

P/N 900344-00 Rev. NC 01/2015 Ce manuel est disponible en francais, simplement Installation and Operation Instructions

DRT/DRC6300 Series Powervent Direct Vent Gas **Fireplaces** 

# Models DRT6340TYN DRT6345TYN en faire la demande. Numéro de la pièce 900344-02. DRC6340TYN DRC6345TYN US Report No. F14-106

INSTALLER: Leave this manual with the appliance. CONSUMER: Retain this manual for future reference.	Installateur : Laissez cette notice avec l'appareil. Consommateur : Conservez cette notice pour consultation ultérieure.
A barrier designed to reduce the risk of burns from	L'écran pare-étincelles fourni avec ce foyer réduit le
the hot viewing glass is provided with this appliance	risque de brûlure en cas de contact accidentel avec
and shall be installed for the protection of children	la vitre chaude et doit être installé pour la protection
and other at-risk individuals.	Des enfants et Des personnes à risques.

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

Cet appareil peut installé dans une maison préfabriquée (mobile) déjà installée à demeure, si les réglements locaux le permettent. Ce appareil doit être utilisé uniquement avec le type de gaz indiqué sure la plaque signalétique. Cet appareil ne peut être converti à d'autres gaz, sauf si une trousse de conversion est utilsée.

# WARNING:

FIRE OR EXPLOSION HAZARD

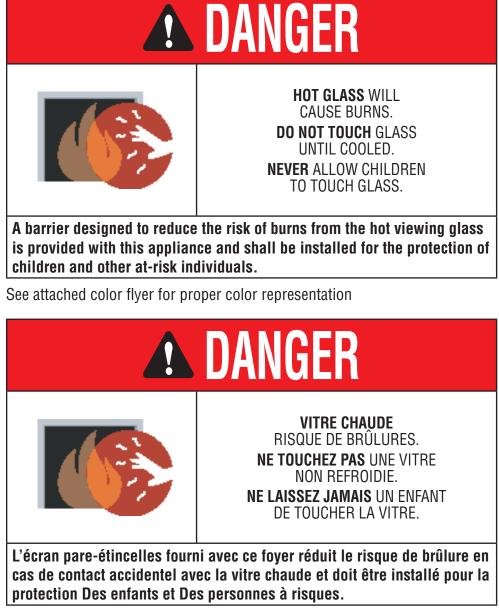
Failure to follow safety warnings exactly could result in serious injury, death, or property damage.

- -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.

# AVERTISSEMENT:

**RISQUED'INDENDIE OU D'EXPLOSION** Le non-respect Des avertissements de sécurité pourrait d'entraîner des blessures graves. la mort ou des dommages matériels.

- Ne pas entreposer ni utilizer d'essence ni d'autres vapeurs ou liquides inflammables dans le voisinage de cet appareil ou de tout autre appareil.
- QUE FAIRE SI VOUS SENTEZ UNE ODEUR DE GAZ:
- Ne pas tenter d'allumer d'appareil.
- Ne touchez à aucan interrupteur. Ne pas vous servir des téléphones se trouvant dans le bâtiment où vous trouvez.
- Sortez immédiatement de bâtiment.
- Appelez immédiatement votre fournisseur de gaz depuis un voisin. Suivez les instructions du fournisseur.
- Si vous ne pouvez rejoindre le fournisseur de gaz, appelez le service des incindies.
- L'installation et l'entretien doivent être assurés par un installateur ou un service d'entretien gualifié ou par le fournisseur de gaz.



Voir ci-joint tract pour une bonne représentation de la couleur



# Safety and Your Fireplace

# All parts of your IHP fireplace get EXTREMELY HOT!

To prevent severe burns and injuries, install a screen or physical barrier to prevent direct contact with the glass.



- Follow the safety instructions below and be sure everyone in your household understands this burn hazard:
  - The surfaces on your fireplace get EXTREMELY HOT!
  - The glass on the front of the fireplace reaches EXTREMELY HIGH temperatures and can cause severe burns if touched.
  - Keep children away from an operating fireplace. Closely supervise children in any room where a fireplace is operating to prevent contact with glass.
  - Keep clothing, furniture, gasoline, and other flammable liquids away from the fireplace.
  - Even after the gas is turned off, fireplace surfaces remain extremely hot.
- Be sure to attach the enclosed Safety-in-Operation Warnings where you turn on your fireplace, to help remind everyone of the dangers associated with high temperatures (Page 32).
- Read Important Safety Information (Page 4)

# La sécurité et votre foyer

Toutes les parties de votre foyer IHP deviennent EXTRÊMEMENT CHAUDES !

Afin d'éviter de vous brûler gravement ou de vous blesser, installez une grille ou une barrière physique pour empêcher tout contact direct avec la vitre.



- Suivez les instructions de sécurité ci-dessous et veillez à ce que tous les membres de votre famille soient conscients du danger de brûlure encouru :
  - Les surfaces de votre foyer deviennent EXTRÊMEMENT CHAUDES !
  - La vitre située à l'avant du foyer atteint des températures EXTRÊMEMENT ÉLEVÉES et peut causer de graves blessures en cas de contact.
  - Tenez les enfants à l'écart du foyer lorsqu'il fonctionne. Surveillez attentivement les enfants dans les pièces où un foyer est utilisé afin d'éviter qu'ils ne soient en contact avec la vitre.
  - Tenez tous les vêtements, les meubles, l'essence et tout autre liquide inflammable à l'écart du foyer.
  - Même après fermeture du gaz, les surfaces du foyer restent extrêmement chaudes.
- Veillez à coller les Étiquettes de mise en garde relatives à la sécurité d'utilisation à l'endroit où vous utilisez le foyer, pour rappeler à tous les utilisateurs les dangers liés aux températures élevées (Page 32).
- Lisez L'information de sûreté importante (Page 4).

# Seguridad y su chimenea

# ¡Todas las partes de la chimenea IHP se ponen MUY CALIENTES!

- Instale una malla o barrera física para evitar el contacto directo con el vidrio y prevenir las quemaduras y lesiones graves.
- Siga las instrucciones de seguridad a continuación y asegúrese de que todos en su hogar sepan acerca de este peligro de quemadura:
- ¡Las superficies de la chimenea se ponen MUY CALIENTES!
- El vidrio delante de la chimenea alcanza temperaturas EXTREMADAMENTE ALTAS y puede causar quemaduras graves si se toca.
- Mantenga a los niños alejados de la chimenea en funcionamiento. Supervise en forma cercana a los niños en cualquier cuarto donde haya una chimenea funcionando para impedir el contacto con el vidrio.
- Mantenga la ropa, mobiliario, gasolina y otros líquidos inflamables alejados de la chimenea.
- Aún después de haber apagado el gas, las superficies de la chimenea permanecen extremadamente calientes.
- Asegúrese de colocar las Etiquetas de advertencia de seguridad de operación en el lugar donde enciende la chimenea, para que todos recuerden los peligros asociados con las altas temperaturas (Página 32).
- □ Lea Información importante de seguridad (Página 4).

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[FRENCH]

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# NOTE:

• IF THE BARRIER BECOMES DAMAGED, THE BARRIER SHALL BE REPLACED WITH THE MANUFACTURER'S BARRIER FOR THIS APPLIANCE.

• FOR USE WITH BARRIER(S) PART NO(S). J7422 (40" MODELS) AND J7423 (45" MODELS).

# PACKAGING

The assembled vented gas fireplace is packaged with:

#### BOX 1 - Fireplace:

- Literature Kit (plastic bag shipped inside firebox),
- Bags of Glowing Embers, Platinum Embers, and Volcanic Stone
- Barrier
- Door Modesty Shield
- Adaptor with Probe Assembly
- (1) Remote Control Kit and Receiver Kit

### **BOX 2 - Power Vent Components:**

- (1) Power Vent Termination
- (1) Termination Adaptor
- (1) Horizontal Firestop Assembly
- (1) Vacuum Hose
- (1) 11/32" Hose Clamp
- (1) Strain Relief
- (1) Bushing
- (4) Insulated 1/4" Male Terminals
- (2) #10 Ring Terminals

### BOX 3 - Firebox Liner Panels:

In one of the following panel styles:

- Ceramic Liner Kit Buff Rustic
- Ceramic Liner Kit Red Rustic
- Porcelain Liner Kit Black
- · Ceramic Liner Kit Red Herringbone
- Ceramic Liner Kit Buff Herringbone

# Please read and understand these instructions before beginning your installation.

### INTRODUCTION

These *Electronic* appliances are designed to operate on natural gas and have an electronic intermittent pilot ignition system. External 120 Volt AC electrical power is required to operate these units.

These vented gas fireplaces are sealed combustion gas fireplaces designed for residential, manufactured home, and commercial applications.

#### **Use Only These Approved Vent Components**

These fireplaces are designed, tested and listed for operation and installation with, the following (4-1/2" inner and 7-1/2" outer) vent components only:

 <u>Secure Vent</u><sup>®</sup> Direct-vent system components manufactured by Security Chimneys International.

These approved vent system components are labeled for identification. Do NOT use any other manufacturer's vent components with these appliances.

# **GENERAL INFORMATION**

# 🛕 WARNING

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 contact burns. A physical barrier is recommended if there are at risk individuals in the house. To restrict 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.

# **AVERTISSEMENT**

Les jeunes enfants devraient être surveillés étroitement lorsau'ils se trouvent dans la même pièce que l'appareil. Les tout petits, les jeunes enfants ou les adultes peuvent subir des brûlures s'ils viennent en contact avec la surface chaude. Il est recommandé d'installer une barrière physique si des personnes à risques habitent la maison. Pour empêcher l'accès à un foyer ou à un poêle, installez une barrière de sécurité: cette mesure empêchera les tout petits, les jeunes enfants et toute autre personne à risque d'avoir accès à la pièce et aux surfaces chaudes.

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

Les enfants et les adultes devraient être infor-més des dangers que posent les températures de surface élevées et se tenir à distance afin d'éviter des brûlures ou que leurs vêtements ne s'enflamment.

DO NOT ATTEMPT TO ALTER OR MODIFY THE CONSTRUCTION OF THE APPLIANCE OR ITS COMPONENTS. ANY MODIFICATION OR ALTERATION MAY VOID THE WARRANTY, CERTIFICATION AND LISTINGS OF THIS UNIT.

# A WARNING

Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to this manual. For assistance or additional information consult a qualified installer, service agency or the gas supplier.

# WARNING

Failure to comply with these installation instructions will result in an improperly installed and operating appliance, voiding its warranty. Any change to this appliance and/or its operating controls is dangerous.

# A WARNING

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

# 

On ne devrait pas placer de vêtements ni d'autres matières inflammables sur l'appareil ni à proximité.

# A WARNING

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

# AVERTISSEMENT

Tout écran ou protecteur retiré pour permettre l'entretien de l'appareil doit être remis en place avant de mettre l'appareil en marche.

# A WARNING

Improper installation or use of this appliance can cause serious injury or death from fire, burns, explosion or carbon monoxide poisoning.

# A WARNING

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

# **AVERTISSEMENT**

Risque de dommages ou de blessures si les pièces ne sont pas installées conformément à ces schémas et ou si des pièces autres que celles spécifiquement approuvées avec cet appareil sont utilisées.

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

L'installation et la réparation devrait être confiées à un technicien qualifié. L'appareil devrait faire l'objet d'une inspection par un technicien professionnel avant d'être utilisé et au moins une fois l'an par la suite. Des nettoyages plus fréquents peuvent être nécessaires si les tapis, la literie, et cetera produisent une quantité importante de pous-sière. Il est essentiel que les compartiments abritant les commandes, les brûleurs et les conduits de circulation d'air de l'appareil soient tenus propres.

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.

Ne pas utiliser cet appareil s'il a été plongé, même partiellement, dans l'eau. Appeler un technicien qualifié pour inspecter l'appareil et remplacer toute partie du système de commande et toute commande qui a été plongée dans l'eau.

Only trim kit(s) supplied by the manufacturer shall be used in the installation of this appliance.

Seules les trousses de garniture fournies par le fabricant doivent être utilisées pour l'installation de cet appareil.

# **Codes and Standards**

These appliances comply with National Safety Standards and are tested and listed by PFS (Report No. F14-106) to Z21.50b-2009 (in Canada, CSA-2.22b-2009), and CAN/CGA-2.17-M91 (R2009) in both USA and Canada, as vented gas fireplaces.

# These appliances are listed by PFS for installation in bedrooms and manufactured (mobile) homes.

Installation must conform to local codes. In the absence of local codes, installation must comply with the current National Fuel Gas Code, ANSI Z223.1/NFPA 54 (in Canada, the current CAN/CGA-B149.1 installation code).

The appliance, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, with the National Electrical Code, ANSI/NFPA 70 - latest edition, or the Canadian Electrical Code, CSA C22.1 - latest edition.

Provide adequate clearances around air openings and adequate accessibility clearance for service and proper operation. Never obstruct the front openings of the appliance.

#### These appliances are designed to operate on natural gas. The use of other fuels or combination of fuels will degrade the performance of this system and may be dangerous.

These appliances must not be connected to a chimney or flue serving a separate solid fuel burning appliance.

These electronic appliances are remotely controlled and feature an electronic intermittent pilot ignition system. External electrical power is required to operate these units.

These electronic models come standard with a remotely-modulated gas valve; flame appearance and heat output cannot be controlled at the gas valve. The BTU Input for these appliances is shown in *Table 1.* 

Input (BTU/HR), Natural Gas		
Model No.	Input (BTU/Hr)	
40 in.	26,500 - 42,000	
45 in.	35,000 - 48,000	
Table 1		

#### **Gas Pressure - All Models**

*Tables 2 and 3* show the appliance inlet and manifold gas pressure requirements.

Inlet Gas Supply Pressure		
Minimum	Maximum	
5.5" WC	10.5" WC	
(1.37 kPa)	(2.62 kPa)	
Table 2		

Manifold Gas Supply Pressure	
Low	High
1.6" WC	3.5" WC
(.40 kPa)	(.87 kPa)
Table 3	

Test gauge connections are provided on the front of the gas control valve; identified IN for the inlet and OUT for the manifold side (see *Figure 1*).

The appliance and its appliance main gas valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures <u>in</u> **excess of** 1/2 psi (3.5 kPa).

The appliance must be isolated from the gas supply piping system by closing its equipment shutoff valve during any pressure testing of the gas supply piping system at test pressures <u>equal to or less than</u> 1/2 psi (3.5 kPa).

#### **Gas Valve Diagram**

See *Figure 1* for gas valve diagram.

#### **PURGE CYCLE**

This is a power vented fireplace that requires household electrical power to operate. It will not operate during a power failure. When the fireplace is turned off, the exhaust blower will continue to operate for approximately fifteen (15) seconds after shutdown to expel the exhaust gases from the venting system.

#### **Orifice Sizes - Sea Level To High Altitude**

These appliances are tested and approved for installation at elevations of 0 - 4500 ft (0 - 1370 m) above sea level, using the standard burner orifice sizes (marked with an "\*" in *Table 4*). For elevations above 4500 ft, contact your gas supplier or qualified service technician.

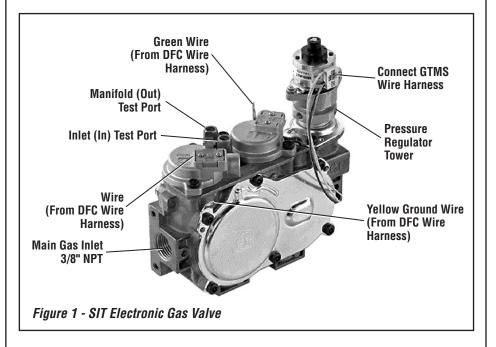
**Deration** - At higher elevations, the amount of BTU fuel value delivered must be reduced by either:

- Using gas that has been derated by the gas company.
- Changing the burner orifice to a smaller size as regulated by the local Authorities Having Jurisdiction and by the (USA) National Fuel Gas Code NFPA 54/ANSI Z223.1 - latest edition, or in Canada, the CAN/CGA-B149.1 code - latest edition.

Install the appliance according to the regulations of the local authorities having jurisdiction, and the (USA) National Fuel Gas Code NFPA 54 / ANSI Z223.1 - latest edition,

or (Canada) CAN/CGA-B149.1 - latest edition.

NOTE: Flame appearance will diminish 4% per one thousand feet of altitude.



Burner Orifice Size Elevation 0 - 4500 ft (0 - 1370 m)		
Мо	del	Orifice Size / Catalog Number
ional	40 in.	0.125" (1/8") * H7924 •
Traditional	45 in.	0.136" (#29) * H8141 •
porary	40 in.	0.0700" (#50) *
Contemporary	45 in.	0.0700" (#50) *
Table	4	* Standard size installed at factory • Part /Cat. Number

In Canada - CAN/CGA-2.17-M91 (R2009) (high altitude):

THE CONVERSION SHALL BE CARRIED OUT BY A MANUFACTURER'S AUTHORIZED REP-RESENTATIVE, IN ACCORDANCE WITH THE REQUIREMENTS OF THE MANUFACTURER, PROVINCIAL OR TERRITORIAL AUTHORITIES HAVING JURISDICTION AND IN ACCORDANCE WITH THE REQUIREMENTS OF THE CAN/CGA-B149.1 OR CAN/CGA-B149.2 INSTALLATION CODES.

### COMMONWEALTH OF MASSACHUSETTS REQUIREMENTS

These appliances are approved for installation in the US state of Massachusetts if the following additional requirements are met:

- Install this appliance in accordance with Massachusetts Rules and Regulations 248 C.M.R. Sections 4.00 through 8.00.
- Installation and repair must be done by a plumber or gas fitter licensed in the Commonwealth of Massachusetts.
- The flexible gas line connector used shall not exceed 36 inches (92 centimeters) in length.
- The individual manual shut-off must be a T-handle type valve.

#### **Massachusetts Horizontal Vent Requirements**

In the Commonwealth of Massachusetts, horizontal terminations installed less than seven (7) feet above the finished grade must comply with the following additional requirements:

 A hard wired carbon monoxide detector with an alarm and battery back-up must be installed on the floor level where the gas fireplace is installed. The carbon monoxide detector must comply with NFPA 720, be ANSI/UL 2034 listed and be ISA certified..  A metal or plastic identification plate must be permanently mounted to the exterior of the building at a minimum height of eight (8) feet above grade and be directly in line with the horizontal termination. The sign must read, in print size no less than one-half (1/2) inch in size, GAS VENT DIRECTLY BELOW. KEEP CLEAR OF ALL OBSTRUCTIONS.

# **COLD CLIMATE INSULATION**

For cold climate installations, seal all cracks around your appliance with noncombustible material and wherever cold air could enter the room. It is especially important to insulate outside chase cavity between studs and under floor on which appliance rests, if floor is above ground level. Gas line holes and other openings should be caulked or stuffed with unfaced fiberglass insulation.

If the fireplace is being installed on a cement slab in cold climates, a sheet of plywood or other raised platform can be placed underneath to prevent cold transfer to the fireplace and into the room. It also helps to sheetrock inside surfaces and tape for maximum air tightness and caulk firestops.

### MANUFACTURED HOME REQUIREMENTS

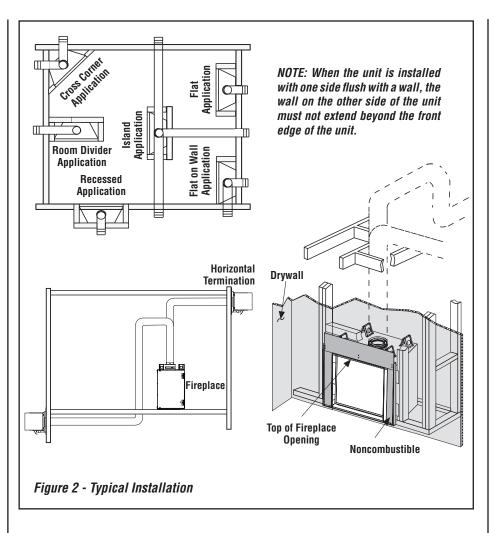
This appliance may be installed in an aftermarket permanently located, manufactured home and must be installed in accordance with the manufacturer's instructions.

Cet appareil peut être installé cómme du matéri-el d'origine dans une maison préfabriquée (É.U. seulement) ou mobile et doit être installé selon les instructions du fabricant.

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.

Cet appareil doit être utilisé uniquement avec le type de gaz indiqué sur la plaque signalétique. Cet appareil ne peut être converti à d'autres gaz.

CAUTION: Ensure that the cross members are not cut or weakened during installation. The structural integrity of the manufactured home floor, wall, and ceiling/roof must be maintained.



CAUTION: This appliance must be grounded to the chassis of the manufactured home in accordance with local codes or in the absence of local codes, with the National Electrical Code ANSI / NFPA 70 - latest edition.

### LOCATION

In selecting the location, the aesthetic and functional use of the appliance are primary concerns. However, vent system routing to the exterior and access to the fuel supply are also important.

Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies (**Figure 2**).

En raison des températures élevées, l'appareil devrait être installé dans un endroit où il y a peu de circulation et loin du mobilier et des tentures (**Figure 2**).

The location should also be free of electrical, plumbing or other heating/air conditioning ducting.

Be aware that this is a heat producing appliance. Objects placed above the unit are exposed to elevated temperatures.

#### Do not insulate the space between the appliance and the area above it.

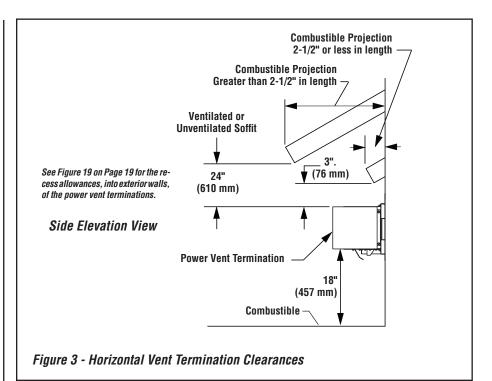
The appliance must be mounted on a fully supported base extending the full width and depth of the unit. The appliance may be located on or near conventional construction materials. However, if installed on combustible materials, such as carpeting, vinyl tile, or other combustible material other than wood flooring, the appliance shall be installed on a metal or wood panel extending the full width and depth of the appliance.

