

Temporary Maintenance Instruction
TMI139-473 Rev. C

Lower LH /RH Longeron Assy
P/N 3G5350A00435 / 3G5350A00635 and
LH/RH lower fitting P/N 3G5350A01453 / 3G5350A01853
Replacement Procedure

All AW139 equipped with Tailboom P/N 3G5350A00135
All AW139 equipped with LH/RH lower fitting
P/N 3G5350A01453 / 3G5350A01853

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

The present TMI will be evaluated for its introduction in the standard set of Technical Publication.

If no further notice is received, the present document expires on: August 24th 2024.

2023-08-24

Introduction

This TMI provides the instructions and requirements to replace the AW139 LH/RH longeron assy P/N 3G5350A00435 / 3G5350A00635 installed on tail boom assy P/N 3G5350A00135.

This TMI provides also the possibility of replacement of LH/RH lower fitting P/N 3G5350A01453 / 3G5350A01853.

Rev. C of this TMI is published in order to extend the expiration date.

Lower LH /RH Longeron Assy P/N 3G5350A00435 / 3G5350A00635 and LH/RH lower fitting P/N 3G5350A01453 / 3G5350A01853 Replacement Procedure

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Table 1 References

Data Module	Title
39-A-00-20-00-00A-120A-A	Helicopter safety - Make the helicopter safe for maintenance
39-A-53-40-00-00A-520A-A	Tail section (structure) - Remove procedures
39-A-53-40-00-00A-520B-A	Tail section (system components installed) - Remove procedures
39-A-53-40-00-00A-720A-A	Tail section (structure) - Install procedure
39-A-53-40-00-00A-720B-A	Tail section (system components installed) - Install procedure

Table 2 Access Point

Access Panel / Door ID	Data Module
No Access Point	

Table 3 Zones

Zone ID	Data Module
No Zones	

Preliminary requirements

Required conditions

Table 4 Required conditions

Conditions	Data Module/Technical Publication
The helicopter must be safe for maintenance	39-A-00-20-00-00A-120A-A
The tail section (structure) must be removed	39-A-53-40-00-00A-520A-A / 39-A-53-40-00-00A-520B-A

Support equipment

Table 5 Support equipment

Nomenclature	Identification No.	Qty
1. Positioning and Drilling Tool Kit	P/N 3G5350A00133A005A	1
2. Starting Drill	CBSD-4-3-N-1	1
3. Starting Reamer	CBSR-4-3-N-1	1
4. Starting Reamer	CBG-4-3-N-1	1
5. Flared Split Sleeve	CBS-4-3-N-16F	200
6. Mandrel	CBM-4-3-N-1-30-VI	2
7. Reamer Gage	CBR-4-3-N-1-M4.775	1
8. Mandrel Check Fixture	CBMG-4-3-N	1
9. Assy, Modular Nosecap	MEN-14A-0423F	1
10. Assy, Lb Puller	LB-20	1
11. Hand Puller	HP-20	1
12. Nose Cap Assy	FT-20	1

Supplies

Table 6 Supplies

Nomenclature	Identification No.	Qty
1. HI-LOK	HL20RB-6-6	AR
2. HI-LOK	HL20RB-6-5	AR
3. HI-LOK	HL20RB-6-4	AR
4. HI-LOK	HL20RB-6-9	AR
5. HI-LOK	HL20RB-6-8	AR
6. HI-LOK	HL20RB-6-7	AR
7. COLLAR	HL86W-6	AR
8. 501722254	LUBRICATING OIL MIL-L-6085	AR
9. 500215763	MIL-S-81733 Ty. 2 Cl. B2 Adhesive PR1436G	AR
10. 900004549	MIL-PRF-81733 Ty. I Cl. 2 Sealing	AR

Note: for hardware not listed above, check on figures and relevant rivet lists.

Note: grip length has to be adapted to the installation. before rivet installation in places where fasteners were just removed, check holes diameter. Refer to ASRP.

Spares

Table 7 Spares

Nomenclature	Identification No.	Qty
1. Lower LH Longeron Assy	P/N 3G5350A00435 (1)	1
2. Lower RH Longeron Assy	P/N 3G5350A00635 (2)	1
3. Bushing	P/N 3G5350A10451 (3)	AR
4. LH Lower Fitting	P/N 3G5350A01453 (4)	1
5. RH Lower Fitting	P/N 3G5350A01853 (5)	1

(1): Part required to replace Lower LH Longeron Assy 3G5350A00435; productive P/N 3G5350A00435A1 shall be provided.

(2): Part required to replace Lower RH Longeron Assy 3G5350A00635; productive P/N 3G5350A00635A1 shall be provided.

(3): Part required to replace LH/RH Lower Fitting 3G5350A01453 / 3G5350A01853 (qty. 1 for each fitting to be replaced).

(4): Part required to replace LH Lower Fitting 3G5350A01453; productive P/N 3G5350A01453A1 shall be provided.

(5): Part required to replace RH Lower Fitting 3G5350A01853; productive P/N 3G5350A01853A1 shall be provided.

Safety conditions

WARNINGS

The materials that follow are dangerous. Before you do this procedure, make sure that you know all the safety precautions and first aid instructions for these materials: Oil (Supplies Ref. 8), Adhesive (Supplies Ref. 9), Sealant (Supplies Ref. 10).

Procedure

NOTES

- A. Place an identification tag on all components that are re-usable, including the attaching hardware that has been removed to gain access to the modification area and adequately protect them until their later re-use.
 - B. Shape the cables in order to prevent interference with the structure and the other existing installations, using where necessary suitable lacing cords.
 - C. During drilling operations pay extreme attention in order to prevent instruments, cables and hosing damage. After drilling, clean the area and remove sharp edges. Apply on bare metal a light film of primer unless the hole is used for ground connection.
 - D. Before installing new rivets check for holes condition; if holes condition is not suitable use oversize rivets. If necessary install rivets with different grips.
 - E. Perform cold working on Aluminium Alloy structure holes for fasteners type "Hi-Lok".
 - F. All riveting and de-riveting in accordance with the IETP ASRP.
 - G. All Hi-Lok fasteners installed and removed in accordance with IETP ASRP.
 - H. Use aliphatic naphtha to degrease. Cleaned surfaces shall be allowed to air dry for at least 30 minutes before bonding.
 - I. Let adhesive cure at room temperature for at least 24 hours unless otherwise specified.
 - J. All dimensions 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-53-40-00-00A-520A-A or DM 39-A-53-40-00-00A-520B-A, remove the tail section from the helicopter.
 3. Get access to the RH lower side of tailboom.
 4. Remove the lower right fitting cover.
 5. In accordance with ANNEX A, install the positioning and drilling tool kit P/N 3G5350A00133A005A on the tail assy.
 6. In accordance with ANNEX A, measure, annotate and store the distance between the lower right tail fitting front surface and the drilling tool kit P/N 3G5350A00133A005A by means of depth mike.
 7. In accordance with ANNEX A, remove the positioning and drilling tool kit P/N 3G5350A00133A005A.
 8. (**Only for Lower Longeron Assy replacement**) With reference to figures from Figure 1 to Figure 8, perform the following steps:
 - 8.1. Remove the Lower Right Longeron Assy P/N 3G5350A00635 by drilling out rivets from the whole assy.
 - 8.2. Store the right lower machined up P/N 3G5350A18854 and down P/N 3G5350A19054 for later re-use .

- 8.3. Temporarily position the new Lower Right Longeron Assy P/N 3G5350A00635, the RH lower machined up P/N 3G5350A18854 and the RH lower machined down P/N 3G5350A19054 in the relevant installation position.
- 8.4. In accordance with ANNEX A, temporarily lock the Longeron assembly to the positioning and drilling tool kit P/N 3G5350A00133A005A.

CAUTION

Pay particular attention during the longeron assembly positioning operation. If possible, perform little adjustment to find the best longeron assembly installation position that ensure the minimum edge margin requirement with existing rivet holes.

- 8.5. Using the tail skin existing fixing holes as a template, countermark on the Longeron assembly the position of the holes to drill.
- 8.6. Remove the Longeron assembly from the positioning and drilling tool.

CAUTION

Before to perform the following step, check that all the countermarked holes on longeron assembly and relevant doublers respect the minimum edge margin requirement.

- 8.7. Drill new Lower RH Longeron assy in the previous countermarked positions.
- 8.8. Cleand and deburr the holes.

NOTE

Apply sealing MIL-S-81733 Ty. II Cl. B2 (adhesive PR1436G) between the longeron and the skin.
Apply sealing MIL-PRF-81733 mixture of Ty. I and Ty. II on rivets shank.

- 8.9. In accordance with ANNEX A, re-install and lock the Longeron assembly to the positioning and drilling tool kit P/N 3G5350A00133A005A.
- 8.10. With reference to figures from Figure 1 to Figure 8, install the new Lower RH Longeron assembly using the indicated rivets.
- 8.11. With reference to figures from Figure 1 to Figure 8, complete the installation of the RH Longeron assembly and both the RH machined up P/N 3G5350A18854 and the RH machined down P/N 3G5350A19054.
- 8.12. In accordance with ANNEX A, check if the measures taken at step 6 between the replaced Lower RH tail fitting front surface and the drilling tool kit P/N 3G5350A00133A005A are respected with the new installed longeron. If necessary spot-face the boss on the fitting.

NOTE

Maximum tolerance allowable is 0.1mm on the face of the boss, with respect to the measure taken on longeron replaced.

- 8.13. In accordance with ANNEX A, through the plate of the positioning and drilling tool kit P/N 3G5350A00133A005:
 - 8.13.1. Ream the fitting hole to 13,8 mm in diameter.
 - 8.13.2. Ream the fitting hole to 14,5 mm in diameter.
 - 8.13.3. Ream the fitting hole to 14,615 – 14,620 mm in diameter.

- 8.14. In the fitting hole previously prepared, install the bushing P/N 3G5350A10451 as follows:
 - 8.14.1. Clean the parts.
 - 8.14.2. Keep the bushing in a fridge for enough time to lower its temperature.
 - 8.14.3. Heat the bushing's housing with a heat gun.
 - 8.14.4. Apply a film of MIL-L-6085 lubricating oil on the bushing, using a dampened cloth.
 - 8.14.5. Install the bushing P/N 3G5350A10451 in the fitting hole of the new Longeron.
 - 8.14.6. After stabilizing, measure the bushing internal diameter and if required ream the bushing hole to 12,750 – 12,820 mm in diameter.
9. (**Only for Lower fitting replacement**) With reference to figures from Figure 1 to Figure 11, perform the following steps:
 - 9.1. Remove the Lower Right Fitting P/N 3G5350A01853 by drilling out rivets; partially remove rivets connecting Lower Right Longeron to tail if necessary to ease Lower Right Fitting removal.
 - 9.2. Temporarily position the new Lower Right Fitting P/N 3G5350A01853 in the relevant installation position.
 - 9.3. In accordance with ANNEX A, temporarily lock the Lower Right Fitting to the positioning and drilling tool kit P/N 3G5350A00133A005A.

CAUTION

Pay particular attention during the fitting assembly positioning operation. If possible, perform little adjustment to find the best fitting assembly installation position that ensure the minimum edge margin requirement with existing rivet holes.

- 9.4. Using the existing fixing holes as a template, countermark on the Lower Right Fitting the position of the holes to drill.
- 9.5. Remove the Lower Right Fitting from the positioning and drilling tool.

CAUTION

Before to perform the following step, check that all the countermarked holes on lower fitting respect the minimum edge margin requirement.

