

# INSTALLATION INSTRUCTIONS AND OWNER'S MANUAL

**SINCE 1932** 

INSTALLER: Leave this manual with the appliance. CONSUMER: Retain this manual for future reference.

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.

#### **▲** 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.

### DIRECT VENT **GAS FIREPLACE HEATER**

FIREPLACE INSERT MODELS **GAS-FIRED** DV25IN33L(N,P)-3 DV25IN73L(N,P)-1 DV(33,35)IN33(N,P)-4 <sup>C</sup> DV(33,35)IN73(N,P)-2

UL FILE NO. MH30033

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.

# **AWARNING**



**HOT GLASS WILL** CAUSE BURNS. **DO NOT TOUCH GLASS** UNTIL COOLED. **NEVER** ALLOW CHILDREN TO TOUCH GLASS.

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.



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.

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# **SPECIFICATIONS**

	DV25IN	I(3,7)3L	DV33IN	I(3,7)3L	DV35IN(3,7)3L		
	LP	NAT	LP	NAT	LP	NAT	
Input BTU/Hr Maximum	25,000	25,000	33,000	33,000	35,000	35,000	
Input BTU/Hr Minimum	17,000	17,000	25,000	23,000	27,000	25,000	
KWH (Maximum)	7.3	7.3	9.57	9.57	10.15	10.15	
KWH (Minimum)	5	5	7.30	6.67	7.83	7.30	
Orifice	#53 (0.0596)	#42 (0.0935)	1.55mm	#36 (0.1065)	1.65mm (0.65)	#35 (.110)	
Air Shutter Opening	Full Open	1/8"	Full Open	1/4"	Full Open	1/4"	
Gas Inlet Shutoff Valve (pipe)	1/2 NPT	1/2 NPT	1/2 NPT	1/2 NPT	1/2 NPT	1/2 NPT	

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

GAS SUPPLY PRESSURES							
GAS TYPE MAXIMUM MINIMUM MANIFOLD							
NAT	14	4.5	3.5				
LP	14	11	10				

## **ACCESSORIES**

Venting Kits	Description	Contents
DVKI	Vertical Vent Kit 17 1/2'	One piece of 35' FlexVent (split for 17 1/2' vent run), Round Cap, Flashing, connectors, and clamps. Recommended when installing to an existing round fireplace chimney pipe.
DVVK3FV	Vertical Vent Kit 25'	Two pieces of 25' FlexVent, Rectangle Cap, Flashing, connectors, and clamps Recommended when installing to a square or rectangular clay flue.
DVK35	Vent Extension Kit	35' flex vent extension section with 2 connectors and 4 clamps

**NOTICE:** When installing vent caps, special locally made flashings may be required to properly seal the vent system to the existing chimney termination.

Remote Controls	Description
FRBC	Millivolt Battery Remote ON/OFF
FRBTC	Millivolt Battery Remote Thermostat
TRW	Millivolt WIRELESS Wall Thermostat
TMV	Millivolt Reed Switch Wall Thermostat
FWS-1	Millivolt Wall Switch

Shroud	Description
	Shroud, Black (For fireplace openings up to 48"x 36" - Requires a surround)

Barrier Screen	Description
DVFQ25TBL	Barrier screen for DV25IN series
DVFQ33TBL	Barrier screen for DV33IN series
DVFQ35TBL	Barrier screen for DV35IN series

Surround Kit	Description
DS2563DBL	Steel Surround, 6 x 3 in.
DS3363DBL	Steel Surround, 6 x 3 in.
DS3563DBL	Steel Surround, 6 x 3 in.
DS2566DBL	Steel Surround, 6 x 6 in.
DS3366DBL	Steel Surround, 6 x 6 in.
DS3566DBL	Steel Surround, 6 x 6 in.
S256VBL	Surround 3-sided, 1-piece
S336VBL	Surround 3-sided, 1-piece
S356VBL	Surround 3-sided, 1-piece
SC256BL	Cast Iron Surround, 6 inch
SC336BL	Cast Iron Surround, 6 inch
SC356BL	Cast Iron Surround, 6 inch

Surround Cover	Description
C253DBL	Surround Bottom Cover (3" Side Panels)
C333DBL	Surround Bottom Cover (3" Side Panels)
C353DBL	Surround Bottom Cover (3" Side Panels)
C256DBL	Surround Bottom Cover (6" Side Panels)
C336DBL	Surround Bottom Cover (6" Side Panels)
C356DBL	Surround Bottom Cover (6" Side Panels)

<b>Decorative Front</b>	Description
DVFQ25HBL	Lancaster Front - Black
DVFQ25HHP	Lancaster Front - Hammered Pewter
DVFQ25HSS	Lancaster Front - Stainless Steel
DVFQ33HBL	Lancaster Front - Black
DVFQ33HHP	Lancaster Front - Hammered Pewter
DVFQ33HSS	Lancaster Front - Stainless Steel
DVFQ35HBL	Lancaster Front - Black
DVFQ35HHP	Lancaster Front - Hammered Pewter
DVFQ35HSS	Lancaster Front - Stainless Steel

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

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### INTRODUCTION

#### Instructions to Installer

- Installer must leave instruction manual with owner after installation.
- Installer must have owner fill out and mail warranty card supplied with the fireplace.
- Installer should show owner how to start and operate the fireplace.
- Installer must mechanically attach the marking supplied with the gas fireplace insert to the inside of the firebox of the fireplace into which the gas fireplace insert is installed.

This direct vent gas fireplace heater 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.

#### **A** WARNING

This unit is not for use with solid fuels

#### **Appliance Certification**

This fireplace is design certified in accordance with American National Standard/CSA Standard ANSI Z21.88/CSA 2.33 and by Underwriters Laboratories as a Direct Vent Gas Fireplace Heater 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 insert, 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* or Canadian Electric code, CSA C22.1, if an external electrical source is utilized.

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

#### **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.

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

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, or CSA B149.1 in Canada. \*Available from the American National Standards Institute, Inc. 11 West 42nd St., New York, N.Y. 10036.* 

#### **A** 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 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 local gas utility for proper orifice size identification.

#### Canadian High Altitude

Altitude: 0-4500 feet (0-1370 m)

When installing this unit at an elevation above 4500 feet (in Canada), check with local authorities.

Consult your local gas utility for assistance in determining the proper orifice for location.

#### Preparation

This direct vent gas fireplace insert 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:

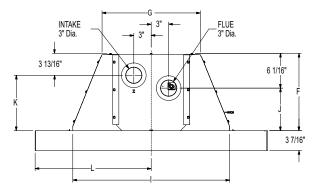
- Installation of any damaged fireplace insert or vent system component.
- Modification of the fireplace insert or direct vent system.
- Installation other than as instructed by Empire Comfort Systems, Inc.
- Improper positioning of the logs or glass door assembly.
- Installation and/or use of any component part not manufactured or approved by manufacturer.
- This appliance comes standard with a 120 VAC cord assembly to accommodate control options and the blower accessory. An outlet box may be installed in a bottom back corner of the existing solid fuel masonry or factory built fireplace to plug in the cord assembly, or the supplied power cord may be routed out onto the hearth to a nearby outlet.
- A 120 VAC circuit fort this product must be protected with ground-fault circuit-interrupter protection, in compliance with the applicable electrical codes, when it is installed in locations such as in bathrooms or near sinks.
- Low voltage and 120 VAC voltage cannot be shared within the same wall box.
- Once the appliance installation is completed, the installer should check that control compartment wiring is secured in a manner as to not interfere with door latches, valve controls, or the louver assembly.

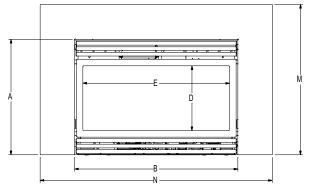
## FIREPLACE INSERT DIMENSIONS

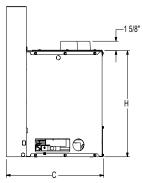
When planning a fireplace insert installation, it's necessary to determine:

- The vent system configuration to be used.
- · Gas supply piping.

- Whether optional accessories devices such as a wall switch or remote control are desired.
- · Electrical supply requirements for blower.
- Proper opening size of fireplace required for installation of the fireplace insert.







**Note:** 6", 1-piece surround shown

	DV FIREPLACE INSERT DIMENSIONS													
MODEL	Α	В	С	D	E	F	G	Н	I	J	K	L	М	N
DV25IN	19-3/4"	28	14-1/2"	11-1/8"	25-1/4"	12-3/4"	17"	18-5/16"	27"	6-3/4"	9"	20"	25-5/8"	40"
DV33IN	22-3/4"	31	16	14-1/8"	28-1/4"	14-1/4"	18-3/4"	21-5/16"	30"	8-1/4"	10-1/2"	21-1/2"	28-5/8"	43"
DV35IN	24-3/4"	34	16	16-1/8"	31-1/4"	14-1/4"	21-3/4"	23-5/16"	33"	8-1/4"	10-1/2"	23"	30-5/8"	46"

Fireplace Opening Dimensional Information/Sizing								
MINIMUM FIREPLACE OPENING DIMENSIONS								
MODEL NO.	HEIGHT A*	FRONT WIDTH B	DEPTH C	REAR WIDTH D				
DV25IN	18-3/8"	27-1/2"	12-3/4"	17-1/4"				
DV33IN	21-3/8"	30-1/2"	14-1/4"	19"				
DV35IN	23-3/8"	33-1/2"	14-1/4"	22"				

\*NOTICE: If the fireplace lintel is wider than 8" (203mm), the height of the fireplace opening must be increased a few inches to allow for a gradual offset in the exhaust and/or intake vent pipes.