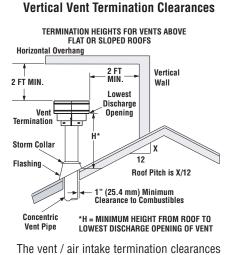
### VENT TERMINATION CLEARANCES

These instructions should be used as a guideline and do not supersede local codes in any way. Install venting according to local codes, these instructions, and the current (USA) National Fuel Gas Code ANSI-Z223.1 / NFPA 54, or (Canada) CAN/CGA-B149.1 standards.

#### **Horizontal Vent Termination Clearances**

The horizontal vent termination must have a minimum of 3" (76 mm) clearance to any overhead combustible projection of 2-1/2" (64 mm) or less (see *Figure 3*). For projections exceeding 2-1/2" (64 mm), see *Figure 3*. For additional vent location restrictions refer to *Figure 4 on Page 9*.





above the high side of an angled roof is as shown in the following chart:

### Figure 4

Termination Heights For Vents Above Flat Or Sloped Roofs Ref. NFPA 54 / ANSI Z223.1				
Roof Pitch	* Feet	* Meters		
Flat to 6/12	1.0	0.3		
6/12 to 7/12	1.25	0.38		
7/12 to 8/12	1.5	0.46		
8/12 to 9/12	2.0	0.61		
9/12 to 10/12	2.5	0.76		
10/12 to 11/12	3.25	0.99		
11/12 to 12/12	4.0	1.22		
12/12 to 14/12	5.0	1.52		
14/12 to 16/12	6.0	1.83		
16/12 to 18/12	7.0	2.13		
18/12 to 20/12	7.5	2.29		
20/12 to 21/12	8.0	2.44		

<u> </u>			1
Jerner L	F - V Openable Fixed Closed F - V Openable Fixed - B - B - B - A ↓ V TERMINATION CAP ⊗ AIR SUPPLY INLET G GAS ME	Balcony with No Side Wall Balcony with No Side Wall Balcony with No Side Wall M Ter RESTRICTED AREA (TERMINATION PROHIBITED)	Recessed Location
		U.S. Installation **	Canadian Installation *
A	Clearance above grade, veranda, porch, desk, or balcony	12" (300 mm) **	12" (300 mm) *
В	Clearance to window or door that may be opened	6" (150 mm) for fireplaces < 10,000 Btu/h (3 kW), 9" (230 mm) for fireplaces > 10,000 Btu/h (3 kW), and < 50,000 Btu/h (15 kW),	6" (150 mm) for fireplaces < 10,000 Btu/h (3 kW), 12" (300 mm) for fireplaces > 10,000 Btu/h (3 kW)
		12" (300 mm) for fireplaces > 50,000 Btu/h (15 kW) **	
C	Clearance to permanently closed window	9" (229 mm) recommended to prevent window condensation	12" (305 mm) recommended to prevent window condensation
D	Vertical clearance to ventilated soffit located above the termination within a horizontal distance of 18" (458 mm)	18" (458 mm)	18" (458 mm)
E	Clearance to unventilated soffit	12" (305 mm)	12" (305 mm)
F	Clearance to outside corner	5" (127 mm) minimum	5" (127 mm) minimum
G	Clearance to inside corner	6" (152 mm) minimum	6" (152 mm) minimum
H	Clearance to each inside of center line extended above meter / regulator assembly	36" (910 mm) within a height of 15 ft above the meter / regulator assembly **	36" (910 mm) within a height of 15 ft above the meter / regulator assembly *
I	Clearance to service regulator vent outlet	36" (910 mm)**	36" (910 mm)*
J	Clearance to nonmechanical air supply inlet to building or the combustion air inlet to any other fireplace	6" (150 mm) for fireplaces < 10,000 Btu/h (3 kW), 9" (230 mm) for fireplaces > 10,000 Btu/h (3 kW) and < 50,000 Btu/h (15 kW), 12" (300 mm) for fireplaces > 50,000 Btu/h (15 kW)**	6" (150 mm) for fireplaces < 10,000 Btu/h (3 kW), 12" (300 mm) for fireplaces > 10,000 Btu/h (3 kW)
К	Clearance to a mechanical air supply inlet	36" (910 mm) above if within 10 ft (3 m) horizontally **	72" (1830 mm) *
L	Clearance above paved sidewalk or paved diveway located on public property	84" (2130 mm) ‡	84" (2130 mm) ‡
М	Clearance under veranda, porch, deck or balcony	12" (300 mm) *‡	12" (300 mm) *‡
N	Depth of alcove (maximum)	72" (1830 mm) **	72" (1830 mm) *
0	Clearance to termination (alcove)	6" (15.2 mm) **	6" (15.2 mm)*
Р	Width of alcove (minimum)	36" (910 mm) **	36" (910 mm) *
Q	Clearance to combustible above (alcove)	18" (457 mm) **	18" (457 mm) *

 $^{\ast}$   $\,$  In accordance with the current CSA-B149.1 National Gas And Propane Installation Code

\*\* In accordance with the curent ANSI Z223.1/NFPA 54 National Fuel Gas Codes

‡ A vent shall not terminate directly above a sidewalk or paved driveway which is located between two single family dwellings and serves both dwellings

\*‡ Only permitted if veranda, porch, deck, or balcony is fully-open on a minimum two sides beneath the floor

Figure 5—Horizontal vent termination clearances for buildings with combustible and noncumbustible exteriors

# MINIMUM CLEARANCES TO COMBUSTIBLES

### **Appliance And Vent Clearances**

The appliance is approved with zero clearance to combustible materials on all sides. Refer to **Table 5** for minimum clearance values. For typical installations, see **Figure 2** on **Page 7**.

MINIMUM CLEARA	NCES* Inches (millimeters)
Sides	1/2" (13 mm) O" (0 mm) Spacers **
Top Spacers	0" (0 mm)
Floor	0" (0 mm)
Back	1/2" (13 mm) O" (0 mm) Spacers
Bottom of Appliance To Ceiling	64" (1626 mm)
Vent	3" (76 mm) Top* 1" (25.4 mm) Sides and Bottom
SERVICE CLE/	ARANCES Feet (meters)
Front	3 feet (0.9 meters)
Table 5	

\* 3" (75 mm) above any horizontal/inclined vent component.

\*\* See Page 11, Step 1 for clearance requirements to the nailing flange located at each side of the unit and any screw heads adjacent to it.

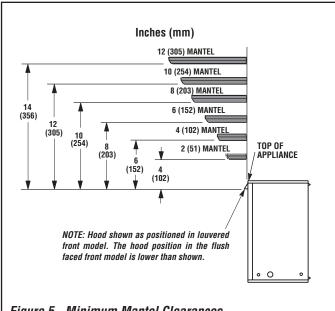
### Wall Finishes / Surrounds / Mantels

NOTE: Combustible wall finish materials and/or surround materials must not be allowed to encroach the area defined by the appliance front face (black sheet metal). Never allow combustible materials to be positioned in front of or overlapping the appliance face. See **Figure** 6 and **Figure 44** on **Page 28**.

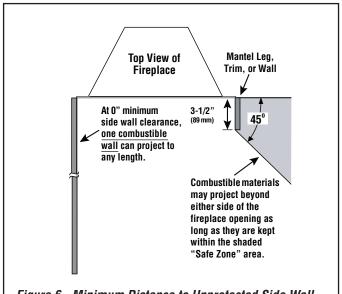
Noncombustible materials, such as surrounds and other appliance trim, may be installed on the appliance front face with these exceptions: they must not cover any portion of the removable glass panel.

Vertical installation clearances to combustible mantels vary according to the depth of the mantel (see *Figure 5*). Mantels constructed of noncombustible materials may be installed at any height above the appliance. Minimum clearance requirements include any projections such as shelves, window sills, mantels, etc. above the appliance.

NOTE: We recommend the use of high temperature paint (rated 175 °F or higher) on the underside of the mantel.









# **PRE-INSTALLATION STEPS**

The appliance is shipped with all gas controls and components installed and pre-wired.

### Before installing the appliance, follow these steps:

- 1. Remove the shipping carton.
- 2. Remove the shipping pad, exposing the barrier and front glass door.

### Barrier (see Notice, Page 40)

This fireplace comes with a barrier to reduce the likelihood of burns from touching hot glass. If the barrier is damaged, the fireplace should be turned off immediately and the fireplace must not be operated until a new, approved factory barrier for this unit is installed.

To remove barrier follow these steps.

- A.Lift barrier up by the frame at the top. B.Remove lower filler piece by pulling down off of the barrier.
- C.Lower barrier and push barrier to left to release right side.
- D.Pull the right side out of fireplace.
- E.Remove barrier.
- 3. Using a Phillips screwdriver, unfasten the two (2) screws located at the top of the glass frame (see *Figure 40* on *Page 26*). Tilt the top of the glass frame away from the unit. Lift it carefully off the bottom door track and set the door aside, protecting it from inadvertent damage.
- 4. Remove the embers and volcanic stone from the control compartment.

# **TYPICAL INSTALLATION SEQUENCE**

The typical sequence of installation is outlined below. However, each installation is unique and may result in variations to the steps described.

See the page numbers references in the following steps for detailed procedures.

- **Step 1.** (*Page 11*) Construct the appliance framing. Position the appliance within the framing and secure with nailing brackets.
- Step 2. (*Page 13*) Route gas supply line to the right side.
- Step 3. (Page 14) Install the vent system and exterior termination.
- **Step 4.** (*Page 20*) Field Wiring Connect 120 VAC electrical power to the appliance receptacle.
- Step 5. (Page 22) Remove glass door assembly.
- Step 6. (Page 23) Make connection to gas supply.
- Step 7. (Page 23) Install firebox liner kit.
- Step 8. (Page 23) Verify appliance operation.
- Step 9. (*Page 24*) Install volcanic stone, glowing embers, and logs.
- Step 10. (Page 26) Install glass door assembly.
   Step 11. (Page 26) Adjust burner to ensure proper flame appearance.
- Step 12. (*Page 29*) Attach Safety-in-Operation Warnings.

# **DETAILED INSTALLATION STEPS**

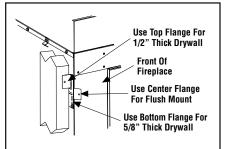
# Step 1. FRAMING

Frame these appliances as illustrated in *Figure 8 on Page 12*, unless the appliance is to be installed in a corner. See *Figure 9 on Page 13* for corner framing installations. All framing details must allow for a minimum clearance to combustible framing members as shown in *Table 5 on Page 10*.

If the appliance is to be elevated above floor level, a solid continuous platform must be constructed below the appliance.

Headers may be in direct contact with the appliance top spacers but must not be supported by them or notched to fit around them.

The fireplace should be secured to the side framing members using the unit nailing flanges - one top and bottom on each side of the fireplace front (see **Figure 7**). Use 8d nails or their equivalent.



NOTE: The nailing flanges, combustible members and screw heads located in areas directly adjacent to the nailing flanges, are EXEMPT from the 1/2" clearance to combustible requirements for the firebox outer wrapper. Combustible framing may be in direct contact with the nailing flanges and may be located closer than 1/2" from screw heads and the firebox wrapper in areas adjacent to the nailing flanges. Frame the opening to the exact dimensions specified in the framing details of this manual.

Left Side Front Corner of Fireplace Shown (Right Side Requirements the Same).

Figure 7 - Unit Secured by Nailing Flanges to the Framing

# FIREPLACE AND FRAMING SPECIFICATIONS

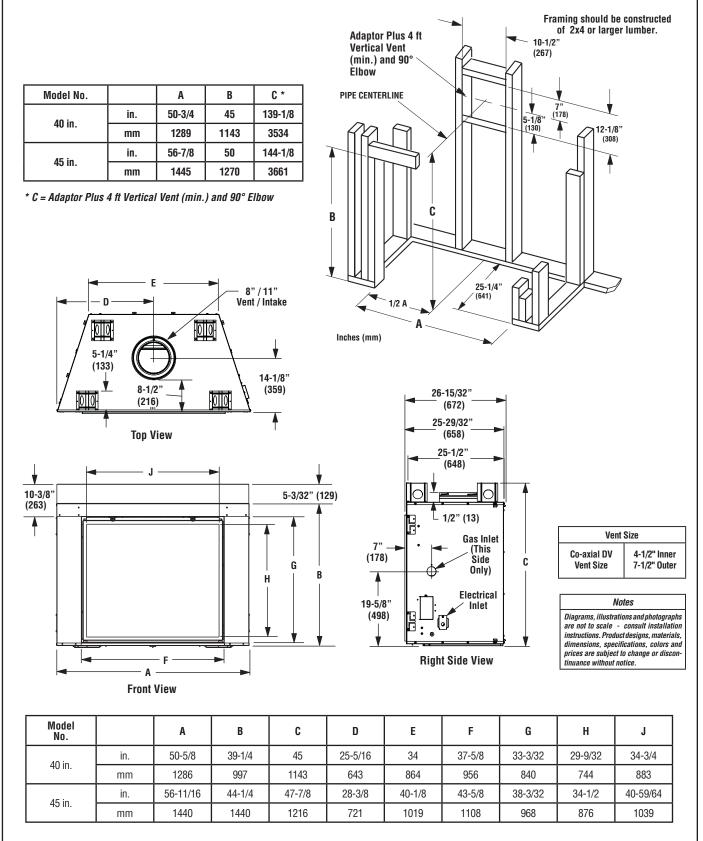
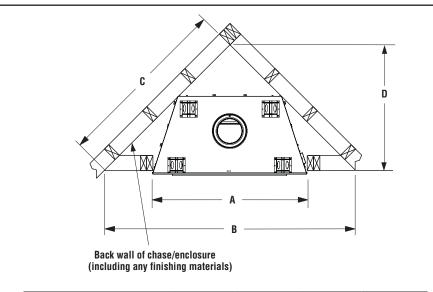
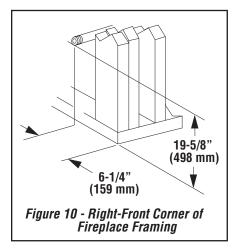


Figure 8 - Fireplace and Framing Specifications



Model No.		A	В	C	D
40 in.	in.	50-5/8	83-5/8	59-1/8	41-7/8
	mm	1286	2124	1502	1064
45 in	in.	56-3/4	89-7/8	63-1/2	44-7/8
45 in.	mm	1441	2283	1613	1140

Figure 9 - Corner Framing with Power Vent Termination



# Step 2. ROUTING GAS LINE

Route a 1/2" (13 mm) gas line along the inside of the right side framing as shown in *Figure* **10**. Gas lines must be routed, constructed and made of materials that are in strict accordance with local codes and regulations.

All appliances are factory-equipped with a flexible gas line connector and 1/2" shutoff valve. (see **Step 6** on *Page 23*).

### **Proper Sizing of Gas Line**

Properly size and route the gas supply line from the supply regulator to the area where the appliance is to be installed per requirements outlined in the (USA) National Fuel Gas Code, ANSI Z223.1/NFPA 54 - latest edition, or (Canada) CAN/CGA-B149.1 - latest edition.

Never use galvanized or plastic pipe. Refer to *Table 6* for proper sizing of the gas supply line, if black iron pipe is being used.

Schedule 40 Black Iron Pipe Inside Diameter		
Length	Inside Diameter	
0 - 10 ft (0 - 3.1 m)	1/2" (12.7 mm)	
10 - 40 ft (3.1 - 12.2 m)	1/2" (12.7 mm)	
40 - 100 ft (12.2 - 30.5 m)	1/2" (12.7 mm)	
100 - 150 ft (30.5 - 45.7 m)	3/4" (19.1 mm)	
150 - 200 ft (45.7 - 61.0 m)	3/4" (19.1 mm)	
Table 6		

Gas lines must be routed, constructed and made of materials that are in strict accordance with local codes and regulations. We recommend hiring a qualified plumber or gas fitter to correctly size and route the gas supply line to the appliance. Installing a gas supply line from the fuel supply to the appliance involves numerous considerations of materials, protection, sizing, locations, controls, pressure, sediment, and more. Only a qualified installer should attempt sizing or installing gas pipe.

### NOTES:

- All appliances are factory-equipped with a flexible gas line connector and 1/2" shutoff valve (see Figure 30 on Page 23).
- See Massachusetts Requirements on Page 6 for additional requirements for installations in the state of Massachusetts in the USA.
- The gas supply line should Not be connected to the appliance until **Step 6** (**Page 23**).
- A pipe joint compound rated for gas should be used on the threaded joints. Be very careful that the pipe compound does not get inside the pipe.
- Installing a sediment trap in the supply line as close as possible to the appliance is recommended.
- Check with local building official for local code requirements.

### Step 3. INSTALL THE VENT SYSTEM

### **General Information**

These instructions should be used as a guideline and do not supersede local codes in any way. Install venting according to local codes, these instructions, and the (USA) National Fuel Gas Code, ANSI Z223.1/NFPA 54 - latest edition, or (Canada) CAN/CGA-B149.1 - latest edition.

These fireplaces are designed, tested and listed for operation and installation only with Secure Vent® (SV4.5) and Secure Flex® Direct-Vent System Components, manufactured by Security Chimneys International. These approved vent system components are labeled for identification. DO NOT use any other manufacturer's vent components with these appliances.

Ensure clearances are in accordance with local installation codes and the requirements of the gas supplier.

Dégagement conforme aux codes d'installation locaux et aux exigences du foumisseunde gaz.

Use only approved venting components. See *Approved Vent Components* on *Page 4*.

# These fireplaces must be vented directly to the outside.

The vent system may not service multiple appliances, and must never be connected to a flue serving a separate solid fuel burning appliance. The vent pipe is tested to be run inside an enclosed wall (such as a chase). There is no requirement for inspection openings in the enclosing wall at any of the joints in the vent pipe.

#### Venting System

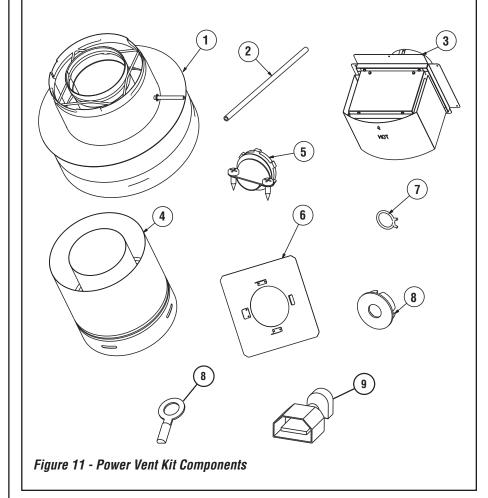
With the appliance secured in framing, determine vent routing and identify the exterior termination location. The following sections describe horizontal (exterior wall) vent applications. A list of approved venting components is shown on Page 30.

### **Power Vent Components**

Locate the fireplace as instructed in this manual. Make the following modifications to add the components used with the Power Vent Kit. This kit may only be used in conjunction with Direct-Vent series electronic versions of Innovative Hearth Products Fireplaces. This installation must conform with local codes, or, in the absence of local codes, with the (USA) National Fuel Gas Code, ANSI Z223.1/NFPA 54 - latest edition, or (Canada) CAN/CGA-B149.1 - latest edition.

CAUTION: This power vent kit cannot be used with millivolt appliances. Use the kit only with the electronically controlled fireplaces listed for its use as shown in this document.

ltem No.	Part Number	Description	Qty.
1	604187-01	Adaptor Assembly With Probe	1
2	601970-01	Vacuum Hose	1
3	601451-01	Termination Assembly	1
4	74L61	SV Termination Adaptor (SV4.5RCH)	1
5	102010-01	Strain Relief - 3/8"	1
6	H2246	Firestop Assembly (Horizontal)	1
7	102022-01	Hose Clamp - 11/32"	2
8	P-8-7102	Snap Bushing	1
9	-	Ring Terminal - #10	2
10	-	Insulated 1/4" Male Terminal	4



#### **VENT SECTION LENGTHS**

Determine the number of straight vent sections required. 4-1/2" (114 mm), 10-1/2" (267 mm), 22-1/2" (572 mm), 34-1/2". (876 mm) and 46-1/2" (1181 mm) net section lengths are available (see **Tables 7 and 8**).

#### **Offset Installation**

Analyze the vent routing and determine the quantities of vent sections and number of elbows required. Refer to *Figures 16 and 17 on Page 17* showing vent run requirements to aid in selecting the type of vertical installation desired. Vent sections are available in net lengths of 4-1/2" (114 mm), 10-1/2" (267 mm), 22-1/2" (572 mm), 34-1/2" (876 mm) and 46-1/2" (1181 mm). Refer to the **Vent Section Length Chart** for an aid in selecting length combinations. Elbows are available in 90° and 45° configurations. Refer to *Figure 15 on Page 16* for the SV4.5 E45 and SV4.5 E90 elbow dimensional specifications.

Where required, a **telescopic vent section** (SV4.5LA) may be used to provide the installer with an option in installing in tight and confined spaces or where the vent run made up of fixed length pieces develops a joint in a undesirable location, or will not build up to the required length. The SV4.5LA Telescopic Vent Section has an effective length of from 1-1/2" (38 mm) to 6-3/4" (171 mm). The SV4.5LA is fitted with a dimpled end (identical to a normal vent section component) and a plain end with 3 pilot holes. Slip the dimpled end over the locking channel end of a standard SV4.5 vent component the required distance and secure with three screws.

Maintain a minimum 1" (25 mm) clearance to combustible materials for all vertical elements. Clearances for all horizontal elements are 3" (76 mm) on top, 1" (25 mm) on sides and 1" (25 mm) on the bottom.

