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Ce manuel est disponible en français, simplement en faire la demande. Numéro de la pièce 900300-02.



P900300-00



Installation and Operation Instructions

Superior™ DRT35 See Through and Peninsula Direct Vent Gas Fireplaces

Models

DRT35STD MN
DRT35STD MP
DRT35STD EN

DRT35PFD MN
DRT35PFD MP
DRT35PFD EN

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 the hot viewing glass is provided with this appliance and shall be installed for the protection of children and other at-risk individuals.

L'écran pare-étincelles fourni avec ce foyer réduit le risque de brûlure en cas de contact accidentel avec la vitre chaude et doit être installé pour la protection 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 être installé dans une maison préfabriquée (mobile) déjà installée à demeure, si les règlements locaux le permettent. Ce 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, sauf si une trousse de conversion est utilisée.

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:

RISQUE D'INCENDIE OU D'EXPLOSION

Le non-respect Des avertissements de sécurité pourrait entraîner des blessures graves, la mort ou des dommages matériels.

- Ne pas entreposer ni utiliser 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 aucun 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 incendies.
- L'installation et l'entretien doivent être assurés par un installateur ou un service d'entretien qualifié ou par le fournisseur de gaz.

DANGER

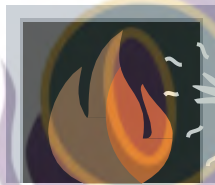


**HOT GLASS WILL
CAUSE BURNS.
DO NOT TOUCH GLASS
UNTIL COOLED.
NEVER ALLOW CHILDREN
TO TOUCH GLASS.**

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

See attached color flyer for proper color representation

DANGER



**VITRE CHAUDE
RISQUE DE BRÛLURES.
NE TOUCHEZ PAS UNE VITRE
NON REFROIDIE.
NE LAISSEZ JAMAIS UN ENFANT
DE TOUCHER LA VITRE.**

L'écran pare-étincelles fourni avec ce foyer réduit le risque de brûlure en cas de contact accidentel avec la vitre chaude et doit être installé pour la protection Des enfants et Des personnes à risques.

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

PELIGRO



**EL VIDRIO CALIENTE
CAUSARÁ QUEMADURAS.
USTED DEBE **NUNCA TOCAR**
EL VIDRIO CALIENTE. LOS
NIÑOS DEBEN **NUNCA TOCAR**
EL VIDRIO.**

Una barrera diseñada para reducir el riesgo de quemaduras desde la mirilla (vidrio) caliente es proveida con este aparato y deberá instalarse para la protección de los niños y otros individuos en riesgo.

Vea el volante adjunto para la representación de color adecuado

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 38**).
- ... Read **Important Safety Information** (**Page 4**)

[ENGLISH]

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 38**).
- ... Lisez **L'information de sûreté importante** (**Page 4**).

[FRENCH]

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 38**).
- ... Lea **Información importante de seguridad** (**Página 4**).

[SPANISH]

TABLE OF CONTENTS

Packaging	Page 4
Introduction	Page 4
General Information	Page 4
Requirements for the	
Commonwealth of Massachusetts	Page 6
New York City Approval	Page 6
Cold Climate Insulation	Page 7
Manufactured Home Requirements	Page 7
Location	Page 7
Vent Termination Clearances	Page 8
Appliance and Vent Clearances	Page 8
Detailed Installation Steps	Page 11
Typical Installation Sequence	Page 11
Step 1. Framing	Page 12
Fireplace and Framing Specifications	Page 13
Step 2. Routing Gas Line	Page 15
Step 3. Appliance Vent Collar	Page 15
Step 4. Install The Venting System	Page 16
Vertical Termination Systems	Page 17
Vent Section Length Chart	Page 17
Vertical Vent Tables and Figures	Page 19
Horizontal Termination System	Page 22
Horizontal Vent Tables and Figures	Page 24
Venting Using Flexible Vent Pipe	Page 27
Step 5. Field Wiring	Page 28
Step 6. Optional Blower Kit Wiring	Page 29
Step 7. Connecting Gas Line	Page 29
Step 8. Verifying Appliance Operation	Page 30
Step 9. Installing Logs	Page 31
Step 10. Remove/Install Glass Door	Page 35
Step 11. Burner Adjustments	Page 35
Step 12. Hood Installation	Page 37
Finishing Requirements	Page 37
Step 13. Attaching Safety-in-	
Operation Warnings	Page 38
Installation Accessories	Page 39
Gas Conversion Kits	Page 41
Operation/Care of Your Appliance	Page 47
Gas Controls Access	Page 47
Variable Flame Adjustment	Page 48
Attaching Safety in	
Operation Warnings	Page 49
Maintenance	Page 50
Front Glass Enclosure Panel,	
Removal and Installation	Page 51
Install Vermiculite, Embers	
and Logs	Page 51
Burner Flame Appearance/Sooting	Page 55
Burner Flame Adjustments	Page 56
Millivolt Appliance Checkout	Page 56
Electronic Appliance Checkout	Page 56
Wiring Diagrams	Page 57
Accessory Components	Page 58
Maintenance Schedule	Page 59
Lighting Instructions – Millivolt	Page 60
Lighting Instructions – Electronic	Page 63
Troubleshooting Guide – Millivolt	Page 64
Troubleshooting Guide – Electronic	Page 65
Replacement Parts List	Page 66
Warranty	Page 69

Please read and understand these instructions before beginning your installation.



PACKAGING

The assembled vented gas fireplace heater is packaged with:

- 1 - the logs are packaged in a carton located within the firebox.
- 2 - one plastic bag of glowing embers is located in the bottom compartment.
- 3 - one envelope containing the literature package which consists of Installation Instructions and Care and Operations manual (IICO) with warning labels and warranty; envelope is located in the bottom compartment.
- 4 - one vent restrictor to be applied as shown on **page 14**; restrictor is taped to the envelope.
- 5 - two hoods on see through units and three hoods on peninsula fireplaces
- 6 - top standoffs taped to top of unit
- 7 - front face assemblies with barriers.

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). J7424 (ST Models) and J7424 and J7425 (PF Models).

INTRODUCTION

The *Millivolt* appliances have a millivolt gas control valve with piezo ignition system. If any optional accessories that will require electrical power are to be installed, the electrical power must be provided at the time of appliance installation.

The *Electronic* appliances are designed to operate on natural or propane gas. An electronic intermittent pilot ignition system provides safe, efficient operation. External electrical power is required to operate these units.

These vented gas fireplace heaters are sealed combustion, air-circulating gas fireplaces designed for residential applications.

Approved Vent Components - These fireplaces are designed, tested and listed for operation and installation with the following vent components only:

- **Secure Vent™** Direct-Vent System Components manufactured by Security Chimneys International.
- **Secure Flex™** Flexible Vent Components manufactured by Security Chimneys International and
- **Z-FLEX™** Model GA Venting Systems listed to UL1777 and ULCS635 manufactured by Flexmaster Canada Limited.

Use only the correct size venting (4-1/2" inner and 7-1/2" outer).

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 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.

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 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.

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.

⚠ 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

⚠ WARNING

Clothing or other flammable material should not be placed

⚠ AVERTISSEMENT

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

⚠ 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.

NOTE: If the barrier becomes damaged, the barrier shall be replaced with the manufacturer's barrier for this appliance.

Note: 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.

Remarque: 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.

Do not use these appliances if any part has been under water. Immediately call a qualified, professional service technician to inspect the appliance and to replace any parts of the control system and any gas control which have 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.

IMPROPER INSTALLATION OR USE OF THIS APPLIANCE CAN CAUSE SERIOUS INJURY OR DEATH FROM FIRE, BURNS, EXPLOSION OR CARBON MONOXIDE POISONING.

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

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

These appliances comply with National Safety Standards and are tested and listed by PFS (Report No. F14-165) to ANSI Z21.88 (in Canada, CSA-2.33), and CAN/CGA-2.17-M91, latest editions, in both USA and Canada, as vented gas fireplace heaters

Both millivolt and electronic versions of these appliances are listed by PFS Corporation for installation in bedrooms and Manufactured Homes.

Misc. Codes / Standards -

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* (In Canada, the current CAN/CSA-B149.1 installation code).

The appliance, when installed, must be electrically grounded and wired 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 or back openings of the appliance.

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

These fireplaces are designed as supplemental heaters. Therefore, it is advisable to have an alternate primary heat source when installed in a dwelling.

Millivolt Models - The millivolt appliances are manually controlled and feature a spark igniter (piezo) that allows the appliance's pilot gas to be lit without the use of matches or batteries. This system provides continued service in the event of a power outage.

Millivolt models come standard with a manually-modulated gas valve; flame appearance and heat output can be controlled at the gas valve. The BTU Input for these appliances is shown in *Table 1*.

Electronic Models - Electronic models have a fixed rate gas valve. Input of electronic models is shown in *Table 1*.

Input (BTU) Gas Valves (all models)		
Models	Fuel Type	Input Rate (BTU / HR)
35" ST/PF DMN (Millivolt)	Natural	30,000 high 23,000 low
35" ST/PF DMP (Millivolt)	Propane	28,000 high 22,000 low
35" ST/PF DEN (Electronic)	Natural	30,000
35" ST/PF (Electronic) (if field converted)	Propane	28,000

Table 1

Efficiencies %				
Models	Natural Gas		Propane	
	AFUE	P4	AFUE	P4
STDMN-P	68.8	59.03	70.3	58.66
STDEN	74.8	54.73	n/a	n/a
PFDMP-P	69.2	60.1	69.7	58.66
PFDEN	74.8	54.73	n/a	n/a

Gas Pressure - All Models

Tables 2 and 3 show the appliances' inlet and manifold gas pressure requirements:

Inlet Gas Supply Pressure (all models)		
Fuel #	Minimum	Maximum
Natural Gas	4.5" WC (1.12 kPa)	10.5" WC (2.61 kPa)
Propane	11.0" WC (2.74 kPa)	13.0" WC (3.23 kPa)

Table 2

Manifold Gas Supply Pressure (all models)		
Fuel #	Low	High
Natural Gas	(Lo) 2.2" WC (0.55 kPa)	(Hi) 3.5" WC (0.87 kPa)
Propane	(Lo) 6.3" WC (1.57 kPa)	(Hi) 10.0" WC (2.49 kPa)

Table 3

Test gauge connections are provided on the front of the millivolt and electronic gas control valve (identified IN for the inlet and OUT for the manifold side). The control valves have a 3/8" (10mm) NPT thread inlet and outlet side of the valve (refer to **Figures 1 and 2**).

Propane tanks are at pressures that will cause damage to valve components. Verify that the tanks have step down regulators to reduce the pressure to safe levels.

These appliances must be isolated from the gas supply piping system (by closing their individual manual shut-off valve) during any pressure testing of the gas supply piping system at test pressures equal to or **less than** 1/2 psig (3.5 kPa).

These appliances and their individual shut-off valves must be disconnected from the gas supply piping system during any pressure testing of that system at pressures **greater than** 1/2 psig (3.5 kPa).

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

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 4**). 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/CSA-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/CSA-B149.1 - latest edition.

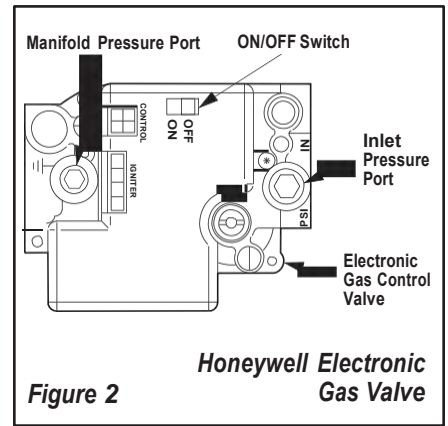
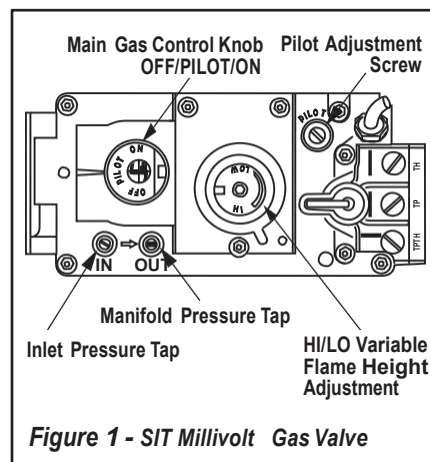
Flame breadth, height and width will diminish 4% for every 1,000 feet of altitude.

Burner Orifice Sizes (all models)		
Elevation Feet (meters)	Natural Gas drill size (inches)	Propane Gas drill size (inches)
0-4500 (0-1372)	#37 (0.104") * 24M10 •	1.55 mm (0.061")* 42M79 •

Table 4 * Standard size installed at factory
 • Part/Cat. Number

Gas Valve Diagrams

See **Figure 1** for Millivolt models and **Figure 2** For Electronic Models.



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.**

NEW YORK CITY, NEW YORK (MEA)

Installation of these fireplaces are approved for installation in New York City in the US state of New York.

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 conduction of cold transferring 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 after-market permanently located, manufactured home and must be installed in accordance with the manufacturer's instructions and the Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280, in the United States, or the Standard for Installation in Mobile Homes, CAN/CSA Z240 MH Series, in Canada.

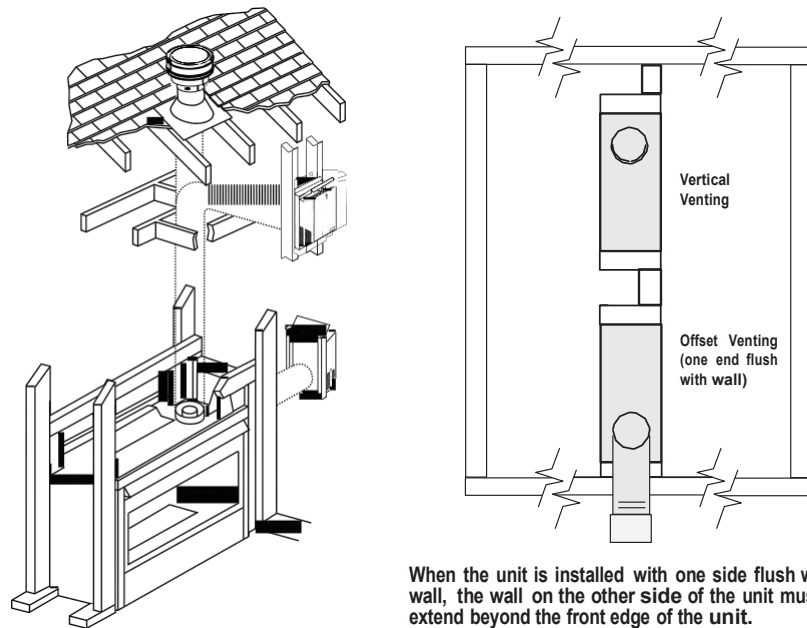
Cet appareil peut être installé comme du matériel d'origine dans une maison préfabriquée (É.U. seulement) ou mobile et doit être installé selon les instructions du fabricant et conformément à la norme Manufactured Home Constructions and Safety, Title 24 CFR, Part 3200 aux Unis ou à la norme Can/CSA-Z240 Série MM, Maisons mobiles au Canada.

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 doit être utilisé uniquement avec le type de gaz indiqué sur la plaque signalétique. Cet appareil ne peut être converti à d'autres gaz, sauf si une trousse de conversion est utilisée.

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 or the Canadian Electrical Code CSA C22.1 - latest edition.



(See-Through Model Shown)

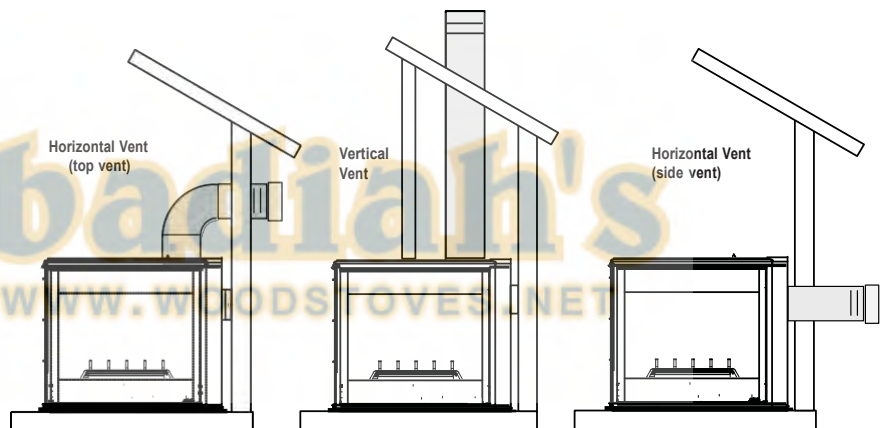


Figure 3

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 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 (Figure 3).

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

These direct-vent appliances are uniquely suited for installations requiring a utility shelf positioned directly above the fireplace. Utility shelves like these are commonly used for locating television sets and decorative plants.

NOTE: DIAGRAMS & ILLUSTRATIONS ARE NOT TO SCALE.

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 (see Figure 8).

The minimum height from the base of the appliance to the underside of combustible materials used to construct a utility shelf in this fashion is shown in **Figure 8**.

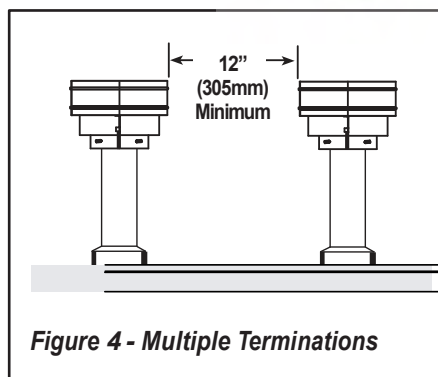
The appliance should be mounted on a fully supported base extending the full width and depth of the unit. The appliance may be located on or near conventional construction materials. However, if installed on combustible materials, such as carpeting, vinyl tile, etc., a metal or wood barrier covering the entire bottom surface must be used.

VENT TERMINATION CLEARANCES

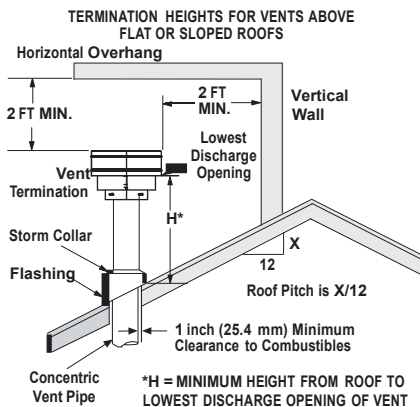
These instructions should be used as a guideline and do not supersede local codes in any way. Install venting according to local codes, these instructions, the current National Fuel Gas Code (ANSI-Z223.1) in the USA or the current standards of CAN/CSA-B149.1 in Canada.

Vertical Vent Termination Clearances

Terminate multiple vent terminations according to the installation codes listed above and **Figures 4 and 5**.



Vertical Vent Termination Clearances



The vent / air intake termination clearances above the high side of an angled roof is as shown in the following chart:

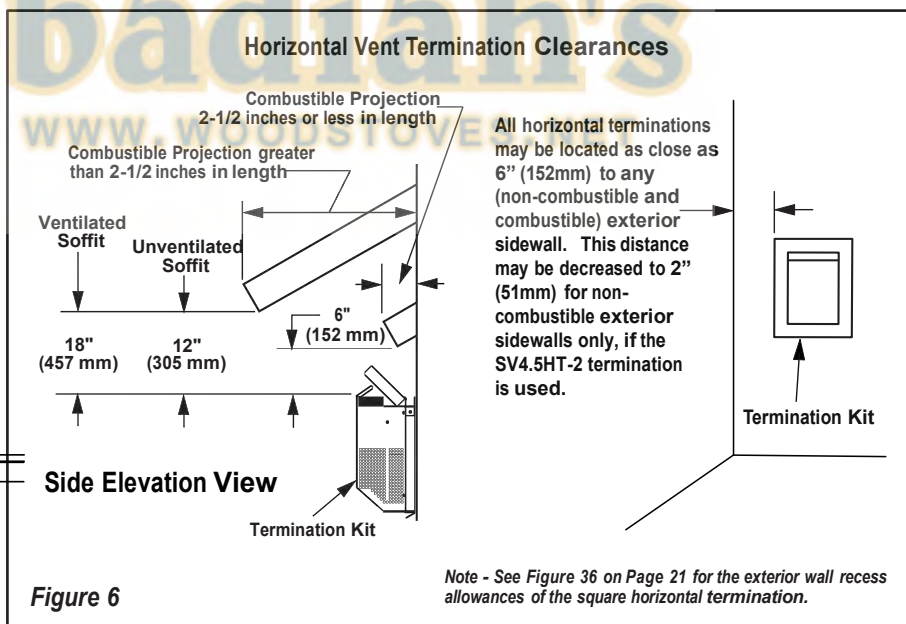
**Termination Heights For Vents Above Flat Or Sloped Roofs
Ref. NFPA 54 / ANSI Z223.1**

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

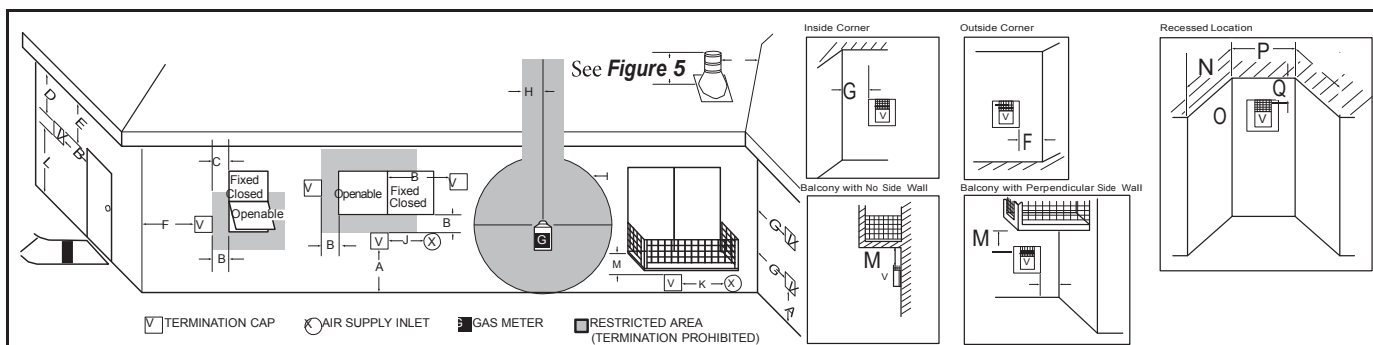
Figure 5

Horizontal Vent Termination Clearances

The horizontal vent termination must have a minimum of 6" (152 mm) clearance to any overhead combustible projection of 2-1/2" (64 mm) or less (see **Figure 6**). For projections exceeding 2-1/2" (64 mm), see **Figure 6**. For additional vent location restrictions refer to **Page 9**.



EXTERIOR HORIZONTAL VENT TERMINATION CLEARANCE REQUIREMENTS



		U.S. Installation **	Canadian Installation *
A	Clearance above grade, veranda, porch, deck, or balcony	12" (300 mm) **	12" (300 mm) *
B	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), 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)
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)
K	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 driveway located on public property	84" (2130 mm) ‡	84" (2130 mm) ‡
M	Clearance under veranda, porch, deck or balcony	12" (300 mm) *‡	12" (300 mm) *‡
N	Depth of alcove (maximum)	72" (1830 mm) **	72" (1830 mm) *
O	Clearance to termination (alcove)	6" (152 mm) **	6" (152 mm) *
P	Width of alcove (minimum)	36" (910 mm) **	36" (910 mm) *
Q	Clearance to combustible above (alcove)	18" (457 mm) **	18" (457 mm) *

* In accordance with the current CSA-B149.1 National Gas And Propane Installation Code

** In accordance with the current 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

NOTE: DIAGRAMS & ILLUSTRATIONS ARE NOT TO SCALE.

MINIMUM CLEARANCES TO COMBUSTIBLES

Appliance And Vent Clearances

The appliance is approved with zero clearance to combustible materials on all sides (as detailed in **Table 5**), with the following exception: **When the unit is installed with one side flush with a wall, the wall on the other side of the unit must not extend beyond the front edge of the unit.** In addition, when the unit is recessed, the side walls surrounding the unit must not extend beyond the front edge of the unit (see **Figure 3**).

***Note: 3 in. (75 mm) above any horizontal/inclined vent component.**

****Note: See Page 12, Step 1 for clearance requirements to the nailing flange located at each side of the unit and any screw heads adjacent to it.**

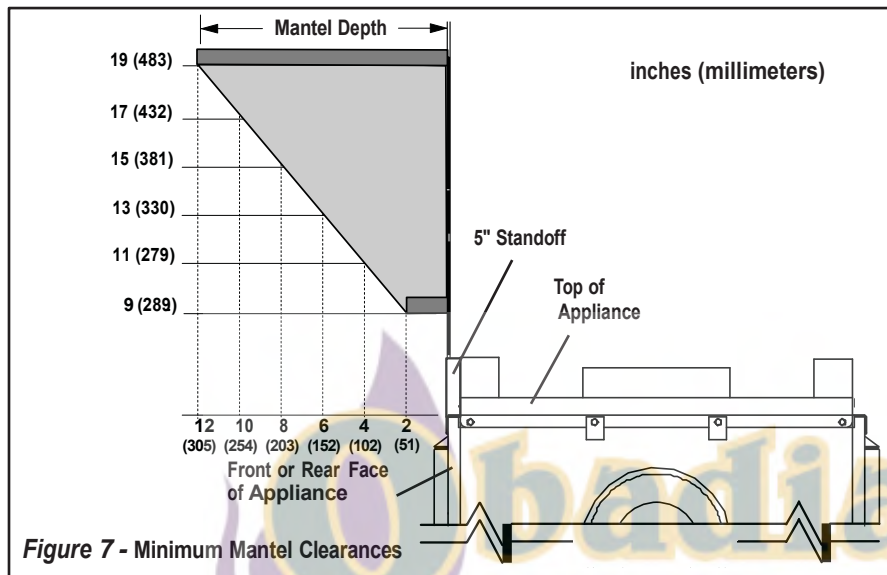
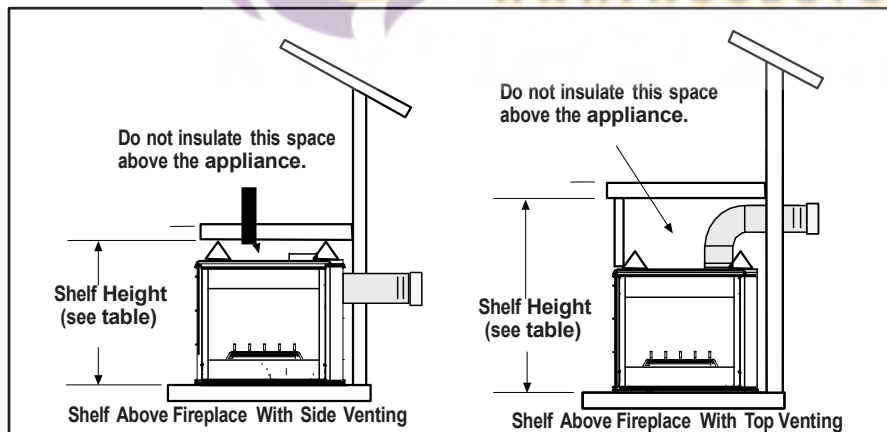


Figure 7 - Minimum Mantel Clearances



Model No.	Shelf Height - Inches (millimeter)		
	Side Vent - Straight Out Back	Top Vent - with One 90 Degree Elbow	
	Secure Vent & Secure Flex	Secure Vent	Secure Flex
ST/PF	37-3/16 (945)	*49-1/2 (1245)	*51-1/4 (1302)

* Includes 3" clearance to combustibles (required above vent components)

Figure 8 - Shelf Height Minimum Clearances

Hearth Extension - A hearth extension is not required with this appliance. If a hearth extension is used, do not block the lower control compartment door. Any hearth extension used is for appearance only and does not have to conform to standard hearth extension installation requirements.

Shelf Height - To provide for the lowest possible shelf surface, use the alternate rear vent outlet, the venting attached to the top vent should be routed in a way to minimize obstructions to the space above the appliance. **Do not insulate the space between the appliance and the area above it (see Figure 8).** The minimum height from the base of the appliance to the underside of combustible materials used to construct a utility shelf in this fashion is shown in **Figure 8**.

The appliance should 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, etc., a metal or wood barrier covering the entire bottom surface must be used.

Wall Finishes / Surrounds / Mantels

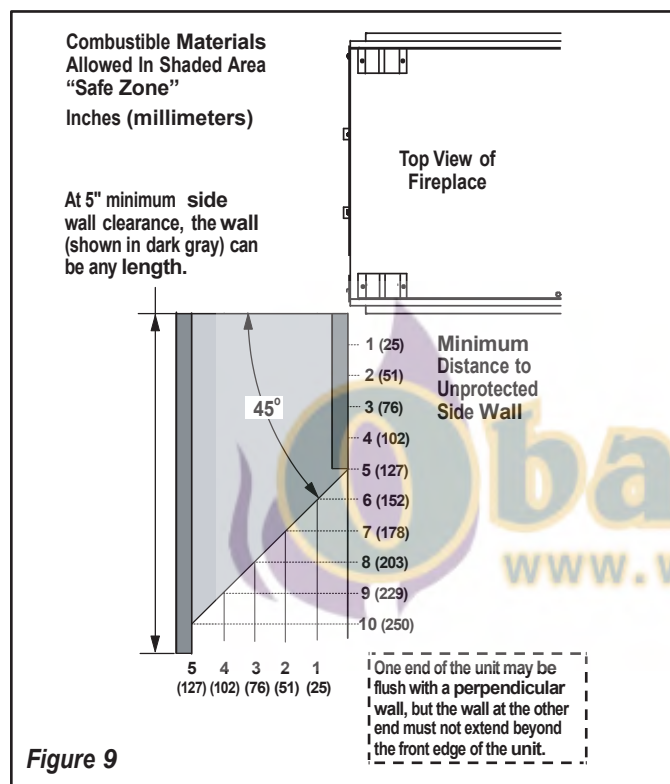
Note: Combustible wall finish materials and/or surround materials must not be allowed to encroach the area defined by the appliance front face (black sheet metal). Never allow combustible materials to be positioned in front of or overlapping the appliance face (see Figure 65 on Page 37).

Non-combustible materials, such as surrounds and other appliance trim, may be installed on the appliance face with these exceptions: they must not cover any portion of the removable glass panel or control compartment.

Vertical installation clearances to combustible mantels vary according to the depth of the mantel. See **Figure 9**. Mantels constructed of non-combustible materials may be installed at any height above the appliance opening; however, do not allow anything to hang below the fireplace hood.

MINIMUM CLEARANCES* Inches (millimeters)	
Sides	1/2 in. (13) 0 (0) from Spacers Or Dimples **
Top of Appliance	5 (127)
Floor	0 (0)
From Bottom of Unit To Ceiling	72 (1829)
Vent	3 (76) Top* / 1 (25.4) Sides & Bottom
SERVICE CLEARANCES Feet (meters)	
Front, Back, Sides	3 feet (0.9 meters)

Table 5



⚠ 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.

DETAILED INSTALLATION STEPS

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

1. Remove the shipping pad, exposing the front face assembly with barrier and hood. Remove the hood by pulling firmly straight away from the unit.
2. Remove the face assembly with barrier by lifting the front face assembly approximately 1/2" then pull straight out away from the fireplace until the mounting tabs clear, exposing the glass door.
3. Open the two latches (located under the firebox floor) securing the glass door. Remove the door by tilting it outward at the bottom and lifting it up. Set the door aside protecting it from inadvertent damage. See *Removing and Installing Glass Panels* on Page 35.
4. Lift the pressure relief plates and remove the cardboard from beneath each plate (be careful not to damage the white gasket).

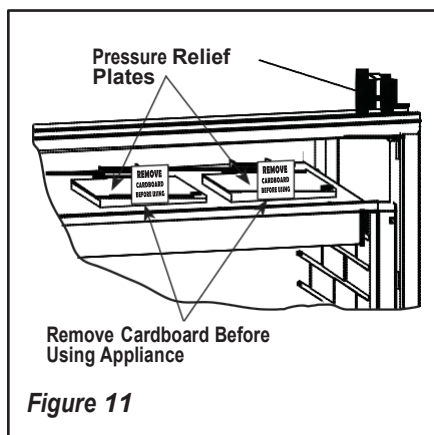


Figure 11

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 12) Construct the appliance framing. Position the appliance within the framing and secure with nailing brackets. Bend up the appropriate header spacing guides for the drywall/finish material thickness to be used (refer to **Figure 62, page 35**). Bend up the outer pair for 1/2" materials and the inner pair for 5/8" materials. Bend out the appropriate nailing flanges for the drywall/finish material to be used. Nailing flanges are provided for flush framing, 1/2 inch and 5/8 inch framing depths (see **Figure 12**).

