A barrier designed to reduce the risk of burns from the hot viewing glass is provided with this appliance and shall be installed for the protection of children and other at-risk individuals.

**WARNING**

**FIRE OR EXPLOSION HAZARD**
Failure to follow safety warnings exactly could result in serious injury, death or property damage.

— 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**
  • Do not try to light any appliance.
  • Do not touch any electrical switch; do not use any phone in your building.
  • Leave the building immediately.
  • 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.

— Installation and service must be performed by a qualified installer, service agency or the gas supplier.

**WARNING**

If not installed, operated and maintained in accordance with the manufacturer’s instructions, this product could expose you to substances in fuel or from fuel combustion which can cause death or serious illness.

This appliance may be installed in an aftermarket, permanently located, manufactured home (USA only) or mobile home, where not prohibited by state or local codes.

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 gases, unless a certified kit is used.

We suggest 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.

INSTALLER:
Leave this manual with the appliance.

CONSUMER:
Retain this manual for future reference.

**DIRECT VENT**
**ZERO CLEARANCE GAS**
**FIREPLACE MODEL SERIES:**
**MULTIFUNCTION REMOTE (MF)**
**DVTL27FP90(N,P)-1**
BEFORE YOU START

1. Gas Supply see page 12.
2. Locating Fireplace see page 13.
3. Electrical Considerations see page 14.
4. Installation see pages 15-19.
5. Vent System Identification see page 20.
6. Venting Fireplace see pages 21-27.
7. Framing and Finishing see pages 28-29.
8. Install Fiber Panels see page 30.
9. Placing Glowing Embers see page 31
10. Log Placement see pages 32-41.
12. Lighting Instructions see page 53.
14. Read the Important Safety Information see pages 60-61.
15. Requirements for Massachusetts, please note the special requirements on page 62.

---

CARTON CONTENTS

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<th>Part No.</th>
<th>Quantity Supplied</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Latch Tool</td>
<td>28932</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Product Registration Card</td>
<td>—</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>AA Battery</td>
<td>R10592</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>AAA Battery</td>
<td>R10600</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>Wall Thimble Spacer</td>
<td>33331</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>Cover Plate, Battery Box</td>
<td>R11783</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>Remote</td>
<td>R11550</td>
<td>1</td>
</tr>
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<td>SPECIFICATIONS</td>
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<td>ACCESSORIES</td>
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INTRODUCTION

Instructions to Installer
1. Installer must leave instruction manual with owner after installation.
2. Installer must have owner fill out and mail warranty card supplied with the fireplace.
3. Installer should show owner how to start and operate the fireplace.

This direct vent gas fireplace is designed to operate with all combustion air being siphoned from the outside of the building and all exhaust gases expelled to the outside of the building. The information contained in this manual pertains to all models and gas control systems unless otherwise noted.

Appliance Certification

⚠️ WARNING
This unit is not for use with solid fuels.

This fireplace is design certified in accordance with American National Standard ANSI Z21.50 and by Underwriters Laboratories as a Direct Vent Gas Fireplace and shall be installed according to these instructions.

Consult your local building code agency, prior to installation, to ensure compliance with local codes—including permits and inspections.

The fireplace, when installed, must be electrically grounded in accordance with local codes or, in absence of local codes, with the National Electric Code ANSI/NFPA 70, if an external electrical source is utilized.

These models may be installed in a bedroom or bed-sitting room in the U.S.A.

Qualified Installing Agency

Installation and replacement of gas piping, gas utilization equipment or accessories and repair and servicing of equipment shall be performed only by a qualified agency. The term “qualified agency” means any individual, firm, corporation or company which either in person or through a representative is engaged in and is responsible for (a) the installation or replacement of gas piping or (b) the connection, installation, repair or servicing of equipment, who is experienced in such work, familiar with all precautions required and has complied with all the requirements of the authority having jurisdiction.

Commonwealth of Massachusetts: The installation must be made by a licensed plumber or gas fitter in the Commonwealth of Massachusetts.

⚠️ WARNING
ANY CHANGE TO THIS FIREPLACE OR ITS CONTROLS CAN BE DANGEROUS.
Improper installation or use of the fireplace can cause serious injury or death from fire, burns, explosions, or carbon monoxide poisoning.

The installation must conform with local codes or, in the absence of local codes, with the National Fuel Gas Code ANSI Z223.1/NFPA 54* Natural Gas and Propane Installation Code *Available from the American National Standards Institute, Inc. 11 West 42nd St., New York, N.Y. 10036.

Any alteration of the original design, installed other than as shown in these instructions or use with a type of gas not shown on the rating plate is the responsibility of the person and company making the change.

Important
All correspondence should refer to complete Model Number, Serial Number and type of gas.

High Altitude
When installing this unit at an elevation above 2000 feet (in the United States) it may be necessary to decrease the input rating by changing the existing burner orifice to a smaller size. Generally, input should be reduced 4 percent for each 1000 feet above sea level. However, if the heating value of the gas has been reduced, this general rule may not apply. Check with Empire Comfort Systems for proper orifice size identification.

Preparation
This direct vent gas fireplace and its components are tested and safe when installed in accordance with this Installation Manual. Report to your dealer any parts damaged in shipment, specifically check glass condition. Do not install unit with damaged, incomplete, or substitute parts. Read all instructions before starting installation and follow these instructions carefully during installation to insure maximum benefit and safety. Failure to follow them will void your warranty and may present a fire hazard.

The warranty will be voided by, and the warranter disclaims any responsibility for the following actions:

- Installation of any damaged fireplace or vent system component.
- Modification of the fireplace or direct vent system.
- Installation other than as instructed by Empire Comfort Systems Inc.
- Improper positioning of logs or embers.
- Installation and/or use of any component part not manufactured or approved by manufacturer.
### SPECIFICATIONS

<table>
<thead>
<tr>
<th></th>
<th>DVTL27FP92N</th>
<th>DVTL27FP92P</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Natural Gas</td>
<td>Propane Gas</td>
</tr>
<tr>
<td><strong>Input BTU/Hr Maximum</strong></td>
<td>36,000</td>
<td>36,000</td>
</tr>
<tr>
<td><strong>Input BTU/Hr Minimum</strong></td>
<td>11,500</td>
<td>11,000</td>
</tr>
<tr>
<td><strong>KWH (Maximum)</strong></td>
<td>10.55</td>
<td>10.55</td>
</tr>
<tr>
<td><strong>KWH (Minimum)</strong></td>
<td>3.37</td>
<td>3.22</td>
</tr>
<tr>
<td><strong>Orifice (Front)</strong></td>
<td>1.90mm</td>
<td>#57</td>
</tr>
<tr>
<td><strong>Orifice (Back)</strong></td>
<td>#43</td>
<td>1.45mm</td>
</tr>
<tr>
<td><strong>Air Shutter Opening (Front)</strong></td>
<td>1/4&quot;</td>
<td>Full Open</td>
</tr>
<tr>
<td><strong>Air Shutter Opening (Back)</strong></td>
<td>3/16&quot;</td>
<td>Full Open</td>
</tr>
<tr>
<td><strong>Height without standoff</strong></td>
<td>47-3/8&quot;</td>
<td>47-3/8&quot;</td>
</tr>
<tr>
<td><strong>Width</strong></td>
<td>37-3/8&quot;</td>
<td>37-3/8&quot;</td>
</tr>
<tr>
<td><strong>Depth</strong></td>
<td>24-3/8&quot;</td>
<td>24-3/8&quot;</td>
</tr>
<tr>
<td><strong>Gas Inlet Shutoff Valve (pipe)</strong></td>
<td>1/2 NPT</td>
<td>1/2 NPT</td>
</tr>
</tbody>
</table>

**NOTICE:** Air shutter settings are factory minimum settings. Some venting configurations may require minor air shutter adjustments for optimum performance.

### GAS SUPPLY PRESSURES

<table>
<thead>
<tr>
<th>Gas Type</th>
<th>Maximum</th>
<th>Minimum</th>
<th>Manifold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural</td>
<td>14.0&quot;</td>
<td>4.5&quot;</td>
<td>3.5&quot;</td>
</tr>
<tr>
<td>Propane</td>
<td>14.0&quot;</td>
<td>10.8&quot;</td>
<td>10.0&quot;</td>
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</tbody>
</table>
The following accessory parts can be obtained from your Empire Comfort Systems dealer. If you need additional information beyond what your dealer can furnish, contact Empire Comfort Systems Inc., 918 Freeburg Ave., Belleville, Illinois 62220-2623.

### ACCESSORIES

<table>
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<th>MODEL NUMBER</th>
<th>DESCRIPTION</th>
<th>FIREPLACE MODELS USED ON</th>
</tr>
</thead>
<tbody>
<tr>
<td>DF272NB</td>
<td>Decorative Front - Beveled Window Frame, Brushed Nickel</td>
<td>DVTL27FP</td>
</tr>
<tr>
<td>DF274NB</td>
<td>Decorative Front - Floating Front, Brushed Nickel</td>
<td>DVTL27FP</td>
</tr>
<tr>
<td>DF27CTBL</td>
<td>Decorative Front - “Cathedral”, Hammered Black Copper</td>
<td>DVTL27FP</td>
</tr>
<tr>
<td>DF27PTBL</td>
<td>Decorative Front - “Portico”, Hammered Black</td>
<td>DVTL27FP</td>
</tr>
<tr>
<td>DVFS27BL</td>
<td>Fireplace Screen, Black</td>
<td>DVTL27FP</td>
</tr>
<tr>
<td>FBB12</td>
<td>Remote Operated, Variable Speed Blower Kit</td>
<td>DVTL27FP</td>
</tr>
<tr>
<td>DCA1ABL</td>
<td>Decorative Forged Andirons</td>
<td>DVTL27FP</td>
</tr>
<tr>
<td>DVP27PKR</td>
<td>Porcelain Liner, Black Reflective</td>
<td>DVTL27FP</td>
</tr>
<tr>
<td>DVP27PMB</td>
<td>Fiber Liner, Rustic Banded Brick</td>
<td>DVTL27FP</td>
</tr>
<tr>
<td>DVP27PWS</td>
<td>Fiber Liner, Old World Stone</td>
<td>DVTL27FP</td>
</tr>
</tbody>
</table>

*A liner kit must be purchased and installed in order to operate the unit.

### FIREPLACE BARRIER SCREENS

<table>
<thead>
<tr>
<th>Screen Model</th>
<th>Description</th>
<th>FIREPLACE MODELS USED ON</th>
</tr>
</thead>
<tbody>
<tr>
<td>DFQ272NB</td>
<td>Beveled Window Frame with Barrier Screen</td>
<td>DVTL27FP</td>
</tr>
<tr>
<td>DFQ274NB</td>
<td>Floating Front Frame with Barrier Screen</td>
<td>DVTL27FP</td>
</tr>
<tr>
<td>DFQ27BL</td>
<td>Barrier Front</td>
<td>DVTL27FP</td>
</tr>
<tr>
<td>DVFQ27CTBL</td>
<td>Fireplace Screen</td>
<td>DVTL27FP</td>
</tr>
<tr>
<td>DVFQ27PTBL</td>
<td>Fireplace Screen</td>
<td>DVTL27FP</td>
</tr>
</tbody>
</table>

**NOTE:** A firescreen is required for operation of the appliance, but are sold separately. Follow the instructions that come with your firescreen for proper installation.

