

# SURE HEAT

## *Installation and Operating Instructions for* **ENERGY EFFICIENT NATURAL GAS FIREPLACE LOGS H BURNER**

**Models: BRO18NG, BRO24NG, CC21NG**

### **DANGER:**

**FAILURE TO FOLLOW THESE INSTRUCTIONS CAREFULLY AND WITHOUT ERROR, OR FAILURE TO HEED ANY AND ALL WARNINGS IN THESE INSTRUCTIONS CAN RESULT IN AN EXPLOSION, FIRE OR THE PRODUCTION OF CARBON MONOXIDE GAS WHICH CAN CAUSE PROPERTY DAMAGE, BODILY INJURY OR DEATH.**



**NOTE: THIS UNIT CANNOT  
BE CONVERTED TO  
DIFFERENT GAS TYPES.**

### **Sure Heat Manufacturing**

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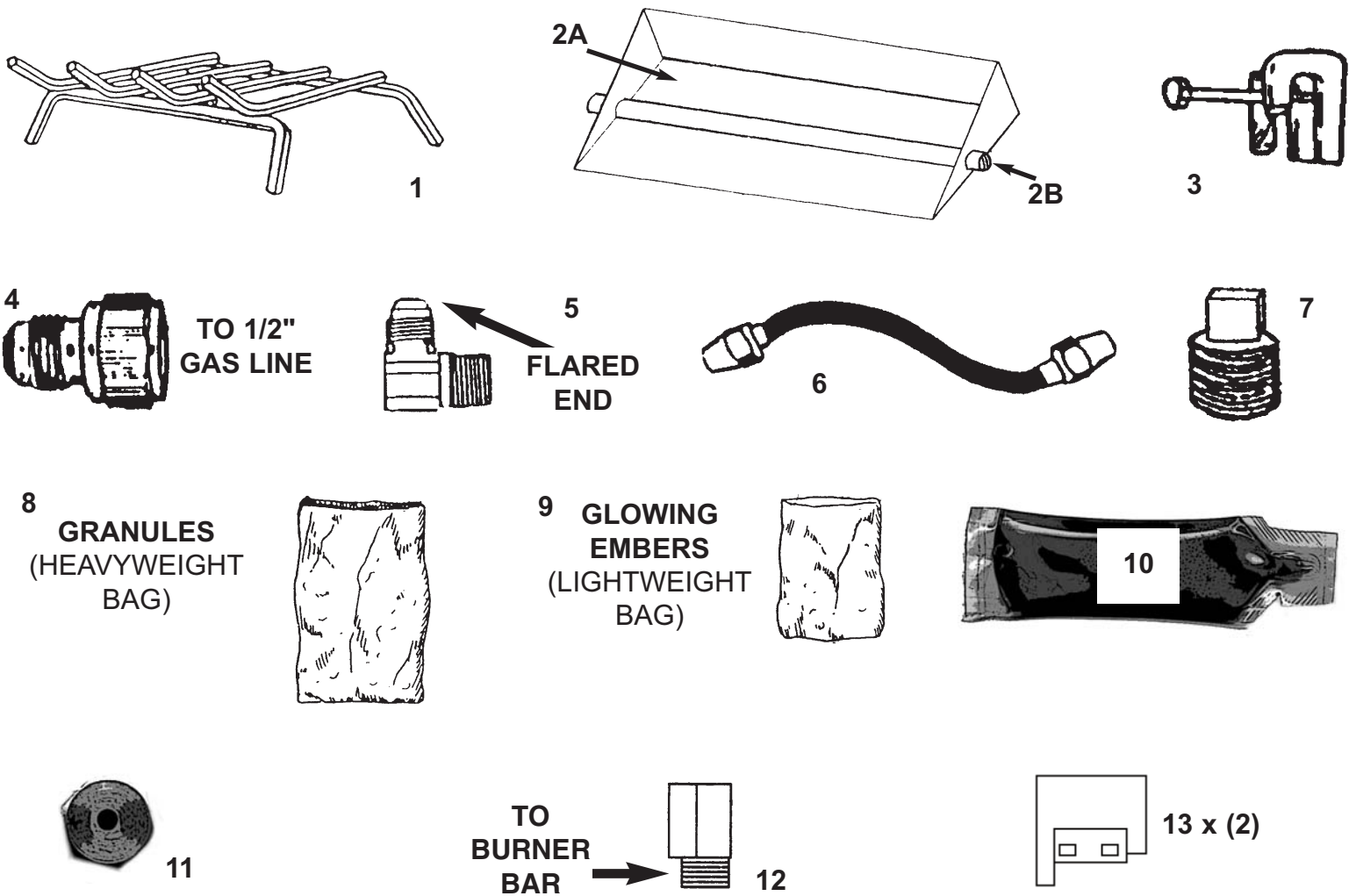
**PLEASE READ** these instructions carefully before you begin to install this gas log set.

