

PORT WING INTERNAL TANK ABRASION CHECK AND REPAIR

1. PLANNING INFORMATION

- A. EFFECTIVITY**

<u>MODEL</u>	<u>S/N</u>
750XL	100 thru 213 (excluding 206)
750XL	8001

- B. REASON**

Chafing can occur in the inner area of the LH wing (leading edge tank skin) because of rubbing by the fuel system finger filters.

- C. DESCRIPTION**

To prevent or repair chafing, this SB is divided in four parts:

 - PART A – Service Panel Assembly: Removal and Modification.
 - PART B – Wing / Tank Inspection: Determine whether chafing has occurred (includes Check Valve and Finger Filters removal).
 - PART C – Wing / Tank Abrasion Patch Installation (if necessary).
 - PART D – Component and Panel Installation.

- D. COMPLIANCE**

Within the next 165 flight hours, check:

 - Remove and modify Inspection Panel Assembly (PART A).
 - Inspect the internal skin of the wing for signs of chafing (PART B):
 - If chafing is found, before the next flight, apply the Abrasion Patch (PART C).
 - If there are no chafing marks, go to Component and Panel Installation (PART D).

- E. APPROVAL**

By delegated authority.

- F. TOOLING**

Borescope.

- G. WEIGHT AND BALANCE**

No change.

- H. REFERENCE N/A.
- I. HOURS REQUIRED Part A – 3 Hours.
Part B – 1 Hour.
Part C – 6 Hours (if necessary).
Part D – 1 Hour.
- J. WARRANTY COVER Normal Warranty conditions apply.

2. **ACCOMPLISHMENT INSTRUCTIONS**

PART A – Service Panel Assembly: Removal and Modification

- 1) Drain the fuel from the wing tanks (Ref. 750XL MM, Chapters 12 and 28).
- 2) At the BL 41.54, remove the Inspection Panel Assembly P/N 11-20391 and related screws from the airframe (See Figure 1).

NOTE: The inspection panel assembly P/N 11-20391 and the screws P/N AN525-10R8 must be retained.

NOTE: The 2 screws P/N AN525-832R6 must be discarded.

