

Temporary Maintenance Instruction TMI139-473 Rev. B

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: April 12^h 2023.

<mark>2022-04-12</mark>



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. B of this TMI is published in order to extend the expiration date and change the second note of Table 6 Supplies.



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

Table of contents

References

Preliminary requirements

Procedure

Requirements after job completion

Appendix A

List of tables

- 1 References
- 2 Access point
- 3 Zones
- **4 Required Conditions**
- 5 Support Equipment
- 6 Supplies
- 7 Spares

List of figures

igure 1	. 11
Figure 1 Figure 2	. 12
igure 3	. 13
- igure 4	. 14
Figure 3 Figure 4 Figure 5	. 15
	16
Figure 8	. 17
jure 8	. 18
	19
Figure 10	20
Figure 10	. 21
	· – ·



References

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-00-20-00A-120A-A			
Tha tail section (structure) must be removed	39-A-53-40-00-00A-520A-A / 39-A-53-40-00-00A-520B-A			

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



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			

Table 5 Support equipment

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.

139

- 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. Cleand 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 ower 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

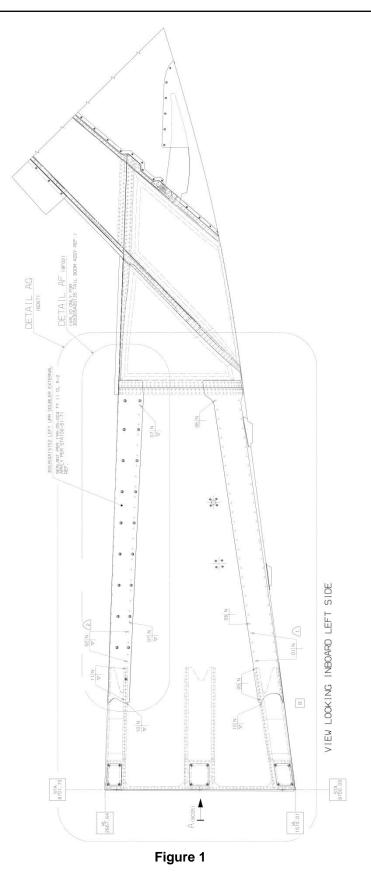
Maximum tolerance allowable is 0.1mm on the face of the boss, with respect to the measure taken on longeron replaced.



- 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 necesary.

Requirements after job completion

1. Return helicopter to flight configuration.



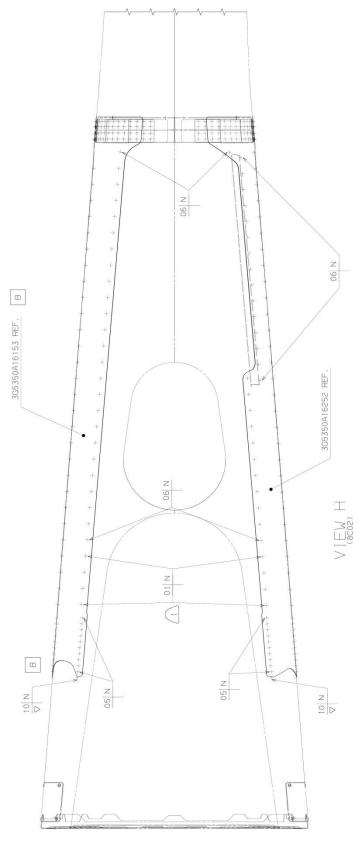
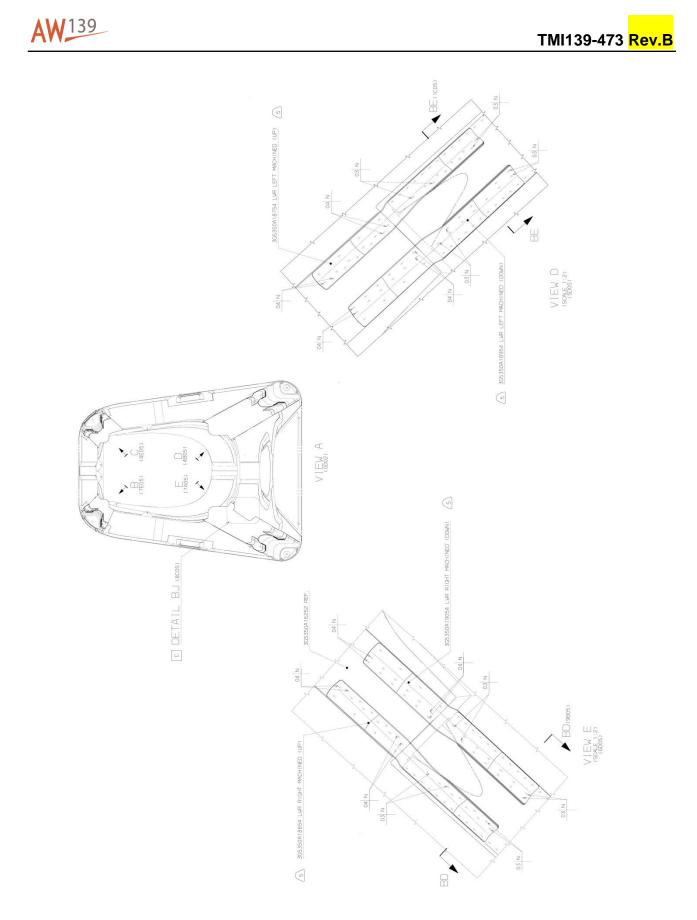


