

NATURAL GAS SAFETY PILOT KIT

Model: CVS-301

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

Including: Single, Dual and Topside Burner Systems

NOTE: This kit is for **Natural Gas applications only**. For L.P. or Propane Gas installations you must use a L.P. Conversion Kit (Model LP101) which contains a special L/P air shutter orifice fitting. **(Do not use the Natural Gas orifice supplied with this kit on L.P. or Propane Gas installations as improper combustion will occur.)**

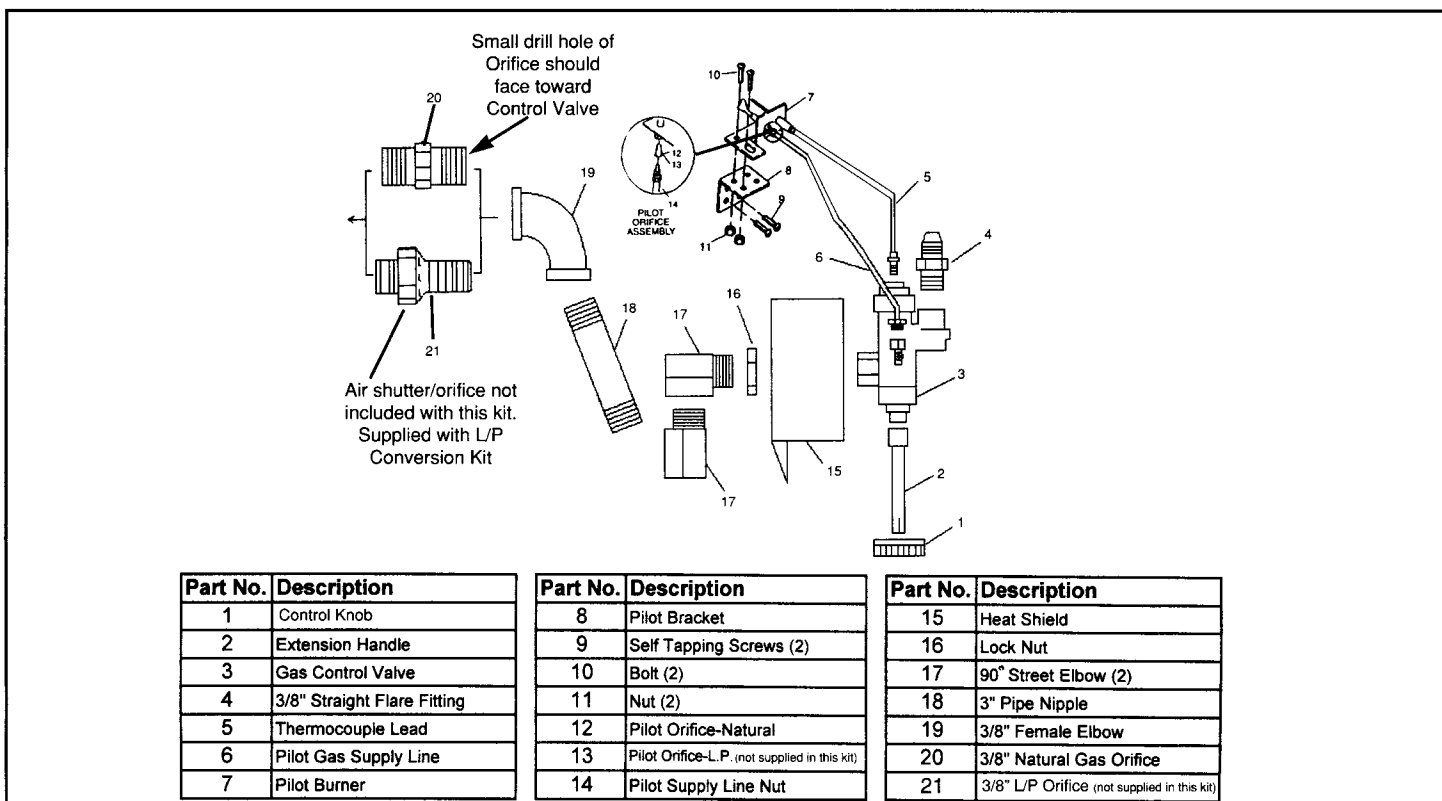
IMPORTANT

Please 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

Figure 1

NOTE: Be sure to turn Pilot adjust screw counter clockwise (↺) two turns to get gas flow to the Pilot. (See Figure



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.

