		139-618L3
		3G7130A26152	Seal	2	..		
19	3G7130A35131		Support Skin LH Assy	1	..		139-618L3
20	3G7130A35231		Support Skin RH Assy	1	..		139-618L3
21	3G7130A35431		Support Connection RH Assy	1	..		139-618L3
22	3G7130A35531		Support Connection LH Assy	1	..		139-618L3
23	3G7130A36331		Plate LH Assy	1	..		139-618L3
24	3G7130A36431		Plate RH Assy	1	..		139-618L3
25	NAS1149C0332R		Washer	16	..		139-618L3
26	NAS1200-3-3		Screw	80	..		139-618L3
27	NAS1802-3-8		Screw	16	..		139-618L3
<b>28</b>	<b>3G7810P02231</b>		<b>REAR FIREWALLS MODULE RETROMOD</b>	<b>REF</b>	..	<b>(1)</b>	-
29	3G7810A19651	3G7810A19651M01	Left Shelf	1	...	(1)	139-618L2
30	3G7810A19751	3G7810A19751M01	Right Shelf	1	...	(1)	139-618L2
31	MS20615-3M3R		Rivet	2	...	(1)	139-618L2
32	MS20615-4M4		Rivet	0.1 kg	...	(1)	139-618L2
33	MS20615-4M4R		Rivet	10	...	(1)	139-618L2
34	NAS1200-3-4		Rivet	4	...	(1)	139-618L2

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
35	199-05-152 type III	Adhesive RTV 730	AR	(2)	I, II

Refer 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
139-618L1	1		I
139-618L2	1	(1)	I,II
139-618L3	1		II

### NOTE

(1) New rear firewall module assy P/N 3G7810A02035 can be installed as an alternative. Old rear firewall module assy reworked in accordance with P/N 3G7810P02231 and new rear firewall module assy P/N 3G7810A02035 are completely equivalent.

(2) Item to be procured as local supply.

## B. SPECIAL TOOLS

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

## C. INDUSTRY SUPPORT INFORMATION

Product Enhancement.

### **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.

#### **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-C-78-10-01-00A-520A-A and with reference to Figure 1, remove the existing rear exhaust module from the helicopter. Retain the fixing hardware for later reuse.
3. In accordance with AMP DM 39-C-78-10-01-01A-520A-B and with reference to Figure 1, remove the LH rear ejector assy and RH rear ejector assy P/N 3G7810A02231 from the rear exhaust module. Retain the fixing hardware for later reuse.

### NOTE

Installation of new rear firewall module assy P/N 3G7810A02035 can be performed in alternative to the rework of the old rear firewall module assy. Old rear firewall module assy reworked in accordance with P/N 3G7810P02231 and new rear firewall module assy P/N 3G7810A02035 are completely equivalent.

4. With reference to Figures 1 thru 3, perform the rear firewalls module retromod as described in the following procedure:
  - 4.1 With reference to Figure 1 Section B-B, remove material from LH and RH rear exhaust firewalls assemblies as indicated.
  - 4.2 With reference to Figure 3 View D, drill out the existing rivet P/N MS20615-4M3R in the indicated positions on LH and RH sides.
  - 4.3 With reference to Figure 2 and Figure 3 View C, temporarily locate left shelf P/N 3G7810A19651 on LH rear exhaust firewalls assy P/N 3G7810A02534 and countermark the position of n°8 rivets that must be installed. Drill n°8 pilot holes on LH rear exhaust firewalls assy.
  - 4.4 With reference Figure 3, install left shelf P/N 3G7810A19651 by means of n°5 rivets P/N MS20615-4M4R, n°2 rivets P/N NAS1200-3-4, rivet P/N MS20615-4M4 and rivet P/N MS20615-3M3R.
  - 4.5 With reference to Figure 2 and Figure 3 View C, temporarily locate right shelf P/N 3G7810A19751 on RH rear exhaust firewalls assy P/N 3G7810A02634 and countermark the position of n°8 rivets that must be installed. Drill n°8 pilot holes on LH rear exhaust firewalls assy.
  - 4.6 With reference Figure 3, install right shelf P/N 3G7810A19751 by means of n°5 rivets P/N MS20615-4M4R, n°2 rivets P/N NAS1200-3-4, rivet P/N MS20615-4M4 and rivet P/N MS20615-3M3R.
  - 4.7 With reference to Figure 1, remark the reworked rear firewalls module assy as P/N 3G7810P02231.
5. In accordance with AMP DM 39-C-78-10-03-00A-520A-A, remove the left cover from the helicopter. Retain the fixing hardware for later reuse.
6. In accordance with AMP DM 39-C-78-10-05-00A-520A-A, remove the right cover from the helicopter. Retain the fixing hardware for later reuse.
7. In accordance with AMP DM 39-C-78-10-04-00A-520A-A, remove the left exhaust duct from the helicopter. Retain the fixing hardware for later reuse.
8. In accordance with AMP DM 39-C-78-10-06-00A-520A-A, remove the right exhaust duct from the helicopter. Retain the fixing hardware for later reuse.



9. With reference to Figure 5, remove and discard the tunnel assy P/N 3G7130A13433 or P/N 3G7130A13434 or P/N 3G7130P00131 from the helicopter, unlocking the related turn locks.
10. With reference to Figure 5 View B, install support connection RH assy P/N 3G7130A35431 by means of n°4 screws P/N NAS1802-3-6 and n°4 washers P/N NAS1149C0332R.
11. With reference to Figure 5 View B, install support connection LH assy P/N 3G7130A35531 by means of n°4 screws P/N NAS1802-3-6 and n°4 washers P/N NAS1149C0332R.
12. With reference to Figure 5 View C, install support skin RH assy P/N 3G7130A35231 by means of n°2 screws P/N NAS1802-3-8 and n°2 washers P/N NAS1149C0332R.
13. With reference to Figure 5 View C, install support skin LH assy P/N 3G7130A35131 by means of n°2 screws P/N NAS1802-3-8 and n°2 washers P/N NAS1149C0332R.

**NOTE**

Perform following step only if tunnel assy has been provided as productive P/N 3G7130A13435A.

14. With reference to Figure 5 View B, bond the gasket P/N 3G7130A26152 to the tunnel assy at STA 7385 using adhesive RTV 730.
15. With reference to Figure 5 View B, install tunnel assy P/N 3G7130A13435 by means of related turn locks, n°4 screws P/N NAS1802-3-8 and n°4 washers P/N NAS1149C0332R.
16. With reference to Figures 13 and 14, check the clearances between tunnel assy and tail rotor shaft as described in the following procedure:

**NOTE**

The dimensions reported in Figure 13 Section K-K represent nominal clearances and are mandatory.

- 16.1 With reference to Figure 13 Section K-K, check that the clearance between tunnel assy and tail rotor shaft is as indicated. The allowed tolerance is +/- 2 mm. If the minimum clearances are not met continue to the following step, otherwise skip to step 17.
- 16.2 With reference to Figure 13 View L and Detail M and Figure 14 View J, check the positions of the tunnel assy and the tail rotor shaft. Repeat step 16.1.
17. In accordance with AMP DM 39-C-78-10-04-00A-720A-A, install the previously removed left exhaust duct in its correct position on the helicopter.
18. In accordance with AMP DM 39-C-78-10-06-00A-720A-A, install the previously removed right exhaust duct in its correct position on the helicopter.

19. In accordance with AMP DM 39-C-78-10-03-00A-720A-A, install the previously removed left cover in its correct position on the helicopter.
20. In accordance with AMP DM 39-C-78-10-05-00A-720A-A, install the previously removed right cover in its correct position on the helicopter.
21. In accordance with AMP DM 39-C-78-10-01-01A-720A-B, install LH rear ejector assy and RH rear ejector assy on the rear firewalls module P/N 3G7810P02231.
22. In accordance with AMP DM 39-A-71-32-01-00A-921A-A, install the rear exhaust module in its correct position on the helicopter
23. In accordance with weight and balance changes, update the Chart A (see Rotorcraft Flight Manual, Part II, section 6).
24. Return the helicopter to flight configuration and record for compliance with Part I of this Service Bulletin on the helicopter logbook.
25. Send the attached compliance form to the following mail box:

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

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

## **PART II**

1. In accordance with AMP DM 39-A-00-20-00-00A-120A-A, prepare the helicopter on ground for a safe maintenance. Disconnect the battery, all electrical power sources and/or the external power supply.
2. In accordance with AMP DM 39-C-78-10-01-00A-520A-A and with reference to Figure 1, remove the existing rear exhaust module from the helicopter. Retain the fixing hardware for later reuse.
3. In accordance with AMP DM 39-C-78-10-01-01A-520A-B and with reference to Figure 1, remove the LH rear ejector assy and RH rear ejector assy from the rear exhaust module. Retain the fixing hardware for later reuse.