Figure 2

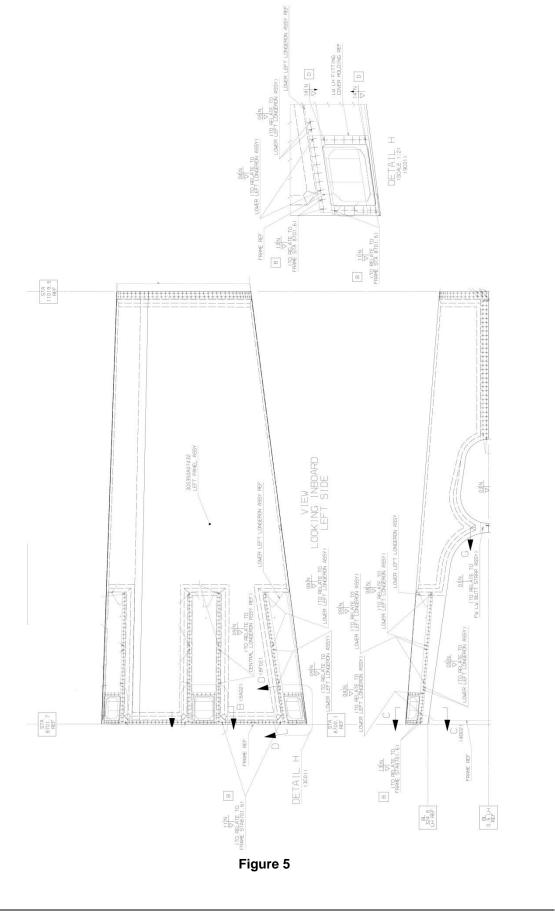




Rivet list for figures from Figure 1to Figure 3

RIVET CODE IN ACCORDANCE WITH NTA018R CODICE RIVETTO SECONDO NTA018R						
REF. NUMBER ORIENTATION NUMERO DI RIFERIMENTO ORIENTAMENTO						
	COUNTERSINK TIPO DI SVASATURA	BLAN LASC	IK LIARE LIBERO			
WHERE IN NON-CO UNIVERSA COUNTERS COMPOS UNIVERSA	STANCE FROM CENTRELINE EXCEPT VOICATED OTHERVISE MPOSITE ALL HEAD 2 TIMES SHANK DIA. SINK HEAD 2.5 TIMES SHANK DIA. ITE ALL HEAD 2.5 TIMES SHANK DIA. SINK HEAD 3 TIMES SHANK DIA.	COME INC NON-COM TESTA UN IL DIAME TESTA SV IL DIAME COMPOS TESTA UN IL DIAME TESTA SV	MPOSITO NIVERSALE 2 VOLTE TRO DEL GAMBO. TRO DEL GAMBO.			
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	1 1	NAS9302BNS-6-05			
05	NAS9301BNS-6-05					
06	NAS9301BNS-6-12					
07	NAS9302BNS-6-12					

