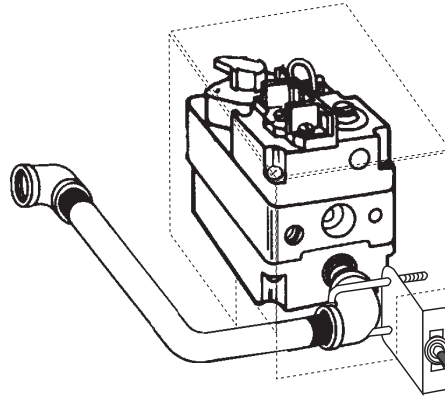


**AUTOMATIC REMOTE LIGHTING SAFETY PILOT SYSTEM  
FOR NATURAL OR PROPANE GAS**



**Installer:** Leave this manual with the consumer.

**Consumer:** Retain this manual for future reference.

**Model APK-10(M)(P)**

**FOR USE WITH PETERSON GAS LOG SETS ONLY**

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

- **Installation and service must be performed by a qualified 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.

**BE SURE DAMPER IS FULLY OPEN  
WHEN OPERATING THE LOG SET**

PETERSON VENTED GAS LOG SETS ARE TO BE OPERATED ONLY IN A FULLY VENTED, NONCOMBUSTIBLE FIREPLACE WITH DAMPER AND CHIMNEY FREE OF ANY OBSTRUCTIONS. THE FIREPLACE MUST BE DESIGNED AND APPROVED TO BURN WOOD. Like burning natural firewood, the Peterson log set is designed to burn with a yellow, smoky flame. For this reason, it must be adequately vented. Be sure the fireplace damper is fully open when you burn the gas log set. The smallest dimension of the chimney flue must be at least 8". If it is smaller, DO NOT USE A PETERSON 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 LOGS UNTIL THE FIREPLACE DRAFT IS CORRECTED. Check with your dealer or installer. Do not use firewood with this unit.

**This safety pilot system contains a control certified by C.S.A.**

# IMPORTANT INFORMATION

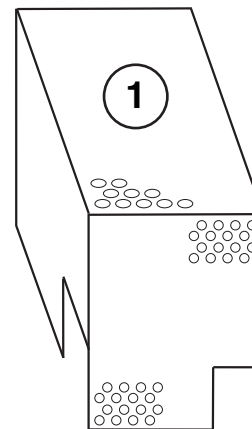
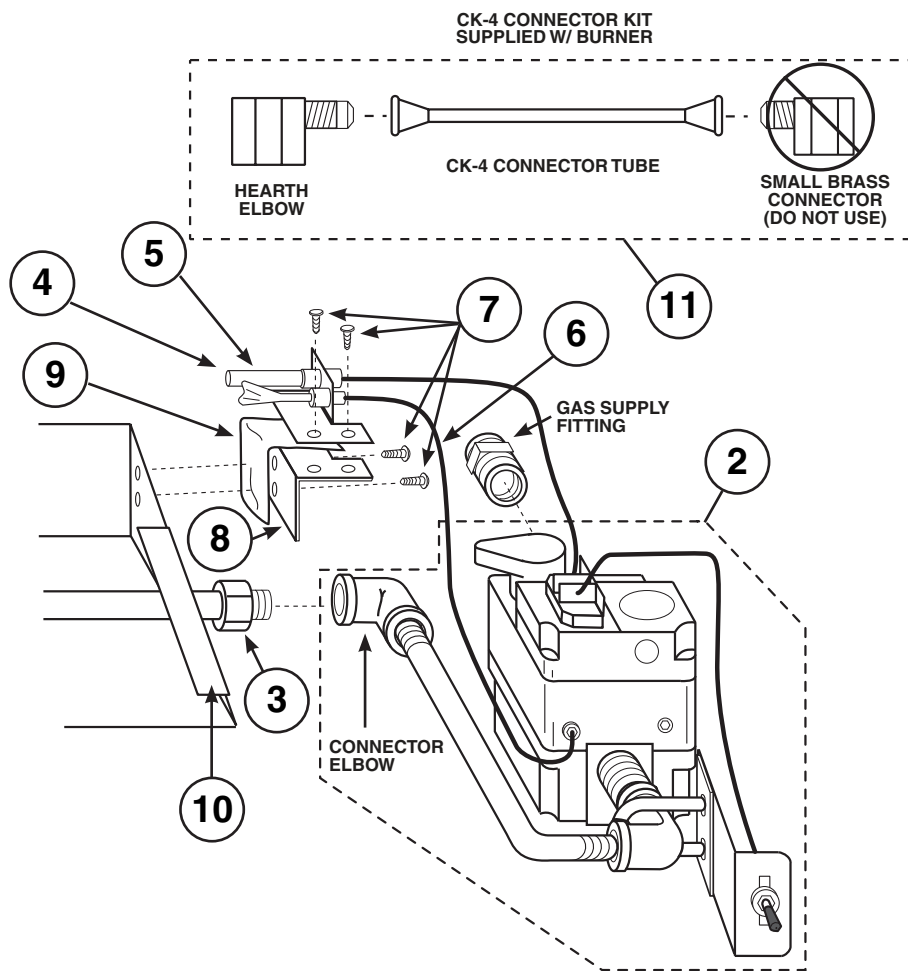
The installation, including provisions for combustion and ventilation air, must conform with local codes or, in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1 (latest edition).

