

# SURE HEAT MANUFACTURING

## Installation and Operating Instructions for NATURAL & L.P. GAS A.G.A. H-BURNER VENTED UNITS

**Model:**

**69/WO/CSO** (18/21,24,30)-NA  
**74/CO** (18/21,24,30)-NA  
**79/GB/CB** (18/21,24,30)-NA  
**84/CC/CH** (18/21,24,30)-NA  
**89/CL/CR** (18/21,24,30)-NA  
**99/GLO/CRO** (18/21,24,30)-NA

For use with Natural Gas Only

**Model:**

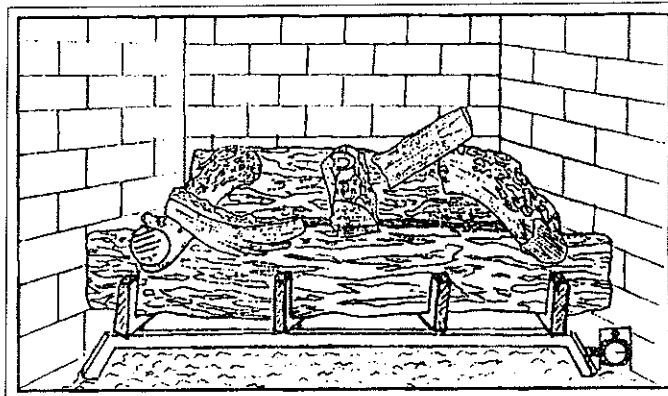
**69/WO/CSO** (18/21,24,30)-LP  
**74/CO** (18/21,24,30)-LP  
**79/GB/CB** (18/21,24,30)-LP  
**84/CC/CH** (18/21,24,30)-LP  
**89/CL/CR** (18/21,24,30)-LP  
**99/GLO/CRO** (18/21,24,30)-LP

For use with Propane Gas Only



### Sure Heat Manufacturing

3130 Moon Station Road  
Kennesaw, GA 30144  
Tel: (770) 422-8008  
Fax: (770) 424-3842



**WARNING:** It is very important to read the instructions in this manual before starting installation.

- Do not attempt to modify or alter the construction of the fireplace or its components. Any modification or alteration of construction may void the warranty of these units.

**WARNING:** Solid fuel shall not be burned in a fireplace where a decorative gas appliance is installed.

**WARNING:** Improper installation, adjustment, service or maintenance can cause injury or property damage. Refer to this manual. For assistance or additional information, consult a certified installer, service agency or the gas supplier.

### FOR YOUR SAFETY

- Do not store or use gasoline or other flammable vapors or liquids in the vicinity of this or any other appliance
- WHAT TO DO IF YOU SMELL GAS:
  - Do not try to light any appliance.
  - Do not touch any electrical switch.
  - Do not use any telephone in your building.
  - Immediately call your gas supplier from a neighbor's telephone.
  - Follow the gas suppliers instructions.
  - If you cannot reach your gas supplier, call the fire department.

- Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.
- Do not place clothing or other flammable material on or near the appliance.
- Children and adults should be alerted to the hazards of high surface temperature and should stay away to avoid burns or clothing ignition.
- Young children should be carefully supervised when they are in the same room with the appliance.
- Please retain this manual for future reference.

The installation must conform with local codes, or in the absence of local codes, with the National Fuel Gas Code ANSI Z223.1, latest edition.

This appliance must be installed only in a solid fuel fireplace with a working flue and constructed of noncombustible material.

Installation and repair should be done by a qualified service person.

The appliance should be inspected before use and at least annually by a qualified service person. More frequent cleaning may be necessary due to excessive dust or carpet lint. It is important that the circulating air passageways be kept clean.

Keep appliance clear and free from combustible materials, gasoline and other flammable vapors and liquids.

### IMPORTANT INFORMATION

Fireplace Sizing Guide:

| <u>Set Size</u> | <u>Opening Height</u> | <u>Front Width</u> | <u>Rear Width</u> | <u>Fireplace Depth</u> | <u>Chimney Opening</u> |
|-----------------|-----------------------|--------------------|-------------------|------------------------|------------------------|
| 18"/21"         | 16 1/2"               | 28"                | 21"               | 15"                    | 50 sq. in.             |
| 24"             | 18"                   | 32"                | 24"               | 15"                    | 50 sq. in.             |
| 30"             | 20"                   | 36"                | 28"               | 15"                    | 50 sq. in.             |

The minimum opening that must be provided by the fireplace chimney to vent the unit properly is shown above in the sizing chart.

