

SURE HEAT MANUFACTURING

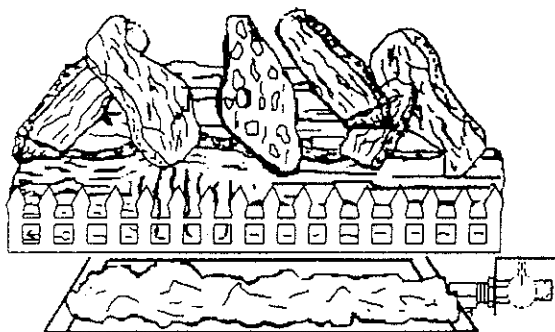
Installation and Operating Instructions for **NATURAL & L.P. GAS** **A.G.A. TOPSIDE BURNER** **VENTED FIREPLACE GAS LOGS**

Model: RP (18,24,30)-N
GO (18,24,30)-N
GLO (18,24,30)-N
CO (18,24,30)-N
CL (18,24,30)-N

For use with Natural Gas Only

Model: RP (18,24,30)-P
GO (18,24,30)-P
GLO (18,24,30)-P
CO (18,24,30)-P
CL (18,24,30)-P

For use with Propane Gas Only



Sure Heat Manufacturing

3130 Moon Station Road

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Tel: (770) 422-8008

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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 should not be burned in a fireplace where a decorative gas appliance is installed.

Warning: There is a possibility of odor fade when using L.P. gas. Never install an L.P. appliance or service line below grade without a gas detector.

WARNING: Improper installation, adjustment, alteration, 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 and 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 supplier's 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"	16 1/2"	28"	21"	15"	50 sq. in.
24"	18"	32"	24"	15"	50 sq. in.
30"	20"	36"	28"	19"	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 openings 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 isolated 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.

NOTE: Use Pipe Compound on all male threads.

Topside Burner Assembly



A. Burner Washer

1. Remove burner pan, burner bar and the bag containing safety valve parts from the box.
2. Place the topside burner bar through the burner washer and place it in the burner pan. (See Figure 1.)
3. If you are assembling a Natural Gas log set:
 - a) Connect the 3/8" x 3/8" Natural Gas orifice through the 3/8" locknut to the end of the burner bar using the pipe dope compound. (See Figure 1.)

NOTE: Make sure the small hole is facing away from the burner.
4. If you are assembling an L.P. Gas log set:
 - a) Connect the air shutter orifice through the 3/8" locknut to the end of the burner bar using the pipe dope compound. (Be sure to place short stem into the burner bar.) (See Figure 1.)

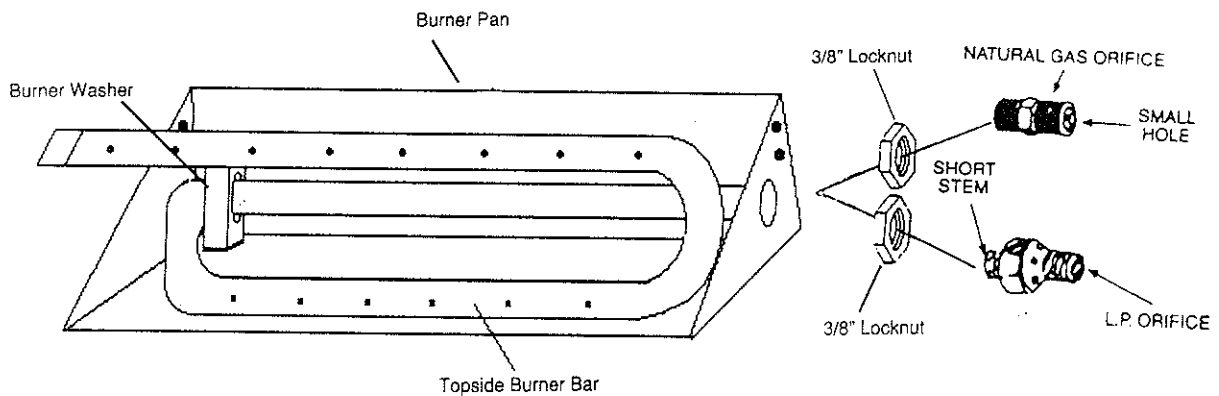


Figure 1

- Attach the pilot bracket to the burner pan by first lining up the holes of both parts and then securing them with the metal screws provided. (See Figure 2.)

