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Ce manuel est disponible en français, simplement en faire la demande. Numéro de la pièce 900299-02.



P900299-00



Report No. 14-171

## Installation and Operation Instructions

### DRT40 Multi-View Series Direct-Vent Gas Fireplaces

#### Models

DRT40STDMN	DRT40PFDMN	DRT40CLDMN	DRT40CRDMN
DRT40STDMP	DRT40PFDMP	DRT40CLDMP	DRT40CRDMP
DRT40STDEN	DRT40PFDEN	DRT40CLDEN	DRT40CRDEN

**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.

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.

## SAFETY AND YOUR FIREPLACE

See attached color flyer for proper color representation



# 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.**

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



# 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.**

Vea el volante adjunto para la representación de color adecuado



# 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.**

## ***Safety and Your Fireplace***

**All parts of your  
IHP fireplace get  
EXTREMELY HOT!**

- ☐ To prevent severe burns and injuries, do Not remove the barrier on the appliance which prevents 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 (**Pages 39**).
- ☐ Read **Important Safety Information** (**Page 5**).



## ***La sécurité et votre foyer***

**Toutes les parties de votre  
foyer IHP deviennent  
EXTRÊMEMENT CHAUDES !**

- ☐ Afin d'éviter les brûlures graves ou les blessures, ne pas retirer l'écran de protection de la foyer qui empêche 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 (**Pages 39**).
- ☐ Lisez **L'information de sûreté importante** (**Page 5**).



## ***Seguridad y su chimenea***

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

- ☐ Para evitar quemaduras y lesiones graves, no quite el protector de malla o guardia de seguridad que evita el contacto directo con el vidrio.
- ☐ 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 39**).
- ☐ Lea **Información importante de seguridad** (**Página 5**).

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



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.

## PACKAGING

The assembled vented gas fireplace heater is packaged with:

- 1 - one log set located within the firebox.
- 2 - one plastic bag containing the literature package, which consists of the Installation and Operation manual, Hot Glass Safety Flyer, and Safety-In-Operation Warning Labels, 8 (DRT40ST), 4 (DRT40PF, DRT40CR, DRT40CL) nailing flanges.
- 3 - two hoods (DRT40ST), or three hoods (DRT40PF) taped to the top of the fireplace.
- 4 - one plastic bag of glowing embers, one plastic bag of decorative volcanic stone and one bag of vermiculate is located in the bottom compartment.
- 5 - one vent restrictor to be applied as shown on **Page 14**; restrictor is taped to the envelope.
- 6 - barriers
- 7 - front face assemblies

## 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). J7420 (ST Models), J7420 and J7421 (PF, CL, and CR 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 IHP,
- **Secure Flex®** Flexible Vent Components manufactured by IHP 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 dangerous.**

### **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**

**Any safety screen, guard, or barrier removed for servicing an 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: Installation and repair should be done by a qualified service person. The appliance should be inspected before use and at least annually by a professional service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, et cetera. It is imperative that control compartments, burners and circulating air passageways of the appliance be kept clean.**

*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.**

### **WARNING**

**Improper installation or use of this appliance can cause serious injury or death from fire, burns, explosions 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. 14-171) 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 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, or the Natural Gas and Propane Installation Code, CAN/CGA B149.1.

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	Ignition Fuel Type	Input Rate (BTU / HR)
ST and PF	Millivolt Natural	37,000 high 29,000 low
CL and CR	Millivolt Natural	31,000 high 24,000 low
ST and PF	Millivolt Propane	34,000 high 27,000 low
CL and CR	Millivolt Propane	28,000 high 22,000 low
ST and PF	Electronic Natural	37,000
CL and CR	Electronic Natural	31,000

**Table 1**

## 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.

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

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

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

These appliances are tested and approved for installation at elevations of 0-4500 feet (0-1372 meters) above sea level using the standard burner orifice sizes (marked with an "\*" in **Table 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.
- By changing the burner orifice to a smaller size as regulated by the local authorities having jurisdiction and by the (USA) National Fuel Gas Code NFPA 54/ANSI Z223.1—latest edition or, in Canada, the CAN/CGA-B149.1 codes—latest edition.

Install the appliance according to the regulations of the local authorities having jurisdiction and, in the USA, the National Fuel Gas Code NFPA 54 / ANSI Z223.1—latest edition or, in Canada, the CAN/CGA-B149.1—latest edition.

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

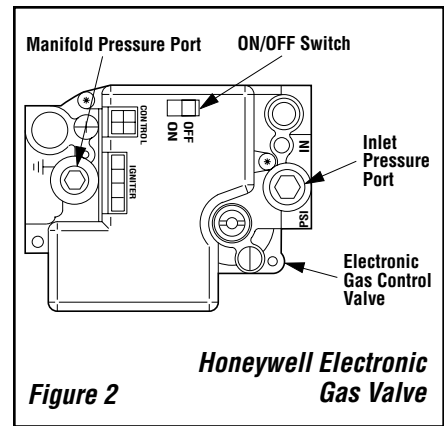
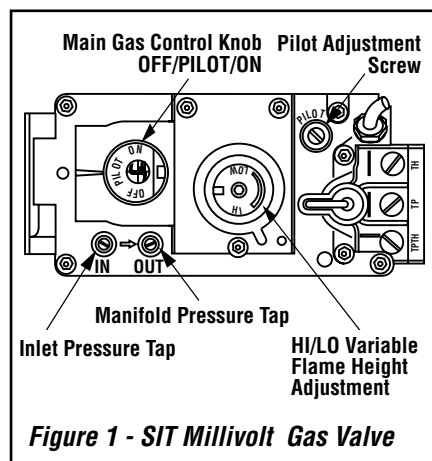
Burner Orifice Sizes (all models)*		
Model	Natural Gas drill size (inches)	Propane Gas drill size (inches)
ST and PF	(0.116") * 37L82 •	(0.065") * 74L88 •
CL and CR	(0.106") * 18L40 •	(0.061") * 42M79 •

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

\*For elevations of 0-4500 ft. or 0-1372 m

## 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.**

## COLD CLIMATE INSULATION

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

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

## MANUFACTURED HOME REQUIREMENTS

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

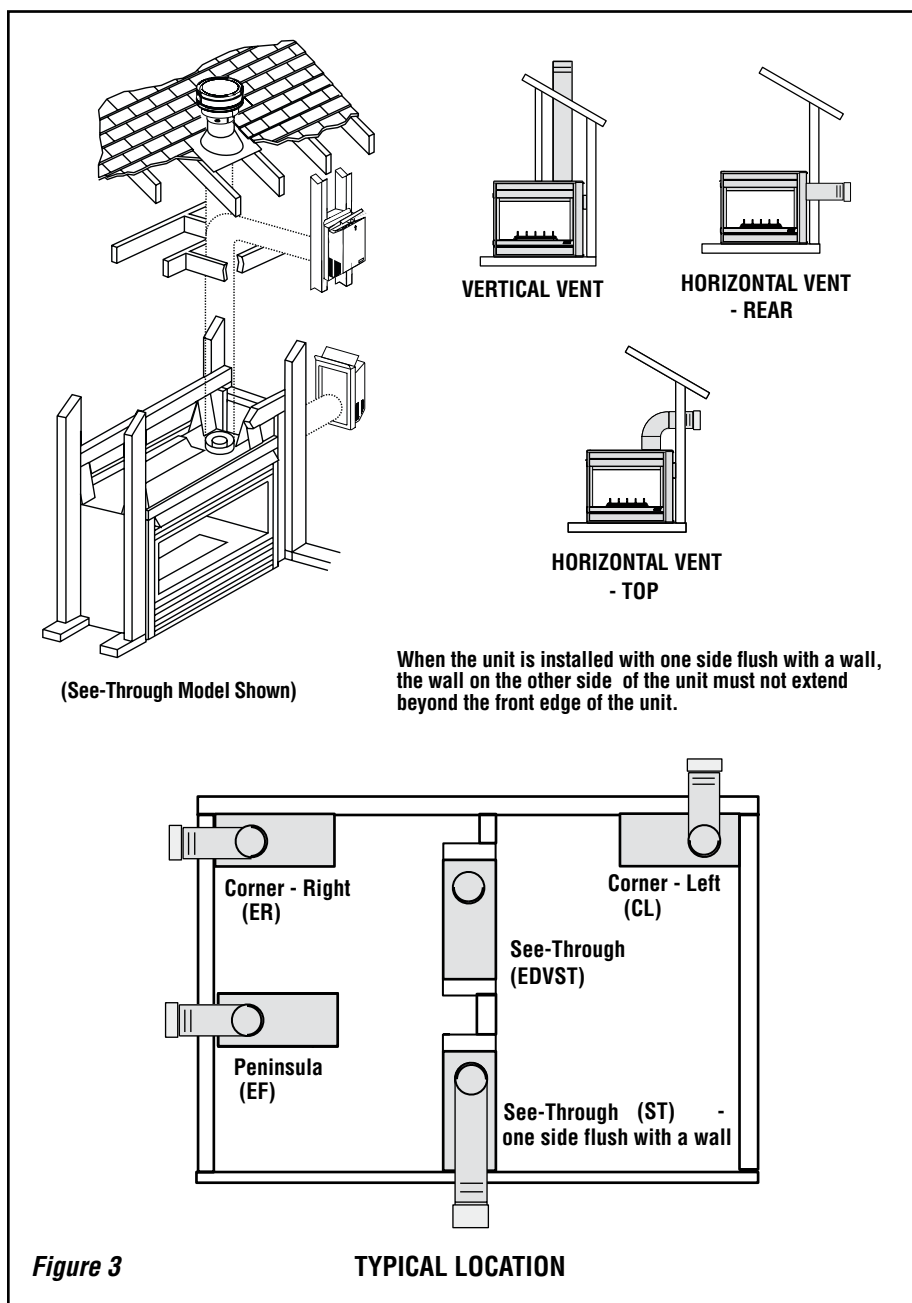
Cet appareil peut être installé comme du matériel d'origine dans une maison préfabriquée (É.U. seulement) ou mobile et doit être installé selon les instructions du fabricant.

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



## 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.



**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**.

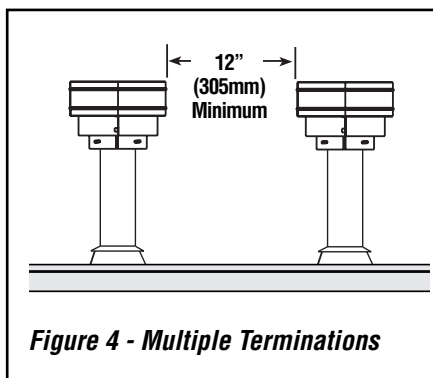
The appliance should be mounted on a fully supported base extending the full width and depth of the unit. The appliance may be located on or near conventional construction materials. However, if installed on combustible materials, such as carpeting, vinyl tile, etc., a metal or wood barrier covering 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/CGA-B149.1 in Canada.

### Vertical Vent Termination Clearances

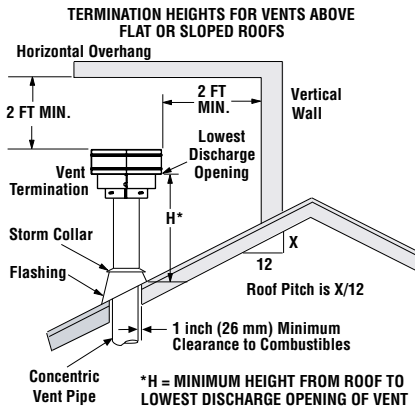
Terminate multiple vent terminations according to the installation codes listed above and **Figures 4 and 5**.



**Figure 4 - Multiple Terminations**

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

### 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:

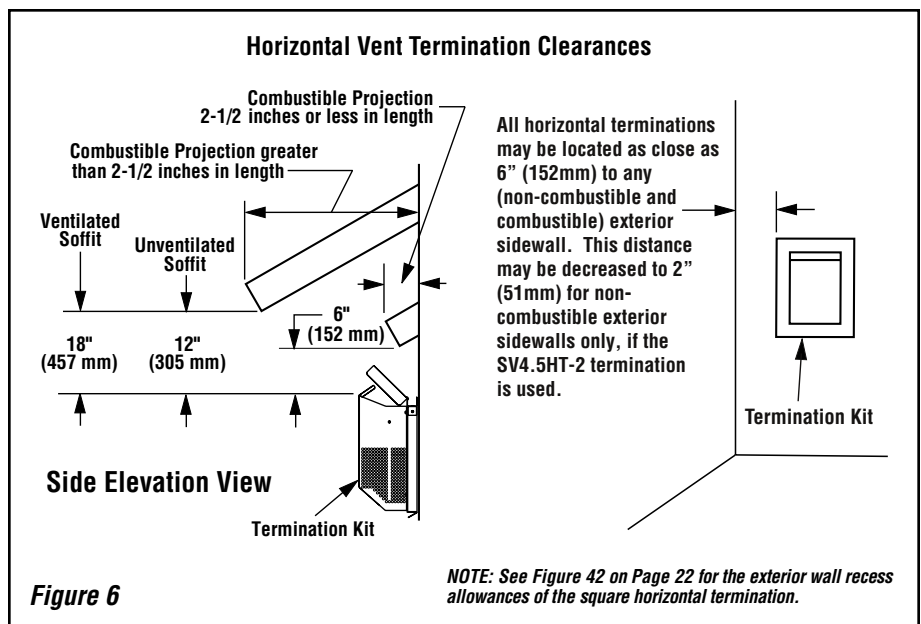
**Termination Heights For Vents Above Flat Or Sloped Roofs**  
Ref. NFPA 54 / ANSI Z223.1

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 7**.

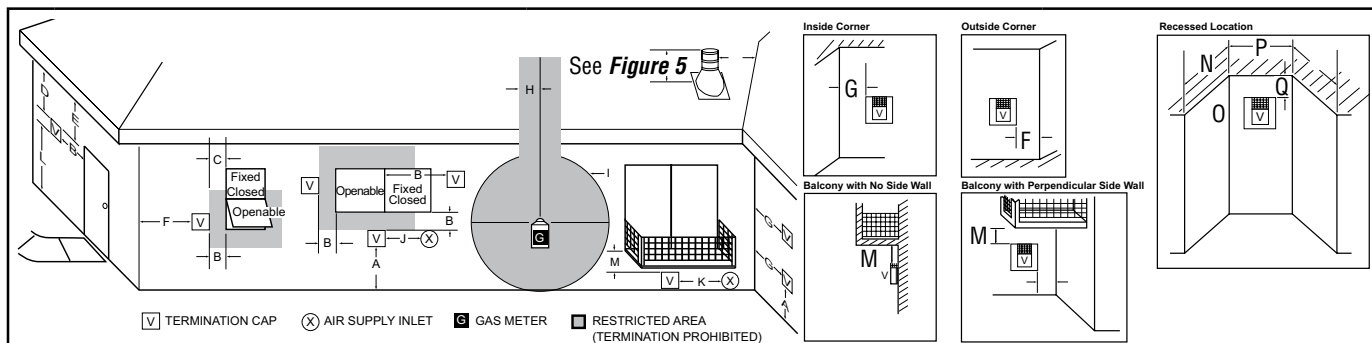


**Figure 6**

**NOTE:** See Figure 42 on Page 22 for the exterior wall recess allowances of the square horizontal termination.



## 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" (15.2 mm) **	6" (15.2 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 CAN/CGA-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

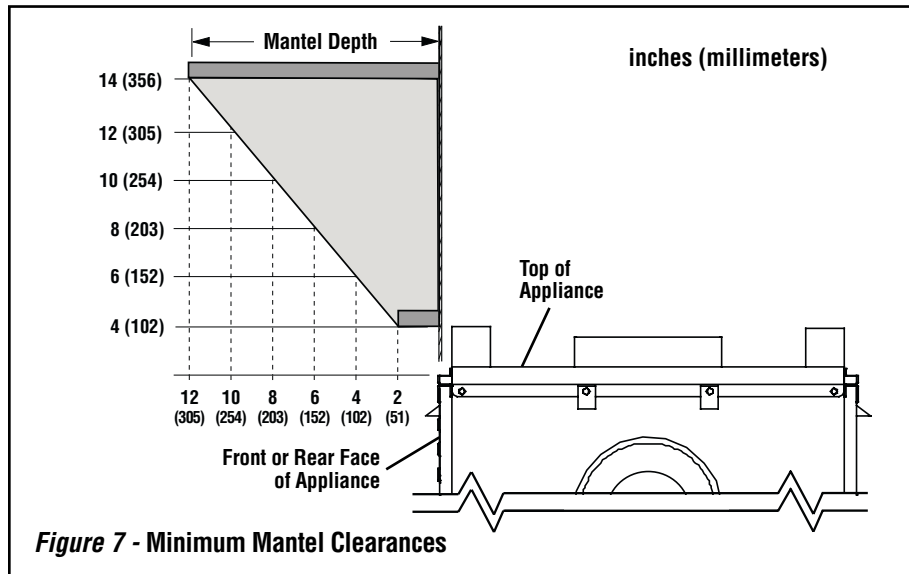
## MINIMUM CLEARANCES TO COMBUSTIBLES

### 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 6" from the front edge of the unit as shown in Figure 9.**

**\*NOTE:** 3" (77 mm) above any horizontal/inclined vent component.

**\*\*NOTE:** See Page 10, Step 1 and Figure 12 for clearance requirements to the nailing flange located at each side of the unit and any screw heads adjacent to it.



**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

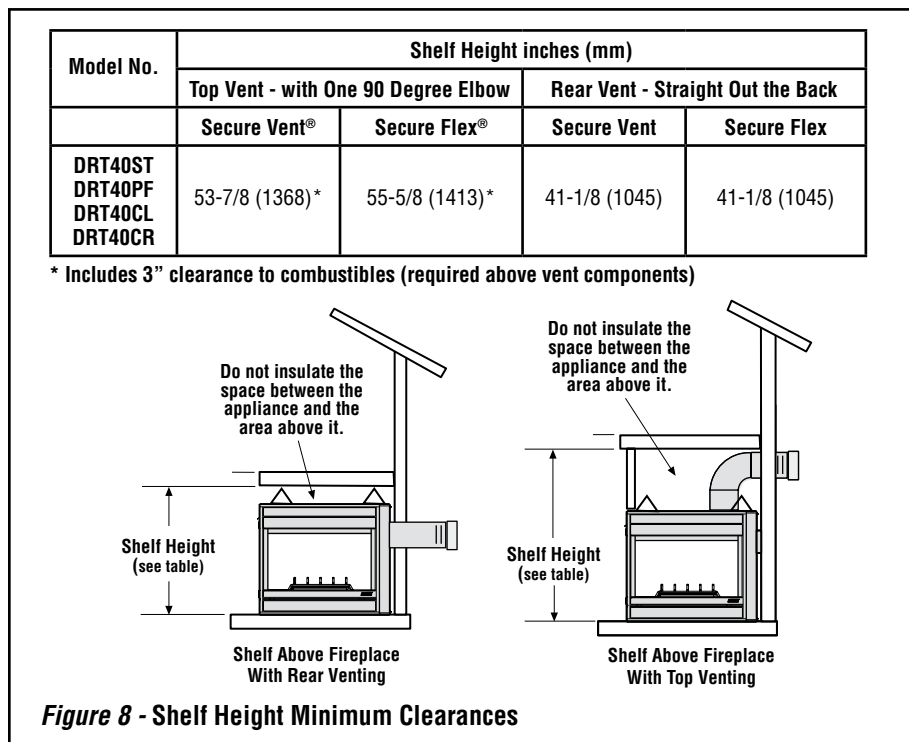
**NOTE:** Combustible wall finish materials and/or surround materials must not be allowed to encroach the area defined by the appliance front face (black sheet metal). **Never allow combustible materials to be positioned in front of or overlapping the appliance face (see Figure 66 on Page 36) and Figure 9 on Page 9.**

Minimum clearance requirements include any projections such as shelves, window sills, mantels, etc. above the appliance.

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.

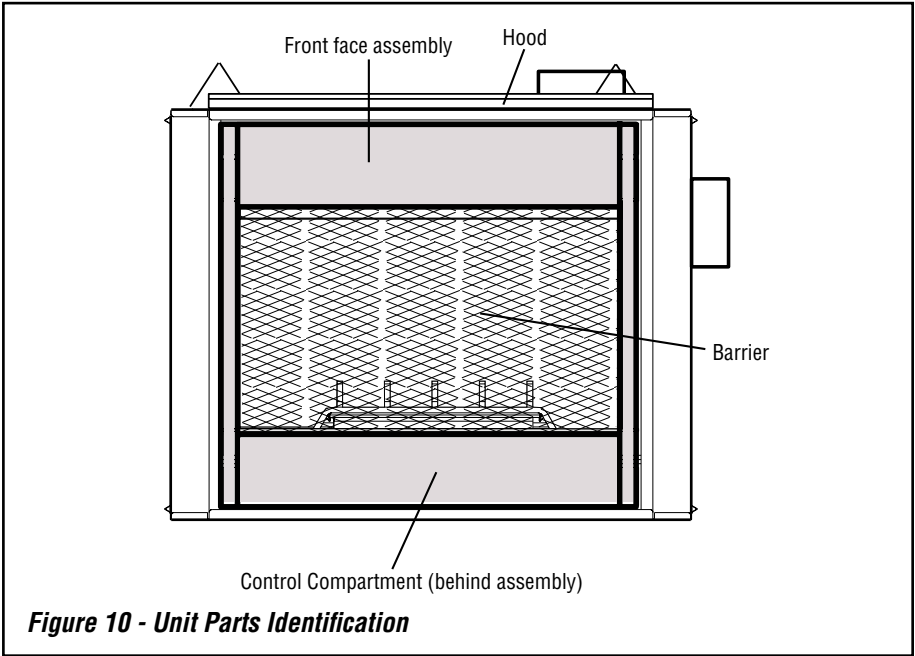
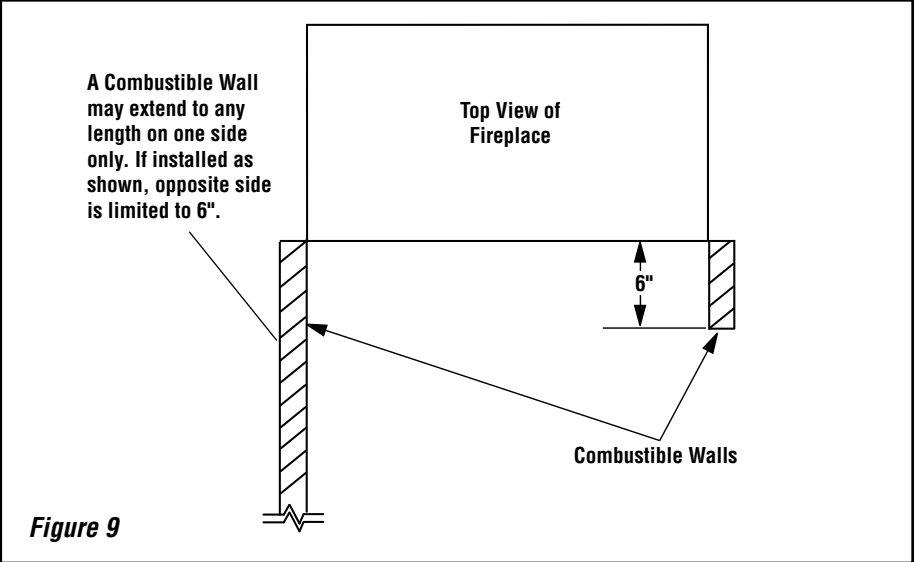
Vertical installation clearances to combustible mantels vary according to the depth of the mantel. See **Figure 7**. Mantels constructed of non-combustible materials may be installed at any height above the appliance opening; however, do not allow anything to hang below the fireplace hood.

**NOTE:** To avoid heat-related finish damage, we recommend the use of high temperature paint (rated 175° F or higher) on the underside of the mantel.



