

# INSTALLATION & OPERATION MANUAL

# DECORATIVE VENTED

# GAS FIREPLACE LOG

## TIERED DUAL BURNER LOG SET



**Models: BRO18NG, BRO24NG - CSO24NG, CSO30NG  
MO18DBNG, MO24DBNG - SH18NG, SH24NG**

Burner set for use with all styles and sizes of SureHeat Dual Burner Natural Gas Log Sets.

**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 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 phone in your building.
  - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's 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.

**INSTALLER:** Leave this manual with the appliance.

**CONSUMER:** Retain this manual for future reference.

# DUAL BURNER PART LIST

## Figure 1



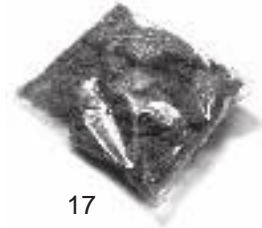
1-6

GRANULES  
(HEAVY WEIGHT BAG)



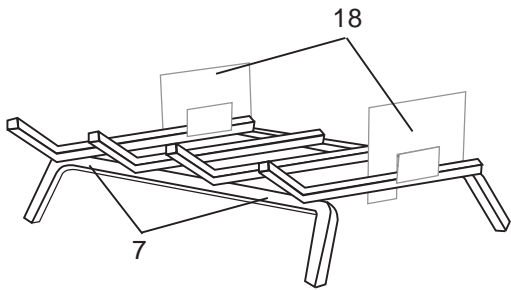
16

GLOWING EMBERS  
(LIGHT WEIGHT BAG)



