SERVICE LETTER 189

8750 AMPHIBIOUS CARRY THROUGH STRAP DOUBLER INSTALLATION

Aircraft Makes/Model(s):	Float Model(s):	Compliance: As required	By: MAB
Textron Aviation 208 and 208B	8750 Amphibious	Part Number: 1009949	Approved: SDW
Textroll Aviation 200 and 200b		Date: 7/9/2020	Revision: D

LOG OF REVISIONS

Revision	Description	
А	Initial release	
В	Add 1 3/8" option, kit P/N 1009949-02	
С	Update Installation	
D	Updated compliance note and method and shop hours. Added new BOM, images, and instructions. Added a Method A and a Method B.	

FAA approval has been obtained for technical data in this publication that affects STC or TSO design compliance.



EFFECTIVITY:

This service letter applies to Textron Aviation 208 and 208B with Wipline 8750 Amphibious floats installed per STC SA1311GL.

COMPLIANCE:

As required. This is a repair option to replacing a carry through strap that has corrosion at the main landing gear trunnion.

NOTE: If all corrosion will not be removed using a 1 1/8" or 1 3/8" reamer, then the carry through strap should be replaced.

BACKGROUND:

Floats operated in salty or brackish water are susceptible to corrosion around the trunnion hole on the carry through strap.

TECHNICAL DATA:

Copies of this service letter, associated service kit (if applicable), float service manual, and float parts manual are available at www.wipaire.com.

COMPLIANCE METHOD:

Affected area should be inspected for corrosion. If found, install up to (4) doublers on the carry thru straps as required or install carry thru strap if required.

APPROXIMATE SHOP HOURS:

Installing a pair of doublers on (1) float for Method A will take approximately 8 hours. Carry Thru Strap removal and replacement for Method B will take approximately 80 hours per strap.

WARRANTY INFORMATION:

Parts and labor costs for this service letter are at the owner's expense.

Method A (Options)

1 1/8"- ITEMS PROVIDED IN SERVICE KIT 1009949-01 (1 FLOAT)

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	1009310	DOUBLER, CARRY THROUGH STRAP, RIGHT 1 1/8"
2	1	1009311	DOUBLER, CARRY THROUGH STRAP, LEFT 1 1/8"
3	2	1001886	BUSHING

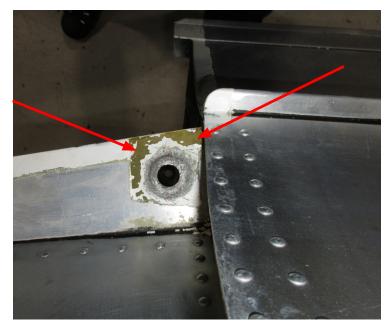
1 3/8"- ITEMS PROVIDED IN SERVICE KIT 1009949-02 (1 FLOAT)

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	1009967	DOUBLER, CARRY THROUGH STRAP, LEFT 1 3/8"
2	1	1009968	DOUBLER, CARRY THROUGH STRAP, RIGHT 1 3/8"
3	2	1001886	BUSHING

Method B

ORDER PARTS INDIVIDUALLY

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	1006339	STRAP, CARRY THRU, LEFT
2	1	1006340	STRAP, CARRY THRU, RIGHT



Example Carry Thru Strap Corrosion

WORK INSTRUCTIONS Perform Inspection

NOTE: See figure on next page for details.

- 1. Safely jack or hoist aircraft so all wheels are off the ground when the main gear is extended.
- 2. Pull gear select, pump 1, and pump 2 circuit breakers.
- 3. Pull aircraft parking brake lever.

NOTE: Do not push on brake pedal while pulling the aircraft parking brake lever.

- 4. Disconnect brake lines at bulkhead 10 and cap each end of hydraulic bulkhead tee fitting and plug each hydraulic brake line.
- 5. Remove main wheel and tire assemblies.
- 6. Remove cotter pin, nut, and washer from each AN bolt at each trunnion attach point.
- 7. Remove cotter pin, nut, washers, and NAS bolt at the top oleo attach point.
- 8. Remove each AN bolt at the trunnion attach point and remove main gear drag link assembly from float.

WARNING!

The main gear assembly will detach from the float after completing the next step. Support the assembly appropriately prior to removing the attaching hardware.