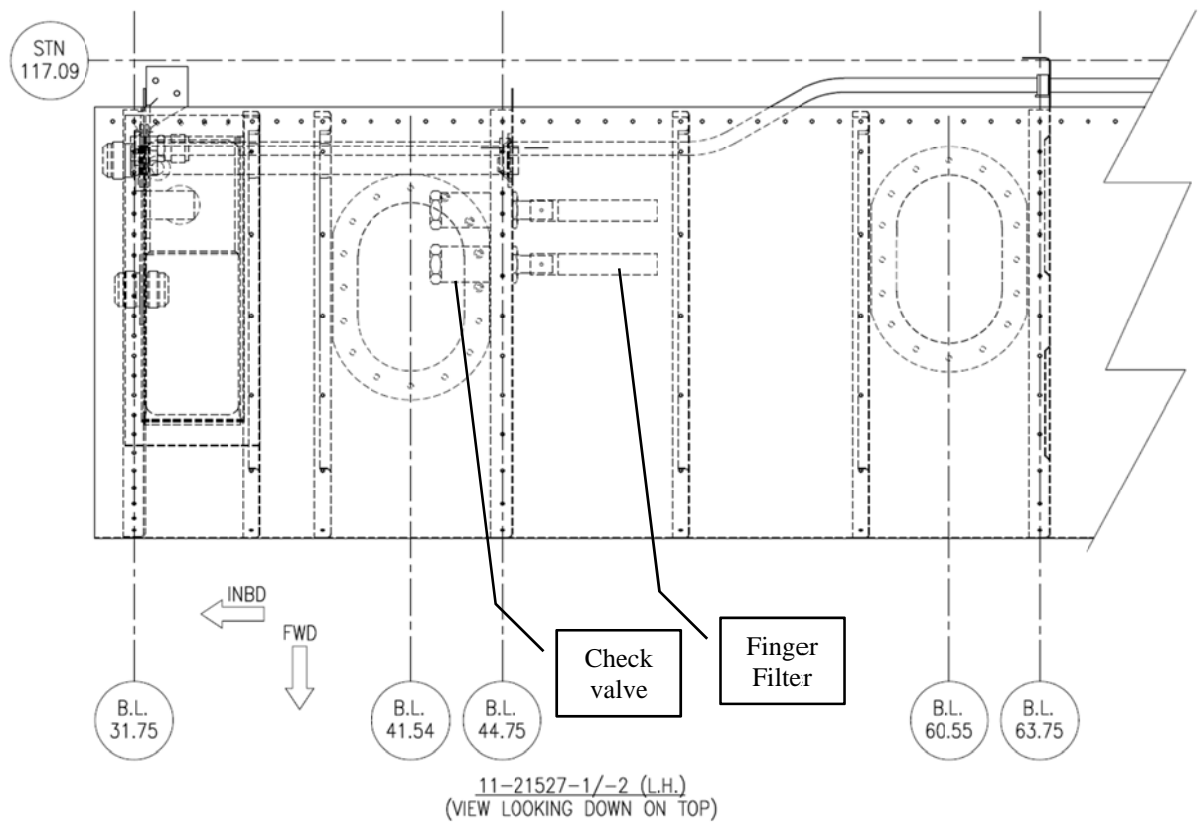


Figure 1 PORT Wing

- 3) On the Inspection Panel Assembly P/N 11-20391, find the position of the anchor-nut to be replaced, and drill out the related rivets using a N^o. 40 Drill (See Figure 2) for removal of existing anchor-nut.
- 4) Drill out the central hole provision for the anchor-nut in the inspection panel assembly using a N^o. E drill (0.250").

NOTE: Be careful to avoid damage to the countersink rivet holes during the drilling operation.

