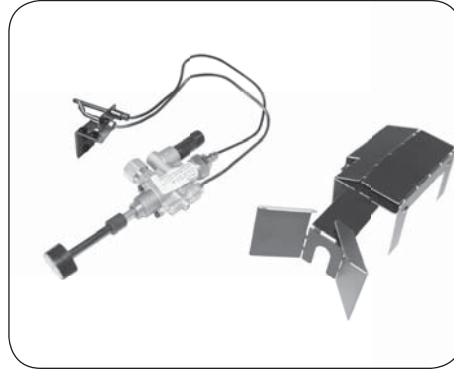




## LOW PROFILE SAFETY PILOT SYSTEM FOR NATURAL OR PROPANE GAS

**Models:**  
**SPK-26(P)**



- CONTROL OPERATED ON/OFF
- VARIABLE FLAME HEIGHT CONTROL

SUITABLE FOR THE FOLLOWING BURNERS:

- PAN BURNERS (P-SERIES)
  - G4 SERIES BURNERS
  - G45 SERIES BURNERS

## SPK-26 PILOT KITS

### **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 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.**

### **INSTALLER & CONSUMER**

These instructions **MUST** be retained with this appliance

**Important:** Read these instructions carefully before starting installation of the burner control system.

The Peterson Real Fyre 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 the unit is installed. The installation, including provisions for combustion, ventilation air, and required minimum permanent vent opening, must conform with the *National Fuel Gas Code (ANSI Z223.1/NFPA 54)* and applicable local building codes. In Canada, the installation must conform with the *Natural Gas and Propane Storage and Handling Installation Code (CSA-B-149.1)*. 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 must be fixed fully opened when burning the unit. The burner system is designed to burn with yellow flames; thus, adequate ventilation is absolutely necessary.**



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.

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# IMPORTANT INFORMATION

**CHECK TO BE SURE THAT THE PROPER FUEL GAS IS BEING USED WITH THIS PILOT KIT.**

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/NFPA 54).

This component and its individual shutoff valve must be disconnected from the gas-supply piping system when testing at pressures that exceed 1/2 psig. This is accomplished by closing the gas-supply line valve.

This component must be isolated from the gas-supply piping system by closing its individual manual shutoff valve during any testing of the gas-supply system at test pressures up to and including 1/2 psig.

A fireplace screen must be in place when the gas burner system is in operation. Unless other provisions for combustion air are provided, the screen shall have an opening(s) for introduction of combustion air.

**WHEN GLASS FIREPLACE ENCLOSURES (DOORS) ARE USED, OPERATE THE BURNER SYSTEM WITH THE GLASS DOORS FULLY OPEN; BOTH SIDES IF THE FIREPLACE IS A SEE-THROUGH TYPE.**

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 *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.

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.

**TO PREVENT VALVE DAMAGE AND FAILURE:**

**IT IS CRITICAL THAT THE HEAT SHIELD BE PLACED CORRECTLY OVER THE VALVE PRIOR TO OPERATION.**

**KEEP SAND, LAVA GRANULES, AND ALL FOREIGN OBJECTS AWAY FROM THE PILOT ASSEMBLY, VALVE ASSEMBLY, AND HEAT SHIELD DURING MEDIA PLACEMENT AND AT ALL TIMES.**

## SPECIFICATIONS

Minimum firebox dimensions required for burner system  
(with SPK valve attached):

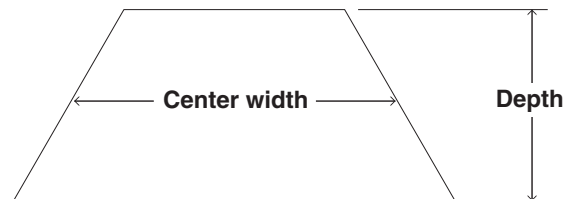
Burner size	Min. Firebox Dimensions		
	Center Width *	Depth	Height
16/19"	30"	11"	18"
18/20"	31"	14"	18"
24"	35"	14"	18"
30"	41"	15"	18"
36"	47"	16"	18"
42"	53"	16"	18"
48"	59"	16"	18"
54"	65"	16"	18"
60"	71"	16"	18"