Step 2. (Page 15) Route gas supply line to appliance location.

Step 3. Preparing the appliance vent collar (**Page 15**).

Step 4. (Page 16) Install the vent system and exterior termination.

Step 5. (Page 28) Field Wiring

- a. Millivolt Appliances – Install the operating control switch (not factory provided) and bring in electrical service line for forced air-circulating blower (optional equipment).
- b. Electronic Appliances – Field wire and install operating control switch.

Step 6. (Page 29) Install blower kit (optional equipment).

Step 7. (Page 29) Make connection to gas supply.

Step 8. (Page 30) Verifying appliance operation.

Step 9. (Page 31) Install the logs, decorative volcanic stone and glowing embers.

Step 10. (Page 35) Install glass door assembly.

Step 11. (Page 35) Adjust burner to ensure proper flame appearance.

Step 12. (Page 37) Install front face assembly with barrier. Install the hoods.

Step 13. (Page 38) Attach Safety in Operation Warnings.

Before proceeding it may be helpful to remove the log set from the firebox and remove the embers and volcanic stone from the control compartment. Refer to the following steps:

1. Remove the front face assembly, hood and glass enclosure panel (see *Removing and Installing Glass Enclosure Panels* on **Page 35**).

2. Remove log set box from firebox. Next, remove embers and volcanic stone from control compartment. Handle logs carefully to prevent breakage.

Step 1. FRAMING

Frame these appliances as illustrated in **Figures 13 and 14** on **Pages 13 and 14**. All framing details must allow for a minimum clearance to combustible framing members as shown in **Table 5** on **Page 8**.

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 when they are bent up vertically maintaining the 3" clearance to the fireplace top, but must not be supported by them or notched to fit around them. All construction above the appliance must be self-supporting. **DO NOT** use the appliance for structural support.

The fireplace should be secured to the side framing members using the unit's nailing flanges - one top and bottom on each side of the fireplace front. See **Figure 12**. Use 8d nails or their equivalent.

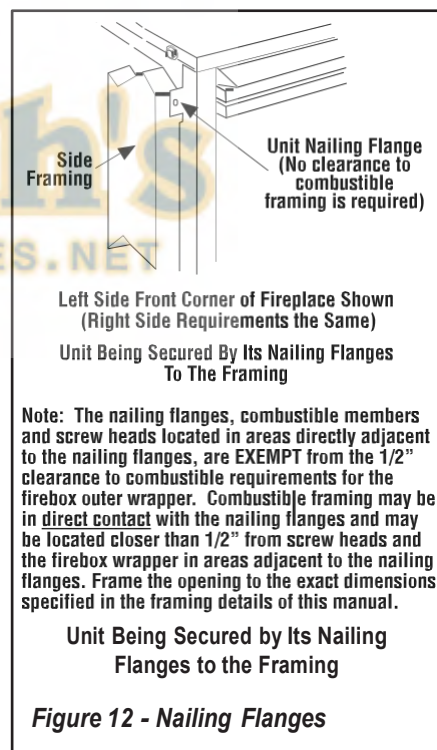


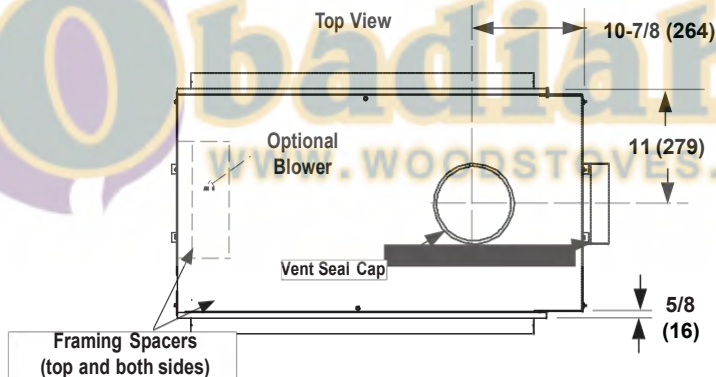
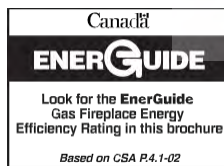
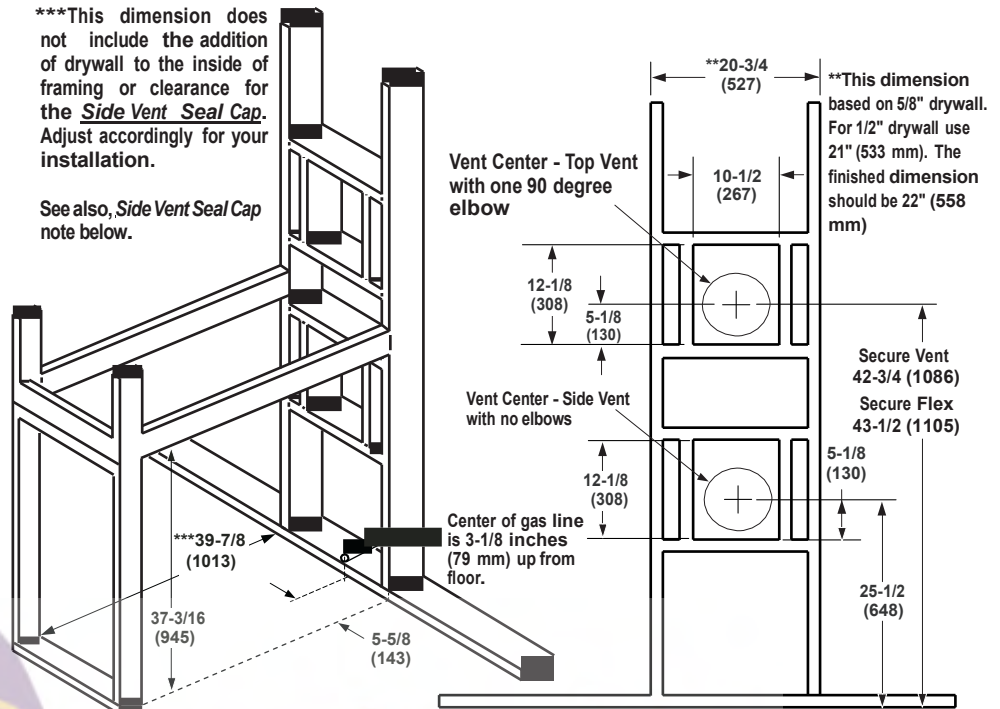
Figure 12 - Nailing Flanges

SPECIFICATIONS	
Natural Gas BTU Input	30,000
Propane Gas BTU Input	28,000
Co-axial DV Vent Size	4-1/2" Inner / 7-1/2" Outer

NOTES	
All specifications, ratings and dimensions are subject to change without notice.	
Appliance has a factory-installed vent seal cap (see Figures 16 & 17 on Page 16) in each flue outlet.	

***This dimension does not include the addition of drywall to the inside of framing or clearance for the Side Vent Seal Cap. Adjust accordingly for your installation.

See also, Side Vent Seal Cap note below.



Vertical Venting Through the Ceiling:
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 (see Figure 20).

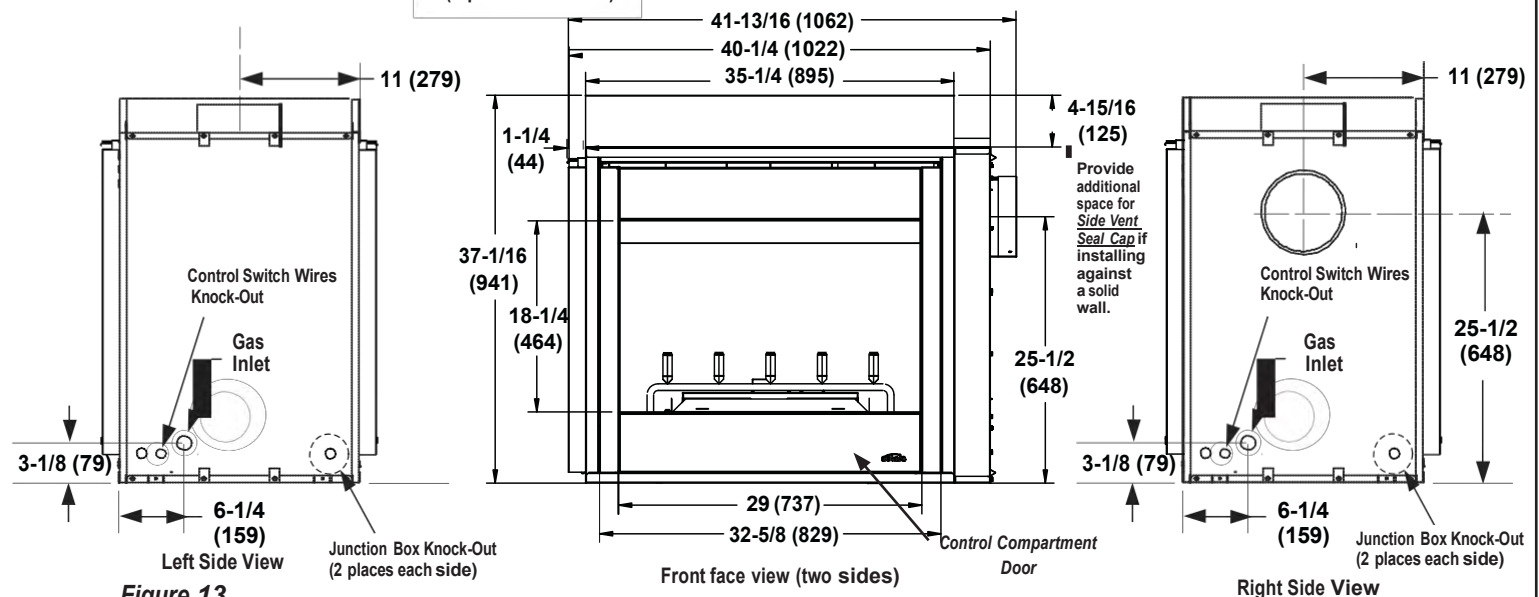


Figure 13

NOTE: DIAGRAMS & ILLUSTRATIONS ARE NOT TO SCALE.

SPECIFICATIONS	
Natural Gas BTU Input	30,000
Propane Gas BTU Input	28,000
Co-axial DV Vent Size	4-1/2" Inner / 7-1/2" Outer

NOTES	
All specifications, ratings and dimensions are subject to change without notice.	
Appliance has a factory-installed vent seal cap (see Figures 16 & 17 on Page 16) in each flue outlet.	

Fireplace Framing Specifications

***This dimension does not include the addition of drywall to the inside of framing or clearance for the Side Vent Seal Cap. Adjust accordingly for your installation.

See also, Side Vent Seal Cap note below.

- Notes:
- Inches (millimeters)
 - Minimum Framing Stud Size is 2 x 4
 - See side views of fireplace below for gas line inlet location options.

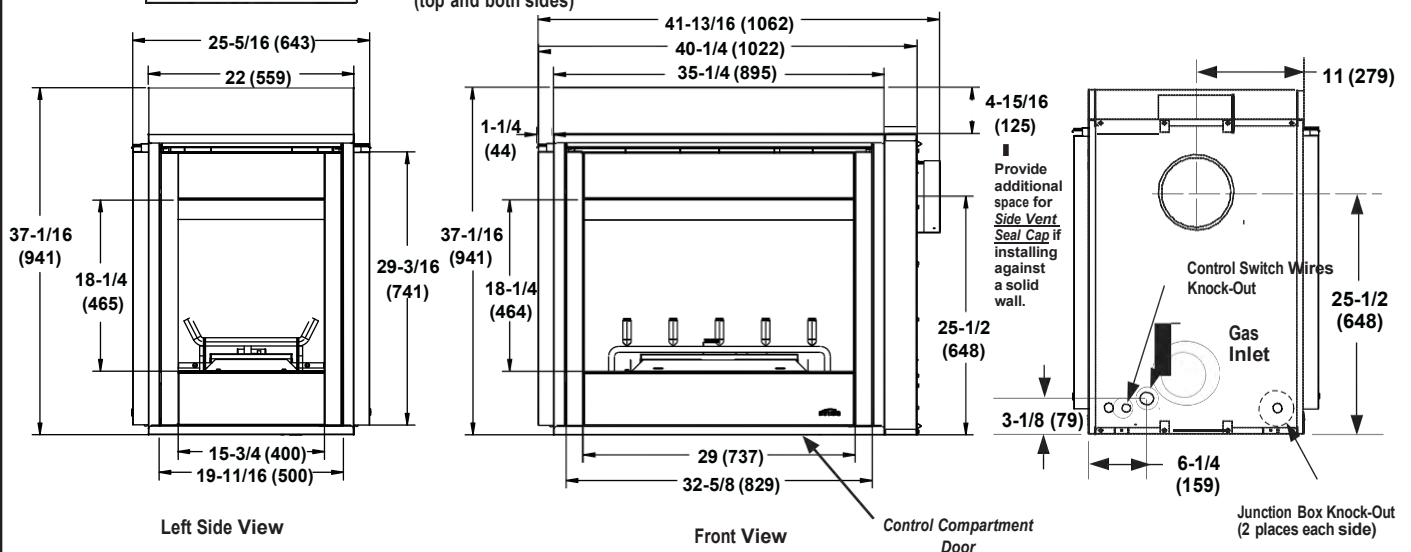
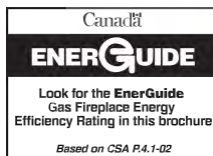
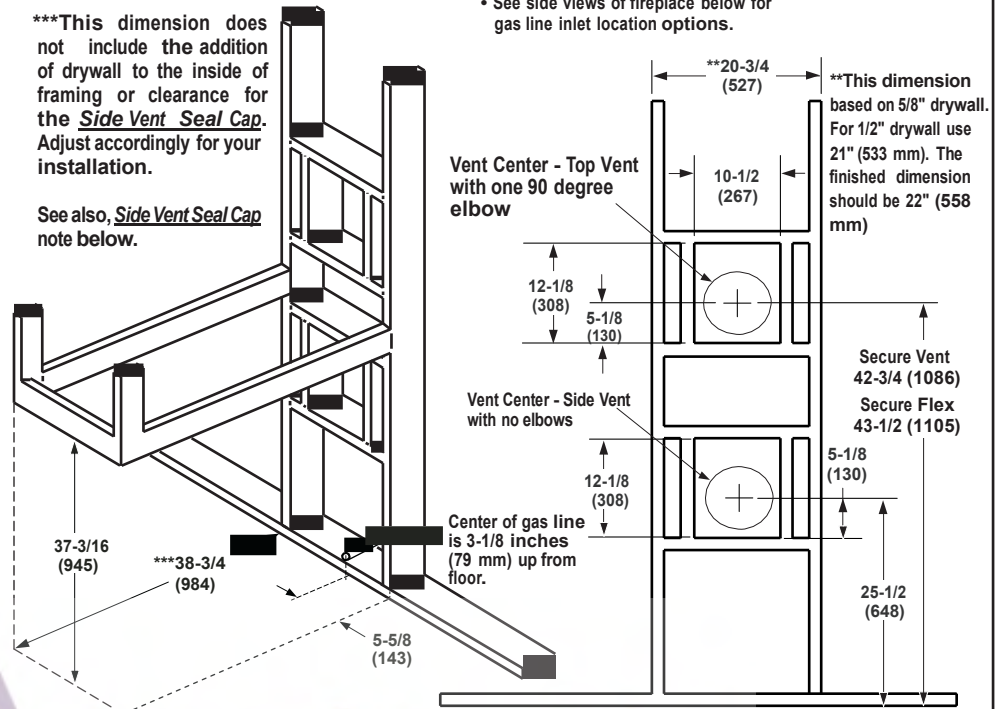
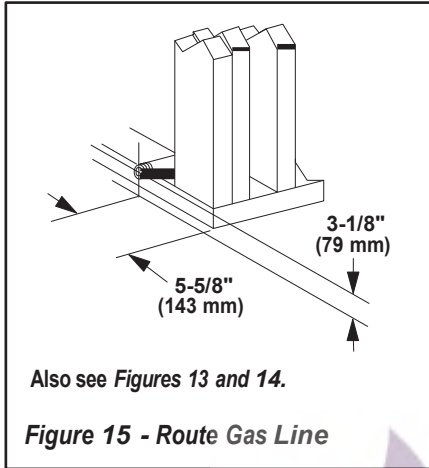


Figure 14

NOTE: DIAGRAMS & ILLUSTRATIONS ARE NOT TO SCALE.

Step 2. ROUTING GAS LINE

Route a 1/2" (13 mm) gas line to the left side of the appliance as shown in **Figure 15**. 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 inch shutoff valve. (See **Step 6 on Page 29**).



Also see **Figures 13 and 14**.

Figure 15 - Route Gas Line

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 National Fuel Gas Code, NFPA 54 - latest edition (USA) or CAN/CSA-B149.1 - latest edition (Canada).

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. Gas lines must be routed, constructed and made of materials that are in strict accordance with local codes and regulations. We recommend that a qualified individual such as a plumber or gas fitter be hired to correctly size and route the gas supply line to the appliance.

Schedule 40 Black Iron Pipe Inside Diameter (Inches)		
Schedule 40 Pipe Length (feet)	Natural Gas	Propane Gas
0-10	1/2	3/8
10-40	1/2	1/2
40-100	1/2	1/2
100-150	3/4	1/2
150-200	3/4	1/2

Table 6

Notes:

- All appliances are factory-equipped with a flexible gas line connector and 1/2 inch shutoff valve (see **Figure 50 on Page 31**).
- See **Massachusetts Requirements on Page 4** 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 29)**.
- A pipe joint compound rated for gas should be used on the threaded joints. **Ensure propane resistant compounds are used in propane applications.** Be very careful that the pipe compound does not get inside the pipe.
- It is recommended to install a sediment trap in the supply line as close as possible to the appliance. Appliances using Propane should have a sediment trap at the base of the tank.
- Check with local building official for local code requirements (i.e. are below grade penetrations of the gas line allowed?, etc).

IMPORTANT: If propane is used, be aware that if tank size is too small (i.e. under 100-lbs, if this is the only gas appliance in the dwelling. Ref. NPFA 58), there may be loss of pressure, resulting in insufficient fuel delivery (which can result in sooting, severe delayed ignition or other malfunctions). Any damage resulting from an improper installation, such as this, is not covered under the limited warranty.

Step 3. PREPARING THE APPLIANCE VENT COLLAR

! WARNING

Failure to reinstall and securely tighten vent seal cap screws could result in leakage of flue products into the living space. Vent seal cap must remain securely installed on unused vent collar. Failure to do so could result in leakage of flue products into living space.

REMOVE VENT SEAL CAP

(From the vent that will be used only)

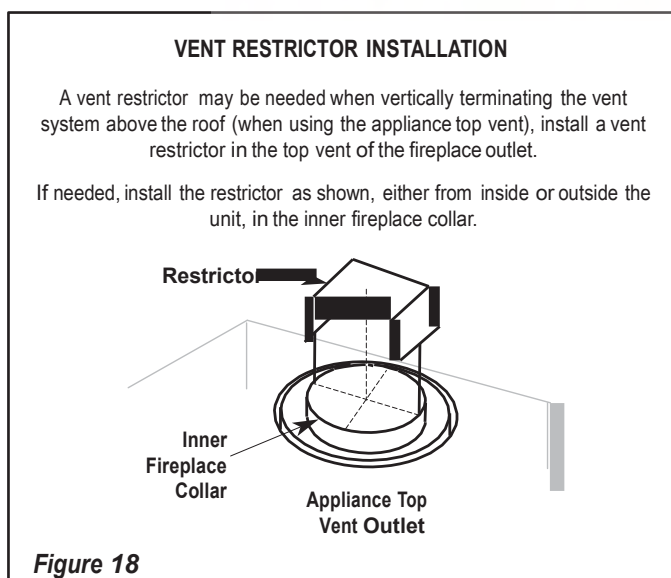
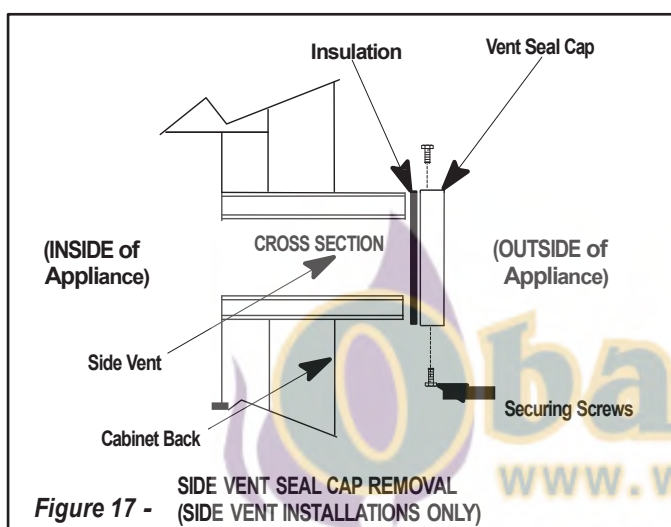
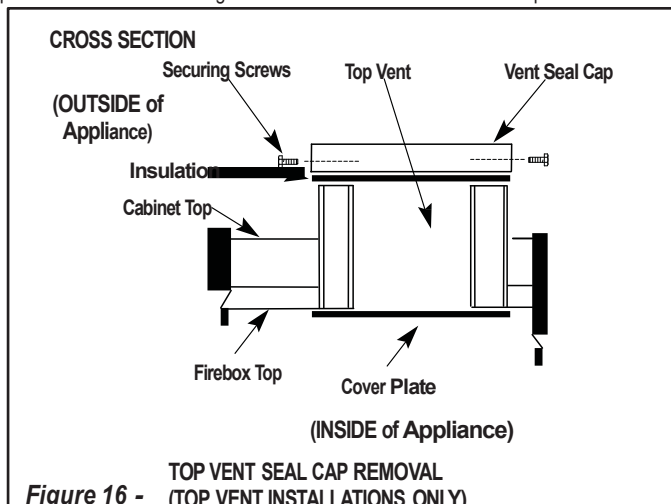
Top Vent Installations - See **Figure 16**

Side Vent Installations - See **Figure 17**

Preparing the Appliance Vent Collar

Each of the appliances' two vent collars are sealed with a seal cap which must be removed from the vent collar being used. In top vent installation the cover plate shall be removed from the inside. Refer to **Figure 16** for top vent installations and **Figure 17** for side vent installations and the following steps to prepare the appropriate collar for use.

From the vent collar being used, remove the two screws securing the vent seal cap. Twist the cap counterclockwise. Pull it away from the appliance and discard, along with the piece of insulation.



Step 4. 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, the current National Fuel Gas Code (ANSI-Z223.1) in the USA or the current standards of CAN/CSA-B149.1 in Canada.

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 fournisseur de 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 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.

Installation of Vent Restrictor

A vent restrictor may be needed with this appliance. The restrictor is installed in the appliance top flue outlet as shown in **Figure 16**, either before adding vent, from above, or after installation of vent from below, within the firebox. The restrictor is self-securing through a positive friction fit.

Determine the venting for the appliance. If the vent run will include at least 8 feet of vertical rise, then install the restrictor in the appliance collar before connecting any vent (Refer to **Figure 19**). Place the restrictor inside the appliance vent collar and press in place.

Note: The restrictor is included within the firebox.

Select Venting System - Horizontal or Vertical

With the appliance secured in framing, determine vent routing and identify the exterior termination location. The following sections describe vertical (roof) and horizontal (exterior wall) vent applications. Refer to the section relating to your installation. A list of approved venting components are shown on Pages 39 and 40.

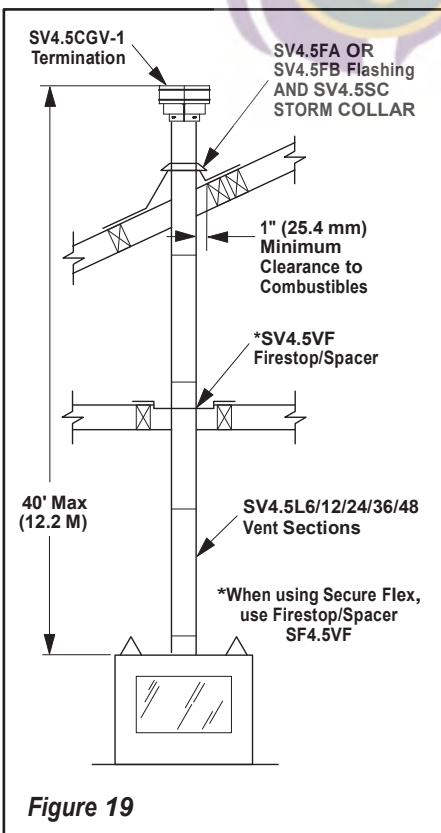
VERTICAL TERMINATION SYSTEMS (ROOF)

See **Figure 19** and **Figures 29 through 34** on **Pages 20, 21 and 22** and their associated Vertical Vent Tables which illustrate the various vertical venting configurations that are possible for use with these appliances. **Secure Vent™** pipe applications are shown in these Figures; **Secure Flex™** pipe may also be used. A Vertical Vent Table summarizes 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.

Both these vertical vent systems terminate through the roof. The minimum vent height above the roof and/or adjacent walls is specified in ANSI Z223.1-(latest edition) (In Canada, the current CAN/CSA-B149.1 installation code) by major building codes. Always consult your local codes for specific requirements. A general guide to follow is the Gas Vent Rule (refer to **Figure 5 on Page 8**).

Vertical (Straight) Installation (Figure 19)

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 on this page and Page 39 - Rigid Vent Sections**). Plan the vent lengths so that a joint does not occur at the intersection of ceiling or roof joists. Refer to the Vent Section Length Chart.



VENT SECTION LENGTH CHART						
Nominal Section Length (inches)	6	12	24	36	48	TOTAL
Net Section Length (inches)	4-1/2	10-1/2	22-1/2	34-1/2	46-1/2	
Height of Vent	Number of Vent Sections					
inches	ft					QTY
4.5	0.375	1	0	0	0	1
9	0.75	2	0	0	0	2
10.5	0.875	0	1	0	0	1
15	1.25	1	1	0	0	2
19.5	1.625	2	1	0	0	3
21	1.75	0	2	0	0	2
22.5	1.875	0	0	1	0	1
25.5	2.125	1	2	0	0	3
31.5	2.625	0	3	0	0	3
34.5	2.875	0	0	0	1	1
37.5	3.125	1	1	1	0	3
43.5	3.625	0	2	1	0	3
45	3.75	0	0	2	0	2
46.5	3.875	0	0	0	1	1
49.5	4.125	1	0	2	0	3
51	4.25	1	0	0	1	2
55.5	4.625	0	1	2	0	3
57	4.75	0	0	1	1	2
66	5.25	0	2	2	0	4
67.5	5.625	0	0	3	0	3
69	5.75	0	0	0	2	2
72	6	1	0	3	0	4
73.5	6.125	1	0	0	2	3
79.5	6.625	0	1	0	2	3
81	6.75	0	0	0	1	1
90	7.5	0	2	1	0	3
91.5	7.625	0	0	2	0	2
93	7.75	0	0	0	0	2
96	8	1	0	1	2	4
97.5	8.125	1	0	0	0	2
102	8.5	2	0	0	0	2
103.5	8.625	0	0	0	3	3
108	9	1	0	0	3	4
114	9.5	0	2	0	0	2
117	9.75	1	0	5	0	6
118.5	9.875	1	1	0	3	5
126	10.5	0	0	1	3	4
130.5	10.875	1	0	1	3	5
135	11.25	0	0	6	0	6
138	11.5	0	0	0	4	4
139.5	11.625	0	0	0	0	3
142.5	11.875	1	0	0	4	5

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

VENT SECTION LENGTH CHART						
Nominal Section Length (inches)	6	12	24	36	48	TOTAL
Net Section Length (inches)	4-1/2	10-1/2	22-1/2	34-1/2	46-1/2	
Height of Vent	Number of Vent Sections					
inches	ft					QTY
144	12	1	0	0	0	3
150	12.5	0	1	0	0	3
154.5	12.875	1	1	0	0	3
160.5	13.375	0	2	0	0	3
172.5	14.375	0	0	0	5	0
177	14.75	1	0	0	5	0
183	15.25	0	1	0	5	0
186	15.5	0	0	0	0	4
190.5	15.875	1	0	0	0	4
196.5	16.375	0	1	0	0	4
205.5	17.125	0	1	1	5	0
207	17.25	0	0	0	6	0
211.5	17.625	1	0	0	6	0
217.5	18.125	0	1	0	6	0
229.5	19.125	0	0	1	6	0
232.5	19.375	0	0	0	0	5
237	19.75	1	0	0	0	5
241.5	20.125	0	0	0	7	0
246	20.5	1	0	0	7	0
252	21	0	1	0	7	0
264	22	0	0	1	7	0
276	23	0	0	0	8	0
279	23.25	0	0	0	0	6
280.5	23.375	1	0	0	8	0
283.5	23.625	1	0	0	0	6
289.5	24.125	0	1	0	0	6
301.5	25.125	0	0	1	0	6
310.5	25.875	0	0	0	9	0
315	26.5	1	0	0	9	0
325.5	27.125	0	0	0	0	7
330	27.5	1	0	0	0	7
336	28	0	1	0	0	7
345	28.75	0	0	0	10	0
349.5	29.125	1	0	0	10	0
372	31	0	0	0	0	8
376.5	31.375	1	0	0	0	8
379.5	31.625	0	0	0	11	0
418.5	34.875	0	0	0	0	9
423	35.25	1	0	0	0	9
465	38.75	0	0	0	0	10

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

NOTE: DIAGRAMS & ILLUSTRATIONS ARE NOT TO SCALE.

Vertical (Offset) Installation

Analyze the vent routing and determine the quantities of vent sections and number of elbows required. Refer to **Vertical Vent Figures and Tables on page 15** to select 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 **Effective Vent Length Chart on page 17** for an aid in selecting length combinations. Elbows are available in 90° and 45° configurations. Refer to **Figure 24** for the SV4.5E45 and SV4.5E90 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 7-1/2" (191 mm). The SV4.5LA is fitted with a locking inclined channel end (identical to a normal vent section component) and a plain end with 3 pilot holes. Slip the plain 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.

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" (267mm x 267mm) inside dimensions, about this center mark (**Figure 20**).

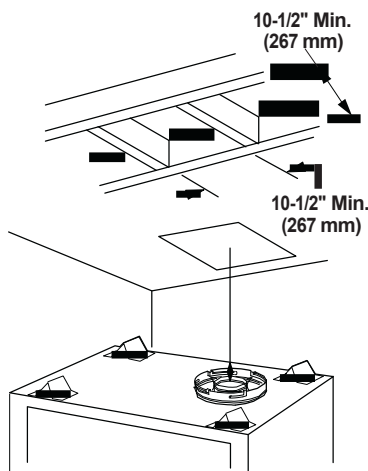


Figure 20

B. Attach vent components to appliance

-Secure Vent SV4.5 direct vent system components are unitized concentric pipe components featuring positive twist lock connections (see **Figures 21 and 22**).

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.

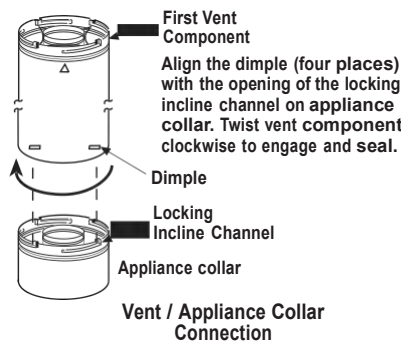


Figure 21

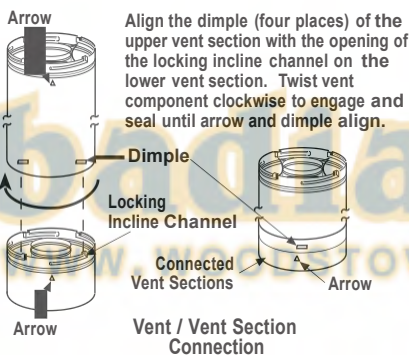


Figure 22

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 inlet of the four inclined channels on the collar (refer to **Figure 21**). 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 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.

Note: An elbow may also be attached to the appliance collar. Attach in the same manner as you would a vent section.

C. Attach vent components to each other

- Other vent sections may be added to the previously installed section in accordance with the requirements of the vertical vent figures and tables. 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 22.**

D. Install firestop/spacer at ceiling - When using **Secure Vent**, use SV4.5VF firestop/spacer at ceiling joists; when using **Secure Flex**, use SF4.5VF firestop/spacer. 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. **Remember to maintain 1" (25 mm) clearance to combustibles, framing members, and attic or ceiling insulation when running vertical chimney sections.** Attic insulation shield (96K94) may be used to obtain the required clearances indicated here. See installation accessories tables on pages 39 and 40.