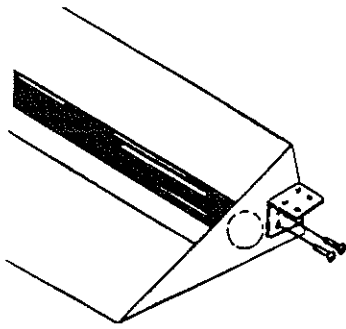


Figure 2

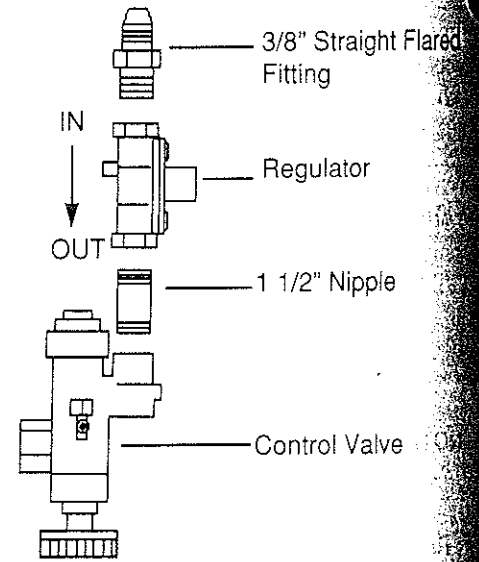


Figure 3

- Remove valve and regulator assembly from the parts bag (remember these parts are only hand tightened, pipe dope must be added and the fittings must be tightened). Remove the 1 1/2 inch Nipple from the back of the valve and regulator and apply pipe dope to it. Screw the nipple back into the valve and regulator, make sure that the arrow on the underneath side of the regulator is pointing toward the control valve. Attach the 3/8 inch straight flared fitting to the "IN" port of the regulator using pipe dope. (See Figure 3.)

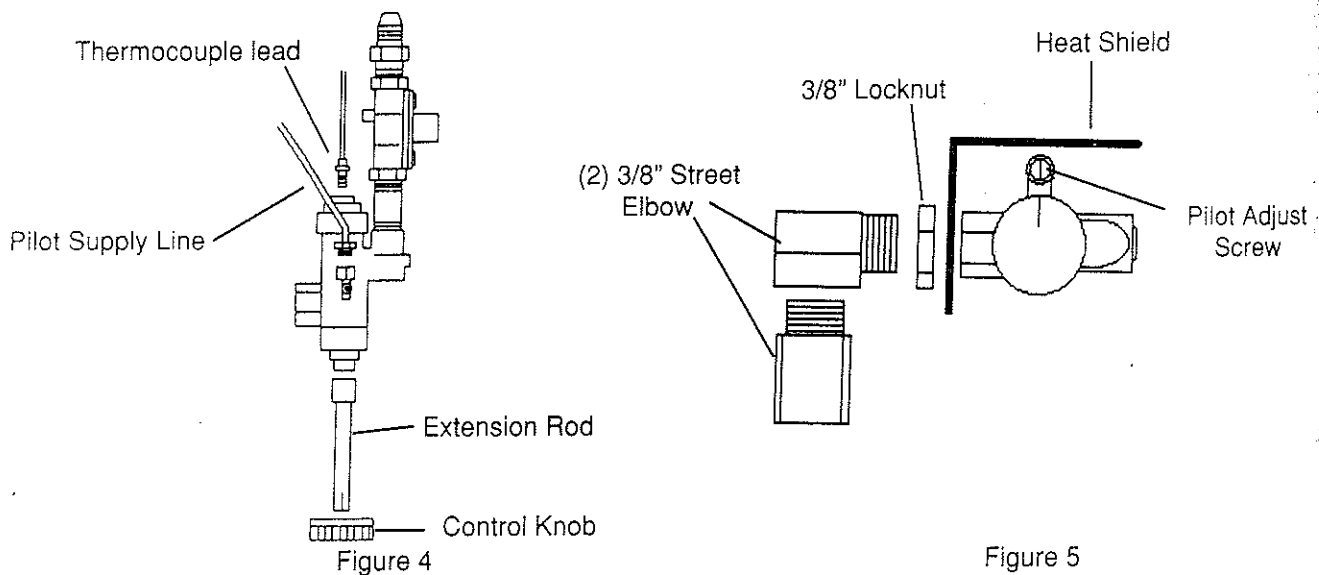


Figure 4

Figure 5

- Connect the pilot gas supply line and the thermocouple lead to the control valve. Attach valve extension rod to knob and control valve. (See Figure 4.)
IMPORTANT: Hand tighten the pilot gas supply and thermocouple leads, then tighten 1/8 turn with a wrench.
NOTE: The use of the extension rod is optional. Its only purpose is to bring the control knob out away from the log set.
- Then connect the (2) 3/8 inch Street Elbows and screw the 3/8 inch Locknut down on the male threads of the elbow. Place the hole of the Heat Shield 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 5.)
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 5.)