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

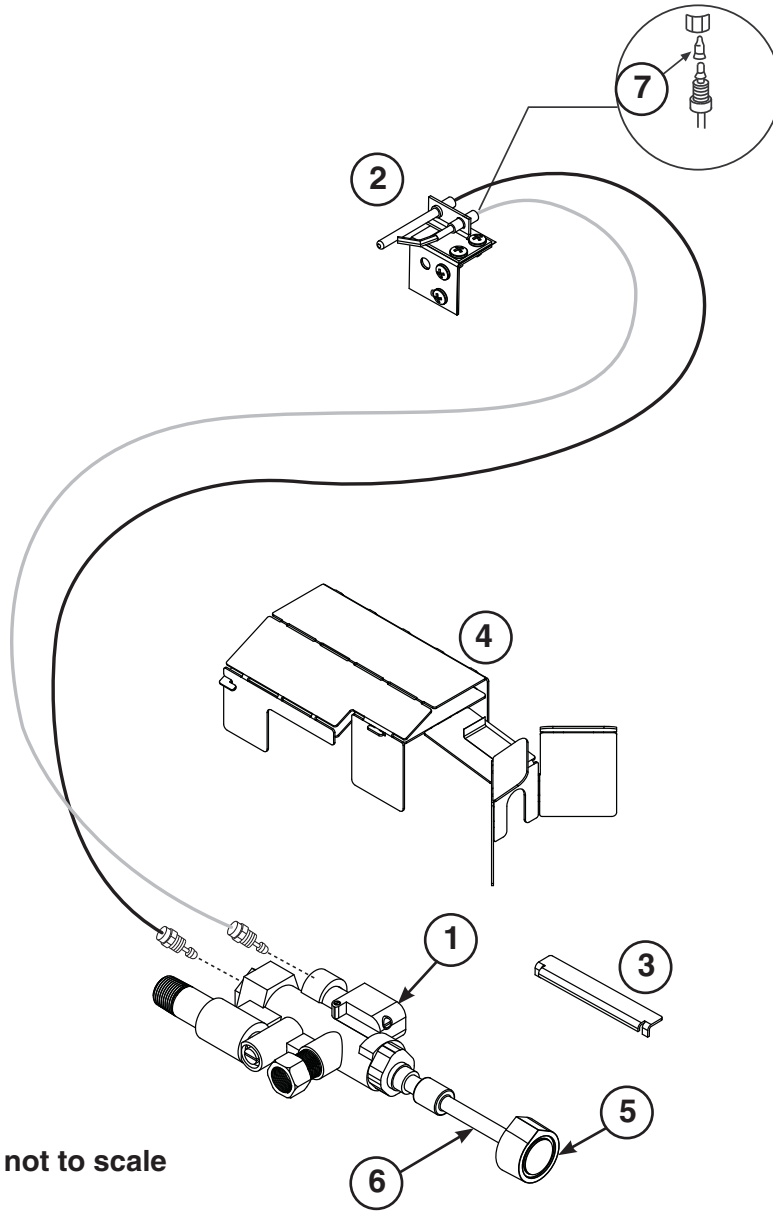
**Table 1 - Minimum Firebox Dimensions**

Model	BTUs	
	Nat.	L.P.
SPK-26	115 k	186 k

**Table 2 - Maximum BTUs**



# REPLACEMENT PARTS LIST



Note: Photos not to scale

Item	Description	Part No.	Qty.
1.	Control valve	SV-19	1
2.	Pilot assembly (natural)	PAC-1NAT	1
or	Pilot assembly (propane)	PAC-1LP	1
3.	Flame diverter bracket	SH-1	1
4.	Valve heat shield	HS-43	1
5.	Control knob	KNOB-6	1
6.	Extension handle	EH-2	1
7.	Nat. gas orifice	PBO-20	1
or	L.P. gas orifice	PBO-10	1

# INSTALLATION

**This safety pilot system must be installed by a qualified professional service technician. Instructions must be followed carefully when installing to ensure proper performance and full benefit from the burner system and safety pilot system.**

These instructions must be used as a supplement to the instructions supplied with the R.H. Peterson burner system. Follow the burner system instructions and make adjustments as appropriate for the addition of a safety pilot system. Use gas pipe sealing compound that is resistant to all gasses (or Teflon tape) and apply to all male pipe connections. **DO NOT** apply pipe sealing compound to any flare connections. Make sure that all connections are tight.

