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SERVICE LETTER 210

10000A Water Scoop Harness Upgrade

| Aircraft Makes/Model(s): | Float Model(s): | Compliance: Optional | By: MAB |
|--------------------------------|-----------------|----------------------|---------------|
| Air Tractor AT-802, AT-802A | 10000A | Part Number: 1011438 | Approved: SDW |
| | | Date: 4/18/2025 | Revision: A |

LOG OF REVISIONS

| Revision | Description | Date |
|----------|-----------------|-----------|
| A | Initial release | 4/18/2025 |

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

EFFECTIVITY:

This service letter applies to Air Tractor model AT-802 and AT-802A with Wipline 10000 Floats installed per STC SA01795CH.

COMPLIANCE:

Optional compliance

BACKGROUND:

This is a repair option for watertight position switches for the scoop actuators. This Service Letter provides instruction to upgrade from Service Letter 191.

COMPLIANCE METHOD:

Install provided parts as shown in the Work Instruction section of this service letter.

APPROXIMATE SHOP HOURS:

The work instruction for this service letter will take approximately 8 labor hours per float for Kit 1011438-01 and approximately 5 hours per float for Kit 1011438-02.

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 at www.wipaire.com.

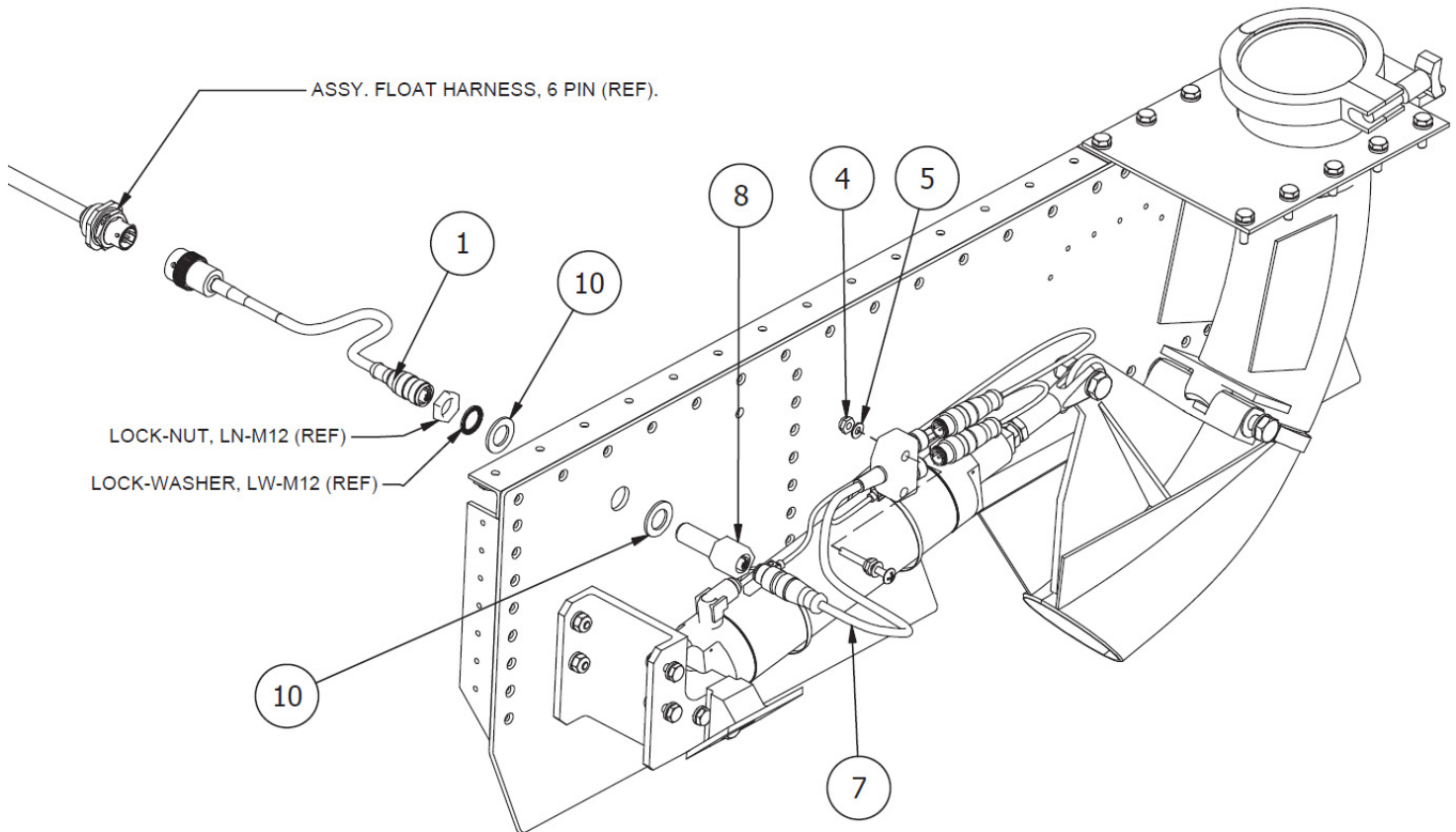
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SERVICE KIT 1011438-01 (FLOAT SET PRIOR TO SERVICE LETTER 191 COMPLETION)
SERVICE KIT 1011438-02 (FLOAT SET AFTER SERVICE LETTER 191 HAS BEEN COMPLETED)

