

### ROBERT H. PETERSON CO.



OWNER'S MANUAL

Hand-Crafted Gas Logs Since 1949





### **DESIGN CERTIFIED**

to
Vent-free Room Heater Standard
ANSI Z21.11.2-2007
and
Vented Decorative Appliance

ANSI Z21.60b-2004

### **G9-2 (SEE-THRU) SERIES GAS LOG SETS FOR NATURAL OR PROPANE GAS**

**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 gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

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

This appliance is only for use with the type of gas indicated on the rating plate.



INSTALLER: Leave these instructions with consumer. CONSUMER: Retain for future reference.

**IMPORTANT:** Read these instructions carefully before starting installation of your log set.

This appliance may be installed in an aftermarket, permanently located, manufactured (mobile) home, where not prohibited by local codes.

This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases.

This is a vent-free gas-fired heater. It uses air (oxygen) from the room in which it is installed. Provisions for adequate combustion and ventilation air *must* be provided. Refer to section entitled VENTILATION AND CONFINED SPACE INFORMATION.

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.

Installation/service MUST be performed by an NFI Certified or other qualified, professional installer or service agency who is familiar with Important Safety Information applicable to vent-free gas log heaters, and with current provisions of ANSI 223.1/NFPA54.

**IMPORTANT**: To comply with certification, building code acceptances, and insurance requirements for safe operation and proper performance, ONLY Peterson parts, controls, valves, remotes, and accessories must be used with this gas log set. Use of any other products which are not designed, tested, and certified for use with Peterson vent-free gas log sets is strictly and absolutely prohibited.

### CONTENTS

<u> </u>	
CONTENTS	2
GENERAL INFORMATION	3
FIREPLACE SIZE REQUIREMENTS AND BTU RATING INFORMATION	3
PRE-INSTALLATION AND FIREPLACE PREPARATION SAFETY	4
IMPORTANT SAFETY INFORMATION	5
INSTALLATION SAFETY INFORMATION	6
INSTALLATION SAFETY GUIDELINES	6
OPERATIONAL SAFETY INFORMATION	7
VENTILATION AND CONFINED SPACE SAFETY INFORMATION	9
MINIMUM CLEARANCE TO COMBUSTIBLES	10
WHEN USED AS A VENTED DECORATIVE APPLIANCE (PER ANSI Z21.60b-2004)	11
INSTALLATION - CONNECTING THE GAS TO THE BURNER SYSTEM	11
LOGS - PARTS LIST	12
BURNER PARTS LIST FOR MILLIVOLT VALVE	13
CONNECTING THE GAS TO THE BURNER SYSTEM (Cont.)	14
ATTACH BURNER PLATE TO THE FLOOR	14
CHECKING GAS PRESSURE	15
GLOWING EMBER AND LOG PLACEMENT	16
OPERATING YOUR LOG SET - LIGHTING AND EXTINGUISHING	18
FOR YOUR SAFETY, READ BEFORE LIGHTING	18
OPERATING YOUR REAL-FYRE® HEATER GAS LOG SET	19
CLEANING AND SERVICING	20
TO CLEAN YOUR LOG SET	20
CLEANING YOUR ODS/PILOT	21
CLEANING AND SERVICING	21
LIGHTING INSTRUCTIONS - SERIES 12 VALVE	22
TROUBLESHOOTING	23
WARRANTY	26

### **GENERAL INFORMATION**

The G9-2 Series vent-free gas log sets are available with a variable flame height control valve that can be used with the optional on/off remote transmitter and receiver.

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 vent-free gas log set is equipped with a pilot 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.

This gas log set has been certified to two standards:

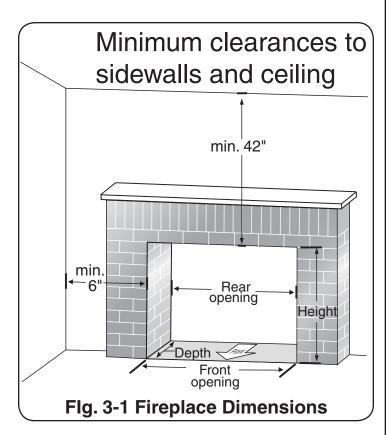
UNVENTED ROOM HEATER-ANSI Z21.11.2-2007

VENTED DECORATIVE APPLIANCE-ANSI Z21.60b-2004

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

# APPROVED INSTALLATIONS Subject to minimum fireplace size requirements specified below:

- 1. Solid-fuel burning fireplaces;
  - A) Prefabricated fireplaces listed to UL-127
  - B) All other masonry fireplaces
- 2. Universal listed vent-free fireplaces.



### Important:

To comply with certification, listing, building code acceptances, and for safe operation and proper performance of this gas log set, use ONLY Peterson Real-Fyre® parts and accessories. Use of other controls, parts and accessories which are not designed for use with Real-Fyre® gas log sets is prohibited and will void all warranties, certifications, listings, and building code approvals, and may cause property damage, personal injury or loss of life.

# FIREPLACE SIZE REQUIREMENTS AND BTU RATING INFORMATION

The minimum size of fireplace for installation of the Real-Fyre® G9-2 heater gas log set is:

Log Cot Cino	_og Set Size Width	Depth	Height	Btu rating Millivolt		
Log Set Size				High Setting	Low Setting	
0.4"	28" front	18"	10"	17"	39,000 Nat.	19,000 Nat.
24"	28" rear		17"	39,000 L.P.	26,000 L.P.	

### PRE-INSTALLATION AND FIREPLACE PREPARATION SAFETY

CAUTION: Installation and repair must be done by an NFI Certified or other qualified professional installer.

**Installer:** Carefully read these instructions before installing this gas burner system. Be sure you understand all safety precautions and warnings contained in this manual.

- **A.** This appliance is designed as an **attended appliance**. Adults must be present when this gas appliance is operating. Do not leave this unit burning when unattended or while anyone is sleeping.
- **B.** This appliance is only for use with the type of gas indicated on the rating plate. This appliance is **NOT CONVERTIBLE** for use with other gasses.
- C. BE CAREFUL: If not installed, serviced, and used correctly per these instructions, this product can cause serious personal injury, property damage, or loss of life.

