

NATURAL GAS SAFETY PILOT KIT

MODEL: CVS-303

Supplemental Installation Instructions for use on Emberglow Natural Gas Vented Log Sets

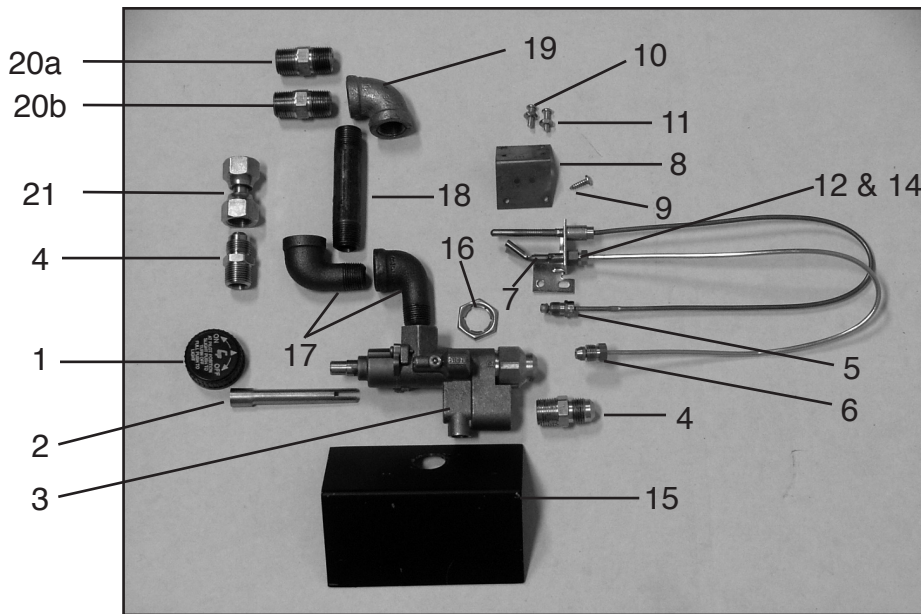
NOTE: This kit is for Natural Gas and L.P. Gas applications. For L.P. or Propane Gas installation see separate instructions packaged with necessary hardware. (Do not use the Natural Gas orifice supplied with this kit on L.P. or Propane Gas Installations as improper combustion will occur.)

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

NOTE: Be sure to turn Pilot adjust screw counter-clockwise (⤵) two (2) turns to get gas flow to the pilot.



Part No.	Description	Part No.	Description	Part No.	Description
1	Control Knob	9	Sheet Metal Screw (1)	18	3" Pipe Nipple
2	Extension Handle	10	Bolt (2)	19	3/8" Female Elbow
3	Gas Control Valve	11	Nut (2)	20a	3/8" Natural Gas Orifice - 18" Small Center Hole
4	3/8" Straight Flare Fitting (2)	12	Pilot Orifice - Natural Gas	20b	3/8" Natural Gas Orifice - 24" & 30" Large Center Hole
5	Thermocouple Lead	14	Pilot Supply Line Nut*	21	3/8" Flare & Swivel Connector
6	Pilot Gas Supply Line	15	Heat Shield		
7	Pilot Burner	16	Lock Nut		
8	Pilot Bracket	17	90 Degree Street Elbow (2)		

*Packaged separately in LP Conversion bag

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 Pilot Bracket (Part #8) to the Burner Pan using one sheet metal screw (Part #9). Install sheet metal screw into top left hole of the bracket (*See Figure 1*)
- C. Attach the 3/8" straight Flared Fitting (Part #4) to the Gas Control Valve using pipe compound. (*See Figure 2*)
- D. Attach Pilot Gas Supply Line (Part #6) and the Thermocouple Lead (Part #5) to the Gas Control Valve. Attach valve extension rod (Part #2) to knob and control valve. (*See Figure 2*)

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.