**WARNING:** If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- 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 touch 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.
- Installation and service must be performed by a qualified installer, service agency or the gas supplier.

# PARTS LIST

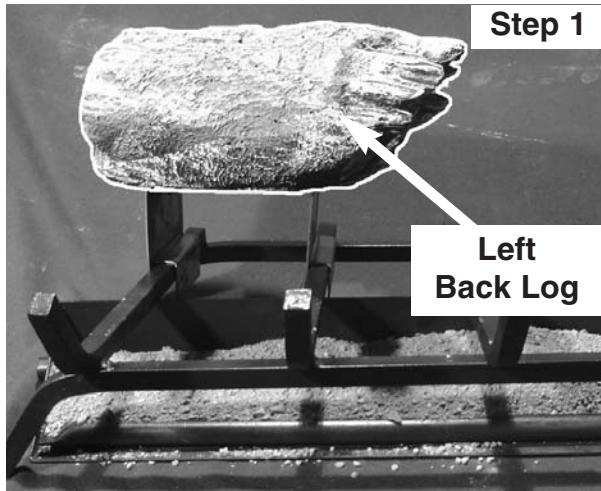
Figure 1



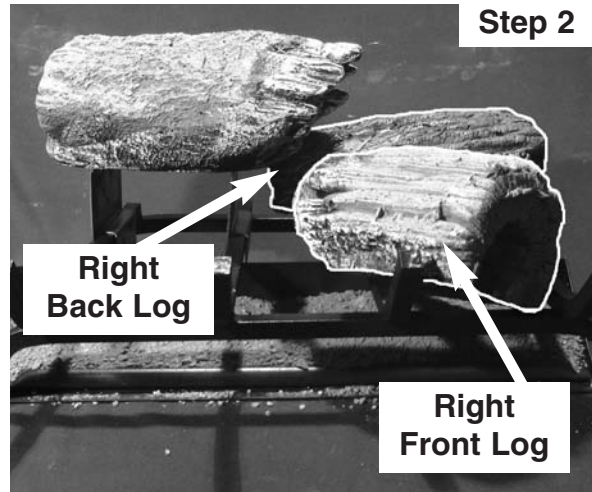
PART NO.	DESCRIPTION
1	Log Grate
2A	Burner Pan
2B	Burner Bar
3	Damper Stop Clamp
4	3/8" Flared to 1/2" Gas Inlet Fitting
5	3/8" Brass Orifice Elbow-Flared
6	3/8" Flared Tubing
7	Burner Bar Plug
8	Granules
9	Glowing Embers
10	Pipe Dope
11	Orifice
12	3/8" Brass Street Elbow
13	Back Log Stand Off