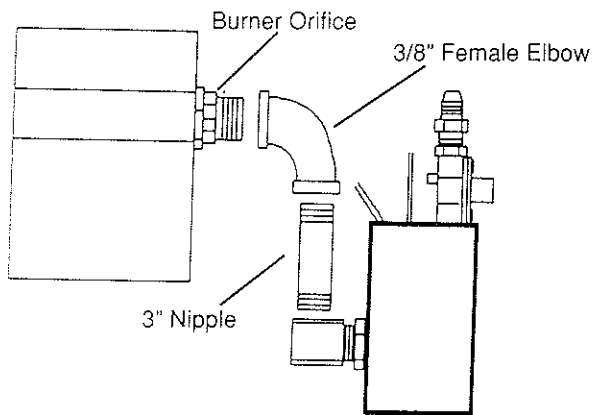


Figure 6

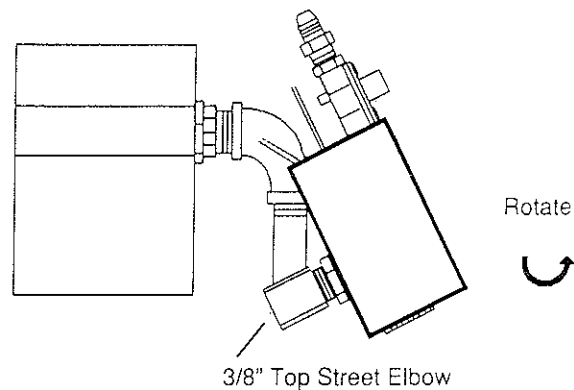


Figure 7

9. 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 6.)
10. 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 7.)

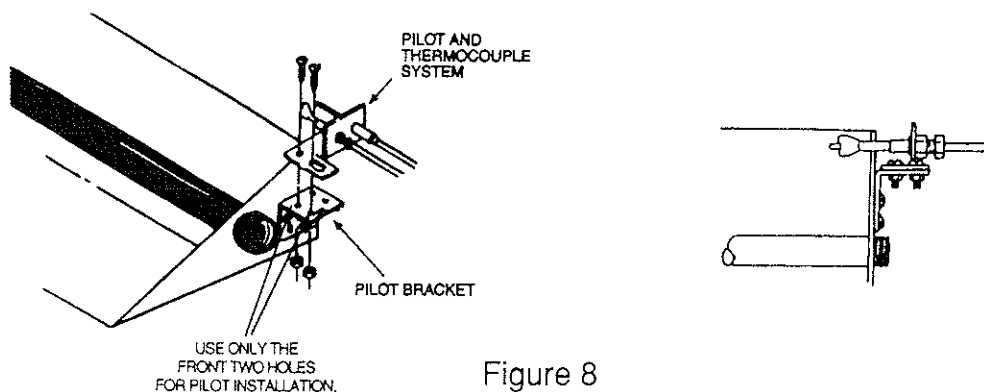


Figure 8

11. Connect pilot and thermocouple to pilot bracket using the screws and nuts provided. Be sure that the pilot and thermocouple is just hanging over the burner pan. (See Figure 8.)
- NOTE:** Carefully bend the pilot tubing when attaching the pilot burner to the burner pan. Care should be taken not to kink the tubing which would restrict the gas flow to the pilot burner.

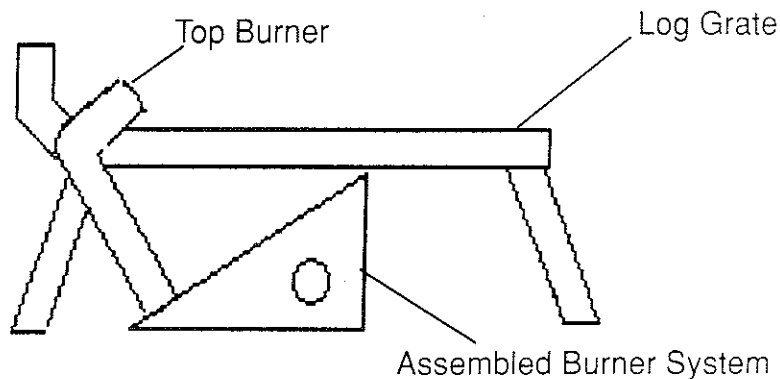


Figure 9

12. Slide the top burner from the assembled burner system over the front part of the log grate. (See Figure 9.)
- NOTE:** The Log grate should be put in place before hooking the unit to the gas supply line.