Effective Vent Length			
Model	Effective Length		
SV4.5L6	4-1/2"		
SV4.5L12	10-1/2"		
SV4.5L24	22-1/2"		
SV4.5L36	34-1/2"		
SV4.5L48	46-1/2"		
Table 7			

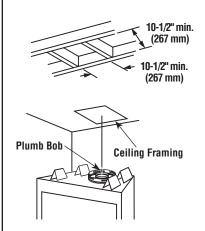
Nom Section (incl	Length les)	6	12	24	36	48	
Net S Length (	ection inches)	4-1/2	10-1/2	22-1/2	34-1/2	46-1/2	Å
Height	of Vent		lumber	of Vent	Section	IS	₽
inches	ft						Y
4.5	0.375	1	0	0	0	0	1
9	0.75	2	0	0	0	0	2
10.5	0.875	0	1	0	0	0	1
15	1.25	1	1	0	0	0	2
22.5	1.875	0	0	1	0	0	1
31.5	2.625	0	3	0	0	0	3
34.5	2.875	0	0	0	1	0	1
37.5	3.125	1	1	1	0	0	3
43.5	3.625	0	2	1	0	0	3
45	3.75	0	0	2	0	0	2
46.5	3.875	0	0	0	0	1	1
51	4.25	1	0	0	0	1	2
55.5	4.625	0	1	2	0	0	3
57	4.75	0	0	1	1	0	2
67.5	5.625	0	0	3	0	0	3
69	5.75	0	0	0	2	0	2
73.5	6.125	1	0	0	2	0	3
79.5	6.625	0	1	0	2	0	3
81	6.75	0	0	0	1	1	2
91.5	7.625	0	0	2	0	1	3
93	7.75	0	0	0	0	2	2
97.5	8.125	1	0	0	0	2	3
103.5	8.625	0	0	0	3	0	3
108	9	1	0	0	3	0	4
117	9.75	1	0	5	0	0	6
118.5	9.875	1	1	0	3	0	5
126	10.5	0	0	1	3	0	4
130.5	10.875	1	0	1	3	0	5
135	11.25	0	0	6	0	0	6
139.5	11.625	0	0	0	0	3	3
142.5	11.875	1	0	0	4	0	5
144	12	1	0	0	0	3	4
154.5	12.875	1	1	0	0	3	5
160.5	13.375	0	2	0	0	3	5
172.5	14.375	0	0	0	5	0	5
177	14.75	1	0	0	5	0	6
186	15.5	0	0	0	0	4	4
196.5	16.375	0	1	0	0	4	5
207	17.25	0	0	0	6	0	6
211.5	17.625	1	0	0	6	0	7
217.5	18.125	0	1	0	6	0	7
229.5	19.125	0	0	1	6	0	7
232.5	19.375	0	0	0	0	5	5
241.5	20.125	0	0	0	7	0	7
246	20.5	1	0	0	7	0	8
252	21	0	1	0	7	0	8

Section	ninal Length hes)	6	12	24	36	48	T Q T
	ection (inches)	4-1/2	10-1/2	22-1/2	34-1/2	46-1/2	Å
Height of Vent		N	lumber	of Vent	Sectio	ns	Q
inches	ft						Y
276	23	0	0	0	8	0	8
279	23.25	0	0	0	0	6	6
280.5	23.375	1	0	0	8	0	9
289.5	24.125	0	1	0	0	6	7
301.5	25.125	0	0	1	0	6	7
310.5	25.875	0	0	0	9	0	9
325.5	27.125	0	0	0	0	7	7
330	27.5	1	0	0	0	7	8
345	28.75	0	0	0	10	0	10
349.5	29.125	1	0	0	10	0	11
372	31	0	0	0	0	8	8
379.5	31.625	0	0	0	11	0	11
418.5	34.875	0	0	0	0	9	9
465	38.75	0	0	0	0	10	10
475.5	39.625	0	1	0	0	10	11
480	40	1	1	0	0	10	11
492	41	1	0	1	0	10	12
499.5	41.625	0	0	0	1	10	11
504	42	1	0	0	1	10	12
511.5	42.625	0	0	0	0	11	11
520.5	43.375	0	2	0	1	11	14
531	44.25	0	2	2	0	11	15
538.5	44.875	1	0	0	2	11	14
549	45.75	1	0	2	1	11	15
558	46.5	0	0	0	0	12	12
562.5	46.875	1	0	0	0	12	13
568.5	40.075	0	1	0	0	12	13
573	47.75	1	1	0	0	12	14
				1			
580.5 589.5	48.375 49.125	0	0	2	0	12	13 15
595.5	49.125	0	1	2	2	10 12	15
604.5	49.625	0	0	0	0	12	13
		0	1	0	0	13	13
615	51.25	÷		-	÷		
625.5	52.125	0	2	0	0	13	15
631.5	52.625		0		0	13	15
637.5	53.125	0	1	1	0	13	15
651	54.25	0	0	0	0	14	14
655.5	54.625	1	0	0	0	14	15
672	56	0	2	0	0	14	16
678	56.5	1	0	1	0	14	16
688.5	57.375	1	1	1	0	14	17
697.5	58.125	0	0	0	0	15	15
702	58.5	1	0	0	0	15	16
712.5	59.375	1	1	0	0	15	17
720	60	0	0	1	0	15	16

Table 8 - Vent Section Length

NOTE: Convert inches into metric equivalent measurement, as follows:

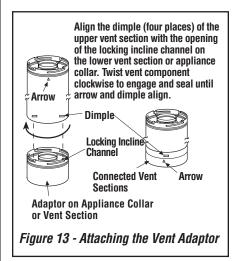
Millimeters (mm) = Inches x 25.4 Centimeters (cm) = Inches x 2.54 Meters (m) = Inches x .0254 **A. Frame ceiling opening** - Use a plumb line from the ceiling above the appliance to locate center of the vertical run. Cut and/or frame an opening, 10-1/2" x 10-1/2" (267 mm x 267 mm) inside dimensions, about this center mark *(Figure 12)*.





**B.** Attach adaptor (with probe) to appliance collar - Secure Vent<sup>®</sup> SV4.5 direct-vent system components are unitized concentric pipe components featuring positive twist lock connections (see *Figure 13*).

All of the appliances covered in this document are fitted with collars having locking inclined channels. The dimpled end of the adaptor fits over the appliance collar to create the positive twist lock connection.



To attach a vent component to the adaptor on appliance collar, align the dimpled end over the adaptor collar, adjusting the radial alignment until the four locking dimples are aligned with the inlet of the four inclined channels on the collar (refer to *Figure 13*). Push the vent component against the collar until it fully engages, then twist the component clockwise, running the dimples down and along the incline channels until they seat at the end of the channels. The unitized design of the Secure Vent<sup>®</sup> components will engage and seal both the inner and outer pipe without the need for sealant or screws. If desired a #6 x 1/2" screw may be used at the joint, but it is not required as the pipe will securely lock when twisted.

**C. Attach vent components to each other** - Other vent sections may be added to the previously installed section in accordance with the requirements shown in *Figures 16 and 17 on Page 17*.

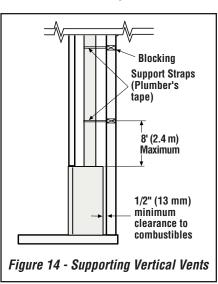
To add another vent component to a length of vent run, align the dimpled end over the inclined channel end of the previously installed section, adjusting the radial alignment until the four locking dimples are aligned with the inlets of the four incline channels of the previous section.

Push the vent component against the previous section until it fully engages, then twist the component clockwise running the dimples down and along the incline channels until they seat at the end of the channels. This seating position is indicated by the alignment of the arrow and dimple as shown in *Figure 13*.

**D. Install firestop/spacer at ceiling -** When using Secure Vent, use SV4.5VF firestop/spacer at ceiling joists. If there is living space above the ceiling level, the firestop/spacer must be installed on the bottom side of the ceiling. If attic space is above the ceiling, the firestop/spacer must be installed on the top side of the joist. Route the vent sections through the framed opening and secure the firestop/spacer with 8d nails or other appropriate fasteners at each corner.

### A firestop spacer is required.

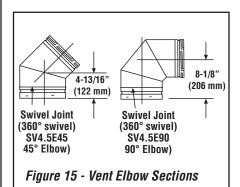
Maintain 1" (25 mm) clearance to combustibles, framing members, and attic or ceiling insulation when running vertical chimney sections. Attic insulation shield (H3907) may be used to obtain the required clearances indicated here. See installation accessories on *Page 30*. The gap between the vent pipe and a vertical firestop may be sealed with noncombustible caulking.



### E. Support the vertical vent run sections -

Support the vertical portion of the venting system every eight feet (2.4 m) above the fireplace vent outlet. One method of support is by utilizing field provided support straps (conventional plumber's tape). Secure the plumber's tape to the framing members with nails or screws. Strap the tape around the vent, securing the ends of the tape to the framing. If desired, sheet metal screws  $\#6 \times 1/2"$  length may be used to secure the support straps to the vent pipe.

F. Change vent direction to horizontal/inclined run - At transition from or to a horizontal/inclined run, install the SV4.5E45 and SV4.5E90 elbows in the same manner as the straight vent sections. The elbows feature a twist section to allow them to be routed about the center axis of their initial collar section to align with the required direction of the next vent run element. Twist elbow sections in a clockwise direction only so as to avoid the possibility of unlocking any of the previously connected vent sections (see Figures 13 and 15).



**G. Continue installation of horizontal/inclined sections** - Continue with the installation of the straight vent sections in horizontal/inclined run as described in **Step C.** Install support straps every three feet (914 mm) along horizontal/ inclined vent runs using conventional plumber's tape (*Figure 16* on *Page 17*).

NOTE: Maintain the horizontal/inclined run in a straight, slightly elevated plane - approximately 1/4" per foot (20 mm per meter) - in a direction away from the fireplace. Smaller rise per foot run ratios are acceptable, down to at or near level. Use a carpenter's level to measure from a constant surface and adjust the support straps as necessary.

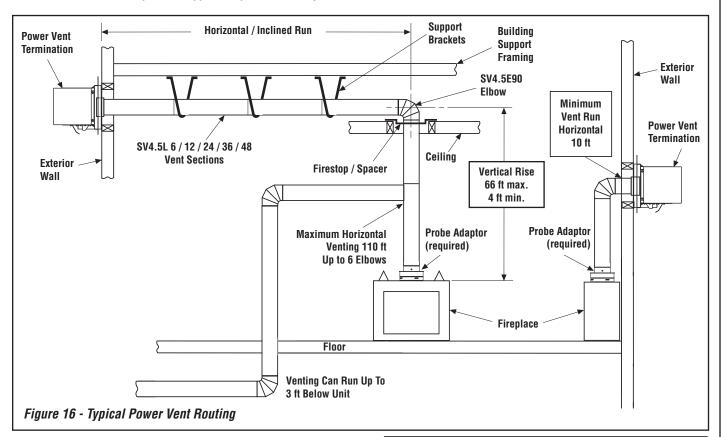
NOTE: Maintain the required clearances to combustibles: 1" (25 mm) at all sides for all vertical runs; and 3" (76 mm) at the top, 1" (25 mm) at sides, and 1" (25 mm) at the bottom for all horizontal/inclined runs.

NOTE: Attic insulation shield (H3907, see Page 30) must be installed when blown or loose-fill insulation is used, and is required for all attic installations.

# VENT FIGURES

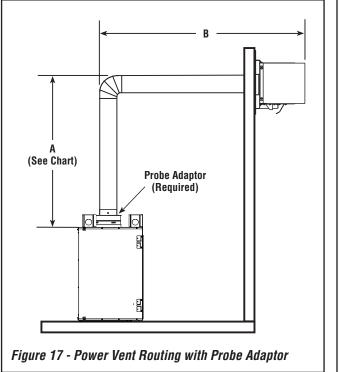
### NOTES:

- Secure Vent<sup>®</sup> components (rigid vent pipe and terminal) are shown.
- Two 45° elbows may be used in place of one 90° elbow.
- SV4.5VF (Secure Vent) firestop/spacer must be used anytime vent pipe passes through a combustible floor or ceiling. SV4.5HF (Secure Vent) firestop/spacer must be used anytime vent pipe passes through a combustible wall.
- Maintain the horizontal/inclined run in a straight, slightly elevated plane approximately 1/4" per foot (20 mm per meter) in a direction
  away from the fireplace. Smaller rise per foot run ratios are acceptable, down to at or near level. Use a carpenter's level to measure from a
  constant surface and adjust the support straps as necessary.



Power Venting				
Maximum Number Of Elbows - 6				
Maximum Feet Of Run	A + B	110 ft		
Minimum Horizontal Run	В	10 ft		
Minimum Vertical Run	A	Adaptor Plus 4 ft Vertical Vent (min.) and 90° Elbow		
Maximum Vertical Rise	A	66 ft		
Table 9				

Minimum Clearance to Combustibles		
Vertical Vent Pipe 1.0" (25.4 mm)		
	Top - 3" (76.2 mm)	
Horizontal Vent Pipe	Sides - 1" (25.4 mm)	
	Bottom - 1" (25.4 mm)	
Table 10		



### HORIZONTAL (OUTSIDE WALL) TERMINATION SYSTEM

**See Figures 16 and 17 on Page 17** illustrating the various horizontal venting configurations that are possible for use with these appliances. **Table 9 on Page 17** shows each system's minimum and maximum vertical and horizontal length values that can be used to design and install the vent components in a variety of applications.

The horizontal vent system terminates through an outside wall. Building codes limit or prohibit terminating in specific areas. Refer to *Figure 4 on Page 9* for location guidelines.

Secure Vent® SV4.5 direct-vent system components are unitized concentric pipe components featuring positive twist lock connection, (refer to *Figure 13 on Page 16*). All of the appliances covered in this document are fitted with collars having locking inclined channels. The dimpled end of the vent components fit over the appliance collar to create the positive twist lock connection.

### A. Plan the vent run -

Analyze the vent routing and determine the types and quantities of sections required 4-1/2" (114 mm), 10-1/2" (267 mm), 22-1/2" (572 mm), 34-1/2" (876 mm) and 46-1/2" (1181 mm) net section lengths are available. Make allowances for elbows as indicated in *Figure 15 on Page 16*.

Maintain a minimum 1" (25 mm) clearance to combustibles on the vertical sections. Clearances for the horizontal runs are: 3" (76 mm) on top, 1". (25 mm) on sides, and 1" (25 mm) at the bottom.

### B. Frame exterior wall opening -

Locate the center of the vent outlet on the exterior wall according to the dimensions shown in *Figure 8 on Page 12*.

Cut and/or frame an opening, 10-1/2" x 12-1/8" (267 mm x 308 mm) inside dimensions, about this center.

C. Frame ceiling opening - If the vertical route is to penetrate a ceiling, use a plumb line to locate the center above the appliance. Cut and/or frame an opening, 10-1/2" x 10-1/2" (267 mm x 267 mm) inside dimensions, about this center (see *Figure 12* on *Page* 16). **D.** Attach vent components to appliance - To attach a vent component to the appliance collar, align the dimpled end over the collar, adjusting the radial alignment until the four locking dimples are aligned with the inlets of the four incline channels on the collar (*refer to Figure 13* on *Page 16*).

Push the vent component against the collar until it fully engages, then twist the component clockwise, running the dimples down and along the incline channels until they seat at the end of the channels. The unitized design of the Secure Vent components will engage and seal both the inner and outer pipe elements with the same procedure. Sealant and securing screws are not required.

- E. Attach vent components to each other -Other vent sections may be added to the previously installed section in accordance with the requirements of the vent tables. To add another vent component to a length of vent run, align the dimpled end of the component over the inclined channel end of the previously installed section, adjusting the radial alignment until the four locking dimples are aligned with the inlets of the four incline channels of the previous section. Push the vent component against the previous section until it fully engages, then twist the component clockwise running the dimples down and along the incline channels until they seat at the end of the channels. This seating position is indicated by the alignment of the arrow and dimple as shown in Figure 13 on Page 16.
- F. Install firestop/spacer at ceiling -When using Secure Vent, use SV4.5VF firestop/spacer at ceiling joists. If there is living space above the ceiling level, the firestop/ spacer must be installed on the bottom side of the ceiling. If attic space is above the ceiling, the firestop/ spacer must be installed on the top side of the joist. Route the vent sections through the framed opening and secure the firestop/spacer with 8d nails or other appropriate fasteners at each corner. The gap between the vent pipe and a firestop can be sealed with noncombustible caulking.

Maintain 1" (25 mm) clearance to combustibles, framing members, and attic or ceiling insulation when running vertical chimney sections.

### G. Support the vertical run sections -

- On the vertical run, support the venting system every eight feet (2.4 m) above the fireplace vent outlet with field provided support straps (Plumber's tape). Attach the straps to the vent pipe and secure to the framing members with nails or screws.
- H. Change vent direction At transitions from or to a horizontal/inclined run, install the SV4.5E45 and SV4.5E90 elbows in the same manner as the straight vent sections. The elbows feature a twist section to allow them to be routed about the center axis of their initial collar section to align with the required direction of the next vent run element. Twist elbow sections in a clockwise direction only so as to avoid the possibility of unlocking any of the previously connected vent sections (see Figure 13 on Page 16).
- Continue installation of horizontal/inclined sections - Continue with the installation of the straight vent sections in horizontal/ inclined run as described in Step E. Install support straps every three feet (1914 mm) along horizontal/inclined vent runs using conventional plumber's tape (see Figure 16 on Page 17).

NOTE: Maintain the horizontal/inclined run in a straight, slightly elevated plane - approximately 1/4" per foot (20 mm per meter) - in a direction away from the fireplace. Smaller rise per foot run ratios are acceptable, down to at or near level. Use a carpenter's level to measure from a constant surface and adjust the support straps as necessary.

### **Installing Power Vent Termination**

J. Assemble vent run to exterior wall - If not previously measured, locate the center of the vent on the exterior wall. Prepare an opening as described in this manual. Assemble the vent system to a point where the terminus of the last section is within 8" of the outside wall surface where the power vent is to be mounted (see *Figure 18 on Page 19*).

If the terminus of the last section is not within this distance, use the **telescopic vent section SV4.5LA**, as the last vent section. For wall thicknesses greater than that shown in *Figure 19 on Page 19*, refer to *Table 11 on Page 19* for the additional venting components needed (in addition to the termination and adaptor) for a particular range of wall thicknesses.

K. Attach termination adaptor - Attach the adaptor (SV4.5RCH - provided with the power vent kit) to the vent section telescoping vent section, or elbow, as shown in *Figures 18* and 19 on Page 17 in the same manner as any SV4.5 vent component. L. Install Firestop/Spacer at exterior wall -Install SV4.5HF Firestop/Spacer, provided with the power vent kit, over the opening at the exterior side of the framing, long side up, with the 3" spacer clearance at the top as shown in *Figure 18*, and nail into place. The Firestop/Spacer may also be installed over the opening at the interior side of the framing. The gap between the vent pipe and a firestop can be sealed with noncombustible caulking.

(The Firestop/Spacer may also be installed over the opening at the interior side of the framing).

M. Install the Power Vent termination - From outside the exterior wall, slide the collars of the termination onto the adaptor until the termination seats against the exterior wall surface to which it will be attached. Orient the housing of the termination with the arrow pointed upwards. Secure the termination to the exterior wall. The termination must not be recessed into the exterior wall or siding by more that the 1-1/4" (32 mm) as shown in *Figure 19*.

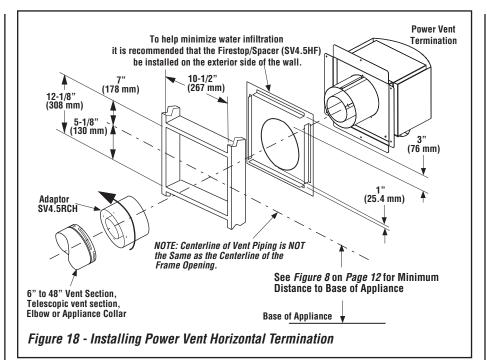
The Power Vent termination has been designed to perform in a wide range of weather conditions. Terminations meet or exceed industry standards.

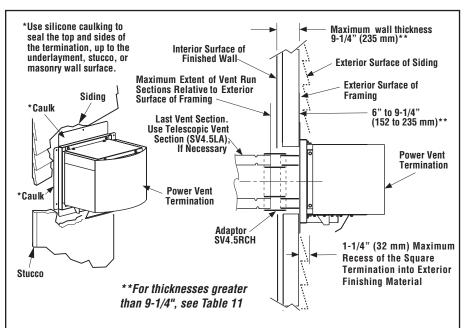
When selecting the location of termination, do not place the termination where water from eaves and adjoining roof lines may create a heavy flow of cascading water onto the termination. If the termination must be placed where the possibility of cascading water exists, it is the responsibility of the builder to direct the water away from the termination cap by using gutters or other means.

Carefully follow the Installation Instructions for the termination, including the use of silicone caulking where required.

See Table 11 as an aid in venting component selection for a particular range of exterior wall thicknesses.

WARNING: The vent termination is hot while in operation and for a period of time following the use of the fireplace. Young children should be carefully supervised when in the same area as a hot termination.







Venting Components Required for Various Exterior Wall Thicknesses when Using the Power Vent Termination			
Vent Components Required Exterior Wall Thickness			
Termination Kit Only 6 to 9-1/4" (152 to 235 mm)			
Termination Kit and 6" Vent Section (SV4.5L6) 10-3/4 to 14" (273 to 356 mm)			
Termination Kit and 12" Vent Section (SV4.5L12) 16-3/4 to 20" (426 to 508 mm)			
Termination Kit and Telescopic Section (SV4.5L12) 11-3/4 to 20" (299 to 508 mm)			
Table 11			

#### Step 4. FIELD WIRING

CAUTION: Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation.

ATTENTION: Au moment de l'entretien des commandes, étiquetez tous les fils avant de les débrancher. Des erreurs de cáblage peuvent entraîner un fonctionnement inadéquat et dangereux.

Verify proper operation after servicing.

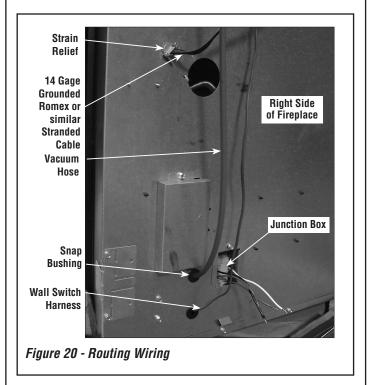
S'assurer que l'appareil fonctionne adéquatement une fois l'entretien terminé.