### **NOTE**

Installation of new rear firewall module assy P/N 3G7810A02035 can be performed in alternative to the rework of the old rear firewall module assy. Old rear firewall module assy reworked in accordance with P/N 3G7810P02231 and new rear firewall module assy P/N 3G7810A02035 are completely equivalent.

4. With reference to Figures 1 thru 3, perform the rear firewalls module retromod P/N 3G7810P02231 as described in the following procedure:
  - 4.1 With reference to Figure 1 Section B-B, remove material from LH and RH rear exhaust firewalls assemblies as indicated.
  - 4.2 With reference to Figure 3 View D, drill out the existing rivet P/N MS20615-4M3R in the indicated positions on LH and RH sides.
  - 4.3 With reference to Figure 2 and Figure 3 View C, temporarily locate left shelf P/N 3G7810A19651 on LH rear exhaust firewalls assy P/N 3G7810A02534 and countermark the position of n°8 rivets that must be installed. Drill n°8 pilot holes on LH rear exhaust firewalls assy.
  - 4.4 With reference Figure 3, install left shelf P/N 3G7810A19651 by means of n°5 rivets P/N MS20615-4M4R, n°2 rivets P/N NAS1200-3-4, rivet P/N MS20615-4M4 and rivet P/N MS20615-3M3R.
  - 4.5 With reference to Figure 2 and Figure 3 View C, temporarily locate right shelf P/N 3G7810A19751 on RH rear exhaust firewalls assy P/N 3G7810A02634 and countermark the position of n°8 rivets that must be installed. Drill n°8 pilot holes on LH rear exhaust firewalls assy.

- 4.6 With reference Figure 3, install right shelf P/N 3G7810A19751 by means of n°5 rivets P/N MS20615-4M4R, n°2 rivets P/N NAS1200-3-4, rivet P/N MS20615-4M4 and rivet P/N MS20615-3M3R.
- 4.7 With reference to Figure 1, remark the reworked rear firewalls module assy as P/N 3G7810P02231.
5. In accordance with AMP DM 39-C-78-10-03-00A-520A-A, remove the left cover from the helicopter. Retain the fixing hardware for later reuse.
6. In accordance with AMP DM 39-C-78-10-05-00A-520A-A, remove the right cover from the helicopter. Retain the fixing hardware for later reuse.
7. In accordance with AMP DM 39-C-78-10-04-00A-520A-A, remove the left exhaust duct from the helicopter. Retain the fixing hardware for later reuse.
8. In accordance with AMP DM 39-C-78-10-06-00A-520A-A, remove the right exhaust duct from the helicopter. Retain the fixing hardware for later reuse.
9. With reference to Figure 7, remove and discard the tunnel assy P/N 3G7130A13431 or P/N 3G7106P10031 from the helicopter, unlocking the related turn locks.
10. With reference to Figure 9, remove and discard n°12 anchor nuts P/N A242ARD.

#### NOTE

Perform following steps 11 and 12 only for helicopters equipped with firewalls installation retromod P/N 3G7106P09111.

11. With reference to Figure 8 Section B-B, cut along cutting line shown to remove bracket assy mid port 3G7130A14032.
12. Repeat step 11 to remove bracket assy aft port P/N 3G7130A14231, bracket assy mid stbd P/N 3G7130A14132 and bracket assy aft stbd P/N 3G7310A14331.
13. With reference to Figure 9, install plate LH assy P/N 3G7130A36331 and plate RH assy P/N 3G7130A36431 by means of n°80 rivets P/N NAS1200-3-3.
14. With reference to Figure 10 and Figure 11 Detail G, install support connection RH assy P/N 3G7130A35431 by means of n°4 screws P/N NAS1802-3-8 and n°4 washers P/N NAS1149C0332R.
15. With reference to Figure 10 and Figure 11 Detail G, install support connection LH assy P/N 3G7130A35531 by means of n°4 screws P/N NAS1802-3-8 and n°4 washers P/N NAS1149C0332R.
16. With reference to Figure 10 and Figure 11 Detail E, install support skin RH assy P/N 3G7130A35231 by means of n°2 screws P/N NAS1802-3-8 and n°2 washers P/N NAS1149C0332R.

17. With reference Figure 10 and Figure 11 Detail E, install support skin LH assy P/N 3G7130A35131 by means of n°2 screws P/N NAS1802-3-8 and n°2 washers P/N NAS1149C0332R.

**NOTE**

Perform following step only if tunnel assy has been provided as productive P/N 3G7130A13435A.

18. With reference to Figure 5 View B, bond the gasket P/N 3G7130A26152 to the tunnel assy at STA 7385 using adhesive RTV 730.
19. With reference to Figures 7, 10 and Figure 11 Section F-F, install tunnel assy P/N 3G7130A13435 by means of related turn locks, n°4 screws P/N NAS1802-3-8 and n°4 washers P/N NAS1149C0332R.
20. With reference to Figures 13 and 14, check the clearances between tunnel assy and tail rotor drive as described in the following procedure:

**NOTE**

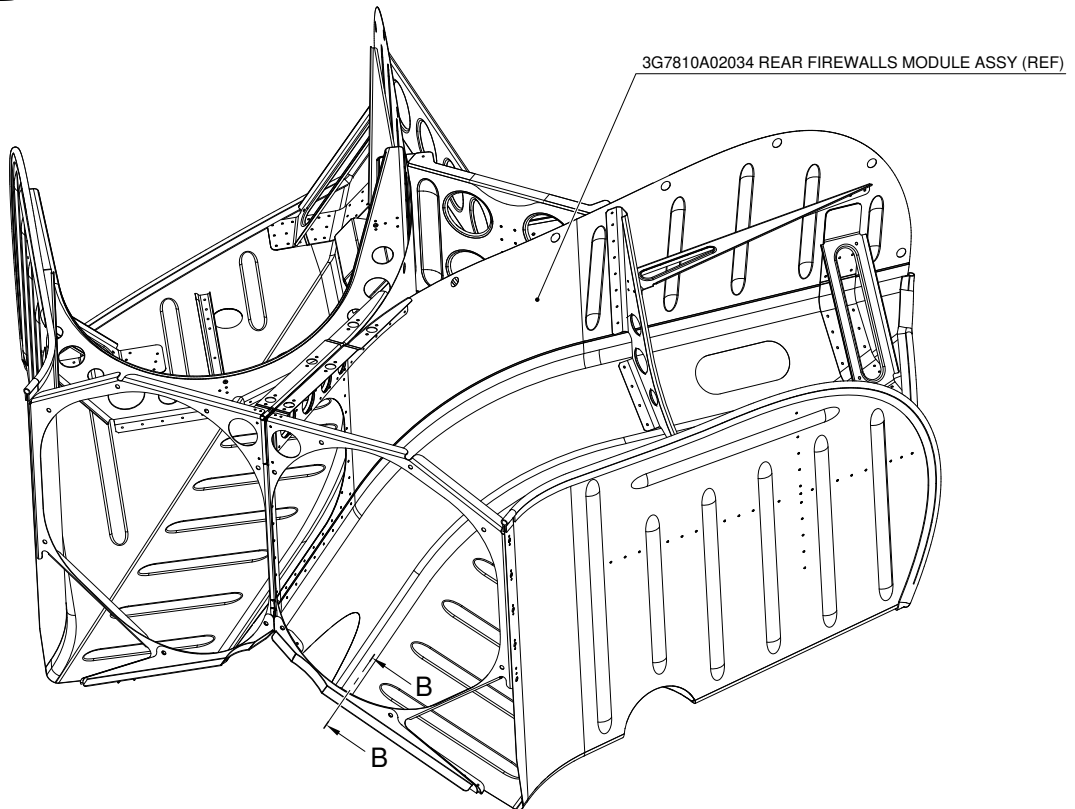
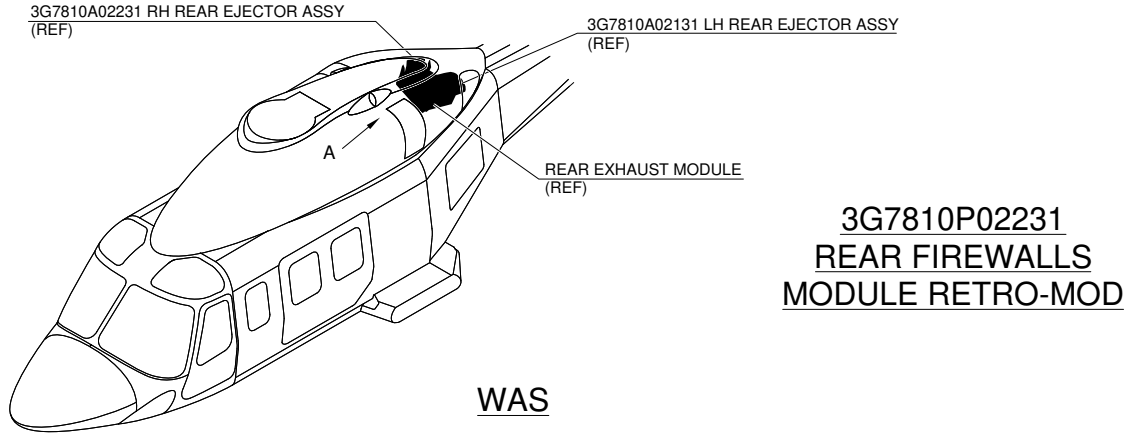
The dimensions reported in Figure 14 Section K-K represent nominal clearances and are mandatory.

