

TECHNICAL DATA SHEET FIREBOX REPLACEMENT FOR DOUBLE BURNER STERLINGS Model 8501 Electronic & Millivolt Kit #5500-2404N

TOOLS REQUIRED:

Phillips Screwdriver 1/2" Wrench 9/16" Wrench Gas Sniffer (Leak Testing) Manometer (Pressure Testing) Hammer or Mallet WD 40 or Other Penetrating Oil

WARNING!

This conversion kit must be installed by a qualified gas service agency in accordance with the manufacturer's instructions and all applicable codes and requirements of the authority having jurisdiction. If the information in these instructions is not followed exactly, a fire, explosion, or production of carbon monoxide may result causing property damage, personal injury, or loss of life. The qualified service agency performing this work assumes responsibility for the proper conversion of this appliance with this kit.

<u>CAUTION:</u> The gas supply must be shut off prior to making this conversion. If the stove is equipped with the optional blower, the electricity must also be disconnected.

PROCEDURE:

- 1. Lift off the top 3 stones from the top of the stove. Bend the tabs on the radiation (heat) shield suspended from the top and let it drop onto the top of the firebox.
- 2. Remove the right side stones by first removing the hanging the side radiation shield. Locate the retention clips on each of the side stones. Place a hammer handle or similar block of wood on the edge of a stone clip and tap it down with a hammer or mallet until it falls off. Repeat on each stone. The stones can be taken out between the corner posts.
- 3. Using a Phillips screwdriver, remove the screw that holds the front door closed. Lift the front door straight up and off the frame (save the hinge pins and any shim washers for reassembly). Remove the four Phillips screws that retain the front door frame and remove the frame. Looking through the top of the stove, locate and remove the 2 bolts that hold the front grill in place. Remove the front grill. Carefully remove the logs, save for reuse.
- 4. Remove the front stones. Remove the log rack (andiron), save for reuse.
- 5. Pull the heat exchanger out of the back of the firebox, use care as the heat exchanger will be reused.



- 6. Using a 1/2" wrench, disconnect the main gas line from the tee on the right side of the firebox. Remove the tee but save it for the reassembly.
- 7. Remove the burner tubes by removing the 3/8" nuts on the left end of each tube (pre-treat these nuts with WD 40 or other penetrating oil). Make a note of which burner goes into the front and rear (shutter adjustment will be different on the natural gas models).
- 8. Locate the 2 hex head bolts in the bottom of the firebox. Remove them with a 1/2" wrench. Lift the firebox up and angle it so you can take it through the front of the stove. The firebox can be discarded.

NOTE: Before installing the new firebox, screw the blocking plate to the outside of the firebox. Locate the 4 holes on the right side of the replacement firebox. Block the bottom holes and use the top holes for the gas line on electronic ignition models. Block the top holes and use the bottom holes for the millivolt units.

- 9. Position the new firebox into the stove. Turn the 2 hex head bolts loosely through the firebox into the bottom casting. Place the rear heat exchanger onto the new firebox so that the bottom of the heat exchanger fits inside the lip of the bottom casting and into the flanges on the back of the firebox. Gently tap it with a rubber mallet to insert it into the firebox.
- 10. Lay the top heat shield onto the top of the firebox. Make sure the side radiation shields are placed in beside the firebox (all three of these shields will be installed later).
- 11. Place the front stones into the stove. Reinstall the front door frame and front grill.
- 12. Position the gas line with tee (previously removed) into the new firebox. Tighten the main burner line into the gas valve. .
- 13. Now pull the firebox as far forward as it will come and tighten the hex head bolts.
- 14. Place the burner tubes back into the original position in the firebox and secure them by returning and tightening the retaining nuts. Set the log rack (andiron) into position in the firebox. Place the logs back into the firebox (refer to the owner's manual for proper positioning if necessary).
- 15. Place the front door back onto the stove. Close the door and retain it by tightening the black oxide Phillips screw.
- 16. Install the side stones: install the bottom stone first, by holding it in position and then installing one of the stone clips behind it. Place the stone clip on the threaded rods on an angle with the dimples against the inside if the stone. Tap it down to a straight horizontal position by reaching in through the side with a block of wood and tapping it down into position with a hammer. Place the upper stone on top on the bottom stone and reach in through the top to install the stone clip.



17. Rehang the side radiation shields. Bend the clips on the top shield and reattach it so that it is once again suspended from the top casting. Place the top 3 stones back onto the top casting.

BEFORE THE STOVE IS USED:

- 1. Connect the gas supply and turn it on. Check the manifold pressure using a manometer. Refer to the Owner's Manual for instruction.
- 2. Leak test before and after lighting the stove.
- 3. The input rate of the heater can be verified by checking the manifold pressure. If the manifold pressure is correct, then the input rate is also correct. Refer to the Owner's Manual for:
 - a. Details on adjustment for proper pilot and main burner flame appearance.
 - b. Instructions for checking out the normal operating sequence of the ignition system.
 - d. Location on the valve to check manifold pressure.