- 9.6. Drill the new Lower Right Fitting in the previous countermarked positions.
- 9.7. Clean and deburr the holes.
- 9.8. In accordance with ANNEX A, re-install and lock the Lower Right Fitting to the positioning and drilling tool kit P/N 3G5350A00133A005A.
- 9.9. With reference to figures from Figure 9 to Figure 11, install the new Lower Right Fitting on the Lower Longeron using the indicated hi-locks.
- 9.10. With reference to figures from Figure 1 to Figure 11, complete the installation of the Lower Right Fitting and Lower Longeron assembly, if necessary.
- 9.11. In accordance with ANNEX A, check if the measures taken at step 6 between the replaced over Right Fitting front surface and the drilling tool kit P/N 3G5350A00133A005A are respected with the new installed component. If necessary spot-face the boss on the fitting.

NOTE

Maximum tolerance allowable is 0.1mm on the face of the boss, with respect to the measure taken on longeron replaced.

- 9.12. In accordance with ANNEX A, through the plate of the positioning and drilling tool kit P/N 3G5350A00133A005:
 - 9.12.1. Ream the fitting hole to 13,8 mm in diameter.
 - 9.12.2. Ream the fitting hole to 14,5 mm in diameter.
 - 9.12.3. Ream the fitting hole to 14,615 – 14,620 mm in diameter.
- 9.13. In the fitting hole previously prepared, install the bushing P/N 3G5350A10451 as follows:
 - 9.13.1. Clean the parts.
 - 9.13.2. Keep the bushing in a fridge for enough time to lower its temperature.
 - 9.13.3. Heat the bushing's housing with a heat gun.
 - 9.13.4. Apply a film of MIL-L-6085 lubricating oil on the bushing, using a dampened cloth.
 - 9.13.5. Install the bushing P/N 3G5350A10451 in the fitting hole of the new longeron.
 - 9.13.6. After stabilizing, measure the bushing internal diameter and if required ream the bushing hole to 12,750 – 12,820 mm in diameter.
10. Install the lower right fitting cover P/N 3G5350A04952.
11. Repeat steps from 3 to 10 to install the new Left Lower longeron P/N 3G5350A00435 or Lower Left Fitting P/N 3G5350A01453, as necessary.

Requirements after job completion

1. Return helicopter to flight configuration.

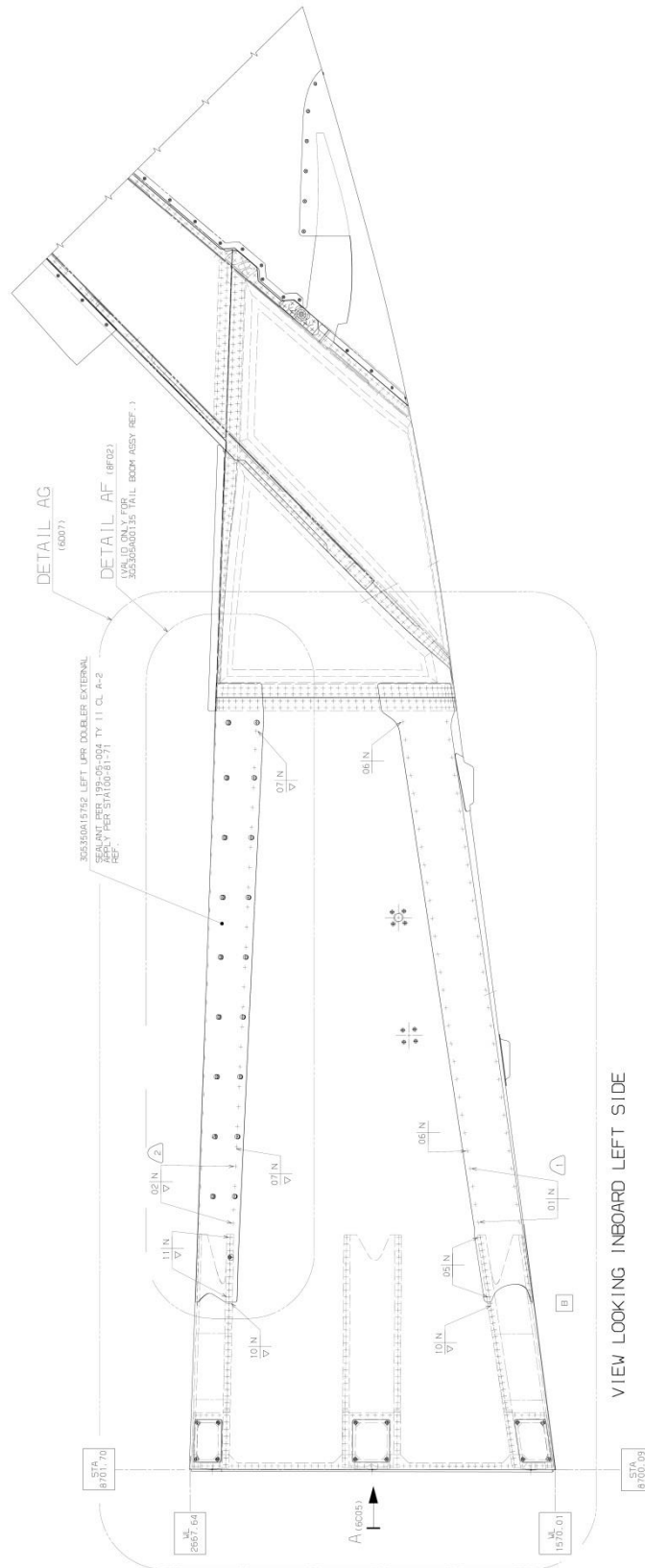


Figure 1

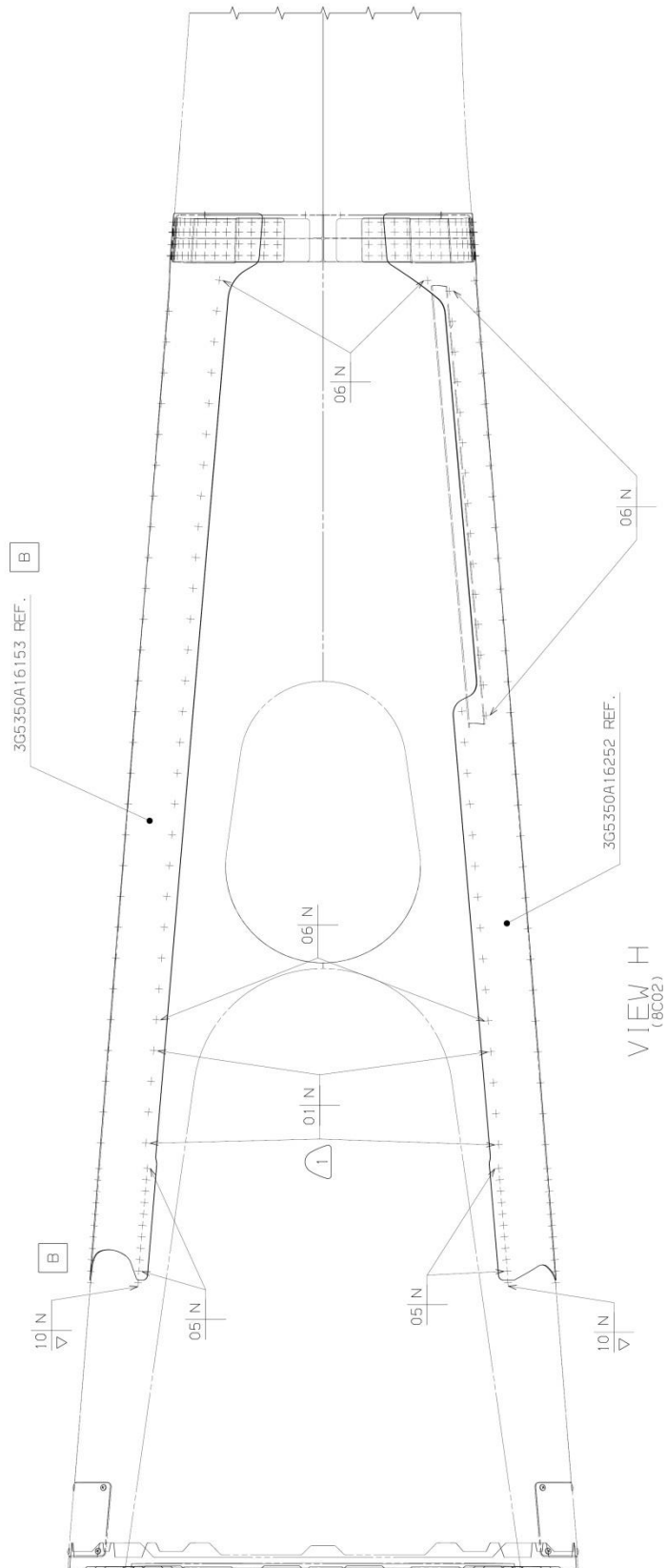


Figure 2

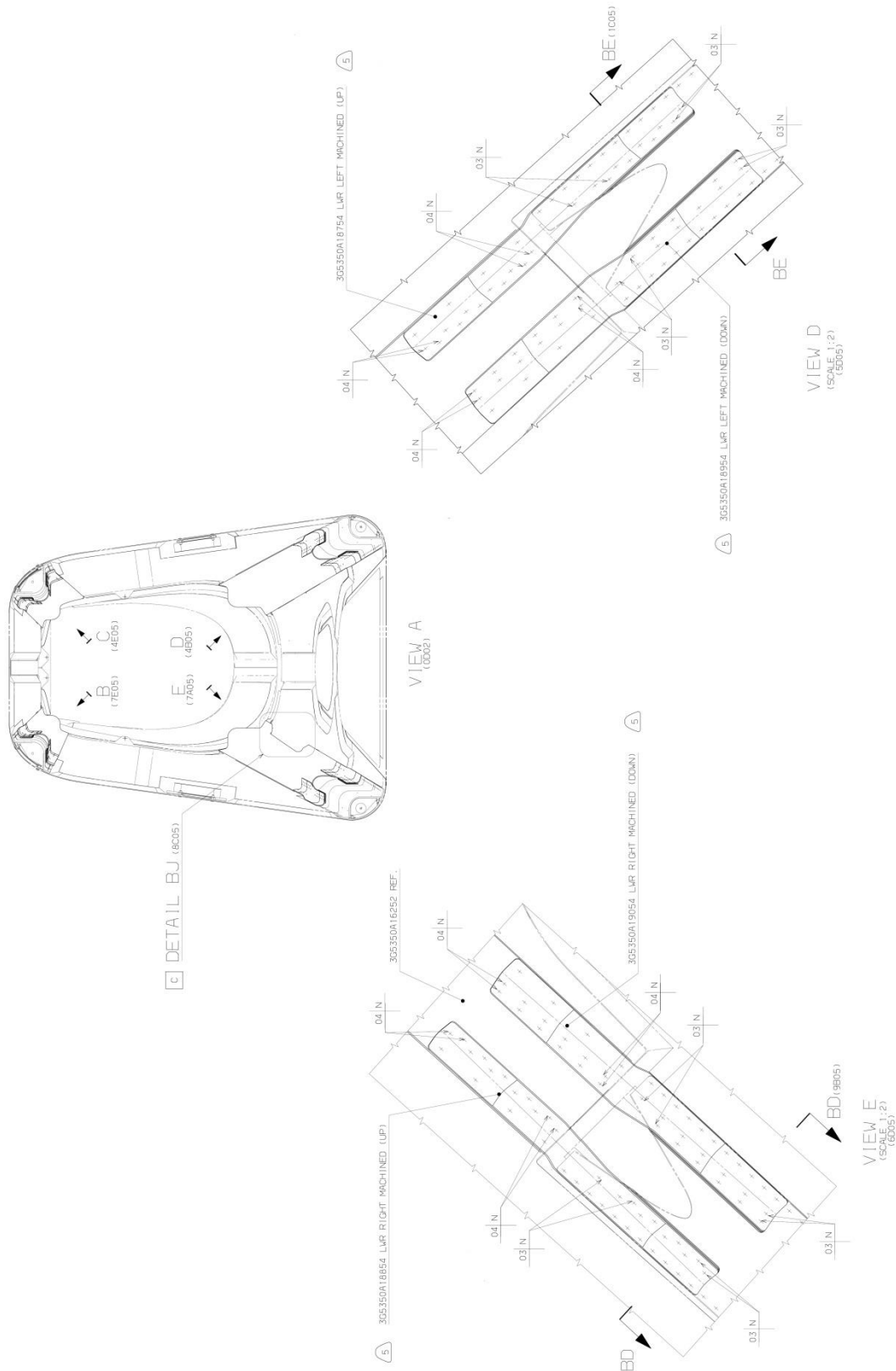


Figure 3

Lower LH /RH Longeron Assy P/N 3G5350A00435 / 3G5350A00635 and
 LH/RH lower fitting P/N 3G5350A01453 / 3G5350A01853
 Replacement Procedure

