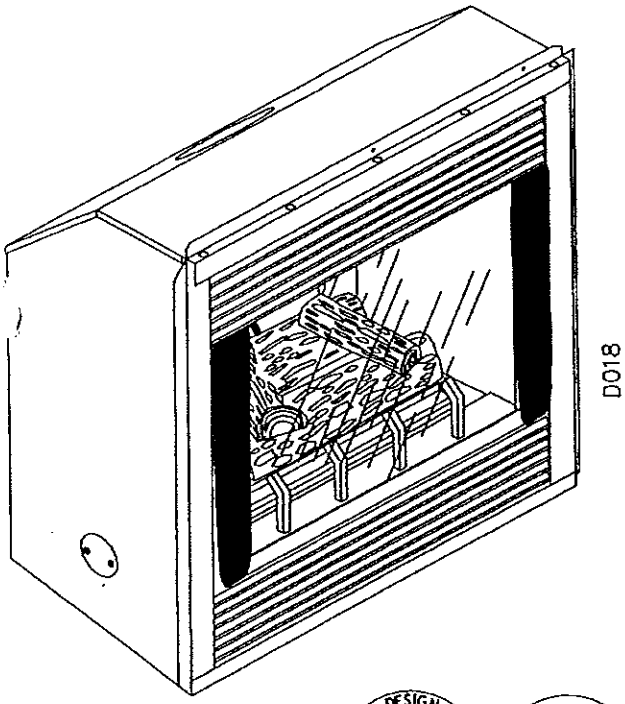
The Symbol of Excellence

Executive Series

DVF42TA/TPA, DVF42TEA/TEPA
DVF42TLA/TPLA, DVF42TELA/TEPLA
(Tempered Glass)
DIRECT- VENT GAS FIREPLACES
INSTALLATION INSTRUCTIONS

SAVE THIS BOOK

This book is valuable. In addition to instructing you on how to install and maintain your appliance, it also contains information that will enable you to obtain replacement parts or optional accessory items when needed. Keep it with your other important papers.



D018

DESIGN CERTIFIED

0700

This appliance may be installed in an aftermarket* permanently located, manufactured (mobile) home, where not prohibited by state or local codes. This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases, unless a certified kit is used.

*Aftermarket: Completion of sale, not for purpose of resale, om the manufacturer.

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

- **Do not store or use gasoline or any other flammable vapors or 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.**

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

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.

CHECK LOCAL CODES PRIOR TO INSTALLATION

CONTENTS

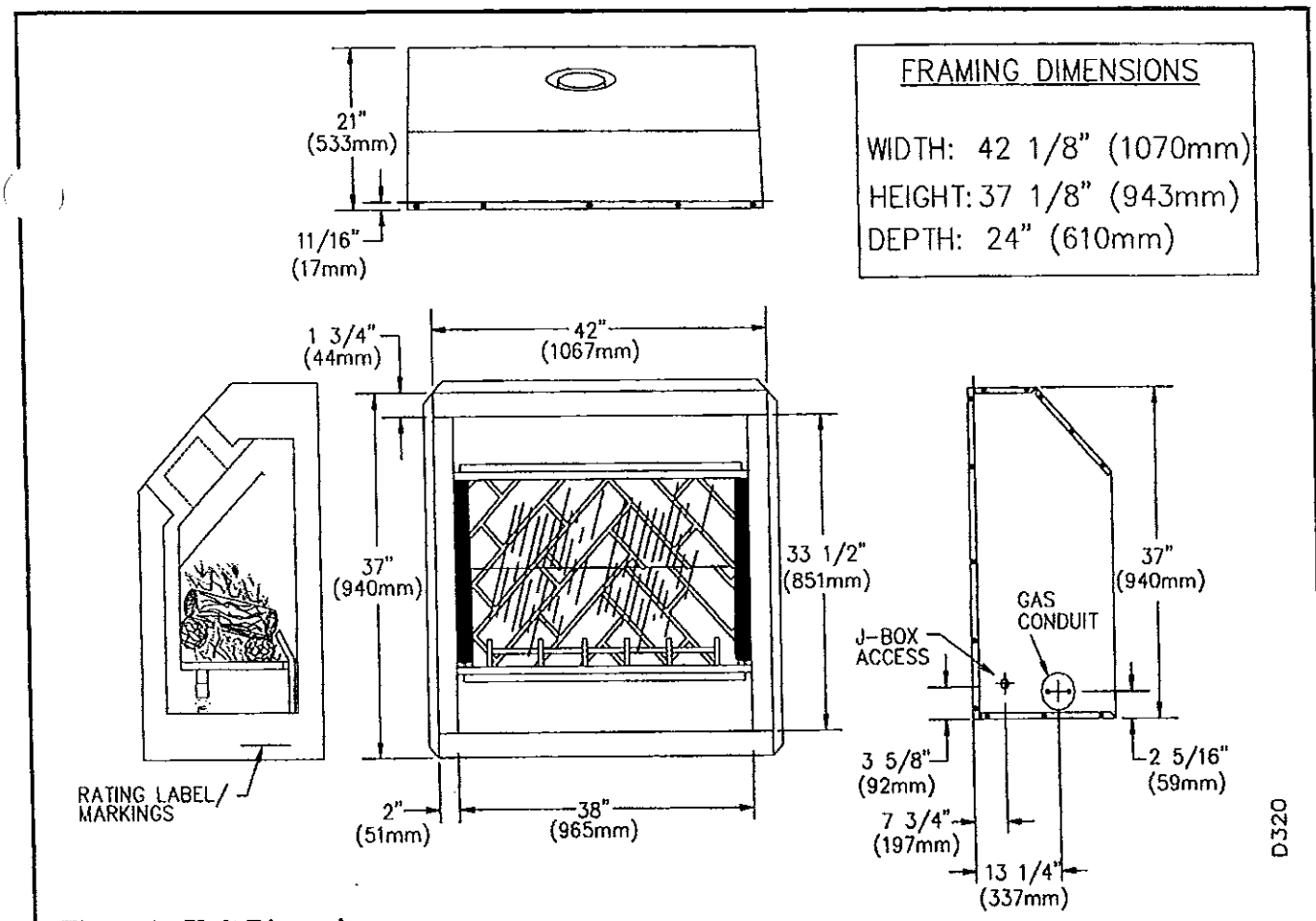


Figure 1 - Unit Dimensions

NOTE : **ALL DIMENSIONS IN THIS INSTALLATION MANUAL ARE IN INCHES UNLESS OTHERWISE SPECIFIED.**

INTRODUCTION

The **DVF42TA-P/L/PL/** series are direct-vented gas fireplaces with a sealed combustion chamber that use a **millivolt gas control with a millivolt ignition system.** The models **DVF42TEA-P/L/PL/** use a **direct spark ignition** with a 24 VAC control module. All models have a manual HI/LO valve to control the flame height. These units can be equipped with louvers for circulating or with panels for non-circulating operation. Either a **DVFFBK** or a **DVFFBKT** fan kit is available for this model as an option.

These units requires a unique termination which includes transition pipes and must be installed prior to operation

NOTICE: Check local building codes for area requirements before installing this appliance.

* Models **DVF42TA/TEA/TLA/TELA** are for use with **NATURAL GAS ONLY.**
* Models **DVF42TPA/TEPA/TPLA/TEPLA** are for use with **PROPANE/LP GASES ONLY.**

If you have any doubts as to which gas your particular appliance is approved and tested for, please check the (CSA) A.G.A./CGA rating plate located at the interior of the appliance opening (see figure 1) or consult your local distributor.

BEFORE YOU BEGIN:

Before beginning the installation of your appliance, read these instructions through completely.

This FMI appliance and its approved components are safe when installed according to this installation manual and operated as recommended by FMI. Unless you use FMI approved components tested for this appliance, **YOU MAY CAUSE A FIRE HAZARD!**

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

A) Modification of the appliance or any of the components manufactured by FMI unless otherwise permitted in writing by FMI.

B) The use of any components or parts not approved by FMI in combination with this FMI appliance.

C) Installation and/or operation in a manner other than instructed in this manual.

D) The burning of anything other than the type of gas approved for use in this gas appliance.

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

The installation must conform to local codes, or in the absence of local codes, with the **National Fuel Gas Code Z223.1 or the Canada Installation Code CAN/CGA-B149.** This appliance complies with **ANS Z21.50 / CSA 2.22-98** as a vented gas fireplace and is listed and tested by the **Canadian Standards Association.**

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

SELECTING LOCATION

To determine the safest and most efficient location for your appliance, consider the following guidelines:

1. The location must allow for all the proper clearances (see section on Clearances).

2. Consider a location where the heat output would not be affected by drafts, air conditioning ducts, windows or doors.

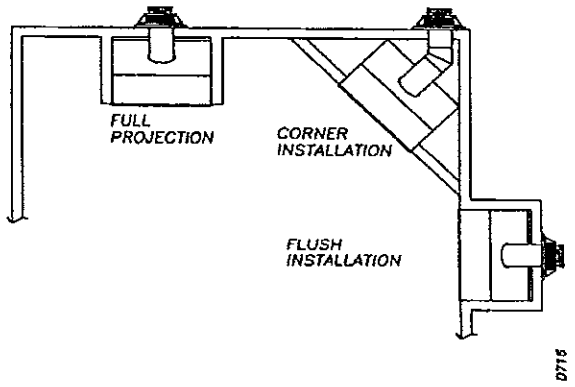


Figure 2 - Possible Installations of DVF42TA Fireplace

Figure 2 shows a few common locations.

Flush installations are recommended where living space is limited or at a premium.

Projected installations can extend a maximum of 22" into the room as shown on figure 10, page 4. A projection may be ideal for a new addition on an existing, finished wall.

Corner installations make use of space that may not normally be used and provides a wider angle of view.

ALSO, IN SELECTING A LOCATION, THE FOLLOWING PRECAUTIONS MUST BE OBSERVED;

1. Do not connect this appliance to a chimney system used for a solid fuel burning fireplace.

2. Due to high temperatures, do not locate this appliance in high traffic areas or near furniture and draperies.

3. **NEVER** obstruct the front opening of the appliance or the flow of combustion and ventilation air. Keep the control compartments accessible.

4. **Do not** locate close to where gasoline or other flammable liquids may be stored. The appliance area must be kept clear and free from these combustible materials.

ARANCES

MINIMUM CLEARANCES TO COMBUSTIBLES ARE:

* BACK AND SIDES: . . . . . 0" MIN.
* VENT SURFACES: . . . . . 1" (25cm) MIN.
* CEILING TO OPENING: . . . . . 42" (107cm) MIN.
* FLOOR: . . . . . .0" MIN.
* SIDEWALL (at nailing flanges): . . . . . 0" MIN.
* PERPENDICULAR:. . . . . .12" (30.5cm) MIN.

⚠ CAUTION: DO NOT BLOCK REQUIRED AIR SPACES WITH INSULATION OR ANY OTHER MATERIALS. DO NOT OBSTRUCT THE EFFECTIVE OPENING OF THE APPLIANCE WITH ANY TYPE OF FACING MATERIAL.

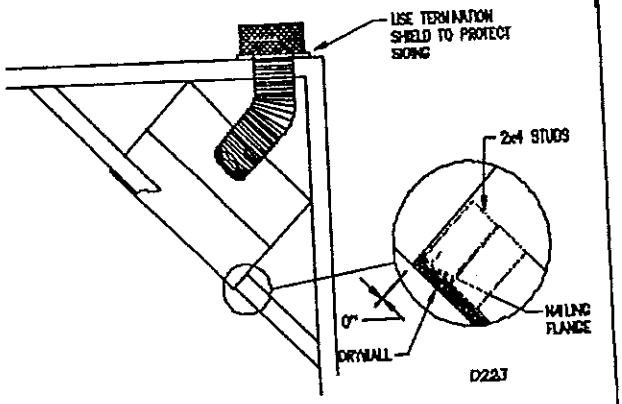


Figure 3 - Clearance to Corner Installation

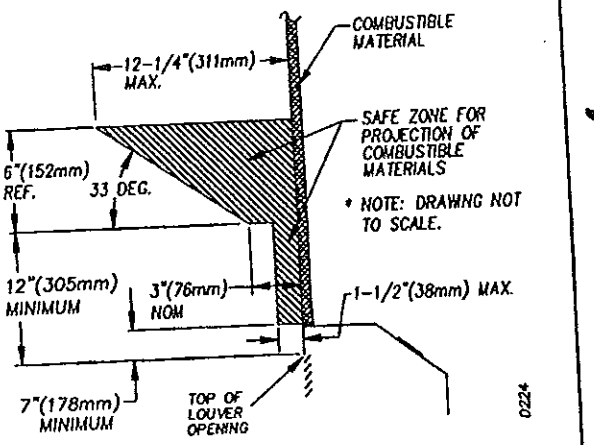


Figure 5 - Mantel Clearances

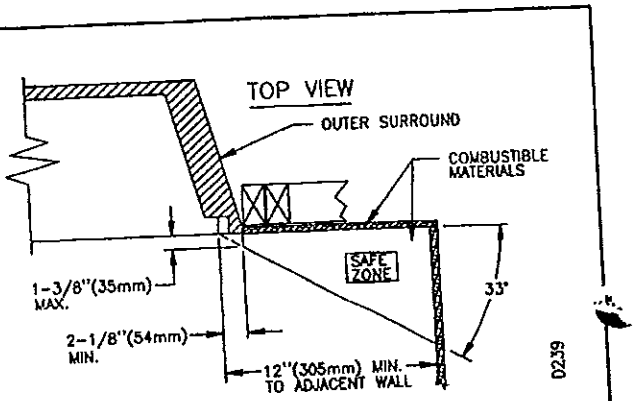


Figure 6 - Minimum Clearances to Side projections

MANTEL CLEARANCES

Woodwork, such as wood trims, mantels, and other combustible materials, should not be placed within 7 inches of the opening of this appliance (Figure 5 & 6). Combustible material above projecting more than 1-1/2 inches from the appliance's front face must not be placed less than 12 inches from the top of the louver opening (ref. NFPA Standard 211 Sec. 7-3.3.3).

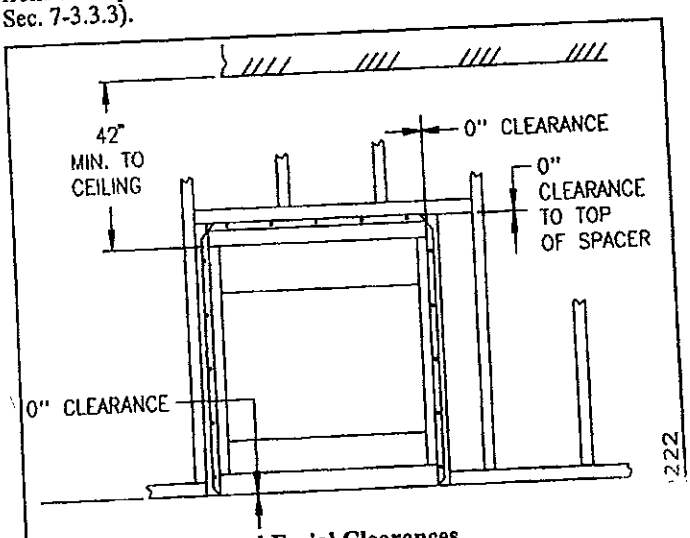


Figure 4 - Ceiling and Facial Clearances

FRAMING

Once the final location has been determined, observing clearances for the vent termination, you may construct framing using dimensions shown in figures 7 through 9, depending on your particular installation.

If the appliance is to be installed directly on carpeting, tile (other than ceramic), or any combustible material other than wood flooring, the appliance must be installed upon a metal or wood panel extending the full width and depth of the appliance.

The gas supply line may be connected through the right side or through the lower sub-flooring or below a platform base if provided (see Figures 1 and 9).

Depending on the type of installation, refer to the appropriate illustration. On a flush or on a projec installation having a wall thickness of up to 11 inche use termination DVF-K (See Figure 10).

On a corner installation having a wall thickness of up 11 inches, use a DVF-K termination with a flex sion (See Figure 11).