The valve system is shipped pre-assembled for easy installation onto the burner pan.

**Note:** Installation is easier when done outside of the fireplace.

## PREPARATION

If the burner that the valve system is to be added to is already installed; remove all decorative media, set aside to be reinstalled later, and disconnect the flex connector and adapter from the burner pan (using the instructions that came with the original burner).

## CONVERTING FOR DIFFERENT GAS TYPE

**CAUTION:** Check to be sure this pilot kit is designed and labeled for the type of gas (natural or propane gas) supplied to the fireplace.

The safety pilot kit may require a pilot orifice conversion. Replace the existing gas orifice with the opposite gas orifice (contained in the envelope marked "L.P. GAS" or "NAT GAS") by carefully removing the pilot gas supply line. Re-attach the pilot gas supply line to the pilot when done. Reference Fig. 5-1.

**CAUTION:** During any conversions, all components must be set/converted for the appropriate gas type (i.e. burner orifice, regulator, etc.). Contact your dealer and a qualified professional service technician.

## INSTALL VALVE

1. Apply gas pipe sealing compound (or Teflon tape) to the male end of the fuel injector or air mixer on the burner.
2. Install the valve to the fuel injector or air mixer by screwing the pan into the valve (Fig. 5-2). Take care not to damage the attached pilot assembly when rotating the burner pan. Be sure all connections are tight, however do not overtighten to prevent damage to the valve.

**Important:** Ensure the bottom of the control knob is at least 3/4" above the floor. See Fig. 5-3.

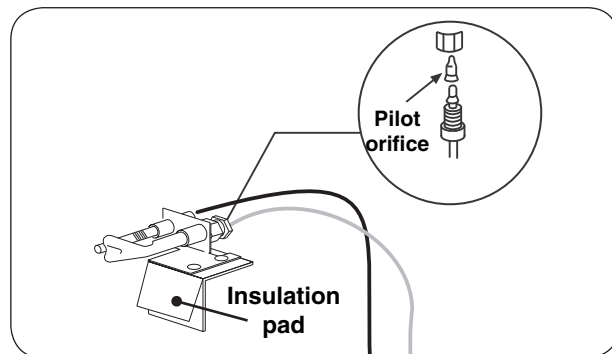


Fig. 5-1 Pilot conversion (only if applicable)