BTU Information

Set	Natural Gas	L.P. Gas
18"	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 an access hole through the masonry wall. The supply line should be secured and seeded 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 prevent full closure of the fireplace damper. The unit must be operated with the damper in the fully opened position. (See Figure 11.)

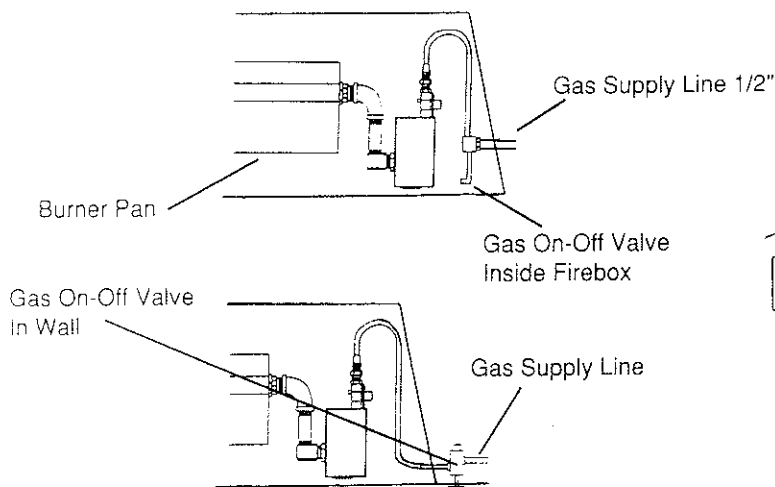


Figure 10: Gas line installation - Masonry fireplace.

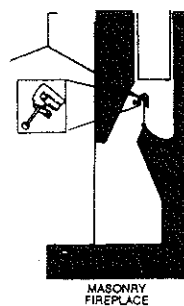


Figure 11: Damper stop clamp.

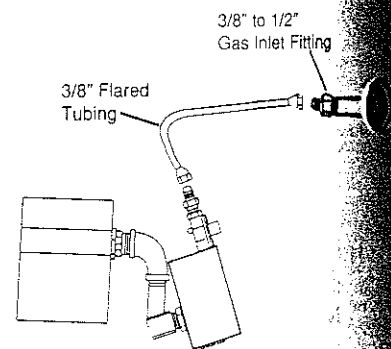


Figure 12

Burner System Location

The burner system should be located toward 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 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. Attach flared tubing to burner system. 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. Flare the cut end of the tube with a flaring tool.

NOTE: A good method of bending this tube is to fill it with sand, bending the tube as needed to make the connection. This method will eliminate kinking in the line. Once the tube is in the desired configuration for hookup, be sure to empty the tube completely of all sand before tube is connected to the gas supply line and the burner system. (See Figure 12.)

4. Be certain all connections are tight and use pipe 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 Grate Enhancer Placement

- 1A. **NATURAL GAS INSTALLATION:** Spread granules (black) over the installed burner pan. The bottom two burners should be covered leaving the top burner, which is above the grate, exposed. 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 the installed burner pan. The bottom two burners should be covered leaving the top burner, which is above the grate, exposed. Vermiculite should be sloped to the same angle as the burner pan filling the entire pan. (See Figure 13.)

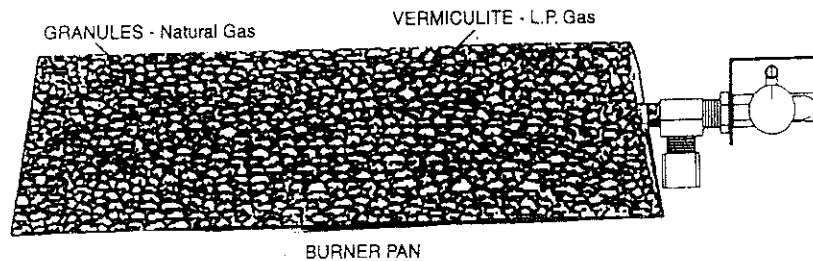


Figure 13

2. Spread 1/2 the glowing embers over the top of the granules or vermiculite covering the entire surface area, concentrating on the front and sides of the burner pan for the most realistic burning effect.
3. Place the (2) back log supports on the back part of the grate. (See Figure 14.)
4. Install the grate enhancer (Part #22) by hanging the G.E. channels over the front part of the log grate. (See Figure 14.)
5. Cover the top burner with the remaining glowing embers, placing the embers between the grate enhancer and the top burner. (See Figure 14.)

