

## DISCONTINUED ITEM

THIS ITEM HAS BEEN DISCONTINUED AND IS NO LONGER IN PRODUCTION. PLEASE CONTACT YOUR LOCAL MONTIGO DEALER REGARDING MAINTENANCE AND SPARE PARTS AVAILABILITY.

www.montigo.com

**Operation & Maintenance Manual**  
Please read all instructions prior to installation.

# C-Series DV Gas Fireplace

**C34DV Indoor**  
**C38DV Indoor**



C38DV Indoor Shown

### **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.

### **Safety Notice:**

Glass doors on gas fireplaces are extremely hot while the fireplace is on and remain hot even after the fireplace has been turned off. Safety screens are available and can reduce the risks of severe burns. Please keep children away from the fireplace at all times.

### **For Your Safety:**

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

 **Warning:** If the information in these instructions is not followed exactly, a fire or explosion may result causing property damage, personal injury or death.

### WHAT TO DO IF YOU SMELL GAS

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

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



- Installer: Leave this manual with the appliance.
- Consumer: Retain this manual for future reference.



**Warning:**  
 Read this manual before installing, operating or troubleshooting this appliance. Please retain this owner's manual for future reference.

## Congratulations!

Congratulations on selecting a Montigo gas fireplace, an elegant and well designed gas fireplace built to your specifications. The Montigo gas fireplace you have selected is designed to provide the utmost in safety, reliability, and engineering standards.

As the owner of this new fireplace, you'll want to read and carefully follow all the instructions contained in this Installation, Operations and Maintenance manual. Pay special attention to all cautions, warnings, and important warnings.

This owner's manual should be retained for future reference. We suggest that you keep it with all your other important documents and product manuals.

The information contained in this owner's manual, unless noted otherwise, applies to all models, and gas control systems.

Your new Montigo gas fireplace will give you years of durable, reliable use. Welcome to the Montigo family of gas fireplace products.

## Safety Alert Key:

- **DANGER!** Indicates a hazardous situation which, if not avoided will result in death or serious injury.
- **WARNING!** Indicates a hazardous situation which, if not avoided could result in death or serious injury.
- **CAUTION!** Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
- **NOTICE:** Used to address practices not related to personal injury.
- **Important:** Used to address practices not related to personal injury.

# Table Of Contents

<p><b>Congratulations</b></p> <p><b>Safety Alert Key</b></p> <p><b>Introduction</b> ..... 3</p> <p><b>Installation</b></p> <p style="padding-left: 20px;">Installing and Framing the Fireplace ..... 4</p> <p style="padding-left: 20px;">Installing the Gasline ..... 5</p> <p style="padding-left: 20px;">The Remote Switch ..... 6</p> <p style="padding-left: 20px;">Direct Vent Installation ..... 5</p> <p style="padding-left: 40px;">General Venting Requirements ..... 5</p> <p style="padding-left: 40px;">Terminations ..... 6</p> <p style="padding-left: 40px;">Top Vent Venting Runs ..... 7 - 9</p> <p style="padding-left: 40px;">Rear Vent Venting Runs ..... 10 - 11</p> <p style="padding-left: 20px;">Finishing around the fireplace</p> <p style="padding-left: 40px;">Facing ..... 12</p> <p style="padding-left: 40px;">Mantels and Surrounds ..... 12</p>	<p style="padding-left: 20px;">Wiring ..... 13 - 14</p> <p style="padding-left: 20px;">Installing Optional Fans ..... 13</p> <p style="padding-left: 20px;">Removing and Installing the Door ..... 15</p> <p style="padding-left: 20px;">Installing the Horizontal Trim ..... 15</p> <p style="padding-left: 20px;">Positioning the Logset ..... 16</p> <p><b>Operation</b> ..... 17 - 20</p> <p><b>Maintenance</b> ..... 20 - 22</p> <p style="padding-left: 20px;">Spare Parts ..... 22</p> <p><b>Warranty</b> ..... 23</p> <p><b>Appendix</b></p> <p style="padding-left: 20px;">A. Termination Locations ..... 24</p> <p style="padding-left: 20px;">B. State of Massachusetts / Amendment ..... 25</p> <p><b>Notes</b> ..... 26</p>
---	--

# Introduction

Thank You for choosing a Montigo Gas Fireplace.

## About this Fireplace:

The **C-Series DV** is a dual burner fireplace with glowing embers and five piece ceramic fibre logset. The fireplace is available in two models, and in top or rear vent for each model.

### Standard Log Set

The **C34DV** is rated for Natural Gas at 20,000 BTU/H (5.86 Kilowatts) Input or Propane at 20,000 BTU/H (5.86 Kilowatts) Input.

- **C34DT**; Top Vent, Millivolt Pilot.
- **C34DR**; Rear Vent, Millivolt Pilot.
- **C34DT-I**; Top Vent, Intermittent Pilot (HSI).
- **C34DR-I**; Rear Vent, Intermittent Pilot (HSI).
- **C34DT-F**; Top Vent, Electronic Ignition (IPI).
- **C34DR-F**; Rear Vent, Electronic Ignition (IPI).


### Standard Log Set

The **C38DV** is rated for Natural Gas at 25,000 BTU/H (7.32 Kilowatts) Input or Propane at 25,000 BTU/H (7.32 Kilowatts) Input.

- **C38DT**; Top Vent, Millivolt Pilot.
- **C38DR**; Rear Vent, Millivolt Pilot.
- **C38DT-I**; Top Vent, Intermittent Pilot (HSI).
- **C38DR-I**; Rear Vent, Intermittent Pilot (HSI).
- **C38DT-F**; Top Vent, Electronic Ignition (IPI).
- **C38DR-F**; Rear Vent, Electronic Ignition (IPI).

## How to use this manual:

This manual covers installation, operation and maintenance. Lighting, operation and care of this fireplace can be easily performed by the homeowner. However, all installation and service work should be performed by a qualified or licensed installer, plumber, or gasfitter who is qualified or licensed by the state, province, region, or governing body in which the appliance is being installed.

This manual covers all models and unless otherwise specified, the designation **C-Series DV** refers to all models. Sections which are specific to a particular model are marked with a  symbol, plus the appropriate model number.

## Warranty and Installation Information:

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

- Modification of the fireplace and/or components including Direct-Vent assembly or glass doors.
- Use of any component part not manufactured or approved by Montigo in combination with this Montigo fireplace system.
- Installation other than as instructed in this manual.

Consult your local Gas Inspection Branch on installation requirements for factory-built gas fireplaces. Installation & repairs should be done by a qualified contractor.

**Installations in Canada** must conform to the current **CAN/CGAB-149.1** and **.2** Gas Installation Code and local regulations. If the optional air-circulating fan kit is installed, it must be electrically grounded in accordance with **CSA C22.1** Canadian Electrical Code Part 1 and/or Local Codes.

**Installations in the USA** must conform to local codes, or in the absence of local codes to the National Fuel Gas Code, **ANSI Z223.1-1988**. If the optional air-circulating fan is installed, it must be grounded in accordance with local codes or, in the absence of local codes, with the National Electrical Code, **ANSI/NFPA 70-1987**. See **Appendix B** for installation within the **State of Massachusetts** accordance with local codes or, in the absence of local codes, with the National Electrical Code, **ANSI/NFPA 70-1987**.


See **Appendix B** for installation within the **State of Massachusetts**.



# WARNING



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



## CAUTION!

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

- Children and adults should be alerted to the hazards of the high surface temperature, which could cause burns or clothing ignition.
- Young children should be carefully supervised when they are in the same room as the appliance.
- Clothing or other flammable materials should not be placed on or near the appliance.

# Installation



## Installing and Framing the Fireplace

The fireplace may be installed in any location that maintains proper clearances to air conditioning ducts, electrical wiring and plumbing. Safety, as well as efficiency of operation, must be considered when selecting the fireplace location. Try to select a location that does not interfere with room traffic, has adequate ventilation, and offers an accessible pathway for Direct Vent installation. Refer to **page 4 - Vent Installation** for more information.

The fireplace dimensions are shown below:

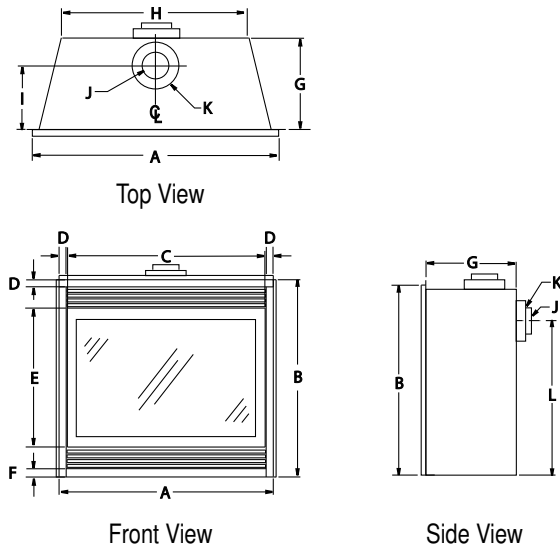


Figure 1. Fireplace dimensions.

	A	B	C	D	E	F	G	H	I	J	K	L
C34-DV	33 <sup>3</sup> / <sub>4</sub>	31 <sup>1</sup> / <sub>2</sub>	31	1 <sup>1</sup> / <sub>4</sub>	18	1	11 <sup>3</sup> / <sub>4</sub>	21 <sup>3</sup> / <sub>4</sub>	8	5	8	25 <sup>1</sup> / <sub>4</sub>
C38-DV	37 <sup>3</sup> / <sub>4</sub>	34 <sup>1</sup> / <sub>2</sub>	34 <sup>3</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>4</sub>	21	1	15 <sup>7</sup> / <sub>8</sub>	24 <sup>1</sup> / <sub>8</sub>	9	5	8	28 <sup>5</sup> / <sub>8</sub>

### Clearances

These clearances apply to all dimensions *except the framed opening*, where the clearance to combustibles is 0". The **C-Series DV** clearances to combustible materials are:

	C34-DV	C38-DV
Top - Rear Vent *	6 1/2"	6 1/2"
Top - Top Vent	13 1/2"	13 1/2"
Back	0"	1"
Sides	1"	0"
Floor	0"	0"
Mantle**	6"	8"

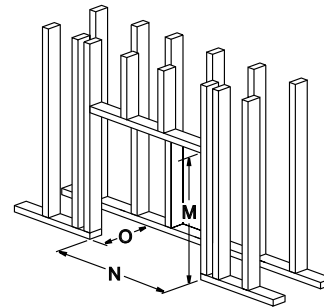
\* Clearance from the top of the fireplace to a combustible ceiling within the fireplace enclosure.

\*\* Refer to graph and requirements on Page 11.

Unprotected combustible walls which are perpendicular to the fireplace opening, must not project beyond the shaded area shown in **Figure 25**.

For protection against freezing temperatures, it is recommended that outer walls of the chase be insulated with a vapor barrier. This will reduce the possibility of a cold-air convection current on the fireplace.

## Framing



\* When sheetrock is not used behind the fireplace, framing depth may be reduced by 5/8"

Figure 2. Framing dimensions.

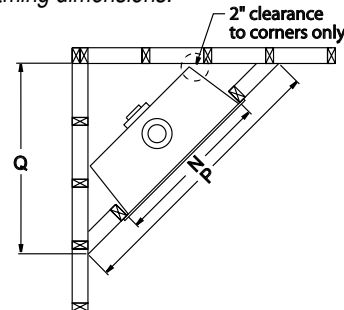


Figure 3. Minimum Corner framing dimensions, using a 45° elbow.

