



Installation Operation & Maintenance



C42-DV Gas Fireplace

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.

For Your Safety:

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.
- 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.

- *Check local codes and read all instructions prior to installation.*
- *Leave this manual with the owner.*



Table Of Contents

Introduction	2
Installation	
Installing the Fireplace Shell	3
Installing the Gasline	4
The Remote Switch	4
Direct Vent Installation	4
General Requirements	4
Terminations	4
Top Vent Models with horizontal venting	6
Top Vent Models with vertical venting	8
Rear Vent Models	9
Construction around the fireplace	
Facing	11
Mantels and Surrounds	11
Wiring	11
Removing and Installing the Door	12
Installing the Logset	13
Installing the Horizontal Trim	13
Operation	14 - 16
Maintenance	16 - 17
Warranty	18
Appendix	
A. Termination Locations	19
B. Wiring for Pilotless Ignition (STB) Equipped Units	20

Introduction

Thank You for choosing a Montigo C-Series Fireplace.


About the C42 Fireplace:

The includes a 27,000 BTU dual burner with embers and a five piece ceramic logset. This model is available in four versions.

- C42DT - Top Vent, Millivolt Pilot
- C42DR - Rear Vent, Millivolt Pilot
- C42DT-S - Top Vent, Pilotless Ignition (STB)
- C42DR-S - Rear Vent, Pilotless Ignition (STB)

The C42-DV is rated for Natural Gas at 27,000 BTU/H (7.33 Kilowatts) Input or Propane at 27,000 BTU/H (7.33 Kilowatts) Input.

How to use this manual:

This manual covers all models and unless otherwise specified, the designation C42-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/CGA B-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**.

CAUTIONS

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 The Fireplace Shell

The fireplace may be installed in any location that is free of 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:

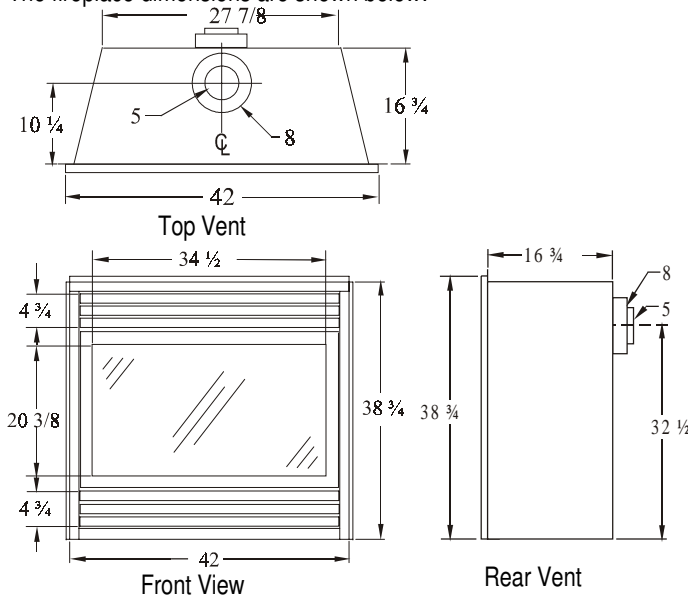


Figure 1. Fireplace dimensions.

Clearances

These clearances apply to all dimensions *except the framed opening*, where the clearance to combustibles is 0". The C42-DV clearances to combustible materials are:

Top - Rear Vent*	8"
Top - Top Vent	15"
Back	1/2"
Flue	1"
Side	1"
Floor	0"
Mantle**	8"

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

** Refer to page 10.

Unprotected combustible walls which are perpendicular to the fireplace opening, must not project beyond the shaded area shown in Figure 19b.

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

Framing

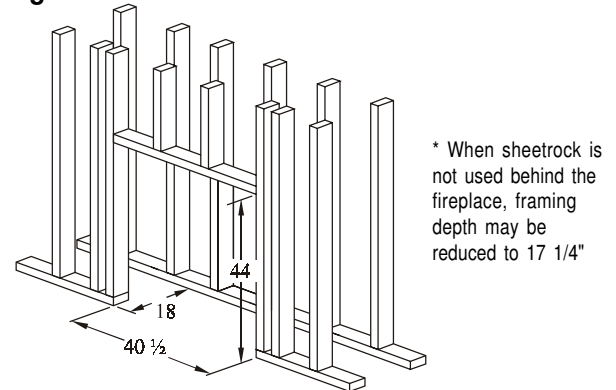


Figure 2. Framing dimensions.

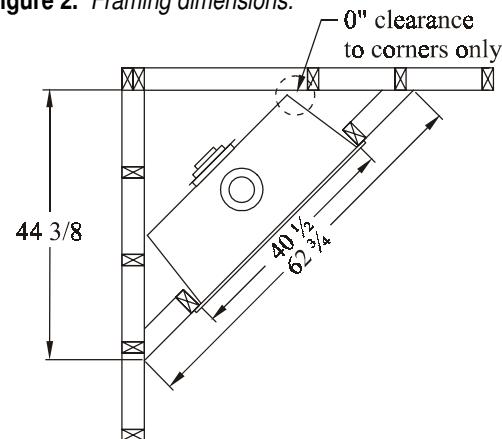


Figure 3. Corner framing dimensions.

When installing a shelf over the top of the fireplace, the following guidelines must be adhered to: For Rear Vent models (C42-DR), the minimum clearance from the top of the fireplace to a shelf is 8". For Top Vent models (C42-DT), the minimum clearance is 15". (Minimum 1" clearance must still be maintained around the vent pipes.)

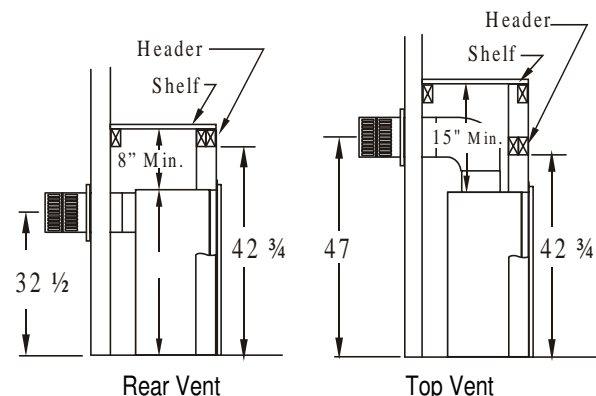


Figure 4. Framing for shelves over the fireplace.

WARNING:

When this appliance is installed directly on carpeting, tile or 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 C42-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 brass 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.

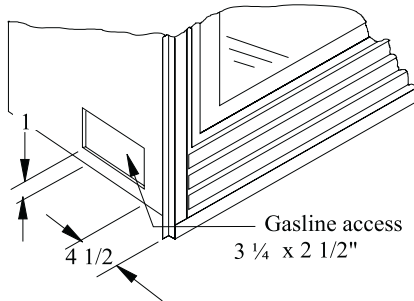


Figure 5. Gas line access.

