

INSTALLATION INSTRUCTIONS



Guardian Flame Sensor Kit

View these instructions online at www.lbwhite.com

Kit Contents:

DESCRIPTION	QTY.
Flame Sensor	1
Heat Shrink Tube	1
1/4" Male Quick Connect Terminal (AW060/AW100)	1
Mounting Hardware	1
Installation Instructions	1

Tools required:

- 5/16 nut driver or standard screwdriver
- Wire cutting/stripper/crimping tool
- Heat gun, small hand-held torch, or butane lighter

Qualifications for installation of the kit:

- You must be able to read and understand these instructions.
- You must be properly trained and have sufficient experience to install the kits.
- You must be able to test the heater for proper operation and place the heater in a continuing safe and normal operating condition.

Discussion:

- Use this kit to maintain corrosion resistance of the electrical connection when replacing the flame sensor.
- Depending on the service kit, not all the parts may be use.

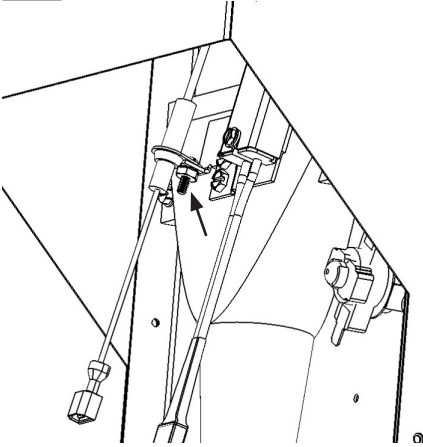
Initial Preparation:

- Disconnect the heater from its electrical supply.
- Close all fuel supply valves to the heater.
- Open the heater's access door at the gas inlet end of the heater.

A. Installation:

- Using the screwdriver or nut driver, remove the flame sensor from the igniter bracket. See Fig. 1. Guardian 100 shown.

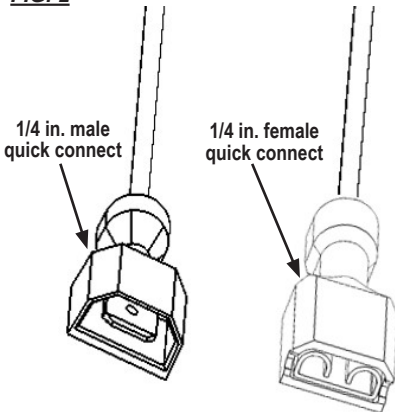
FIG. 1



- For Guardian 60/100:
 - Compare the 2 flame sensor end terminals. See Fig. 2.
 - a. If the replacement flame sensor end terminal is of the same terminal, skip to step 6.
 - b. If the replacement flame sensor end terminal is of a different terminal, proceed to step 4.

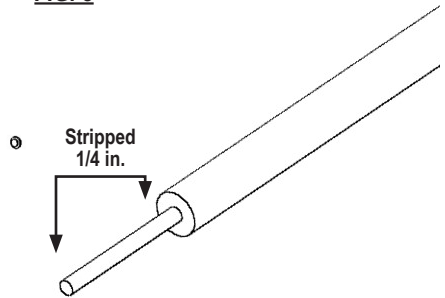
- For Guardian 250, skip to step 6.

FIG. 2



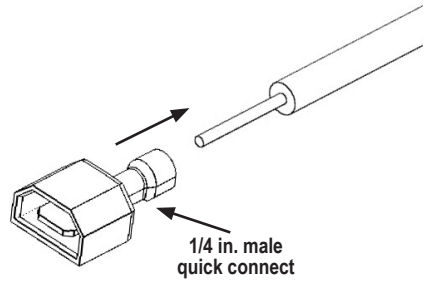
- Cut the end terminal and strip back 1/4 in. of the insulation of the flame sensor wire. See Fig. 3.

FIG. 3



- Crimp the 1/4 in. male QC terminal provided with the kit to the flame sensor wire. Tug the wire to ensure the wire is securely crimped. See Fig. 4.

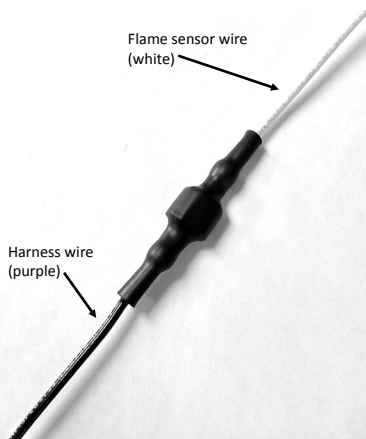
FIG. 4



- Securely mount the replacement sensor to its bracket, using the provided kit's hardware.

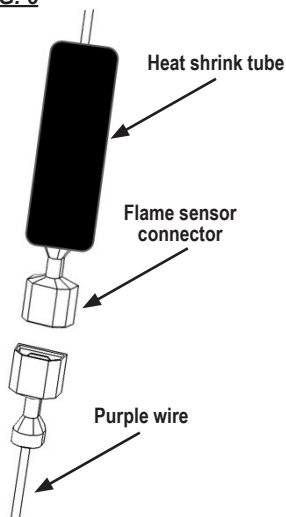
7. Slide the heat shrink tube provided with kit onto flame sensor wire. See Fig. 5.

FIG. 5



8. Connect the flame sensor wire to the purple harness wire.
9. Slide the heat shrink tube over the connection point and apply heat to the heat shrink tube. See Fig. 6. Move the heat along the length of the tube to ensure the shrink material isn't charred by the heat, and is completely formed around the connection.

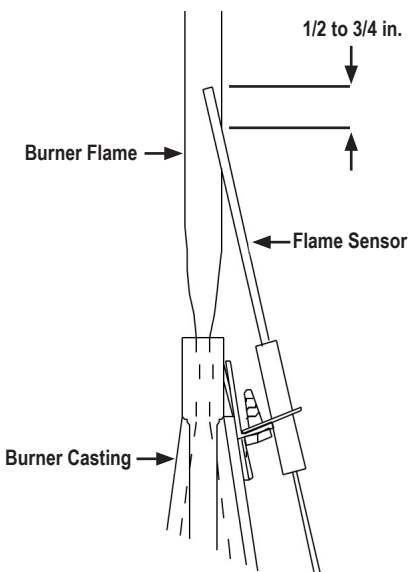
FIG. 6



B. Completion

1. Secure any excess of wire using the purse lock clip.
2. Close and latch the access door.
3. Reconnect the heater to its electrical supply.
4. Open all fuel supply valves to the heater inlet.
5. Start the heater so main burner ignites
 - Check for proper operation.
 - Ensure the flame sensor tip is a minimum $\frac{1}{2}$ inch in the flame when the burner ignites, and does not touch any metal structure in the heater. See Fig. 7.

FIG. 7



6. Keep these instructions for future use.

Service

Contact your local L.B. White dealer for replacement parts and service. You may also call the L.B. White Co., Inc. at 1-800-345-7200, for assistance, or email us at customerservice@lbwhite.com.

Be sure that you have your heater model number and configuration number when calling.



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411 Mason Street, Onalaska, WI 54650

800-345-7200 • 608-783-5691

608-783-6115 (fax)

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