- 20.1 With reference to Figure 13 Section K-K, check that the clearance between tunnel assy and tail rotor shaft is as indicated. The allowed tolerance is +/- 2 mm. If the minimum clearances are not met continue to the following step, otherwise skip to step 20.
- 20.2 With reference to Figure 13 View L and Detail M and Figure 14 View J, check the positions of the tunnel assy and the tail rotor shaft. Repeat step 16.1.
21. In accordance with AMP DM 39-C-78-10-04-00A-720A-A, install the previously removed left exhaust duct in its correct position on the helicopter.
22. In accordance with AMP DM 39-C-78-10-06-00A-720A-A, install the previously removed right exhaust duct in its correct position on the helicopter.
23. In accordance with AMP DM 39-C-78-10-03-00A-720A-A, install the previously removed left cover in its correct position on the helicopter.
24. In accordance with AMP DM 39-C-78-10-05-00A-720A-A, install the previously removed right cover in its correct position on the helicopter.
25. In accordance with AMP DM 39-C-78-10-01-01A-720A-B, install LH rear ejector assy P/N 3G7810A02131 and RH rear ejector assy P/N 3G7810A02231 on the rear firewalls module P/N 3G7810P02231.
26. In accordance with applicable steps of AMP DM 39-A-71-32-01-00A-921A-A, install the rear exhaust module in its correct position on the helicopter.

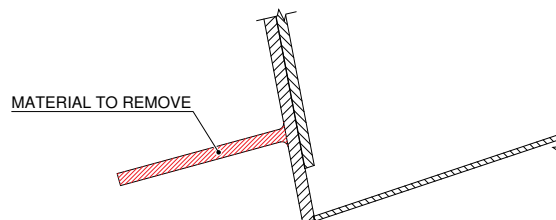
27. In accordance with weight and balance changes, update the Chart A (see Rotorcraft Flight Manual, Part II, section 6).
28. Return the helicopter to flight configuration and record for compliance with Part II of this Service Bulletin on the helicopter logbook.
29. Send the attached compliance form to the following mail box:

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

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



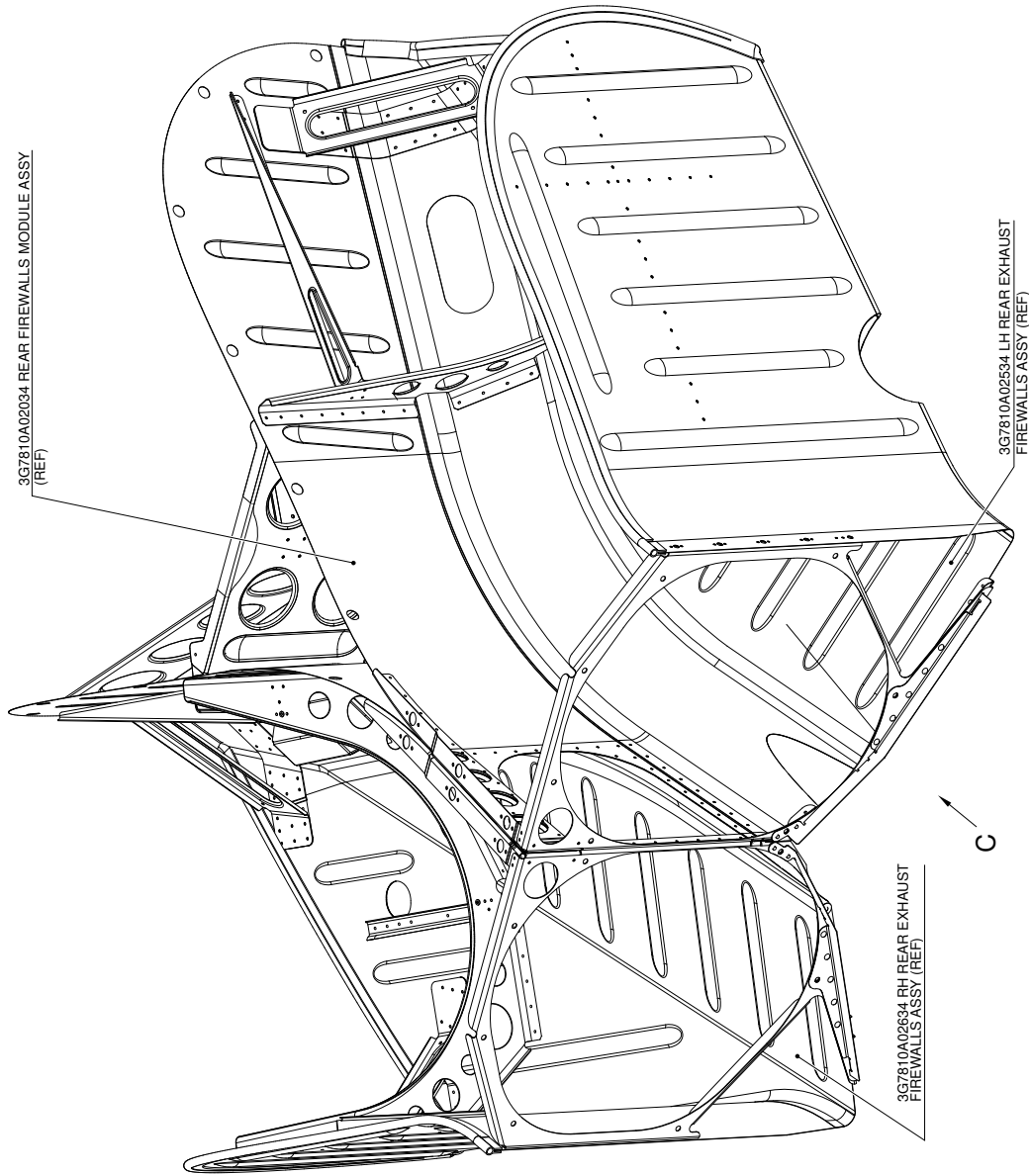
**VIEW A**  
STRUCTURES AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE



**SECTION B-B**  
STRUCTURES AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE  
(LH SIDE SHOWN, RH SIDE OPPOSITE)

**Figure 1**

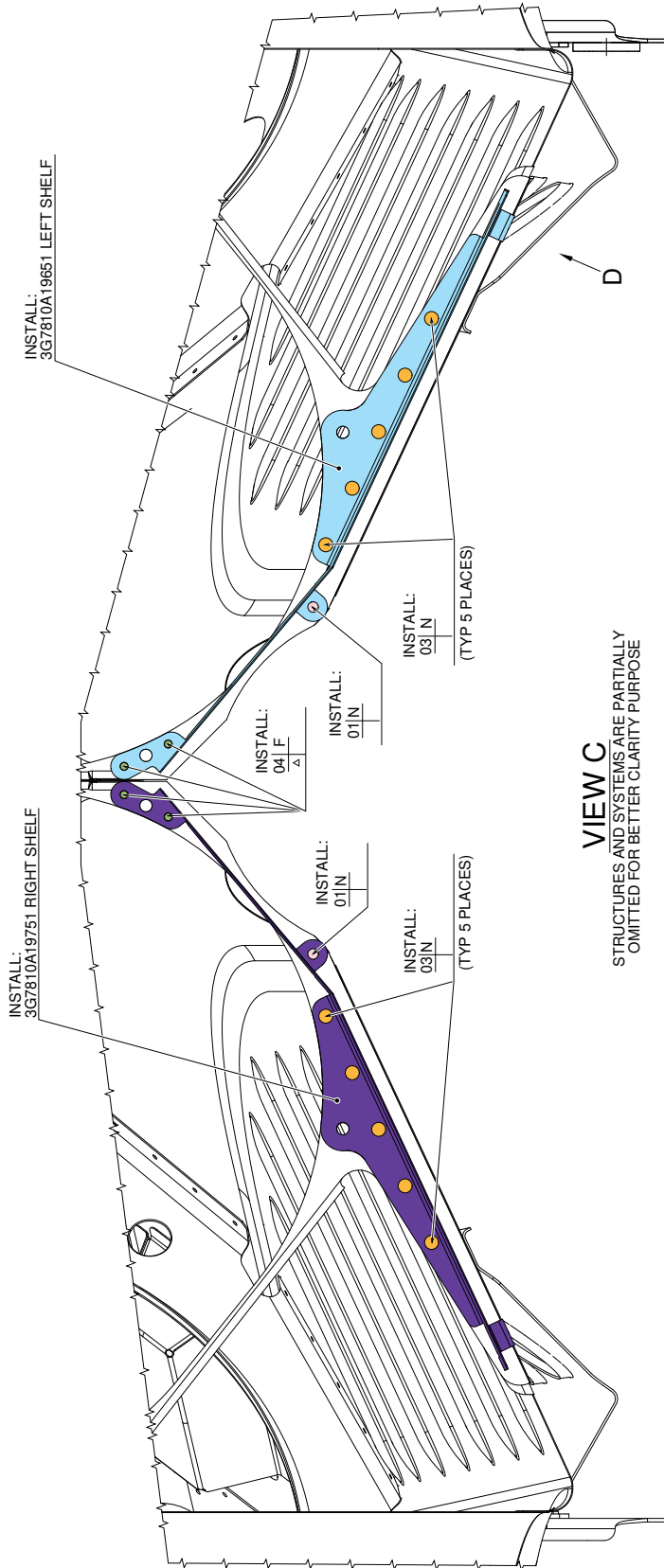
BECOMES



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

**Figure 2**

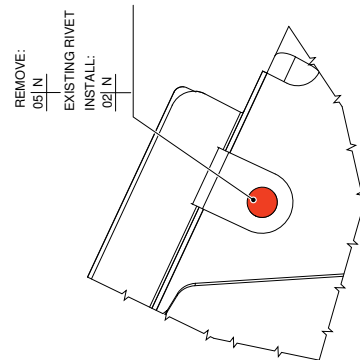




**VIEW C**

STRUCTURES AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE

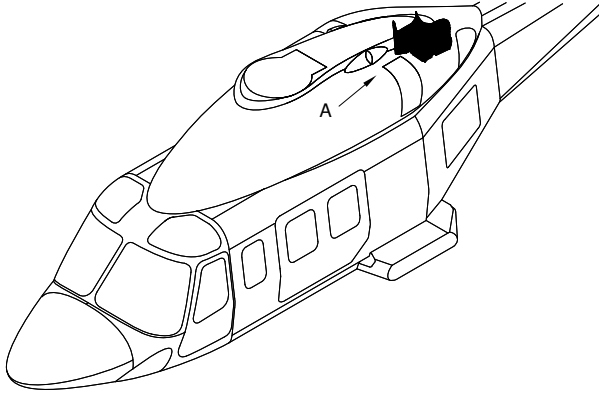
RIVET REFERENCE TABLE	
REF. N°	RIVET P/N
01	MS20615-3M3R
02	MS20615-4M4
03	MS20615-4M4R
04	NAS1200-3-4
05	MS20615-4M3R
N	PRE-FORMED HEAD IS ON NEAR SIDE
F	PRE-FORMED HEAD IS ON FAR SIDE
▽	COUNTERSINK (100° ONLY) IS ON NEAR SIDE
△	COUNTERSINK (100° ONLY) IS ON FAR SIDE



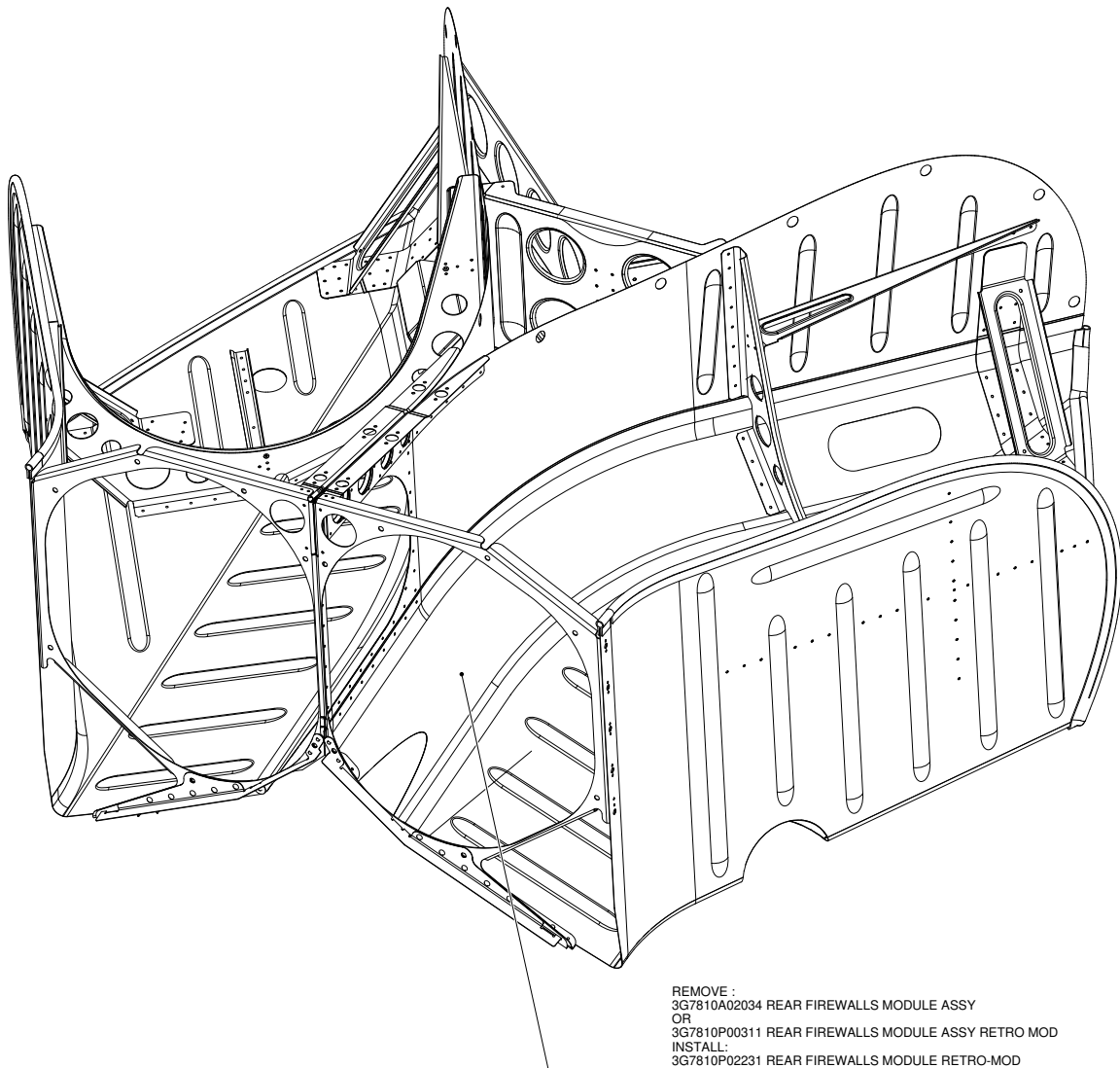
**VIEW D**

STRUCTURES AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE (LH SIDE SHOWN, RH SIDE OPPOSITE)