CAUTION: Ground supply lead must be connected to the wire attached to the green ground screw located on the outlet box. See *Figures 27 and 28 on Page 21*. Failure to do so will result in a potential safety hazard. The appliance must be electrically grounded in accordance with local codes or, in the absence of local codes, the (USA) National Electrical Code, ANSI/NFPA 70 - latest edition, or the Canadian Electrical Code, CSA C22.1 - latest edition.

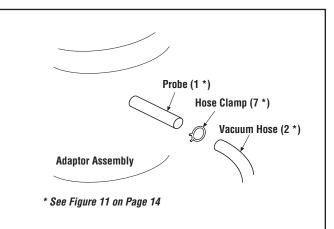
### **Route Cable**

#### NOTE: Electrical wiring must be performed by a qualified electrician.

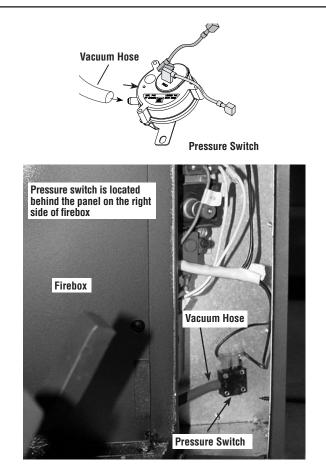
- Install the strain relief in the hole provided on the right side of fireplace for the electrical wiring (see *Figure 20*).
- Either use the intgrated junction box, or position an electrical junction box (not provided) within reach of the termination wiring pigtail (see *Figure 23 on Page 21*). Route the pigtail to the junction box as the termination is installed.
- Route 14 gage AWG grounded solid wire Romex<sup>®</sup> or equally-sized stranded cable (e.g., SJOT) from the fireplace to the newly installed junction box near the termination. Ensure the cable is safety plated to prevent damage from framing nails and finish drywall screws. Route it into the lower control compartment and cut to length before installing the terminals. Install provided hardware on the ends of the cable. Cable is not provided. The provided crimp terminals are intended for use with stranded cable. If using Romex, connect per National Electric Code or local code.



- Refer to *Figure 25 on Page 21* and install the electrical hardware on the ends of the cable. Male terminals on the Black and White wires, and ring terminals on the ground wire.
- Using standard electrical practices and the terminals provided, connect the three wires of the cable to the termination pigtail within the Electrical junction box. Ensure ground.
- The fireplace end of the cable will be addressed in **Connecting The Power Vent To The Fireplace Control System**.







NOTE: Pressure switch style may vary from that shown.

Figure 22 - Vacuum Hose Connection to Pressure Switch

### Wiring - Fireplace (See Figures 27 and 28 on Page 22)

# NOTE: These electronic appliances must be connected to the main power supply. The gas valve is set in place and pre-wired at the factory.

- 1. Route a 3-wire 120 Vac 60 Hz 1ph power supply to the appliance junction box.
- 2. Remove the electrical inlet cover plate from the side of the unit by removing the plate securing screws (see *Figure 8 on Page 12*).
- **3**. Remove the cover plate knockout and then feed the power supply through the knockout opening and into the unit junction box.
- Connect the black power supply to the power outlet red pigtail lead and the white power supply to the common terminal of the outlet as shown in Figures 27 and 28 on Page 22.
- 5. Connect the ground supply to the pigtail lead attached to outlet green ground screw.
- Wall-mounted ON/REMOTE/OFF burner control switch and remote control kits may be used. Mount the switch in a convenient location on a wall near the fireplace.

NOTE: One end of the supplied wire (15 ft) is factory-connected and the other end is attached to the side of the unit.

# CAUTION: Do Not connect the ON/REMOTE/OFF wall switch to a 120 V power supply.

- 8. Turn the wall-mounted ON/REMOTE/OFF burner control switch to the OFF position.
- 9. After the wiring is complete, replace the cover plate.

#### Wiring - Power Vent Termination

**Alternate Instructions** (For use when access to the termination is easy and a secondary electrical junction box installation is not desired).

- Remove the junction box cover from the termination by removing the attaching screw (see *Figure 23*).
- Loosen the strain relief on the termination shown in *Figure 25*. Pull the pigtail in and shorten it to fit within the junction box cover.

# WARNING: Crimp connectors may be used on stranded cables (such as SJOT cable) only. Solid wire Romex must be connected per the National Electric Code, NEC 70 - latest version, or local codes.

 Route 14 gage AWG grounded solid wire Romex or equally sized stranded cable (e.g., SJOT) from the fireplace to the newly installed junction box near the termination. Ensure the cable is safety plated to prevent damage from framing nails and finish drywall screws. Route it into the lower control compartment and cut to length before installing the terminals. Install provided hardware on the ends of the cable. Cable is not provided. The provided crimp terminals are intended for use with stranded cable. If using Romex, connect per National Electric Code or local code.

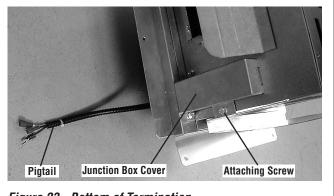
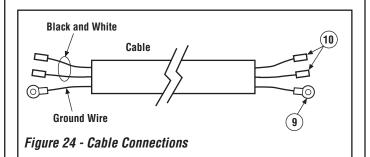
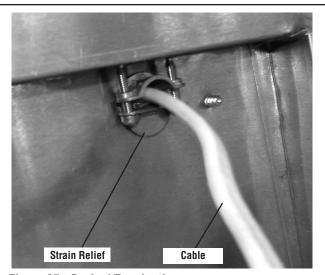
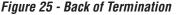


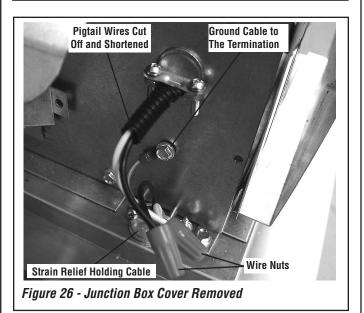
Figure 23 - Bottom of Termination

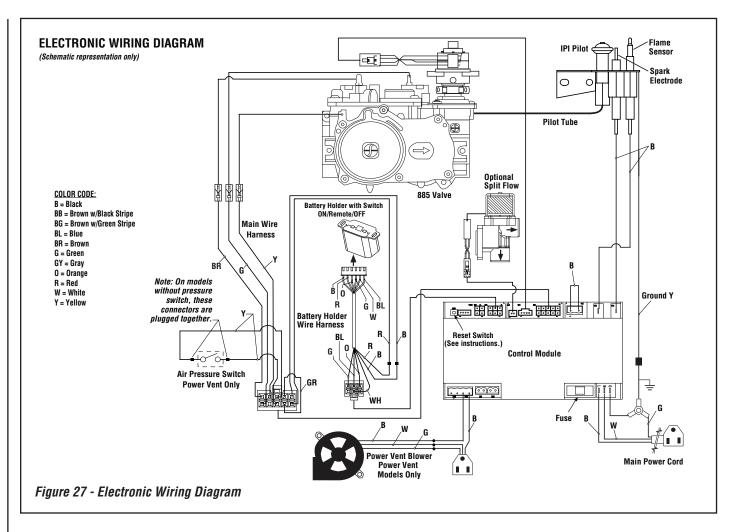
- Refer to *Figure 26* and install the electrical hardware on the fireplace end of the cable. Male terminals (#10) on the Black and White wires, and ring terminals (#9) on the ground. The termination end of the cable will be connected to the termination with wire nuts (not provided).
- Refer to *Figure 26* to connect the three wires of the cable to the termination. Ensure the ground ring terminal is grounded beneath a structural screw as shown. Attach the junction box cover to the termination with the screw previously removed.
- The fireplace end of the cable will be addressed in **Connecting The Power Vent To The Fireplace Control System**.

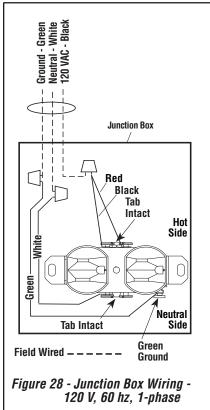












Step 5. REMOVE THE GLASS DOOR ASSEMBLY

# A WARNING

- Handle this glass with extreme care! Glass is susceptible to damage - Do not scratch or handle roughly.
- Do not attempt to substitute the materials used on this door, or replace cracked or broken glass with any materials other than those provided by the appliance manufacturer.
- The glass door of this appliance must only be replaced as a complete unit as provided by the manufacturer. Do not attempt to replace broken, cracked, or chipped glass separately.

Refer to *Figure 40 on Page 26* and remove the front glass door assembly as follows:

### Barrier (see Notice, Page 40)

This fireplace comes with a barrier to reduce the likelihood of burns from touching hot glass. If the barrier is damaged, the fireplace should be turned off immediately and the fireplace must not be operated until a new, approved factory barrier for this unit is installed.

To remove barrier follow these steps.

- A.Lift barrier up by the frame at the top.
- B.Remove lower filler piece by pulling down off of the barrier.
- C.Lower barrier and push barrier to left to release right side.
- D.Pull the right side out of fireplace. E.Remove barrier.
- E.Reinove Darner.

Using a Phillips screwdriver, unfasten the two (2) screws located at the top of the glass door assembly.

Tilt the glass door assembly at the top away from the unit. Lift it carefully off the bottom door track and set the glass door assembly aside, protecting it from inadvertent damage.

### Step 6. CONNECTING GAS LINE

All codes require a shut-off valve mounted in the supply line. The orientation of the shut-off valve should face the front. *Figure 30* illustrates two methods for connecting the gas supply. A Sediment Trap is recommended to prevent moisture and debris in gas line from damaging the valve.

The flex-line method is acceptable in the USA where local codes permit. Installation must be in compliance with local codes. These appliances are equipped with a gas flex-line for use in connecting the unit to the gas line.See *Figure 30* for flex-line description.

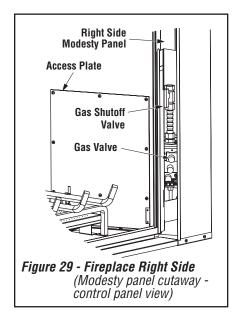
A manual shutoff valve is also provided with the flex-line. The gas control valve is located on the right side of the unit.

When using solid gas line connector, access the valve by removing the front door assembly on the valve access side and the access plate (see *Figure 29*).

The electronic control valve has a 3/8" (10 mm) NPT thread gas supply inlet.

# Secure all joints tightly using appropriate tools and sealing compounds.

Bring the shutoff valve on the end of the flex-line over to the hard pipe and tighten with wrenches from above through the firebox opening.



# TEST ALL CONNECTIONS FOR GAS LEAKS (FACTORY AND FIELD)

# **WARNING**

Never use an open flame to check for leaks.

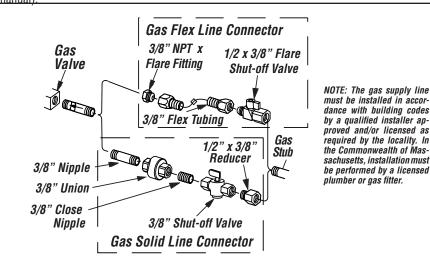
Turn on gas supply and test for gas leaks using a gas leak test solution (also referred to as bubble leak solution).

NOTE: Using a soapy water solution is an effective leak test solution but it is not recommended, because the soap residue that is left on the pipes/fittings can result in corrosion over time.

A. Light the appliance (refer to the lighting instructions label in control compartment or in the Care and Operation instructions manual).

#### NOTE: Lighting Instructions are also found on the literature tag tied to the bracket above the gas valve. To access the tag, reach into the right side opening.

When first lighting the appliance, it will take a few minutes for the line to purge itself of air. Once purging is complete, the pilot and burner will light and operate as indicated in the instruction manual. Subsequent lighting of the appliance will not require such purging. Inspect the pilot flame (remove logs, if necessary, handling carefully).



### Figure 30 - Gas Connection

- **B.** Brush all joints and connections with the gas leak test solution to check for leaks. If bubbles are formed, or gas odor is detected, turn the unit off. Either tighten or refasten the leaking connection, then retest as described above.
- **C.** When the gas lines are tested and leak free be sure to rinse off the leak testing solution.
- **D**. Re-install the access plate, making certain the gasket has not been damaged.

### Step 7. INSTALL FIREBOX LINER KIT

Install the firebox liner kit per the included instructions.

# Step 8. VERIFYING APPLIANCE OPERATION

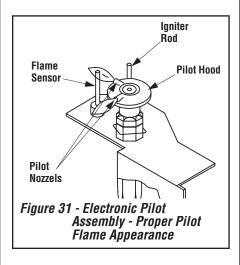
Turn on burner then observe the individual tongues of flame on the burner. Make sure all ports are open and producing flame evenly across the burner. If any ports are blocked, or partially blocked, clean out the ports.

With gas line installed run initial system checkout before closing up the front of the unit. Follow the pilot lighting instructions provided.

#### **Electronic Appliance Checkout**

To light the burner, turn the ON/REMOTE/OFF wall switch or remote control to the ON position. Ensure the igniter lights the pilot. The pilot flame should engulf the flame sensor as shown in *Figure 31*.

NOTE: The control must detect the pressure switch in the open state, at startup, and then close after the blower starts.



Step 9. INSTALL VOLCANIC STONE, GLOWING EMBERS, AND LOGS (Traditional Only), or GLASS MEDIA (Contemporary Only)

**NOTE:** If installing the contemporary burner/floor kit, skip this step and instead refer to the instructions provided with the kit.

# A WARNING

 DO NOT operate this appliance without the required accessories properly installed:

 floor (log set or contemporary kit), and
 panels (ceramic or porcelain).

# A WARNING

- DO NOT attempt to install the logs until the appliance installation has been completed, the gas line connected and tested for leaks and the initial burner operation has been checked out.
- The size and position of the log set was engineered to give the appliance a safe, reliable and attractive flame pattern. Any attempt to use a different log set in the fireplace will void the warranty and will result in incomplete combustion, sooting, and poor flame quality.
- Logs get very hot and will remain hot up to one hour after gas supply is turned off. Handle only when logs are cool. Turn off all electricity to the appliance before you install grate, volcanic stone, embers and logs.
- This appliance is not designed to burn wood. Any attempt to do so could cause irreparable damage to the appliance and prove hazardous to your safety.
- If logs are not installed according to the log installation instructions, flame impingement and improper combustion could occur and result in soot and/or excessive production of carbon monoxide (CO), a colorless, odorless, toxic gas.
- Step 1. Install the ceramic or porcelain panels per the instructions provided in kit.
- Step 2. Place volcanic stone around the burner (the entire bag of volcanic stone will NOT be used). DO NOT PLACE VOLCANIC STONE ON THE BURNER. See Figure 32.
- Step 3. Separate the glowing embers (rockwool) into pieces about the size of a quarter (*Figure 33*). Keep the pieces fluffed, not matted. Distribute these pieces over the burner as shown in *Figure 34*. Do not use more than is necessary. When properly positioned, the glowing embers will cover approximately 75% of the burner.
- **Step 4.** Distribute the platinum embers over the burner as desired. Do not use more than is necessary.

NOTE: Excessive use of embers may result in sooting or poor flame. This appliance is provided with enough embers for several applications, do not use all that is in a new bag. For best glowing effect, replace the ember material annually. Replacement volcanic stone, glowing embers, and platinum embers are available.

	Firebox Accessories				
Cat. No.	Cat. No. Model Description				
88L53	FGE	Bag of Glowing Embers			
80L42	FDVS	Bag of Volcanic Stone			
H8312	PGE	Bag of Platinum Embers			

Step 5. Position the individual logs as shown in *Figures 36 through 39*. Logs should be placed in the order shown. Place logs 2 and 3 against the pins on the grate, NOT over them.

> Proper log and twig placement is critical to encourage outstanding flame appearance and prevent sooting. When positioned properly, as shown, twigs will be positioned between flame peaks and will not impinge any flames.

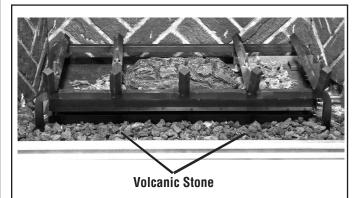
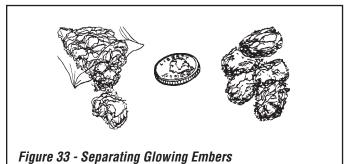
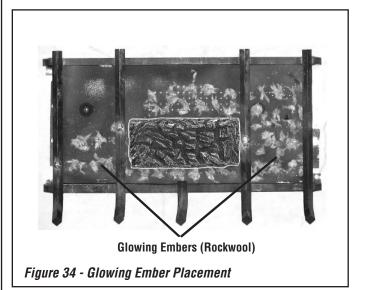
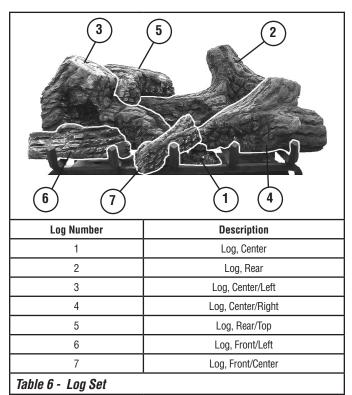


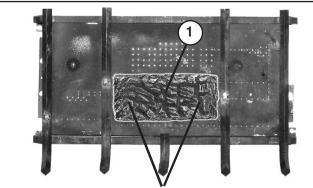
Figure 32 - Volcanic Stone Placement



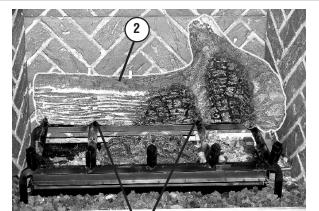


### **Traditional Only: Log Placement**

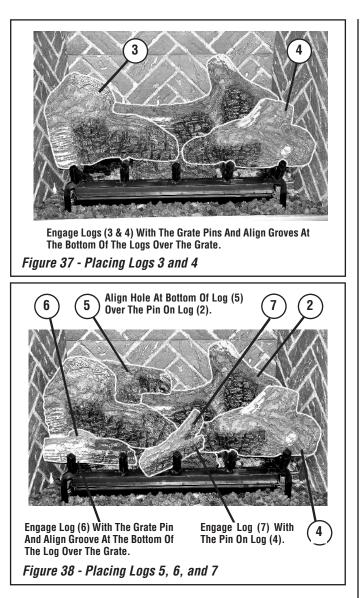




Align Two Holes At Bottom Of Log (1) Over The Pins On The Gas Burner. Figure 35 - Placing Log 1



Align Groove At The Bottom Of Log (2) Over The Grate And Push It Towards The Rear. Figure 36 - Placing Log 2



# **Contemporary Only: Glass Media Placement**

1. Spread a thin layer of the media evenly on the burner and media screen.



### Figure 39 - Glass media installed

2. On the corner of the right media screen, arrange the media to allow the pilot flame to reach the burner during lighting.

# Step 10. INSTALLATION AND REMOVAL OF GLASS DOOR

# 🛕 WARNING

- When reinstalling the glass door, the door latch screws must be securely tightened to prevent the glass door from falling out, which could potentially cause damage and possible injury.
- Do not attempt to substitute the materials used on this door, or replace cracked or broken glass.
- Handle this glass with extreme care! Glass is susceptible to damage - Do not scratch or handle roughly while reinstalling the glass door frame.
- The glass door of this appliance must only be replaced as a complete unit as provided by the manufacturer. Do not attempt to replace broken, cracked or chipped glass separately.
- Do not attempt to touch the front enclosure glass with your hands while the fireplace is in use.

# WARNING

Do not operate appliance with the glass front removed, cracked or broken.

# AVERTISSEMENT

Ne pas utiliser l'appareil si le panneau frontal en verre n'est pas en place, est craqué ou brisé.

Only doors certified with the appliance shall be used.

Seules des portes certifiées pour cet appareil doivent être utilisées.

WARNING: DO NOT abuse glass door by striking or slamming shut.

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

AVERTISSEMENT : Tout écran ou protecteur retiré pour permettre l'entretien de l'appareil doit être remis en place avant de mettre l'appareil en marche.

# Installing Glass Enclosure Panel (see *Figure 40*)

To install the front glass door assembly, proceed as follows:

- 1. Retrieve the glass door assembly. Visually inspect the gasket on the backside of the panel. The gasket surface must be clean, free of irregularities and seated firmly.
- 2. Position the door frame in front of the firebox opening and engage the bottom flange over the rail at the bottom of the firebox opening.
- 3. Swing the door up and back. Ensure the gasket seats evenly as the door draws shut. Engage the nut insert and fasten with two screws to secure the door.
- 4. Install the door modesty shield on top flange glass door as follows: grab the door modesty shield with both hands, with the open hem going down and engage it with the upper lip of the glass door frame by pushing it all the way down. Make sure the installed shield is firmly in place.

#### WHEN INSTALLING THE GLASS DOOR, SE-CURELY TIGHTEN THE LATCH SCREWS - SEE THE FIRST WARNING ON THIS PAGE.

### Barrier (see Notice, Page 40)

This fireplace comes with a barrier to reduce the likelihood of burns from touching hot glass. If the barrier is damaged, the fireplace should be turned off immediately and the fireplace must not be operated until a new, approved factory barrier for this unit is installed.

To remove barrier follow these steps.

- 1.Lift barrier up by the frame at the top.
- 2.Remove lower filler piece by pulling down off of the barrier.
- 3.Lower barrier and push barrier to left to release right side.
- 4. Pull the right side out of fireplace.
- 5.Remove barrier.
- 6. Install the new, approved factory barrier with flat side of barrier toward firebox.

# Step 11. BURNER ADJUSTMENTS

### Flame Appearance and sooting

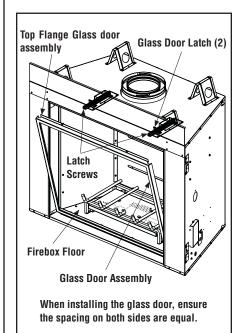
Proper flame appearance is a flame which is blue at the base and becomes yellow-orange in the body of the flame. When the appliance is first lit, the entire flame may be blue and will gradually turn yellow-orange during the first 15 minutes of operation. After 15 minutes of operation, if the flame is blue, or if the flame is orange with evidence of sooting (black tip), the air shutter opening may need to be adjusted.