MINIMUM CLEARANCES* Inches (millimeters)	
Back and Sides	1/2 (13) 0 (0) from Spacers Or Dimples **
Top Spacers	0 (0)
Floor	0 (0)
From Bottom of Unit To Ceiling	64 (1626)
Vent	3 (77) Top* / 1 (26) 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 carton.
2. Remove Front Face Assembly (**refer to Figure 11**) by lifting and pulling straight out from the fireplace.
3. **Lift the pressure relief plates and remove the cardboard from underneath each of them.**
4. Open the two latches (located under the firebox floor) securing the glass enclosure panel. Remove the panel by tilting it outward at the bottom and lifting it up. Set the door aside protecting it from inadvertent damage. **See Figure 63 on Page 36.**

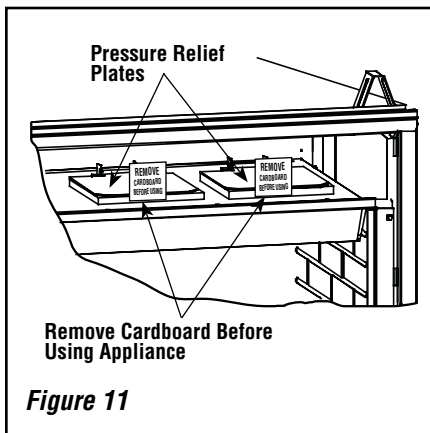


Figure 11

## 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 (refer to Figure 12).

**Step 2. (Page 16)** Route gas supply line to appliance location.

**Step 3. (Page 16)** Preparing the appliance vent collar (Page 16).

**Step 4. (Page 17)** Install the vent system and exterior termination.

**Step 5. (Page 29)** 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 30)** Install blower kit (optional equipment).

**Step 7. (Page 31)** Make connection to gas supply.

**Step 8. (Page 31)** Verifying appliance operation.

**Step 9. (Page 33)** Install the logs, decorative volcanic stone and glowing embers.

**Step 10. (Page 36)** Install glass door assembly.

**Step 11. (Page 36)** Adjust burner to ensure proper flame appearance.

**Step 12. (Page 36)** Install front face assembly with barrier.

**Step 12. (Page 38)** Install the hoods.

**Step 13. (Page 39)** 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 glass enclosure panel** (see *Removing and Installing Glass Enclosure Panels* on Page 34).

**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 (DRT40ST), 14 (DRT40PF), 15 (DRT40CL) or 16 (DRT40CR)**. All framing details must allow for a minimum clearance to combustible framing members as shown in **Table 5 on Page 9**. If the appliance is to be elevated above floor level, a solid continuous platform must be constructed. Headers may be in direct contact with the appliance top spacers 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.

## Side Nailing Flanges

The fireplace should be secured to the framing at the side(s) and/or rear of the unit using the factory-provided nailing flanges. Install the nailing flanges - 8 (DRT40ST), 4 (DRT40PF, DRT40CL and DRT40CR) - as shown in **Figure 12** using the existing screws.

Position the fireplace within the framing. When required, the flanges may be bent 90 degrees by hand or with the assistance of a hammer. Use wood screws to secure the nailing flanges to the framing. **See Table 5 on Page 8** for clearances of framing members to cabinet parts in the nailing flange area. The nailing flange itself is exempt from these clearances.

## Floor Nailing Tabs

Secure the fireplace to the floor as shown in **Figure 12**.

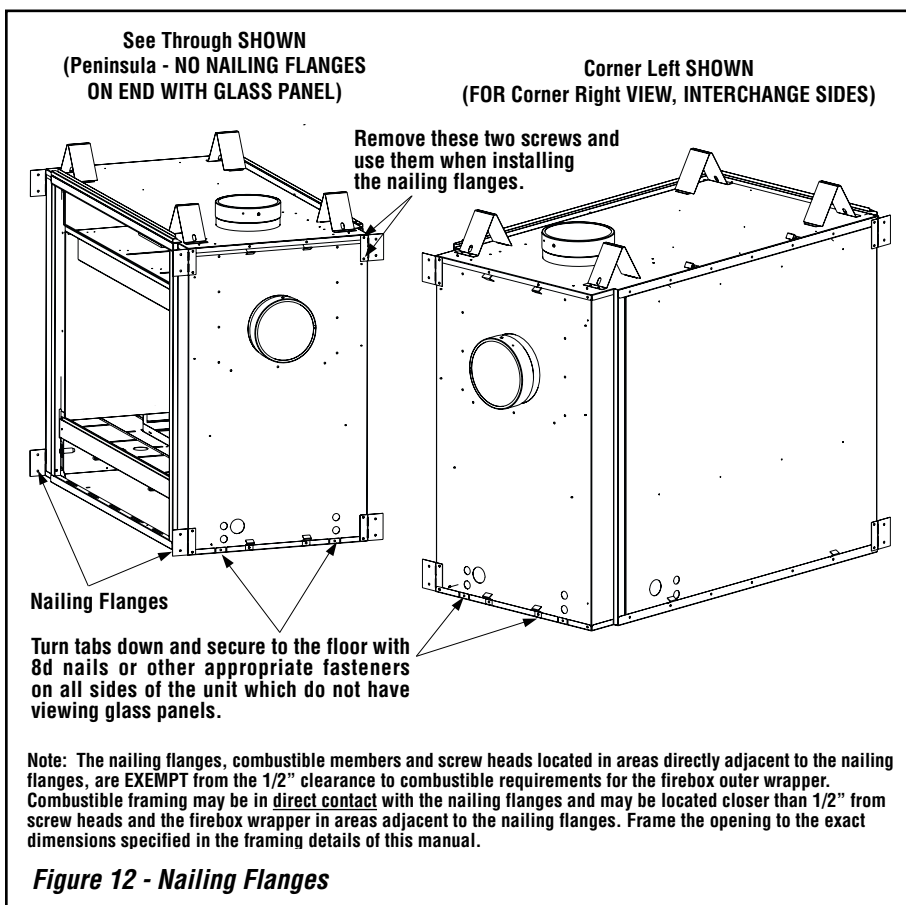
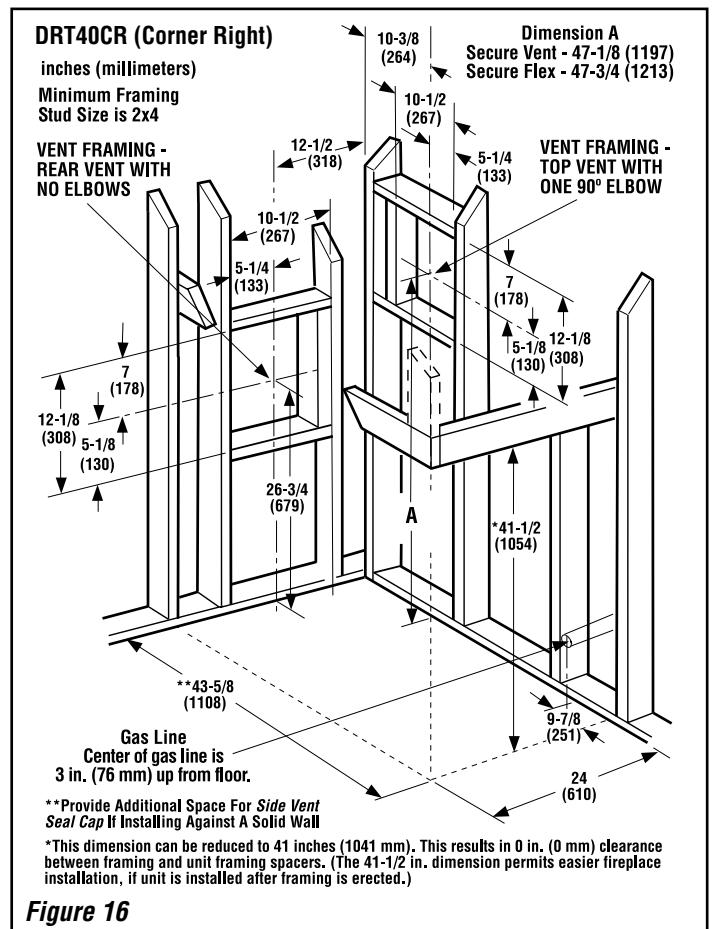
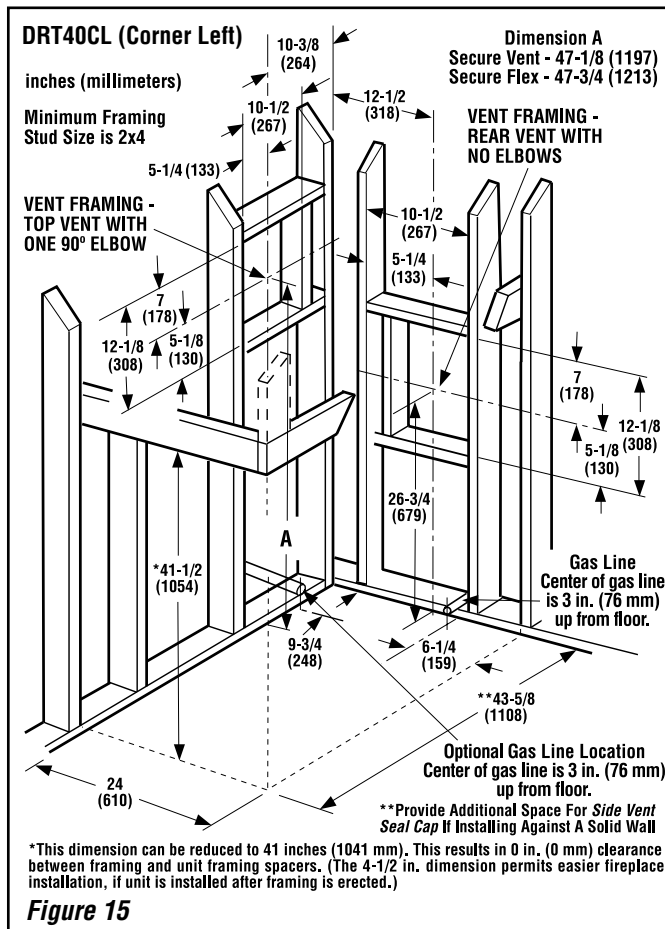
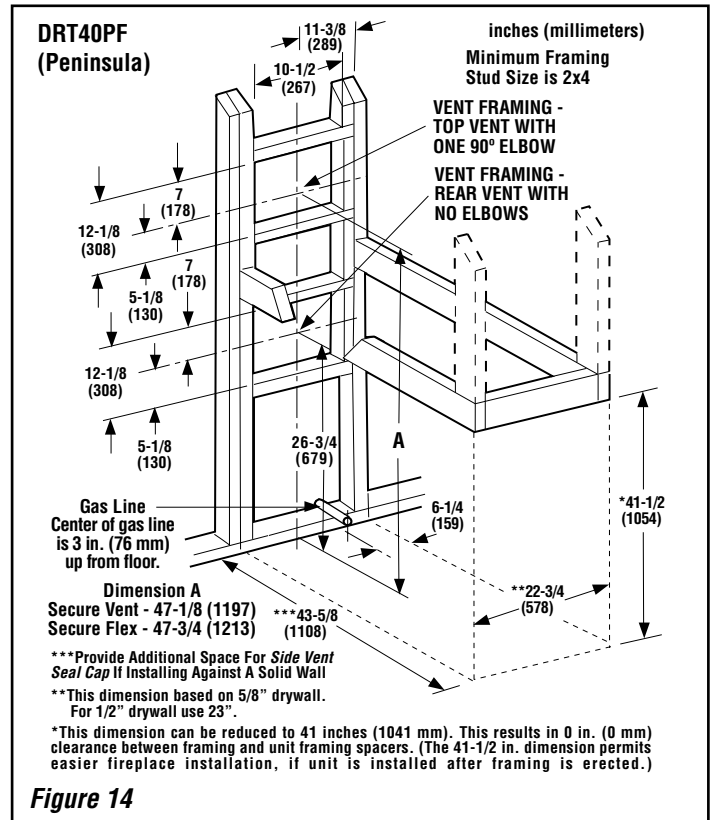
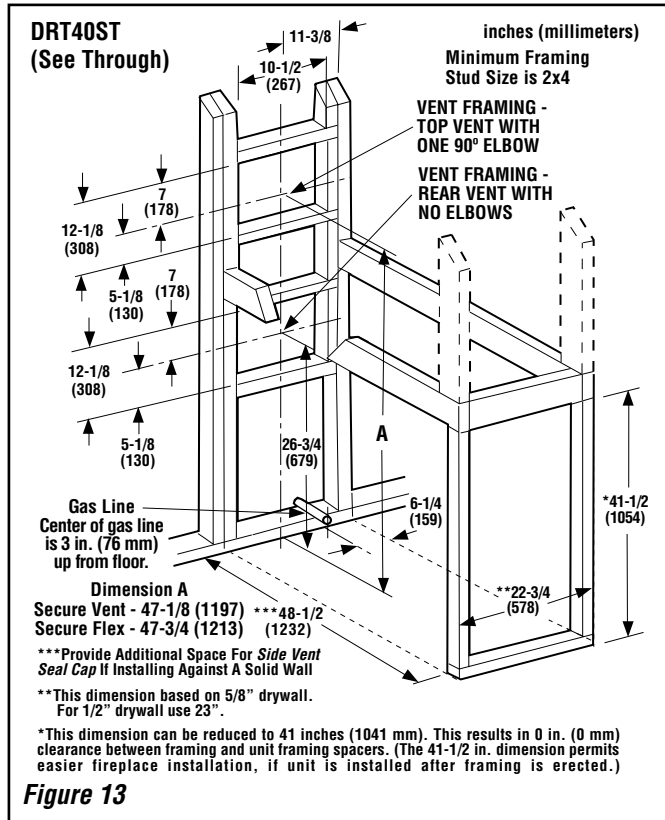


Figure 12 - Nailing Flanges

## FIREPLACE FRAMING SPECIFICATIONS



## FIREPLACE SPECIFICATIONS

### DRT40ST (See-Through)

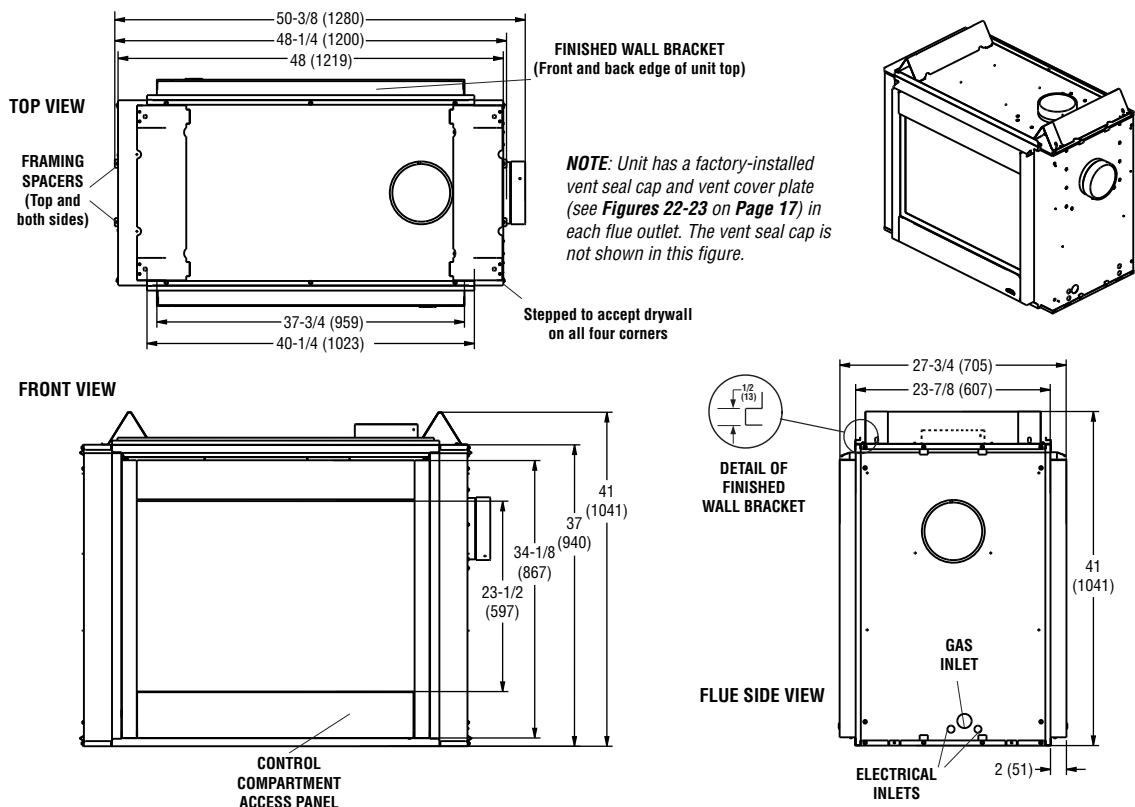


Figure 17

### DRT40PF (Peninsula)

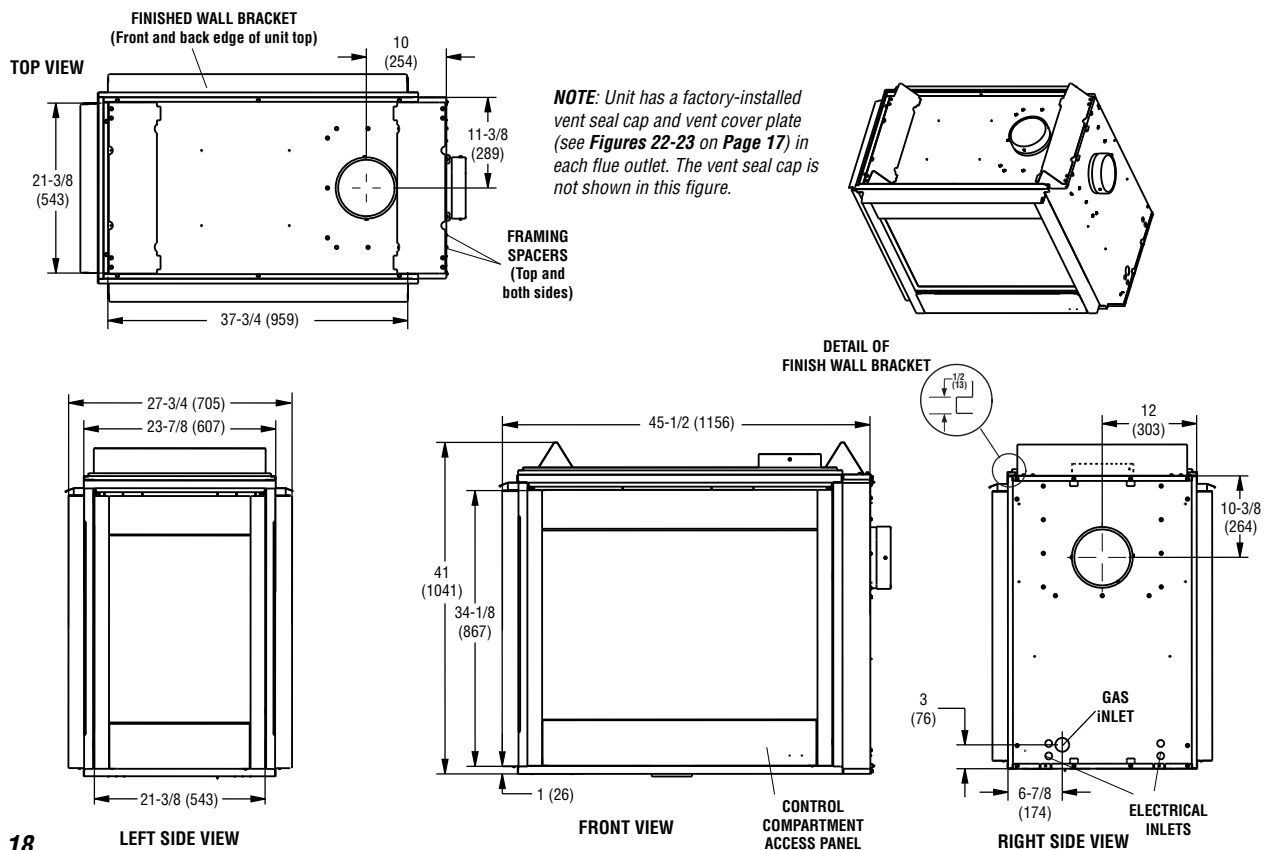
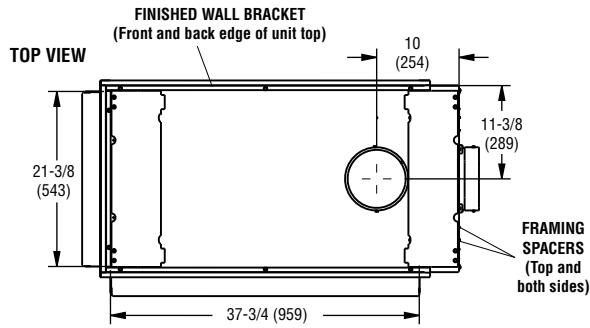


Figure 18

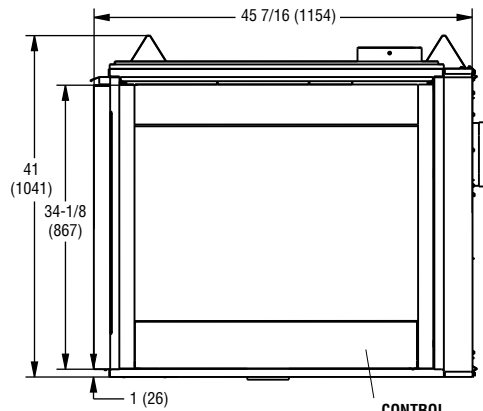
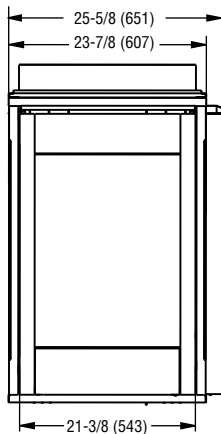
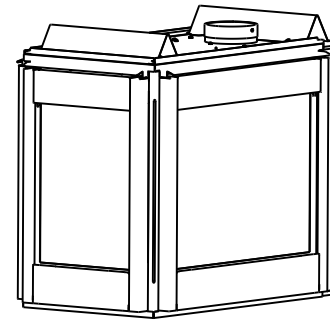
NOTE: DIAGRAMS & ILLUSTRATIONS ARE NOT TO SCALE.

## FIREPLACE SPECIFICATIONS CONTINUED

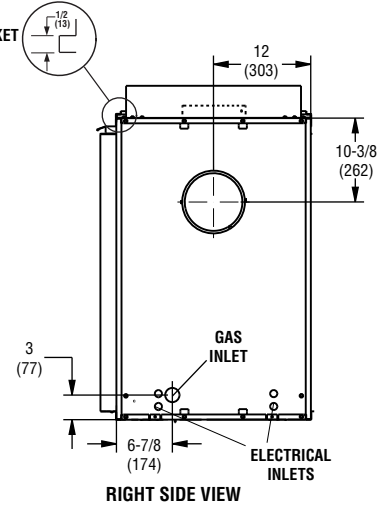
### DRT40CL (Corner-Left)



**NOTE:** Unit has a factory-installed vent seal cap and vent cover plate (see Figures 22-23 on Page 17) in each flue outlet. The vent seal cap is not shown in this figure.

