

Burner systems:

- G45-2-16/19(N,P)-SS
- G45-2-18/20(N,P)-SS
- G45-2-24(N,P)-SS
- G45-2-30(N,P)-SS
- G45-2-36(N,P)-SS
- G45-2-42(N,P)-SS
- G45-2-48(N,P)-SS
- G45-2-60(N,P)-SS

Unregulated burner system for use with propane or natural gas



**FOR INSTALLATION IN
SEE-THRU SOLID-FUEL
BURNING FIREPLACES**

G45-2 STAINLESS STEEL BURNER FOR INDOOR OR OUTDOOR USE

Important: Read this manual carefully before starting installation of the log set.

WARNING

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

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

An LP-cylinder shall not be stored in the vicinity of this or any other appliance.

WHAT TO DO IF YOU SMELL GAS:

- Do not try to light any appliance.
- Do not touch any electrical switch; do not use any phone in the building.
- Immediately call the gas supplier from a neighbor's phone and follow the gas supplier's instructions.
- If you cannot reach the gas supplier, call the fire department.

Installation and service must be performed by an NFI Certified or other qualified professional installer, service agency, or the gas supplier.

CODE AND SUPPLY REQUIREMENTS

This outdoor burner must be installed in accordance with local codes and ordinances, or in the absence of local codes, with the latest National Fuel Gas Code, ANSI Z223.1.

! WARNING

Improper installation, adjustment, alteration, service, or maintenance can cause injury or property damage. Read the installation, operating and maintenance instructions thoroughly before installing or servicing this equipment.

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. If this product is left burning unattended it may cause damage or serious injury.

INSTALLER: Leave this manual with the appliance.
CONSUMER: Retain this manual for future reference.



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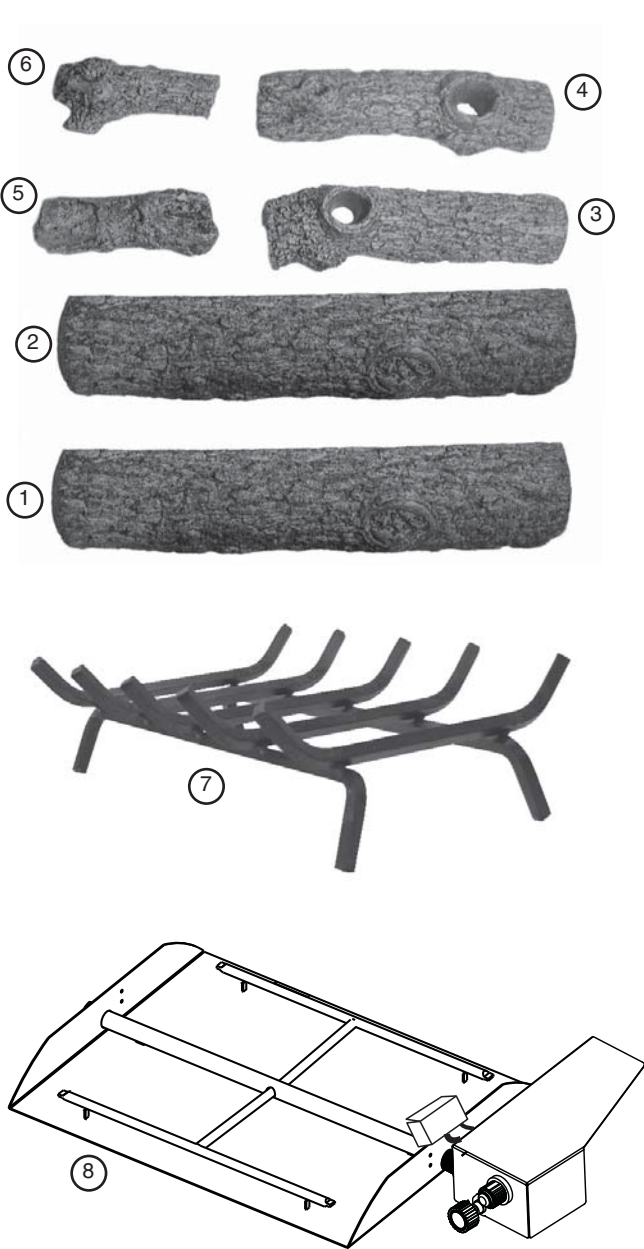
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SAFETY INFORMATION

