

# **SERVICE LETTER 190**

### 8750 SERIES BONDED STIFFENER CORROSION

Aircraft Makes/Model(s):	Float Model(s):	Compliance: Mandatory	By: MAS
Textron Aviation 208 and 208B	8750 Series	Part Number: 1009944	Approved: DRH
		Date: 4/17/2023	Revision: D

## LOG OF REVISIONS

Revision	Description	Date
А	Initial release	3/25/2019
В	Added pinhole corrosion information	6/14/2019
С	Updated serial number effectivity.	
D	Clarified Condition 2 description and Method B & C instructions.	

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 models 208 and 208B with Wipline 8750 floats S/N 87214 and prior, but excludes floats 87187A/87188A and 87211A/87212A installed per STC SA1311GL.

#### COMPLIANCE:

Mandatory compliance

#### BACKGROUND:

Stiffeners and skins are showing signs of corrosion in the locations where the stiffeners are glued to the float side skins.

#### COMPLIANCE METHOD:

Inspect stiffeners and skins and, if required, install new stiffeners per the Work Instruction section of this service letter.

#### **APPROXIMATE SHOP HOURS:**

- Condition 1 No corrosion or minimal superficial corrosion is present: 8 man-hours per float.
- Condition 2 Corrosion is visible around the stiffener and the stiffener will need to be removed for replacement and for closer inspection of the skin: 1 man-hour per stiffener removed.
- Condition 3 Corrosion visible under stiffener and corrosion has spread through the skins: 2 man-hours per stiffener removed.

#### WARRANTY INFORMATION:

Contact Wipaire customer service for details.

#### TECHNICAL DATA:

Copies of this service letter, associated service kit (if applicable), float service manual, and float parts manual are available by contacting Wipaire customer service.