This appliance and its individual shutoff valve must be disconnected from the gas supply piping system when testing at pressures exceeding 1/2 psig. Do this by closing the gas supply valve.

This appliance 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.

**WHEN GLASS FIREPLACE ENCLOSURES (DOORS) ARE USED, OPERATE THE GAS LOG SET WITH THE GLASS DOORS FULLY OPEN; BOTH SIDES IF FIREPLACE IS SEE-THRU TYPE.**

## PARTS LIST



Item No.	Part No.	Description	Item No.	Part No.	Description
1.	HS-3	Radiant Heat Shield	3.	AB-2	Fuel Injector (Nat. Gas only) or
2.	VA-100	Valve Assembly		AM-2	Air Mixer (supplied w/burner)
	SV-5	• Safety Valve	4.	PG-1	Pilot Assembly
	NP-3	• Gas Supply Fitting	5.	GN-1	Generator
		1/2" NPT x 3/8" Flare	6.	PG-3	Pilot Gas Supply
	NP-4	• 1/2" NPT Close Nipple	7.	3983-6003	screw #10 x 3/8" PH, BLK (4 Req.)
	EL-1	• Connector Elbow	8.	PB-1	Pilot Assembly Mounting Bracket
		3/8" NPT Female Thread	9.	GP-1	Burner Insulation Pad
	EL-9	• Connector Elbow	10.	SH-1	Flame Diverter Bracket
		1/2" to 3/8" NPT Female Thread	11.	CK-4	Connector Kit (supplied w/burner)
	MF-10	• 3/8" Manifold	12.	SS-2	1/4" Slotted bolt and nut
	3980-9216	• U-Bolt w/ plate and nuts			(For Front Flame burner installation only.)
	SW-2	• Toggle Switch Control	13.	RR-1A	Remote kit (if equipped)
	WI-3	• Wire Harness			

# INSTALLATION INSTRUCTIONS

Refer to the parts list when following these instructions.

**Be sure your Automatic Remote Lighting Safety Pilot System has been assembled for the proper gas. Systems labeled APK-10(M) are for natural gas and APK-10(M)P are for propane (L.P.) gas.**

## SAFETY VALVE INSTALLATION

Use teflon tape or pipe compound for all male connectors to prevent gas leaks.

**NOTE:** Your valve assembly is pre-assembled for ease of installation. Additional parts are required if mounting valve on the left side of burner or outside the fireplace.

## PLACEMENT OF THE APK SAFETY VALVE

Correct placement of the APK safety valve in the fireplace is important to ensure proper operation. The valve must be placed in the front right corner of the fireplace. Placement in the front left corner of the fireplace or outside the fireplace is also permitted, but may require additional connecting parts.

## 1. CONNECTING THE SAFETY VALVE TO THE BURNER

- Follow the instructions supplied with your Peterson gas log set for proper burner placement.
- Attach the connector elbow, part of the valve assembly (see parts list), to the fuel injector or air mixer (Item 3) on burner. Be sure all connections are tight.

## INSTALLATION ON SEE-THRU BURNERS

- Follow the instructions supplied with your Peterson gas log set for proper burner placement.
- Attach the street elbow and 3/8" nipple to the burners manifold (see Fig. 3-1).
- Attach the 3/8" connector elbow to the 3/8" nipple.
- Attach the valve to the elbow.

