

ROBERT H. PETERSON CO.
Real-Fyre®
 G7 SERIES GAS LOG SETS
 FOR NATURAL OR PROPANE GAS

AVAILABLE IN
THE
FOLLOWING
LOG STYLES IN
SIZES 20", 24"
and 30"

Golden Oak Designer
 (RD7)

Split Oak
 (S7)



**A.G.A. DESIGN
 CERTIFIED**
 to the
 Unvented Room Heater
 Standard
 ANSI Z21.11.2
 and as a
 Vented Decorative
 Appliance
 ANSI Z21.60



OWNER'S MANUAL

Installer:

Please leave these instructions with the consumer.

Consumer:

Please retain for future reference.

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**
 - Open a window.
 - 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 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.**

IMPORTANT: READ THIS MANUAL CAREFULLY BEFORE STARTING INSTALLATION OF YOUR UNVENTED GAS LOG SET.

This is an unvented gas-fired heater. It uses air (oxygen) from the room in which it is installed. Provisions for adequate combustion and ventilation air *must* be made. Refer to PAGE 8.

There may be conditions requiring a window to be opened slightly or ventilation to be otherwise increased. **SEE VENTILATION AND CONFINED SPACE INFORMATION ON PAGE 8.**

G7 UNVENTED GAS LOG SETS

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GENERAL INFORMATION

These Unvented Gas Log Sets are available with either a manual valve; or a millivolt valve that can be controlled with a switch, wall thermostat, or remote control.

A spark ignition system (piezo) allows the gas pilot to be lit without the use of matches, and permits the operation of the appliance during a power outage.

This Unvented Gas Log Set is equipped with a pilot light safety system with ODS (Oxygen Depletion Sensor). The ODS senses the amount of oxygen available in the room and shuts the log set off before the oxygen level drops below 18%. The pilot can only be relit when fresh air is available. This may require opening a window or a door to another room or cracking the damper open slightly.

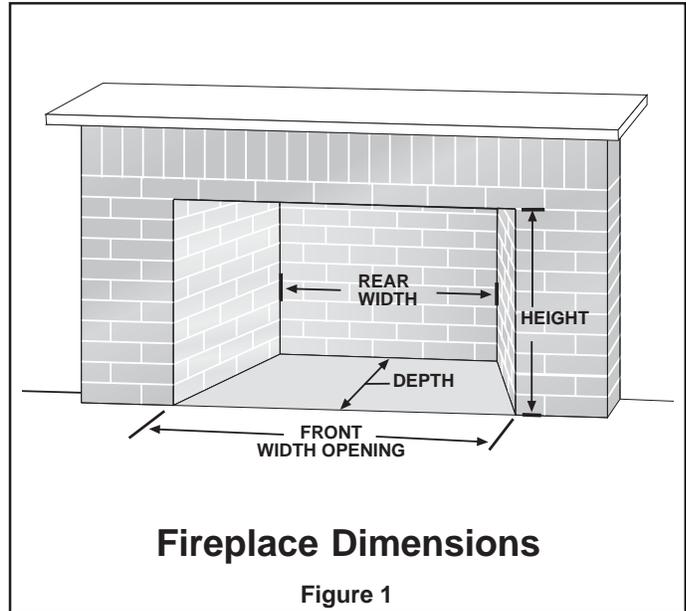
Your Real-Fyre Gas Log Set has been certified to two standards:

- UNVENTED ROOM HEATER-ANSI Z21.11.2
- VENTED DECORATIVE APPLIANCE-ANSI Z21.60

Check local or state codes to determine if unvented heaters are permitted in your locality before you install this log set as an unvented appliance. If not permitted, you may install and operate this log set as a vented appliance.

APPROVED INSTALLATIONS

1. Solid Fuel Burning Fireplaces.
2. Approved Unvented Fireplaces:
FMI "GL" and "UV" series, Superior VFCE" series and Temco Fireplace Prod. "ADL" and "ADF" series.
3. Certain Universal Approved Unvented Fireplaces.



FIREPLACE SIZE REQUIREMENTS AND BTU RATING INFORMATION

The minimum size of FIREPLACE for installation of the REAL-FYRE Unvented Gas Log Set is:					BTU Rating		
Log Set Size	Width		Depth	Height	High Setting	Low Setting	
	Manual Valve	Millivolt Valve				Millivolt Valve	Manual Valve
20"	24" front 17" rear	26" front 21" rear	13"	17"	32,000	19,000 Nat. 23,000 L.P.	*
24"	26" front 21" rear	26" front 23" rear	13"	17"	32,000	19,000 Nat. 23,000 L.P.	*
30"	32" front 21" rear	32" front 23" rear	13"	17"	39,000	19,000 Nat. 26,000 L.P.	*

Figure 2

*The manual valve allows adjustable flame height and heat output. **THESE SETTINGS SHOULD ALWAYS BE HIGH ENOUGH FOR THE CENTER FLAME ON THE REAR BURNER TO BE CLEARLY VISIBLE ABOVE THE FRONT BOTTOM LOG. NEVER SET THE VALVE LOWER.** (See Page 10, Section I.)

IMPORTANT SAFETY INFORMATION

Caution: Installation and repair must be done by a qualified service person. Read these instructions before installing this gas log set. Be sure you understand all safety precautions and warnings contained in this manual.

ANSI Z21.11.2 UNVENTED HEATER STANDARD SAFETY INFORMATION

A. WARNING: CARBON MONOXIDE POISONING MAY LEAD TO DEATH.

When used without fresh air, gas log sets may give off carbon monoxide, an odorless, colorless, poisonous gas. Early signs of carbon monoxide poisoning are similar to the flu, with headaches, dizziness and/or nausea. If you have these signs, the gas log set may not be installed correctly, or may not be working properly. **GET FRESH AIR AT ONCE! STOP USING THE LOG SET IMMEDIATELY!** Have the log set serviced before using again.

Some people, including pregnant women, persons with heart or lung disease, asthma or anemia, those under the influence of alcohol and persons at high altitudes are more affected by carbon monoxide than others.

B. This is an unvented gas-fired heater. It uses air (oxygen) from the room in which it is installed. Provision for adequate combustion and ventilation air MUST be made.

C. INSTALLATION AND PROVISION FOR COMBUSTION AIR AND VENTILATION AIR MUST CONFORM TO ALL LOCAL CODES AND TO THE LATEST EDITION OF THE NATIONAL FUEL GAS CODE ANSI Z223.1 OR NFPA54.

D. DO NOT MODIFY THIS UNVENTED HEATER OR ITS CONTROLS. Any change may be dangerous. Improper installation or use of your unvented gas log set can cause serious injury or death from fire, burns, explosions or carbon monoxide poisoning.

E. This appliance is designed as an “attended appliance”. Adults must be present when the unit is operating. Do not leave this unit burning when unattended or while anyone is sleeping.

BE CAREFUL

**If not installed and used correctly per these instructions,
this product can cause serious injury.**

IMPORTANT SAFETY INFORMATION

Caution: Installation and repair must be done by a qualified service person. Read these instructions before installing this gas log set. Be sure you understand all safety precautions and warnings contained in this manual.

PRE-INSTALLATION AND FIREPLACE PREPARATION SAFETY GUIDELINES

- A. This appliance is for installation ONLY in a solid fuel burning fireplace, or an APPROVED unvented firebox enclosure (see page 4). Contact the Robert H. Peterson Co. or your Peterson Distributor for further information on currently approved fireboxes.
- B. Before installing this gas log set, check Safety - Ventilation and Confined Space Information (page 8) to ensure that the **unit is properly sized for the space (room) in which it is installed.**
- C. Before installing this gas log set, check Fireplace Size requirements (page 4) to ensure that the unit is **properly sized for the fireplace.**
- D. Before installing in a solid fuel burning fireplace, the chimney flue, damper, and firebox must be thoroughly CLEANED of soot, creosote, ashes, and loose paint and inspected by a qualified chimney cleaner. Some older fireplaces may need repair prior to installing this appliance.
- E. CHECK GAS TYPE (Natural or Propane): The gas supply must be the same as stated on your Gas Log Set rating plate. If the gas supply is different, **DO NOT INSTALL.** Contact your dealer for immediate assistance.
- F. Any outside air ducts and/or ash dumps located on the floor or wall of the fireplace must be permanently sealed shut during the installation. Use a heat resistant sealant. Do not seal the chimney flue damper.
- G. INSUFFICIENT GAS PRESSURE WILL KEEP THE ODS/PILOT FROM OPERATING PROPERLY. DO NOT USE IF GAS PRESSURE IS LOWER THAN THE MINIMUM REQUIREMENT. SEE 'H', directly below, and see Checking Gas Pressure (page 20).
- H. The minimum inlet gas supply pressure for purposes of input adjustment is **5 inches** water column on **natural gas**; and **11 inches** water column on **LP gas**. Insufficient gas pressure will affect proper operation of the ODS. Do not install this Gas Log Set if minimum pressure is not available. The maximum inlet gas supply pressure is 10.5 inches water column on natural gas; and 13 inches water column on LP gas. The LP source must be regulated (Do not connect this appliance directly to an unregulated Propane LP Gas tank - this can cause an explosion).
- I. Gas piping system must be sized to provide minimum inlet pressure at the maximum flow rate (BTU/hr). Undue pressure loss will occur if the pipe is too small, or the run is too long.
- J. Some people, including pregnant women, persons with heart or lung disease, asthma or anemia, those under the influence of alcohol and persons at high altitudes are more affected by carbon monoxide than others.

IMPORTANT SAFETY INFORMATION

PRE-INSTALLATION AND FIREPLACE PREPARATION SAFETY GUIDELINES cont.

- K. Tightly constructed homes may require increased ventilation for the product to work correctly.
- L. Do not install this appliance in a bedroom, bathroom, or any room where the occupant may be sleeping.
- M. The minimum clearance from the fireplace opening to combustible materials on the side walls and ceiling must be maintained as outlined in section "MINIMUM CLEARANCE TO COMBUSTIBLES - WALLS AND CEILING" (see Page 13).
- N. At least 10"-12" of non-combustible or heat resistant material is required above the fireplace. A fireplace hood will be required to act as a heat deflector in protecting combustible fireplace surrounds (facing and/or mantel) if certain minimum clearances cannot be met. (See Minimum Clearance to Combustibles - Above and In front of the Fireplace - Mantels and Fireplace Hoods, page 13).
- O. Be certain that combustible flooring material (i.e.: carpet, tile, etc.) is not too close to this gas log set. If this gas log set is at floor level or less than 6" above the floor, there must be at least 12" of non-combustible material between the base of the fireplace and any combustible flooring.
- P. Input ratings shown in BTU per hour are for elevations up to 2,000 ft. For elevations above 2,000 ft., input ratings should be reduced approximately 4% for each 1,000 ft. above sea level. Refer to the National Fuel Gas Code. Contact the Robert H. Peterson Company before installing this product at elevations above 2,000 ft..
- Q. The Gas Log set and its main gas valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psig.

The Gas Log Set must be isolated from the gas supply piping system by closing its equipment shut-off valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psig. This is accomplished by closing the gas supply line valve, as required by NFPA 54, section 5-54.

SAFETY - VENTILATION AND CONFINED SPACE INFORMATION

IT MAY BE NECESSARY TO OPEN A WINDOW SLIGHTLY (1" - 2") OR OTHERWISE INCREASE VENTILATION. Conditions requiring this include, but are not limited to:

1. Installation in a "Confined Space".
2. Installation in a Tightly-Constructed Home.
3. Installation at High Altitudes.
4. Certain medical or physical conditions of the homeowner which may be adversely impacted by combustion products created by burning natural or propane gas.

Your Unvented Gas Log Set shall not be installed in a confined space unless provisions are made for adequate combustion and ventilation air.

The National Fuel Gas Code defines a **confined** space as a space where volume is **less than 50** cubic feet per 1000 BTU per hour (4.8 cubic meters per kw) of the aggregate input rating of all appliances installed in that space.

An **unconfined** space is a space where volume is **at least 50** cubic feet per 1000 BTU per hour (4.8 cubic meters per kw) of the aggregate input rating of all appliances in that space. Rooms communicating directly with the space in which the appliances are installed, through openings not furnished with doors, are considered a part of the space.

WARNING: If the area in which the log set may be operated is smaller than that defined as an unconfined space or if the building is of unusually tight construction, you must provide adequate combustion and ventilation air by one of the methods described in the National Fuel Gas Code, ANSI Z223.1, Section 5.3 or applicable local codes.

To determine if the area where this Gas Log Set is to be installed fits the definition of an "unconfined space", multiply the length of the room, by the width of the room, by the height of the room, then multiply by 20. The result is the maximum BTU's allowed.

(Length x Width x Height x 20 = Maximum BTU's allowed)

Example: To install a Real-Fyre G7 20" or 24" Unvented Gas Log Set (32,000 BTU) in a space with no other gas burning appliances, the space **MUST** be 1600 cubic feet or larger (assuming an 8' ceiling, space dimensions must be a minimum of 200 sq. ft., - i.e.: 10'x20', 16'x12.5', etc.) See Figure 3.