17

NUMBER OF LOGS ARE DETERMINED BY  
THE SIZE AND MODEL CHOSEN SETS  
RANGE FROM 4 TO 9 LOGS

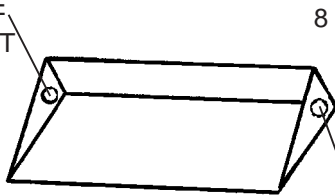


19



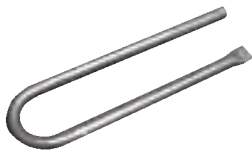
20

LEFT SIDE  
KNOCKOUT  
PLUG

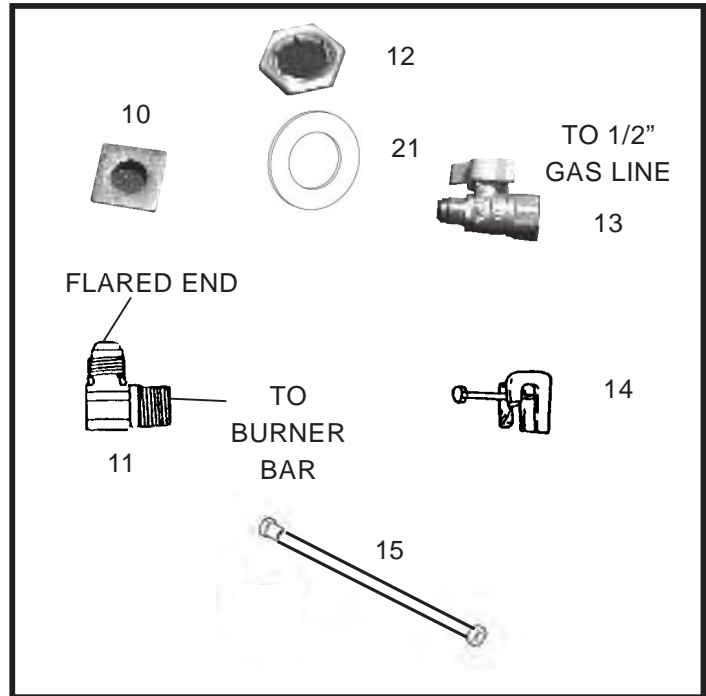


8

RIGHT SIDE  
KNOCKOUT  
PLUG



9



10

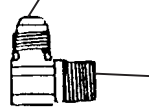
12

21

TO 1/2"  
GAS LINE

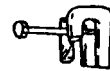
13

FLARED END



11

TO  
BURNER  
BAR



14

15

REF.	DUAL BURNER Z21.84	PART NUMBER	QTY	PART NUMBER	QTY	PART NUMBER	QTY
		18" SET		24" SET		30" SET	
1-6	LOGS		1		1		1
7	GRATE	WIP-200-90556	1	WIP-200-90566	1	WIP-200-90680	1
8	BURNER PAN	WIP-200-90502	1	WIP-200-90504	1	WIP-200-90506	1
9	DUAL BURNER BAR	WIP-190-90521	1	WIP-190-90523	1	WIP-190-90525	1
10	3/4 BURNER SUPPORT SPACER	RMH-120-00420	1	RMH-120-00420	1	RMH-120-00420	1
11	3/8 BRASS ORIFICE ELBOW	WIP-120-00350	1	WIP-120-00350	1	WIP-120-00350	1
12	3/8" LOCKNUT	RMH-120-00963	1	RMH-120-00963	1	RMH-120-00963	1
13	VALVE	X	X	X	X	X	X
14	DAMPER STOP CLAMP	RMH-120-00100	1	RMH-120-00100	1	RMH-120-00100	1
15	3/8" FLARED TUBING	WIP-120-90426	1	WIP-120-90426	1	WIP-120-90426	1
16	GRANULES	WIP-130-00010	1	WIP-130-00010	1	WIP-130-00010	2
17	GLOWING EMBERS	WIP-130-00300	1	WIP-130-00300	1	WIP-130-00300	2
18	BACK LOG STANDOFFS	WIP-190-90560	2	WIP-190-90560	2	WIP-190-90560	2
19	TAPE SEALANT	RMH-120-00180	1	RMH-120-00180	1	RMH-120-00180	1
20	INSTRUCTION MANUAL	RMH-130-00588	1	RMH-130-00588	1	RMH-130-00588	1
21	WASHER	RCODZ00145A	1	RCOPZ00007A	1	RCOPZ00007A	1

**WARNING:** Improper use or installation may cause Carbon Monoxide Poisoning. Carbon Monoxide, is an colorless and odorless gas, and 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.

**WARNING: Do not burn wood, solid fuels, or other material in any fireplace fitted with a gas log set.**

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

Do not place clothing or other flammable material on or near the appliance.

Children and adults should be alearted to the hazards of high surface temperature and should be kept clear to avoid burns or clothing ignition.

- Young children should be carefully supervised when they are in the same room as the appliance.
- 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.
- A fireplace screen must be in place when appliance is operating. Unless other provisions are made for combustion air, the fireplace screen must have provisions for combustion air.
- Installation of this Energy Efficient Gas Log Set and provisions for combustion and ventilation air must conform with the National Fuel Gas Code ANSI Z21-84 and appliance local codes.
- 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.
- To operate this gas log set, the fireplace damper must be fully opened and locked.
- 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 this log set and it must not be used until the fireplace draft is corrected.
- This appliance must be installed with a Damper Stop Clamp (Part #14). When operating this gas log set, the flue damper must be fully open.
- The nominal inlet gas pressure for this appliance is 7" water column for natural gas.
- This appliance must also be disconnected from the gas supply system by closing its individual manual shutoff valve during any pressure testing at pressure equal to or less than 1/2 PSIG.

## FIREPLACE PREPERATION

- A. Professionally clean chimney and fireplace floor of any combustibile material to limit the smell from the system.
- B. Open fireplace damper fully and install Damper Stop Clamp with 1/4x2" set screw (Part 14#). This clamp is Designed to allow any pilot combustion by-products to vent (See **Fig.2**) Should the 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".  
The damper must be in the fully open position anytime the unit is in operation.
- C. Prior to connecting the gas log set, make sure that the gas supply to the fireplace is completely shut off.