If the air shutter opening is closed too far, sooting may develop. Sooting is indicated by black puffs developing at the tips of very long orange flames. Sooting results in black deposits forming on the logs, appliance inside surfaces and on exterior surfaces adjacent to the vent termination.

Sooting is caused by incomplete combustion in the flames and lack of combustion air entering the air shutter opening. To achieve a warm yellow-orange flame with an orange body that does not soot, the shutter opening must be adjusted between these two positions.

### Air Shutter Adjustment Guidelines

- If there is smoke or soot present, first check the log set positioning to ensure that the flames are not impinging on any of the logs. If the log set is properly positioned and a sooting condition still exists, then the air shutter opening should be increased.
- The more offsets in the vent system, the larger the air shutter opening will need to be.

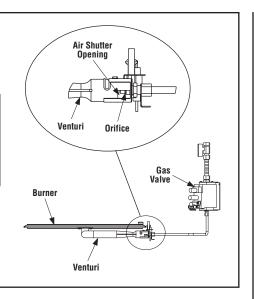


 An appliance operated with the air shutter opened too far, may have flames that appear blue and transparent. These weak, blue and transparent flames are termed anemic.

The following chart is provided to aid in correctly adjusting the air shutter.

Air Shutter Adjustment Guidelines				
Amount of Primary Air	Flame Color	Air Shutter Adjustment		
If air shutter is closed too far	Flame will be orange	Air shutter gap should be increased		
If air shutter is open too far	Flame will be blue	Air shutter gap should be decreased		

Main Burner Factory Air Shutter<br/>Opening Setting - Inches (millimeter)ModelNat.Gas40 in.1/8" (3.18 mm)45 in.1/8" (3.18 mm)





Burner Air Shutter Adjustment Procedure

# A WARNING

- Air shutter adjustment should only be performed by a qualified professional service technician.
- Ensure that the front glass door assembly is in place and sealed After adjustment.

# **CAUTION**

Soot will be produced if the air shutter is closed too much. Any damage due to carboning resulting from improperly setting the air shutter is not covered under the warranty.

To adjust the flame, move the adjustment air shutter (located on the lower venturi) back or forward to increase or reduce the air shutter opening, respectively. Position the air shutter to the factory setting as shown in *Figure 41*. Allow the burner to operate for at least 15 minutes. Observe the flame continuously. If it appears weak or sooty as previously described, adjust the air shutter until the flame appearance is as desired.

When satisfied that the appliance operates properly, finish the installation. Leave the ON/REMOTE/OFF wall switch in the REMOTE position and turn the remote switch OFF.

Use the remote to adjust the flame height as desired.



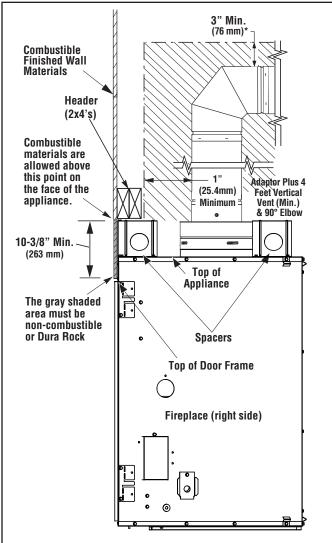
Figure 42 - Burner Flame Appearance



Figure 43 - Burner Flame Appearance

# FINISHING REQUIREMENTS Wall Details

Complete the finished interior wall. To install the appliance facing flush with the finished wall, position framework to accommodate the thickness of the finished wall (*Figure 44*).



\* Insulation is NOT ALLOWED in the clearance zones around vent components. Keep this area free from combustible materials.

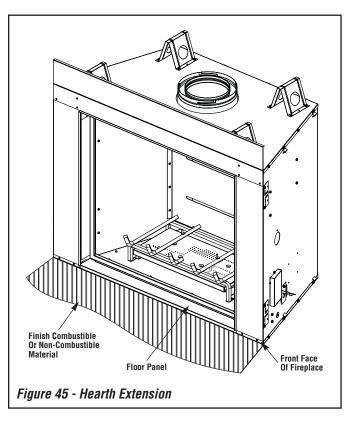
### Figure 44 - Finished Wall

A hearth extension is not required with this appliance. If a hearth extension is used, there are two methods of installation:

Noncombustible materials, such as surrounds and other appliance trim, may be installed on the appliance front face with the exceptions.

Vertical installation clearances to combustible mantels vary according to the depth of the mantel (see *Figure 5 on Page 10*). Mantels constructed of noncombustible materials may be installed at any height above the appliance opening.

Combustible materials may project beyond the side of the fireplace opening as long as it is kept within the shaded area illustrated in *Figure 6 on Page 10*.



**NOTE:** A finish trim piece is shipped with your fireplace to extend the base 1/2" to be flush with the finish flanges on the side of the fireplace. This filler is shipped on top of the fireplace wrapped in foam. If desired this piece can be placed on the base of the fireplace. It is secured with bend tabs on either side. Lay the extension in front of the base then secure by bending tabs on each side over to secure to the base. While this piece is provided it is not required.

### Step 12. INSTALLER INSTRUCTIONS - ATTACHING SAFETY IN OPERATION WARNINGS

It is the installers responsibility to ensure these warnings are properly affixed during installation. These warning labels are a critical step in informing consumers of safe operation of this appliance.

#### ATTACHING SAFETY IN OPERATION WARNINGS

It is required that the set of safety instruction labels that have been furnished with the fireplace be affixed to the operation and control points of the fireplace. A safety instruction label must be affixed to the receiver wall switch plate where the fireplace is turned on and off (*See Figure A*) and on the remote control handheld transmitter (*See Figure B*). To properly complete the installation of this fireplace, locate the multi-lingual adhesive labels provided with the Care and Operation Instructions and proceed as follows:

- Locate the wall receiver that controls the fireplace (verify the switch operates the fireplace by turning it on and off). Clean the wall receiver plate thoroughly to remove any dust and oils. Affix the label to the surface of the plate of the wall receiver that controls the fireplace (*Figure A*). Choose the language primarily spoken in the home. If unknown, affix the English language label.
- Locate the remote control transmitter and clean it thoroughly to remove any dust and oils. Affix the label to the surface of handheld transmitter (*Figure B*). Choose the language primarily spoken in the home. If unknown, affix the English language label.
- If you are unable to locate the labels, please call Innovative Hearth Products or your nearest Innovative Hearth Products dealer to receive additional safety instruction labels free of charge.

Cat. No. H8024 Replacement Label Kit

**INNOVATIVE HEARTH PRODUCTS** 

NOTE: English is red text on clear label. French and Spanish are white text on black label.

#### APPOSITION DES MISES EN GARDE RELATIVES À la sécurité d'utilisation

Il est impératif que le jeu d'étiquettes de sécurité qui ont été fournies avec le foyer soient collées à côté des dispositifs de contrôle du foyer. Une étiquette de sécurité doit être collée sur la plaque du récepteur mural contrôlant l'allumage du foyer (*voir Figure A*) et sur le boîtier de la télécommande (*Figure B*). Pour achever l'installation correcte de ce foyer, procédez comme suit avec les étiquettes adhésives en langues étrangères fournies avec les instructions d'utilisation et d'entretien: 1. Repérez le récepteur mural qui contrôle le fover

- Répéréz le récépteur mural qui contrôle le foyer (vérifiez que l'interrupteur contrôle le fonctionnement du foyer en le faisant basculer de Marche à Arrêt, et vice-versa). Nettoyez soigneusement la plaque du récepteur mural pour éliminer la poussière et les traces de graisse ou d'huile. Collez l'étiquette sur la surface de la plaque du récepteur mural qui contrôle le foyer (*Figure A*). Choisissez la langue qui est principalement parlée dans la résidence du propriétaire. En cas de doute, collez l'étiquette en anglais.
- Repérez la télécommande et nettoyez-la soigneusement pour éliminer la poussière et les traces de graisse ou d'huile. Collez l'étiquette sur le boîtier de la télécommande (*Figure B*). Choisissez la langue qui est principalement parlée dans la résidence du propriétaire. En cas de doute, collez l'étiquette en anglais.
- Si vous ne trouvez pas les étiquettes, veuillez appeler Innovative Hearth Products ou votre distributeur Innovative Hearth Products local pour recevoir gratuitement des étiquettes supplémentaires.

Étiquettes de remplacement, n° cat. H8024

#### **INNOVATIVE HEARTH PRODUCTS**

Remarque : Le texte anglais est rouge sur un support transparent. Le texte français et espagnol est blanc sur un support noir.

#### COLOCACIÓN DE ADVERTENCIAS DE SEGURIDAD En operación

Se requiere que el juego de etiquetas de instrucciones de seguridad que se incluyeron con la chimenea se coloque en los puntos de operación y control de la misma. Se debe colocar una etiqueta de instrucciones de seguridad en la placa del interruptor de pared del receptor desde el cual se enciende y se apaga la chimenea (ver la Figura A) y en el transmisor de control remoto (ver la Figura B). Para completar correctamente la instalación de esta chimenea, encuentre las etiquetas adhesivas multilingües incluidas con las instrucciones de cuidado y operación y haga lo siguiente:

- Identifique el receptor de pared que controla la chimenea (verifique que el interruptor opera la chimenea encendiéndola y apagándola). Limpie bien la placa del receptor de pared para quitar el polvo y aceite. Pegue la etiqueta en la superficie de la placa del receptor de pared que controla la chimenea (*Figura A*). Seleccione el idioma que más se habla en la casa. Si no sabe cuál es, use la etiqueta en inglés.
- Identifique el transmisor de control remoto y límpielo bien para quitar el polvo y aceite. Pegue la etiqueta en la superficie del transmisor (*Figura B*). Seleccione el idioma que más se habla en la casa. Si no sabe cuál es, use la etiqueta en inglés.
- Si no puede encontrar las etiquetas, sírvase llamar a Innovative Hearth Products o al distribuidor de Innovative Hearth Products más cercano para recibir etiquetas de instrucciones de seguridad adicionales gratuitas.

Juego de etiquetas de repuesto - Nº de cat. H8024

#### **INNOVATIVE HEARTH PRODUCTS**

Nota: La etiqueta en inglés es transparente con texto rojo. Las etiquetas en francés y español son negras con texto blanco.

#### SAFETY LABEL DIAGRAMS

EXTREMELY HOT glass and fireplace Risk of Severe Burns ALWAY 5 KEEP CHILDREN AWAY FROM FIREPLACE

# DIAGRAMMES DES ÉTIQUETTES DE SÉCURITÉ



### DIAGRAMAS DE ETIQUETAS DE SEGURIDAD

ADVERTENCIA Vidrio y chimenea EXTREMADAMENTE CALIENTES Riesgo de quemaduras graves Siempre mantenga a los niños alejados de la chimenea

Figure A



Figure B



Listed Secure Vent® Components					
Cat. No. Model No. Description					
	77L70	SV4.5L6	6" (152mm) Vent Section		
	77L71	SV4.5L12	12" (305mm) Vent Section		
	77L72	SV4.5L24	24" (610mm) Vent Section		
	77L73	SV4.5L36	36" (914mm) Vent Section		
	77L74	SV4.5L48	48" (1219mm) Vent Section		
	77L75	SV4.5LA	Telescopic Section		
	77L76	SV4.5E45	45 Degree Elbow		
	77L77	SV4.5E90	90 Degree Elbow		
	H2246	SV4.5HF	Firestop/Spacer, Horizontal (3 - 1 - 1 spacing) 10 pack		
	H2247	SV4.5VF	Firestop/Spacer, Vertical (1 - 1 - 1 spacing) 10 pack		
The followi	ng flashings con	ne packaged with	a storm collar:		
	H5816	SV4.5-TWSK	Through Wall Shield Kit (used to shield the direct-vent pipe from blown insulation) Ref. instr. # 750247M		
	96K93	SV4.5SU	Support Strap		
	96K92	SV4.5SP	Support Plate		

Listed Secure Vent / Secure Flex® Components					
	Cat. No.	Model No.	Description		
	H3907	SV4.5RSA	Attic Insulation Shield (adjustable 12" to 22")		
	H7748	FVK36	36" Flex Vent Kit NOTE: Flex attaches to appliance collar at one end and to rigid venting at the other end.		
	10K81	SFMP	Mill-Pac, Black, High Temperature Sealant		
	89L40	SFMP-12	Mill-Pac, Black, High Temperature Sealant - Bulk 12 pack		
	91L66	SF-GC4-6	Gear Clamp 4.5" (114 mm) for flex (6 pieces)		
	91L67	SF-GC7-6	Gear Clamp 7.5" (190.5 mm) for flex (6 pieces)		

# **Important Safety Information**

- 1. WARNING: Do not operate appliance with the glass front removed, cracked or broken.
- 2. 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.
- 3. Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.
- Children and adults should be alerted to the hazards of high surface temperature and should stay away to avoid burns or clothing ignition.
- 5. Clothing or other flammable material should not be placed on or near the appliance.
- 6. 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 contact burns. A physical barrier is recommended if there are at-risk individuals in the house. To restrict 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.
- 7. Any safety screen or guard removed for servicing an appliance must be replaced prior to operating the appliance.
- 8. Installation and repair should be done by a qualified service person. The appliance should be inspected before use and at least annually by a professional service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, et cetera. It is imperative that control compartments, burners, and circulating air passageways of the appliance be kept clean. See maintenance instructions on *Page 39*.

# L'information de sûreté importante

- 1. AVERTISSEMENT. Ne pas utiliser l'appareil si le panneau frontal en verre n'est pas en place, est craqué ou brisé.
- Ne pas utiliser cet appareil s'il a été plongé, même partiellement, dans l'eau. Appeler un technicien qualifié pour inspecter l'appareil et remplacer toute partie du système de commande et toute commande qui a été plongée dans l'eau.
- 3. En raison des températures élevées, l'appareil devrait être installé dans un endroit où il y a peu de circulation et loin du mobilier et des tentures.
- Les enfants et les adultes devraient être informés des dangers que posent les températures de surface élevées et se tenir à distance afin d'éviter des brûlures ou que leurs vêtements ne s'enflamment.
- 5. On ne devrait pas placer de vêtements ni d'autres matières inflammables sur l'appareil ni à proximité.
- 6. Les jeunes enfants devraient être surveillés étroitement lorsqu'ils se trouvent dans la même pièce que l'appareil. Les tout petits, les jeunes enfants ou les adultes peuvent subir des brûlures s'ils viennent en contact avec la surface chaude. Il est recommandé d'installer une barrière physique si des personnes à risques habitent la maison. Pour empêcher l'accès à un foyer ou à un poêle, installez une barrière de sécurité ; cette mesure empêchera les tout petits, les jeunes enfants et toute autre personne à risque d'avoir accès à la pièce et aux surfaces chaudes.
- 7. Tout écran ou protecteur retiré pour permettre l'entretien de l'appareil doit être remis en place avant de mettre l'appareil en marche.
- 8. L'installation et la réparation devrait être confiées à un technicien qualifié. L'appareil devrait faire l'objet d'une inspection par un technicien professionnel avant d'être utilisé et au moins une fois l'an par la suite. Des nettoyages plus fréquents peuvent être nécessaires si les tapis, la literie, et cetera produisent une quantité importante de poussière. Il est essentiel que les compartiments abritant les commandes, les brûleurs et les conduits de circulation d'air de l'appareil soient tenus propres. Voyez les instructions d'entretien à la Page 39.

### [SPANISH]

# Información importante de seguridad

- 1. ADVERTENCIA: No opere el artefacto con el frente de vidrio quitado, agrietado o roto.
- 2. No use este artefacto si alguna de sus partes ha estado bajo agua. Llame de inmediato a un técnico de servicio calificado para que inspeccione el artefacto y reemplace cualquier parte del sistema de control y cualquier control de gas que haya estado bajo agua.
- 3. Debido a las altas temperaturas, el artefacto debe situarse fuera de las áreas de tráfico y lejos del mobiliario y cortinas.
- 4. Se debe alertar a los niños y adultos sobre los peligros de las altas temperaturas en la superficie y que se mantengan alejados para evitar quemaduras o ignición de la ropa.
- 5. No debe colocarse ropa u otros materiales inflamables sobre y cerca del artefacto.
- 6. Se debe supervisar de cerca a los niños cuando estén en el mismo cuarto que el artefacto. Los niños pequeños, los jóvenes y otras personas pueden ser susceptibles a quemaduras por contacto accidental. Se recomienda instalar una barrera física si hay personas en riesgo en la casa. Para restringir el acceso a una chimenea o estufa, instale una puerta de seguridad ajustable para mantener a los niños pequeños, jóvenes y otras personas en riesgo fuera del cuarto y lejos de las superficies calientes.
- 7. Cualquier malla o resguardo de seguridad quitado para dar servicio a un artefacto, debe reinstalarse antes de operar el artefacto.
- 8. Una persona de servicio competente debe realizar la instalación y reparación. Una persona de servicio profesional debe inspeccionar el artefacto antes de usar al menos una vez por año. Se puede requerir limpieza más frecuente debido a la pelusa excesiva del alfombrado, del material de cobijas, etc. Es imprescindible mantener limpios los compartimientos de control, los quemadores y los pasajes de circulación del aire del artefacto. Ver las instrucciones de mantenimiento en la *Página 39*.

### HOMEOWNER'S INSTRUCTIONS - ATTACHING SAFETY-IN-OPERATION WARNINGS

### ATTACHING SAFETY-IN-OPERATION WARNINGS

Your fireplace has been furnished with safety instruction labels that are to be affixed to the operation and control points of the fireplace. A safety instruction label should be affixed to the receiver wall switch plate where the fireplace is turned on and off (See *Figure A*) and the remote control handheld transmitter (*Figure B*). The warnings should already have been put in place when the fireplace initial set-up was completed. If they are not affixed at these spots, locate the multi-lingual adhesive labels provided with these instructions and proceed as follows:

- Locate the wall receiver that controls the fireplace (verify the switch operates the fireplace by turning it on and off). Clean the wall receiver plate thoroughly to remove any dust and oils. Affix the label to the surface of the plate of the wall receiver that controls the fireplace (*Figure A*). Choose the language primarily spoken in the home.
- Locate the remote control transmitter and clean it thoroughly to remove any dust and oils. Affix the label to the surface of handheld transmitter (*Figure B*). Choose the language primarily spoken in the home.
- If you are unable to locate the labels, please call Innovative Hearth Products or your nearest Innovative Hearth Products dealer to receive additional safety instruction labels free of charge.

Cat. No. H8024 Replacement Label Kit

#### **INNOVATIVE HEARTH PRODUCTS**

NOTE: English is red text on clear label. French and Spanish are white text on black label.

#### APPOSITION DES MISES EN GARDE RELATIVES À La sécurité d'utilisation

Votre foyer a été livré avec des étiquettes de sécurité qui doivent être collées à côté des dispositifs de contrôle du foyer. Une étiquette de sécurité devrait être collée sur la plaque du récepteur mural contrôlant l'allumage du foyer (voir *Figure A*) et sur le boîtier de la télécommande (*Figure B*). Les mises en garde auraient dû être collées au moment de l'installation initiale du foyer. Si ce n'est pas le cas, prenez les étiquettes adhésives multilingues fournies avec ces instructions et procédez comme suit:

- Repérez le récepteur mural qui contrôle le foyer (vérifiez que l'interrupteur contrôle le fonctionnement du foyer en le faisant basculer de Marche à Arrêt, et vice-versa). Nettoyez soigneusement la plaque du récepteur mural pour éliminer la poussière et les traces de graisse ou d'huile. Collez l'étiquette sur la surface de la plaque du récepteur mural qui contrôle le foyer (*Figure A*). Choisissez la langue qui est principalement parlée dans la résidence du propriétaire.
- Repérez la télécommande et nettoyez-la soigneusement pour éliminer la poussière et les traces de graisse ou d'huile. Collez l'étiquette sur le boîtier de la télécommande (*Figure B*). Choisissez la langue qui est principalement parlée dans la résidence du propriétaire.
- Si vous ne trouvez pas les étiquettes, veuillez appeler Innovative Hearth Products ou votre distributeur Innovative Hearth Products local pour recevoir gratuitement des étiquettes supplémentaires.

Étiquettes de remplacement, n° cat. H8024

#### **INNOVATIVE HEARTH PRODUCTS**

Remarque : Le texte anglais est rouge sur un support transparent. Le texte français et espagnol est blanc sur un support noir.

#### COLOCACIÓN DE ADVERTENCIAS DE SEGURIDAD En operación

Su chimenea incluye etiquetas de instrucciones de seguridad que deben colocarse en los puntos de operación y control de la chimenea. Se debe colocar una etiqueta de instrucciones de seguridad en la placa del interruptor de pared del receptor desde el cual se enciende y se apaga la chimenea (ver la *Figura A*) y en el transmisor de control remoto (*Figura B*). Las advertencias ya deben haberse colocado cuando se completó la instalación inicial de la chimenea. Si no están colocadas en estos lugares, encuentre las etiquetas adhesivas multilingües proporcionadas con estas instrucciones y prosiga de la siguiente manera:

- Identifique el receptor de pared que controla la chimenea (verifique que el interruptor opera la chimenea encendiéndola y apagándola). Limpie bien la placa del receptor de pared para quitar el polvo y aceite. Pegue la etiqueta en la superficie de la placa del receptor de pared que controla la chimenea (*Figura A*). Seleccione el idioma que más se habla en la casa.
- Identifique el transmisor de control remoto y límpielo bien para quitar el polvo y aceite. Pegue la etiqueta en la superficie del transmisor (*Figura B*). Seleccione el idioma que más se habla en la casa.
- Si no puede encontrar las etiquetas, sírvase llamar a Innovative Hearth Products o al distribuidor de Innovative Hearth Products más cercano para recibir etiquetas de instrucciones de seguridad adicionales gratuitas.

Juego de etiquetas de repuesto - Nº de cat. H8024

#### **INNOVATIVE HEARTH PRODUCTS**

Nota: La etiqueta en inglés es transparente con texto rojo. Las etiquetas en francés y español son negras con texto blanco.