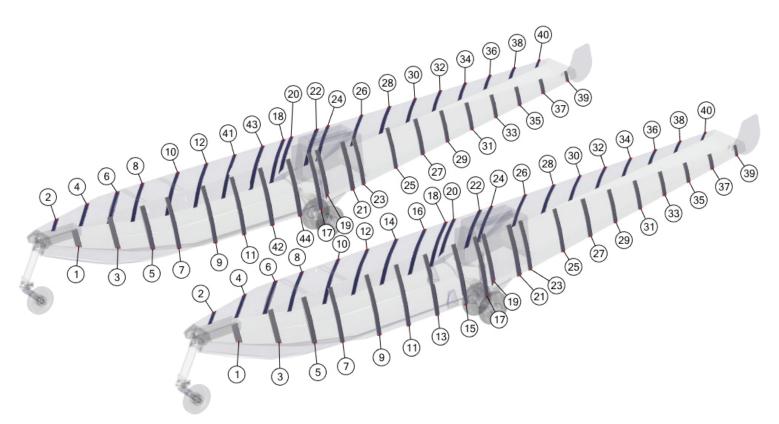


### PARTS LIST (ORDER DESIRED PARTS INDIVIDUALLY)

ITEM	PART NUMBER	DESCRIPTION
1	1007959	STIFFENER, 1, LEFT FLOAT OUTBOARD, RIGHT FLOAT INBOARD
2	1007960	STIFFENER, 1, LEFT FLOAT INBOARD, RIGHT FLOAT OUTBOARD
3	1007961	STIFFENER, 2, LEFT FLOAT OUTBOARD, RIGHT FLOAT INBOARD
4	1007962	STIFFENER, 2, LEFT FLOAT INBOARD, RIGHT FLOAT OUTBOARD
5	1007963	STIFFENER, 3, LEFT FLOAT OUTBOARD, RIGHT FLOAT INBOARD
6	1007964	STIFFENER, 3, LEFT FLOAT INBOARD, RIGHT FLOAT OUTBOARD
7	1007965	STIFFENER, 4, LEFT FLOAT OUTBOARD, RIGHT FLOAT INBOARD
8	1007966	STIFFENER, 4, LEFT FLOAT INBOARD, RIGHT FLOAT OUTBOARD
9	1007967	STIFFENER, 5, LEFT FLOAT OUTBOARD, RIGHT FLOAT INBOARD
10	1007968	STIFFENER, 5, LEFT FLOAT INBOARD, RIGHT FLOAT OUTBOARD
11	1007969	STIFFENER, 6, LEFT FLOAT OUTBOARD, RIGHT FLOAT INBOARD
12	1007970	STIFFENER. 6, LEFT FLOAT INBOARD, RIGHT FLOAT OUTBOARD
13	1007971	STIFFENER, 7, LEFT FLOAT OUTBOARD
14	1007972	STIFFENER, 7, LEFT FLOAT INBOARD
15	1007973	STIFFENER, 8, LEFT FLOAT OUTBOARD
16	1007974	STIFFENER, 8, LEFT FLOAT INBOARD
17	1007975	STIFFENER, 9, LEFT FLOAT OUTBOARD, RIGHT FLOAT INBOARD
18	1007976	STIFFENER, 9, LEFT FLOAT INBOARD, RIGHT FLOAT OUTBOARD
19	1007977	STIFFENER, 10, LEFT FLOAT OUTBOARD, RIGHT FLOAT INBOARD
20	1007978	STIFFENER, 10, LEFT FLOAT INBOARD, RIGHT FLOAT OUTBOARD
21	1007979	STIFFENER, 11, LEFT FLOAT OUTBOARD, RIGHT FLOAT INBOARD
22	1007980	STIFFENER, 11, LEFT FLOAT INBOARD, RIGHT FLOAT OUTBOARD
23	1007981	STIFFENER, 12, LEFT FLOAT OUTBOARD, RIGHT FLOAT INBOARD
24	1007982	STIFFENER, 12, LEFT FLOAT INBOARD, RIGHT FLOAT OUTBOARD
25	1007983	STIFFENER, 13, LEFT FLOAT OUTBOARD, RIGHT FLOAT INBOARD
26	1007984	STIFFENER. 13. LEFT FLOAT INBOARD. RIGHT FLOAT OUTBOARD
27	1007985	STIFFENER, 14, LEFT FLOAT OUTBOARD, RIGHT FLOAT INBOARD
28	1007986	STIFFENER, 14, LEFT FLOAT INBOARD, RIGHT FLOAT OUTBOARD
29	1007987	STIFFENER, 15, LEFT FLOAT OUTBOARD, RIGHT FLOAT INBOARD
30	1007988	STIFFENER, 15, LEFT FLOAT INBOARD, RIGHT FLOAT OUTBOARD
31	1007989	STIFFENER, 16, LEFT FLOAT OUTBOARD, RIGHT FLOAT INBOARD
32	1007990	STIFFENER, 16, LEFT FLOAT INBOARD, RIGHT FLOAT OUTBOARD
33	1007991	STIFFENER, 17, LEFT FLOAT OUTBOARD, RIGHT FLOAT INBOARD
34	1007992	STIFFENER, 17, LEFT FLOAT INBOARD, RIGHT FLOAT OUTBOARD
35	1007993	STIFFENER, 18, LEFT FLOAT OUTBOARD, RIGHT FLOAT INBOARD
36	1007994	STIFFENER, 18, LEFT FLOAT INBOARD, RIGHT FLOAT OUTBOARD
37	1007995	STIFFENER, 19, LEFT FLOAT OUTBOARD, RIGHT FLOAT INBOARD
38	1007996	STIFFENER, 19, LEFT FLOAT INBOARD, RIGHT FLOAT OUTBOARD
39	1007997	STIFFENER, 20, LEFT FLOAT OUTBOARD, RIGHT FLOAT INBOARD
40	1007998	STIFFENER, 20, LEFT FLOAT INBOARD, RIGHT FLOAT OUTBOARD
40	1007881	STIFFENER, 7, RIGHT FLOAT OUTBOARD
42	1007882	STIFFENER, 7, RIGHT FLOAT OUTDOARD
43	1007883	STIFFENER, 8, RIGHT FLOAT OUTBOARD
44	1007884	STIFFENER, 8, RIGHT FLOAT INBOARD



#### SERVICE LETTER 190 8750 SERIES BONDED STIFFENER CORROSION





Reference the following documents for instruction pertaining to inspection and repair when completing the following tasks:

- AC43.13-1B or later FAA approved revision guidelines
- Structural Repair Manual for Wipline Aluminum Floats Wipaire part number 1008274

# WORK INSTRUCTION

- 1. Prepare floats for inspection and remove all top deck access covers.
- 2. Depending on the outcome of inspection, make repairs as instructed:

#### Condition 1 - No corrosion or minimal superficial corrosion is present

Perform Work Instruction - Method A below.



