

# **Technical Data Sheet**

# Converting The Sterling 8501 Electronic Ignition Gas Stove From Liquid Propane (LP) to Natural Gas (NG)

Assembly 95-56904

**Date:** 5/26/2004 Page: 1 of 3

## Kit Number 95-56904:

2 - #44 Burner Orifice Hoods
1- NG Pilot Hood (#26-N)
1- NG Conversion Kit (Cap Screw, Adjustment Screw, and Spring)
1- NG Sticker (White)

### **Tools Required:**

Philips and Slotted Screwdrivers
Penetrating Oil
1/2" Wrench
11/32" Wrench
3/16" Allen Wrench
Slotted Screwdriver (long, slender) -orStandard Apex w/ 1/4" wrench
Manometer
Leak Testing Equipment

<u>WARNING:</u> SERVICING OF GAS CONTROLS, APPLIANCES, AND SYSTEMS MUST BE PERFORMED BR QUALIFIED SERVICE PERSONNEL ONLY.

**BEFORE YOU BEGIN:** Turn off the gas and electricity to the appliance.

### **PROCEDURE:**

- 1. Using a phillips screwdriver, open the front door. Before removing the logs, make a mental note of their position. Carefully remove the logs.
- 2. Apply penetrating oil (WD 40) to the 3/8" nuts on the left-hand end of the burner tubes. Remove these nuts with an 11/32" wrench. Lift this end of the burner tube up and slide them out of the stove.
- 2. Using a 1/2" wrench disconnect the pilot supply tube at the pilot assembly, remove the LP orifice and replace it with the NG pilot orifice supplied in this kit. Reconnect the pilot

- line and tighten with the 1/2" wrench.
- 3. Remove the two main burner orifices with a 1/2" wrench and replace them with the #44 orifices supplied in this kit. Tighten them with the 1/2" wrench.
- 4. Before replacing the burner tubes, reduce the shutter opening on the front tube from 1/4" to 1/16". To do this, loosen the set screw with a slotted screwdriver, adjust the shutter, and then tighten the set screw. The rear burner should remain at the 1/4" setting. Replace the burner tubes and secure them with the 3/8" nuts previously removed.
- 5. See the illustration for converting the valve. Remove the slotted cap screw (A), adjusting screw (B), and LP spring (C) from the gas control valve. Access these parts in one of the following ways:
  - 5.0.1 Use a long, slender slotted screwdriver through the access hole in the firebox directly above the valve.

-or-

- 5.0.2 Reach above the valve through the valve access door using a common apex and 1/4" wrench.
- 6. Install the new NG spring and adjusting screw. **Important:** Do not stretch or alter spring.
- 7. Remove pressure cap (D) and attach manometer to this outlet.
- 8. Turn on the gas and electricity. Raise the level of the thermostat to call for heat.
- 9. With the burner on, adjust the screw (B) until the pressure setting is at 3.5 w. c. This is the maximum pressure setting. If flames appear high, reduce the pressure until flame appearance is normal (see manual). Turn the gas control on the valve to the Aoff@ position.
- 10. Turn off the gas and electrical supply to the appliance.
- 11. Remove the Manometer and reinstall the fitting (D). Securely install the new slotted cap screw.
- 12. Turn on the gas and electricity to the appliance. Raise the thermostat to call for heat. Turn the control valve to the Aon@ position.
- 13. With the burners operating, immediately check all fitting for leaks. If any leaks are detected, shut off the unit and tighten the loose fittings. Once the unit has passed the

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leak test proceed to the next step.

- 14. Attach the white NG sticker on the inside of the valve door to indicate that the unit has been converted to Natural Gas.
- 15. Replace the logs in the firebox. Refer to the owner=s manual for proper location if necessary. Close the front door and secure with the screw.
- 16. Turn the unit on and observe the flame pattern. Note: It will take approximately ten minutes for the flame to stabilize. The flame should have yellow tipping and rise above the logs, but not touch the top of the firebox. Long orange flames are not desirable as they will create carbon soot and possibly carbon monoxide. Flame height and appearance can be controlled by the shutter adjustment. Opening the shutter will create a smaller, bluer flame.