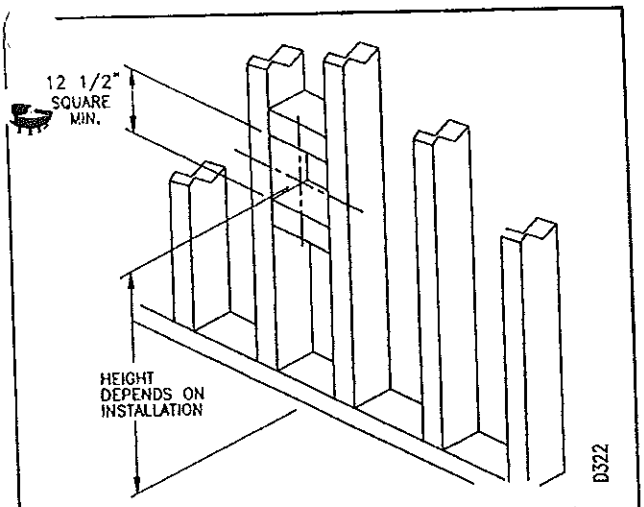


Figure 7 - Rough Opening for Installation of Exterior Vent Terminal

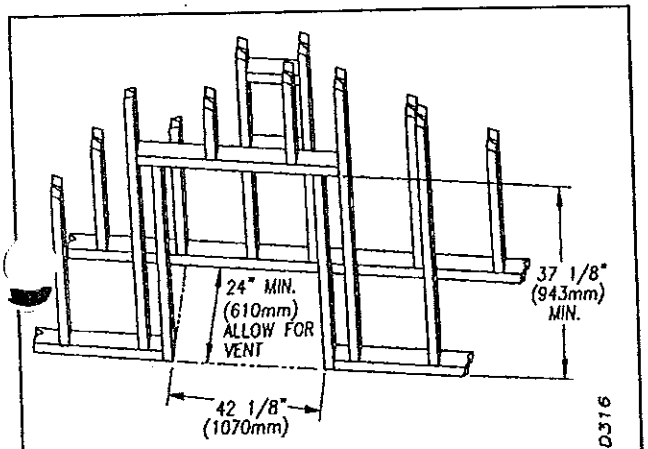


Figure 8 - Rough Opening for a Flush Installation

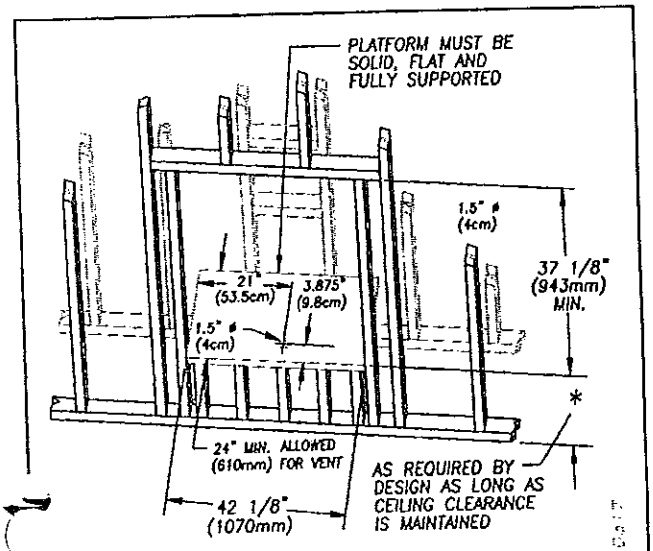


Figure 9 - Rough Opening for Platform Installation with Alternate Gas Supply Location

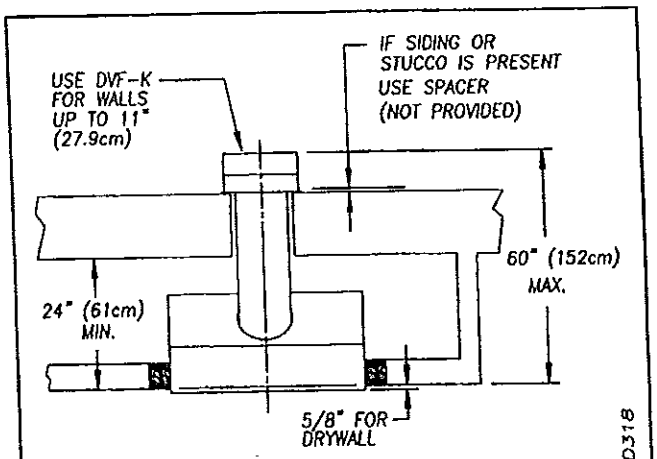


Figure 10 - Flush Vent Installation

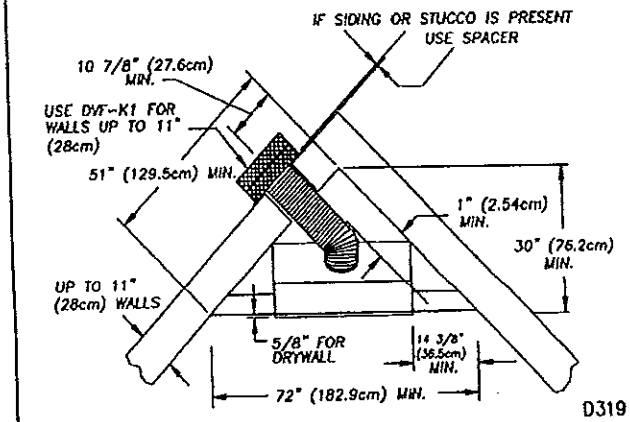


Figure 11 - Corner Vent Installation

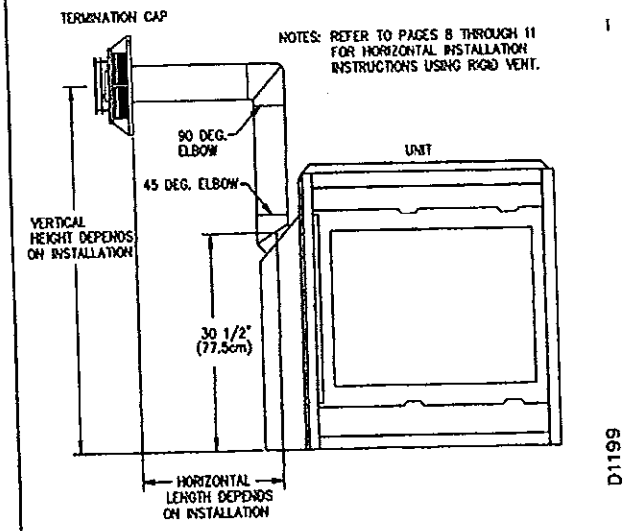


Figure 12 - Vent Opening Height

GENERAL VENTING

These models are approved for use with Simpson, Dura-Vent® rigid type direct vent pipe as supplied by FMI or may be vented horizontally with approved types of flexible vent pipe (i.e. ECCO-FLEX™ or Z-Flex™) when appropriately sized for a 8" outer and 5" inner diameter application.

Your Fireplace is approved for venting either horizontally through a side wall, or vertically through a roofline using the following guidelines:

- Only use FMI supplied or approved types of venting components or venting kits. Do not mix different types of vent components, modify vent components, or custom fabricate vent components for use in any one installation.
- Minimum clearances between vent pipes and combustible material is 1" (25mm), except where stated otherwise.
- Combustible material may be flush with the top front of the fireplace with a maximum thickness of 3/4".
- Do not recess venting terminals into a wall or siding
- Do not install vent terminals below grade level. Maintain a minimum height of 12" above snow line.

Do not terminate the venting system into an attic or garage.

- Install horizontal venting with a 1/4" rise for every 12" of run towards the termination.
- There must not be any obstruction such as bushes, garden sheds, fences, decks, or utility buildings within 24" from the front of the termination cap.
- Do not locate termination cap where excessive snow or ice build up may occur. Be sure to clear vent termination area after snow falls to prevent accidental blockage of the venting system. When using snow blowers, do not direct snow towards vent termination area.

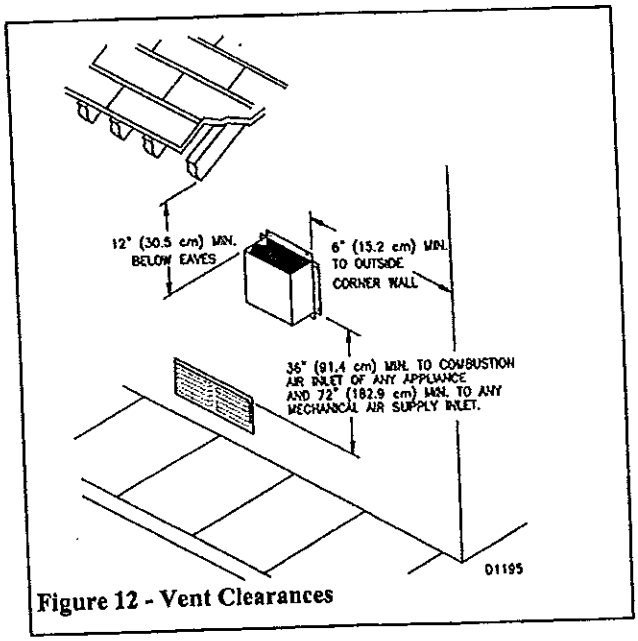


Figure 12 - Vent Clearances

VENT TERMINATION CLEARANCES

The final position of your appliance depends on the location of the vent termination in relation to the clearances that must be observed as shown in figures **12, 13** and **14**. You may avoid extra framing by positioning your fireplace against an already existing framing member. The back of the fireplace may be positioned directly against a combustible wall.

* Check with local codes or with the current CAN/CGA B149 (.1 or .2) Installation Codes for Canada for Installations in the USA follow the current National Fuel Gas Code, ANS Z223.1 also known as NFPA 54.

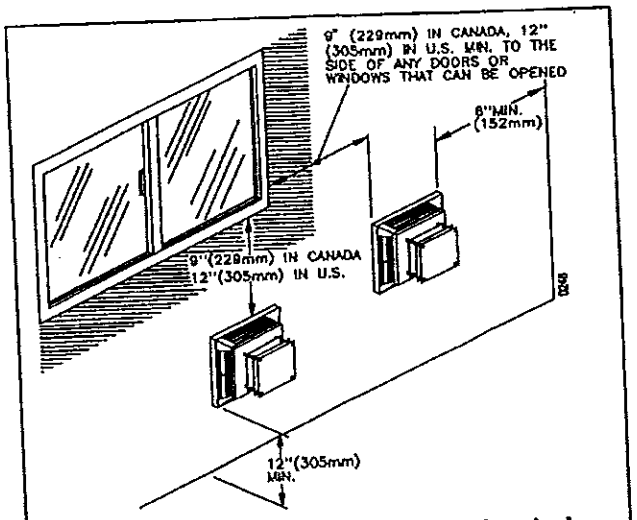
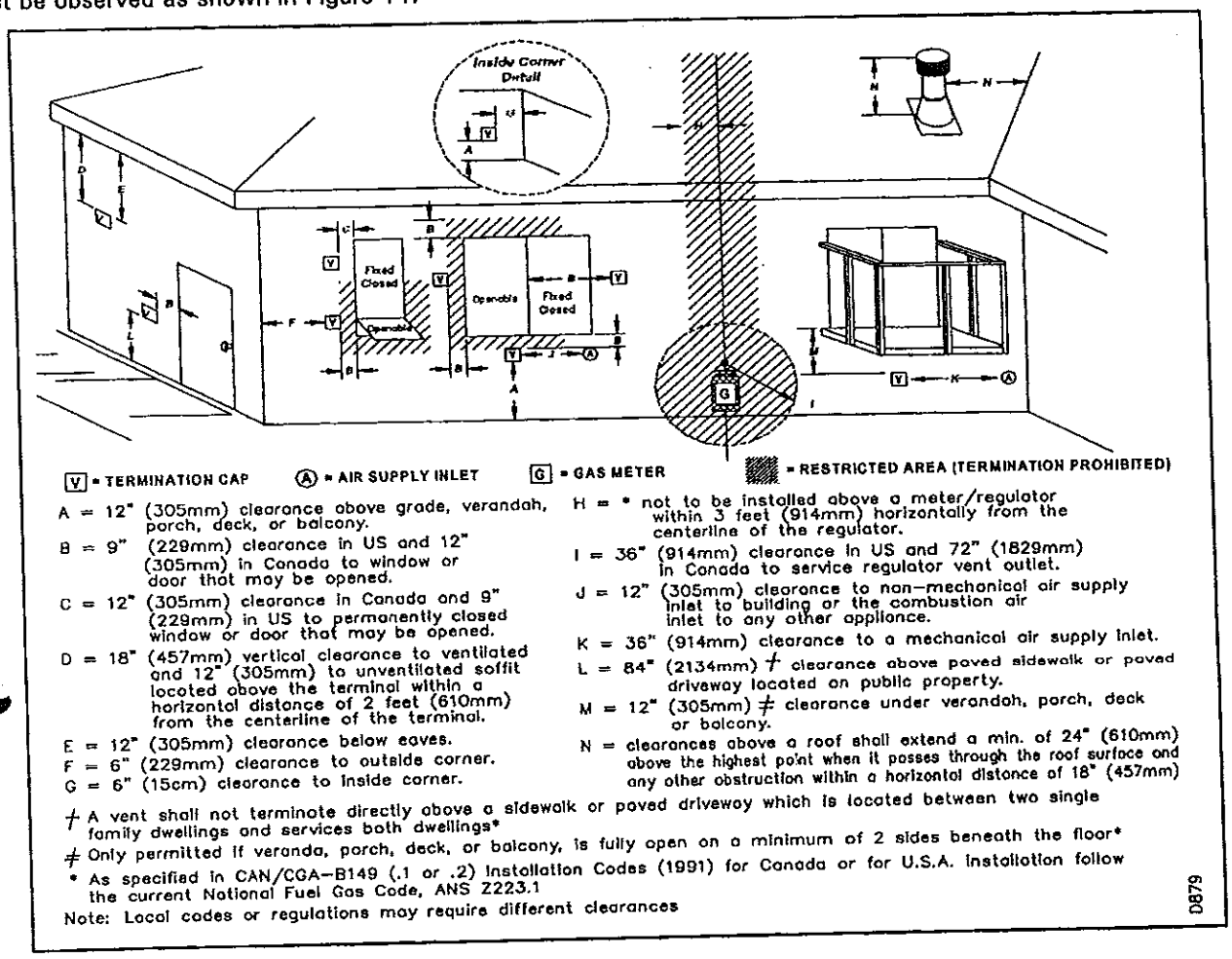


Figure 13 - Minimum Clearances to Vent Terminal

GENERAL VENTING & TERMINATION CLEARANCES

The final position of your appliance depends on the location of the termination in relation to the clearances that must be observed as shown in Figure 14.



Termination Clearances for Buildings with Combustible and Noncombustible Exteriors

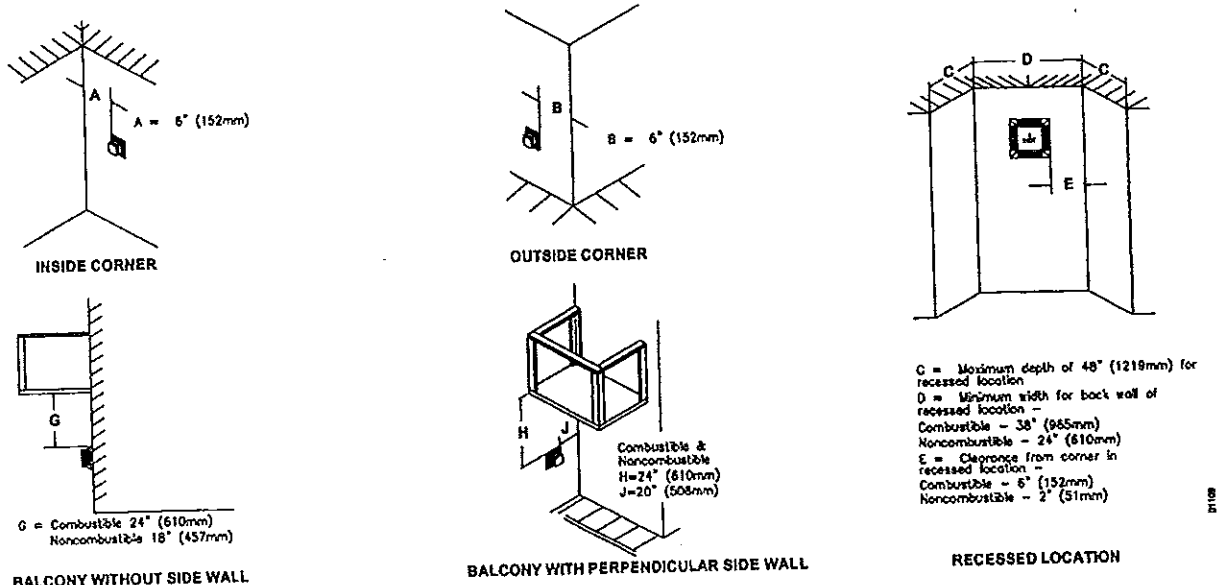


Figure 14 - Minimum Clearances for Vent Terminations

VENTING INSTALLATION

⚠ WARNING: Read all instructions completely and thoroughly before attempting installation. Failure to do so could result in serious injury, property damage or loss of life. Operation of an improperly installed and maintained venting system could result in serious injury, property damage or loss of life.