Rivet list for figures from Figure 1to Figure 3

RIVET CODE IN ACCORDANCE WITH NTA018R CODICE RIVETTO SECONDO NTA018R			
REF. NUMBER NUMERO DI RIFERIMENTO		ORIENTATION ORIENTAMENTO	
COUNTERSINK TIPO DI SVASATURA		BLANK LASCIARE LIBERO	
<p><u>NOTE:</u> EDGE DISTANCE FROM CENTRELINE EXCEPT WHERE INDICATED OTHERWISE</p> <p><u>NON-COMPOSITE</u> UNIVERSAL HEAD 2 TIMES SHANK DIA. COUNTERSINK HEAD 2.5 TIMES SHANK DIA.</p> <p><u>COMPOSITE</u> UNIVERSAL HEAD 2.5 TIMES SHANK DIA. COUNTERSINK HEAD 3 TIMES SHANK DIA.</p>		<p><u>NOTA:</u> DISTANZA DEL BORDO DALL'ASSE ECETTO COME INDICATO</p> <p><u>NON-COMPOSITO</u> TESTA UNIVERSALE 2 VOLTE IL DIAMETRO DEL GAMBO. TESTA SVASATA 2 VOLTE IL DIAMETRO DEL GAMBO.</p> <p><u>COMPOSITO</u> TESTA UNIVERSALE 2,5 VOLTE IL DIAMETRO DEL GAMBO. TESTA SVASATA 3 VOLTE IL DIAMETRO DEL GAMBO.</p>	
REF.No No RIF.	RIVET PART NUMBER NUMERO PEZZO RIVETTO	REF.No No RIF.	RIVET PART NUMBER NUMERO PEZZO RIVETTO
01	A297A06TW13	08	NAS9301BNS-5-03
02	A298A06TW13	09	NAS9302BNS-4-02
03	NAS9301BNS-6-03	10	NAS9302BNS-6-04
04	NAS9301BNS-6-04	11	NAS9302BNS-6-05
05	NAS9301BNS-6-05		
06	NAS9301BNS-6-12		
07	NAS9302BNS-6-12		

Figure 4

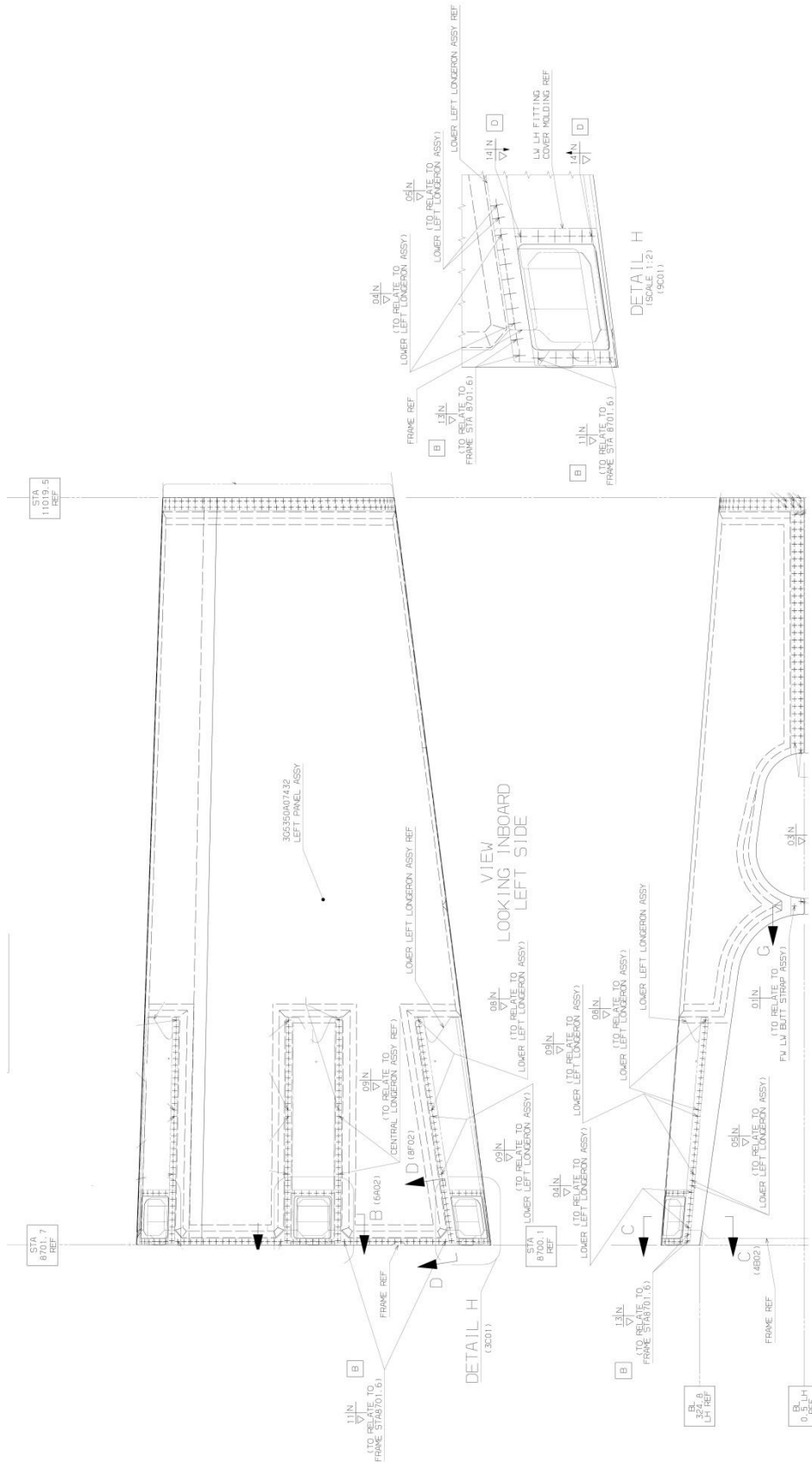


Figure 5

Lower LH /RH Longeron Assy P/N 3G5350A00435 / 3G5350A00635 and
 LH/RH lower fitting P/N 3G5350A01453 / 3G5350A01853
 Replacement Procedure

Rivet list for Figure 5

RIVET CODE IN ACCORDANCE WITH NTA018R CODICE RIVETTO SECONDO NTA018R							
REF. NUMBER NUMERO DI RIFERIMENTO		ORIENTATION ORIENTAMENTO					
COUNTERSINK TIPO DI SVASATURA		BLANK LASCIARE LIBERO					
NOTE: EDGE DISTANCE FROM CENTRELINE EXCEPT WHERE INDICATED OTHERWISE				NOTA: DISTANZA DEL BORDO DALL'ASSE ECETTO COME INDICATO			
NON-COMPOSITE UNIVERSAL HEAD 2 TIMES SHANK DIA. COUNTERSINK HEAD 2.5 TIMES SHANK DIA.				NON-COMPOSITO TESTA UNIVERSALE 2 VOLTE IL DIAMETRO DEL GAMBO. TESTA SVASATA 2 VOLTE IL DIAMETRO DEL GAMBO.			
COMPOSITE UNIVERSAL HEAD 2.5 TIMES SHANK DIA. COUNTERSINK HEAD 3 TIMES SHANK DIA.				COMPOSITO TESTA UNIVERSALE 2,5 VOLTE IL DIAMETRO DEL GAMBO. TESTA SVASATA 3 VOLTE IL DIAMETRO DEL GAMBO.			
REF. No No RIF.	RIVET PART NUMBER NUMERO PEZZO RIVETTO	REF. No No RIF.	RIVET PART NUMBER NUMERO PEZZO RIVETTO	REF. No No RIF.	RIVET PART NUMBER NUMERO PEZZO RIVETTO	REF. No No RIF.	RIVET PART NUMBER NUMERO PEZZO RIVETTO
01	AGS4719-512	07	AS46790-512	13	A298A05TW05		
02	AGS4719-508	08	NAS9302BNS-6-03	14	NAS1721H5L3A		
03	AGS4720-512	09	NAS9302BNS-6-04				
04	MS90353S0604	10	A297A05TW03				
05	MS90353S0603	11	A298A05TW02				
06	AS46788-512	12	A298A06TW04				