### GAS CONVERSION KITS

<table>
<thead>
<tr>
<th>Conversion Kit Number</th>
<th>Description</th>
<th>FIREPLACE MODELS USED ON</th>
</tr>
</thead>
<tbody>
<tr>
<td>34374</td>
<td>Conversion Kit - Natural to Propane</td>
<td>DVTL27FP90N</td>
</tr>
<tr>
<td>34375</td>
<td>Conversion Kit - Propane to Natural</td>
<td>DVTL27FP90P</td>
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**FIREPLACE DIMENSIONS**

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<th>Index Letter</th>
<th>Dimension Description</th>
<th>DVTL27</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>The maximum height of firebox face (excluding standoffs)</td>
<td>47-3/8''</td>
</tr>
<tr>
<td>B</td>
<td>The maximum width of the firebox face (excluding nailing flanges)</td>
<td>37-3/8''</td>
</tr>
<tr>
<td>C</td>
<td>The maximum depth of the firebox</td>
<td>26''</td>
</tr>
<tr>
<td>D</td>
<td>The height of the firebox opening</td>
<td>37''</td>
</tr>
<tr>
<td>E</td>
<td>The width of the firebox opening</td>
<td>28-1/4''</td>
</tr>
<tr>
<td>F</td>
<td>The interior depth of the firebox</td>
<td>20-1/2''</td>
</tr>
<tr>
<td>G</td>
<td>The rear exterior width of the firebox</td>
<td>23-3/4''</td>
</tr>
<tr>
<td>H</td>
<td>The height to the firebox standoffs</td>
<td>N/A</td>
</tr>
<tr>
<td>I</td>
<td>Width from the left side of the box to the centerline of vent</td>
<td>18-11/16''</td>
</tr>
<tr>
<td>J</td>
<td>Depth from back of box to centerline of top vent</td>
<td>8-11/16''</td>
</tr>
<tr>
<td>K</td>
<td>Height from the bottom of the box to the gas line opening</td>
<td>3-1/4''</td>
</tr>
<tr>
<td>L</td>
<td>Depth from the front of the box to gas line opening</td>
<td>22''</td>
</tr>
<tr>
<td>M</td>
<td>Depth from rear of box to gas line opening</td>
<td>1-3/4''</td>
</tr>
<tr>
<td>N</td>
<td>Glass frame opening height</td>
<td>31-7/8''</td>
</tr>
<tr>
<td>O</td>
<td>Glass frame opening width</td>
<td>23-3/4''</td>
</tr>
<tr>
<td>P</td>
<td>Depth from front of box to centerline of vent</td>
<td>15-3/4''</td>
</tr>
<tr>
<td>Q</td>
<td>Distance from floor to fireplace opening</td>
<td>3/4''</td>
</tr>
<tr>
<td>R</td>
<td>Height from floor to vent collar</td>
<td>40-1/4''</td>
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</tbody>
</table>
CLEARANCES

<table>
<thead>
<tr>
<th>CLEARANCE TO COMBUSTIBLES</th>
</tr>
</thead>
</table>
| Back                      | 2-3/4"  
| Side                      | 2-3/4"  
| Floor                     | 0"      
| Top Framing Edge          | 0"      

NOTE A: See Figure 3 for maximum mantel depth and minimum height above unit.

Television Considerations
Installing a television above a fireplace has become increasingly popular; however, the area above any fireplace gets hot and most TV manufacturers recommend against placing their products near a heat source.

If you install a television above this fireplace, Empire Comfort Systems accepts no responsibility for damage or injuries. Follow the television manufacturer’s installation instructions, including any recommendations regarding proximity to heat sources.

If you have a TV above your fireplace, turn off the fireplace and let it cool completely before servicing or touching any buttons on the TV.

<table>
<thead>
<tr>
<th>INDEX LETTER</th>
<th>DISTANCE FROM FIREPLACE OPENING</th>
<th>DISTANCE FROM FINISHED WALL</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>28&quot;</td>
<td>12&quot;</td>
</tr>
<tr>
<td>B</td>
<td>26-3/4&quot;</td>
<td>8&quot;</td>
</tr>
<tr>
<td>C</td>
<td>24&quot;</td>
<td>6&quot;</td>
</tr>
<tr>
<td>D</td>
<td>22&quot;</td>
<td>4-1/2&quot;</td>
</tr>
<tr>
<td>E</td>
<td>19&quot;</td>
<td>2-1/4&quot;</td>
</tr>
<tr>
<td>F</td>
<td>18&quot;</td>
<td>1-1/2&quot;</td>
</tr>
<tr>
<td>G</td>
<td>16&quot;</td>
<td>0&quot;</td>
</tr>
</tbody>
</table>
CLEARANCES (CONT’D)

Clearances
Clearance from top front edge of fireplace to ceiling is 40 inches. Clearance from side of fireplace to adjacent sidewall is 6 inches.

Figure 4

COMBUSTIBLE MATERIAL

No greeting cards, stockings or ornamentation of any type should be placed on or attached to the fireplace. The flow of heat out of the appliance can ignite combustibles.

Figure 5
Termination clearance for buildings with combustible and noncombustible exteriors.

**Figure 6**

**Vertical Sidewall Installations**

**Important!** Minimum clearance between vent pipes and combustible materials is 3 inch on top, and 1 inch (on bottom and sides).

**Important!** When vent termination exits through foundation less than 20 inches below siding outcrop, the vent pipe must extend outward so that the horizontal vent termination is located flush to, or beyond the outcrop siding.

**Information on Various Venting Routes and Components**

**Important!** It is always best to locate the fireplace in such a way that minimizes the number of offsets and horizontal vent length.

Since it is very important that the venting system maintain its balance between the combustion air intake and the flue gas exhaust, certain limitations as to vent configurations apply and must be strictly adhered to.

The graph showing the relationship between vertical and horizontal side wall venting will help to determine the various vent lengths allowable.

The horizontal vent run refers to the total length of vent pipe from the flue collar of the fireplace to the face of the outer wall.

Venting termination shall not be recessed into wall or siding.
### VENT TERMINATION CLEARANCES

**A** = Clearance above grade, veranda, porch, deck, or balcony
- Canadian Installations 1: 12 in (30 cm)
- US Installations 2: 12 in (30 cm)

**B** = Clearance to window or door that may be open
- 6 in (15 cm) for appliances ≤ 10,000 Btuh (3 kW), 12 in (30 cm) for appliances > 10,000 Btuh (3 kW) and ≤ 100,000 Btuh (30 kW), 36 in (91 cm) for appliances > 100,000 Btuh (30 kW)

**C** = Clearance to permanently closed window
- 12 in (30 cm)

**D** = Vertical clearance ventilated soffit located above the terminal within a horizontal distance of 2 feet (61 cm) from the center line of the terminal
- 24 in (61 cm)

**E** = Clearance to unventilated soffit
- 12 in (30 cm)

**F** = Clearance to outside corner
- 6 in (15 cm)

**G** = Clearance inside corner
- 9 in (23 cm)

**H** = Clearance to each side of center line extended above meter/regulator assembly
- 3 ft (91 cm) within a height 15 ft (4.5 m) above the meter/regulator assembly

**I** = Clearance to service regulator vent outlet
- 3 ft (91 cm) above the meter/regulator assembly

**J** = Clearance to nonmechanical air supply inlet to building or the combustion air inlet to any other appliance
- 6 in (15 cm) for appliances ≤ 10,000 Btuh (3 kW), 12 in (30 cm) for appliances > 10,000 Btuh (3 kW) and ≤ 50,000 Btuh (15 kW), 36 in (91 cm) for appliances > 50,000 Btuh (15 kW)

**K** = Clearance to a mechanical air supply inlet
- 6 ft (1.83 m) above if within 10 ft (3 m) horizontally

**L** = Clearance above paved sidewalk or paved driveway located on public property
- 7 ft (2.13 m) †

**M** = Clearance under veranda, porch, deck, or balcony
- 12 in (30 cm) ‡

### ATTENTION: Vinyl Soffit, Vinyl Ceiling, Vinyl Overhang
Clearances are to heat resistant material (i.e. wood, metal). This does not include vinyl. Empire Comfort Systems Inc. will not be held responsible for heat damage caused from terminating under vinyl overhangs, vinyl ceilings or vinyl ventilated/unventilated soffits.

### Disclaimer
Clearances are to heat resistant material (i.e. wood, metal). This does not include vinyl. Empire Comfort Systems Inc. will not be held responsible for heat damage caused from terminating under vinyl overhangs, vinyl ceilings or vinyl ventilated/unventilated soffits.

**Figure 7**
The gas pipeline can be brought in through the right side of the appliance only. Consult the current National Fuel Gas Code, ANSI Z223.1 installation code.

### RECOMMENDED GAS PIPE DIAMETER

<table>
<thead>
<tr>
<th>Pipe Length</th>
<th>Schedule 40 Pipe Inside Diameter</th>
<th>Tubing, Type L Outside Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Natural</td>
<td>Propane</td>
</tr>
<tr>
<td>0-10 feet</td>
<td>1/2&quot;</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>10-40 feet</td>
<td>1/2&quot;</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>40-100 feet</td>
<td>1/2&quot;</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>100-150 feet</td>
<td>3/4&quot;</td>
<td>1/2&quot;</td>
</tr>
</tbody>
</table>

**NOTE:** Never use plastic pipe. Check to confirm whether your local codes allow copper tubing or galvanized.

**NOTE:** Since some municipalities have additional local codes, it is always best to consult your local authority and installation code.

The use of the following gas connectors is recommended:
- ANSI Z21.45 Assembled Flexible Appliance Connectors of Other Than All-Metal Construction

The above connectors may be used if acceptable by the authority having jurisdiction. The Commonwealth of Massachusetts requires that a flexible appliance connector cannot exceed three feet in length.

### FLEXIBLE GAS LINE CONNECTION

Access to and positioning of the gas pipeline is shown in Figures 9, 10, and 11.

### GAS SUPPLY PRESSURE (INCHES W.C.)

<table>
<thead>
<tr>
<th></th>
<th>Minimum</th>
<th>Normal</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Gas</td>
<td>4.5&quot;</td>
<td>7.0&quot;</td>
<td>14.0&quot;</td>
</tr>
<tr>
<td>Propane Gas</td>
<td>10.8&quot;</td>
<td>11.0&quot;</td>
<td>14.0&quot;</td>
</tr>
</tbody>
</table>
| Manifold Pressure (inches w.c.)
  Normal (HI)    | 3.5"    |
  Propane Gas    | 10.0"   |
**GAS SUPPLY (CONT’D)**

**Installing a New Main Gas Shut-Off (Check Local Code)**
Each appliance should have its own manual gas shut-off. A manual main gas shut-off should be located in the vicinity of the unit. Where none exists, or where its size or location is not adequate, contact your local authorized installer for installation or relocation. Compounds used on threaded joints of gas piping shall be resistant to the action of liquefied petroleum gases. The gas lines must be checked for leaks by the installer. This should be done with a soap solution watching for bubbles on all exposed connections, and if unexposed, a pressure test should be made.

**Never use an exposed flame to check for leaks. Appliance must be disconnected from piping at inlet of control valve and pipe capped or plugged for pressure test. Never pressure test with appliance connected; control valve will sustain damage!**

**NOTE:** When using copper or flex connector, use only approved fittings.

The appliance and its individual shut off valve must be disconnected from supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psig (3.5 kPa).