⚠ WARNING: Seal all of the connections with high temperature silicone (600°F/316°C) every time a vent connection is made. Before joining elbows and pipes, apply a bead of high temperature silicone sealant (GE RTV 106/Loctite RTV 81585) to the male ends of the elbow or pipe. High temperature silicone must also be used to re-seal any connections after maintenance to venting system.

NOTICE: Failure to follow these instructions will void the warranty.

INSTALLATION PRECAUTIONS

Consult local building codes before beginning the installation. The installer must make sure to select the proper vent system for installation. Before installing a vent kit, the installer must read this fireplace manual and any vent kit instructions.

Only a qualified service person should install a venting system. The installer must follow these safety rules:

- Wear gloves and safety glasses for protection.
- Use extreme caution when using ladders or when working on top of roofs.
- Be aware if electrical wiring locations in walls and ceilings.

The following actions will void the warranty on your venting system:

- Installation of any damaged venting component.
- Unauthorized modification of the venting system.
- Installation of any component part not manufactured or approved by FMI.
- Installation other than as instructed by these instructions.

⚠ WARNING: This gas fireplace and its vent assembly must be vented directly to the outside. The venting system must NEVER be attached to a chimney serving a separate solid fuel, burning appliance. Each gas appliance must use a separate vent system. Do not use in a common vent system.

INSTALLATION PLANNING

There are two basic types of direct-vent installations:

- Horizontal Termination
- Vertical Termination

It is important to select the proper length of vent pipe for the type of termination you choose. It is also important to note the wall thickness.

For Horizontal Termination: Select the amount of vertical rise desired. The horizontal run of venting must have 1/4" rise for every 12" of run towards the termination.

⚠ WARNING: Never run the vent downward as this may cause excessive temperatures, which could cause a fire.

Up to two 90° elbows may be used in this vent configuration. See Horizontal Termination Configurations pages 10 and 11.

For Vertical Terminations: Measure the distance from the fireplace flue outlet to the ceiling. Add the ceiling thickness, the vertical rise in an attic or second story, and allow for sufficient vent height above the roofline.

You may use up to two 90° elbows in this configuration. See Vertical Termination Configurations on pages 13 and 14.

Note: You may use two 45° elbows in place of a 90° elbow. You must follow rise to run ratios when using 45° elbows.

For two-story applications, fire stops are required at each floor level. If an offset is needed in the attic, additional pipe and elbows will be required.

You may use a chase with a vent termination having exposed pipe on the exterior of the house. See Installing Vent System in a Chase, below.

Your FMI direct-vent fireplace has been tested for a maximum of 12" straight horizontal extension using one 45° elbow plus accommodation for a maximum of 11" wall thickness. Any horizontal application longer than 12" must provide a minimum of one (1) foot of vertical rise for every three (3) feet of horizontal run. The maximum amount of horizontal run is 15' with 5' of vertical rise (see Installation for Horizontal Termination, page 8). The maximum vertical run is 30' (see Installation for Vertical Termination, page 12).

Installing Vent System in a Chase

A chase is a vertical box-like structure built to enclose venting that runs along the outside of a building. A chase is not required for such venting.

NOTICE: Treatment of firestops and construction of the chase may vary from building type to building type. These instructions are not substitutes for the requirements of local building codes. You must follow all local building codes.

NOTE: When installing in a chase, you should insulate the ch as you would the outside walls of your home. This is especially important in cold climates. Minimum clearances between vent pipes and combustible materials such as insulation is 1".

After framing the chase install the venting system by following the installation instructions for vertical installations on page 12.

VENTING INSTALLATION continued

INSTALLATION FOR HORIZONTAL TERMINATION

1. Determine the route your horizontal venting will take. NOTE: The location of the horizontal vent termination on the exterior wall must meet all local and national building codes and must not be easily blocked or obstructed.

⚠ WARNING: Do not recess a vent terminal into a wall or a siding. This will cause a fire hazard.

Snorkel terminations are available for terminations requiring a vertical rise on the exterior of the building (see Figures 15 and 16). Snorkel kits are available for rigid pipe applications only to provide for a 14" rise and a 36" rise (see page 19). Follow the same installation procedures used for standard horizontal terminations. If installing the snorkel termination to raise the vent termination from below grade level such as in a basement installation, you must provide proper drainage to prevent water from entering the snorkel termination (see Figure 16). Do not back fill around the snorkel termination.

2. Rigid vent-pipes and fittings have special twist-lock connections. Assemble the desired combinations of pipe and elbows to the appliance adapter with pipe seams oriented towards the wall or floor.

Twist-lock Procedure: The female ends of the pipes and fittings have four locking lugs (indentations). These lugs will slide straight into matching slots on the male ends of the adjacent pipes and fittings. (All connections must be sealed with high temperature silicone sealant as specified in the second warning statement on page 7.) Push the pipe sections together and twist one section clockwise approximately one-quarter turn until the sections are fully locked (See Figure 17). NOTE: Horizontal runs of vent must be supported every three feet. Use wall strap for this purpose.

Flexible vent pipe must be installed with spacer springs every 12" and especially near each bend (See Figure 18). Make the 5" inner pipe connection to the unit with the clamp provided. Install the spacer springs by looping them around the 5" pipe and connecting at both ends. Slide the 8" outer pipe over the springs and inner section and continue adding sections in this manner. All connections need a minimum of 1 1/4" (32mm) overlap, must be clamped tightly and sealed with high temperature silicone sealant as specified in the second warning statement on page 7.

3. Attach the vent pipe assembly to the fireplace using twist-lock connections for rigid pipe or clamp, method for flex pipe. See Figures 19 and 20, on page 9. Set fireplace in front of its permanent location to insure minimum clearances. Mark the wall for a 12 1/2" square hole (for non-combustible material such as masonry block or concrete, a 8 1/2" diameter hole is acceptable). See Figure 18, on page 9. The center of the hole should line up with the centerline of the rigid vent pipe. Cut a 12 1/2" x 12 1/2" (317.5mm x 317.5mm) square hole through combustible exterior wall (8 1/2" (216mm) diameter hole if non-combustible). Frame as necessary (see Figure 17).

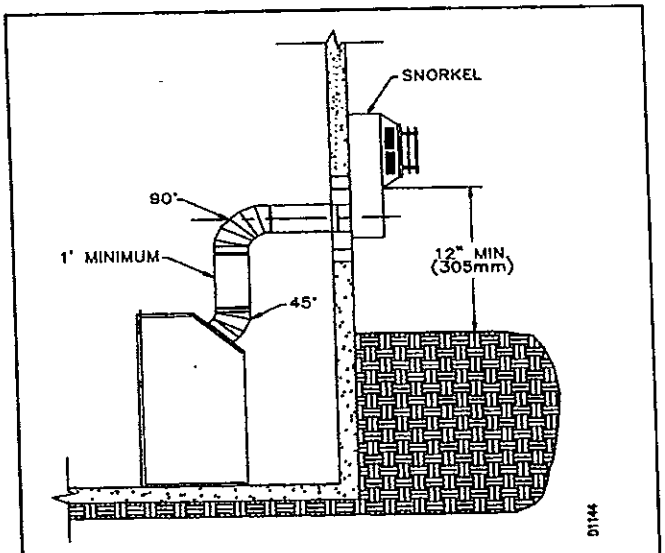


Figure 15 - Snorkel Termination

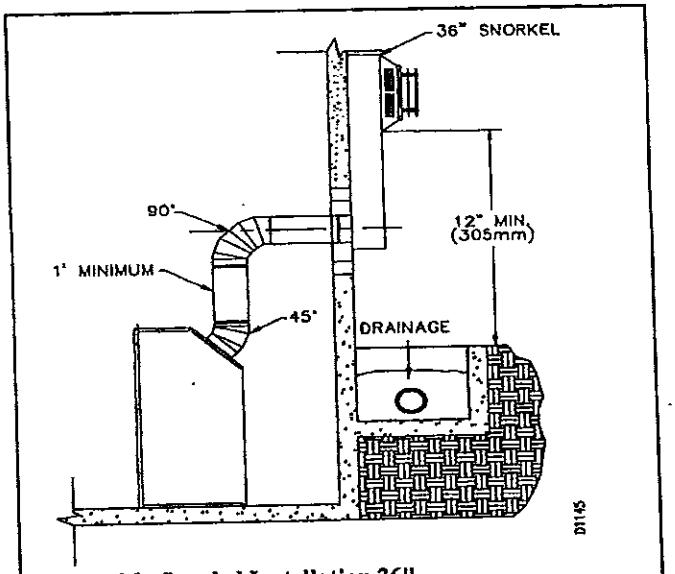


Figure 16 - Snorkel Installation 36"

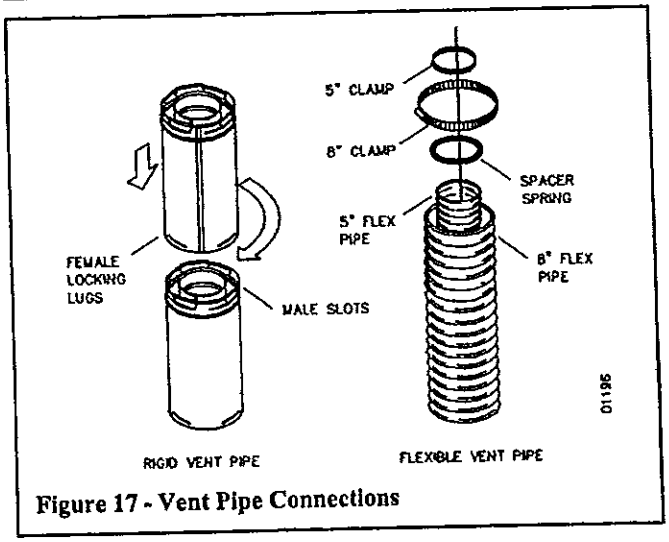


Figure 17 - Vent Pipe Connections

VENTING INSTALLATION continued

4. Three types of vent caps are available for horizontal terminations. Two square terminals are available; one for rigid pipe applications and one for flex pipe applications. A round vent termination with a slip fit connection is also provided for rigid pipe applications, when a wall thickness or off spacing must be accommodated. See figure 22 on page 10. Each may be purchased as a kit, which includes a 45° elbow and a firestop that accommodates a square or round termination. When installing a square termination, apply a bead of non-hardening mastic around the outside edge of the vent cap. Position the square or the round vent cap in the center of the 8 1/2" hole on the exterior wall or in a firestop when installed over a 12 1/2" square cutout. Make certain that the arrow on the vent cap is pointing up after making the final connection. If installing the square flex vent termination the square open must be pointing up. The firestop must be used to insure that the proper clearance of 1" to combustibles is maintained. If using the square vent attach the vent cap with four wood screws. If installing the round vent cap use the firestop provided with the installation kit to accommodate the square hole and then seal the remaining edge with mastic. Note: Replace the wood screws with the appropriate type of removable fasteners for stucco, brick, concrete or other types of siding.

   NOTICE: The vent termination must be removable for service and vent pipe inspection.

   For vinyl siding, use vinyl siding standoffs between the vent cap and the exterior wall. The vinyl siding standoff prevents excessive heat from melting the vinyl siding only and must not be used to substitute or replace a firestop. Bolt the vent cap to the standoff. Apply non-hardening mastic around the outside edge of the standoff instead of the vent terminal as described earlier. Use wood screws to attach the standoff (See Figure 23.)

5. There are several ways to make the final connection to the vent terminal. If installing a flush or recessed installation with a short vent system, you may pre-size the vent system, check for final fit and slide the unit into the framing with the firestop in place. This is especially helpful when using rigid pipe and a round vent termination, as the vent may be pre-connected and slipped through the firestop. However, you must make certain that the 45° connection at the unit is tight and does not come loose before finish nailing the unit to the framing. When installing a square vent or a long vent configuration, the vent pipe must be manipulated at the outer end to make the final connection. This may be accomplished by manually securing the pipe from within the open framing. However, if this is a retrofit installation in an inaccessible space, you may have to secure the outer end of the vent pipe with wall straps and tap screws at the outer end. When using tap screws with rigid pipe, make certain that the screws do not penetrate the inner pipe. These procedures may be followed as well for flexible pipe installations. However, the connections at the unit must first be adequately secured, the vent must be drawn through the end firestop, cut back to about 6 to 8 inches to permit easy connection of the flex termination and the termination must be slipped back into and secured to the installation. Make sure to use an adequate number of spring spacers at the ends and the closest bend to the termination to prevent kinks or collapsing of the pipe. Do not use screws with flex pipe. Remember, that the system must be code inspected and released before dry wall or other surface treatments.