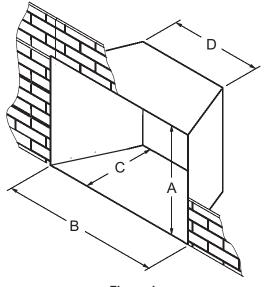


Figure 1

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# MANTEL AND TRIM CLEARANCES

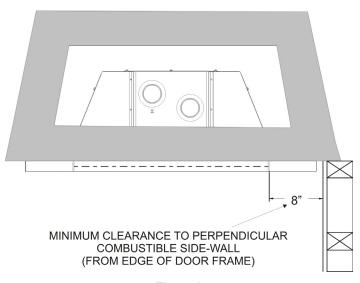
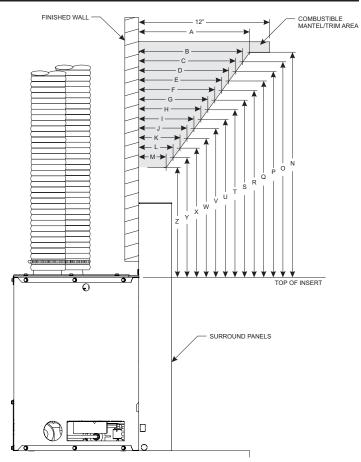


Figure 2



	ce from Fireplace	Height Above Top of Insert		
А	10"	N	23"	
В	9-1/4"	0	22"	
С	8-3/4"	Р	21"	
D	8"	Q	20"	
E	7-1/4"	R	19"	
F	6-1/2"	S	18"	
G	6"	Т	17"	
Н	5-1/4"	U	16"	
I	4-1/2"	V	15"	
J	3-3/4"	W	14"	
K	3"	Х	13"	
L	2-1/2"	Y	12"	
М	1-3/4"	Z	11"	

Figure 3

#### **Combustible Material**

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

### **GAS SUPPLY**

If the factory factory built fireplace has no gas access hole(s) provided, an access hole of 1.5 in (37.5 mm) or less may be drilled through the lower sides or bottom of the firebox in a proper workmanship-like manner. This access hole must be plugged with non-combustible insulation after the gas supply line has been installed.

The gas pipeline can be brought in through the right or left side of the appliance. The insert has a Flexline with shutoff valve located on the right side when facing the unit. **See Figures 4 and 6.** Consult the current National Fuel Gas Code, ANSI Z223.1 CAN/CGA-B149 (.1 or .2) installation code.

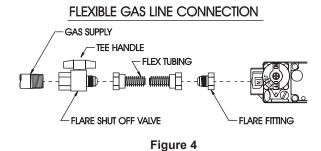
Recommended Gas Pipe Diameter					
Pipe Length	Schedule 4 Inside Diar		Tubing, Ty Outside D	•	
	Nat.	L.P.	Nat.	L.P.	
0-10ft	1/2"	3/8"	1/2"	3/8"	
0-3m	12.7mm	9.5mm	12.7mm	9.5mm	
11-40ft	1/2"	1/2"	5/8"	1/2"	
4-12m	12.7mm	12.7mm	15.9mm	12.7mm	
41-100ft	1/2"	1/2"	3/4"	1/2"	
13-30m	12.7mm	12.7mm	19mm	12.7mm	
101-150ft	3/4"	1/2"	7/8"	3/4"	
31-46m	19mm	12.7mm	22.2mm	1.9 mm	

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

**NOTICE:** 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:

- ANS Z21.24 Appliance Connectors of Corrugated Metal Tubing and Fittings.
- ANS 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 state of Massachusetts requires that a flexible appliance connector cannot exceed three feet in length.



	Gas Supply Pressure (inches w.c.)				
	Minimum Normal		Maximum		
Natural Gas	4.5"	7.0"	14.0"		
LP (Propane)	10.8"	11.0"	14.0"		
	Manifold Pressure (inches w.c.)				
	Normal (HI)				
Natural Gas	3.5"				
LP (Propane)	10.0"				

#### Installing a New Main Gas Cock

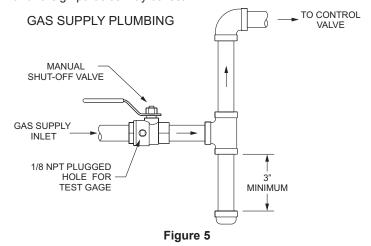
Each appliance should have its own manual gas cock.

A manual main gas cock 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!

A gas valve and ground joint union should be installed in the gas line upstream of the gas control to aid in servicing. It is required by the National Fuel Gas Code that a drip line be installed near the gas inlet. This should consist of a vertical length of pipe tee connected into the gas line that is capped on the bottom in which condensation and foreign particles may collect.



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### **GAS SUPPLY**

**NOTICE:** The millivolt gas controls are equipped with a captured screw type pressure test point, therefore it is not necessary to provide a 1/8" test point up stream of the control.

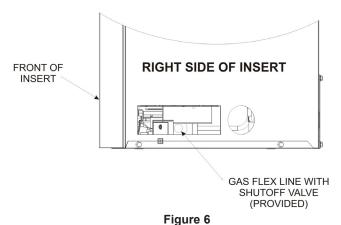
When using copper or flex connector use only approved fittings. The appliance and it's individual shut off valve must be disconnected from supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psig (3.5kPa).

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 (3.5kPa).

**Attention!** 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. (.871kPa) at the valve outlet with the inlet pressure to the valve from a minimum of 4.5" w.c. (1.120kPa) for the purpose of input adjustment to a maximum of 14.0" w.c. (3.484kPa). Propane gas models will have a manifold pressure approximately 10.0" w.c. (2.49kPa) at the valve outlet with the inlet pressure to the valve from a minimum of 10.8" w.c. (2.68kPa) for the purpose of input adjustment to a maximum of 14.0" w.c. (3.484kPa).



## **VENTING AND INSTALLATION**

- Before beginning, remove glass door and log package from unit. Also check to make sure there is no hidden damage to the unit. Take a minute and plan out the gas, venting and electrical route. It is best to start with the gas line first, followed by the chimney liner and electrical supply requirements.
- Minimum fireplace opening requirements are shown in Figure 1 of this installation manual. The firebrick (refractory), glass doors, screen rails, screen mesh and log grates can be removed from a <u>factory built fireplace</u> in order to gain minimum gas insert opening requirements prior to installing the gas fireplace insert.
- This insert requires no hearth extensions. Combustible material on the floor may be installed up to the insert. Do not obstruct the lower louver of the insert. The original fireplace cannot be returned to solid fuel in this condition.
- 4. The metal floor of the solid fuel firebox may be removed to facilitate the installation of the insert. CLEARANCE TO COMBUSTIBLE MATERIAL UNDER THE INSERT IS 1/4". YOU MUST USE THE LEVELING LEGS TO RAISE THE INSERT A MINIMUM OF 1/4" IF THE INSERT IS TO SIT ON COMBUSTIBLE MATERIAL. The side walls and top structure of the firebox may not be altered with the exception of removable baffles and dampers. Smoke shields, shelves and baffles may be removed if attached with mechanical fasteners. The original fireplace cannot be returned to solid fuel in this condition.
- 5. The original specified clearances of a factory-built fire-place must be maintained, with the exception of the hearth. Clearances on a masonry fireplace must be maintained at 12" from the opening for combustible projections over 1-1/2". Clearances for combustible projections under 1-1/2" must be maintained at 6" from the opening per NFPA211. Plan the surround size accordingly. A surround must be used with the insert. UNDER NO CIRCUMSTANCE CAN COMBUSTIBLE MATERIAL BE PLACED BEHIND THE SURROUND!
- The insert surround is tested and approved with this gas insert and may cover existing air circulation vents or grills on the solid fuel fireplace it is installed into. If the surround does not cover the entire ventilation grill surface, the exposed grill area should be left open.

*NOTICE*: Surround panel kits have been tested and approved to cover existing air circulation vents or grills.

*NOTICE*: Cutting of sheet metal parts of a fireplace in order to install the fireplace insert is prohibited.

#### **A** WARNING

Only the surround as supplied may be used to cover integral grills on the solid fuel-burning fireplace. No other components such as shrouds, sheet metal plates, etc. may be used to seal off vents.

 To assure top performance, safety and efficiency, inserts must be installed with an approved flue liner as per CAN/CGA B-149 or National Fuel Code ANSI Z223 and these instructions

NOTICE: The following statement is also provided on a separate label plate in the instruction packet. Prior to installation of the fireplace insert, the installer must mechanically secure this warning plate to the inside of the fireplace for future reference as required.

#### **MARNING**

The solid fuel fireplace has been converted for use with gas only and cannot be used for burning wood or solid fuels unless all original parts have been replaced and the fireplace has been reapproved by the authority having jurisdiction.

- The solid fuel fireplaces' flue damper must be fully locked in the open position or removed for installation of the gas fireplace insert.
- The fireplace and fireplace chimney must be cleaned and in good working order and constructed of noncombustible materials.
- 10. Make sure that all chimney cleanouts fit properly so air cannot leak into the chimney.
- 11. Install the insert without the surround panels attached and make all gas, venting, and electrical connections.
- To complete the installation, install surround panel assembly.
   Please refer to instructions included with the surround panel kit

#### **A** CAUTION

Ensure there are no obstructions to side air passages of decorative trim once installed on insert.

#### **INSTALLING THE VENT SYSTEM**

#### **Vent System Installation Precautions**

Before starting installation of vent kits, the installer should read these instructions and the Vent Kit Instructions to ensure that a proper vent installation is completed. Consult your local Building Codes before beginning the Installation.

#### **A** WARNING

THIS GAS INSERT AND VENT ASSEMBLY MUST BE VENTED DIRECTLY TO THE OUTSIDE AND MUST NEVER BE ATTACHED TO A CHIMNEY SERVING A SEPARATE SOLID FUEL BURNING APPLIANCE. EACH GAS APPLIANCE MUST USE A SEPARATE VENT SYSTEM. COMMON VENT SYSTEMS ARE PROHIBITED.

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## **VENTING AND INSTALLATION**

#### **Vent System Approvals**

Figure 8 shows the vent termination caps and systems approved for use with these models. Approved vent system terminations are labeled for identification. 3-inch diameter listed flexible aluminum or stainless steel gas vent is used for both the incoming combustion air and exhaust vent pipes. NO OTHER VENTING SYSTEMS OR COMPONENTS MAY BE USED. Detailed installation instructions are included with each vent termination kit and should be used in conjunction with this manual.

#### **Horizontal Venting**

The vent system on this model **CANNOT** be terminated horizontally.

#### **Vertical Venting**

The inlet and exhaust vent pipes **MUST** be connected to the proper collars on the unit **AND** to the termination cap or the unit will not operate. The intake vent collar is identified by a stamped "I" on the top collar sliding vent plate assembly.

#### **MARNING**

MAJOR U.S. BUILDING CODES SPECIFY MINIMUM CHIMNEY AND/OR VENT HEIGHT ABOVE THE ROOF TOP. THESE MINIMUM HEIGHTS ARE NECESSARY IN THE INTEREST OF SAFETY. SEE FIGURES 8 THROUGH 10 FOR MINIMUM HEIGHTS, PROVIDED THE TERMINATION CAP IS AT LEAST 2-FEET FROM A VERTICAL WALL AND 2-FEET BELOW A HORIZONTAL OVERHANG.

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

#### **MARNING**

THE EXHAUST PIPE MUST ONLY BE CONNECTED TO THE EXHAUST STARTING COLLAR OF THE UNIT AND TO THE EXHAUST COLLAR OF THE TERMINATION CAP.