The appliance 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 1/2 psig (3.5 kPa).

---

**CAUTION**
If one of the procedures results in pressures in excess of 1/2 psig (14” w.c.) (3.5 kPa) on the fireplace gas valve, it will result in a hazardous condition.

**Checking Manifold Pressures**
Both Propane and Natural Gas valves have a built-in pressure regulator in the gas valve. Natural Gas models will have a manifold pressure of approximately 3.5” w.c. (.871 kPa) at the valve outlet with the inlet pressure to the valve from a minimum of 4.5” w.c. (1.120 kPa) for the purpose of input adjustment to a maximum of 14.0” w.c. (3.484 kPa). Propane Gas models will have a manifold pressure approximately 10.0” w.c. (2.49 kPa) at the valve outlet with the inlet pressure to the valve from a minimum of 10.8” w.c. (2.68 kPa) for the purpose of input adjustment to a maximum of 14.0” w.c. (3.484 kPa).

---

**LOCATING FIREPLACE**

**NOTE:** Island and room divider installation is possible as long as the horizontal portion of the vent system does not exceed 20 feet with a minimum vertical run of 8 feet (measured from bottom of appliance). See details in Venting Section.

**NOTE:** When installing this appliance against exterior wall, insulate to applicable insulation codes.

When you install your Direct Vent Fireplace in room divider or Flat on wall corner positions, a minimum of 6 inches clearance must be maintained from the perpendicular wall to the fireplace opening.

**Figure 12**
ELECTRICAL CONSIDERATIONS

CAUTION

All wiring should be done by a qualified electrician and shall be in compliance with all local, city and state building codes. Before making the electrical connection, make sure the main power supply is disconnected. The appliance, when installed, must be electrically grounded in accordance with local codes, or in the absence of local codes, with the National Electrical Code ANSI/NFPA 70 (Latest Edition).

A factory installed junction box is located on the lower right side of the fireplace. Wiring must be fed to the junction box and attached with wire nuts to the control module power leads already fed into the junction box. Attach black to black and white to white. The ground wire should be attached to the green control module lead.

The user interface/battery holder must be mounted within a distance allowed by the attached 12 foot harness. As shipped, this harness is already fed through a strain relief on the bottom of the component access box and is attached to the User Interface/Battery Holder.

NOTE: A one inch diameter hole should be use to pass wiring through studs.
Framing and Finishing

**CAUTION**

Measure fireplace dimensions and verify framing methods, and wall covering details before framing construction begins.

1. Choose unit location.
2. Frame in fireplace with a header across the top.

**NOTE:** Fireplace framing can be built before or after the fireplace is set in place. Framing should be positioned to accommodate wall covering and fireplace facing material. The fireplace framing should be constructed of 2 x 4 lumber. The framing headers may rest on the fireplace standoffs. Refer to Figures 15 and 16 for minimum framing dimensions.

**NOTE:** When installing this unit against exterior wall, insulate to applicable insulation codes.

3. Remove two screws which are accessed through the clearance holes in the rear heat shield. See Figure 17. Hand bend the rear stand-off as shown in Figure 18 and Figure 19. Replace the two screws previously removed to secure stand-off to unit.

3. Attach fireplace to frame using nailing flange. Preset depth to suit facing material (adjustable to 1/2 inch or 5/8 inch depths). See Figures 20 to 22.

*Adjust accordingly if chase is finished with drywall or other material.

Figure 15

Figure 16

Figure 17
INSTALLATION (CONT’D)

Figure 18

Figure 19

Figure 20

Figure 21

FOR 1/2" DRYWALL
FOR 5/8" DRYWALL
FOR 1/2" DRYWALL
FOR 5/8" DRYWALL

USE THE APPROPRIATE NAILING FLANGES
FOR YOUR THICKNESS OF DRYWALL, 1/2" OR 5/8"

REAR HEAT SHIELD
REAR STANDOFF

REAR HEAT SHIELD
REAR STANDOFF

SCREWS

NAILING FLANGES SECURED IN PLACE
Vent Pipe Clearance

NOTE: Maintain all clearances to combustibles as shown in Figures 1 and 2 on page 8.

For horizontal vent, maintain a minimum 1 inch clearance to the bottom and sides of the vent, and 3 inches of clearance to combustibles above the vent pipe. See Figure 24.
Vent Runs
In planning the installation for the fireplace, it is necessary to install certain components before the appliance is completely positioned and installed. These include the direct vent system, gas piping for the appliance and the electrical wiring.

The appliance can be mounted on any of the following surfaces:
1. A flat, hard surface
2. A raised wooden platform
3. Four corner supports (Example: Four concrete masonry blocks.) These supports must be positioned adequate is made with bottom standoffs). See local codes.

Note For Horizontal Vent Runs (Figure 25):
A specific wall thimble (see parts list page 55) must be used for horizontal vent installations through combustible wall.
VERTICAL, 90° ELBOW TO HORIZONTAL OUT THE WALL
(12 inches minimum rise before elbow)

NOTE: A “B” dimension greater than 18 inches will require a vertical rise before the elbow that is greater than 12 inches. See Venting graph on page 22.

<table>
<thead>
<tr>
<th>PIPE LENGTH (A)</th>
<th>VENT TO EXTERIOR WALL (B)</th>
<th>WALL THICKNESS (C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6”</td>
<td>15” to 16-1/2”</td>
<td>4-3/4” to 6-1/4”</td>
</tr>
<tr>
<td>9”</td>
<td>18” to 19-1/2”</td>
<td>7-3/4” to 9-1/4”</td>
</tr>
<tr>
<td>12”</td>
<td>21” to 22-1/2”</td>
<td>10-3/4” to 12-1/4”</td>
</tr>
</tbody>
</table>

NOTE: A horizontal vent with the minimum required vertical rise (using a 12 inch section of vent before the elbow) will use a maximum 9 inch section of horizontal vent before the termination.
Begin the vent system installation by selecting the type of venting to be installed and the path that it will take. Verify that clearances are met throughout the path of the venting system. Determine how the vent system will be terminated out the side of the house or through the roof. Verify clearances for the termination.

When selecting a vent system for use with the fireplace, refer to the “Vent Fireplace” section in this manual to determine what systems are acceptable. Check all clearances and venting components. Identify problems existing in the vent system, if any. Use pages 20 to 27 for venting to eliminate issues after installation. Check pipe diameter on vent system and fireplace to verify the size is the same.

**NOTICE:** All outer connection joints must be sealed with aluminum tape, screws or silicone sealant rated above 300°F/149°C. The inner flue joints do not require any sealant.

### VENT SYSTEM IDENTIFICATION

The following vent systems are acceptable:
- Simpson Duravent® GS 5" - 8"
- American Metal Products 5" - 8"
- Selkirk Direct-Temp® 5" - 8"
- Security Secure Vent® 5" - 8"
- Excel DV Venting 5" - 8"
- BDM 5"-8"

---

**Figure 29**

**VENT SYSTEMS**
VENTING FIREPLACE

Below Grade Installation
When it is not possible to meet the required vent termination clearances of 12 inches above grade level, a snorkel kit is recommended. It allows installation depth down to 7 inches below grade level. The 7 inches is measured from the center of the horizontal vent pipe as it penetrates through the wall.

Ensure the sidewall venting clearances are observed. If venting system is installed below ground, we recommend a window well with adequate and proper drainage to be installed around the termination area.

<table>
<thead>
<tr>
<th>HARD ELBOW DIMENSIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
</tr>
<tr>
<td>57-1/2”</td>
</tr>
</tbody>
</table>

NOTE: THE A1 HOLE LOCATION DIMENSION IS FOR THROUGH THE WALL HORIZONTAL INSTALLATIONS WITH 90° ELBOW AND 12 INCH RISE OFF TOP OF FIREPLACE

Allowable A2 and E dimensions to be determined by consulting the venting graph and horizontal venting termination examples on pages 22 and 23.

Positioning the Fireplace
Determine the exact position of the appliance so the direct vent termination will be centered (if possible) between two studs. This will avoid any extra framing. All vent kit pipes should be assembled on the unit after the unit is moved into the final position.

Cutting the Hole
After the fireplace has been positioned in its permanent location, the hole through the exterior wall of the house can be cut. This hole must be 12-5/8 inches high x 10-5/8 inches wide with its location determined by the amount of vertical rise and horizontal run of the termination. See Figure 30. When locating the hole it must be noted that the bottom of the cap must be 12 inches minimum above the ground level, or average snowfall, and top of the cap must be no less than 18 inches below a combustible projection and no closer than 9 inches to any wall running parallel to vent termination.
To Use the Vent Graph
1. Determine the height of the center of the horizontal vent pipe. Using this dimension on the Sidewall Vent Graph, locate the point it intersects with the slanted graph line.
2. From the point of this intersection, draw a vertical line to the bottom of the graph.
3. Select the indicated dimension, and position the unit in accordance with same.

**EXAMPLE A:**
If the vertical dimension from the floor of the unit is 32 feet, the horizontal run to the outer wall flange must not exceed 5 feet.

**EXAMPLE B:**
If the vertical dimension from the floor of the unit is 24 feet, the horizontal run to the outer wall flange must not exceed 10 feet.

**EXAMPLE C:**
If the horizontal run to the outer wall flange is 17 feet, the vertical dimension from the floor of the unit to the center of the termination must not be less than 7 feet 6 inches.

**SPECIAL NOTE:** For each 45° elbow installed in the horizontal run, the length of the horizontal run MUST be reduced by 18 inches. Reduce 3 feet for every 90° elbow. This does not apply if the 45° elbows are installed on the vertical part of the vent system.

**Example:** According to the chart the maximum horizontal vent length is 20 feet and if two 45° elbows are required in the horizontal vent it must be reduced to 17 feet.

The maximum number of 45° elbows permitted per side wall installation is two. These elbows can be installed in either the vertical or horizontal run.

The maximum number of 90° elbows in a vent run is three.

**Note:** On vertical venting the first elbow does not get counted.

**Note:** A horizontal vent with the minimum required vertical rise (using a 12 inch section of vent before the elbow) will use a maximum of a 9 inch section of horizontal vent before the termination.
TOP VENT - HORIZONTAL TERMINATION

One Elbow

Two Elbows

Note: Subtract 3 feet from the total horizontal measurement for each 90° elbow installed horizontally. Subtract 1-1/2 feet from the total horizontal measurement for each 45° elbow installed horizontally.

Example Vent Runs

### Initial Pipe Length

<table>
<thead>
<tr>
<th>A (Vertical)</th>
<th>B (Horizontal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5'-10&quot;</td>
<td>7'-3&quot; MAXIMUM</td>
</tr>
<tr>
<td>6'-10&quot;</td>
<td>13&quot; MAXIMUM</td>
</tr>
<tr>
<td>7'-6&quot;</td>
<td>17&quot; MAXIMUM</td>
</tr>
<tr>
<td>24&quot;</td>
<td>5'-10&quot;</td>
</tr>
<tr>
<td>36&quot;</td>
<td>6'-10&quot;</td>
</tr>
<tr>
<td>4'-7&quot;</td>
<td>8'</td>
</tr>
<tr>
<td>20'-7&quot;</td>
<td>10' MAXIMUM</td>
</tr>
<tr>
<td>28'-7&quot;</td>
<td>32'</td>
</tr>
</tbody>
</table>

**Figure 33**

Note: Pipe straps must be used every 2 feet to secure venting.