The appliance and its individual shutoff 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 shutoff 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.**

Installing The Remote Switch

The C42-DV's gas valve, located behind the lower brass trim, may be connected to a wall switch. The valve generates its own power on a millivolt circuit. **Use only low voltage wire, and DO NOT connect any external power to it.**

Refer to Figure 26 for wiring requirements.

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

Vent Installation

This section covers the installation of direct venting and terminations.

Installation Requirements

- C42-DV fireplaces are certified for use with Montigo Premium Series (5" / 8") venting components. The C42-DV **Top Vent** may be used with Standard Series (4"/7") components on vertical vent runs only.
- Minimum 1" clearance to combustibles required for vent pipes
- 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 tapered end

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*.

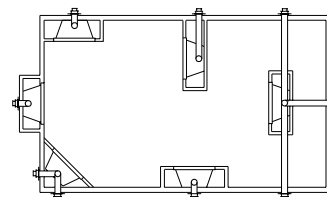


Figure 6. Fireplace locations and vent terminations.

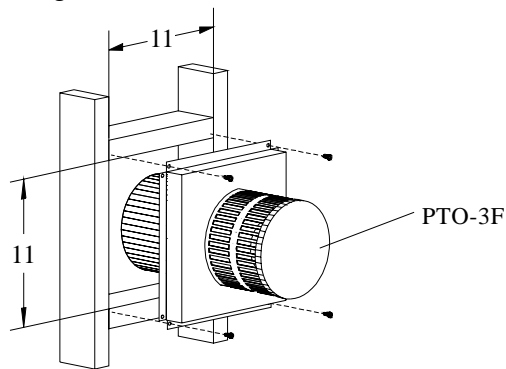
Cautions:

- 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.

Installation

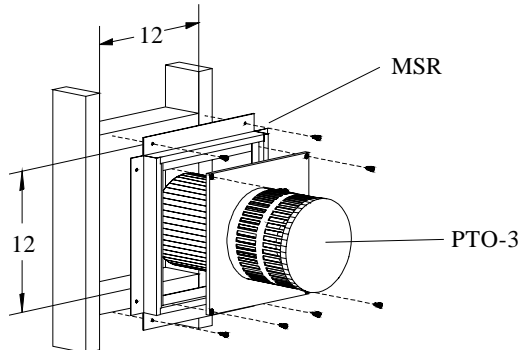


Installing Terminations with Built-In Frames



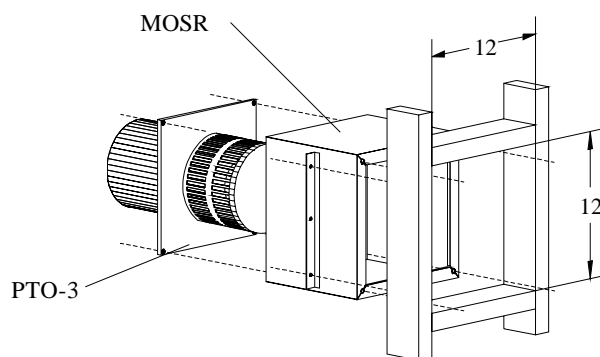
1. Frame the termination opening to 11" x 11".
2. Fasten the termination to the studs using a minimum of 4 screws.

Installing Terminations with MSR Frames



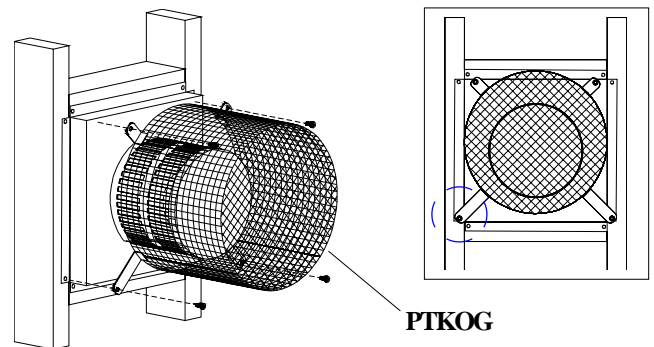
1. Frame the termination opening to 12" x 12".
2. Fasten the termination to the studs using a minimum of 4 screws.

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.



Installation

Top Vent Venting Runs

For the C42-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. 7) 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 36", this would be an acceptable installation.

Example B: (Acceptable Installation)

If the vertical dimension from the hearth is 90" 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.**

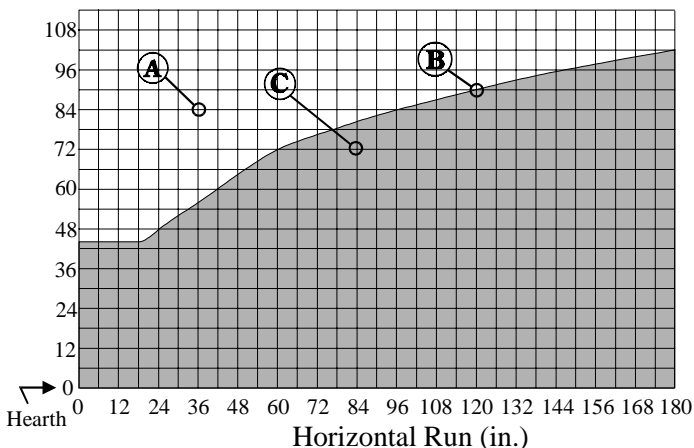


Figure 7. Venting Graph

Heat Shields

Due to high flue temperatures, heat shields are required on all C42-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".

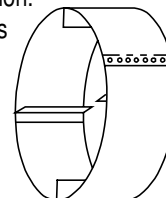


Figure 8. Heat Shield. Install by sliding over the vent pipe where it passes through combustible construction.

Available Top Vent Components

The following venting components are available for the **C42-DV Top Vent**:

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) PEXT-6 (72" 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 center of the vent pipe.

Venting runs *must* fall within the limits set by the venting graph (see Figure 7).

Installation



Example 1:

For our shortest venting configuration use components A and F (see Figure 9a).

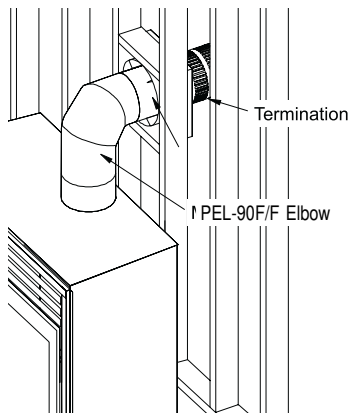


Figure 9a. Typical Top Vent installation. If the 90° elbow is installed directly on the fireplace, the height to the center of the termination is 43½".