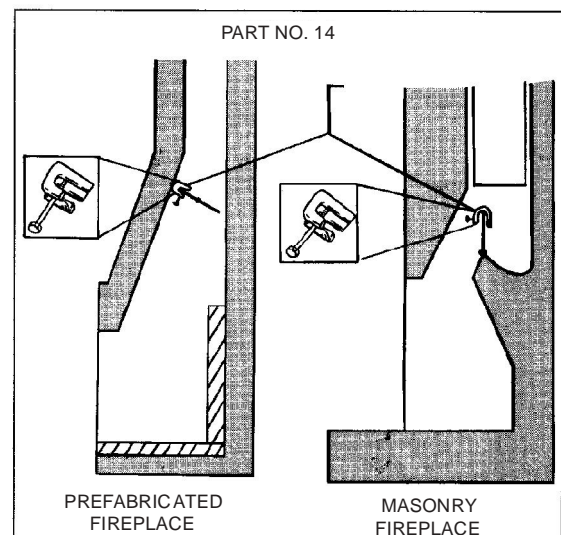


Figure 2. Damper stop clamp

- D. **Prefabricated fireplace:** Refer to the manufacturer's fireplace instruction manual for specific information regarding the running of a gas line into that particular model. A typical installation involves the insertion of a 1/2 inch gas pipe through the gas line tube provided by the manufacturer from **outside** the fireplace. The Knockout on the inside of the fireplace is removed as the gas pipe is punched through the fireplace. (See **Figure 3**).
- E. **Masonry fireplace:** 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 a shutoff valve either in the wall or inside the fireplace (see **Figure 4**).

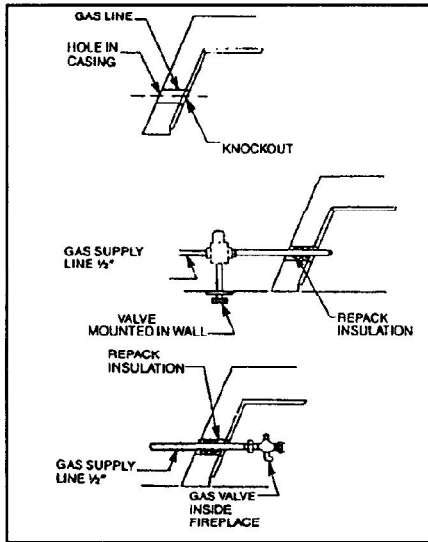


Figure 3. Gas line installation - Prefabricated Fireplace

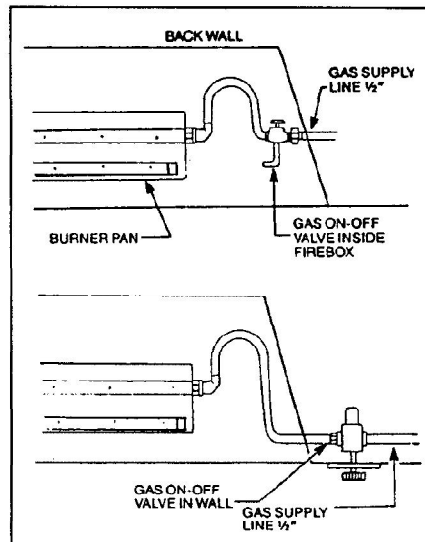


Figure 4. Gas line installation - Masonry Fireplace

## GAS LOG INSTALLATION

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

### BURNER PAN INSTALLATION

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

- A. Determine if the fireplace has a right or left hand gas line feed. The circular "Dimpled" hole covering must be knocked out on the appropriate side (right or left) of the burner pan.  
**NOTE:** Brace pan on workbench when removing burner knock-out. Strike knock-out plug with a punch or drift.
- B. Locate 3/8" locknut (Part #12) and washer (Part #21), and attach them to the 3/8" brass orifice elbow (Part #11) Do not fasten the locknut on the "flared" end.
- C. Slide the 3/4" burner support spacer (Part # 10) over the Dual Burner bar (Part #9) and move spacer to opposite side of the gas inlet connection (See **Figure 5**).
- D. Secure the intake end of the Dual burner bar (Part # 9) to the burner pan (Part # 8) through the knock-out hole selected (right or left hand) with the 3/8" brass orifice elbow (Part # 11), 3/8" locknut (Part # 12), and washer (Part #21) previously assembled in Step B (See **Figure 6**).
- E. Tighten elbow until firmly attached to the Dual burner bar. Then, firmly tighten the attached lock-nut on the elbow to seal the burner bar to the wall of the burner pan.