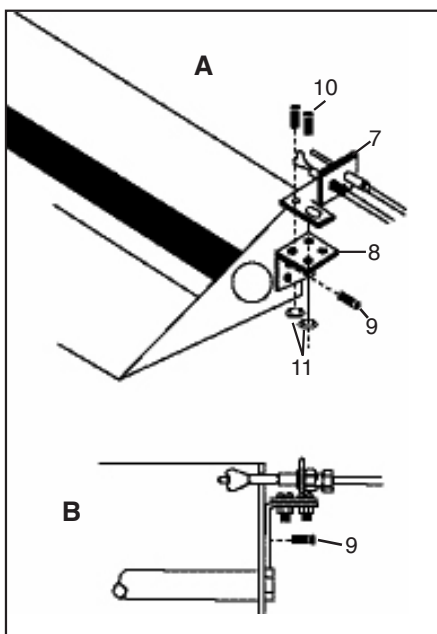


Figure 1
(A&B) Pilot Burner Assembly

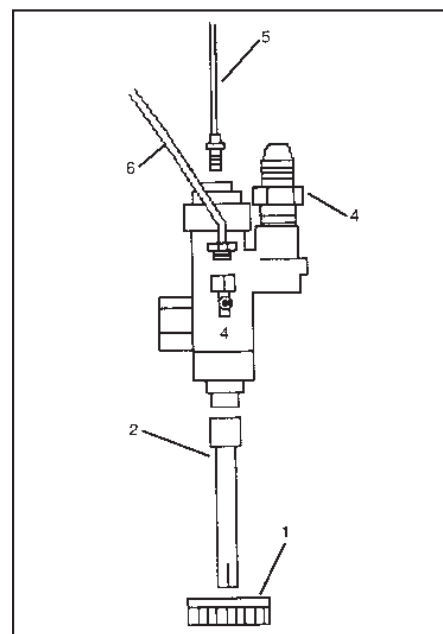


Figure 2

SINGLE, DUAL & TOPSIDE SYSTEMS (cont.)

INSTALLATION OF NATURAL GAS PILOT VALVE (cont.)

- E. Connect the two 3/8" Street Elbows (Part #17) and screw the 3/8" Locknut (Part #16) down on the male threads of the elbow. Place the hole of the Heat Shield (Part #15) over the elbow and slide it down against the locknut. Apply pipe compound to the male threads of the elbow and attach it to the control valve.

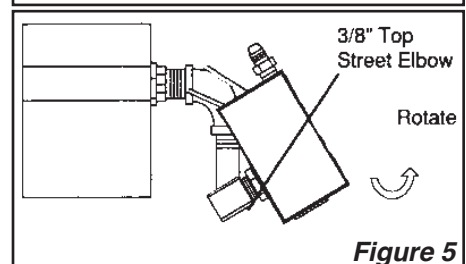
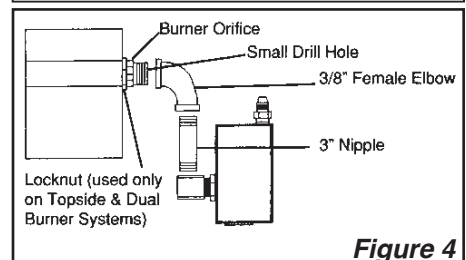
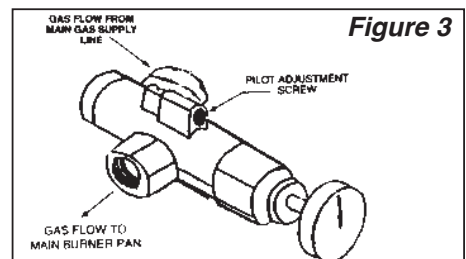
(See Figure 3)

IMPORTANT: Be sure to turn the pilot adjust screw with a screwdriver two full turns in a counter-clockwise (↺) direction to enable pilot operation. (See Figure 3)