Two 45° Elbows

Installation requirements to replace the first 90° elbow with two 45° elbows:

Example Vent Runs

### Initial Pipe Length

<table>
<thead>
<tr>
<th>A (Vertical)</th>
<th>B (Horizontal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6'-10&quot;</td>
<td>10&quot; MAXIMUM</td>
</tr>
<tr>
<td>7'-10&quot;</td>
<td>15'-10&quot; MAXIMUM</td>
</tr>
<tr>
<td>8'</td>
<td>17&quot; MAXIMUM</td>
</tr>
<tr>
<td>16'</td>
<td>12&quot; MAXIMUM</td>
</tr>
<tr>
<td>28'</td>
<td>4'-6&quot; MAXIMUM</td>
</tr>
</tbody>
</table>

**Figure 35**

Three Elbows

Example Vent Runs

### Initial Pipe Length

<table>
<thead>
<tr>
<th>A (Vertical)</th>
<th>B (Horizontal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6'-6&quot;</td>
<td>12' MAXIMUM</td>
</tr>
<tr>
<td>7'-6&quot;</td>
<td>17' MAXIMUM</td>
</tr>
<tr>
<td>8'</td>
<td>15' MAXIMUM</td>
</tr>
<tr>
<td>16'</td>
<td>5' MAXIMUM</td>
</tr>
</tbody>
</table>

**Figure 36**
**TOP VENT - VERTICAL TERMINATION**

**No Elbows**

![Diagram of top vent with no elbows]

**Dimensions**

<table>
<thead>
<tr>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>10'</td>
<td>40'</td>
</tr>
</tbody>
</table>

**Example Vent Runs**

![Diagram of top vent with no elbows]

**Two Elbows**

**Note:** Subtract 3 feet from the total horizontal measurement for each 90° elbow installed horizontally. Subtract 1-1/2 feet from the total horizontal measurement for each 45° elbow installed horizontally.

**Example Vent Runs**

<table>
<thead>
<tr>
<th>Initial Pipe Length</th>
<th>A (Vertical)</th>
<th>B (Horizontal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3'-7&quot;</td>
<td>7'</td>
<td>11'-6&quot; Maximum</td>
</tr>
<tr>
<td>4'-7&quot;</td>
<td>8'</td>
<td>17&quot; Maximum</td>
</tr>
<tr>
<td>8'-7&quot;</td>
<td>12'</td>
<td>14'-6&quot; Maximum</td>
</tr>
<tr>
<td>12'-7&quot;</td>
<td>16'</td>
<td>12&quot; Maximum</td>
</tr>
<tr>
<td>24'-7&quot;</td>
<td>28'</td>
<td>4'-6&quot; Maximum</td>
</tr>
</tbody>
</table>

**Three Elbows**

![Diagram of top vent with three elbows]

**Example Vent Runs**

<table>
<thead>
<tr>
<th>Initial Pipe Length</th>
<th>A (Vertical)</th>
<th>B (Horizontal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4'-1&quot;</td>
<td>7'-6&quot;</td>
<td>17&quot; Maximum</td>
</tr>
<tr>
<td>4'-7&quot;</td>
<td>8'</td>
<td>20&quot; Maximum</td>
</tr>
<tr>
<td>12'-7&quot;</td>
<td>16&quot;</td>
<td>15&quot; Maximum</td>
</tr>
<tr>
<td>24'-7&quot;</td>
<td>28&quot;</td>
<td>7'-6&quot; Maximum</td>
</tr>
<tr>
<td>28'-7&quot;</td>
<td>32&quot;</td>
<td>5&quot; Maximum</td>
</tr>
</tbody>
</table>
Locate and mark the center point of the vent pipe using a nail on the underside of the roof. Drive the nail through the center point. Mark the outline of the roof hole around this center point.

**NOTE:** Size of the roof hole dimensions depend on the pitch of the roof. There must be a 1 inch clearance to the vertical pipe sections. This clearance is to all combustible material.

Cover the opening of the vent pipe and cut and frame the roof hole. Use framing lumber the same size as the roof rafters and install the frame securely. Flashing anchored to frame must withstand high winds. The storm collar is placed over this joint to make a water-tight seal. Non-hardening sealant should be used to completely seal this flashing installation.

**Determining Minimum Vent Height Above the Roof**

<table>
<thead>
<tr>
<th>ROOF PITCH</th>
<th>H (Min.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flat to 6/12</td>
<td>12&quot;</td>
</tr>
<tr>
<td>6/12 to 7/12</td>
<td>15&quot;</td>
</tr>
<tr>
<td>Over 7/12 to 8/12</td>
<td>18&quot;</td>
</tr>
<tr>
<td>Over 8/12 to 16/12</td>
<td>24&quot;</td>
</tr>
<tr>
<td>Over 16/12 to 21/12</td>
<td>36&quot;</td>
</tr>
</tbody>
</table>

Note that for steep roof pitches, the vent height must be increased. In high wind conditions, nearby trees, adjoining roof lines, steep pitched roofs, and other similar factors can result in poor draft, or downdrafting. In these cases, increasing the vent height may solve this problem.

**General Maintenance**

Inspect venting system semi-annually as follows:

1. Check for corrosion areas of the venting system exposed to the elements. These will appear as rust spots or streaks and, in extreme cases, holes. Replace damaged components should immediately.
2. Remove the cap and shine a flashlight down the vent. Remove any bird nests or other foreign material.
3. Check for evidence of excessive condensate, such as water droplets forming in the inner liner and subsequently dripping out at joints. Condensate can cause corrosion of caps, pipe and fittings. It may be caused by having excessive lateral runs, too many elbows and exterior portions of the system being exposed to cold weather.
4. Inspect joints to verify that no pipe sections or fittings have been disturbed and, consequently, loosened. Also, check mechanical supports, such as wall straps or plumbers’ tape for rigidity. Venting termination shall not be recessed into a wall or siding.

A removable panel or other means must be provided in the enclosure for visual inspection of the flue connection.

**NOTE:** This also pertains to vertical vent systems installed on the outside of the building.

Slide the vertical vent cap over the ends of the vent pipe and secure. See Figure 41.

**Installing the Vent System in a Chase**

A chase is a vertical box-like structure built to enclose the gas appliance and/or its vent system. Vertical vent runs on the outside of a building may be, but are not required to be installed inside a chase.

**CAUTION**

Treatment of firestop spacers and construction of the chase may vary with the type of building. These instructions are not substitutes for the requirements of local building codes. Check local building codes to determine the requirements for these steps.

**NOTE:** Build the chase large enough to the minimum clearance of combustible materials (including insulation) to the vent system. When installing the vent system in a chase, to insulate the chase as you would the outside walls of your home. This is especially important in cold climates. Upon completion of chase framing, install the vent system by following the instructions in this manual.
The vertical termination cap for this fireplace must not be any closer than 24-in. to any other vent termination or chimney of any type.

Vertical Through the Roof Applications
Your Gas Fireplace has been approved for:

a) Vertical installations up to 40 feet in height.

b) Two sets of 45° elbow offsets within these vertical installations. A vent pipe from 0 to a maximum of 8 feet can be used between elbows.

c) Wall straps must be used to support offset pipe every 4 feet.

This application will require that you first determine the roof pitch and use the appropriate venting components.

<table>
<thead>
<tr>
<th>ELBOW DEGREES</th>
<th>CHIMNEY SECTION</th>
<th>OFFSET INCHES</th>
<th>RISE INCHES</th>
</tr>
</thead>
<tbody>
<tr>
<td>45°</td>
<td>0&quot;</td>
<td>5-5/8&quot;</td>
<td>15-3/8&quot;</td>
</tr>
<tr>
<td>45°</td>
<td>6&quot;</td>
<td>8-7/8&quot;</td>
<td>18-3/8&quot;</td>
</tr>
<tr>
<td>45°</td>
<td>9&quot;</td>
<td>10-7/8&quot;</td>
<td>20-5/8&quot;</td>
</tr>
<tr>
<td>45°</td>
<td>12&quot;</td>
<td>13&quot;</td>
<td>22-5/8&quot;</td>
</tr>
<tr>
<td>45°</td>
<td>24&quot;</td>
<td>21-3/8&quot;</td>
<td>31-1/8&quot;</td>
</tr>
<tr>
<td>45°</td>
<td>36&quot;</td>
<td>29-7/8&quot;</td>
<td>39-3/8&quot;</td>
</tr>
<tr>
<td>45°</td>
<td>36&quot;</td>
<td>28-7/8&quot;</td>
<td>39-3/8&quot;</td>
</tr>
<tr>
<td>45°</td>
<td>48&quot;</td>
<td>38-1/4&quot;</td>
<td>47-7/8&quot;</td>
</tr>
</tbody>
</table>

Figure 44
The included flue restrictor disc may be used in vertical vent runs of 10 to 40 feet as measured from the bottom of the fireplace. Use the restrictor disc when a more yellow flame is desired. If the flue restrictor is installed on a natural gas fireplace, the rear burner’s air shutter must be adjusted to 1/8-in. open.
Installing Support Brackets
Install a horizontal pipe support used for each 3 feet of horizontal run to framing members. Allow 3 inches of clearance to combustibles above 8 inch diameter pipe and elbows and 1 inches of clearance on both sides and bottom. Support vertical runs of this vent systems every 4 feet using wall brackets attached to the vent pipe and secured with nails or screws to structural framing.

Note: Maintain all clearances to combustibles as shown in Figures 1 and 2 on page 8.

Installing Firestops
Firestops are required for safety whenever the vent system passes through an interior wall, an exterior wall, or a ceiling. These firestops act as a firebreak heat shield and as a means to insure that minimum clearances are maintained to the vent system.

Horizontal Firestops
Horizontal runs in the vent system which pass through either interior or exterior walls, require the use of wall firestops on both sides of the wall through which the vent passes. Position the firestops on both sides of the framed hole, previously cut. Refer to Figure 46 for sizing information. Secure firestop with nails or screws. The heat shields of the firestops MUST BE placed towards the top of the hole. Continue the vent run through the firestops.

NOTE: SD58DVAWTEC Wall thimble is necessary to maintain the required three inches of clearance to combustibles above the vent. Framed hole dimensions shown above are for this wall thimble.
Vertical Firestops
Vertical runs of this system which pass through ceilings require ONE ceiling firestop at the hole in each ceiling through which the vent passes.

Position a plumb bob directly over the center of the vertical vent component and mark the ceiling to establish the center point of the vent. Drill a hole or drive a nail through this center point and check the floor above for any obstructions such as wiring or plumbing runs. Reposition the appliance and vent system, if necessary, to accommodate ceiling joists and/or obstructions.

Cut a 10-5/8 inch x 10-5/8 inch hole through the ceiling using the center point previously marked. Frame the hole with framing lumber the same size as the ceiling joists. See Figure 47. If the area above the ceiling is NOT an attic, position and secure the ceiling firestop on the ceiling side of the previously cut and framed hole. See Figure 48. If the area above the ceiling is an attic, position and secure the firestop on top of the previously framed hole. See Figure 49.

NOTE: Remove insulation from the framed area in the attic before installing the firestop and/or vent pipes.

