

FLAME SENSOR REPLACEMENT KIT INSTRUCTIONS

MAC/MAH/DCC/DCB

Kit 550003151

Kit installation shall be completed by qualified agency.

⚠ WARNING

Fire, explosion, asphyxiation and electrical shock hazard. Improper installation could result in death or serious injury. Read these instructions and understand all requirements, including requirements of authority having jurisdiction, before beginning installation. Installation not complete until appliance operation is verified per Installation, Operation & Maintenance Manual provided with boiler.

⚠ CAUTION

Laceration, burn hazard. Metal edges and parts may have sharp edges and/or may be hot. Use appropriate personal protection equipment to include safety glasses and gloves when installing or servicing this appliance. Failure to follow these instructions could result in minor or moderate injury.

Tools required:

- 3mm (7/64") Allen Head Wrench
- Phillips Screw Driver

Flame Sensor Replacement

1. Follow instructions To TURN OFF GAS TO APPLIANCE found on Operating Instructions label on boiler or in Installation, Operation & Maintenance Manual. Verify all electrical power to boiler is turned off.

⚠ WARNING

Electrical shock hazard. Turn OFF electrical power supply at service panel.

2. Remove two (2) screws at bottom of front jacket cover. Lift jacket up and off.

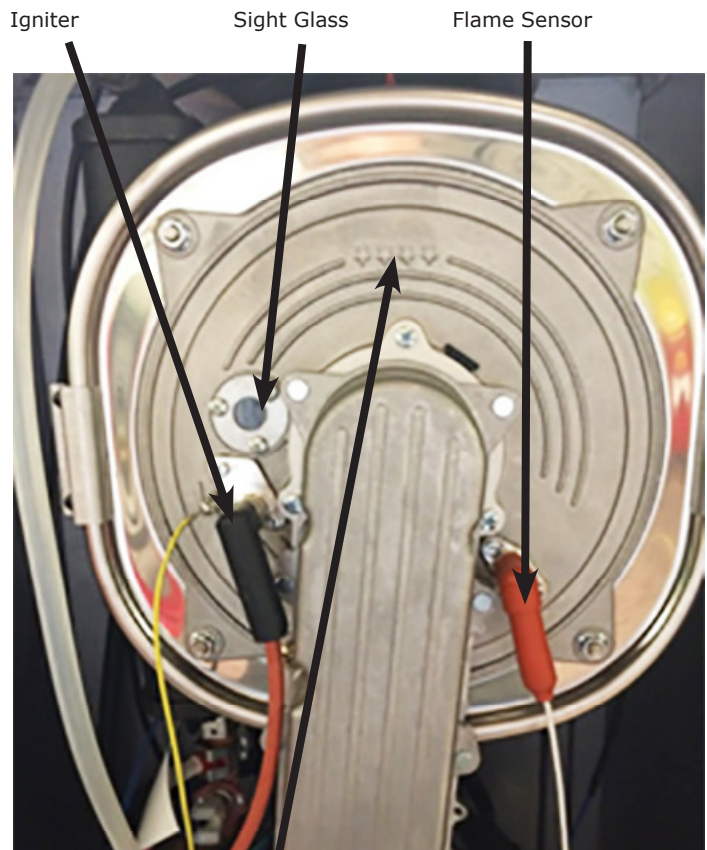
⚠ WARNING

Burn hazard. Verify heat exchanger and flame sensor have cooled or use appropriate personal protection equipment before removing flame sensor.

3. Inspect combustion chamber through sight glass. Verify flame is not present.
4. Flame sensor is located on right of heat exchanger cover.
5. Disconnect flame sensor cable from flame sensor.
6. Remove two (2) mounting screws using 3mm (7/64") Allen head wrench. See figure 1.
7. Twist sensor slightly clockwise and remove. Remove gasket.

Flame Sensor Replacement Kit 550003151 includes:		
DESCRIPTION	PART #	QTY
Flame Sensor	-	1
Flame Sensor Gasket	-	1
Instructions	240011397	1

Figure 1 - View of Heat Exchanger From Front of Boiler



(Location of 165/205 Temp Switch - not shown)

FLAME SENSOR REPLACEMENT KIT

8. Install new flame sensor by twisting it slightly counter clockwise. Install new gasket.
9. Re-install and tighten two (2) mounting screws using 3mm (7/64") Allen head wrench.
10. Re-install flame sensor cable.

11. Perform Automatic Calibration Function:

Note *Boiler must not shutoff during calibration. Open all heating zones in heating or DHW mode to ensure boiler does not shutoff.*

Before performing this function verify there are no heat demands in progress.

During this function ensure there is maximum heat exchange to the system in Heating or DHW mode (DHW request) to avoid boiler shutting off due to overheating.

Press **(O/R)** and **(III-)** together and hold for about 6 seconds. When display indicates "On" press **(i/P)** within 3 seconds after pressing previous buttons.

NOTICE

Important: If display indicates "303" Automatic Calibration function has not been activated. Disconnect boiler from main power supply for few seconds and repeat procedure.

- A. When function is enabled, **(II-)** and **(III-)** will flash on the display.
 - B. After ignition sequence, which can also take place after few attempts, boiler performs three operations. Each operation lasts about 1 minute:
 - maximum power
 - ignition power
 - minimum power
 - C. Before moving to the following phase, from maximum power to ignition power and then to minimum power. **P** and **(II-)** appear on the display.
 - D. During this phase, power level reached by boiler and delivery temperature alternate on the display.
 - E. When **(II-)**, **(II-)** and **(III-)** flash together on the display, calibration function has terminated.
 - F. Press **(O/R)** to exit the function. Display will show **ESC**.
12. Resume operation using OPERATING INSTRUCTIONS found on Operating Instructions label on boiler or in Installation, Operation & Maintenance Manual.
 13. Install front panel. Secure with two screws at bottom of front panel.
 14. Verify proper operation.

Figure 2 - Control Cover

