



Robert H. Peterson Co.

Real-Fyre[®]

Gas Log Sets

Owner's
Manual



Woodland Oak (WOG4-24) Shown

G4/ GX4 SERIES BURNER

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 a neighbor's phone and follow the gas supplier's instructions.
- If you cannot reach your 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.



We recommend that our gas hearth products be installed and serviced by professionals who are certified in the U.S. by the National Fireplace Institute[®] (NFI) as NFI Gas Specialists.

IMPORTANT: READ THESE INSTRUCTIONS CAREFULLY BEFORE STARTING INSTALLATION OF YOUR LOG SET

Your Peterson Real-Fyre gas log set is to be installed only in a solid-fuel burning fireplace with a working flue constructed of noncombustible material. Solid fuels shall not be burned in a fireplace where this gas log set is installed. The installation, including provisions for combustion, ventilation air and required minimum permanent vent opening, must conform with the National Fuel Gas Code (Z223.1) and applicable local building codes. A Damper Stop Clamp is included to maintain the minimum permanent vent opening and to prevent full closure of the damper blade. **The chimney damper should be fully opened when burning the log set. Your log set is designed to burn with yellow flames; thus adequate ventilation is absolutely necessary.**

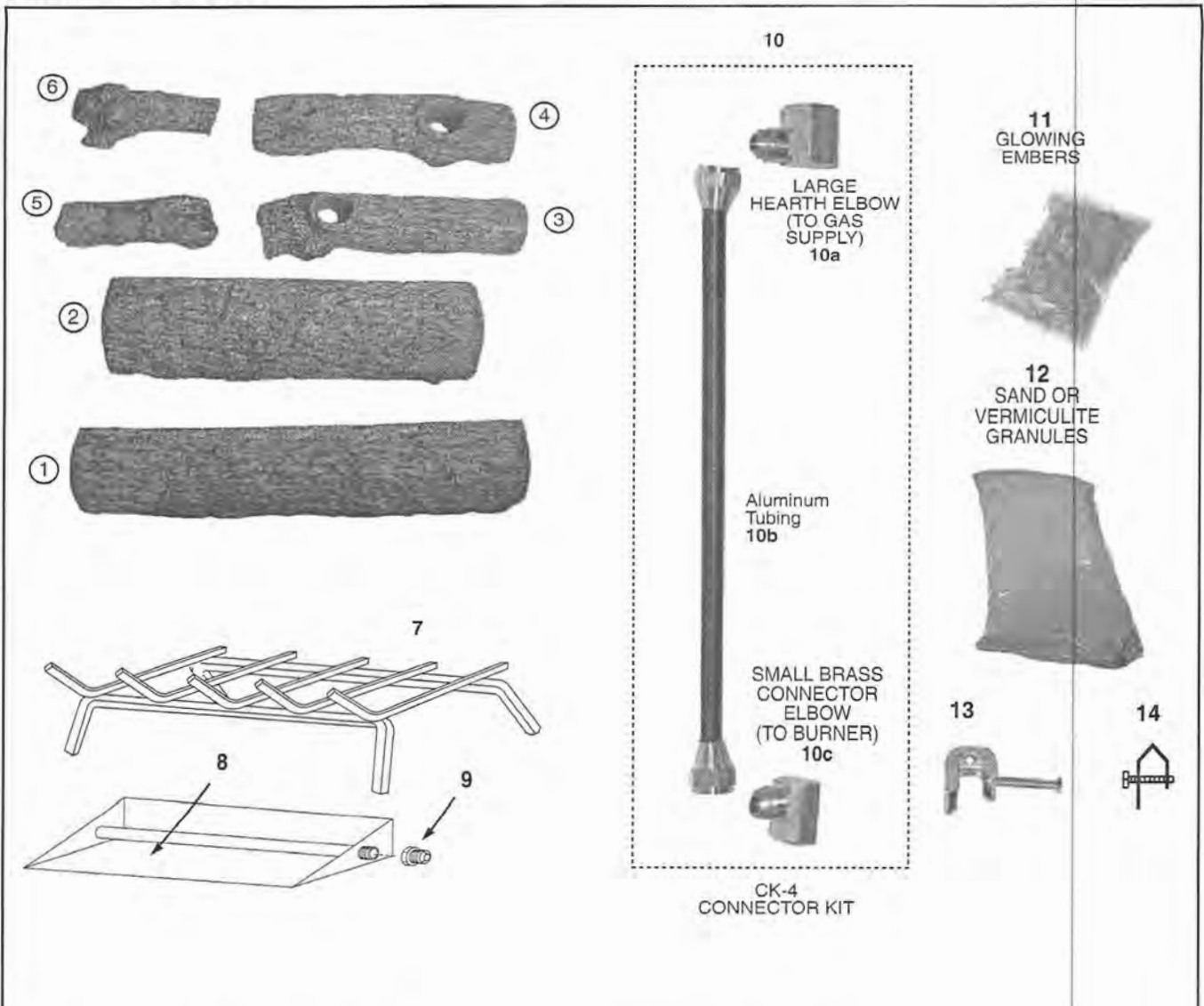
INSTALLER & CONSUMER:
These instructions **MUST** be retained with this appliance.



IMPORTANT: To comply with RADCO listing and building code acceptance, and for safe operation and proper performance ONLY Peterson parts and accessories must be used with this gas log set.

PARTS LIST AND ILLUSTRATIONS FOR YOUR REAL-FYRE GAS LOG

Before beginning installation, be sure your gas log set is complete by comparing its contents with this parts list. The RG4-24 set is listed and illustrated. Your parts may differ depending upon the log style and size of your set. Be sure you know your model number and size of your set when ordering replacement or optional parts and accessories.



ITEM NO.	PART NO.	DESCRIPTION	ITEM NO.	DESCRIPTION
1.	RL-24BF	Golden Oak Front Bottom Log 24"	9.	Fuel Injector (Nat. Gas. Only)
2.	RL-20BR	Golden Oak Rear Bottom Log 20"		or Air Mixer
3.	RL-15T	Golden Oak Top Log 15"	10.	Connector Kit
4.	RL-15T	Golden Oak Top Log 15"	11.	Real-Fyre Glowing Embers
5.	RL-9T	Golden Oak Top Log 9"	12.	Select Sand (Nat. Gas Only)
6.	RL-9T	Golden Oak Top Log 9"		or Vermiculite (L.P. Gas)
7.		Fireplace grate 24"	13.	Damper Clamp
7A.		Heavy-duty Fireplace grate for (GX4 Log Sets)	14.	(2) Stabilizer Clips OR
8.		Burner Pan, Glowing Ember 24"		or (2) Stabilizer Clips 5/8" for (GX4 Log Sets)

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INSTALLING THE DAMPER CLAMP

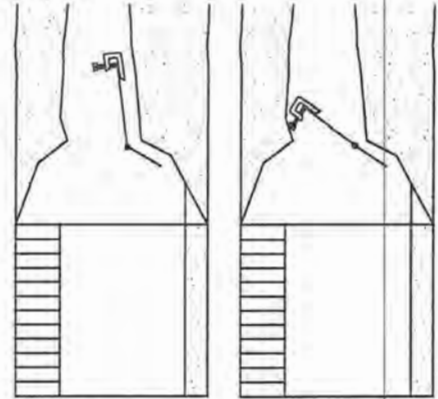
A Damper Clamp (Item No. 13) is provided as a means to prevent full and/or accidental closure of the fireplace damper when installed as illustrated (Figure 2). **When your gas log set is operating, the damper must be fully open.** To install your damper clamp:

1. Open your fireplace damper.
2. Place the damper clamp over the damper blade (Figure 2).
3. Tighten the set screw of the damper clamp with pliers or a wrench so that it affixes to the damper blade. The clamp must be permanently installed.