THE INLET AIR PIPE MUST ONLY BE CONNECTED TO THE INLET AIR STARTING COLLAR OF THE UNIT AND TO THE INLET AIR COLLAR OF THE TERMINATION CAP. BOTH THE INLET VENT AND THE FLUE VENT MUST BE CONNECTED FROM THE INSERT TO THE VENT TERMINATION CAP.

**NOTICE:** The minimum vertical vent rise is 10 feet and the maximum vertical vent rise is 35 feet. These dimensions are measured from the starting collars of the unit to the end of the last section of vent pipe. **See Figure 8.** 

**NOTICE:** The damper of the masonry chimney may need to be removed to allow installation of the flexible-vent pipe.

When installing into a zero clearance, factory built wood-burning fireplace, the use of the DVKI Round Vertical Termination Kit should allow you to mount the vent adaptor and cap to the exposed round chimney pipe easily.

#### **Connecting the Vent Pipe**

#### **A** CAUTION

Sharp edges. Always use gloves when installing.

Install the 3-inch flexible vent pipes down through the chimney.

Attach the pipe-to-cap adaptor to the termination cap and the top of the flexible vent pipe, then install the cap to the top of the chimney.

Remove the vent slide plate assembly from the top of the insert. **See Figure 7.** Trim off excess venting then attach and secure the bottom ends of the flex pipes to the starting collars with the adjustable band clamps provided. Slide the gas insert into place, and position any excess flex vent pipe back up into the chimney. Begin installation of the insert into the fireplace opening. Align the vent slide plate assembly with the guides located on top of the insert. Work the insert inch by inch into the fireplace cavity as you pull forward on the vent slide plate assembly. Do not use excessive force on the vent slide plate. Once the vent slide plate is close to seating, install the black button head 5/16-18 x 2 1/2" long bolt through the center hole of the insert top flange, and into the vent slide plate nut. Using the hex key wrench provided, tighten the bolt until the vent slide plate is seated forward completely.

#### Positioning, Leveling, and Securing Insert

1. Place the insert into position.

**NOTICE:** The front flanges of the insert (without surround panels) should be set at approximately 1"(inch) in front of the face of the fireplace.

- Level the insert from side to side and front to back.
- If necessary, use the leveling bolts included in the instruction pack. Screw the legs into the nuts installed in the bottom of the insert. Turn legs in until insert is level.

Note: If desired, it is acceptable to attach metal strapping or brackets (not provided) from the fireplace cavity to the insert outer jacket to secure the Fireplace Insert to the fireplace hearth or opening.

#### **A** CAUTION

TO AVOID DOWNDRAFTS AND/OR COLD AIR PROBLEMS, IT IS RECOMMENDED TO SEAL OFF THE AREA BETWEEN THE TERMINATION CAP AND THE TOP OF THE SOLID-FUEL CHIMNEY OPENING INTO WHICH THE VENT CAP HAS BEEN INSTALLED.

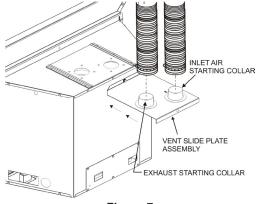


Figure 7

## **VENTING AND INSTALLATION**

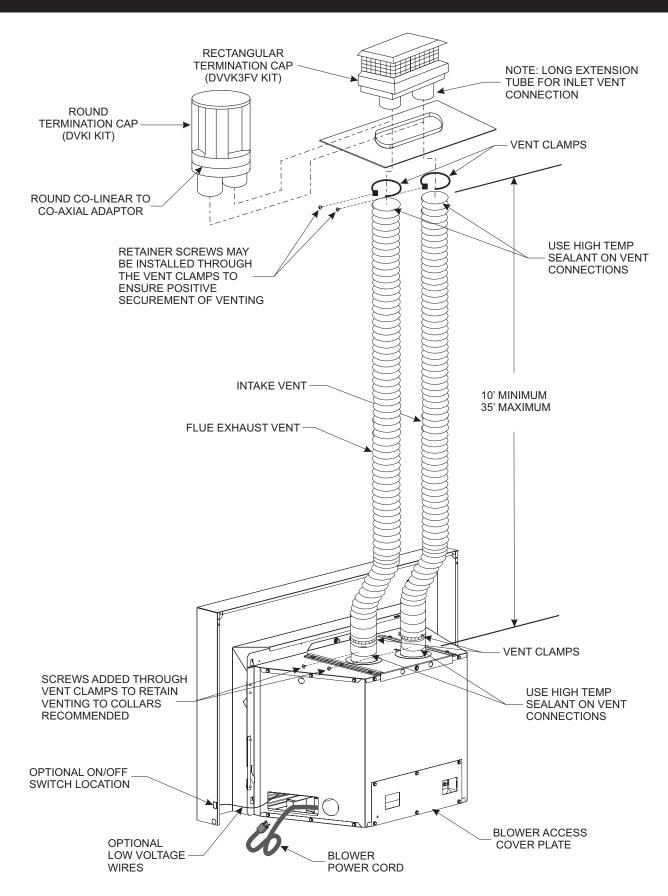


Figure 8

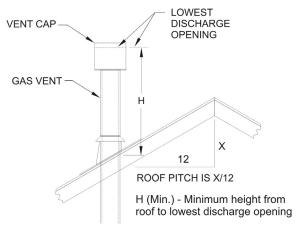
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## **VERTICAL TERMINATION**

Determining Minimum Vent Height Above the Roof.

#### **A** WARNING

Major U.S. building codes specify minimum chimney and/or vent height above the roof top. These minimum heights are necessary in the interest of safety. These specifications are summarized in Figure 9.



ROOF PITCH	H (Min.)
Flat to 6/12	12" (305 mm)
6/12 to 7/12	15" (381 mm)
Over 7/12 to 8/12	18" (457 mm)
Over 8/12 to 16/12	24" (610 mm)
Over 16/12 to 21/12	36" (914 mm)

Figure 9

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 down-drafting. In these cases, increasing the vent height may solve this problem.

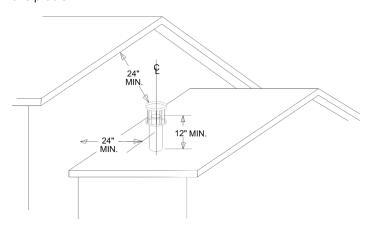


Figure 10

When terminating the vent cap near an exterior wall or overhang, maintain minimum clearances as shown in **Figure 10**.

#### **Vertical Through the Roof Applications**

The Gas Fireplace Insert has been approved for:

- a) Vertical installations up to 35 feet in height (top of insert to cap).
- b) Two sets of 45 degree elbow offsets (bends in flexvent) within the vertical installation. From 0 to a maximum of 8 ft. of vent pipe can be used between elbows.
- c) Wall straps must be used to support offset pipe every 4'. This application will require that you first determine the roof pitch and use the appropriate venting components.

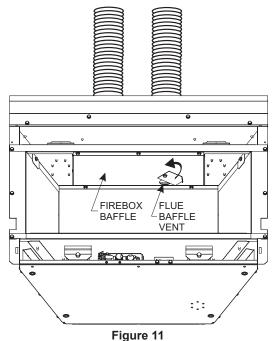
#### **General Maintenance**

Conduct an inspection of the venting system semi-annually. Recommended areas to inspect are as follows:

- Check areas of the venting system which are exposed to the elements for corrosion. These will appear as rust spots or streaks and, in extreme cases, holes. These components should immediately be replaced.
- 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 flex venting and subsequently dripping out at joints or seams. Condensate can cause corrosion of caps, pipe and fittings. It may be caused by having excessive lateral runs, or having exterior portions of the system exposed to cold weather.
- 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.

#### **Tall Vent Heights**

In some circumstances when venting vertically (20 to 30 feet), it may require that the flue baffle vent door be opened to improve performance. It is especially important during initial cold start-ups. To adjust, rotate the vent door enough to encourage better draft for improved combustion.



## **VERTICAL TERMINATION**

#### **Optional Inlet Air Restrictor Plate Installation**

**Note:** For certain installations with 20 to 35 feet vertical venting, or in high wind areas, the installation of the inlet air restrictor plate may be required. The optional restrictor plate is included in the instruction packet.

- If applicable, remove the glass door, log set and brick liner panels and set aside.
- 2. Remove the rear log support bracket by removing the two screws securing it to the log support and set aside.
- 3. Remove the rear log support by removing the three screws securing it to the firebox and set aside.
- Loosen the two bottom screws that secure the inlet air duct collar at the rear of the firebox. See Figure 12.
- Place the inlet air restrictor plate over the air intake opening. Align the plate with the loosened screws, shift the plate on the keyhole slots, then retighten the two screws. See Figure 12 for locating the inlet air duct opening.
- Reinstall the rear log support and three screws removed in step 3.
- 7. Reinstall the rear log support bracket and two screws removed in step 2.
- 8. Reinstall brick liner panels, log set and glass door.

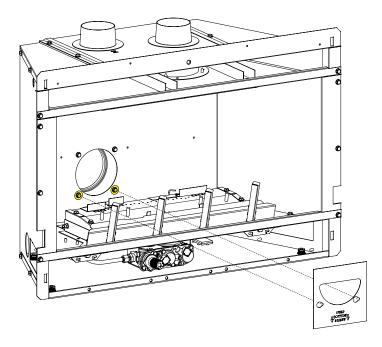


Figure 12

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### ALTERNATE ON/OFF SWITCH INSTALLATION

#### WIRING THE FIREPLACE

NOTICE: Electrical wiring must be installed by a licensed electrician.

#### **A** CAUTION

DISCONNECT REMOTE CONTROLS IF YOU ARE ABSENT FOR EXTENDED TIME PERIODS. THIS WILL PREVENT AC-CIDENTAL FIREPLACE OPERATION.

#### Installation of Alternate Surround Panel ON/OFF Switch

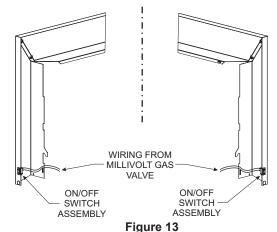
An ON/OFF switch and wire assembly are provided. They are included in the instruction packet.

Do not cut wire or insulation on metal edges.

#### **Contemporary Surrounds**

- Find the coiled low voltage wire assembly and ON/OFF switch located in the instruction packet.
- Millivolt Valve Attach the flag terminal ends to the "TH/TP" and "TH" terminals on the front terminal block of the gas valve. See Figure 15.
  - **"IP" Valve** Locate the two 5-1/2" long black wires connected to the ON/OFF switch. Disconnect these two black wires at the green and white wire connections. Attach the flag terminals (the low voltage wire assembly found in the Instruction Packet) to the green and white wire connections.
- Run the low voltage alternate switch wires up the back of the right or left surround panel. Then secure the wires with wire clips provided. See Figure 13.

