

LP/NATURAL GAS SAFETY PILOT KIT MODEL: CVS-303

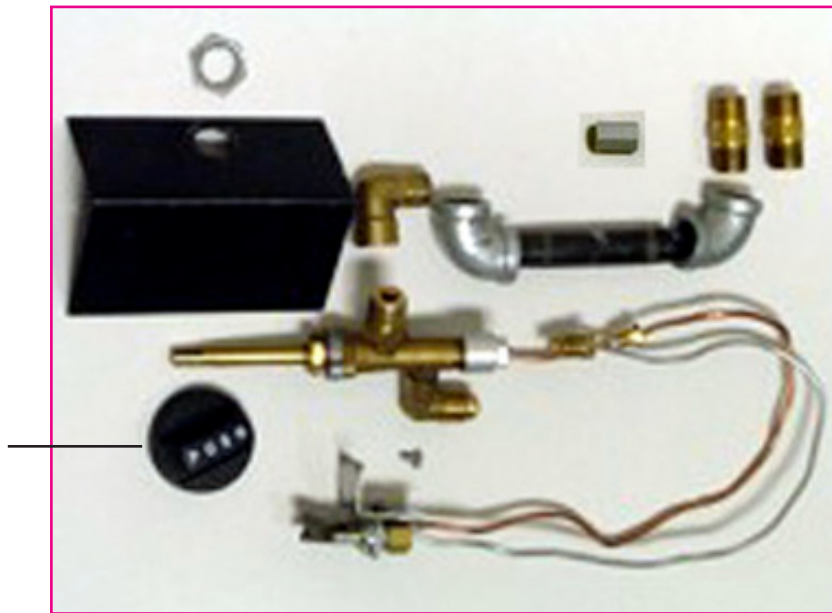
Supplemental Installation Instructions for use on Emberglow Natural Gas Vented Log Sets FOR INFRARED BURNER SYSTEMS ONLY

NOTE: This kit is for Natural Gas and L.P. Gas applications. For L.P. or Propane Gas installation see separate instructions packaged with necessary hardware. (Do not use the Natural Gas orifice supplied with this kit on L.P. or Propane Gas Installations as improper combustion will occur.

IMPORTANT

Read and follow all instructions carefully as these supplemental Pilot Assembly instructions are to be used in conjunction with the General Installation Instructions supplied with all Emberglow Natural Gas log sets.

PARTS LIST & ILLUSTRATION



Part No.	Description	Part No.	Description	Part No.	Description
1	Control Knob	12	Pilot Orifice - Natural Gas	20a	3/8" Natural Gas Orifice - 18" Small Center Hole
3	Gas Control Valve	14	Pilot Supply Line Nut		
5	Thermocouple Lead	15	Heat Shield	20b	3/8" Natural Gas Orifice - 24" & 30" Large Center Hole
6	Pilot Gas Supply Line	16	Lock Nut		
7	Pilot Burner	17	90 Degree Street Elbow		
8	Pilot Bracket	18	3" Pipe Nipple	21	3/8 Flare to 3/8 NPT
9	Sheet Metal Screw (1)	19	3/8" Female Elbow (2)		

National Code requirements mandate the use of a Pilot Safety Valve on all L.P. or Propane gas applications. These regulations must be followed on all installations of this type.

SINGLE, DUAL & TOPSIDE SYSTEMS

(For Infrared Systems See Page 3)



BEFORE proceeding with these instructions verify the type of log set you have. Is it a **DUAL BURNER Set** (Models MO18NG, MO24NG, SH18NG, SH24NG, CSO30NG) **OR** an **INFRARED Set** (Models GO18TIR or GO24TIR)?

1. If a **DUAL BURNER Set** proceed with the instructions beginning *below through page 3*.
2. If an **INFRARED Set** proceed with instructions starting on *page 4 continuing through page 5*.

INSTALLATION OF NATURAL GAS PILOT VALVE

This Safety Pilot Kit contains a Control Valve certified by C.S.A., which provides a safe and convenient way to ignite your energy efficient gas log set.