Figure 6

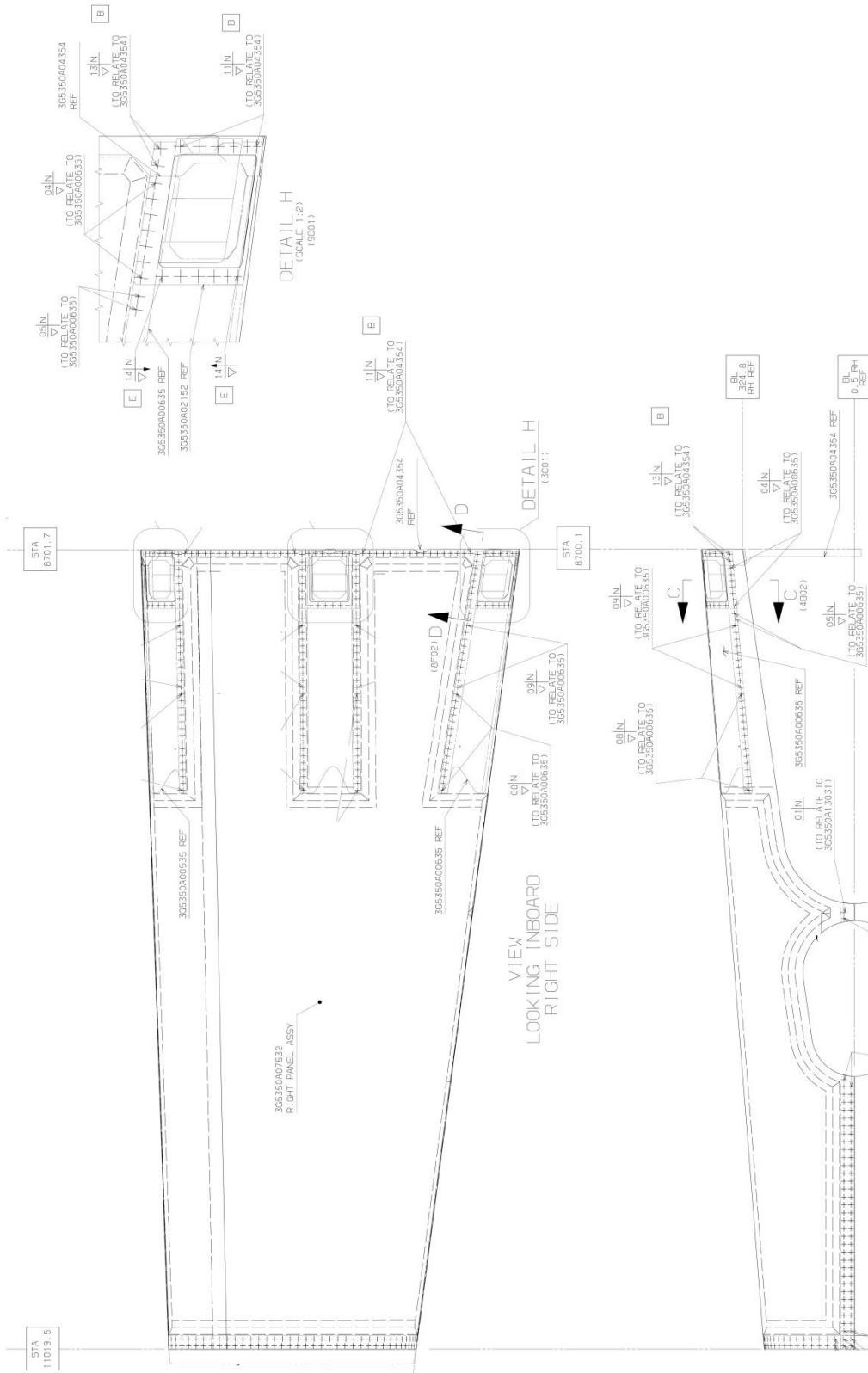


Figure 7

Rivet list for Figure 7

RIVET CODE IN ACCORDANCE WITH NTA018R CODICE RIVETTO SECONDO NTA018R							
REF. NUMBER NUMERO DI RIFERIMENTO		ORIENTATION ORIENTAMENTO		COUNTERSINK TIPO DI SVASATURA		BLANK LASCIARE LIBERO	
NOTE: EDGE DISTANCE FROM CENTRELINE EXCEPT WHERE INDICATED OTHERWISE				NOTA: DISTANZA DEL BORDO DALL'ASSE ECETTO COME INDICATO			
NON-COMPOSITE UNIVERSAL HEAD 2 TIMES SHANK DIA. COUNTERSINK HEAD 2,5 TIMES SHANK DIA.				NON-COMPOSITO TESTA UNIVERSALE 2 VOLTE IL DIAMETRO DEL GAMBO. TESTA SVASATA 2 VOLTE IL DIAMETRO DEL GAMBO.			
COMPOSITE UNIVERSAL HEAD 2,5 TIMES SHANK DIA. COUNTERSINK HEAD 3 TIMES SHANK DIA.				COMPOSITO TESTA UNIVERSALE 2,5 VOLTE IL DIAMETRO DEL GAMBO. TESTA SVASATA 3 VOLTE IL DIAMETRO DEL GAMBO.			
REF. No No RIF.	RIVET PART NUMBER NUMERO PEZZO RIVETTO	REF. No No RIF.	RIVET PART NUMBER NUMERO PEZZO RIVETTO	REF. No No RIF.	RIVET PART NUMBER NUMERO PEZZO RIVETTO	REF. No No RIF.	RIVET PART NUMBER NUMERO PEZZO RIVETTO
01	AGS4719-512	07	AS46790-512	13	A298A06TW05		
02	AGS4719-508	08	NAS9302BNS-5-03	14	NAS1721H5L3A		
13	AGS4720-512	09	NAS9302BNS-5-04				
04	MS90353S0604	10	A297A05TW03				
05	MS90353S0603	11	A298A05TW02				
06	AS46788-512	12	A298A06TW04				

Figure 8

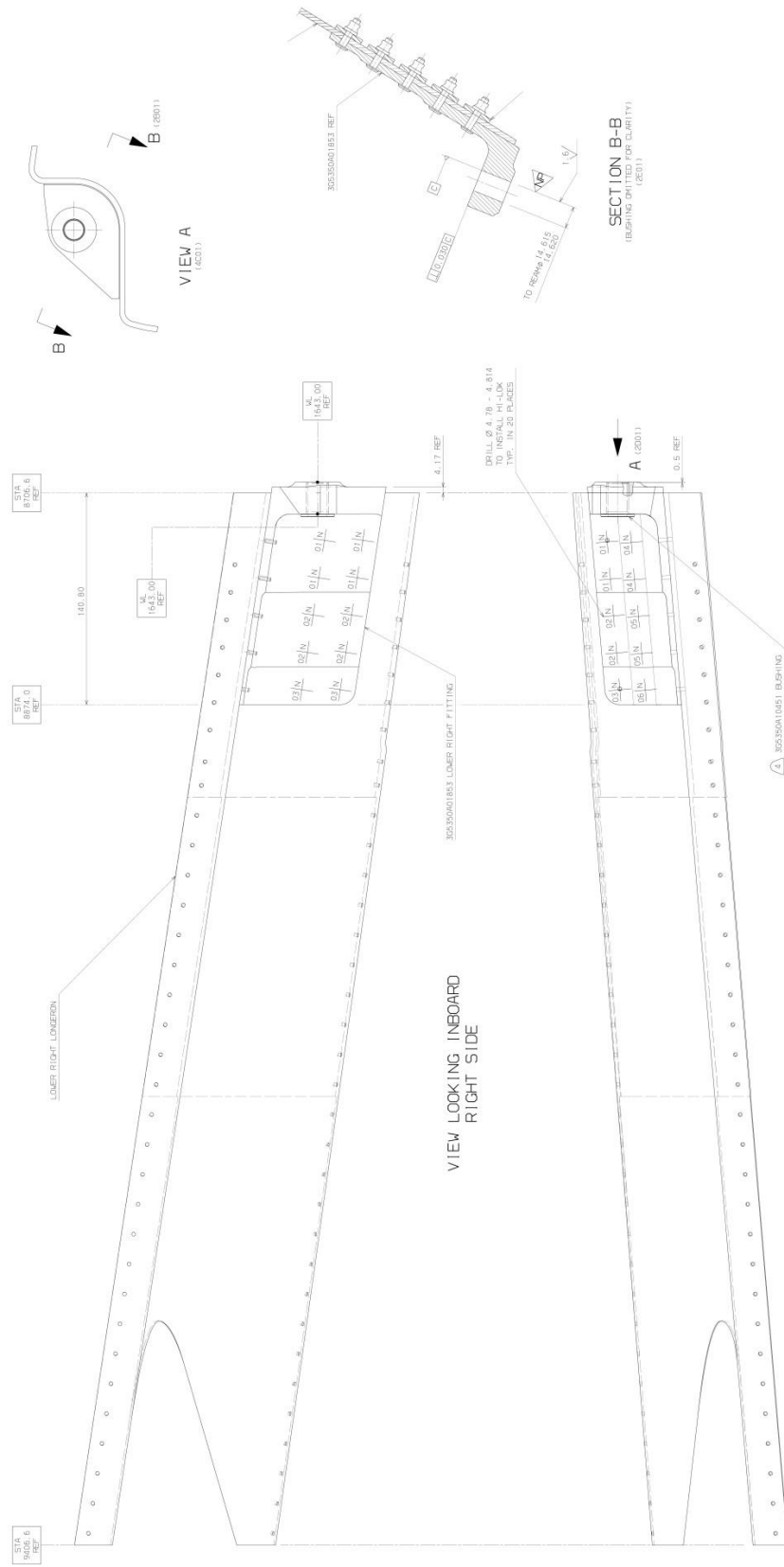


Figure 9

Lower LH /RH Longeron Assy P/N 3G5350A00435 / 3G5350A00635 and
 LH/RH lower fitting P/N 3G5350A01453 / 3G5350A01853
 Replacement Procedure

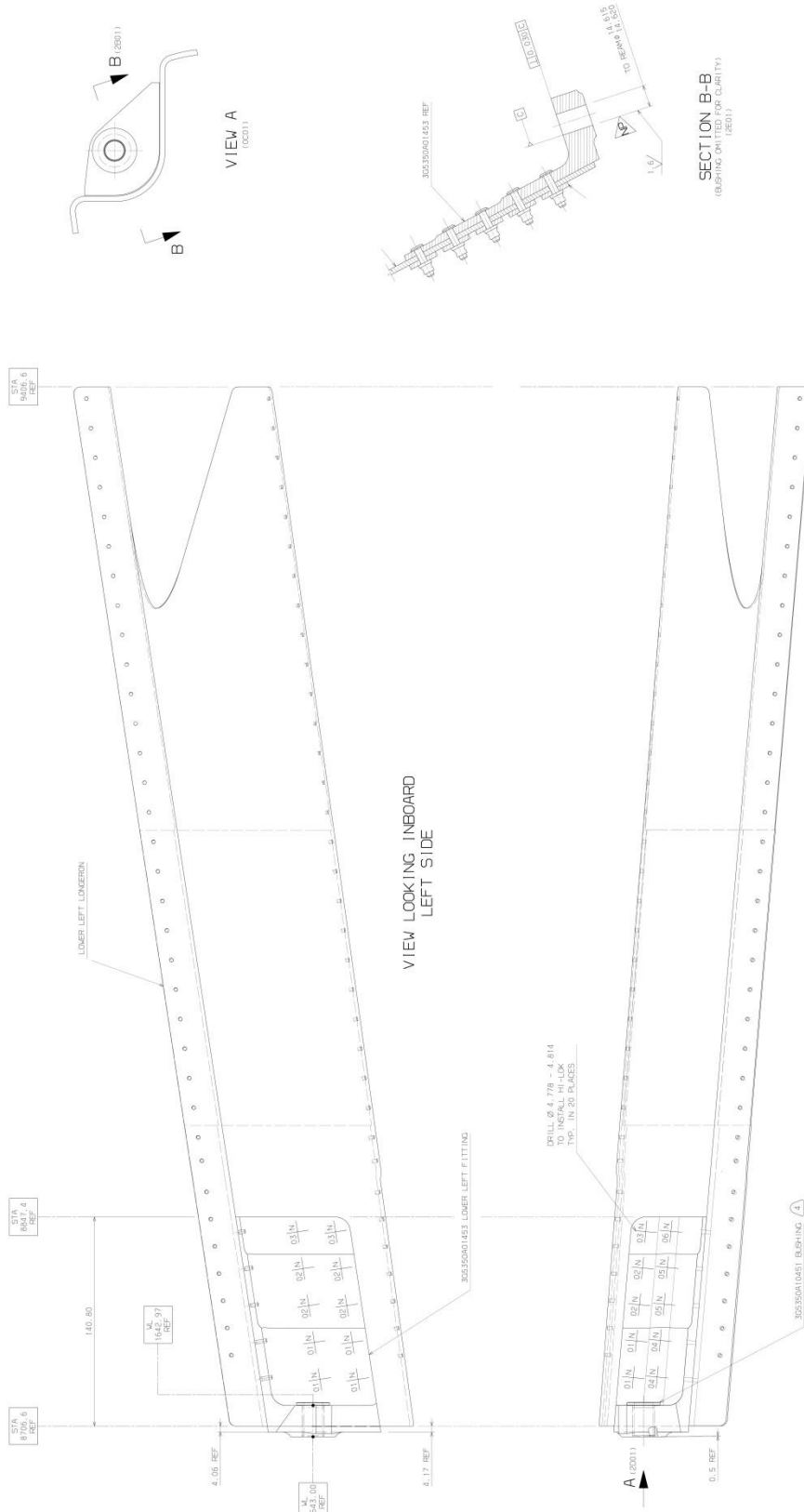


Figure 10

Lower LH /RH Longeron Assy P/N 3G5350A00435 / 3G5350A00635 and
 LH/RH lower fitting P/N 3G5350A01453 / 3G5350A01853
 Replacement Procedure