It is necessary to provide adequate combustion and ventilation air. Air for combustion and ventilation must not be obstructed. Provide adequate clearance around air opening in the combustion chamber and adequate accessibility clearance for servicing and proper operation.

**NEVER obstruct the front opening of the fireplace.**

**WARNING:** Any safety guard removed for servicing an appliance must be replaced before operating the appliance

## INSTALLATION

### Unpacking

Unpack the appliance carefully and inspect for missing parts or damages that may have occurred during shipping. If any part of the appliance is missing or damaged, please notify Sure Heat Manufacturing at (770) 422-8008.

### Fireplace Preparation

The fireplace needs to be properly prepared before installing this fireplace unit.

1. Turn off gas supply to the fireplace.
2. Clean chimney and fireplace floor of any combustible material to limit the smell from the system.

### Gas Piping and Gas Pressure Requirements

#### PREPARATION

Check the type of gas that is supplied to your fireplace. Only install the unit that is equipped to operate on the gas that is supplied to your fireplace. All gas piping must be installed to comply with local and national fuel gas codes. Compounds used on threaded joints of gas piping must be resistant to the action of L.P. gas. Before installing the

unit, it is necessary to close the main gas valve at the gas meter or L.P. tank. Ensure that there is proper ventilation in the area in which the system is operating.

### **GAS PRESSURE INFORMATION**

The minimum inlet gas supply pressure is 5.5 inches water column for natural gas and 11.0 inches water column for propane. The maximum allowable inlet gas supply pressure is 10.5 inches water column for natural gas and 13.0 inches water column for propane. If this appliance is to be supplied with L.P. gas the tank or bottle supplying the gas must have a regulator that reduces gas pressure between 11 and 13 inches water column.

**WARNING:** This appliance must be isolate from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 PSIG.

The appliance and its individual shutoff valve must be disconnected from the gas supply piping system during pressure testing of that system at test pressures in excess of 1/2 PSIG.

### **BTU Information**

| <b><u>Set</u></b> | <b><u>Natural Gas</u></b> | <b><u>L.P. Gas</u></b> |
|-------------------|---------------------------|------------------------|
| 18"/21"           | 48,000                    | 48,000                 |
| 24"               | 70,000                    | 70,000                 |
| 30"               | 70,000                    | 70,000                 |

### **Installation to Existing Gas Line in Fireplace**

A manual on/off valve should be present within easy reach of the gas log set. If a manual valve is not present, one must be installed prior to the gas log installation.

### **Installation in a Masonry Fireplace**

A 1/2" gas supply line must be provided to the fireplace. Most installations require drilling and access hole through the masonry wall. The supply line should be secured and sealed by mortar within the access hole. The supply line should also have an on/off valve in the wall or inside the fireplace. (See Figure 10.)

### **Damper Clamp Installation**

This appliance is only to be installed and burned in a fully vented fireplace with a fully functional damper and chimney that is free of any obstructions. A damper clamp is provided to allow any pilot combustion products to vent. The unit must be operated with the damper in the fully opened position. (See Figure 11.)

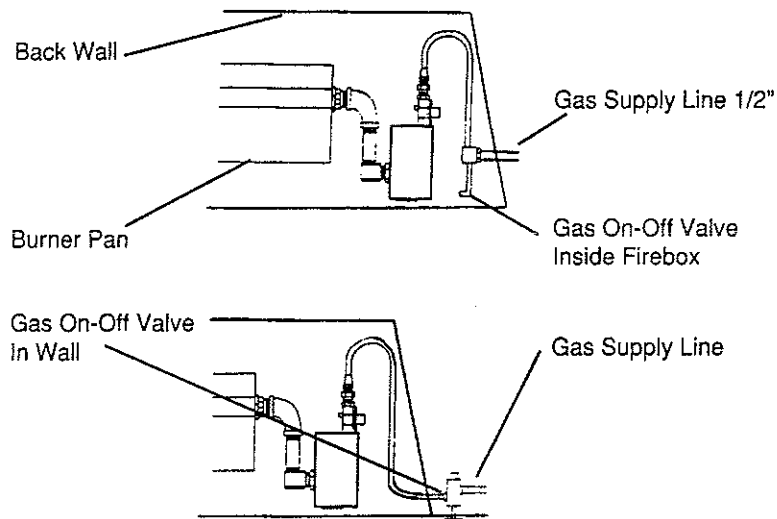


Figure 10: Gas line installation - Masonry fireplace.