Note: Use pipe compound on all male threads to seal joints.

- A. This Safety Pilot Kit contains a Natural Gas Orifice and L.P. Gas hardware. Instructions are packaged separately in this kit.
- B. Attach the 3/8" Natural Gas Orifice (Part #20a or #20b) through the Burner Pan to the Burner Bar using the 3/8" Locknut supplied only with Dual and Topside Burner log sets. When installing a single burner log set, a 3/8" locknut is not used. Be sure the small drill hole on the 3/8" Natural Gas Orifice is facing the gas control valve and the large hole is facing the burner pan. (See Figure 1 & 2)
- C. Connect a 3/8" female elbow (Part #19) to the Natural Gas Orifice. (See Figure 3)
- D. Connect the 3" Pipe Nipple (Part #18) to elbow. (See Figure 4)
- E. Connect the second 3/8" female elbow (Part # 19) to the 3" Pipe Nipple. (See Figure 5)

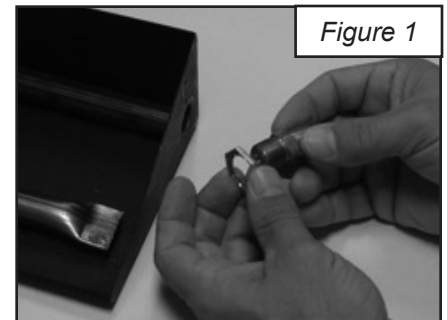


Figure 1

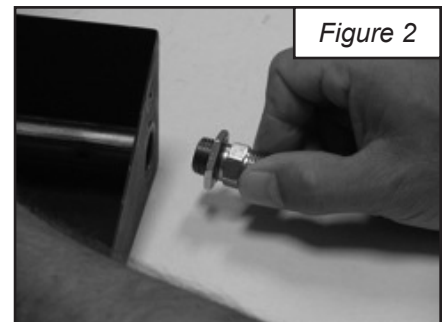


Figure 2

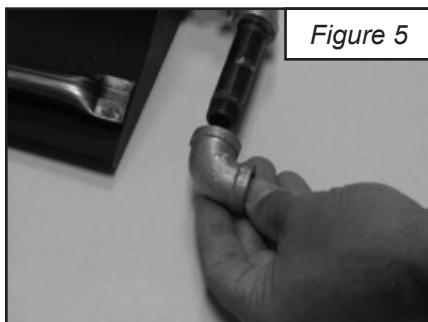


Figure 5

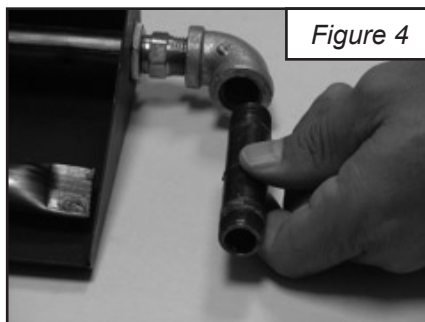


Figure 4

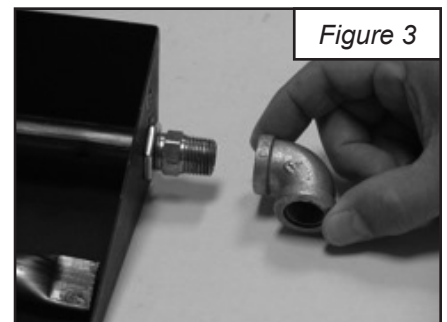


Figure 3

INSTALLATION OF NATURAL GAS PILOT VALVE (cont.)