When installing a shelf over the top of the fireplace, the following guidelines must be adhered to: For Rear Vent applications the minimum clearance from the top of the fireplace to a shelf is 6 1/2". For Top Vent applications, the minimum clearance is 13 1/2". (Minimum 2" clearance must still be maintained around the vent pipes.)

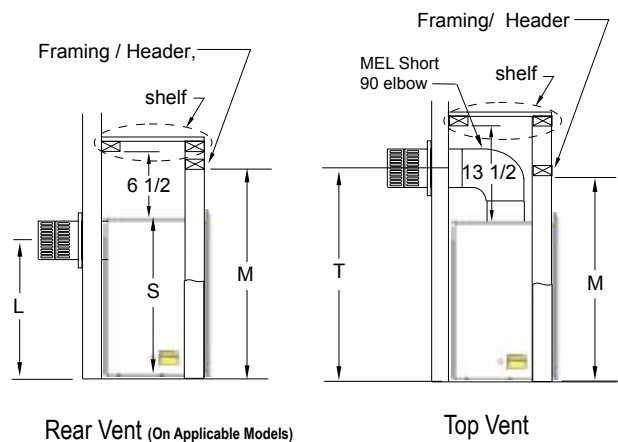


Figure 4. Framing for shelves over the fireplace.

	M	N	O	P	Q	R	T
C34-DV	36 <sup>3</sup> / <sub>4</sub>	33	14 <sup>1</sup> / <sub>2</sub>	50	35 <sup>5</sup> / <sub>8</sub>	30 <sup>3</sup> / <sub>8</sub>	39 <sup>7</sup> / <sub>8</sub>
C38-DV	39 <sup>3</sup> / <sub>4</sub>	37	17 <sup>5</sup> / <sub>8</sub>	56	39 <sup>5</sup> / <sub>8</sub>	33 <sup>3</sup> / <sub>8</sub>	42 <sup>1</sup> / <sub>8</sub>

### WARNING!

When this appliance is installed directly on any combustible material other than wood flooring, it must be installed on a metal or wood panel extending the full width and depth of the appliance.

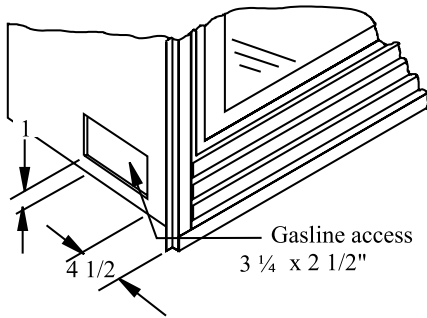


# Installation

## Installing The Gas Line

The gas line must be installed before finishing the **C-Series DV** Fireplace. **Natural Gas** requires a minimum inlet gas supply pressure of 5.5" W.C. & a manifold pressure of 3.5" W.C. **Propane Gas** requires a minimum inlet gas supply pressure of 11" W.C. & a manifold pressure of 10" W.C. Provision must also be made for a 1/8" N.P.T. plugged tapping and be accessible for test gauge connection immediately upstream of the gas supply controls to the appliance. The fireplace gas connection and the main operating gas valve is located behind the removable trim at the bottom of the unit and need only be attached to the gas line with an approved fitting, as required by the **applicable installation codes**.

- Only use gas shut-off valves approved for use by the state, province, region, or governing body, in which the appliance is being installed, or as required by the applicable installation codes.
- Flexible gas connectors must not exceed 3 feet in length, unless it is allowable within applicable installation codes.



**Figure 5.** Gas line access.

The appliance and its individual shut-off 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 psig (3.5 kPa).

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

**Note:** After gas line is connected, **each appliance connection, valve and valve train** must be checked while under normal operating pressure with either a liquid solution, or leak detection device, to locate any source of leak. Tighten any areas where bubbling appears or leak is detected until bubbling stops completely or leak is no longer detected. **DO NOT use a flame of any kind to test for leaks.**

## Vent Installation

This section covers the installation of direct venting and terminations.

### Installation Requirements

- **C-Series DV** fireplaces are certified for use with Montigo Premium Series (5"/8") venting components. The **C-Series DV Top Vent** may be used with the Montigo Standard Series (4"/7") components on vertical vent runs only.
- **Minimum 1" clearance to combustibles around the vent pipe.**
- Use only **certified Montigo vent components**. (Use of other parts will void the Montigo warranty, and may impede the operation of the fireplace.)

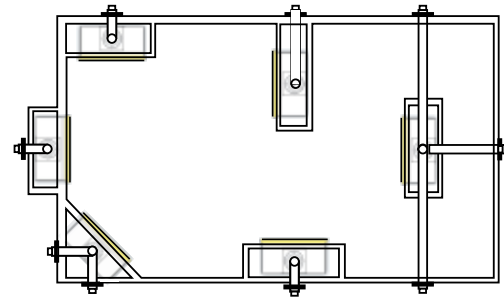
- All joints must be secured with a minimum of two screws per joint
- Vent terminations must not be recessed in walls or siding
- Horizontal runs must be supported by a minimum of two supports per horizontal run. A minimum of one screw on each side of support is also required
- Flex vent sections may be stretched up to 50% of their total length (eg. a 24" section may be stretched to 36")
- Maximum horizontal run for a flex section with no vertical rise is 3 feet.
- Flex vent sections over 3 feet must fall within the limits set by the venting graph and must have a minimum vertical rise of 3 inches per foot of flex.
- Solid vent sections may be cut less than half way from the female end
- Venting components can be used in any combination of solid/rigid pipe or flex pipe and in any orientation (Male connectors can face in any direction)

### Vent Terminations

#### Selecting A Termination Location

Choosing your vent termination location will help to determine whether you need to use a top vent or rear vent fireplace. **Figure 6**, below, shows typical fireplace locations and the venting options they provide.

For a more detailed diagram of allowed termination locations, see **Appendix A**.



**Figure 6.** Fireplace locations and vent terminations.

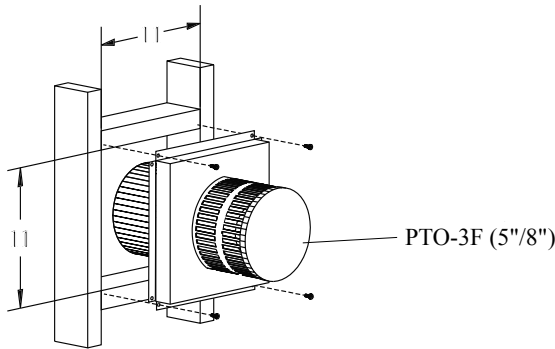
## ⚠ CAUTIONS!

- Vent terminations can be very hot. If the termination is less than 7 feet above a public walkway, it should be fitted with a certified Montigo Heat Guard. (Part no. PTKOG).
- Do not obstruct, or attempt to conceal the vent termination. These actions will affect the operation of the fireplace, and may be hazardous.
- In heavy snow areas, take extra care to prevent snow buildup from obstructing the vent termination.
- Use Montigo Vinyl Heat Shield (Part no. VSS) when using on applications with vinyl siding to guard against possible damage.

# Installation

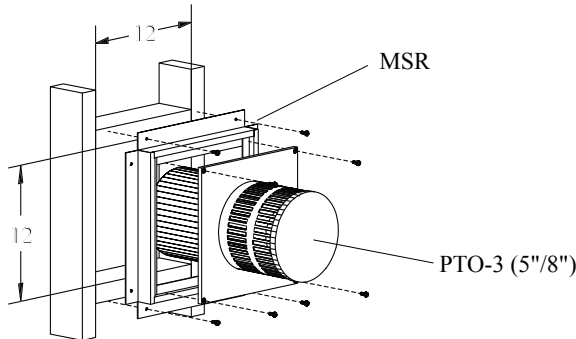


## Installing Terminations with Built-In Frames



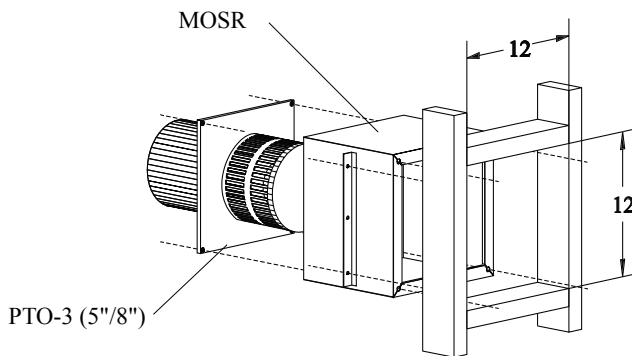
1. Frame the termination opening to 11" x 11".
2. Fasten the termination to the studs using a minimum of 4 screws.

## Installing Terminations with MSR Frames



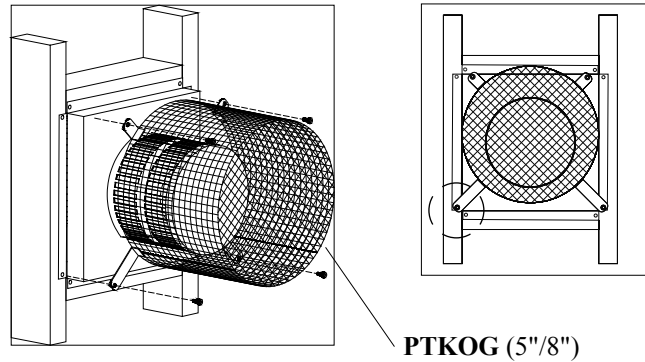
1. Frame the termination opening to 12" x 12".
2. Fasten the termination to the studs using a minimum of 4 screws.

## Installing Terminations with MOSR Frames



1. Frame the termination opening to 12" x 12".
2. Fasten the MOSR frame to the interior side of the studs using a minimum of 4 screws.
3. Insert the termination into the MOSR frame as shown here, and attach by screwing through the four pilot holes in the termination.

## Installing Heat Guards over Terminations



1. Ensure that the two **long** mounting brackets are facing the bottom of the termination. (See inset). This will provide more heat protection at the top of the termination, where temperatures are highest.
2. Attach to the faceplate of the termination using four sheet metal screws.

## Installing The Remote Switch

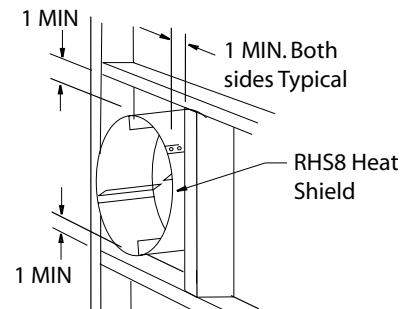
The **C-Series DV's** gas valve, located behind the lower trim, may be connected to a wall switch. The valve will either generates its own power on a **millivolt circuit** or draws its power from an **AC connection** inside the fireplace, depending on the model of your unit. **Use only low voltage wire, and DO NOT** connect any external power to the remote switch.

Refer to **Figures 26 & 27** for wiring requirements.

**Note:** The switch location must not exceed 30' from the fireplace.

## Heat Shields

Due to high flue temperatures, heat shields are required on all **C Series DV** installations (except those with vertical terminations) at the point where the venting connects to the termination. With the heat shield, vent clearances can be maintained at 1".



**Figure 8.** Heat Shield. Install by sliding over the vent pipe where it passes through combustible construction.



# Installation

## Top Vent Venting Runs

For the **C-Series DV Top Vent**, there are two types of installations: A) Through-The-Wall Installations and B) Vertical (Through-The-Roof) Installations.

### A) Through-The-Wall Installations

Before you install any venting, you must determine whether the venting run will be acceptable. Unacceptable venting can affect the fireplace's combustion.