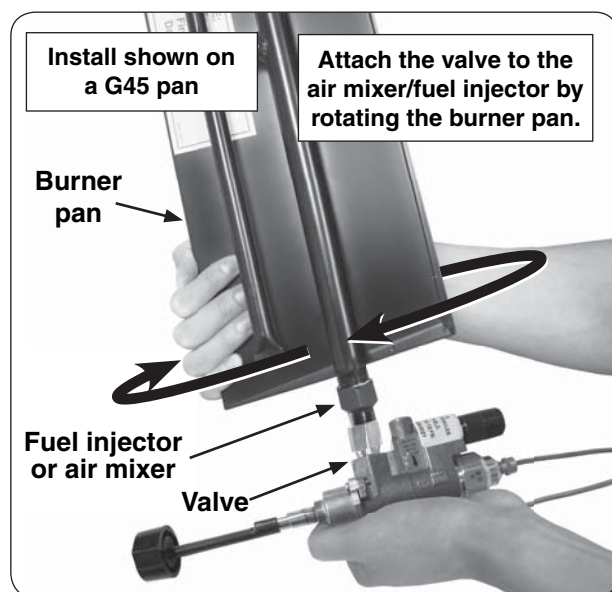


Fig. 5-2 Install valve

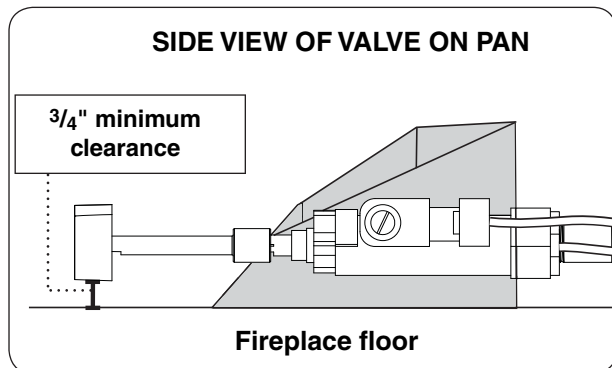


Fig. 5-3 Ensure knob clearance

## INSTALLATION (Cont.)

### INSTALL FLAME DIVERTER BRACKET

For installation on G4/G45 burners only. When properly installed onto the burner pan, the flame diverter bracket will promote quicker ignition and protect the safety control system from overheating.

**Note:** You must first install the flame diverter bracket before installing the pilot/igniter assembly.

1. Place the flame diverter bracket over the side edge of the burner pan, near the location the safety control system pilot bracket will be attached. It should be placed **approximately 1-1/4"** from the rear wall of the burner pan (see Fig. 6-1).
2. Tap the bracket lightly with a rubber mallet to secure it in place.

### INSTALL PILOT ASSEMBLY TO BURNER

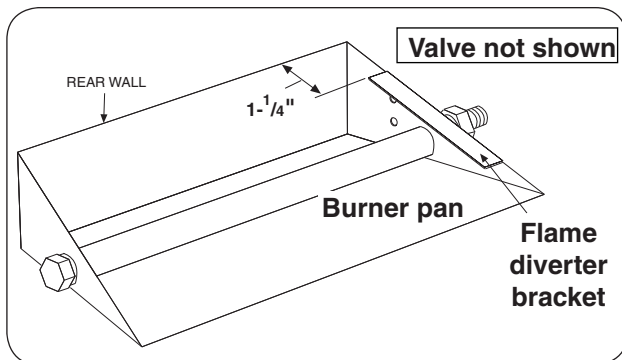
**CAUTION:** Do not kink or damage the pilot gas supply line and thermocouple lead. Do not unscrew the gas line from the valve.

1. The pilot assembly comes with two Phillips screws installed on the long side of the pilot bracket. Remove the screws and use them to fasten the pilot assembly to the burner pan using the pre-drilled holes in the pan (see Fig. 6-2 and Fig. 6-3).

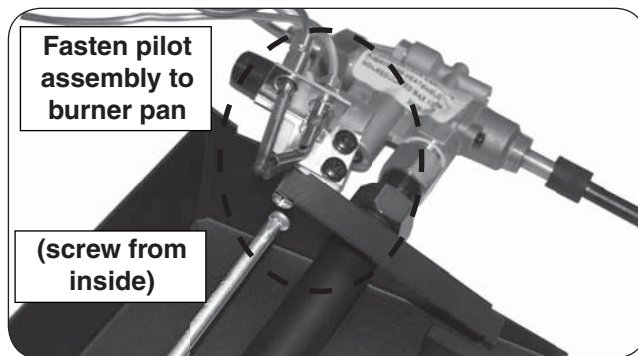
**Note:** Ensure the insulation is properly in place between the pilot bracket, burner pan, and pilot assembly. Screw from the inside of burner pan.

2. Ensure the pilot supply line and thermocouple tube are bent in a similar manner as shown in Fig. 6-3 to prevent damage / unsafe operation, and to allow for proper heat shield placement. Maintain this orientation at all times.