| ITEM | KIT-01 | KIT-02 | PART NUMBER | DESCRIPTION |
|------|--------|--------|---------------|--|
| 1 | 2 | 2 | 1011437 | ASSEMBLY, FIREBOSS SCOOP HARNESS ADAPTER |
| 2 | 2 | 0 | AN526-832R12 | SCREW, MACHINE, TRUSS HEAD |
| 3 | 4 | 0 | M6965106 | ASB-6 STRAP |
| 4 | 4 | 0 | MS21083N08 | NUT, LOCKING, LOW HEIGHT, 8-32 UNC |
| 5 | 4 | 0 | NAS1149FN832P | WASHER, 0.174 ID, 0.032 THK, STEEL |
| 6 | 4 | 0 | S6913351 | CORD SET |
| 7 | 2 | 0 | U0163-11 | SPLITTER, 2-BRANCH, 4-WIRE, MALE |
| 8 | 2 | 2 | U1135-1 | CONNECTOR, 4 PIN, FEED-THRU |
| 9 | 4 | 0 | 1011941-01 | SENSOR, MAGNETIC, NPN, 10-30 VDC |
| 10 | 4 | 4 | NAS1149D0863J | WASHER, 0.515 ID, 0.063 THK, ALUMINUM |



Work Instructions For Kit 1011438-01

Upgrade from original manufacture, see below for upgrade from previous Wipaire Service Letter 191.

The purpose of this installation is to retrofit Wipaire, Inc. OEM Water Scoop Position Sensor Systems with improved watertight position switches for the scoop actuators. Quantities shown in parts list is for two floats.

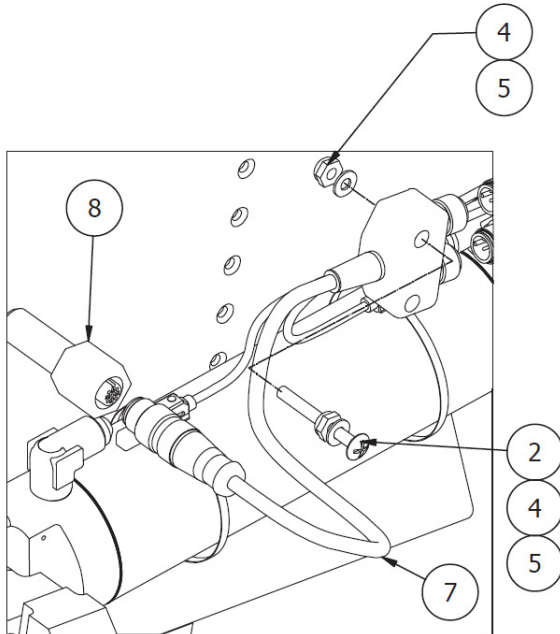
1. Gain access to water scoop system by removing baggage area aft bulkhead panel. Remove water scoop tunnel cover.