Horizontal Venting

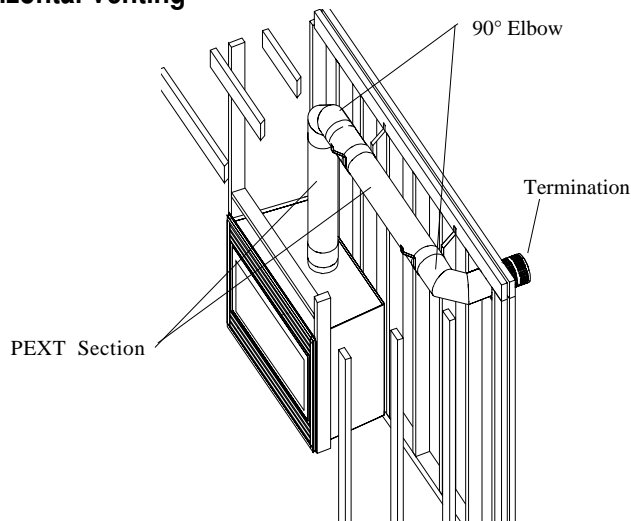


Figure 9b. Typical Top Vent installation. The solid sections can be used in various combinations to obtain the desired vent run. The vent run must fall within the limits set by the venting graph.

Example 2:

Rigid sections and an elbow used in conjunction with 3 ft. flex section (PFL-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 10 and 11).

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

NOTE: Flex section with no vertical rise must not exceed maximum horizontal length of 3 feet (see Figure 12). 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.

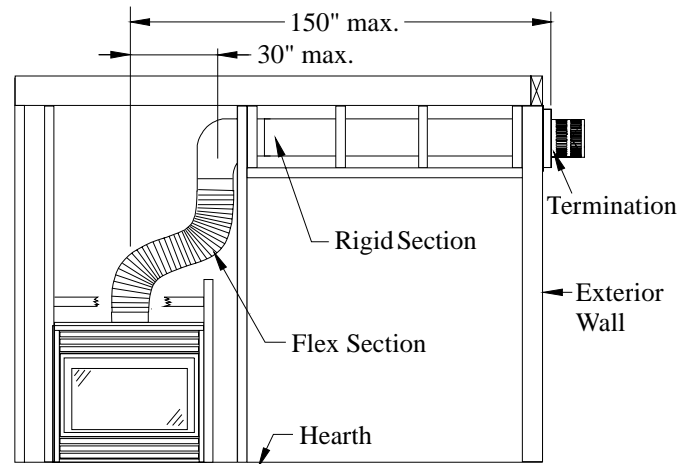


Figure 10. Extended Installation using a combination of solid and flex venting. Use the vent graph to determine your allowable run, then select appropriate components.

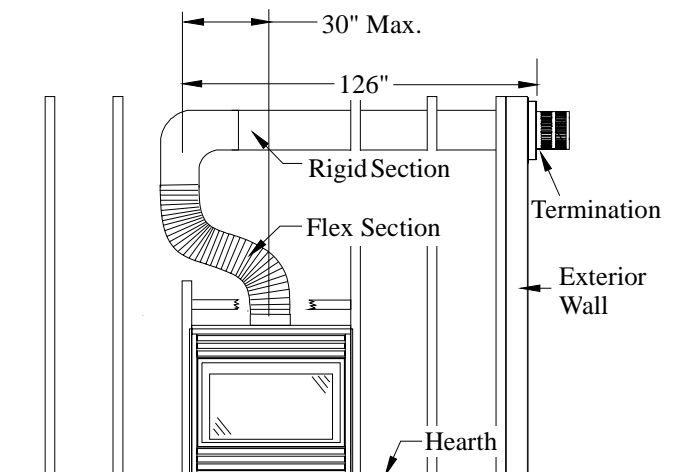


Figure 11. Retracted Installation using a combination of solid and flex venting. Use the vent graph to determine your allowable run, then select appropriate components.

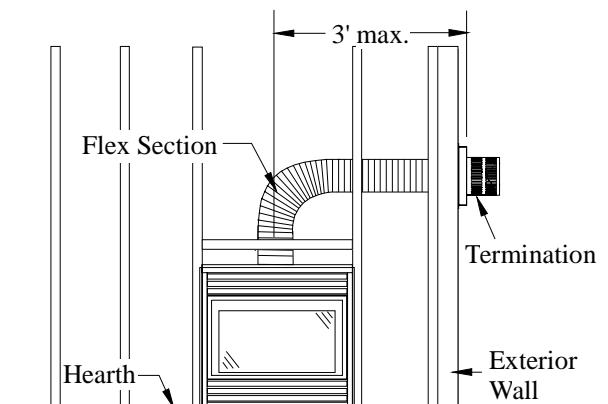


Figure 12. Horizontal flex installation with no vertical rise.



Installation

B. Vertical (Through-The-Roof) Installations

5/8" with option for 4/7"

- 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 3' (three feet) from a parapet wall.
- Maximum vent height is 35 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.

Part	Size	5/8 Venting	4/7 Venting
A - Termination	n/a	PVTK-1	MVTK-1
B - Flex sections	12	PFL-1	MFL-1
	24	PFL-2	MFL-2
	36	PFL-3	MFL-3
	48	PFL-4	MFL-4
C - Solid sections	12	EXT-1	MEXT-1
	24	EXT-2	MEXT-2
	36	EXT-3	MEXT-3
	48	EXT-4	MEXT-4
D - Support Ring & Plate		PSPXT-8	MSPXT-7
E - Firestop		PS-8	FS-7
F - Roof Flashing	(1/12 - 7/12 pt.)	PRF-7	MRF-7
	(7/12 - 12/12 pt.)	PRF-12	MRF-12
G - Adaptor	(5/8 - 4/7)		

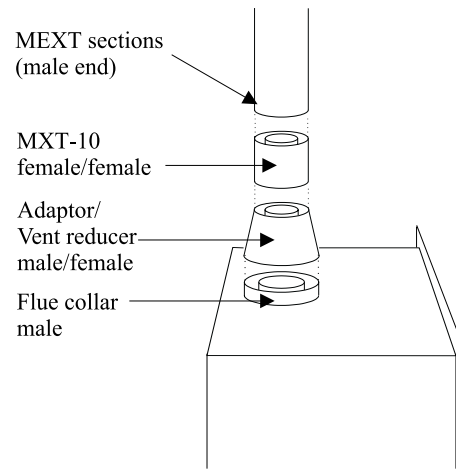
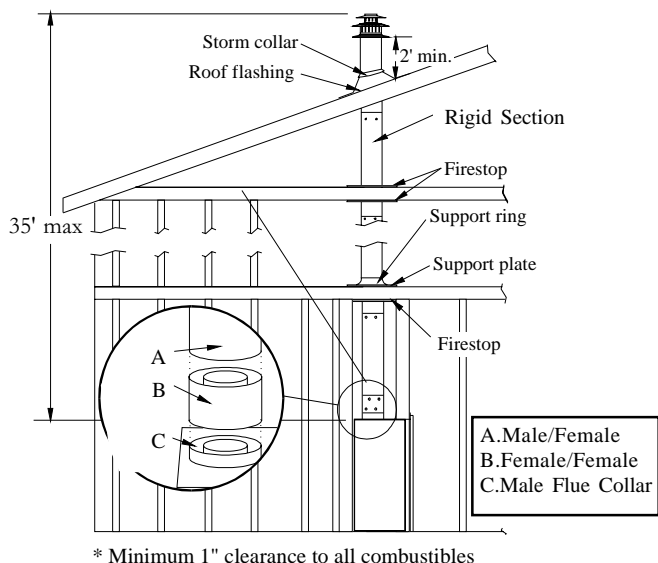


Figure 13b. Reducing Vertical Vent from 5/8" to 4/7".