Damper Clamp (Part No. DC-1)

4. Should the damper clamp not fit, install a permanent damper stop or provide some other means of preventing full and/or accidental closure of the damper.



Open Closed
Figure 2

INSTALLING YOUR REAL-FYRE BURNER SYSTEM

Refer to the parts list on page 3 when installing your Real-Fyre gas log set

1. Carefully unpack your burner system. Check the parts list to be sure all parts are included.
2. Your Real-Fyre gas log set may be operated using a number of optional Peterson control systems (see below), or with the remote gas valve of your fireplace. Peterson control systems are engineered to provide convenient, safe and reliable operation of your gas log set.

For safe operation, proper performance and to comply with safety standards and certifications, use only Robert H. Peterson Company control systems, parts and accessories with your Real-Fyre gas log set.

Unpack your Peterson control system (if purchased) and check parts list provided with your control to be sure all parts are included.

Peterson Control Systems

Manual On/Off Systems

AV-17 (knob) or AV-18 (rod handle) Manual On/Off, match lit, no pilot

Manual Safety Pilot Systems*

SPK-20 (knob) or SPK-21 (rod handle) Standard Pilot
 SPK-26 Low Profile Valve
 SPK-32 Piezo Spark Pilot Ignition
 SPK-33 Piezo Spark Intermittent Ignition Pilot

Remote Safety Pilot Systems*

APK-11M, APK-10M, EPK-01 Toggle Switch
 APK-11M, APK-10M, EPK-01 and WS-1 Wall Switch
 APK-11M, APK-10M, EPK-01 and WS-2 Wall Timer
 APK-11M, APK-10M, EPK-01 and WCS-1 Wood Chip Switch
 APK-11M, APK-10M, EPK-01 and RRF-1 110V Remote
 APK-11M, APK-10M, EPK-01 and RUS-1 RUS Remote
 APK-11M, APK-10M, EPK-01 and PC-100 Pine Cone Remote
 APK-15M Variable Flame Height Remote
 APK-16M and PC-106 Pine Cone Remote

* When systems are to be used with Propane Gas add a "P" to the Control Model No. (e.g., APK11MP). Propane Gas Log Sets require a Safety Pilot System. Not all Safety Pilot Systems are available for all Gas Log Set sizes.

INSTALLING YOUR REAL-FYRE BURNER SYSTEM

Check to see if the burner fuel injector or air mixer is installed on the side of the burner closest to the gas connection. The fuel injector or air mixer may be mounted at either end of the burner pan. Be sure the opposite end is capped tightly.

Your Real-Fyre gas log set can be installed using a number of valve options. Proceed to the appropriate section identified with the valve option you are using:

- * Fireplace valve - Section 13A
- * Peterson Manual On/Off Valve (AV Series) - Section 13B
- * Peterson Manual Safety Pilot System (SPK Series) - Section 13C
- * Peterson Remote Safety Pilot System (APK Series) - Section 13D

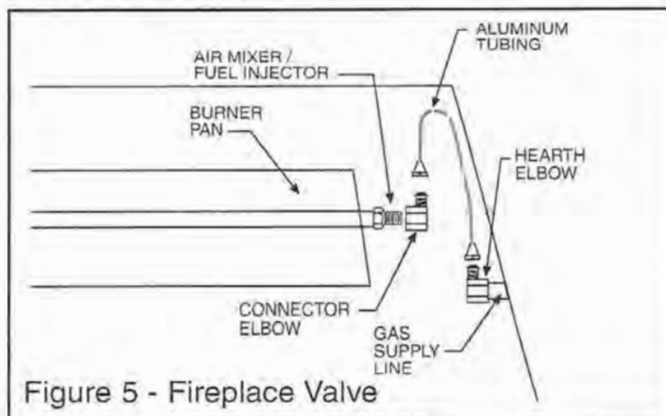


Figure 5 - Fireplace Valve

13A. Installing your Real-Fyre gas log set using the valve supplied with fireplace (Figure 5)

- a. Attach the hearth elbow (Item No. 10a) to the gas supply stub in your fireplace. Use teflon tape or pipe compound on the stub. Tighten securely.
- b. Attach the smaller connector elbow (Item No. 10c) to the fuel injector or air mixer on the burner pan. Use teflon tape or pipe compound. Tighten securely.
- c. Connect the hearth elbow to the connector elbow with the aluminum tubing (Item No. 10b). Tighten both ends securely.
- d. Use a long-necked butane lighter, or lay a lighted match next to the burner pipe and carefully turn on the gas supply until the burner ignites.
- e. Test for leaks at all connections with a soapy water solution. **Never use an open flame to check for leaks.**
- f. Turn off gas supply.
- g. Proceed to "Granule Placement" on page 10.

