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.**

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**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.

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**Important:** Read these instructions carefully before starting installation of the gas

This burner system is to be installed only in a solid-fuel-burning fireplace with a working flue and 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.**

The log set is designed to burn with yellow flames; thus, adequate ventilation is absolutely necessary.

**Important:** To comply with certification, listings, and building code acceptance, and for safe operation and proper performance, ONLY Peterson parts and accessories may be used with these instructions **MUST** be retained with this appliance.
**IMPORTANT INFORMATION**

**CHECK TO BE SURE THE COAL GRATE SET IS FOR THE PROPER GAS TYPE**

Coal grate sets are designed for use with natural gas, unless clearly labeled for propane. Never use propane gas in a set designed for natural gas, or natural gas in a 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 Z223.1-1988 and NFPA54-1988.

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. This is accomplished by closing the gas-supply line valve, which is required by NFPA54, section 5.5.4.

The appliance must be isolated from the gas supply piping system by closing its individual manual shut off 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 7” for natural gas and 11” 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 coal grate set is burning.

**WHEN GLASS FIREPLACE ENCLOSURES (DOORS) ARE USED, OPERATE THE COAL GRATE SET WITH THE GLASS DOORS OPEN.**

The minimum-size fireplace in which the VG4 Series burner is to be installed is listed in the table below:

<table>
<thead>
<tr>
<th>Coal Grate Size</th>
<th>Depth</th>
<th>Height</th>
<th>Front Opening Width*</th>
</tr>
</thead>
<tbody>
<tr>
<td>18&quot;</td>
<td>12&quot;</td>
<td>16&quot;</td>
<td>24&quot;</td>
</tr>
<tr>
<td>24&quot;</td>
<td>12&quot;</td>
<td>16&quot;</td>
<td>30&quot;</td>
</tr>
<tr>
<td>30&quot;</td>
<td>12&quot;</td>
<td>16&quot;</td>
<td>36&quot;</td>
</tr>
</tbody>
</table>

* This required width allows for centering of the log set. Add 4” to front width if the burner is to be installed with a pilot kit.

**PARTS LIST**

Replacement parts can be ordered from your local Real-Fyre® dealer.

24” model shown

<table>
<thead>
<tr>
<th>Description</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Lava coal rocks</td>
<td>VS-12</td>
</tr>
<tr>
<td>2. Grate</td>
<td>VV-24</td>
</tr>
<tr>
<td>3. Glowing ember burner</td>
<td>GG-24</td>
</tr>
<tr>
<td>4. Fuel injector (nat. gas)</td>
<td>AB-2</td>
</tr>
<tr>
<td>or Air mixer (propane)</td>
<td>AM-2</td>
</tr>
<tr>
<td>5. Connector kit (w/ adapters)</td>
<td>CK-14-12</td>
</tr>
<tr>
<td>6. Gowing embers</td>
<td>EM-1</td>
</tr>
<tr>
<td>7. Select sand granules</td>
<td>CS-10</td>
</tr>
<tr>
<td>or Vermiculite granules</td>
<td>LF-15</td>
</tr>
<tr>
<td>8. Damper clamp</td>
<td>DC-1</td>
</tr>
</tbody>
</table>

**Note:** Values in bold change with model size
INSTALLING THE GAS COAL GRATE SET

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

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

INSTALLING THE BURNER

Gas coal grate sets must be installed only in a wood-burning fireplace with flue at least 8” at smallest dimension. Open damper fully and be sure damper clamp is in place (see DAMPER CLAMP installation instructions on p. 4). Check PARTS LIST to be sure all parts are included. For safe operation and proper performance, use only Robert H. Peterson parts and accessories. Gas-supply pipe must be 1/2” minimum I.D. or larger (3/4”) if gas line is longer than 20’.

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

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

REFER TO THE PARTS LIST WHEN FOLLOWING THESE INSTRUCTIONS. **If your burner is to be installed with a pilot kit; carefully follow the instructions supplied with your pilot kit for specific gas connection.**

The burner pan is supplied with an air mixer for propane gas or a fuel injector for natural gas. **The air mixer / fuel injector must be used in ALL installations.** The air mixer / fuel injector has a precisely sized orifice to ensure only the proper quantity of gas enters the burner. This allows maximum performance and gas conservation.