- A maximum of two offsets with 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.

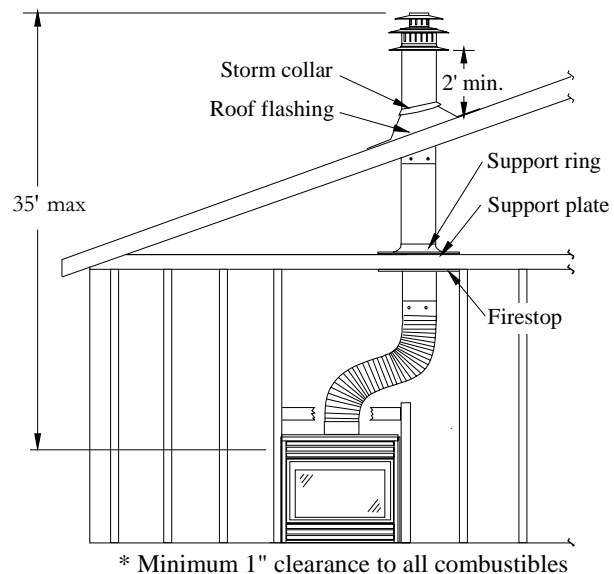


Figure 14a. Vertical venting with 1 offset.

Vent Restrictors

When venting vertically, Vent Restrictors may be added to enhance the burn characteristics of the fireplace.

Figure 13.a Straight, vertical venting using required adaptor.

Installation

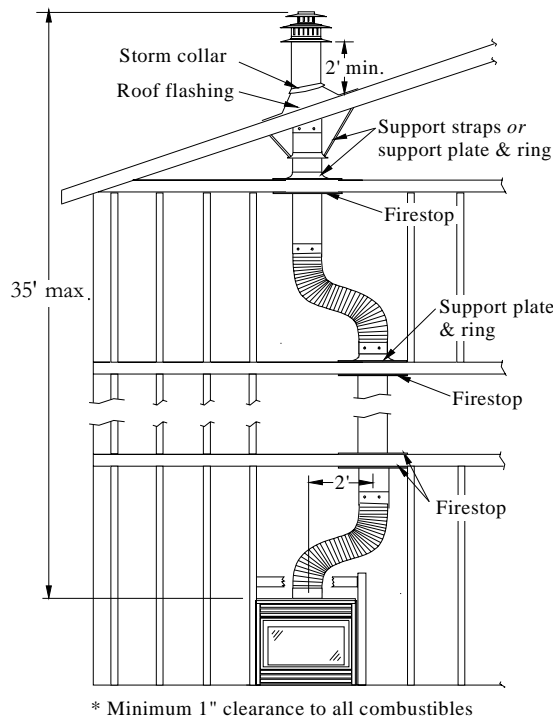


Figure 14b. Vertical venting with 2 offsets.

Rear Vent Venting Runs

The C42-DV Rear Vent has three possible installations which do not require vertical lift:

1. Straight Installation.

The height from the hearth to the center of the termination is 31 1/2". C42-DV Rear Vent versions are supplied with a 20" extension pipe (PXT-20) with female/female connections. For shorter installations, cut the PXT-20 to the desired length.

For extended installations, use the PXT-20 section as supplied for a 20" vent run.

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

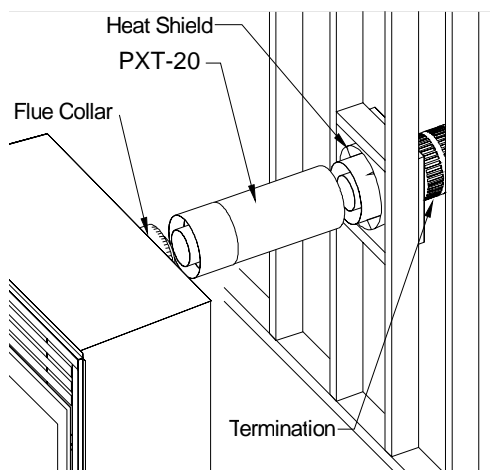


Figure 15. Extended installation.

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.

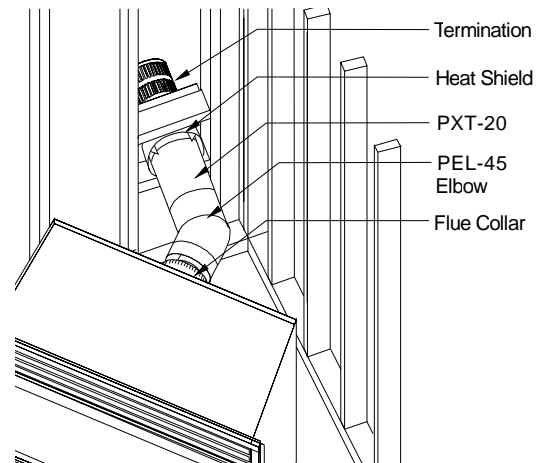


Figure 16. Corner installation.

3. Corner Installation — 45° or less.

Use an PTO-3 termination and 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°.

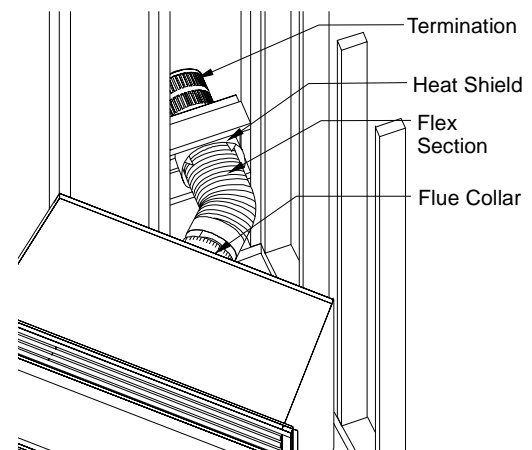


Figure 17. Flex installation.

Heat Shields

Due to high flue temperatures, heat shields are required on all C42-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". *Heat Shields are included.

See Figure 8.



Installation

B. Multi-Elbow Installations

For more difficult installation situations, the C42-DV 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:

- 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 18a

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. 18a) 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 36", this would be an acceptable installation.

Example B: (Acceptable Installation)

If the vertical dimension from the hearth is 90" and the horizontal run to the wall flange of the vent termination is 126", this would be an acceptable installation.