Figure 4



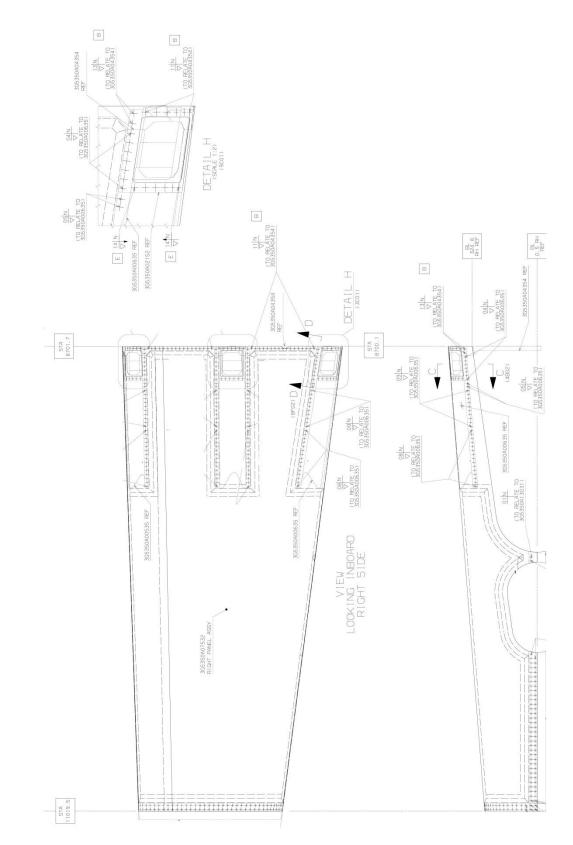




Rivet list for Figure 5

RIVET CODE IN ACCORDANCE WITH NTA018R CODICE RIVETTO SECONDO NTA018R							
NUM	REF. NUMBER ORIENTATION NUMERO DI RIFERIMENTO ORIENTAMENTO						
	COUNTERSINK TIPO DI SVASATURA	BLAN LASC	K TARE LIBERO				
	STANCE FROM CENTRELINE EXCEPT	NOTA: DISTANZA COME INC	DEL BORDO DALL'ASSE ECETTO				
NON-COM UNI VERSA COUNTERS	MPOSITE AL HEAD 2 TIMES SHANK DIA. SINK HEAD 2.5 TIMES SHANK DIA.	IL DIAME	1POSITO IVERSALE 2 VOLTE TRO DEL GAMBO. ASATA 2 VOLTE				
COMPOS UNI VERSA COUNTERS	<u>lte</u> NL head 2,5 times shank dia. Sink head 3 times shank dia.	IL DIAME COMPOSI TESTA UN IL DIAME TESTA SV	TRO 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.	PART NUMBER 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



AW_139

TMI139-473 Rev.B



Rivet list for Figure 7

RIVET CODE IN ACCORDANCE WITH NTA018R CODICE RIVETTO SECONDO NTA018R							
NUM	NUMERO DI RIFERIMENTO						
	COUNTERSINK TIPO DI SVASATURA	BLAN	IK LIARE LIBERO				
	STANCE FROM CENTRELINE EXCEPT NOICATED OTHERVISE	NOTA: DISTANZA COME INC	A DEL BORDO DALL'ASSE ECETTO DICATO				
UNIVERSA	M <u>POSITE</u> AL HEAD 2 TIMES SHANK DIA. SINK HEAD 2.5 TIMES SHANK DIA.	TESTA UN IL DIAME TESTA SV	MPOSITO NIVERSALE 2 VOLTE TRO DEL GAMBO. /ASATA 2 VOLTE				
	<u>ITE</u> AL HEAD 2.5 TIMES SHANK DIA. SINK HEAD 3 TIMES SHANK DIA.	COMPOS TESTA UN IL DIAME TESTA SV	TRO DEL GAMBO. <u>ITO</u> NIVERSALE 2.5 VOLTE TRO DEL GAMBO. /ASATA 3 VOLTE TRO 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	1 1	A298A05TW02				
06	AS46788-512	12	A298A06TW04				