# LOG PLACEMENT

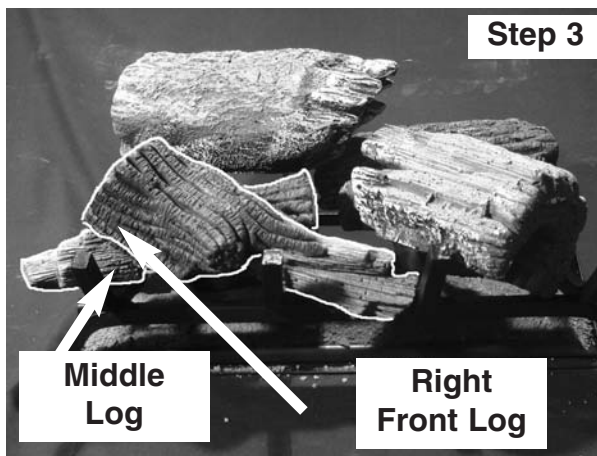
## MODELS: BRO18NG & BRO24NG



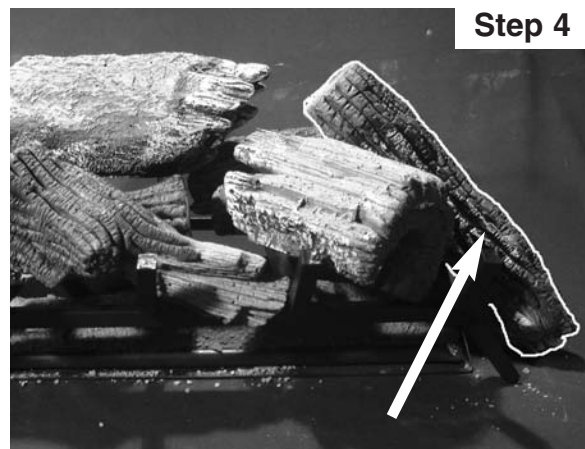
Place back log onto the 2 standoffs



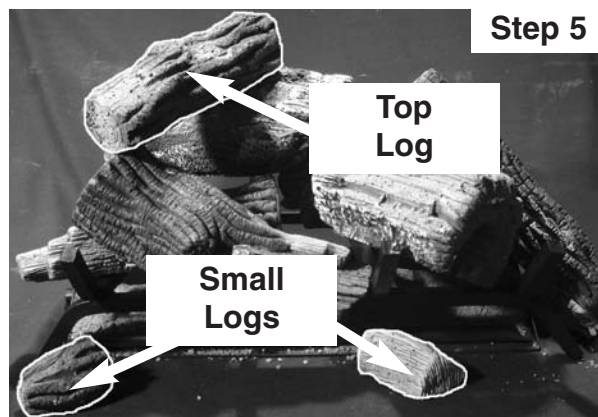
Place right back log and right front log onto grate



Place the middle log in front of the left back log. Then place the left front log in front of the middle log onto the grate



Place the side log in between the right back log and right front log



Place the two small logs in front of the grate as shown and the top log on top of the left back log

### **NOTE:**

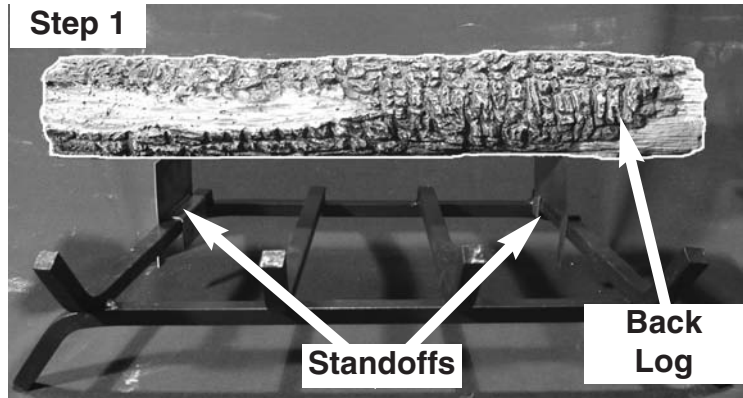
**MODEL BRO18NG**  
will only have 7 logs. It will not contain the middle log or one of the small logs.