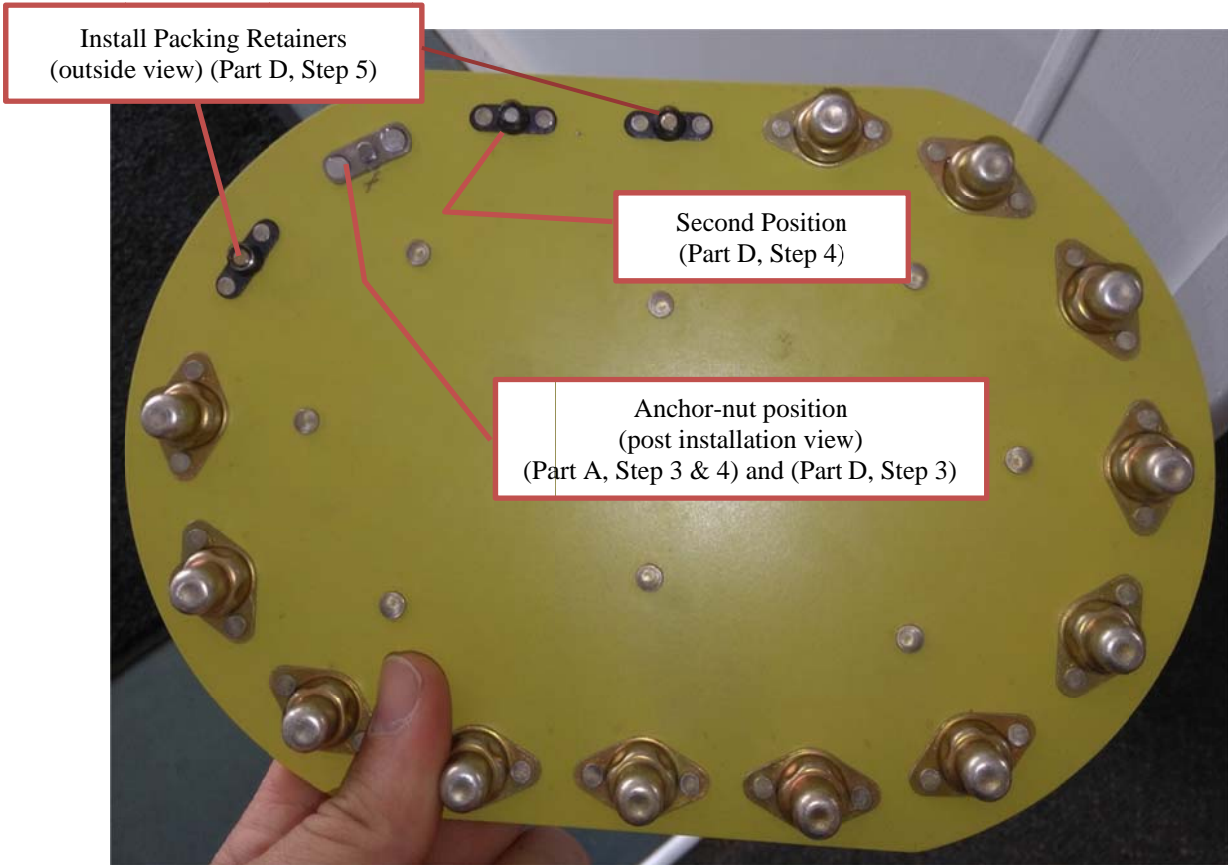


Figure 2 Inspection Panel Assembly (After modification)

- 5) Remove the primer/paint of the anchor-nut mating surface area on inspection panel assembly and lightly sand using Scotch brite. Clean the area with Prepsol / Acetone.
- 6) Apply Sealant AMS-S-8802 to the contact faces (See Figure 3).
- 7) Locate the anchor-nut P/N ANC-1-832 centrally to the hole drilled on Step 4).

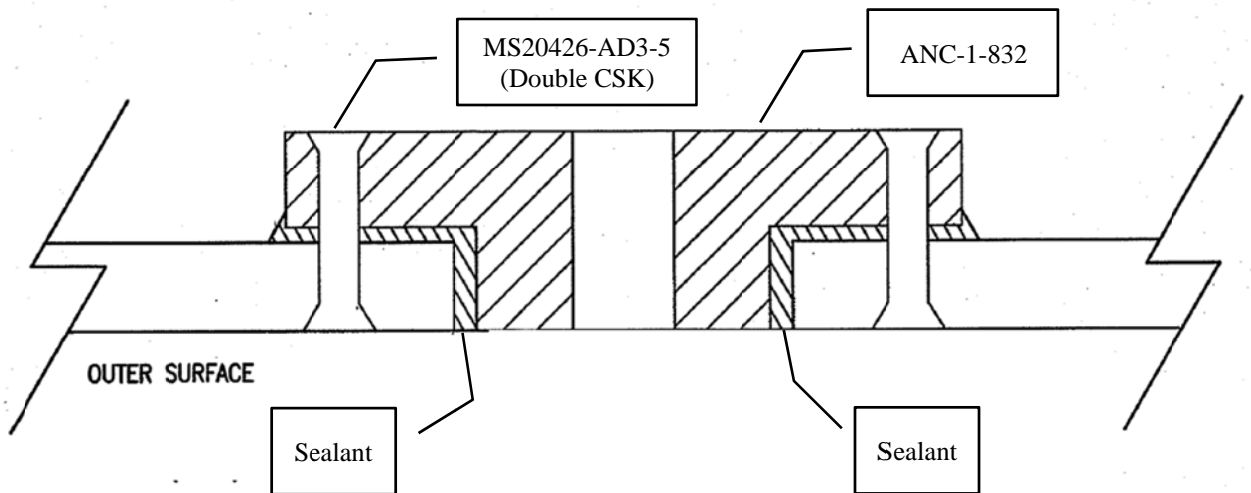


Figure 3 Cross Sectional View of Installed Anchor-nut

- 8) Attach the anchor-nut to the panel using 2 countersunk rivets P/N MS20426-AD3-5 and apply Sealant AMS-S-8802 around the anchor-nut.

