

**Unregulated  
Burner Systems:**

- PB-18(P)**
- PB-24(P)**
- PB-30(P)**



**DESIGN CERTIFIED**  
to  
**RGA2-72**  
for natural gas only

**PB SERIES GLASS/PAN BURNER SETS**

**WARNING**

If the information in this manual is not followed exactly, a fire or explosion can 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 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.**



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 the burner system.

This burner system 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 a gas appliance is installed. The minimum permanent vent opening provided by the fireplace chimney or chimney damper to vent the flue products is listed on p. 2. The chimney damper must be fixed in a manner to maintain the minimum permanent vent opening. The installation, including provisions for combustion and ventilation air, must conform with the *American National Standard National Fuel Gas Code Z223.1/ NFPA 54* and applicable local building codes.



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

# TABLE OF CONTENTS

IMPORTANT SAFETY INFORMATION	2
PARTS LIST	3
IMPORTANT SAFETY INFORMATION (Cont.)	4
PRE-INSTALLATION AND FIREPLACE PREPARATION SAFETY GUIDELINES	4
GLASS QUANTITY DETERMINATION	5
LOG SET NOTES PAGE	6
INSTALLATION	7
BURNER PLACEMENT & ASSEMBLY	7
CONNECT GAS SUPPLY	7
GLASS PLACEMENT	7
DAMPER STOP	8
MAINTENANCE	8
PETERSON CONTROL SYSTEM OPTIONS	8
MANUAL LIGHTING INSTRUCTIONS	9
WARRANTY	10

## IMPORTANT SAFETY INFORMATION

### CHECK TO BE SURE VENTED GAS BURNER IS FOR PROPER GAS TYPE

Peterson PB Series burner sets are designed for use with natural gas, unless clearly labeled for propane. Never use propane gas in a burner set designed for natural gas, or natural gas in a burner set designed for use with propane gas.

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

The appliance and its individual shutoff valve must be disconnected from the gas-supply piping system when testing the system at test pressures in excess of ½ psig.

The appliance must be isolated from the gas-supply piping system by closing its individual manual shutoff valve during any pressure testing of gas-supply system at test pressures equal to or less than ½ psig.

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. A fireplace screen must be in place when the pan burner set is burning.

**WHEN GLASS FIREPLACE ENCLOSURES (DOORS) ARE USED, OPERATE THE GAS BURNER SET WITH THE GLASS DOORS FULLY OPEN. KEEP APPLIANCE AREA CLEAR & FREE FROM COMBUSTIBLE MATERIALS, GASOLINE, AND OTHER FLAMMABLE VAPORS AND LIQUIDS.**

The minimum size fireplace in which the burner is to be installed is listed in Table 2-2.

Burner Size	Unregulated	
	Natural	Propane
18"	75,000 BTU	60,000 BTU
24"	90,000 BTU	75,000 BTU
30"	90,000 BTU	80,000 BTU

**Table 2-1**

The minimum-size fireplace in which the burner is to be installed is listed in the table below:

Burner	Depth	Height	Front Opening Width*
18"	16"	16"	22"
24"	16"	16"	28"
30"	16"	16"	34"

\*Add 4" to the minimum front opening width if the burner is to be installed with a pilot kit. Double this measurement to center burner.

**Table 2-2**

### Minimum Free Opening Area of Chimney Damper for Venting

Chimney Height	For Factory-Built Fireplaces Burner Sizes			For Masonry-Built Fireplaces Burner Sizes		
	18"	24"	30"	18"	24"	30"
15'	46 sq. in.	56 sq. in.	69 sq. in.	50 sq. in.	60 sq. in.	73 sq. in.
20'	42 sq. in.	50 sq. in.	61 sq. in.	46 sq. in.	54 sq. in.	65 sq. in.
30'	37 sq. in.	45 sq. in.	55 sq. in.	41 sq. in.	49 sq. in.	59 sq. in.

**Note:** The minimum chimney height from hearth to top of chimney is 15'.

**Table 2-3**

# PARTS LIST

1



## PARTS LIST FOR PETERSON PB SERIES GLASS PAN BURNER (PB SERIES)

ITEM NO.	DESCRIPTION	QTY.
1.	Burner pan	1
2.	CK-5 connector kit	1
3.	Damper clamp	1
4.	Glass *	1
5.	Sand (nat.) or Lava-Fyre Granules™ (propane) *	1

2



\* Glass kits (which include sand/granules) are sold and packed separately.