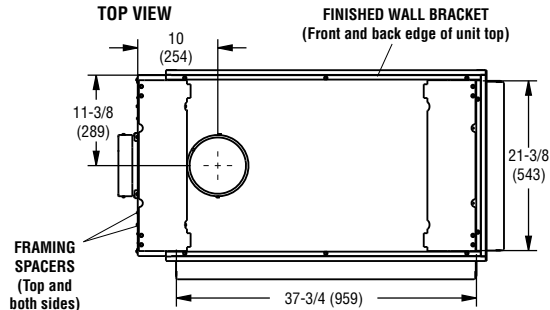


#### DETAIL OF FINISH WALL BRACKET

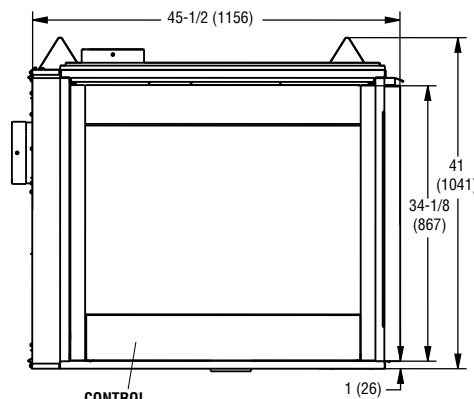
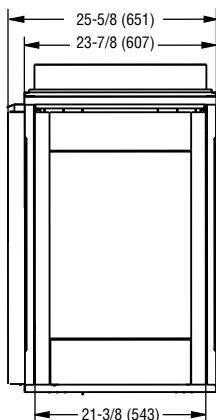
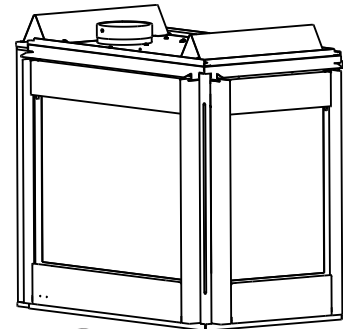


**Figure 19**

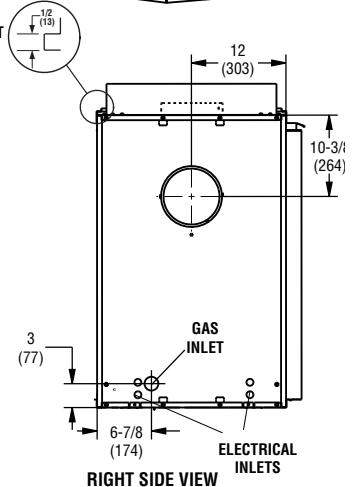
### DRT40CR (Corner-Right)



**NOTE:** Unit has a factory-installed vent seal cap and vent cover plate (see Figures 22-23 on Page 17) in each flue outlet. The vent seal cap is not shown in this figure.



#### DETAIL OF FINISH WALL BRACKET



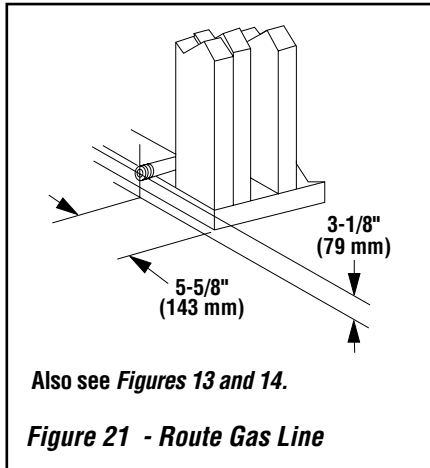
**Figure 20**

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 21**. 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 7 on Page 31**).



### 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/CGA-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.

Installing a gas supply line from the fuel supply to the appliance involves numerous considerations of materials, protection, sizing, locations, controls, pressure, sediment, and more. Certainly no one unfamiliar and unqualified should attempt sizing or installing gas piping.

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 **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 7 (Page 31)**.
- 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. NFPA 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

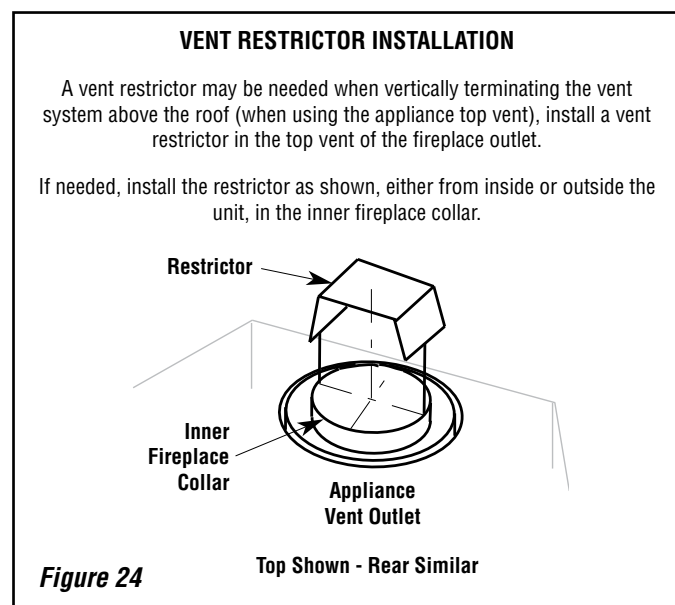
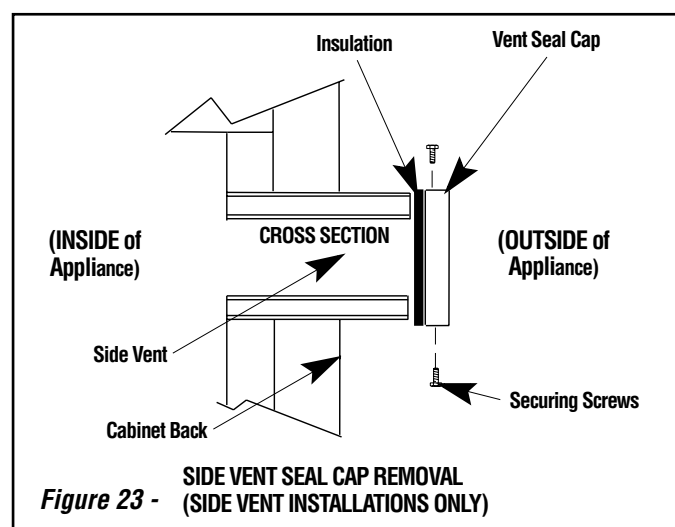
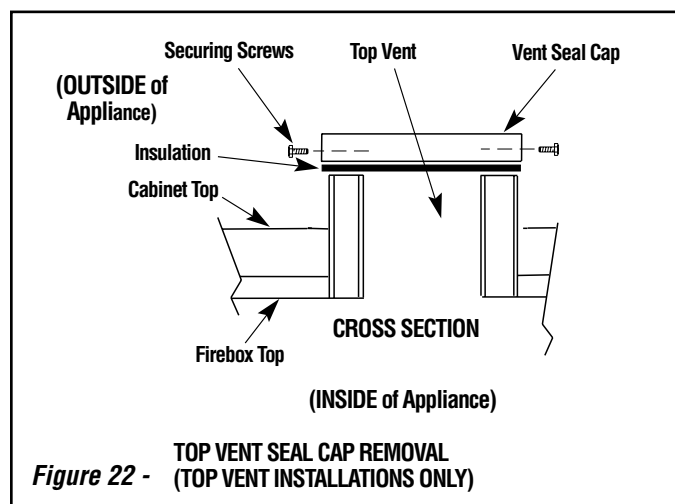
(From the vent that will be used only)

Top Vent Installations - See **Figure 22**  
Side Vent Installations - See **Figure 23**

### 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. Refer to **Figure 22** for top vent installations and **Figure 23** 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/CGA-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 24**, 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 24).** 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 40 and 41.**

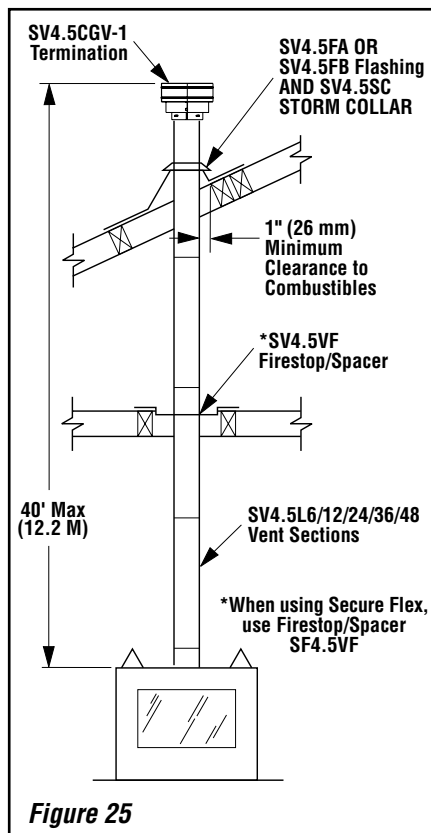
## VERTICAL TERMINATION SYSTEMS (ROOF)

See **Figure 25** and **Figures 35 through 39** on **Pages 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/CGA-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 25)

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 40 - 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.



**Figure 25**

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	0	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	2
90	7.5	0	2	1	0	4
91.5	7.625	0	0	2	0	3
93	7.75	0	0	0	0	2
96	8	1	0	1	2	4
97.5	8.125	1	0	0	0	3
102	8.5	2	0	0	0	4
103.5	8.625	0	0	0	3	3
108	9	1	0	0	3	4
114	9.5	0	2	0	0	4
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

**NOTE:** Attic insulation shield (H3907, see Page 41) must be installed when blown or loose-fill insulation is used, and is required for all attic installations.

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**

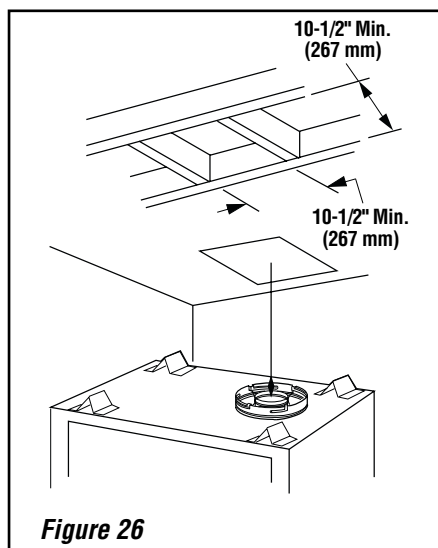
## Vertical (Offset) Installation

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 18** 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 Table 7 on Page 18** for an aid in selecting length combinations. Elbows are available in 90° and 45° configurations. Refer to **Figure 30** 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.

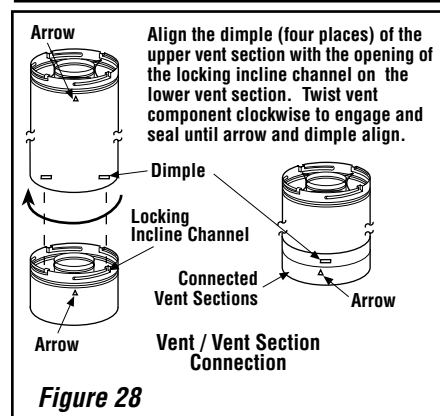
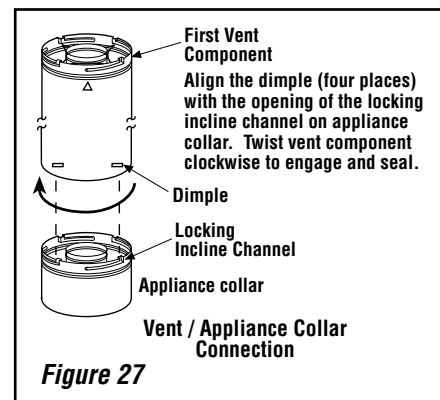
**Maintain a minimum 1" (26 mm) clearance to combustible materials for all vertical elements. Clearances for all horizontal elements are 3" (77 mm) on top, 1" (26 mm) on sides and 1" (26 mm) on the bottom.**

**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 26**).



**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 27 and 28*).

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.



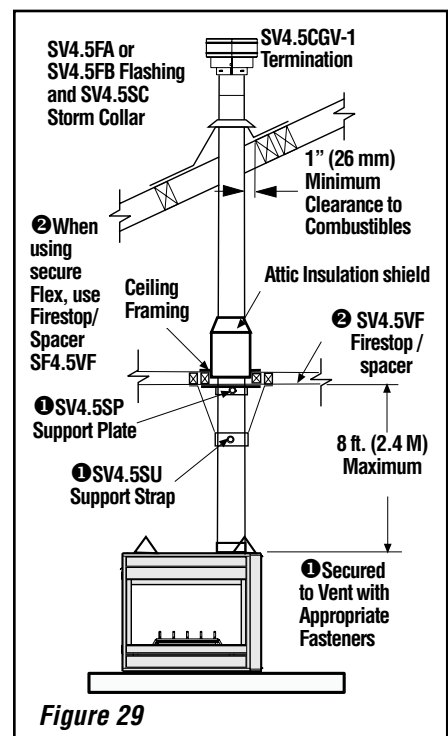
To attach a vent component to the appliance collar, align the dimpled end over the collar, adjusting the radial alignment until the four locking dimples are aligned with the inlet of the four inclined channels on the collar (*refer to Figure 27*). Push the vent component against the collar until it fully 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.

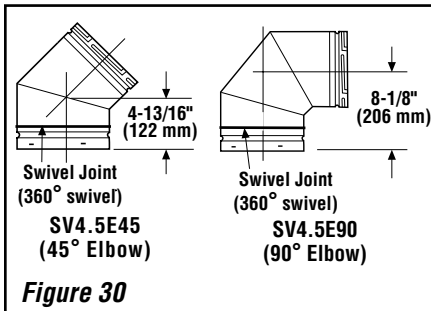
Push the vent component against the previous section until it fully engages, then twist the component clockwise running the dimples down and along the incline channels until they seat at the end of the channels. **This seating position is indicated by the alignment of the arrow and dimple as shown in Figure 28.**

**D. Install firestop/spacer at ceiling (Figure 29)** - 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" (26 mm) clearance to combustibles, framing members, and attic or ceiling insulation when running vertical chimney sections. Attic insulation shield (H3907) must be used and may help to obtain the required clearances indicated here. See installation accessories tables on Pages 38 and 39.**



**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 30**.

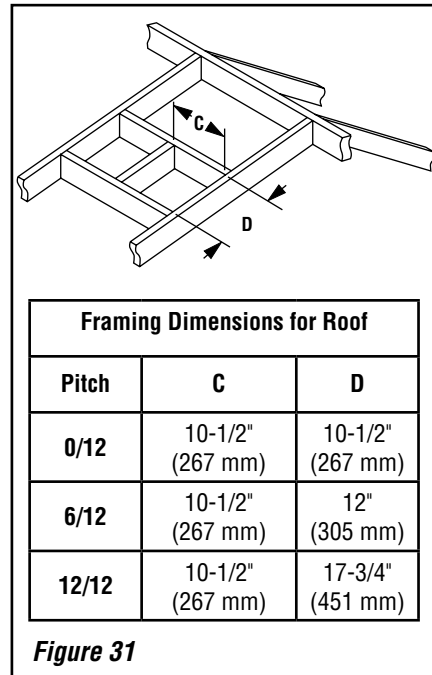
**E. Support the vertical vent run sections** - **NOTE: Proper venting support is very important. The weight of the vent must not be supported by the fireplace in any degree.** Support the vertical portion of the venting system every 8 feet (2.4m) above the fireplace vent outlet. One method of support 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. Refer to **Figure 29**.



**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.

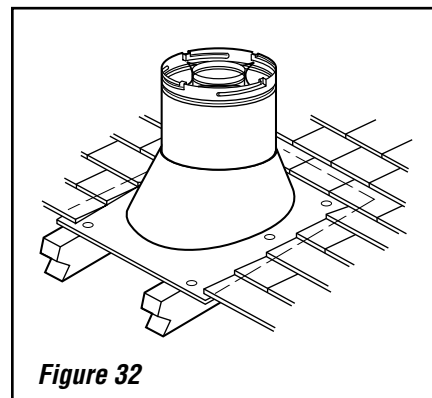
**It is important to maintain the required clearances to combustibles: 1" (26 mm) at all sides for all vertical runs; and 3" (77 mm) at the top, 1" (26 mm) at sides, and 1" (26 mm) at the bottom for all horizontal/inclined runs.**

**H. Frame roof opening** - Identify location for vent at the roof. Cut and/or frame opening per Roof Framing Chart and **Figure 31**.



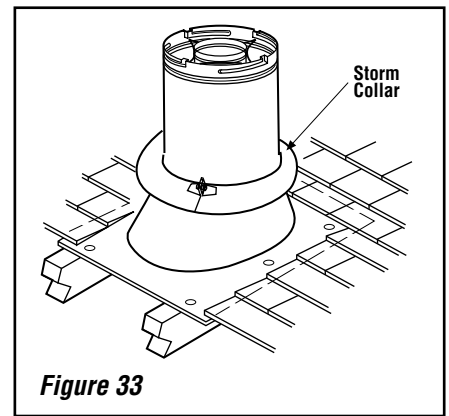
**Figure 31**

**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 32**). 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.



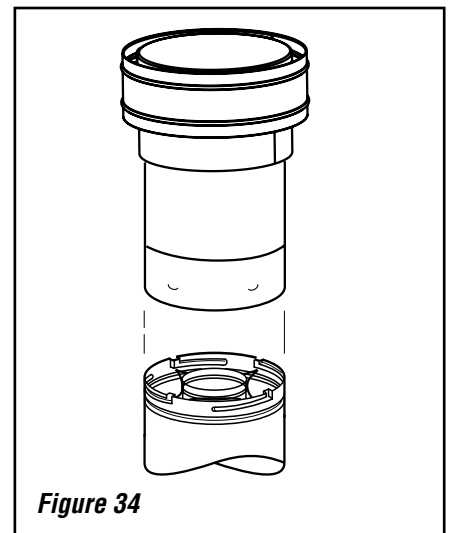
**Figure 32**

**J. Install the storm collar** - Install the storm collar, supplied with the flashing, over the vent/flashing joint. See **Figure 33**. 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 33**

**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 34**) 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 34**

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.*

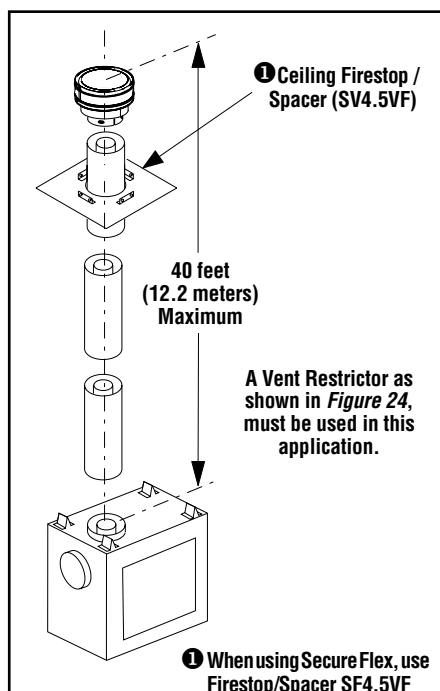
**NOTE:** *SV4.5VF (Secure Vent), SF4.5VF (Secure Flex) firestop/spacer must be used anytime vent pipe passes through a combustible floor or ceiling. SV4.5HF (Secure Vent), SF4.5HF (Secure Flex) firestop/spacer must be used anytime vent pipe passes through a combustible wall.*

**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 44 on Page 25).*

### ⚠ WARNING

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



**Figure 35 - 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			

① 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 36 - Side Vent - ONE 90 DEGREE ELBOW**

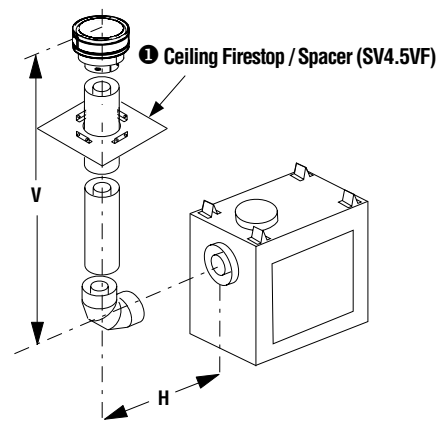
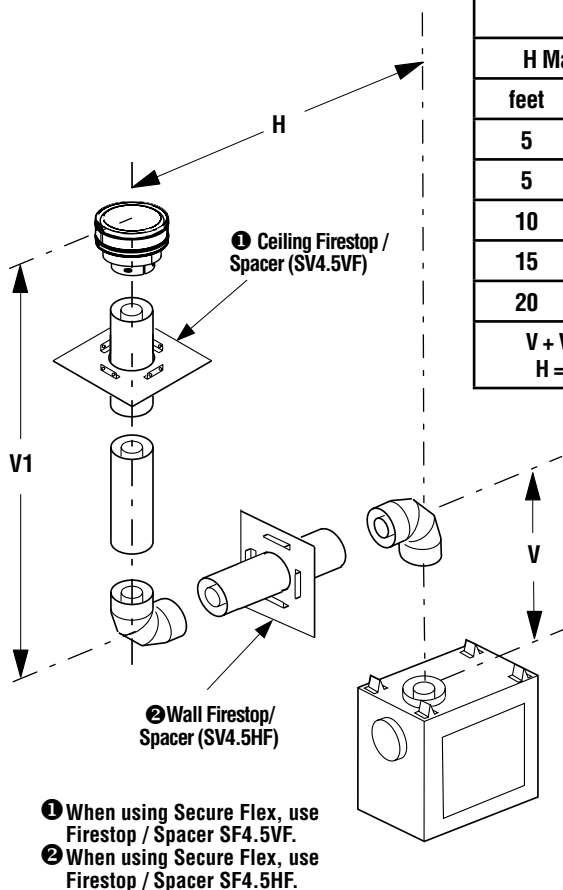


Table B			
H Maximum		V Minimum	
feet	(meter)	feet	(meter)
5	(1.524)	Elbow Only	
5	(1.524)	1	(0.305)
10	(3.048)	2	(0.610)
15	(4.572)	3	(0.914)
20	(6.096)	4	(1.219)
V + V <sub>1</sub> + H = 40 feet (12.2 m) Max.			
H = 20 feet (6.096 meters) Max.			



**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 44.

**Figure 37 - Top Vent - TWO 90 DEGREE ELBOWS**

## VERTICAL VENT FIGURES / TABLES (CONTINUED)

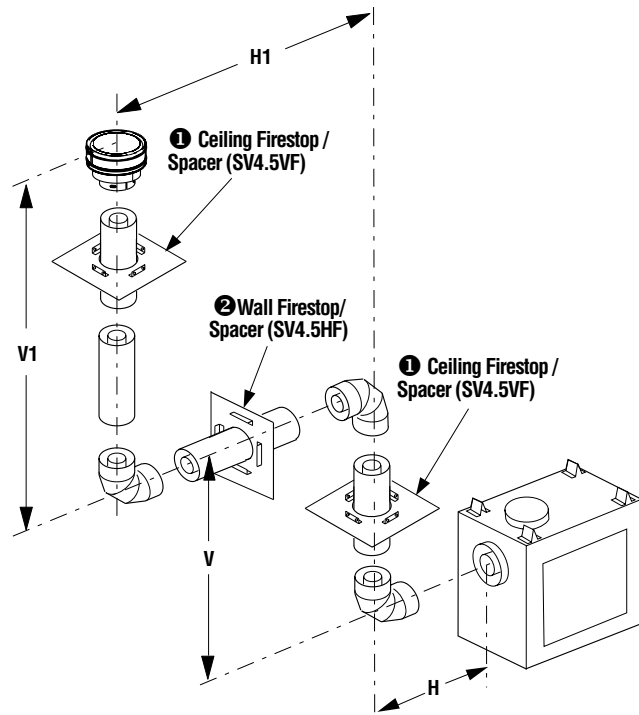
Table C					
H+H <sub>1</sub> Maximum		H Maximum		V Minimum	
feet	(meter)	feet	(meter)	feet	(meter)
5	(1.524)	2	(0.610)	1	(0.305)
10	(3.048)	4	(1.219)	2	(0.610)
15	(4.572)	6	(1.829)	3	(0.914)
20	(6.096)	8	(2.438)	4	(1.219)
$V + V_1 + H + H_1 = 40 \text{ feet (12.2 m) Max}$ $H = 8 \text{ feet (2.438 meters)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

① When using Secure Flex®, use Firestop / Spacer SF4.5VF

② When using Secure Flex, use Firestop / Spacer SF4.5HF

**Example:** If 20 feet total (H+H<sub>1</sub>) 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+H<sub>1</sub>) horizontal run up to a maximum total horizontal run of 20 feet.