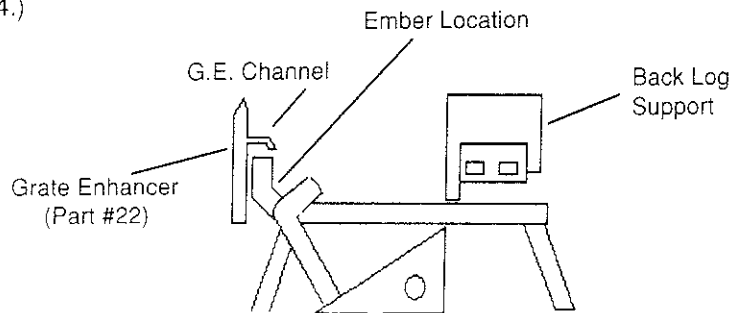


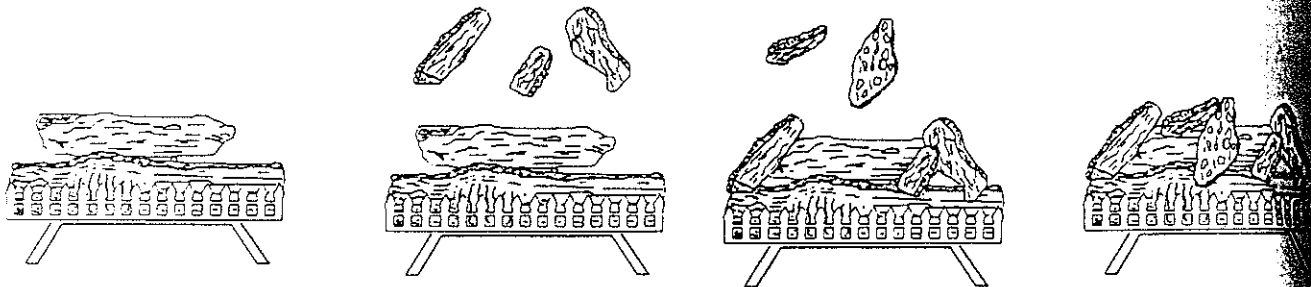
Figure 14
Side View

Log Placement

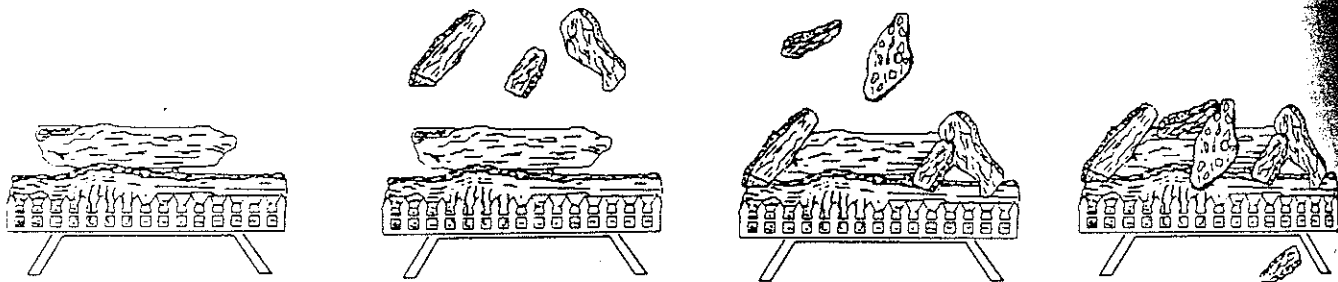
1. Place the longest log in the front of the grate, just behind the top burner.
2. Place the next longest log on the back log supporting brackets as far back as possible.
3. Arrange top logs according to the illustrations on the following page for your specific set size.