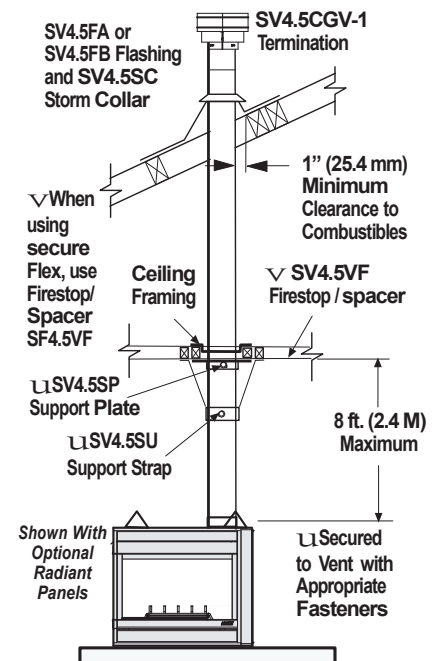


Figure 23

NOTE: DIAGRAMS & ILLUSTRATIONS ARE NOT TO SCALE.

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 **Figure 24**.

E. Support the vertical vent run sections - **Note** - Proper venting support is very important. The weight of the vent must not be supported by the fireplace in any degree. Support the vertical portion of the venting system every 8 feet (2.4m) 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. Loop the tape around the vent, securing the ends of the tape to the framing. If desired, sheet metal screws #6 x 1/2" length may be used to secure the support straps to the vent pipe. See **Figure 23**.

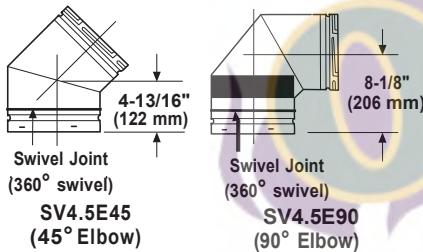
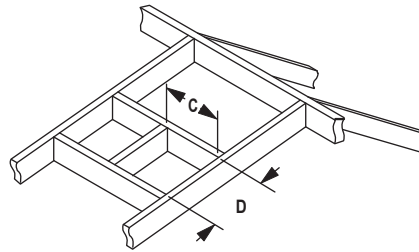


Figure 24

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 5' (1.52 m) along horizontal/inclined vent runs using conventional plumber's tape. **It is very important that the horizontal/inclined run be maintained in a straight (no dips) and slightly elevated plane in a direction away from the fireplace 1/4" per foot (20 mm per meter) of horizontal vent.** Use a carpenter's level to measure from a constant surface and adjust the support straps as necessary.

It is important to 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.

H. Frame roof opening - Identify location for vent at the roof. Cut and/or frame opening per Roof Framing Chart and **Figure 25**.



Framing Dimensions for Roof

Pitch	C	D
0/12	10-1/2 in. (267 mm)	10-1/2 in. (267 mm)
6/12	10-1/2 in. (267 mm)	12 in. (305 mm)
12/12	10-1/2 in. (267 mm)	17-3/4 in. (451 mm)

Figure 25

I. Install the roof flashing - Extend the vent sections through the roof structure. Install the roof flashing over the vent section and position such that the vent column rises vertically (use carpenter's level) (**Figure 26**). Nail along perimeter to secure flashing or adjust roofing to overlap the flashing edges at top and sides only and trim where necessary. Seal the top and both sides of the flashing with waterproof caulking.

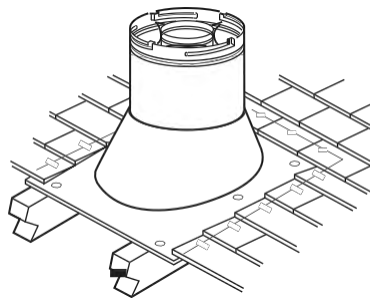


Figure 26

J. Install the storm collar - Install the storm collar, supplied with the flashing, over the vent/flashing joint. See **Figure 27**. Loosen the storm collar screw. Slide collar down until it meets the top of the flashing. Tighten the adjusting screw. Apply non-combustible caulking or mastic around the circumference of the joint to provide a water tight seal.

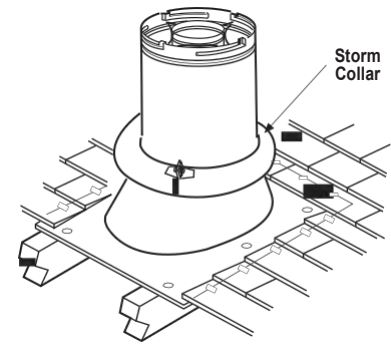


Figure 27

K. Install the vertical termination - The final step involves installation of the SV4.5CGV-1 Vertical Termination. Extend the vent sections to the height as shown in the "Vertical vent termination section" on **page 6**. The SV4.5CGV-1 Vertical Termination (**Figure 28**) installs in the exact same fashion as any other **Secure Vent** section. Align the termination over the end of the previously installed section, adjusting the radial alignment until the four locking dimples of the termination are aligned with the inlets of the four incline channels of the last vent section. Push the termination down until it fully engages, then twist the termination clockwise running the dimples down and along the incline channels until they seat at the end of the channels.

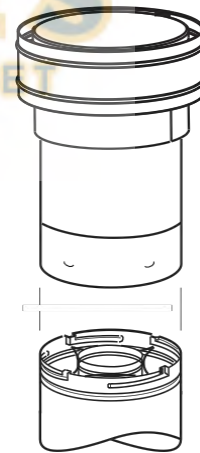


Figure 28

If the vent system extends more than 5' (1.5 m) above the roof flashing, stabilizers may be necessary. Additional screws may be used at section joints for added stability. Guide wires may be attached to the joint for additional support on multiple joint configurations.

VERTICAL VENT FIGURES/TABLES

Note: *Secure Vent* (rigid vent pipe) is shown in the figures; *Secure Flex* (flexible vent pipe) may also be used.

Note: It is very important that the horizontal/inclined run be maintained in a straight (no dips) and recommended to be in a slightly elevated plane, in a direction away from the fireplace of 1/4" rise per foot (20 mm per meter) which is ideal, though rise per foot run ratios that are smaller are acceptable all the way down to at or near level.

Note: SV4.5VF (*Secure Vent*), SF4.5VF (*Secure Flex*) firestop/spacer must be used anytime vent pipe passes through a combustible floor or ceiling. SV4.5HF (*Secure Vent*), SF4.5HF (*Secure Flex*) firestop/spacer must be used anytime vent pipe passes through a combustible wall.

Note: Two 45 degree elbows may be used in place of one 90 degree elbow. The same rise to run ratios, as shown in the venting figures for 90 elbows, must be followed if 45 degree elbows are used.

Note: An elbow is acceptable as 1 foot of vertical rise, except where an elbow is the only vertical component in the system. (See Figure 38 on page 24).

⚠ WARNING

Under no circumstances, may separate sections of concentric flexible vent pipe be joined together.

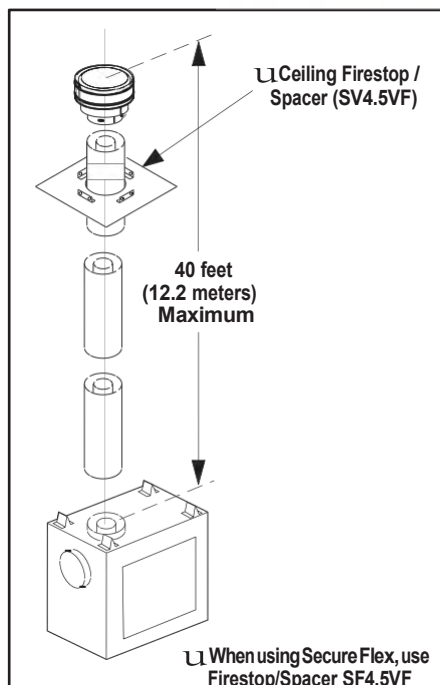
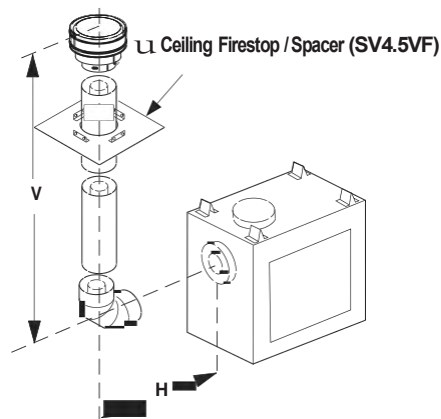


Figure 29 - Top Vent - STRAIGHT

Table A			
H Maximum		V Minimum	
feet	(meter)	feet	(meter)
2	(0.610)	1	(0.305)
4	(1.219)	2	(0.610)
6	(1.829)	3	(0.914)
8	(2.438)	4	(1.219)
V + H = 40 feet (12.2 meters) Max. H = 8 feet (2.4 meters) Max. Ratio V to H ratio is 1:2			

⌋ When using *Secure Flex*, use Firestop / Spacer SF4.5VF.

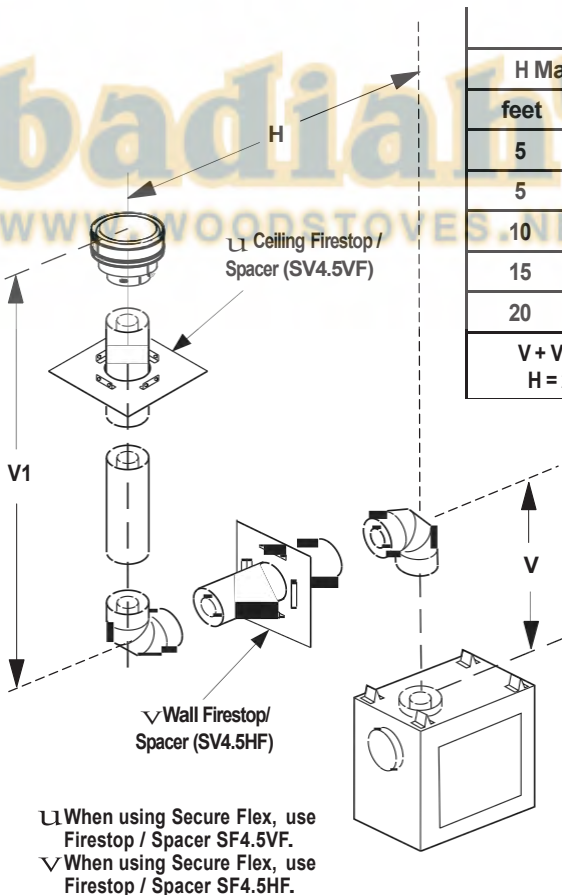


Example: If 8 feet of (H) horizontal vent run is needed, then 4 feet minimum (V) vertical vent will be required.

This table shows a 1(V) to 2(H) ratio. For every 1 foot of (V) vertical, you are allowed 2 feet of (H) horizontal run, up to a maximum horizontal run of 8 feet.

Figure 30 - Side Vent - ONE 90 DEGREE ELBOW

Table B			
H Maximum		V Minimum	
feet	(meter)	feet	(meter)
5	(1.524)	Elbow Only	
5	(1.524)	1	(0.305)
10	(3.048)	2	(0.610)
15	(4.572)	3	(0.914)
20	(6.096)	4	(1.219)
V + V ₁ + H = 40 feet (12.2 m) Max. H = 20 feet (6.096 meters) Max.			



Example: If 20 feet of (H) horizontal vent run is needed, then 4 feet minimum of (V) vertical vent will be required.

This table shows a 1(V) to 5(H) ratio. For every 1 foot of (V) vertical, you are allowed 5 feet of (H) horizontal run, up to a maximum horizontal run of 20 feet.

An elbow is acceptable as 1 foot of vertical rise except where an elbow is the only vertical component in the system. See Figure 38.

Figure 31 - Top Vent - TWO 90 DEGREE ELBOWS

NOTE: DIAGRAMS & ILLUSTRATIONS ARE NOT TO SCALE.

VERTICAL VENT FIGURES / TABLES (CONTINUED)

Table C					
H+H ₁ Maximum		H Maximum		V Minimum	
feet	(meter)	feet	(meter)	feet	(meter)
5	(1.524)	2	(0.610)	1	(0.305)
10	(3.048)	4	(1.219)	2	(0.610)
15	(4.572)	6	(1.829)	3	(0.914)
20	(6.096)	8	(2.438)	4	(1.219)
$V + V_1 + H + H_1 = 40$ feet (12.2 m) Max $H = 8$ feet (2.438 meters) Max. $H + H_1 = 20$ feet (6.096 meters) Max.					

⌌ When using Secure Flex, use Firestop / Spacer SF4.5VF
 ∇ When using Secure Flex, use Firestop / Spacer SF4.5HF

Example: If 20 feet total (H+H₁) horizontal vent run is needed, then 4 feet minimum of (V) vertical vent will be required.

This table shows a 1(V) to 5(H) ratio. For every 1 foot of (V) vertical, you are allowed 5 feet of (H+H₁) horizontal run up to a maximum total horizontal run of 20 feet.

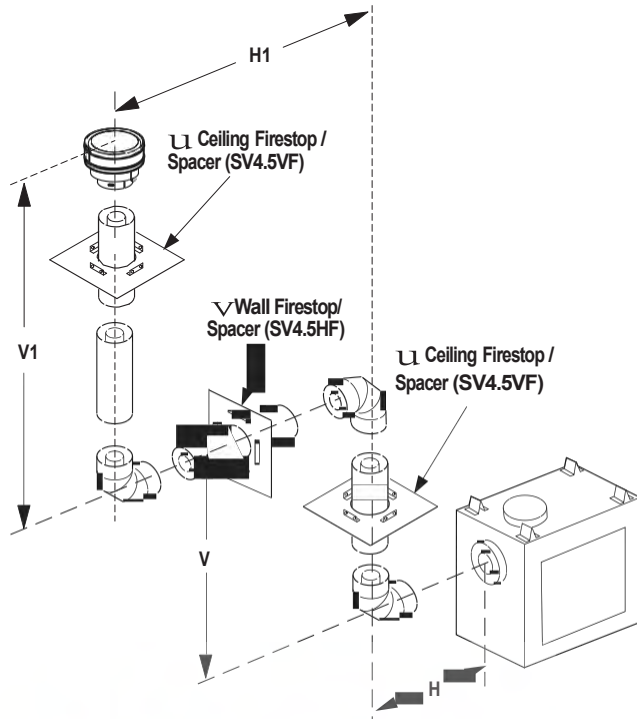


Figure 32 - Side Vent - THREE ELBOWS

Table D			
H + H ₁ Maximum		V Minimum	
feet	(meter)	feet	(meter)
5	(1.524)	Elbow Only	
5	(1.524)	1	(0.305)
10	(3.048)	2	(0.610)
15	(4.572)	3	(0.914)
20	(6.096)	4	(1.219)
$H + H_1 = 20$ feet (6.096 m) Max. $V + V_1 + H + H_1 = 40$ ft. (12.192 m) Max.			

⌌ When using Secure Flex, use Firestop / Spacer SF4.5VF
 ∇ When using Secure Flex, use Firestop / Spacer SF4.5HF

Example: If 20 feet total (H+H₁) horizontal vent run is needed, then 4 feet minimum of (V) vertical vent will be required.

This table shows a 1(V) to 5(H) ratio. For every 1 foot of (V) vertical, you are allowed 5 feet of (H+H₁) horizontal run up to a maximum total horizontal run of 20 feet.

An elbow is acceptable as 1 foot of vertical rise except where an elbow is the only vertical component in the system. See Figure 38.

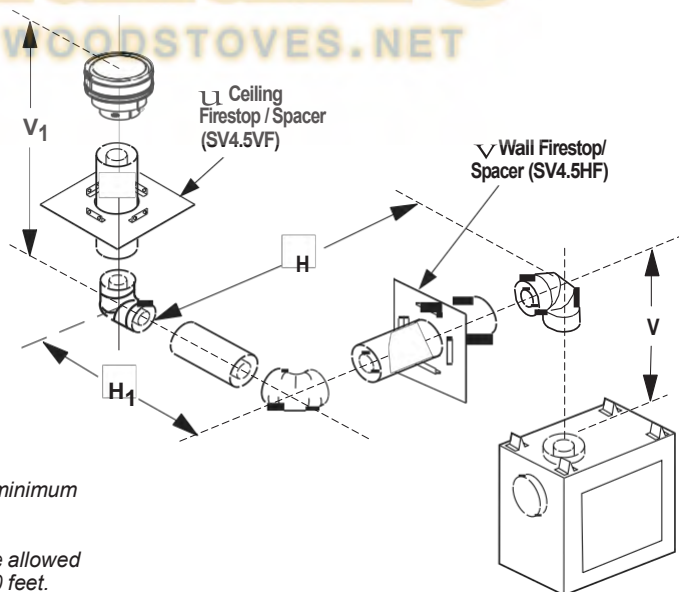


Figure 33- Top Vent - THREE ELBOWS

HORIZONTAL (OUTSIDE WALL) TERMINATION SYSTEM

Figures 34, and Figures 37 to 42 on pages 24 to 26 and their associated Horizontal Vent Table illustrate the various horizontal venting configurations that are possible for use with these appliances. **Secure Vent** pipe applications are shown in these figures; **Secure Flex** pipe may also be used. A Horizontal Vent Table summarizes 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.

Both of these horizontal vent systems terminate through an outside wall. Building Codes limit or prohibit terminating in specific areas. Refer to **Figure 6 and 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 21 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. It is recommended that you plan the venting so that a joint does not occur in the ceiling or roof joists. Allow for elbows as indicated in **Figure 24 on page 19**.

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 **Figures 13 & 14 on pages 13 & 14**. 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 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 (refer to **Figure 20 on page 18**).

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 21 on page 18**).

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.

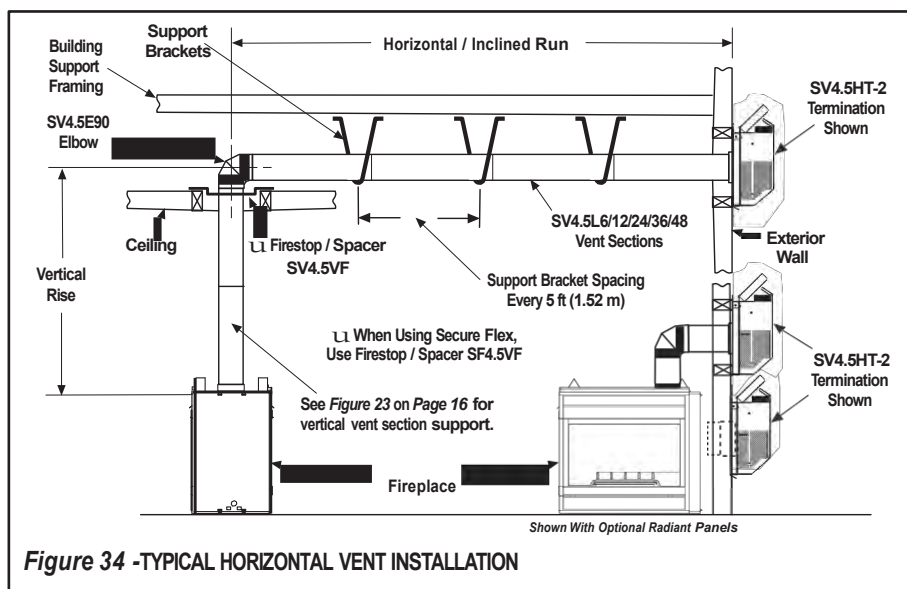


Figure 34 - TYPICAL HORIZONTAL VENT INSTALLATION

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.

Note: An elbow may also be attached to the appliance collar. Attach in the same manner as you would a vent section.

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 22 on page 18.**

F. Install firestop/spacer at ceiling -

When using **Secure Vent**, use SV4.5VF firestop/spacer at ceiling joists; when using **Secure Flex**, use SF4.5VF firestop/spacer. 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.

Remember to 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 8 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. See **Figure 23 on page 18**.

H. Change vent direction - 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 **Figure 24 on page 17**.

I. 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 5 ft. (1.52 m) along horizontal/inclined vent runs using conventional plumber's tape. See **Figure 34**, it is very important that the horizontal/inclined run be maintained in a straight (no dips) and recommended to be in a slightly elevated plane, in a direction away from the fireplace of 1/4" rise per foot (20 mm per meter) which is ideal, though rise per foot run ratios that are smaller are acceptable all the way down to at or near level. Use a carpenter's level to measure from a constant surface and adjust the support straps as necessary.

It is important to 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: DIAGRAMS & ILLUSTRATIONS ARE NOT TO SCALE.

J. Assemble vent run to exterior wall - If not previously measured, locate the center of the vent at the exterior wall. Prepare an opening as described in **Step B**. Assemble the vent system to point where the terminus of the last section is within 7 in. (178 mm) to 11-1/4 in. (286 mm) inboard of the exterior surface to which the SV4.5 HT termination is to be attached, see **Figure 36**. 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 36**, refer to **Table 8 on page 24**. This table lists the additional venting components needed (in addition to the termination and adapter) for a particular range of wall thicknesses.

K. Attach termination adapter - Attach the adapter (adapter -SV4.5RCH - provided with the termination) to the vent section or telescoping vent section, elbow or appliance collar as shown in **Figure 35** in the same manner as any SV4.5 vent component (refer to **Step E**).

L. Install Firestop/Spacer at exterior wall - When using the **square** termination, install SV4.5HF (Secure Vent), SF4.5HF (Secure Flex) Firestop/Spacer over the opening at the exterior side of the framing, long side up, with the 3 inch spacer clearance at the top as shown in **Figure 35**, and nail into place.

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

M. Install the desired termination -

1. Install the square termination (SV4.5HT-2) - For the last step, from outside the exterior wall, slide the collars of the termination onto the adapter (the outer over the outer and the inner inside the inner) 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 horizontal termination must not be recessed into the exterior wall or siding by more than the 1-1/4" (32 mm) as shown in Figure 36.**

SVHRK Snorkel Cap -The snorkel cap is designed to be fitted into a basement window box. The SVHRK cap is for use with flex vent. The vertical distance between the inlet and outlet of the cap is 28 in. (711 mm). pipe.

IMPORTANT: The vent termination is hot while in operation and for a period of time following the use of the fireplace. To prevent contact with hot surfaces, we recommend the use of a **Termination Guard**. See **Page**. This can be purchased at your local dealer.

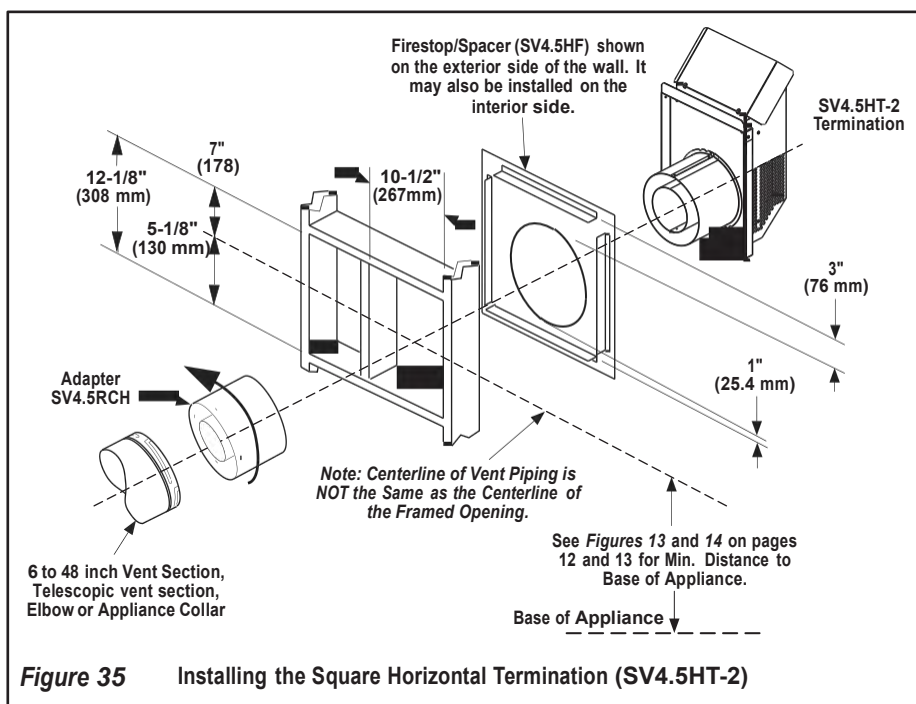


Figure 35 Installing the Square Horizontal Termination (SV4.5HT-2)

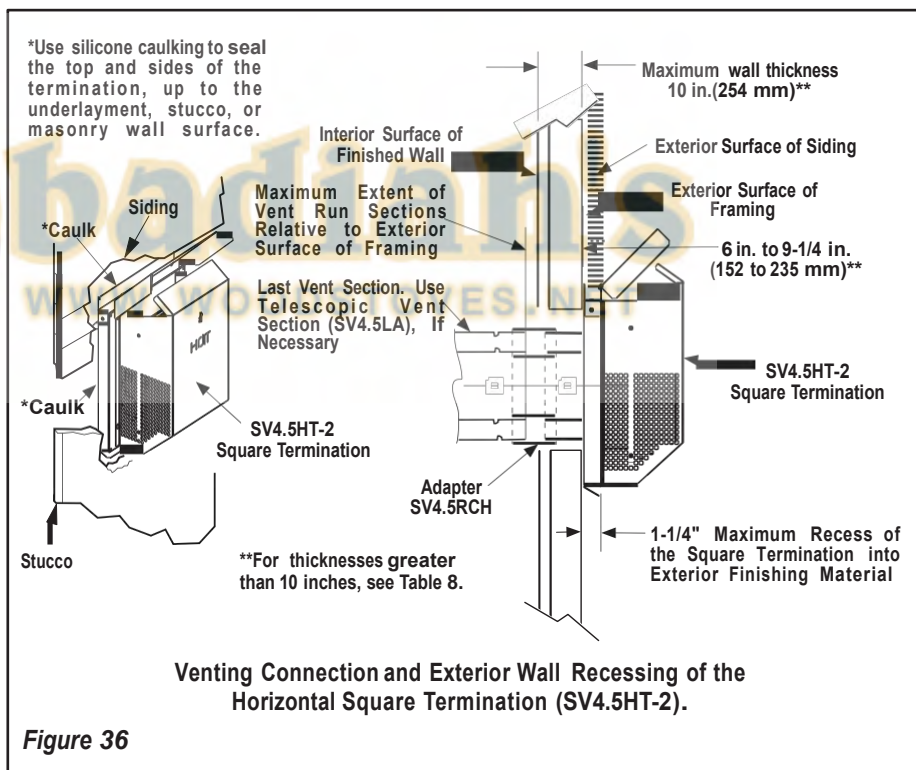


Figure 36

Horizontal terminations have been designed to perform in a wide range of weather conditions. Our terminations meet or exceed industry standards.

When selecting the locations of your horizontal terminations, do not place the termination where water from eaves and adjoining rooflines may create a heavy flow of cascading water onto the termination cap. If the cap 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.

Take care to carefully follow the installation instructions for the termination, including the use of silicone caulking where required.

HORIZONTAL VENT FIGURES/TABLES

Note: *Secure Vent* components (rigid vent pipe and terminal) are shown in the figures; *Secure Flex* components (flexible vent pipe and terminal) may also be used.

Note: Two 45 degree elbows may be used in place of one 90 degree elbow. The same rise to run ratios, as shown in the venting figures for 90 elbows, must be followed if 45 degree elbows are used.

Note: It is very important that the horizontal/inclined run be maintained in a straight (no dips) and recommended to be in a slightly elevated plane, in a direction away from the fireplace of 1/4" rise per foot (20 mm per meter) which is ideal, though rise per foot run ratios that are smaller are acceptable all the way down to at or near level.

Note: SV4.5VF (Secure Vent), SF4.5VF (Secure Flex) firestop/spacer must be used anytime vent pipe passes through a combustible floor or ceiling. SV4.5HF (Secure Vent), SF4.5HF (Secure Flex) firestop/spacer must be used anytime vent pipe passes through a combustible wall.

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

Table 8 Note: See Figure 36 showing wall thickness range when using SV4.5HT-2 termination kit.

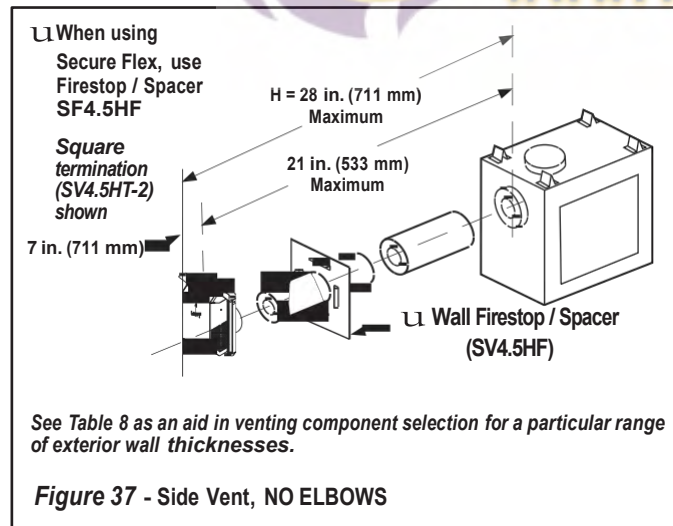
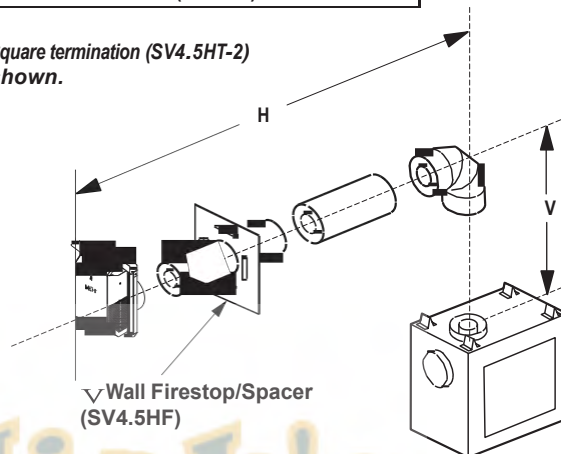


Table F			
H Maximum		V Minimum	
feet	(meter)	feet	(meter)
3	(0.914)	Elbow Only	
5	(1.524)	1	(0.305)
10	(3.048)	2	(0.610)
15	(4.572)	3	(0.914)
20	(6.096)	4	(1.219)
V + H = 40 feet (12.2 m) Max. H = 20 ft. (6.096 m) Max.			

Square termination (SV4.5HT-2) shown.



See Table 8 as an aid in venting component selection for a particular range of exterior wall thicknesses.

Example: If 20 feet of (H) horizontal vent run is needed, then 4 feet minimum of (V) vertical vent will be required.

This table shows a 1(V) to 5(H) ratio. For every 1 foot of vertical, you are allowed 5 feet of (H) horizontal run up to a maximum (H) horizontal run of 20 feet.