Figure 8

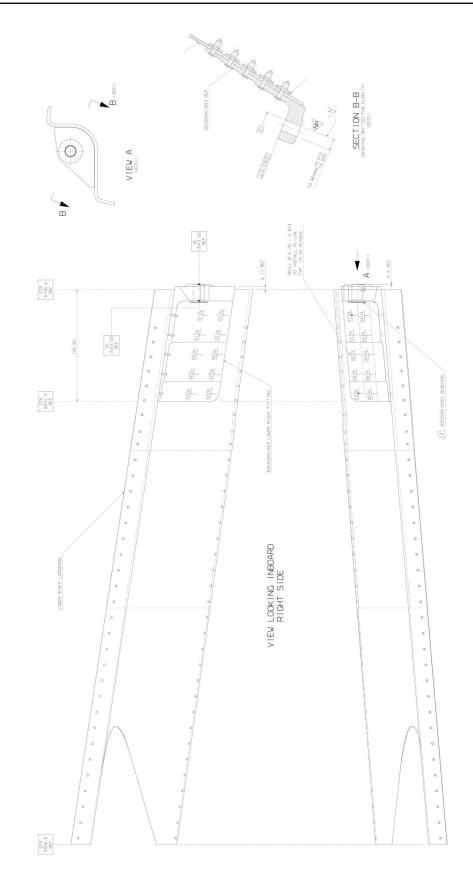


Figure 9

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

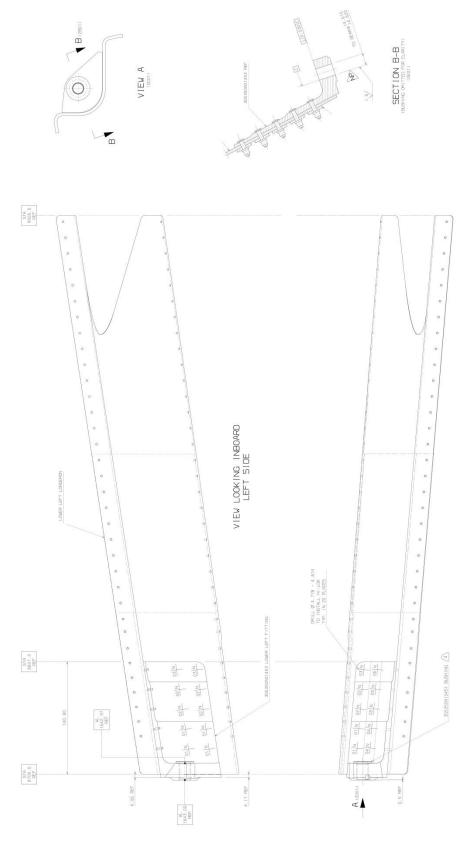


Figure 10

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 1Figure 9 to Figure 10

RIVET CODE IN ACCORDANCE WITH NTA018R CODICE RIVETTO SECONDO NTA018R						
NUMER	REF. NUMBER/ RO DI RIFERIMENTO	ORIENTATION/ ORIENTAMENTO				
т	COUNTERSINK/ IPO DI SVASATURA	BLAI	NK/ CIARE LIBERO			
NOTE: EDGE DIS WHERE IN	STANCE FROM CENTRELINE EXCEPT	NOTA: DISTANZA COME IND	DEL BORDO DALL'ASSE ECCETTO			
NON-COM UNIVERSA COUNTERS	M <u>POSITE</u> AL HEAD 2 TIMES SHANK DIA. SINK HEAD 2.5 TIMES SHANK DIA.	NON-COMPOSITO TESTA UNIVERSALE 2 VOLTE IL DIAMETRO DEL GAMBO. TESTA SVASATA 2.5 VOLTE IL DIAMETRO DEL GAMBO.				
COMPOS UN I VERSA COUNTERS	ITE AL HEAD 2.5 TIMES SHANK DIA. SINK 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			
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.

<u>NOTE</u>

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

<u>NOTE</u>

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

<u>NOTE</u>

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

- 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.

<u>NOTE</u>

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

<u>NOTE</u>

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).

<u>NOTE</u>

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

<u>NOTE</u>

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 Ø11.8 (ITEM 13) by means of n°3 special screws (ITEM 5).
- 7. With reference to Figure A5, ream the fitting hole to Ø11.8 by means of reamer Ø11.8.
- 8. With reference to Figure A6, remove the drilling tool Ø11.8 (ITEM 13) and the n°3 special screws (ITEM 5).

<u>NOTE</u>

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 Ø32.0 (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 Ø32.0 spot-facer.
- With reference to Figure A7, remove the drilling tool Ø32.0 (ITEM 13) and install the drilling tool Ø12.3 (ITEM 13) by means of n°3 special screws (ITEM 5); ream the fitting hole to Ø12.3 by means of reamer Ø12.3.
- 11. With reference to Figure A7, remove the drilling tool Ø12.3 (ITEM 13) and the n°3 special screws (ITEM 5).
- 12. With reference to Figure A8, install the drilling tool Ø12.6 (ITEM 13) by means of n°3 special screws (ITEM 5) and ream the fitting hole to Ø12.6 by means of reamer Ø12.6.
- 13. With reference to Figure A9, remove the drilling tool Ø12.6 (ITEM 13) and the n°3 special screws (ITEM 5).
- 14. With reference to Figure A9, install the drilling tool Ø12.75 (ITEM 13) by means of n°3 special screws (ITEM 5) and ream the fitting hole to Ø12.75 by means of reamer Ø12.75.
- 15. With reference to Figure A9, remove the drilling tool Ø12.75 (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.