1. Children and adults should be alerted to the hazards of high surface temperatures and should stay away to avoid burns or clothing ignition.
2. Young children should be carefully supervised when they are in the area of the appliance.
3. Clothing or other flammable materials should not be placed on or near the appliance.
4. Any guard or other protective device removed for servicing the appliance must be replaced prior to operating the appliance.
5. Installation and repair must be done by a qualified professional service person. The appliance must be inspected before use and at least annually by a qualified professional service person. More frequent cleaning may be required as necessary.
6. Solid fuels shall not be burned in a fireplace where this gas log set is installed.
7. Keep the appliance area clear and free from combustible materials, gasoline and other flammable vapors and liquids.
8. The burner assembly must be replaced prior to the appliance being put into operation if it is evident that the burner assembly is damaged. Contact your local dealer for replacement parts.
9. A fireplace screen must be in place when the system is burning. Provisions for adequate combustion air must be maintained. Unless other provisions for combustion air are provided, the screen shall have an opening(s) for introduction of combustion air. Combustion air is adequate when all flames curl into the fireplace and away from the screen. When a glass fireplace enclosure (door) is used, leave the doors fully open when the system is in operation.

PARTS LIST

Before beginning installation, be sure the gas log set is complete by comparing its contents with this PARTS LIST. The Golden Oak log set is listed and illustrated. The parts may differ depending upon the log style and size of the set. Be sure you know the model number and size of your set when ordering replacement or optional parts and accessories.

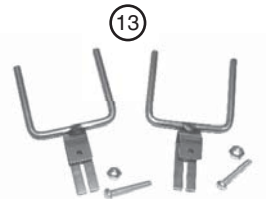


Replacement parts can be ordered from your local dealer.

10
Glowing embers



11
Granules



ITEM#	DESCRIPTION
1.	Golden Oak front log
2.	Golden Oak front log
3.	Golden Oak top log
4.	Golden Oak top log
5.	Golden Oak top log
6.	Golden Oak top log
7.	Fireplace grate

ITEM#	DESCRIPTION
8.	Burner pan and valve assembly
9.	Connector kit (with adapter)
10.	Real-Fyre® glowing embers
11.	Select sand granules (natural gas only) or Vermiculite granules (propane only)
12.	Damper clamp
13.	(2) Log locators

BEFORE YOU BEGIN - IMPORTANT INFORMATION

Before You Begin, review the information and safeguards below about the installation and operation of the Real-Fyre® gas log set.

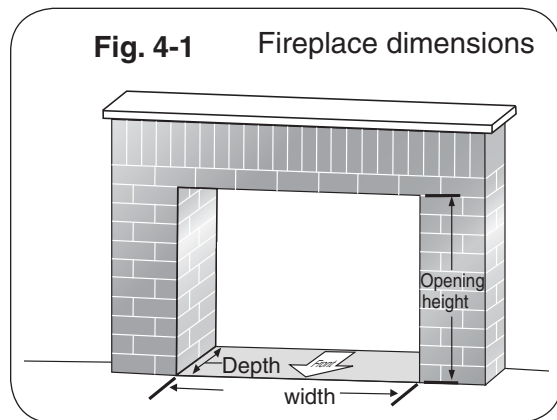
Check to be sure that the fireplace meets the venting and construction requirements for the installation of the Real-Fyre® gas log set.

THIS BURNER IS DESIGNED FOR USE WITH PROPANE OR NATURAL GAS. Never use natural gas in a log set designed for use with propane gas and never use propane gas in a burner designed for natural gas.

This product is not recommended for use in temperatures below 32°F.

Be sure the gas log set is properly sized for the fireplace. Improper sizing may negatively impact the proper drafting of the fireplace. Additionally, too large a log set will adversely affect the burn and hamper the proper operation of the control system. Too small a log set will diminish the beauty of the hearth setting. Fig. 4-1 illustrates the critical dimensions of the firebox.