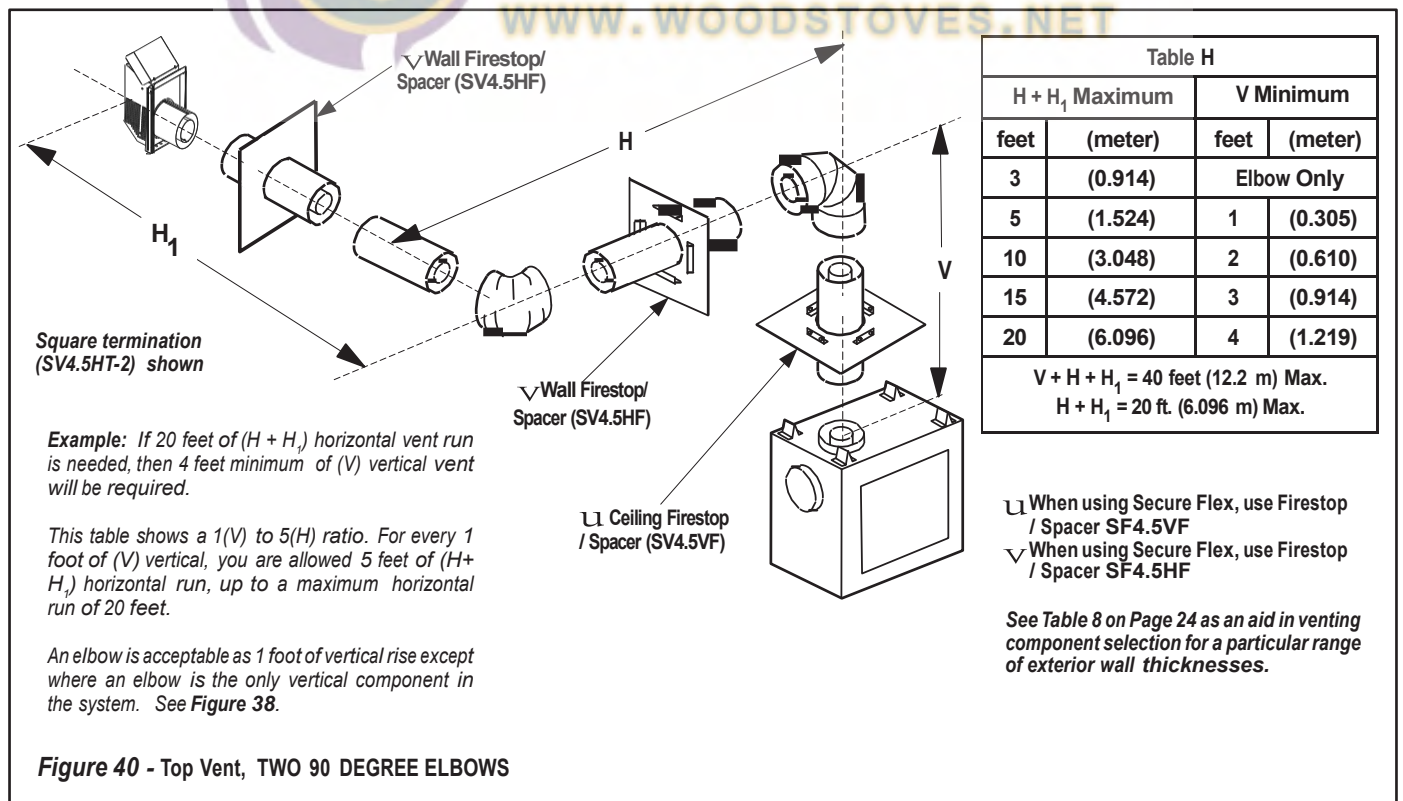
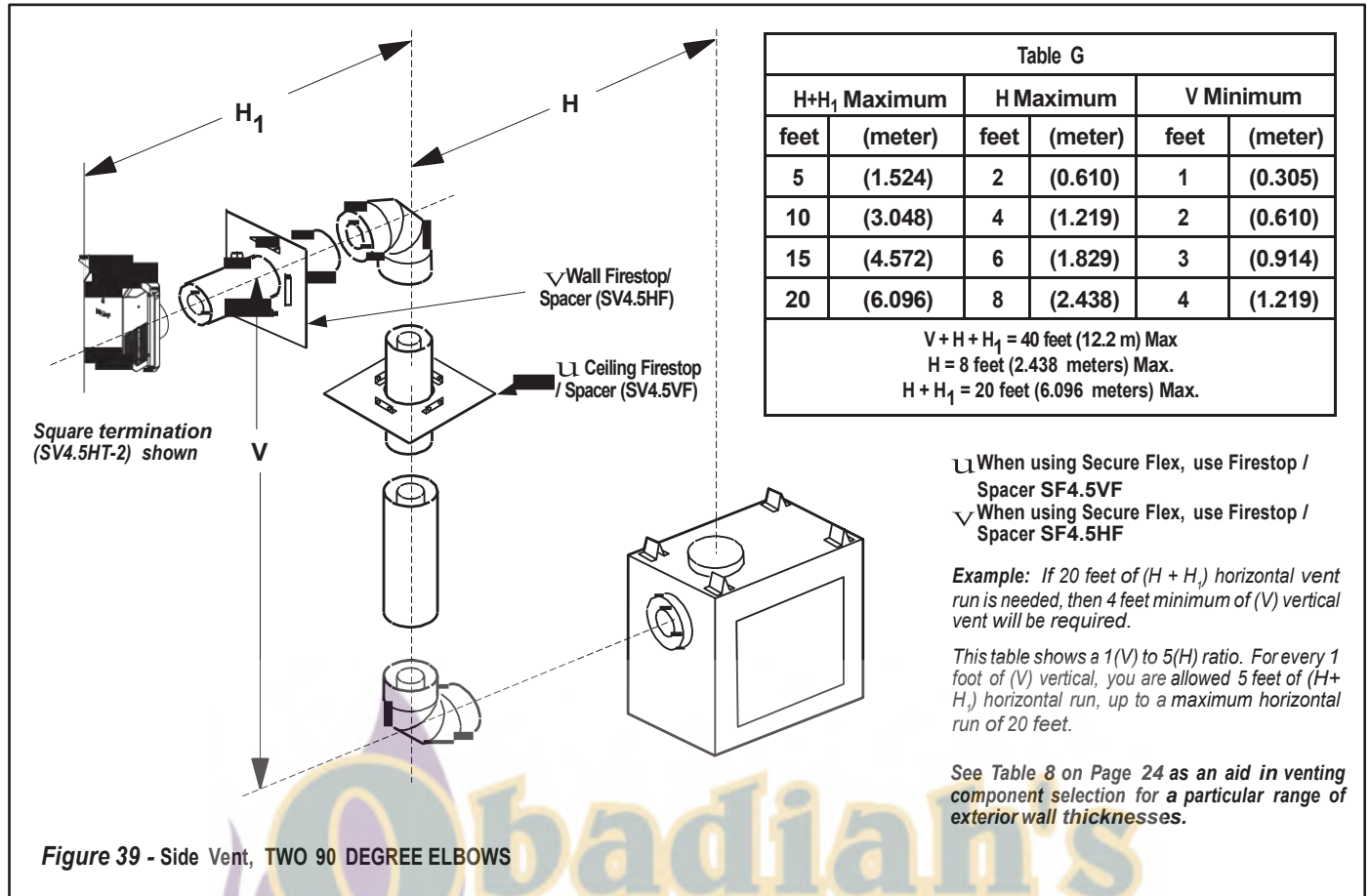
- When using Secure Flex, use Firestop / Spacer SF4.5VF
- When using Secure Flex, use Firestop / Spacer SF4.5HF

Figure 38 - Top Vent, ONE 90 DEGREE ELBOW

WARNING

Under no circumstances, may separate sections of concentric flexible vent pipe be joined together.

HORIZONTAL VENT FIGURES/TABLES (continued)

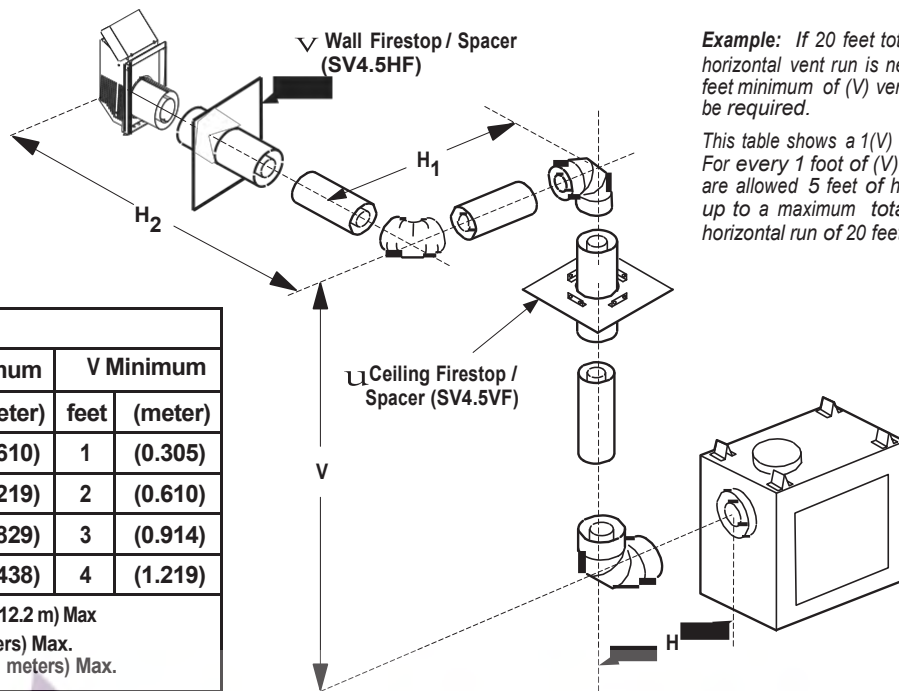


HORIZONTAL VENT FIGURES/TABLES (continued)

- ⌋ When using Secure Flex, use Firestop / Spacer SF4.5VF
- ⌋ When using Secure Flex, use Firestop / Spacer SF4.5HF

Note: See Table 8 as an aid in venting component selection for a particular range of exterior wall thicknesses.

Table J					
H + H ₁ + H ₂ Maximum		H Maximum		V Minimum	
feet	(meter)	feet	(meter)	feet	(meter)
5	(1.524)	2	(0.610)	1	(0.305)
10	(3.048)	4	(1.219)	2	(0.610)
15	(4.572)	6	(1.829)	3	(0.914)
20	(6.096)	8	(2.438)	4	(1.219)
V + H + H ₁ + H ₂ = 40 feet (12.2 m) Max					
H = 8 feet (2.438 meters) Max.					
H + H ₁ + H ₂ = 20 feet (6.096 meters) Max.					



Example: If 20 feet total (H+H₁+H₂) horizontal vent run is needed, then 4 feet minimum of (V) vertical vent will be required.

This table shows a 1(V) to 5(H) ratio. For every 1 foot of (V) vertical, you are allowed 5 feet of horizontal run up to a maximum total (H+H₁+H₂) horizontal run of 20 feet.

Square termination (SV4.5HT-2) shown

Figure 41 - Side Vent, THREE 90 DEGREE ELBOWS

Square termination (SV4.5HT-2) shown.

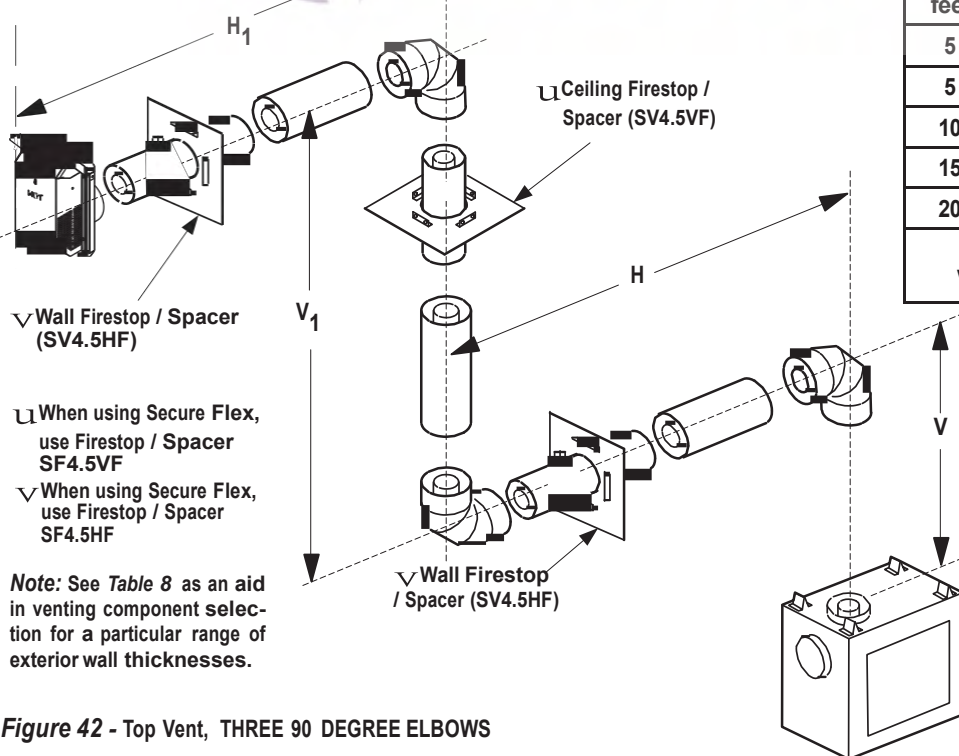


Table K			
H + H ₁ Maximum		V Minimum	
feet	(meter)	feet	(meter)
5	(1.524)	Elbow Only	
5	(1.524)	1	(0.305)
10	(3.048)	2	(0.610)
15	(4.572)	3	(0.914)
20	(6.096)	4	(1.219)
H + H ₁ = 20 feet (6.096 m) Max.			
V + V ₁ + H + H ₁ = 40 ft. (12.192 m) Max.			

Example: If 20 feet total (H+H₁) horizontal vent run is needed, then 4 feet minimum of (V) vertical vent will be required.

This table shows a 1(V) to 5(H) ratio. For every 1 foot of (V) vertical, you are allowed 5 feet of (H+H₁) horizontal run, up to a maximum horizontal run of 20 feet.

An elbow is acceptable as 1 foot of vertical rise except where an elbow is the only vertical component in the system. See Figure 38.

Figure 42 - Top Vent, THREE 90 DEGREE ELBOWS

VERTICAL OR HORIZONTAL VENTING USING SECURE FLEX KITS AND COMPONENTS

Secure Flex venting kits and components may be used in any venting application where rigid **Secure Vent** (SV4.5) direct vent components can be used. All restrictions, clearances and allowances that pertain to the rigid piping apply to the flexible venting. **Secure Flex** kits may **not be modified; also, under no circumstances may separate sections of flex pipe be joined together.** **Secure Flex** kits may be added to the end of a vent run made up of rigid **Secure Vent** (SV4.5) vent sections provided that doing so does not violate any of the venting length, height, routing, horizontal to vertical ratio requirements or clearance considerations detailed in this manual.

Secure Flex kits come with an included adapter that can be fitted to the appliance collar or the inclined channel end of the last **Secure Vent** (SV4.5) vent section in a rigid system in the exact same fashion as any other **Secure Vent** section. Align the dimpled end of the adapter over the previously installed section or appliance collar, adjusting the radial alignment until the four locking dimples of the adapter are aligned with the inlets of the four incline channels of the last vent section or collar. Push on the adapter until it fully engages, then twist the adapter clockwise running the dimples down and along the incline channels until they seat at the end of the channels.

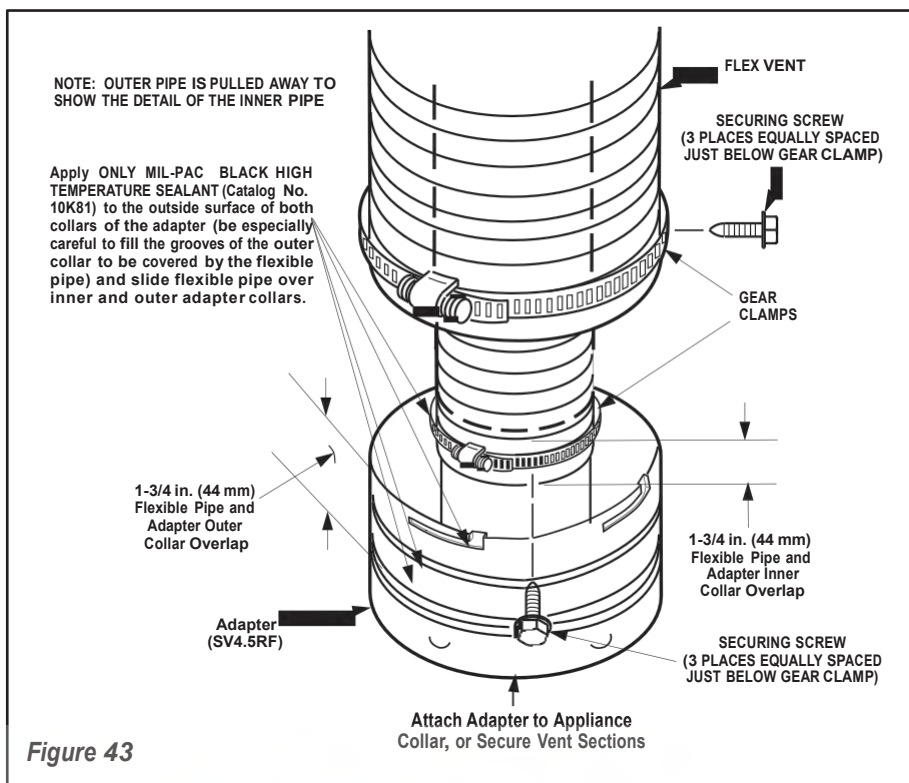
Attach the flexible vent to the adapter as follows (see Figure 43):

A. Install the Inner Flex Pipe -

1. Install the small gear clamp loosely around the inner flexible vent pipe, push it back out of the way.
2. Apply a bead of **Mill-Pac Black (700°F) high temperature sealant - Catalog No. 10K81** to the inner adapter collar, approximately 1/2 inch from the end.
3. Pull and extend the inner flexible vent pipe.
4. Slide the inner flex pipe over the adapter collar. Ensure the flexible vent pipe completely engages the adapter collar to a distance of 1-3/4 inches from the end, and that it is free from damage or tears.
5. Slide the gear clamp down and tighten it fully to secure the flexible vent to the adapter inner collar approximately 3/4 inch from the end of the flex.
6. Install **three screws 120 degrees apart** through the flexible vent pipe and into the adapter collar just below the gear clamp to provide additional security to the connection.

B. Install the Outer Flex Pipe -

1. Install the large gear clamp loosely around the outer flexible vent pipe, push it back out of the way.



2. Apply a bead of **Mill-Pac Black (700°F) high temperature sealant - Catalog No. 10K81** to the outer adapter collar; to the grooves of the collar which extend approximately 1 inch from the end and to the flat surface, approximately 1-3/8 inches from the end.

3. Pull and extend the outer flexible vent pipe.
4. Slide the outer flex pipe over the adapter collar. Ensure the flexible vent pipe completely engages the adapter collar to a distance of 1 3/4 inches from the end, and that it is free from damage or tears.
5. Slide the gear clamp down and tighten it fully to secure the flexible vent to the adapter outer collar approximately 3/4 inch from the end of the flex.
6. Install **three screws 120 degrees apart** through the flexible vent pipe and into the adapter collar just below the gear clamp to provide additional security to the connection.

C. Route Flex Vent -

Ensure that the flex vent is properly routed to provide the required clearance. Do Not allow the flexible vent to bend in a radius tighter than 5" (127 mm). Refer to **Figure 44**. Support horizontal sections of flex with metal straps at 2 foot (0.61 m) intervals.

D. Install Firestop/Spacers at ceilings and walls - When **Secure Flex** penetrates a wall or ceiling, a firestop/spacer is required: use the SF4.5 VF firestop/spacer for ceilings and the SF4.5 HF firestop/spacer for walls.

See the appropriate sections and figures shown throughout the venting section for their installation requirements.

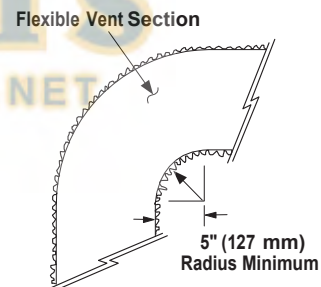


Figure 44

E. Attach Flex Vent to Termination -

Secure Flex components can be purchased separately and attached to bulk lengths of **Secure Flex** flexible tubing cut to size at the job site. Secure the flexible vent to the **Secure Flex** terminations in the same manner (see **Figure 43**) as it was attached to the adapter.

Note: Secure Flex vent must be attached to Secure Flex terminations only. DO NOT substitute Secure Vent terminations or the Secure Vent adapter for Secure Flex components. The collars of Secure Flex terminations and adapters have a different circumference than that used with the Secure Vent pipe. Additionally, Secure Flex components have an extended length center tube for use in attaching the flexible vent.

Step 5. FIELD WIRING



CAUTION

Ground supply lead must be connected to the wire attached to the green ground screw located on the outlet box. See *Figures 46 & 47*. 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 National Electrical Code, ANSI/NFPA 70-latest edition. (In Canada, the current CSA C22-1 Canadian Electrical Code).

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 câblage peuvent entraîner un fonctionnement inadéquat et dangereux.

Verify proper operation after servicing.

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

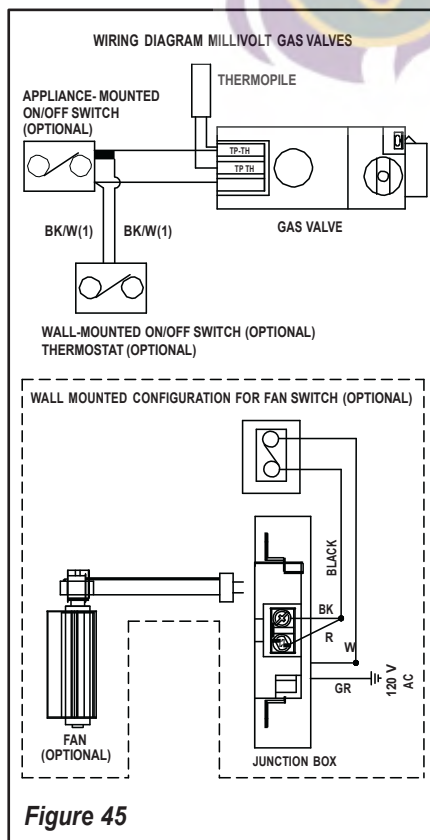


Figure 45

Refer to Section A for millivolt appliances and Section B for electronic appliances. The gas valve is set in place and pre-wired at the factory on both models.

A. Millivolt Wiring (See Figure 45)

1. Install and wire in the burner control switch. Install either "a" or "b" below, NOT BOTH (installing both may result in improper burner operation).

a. **Standard OFF/ON Switch** - Install the OFF/ON burner control switch (rocker switch) as shown in *Figures 45, 46 and 49*.

b. **Optional Control Switch** (OFF/ON wall switch, wall thermostat or remote control receiver). Install snap bushing (provided in Electrical Outlet Kit) into control switch knockout in side panel (see *Figures 13, 14 and 48*). Wire the optional control switch within the millivolt control circuit (as shown in *Figure 45*) using the 15 feet of 2 conductor wire supplied (route wires through the snap bushing to the optional control switch). Mount the optional control switch or wall thermostat in a convenient location on a wall near the fireplace.



CAUTION

Do not connect optional control switch to 120VAC power supply.

2. Install the junction box and receptacle outlet to the left of the valve in the front (for optional blower kit). See junction box and receptacle outlet as explained in steps 1-11 for (B) Electronic Wiring (on this page).

B. Electronic Wiring (See Figure 50)

Note: The electronic appliance must be connected to the main 120 VAC power supply.

1. Locate the Electrical Outlet Kit provided (packaged in firebox - contents: junction box, 2 screws, receptacle outlet, OFF/ON rocker switch -for millivolt units only, and a snap bushing).

Note: The junction box can be installed in any of the 4 outside corners of the control compartment (outlet installed in front left corner is shown in *Figure 48*). If an optional blower is to be installed place the junction box to the left of the valve in the front corner.

2. Route a 3-wire, 120 VAC, 60 Hz, 1 ph power supply to the location on appliance where junction box is to be installed.

Install OFF/ON Switch (millivolt models)

1. Connect the 2 wires (provided in Electrical Outlet Kit) to the TP/TH and TH terminals on valve.
2. Pass the 2 wires through the opening where OFF/ON switch will be installed (left of piezo, below valve).
3. Connect the two wires to the OFF/ON Switch.



4. Press the OFF/ON switch into bracket as shown below (it will snap into place).

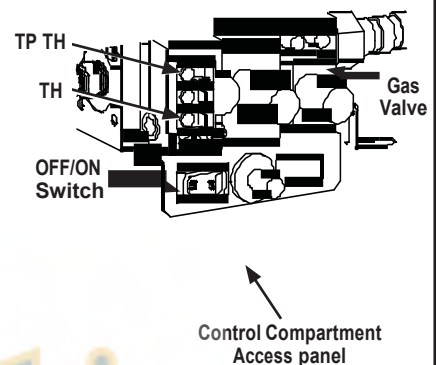


Figure 46

3. Open the control compartment access panel.

4. Wire and install the outlet receptacle to junction box, then install into the chosen corner of the control compartment as shown in *Figures 46, 47 and 49*.

5. After the receptacle/junction box wiring is complete, install the field-provided metal junction box cover plate (see *Figure 48*).

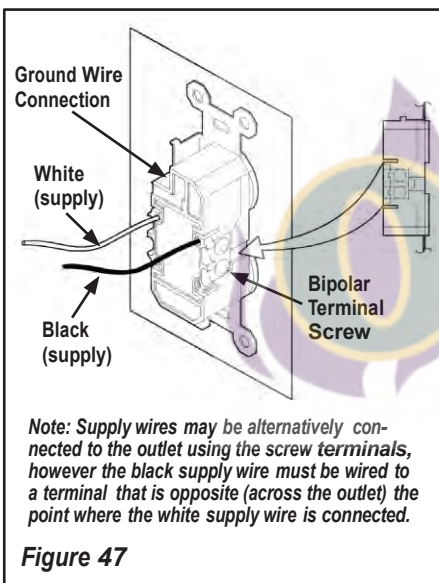
6. Install the snap bushing (provided in kit) into the selected cabinet knockout opening in side cabinets (see *Figures 13, 14 and 48*). The snap bushing provides protection for the wires (see note below) passing through side cabinet going to an optional burner control switch. Wire in the burner control switch to the low voltage circuit as shown in *Figure 49*.

Note: The supplied 15 feet of 2 conductor wire has one end of each conductor connected to the gas valve circuit and the other end of each conductor placed loose on top of the appliance.

Important Note: The gas valve OFF/ON switch is shown in **Figure 46** on **Page 28**. It is integral with the gas valve and should be set to the ON position.

⚠ WARNING

Electronic models of these appliances are equipped with a three-prong (grounding) plug utilized in connecting the electronic components to the junction box in the lower compartment. This grounding plug provides protection against shock hazard and should be plugged directly into the properly grounded three-prong receptacle. **DO NOT** cut or remove the grounding prong from the plug.



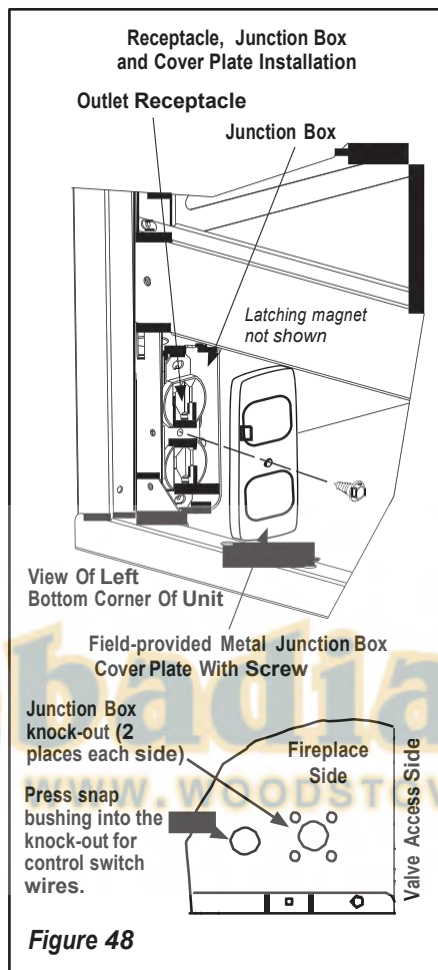
Step 6. WIRING - OPTIONAL FORCED AIR BLOWER KIT

FBK-100, FBK-200 and FBK-250 Kits
(See **Figure 49** on page 30 for wiring) -

An electrical receptacle is provided for the installation of the **FBK-100, FBK-200 and FBK-250** forced air blower kits. Electrical power must be connected to this receptacle in order to operate these blowers. Install the blower kits according to the installation instructions provided with the kits. See **Figure 13 on Page 13** showing where blower should be located on unit.

⚡ CAUTION

Remove the carton support from the control compartment before operating the appliance.



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

⚠ WARNING

Never use an open flame to check for leaks.

Step 7. CONNECTING GAS LINE

Make gas line connections. All codes require a shut-off valve mounted in the supply line. **Figure 50** illustrates two methods for connecting the gas supply. The flex-line method is acceptable in the U.S., however, Canadian requirements vary depending on locality. Installation must be in compliance with local codes. A sediment trap is recommended in the gas piping within the home to prevent moisture and debris in the line from damaging the valve.

These appliances are equipped with a gas flex line for use (where permitted) in connecting the unit to the gas line. A gas flex line is provided to aid in attaching the direct vent appliance to the gas supply. The gas flex line can only be used where local codes permit. Refer to **Figure 51** for flex line location. The flex line is rated for both natural and propane gas. A manual shut off valve is also provided with the flex line.

The gas control valve is located in the lower control compartment.

The gas controls can be found behind the hinged drop-down panel.

Open the control compartment access panel, by lifting panel approximately 1/2" to disengage and swing the panel open from top.

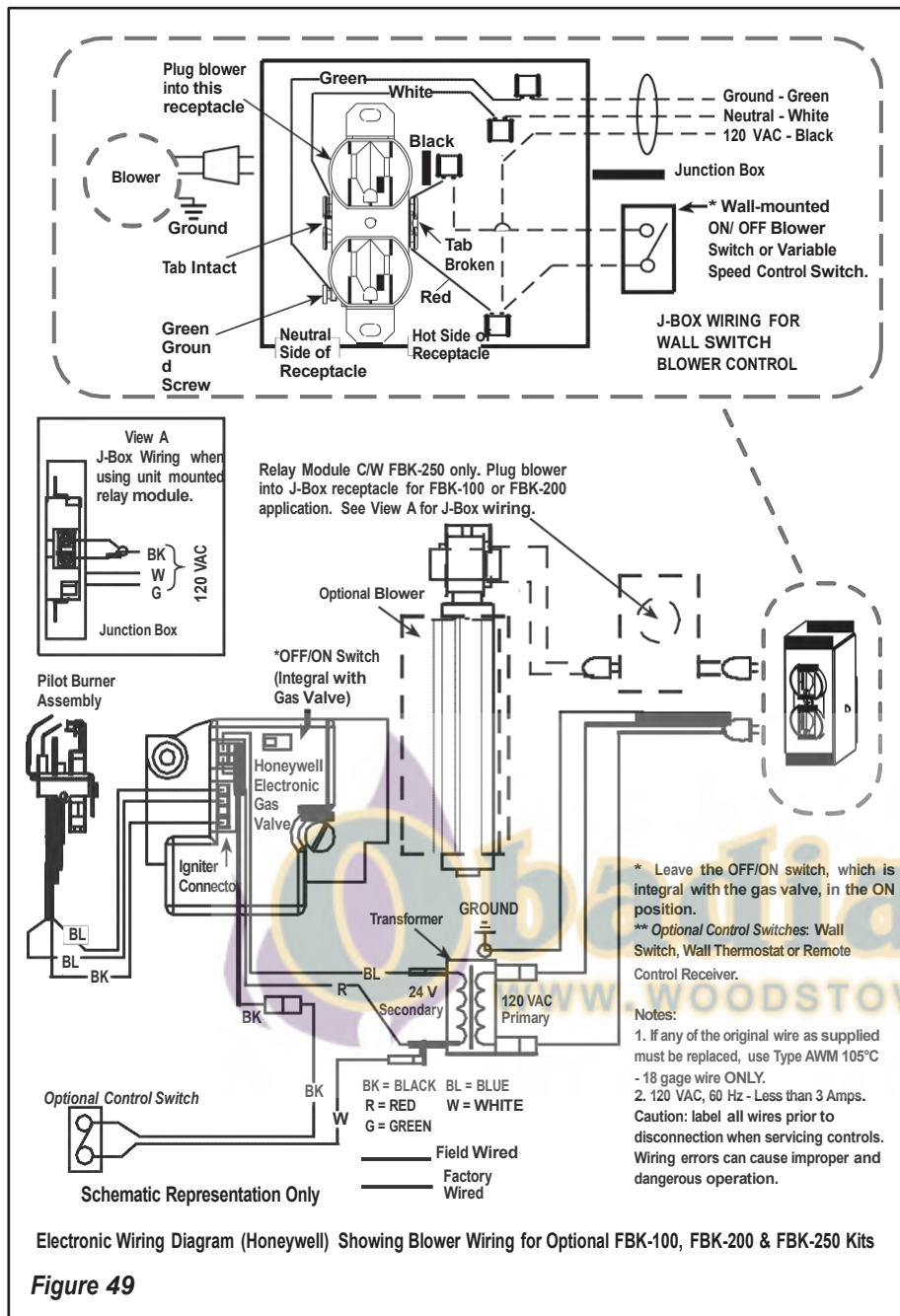
Remove the bottom compartment door by sliding the hinge pin, located at the door's left side, to the right until it disengages from the left corner post hole. Pull the door diagonally to the left, away from the fireplace.

The lower control compartment door on the side opposite the valve lifts on and off.

The millivolt control valve has a 3/8" (10 mm) NPT thread inlet port. The electronic control valve has a 1/2" (13 mm) NPT thread inlet port and is fitted with a 1/2" x 3/8" (13 mm x 10 mm) NPT fitting.

Secure all joints tightly using appropriate tools and sealing compounds (ensure propane resistant compounds are used in propane applications).

All codes require a shut-off valve mounted in the supply line. The orientation of the shut-off valve should face the front. **Figure 50** illustrates two methods for connecting the gas supply. A sediment Trap is recommended to prevent moisture and debris in the gas line for damaging the valve.



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 the control compartment or in the Care and Operation Instructions manual).