**Be sure all connections are tight.**

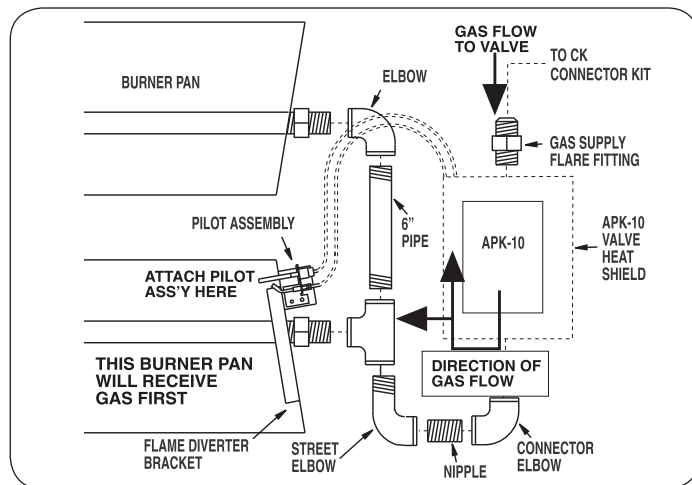


Fig. 3-1

- When the valve is connected, for correct and safe lighting, attach the pilot assembly to the **first pan that will receive gas** during operation (see Fig. 3-1)

## 2. CONNECTING THE SAFETY VALVE TO THE GAS SUPPLY

- Turn off the gas supply to the fireplace.
- Attach the hearth elbow supplied with the CK-4 connector kit (Item 11) to your gas supply. This item is supplied with your burner assembly.
- Remove and discard the small brass connector elbow from the CK-4. Attach the CK-4 connector tube, one end to the hearth elbow that is attached to the gas supply and the other end to the gas supply fitting that is attached to the safety valve.

## 3. CONNECTING THE PILOT ASSEMBLY TO THE SAFETY VALVE

- Connect one of the spade clips on the wires from the generator (Item 5) to the terminal screw marked "PG" and the other spade clip to the terminal screw marked "TH-PG." on the safety pilot valve (Item 2). Tighten screws. (Note: Two wires, one from the toggle switch control and one from the generator, should be connected to the terminal screw marked "TH-PG", BE SURE THE JUMPER WIRE IS IN PLACE (Figure 3).
- Screw the pilot gas supply (Item 6) to the safety valve at the gas port marked "pilot." Be sure the connection is tight.

## 4. RADIANT HEAT SHIELD PLACEMENT

Cover the safety valve (Item 2) with the radiant heat shield (Item 1). Be sure the solid black face of the shield is between the valve and the burner.

## 5. PILOT ADJUSTMENT

- The pilot flame should encircle the generator tip which is present at the factory (see Fig. 5-1). Ordinarily, the pilot will not require field adjustment.

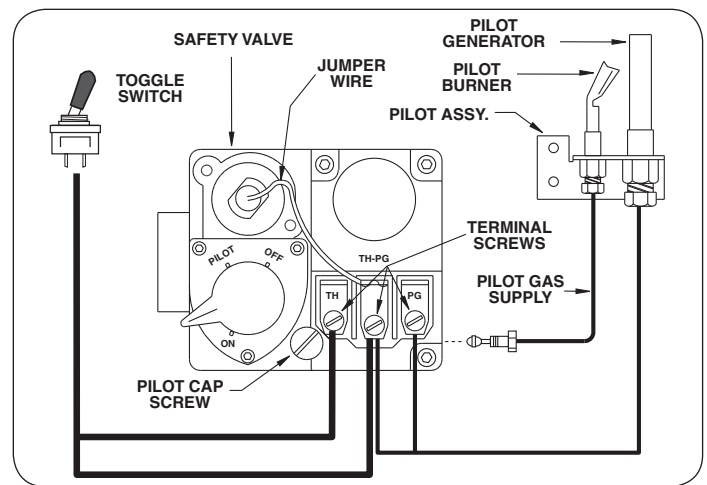


Fig. 3-2

## INSTALLATION INSTRUCTIONS (cont.)

- b. If adjustment is necessary, remove the cap screw (Figure 4) and turn the smaller gas adjustment screw inside counterclockwise to increase the pilot flame and clockwise to decrease the pilot flame. Replace cap screw.

**NOTE:** This valve is equipped with a thermo fuse that will disable the valve if the valve is heated to 190°F or greater. Be sure to install your APK valve as indicated in "Placement of the APK Safety Valve". This valve does not require an outside electrical source (millivolt system only).

