Instinct LWCO Sensor Replacement



Kit Part Number	Description	Model
PARKIT04	Low Water Cut Off Sensor Replacement	All Instincts

Each Kit Includes:

• LWCO Pressure Sensor

Recommended Tools:

• Phillips Head Screwdriver

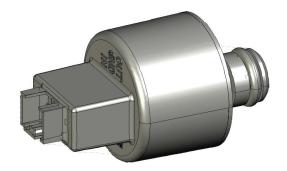


Fig. 1: Low Water Cut Off Sensor



Indicates a potentially hazardous situation which, if ignored, can result in serious injury or substantial property damage.

NOTICE

Indicates special instructions on installation, operation or maintenance, which are important to equipment but not related to personal injury hazards.



For your safety, turn off electrical power supply at service panel and allow unit to cool before proceeding to avoid possible electrical shock and scald hazard. Failure to do so can cause severe personal injury or death.



Failure to follow instructions below can result in severe personal injury or damage if ignored.

- Instructions are for a qualified installer/ service technician only.
- Read all instructions before proceeding.
- Follow instructions in proper order.

Instinct LWCO Sensor Replacement



1. Preliminary Instructions

- 1. Verify that the pressure sensor replacement kit is correct for the model of boiler. See table on page 1.
- 2. Carefully open and unpack the PARTS BOX from its shipping carton.
- 3. Carefully remove and check for any damage.



Installing a damaged temperature sensor will cause malfunction of the boiler. Contact Triangle Tube right away if the pressure sensor damaged in any way.

- 4. Turn off the electrical power supply to the boiler.
- 5. Close the manual gas shut off valve to the unit.

2. Drain the boiler

- 1. Turn power to the unit "OFF"
- 2. Close all isolation valves on the system piping to the boiler. Close the fill valve line to the system.
- 3. Connect a garden hose to the boiler drain.
- 4. Direct the hose to a suitable place of drainage. Ensure boiler drain connection is between the boiler and the closed isolation valve.
- 5. Open the drain valve and begin draining the boiler.



Water from the boiler drain connection may be extremely hot. To avoid personal injury, death or substantial property damage:

- Tighten all drain hose connections to avoid leakage.
- Direct hot water away from all persons.

3. Pressure Sensor Removal

 Remove the screw from the bottom of the front panel. Remove the front panel of the boiler. Pull the panel up and forward to remove the front panel from the unit. Do not discard the screws.

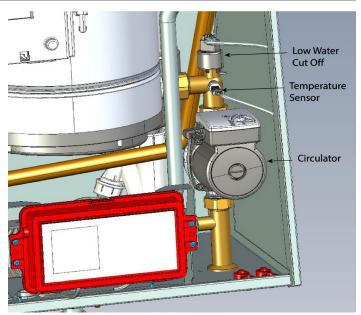


Fig. 2: Pressure Sensor Installation

2. Disconnect the wire harness from the pressure sensor by pulling back the locking clip and pulling the harness out.



Take care to ensure the wiring and harness are not damaged.

3. Pull the lock pin below the Sensor out and pull the pressure sensor out.

4. Pressure Sensor Installation

- 1. Insert the new sensor into the connection. Insert the locking pin to secure in place.
- 2. Reconnect the wiring harness to the sensor and close the locking clip.
- 3. Give the sensor a light tug up to ensure the locking clip is engaged properly.
- 4. Open all isolation valves and the fill system on the boiler to refill the unit. Check for leaks around the LWCO and tighten the device if necessary.
- 5. Once the boiler is completely full and 12 psig pressure is established, check continuity across the LWCO terminals.



Instinct LWCO Sensor Replacement



- 6. If the LWCO device shows an open contact at 12 psig, increase the system pressure to 15 psig and recheck the continuity across the device. If the LWCO device continues to show an open contact, repeat the procedures for removing the device and replacing it.
- 7. If the contacts show as closed, attach the wire terminals to the LWCO device.
- 8. Re-installing the front jacket panel.
- 9. Reconnect power supply and return the boiler back to service.