# LOG PLACEMENT

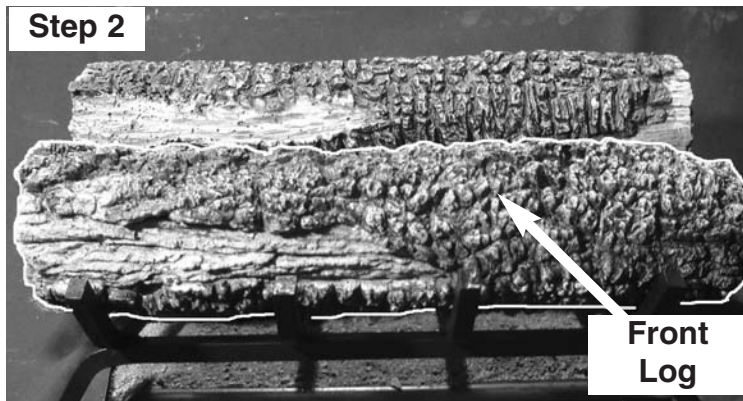
## MODEL: CC21NG

Step 1



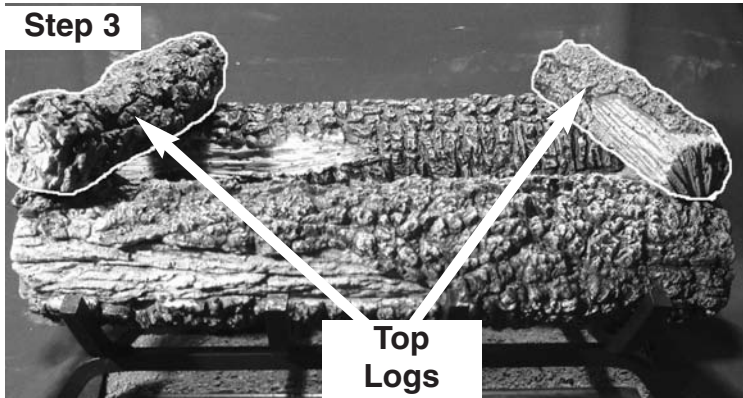
Place back log onto the 2 standoffs

Step 2



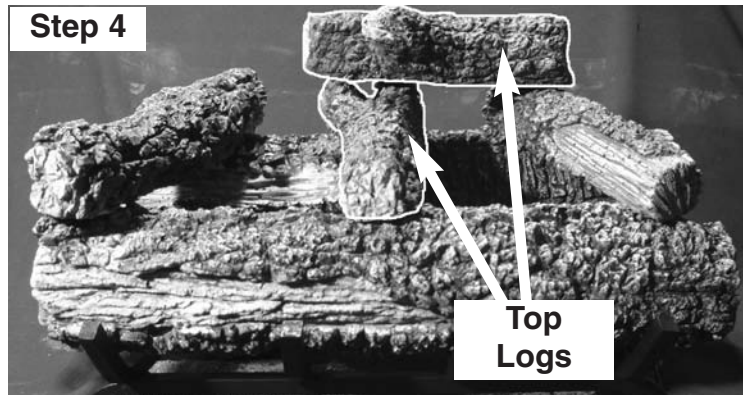
Place front log in front of back log

Step 3



Place top logs on top of back and front logs

Step 4



Place remaining top logs as shown above

# IMPORTANT INFORMATION

1. This gas log set 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. The fireplace must be constructed of non-combustible materials and approved to burn wood. **Warning: Do not burn wood or other material in any fireplace fitted with a gas log set.**
2. To operate this gas log set, the fireplace damper must be fully opened and locked.
3. The smallest or minimum dimension of the chimney flue must be 8 inches in diameter.
  - Do not use an Energy Efficient Gas Log Set if it is smaller than 8 inches.
  - Do not use an Energy Efficient Gas Log Set if fumes from the burner emerge into the room when the damper is fully open. This indicates that there is not adequate draft for our log sets and the gas log set must not be used until fireplace draft is corrected.
4. This appliance must be installed with a Damper Stop Clamp (Part # 9). When operating this gas log set, the flue damper must be fully open.