23/33

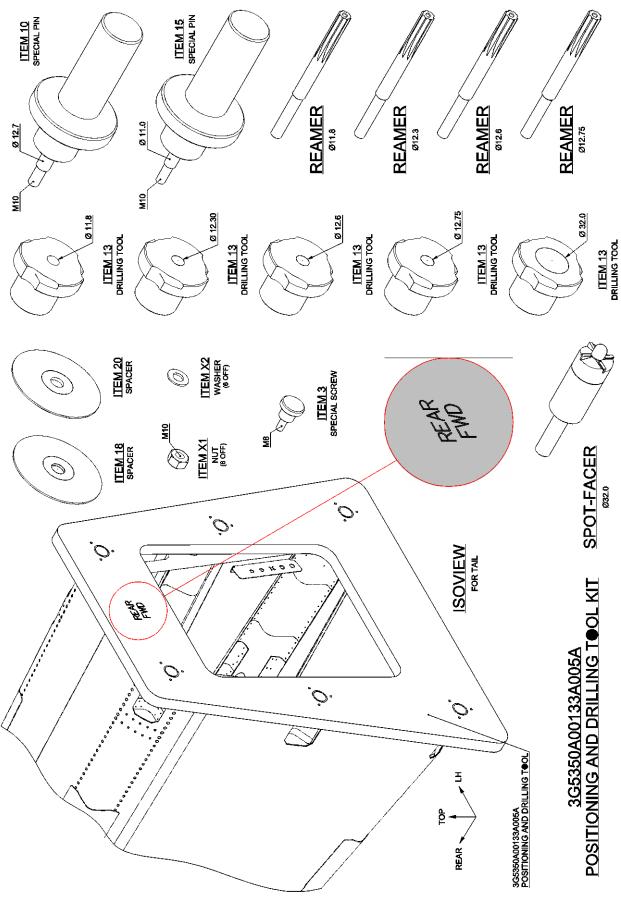
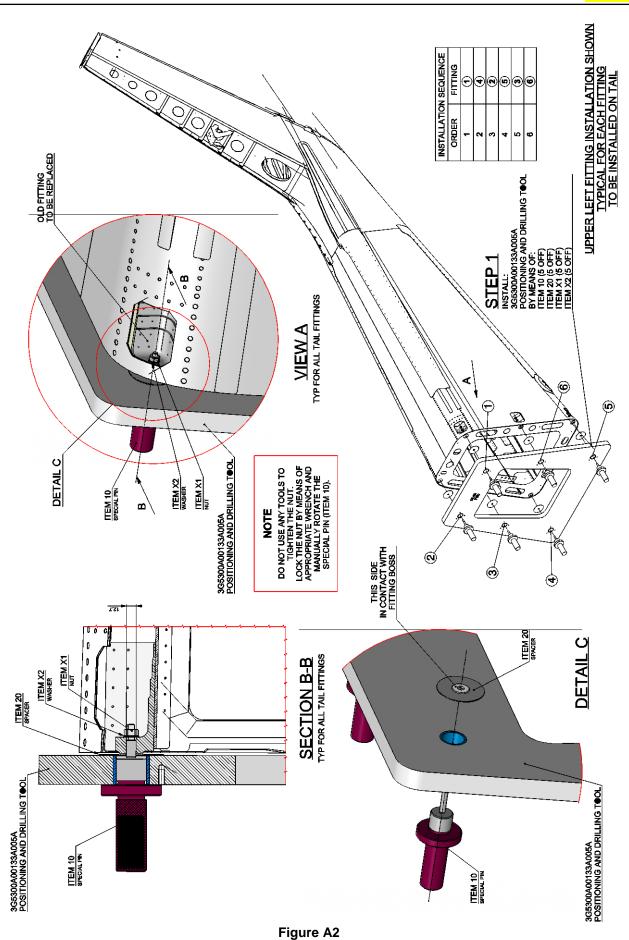
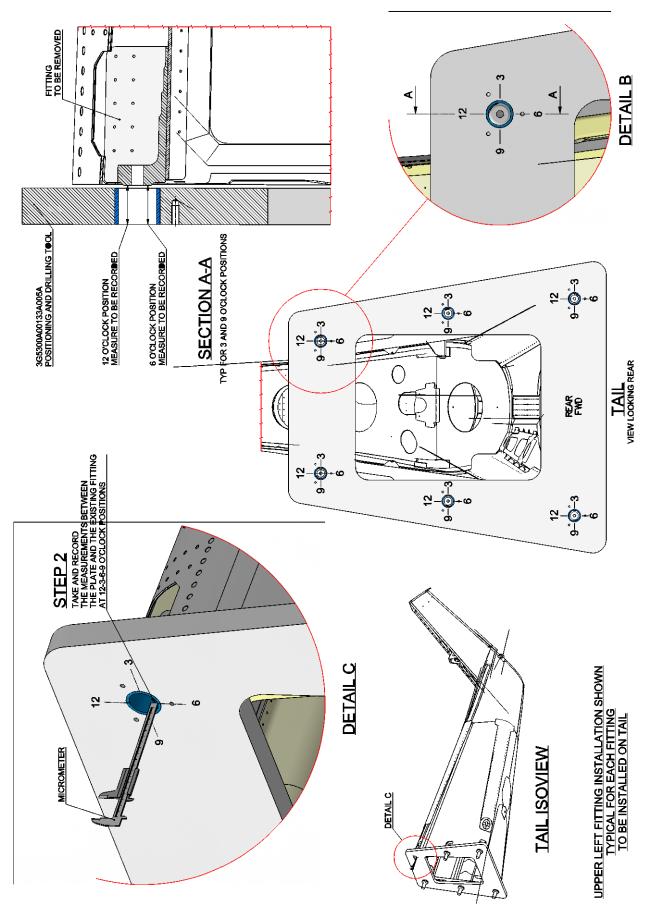