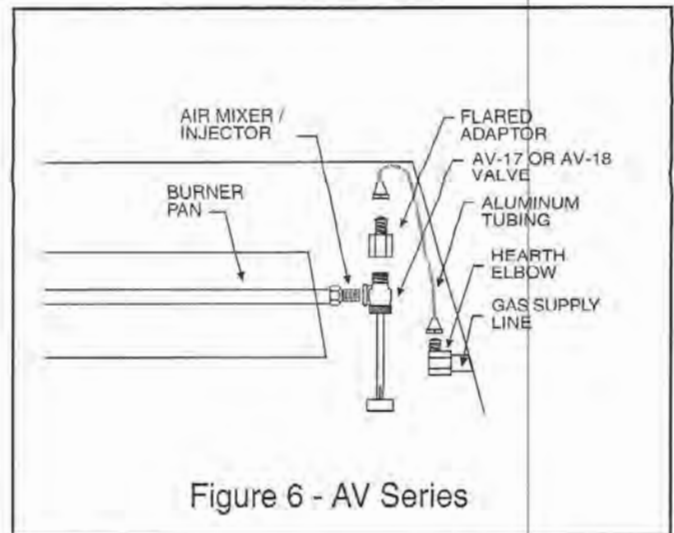


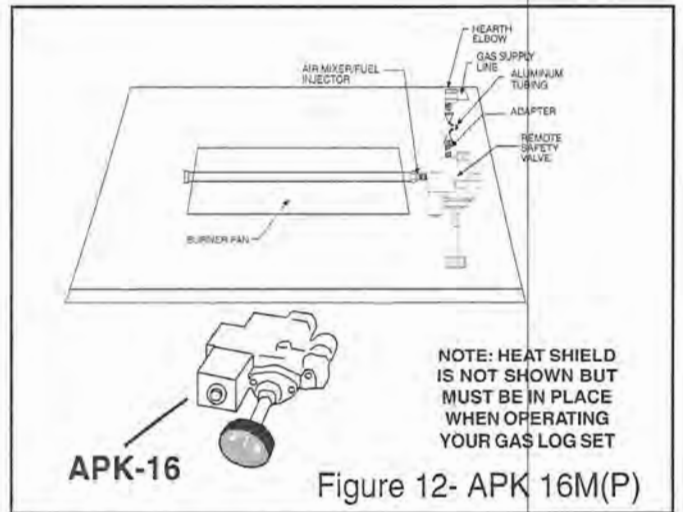
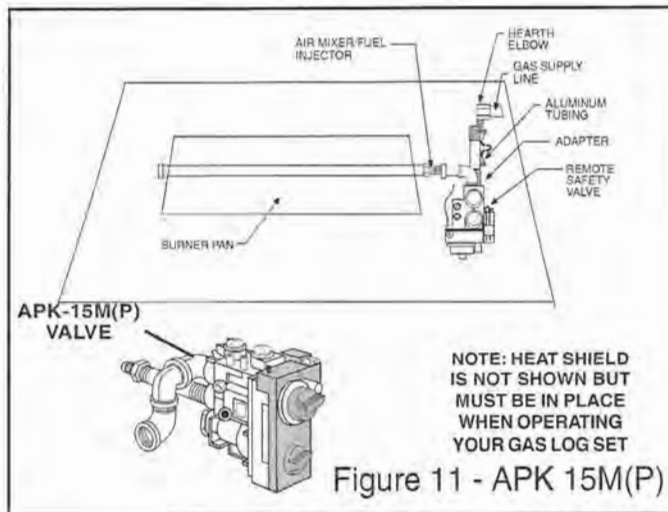
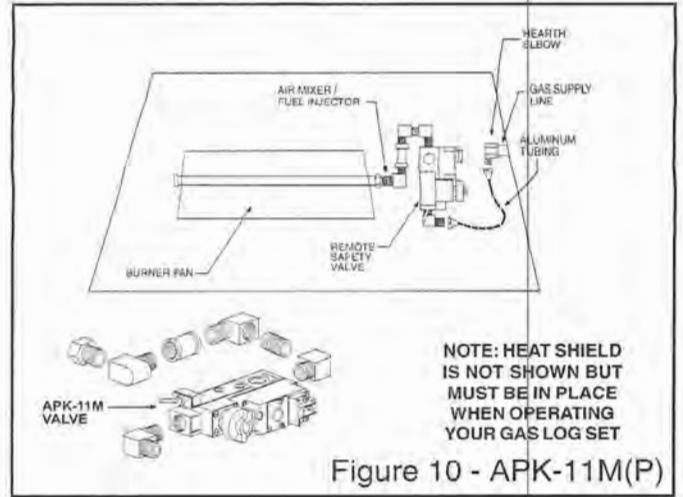
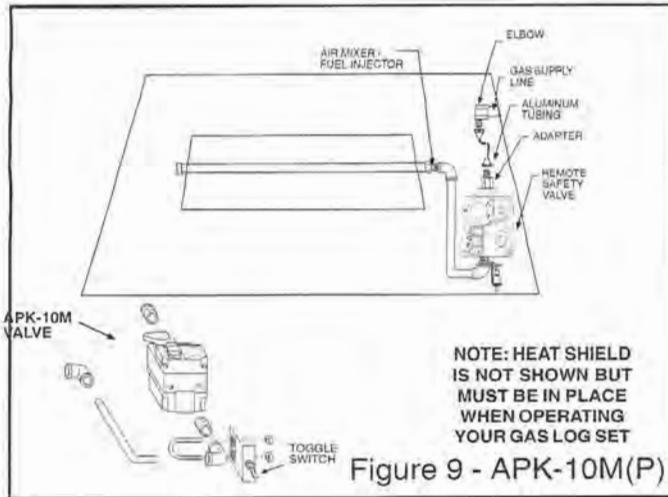
Figure 6 - AV Series

13B. Installing your Real-Fyre gas log set using a Peterson Manual On/Off System (AV Series) (Figure 6).

The AV Series is an On/Off Control System for use in a fireplace not supplied with its own valve. The solid brass valve is CSA certified. The AV-17 has a knob handle and extension; the AV-18 has a steel rod handle. This System requires a match or long-necked butane lighter to manually ignite the log set.

- a. Attach the hearth elbow (Item No. 10a) to the gas supply stub in your fireplace. Use teflon tape or pipe compound on the stub. Tighten securely.
- b. Attach the AV valve to the fuel injector or air mixer on the burner pan using the 3/8" elbow supplied with the AV valve. Use teflon tape or pipe compound. Tighten securely.
- c. Discard the connector elbow (Item 10c) of the connector kit. Be sure the flared adapter supplied with the AV valve is securely attached to the inlet side of the valve. Connect the hearth elbow to the flared adapter with the aluminum tubing (Item No. 10b). Tighten both ends securely.
- d. **Turn off the AV valve** and turn on the gas supply to the fireplace.
- e. Use a long-necked butane lighter, or lay a lighted match next to the burner pipe and carefully turn on the AV valve until the burner ignites.
- f. Test for leaks at all connections with a soapy water solution. **Never use an open flame to check for leaks.**
- g. **Turn off the AV valve.**
- h. Proceed to "Granule Placement" on page 10.

INSTALLING YOUR REAL-FYRE BURNER APK SYSTEM



13D. Installing your Real-Fyre gas log set using a Peterson Remote Safety Pilot System (APK Series) (Figure 9 APK-10M(P), Figure 10 APK-11M(P), Figure 11 APK-15M(P), Figure 12 APK-16M(P))

Peterson remote systems are designed to provide the ultimate in convenient and reliable lighting of your Real-Fyre gas log set. With the flick of a switch or the push of a button, you can sit back, relax and enjoy a comforting fire. Each APK System includes a control (a number of options are available - see page 5), gas valve (APK valves are CSA and C.G.A. certified for natural or propane gas), pilot assembly, heat shield and APK connector kit.