Finishing
Finish the walls with the material of your choice. Figure 1 and 2 on page 8 shows the minimum vertical and corresponding maximum horizontal dimensions of mantels or other combustible projections above the top front edge of the fireplace. Only non-combustible materials may be used to cover the black fireplace front.

WARNING
When finishing the fireplace never obstruct or modify the gap around the glass frame in any manner. Provide adequate clearances around air openings into the combustion chamber.

CAUTION
If the joints between the finished wall and the fireplace surround (top and sides) are sealed, a 300°F minimum sealant material must be used. These joints are not required to be sealed. Only non-combustible material (using 300°F minimum adhesive if needed) can be applied as facing to the fireplace surround.
NOTE: Install liner before positioning the logs in place.

Figure 50

PLACING THE REQUIRED FIBER PANELS AND FLOOR LINER INTO FIREPLACE:
1. Locate the Center Floor Liner, and place on the fireplace floor in front of the front burner.
2. Locate the Left and Right Side Floor Liner and place on the bottom left and bottom right of fireplace floor.
3. Shift the three Floor Liner sections as far forward as possible.
4. Locate Rear Panel and place tight against rear wall into rear bottom bracket.
5. Locate Left Panel and place into position against left-side firebox wall. Secure using front upper bracket and screw provided.
6. Place Right Panel into position against right-side firebox. Secure with front upper bracket and screw provided.
1. Apply a single layer of small "dime-sized" pieces of rock wool (glowing embers) in the shaded areas shown below.

**NOTE:** Pieces of glowing embers should be fluffed up prior to placement onto the burner.

**NOTE:** Replacement of loose material (glowing embers) must be purchased from Empire Comfort Systems, Inc. Application of excess loose material (glowing embers) may adversely affect performance of the appliance.

---

**WARNING**

All previously applied loose material must be removed prior to reapplication.

---

**TOP View - Ember Placement Shown in Shaded Area**

Figure 51
Before you begin: Do not handle these logs with your bare hands! Always wear gloves to prevent skin irritation. After handling logs, wash your hands gently with soap and water.

**All Logs**
The positioning of the logs is critical to the safe and clean operation of this appliance. Sooting and other problems may result if the logs are not properly and firmly positioned in the appliance.

Refer to Figures 52 & 53 for the following warning.

<table>
<thead>
<tr>
<th>WARNING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Failure to position the parts in accordance with this diagram or failure to use only parts specifically approved with this appliance may result in property damage or personal injury.</td>
</tr>
</tbody>
</table>

Attention: Do not use Figure 52 to order replacement logs. Refer to Page 31, Parts List and Parts View to order logs for your appropriate model number.

**NOTE:** Once the installation is complete with the glowing embers and log set in place, operate the fireplace to verify flame appearance. If there are flames directly impinging a log, turn off fireplace, then remove the glowing ember material directly below where the flame impingement occurred. This should eliminate sooting on the log, and provide a more pleasing flame appearance.

Replacement of glowing embers must be purchased from Empire Comfort Systems, Inc. Application of excess glowing embers may adversely affect performance of the appliance.

<table>
<thead>
<tr>
<th>WARNING</th>
</tr>
</thead>
<tbody>
<tr>
<td>All previously applied loose material must be removed prior to reapplication.</td>
</tr>
</tbody>
</table>

Log Placement Figure 52

FRONT VIEW - COMPLETED LOG SET INSTALLATION (WITHOUT EMBERS) Figure 53
**LOG PLACEMENT**

Attention: When ordering parts, it is very important that **part number** and **description** of part coincide.

<table>
<thead>
<tr>
<th>FRONT</th>
<th>TOP</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Part Number 31034 - Right Rear (A)" /></td>
<td><img src="image2" alt="Part Number 31034 - Right Rear (A)" /></td>
</tr>
<tr>
<td><img src="image3" alt="Part Number 31033 Left Rear (B)" /></td>
<td><img src="image4" alt="Part Number 31033 Left Rear (B)" /></td>
</tr>
<tr>
<td><img src="image5" alt="Part Number 31036 - Left Front (C)" /></td>
<td><img src="image6" alt="Part Number 31036 - Left Front (C)" /></td>
</tr>
<tr>
<td><img src="image7" alt="Part Number 31037 - Right Front (D)" /></td>
<td><img src="image8" alt="Part Number 31037 - Right Front (D)" /></td>
</tr>
<tr>
<td><img src="image9" alt="Part Number 31039 - Center Front(E)" /></td>
<td><img src="image10" alt="Part Number 31039 - Center Front(E)" /></td>
</tr>
<tr>
<td><img src="image11" alt="Part Number 31038 - Right Corner (F)" /></td>
<td><img src="image12" alt="Part Number 31038 - Right Corner (F)" /></td>
</tr>
<tr>
<td><img src="image13" alt="Part Number 31035 - Center Rear (G)" /></td>
<td><img src="image14" alt="Part Number 31035 - Center Rear (G)" /></td>
</tr>
</tbody>
</table>

**USE ONLY MANUFACTURER’S REPLACEMENT PARTS. USE OF ANY OTHER PARTS COULD CAUSE INJURY OR DEATH.**
1. Place Right Rear Log (A) onto the right-side pin on the rear burner.

2. Using right-hand, hold Right Rear Log (A) at approximately the angle shown.
3. Place Left Rear Log (B) on left-side pin on rear burner and attach the top of the Left Rear Log (B) to the pin on Right Rear Log (A).
4. Place Right Front Log (D) on the two pins on the right-hand side of the front burner.
5. Place Center Front Log (E) on tab in center of front burner. Orient as shown.
6. Place Left Front Log (C) onto the two pins on the left-hand side of the front burner.
7. Place Right Corner Log (F) onto pin on Right Front Log (D). Rest opposite end of Right Corner Log (F) in the right corner of the firebox.
8. Place Center Rear Log (G) into recess onto the pin on the Left Front Log (C).
<table>
<thead>
<tr>
<th>INDEX NUMBER</th>
<th>DESCRIPTION</th>
<th>PART NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>WIRE HARNESS, LIGHT SOCKETS</td>
<td>R11860</td>
</tr>
<tr>
<td>B</td>
<td>WIRE HARNESS, MODULE TO USER INTERFACE</td>
<td>R11552</td>
</tr>
<tr>
<td>C</td>
<td>WIRE HARNESS, SPLIT-FLOW SOLENOID TO MODULE</td>
<td>R11551</td>
</tr>
<tr>
<td>D</td>
<td>WIRE HARNESS, LIGHTS AND BLOWER TO MODULE</td>
<td>R11741</td>
</tr>
<tr>
<td>E</td>
<td>WIRE HARNESS, JUNCTION BOX TO MODULE</td>
<td>R11730</td>
</tr>
</tbody>
</table>
**MULTIFUNCTION REMOTE OPERATING INSTRUCTIONS**

**Transmission**
- Thermostat OFF/ON/SMART
- Set Point Temperature/Level/State
- Flame ON
- Comfort fan

**Child safety lock-out**
- Low battery alarm
- Room Temperature
- CPI mode
- Aux ON
- Split Flow/Center Burner Shut-Down
- Lights

---

**TECHNICAL DATA**

<table>
<thead>
<tr>
<th>Remote Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply voltage</td>
</tr>
<tr>
<td>Ambient temperature ratings</td>
</tr>
<tr>
<td>Radio frequency</td>
</tr>
</tbody>
</table>

**WARNING**

The transmitter and receiver are radio frequency devices. Placing the receiver in or near metal may severely reduce the signal range.

**WARNING**

Turn “off” the main gas supply and electrical supply to the appliance during installation and/or maintenance of the receiver device.

**WARNING**

Property Damage Hazard. Excessive heat can cause property damage. The appliance can stay lit for many hours. Turn off the appliance if it is not going to be attended for any length of time. Always place the Transmitter where children can not reach it.

---

**NOTE:** This control system includes a Battery Back-up pack that allows the Fireplace to operate in the event of a power outage.
**NOTE:** The Accent Light and/or Blower features will not operate during a power outage.
**NOTE:** Replace all Batteries at least once each year, preferably before at the beginning of the season.

**CAUTION**

**FIRE OR EXPLOSION HAZARD.** Can cause property damage, sever injury or death. Do not attempt to take apart the gas control or to clean it. Improper assembly and cleaning can cause unreliable operation.
MULTIFUNCTION REMOTE OPERATING INSTRUCTIONS

Initializing the System for the First Time
1. Remove the wall cover. Remove cover on the wall mounted battery back-up holder. See Figure 57. Install the four AA batteries into the wall mounted battery back-up holder then reinstall the cover. See Figure 58.
2. Install three AAA batteries into the battery bay located on the base of the transmitter. See Figure 59.
3. Set the wall remote slide switch to the “REMOTE” position. See Figure 58.
4. Press and release the SWI button on the wall control with a paper clip and the IFC module will beep three times to indicate the IFC module is ready to synchronize with the transmitter within ten seconds. See Figure 58.

5. With the batteries already installed in the Transmitter, push the On button. The Receiver will “beep” four times to indicate the Transmitter’s command is accepted and sets to the particular code of that Transmitter. The system is now initialized.

Temperature Indication Display °C or °F
With the system in the “OFF” position, press the Thermostat Button and the Mode Button at the same time. Look at the LCD screen on the Transmitter to verify that a °C or °F is visible to the right of the Room Temperature display. See Figures 60 and 61.
### Turn On the Appliance
With the system OFF, press the ON/OFF Button on the Transmitter. The Transmitter display will show some other active Icons on the screen. At the same time the Receiver will activate the appliance. A single “beep” from the Receiver will confirm reception of the command.

### Turn OFF the Appliance
With the system ON, press the ON/OFF Button on the Transmitter. The Transmitter LCD display will only show the room temperature. See Figure 62 At the same time the Receiver will turn off the appliance. A single “beep” from the Receiver confirms reception of the command.

### Remote Flame Control
The Profame has six flame levels. With the system on, and the flame level at the maximum in the appliance, pressing the Down Arrow Button once will reduce the flame height by one step until the flame is turned off.

The Up Arrow Button will increase the flame height each time it is pressed. If the Up Arrow Button is pressed while the system is on but the flame is off, the flame will come on in the high position. See Figures 63 through 66. A single “beep” will confirm reception of the command.
The Thermostat Feature may be disabled if desired.
With all three AAA type batteries installed:
1. Take out one AAA battery.
2. While re-inserting the AAA battery, Push and hold down the thermostat button. This will disable the thermostat feature on the transmitter.

Room Thermostat (Transmitter Operation)
The Remote Control can operate as a room thermostat. The thermostat can be set to a desired temperature to control the comfort level in a room. To activate this function, press the Thermostat Button (Figure 56). The LCD display on the Transmitter will change to show that the room thermostat is "ON" and the set temperature is now displayed. See Figure 67. To adjust the set temperature, press the Up or Down Arrow Buttons until the desired set temperature is displayed on the LCD screen of the Transmitter. See Figure 68.

Smart Thermostat (Transmitter Operation)
The Smart Thermostat function adjusts the flame height in accordance to the difference between the set point temperature and the actual room temperatures. As the room temperature gets closer to the set point the Smart Function will modulate the flame down. To activate this function, press the Thermostat Button until the word "SMART" appears to the right of the temperature bulb graphic. See Figure 66. To adjust the set temperature, press the Up or Down Arrow Buttons until the desired set temperature is displayed on the LCD screen of the Transmitter. See Figure 70.