Figure A1

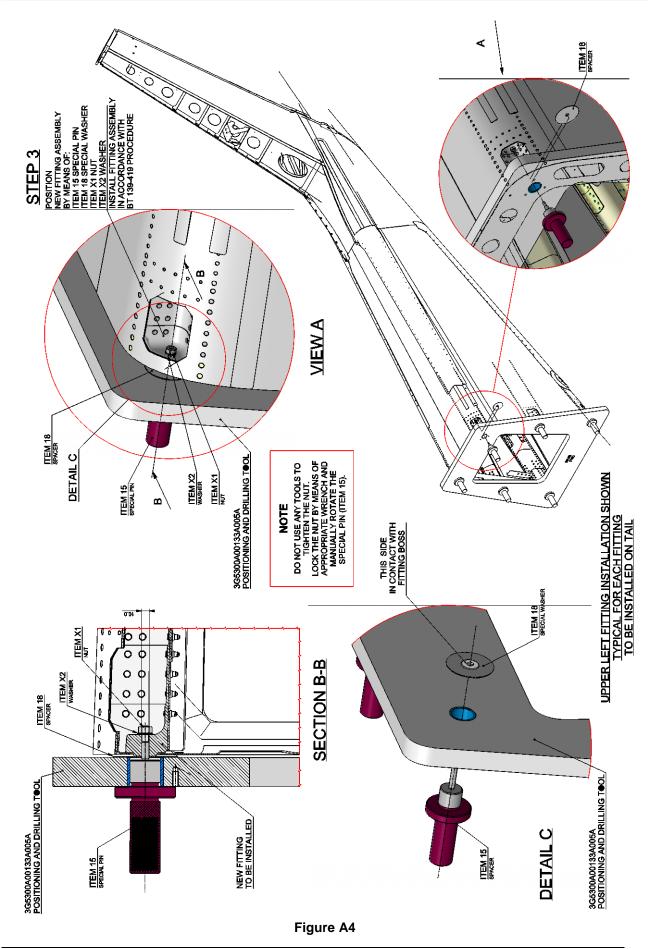


Lower LH /RH Longeron Assy P/N 3G5350A00435 / 3G5350A00635 and LH/RH lower fitting P/N 3G5350A01453 / 3G5350A01853 Replacement Procedure