#### Right Side Installation Left Side Installation



## Insert ON/OFF switch into side panel then attach wire assembly from valve terminals.

- Remove the switch knockout on the side surround panel, then install the ON/OFF switch.
- Connect the low voltage wires from the gas valve to the ON/OFF switch.
- 6. Attach the surround panel assembly to the insert. Place the surround panel assembly against the face of the insert and align the lower retaining tabs with the notches on the insert sides. Lift the surround panel assembly slightly until the bottom return flange (top panel) is positioned over the top flange on the insert. This secures the surround panel assembly to the insert without screws.

#### **Traditional Cast Iron Surrounds**

- 1. Find the coiled low voltage wire assembly and ON/OFF switch located in the instruction packet.
- Attach the flag terminal ends to the "TH/TP" and "TH" terminals on the front terminal block of the gas valve. See Figure 15.

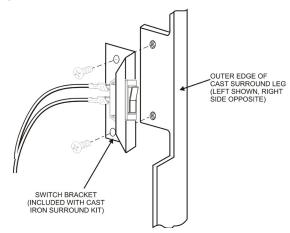
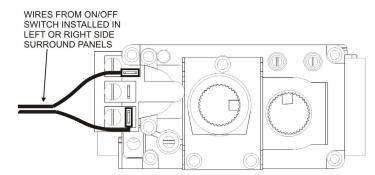


Figure 14

## NOTICE: For right side leg installation, reverse switch position in bracket.

- Run the low voltage alternate switch wires up the back of the right or left cast surround leg. Then secure them with the wire clips provided.
- Install the switch bracket with screws as shown in Figure 14 to the back of the cast surround leg.
- Install ON/OFF switch, and connect low-voltage wires from gas valve.
- 6. Attach cast surround panel assembly to the insert. Place the cast surround assembly against the face of the insert and align the lower retaining tabs with the notches on the insert sides. Lift the cast surround assembly slightly until the bottom return flange (top panel) is positioned over the top flange on the insert. This secures the cast surround assembly to the insert without screws.



NOTE: TO OPERATE INSERT WITH SIDE PANEL ON/OFF SWITCH, BE SURE TO PLACE THE MAIN SWITCH (TO THE RIGHT SIDE OF GAS VALVE) TO "OFF" POSITION.

Figure 15

## **BLOWER ACCESSORY INFORMATION**

The appliance, when installed must be electrically connected and grounded in accordance with local codes or, in the absence of local codes, with the current CSA C22.1 Canadian Electrical Code.

U.S. Installations, follow local codes and the National Electrical Code, ANSI/NFPA No. 70.

Should this blower require servicing, the power supply must be disconnected. For rewiring of any replacement components, refer to Figures 16 and 17 and the parts list on pages 30 and 31.

## BLOWER ACCESSORY Operation

The fireplace insert is equipped with a factory installed blower that includes a fan control switch, plus a rheostat (speed control).

The speed control knob is located behind the lower louver at the right side of the insert.

From a cold start, the temperature activated fan control switch will normally take 5-10 minutes to heat up and energize the blower.

Once the blower is energized, adjust the blower speed control as desired, then replace the lower louver.

When the insert is shut off, it may take 30-40 minutes for the heated unit to dissipate (cool down) enough for the blower to shut off automatically. **NOTICE**: The blower shut off times will vary on blower speed and BTU input level setting control by adjustment of the HI/LO knob located on the gas valve.

#### **Blower removal instructions**

Servicing or removal of the blower system must be performed by a qualified service person.

If the blower assembly must be replaced, the following steps are recommended for removal:

- 1. Turn off gas and disconnect the electrical supply.
- 2. Remove the glass door assembly.
- 3. Remove the log set.
- Remove the front surround panel assembly by lifting upward and outward to detach.
- 5. Remove the 5/16" x 2-1/2" center bolt that retains the Vent Slide plate assembly.
- Remove the insert from the fireplace cavity by pulling forward on the insert, and at the same time, sliding the vent plate rearward until disengaged.
- As the insert is moved outward, the gas line may need to be disconnected at the insert shut off valve. If so, make sure the main gas line is shut off that supplies gas to the insert.
- 8. Once the insert is pulled out, the blower assembly can be removed by locating the (6) screws on the lower back of the insert that retains the blower base plate.
- When the screws are removed, gently pull the blower assembly outward.
- 10. Disconnect the two 1/4" wire terminals from the motor.
- 11. Remove the (4) screws that retain the blower assembly to the base plate, and set blower aside.
- Install the replacement blower, and re-install the insert by reversing above steps.

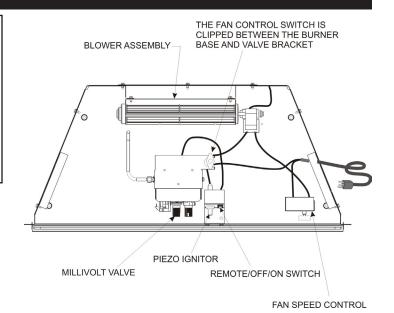
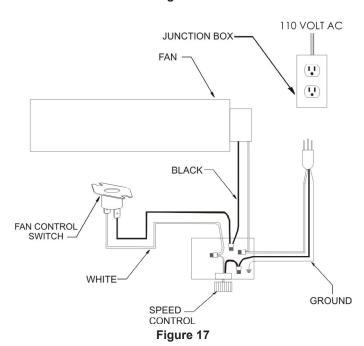


Figure 16



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## LOG PLACEMENT

Before you begin: This fireplace insert is supplied with a set of seven ceramic fiber logs. Do not handle these logs with your bare hands. Always wear gloves to prevent skin irritation from ceramic fibers. After handling logs, wash your hands gently with soap and water to remove any traces of fiber.

The positioning of logs is critical to safe and clean operation of this fireplace. Sooting and other problems may result if the logs are not properly and firmly positioned in the fireplace. Refer to **Figure 18** and **Figure 19** and corresponding WARNING when completing following log placement steps.

- 1. Remove top louver, grasp louver, lift and pull forward.
- 2. Lower bottom louver, lift and hinge forward.
- Release two glass frame spring clamps at bottom of the glass door assembly.
- 4. Swing the bottom of the glass door outward approximately 10-15 degrees, then grasping the edges, gently lift upward to remove the door assembly, and set aside.
- Remove the foam packaging that contains the log set from inside the firebox.
- Carefully unpack the logs and twigs. Spread them out for easy identification.
- 7. Begin with the front left and front right logs. Place these so that they are centered left to right on the front log support ledge. The flat bottoms will rest on top of the front log support ledge, and they must be position all the way forward and touching the back of the grate tangs. Two small tabs on the log support keep the two front logs from shifting rearward. Important: The front right log has a small knot as shown in Figure 18.
- 8. Next install the large rear log. It will be centered left to right and placed all the way to the back of the firebox, on top of the rear log support. NOTICE: DV25IN models incorporate two small tabs in the rear log support that keep the back log positioned correctly. DV33IN models have one small tab in the rear log support to ensure the back log is in the correct position. The DV35IN models will have two tabs bent forward in the rear log support to ensure proper left to right positioning of the log, plus one small tab near the center that keeps the back log from shifting forward.
- 9. Locate the center left log. It will have two locator pin holes on the bottom flat surface. Align the two holes with the two left pins on the burner assembly. Make sure this log is not raised up off of the burner. The flat bottom surface must be completely resting flat on the top of the burner surface.
- 10. Install the center right log. It will also have two locator pin holes on the bottom flat surface. Align these two holes with the two right pins on the burner assembly. Make sure this log is not raised up off of the burner. The flat bottom surface must be completely resting flat on the top of the burner surface.
- 11. Add the right twig by placing the locator pin hole on the bottom of the twig with the pin on top of the center right log. The tip of the right twig will rest on top of the rear log near the right end.
- 12. Add the left twig by placing the locator pin hole on the bottom of the twig with the pin on top of the center left log. The long branch of the left twig will rest in a small groove on top of the rear log. Note: The flat side of the twig will face the left side liner. This groove is near the left end of the rear log.
- 13. Replace the glass door assembly onto the fireplace insert.
- 14. Secure the glass door with the two spring clamps located under the firebox.
- 15. Re-install the upper and lower louver assemblies by aligning the end tabs with the slots provided in the outer face flanges of the insert.

#### **A** CAUTION

Decorative Rock is not included with the Fireplace Insert, however it may be purchased separately and placed only on the firebox floor. Do Not place decorative rock or rock wool on the logs or burner assembly.

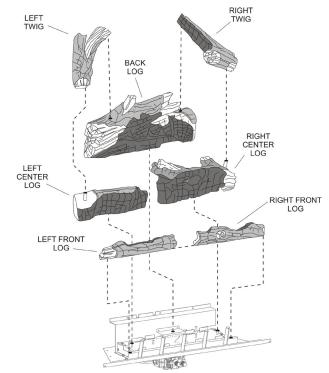


Figure 18

#### **A** WARNING

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.



NOTE: FRONT RIGHT LOG HAS A SMALL KNOT FOR IDENTIFICATION

Figure 19

**NOTICE:** Center the front two logs on the front log support ledge. Then make sure they are positioned all the way forward and touching the back edges of the grate tang uprights. The bottom of the two front logs are flat and must sit on top of the front log support ledge.

## **OPERATING INSTRUCTIONS**

#### 750 Millivolt System

The standing pilot (750 millivolt system) is a continuous burning pilot. The pilot remains ON even when the main burner is OFF.

When you ignite the pilot, the thermopile produces millivolts (electrical current) which energizes the magnet in the gas valve. After 30 seconds to 1 minute time period you can release the gas control knob and the pilot will stay ON. Allow your pilot flame to operate an additional one (1) to two (2) minutes before you turn the gas control knob from the PILOT position to the ON position. This time period allows the millivolts (electrical current) to build-up to a sufficient level allowing the gas control to operate properly.

 Follow the SAFETY and LIGHTING INSTRUCTIONS for standing pilot controls found in this manual and on labels found in control compartment behind the door assembly.

#### **A** WARNING

During the initial purging and subsequent lightings, never allow the gas valve control knob to remain depressed in the "pilot" position without pushing the piezo ignitor button at least once every second.

 During the operating season, leave the control valve knob in the "ON" position. This will allow the pilot flame to remain lit. Turn the burner flame on or off with the fireplace REMOTE/ OFF/ON switch, wall switch or remote controls.