Note: When Smart Thermostat is activated, manual flame height adjustment is disabled.
**MULTIFUNCTION REMOTE OPERATING INSTRUCTIONS**

**Blower Control (Fan)**
If the appliance is equipped with a hot air circulating fan, the speed of the fan can be controlled by the Proflame system. The fan speed can be adjusted through six speeds. To activate this function, use the Mode Button (Figure 56) to index the fan control icon. See Figure 71. Use the Up/Down Arrow Buttons (Figure 56) to turn on or off the fan speed. See Figure 72. A single “beep” will confirm reception of the command.

![Figure 71](image1)

![Figure 72](image2)

**Remote Dimmer Control (Light)**
The auxiliary function controls the AUX power outlet by the dimmable light control. To activate this function, use the Mode Button (Figure 56) to index to the AUX icon. See Figures 73 and 74. The intensity of the output can be adjusted through six levels. Use the Up/Down Arrow Buttons (Figure 56) to adjust the output level. A single “beep” will confirm reception of the command.

*Note:* This function is available only with the IFC control Module.
**MULTIFUNCTION REMOTE OPERATING INSTRUCTIONS**

**Split Flow Control**
The secondary burner is controlled by the split Flow. To activate this function use the Mode Button (Figure 56) to index to the SPLIT FLOW mode icon. See Figures 75 and 76. Pressing the Up Arrow Button will activate the secondary burner. Pressing the Down Arrow Button will turn the secondary burner off. A single "beep" will confirm the reception of the command.

**Remote Auxiliary Relay Control (optional with this fireplace)**
The auxiliary function controls the AUX relay outlet. To activate this function use the Mode Button (Figure 56) to index to the AUX icon (Figures 77 & 78). Pressing the Up Arrow Button will activate the outlet. Pressing the Down Arrow Button will turn the outlet off. A single "beep" will confirm the reception of the command.
Continuous Pilot/Intermittent Pilot (CPI/IPI) Selection
With the system in "OFF" position press the Mode Button (Figure 56) to index to the CPI mode icon. See Figures 79 and 80. Pressing the Up Arrow Button will activate the CPI. Pressing the Down Arrow Button will return to IPI. A single “beep” will confirm the reception of the command.

![Figure 79](image)

![Figure 80](image)

Button Lock
This function will lock the Buttons to avoid unsupervised operation.
To activate this function, press the MODE and UP Buttons at the same time. See Figure 81.
To deactivate this function, press the MODE and UP Buttons at the same time.

![Figure 81](image)

Low Battery Power Detection - Transmitter
The life span of the remote control batteries depends on various factors: quality of the batteries used, the number of ignitions of the appliance, the number of changes to the room thermostat set point, etc.
When the transmitter batteries are low, an Icon will appear on the LCD display of the transmitter See Figure 82 before all battery power is lost. When the batteries are replaced this Icon will disappear.

![Figure 82](image)
MULTIFUNCTION REMOTE OPERATING INSTRUCTIONS

Using the Fireplace without a Remote Control
The fireplace can be turned ON (HI only) and OFF with the wall switch. The fireplace flame ON/OFF is the only function that will operate; no flame adjustment, light or blower will work when using the wall switch. The wall control switch should be turned OFF when the fireplace is not being used for extended periods of time.

Battery Backup Operation
Install batteries (See initialization sequence on page 44). In case of power loss, the fireplace will switch to battery mode automatically. The fireplace will operate normally without the fan or light control when in battery mode.

Low Battery Detection
When the backup batteries are low, a double-beep will be emitted when the module receives an on/off command. No commands will be accepted until the batteries are replaced or the A/C power is restored.

Lockout State Definition
A lockout state is reached when an ignition error occurs. The lockout state will remain set in memory as long as the power supplies are applied. This could mean both an irregular flame detection and/or too many unsuccessful ignition attempts. This state is a safe condition for the appliance and is entered automatically by the IFC board.

When the IFC board gets into lockout state:
1. both the Pilot and the Main Burner solenoids in the gas valve are de-energized;
2. a diagnostic code is sent through the diagnostic red LED.
3. the IFC board will ignore any burner ignition command and remain in the OFF state unless the unlock command sequence is met.

The causes of lockout must be investigated under safe conditions by the user and/or the service personnel.
To reset the IFC from a lockout state, perform the following procedure:
   Turning the system power supplies (to the wall control or remote control) OFF for two or three seconds and then restoring a power supply back on.
The return of the system to normal operation must be checked under safe conditions by the user and/or service personnel.
If the IFC is signaling lock out: The board should be unlocked to reinitiate a pilot flame ignition (for the correct unlock sequence refer to the IFC Use and Installation Instructions).

1. Verify the electrical connections’ integrity and make sure they are in accordance with the relevant system wiring diagram. If necessary, replace the wire harness.
2. Replace the IFC board.

Is the IFC board in lockout?

YES

1. Check the spark electrode positioning - adjust as necessary.
2. Replace the pilot assembly.
3. Verify the electrical connections’ integrity and make sure they are in accordance with the relevant system wiring diagram. If necessary, replace the wire harness.
4. Replace the IFC board.

NO

Was spark observed at the Pilot Hood before the IFC board locked out?

YES

1. Replace the pilot assembly.
2. Replace the IFC board.

NO

Spark continues while the pilot is ON.

YES

1. Replace the pilot assembly.
2. Replace the IFC board.

NO
**CONTROL SYSTEM TROUBLESHOOTING**

1. Replace IFC board.
2. Replace the gas valve.

---

**Main burner lights when the pilot only should light.**

YES

1. Verify the pilot flame fully engulfs the tip of the sense electrode. If not, replace the pilot assembly.
2. Replace the pilot assembly.
3. Carefully clean the electrical connections of the sense cable and the IFC board sense cable connection.
4. Replace the sense cable, the cable-sense electrode assembly, or the pilot assembly.
5. Verify the pilot is properly grounded.
6. Replace the pilot orifice with a new orifice of correct size and type or replace the pilot assembly.
7. If pilot flow adjuster screw is not sealed, correct it.

NO

**Pilot holds the flame?**

NO

1. Replace IFC board.
2. Replace the gas valve.

YES

1. Verify the electrical connections’ integrity and make sure they are in accordance with the relevant system wiring diagram. If necessary, replace the wire harness.
2. Check if the optional remote transmitter is in “thermostat” or “on” mode and verify there is a call for heat (if using a thermostat remote). Adjust the setting for heat.
3. Verify that the pilot hood is properly fitted and a pilot flame is directed to properly ignite the main appliance burner.
4. Replace the main burner orifice with a new orifice of correct size and type or replace the pilot assembly. Under all circumstances, follow the service instructions.
5. Remove the provided wiring harnesses from EV2 of gas valve (red base) and verify voltage at ignition between the EV1 terminal and the ground connection on the valve body.
   1. If the voltage is greater than 0, then replace valve.
   2. Or Replace IFC.
6. Check the pressure at the outlet pressure test point out according to the manufacturer’s instruction. If not in accordance, replace the gas valve.

**Main burner ignites?**

NO

1. Verify the electrical connections’ integrity and make sure they are in accordance with the relevant system wiring diagram. If necessary, replace the wire harness.
2. Check the pressure at the outlet pressure test point out according the manufacturer’s instruction. If not in accordance, replace the gas valve.
3. With the system in the OFF position, connect the voltmeter between the EV2 terminal (green base) on the valve and the ground on the valve body. Turn the system ON, let pilot light, and observe the following voltage sequence: once the pilot flame is proved, the voltage on EV2 should spike to approx. 5 VdC for approx. 2 sec and then drop to approx. 0.6 VdC continuously.
   1. If the sequence is followed, replace the gas valve.
   2. If the sequence is not followed, replace the IFC board.

YES

1. Replace the main burner orifice with a new orifice of correct size (partial blockage possible). Verify that the main burner flame modulates. If it does not modulate, replace the gas valve.
2. Verify that the gas valve outlet pressure limits are in accordance with the manufacturer specifications. If not, replace the gas valve.
3. Remove the provided wiring harnesses from EV2 of gas valve (red base) and verify voltage at ignition between the EV1 terminal and the ground connection on the valve body.
   1. If the voltage is greater than 0, then replace valve.
   2. Or Replace IFC.
4. Check the pressure at the outlet pressure test point out according to the manufacturer’s instruction. If not in accordance, replace the gas valve.

**Main burner remains ON?**

NO

1. Replace the main burner orifice with a new orifice of correct size (partial blockage possible). Verify that the main burner flame modulates. If it does not modulate, replace the gas valve.
2. Verify that the gas valve outlet pressure limits are in accordance with the manufacturer specifications. If not, replace the gas valve.

**Main burner modulates properly?**
LIGHTING INSTRUCTIONS

FOR YOUR SAFETY READ BEFORE LIGHTING

A 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. This appliance must be lighted with the remote control. When lighting the pilot, follow these instructions exactly.
B. BEFORE LIGHTING, smell around the appliance area for gas. Be sure to smell next to the floor because some gas in heavier than air and will settle on the floor.
WHAT TO DO IF YOU SMELL GAS
• 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. Follow the gas supplier's instructions. If you can not reach your gas supplier, call the fire department.
C. Use only the remote control to operate the valve. Never use tools. If valve does not operate, don't try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or explosion.
D. 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 which has been underwater.

LIGHTING INSTRUCTIONS

1. STOP! Read the safety information above.
2. Turn OFF electric power to the appliance.
3. Turn gas shut-off counterclockwise to "ON" position.
4. Wait ten minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information above on this label. If you do not smell gas, go to the next step.
5. Turn ON electric power to the appliance.
6. Using the remote control, turn main flame to "ON." Refer to the Multifunction Remote Operating Instructions for more information. If the pilot does not light within 60 seconds, stop and go back to Step 4.
7. Refer to remote control instructions for detailed information, control features, and operation. NOTE: Refer to Multifunction Remote operating instructions for selection of continuous standing pilot mode or intermittent pilot mode. If the pilot or burner does not stay lit (in the standing pilot mode), stop and immediately call a qualified service technician or gas supplier.
8. If the burner or pilot does not operate properly after several tries, turn the gas control knob clockwise to "OFF" and call your service technician or gas supplier.
9. Operation of the gas valve, blower, and/or optional light must be controlled by using the hand held remote control. Refer to remote instructions for detailed operation information.