This gas log set must be installed by an NFI Certified or other qualified professional installer. The Real-Fyre® gas log set is to be installed only in a solid-fuel burning fireplace with a working flue and constructed of noncombustible material. The fireplace must have an open damper. The chimney must be free of any obstructions.



The fireplace must have a gas supply line that has been installed by a qualified technician in accordance with all local codes. The gas supply line must have a ½" minimum interior diameter. If the gas line to the fireplace is longer than 20', a larger diameter line may be necessary.

Be sure to clean the fireplace floor of any ashes or other foreign materials. It is recommended that the fireplace and chimney be examined and cleaned by a chimney sweep or other qualified person before you install the Real-Fyre® gas log set, and annually thereafter.

Required Gas Pressure: The minimum inlet gas-supply pressure for the purpose of input adjustment is 5" for natural gas and 10" for propane gas. The maximum inlet gas-supply pressure for this burner is 10.5" for natural gas and 13" for propane gas.

Testing the Gas Supply System: The gas log set and its individual shut-off valve must be disconnected from the gas supply piping system while performing any tests of the piping system at pressures in excess of ½ psig (3.5 kPa). The gas log set must be isolated from the gas supply piping system by closing its individual manual shut-off valve during any pressure testing of the gas supply piping system at test pressures equal to or less than ½ psig (3.5 kPa). This is accomplished by closing the gas supply line valve, which is required by NFPA 54, section 5.54.

Burner size	Min. Fireplace Dimensions			BTU	
	Width*	Depth	Height	NAT.	L.P.
16/19"	29"	15"	18"	45k	35k
18/20"	30"	17"	18"	80k	65k
24"	34"	17"	18"	90k	75k
30"	40"	17"	18"	90k	75k
36"	46"	22"	18"	130k	100k
42"	52"	22"	18"	150k	120k
48"	58"	22"	18"	170k	130k
60"	70"	22"	18"	190k	140k

* This required width allows for centering of the log set.

Minimum Free Opening Area of Chimney Damper for Venting (sq. in.)								
For Factory-Built Fireplaces *								
Chimney Height	16/19"	18/20"	24"	30"	36"	42"	48"	60"
15' (min.)	29	50	57	57	82	94	107	119
20'	26	45	51	51	73	85	96	107
30'	23	41	46	46	66	76	86	96

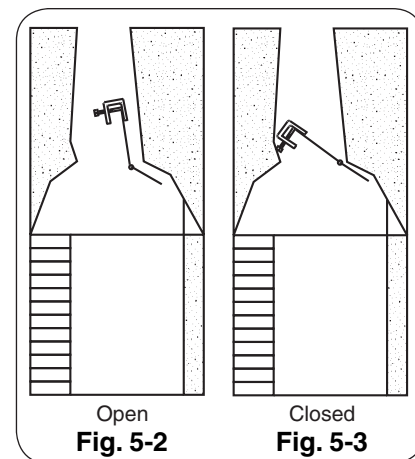
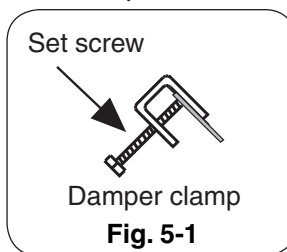
* For Masonry-Built Fireplaces; add 4 sq. in. to amount shown.

Important: For safe operation and proper performance of this product and to comply with certification, listings, and building code acceptances, use ONLY Peterson Real-Fyre® controls, parts, and accessories that have been specifically listed or certified for use with this burner system. Use of other controls, parts, or accessories is prohibited and will void all warranties, certifications, listings, and building code approvals, and may cause property damage, personal injury, and loss of life.

INSTALLING THE DAMPER CLAMP

The damper clamp with hex bolt (Fig. 5-1) is provided as a means to prevent full closure of the damper blade. The clamp is easily attached to most damper blades with pliers or a wrench, and must be permanently installed. The clamp is designed to prevent accidental closure of the damper when installed as illustrated (Fig. 5-2 and Fig. 5-3). Should the clamp not fit, or fail to provide the permanent vent opening listed in the table found above, have a permanent stop installed, remove the damper blade, or have the damper cut to provide the minimum permanent opening required.

Note: These are minimum damper opening specifications. The damper must be completely opened when operating this gas appliance to achieve the best ventilation possible.