**Figure 38 - Side Vent - THREE ELBOWS**

Table D			
H + H <sub>1</sub> 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)
$H + H_1 = 20 \text{ feet (6.096 m) Max.}$ $V + V_1 + H + H_1 = 40 \text{ ft. (12.192 m) Max.}$			

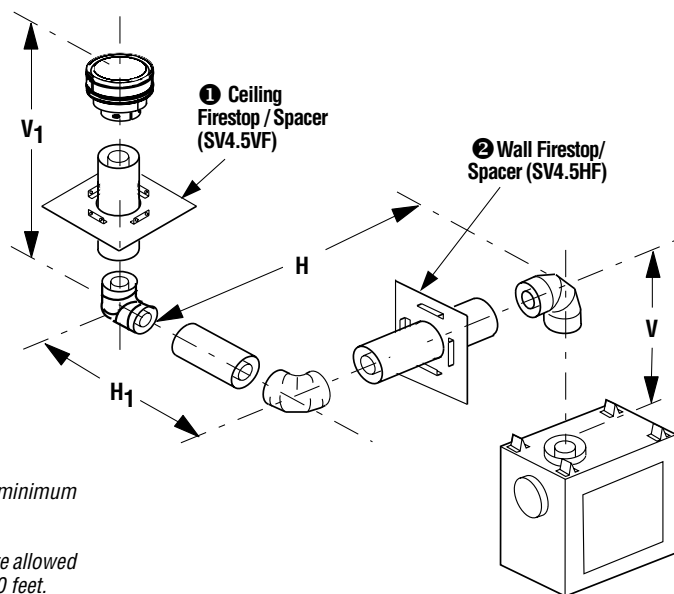
① When using Secure Flex, use Firestop / Spacer SF4.5VF

② When using Secure Flex, use Firestop / Spacer SF4.5HF

**Example:** If 20 feet total (H+H<sub>1</sub>) 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+H<sub>1</sub>) 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 44**.



**Figure 39 - Top Vent - THREE ELBOWS**



## HORIZONTAL (OUTSIDE WALL) TERMINATION SYSTEM

**Figures 40, and Figures 43 to 48 on Pages 25 to 27** 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 7** for location guidelines.

**Secure Vent SV4.5** Direct-Vent system components are unitized concentric pipe components featuring positive twist lock connection, (refer to **Figure 28 on Page 19**). 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 30 on Page 18**.

**Maintain a minimum 1" (26 mm) clearance to combustibles on the vertical sections. Clearances for the horizontal runs are; 3" (77 mm) on top, 1" (26 mm) on sides, and 1" (26 mm) at the bottom.**

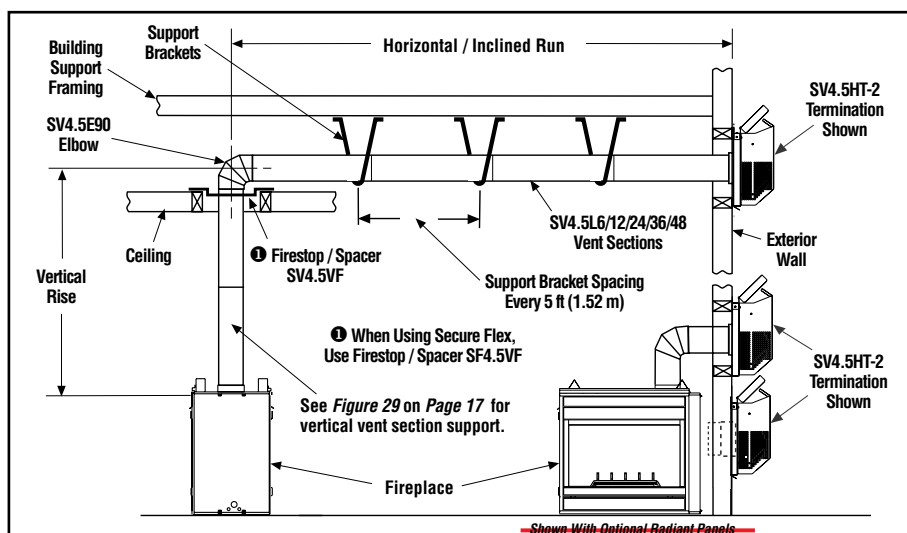
### B. Frame exterior wall opening -

Locate the center of the vent outlet on the exterior wall according to the dimensions shown in **Figures 13, through 16 on Page 13**. 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 26 on Page 19**).

**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 27 on Page 19**).

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 40 - 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 28 on Page 19.**

### 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 attic insulation shield 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" (26 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 (2.4m) 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 29 on Page 19**.

**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 30 on Page 18**.

**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 40**, 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" (26 mm) at all sides for all vertical runs; and 3" (77 mm) at the top, 1" (26 mm) at sides, and 1" (26 mm) at the bottom for all horizontal/inclined runs.**

**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" (178 mm) to 11-1/4" (286 mm) inboard of the exterior surface to which the SV4.5 HT termination is to be attached, see **Figure 42**. 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 42**, refer to **Table 8 on Page 25**. This table lists the additional venting components needed (in addition to the termination and adaptor) for a particular range of wall thicknesses.

**K. Attach termination adaptor** - Attach the adaptor (adaptor - SV4.5RCH - provided with the termination) to the vent section or telescoping vent section), elbow or appliance collar as shown in **Figure 41** 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 41**, and nail into place.

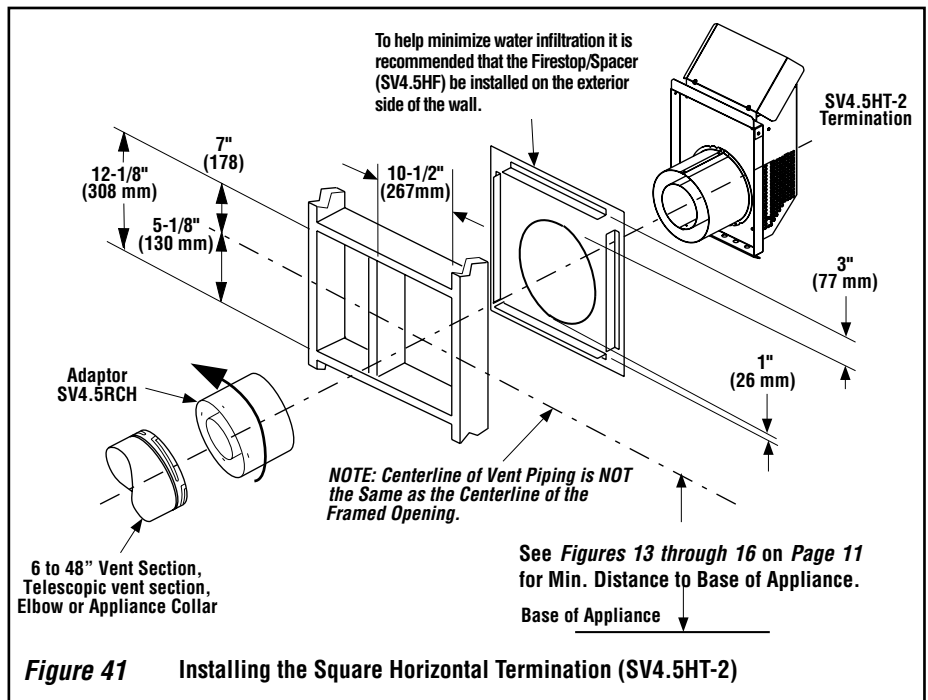
(The Firestop/Spacer may also be installed over the opening at the interior side of the framing).

**M. Install the desired termination** -

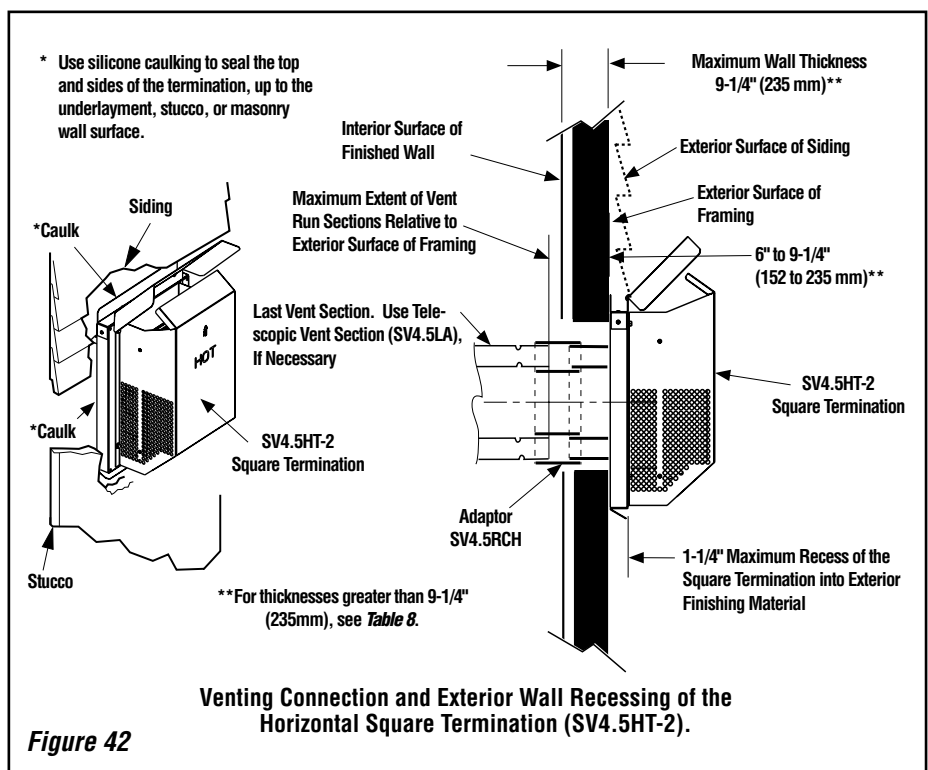
**1. Install the square termination (SV4.5HT-2)** - For the last step, from outside the exterior wall, slide the collars of the termination onto the adaptor (the outer over the outer and the inner inside the inner) until the termination seats against the exterior wall surface to which it will be attached. 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 42**.

**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" (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 41. This can be purchased at your local dealer.**



**Figure 41** Installing the Square Horizontal Termination (SV4.5HT-2)



**Figure 42**

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" Vent Section (SV4.5L6)	10-3/4 to 14 (273 to 356)
Termination Kit and 12" 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 42 showing wall thickness range when using SV4.5HT-2 termination kit.*

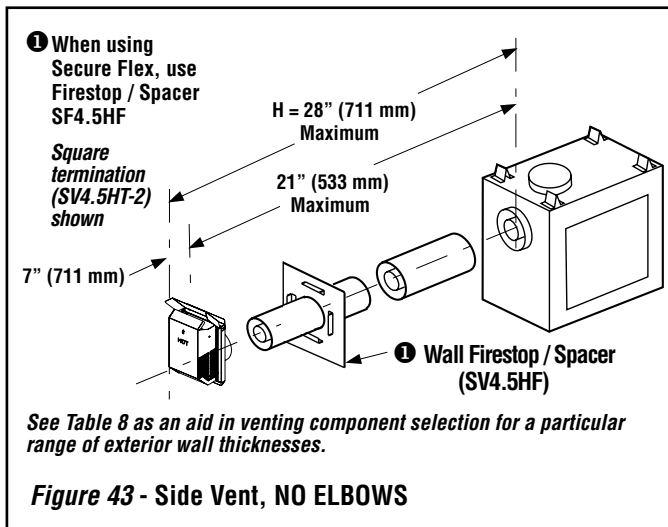
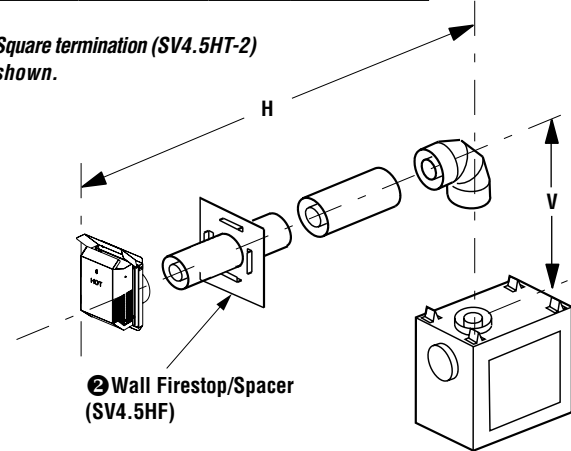


Table F			
H Maximum		V Minimum	
feet	(meter)	feet	(meter)
3	(0.914)	Elbow Only	
5	(1.524)	1	(0.305)
10	(3.048)	2	(0.610)
15	(4.572)	3	(0.914)
20	(6.096)	4	(1.219)
V + H = 40 feet (12.2 m) Max.			
H = 20 ft. (6.096 m) Max.			

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.

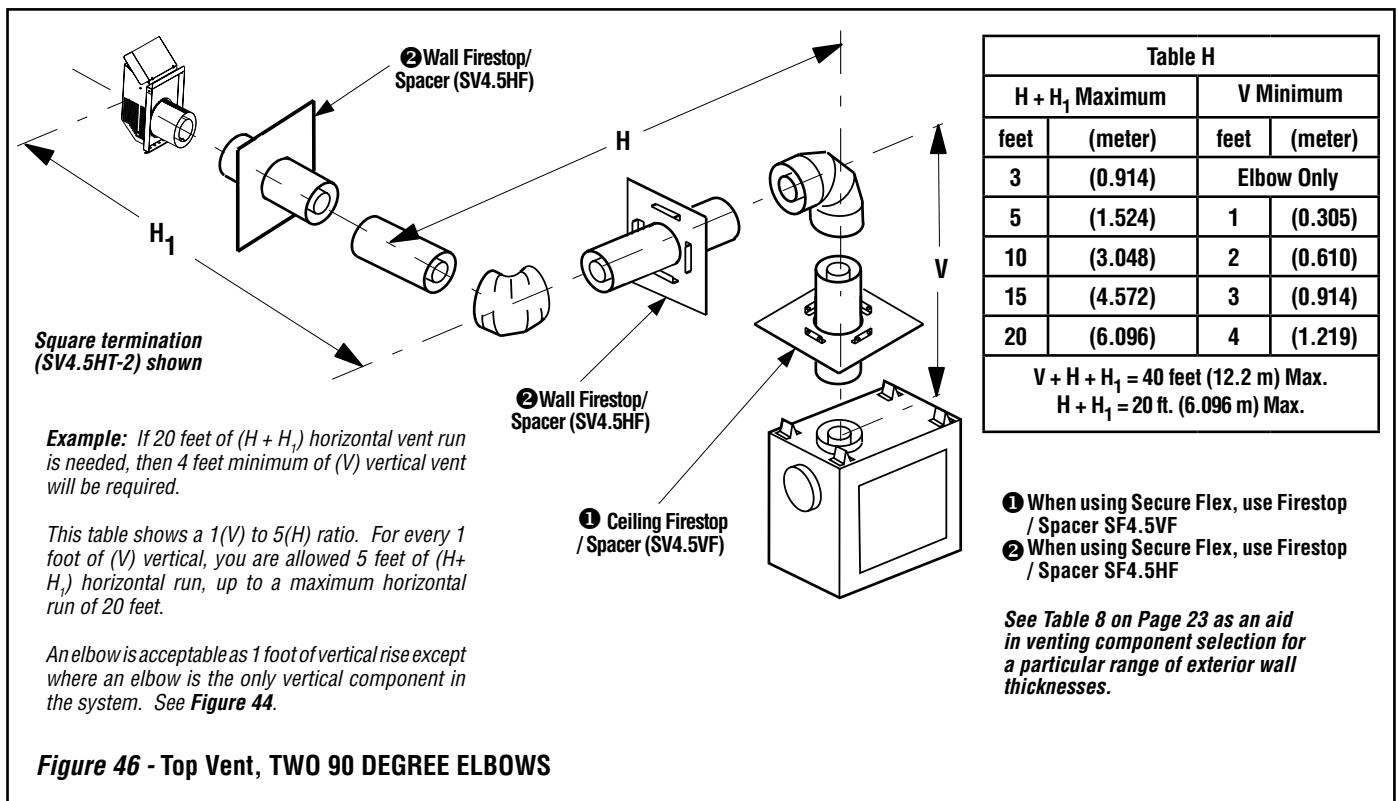
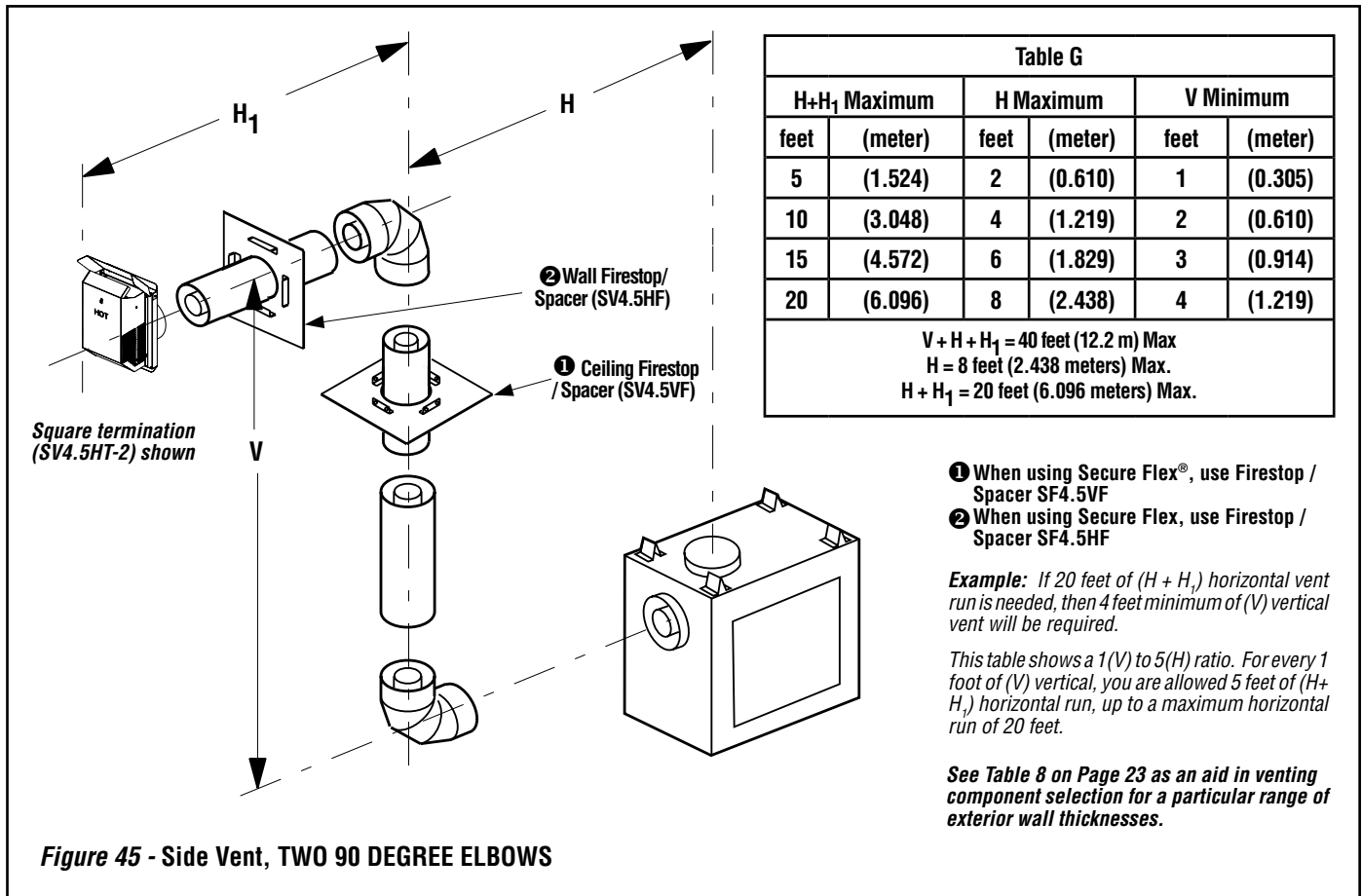
- ① When using Secure Flex, use Firestop / Spacer SF4.5VF
- ② When using Secure Flex, use Firestop / Spacer SF4.5HF

**Figure 44 - 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)

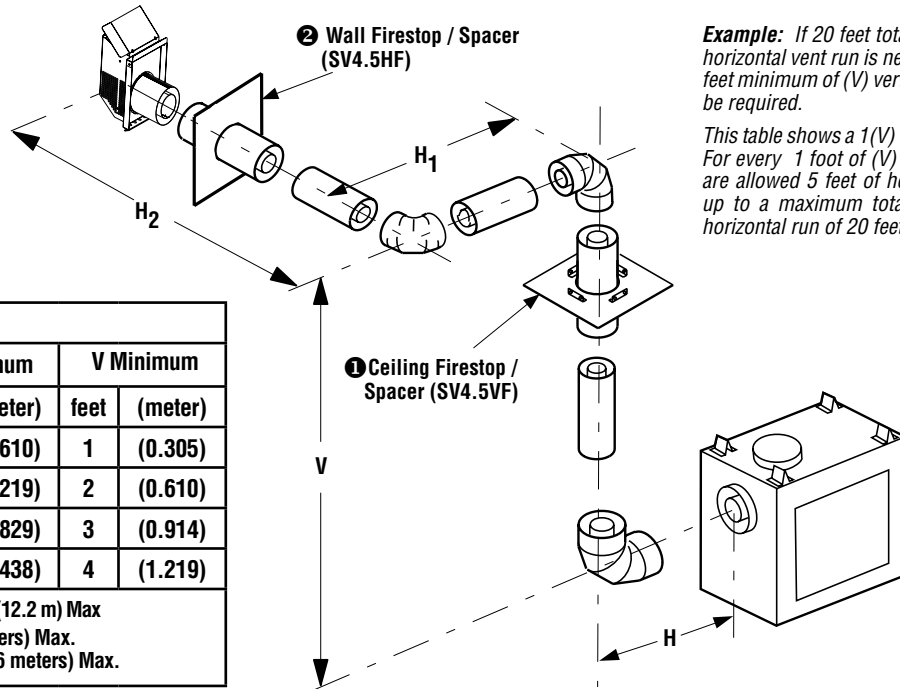


## HORIZONTAL VENT FIGURES/TABLES (continued)

- ① When using Secure Flex®, use Firestop / Spacer SF4.5VF
- ② 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 <sub>1</sub> + H <sub>2</sub> 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 <sub>1</sub> + H <sub>2</sub> = 40 feet (12.2 m) Max H = 8 feet (2.438 meters) Max. H + H <sub>1</sub> + H <sub>2</sub> = 20 feet (6.096 meters) Max.					



**Example:** If 20 feet total (H+H<sub>1</sub>+H<sub>2</sub>) 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+H<sub>1</sub>+H<sub>2</sub>) horizontal run of 20 feet.