Example C: (Unacceptable Installation)

If the vertical dimension from the floor of the fireplace is 78" and the horizontal run to the wall flange of the vent termination is 108", **this would NOT be an acceptable installation.**

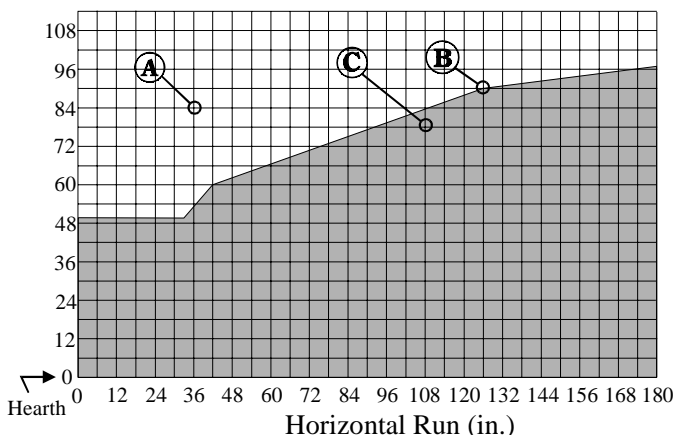


Figure 18a. C42-DV Rear Vent Venting Graph

Installation Of Rear Vent DV

C42-DV Rear Vent versions are supplied with an PXT-20 (female/female) section. In addition, the following venting components are available for **Rear Vent installations**:

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 - Solid sections	PEXT-1 (12" section) PEXT-2 (24" section) PEXT-3 (36" section) PEXT-4 (48" section)
E - 90 degree elbow	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 18a).

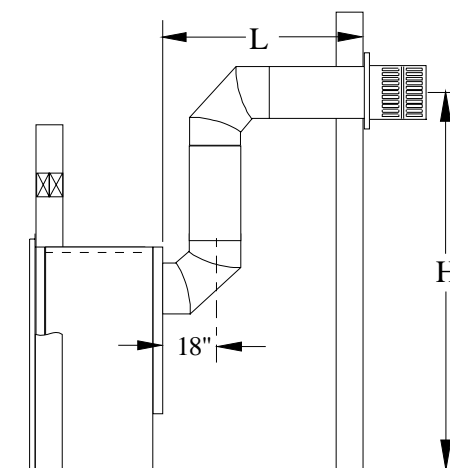


Figure 18b. Multi-elbow installation. Distance 'H' must be a minimum of 50". The vent run must comply with figure 18a.



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 19a**. Side wall clearances are 3". Combustible surrounds may be installed with 3" clearance to the side of the fireplace as shown in **Figure 19b**.

Fireplace Facing

When selecting the finish material for your fireplace, it is important to remember the following: **BRASS TRIMS 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.

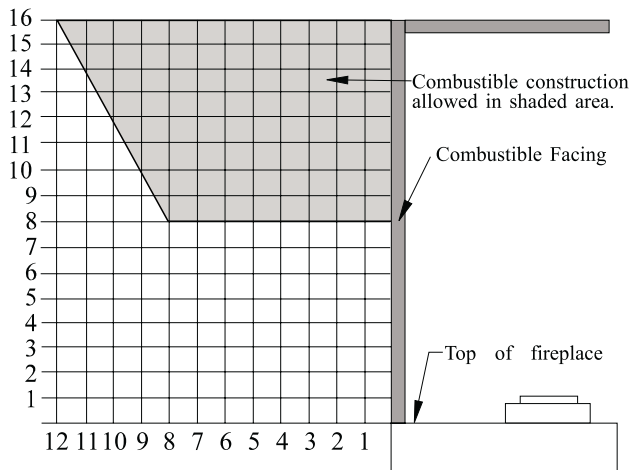


Figure 19a. Combustible mantles and facings.

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.

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.

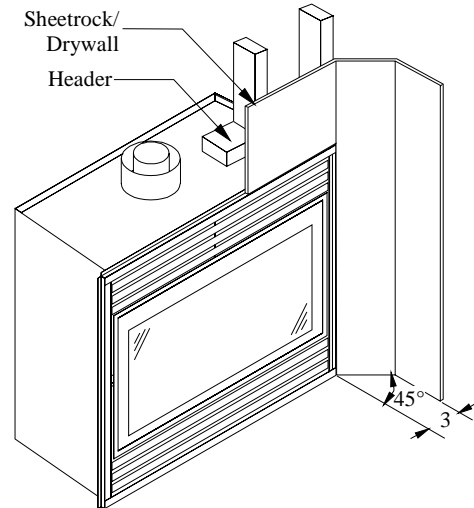


Figure 19b. Combustible surrounds.



Installation

Wiring for the optional Fan Kit

All C42-DV fireplaces may be equipped with optional fan kits (Part no. RFK1001, RFK1003, RFK1006 or RFK1007) for circulating heat into the living space.

Installations in Canada which employ the fans must be electrically grounded in accordance with **CSA C22.1** Canadian Electrical Code Part 1 and/or Local Codes.

Installations in the USA which employ the fans must be grounded in accordance with local codes or, in the absence of local codes, with the National Electrical Code, **ANSI/NFPA 70-1987**.

For more information see the **Fan Kit Installation Guide** included with the fan kit.

NOTE: If any of the original wire supplied with the appliance is replaced, it must be replaced with the same type, or its equivalent.

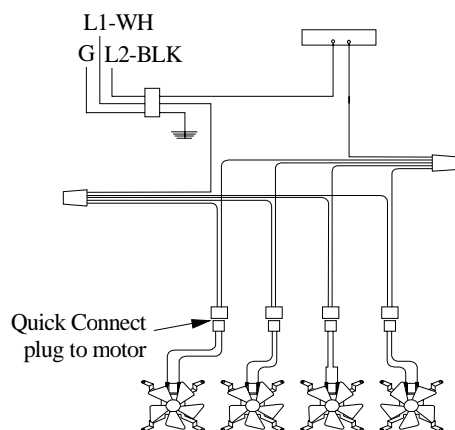


Figure 22a. Wiring for optional air circulating fan kit.

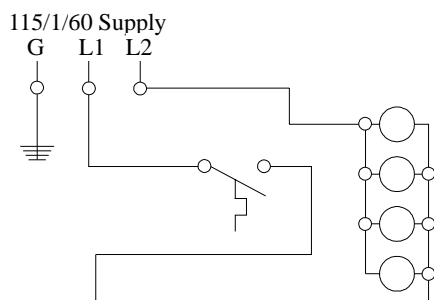


Figure 22b. Wiring schematic for optional fan kit.

Removing and Installing the Door

Removing the Door:

Remove the trim (as described on the next page) 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 all three latches. Be sure to hold the door carefully so it does not fall. (See figure 23a.)

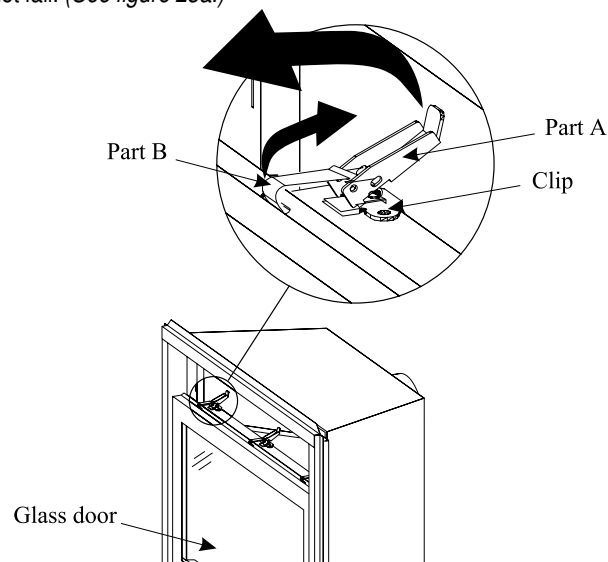


Figure 23a. Operating the door latches.