- 9. Remove both INBD and OTB trunnion from step bulkhead to facilitate inspection of carry through strap.
- 10. Inspect for corrosion on OTB side of strap at trunnion attach point under washer.
- 11. Remove trunnion from bulkhead.
- 12. Inspect for corrosion on INBD side of strap at trunnion attach point where p/n 1003729 hat bushing contacts carry through strap.
- 13. If no corrosion is present, reinstall as original starting at item 14 in Method "A" work instructions
- 14. If corrosion is present, it must be decided how much material can be removed to effectively remove corrosion damage from strap and install repair doubler(s) per Method "A" work instructions.
 - a. p/n 1009949-01 1 1/8" diameter repair kit
 - b. p/n 1009949-02 1 3/8" diameter repair kit
- 15. If corrosion is present and exceeds repair doubler kit dimensions in Method "A", proceed with work instructions in Method "B".

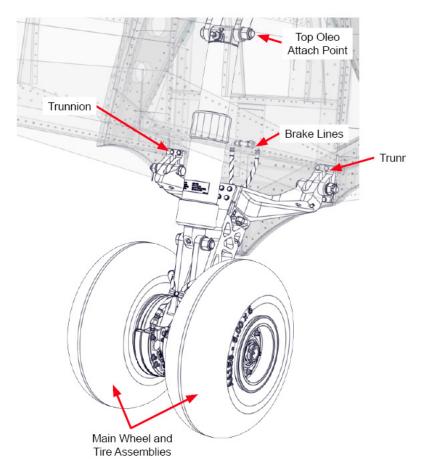


Figure 1



WORK INSTRUCTIONS Method A

- 1. Temporarily install each trunnion.
- 2. Using a slow speed drill and a 1 1/8" or 1 3/8" reamer with a 5/8" guide, ream out the bolt hole using the trunnion as a guide. Contact Wipaire Customer Service regarding tool use.



Example Reamer

- 3. Remove each trunnion and remove the outboard 1003729 hat bushing from each trunnion.
- 4. Install 1001886 bushing where the hat bushings were removed from. Verify installed bushings are flush with the inside of trunnion.
- 5. Temporarily install each trunnion.
- 6. Fit each doubler to the outboard side of each carry through strap. Make sure it sits flush with the carry through strap and the 5/8" hole aligns with the trunnion.
- 7. Temporarily install AN trunnion bolt (for alignment).
- 8. Secure the doubler to the carry through strap and back drill the (18) aft rivet holes (see rivets boxed in figure 2).

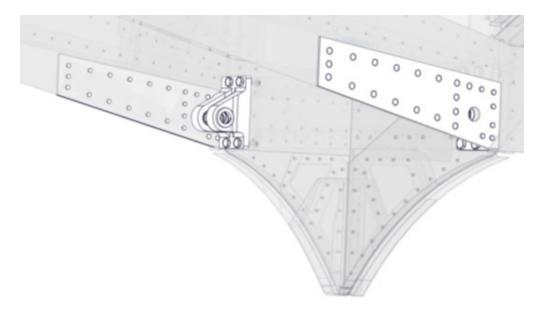
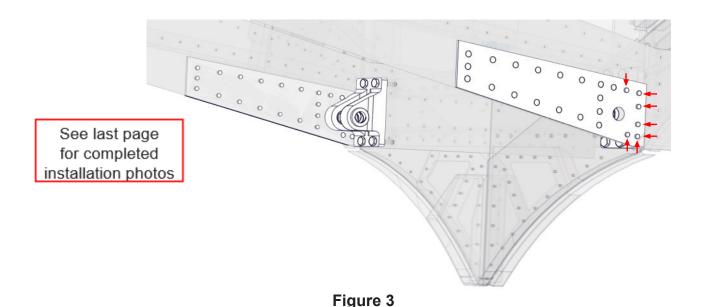


Figure 2



- 9. Remove each trunnion and backdrill the remaining (6) rivet holes (indicated by arrows in figure 3).
- 10. Countersink the (6) rivet holes on the inboard side of each carry through strap.
- 11. Fully seal the backside of the double with PR 1422-B2 or equivalent.
- 12. Wet install the double to the carry through strap using AN427AD5-XX or equivalent.
- 13. Install the remaining (6 rivets) flush with each carry through strap using AN426AD5-XX or equivalent.

NOTE: Counter sink rivets indicated with an arrow as well as the same rivets on the opposing side.