Glass



(Clear, black, sapphire blue,  
emerald green, or bronze)

4

5



Sand  
(for natural gas)

OR



Lava-Fyre Granules™  
(for propane)

Burner	Glass kit
18"	GLF-18-(P)x
24"	GLF-24-(P)x
30"	GLF-30-(P)x

Replace "x" in model number with the glass code in parentheses below:

- Black (B)
- Clear (C)
- Bronze (Z)
- Sapphire blue (S)
- Emerald green (E)

## IMPORTANT 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 appliance. 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, the chimney flue, damper, and firebox must be thoroughly CLEANED of soot, creosote, ashes, and loose paint and inspected by a qualified chimney cleaner. Some older fireplaces may need repair prior to installing this appliance.
- E. **CHECK GAS TYPE** (natural or propane): The gas supply must be the same as stated on the burner system rating plate. If gas supply is different, **DO NOT INSTALL**. Contact the dealer for immediate assistance.
- F. Any outside air ducts and/or ash dumps located on the floor or walls of the fireplace must be permanently sealed shut before the installation. Use a heat-resistant sealant. Do not seal the chimney flue damper.
- G. The minimum inlet gas-supply pressure for purposes of input adjustment is **5"** water column (w.c.) on **natural gas** and **10"** water column on **propane gas**. Insufficient gas pressure will affect proper operation of the 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.)
- H. 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.
- I. 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.
- J. 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.
- K. 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.
- L. Input ratings shown in BTU per hour are for elevations up to 2,000 ft. Refer to the National Fuel Gas Code, or contact the Robert H. Peterson Company before installing this product at elevations above 2,000 ft.
- M. The gas appliance and its main gas valve must be disconnected from the gas-supply piping system during any pressure testing of that system, as required by NFPA 54.

### OPERATIONAL GAS PRESSURE SPECIFICATIONS

NATURAL GAS			
MANUAL PRESSURE		MILLIVOLT PRESSURE	
Gas inlet pressure:	Max. 10.5" w.c.	Inlet pressure reading:	Max. 10.5" w.c.
	Min. 5" w.c.		Min. 5" w.c.
PROPANE GAS			
MANUAL PRESSURE		MILLIVOLT PRESSURE	
Gas inlet pressure:	Max. 13" w.c.	Inlet pressure reading:	Max. 13" w.c.
	Min. 10" w.c.		Min. 10" w.c.

## GLASS QUANTITY DETERMINATION

**CAUTION:** Sand is for use with natural-gas systems only. Always use R.H. Peterson Lava-Fyre Granules™ for systems using propane gas.

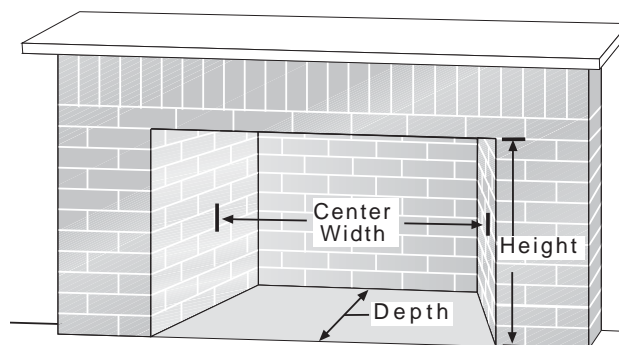
The glass and either sand or lava that come with the burner system are pre-measured and must be used per these instructions (see GLASS PLACEMENT section).

Additional decorative glass may be placed on or around the burner (but not on the valve or pilot). Use Table 5-1 to determine how many bags of glass to order based on fireplace size.

Fireplace glass coverage Table 5-1	Fireplace				Glass
	Opening size	Center width (in.)	Front to back depth (in.)	Area (sq. in.)	10 lb. bags* for 2" depth
<b>Standard Fireplace Sizes</b>	28"	25	16	400	5
				540	7
	36"	30	23	690	9
	32" see-thru	31	23	713	10
	42"	36	30	828	11
				1085	14
	50"	46	33	1334	18

\*One bag of glass is included with a bag of either sand or Lava-Fyre Granules™ to cover the burner. One 10-lb. bag of glass fills about 155 cubic inches. The burner is 2 inches tall.