INSTALLATION OF NATURAL GAS PILOT VALVE

This Safety Pilot Kit contains a Control Valve certified by A.G.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 will not operate on L.P. Gas properly. You must use the L.P. conversion kit (Model LP101) for this type of installation which includes Part #21, 3/8" L/P Air Shutter Orifice.
- B. Attach Pilot Bracket (Part #8) to the Burner Pan using the two sheet metal screws (Part #9). (See Figure 2B.)
- C. Attach the 3/8" straight Flared Fitting (Part #4) to the Gas Control Valve using pipe dope. (See Figure 3)
- 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 3)

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 Pilot will not function properly.

- E. Connect the (2) 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 dope to the male threads of the elbow and attach it to the control valve. (See Figure 4)

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 Figure 4)

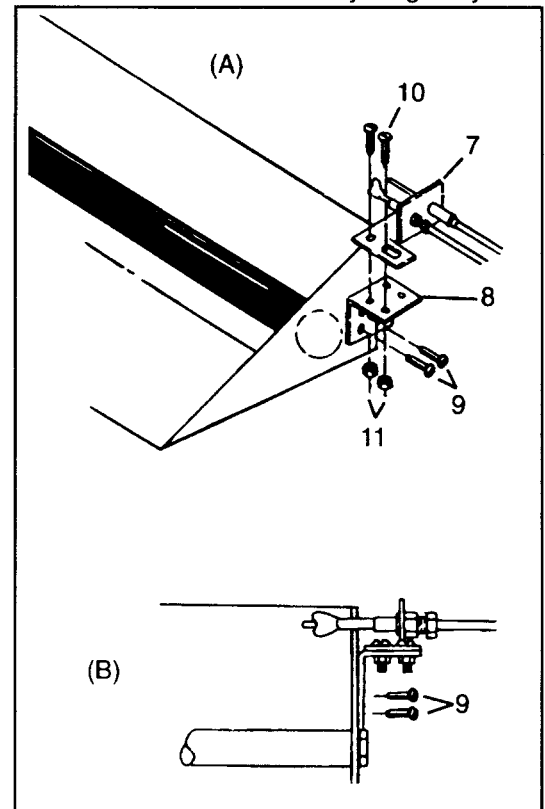


Figure 2 (A & B). Pilot Burner Assembly

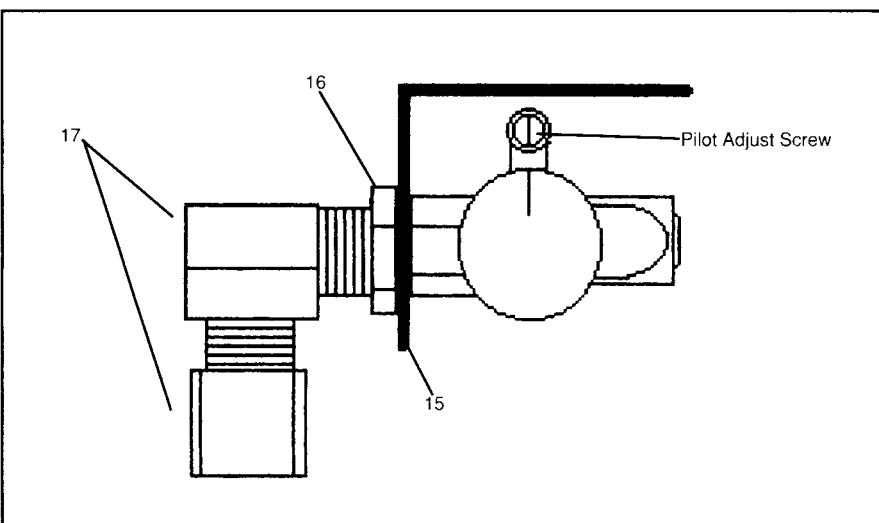


Figure 4

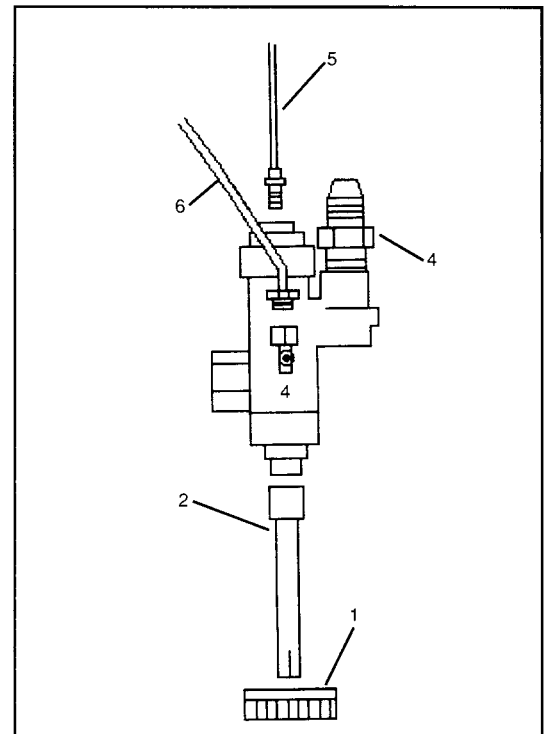