Square termination (SV4.5HT-2) shown

**Figure 47 - Side Vent, THREE 90 DEGREE ELBOWS**

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

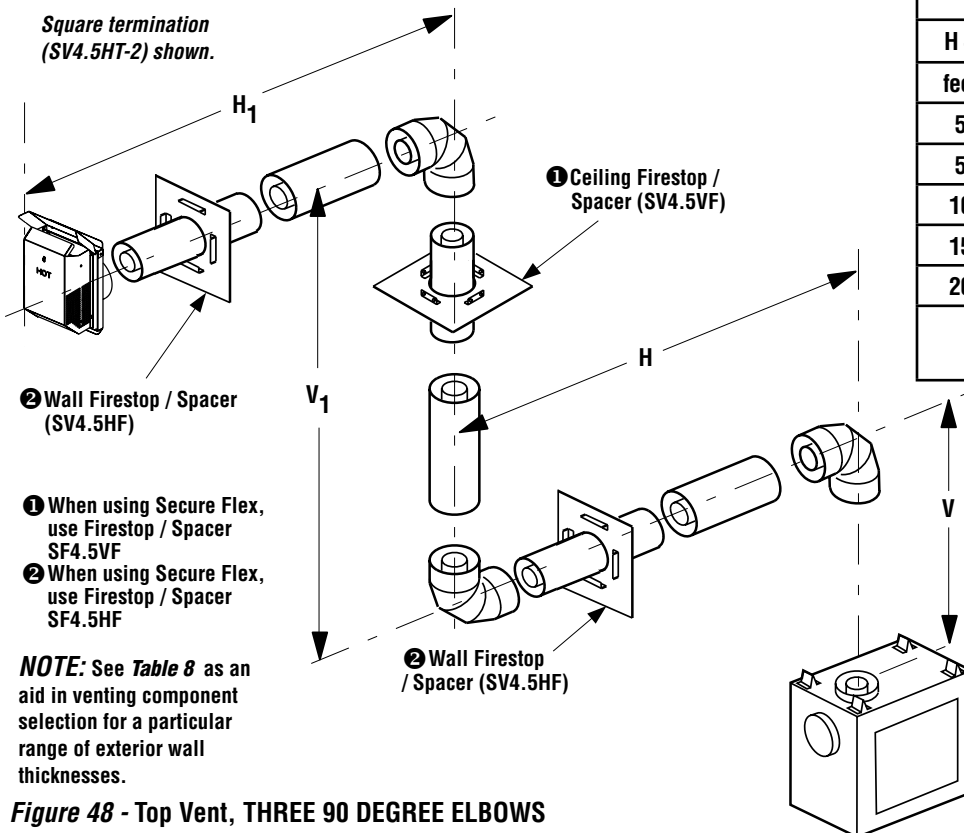


Table K			
H + H <sub>1</sub> Maximum		V Minimum	
feet	(meter)	feet	(meter)
5	(1.524)	Elbow Only	
5	(1.524)	1	(0.305)
10	(3.048)	2	(0.610)
15	(4.572)	3	(0.914)
20	(6.096)	4	(1.219)
H + H <sub>1</sub> = 20 feet (6.096 m) Max. V + V <sub>1</sub> + H + H <sub>1</sub> = 40 ft. (12.192 m) Max.			

**Example:** If 20 feet total (H+H<sub>1</sub>) 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+ H<sub>1</sub>) 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 44.

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

**Figure 48 - 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 adaptor 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 adaptor over the previously installed section or appliance collar, adjusting the radial alignment until the four locking dimples of the adaptor are aligned with the inlets of the four incline channels of the last vent section or collar. Push on the adaptor until it fully engages, then twist the adaptor clockwise running the dimples down and along the incline channels until they seat at the end of the channels.

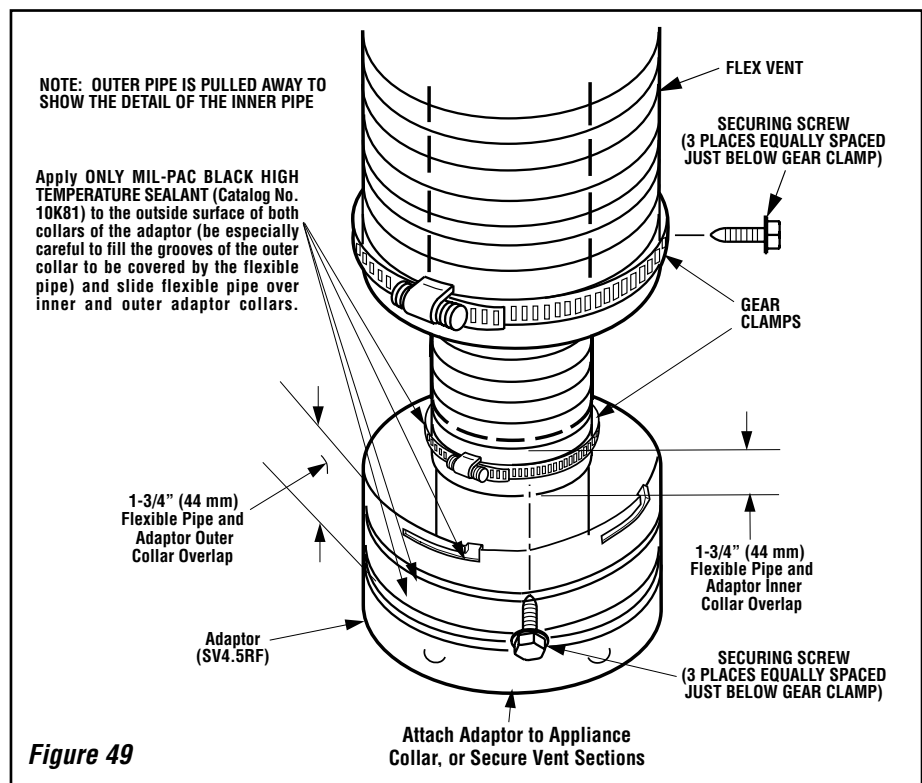
**Attach the flexible vent to the adaptor as follows (see Figure 49):**

### 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 adaptor collar, approximately 1/2" from the end.
3. Pull and extend the inner flexible vent pipe.
4. Slide the inner flex pipe over the adaptor collar. Ensure the flexible vent pipe completely engages the adaptor collar to a distance of 1-3/4" 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 adaptor inner collar approximately 3/4" from the end of the flex.
6. Install **three screws 120 degrees apart** through the flexible vent pipe and into the adaptor 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.



**Figure 49**

2. Apply a bead of **Mill-Pac Black (700°F) high temperature sealant - Catalog No. 10K81** to the outer adaptor collar; to the grooves of the collar which extend approximately 1 inch from the end and to the flat surface, approximately 1-3/8" from the end.
3. Pull and extend the outer flexible vent pipe.
4. Slide the outer flex pipe over the adaptor collar. Ensure the flexible vent pipe completely engages the adaptor collar to a distance of 1-3/8" 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 adaptor outer collar approximately 3/4" from the end of the flex.
6. Install **three screws 120 degrees apart** through the flexible vent pipe and into the adaptor collar just below the gear clamp to provide additional security to the connection.

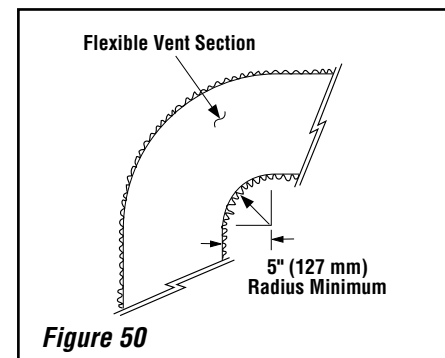
### C. Route Flex Vent -

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 50**. 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 50**

### 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 49**) as it was attached to the adaptor.

**NOTE: Secure Flex vent must be attached to Secure Flex terminations only. DO NOT substitute Secure Vent terminations or the Secure Vent adaptor for Secure Flex components. The collars of Secure Flex terminations and adaptors 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 52 & 53**. 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., or the Canadian Electrical Code, CAN/CGA C22.1—latest edition.

**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.

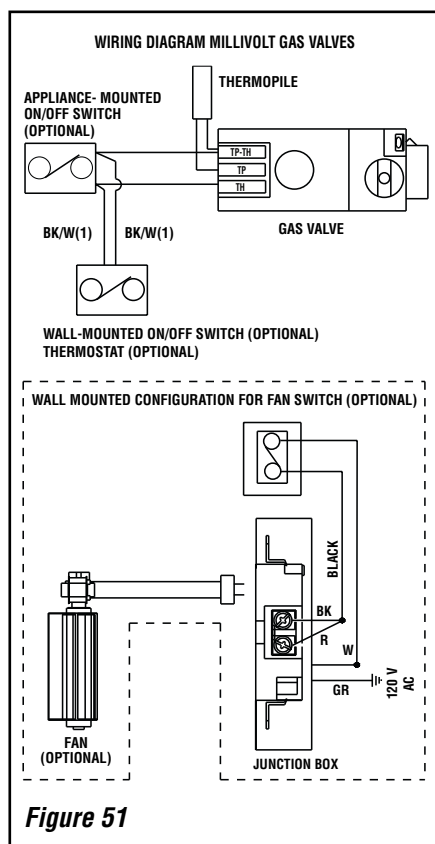


Figure 51

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 51) –

**Install Optional Control Switch** (OFF/ON wall switch, wall thermostat or remote control receiver). Install snap bushing (on brown wall switch wire) into control switch knock-out in side panel (see **Figures 17 through 20 and 53**). Wire the optional control switch within the millivolt control circuit (as shown in **Figure 51**) using the 15 feet of brown 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.

1. Install the junction box and receptacle outlet to the right 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 54)

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

**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 53**). If an optional blower is to be installed place the junction box to the right of the valve in the front corner.

1. Route a 3-wire, 120 VAC, 60 Hz, 1 ph power supply to the location on appliance where junction box is to be installed.
2. Open the control compartment access panel.
3. Wire and install the outlet receptacle to junction box, then install into the chosen corner of the control compartment as shown in **Figures 51, 52 and 54**.
4. After the receptacle/junction box wiring is complete, install the provided metal junction box cover plate (see **Figure 53**).
5. Install the snap bushing (on brown wall switch wire) into the selected cabinet knockout opening in side cabinets (see **Figures 17-20 and 53**). 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 54**.

**NOTE:** The supplied 15 feet of brown 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 bottom of the appliance.

**IMPORTANT NOTE:** The gas valve OFF/ON switch is shown in **Figure 54** on **Page 30**. 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.

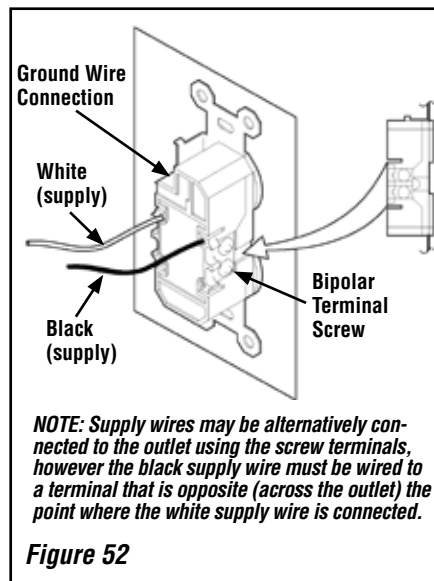


Figure 52



## Step 6. WIRING - OPTIONAL FORCED AIR BLOWER KIT

**FBK-100, FBK-200 and FBK-250 Kits**  
(See **Figure 54** on **Page 29** for wiring) -

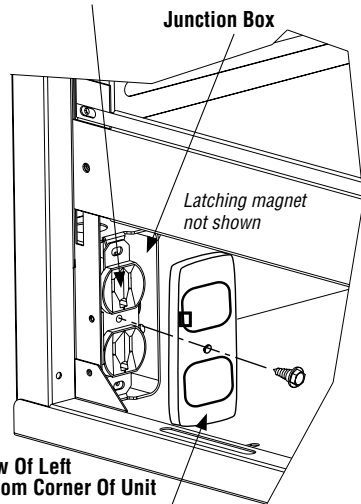
An electrical receptacle is provided for the installation of the **FBK-100, FBK-200 and FBK-250** forced air blower kits. Electrical power must be connected to this receptacle in order to operate these blowers. Install the blower kits according to the installation instructions provided with the kits.

### **CAUTION**

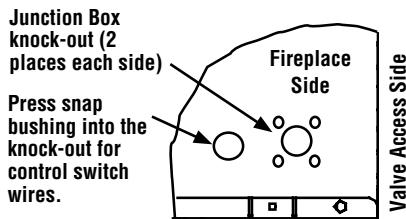
**Remove the carton support from the control compartment before operating the appliance.**

#### Receptacle, Junction Box and Cover Plate Installation

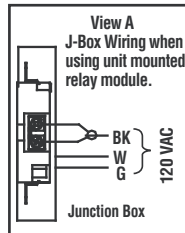
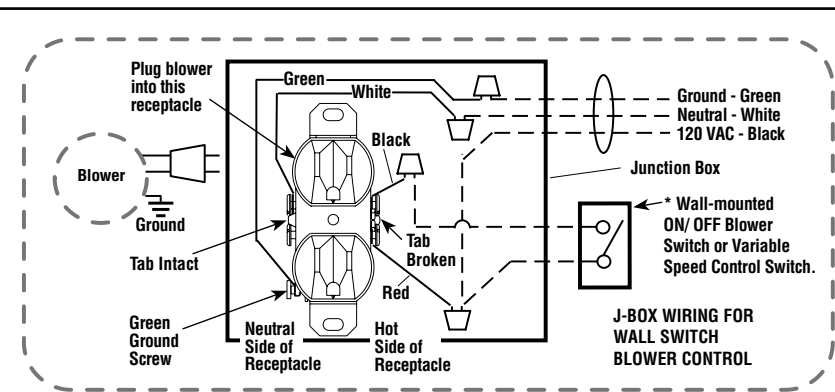
##### Outlet Receptacle



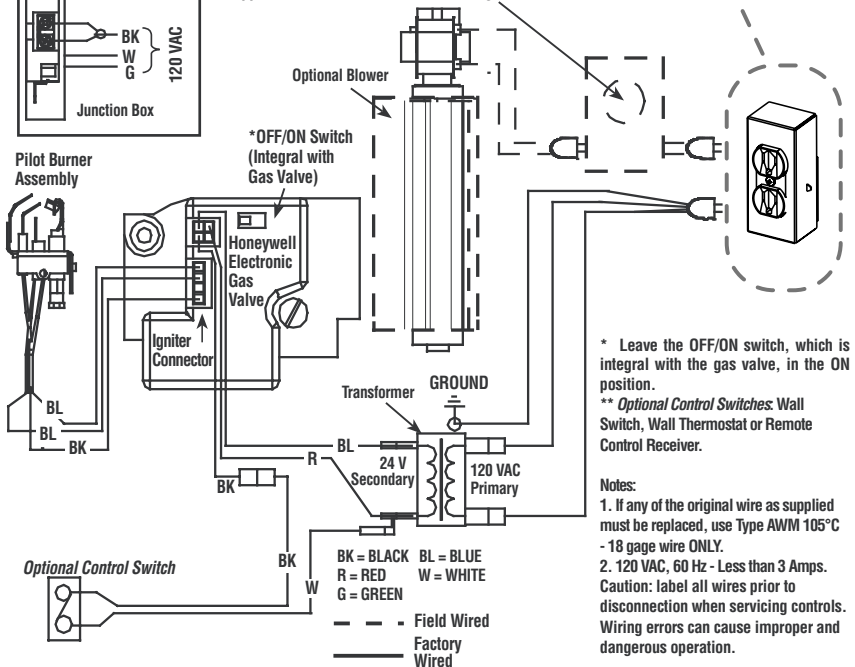
##### Metal Junction Box Cover Plate With Screw



**Figure 53**



Relay Module C/W FBK-250 only. Plug blower into J-Box receptacle for FBK-100 or FBK-200 application. See View A for J-Box wiring.



\* Leave the OFF/ON switch, which is integral with the gas valve, in the ON position.

\*\* Optional Control Switches: Wall Switch, Wall Thermostat or Remote Control Receiver.

Notes:  
1. If any of the original wire as supplied must be replaced, use Type AWM 105°C - 18 gage wire ONLY.  
2. 120 VAC, 60 Hz - Less than 3 Amps.  
Caution: label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation.

**Figure 54**  
Electronic Wiring Diagram (Honeywell) Showing Blower Wiring for Optional FBK-100, FBK-200 & FBK-250 Kits

## Step 7. CONNECTING GAS LINE

Make gas line connections. All codes require a shut-off valve mounted in the supply line. **Figure 55** 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. 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.

To access the valve open the lower control compartment door (**see Figure 56**) by pushing in the right top corner 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. 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 55** 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.

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

#### WARNING

**Never use an open flame to check for leaks.**

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

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

- Light the appliance (refer to the lighting instructions label in the control compartment or in the Installation and Operation Instructions manual).
- 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.
- When the gas lines are tested and leak free, be sure to rinse off the leak testing solution.

## Step 8. VERIFYING APPLIANCE OPERATION

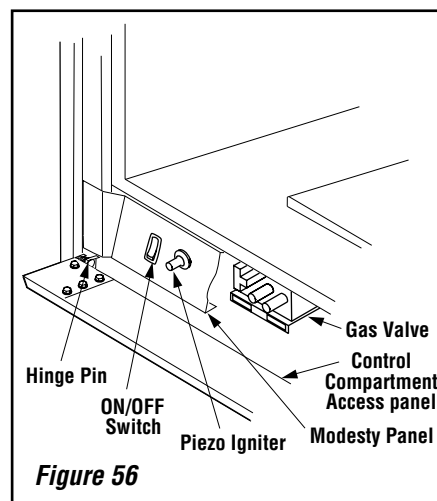
Turn on burner and observe the individual tongues of flame on the burner. Make sure all ports are open and producing flame evenly across the burner. If any ports are blocked, or partially blocked, clean out the ports.

With gas line installed run initial system checkout before closing up the front of the unit. Follow the pilot lighting instructions provided in the Installation and Operation Instructions manual. For piezo igniter location see **Figure 56 on Page 31** (millivolt appliances only).

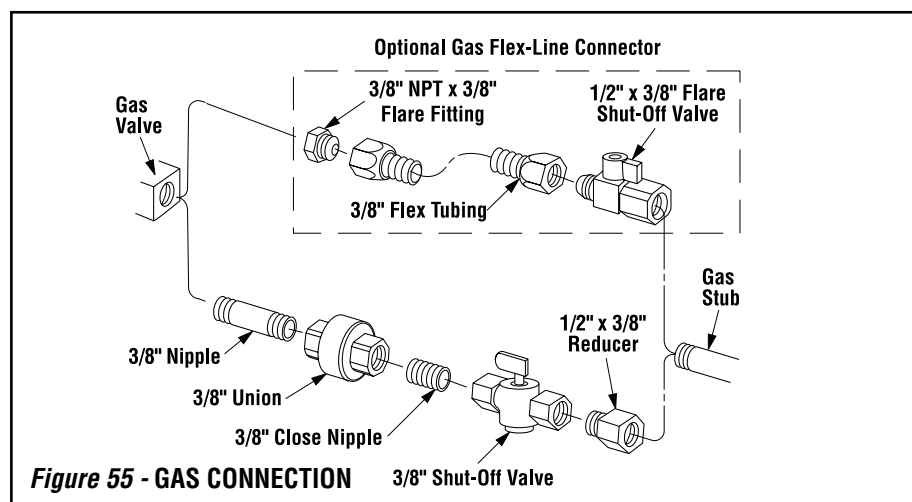
**NOTE:** Lighting Instructions are also found on the literature tag tied to the gas piping next to the gas valve. To access the tag, open the lower control compartment door (**Figure 56**) by pushing in simultaneously the left and right top corners of the door. (The door is hinged at the bottom.) Remove 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).



**Figure 56**



**Figure 55 - GAS CONNECTION**

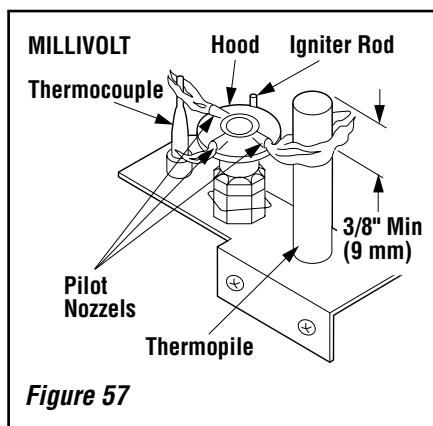
### Millivolt Appliance Checkout

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" (26 mm) beyond the hood at all three ports (see **Figure 57**). Replace logs if removed for pilot inspection.

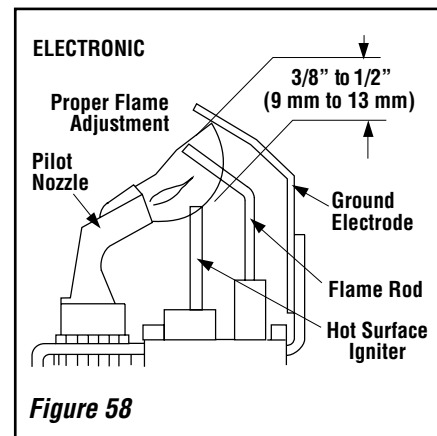
To light the burner; turn "ON" the remote wall switch and rotate the gas valve control knob counterclockwise to the "ON" position ("ON" will be at the top side of the valve).



**Figure 57**

### 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 58**.



**Figure 58**

## Step 9. INSTALL VERMICULITE, GLOWING EMBERS AND LOGS

**NOTE:** It is important to ensure proper log placement per the manual when installing these units. Verify pilot flame is not obstructed. See Verifying Appliance Operation on **Pages 31 and 32**.

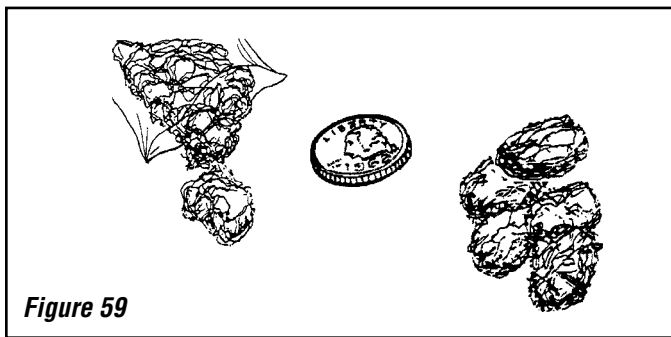
**NOTE:** Turn off all electricity to the appliance before you install vermiculite, embers and logs. DO NOT attempt to install the logs until the appliance installation has been completed, the gas line connected and tested for leaks and the initial burner operation has been checked out.