- F. 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 4)
- G. Using pipe compound, connect the 3" Nipple to the Street Elbow attached to the valve assembly and to the 3/8" Female Elbow. Connect the 3/8" Female elbow, which is now connected to the entire valve assembly, to the Burner Orifice using pipe compound. (See Figure 4)
- H. The valve assembly can be rotated to better conceal the controls. Simply rotate the entire valve assembly by turning the top 3/8" Street Elbow with a wrench. (See Figure 5)
- I. Attach Pilot Burner Assembly (Part #7) to the Pilot Bracket (Part #8) using the two bolts (Part #10) and two nuts (Part #11). See Figure 1A on the previous page. Carefully bend the Pilot tubing (Part #6) when attaching the Pilot Burner Assembly to the Burner Pan. Care should be taken not to kink the tubing which would restrict gas flow to the Pilot Burner.

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. Only one Mounting Screw (Part #10) will be used in this application.

- J. Place the assembled Burner Pan with the Gas Control Valve in the center of the fireplace.
- K. 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.
- L. Test connections for leaks with soapy water. Retighten if necessary, and retest the connections to determine if any other leaks are present.
- M. Refer the General Installation Instructions for Granule, Ember, Grate and Log placement.



INSTALLATION FOR INFRARED BURNER SYSTEMS

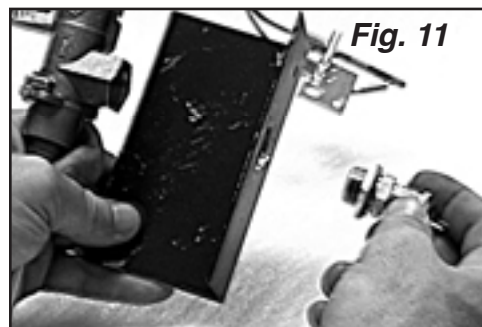
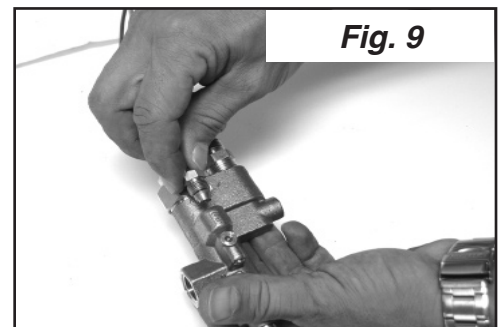
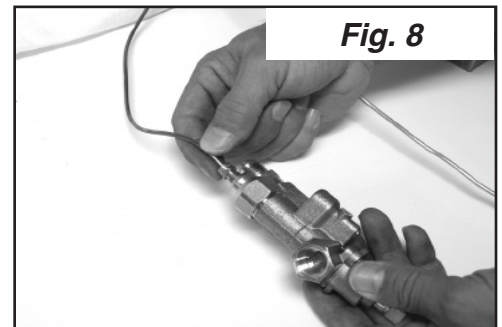
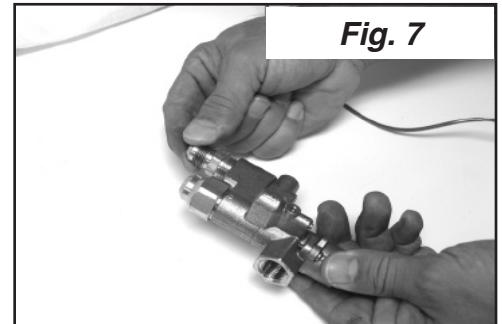
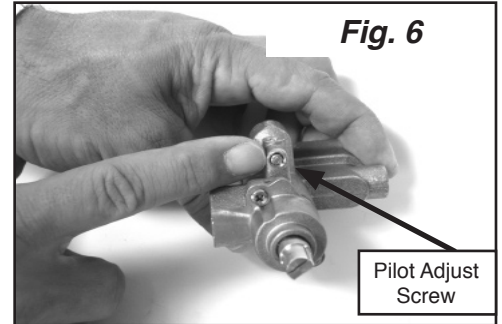
Valve Body Assembly