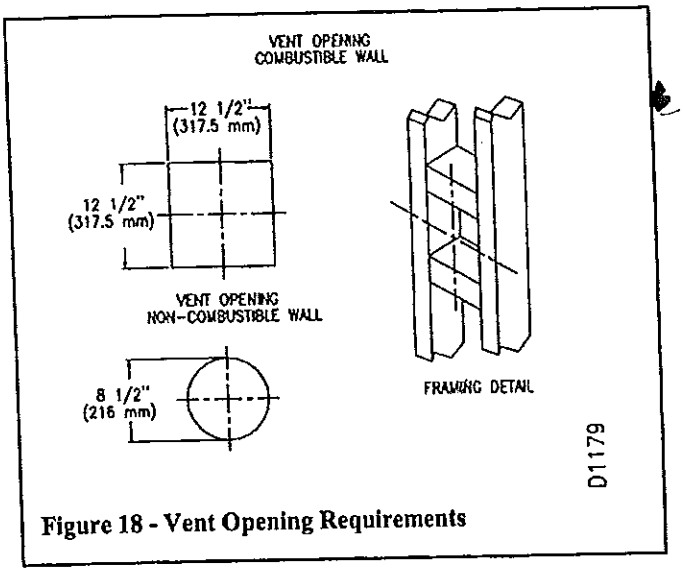


Figure 18 - Vent Opening Requirements

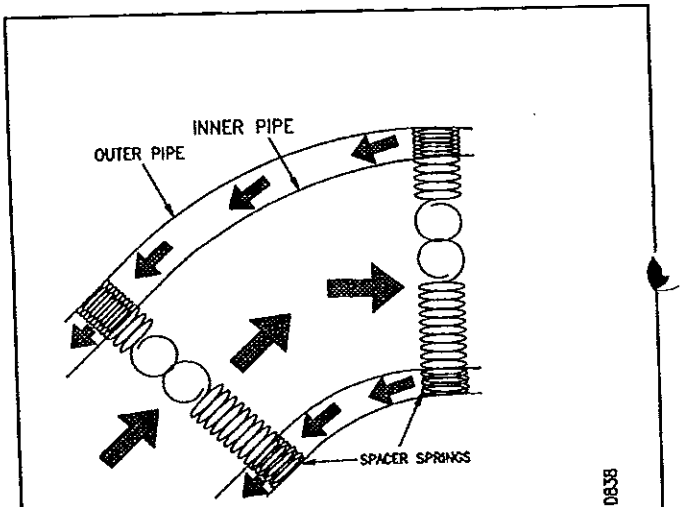


Figure 19 - Flex Pipe Installation

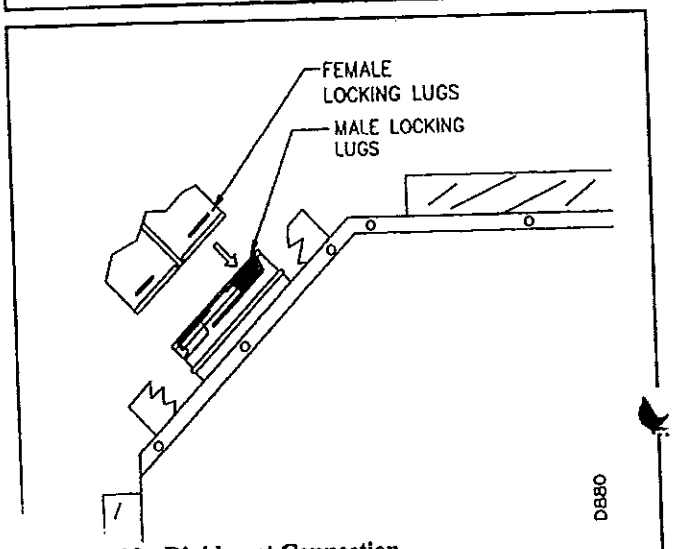


Figure 20 - Rigid vent Connection

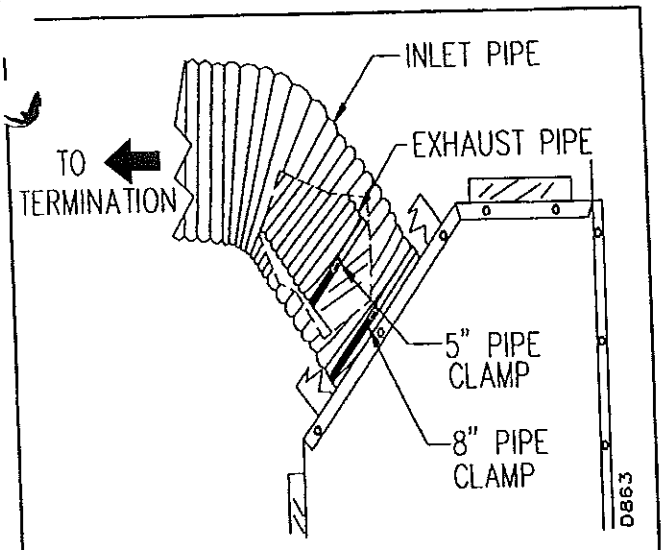


Figure 21 - Flex Vent Connection

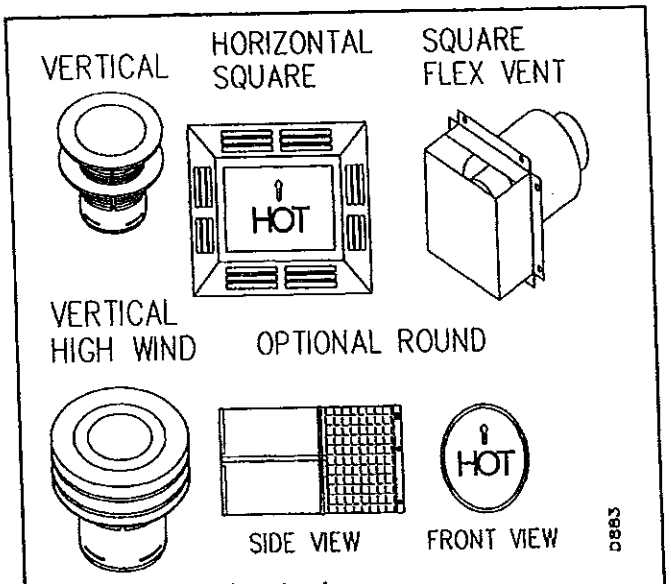


Figure 22 - Vent Terminations

VENTING INSTALLATION continued

HORIZONTAL TERMINATION CONFIGURATIONS

Figures 24 through 27 show different configurations for venting with horizontal termination. Each figure includes a chart with vertical minimum/maximum and horizontal maximum dimensions, which must be met. All connections must be sealed with high temperature silicone sealant as specified in the second warning statement on page 7. All horizontal terminations require 1/4" rise per 12" of horizontal run. Therefore, you must add 1/4" of vertical height (V) in the following tables for each foot of horizontal run (H).

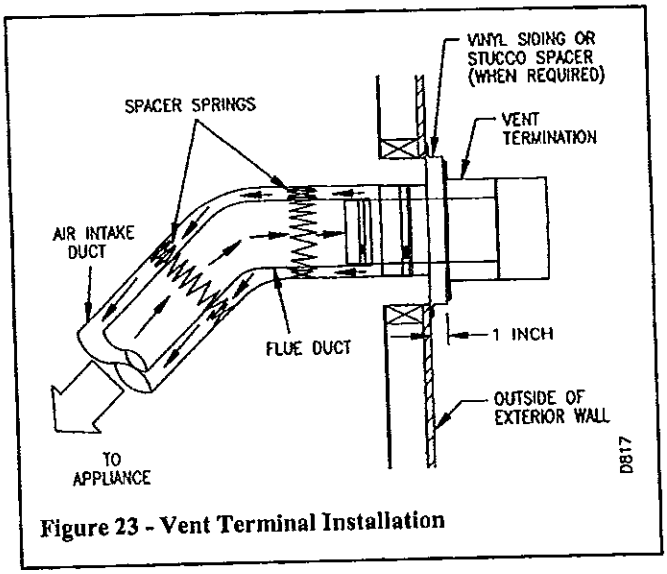


Figure 23 - Vent Terminal Installation

Horizontal Flush Venting

(Recommended for flush walls or cabinet mantels)

Vertical (V)	Horizontal (H)
33" min.	11" max.
(45° Elbow Without Starter Section)	
36" min.	18" max.
40" min.	24" max.

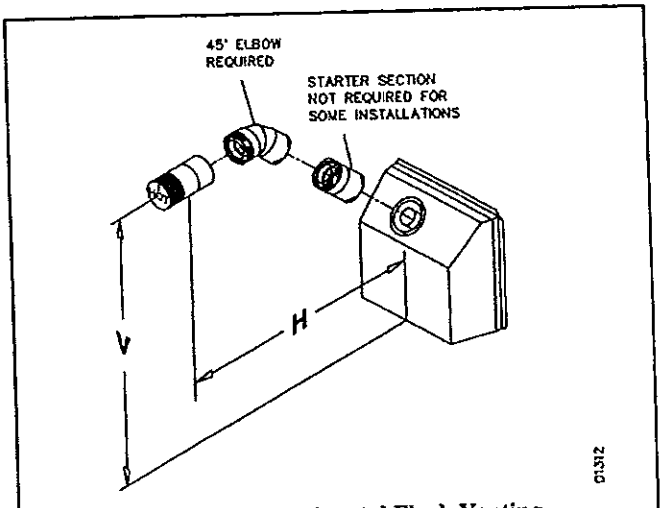


Figure 24 - Minimum Horizontal Flush Venting

HORIZONTAL TERMINATION CONFIGURATIONS

Figure 26 shows the acceptable configuration when venting horizontally using flexible venting systems. The same vertical height and horizontal length rules as shown in figure 25 also applies to flex vent with no linear gain losses. However, the flex vent system must be designed and supported to prevent restriction on the venting system. There should be no more than one 45° and one 90° degree bend. All bends must be made with a minimum bend radius of 3" plus the radius of the outer pipe or as specified by the pipe manufacturer to prevent reduction of the pipe diameter. As with rigid pipe, flex vent must be pitched upwards and supported without the use of screws in the vent pipe to prevent sagging and damage. All connections must be clamped and sealed with high temperature silicone sealant as specified in the second warning statement on page 7.

Figures 25 and 26 show the minimum vertical rise requirements for a horizontal system using one 90° elbow.

Horizontal Venting with One 90° Elbow or with One 45° Bend when using Flexible Vent

* Vertical (V)	* Horizontal (H)
36" min. (**)	11" max. (**)
(** Minimum configuration for flexible vent)	
40" min. (1/2')	19" max. (1.5')
48" min. (1')	39" max. (3')
60" min. (2')	73.25" max. (6')
72" min. (3')	108" max. (9')
84" min. (4')	144" max. (12')
94.5" min. (5')	178.5" max. (15')
106.5" min. (6')	221.5" max. (18')
118.5" min. (7')	237" max. (20')

Figure 27 shows the minimum vertical rise requirements for a horizontal system using two 90° elbows.

Horizontal Venting with Two 90° Elbows

* Vertical (V)	* Horizontal (H_1) + (H_2)
48" min. (1')	49" max. (3')
60" min. (2')	85" max. (6')
72" min. (3')	121" max. (9')
84" min. (4')	157" max. (12')
94.5" min. (5')	191.5" max. (15')
106.5" min. (6')	225.5" max. (18')
20' max.	20' max.

* These tables were determined using the maximum sized sections available and accounting for a loss of 1.5" linear gain per section. The number in (parentheses) indicates the integral foot equivalence of total straight pipe sections.

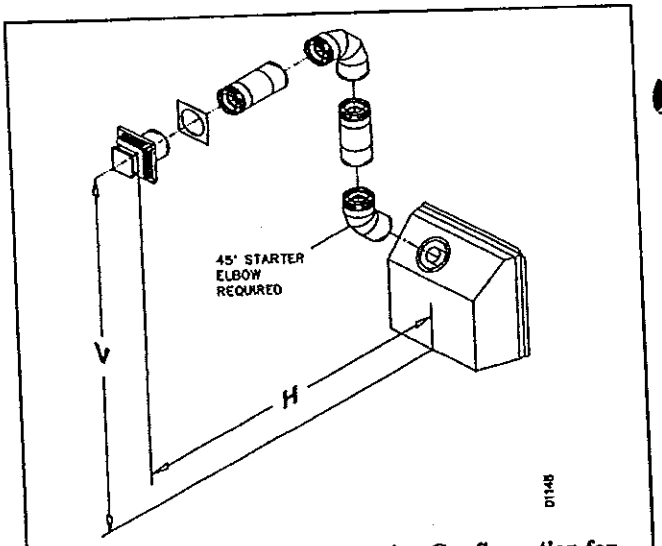


Figure 25 - Horizontal Termination Configuration for Rigid Venting Using One 90° Elbow

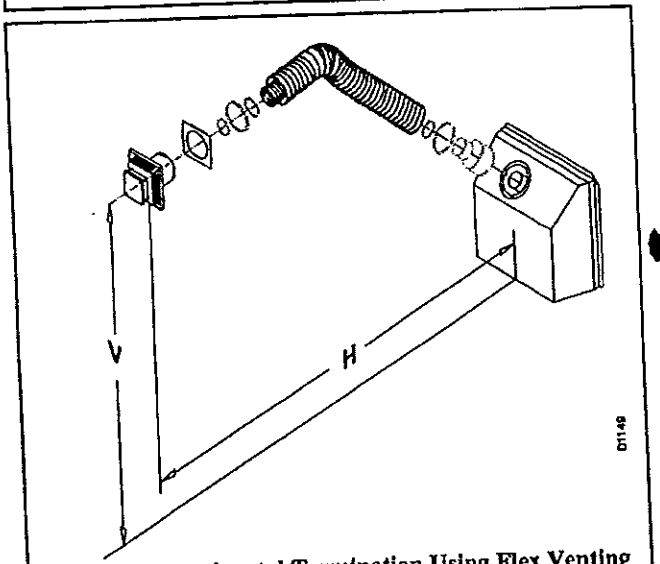


Figure 26 - Horizontal Termination Using Flex Venting

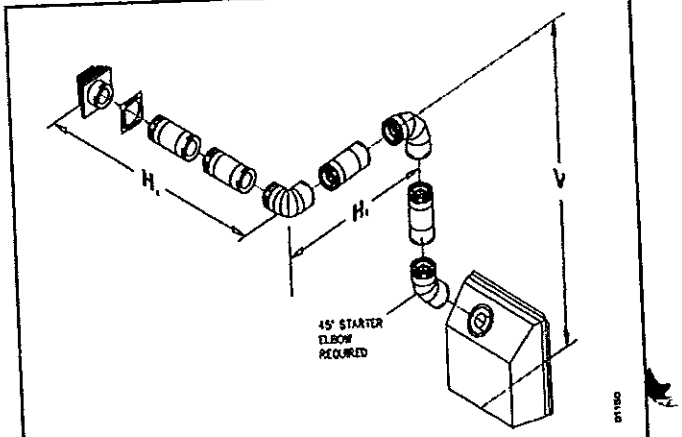


Figure 27 - Horizontal Termination Configuration for Rigid Venting Using Two 90° Elbows with Termination at 90° to Fireplace

VENTING INSTALLATION continued

INSTALLATION FOR VERTICAL TERMINATION

NOTE: Use rigid pipe only. Flex venting is not to be used with a vertical termination.

1. Determine the route that your vertical venting will take. If ceiling joists, roof rafters, or other framing will obstruct the venting system, consider an offset (see Figure 27) to avoid cutting load bearing members. NOTE: Pay special attention to these installation instructions for required clearances (air space) to combustibles when passing through ceilings, walls, roofs, enclosures, attic rafters, etc. Do not pack required air spaces with insulation. Also note maximum vertical rise of the venting system and any maximum horizontal offset limitations. Offsets must fall within the parameters shown in Figure 28 and Figure 14 on page 6.

2. Set the fireplace in the desired location. Drop a plumb line down from the ceiling to the position of the fireplace exit flue. Drill a small locating hole at this point.

   Drop a plumb line from the inside of the roof to the locating hole in the ceiling. Mark the center point where the vent will penetrate the roof. Drill a small locating hole at this point.

Flat Ceiling Installation

1. Cut a 12 1/2" hole in the ceiling using the locating hole as a center point. The opening should be framed to a 12 1/2" x 12 1/2" (317.5mm x 317.5 mm) inside dimensions, as shown in Figure 18 on page 9 using framing lumber the same size as the ceiling joists. If the area above the ceiling is an insulated ceiling or a room, nail firestop from the topside. This prevents loose insulation from falling into the required clearance space. Otherwise, install firestop below the framed hole. The firestop should be installed with the flanges set into the framing and secured with no less than three nails per side (see figure 29).

2. Assemble the desired lengths of pipe and elbows necessary to reach from the fireplace flue up through the firestop. All connections must be sealed with high temperature silicone sealant as specified in the second warning statement on page 7. Be sure all pipe and elbow connections are fully twist-locked (see Figure 17, on page 8).

3. Cut a hole in the roof using the locating hole as sa center point. (Cover any exposed open vent pipes before cutting a hole in the roof). The 12 1/2" x 12 1/2" hole must be measured on the horizontal; actual length may be larger depending on the pitch of the roof. There must be a 1" clearance from the vent pipe to combustible materials. Frame the opening as shown in Figure 18, on page 9.

4. Connect a section of pipe and extend up through the hole.

   Note: If an offset is needed to avoid obstructions, you must support the vent pipe every 3 feet. Use wall straps for this purpose (see Figure 27). Whenever possible, use 45° elbows instead of 90° elbows. The 45° elbow offers less restriction to the flow of the flue gases and intake air.