### SAFETY LABEL DIAGRAMS

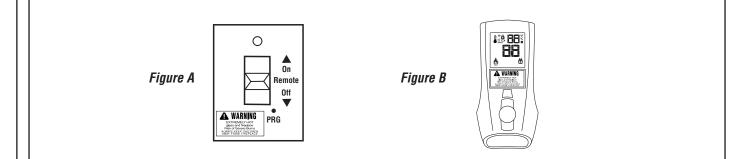


### DIAGRAMMES DES ÉTIQUETTES DE SÉCURITÉ



### DIAGRAMAS DE ETIQUETAS DE SEGURIDAD





### APPLIANCE INSTALLATION, SERVICE, AND MAINTENANCE NOTICES

WARNING: Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to the owner's information manual provided with this appliance. For assistance or additional information consult a qualified installer, service agency or the gas supplier.

AVERTISSEMENT : Une installation, un réglage, une modification, une réparation ou un entretien mal effectué peut causer des dommages matériels ou des blessures. Voir la notice de l'utilisateur qui accompgne l'appareil. Pour de l'aide ou des renseignements supplémentaires, consultez un installateur, un technicien agréé ou le fournisseur de gaz.

Only trim kit(s) supplied by the manufacturer shall be used in the installation of this appliance.

Seules les trousses de garniture fournies par le fabricant doivent être utilisées pour l'installation de cet appareil.

These appliances must not be connected to a chimney or flue serving a separate solid fuel burning appliance.

Any change to this appliance and/or its operating controls is dangerous. Improper installation or use of this appliance can cause serious injury or death from fire, burns, explosion or carbon monoxide poisoning.

CARBON MONOXIDE POISONING: Early signs of carbon monoxide poisoning are similar to the flu with headaches, dizziness and/or nausea. If you have these signs, obtain fresh air immediately. Turn off the gas supply to the appliance and have it serviced by a qualified professional, as it may not be operating correctly. Some people are more affected by carbon monoxide than others, including pregnant women, people with heart or lung disease or anemia, those under the influence of alcohol, and those at high altitudes. Turn off gas and electrical power to the fireplace and allow it to cool before cleaning or servicing the appliance.

The vent termination is hot while in operation and for a period of time following the use of the fireplace. Young children should be carefully supervised when they are in the same area as a hot termination.

# **APPLIANCE OPERATION NOTICES**

Do not operate appliance with the glass front removed, cracked, or broken.

These fireplaces are vented gas appliances. Do not burn wood or other material in these appliances.

This appliance is only for use with the type of gas indicated on rating plate. This appliance is not convertible for use with other gases.

Cet appareil doit être utilisé uniquement avec les types de gaz indiqués sur la plaque signalétique. Cet appareil ne peut être converti à d'autres gaz.

These appliances are designed to operate on natural gas only. The use of other fuels or combinations of fuels will degrade the performance of this system and may be dangerous.

Provide adequate clearances around air openings and adequate accessibility clearance for service and proper operation. Never obstruct the front openings of the appliance.

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 that has been under water.

These fireplaces are designed as decorative appliances and are not intended for use as area heaters. They must not be equipped with wall thermostats or remote controls with thermostat functions.

CAUTION: Hot while in operation. Do not touch. Severe Burns may result. Keep children, clothing furniture, gasoline and other liquids having flammable vapors away.

ATTENTION : L'appareil est chaud lorsqu'il fonctionne. Ne pas toucher l'appareil. Risque de brûlures graves. Surveiller les enfants. Garder les vêtements, les meubles, l'essence ou autres liquides produisant des vapeur inflammables loin de l'appareil.

# WARRANTY INFORMATION

Your gas appliance is covered by a limited lifetime warranty. You will find a copy of the warranty accompanying this manual. Please read the warranty to be familiar with its coverage.

Retain this manual. File it with your other documents for future reference.

Failure to comply with the installation and operating instructions provided will result in an improperly installed and operating appliance, voiding its warranty.

Do not attempt to alter or modify the construction of the appliance or its components. Any modification or alteration may void the warranty, certification, and listings of this unit.

### **GENERAL INFORMATION**

The fireplace models covered in this manual are direct-vent, sealed combustion gas fireplaces designed for residential, commercial, and manufactured home applications. Directvent appliances operate with the combustion chamber completely isolated from the indoor environment.

All air for combustion is brought in from the outside and exhaust gases are vented through the same direct-vent, co-axial (intake/exhaust) vent system.

These electronic appliances are designed to operate on natural gas and have an electronic intermittent pilot ignition system. External 120 Volt AC electrical power is is required to operate these units.

These appliances comply with National Safety Standards and are tested and listed by PFS (Report No. F14-106) to ANSI Z21.50b-2009 (in Canada, CGA 2.22b-2009), and CAN/ CGA-2.17-M91 (R2009) in both the USA and Canada, as vented gas fireplaces.

The Installation must conform to local codes or, in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1/NFPA 54 - latest edition, or the Natural Gas Installation Code, CAN/CGA B149.1 - latest edition. The appliance, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, with the National Electrical Code, ANSI/NFPA 70 - latest edition, or the Canadian Electrical Code, CSA C22.1 - latest edition.

### **BTU Input**

The BTU Input for these appliances is shown in *Table 1.* 

Input (BTU/HR), Natural Gas				
Model No. Input (BTU/Hr)				
40 in.	26,500–42,000			
45 in.	35,000–48,000			
Table 11				

### **Gas Pressure Requirements**

*Tables 2 and 3* show the appliances' gas pressure requirements.

Inlet Gas Supply Pressure			
Minimum Maximum			
5.5" WC 10.5" WC			
(1.37 kPa) (2.62 kPa)			
Table 12			

Manifold Gas Supply Pressure		
Low	High	
1.6" WC	3.5" WC	
(.40 kPa)	(.87 kPa)	
Table 13		

Test gauge connections are provided on the front of the gas control valve, identified IN for the inlet and OUT for the manifold side (see *Figure 12* on *Page 34*). The control valve has a 3/8" (10 mm) NPT thread inlet and outlet side of the valve.

The appliance and its appliance main gas valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures <u>in</u> **excess of** 1/2 psi (3.5 kPa).

The appliance must be isolated from the gas supply piping system by closing its equipment shutoff valve during any pressure testing of the gas supply piping system at test pressures **equal to or less than** 1/2 psi (3.5 kPa).

# Orifice Sizes - Sea Level to High Altitude (All Models)

These appliances are tested and approved for installation at elevations of 0-4500 feet (0-1372 meters) above sea level using the standard burner orifice sizes (marked with an "\*" in *Table 14*).

For elevations above 4500 feet, contact your gas supplier or qualified service technician.

**Deration** - At higher elevations, the amount of BTU fuel value delivered must be reduced by either using gas that has been derated by the gas company or by changing the burner orifice to a smaller size as regulated by the local authorities having jurisdiction and by the (USA) National Fuel Gas Code NFPA 54/ANSI Z223.1 - latest edition or, in Canada, the CAN/ CGA-B149.1 codes - latest edition.

Install the appliance according to the regulations of the local authorities having jurisdiction and, in the USA, the National Fuel Gas Code NFPA 54 / ANSI Z223.1 - latest edition or, in Canada, the CAN/CGA-B149.1 - latest edition. Flame breadth, height and width will diminish 4% for every 1,000 feet of altitude.

Burner Orifice Size Elevation 0–4500 ft (0–1372 m)		
Model		Orifice Size / Catalog No.
onal	40 in.	0.125" (1/8") * / H7924 •
Traditional	45 in.	0.136" (#29) * / H8141 •
40 in.	40 in.	0.0700" (#50) *
Conten	45 in.	0.0700" (#50) *
* Standard size installed at factory <b>Table 14</b> • Part /Cat. Number		

In Canada - CAN/CGA-2.17-M91 (R2009) (high altitude):

THE CONVERSION SHALL BE CARRIED OUT BY A MANUFACTURER'S AUTHO-RIZED REPRESENTATIVE, IN ACCOR-DANCE WITH THE REQUIREMENTS OF THE MANUFACTURER, PROVINCIAL OR TERRITORIAL AUTHORITIES HAVING JURISDICTION AND IN ACCORDANCE WITH THE REQUIREMENTS OF THE CAN/CGA-B149.1 OR CAN/CGA-B149.2 INSTALLATION CODES.

### **Burn-in Period**

During the first few fires of this appliance there will be some odor due to the curing of the paint and burning off of lubricants used in the manufacturing process. Depending on your use, the burn-in period may take a few hours or a few days.

KEEP YOUR HOUSE WELL VENTILATED DURING THE CURING PROCESS. THE ODOR AND HAZE EMITTED DURING THE CURING PROCESS CAN BE QUITE NOTICEABLE AND MAY SET OFF A SMOKE DETECTOR.

**NOTICE:** A white film may develop on the glass enclosure panel during the first few fires as part of the burn-in process.

The first few times you use the fireplace, clean the glass after each use (AFTER THE GLASS HAS COMPLETELY COOLED); otherwise, the white film will bake onto the glass and become difficult to remove.

See glass cleaning instructions on **Page 39**.

# **OPERATION AND CARE OF YOUR APPLIANCE**

# WARNING

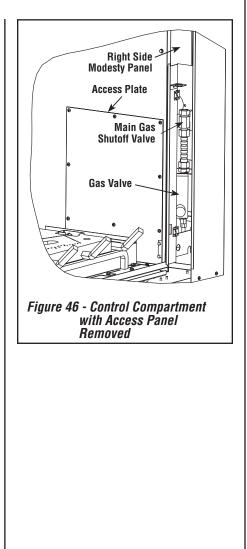
Young children should be carefully supervised when they are in the same room as the appliance. Toddlers, young children and others may be susceptible to accidental contact burns. A physical barrier is recommended if there are at risk individuals in the house. To restrict access to a fireplace or stove, install an adjustable safety gate to keep toddlers, young children and other at risk individuals out of the room and away from hot surfaces.



Les jeunes enfants devraient être surveillés étroitement lorsqu'ils se trouvent dans la même pièce que l'appareil. Les tout petits, les jeunes enfants ou les adultes peuvent subir des brûlures s'ils viennent en contact avec la surface chaude. Il est recommandé d'installer une barrière physique si des personnes à risques habitent la maison. Pour empêcher l'accès à un foyer ou à un poêle, installez une barrière de sécurité; cette mesure empêchera les tout petits, les jeunes enfants et toute autre personne à risque d'avoir accès à la pièce et aux surfaces chaudes.

### Gas Controls / Control Compartment Access

The gas control valve and gas shutoff valve are located behind the right side panel in the control compartment (see *Figure 46*).



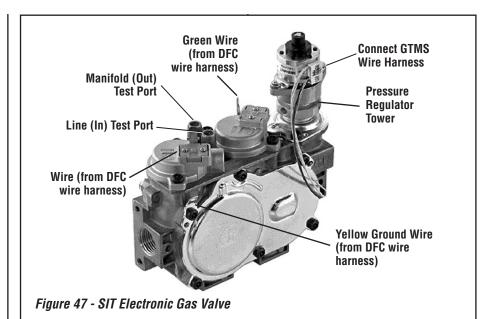
# **Appliance Operation**

To light the appliance refer to the detailed lighting instructions (see *Pages 48 and 49*). The appliance lighting instructions may also be found on the pull out lighting instruction labels attached to the gas control valve.

Your appliance is equipped with a Wall ON/ REMOTE/OFF switch, remote control, and the appliance main burner may be turned on and off using either switch.

# PURGE CYCLE

This is a power vented fireplace that requires household electrical power to operate. It will not operate during a power failure. When the fireplace is turned OFF, the exhaust blower will continue to operate for approximately fifteen seconds after shutdown to expel the exhaust gases from the venting system.



### **Remote Control System**

The remote control and receiver allow you to command the functions of your fireplace from the comfort of your chair. They are configured to control the primary burner operation, its flame levels (through six levels) and provide ON/OFF and smart control of this appliance.

The control board connects directly to the gas valve and stepper motor (see *Wire Diagram* on *Page 45*).

The control is powered by four (4) AA batteries in the wall switch and/or 120 VAC line power.

The control accepts commands via radio frequency from the transmitter and does not require line-of-sight operation.

The ON/REMOTE/OFF switch can be set to one of three positions:

- ON (manual override)
- REMOTE (remote control)
- 0FF

# Initializing the System for the First Time

Install four (4) AA batteries into the receiver battery bay, behind the wall switch plate.

NOTE: Install the batteries into the battery bay as indicated on the battery cover. Ensure that batteries are installed with proper polarity (+/-).

Place the ON/REMOTE/OFF switch in the REMOTE position (see *Figure 48* on *Page 37*). Insert the end of the paper clip (or other similar object) into the hole marked "PRG" on the receiver front cover. The control board, located in the fireplace, will "beep" three (3) times to indicate that it is ready to synchronize with a transmitter.

Install three (3) AAA batteries in the transmitter battery bay, located on the base of the transmitter. With the batteries installed in the transmitter, push the ON button. The receiver will "beep" four (4) times to indicate the transmitter command has been accepted and is set to the particular code of that transmitter. The system is now initialized.

### Low Battery Power Detection

The life span of the receiver batteries depends on various factors:

- Quality of the batteries used
- Number of ignitions of the appliance
- etc.

When the receiver batteries are low, no "beep" will be emitted from the receiver when it receives an ON/OFF command from the transmitter. This is an alert for a low battery condition for the receiver. When the batteries are replaced the "beep" will be emitted from the receiver when the ON/OFF key is pressed (See *Initializing the System for the First Time*).

When the transmitter batteries are low, a battery icon will appear on the LCD display of the transmitter before all battery power is lost. When the batteries are replaced this icon will disappear.

# WARNING

Fire Hazard. Can cause severe injury or death. The receiver causes ignition of the appliance. The appliance can turn on suddenly. Keep away from the appliance burner when operating the remote system or activating manual bypass of the remote system.

CAUTION: Property damage hazard. Excessive heat can cause property damage. The appliance can stay lit for many hours. Turn off the appliance if it is not going to be attended for any length of time. Always place the Transmitter where children can not reach it. Control will automatically shut off after 24 hrs of continued operation

### **Temperature Indicator Display**

With the system in the OFF position, press the Room Temperature Key and the Mode Key at the same time (see *Figure 49* on *Page 37*). Look at the LCD screen on the transmitter to verify that a "C" or "F" is visible to the right of the Room Temperature display (see *Figure 50* on *Page 37*).

### **Turn ON the Appliance**

With the receiver switch in the REMOTE position, press the ON/OFF Key on the transmitter. The transmitter display will show all active icons on the screen. At the same time, the receiver connects to the gas valve coil and the appliance main burner turns on. A single "beep" from the receiver will confirm reception of the command.

### Turn OFF the Appliance

Press the ON/OFF Key on the transmitter. The transmitter LCD display will only show the room temperature and icon. At the same time, the receiver disconnects the gas valve coil and the appliance burner turns off. A single "beep" from the receiver confirms reception of the command.

### **Remote Flame Control**

The system has six (6) flame levels. See *Figure* **51** on *Page* **37** for an example. With the system on, and the flame level at the maximum in the appliance, pressing the Down Arrow Key once will reduce the flame height by one step until the flame is turned OFF.

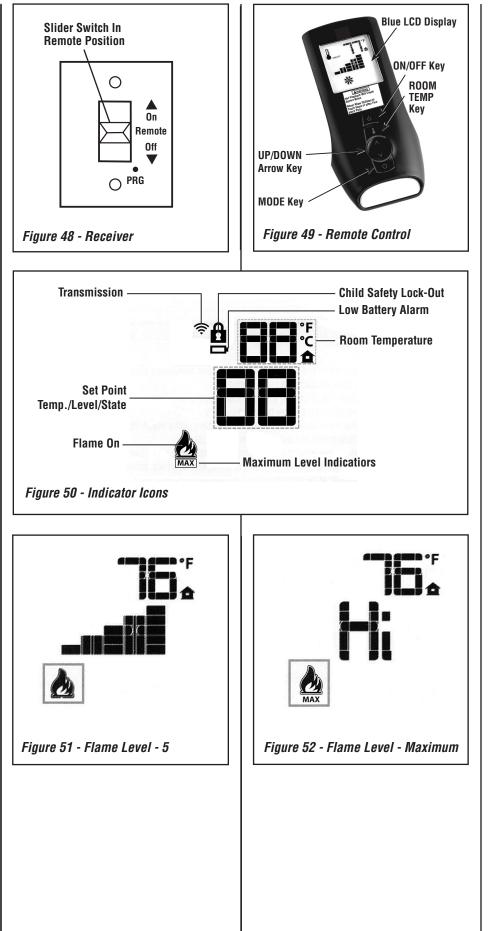
The Up Arrow key will increase the flame height each time it is pressed. If the Up Arrow key is pressed while the system is ON but the flame is OFF, the flame will come on in the high position (see *Figure 52* on *Page 37*). A single "beep will confirm reception of the command.

## Key Lock

This function will lock the keys to avoid unsupervised operation To activate this function, press the Mode and Up Arrow keys at the same time. To deactivate this function, press Mode and Up Arrow keys at the same time.

## Manual Bypass Of the Remote System

If the batteries of the receiver or transmitter are low or depleted, the appliance can be turned on manually by sliding the ON/REMOTE/OFF slider switch to the ON position. This will bypass the remote control feature of the system and the appliance main burner will come on if the gas valve is in the ON position.



# Lighting the Appliance

To light electronic appliances refer to the detailed lighting instructions found on *Page 48* of these instructions. Instructions can also be found on the pull-out lighting instruction labels attached to the gas control valve.

# POWER VENT OPERATION

# **Operating Instructions for the Appliance**

## To turn ON the appliance with the receiver:

- 1. Manually slide the ON/REMOTE/OFF switch to the ON position.
- 2. Blower should start immediately.
- 3. Igniter starts sparking and pilot will light.
- 4. Burner should light after a few seconds.

# To turn ON the appliance with the remote transmitter:

- Manually slide the ON/REMOTE/OFF switch to the REMOTE position, then press the ON/ OFF key on the transmitter.
- 2. Blower should start immediately.
- 3. Igniter starts sparking and pilot will light.
- 4. Burner should light after a few seconds.

# To Turn OFF

- 1. Manually slide the ON/REMOTE/OFF switch to the OFF position or press the ON/OFF key on the transmitter.
- 2. Burner and pilot should turn off immediately.
- 3. Blower will continue to run for about 15 seconds, then the blower will stop.

# MAINTENANCE

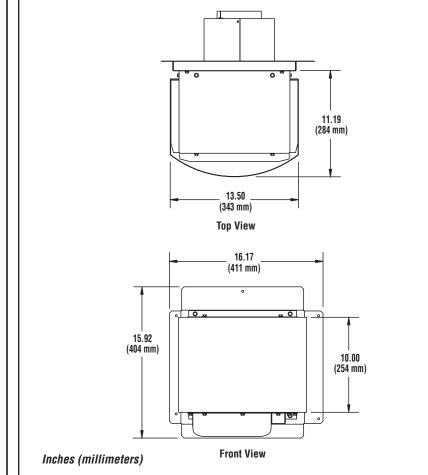
## (See Maintenance Schedule, Page 50)

Refer to the maintenance schedule for maintenance tasks, procedures, frequency and by whom they should be performed. Always verify proper operation of the appliance after servicing.

# 🛕 WARNING

Turn OFF gas and electrical power to the fireplace and allow it to cool before cleaning or servicing the appliance.

CAUTION:Weargloves and safety glasses for protection while doing required maintenance.





Verify proper operation after servicing.

S'assurer que l'appareil fonctionne adéquatement une fois l'entretien terminé.

Always turn off the gas before cleaning. Before re-lighting, refer to the lighting instructions in this manual. Instructions are also found on a pull-out panel located in the control compartment.

Always keep the appliance area clear and free from combustible materials, gasoline and other flammable liquids.

Before re-lighting the fireplace, refer to the lighting instructions in this manual. Instructions are also found on pull-out panels located in the control compartment.

# **Inspect Venting System**

The appliance and venting system should be thoroughly inspected before initial use and at least annually by a qualified service technician (inspection should include ensuring that exhaust or intake passages are unobstructed and vent components are properly assembled and not damaged). **Homeowner must contact a qualified service technician at once if any abnormal condition is observed.** 

If the venting system is disassembled for any reason, a qualified service technician should follow vent installation instructions for proper reassembly and proper sealing of the venting system components. However, more frequent periodic inspections and cleanings should be performed by the homeowner.

# **Glass Cleaning**

See Front Glass Enclosure Panel, Removal and Installation on **Page 39**.

38

NOTE: Clean glass after first two weeks of operation (after Burn-In period is over) and then only when necessary and when the fireplace is cool. Wipe surface with clean, dampened, soft cloth. Follow with a dry, soft towel as desired. Take care not to scratch the glass surface.

#### WARNING: Do not use abrasive cleaners on glass. Never clean the glass when it is hot.

The viewing glass should be cleaned periodically to remove any build-up caused from the following:

- During start-up, it is normal for condensation to form on the inside of the glass (this condensation and fog will usually disappear in a few minutes). The moisture can cause lint, dust and other airborne particles to cling to the glass surface.
- Initial curing of the high temperature paint and burning off of lubricants used in the manufacturing process may result in a film on the glass.
- A white coating may form on the glass as a result of impurities and minerals in the fuel.

It is recommended that the glass be cleaned two or three times during each burning season, depending on the circumstances present. The following cleaning solutions are approved for use to clean glass:

- Non-ammonia based household cleaner
- 50/50 mix of white vinegar & water
- Gas fireplace/stove glass cleaner

#### **Inspect Glass Gasket**

Visually inspect the gasket on the backside of the glass enclosure panels. The gasket surface must be clean, free of irregularities and seated firmly.

#### **Clean Control Compartment**

Keep control compartment clean by vacuuming or brushing at least twice a year. More frequent cleaning may be required due to excessive lint from carpeting, bedding materials, etc. It is important that control compartments, burners and circulating air passageways of the appliance be kept clean.

#### **Clean Logs and Burner**

Carefully remove the logs (use care when handling the fiber logs, as they become quite fragile after curing). Vacuum out any foreign matter (lint, carbon, etc.) on the burner. Ensure the burner ports are "open." Remove any carbon deposits from the under side of the logs using a vacuum cleaner, or a soft bristled brush (i.e. paint brush).