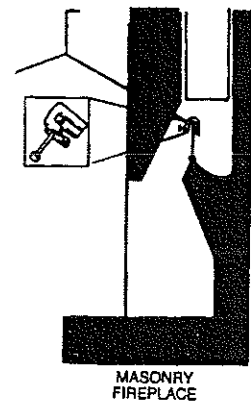


Figure 11: Damper stop clamp.

### Burner System Location

1. The Burner system should be located towards the back and centered in the combustion chamber of the vented fireplace. The burner system should be centered from left to right, with about an inch of space on either side.

### Connecting Gas Supply to Burner Pan

1. Place burner system in proper location.
2. Attach brass 3/8" to 1/2" gas inlet fitting to the 1/2" gas supply stub.
3. Carefully bend the flared tubing as needed to make the connection between the burner assembly and the gas inlet fitting. Next attach the flared tubing to the burner assembly first, then to the gas inlet fitting.

Avoid kinking the flared tubing while bending. If tubing must be cut, use a tube cutter. Flare the cut end of the tube with a flaring tube.

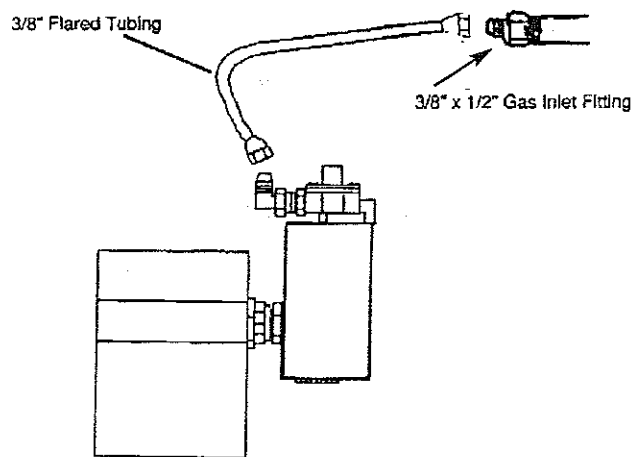


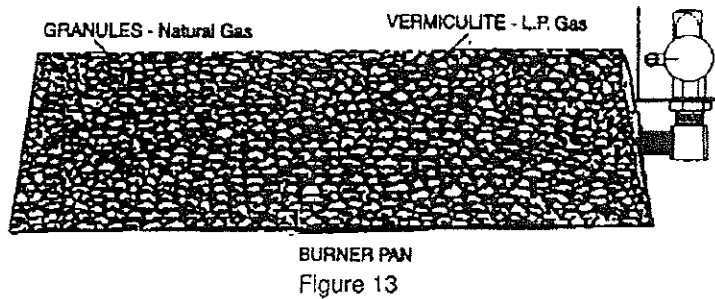
Figure 12

4. Be certain all connections are tight and use compound on all male threads to seal joints.

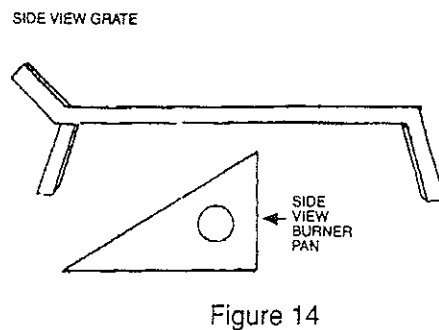
The pipe compound must be resistant to the action of L.P. gas. Test all connections with a soapy water solution with gas supply turned on. If bubbles appear on any connection, retighten and reset. Once it is determined there are no leaks whatsoever, turn off gas supply and move to next assembly step.

### Granule, Ember, and Log Grate Placement

- 1A. **Natural Gas Installation:** Spread granules or sand over each installed burner pan. Granules should be sloped to the same angle as the burner pan filling the entire pan (See Figure 13.)
- 1B. **L.P. Gas Installation:** Spread vermiculite (white) over each installed burner pan. Vermiculite should be sloped to the same angle as the burner pan filling the entire pan (See Figure 13.)