**READ WARNINGS ON THIS PAGE BEFORE PROCEEDING. FOLLOW THE LOG PLACEMENT INSTRUCTIONS EXACTLY**

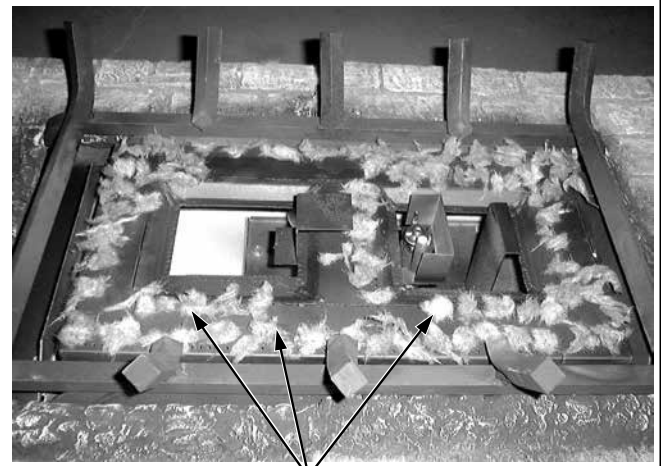
### INSTALLATION STEPS:

1. **Remove front face assembly** by lifting up and pulling away from unit.
2. **Remove the front glass enclosure panel** (see *Glass Enclosure Panel Removal and Installation Instructions, Page 34*).
3. **Remove the following from firebox:** log set, bag of embers and bag of vermiculite. **Handle logs carefully to prevent breakage.**
4. **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.
5. **Placement of Glowing Embers -**  
Separate the Embers (rockwool) into pieces about the size of a quarter (see **Figure 59**). Keep the pieces fluffed up, not matted. Distribute these pieces over the surface of the burner, as shown in **Figure 60**. Do not use more than is necessary. Ensure that the main burner ports remain uncovered by the ember material.
6. **Place Volcanic stone -** Spread volcanic stone evenly over firebox floor.
7. **Install Vermiculite -** Place some vermiculite on the firebox floor around the grate (the entire bag of vermiculite will NOT be used). See **Figure 60**. **DO NOT PLACE ANY VERMICULITE ON THE BURNER.**

**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).



**Figure 59**



**Glowing Embers**

**Figure 60**

### REFERENCE

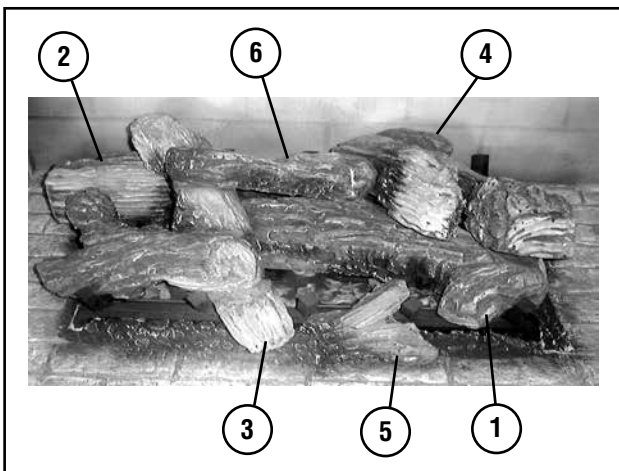
#### Firebox Accessories / Parts

Cat. No.	Model No.	Description
88L53	FGE	Bag of Glowing Embers
80L42	FDVS	Bag of Decorative Volcanic Stone

### ! 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.

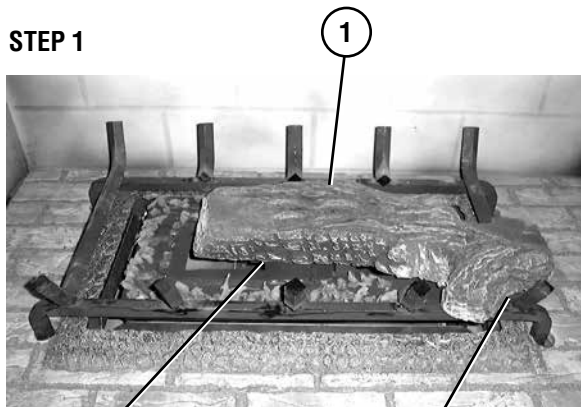
## DRT40PF, DRT40ST, DRT40CL AND DRT40CR LOG PLACEMENT



Log Number	Description
1	Log, Corner
2	Log, Rear/Left
3	Log, Front/Left
4	Log, Rear/Right
5	Log, Front/Center
6	Log, Center/Top

Catalog Number for the entire log set: 55M04

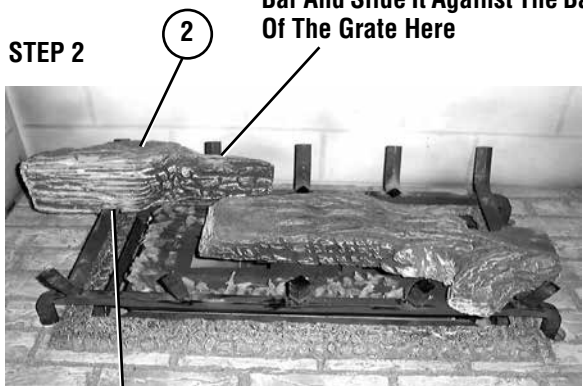
### STEP 1



Position Groove At The Bottom Of Log (1) Over The Burner Log Support Bracket

Position The Groove At The Bottom Of Log (1) Over The Grate And Slide It Forward Against The Grate Here

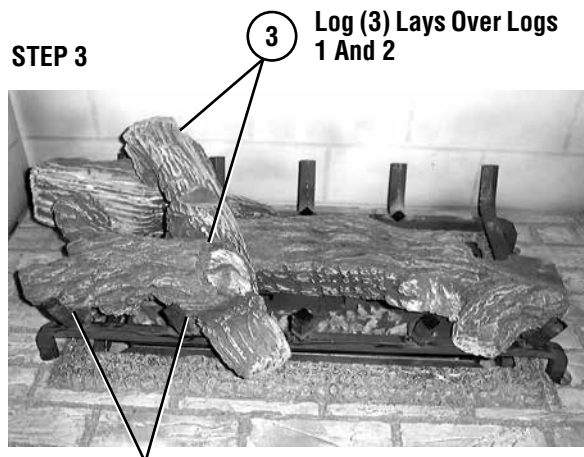
### STEP 2



Position Groove At The Bottom Of Log (2) Over The Grate Here And Slide It Against The Back Of The Grate

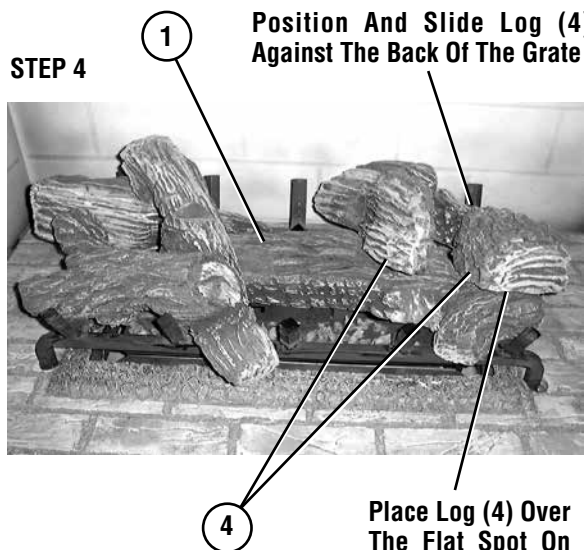
Position Log (2) Over The Grate Bar And Slide It Against The Back Of The Grate Here

### STEP 3



Place Bottom Hole Of Log (3) On Pin In Log (2). Position Grooves At The Bottom Of Log (3) Over The Grate.

### STEP 4

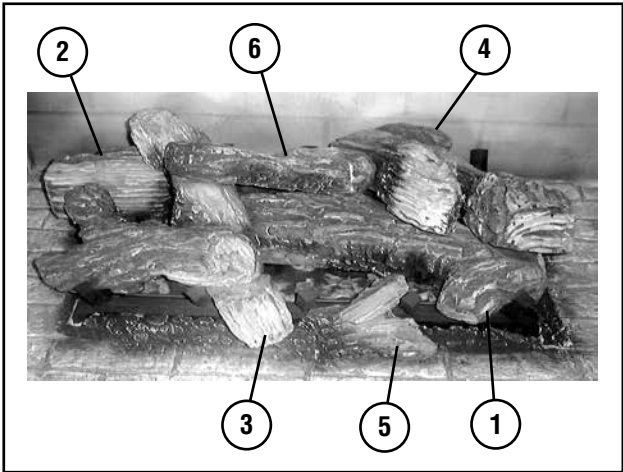


Place Log (4) Over The Flat Spot On Log (1) Here

Position And Slide Log (4) Against The Back Of The Grate

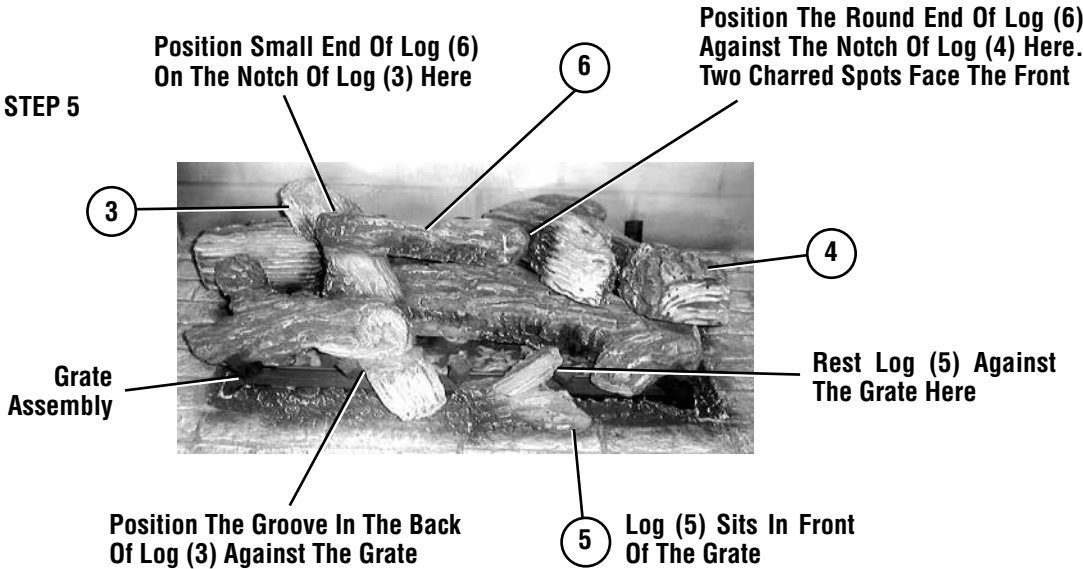
Figure 61

**DRT40PF, DRT40ST, DRT40CL AND DRT40CR LOG PLACEMENT (CONTINUED)**



Log Number	Description
1	Log, Corner
2	Log, Rear/Left
3	Log, Front/Left
4	Log, Rear/Right
5	Log, Front/Center
6	Log, Center/Top

**Catalog Number for the entire log set: 55M04**



**Figure 62**

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

### ⚠ 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

The door should easily close without needing to be pressed down. If it has to be pressed down to close, the gasket in the top of the door should be dressed so it lays on the glass.

Only doors certified with the appliance shall be used.

Seules des portes certifiées pour cet appareil doivent être utilisées.

#### Removing Glass Enclosure Panel (see Figure 63)

Remove the top louver assembly or radiant panel.

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 and pulling straight out from the unit once the brackets are disengaged.

Locate the two (2) latches at the top of the control compartment and disengage them from the door frame bottom vee-flange, pulling down on their handles to open them.

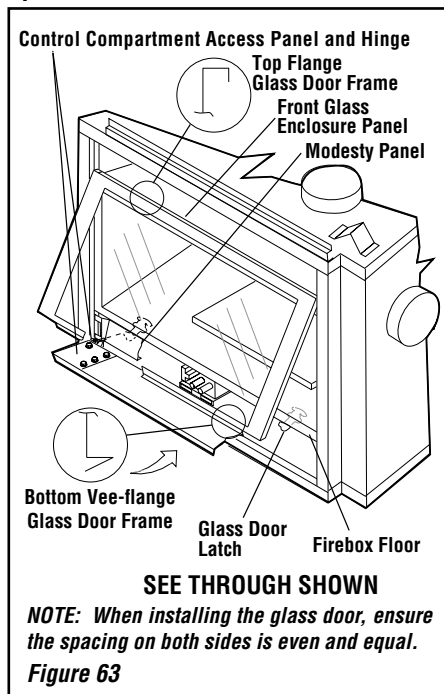
#### Installing Glass Enclosure Panel (see Figure 63)

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 63). 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 latches located underneath the firebox floor to the door's vee-flange. Close both the latches securely.

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



## 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



# 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). J7420 (ST Models), J7420 and J7421 (PF, CL, and CR Models).



## WARNING

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



## 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

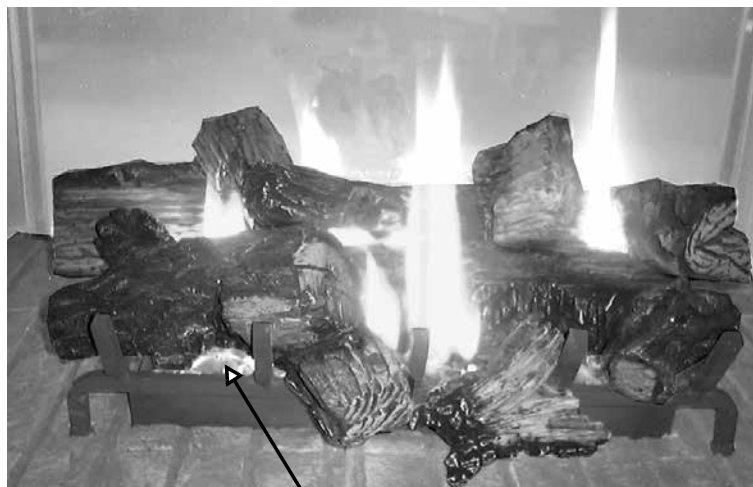
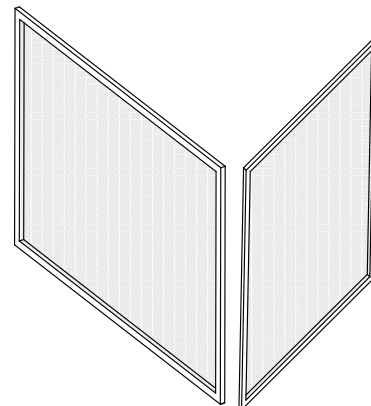
- Soot will be produced if the air shutter is closed too much. Any damage due to sooting, resulting from improperly setting the air shutter, is not covered under the warranty.
- The air shutter door and nearby appliance surfaces are hot. Exercise caution to avoid injury while adjusting flame appearance.

**NOTICE:** All DRT40 model fireplaces include barriers to reduce the risk of burns from hot viewing glass. The barriers in the fireplace are screens shown right.

**ST Model Barrier Cat. No. J7420**  
(two used)

**PF Model Barrier Cat. No. J7420**  
(two used) and J4221

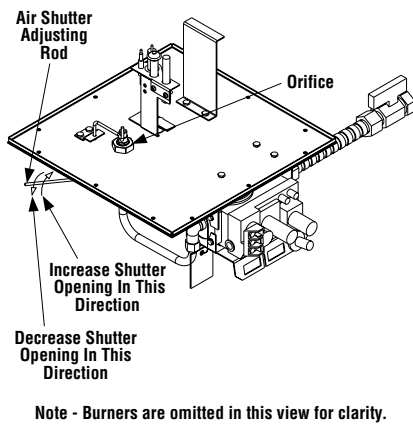
**CL and CR Barrier Cat. Nos. J7420**  
and J7421



**Glowing Embers (Rockwool)**

**Figure 64 - Burner Flame Appearance**

1. Refer to **Figure 64** 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 65**.
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.



**MAIN BURNER  
FACTORY SHUTTER SETTING**

Models	Natural Gas inches (mm)	Propane Gas inches (mm)
DRT40ST DRT40PF DRT40CL DRT40CR	1/4" (6.35)	5/8" (15.88)

Adjustment Rod Positions (when viewed from above)

**Figure 65**

**Step 12. HOOD INSTALLATION**

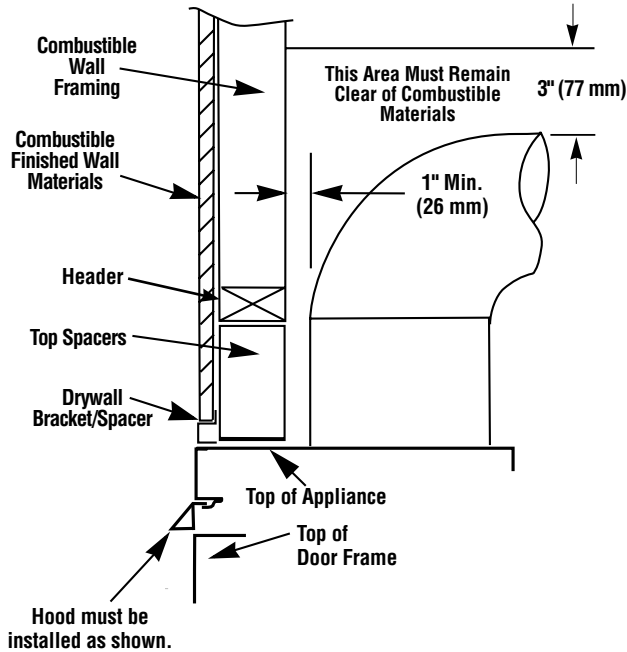
**Refer to Figure 66. All of these appliances must have hoods installed prior to operating.**

**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 66**)

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



**Figure 66 - FINISHING REQUIREMENTS**

## STEP 13. ATTACHING SAFETY-IN-OPERATION WARNINGS

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

### ATTACHING SAFETY IN OPERATION WARNINGS

It is required that the 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 contact IHP or your nearest IHP dealer to receive additional safety instruction labels free of charge.

Cat. No. H8024 Replacement Label Kit

IHP  
SuperiorFireplaces.us.com

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

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

Il est impératif que 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 (voir **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 parvenez pas à localiser les étiquettes, s'il vous plaît contactez IHP ou votre revendeur le plus proche pour recevoir IHP étiquettes d'instructions de sécurité supplémentaires gratuitement. Étiquettes de remplacement, n° cat. H8024

IHP  
SuperiorFireplaces.us.com

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

### COLOCACIÓN DE ADVERTENCIAS DE SEGURIDAD EN OPERACIÓN

Se requiere que 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 **Figura A**) o en el termostato de pared (ver la **Figura B**) y en el transmisor de control remoto (**Figura 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 (**Figura A**) o en el termostato de pared (**Figura 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 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. Si no sabe cuál es, use la etiqueta en inglés.
3. Si usted es incapaz de localizar las etiquetas, por favor póngase en contacto con IHP, o con su distribuidor más cercano IHP recibir instrucción etiquetas de seguridad adicionales sin costo.

Juego de etiquetas de repuesto - N° de cat. H8024

IHP  
SuperiorFireplaces.us.com

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

### SAFETY LABEL DIAGRAMS



### DIAGRAMMES DES ÉTIQUETTES DE SÉCURITÉ



### DIAGRAMAS DE ETIQUETAS DE SEGURIDAD



Illustrations are for example only.  
Your accessories may be different.

Les illustrations sont par exemple  
uniquement. Vos accessoires  
peuvent être différents.

Las ilustraciones son sólo ejemplos.  
Tu accesorios pueden ser diferentes.

Figure A  
Figura A



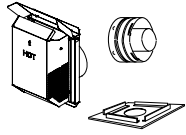

Figure B  
Figura B

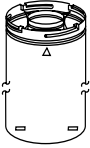




Figure C  
Figura C

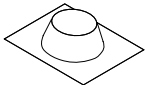
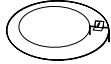


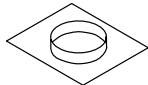


## INSTALLATION ACCESSORIES

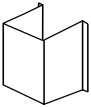
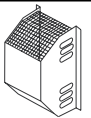
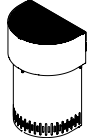
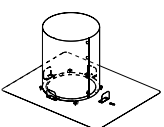

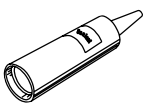
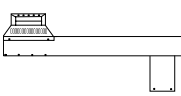
Listed Secure Vent® Components			
	Cat. No.	Model	Description
	H1968	SV4.5HT-2	Horizontal Square Termination With Firestop / spacer (H2246) & Adaptor (74L61)
	H2152	SV4.5CGV-1	Vertical Termination Cap, High Wind

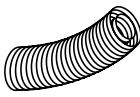
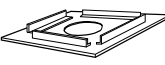
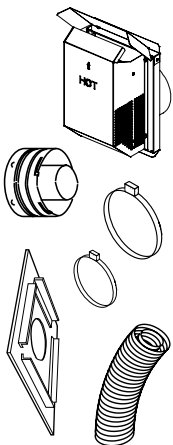
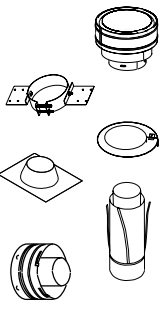

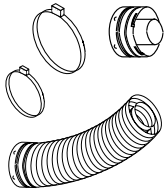
	Cat. No.	Model	Description
Vent Sections (Rigid) 	77L70	SV4.5L6	6 Inch (152 mm)
	77L71	SV4.5L12	12 Inch (305 mm)
	77L72	SV4.5L24	24 Inch (610 mm)
	77L73	SV4.5L36	36 Inch (914 mm)
	77L74	SV4.5L48	48 Inch (1219 mm)
	77L75	SV4.5LA	Telescopic Length Slip Section (2" to 7-1/2" rigid)
	77L76	SV4.5E45	45 Degree 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", <b>rigid</b>
	H6184	SF4.5HF5	Firestop Spacer, 5", <b>flex</b>
	H2246	SV4.5HF-10	Firestop / Spacer-Horizontal, <b>rigid</b> (3-1-1 spacing), 10 Pack
	H2247	SV4.5VF-10	Firestop / Spacer-Vertical, <b>rigid</b> (1-1-1 spacing), 10 Pack
	96K92	SV4.5SP	Support Plate

## INSTALLATION ACCESSORIES CONTINUED

Listed Secure Vent® Components			
	Cat. #	Model	Description
 (Fits 94L10 & H1968)	17M52	SV4.5HGS-1	Termination Guard, Square (1 pack) Ref. instr. #750109M
	17M53	SV4.5HGS-12	Termination Guard, Horizontal Square (12 pack) Ref. instr. #750109M
 (Fits 94L10 & H1968)	87L02	SV4.5HGS	Termination Guard for Horizontal Square Termination (Deluxe) (1 pack) Ref. instr. #750055M
 (Fits H1968)	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. #750247M
	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. #750146M
	99L03	SV4.5HRK36	Horizontal Riser Kit, 36", Ref. instr. #750146M

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 <b>flex</b> , Ref. instr. #750053M
	98K03	SF-12	12 feet (3.66 m) * compressed <b>flex</b> , Ref. instr. #750052M
	H2248	SF4.5HF-10	Firestop / Spacer - Horizontal, <b>flex</b> (3-1-1 spacing), 10 Pack
	H2249	SF4.5VF-10	Firestop/Spacer-Vertical, <b>flex</b> (1-1-1 spacing), 10 Pk
	H1969	SF4.5HT-2	Horizontal Square Termination for <b>flex</b> (without flex)
	77L87	SFKIT12S	Square Term. for <b>flex</b> (with 12 inch [305 mm] * compressed flex)
	77L88	SFKIT18S	Square Term. for <b>flex</b> (with 18 inch [457 mm] * compressed flex)
	77L89	SFKIT24S	Square Term. for <b>flex</b> (with 24 inch [610 mm] * compressed flex)
	77L90	SFKIT36S	Square Term. for <b>flex</b> (with 36 inch [914 mm] * compressed flex)
	77L91	SFKIT48S	Square Term. for <b>flex</b> (with 48 inch [1219 mm] * compressed flex)
	56L74	SFVT30	Vertical Termination for <b>flex</b> (flat to 6/12) with flex adaptor, section of rigid vent, roof support collar assembly, roof flashing and storm collar. Ref. instr. #750052M
	56L75	SFVT45	Vertical Termination for <b>flex</b> (6/12 to 12/12) with flex adaptor, section of rigid vent, roof support collar assembly, roof flashing and storm collar. Ref. instr. #750052M
	91L66	SFGC4-6	Gear Clamp 4-1/2" (114 mm) for <b>flex</b> (6 pack)
	91L67	SFGC7-6	Gear Clamp 7-1/2" (190.5 mm) for <b>flex</b> (6 pack)
	H7748	H7748	36" <b>Flex</b> Connector Kit. 36" of flex with two adaptors 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 instruction 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/CGA-B149.1 INSTALLATION CODE.

LA CONVERSION DEVRA ÊTRE EFFECTUÉE CONFORMÉMENT AUX RECOMMANDATIONS DES AUTORITÉS PROVINCIALES AYANT JURIDICION ET CONFORMÉMENT AUX EXIGENCES DU CODE D'INSTALLATION CAN/CGA-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.

#### Natural to Propane Conversion Kit

Models	Unit type	Catalog No.
ST and PF	Millivolt	F2314
ST and PF	Electronic	F2316
CL and CR	Millivolt	F2315
CL and CR	Electronic	F2317

#### Propane to Natural Gas Conversion Kit

Models	Unit type	Catalog No.
ST and PF	Millivolt	F2318
CL and CR	Millivolt	F2319

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

**b.** Remove the bottom control compartment access panel by compressing the spring-loaded hinge pin on the left side until it disengages from the left cabinet panel hole. Pull the panel away from the fireplace.