**Figure 3**



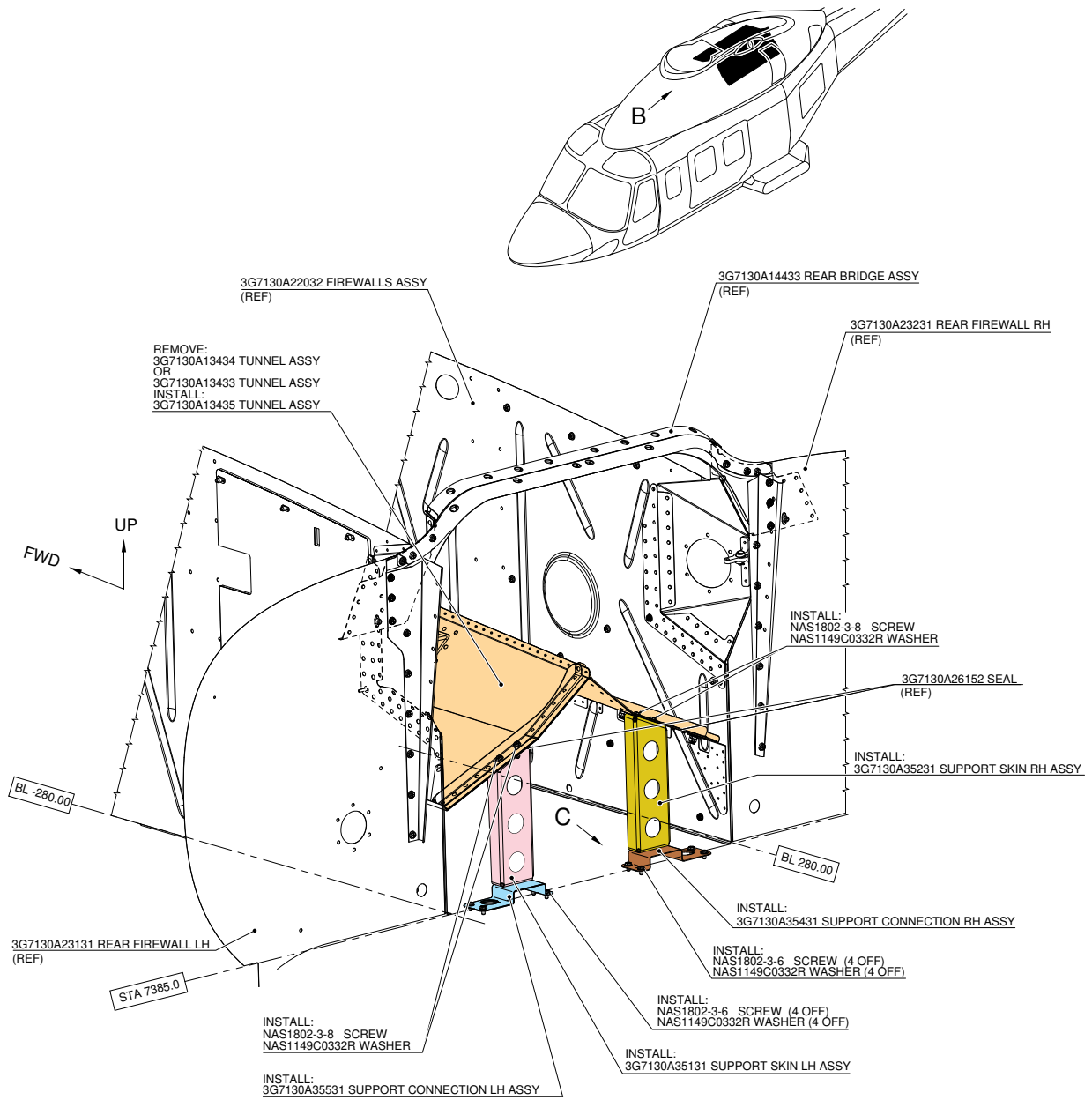
**3G7130P01611**  
**TUNNEL ASSY AND FIREWALLS**  
**MODULE RETRO-MOD**



**VIEW A**

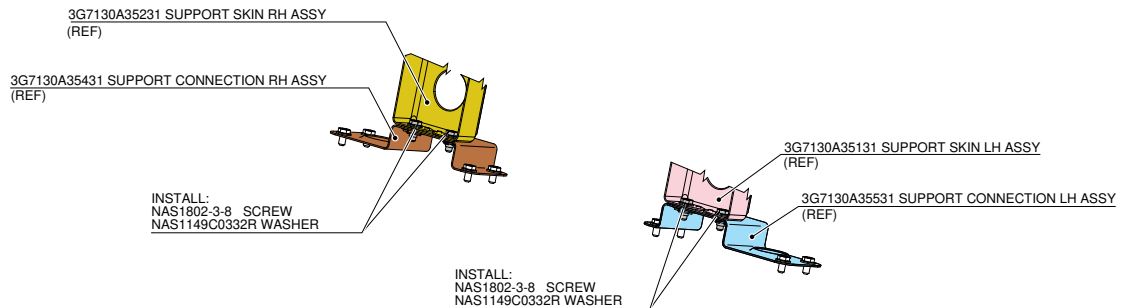
STRUCTURES AND SYSTEMS ARE PARTIALLY  
OMITTED FOR BETTER CLARITY PURPOSE

**Figure 4**



**VIEW B**

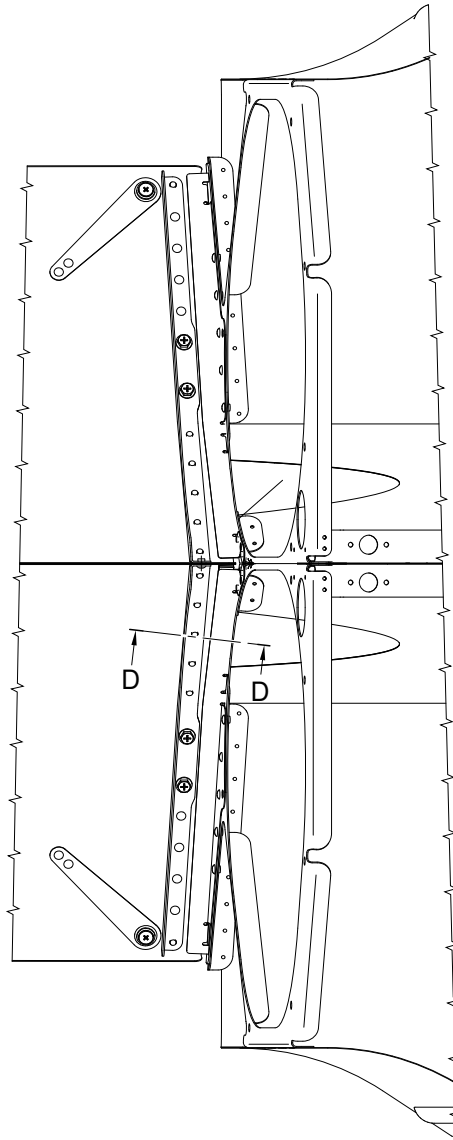
STRUCTURES AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE



**VIEW C**

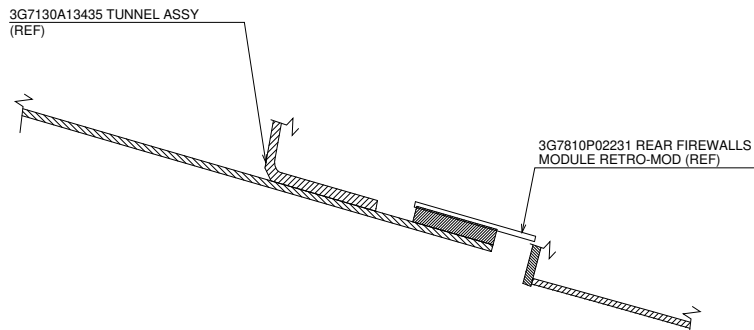
STRUCTURES AND SYSTEMS ARE PARTIALLY OMITTED FOR BETTER CLARITY PURPOSE

**Figure 5**



**TOP VIEW**

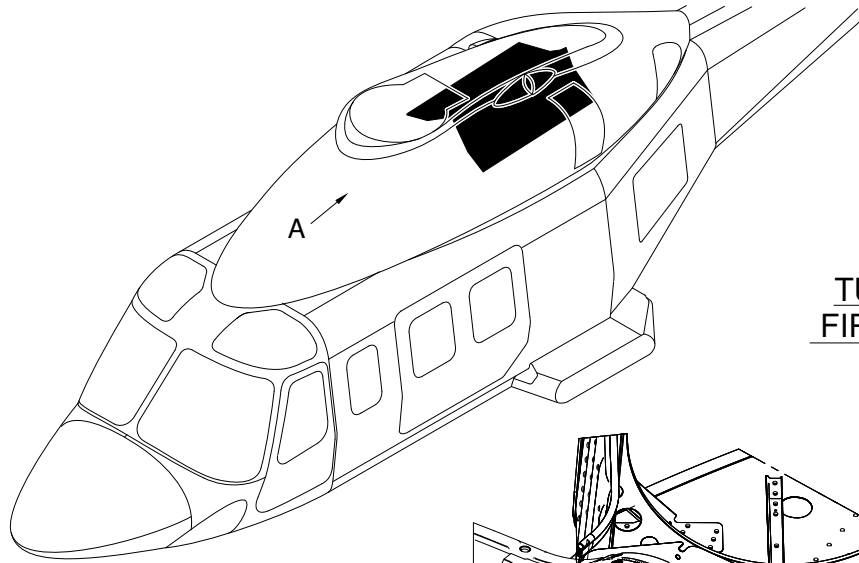
STRUCTURES AND SYSTEMS ARE PARTIALLY  
OMITTED FOR BETTER CLARITY PURPOSE  
FOR INTERFACE TUNNEL ASSY  
WITH MODULE