NOTE: Make sure that the screw thread finishes flush with the bottom face of anchor-nut P/N ANC-1-832 (adjust the length of screw if necessary). Identify the screw position on the plate exterior.

- 9) Identify the position of the unchanged anchor-nut (See Figure 2, Second Position) on the panel exterior.

PART B – Wing / Tank Inspection

- 1) At the BL 60.55, remove the Inspection Panel Assembly P/N 11-20371 and related screws from the airframe. The removal of this Inspection Panel Assembly is only to improve the access of the area to be inspected / repaired inside the wing.

NOTE: The Inspection Panel Assembly P/N 11-20371 and the screws P/N AN525-10R8 must be retained.

- 2) Remove the check valve and finger filters on the outboard rib adjacent to the inspection panel access (See Figure 1).
- 3) Using a borescope inspect the internal skin of the wing, on both sides of the rib behind the check valve and finger filter locations for signs of chafing.
- 4) After inspection, proceed as follows:
 - If chafing marks are found less than .003" deep blend the marks and finish IAW 750XL Maintenance Manual chapter 20 `Cleaning and Painting` & go to Section 2. Part D.
 - If the chafing marks are found deeper than 0.003", go to Section 2. Part C.
 - If there are no chafing marks, go to Section 2. Part D.

PART C – Wing / Tank Abrasion Patch Installation

- 1) Repair and install doubler IAW Drawing 11-03613 (See Annex 1 attached).
- 2) Inspect Fuel Filter P/N 1743640-14 for swarf.

NOTE: Replace the filter if any sign of swarf is observed (Ref. 750XL MM, Chapter 28).

- 3) Go to Section 2. Part D.

PART D – Component and Panel Installation

- 1) Install the finger filter and check valve again.
- 2) Re-install the Inspection Panel Assembly P/N 11-20391 to the airframe using the provided gasket P/N 11-20397-1 and remaining retained screws thru all sealed anchor nuts. The Low Adhesive Sealant AMS 3284A3 must be applied on Inspection Panel Assembly before the installation.
- 3) Install the screw P/N SCR-4-832 and Packing Retainer P/N NAS1523AA08R thru modified anchor-nut in Part A. (Apply Sealant AMS-S-8802 to the screw thread as required to ensure adequate sealing before Installation).

NOTE: Make sure that the screw thread finishes flush with the bottom face of anchor-nut P/N ANC-1-832 (adjust the length of screw if necessary). Identify the screw position on the plate exterior.

- 4) Install the screw P/N AN503-8-6 and Packing Retainer P/N NAS1523AA08R thru anchor-nut marked as "Second Position" (Refer Part A, Step 9). (Apply Sealant AMS-S-8802 to the screw thread as required to ensure adequate sealing before Installation).
- 5) Install the existing screws and supplied Packing Retainers P/N NAS1523AA08R in remaining 2 positions on Inspection Panel Assembly (Refer to Figure 2).
- 6) Safety Screws installed in Steps 3) and 4) using the Lockwire P/N MS20995-C32 IAW standard practices.
- 7) Re-install the Inspection Panel Assembly P/N 11-20371 (At the BL 60.55) the airframe using the provided gasket P/N 11-20397-1 and existing screws. The Low Adhesive Sealant AMS 3284A3 must be applied on Inspection Panel Assembly before the installation.
- 8) Refuel the aircraft and inspect visually the wing for signs of fuel leakage.

3. **CERTIFICATION**

Record compliance with this Service Bulletin in the Aircraft Log Book.