- F. Connect the 90 degree street elbow (Part #17) to the 3/8" female elbow. (See Figure 6)
- G. Slide the hole in the heat shield (Part #15) over the 3/8" NPT threads on the Gas Control Valve (Part # 3). (See Figure 7)
- H. Then secure the heat shield in place with the lock nut (Part # 16). (See Figure 8)
- I. Attach the control valve & heat shield assembly to the 90 degree street Elbow. (See Figures 9 & 10)
- J. Attach the pilot bracket (Part # 8) to the burner pan using the sheet metal screw (Part # 9). (See Figure 11)

NOTE: The Pilot Bracket utilizes four mounting holes for adjustment of the Pilot Burner Assembly should your installation require repositioning. Repositioning of the Pilot Burner Assembly may be necessary if the log set is experiencing intermittent shutdown. Shutdown is caused by overheating of the Pilot Burner Assembly by the main burner flame. If shut down is occurring, move the Pilot Burner Assembly over to the next mounting hole so that only the tips of the Pilot Burner Assembly are hanging over the Burner Pan.

- K. Carefully bend the Thermocouple lead (Part #5) and attach to the back of the control valve. (See Figure 12)

NOTE: When screwing into the Control Valve, hand tighten both the Pilot Gas supply line and Thermocouple Lead, then tighten 1/8 turn with a wrench. **DO NOT OVER TIGHTEN** as this will cause the Pilot to not function properly.

- L. Attach pilot gas supply line (Part # 6) to the bottom of the gas control valve. Care should be taken not to kink the tubing which would restrict gas flow to the Pilot Burner. (See Figure 13)