**NOTICE:** The gas control valve allows you to increase or decrease the height of the main burner flame. The control valve has a pressure regulator with a knob as shown in **Figure 20**. Rotate the knob clockwise to "HI" to increase the flame height and counterclockwise to "LO" to decrease the flame height.

When the operating season is over, turn the REMOTE/OFF/ON switch to "OFF" and the control valve to "OFF". The system, including the pilot light, will be shut down.

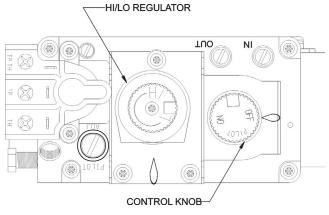


Figure 20

The OWNER should carefully read and follow these operating instructions at all times. Lower the door assembly to view the gas controls for the fireplace.

#### **Initial Lighting**

Upon completing the gas line or turning the gas valve on after it has been in the "OFF" position, a small amount of air will be in the lines. When first lighting the fireplace, it will take a few minutes for the lines to purge themselves of this air. Once the purging is complete, the fireplace will light and operate satisfactorily.

Subsequent lightings of the appliance will not require such purging if the gas valve is not turned to "OFF."

#### **Pilot Flame**

The thermopile/thermocouple (standing pilot) tips should be covered with flame.

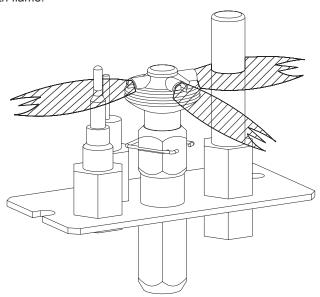


Figure 21

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## STANDING PILOT LIGHTING INSTRUCTIONS

### FOR YOUR SAFETY READ BEFORE LIGHTING

▲ WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- A. This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.
- B. Before lighting smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

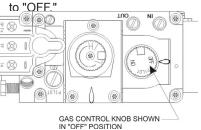
What To Do If You Smell Gas

- · Do not 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 cannot reach your gas supplier, call the fire department.
- C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it; call a qualified service technician. Force or attempted repair may result in a fire or explosion.
- D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

### LIGHTING INSTRUCTIONS

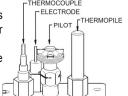
- 1. Stop! Read the safety information above.
- 2. Set REMOTE/OFF/ON switch to OFF.
- 3. Turn off all electric power to the appliance (if applicable).
- 4. Lower bottom louver assembly.
- 5. Push in gas control knob slightly and turn clockwise





Note: Knob cannot be turned from "PILOT" to "OFF" unless knob is pushed in slightly. Do not force.

- 6. Wait ten (10) minutes to clear out any gas. Then smell for gas, including near the floor. If you then smell gas, STOP! Follow "B" in the safety information above. If you do not smell gas, go to the next step.
  THERMOCOUPLE
- 7. Find pilot Follow metal tube from gas control. The pilot is behind the burner on the right side.
- Turn gas control knob counterclockwise to "PILOT."



- 9. Push in control knob all the way and hold in. Repeatedly push the piezo ignitor button until the pilot is lit. Continue to hold the control knob in the for about one (1) minute after the pilot is lit. Release knob, and it will pop back up. Pilot should remain lit. If it goes out, repeat steps 5 through 9.
  - If the control knob does not pop up when released, STOP and IMMEDIATELY call a qualified service technician or gas supplier.
  - If the pilot will not stay lit after several tries, turn the gas control knob to "OFF" and call your service technician or gas supplier.
- 10. Turn gas control knob counterclockwise to "ON."
- 11. Close bottom louver assembly.
- 12. Turn on all electric power to the appliance (if applicable).
- 13. Set REMOTE/OFF/ON switch to desired setting.

## TO TURN OFF GAS TO FIREPLACE

- Set REMOTE/OFF/ON switch to OFF.
- 2. Turn off all electric power to the appliance if service is to be performed (if applicable).
- 3. Lower bottom louver assembly.

- Push in gas control knob slightly and turn clockwise to "OFF." Do not force.
- Close bottom louver assembly.

### STANDING PILOT WIRING

For Standing Pilot Ignition Wiring: Appliance Requirements

#### **A** WARNING

DO NOT CONNECT 110-120 VAC TO THE GAS CONTROL VALVE OR THE APPLIANCE WILL MALFUNCTION AND THE VALVE WILL BE DESTROYED.

#### **Optional Wall Switch**

Position the wall switch in the desired position on a wall. Run a maximum of 25 feet (7.8m) or less length of 18 A.W.G. minimum wire and connect it to the fireplace valve pigtails.

#### **MARNING**

DO NOT CONNECT THE 110-120 VAC TO THE WALL SWITCH OR THE CONTROL VALVE WILL BE DESTROYED.

#### **A** WARNING

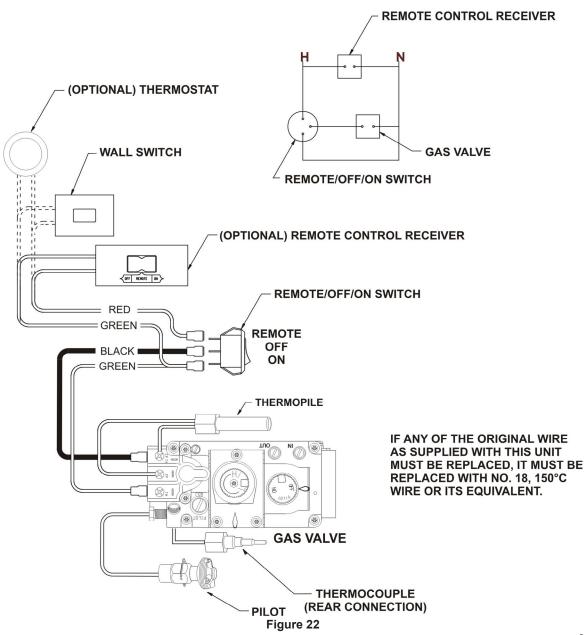
LABEL ALL WIRES PRIOR TO DISCONNECTION WHEN SERVICING CONTROL. WIRING ERRORS CAN CAUSE IMPROPER AND DANGEROUS OPERATION. VERIFY PROPER OPERATION AFTER SERVICING.

#### **A** WARNING

#### **Electrical Grounding Instructions**

This appliance is equipped with a three-prong (grounding) plug for your protection against shock hazard and should be plugged directly into a properly grounded three-prong receptacle. Do not cut or remove the groundig prong from this plug.

### STANDING PILOT WIRING DIAGRAM



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## STANDING PILOT TROUBLESHOOTING

With proper installation and maintenance, your new Direct Vent Gas Fireplace will provide years of trouble-free service. If you do experience a problem, refer to the Trouble Shooting Guide below. This guide will assist a qualified service person in the diagnosis of problems and the corrective action to be taken.

#### Spark ignitor will not light pilot after repeated triggering of piezo ignitor button.

- a. Defective ignitor (no spark electrode)
  - —Check for spark at electrode and pilot; if no spark and electrode wire is properly connected, replace ignitor.
- b. No gas or low gas pressure.
  - —Check remote shut off valves from fireplace. Usually there is a valve near the main. There can be more than one (1) valve between the fireplace and main.
  - —Low pressure can be caused by a variety of situations such as a bent line, too narrow diameter of pipe, or low line pressure. Consult with plumber or gas supplier.
- c. No LP in tank.
  - —Check LP (propane) tank. Refill tank.

#### Pilot will not stay lit after carefully following lighting instructions.

- a. Defective thermocouple.
  - —Check that pilot flame impinges on thermocouple. Clean and/or adjust pilot for maximum flame impingement.
  - —Ensure the thermocouple connection at the gas valve is fully inserted and tight (hand tight plus 1/4 turn). Faulty thermocouple if reading is below specified minimum of 15 millivolts.
  - —Disconnect the thermocouple from the valve, place one millivolt meter lead wire on the end of the thermocouple and the other millivolt meter lead wire on the thermocouple copper wire. Start the pilot and hold the valve knob in. If the millivolt reading is less than 15 millivolt, replace the thermocouple.
- b. Defective valve.
  - —If thermocouple is producing more than 15 millivolts, replace faulty valve.

## 3. Pilot burning, no gas to burner, valve knob "ON", REMOTE/ OFF/ON switch "ON."

- REMOTE/OFF/ON switch, wall switch, remote control or wires defective.
  - —Check REMOTE/OFF/ON switch and wires for proper connections. Place jumper wires across terminal at switch. If burner comes on, replace defective switch. If OK, place jumper wires across switch wires at gas valve-if burner comes on, wires are faulty or connections are bad.
- b. Thermopile may not be generating sufficient millivolts.
   —If the pilot flame is not close enough physically to the
  - —If the pilot flame is not close enough physically to the thermopile, adjust the pilot flame.
  - —Be sure the wire connections from the thermopile at the gas valve terminals are tight and the thermopile is fully inserted into the pilot bracket.
  - —Check the thermopile with a millivolt meter. Take the reading at TH-TP & TP terminals of the gas valve. The meter should read 350 millivolts minimum, while holding the valve knob depressed in the PILOT position, with the pilot lit, and the REMOTE/OFF/ON switch in the OFF position. Replace the faulty thermopile if the reading is below the specified minimum.

- —With the pilot in the ON position, disconnect the thermopile leads from the valve. Take a reading at the thermopile leads. The reading should be 350 millivolts minimum. Replace the thermopile if the reading is below the minimum.
- c. Defective valve.
  - —Turn valve knob to ON. Place REMOTE/OFF/ON switch to ON. Check with millivolt meter at thermopile terminals. Millivolt meter should read greater than 200 millivolts. If the reading is okay and the main burner does not ignite, replace the gas valve.
- d. Plugged main burner orifice.
- —Check main burner orifice for blockage and remove.

#### 4. Frequent pilot outage problem.

- a. Pilot flame may be too high or too low, or blowing (high), causing pilot safety to drop out.
  - —Clean and adjust flame for maximum flame impingement on the thermocouple. Follow lighting instructions carefully.

#### . The pilot and main burner extinguish while in operation.

- a. No LP (Propane) in tank.
  - Check LP (Propane) tank. Refill fuel tank.
- b. Inner vent pipe leaking exhaust gases back into system.
   —Check for leaks.
- c. Glass too loose, gasket leaks in corners after usage.
  - -Be certain glass assembly is installed correctly.
- d. Horizontal vent improperly pitched.
  - —The horizontal vent cap should slope down only enough to prevent any water from entering the unit. The maximum downwards slope is 1/4 inch.
- e. Bad thermopile or thermocouple.
  - -Replace if necessary.
- f. Improper vent cap installation.
  - —Check for proper installation and freedom from debris or blockage.

