LJ Igniter Retrofit Kit

MARNING-FOR YOUR SAFETY: This product must be installed and serviced by a professional service technician, qualified in pool/spa heater installation and maintenance. Improper installation and/or operation could create carbon monoxide gas in flue gases which could cause serious injury, property damage, or death. Improper installation and/or operation will void the warranty.

These instructions are to be used with the following Jandy Replacement Kit: R0449800 -- LJ Igniter Retrofit Kit

WARNING

If the information in these instructions is not followed exactly, a fire or explosion may result causing property damage, personal injury or death.

This document gives instructions for installing the LJ Igniter Retrofit Kit on all Lite2 model LJ pool/spa heaters. The instructions must be followed exactly. Read through the instructions completely before starting the procedure.

In earlier models of the Lite2 LJ heater, the flame sensor was installed in the igniter box along side of the igniter. Newer models of the Lite2 LJ heater have the flame sensor mounted to the first burner on the right side of the burner tray. Since this kit is designed to eliminate the igniter box, if the flame sensor is located in the igniter box, the new flame sensor replacement kit (R0334300) must be ordered and installed along with this kit. Instructions for the installation of the flame sensor are included with that kit.

Before starting the procedure, use the parts list at the back of these instructions to identify the parts that are in your kit. If any parts are missing from the kit, please call your local Jandy distributor for assistance. For technical assistance, please contact our Technical Service Department at (707) 776-8200 extension 260.

Removing the Burner Tray

A CAUTION

Burners have sharp edges. Wear heavy leather gloves to protect hands while handling burners. Failure to wear gloves can cause serious injury to hands.



WARNING: SHOCK HAZARD

Disconnect power to the heater before starting the following procedure

- Disconnect the heater from the supply voltage by turning off the breaker that controls the heater.
- 2. Turn off the main gas supply to the heater at the meter or the manual gas cock outside the heater.
- 3. Remove the front panel (door) of the heater and the cover of the power connection box.
- Turn off the heater gas valve following the applicable shutdown instructions in the lighting and shutdown instructions found on the inside of the heater door.
- 5. Remove the burner tray from the heater as follows: See Figure 1.
 - a. Disconnect the service union from the gas line, and unscrew the gas supply line from the gas valve.
 - b. Label and disconnect all wiring from the gas

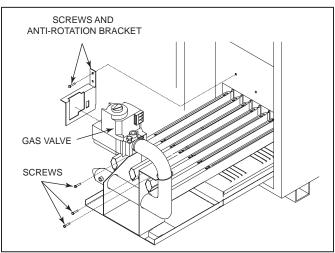


Figure 1. Removal of the Burner Tray

- If the heater has an existing flame rod on the burner tray, disconnect it from the power circuit board.
- d. Remove the three screws holding the burner tray to the inner panel.
- e. Remove the two screws holding the antirotation bracket on the left side of the gas valve and remove the anti-rotation bracket.
- 6. Pull the burner tray straight out from the combustion chamber. Be careful not to disturb the refractory blanket while removing the burner tray.

2. Removing the Old Igniter Box Assembly

- 1. Disconnect the igniter wires from the fuse wire harnesses. If the flame rod is mounted in the igniter box alongside of the igniter, disconnect the flame sensor from the power circuit board.
- 2. Remove the two screws holding the igniter box to the inner panel.
- 3. Remove the igniter box assembly.

3. Installing the Igniter Box Cover Bracket

- 1. Rotate the igniter box cover counter-clockwise 90° and slide the insulation portion of the bracket between the inner panel and the combustion chamber panel. See Figure 2.
- 2. Rotate the cover bracket 90° clockwise.

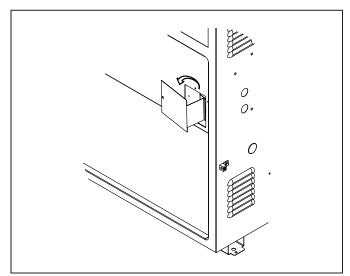


Figure 2. Installation of the Igniter Box Cover Bracket

- 3. Ensure that the flange on the cover bracket catches the bottom lip of the combustion chamber panel opening. See Figure 3.
- 4. Using the screw provided in the kit, secure the igniter box cover bracket to the inner panel.

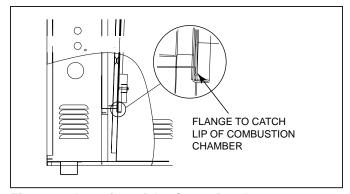


Figure 3. Location of the Cover Bracket

4. Installing the New Igniter Assembly

NOTE For protection during shipping, the igniter is packaged separately. We suggest installing the burner in the burner tray assembly (while it is removed from the heater) before installing the igniter. The igniter element is very fragile. Rough handling or dropping of the igniter may break the element.

- 1. Remove the last burner on the far left side of the burner tray.
- 2. Install the new burner/igniter bracket assembly into the burner tray in the last burner location.
- 3. Install the new igniter in the igniter bracket on the burner and secure it using the screw provided in the kit. See Figure 4.

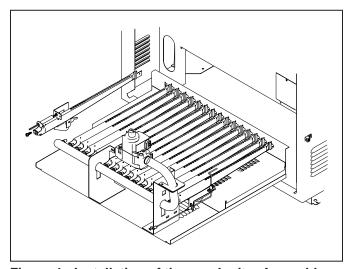


Figure 4. Installation of the new Igniter Assembly



Replacing the Burner Tray 5.

- 1. Remove any debris that may have accumulated in the bottom of the combustion chamber.
- 2. Carefully insert the burner tray into the combustion chamber. Do not disturb the combustion chamber insulation, or the igniter.
- Mount the manifold bracket to the inner panel using two screws.
- 4. Re-install the anti-rotation bracket and the third screw holding the manifold bracket.
- 5. Re-connect the gas valve wiring.
- 6. Connect the flame sensor to the power circuit board.
- 7. Connect the new igniter to the fuse wire harnesses.
- 8. Connect the main gas supply line to the gas valve. Turn on the gas supply at the meter or the manual gas cock.
- Check for gas leaks using a mild soap solution at all gas connections that were disturbed during the installation.
- **NOTE** Be sure to rinse the soap from the connections with clean water. Some soaps contain chemicals that can cause corrosion of metal pipes.
- 10. Replace the cover of the power connection box.

A CAUTION

National codes require that the high voltage wires and the low voltage wires exit the connection box through different outlets. Be sure that low voltage wires (24V) exit the connection box through the hole on the upper left side of the cover. The high voltage wires (115V for the igniter) must exit through the hole on the lower left side of the cover.

- 11. Restore the electrical supply to the heater.
- 12. Turn on the heater gas valve and light the heater following the lighting and shutdown instructions found on the inside of the heater door.
- 13. Replace the door of the heater.

Retrofit Kit Parts List 6.

Parts List

| Item | Description | Qty |
|------|------------------------------------|-----|
| 1 | Burner / Igniter Bracket Assembly | 1 |
| 2 | Hot Surface Ignitor | 1 |
| 3 | Igniter Box Cover Bracket Assembly | 1 |
| 4 | Screw, #6-20 (Igniter) | 1 |
| 5 | Screw, #10-16 (Igniter Box Cover) | 1 |
| 6 | Wire Labels | 5 |



NOTES



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