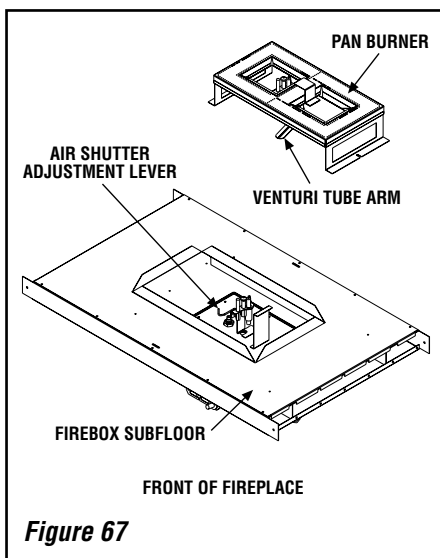
**c.** Remove the modesty panel by pulling the bottom right corner of the modesty panel out slightly to disengage the snap-fit feature; lift the modesty panel by the tab on the panel's right end, pull the right end of the panel away from the cabinet and then pull the panel diagonally out of the left side cabinet panel slots. (In the above procedure, reverse the words "left" and "right" for DRT40CR models). Remove the modesty panel carefully, so that none of the wires become loose or disconnected.

d. 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 unit. See **Figure 63** on **Page 36**.

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

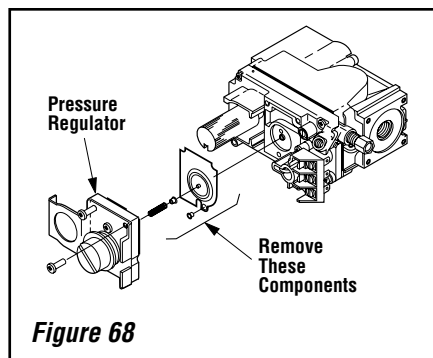
**Step 2.** Carefully remove the log set. **Exercise care as not to break the log set.**

**Step 3.** Referring to **Figure 67**, remove the burner.



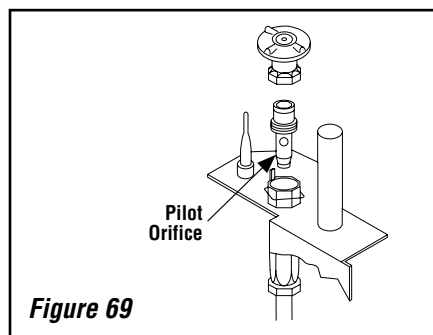
#### Millivolt Appliances

**Step 4.** Refer to **Figure 68** and the instructions provided with the kit. Using a Torx T20, 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.

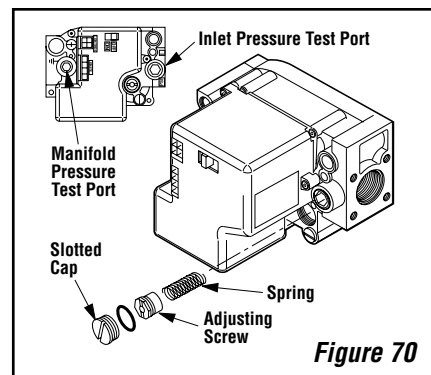
**Step 6.** Refer to **Figure 69** and remove the pilot hood assembly to access the hexed pilot orifice. Remove and replace the orifice with the one provided with the kit.



#### Electronic Appliances

**Step 7. Honeywell Electronic Valves -** See **Figure 70** 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 units. Silver cap and stainless steel spring for natural gas units. 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.

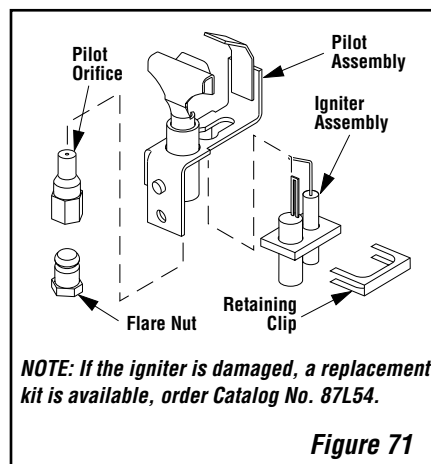
See **Figure 71** and replace the pilot orifice as follows: Remove the igniter assembly retainer clip, and carefully remove the igniter assembly.



**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.**



#### All Models

**Step 8.** (Refer to **Figure 67**)

**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 72** illustrates the orifice. Always check and verify correct orifice size.

**B.** Install the burner as shown in **Figure 73**.



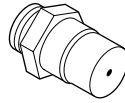
Ensure that the arm of the venturi of the burner is hooked onto the air shutter adjustment lever (refer to **Figure 67 on Page 41**). The primary air opening can be adjusted by rotating the adjustment lever from beneath the firebox floor. Refer to **Figure 65 on Page 36** for the recommended minimum primary air opening setting.

Burner Orifice Sizes (all models)*		
Model	Natural Gas drill size (inches)	Propane Gas drill size (inches)
ST and PF	(0.116") * 37L82 •	(0.065") * 74L88 •
CL and CR	(0.106") * 18L40 •	(0.061") * 42M79 •

**Table 49** \* Standard size installed at factory  
• Part/Cat. Number

\*For elevations of 0-4500 ft. or 0-1372 m

Figure 72



#### BURNER POSITIONING

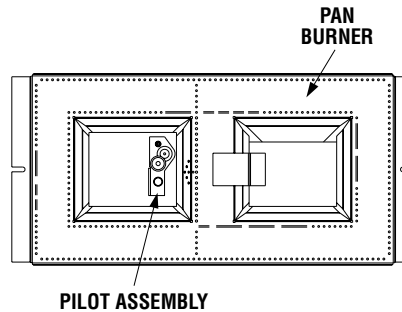


Figure 73

**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.

**ALWAYS TEST PRESSURE WITH THE VALVE REGULATOR CONTROL AT THE HIGHEST SETTING**

#### CARE AND OPERATIONS WARNINGS

##### ! 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.

##### ! 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.

#### 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 48**.

### **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.**

## **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**

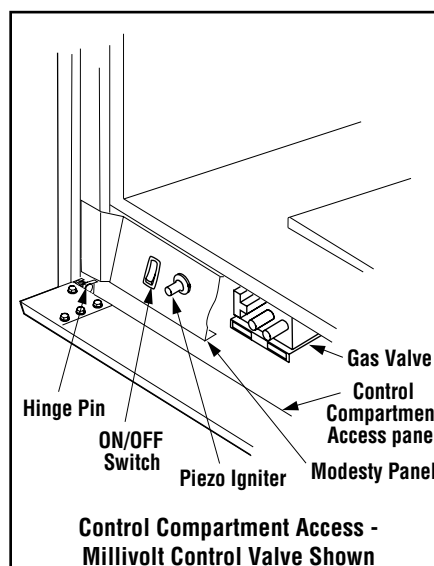
The gas controls can be found behind the hinged drop-down panel.

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 igniter, 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 73**.

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.

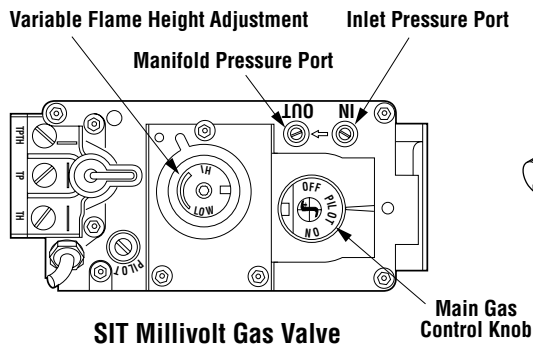
Operation of millivolt and electronic gas control systems are different. Before lighting and operating your appliance determine if you have a millivolt or electronic appliance.



**Figure 73**

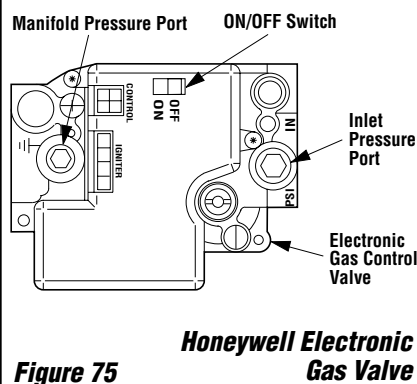
Refer to **Figure 73** for access to the gas control valve. Millivolt appliances will be fitted with the gas control valve shown in **Figure 74**.

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 igniter 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 59 (English) and Page 60 (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 1** 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 61 and 62** 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 contact IHP or your nearest IHP dealer to receive additional safety instruction labels free of charge.

Cat. No. H8024 Replacement Label Kit

IHP  
ComfortFlame.us.com

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

### SAFETY LABEL DIAGRAMS



### 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 parvenez pas à localiser les étiquettes, s'il vous plaît contactez IHP ou votre revendeur le plus proche pour recevoir IHP étiquettes d'instructions de sécurité supplémentaires gratuitement.

Étiquettes de remplacement, n° cat. H8024

IHP  
ComfortFlame.us.com

**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



### 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 límpiolo 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 usted es incapaz de localizar las etiquetas, por favor póngase en contacto con IHP, o con su distribuidor más cercano IHP recibir instrucción etiquetas de seguridad adicionales sin costo.

Juego de etiquetas de repuesto - N° de cat. H8024

IHP  
ComfortFlame.us.com

**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



Illustrations are for example only.  
Your accessories may be different.

Les illustrations sont par exemple  
uniquement. Vos accessoires  
peuvent être différents.

Las ilustraciones son sólo ejemplos.  
Tu accesorios pueden ser diferentes.

Figure A  
Figura A



Figure B  
Figura B



Figure C  
Figura C



## MAINTENANCE

### (See Maintenance Schedule, *Page 58*)

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 49*).

**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:



### WARNING

**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 *Pages 48 and 49* for ordering information).

### Re-Install Embers and Logs

Carefully follow placement instructions on *Pages 47 through 49*. 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 55*.

**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 and Pilot Flame Appearance

Periodically do a visual check of the burner flame and the pilot flame. Ensure that the burner flame appearance resembles the flame shown in *Figure 81* and as described in *Flame Appearance and Sooting* on *Page 53*. Refer to *Figure 57 and Pages 31-32* for more information about the pilot flame appearance. Contact a qualified service technician at once if any abnormal condition is observed.

### Small Area Paint Touch-up

Only use a factory supplied paint kit for touch-ups. Paint is available at your local 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 44*). If the surface later becomes stained or marred, it may be lightly sanded and touched up with spray paint.

## Front Glass Enclosure Panel, Removal and Installation

### 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 while the fireplace is in use.
- DO NOT abuse glass door by striking or slamming shut.

### 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

The door should easily close without needing to be pressed down. If it has to be pressed down to close, the gasket in the top of the door should be dressed so it lays on the glass.

### WARNING

Any safety screen, guard, or barrier removed for servicing an 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.

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.

#### Removing Glass Enclosure Panels (see Figure 76)

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 and pulling straight out from the unit once the brackets are disengaged.

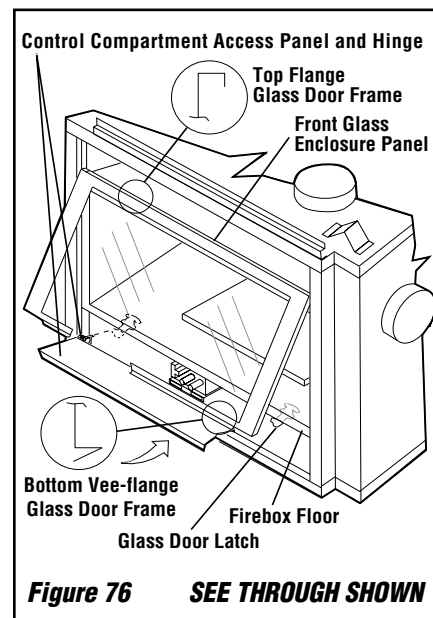
Locate the two (2) latches at the top of the control compartment and disengage them from the door frame bottom vee-flange, pulling down on their handles to open them.

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 two latches located underneath the firebox floor to the door's vee-flange. Close both the latches securely.

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



**Figure 76 SEE THROUGH SHOWN**

## INSTALL VERMICULITE, GLOWING EMBERS AND LOGS

**NOTE:** It is important to ensure proper log placement per the manual when installing these units. Verify pilot flame is not obstructed. See Verifying Appliance Operation on **Pages 31 and 32**.

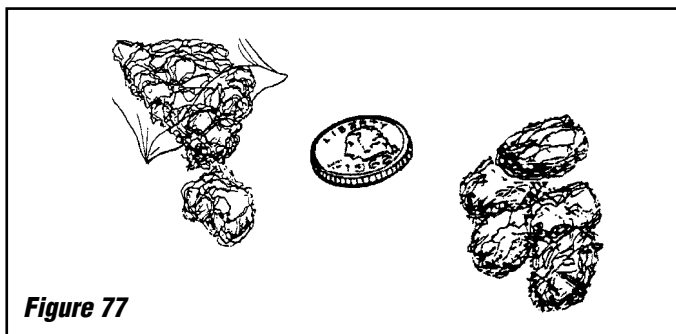
**NOTE:** Turn off all electricity to the appliance before you install vermiculite, embers and logs. DO NOT attempt to install the logs until the appliance installation has been completed, the gas line connected and tested for leaks and the initial burner operation has been checked out.

**READ WARNINGS ON THIS PAGE BEFORE PROCEEDING. FOLLOW THE LOG PLACEMENT INSTRUCTIONS EXACTLY**

### INSTALLATION STEPS:

1. **Remove the Front Face Assembly with Barrier, front glass enclosure panel** (see *Glass Enclosure Panel Removal and Installation Instructions, Page 9*).
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. **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.
5. **Place Volcanic Stone -** Spread volcanic stone evenly over firebox floor.
6. **Install Vermiculite -** Place some vermiculite on the firebox floor around the grate (the entire bag of vermiculite will NOT be used). See **Figure 6**. **DO NOT PLACE ANY VERMICULITE ON THE BURNER.**

**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).



**Figure 77**



Glowing Embers

**Figure 78**

### REFERENCE Firebox Accessories / Parts

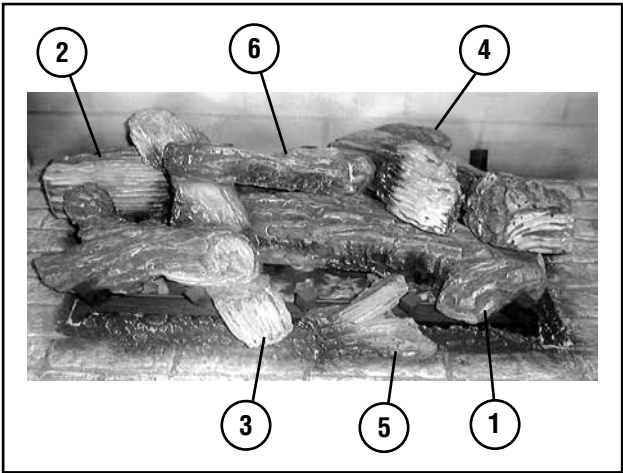
Cat. No.	Model No.	Description
88L53	FGE	Bag of Glowing Embers
80L42	FDVS	Bag of Decorative Volcanic Stone

## ! 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.**



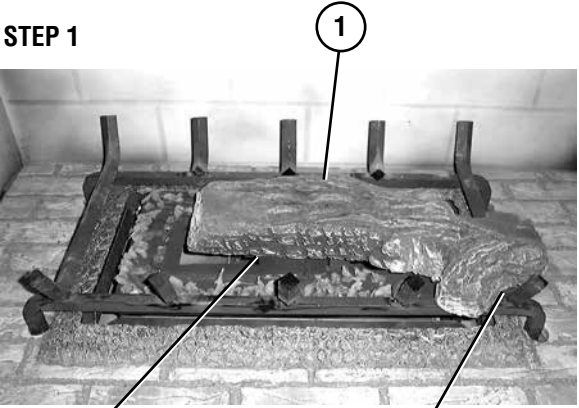
### DRT40PF, DRT40ST, DRT40CL AND DRT40CR LOG PLACEMENT



Log Number	Description
1	Log, Corner
2	Log, Rear/Left
3	Log, Front/Left
4	Log, Rear/Right
5	Log, Front/Center
6	Log, Center/Top

Catalog Number for the entire log set: 55M04

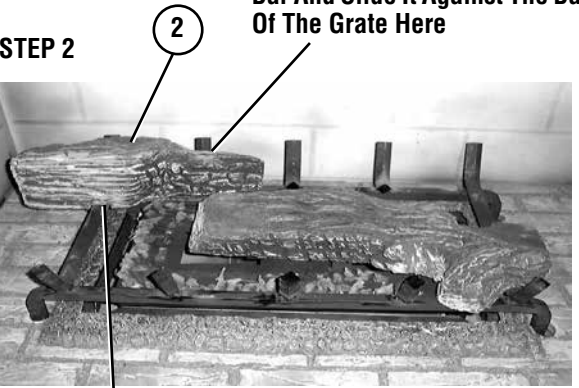
#### STEP 1



Position Groove At The Bottom Of Log (1) Over The Burner Log Support Bracket

Position The Groove At The Bottom Of Log (1) Over The Grate And Slide It Forward Against The Grate Here

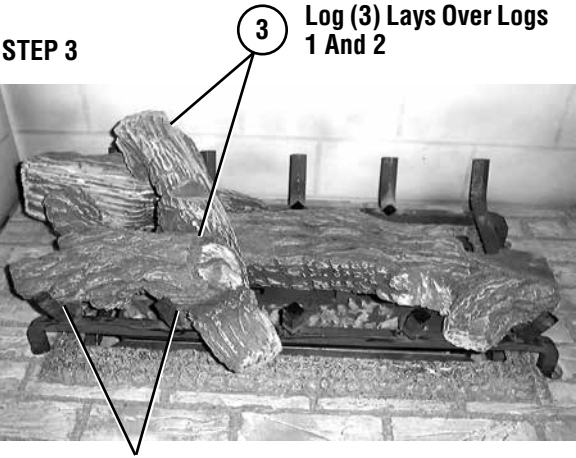
#### STEP 2



Position Groove At The Bottom Of Log (2) Over The Grate Here And Slide It Against The Back Of The Grate

Position Log (2) Over The Grate Bar And Slide It Against The Back Of The Grate Here

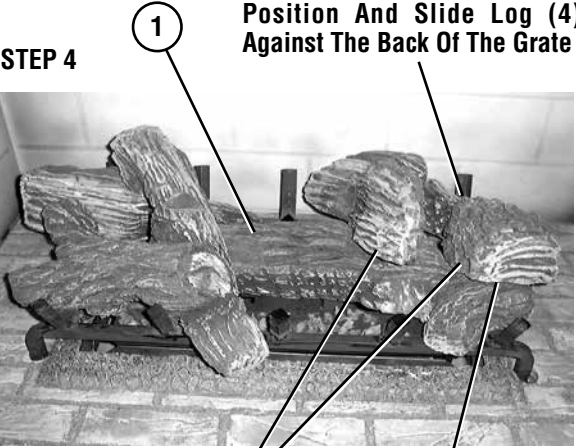
#### STEP 3



Log (3) Lays Over Logs 1 And 2

Place Bottom Hole Of Log (3) On Pin In Log (2). Position Grooves At The Bottom Of Log (3) Over The Grate.

#### STEP 4

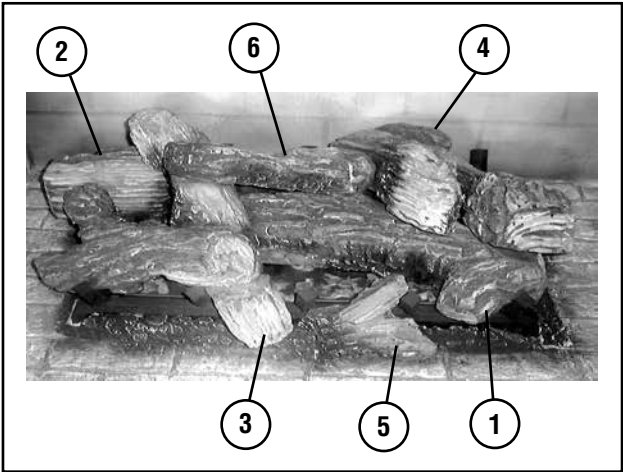


Position And Slide Log (4) Against The Back Of The Grate

Place Log (4) Over The Flat Spot On Log (1) Here

Figure 79

DRT40PF, DRT40ST, DRT40CL AND DRT40CR LOG PLACEMENT (CONTINUED)



Log Number	Description
1	Log, Corner
2	Log, Rear/Left
3	Log, Front/Left
4	Log, Rear/Right
5	Log, Front/Center
6	Log, Center/Top

Catalog Number for the entire log set: 55M04

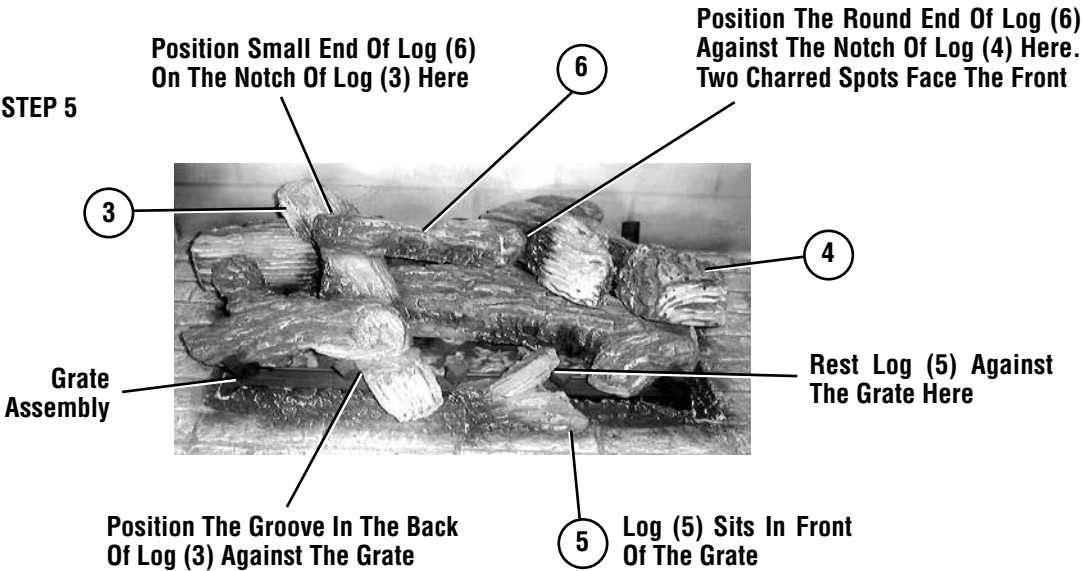


Figure 80

**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



**Glowing Embers (Rockwool)**

**Figure 81 - Burner Flame Appearance**

## BURNER FLAME ADJUSTMENTS

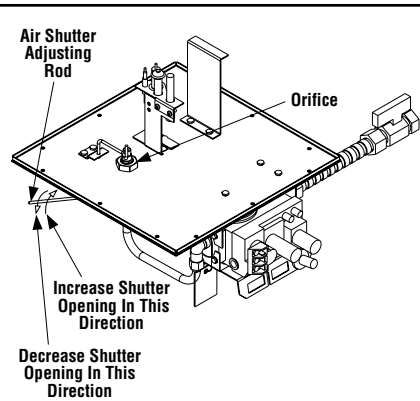
### ⚠ WARNINGS

- 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 81** 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 82**.
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 - Burners are omitted in this view for clarity.

MAIN BURNER FACTORY SHUTTER SETTING		
Models	Natural Gas inches (mm)	Propane Gas inches (mm)
DRT40ST DRT40PF DRT40CL DRT40CR	1/4" (6.35)	5/8" (15.88)

Adjustment Rod Positions (when viewed from above)

**Figure 82**

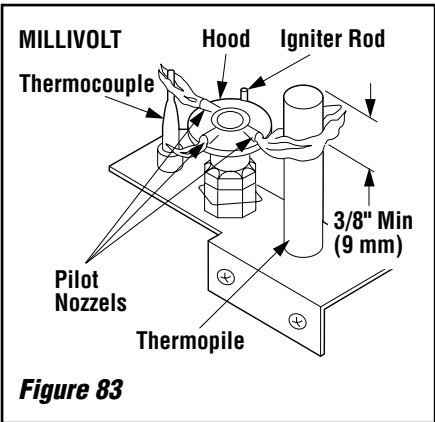
### Millivolt Appliance Checkout

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" (26 mm) beyond the hood at all three ports (see **Figure 83**). Replace logs if removed for pilot inspection.