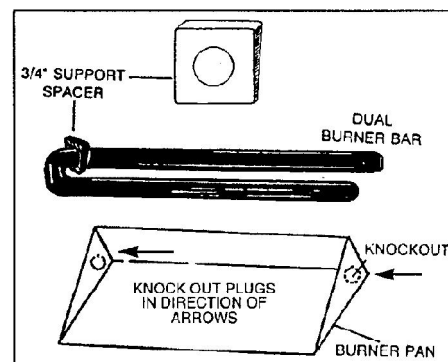


Figure 5. Burner bar placement

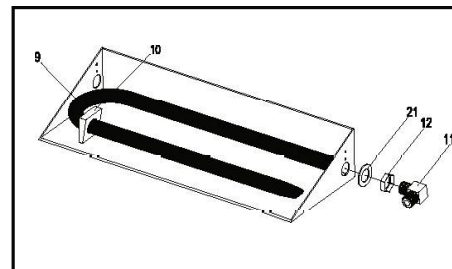


Figure 6. Burner bar connection

## CONNECTING GAS SUPPLY TO BURNER ASSEMBLY

Natural Gas applications installed without a Safety Pilot Kit. LP/NG Safety Pilot Kit available at your local store (If a Safety Pilot Kit is to be used, please refer to separate instructions included with the kit.)

- A. Place burner pan assembly in the center of the fireplace.
- B. Attach 3/8" Flare X 1/2" NPT gas valve (Part #13) to the 1/2 inch gas supply stub already in fireplace. Be certain connections are tight and use pipe compound on all male NPT (pipe) threads to seal joints.
- C. Attach 3/8" flared tubing (Part #15) to burner pan assembly. Attach opposite end to gas supply line by carefully bending the flared tubing as needed to make the connection. Avoid kinking the tubing while bending. If tubing must be cut, use a tubing cutter. Flare the cut end of tube with a flaring tool.  
NOTE: A good method of bending the 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, be sure to **empty** the tube completely of any sand before tube is connected to the gas supply line and burner assembly.
- D. Be certain all connections are tight. Only use pipe compound on all male NPT (pipe) threads. Test all connections with a soapy water solution, and with the gas supply turned on. If bubbles appear on any connection, 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 GRATE PLACEMENT

- A. Spread granules (Part # 16) over the installed burner pan. Granules should be sloped to the same angle as the burner pan filling the entire pan. (See Figure 7A.)
- B. Spread glowing embers (Part # 17) evenly 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 as shown. (See Figure 7B.)
- D. Attach back log Standoff (Part # 18) to the back part of the grate. (See Figure 7B.)

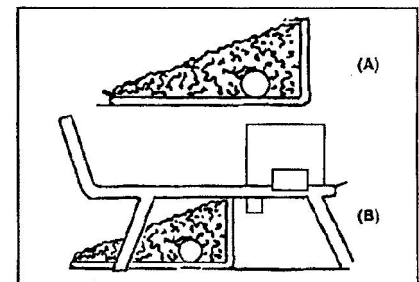


Figure 7 ( A & B) Granule and Grate Placement

**NOTE:** A hammer may be used to tap the back log stand-off in place. It may be necessary to squeeze the back log stand-off with pliers after attaching to the grate.

