# **SERVICE LETTER 261**

## WIRE TERMINAL BLOCK REPLACEMENT

Aircraft Makes/Model(s):	Float Model(s):	Compliance: Optional	By: MAS
Textron Aviation 208, 208B, Air Tractor AT-802 & AT-802A, 8750A, 10000A, & 13000A	Part Number: 1012490	Approved: DRH	
DeHavilland DHC-6	57 557 K, 15 555 K, & 15 555 K	Date: 1/23/2024	Revision: A

# **LOG OF REVISIONS**

Revision	Description	Date
Α	Initial release	1/23/2024

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 amphibian floats installed per STC SA1311GL, Air Tractor models AT-802 and AT-802A with Wipline 10000 amphibian floats installed per STC SA1795CH, and DeHavilland model DHC-6 with Wipline 13000 amphibian floats installed per STC SA2CH.

## **COMPLIANCE:**

Compliance is optional.

# **BACKGROUND:**

Current wire terminal block offers no protection to wires and terminals to water or condensation and incidental damage.

#### **COMPLIANCE METHOD:**

Remove old terminal block and install new IP67 terminal block housing. Verify full and correct landing gear functionality after installation.

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

Performing the work instructions will take approximately 5 labor hours to complete, or 2.5 hours per float.

#### **WARRANTY INFORMATION:**

This service letter does not include warranty for labor and parts.

#### **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.



ITEMS PROVIDED IN SERVICE KIT 1012490-01 (1 KIT PER AIRCRAFT)				
ITEM	QTY	PART NUMBER	DESCRIPTION	
1	2	PTT-10681-C	6 CENTRAL TERMINAL BLOCKS, IP67 JUNCTION BOX (INCLUDES HARDWARE TO SECURE LID)	
2	4	IPG-222135	6-12MM NYLON CABLE GLAND, PG13.5	
3	4	LP526-632R12	6-32 THREAD, 3/4" LENGTH, STANDARD MACHINE SCREW	
4	4	90295A400	NYLON WASHER, 0.173" ID	
5	4	MS27130A7	FLAT HEAD 6-32 THREAD BLIND RIV NUT	
6	20	MS25036-102	#6 STUD RING TERMINAL 16-22 AWG	
7	1 FT	3635W-3/16-0	HEAT SHRINK, ADHESION LINED, 3/16 IN	

REQUIRED TOOLS			
ITEM	DESCRIPTION		
1	AC-1377 OR SIMILAR SPECIFIED CRIMP TOOL		
2	3/16" DRILL BIT AND DRILL (#10 WHEN USING A 6-32 RIVNUT)		
3	RIVNUT CRIMPER		
4	WIRE STRIPPER		
5	CORROSION X OR EQUIVALENT		
6	DC4 ELECTRICAL INSULATING COMPOUND		
7	LOCTITE 242 OR EQUIVALENT		

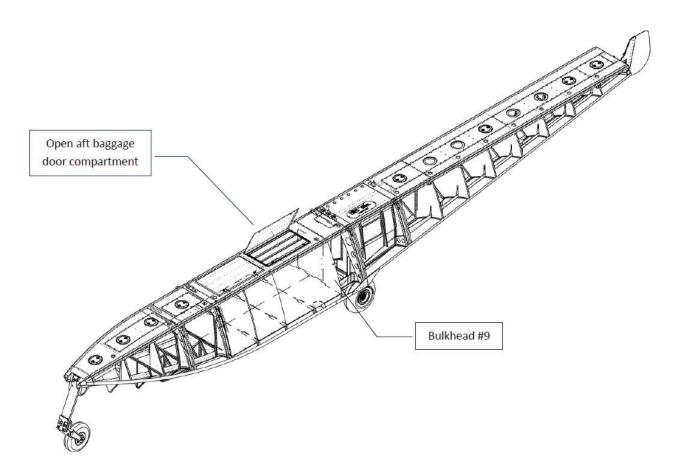
Reference the following documents for instructions pertaining to inspection and repair when completing the following tasks:

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



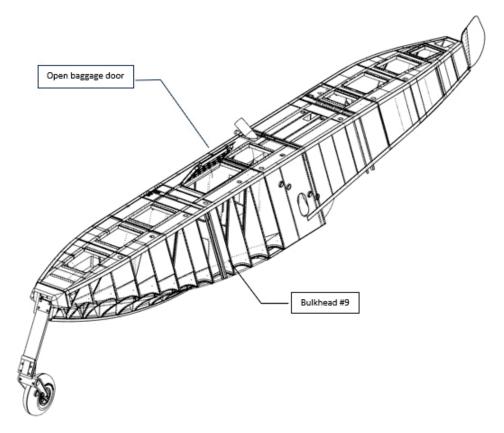
# **Work Instructions**

- 1. Position and prepare aircraft for safe maintenance.
- 2. Disconnect aircraft battery.
- 3. Locate the existing wiring terminal. For 8750, the terminal is in the aft baggage compartment on bulkhead #9. For 10,000 series, the terminal is on the forward bulkhead in the baggage compartment, bulkhead #9. The terminal block on the 13000 series float is in the front baggage compartment on bulkhead #6.