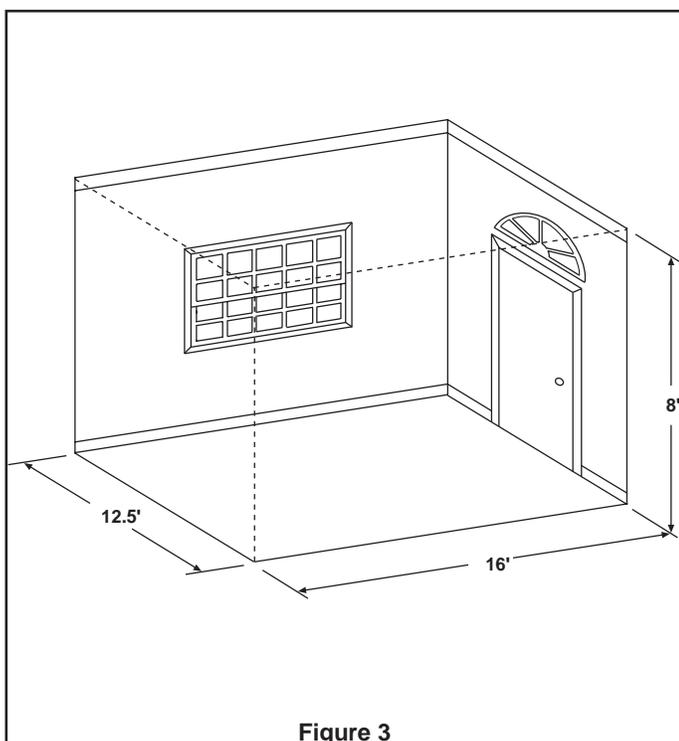


Figure 3

Installation in a tightly-constructed home and/or installation at high altitudes may cause your Unvented Gas Log Set to produce excessive heat, or excessive moisture. The oxygen depletion sensor may shut down the log set. These conditions may be corrected by opening a window or otherwise increasing ventilation.

The Peterson Real-Fyre Unvented Gas Log Set has been certified to function safely and reliably with emission by-products well within accepted safety and health standards. Your specific medical or physical condition may render you more sensitive to products created by burning natural or propane gas. If this is the case, you should open a window or otherwise increase ventilation.

REMEMBER

L X W X H X 20 = MAXIMUM BTU's ALLOWED

If the space is smaller than the above formula allows, and/or smaller than the examples and diagrams on this page specify, do not install the Unvented Gas Log Set unless provisions for additional combustion and ventilation air are made.

IMPORTANT SAFETY INFORMATION

Caution: Installation and repair must be done by a qualified service person. Installer read these instructions before installing this gas log set. Be sure you understand all safety precautions and warnings contained in this manual.

INSTALLATION SAFETY GUIDELINES

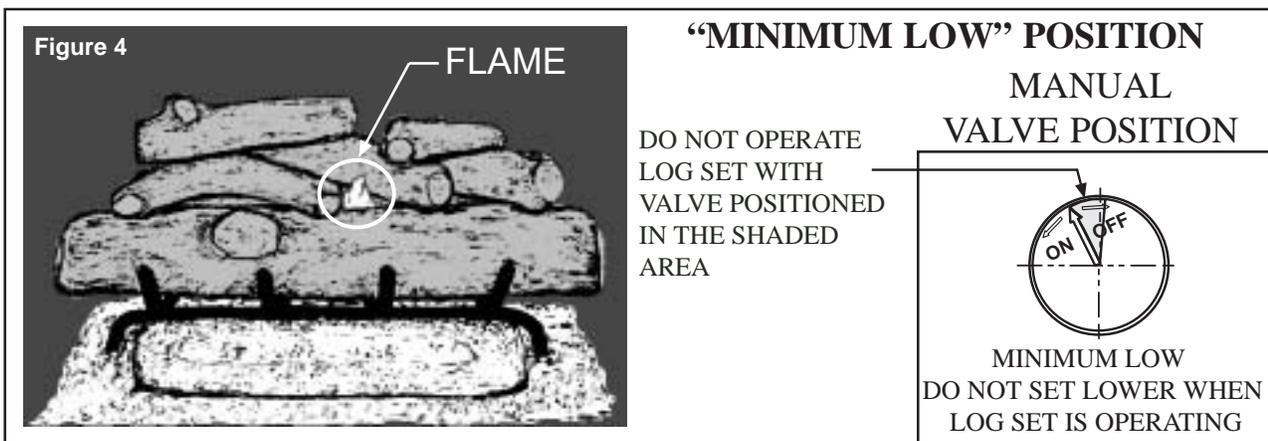
- A. Before installing in a solid fuel burning fireplace, the chimney flue and firebox **must be cleaned** of soot, creosote, ashes, and loose paint by a qualified chimney cleaner.
- B. Carefully inspect the burner and log cartons for shipping damage. If any parts are missing/damaged, call your dealer. **Do not attempt** to install the appliance unless all parts are in good condition.
- C. Insufficient gas pressure will keep the ODS from operating properly. Do not use if gas pressure is lower than the minimum requirement. See Checking Gas Pressure (page 20).
- D. Correct installation of each of the refractory ceramic gas logs, and proper placement and installation of the burner assembly, including ember bed and grate, are crucial to safe performance of your log set. Problems **WILL** occur if all items are not properly installed and placed. See Installation (pages 18-22) for further information.
- E. We recommend securing the gas log Unvented to the fireplace floor. If not, the entire unit may move when you adjust the controls. Movement of unit may cause shifting of the gas logs which leads to sooting and improper burning. Grate movement could cause a gas leak. Two (2) security holes are provided on the burner plate for this to be accomplished (See figure 12, page 19).
- F. When installing in a wood-burning fireplace, place the log set forward in the fireplace - while making certain that no part of the assembly protrudes (forward) beyond the face of the fireplace. **DO NOT PUSH THE UNIT ALL THE WAY TO THE BACK.**
- G. Do not allow lava granules in or on any part of the burner assembly or on the logs. Lava granules should only be placed on the floor of the fireplace or on the front and sides of the burner plate (away from burner or controls) to build up to ember bed as instructed in Lava Granule Placement (page 22).
- H. **DO NOT PLACE** logs or other accessories such as wood chips, pine cones or vermiculite on this appliance. These items will cause improper burning, sooting and/or high levels of carbon monoxide. Additional logs and/or accessories may be placed around the burner system, as long as they do not interfere with the burning of your G7 Series Unvented Gas Log Set.
- I. Due to high temperatures, the Log Set should be located out of traffic, away from furniture/draperies.
- J. A fireplace screen must be in place when the Gas Log Set is in operation. Unless other provisions for combustion air are provided, the screen shall have an opening(s) for introduction of combustion air.
- K. Connecting directly to an unregulated propane/LPG tank can cause an explosion.
- L. Special care is required if you are installing the unit into a sunken fireplace. You must raise the fireplace floor to allow access to gas log controls. This will ensure adequate air flow and guard against sooting. Raise the fireplace floor using noncombustible materials.

IMPORTANT SAFETY INFORMATION

Caution: Installation and repair must be done by a qualified service person. Installer read these instructions before installing this gas log set. Be sure you understand all safety precautions and warnings contained in this manual.

OPERATING YOUR UNVENTED GAS LOG SET SAFELY AND CORRECTLY

- A. SOLID FUEL MUST NOT BE BURNED in a fireplace where your unvented gas log is installed.
- B. GLASS DOORS MUST BE OPEN when your unvented gas log set is operating. This appliance MUST NOT BE ON if glass doors are closed. This can lead to sooting, burner outages and possibly explosion causing damage or injury.
- C. DON'T ALLOW DRAFTS INTO THE FIREPLACE. DON'T OPERATE FANS, WHICH MAY ALTER FLAME PATTERNS. Sooting, excess *carbon monoxide*, or pilot outages may occur due to drafts.
- D. DO NOT USE A BLOWER INSERT, HEAT EXCHANGER INSERT or any other accessory which is not specifically certified for use with your Unvented Gas Log Set (Check with the fireplace manufacturer to be certain that any unit is compatible with the fireplace).
- E. Do not allow lava granules in or on any part of the burner assembly or on the logs. Lava granules should only be placed on the floor of the fireplace, or on the front and sides of the burner plate (away from burner or controls) to build up to ember bed as shown in Lava Granule Placement (pg. 22).
- F. Make sure there is adequate combustion and ventilation air when your logset is operating. (You may need to crack the damper or open a window slightly).
- G. Do not continue using if you smell odors, or have headaches, nausea or are dizzy.
- H. To light the pilot: Prime the unit by depressing the control knob in the pilot position. At the same time, press and release the piezo ignitor. Continue to depress the control knob for up to 1 minute. Prime the unit for longer than 1 minute after long periods of non-use.
- I. **For manual valve systems:**
When your Log Set is burning, YOU SHOULD CLEARLY SEE FLAME on the top/rear burner above the front bottom log.



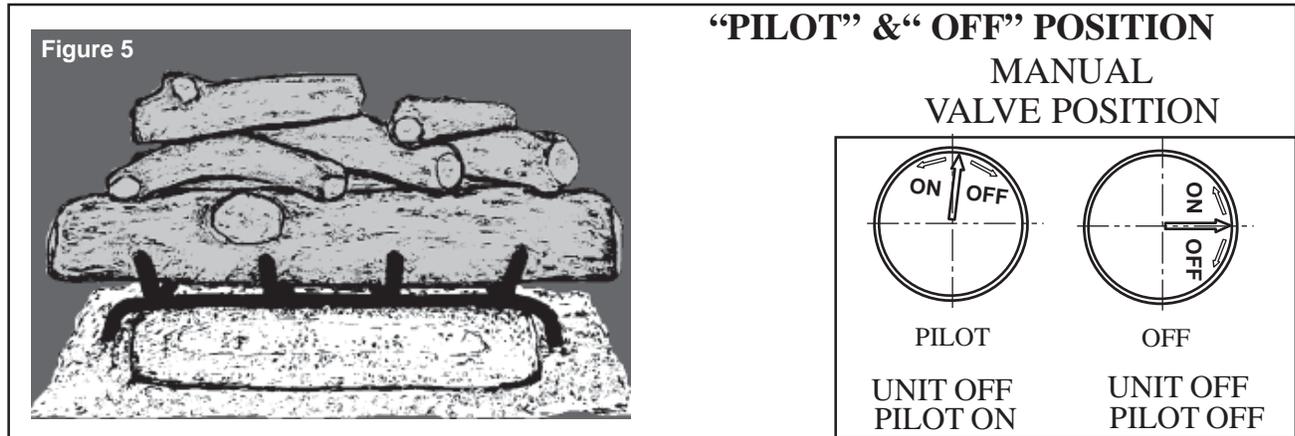
When rear top flame is clearly visible, the set is operating at the minimum low position. If you operate the set at lower settings, soot will develop which will create a dangerous situation.

- J. Wait 30 seconds or more, before readjusting the unvented gas log set when the control knob has been turned down to a lower setting.

IMPORTANT SAFETY INFORMATION

OPERATING YOUR UNVENTED GAS LOG SET SAFELY AND CORRECTLY - cont.

- K. If you operate your Unvented Gas Log Set fueled by propane gas, operating characteristics may vary as the fuel in the tank approaches empty (less than 1/4 full). Sooting and other increases in combustion by-products will occur. Turn off your Log Set, re-fill your Propane tank, and have your burners cleaned.
- L. When shutting the unit down—be sure to TURN THE FLAME FULLY OFF (to Pilot/or Off). Make sure burner is completely off for 30 seconds before re-lighting!



- M. During manufacturing, various components of this appliance are treated with oils or paints. These are not harmful, but may produce annoying smoke and smells as they are burned off during initial operation. This is a normal and temporary occurrence. The initial break-in period should last 4-6 hours. Provide maximum ventilation during break-in by opening windows, doors, or the chimney flue to allow odors to dissipate. The only odors remaining after this initial period should be those odors associated with the combustion of Natural or Propane Gas, and should be minimal.
- N. Keep the area around your Gas Log Set clear of combustible materials, gasoline, and any other flammable vapors/liquids. Provide adequate clearance for servicing and operation. Be especially cautious if your Gas Log Set is installed in a basement or converted garage.
- O. Do not place clothing or any flammable material on or near your Unvented Gas Log Set. Matches, paper, garbage, or any other material must not be thrown on top of the logs, burner, or into the flame.
- P. Young children should be carefully supervised when in the same room with this appliance.
- Q. Children and adults should be alerted to the hazard of high surface temperatures and should stay away to avoid burns or clothing ignition.
- R. Unvented gas heaters are **supplemental zone heaters, not to be used as a primary heating source**. Water vapor produced by an unvented heater can create moisture problems in a home when operated for extended periods of time. If condensation begins to occur, open your damper or a window.
- S. DO NOT PLACE logs or other accessories such as wood chips, pine cones or vermiculite on this appliance. These items will cause improper burning, sooting and/or high levels of carbon monoxide. Additional logs and/or accessories may be placed around the burner system, as long as they do not interfere with the burning of your G8 Series Unvented Gas Log Set.
- T. Do not use your Unvented Gas Log Set if any part of it has been under water. Immediately call a qualified service technician to inspect the set and to replace any part of the control system and any gas control which has been under water.
- U. If the gas quality is poor, your pilot may not stay lit, the burners may produce soot or the unit may backfire. If the gas quality or pressure is low, contact your local gas supplier immediately.
- V. This appliance is designed as an “attended appliance”. Adults must be present when the unit is operating. Do not leave this unit burning when unattended or while anyone is sleeping.

IMPORTANT SAFETY INFORMATION

Caution: Installation and repair must be done by a qualified service person. Installer read these instructions before installing this gas log set. Be sure you understand all safety precautions and warnings contained in this manual.