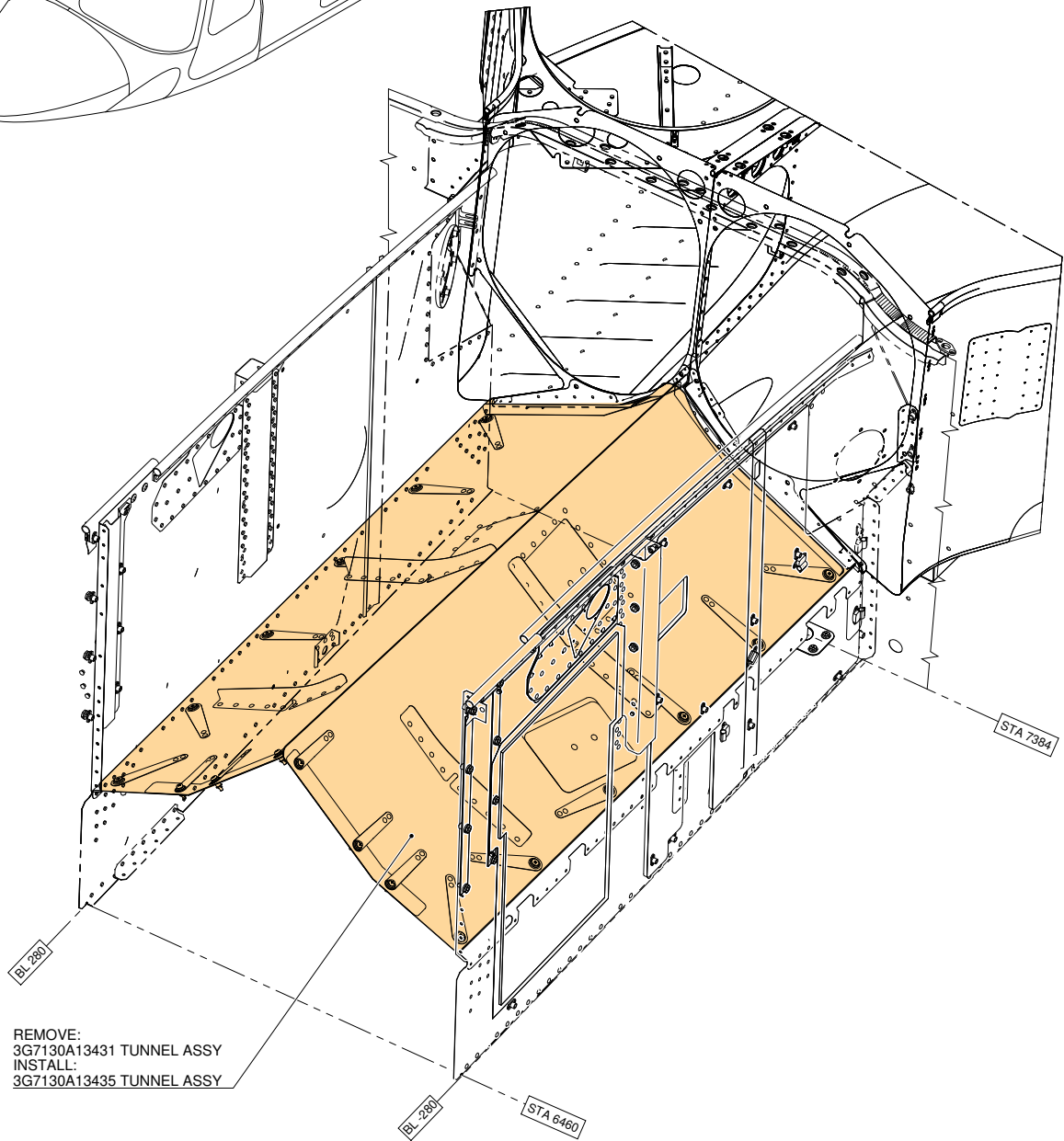
**SECTION D-D**

STRUCTURES AND SYSTEMS ARE PARTIALLY  
OMITTED FOR BETTER CLARITY PURPOSE

**Figure 6**



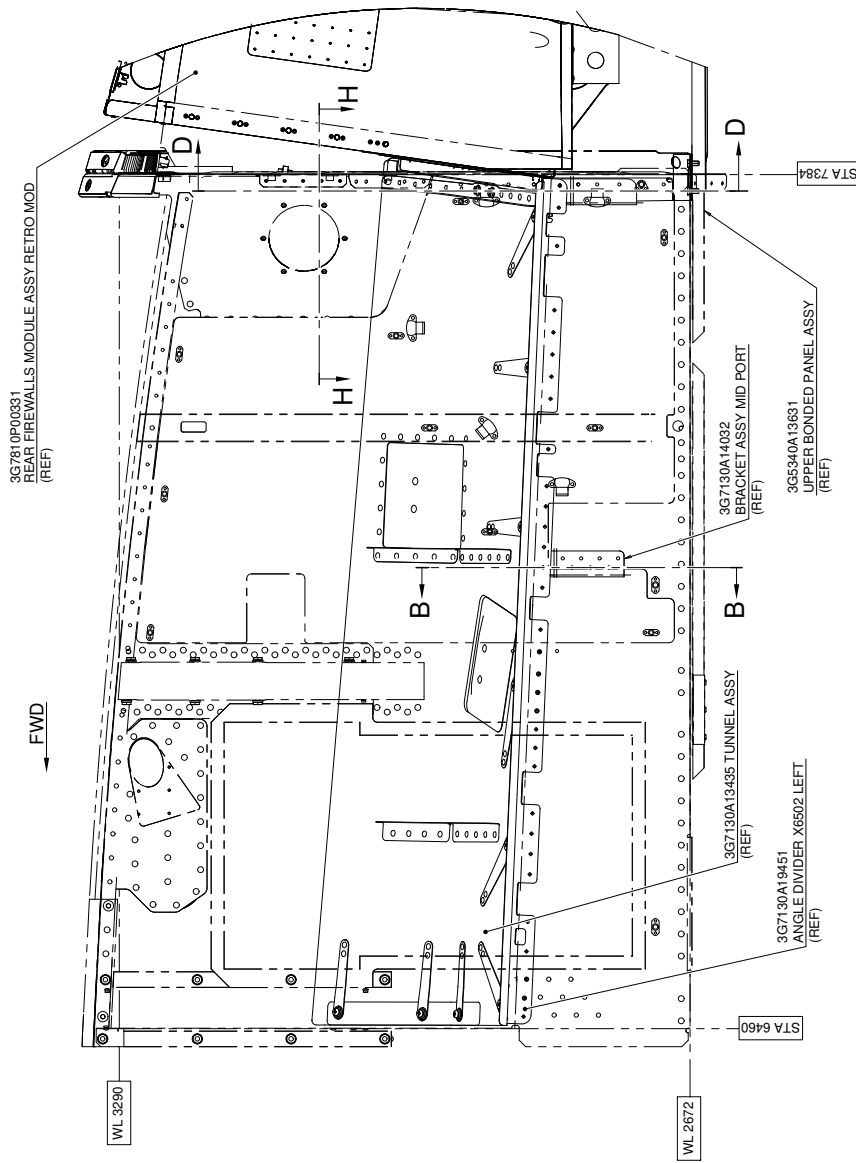
**3G7130P01811**  
**TUNNEL ASSY AND**  
**FIREWALLS MODULE**  
**RETROMOD**



REMOVE:  
3G7130A13431 TUNNEL ASSY  
INSTALL:  
3G7130A13435 TUNNEL ASSY

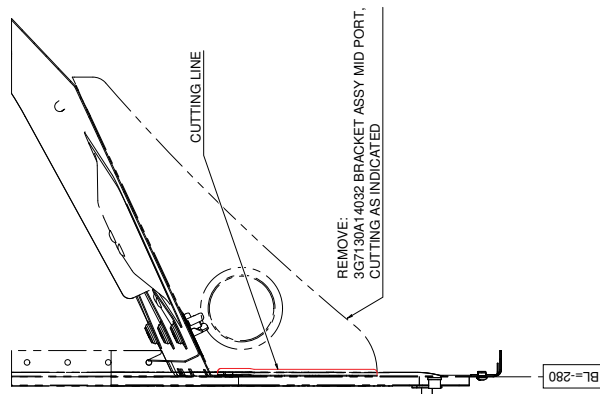
**VIEW A**  
STRUCTURES AND SYSTEMS ARE PARTIALLY  
OMITTED FOR BETTER CLARITY PURPOSE