IMPORTANT: Be sure to turn the pilot adjust screw with a screwdriver (2) full turns in a counter-clockwise (⤵) direction to enable pilot operation. (See Fig. 6)

1. Attach the 3/8" Straight Flared Fitting into the back of the control valve. (See Fig. 7)
2. Attach the thermocouple lead and the pilot gas supply line to the control valve. (See Fig. 8-9)

NOTE: When attaching the thermocouple lead and gas supply line, hand tighten and then **tighten 1/8 turn** with a wrench. **DO NOT OVER TIGHTEN** as the pilot will not function properly.

3. Attach lock nut to 3/8" straight flare fitting. (See Fig. 10)
4. Slide the 3/8" straight flare fitting with lock nut through the heat shield. Then attach the fitting to the valve inlet. Tighten securely with a wrench. (See Fig. 11)



INSTALLATION FOR INFRARED BURNER SYSTEMS

Valve Body Assembly (cont.)

5. Attach the pilot bracket to the burner pan using the one (1) sheet metal screw. (See Fig. 12)
6. Attach the pilot burner to the pilot bracket using the two (2) bolts & nuts supplied. (See Fig. 13-14)

NOTE: Care should be taken not to kink the tubing which would restrict gas flow to the pilot burner.

7. Attach 3/8" swivel to the Main Burner Assembly. (See Fig. 15)
8. Attach Pilot Burner Assembly to the other end of the 3/8" Swivel. (See Fig. 16)

NOTE: Tighten all fittings securely with a wrench.

9. Attach the pilot extension rod to the valve stem, then attach the control knob to the extension rod. (See Fig. 17 - 18)
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 the 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.