#### The Venting Graph

Measure the vertical height from the fireplace hearth to the centre of the termination and the horizontal run from the fireplace flue collar to the wall flange of the termination. Plot on the Venting Graph (**Fig. 9**) with an 'X'.

If the 'X' falls on or above the top boundary of the shaded area, the installation is acceptable.

## C-Series DV

### Example A: (Acceptable Installation)

If the vertical dimension from the hearth is 84" and the horizontal run to the wall flange of the vent termination is 30", this would be an acceptable installation.

### Example B: (Acceptable Installation)

If the vertical dimension from the hearth is 108" and the horizontal run to the wall flange of the vent termination is 120", this would be an acceptable installation.

### Example C: (Unacceptable Installation)

If the vertical dimension from the floor of the fireplace is 72" and the horizontal run to the wall flange of the vent termination is 84", **this would NOT be an acceptable installation.**

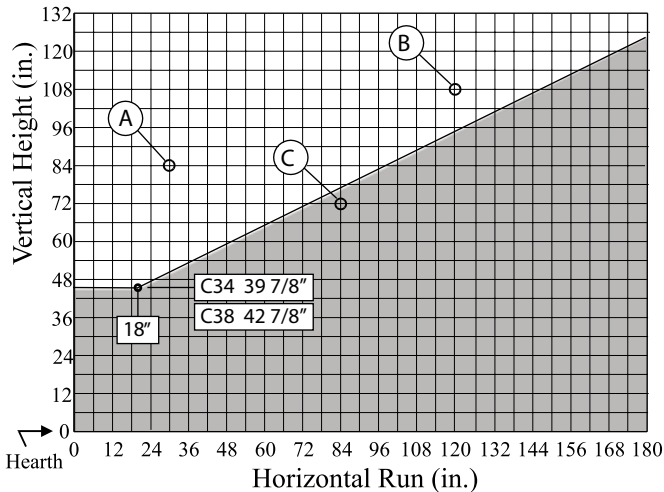


Figure 9. C34-DV, C38-DV Top Vent Venting Graph

## Installation of Rear Vent DV

The following venting components are available for the **Rear Vent installation:**

	5" / 8" Venting
A - Termination	PTO-3 (3" Length) PTO-3F (3" Length)
B - Stucco Kits	MSR (Stucco Frame) MOSR (Stucco Can) BSR ( Brick Can)
C - Flex Sections	PFL-1 (12" Section) PFL-2 (24" Section) PFL-3 (36" Section) PFL-4 (48" Section)
D - Rigid Sections	PEXT-1 (12" m/f Section) PEXT-2 (24" m/f Section) PEXT-3 (36" m/f Section) PEXT-4 (48" m/f Section)
E - Elbows	PEL-90MM (m/m 90° Elbow) PEL-90FF (f/f 90° Elbow) PEL-90FM (f/m 90° Elbow)

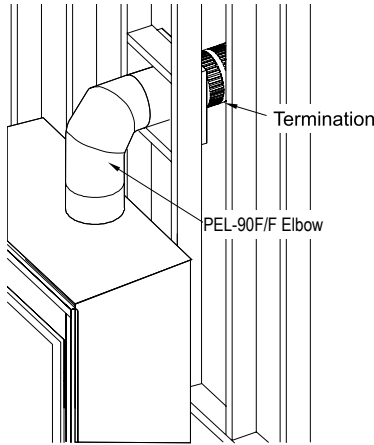
**NOTES:** All dimension lengths for vertical or horizontal runs are measured from centre of the vent pipe. Venting runs *must* fall within the limits set by the venting graph (see **Figure 9**).

# Installation



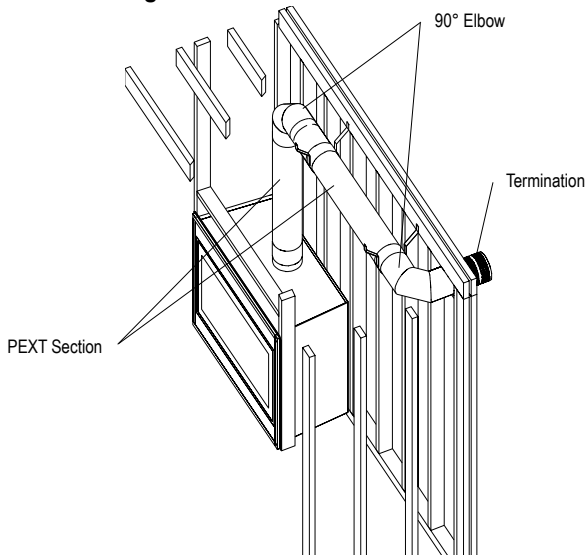
**Example 1:**

For our shortest venting configuration use components A and E (see table on page 6).



**Figure 10.** Typical Top Vent installation. If the 90° elbow is installed directly on the fireplace, for height to the center of the termination see chart on page 4.

**Horizontal Venting**



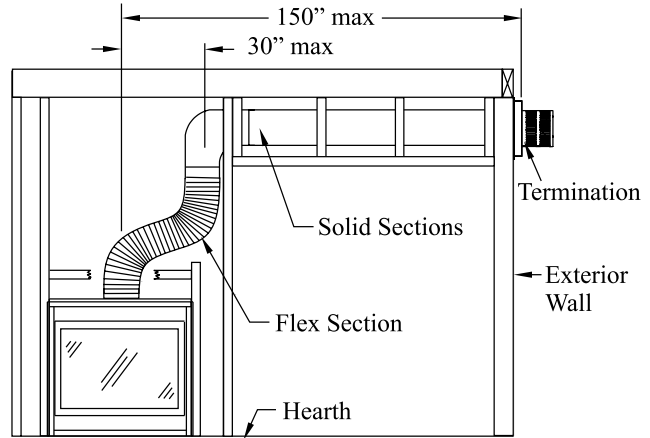
**Figure 11.** Typical Top Vent installation. The solid sections can be used in various combinations to obtain the desired vent run. The vent run must fall within the limits set by the venting graph.

**Example 2:**

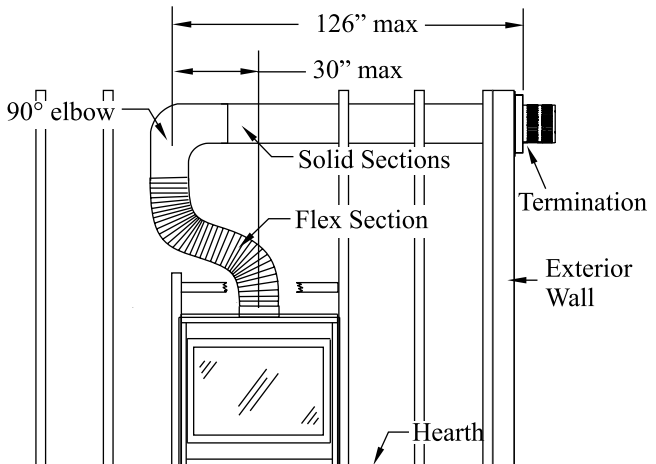
Rigid sections and an elbow used in conjunction with 3 ft. flex section (MFL-3) will, when extended in a five foot chase, allow for a maximum horizontal run of twelve and one-half feet from the centre of the fireplace to outside wall and a minimum of 7'6" when retracted in opposite direction (see Figure 12 & 13).

"C" flex sections and "D" rigid sections may be used in conjunction with one another to obtain different possible horizontal length installations, Figure 13.

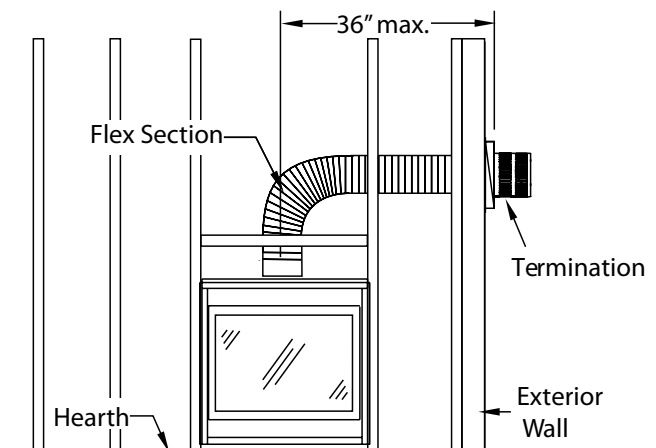
**NOTE:** Flex section with no vertical rise must not exceed maximum horizontal length of 3 feet (see Figure 14). Flex runs over 3 feet must fall within the limits set by the venting graph, and must have a minimum vertical rise of 3" per foot of flex.



**Figure 12.** Extended Installation using a combination of solid and flex venting. Use the vent graph to determine your allowable run, then select appropriate components.



**Figure 13.** Retracted Installation using a combination of solid and flex venting. Use the vent graph to determine your allowable run, then select appropriate components.



**Figure 14.** Horizontal flex installation with no vertical rise.

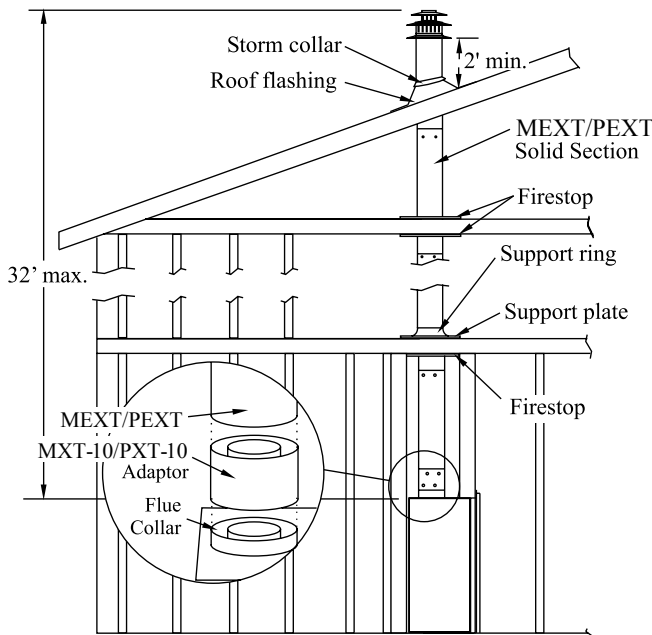


# Installation

## B. Vertical (Through-The-Roof) Installations

- Vertical rise > 12' can be reduced
  - Vertical Terminations must be installed:
    - minimum 2' (two feet) above the highest point where vent passes through the roof.
    - minimum 6' (six feet) from a mechanical air inlet
    - minimum 18" (1 1/2 feet) from a parapet wall.
  - Maximum vent height is 32 feet above fireplace.
- Note: Flame characteristics will change if the maximum vent height is used.
- Minimum clearances 1" from vent to all combustible materials must be maintained.