CLEANING and SERVICING

- A. Always shut off the gas to Unvented Gas Log Set while performing service work.
- B. Allow your Unvented Gas Log Set to cool before servicing.
- C. **Your Gas Log Set should be inspected regularly to prevent burner shutdown, sooting, odors, etc.. This unit must be cleaned at least annually by a professional service person to check for clean burning operation and proper ODS appearance, with the correct tools to service this unit. More frequent cleaning may be required.** Excessive lint can build up on this unit from carpeting, bedding material, pet hairs, or other particles in the air. It is critical that all control components, burners, and circulating air passageways be kept clean and free of all obstructions. Your ODS/Pilot is especially sensitive to a dirty environment, and will not function properly if dirty.

Make certain all air openings are clean and free of obstructions, including:

- 1. The two (2) air intake openings on ODS/Pilot Assembly.
- 2. The pilot opening.
- 3. The air shutters - on a natural gas set, the front/bottom burner ; on a propane gas set, both the front/bottom and rear/top burners.
- 4. All of the portholes on the carryover tube.
- 5. All of the portholes on both the front/bottom burner and the rear/top burner.

See pages 27 and 28 for more information on Cleaning and Servicing your Unvented Gas Log Set.

- D. Any safety screen or guard removed for servicing must be replaced prior to operating this Gas Log Set.

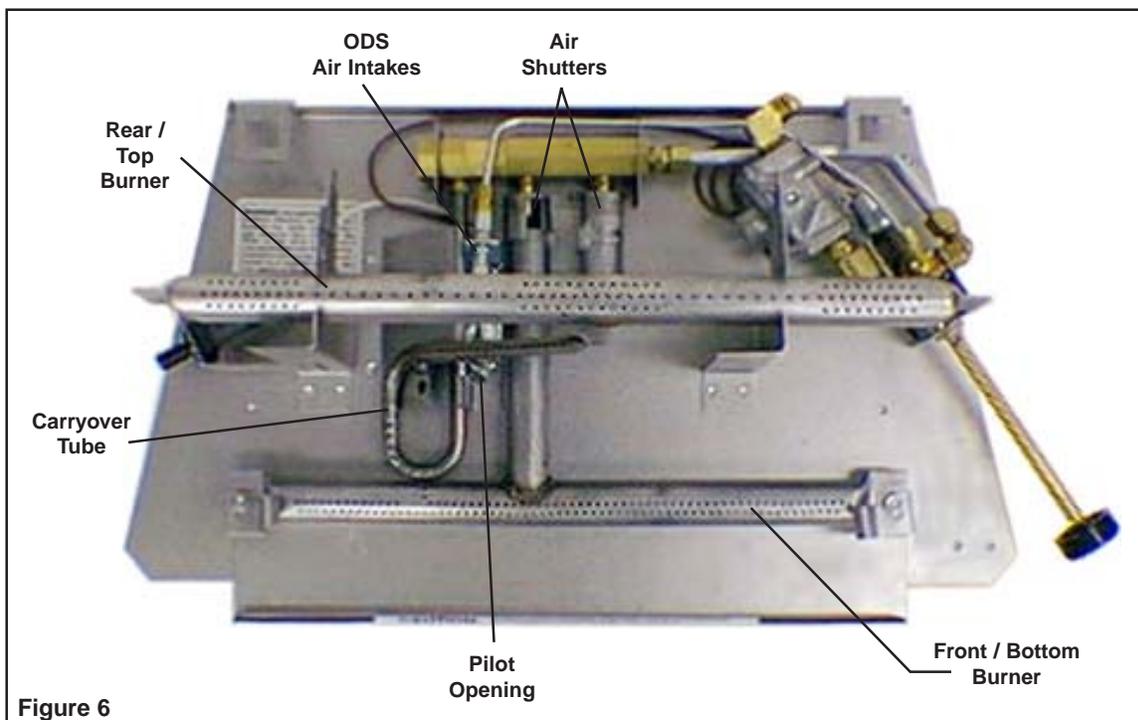


Figure 6

MINIMUM CLEARANCE TO COMBUSTIBLES - WALL AND CEILING

If your Unvented Gas Log Set is installed in a factory built fireplace, follow the manufacturers guidelines for minimum clearances to combustibles. In the absence of such guidelines, follow the instructions below.

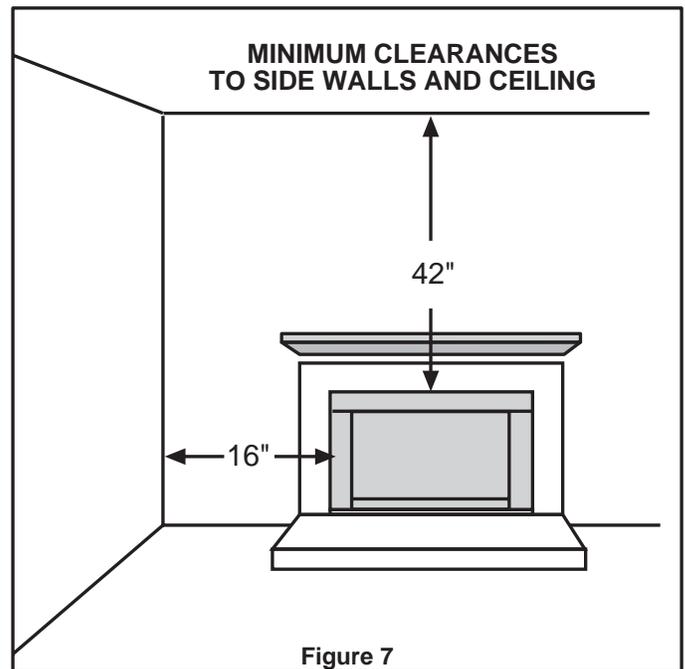
Clearances to Combustible Construction:

Sidewalls:	16" from side of fireplace opening (Figure 7).
Ceiling:	42" from top of fireplace opening (Figure 7).
Mantel:	See page 14 (Figures 8 and 9) (Section A).
Flooring:	See page 14 (Section B).



NOTE: Clearances to combustible construction are those distances required to ensure that fireplace mantels, facings, walls, ceilings, and floorings will not catch fire.

In most cases, these clearances should also be adequate to prevent any discoloration or warping due to heat. However, every Gas Log Installation presents a different and unique set of circumstances involving many variables beyond the control of the Gas Log Manufacturer. These include paint or finish composition, previous exposure to heat, methods and quality of construction, air flow patterns, glass doors, fans or blowers, etc.. Because of these variables, we cannot guarantee that heat warping or discoloration will never occur. The potential for heat or discoloration may exist no matter what item(s) you are burning in your fireplace, including wood.



The dimensions shown in Figure 7 are **MINIMUM CLEARANCES** to maintain when you install this gas log set. **BOTH SIDES** of the fireplace opening **MUST BE AT LEAST 16"** from any combustible sidewalls. The ceiling **MUST BE** at least **42"** from the top of the fireplace opening.

MINIMUM CLEARANCE TO COMBUSTIBLES - ABOVE AND IN FRONT OF THE FIREPLACE HOW TO SPECIFY, CORRECTLY SIZE, AND INSTALL MANTELS AND FIREPLACE HOODS

A. ABOVE THE FIREPLACE:

To install your unvented gas log set, there must ALWAYS be non-combustible or heat resistant material immediately above the fireplace opening. Heat resistant materials (i.e., marble or slate) must be at least 5/8" thick. Sheet metal should not be installed onto combustible materials.

If you DO NOT install a fireplace hood, there MUST be at least 12" of non-combustible or heat resistant material immediately above the fireplace opening. (See X in figure 8 below).

If you DO install a fireplace hood, there MUST be at least 10" of non-combustible or heat resistant material immediately above the fireplace opening. (See Y in figure 9 below).

If there is a wooden mantel, shelf, or other combustible projection above the fireplace, follow the information in figure 8 or figure 9 below:

- EXAMPLE: If the fireplace has a combustible projection (mantel or shelf) 20" above the top of the firebox, the maximum horizontal projection out from the face of the fireplace will be:
1. If a fireplace hood is not installed - 2.5" (see figure 8).
 2. If a fireplace hood is installed - 10" (see figure 9).

A fireplace hood deflects heat away from the fireplace face and mantel reducing the potential for heat related warping or discoloration. The use of a fireplace hood is highly recommended. Fireplace hoods are sold by the Robert H. Peterson Co. through authorized distributors and dealers.

MANTEL CLEARANCE WITHOUT HOOD

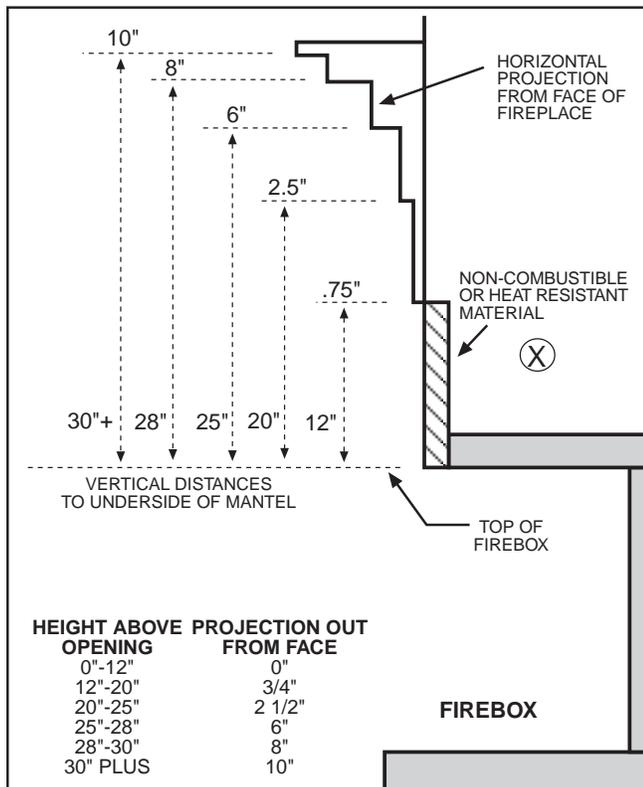


Figure 8

MANTEL CLEARANCE WITH HOOD*

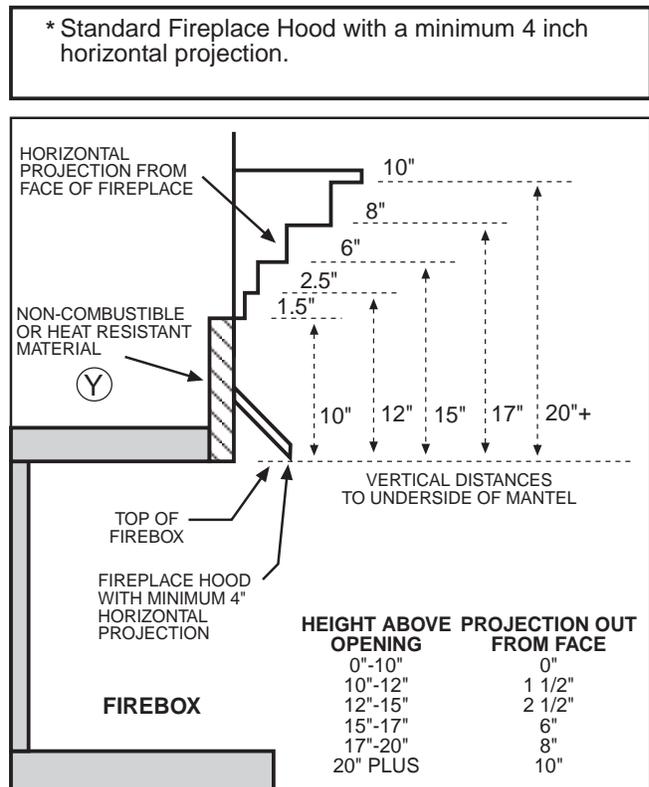


Figure 9

**IF YOU CANNOT MEET THESE MINIMUM CLEARANCES,
YOU MUST OPERATE THE UNVENTED GAS LOG SET WITH THE CHIMNEY FLUE DAMPER OPEN.**

B. IN FRONT OF THE FIREPLACE:

Be certain that combustible flooring material (i.e.: carpet, tile, etc.) is not too close to your unvented gas log set. If your unvented gas log set is at floor level or less than 6" above the floor, there MUST be at least 12" (1 foot) of non-combustible material between the front of the fireplace and any combustible flooring.