#### NOTE: Improperly positioned logs can create carbon build-up and will alter the performance of the appliance.

#### **Replacing Logs**

If the logs become damaged by accident or improper handling and need replacement, use only the proper replacement logs from manufacturer (see **Page 45** for ordering information).

**Re-install Embers, Volcanic stone and Logs** Carefully follow placement instructions on *Pages 14 and 15*). All logs should fit onto corresponding pins and/or log stoppers. This will ensure a proper flame and safe combustion. *NOTE: If installing the contemporary burner/* 

# floor kit, skip this step and instead refer to the instructions provided with the kit.

### Inspect Wiring

Refer to wiring diagram on Page 48.

CAUTION: Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.

ATTENTION: Au moment de l'entretien des commandes, étiquetez tous les fils avant de les débrancher. des erreurs de cáblage peuvent entraîner un fonctionnement inadéquat et dangereux.

Inspect and clean all wire connections. Ensure there is no melting melting or other damage. Inspection should include:

- Terminals at the valve
- Wall ON/REMOTE/OFF switch

### Low Battery Power Detection

The life span of the remote control system batteries depends on many factors:

- the quality of the batteries used
- the number of appliance ignitions
- etc.

When the batteries are low, the receiver will emit two (2) beeps (low battery alert) when it receives a command from the transmitter.

After the batteries are replaced, the receiver will emit one (1) beep when it receives a command from the transmitter. See *"Initialization of the System"* in the Installation Instructions.

## Inspect Burner Flame and Pilot Flame Appearance

Periodically do a visual check of the burner flame and the pilot flame. Ensure that the burner flame appearance resembles the flame shown in *Figures 62 and 63* and as described in *Flame Appearance and Sooting* on *Page 43*. Refer to *Figure 64 on Page 43* for more information about the pilot flame appearance. Contact a qualified service technician at once if any abnormal condition is observed.

#### Small Area Paint Touch-up

Only use a factory supplied paint kit for touchups. Paint is available at your local Innovative Hearth Products dealer. Never attempt to paint a hot fireplace.

If the surface later becomes stained or marred, it may be lightly sanded and touched up with spray paint. Front Glass Enclosure Panel Removal and Installation

# A WARNING

- When reinstalling the glass door, the door latch screws must be securely tightened to prevent the glass door from falling out, which could potentially cause damage and possible injury.
- Do not attempt to substitute the materials used on this door, or replace cracked or broken glass.
- Handle this glass with extreme care! Glass is susceptible to damage - Do not scratch or handle roughly while reinstalling the glass door frame.
- The glass door of this appliance must only be replaced as a complete unit as provided by the manufacturer. Do not attempt to replace broken, cracked or chipped glass separately.
- Do not attempt to touch the front enclosure glass with your hands while the fireplace is in use.

# A WARNING

Do not operate appliance with the glass front removed, cracked or broken.

# **AVERTISSEMENT**

Ne pas utiliser l'appareil si le panneau frontal en verre n'est pas en place, est craqué ou brisé.

(Front Glass Enclosure Panel Removal and Installation continued on following page)

# **WARNING**

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

# AVERTISSEMENT

Tout écran ou protecteur retiré pour permettre l'entretien de l'appareil doit être remis en place avant de mettre l'appareil en marche.

Only doors certified with the appliance shall be used.

# Seules des portes certifiées pour cet appareil doivent être utilisées.

# WARNING: DO NOT abuse glass door by striking or slamming shut.

These are direct-vent appliances. They are designed to operate only when the front glass enclosure panel is installed. Generally the front glass enclosure panel should not be removed except to gain access to the components within the firebox.

# Removing Glass Enclosure Panel (see *Figure 54)*

Remove the door modesty shield from the top flange glass door by pulling it up firmly with both hands until it is disengaged. Using a phillips screwdriver, unfasten two (2) screws located at the top of the glass frame.

Tilt the glass frame at the top away from the unit. Lift it carefully off the bottom door track and set the door aside, protecting it from inadvertent damage.

# Barrier (see Notice, Page 40)

This fireplace comes with a barrier to reduce the likelihood of burns from touching hot glass. If the barrier is damaged, the fireplace should be turned off immediately and the fireplace must not be operated until a new, approved factory barrier for this unit is installed.

To remove barrier follow these steps.

- 1.Lift barrier up by the frame at the top.
- 2.Remove lower filler piece by pulling down off of the barrier.
- 3.Lower barrier and push barrier to left to release right side.
- 4.Pull the right side out of fireplace.
- 5.Remove screen.
- 6. Install the new, approved factory barrier with flat side of screen toward firebox.

# To install the front glass door assembly, proceed as follows:

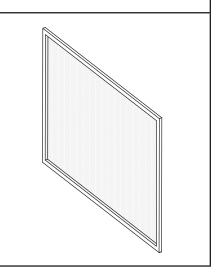
- 1. Retrieve the glass door assembly. Visually inspect the gasket on the backside of the panel. The gasket surface must be clean, free of irregularities and seated firmly.
- Position the door frame in front of the firebox opening and engage the bottom flange over the rail at the bottom of the firebox opening.
- **3.** Swing the door up and back. Ensure the gasket seats evenly as the door draws shut. Engage the nut insert and fasten with two screws to secure the door.
- 4. Install the door modesty shield on top flange glass door as follows: grab the door modesty shield with both hands, with the open hem going down and engage it with the upper lip of the glass door frame by pushing it all the way down. Make sure the installed shield is firmly in place.

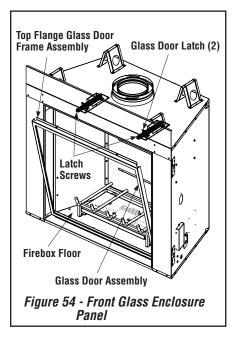
# WHEN INSTALLING THE GLASS DOOR, SECURELY TIGHTEN THE LATCH SCREWS - SEE THE FIRST WARNING ON THIS PAGE.

When installing the glass door, ensure the spacing on both sides are equal.

NOTICE: All DRT/DRC6300 PV Series fireplaces include a barrier to reduce the risk of burns from hot viewing glass. This barrier in the fireplace is a screen shown below.

40" Barrier Cat. No. J7422 45" Barrier Cat. No. J7423





INSTALL VOLCANIC STONE, GLOWING EMBERS, AND LOGS (Traditional Only), or GLASS MEDIA (Contemporary Only)

# 🛕 WARNING

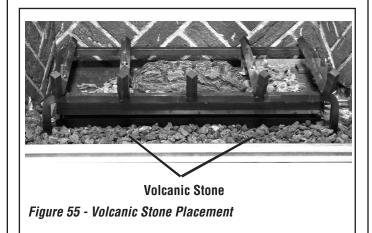
- DO NOT attempt to install the logs until the appliance installation has been completed, the gas line connected and tested for leaks and the initial burner operation has been checked out.
- The size and position of the log set was engineered to give the appliance a safe, reliable and attractive flame pattern. Any attempt to use a different log set in the fireplace will void the warranty and will result in incomplete combustion, sooting, and poor flame quality.
- Logs get very hot and will remain hot up to one hour after gas supply is turned OFF. Handle only when logs are cool. Turn OFF all electricity to the appliance before you install grate, volcanic stone, embers and logs.
- This appliance is not designed to burn wood. Any attempt to do so could cause irreparable damage to the appliance and prove hazardous to your safety.
- If logs are not installed according to the log installation instructions, flame impingement and improper combustion could occur and result in soot and/or excessive production of carbon monoxide (CO), a colorless, odorless, toxic gas.
- Step 1. Install the ceramic or porcelain panels, per the instructions provided in kit.
- Step 2. Place volcanic stone around the burner, as shown in Figure 55.
- **Step 3.** Separate the glowing embers from the larger bag into pieces about the size of a quarter, as shown in *Figure 56*. Mix the glowing embers with the bag of platinum embers also provided with the fireplace. Keep the pieces fluffed, not matted. Distribute these pieces over the burner as shown in *Figure 57*. Do not use more glowing embers than necessary. When properly positioned, the glowing embers will cover approximately 75% of the burner for natural gas applications.

NOTE: Excessive use of glowing embers may result in sooting or poor flame. This appliance is provided with enough glowing embers for several applications. Do not use all provided, in one application. For best glowing effect, replace the ember material annually. Replacement volcanic stone, glowing embers, and platinum embers are available (see **Table 5**).

Step 4. Position the individual logs as shown in *Figure 58* through *Figure 61* on *Page 42*. Logs should be placed in the order shown. Place logs 2 and 3 against the pins on the grate, NOT over them.

Proper log and twig placement is critical to encourage outstanding flame appearance and prevent sooting. When positioned properly as shown, twigs will be positioned between flame peaks and will not impinge any flames.

Cat. No.	Model	Description
88L53	FGE	Bag of Glowing Embers
80L42	FDVS	Bag of Volcanic Stone
H8312	PGE	Bag of Platinum Embers
Table 5 - Firebox Accessories		



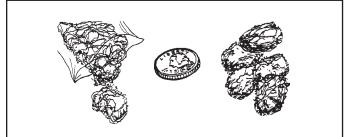
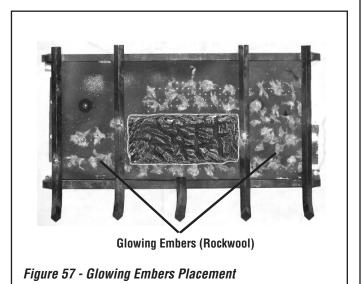


Figure 56 - Glowing Embers Separation



#### **Traditional Only: Log Placement**

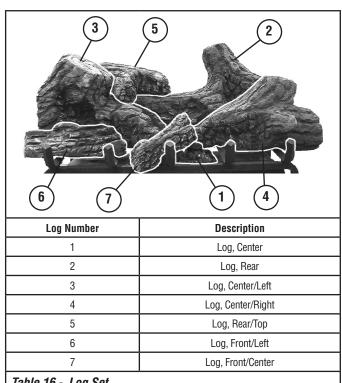
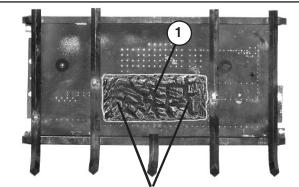
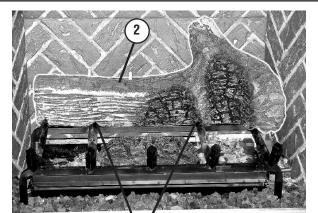


Table 16 - Log Set

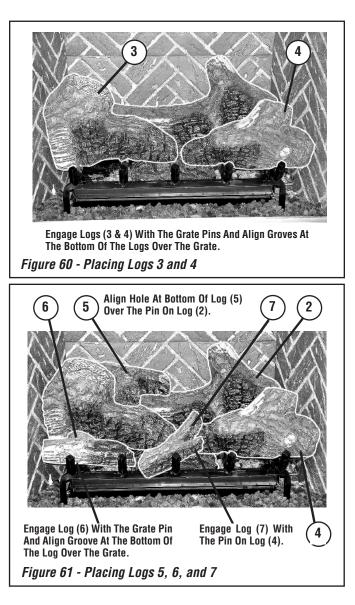


Align Two Holes At Bottom Of Log (1) Over The Pins On The Gas Burner. Figure 58 - Placing Log 1



Align Groove At The Bottom Of Log (2) Over The Grate And Push It Towards The Rear.

Figure 59 - Placing Log 2



# **Contemporary Only: Glass Media Placement**

1. Spread a thin layer of the media evenly on the burner and media screen.



- Figure 62 Glass media installed
- 2. On the corner of the right media screen, arrange the media to allow the pilot flame to reach the burner during lighting.

## BURNER ADJUSTMENTS (QUALIFIED TECHNICIANS ONLY)

## Flame Appearance and Sooting

Proper flame appearance is a flame which is blue at the base and becomes yellow-orange in the body of the flame. When the appliance is first lit, the entire flame may be blue and will gradually turn yellow-orange during the first 15 minutes of operation. After 15 minutes of operation, if the flame is blue, or if the flame is orange with evidence of sooting (black tip), the air shutter opening may need to be adjusted.

If the air shutter opening is closed too far, sooting may develop. Sooting is indicated by black puffs developing at the tips of very long orange flames. Sooting results in black deposits forming on the logs, appliance inside surfaces and on exterior surfaces adjacent to the vent termination. Sooting is caused by incomplete combustion in the flames and lack of combustion air entering the air shutter opening. To achieve a warm yellow-orange flame with an orange body that does not soot, the shutter opening must be adjusted between these two extremes.

#### Air Shutter Adjustment Guidelines

- If there is smoke or soot present, first check the log set positioning to ensure that the flames are not impinging on any of the logs. If the log set is properly positioned and a sooting condition still exists, then the air shutter opening should be increased.
- The more offsets in the vent system, the larger the air shutter opening will need to be.
- An appliance operated with the air shutter opened too far, may have flames that appear blue and transparent. These weak, blue and transparent flames are termed anemic.

The following chart is provided to aid you in achieving the correct air shutter adjustment for your installation.

Amount of Primary Air	Flame Color	Air Shutter Adjustment
If air shutter is closed too far	Flame will be orange	Air shutter gap should be increased
If air shutter is open too far	Flame will be blue	Air shutter gap should be decreased
Table 7 - Air Shutter Adjustment Guidelines		



Figure 63 - Burner Flame Appearance

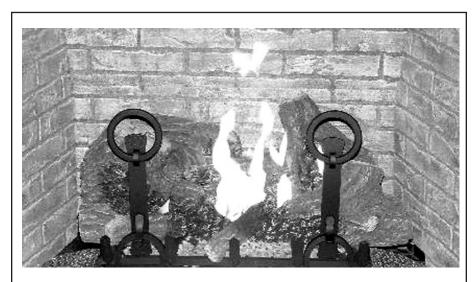


Figure 64 - Burner Flame Appearance

## Burner Air Shutter Adjustment Procedure

# A WARNING

- Air shutter adjustment should only be performed by a qualified professional service technician.
- Ensure that the front glass door assembly is in place and sealed After adjustment.

# **CAUTION**

Soot will be produced if the air shutter is closed too much. Any damage due to carboning resulting from improperly setting the air shutter is not covered under the warranty.

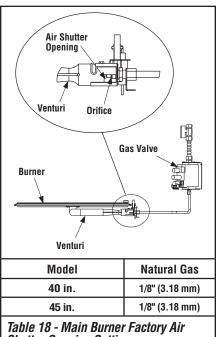
The following paragraphs address burner adjustment concerns and procedures.

When lit for the first time, this appliance will emit a slight odor for an hour or two. This is due to the "burn-in" of internal paints and lubricants used in the manufacturing process.

#### Adjustment

To adjust the flame, move the adjustment air shutter (located on the lower venturi) back or forward to increase or reduce the air shutter opening, respectively. **Position the air shut**ter to the factory setting as shown in *Table* **8.** Allow the burner to operate for at least 15 minutes. Observe the flame continuously. If it appears weak or sooty as previously described, adjust the air shutter until the flame appearance is as desired.

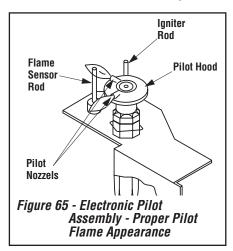
When satisfied that the appliance operates properly, leave the wall ON/REMOTE/OFF switch in REMOTE position and turn the remote switch OFF.



Shutter Opening Setting

#### **Electronic Appliance Inspection**

To light the burner, refer to the lighting instructions on *Page 21*. Ensure the igniter lights the pilot. The pilot flame should engulf the flame sensor rod as shown in *Figure 19*.



### ORDERING REPLACEMENT PARTS

A complete parts list is found at the end of this manual. Use only parts supplied from the manufacturer.

With proper care and maintenance, your appliance will provide many years of enjoyment. If you should experience any problem, first refer to the troubleshooting guide in this manual. If problem persists, contact your Innovative Hearth Products dealer or distributor.

Normally, all parts should be ordered through your Innovative Hearth Products distributor or dealer. Parts will be shipped at prevailing prices at time of order.

When ordering repair parts, always provide:

- **1.** The model number of the appliance.
- 2. The serial number of the appliance.
- 3. The part number.
- **4.** The description of the part.
- 5. The quantity required.
- **6.** The installation date of the appliance.

## WIRING DIAGRAM

This wiring diagram is provided for reference purposes only. This information is also provided on schematics attached directly to the appliance on a pullout panel located within the control compartment. If you encounter any problems or have any questions concerning the installation or application of this system, please contact your dealer or distributor.

Innovative Hearth Products 1508 Elm Hill Pike, Suite 108 Nashville, TN 37210

Visit us at SuperiorFireplaces.US.com

## **PRODUCT REFERENCE INFORMATION**

We recommend that you record the important reference information about your fireplace in the space provided below.

Please call Innovative Hearth Products for the phone number of your nearest Innovative Hearth Products dealer who will answer your questions or address your concerns.

Fireplace Model Number \_\_\_\_\_

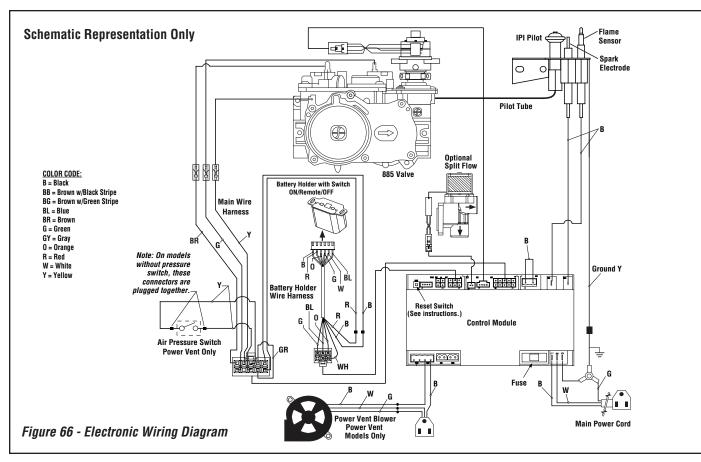
Fireplace Serial Number\_\_\_\_\_

Date Installed

Type of Gas Used in Fireplace \_\_\_\_\_

Dealer Name

CAUTION: LABEL ALL WIRES PRIOR TO DISCONNECTION WHEN SERVIC-ING CONTROLS. WIRING ERRORS CAN CAUSE IMPROPER AND DANGER-OUS APPLIANCE OPERATION. ATTENTION: AU MOMENT DE L'ENTRETIEN DES COMMANDES, ÉTIQUETEZ TOUS LES FILS AVANT DE LES DÉBRANCHER. DES ERREURS DE CÁBLAGE PEU-VENT ENTRAÎNER UN FONCTIONNEMENT INADÉQUAT ET DANGEREUX.



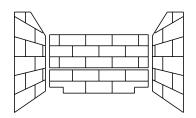
# **ACCESSORY COMPONENTS**



Bag of Glowing Embers Bag of Volcanic Stone Bag of Platinum Embers

Replacement ember material and volcanic stone are available for use with these appliances. Order them to replace materials as part of the periodic maintenance of the appliance.

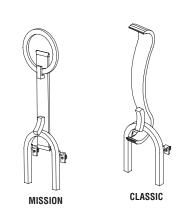
Firebox Accessories		
Cat. No.	Model	Description
88L53	FGE	Bag of Glowing Embers
80L42	FDVS	Bag of Volcanic Stone
H8312	PGE	Bag of Platinum Embers



## **Ceramic and Porcelain Firebox Liners**

The firebox liner kits include ceramic and porcelain panels of the side and rear walls. The ceramic panels have brick-like features in relief.

Ceramic and Porcelain Firebox Liner Kits		
Model	Cat. No. Model	Description
	H8697 LKC-BFRS-MDLX40	Ceramic, Buff Rustic
	H8698 LKC-RDRS-MDLX40	Ceramic, Red Rustic
40 in.	H2220 BLKH-LSM40	Ceramic, Buff Herringbone
	H4803 BLK-REDH-LSM40	Ceramic, Red Herringbone
	H8581 LKP-BK-MDLX40	Porcelain, Black
	H8699 LKC-BFRS-MDLX45	Ceramic, Buff Rustic
	H8700 LKC-RDRS-MDLX45	Ceramic, Red Rustic
45 in.	H2224 BLKH-LSM45	Ceramic, Buff Herringbone
	H4804 BLK-REDH-LSM45	Ceramic, Red Herringbone
	H8696 LKP-BK-MDLX45	Porcelain, Black



### Andiron Door Kits

The andiron kits attach to the grate assembly without the use of hardware.

Andiron Door Kits			
Fits Fireplace	o. (Model)		
Models	Mission	Classic	
40 in. 45 in.	H2227 (AKM-LSM)	H2228 (AKC-LSM)	



### **Touch-Up Paint Kit**

Repair of minor scratches and discoloration of the appliances black painted surfaces may be accomplished with the touch-up paint kit.

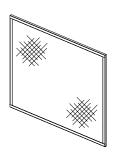
Touch-Up Paint (Black) Kit		
Cat. No.	Model	Description
90L73	FTPK-B	Black Paint Kit



## Log Sets

This finely crafted log set has detailing that replicates the natural look of real wood.

Oak Log Set	
Cat. No. Model	
H8676	LOG-OAK-MDLX4045



#### **Barrier Kits**

These screen panel kits create a barrier to prevent direct contact with the hot glass. The screen panel affixes directly to the front glass enclosure panel.

Barrier Screen Kits		
Cat. No.	. No. Description	
J7422	40" Barrier Screen	
J7423	45" Barrier Screen	



## **Dual Arch Screen Kits**

These Dual Arch screen kits can be installed on the glass enclosure panel to help prevent direct human contact with the hot glass surface.

Dual Arch Screen Kits			
Cat. Model Description			
H5051	DASK-LSM40IN-2	40" Screen	
H5054	DASK-LSM45IN-2	45" Screen	



## Arch Screen Kits

These arch screen kits can be installed on the glass enclosure panel to help prevent direct human contact with the hot glass surface.