Rustic Pine (R.P.) Series

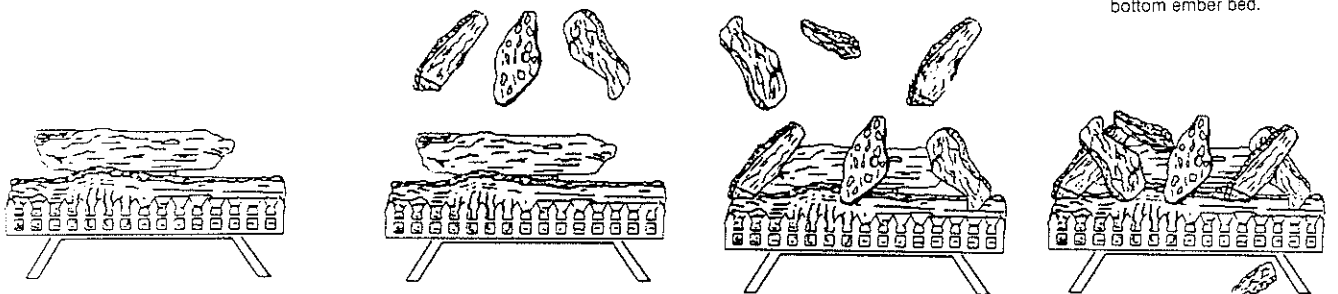
18" Set



24" Set



30" Set

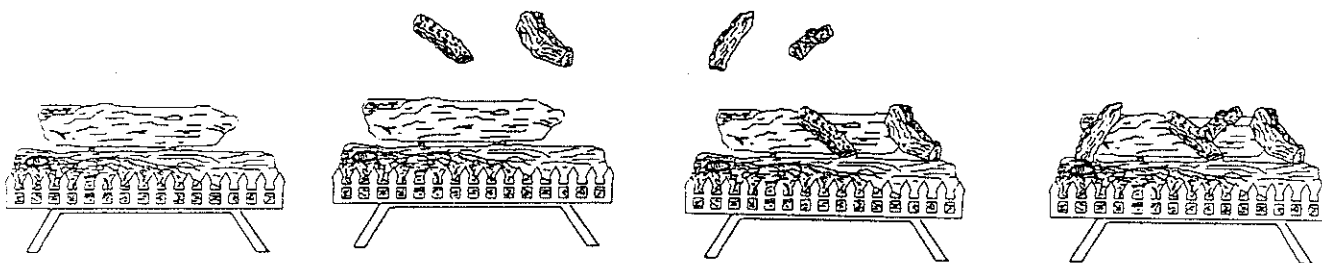


Small chip log to be placed on bottom ember bed.

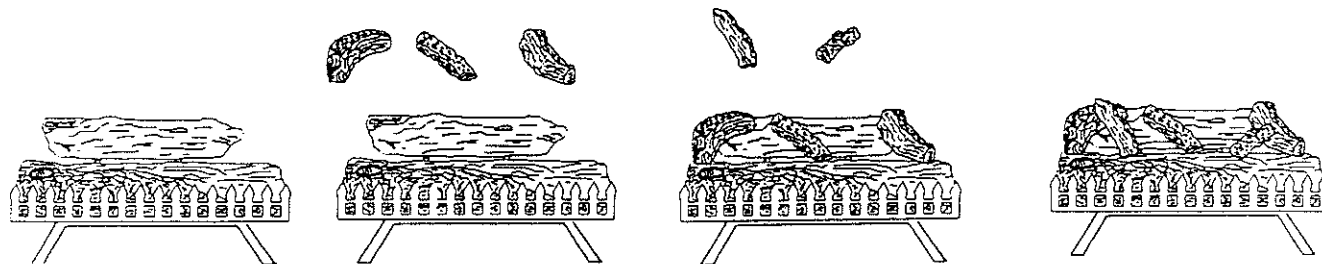
Small chip log to be placed on bottom ember bed.