- a. Carefully follow the instructions supplied with your Peterson Remote Safety System for the steps to assemble your remote system, install it on the burner pan, and test for leaks.
- b. Turn off the APK system.
- c. Proceed to "granule placement" on page 10.

PLACEMENT OF REAL-FYRE GAS LOGS

The beauty and design of your Real-Fyre gas logs are the result of skilled craftsmanship, research and engineering. The fine quality materials used to mold the logs are formulated from kiln-fired ceramics, superior refractories and the best expanded shales and aggregates, exactly proportioned. Added to this material are steel reinforcing rods, precisely sized and designed to prevent breakage. This creates realistic, long-lasting logs. Their durability has been proven by over a half century of use in family homes. Real-Fyre logs are guaranteed for as long as you own them. Hairline cracks are common and may appear after the first use. This will not affect the integrity of the logs or the operation.

Each log is skillfully designed and crafted to duplicate natural wood. Deep rugged bark textures and hand-painted highlighting challenges the viewer to tell whether they're looking at real wood logs or Real-Fyre logs. Knot holes, branch stubs and peeled-away bark in many styles also add to the realism of your Real-Fyre gas log set.

Designer and Classic Series Log Placement

(for Charred Series log sets see page 12).

1. **Log placement is very important for the proper operation and performance of your 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 your log set.
2. The second longest log (Item No. 2) is placed on the rear of the grate with the bark of the log facing forward. If you have a heat chamber built into your log style, it can face forward or to the rear of the fireplace as you desire.

3. The longest log (Item No. 1) is placed on the front of the grate with the bark of the log facing forward. If you have a heat chamber built into your log style, it should be facing the rear of the fireplace (Figure 15).

Be sure to provide a minimum of 3" between the front and rear log (Figure 15). This will create the energy efficiency and heat radiating effect of the log set and will also reduce carbon buildup.

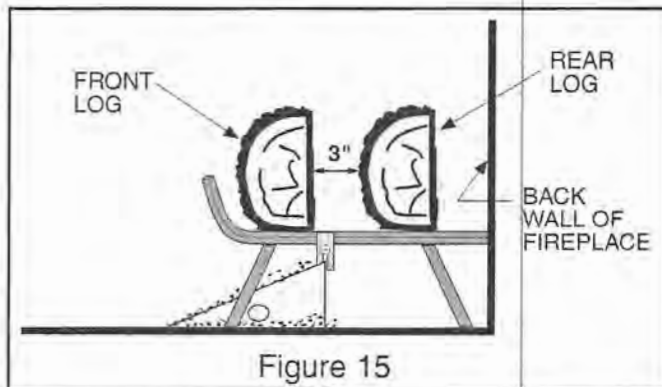
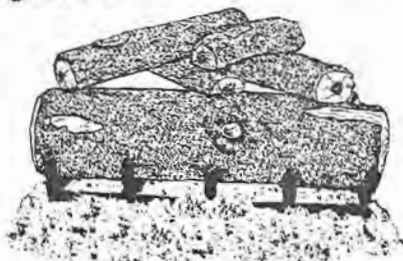


Figure 15

4. Top logs should be placed diagonally with space between the logs so that the flames are not choked off. Top logs may be moved to achieve the desired flame pattern. Some carbon buildup (sooting) may be observed where the flames impinge on the logs. Unless the sooting is excessive, this should not be a concern. If sooting is excessive, rearrange the top logs so there is less flame impingement. Examples of log stacks are shown in Figure 16.

Figure 16



Woodland
Oak



Split Oak
Designer
Plus



Royal
English Oak
Designer

REAL-FYRE GAS LOG SET OPERATING INSTRUCTIONS

* 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 (see Figures below for typical control positions).

Before operating your gas log set:

1. Be sure your fireplace is free from flammable liquids or combustible materials.
2. Be sure your damper is open.
3. Smell all around the gas log set for the odor of escaping gas. If you smell gas:
 - a. Do not light your gas log set.
 - b. Do not touch any electrical switch.
 - c. Do not use the telephone in the building.
 - d. Call your gas supplier from a neighbor's phone and follow their instructions.
 - e. If you cannot reach your gas supplier, call the fire department.

Lighting Instructions

If your Real-Fyre gas log set is operated by the fireplace valve or the Peterson On/Off System (AV Series):

1. Lay a lighted 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 (Figure 22).
2. Slowly turn the fireplace remote valve or the Peterson AV valve to the 'ON' position. Your log set should light.
3. If the log set does not light before the match goes out, immediately turn the valve off.
4. Wait approximately five (5) minutes to clear out any gas, and repeat steps 1-3 above.
5. If your log set fails to light again, turn off the valve and contact your dealer or gas supplier.
6. To extinguish your Real-Fyre gas log set, simply turn the valve to the 'OFF' position. Be sure the valve is turned fully off to avoid any gas leakage.

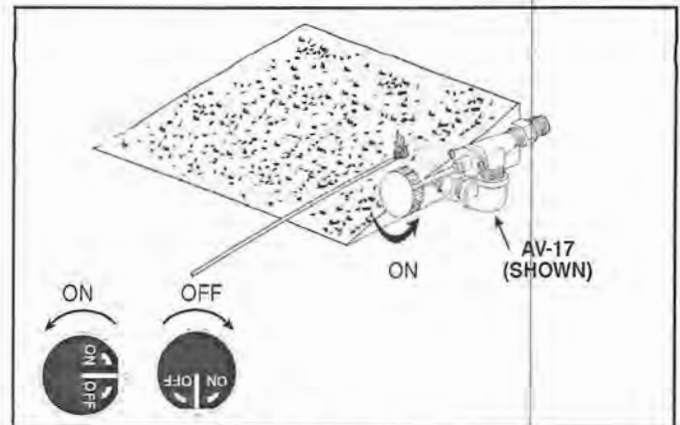


Figure 22

If your Real-Fyre gas log set is operated by a Peterson Manual Safety Pilot System (SPK Series):

1. Light the pilot following the instructions included with your safety pilot system.
2. From the pilot position, turn the control valve counterclockwise to the 'ON' position (Figure 23). Your gas log set should light.
3. If your gas log set fails to light, refer to the troubleshooting section of your Peterson SPK instructions.
4. To extinguish your Real-Fyre gas log set, turn the SPK control knob clockwise to the 'PILOT' position. Your log set will extinguish and the pilot will remain lit.
5. To extinguish the pilot, from the 'PILOT' position, push the SPK knob in slightly and turn clockwise to the 'OFF' position.