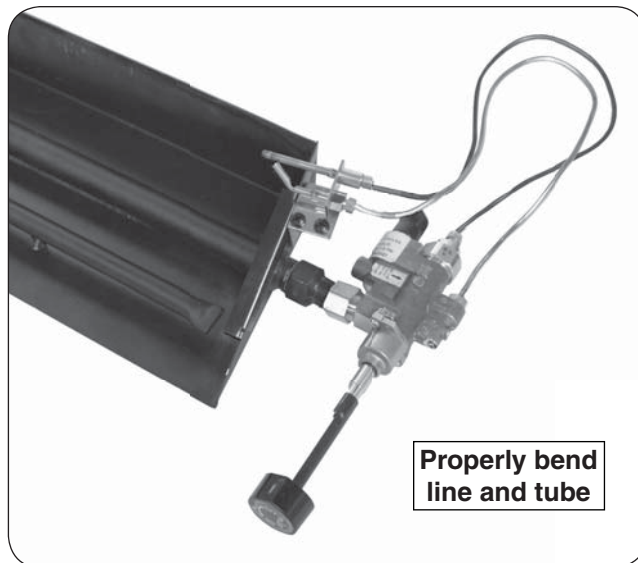
**WARNING:** Keep the pilot assembly clear at all times. Never cover any part of the pilot assembly.



**Fig. 6-1** Install diverter bracket (if applicable)



**Fig. 6-2** Install pilot assembly



**Fig. 6-3** Proper line and tube orientation



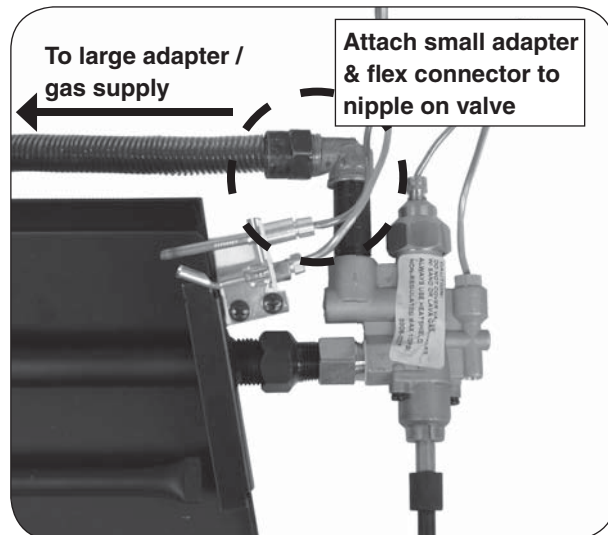
## CONNECT TO GAS SUPPLY

To connect the valve to the gas supply, the flex connector kit and component parts will be needed, which are included with the burner system. Refer to the PARTS LIST in the instructions supplied with the burner to identify the key parts needed.

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.

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

3. Attach the small adapter (included with burner flex connector kit) to the gas nipple on the control valve using a pipe compound resistant to all gasses. Tighten securely. Then attach one end of the connector to the small adapter. Tighten securely. See Fig. 7-1.
4. Place the burner system in the fireplace. Center the burner in the fireplace.
5. **Be sure gas to the fireplace is off.** Attach the large adapter (included with burner flex connector kit) to the gas-supply stub using a pipe compound resistant to all gasses. Tighten securely. Then attach the open end of the flex connector to the large adapter. Tighten securely.
6. **LEAKTEST:** 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.**
7. Follow the instructions supplied with the Peterson burner system for any additional requirements regarding specific burner setup and placement.



**Fig. 7-1** Install flex connector to valve

## HEAT SHIELD PLACEMENT

### TO PREVENT VALVE DAMAGE AND FAILURE:

**IT IS CRITICAL THAT THE HEAT SHIELD BE PLACED CORRECTLY OVER THE VALVE PRIOR TO OPERATION.**

### TO PREVENT OVERHEATING THE VALVE:

Cover the valve with the heat shield as shown in Fig. 8-1 and Fig. 8-2. It should rest flat above the valve.

**Keep the area above and below the heat shield clear of decorative media or any other objects at all times.**

**Important: Ensure the pilot supply line and thermocouple tube do not interfere with heat shield placement.**

**Important:** Keep sand, lava granules, and all foreign objects away from the pilot assembly, valve assembly, and heat shield during media placement and at all times.

Installation is complete at this point. Ensure ALL information in this manual is followed to ensure proper operation.