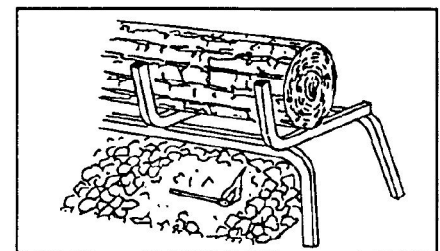


Figure 8. Lighting the log set

## 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 8**).
- D. With match burning, slowly turn on gas.

# LOG PLACEMENT

## MODEL: BRO18NG



**Log Identification**



**Back Log Stand-Offs in place**



**Place log (1) onto back left area of the grate, perpendicular to log (2)**



**Place log (3) at the front right of the grate with the "burned" area to the flame**



**Place "Y" shaped log (4) onto left of the grate ahead of raised area**



**Place log (5) atop log (4), brace on left center grate finger**



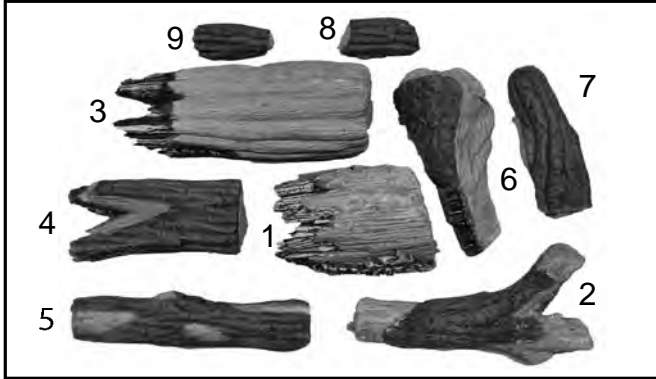
**Place log (6) atop logs (1) and (3)**



**Place the two small logs (7) and (8) in front of the grate as shown**

# LOG PLACEMENT

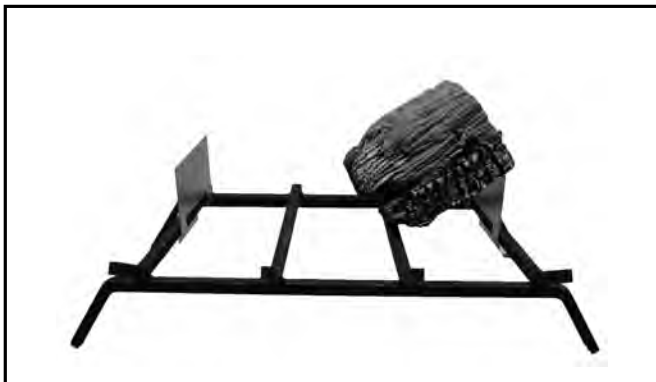
## MODEL: BRO24



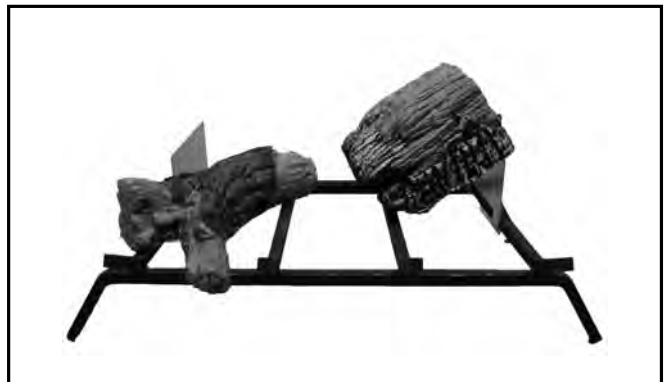
**Log Identification**



**Back Log Stand-Offs in place**



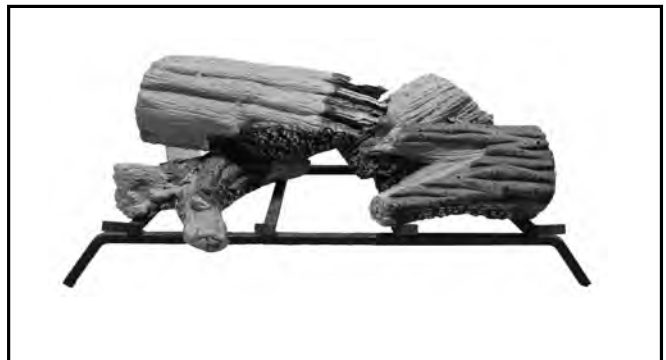
**Place log (1) onto back right area of the grate**