TO TURN OFF GAS TO APPLIANCE

1. Turn off all electric power to the appliance if service is to be performed (if applicable).
2. Locate On/Off gas shut-off and turn clockwise to "OFF." Do not force.
<table>
<thead>
<tr>
<th>INDEX NO.</th>
<th>PART NO.</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>33821</td>
<td>FLOOR LINER, LEFT</td>
</tr>
<tr>
<td>2</td>
<td>33823</td>
<td>FLOOR LINER, CENTER</td>
</tr>
<tr>
<td>3</td>
<td>33822</td>
<td>FLOOR LINER, RIGHT</td>
</tr>
<tr>
<td>4</td>
<td>33786</td>
<td>BRICK PANEL, LEFT</td>
</tr>
<tr>
<td>5</td>
<td>33787</td>
<td>BRICK PANEL, RIGHT</td>
</tr>
<tr>
<td>6</td>
<td>33788</td>
<td>BRICK PANEL, BACK</td>
</tr>
<tr>
<td>7</td>
<td>30787</td>
<td>ACCENT LIGHT ASSEMBLY (WITHOUT BULB)</td>
</tr>
<tr>
<td>8</td>
<td>R10928</td>
<td>G9 (120V/25W) SERIES HALOGEN BULB</td>
</tr>
<tr>
<td>9</td>
<td>32858</td>
<td>GLASS FRAME (WITH GLASS AND GASKET)</td>
</tr>
<tr>
<td>10</td>
<td>33022</td>
<td>OFFSET FRAME</td>
</tr>
<tr>
<td>11</td>
<td>33483</td>
<td>JUNCTION BOX WITH COVER</td>
</tr>
<tr>
<td>12</td>
<td>31022</td>
<td>REAR BURNER, COMPLETE WELDMENT</td>
</tr>
<tr>
<td>13</td>
<td>31023</td>
<td>FRONT BURNER, COMPLETE WELDMENT</td>
</tr>
<tr>
<td>14</td>
<td>R11978</td>
<td>VENTURI ASSEMBLY</td>
</tr>
<tr>
<td>15</td>
<td>R11591</td>
<td>ACCESS PANEL GASKET</td>
</tr>
<tr>
<td>16</td>
<td>30953</td>
<td>ACCESS PANEL</td>
</tr>
<tr>
<td>17</td>
<td>P181</td>
<td>ORIFICE 1.90mm, NATURAL (FRONT)</td>
</tr>
<tr>
<td>18</td>
<td>P320</td>
<td>ORIFICE #57, PROPANE (FRONT)</td>
</tr>
<tr>
<td>19</td>
<td>P245</td>
<td>ORIFICE #43, NATURAL (REAR)</td>
</tr>
</tbody>
</table>

** - Fiber Liner, Rustic Banded Brick
*** - Fiber Liner, Old World Stone

**WARNING**

Use only manufacturer's replacement parts. Use of any other parts could cause injury or death.
MAINTENANCE AND SERVICE

MAINTENANCE

Maintenance frequency must be determined individually for each application. Some considerations are:

• Exposure to water, dirt, chemicals and heat can damage the gas control and shut down the control system.
• Cycling frequency. Appliances that may cycle 20,000 times annually should be checked monthly.
• Intermittent use. Appliances that are used seasonally should be checked before shutdown and again before the next use.
• Dusty, wet or corrosive environment. Because these environments can cause the gas control to deteriorate more rapidly, the system should be checked more often.
• Any control should be replaced if it does not perform properly on checkout or service. In addition, replace any module if it is wet or looks like it has been wet.

SERVICE

Do not disassemble the gas control; it contains non-replaceable components. Attempted disassembly or repair can damage the control.

Exactly follow the warnings and the lighting instructions.

1. Before lighting, smell around the appliance area for gas. If the appliance uses Propane (bottled) Gas, be sure to smell next to the floor because Propane gas is heavier than air. If you smell gas, immediately shut off the manual valve in the gas piping to the appliance or on Propane at the tank. Do not try to light any appliance. Do not touch any electrical switch or use the phone. Leave the building and call your gas supplier. If your gas supplier cannot be reached, call the fire department.

2. The gas control must be replaced if it has been flooded with water. Call a qualified service technician.

3. The gas control is a safety device. It must be replaced in case of any physical damage such as bent terminals, missing parts, stripped threads, or evidence of exposure to excessive heat.

Follow the operating instructions provided by the manufacturer of your appliance.
It is normal for appliances fabricated of steel to give off some expansion and/or contraction noise during the start up or cool down cycle. Similar noises are found with your furnace heat exchanger or car engine.

It is normal for your gas fireplace to give off some odor the first time it is burned. This is due to the curing of the paint and any undetected oil from the manufacturing process.

Please ensure that your room is well ventilated - open all windows.

It is recommended that you burn your fireplace for at least six hours the first time you use it. If optional fan kit has been installed, place fan in the “OFF” position during this time.

IMPORTANT: Turn off gas before servicing appliance. It is recommended that a qualified service person perform these check-ups once a year preferably before the using of the appliance.

**Clean Burner and Control Compartment**

Keep the control compartment and burner area clean by vacuuming or brushing at least twice a year.

**Cleaning Procedure**

1. Turn off unit.
2. Remove offset frame and glass front. See Glass Removal.
3. Remove logs and embers.
4. Vacuum burner compartment (a clean portable shop-vac is recommended).
5. Replace logs and embers.
6. Reinstall glass front and offset frame.
7. Ignite unit. See Lighting Instructions.
8. If flame appears abnormal, call a service person.

**Check Vent System**

The appliance and venting system should be inspected before initial use and at least annually by a qualified service person. Inspect the external vent cap on a regular basis to make sure that no debris is interfering with the air flow.

**Glass Cleaning**

It will be necessary to clean the glass periodically. During start-up condensation (which is normal) forms on the inside of the glass and causes lint, dust and other airborne particles to cling to the glass surface. Also initial paint curing may deposit a slight film on the glass. It is recommended that the glass be cleaned two or three times with a non-abrasive household cleaner and warm water (we recommend gas fireplace glass cleaner). After that clean the glass two or three times during each season or more often if necessary.

**General Glass Information**

- **WARNING**
  
  > Do not operate appliance with the glass front removed, cracked or broken.

Only glass approved for use by the manufacturer in fireplace may be used for replacement. The glass replacement should be done by a licensed or qualified service person.

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<table>
<thead>
<tr>
<th><strong>WARNING</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The use of substitute glass will void all product warranties.</td>
</tr>
<tr>
<td>2. Care must be taken to avoid breakage of the glass.</td>
</tr>
<tr>
<td>3. Under no circumstances should this appliance be operated without the glass front or with a broken glass front. Replacement of the glass (with gasket) as supplied by the manufacturer should be done by a qualified service person.</td>
</tr>
<tr>
<td>4. Do not abuse the glass by striking or hitting it.</td>
</tr>
</tbody>
</table>

**Glass and Offset Frame Removal and Replacement**

1. The glass latch tool is shipped with the unit attached to the left hand side, and may be stored on a hook inside the left hand side of the firebox cavity. See Figure 83.
2. To remove the offset frame; release tabs in the upper corners by flexing them away from the glass frame. Tilt offset frame to the left or right in order to access one of the bottom tabs. Release tab and remove offset frame. See Figure 84. Installation is the reverse of removal.

**NOTE:** If no decorative front accessory is being installed, the four shoulder bolts on the offset frame may be removed.

**NOTE:** The glass frame is held on to the firebox with six glass frame latches. Only the sides and top latches need to released with the glass frame tool in order to remove the glass frame.

3. Use the glass latch tool to grip the latch bar and pry it over the glass frame hook flanges. See Figure 85.
4. Tilt the glass frame towards you and pull upwards to remove from the unit.
5. To replace glass frame, set glass frame bottom flange into the bottom latch bars. Tilt the glass frame towards the unit. Use glass latch tool to pull the remaining four latch bars out and over the glass frame hook flanges.
Wiring
If any of the original wire supplied with this unit must be replaced, it must be replace with 18 GA. 150°C wire or its equivalent.
Accessing Gas Valve and Controls

1. Remove the Offset Frame and Glass Frame.
2. Remove the Burner Components Heat Shield. See Figure 86.
3. Remove logs from firebox.
4. Remove the liner bracket on top of the right-hand liner panel and remove right hand liner panel.
5. Remove the Access Plate. See Figure 86.

**NOTE:** The control Module is located in the front right hand corner of the cavity. To remove it, lift up and away from the wall.

**NOTE:** If it is necessary to remove one of the gas valve train components, break free the plumbing fittings and remove the screw indicated in Figure 87.

![Figure 86](image1)

![Figure 87](image2)
Before enclosing the vent pipe assembly, operate the appliance to ensure it is venting properly.

**WARNING**

Do not operate this appliance without glass front panel installed.

- If this appliance is installed directly on carpeting, tile or other combustible material other than wood flooring the appliance shall be installed on a metal or wood panel extending the full width and depth of the appliance.
  
  The base referred to above does not mean the fireproof base as used on wood stoves. The protection is for rugs that are extremely thick and light colored tile.

- Children and adults should be alerted to the hazards of high surface temperatures and should stay away to avoid burns or clothing ignition.

- Young children should be carefully supervised when they are in the same room as the appliance.

- Clothing or other flammable material should not be placed on or near the appliance.

- Adequate accessibility clearances for servicing and proper operation.

- This appliance must not share or be connected to a flue serving a separate solid-fuel burning appliance.

- Keep the area around your appliance clear of combustible materials, gasoline and other flammable vapor and liquids.

- **Under no circumstances** should any solid fuels (wood, coal, paper or cardboard etc.) be used in this appliance.

- The flow of combustion and ventilation air must not be obstructed in any way.

- Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.

- The glass front or any part removed for servicing the appliance must be replaced prior to operating the appliance. Work should be done by a qualified service person.

- Any safety screen or guard removed for servicing the appliance must be replaced prior to operating the appliance.

- Keep burner and control compartment clean.

- Vent cap is **hot** while fireplace is in operation and some time afterward.

- Installation and repair should be done by a **QUALIFIED SERVICE PERSON.** The appliance should be inspected before use and at least annually by a qualified service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding materials, etc. It is imperative that control compartments, burners and circulating air passageways of the appliance be kept clean.

**CAUTION**

If the glass is cracked or damaged in any way, it should be replaced only with a complete glass frame assembly from Empire. See parts list on Page 55 for ordering.

- **DO NOT** put anything around the fireplace that will obstruct the flow of ventilation air.

- **DO NOT** use this fireplace if any part has been under water. Immediately call a qualified service technician to inspect the fireplace and to replace any part of the control system and any gas control which has been under water.

- **DO** keep the appliance area clear and free from combustible material, gasoline and other flammable vapors and liquids.

- **DO** examine venting system periodically and replace damaged parts.

- **DO** make a periodic visual check of pilot and burners. Clean and replace damaged parts.
SAFETY INFORMATION FOR USERS OF PROPANE GAS

Propane is a flammable gas which can cause fires and explosions. In its natural state, propane is odorless and colorless. You may not know all the following safety precautions which can protect both you and your family from an accident. Read them carefully now, then review them point by point with the members of your household. Someday when there may not be a minute to lose, everyone’s safety will depend on knowing exactly what to do. If, after reading the following information, you feel you still need more information, please contact your gas supplier.

PROpane GAS WARNING ODOR

If a gas leak happens, you should be able to smell the gas because of the odorant put in the Propane Gas. That’s your signal to go into immediate action!

- Do not operate electric switches, light matches, use your phone. Do not do anything that could ignite the gas.
- Get everyone out of the building, vehicle, trailer, or area. Do that IMMEDIATELY.
- Close all gas tank or cylinder supply valves.
- Propane Gas is heavier than air and may settle in low areas such as basements. When you have reason to suspect a gas leak, keep out of basements and other low areas. Stay out until firefighters declare them to be safe.
- Use your neighbor’s phone and call a trained Propane Gas service person and the fire department. Even though you may not continue to smell gas, do not turn on the gas again. Do not re-enter the building, vehicle, trailer, or area.
- Finally, let the service man and firefighters check for escaped gas. Have them air out the area before you return. Properly trained Propane Gas service people should repair the leak, then check and relight the gas appliance for you.