LOGS - PARTS LIST

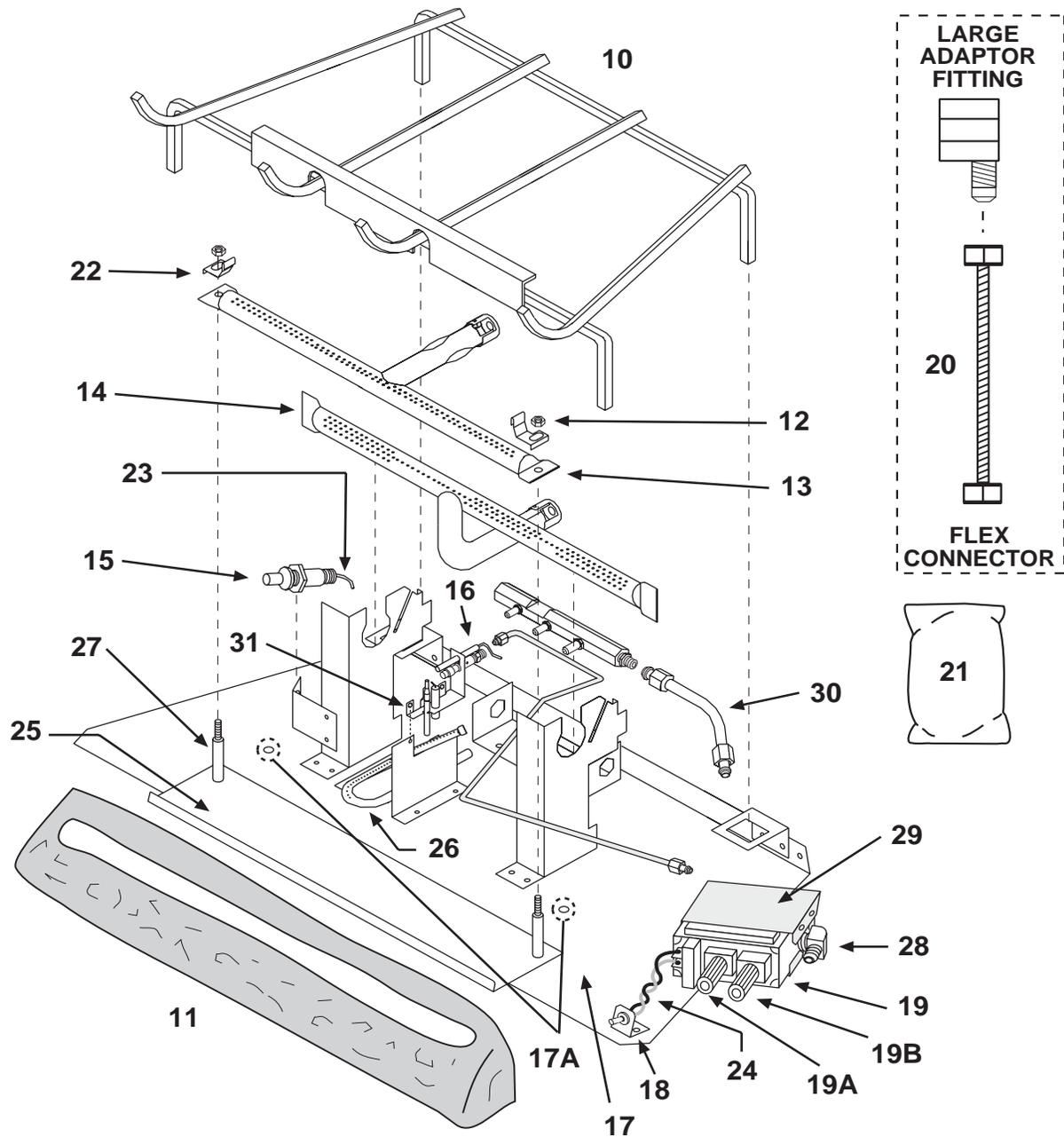
WARNING: Failure to position the parts in accordance with these diagrams or failure to use only parts specifically approved with this unvented gas log set may result in property damage or personal injury.



RD = Golden Oak Designer S = Split Oak

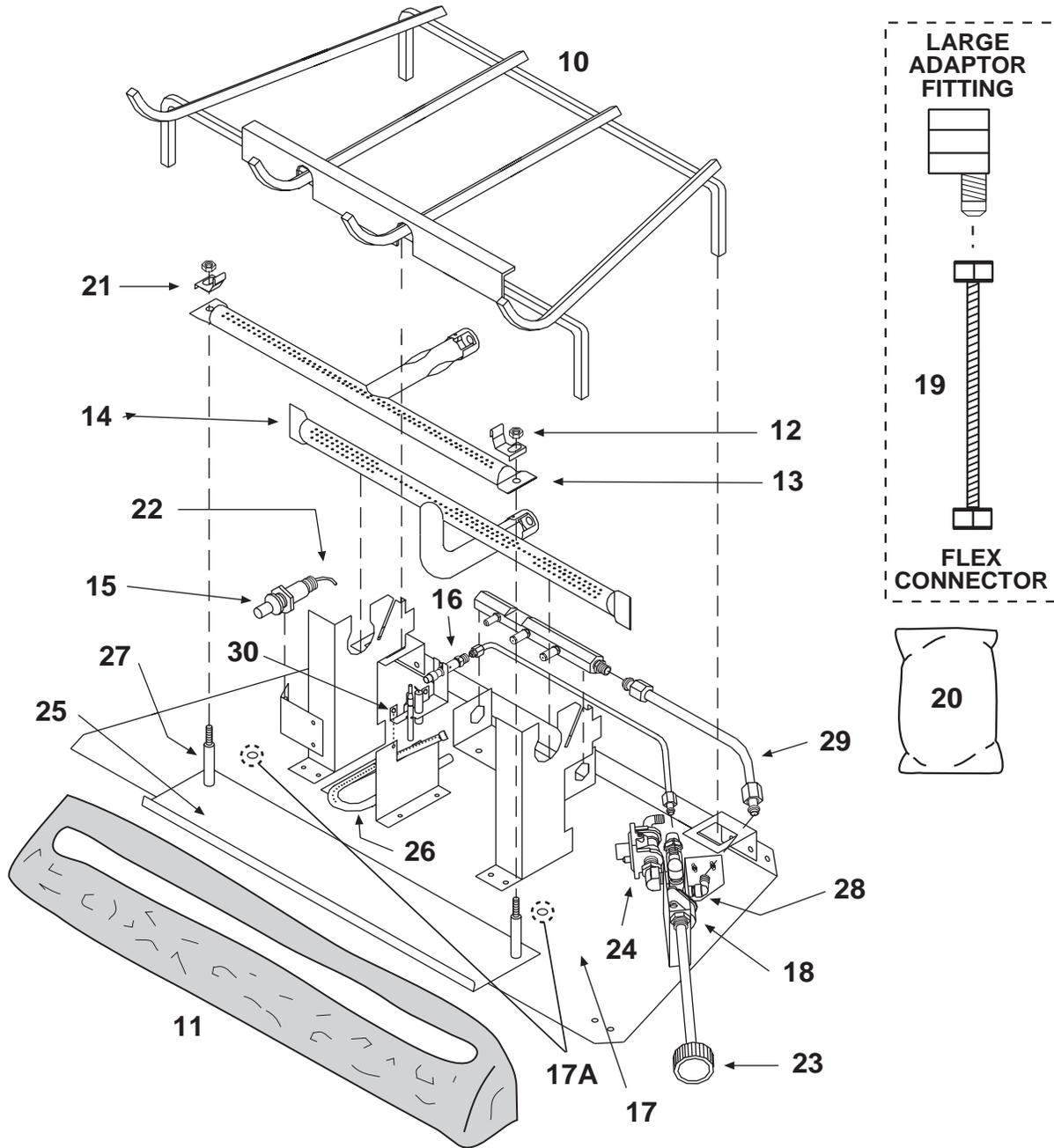
ITEM NO.	PART NO.	DESCRIPTION	ITEM NO.	PART NO.	DESCRIPTION
1.	RDL7-30BF SL7-30BF	Bottom Front Log 30"	3.	RDL7-10TY SL7-10TY	Top Y Log 10"
	RDL7-24BF SL7-24BF	Bottom Front Log 24"	4.	RDL7-10TC SL7-10TC	Top Center Log 10"
	RDL7-20BF SL7-20BF	Bottom Front Log 20"	5.	RDL7-10TR SL7-10TR	Top Right Log 10"
2.	RDL7-20BR RDL7-15BR	Bottom Rear Log 20" (24"/30" sets) Bottom Rear Log 15" (20" sets)	6.	RDL7-11TL SL7-11TL	Top Left Log 11"
	• Used for both Golden Oak & Split Log Styles		7.	RDL7-9TY SL7-9TY	Top Y Log 9"

BURNER PARTS LIST FOR MILLIVOLT VALVE



ITEM NO.	PART NO.	DESCRIPTION	ITEM NO.	PART NO.	DESCRIPTION
10.	G7-015	Grate w/ Flame Shield (20" and 24")	19A.	----	HI/LO Flame Adjustment Knob
	G7-031	Grate w/ Flame Shield (30")	19B.	----	ON/OFF/PILOT Knob
11.	G7-06	Ember Bed	20.	CK-7	3/8" x 12" Flex Connector Kit
12.	3990-0006	Nut 1/4-20 Hex (2)	21.	LF-4	Lava Granules 4lb.
13.	G7-03	Front Burner (20", 24" and 30")	22.	G7-010R	Ember Bed Mount Right
14.	G7-04	Rear Burner (20", 24" and 30")		G7-010L	Ember Bed Mount Left
15.	PZ-1	Piezo Ignitor	23.	PW-3	Piezo Ignitor Wire
16.	ODS-0003	Pilot ODS #8204 (Nat. Millivolt Valve)	24.	WI-5	Switch Wire (Millivolt Valve)
	ODS-0004	Pilot ODS #8404 (L.P. Millivolt Valve)	25.	G7-029	Caution Plate
17.	G7-01MV	Base Plate	26.	G7-011	Burner Carry Over Tube
17A.	----	Security Holes	27.	G7-007	Spacer
18.	SW-3	Switch (Millivolt Valve)	28.	BE-10	Brass Elbow 3/8" FL x 3/8" MIP
19.	SV-16	Millivolt Valve (Nat.)	29.	G7-028	Heatshield Millivolt
	SV-17	Millivolt Valve (L.P.)	30.	G7-013	Tubing, Gas Supply
			31.	3986-6003	#6 x 3/8" phillips sm. screw (3)

BURNER PARTS LIST FOR MANUAL VALVE



ITEM NO.	PART NO.	DESCRIPTION
10.	G7-015	Grate w/ Flame Shield (20" and 24")
	G7-031	Grate w/ Flame Shield (30")
11.	G7-06	Ember Bed
12.	3990-0006	Nut 1/4-20 Hex (2)
13.	G7-03	Front Burner (20", 24" and 30")
14.	G7-04	Rear Burner (20", 24" and 30")
15.	PZ-1	Piezo Ignitor
16.	ODS-0001	Pilot ODS #8213 (Nat. Manual Valve)
	ODS-0002	Pilot ODS #8402 (L.P. Manual Valve)
17.	G7-01MV	Base Plate
17A.	----	Security Holes
18.	SV-18	Manual Valve

ITEM NO.	PART NO.	DESCRIPTION
19.	CK-7	3/8" x 12" Flex Connector Kit
20.	LF-4	Lava Granules 4lb.
21.	G7-010R	Ember Bed Mount Right
	G7-010L	Ember Bed Mount Left
22.	PW-3	Piezo Ignitor Wire
23.	KNOBS2	Manual Valve Knob
24.	PR-2	Pressure Regulator (20"/24" Nat. Gas)
	PR-1LP	Pressure Regulator (L.P. Gas)
	PR-1NAT	Pressure Regulator (30" Nat. Gas)
25.	G7-029	Caution Plate
26.	G7-011	Burner Carry Over Tube
27.	G7-007	Spacer
28.	BE-10	Brass Elbow 3/8" FL x 3/8" MIP
29.	G7-013	Tubing, Gas Supply
30.	3986-6003	#6 x 3/8" phillips sm. screw (3)

WHEN USED AS A VENTED DECORATIVE APPLIANCE (PER ANSI Z21.60)

This appliance is for installation in a solid fuel burning fireplace (masonry fireplace or manufactured fireplace) with a working flue and constructed of non-combustible material.

These gas logs may be installed as vented decorative log sets in compliance with ANSI Z21.60 and National Fuel Gas Code, Section 6.6. The minimum permanent free opening of the fireplace chimney or chimney damper must be at least **29 sq. inches** based upon a minimum chimney height of at least 15 feet. The chimney damper must be fixed in a manner to maintain permanent free opening at all times. To accomplish this, you may install a screw or bolt in the edge of the damper to prevent closing, or drill holes in the damper or remove the damper.

CONNECTING THE GAS TO THE BURNER SYSTEM

I M P O R T A N T

Be sure you have read and understand all safety precautions and warnings contained in this manual.



Note: To install your Real-Fyre Unvented Gas Log Set, your fireplace must have a gas supply line that has been installed by a qualified technician in accordance with all local codes.

Refer to the Parts List when installing the Unvented Gas Log Set.

Tools Required:

- | | |
|---|--|
| 1. Adjustable open-ended wrench | 4. Soapy water solution & brush for leak detection |
| 2. Pliers | 5. Flathead screwdriver |
| 3. Propane gas resistant pipe compound or Teflon tape | 6. Manometer (recommended for checking gas pressure) |

I M P O R T A N T

CHECK GAS TYPE (Natural or Propane). The gas supply must be the same as stated on your Gas Log Set rating plate. If the gas supply is different, **DO NOT INSTALL.** Contact your dealer for immediate assistance.

BE SURE THE GAS SUPPLY TO THE FIREPLACE IS TURNED OFF.

BEFORE PROCEEDING, CAREFULLY READ ALL OF THE IMPORTANT SAFETY INFORMATION CONTAINED IN THIS OWNER'S MANUAL, INCLUDING:

- A. Pre-Installation and Fireplace Preparation Safety Guidelines (pages 6 and 7).
- B. Ventilation and Confined Space Information (page 8).
- C. Installation Safety Guidelines (page 9).

CONNECTING THE GAS TO THE BURNER SYSTEM cont.

