

LP Altitude Electrode Instructions

NOTICE: For use only on 150, 180, 200 MBH boilers using LP gas and above 2,000 ft. (610 m).

WARNING

Asphyxiation Hazard. Fire Hazard. Explosion Hazard.

This boiler must be installed, serviced or repaired by a skilled and experienced service technician. Improper installation, adjustment, alteration, service or maintenance can cause severe personal injury, death, or substantial property damage. Read and understand these instructions and entire boiler manual before attempting to service boiler. Up to date boiler manual is posted on manufacturer's website.

DANGER

Explosion Hazard. Electrical Shock Hazard. Burn Hazard.

This boiler uses flammable gas, high voltage electricity, moving parts, and very hot water under high pressure. Assure that all gas and electric power supplies are off and that water temperature is cool before attempting any disassembly or service. Do not rely solely on temperature/pressure gauge to make this determination.

Instructions apply to the following conversion kit:

Conversion Kit	Description
111745-01	LP Electrode, 2,001-10,100', 150-200 MBH

Included with this conversion kit:

- Ignitor/flame sensor
- Ignitor/flame sensor gasket
- Spare screws for ignitor/flame sensor (M4 x 8 mm, socket, T20 torx)
- Instructions

Recommended tools:

- T20 Torx wrench

Before installing conversion kit, perform the following steps:

1. Follow procedure "To Turn off Gas to Appliance" posted on inside of front door.
2. Verify electric power is off.
3. Verify gas shutoff valve at boiler is closed.
4. Disconnect ignitor/flame sensor and ground wires at burner door.
5. Remove existing ignitor/flame sensor.
6. Replace with supplied ignitor/flame sensor and new gasket. Screw torque: 22 in. lbs. (2.5 N-m).

WARNING

Asphyxiation Hazard. This conversion kit is used only on 150, 180, and 200 LP gas installations above 2,000 ft. (610 m). Use for other installations is prohibited. Failure to comply can cause severe personal injury, death, or substantial property damage.

(see next page)

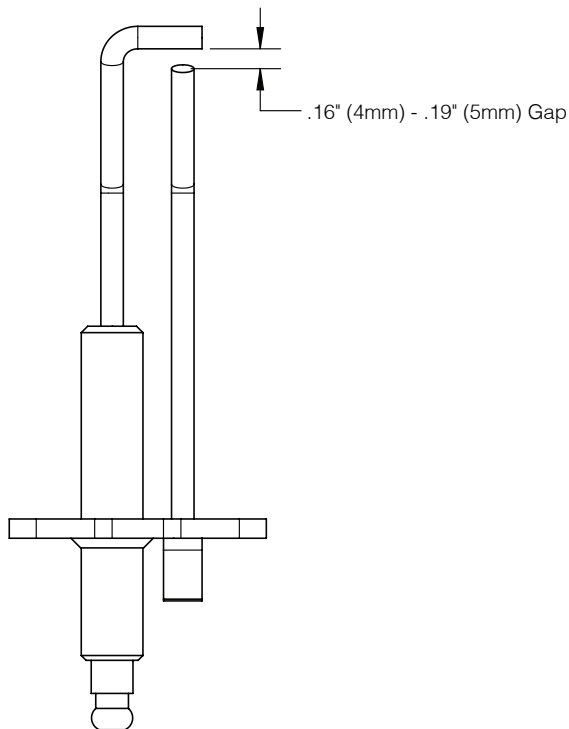


Figure 1: Ignitor/Flame Sensor Spark Gap

⚠ WARNING

Fire Hazard. Explosion Hazard.

Ensure Ignitor/flame sensor gasket is installed and secured.

7. Reconnect ignitor/flame sensor and ground wires.
8. Convert boiler for use with LP gas and to correct altitude by changing gas valve fuel switch and control parameters following *Installation, Operation and Service Instructions* provided with boiler.
9. Place boiler in operation following "Operating Instructions" posted on inside of front door.
10. Perform (5) manual calibrations to synchronize new components to control system.
 - a. Remove any call for heat.
 - b. Press and hold the "menu" for 3 seconds.
 - c. Press "↑" or "↓" buttons until *PR5* is visible and press "enter".
 - d. Press "enter" while *PR1* is visible.
 - e. Press "+" or "-" buttons until "85" is reached and press "enter". Press and hold for 5 seconds to adjust by increments of 10.
 - f. Press "menu" button until *PR5* is visible.
 - g. Press "↑" or "↓" buttons until *R* is visible and press "enter".

- h. Press "↑" or "↓" buttons until *ROB* is visible and press "enter".
- i. Press "+" or "-" buttons to change "OFF" to "On" and press "enter".
- j. Give boiler call for heat.
- k. After boiler status returns to "B" remove call for heat, set *ROB* to On and repeat for a total of 5 times. See Figures 2 and 3.

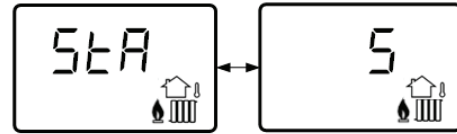


Figure 2: Status Screen during Calibration

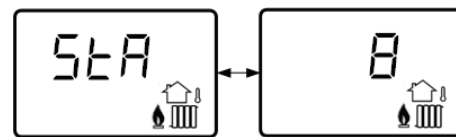


Figure 3: Status Screen after successful Calibration

11. Perform combustion test.

⚠ WARNING

Asphyxiation Hazard.

Use a combustion analyzer to verify proper operation by checking carbon monoxide (CO) levels. Failure to use a combustion analyzer could cause operation of boiler with elevated CO levels resulting in severe personal injury, death or substantial property damage.

- a. Boiler is equipped with a screw cap in vent adapter. Be sure to replace this cap when combustion testing is complete.
 - b. Measure carbon monoxide (CO) level after 5 minutes of operation above 50% firing rate. This can be done by providing DHW demand. Ensure door is sealed before taking combustion readings.
 - c. CO should not exceed 300 ppm air free. (In event of high CO, see Troubleshooting section of manual).
12. Perform (3) light offs to verify smooth ignition and operation.