**Note:** Your fireplace area can be determined by measuring the center width of your fireplace in inches and multiplying by the depth from front to back in inches. You can then use the area column in the table above to approximate the number of bags of glass needed. See-through or rectangular fireplaces will have greater area than a fireplace with the same size front opening in which the side walls taper inward as shown in Fig 5-1.



**Fig. 5-1**

**CAUTION:** Covering the burner with glass more than 1" above the top of the burner may result in unsafe ignition. Use only the glass provided with the burner to cover the burner itself. Do not use extra decorative glass directly on top of the burner.

## NOTES PAGE

Please use this page to record any information about your burner system that you may want to have at hand.

## INSTALLATION

**This burner system must be installed by an NFI Certified or other qualified professional installer. Instructions must be followed carefully when installing to ensure proper performance and full benefit from the burner system.**

Real-Fyre® gas burner sets must be installed only in a solid-fuel-burning fireplace with flue, and constructed of noncombustible material. Solid fuels shall not be burned where a decorative appliance is installed.

Open damper fully and be sure damper clamp is in place (see DAMPER STOP installation instructions). Check PARTS LIST to be sure all parts are included. Inspect to be sure the burner has air mixer or fuel injection installed. For safe operation and proper performance, use only Robert H. Peterson parts and accessories. Gas-supply pipe must be ½" minimum I.D. or larger (¾") if gas line is longer than 20'. REFER TO PARTS LIST WHEN FOLLOWING THESE INSTRUCTIONS.

### BURNER PLACEMENT & ASSEMBLY

1. Turn off gas supply to the fireplace.
2. Clean fireplace floor of any ashes.
3. Place the pan as far back in the fireplace as possible, centered right to left.

### CONNECT GAS SUPPLY

**Note:** If your unit is to be installed with a safety pilot kit, refer to the instructions supplied with it for gas supply connection.

Using the CK-5 connector kit (Item #2), connect the gas supply to the valve assembly inlet. Make sure to attach the flare fitting between the corrugated hose and gas-supply line. **DO NOT KINK TUBING. PIPE COMPOUND RESISTANT TO THE ACTION OF PROPANE GASSES MUST BE USED ON ALL THREADED MALE CONNECTIONS, EXCEPT BRASS TO BRASS.**

### LEAK TESTING

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. Test for leaks at all connections with a soapy water solution. **Never use an open flame to check for leaks.** Turn off gas supply.

### GLASS PLACEMENT

**Important:** Make sure the burner is off before pouring glass and sand or Lava-Fyre Granules™.

1. Pour either sand (for natural-gas burners) or Lava-Fyre Granules™ (for propane-gas burners) into bottom of burner pan just below level of center flame baffle (Fig. 7-1 & 7-2).
2. Pour contents of glass bag to top of the pan rim (Fig. 7-1 & 7-2). If safety pilot is used, make sure to place the heatshield over the valve assembly and cover the pilot before pouring glass to avoid pouring it on the pilot.



Fig. 7-1

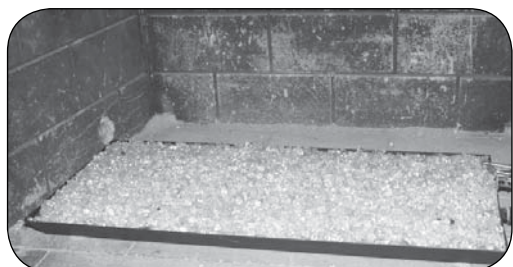


Fig. 7-2

Sand used for natural gas burner (Fig. 7-1); for propane gas, use Lava-Fyre Granules™ under glass.