1. Center the burner assembly in the fireplace. Make certain that no part of the assembly protrudes beyond the face of the fireplace.
2. Attach the large adaptor fitting of the flex connector kit (item 19 on Manual Valve, item 20 on Millivolt valve) to the gas supply line using pipe compound resistant to L.P. gas or Teflon tape. Tighten the connection. Connect one end of flex connector to the large adaptor, and the other end to the elbow connector on the burner assembly (see Figure 11).
3. Make sure that the control valve on the assembly is in the "OFF" position (see Figure 10). Turn on the gas to the fireplace and check for leaks at all connections by using a soapy water solution. **Never use an open flame to check for leaks.**

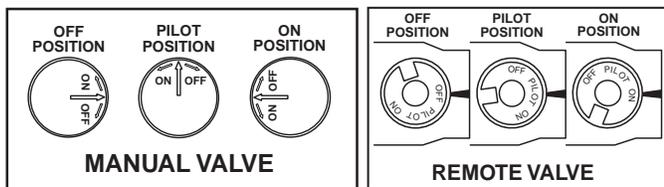


Figure 10

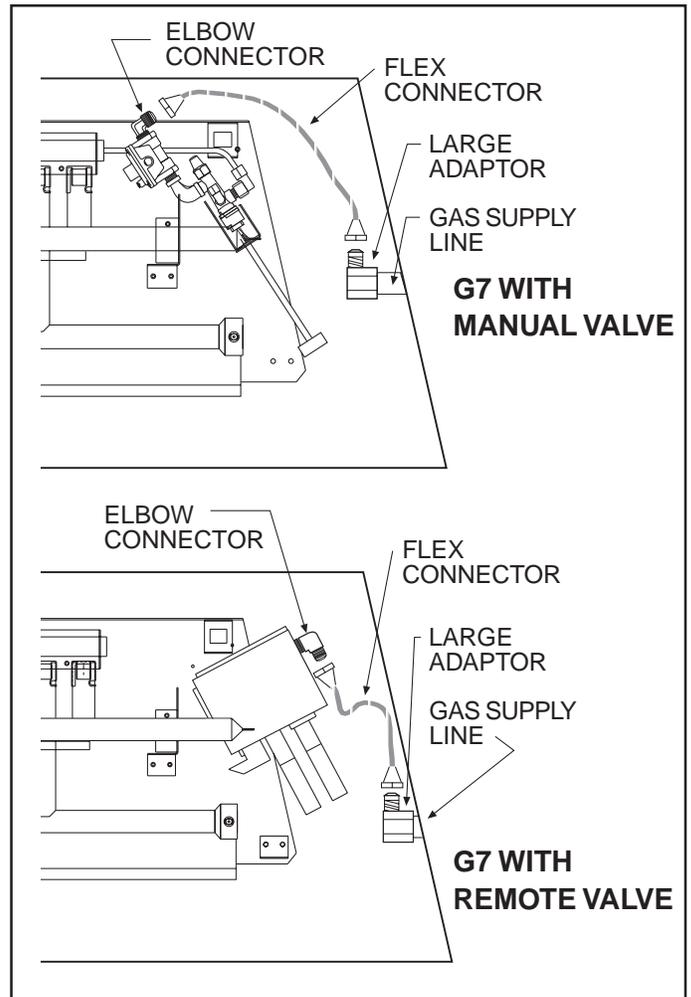


Figure 11

ATTACH BURNER PLATE TO THE FLOOR

Two security holes are provided in the base plate (item 17A). After centering the burner base plate in the fireplace, secure with appropriate screws (not provided). You may have to drill holes in the floor of the fireplace (Note: If you have a manufactured fireplace, check with the manufacturer before drilling holes in the floor). Indicate hole placement with the security holes in the burner base plate, then drill and attach with screws.

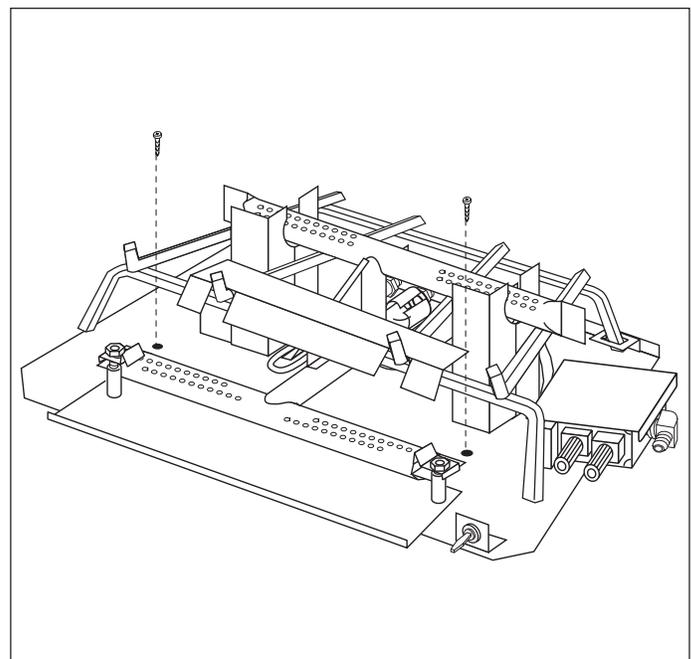


Figure 12

CHECKING GAS PRESSURE

WARNING

Do not connect this appliance directly to a high pressure natural gas line or an unregulated LP Tank.

Test all gas joints from the gas meter to the valve assembly for leaks using a gas analyzer or soap and water solution after completing connection. **DO NOT USE AN OPEN FLAME FOR CHECKING GAS LEAKS.**

IMPORTANT

Check the gas pressure with your Unvented Gas Log Set burning and the control set to **HIGH**.

The Gas Log set and its main gas valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psig.. The Gas Log Set must be isolated from the gas supply piping system by closing its equipment shut-off valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psig. This is accomplished by closing the gas supply line valve, as required by NFPA 54, section 5-54.

Manual Safety Pilot Valve (Figure 13)

The pressure regulator is preset at the factory and locked to discourage tampering. If the pressure is not as specified, replace the regulator with the correct part from the parts list in this manual.

Remove 1/8" pressure tap screw plug, located on the side of the regulator body. Install fitting and tubing of pressure gauge. After taking pressure reading, re-install the pressure tap screw and check for leaks.

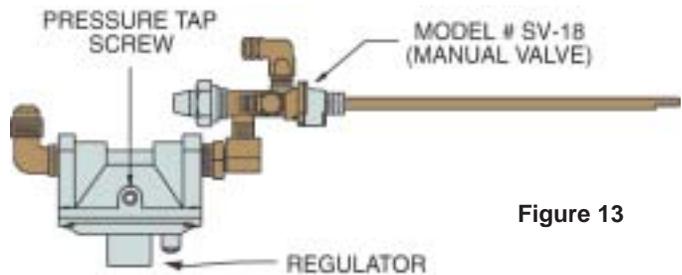


Figure 13

Millivolt Safety Pilot Valve (Figure 14)

The valve regulator controls the burner pressure which should be checked at the pressure *inlet* point. Turn the inlet screw counter clockwise 2 or 3 turns and then place the tubing of the pressure gauge over the pressure *inlet* point. (The test "inlet" point is closest to the gas supply inlet). After taking the pressure reading, be sure to turn the inlet screw clockwise firmly to re-seal. Do not over torque. Check for gas leaks.

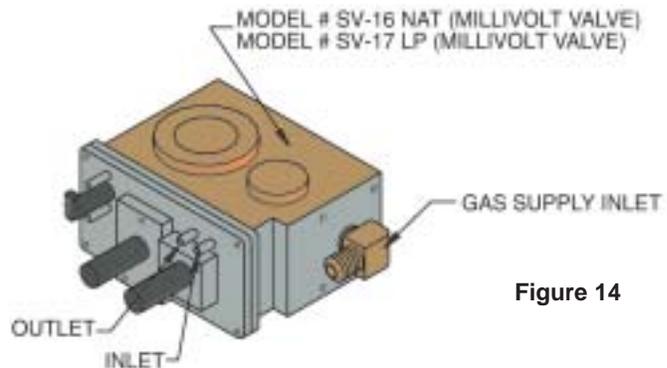


Figure 14

GAS PRESSURE SPECIFICATIONS -

NATURAL GAS

MANUAL PRESSURE		MILLIVOLT PRESSURE	
Regulator Pressure Reading:	Min. 3.5" w.c.	Inlet Pressure Reading:	Min. 5" w.c.
Gas Inlet Pressure:	Max. 10.5" w.c. Min. 5" w.c.	Outlet Pressure Reading: (Flame Adjustment on High)	Min. 3.5" w.c.
		Gas Inlet Pressure:	Max. 10.5" w.c. Min. 5" w.c.

PROPANE (L.P.) GAS

MANUAL PRESSURE		MILLIVOLT PRESSURE	
Regulator Pressure Reading:	Min. 10" w.c.	Inlet Pressure Reading:	Min. 11" w.c.
Gas Inlet Pressure:	Max. 13" w.c. Min. 11" w.c.	Outlet Pressure Reading: (Flame Adjustment on High)	Min. 10.5" w.c.
		Gas Inlet Pressure:	Max. 13" w.c. Min. 11" w.c.

INSTALLING THE EMBER BED AND LOG PLACEMENT

INSTALLING THE EMBER BED

THE FRONT EMBER BED IS FRAGILE! TAKE CARE WHEN HANDLING TO AVOID BREAKAGE.

Proper log placement is critical to insure proper performance of your Real-Fyre Gas Log Set. Be sure to follow log placement instructions carefully! Logs are placed the same way for all size log sets in both Golden Oak Designer and Split Oak styles.

Refer to the Parts List on pages 14, 15, and 16 when following the instructions below:

1. Lift the grate and carefully position the ember bed (item 11) down on the front burner so that the slot in the ember bed fits over the ember bed mounts at each end of the burner. This will properly center the ember bed over the burner. Be sure the grate is properly re-positioned on the base plate with the rear legs of the grate in the slots provided (Figure 15).

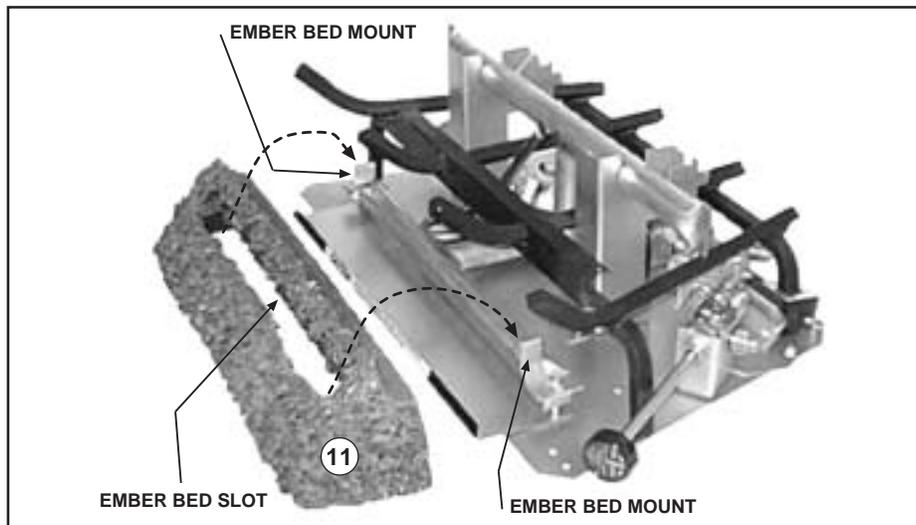


Figure 15

LOG PLACEMENT

2. Each log in your Real-Fyre Unvented Gas Log Set is numbered to aid in the log placement procedures. Set the front log #1 and rear log #2 in their approximate positions on the grate (as shown in Figure 16). The rear burner supports are log positioners for Logs #1 and #2.
3. Center the front log #1 (left to right) so that the rear burner supports fit into the slots in back of this log (Figure 16).
4. Center the rear log #2 (left to right) and pull forward so the slots in the front of this log are against the rear burner supports (Figure 16).

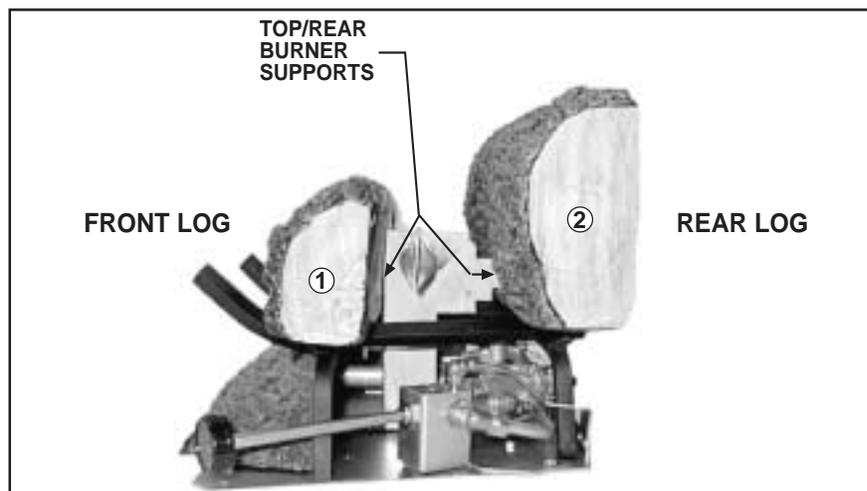


Figure 16

INSTALLING THE EMBER BED AND LOG PLACEMENT cont.

LOG PLACEMENT cont.

5. Position the intermediate logs #3, #4 and #5 on top of the bottom logs. Locate the logs so that the pins in the rear bottom of each log fit into the holes in the bottom rear log, and the front end of each log rests on the corresponding slots on the bottom front log (see Figure 17).
6. Position the two top logs #6 & #7 on the top of the intermediate logs. Locate the top logs by fitting the holes in the bottom of each log with the pins of the intermediate logs. Place the other end of the top logs into the slots of the intermediate logs (see Figure 17).