Rivet list for figures from Figure 1 Figure 9 to Figure 10

RIVET CODE IN ACCORDANCE WITH NTA018R CODICE RIVETTO SECONDO NTA018R			
REF. NUMBER/ NUMERO DI RIFERIMENTO		ORIENTATION/ ORIENTAMENTO	
COUNTERSINK/ TIPO DI SVASATURA		BLANK/ LASCIARE LIBERO	
NOTE: EDGE DISTANCE FROM CENTRELINE EXCEPT WHERE INDICATED OTHERWISE NON-COMPOSITE UNIVERSAL HEAD 2 TIMES SHANK DIA. COUNTERSINK HEAD 2.5 TIMES SHANK DIA. COMPOSITE UNIVERSAL HEAD 2.5 TIMES SHANK DIA. COUNTERSINK HEAD 3 TIMES SHANK DIA.		NOTA: DISTANZA DEL BORDO DALL'ASSE ECCETTO COME INDICATO NON-COMPOSITO TESTA UNIVERSALE 2 VOLTE IL DIAMETRO DEL GAMBO. TESTA SVASATA 2.5 VOLTE IL DIAMETRO DEL GAMBO. COMPOSITO TESTA UNIVERSALE 2.5 VOLTE IL DIAMETRO DEL GAMBO. TESTA SVASATA 3 VOLTE IL DIAMETRO DEL GAMBO.	
REF No/ No RIF	RIVET PART NUMBER/ NUMERO PEZZO RIVETTO	REF No/ No RIF	RIVET PART NUMBER/ NUMERO PEZZO RIVETTO
01	HL20RB-6-6	04	HL20RB-6-9
	HL86W-6		HL86W-6
02	HL20RB-6-5	05	HL20RB-6-8
	HL86W-6		HL86W-6
03	HL20RB-6-4	06	HL20RB-6-7
	HL86W-6		HL86W-6

Figure 11

Annex A

The following procedure describe the use of the positioning and drilling tool for the replacement of the tail LH Upper fitting.

The procedure is valid for all the other installed tail fittings to be replaced.

NOTE

Install the positioning and drilling tool "TAIL AFTER" face in contact with the TAIL (script "REAR FWD" must be visible).

NOTE

Install spacer ITEM 20 with the boss in contact with the fitting boss.

NOTE

The nuts (ITEMS X1) must be tightened manually acting only on special PIN (ITEM 10). Use suitable wrench to lock the nut.

1. With reference to Figure A2, install the positioning and drilling tool kit P/N 3G5350A00133A005A on tail assy securing the plate in the points 2-3-4-5-6 by means of n°5 special pins (ITEM 10), n°5 spacers (ITEM 20), n°5 washers (ITEM X2) and n°5 nuts (ITEM X1).
2. With reference to Figure A3, measure the distance between the plate and the fitting-boss in the n°4 indicated positions. Record the measures in the relevant table of Figure A10.
3. Remove the positioning and drilling tool and perform remove the LH upper fitting in accordance with procedure.

NOTE

Install the positioning and drilling tool "TAIL AFTER" face in contact with the TAIL (script "REAR FWD" must be visible).

NOTE

Install spacer ITEM 20 with the boss in contact with the fitting boss.

CAUTION

The nuts (ITEMS X1) must be tightened manually acting only on special PIN (ITEM 10). Use suitable wrench to lock the nut.

4. With reference to Figure A2, re-install the positioning and drilling tool kit P/N 3G5350A00133A005A on tail assy securing the plate in the points 2-3-4-5-6 by means of n°5 special pins (ITEM 10), n°5 spacers (ITEM 20), n°5 washers (ITEM X2) and n°5 nuts (ITEM X1).

NOTE

Install spacer ITEM 18 with the boss in contact with the fitting boss.

NOTE

The nuts (ITEMS X1) must be tightened manually acting only on special PIN (ITEM 15). Use suitable wrench to lock the nut.

5. With reference to Figure A4, position the new fitting assembly to install in relevant position by means of a special pin (ITEM 15), a spacer (ITEM 18), a washer (ITEM X2) and a nut (ITEM X1) and perform the LH upper fitting installation in accordance with BT139-419 procedure.
6. With reference to Figure A5, remove a special pin (ITEM 15), a spacer (ITEM 18), a washer (ITEM X2) and a nut (ITEM X1) installed in the previously step and install the drilling tool $\varnothing 11.8$ (ITEM 13) by means of n°3 special screws (ITEM 5).
7. With reference to Figure A5, ream the fitting hole to $\varnothing 11.8$ by means of reamer $\varnothing 11.8$.
8. With reference to Figure A6, remove the drilling tool $\varnothing 11.8$ (ITEM 13) and the n°3 special screws (ITEM 5).

NOTE

Maximum tolerance allowable is 0.1 mm on the face of the boss, with respect to the measure taken.

9. With reference to Figure A6, install the drilling tool $\varnothing 32.0$ (ITEM 13) by means of n°3 special screws (ITEM 5) and spot-face the fitting boss to the previously measure at step 2 by means of $\varnothing 32.0$ spot-facer.
10. With reference to Figure A7, remove the drilling tool $\varnothing 32.0$ (ITEM 13) and install the drilling tool $\varnothing 12.3$ (ITEM 13) by means of n°3 special screws (ITEM 5); ream the fitting hole to $\varnothing 12.3$ by means of reamer $\varnothing 12.3$.
11. With reference to Figure A7, remove the drilling tool $\varnothing 12.3$ (ITEM 13) and the n°3 special screws (ITEM 5).
12. With reference to Figure A8, install the drilling tool $\varnothing 12.6$ (ITEM 13) by means of n°3 special screws (ITEM 5) and ream the fitting hole to $\varnothing 12.6$ by means of reamer $\varnothing 12.6$.
13. With reference to Figure A9, remove the drilling tool $\varnothing 12.6$ (ITEM 13) and the n°3 special screws (ITEM 5).
14. With reference to Figure A9, install the drilling tool $\varnothing 12.75$ (ITEM 13) by means of n°3 special screws (ITEM 5) and ream the fitting hole to $\varnothing 12.75$ by means of reamer $\varnothing 12.75$.
15. With reference to Figure A9, remove the drilling tool $\varnothing 12.75$ (ITEM 13) and the n°3 special screws (ITEM 5).
16. Remove the tool from the positioning and drilling tool P/N 3G5350A00133A005A from the tail.