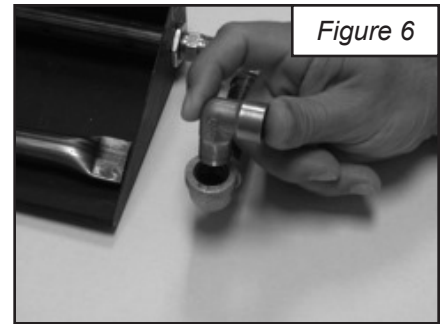


Figure 6

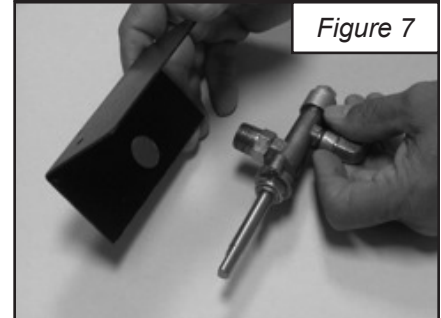


Figure 7

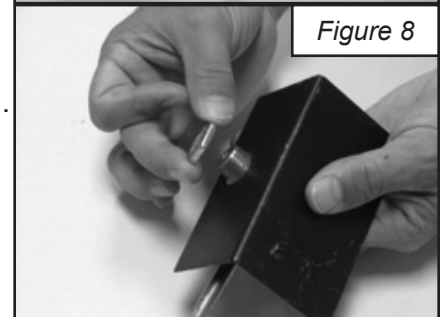


Figure 8

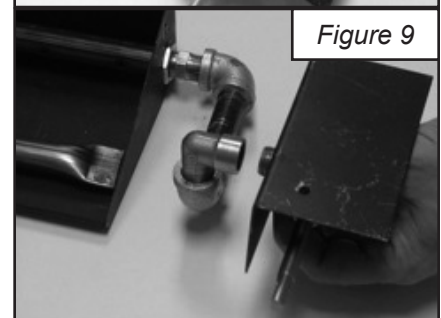


Figure 9

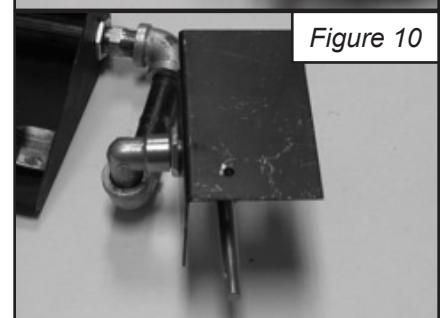


Figure 10

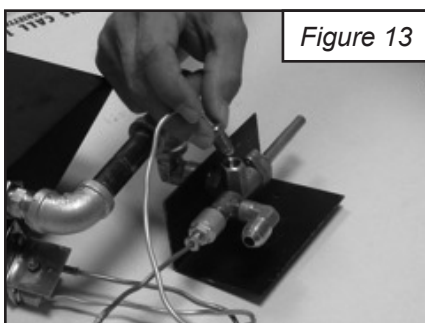


Figure 13

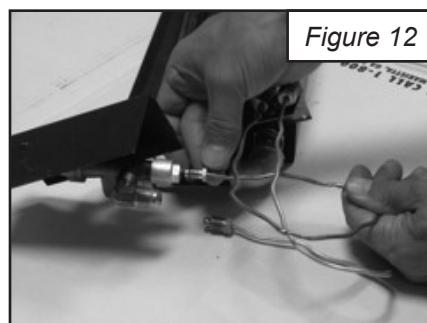


Figure 12

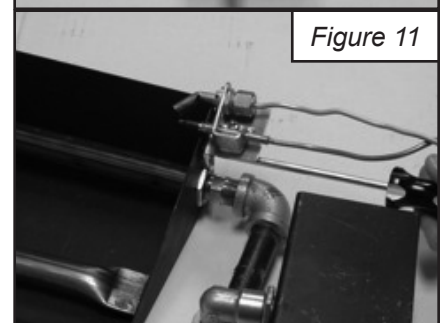
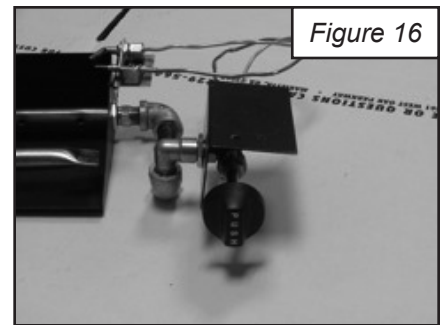
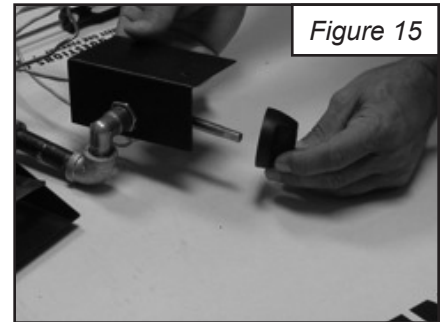
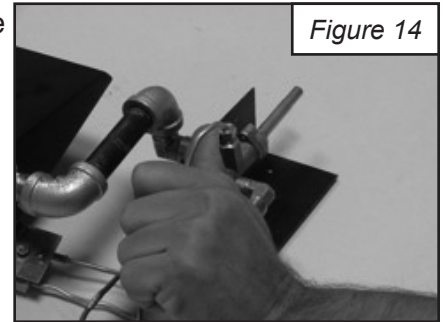


Figure 11

INSTALLATION OF NATURAL GAS PILOT VALVE (cont.)

- M. Carefully bend the supply line in a smooth 90 degree angle to prevent the line from being kinked. (See Figure 14)
- N. Connect control knob (Part # 1) to gas control valve stem. (See Figures 15 & 16)
- O. Place the assembled Burner Pan with the Gas Control Valve in the center of the fireplace.
- P. Connect the 1/2" gas supply line from the fireplace to the 3/8" Straight Flared fitting (Part # 4) with the 3/8" Flared Tubing supplied with the gas log set. Refer to the General Installation Instructions section titled "Connecting Gas Supply to Burner Pan" for full instructions.
- Q. Test connections for leaks with soapy water. Retighten if necessary, and retest the connections to determine if any other leaks are present.
- R. Refer to the General Installation Instructions for Granule, Ember, Grate and Log placement.



INSTALLATION FOR INFRARED BURNER SYSTEMS

Valve Body Assembly

1. Slide the hole in the heat shield over the 3/8" NPT threads on the Gas Control valve (Part # 3). (See Figure 17)
2. Then secure the heat shield in place with the lock nut (Part # 16). (See Figure 18)
- 3.. Attach the 3/8" Flare to 3/8" NPT Connector (Part # 21) to the Gas Control Valve. (See Figure 19)

NOTE: This connector fitting has two (2) different thread patterns and will only install one way.