4. MATERIAL REQUIRED:

Part A

<u>Description</u>	<u>Part Number</u>	<u>Qty Required</u>
Low Profile Anchor-nut	ANC-1-832	1
Sealant	AMS-S-8802	A/R
Countersunk Rivet	MS20426-AD3-5	2
Modified Drilled Fillister Head Screw	SCR-4-832	1

Part C (Drawing 11-03613)

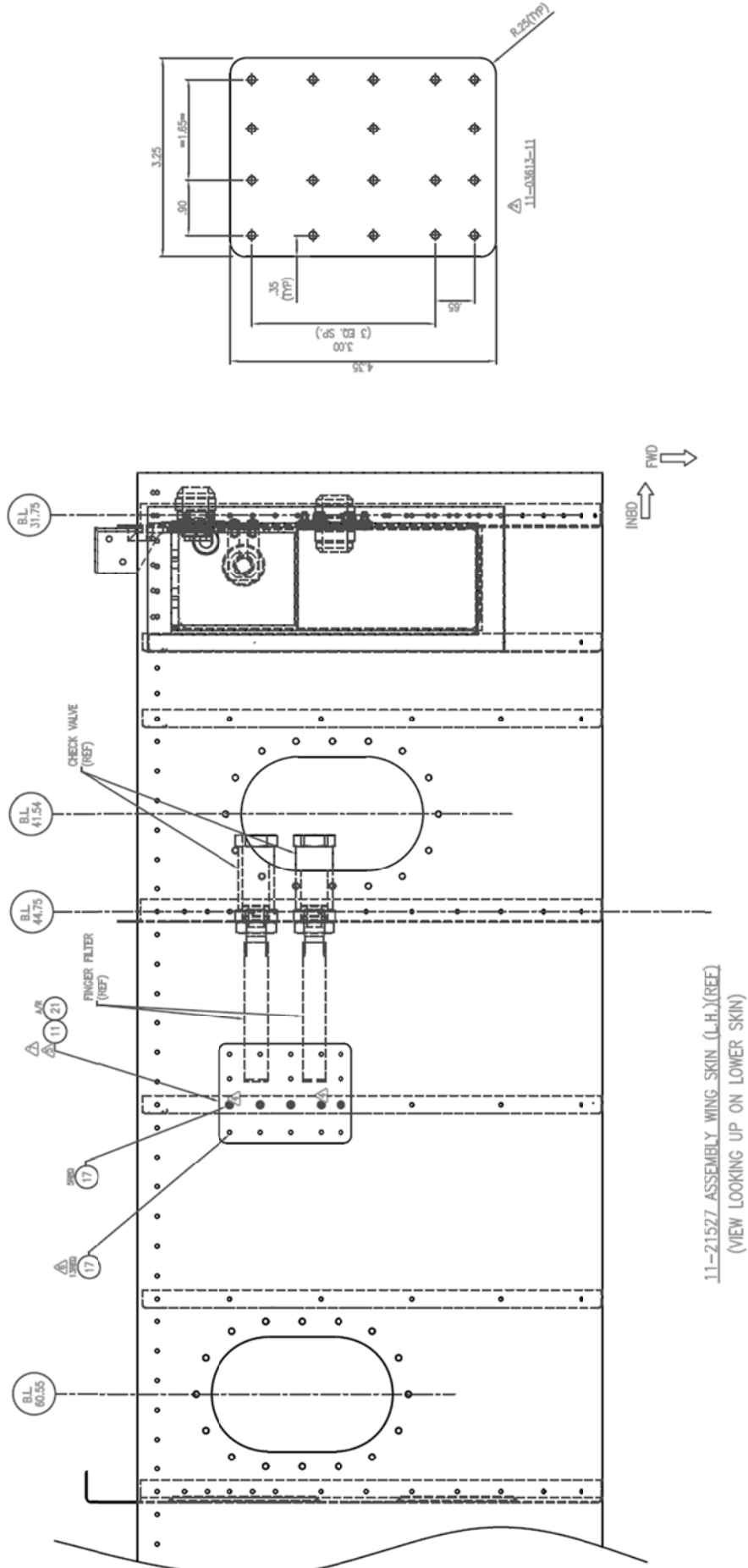
<u>Description</u>	<u>Part Number</u>	<u>Qty Required</u>
**Rivet	MS20470AD4	18
Sealant	AMS-S-8802	A/R
Doubler	11-03613-11	1