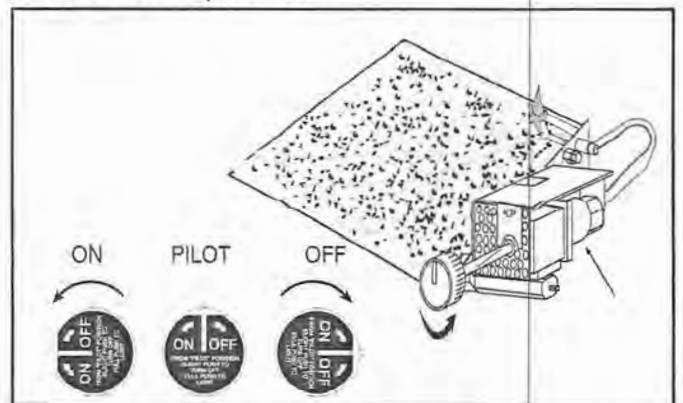


Figure 23

TROUBLESHOOTING YOUR GAS LOG SET

SYMPTOM	CAUSE	SOLUTION
<p>1. Excessive smoking and sooting</p> <p>(Note: like burning natural firewood, your 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 an L.P. (propane) gas set with L.P. (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. Flue is less than 8" in diameter.	F. Remove the log set. Inadequate fireplace ventilation.
	G. Air mixer on propane set is closed.	G. Open air mixer completely
<p>2. Low Flame</p>	A. Incorrect log set for type of gas used.	A. Consult your 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 L.P. 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 YOUR GAS LOG SET (cont'd)

SYMPTOM	CAUSE	SOLUTION
3. Uneven flame distribution (Lower at one end of the burner)	A. Clogged or blocked port holes.	A. Port holes 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	A. Clogged or blocked port holes.	A. Port holes 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 vermiculite (not sand) is used with an Air Mixer.
	D. Excessive gas pressure.	D. Contact your gas supplier.

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)**.

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 which may vary from state to state.

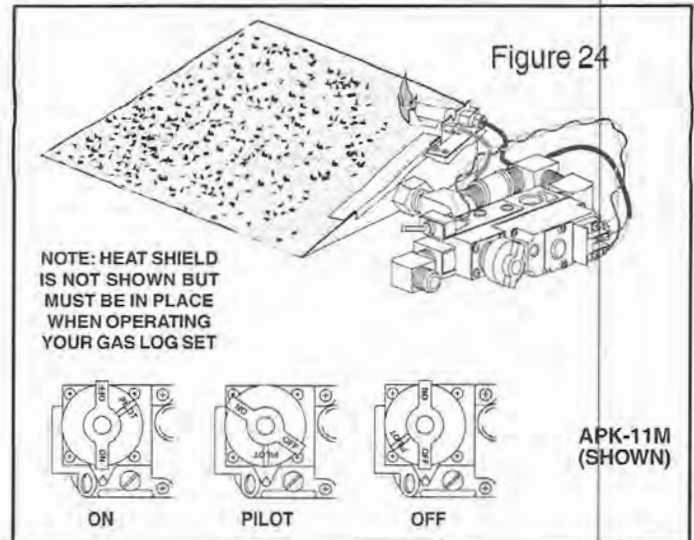
For additional information regarding this warranty, or information on how to place a warranty claim, contact your Peterson dealer or the Robert H. Peterson Company.

ROBERT H. PETERSON CO. 14724 East Proctor Avenue, City of Industry, CA 91746

REAL-FYRE GAS LOG SET OPERATING INSTRUCTIONS

If your Real-Fyre gas log set is operated by a Peterson Remote Safety Pilot System (APK Series):

1. Light the pilot following the instructions included with your remote safety pilot system.
2. Be sure your remote switch is in the 'OFF' position.
3. Turn the APK valve from the 'PILOT' position to the 'ON' position (Figure 24).
4. Turn your APK remote control switch to the 'ON' position. Your log set should light.
5. If your log set fails to light, turn your APK remote control switch to the 'OFF' position and review the troubleshooting guide in the instructions supplied with your Peterson remote control system.
6. To extinguish your log set, switch the APK remote control switch to the 'OFF' position. The log set should extinguish, but the pilot will remain lit.



TECHNICAL DATA AND SPECIFICATION INFORMATION

MODEL N ^o .	LOG SET DIMENSIONS			BTU's	
	FRONT	BACK	DEPTH	NATURAL	PROPANE
G4-12	12"	12"	9"	25M	25M
G4-16	16"	12"	9"	39M	39M
G4-18	18"	15"	12"	75M	50M
G4-20	20"	15"	12"	75M	50M
G4-24	24"	20"	12"	90M	65M
G4-30	30"	24"	12"	90M	65M
*G4-36	36"	30"	13"	120M	90M
*G4-42	42"	36"	20"	150M	105M
*G4-48	48"	42"	20"	150M	105M
*G4-54	54"	48"	20"	150M	105M
*G4-60	60"	54"	20"	150M	105M

Note: It is recommended that complete firebox dimensions (front width, depth, back wall and height) be obtained to ensure proper sizing.

* This log set exceeds the 90,000 BTU maximum input allowed by the LA Standard and is not included in the RADCO listing.

Maintenance

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

1. Excessive Sooting - Some sooting of your 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 ember glow and granules - Moisture may cause the granules and ember glow in your burner pan to settle and affect your burn. Using a screwdriver or flat blade knife, you can carefully

stir the granules and embers, loosening the materials.

3. Debris around the control - Inspect the control and pilot to be sure it is free of any dirt or debris.

Service

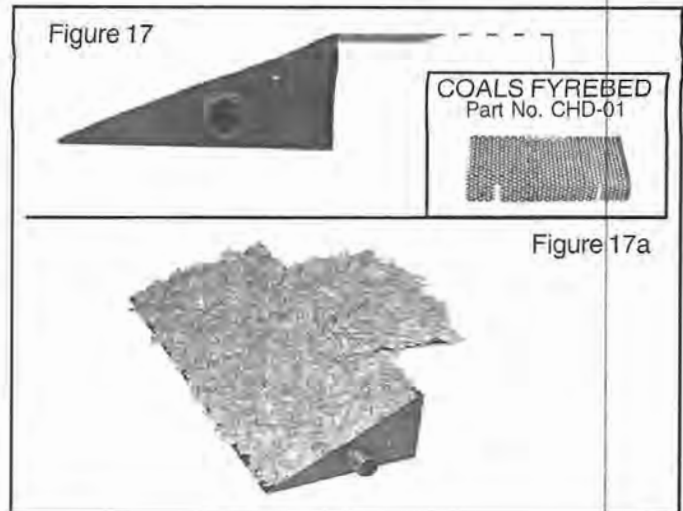
While some minor service conditions may be handled by the owner of the log set, it is recommended that a qualified, professional service technician be called to service your gas log set and control should service be required. The troubleshooting section of these instructions serves as a guide for ensuring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

CHARRED SERIES SUPPLEMENTAL INSTRUCTIONS

These instructions must be used with the Charred Series gas log set - Charred Oak (CHD), Charred Split (CHS), and Charred Royal (CHB). Proceed with the Owner's Manual instructions through the GLOWING EMBERS PLACEMENT, step 1, page 10.