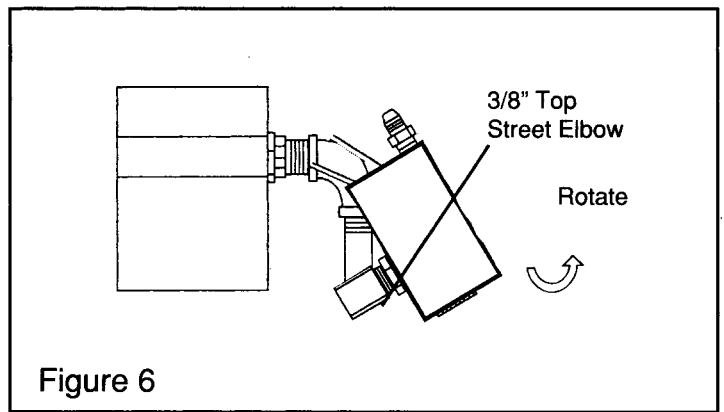
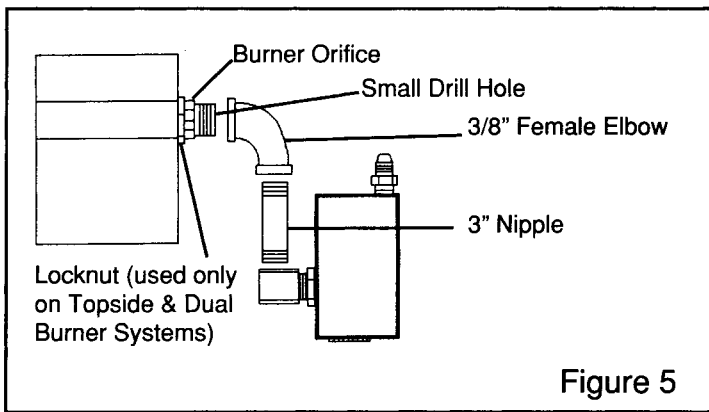


Figure 3

- F. Attach the 3/8" Natural Gas Orifice (Part #20) through the Burner pan to the Burner bar (using the 3/8" Locknut supplied only with Dual & 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 5)



- G. Using pipe dope connect the 3" Nipple to the Street Elbow attached to the valve assembly and to the 3/8" Female Elbow. Then connect the 3/8" Female Elbow, which is connected to the entire valve assembly, to the Burner Orifice using pipe dope. (See Figure 5)
- H. The valve assembly could 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 6)
- 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 2A on 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 shutdown is occurring move Pilot burner assembly over to the next mounting hole, so 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 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 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 to determine if any leaks are present.
- M. Refer to General Installation Instructions for Granule, Ember, Grate and Log placement.