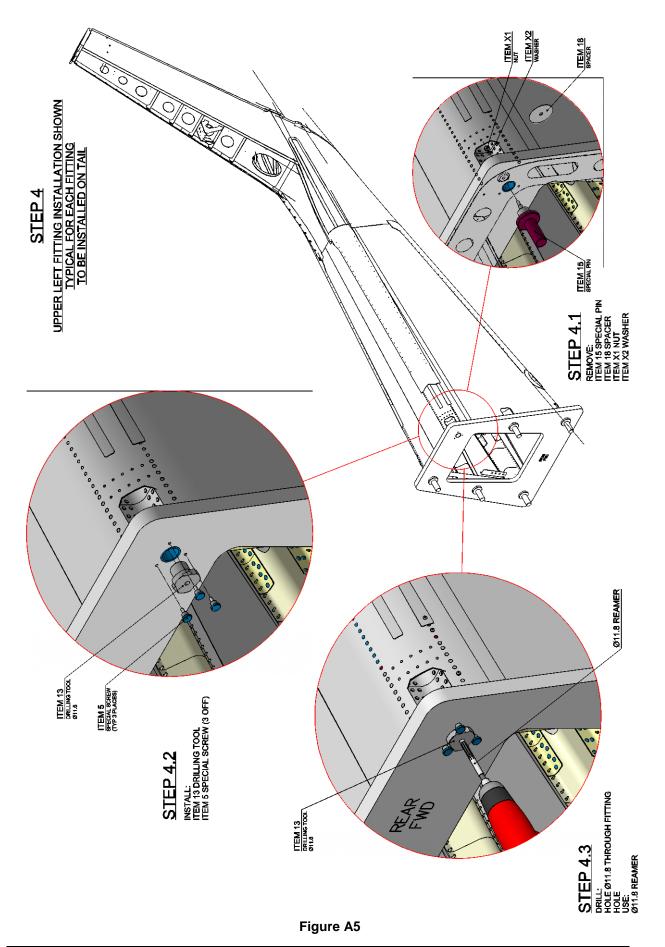
AW139



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



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



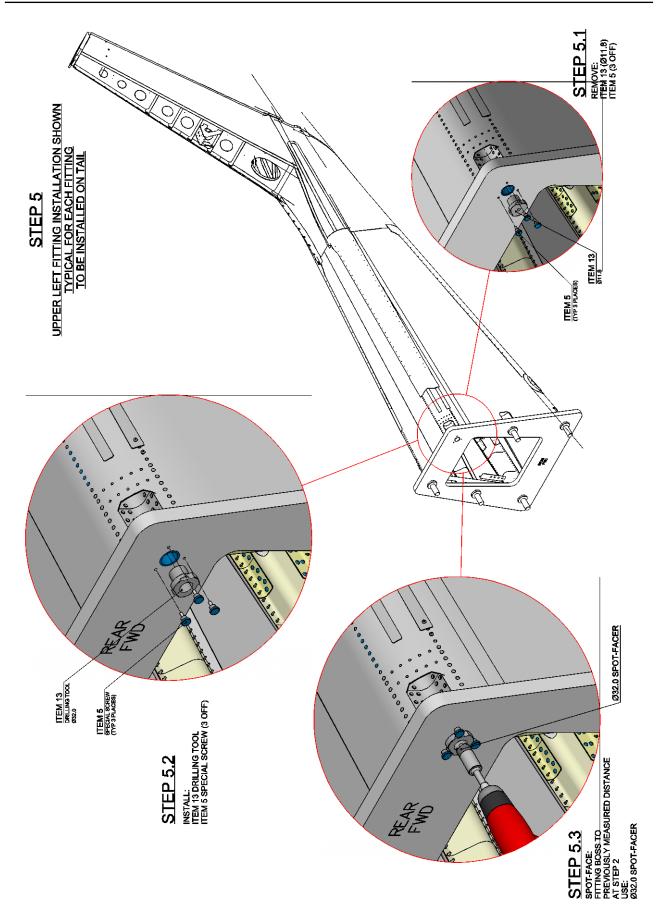