**Place "Y" shaped log (2) onto left of the grate ahead of raised area**



**Place log (3) onto back left area of the grate, perpendicular to log (1)**



**Place log (4) at the front right of the grate with the "split" area to the flame**



**Place log (5) on to log (2) and brace it on the grate finger left of center**



**Place log (6) atop logs (5) and (4) as shown**

# LOG PLACEMENT

## MODEL: BRO24 Continued

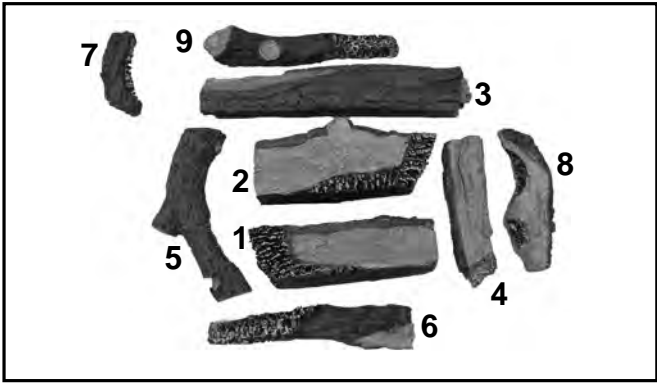


**Place the two small logs (7) and (8) in front of the grate as shown**

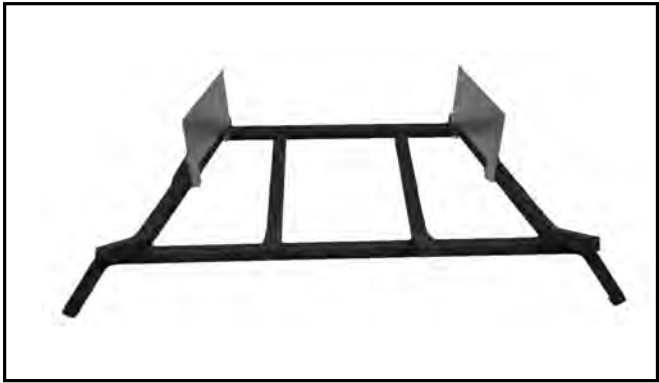


# LOG PLACEMENT

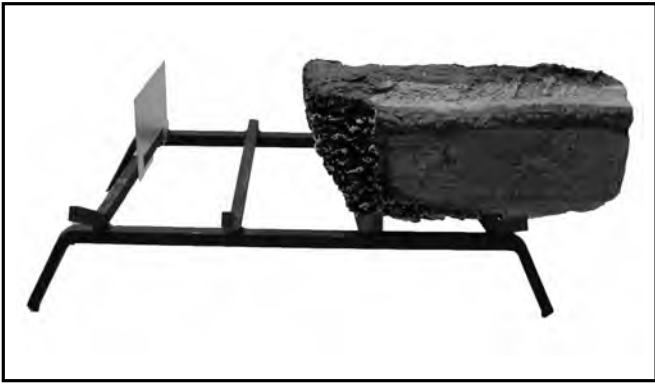
## MODEL: CSO24/CSO30



**Log Identification**



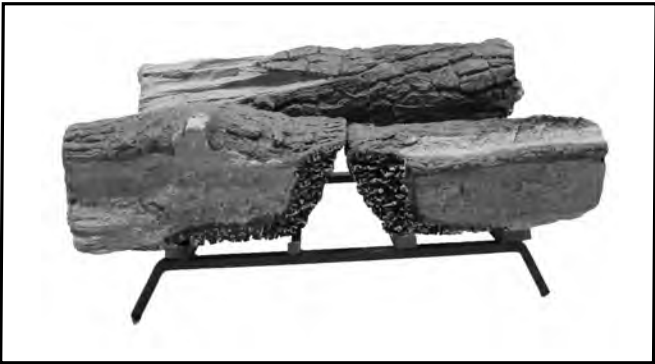
**Back Log Stand-Offs in place**



**Place Right front log (1) onto front area of the grate**



**Place left front log (2) onto front area of the grate**



**Place back log (3) onto raised area of the grate**



**Place Cross-Log (4) at the center left**



**Place "Y" shaped Cross-Log (5) at right**



**Place Cross-Log (6) from front left to lay on log (5) as shown**

# LOG PLACEMENT

## MODEL: CSO24/CSO30 Continued



**Place Cross-Log (7) at the center right**



**Place Cross-Log (8) at the top center  
across logs (5) and (7)**



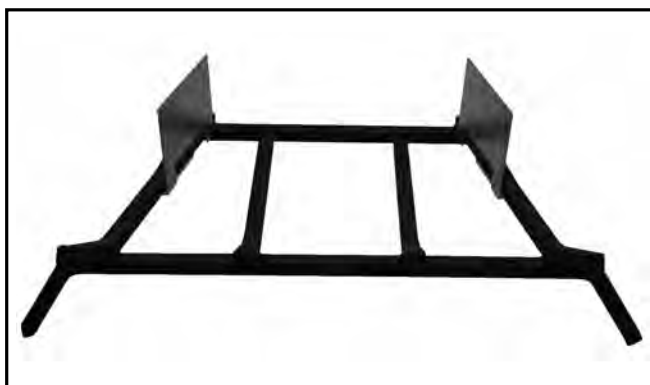
**Place log (8) in front of the set, on the fireplace floor  
Make sure it is in front of the burner pan**