EMBER COALS PLACEMENT

Attach the COALS FYREBED (Part No. CHD-01) to the burner by slipping it onto the back edge (center left to right) with the perforated section facing towards the back fireplace wall (Figure 17). Cover the surface of the COALS FYREBED with the EMBER COALS (Part No. EM-4, supplied with your Charred Series log set) (Figure 17a). For best glowing performance, they should be applied evenly and pulled slightly apart so the fibres are somewhat loose. (It is not necessary to pile the entire bag of the EMBER COALS. More EMBER COALS may be added after completion of the entire installation).



GRATE REPLACEMENT

Follow instructions on page 10.

Note: COALS FYREBED (CHD-01) included with Charred Series log sets only.

CHARRED SERIES LOG PLACEMENT

Place the long bottom rear log (Log #2) on the back of the grate with the flat hollow side facing the rear of the fireplace. The two sections of the front log (Log #1A & 1B) are placed on the front of the grate with the charred sections facing each other and approximately one inch apart at the top (Figure 18). There should be three inches between the front and rear logs.

Place the two top knot hole logs (Logs #3 & #4) so that one end rests on each front log (Log #1A & 1B) and the other end on the rear log (Log #2). The charred sections should be over the opening between the front and rear logs. (Figure 19)

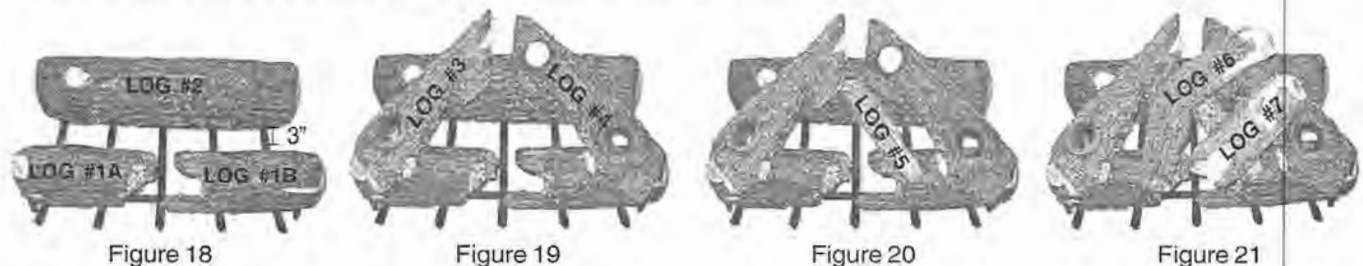
Place the small top charred log (Log #5) between the knot hole logs so it rests on the rear log (Log #2) and the right hand front log (Log #1b) (Figure 20) with the charred section facing the front.

Place the curved top charred log (Log #6) so the charred section rests on the left hand front log (Log #1A) and the other end rests on the middle of the right top knot hole log (Log #4) (Figure 21).

Place the additional top log (Log #7) on the top in a desired position. *Additional log not available with 18" log set.*

* *Other options may be chosen for top log placement.*

Light the log set referring to installation instructions for procedures. More EMBER COALS may be placed on the COALS FYREBED for the added realism of a burning wood look.



NOTE: Charred Oak (CHD) Log set used for illustration.

PLACEMENT OF GRANULES, EMBER GLOW AND GRATE

IMPORTANT

For all valves, the air **MUST** 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.

Two types of granules are available for your Real-Fyre burner pan. A **select white sand** is used with natural gas and **vermiculite granules** are used with propane gas. **Never use sand in a burner designated for use with propane gas.**

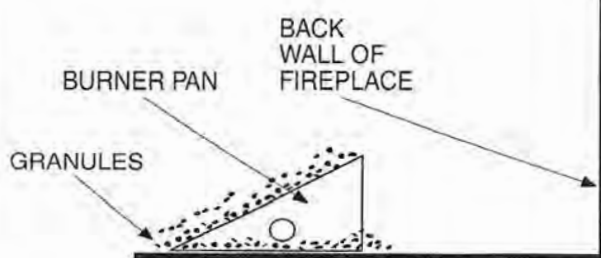
The select sand (Item No. 12) is composed of fine-quality sterile sand which has been carefully sized for even flame distribution. It is free from foreign elements which could cause unpleasant odors and flame distortion. It provides quiet operation, eliminating the "hiss" sound heard with other materials.

The vermiculite granules are specially selected for use with propane gas. They maximize flame distribution and reduce carbon buildup.

Granule Placement

1. With the burner pan off and properly positioned in your fireplace, fill the burner pan completely with the granules (sand or vermiculite). **Avoid spilling the granules on your Peterson control, if one is in place.**
2. Slope the granules at the same angle as the burner pan. This is important to ensure quiet lighting and even flame distribution.

Figure 13



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.

3. Pour a small amount of the granules along the outside bottom edges and back of the burner pan. This prevents flame diversion (Figure 13).

Glowing Embers Placement

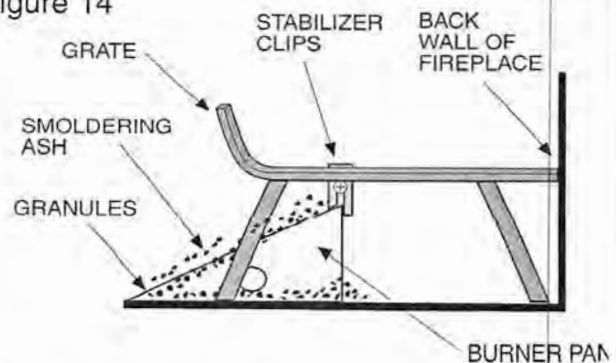
Real-Fyre ember glow (Item No. 11) is specially formulated and sized to create the most authentic, uniform "glow", duplicating red hot coals under the grate. They are a major element in the beautiful realism of Real-Fyre gas log sets. All materials used are nonflammable and inert, containing no asbestos.

1. Sprinkle the Real-Fyre ember glow lightly and evenly over the entire surface of the granules (Figure 14). For Charred Series log sets see page 12.