### PRE-INSTALLATION AND FIREPLACE PREPARATION SAFETY GUIDELINES

- **D. WARNING:** Before installing in a solid-fuel-burning fireplace, <u>the chimney flue, damper, and firebox must be thoroughly CLEANED</u> of soot, creosote, ashes, and loose paint, and must be 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 burner system rating plate. If 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 walls of the fireplace <u>must</u> be permanently sealed shut before the installation. Use a heat-resistant sealant. Do not seal the chimney flue damper.
- **G.** INSUFFICIENT GAS PRESSURE WILL KEEP THE ODS (OXYGEN DEPLETION SENSOR) PILOT FROM OPERATING PROPERLY. DO NOT USE IF GAS PRESSURE IS LOWER THAN THE MINIMUM REQUIREMENT.
- H. The minimum inlet gas-supply pressure for purposes of input adjustment is 5" water column (w.c.) on <u>natural gas</u> and <u>11"</u> w.c. on <u>propane gas</u>. Insufficient gas pressure will affect proper operation of the ODS pilot. Do not install this gas appliance if minimum pressure is not available. The maximum inlet gas-supply pressure is 10.5" w.c. on natural gas and 13" w.c. on propane gas. The propane source must be regulated. (Do not connect this appliance directly to an unregulated propane gas tank this can cause an explosion.)
- I. The 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.** The minimum clearance from the fireplace opening to combustible materials on side walls and ceiling must be maintained as outlined in MINIMUM CLEARANCE TO COMBUSTIBLES WALLS AND CEILING.
- **K.** At least 10"-12" of noncombustible 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.
- L. Be certain that combustible flooring material (i.e., carpet, tile, etc.) is not too close to this gas appliance. If this appliance is at floor level or less than 6" above the floor, there must be at least 12" of noncombustible material between the base of the fireplace and any combustible flooring.
- **M.** Input ratings shown in BTU per hour are for elevations up to 2,000 ft. For elevations above 2,000 ft., refer to the National Fuel Gas Code or contact the Robert H. Peterson Company before installing this product.
- **N.** This gas appliance 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.
- O. This gas appliance must be isolated from the gas-supply piping system by closing the equipment shutoff valve connected to the gas-supply line during any pressure testing of the gas-supply piping system at test pressures equal to or less than <sup>1</sup>/<sub>2</sub> psig.
- **P.** Do not use this appliance if any part has been underwater. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control that has been underwater.

### **WARNING**

THIS APPLIANCE IS EQUIPPED FOR (NATURAL OR PROPANE) GAS. FIELD CONVERSION IS NOT PERMITTED.

### **IMPORTANT SAFETY INFORMATION**

CAUTION: Installation and repair must be done by an NFI Certified or other qualified professional

installer.

**Installer:** Carefully read these instructions before installing this gas log set. Be sure you understand all

safety precautions and warnings contained in this manual.

### ANSI Z21.11.2-2007 UNVENTED ROOM HEATER GENERAL 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 use continues. 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.

If there are ANY signs of carbon monoxide, GET FRESH AIR AT ONCE! STOP USING THE LOG SET IMMEDIATELY!

- **B.** If any soot appears on the log set or other areas of the fireplace in which this appliance is installed, shut system off and call a qualified professional service technician, **vent-free gas log technician**, or your local gas company.
- C. WHEN INSTALLING AS A DECORATIVE VENTED LOG SET, THE UNIT MUST CONFORMTO ALL LOCAL CODES AND TO THE LATEST EDITION OF THE NATIONAL FUEL GAS CODE ANSI Z223.1 OR NFPA54.
- **D.** DO NOT MODIFY THIS VENT-FREE HEATER OR ITS CONTROLS. Any change may be dangerous. Improper installation or use of your vent-free 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.
- **F.** This appliance may be installed in an aftermarket, permanently located, manufactured (mobile) home where not prohibited by local codes. Installation of appliances designed for manufactured homes or mobile homes must conform with the *Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280* in the U.S.; or with *CAN/CSA Z240 MH* in Canada; or with *ANSI/NCSBCS A225.1/NFPA 501A, Manufactured Home Installations Standard* when such as standard is not applicable.
- **G.** Eliminate drafts **before** using the gas log set by closing heating and air conditioning vents, returns, and outside air vents. Fans blowing directly into the fireplace must be turned off when the log set is operating.
- **H.** This appliance is only for use with the type of gas indicated on the rating plate. This appliance is **NOT CONVERTIBLE** for use with other gasses.
- I. CAUTION: If not installed, serviced, and used correctly per these instructions, this product can cause serious personal injury, property damage, or loss of life.
- **J. WARNING:** This appliance is for installation only in a solid-fuel-burning masonry or UL 127 factory-built fireplace or in a listed ventless firebox enclosure. It has been design certified for these installations. Exception: DO NOT install this appliance in a factory-built fireplace that includes instructions stating it has not been tested or should not be used with unvented gas logs.

### **INSTALLATION SAFETY INFORMATION**

CAUTION: Installation and repair must be done by an NFI Certified or other qualified professional

installer.

**Installer:** Carefully 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 thoroughly cleaned** of soot, creosote, ashes, and loose paint by a qualified chimney cleaner. Some older fireplaces may need repair prior to installing this product.

- **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 pilot from operating properly. Do not use if gas pressure is lower than the minimum requirement. Reference INSTALLATION section, CHECKING GAS PRESSURE.
- D. Correct installation of the ceramic refractory log set and proper placement and installation of burner assembly, including ember placement and Lava Granule placement, are crucial to safe operation of your set. Problems WILL occur if all items are not properly installed. Reference INSTALLATION section, LOG PLACEMENT.
- E. When installing in a wood-burning fireplace, place the log set <u>forward</u> 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.**
- **F.** If you use Lava Granules for decorative use, do not allow Lava Granules into or on any part of the burner or on the logs. Lava Granules should only be placed on the floor of the fireplace, in front of and to the sides of the burner, but away from the controls.
- **G.** <u>DO NOT PLACE</u> 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 <u>may</u> be placed around the burner system, as long as they do not interfere with the burning of your gas log set.
- **H.** Due to high temperatures, the log set should be located out of traffic and away from furniture/draperies.
- I. 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.
- **J.** Connecting directly to an unregulated propane tank can cause an explosion.
- K. 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 airflow and guard against sooting. Raise the fireplace floor using noncombustible materials.
- L. The installation of appliances designed for manufactured home or mobile home installation must conform with the Standard CAN/CSA Z240 MH, Mobile Housing in Canada; or with the Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280 in the United States; or when such a standard is not applicable, ANSI/NCSBCS A225.1/NFPA 501A, Manufactured Home Installations Standard.
- **M.** A vent-free room heater having an input rating of more than 10,000 BTU per hour shall not be installed in a bedroom (ANSI Z21.11.2). If local codes allow, you may install a G8-xxR burner, having a rating of 9,500 BTU, in a bedroom. An unvented room heater having an input rating of more than 6,000 BTU per hour shall not be installed in a bathroom (ANSI Z21.11.2).

### **OPERATIONAL SAFETY INFORMATION**

CAUTION: Installation and repair must be done by an NFI Certified or other qualified professional

installer.