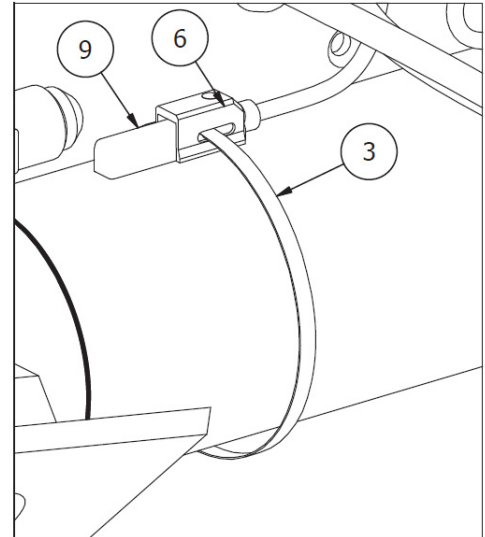
2. Remove hydraulic actuator assembly from tunnel to facilitate installation of new switches.
 3. Disconnect existing cannon plugs from scoop tunnel side wall. Remove and discard switches from hydraulic scoop actuator. If not already done, mark the splitter, 2 Branch, 4 Wire (U0163-11) with "DN" at the #1 position and "UP" at the #2 position. The "UP" switch will be installed on the hydraulic actuator towards the aft end of the float and the "DN" switch will be toward the forward end of the float.
 4. Install 1 Washer (NAS1149D0863J) to Connector, 4 Pin Feed-Thru (U1135-1) as shown. Insert 4 Pin Feed-Thru through mount hole from the tunnel side outwards. Install 1 Washer (NAS1149D0863J) and 1 Lock-Washer (LW-M12) to Connector, 4 Pin Feed-Thru and secure with Locknut (LN-M12). Use Sika-Flex, proseal or equivalent to seal junction through tunnel wall.
 5. Connect Fire Boss Scoop Harness Adapter (1011437) to existing float harness and to Connector, 4 Pin Feed-Thru. Ensure connector ends and internal area remain free of sealant. S-fold and secure the excess wiring to the adjacent hydraulic lines with plastic cable-ties.
 6. Before installation, remove screws from Inductive Magnet Sensors (1011941-01). Mount switches on each scoop hydraulic actuator using the ASB-6 Straps (M6965106) and Cord Sets (S693351).
- Note:** Screws in sensors have left hand thread! See sensor install detail.
7. On the opposite side of the tunnel wall from the electrical and hydraulic pass-throughs, drill a #19 hole approximately 1" below the 4th rivet from the front of the tunnel.
 8. Re-install hydraulic actuator assembly with previously removed hardware.
 9. Install 1 Screw (AN526-832R12) with Proseal, or equivalent, (facing inwards) in previously drilled hole with 1 Washer (NAS1149FN832P) and 1 Nut (MS21083N08). Mount Splitter to this screw. Secure splitter with 1 Washer (NAS1149FN832P) and Nut (MS21083N08). Do not over-tighten. S-fold and secure the excess wiring with plastic cable-ties.
 10. Re-install tunnel cover with previously removed hardware.

11. Operational Check:

- With scoops in up position, adjust UP switch forward or aft to make contact. LED will be illuminated.
- With scoops in down position, adjust DN switch forward or aft to make contact. LED will be illuminated.
- **Note:** Ensure the switch LED comes on at the same time the scoop cylinder bottoms out. Timing of the scoop travel for full up or full down limits should be approximately 1 second.