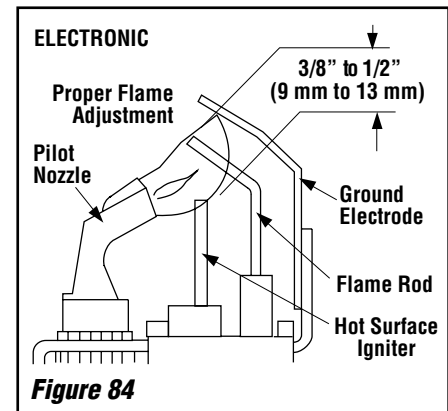
To light the burner; turn "ON" the remote wall switch and rotate the gas valve control knob counterclockwise to the "ON" position ("ON" will be at the top side of the valve).



**Figure 83**

### 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 12**.

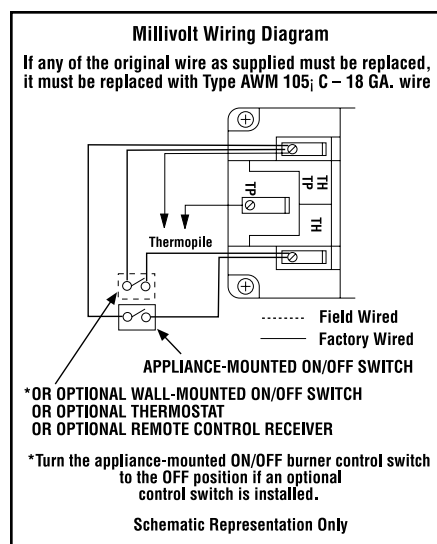


**Figure 84**

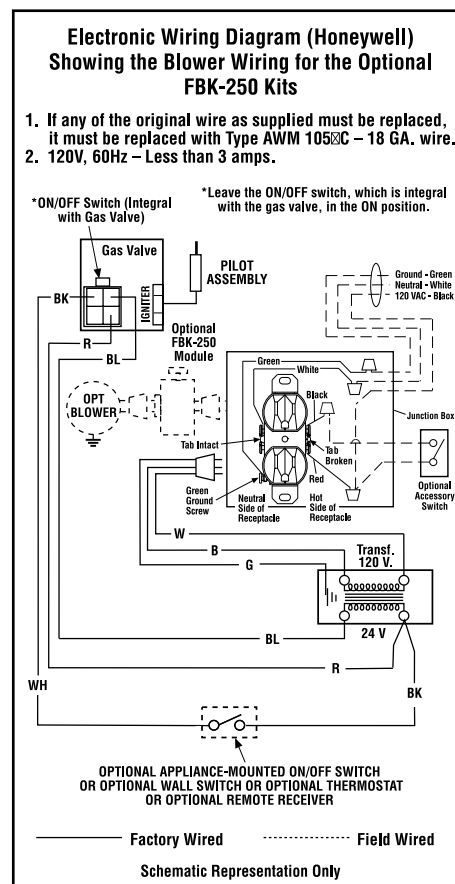
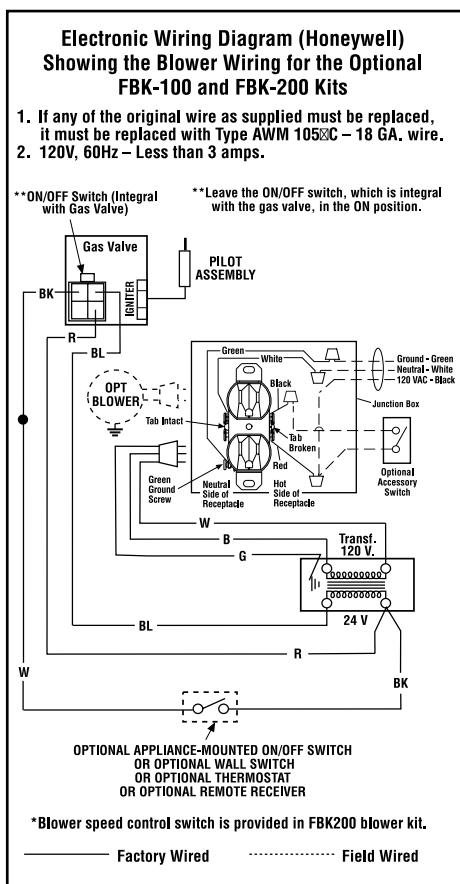
## WIRING DIAGRAMS

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 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 20-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](http://SuperiorFireplaces.us.com)

## ACCESSORY COMPONENTS



### Thermostatic or Manual modes

- LCD Display
- Up to 9 hour Count down Timer
- Includes batteries
- Child lock
- Low battery indicator
- Receiver may be wall mounted or placed in the valve compartment

Remote, LCD Stat, Thermostat, On/Off		
Cat. No.	Model No.	Description
H8861	RC-S-STAT	Remote Control



### State-of-the-art control with touch screen operation

- Backlit LCD display
- Wall mounted docking station for the transmitter
- Thermostatic or manual ON/OFF
- Programmable Weekday/Weekend modes
- Flame icon and low battery indicator
- Receiver may be wall mounted or placed in the valve compartment
- Includes batteries

Remote, Touch Screen, Thermostat, On/Off		
Cat. No.	Model No.	Description
H8865	RC-S-TOUCH	Remote Control



### Flame and Heat modulation

- Includes solenoid for SIT millivolt valves
- Thermostatic, manual or up to 9 hour Count-down Timer modes
- 3 Fan speed settings
- Child lock
- Low battery indicator
- Wall clip included
- Includes batteries

Remote With Hi/Low Flame, Millivolt		
Cat. No.	Model No.	Description
H8862	RC-S-MODMV	Remote Control



### Manual or up to 3 hr Countdown Timer modes

- LCD display
- Displays room temp. in °F or °C
- Flame icon and low battery indicator
- Includes batteries
- Wall clip included
- Receiver may be wall mounted or placed in the control compartment
- Includes white face plate
- Flame icon
- Low battery indicator
- Batteries included

Remote, Two Button, Timer, On/Off Or Timer Mode		
Cat. No.	Model No.	Description
H8860	RC-S-1	Remote Control



### Cost Effective Solution

- Simple On/Off operation

### Kit includes:

#### Remote and Receiver

RCKit4001, Simple On/Off		
Cat. No.	Model No.	Description
F2236	RCKit4001	Remote Control



### Wall Thermostat

- Wall surface mounted
- Thermostat or manual ON/OFF operation
- Large LCD screen to display room and set temperature in °F and °C
- Connects to wall switch wire

Wall Thermostat, On/Off and Thermostatic functions		
Cat. No.	Model No.	Description
H8864	WS-S-TSTAT	Wall Thermostat

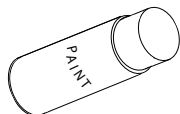


### Wall Control

- 4-button timer with 30/60/120/OFF minutes
- Wall surface mounted
- Connects to wall switch wire
- Perfect for rental and resort applications

Wall Switch, Countdown Timer		
Cat. No.	Model No.	Description
H8863	WS-S-TMR	Wall Switch

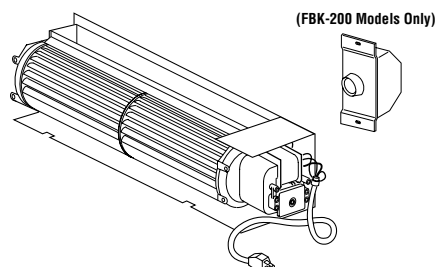
## ACCESSORY COMPONENTS CONTINUED



### Touch-Up Paint Kit

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

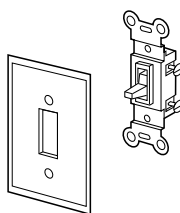
Touch-Up Paint Kits		
Cat. No.	Model No.	Description
F1881	SCITPSAB	Black Touch-Up Paint, Firebox Interior
F1882	SCTPSAB	Black Touch-Up Paint, Powder Coat Exterior



### Forced Air Blower 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 heat activation and a unit mounted switch which provides variable speed forced air circulation.

Blower Kits		
Cat. No.	Model No.	Description
80L84	FBK-100	Single Speed
80L85	FBK-200	Variable Speed with wall-mountable switch
80L86	FBK-250	Heat activated variable speed with unit mounted switch



### 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.

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



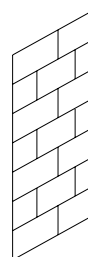
### Bag of Glowing Embers

### Bag of Volcanic Stone

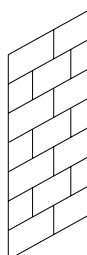
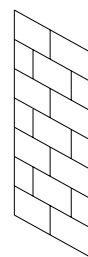
Replacement ember materials or volcanic stone are available for use with these appliances. Order kits as part of the periodic maintenance of the appliance.

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

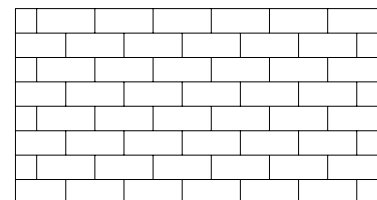
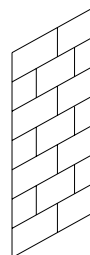
Panel Liner Kits	
Model No.	Catalog No. Model No.
DRT40PF	H0778 EBLK-PF
DRT40ST	H0779 EBLK-ST
DRT40CL	H0780 EBLK-CL
DRT40CR	H0781 EBLK-SR



H0779  
(Top Vent)



H0778  
(Top Vent)

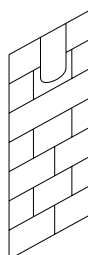
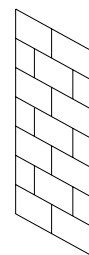


H0780 & H0781  
(Top Vent)

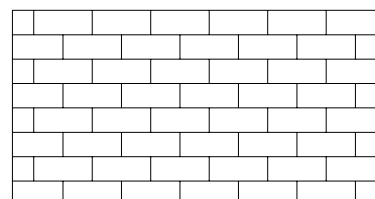
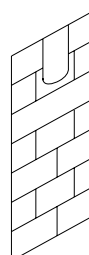
The brickaded liner kits include ceramic panels as shown here. The panels have brick-like features in relief.



H0779  
(Rear Vent)



H0778  
(Rear Vent)



H0780 & H0781  
(Rear Vent)



## 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 <b>Figure 9</b> on <b>Page 13</b> 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 <b>Figures 11 and 12</b> on <b>Page 14</b> . 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's 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 Glowing Ember Materials (rockwool)	Homeowner/Qualified Service Technician	Remove old glowing ember materials and vacuum the ember 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, glowing embers (rockwool), volcanic stone and vermiculite. Vacuum out interior of the firebox. Clean firebox walls and log grate. Replace logs, glowing embers and vermiculite as detailed in this manual.
Check Flame Patterns and Flame Height	Homeowner	Refer to <b>Figure 9</b> on <b>Page 13</b> 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. <b>DO NOT TOUCH OR ATTEMPT TO CLEAN GLASS WHILE HOT.</b>

## LIGHTING INSTRUCTIONS, MILLIVOLT - ENGLISH



### 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

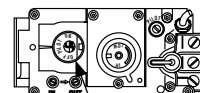
1. **STOP!** Read the safety information above on this label.
2. (If applicable) Set the thermostat to lowest setting. Turn wall on/off switch, unit mounted on/off switch or remote control switch "OFF."
3. Turn OFF all electric power to the appliance.
4. Access the control compartment.
5. Push in gas 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."

Gas Control Valves

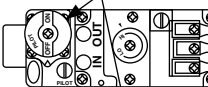
Pilot Assemblies

SIT

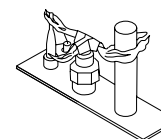
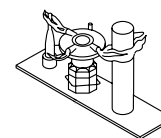
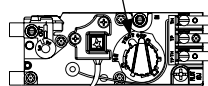


Gas Control Knobs


Robertshaw



Honeywell



### 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.**

## LIGHTING INSTRUCTIONS, MILLIVOLT - FRENCH



### 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

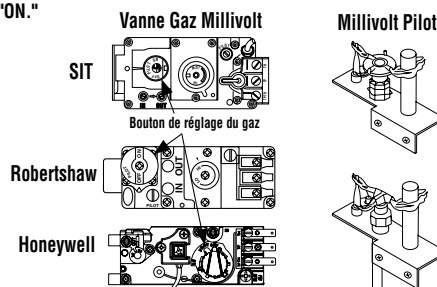
les instructions du fournisseur.

- 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. Attendre 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 "Pilote".
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 - ENGLISH



### FOR YOUR SAFETY READ BEFORE OPERATING

**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 is equipped with an ignition device which automatically lights the pilot. Do **not** try to light the pilot by hand.
- 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:

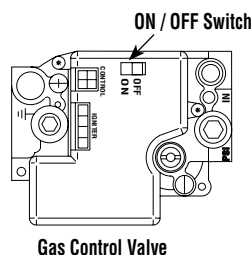
- Do not try to light any appliance.
- Do not touch any electric switch; do not use any phone in your building.

- 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 actuate the gas valve ON/OFF switch. Never use tools. If the switch will not move 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.

### OPERATING 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. This appliance is equipped with an ignition device which automatically lights the pilot. Do **not** try to light the pilot by hand.
5. Access the control compartment.
6. Turn the ON/OFF switch, on the gas control valve, to "OFF." Do not force.
7. 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.
8. Turn the ON/OFF switch, on the gas control valve, to "ON." Do not force.
9. Turn on all electrical power to the appliance.
10. (If applicable) Set thermostat to desired setting. Turn wall on/off switch, unit mounted on/off switch or remote control switch "ON."
11. Close control compartment.

12. If the appliance will not operate, follow the instructions "To Turn Off Gas To Appliance" and call your service technician or gas supplier.



Electronic Pilot Assembly

### 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. Turn the ON/OFF switch, on the gas control valve, 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.**

## LIGHTING INSTRUCTIONS, ELECTRONIC - FRENCH



### POUR PLUS DE SÉCURITÉ LIRE AVANT DE METTRE EN MARCHÉ

**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'un dispositif d'allumage qui allume automatiquement la veilleuse. Ne tentez pas d'allumer la veilleuse manuellement.

B. **AVANT DE FAIRE FONCTIONNER**, 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.

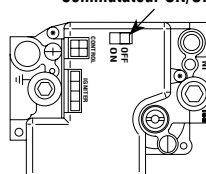
- Si vous ne pouvez rejoindre le fournisseur, appelez le service des incendies.
- C. N'utilisez que votre main pour manipuler l'interrupteur "ON/OFF" de la valve à gaz. N'utilisez jamais d'outils. Si l'interrupteur ne bouge pas manuellement, n'essayez pas de le réparer. Communiquez immédiatement avec un technicien de service qualifié. Toute tentative pour forcer l'interrupteur ou le réparer, risquerait de provoquer un incendie ou une explosion.
- 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 DE MISE EN MARCHÉ

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. Cet appareil est muni d'un dispositif d'allumage qui allume automatiquement la veilleuse. Ne tentez pas d'allumer la veilleuse manuellement.
5. Accédez au compartiment de contrôle.
6. Tournez l'interrupteur sur la valve de contrôle à "OFF." Ne pas forcer.
7. 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.

8. Tournez l'interrupteur sur la valve de contrôle à "ON." Ne pas forcer.
9. Mettez l'appareil sous tension.
10. (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."
11. Fermer le compartiment de contrôle.
12. Si l'appareil ne se met pas en marche, suivez les instructions intitulées « Comment couper l'admission de gaz de l'appareil » et appelez un technicien qualifié ou le fournisseur de gaz.

Commutateur ON/OFF



Valve Honeywell



Veilleuse de l'appareil électronique

### 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. Tournez l'interrupteur sur la valve de contrôle à "OFF." Ne pas forcer.
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.**

## 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.

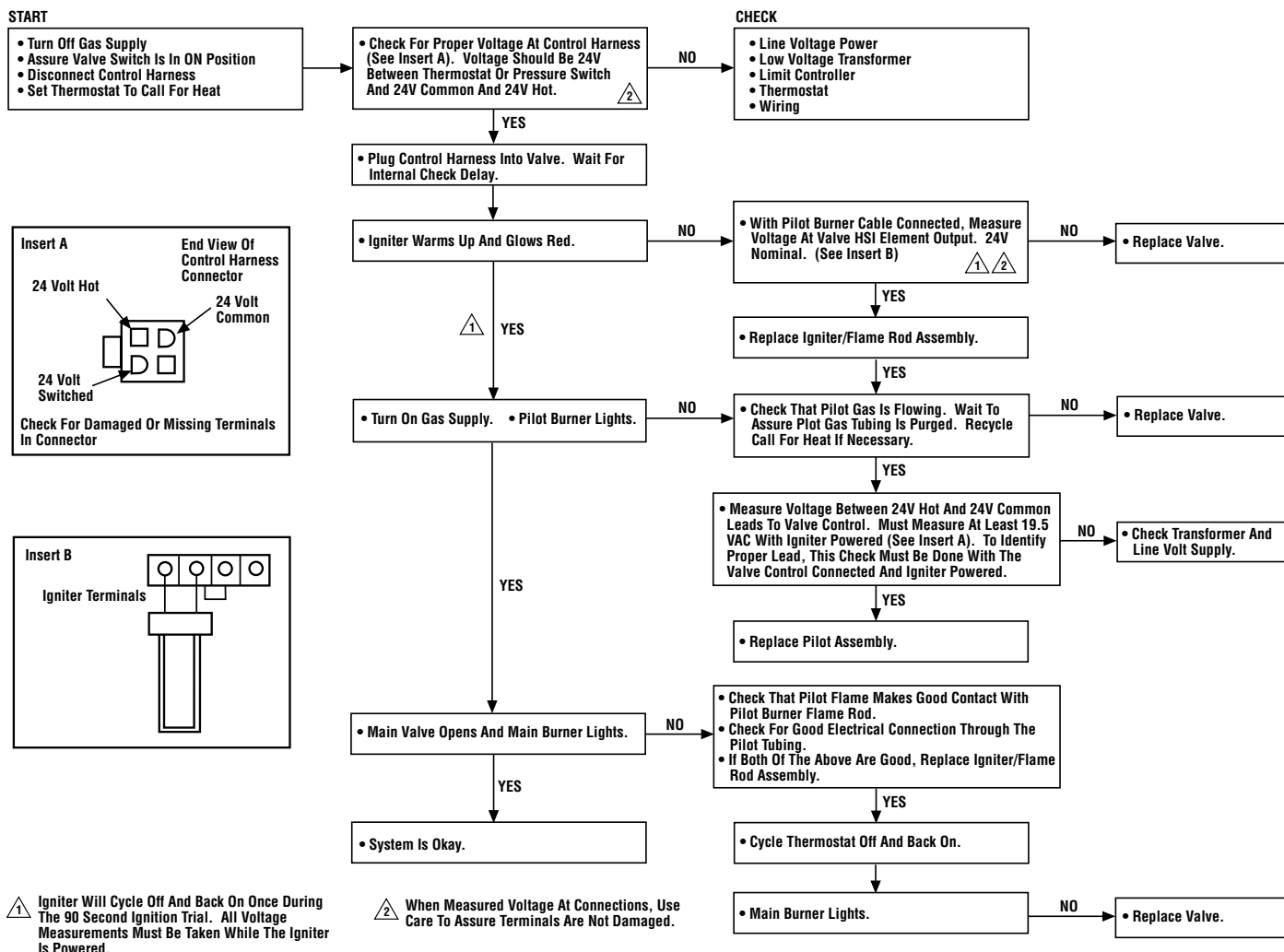
SYMPTOM	POSSIBLE CAUSES	CORRECTIVE ACTION
1. Spark igniter will not light pilot after repeated triggering of igniter button.	<b>A.</b> Defective igniter (no spark at electrode).	Check for spark at electrode and pilot; if no spark and electrode wire is properly connected, replace igniter.
	<b>B.</b> Defective or misaligned electrode at pilot (spark at electrode).	Using a match, light pilot. If pilot lights, turn off pilot and trigger the igniter 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 ( <b>Figure 11 on Page 14</b> ).
	<b>C.</b> Gas supply pressure errant.	Check inlet gas pressure. It should be within the limits as marked on the rating plate.
	<b>D.</b> Pilot orifice plugged.	Clean or replace pilot orifice.
2. Pilot will not stay lit after carefully following the lighting instructions.	<b>A.</b> Defective pilot generator (thermocouple).	Check pilot flame, it must impinge on thermocouple ( <b>Figure 11 on Page 14</b> ) 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.”	<b>A.</b> 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>B.</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.
	<b>C.</b> Plugged burner orifice.	Check burner orifice for stoppage and remove.
4. Frequent pilot/burner outage problem.	<b>A.</b> 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 ( <b>Figure 11 on Page 14</b> ).

## 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.  <b>NOTE:</b> 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.



NOTE: DIAGRAMS & ILLUSTRATIONS ARE NOT TO SCALE.



REPLACEMENT PARTS LIST						
No.	Description	Part No.	DRT40ST	DRT40PF	DRT40CL	DRT40CR
1	Hood (Black) 24"	J7537	0	1	1	1
2	Hood (Black) 40"	J7536	2	2	1	1
3	Glass Enclosure Assembly 24"	H6336	0	1	1	1
4	Glass Enclosure Assembly 40"	H8122	2	2	1	1
5	Log Set	55M04	1	1	1	1
6	Grate Assembly	H6287	1	1	1	1
7	Burner Assembly	55M42	1	1	1	1
9	Gasket, Venturi Tube Mounting	43K85	1	1	1	1
10	Venturi Tube Arm	42M80	1	1	1	1
11	Switch, Rocker	80L41	1	1	1	1
12	Air Shutter Adjustment Rod	H6321	1	1	1	1
13	Flexline Gas Conductor	93L32	1	1	1	1
14	Barrier, Front	J7420	2	2	1	1
15	Barrier, End	J7421	0	1	1	1
16	Front Face Assembly with Barrier	J7530	2	2	1	1
17	End Face Assembly with Barrier	J7531	0	1	1	1
---	Superior® Badge (logo)	J8150	1	1	1	1

**NOTE:** Ordering information for Volcanic Stone, Glowing Embers and Touch-up Paint can be found on **Page 57**.



### 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 LIST CONTINUED

### GAS CONTROLS — SIT MILLIVOLT

No.	DESCRIPTION	Natural		Propane	
		Part No.	Qty.	Part No.	Qty.
30	Gas Valve - SIT	H6209	1	88J53	1
31	Piezo Igniter	10K86	1	10K86	1
32	Pilot Assembly	69L17	1	69L18	1
33	Pilot Generator	60J79	1	60J79	1
34	Thermocouple	74L57	1	74L57	1
35	Pilot Tube	74L56	1	74L56	1
36	Electrode And Cable	H6212	1	H6212	1
37a	Orifice ST/PF	37L82	1	74L88	1
37b	Orifice CR/CL	18L40	1	42M79	1

### GAS CONTROLS — HONEYWELL ELECTRONIC

No.	DESCRIPTION	Natural	
		Part No.	Qty.
40	Gas Valve - Honeywell	62L18	1
41	Pilot Assembly	62L14	1
42	Transformer	42J32	1
43	Igniter Assembly (Kit)	87L54	1
44a	Orifice ST/PF	37L82	1
44b	Orifice CR/CL	18L40	1
46	Pilot Tube	H6333	1

Contact an Innovative Hearth Products dealer to obtain any of these parts.



#### 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.



#### WARNING

Never use substitute materials. Use of non-approved parts can result in poor performance and safety hazards.

# 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 purchase. 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](http://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	

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.