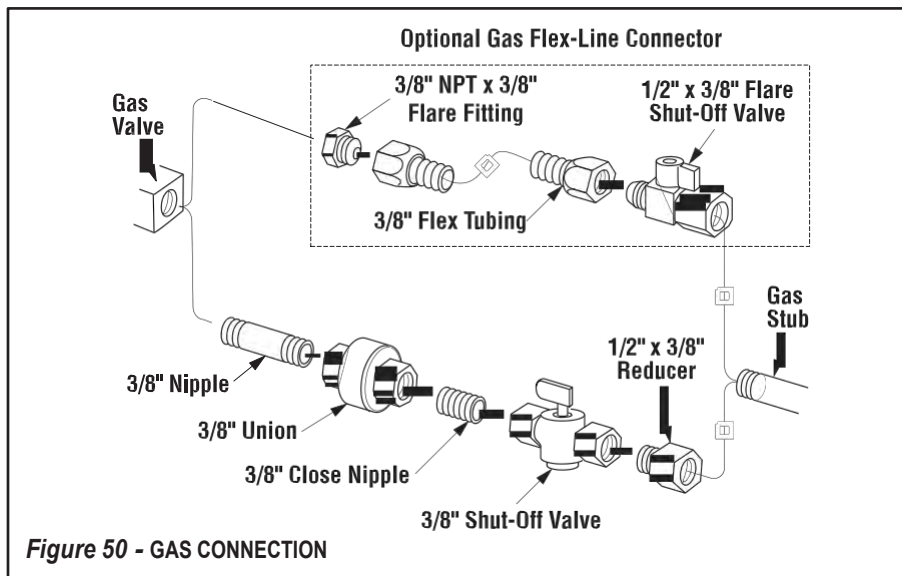
B. Brush all joints and connections with the gas leak test solution to check for leaks. If bubbles are formed, or gas odor is detected, turn the gas control knob (off/pilot/on) to the "OFF" position. Either tighten or refasten the leaking connection, then retest as described above.

C. When the gas lines are tested and leak free, be sure to rinse off the leak testing solution.

Step 8. VERIFYING APPLIANCE OPERATION

With gas line installed run initial system checkout before closing up the front of the unit. Follow the pilot lighting instructions provided in the Care and Operation Instructions manual. For piezo igniter location see **Figure 51** on **Page 29** (millivolt appliances only).

Note: Lighting Instructions are also found on the literature tag tied to the gas piping next to the gas valve. To access the tag, open the lower control compartment door (**Figure 51**) by pushing in simultaneously the left and right top corners of the door. (The door is hinged at the bottom). Remove the bottom compartment door by sliding the hinge pin, located at the door's left side, to the right until it disengages from the left corner post hole. Remove the modesty panel. To remove the modesty panel, slide the panel forward until it contacts the cabinet bottom panel, then lift straight up and tilt forward. Remove the modesty panel carefully, so that none of the wires become loose or disconnected.



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).

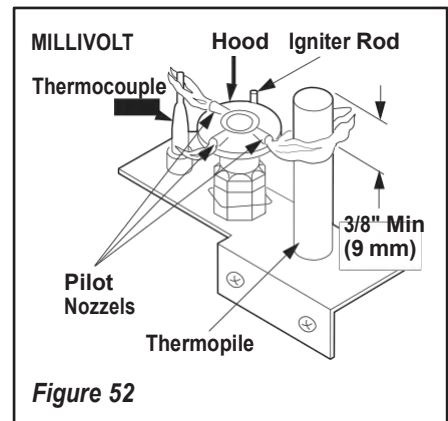
Millivolt Appliance Checkout

The pilot flame should be steady, not lifting or floating. Flame should be blue in color with traces of orange at the outer edge.

The top 3/8" (10 mm) at the pilot generator (thermopile) and the top 1/8" minimum (tip) of the quick drop out thermocouple should be engulfed in the pilot flame.

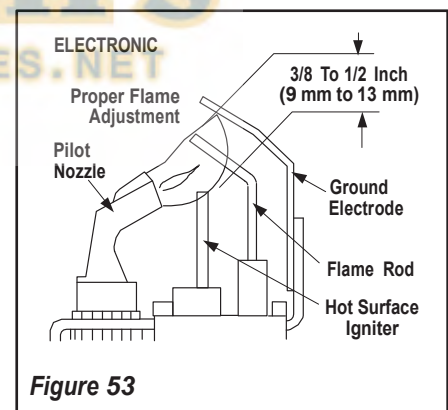
The flame should project 1" (25 mm) beyond the hood at all three ports (see **Figure 52**). Replace logs if removed for pilot inspection.

To light the burner; turn "ON" the remote wall switch and rotate the gas valve control knob counterclockwise to the "ON" position ("ON" will be at the top side of the valve).



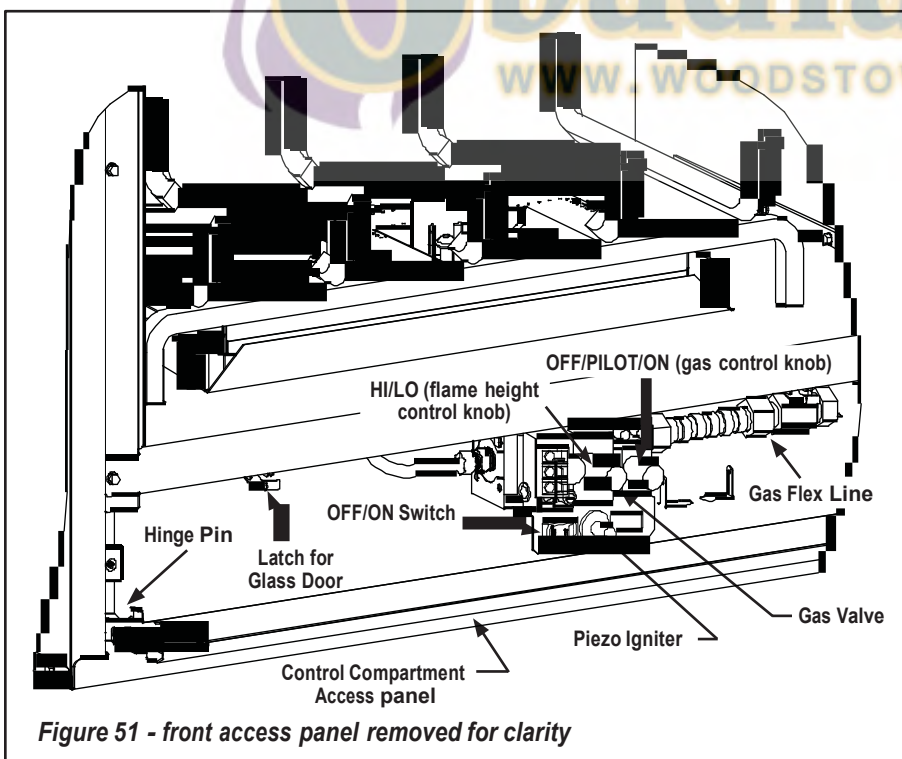
Electronic Appliance Checkout

To light the burner, turn 'ON' the unit mounted On/Off switch or the optional remote wall switch. Ensure the igniter lights the pilot. The pilot flame should engulf the flame rod as shown in **Figure 53**.



Step 9. INSTALL VERMICULITE, GLOWING EMBERS AND LOGS

NOTE: Turn off all electricity to the appliance before you install vermiculite, embers and logs. 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.



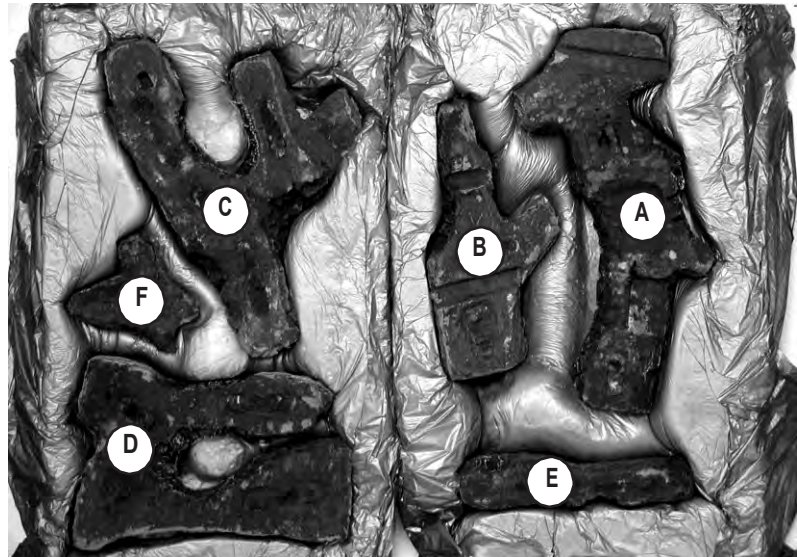
LOG SET - IDENTIFICATION

LOG SET Catalog Number H3210	
* Item	Description
A	Log, Center
B	Log, Left Rear
C	Log, Right
D	Log, Top Center
E	Log, Top/Left
F	Log, Top/Right

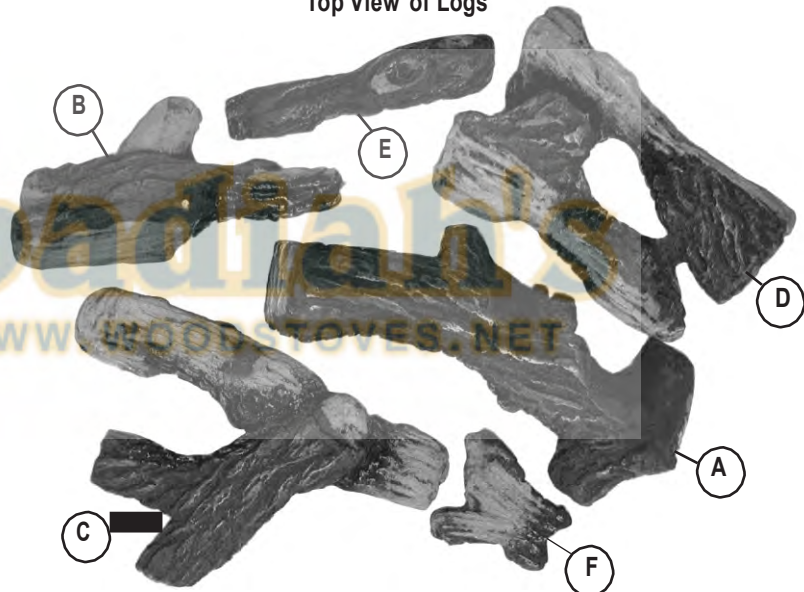
* Item "letters" above correspond to photos on right

REFERENCE Firebox Accessories / Parts		
Cat. No.	Model No.	Description
88L53	FGE	Bag of Glowing Embers
80L42	FDVS	Bag of Decorative Volcanic Stone

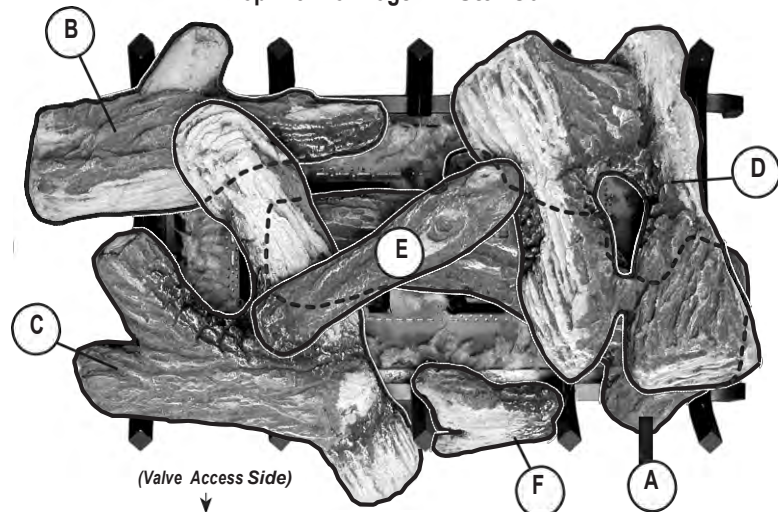
Bottom View of Logs (in packaging)



Top View of Logs



Top View of Logs - Installed



Glowing Embers

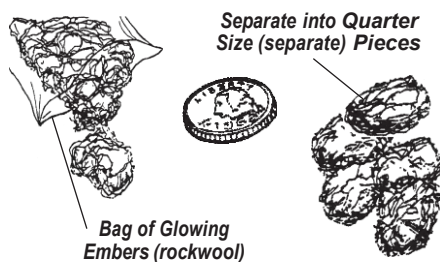


Figure 54

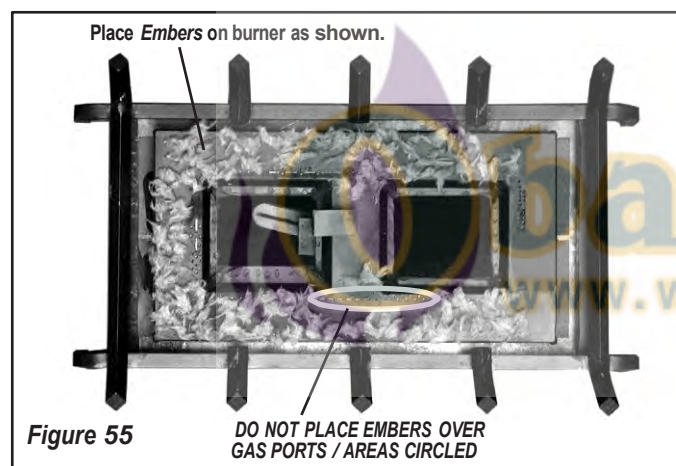
NOTE: DIAGRAMS & ILLUSTRATIONS ARE NOT TO SCALE.

INSTALLATION STEPS:

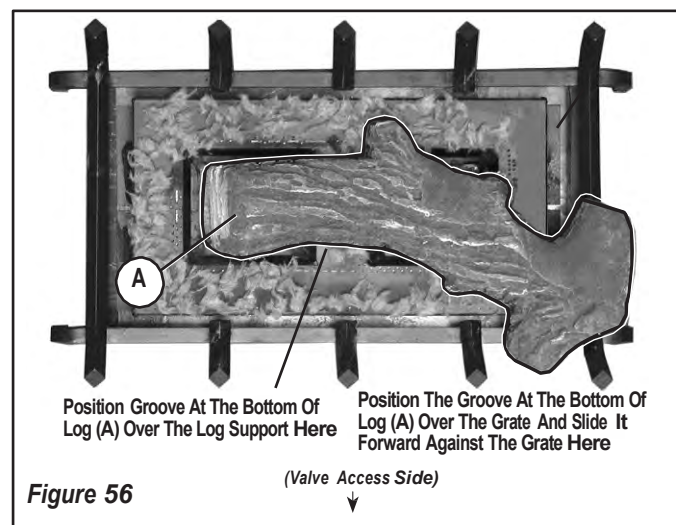
READ WARNINGS ON Page 34 BEFORE PROCEEDING

1. Remove the front glass enclosure panel (see *Glass Enclosure Panel Removal Instructions, Page 35*).
2. Remove the following from firebox; log set, bag of embers and bag of vermiculite. Handle logs carefully to prevent breakage.
3. Ensure the Grate is properly installed in the firebox with the 4 legs of the grate fitting into the 4 dimples on the firebox floor.
4. **Install Vermiculite** - Place some vermiculite on the firebox floor around the grate (the entire bag of vermiculite will NOT be used). See *Figure 63 on Page 36*. DO NOT PLACE ANY VERMICULITE ON THE BURNER.
5. **Placement of Glowing Embers** - Separate the Embers (rockwool) into pieces about the size of a quarter (see *Figure 54*). Keep the pieces fluffed up, not matted. Distribute these pieces over the surface of the burner, as shown in *Figure 58*. Do not use more than is necessary. Ensure that the main burner ports remain uncovered by the ember material.

Note: This appliance is provided with enough Glowing Embers for several applications, do not use all that is in a new bag at one time. For best glowing effect, replace the ember material annually. Replacement Glowing Embers are available (order Catalog Number 88L53).

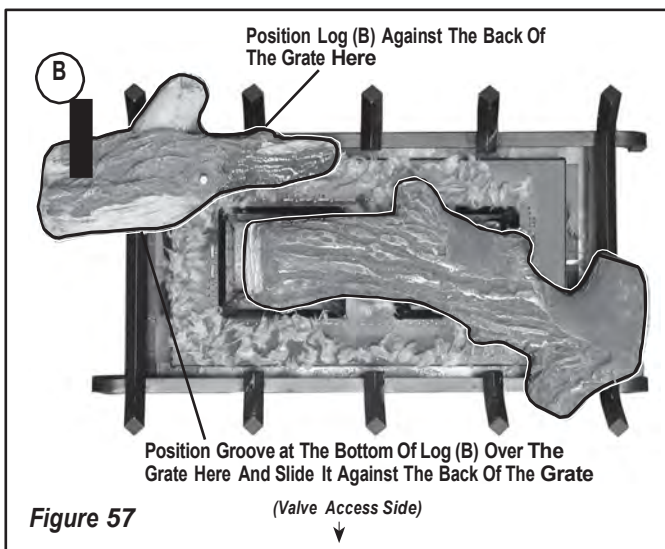


6. Place Log (A) on the grate as shown in *Figure 56*.

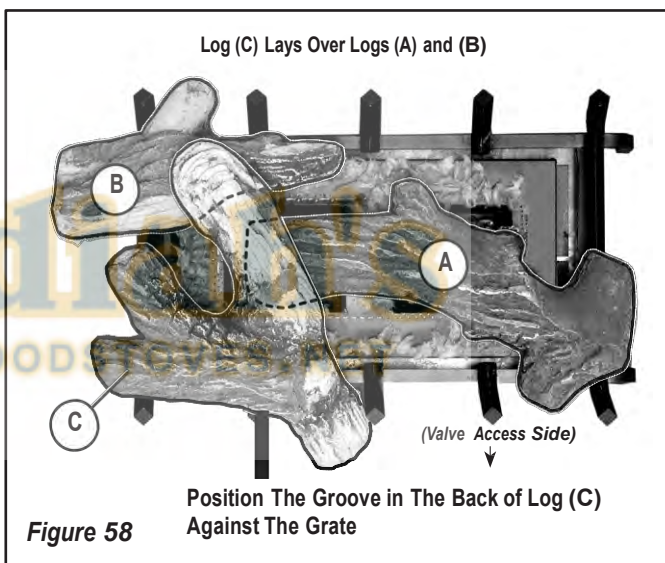


NOTE: DIAGRAMS & ILLUSTRATIONS ARE

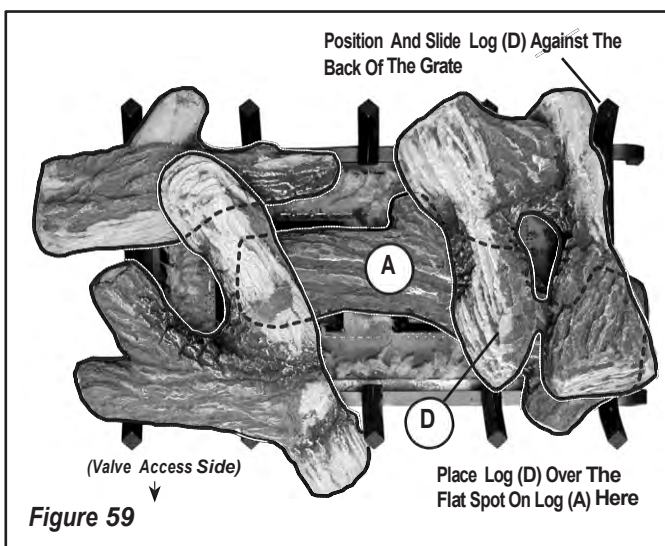
7. Place Log (B) as shown in *Figure 57*.



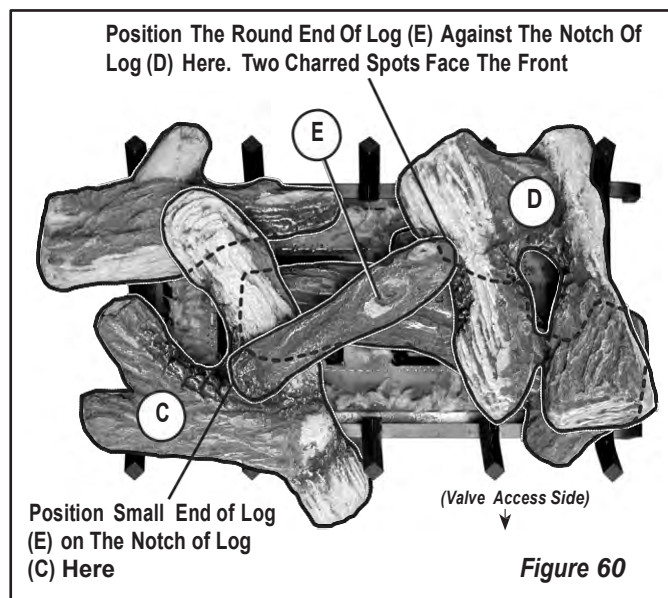
8. Place Log (C) as shown in *Figure 58*.



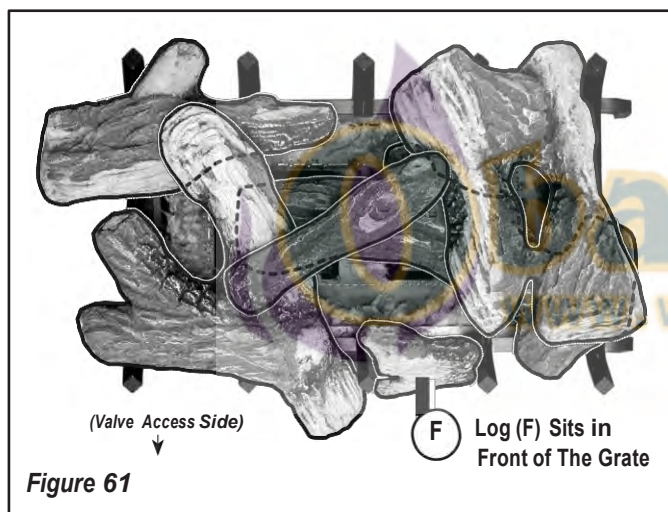
9. Place Log (D) as shown in *Figure 59*.



10. Place Log (E) as shown in **Figure 60**.



11. Place Log (F) as shown in **Figure 61**.



! 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, vermiculite, 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 10. REMOVING AND INSTALLING THE GLASS DOOR

⚠ WARNING

- Do not attempt to substitute the materials used on these doors, 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(s) 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.

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

Removing Glass Enclosure Panel
(see Figure 62)

To access the glass door securing latches, first remove the hood by pulling firmly straight away from the unit. Remove the front face assembly by lifting top and bottom evenly approximately 1/2" and pulling straight out from the unit once the brackets are disengaged.

Locate the two (2) glass door spring latches at the top of the control compartment (see Figure 58). Pull out each spring latch until it disengages from the door frame bottom vee-flange.

Remove the door by tilting it outward at the bottom and lifting it up. Set the door aside, taking care to protect it from inadvertent damage.

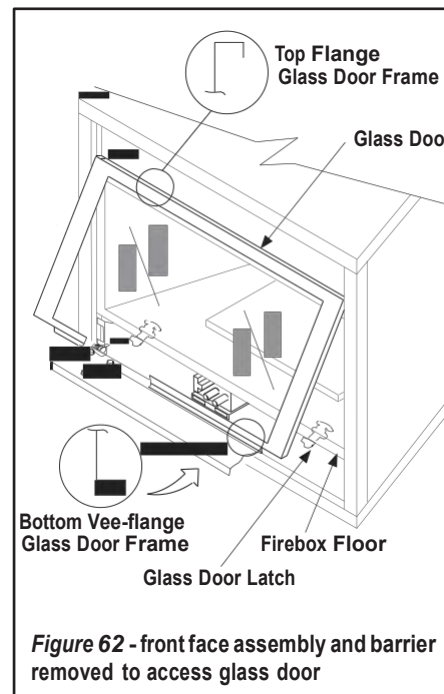
Installing Glass Enclosure Panel (see Figure 58)

Retrieve the glass door. Visually inspect the gasket on the backside of the frame. Gasket surface must be clean, free of irregularities and seated firmly.

Position the door in front of the firebox opening with the bottom of the door held away from the fireplace (Figure 58). Hook the top flange of the door frame over the top of the firebox frame.

Let the bottom of the door frame swing gently in towards the fireplace ensuring that the gasket seats evenly as the door frame draws shut. Fasten the two spring latches located underneath the firebox floor to the door's vee-flange.

NOTE: Front Face Assembly with barrier installed must be reinstalled prior to operation.



NOTE: DIAGRAMS & ILLUSTRATIONS ARE NOT TO SCALE.

Step 11. BURNER ADJUSTMENTS

Flame Appearance and sooting

Proper flame appearance is a flame which is blue at the base and becomes yellowish-orange in the body of the flame.

When the appliance is first lit, the entire flame may be blue and will gradually turn yellowish-orange during the first 15 minutes of operation. If the flame remains 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 yellowish-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.
- Propane models may exhibit flames which candle or appear stringy. If this is present and persists, adjust the air shutter to a more closed position, then operate the appliance for a few more minutes to ensure that the flame normalizes and the flames do not appear sooty.

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

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

! WARNINGS

- Air shutter adjustment should only be performed by a qualified professional service technician.
- Ensure front glass panel are in place and sealed during adjustment.

! CAUTIONS

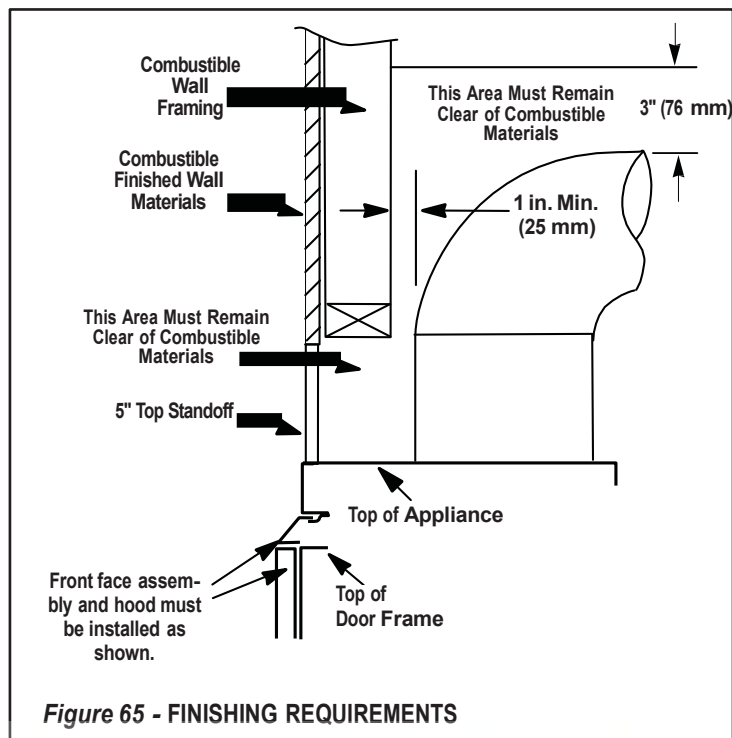
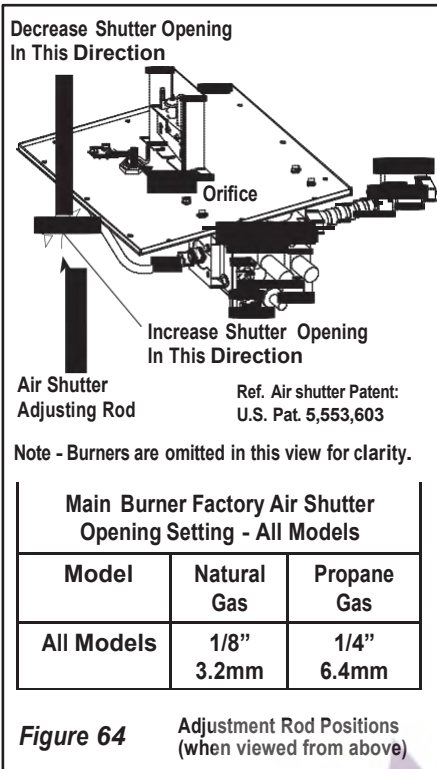
- Soot will be produced if the air shutter is closed too much. Any damage due to sooting, resulting from improperly setting the air shutter, is not covered under the warranty.
- The air shutter door and nearby appliance surfaces are hot. Exercise caution to avoid injury while adjusting flame appearance.



Figure 63 - Burner Flame Appearance

1. Refer to **Figure 63** for proper flame appearance. To adjust the flame, rotate the adjustment rod toward the back or toward the front of the fireplace (rod located in the lower control area). Position the air shutter to the factory setting as shown in the table in **Figure 64**.
2. Light appliance (follow lighting procedure on lighting label in control compartment or see the Care and Operation Manual).
3. Allow the burner to operate for at least 15 minutes while observing the flame continuously to ensure that the proper flame appearance has been achieved. If the following conditions are present, adjust accordingly.
 - If flame appears weak or sooty, adjust the air shutter, incrementally, to a more open position until the proper flame appearance is achieved.
 - If flame remains blue, adjust the air shutter, incrementally, to a more closed position until the proper flame appearance is achieved.
4. Leave the control knob (off/pilot/on) in the ON position and the burner OFF/ON switch OFF (and remote switches, if applicable).
5. When satisfied that the burner flame appearance is normal, re-install the lower control compartment door then proceed to finish the installation.

NOTE: DIAGRAMS & ILLUSTRATIONS ARE NOT TO SCALE.



Step 12. HOOD INSTALLATION

Refer to Figure 65. All of these appliances must have front face assemblies and barriers and hoods installed prior to operating.

FINISHING REQUIREMENTS

Wall Details

Complete finished interior wall. To install the appliance facing flush with the finished wall, position framework to accommodate the thickness of the finished wall (Figure 65).

**See Page 7 for
Cold Climate Insulation and
Page 10 for Clearances**

STEP 13. ATTACHING SAFETY-IN-OPERATION WARNINGS

It is the installer's 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 safety instruction labels furnished with the fireplace be affixed to the operation and control point of the fireplace. A safety instruction label must be affixed to the wall switch plate where the fireplace is turned on and off (See **Figure A**) or wall thermostat (See **Figure B**) and if used on the remote control handheld transmitter (**Figure C**). 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:

1. Locate the wall switch or wall thermostat that controls the fireplace (verify the switch operates the fireplace by turning it on and off). Clean the wall switch plate or wall thermostat thoroughly to remove any dust and oils. Affix the label to the surface of the plate of the wall switch that controls the fireplace (**Figure A**) or the wall thermostat (**Figure B**). Choose the language primarily spoken in the home. If unknown, affix the English language label.
2. If a remote control is used to control the fireplace, locate the transmitter and clean it thoroughly to remove any dust and oils. Affix the label to the surface of handheld transmitter (**Figure C**). Choose the language primarily spoken in the home. If unknown, affix the English language label.
3. 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.

SAFETY LABEL DIAGRAMS



Figure A

APPOSITION DES MISES EN GARDE RELATIVES À LA SÉCURITÉ D'UTILISATION

Il est impératif que les étiquettes de sécurité fournies avec le foyer soient collées à côté des dispositifs de contrôle du foyer. Une étiquette de sécurité doit être collée sur la plaque de l'interrupteur contrôlant l'allumage du foyer (voir **Figure A**) ou sur le thermostat mural (voir **Figure B**) et, le cas échéant, sur le boîtier de la télécommande (**Figure C**). 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 l'interrupteur ou le thermostat 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 murale de l'interrupteur ou le thermostat mural pour éliminer la poussière et les traces de graisse ou d'huile. Collez l'étiquette sur la surface de la plaque de l'interrupteur mural qui contrôle le foyer (**Figure A**) ou du thermostat mural (**Figure B**). Choisissez la langue qui est principalement parlée dans la résidence du propriétaire. En cas de doute, collez l'étiquette en anglais.
2. Si une télécommande est utilisée pour contrôler le foyer, 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 C**). Choisissez la langue qui est principalement parlée dans la résidence du propriétaire. En cas de doute, collez l'étiquette en anglais.
3. 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.