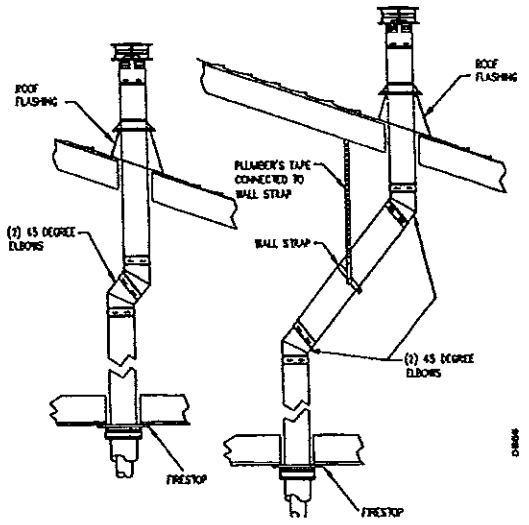
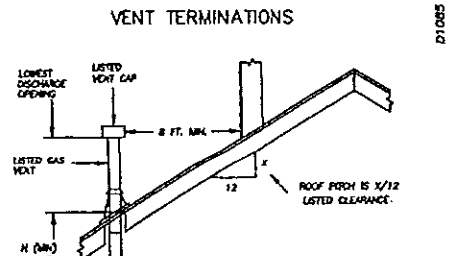


Figure 27 - Vertical Vent Pipe Offsets



ROOF PITCH	H (MIN) ft.	m
Flat to 6/12	1.0	0.30
6/12 to 7/12	1.25	0.38
Over 7/12 to 8/12	1.5	0.46
Over 8/12 to 9/12	2.0	0.61
Over 9/12 to 10/12	2.5	0.76
Over 10/12 to 11/12	3.25	0.99
Over 11/12 to 12/12	4.0	1.22
Over 12/12 to 14/12	5.0	1.52
Over 14/12 to 16/12	6.0	1.83
Over 16/12 to 18/12	7.0	2.13
Over 18/12 to 20/12	7.5	2.27
Over 20/12 to 21/12	8.0	2.44

Figure 28 - Vertical Vent Termination Clearances

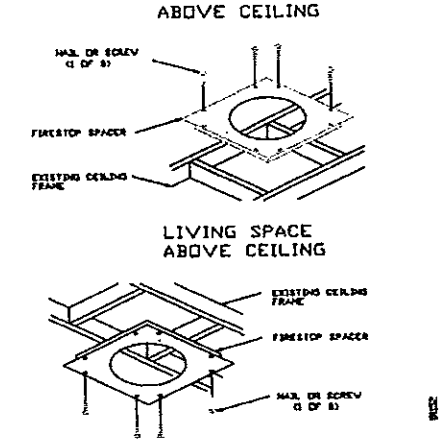


Figure 29 - Installing Firestop

VENTING INSTALLATION continued

INSTALLATION FOR VERTICAL TERMINATION

5. Place the flashing over the pipe section(s) extending through the roof. Apply a bead of silicone or roof sealer to the bottom flange of the flashing and secure the base of the flashing to the roof and framing with roofing nails. Be sure roofing material overlaps the top edge of the flashing as shown in figure 27, on page 12. There must be a 1" clearance from the vent pipe to combustible material.

6. Continue to add pipe section(s) until the height of the vent cap meets the minimum building code requirements described in Figure 14, on page 6. Note you must increase the vent height for steep roof pitches, nearby trees, adjoining rooflines and other adjacent factors, which may cause poor drafting or a down-draft condition (see Figure 28, on page 12). Increasing the vent height may solve this problem.

7. Apply a bead of sealer to the upper edge of the flashing collar and slide the storm collar over the pipe and down on the top edge of the flashing. Apply a second bead of silicone or roof sealer around the remaining seam of the storm collar. Twist-lock the vent cap onto the last section of vent pipe and seal with high temperature silicone as specified in the second warning statement on page 7. Finish sealing the flange around the roofing material with roofing sealer.

   Note: If the vent pipe passes through any occupied areas above the first floor, including storage spaces and closets, you must enclose the entire exposed pipe. You may frame and sheetrock the enclosure with standard construction materials. Make sure the enclosure meets the minimum allowable clearances to combustibles. Do not fill any of the required air spaces with insulation.

Vertical Termination Configurations

Figures 30 through 33 show four different configurations for vertical termination. These minimum vertical rises are based on horizontal runs with a minimum of 1/4" upwards pitch per foot and do not reflect constraints on a vertical system with 45° or greater offsets. Any offset pitch of 45° or less must be considered horizontal and sized within the maximum allowable lengths listed in the following examples. All connections must be sealed with high temperature silicone sealant as specified in the second warning statement on page 7.

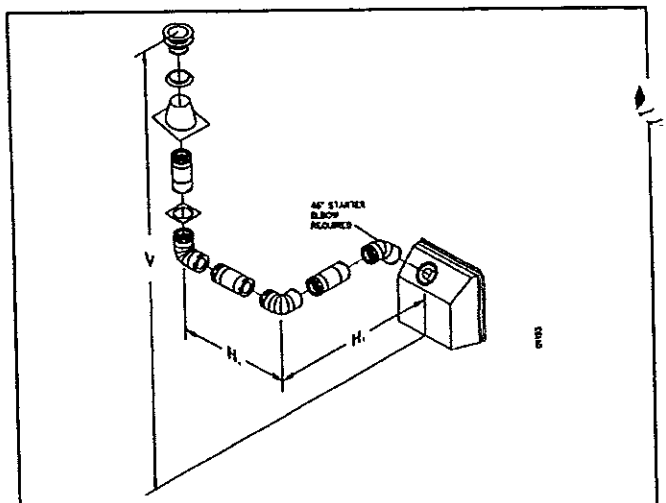


Figure 30 - Vertical Rigid Venting Configuration Using Two 90° Elbows with Two Horizontal Runs

Venting with Two 90° Elbows

Vertical (V)	Horizontal (H_1) + (H_2)
5' min.	2' max.
6' min.	4' max.
7' min.	6' max.
8' min.	8' max.
20' max.	8' max.

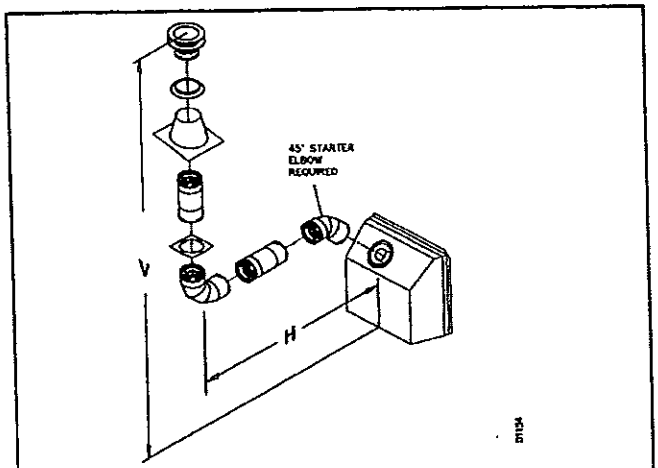


Figure 31 - Vertical Rigid Venting Configuration Using One 90° Elbow

Venting with One 90° Elbow

Vertical (V)	Horizontal (H)
5' min.	2' max.
6' min.	4' max.
7' min.	6' max.
8' min.	8' max.
20' max.	8' max.

VENTING INSTALLATION continued

INSTALLATION FOR VERTICAL TERMINATION

Vertical Termination Configurations

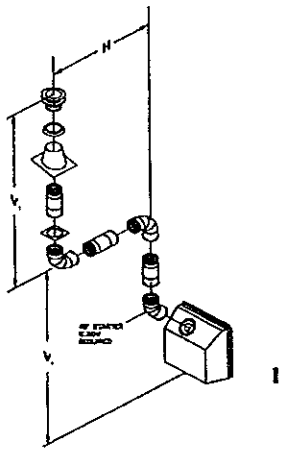


Figure 32 - Vertical Rigid Venting Configuration Using Two 90° Elbows

Venting with Two 90° Elbows

Vertical (V_1)	Horizontal (H)
5' min.	6' max.
6' min.	12' max.
7' min.	18' max.
8' min.	20' max.

Note: Vertical (V_1) + Vertical (V_2) = 20' max.

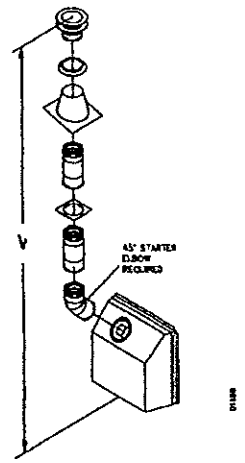


Figure 33 - Vertical Rigid Venting Configuration With No Horizontal Runs

Vertical Venting

V = 30' max.

VENTING INSTALLATION continued

INSTALLATION FOR VERTICAL TERMINATION

Your FMI vented fireplace has been AGA tested and approved for elevations from 0-2000 feet (609 m) and CGA certified for elevations from 0-4500 feet (1371 m).

When installing this fireplace at elevations above 2000 ft (in the USA), you may need to decrease the input rating by changing the existing burner orifice to a smaller size. Reduce the input 4% for each 1000 feet above sea level.

When installing this fireplace at an elevation above 4500 ft (1371 m) in Canada, check with local or provincial authorities.

Consult with your local gas company to help determine the proper orifice size and identification for your location.

For assistance with any high altitude installation contact your FMI dealer or distributor.

PARTS LIST RIGID VENT

PART #	DESCRIPTION	QTY.
01493	Basic Vertical Kit - Adjustable Flashing -Storm Collar Cap	1 per
01501	48" Pipe Length	4 per
01500	36" Pipe Length	4 per
01499	24" Pipe Length	4 per
01498	12" Pipe Length	4 per
01513	6" Pipe length	4 per
01606	17" to 24" Adjustable Pipe Length	4 per
01502	45 Degree Elbow	4 per
01503	90 Degree Elbow	4 per
01607	Wall Firestop.	4 per
01505	Adjustable Flashing (0/12-8/12).	4 per
01506	Steep Pitch Flashing (12/12).	4 per
01514	Vinyl Siding Standoff	1 per
01504	Firestop Plate	4 per
01494	Vertical Cap	1 per
01495	Horizontal Round Termination Cap	1 per
01496	Horizontal Square Termination Cap	1 per
01802	36" Snorkel Termination	1 per
01801	14" Snorkel Termination	1 per
01800	Termination, High Rise Horizontal	1 per
01798	Vertical High Wind Termination	1 per
01508	Wall Strap	4 per
01507	Storm Collar	4 per
01510	Twist Lock to Flex Retro Connect	4 per

Components and parts must be ordered, by correct part number, through your local dealer or distributor.

WALL SWITCH INSTALLATION

The DVF42TE series uses a 24 VAC current supplied from a transformer mounted on the ignition module and is prewired for easy connection to a wall switch (see Figure 34). The DVF42T versions use a self-generated millivolt current that allows you to activate the gas control valve directly, without the use of normal household electricity (see Figure 35). Both versions are supplied with a wall switch kit for ready connection and mounting.

⚠ WARNING: Do not wire the remote wall switch to the main 120 VAC household supply current.

1. To remove the lower louvers simultaneously pull both top end spring latches towards the center of the appliance until they are disengaged from the locating holes. Repeat for the bottom spring latches and pull the louvers outward (see Figure 36).

2. Connect the 18 GA. wires from the WALL SWITCH to the gas control valve terminals marked TH and TPTH or to the ignition module using the pigtails and wirenut connectors supplied with the appliance.

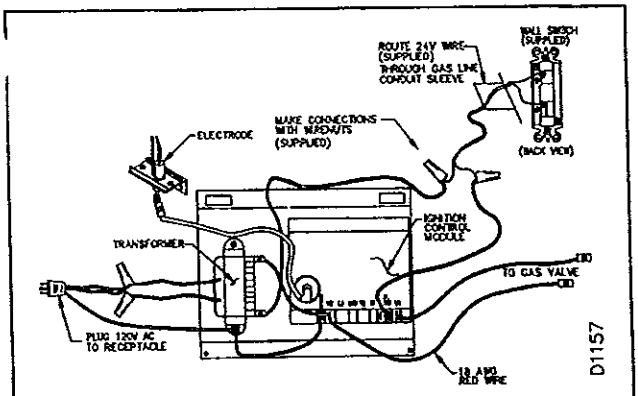


Figure 34 - Wall Switch Connection Electronic Units

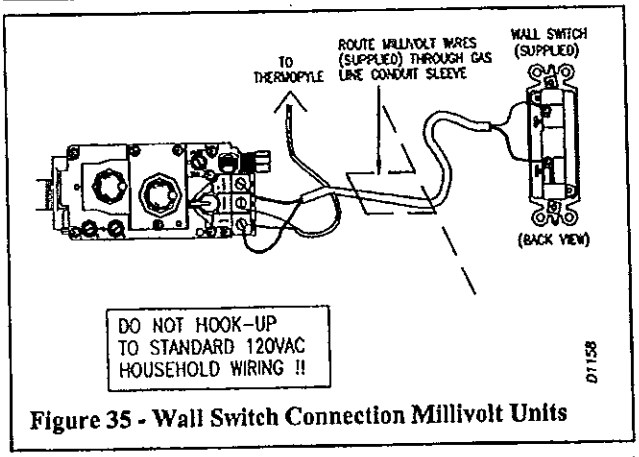


Figure 35 - Wall Switch Connection Millivolt Units

NOTE: If any of the original wire supplied, must be replaced, use type 18 AWG-105 °C (25 MAXIMUM length) or equivalent.

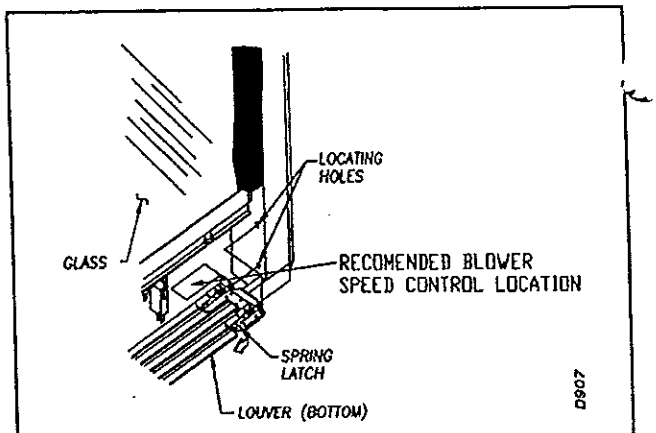


Figure 36 - Removing Louver

ELECTRICAL HOOKUP FOR THE (OPTONAL) BLOWER ACCESSORY

Before the optional blower accessory can be operated, the appliance outlet box must be properly connected to a standard 120 VAC power source. This must be done when the appliance is originally installed. Refer to the Wiring Diagram on page 23.

An outlet box with two receptacles has been provided for your convenience and is located on the lower right side of the appliance (see Figure 37). The variable speed controller is mounted on a magnetic base and may be positioned anywhere within an accessible distance behind the louvered opening (see Figure 36).

⚠ CAUTION: Due to high temperatures, make sure wires are not touching the upper firebox.

You may test the blower for operation by turning the control knob clockwise just until it clicks on, which is the full on position. Further turning no more than 1/4 of a turn clockwise, adjusts the fan speed to the lowest setting.

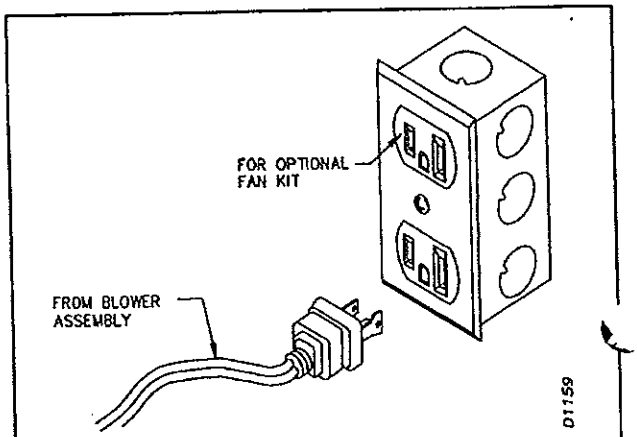


Figure 37 - Connecting Blower Assembly to the Power Supply

OPTIONAL WIRELESS HAND HELD REMOTE CONTROL INSTALLATIONS

NOTE: If using an optional wireless hand held remote control, the wall switch is no longer operational.

NOTICE: Only use alkaline batteries (not included).

INSTALLING THE (SKYTECH) and (US-RC) MODEL REMOTE CONTROLS (MILLIVOLT MODELS ONLY)

1. Remove lower louver access panel from fireplace (see Figure 36 on page 15).
2. Disconnect the wall switch wires from the terminals marked TH and TPTH on the (see Figure 36 on page 15).
3. Slide a 9 volt battery into the clip on the back of the US-RC remote receiver and connect the battery terminals to the battery. Install the remote mount the unit on the bracket with the clips provided. (see Figure 38) The US-RC receiver may also be installed to replace an existing wall switch and can be mounted in a standard switch box using the cover plate and screws provided.

   The SKYTECH model receiver does not require a battery and can be installed by plugging the extension cord into one of the outlet receptacles on the outlet box, and plugging the unit into the extension cord see Figure 39.