**Installer:** Carefully 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 vent-free gas log is installed.

- B. GLASS DOORS MUST BE FULLY OPEN when your vent-free gas log set is operating. This appliance MUST NOT BE ON if glass doors are closed, as it can lead to sooting, burner outages, and possibly explosion, causing damage or injury.
- C. WARNING: DO NOT ALLOW DRAFTS INTO OR AROUND THE FIREPLACE. CLOSE (SHUT) HEATING AND AIR CONDITIONING VENTS, RETURNS, AND OUTSIDE AIR VENTS. DO NOT OPERATE FANS (WINDOW FANS, CEILING FANS, FLOOR FANS), WHICH MAY ALTER FLAME PATTERNS. Sooting, excess carbon monoxide, or ODS pilot outages may occur due to drafts.
- **D. WARNING: DO NOT USE A BLOWER INSERT, HEAT EXCHANGER INSERT,** or any other accessory that is not specifically certified for use with your vent-free gas log set.
- **E.** If you use Lava Granules for decorative use, do not allow Lava Granules into or on any part of the burner or on the logs. Lava Granules should only be placed on the floor of the fireplace, in front of and to the sides of the burner, but away from the controls.
- **F.** Make sure there is adequate combustion and ventilation air when your log set is operating. You may need to crack the damper or open a window slightly.
- **G.** Discontinue using if you smell odors, or experience headaches, nausea, or dizziness.
- **H.** To light the log set, it may be necessary to purge the unit for longer than one minute after long periods of non-use.
- I. If you operate your vent-free gas log set fueled by propane, 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, refill your propane tank, and have your burners cleaned.
- **J.** During manufacturing, various parts of this unit are treated with oils or paints. Though not harmful, they may produce annoying smoke and smells as they are burned off during initial operation. This is a normal occurrence. Initial break-in period should last four to six hours; maximum ventilation should be provided by opening windows, doors, or chimney flue.
- **K.** 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.
- **L.** Do not place clothing or any flammable material on or near your vent-free gas log set. Matches, paper, garbage, or any other material must not be thrown on top of the logs, burner, or into the flame.
- **M.** Young children should be carefully supervised when in the same room with this appliance.
- N. Children and adults should be alerted to the hazard of high surface temperatures and should stay away to avoid burns or clothing ignition.

### **OPERATIONAL SAFETY INFORMATION (Cont.)**

CAUTION: Installation and repair must be done by an NFI Certified or other qualified professional

installer.

**Installer:** Carefully 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

O. Vent-free gas logs are supplemental zone heaters, not to be used as a primary heating source. Water vapor produced by vent-free gas logs 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.

As a supplemental zone heater, this set should not be used more than six continuous hours per day or more than 40 hours per week. More frequent use indicates that this unit is being used as a primary heat source. The higher presence of carbon monoxide generated by this amount of use can be considered unsafe.

- **P. 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 <u>may</u> be placed around the burner system, if they do not interfere with log set operation.
- **Q.** Do not use your vent-free gas log set if any part of it has been underwater. Immediately call a qualified professional service technician to inspect the set. Replace any part of the control system or gas control affected.
- **R.** If the gas quality is poor or pressure low, your ODS pilot may not stay lit, the burners may produce soot, or the unit may backfire. Contact your local gas supplier immediately.
- **S.** This appliance is designed for adults to be present while in operation. Do not leave this unit burning when <u>unattended</u> or while sleeping. **This is an attended appliance.**
- T. WARNING: Failure to keep the primary air opening(s) of the burner(s) clean may result in sooting and property damage.
- U. WARNING: All previously applied loose material, such as embers, must be removed prior to reapplication. All replacement loose material must be purchased from the original appliance manufacturer.
- V. Unusually tight construction is defined as:
  - a) Walls and ceilings exposed to the outside atmosphere have a continuous water vapor retarder with a rating of 1 perm (6x10<sup>11</sup> kg per pa-sec-m<sup>2</sup>) or less with openings that are sealed or use gaskets;
  - b) Weather stripping has been added on openable windows and doors; AND
  - **c)** Caulking or sealants are applied to areas such as joints around window and door frames; between sole plates and floors; between wall-ceiling joints; between wall panels; at penetrations for plumbing, electrical, and gas lines; and at other openings.

### **VENTILATION AND CONFINED SPACE SAFETY 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 that may be adversely impacted by combustion products created by burning natural or propane gas.

Your vent-free gas log set SHALL NOT BE INSTALLED IN A CONFINED SPACE or unusually tight construction unless provisions are made for adequate combustion and ventilation air.

The National Fuel Gas Code, ANSI Z223.1/NFPA 54 defines a confined space as a space whose volume is less than 50 cu. ft. per 1,000 BTU per hour (4.8 meters per kw) of the aggregate input rating of all appliances installed 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 unconfined space.

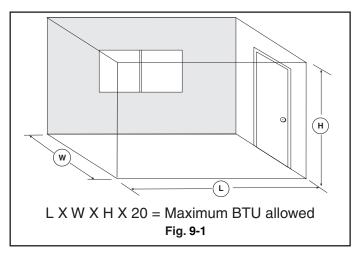
An unconfined space is a space where volume is <u>at least 50 cu. ft.</u> per 1,000 BTU per hour (4.8 meters<sup>3</sup> per kw) of the aggregate input rating of all appliances in that space. Rooms communicating directly with the space in which the appliances are installed, through openings not furnished with doors, are considered a part of the space.

**WARNING:** Do not install the unvented burner system where the room is considered a confined space (see Fig. 9-1).

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 allowed.

(Length x Width x Height x 20 = Maximum BTUs allowed)

Example: To install a Peterson Real-Fyre<sup>®</sup> 24" vent-free gas log set with 39,000 BTU (nat. gas) in a space with no other gas-burning appliances, the space **MUST** be 1,950 cu. ft. or larger (assuming an 8' ceiling, space dimensions must be a minimum of 243.75 sq. ft., i.e.; 16.3' x 15', etc.) (see Fig. 9-1).



### **WARNING**

If the area in which the heater may be operated is smaller than that defined as an unconfined space or if the building is of unusually tight construction, provide adequate combustion and ventilation air by one of the methods described in the National Fuel Gas Code, ANSI Z223.1/NFPA 54, Air for Combustion and Ventilation, or applicable local codes.

Installation in a tightly constructed home and/ or installation at high altitudes may cause your vent-free 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 the number of air changes in the home.

The Peterson Real-Fyre® vent-free 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 BTUs 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 vent-free gas log set <u>unless</u> provisions for additional combustion and ventilation air are made.

### MINIMUM CLEARANCE TO COMBUSTIBLES

If the unvented gas log set is installed in a factory-built fireplace, follow the manufacturer's guidelines for minimum clearances to combustibles. In the absence of such guidelines, follow the instructions below:

### Clearances to Combustible Construction:

Side walls: 6" from side of fireplace opening (Fig. 10-1) 42" from top of fireplace opening (Fig. 10-1) Mantel: (see Figs. 10-2, 10-3, and paragraph A below)

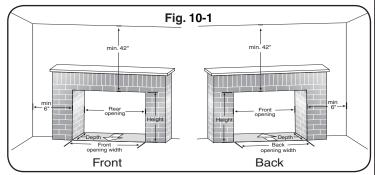
Flooring: (see paragraph B below)

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, airflow 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 warping or discoloration may exist no matter what item(s) you are burning in the fireplace, including wood.

The dimensions shown in Fig. 10-1 are MINIMUM **CLEARANCES** to maintain when you install this gas log set. **BOTH SIDES** of the fireplace opening **MUST BE AT LEAST** 6" from any combustible side walls. The ceiling MUST BE at least 42" from the top of the fireplace opening.