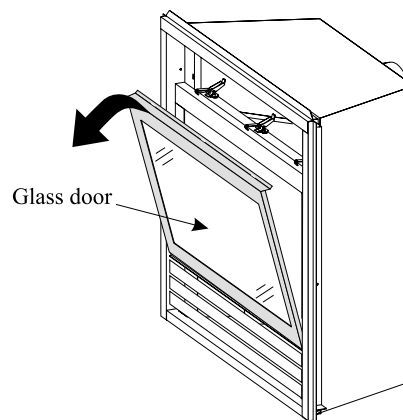


Figure 23b. Removing the door.

Once the three latches are unhinged, tilt the top of the door forward and lift it out of the slots. See figures 23b and 23c.

Installation

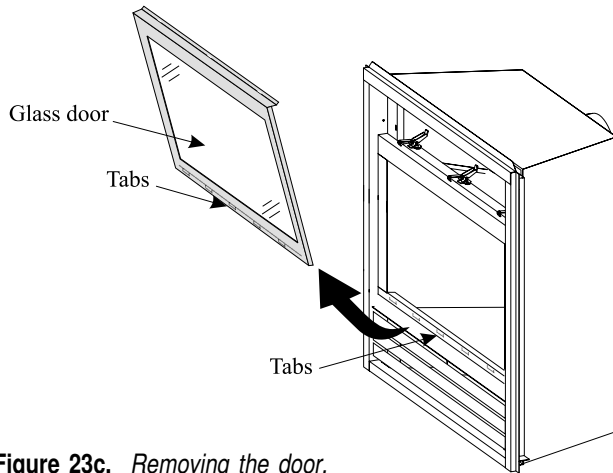


Figure 23c. Removing the door.

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.

Installing the Log Set

Installing the Logs:

The C42-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 24a. 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.

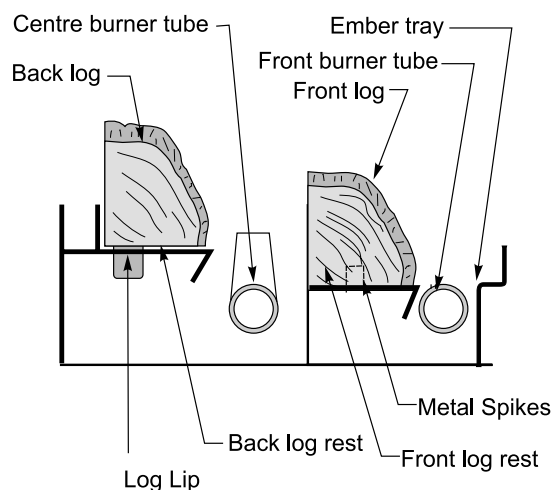


Figure 24a. Positioning for the front and back logs.

4. Place the top logs in position as shown in figure 24b, 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.

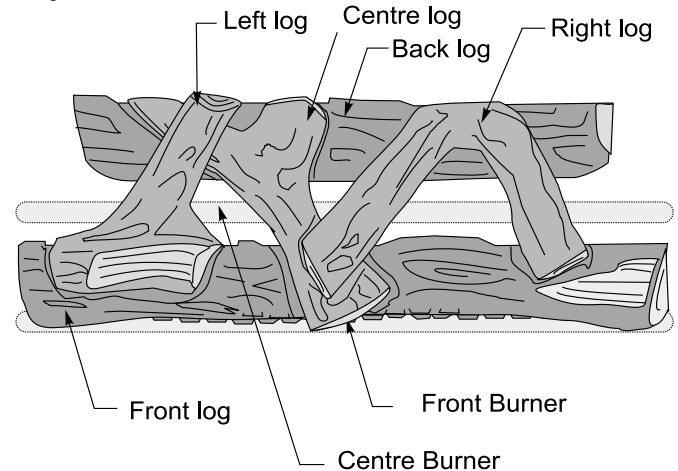


Figure 24b. Proper log placement.

NOTES:

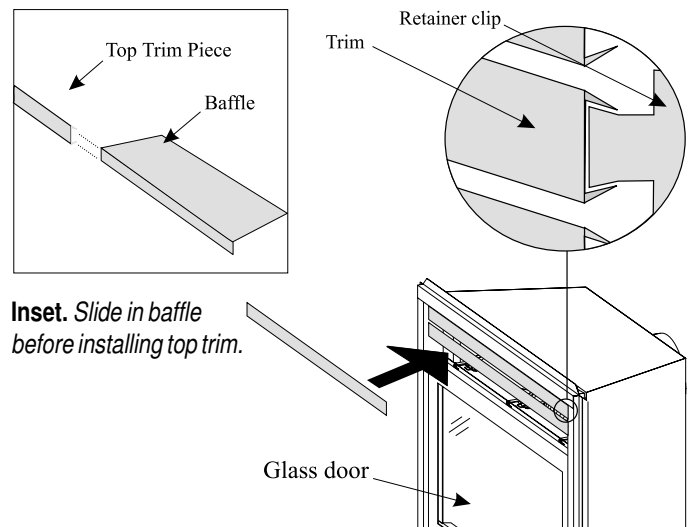
- If logs are not placed properly, excessive sooting will result.
- The surface of the logs will crack due to the heat from the flames. This is a normal occurrence.

Installing the Trim & Baffle

The fireplace is shipped with 6 horizontal trim pieces (3 upper and 3 lower), which 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 25) Remember to slide the baffle into the top trim piece. (See Inset)

Note: Baffle should rest on top of the tabs.



Inset. Slide in baffle before installing top trim.

Figure 25. Installing the horizontal trim pieces.

C42-DV

Operation - Model C42-DV






with Continuous Pilot

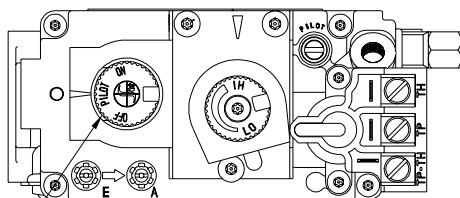
For Your Safety - READ BEFORE LIGHTING:

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.
 - 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.

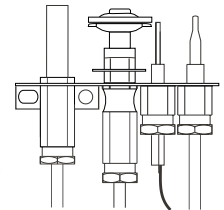
Lighting Instructions:

1. **STOP!** Read the safety information above on this label.
2. Flip down the lower trims.
3. 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 counterclockwise  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 counterclockwise  to "ON."
9. Flip up the lower trim.
10. Turn on remote switch to ignite fire.




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

NOTE: 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.