SPLITTER STOWING DETAILS



SENSOR INSTALL DETAIL

Work Instructions For Kit 1011438-02

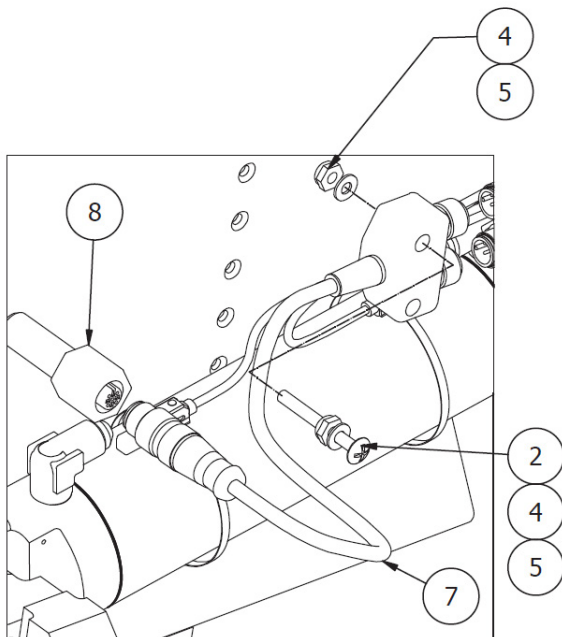
Upgrade from Wipaire Service Letter 191 modification.

The purpose of this installation is to add an upgrade to the system previously modified in accordance with Wipaire Service Letter 191. This upgrade adds higher performance watertight harnesses and fittings to reduce effects of salt-water corrosion on the harness interface area on the scoop tunnel.

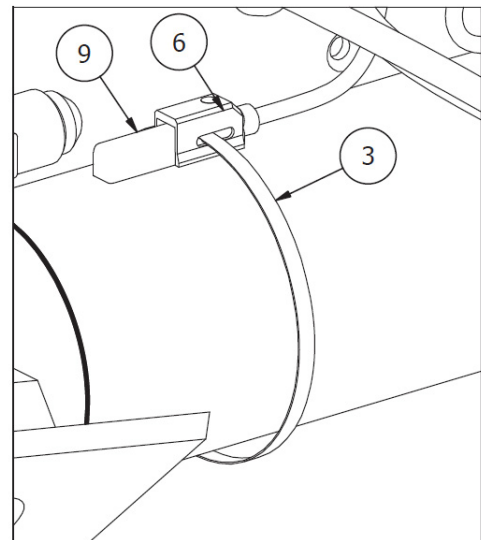
1. Gain access to water scoop system by removing baggage area aft bulkhead panel. Remove water scoop tunnel cover.



2. Disconnect existing plugs from scoop tunnel side wall.
3. Install 1 Washer (NAS1149D0863J) to Connector, 4 Pin Feed-Thru (U1135-1) as shown. Insert 4 Pin Feed-Thru through mount hole from the tunnel side outwards. Install 1 Washer (NAS1149D0863J) and 1 Lock-Washer (LW-M12) to Connector, 4 Pin Feed-Thru and secure with LockNut (LN-M12). Use Sika-Flex, ProSeal or Equivalent to seal junction through tunnel wall.
4. Connect Fire Boss Scoop Harness Adapter (1011437) to existing float harness and to Connector, 4 Pin Feed-Thru. Ensure connector ends and internal area remain free of sealant. S-fold and secure the excess wiring to the adjacent hydraulic lines with plastic cable-ties.
5. Connect plug from splitter to Feed-Thru Connector inside of scoop tunnel.
6. On the opposite side of the tunnel wall from the electrical and hydraulic pass-throughs, drill a #19 hole approximately 1" below the 4th rivet from the front of the tunnel.
7. Install 1 Screw (AN526-832R12) with ProSeal, or equivalent, (facing inwards) in previously drilled hole with 1 Washer (NAS1149FN832P) and 1 Nut (MS21083N08). Mount splitter to this screw. Secure splitter with 1 Washer (NAS1149FN832P) and Nut (MS21083N08). Do not over-tighten. S-fold and secure the excess wiring with plastic cable-ties.
8. Re-install tunnel cover with previously removed hardware.
9. Operational Check:
 - With scoops in up position, adjust "UP" switch forward or aft to make contact. LED will be illuminated.
 - With scoops in down position, adjust "DN" switch forward or aft to make contact. LED will be illuminated.
 - **Note:** Ensure the switch LED comes on at the same time the scoop cylinder bottoms out. Timing of the scoop travel for full up or full down limits should be approximately 1 second.



SPLITTER STOWING DETAILS



SENSOR INSTALL DETAIL

Aircraft Closing & Return to Service

1. Upon completion of inspection, enter information in Aircraft Logbook for completion of Wipaire Service Letter 210.