Golden Oak (G.O.) & Glowing Oak (G.L.O.) Series

18" Set

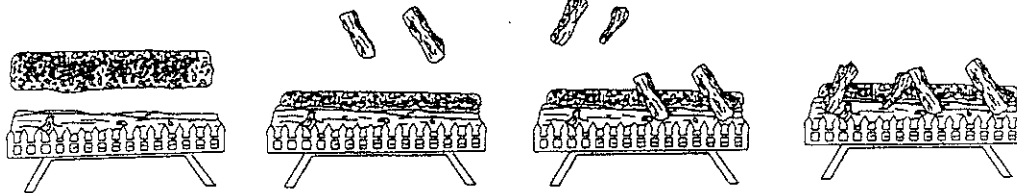


24" & 30" Set

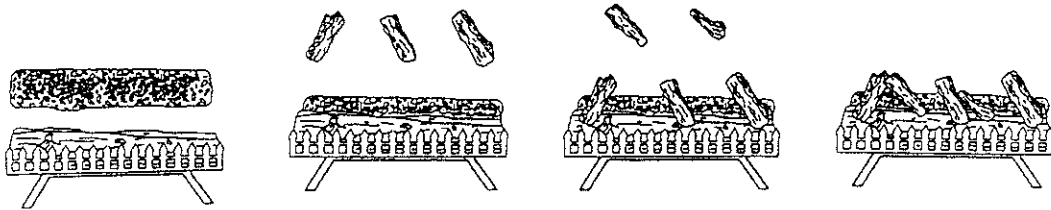


Country Oak (C.O) Series

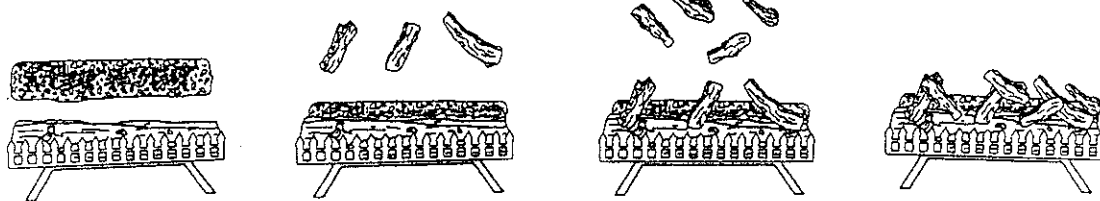
18" Set



24" Set

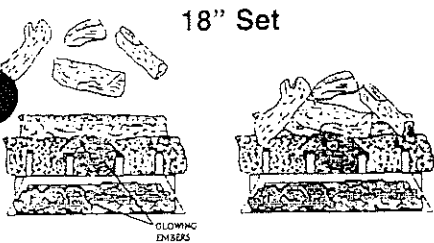


30" Set

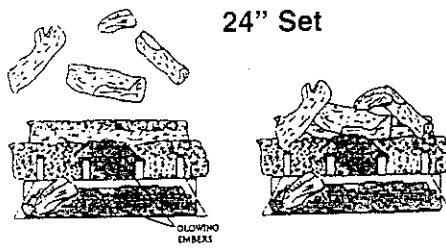


Colonial Bark (CL) Series

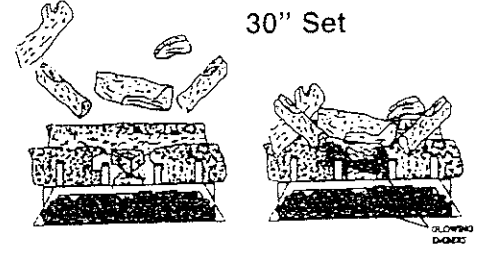
18" Set



24" Set



30" Set



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 the 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

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.)

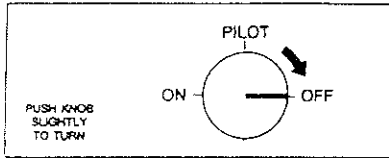


Figure 15. Rotate control valve to OFF position for both pilot and burner shutdown.

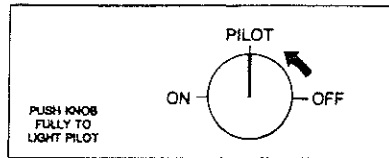


Figure 16. Rotate control valve to PILOT position.

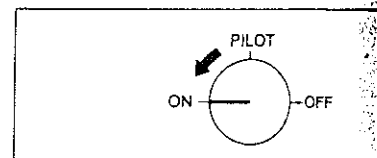


Figure 17. Rotate control valve to ON position to ignite burner.

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". Should Pilot Flame become inadequate to heat the thermocouple properly, you will need to adjust the pilot. (See Figure 18.)