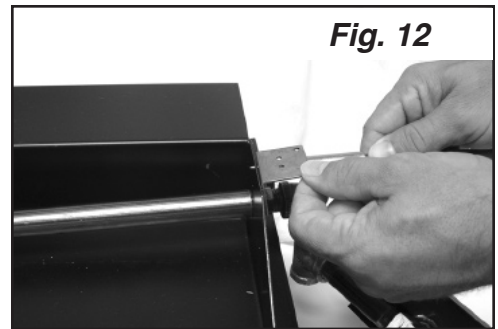


Fig. 12

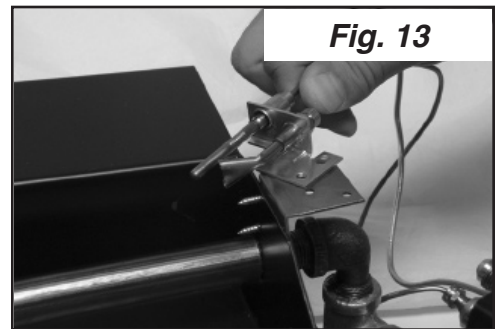


Fig. 13

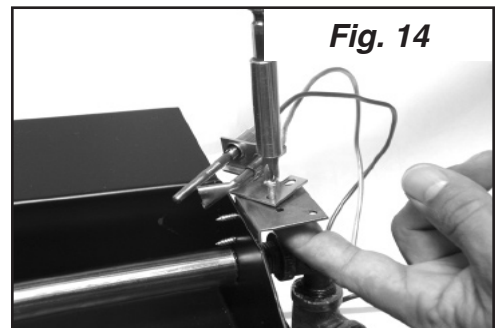


Fig. 14

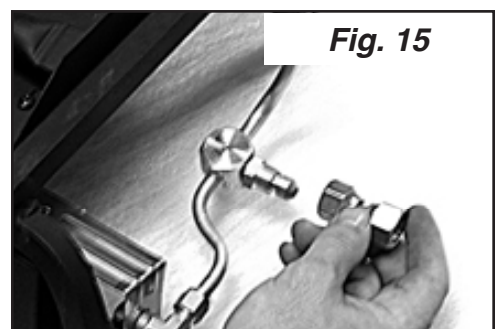


Fig. 15

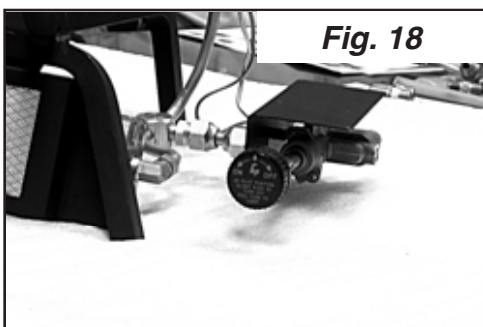


Fig. 18

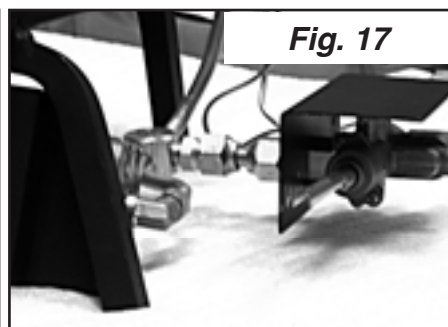


Fig. 17

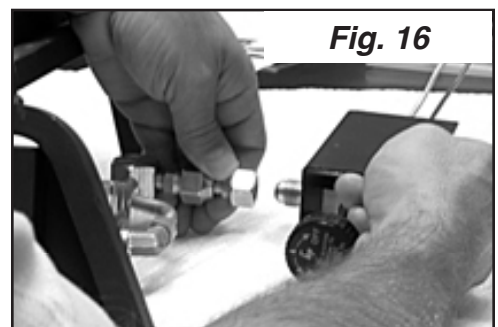


Fig. 16

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.

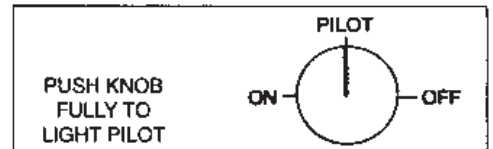


Figure 17-Rotate control valve to Pilot Position

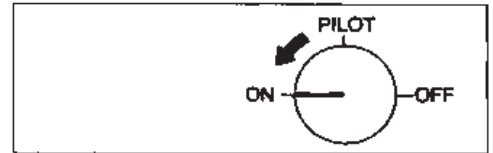


Figure 18-Rotate control valve to On Position to ignite burner

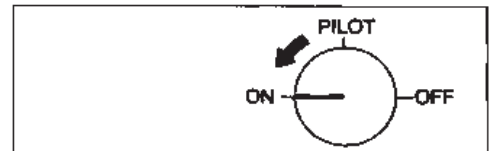


Figure 19-Rotate control valve to Off Position for both Pilot and Burner shutdown

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).

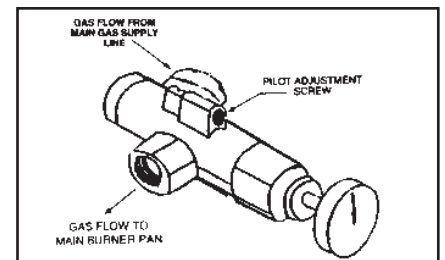


Figure 20-Pilot Flame Adjustment

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

5. Pilot Flame Adjustment

The Pilot Thermocouple should be engulfed by the Pilot Flame by approximately 1/2". Should the Pilot Flame become unable to heat the Thermocouple properly, you will need to adjust the Pilot. Adjust the height of the Pilot Burner flame by rotating the Pilot Adjustment Screw to the desired 1/2" flame height (Figure 20).

NOTE: Be sure to turn Pilot Adjust Screw counter-clockwise (↺) two turns to get gas to flow to the Pilot. (See Figure 20). 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.• Adjust pilot flame.
2. Pilot will not light	Inadequate gas flow Thermocouple too tight	<ul style="list-style-type: none">• Check all valves• Clear obstructions• Check for line kinks • 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**