INSTALLATION

INSTALLING THE BURNER

The Real-Fyre gas log set must be installed by a qualified professional service technician. Instructions must be followed carefully to ensure proper performance and full benefit from the gas log set. **Check to be sure the log set is designed and labeled for the type of gas (natural or propane gas) supplied to the fireplace. Fireplace floor must be level, clean, and smooth.**

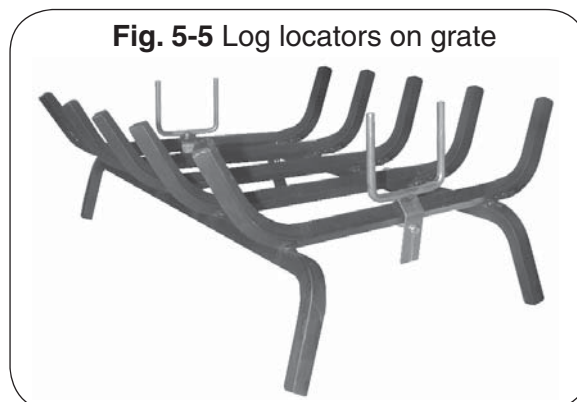
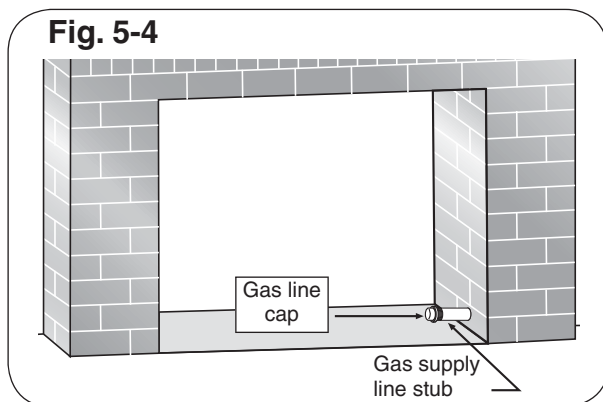
WARNING: Failure to position the parts in accordance with these diagrams or failure to use only parts specifically approved with this appliance may result in property damage or personal injury.

REFER TO THE PARTS LIST WHEN FOLLOWING THESE INSTRUCTIONS.

1. MAKE SURE THE FIREPLACE GAS SUPPLY IS TURNED OFF.
2. Locate the gas-supply stub inside the fireplace and remove the cap, if attached (see Fig. 5-4).

CAUTION: When removing the cap, make sure the stub does not turn, loosening the connection inside the wall.

3. Locate the grate (Item 7) and attach the log locators (Item 13) to the 2 outer bars of the grate with screws and nuts. The log locators should be positioned on the middle of the bars with screw slots facing towards fireplace side walls (Fig. 5-5).
4. Attach the nut end of the flex connector (Item 9) to the adapter found on the valve. Tighten securely.
5. Place the burner pan into the fireplace so that it is centered.
6. **Be sure gas to the fireplace is off.** Attach the large adapter end of the flex connector (Item 9) to the gas-supply stub using a pipe compound resistant to all gases. Ensure adapter (and nut) are tightened securely. Ensure the pan rests level on the fireplace floor after connection. Adjust the pan if necessary.

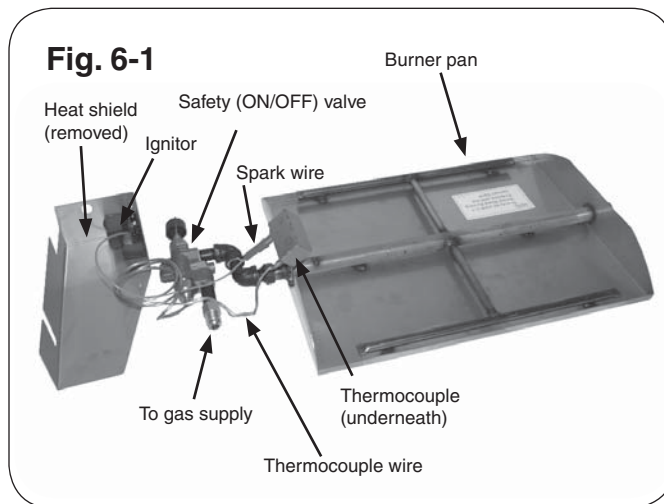


INSTALLATION (cont.)