4. nnect the white wire to the control valve marked TH id the red wire to the terminal marked TPTH and place the remote select switch to the position marked REMOTE.
5. Replace the louvered access panel by following the reverse steps on page 15.
6. Install a 9 volt battery into the US-RC hand held remote by removing the screw on the back and lifting the case open. The SKYTECH model has a 12V battery preinstalled to activate the battery you must remove the insulating tab on the back of the handset (see Figure 41).
7. Once installed the unit is ready to use. Remember to turn the receiver to the OFF position, if away from premises.

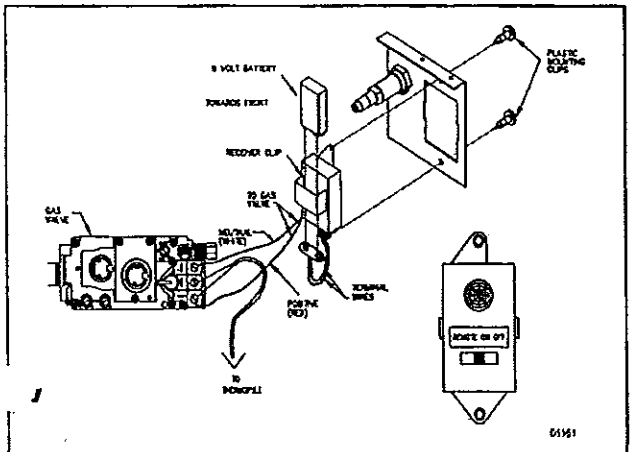


Figure 38 - Installing Remote Receiver (Shown from Rear of Mounting Bracket)

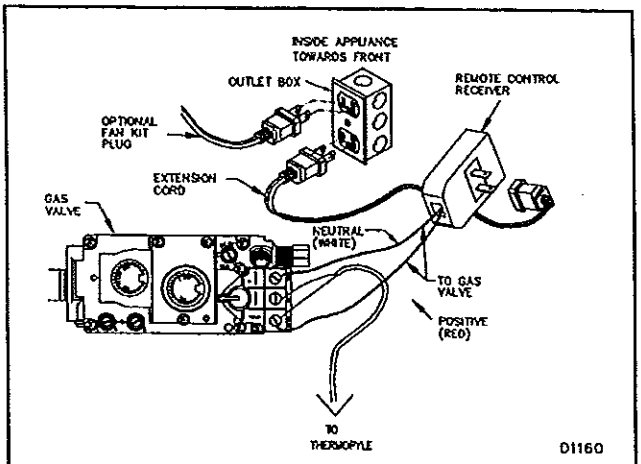


Figure 39 - Installing the SKYTECH Remote Receiver

INSTALLING THE (SKYTECH) and (WRC) MODEL REMOTE CONTROLS (ELECTRONIC MODELS ONLY)

1. Remove lower louver access panel from fireplace (see Figure 36 on page 15).
2. If a wall switch was installed it must be removed from the ignition control circuit for the remote to work properly. Remove the wirenuts from the switch connection at the ignition control module. Using one of the wirenuts, connect the transformer (blue) wire to the remaining wire connected to the control terminal marked (P. SW) (see Figure 34 on page 15).
3. The WRC model receiver does not require a battery and can be installed by plugging the extension cord into one of the outlet receptacles on the outlet box, then plug the receiver unit into the extension cord and finally plug the ignition module into the receiver unit, see Figure 40.
4. Replace the louvered access panel by following the reverse steps on page 15.
5. Activate the handset battery by removing the insulating tab on the back of the handset. See Figure 41, on page 17.
6. Once the battery is activated the unit is ready to use.

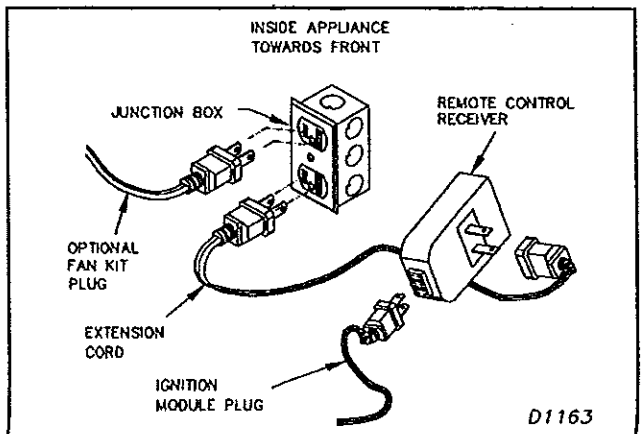


Figure 40 - Installing the WRC Remote Receiver

INSTALLING A ALKALINE BATTERY IN HAND HELD REMOTE CONTROL UNITS

1. Remove battery cover on back of remote control unit.
2. Attach terminal wires to the battery (not included). Place battery into the battery housing.
3. Replace battery cover onto remote control unit.

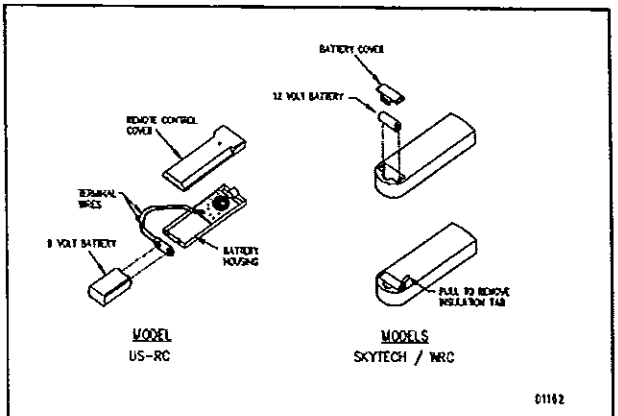


Figure 41 - Installing Battery in Hand Held Remotes

S LINE HOOK-UP

WARNING: Before you proceed, make sure your gas supply in OFF.

WARNING: Gas line hookup should be done by your gas supplier or a qualified service person.

A manual shut-off valve has been included in the appliance's gas supply system. You may consider installing an extra gas shut-off valve outside the appliance's enclosure (check with local codes) where it can be accessed more conveniently with a key through a wall as shown in Figure 42.

Route a 1/2" NPT GAS LINE towards the appliance coming in from the right. If you wish to route your incoming gas line coming in from the left, remove the gas line conduit sleeve on the right side of the appliance and place it on the left side. It is recommended to route the pipe between the stand of the firebox and the surround of the fireplace (see Figure 43).

IMPORTANT: The appliance and its individual shut-off valve must be disconnected from the gas supply piping system during any pressure testing of the system at pressures in excess of 1/2 psig. (3.5kPa). 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. (3.5kPa).

CAUTION: Do not kink flexible gas line.

CAUTION: Compounds used on threaded joints of gas piping shall be resistant to the action of Liquefied Petroleum (LP or Propane) gases, and should be applied lightly to ensure excess sealant does not enter the gas line.

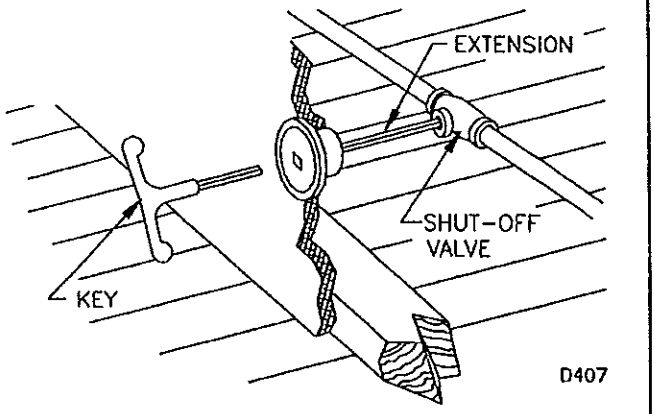


Figure 42 - Typical Exterior Wall Gas Shut-Off Installation

1. Install a sediment trap between the incoming gas line and the gas control valve (see Figure 43). The sediment trap should extend down the center of the pipe. Refer to your local codes.
2. Prepare incoming gas line and check with local codes regarding the use of teflon tape. Complete your gas line installation by connecting the incoming gas line with the flexible gas line. Secure tightly with a wrench, **Do Not Overtighten.**

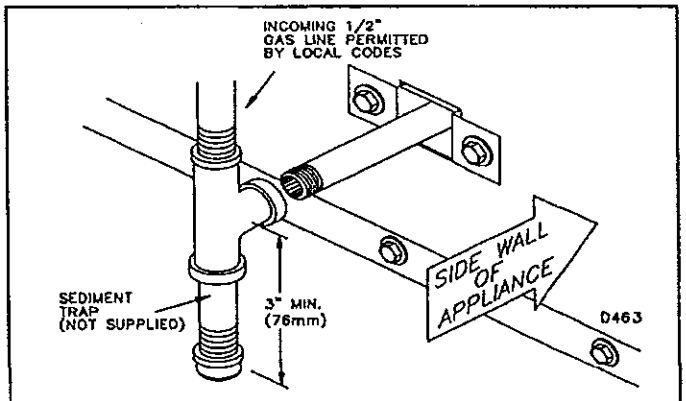


Figure 43 - Sediment Trap

GAS RATINGS		
TYPE OF GAS	NATURAL	PROPANE/LP
Max. Input Rating:	26,000 Btu/hr	26,000 Btu/hr
Orifice Size (0-4500 Ft.):	#42 DMS	#54 DMS
Minimum Input Rating: (With Valve in LOW Position)	18,000 Btu/hr	18,000 Btu/hr
Manifold Pressure:	3.5 in. WC	10.0 in. WC
**Minimum Supply Pressure	4.5 in. WC	11.0 in. WC
**Maximum Supply Pressure	10.5 in. WC	13.0 in. WC

** For the purpose of input adjustment.

⚠ WARNING: All gas piping and connections must be tested for leaks after the installation is completed.

After ensuring that the gas valve is open, apply a soap and water solution to all connections and joints. If bubbles appear, leaks can be detected and corrected.

Do not use an open flame for leak testing and do not operate any appliance if a leak is detected.

⚠ 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 gas supplier.

GAS SUPPLY TESTING

NOTE: This section is intended as a guide for qualified service technicians installing gas to the appliance.

⚠ CAUTION: Do not connect appliance before pressure testing gas piping. Damage to the gas valve may result and an unsafe condition may be caused.

The millivolt system with manual HI/LO applies only to the DVF42TA and DVF42TPA models. The gas control valve is accessible from the lower control compartment. Two pressure taps are provided on the gas control valve for a pressure gas connection (see Figure 44).

The electronic system applies to the DVF42TEA and DVF42TEPA models.

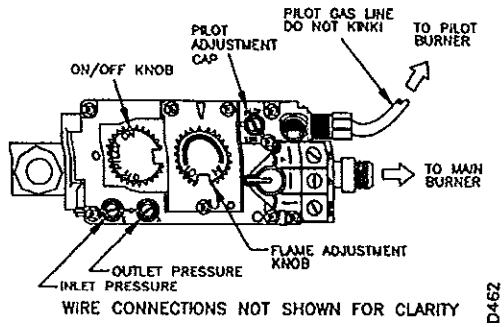


Figure 44 - Millivolt Control Valve

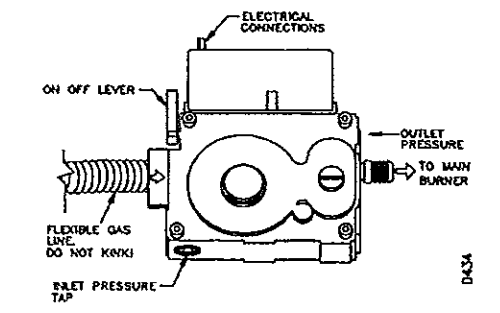


Figure 45 - Electronic Control Valve

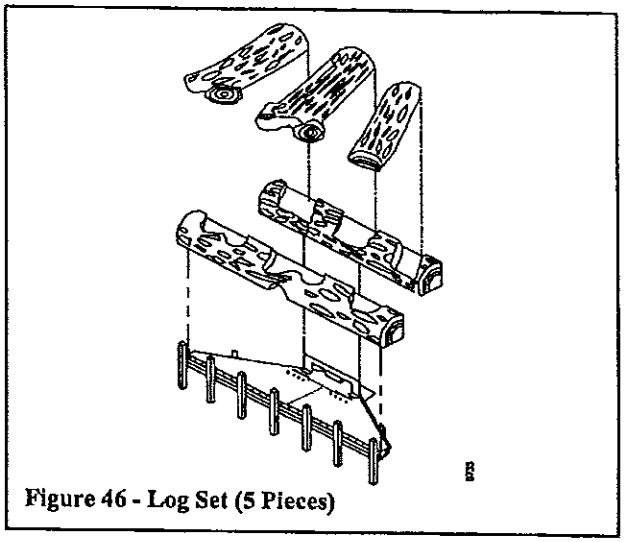


Figure 46 - Log Set (5 Pieces)

INSTALLING LOG SET

Before proceeding, make sure the gas control valve is in the "OFF" position. Logs have been shrink-wrapped on a cardboard backing to prevent breakage during shipping. If using a razor blade cut around the perimeter of each log and pull gently on the shrink-wrap and not the logs to prevent damage when removing the packing.

1. To remove louvers follow the instructions on page 15. Refer to Figure 36.
2. Remove screen rod, if installed, by sliding the screen rod either to the left or to the right of the fireplace until one of the rod ends is free and completely remove the screen from the fireplace.
3. To open the glass door, undo the latches located on the top and bottom side of the firebox, (see Figure 47). Then carefully swing the door to the left. The glass door is securely mounted to the firebox by means of six screws.
4. Carefully place the log set as shown in Figure 46. Be careful not to alter the pilot or burner location.
5. Next, remove the ceramic fiber embers from the bag and place small pieces on top of burner ember tray located on the very front of burner with grate. Avoid blocking burner ports when placing embers.
6. When closing the glass door, make certain that all four latches are fully secured. Replace items removed in the reverse order.

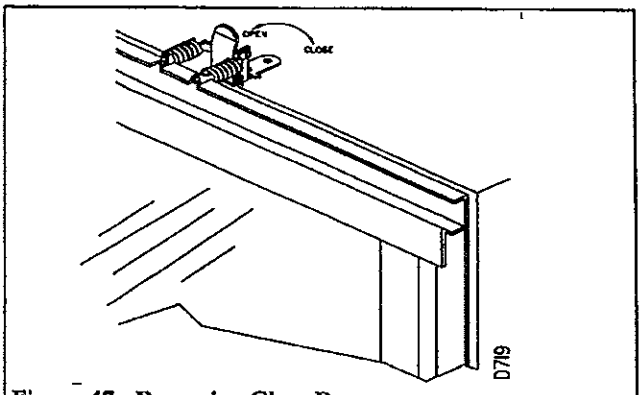


Figure 47 - Removing Glass Door

DECORATIVE FACING

Any noncombustible material may be used for facing (glass, tile, brick, etc.) as long as the proper clearances are observed (see Clearances, on page 3). IMPORTANT: Louvered openings must not be obstructed and upper and lower panels must remain removable for servicing. Use only heat-resistant, non-combustible mortar or adhesive when securing facing material.

NOTE: Combustible material, such as wood, that has been fireproofed is not considered noncombustible.

PILOT / ELECTRODE ASSEMBLY ADJUSTMENTS

The pilot assembly is factory preset for the proper flame height. Alterations to these settings may have occurred during shipping and handling. If this is the case, some minor readjustments may be necessary and should be done by a qualified technician. To access the pilot assembly, the glass door must be opened. The proper settings for the thermopile height should be at a distance of 3/8" to 1/2" from the pilot flame as shown in Figure 48.

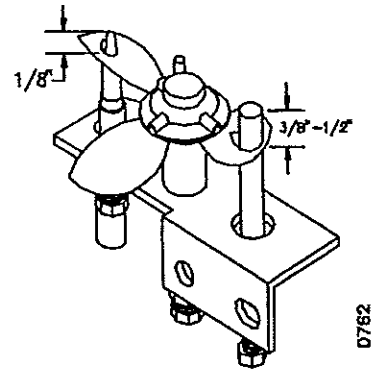


Figure 48 - Correct Pilot Flame Pattern

The electrode is installed at the factory for proper positioning. However, Alterations to the position may have occurred due to shipping and handling. These setting may need adjustment and must be done by a qualified technician. The correct position and height is as shown in Figure 49.