DIAGRAMMES DES ÉTIQUETTES DE SÉCURITÉ



Figure B

COLOCACIÓN DE ADVERTENCIAS DE SEGURIDAD EN OPERACIÓN

Se requiere que las etiquetas de instrucciones de seguridad incluidas con la chimenea se coloquen en el punto de operación y control de la misma. Se debe colocar una etiqueta de instrucciones de seguridad en la placa del interruptor de pared desde el cual se enciende y se apaga la chimenea (ver la **Figure A**) o en el termostato de pared (ver la **Figure B**) y en el transmisor de control remoto (**Figure C**) si se usa. 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:

1. Identifique el interruptor o el termostato de pared que controla la chimenea (verifique que el interruptor opera la chimenea encendiéndola y apagándola). Limpie bien la placa del interruptor o el termostato de pared para quitar el polvo y aceite. Pegue la etiqueta en la superficie de la placa del interruptor que controla la chimenea (**Figure A**) o en el termostato de pared (**Figure B**). Seleccione el idioma que más se habla en la casa. Si no sabe cuál es, use la etiqueta en inglés.
2. Si se usa un control remoto para controlar la chimenea, encuentre el transmisor y límpiolo bien para quitar el polvo y aceite. Pegue la etiqueta en la superficie del transmisor (**Figure C**). Seleccione el idioma que más se habla en la casa. Si no sabe cuál es, use la etiqueta en inglés.
3. 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 - N° de cat. H8024

INNOVATIVE HEARTH PRODUCTS

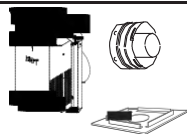
Nota: La etiqueta en inglés es transparente con texto rojo. Las etiquetas en francés y español son negras con texto blanco.

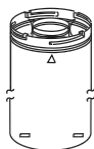
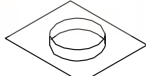
DIAGRAMAS DE ETIQUETAS DE SEGURIDAD

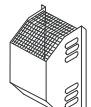
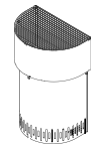
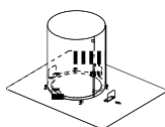
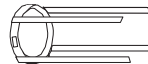
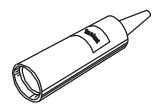
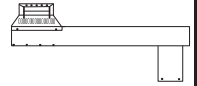


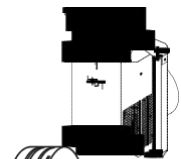
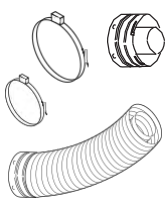
Figure C

INSTALLATION ACCESSORIES

Listed Secure Vent™ Components			
	Cat. No.	Model	Description
	H1968	SV4.5HT-2	Horizontal Square Termination With Firestop / spacer (H2246) & Adaptor (74L61)
	H2152	SV4.5CGV-1	Vertical Termination Cap, High Wind

	Cat. No.	Model	Description
Vent Sections (Rigid) 	77L70	SV4.5L6	6 Inch (152 mm)
	77L71	SV4.5L12	12 Inch (305 mm)
	77L72	SV4.5L24	24 Inch (610 mm)
	77L73	SV4.5L36	36 Inch (914 mm)
	77L74	SV4.5L48	48 Inch (1219 mm)
	77L75	SV4.5LA	Telescopic Length Slip Section (2" to 7-1/2" rigid)
	77L76	SV4.5E45	45 Degree Elbow
	77L77	SV4.5E90	90 Degree Elbow
The following flashings come packaged with a storm collar:			
 	77L78	SV4.5F	Flat Roof Flashing
	77L79	SV4.5FA	1/12 to 7/12 Adjustable Flashing
	77L80	SV4.5FB	7/12 to 12/12 Adjustable Flashing
	77L81	SV4.5SC6	Storm Collar (6 per box)
	H6183	SV4.5HF5	Firestop Spacer, 5", rigid
	H6184	SF4.5HF5	Firestop Spacer, 5", flex
	H2246	SV4.5HF-10	Firestop / Spacer-Horizontal, rigid (3-1-1 spacing), 10 Pack
	H2247	SV4.5VF-10	Firestop / Spacer-Vertical, rigid (1-1-1 spacing), 10 Pack
	96K92	SV4.5SP	Support Plate

Listed Secure Vent™ Components			
	Cat. #	Model	Description
	17M52	SV4.5HGS-1	Termination Guard, Square (1 pack) Ref. instr. #750,109M
	17M53	SV4.5HGS-12	Termination Guard, Horizontal Square (12 pack) Ref. instr. #750,109M
	87L02	SV4.5HGS	Termination Guard for Horizontal Square Termination (Deluxe) (1 pack) Ref. instr. #750,055M
	H5820	SV4.5HTSK	Termination Shroud (Guard) for Horizontal Square Termination (1 pack) (ref. instr. #750246M)
	H5816	SV4.5-TWSK10	Through Wall Shield Kit (used to shield the direct-vent pipe from blown insulation) Ref. instr. #750,247M
	H3907	SV4.5ARSA	Attic Insulation Shield w/ adjustable height, 12"-22"
	96K93	SV4.5SU	Support Strap
	10K81	SFMP	Mill-Pac, Black, High Temperature Sealant
	89L40	SFMP-12	Mill-Pac, Black, High Temperature Sealant - Bulk 12 pack
	99L02	SV4.5HRK14	Horizontal Riser Kit, 14", Ref. instr. #750,146M
	99L03	SV4.5HRK36	Horizontal Riser Kit, 36", Ref. instr. #750,146M

Listed Secure Flex™ Components			
	Cat. #	Model	Description
These termination kits include firestop/spacer, gear clamps and flex adaptor.			
	60L10	SF-18	18 feet (5.49 m) * compressed flex, Ref. instr. #750,053M
	98K03	SF-12	12 feet (3.66 m) * compressed flex, Ref. instr. #750,052M
	H2248	SF4.5HF-10	Firestop / Spacer - Horizontal, flex (3-1-1 spacing), 10 Pack
	H2249	SF4.5VF-10	Firestop/Spacer-Vertical, flex (1-1-1 spacing), 10 Pk
	H1969	SF4.5HT-2	Horizontal Square Termination for flex (without flex)
	77L87	SFKIT12S	Square Term. for flex (with 12 inch [305 mm] * compressed flex)
	77L88	SFKIT18S	Square Term. for flex (with 18 inch [457 mm] * compressed flex)
	77L89	SFKIT24S	Square Term. for flex (with 24 inch [610 mm] * compressed flex)
	77L90	SFKIT36S	Square Term. for flex (with 36 inch [914 mm] * compressed flex)
	77L91	SFKIT48S	Square Term. for flex (with 48 inch [1219 mm] * compressed flex)
	56L74	SFVT30	Vertical Termination for flex (flat to 6/12) with flex adaptor, section of rigid vent, roof support collar assembly, roof flashing and storm collar. Ref. instr. #750,052M
	56L75	SFVT45	Vertical Termination for flex (6/12 to 12/12) with flex adaptor, section of rigid vent, roof support collar assembly, roof flashing and storm collar. Ref. instr. #750,052M
	91L66	SFGC4-6	Gear Clamp 4.5 in. (114 mm) for flex (6 pack)
	91L67	SFGC7-6	Gear Clamp 7.5 in. (190.5 mm) for flex (6 pack)
	H7748	H7748	36" Flex Connector Kit. 36" of flex with two adapters for mating two rigid sections of vent together.

* All compressed flex vents can be expanded up to two times.

GAS CONVERSION KITS

WARNING

This conversion kit shall be installed by a qualified service agency in accordance with the manufacturer's instructions and all applicable codes and requirements of the authority having jurisdiction. If the information in these instructions is not followed exactly, a fire, explosion or production of carbon monoxide may result causing property damage, personal injury or loss of life. The qualified service agency is responsible for the proper installation of this kit. The installation is not proper and complete until the operation of the converted appliance is checked as specified in the manufacturer's instructions supplied with the kit. The qualified service agency performing this installation assumes responsibility for this conversion.

AVERTISSEMENT

Cette trousse de conversion doit être installée par un technicien agréé, selon les instructions du fabricant et selon toutes les exigences et tous les codes pertinents de l'autorité compétente. Assurez-vous de bien suivre les instructions dans cette notice pour réduire au minimum le risque d'incendie, d'explosion ou la production de monoxyde de carbone pouvant causer des dommages matériels, des blessures ou la mort. Le technicien agréé est responsable de l'installation de cette trousse. L'installation n'est pas adéquate ni complète tant que le bon fonctionnement de l'appareil converti n'a pas été vérifié selon les instructions du fabricant fournies avec la trousse. Le fournisseur de service qualifié ayant réalisé l'installation assume les responsabilités liées à la conversion.

In Canada:

THE CONVERSION SHALL BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF THE PROVINCIAL AUTHORITIES HAVING JURISDICTION AND IN ACCORDANCE WITH THE REQUIREMENTS OF THE CAN/CSA-B149.1 INSTALLATION CODE.

LA CONVERSION DEVRA ÊTRE EFFECTUÉE CONFORMÉMENT AUX RECOMMANDATIONS DES AUTORITÉS PROVINCIALES AYANT JURIDICTION ET CONFORMÉMENT AUX EXIGENCES DU CODE D'INSTALLATION CAN/CSA-B149.1.

Gas conversion kits are available to adapt your appliance from the use of one type of gas to the use of another. These kits contain all the necessary components needed to complete the task including labeling that must be affixed to ensure safe operation.

Kit part numbers are listed here and the following steps detail the conversion procedure. Refer to the instructions provided with the conversion kit when performing any gas conversion.

NOTE: DIAGRAMS & ILLUSTRATIONS ARE NOT TO SCALE.

Natural Gas to Propane Gas Conversion Kits

Fireplace Model No.	Cat. No. (model)
ST/PF-DMN millivolt	H3360 (GCK35STMPN)
ST/PF-DEN electronic	H3361 (GCK35STENP)

Table 9

Propane Gas to Natural Gas Conversion Kits

Fireplace Model No.	Cat. No. (model)
ST/PF-DMP millivolt	H2014 GCK-MPD40MPN
ST/PF-DEN electronic	26M65 (GCK-MP40EPN)

Table 10

INSTALLATION INSTRUCTIONS

Step 1. TURN OFF THE GAS SUPPLY TO THE APPLIANCE and disconnect power supply at the circuit breaker. Ensure appliance is cold.

CAUTION: THE GAS SUPPLY SHALL BE SHUT OFF PRIOR TO DISCONNECTING THE ELECTRICAL POWER, BEFORE PROCEEDING WITH THE CONVERSION.

ATTENTION: AVANT D'EFFECTUER LA CONVERSION, COUPEZ D'ABORD L'ALIMENTATION EN GAZ, ENSUITE, COUPEZ L'ALIMENTATION ÉLECTRIQUE.

A. Remove hood and front face assembly with barrier.

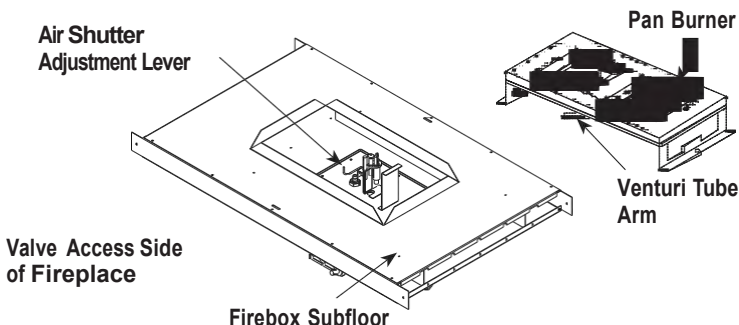


Figure 66

b. Locate the two (2) latches at the top of the control compartment. To disengage the two latches from the bottom vee-flange of the glass enclosure panel, reach for the handles located towards the back of the latches and pull the handles down toward the front of the appliance.

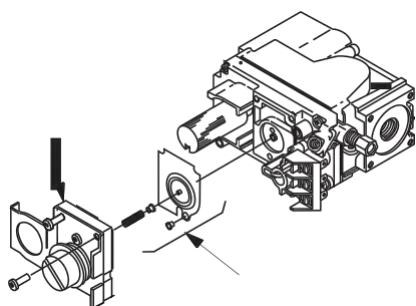
c. Swing the bottom of the door out and raise it slightly to lift the top flange of the door frame away from the appliance.

Step 2. Carefully remove the log set. Exercise care as not to break the log set.

Step 3. Referring to **Figure 66**, remove the burner.

Millivolt Appliances

Step 4. Refer to **Figure 67** and the instructions provided with the kit. Using a Torx T20 tool or standard flat screwdriver, remove and discard the three pressure regulator mounting screws. Remove the pressure regulator, spring, poppet, diaphragm and bushing. Discard all removed components. Ensure the rubber gasket installed on the back of the replacement pressure regulator is properly positioned and install the new pressure regulator using the new screws supplied with the kit. Tighten screws to 25 In. lb. torque.



Step 5. Attach manometer to the manifold side pressure test fitting and verify manifold pressure reads 3.5 inches water column (0.87 kPa) for natural gas, and 10.0 inches water column (2.49 kPa) for propane gas.

Step 6. Refer to **Figure 68** and remove the pilot hood assembly to access the hexed pilot orifice. Remove and replace the orifice with the one provided with the kit.

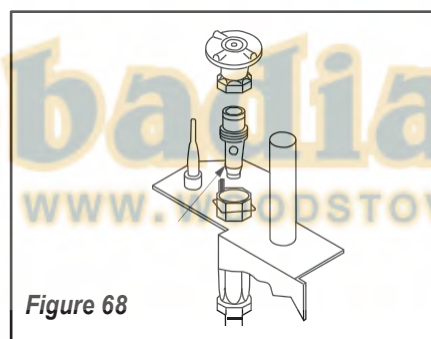


Figure 68

Electronic Appliances

Step 7. Honeywell Electronic Valves - See **Figure 69** and the instructions provided with the kit. Remove the slotted cap screw, o-ring, pressure-regulating adjusting screw and spring. Retain all parts for possible later use. Install new components from the kit. Black cap and red spring for propane gas appliances. Silver cap and stainless steel spring for natural gas appliances. Before installing the cap, attach manometer to the manifold side pressure test fitting and adjust screw until pressure reads 3.5 inches water column (0.87 kPa) for natural gas, and 10.0 inches water column (2.49 kPa) for propane gas.

See **Figure 70** and replace the pilot orifice as follows: Remove the igniter assembly retainer clip, and carefully remove the igniter assembly.

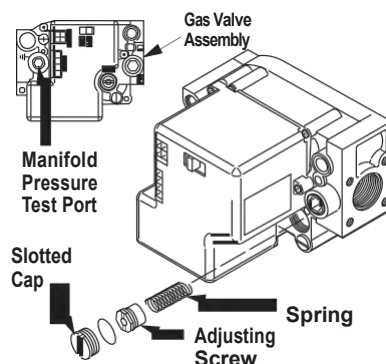
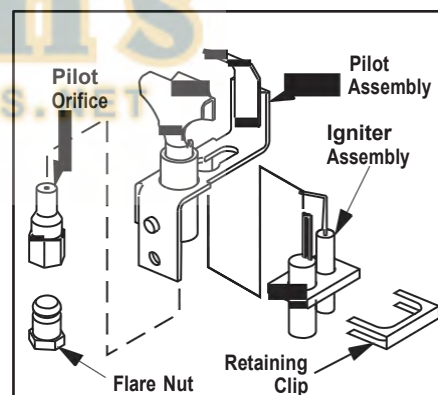


Figure 69

Exercise extreme care to prevent damage to or breakage of the igniter assembly.

Remove the screw securing the pilot assembly to its mounting bracket. Back off the flare nut at the end of the pilot gas line to free the pilot assembly from the gas line. Remove the pilot orifice and replace it with the one provided with the conversion kit. Reinstall the pilot assembly by reversing the steps detailed here.

When reinstalling the igniter assembly, use extreme care to prevent damage and breakage. Do not apply any leverage to the igniter assembly while restoring the retainer clip to its original position.



Note: If the igniter is damaged, a replacement kit is available, order Catalog No. 87L54.

Figure 70

All Models

Step 8.

a. Remove the orifice from the manifold and replace it with the one provided in the kit. The following Table shows the orifice sizes for natural and propane models. **Figure 71** illustrates the orifice.

b. Install the burner as shown in *Figure 72*.

Ensure that the arm of the venturi of the burner is hooked onto the air shutter adjustment lever (refer to *Figure 66 on Page 42*). The primary air opening can be adjusted by rotating the adjustment lever from beneath the firebox floor. Refer to *Figure 64 on Page 37* for the recommended minimum primary air shutter opening setting.

Burner Orifice Sizes (all models)		
Elevation Feet (meters)	Natural Gas drill size (inches)	Propane Gas drill size (inches)
0 - 4500 (0-1372)	#37 * (.104")	1.55 mm * (.061")

* Standard size installed at factory
Table 11

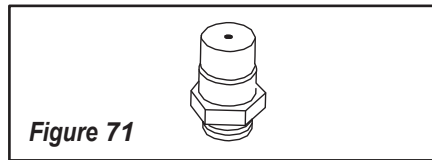


Figure 71

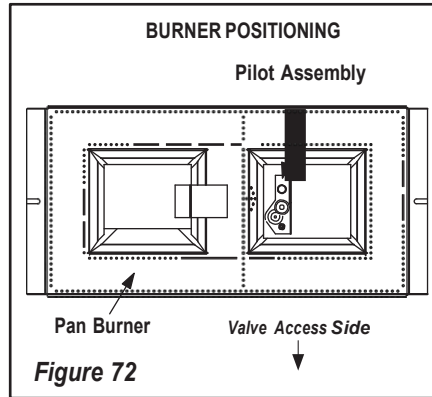


Figure 72

Step 9. Reassemble the remaining components by reversing the procedures outlined in the preceding steps.

Use pipe joint compound or Teflon tape on all pipe fittings before installing (ensure propane resistant compounds are used in propane applications, do not use pipe joint compounds on flare fittings).

Step 10. Attach the conversion label provided in the conversion kit to the rating plate on the appliance.

Step 11. Turn on gas supply and test for gas leaks.

NOTE: Front Face Assembly with barrier installed must be reinstalled prior to operation.

CONGRATULATIONS!

In selecting this Innovative Hearth Products direct-vent gas appliance you have chosen the finest and most dependable fireplace to be found anywhere. It is a beautiful, prestigious alternative to a wood burning fireplace. Welcome to a family of tens of thousands of satisfied Innovative Hearth Products fireplace owners.

Please carefully read and follow all of the instructions found in this manual. Please pay special attention to the safety instructions provided in this manual. The care and operation instructions included here will assure that you have many years of dependable and enjoyable service from your Innovative Hearth Products fireplace.

INTRODUCTION

The fireplace models covered in this manual are direct-vent sealed combustion gas fireplace heaters designed for residential application. These direct-vent 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.

The **Millivolt** appliances have a millivolt gas control valve with piezo ignition system. If any optional accessories which require electrical power are being installed, the electrical power must be provided at the time of appliance installation.

The **Electronic** appliances are designed to operate on either natural or propane gas. An electronic intermittent pilot system provides safe, efficient operation. External electrical power is required to operate these units.

These appliances comply with National Safety Standards and are tested and listed by PFS Corporation (Report No. F14-165) to ANSI Z221.88 (in Canada, CSA-2.33), and CAN/CGA-2.17-M91 in both USA and Canada, as vented gas fireplace heaters.



We recommend that our gas hearth products be installed and serviced by professionals who are certified in the U.S. by the National Fireplace Institute® (NFI) as NFI Gas Specialists.

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 and Propane Installation Code, CAN/CSA B149.1-latest edition. The appliance, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, the latest edition of the National Electrical Code, ANSI/NFPA 70, or the Canadian Electrical Code, CSA C22.1 - latest editions.

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). J7424 (ST Models) and J7424 and J7425 (PF Models).

GENERAL INFORMATION

WARNING

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

AVERTISSEMENT

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.

WARNING

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

AVERTISSEMENT

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

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.

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.

Note: 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. See maintenance instructions on Page 50.

Remarque : 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.

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

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

Due to high temperatures the appliance should be located out of traffic and away from furniture and draperies. Locate furniture and window coverings accordingly.

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.

The vent termination is hot while in operation and for a period of time following the use of the fireplace. To prevent contact with hot surfaces, we recommend the use of a termination guard. See Page 57 for ordering information.

These fireplaces are designed as supplemental heaters. Therefore, it is advisable to have an alternate primary heat source when installed in a dwelling.

These appliances are designed to operate on natural gas or propane gas only. 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.

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. These include pregnant women, people with heart or lung disease or anemia, those under the influence of alcohol, and those at high altitudes.

WARNING

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

WARNING

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

WARNING

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, unless a certified kit is used.

AVERTISSEMENT

Cet appareil doit être utilisé uniquement avec les types de gaz indiqués sur la plaque signalétique. Ne pas l'utiliser avec d'autres gaz sauf si un kit de conversion certifié est installé.

WARNING

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

AVERTISSEMENT

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 vapeurs inflammables loin de l'appareil.

BTU Input

These fireplaces are designed as supplemental heaters. Therefore, it is advisable to have an alternate primary heat source when installed in a dwelling.

Millivolt Models - The millivolt appliances are manually controlled and feature a spark igniter (piezo) that allows the appliance's pilot gas to be lit without the use of matches or batteries. This system provides continued service in the event of a power outage.

Millivolt models come standard with a manually-modulated gas valve; flame appearance and heat output can be controlled at the gas valve. The BTU Input for these appliances is shown in **Table 12**.

Electronic Models - Electronic models have a fixed rate gas valve. Input of electronic models is shown in **Table 12**.

Input (BTU) Gas Valves (all models)		
Models	Fuel Type	Input Rate (BTU / HR)
35" ST/PF DMN (Millivolt)	Natural	30,000 high 23,000 low
35" ST/PF DMP (Millivolt)	Propane	28,000 high 22,000 low
35" ST/PF DMN (Electronic)	Natural	30,000
35" ST/PF (Electronic) (if field converted)	Propane	28,000

Table 12

Efficiencies %				
Models	Natural Gas		Propane	
	AFUE	P4	AFUE	P4
STDMN-P	68.8	59.03	70.3	58.66
STDEN	74.8	54.73	n/a	n/a
PFDMN-P	69.2	60.1	69.7	58.66
PFDEN	74.8	54.73	n/a	n/a

Gas Pressure - All Models

Tables 13 and 14 show the appliances' inlet and manifold gas pressure requirements:

Inlet Gas Supply Pressure (all models)		
Fuel #	Minimum	Maximum
Natural Gas	4.5" WC (1.12 kPa)	10.5" WC (2.61 kPa)
Propane	11.0" WC (2.74 kPa)	13.0" WC (3.23 kPa)

Table 13

Manifold Gas Supply Pressure (all models)		
Fuel #	Low	High
Natural Gas	(Lo) 2.2" WC (0.55 kPa)	(Hi) 3.5" WC (0.87 kPa)
Propane	(Lo) 6.3" WC (1.57 kPa)	(Hi) 10.0" WC (2.49 kPa)

Table 14

Test gauge connections are provided on the front of the millivolt and electronic gas control valve (identified IN for the inlet and OUT for the manifold side). The control valves have a 3/8" (10mm) NPT thread inlet and outlet side of the valve (refer to **Figures 73 and 74**).

Propane tanks are at pressures that will cause damage to valve components. Verify that the tanks have step down regulators to reduce the pressure to safe levels.

These appliances must be isolated from the gas supply piping system (by closing their individual manual shut-off valve) during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psig (3.5 kPa).

These appliances and their individual shut-off valves must be disconnected from the gas supply piping system during any pressure testing of that system at pressures greater than 1/2 psig (3.5 kPa).

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

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 15**).

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/CSA-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/CSA-B149.1 - latest edition.

Flame breadth, height and width will diminish 4% for every 1,000 feet of altitude.

Burner Orifice Sizes (all models)		
Elevation Feet (meters)	Natural Gas drill size (inches)	Propane Gas drill size (inches)
0-4500 (0-1372)	#37 (0.104") * 24M10 •	1.55 mm (0.061")* 42M79 •

Table 15 * Standard size installed at factory • Part/Cat. Number

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.

If an optional blower is installed, Do Not turn it on during the Burn-In period.

A white film may develop on the glass front during the first few fires as part of the curing process. The glass should be kept clean during the first two weeks of use to prevent the film from baking on (making it very difficult to remove). See **Cleaning Glass** on **Page 51**.

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.

AVERTISSEMENT

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 controls can be found behind the hinged drop-down panel.

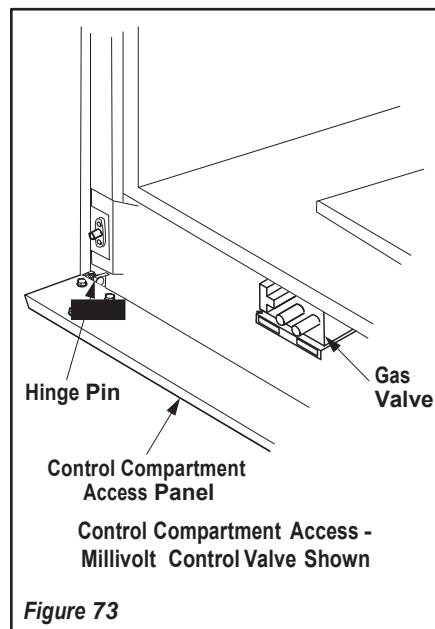
Open the control compartment access panel, by lifting panel approximately 1/2" to disengage and swing the panel open from top.

On millivolt systems, the piezo ignitor, Hi/Lo flame adjustment knob, and pilot and main gas ON/OFF control knob are located on the modesty panel. On both millivolt and electronic systems the gas valve is located behind the modesty panel. See **Figure 1**.

Remove the bottom compartment door by sliding the hinge pin, located at the door's left side, to the right until it disengages from the left corner post hole. Pull the door diagonally to the left, away from the fireplace.

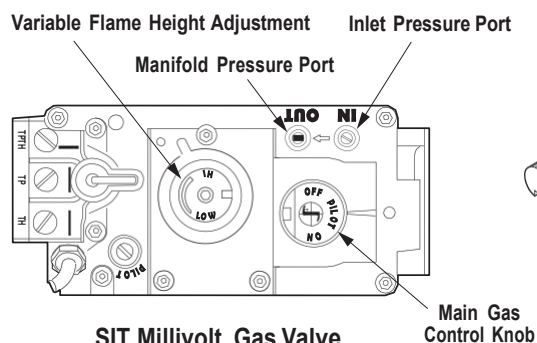
To ease door closure, depress the catches to place them in their retracted position until they stay there, then close the door.

Operation of millivolt and electronic gas control systems are different. Before lighting and operating your appliance determine if you have a millivolt or electronic appliance.



Refer to **Figure 73** for access to the gas control valve. Millivolt appliances will be fitted with the gas control valve shown in **Figure 73**.

Appliances with electronic systems will be fitted with the electronic valve shown in **Figure 75**. Familiarize yourself with the gas control valve that your appliance uses.



Note: The piezo ignitor is located on the modesty panel - refer to Figure 1.

Figure 74

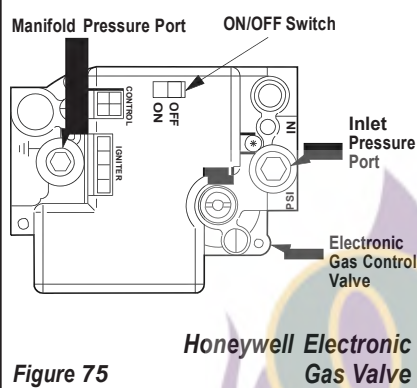


Figure 75

Millivolt Appliances -

To light millivolt appliances refer to the detailed lighting instructions found on **page 60 (English) and page 61 (French)**. Millivolt appliance lighting instructions may also be found on the pull out lighting instruction labels attached to the gas control valve.

Millivolt appliances are fitted with an ON/OFF Rocker Switch for appliance ON/OFF control. Refer to **Figure 73** for its location. Once the pilot is lighted, the ON/OFF rocker switch will control the appliance ON/OFF operation. To operate: Toggle the switch between its ON and OFF positions.

If your millivolt appliance is equipped with an optional remote wall switch or remote control kit and the pilot is lit, the appliance main burner may be turned on and off with the wall switch or remote control.

Electronic Appliances -

To light electronic appliances refer to the detailed lighting instructions found in both English and French on **pages 62 and 63** of these instructions respectively. **Electronic appliance lighting instructions may also be found on the pull out lighting instruction labels attached to the gas control valve.** Electronic appliances are fitted with an ON/OFF Rocker Switch for appliance ON/OFF control. Refer to **Figure 73** for its location.

Once the pilot is lighted, the ON/OFF rocker switch will control the appliance ON/OFF operation. To operate: Toggle the switch between its ON and OFF positions.

If your electronic appliance is equipped with an optional remote wall switch or remote control kit the appliance main burner may be turned on and off with the wall switch or remote control.

Variable Flame Height Adjustment (Millivolt Appliances only)

1. All Millivolt appliances are equipped with a variable gas control valve. Flame height for these models may be adjusted through a range between fixed low and high settings, alternately, while the appliance is in operation.

Adjust the flame height as desired after lighting the appliance by rotating the variable adjustment control knob located on the front of the valve (**refer to Figure 74**). (An extension is provided to this knob so that the adjustment may be made at the modesty panel.)

2. 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.

3. Keep lower 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 and clear of obstruction of venting and combustion air.

4. Always turn off gas to the pilot (millivolt appliances) before cleaning. Before re-lighting, refer to the lighting instructions in this manual. Instructions are also found on a pull-out panel located on the floor of the appliance.

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

6. Remember, Millivolt appliances have a continuous burning pilot flame. Exercise caution when using products with combustible vapors.

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 point of the fireplace. A safety instruction label should be affixed to the wall switch plate where the fireplace is turned on and off (See **Figure A**) or wall thermostat (See **Figure B**) and if used on the remote control handheld transmitter (**Figure C**). 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:

1. Locate the wall switch or wall thermostat that controls the fireplace (verify the switch operates the fireplace by turning it on and off). Clean the wall switch plate or wall thermostat thoroughly to remove any dust and oils. Affix the label to the surface of the plate of the wall switch that controls the fireplace (**Figure A**) or the wall thermostat (**Figure B**). Choose the language primarily spoken in the home.
2. If a remote control is used to control the fireplace, locate the transmitter and clean it thoroughly to remove any dust and oils. Affix the label to the surface of handheld transmitter (**Figure C**). Choose the language primarily spoken in the home.
3. 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

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 doit être collée sur la plaque de l'interrupteur contrôlant l'allumage du foyer (voir **Figure A**) ou sur le thermostat mural (voir **Figure B**) et, le cas échéant, sur le boîtier de la télécommande (**Figure C**). 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:

1. Repérez l'interrupteur ou le thermostat 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 murale de l'interrupteur ou le thermostat mural pour éliminer la poussière et les traces de graisse ou d'huile. Collez l'étiquette sur la surface de la plaque de l'interrupteur mural qui contrôle le foyer (**Figure A**) ou du thermostat mural (**Figure B**). Choisissez la langue qui est principalement parlée dans la résidence du propriétaire.
2. Si une télécommande est utilisée pour contrôler le foyer, 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 C**). Choisissez la langue qui est principalement parlée dans la résidence du propriétaire.
3. 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

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 el punto de operación y control de la chimenea. Se debe colocar una etiqueta de instrucciones de seguridad en la placa del interruptor de pared desde el cual se enciende y se apaga la chimenea (ver la **Figura A**) o en el termostato de pared (ver la **Figura B**) y en el transmisor de control remoto (**Figura C**) si se usa. 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:

1. Identifique el interruptor o el termostato de pared que controla la chimenea (verifique que el interruptor opera la chimenea encendiéndola y apagándola). Limpie bien la placa del interruptor o el termostato de pared para quitar el polvo y aceite. Pegue la etiqueta en la superficie de la placa del interruptor que controla la chimenea (**Figura A**) o en el termostato de pared (**Figura B**). Seleccione el idioma que más se habla en la casa.
2. Si se usa un control remoto para controlar la chimenea, encuentre el transmisor y límpielo bien para quitar el polvo y aceite. Pegue la etiqueta en la superficie del transmisor (**Figura C**). Seleccione el idioma que más se habla en la casa.
3. 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 - N° de cat. H8024

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

DIAGRAMMES DES ÉTIQUETTES DE SÉCURITÉ / DIAGRAMAS DE ETIQUETAS DE SEGURIDAD / SAFETY LABEL DIAGRAMS

⚠ AVERTISSEMENT

Un foyer chaud peut causer de graves brûlures
Ne laissez jamais un enfant toucher à la vitre ou à toutes autres parties du foyer

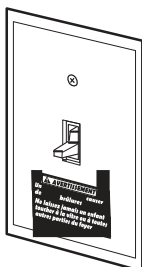


Figure A

⚠ ADVERTENCIA

La chimenea caliente causará quemaduras graves
Nunca permita que los niños toquen el vidrio ni otras partes de la chimenea



Figure B

⚠ WARNING

Hot Fireplace Will Cause Severe Burns
Never Allow Children to Touch Glass or other Fireplace Parts



Figure C

MAINTENANCE

(See Maintenance Schedule, Page 59)

Refer to the maintenance schedule for maintenance tasks, procedures, periodicity 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: Wear gloves 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 gas to the pilot (millivolt appliances) 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.

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.

Cleaning Glass

(see *Front Glass Enclosure Panel, Removal and Installation* on **Page 9**).

