

Instinct Temperature Sensor Replacement



Kit Part Number	Description	Model
PTRKIT122	Supply Temperature Sensor Replacement	All Instincts
PTRKIT122	Return Temperature Sensor Replacement	All Instincts
PARKIT01	Flue Temperature Sensor Replacement	All Instincts

Each Kit Includes:

- Temperature Sensor

Recommended Tools:

- Adjustable Wrenches
- Phillips Head Screwdriver



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



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.



The red wire adapter shipped with the temperature sensor is not required with the HeatMaster.

Instinct Temperature Sensor Replacement



1. Preliminary Instructions

1. Verify that the temperature 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.

NOTICE

Installing a damaged temperature sensor will cause malfunction of the boiler. Contact Triangle Tube right away if the temperature 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. Temperature Sensor Removal

1. Turn power to the unit "OFF"
2. Remove the front panel of the boiler by removing the screw on the bottom of the front panel and lifting the panel up and out. Do not discard the screws.

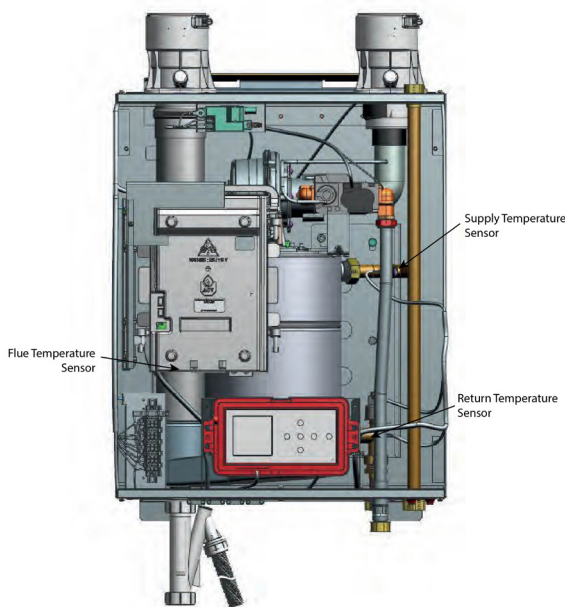


Fig. 1: Instinct 110 Temperature Sensor Location

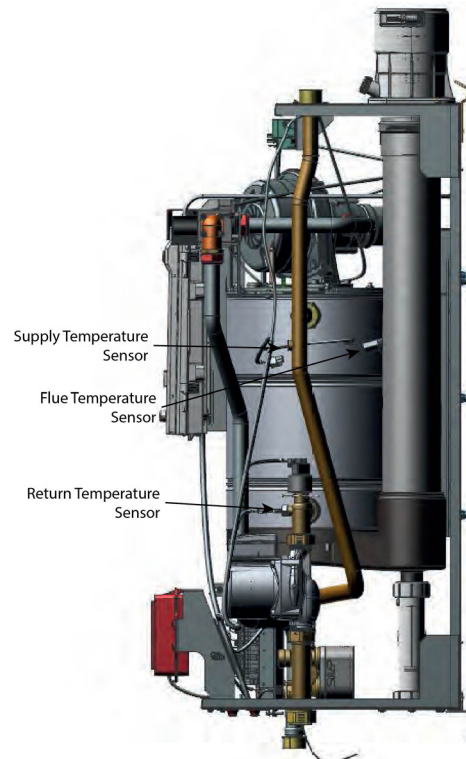


Fig. 2: Instinct 155 Temperature Sensor Location

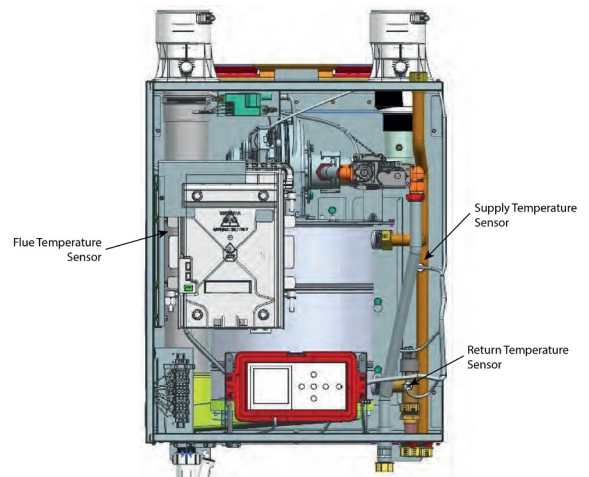


Fig. 3: Instinct 199 Temperature Sensor Location

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

2. Thread the temperature sensor on by hand and tighten as tightly as possible. Tighten the temperature sensor an additional 1/4 turn using an adjustable wrench.
3. Reconnect the wiring harness to the sensor. The harness will "click" onto the locking clip when fully attached.
4. Open all isolation valves and the fill system on the boiler to refill the unit. Check for leaks around the sensor and tighten the device if necessary.
5. Once the boiler is completely full and 12 psig pressure is established restore power to the unit and operate to verify there is no leakage around the temperature sensor.



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.

7. Locate the temperature sensor location from Fig. 1 for Instinct 110, Fig. 2 for Instinct 155 models, and Fig. 3 for Instinct 199 models.
8. Disconnect the wire harness from the temperature sensor by disengaging the locking clip and pulling the plug out.
9. Remove the temperature sensor using an adjustable wrench.



Do not check for leaks with an open flame. Use a bubble test. Failure to check for gas leaks can cause severe personal injury, death or substantial property damage.

6. Restore power to the unit and operate to verify there is no leakage around the temperature sensor.
7. Replace the front jacket panel and secure with the screws on the sides of the panel.



Ensure the piping is not damaged when removing the sensor. Contact Triangle Tube right away if there is any damage to the boiler.



Ensure the flue tube is not damaged during the removal process. If the flue tube is damaged, a gas leak can develop causing severe personal injury, death or substantial property damage.

3. Temperature Sensor Installation

1. Verify that an o-ring is installed at the base of the temperature sensor before installing the sensor.