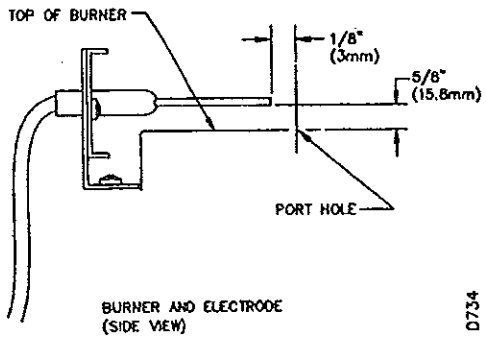


Figure 49 - Correct Igniter Location

BURNER FLAME ADJUSTMENT

The air shutter, located at the base of the main burner has been factory preset to the proper air-to-gas-ratio which results in an even, clean burning flame across the burner (see Figure 50). If readjustment is necessary, you can restore the proper flame setting by loosening the air shutter screw and rotating the air shutter until proper flame setting is achieved (the shutters normal setting is fully opened). Don't forget to retighten screw (see Figure 51).

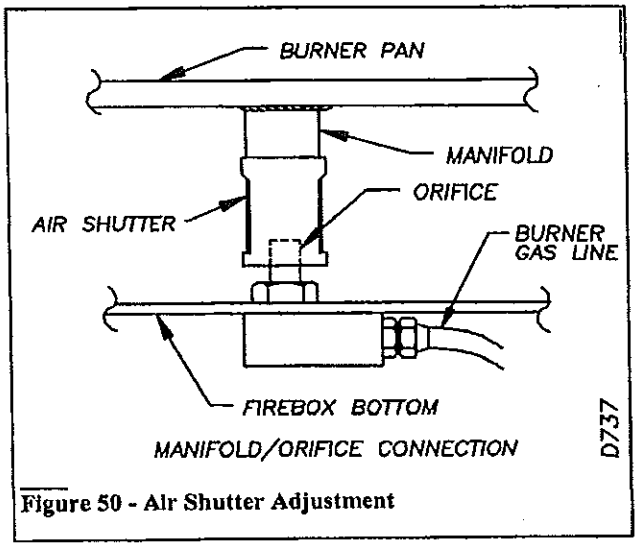


Figure 50 - Air Shutter Adjustment

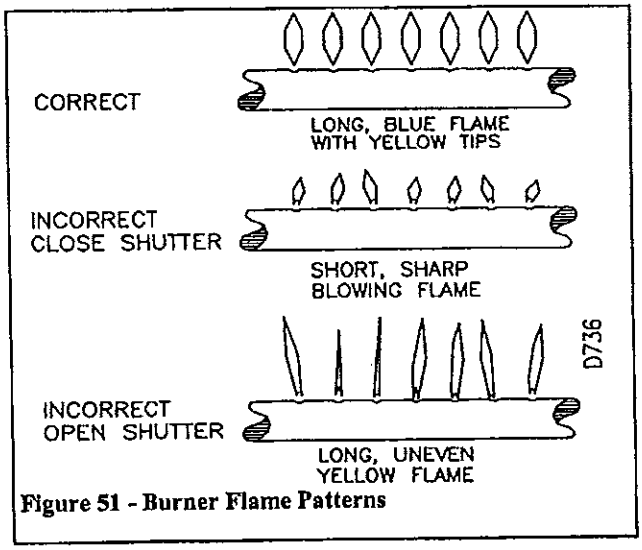


Figure 51 - Burner Flame Patterns

BURNER REMOVAL

⚠ CAUTION: Before proceeding to open the glass door or handle logs, make sure entire unit is cool.

1. Remove the top and bottom louvers and screen assembly, then open the glass door.

2. Carefully remove the log set.

BURNER REMOVAL continued

3. Remove the two screws holding the pilot or the igniter onto the burner. Be sure not to over bend the pilot gas line.

4. Lift the burner off the orifice and remove from the firebox.

5. To reinstall the burner, the orifice mount back over the orifice and secure the right hand burner bracket and the pilot or igniter bracket back in place.

⚠ CAUTION: Make certain that the orifice is fully inside the venturi tube's air shutter, and that the air shutter is adjusted accordingly. See Burner Flame Adjustment, Figure 50 on page 19.

6. Replace the log set, close the door with all four latches, and reattach the screen and louvers.

TEMPERED GLASS DOOR REMOVAL OR REPLACEMENT

When tempered glass is installed with your unit, and cleaning or replacement is necessary, refer to the following steps.

NOTE: Before proceeding make sure unit is completely cool.

1. Remove the top and bottom louvers and the screen assembly. Undo the four latches (refer to page 19).

REPLACING THE GLASS DOOR

2. If replacement of the glass is necessary, the entire assembly (frame and glass) must be replaced. If glass is broken you may want to wear gloves and tape the remaining fragments onto the frame. Remove the seven (7) screws located on the left side of the firebox while holding frame assembly to prevent it from falling and causing injury. Remount the new frame at the hinge with seven (7) new screws, before closing and latching the door. This will ensure seating of the gasket.

CLEANING THE GLASS DOOR

3. When cleaning the glass, **DO NOT** remove the glass from the frame. Use any household cleaner to clean the glass. Do not use abrasive cleaners as this may damage the glass.

4. To install or replace items removed, simply reverse the procedures in step one.

OPERATING GUIDELINES AND MAINTENANCE INSTRUCTIONS

When lit for the first time, the appliance may emit a slight odor for about 16 to 24 hours. This is normal and is due to the "curing" of the logs and the "burn-in" of internal paints and lubricants used in the manufacturing process. Keep compartments, logs, burners, and area surrounding the logs clean by vacuuming or brushing at least twice a year. Temporary removal of the log set may ease the cleaning of the burner and pilot assembly. In cleaning, take care not to alter the pilot or burner location. Be sure appliance is cool before each maintenance session.

⚠ CAUTION: The appliance and logs can get very hot - Handle only when the appliance is cool.

⚠ WARNING: Turn off gas and wall switch before servicing appliance. Any safety screen or guard removed for servicing must be replaced prior to operating the appliance.

⚠ WARNING: Do not operate appliance with panel(s) and glass removed, cracked, or broken. Replacement of the panel(s) should be done by a licensed, qualified service person.

⚠ WARNING: Make certain that wires and gas lines are not touching the underside of the firebox.

⚠ CAUTION: If the glass breaks, be cautious of fragments on the floor. Keep children away from the area. Do not operate the unit. Use proper safety gloves to remove the broken glass door. Discard safely. A glass door kit can be ordered through your local distributor. Do not substitute other material for the glass.

⚠ WARNING: Children and adults should be alerted to the hazards of high surface temperatures, and to stay away from the appliance to avoid burns or clothing ignition. Young Children should be carefully supervised when they are in the same room as the appliance.

⚠ WARNING: Have a qualified agency periodically inspect the vent system at the start of each heating season, for any obstruction which may hinder its normal operation. Never obstruct the flow of combustion and ventilation air. Keep the front of the appliance clear of all obstacles and materials.

⚠ WARNING: Do not abuse, strike, or slam the glass doors.

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

For further operating guidelines, contact your authorized dealer.

OPERATING INSTRUCTIONS MILLIVOLT SYSTEM

FOR YOUR SAFETY READ BEFORE LIGHTING

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

A. This appliance has a pilot which must be lit manually. When lighting the pilot, follow these instructions exactly.

B. BEFORE LIGHTING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

WHAT TO DO IF YOU SMELL GAS

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

C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, do not try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or explosion.

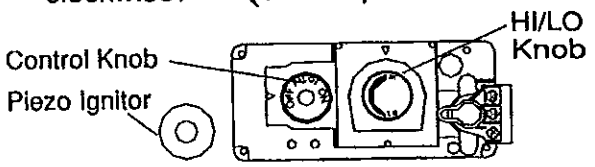
D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

TO TURN OFF GAS TO APPLIANCE

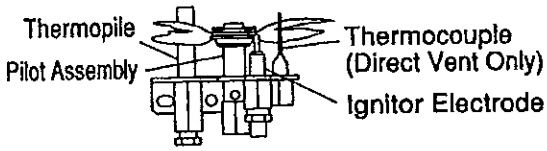
1. Turn off wall switch.
2. Turn off all electric power to the appliance if service is to be performed.
3. Open control access panel.
4. Push in gas control knob slightly and turn clockwise ↷ to "OFF". Do not force.
5. Close control access panel.

LIGHTING INSTRUCTIONS

1. **STOP! Read "For Your Safety..." information to the left before proceeding.**
2. Set the "HI-LO" knob to the lowest setting.
3. Turn off all electric power to the appliance.
4. Open control access panel.
5. Push in gas control knob slightly and turn clockwise ↷ to "OFF" position. Do not force.



6. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, **STOP!** Follow **"WHAT TO DO IF YOU SMELL GAS"** in **"FOR YOUR SAFETY..."**. If you don't smell gas, go to the next step.
7. The pilot is located by the main burner.
8. Turn knob on gas control counterclockwise ↶ to "PILOT" position.
9. Push in control knob all the way and hold in. Immediately light the pilot by repeatedly depressing the Piezo spark ignitor until a flame appears at pilot assembly. If flame does not appear after several attempts, repeat Steps 5 to 9.



If flame appears, hold control knob in for about one (1) minute. Release knob and it will pop back into original position. Pilot should remain lit. If it goes out, repeat steps 6 to 10.

- 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 attempts, turn the gas control knob to "OFF" and call your service technician or gas supplier.

10. Turn gas control knob counterclockwise ↶ to "ON" position.
11. Set the "HI/LO" knob to desired setting.
12. Turn on all electric power to the appliance.
13. Replace control access panel.

D1164

OPERATING INSTRUCTIONS ELECTRONIC IGNITION SYSTEM

FOR YOUR SAFETY READ BEFORE LIGHTING

WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damaged, 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 try to light the burner 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 electric switch.
- Do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, do not try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or explosion.

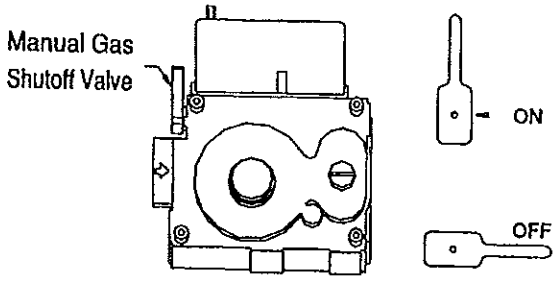
D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

TO TURN OFF GAS TO APPLIANCE

1. Turn off wall switch.
2. Turn off all electric power to the appliance if service is to be performed.
3. Open control access panel.
4. Turn the manual gas shutoff valve clockwise ↷ to the "OFF" position. Do not force.
5. Close control access panel.

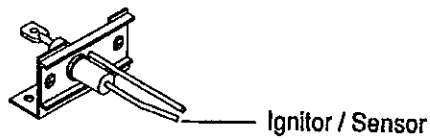
LIGHTING INSTRUCTIONS

1. **STOP! Read "For Your Safety..." information first before lighting.**
2. Turn off all electric power to the appliance.
3. Turn the wall switch to the "OFF" position.
4. Open bottom access door.
5. Turn the manual gas shutoff valve clockwise ↷ to the "OFF" position. Do not force.



Control Valve

6. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, **STOP!** Follow **"WHAT TO DO IF YOU SMELL GAS"** in **"FOR YOUR SAFETY..."**. If you don't smell gas, go to the next step.
7. Turn the manual gas shutoff valve counterclockwise ↶ to the "ON" position. Do not force.
8. Replace control access panel.
9. Turn on all electric power to the appliance.
10. Turn the wall switch to the "ON" position.



Ignitor Assembly

11. Visually locate the ignitor. The ignitor should begin to spark and the main burner should ignite.
    - If lighting the appliance for the first time each season, it may take several attempts before the supply gas can reach the main burners.
    - If the appliance will not stay lit after several attempts, follow the instructions "To Turn Off Gas To Appliance" and call your service technician or gas supplier.

D1165

SERVICE HINTS

When Gas Pressure Is Too Low

- Pilot will not stay lit
- Burner will have delayed ignition
- Fireplace will not produce specified heat
- Propane/LP gas supply may be low

When Gas Quality Is Bad

- Pilot will not stay lit
- Burner will produce yellow flames and soot
- Fireplace will backfire when lit

WIRING DIAGRAMS

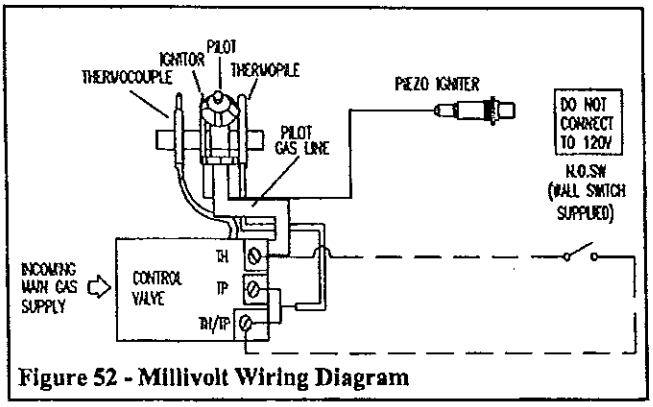


Figure 52 - Millivolt Wiring Diagram

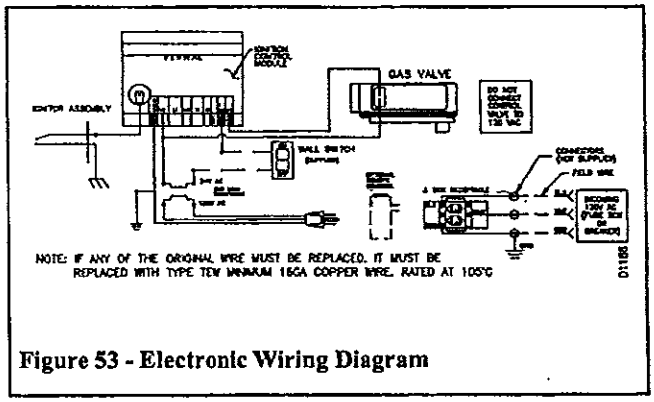


Figure 53 - Electronic Wiring Diagram

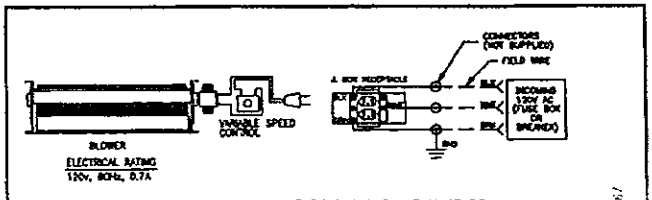


Figure 54 - Optional Blower Wiring Diagram

REPLACEMENT AND ACCESSORY PARTS

Log Set: Front/Rear, and Top Logs (standard with all units).

Pilot Assembly: If in need of replacing, a qualified technician must replace it.

Gas Control Valve: If in need of replacing, a qualified technician must replace it.

Wall Switch: The Wall Switch, cover plate, and millivolt wires come standard with this appliance.