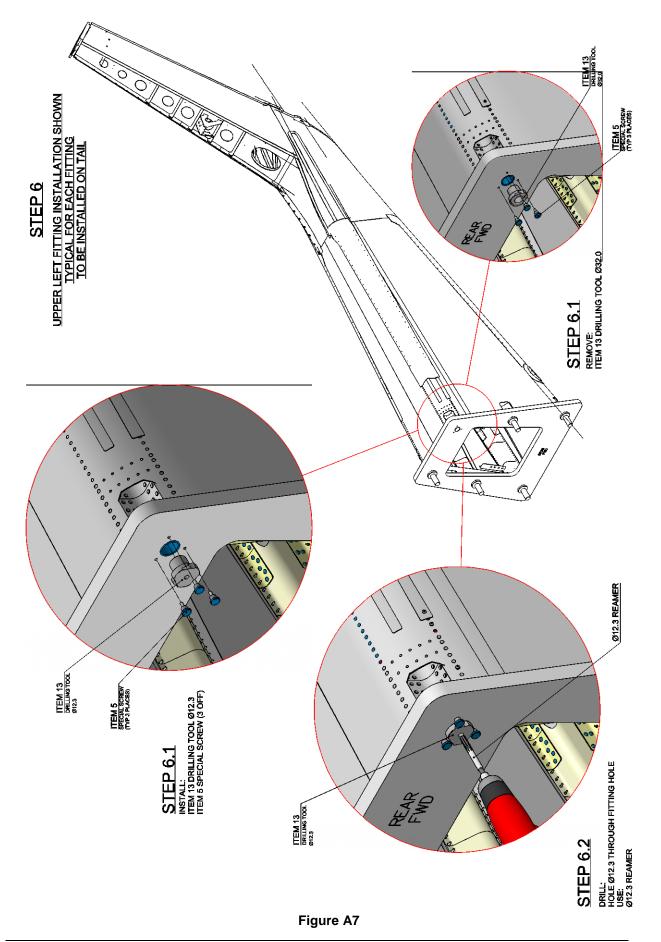
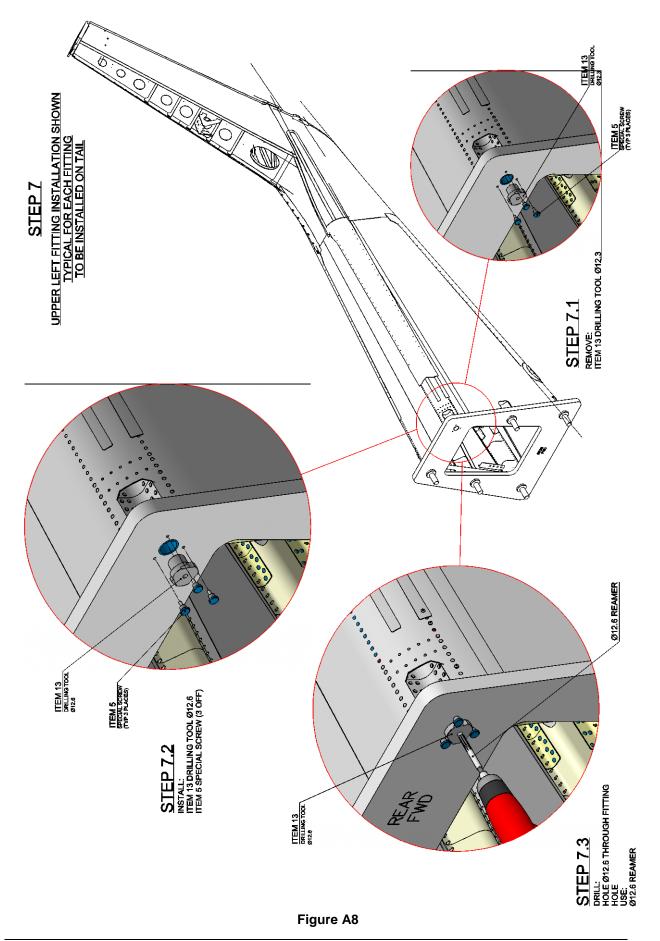
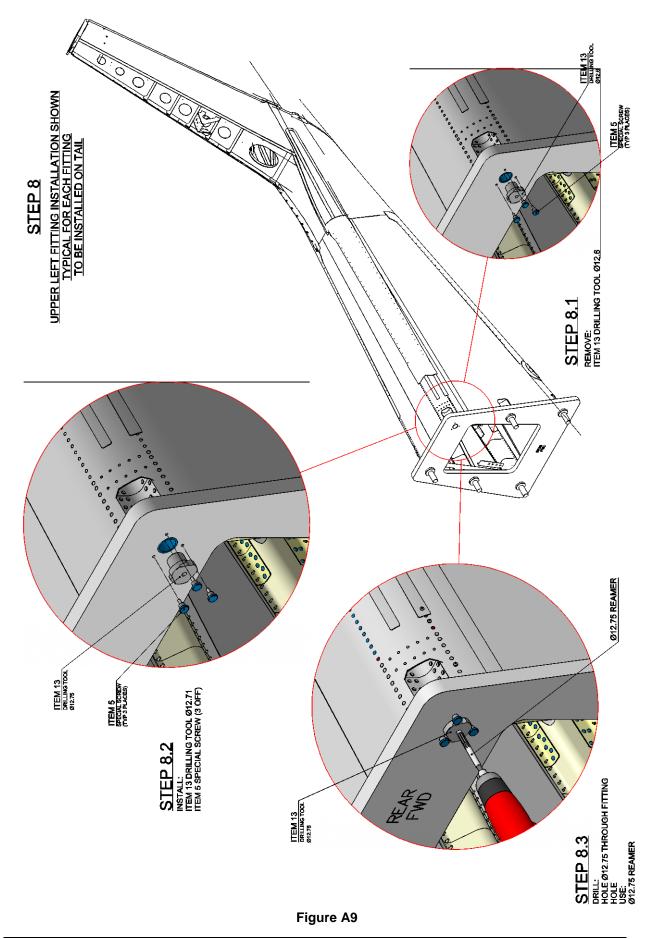
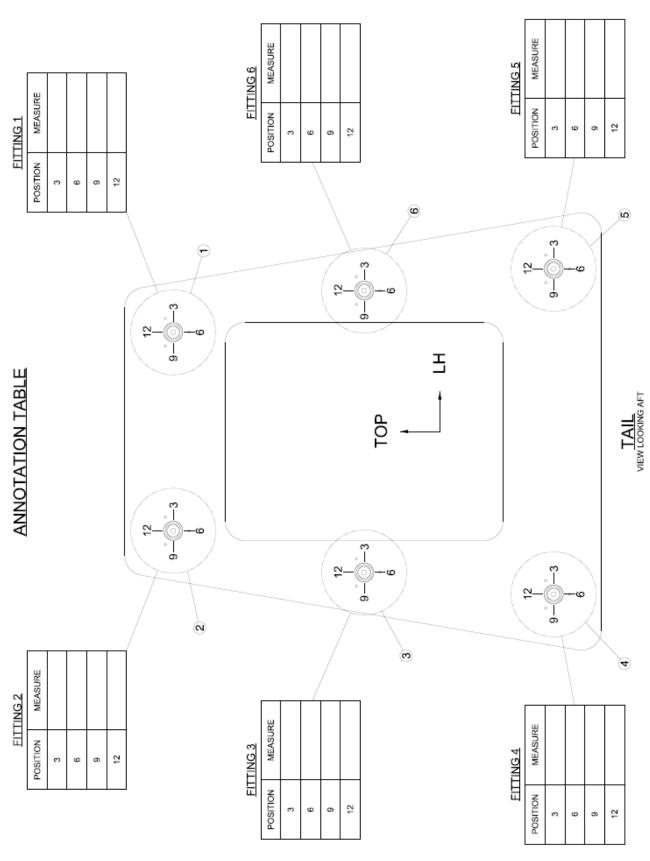


Figure A6









AW139

Figure A10

TMI139-473 Rev.B