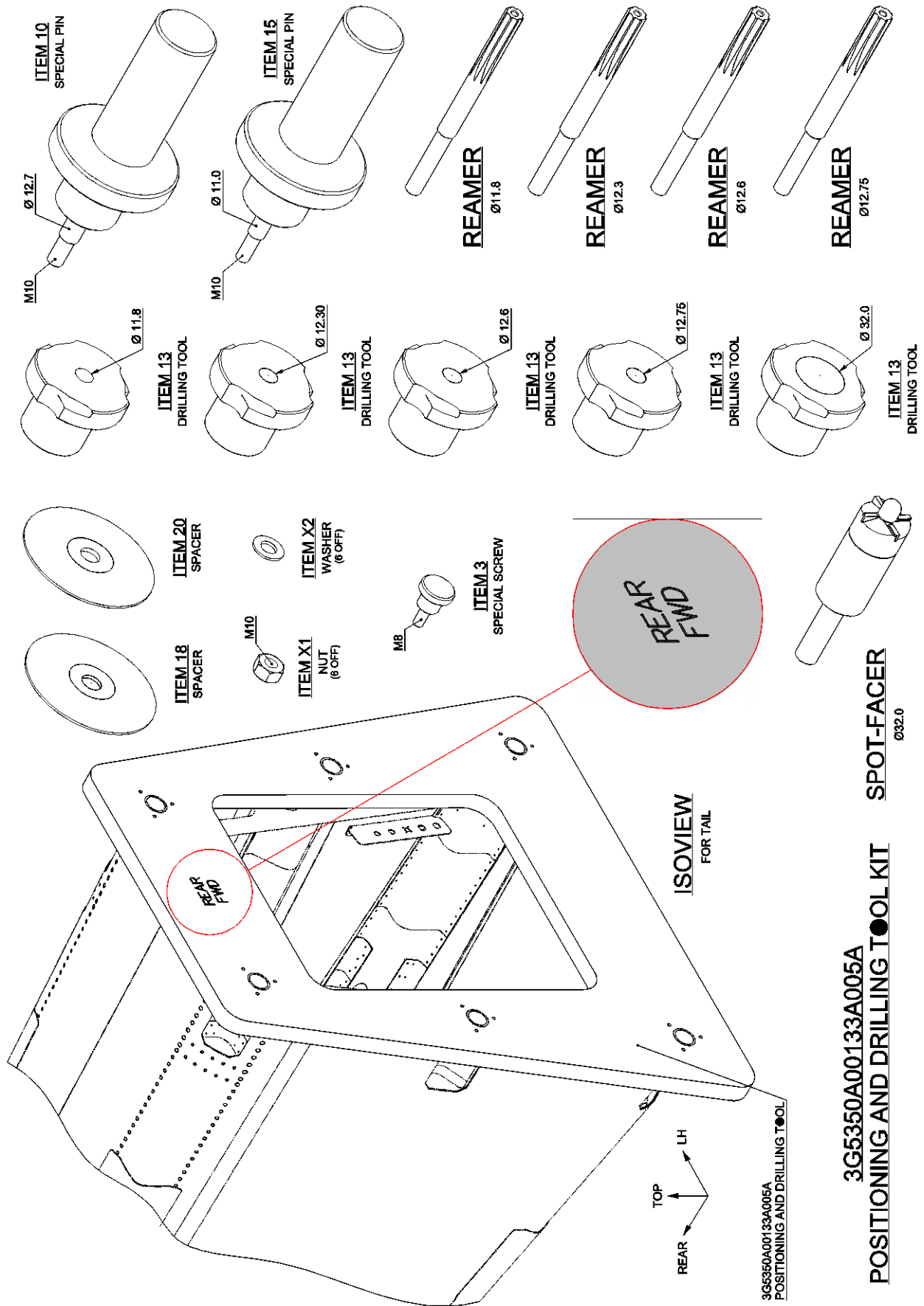


Figure A1

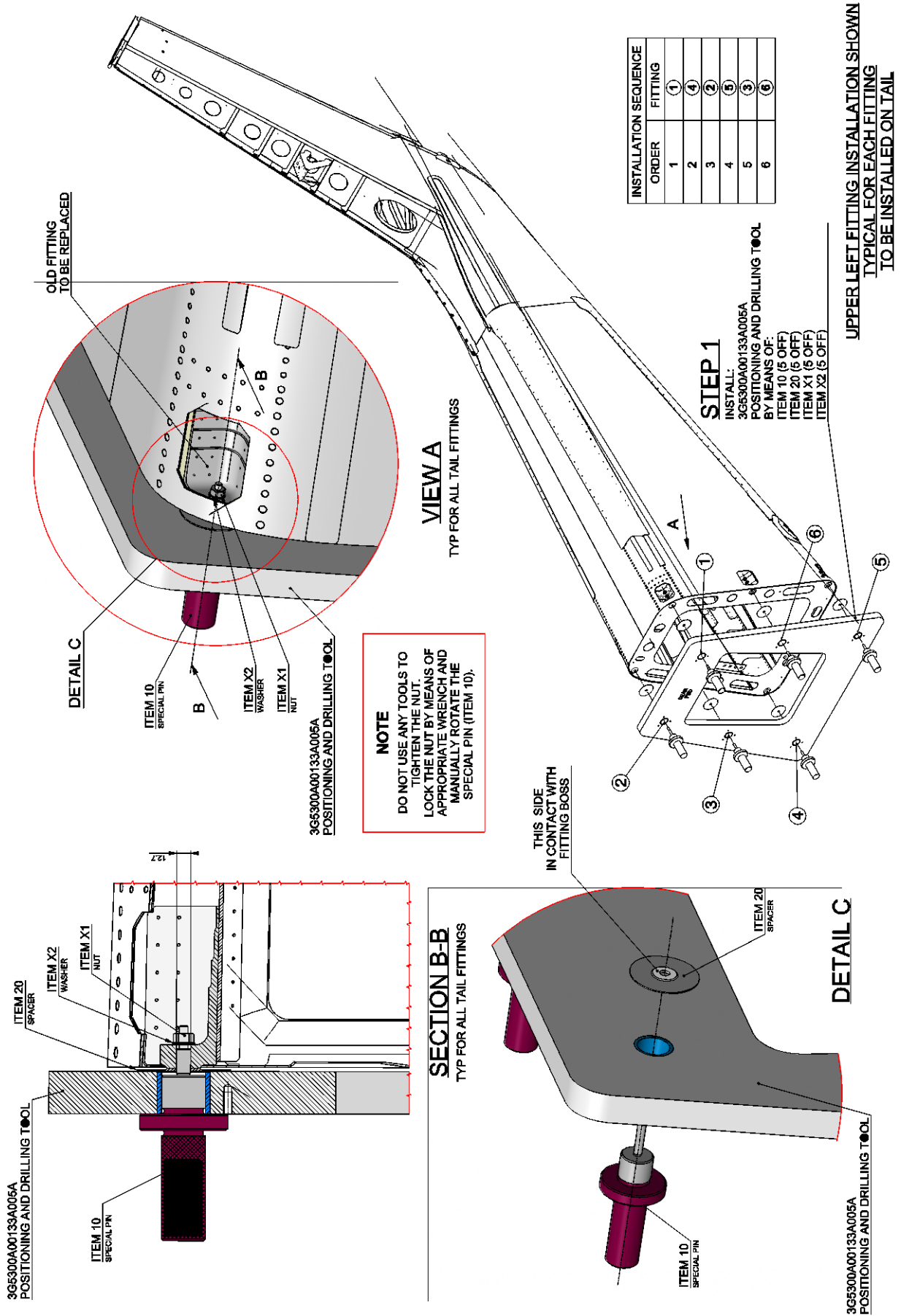


Figure A2

Lower LH /RH Longeron Assy P/N 3G5350A00435 / 3G5350A00635 and
 LH/RH lower fitting P/N 3G5350A01453 / 3G5350A01853
 Replacement Procedure

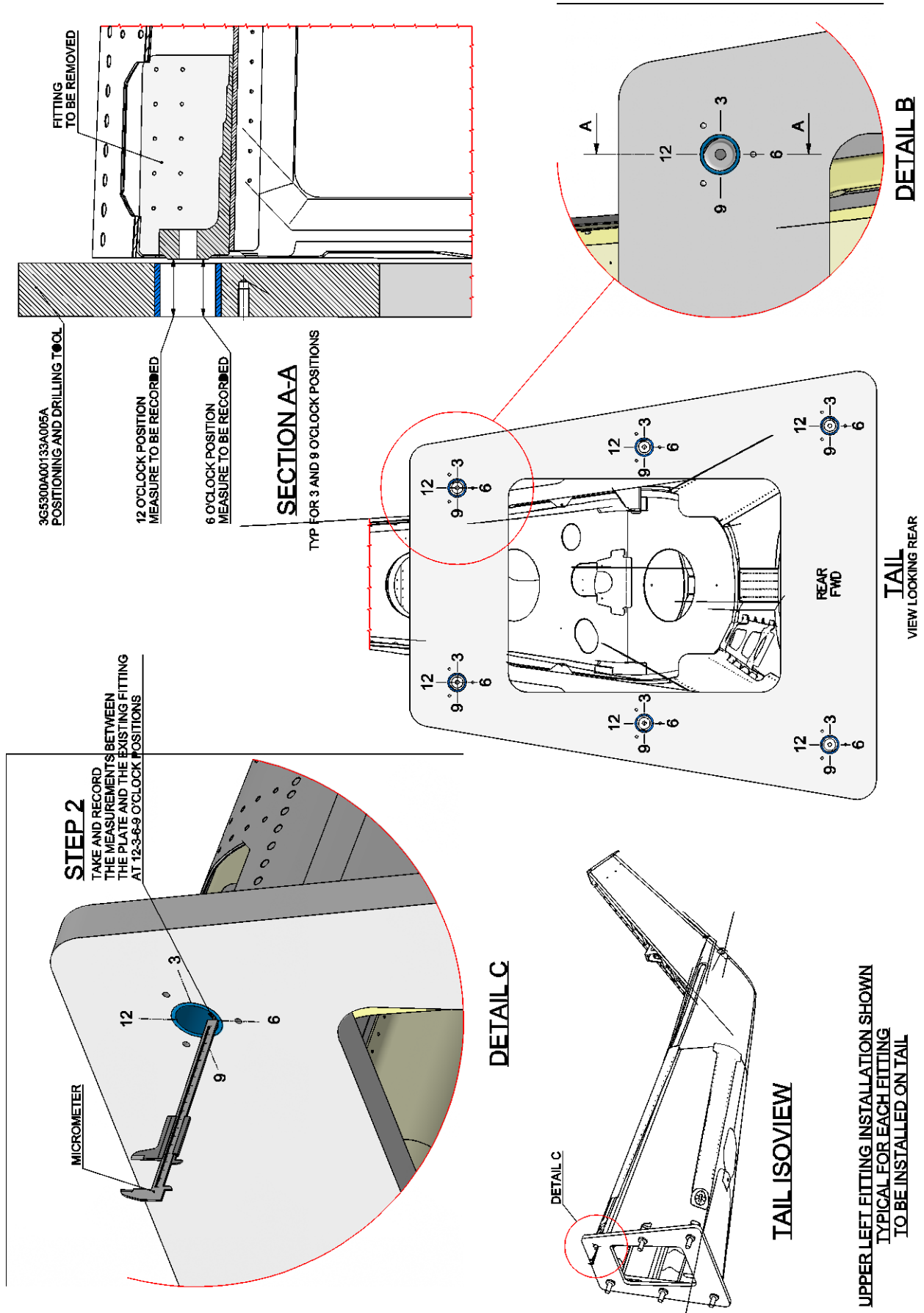


Figure A3

Lower LH /RH Longeron Assy P/N 3G5350A00435 / 3G5350A00635 and
LH/RH lower fitting P/N 3G5350A01453 / 3G5350A01853
Replacement Procedure

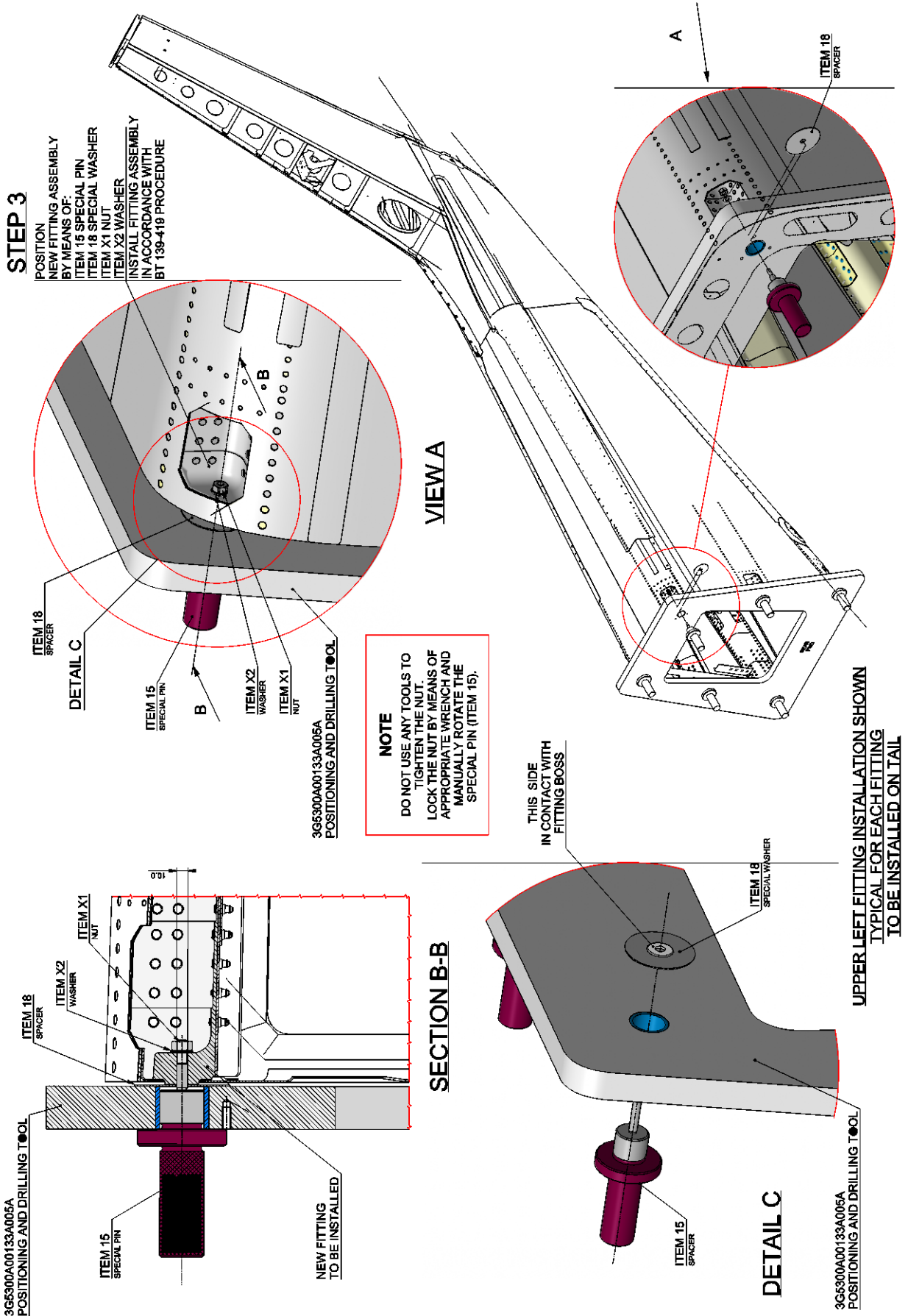


Figure A4

Lower LH /RH Longeron Assy P/N 3G5350A00435 / 3G5350A00635 and
 LH/RH lower fitting P/N 3G5350A01453 / 3G5350A01853
 Replacement Procedure