Condition 2 - Corrosion is visible around the stiffener, and the stiffener will need to be removed for replacement and for closer inspection of the skin.

Perform Work Instruction - Method B below.



Condition 3 - Corrosion visible under stiffener, and corrosion has spread into the skins.

Perform Work Instruction - Method C below.





# **METHOD A**

Performed if no corrosion or minimal superficial corrosion is present

- 1. Do not remove stiffener. Clean, alodine and prime any visible corrosion found on the interior of the side skin or the stiffener.
- 2. Seal the sides of stiffener with PR 1422-B2 or equivalent.



# METHOD B

Performed if corrosion is visible around the stiffener

- 1. Each stiffener is attached to the gunwall and chine with 2 to 3 rivets and adhesive. Remove rivets, if stiffener does not come off easily, use a heat gun on skin exterior to soften the adhesive (do not exceed 200°F) and remove each stiffener showing signs of corrosion.
- 2. Remove any corrosion on side skins and clean. Make sure to not remove any more material than necessary.

NOTE: Skin must have 50% or more of original thickness remaining.

- 3. Alodine and prime cleaned surface.
- 4. Fit up replacement stiffener to skin, picking up existing stiffener rivet locations and adjacent existing locations in gunwall and chine. Ensure proper edge distance per AC 43.13-1B. Mark and remove any interfering existing rivets.

NOTE: Stiffener may have to be moved forward or aft one rivet to line up better.

5. Generously apply PR 1422-B2 or equivalent and attach the stiffeners to the side skin.

**NOTE:** Use enough sealant so that when stiffener is pressed to the side skin, sealant should fully cover the stiffener with no voids.



6. Rivet stiffeners to gunwall and chine, as shown below.

NOTE: No rivets are installed through side skin for Method B.



7. Paint as desired.



# METHOD C

Performed if corrosion is visible under stiffener and corrosion has spread more than 50% of skin thickness for a total length of more than 20% of the stiffener length through the skins.

- 1. Each stiffener is attached to the gunwall and chine with 2 to 3 rivets and adhesive. Remove rivets, if stiffener does not come off easily, use a heat gun on skin exterior to soften the adhesive (do not exceed 200°F) and remove each stiffener showing signs of corrosion.
- 2. Remove any corrosion on side skins and clean. Make sure to not remove any more material than necessary.
- 3. Add (2) rows of rivet holes to each stiffener. Rivets through side skin will be MS20470AD4 and should be spaced no more than 3" apart. If the corrosion is present on most of the length of the stiffener, use 1" spacing for rivet pattern.
- 4. In some cases, there may be a pinhole through the skin, in which case, it is acceptable to drill it out and install a #4 rivet.
- 5. Alodine and prime cleaned surface.
- 6. Fit up replacement stiffener to skin, picking up existing stiffener rivet locations and adjacent existing locations in gunwall and chine. Ensure proper edge distance per AC 43.13-1B. Mark and remove any interfering existing rivets.

NOTE: Stiffener may have to be moved forward or aft one rivet to line up better.

- 7. Backdrill side skin to match rivet rows in stiffener.
- 8. Generously apply PR 1422-B2 or equivalent and attach the stiffeners to the side skin.

**NOTE:** Use enough sealant so that when stiffener is pressed to the side skin, excess sealant seeps out along both sides of the entire stiffener.

9. Rivet stiffeners to side skins, gunwall, and chine. Match previously installed rivet type for gunwall and chine. Use MS20470AD4 for side skin locations. See below.



10. Paint as desired.

# AIRCRAFT CLOSING AND RETURN TO SERVICE

- 1. Reinstall top deck access covers.
- 2. Upon completion of inspection, enter information in Aircraft Logbook for completion of this Wipaire Service Letter 190.