**WARNING:** *Improper use or installation may cause Carbon Monoxide Poisoning. Carbon Monoxide, which is an odorless and colorless gas, is a by-product of combustion. Caution must be taken to insure the fireplace is properly vented when logs are in use. To avoid having potentially dangerous fumes enter the living area, be sure the chimney is drawing properly and has sufficient draft.*

5. A fireplace screen must be in place when operating this gas log set. This screen shall have an opening(s) for the introduction of combustion air. If the fireplace has glass doors, operate this gas set with the doors fully opened.
6. The nominal inlet gas pressure for this appliance is 7" water column for natural gas.
7. This gas log appliance and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing at pressures in excess of 1/2 PSIG.
  - This appliance must also be disconnected from the gas supply system by closing its individual manual shutoff valve during a pressure testing at pressures equal to or less than 1/2 PSIG.

## FIREPLACE PREPARATION

- A. Remove all ash and debris from floor of fireplace.
- B. Open fireplace damper fully and install Damper Stop Clamp with 1/4 x 2" set screw (Part # 9). This clamp is designed to prevent accidental closure of the damper while in use. (See Figure 2)
  - Should Damper Stop Clamp supplied not fit, a permanent Damper Stop Clamp must be installed that will keep the damper open at a distance of not less than 1 1/2".
- C. Prior to connecting the gas log set, make sure that the gas supply to the fireplace is completely shut off.

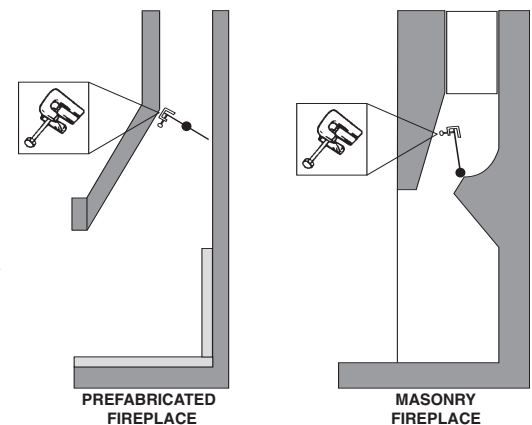


Figure 2. Damper Stop Clamp

**Installation of this Energy Efficient Gas Log Set and provisions for combustion and ventilation air must conform with the National Fuel Gas Code ANSI Z223.1 and applicable local codes.**

# FIREPLACE PREPARATION (CONT.)

- D. **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.
- E. **Pre-fabricated fireplace.** Refert to the manufacturer's fireplace instruction manual for specific information regarding the running of a gas line into that particular model
- A typical pre-fab installation involves the insertion of a 1/2 inch gas pipe through the gas line tube provided by each manufacturer **outside** the fireplace. The knockout on the inside of the fireplace is removed as the gas pipe is punched through the fireplace
  - An ON-OFF valve should be placed within easy reach of the fireplace either inside the fireplace or in the wall. Re-pack any insulation removed from the gas line tube. (See Figure 3)
- F. **Masonry fireplaces.** A 1/2 inch gas supply line must be provided to the firebox. Most installations require drilling an 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 either in the wall or inside the fireplace. (See Figure 4)