2. Spread glowing embers over the top of the granules or vermiculite covering the entire surface area, concentrating on the front and sides of each burner pan for the most realistic burning effect.
3. Place log grate over the burner pan. (See Figure 14.)



### Log Placement

1. See log placement sheet included with each log box, as each set has its own unique layout.

## FOR YOUR SAFETY, READ BEFORE LIGHTING

**WARNING:** IF YOU DO NOT FOLLOW THESE INSTRUCTIONS EXACTLY, A FIRE OR EXPLOSION MAY RESULT CAUSING DAMAGE, PERSONAL INJURY OR LOSS OF LIFE.

1. This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.
2. Before lighting smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on floor.

### WHAT TO DO IF YOU SMELL GAS:

- Do not try to light any appliance.
  - Do not touch any electrical switch.
  - Do not use any telephone in your building.
  - Immediately call your gas supplier from a neighbor's telephone.
  - Follow the gas supplier's instructions.
  - If you cannot reach your gas supplier, call the fire department.
3. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, do not try to repair it. Call a qualified service technician. Force or attempted repair may result in a fire or explosion.
  4. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

## LIGHTING OPERATION

**NOTE:** Open Pilot Adjust Screw 2 turns before lighting. (See Fig. 19 on page 7)

1. **STOP!** Read all the Safety Instructions above.
2. Push in gas control knob slightly and turn clockwise (↻) to the "OFF" position. (See Figure 15.)  
**NOTE:** Knob cannot be turned from "PILOT" to "OFF" unless knob is pushed in slightly. Do not force.
3. Wait five (5) minutes to clear out any gas. If you then smell gas, STOP! Follow "2" in the safety information above. If you do not smell gas, go to the next step.
4. Remove the front and top logs for access to the pilot burner.
5. Turn the knob counterclockwise(↺) to the "PILOT". Do not push the knob in as you turn. (See Figure 16.)

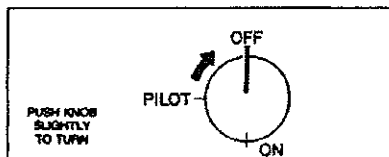


Figure 15. Rotate control valve to OFF position for both pilot and burner shutdown.

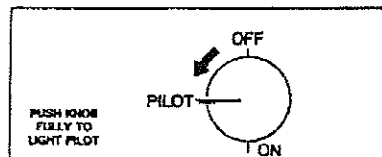


Figure 16. Rotate control valve to PILOT position.

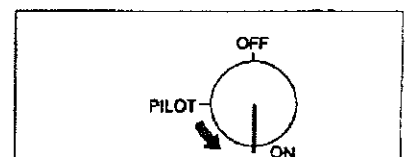


Figure 17. Rotate control valve to ON position to ignite burner.

6. Push the control knob all the way in and hold. Immediately light the pilot with a match. Continue to hold the control knob in for about one (1) minute after the pilot is lit. Release knob and it will pop back out. Pilot should remain lit. If it goes out, repeat Steps 3 through 5.

- If the knob does not pop out when released, stop and call your service technician or gas supplier.
- If the pilot will not stay lit after several tries, turn the gas control knob to the "OFF" position and call your service technician

7. Replace front and top logs in their designated location.

8. Turn gas control knob counterclockwise (↺) to the "ON" position. (See Figure 17.)

## TO TURN OFF GAS TO APPLIANCE

1. Push in gas control knob slightly and turn clockwise (↻) to "OFF". Do not force. (See Figure 15.)

## PILOT FLAME ADJUSTMENT

The Pilot Thermocouple should be engulfed by the Pilot Flame by approximately 1/2". (See Figure 18.) Should Pilot Flame become inadequate to heat the thermocouple properly, you will need to adjust the pilot (See Figure 19.) Adjust the height of the Pilot Burner Flame by rotating the Pilot Adjust Screw to the desired flame height.

**Remember:** Be sure to turn the pilot adjust screw (2) full turns in a counter-clockwise (↺) direction to enable pilot operation.