	4" / 7" Venting	5" / 8" Venting
A - Termination	MVTK-1	PVTK-1
B - Flex Sections	MFL-1 (12" Section) MFL-2 (24" Section) MFL-3 (36" Section) MFL-4 (48" Section)	PFL-1 (12" Section) PFL-2 (24" Section) PFL-3 (36" Section) PFL-4 (48" Section)
C - Rigid Sections	MEXT-1 (12" m/f Section) MEXT-2 (24" m/f Section) MEXT-3 (36" m/f Section) MEXT-4 (48" m/f Section)	PEXT-1 (12" m/f Section) PEXT-2 (24" m/f Section) PEXT-3 (36" m/f Section) PEXT-4 (48" m/f Section)
D - Support Ring & Plate	MSPXT-8	PSPXT-8
E - Firestop	FS-8	PS-8
F - Roof Flashing	MRF-7 (1/12 - 7/12 pt.) MRF-12 (7/12 - 12/12 pt.)	PRF-7 (1/12 - 7/12 pt.) PRF-12 (7/12 - 12/12 pt.)
G - Adaptor / Vent Reducer		PVA5487 (5"8" to 4"7")

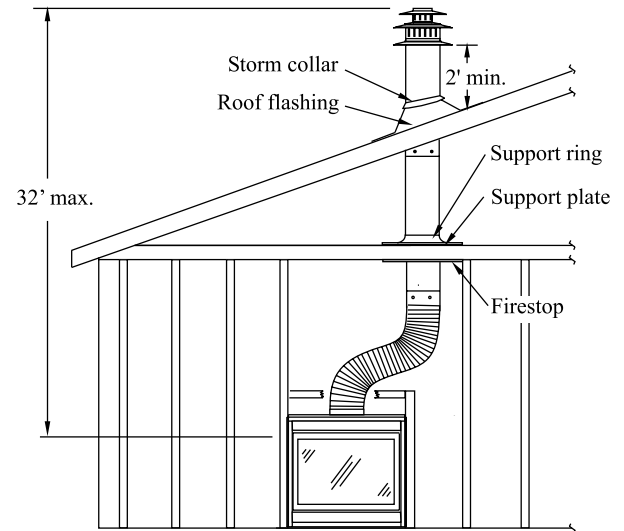


**Figure 15.** Straight, vertical venting showing required PXT-10 adaptor (supplied with the PVTK-1 termination).

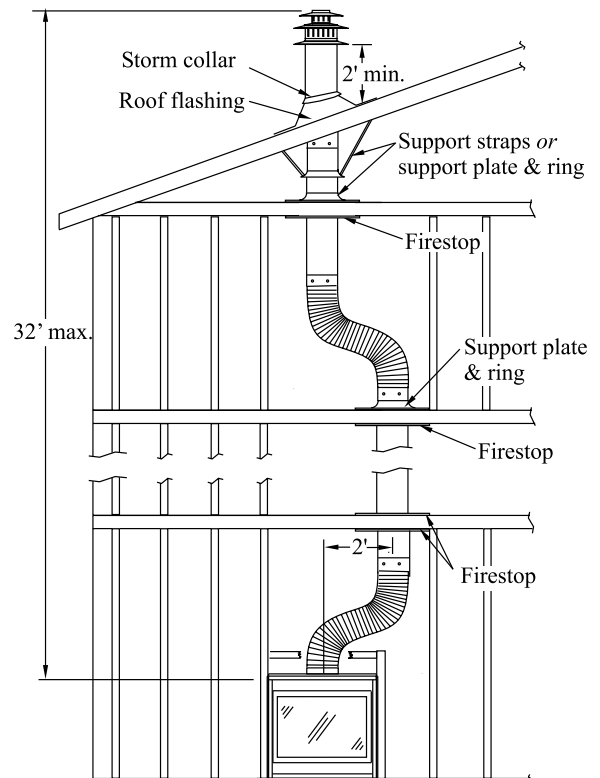
- A maximum of two offsets (each offset has two 90° bends) may be made and shall not exceed total length of 25% of the vertical vent height, when measured center to center of piping.

Example: Typical vent installation.  
 20' vertical vent  
 2 - 2' offsets required  
 25% of 20' = 5' max. offset allowed

This venting configuration meets requirements.



**Figure 16.** Vertical venting with 1 offset (1 offset= two 90° bends).



**Figure 17.** Vertical venting with 2 offsets (1 offset= two 90° bends).

# Installation



## Reduced Vertical Installation

It is possible to reduce vertical vent runs from 5"8" venting to 4"7" venting. Reduced vertical venting may only be used when the installation exceeds 12 feet and terminates through the roof, and if the vertical vent reducer is used with the following venting configuration.

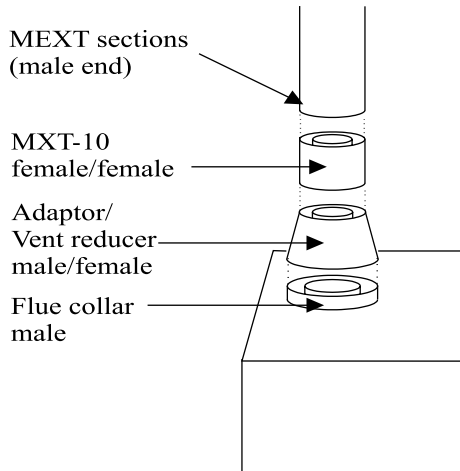


Figure 18. Reducing Vertical Vent from 5"8" to 4"7".

## Rear Vent Venting Runs

### A. No Lift Installations

The C-Series DV Rear Vent has three possible installations which do not require vertical lift.

#### 1. Straight Installation.

The C-Series DV rear vent versions are supplied with and 18" extension pipe (PXT-20) with female/female connections. For shorter installations, cut the PXT-20 to the desired length. Refer to **page 4** for measurements from the hearth to the center of the termination.

**Note:** For Rear Vent models, maximum horizontal run with no vertical lift must never exceed 20".

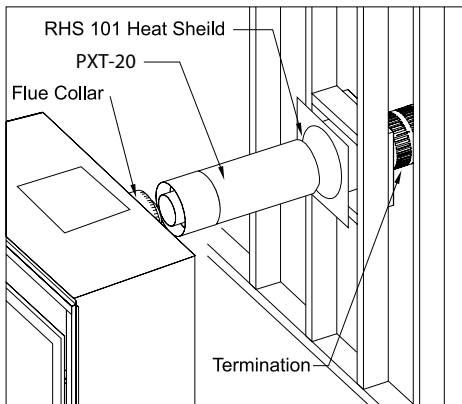


Figure 19. Extended installation.

#### 2. 45° Corner Installation.

Attach an PEL-45 (45° elbow) directly onto the flue collar. Cut the PXT-20 to suit, and attach it to the PEL-45. Slide the fireplace into position and attach to the termination. **Maximum horizontal run must not exceed 20"**

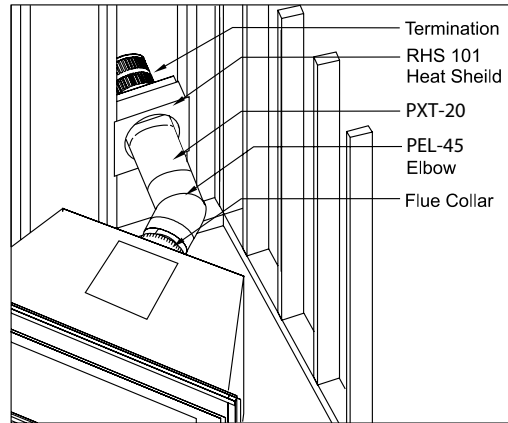


Figure 20. Corner installation.

#### 3. Corner Installation — 45° or less.

Use an PTO-3 or PTO-3F termination, an PFL-1 or PFL-2(12" or 24" compressed length) and a frame, if appropriate. Flex may be turned to obtain desired degree of angle required but must not exceed 45°.

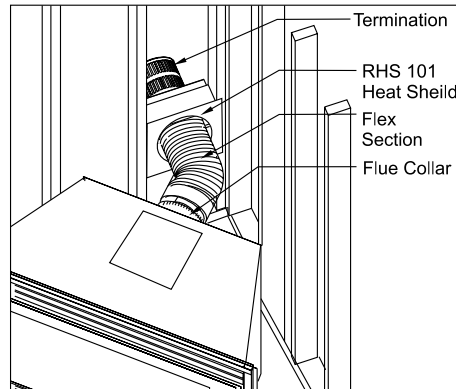


Figure 21. Flex installation.

# Installation

## B. Multi-Elbow Installations

For more difficult installation situations, the C-Series DR Rear Vent may be installed with two - 90° elbows and up to 15' of horizontal run. If using this installation option, you must adhere to the following guidelines:

**Important: Some models are not available to be installed in a rear vent application. Please refer to the model specifications on page 2 of this manual.**

- the first 90° elbow must be placed directly on the flue collar
- you must have a minimum vertical lift of 50" (measured from the hearth)
- your vent run must fall within the limits set by **Figure 22**.

Before you install any venting, you must determine whether the venting run will be acceptable. Unacceptable venting can affect the fireplace's combustion.

### The Venting Graph

Measure the vertical height from the fireplace hearth to the centre of the termination and the horizontal run from the fireplace flue collar to the wall flange of the termination. Plot on the Venting Graph (**Fig. 22**) with an 'X'.

If the 'X' falls on or above the top boundary of the shaded area, the installation is acceptable.

#### Example A: (Acceptable Installation)

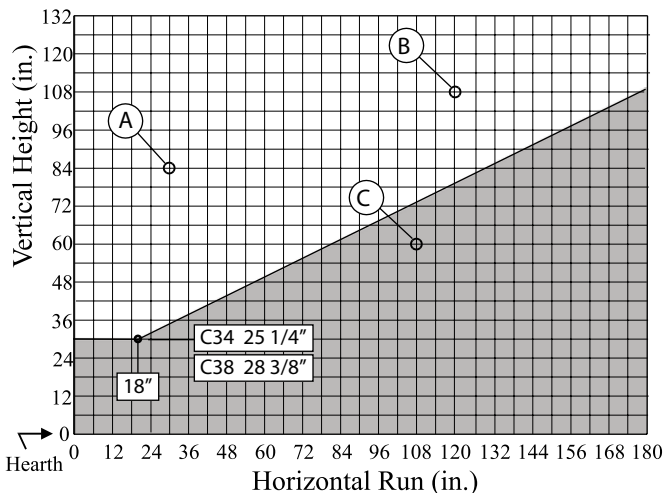
If the vertical dimension from the hearth is 84" and the horizontal run to the wall flange of the vent termination is 30", this would be an acceptable installation.

#### Example B: (Acceptable Installation)

If the vertical dimension from the hearth is 108" and the horizontal run to the wall flange of the vent termination is 120", this would be an acceptable installation.

#### Example C: (Unacceptable Installation)

If the vertical dimension from the floor of the fireplace is 60" and the horizontal run to the wall flange of the vent termination is 108", **this would NOT be an acceptable installation.**



**Figure 22.** C-Series DV Multi-Elbow Venting Graph.

## Installation Of Rear Vent DV

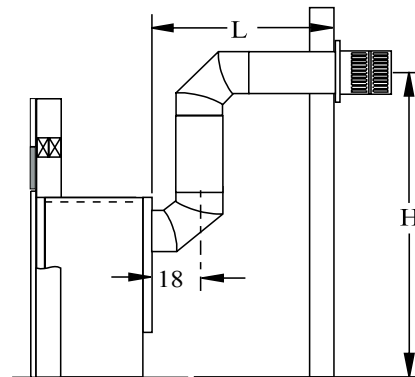
The following venting components are available for an C-Series DV in a Rear Vent installation:

5" / 8" Venting	
A - Termination	PTO-3 (3" Length) PTO-3F (3" Length)
B - Stucco Kits	MSR (Stucco Frame) BSR-4 (4" Brick Frame) BSR-6 (6" Brick Frame) MOSR (Stucco Can)
C - Flex Sections	PFL-1 (12" Section) PFL-2 (24" Section) PFL-3 (36" Section) PFL-4 (48" Section)
D - Rigid Sections	PEXT-1 (12" m/f Section) PXT-20 (20" section) PEXT-2 (24" m/f Section) PEXT-3 (36" m/f Section) PEXT-4 (48" m/f Section)
E - Elbows	PEL-90MM (m/m 90° Elbow) PEL-90FF (f/f 90° Elbow) PEL-90FM (f/m 90° Elbow) PEL-45FM (f/m 45° Elbow)

#### NOTES:

All dimension lengths for vertical or horizontal runs are measured from center of the vent pipe.