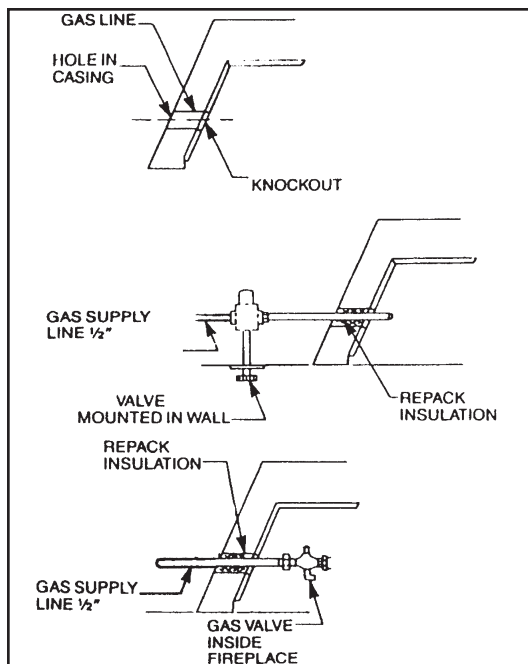


Figure 3. Gas line installation - Pre-fabricated Fireplace

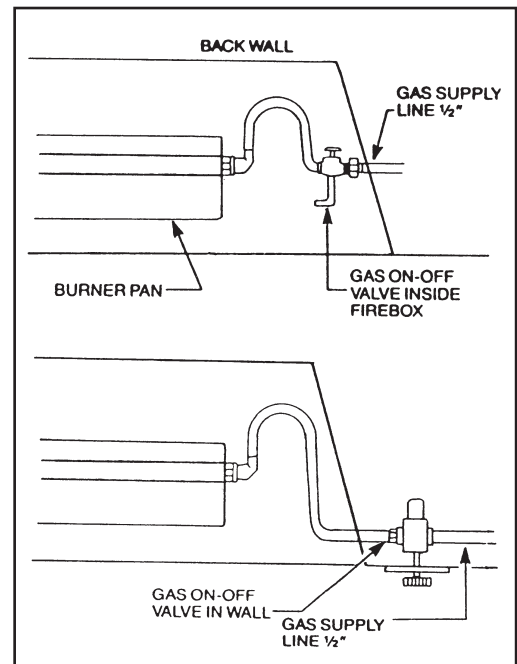


Figure 4. Gas line installation - Masonry fireplace

## GAS LOG INSTALLATION

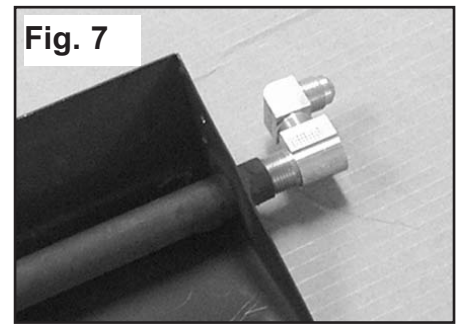
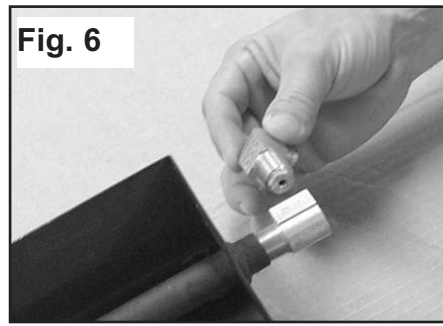
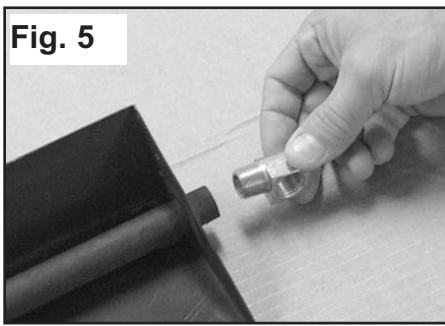
(See Figure 1 Parts List as a guide to reference part numbers)

## BURNER PAN ASSEMBLY

(NOTE: Use pipe compound on all male threads to seal joints)

- A. Determine if fireplace has a right or left-hand gas line feed. Uses burner bar plug (Part # 13) to seal off the end of the burner bar (Part #8B) that will not be attached to the gas supply line.
- B. Install the orifice (Part #17) in to the 3/8" Brass orifice elbow (Part #11).
- C. Attach the 3/8" brass street elbow (Part #19) to the side of the burner pan that the gas line will be attached to. (See Fig. 5 on following page)
- D. Attach the 3/8" brass orifice elbow (Part #11) to the 3/8" brass street elbow (22 Fig. 6-7 on following page)

**NOTE: THIS FITTING IS INTERNALLY MACHINED FOR USE AS THE ORIFICE ON NATURAL GAS INSTALLATIONS. DO NOT USE FOR L.P. OR PROPANE GAS APPLAICATIONS**



## CONNECTING GAS SUPPLY TO BURNER PAN

(If a Safety Pilot Kit is to be used, please refer to separate installation instructions). These instructions refer to the Natural Gas applications installed without a Safety Pilot Kit. (Pilot Safety Kit available at your local dealer).