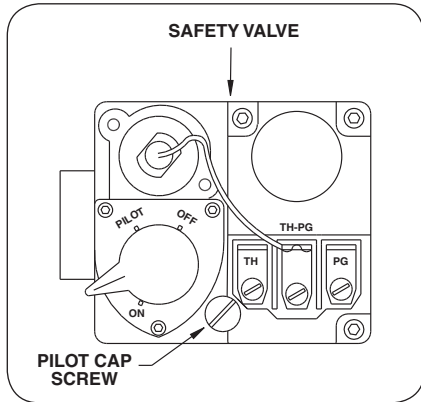


Fig. 4-1

### MOUNTING THE PILOT ASSEMBLY TO YOUR PETERSON REAL-FYRE BURNER

#### 1. ATTACHING THE FLAME DIVERTER BRACKET ON THE BURNER.

Attach the flame diverter bracket (Item 10) to the side wall of the burner pan nearest to the valve. The flame diverter bracket should be placed approximately 1 1/4" from the back side of the burner pan.

**NOTE:** The flame diverter bracket is used only on G4 series, G45 series and P series burners.

#### 2. GLOWING EMBER BURNER - G4 AND G45 SERIES.

- a. Attach the pilot assembly mounting bracket (Item 8) to the pilot assembly (Item 4) with #10 screws (Item 7) (Fig. 4-2 - Note: bracket, insulation pad and pilot assembly are shown attached).
- b. Place the burner insulation pad (Item 9) between the bracket and the burner. Insert the screws (Item 7) through the pilot assembly, insulation pad and holes in the side of the burner, and tighten.

#### 3. PAN BURNER — P SERIES

- a. Attach the pilot assembly mounting bracket (Item 8) to the pilot assembly (Item 4) with #10 screws (Item 7) (Fig. 4-3 - Note: bracket, insulation pad and pilot assembly are shown attached).
- b. Place the burner insulation pad (Item 9) between the bracket and the burner. Insert the screws (Item 7) through the pilot assembly, insulation pad and holes in the side of the burner.

**NOTE:** The generator and gas supply leads should not be touching the burner pan or be placed in the fire.

**CHECK ALL CONNECTIONS FOR GAS LEAKS USING A SOAPY WATER SOLUTION. NEVER USE AN OPEN FLAME TO CHECK FOR GAS LEAKS.**

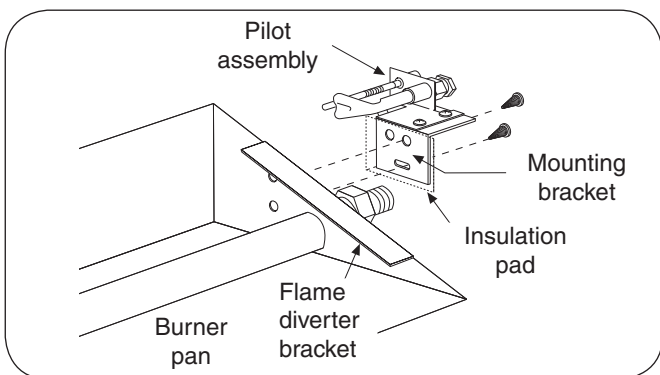


Fig. 4-2

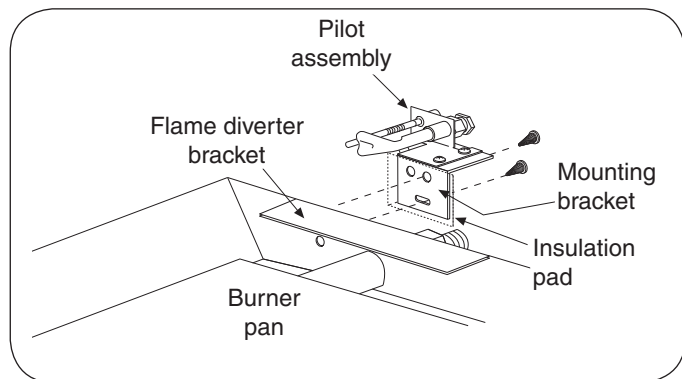


Fig. 4-3

# OPERATING INSTRUCTIONS

## HOW TO LIGHT THE PILOT

To light the pilot from the 'PILOT' position, make sure the toggle switch is in the 'OFF' position (down), push in slightly on the safety valve knob and turn to the 'OFF' position. Wait five minutes, then turn the safety valve knob to the 'PILOT' position. Push the safety valve knob fully in and at the same time place a long match or a butane lighter at the pilot burner. The pilot will light. Hold the safety valve knob in for approximately 60 seconds. If the pilot does not stay lit, turn the safety valve knob to the full 'OFF' position. Wait five minutes and repeat the lighting instructions.

## HOW TO TURN YOUR GAS LOG SET ON AND OFF USING YOUR APK SYSTEM

**To turn on your gas log set** with the pilot lit, turn the safety valve knob to the 'ON' position. Switch the toggle switch control to the 'ON' (UP) position and the gas log set will light.