4. Attach the other end of the connector to the inlet fitting on the infrared burner system. (See Figure 20)
5. Attach the pilot bracket (Part # 8) to the burner pan using the sheet metal screw (Part # 9). (See Figure 21)

NOTE: The Pilot Bracket utilizes four mounting holes for adjustment of the Pilot Burner Assembly should your installation require repositioning. Repositioning of the Pilot Burner Assembly may be necessary if the log set is experiencing intermittent shutdown. Shutdown is caused by overheating of the Pilot Burner Assembly by the main burner flame. If shut down is occurring, move the Pilot Burner Assembly over to the next mounting hole so that only the tips of the Pilot Burner Assembly are hanging over the Burner Pan.

6. Carefully bend the Thermocouple lead (Part #5) and attach to the back of the control valve. (See Figure 22)

NOTE: When screwing into the Control Valve, hand tighten both the Pilot Gas supply line and Thermocouple Lead, then tighten 1/8 turn with a wrench. DO NOT OVER TIGHTEN as this will cause the Pilot to not function properly.

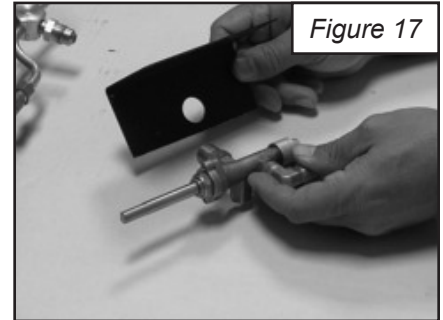


Figure 17

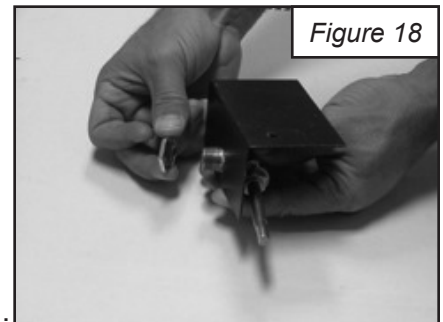


Figure 18

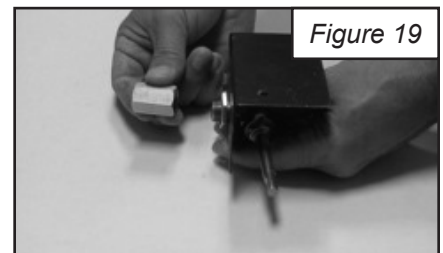


Figure 19

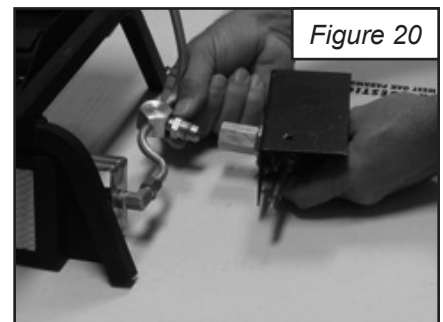


Figure 20

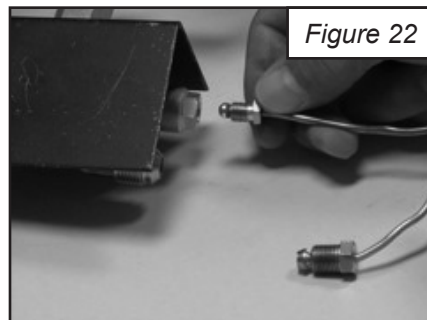


Figure 22

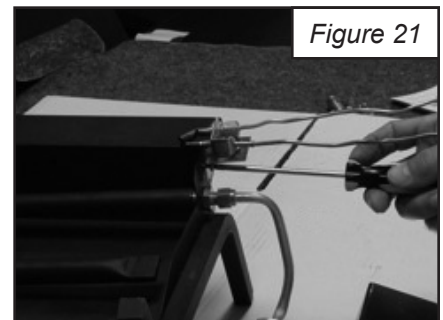


Figure 21

Valve Body Assembly (cont.)