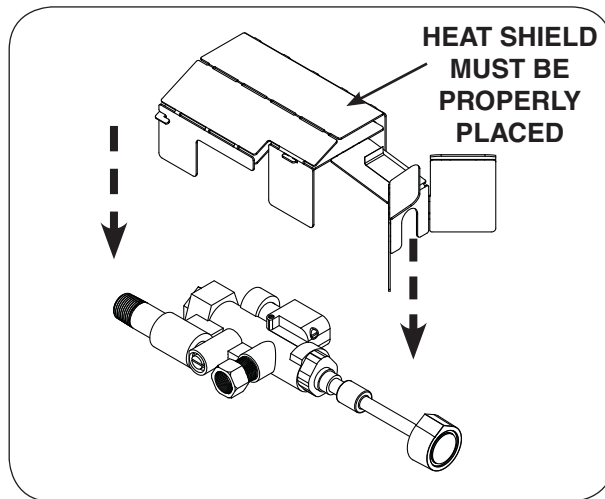
## LIGHTING TEST

Prior to proceeding with installation, perform a lighting test (see lighting instructions for lighting your burner).

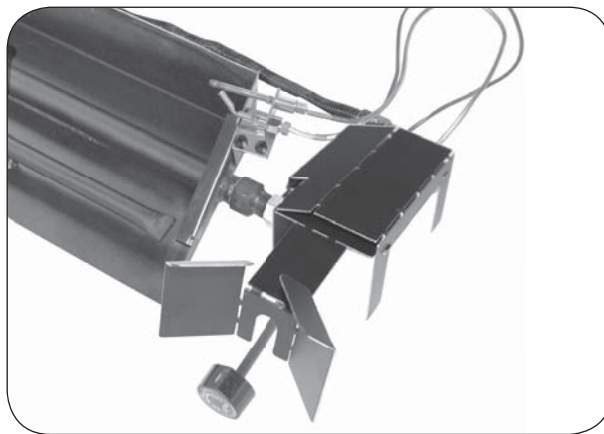
## DECORATIVE MEDIA REPLACEMENT

Refer to the burner instructions for proper placement of decorative media.

**Important:** Keep sand, lava granules, and all foreign objects away from the pilot assembly, valve assembly, and heat shield during media placement and at all times.



**Fig. 8-1** Place heat shield



**Fig. 8-2** Heat shield properly placed



# LIGHTING INSTRUCTIONS

## 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.** 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. Excessive force or attempted repair may result in fire or explosion.
- B. BEFORE OPERATING,** smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

### WHAT TO DO IF YOU SMELL GAS

- Do not light any appliance.
  - Do not touch any electric 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.** The burner system has a pilot that can be lit by hand using a match or long-necked lighter. When lighting the pilot, follow these instructions exactly.
- D.** Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water. Attempted operation may result in fire or explosion resulting in property damage, personal injury or loss of life.

### LIGHTING THE PILOT

1. Locate the valve on the side of the unit. Push in the gas control knob slightly and turn clockwise to **OFF** (Fig. 9-1).

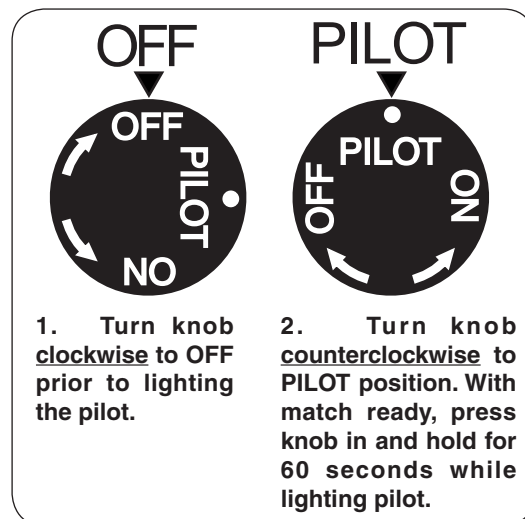
**Note:** The control knob cannot be turned from **PILOT** to **OFF** unless the knob is pushed in slightly. Do not force.