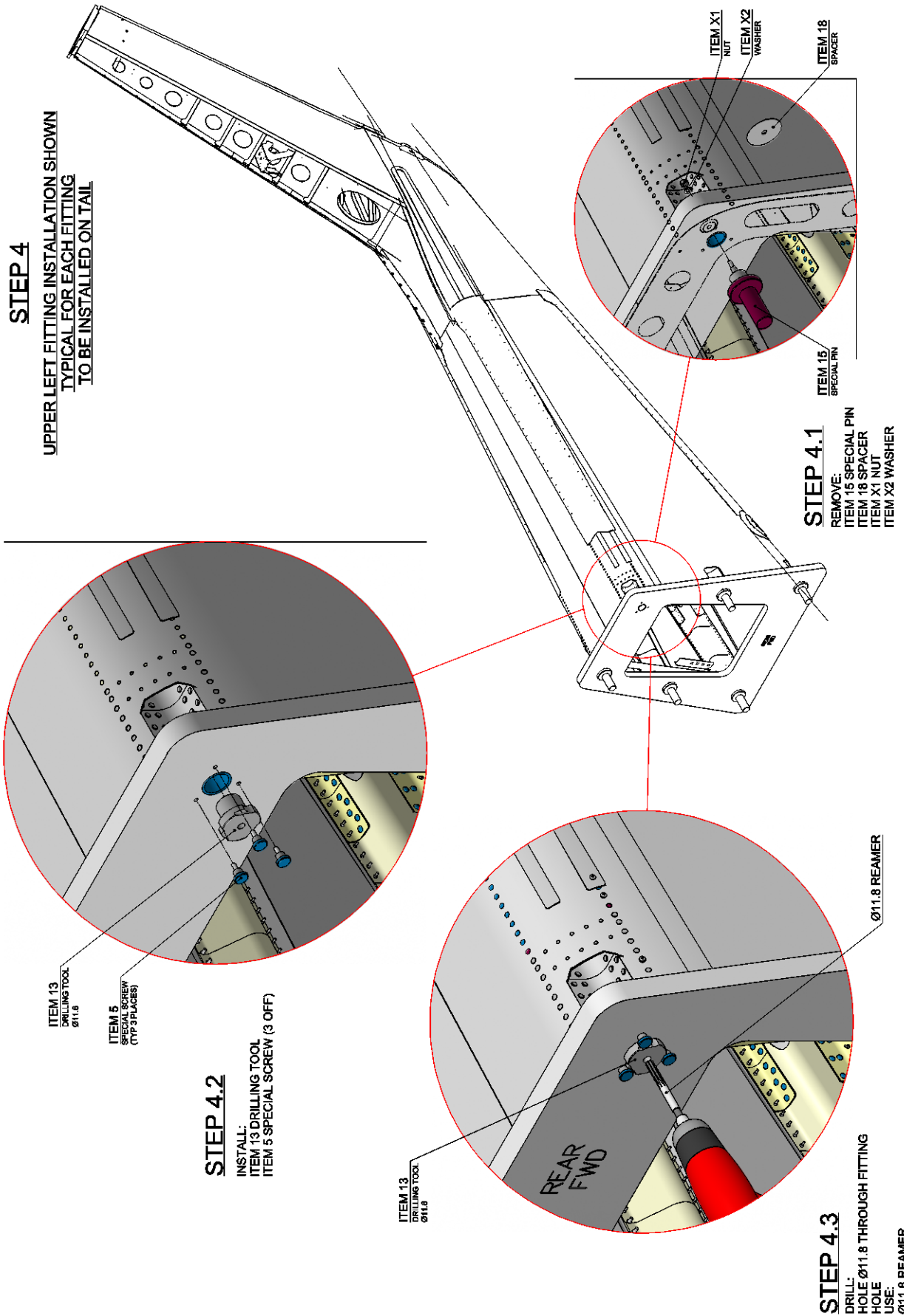


Figure A5

Lower LH /RH Longeron Assy P/N 3G5350A00435 / 3G5350A00635 and
LH/RH lower fitting P/N 3G5350A01453 / 3G5350A01853
Replacement Procedure

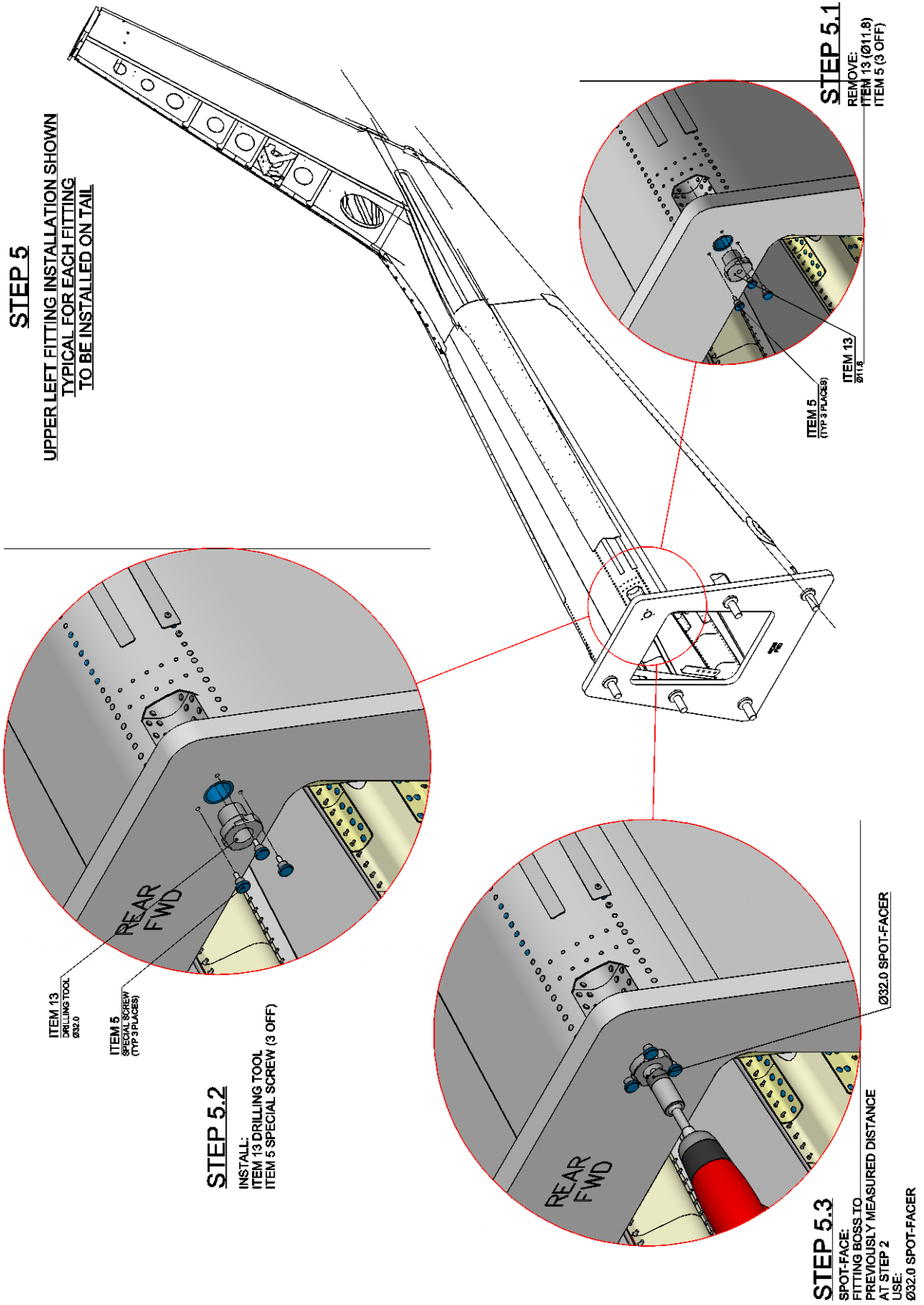


Figure A6

Lower LH /RH Longeron Assy P/N 3G5350A00435 / 3G5350A00635 and
LH/RH lower fitting P/N 3G5350A01453 / 3G5350A01853
Replacement Procedure

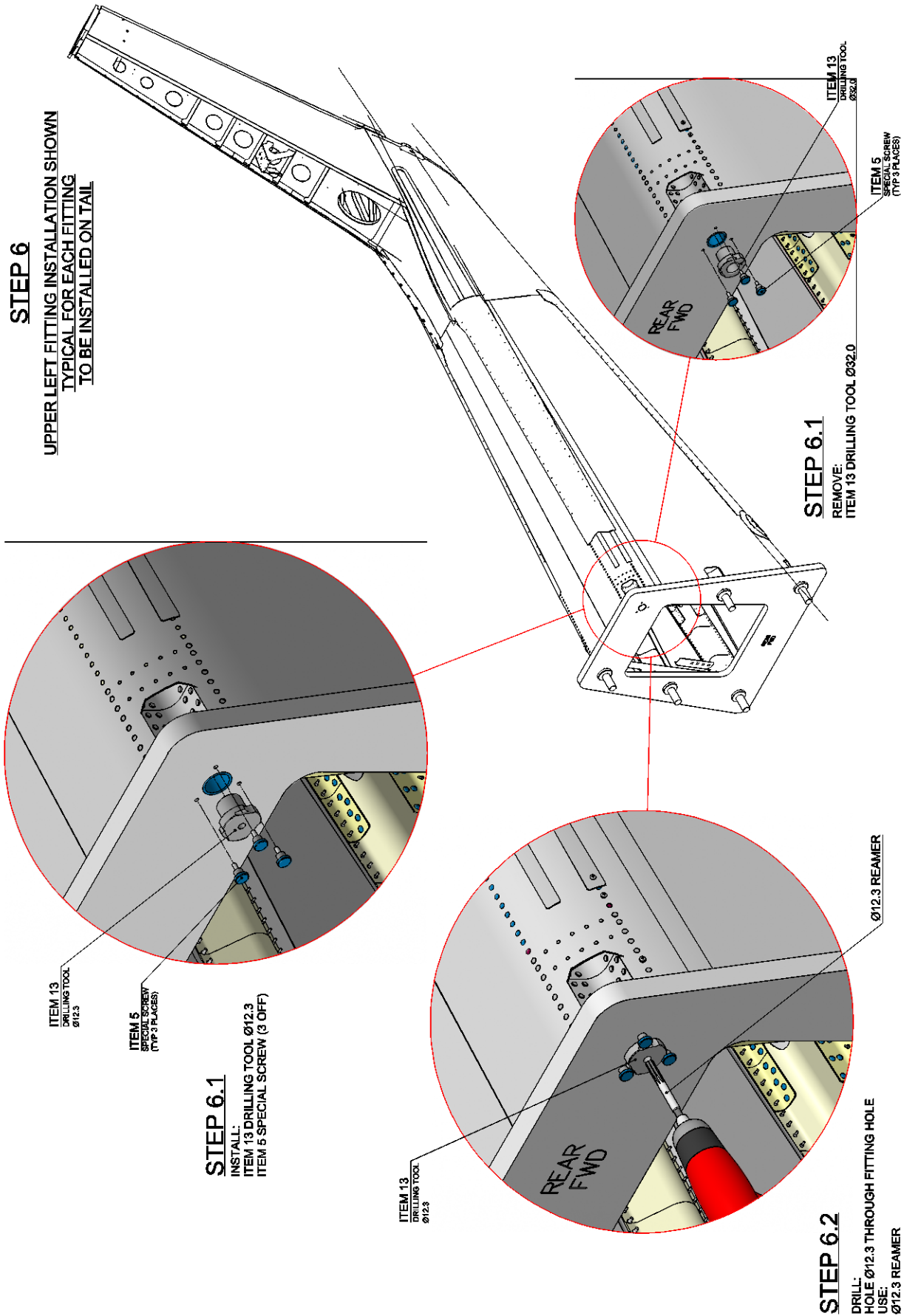


Figure A7

Lower LH /RH Longeron Assy P/N 3G5350A00435 / 3G5350A00635 and
LH/RH lower fitting P/N 3G5350A01453 / 3G5350A01853
Replacement Procedure