### HOW TO CORRECTLY SIZE AND INSTALL MANTELS AND FIREPLACE HOODS

### A. ABOVE THE FIREPLACE:

To install the unvented gas log set, there must <u>ALWAYS</u> be noncombustible 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 <u>DO NOT</u> install a fireplace hood, there <u>MUST</u> be at least 12" of noncombustible or heat-resistant material immediately above the fireplace opening (see X in Fig. 10-2 below). If you <u>DO</u> install a fireplace hood, there <u>MUST</u> be at least <u>10"</u> of noncombustible or heat-resistant material immediately above the fireplace opening (see Y in Fig. 10-3 below). If there is a wooden mantel, shelf, or other combustible projection above the fireplace, follow the information in Fig. 10-2 or Fig. 10-3 below.

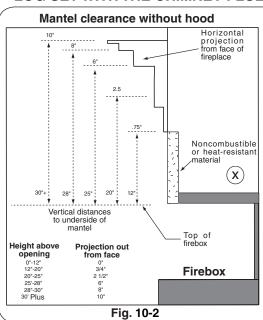
**EXAMPLE:** If the fireplace has a combustible projection (mantel or shelf) 20" above the top of the firebox, the maximum horizontal projection out from the face of the fireplace will be:

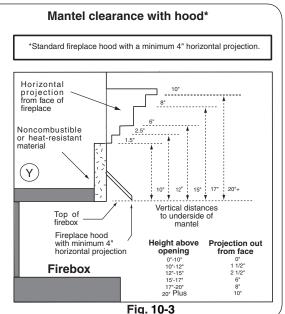
- 1. If a fireplace hood is not installed 2.5" (see Fig. 10-2).
- 2. If a fireplace hood is installed 10" (see Fig. 10-3).

### 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 the unvented gas log set. If the unvented gas log set is at floor level or less than 6" above the floor, there MUST be at least 12" (1 foot) of noncombustible material between the front of the fireplace and any combustible flooring.





### WHEN USED AS A VENTED DECORATIVE APPLIANCE (PER ANSI Z21.60b-2004)

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

These gas logs may be installed as vented decorative log sets in compliance with ANSI Z21.60b-2004 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. in.** based upon a minimum chimney height of at least 15'. Chimney damper must be fixed in a manner to maintain a permanent free opening at all times. To accomplish this, install a screw or bolt in the edge of the damper to prevent closing, or drill holes in damper or remove damper.

### **INSTALLATION - CONNECTING THE GAS TO THE BURNER SYSTEM**

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
- B. Ventilation and Confined Space Information
- C. Installation Safety Guidelines

### IMPORTANT

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

Note: To install your Real-Fyre® vent-free gas log set, your fireplace must have a gas supply line that has been installed by a qualified, professional technician in accordance with all local codes. Refer to the PARTS LIST when installing the vent-free gas log set.

Tools Required:

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

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.

#### WARNING

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

Refer to the PARTS LIST when installing the vent-free gas log set.

- 1. MAKE SURE THE FIREPLACE GAS SUPPLY IS TURNED OFF.
- 2. Center the burner assembly in the fireplace. Make certain that no part of the assembly protrudes beyond the face of the fireplace.
- 3. Attach the large adaptor fitting of the flex connector kit to the fireplace gas supply line using pipe compound resistant to propane gas or Teflon tape. Tighten the connection. Connect one end of flex connector to the large adaptor, and the other end to the adapter on the valve assembly.
- **4.** Make sure that the control valve on the burner system is in the **OFF** position. Turn on the gas to the fireplace and check for leaks at all connections.

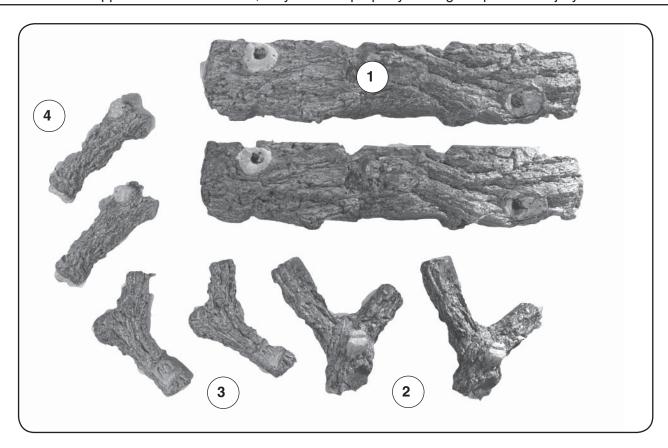
Test all gas joints from the gas meter to the valve assembly for leaks using a gas analyzer or soap and water solution after completing connection.

DO NOT USE AN OPEN FLAME FOR CHECKING GAS LEAKS.

### LOGS - PARTS LIST

### WARNING

Failure to position the parts in accordance with these diagrams, or failure to use only parts specifically approved with this heater, may result in property damage or personal injury.



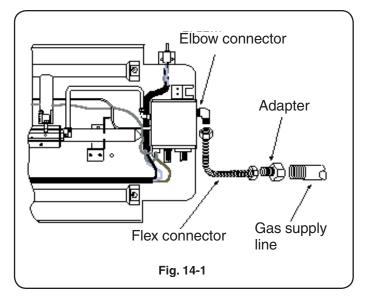
		RD = Golden Oak Designer		S = Split Oak	FO=Forest Oak	
			ITEM NO.	QTY.	PART NO.	DESCRIPTION
Note:	To aid in p	ositioning	1.	2	RDL-9-2-24B SL-9-2-24B FOL-9-2-24B	Bottom log
the logs, Log #2 and #3 hav numbers engrave into the notches and Log #4 has th number on an en face.	#2 and numbers	2 and #3 have umbers engraved	2.	2	RDL-9-2-10TY SL-9-2-10TY FOL-9-2-10TY	Top Y log 8"
	44 has the	3.	2	RDL-9-2-8TR SL-9-2-8TR FOL-9-2-8TR	Top Y log 9"	
			4.	2	RL9-2-8T SL9-2-8T FOL9-2-8T	Bonus logs

# **BURNER PARTS LIST FOR MILLIVOLT VALVE** (11) 10 8

ITEM NO.	DESCRIPTION	ITEM NO.	DESCRIPTION
1.	Piezo ignitor (1)	6.	Rear burner (1)
2.	Switch (2)	7.	Grate (1)
3.	Front burner (1)	8.	Pilot (natural) (1) Pilot (propane) (1)
4.	alve (natural) (1) alve (propane) (1)		Pilot (propane) (1)
	Valve (propane) (1)	9.	Connector kit
5.	Center burner (1)	10.	Lava granules (2)
		11.	Glowing embers (2)

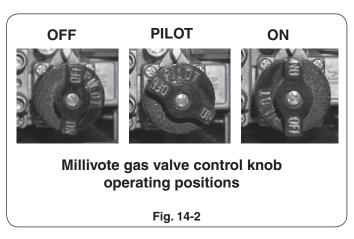
### **CONNECTING THE GAS TO THE BURNER SYSTEM (Cont.)**

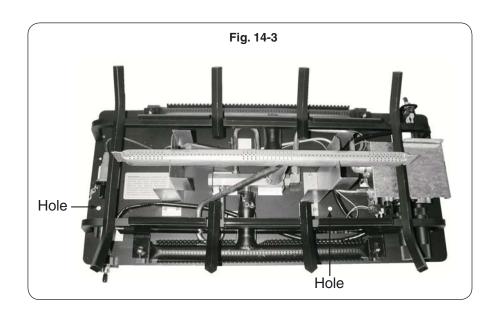
- 1. Center the burner assembly in the fireplace. Make certain that no part of the assembly protrudes beyond the face of the fireplace.
- 2. Attach the large adaptor fitting of the flex connector kit to the gas supply line using pipe compound resistant to propane gas or Teflon tape. Tighten the connection. Connect one end of flex connector to the large adaptor, and the other end to the elbow connector on the burner assembly (see Fig. 14-1).
- 3. Make sure that the control valve on the assembly is in the OFF position (see Fig. 14-2). 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.