Arch Screen Kits			
Cat. Model Description			
H5053	ASK-LSM40-2	40" Screen	
H5056	ASK-LSM45-2	45" Screen	



### **Classic Screen Kits**

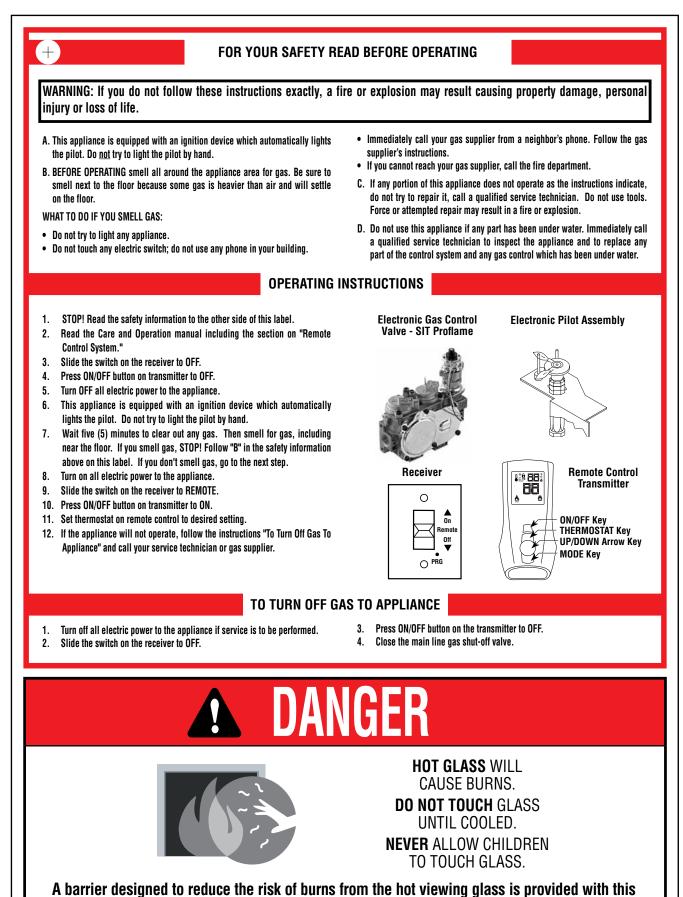
These Screen kits can be installed on the glass enclosure panel to help prevent direct human contact with the hot glass surface.

Classic Screen Kits		
Cat. No. Model Description		
H5052	SK-LSM40-2	40" Screen
H5055	SK-LSM45-2	45" Screen

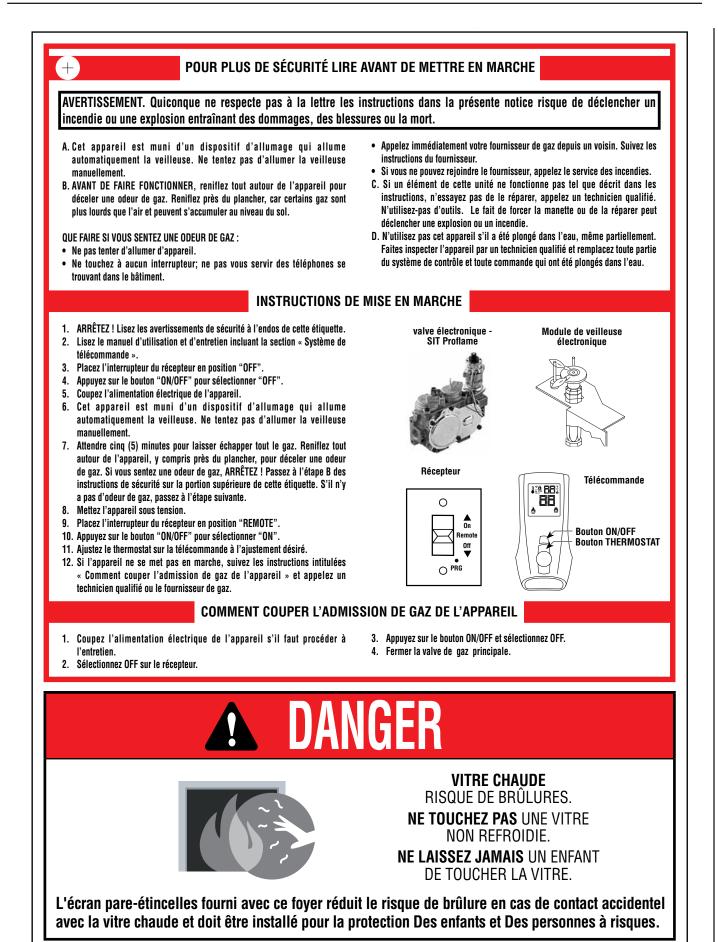
#### **Glass Media Kits**

Select from five glass media options to suit your taste, or to complement home decor.

Glass Media Kits			
Cat. No.	Model	Description	
H8412	CRSHGL-RBLK	Reflective Black	
H8424	CRSHGL-RBLU	Reflective Blue	
H8413	CRSHGL-P	Platinum	
H8538	CRSHGL-GF	Goldfinger	
H8539	CRSHGL-C	Copper	



appliance and shall be installed for the protection of children and other at-risk individuals.



P/N 900333-00 Rev. 0

# **MAINTENANCE SCHEDULE**

# Turn OFF gas and electrical power to the fireplace and allow it to cool before cleaning or servicing the appliance.

Annually (Before the onset of the Burning Season)

MAINTENANCE TASK	PERFORMED BY	PROCEDURE
Inspect/Clean Burner, Logs and Controls	Qualified Service Technician	Inspect valve and ensure it is properly operating. Check piping for leaks. Vacuum the control compartment, fireplace logs and burner area.
Check Flame Patterns and Flame Height	Qualified Service Technician	Refer to <i>Figures 18 and 19 on Page 16</i> and verify the flame pattern and height displayed by the appliance conforms to the picture. Flames must not impinge on the logs. Ensure flames are steady (not lifting or floating).
Inspect/Clean Pilot and Burner	Qualified Service Technician	Refer to <i>Figure 20 on Page 17</i> . Remove any surface build-up on pilot and burner assembly. Wipe the pilot nozzles, igniter/flame rod and hood. Ensure the pilot flame engulfs the flame sensor as shown.
Check Vent System	Qualified Service Technician	Inspect the vent system at the top and at the base (within the firebox) for signs of blockage or obstruction. Look for any signs of dislocation or deterioration of the vent components. <b>NOTE: Excessive condensation can cause corrosion of caps, pipe,</b> <b>and fittings (excessive condensation can be caused by long lateral</b> <b>runs, too many elbows and/or exterior portions of the system being</b> <b>exposed to cold weather). Also, inspect wall straps or plumbers's</b> <b>tape to ensure it is secure and in place.</b>
Appliance Checkout	Qualified Service Technician	Perform the appropriate appliance checkout procedure detailed in this manual.
Replace Glowing Embers	Homeowner/Qualified Service Technician	Remove old ember materials (rockwool) and vacuum the ember placement area. Place new embers per instructions on <b>Page 14</b> .

Periodically (After the Burning Season)

MAINTENANCE TASK	PERFORMED BY	PROCEDURE
Clean Firebox Interior	Homeowner	Carefully remove logs, rockwool and volcanic stone. Vacuum out interior of the firebox. Clean firebox walls and log grate. Replace logs, glowing embers (rockwool) and volcanic stone as detailed in this manual.
Check Flame Patterns and Flame Height	Homeowner	Refer to <i>Figures 18</i> and <i>19 on Page 16</i> and verify the flame pattern and height displayed by the appliance conforms to the picture. Flames must not impinge on the logs.
Check Vent System	Homeowner	Inspect the vent system at the top and at the base (within the firebox) for signs of blockage or obstruction. Look for any signs of dislocation of the vent components (reconnect or replace as necessary).
Clean Front Glass Enclosure Panel	Homeowner	Clean as necessary following the directions provided in this manual. <i>NOTE: DO NOT TOUCH OR ATTEMPT TO CLEAN GLASS WHILE HOT.</i>

### TROUBLESHOOTING GUIDE

**Electronic Gas Control System** 

NOTE: Service must be performed by a qualified installer, service agency, or your gas supplier.

#### **BEFORE TROUBLESHOOTING THE UNIT:**

- 1. Confirm there is power to the unit (fireplace).
- 2. Confirm there is gas to the unit (fireplace).

3. The igniter module in the fireplace is equipped with a device that can put the unit into a lockout state. Follow the steps in the chart below to reset the control: Turn the ON/REMOTE/OFF switch to the OFF position, or turn the remote to the OFF position.

4. If this is the first time that the unit has been fired, check the wiring of the unit against the wiring diagram before commencing troubleshooting.

SYMPTOM	POSSIBLE CAUSES	CORRECTIVE ACTION	
Nothing happens when the fireplace is turned ON/OFF.	Remote control system is not functioning properly.	To use the remote control system, the Wall ON/ REMOTE/OFF switch must be set to REMOTE.	
		Manually operate the fireplace using the Wall ON/ REMOTE/OFF switch.	
		Replace the batteries in the handheld remote and/or behind the Wall ON/REMOTE/OFF switch plate.	
	Unit is not receiving power.	Check/replace batteries behind the wall switchplate.	
		Check building circuit breakers to ensure power is on to the fireplace.	
	Gas is not reaching the fireplace.	Check the gas supply and gas shutoff valves (call a service technician, if required).*	
The main burner does not light and the igniter is sparking.	Gas is not reaching the fireplace.	Check the gas supply and gas shutoff valves (call a service technician, if required).*	
	Loose wires to the valve.	Check control compartment for any obvious loose wiring (call a service technician).	
	Loose wires to ignition module.	Check control compartment for any obvious loose wiring (call a service technician).	
	Air in the gas line.	Purge gas line of air (call a service technician).	
The burner lights, then immediately goes out.	Gas is not reaching the fireplace.	Check the gas supply and gas shutoff valves (call a service technician, if required).*	
	Loose wires to the valve or ignition module.	Check the gas supply and gas shutoff valves (call a service technician, if required).*	
	Pilot flame is not engulfing the sensor.	Call a service technician.	
	Obstructed vent system.	Call a service technician.	
Log and glass soot	Flame impingement on the top log.	Check for proper log placement.	
	Improper Air shutter opening.	Check for proper air shutter openings.	
Table 9 - Troubleshooting Guide -	Electronic Gas Control System		

\*The unit may have multiple gas supply shutoffs (the main gas supply valve in the house, the gas supply valve in the fireplace control compartment, and/or an additional shutoff valve near the fireplace).

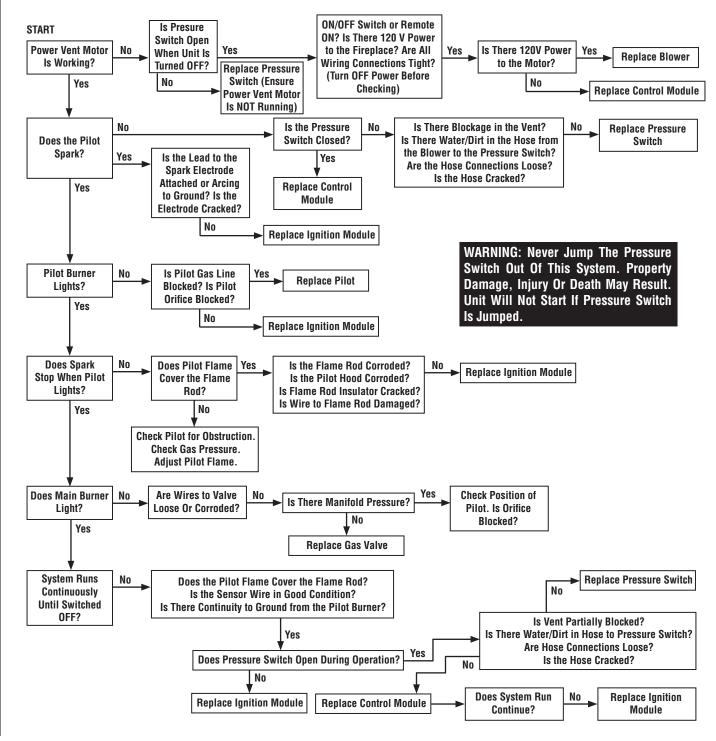
#### **TROUBLESHOOTING GUIDE**

**Power Vent System** 

NOTE: Service must be performed by a qualified installer, service agency, or your gas supplier.

**BEFORE TROUBLESHOOTING THE UNIT:** 

- 1. Confirm there is power to the unit (fireplace).
- 2. Confirm there is gas to the unit (fireplace).
- 3. The igniter module in the fireplace is equipped with a device that can put the unit into a lockout state. Follow the steps in the chart below to reset the control: Turn the ON/REMOTE/OFF switch to the OFF position, or turn the remote to the OFF position.
- 4. If this is the first time that the unit has been fired, check the wiring of the unit against the wiring diagram before commencing troubleshooting.



# **REPLACEMENT PARTS LIST**

Itom		40 ir	40 in.		45 in.	
ltem No.	Description	Catalog No.	Qty.	Catalog No.	Qty.	
1	Door Modesty Shield	H4808	1	H4809	1	
2	Log Set (Oak)	H8676	1	H8676	1	
3	Enclosure, Glass Door	H2281	1	H2282	1	
4	Spring Latch Assembly	H2274	2	H2274	2	
5	Burner Assembly, Traditional	H4817	1	H4817	1	
5	Burner Assembly, Contemporary	F1880	1	F1880	1	
6	Venturi	H1428	1	H1428	1	
7	Gasket - Venturi	43K85	1	43K85	1	
8	Access Plate	H2277	1	H2277	1	
9	Barrier	J7422	1	J7423	1	
10	Barrier Filler	J7543	1	J7543	1	
11	Gasket, Access Plate	H1452	1	H1452	1	
12	Gas Line Tubing	H2283	1	H2284	1	
13	Connector, Male	H2285	1	H2285	1	
14	Orifice, Natural Gas	H7924	1	H8141	1	
15	Bag of Glowing Embers	88L53	1	88L53	1	
16	Grate Assembly	H4907	1	H4907	1	
17	Gas Line, Flexible Connection	93L32	1	93L32	1	
18	Modesty Panel, Right Side	H3371	1	H3372	1	
19	Modesty Panel, Left Side	H3373	1	H3374	1	
20	Floor Panel	H3369	1	H3370	1	
21	Bag of Volcanic Stone	80L42	1	80L42	2	
22	Bag of Platinum Embers	H8312	1	H8312	1	
23	Springs	J7542	1	J7542	1	
24	Access Door	J7541	1	J7541	1	
25	Insulation	J7544	1	J7544	1	
26	Top Channel	J7545	1	J7545	1	
27	Heat Baffle	J7548	1	J7548	1	
28	Header Heat Shield	J7549	1	J7549	1	

GAS CONTROLS - SIT ELECTRONIC				
ltem No.	Description	Natural Gas		
	Description	Part No.	Qty.	
29	Gas Valve, SIT	H7270	1	
30	Pilot Assembly	H7268	1	
31	Control Module	H8842	1	
32	Wiring Harness, Power	H8811	1	
33	Wiring Harness, Control	H8814	1	
34	Wiring Harness, Wall ON/REMOTE/OFF Switch	H8813	1	
35	Wiring Harness, Jumper	H8809	1	

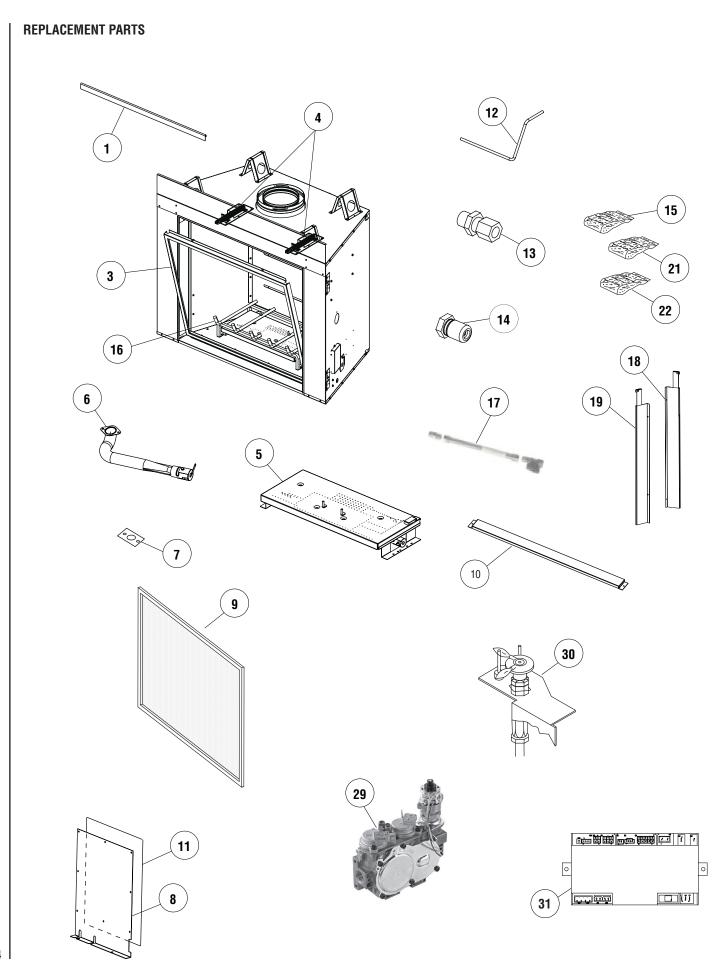
Contact a Innovative Hearth Products dealer to obtain any of these parts. Never use substitute materials. Use of non-approved parts can result in poor performance and safety hazards.

# 🛕 WARNING

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

# AVERTISSEMENT

Risque de dommages ou de blessures si les pièces ne sont pas installées conformément à ces schémas et ou si des pièces autres que celles spécifiquement approuvées avec cet appareil sont utilisées.

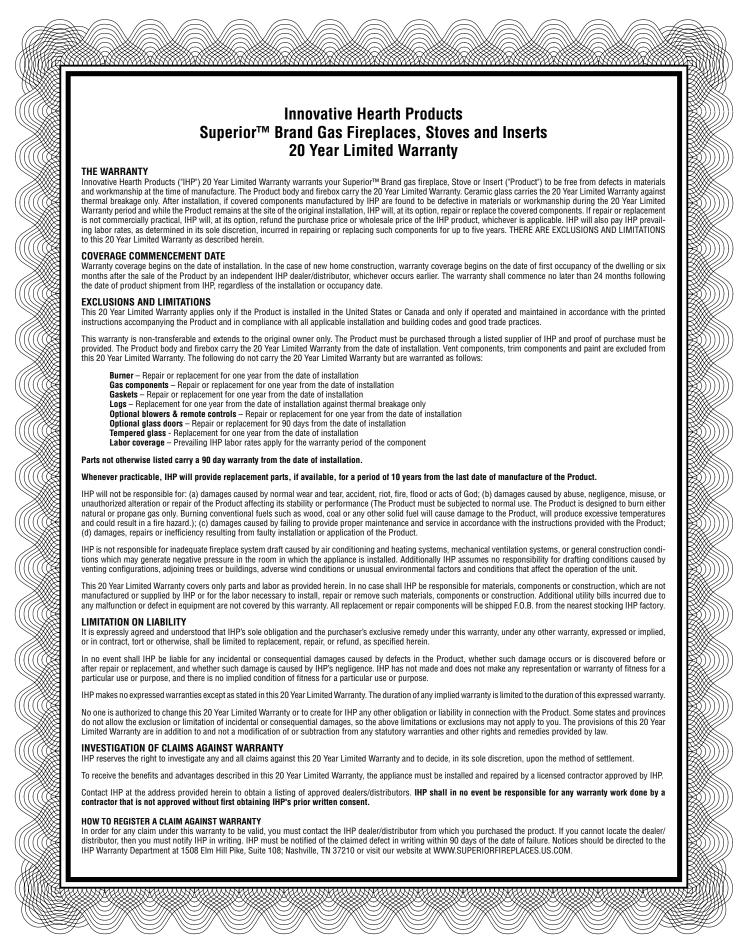


# **INSTALLATION ACCESSORIES**

Listed Secure Vent® Components			
	Cat. No.	Model No.	Description
	77L70	SV4.5L6	6" (152mm) Vent Section
	77L71	SV4.5L12	12" (305mm) Vent Section
	77L72	SV4.5L24	24" (610mm) Vent Section
	77L73	SV4.5L36	36" (914mm) Vent Section
	77L74	SV4.5L48	48" (1219mm) Vent Section
	77L75	SV4.5LA	Telescopic Section
	77L76	SV4.5E45	45 Degree Elbow
	77L77	SV4.5E90	90 Degree Elbow
	H2246	SV4.5HF	Firestop/Spacer, Horizontal (3 - 1 - 1 spacing) 10 pack
	H2247	SV4.5VF	Firestop/Spacer, Vertical (1 - 1 - 1 spacing) 10 pack
The followi	ng flashings con	ne packaged with	a storm collar:
	H5816	SV4.5-TWSK	Through Wall Shield Kit (used to shield the direct-vent pipe from blown insulation) Ref. instr. # 750247M
	96K93	SV4.5SU	Support Strap
	96K92	SV4.5SP Support Plate	

Listed Secure Vent / Secure Flex® Components			
	Cat. No.	Model No.	Description
	H3907	SV4.5RSA	Attic Insulation Shield (adjustable 12" to 22")
	H7748	FVK36	36" Flex Vent Kit NOTE: Flex attaches to appliance collar at one end and to rigid venting at the other end.
NY.	10K81	SFMP	Mill-Pac, Black, High Temperature Sealant
	89L40	SFMP-12	Mill-Pac, Black, High Temperature Sealant - Bulk 12 pack
	91L66	SF-GC4-6	Gear Clamp 4.5" (114 mm) for flex (6 pieces)
	91L67	SF-GC7-6	Gear Clamp 7.5" (190.5 mm) for flex (6 pieces)

# NOTES



Contact an IHP dealer to obtain any of these parts. Please contact IHP for the phone number of your nearest IHP dealer. SuperiorFireplaces.us.com

Record the following important information about your fireplace:

Fireplace model number	
Fireplace serial number	
Date fireplace was Installed	
Type of gas fireplace uses	
Dealer name	



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