LIGHTING YOUR GAS LOGS WITH THE SAFETY PILOT KIT

1. Light Pilot

Turn Control Knob to **Pilot** Position (Figure 7), 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 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.

NOTE: If the Pilot continues to go out, check to be sure that the Pilot Thermocouple lead (Part #5) has not been over tightened 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 8). 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 9).

NOTE: The Control Knob will need to be depressed slightly for movement from the Pilot Position to the Off Position.

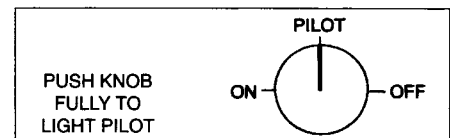


Figure 7. Rotate control valve to Pilot position.

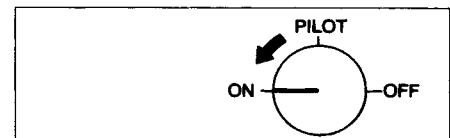


Figure 8. Rotate control valve to On position to ignite burner.

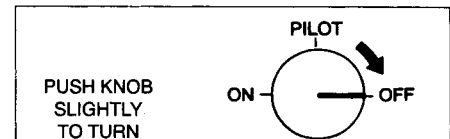


Figure 9. Rotate control valve to Off position for both Pilot and Burner shutdown.

5. Pilot Flame Adjustment

The Pilot Thermocouple should be engulfed by the Pilot Flame by approximately 1/2". Should Pilot Flame become inadequate to heat the Thermocouple properly, you will need to adjust the pilot flame. Adjust the height of the Pilot Burner Flame by rotating the Pilot adjustment Screw to the desired 1/2" flame height (Figure 10).

NOTE: Be sure to turn pilot adjust screw counter clockwise (↺) two turns to get gas flow to the Pilot (See Figure 10.)

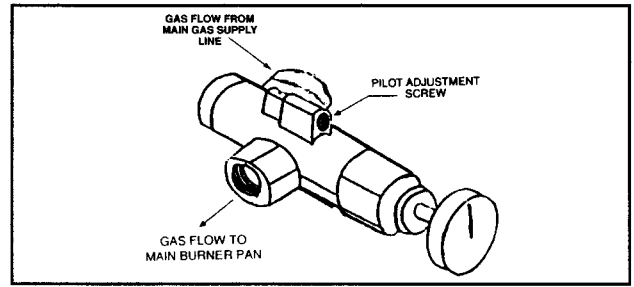


Figure 10. Pilot Flame Adjustment

TROUBLE SHOOTING

<u>Problem</u>	<u>Cause</u>	<u>Corrective Action</u>
1. Pilot noise	Excess pressure	Check line pressure and adjust to 7 inch water column Adjust pilot flame
2. Pilot will not light	Inadequate gas flow Thermocouple too tight	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	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, to move Main Burner flames away from the Thermocouple. If you have glass doors, open them fully when operating your gas logs.

IMPORTANT: Main Burner should ignite softly and evenly. See General Installation Instructions for placement of Granules, Embers and Logs as improper placement will affect ignition of the set.

CAUTION: Under no circumstances should any attempt be made to disassemble the Valve for repair or adjustments purposes as this will void the manufacturer's warranty and could create a potentially serious hazard.

ONE YEAR WARRANTY

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

Safety Pilot, valves and thermocouples are guaranteed for a period of one (1) year under the original manufacturer's 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 reinstallation are the expressed responsibility of the purchaser.

Repair, replacement, or service to defective part or parts to be secured at outlet of original purchase within first 30 days of purchase. Thereafter, with valid warranty registration and proof of purchase, ship defective part prepaid and insured in original carton to Sure Heat Manufacturing, 3130 Moon Station Road, Kennesaw, GA 30144. 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 for 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 to Sure Heat within 14 days of purchase.

If you have other questions, please contact Customer Service Hotline (770) 422-8008.