Trinity

Model Numbers: Lx500-800
Version Date: 8-Mar-2017

FLOW SWITCH REPLACEMENT (P/N 84102) INSTALLATION INSTRUCTIONS

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Installer Responsibilities

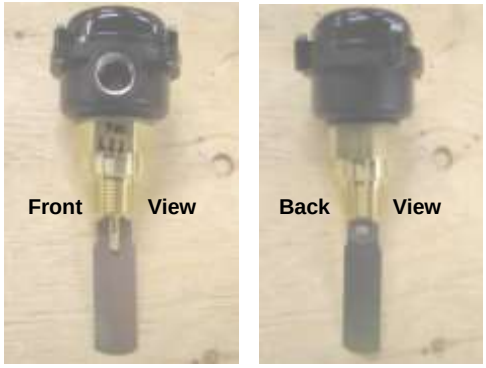
As the installing technician, it is your responsibility to ensure the installation is performed in accordance with the NTI instructions included with the flow switch. Refer to replacement procedure below for paddle cut lengths by boiler model and assembly instructions.

Contents (P/N 84102)

- 84102 - Flow Switch FS8-W
- Replacement Instructions

⚠ WARNING Failure to follow these instructions may permit burner operation when no water or no water flow is present resulting in fire, property damage or loss of life.

Fig. 1 - Final Paddle Assembly



Replacement Procedure

1. **Power Down:**
   To turn off power to the boiler, switch off the power switch at the back right side of the unit.
2. **Removing the Flow Switch:**
   a. With power off, close boiler isolation valves, drain water from boiler in preparation for replacing the flow switch.
   b. Pull conduit away from flow switch to create slack in wiring. DO NOT detach electrical conduit where it enters the boiler.
   c. Remove flow switch cover and detach wires from terminals.
   d. Disconnect electrical conduit/fitting from flow switch.
   e. Unthread and remove flow switch from water line.
3. **Paddle Cut Length:**
   a. Measure paddle cut length from center of the largest mounting hole to where the tip of the paddle will end (i.e. paddle cut line).
   b. Cut paddle to specified length based on boiler model (**Fig. 2**).
   c. Once the paddle is cut-to-length, corners must be chamfered. Use a pre-cut paddle as a template trim corners. (**Fig. 3**)
4. **Paddle Assembly:**
   a. Locate flow direction arrow on brass housing, verify it points to the front of the flow switch.
   b. Place cut-to-length paddle on back of flow switch lever.
   c. Place large washer over paddle, secure to lever with screw and small lock washer provided with flow switch.
   d. Refer to "Final Paddle Assembly" (**Fig. 1**).

Fig. 2 - Paddle Cut Lengths

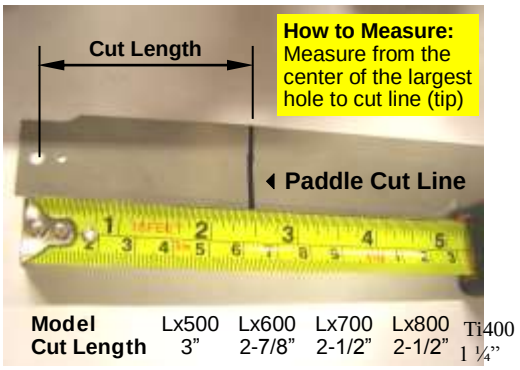


Fig. 3 - Chamfer Paddle Corners

5. **Replacing the Flow Switch:**
   a. Apply thread sealant to flow switch threads, securely tighen in place. Final flow switch position should be level with flow arrow pointing away from the boiler and conduit connection facing out (**Fig. 4**).
   b. Remove flow switch cover, feed wires through electrical conduit fitting first and then into switch housing. (**Fig. 5**)
   c. Attach orange wire to center contact (NO), purple wires to right contact (C), good contact between screwhead & washer.
   d. Secure electrical conduit/fitting to flow switch.
   e. Final step, screw on flow switch cover.
6. **Leak Check:**
   a. Open boiler isolation valves, fill boiler with water before powering up. **DO NOT fire boiler without water in it.**
   b. Check for water leaks around flow switch connections.
7. **Power Up:**
   To turn on power to the boiler, switch on the power switch at the back right side of the unit.
8. **Verify Flow Switch Operation:**
   a. Test 1 - With isolation valves open and flow on, verify burner operation.
   b. Test 2 - With isolation valves closed 50-75%, verify burner Lockout.
   c. Return isolation valves to open position, clear Lockout, verify burner operation again.

Fig. 4 - Final Flow Switch Position

Fig. 5 - Flow Switch Wiring

For the Ti400 you do not have to reinstall the flow switch cover