#### 6. Glass soots, and/or soot deposits collected on logs.

- a. Flame impingement on logs incorrect.
  - —Check and adjust log position. See Page 17. Contact Empire Comfort Systems, Inc.
- b. Debris around throat of main burner.
  - —Inspect the opening at the base of the main burner. It is imperative that <u>NO</u> material be placed in this opening.

#### 7. Flame burns blue and lifts off main burner.

- a. Insufficient oxygen being supplied.
  - —Check to make sure vent cap is installed properly and free of debris. Make sure that vent system joints are tight and have no leaks.
  - —Check to make sure that no material has been placed at the main burner base.

## IPI ELECTRONIC SYSTEM OPERATING INSTRUCTIONS

#### 5.25 VDC ELECTRONIC CONTROL VALVE

The electronic control valve system includes the ability to switch the pilot from a standing pilot mode to an intermittent pilot mode.

- IPI Mode In the Intermittent Pilot mode, when the unit is turned ON, it will cause spark to the pilot, light the pilot, then allow the burner to light. When the unit is turned to OFF, both the burner and pilot will be OFF.
- CPI Mode In the Continuous Pilot mode, the pilot remains ON continuously even when the burner is turned OFF.

Note: A small toggle switch is located on the front of the module tray that is used to switch from IPI (left position) to the CPI (right position). See Figure 23.

When the unit is turned to ON, the electrical current will energize a spark to the pilot igniter. Once the pilot sensor heats up (after a few seconds), the valve will be energized, allowing gas to flow to the burner.

#### AC/DC Adapter

An AC/DC adapter is located in the Instruction Packet. To install, connect the adapter to the mating female connector located near the gas valve. Run the adapter plug out one of the side openings of the insert in a similar manner as the blower power cord, then plug the adapter into a 120V receptacle.

 Follow the SAFETY and LIGHTING INSTRUCTIONS for Intermittent Pilot controls found in this manual, and on labels found in the control compartment located in the lower cavity of the appliance.

- During the operating season (or in power outage periods), it is recommended that the pilot remain in the CPI (standing pilot mode) to reduce cold start issues, and/or conserve battery backup power during a power outage.
- The gas valve has inlet and outlet pressure taps as shown in Figure 23. Refer to pages 8 and 9 for gas pressure requirements.

Note: The gas control has a manual HI/LO flame adjustment knob (regulator) that allows you to increase or decrease the height of the burner flame. See Figure 23. Rotate the HI/LO knob counterclockwise to "HI" to increase the flame height, and clockwise to "LO" to decrease the flame height.

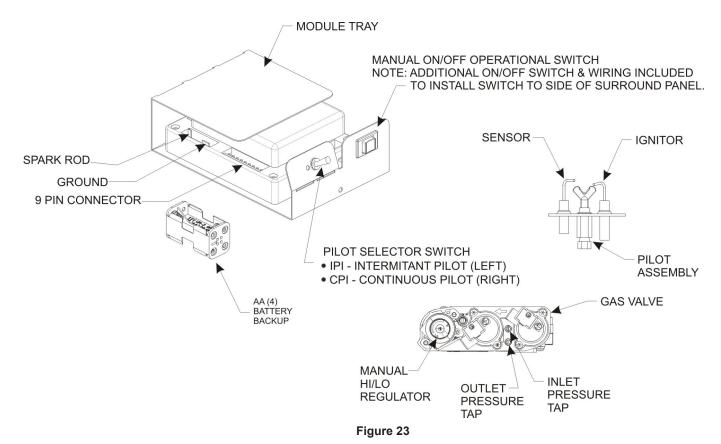
#### **OPTIONAL REMOTE CONTROLS**

Optional remote controls are available for use with this appliance. It is recommended that the remote receiver be placed either in a wall outlet box with extended wiring, on the fireplace hearth, behind the left side surround panel, or in the control compartment area as far forward in the insert as possible.

The placement options for the remote receiver are given to allow flexibility however, battery life will be extended if the receiver is placed in cooler areas.

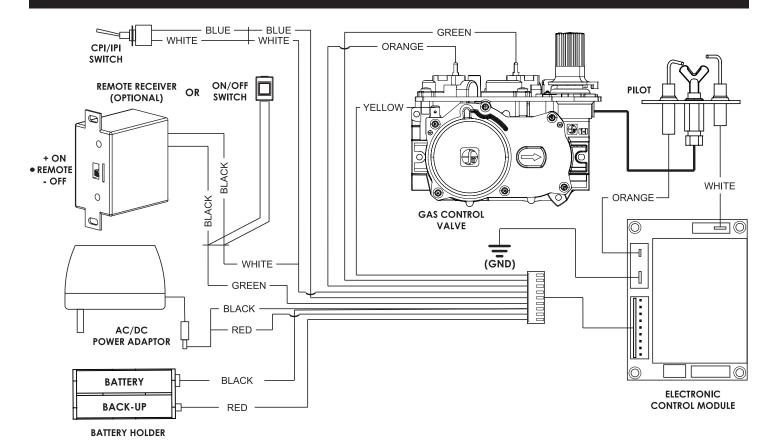
To connect the remote receiver to the appliance, first disconnect the ON/OFF switch wires from the white and green wire connectors and connect the wires from the remote receiver to the green and white wire connectors. See Page 23.

Follow the instructions included with the remote control for programming and other operational information.



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## **IPI ELECTRONIC SYSTEM WIRING DIAGRAM**



If any of the original wire as supplied with this unit must be replaced, it must be replaced with equivalent gauge and temperature rated wire.

This appliance is only for use with the type of gas indicated on the rating plate and may be installed in an aftermarket, permanently located, manufactured (mobile) home where not prohibited by local codes. This appliance is not convertible for use with other gases, unless a certified kit is used.

#### **A** CAUTION

Do not operate the appliance with panel(s) removed, cracked or broken. Replacement of the panel(s) should be done by a licensed or qualified service person.

#### **A** WARNING

Improper installation, adjustment, alteration, service or maintenance can cause property damage, personal injury or loss of life. Installation and service must be performed by a qualified installer, service agency or the gas supplier.

#### **A** WARNING

#### **Electrical Grounding Instructions**

This appliance is equipped with a three-prong (grounding) plug for your protection against shock hazard and should be plugged directly into a properly grounded three-prong receptacle. Do not cut or remove the grounding prong from this plug.

### INTERMITTENT PILOT LIGHTING INSTRUCTIONS

### FOR YOUR SAFETY READ BEFORE LIGHTING



⚠ WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- A. This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.
- B. Before lighting smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

What To Do If You Smell Gas

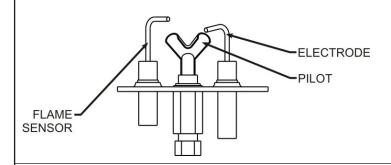
- · Do not try to light any appliance.
- · Do not touch any electrical switch;
- · Do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone.
   Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

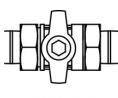
- C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it; call a qualified service technician. Force or attempted repair may result in a fire or explosion.
- D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

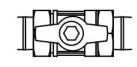
### LIGHTING INSTRUCTIONS

- 1. STOP! Read the safety information above.
- 2. Turn OFF electric power to the appliance.
- Remove front surround panel assembly or bottom louver if included.
- 4. Turn gas cock counterclockwise to "On" position.
- Wait ten (10) 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 page. If you do not smell gas, go to the next step.
- 6. Turn ON electric power to the appliance.
- Find pilot Follow metal tube from gas control. The pilot is behind the burner on the right side.
- 8. Turn main flame to on. If the pilot does not light within 60 seconds, stop and go to Step 5.
- 9. Refer to remote control instructions for detailed information, control features, and operation. Note: There is a CPI/IPI switch behind the right side panel that allows for a continuous standing pilot mode or an intermittent pilot mode. See appliance manual for location of this switch. 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.
- 10. If the burner or pilot does not operate properly after several tries, turn the gas cock clockwise to "OFF" and call your service technician or gas supplier.
- Replace the front surround assembly or close bottom louver assembly.
- 12. Operation of the gas valve is controlled by a manual on/ off switch or a hand held remote control. Refer to remote instructions for detailed operation information.

**GAS COCK** 







OFF

ON

## TO TURN OFF GAS TO FIREPLACE

- Set REMOTE/OFF/ON switch to OFF.
- Turn off all electric power to the appliance if service is to be performed (if applicable).
- Lower bottom louver assembly.

- Push in gas control knob slightly and turn clockwise to "OFF." Do not force.
- Close bottom louver assembly.

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## INTERMITTENT CONTROL SYSTEM TROUBLESHOOTING

#### **Brief Description of the Components**

The gas valve is fitted with a manual HI/LO knob to allow for manual modulation of the gas outlet pressure to the appliance burner. The controls are designed to be used with either LPG or Natural Gas and can be converted by use of an OEM supplied conversion kit.

The Digital Fireplace Control (DFC) is an automatic gas ignition system based on a single microcontroller core. This control manages all functions related to ignition, flame sensing and supervision for atmospheric applications.

The DFC can be set to provide continuous or intermittent ignition control sequences and flame monitoring with safety shutdown in case of failure.

The DFC is set up as a stand alone (AC powered system with battery back up. See Lighting Instructions on page 24 and Wiring Diagram on page 23.

#### **Troubleshooting**

Before proceeding with the procedures in the following troubleshooting table, verify that the power supply (AC/DC adapter) is present and that the batteries inside the receiver and/or optional battery pack are fresh and installed with correct polarity.

Make sure all the connections between the wire harnesses and system components are proper and positive.

Verify that the static inlet pressure meets the manufacturer's recommended inlet pressure. If necessary adjust the line pressure regulator.