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

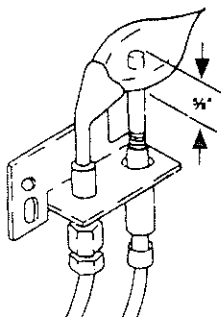


Figure 18

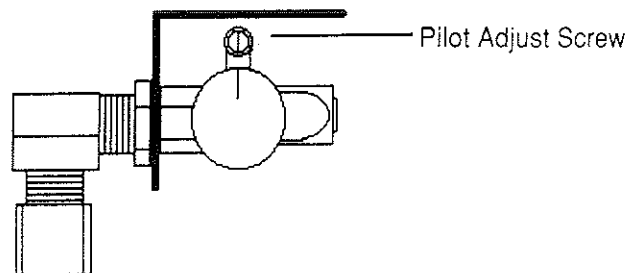


Figure 19

TROUBLE SHOOTING

<u>Problem</u>	<u>Cause</u>	<u>Corrective Action</u>
1. No pilot ignition	- pilot valve not on	- turn valve to "PILOT" and depress, keep match near pilot burner until ignition
	- gas line not clear	- inspect supply lines for tube kinks or obstructions
	- air in gas line	- turn valve to "PILOT" and depress, keep match near pilot burner until ignition
		- allow air to purge through the line
	- no gas supply to fireplace	- check to see if the fireplace is hooked to the gas supply
	- no L.P. gas	- fill tank
	- main shutoff valve closed	- turn valve on
2. Inadequate flame	- pilot adjust screw closed	- turn pilot adjust screw 2 turns in a counter-clockwise direction.
	- valve partially closed	- open valve fully
	- gas line obstruction	- burner inspection for tube kinks or obstructions
3. Pilot will not stay lit	- weak pilot flame	- adjust pilot flame to 1/2"
	- incorrect thermocouple position	- adjust thermocouple position
4. Unit shuts off	- thermocouple is overheating	- move pilot & thermocouple assembly to the next set of holes on the pilot bracket. (Make sure only the tips of the pilot and thermocouple are hanging over the burner pan.)

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.

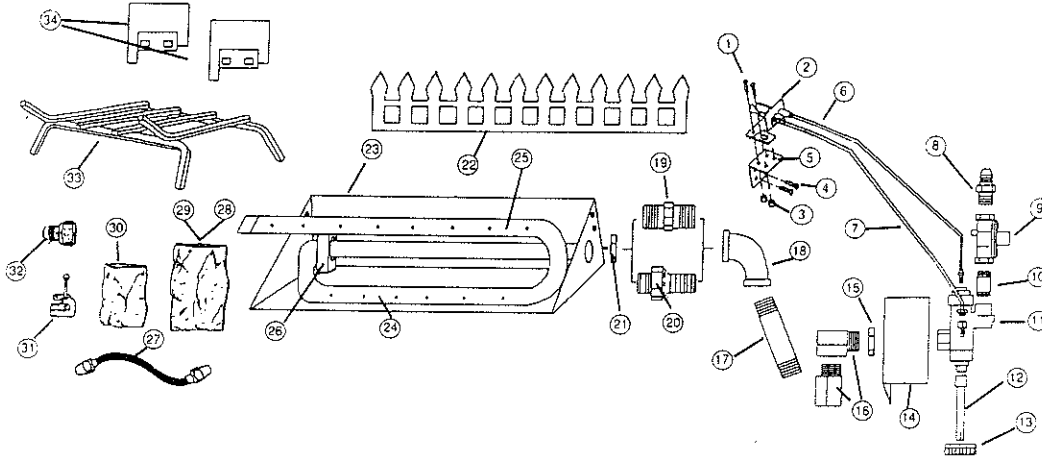
Sufficient space must be provided around this appliance to provide air for combustion and ventilation. Keep the front of the appliance clear of all obstacles and materials.

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.

REF. #	Part Name	QTY.
1	Machine Screws	2
2	Pilot Burner Assembly	1
3	Nuts	2
4	Sheet Metal Screws	2
5	Pilot Bracket	2
6	Thermocouple Lead	1
7	Pilot Gas Supply Line	1
8	3/8" Straight Flared Fitting	1
9	Regulator	1
10	1 1/2" Pipe Nipple	1
11	Control Valve	1
12	Extension Rod	1
13	Knob	1
14	Heat Shield	1
15	Locknut	1
16	3/8" Street Elbow	2
17	3" Pipe Nipple	1

REF. #	Part Name	QTY.
18	3/8" Female Elbow	1
19	Burner Orifice-Nat. Gas Sets Only	1
20	Burner Orifice-L.P Gas Sets Only	1
21	Locknut	1
22	Grate Enhancer	1
23	Burner Pan	1
24	Burner Bar	1
25	Top Ember Burner	1
26	Burner Washer	1
27	3/8" Flared Tubing	1
28	Granules-Nat. Gas Sets Only	1
29	Vermiculite-L.P. Gas Sets Only	1
30	Glowing Embers	1
31	Damper Stop Clamp	1
32	1/2" x 3/8" Flared Inlet Fitting	1
33	Grate Assembly	1
34	Back Log Standoffs	2



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 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