7. **LEAK TEST:** Turn on the fireplace gas supply, and test at all connections for leaks using the appropriate soapy water solution. If bubbles appear, a leak is present. Turn off the gas and tighten at all connections. Repeat until no leaks are present. If a leak persists, turn off the gas supply and contact the local gas company or dealer. **NEVER USE A FLAME TO CHECK FOR LEAKS.**

Turn off the gas supply prior to proceeding.

Important: Heatshields must be in place during operation of the gas log set. Overheating of the valve will cause shut down of the gas log set or other operating problems.



GRANULE, EMBER, AND GRATE PLACEMENT

GRANULE PLACEMENT

The granules supplied with the unit are specially selected for use with either propane gas or natural gas. They maximize flame distribution and reduce carbon buildup.

1. Fill the burner pan completely with the granules* (Item 11). See Fig. 6-2. **Avoid spilling the granules on the pilot kit.**

***Note:** Use only select sand for natural gas burners and vermiculite for propane gas burners.

2. Slope the granules at the same angle as the burner pan. This is important to ensure quiet lighting and even flame distribution.
3. Pour a small amount of the granules along the outside edges of the burner pan (Fig. 6-2). This prevents flame diversion.

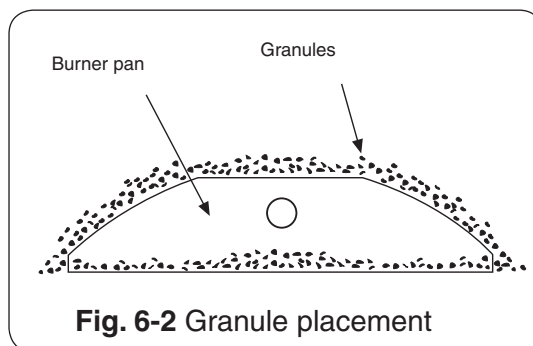


Fig. 6-2 Granule placement

EMBER PLACEMENT

Sprinkle the glowing embers (Item 10) lightly and evenly over the entire surface of the granules (in the pan only). **Break up any clumps that may have developed during shipment.**

Important: Do not add any additional embers to this log set. Any additional embers may cause unsafe operation.

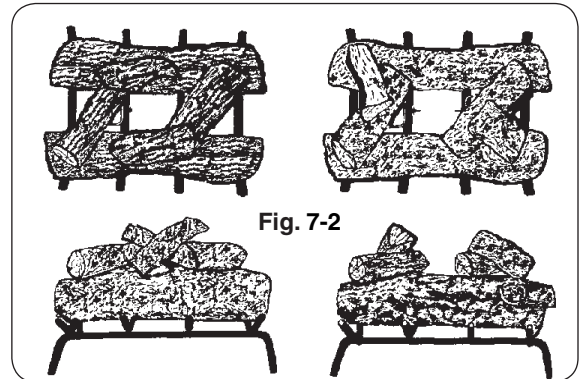
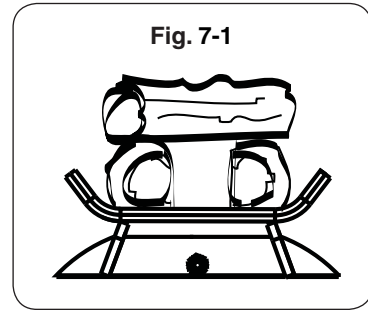
GRATE PLACEMENT

Center the grate over the burner pan.

LOG PLACEMENT

1. **Log placement is very important for the proper operation and performance of the Real-Fyre® gas log set.** Although you have some flexibility in the log arrangement, it is necessary to follow the log placement instructions carefully to fully enjoy the log set.
2. Place the bottom logs on the grate. The log locators ensure that adequate space between the logs is maintained for a clean burn (Fig. 7-1).
3. Place the middle/top logs diagonally with space between the logs so that the flames are not choked off. Adjust the middle/top logs until desired look, and flame pattern are achieved. Flexibility is possible provided excessive sooting does not result from flames striking the logs too directly. Reference Fig. 7-2 for some examples.