# ATTACH BURNER PLATE TO THE FLOOR

Two holes are provided in the base plate (Fig. 14-3) to enable you to secure your burner set to the floor. After centering the burner base plate in the fireplace, indicate hole placement with the holes in the base plate. You may have to drill holes in the floor of the fireplace (**Note:** If you have a manufactured fireplace, check with the fireplace manufacturer before drilling holes in the floor). Attach and secure the base plate with appropriate screws (not provided).





### **CHECKING GAS PRESSURE**

### WARNING

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

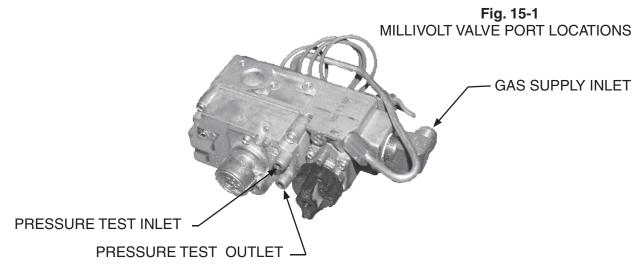
### IMPORTANT

Check the gas pressure with your heater 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.

### Millivolt Safety Pilot Valve (Fig. 15-1)

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 reseal. Do not over torque. Check for gas leaks.



GAS PRESSURE SPECIFICATIONS -

NATURAL GA	AS	PROPANE (L.P.)	GAS	
MILLIVOLT PRESS	SURE	MILLIVOLT PRESSURE		
Outlet Pressure Reading:	Min. 3.5" w.c.	Outlet Pressure Reading:	Min. 10" w.c.	
Gas Inlet Pressure: Max. 10.5" w. Min. 5" w.		Gas Inlet Pressure:	Max. 13" w.c. Min. 11" w.c.	

### **GLOWING EMBER AND LOG PLACEMENT**

### **GLOWING EMBER PLACEMENT**

Your glowing embers are provided in a bag labelled glowing embers. It is very important that you use only the embers supplied with your set and do not add additional embers. Open the bag carefully and slide the embers out. Spread them evenly in a thin layer across the bottom burners and ember tray, ensuring that there are no ember clumps larger than 1/4" in diameter. If the embers have clumped during shipment, break up the clumps and spread them across the burner.

Proper log placement is critical to ensure proper performance of your Real-Fyre® gas log set. Be sure to

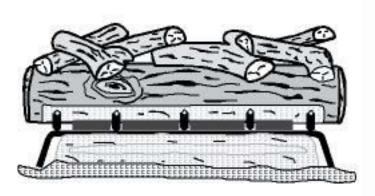
Place glowing embers on ember burners below bottom logs

follow log placement instructions carefully! Logs are placed the same way for both Golden Oak designer and Split Oak styles.

### LOG PLACEMENT

### **WARNING**

Failure to position the parts in accordance with these diagrams, or failure to use only parts specifically approved with this heater, may result in property damage or personal injury.





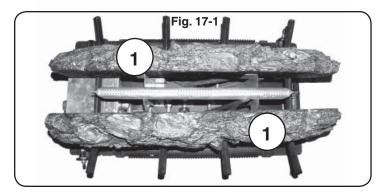
Carefully follow the detailed instructions on pages 16-18 for correct log placement.

### **GLOWING EMBER AND LOG PLACEMENT (Cont.)**

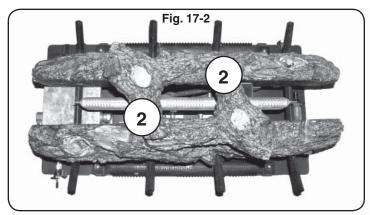
### **4 EASY STEPS TO LOG PLACEMENT**

Each log in your Real-Fyre® heater gas log set is numbered to aid in the log placement procedures, and also has seating notches which stabilize the logs together in their correct position.

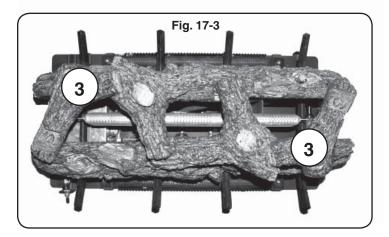
1. Using the top burner supports as log positioners, set the two (2) bottom logs (Log #1) in their approximate positions on the grate, as shown in Fig. 17-1. Ensure that the positoners slot into the back of each bottom log.

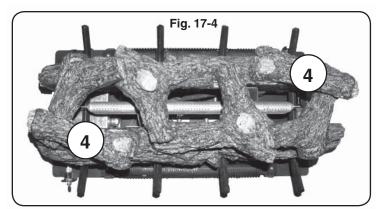


2. Position the two (2) intermediate ("Y") logs (Log #2) on top of the bottom logs, as shown in Fig. 17-2. Locate the logs so that each one fits into 2 notches; one end on each bottom #1 logs, and one end (engraved with a "2") at the end of the corresponding log, forming a stable square.



- 3. Position the two (2) smaller "Y" top logs (Log #3) on the top of the intermediate and bottom logs, as shown in Fig. 17-3. Locate the logs by fitting one end into the notch on an intermediate log (Log #2), and the other two ends into the notches at the end of each of the bottom logs, with the "3" facing outermost, as shown in Fig. 17-3.
- 4. Position the two (2) top logs (Log #4) on the top of Logs #3 and the bottom logs, as shown in Fig. 17-4. Locate the logs so that they rest with one end in the notch on Log #3 and the other (the "v" end) into the remaining notches on the bottom log.





### **GLOWING EMBER AND LOG PLACEMENT (Cont.)**

## **CAUTION:** BURN HAZARD. LOGS WILL REMAIN HOT FOR SOME TIME AFTER USE.

YOU MUST MAINTAIN THE LOG LAYOUT AS SHOWN TO ENSURE PROPER OPERATION OF YOUR LOG SET.

IF YOU NEED TO REPOSITION ANY LOG TO MAINTAIN THE PROPER LAYOUT, USE HEAT RESISTANT GLOVES OR ALLOW LOGS ADEQUATE TIME TO COOL BEFORE HANDLING.

After setting the logs into position as described on previous page, ensure each is properly and firmly situated. Your heater 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 #2, 3, or 4. Periodically check the positioning of all logs to ensure proper log placement and stability. If any flame is striking Logs #2, 3, or 4, recheck log placement. Adjust to conform with instructions. There should be no flame impingement on these logs.