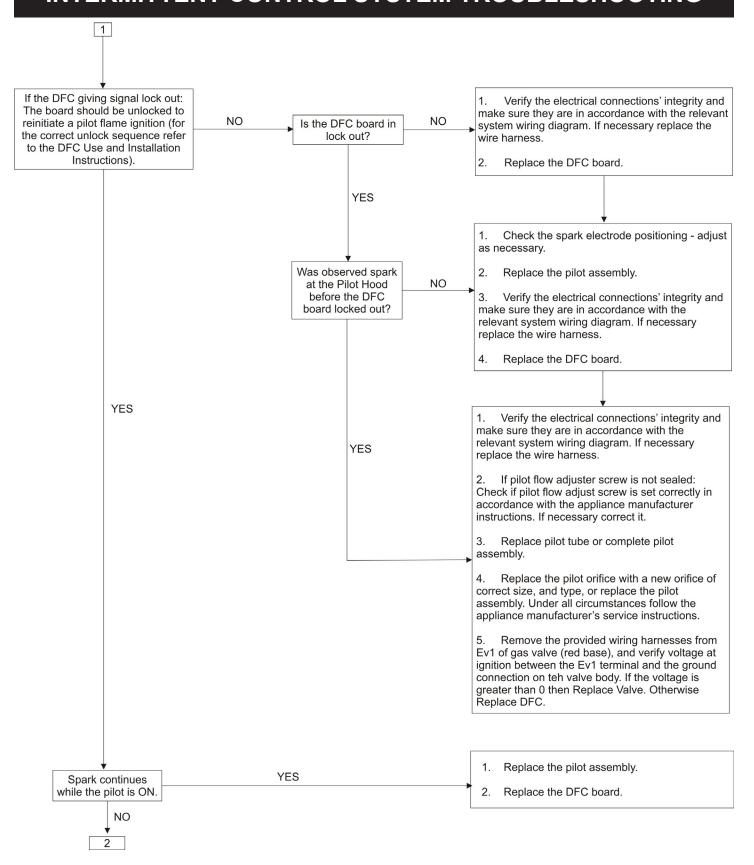
If the recommended actions for the following troubleshooting chart do not help to address the problem consider replacing wiring harnesses.

#### WARNING:

Any actions performed on the gas valve must be performed in accordance with this instruction manual. Likewise, any actions performed on the DFC or other system components must be done in accordance with the individual component instructions.

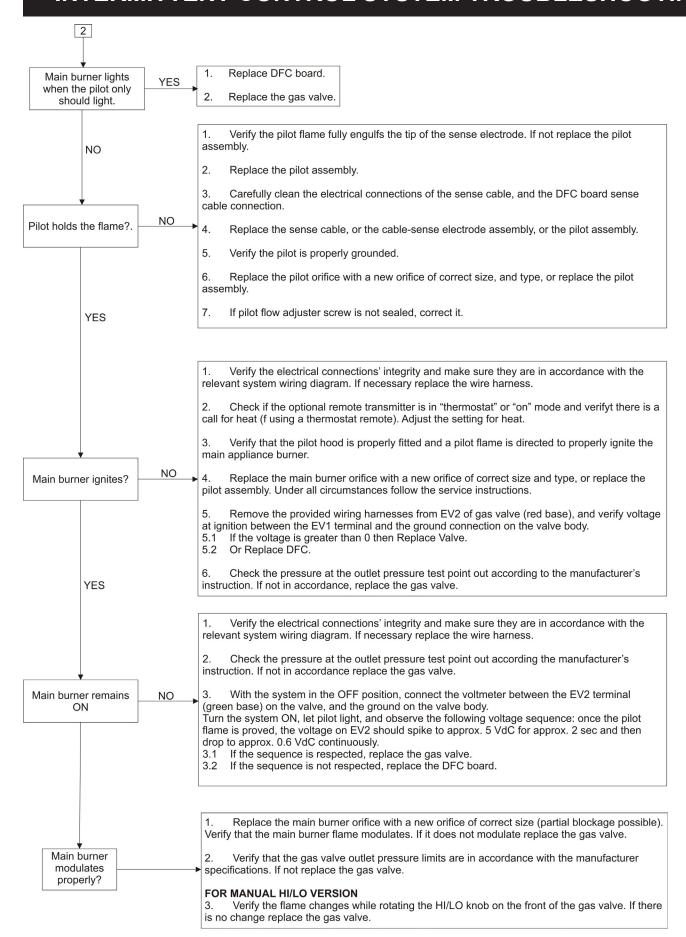
Replacement of components must be performed in accordance with this instructions manual.

## INTERMITTENT CONTROL SYSTEM TROUBLESHOOTING



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## INTERMITTENT CONTROL SYSTEM TROUBLESHOOTING



## **INSERT MAINTENANCE AND SERVICE**

#### NOTE

It is normal for steel appliances to make 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 oil from the manufacturing process.

If odor becomes offensive, open windows.

#### **General Glass Information**

#### **MARNING**

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.

#### **A** WARNING

- 1. The use of substitute glass will void all product warranties.
- 2. Avoid breaking the glass.
- Do not operate this appliance without the glass front or with a broken glass front. Have a qualified service person replace damaged glass and gasket using materials specified by Empire Comfort Systems.
- Do not abuse or strike the glass.

#### **A** WARNING

Do not use Ammonia based or abrasive cleaners on glass. Do not attempt to clean glass when glass is hot.

#### **Cleaning Glass Door**

**Frequency:** After the first 3 to 4 hours of use. As necessary after initial cleaning.

By: Home owner.

**Task:** Remove and clean glass after the first 3 to 4 hours of use. After the initial cleaning, clean as necessary. Film deposits on the inside of the glass door should be cleaned off using a household glass cleaner.

#### **A** CAUTION

DO NOT handle or attempt to clean the door when it is hot and DO NOT use abrasive cleaners.

#### **Glass Door Removal**

- Remove the top louver by grasping the louver, then lift upward and pull forward.
- 2. Remove the bottom louver by lifting up and pulling forward.
- 3. Locate the bottom two glass frame spring clamps. Pull forward and down to release them from the Glass Door frame.
- Remove the Glass Door by pulling the bottom of the door outward several inches, then lift upwards to disengage it from the firebox upper flange.
- 5. Do not abuse the glass by striking or hitting the glass.

Although the frequency of servicing and maintenance will depend on use and the type of installation, you should have a qualified service technician perform an appliance checkup at the beginning of each heating season. Specific guidelines regarding each appliance maintenance task are listed below.

#### **Glass Door Installation**

- 1. When installing the Glass Door assembly, make sure that the door top flange is hooked over the firebox top flange as illustrated in the "Correct" view in Figure 24.
  - Important: Do not allow the gasket across the top of the door to roll up on top of the firebox flange as shown in "Incorrect" view in Figure 24.
- To install correctly, the door should be held at an angle outward from the firebox as shown in the illustration, then carefully engage the upper flange of the door frame with the top flange of the firebox. Center the door left to right, then allow the bottom of the door to swing inward to seal against the firebox front.
- 3. Once the glass door is placed flat to the firebox front edges, engage the two spring latches to the bottom flange on the glass door frame to secure the door assembly.
- 4. Replace the top and bottom louvers.

## IMPORTANT: TURN OFF THE GAS BEFORE SERVICING YOUR APPLIANCE.

#### **Cleaning Burner and Controls**

Frequency: Once annually.

By: Qualified service technician.

**Task:** Brush or vacuum the control compartment, fireplace logs and burner areas surrounding the logs.

#### **Checking Flame Patterns, Flame Height**

Frequency: Periodically.

By: Qualified service technician/Home owner.

**Task:** Make a visual check of your fireplace's flame patterns.

Make sure the flames are steady - not lifting or floating. The thermopile/thermocouple (standing pilot) tips should be covered with flame. See Figure 21.

#### **Checking Vent System**

**Frequency:** Before initial use and at least annually thereafter, more frequently if possible.

By: Qualified service technician/Home owner.

**Task:** Inspect the external vent cap on a regular basis to ensure that no debris is interfering with the flow of air. Inspect entire vent system for proper function.

#### **Cleaning Logs**

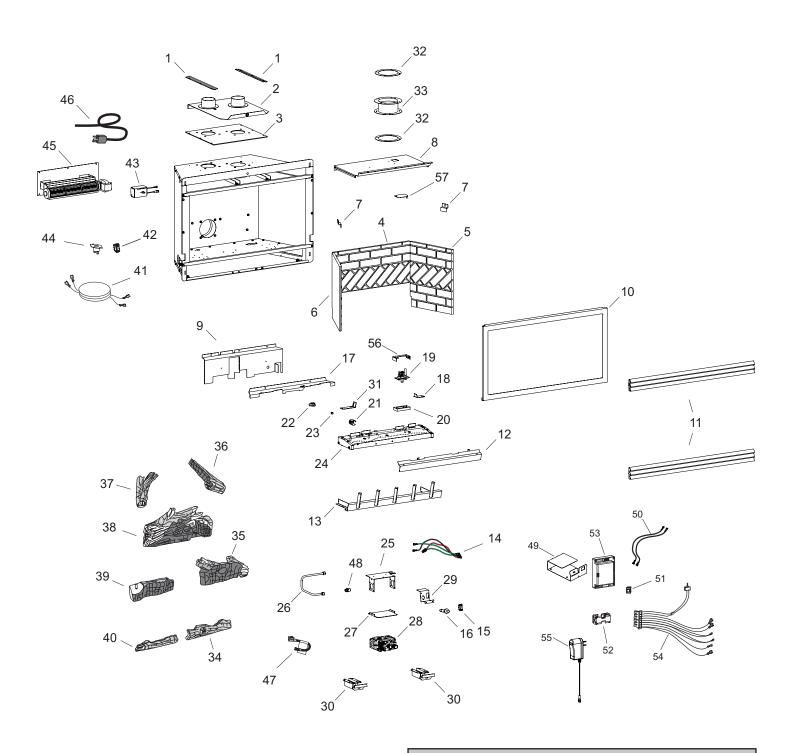
Use a soft brush attachment on a vacuum cleaner to gently remove dust or soot deposits from logs and burner.