Styles and sizes will vary depending upon the log set ordered. If the log set ordered includes placement instructions; follow those instructions.



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.

OPERATING THE 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.

- 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. IF YOU SMELL GAS:**
- **Shut off the gas to the appliance.**
 - **Extinguish any open flame.**
 - **If odor continues, keep away from the appliance, and immediately call the gas supplier or 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 underwater. 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 that has been underwater.

LIGHTING THE GAS LOG SET

1. After you have finished checking for leaks, ensure that the unit is turned completely off by pushing in the ON/OFF control knob and turning clockwise toward **OFF** until you reach a stop.
2. Turn the ON/OFF control knob counter-clockwise to the **ON** position. **DO NOT PUSH KNOB IN!**

Note: You should not hear or smell any gas at this point.

3. Wait five (5) minutes to clear out any gas. Smell for gas, including near the floor. If you smell gas, stop and follow step B of the safety information above. If you don't smell gas, go to the next step.

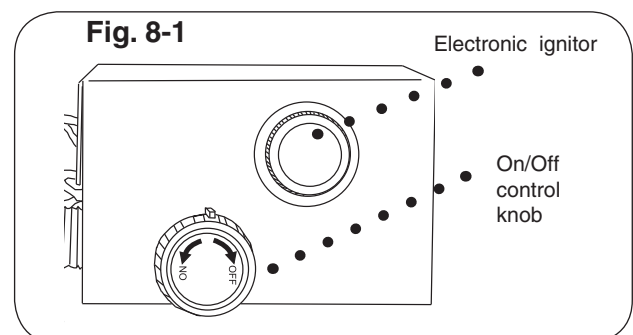
4. LIGHTING INSTRUCTIONS

- a. Press and hold in the electronic ignitor button. The ignitor will spark with a rapid clicking noise.
- b. While holding in the electronic ignitor, push in the ON/OFF control knob to open the valve. Burner will now ignite at the maximum BTU input.
- c. Continue to hold knob for 10-15 seconds; this will allow the safety valve to activate and the main burner to remain burning.

Note: Electronic igniter may not properly operate when exposed to high moisture. To manually light the burner, lay a long-stem match on the surface of the embers near the gas inlet (**do not hold the match in your hand**) or use a lighted long necked butane lighter.

TURNING OFF THE GAS LOG SET

1. Push in the ON/OFF control knob and turn clockwise toward **OFF** until you reach a stop (burner will extinguish).



MAINTENANCE

Once installed and operating properly, the Real-Fyre® gas log set requires very little maintenance. You should inspect the log set and control annually for the following:

- 1. Excessive sooting** - Some sooting of the log set is normal and adds to the appearance of burned wood. If sooting accumulates, you may brush the soot off with a stiff brush. Do not use water or soot cleaners to clean off the soot.
- 2. Settling of glowing embers and granules** - Moisture may cause the granules and glowing embers in the burner pan to settle and affect the burn. Using a screwdriver or flat blade knife, carefully stir the granules and embers, loosening the materials.
- 3. Debris around the control** - Inspect the control to be sure it is free of any dirt or debris.

SERVICE

While some minor service conditions may be handled by the owner of the log set, it is recommended that a qualified service technician be called to service the gas log set and control should service be required. The TROUBLESHOOTING section of these instructions serves as a guide for ensuring optimum performance of the gas log set.

FLAME DESCRIPTION

Observe the flames. The main burner flames should be blue at the base and a combination of blue/yellow at the body and at the tips. They should be 5" to 8" above the logs, with the center flame being the tallest (see cover photo). Flames in the ember burner should be 1/4" above the embers.