Lava granules are provided as an aesthetic enhancement to your heater gas log set and do not affect its operation. Spread the lava granules on the floor of your firebox around the front and the sides of your gas log set (Fig. 18-1). BE SURE THAT NO GRANULES ENTER THE BURNER SYSTEM OR INTERFERE WITH THE BURNING OF YOUR LOG SET.

Note spacing between logs

Glowing embers

Fig. 18-1

Note: Granules spread around log set

### **OPERATING YOUR LOG SET - LIGHTING AND EXTINGUISHING**

### **IMPORTANT**

For all valves, the air <u>MUST</u> be purged from the gas line before the pilot will light properly. The time taken to do this will depend on the length of gas line from the meter to the unit and the length of time since the unit or gas line was last used (in the case of non-use during warm weather for example). It may take from 3-15 minutes before all the air is purged and the pilot will light properly. This is done using the method for lighting the pilot, but holding in the control valve for a longer period. Follow the LIGHTING INSTRUCTIONS in this manual for your specific valve type.

\* We recommend that before you install your log set you familiarize yourself with the control valve layout. This will help you to be confident operating the log set when fully installed.

### 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**

- 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, professional 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 underwater. Immediately call a qualified, professional service technician to inspect the gas log set and to replace any part of the control system and any gas control which has been underwater.

Your Peterson Real-Fyre® heater gas log set is equipped with a millivolt gas valve that can be controlled with a toggle switch, wall 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.

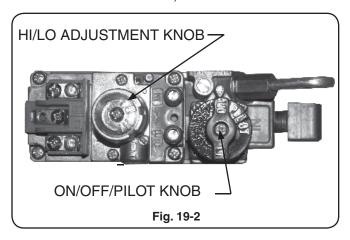
### OPERATING YOUR REAL-FYRE® HEATER GAS LOG SET

The gas will now flow to the bottom burners, top burner and through the carryover tube (see Fig. 19-2). The carryover tube will ignite first, which in turn lights both bottom burners and the top burner. The entire ignition sequence normally takes one to three seconds.

Observe all burners' flames. The bottom burner 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 top flame will be blue at the base and a combination of blue and yellow at the body and tips, and should be 5" to 8" tall, with the center flame being the tallest (see Fig. 19-1).

Your Real-Fyre® heater gas log set is now ready for you to enjoy. Follow LIGHTING INSTRUCTIONS. Then, simply turn your **ON/OFF/PILOT** knob and toggle switch to the **ON** position and adjust the **HI/LO** adjustment knob to the flame height & heat output you desire (Fig. 19-2). **Note:** To lower the setting, turn to the right or clockwise direction. When you are finished enjoying your log set, flip either toggle switch to the **OFF** position. The pilot will remain lit.

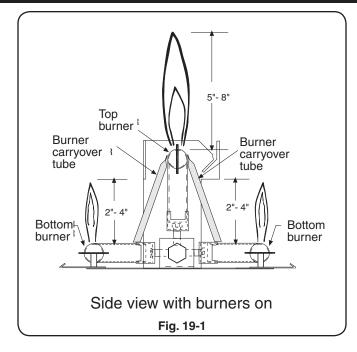
If total shutdown is desired, turn the valve control knob



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 heater gas log set, follow the section entitled OPERATING YOUR GAS LOG SET - LIGHTING AND EXTINGUISHING.

Every Real-Fyre® heater gas log set that leaves the factory is quality checked to ensure that it has been manufactured to the specifications to which it was submitted and approved for certification. This check includes an operational test to ensure both satisfactory combustion and operation.

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 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 propane or natural gas.
- Production of water vapor. Water vapor helps to increase indoor humidity, which may be beneficial during the dry heating season.

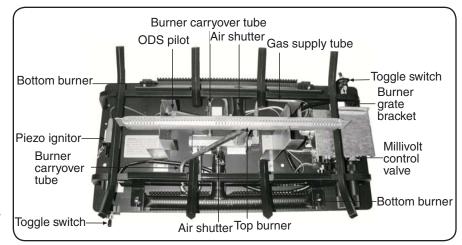
If you operate your heater gas log set fueled by propane gas, operating characteristics may vary as the fuel in the tank approaches empty (less than  $^{1}/_{4}$  full). Sooting and other increases in combustion byproducts will occur. Turn off your log set and re-fill your propane tank.

### **CLEANING AND SERVICING**

- **A.** Always shut off the gas to heater gas log set while performing service work.
- **B.** Allow your heater 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 <u>at least annually</u> by a professional service person with the correct tools to service this unit to check for clean burning operation and proper ODS appearance. 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 <u>all</u> control components, burners, and circulating air passageways be kept <u>clean</u> 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 the ODS/pilot assembly.
- 2. The pilot opening.
- The air shutters both of the bottom burners and the top burner for propane and natural gas.
- 4. All of the ports on the carry over tube.
- 5. All of the ports on both the front/ bottom burner and the rear/top burner.



**D.** Any safety screen or guard removed for servicing must be replaced prior to operating this gas log set.

Only limited cleaning will be required under normal use of your heater gas log set.

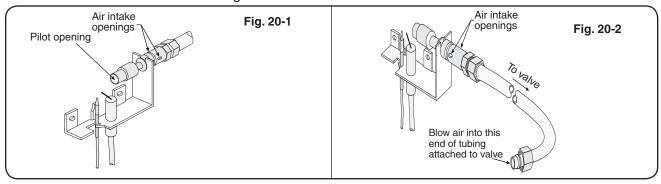
### TO CLEAN YOUR LOG SET

- 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 the section entitled GLOWING EMBER AND LOG PLACEMENT in this manual.

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 heater 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 heater gas log set frequently for evidence of sooting. If sooting is present, discontinue use until the source of sooting is corrected.

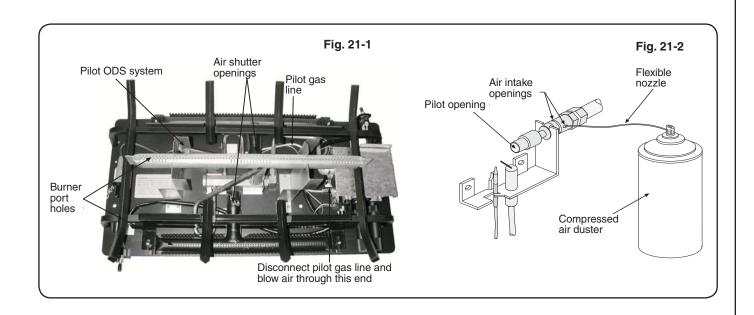


### **CLEANING AND SERVICING**

### **CLEANING YOUR ODS/PILOT**

Periodic cleaning and maintenance of your heater gas log set is recommended to ensure 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, professional service technician familiar with the specific characteristics of your log set.

- 1. Turn your heater gas log set to the **OFF** position and allow it to cool. Inspect the pilot area (see Fig. 21-1) 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 Fig. 21-2) 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.
- 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, ensuring that the nozzle is pointed toward the pilot opening (see Fig. 21-2). 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 Fig. 21-1).
- 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 Fig. 21-2). 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 GAS LOG SET LIGHTING & EXTINGUISHING).
- **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.