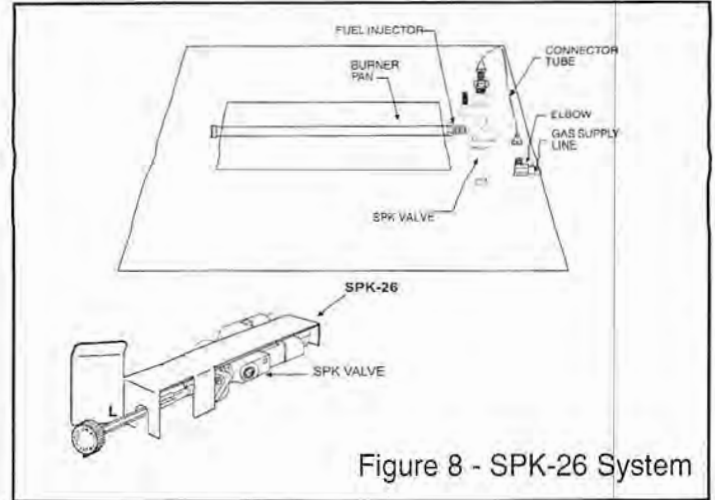
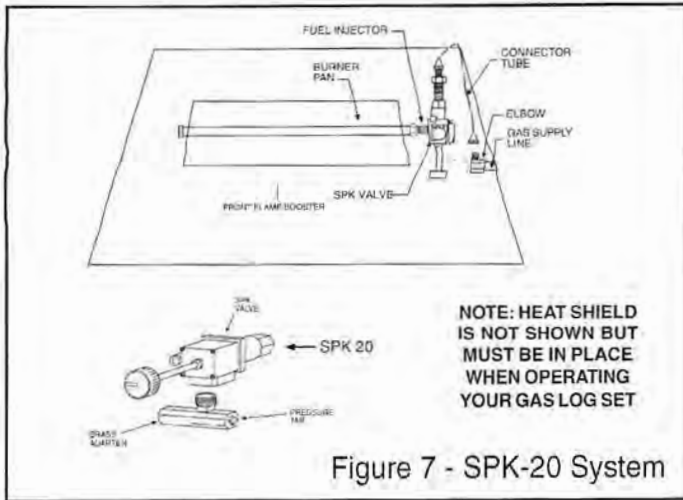
Grate Replacement

1. Reposition the grate in your fireplace over the burner pan. The grate should be as far back in the fireplace as possible; the back edge of the burner pan should be approximately at the half way point of the grate (Figure 14).
2. Make sure the stabilizer clips fit over the back edge of the burner pan.
The stabilizer clips secure the burner pan to the grate and maintain the position of all parts of the gas log set. This preserves your installation, eliminates any settling problems and assures the attractive flame pattern is maintained. These clamps also ensure optimum safety performance of all Peterson controls that may be installed.

Figure 14



INSTALLING YOUR REAL-FYRE BURNER SPK SYSTEM



13C. Installing your Real-Fyre gas log set using a Peterson Manual Safety Pilot System (SPK Series) (Figure 7 & Figure 8)

The Peterson SPK Control Systems makes enjoying your Real-Fyre gas log set convenient and trouble-free. Just a turn of the knob (SPK-20, SPK-26, SPK-32 or SPK-33) or steel rod handle (SPK-21) allows you to easily ignite or extinguish your log set. The SPK Series is available for natural or propane gas and will continue to operate during power failures as it requires no outside source of electricity to operate.

The valve is CSA certified and the standing pilot is adjustable. The built-in safety feature automatically shuts off the gas flow should the pilot go out. A convenient pressure tap is included for easy gas pressure testing. Advanced heat shielding adds greater heat protection for cooler, long-lasting operation.

- a. **Carefully follow the instructions supplied with your Peterson Manual Safety Pilot Kit** for steps to assemble your Safety Pilot System, install it on the burner pan, and test for leaks.
- b. Turn off the SPK System.
- c. Proceed to "Granule Placement" on page 10.

INSTALLING YOUR REAL-FYRE BURNER SYSTEM

3. Check to be sure your Real-Fyre Gas Log Set is designed for the type of gas that fuels your fireplace.
4. Be sure the gas supply to the fireplace is turned off.
5. Clean the floor of the fireplace of any dirt or ashes.
6. Remove the cap from the gas supply line stub in the fireplace (Figure 3). **Caution:** Be sure that, when removing the cap, the stub does not turn, loosening the connection inside the wall.

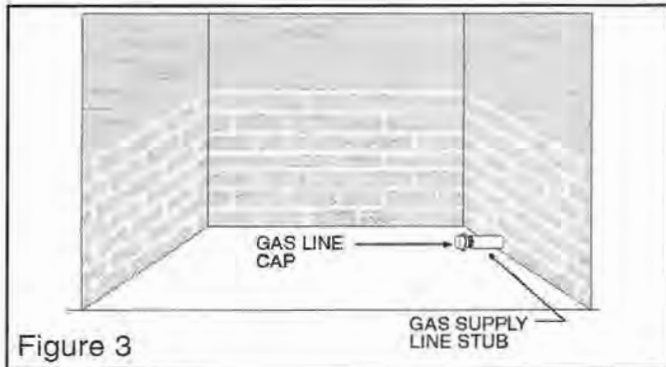


Figure 3

Placement of Grate and Burner

7. Your Real-Fyre grate (Item No. 7) is modeled after wood fire grates to add to the natural wood-fire appearance of your log set. Its heavy duty construction and design provides a better fit - even in narrow, shallow fireboxes - and works with the log set to provide an attractive flame pattern.
To locate your Real-Fyre gas log set properly in the fireplace, place the grate as far back in the fireplace as possible, centered left-to-right (Figure 4). The grate is tapered. The widest side should face forward.
8. Created to provide the maximum in both safety and durability, your Real-Fyre burner pan (Item No. 8) is constructed of high-quality steel and coated with

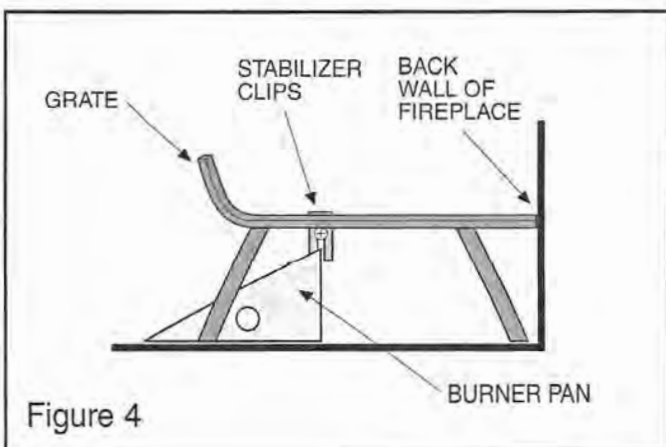


Figure 4

a specially formulated high temperature paint to prevent rust. It is welded securely at all corners and where the burner pipe passes through the pan to ensure that gas does not escape. The burner pipe has portholes that are precisely sized and spaced to ensure maximum flame height, balance and distribution. It provides for quick and quiet ignition. The portholes are facing the bottom of the burner pan, which prevents granules from clogging the holes and promotes gas dispersion throughout the burner pan.

Place the burner pan under the grate. The open edge should face forward and the back edge of the burner pan should be positioned approximately half way under the grate (Figure 4).