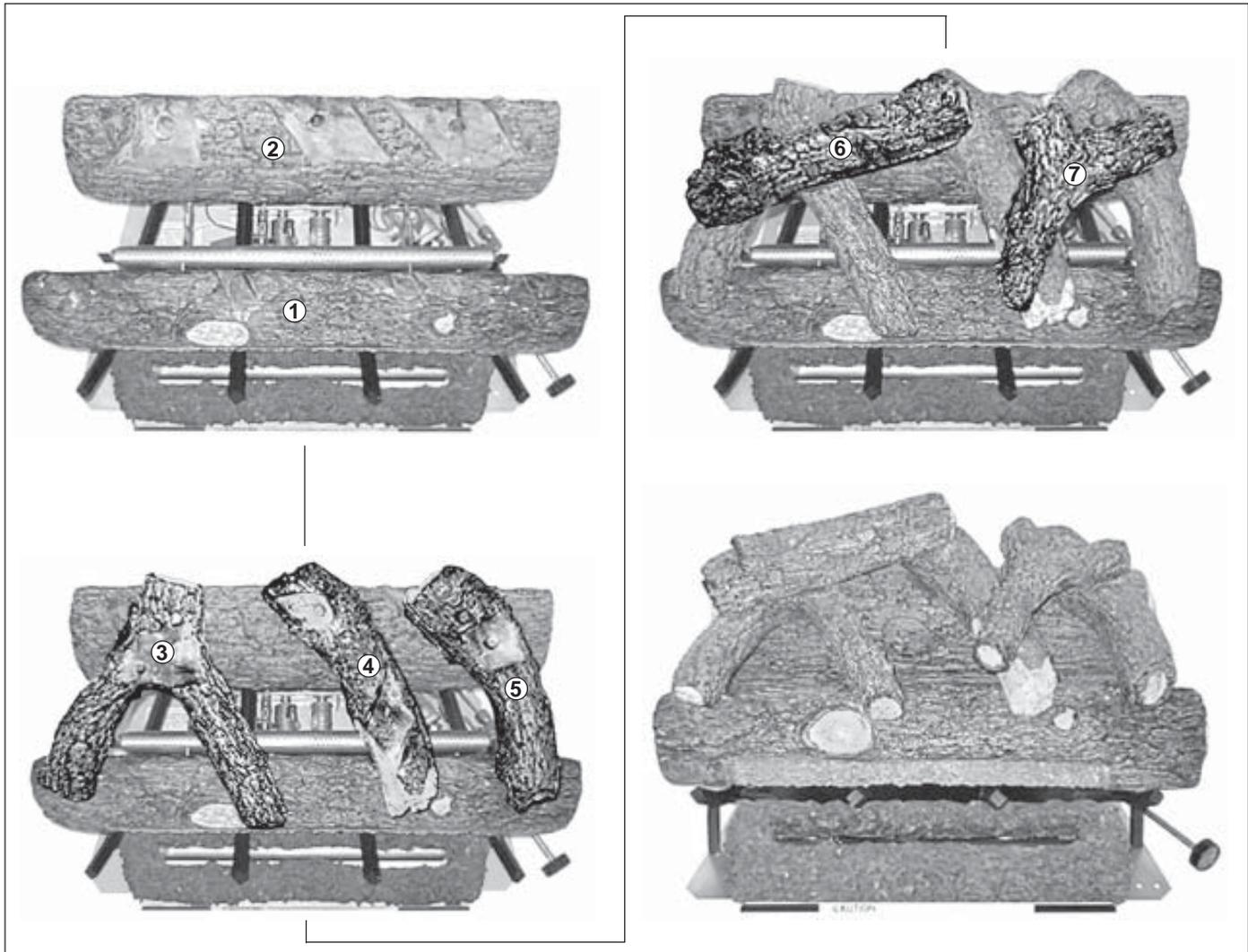


Figure 17

Maintain log position as shown AT ALL TIMES.

After setting the logs into position as described above, ensure each is properly and firmly situated. Your Unvented Gas Log Set will not function as intended if the logs are not correctly positioned. When placed properly, the flames will not strike any portion of logs 3,4,5,6 or 7. Periodically check the positioning of all logs to insure proper log placement and stability. If any flame is striking logs #3,4,5,6 or 7, recheck log placement. Adjust to conform with instructions. There should be no flame impingement on these logs.

7. Lava Granules (item 20/21) are provided as an aesthetic enhancement to your Unvented Gas Log Set and do not effect its operation. Spread the Lava Granules on the floor of your firebox around the front and the sides of your Unvented Gas Log Set. **BE SURE THAT NO GRANULES ENTER THE BURNER SYSTEM OR INTERFERE WITH THE BURNING OF YOUR LOG SET.**

OPERATING YOUR LOG SET - LIGHTING AND EXTINGUISHING

FOR YOUR SAFETY, READ BEFORE LIGHTING

WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

The Peterson Real-Fyre Gas Log Set has a pilot which must be lit by hand. When lighting the pilot, follow these instructions exactly.

A. BEFORE LIGHTING, smell all around the gas log set area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

B. WHAT TO DO IF YOU SMELL GAS

- Open a window.
- Do not try to light the 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.

C. 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, don't try to repair it. Call a qualified service technician. Force or attempted repair may result in fire or explosion.

D. Do not use the gas log set if any part has been under water. Immediately call a qualified service technician to inspect the gas log set and to replace any part of the control system and any gas control which has been under water.

Your Peterson Real-Fyre Unvented Gas Log Set is available with either a manual valve or a millivolt gas valve that can be controlled with a toggle switch, wall thermostat, or remote control. The millivolt control also incorporates a "HI/LO" knob that is used to vary the height of the flame and the heat output. The Manual Valve allows adjustable flame height and heat output. The valve should never be set so low that the flames from the rear burner are not visible above the front bottom log.

LIGHTING THE PILOT

1. With the valve in the "OFF" position, slightly push in the control knob on the valve and turn to "pilot".
2. Depress the control knob and light the pilot by pressing and releasing the ignitor (located behind the left end of the ember bed). You may need to press and release the ignitor several times for the spark to ignite the pilot. Continue to depress the control knob for up to one minute until pilot remains lit when the knob is released (see Figure 18).
3. The pilot flame should now be burning. This pilot flame should always be present when the Unvented Gas Log Set is in operation, and should just envelop the tip of the thermopile / thermocouple (see Figure 19).
Note: When the millivolt valve is turned to the "off" position, a built-in safety system prevents the valve from being turned back on while the thermopile is hot. This protects you against gas flow to the system while the pilot is extinguished. Wait approximately 30 seconds (or listen for the safety stop to disengage - you will hear a small "click" sound) before attempting to turn the valve back to the "pilot" position.

Figure 18

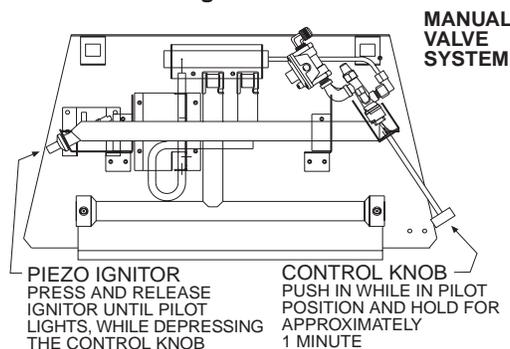
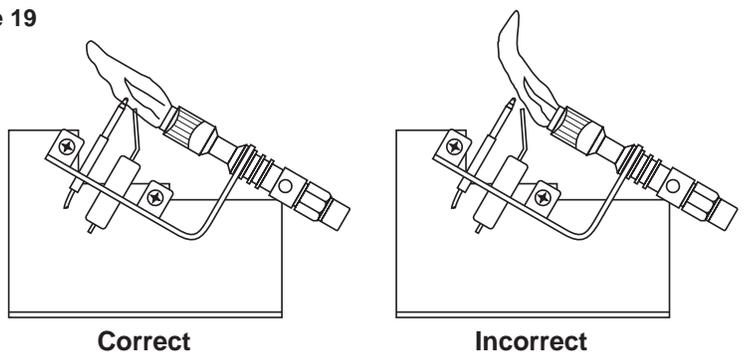


Figure 19



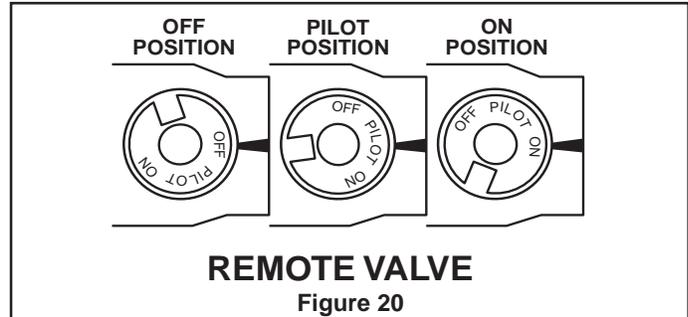
WARNING: NO ADJUSTMENTS ARE TO BE MADE TO THE ODS PILOT SYSTEM. TAMPERING WITH THIS SYSTEM CAN BE EXTREMELY HAZARDOUS.

OPERATING YOUR LOG SET - LIGHTING AND EXTINGUISHING cont.

LIGHTING INSTRUCTIONS FOR MILLIVOLT GAS VALVE

1. **STOP!** Read the safety information on the previous page.
2. Turn the control switch, wall switch, or remote switch to the "OFF" position or set thermostat in the lowest possible setting.
3. Push in the control knob and turn clockwise ↻ to the "OFF" position.
4. Wait five (5) minutes to clear out any gas. Then smell for gas including near the floor. If you smell gas, **STOP!** Follow "B" in the safety information on the previous page. If you don't smell gas, go to the next step.
5. Push and turn control knob counterclockwise ↻ to pilot.
6. Push in on control knob all the way and hold in. Immediately light the pilot or press in igniter button to light pilot. Continue to hold the control knob in for approximately 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 6.

- If knob does not pop up when released, stop and immediately call your service technician or gas supplier.
 - If the pilot will not stay lit after several tries, follow the instructions "To Turn Off Gas To Appliance" and call your service technician or gas supplier.
7. Push and turn gas control knob counterclockwise to "ON". ↻
 8. To operate put control switch, wall switch or remote switch in the "ON" position or set thermostat to desired setting.



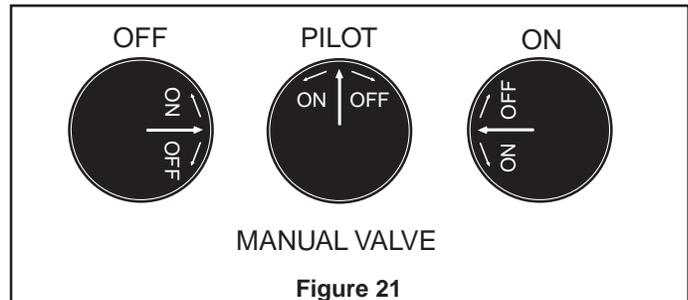
TO TURN OFF GAS TO APPLIANCE

1. Turn the "Wall Switch" or "Remote" to the "OFF" position or set the "Thermostat" to the lowest possible setting.
2. Push in the control knob and turn clockwise ↻ to "OFF" position.

LIGHTING INSTRUCTIONS FOR MANUAL GAS VALVE

1. **STOP!** Read the safety information on the previous page.
2. Push in the gas control knob slightly and turn clockwise ↻ to "OFF". NOTE: The knob cannot be turned from "PILOT" to "OFF" unless the knob is pushed in slightly. Do not force.
3. Wait five (5) minutes to clear out any gas. Then smell for gas including near the floor. If you smell gas, **STOP!** Follow "B" in the safety information on the previous page. If you don't smell gas, go to the next step.
4. The pilot is located under the top/rear burner next to the carry over tube.
5. Turn the knob on the gas control counterclockwise to "PILOT". ↻
6. Push in on the control knob all the way and hold in. Immediately light the pilot or press in igniter button to light the pilot. Continue to hold the control knob in for approximately 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 6.
- If knob does not pop up when released, stop and immediately call your service technician or gas supplier.
 - If the pilot will not stay lit after several tries, follow the instructions "To Turn Off Gas To Appliance" and call your service technician or gas supplier.
7. Turn the gas control knob counterclockwise ↻ to "ON" to light your set.
 8. Periodically check the pilot flame for proper flame pattern (see page 26).



TO TURN OFF GAS TO THE APPLIANCE

1. From the "On" position, turn control knob clockwise ↻ to the "PILOT" position. The log set will extinguish and the pilot will remain lit.
2. If complete shutdown is desired, from the "PILOT" position, push in the control knob slightly and turn clockwise ↻ to the "OFF" position. Do not force the knob.

OPERATING YOUR REAL-FYRE UNVENTED GAS LOG SET

The gas will now flow to the front burner, rear burner, and through the burner carryover tube (see Figure 22). The burner carryover tube will ignite first which in turn lights both the front and rear burners. The entire ignition sequence normally takes one to three seconds.

Observe the front and rear flames. The front flames should be blue at the base and a combination of blue / yellow at the body and tips. Front flames should be 2" to 4" tall. The rear flames will be blue at the base and a combination of blue and yellow at the body and tips. Rear flames should be 5" to 8" tall, with the center flame being the tallest (see Figure 22).

Your Real-Fyre Unvented Gas Log Set is now ready for you to enjoy. Follow the "Lighting the Pilot" instructions on pages 23-24. Then, simply turn your valve control (and control switch of the millivolt system) to the "ON" position and adjust to the flame height & heat output you desire. Note: When the manual valve is turned fully to the "ON" position (far left or counterclockwise position), it will lock in place. To lower the setting, push in slightly and turn to the right or clockwise direction. When you are finished enjoying your log set, flip your toggle switch to the "OFF" position (millivolt system) or set the control to the "Pilot" position (manual valve system). The pilot light will remain lit.