# LIGHTING INSTRUCTIONS - SERIES 12 VALVE 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.

Do not use this appliance if any part has been underwater. Immediately call for a qualified professional service technician to inspect the appliance and to replace any part of the control system and any gas control that has been underwater.

The Real-Fyre® burner system has an ODS (Oxygen Depletion Sensor) pilot that can be lit by using the built in piezo ignitor switch on the burner, or by hand using a match or long necked lighter. When lighting the ODS pilot, follow these instructions exactly.

**BEFORE LIGHTING**, smell all around the burner area for gas. Be sure to smell next to the floor as some gas is heavier than air and will settle on the floor. IF YOU SMELL GAS, FOLLOW THE INSTRUCTIONS ON PAGE 1.

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 professional service technician. Force or attempted repair may result in fire or explosion.

### LIGHTING THE ODS PILOT

To read the safety valve control knob (Fig. 22-1), read the marking nearest the teardrop-shaped metal pointer.

- 1. If the safety valve control knob is in the **PILOT** position, push in slightly on the knob and rotate it clockwise to the **OFF** position.
- 2. Release knob and wait five minutes.
- 3. Turn safety valve knob counterclockwise ✓ to the PILOT position. (Only the ODS pilot gas will flow when the knob is pushed in.)
- **4.** Push and hold the safety valve knob fully in and push in the piezo ignitor button several times until the ODS pilot lights.
- **5.** Hold the safety valve knob in for approximately 60 seconds before releasing.
- 6. If the ODS pilot does not stay lit, turn the safety valve knob clockwise to the full OFF position. Wait five minutes, then repeat steps 3 through 5.

### **IGNITING THE MAIN BURNER**

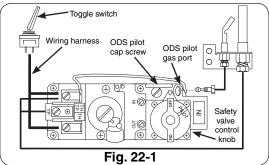
With the ODS pilot lit, turn the safety valve knob counterclockwise to the **ON** position. Switch the toggle switch control to the **ON** position and the burner will light. Refer to the PARTS LIST for the toggle switch location.

### SHUTTING OFF THE MAIN BURNER

Switch the toggle switch control clockwise  $\frown$  to the **OFF** position. The ODS pilot will remain lit.

### SHUTTING OFF THE ODS PILOT

Be sure the toggle switch control is **OFF** and depress and turn the safety valve knob clockwise to the **OFF** position.



### ADJUSTING THE ODS PILOT

- a. The ODS pilot flame should encircle the generator tip, and is preset at the factory (Fig. 22-2). Ordinarily, the ODS pilot will not require field adjustment.
- b. If adjustment is necessary, remove the cap screw (Fig. 22-1) and turn the smaller gas adjustment screw inside counterclockwise to increase the ODS pilot flame, and clockwise to decrease the ODS pilot flame. Replace the cap screw.

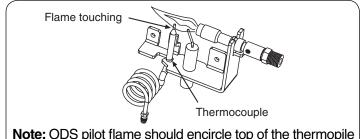
### **MAINTENANCE**

Your pan burner is equipped with a safety ODS pilot that will shut off the gas supply in case the ODS pilot is not burning or functioning properly. Make sure the ODS pilot is adjusted properly and that the generator spade clips are tightly connected to the terminal screws on the valve. If the ODS pilot will not stay lit, call your local gas utility or gas supplier.

A periodic check of the following should be performed at least annually by a qualified professional service representative:

- Valves and toggle switch control for proper operation.
- 2. Flue system for rust, damage, or leaks.
- 3. Damper operation.
- **4.** Orifices for dirt or other foreign matter.
- 5. Visual check on the burner.

If this unit was shipped with a remote, or if a remote system was installed later, read and follow the separate remote instructions to operate the burner remotely.



**Note:** ODS pilot flame should encircle top of the thermopile Fig. 22-2 Lighting the ODS pilot

	POSSIBLE CAUSE		TROUBLESHOOTING  SOLUTIONS
	BURNE	R S	HUTTING DOWN DURING OPERATION
A.	Insufficient or excessive gas pressure		Check gas pressure (check with local gas company). For natural gas, pressure must be minimum 5" w.c. at fireplace with burner operating. Maximum inlet gas pressure is 10.5", w.c. Reading at inlet pressure tap (farthest to valve inlet) on remote-capable valves burners should be 5" w.c. (minimum). With the knob on high, maximum inle pressure is 10.5" w.c.
		A2.	Other gas appliances may be on the same gas line, dropping gas pressure to the log set. Check pressures with everything operating to ensure adequate pressure.
B.	Foreign debris in or around the fireplace and around the air intake of the ODS pilot	B.	Dust, carpet fibers, paper, spider webs, pet hair, etc. in fireplace or on burner assembly can affect operation of burner and ODS pilot assembly. Clean out debris and vacuum around burner for accumulated dust. Vacuum or use compressed air to clean out the ODS pilot assembly area, air shutter holes, burner orifices, and ODS pilot air intake openings. Blockage in this area will affect the operation of the ODS pilot assembly.
C.	Room size (unconfined space)	C.	50 cu. ft. is required for every 1,000 BTU. Multiply the room's length $x$ width $x$ height by 20 (L $x$ W $x$ H $x$ 20). If resulting number is less than the BTU rating of the burner, ODS pilot outages may occur. Provisions for adequate combustion and ventilation air must be made (see VENTILATION AND COMBINED SPACE SAFETY INFORMATION).
D.	Log placement	D.	Your logs may have notches for correct placement. The burner may have brackets for correct placement. Make sure log set is placed in proper position (see LOG PLACEMENT) so there is no flame impingement on the log set.
E.	Flue area, fireplace, or damper dirty from soot	E.	Clean around, above, and under damper thoroughly. Clean fireplace, removing loose material, including soot and creosote.
F.	Fans, furnaces, air conditioning vents, returns, or fireplace outside air vents near or blowing into fireplace may create drafts, altering flame patterns	F.	Eliminate drafts by closing heating and air conditioning vents, returns, and closing outside air vents. Fans blowing directly into the fireplace should be turned off when set is operating.
G.	Blockages on burner	G.	Vacuum any Lava Granules or material that may have fallen onto burner pipe area
H.	Fireplaces with high top cavities can accumulate by-products of combustion, which can start recirculating, causing shutdown	H.	Open window or damper slightly. Move burner forward if possible, or otherwise increase ventilation.
I.	Insufficient air circulation	I.	Check log placement, Glowing Ember placement, Bryte Coals™ placement, and sizing of log set (check your owner's manual for proper placement and requirements) Reposition burner closer to the front of fireplace. ( <b>Note:</b> Do not place burner to close to combustibles.) (See INSTALLATION SAFETY GUIDELINES section.)
J.	Fireplace too small for unit	J.	Ensure minimum requirements are met (see FIREPLACE SIZE REQUIREMENT section).
K.	At high altitude, too much heat or moisture can cause ODS pilot to shut down log set	K.	Open a window or the damper slightly or otherwise increase the ventilation. Your se may not be certified for use over 2,000 feet. Check your owner's manual.
L.	ODS pilot flame lifting off thermocouple/generator	L.	Check gas pressure (see item A1 in this table).
M.	Soot inside burner	M.	Take burner tube out of unit and shake it or tap it to loosen soot inside burner. Clear thoroughly and place burner tube back onto unit.
	Pilot (remote-capable)		Contact your dealer for instructions on replacement.