**Allow five (5) minutes for any gas in the unit to dissipate. IF YOU SMELL GAS, SEE STEP B ABOVE.** If you don't smell gas, go on to step 2.

2. Turn the control knob counterclockwise to **PILOT** (Fig. 9-1). Push the control knob **firmly and fully** in and hold. Hold a long fireplace match or lighter near the thermocouple to light the pilot. Continue to hold the control knob in for approximately 60 seconds after the pilot is lit, then release the knob. The pilot will remain lit.

**WARNING: If the pilot fails to light repeat steps 1 and 2.**

If the pilot fails to light after several tries, turn the control knob to **OFF** and contact a qualified professional service technician.



**Fig. 9-1** Control knob detail (OFF, PILOT)

## LIGHTING THE BURNER

1. Ensure the pilot is burning. Turn the gas control knob counterclockwise to **ON** (Fig. 10-1) to ignite the burner. The valve will open and the burner will light.

**Note:** The ignition sequence will take approximately 5 seconds.

**WARNING:** If the burner fails to light within 5 seconds, turn the control knob clockwise to **PILOT**. Allow five (5) minutes for any gas in the unit to dissipate, then repeat step 1 above. **IF YOU SMELL GAS, SEE STEP B AT BEGINNING OF LIGHTING INSTRUCTIONS.**

If the burner fails to light after several tries, push in the control knob slightly and turn clockwise to **OFF**, and contact a qualified professional service technician.

## SHUTTING DOWN

**MAIN BURNER ONLY (pilot will remain lit):**

Turn the control knob clockwise to **PILOT**.

**BURNER AND PILOT (total shutdown):**

If you do not plan on using your burner system for an extended period (one week or more), **you may extinguish the pilot.** This will conserve energy and save you money.

Push in the control knob slightly and turn clockwise to **OFF**.

## PILOT BURNER CHECK/ADJUSTMENT

With the pilot burner lit and the control knob in the pilot position, check the pilot system for proper flame size and appearance (see Fig. 10-2). The pilot adjustment screw is located on the front of the gas valve (see Fig. 10-2). Using a small flat head screwdriver, adjust the pilot screw to properly size the flames. Turning the screw clockwise will lower the flames, and turning it counterclockwise will raise them. Be careful not to back the screw out of its threads.

The pilot flame should be a quiet, soft blue flame with yellow tipping that encircles the thermocouple tip.



Fig. 10-1 Control knob detail (ON)