If total shutdown is desired, turn the valve control knob from the "ON" position to the "Pilot" position. Push the control knob in slightly and turn from the "Pilot" position to the "OFF" position. Your pilot light will be extinguished. If you wish to re-light your Unvented Gas Log Set, follow the "Lighting & Extinguishing Your Real-Fyre Unvented Gas Log Set" found on pages 23-24.

Every REAL-FYRE Unvented Gas Log Set leaves the factory tested and quality checked to ensure that it has been manufactured to the strict specifications to which it was submitted and approved for certification by the American Gas Association. This check includes an operational test to ensure both satisfactory combustion and operation.

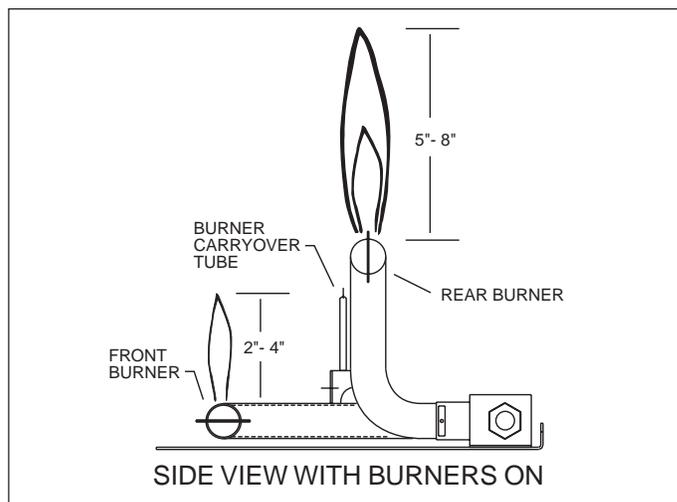


Figure 22

Each installation site for any unvented appliance presents its own unique combustion environment. Specific factors such as weather tightness of the home, size of the room in which the log set is installed, central heating, ceiling fans, altitude, drafts, pet hair, the size of the fireplace, paint or soot inside the fireplace, etc., all have an influence on the proper operation of an unvented appliance and its pilot/ODS system. A normally operating unvented log set will demonstrate the following characteristics:

- A lively, realistic flame and front ember bed glow. The flame will be blue / yellow on the front burner and on the rear burner.
- Clean burning combustion, which will produce no soot or smoke, after normal break-in.
- Production of no odor, other than normal odors associated with the combustion of L.P. or Natural Gas.
- Production of water vapor. Water vapor helps to increase indoor humidity, which may be beneficial during the dry heating season.

If you operate your Unvented Gas Log Set fueled by propane gas, operating characteristics may vary as the fuel in the tank approaches empty (less than 1/4 full). Sooting and other increases in combustion by-products will occur. Turn off your Log Set and re-fill your propane tank.

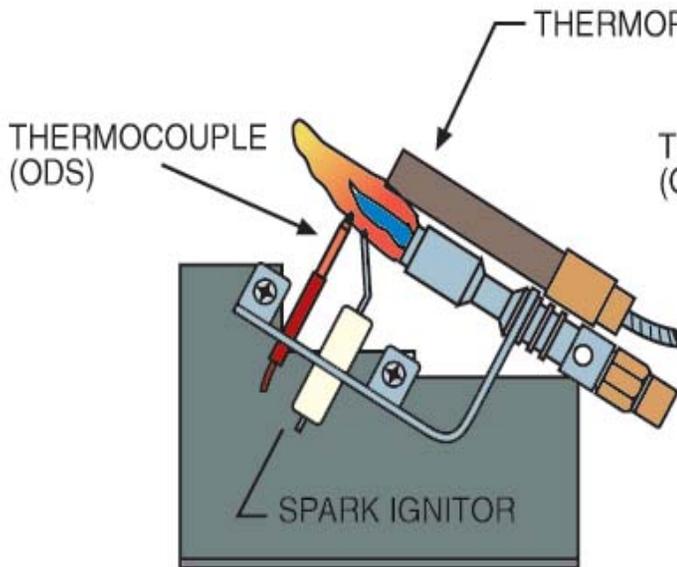
CHECKING PILOT FLAME APPEARANCE

When installing the G7 burner assembly, it is important to visually check the pilot flame and the front and rear burner flames.

1. The Pilot Flame must be present when the burner is operating. The flame should touch the top of the thermocouple tip (see figures 23 and 24).
2. If the pilot flame does not touch the top of the thermocouple tip, then the main burner will not function properly (see Figure 25 and 26 - for incorrect pilot flame).
3. With the burners off and the pilot flame off, and the assembly cool, check the burner assembly, air intake openings on the ODS and air shutter openings on the burner for any blockages that could affect the operation of the ODS pilot flame.

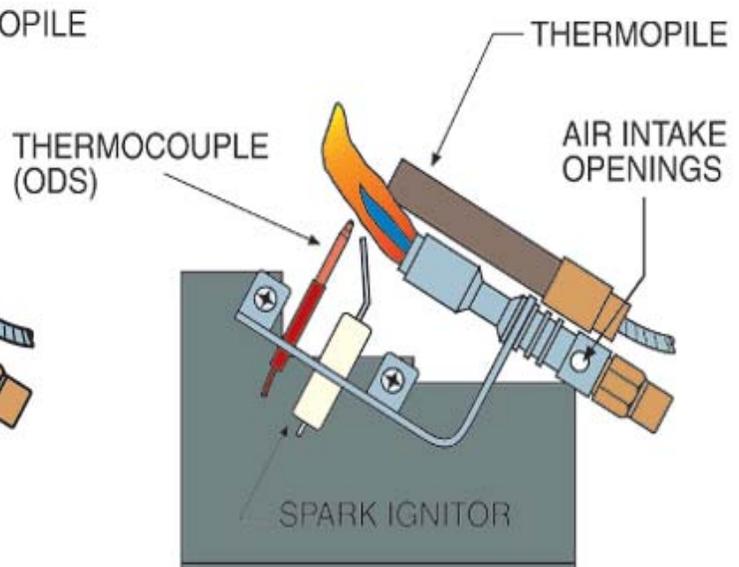
ODS PILOT FOR REMOTE VALVE

(NG shown)



CORRECT PILOT FLAME

Figure 23

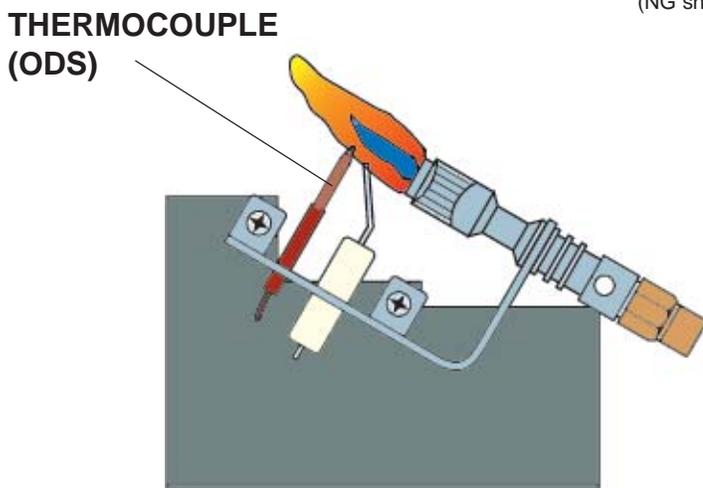


INCORRECT PILOT FLAME

Figure 25

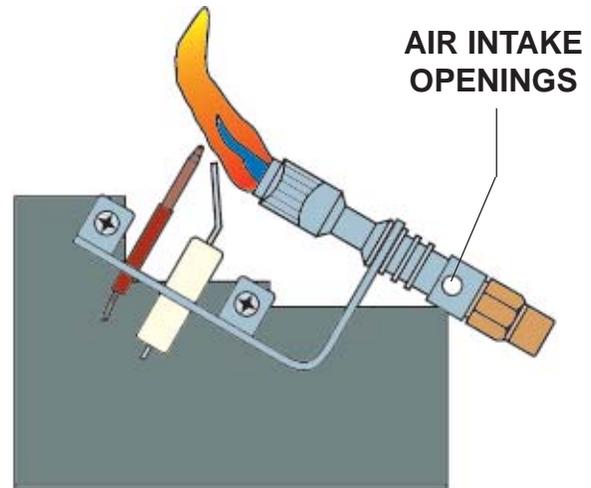
ODS PILOT FOR MANUAL VALVE

(NG shown)



CORRECT PILOT FLAME

Figure 24



INCORRECT PILOT FLAME

Figure 26

CLEANING AND SERVICING

Only limited cleaning will be required under normal use of your Unvented Gas Log Set.

TO CLEAN YOUR LOG SET

1. Remove the logs. Use a vacuum cleaner to remove loose particles from all surfaces of the logs. Do not use cleaning fluids to clean the log or any other part of the log set.
2. Dust the grate, the base of the assembly and the burners.
3. Replace the logs as instructed in "Installing the Ember Bed and Log Placement" on pages 21 & 22 of this manual.

CLEANING YOUR ODS/PILOT

Periodic cleaning and maintenance of your Unvented Gas Log Set is recommended to insure that your log set operates properly. Cleaning of the ODS Pilot System is an important part of the maintenance program. **This ODS Pilot Cleaning Procedure must be performed by a qualified service technician familiar with the specific characteristics of your log set.**

1. Turn your Unvented Gas Log Set to the off position and allow it to cool. Inspect the pilot area (See Figure 27) for any visual contamination or debris (usually lint, hair, spider webs, or small insects). Lightly brush off all external surfaces while vacuuming loosened debris from the pilot opening. **Be careful not to brush any foreign material into the pilot opening.**
2. Clean out both Air Intake Openings (See Figure 28) by lightly brushing around the Openings while vacuuming. Note: It is very important that the Air Intake Openings be kept clear of debris. Should the Openings become blocked, the pilot system will not operate properly.
3. Light the pilot, (See Operating Your Log Set). The pilot flame should appear as shown in the instructions (see page 26).

If, after a period of use, the flames start to exhibit unusual shapes and behavior, or the burners fail to ignite smoothly, the burner holes may require some cleaning. If this happens, it is preferable to contact your nearest dealer to get your Unvented Gas Log Set serviced.

Do not remove Rating Plate and/or Warning Tags. These labels are an integral safety and identification component of this appliance.

During periods of heavy use, inspect your Unvented Gas Log Set frequently for evidence of sooting. If sooting is present, discontinue use until the source of sooting is corrected.

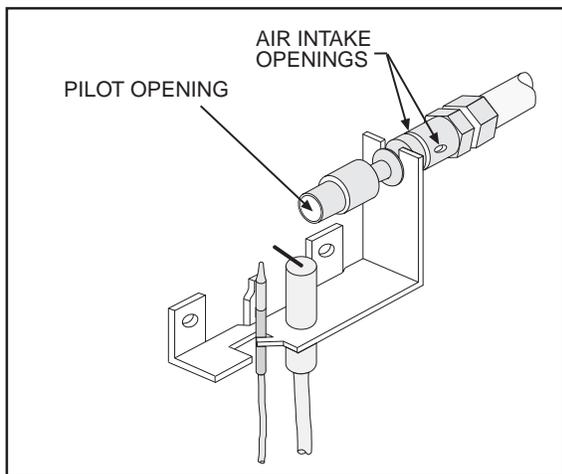


Figure 27

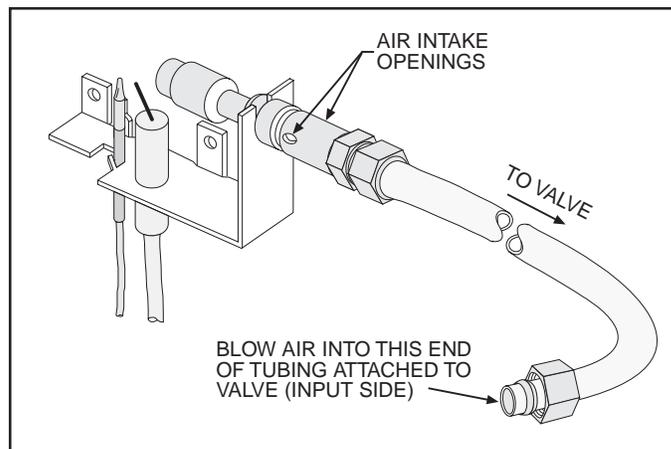


Figure 28

CLEANING AND SERVICING

4. If the pilot flame does not burn as indicated in the instructions, extinguish the pilot by turning the valve to the full off position. Using a compressed air duster (commonly available at computer, electronic or office supply stores), insert the flexible nozzle through either Air Intake Openings, insuring that the nozzle is pointed toward the pilot opening (See Figure 29). Blow air through both Air Intake Openings to clear out any debris that may be in the system.
5. Re-light the pilot and inspect it to be sure it is burning as shown in the instructions. If not, extinguish the pilot and **turn off the gas supply to your gas log set**. Using an adjustable or a 1/4" wrench, disconnect the pilot gas line from the valve (See Figure 30).
6. Insert the flexible nozzle of the compressed air duster and blow air into the input end of the pilot gas line to remove any blockages. (See Figure 28). **Do not blow air directly into the pilot opening. Blow air in the direction of the gas flow.**
7. Re-install the pilot gas line and check for leaks.
8. Light the pilot to make sure it is operating properly (See Operating Your Log Set).
9. If the pilot still does not operate properly, **the ODS may need to be replaced with the same model as the one on your unvented burner.**