TROUBL	ESHOOTING (Cont.)
POSSIBLE CAUSE	SOLUTIONS
ODS PILO	OT WILL NOT LIGHT
A. ODS pilot flame lifting off thermocouple/generator	A. Check gas pressure.
B. Piezo spark not lighting ODS pilot	B. Check to make sure piezo is sparking when turning ignitor control knob. (Note: You may need to turn ignitor several times to ignite ODS pilot.) See LIGHTING INSTRUCTIONS section.
C. Gas supply off/manual shutoff valve closed	C. Turn on gas supply or open manual shutoff valve.
D. Air in gas line	D. Hold control knob to bleed the line and repeat LIGHTING INSTRUCTIONS until air is removed.
3 HIGH CO - CARBON MONOXID	E DETECTORS IN HOME TURNING ALARM ON
A. High CO levels	A. TURN OFF UNIT IMMEDIATELY.
	<b>B.</b> Call a qualified service technician or your gas supplier.
4 co	NDENSATION
A. High room humidity and cold walls or windows will create condensation in room	A. Open a window or damper slightly.
5 LOW	FLAME HEIGHT
A. Low gas pressure	A. Check gas pressure.
B. Propane tank running low	B. Fill tank completely.
6 BURNER N	OT BURNING EVENLY
A. Top burner lights; bottom burner has delayed ignition or does not light	A1. Check gas pressure. Can be caused by too small a gas line (see ANSI 223.1/NFPA 54 Piping Guidelines).
	<b>A2.</b> Low propane fuel gas level. Vacuum burner tube for soot blockage and fill propane tank.
	A3. Flash tube (if present) blocked. Clear blockage.
B. Burner orifice clogged	B. Clean burner orifice.
NO SPARK AT ODS PILOT WE	HEN IGNITOR CONTROL KNOB IS TURNED
A. Ignitor electrode wire loose	A. Check wiring and reconnect any loose wiring
8	ODORS
A. New log set (break-in period)	<b>A.</b> Burn unit for four to six hours with damper, doors, or windows open. Allow odors to dissipate.
B. Odors created by aerosol sprays, detergents, household chemicals, and insecticides	<b>B.</b> When these odors are drawn into the fireplace, this may cause objectionable odors. Thoroughly ventilate the area before restarting your log set.
C. Gas leak	C. Locate gas leak and correct all leaks.
D. New home, new carpet, or new paint	D. When these odors are drawn into the fireplace, this may cause objectionable odors. Thoroughly ventilate the area before restarting your log set.
	D. When these odors are drawn into the fireplace, this may can objectionable odors. Thoroughly ventilate the area before restart

POSSIBLE CAUSE		HOOTING (Cont.) SOLUTIONS
9 500	TI	
A. Low gas pressure		Check gas pressure.
B. Drafts in room		Eliminate drafts by closing heating and air conditioning ventures, and outside air vents. Fans blowing directly into fireplations should be turned off when set is operating.
C. Air shutters blocked	C.	Burner air shutters are blocked with debris. Vacuum debris in a around burner area.
D. Log placement	D.	Some log sets have notches on the bottom front and rear logs restrict any side-to-side movement. The log support/main burn brackets restrict any forward or backward movement. Make su log set is placed in its proper position as instructed in the owner manual, so there is no flame impingement on log set.
E. Too many embers on the ember burner (where fitted)	E.	Remove any additional embers not included with your vent-free glog set. Important: DO NOT ADD ANY ADDITIONAL EMBERTO THIS LOG SET. ANY ADDITIONAL EMBERS MAY CAUSUNSAFE OPERATION.
<b>F.</b> Using a product other than Real-Fyre <sup>®</sup> gas logs with burner	F.	Make sure only Real-Fyre® <u>vent-free</u> gas logs are used with you vent-free burner.
<b>G.</b> Using natural gas burner on propane gas or propane burner on natural gas	G.	Make sure burner is set up for the gas you are using. Che nameplate attached to burner. Call your dealer immediately nameplate does not match the gas you are using.
H. Adding any accessories to log sets	Н.	Shut down log set and take off any logs or accessories that do r belong with the set.
l. Blocked orifices or air shutters	I.	Dust, lint, fibers, paper, spider webs, pet hair, etc. in the firepla and on the burner assembly can affect the operation of the burn and the ODS pilot assembly. Clean out the debris and vacua around burner for dust that may have accumulated over tin Vacuum the ODS pilot assembly and over the air shutter hole. Any blockages in this area will affect the operation of the OI sensor.
ODS PILOT WILL NOT	ST	AY LIT WHEN KNOB IS RELEASED
A. Haven't held knob in long enough		Hold knob in for 1 minute and release. If the knob doesn't ho contact your dealer for service (valve replace or new ODS).
11 POPPING NO	ISE	COMING FROM BURNER
A. Flash tube blocked	A.	Clear flash tube of all obstructions, especially around t bottom.

### WARRANTY

### PETERSON VENT-FREE GAS LOG SETS LIMITED WARRANTY

All Peterson vent-free ceramic refractory gas logs are WARRANTED for as long as you own them (lifetime).

All Peterson vent-free fiber ceramic gas logs are WARRANTED for SEVEN (7) YEARS.

All Peterson vent-free burner component parts, except valves, ODS pilots, and controls, are **WARRANTED for TEN (10) YEARS**.

All Peterson valves, ODS pilots, and controls are covered by a ONE (1) YEAR Limited Warranty (excluding batteries).

This warranty applies only to the original purchaser from the date of purchase, and to Peterson products purchased for residential purposes.

This warranty does not cover parts becoming defective by misuse, accidental damage, electrical damage, improper handling, and/or installation or service (log sets must be installed as outlined in the enclosed instructions by a qualified professional installer and with only Peterson parts, control valves, remotes, and accessories). 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 that may vary from state to state.

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

# WHEN USED IN THE COMMONWEALTH OF MASSACHUSETTS

INSTALLATION OF THIS APPLIANCE MUST BE PERFORMED BY A MASSACHUSETTS LICENSED PLUMBER OR GAS FITTER ONLY.

THE INSTALLATION OF THIS APPLIANCE MUST CONFORM TO THE BOARD OF FIRE PREVENTION REGULATIONS 527 CMR 30.00 UNVENTED PROPANE OR NATURAL GAS-FIRED SPACE HEATERS.

This vent-free gas appliance is designed for use in a standard wood-burning fireplace. It is designed to be used with an external wall switch or external remote thermostatic control system. Models with the suffix 12(P) or 01(P) are designed to be used with an external wall switch or an external remote wall thermostatic control system.

ROBER	T H. PETERSON	N CO.	
Quality Che	eck	Date:	
Orifice # (N	ain):		
Orifice # (O	ther):	Model #:	
Leak Test:		Serial #:	
Burn Test:		Air Shutter:	
Gas Type:	NAT. / PROPANE	Inspector:	

Robert H. Peterson Co. • 14724 East Proctor Avenue • City of Industry, CA 91746