Figure 24

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## **INSERT PARTS VIEW**



## **A** WARNING

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

# **INSERT PARTS LIST**

INDEX	PART NUMBER						
NO.	<b>DV25IN33</b>	DV25IN73	DV33IN33L	DV33IN73L	DV35IN33L	DV35IN73L	DESCRIPTION
1	22950	22950	22950	22950	22950	22950	GUIDE, FLUE CONNECTOR
2	23309	23309	23211	23211	23211	23211	VENT SLIDE PLATE ASSEMBLY
3	R9188	R9188	R9188	R9188	R9188	R9188	GASKET, TOP
4	R9192	R9192	R9196	R9196	R9199	R9199	BRICK PANEL, BACK
5	R9195	R9195	R9198	R9198	R9201	R9201	BRICK PANEL, RIGHT
6	R9194	R9194	R9197	R9197	R9200	R9200	BRICK PANEL, LEFT
7	20448	20448	20448	20448	20448	20448	BRICK LINER BRACKET
8	22951	22951	22972	22972	22972	22972	FIREBOX BAFFLE
9	22958	22958	22976	22976	22990	22990	LOG SHELF
10	23303	23303	23006	23006	23320	23320	GLASS DOOR & FRAME ASSEMBLY
11	23329	23329	17169	17169	17127	17127	LOUVER ASSEMBLY (2 REQUIRED)
12	26140	26140	25549	25549	25549	25549	LOG SUPPORT, FRONT
13	23315	23315	23024	23024	23024	23024	GRATE TANG / BRACKET ASSEMBLY
14	R10947	R10947	R10947	R10947	R10947	R10947	WIRE ASSEMBLY
15	R3436	R3436	R3436	R3436	R3436	R3436	SWITCH, REMOTE/OFF/ON
16	R2708	R2708	R2708	R2708	R2708	R2708	IGNITER, PIEZO
17	26141	26141	25550	25550	25551	25551	LOG SUPPORT, REAR
18	-	-	25547	25547	25547	25547	FLAME SHIELD, RIGHT
19a	R7612	R10423	R7612	R10423	R7612	R10423	PILOT ASSEMBLY, (NAT)
19b	R7611	R10424	R7611	R10424	R7611	R10424	PILOT ASSEMBLY, (LP)
20	R9189	R9189	R9189	R9189	R9189	R9189	GASKET, PILOT
21	R5676	R5676	R5676	R5676	R5676	R5676	AIR SHUTTER
22	P253	P253	P253	P253	P253	P253	FITTING, ORIFICE ANGLED
23a	P286	P286	P243	P243	P184	P184	ORIFICE, MAIN BURNER (NAT)
23b	P214	P214	P258	P258	P250	P250	ORIFICE, MAIN BURNER (LP)
24	26144	26144	25541	25541	25541	25541	BURNER ASSEMBLY
25	22959	29400	22959	29400	22959	29400	VALVE BRACKET
26	22739	22739	22738	22738	22738	22738	TUBING ASSEMBLY
27	22973	22973	22973	22973	22973	22973	SHIELD, VALVE
28a	R7577	R11125	R7577	R11125	R7577	R11125	VALVE, SIT GAS (NAT)
28b	R7578	R11126	R7578	R11126	R7578	R11126	VALVE, SIT GAS (LP)
29	22953	22953	22953	22953	22953	22953	PIEZO BRACKET

### **A** WARNING

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

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# **INSERT PARTS LIST**

INDEX	PART NUMBER					DESCRIPTION	
NO.	<b>DV25IN33</b>	DV25IN73	DV33IN33L	DV33IN73L	DV35IN33L	DV35IN73L	DESCRIPTION
30	16223	16223	16223	16223	16223	16223	SPRING RETAINER ASSEMBLY
31	-	-	25548	25548	25548	25548	FLAME SHIELD, LEFT
32	M163	M163	M163	M163	M163	M163	GASKET, FLUE CONNECTOR
33	23009	23009	23009	23009	23009	23009	FLUE CONNECTOR ASSEMBLY
34	R9257	R9257	R9219	R9219	R9219	R9219	LOG, RIGHT FRONT
35	R9258	R9258	R9220	R9220	R9220	R9220	LOG, RIGHT CENTER
36	R9260	R9260	R9252	R9252	R9252	R9252	TWIG, RIGHT
37	R9261	R9261	R9253	R9253	R9253	R9253	TWIG, LEFT
38	R9255	R9255	R9217	R9217	R9217	R9217	LOG, BACK
39	R9259	R9259	R9251	R9251	R9251	R9251	LOG, LEFT CENTER
40	R9256	R9256	R9218	R9218	R9218	R9218	LOG, LEFT FRONT
41	R9268	R9268	R9268	R9268	R9268	R9268	WIRE ASSEMBLY - SWITCH
42	R2522	R2522	R2522	R2522	R2522	R2522	SWITCH, ON / OFF
43	18879	18879	18879	18879	18879	18879	RHEOSTAT ASSEMBLY (SPEED CONTROL)
44	33411	33411	33411	33411	33411	33411	SWITCH ASSEMBLY
45	24925	24925	24925	24925	24925	24925	BLOWER SUB-ASSEMBLY (W/MOUNTING PLATE, PAD)
46	R2204	R2204	R2204	R2204	R2204	R2204	CORD SET
47	R10961	R10961	R10961	R10961	R10961	R10961	FLEXLINE W/SHUTOFF VALVE
48	R2423	R2423	R2423	R2423	R2423	R2423	CONNECTOR, MALE
49	-	29382	-	29382	-	29382	TRAY, MODULE
50	-	R2667	-	R2667	-	R2667	WIRE 5-1/2" BLACK (QTY 2)
51	-	R2522	-	R2522	-	R2522	ON/OFF SWITCH
52	-	R11122	-	R11122	-	R11122	BATTERY HOLDER
53	-	R11127	-	R11127	-	R11127	DFC CONTROL BOARD
54	-	R11123	-	R11123	-	R11123	WIRE HARNESS
55	-	R11128	-	R11128	-	R11128	AC ADAPTOR, 7.0 VDC
56	31300	31300	31300	31300	31300	31300	BRACKET, PILOT ALIGNMENT
57	-	-	27860	27860	27860	27860	PLATE, FIREBOX BAFFLE
NS	R9212	R9212	R9212	R9212	R9212	R9212	BOLT, 5/16-18 X 2 1/2 HEX HEAD (QTY 4)
NS	R11497	R11497	R11497	R11497	R11497	R11497	BOLT, 5/16-18 X 2 1/2 BUTTON HEAD

NS - Not Shown

## **▲** WARNING

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

### **MASTER PARTS DISTRIBUTOR LIST**

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.

#### **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

#### Victor Division of 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 . . .

2	
Appliance Model Number	Part Description
Appliance Serial Number	Part Number
Type of Gas (Propane or Natural)	
Do not order bolts, screws, washers or nuts. They are standard hardwa	are items and can be purchased at any local hardware store.
Shipments contingent upon strikes, fires and all causes beyond our cor	ntrol.

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## **IMPORTANT SAFETY INFORMATION**

#### **Definitions:**

▲ DANGER: Indicates a hazardous situation which, if not avoided, will result in death or serious injury.

**A** WARNING: Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

**A** CAUTION: Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE: Addresses practices not related to personal injury.

#### **MARNING**

Read and follow these safety precautions prior to operating this appliance. Failure to follow these precautions may result in death, injury, or property damage.

#### **Safety Precautions**

Before enclosing the vent pipe assembly, operate the appliance to ensure it is venting properly.

DO NOT OPERATE THIS APPLIANCE WITH-OUT GLASS FRONT PANEL INSTALLED.

#### **A** CAUTION

If the glass used in your fireplace is cracked or damaged in any way, it should be replaced only with a complete glass frame assembly from Empire. See parts list on Pages 30 to 31 for ordering.

- Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies
- If this appliance is installed directly on carpeting, tile or other combustible material other than wood flooring the appliance must 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 hazrds of high surface temperature and should stay away to avoid burns or clothing ignition. Alert people – and especially children – to the hazards of high surface temperatures. This heater may become hot enough to burn skin and ignite clothing after prolonged contact. To prevent injury, caution people to stay clear and avoid touching the heater.
- Young children should be carefully supervised when they
  are in the same room as the appliance. Toddlers, young
  children, and others may be susceptible to accidental
  contract burns. Aphysical barrier is recommended if there
  are at-risk individuals in the house. To restrictr access to
  a fireplace or stove, install an adjustable safety gate to
  keep toddlers, young children, and other at-risk individuals
  out of the room and away from hot surfaces.

- Always keep the appliance area clear and free from combustible material, gasoline and other flammable vapors and liquids.
- This appliance must not share or be connected to a flue serving a separate solid-fuel burning appliance.
- The vent cap, located on the outside of your home, will become very hot. Alert everyone, adults and children, to stay clear and avoid touching the vent cap. Keep the area around the vent cap clear of combustibles, including shrubs and trees.
- Under no circumstances should any solid fuels (wood, coal, paper or cardboard etc.) be used in this appliance.
- This appliance requires an unimpeded flow of air to circulate warm air. Do not place objects on or around the appliance that may restrict air flow to or from the appliance.
- Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.
- Keep the area around the heater free of combustible materials – including drapery, upholstered furniture, paper, boxes, and clothing.
- 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, guard, or barrier removed to service an appliance must be replaced prior to operating the appliance.
- If the barrier becomes damaged, the barrier shall be replaced with the manufacturer's barrier for this appliance.
- Only trim kit(s) supplied by the manufacturer shall be used in the installation of this appliance.

## **IMPORTANT SAFETY INFORMATION**

#### **Maintenance Precautions**

- 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 material, etc. It is imperative that control compartments, burners and circulating air passageways of the appliance be kept clean.
- · Keep burner and control compartment clean.
- Examine venting system periodically and replace damaged parts.
- Make a periodic visual check of pilot and burners. Clean and replace damaged parts.

#### **Damaged Heater**

- Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.
- In the event of a natural disaster (tornado, earthquake, fire, etc.) have a qualified technician inspect the heater for damage or potential gas leaks. Repair or replace any damaged components before operating this heater.

#### **A** WARNING

Do not operate this gas log set with glass doors closed.

- Clothing or other flammable material should not be placed on or near the appliance.
- Do not place trash or other articles on the log set during operation.
- During manufacturing, fabricating and shipping, various components of this appliance are treated with certain oils, films or bonding agents. These bonding agents are not harmful but may produce annoying smoke and smells as they are burned off during initial operation of the appliance. This is a normal temporary occurrence. A window should be opened during the initial bake out period.
- Keep burner and control compartment clean.
- 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, hair from pets, etc. It is imperative that control compartments, burners and circulating air passageways of the appliance be kept clean.
- Do not put anything around the fireplace that will obstruct the flow of ventilation air.
- Do keep the appliance area clear and free from combustible material, gasoline and other flammable vapors and liquids.

- A yearly examination and cleaning of the venting system of the solid-fuel burning fireplace must be performed by a qualified agency.
- Do make a periodic visual check of pilot and burners.
   Clean and replace damaged parts.
- Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

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### SAFETY INFORMATION FOR USERS OF LP-GAS

Propane (LP-Gas) 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.

#### **LP-GAS WARNING ODOR**

If a gas leak happens, you should be able to smell the gas because of the odorant put in the LP-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.
- LP-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 LP-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 LP-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 LP-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 LP-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.

LP-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 LP-gas. Your local LP-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 LP-Gas has a weak or abnormal odor, call your LP-Gas
  Dealer.
- If you are not qualified, do not light pilot lights, perform service, or make adjustments to appliances on the LP-Gas system. If you are qualified, consciously think about the odor of LP-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 LP-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 LP-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 LP-gas dealer. A periodic sniff test of the LP-gas is a good safety measure under any condition.
- If, at any time, you do not smell the LP-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 LP-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.

### **WARRANTY**

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. 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 your specific legal rights, and you may also have other rights, which vary from state to state.



Empire Comfort Systems Inc. 918 Freeburg Ave. Belleville, IL 62220

If you have a general question about our products, please e-mail us at info@empirecomfort.com.

If you have a service or repair question, please contact your dealer.

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