# LOG PLACEMENT

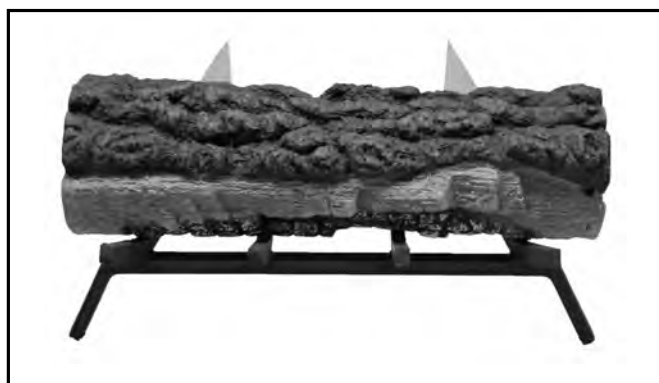
## MODEL: MO24NG



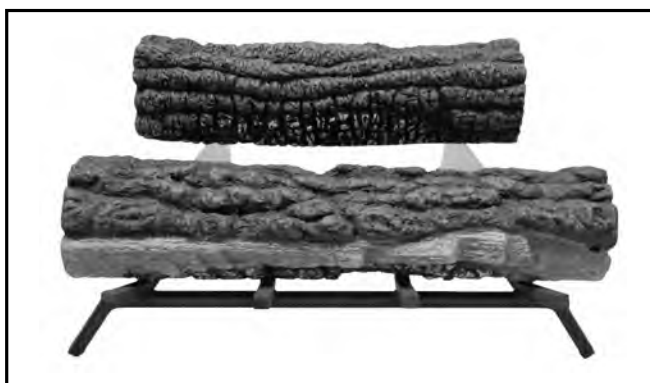
**Log Identification**



**Back Log Stand-Offs in place**



**Place Main Front Log (1) onto front area of the grate**



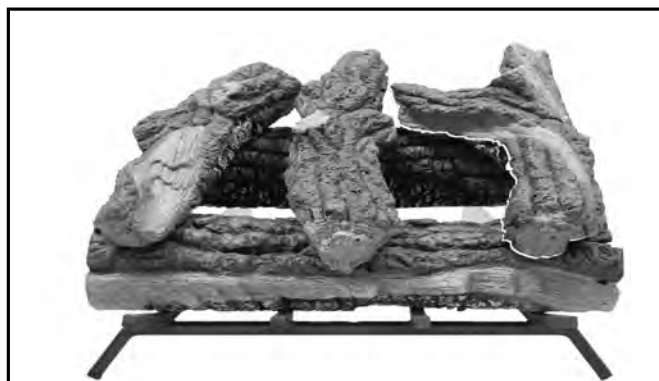
**Place shorter back log (2) onto Back Log Stand-Offs**