**Figure 7**



**SIDE VIEW**

STRUCTURES AND SYSTEMS ARE PARTIALLY  
OMITTED FOR BETTER CLARITY PURPOSE



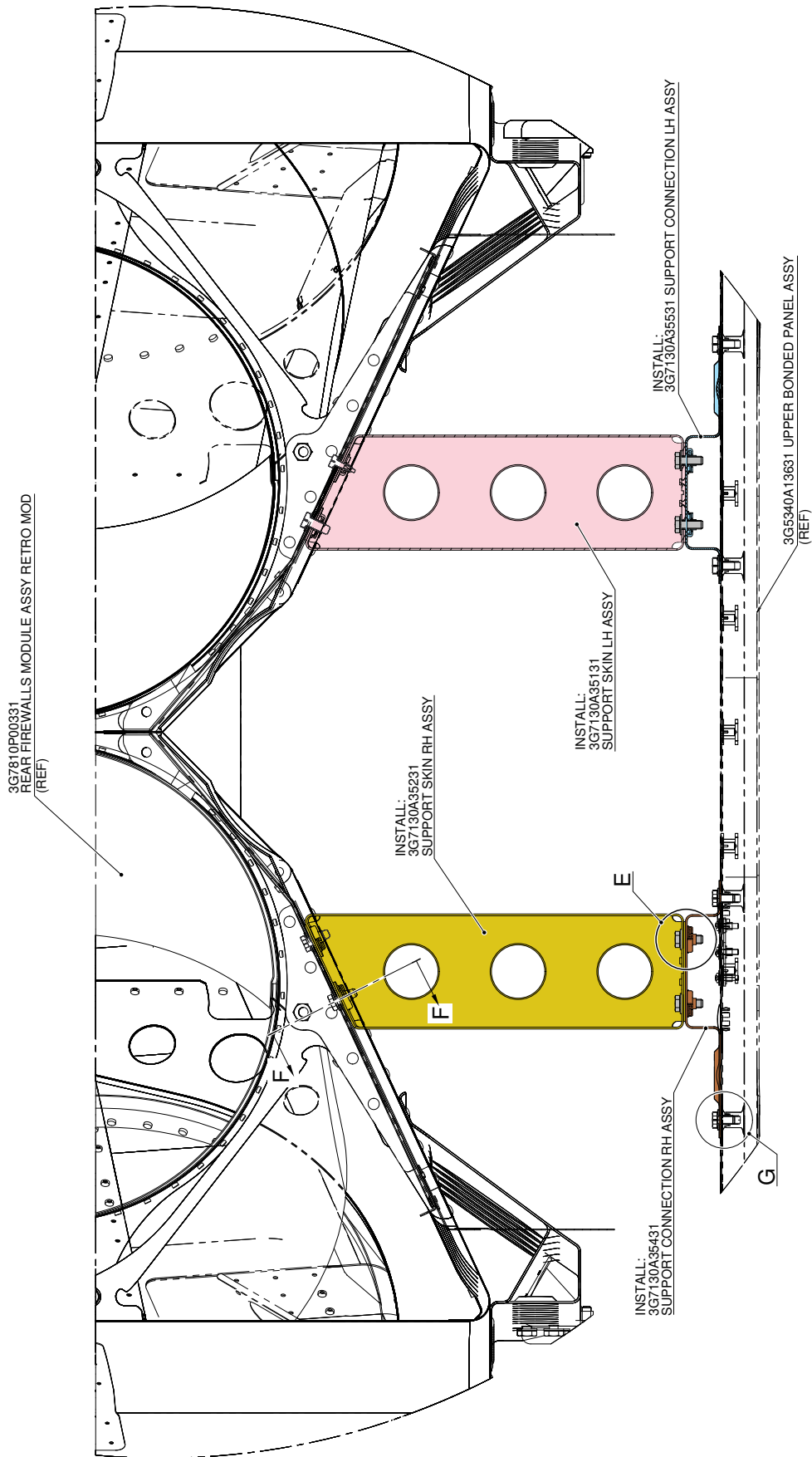
**SECTION B-B**

STRUCTURES AND SYSTEMS ARE PARTIALLY  
OMITTED FOR BETTER CLARITY PURPOSE  
TYP. FOR 3G7130A14231 BRACKET ASSY AFT PORT.  
3G7130A14132 BRACKET ASSY MID STBD, 3G7310A14331 BRACKET ASSY AFT STBD

**Figure 8**



**Figure 9**

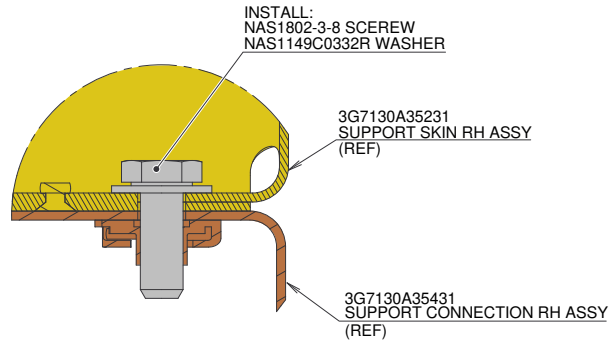


**SECTION D-D**

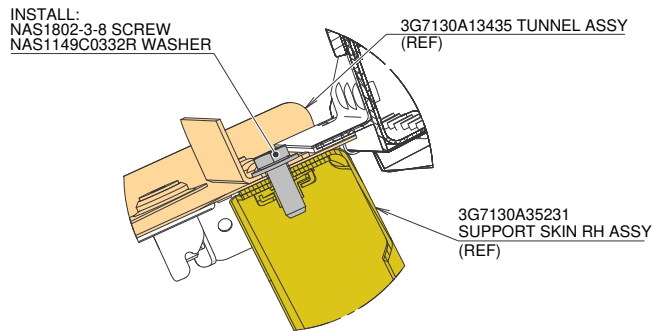
STRUCTURES AND SYSTEMS ARE PARTIALLY  
OMITTED FOR BETTER CLARITY PURPOSE

**Figure 10**

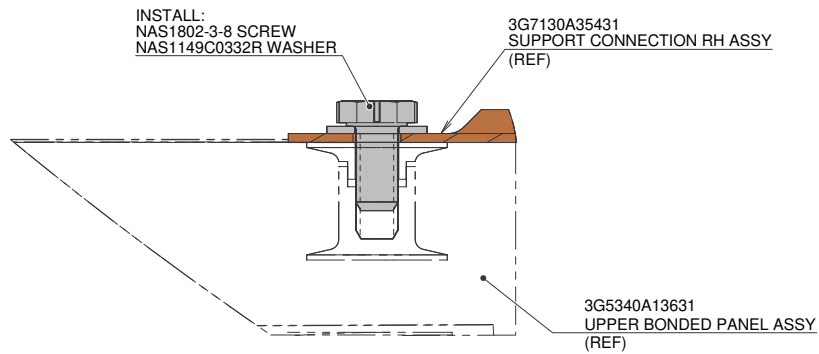




**DETAIL E**  
STRUCTURES AND SYSTEMS ARE PARTIALLY  
OMITTED FOR BETTER CLARITY PURPOSE  
(TYP. 4 PLACES)



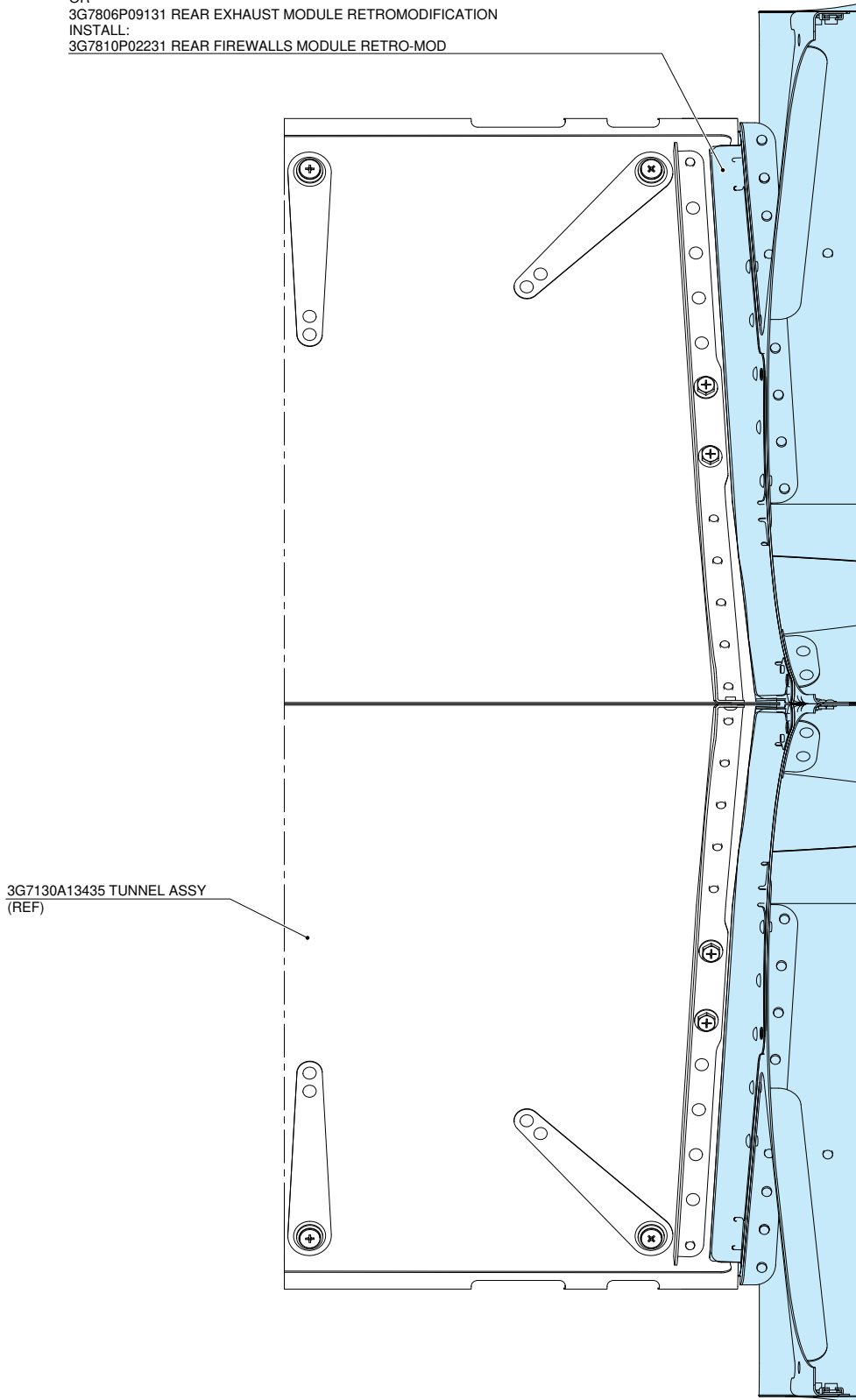
**SECTION F-F**  
STRUCTURES AND SYSTEMS ARE PARTIALLY  
OMITTED FOR BETTER CLARITY PURPOSE  
(TYP. 4 PLACES)