C42-DV-S

Operation - Model C42-DV-S

with Pilotless (Spark-to-Burner) Ignition

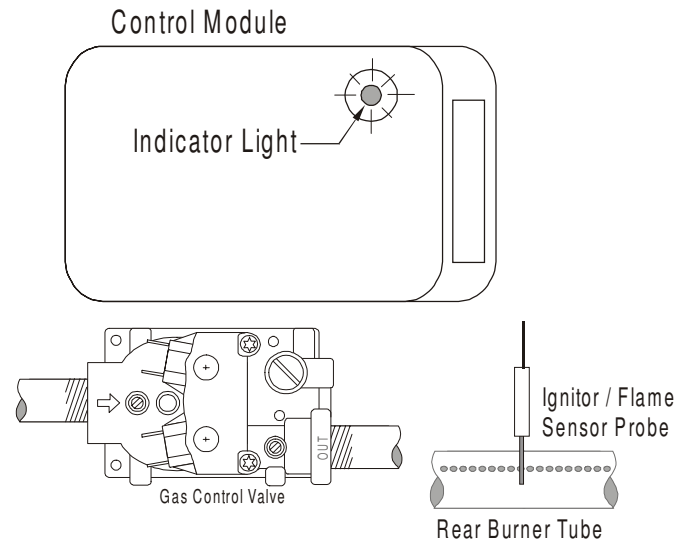
For Your Safety - READ BEFORE LIGHTING:

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 does not have a pilot. It is equipped with an ignition device which automatically lights the burner. Do **not** attempt to light the burner 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 the 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 suppliers instructions.
- C. Do not tamper with, or attempt to repair the gas control valve. If the system does not operate properly, call your service technician or gas supplier. 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. Make sure the wall switch is in the "OFF" position. Flip down the lower horizontal trim.
3. 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 step 4.
4. Find the indicator light on the control module, located under the fireplace near the gas control valve. If the indicator light is flashing slowly, the system is ready for lighting.
5. Turn on the wall switch. You will hear a 'ticking' sound as the system attempts to light the fireplace. If successful, the main burner will ignite, and the indicator light will flash quickly. If not successful, the system will automatically close the gas valve to stop the flow of gas. The indicator light will double flash, and the system will lock out for five minutes.
6. Flip up the lower horizontal trim.



To Turn Off Gas To Appliance:

1. Turn off the wall switch.
2. If service is to be performed, turn off all electric power to the appliance.

Operation



Lighting Instructions

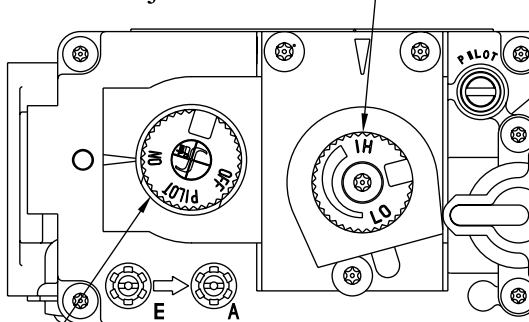
See pages 14 and 15.

Burner Adjustment

The C42-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 centre of the gas control valve (See Figure 26). The front burners are not adjustable.

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

Hi-low adjustment knob



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

Figure 26. 'Hi-Lo' Adjustment on the C42-DV's gas valve.

Note: C42-DV-I models (pilotless ignition) do not feature hi/lo adjustment.

Maintenance



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.

General

- Have the fireplace installation inspected yearly, including a visual check of the vent system, the burner and the pilot flame. For your convenience a 1/8" manifold pressure tap is supplied on the gas valve for a test gauge connection. See Figure 27.
- 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 vapours 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 byproduct of combustion) which may be visible. Film can easily be removed by removing the door, as shown on page 12-13. 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

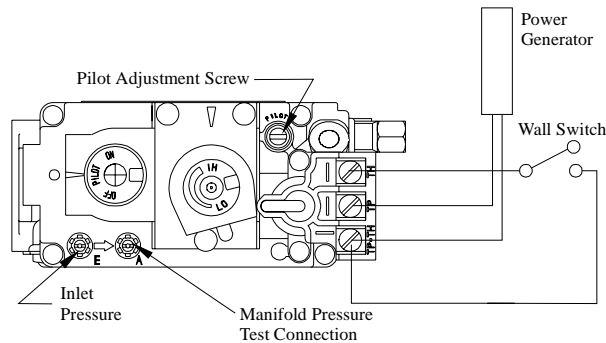


Figure 27 Sit Nova 820 gas valve.

Pilot Burner Adjustment

1. Locate Pilot Adjustment Screw. (See figure 27.)
2. Adjust pilot screw to provide properly sized flame as shown in figure 28).
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.

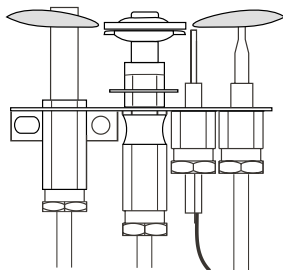


Figure 28. Pilot Burner

Troubleshooting C42-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 27.
Main burner will not light	1. Check wiring (see figure 27). 2. Check wall switch for proper connection.

Troubleshooting C42-DV-S

A. Diagnosing the status using the indicator light.

The LED indicator light on the control module will show the control system's current status.

LED Pattern	Status
No Light	System does not have power. Action: Ensure that the power cord is plugged into the PPO-D box. See Figure 30.
Slow Steady Flash	System is ready.
Fast Steady Flash	System is trying to light the burner.
Double Flashes	5 Minute Lockout. The system did not light/remain lighted successfully. Action: Wait five minutes before attempting to re-light the burner.
Continuous On	Hard system lockout. You must unplug the power cord from the PPO-D box to reset the system. (See figure 30.)

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.

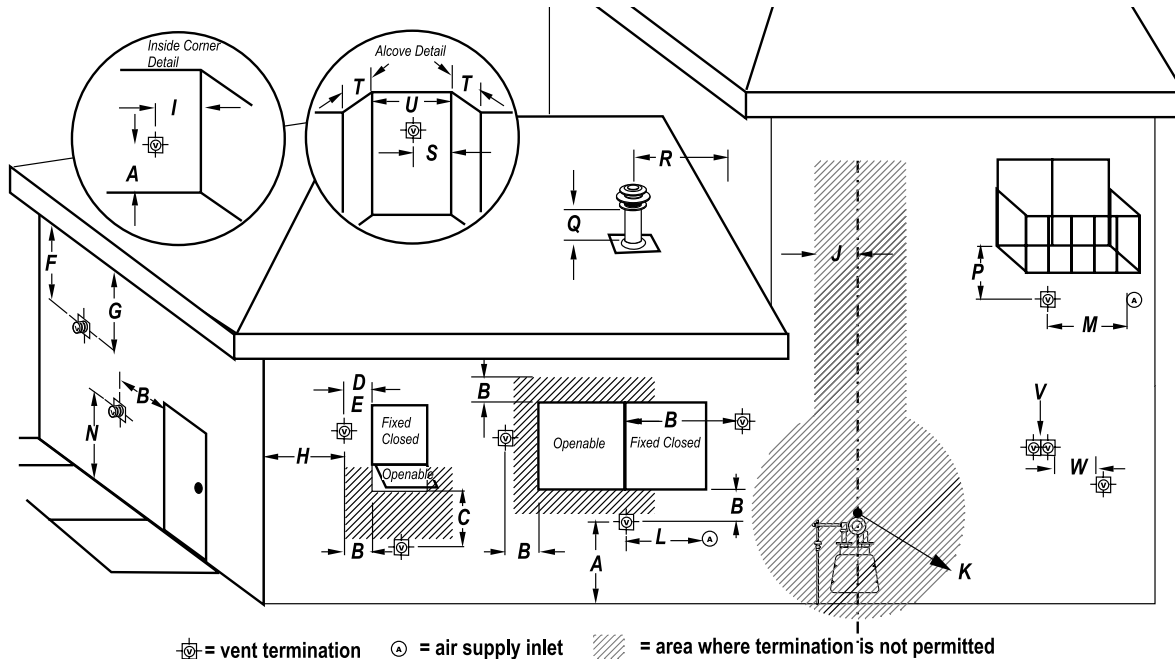
Other Rights

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.