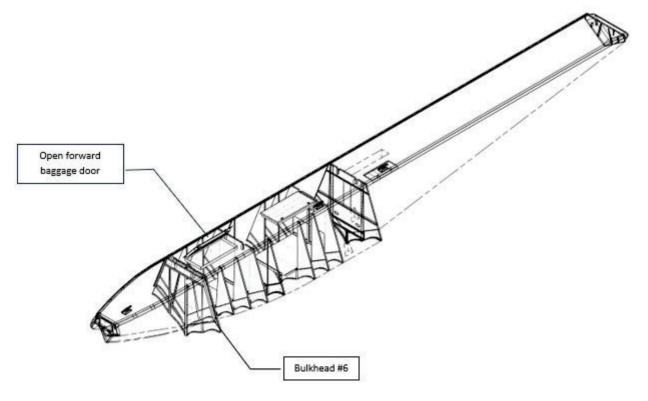


8750A Float Model





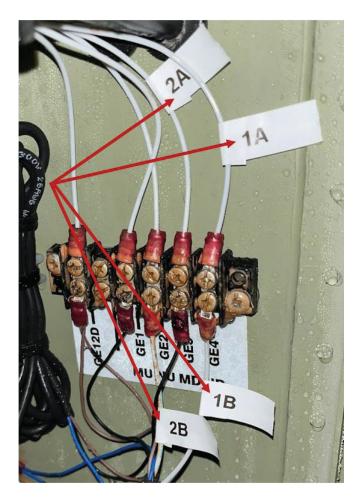
10000A Float Model



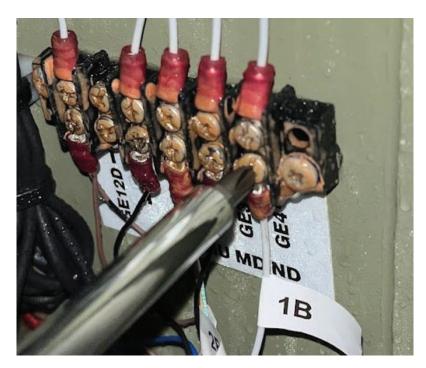
13000A Float Model



4. Mark or label each wire pairing so when wires are reinstalled, the correct wire pairs are installed together.



5. Remove the wires from the existing terminal block and remove the existing terminal block.





6. Prepare the new terminal block by drilling out and deburring the knock-out holes, then installing the cable glands. Ensure the seal on cable gland is between the exterior housing and nut. Tighten both nuts with a wrench.

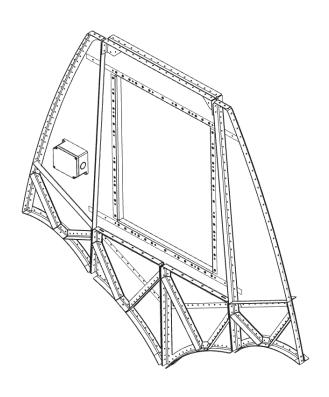


7. Apply corrosionX or equivalent on the backside of the lid thread inserts on the housing.



8. Locate new installation location for terminal box on the bulkhead ensuring at least 1.5" of clearance on each side for the cable gland and wires.







9. Orient the housing horizontally (wire glands on left and right side), then mark locations to drill new holes.



- 10. Drill 3/16" or #10, when using a 6-32 rivnut, holes through the bulkhead in the marked locations to install the rivnuts.
- 11. Install rivnuts using proper crimping tool and installation method as specified in AC43.13-1B.



12. Install the new terminal block with the LP526-632R12 screws and 90295A400 washers. Install washers in between terminal block and bulkhead. Apply DC4 Electrical compound in between bulkhead and housing.



13. Tighten both screws until the housing is firmly secure and apply corrosionX or equivalent compound on the screw heads.





14. Cut the original ring terminals off the wires and feed each wire bundle grouping through 3/16"x3" heat shrink tubing. Use a heat gun to shrink the heat shrink tubing around each wire bundle leaving about 1-3/4" of loose wire ends.



15. Feed each wire grouping through the cable groves on either side of the terminal housing. Strip and crimp new ring terminals on wires using proper crimping techniques and crimping tools outlined in AC43.13-1B standards.





16. Secure each wire pairing to the new terminal block in the housing. Place corrosionX or equivalent compound on the terminal junctions.

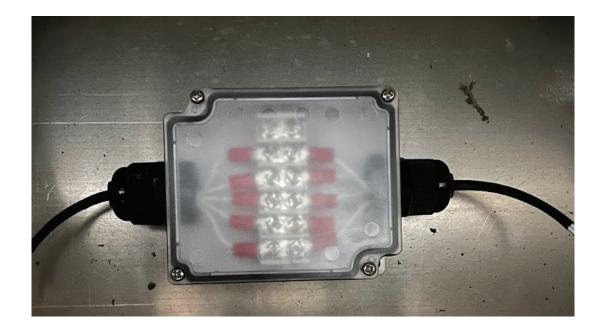


17. Tighten the cable grove coupler around the wire bundles until the rubber grommet is sealed around the wire bundles.





18. Secure the housing lid by using the included mounting screws with Loctite 242 or equivalent. Place corrosionX or equivalent on screw heads.



19. Bundle up remaining wire into a service loop and tie wrap.



- 20. Repeat steps 3-19 on opposite float.
- 21. Reconnect aircraft battery.
- 22. Verify full and correct functionality of landing gear mechanisms as per corresponding aircraft Service Manual before returning aircraft to service.

# Aircraft Closing & Return to Service

1. Upon completion of inspection, enter information in Aircraft Logbook for completion of Wipaire Service Letter 261.

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