**DETAIL G**  
STRUCTURES AND SYSTEMS ARE PARTIALLY  
OMITTED FOR BETTER CLARITY PURPOSE  
(TYP. 8 PLACES)

**Figure 11**

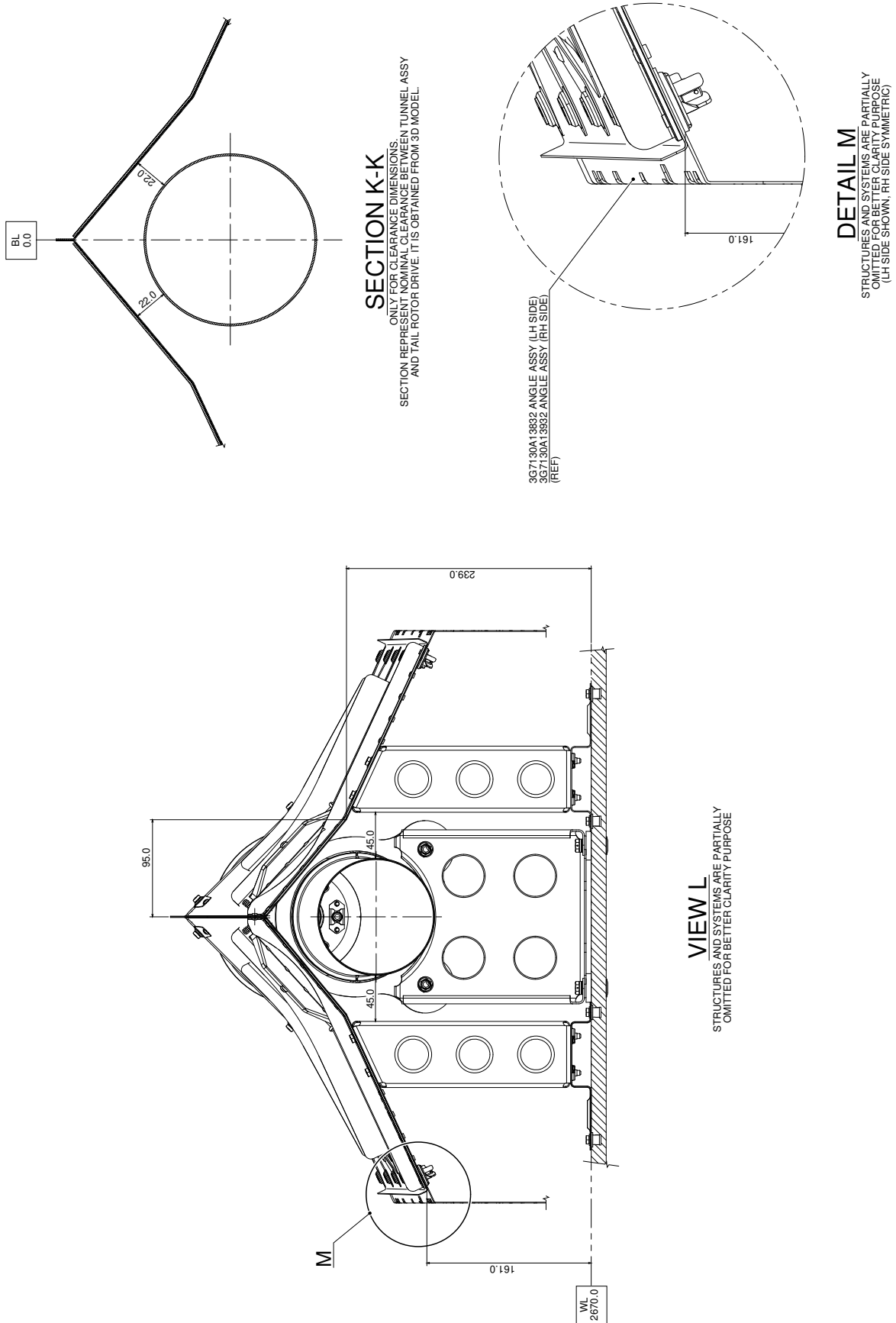
REMOVE:  
 3G7810P00331 REAR FIREWALLS MODULE ASSY RETRO MOD  
 OR  
 3G7810P01331 REAR EXHAUST MODULE RETRO MODIFICATION  
 OR  
 3G7806P09131 REAR EXHAUST MODULE RETROMODIFICATION  
 INSTALL:  
 3G7810P02231 REAR FIREWALLS MODULE RETRO-MOD



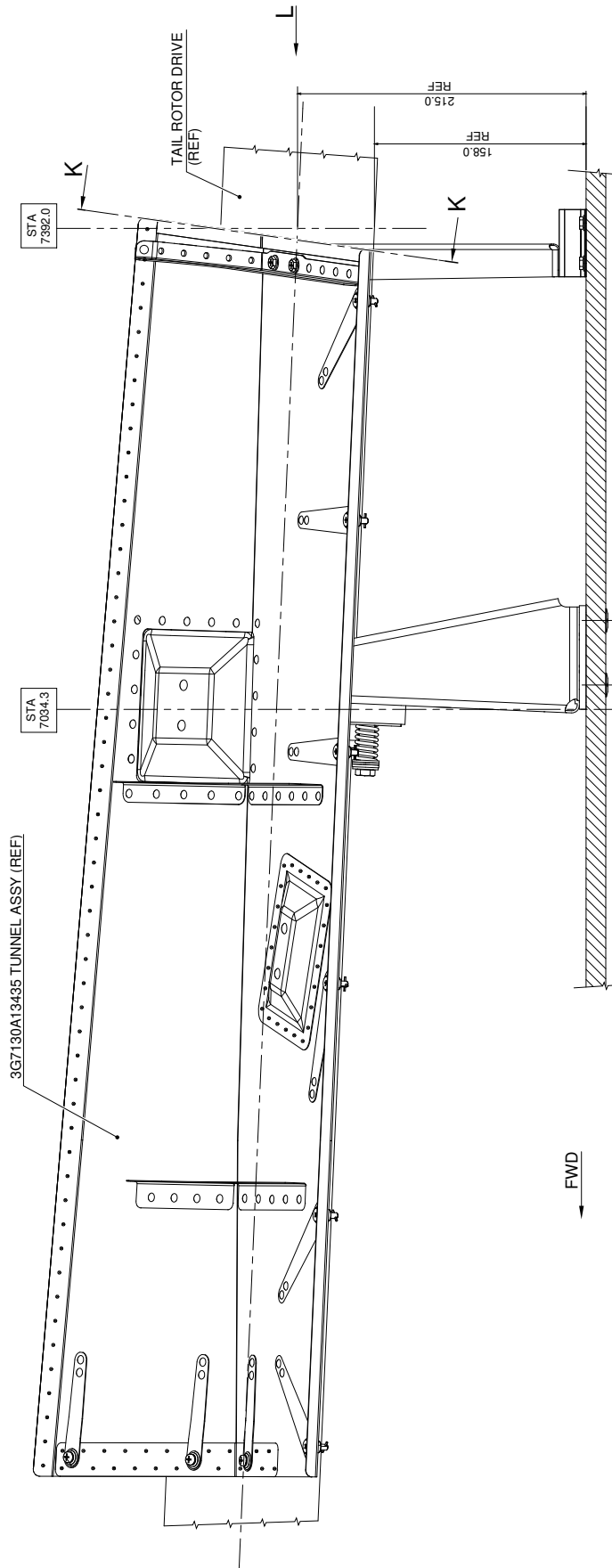
**SECTION H-H**

STRUCTURES AND SYSTEMS ARE PARTIALLY  
 OMITTED FOR BETTER CLARITY PURPOSE

**Figure 12**



**Figure 13**



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

**Figure 14**

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