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 a clean, dampened, soft cloth. Follow with a dry, soft towel as desired. Take care not to scratch the glass surface.

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

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

- 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 heating 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 and 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: Improper positioning of 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 48** for ordering information).

Re-Install Embers and Logs

Carefully follow placement instructions on **Pages 48 through 50**. All logs should fit onto corresponding pins and/or log stoppers. This will ensure a proper flame and safe combustion.

Inspect Wiring

Refer to wiring diagrams on **Page 53**.

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 câblage peuvent entraîner un fonctionnement inadéquat et dangereux.

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

- Terminals at the Valve
- OFF/ON Switch
- (Optional Control Switch) Wall Thermostat, Remote Control or Remote Wall Switch Kit

Inspect Burner Flame Appearance

Ensure that the burner flame appearance resembles the flame shown in **Figures 87 and 88** and as described in *Flame Appearance and Sooting* on **Page 56**. The Homeowner must 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 touch-ups. Paint is available at your local authorized Innovative Hearth Products dealer. Never attempt to paint a hot fireplace.

Do not attempt to repaint the appliance until the finish is completely cured (see *Burn-In Period* on **Page 42**). If the surface later becomes stained or marred, it may be lightly sanded and touched up with spray paint.

NOTE: DIAGRAMS & ILLUSTRATIONS ARE NOT TO SCALE.

Front Glass Enclosure Panel, Removal and Installation

WARNING

- 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(s) 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

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.

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.

CAUTION: 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 panels are installed. Generally the front glass enclosure panel should not be removed except to gain access to the components within the firebox.

To access the glass door securing latches, first remove the hood by pulling firmly straight away from the unit. Remove the front face assembly by lifting up top and bottom evenly approximately 1/2" and pulling straight out from the unit once the brackets are disengaged.

Remove the bottom compartment door by sliding the hinge pin, located at the door's left side, to the right until it disengages from the left corner post hole. Pull the door diagonally to the left, away from the fireplace. Locate the latch at the top of the control compartment and disengage them from the door frame bottom vee-flange, pulling down on its handle to open it.

Installing Glass Enclosure Panel (see Figure 76)

Retrieve the glass door. Visually inspect the gasket on the backside of the frame. Gasket surface must be clean, free of irregularities and seated firmly.

Position the door in front of the firebox opening with the bottom of the door held away from the fireplace (Figure 76). Hook the top flange of the door frame over the top of the firebox frame.

Let the bottom of the door frame swing gently in towards the fireplace ensuring that the gasket seats evenly as the door frame draws shut. Fasten the latch located underneath the firebox floor to the door's vee-flange. Close both the latch securely.

NOTE: Front Face Assembly with barrier installed must be reinstalled prior to operation.

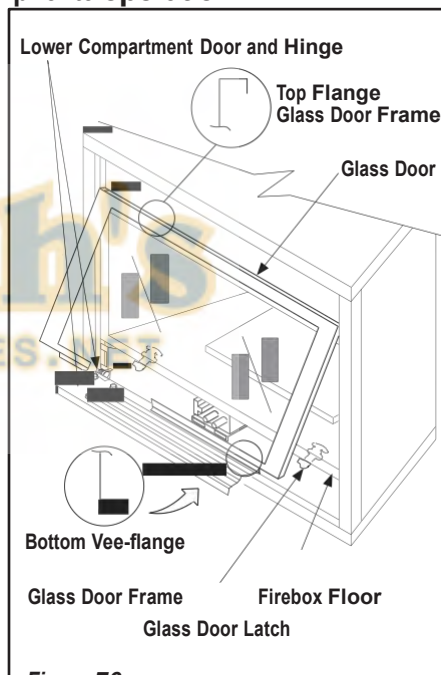


Figure 76

INSTALL VERMICULITE, GLOWING EMBERS AND LOGS

NOTE: Turn off all electricity to the appliance before you install vermiculite, embers and logs. 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.

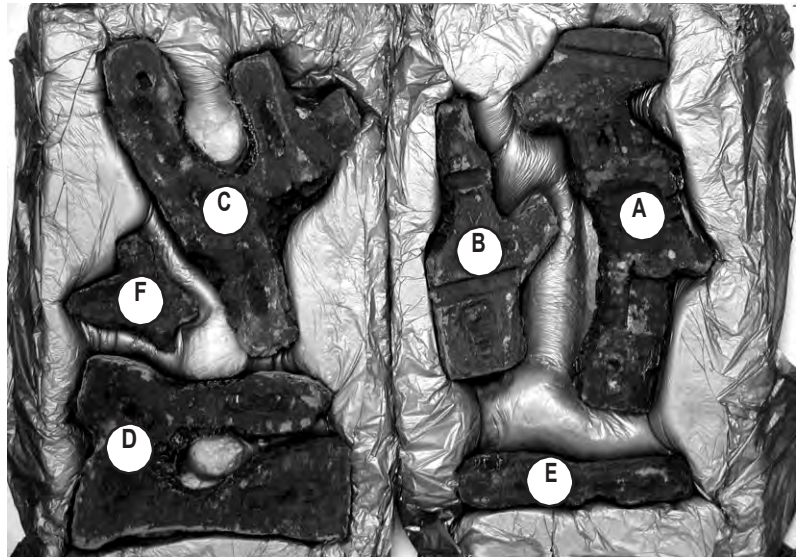
LOG SET - IDENTIFICATION

LOG SET Catalog Number H3210	
* Item	Description
A	Log , Center
B	Log, Left Rear
C	Log, Right
D	Log, Top Center
E	Log, Top/Left
F	Log, Top/Right

* Item "letters" above correspond to photos on right

REFERENCE Firebox Accessories / Parts		
Cat. No.	Model No.	Description
88L53	FGE	Bag of Glowing Embers
80L42	FDVS	Bag of Decorative Volcanic Stone

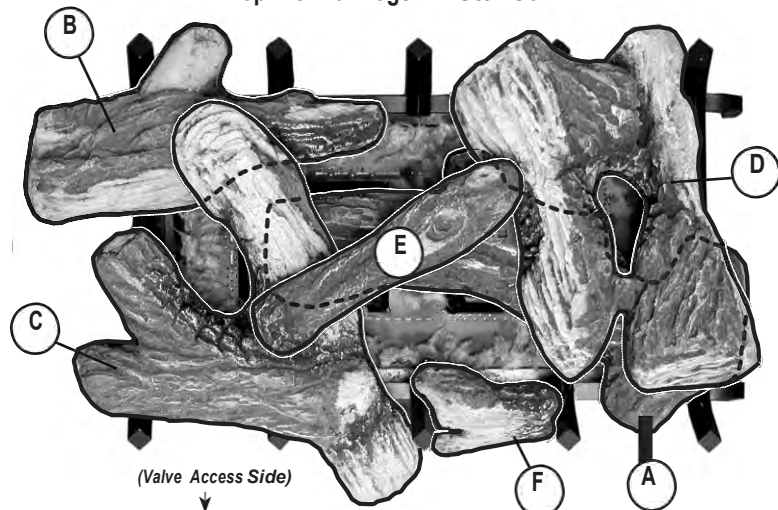
Bottom View of Logs (in packaging)



Top View of Logs



Top View of Logs - Installed



Glowing Embers

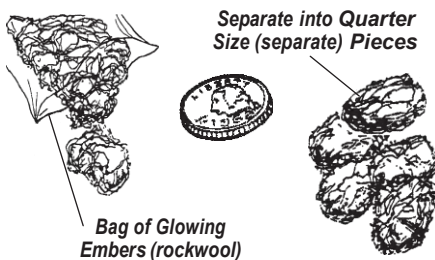


Figure 5

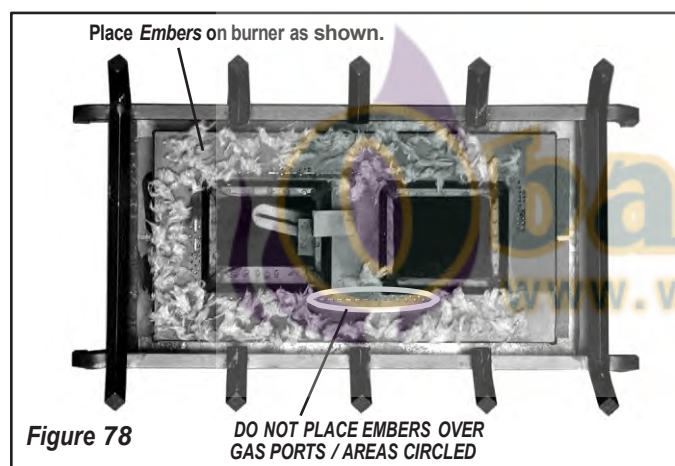
NOTE: DIAGRAMS & ILLUSTRATIONS ARE NOT TO SCALE.

INSTALLATION STEPS:

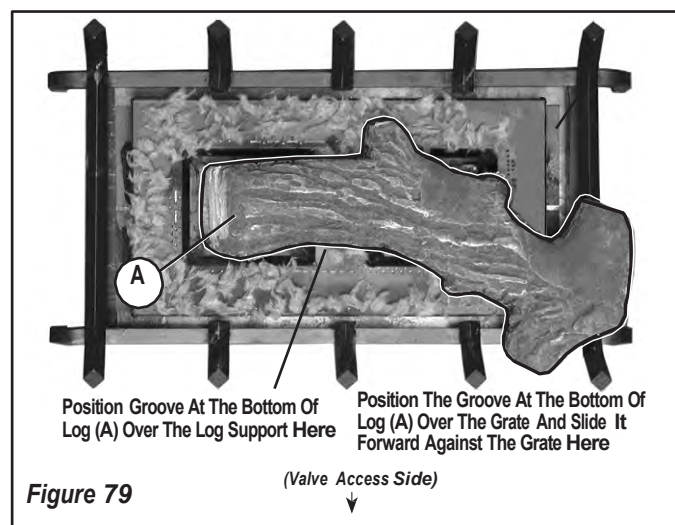
READ WARNINGS ON Page 50 BEFORE PROCEEDING

1. Remove the front glass enclosure panel (see Glass Enclosure Panel Removal Instructions, Page 47).
2. Remove the following from firebox; log set, bag of embers and bag of vermiculite. Handle logs carefully to prevent breakage.
3. Ensure the Grate is properly installed in the firebox with the 4 legs of the grate fitting into the 4 dimples on the firebox floor.
4. Install Vermiculite - Place some vermiculite on the firebox floor around the grate (the entire bag of vermiculite will NOT be used). See Figure 13 on Page 13. DO NOT PLACE ANY VERMICULITE ON THE BURNER.
5. Placement of Glowing Embers - Separate the Embers (rockwool) into pieces about the size of a quarter (see Figure 77). Keep the pieces fluffed up, not matted. Distribute these pieces over the surface of the burner, as shown in Figure 78. Do not use more than is necessary. Ensure that the main burner ports remain uncovered by the ember material.

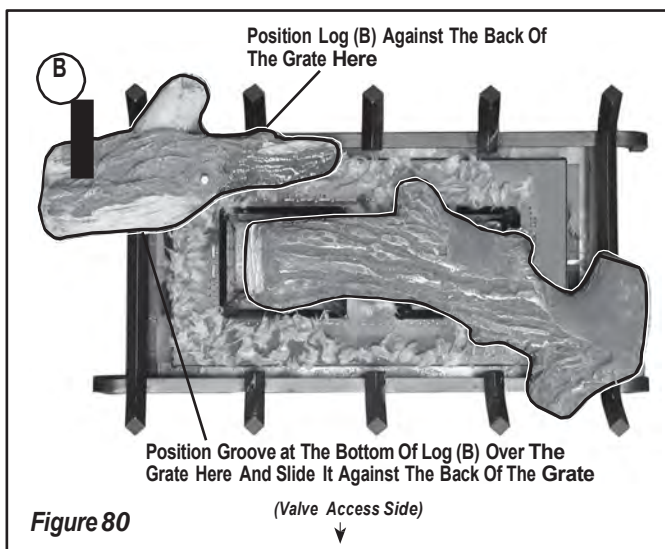
Note: This appliance is provided with enough Glowing Embers for several applications, do not use all that is in a new bag at one time. For best glowing effect, replace the ember material annually. Replacement Glowing Embers are available (order Catalog Number 88L53).



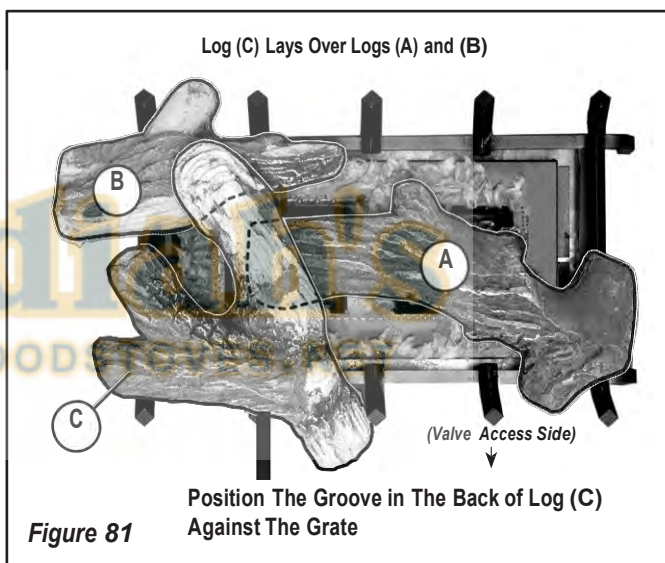
6. Place Log (A) on the grate as shown in Figure 7



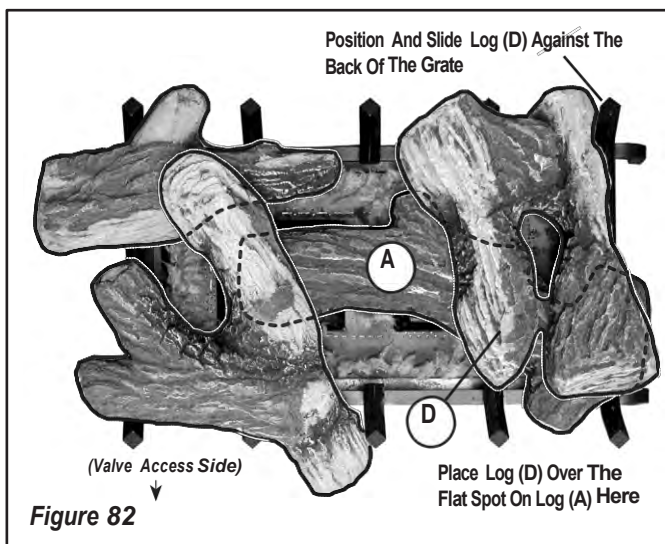
7. Place Log (B) as shown in Figure 8.



8. Place Log (C) as shown in Figure 9.

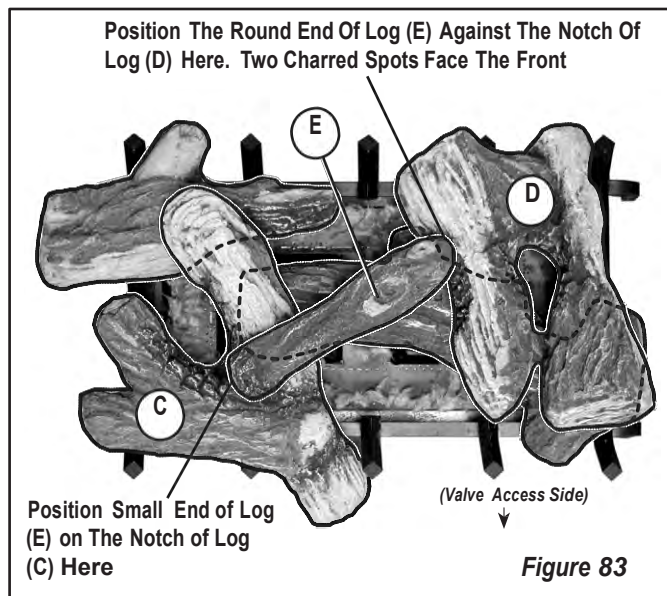


9. Place Log (D) as shown in Figure 10.

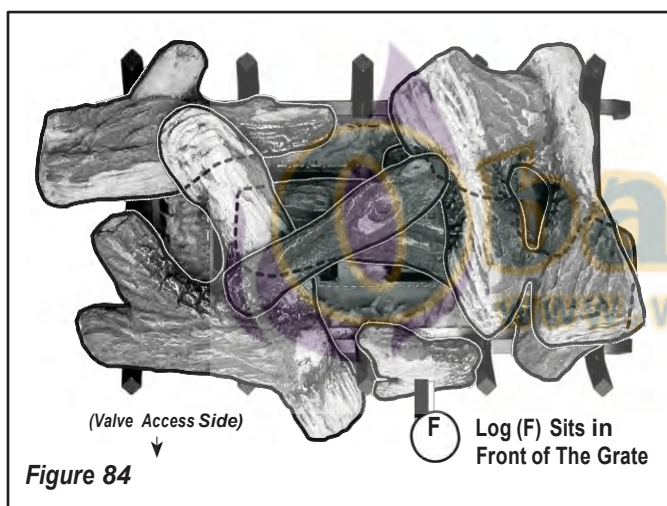


NOTE: DIAGRAMS & ILLUSTRATIONS ARE NOT TO SCALE.

10. Place Log (E) as shown in **Figure 11**.



11. Place Log (F) as shown in **Figure 12**.



! 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, vermiculite, 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.

BURNER ADJUSTMENTS (QUALIFIED TECHNICIANS ONLY)

Flame Appearance and Sooting

Proper flame appearance is a flame which is blue at the base and becomes yellowish-orange in the body of the flame.

When the appliance is first lit, the entire flame may be blue and will gradually turn yellowish-orange during the first 15 minutes of operation. If the flame remains 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 yellowish-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.
- Propane models may exhibit flames which candle or appear stringy. If this is present and persists, adjust the air shutter to a more closed position, then operate the appliance for a few more minutes to ensure that the flame normalizes and the flames do not appear sooty.

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

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



Figure 85 - Burner Flame Appearance

BURNER FLAME ADJUSTMENTS

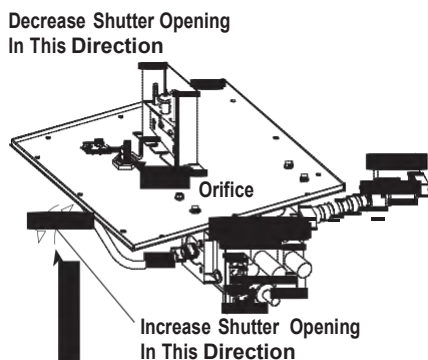
⚠ WARNINGS

- Air shutter adjustment should only be performed by a qualified professional service technician.
- Ensure front glass panel are in place and sealed during adjustment.

⚠ CAUTIONS

- Soot will be produced if the air shutter is closed too much. Any damage due to sooting, resulting from improperly setting the air shutter, is not covered under the warranty.
- The air shutter door and nearby appliance surfaces are hot. Exercise caution to avoid injury while adjusting flame appearance.

1. Refer to **Figure 85** for proper flame appearance. To adjust the flame, rotate the adjustment rod toward the back or toward the front of the fireplace (rod located in the lower control area). Position the air shutter to the factory setting as shown in the table in **Figure 86**.
2. Light appliance (follow lighting procedure on lighting label in control compartment or see the Care and Operation Manual).
3. Allow the burner to operate for at least 15 minutes while observing the flame continuously to ensure that the proper flame appearance has been achieved. If the following conditions are present, adjust accordingly.
 - If flame appears weak or sooty, adjust the air shutter, incrementally, to a more open position until the proper flame appearance is achieved.
 - If flame remains blue, adjust the air shutter, incrementally, to a more closed position until the proper flame appearance is achieved.
4. Leave the control knob (off/pilot/on) in the ON position and the burner OFF/ON switch OFF (and remote switches, if applicable).
5. When satisfied that the burner flame appearance is normal, re-install the lower control compartment door then proceed to finish the installation.



Air Shutter Adjusting Rod
Ref. Air shutter Patent: U.S. Pat. 5,553,603

Note - Burners are omitted in this view for clarity.

Main Burner Factory Air Shutter Opening Setting - All Models

Model	Natural Gas	Propane Gas
All Models	1/8" 3.2mm	1/4" 6.4mm

Figure 16 Adjustment Rod Positions (when viewed from above)

Millivolt Appliance Checkout

The pilot flame should be steady, not lifting or floating. Flame should be blue in color with traces of orange at the outer edge.

The top 3/8" (10 mm) at the pilot generator (thermopile) and the top 1/8" minimum (tip) of the quick drop out thermocouple should be engulfed in the pilot flame.

The flame should project 1" (25 mm) beyond the hood at all three ports (see **Figure 87**). Replace logs if removed for pilot inspection.

To light the burner; turn "ON" the remote wall switch and rotate the gas valve control knob counterclockwise to the "ON" position ("ON" will be at the top side of the valve).

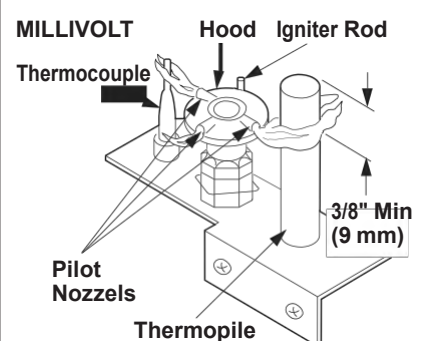


Figure 87

Electronic Appliance Checkout

To light the burner, turn 'ON' the unit mounted On/Off switch or the optional remote wall switch. Ensure the igniter lights the pilot. The pilot flame should engulf the flame rod as shown in **Figure 16**.

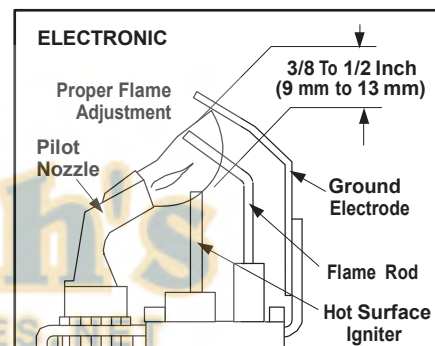


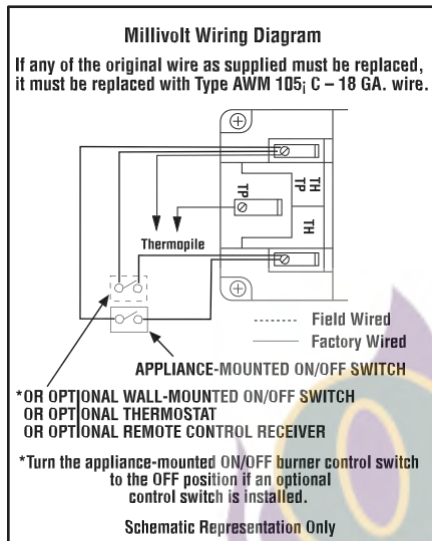
Figure 88

NOTE: DIAGRAMS & ILLUSTRATIONS ARE NOT TO SCALE.

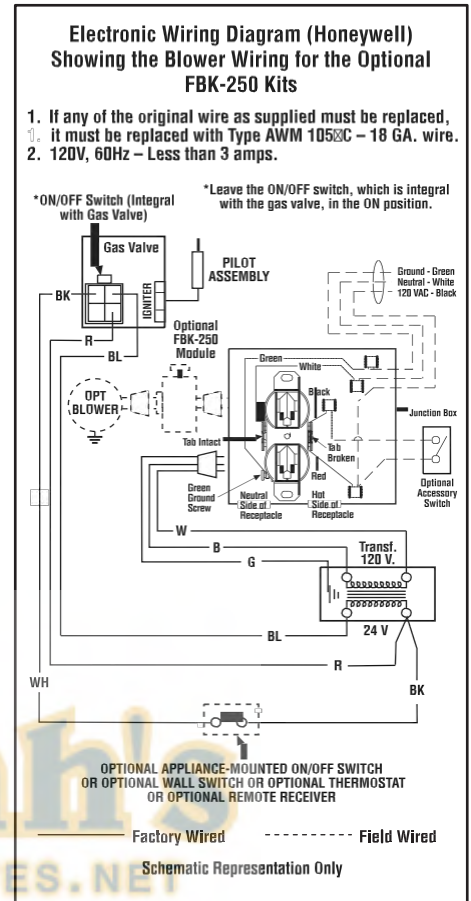
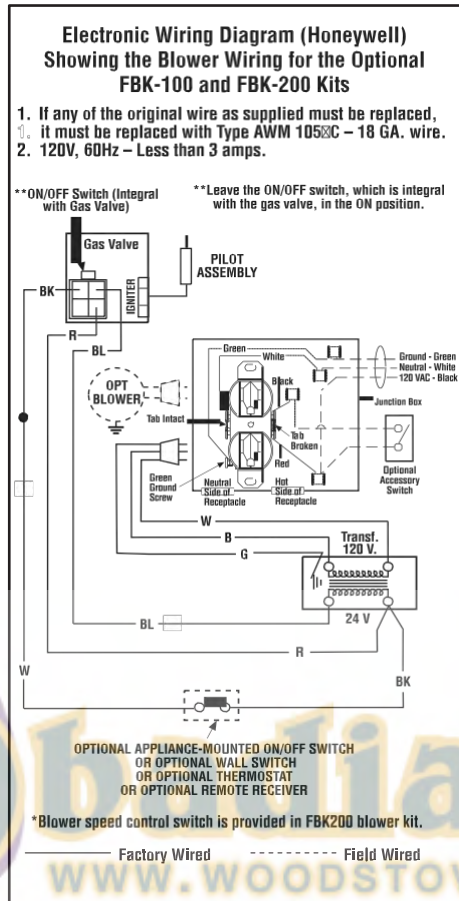
WIRING DIAGRAMS

Wiring diagrams are provided here 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.

CAUTION: LABEL ALL WIRES PRIOR TO DISCONNECTION WHEN SERVICING CONTROLS. WIRING ERRORS CAN CAUSE IMPROPER AND DANGEROUS APPLIANCE OPERATION.



ATTENTION: AU MOMENT DE L'ENTRETIEN DES COMMANDES, ÉTIQUETEZ TOUS LES FILS AVANT DE LES DÉBRANCHER. DES ERREURS DE CÂBLAGE PEU-VENT ENTRAÎNER UN FONCTIONNEMENT INADÉQUAT ET DANGEREUX.



WARRANTY

Your gas appliance is covered by a twenty year limited 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.

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 give the following information:

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.

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

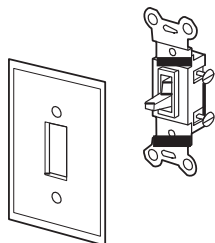
PRODUCT REFERENCE INFORMATION

We recommend that you record the following important information about your fireplace. 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.

Your	Fireplace's	Model	Number
Your	Fireplace's	Serial	Number
The	Date	On	Which
Your	Fireplace	Was	Installed
The	Type	of	Gas
Your	Fireplace	Uses	
Your Dealer's Name _____			

NOTE: DIAGRAMS & ILLUSTRATIONS ARE NOT TO SCALE.

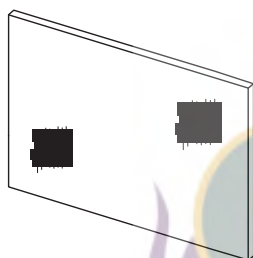
ACCESSORY COMPONENTS



White Wall Switch Kit		
Cat. No.	Model No.	Description
85L87	FWSK	OFF/ON Wall Switch Kit

OFF/ON Wall Switch Kit

The OFF/ON wall switch kit may be used to control the operation of the fireplace burner. Install the OFF/ON wall switch in a convenient location near the fireplace.

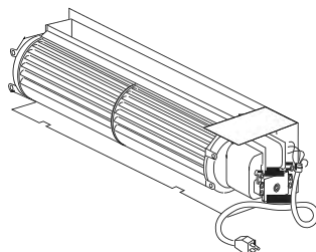


Barrier Kit	
Cat. No.	Description
J7424	35" Barrier Kit
J7425	22" Barrier Kit

Barrier Kit

Two or three barriers are provided with this fireplace in front and side face assemblies to reduce the risk of burns from hot glass (see warnings on **Page 2**).

NOTE: If the barrier becomes damaged, the barrier shall be replaced with the manufacturer's barrier for this appliance.

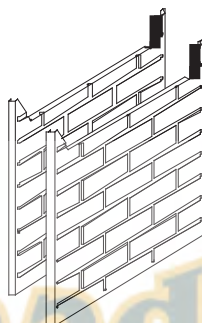


Forced Air Kit

The FBK-100 blower provides constant velocity forced air circulation. The FBK-200 assembly with variable speed, wall-mountable switch provides variable speed forced air circulation. The FBK-250 assembly with variable speed unit-mountable switch, also provides variable speed forced air circulation.

Forced Air Blower Kits		
Cat. No.	Model No.	Description
80L84	FBK-100	Blower, Standard (single speed)
80L85	FBK-200	Blower, Variable Speed (w/wall-mounted switch)
80L86	FBK-250	Blower, Variable Speed (w/unit-mounted switch)
94L89	FBK-100-36	Blower, Standard, 36 Pack
94L90	FBK-200-36	Blower Kit - Variable Speed with Wall Switch 36 Pack
H0543	FBK-250-36	Blower Kit - Variable Speed with Thermo Snap Switch 36 Pack

(ref. Form # 750,028M & 750,029M)



Brickaded Wall Liner Kits		
Cat. No.	Model No.	Description
H3207	MBLK-35ST	Interior Brick Liner Kit

(ref. Form # 750,160M)

Brickaded Panel Liner Kit

The brickaded liner kits include ceramic panels as shown here. The panels have brick-like features in relief.



Touch-Up Paint Kits		
Cat. No.	Model No.	Description
NEW	TPK-B	Touch-Up Paint (Black)
NEW	TPK-T	Touch-Up Paint (Tan)

(TPK-C ref. Form # 504,216M)

Touch-Up Paint Kit

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



Decorative Firebox Accessories		
Cat. No.	Model No.	Description
88L53	FGE	Bag of Glowing Embers (1 oz. rockwool)
80L42	FDVS	Bag of Decorative Volcanic Stone

(FDVS ref. Form #750,010M)

Bag of Glowing Embers

Bag of Volcanic Stone

Replacement ember materials or volcanic stone are available for use with these appliances. Order kits as part of the periodic maintenance of the appliance.

NOTE: DIAGRAMS & ILLUSTRATIONS ARE NOT TO SCALE.

MAINTENANCE SCHEDULE**Annually** (Before the onset of the Burning Season)

MAINTENANCE TASK	ACCOMPLISHING PERSON	PROCEDURE
Inspecting/Cleaning 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 Figure 85 on Page 55 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).
Inspecting/Cleaning Pilot and Burner	Qualified Service Technician	Refer to Figures 87 & 88 on Page 56 . 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.
Checking 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. Note: Excessive condensation can cause corrosion of caps, pipe & fittings (excessive condensation can be caused by long lateral runs, too many elbows and/or exterior portions of the system being exposed to cold weather). Also inspect wall straps or plumbers' tape to ensure it is secure and in place.
Appliance Checkout	Qualified Service Technician	Perform the appropriate appliance checkout procedure detailed in this manual.
Replacing Rockwool Ember Materials	Homeowner/Qualified Service Technician	Remove old ember materials (rockwool) and vacuum the rockwool placement area. Place new embers as described in this document.

Periodically (After the Burning Season)

MAINTENANCE TASK	ACCOMPLISHING PERSON	PROCEDURE
Cleaning Firebox Interior	Homeowner	Carefully remove logs, rockwool, volcanic stone and vermiculite. Vacuum out interior of the firebox. Clean firebox walls and log grate. Replace logs, Rockwool and vermiculite as detailed in this manual.
Check Flame Patterns and Flame Height	Homeowner	Refer to Figure 85 on Page 55 and verify the flame pattern and height displayed by the appliance conforms to the picture. Flames must not impinge on the logs.
Checking 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.
Cleaning Front Glass Enclosure Panel	Homeowner	Clean as necessary following the directions provided in this manual. DO NOT TOUCH OR ATTEMPT TO CLEAN GLASS WHILE HOT.