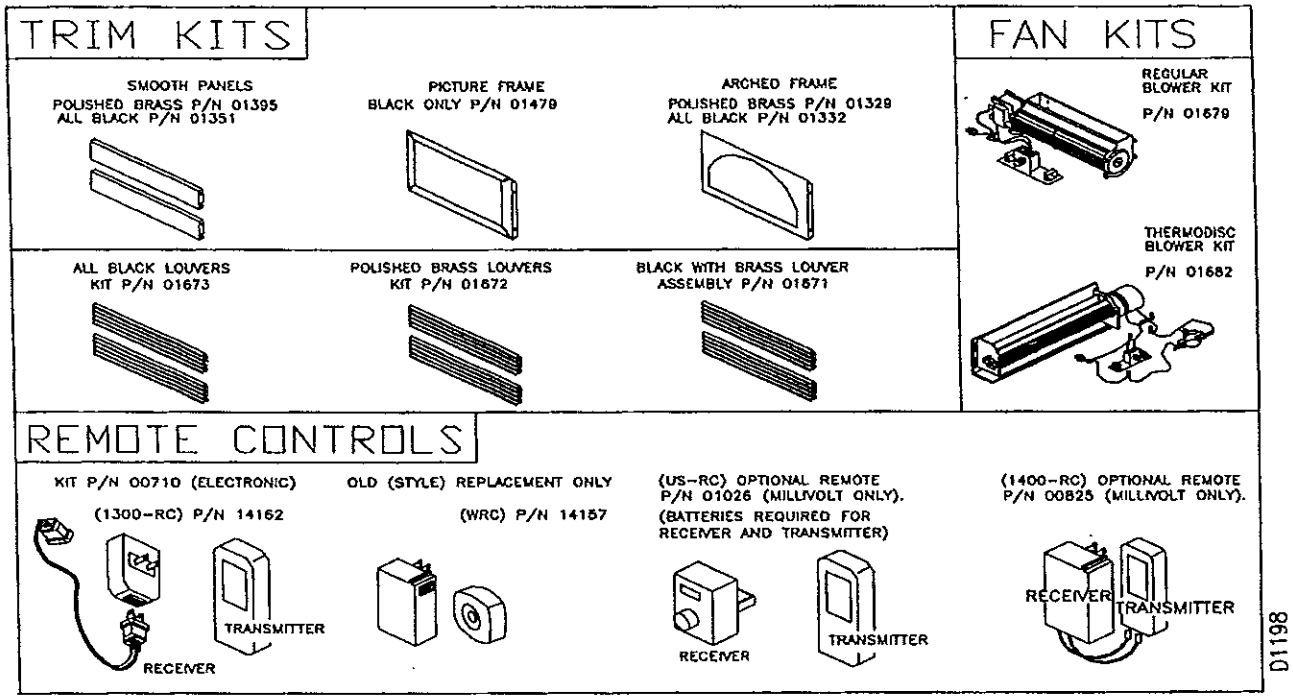
Fan Kit: The Fan Kit is optional and may be installed at any time. Installation instructions are included with the fan kit.

Ceramic Embers: This ember material will provide a warm red glow and licks-of-flame when operating the appliance.

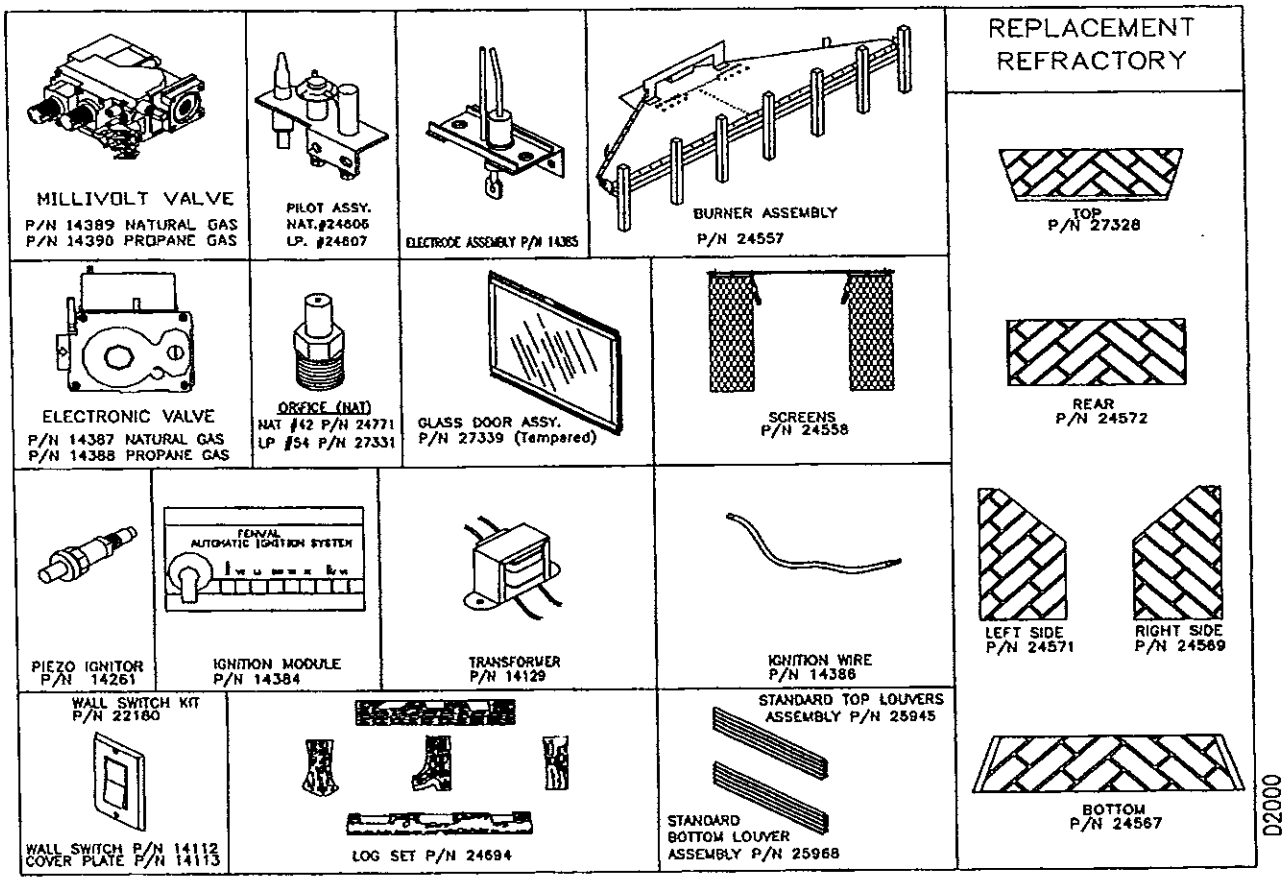
- When ordering replacement or accessory items, please have your appliance's model and serial number ready.
- The model and serial number for your particular appliance may be found on the rating plate located inside the appliance (see Figure 1).
- Refer to the parts list and diagrams when ordering replacement parts for your appliance.
- Repair parts or accessory items may be bought from your distributor/dealer.
- All product specifications are subject to change without notice.

NOTE: Use only original replacement parts. This will protect your warranty coverage for parts replaced under warranty.

OPTIONAL ACCESSORIES



REPLACEMENT PARTS



MILLIVOLT SYSTEM
TROUBLESHOOTING GUIDE
FOR DVF42TA VENTED GAS FIREPLACES

THE TWO MOST COMMON CAUSES OF A MALFUNCTIONING GAS APPLIANCE ARE:

1. LOOSE WIRING CONNECTIONS
2. CONSTRUCTION DEBRIS CLOGGING THE PILOT AND/OR GAS CONTROL VALVE FILTER.

⚠ **NOTE: BEFORE TROUBLESHOOTING THE SYSTEM, MAKE SURE THE GAS SHUT-OFF VALVE IS OPEN. BE SURE THE APPLIANCE IS COOL AND POWER IS DISCONNECTED TO THE UNIT BEFORE SERVICING ONLY A QUALIFIED SERVICE PERSON SHOULD SERVICE OR REPAIR THE FIREPLACE.**

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
1. PILOT WILL NOT LIGHT.	1a. NO GAS SUPPLY, OR SHUT-OFF VALVE IS OFF.	A. CHECK TO SEE IF YOU HAVE GAS SUPPLY.
	1b. AIR IN GAS LINE.	B. HOLD REGULATOR CONTROL VALVE IN THE "PILOT" POSITION FOR 2 OR 3 MINUTES TO PURGE AIR. IF YOU SMELL GAS **STOP** AND WAIT FOR A FEW MINUTES BEFORE TRYING TO LIGHT THE FIREPLACE.
	1c. CONSTRUCTION DEBRIS CLOGGING PILOT ORIFICE.	C. REMOVE DEBRIS AND DIRT, INSPECT AND CLEAN ANY OTHER POSSIBLE OBSTRUCTIONS.
	1d. LOW GAS PRESSURE.	D. CONTACT YOUR GAS SUPPLIER.
	1e. CONTROL VALVE KNOB IS NOT ON "PILOT" POSITION.	E. REFER TO SECTION ON PILOT LIGHTING.
	1f. KINKED PILOT LINE	F. HAVE A QUALIFIED TECHNICIAN REPLACE PILOT LINE.
	1g. BAD VALVE.	G. REPLACE REGULATOR VALVE (REFER TO REPLACEMENT PARTS LIST).
2. PILOT WILL NOT STAY LIT	2a. LOOSE WIRING ON THERMOPILE TO REGULATOR VALVE - NO MILLIVOLT CURRENT IS BEING SENT BACK TO REGULATOR.	A. CHECK WIRING CONNECTIONS. REFER TO WIRING DIAGRAM
	2b. IF VALVE KNOB AND WALL SWITCH ARE IN THE "ON" POSITION-PROBABLE DEFECTIVE REGULATOR VALVE.	B. HAVE A QUALIFIED TECHNICIAN REPLACE VALVE.
3. NO GAS TO BURNER, ALTHOUGH WALL SWITCH AND VALVE ARE SET TO THE "ON" POSITION.	3a. WALL SWITCH WIRES DEFECTIVE.	A. CHECK ELECTRICAL CONNECTIONS.
	3b. POWERPYLE GENERATOR OR SENSOR NOT GENERATING SUFFICIENT VOLTAGE	B. RE-CHECK PROBLEM #2.
4. FREQUENT PILOT OUTAGE.	4a. PILOT FLAME MAY BE TOO LOW, CAUSING SAFETY PILOT TO "DROP-OUT".	A. CLEAN AND ADJUST PILOT FLAME FOR MAXIMUM FLAME IMPINGEMENT ON THERMOPILE.
5. PILOT GOES OUT WHEN WALL SWITCH IS ON.	5a. MILLIVOLT OUTPUT ON THERMOPILE TOO HIGH.	A. REPLACE THERMOPILE

MILLIVOLT SYSTEM
TROUBLESHOOTING GUIDE
FOR DVF42TA VENTED GAS FIREPLACES

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
6. SPARK IGNITOR WILL NOT LIGHT PILOT AFTER REPEATED TRIGGERING OF RED BUTTON.	6a. DEFECTIVE IGNITOR (NO SPARK AT ELECTRODE).	A. CHECK FOR SPARK AT THE ELECTRODE AND PILOT; IF NO SPARK AND ELECTRODE WIRE IS PROPERLY CONNECTED, REPLACE IGNITOR..
	6b. DEFECTIVE PILOT OR MISALIGNED ELECTRODE AT PILOT (SPARK AT ELECTRODE).	B. USING A MATCH, LIGHT PILOT. IF PILOT LIGHTS, TURN OFF PILOT AND TRIGGER THE RED BUTTON AGAIN. IF PILOT LIGHTS, AN IMPROPER GAS/AIR MIXTURE CAUSED THE IMPROPER LIGHTING AND A LONGER PURGE PERIOD IS RECOMMENDED. IF PILOT WILL NOT LIGHT – CHECK GAP AT ELECTRODE AND PILOT SHOULD BE 1/8 INCH TO HAVE A STRONG SPARK. IF OK, REPLACE PILOT.
	6c. NO GAS OR LOW GAS PRESSURE.	C. CHECK REMOTE SHUT OFF VALVES FROM FIREPLACE. USUALLY THERE IS A VALVE NEAR THE FIREPLACE AND SOMETIMES THERE IS A VALVE NEAR THE MAIN. THERE CAN BE MORE THAN ONE (1) VALVE BETWEEN THE FIREPLACE AND MAIN. Ca. LOW PRESSURE CAN BE CAUSED BY A VARIETY OF SITUATIONS SUCH AS BENT LINE, TOO NARROW DIAMETER OF PIPE OR EVEN LOW LINE PRESSURE. CHECK FOR KINKED LINES. IF NONE, CONSULT WITH PLUMBER OR GAS SUPPLIER.
	6d. NO L.P. IN TANK.	D. CHECK L.P. (PROPANE). YOU MAY BE OUT OF FUEL.

ELECTRONIC IGNITION SYSTEM TROUBLESHOOTING GUIDE

FOR DVF42TEA VENTED GAS FIREPLACES

THE TWO MOST COMMON CAUSES OF A MALFUNCTIONING GAS APPLIANCE ARE:

1. LOOSE WIRING CONNECTIONS
2. CONSTRUCTION DEBRIS CLOGGING THE PILOT AND/OR GAS CONTROL VALVE FILTER.

⚠ *NOTE: BEFORE TROUBLESHOOTING THE SYSTEM, MAKE SURE THE GAS SHUT-OFF VALVE IS OPEN. BE SURE THE APPLIANCE IS COOL AND POWER IS DISCONNECTED TO THE UNIT BEFORE SERVICING ONLY A QUALIFIED SERVICE PERSON SHOULD SERVICE OR REPAIR THE FIREPLACE.*

PROBLEM	*POSSIBLE CAUSE*	*CORRECTIVE ACTION*
1. IGNITOR WILL NOT SPARK OR BURNER WILL NOT LIGHT	*1a.* NO GAS SUPPLY, OR SHUT-OFF VALVE IS OFF.	*A.* CHECK TO SEE THAT YOU HAVE GAS SUPPLY AND THAT THE MANUAL SHUTOFF VALVE IS OPENED.
	1b. AIR IN GAS LINE.	*B.* REPEAT LIGHTING PROCEDURE SEVERAL TIMES TO PURGE ALL AIR OUT OF LINES. IF AFTER REPEATED ATTEMPTS APPLIANCE DOES NOT LIGHT CALL FOR QUALIFIED SERVICE AND REPAIR.
	1c CONSTRUCTION DEBRIS CLOGGING MAIN ORIFICE.	*C.* REMOVE DEBRIS AND DIRT, INSPECT AND CLEAN ANY OTHER POSSIBLE OBSTRUCTIONS.
	1d. LOW GAS PRESSURE.	*D.* CONTACT YOUR GAS SUPPLIER TO CHECK PRESSURE.
	1e. KINKED PILOT LINE	*E.* HAVE A QUALIFIED TECHNICIAN REPLACE PILOT LINE.
	1f. CONTROL VALVE IS NOT OPENING.	*F.* REPLACE CONTROL VALVE (REFER TO REPLACEMENT PARTS LIST).
	1g. NO POWER TO UNIT OR THE IGNITION MODULE OR POWER TRANSFORMER IS BAD.	*G.* CHECK THAT MAIN POWER IS ON AND THAT ALL WIRE CONNECTIONS ARE MADE CORRECTLY TO THE IGNITION MODEL (SEE WIRING DIAGRAM) - CHECK FOR 24 VAC AT THE SECONDARY SIDE OF THE TRANSFORMER. IF 24 VAC IS PRESENT AND THE MODULE DOES NOT OPERATE, HAVE THE MODULE REPLACED OTHERWISE HAVE THE TRANSFORMER REPLACED.
2. BURNER LIGHTS BUT WILL NOT STAY LIT	*2a.* LOOSE WIRING ON IGNITOR WIRE TO IGNITION MODULE - POOR GROUND TO IGNITION MODULE.	*A.* CHECK IGNITOR WIRE CONNECTION. REFER TO WIRING DIAGRAM - CHECK GROUND WIRE TO IGNITION MODULE.
	2b. MAIN BURNER FLAME TOO LOW TO SENSE.	*B.* CLEAN AND ADJUST MAIN BURNER - CHECK GAS SUPPLY AND INLET PRESSURE TO UNIT. HAVE A QUALIFIED TECHNICIAN REPLACE IGNITION ASSEMBLY IF BROKEN OR CORRODED.
3. NO GAS TO MAIN BURNER, WHEN WALL SWITCH AND VALVE ARE SET TO THE "ON" POSITION.	*3a.* WALL SWITCH WIRES DEFECTIVE.	*A.* CHECK ELECTRICAL CONNECTIONS.
	3b. SENSOR, VALVE OR IGNITION MODULE ARE NOT OPERATING.	*B.* RE-CHECK PROBLEMS #1 AND 2.
4. FREQUENT MAIN BURNER OUTAGE.	*4a.* BURNER FLAME IS TOO LOW OR IGNITOR IS MISALIGNED CAUSING SAFETY MAIN BURNER TO "DROP OUT"	*A.* CLEAN AND ADJUST MAIN BURNER FLAME OR ADJUST IGNITER LOCATION FOR MAXIMUM FLAME IMPINGEMENT ON SENSOR.
	4b. VENT MAY BE BLOCKED OR RESTRICTED.	*B.* HAVE VENT INSPECTED FOR BLOCKAGE OR DAMAGE.