7. Attach pilot gas supply line (Part # 6) to the bottom of the gas control valve. Care should be taken not to kink the tubing which would restrict gas flow to the Pilot Burner. (See Figure 23)
8. Carefully bend the supply line in a smooth 90 degree angle to prevent the line from being kinked. (See Figure 24)
9. Connect control knob (Part # 1) to gas control valve stem. (See Figures 25 & 26)

NOTE: Tighten all fittings securely with a wrench.

10. Place the assembled burner pan with gas control valve in the center of the fireplace.
11. Connect the 1/2" gas supply line from the fireplace to the 3/8" straight flared fitting (Part # 4) with the 3/8" flared tubing supplied with gas log set. Refer to General Installation Instructions section titled, "Connecting Gas Supply to Burner Pan" for full instructions.
12. Test connections for leaks with soapy water, re-tighten if necessary and re-test to determine if any leaks are present.
13. Refer to General Installation Instructions for Granule, Ember, Grate and Log Placement.

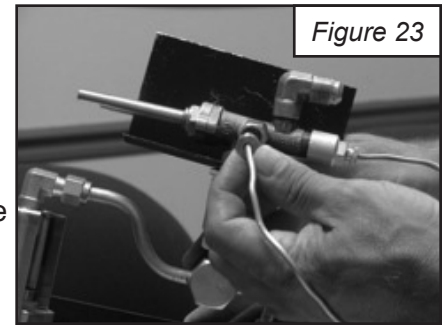


Figure 23

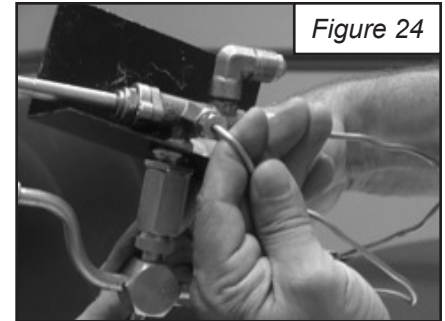


Figure 24

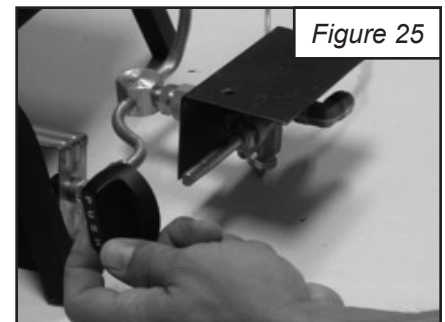


Figure 25

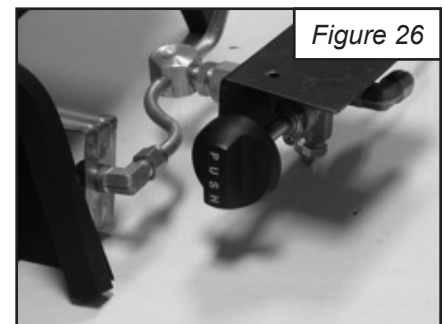


Figure 26

LIGHTING YOUR GAS LOGS WITH THE SAFETY PILOT KIT

1. Light Pilot

Turn Control Knob to **Pilot** Position (Figure 17), push knob fully in and hold a long lighted match at the Pilot Burner Assembly. After lighting the Pilot, hold the Control Knob in the ignition position for approximately 45 seconds. This is an adequate time for the Thermocouple to reach an operational temperature in order to keep the Pilot lit once the Control Knob is released. If the Pilot does not remain lit, turn the Control Knob to the Off position, **wait 5 minutes**, then repeat the process as outlined above.