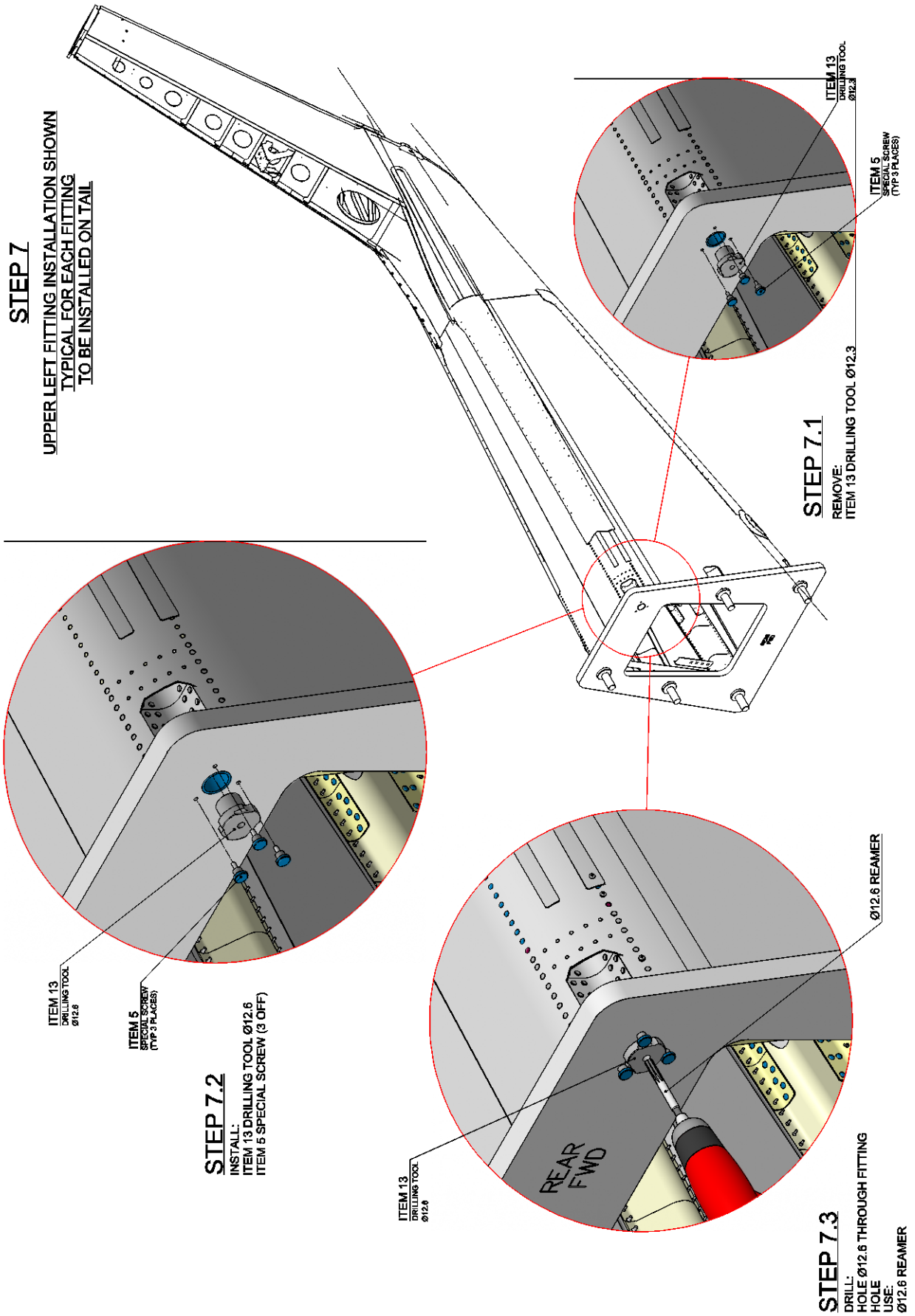


Figure A8

Lower LH /RH Longeron Assy P/N 3G5350A00435 / 3G5350A00635 and
LH/RH lower fitting P/N 3G5350A01453 / 3G5350A01853
Replacement Procedure

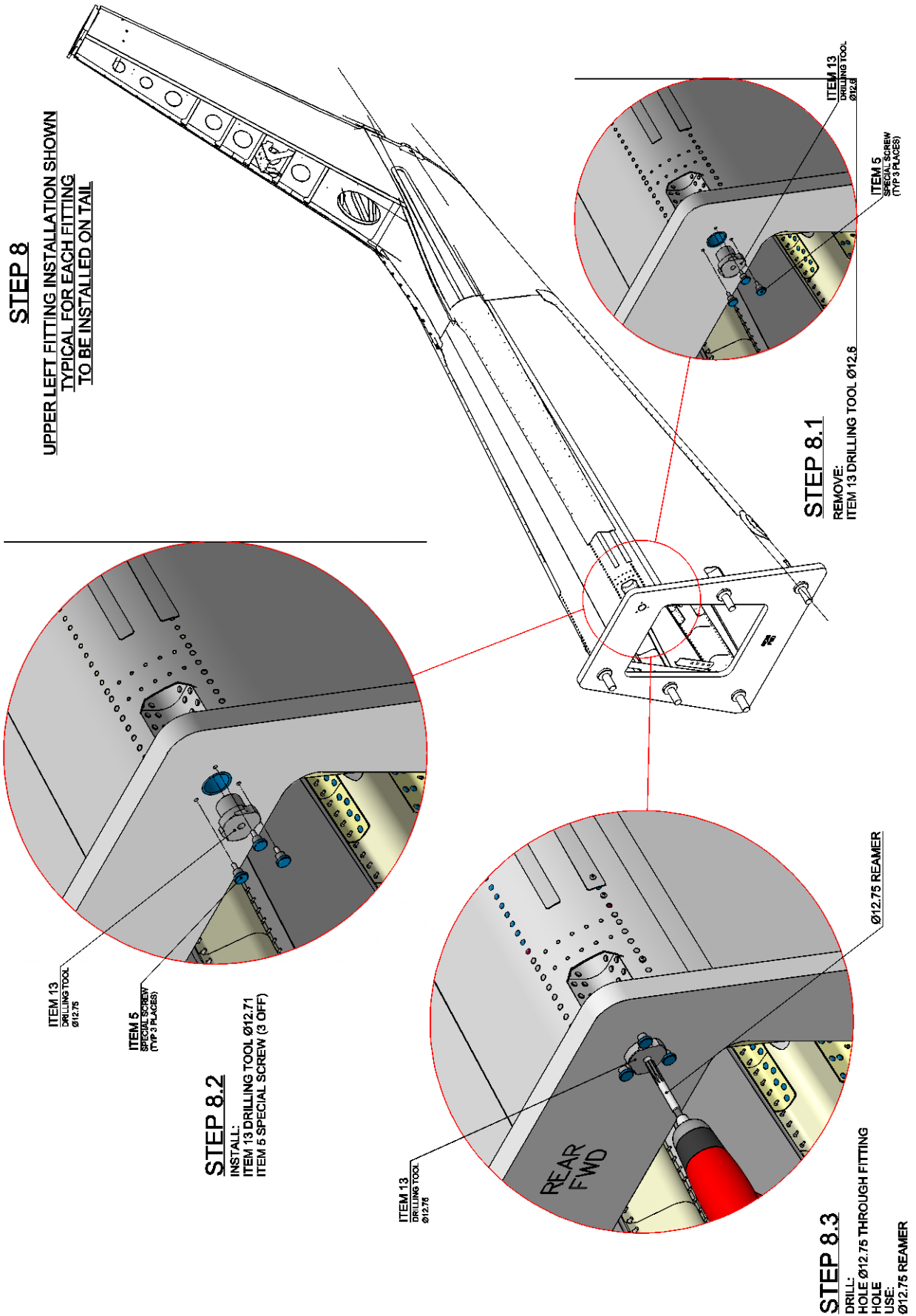


Figure A9

Lower LH /RH Longeron Assy P/N 3G5350A00435 / 3G5350A00635 and
LH/RH lower fitting P/N 3G5350A01453 / 3G5350A01853
Replacement Procedure

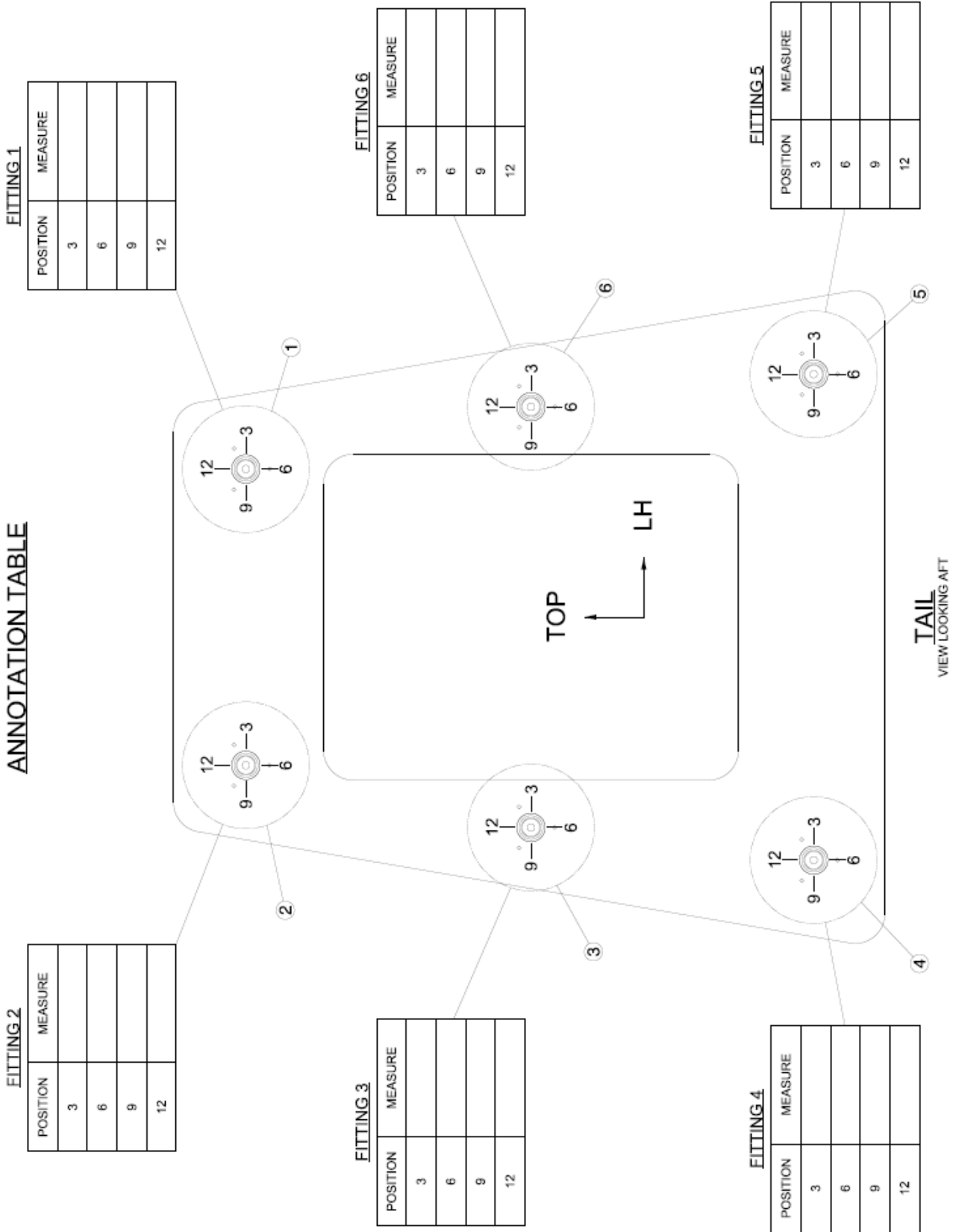


Figure A10