To adjust the flame pattern, take a long blade screwdriver or similar tool and stir the granules until the desired pattern is achieved. **DO NOT REMOVE GRANULES FROM THE BURNER PAN**

TROUBLESHOOTING THE GAS LOG SET

SYMPTOM	CAUSE	SOLUTION
<p>1. Excessive smoking and sooting</p> <p>Note: Like burning natural firewood, the Real-Fyre® gas log set is designed to burn with a yellow smoky flame. Some sooting is common and desirable.</p>	A. Poor draft or down draft	A. Check for chimney blockage. Be sure chimney is at least 3' taller than anything within 10' of it in all directions. If not, consult a chimney sweep. Chimney cap or fan may help. Under severe conditions, you may need to open a window near the fireplace about 1" to 2" when burning the log set.
	B. Improper set for gas used	B. Use only a natural gas set with natural gas. Use only a propane gas set with propane gas.
	C. Damper closed	C. Open damper fully when operating gas log set.
	D. Set is positioned too close to the front of the firebox	D. Move set so that the back of the grate touches the back wall of the firebox.
	E. Improper log placement	E. Be sure the bottom logs are spaced at least 3" apart. Top logs should be placed to minimize flame impingement.
	F. Air mixer on propane set is closed	F. Open air mixer completely.
<p>2. Low flame</p>	A. Incorrect log set size for burner system	A. Consult the dealer for proper set.
	B. Insufficient gas supply	B. Other gas appliances may be competing for gas supply. Consult installer or plumber. Orifice size is based upon 7" w.c. pressure for natural gas and 11" w.c. pressure propane gas. Plumbing must supply adequate pressure.
	C. Blockage or kink in connector kit, plumbing or burner orifice	C. Clean out blockage. If connector kit is kinked, replace it.
	D. Valve not fully open	D. Open valve fully.

TROUBLESHOOTING THE GAS LOG SET (cont.)

SYMPTOM	CAUSE	SOLUTION
3. Uneven flame distribution (Lower at one end of the burner)	A. Clogged or blocked portholes	A. Portholes can be cleared of foreign object by running a wire through them.
	B. Insufficient gas pressure and/or supply	B. Consult installer or plumber (see solution 2b).
	C. Granules may be packed down too tightly or not evenly	C. Loosen granules around burner pipe by running a kitchen knife along both sides of pipe. Even out granules in burner pan.
	D. Auxiliary shut-off valve partially closed	D. Open valve fully. Usually, you will find this along the wall 3' from the fireplace.
	E. Valve not fully open	E. Open valve fully.
4. Flame backing out of air mixer (propane)	A. Clogged or blocked portholes	A. Portholes can be cleared of foreign object by running a wire through them.
	B. Insufficient gas pressure and/or supply	B. Consult installer or plumber (see solution 2b).
	C. Granules may be packed down too tightly	C. Loosen granules around the burner by running a kitchen knife along both sides of the pipe. Be sure lava granules are used.
	D. Excessive gas pressure	D. Contact the gas supplier.

WARRANTY

PETERSON VENTED GAS LOG SETS LIMITED WARRANTY

All Peterson gas logs are **WARRANTED for as long as you own them (lifetime)**.

All Peterson burner assemblies are **WARRANTED for TEN (10) YEARS**.

SPK-26 controls are covered by a **THREE (3) YEAR "All Parts" Warranty**.

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

PLEASE KEEP A COPY OF YOUR SALES SLIP FOR PROOF OF PURCHASE

This warranty applies to the original purchaser and to single family residential use only. It commences from date of purchase, and is valid only with proof of purchase.

This warranty does not cover parts becoming defective through misuse, accidental damage, electrical damage, improper handling, storage, and/or installation. Product must be installed (and gas must be connected) as specified in the instructions or operator's manual, by a **qualified professional installer**. Accessories, parts, valves, remotes, etc., when used must be Peterson Co. product.

This warranty **does not** apply to rust, corrosion, oxidation, or discoloration, unless the affected component becomes inoperable. It **does not** cover labor or labor-related charges.

This warranty 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 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 to place a warranty claim, contact the R.H. Peterson dealer where the product was purchased.

**TO REGISTER YOUR PRODUCT ONLINE GO TO: WWW.RHPETERSON.COM,
AND CLICK ON PRODUCT REGISTRATION. THANK YOU FOR YOUR PURCHASE.**

Quality Check			Date: _____		
Burner Orifices	Nat.	L.P.	Leak Test: _____	Model#: _____	_____
Main:	_____	_____	Burn Test: _____	Serial#: _____	_____
Other:	_____	_____	Gas Type: <u>Nat. / L.P.</u>	Air Shutter: _____	_____
				Inspector: _____	_____