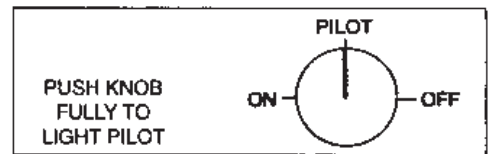


Figure 27-Rotate control valve to Pilot Position

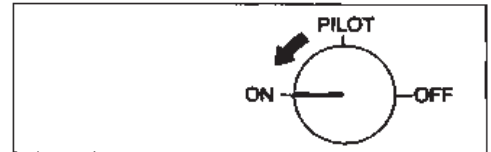


Figure 28-Rotate control valve to "ON" Position to ignite burner

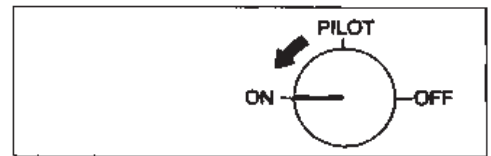


Figure 29-Rotate control valve to Off Position for both Pilot and Burner shutdown

NOTE: If the Pilot continues to go out, check to be sure the Pilot Thermocouple lead (Part #5) has not been overtightened to the Gas Control Valve.

2. Burner Ignition

To light the Burner, turn the Control Knob counter clockwise from the Pilot Position to the On Position (Figure 18). In this position, both the Pilot Burner and Main Pan Burner will be lit.

3. Burner Shutdown

To turn off the Burner Pan, move the Control Knob clockwise back to the Pilot Position. This will extinguish the Main Burner Pan, but will keep the Pilot Burner lit for instantaneous ignition of the Main Burner Pan the next time you wish to use your gas log set.

4. Total Burner Shutdown

To turn off the gas supply to the Main Burner Pan and the Pilot Burner, move the Control Knob clockwise from the Pilot Position to the "OFF" Position (Figure 19).

NOTE: The Control Knob will need to be depressed slightly in order to move it from the Pilot Position to the "OFF" Position.

TROUBLESHOOTING

PROBLEM	CAUSE	CORRECTIVE ACTION
1. Pilot noise	Excess pressure	<ul style="list-style-type: none"> • Check line pressure and adjust to 7 inch water column.
2. Pilot will not light	Inadequate gas flow	<ul style="list-style-type: none"> • Check all valves • Clear obstructions • Check for line kinks
	Thermocouple too tight	<ul style="list-style-type: none"> • Loosen Thermocouple slightly
3. Pilot & Burner go out after burning for several minutes (up to one hour)	Overheating of Thermocouple	<ul style="list-style-type: none"> • Check to see that Main Burner Flames are not hitting the Thermocouple (move Pilot Assembly so only the tips of the Thermocouple and pilot are hanging over the burner pan). • Reposition logs, if that is the cause, move Main Burner flames away from the Thermocouple. • If you have glass doors, open them fully when operating your gas logs.

LIMITED WARRANTY

Limited Warranty shall apply to the original purchaser at the original installation point only.

Pilot, valves and thermocouples are guaranteed for a period of one (1) year under the original manufacturers warranty.

General Warranty: This warranty does not apply in the case of improper installation, neglect, accident, misuse or as a result of modifications of the original product.

All costs for removal and re-installation are the expressed responsibility of the purchaser.

For repair, replacement, or service to defective part(s) please contact our Customer Service Hotline, number below. Thereafter with valid warranty registration and proof of purchase, call the Customer Service Hotline for authorization to ship defective part prepaid and insured in original carton to Sure Heat Manufacturing, 1861 West Oak Parkway, Marietta, GA 30062. Goods returned improperly packaged are the sole responsibility of purchaser.

It is agreed that any repair or replacement is the exclusive remedy from Sure Heat Manufacturing. In no case shall Sure Heat be liable for any consequential damage or breach of this or any other warranty expressed or implied whatsoever. This limitation as to consequential damages shall not apply in states where prohibited.

Purchased From: _____ Date: _____

Size: 18" 24" 30"

Model:

Name: _____ Phone: (____) _____

Address: _____

City: _____ State: _____ Zip: _____

Please photocopy and return registration along with proof of purchase
within 14 days of purchase to
Sure Heat, 1861 West Oak Parkway, Marietta, GA 30062

**If you have other questions, please contact the
Customer Service Hotline — (800) 229-5647**