Venting runs *must* fall within the limits set by the venting graph (see **Figure 22**).



**Figure 23.** Multi-elbow installation. Distance 'H' must be a minimum of 50". The vent run must comply with figure 22.

# Installation



## Finishing Around the Fireplace

Combustible mantels and mouldings may be safely installed over the top and on the front of the fireplace provided that they do not project beyond shaded area shown in **Figure's 24 & 24a**.

Side wall clearances are 3". Combustible surrounds may be installed with 3" clearance to the side of the fireplace as shown in **Figure 25**.

### Fireplace Facing

When selecting the finish material for your fireplace, it is important to remember the following: **THE HORIZONTAL LOUVRES MUST NOT BE OBSTRUCTED IN ANY WAY - to do so restricts the air supply for the control compartments and heat exchanger it also prevents access for servicing controls.**

The face of the fireplace may be painted to match the room decor, provided you use a heat-resistant paint. Decorative facing must not extend past the fireplace opening at all, because it will interfere with the access to retainers for removal of glass door.

### C34DV

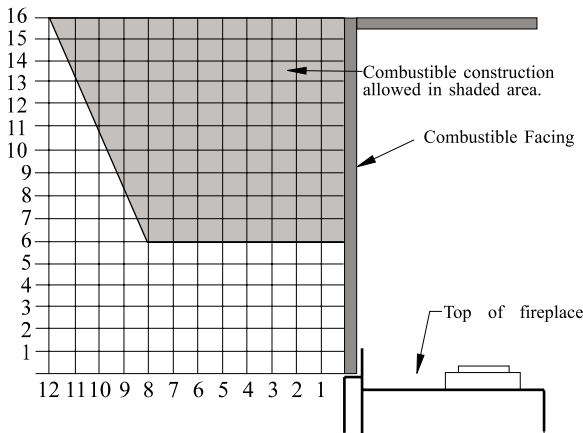


Figure 24. Combustible mantles and facings for **C34DV**.

### C38DV

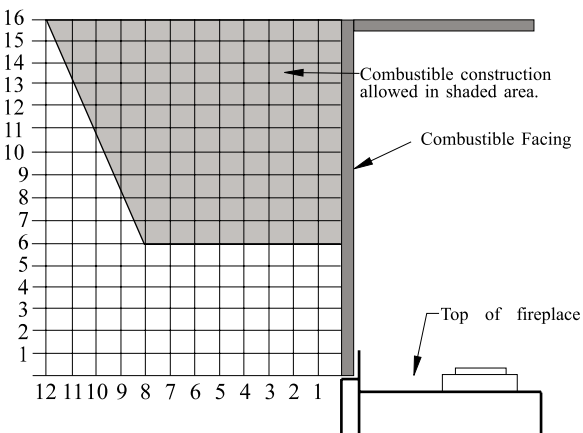


Figure 24a. Combustible mantles and facings for **C38DV**.

## Mantels & Surrounds

**NOTE:** National Canadian Gas Association mantel test requirements are for fire hazard prevention to combustible materials.

New technology, to meet consumer and government demands for the wise use of energy, has prompted us to manufacture many models of fireplaces which are hot, fuel and energy efficient.

Please be aware; temperatures over the mantel will rise above normal room temperature and walls above fireplace may be hot to touch.

### Warning:

When covering the upper metal portion of the fireplace with a non-combustible material Please Note: The decorative facing materials may be subject to temperatures in excess of 250° F. This should be considered when selecting facing materials.

We recommend careful consideration be given to the effects of elevated mantel temperatures which may be in excess of product design, for example: candles, plastic or pictures. This can cause melting, deformation, discoloration or premature failure of T.V. and radio components.

### Painting:

Special care is recommended by the Master Painters and Decorators Association, when painting the fireplace surrounds, to select and apply a quality **Alkyd sealer** prior to the applying of latex paints. This is to prevent leaching of water from evaporation and causing a brownish staining effect to paint over coats.

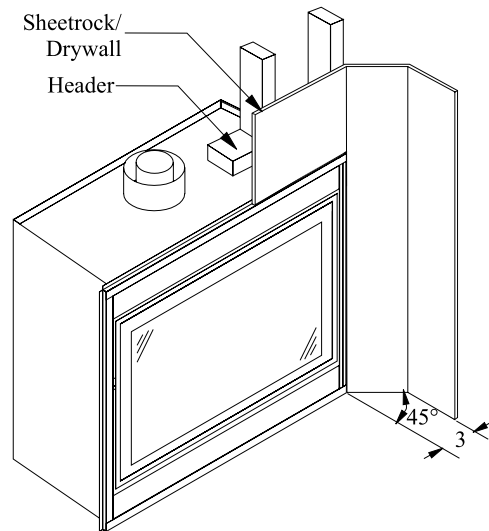


Figure 25. Combustible surrounds.



# Installation



## Gas Control and Pilot Wiring

C-Series DV-F

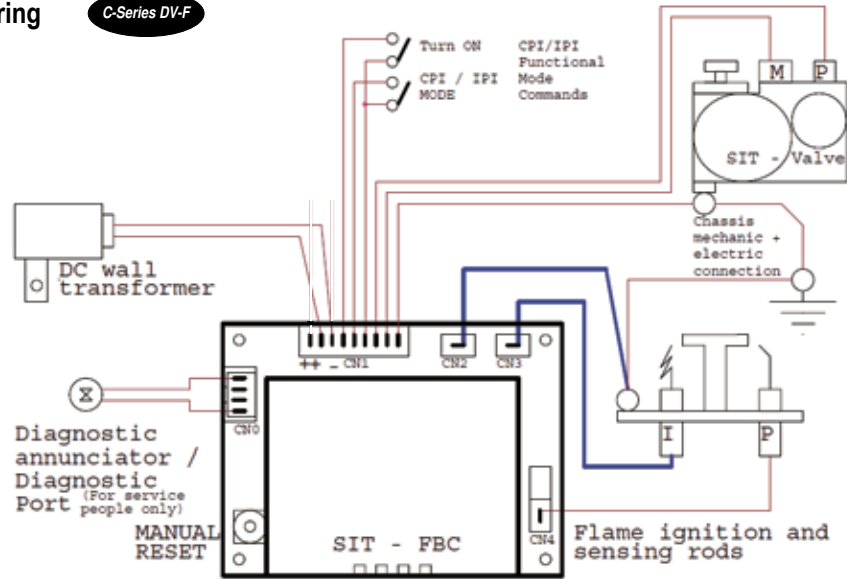


Figure 27. Wiring for the SIT IPI Wiring Schematic

### CAUTIONS!

- DO NOT OPERATE THIS FIREPLACE WITHOUT THE GLASS DOOR OR WITH A BROKEN GLASS DOOR.



# Installation

## Removing and Installing the Door

### Removing the door:

Remove the trim (as described in the next column) to access the door latches. Open the latches by pulling Part A upwards and towards you to disengage Part B from the door. Lift Part B clear of the door. Repeat for both latches. Be sure to hold the door carefully so it does not fall. (See *figure 28a.*)

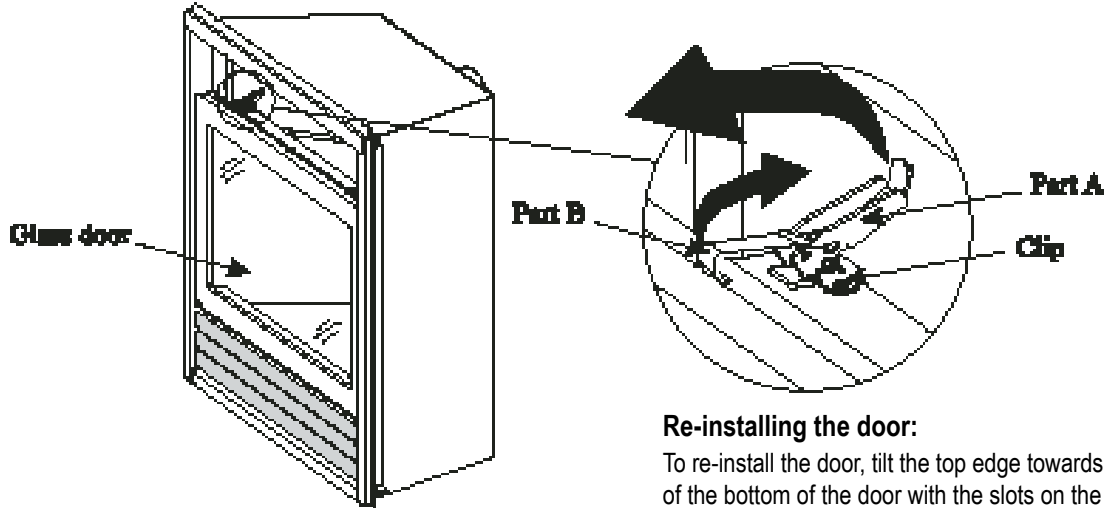


Figure 28a. Removing and installing the glass door.

### Re-installing the door:

To re-install the door, tilt the top edge towards you and line up the tabs of the bottom of the door with the slots on the fireplace. Place the tabs into the slots, and tilt the top of the door back towards the fireplace as far as it will go. Close the latches by hooking Part B onto the groove at the top of the door and pushing Part A down completely.

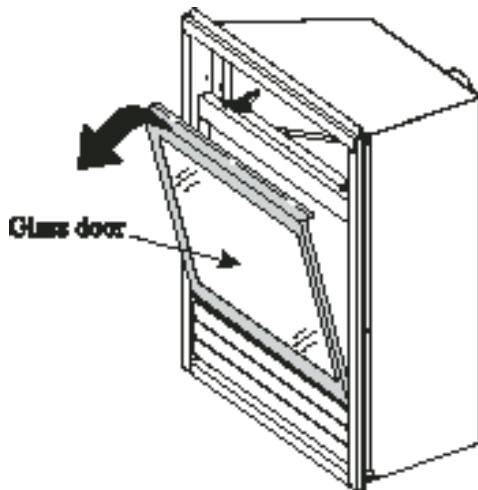


Figure 28b. Removing and installing the glass door.

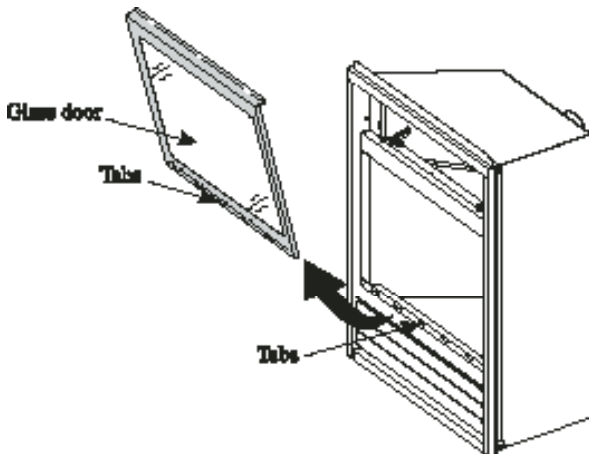


Figure 28c. Removing and installing the glass door.

## Installing the Trim & Baffle

### Installing the Logs:

The 6 horizontal trim pieces (3 upper and 3 lower) are purchased separate from the fireplace, and must be field-installed.