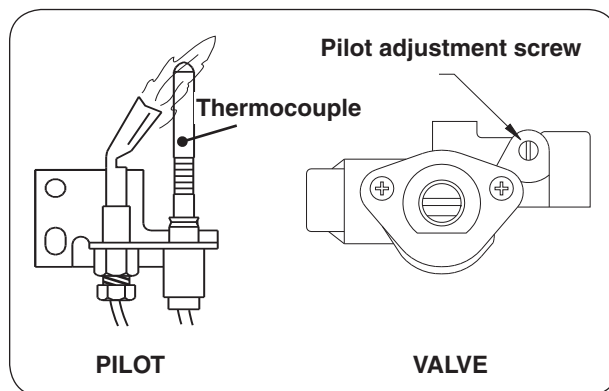


Fig. 10-2 Pilot adjustment detail

## TROUBLESHOOTING

PROBLEM	CAUSE	SOLUTION
1. Pilot will not light	<ul style="list-style-type: none"> <li>a. Obstruction in pilot gas supply or pilot gas-supply line is kinked</li> <li>b. Inadequate gas supply</li> <li>c. Air in line</li> </ul>	<ul style="list-style-type: none"> <li>a. Clear out obstruction. Replace pilot gas-supply line if kinked</li> <li>b. Have gas pressure checked by installer or gas supplier</li> <li>c. Air should clear; attempt to relight</li> </ul>
2. Pilot will not stay lit after releasing knob	<ul style="list-style-type: none"> <li>a. Thermocouple connection to valve either too tight or too loose</li> <li>b. Bad thermocouple</li> </ul>	<ul style="list-style-type: none"> <li>a. Thermocouple should be finger tight and then 1/8" turn with a wrench</li> <li>b. Replace thermocouple</li> </ul>
3. Log set extinguishes a few minutes after lighting	<ul style="list-style-type: none"> <li>a. Inadequate gas supply causes pilot flame to reduce after burner lights</li> </ul>	<ul style="list-style-type: none"> <li>a. Using pilot adjustment, increase gas to pilot. Pilot flame must be in contact with the thermocouple tip.</li> </ul>
4. Log set extinguishes after burning for some time (approximately 10 minutes to 1 hour)	<ul style="list-style-type: none"> <li>a. Thermocouple has overheated; glass doors are closed</li> <li>b. Thermocouple has overheated; insulation pad is not in place</li> <li>c. Thermocouple has overheated; burner flames are heating the thermocouple cold junction</li> </ul>	<ul style="list-style-type: none"> <li>a. Be sure glass doors are open during operation</li> <li>b. Be sure that the insulation pad is in place between the burner pan and the pilot bracket</li> <li>c. Be sure the pilot assembly and the flame diverter are in their proper position. Re-arrange logs so that flame is not deflected to the thermocouple.</li> </ul>

# WARRANTY

## PETERSON VENTED DECORATIVE GAS APPLIANCE LIMITED WARRANTY

Robert H. Peterson Co. ("RHP") warrants your Real Fyre® vented decorative gas appliance to be free from defects in material and workmanship.

Peterson vented ceramic refractory gas logs are warranted for **as long as you own them (lifetime)**.

Peterson vented burner assemblies are **WARRANTED for TEN (10) YEARS**. Peterson vented outdoor stainless-steel burner assemblies are warranted for **FIVE (5) YEARS**.

Peterson glass, gems, nuggets, and fiber-ceramic blend gas logs are warranted for **FIVE (5) YEARS**.

SPK-26 controls are warranted for **THREE (3) YEARS**.

APK-17 controls (including -17 valve) are warranted for **TWO (2) YEARS**.

All other Peterson valves, pilots, and controls are warranted for **ONE (1) YEAR (excluding batteries)**.

### A COPY OF YOUR SALES SLIP FOR PROOF OF PURCHASE IS REQUIRED

This warranty applies to the original purchaser for products which are installed in the United States or Canada and which are operated and maintained as intended for single family residential usage. This warranty is valid only with proof of purchase, shall commence on the date of purchase, and shall terminate (both as to original and any replacement products) on the anniversary date of the original purchase of the product stated on the above schedules.

This warranty covers defects in material and workmanship. This warranty **does not** cover parts which become defective as a result of negligence, misuse, use not in compliance with the Owner's Manual/Installation Instructions, accidental damage, improper handling, improper storage, improper installation, **lack of required routine maintenance** (as specified in the Owner's Manual/Installation Instructions), electrical damage, local gas impurities or failure to protect against combustibles. Product must be installed (and gas must be connected) as specified in the Owner's Manual/Installation Instructions by a **qualified professional installer**. Modifications to products which are not specifically authorized will void this warranty. Accessories, parts, valves, remotes, etc. when used must be Peterson products or this warranty is void. Warrantied items will be repaired or replaced at Peterson's sole discretion. This warranty **does not** apply to rust, corrosion, oxidation, or discoloration unless the affected part becomes inoperable.

This warranty **does not** cover labor or labor related charges, except as provided by separate specific written programs from the Peterson Co. All repair work must be performed by a qualified professional service person and requires prior approval of Peterson.

Peterson may require the defective product or part to be returned to the factory to determine the cause of failure. Peterson will pay freight charges if the product or part is determined to be defective. This warranty does not cover breakage in shipment from our (Independent) distributor to its customer if the damage is determined to have occurred during that shipment.

This warranty specifically excludes liability for **indirect, incidental, or consequential damages**. Some states and provinces 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 vary from state to state or province.

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.**

<b>Quality Check</b>		<b>Date:</b> _____	
<b>Leak Test:</b> _____	<b>Burn Test:</b> _____	<b>Gas Type:</b>	<b>Nat. / L.P.</b>
<b>Inspector:</b> _____			