****Alternative Rivets**
MS20470AD4 (Qty 5) and
CR9163-4-1 (Qty 13) IAW
Drawing 11-03613.

Part D

<u>Description</u>	<u>Part Number</u>	<u>Qty Required</u>
Inspection Panel Gasket	11-20397-1	2
Sealant	AMS-S-8802	A/R
Sealant – Low Adhesion	AMS 3284A3	A/R
Packing Retainer	NAS1523AA08R	4
Lock Wire	MS20995-C32	A/R
Machine Screw Drilled Fillister Head	AN503-8-6	1

ANNEX 1 – DWG P/N 11-03613 (PART 1 OF 2)



ANNEX 1 – DWG P/N 11-03613 (PART 2 OF 2)

NOTES:

1. REPAIR/COMPONENTS ON THIS DRAWING TO BE IN ACCORDANCE WITH COMPANY APPROVED MANUFACTURING STANDARDS AND PROCEDURES.
2. ALL HOLES IN ITEM 11 DOUBLER TO BE PILOT DRILLED TO .098 DIA (No. 40 DRILL). MANUFACTURE DOUBLER AS PER SUPPLIED ELECTRONIC DXF. HOLES TO BE OPENED OUT ON ASSEMBLY TO .128 DIA (No. 30 DRILL).
3. DE-FUEL THE LEADING EDGE FUEL TANK BEFORE REPAIR IAW MM CHAPTER 12.
4. UNINSTALL EXISTING MS20470AD4 RIVETS (2 PLACES) THRU SKIN AND FORMER.
5. REPAIR SCHEME (USE EXISTING INSPECTION PANEL ON LOWER SIDE OF LE SKIN TO CARRYOUT REPAIR) :
 - i) BLEND OUT GOUGES IN SKIN INTERIOR TO REMOVE SHARP CORNERS (RATIO 20:1).
 - ii) POSITION THE DOUBLER ON OUTER SURFACE OF THE SKIN COVERING THE DAMAGE AND LOCATING ON 2 EXISTING HOLES IN THE SKIN AND FORMER.
 - iii) DRILL .128 DIA (No. 30 DRILL) IN THE SKIN TO COORD WITH EXISTING HOLES IN THE DOUBLER (18 PLACES).
 - iv) APPLY ITEM 21 AMS-S-8802 ADHESIVE SEALANT BETWEEN MATING SURFACES OF THE DOUBLER AND SKIN.
 - v) INSTALL THE DOUBLER USING ITEM 17 RIVETS (18 PLACES).
 - vi) REMOVE ALL SWarf FROM THE WING TANK AND RESEAL THE INSIDE OF THE TANK.
 - vii) CARRY OUT FUEL TANK SEALING AS PER "SEALING – MAINTENANCE PRACTICES" PAC 750XL MAINTENANCE MANUAL CHAPTER 20.
6. ITEM 18 RIVET MAY BE INSTALLED AS ALTERNATIVE TO ITEM 17 RIVET THRU DOUBLER AND SKIN (13 PLACES ONLY).
7. FINISH IAW GENERAL MAINTENANCE PRACTICES AS PER PAC 750XL MAINTENANCE MANUAL CHAPTER 20 CLEANING & PAINTING.

A/R	21	AMS-S-8802	ADHESIVE SEALANT (PRC TYPE)	
	20			
	19			
6	18	CR9163-4-1	RIVET	
18	17	MS20470AD4	RIVETS	
	16			
	15			
	14			
	13			
	12			
	11			
1	10	11-03613-11	DOUBLER – ALC. SHT. 0.025 THICK 2024-T3	
	9			
	8			
	7			
	6			
	5			
	4			
	3			
	2			
✓	1	11-03613-1	REPAIR – WING LE SKIN	PACSB/XL/099
-1	ITEM	PART NUMBER	DESCRIPTION – SIZE – SPECIFICATION	NEXT ASSY

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