NO ODOR DETECTED - ODOR FADE
Some people cannot smell well. Some people cannot smell the odor of the chemical put into the gas. You must find out if you can smell the odorant in propane. Smoking can decrease your ability to smell. Being around an odor for a time can affect your sensitivity or ability to detect that odor. Sometimes other odors in the area mask the gas odor. People may not smell the gas odor or their minds are on something else. Thinking about smelling a gas odor can make it easier to smell.

The odorant in Propane Gas is colorless, and it can fade under some circumstances. For example, if there is an underground leak, the movement of the gas through soil can filter the odorant. Odorants in Propane Gas also are subject to oxidation. This fading can occur if there is rust inside the storage tank or in iron gas pipes.

The odorant in escaped gas can adsorb or absorb onto or into walls, masonry and other materials and fabrics in a room. That will take some of the odorant out of the gas, reducing its odor intensity. Propane Gas may stratify in a closed area, and the odor intensity could vary at different levels. Since it is heavier than air, there may be more odor at lower levels. Always be sensitive to the slightest gas odor. If you detect any odor, treat it as a serious leak. Immediately go into action as instructed earlier.

SOME POINTS TO REMEMBER

- Learn to recognize the odor of Propane Gas. Your local Propane Gas Dealer can give you a “Scratch and Sniff” pamphlet. Use it to find out what the propane odor smells like. If you suspect that your Propane Gas has a weak or abnormal odor, call your Propane Gas Dealer.
- If you are not qualified, do not light pilot lights, perform service, or make adjustments to appliances on the Propane Gas system. If you are qualified, consciously think about the odor of Propane Gas prior to and while lighting pilot lights or performing service or making adjustments.
- Sometimes a basement or a closed-up house has a musty smell that can cover up the Propane Gas odor. Do not try to light pilot lights, perform service, or make adjustments in an area where the conditions are such that you may not detect the odor if there has been a leak of Propane Gas.
- Odor fade, due to oxidation by rust or adsorption on walls of new cylinders and tanks, is possible. Therefore, people should be particularly alert and careful when new tanks or cylinders are placed in service. Odor fade can occur in new tanks, or reinstalled old tanks, if they are filled and allowed to set too long before refilling. Cylinders and tanks which have been out of service for a time may develop internal rust which will cause odor fade. If such conditions are suspected to exist, a periodic sniff test of the gas is advisable. If you have any question about the gas odor, call your Propane Gas Dealer. A periodic sniff test of the Propane Gas is a good safety measure under any condition.
- If, at any time, you do not smell the Propane Gas odorant and you think you should, assume you have a leak. Then take the same immediate action recommended above for the occasion when you do detect the odorized Propane Gas.
- If you experience a complete “gas out,” (the container is under no vapor pressure), turn the tank valve off immediately. If the container valve is left on, the container may draw in some air through openings such as pilot light orifices. If this occurs, some new internal rusting could occur. If the valve is left open, then treat the container as a new tank. Always be sure your container is under vapor pressure by turning it off at the container before it goes completely empty or having it refilled before it is completely empty.
REQUIREMENTS FOR MASSACHUSETTS

For all side wall horizontally vented gas fueled equipment installed in every dwelling, building or structure used in whole or in part for residential purposes, including those owned or operated by the Commonwealth and where the side wall exhaust vent termination is less than seven feet above finished grade in the area of the venting, including but not limited to decks and porches, the following requirements shall be satisfied:

1. INSTALLATION OF CARBON MONOXIDE DETECTORS. At the time of installation of the side wall horizontally vented gas fueled equipment, the installing plumber or gasfitter shall observe that a hard wired carbon monoxide detector with an alarm and battery back-up is installed on the floor level where the gas equipment is to be installed. In addition, the installing plumber or gasfitter shall observe that a battery operated or hard wired carbon monoxide detector with an alarm is installed on each additional level of the dwelling, building or structure served by the side wall horizontally vented gas fueled equipment. It shall be the responsibility of the property owner to secure the services of qualified licensed professionals for the installation of hard wired carbon monoxide detectors.
   a. In the event that the side wall horizontally vented gas fueled equipment is installed in a crawl space or an attic, the hard wired carbon monoxide detector with alarm and battery back-up may be installed on the next adjacent floor level.
   b. In the event that the requirements of this subdivision can not be met at the time of completion of installation, the owner shall have a period of thirty days to comply with the above requirements; provided, however, that during said thirty day period, a battery operated carbon monoxide detector with an alarm shall be installed.

2. APPROVED CARBON MONOXIDE DETECTORS. Each carbon monoxide detector as required in accordance with the above provisions shall comply with NFPA 720 and be ANSI/UL 2034 listed and IAS certified.

3. SIGNAGE. A metal or plastic identification plate shall be permanently mounted to the exterior of the building at a minimum height of eight feet above grade directly in line with the exhaust vent termination for the horizontally vented gas fueled appliance or equipment. The sign shall read, in print size no less than 1/2 inch in size, “GAS VENT DIRECTLY BELOW. KEEP CLEAR OF ALL OBSTRUCTIONS”.

4. INSPECTION. The state or local gas inspector of the side wall horizontally vented gas fueled equipment shall not approve the installation unless, upon inspection, the inspector observes carbon monoxide detectors and signage installed in accordance with the provisions of 248 CMR 5.08(2)(a) 1 through 4.
   (b) EXEMPTIONS: The following equipment is exempt from 248 CMR 5.08(2)(a)1 through 4:
   1. The equipment listed in Chapter 10 entitled “Equipment Not Required To Be Vented” in the most current edition of NFPA 54 as adopted by the Board; and
   2. Product Approved side wall horizontally vented gas fueled equipment installed in a room or structure separate from the dwelling, building or structure used in whole or in part for residential purposes.

(d) MANUFACTURER REQUIREMENTS - GAS EQUIPMENT VENTING SYSTEM NOT PROVIDED. When the manufacturer of a Product Approved side wall horizontally vented gas fueled equipment does not provide the parts for venting the flue gases, but identifies “special venting systems”, the following requirements shall be satisfied by the manufacturer:
   1. The referenced “special venting system” instructions shall be included with the appliance or equipment installation instructions; and
   2. The “special venting systems” shall be Product Approved by the Board, and the instructions for that system shall include a parts list and detailed installation instruction.

(e) A copy of all installation instructions for all Product Approved side wall horizontally vented gas fueled equipment, all venting instructions, all parts lists for venting instructions, and/or all venting design instructions shall remain with the appliance or equipment at the completion of the installation.
To Order Parts Under Warranty, please contact your local Empire dealer. See the dealer locator at www.empirecomfort.com. To provide warranty service, your dealer will need your name and address, purchase date and serial number, and the nature of the problem with the unit.

To Order Parts After the Warranty Period, please contact your dealer or one of the Master Parts Distributors listed below. This list changes from time to time. For the current list, please click on the Master Parts button at www.empirecomfort.com. Please note: Master Parts Distributors are independent businesses that stock the most commonly ordered Original Equipment repair parts for Heaters, Grills, and Fireplaces manufactured by Empire Comfort Systems Inc.

### Master Parts Distributor List

**Dey Distributing**  
1401 Willow Lake Boulevard  
Vadnais Heights, MN 55101  

**Phone:** 651-490-9191  
**Toll Free:** 800-397-1339  
**Website:** www.deydistributing.com  
**Parts:** Heater, Hearth and Grills

**F. W. Webb Company**  
200 Locust Street  
Hartford, CT 06114  

**Phone:** 860-722-2433  
**Toll Free:** 800-243-9360  
**Fax:** 860-293-0479  
**Toll Free Fax:** 800-274-2004  
**Websites:** www.fwwebb.com & www.victormfg.com  
**Parts:** Heater, Hearth and Grills

**East Coast Energy Products**  
10 East Route 36  
West Long Branch, NJ 07764  

**Phone:** 732-870-8809  
**Toll Free:** 800-755-8809  
**Fax:** 732-870-8811  
**Website:** www.eastcoastenergy.com  
**Parts:** Heater, Hearth and Grills

### How to Order Repair Parts

**Parts Not Under Warranty**  
Parts can be ordered through your Service Person, Dealer, or a Master Parts Distributor. See this page for the Master Parts Distributors list. For best results, the service person or dealer should order parts through the distributor. Parts can be shipped directly to the service person/dealer.

**Warranty Parts**  
Warranty parts will need a proof of purchase and can be ordered by your Service Person or Dealer. Proof of purchase is required for warranty parts.

All parts listed in the Parts List have a Part Number. When ordering parts, first obtain the Model Number and Serial Number from the name plate on your equipment. Then determine the Part Number (not the Index Number) and the Description of each part from the following illustration and part list. Be sure to give all this information . . .

<table>
<thead>
<tr>
<th>Appliance Model Number</th>
<th>Part Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appliance Serial Number</td>
<td>Part Number</td>
</tr>
</tbody>
</table>

Type of Gas (Propane or Natural)

Do not order bolts, screws, washers or nuts. They are standard hardware items and can be purchased at any local hardware store. Shipments contingent upon strikes, fires and all causes beyond our control.
Empire Comfort Systems Inc. warranties this hearth product to be free from defects at the time of purchase and for the periods specified below. Hearth products must be installed by a qualified technician and must be maintained and operated safely, in accordance with the instructions in the owner’s manual. Empire will not warranty any Château, Boulevard, or Mantis fireplace that is not installed by the selling dealer or that dealer’s direct contract agents. This warranty applies to the original purchaser only and is not transferable. All warranty repairs must be accomplished by a qualified gas appliance technician.

**Limited Lifetime Parts Warranty – Combustion Chamber, Heat Exchanger, and Factory-Installed Glass**
If the combustion chamber, heat exchanger (see parts list) or factory-installed glass fails because of defective workmanship or material, Empire will repair or replace at Empire’s option.

**Limited Three-Year Parts Warranty – All Other Components**
(Except Remote Controls, Thermostats, Accessories and Replacement Parts)
Should any part fail because of defective workmanship or material within three years from the date of purchase, Empire will repair or replace at Empire’s option.

**Limited One-Year Parts Warranty – Remote Controls, Thermostats, Accessories, and Parts**
Should any remote control, thermostat, accessory, or other part fail because of defective workmanship within one year from the date of purchase, Empire will repair or replace at Empire’s option.

**Duties of the Owner**
The appliance must be installed by a qualified installer and operated in accordance with the instructions furnished with the appliance. A bill of sale, cancelled check, or payment record should be kept to verify purchase date and establish warranty period. Ready access to the appliance for service.

**What Is Not Covered**
- Damages that might result from the use, misuse, or improper installation of this appliance.
- Travel, diagnostic costs and freight charges on warranted parts to and from the factory.
- Claims that do not involve defective workmanship or materials.
- Unauthorized service or parts replacements.
- Removal and reinstallation cost.
- Inoperable due to improper or lack of maintenance.

**How To Get Service**
To make a claim under this warranty, please have your receipt available and contact your installing dealer. Provide the dealer with the model number, serial number, type of gas, and purchase verification. The installing dealer is responsible for providing service and will contact the factory to initiate any warranted parts replacements. Empire will make replacement parts available at the factory. Shipping expenses are not covered.

If, after contacting your Empire dealer, service received has not been satisfactory, contact:
Consumer Relations Department, Empire Comfort Systems Inc., PO Box 529, Belleville, Illinois 62222, or send an e-mail to info@empirecomfort.com with “Consumer Relations” in the subject line.

**Your Rights Under State Law**
This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.