- A. Place Burner Pan assembly in the center of the fireplace.
- B. Attach Brass 3/8" Flared to 1/2" Gas Inlet Fitting (Part # 10) to the 1/2 inch gas supply stub.
- C. Attach 3/8" Flared Tubing (Part # 12) to the 3/8" Brass orifice Elbow (Part # 11). Attach opposite end to gas supply line by carefully bending the flared tubing as needed to make the connection. Avoid kinking the flared tubing while bending. If tubing must be cut, use a tube cutter and flare the cut end of the tube with a flaring tool.
- D. Be certain all connections are tight and use pipe compound on all male threads to seal joints. Test all connections with a soapy water solution with the gas supply turned on. If bubble appear on any connection, re-tighten and re-test. 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

- A. Spread granules (Part #14) over the installed burner pan. Granules should not fill up the entire pan. The granules should stop 3/4" - 1" from the top of the pan. Slope the Granules down toward the front of the pan without over flowing them over the front lip of the burner pan. (See Fig. 8)
- B. Spread glowing embers (Part # 15) over the top of the granules, covering the entire surface area, concentrating on the front and sides of the burner pan for the most realistic burning effect.
- C. Place log grate (Part # 7) over the burner pan, aligning the front legs with the front edge of the burner pan. (See Figure 9b).

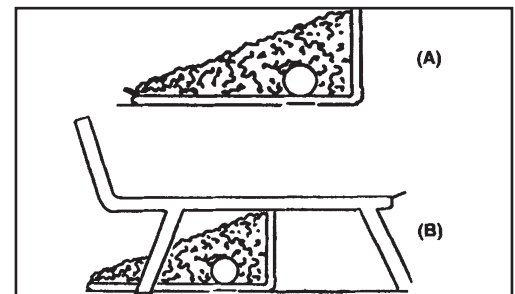


Figure 9 (A & B). Granule, ember and grate placement.

## LIGHTING YOUR GAS LOG SET

(Manual valve only)

- A. Open chimney flue damper to the full open position.
- B. Be sure gas supply is shut off
- C. Lay match on top of embers and granules near gas burner input. **Do not hold match in hand. (See Figure 10)**
- D. With match burning, slowly turn on gas.

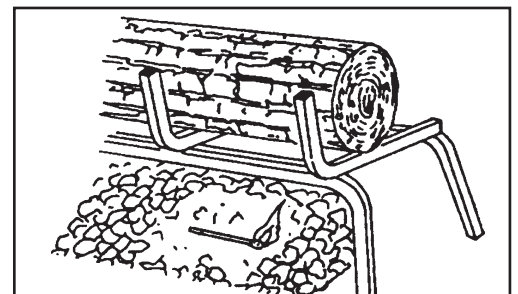


Figure 10. Lighting the log set.



## MAINTENANCE

Very little maintenance is required. The carbon deposit resulting from combustion is natural and adds to the realistic appearance of the set. If carbon becomes excessive it can be lightly brushed or vacuumed away.

## TROUBLE SHOOTING

<u>Problem</u>	<u>Cause</u>	<u>Corrective Action</u>
1. No ignition	- Valve not on - Gas line not clear	- Turn valve on - Inspect supply lines for tube kinks or obstructions
2. Inadequate flame	- Valve partially closed - Gas line obstruction - Log arrangement	- Open valve fully - Inspect burner for tube kinks or obstructions. - Re-arrange logs to desired pattern

## WARRANTY

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

All logs are guaranteed for three years against manufacturer's defects.

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

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 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"  21"  24"  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 (800) 229-5647