Install the trim by placing the top edge of the trim over to the retainer clips on either side of the fireplace. Push the bottom edge firmly inwards and the trim will snap on. (See *figure 29*) Install the upper trim pieces so that the baffle is resting between the top and middle piece, as shown below.

The trim piece with the Montigo Emblem should be installed on the lower middle clips with the emblem on the right side.

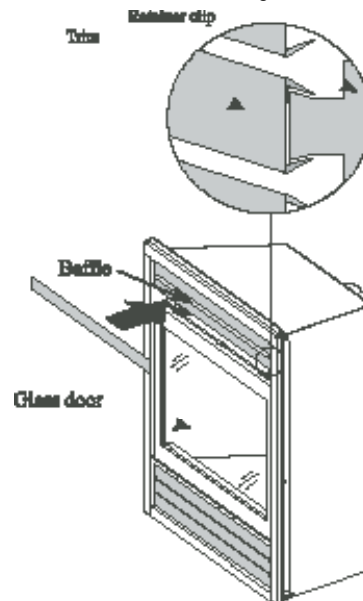


Figure 29. Installing the Trims.

# Installation



## Installing the Log Set

### Installing the Logs:

The C-Series DV is supplied with five ceramic fibre logs. Unpack the logs and handle them very carefully.

1. Remove the door cover and the glass door.
2. Place the Back log onto the back log rest as shown below in figure 24a. The log has lip on the bottom which fits into the slot on the log rest.
3. Place the Front log onto the front log rest as shown in **figure 30**. Center the log from side to side, and push it against the back of the log rest. Carefully push the log onto the metal spikes on the log rest.
4. Place the top logs in position as shown in **figure 30a**, place the centre log down first, then the right and left logs.
5. Start the fireplace. If the flame appears satisfactory, replace the glass door and door cover.

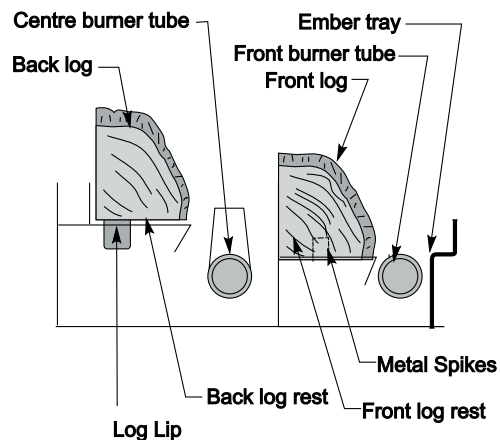


Figure 30. Positioning for the front and back logs.

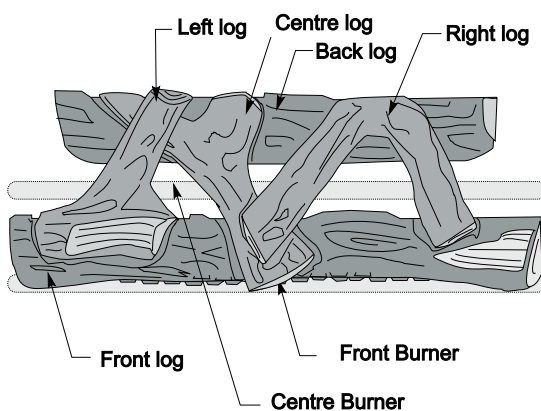


Figure 30a. Proper log placement.

### CAUTIONS!

- If logs are not placed properly, excessive sooting will result.
- The surface of the logs will crack due to the heat of the flames. This is a normal occurrence.





C-Series DV

# Operation - Model C-Series DV

## with Continuous Pilot

### For Your Safety - READ BEFORE LIGHTING:

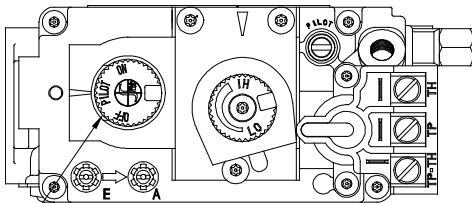
**WARNING:** If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- A. This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.
- B. **BEFORE LIGHTING** smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.
  - Do not try to light any appliance.
  - Do not touch any electrical switch; do not use any phone in your building.
  - Immediately call your gas supplier from a neighbour'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 attempt to 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.

**What To Do If You Smell Gas:**

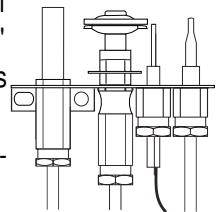
### Lighting Instructions:

1. **STOP!** Read the safety information above on this label.
2. Flip down the lower trims.
3. Push in gas control knob and turn clockwise ↻ to "OFF."
4. Wait five (5) minutes to clear out any gas. Smell for gas, including near the floor. If you then smell gas, **STOP!** Follow "B" in the safety information above on this label. If you don't smell gas, go to the next step.
5. Locate pilot burner (*See illustration at right.*) and follow steps below.
6. Turn knob on gas control counter clockwise ↻ to "PILOT."
7. Push in gas control knob completely and hold. Light with Piezo Igniter button. Continue to hold the control knob in for about (1) minute after the pilot is lit. Release the knob and it will pop back up. Pilot should remain lit. If it goes out repeat steps 3 through 8.
  - 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.
8. Push in gas control knob and turn counter-clockwise ↻ to "ON."
9. Flip up the lower trim.
10. Turn on remote switch to ignite fire.



(Shown in "Pilot" position.)  
Gas Control Knob

**NOTE:** Gas control knob cannot be turned from "PILOT" to "OFF" unless knob is pushed in slightly. Do not force.



### To Turn Off Gas To Appliance:

1. Turn off remote switch.
2. Flip down the lower trim.
3. Push in gas control knob slightly and turn ↻ clockwise to "Off". Do not force.
4. Flip up the lower trim.



## with Honeywell Electronic Ignition

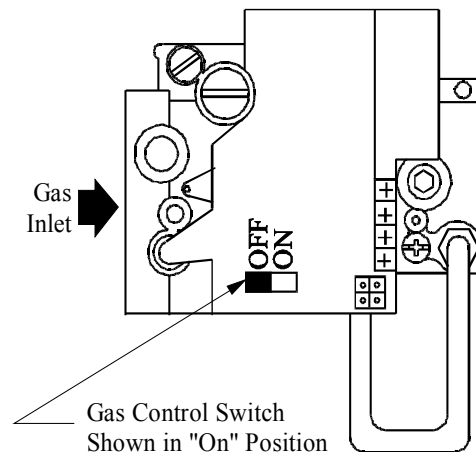
### For Your Safety - READ BEFORE LIGHTING:

**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 is equipped with an ignition system that lights the pilot burner automatically. **Do not attempt to light the pilot by hand.**
- B. BEFORE LIGHTING** smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.
- What To Do If You Smell Gas:**
- Do not try to light any appliance.
  - Do not touch any electrical switch; do not use any phone in your building.
  - Immediately call your gas supplier from a neighbour'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 attempt to 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. Flip down the lower trims.
3. Turn switch on the gas control to "OFF".
4. Wait 5 minutes to clear out any gas. 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.
5. Turn switch on the gas control to "ON". **NOTE:** This unit is equipped with an ignition system that lights the pilot burner automatically. **Do not attempt to light the pilot by hand.**
6. Turn on wall switch.
7. Flip up the lower trim.
8. If the fireplace does not operate, follow the instructions "To Turn Off Gas To Appliance" and call your service technician or gas supplier.



### To Turn Off Gas To Appliance:

1. Turn off remote switch.
2. Flip down the lower trim.
3. Turn the switch on the gas control to "Off".
4. Flip up the trim.

**Operation - Model C-Series DV-F** C-Series DV-F

**Proflame SIT Electronic Ignition**

**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 is equipped with an ignition system that lights the pilot burner automatically. Do not attempt to light the pilot by hand.
- B. BEFORE LIGHTING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

**What To Do If You Smell Gas:**

- Do not try to light any appliance.
- Do not touch any electrical switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbour's

phone. Follow the gas supplier's instructions.

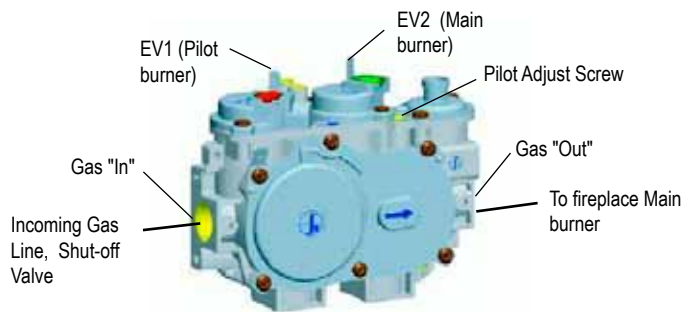
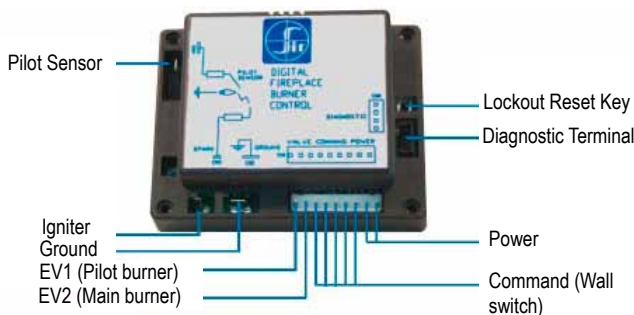
- If you cannot reach your gas supplier, call the Fire Department.
- C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it, call a qualified service technician. Force or attempt to repair may result in a fire 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. Remove the lower Horizontal access panel.
3. Turn Incoming gas valve to the ON" position.
4. Wait 5 minutes to clear out any gas. 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.
5. Turn wall switch "ON".
6. If the Fireplace does not light, the System will cycle through

two trials, (one minute audible clicking, thirty seconds of silence, and then another one minute of audible clicking).

7. After completion of the information in the Troubleshooting section, Repeat step 5.
8. If the system will not function correctly, follow the instructions "To Turn Off Gas To Appliance" and call your service technician or gas supplier.



**To Turn Off Gas To Appliance:**

1. Turn off remote switch.
2. Remove the lower Horizontal access panel.
3. Turn the incoming gas control valve to "Off".
4. Replace the lower Horizontal access panel.

# Operation

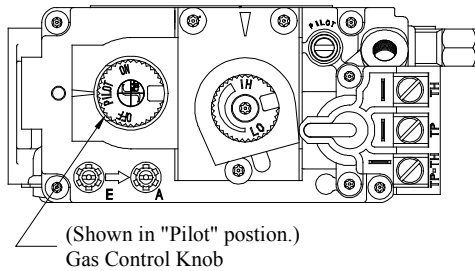
## Lighting Instructions

See pages 17 to 19.

### **C-Series DV** **Burner Adjustment**

The **C-Series DV** is equipped with an adjustable burner, allowing you to raise or lower the flames. To adjust the flames, locate the black knob marked 'Hi-Lo', in the right of the gas control valve (See **Figure 31**). The front burners are not adjustable.

- To raise the flame height, turn the black knob (located behind the lower trim) **counter-clockwise**.
- To lower the flame height, turn **clockwise**.