9. Install the **stabilizer clips** (Item 14) on the second grate finger in from either side so that they fit over the back edge of the pan and tighten into place (Figure 4). Remove the grate from the firebox for gas connection and granule placement.

Connecting the Gas Supply

10. Your Real-Fyre gas log set is supplied with a **connector kit** (CK-4, Item No. 10) which is comprised of a connector elbow, 3/8" aluminum tubing and a hearth elbow. The connector kit has been designed to ensure dependable, reliable performance. The tubing is sized for optimum gas flow and quiet operation. The connections are flared for leak-free operation.
For proper connection and log set placement, the tubing may be bent manually or with the aid of a tube bender. **Be sure you do not kink the tubing.** If the tubing must be shortened, use a tube cutter and a flaring tool to re-flare the cut end.
11. When installing your log set, **use teflon tape or pipe compound, resistant to the action of propane gas, on all threaded male connections except brass to brass connections.** The burner fuel injector or air mixer (Item No. 9), although brass in color is not brass and teflon tape or pipe compound must be used.
12. Your burner pan is supplied with a **fuel injector** for natural gas log sets or an **air mixer** for either natural or propane gas sets (Item No. 9). **The fuel injector or air mixer must be used in ALL installations.** The fuel injector or air mixer has a precisely sized orifice to ensure only the proper quantity of gas enters the burner. This allows maximum performance gas conservation.

BEFORE YOU BEGIN - IMPORTANT INFORMATION

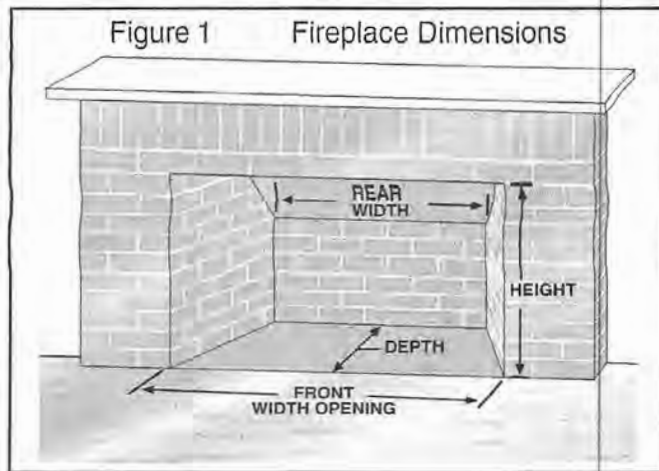
Before You Begin, review the below information and safeguards about the installation and operation of your Real-Fyre gas log set.

Check to be sure your fireplace meets venting and construction requirements for the installation of your Real-Fyre gas log set (see Fireplace Requirements section below).

Check to be sure your gas log set is designed for the proper gas type. Real-Fyre log sets are designed for use with natural gas unless clearly labeled for propane (L.P.) gas. Sets designed for use with propane gas must be installed with a safety pilot system. Never use propane gas in a log set designed for natural gas or natural gas in a log set designed for use with propane gas.

Be sure your gas log set is properly sized for your 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 your hearth setting. Figure 1 illustrates the critical dimensions of your firebox.

Figure 1 Fireplace Dimensions



This gas log set must be installed by an NFI Certified or other qualified, professional installer.

The installation, including provisions for combustion and ventilation air, must conform with local codes, or in the absence of local codes, with the latest edition of the National Fuel Gas Code, ANSI Z223-1 and NFPA54.

IMPORTANT: To comply with RADCO listing and building code acceptances and for safe operation and proper performance ONLY Peterson parts and accessories must be used with this gas log set. Robert H. Peterson Co. valves, controls, parts and accessories have been designed, tested and certified for use with Real Fyre gas log sets. 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 REQUIREMENTS

Your Real-Fyre gas log is to be installed only in a fully vented, noncombustible fireplace with an open damper. The chimney must be free of any obstructions. The fireplace must be designed and approved to burn wood. The fireplace flue must be at least 8" at its smallest dimension.

Your 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 be ½" minimum interior diameter. If the gas line to your fireplace is longer than 20', a larger diameter line may be necessary.

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

Required Gas Pressure: The minimum inlet gas supply pressure for the purpose of input adjustment is 7" of water column for natural gas and 11" of water column for propane gas. The maximum inlet gas supply pressure is 10.5" water column for natural gas and 13" water column 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. 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. This is accomplished by closing the gas supply line valve, which is required by NFPA 54, section 5.54. A fireplace screen must be in place when the log set is burning. **When glass fireplace doors are used, operate the gas log set with the doors open.**

IMPORTANT - Read this Manual Carefully Before Starting Installation of Your Log Set

When your log set is burning, your fireplace damper must be fully open. Your Peterson Real-Fyre gas log set is to be burned only in a fully vented, noncombustible fireplace with damper and chimney free of any obstructions. Your fireplace must be designed and approved to burn wood. Like burning natural firewood, your Real-Fyre log set is designed to burn with yellow, smoky flames. For this reason, it must be adequately vented. The smallest dimension of the chimney flue must be at least 8 inches. If it is smaller **do not use this Real-Fyre log set.** If fumes

from the burner emerge into the room when the damper is fully open, creating a smell like a smoldering oil lamp, it indicates that the fireplace draft is defective. Check chimney flue for obstructions. **Do not operate your log set until the fireplace draft is corrected.** Check with your dealer or installer. Do not use firewood with your gas log set.

FOR YOUR SAFETY

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

WARNING: Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to this manual. For assistance or additional information, consult a qualified professional installer, service agency or the gas supplier.

Tools Required:

The following tools and supplies may be needed to assemble, install and test your Real-Fyre Gas Log Set:

1. Adjustable Open-Ended Wrench 8" - 10"
2. Pipe Wrench 8" - 10"
3. Pliers
4. Needle nose Pliers
5. Tube cutter, flaring tool & tube bender
6. Wire cutters
7. Teflon tape or pipe compound resistant to Propane Gas
8. Small Phillips-Head screwdriver & Flat head screwdriver
9. Leak Detector or Soapy water solution & brush to test for gas leaks.
10. Pipe joint compound
11. Butane Lighter
12. Flashlight
13. Manometer
14. Work gloves

Available Log Styles:

Charred Series

Charred Oak (CHD)
Charred Split (CHS)
Charred Royal (CHB)

Designer Series

Golden Oak Designer Plus (RDP)
Split Oak (S)
Split Oak Designer Plus (SDP)
Woodland Oak (WO)
Designer (EXD)
Royal English Oak Designer (BD)
Heritage Designer (HD)
White Birch (W)
Golden Oak Designer (RD6)

Classic Series

Golden Oak (R)
Post Oak (PO)
Emberwood (E)
Royal English Oak (B)
Mountain Oak (K)
Twisted Pine (C)

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We reserve the right to amend product specifications without prior notice.