NOTE: During reassembly, replace any hardware that shows signs of corrosion.

- 14. Reinstall each trunnion, sealing any part of the trunnion that contacts the carry through strap, and seal all edges around trunnion with PR 1422-B2 or equivalent and allow to cure.
- 15. Apply a light coating of grease or equivalent to each trunnion attach point.
- 16. Install main gear assembly without wheels at each trunnion attach point using (2) AN bolts.
- 17. Apply a light coating of grease or equivalent to the bolt and pivot points at the oleo attach point.
- 18. Connect the oleo assembly to the main gear assembly using NAS bolt, washers, nut, and new cotter pin.
- 19. Install nuts, washers, and new cotter pins on each AN bolt at each trunnion attach point.
- 20. Apply corrosion inhibitor on nuts and bolts where needed.
- 21. Service grease points as required.
- 22. Reinstall main wheel and tire assemblies.
- 23. Reconnect brake lines at bulkhead 10 and bleed any air from system.
- 24. If equipped with oil bath system, reconnect oil bath line and service system.
- 25. Release aircraft parking brake lever.
- 26. Bleed the brake system.
- 27. Push in gear select, pump 1, and pump 2 circuit breakers.
- 28. Fully cycle the hydraulic gear system up and down to ensure correct operation.
- 29. Remove aircraft jacks.
- 30. Upon completion of inspection, enter information in Aircraft Logbook for completion of Wipaire Service Letter 189 Method A.





Figure 4



Figure 5



WORK INSTRUCTIONS Method B

- 1. Support aircraft on stands. Refer to 8750 Service Manual for details.
- 2. Pull Amphib Pump 1 and Amphib Pump 2 circuit breakers.
- 3. Pull parking break.
- 4. Remove baggage floor, foam, bulkhead #9 panel.
- 5. Disconnect brake lines from bulkhead #10.
- 6. Remove main landing gear assembly including oleo.
- 7. Remove wheel well panel.
- 8. Drill off suction breaker between bulkheads 12-13.
- 9. Drill and loosen aft keel between bulkheads 11-15.
- 10. Drill and loosen aft skin from bulkheads 10-13, including inner siste keel and next to the carry thru strap. It is not necessary to drill out the flush rivets from the aft chine to remove the carry thru strap (see Figure 6).



Figure 6



- 11. Drill out all rivets from the carry thru strap and remove all sealer.
- 12. Bulkhead #12 needs to be notched before removing the carry thru strap (see Figure 7).

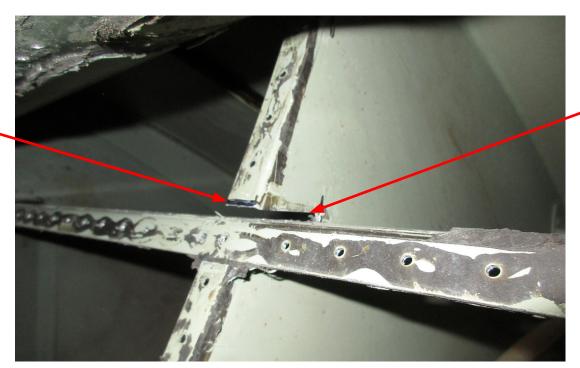


Figure 7

- 13. With carry thru strap removed, clean and remove any sealer as needed.
- 14. Fit new carry thru strap to float p/n 1006339 (LH) or p/n 1006340 (RH)
- 15. Apply sealer to new carry thru strap and rivet into place (see Figure 8).

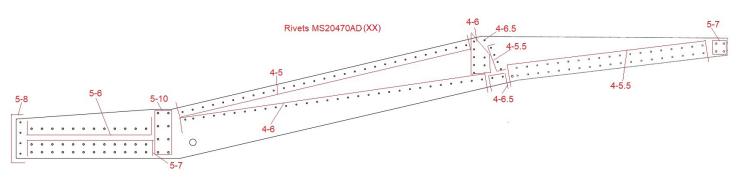


Figure 8

- 16. With clean skins and keel, seal and rivet into place.
- 17. Seal all internal and external edges.
- 18. Water check float.
- 19. Reinstall all components in reverse order.
- 20. Swing landing gear, bleed breaks.
- 21. Upon completion of inspection, enter information in Aircraft Logbook for completion of Wipaire Service Letter 189 Method B.

Revision D Page 9 of 9 1009949