**Figure 31.** 'Hi-Lo' Adjustment on the **C-Series DV's** gas valve.

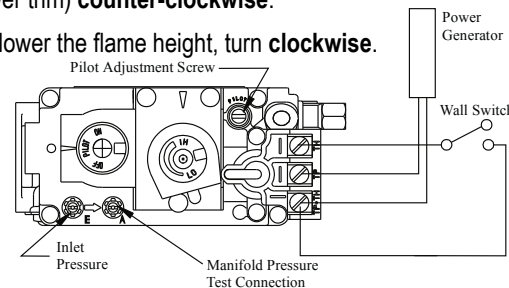
### **C-Series DV-I**

**Note:** **C-Series DV-I** models (electronic ignition) do not feature hi/lo adjustment.

### **C-Series DV-F** **Burner Adjustment**

The **C-Series DV-F** is equipped with an adjustable burner, allowing you to raise or lower the flames. To adjust the flames, locate the black knob marked 'Hi-Lo', in the left of the gas control valve (See **Figure 32**). The front burners are not adjustable.

- To raise the flame height, turn the black knob (located behind the lower trim) **counter-clockwise**.
- To lower the flame height, turn **clockwise**.



**Figure 32.** 'Hi-Lo' Adjustment on the **C-Series DV-F's** gas valve.

**⚠ CAUTIONS!**

- Fireplace gas control must be in the "OFF" position and pilot and main burners extinguished when cleaning appliance with a vacuum.
- Doors and logs can get very hot. Handle only when cool.

# Maintenance

## General

- **Have the fireplace and installation inspected yearly.** The inspection must include, but is not limited to, the following:
  - A visual check of the entire vent system and termination.
  - An inspection of the explosion relief flappers and the door gasketing to ensure a proper seal.
  - An inspection of the burner, venturi, and primary air openings.
  - An inspection of the gas valve, gas components, and pilot flame. For your convenience a 1/8" manifold pressure tap is supplied on the gas valve for a test gauge connection. See **Figure 31 & 32**.
  - Ensure proper log placement as per this manual.
  - Inspection of all optional equipment; fans, thermostats, etc.
- For **Natural Gas** this appliance requires a minimum inlet pressure of 5.5" W.C. and a manifold pressure of 3.5" W.C.
- For **Propane Gas** this appliance requires a minimum inlet pressure of 11" W.C. and a manifold pressure of 10" W.C.
- Always keep the fireplace area clear and free of combustible materials, as well as gasoline and other flammable vapors and liquids.
- 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.

## Cleaning

When the fireplace is first activated, there may be some smoking and a visible film may be left on the glass. This is a normal condition, and is the result of burning of protective coatings on new metal.

- Glass must be cleaned periodically to remove any film (which is a normal by-product of combustion) which may be visible. Film can easily be removed by removing the door, as shown on **page 15**. Handle the door carefully, and clean it with non-abrasive glass cleaners. One of the most effective products is Kel Kem.
- Silicone seals on inner door during initial firing will "off gas", leaving a visual deposit of a white substance on combustion chamber walls. This can easily be removed using normal household products.
- Use a vacuum cleaner or whisk broom to keep the control compartment, burner, and firebox free from dust and lint.
- Logs may be cleaned periodically with a vacuum to remove soot or other contaminants.

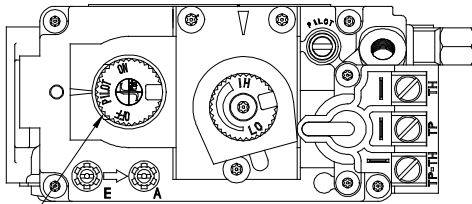
**⚠ WARNING:**

Do not attempt to clean glass when hot.

Do not clean glass with abrasive materials as any glass etching may cause premature glass failure.

# Maintenance

## Gas Control Valve



(Shown in "Pilot" position.)  
Gas Control Knob

**NOTE:** Gas control knob cannot be turned from "PILOT" to "OFF" unless knob is pushed in slightly. Do not force.

Figure 33. SIT gas valve.

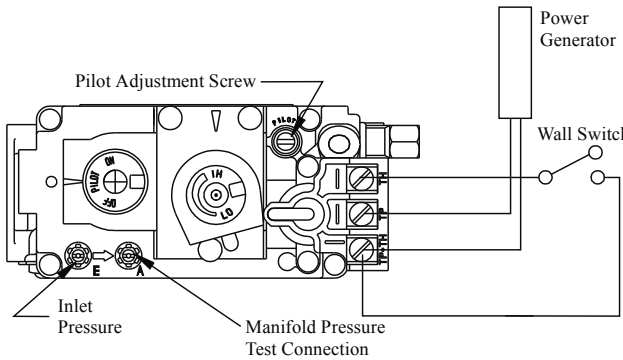


Figure 34. IPI gas valve.

## Pilot Burner Adjustment

1. Locate Pilot Adjustment Screw. (See figure 35.)
2. Adjust pilot screw to provide properly sized flame as shown in figure 35).
3. After installing or servicing, leak test with a soap solution with main burner on. Coat pipe and tubing joints, gasket etc. with soap solution. Bubbles indicate leaks. Tighten any areas where the bubbles appear until the bubbling stops completely.

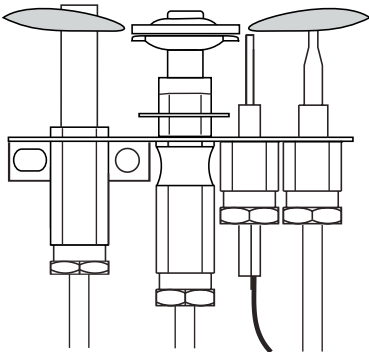


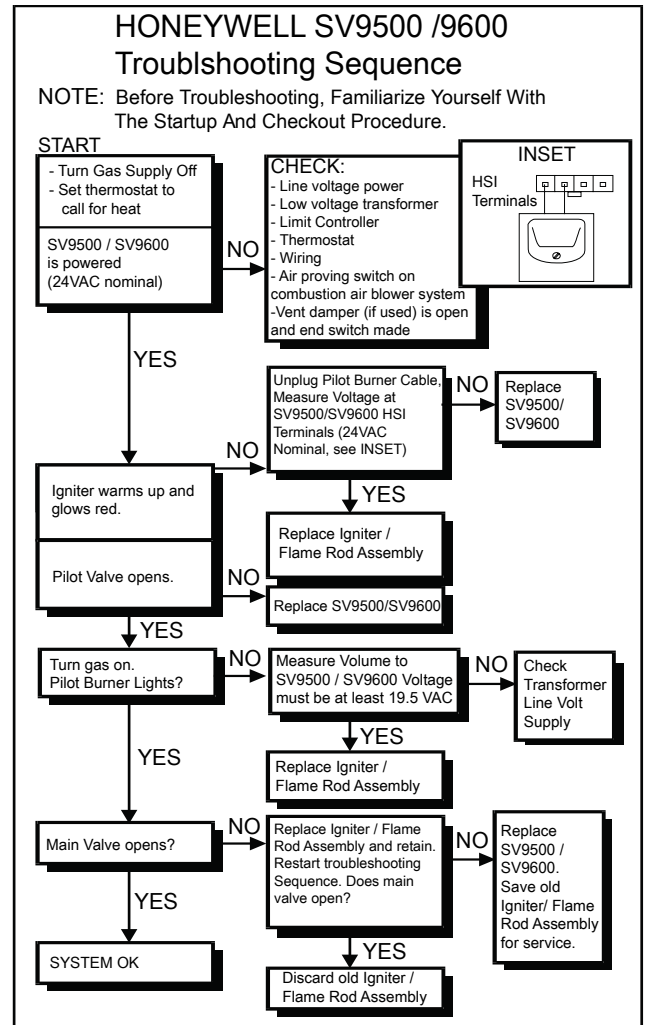
Figure 35. Pilot Burner.

## Troubleshooting C-Series-DV

The following is a troubleshooting chart of possible problems:

PROBLEM	CORRECTIVE ACTION
Noisy Pilot Flame	Locate pilot adjustment screw on gas control valve. Flame is decreased by turning adjustment screw clockwise.
Pilot won't ignite	Disconnect remote wires and try to light pilot. If pilot now works, remote connections are faulty. Check wiring diagram figure 31.
Main burner will not light	1. Check wiring (see figure 31). 2. Check wall switch for proper connection.

## Troubleshooting C-Series DV-I



If your fireplace still does not operate correctly, consult your dealer or the manufacturer.

All service and repairs should be performed by a qualified agency.

All spare parts, optional fans, and optional trim finishes are available from your local dealer or the manufacturer.

## Maintenance

## Notes

### Spare Parts - C-Series DV

	C34DV	C38DV
NG Gas Valve	RGC1006	RGC1006
LP Gas Valve	RGC1005	RGC1005
NG Pilot	RPA020	RPA020
LP Pilot	RPA021	RPA021
Burner NG Front	RBT1005	RBT1009
Burner NG Rear	RBT1006	RBT1010
Burner LPG Front	RBT1007	RBT1011
Burner LPG Rear	RBT1008	RBT1012
Orifice NG Front	ROR1005	ROR1009
Orifice NG Rear	ROR1006	ROR1010
Orifice LPG Front	ROR1007	ROR1011
Orifice LPG Rear	ROR1008	ROR1012
Door	RDTSC34	RDTSC38
Log Set	RLGS25	RLGS26

# Warranty

## The Warranty

The Companies warrants the Montigo Gas Appliance to be free from defects in materials and workmanship at the time of manufacture. On the Montigo, there is a ten-year warranty on the firebox and its components, a five-year warranty on the main burner and pilot burner, and a one-year warranty on the gas control valve and fibre logs. Glass, plated/painted finishes, and refractory lining are exempt.

## Remedy And Exclusions

The coverage of this Warranty is limited to all components of the Gas Appliance manufactured by The Companies.

This Warranty only covers Montigo Gas Appliances installed in the United States or Canada.

If the components of the Gas Appliance covered by this Warranty are found to be defective within the time frame stated (see The Companies right of investigation outlined below). The Companies will, at its option, replace or repair defective components of the Gas Appliance manufactured by The Companies at no charge, and will also pay for reasonable labour costs incurred in replacing or repairing components. If repair or replacement is not commercially practical, The Companies will, at its option, refund the purchase price of the Montigo Gas Appliance.

This Warranty covers only parts and labour as provided above. In no case shall The Companies be responsible for materials, components, or construction which are not manufactured or supplied by The Companies, or for the labour necessary to install, repair or remove such materials, components or construction. All replacement or repair components will be shipped F.O.B. the nearest The Companies factory.

## Qualifications To The Warranty

The Gas Appliance Warranty outlined above is further subject to the following qualifications:

- (1) The Gas Appliance must be installed in accordance with The Companies installation instructions and local building codes. The Warranty on this Montigo Gas Appliance covers only the component parts manufactured by The Companies. The use of components manufactured by others with this Montigo Gas Appliance could create serious safety hazards, may result in the denial of certification by recognized national safety agencies, and could be in violation of local building codes. This warranty does not cover any damages occurring from the use of any components not manufactured or supplied by The Companies
- (2) The Montigo Gas Appliance must be subjected to normal use. The Gas Appliances are designed to burn gas only. Burning conventional fireplace fuels such as wood, coal or any other solid fuel will cause damage to the Gas Appliance, will produce excessive temperatures and will result in a fire hazard.

## Limitations On Liability

It is expressly agreed and understood that The Companies sole obligation, and 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 above.

In no event shall The Companies be responsible for any incidental or consequential damages caused by defects in its products, whether such damage occurs or is discovered before or after replacement or repair, and whether or not such damage is caused by The Companies negligence. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. The duration of any implied warranty with respect to this Montigo Gas Appliance is limited to the duration of the foregoing warranty. Some states do not allow limitation on how long an implied warranty lasts, so the above may not apply to you.

## Investigation Of Claims Against Warranty

The Companies reserves the right to investigate any and all claims against this Warranty and to decide upon method of settlement.