**Place Cross-Log (3) at the left side**



**Place Cross-Log (4) at the center**



**Place Cross-Log (5) at the right side**



**Place Cross-Log (6) from the center to the right side**

# LOG PLACEMENT

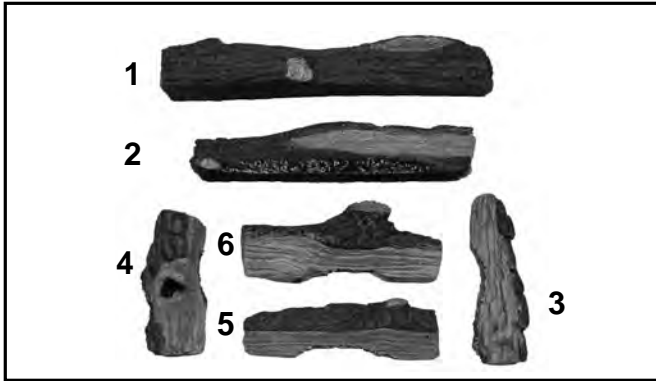
## MODEL: MO24NG Continued



**Place Cross-Log (7) atop the center  
Left (4) to the center right (5) logs**

# LOG PLACEMENT

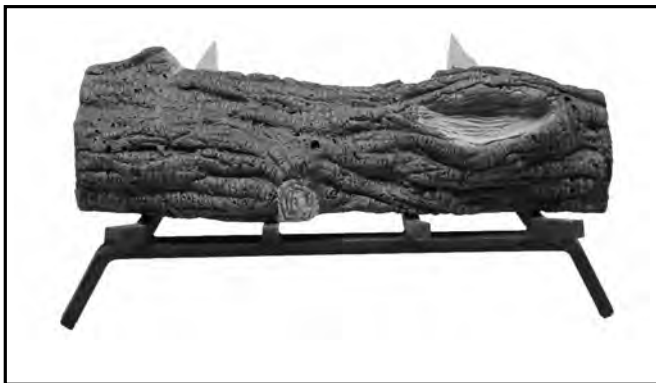
## MODEL: SH18NG



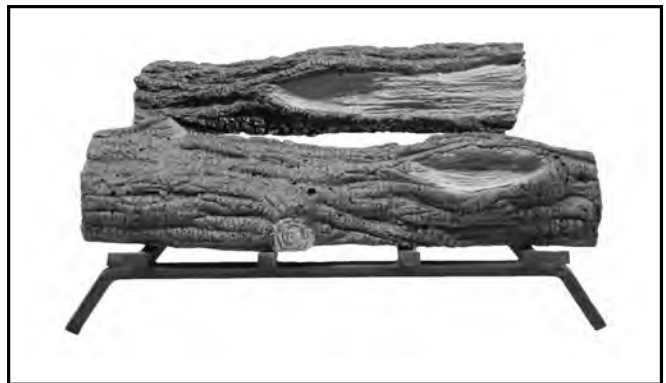
**Log Identification**



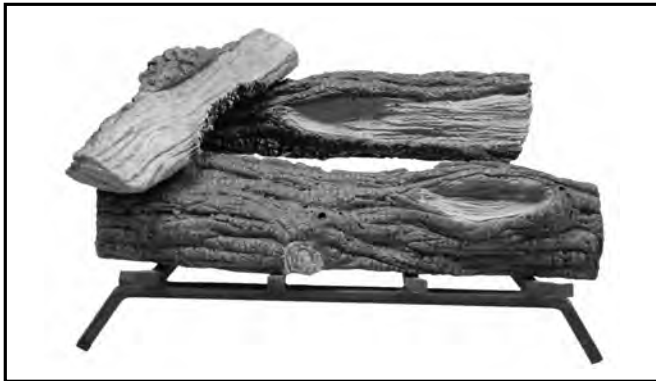
**Back Log Stand-Offs in place**



**Place main front log (1) onto front area of the grate**



**Place shorter back log (2) onto raised area of the grate**



**Place Cross-Log (3) at the left side**



**Place Cross-Log (4) at the right side**



**Place Cross-Log (5) at the center**



**Place Cross-Log (6) from the center to the right side**

# LOG PLACEMENT

## MODEL: SH24NG



**Log Identification**



**Back Log Stand-Offs in place**



**Place main front log (1)  
onto front area of the grate**



**Place shorter back log (2)  
onto raised area of the grate**



**Place Cross-Log (3) at the left side**



**Place Cross-Log (4) at the center left**



**Place Cross-Log (5) at the center right**



**Place Cross-Log (6) at the right side**

# LOG PLACEMENT

## MODEL: SH24NG Continued



**Place cross-log (7) atop cross-log (6) and  
to front center as shown**

## 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 fully in "on" position -gas line obstruction	-turn valve to "on" position -inspect supply lines/ tube for kinks or obstructions
2.	Inadequate flame	-Valve partially closed -gas line partial obstruction  -log arrangement incorrect	-open valve fully -inspect burner tube for kinks or obstructions  -rearrange logs to specified pattern

## LIMITED 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 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 Partway, 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 to SHM International within 14 days of purchase***  
If you have other questions, please contact the Customer Service Hotline - (800) 229-5647