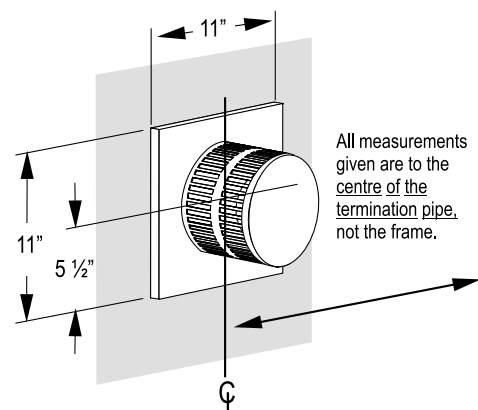
Appendix A - Termination Locations



- 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 $\leq 100\,000$ BTU/H (30kW)]
- C** = clearance to bottom of window that may be opened horizontally [36 inches (92 cm) minimum for appliances $\leq 100\,000$ 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 nonmechanical air supply inlet to building or the combustion air inlet to any other appliance [16 inches (41 cm) minimum for appliances $\leq 100\,000$ 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 neighbouring 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 clearances



Appendix B - Wiring for STB-Equipped fireplaces

Option A - Single Wall Switch for STB Control Only

Use this wiring option when installing a single wall switch to control the fireplace only. The switch on the yellow circuit controls the Spark To Burner (STB) system. The blue circuit provides power to the optional fans and is always hot.

The fireplace can be safely wired this way, even if fans are not installed. The fans can be added later, if desired.

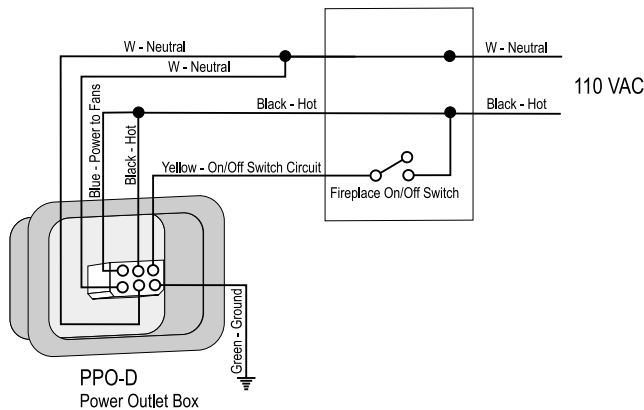


Figure 29a. Wiring schematic for using a single wall switch to control the fireplace. The circuit that supplies electricity to the optional fans is always hot.

Option B - Two Wall Switches for STB and Fan Control

This wiring option is for installing two wall switches. The switch on the yellow circuit controls the Spark To Burner (STB) system. The other switch (blue circuit) is for controlling the optional fans.

The fireplace can be safely wired this way, even if fans are not installed. The fans can be added later, if desired.

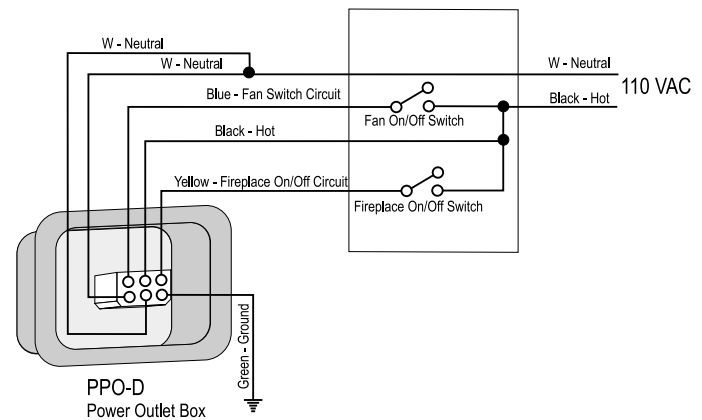


Figure 29b. Wiring schematic for using two wall switches: one to control the fireplace and another to control optional fans for the fireplace.

System Wiring Schematic

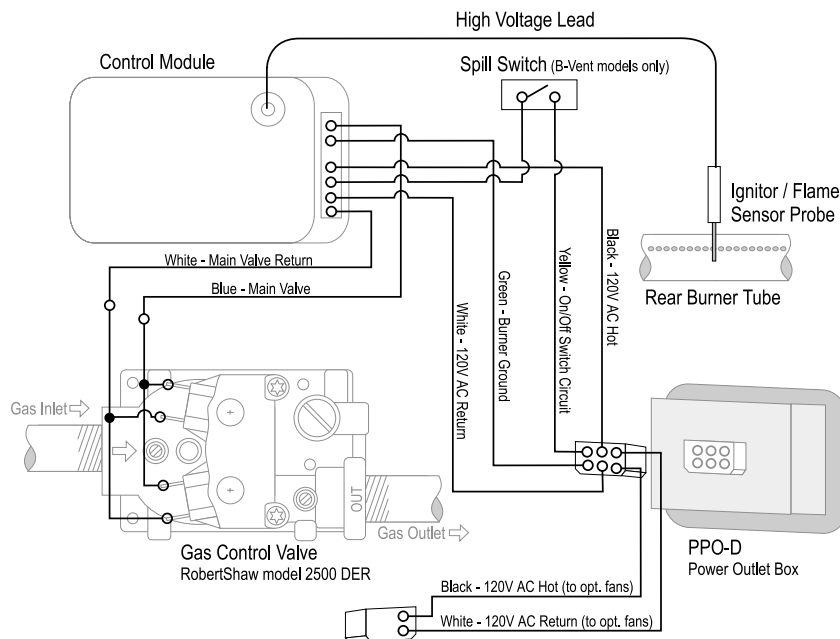


Figure 30. STB system wiring schematic showing the wiring of the control module and gas control valve to the household electrical supply.

WARNING:

Unplug the Power Cord Before Resetting the Spill Switch

The spill switch is located behind the upper horizontal trims on the right hand side of the fireplace. If the spill switch trips it will shut down the fireplace (causing the red button to pop out).

You **must** disconnect the power cord from the PPO-D box (see fig. 3), before resetting the switch. To reset the switch, push the red button in using the bottom of a pen or other blunt object.

Notes



XG0119B Rev. 01 - 07/00

Canadian Heating Products Inc.
Surrey, BC V3W 2V6

Montigo Del Ray Corp.
Ferndale, WA 98248