The Companies Are Not Responsible For Work Done Without Written Consent

The Companies shall in no event be responsible for any warranty work done without first obtaining The Companies written consent.

Dealers Have No Authority To Alter This Warranty

The Companies employees and dealers have no authority to make any warranties nor to authorize any remedies in addition to or inconsistent with those stated above.

## How To Register A Claim Against Warranty

In order for any claim under this Warranty to be valid, The Companies must be notified of the claimed defect in writing or by telephone, as soon as reasonably possible after the defect is discovered. Claims against this Warranty in writing should include the date of installation, and a description of the defect.

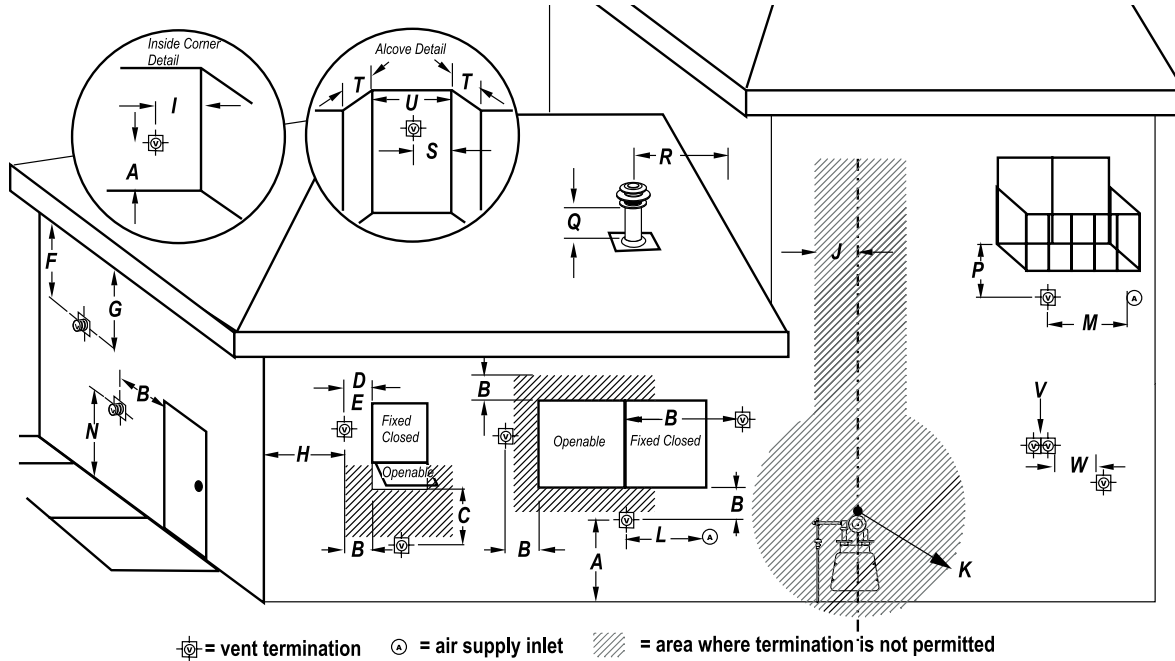
## Other Rights

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

**NOTE:** *The Companies as stated above refer to - Canadian Heating Products Inc. and/or Montigo Del Ray Corp.*

*Canadian Heating Products Inc. and/or Montigo DelRay Corp. reserves the right to make changes at any time, without notice, in design, materials, specifications, prices and also to discontinue colors, styles and products.*

# Appendix A - Termination Locations



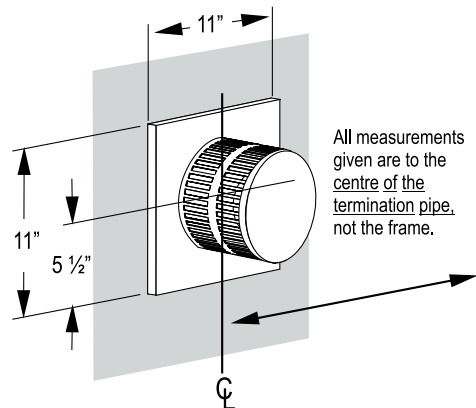
⊕ = vent termination   ⊙ = air supply inlet   ▨ = area where termination is not permitted

- A** = clearance to the termination frame above grade, veranda, porch, deck, or balcony [16 inches (41 cm) minimum]
- B** = clearance to door, or sides and top of window, that may be opened [16 inches (41 cm) minimum for appliances ≤100 000 BTU/H (30kW)]
- C** = clearance to bottom of window that may be opened horizontally [36 inches (92 cm) minimum for appliances ≤100 000 BTU/H (30kW)]
- D** = no clearance to permanently closed window when installed with approved glass penetration termination
- E** = clearance to permanently closed window [16 inches 41 cm recommended to prevent condensation on window]
- F** = vertical clearance to ventilated soffit located above the termination within a horizontal distance of 2 feet (61 cm) from the centreline of the termination [22 inches (56 cm) minimum]
- G** = clearance to unventilated soffit [16 inches (41 cm) minimum to non-combustibles] [22 inches (56 cm) minimum to combustibles]
- H** = clearance to outside corner [9 inches (23 cm) minimum]
- I** = clearance to inside corner [12 inches (31 cm) minimum]
- J** = \* not to be installed above a meter/regulator assembly within 40" (103 cm) horizontally from the centreline of the regulator
- K** = clearance to service regulator vent outlet [3 feet minimum in the United States] [\*6 feet (1.8 m) minimum in Canada]
- L** = clearance to non-mechanical air supply inlet to building or the combustion air inlet to any other appliance [16 inches (41 cm) minimum for appliances ≤100 000 BTU/H (30kW)]
- M** = clearance to mechanical air supply inlet [\*6 feet (1.8 m) minimum]

- N** = † clearance above paved sidewalk or a paved driveway located on public property [\*7 feet (2.1 m) minimum]
  - P** = clearance under veranda, porch, deck, or balcony [16 inches (41 cm) minimum† to non-combustibles] [22 inches (56 cm) minimum† to combustibles]
  - Q** = clearance above a roof [24 inches (61 cm) minimum]
  - R** = clearance to adjacent walls and neighboring buildings [18 inches (46 cm) minimum]
  - S** = clearance from corner in recessed location [12 inches (31 cm) minimum]
  - T** = maximum depth in recessed location [48 inches (122 cm) minimum]
  - U** = minimum width for back wall of recessed location [24 inches (61 cm) minimum]
  - V** = no horizontal clearance between the frames of two terminations that are level.
  - W** = horizontal clearance between the frames of two terminations that are not level. [36 inches (92 cm) minimum]
- † 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 has an open side that is equal to or greater than the depth of the enclosed area

\* as specified in CGA B149 Installation Codes. Note: local Codes or Regulations may require different clearance.





# Appendix B - State of Massachusetts

## Amendment

(Gas Fireplace / Equipment sold in the State of Massachusetts)

### 5.08: Modifications to NFPA-54, Chapter 10

**(1) Revise NFPA-54 section 10.5.4.2** by adding a second exception as follows:

Existing chimneys shall be permitted to have their use continued when a gas conversion burner is installed, and shall be equipped with a manually reset device that will automatically shut off the gas to the burner in the event of a sustained back-draft.

**(2) Revise 10.8.3** by adding the following additional requirements:

(a) For all side wall horizontally vented gas fueled equipment installed in every dwelling, building or structure used in whole or in part for residential purposes, including those owned or operated by the Commonwealth and where the side wall exhaust vent termination is less than seven (7) feet above finished grade in the area of the venting, including but not limited to decks and porches, the following requirements shall be satisfied:

**1. INSTALLATION OF CARBON MONOXIDE DETECTORS.** At the time of installation of the side wall horizontal vented gas fueled equipment, the installing plumber or gas fitter shall observe that a hard wired carbon monoxide detector with an alarm and battery back-up is installed on the floor level where the gas equipment is to be installed. In addition, the installing plumber or gas fitter shall observe that a battery operated or hard wired carbon monoxide detector with an alarm is installed on each additional level of the dwelling, building or structure served by the side wall horizontal vented gas fueled equipment. It shall be the responsibility of the property owner to secure the services of qualified licensed professionals for the installation of hard wired carbon monoxide detectors

a. In the event that the side wall horizontally vented gas fueled equipment is installed in a crawl space or an attic, the hard wired carbon monoxide detector with alarm and battery back-up may be installed on the next adjacent floor level.

b. In the event that the requirements of this subdivision can not be met at the time of completion of installation, the owner shall have a period of thirty (30) days to comply with the above requirements; provided, however, that during said thirty (30) day period, a battery operated carbon monoxide detector with an alarm shall be installed.

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

**3. SIGNAGE.** A metal or plastic identification plate shall be permanently mounted to the exterior of the building at a minimum height of eight (8) feet above grade directly in line with the exhaust vent terminal for the horizontally vented gas fueled heating appliance or equipment. The sign shall read, in print size no less than one-half (1/2) inch in size, "GAS VENT DIRECTLY BELOW. KEEP CLEAR OF ALL OBSTRUCTIONS".

**4. INSPECTION.** The state or local gas inspector of the side wall horizontally vented gas fueled equipment shall not approve the installation unless, upon inspection, the inspector observes carbon monoxide detectors and signage installed in accordance with the provisions of 248 CMR 5.08(2)(a)1 through 4.

(b) EXEMPTIONS: The following equipment is exempt from 248 CMR 5.08(2)(a)1 through 4:

1. The equipment listed in Chapter 10 entitled "Equipment Not Required To Be Vented" in the most current edition of NFPA 54 as adopted by the Board; and

2. Product Approved side wall horizontally vented gas fueled equipment installed in a room or structure separate from the dwelling, building or structure used in whole or in part for residential purposes.

**(c) MANUFACTURER REQUIREMENTS - GAS EQUIPMENT VENTING SYSTEM PROVIDED.** When the manufacturer of Product Approved side wall horizontally vented gas equipment provides a venting system design or venting system components with the equipment, the instructions provided by the manufacturer for installation of the equipment and the venting system shall include:

1. Detailed instructions for the installation of the venting system design or the venting system components; and

2. A complete parts list for the venting system design or venting system.

**(d) MANUFACTURER REQUIREMENTS - GAS EQUIPMENT VENTING SYSTEM NOT PROVIDED.** When the manufacturer of a Product Approved side wall horizontally vented gas fueled equipment does not provide the parts for venting the flue gases, but identifies "special venting systems", the following requirements shall be satisfied by the manufacturer:

1. The referenced "special venting system" instructions shall be included with the appliance or equipment installation instructions; and

**2. The "special venting systems"** shall be Product Approved by the Board, and the instructions for that system shall include a parts list and detailed installation instructions.

(e) A copy of all installation instructions for all Product Approved side wall horizontally vented gas fueled equipment, all venting instructions, all parts lists for venting instructions, and/or all venting design instructions shall remain with the appliance or equipment at the completion of the installation.

**(3) After NFPA-54 section 10.10.4.2** add a new section 10.10.4.3 as follows:

When more than four gas appliances are to be vented through a common gas vent or common horizontal vent manifold, a plan of the proposed vent installation shall be submitted to the Inspector and the serving gas supplier for review and approval.

**Extraction from: Massachusetts Rules and Regulations**

**5.00: Amendments To 2002 Edition Of ANSI Z223.1-NFPA-54**

# Notes

**Notes**





XG0170 - 080610

---

**Canadian Heating Products Inc.**  
Langley, BC V4W 4A1

**Montigo Del Ray Corp.**  
Ferndale, WA 98248