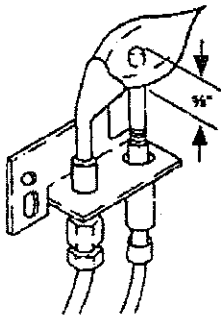


Figure 18

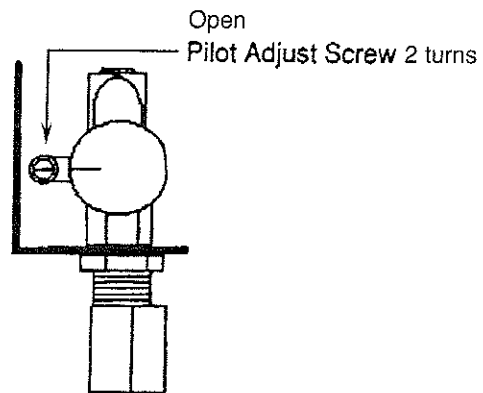


Figure 19

# TROUBLE SHOOTING

| <u>Problem</u>             | <u>Cause</u>   | <u>Corrective Action</u>  |
|----------------------------|--|---|
| 1. No pilot ignition       | <ul style="list-style-type: none"><li>- no gas to pilot</li><li>- pilot valve not on</li><li>- gas line not clear</li><li>- air in gas line</li><li>- no gas supply to fireplace</li><li>- no L.P. gas</li><li>- main shutoff valve closed</li></ul> | <ul style="list-style-type: none"><li>- open pilot adjust screw two turns counter clockwise</li><li>- turn valve to "PILOT" and depress, keep match near pilot burner until ignition</li><li>- inspect supply lines for tube kinks or obstructions</li><li>- turn valve to "PILOT" and depress, keep match near pilot burner until ignition</li><li>- allow air to purge through the line ,may take up to 5 minutes</li><li>- check to see if the fireplace is hooked to the gas supply</li><li>- fill tank</li><li>- turn valve on</li></ul> |
| 2. Inadequate flame        | <ul style="list-style-type: none"><li>- valve partially closed</li><li>- gas line obstruction</li></ul>  | <ul style="list-style-type: none"><li>- open valve fully</li><li>- burner inspection for tube kinks or obstructions</li></ul>   |
| 3. Pilot will not stay lit | <ul style="list-style-type: none"><li>- weak pilot flame</li><li>- incorrect thermocouple position</li></ul>   | <ul style="list-style-type: none"><li>- adjust pilot flame to 1/2"</li><li>- adjust thermocouple position</li></ul>   |
| 4. Unit shuts off          | <ul style="list-style-type: none"><li>- thermocouple is overheating</li></ul>  | <ul style="list-style-type: none"><li>-reposition logs to keep main burner flame off the thermocouple assembly.</li></ul>   |

## MAINTENANCE OF THE SYSTEM

Under normal use, this unit will require only limited cleaning.

To clean the unit, first turn the control knob to "OFF" and allow the system to cool down.

The logs and grate can get very hot. Handle only when the system is cool.

Keep the control valve, logs and burner area clean by vacuuming or brushing at least twice a year.

Visually inspect the pilot. Dust or blow away any dust or lint accumulating. See Figure 18 for typical view of pilot burner flame.

Sufficient space must be provided around this appliance to provide air for combustion and ventilation. Keep the front of the appliance clear of all obstacles and materials.

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

During the manufacturing process this appliance is treated with certain coloring agents. These agents are not harmful, but may produce annoying smell and smoke as they are burned off. This is a temporary occurrence that ceases after two (2) to three (3) hours of use.





# LIMITED LIFETIME WARRANTY

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

All logs are guaranteed for the lifetime of the original purchaser against destruction by fire or heat.

The burner assembly system is guaranteed for a period of three (3) years from the date of purchase and will be replaced for freight costs only.

Safety 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 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, call Sure Heat @ 800-229-5647 for authorization to 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"/21"  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.

# NOTICE

## IMPORTANT H-BURNER AMENDMENT:

### NEW HEAT SHIELD INSTALLATION INSTRUCTIONS

Due to continuing product improvement we have manufactured a new heat shield to reduce the temperature of the control knob.

**Fig 1:** Current look of H-burner pan and control knob.

**Fig 2:** Slightly lift the grate and slide the new Heat Shield in between the burner pan and control knob. (Be sure the left edge of the new Heat Shield touches the right edge of the burner pan.)

**Fig 3:** Slide the Heat Shield back far enough so the the upper lip of the Heat Shield is equal with the control knob assembly. Set the Grate back down on top of the new Heat Shield to hold it in place