1. **MAKE SURE THE FIREPLACE GAS SUPPLY IS TURNED OFF.**

2. Locate the gas-supply stub inside the fireplace and remove the cap, if attached (see Fig. 3-4).

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

3. Attach the small adapter (Item 5C) to the fuel injector / air mixer on the burner pan, using a pipe compound resistant to all gases. Tighten securely. **DO NOT REMOVE THE FUEL INJECTOR / AIR MIXER.** Then attach one end of the flex connector (Item 9B) to the small adapter. Tighten securely.

4. Place the burner system into the fireplace so the open burner pan faces outward.

5. Attach the grate backing to the grate basket (Item 2) with the nuts and bolts provided.

6. Place the grate 1” from the back wall of the fireplace (see Fig. 3-5). Center the grate from left to right.

7. Orient the burner under the grate with the open edge toward the front. The grate front legs are to be placed in front of the corners of the burner pan (see Fig. 3-5).
8. **Be sure gas to the fireplace is off.** Attach the large adapter (Item 9A) to the gas-supply stub using a pipe compound resistant to all gases. Tighten securely. Then attach the open end of the flex connector to the large adapter. Tighten securely. Ensure the pan rests level on the fireplace floor after connection. Adjust the pan if necessary.

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

Turn off the gas supply prior to proceeding.

**GRANULE, EMBER, AND GRATE PLACEMENT**

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

1. Fill the burner pan completely with the granules* (Item 7). See Fig. 4-2. Avoid spilling the granules on the pilot kit (if equipped).

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

2. Slope the granules at the same angle as the burner pan. This is important to ensure quiet lighting and even flame distribution.

**EMBER PLACEMENT**
Sprinkle the glowing embers (Item 6) lightly and evenly over the entire surface of the granules. Break up any clumps that may have developed during shipment. Important: Do not add any additional embers to this gas coal grate set. Any additional embers may cause unsafe operation.

**GRATE PLACEMENT**
Replace the grate back in position over the burner.

**LAVA COAL ROCK PLACEMENT**
For best performance, place lava coal rock in the grate in a random manner, allowing space for the flame to rise (see Fig. 4-3).
Important: Keep the fireplace area free from combustible materials, gasoline and other flammable vapors and liquid.

1. **BE SURE CHIMNEY DAMPER IS FULLY OPEN.**

2. To light the set with floor or wall valve or optional on/off valve (AV-17 or AV-18), lay a lighted match on the surface of the burner embers (granules) near gas inlet. **DO NOT HOLD THE MATCH IN YOUR HAND.** Turn on gas slowly. Burner should light.

3. If safety pilot is used and the pilot is lit (see safety pilot system instructions), turn the valve on, and the burner should light.

**WHEN USING PROPANE GAS**

All propane log sets must be installed with vermiculite granules, **safety pilot**, and the correct air mixer with the proper orifice. **DO NOT USE SAND WITH A PROPANE BURNER.**

The composition of propane gas will vary in its contents. In rare instances, the propane gas mixes will increase the BTU input rating. It is possible that a smoky flame will be produced by the burner, resulting in excessive buildup of carbon deposits. When this occurs, check the following:

1. Be certain the fireplace damper is open (see "A," below) all the way when burning.

2. Lava coal rocks must be repositioned so as not to choke off flames.

3. Grate (see "B," below) must be set approximately 1" from the rear wall.

4. Front of ember pan should be located even with front leg of grate.

5. Air mixer on burner should be open all the way (see "C," below).

In certain rare instances, the formulation of the propane gas may still produce smoke and carbon. If this occurs after taking the above steps, it is not the fault of the coal grate set; check with the gas supplier.
PETE RSON VENTED DECORATIVE GAS APPLIANCE
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.
All Peterson glass is Warranted for Five (5) 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, lack of routine maintenance, storage, and/or installation. Product must be installed (and gas must be connected) as specified in the instructions or operator’s manual, by a qualified professional installer. Accessories, parts, valves, remotes, etc., when used must be Peterson Co. product.
This warranty does not apply to rust, corrosion, oxidation, or discoloration, unless the affected component becomes inoperable. It does not cover labor or labor-related charges.
This warranty specifically excludes liability for indirect, incidental, or consequential damages. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion may not apply to you. This warranty gives you specified legal rights, and you may have other rights that may vary from state to state.
For additional information regarding this warranty, or to place a warranty claim, contact the R.H. Peterson dealer where the product was purchased.

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