LIGHTING INSTRUCTIONS – MILLIVOLT GAS VALVE



FOR YOUR SAFETY READ BEFORE LIGHTING

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

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

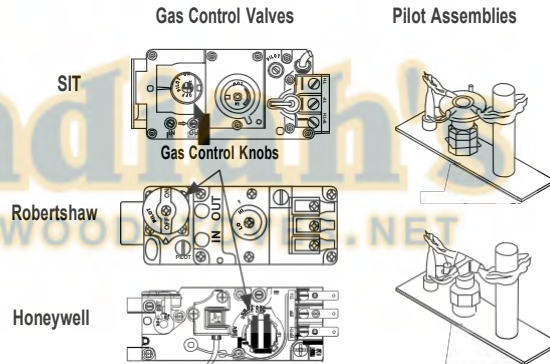
WHAT TO DO IF YOU SMELL GAS:

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

LIGHTING INSTRUCTIONS

1. **STOP!** Read the safety information above on this label.
2. (If applicable) Set the thermostat to lowest setting. Turn wall on/off switch, unit mounted on/off switch or remote control switch "OFF."
3. Turn OFF all electric power to the appliance.
4. Access the control compartment.
5. Push in gas control knob slightly and turn clockwise to "OFF."
NOTE: Knob cannot be turned from "PILOT" to "OFF" unless knob is pushed in slightly. Do Not force.
6. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, **STOP!** Follow "B" in the safety information above on this label. If you don't smell gas, go to the next step.
7. Find pilot - located in firebox on the same plane as the top of the burner.
8. Turn knob on gas control counterclockwise to "PILOT."
9. Push in control knob all the way and hold in. Immediately light the pilot by triggering the piezo igniter (pushing the button) until pilot lights. Continue to hold the control knob in for about 1-1/2 minutes after the pilot is lit. Release knob and it will pop back up. Pilot should remain lit. If it goes out, repeat steps 5 through 9.
 - If knob does not pop up when released, stop and immediately call your service technician or gas supplier.

- If the pilot will not stay lit after several tries, turn the gas control knob to "OFF" and call your service technician or gas supplier.
10. Turn gas control knob counterclockwise to "ON."
 11. Close control compartment.
 12. (If applicable) Turn on all electrical power to the appliance.
 13. (If applicable) Set thermostat to desired setting. Turn wall on/off switch, unit mounted on/off switch or remote control switch "ON."



TO TURN OFF GAS TO APPLIANCE

1. (If applicable) Set the thermostat to lowest setting. Turn wall on/off switch, unit mounted on/off switch or remote control switch "OFF."
2. Turn OFF all electric power to the appliance, if service is to be performed.
3. Access the control compartment.
4. Push in gas control knob slightly and turn clockwise to "OFF." Do not force.
5. Close the main line gas shut-off valve.
6. Close control compartment.



DANGER



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

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

INSTRUCTIONS D'ALLUMAGE – VANNE GAZ MILLIVOLT



POUR PLUS DE SÉCURITÉ, LIRE AVANT D'ALLUMER

AVERTISSEMENT. Quiconque ne respecte pas à la lettre les instructions dans la présente notice risque de déclencher un incendie ou une explosion entraînant des dommages, des blessures ou la mort.

A. Cet appareil est muni d'une veilleuse qui doit être allumée avec un allumeur piézo-électrique. Respectez les instructions ci-dessous à la lettre.

B. **AVANT L'ALLUMAGE:** Avant d'allumer la veilleuse, reniflez tout autour de l'appareil pour déceler une odeur de gaz. Reniflez près du plancher, car certains gaz sont plus lourds que l'air et peuvent s'accumuler au niveau du sol.

QUE FAIRE SI VOUS SENTEZ UNE ODEUR DE GAZ :

- Ne pas tenter d'allumer d'appareil.
- Ne touchez à aucun interrupteur ; ne pas vous servir des téléphones se trouvant dans le bâtiment.
- Appelez immédiatement votre fournisseur de gaz depuis un voisin. Suivez

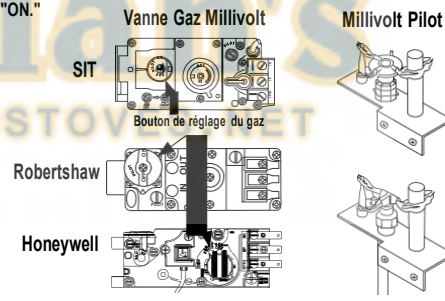
les instructions du fournisseur.

- Si vous ne pouvez rejoindre le fournisseur, appelez le service des incendies.
- C. Ne pousser ou tourner la manette d'admission du gaz qu'à la main. Ne jamais employer d'outil à cette fin. Si la manette reste coincée, ne tentez pas de la réparer; appelez un technicien qualifié. Quiconque tente de forcer la manette ou de la réparer peut provoquer une explosion ou un incendie.
- D. N'utilisez pas cet appareil s'il a été plongé dans l'eau, même partiellement. Faites inspecter l'appareil par un technicien qualifié et remplacez toute partie du système de contrôle et toute commande qui ont été plongés dans l'eau.

INSTRUCTIONS D'ALLUMAGE

1. **ARRÊTEZ !** Lisez les instructions de sécurité sur la portion supérieure de cette étiquette.
2. (Si applicable) Réglez le thermostat à la température la plus basse. Tournez l'interrupteur murale, l'interrupteur sur l'unité ou le contrôle à distance à "OFF."
3. Coupez l'alimentation électrique de l'appareil.
4. Accédez au compartiment de contrôle.
5. Enfoncez légèrement le bouton de réglage du gaz et tournez-le dans le sens des aiguilles d'une montre jusqu'à la position d'arrêt "OFF".
Remarque: Il est impossible de tourner le bouton de "PILOT" à "OFF" à moins qu'il ne soit légèrement enfoncé. Ne le forcez pas.
6. Attendez cinq (5) minutes pour laisser échapper tout le gaz. Reniflez tout autour de l'appareil, y compris près du plancher, pour déceler une odeur de gaz. Si vous sentez une odeur de gaz, **ARRÊTEZ !** Passez à l'étape B des instructions de sécurité sur la portion supérieure de cette étiquette. S'il n'y a pas d'odeur de gaz, passez à l'étape suivante.
7. Trouver le pilote – Situé dans l'âtre sur la même surface que le dessus du brûleur.
8. Tournez le bouton de contrôle sur la valve à gaz dans le sens antihoraire vers "Pilot".
9. Enfoncez le bouton de réglage jusqu'au fond et gardez-le enfoncé. Allumez immédiatement la veilleuse en déclenchant l'allume-gaz à étincelle (en poussant le bouton) jusqu'à ce que la veilleuse s'enflamme. Continuez de tenir le bouton de réglage enfoncé pendant environ 90 secondes après l'allumage de la veilleuse. Relâchez le bouton et il sortira subitement. La veilleuse devrait rester allumée. Si elle s'éteint, répétez les étapes 5 à 8 inclusivement.

- Si la manette ne se soulève pas d'elle-même lorsqu'on la relâche, arrêter et appeler immédiatement un technicien qualifié ou le fournisseur de gaz.
 - Si la veilleuse ne reste pas allumée après plusieurs tentatives, réglez la manette d'admission du gaz à la position OFF et appelez un technicien qualifié ou le fournisseur de gaz.
10. Tournez le bouton de réglage du gaz en sens inverse des aiguilles d'une montre jusqu'à sa position de marche "ON".
 11. Fermer le compartiment de contrôle.
 12. (Si applicable) Mettez l'appareil sous tension.
 13. (Si applicable) Réglez le thermostat à la température désirée. Tournez l'interrupteur murale, l'interrupteur sur l'unité ou le contrôle à distance à "ON."



COMMENT COUPER L'ADMISSION DE GAZ DE L'APPAREIL

1. (Si applicable) Réglez le thermostat à la température la plus basse. Tournez l'interrupteur murale, l'interrupteur sur l'unité ou le contrôle à distance à "OFF."
2. Coupez l'alimentation électrique de l'appareil s'il faut procéder à l'entretien.
3. Accédez au compartiment de contrôle.
4. Enfoncez légèrement le bouton de réglage du gaz et tournez-le dans le sens des aiguilles d'une montre jusqu'à la position d'arrêt "OFF".
Ne forcez pas le bouton.
5. Fermer la valve de gaz principale.
6. Fermer le compartiment de contrôle.



DANGER



VITRE CHAUDE
RISQUE DE BRÛLURES.
NE TOUCHEZ PAS UNE VITRE
NON REFROIDIE.
NE LAISSEZ JAMAIS UN ENFANT
DE TOUCHER LA VITRE.

L'écran pare-étincelles fourni avec ce foyer réduit le risque de brûlure en cas de contact accidentel avec la vitre chaude et doit être installé pour la protection Des enfants et Des personnes à risques.

LIGHTING INSTRUCTIONS - ELECTRONIC

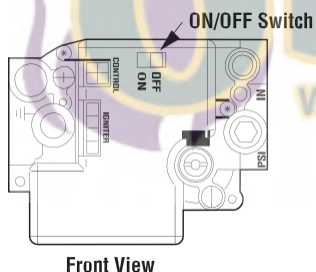
FOR YOUR SAFETY READ BEFORE LIGHTING

WARNING: IF YOU DO NOT FOLLOW THESE INSTRUCTIONS EXACTLY, A FIRE OR EXPLOSION MAY RESULT CAUSING PROPERTY DAMAGE, PERSONAL INJURY OR LOSS OF LIFE.

- A.** When lighting the appliance, follow these instructions exactly.
- B. BEFORE OPERATING** smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.
- WHAT TO DO IF YOU SMELL GAS**
- Extinguish any open flame.
 - Open windows.
 - Do not light any appliance.
 - Do not touch any electrical switches.
 - Do not use any phone in your building.
 - Immediately call your gas supplier from a neighbor's phone.
 - If your gas supplier cannot be reached, call the fire department.
- C.** Use only your hand to turn the gas control lever. Never use tools. If the lever will not turn by hand, do not try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or an explosion.
- D.** Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

LIGHTING INSTRUCTIONS

1. **STOP!** Read the safety information above on this page.
2. Turn remote wall switch to "OFF."
3. Open lower control compartment door.
4. Verify main line shut-off valve is open.
5. Turn the ON/OFF switch to "OFF". Do not force.
6. Wait five (5) minutes to clear out any gas. If you then smell gas, STOP! Follow "B" in the safety information above on this page. If you do not smell gas, go to the next step.
7. Turn the ON/OFF switch to "ON". Do not force.
8. Turn "ON" all electrical power to appliance (remote wall switch).
9. Close lower control compartment door.



TO SHUT OFF

1. Turn off all electrical power to the appliance (remote wall switch).

TO TURN OFF GAS TO APPLIANCE

1. For complete shut-down, turn remote wall switch to "OFF."
2. Open lower control compartment door.
3. Turn the ON/OFF switch to "OFF". Do not force.
4. Close the main line shut-off valve.
5. Close lower control compartment door.



DANGER



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

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

INSTRUCTIONS D'ALLUMAGE — ELECTRONIC

POUR VOTRE SÉCURITÉ, LISEZ CES INSTRUCTIONS AVANT L'ALLUMAGE

AVERTISSEMENT: SI VOUS NE SUIVEZ PAS CES INSTRUCTIONS À LA LETTRE, IL POURRAIT S'EN SUIVRE UN INCENDIE OU UNE EXPLOSION CAUSANT DES DOMMAGES MATÉRIELS, DES BLESSURES CORPORELLES OU MÊME DES PERTES DE VIE.

A. Lorsque vous allumez l'appareil, suivez exactement ces instructions.

B. AVANT L'ALLUMAGE: Assurez-vous que vous ne détectez aucune odeur de gaz autour de l'appareil ainsi que près du sol; certains gaz, étant plus lourds que l'air, descendent au niveau du sol.

VOICI CE QUE VOUS DEVEZ FAIRE SI VOUS DÉCELEZ UNE ODEUR DE GAZ

- Éteignez toute flamme visible.
- Ouvrez les fenêtres.
- N'allumez aucun appareil.
- Ne touchez à aucun commutateur électrique.
- Ne vous servez d'aucun téléphone dans votre édifice.

• Appelez immédiatement votre compagnie de gaz en utilisant le téléphone du voisin.

• S'il vous est impossible de contacter votre compagnie de gaz, appelez le service des incendies.

C. N'utilisez que votre fournisseur pour manipuler l'interrupteur "ON/

OFF". N'utilisez jamais d'outil pour manipuler l'interrupteur. Si l'interrupteur ne bouge pas manuellement, n'essayez pas de le

C. Ne poussez ou tournez pas la manette d'admission de gaz qui a la main de

jamais employé d'outil à cet effet. Si la manette résiste, ne tentez pas de la

D. Ne vous servez pas de cet appareil si l'un de ses éléments a

D. N'utilisez pas cet appareil s'il a été plongé dans l'eau, même

partiellement. Faites inspecter l'appareil par un technicien qualifié et

remplacez toute partie du système de contrôle et toute commande qui ont

été immergés dans l'eau. Appelez immédiatement un technicien

compétent pour faire inspecter l'appareil et remplacer toute

pièce du système de réglage ou commande du gaz qui a été

sous l'eau.

INSTRUCTIONS D'ALLUMAGE

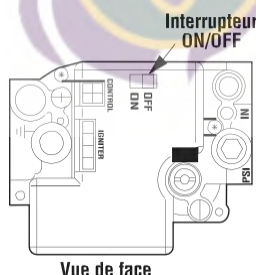
1. ARRÊTEZ ! Lisez les consignes de sécurité au verso de cette plaque.

2. Tournez l'interrupteur mural à la position d'arrêt "OFF".

3. Ouvrez la porte du compartiment de contrôle du bas.

4. Assurez-vous que la soupape d'arrêt de la canalisation principale est ouverte.

5. Tournez la manette de réglage du gaz à la position d'arrêt "OFF".



6. Attendez cinq (5) minutes pour l'évacuation du gaz. Si vous décelez une odeur de gaz ARRÊTEZ ! Retournez au point "B" des consignes de sécurité au verso de cette plaque. Si vous ne remarquez aucune odeur de gaz, passez à l'étape suivante.

7. Tournez la manette de réglage du gaz jusqu'à la position de marche "ON". Ne la forcez pas.

8. Ouvrez le courant électrique ("ON") qui alimente l'appareil (interrupteur mural).

9. Fermez la porte du compartiment de contrôle du bas.

10. Au besoin, rebrancher l'appareil au courant électrique et remettre l'interrupteur principal du brûleur à la position "ON" ou régler le thermostat à la température désirée.

11. Si l'appareil ne se met pas en marche, suivre les instructions intitulées "Pour fermer le gaz qui alimente l'appareil" et appeler un technicien ou le fournisseur de gaz.

POUR ÉTEINDRE L'APPAREIL

1. Coupez tout le courant électrique qui alimente l'appareil (interrupteur mural).

POUR FERMER LE GAZ QUI ALIMENTE L'APPAREIL

1. Pour une fermeture complète, tournez l'interrupteur mural à la position d'arrêt "OFF".

2. Ouvrez la porte du compartiment de contrôle du bas.

3. Tournez la manette de réglage du gaz à la position d'arrêt "OFF". Ne la forcez pas.

4. Fermez la soupape d'arrêt de la canalisation principale.

5. Fermez la porte du compartiment de contrôle du bas.



DANGER



VITRE CHAUDE
RISQUE DE BRÛLURES.
NE TOUCHEZ PAS UNE VITRE
NON REFROIDIE.
NE LAISSEZ JAMAIS UN ENFANT
DE TOUCHER LA VITRE.

L'écran pare-étincelles fourni avec ce foyer réduit le risque de brûlure en cas de contact accidentel

TROUBLESHOOTING THE MILLIVOLT GAS CONTROL SYSTEM

Note: Before troubleshooting the gas control system, be sure external gas shut off valve (located at gas supply inlet) is in the "ON" position.

Important: Valve system troubleshooting should only be accomplished by a qualified service technician.

SYMPTOM	POSSIBLE CAUSES	CORRECTIVE ACTION
1. Spark ignitor will not light pilot after repeated triggering of ignitor button.	A. Defective ignitor (no spark at electrode).	Check for spark at electrode and pilot; if no spark and electrode wire is properly connected, replace ignitor.
	B. Defective or misaligned electrode at pilot (spark at electrode).	Using a match, light pilot. If pilot lights, turn off pilot and trigger the ignitor button again. If pilot lights, an improper gas mixture caused the bad lighting and a longer purge period is recommended. If pilot will not light – check gap at electrode and pilot – should be 1/8" to have a strong spark. If gap measures 1/8", replace pilot (Figure 86 on page 56).
	C. Gas supply pressure errant.	Check inlet gas pressure. It should be within the limits as marked on the rating plate.
	D. Pilot orifice plugged.	Clean or replace pilot orifice.
2. Pilot will not stay lit after carefully following the lighting instructions.	A. Defective pilot generator (thermocouple).	Check pilot flame, it must impinge on thermocouple (Figure 86 on page 56) Clean and/or adjust pilot for maximum flame impingement on thermocouple. Ensure that the connection between the valve and thermocouple are tight and secure.
3. Pilot burning, no gas to burner, Valve knob "ON," Wall Switch "ON."	A. Wall switch or wires defective.	Check wall switch and wires for proper connections. Jumper wire across terminals at wall switch, if burner comes on, replace defective wall switch. If okay, jumper wires across wall switch wires at valve, if burner comes on, wires are faulty or connections are bad.
	B. Thermopile may not be generating sufficient millivoltage.	Check thermopile with millivolt meter. Take reading at thermopile terminals of gas valve. Should read 325 millivolts minimum with optional wall switch "OFF." Replace faulty thermopile if reading is below specified minimum.
	C. Plugged burner orifice.	Check burner orifice for stoppage and remove.
4. Frequent pilot/burner outage problem.	A. Pilot flame may be too low or blowing (high) causing the pilot/valve safety to drop out.	Clean and/or adjust pilot flame for maximum flame impingement on thermocouple (Figure 86 on page 56).

TROUBLESHOOTING THE ELECTRONIC IGNITION SYSTEM

Note: Before troubleshooting, be sure that the appliance main line gas shut-off valve, the gas control valve and the wall switch are in the "ON" position.

Important: Valve system troubleshooting should only be accomplished by a qualified service technician.

SYMPTOM	POSSIBLE CAUSES	CORRECTIVE ACTION
1. Burner will not light.	A. Faulty Valve System.	See Below.
	B. "OFF/ON" or wall switch defective.	Disconnect the two black wires from the wire nuts. Test switch(s) for continuity with a multimeter. If continuity is not indicated, switch(s) is defective and must be replaced. Note: Before replacing "OFF/ON" switch, be sure to check wiring for loose connections or broken wires and repair as needed.
2. Burners come "ON" but go "OFF."	A. Burner orifice plugged.	Check main burner orifice(s) for stoppage. Clean or replace.
	B. Obstructed vent system.	Check vent system for obstructions.

START

- Turn Off Gas Supply
- Assure Valve Switch Is In ON Position
- Disconnect Control Harness
- Set Thermostat To Call For Heat

- Check For Proper Voltage At Control Harness (See Insert A). Voltage Should Be 24V Between Thermostat Or Pressure Switch And 24V Common And 24V Hot.

CHECK

- Line Voltage Power
- Low Voltage Transformer
- Limit Controller
- Thermostat
- Wiring

- Plug Control Harness Into Valve. Wait For Internal Check Delay.

- Igniter Warms Up And Glows Red.

- With Pilot Burner Cable Connected, Measure Voltage At Valve HSI Element Output. 24V Nominal. (See Insert B)

- Replace Valve.

- Replace Igniter/Flame Rod Assembly.

- Check That Pilot Gas Is Flowing. Wait To Assure Pilot Gas Tubing Is Purged. Recycle Call For Heat If Necessary.

- Replace Valve.

- Measure Voltage Between 24V Hot And 24V Common Leads To Valve Control. Must Measure At Least 19.5 VAC With Igniter Powered (See Insert A). To Identify Proper Lead, This Check Must Be Done With The Valve Control Connected And Igniter Powered.

- Check Transformer And Line Volt Supply.

- Replace Pilot Assembly.

- Check That Pilot Flame Makes Good Contact With
- Check For Good Electrical Connection Through The Pilot Tubing.
- If Both Of The Above Are Good, Replace Igniter/Flame

- Cycle Thermostat Off And Back On.

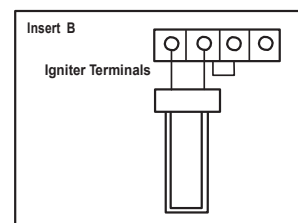
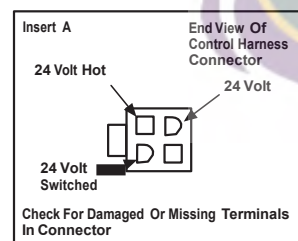
- Main Burner Lights.

- Replace Valve.

- Turn On Gas Supply. • Pilot Burner Lights.

- Main Valve Opens And Main Burner Lights.

- System Is Okay.



⚠ Igniter Will Cycle Off And Back On Once During The 90 Second Ignition Trial. All Voltage Measurements Must Be Taken While The Igniter Is Powered.

⚠ When Measured Voltage At Connections, Use Care To Assure Terminals Are Not Damaged.

REPLACEMENT PARTS LIST - ST/PF

Item	Part/Cat.No.	Qty	Description	Where Used
SIT Millivolt Only				
1	H3357	1	Gas Train Assembly, NG, MV	SEE THROUGH
2	H3355	1	Gas Train Assembly, LP, MV	PENINSULA
Honeywell Electronic Only				
3	H3356	1	Gas Train Assembly, NG, Electr.	SEE THROUGH
4	42J32	1	Transformer	SEE THROUGH
Misc. Replacement Parts				
5	H3352	1	Burner, Pan	All
6	H3353	1	* Electrical kit	All
7	J7533	2	Hood, Front	SEE THROUGH
8	J7534	1	Hood, End	PENINSULA
9	93L32	1	Flex Line Gas Connector, FFGC	All
10	H4864	2	Glass Enclosure Assembly 35"	SEE THROUGH
11	H7033	1	Glass Enclosure Assembly 22"	SEE THROUGH
12	H3696		Vermiculite, Bag of	All
13	H3358	1	Grate Assembly	All
14	69L21	4	Latch, Glass Enclosure Panel	All
15	H3354	1	Firebox Sub-Floor	All

Item	Part/Cat. No.	Qty	Description	Where Used
Misc. Replacement Parts				
16	H3210	1	Log Set	All
17	H3740	8	Nailing Flange	All
18	24M10	1	Orifice, Burner, NG, #37 (.104")	SEE THROUGH
19	42M79	1	Orifice, Burner, LP, 1.55mm (.061")	SEE THROUGH
20	91K94	1	Piezo Igniter (w/wire)	SEE THROUGH
21	27K30	1	OFF/ON Switch, Rocker	All
22	H3363		Vent Restrictor	All
23	J7424	2	Barrier, Front	SEE THROUGH PENINSULA
24	J7425	1	Barrier, End	PENINSULA
26	J7528		Front Face Assembly with Barrier	SEE THROUGH PENINSULA
26	J7529		End Face Assembly with Barrier	PENINSULA

* Electrical Outlet Kit consists of a junction box, 2 screws, a receptacle outlet, an OFF/ON rocker switch and a snap bushing. Note: All the components in the electrical kit will Not be used by every model.

Note: Ordering information for Volcanic Stone, Glowing Embers and Touch-up Paint can be found on **Page 19**.

Contact an Authorized 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.

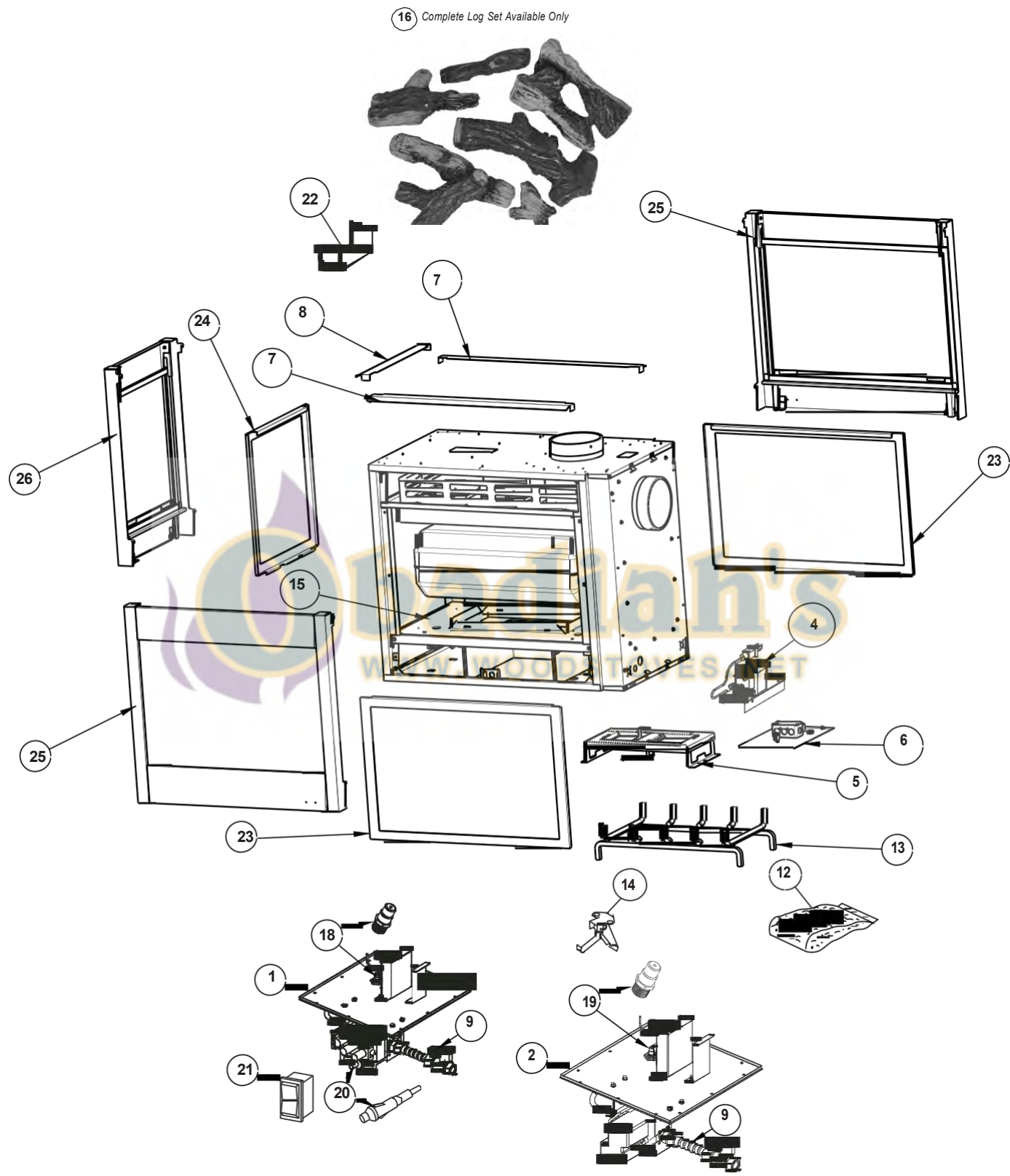
WARNING

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.

REPLACEMENT PARTS (PENINSULA SHOWN)



NOTES:



WARRANTY

Innovative Hearth Products Superior™ Brand Gas Fireplaces, Stoves and Inserts 20 Year Limited Warranty

THE WARRANTY

Innovative Hearth Products ("IHP") 20 Year Limited Warranty warrants your Superior™ Brand gas fireplace, Stove or Insert ("Product") to be free from defects in materials and workmanship at the time of manufacture. The Product body and firebox carry the 20 Year Limited Warranty. Ceramic glass carries the 20 Year Limited Warranty against thermal breakage only. After installation, if covered components manufactured by IHP are found to be defective in materials or workmanship during the 20 Year Limited Warranty period and while the Product remains at the site of the original installation, IHP will, at its option, repair or replace the covered components. If repair or replacement is not commercially practical, IHP will, at its option, refund the purchase price or wholesale price of the IHP product, whichever is applicable. IHP will also pay IHP prevailing labor rates, as determined in its sole discretion, incurred in repairing or replacing such components for up to five years. THERE ARE EXCLUSIONS AND LIMITATIONS to this 20 Year Limited Warranty as described herein.

COVERAGE COMMENCEMENT DATE

Warranty coverage begins on the date of installation. In the case of new home construction, warranty coverage begins on the date of first occupancy of the dwelling or six months after the sale of the Product by an independent IHP dealer/distributor, whichever occurs earlier. The warranty shall commence no later than 24 months following the date of product shipment from IHP, regardless of the installation or occupancy date.

EXCLUSIONS AND LIMITATIONS

This 20 Year Limited Warranty applies only if the Product is installed in the United States or Canada and only if operated and maintained in accordance with the printed instructions accompanying the Product and in compliance with all applicable installation and building codes and good trade practices.

This warranty is non-transferable and extends to the original owner only. The Product must be purchased through a listed supplier of IHP and proof of purchase must be provided. The Product body and firebox carry the 20 Year Limited Warranty from the date of installation. Vent components, trim components and paint are excluded from this 20 Year Limited Warranty. The following do not carry the 20 Year Limited Warranty but are warranted as follows:

- Burner** – Repair or replacement for one year from the date of installation
- Gas components** – Repair or replacement for one year from the date of installation
- Gaskets** – Repair or replacement for one year from the date of installation
- Logs** – Replacement for one year from the date of installation against thermal breakage only
- Optional blowers & remote controls** – Repair or replacement for one year from the date of installation
- Optional glass doors** – Repair or replacement for 90 days from the date of installation
- Tempered glass** – Replacement for one year from the date of installation
- Labor coverage** – Prevailing IHP labor rates apply for the warranty period of the component

Parts not otherwise listed carry a 90 day warranty from the date of installation.

Whenever practicable, IHP will provide replacement parts, if available, for a period of 10 years from the last date of manufacture of the Product.

IHP will not be responsible for: (a) damages caused by normal wear and tear, accident, riot, fire, flood or acts of God; (b) damages caused by abuse, negligence, misuse, or unauthorized alteration or repair of the Product affecting its stability or performance. (The Product must be subjected to normal use. The Product is designed to burn either natural or propane gas only. Burning conventional fuels such as wood, coal or any other solid fuel will cause damage to the Product, will produce excessive temperatures and could result in a fire hazard.); (c) damages caused by failing to provide proper maintenance and service in accordance with the instructions provided with the Product; (d) damages, repairs or inefficiency resulting from faulty installation or application of the Product.

IHP is not responsible for inadequate fireplace system draft caused by air conditioning and heating systems, mechanical ventilation systems, or general construction conditions which may generate negative pressure in the room in which the appliance is installed. Additionally IHP assumes no responsibility for drafting conditions caused by venting configurations, adjoining trees or buildings, adverse wind conditions or unusual environmental factors and conditions that affect the operation of the unit.

This 20 Year Limited Warranty covers only parts and labor as provided herein. In no case shall IHP be responsible for materials, components or construction, which are not manufactured or supplied by IHP or for the labor necessary to install, repair or remove such materials, components or construction. Additional utility bills incurred due to any malfunction or defect in equipment are not covered by this warranty. All replacement or repair components will be shipped F.O.B. from the nearest stocking IHP factory.

LIMITATION ON LIABILITY

It is expressly agreed and understood that IHP's sole obligation and the purchaser's exclusive remedy under this warranty, under any other warranty, expressed or implied, or in contract, tort or otherwise, shall be limited to replacement, repair, or refund, as specified herein.

In no event shall IHP be liable for any incidental or consequential damages caused by defects in the Product, whether such damage occurs or is discovered before or after repair or replacement, and whether such damage is caused by IHP's negligence. IHP has not made and does not make any representation or warranty of fitness for a particular use or purpose, and there is no implied condition of fitness for a particular use or purpose.

IHP makes no expressed warranties except as stated in this 20 Year Limited Warranty. The duration of any implied warranty is limited to the duration of this expressed warranty.

No one is authorized to change this 20 Year Limited Warranty or to create for IHP any other obligation or liability in connection with the Product. Some states and provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. The provisions of this 20 Year Limited Warranty are in addition to and not a modification of or subtraction from any statutory warranties and other rights and remedies provided by law.

INVESTIGATION OF CLAIMS AGAINST WARRANTY

IHP reserves the right to investigate any and all claims against this 20 Year Limited Warranty and to decide, in its sole discretion, upon the method of settlement.

To receive the benefits and advantages described in this 20 Year Limited Warranty, the appliance must be installed and repaired by a licensed contractor approved by IHP.

Contact IHP at the address provided herein to obtain a listing of approved dealers/distributors. IHP shall in no event be responsible for any warranty work done by a contractor that is not approved without first obtaining IHP's prior written consent.

HOW TO REGISTER A CLAIM AGAINST WARRANTY

In order for any claim under this warranty to be valid, you must contact the IHP dealer/distributor from which you purchased the product. If you cannot locate the dealer/distributor, then you must notify IHP in writing. IHP must be notified of the claimed defect in writing within 90 days of the date of failure. Notices should be directed to the IHP Warranty Department at 1508 Elm Hill Pike, Suite 108; Nashville, TN 37210 or visit our website at WWW.SUPERIORFIREPLACES.US.COM.

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	



P900300-00

Innovative Hearth Products reserves the right to make changes at any time, without notice, in design, materials, specifications, prices and also to discontinue colors, styles and products. Consult your local distributor for fireplace code information.

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