**To turn off your gas log set**, switch the toggle switch control to the 'OFF' (Down) position. The pilot will remain lit.

**To turn off the pilot**, be sure the toggle switch control is 'OFF' and depress and turn the safety valve knob to the 'OFF' position.

## MAINTENANCE

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

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

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

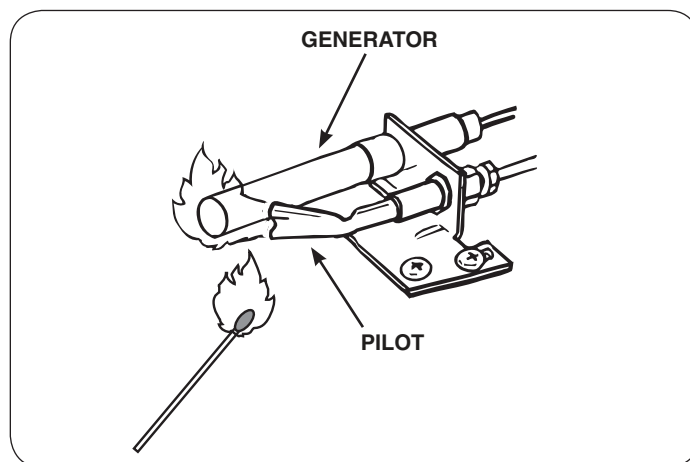


Fig. 5-1 Lighting the pilot

**Note:** Pilot flame should encircle top of the generator.

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

## TROUBLE SHOOTING

PROBLEM	CAUSE	SOLUTION
<b>1. Pilot will not stay lit</b>	<ul style="list-style-type: none"> <li>a. Pilot generator may not be producing sufficient millivoltage.</li> <li>b. Pilot flame is making a blowing noise.</li> <li>c. Generator wire leads are attached to the wrong terminals on the valve.</li> <li>d. Defective thermomagnet safety in the valve.</li> </ul>	<ul style="list-style-type: none"> <li>a. Check with a millivolt meter. Should be 250 millivolts or more.</li> <li>b. Pilot needs adjusting. See pg. 3 (Pilot Adjustment).</li> <li>c. See pg.3 (Connecting Pilot Assembly to Safety Valve).</li> <li>d. Replace valve.</li> </ul>
<b>2. Pilot Burning - No Gas to Burner</b>	<ul style="list-style-type: none"> <li>a. Safety valve not turned to the "ON" position after lighting pilot.</li> <li>b. Wire Leads are not connected to proper valve terminals or Toggle Switch terminals not tight.</li> <li>c. Pilot generator may not be producing sufficient millivoltage.</li> <li>d. Defective valve.</li> </ul>	<ul style="list-style-type: none"> <li>a. Turn to "ON" position.</li> <li>b. Make sure all wire leads are tight and attached to proper terminals (See wiring diagram on pg. 3).</li> <li>c. See section 1a above.</li> <li>d. Replace valve.</li> </ul>
<b>3. Log Set Not Burning Properly</b>	<ul style="list-style-type: none"> <li>a. Low flame/uneven flame.</li> </ul>	<ul style="list-style-type: none"> <li>a. Check for low gas pressure; should have operating pressures of 7" W.C. for natural gas, 11" W.C. for LPG at Manifold.</li> <li>b. Burner should be filled completely with Sand or Vermiculite (L.P.)</li> </ul>
<b>4. Log Set Operates But Will Not Shut "OFF"</b>	<ul style="list-style-type: none"> <li>a. Toggle Switch Control lead wires to the valve may be shorted together or on wrong terminals.</li> </ul>	<ul style="list-style-type: none"> <li>a. See pg. 3 (wiring diagram)</li> </ul>
<b>5. Frequent Pilot Outage</b>	<ul style="list-style-type: none"> <li>a. Pilot flame is out of adjustment.</li> <li>b. Down drafts from the chimney, extinguishing the pilot.</li> </ul>	<ul style="list-style-type: none"> <li>a. See section 1b above.</li> <li>b. Check draft. Consult with a qualified chimney expert.</li> </ul>
<b>6. Log Set Shuts Down During Operation</b>	<ul style="list-style-type: none"> <li>a. Glass doors closed causing excessive heat buildup.</li> <li>b. Pilot generator improperly mounted on rear of burner pans.</li> <li>c. Heat shield not in place.</li> </ul>	<ul style="list-style-type: none"> <li>a. Open glass doors.</li> <li>b. See (Mounting Pilot Assembly to Real-Fyre burners).</li> <li>c. Place heat shield over valve. Be sure the solid black face of the shield is between the valve and the burner.</li> </ul>

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

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