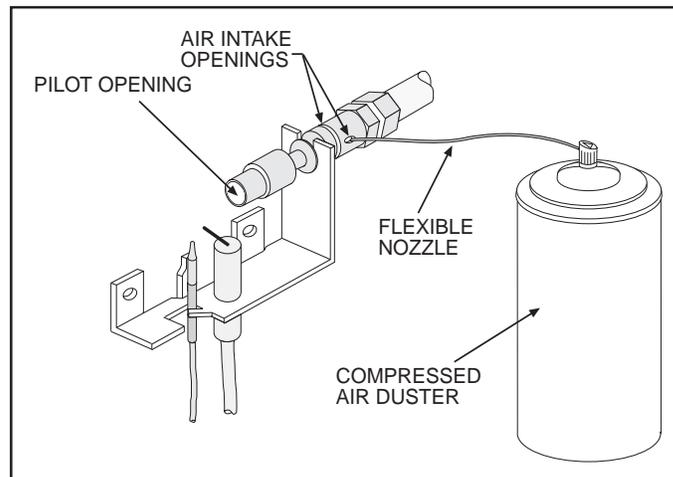


Figure 29

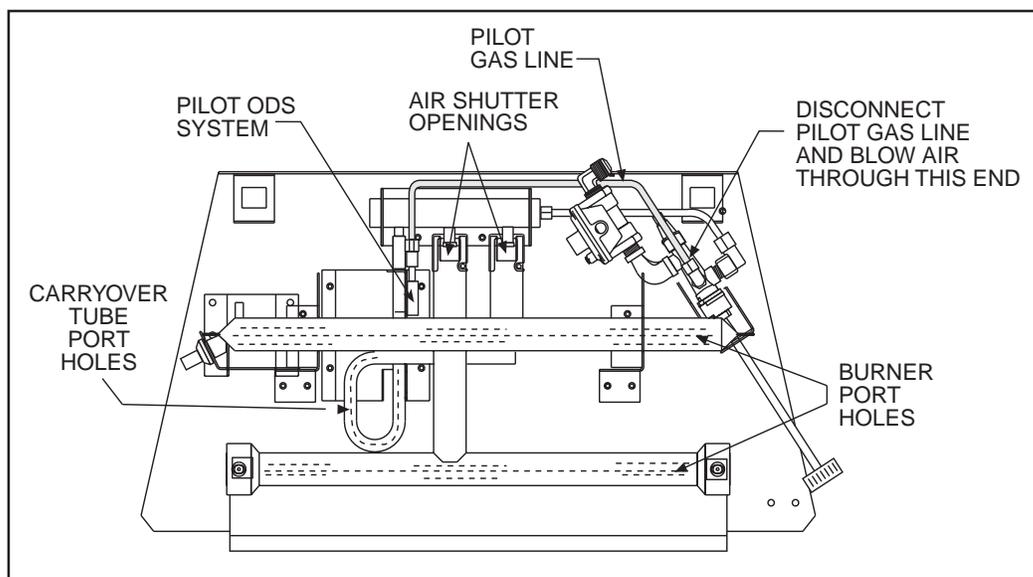


Figure 30

TROUBLESHOOTING

<u>PROBLEM</u>	<u>POSSIBLE CAUSE</u>	<u>SOLUTIONS</u>
<p>1. Burner Shutting down during operation (Pilot Outage) cont'd</p>	<p>C. Room Size (unconfined space).</p> <p>D. Log Placement.</p> <p>E. Flue area, fireplace or damper dirty from soot.</p> <p>F. Fans, furnace, air conditioning vents and returns and fireplace outside air vents near or blowing into the fireplace can create drafts which alter the flame patterns.</p> <p>G. Blockages on burner.</p> <p>H. Fireplaces with high top cavities can accumulate by products of combustion which eventually start recirculating causing shut down.</p>	<p>C. 50 cubic feet is required for every 1000 BTU's. Multiply the length, width, height by 20 (L X W X H X 20) of your room. If the resulting number is less than the BTU rating of the burner, pilot outages may occur. Provisions for adequate combustion and ventilation air must be made (See page 8 of your Owner's Manual).</p> <p>D. Center the front log so that the front of the rear burner supports fit into the wide slots in the back of the log. Center the rear log (left to right) and place so the narrow slots in the front of the rear log touches the back of the rear burner supports. All logs are designed to be locked in place with pins and/or notches; each log is numbered for easy installation (Check your Owner's Manual for proper log placement).</p> <p>E. Clean around, above and under the damper thoroughly. Clean fireplace and remove loose material including soot and creosote.</p> <p>F. Eliminate drafts by closing heating and air conditioning vents, and returns and closing the outside air vents. Fans blowing directly into the fireplace should be turned off when the set is operating.</p> <p>G. Vacuum any lava granules or other material that may have fallen onto the burner pipe area.</p> <p>H. Open a window or the damper slightly. Move the burner forward if possible or otherwise increase the ventilation.</p>

TROUBLESHOOTING

<u>PROBLEM</u>	<u>POSSIBLE CAUSE</u>	<u>SOLUTIONS</u>
<p>1. Burner Shutting down during operation (Pilot Outage) cont'd</p>	<p>I. Insufficient air circulation.</p> <p>J. Fireplace too small for log set.</p> <p>K. High altitude may cause excessive heat, produce excessive moisture, or cause the oxygen depletion sensor (ODS) to shut down the log set.</p> <p>L. Pilot flame lifting off of the thermocouple/generator.</p> <p>M. Soot inside burner.</p> <p>N. On remote compatible burners, pilot assembly (generator) is not producing enough millivolts to keep the valve open.</p>	<p>I. Check log placement, ember bed placement and sizing of the log set (check your Owner's Manual for proper placement and requirements). Reposition burner closer to the front of the fireplace (Note: Do not place burner too close to combustibles).</p> <p>J. Make sure that the minimum requirements are met (See Fireplace Size Requirement in your Owner's Manual).</p> <p>K. Open a window or the damper slightly or otherwise increase the ventilation. This set is not certified for use over 5,000 feet.</p> <p>L. Check gas pressure (see Section 1A).</p> <p>M. Take burner tube out of unit and shake it or tap it to loosen soot inside the burner. Clean thoroughly and place burner tube back onto G7 unit.</p> <p>N. Contact your dealer for instructions on replacement.</p>
<p>2. Pilot will not light</p>	<p>A. Pilot flame lifting off of thermocouple/generator.</p> <p>B. Knob not turned to pilot position.</p> <p>C. Piezo spark is not lighting pilot.</p> <p>D. Gas supply turned off or manual shut off valve is closed.</p>	<p>A. Check gas pressure (see section 1A).</p> <p>B. Make sure the knob is in the pilot. Hold control knob in pilot position for 60 seconds and simultaneously click the piezo button.</p> <p>C. Check to make sure piezo is sparking when pressing the piezo button (Note: You may need to press the piezo button several times for the spark to ignite the pilot).</p> <p>D. Turn on gas supply or open manual shut off valve.</p>

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	SOLUTIONS
<p>4. High C/O - C/O detectors in home turning on (cont'd)</p>	<p>C. Using any product other than Peterson's unvented gas logs on this G7 burner.</p> <p>D. Using a natural gas burner on LP gas or using an LP burner on natural gas.</p> <p>E. Fans, furnace, air conditioning vents and returns and fireplace outside air vents near or blowing into the fireplace can create drafts which alter flame patterns.</p> <p>F. Operating the burner at less than high (manual valve).</p> <p>G. Flue area, fireplace or damper dirty from soot.</p> <p>H. Adding additional logs or other accessories to the log stacks.</p>	<p>C. Make sure only Peterson's unvented gas logs are used with this unvented burner.</p> <p>D. Make sure the burner is set up for the gas you are using. Check name plate attached to burner. Call your dealer immediately if name plate does not match the gas you are using.</p> <p>E. Eliminate drafts by closing heating and air conditioning vents and returns and closing the outside air vents. Fans blowing directly into the fireplace should be turned off when the set is operating.</p> <p>F. The burner should be operated so that the flames from the rear burner are visible above the front bottom log.</p> <p>G. Clean around, above and under the damper thoroughly. Clean fireplace and remove loose material including soot and creosote.</p> <p>H. Remove any logs or accessories that do not belong with the set.</p>
<p>5. Sooting</p>	<p>A. On logs, in firebox or in the room.</p> <p>B. Drafts in the room.</p> <p>C. LP tank too low.</p> <p>D. Air shutters blocked.</p>	<p>A. Check gas pressure (see Section 1A).</p> <p>B. Eliminate drafts by closing heating and air conditioning vents and returns and closing the outside air vents. Fans blowing directly into the fireplace should be turned off when the set is operating.</p> <p>C. Fill your LP tank completely and vacuum your burner, to remove any accumulated soot. LP tanks accumulate heavier gases when the tanks run low, causing dirtier gases which create more soot. LP tanks should not drop below 25%.</p> <p>D. Burner air shutters are blocked with debris. Vacuum debris in and around the burner area (See Section 1B).</p>

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	SOLUTIONS
5. Sooting (cont'd)	<p>E. Log Placement.</p> <p>F. Ember bed blocking bottom burner.</p> <p>G. Using any product other than Peterson's unvented gas logs on this G7 burner.</p> <p>H. Using a natural gas burner on LP gas or using an LP burner on natural gas.</p> <p>I. Adding additional logs or other accessories to the log stack.</p> <p>J. Orifices and/or blocked air shutters.</p> <p>K. Operating the burner at less than high (manual valve).</p>	<p>E. Center the front log so that the rear burner support fits into the wide slots in back of this log. Center the rear log (left to right) and place so the narrow slots in the front of the rear log touches the rear burner supports. All logs are designed to be locked in place with pins and/or notches; each log is numbered for easy installation (Check your Owner's Manual for proper log placement).</p> <p>F. Position ember bed properly over bottom burner. Ember bed should fit over locating brackets easily and the burner ports must be clear from the rectangular opening of the ember bed (Check your Owner's Manual for proper placement).</p> <p>G. Make sure only Peterson's unvented gas logs are used with this unvented burner.</p> <p>H. Make sure the burner is set up for the gas you are using. Check name plate attached to burner. Call your dealer immediately if name plate does not match the gas you are using.</p> <p>I. Take off any logs or accessories that do not belong with the set.</p> <p>J. Dust, lint, fibers, paper, spider webs, pet hair, etc. in the fireplace and on the burner assembly can affect the operation of the burner and the ODS Pilot Assembly. Clean out the debris and vacuum around the burner for dust that may have accumulated over time. Vacuum the pilot assembly and over the air shutter holes. Any blockages in this area will affect the operation of the ODS sensor.</p> <p>K. The burner should be operated so that the flames from the rear burner are visible above the front bottom log.</p>

TROUBLESHOOTING

<u>PROBLEM</u>	<u>POSSIBLE CAUSE</u>	<u>SOLUTIONS</u>
6. Low flame height	<p>A. Gas Pressure.</p> <p>B. LP gas tank running low.</p>	<p>A. Check gas pressure (see section 1A).</p> <p>B. Fill tank completely.</p>
7. Odors	<p>A. New log set (break in period).</p> <p>B. Odors generated by aerosol sprays, detergents, insecticides and household chemicals.</p> <p>C. Gas Leak.</p>	<p>A. Burn the unit for three to four hours with the damper, doors or windows open to allow odors to dissipate.</p> <p>B. When these odors are drawn into the fireplace, this will cause objectionable odors. Thoroughly ventilate the area before re-starting your log set.</p> <p>C. Locate gas leak and correct all leaks.</p>
8. Condensation	A. High humidity along with cold walls or windows will create condensation in the room.	A. Open a window or damper slightly.
9. When ignitor button is pressed, there is no spark at ODS/pilot	A. Ignitor electrode became loose from shipping.	A. Check wiring and re-connect any loose wiring.
10. Burner not burning evenly	<p>A. Top burner lights but bottom burner has a delayed ignition.</p> <p>B. Burner orifice is clogged.</p>	<p>A1. Check gas pressure (see section 1A).</p> <p>A2. Check the carry over tube (item #26 in the instructions) to make sure it is not blocked with soot or foreign debris, particularly when using LP gas.</p> <p>A3. Low LP fuel gas level tank. Vacuum burner tube for any soot blockage and fill LP tank.</p> <p>B. Clean burner orifice (See Section 1B).</p>
11. Burner sounds like wind roaring through the burner tube (on LP gas)	A. LP gas is settling in burner causing a wind noise in the air shutter.	A. Turn unit off, wait 5 seconds and turn back on. The problem will go away. The burner should be operated so that the flames from the rear burner are visible above the front bottom log.

**PETERSON REAL-FYRE
UNVENTED GAS LOG SET (G7 SERIES)
WARRANTY**

SEVEN (7) YEAR LIMITED WARRANTY ON LOGS

THREE (3) YEAR LIMITED WARRANTY ON BURNER ASSEMBLIES

All Peterson REAL-FYRE Unvented Gas Logs are covered by a seven (7) year limited warranty.

All Peterson REAL-FYRE Unvented Burner component parts, except the valves, pilots and controls, are covered by a three (3) year limited warranty.

All Peterson valves, pilots and controls are covered by a separate one (1) year limited warranty.

This warranty applies only to the original purchaser and to Real-Fyre products purchased primarily for personal, family or household purposes.

This warranty does not cover parts becoming defective by misuse, accidental damage, improper handling and/or installation (log sets must be installed as outlined in the enclosed instructions). It does not cover labor or labor-related charges. It specifically excludes liability for indirect, incidental or consequential damages. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion or limitation may not apply to you. This warranty gives you specified legal rights and you may have other rights which may vary from state to state.

For additional information regarding this warranty, or information on how to place a warranty claim, contact your Authorized Real-Fyre dealer or the Robert H. Peterson Company.