### **WARNING**

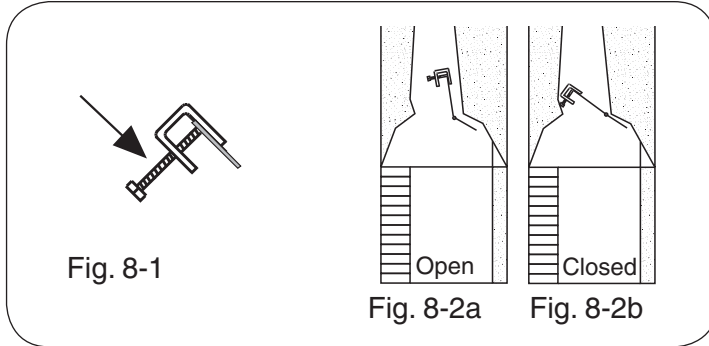
Failure to position the parts in accordance with these instructions and diagrams, or failure to use only parts specifically approved with this appliance, can result in property damage or personal injury.

## INSTALLATION (Cont.)

### DAMPER

WHEN THE BURNER SET IS OPERATING, THE DAMPER MUST BE FULLY OPEN.

A damper clamp (Fig. 8-1) is provided as a means to prevent full closure of the fireplace damper blade. This clamp is easily attached to most damper blades with pliers or wrench, and must be permanently installed. The clamp is designed to prevent accidental closure of the damper when installed as illustrated (Fig. 8-2a and b). Should the damper clamp not fit, have a permanent stop installed.



### MAINTENANCE

Periodically check burner for excessive dirt and soot. Clean with a soft brush. Be sure burner pan is filled with glass (see section on GLASS PLACEMENT).

Periodically examine and clean the venting system of the solid-fuel-burning fireplace. This should be conducted by a qualified professional or the gas supplier.

## PETERSON CONTROL SYSTEM OPTIONS

### 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

### Remote Safety Pilot Systems\*

APK-11, EPK-1 ..... Toggle switch  
APK-11, EPK-1 and WS-1 ..... Wall switch  
APK-11, EPK-1 and WS-2 ..... Wall timer  
APK-11, EPK-1 and WCS-1 ..... Wood chip switch  
APK-11, EPK-1 and RRF-1 ..... 110V remote  
APK-11, EPK-1 and RUS-1 ..... RUS remote  
APK-11, EPK-1 and PC-100 ..... Pine cone remote  
APK-15, APK-17..... Variable flame-height remote  
PC-106 ..... Pine cone remote

\* When systems are to be used with propane gas, add a "P" to the control model No. (e.g., APK11P). Propane burner sets require a safety pilot system. Not all safety pilot systems are available for all burner sizes.

When using a pilot/thermocouple, pilot/generator safety valve system, keep the pilot/assembly clear of sand, glass, granules, etc. or pilot outage will occur, read and follow lighting instructions (included in safety pilot kit).



## MANUAL LIGHTING INSTRUCTIONS

### FOR YOUR SAFETY, READ BEFORE LIGHTING

**WARNING:** If you do not follow these instructions exactly, a fire or explosion can 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.

**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 P. 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 can result in fire or explosion.

#### LIGHTING THE BURNER

**If the Real-Fyre® glass burner set is operated by the fireplace valve (natural only):**

1. Lay a lighted long-stem match on the surface of the glass near the gas inlet (**do not hold the match in your hand**), or use a lighted long-necked butane lighter.
2. Turn on the gas at the source.
3. If the burner does not light before the match goes out, immediately turn off the gas at the source.
4. Wait approximately five (5) minutes to clear out any gas, and repeat steps 1-3 above. Smell for gas, including near the floor. If you smell gas, stop, and follow the instructions on p. 1. If you don't smell gas, go on to the next step.
5. If the burner fails to light again, turn off the gas at the source and contact the dealer or gas supplier.
6. To extinguish the Real-Fyre® glass/pan burner, simply turn the valve to the **OFF** position. Be sure the valve is turned completely off to avoid any gas leakage.

**If your gas log set is operated by a Peterson manual safety pilot system (SPK Series) or a Peterson remote safety pilot system (APK Series):**

1. Carefully follow the lighting instructions supplied with your Peterson pilot system for the steps to ignite the burner.

# WARRANTY

## PETERSON VENTED DECORATIVE GAS APPLIANCE LIMITED WARRANTY

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

All Peterson glass is **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](http://WWW.RHPETERSON.COM),  
AND CLICK ON PRODUCT REGISTRATION. THANK YOU FOR YOUR PURCHASE.**